







REPORT

OF THE

## Minister of Public Works

FOR THE

PROVINCE OF ONTARIO

FOR THE

TWELVE MONTHS ENDING MARCH 31st, 1938

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY OF ONTARIO SESSIONAL PAPER No. 8 — 1939



ONTARIO

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To:

THE HONOURABLE ALBERT MATTHEWS,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of Your Honour and the Legislative Assembly, the Annual Report of the works under the control of the Public Works Department, comprising the reports of the Deputy Minister, the Architect, Secretary and Accountant, for the twelve months ending the 31st of March, 1938.

Respectfully submitted,

COLIN A. CAMPBELL,
Minister of Public Works.

Department of Public Works, Ontario. Toronto, March 27, 1939.



#### REPORT

OF THE

## Deputy Minister of Public Works

HONOURABLE COLIN A. CAMPBELL,

Minister of Public Works. Ontario.

Sir,—

I have the honour to submit to you the accompanying reports of the branches of this Department for the fiscal year ending March 31st. 1938.

#### ARCHITECT'S BRANCH

The work of this branch for the year is summarized as follows:

To provide additional office space for the Department of Highways and Labour, a re-arrangement of offices of some departments was carried out, the major move consisting of a transfer of the Archives from the Tower in the East Block to the North Wing. To mark the occasion of the Coronation of His Majesty King George VI, a suitable decorative scheme was carried out on the front of the Parliament Buildings and was floodlighted at night.

A considerable amount of repairs to the buildings has been necessary and alterations and fireproofing have been carried out where possible.

A comparison of the expenditure for repairs to buildings indicates the extent of the necessary work performed.

Institution	Expenditures for fiscal year ending March 31, 1937	Expenditures for fiscal year ending March 31, 1938		
Educational Buildings Agricultural Buildings Welfare Buildings District Buildings Hospitals and Reformatories	10,747 51 2,318 74 8,732 76	\$ 52,463 42 15,686 77 561 94 31,615 58 46,490 61 \$ 146,818 32		

The construction was commenced of three new Hospital Units, being located at St. Thomas, Brampton and Port Arthur; at Woodstock, construction was also started on the erection of a new Children's Unit.

This extensive programme could not have been adequately carried out without considerable additions to our staff and the services of architects in private practice were secured as associates in developing the various schemes in conjunction with the architects of the Department.

#### ENGINEER'S BRANCH

This Branch, dealing with the maintenance of locks, dams, bridges and protective works, was transferred to the Department of Highways on April 1, 1937.

#### OFFICE OF THE SECRETARY

A total of fifty-five contracts were awarded during the fiscal year, ten in connection with alterations and repairs to buildings and forty-five for new construction.

#### OFFICE OF THE ACCOUNTANT

Revenue totalled for the year, \$158,245.16, the largest items being for the sale of Ontario House in London, England, for \$146,724.62, and property at Smith's Falls for \$2,500.00.

The construction of the new Hospital Units accounts for the considerable increase in capital expenditure.

A summary and comparison of ordinary and capital expenditures with the previous fiscal year is as follows:

#### SUMMARY OF EXPENDITURES

	Fiscal Year 1936-37	Fiscal Year 1937-38
Ordinary		\$ 734,365 19 2.015.118 07
	\$ 785.480 60	\$2,749.483 26

I have the honour to be. Sir.

Your obedient servant,

R. A. McAllister.

Deputy Minister of Public Works.

#### REPORT OF THE ARCHITECT

THE HONOURABLE COLIN A. CAMPBELL,

Minister of Public Works, Ontario.

Sir,—

I have the honour to report on the work done by the Architect's Branch of the Department of Public Works, Ontario, during the fiscal year April 1st, 1937, to March 31st, 1938.

#### Government House:

Painting of the servants' wing and some minor repairs have been made.

#### Parliament Buildings:

The buildings, including the Parliament Buildings, East Block, numbers 11, 15 and 39 Queen's Park, Highways and Provincial Police Garages, 112 College Street, Liquor Control Board Offices, at 454 University Avenue, and the Labour Bureau Buildings at 70 Lombard Street have been kept in repair.

In the Parliament Buildings, the Archives were removed from the Tower in the East Block to provide additional accommodation for the Department of Highways. The basement of the north wing was partitioned off for the storage of the Archives and office space for the staff was provided in the north wing. Alterations were made to provide additional accommodation for women, by moving the lavatory to the fourth floor from the third floor, and so increasing the office space on the third floor. A report of the Fire Marshall drew attention to the need of some improvements as a precaution against fire and these improvements were made consisting chiefly of the closing up of openings. Alterations were begun to provide accommodation in the former suite of the Honourable the Speaker, for the Honourable the Lieutenant Governor, adding to it, as an additional room, the Ministers' dining room and providing and fitting up as a new dining room for the Ministers, the room immediately to the south. Further extensions to this suite were made by adding the reception room (used as the Members' dining room during the session) with communicating doors to the suite. Accommodation for the Honourable the Speaker was made on the third floor by making minor changes only. Improved vault accommodation was provided and a complete mezzanine floor was built in the west Treasury vault, third floor, for the Succession Duty Records.

In the East Block, offices for the Industrial and Labour Board were provided on the 9th floor and other offices were re-arranged with new glass partitions for the Highways' Department in the tower. New laboratories for the Department of Health were provided on the fourth floor and the stock rooms for that Department were moved to and fitted up on the 7th floor. Alterations were made on the 6th floor to provide office suite for the Minister of Labour. Extension of the dictograph system was made for the Department of Highways. On the occasion of the Coronation of His Majesty King George VI, the central south front of the Parliament buildings was decorated and flood lighted at night. The buildings at numbers 11 and 15 Queen's Park and all other outside fences, lamp standards and greenhouses in Queen's Park were painted. Arrangements were made to provide steam heating to the Academy of Medicine, 13 Queen's Park, and this building is now linked up with the central plant. The boundaries of the Government property in Queen's Park were established and survey monuments were placed to mark the boundaries. At 70 Lombard Street, the women's section of the Labour Bureau has been painted throughout.

#### Osgoode Hall:

A complete new heating plant, to replace the old boilers, has been planned to meet the additional load in heating the new wing extension of the Law Society on

Chestnut Street, in accordance with a joint agreement between the Law Society and the Department. The four large court rooms have been decorated throughout. Alterations have been made in the offices of the Public Trustee to provide filing and vault accommodation. Sketches were prepared for consideration of the extension of the Law Library into the west wing, but no action was taken.

#### EDUCATIONAL BUILDINGS

At the Normal and Model Schools, Toronto, several class rooms have been painted: extensive repairs and renewals were made to rain water gutters and down pipes and roofs. New stoker has been installed in number 1 boiler and both boilers were re-set.

At the Normal School, Hamilton, a deviation has been made in the lane to the rear of this property, whereby a section of ground, formerly cut off by the lane, has been joined up and new boundary fences to the property have been put in.

At the London Normal School a new boiler and stoker have been installed.

At the North Bay Normal School, repairs have been made to the outside concrete steps, sidewalks and retaining wall; all windows have been overhauled and repaired and main stair has been strengthened by suspending landings on steel rods; a new flag pole has been supplied and erected.

At Ottawa Normal and Model Schools the heating plant and boiler room have been renovated and new boiler settings and stokers have been installed. New exterior entrance doors and vestibule doors at boys' and girls' entrances have been installed.

At Peterborough Normal School, the main stair has been strengthened by suspending landing on steel rods from overhead steel beams; stone sills have replaced artificial stone sills in a number of windows.

At Stratford Normal School, a new ash elevator has been installed and repairs made to boiler piping; the main stair has been strengthened by suspending landings on steel rods from overhead steel beams.

In addition, all of the above schools have been kept in repair and painting has been done where found necessary. All boiler plants and heating apparatus have been inspected and all the necessary repairs and adjustments made.

At the Ontario School for the Deaf, Belleville, painting of the exterior of dormitories and of the basement rooms in the new junior residence has been done; general repairs have been done throughout and drains have been overhauled to give greater fall; alterations have been made to laundry and new washer and mangle have been installed.

At the Ontario School for the Blind at Brantford, the boys' dormitory, workshops and superintendent's house have been painted; repairs to roofs, flashings and gutters have been done. The laundry has been completely remodelled and new machinery, consisting of washing machine, extractor, tumbler dryer, etc., installed.

At the Training School for Technical Teachers at Hamilton, painting of the corridors throughout has been done and new blackboards have been installed.

Reports to the Department of Education:

Plans have been examined and reports made to the Department of Education in connection with the following schools throughout the Province:

Cornwall, Collegiate Institute: Report on plans of extension.

Embrum High School: Report on heating system.

Straffordville, Elgin County No. 14 Bayham: Stock sketch plans for 2-room school were sent to the Department of Education.

Fort Erie High School: Report re ventilation system.

Hearst and McVittie, Larger Lake, Public School Section No. 1: Stock sketch plans for three types of 4-roomed schools sent to Department of Education.

Hawk Junction United School Section No. 1: Stock sketch plan for 1-roomed school.

Little Current Public School: Stock sketch plan for 6-roomed school.

Michipicoten, Goudreau. Ont., School Section No. 6: Stock sketch plans for 1-roomed brick veneered school.

Mindemoya Consolidated School: Report re condition of roof; plans and specifications.

New Liskeard Public School: Report re central heating.

Ramore Separate School No. 1, Mayfair: Stock sketch plans for 4-roomed school sent to Department of Education.

Port Credit Public School, Forest Avenue: Report re basement walls.

Sault Ste. Marie School, Second line, Prince Township: Stock sketch plans for 1-roomed school.

Seaforth High School: Plans and specifications examined for extension to building and report made to the Department of Education.

Spanish, Indian Residential School: Report on shower baths.

Typical drawings were made for new courses of study in Home Economics and shop practice.

#### AGRICULTURAL BUILDINGS

#### Ontario Agricultural College, Guelph:

Repairs and rebuilding of steps to Memorial Hall and Watson Hall have been done; extensive repairs have been made to slate roofs of Main Building, Macdonald Hall, Mills Hall. Memorial Hall and Massey Library and new gutters have been installed in Mills Hall and new roofs have been put on sewage plant and piggery buildings. Exterior painting has been done to Massey Library and to the three cottages on the hill. The matter of the discontinuance of the Guelph Street Railway has been dealt with in correspondence. The Physics Building, which had a separate septic tank sewage disposal, has been connected up to the main sewage system; general repairs have also been made, as required.

#### Kemptville, Agricultural School:

The main drains leading to the activated sludge house have been taken up and relaid to new alignment. A new storm drain from the main building has been laid to greater depth to take floor drains in dairy basement rooms. The sheep pen. piggery and machine shed have been wired for electric light, screening for windows in main building and residence has been supplied.

#### Agricultural Experimental Farm, Ridgetown:

The new stock judging pavilion has been practically completed. This building is of frame and is two stories in height with a room 52' 2" x 40' 2" on the ground floor for stock judging and with outside stairs to class room above for seed judging and other classes. It is intended that this building shall be brick veneered at a later date and is heated meantime by natural gas stoves only. Repairs have been made to the foundation of the Superintendent's house; exterior painting has been done to the school, the Superintendent's house, double house for farm employees and to the office building.

Horticultural Experimental Station, Vinelands:

Repairs to boiler plant and installation of two mechanical stokers have been done.

Reports were made to the Department of Agriculture on Cold Storage Plants at Picton, Thedford and Parkhill.

#### DISTRICT BUILDINGS

Throughout the Districts, necessary repairs were made to the Court Houses, Registry and Land Titles Offices, Lock-ups and Mining Recorder's office buildings.

#### Algoma:

The exterior of the Court House at Sault Ste. Marie has been painted and also the interior of the court room and all public corridors. The roofs and flashings have been repaired and the brick and stone work have been re-pointed. For milk testing a new sink and cupboards have been installed in the Agricultural Offices in the Court House. Plumbing repairs and other minor repairs have been made. The old Registry Office has been leased to the Red Cross.

At the Jail, seats and tables for prisoners have been installed in the day spaces. The interior has been painted and repairs have been made to strengthen the window grilles. Roof repairs to gutters and down pipes have been made and plumbing fixtures, where required, have been replaced.

For the Ontario Air Base at Sault Ste. Marie, plans and specifications have been prepared for a new runway of reinforced concrete.

#### Cochrane:

Locks in the Court House have been fitted with new cylinders and a new steel plan cabinet has been supplied in the Land Titles Office.

At the Hearst Jail, the interior of the cells and the ceilings of the Jailer's house have been painted; fly screens have been provided for windows, and an outside coal bin has been installed and plumbing repairs made.

Sketch plans for a proposed jail at Porquois Junction have been made.

#### Kenora:

The exterior of the Court House has been painted; the Jailer's house has been re-shingled and repairs have been made to eavestroughing and windows have been caulked. Linoleum rugs have been supplied to Magistrate's and Judge's offices.

At Sioux Lookout Lock-up, repairs have been made to the septic tank and sewer and fly screens have been installed.

#### Manitoulin:

At the Court House and Jail at Gore Bay, water supply has been installed from Town mains with pump and pressure tank; plumbing fixtures and piping have been installed both in the Court House and Jail and new drainage system with sewage tanks has been completed. The exterior of the Court House and Registry Office and the interior of the Court House have been painted and repairs made to gutters and down pipe. An alarm system has been installed in the Jail and general repairs made on all buildings.

#### Muskoka:

The Court House. Registry Office and Jail Buildings at Bracebridge have been painted externally and new gutters and down pipes have been installed at the Court

House. The court room has been painted and the Judge's bench has been re-built and improved by building up the window behind it. New locks have been provided throughout the Court House and new office door name plates. The Judge's office of two rooms has been redecorated throughout and new furniture has been supplied for them. Repairs to steps at both outside entrances to Court House have been done and other general repairs.

The interior of the Jail has been partially remodelled; new windows cut for ventilation of cells, which were formerly without outside light, or air, and new doors to men's cells were installed; plaster repaired and new floors put in all corridor cells and office. The Registry Office has been re-shingled.

#### Nipissing:

The Court House building at North Bay has been completely overhauled; all outside brickwork repaired; old kitchen removed from the back of the Jail; roofs re-shingled and new gutters and down pipes added; exterior of building re-pointed; main doors have been changed to open out and new entrance steps built in. New lavatory provided behind Court Room and old Jury room altered to provide rooms for barristers. Court room has been re-wired and re-painted and fitted with new electric fixtures, blinds, linoleum and new benches. A new flag pole has been provided and set up in front of the building.

The Judges' Chamber brickwork has been repaired and exterior of the building has been painted; gutters repaired, and other minor repairs have been done. A roof over the entrance and side steps has been built to shelter them from ice. The Registry Office and Land Titles Office has been painted, both inside and outside. The T.B. Clinic, formerly the Jailer's house has been altered and the building has been painted outside and inside.

At the Jail, repairs to roofs and other general repairs have been done; a flag pole has been installed and new fencing has been supplied.

The building occupied by the Department of Highways has been fitted with a new heating boiler and minor changes have been made to the heating.

#### Parry Sound:

The exterior of the Jail and the Jailer's house at Parry Sound have been painted; new floors have been laid in the Jail offices and kitchen and a new electric stove has been supplied for the Jail kitchen.

The Lock-up at Burk's Falls has been thoroughly repaired, including plumbing work and the outside and inside have been painted. A new roof has been put on and a new vault has been built in the basement for the use of the Provincial Police.

#### Rainy River:

Repairs of a minor nature have been done; a new grille gate has been put in the women's cell corridor and the return steam pipe from the Jail to the Court House has been renewed.

#### Sudbury:

The exterior of the Court House and Registry Office, Sudbury, including the brickwork has been painted, also the corridors, the caretaker's rooms and the Judge's retiring room. New linoleum has been laid in the main corridor and radiator covers have been provided in the Court Room.

At the Jail, repairs to roofs and flashings have been done; the hot water supply and storage tank have been overhauled and the service improved. Repairs to shower bath mixers have been done.

In addition to the painting at the Registry Office, new gutters have been put on and a new side door provided and the locks repaired.

#### Temiskaming:

The stonework at the three entrances to Court House. Haileybury, have been re-set. The Court House roof has been renewed and all flashings repaired and painted and the ceilings of the caretaker's quarters have been painted.

At the Land Titles Office, the interior has been painted and new steel files for books of 48 shelves have been supplied.

At the Jail, an additional grille was put in the vestibule to add protection to the office. Metal cornice and flashings were painted. Plans for new cells in the basement were prepared and these were ordered from the Guelph Reformatory.

The Government Building at New Liskeard, occupied by the Department of Highways, was overhauled and offices were altered to provide better office accommodation. Re-wiring was done and new electric fixtures installed and the interior of the rooms painted. At entrance porch was added.

For Elk Lake, plans were prepared for a Lock-up with accommodation in the same building for the Mining Recorder's office. A survey of the site was made with special reference to water supply and drainage.

At the Lock-up at Englehart, only minor repairs have been made.

At the Mining Recorder's Office at Swastika, the interior has been re-painted.

#### Thunder Bay:

At the Court House. Port Arthur, a new roof was formed over the existing flat roof to give less fall and laid with a built up. twenty-year guarantee, roof; flashings were wedged up and renewed where required. Repairs throughout were made to plaster work: flag pole was painted: additional files for documents in Registrar's vault were installed and new shelving in the Mining Recorder's office.

At the Registry Office, repairs were made to brickwork and roofs.

At the Jail, Port Arthur, an additional grille was put in the vestibule to add protection to the office. A new stove was supplied for the laundry dryer and new beds for cells were supplied. Paint was supplied and applied by inmate labour.

Plans and specification were prepared for a new Lock-up at Geraldton, but were re-considered and held over.

#### ONTARIO HOSPITALS

#### Ontario Hospital, Brockville:

Consideration has been given to improve the dining hall and kitchen accommodation and plans and specifications were prepared in a complete study of the situation. The central tower was examined as to its safety and, after careful consideration, it was decided to demolish it by taking down to the caves level of the main building and this has been done. General repairs were made to the brickwork of chimneys of cottages.

#### Ontario Hospital. Concord:

This building, formerly the Women's Jail Farm, leased from the City of Toronto, was occupied by patients on the 2nd of April. 1937. New electric dumb waiter was supplied and installed by the Otis Fenson Elevator Company.

#### Ontario Hospital, Cobourg:

The brick setting of the boiler has been re-built; wire guards have been supplied and installed on a number of windows and repairs to roofs have been made.

#### Ontario Hospital, Fort William:

An auxiliary pump for water has been installed.

#### Ontario Hospital, Hamilton:

A contract was let for painting of Orchard House and a section of the Main Building. Repairs have been made to copper flashings of the roof of the Assembly Hall. Tenders were called for the completion of the new residence for nurses, the foundations for which had been built, and plans and specifications for a new reception building have been prepared. Messrs. Murton and Husband of Hamilton acted as Associate Architects with the Department and completed the working drawings of both buildings designed by the Department and prepared the specifications. The matter of proceeding with these buildings was held over for further consideration.

#### Ontario Hospital, Kingston:

To prevent spring flooding from the higher fields behind the Farm to the Village of Portsmouth, storm drains were laid to drain into natural water courses. To prevent flooding over the hospital grounds from the east, a ditch was dug to carry the water south in a natural water course to the lake. Repairs have been made to the Gardener's House, Piggery and Root House, Main roof and eavestroughs. Exterior painting of a section of the Main building has been done; new casement windows and frames, complete with wire grilles to replace gradually all the old double hung windows, has been undertaken and some forty windows have now been installed. Livingston Stokers have been installed to numbers 3, 4 and 5 boilers. New steel sashes have been applied in kitchen for improved ventilation.

#### Ontario Hospital, London:

Repairs and alterations on the east cottage have been made to improve the exits and outside fire escapes have been installed. Lavatory accommodation for inmates has been installed in the Canning Factory; the brickwork of boilers has been extensively repaired. Re-wiring and painting has been done in the staff dormitory.

#### Ontario Hospital, New Toronto:

Sketch plans have been prepared for a new Reception Building. Plans and specifications have been prepared for a new Power House, tenders called for, and contracts have been awarded as follows:

General contractor—Teagle & Son, Toronto.

Boilers and Stokers-E. Leonard & Sons, London.

Coal Handling Equipment-United Steel Corporation Limited. Toronto.

Plumbing and Steam Piping—Purdy Mansell Limited, Toronto.

Radial Brick Chimney-Francis Hankin & Company Limited, Toronto.

Electrical Work—Canadian Comstock Company, Toronto.

The new building replaces an obsolete congested boiler room and is placed some distance south west of the Institution and connected to it by a concrete heating trench carrying the mains and returns and water service. The electric cables and telephones are placed alongside the trench. The power house accommodates two 385 H.P. E. Leonard four drum boilers with a working power of 150 lbs. per square inch and with sufficient space for a third boiler. Coal is brought to the plant by trucks and

dumped into hopper and is elevated by a centrifugal discharge bucket elevator which discharges into a spiral conveyor running along the top of the coal storage bin of 150 tons capacity. From the storage bin, coal is fed by gravity to the stoker hoppers.

Repairs and painting have been done to the Superintendent's residence. Additional protective window screens have been installed in the Main building and repairs to roofs and gutters and painting have been done in the various buildings. Nurses' lavatories have been overhauled and repairs made to plumbing. A new lavatory for visitors have been fitted up.

#### Ontario Hospital, Orillia:

Contracts were awarded for the painting of the water tower and the dairy barn and the work has been carried out and completed. A contract for paving of driveways from the main entrance at the highway to the entrance to the Main building was awarded to the Non-Skid Pavement Company Limited of Toronto and the work has been completed. Considerable repairs and pointing of brickwork and plaster work has been done. The retaining wall between cottages D and the Nurses' residence was taken down and re-built. The coal trestle has been repaired and new timbers put in where necessary; the work was carried out by the Canadian National Railway under contract. Wire guards were installed in Cottages A and K. Two new Livingstone stokers to boilers have been installed.

Plans and specifications have been prepared to provide a fireproof sun room wing to replace the existing verandahs on the south of main building for female patients and to fireproof the corridors leading to it and to build two new fireproof stairs on the east side of the Main building, to replace inside wood stairs. The new wing is three stories and basement in height, with stair connecting the three floors to exits at grade. The basement is planned as a dining room to form part of a future scheme of internal alterations whereby the present patients' dining room will be altered for staff, and present staff dining room will become class rooms. New floors are terrazzo throughout; rooms are well lighted with casement metal sashes, protected by wire guards. All new stairs are fully enclosed, with metal doors and in every case have exits at grade and are completely fireproof. The general contract was awarded to Messrs. Bennett-Pratt Limited, Toronto; the heating and plumbing to Messrs. B. J. Miller & Company of Toronto and the electrical work to the Ontario Electrical Construction Company Limited of Toronto.

#### Ontario Hospital, Penetanguishene:

Sections of overhead power lines were placed in cables underground. The exterior woodwork of the Main building, outside fire escapes and water tank and several cottages for employees have been painted; smoke breeching in boiler room altered; new additional tumbler dryer has been installed in the laundry. Paving and draining of court yard and roadways were done. Alarm system for the Criminally Insane Building has been installed and additional inside grille installed.

Plans and specifications for a proposed new pavilion to form a wing on the north side of the Main building for female patients, were prepared and tenders were called for. The excavations for this new wing and the laying of main storm and sanitary drains have been done. Plans were prepared for temporary X-ray rooms.

#### Ontario Hospital. Toronto:

Repairs were begun to boundary wall; brickwork and repairs were made to roof of laundry building and several window guards were replaced.

Drawings have been prepared for proposed interior alterations to include new elevator shaft and improved entrances to ward dining room on third floor in men's section of the Main building.

#### Ontario Hospital, Whitby:

Extensive re-plastering, continued from last year, has been completed to the Administration building. Repairs throughout to brickwork, tile roofs, gutters, and flashings have been done, including roofs of Barn, Vocational Hall and Dining Hall. Brickwork of numbers 1 and 2 boilers have been repaired.

#### Ontario Hospital, Woodstock:

Repairs were made to brickwork and several dis-used chimneys in cottages taken down, being found to be dangerous. New storage water heater was installed. Repairs were made to the Railway siding and new lengths of rails and sleepers were renewed and re-ballasted. Brickwork of boilers has been repaired. New refrigerator units were supplied and installed in Diet kitchens of north cottages and a number of radiator guards were supplied and installed in these same cottages.

#### New Ontario Hospitals:

An extensive programme to provide additional hospital accommodation for mental patients was begun and to facilitate the work in connection with the various schemes, the services of architects in private practice were engaged and agreements were entered into with the various architects concerned for partial services, to include the designing of the external elevations, preparing working drawings, detail drawings and specifications; the supervision of the work being done by the Department officials.

Special reference in connection with the planning and laying out of the new institutions should be made to the services rendered by the Assistant Architect, Mr. Geo. N. Williams, whose intensive study of mental hospitals over a long period of years as Architect to the Department of Health, in dealing with requirements, maintenance and extension of existing institutions has fully qualified him to meet this new development, and who has been responsible for the planning of the new hospitals, preparing, in each case, sketches of a complete layout of the final grouping and of carefully considered plans of each individual building and supervising complete drawing of all special conditions of individual rooms and equipment for the comfort and care and hospitalization of patients.

In the selecting of the sites for the new hospitals, special consideration was given to the securing suitable level areas where neighboring town utilities of water supply, sewage disposal and electric services would be available and where such sites were readily available to the public with transportation facilities.

## Ontario Hospital, St. Thomas, Mr. W. L. Somerville, F.R.I.B.A., F.R.A.I.C., A.R.C.A., Associate Architect.

A site of some 442.15 acres, more or less, approximately two miles south of St. Thomas on the east side of number 7 Highway from St. Thomas to Port Stanley was selected, being readily accessible by highway and street railway and having City water and sewage disposal facilities within reasonable distance. On this site, an institution as planned will finally accommodate 3,850 patients approximately. On August 4th, a contract was awarded to the Pigott Construction Company of Hamilton as General Contractors for the erection of the six Pavilions, each to house 212 patients and on October 20th another contract for the erecting of the Dining Hall and Kitchen Building and Male and Female Infirmary Buildings was awarded to the same firm. For the mechanical trades, contracts were awarded as follows:

Purdy Mansell Limited, Toronto—Plumbing work, male patients' pavilions Nos. 1, 3, 5. Geo. C. Abbott Limited, Toronto—Heating work, male patients' pavilions Nos. 1, 3, 5. Eggett and Company, London—Plumbing work, female patients' pavilions Nos. 2, 4, 6. Bennett & Wright Limited, Toronto—Heating work, female patients' pavilions Nos. 2, 4, 6.

Canada Electric Co., Limited, Toronto-Electrical work for the six pavilions.

Goodram Bros.. Hamilton-Plumbing work, Dining Hall, Kitchen and two Infirmary Buildings.

R. Rankin & Sons, St. Thomas—Heating work. Dining Hall, Kitchen and Two Infirmary Buildings.

Canada Electric Co., Toronto—Electrical work, Dining Hall. Kitchen and two Infirmary Buildings.

All the buildings will be built of fireproof material throughout. The outside walls will be faced with stone; the floors and flat roofs will be of tile and reinforced beam construction, the former finished in terrazzo or linoleum. All windows are of steel casement type protected on the outside with grille work. All buildings are connected by passageways at ground floor level, with the basement below for service pipes for heating, water supply and drainage. The Pavilions will be three stories in height with stairs and elevators connecting the floors. All these floors are practically alike each with a visitors' room, eight bed wards, single rooms and day rooms for patients with toilet room, wash room and bathrooms, diet kitchen, utility rooms and clothing rooms and nurses' stations.

On the ground floor is a Doctor's office and in an annex. outdoor clothing rooms and wash rooms.

The Central dining hall and kitchen building. This building, connected by corridor with the pavilions and other buildings, in addition to the large dining rooms for male and female patients, provides dining rooms for executives, nurses, female help, male attendants and male help. The kitchen wing will be complete with kitchen proper, refrigerator units and food preparation rooms and dish washing units. The building is one storey and basement in height.

Infirmary Buildings: The Infirmary Buildings, one for men and one for women, are two stories in height, similar in nature of accommodation to the pavilions, except that the Dining rooms are added, one on each floor for the patients with services complete. Each building accommodates 188 patients.

Contracts were awarded to Carroll-Sharp of Toronto for the laying of sanitary sewers and water mains from the City of St. Thomas to the site and for the sanitary services within the grounds and for storm drains to connect up with the adjoining creeks to the west of the L. & P. S. Railway.

Ontario Hospital, Woodstock. Roy Bishop, M.R.A.I.C.. Associate Architect.

In addition to the lands on the east side of number eighteen highway, forming part of the Ontario Hospital property at Woodstock, it was found necessary to secure additional land to the south for the new unit, of 29.4 acres. The new institution designed as a Children's Unit for the epileptic children is composed of a group of one storey buildings with basements and planned to accommodate 425 patients when completed. On October 1st a contract was awarded to the Frid Construction Co., of Hamilton, as general contractors for the Reception building, Cottage buildings, one for male and one for female bed patients; dining hall and kitchen building. Cottage buildings, one for male and one for female for ambulant patients and the connecting corridors between the buildings. The contracts for the mechanical trades were awarded as follows:

Adam Clark Limited. Hamilton—Heating and Plumbing. Canadian Comstock Co., Toronto—Electrical Work.

The buildings are of fireproof construction with buff pressed brick outside walls and sloping roofs covered with heavy butt asphalt slates, windows throughout are sliding sashes of metal in metal frames and have guards on lower part only. The unit will be connected up with the central heating plant of the existing hospital and

the drains will connect up with the present drainage system; the sewage being pumped to Woodstock and the storm drain discharging into the Thames creek. A contract for the laying of storm and sanitary sewers has been awarded to the Sterling Construction Company of Windsor and a contract was awarded to J. A. Vance of Woodstock for extending the water main.

Ontario Hospital, Brampton, James H. Craig, F.R.A.I.C., B.A.Sc., Associate Architect.

The site of this new hospital is about one mile south-west of Brampton and is 306.6 acres in area. The ground slopes gently to the north and the buildings are planned to be diagonally across the site with all the patients' rooms facing south. the group of buildings will provide for 722 tubercular mental patients. A contract was awarded to the Goldie Construction Company of Toronto as general contractor for the Administration Building and awards were made for the mechanical trades as follows:

Geo. C. Abbott Limited, Toronto—Heating. G. R. Muckart, Georgetown—Plumbing. Moss Electric Co., Toronto—Electric wiring.

This building is fireproof throughout and is one storey and basement in height. Walls are of buff coloured brick with stone dressing; sashes are of steel of casement type; floors are of terrazzo, or linoleum throughout.

A contract was awarded to the Mohan Construction Co., Limited, of Toronto, for storm and sanitary sewers.

Ontario Hospital, Port Arthur, Charles B. Dolphin, M.R.A.I.C., Associate Architect; C. D. Howe & Co., Port Arthur, superintending engineers.

The site selected for this institution is immediately north of Port Arthur, with a high elevation commanding a wide view of Thunder Bay to the east and is bounded on the east by Algoma Street and occupies some 164.9 acres, more or less. The new institution is one for mental patients and will accommodate some 850 patients when completed. A contract has been awarded Mr. J. Tocheri of Port Arthur as general contractor for the Administration Building and awards were made for the mechanical trades as follows:

Summers Darling & Co. Ltd., Fort William—Heating and Plumbing. Mahon Electric Co. Ltd., Port Arthur—Electric Wiring.

The building is one storey and basement in height and will be fireproofed throughout and is of local brick with local rubble stone base and dressed limestone trimmings.

#### REPORTS TO THE DEPARTMENT OF HEALTH

Plans have been examined and reports made to the Department of Health in connection with the following hospitals throughout the Province.

London Life Pavilion for T.B. Patients—Report on sketch plans submitted.

General Hospital, Belleville—Report on extension to Board room.

Memorial Hospital, Bracebridge—Report on proposed addition.

Burlington Symington Residence—Report on proposal to use as convalescent home for children.

St. Lawrence Sanatorium, Cornwall—Report on plans of nurses' residence submitted. General Hospital, Cobourg—Report on electric power bill.

Essex County Sanatorium, Sandwich—Report on proposed new buildings and sketch plans.

Freeport Sanatorium—Report on proposed extension.

Hamilton Health Association—Report on new male help building.

Hamilton Mountain Sanatorium—Report on proposed addition to nurses' residence.

Hillcrest Convalescent Home, Toronto—Report on buildings.

Kirkland Lake, Hospital—Report on cement floor.

London Parkwood Hospital for Incurables—Report on new nurses' residence.

Leamington Hospital—Report on new hospital. Victoria Hospital. London—Report on fire escape.

United Church Women's Missionary Society Hospital, Matheson—Report on site.

St. Andrew's Hospital, Midland-Report on proposed addition.

Oakville T. B. Sanatorium—Report on site.

Willett Hospital, Paris-Report on fire escape. Report on proposed extension.

St. Joseph's Hospital, Peterborough—Report on new front entrance.

St. Joseph's Hospital, Parry Sound-Report on fire escapes. Report on new wing.

War Memorial Hospital. Perth-Report and sketch for addition.

Norfolk Hospital, Simcoe—Report on new wing.

General Hospital, Porcupine—Report on floor construction. Strathroy General Hospital—Report on Maid's Residence.

St. Mary's Hospital, Timmins-Report on nurses' home and pediatric department.

Metropolitan Hospital, Windsor—Report on plans.

Hotel Dieu Hospital. Windsor—Report on mechanical plans.

Toronto Hospital for Consumptives, Weston—Report on plans for extension. Department of Health T. B. Clinic. Ottawa—Report on premises to be leased.

Department of Health T. B. Clinic, Timmins—Report on plans for premises to be leased.

Fort William Sanatorium—Report on extension.

#### WELFARE BUILDINGS

#### Boys' Training School, Bowmanville:

The Hospital and Reception building described in last year's report has been completed and occupied. There has been added to the basement accommodation for an X-ray department, fitted up with the necessary dark room, view room and waiting rooms. A survey has been made of farm lots 19 to 21, concession 6, Township of Darlight for the Department of Highways.

#### Girls' Training School, Galt:

The new dormitory building described in last year's report has been completed and occupied. Natural gas has been installed and new cooking ranges have been put in all kitchens throughout all buildings and water softeners have been installed in the school and the dormitory buildings. The view gallery of the school hall has been built up as a safety measure against children climbing. The driveways within the grounds have been laid with impervious surfaces and sketches for a new entrance gateway on the Hespeler-Galt Highway on the east boundary were prepared.

#### REFORMATORIES

#### Industrial Farm, Burwash:

The extension of the main building, referred to in last year's report, being the Dormitory and Hospital wing, has been carried on by inmate labour, under the supervision of the Provincial Secretary's Department from detail drawings furnished by this department, as the work progresses. Plans and specifications were prepared for a semi-detached house for guards' families. This building was of frame, brick veneered and was built under the supervision of the Provincial Secretary's Department, using inmate labour and a number of skilled mechanics.

Ontario Reformatory, Guelph:

The Assembly Hall referred to in last year's report has been completed. Plans and details were prepared for the reconstruction of the Dairy Barn, damaged by fire and the work has been carried out by inmate labour under the supervision of the Provincial Secretary's Department. Plans and specifications for the extension of the main building have been prepared. The new building consist of a wing to accommodate 309 cells and with the existing building, includes a hollow square which will serve the purpose of court yard entirely surrounded by buildings, three full stories in height. The exposed fronts are of rough cast on brickwork with gables of stone to match the existing facade. The cells, except in the north side, are back to back with a plumbing corridor between and are fitted with w. c. bowl, basin with hot and cold water and a table and bed. Cells in the north-east arm have windows in them and face the hollow square referred to. Ample bathing facilities are provided on each floor. The building is so placed that segregation of groups can be readily arranged for. The fronts of the cells are grilled and open on to a wide corridor lighted to the outside. Grille gates to cells are controlled at the end of each row of cells by lever controls outside the cell enclosure space. The buildings are fireproof throughout. The work is being carried on under the supervision of this department with hired skilled labour and using the inmates for the unskilled labour. Much of the material, bricks, structural tile and wall tile are made by inmate labour at New Toronto and all the metal grilles and doors and tables are being made at the Reformatory at Guelph.

#### ONTARIO SAVINGS OFFICES

New premises for branch offices were considered at 69 Wydenham Street, Guelph. A lease has been signed for new premises at 22 King Street, E. Hamilton, and repairs have been made on the vacated premises York and McNab Streets, as per agreements. New signs have been put on the premises at Pembroke. Changes have been made in the lighting at the University and Dundas Streets Branch, Toronto. A new office has been fitted up at 15 St. Clair E., Toronto. Leases have been renewed at 535 Danforth Ave., Toronto, and at Danforth Avenue and Fenwick Ave., Toronto. Premises have been leased at Sault Ste. Marie and plans made for alterations to premises and fitting up.

The following items of work have been carried out by the Department acting on behalf of other Departments.

Sketch plans for Weigh Scale Houses in Highways: report on building for Highway's office at Bancroft and preparing plans and specifications for improvements.

Report on properties at Chatham and Owen Sound for Highways: report on office for Employment Service, Hamilton.

Report on transfer of sections of land from City of London to the Government, being part of the area of the site of the Hygienic Institute, London.

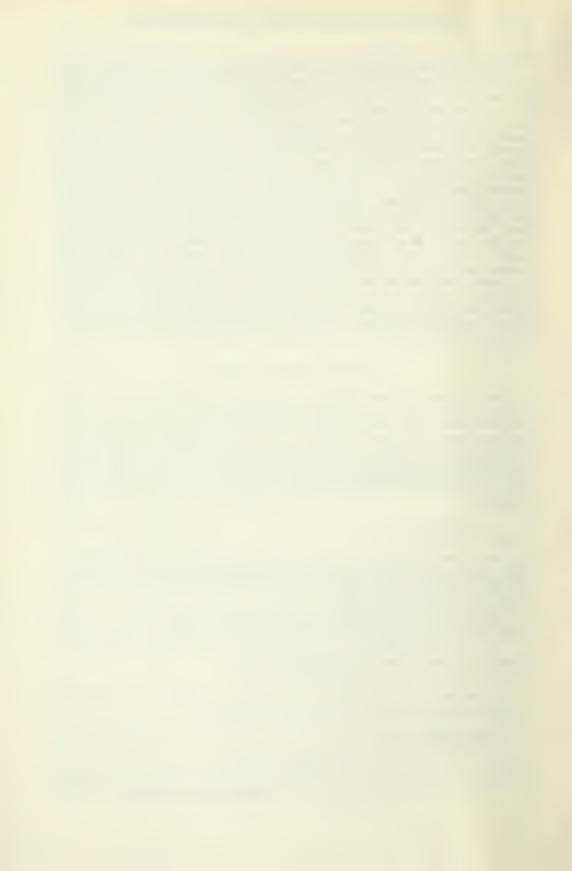
Plans and specifications were prepared at the request of the Department of Health for a Comfort Station at Port Burwell. The work of building this station in frame construction has been carried out under contract.

Throughout the Province the annual inspection of boilers has been made and repairs where necessary have been made to heating plants.

I have the honour to be. Sir,

Your obedient servant,

GEORGE WHITE, Architect.



Toronto. March 13th, 1939.

Honourable Colin A. Campbell, Minister of Public Works, Ontario.

Sir.—

I have the honour to submit the following statement showing the several contracts entered into with His Majesty during the twelve months ending March 31st, 1938, in connection with the Public Buildings and Works, subject to the control of the Public Works Department of Ontario.

I have the honour to be, Sir,

Your obedient servant.

DIGBY HORRELL,
Secretary and Purchasing Agent.

STATEMENT No. 20

Showing the several contracts entered into with His Majesty during the twelve months ending 31st March, 1938, in connection with the Public Buildings and Works, subject to the control of the Department of Public Works, Ontario.

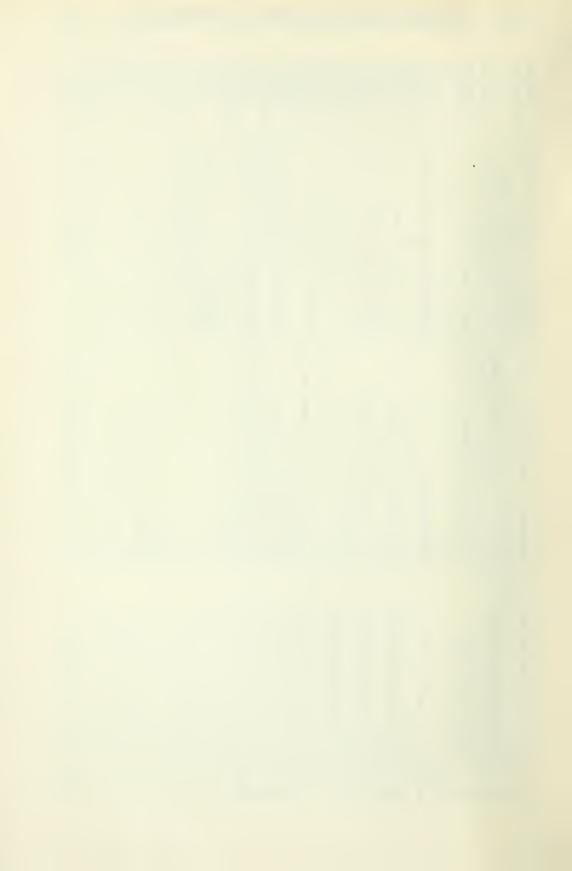
Amount	\$10,500 00	6,693 50	5,521 00	3,257 00	1,040,000 00 less Sales Tax included in Tender	38,773 00 less Sales Tax included in Tender	29,162 00 less Sales Tax	50,343 00 less Sales Tax	12,739 00 less Sales Tax	50,918 00 less Sales Tax	273,840 00	3,525 00	2.297 00 less Sales Tax	3,267 60 less Sales Tax
Contractors	Livingston Automatic Underfeed Stoker Co. Ltd., Hamilton	Arthur V. J. Herbert, Ottawa	C. B. Turner & Co. Ltd., Foronto	C. A. Walker, St. Thomas	Pigon Construction Co. Ltd., Hamilton.	:	Purdy, Mansell, Limited, Toronto	George C. Abbott Limited, Toronto	Carroll-Sharp Construction Co. Ltd., Toronto	E. Leonard & Sons Limited, London	Pigott Construction Co. Ltd., Hamilton.	Beaver Laundry Machinery Co. Ltd., Toronto	Canadian Laundry Machinery Co. Ltd., Toronto	Goodram Bros, Hamilton
Subject of Contract	Supply and installation of Stokers	Resetting Boilers and installing Stoker	Resetting Boilers and installing Stoker	. Erection of Comfort Station	Construction of 6 Dormitory Buildings	Electrical Work for 6 Dormitory Buildings Canada Electric Co. Ltd., Toronto	Plumbing in Pavilions 1, 3 and 5	Heating in Pavilions 1, 3 and 5	Laying Water and Sewer Mains	Installation of Boilers and Stokers	St. Thomas, Ontario Hospital Supply and Supervision of Cat Stone Pigott Construction Co. Ltd., Hamilton	Brantford, Ontario School for the Blind Supply and installation of Laundry Machinery Beaver Laundry Machinery Co. Ltd.,  Toronto	Brantford, Ontario School for the Blind Supply and installation of Laundry Machinery Canadian Laundry Machinery Co. Ltd.,  Toronto	Experiment Supply and installation of two Iron Fireman Goodram Bros, Hamilton
Work	May 10 Orillia, Ontario Hospital	Ottawa, Normal School	Toronto, Normal School	Port Burwell, Comfort Station	Aug. 4 St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	Brantford, Ontario School for the Blind	Brautford, Ontario School for the Blind	Vineland, Horticultural Experiment Station
Date	1937 May 10	June 2	June 7	July 28	Aug. J	Aug. 19	Апg. 20	Aug. 20	Анд. 19	Aug. 27	Sept. 7	Aug. 20	Aug. 20	Aug. 26

00	00	00	00	50 ax	00 ax	00 Sax	00 ax	00 ax	00 ax	00 ax	00 ax	) 00 Tax	00 ax	00 00 ax	00 ax
4,360 00	3,365 00	5,250 00	6,782 00	28,452 50 Sales Tax	50,343 00 Sales Tax	2,477 00 less Sales Tax	55,950 00 Sales Tax	35,442 00 Sales Tax	52,214 00 less Sales Tax	577,427 00 less Sales Tax	63,280 00 less Sales Tax	1,037,800 00 less Sales Tax	84,500 00 Sales Tax	3,428 00 4,496 00 Sales Tax	3,445 00 Sales Tax
				less	less	less	less	less				less	less	less	less
delivery and erection of Laundry Canadian Laundry Machinery Co. Ltd.,  Toronto	Beaver Laundry Machinery Co. Ltd., Toronto	Livingston Stoker Co. Ltd., Hamilton	Pumps and Babcock-Wilcox & Goldie-McCulloch, Ltd., Toronto	Eggett & Company, London	Bennett & Wright Limited, Toronto	Francis Hankin & Co. Ltd., Toronto	Bennett-Pratt, Limited, Toronto	Teagle & Son, Toronto	E. Leonard & Sons, Ltd., London	The Frid Construction Co. Ltd., Hamilton	The Goldie Construction Co. Ltd., Toronto	In- Pigott Construction Co. Ltd., Hamilton.	Joseph Tocheri, Port Arthur	B. J. Miller & Co. Ltd., Toronto	Ontario Electrical Construction Co.Ltd., Toronto
Supply, delivery and erection of Laundry Machinery	for the Deaf. Supply and erection of Laundry Machinery Beaver Laundry Toronto	Supply and installation of Livingston Underfeed Stokers	Supply and erection of Water Pumps and Motors	Plumbing Pavilions 2, 4 and 6	Heating Pavilions 2, 4 and 6	Erection of Brick Chimney	Additions and Alterations	Erection of Power House	Installation of Boilers, Stokers, etc E. Leonard & Sons, Ltd., London	Construction of Children's Annex Buildings The Frid Construction Co. Ltd., Hamilton	Construction of Administration Building The Goldie Construction	Construction of Central Dining Hall, In-Infinaries and Connecting Passageways	Construction of Administration Building	Plumbing in Alterations and Additions; Heating in Alterations and Additions	Electrical Work in Alterations and Additions.   Ontario Electrical Construction Co.Ltd.,
Penctanguishene, Ontario Hospital Supply,	Belleville, Ontario School for the Deaf.	Kingston, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	Mimico, Ontario Hospital	Orillia, Ontario Hospital	Mimico, Ontario Hospital	Mimico, Ontario Hospital	Woodstock, Ontario Hospital	Brampton, Ontario Hospital	St. Thomas, Ontario Hospital	Port Arthur, Ontario Hospital	Orillia, Ontario Hospital	Orillia, Ontario Hospital
7	7	6	10	17	22	22	22	23	30	-	18	20	2	2	23
Sept.	Sept.	Sept.	Sept. 10	Sept.	Sept.	Sept.	Sept.	Sept.	Sept.	Oct.	Oct.	Oct.	Nov.	Nov.	Nov.

	Work	Subject of Contract	Contractors	Amount
2	Woodstock, Ontario Hospital	Electrical Work in Children's Annex Buildings Canadian Comstock Limited, Toronto.	Canadian Comstock Limited, Toronto	3,525 00 less Sales Tax
0.1	Brampton, Ontario Hospital	Electrical Work	Moss Electric Company, Toronto	2,970 00 less Sales Tax
00	Brampton, Ontario Hospital	Heating and Ventilating System	George C. Abbott Limited, Toronto	5,691 00 less Sales Tax
$\infty$	Brampton, Ontario Hospital	Plumbing	G. R. Muckerl, Georgetown	4.075 36 less Sales Tax
00	Port Arthur, Ontario Hospital	Plumbing and Heating Work	Summers & Darling Co. Ltd., Fort	4,167 00 3,422 00 less Sales Tax
22	Mimico, Ontario Hospital	Installation of Coal Handling Equipment in Power Honse	United Steel Corporation 14d., Toronto.	9,220 00
6	St. Thomas, Ontario Hospital	Passenger Elevators in Patients' Pavilions	Oris Fensom Elevator Co. Ltd., Toronto	36.820 00 less Sales Tax
24	St. Thomas, Ontario Hospital	Plumbing for Dining Hall, Infirmaries, etc Goodram Bros, Hamilton.	Goodram Bros, Hamilton	80,000 00 less Sales Tax
2.4	St. Thomas, Ontario Hospital	Heating and Ventilating for Dining Hall, In-Robert Rankin & Sons, St. Thomas. firmaries, etc	Robert Rankin & Sons, St. Thomas	96,400 00 less Sales Tax
2.1	Woodstock, Ontario Hospital	Phumbing, Children's Unit Buildings	Adam Clark Limited, Hamilton	70,164 00 less Sales Tax
52	Woodstock, Ontario Hospital	Heating, Children's Unit Buildings	Adam Clark Limited, Hamilton	65,320 00 less Sales Tax
57	Mimico, Ontario Hospital	Electrical Work, New Power House	Canadian Constock Limited, Toronto	4,180 00 less Sales Tax
27	Mimico, Ontario Hospital	Plumbing for New Power House	Purdy, Mansell, Limited, Toronto	3,350 00 less Sales Tax
29	Woodstock, Ontario Hospital	Laying Drains, for Children's Unit Buildings, Sterling Construction Co. Ltd., Windsor	Sterling Construction Co. Ltd., Windsor	28,819 00
Nov. 30	Sault Ste, Marie, Ontario Savings Office Alterations		. Brechin & Haney, Sault Ste. Marie	7.745 00 less Sales Tax

46,949 00 less Sales Tax	28,795 00 less Sales Tax	13,945 00 less Sales Tax	6,593 00 less Sales Tax	16,150 00 less Sales Tax	16,700 00 less Sales Tax	174,500 00 less Sales Tax	70,936 00 less Sales Tax	9,437 00 less Sales Tax	30,941 52 less Sales Tax
Carroll-Sharp Construction Co. Ltd.,	Canada Electric Co. Ltd., Toronto	. Teagle & Son, Toronto	Francis Hankin & Co. Ltd., Toronto	Horton Steel Works, Limited, Toronto.	. Mohan Construction Co. Ltd., Toronto.	. Pigott Construction Co. Ltd., Hamilton.	B. J. Miller & Co. Ltd., Toronto	Canada Electric Co. Ltd., Toronto	Stephens-Adamson Mfg. Co. of Canada Ltd., Belleville
Installation of Sewers and Drains	Electrical Work in Dining Hall, Infirmaries, Canada Electric Co. Ltd., Toronto	. Construction of Pipe Trench	Radial Brick Chinney	Supply and erection of Steel Water Tower Horton Steel Works, Limited, Toronto.	Construction of Sewers and Drains	Construction of Power House	Piping, Plumbing and Drainage for Power B. J. Miller & Co. Ltd., Toronto.	Electrical Work in Power House	Coal and Ash Handling Equipment, including Stephens-Adamson Mfg. Co. of Canada Platforms
Dec. 13 St. Thomas, Ontario Hospital	Dec. 13 St. Thomas, Ontario Hospital	Mimico, Ontario Hospital	St. Thomas, Ontario Hospital	Jan. 20 St. Thomas, Ontario Hospital	10 Brampton, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	St. Thomas, Ontario Hospital	Jan. 21 St. Thomas, Ontario Hospital
Dec. 13	Dec. 13	Dec. 17	1938 Jan. 20	Jan. 20	Jan. 10	Jan. 20	Jan. 20	Jan. 20	Jan. 21

Digix Homeels, Secretary and Parchasing Agent.



## STATEMENTS

OF THE

## Accountant of Public Works

1937-1938

Department of Public Works, Ontario,

Toronto. June. 2nd, 1938.

Honourable Colin A. Campbell.

Minister of Public Works.

Sir:-

I have the honour to submit detailed statements of Ordinary Expenditure of Civil Government and Maintenance and Repairs Government Buildings; also Capital Expenditure on Provincial Public Buildings, during the fiscal year which ended on the 31st of March. 1938.

I have the honour to be, Sir,

Your obedient servant,

C. KENTLETON,
Accountant Public Works.

#### SUMMARY OF EXPENDITURE

#### FOR FISCAL YEAR APRIL 1st, 1937, TO MARCH 31st, 1938

Service	Ordinary	Capital	Total
Main Office-Administration expenses, etc\$	108.768 37		\$ 108,768 37
Maintenance and repairs. Government Buildings			625,596 82
Public Buildings		2,009.103 58	2,009,103 58
Special Warrants:—			
Comfort Station, Port Burwell		5.144 63	5,144 63
Stock Judging Pavilion, Ridgetown		3,423 36	3,423 36
-			
TOTAL NET EXPENDITURE	734.365 19	\$2.017,671 57	\$2,752.036 76

#### STATEMENT OF REVENUE

MAIN OFFICE:	Ordinary	Capital	Total
Commission on telegraphs and telephones\$ Sale of material Sale of property Building equipment Refunds — Miscellaneous	3.453 07 3.586 76 188 10 242 61	1,550 00 149,224 62	\$ 3,453 07 5,136 76 149,224 62 188 10 242 61
TOTAL NET REVENUE	7.470 54	\$ 150.774 62	\$ 158.245 16

C. KENTLETON,

Accountant.

Toronto, June 2nd, 1938.

# STATEMENT OF EXPENDITURE, MAIN OFFICE, MAINTENANCE, REPAIRS AND CONSTRUCTION OF PUBLIC BUILDINGS FOR FISCAL YEAR ENDING MARCH 31st. 1938

# ORDINARY Service Amount Amount MAIN OFFICE: \$ 3,726 03 Salaries—Minister's salary \$ 3,726 03 Salaries—Permanent 69,977 89 Maintenance 8,040 23 Travelling expenses 1,902 60

Insurance and lightning rods	24,000 00
Local Improvement taxes	671 62
Unforeseen and unprovided	450 00
	\$ 108,768 37
GENERAL SUPERINTENDENCE:	,,
Salaries—Permanent\$	21,726 52
Services, travelling and other expenses	
	27.994 91
GOVERNMENT HOUSE:	
Salaries—Permanent\$	8,375 57
Pay List-Gardeners, Firemen and other help	3.904 80
Water, fuel, light and power	3.815 80
Repairs, contingencies	6.672 04
Furniture and furnishings	947 06
Turniture and Introduction Ferritarian Control of the Control of t	

 Uniforms for Messengers. Gardeners. etc.
 343 00

 Telephone service.
 546 61

 Seduct—Perquisite
 \$ 24,604 88

 486 00
 486 00

\_\_\_\_\_ 24,118 88

LEGISLATIVE AND DEPARTMENTAL BUILDINGS:		
Salaries—Permanent\$	106,282 44	
Water and fuel	28,169 69	
Electric power and light current and gas	22,072 09	
	103,023 59	
Furniture and furnishings and equipment for buildings	4,845 63	
Telephone service	36,239 97 21 03	
Rental of property and office space	305 00	
Typewriter inspection and repairs	3,452 77	
Sewage Experimental Station, Toronto, repairs	53 93 407 28	
454 University Avenue, Toronto, repairs and incidentals	401 28	
\$	434,108 32	
Deduct—Rentals         \$ 41,820 25           " Perquisites         1,260 00		
1.200 00	43.080 25	
-		391,028 07
OSGOODE HALL:	((=0,00	
Salaries—Permanent\$ Fuel, light, water and power	6,650 00 5,443 49	
Furniture, furnishings and equipment	1,029 73	
Telephone service	2,876 07	
Cleaning of building and incidentals	11,089 44 5 00	
General repairs and alterations	9.148 91	
	06.242.64	
Deduct—Perquisite	36.242 64	
_		35,636 64
EDUCATIONAL BUILDINGS:		
Normal and Model Schools: Toronto: Repairs and incidentals\$	1.061.91	
Ottawa: Repairs and incidentals	4,964 21 3,129 77	
London: Repairs and incidentals	1,922 27	
Hamilton: Repairs and incidentals	1,376 39	
Peterborough: Repairs and incidentals	616 68 1,132 85	
North Bay: Repairs and incidentals	1.754 83	
Belleville School for the Deaf: Repairs and incidentals	70.660.05	
Brantford School for the Blind:	10.662 35	
Repairs and incidentals	5.242 55	
Northern Academy, Monteith: Repairs and incidentals	2 ~9	
Ontario Training School for Technical Teachers, Hamilton:	3 72	
Repairs and incidentals	1,554 05	
General: Repairs and incidentals to boilers, etc	20.103 75	
-		52,463 42
AGRICULTURAL BUILDINGS:		
Ontario Agricultural College, Guelph: Repairs and incidentals	6.929 37	
Ontario Veterinary College, Guelph:	0.929 31	
Repairs and incidentals	410 00	
Horticultural Experimental Station, Vineland: Repairs and incidentals	866 71	
Western Ontario Experimental Farm, Ridgetown:	007 11	
Repairs and incidentals	459 83	
Agricultural School, Ridgetown: Repairs and incidentals	328 82	
Eastern Dairy School, Kingston:		
Repairs and incidentals	338 31	
Repairs and incidentals	3,122 18	
General:		
Repairs and incidentals to boilers, etc	3,231 55	15,686 77
		10,000

WEI FADE DITH DINCE.		
WELFARE BUILDINGS:		
Ontario Training School for Boys, Bowmanville: Repairs and incidentals\$	173 35	
Ontario Training School for Girls, Galt: Repairs and incidentals	266 99	
General:	200 ))	
Repairs and incidentals to boilers, etc	121 60	561 94
DISTRICT BUILDINGS:		
Algoma: Repairs and alterations, furniture and furnishings and improvements to grounds to all District Buildings\$	5.011 74	
Cochrane: Repairs and alterations, etc	507 87	
Kenora: Repairs and alterations, etc	1,484 83	
Manitoulin: Repairs and alterations, etc	1,802 99	
Muskoka: Repairs and alterations, etc	3,236 25	
Nipissing: Repairs and alterations, etc	5,922 70	
Parry Sound: Repairs and alterations, etc	1,032 98	
Rainy River: Repairs and alterations, etc	255 95	
Sudbury: Repairs and alterations, etc	4.162 63	
Thunder Bay: Repairs and alterations, etc.  Temiskaming: Repairs and alterations, etc.	2,334 83	
" Salary of Caretaker	4,072 80 752 90	
General: To provide for repairs, installation of boilers and heating plants	102 90	
in Districts and fire protection	1.037 11	
-	1.007 11	31,615 58
ONTARIO HOSPITALS:		01,010 00
Brockville: Repairs and incidentals\$	3,418 28	
Cobourg: Repairs and incidentals.	1,150 59	
Hamilton: Repairs and incidentals.	5.630 31	
Kingston: Repairs and incidentals.	4,583 86	
London: Repairs and incidentals	4,313 32	
New Toronto: Repairs and incidentals	2.838 77	
Orillia: Repairs and incidentals	5,905 08	
Penetanguishene: Repairs and incidentals	7,580 58	
Toronto, Repairs and incidentals	1,750 36	
Psychiatric, Toronto: Repairs and incidentals	778 58	
Whitby: Repairs and incidentals	2,872 56	
Woodstock: Repairs and incidentals	3,770 70	
Fort William: Repairs and incidentals	592 34	
Concord: Repairs and incidentals	1,305 28	
_		46,490 61
TOTAL ORDINARY EXPENDITURE	\$	734,365 19
CAPITAL		
PUBLIC BUILDINGS:		
Legislative and Departmental Buildings:		
To provide additional accommodation	\$	641 35
	4	0.1 00
EDUCATIONAL BUILDINGS:		
Brantford School for the Blind:		
Additions and alterations, including fireproofing		10,888 10
		10,000 10
WELFARE BUILDINGS:		
Ontario Training School for Boys, Bowmanville:		
Construction of new building, furniture and furnishings and expenses in connection therewith	19,000,26	
expenses in connection therewith	12,000 36	
Ontario Training School for Girls, Galt:		
Construction of new building, furniture and furnishings and		
	54.490 32	
	0 1,170 02	66,490 68
		,

ONTARIO HOSPITALS AND REFORMATORIES:		
Brockville: Additions, improvements, equipment and fireproofing\$ 2.7	60 60	
Hamilton: New Nurses' Residence, furniture and furnishings and expenses in connection therewith	06 40	
New Reception Building, furniture and furnishings and expenses in	68 55	
Kingston: Additions, improvements, equipment and fireproofing	23 86	
London: Addition, improvements, equipment, etc	84 80	
New Toronto: Additions, improvements, equipment, etc	03 28	
Orillia: Additions, improvements, equipment, etc	28 26	
Penetanguishene: Additions, improvements, equipment, etc	06 80	
	37 21 40 95	
New Units: For purchase of property construction of buildings, furniture and furnishings, and other expenses	57 77	
Ontario Reformatory, Guelph: Additions, alterations, etc	82 97	1,928,501 45
DISTRICT BUILDINGS:		1,720,001 10
Thunder Bay: New Lock-up, Geraldton\$	28 50	\$ 28 50
SPECIAL WARRANTS:		20 00
Comfort Station, Port Burwell. Stock Judging Pavilion, Ridgetown.		5,144 63 3,423 36
TOTAL		\$2.015,118 07
MISCELLANEOUS REFUNDS:		
Refunds of Deposits with tenders		2,553 50
TOTAL CAPITAL EXPENDITURE		\$2.017.671 57
SUMMARY ORDINARY EXPENDITURE: Main Office and Maintenance and Repairs of Government Buildings		2 721 265 10
		, 104,000 19
CAPITAL EXPENDITURE: Public Buildings		2.017,671 57
		\$2,752,036 76
	:	

## Thirty-First Annual Report

OF THE

# Game and Fisheries Department

1937-1938

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY OF ONTARIO SESSIONAL PAPER No. 9, 1939



#### TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty  $1\ 9\ 3\ 9$ 

#### TO THE HONOURABLE ALBERT MATTHEWS,

Lieutenant-Governor of the Province of Ontario.

#### MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-first Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1938.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,

Minister in Charge,
Department of Game and Fisheries

Toronto, 1939.

#### THIRTY-FIRST ANNUAL REPORT

OF THE

## Game and Fisheries Department of Ontario

TO: THE HONOURABLE H. C. NIXON,

Minister in charge,

Department of Game and Fisheries.

SIR:-

I have the honour to submit to you in this and the following pages the Thirty-first Annual Report of the Department of Game and Fisheries, outlining the activities of Departmental services and including statistical and comparative tables for the fiscal year ended March 31st, 1938.

#### INTRODUCTORY

The wild life of the Province of Ontario constitutes a resource of tremendous importance and value. It is a heritage of the Crown administered by this Department and the policies which govern the administration of this trust are based on the premise that every citizen has an equity in these resources.

The natural resources of any country are the basis of its national wealth and in evaluating the true worth of our wild life natural resources, it is pertinent to point out that these form a vital part of our economic structure. Analyzing these thoughts we find the following facts:

The fur trade of Canada is closely associated with the development of the country, for the trappers and fur buyers were pioneers in opening up the north and the west. In the Province of Ontario trapping is still more or less extensively carried on. During the year under review trappers in excess of sixty-five hundred were licensed and operating in Ontario, while fur dealers' license fees contributed \$27,438.75 to Departmental revenues, which last fact indicates that the trapper is plentifully supplied with avenues for the disposal of his catch. During the same period royalty to the amount of \$63,632.70 was paid to the Department on furs while the value to the trapper of his season's fur catch is estimated at \$966,552.92. In addition to these figures it is pointed out that private fur farmers raised and disposed of 33,235 silver and black fox pelts, 233 cross fox pelts, and 24,864 mink pelts of an estimated value of \$896,963.15.

It should be noted that in Northern Ontario where the lands are mostly still in the Crown, it is the policy to allot a separate area, consisting of a township or part of a township, to each trapper. While much of the north country is still unsurveyed it is hoped that in the very near future eighty per cent of the trappers will have their trap lines on a defined zone. Each trapper will then be responsible for taking care of the fur-bearing animals in his own area, because his future earnings will depend on his conservation of the supply within the zone.

The commercial fishing industry of the Province employed some 4,440 men during the year ending March 31st, 1938, and had approximately \$3,277,701 invested in gear and equipment, while the sum of \$2,644,163.49 was derived by these commercial fishermen from their operations.

From the economic standpoint, however, the greatest worth of our game and fish resources lies in their attraction to tourists. The seasonal influx of visitors from all parts of the world has developed into an industry of major importance and it is estimated that \$117,029,099.00 was circulated by tourists in Ontario during the year under review. This Province has, of course, many attractions, but the lodestone which exercises the greatest drawing power is the excellent fishing to be had in our many lakes and streams. It will be apparent that the natural resources which are the backbone of such an important industry are of very real economic value.

Again, the importance of bird life as an aid to agriculture is beyond computation. Insect control is essential to crop success. Much of this burden is lifted from the shoulders of the farmers by the migratory and non-migratory birds which are a part of our wild life assets.

From the standpoint of the sportsman this wild life heritage has a recreational value which cannot be measured in terms of dollars and cents. Fishing and hunting are perhaps the very finest of the health-giving and recreational sports available to the people of this Province. The incentive which wild life provides for enjoying the great outdoors is of inestimable value in the development of character and good citizenship.

It is therefore obvious from the foregoing comments and observations that our wild life heritage is a trust of great economic and moral worth, and being a common heritage its preservation and wise use is the care of every resident within our borders. How this Department has administered this trust on behalf of the people of this Province during the period under review is detailed in these pages for the information of all concerned.

#### FINANCIAL

#### ORDINARY REVENUE FOR FISCAL YEAR ENDING MARCH 31st, 1938.

ORDINARY—			
MAIN OFFICE—			
GAME—			
Licenses			
Trapping	. \$	29.167.60	
Non-resident Hunting		92.370.00	
Deer		72.320.10	
Moose		3,179.00	
Gun		77,780.81	
Dog		4.636.10	
Fur Dealers		27.438.75	
Fur Farmers		8.737.50	
		140.00	
Tanners		157.00	
Cold Storage	•	157.00	
	0	215 020 00	
		315,926.86	
Royalty	•	63,632.70	
•		\$	379,559.56
FISHERIES—			
Licenses—			
Fishing	. \$	103,408.66	
Angling		331,430.45	
• -		10100011	
	\$	434,839.11	
Sales — Spawn taking		72.70	
Royalty		10,849.95	
-		\$	445,761.76

GENERAL—		
Licenses—		
Tourist Outfitters\$	5,790.00	
Guides	7,782.00	
\$	13,572.00	
Fines	11,561.50	
Costs	664.62	
Sales — Confiscated articles	10,683.74	
Rent	3,229.00	
Commission	1,959.63	
Miscellaneous	231.00	
	\$	41,901.49
	\$	867,222.81
EXPERIMENTAL FUR FARM—		
Sales — Pelts		1,258.08
Gross Ordinary Revenue	\$	868,480.89
DEDUCT—		
Revenue applied in reduction of Expenditures—		
Main Office — Costs\$	664.62	
Experimental Fur Farm — Sale of Pelts	1,258.08	
		1,922.70
Net Ordinary Revenue	\$	866,558.19

Again I am privileged to report an increase in the amount of the total ordinary revenue which was collected by this department during the year under review. The total figure of \$866,558.19 is the largest yet produced in any one fiscal year, and is \$84,340.56 in excess of the previous high total, viz:— that of \$782,217.63 collected in 1936-37.

This increase is attributable principally to the larger revenue derived from the sale of non-resident angling and hunting licenses in 1937-38 as compared with the figures for 1936-37. The sale of such angling licenses in 1936-37 produced \$272,690.50 as compared with a total of \$331,430.45 from a similar source in 1937-38, an increase of practically sixty thousand dollars. This is an interesting and encouraging sign. The tourist is evidently finding out what the resident fisherman already knows, that as a result of the energetic restocking of the past few years, Ontario waters keep on improving, despite the intensity with which they are being fished. The economic possibilities of this seasonal business loom larger than ever before, and we believe the people of the Province are becoming increasingly conscious of the necessity for conserving and continually renewing the fish and game resources which add so much to the attractiveness of this Province as a vacation resort. From the sale of non-resident hunting licenses in 1937-38 we derived \$18,432.50 in excess of the revenue derived from that source in the previous fiscal year, so that of the total increase of \$84,340.56 to which previous reference has been made, the sum of \$77,172.45 was due to the increased sale of various non-resident hunting and angling licenses.

Revenue exceeded expenditure, both ordinary and capital, by \$302,619.86. Ordinary expenditures totalled \$513,383.80, some of the principal items of this expenditure being \$212,038.54 on the work of enforcing provisions of the Game and Fisheries Act, and \$166,939.91 on Fish Hatchery Service. Other items of ordinary expenditure include \$10,662.43 spent in connection with the propagation of

game birds and animals and \$4,182.98 at the Experimental Fur Farm at Kirkfield (Victoria County). Expenditures in connection with the payment of wolf bounties totalled \$27,474.24, while grants to various individuals and organizations amounted to \$8,400.00. The total amount paid out for capital expenditures was \$50,554.53, the greater proportion of which amount was spent on projects which were necessary in connection with the expansion of our fish culture services. Some of the principal items were as follows:—Manitoulin Bass Ponds, \$12,911.92; North Bay Trout Rearing Station, \$15,811.04; and White Lake (additional ponds), \$12,465.33.

#### **GAME**

The comparative table which follows will show in detail the various hunting licenses, both resident and non-resident, which were issued during the year under review, and such figures for the three previous years. While reference has already been made to the increased revenue derived in 1937-38 from the sale of non-resident hunting licenses, it will be of interest to state that the revenue derived from the sale of resident hunting licenses—deer, moose and gun,—in 1937-38 was in excess of that collected from the same sources in the previous year by the sum of \$19,419.65.

	1934	1935-36	1936-37	1937-38
Resident Moose	512	496	542	580
Resident Deer	12,890	14,779	15,394	18,672
Resident Deer (Camp)	175	258	262	283
Resident Deer (Farmers)	4,902	5,221	5,386	6,503
Resident Gun	76,210	85,884	79,531	90,756
Non-resident Small Game	489	686	1,129	1,634
Non-resident Deer	475	652	848	1,036
Non-resident "General"	457	680	878	1,043

The sportsman to-day is not so much interested in the kill as in the chase, although his pleasure is increased when his efforts are rewarded. Meat, however, is not the primary consideration. Health and "the pursuit of happiness" are the lures which beckon the good sportsman from the artificialities of life to the soothing influence and restful atmosphere of nature. Wild life is but a means to an end, an incentive to physical and mental relaxation.

The following pages contain a summary of conditions as they apply to the game life of the province,—both animal and bird, and which information is compiled from reports submitted by the various members of the field service staff of the Department:—

DEER:—This particularly fine species of game animal continues to be fairly plentiful in various sections of the Province and while the hunting of these animals during the regular open season supplies an exhilarating brand of recreation for the interested sportsman there is no doubt, notwithstanding the fact that there was provision for some minor moderation of the regulations which had previously applied to restrict the taking of does and fawns, that the preservation and possible improvement of the existing deer herds depends very largely upon the protection which the existing provisions of the Game and Fisheries Act provide and the observance of such restrictions by all concerned.

Reports submitted by members of the Field Service staff indicate that so far as the northern and northwestern portions of the Province are concerned generally speaking conditions are quite favourable, though there are various scattered sections throughout this region where such is not the case. The northern districts in the

southern portion of the Province continue to attract the majority of hunters seeking deer, and it would appear that these animals are still sufficiently plentiful and showing some increase in numbers in some sections of these areas, i.e. Parry Sound, Muskoka, Haliburton, Renfrew and the northern portions of Victoria, Peterborough, Hastings, Addington, Frontenac and Lanark, to warrant the belief that this branch of sporting activity will long be available here. In the Counties included in the southwestern peninsula and in certain eastern counties there has been an entire close season on deer for the past several years, and even though these particular counties represent the most settled portions of the entire Province we are able to state that the complete protection which prevails here is resulting in the number of deer increasing in most of these counties. This has been particularly the case in the counties of Bruce and Grey where conditions have been so favourable as to warrant the Department providing a short open season there.

The open season for deer during the year reported on was a highly successful one. Reports to the Department from sportsmen and overseers indicated that as a general rule deer were more numerous in certain sections than was the case in the previous season. While this may in some measure be attributable to a natural movement of the herd, it is reasonable to assume that the comparatively mild winters of the past two years, together with the protective measures in force have resulted in increased reproduction. We are referring, of course, to those areas in which hunting was legal. The Department's Inspector, who was stationed at a strategic point on the highway to check hunters on their return from the north, reported that the consensus of opinion was that there were more deer seen than ever before. A Deputy Game Warden with whom we were discussing the hunt said,—"I have been hunting deer for seventeen years and never saw them so thick as they were this year." Such reports are encouraging, indicating as they do that the deer herd, with a reasonable measure of protection, is capable of replenishing itself despite natural and unnatural enemies.

MOOSE:—This splendid monarch of the Ontario forest is to be found only in the northern portion of the Province though scattered specimens are to be found in Muskoka, Parry Sound, Renfrew and in the sections immediately to the south of Algonquin Provincial Park. Nowhere in Ontario are they plentiful and there is no doubt that the various regulations which exist for the protection of these magnificent animals are absolutely necessary for the welfare of this species. It is only in a few sections that their numbers are reported to be even fairly plentiful, and nowhere has any decided improvement in numbers been observed.

CARIBOU:—These animals are extremely scarce and are reported only from the Districts of Rainy River, Kenora and Thunder Bay, also from the northern portions of Algoma and Cochrane. Some slight increase has been observed in the eastern portion of Thunder Bay and in the Chapleau Game Preserve, which is located in the Districts of Sudbury and Algoma.

EI.K:—As has been outlined in previous reports the elk which are to be found in Ontario at present are those which were imported to the Province from Western Canada, and their progeny. The original shipments were made with the approval and co-operation of the Dominion National Parks Branch, and on arrival here were placed on the following Crown Game Preserves, viz:—Pembroke, Burwash, Chapleau, Nipigon-Onaman and Goulais River-Ranger Lake.

There has been some improvement in practically all instances save one,—those liberated on the Nipigon-Onaman Crown Game Preserve. Elk from the herd at Pembroke have been placed in Algonquin Park and on the Bruce Peninsula, while some animals from the herd at Burwash were liberated in territory immediately adjacent thereto. It is reported that their numbers have increased in the Chapleau and Burwash Game Preserves and also on the Bruce Peninsula, while some of these animals have been observed on Beausoleil Island in Georgian Bay off Simcoe County.

BEAR:—These animals are both hunted and trapped but not very extensively, though there is an indication that increasing numbers of non-resident hunters are becoming interested in the spring hunt which has been provided during the months of April and May. They are available in varying numbers throughout the entire northern portion of the Province and are reported to be quite plentiful in many sections, and to a lesser extent in Parry Sound, Muskoka, Haliburton, Renfrew and the northern part of Hastings County.

RABBITS:—Rabbits continue to provide many opportunities which are favourable from the sportsman's point of view, and more particularly is this so in the southern counties. In this section of the Province cotton-tail rabbits are available in satisfactory numbers, while the jack rabbit (European Hare) is pretty well confined to the western counties though this species is slowly extending its numbers to the east and north. In northern Ontario snow shoe rabbits are the prevailing species and although they are reported to be quite scarce there are indications of improvement in some districts.

Rabbit hunting is a favourable activity of Ontario sportsmen during the fall and winter months. The "jack" is probably the most popular of the species because of its size and the open country it inhabits. Its long and powerful legs propel it at tremendous speed and the difficulty of hitting such a fast moving target intensifies the pleasure of the hunt. The "jack" does not readily capitulate. It has power and stamina which provide an excellent defense against all but the most experienced. The varying hare or snowshoe rabbit on the other hand has quite a burst of speed, but lacks the reserve power and physical courage of the "jack". It succumbs readily.

The cotton tail and the hare are in about the same class from the sporting standpoint, although the former provides a measure of additional sport to those who enjoy hunting with ferrets.

Hunters should realize that there is just as much danger of exterminating the rabbit through needless waste as any other species of game. This is particularly true in the more populous areas, where hunting is heavy and habitat restricted. Game which provides such healthy outdoor recreation at a minimum of expense is worth conserving.

SQUIRREL (Black and Grey):—These animals are quite numerous in the southern counties and particularly is this applicable to the western portion. They were afforded the protection of an entire close season which in all probability contributed largely to the improvement evident in the numbers of these varieties of squirrel.

PARTRIDGE:—Conditions as they applied to the various species of this desirable game bird were not sufficiently favourable to justify any action along the lines of an open season.

The sharp-tailed grouse or prairie chicken is found only in the northwestern districts and while scarce they showed signs of some increase.

As far as ruffed grouse are concerned, these birds exist throughout the Province, though their numbers are, of course, quite limited in the more settled sections. However, as previously stated in no section were they in any way numerous though reports received by the Department advised that improvement was noticeable principally in Northern Ontario and the northern districts and eastern counties of the southern part of the Province.

QUAIL:—These birds are found principally in the counties of Essex, Kent, Lambton and Middlesex, and in counties immediately adjacent to the eastern boundaries thereof, and in which section they are fairly plentiful. Scattered bevies of quail are reported also in some eastern counties, that is Stormont, Dundas and Glengarry.

PHEASANT:—During the year reported upon the Department intensified its pheasant re-stocking activities insofar as they applied to live birds, with the result that the distribution of eggs was to that extent curtailed. Departmental records reveal the fact that only 303 settings, or 4,545 eggs, were distributed to interested applicants, while live pheasants numbering 5,076 in all were liberated in suitable areas, 4,703 of which birds were placed in various Regulated Game Preserve areas, a scheme of protected areas inaugurated during the year, and to which scheme detailed reference is made later on in this Report.

The following references concerning the earlier efforts in connection with the re-stocking of pheasants will probably be of sufficient interest to warrant inclusion in this Report.

It seems rather a hopeless task to definitely determine the time and circumstances when the English ring-necked pheasant was first introduced into this Province. The only official record to be found is in the published reports for the Department. It is strange that while reference is made in some of them to conditions, no information is included as to when they were planted or by whom. The first reference found is in a report of the Ontario Game and Fish Commissioners for 1895, and concerns Mongolian and English pheasants, viz:—

"There is an increasing feeling among sportsmen that further and greater efforts must be made in the near future looking towards the restocking of game covers, and quail seems to be the only bird which offers a fair compensation for the outlay of time and money. As is well known, none of the other native birds admit of propagation so that restocking with them is out of the question. Some ardent sportsmen have introduced the Mongolian pheasant and also the English pheasant but sufficient time has not yet elapsed in which to test the success of the experiment."

The report of the same organization for 1896 mentions the fact that a number of English pheasants, about 120, were reared at Rondeau during the year.

And again in 1901:—"It has been suggested in consequence of the English pheasants that have been liberated on Point Pelee having done so well, that the Point should be made a preserve and no shooting or hunting at any time be allowed on the Point."

Finally,—reference is made to an open season, and the following is quoted from the Ontario Game and Fisheries Commission (Special Committee) Final Report, 1910,—"The open season for pheasants which was declared during the past year, resulted apparently in the satisfactory discovery that the birds were more plentiful than had been supposed, and most excellent sport would appear to have been enjoyed. Sufficient time, however, has not yet elapsed to enable a determination to be arrived at in regard to the advisability of repeating the experiment of an open season during 1911. Careful investigation should be made at this point by the proper authorities, for the pheasants in some localities have become so well acclimatized and are thriving to such an extent that it would be a grievous mistake to allow their numbers to become unduly diminished."

HUNGARIAN PARTRIDGE:—These birds are not very plentiful anywhere in the Province. So far as the north is concerned their numbers are negligible though evidence of their existence is reported from certain sections of Thunder Bay, Algoma and Temiskaming. They are most numerous in the very extreme southwestern counties, while reports indicate they are becoming more plentiful in some of the eastern counties. During the year 102 of these birds were distributed by the Department in selected areas.

**DUCKS:**—Generally speaking this species of migratory waterfowl provides quite a large proportion of the sport which is available to the hunter during any season, and the present restrictions which apply for their protection are providing a measure of conservation which will undoubtedly be beneficial and result in maintaining the supply for the enjoyment of sportsmen in future years. Reports from practically every section of the Province are quite favourable, though there are some areas in the north in which conditions are not too good.

GEESE:—There are not many areas in Ontario in which these birds may be successfully hunted, and while they are observed in flight during the fall and spring migrations in numerous sections the conditions which prevail during these migrations are such that during the open season which is provided any hunting which is available is pretty well restricted to the James Bay shore in the far north, and to a few of the extreme southwestern counties.

WOODCOCK:—This species is extremely scarce in Northern Ontario, and is none too plentiful in the southern portion of the Province. From reports to the Department it is apparent that most favourable locations are in some of the counties along the north shore of Lake Erie.

SNIPE:—As in the case of the woodcock, snipe are extremely scarce in the northern districts. They are reported to be somewhat plentiful in a number of the eastern counties, and while some improvement was observed in scattered areas throughout the southern counties as a general rule their numbers are sufficient to provide nothing more than fair shooting.

**PLOVER:**—Continues to be very scarce in practically every section of the Province, and no improvement indicated by reports.

During the year under review Regulations were approved which provided for special open seasons, details of which are as follows:—

- (a) Deer in that portion of Carleton County lying west of the Rideau River,—from November 5th to 20th, inclusive. General deer hunting regulations applied.
- (b) Deer in the counties of Bruce and Grey,—from November 8th to 13th, inclusive. General deer hunting regulations applied except that the use of dogs was not permitted.
- (c) Pheasants—Pelee Island, October 28th and 29th. Five birds per day. Special municipal license \$3.
- (d) Pheasants, quail and Hungarian Partridge,—The counties of Essex and Kent, October 28th and 29th. Three pheasants, three quail and two Hungarian Partridge per day.
- (e) Pheasants,—in the following Townships, which were established as Regulated Game Preserve Areas, viz:—Markham, Nelson, Trafalgar, Flamborough, E., Beverley, Ancaster, Saltfleet, Binbrook, Barton, Humberstone, Canborough, Dunn, Cayuga North, Cayuga South, Oneida and Seneca, October 28th and 29th. Three birds per day. Special municipal license \$1. per day.
- (f) Pheasants,—in the following Townships, which were established as Regulated Game Preserve Areas, viz:—Grimsby North, Clinton, Louth, Grantham, Niagara, Caistor, Willoughby and Bertie, October 28th. Three birds per day. Special municipal license \$1.00.

#### FUR BEARERS

Conditions as they apply to fur bearing animals throughout the Province are set forth in the following references, as summarized from reports of the Field Service staff to the Department:—

BEAVER:—These animals had the protection of an entire close season, though it was found necessary to open the season on Manitoulin Island for the first fifteen days of November. Trapping of these animals under the regulations which prevailed restricted such operations to trappers and farmers actually resident on Manitoulin, limited the catch of each person to not more than ten beaver, and required that pelts so taken be disposed of under supervision of the Department. The close season which has been in effect has resulted in a noticeable increase in the numbers of these animals practically throughout the entire Province.

FISHER:—This species is extremely scarce throughout the Province and few if any are taken anywhere south of the French and Mattawa Rivers.

FOX:—Conditions remained pretty much the same in the various sections in which these animals have been found, with improvement and decreasing numbers reported from different districts. There was unquestionably no general increase, which would appear to be supported by the fact that there was quite a noticeable decrease in the numbers of the various species of fox taken during the season. Silver fox now are very seldom taken in the wild.

**LYNX:**—This species also is extremely scarce everywhere in the Province, and while the pelt is one of the most valuable of those taken in the wild the trapper does not derive much of his revenue therefrom.

MARTEN:—Very scarce, and while there was an increase in the number of pelts taken during the season, such increase should not be regarded as an indication of any permanent or general improvement.

MINK:—There would appear to be no doubt that this species is becoming less numerous in many areas. There were few sections in which conditions were favourable or any improvement observed.

MUSKRAT:—Conditions in Northern Ontario particularly were not at all good, and while there were some sections in Southern Ontario from which favourable reports were received, generally speaking conditions here were only comparatively fair. The decline in the annual catch which has now been progressing over a number of years continued during the season reported upon.

OTTER:—These animals are to be found chiefly in Northern Ontario, and even there they are not particularly numerous. Conditions remained about the same as is indicated by the annual take. While continuing scarce some improvement was reported in scattered areas.

RACCOON:—This species does not inhabit the north. General conditions in southern Ontario remained about the same. They are not plentiful anywhere, and reports indicate that generally speaking their numbers are possibly decreasing to some extent.

SKUNK:—While these animals were reported to be very plentiful throughout the entire Province there was quite an extensive decrease in the number taken by trappers during the season.

**WEASEL:**—This species continues to be very plentiful in every portion of the Province, with the possible exception of certain counties in the southwestern peninsula. The catch was about the same as in the previous year.

There can be no question as to the necessity of the present restrictions which are provided by the Game and Fisheries Act as a means of protecting existing fur bearing animals in this Province, and while in some particular instances these regulations may appear to be unnecessary appearances of such a nature are deceptive. As a general rule the more desirable species of fur bearers are diminishing in number, no doubt attributable for the most part to decreased suitable and available habitat as well as to the intensified trapping operations to which these animals have been subjected in past years. In Northern Ontario all the species of fur-bearing animals mentioned in this report are to be found in varying numbers while in Southern Ontario at the present time fur bearing animals would include fox, mink, muskrat, raccoon, skunk and weasel, and, to a lesser extent beaver and otter, the other species herein referred to being practically extinct in this section.

There is no doubt that the year under review was an extremely difficult one for the trapper, because as will be observed from the following comparative statement not only was there a considerable decrease in the number of pelts actually taken and disposed of but the prices which these pelts commanded on the open market were indeed quite low, and much below what has been recorded as average in more recent years.

This comparative table shows the numbers of pelts of the various species of fur bearing animals which were exported from or dressed within the Province, during the year under review as well as in the two years immediately preceding:—

	1935-36	1936-37	1937-38
Bear	411	476	496
Beaver	6,785	238	235
Fisher	2,137	2,117	1,463
Fox (cross)	5,424	4,156	2,426
Pox (red)	37,044	35,232	24,912
Fox (silver or black)	500	360	201
Fox (white)	883	17	47
ynx	2,642	2,081	1,284
Marten	1,282	1,464	1,709
Mink	47,057	33,930	22,766
Muskrat	398,043	370,239	343,972
Otter	3,701	3,779	3,737
Raccoon	13,259	14,243	13,194
Skunk	50,747	87,950	61,576
Weasel	42,643	78,643	79,853
Wolverine	4	2	5
	613,057	635,203	557,876

Information compiled in the Department shows that these furs were worth to the trappers responsible for taking the same, the sum of \$966,552.92, which is but little more than fifty per cent of the amount realized from such sales in the previous year.

To these figures should be added statistics as they apply to the product of licensed fur farms not subject to the payment of royalty, including silver, black and cross foxes and mink. Furs disposed of during the year by these fur farmers included 33,235 silver fox pelts worth \$683,643.95, 26,480 of which were exported and the remaining 6,755 dressed in the Province; 24,864 mink pelts worth \$209,852.16, 24,381 of which were exported and the remaining 483 dressed in the Province; and 233 cross fox pelts worth \$3,467.04, 192 of which were exported and the remaining 41 dressed in the Province.

#### FUR FARMING

During the year there were 1,536 licenses issued to authorize fur farming operations. Of this number some 331 were new licenses. As compared with the previous year there was a net increase in the number of licensed fur farms under operation totalling 188. The records show that silver foxes were raised on 986 of these fur farms, cross foxes on 103 fur farms, red foxes on 133 fur farms, mink on 614 fur farms, and raccoon on 91 fur farms. There were 859 fur farms on which operations were confined to foxes, 451 fur farms on which only mink were raised, while on 38 fur farms only raccoon were propagated. On the remaining 188 fur farms operations were not limited to any one species.

The subjoined comparative table shows the total breeding stock retained on these licensed fur farms as on the first day of January in each of the years included therein:—

SUMMARY OF BREEDING STOCK ON LICENSED FUR FARMS
AS AT JANUARY 1ST

	1936	1937	1938
Beaver Fisher Fox (cross) Fox (red)	70 16 367 228	21 20 257 207	25 16 235 140
Fox (silver or black) Fox (blue) Lynx Mink	21,645 5 2 12,332	$\begin{array}{c c} 23,869 & & \\ 0 & & \\ 2 & \\ 15.539 & & \end{array}$	$24,848 \\ 0 \\ 2 \\ 21.982$
Muskrat Raccoon Skunk	375 524 3	351 358 5	302 351 9
Bear Marten	21	15 4	15 11

It will be observed that silver fox and mink represent by far the greater proportion of the activities which are carried on by the operators of these licensed fur farms, and though in each instance an increase is indicated, that in the case of mink far exceeded the increase in silver fox. The raising of mink is rapidly becoming an important branch of the fur farming industry. One can realize the truth of this statement when it is noted that the stock of mink maintained on these fur farms increased from 8,605 to 21,982 in a period of only three years.

#### CROWN GAME PRESERVES

One of the first measures taken to preserve the game in the Province of Ontario was the setting aside of large areas of land as Provincial Parks. In these Parks no hunting or trapping is permitted and the wild life is given a chance to increase and develop under natural conditions and without molestation from man. These protective areas proved so successful that the idea was extended and large areas of crown lands in Northern Ontario have been set aside for the same purpose under the Department of Game and Fisheries. These areas are known as Crown Game Preserves. At the present time there are 116 such Crown Game Preserves with an area of approximately 6,068,914 acres.

While the largest portion of this area is situated in Northern Ontario it has been possible to establish a number of preserve areas in the southern part of the Province with the co-operation of owners of private property. These areas will be primarily useful for the protection and propagation of upland game birds, although all species of desirable game will be protected.

It is generally acknowledged that where wild life is allowed to propagate with a minimum of human interference and in surroundings which provide natural food and cover there will in time be a return to the normal conditions set up by nature. This means not only increased game in the protected areas but a general improvement in conditions throughout the Province.

During the year five additional Crown Game Preserves were established in southwestern Ontario in accordance with the schedule appended hereto, and changes were made in the boundaries of the Jocko Crown Game Preserve in the District of Nipissing and in the Peasemarsh Crown Game Preserve, in the County of Grey.

Designation				County	Extent in Acres
Crosshill Crown Highgate "Long Branch" Wainfleet "Windham"	Game	Preserv	·e	Waterloo Kent Peel Welland Norfolk	1,200 575 450 5,000 400

#### REGULATED GAME PRESERVE AREAS

The year saw a new development in the matter of the control of indiscriminate hunting. In line with the desire to provide better hunting and to maintain in large measure the privilege which sportsmen have enjoyed for generations of using private lands in the pursuit of game, arrangements were entered into between the Department and some twenty-seven Townships whereby hunting in these Townships would be restricted to certain open seasons for pheasants and rabbits, and that only those who had the necessary hunting license issued by the Municipality would be authorized to take advantage of the open dates. This had the effect of creating these areas as Regulated Game Preserves because of the fact that hunting was prohibited except on open dates as proclaimed on the recommendation of the Department. These open dates were limited to a two-day pheasant shoot and a seasonal period during the winter for rabbit hunting. It had an additional effect of preventing an influx of non-residents to the area because the number of special licenses issued was based on the number of available pheasants and only those with a pheasant license were permitted to partake in the rabbit hunting. The Municipality collected a small fee for the license. The Department stocked these areas with several thousand live birds and hopes to largely increase its pheasant production for the restocking of these Regulated Areas.

By concentrating the restocking of pheasants on these Regulated Areas, rather than scattering the available birds over a large section of Southern Ontario and thereby thinning the numbers in most counties below the point where hunting is desirable, it is believed a sufficient quantity of birds will be raised to warrant an open season. The bag limit which would apply during an open season would permit the taking of cock birds only. Continuous replenishment of the stock will be part of the plan so that an open season simply means a temporary reduction of the surplus stock. In other words protecting the hens will maintain an ever increasing brood stock and the surplus destroyed during a shoot will be replaced to take care of the next open season.

Several specific and important results are anticipated from this arrangement. First, and quite important, is the fact that the farmer will not be subject to the expense and inconvenience of having irresponsible hunters tramping over his lands and damaging property during the whole gun license season. It is well known that the actions of a few have brought about a feeling of animosity between the farmer and the sportsman, a situation which threatens to put an end to free hunting. Those who

obtain a license during the open season will be readily identified, and abuse of the privilege will mean prosecution and cancellation of any future privileges. As the carrying of fire-arms for hunting purposes within such Regulated Areas is forbidden, except during such open seasons as may be prescribed and then only under the authority of a special license, it is hoped to eliminate practically all of the poaching which otherwise takes place.

It is pleasing to learn that the open seasons established in these Regulated Townships were quite successful and have done much to stay the epidemic of land posting which threatened so seriously to curtail the opportunity for hunting over private lands. It is not suggested, of course, that the present arrangements are perfect, experience will doubtless bring minor changes in control and regulation but the inauguration of such a scheme will, we believe, receive the approbation of every sportsman when its underlying benefits become better known.

The various townships which entered this scheme of Regulated Game Preserve Areas during the year are as follows:—

The Township of Markham, in York County;

The Townships of Nelson and Trafalgar, in Halton County;

The Townships of Flamborough East, Beverley, Ancaster, Saltfleet, Barton and Binbrook, in Wentworth County;

The Townships of Grimsby North, Clinton, Louth, Grantham, Niagara and Caistor, in Lincoln County;

The Townships of Stamford, Willoughby, Bertie and Humberstone, in Welland County;

The Townships of Canborough, Dunn, Cayuga South, Cayuga North, Oneida and Seneca, in Haldimand County.

Part of the Township of Westminister, in Middlesex County;

The Township of Bayham, in Elgin County.

#### WOLF BOUNTIES

The following is a comparative table of condensed wolf bounty statistics covering the last four fiscal years:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Oct. 31, 1934. For year ending Mar. 31, 1936. For year ending Mar. 31, 1937. For year ending Mar. 31, 1938.	1,159 1,090	812 1,713 1,197 837	57 33 31 30	1,859 2,905 2,318 1,889	\$27,080.65 42,399.89 33,360.63 27,474.24

During the year 1,380 claims for wolf bounty were paid in respect of 1,889 wolves as shown above, in addition to which 19 claims were disallowed for various reasons. Bounty was paid to 1,109 different persons, 735 of whom applied in connection with only one wolf each. Applicants submitting claims on two wolves numbered 179. The remainder of the applicants had claims for varying numbers, while the largest total bounty paid to any one person amounted to \$210.

Details as to the sources of origin of the pelts submitted for bounty are set forth in the following table:—

#### REPORT OF WOLF BOUNTY CLAIMS

District on County	Adult Wolves		Pups	Total
District or County	Timber	Brush	- ups	Total
Algoma	82	109	0	191
Bruce	13	6	0	19
Cochrane	38	2	4	44
Frontenac	6	0	0	6
Grey	0	2	0	2
Haliburton	8	0	0	8
Hastings	8	4	6	18
Huron	1	0	0	1
Kenora	263	144	16	423
Lambton	0	4	0	4
Lanark	1	1	0	2
Leeds	1	0	0	1
Manitoulin	13	111	1	125
Muskoka	12	6	0	18
Nipissing	38	11	0	49
Norfolk	0	1	0	1
Lennox & Addington	7	1	0	8
Parry Sound	59	3	0	62
Patricia	59	21	2	82
Peterboro	1	0	0	1
Rainy River	155	188	3	346
Renfrew	2 4	0	i	2.5
Simcoe	11	1	0	12
Sudbury	62	114	Ŏ	176
Temiskaming	2	2	Ö	4
Thunder Bay	$16\bar{1}$	112	, š	276
Waterloo	1	0	o o	1
Welland	Õ	ľ	ŏ	ī
York	0	ī	ő	î
Totals	1,026	845	36	1,907

While the total expenditures incurred in connection with the administration of the Wolf Bounty Act amounted to \$27,474.24, actual bounty payments accounted for \$27,204.00 of this total, details of which are contained in the following statement:—

Brush Wolves (Counties) (Districts)	21 816		\$ 6.00 \$15.00	\$ 126.00 \$12,240.00	
Total Brush Wolves	837				\$12,366.00
Timber Wolves (Counties) (Districts)		-	\$ 6.00 \$15.00	\$ 426.00 \$14,265.00	
Total Timber Wolves	1,022				\$14,691.00
Pups (Counties) (Districts)			\$ 2.00 \$ 5.00	$\begin{array}{ccc} \$ & 2.00 \\ \$ & 145.00 \end{array}$	
Total Pups	30				\$ 147.00
Grand Total	1,889				\$27,204.00

In the northern districts the Province pays the entire bounty, but so far as claims originating in the southern counties are concerned, bounty is paid by the County Treasurers and forty per cent rebated to the counties by the Province.

Trappers and farmers were responsible for taking more than eighty per cent of the wolf pelts submitted for bounty, while it is reported that forty-five per cent of the animals were snared, twenty-six per cent trapped, twenty-one per cent shot, and the authorized use of poison was responsible for taking only three per cent. The remaining five per cent were taken by miscellaneous means.

#### GENERAL

#### GAME & FISHERIES ACT.

The Game and Fisheries Laws are an important part of the Department's programme to properly conserve the heritage with which it is entrusted. They are not merely regulatory or restrictive but are, in reality, the controlling factors which determine the abundance or otherwise of our wild life resources. They are the result of biological knowledge and practical experience, and have been framed with due regard to the life history of the various species, particularly that phase of it which determines perpetuation. These laws have many classifications but in general they are intended to develop all classes of desirable wild life while permitting the greatest possible use of these resources, and to discourage certain undesirable forms which do not fit into the economic scheme of things.

A study of the laws and regulations will convince the most skeptical that they are an important part of the programme necessary for the conservation of our fish and game resources and that when the public is urged to observe the laws it is a request for co-operation in the management of a valuable trust. Non-observance of the regulations, however unimportant the details may seem, is unfair to that ever-increasing family of sportsmen and nature lovers who conscientiously obey the laws and pursue their recreational pleasures from the highest standard of sportsmanship.

Amendments enacted by the Legislative Assembly and which became effective during the year included the following provisions:—

- (a) Open season and other regulations governing the hunting of woodcock, snipe, ducks, geese and other migratory water-fowl to be as provided by the Migratory Birds Convention Act (Canada).
- (b) Parties of non-resident hunters to engage licensed guides when hunting moose.
- (c) Non-resident bear hunting license for the months of April and May at a fee of \$5.25.
- (d) Adjustment of royalties on the pelts of certain fur-bearing animals,—lynx, mink, otter and skunk. Ranch raised cross fox exempted from royalty.
- (e) Taking of does and fawns permitted in the proportion of one doe or fawn for each two hunters in the party.
- (f) Use of snares prohibited in Peel and Carleton Counties.
- (g) Permitting use of an automatic shot gun when so permanently reconstructed and plugged as to be capable of holding not more than two shells at any one time.

Amendments to the Fisheries Regulations adopted during the year included the following provisions:—

- (a) Minor changes in the open seasons for pickerel, lake trout and whitefish in certain northern districts.
- (b) Persons engaging licensed guides while angling not to include such guide as one of their number when computing the number or quantity of fish they are entitled to take.
- (c) Exportation of maskinonge by non-resident anglers restricted to one day's catch.

#### TOURIST OUTFITTERS.

Complete reference to the system of licensing tourist outfitters operating in the northern portion of the Province was embodied in the previous Annual Report. The following analysis shows the distribution by Districts of the 498 camps which were licensed to operate during the year under review:—

## TOURIST OUTFITTERS CAMP LICENSES SUMMARY

Algoma 7	3
Cochrane	
Kenora 10	3
Manitoulin	7
Nipissing 9	1
Parry Sound	0
Patricia	1
Rainy River 2	8
Renfrew	
Sudbury 4	•
Thunder Bay	-
Temiskaming	1
	_
Total 49	8

Four hundred and fifty-six of these camps were operated by residents of Ontario, the remaining forty-two by non-residents.

#### EDUCATIONAL.

In a previous report reference was made to the preparation and distribution of a Monthly Bulletin. This publication was originally produced wholly in the Department and took the form of a mimeographed booklet. Because of the work entailed it had necessarily a limited circulation, although many requests for copies were received. To ensure a wider distribution and to take care of the increasing demands for copies from Protective Associations, schools and private individuals, it was found desirable to have the material printed. Beginning with the May, 1937, issue, therefore, the Bulletin assumed a new form, and a greater significance as an educational medium in the sphere of wild life conservation. The original issue amounted to about 600 copies monthly, under the new scheme of publication the circulation immediately doubled and since then it has continued to increase with each issue.

In this connection we quote the following editorial comment from the June, 1937, issue of this Monthly Bulletin:—

"Education is the foundation of all intelligent thought and action. It is the most important factor entering into the conservation of our wild life and other natural resources. Such progress as has been made in protecting, propagating and re-stocking is due to the practical knowledge and scientific attainment. Practical knowledge of wild life conditions is the result of experience gained in actual personal contact and observations under natural conditions. It is not always reliable taken alone because unwarranted conclusions are frequently drawn from certain conditions or experiences which are open to several explanations. However, the practical value of such first-hand information is of very great importance as it serves to confirm the conclusions arrived at through scientific investigation. The combination of these two sources of knowledge is the basis of our conservation programme."

"Knowledge, however, is progressive. It knows no limitation. The ideas of yesterday are but the stepping-stones to future enlightenment and creative effort. In the field of wild life conservation more attention is being paid to the scientific investigation of life history and environmental conditions. The idea that our wild life resources are inexhaustible passed on with the horse and buggy and the carrier pigeon. Nature provided certain fundamental conditions necessary to wild life perpetuation. We have unwittingly disturbed these conditions and so, in order to keep pace with modern demands, we must take advantage of modern knowledge and experience. This means wise conservation laws based on biological knowledge and practical experience; the investigation of life history and natural conditions; the operation of hatcheries for intensive stocking; the setting aside of preserve areas for natural propagation and development, and the passing on of the knowledge acquired to the public through means of education and publicity. These things, the Department of Game and Fisheries is attempting to do. The results so far have justified the effort."

"The sportsman can do much to foster these plans by co-operating wherever practicable and by lending his aid to put across the ideals of conservation. These ideals have been developed over a long period of years. They embody the results of progressive thought and scientific knowledge, therefore they are modern and worth while. They proclaim individual responsibility as necessary to success, and organized effort the best method of accomplishing the greatest good for the greatest number. In short, conservation is education practically applied, and is the care of everyone interested in wild life preservation or better hunting and fishing."

#### ENFORCEMENT SERVICE

Many people, who take but a superficial view of the matter, believe that all that is necessary to eliminate and control the ills which afflict organized society, is to enact regulatory laws designed to take care of the problem or problems involved. Laws are essential and necessary to good government, but they are not in themselves a panacea for all the troubles which beset our social and economic systems. Experience has demonstrated that the fewer the laws and the simpler their enactments to cover any particular subject the more effective is their enforcement.

The Game and Fisheries Laws are necessary to the proper administration and perpetuation of our wild life. They are designed with a view to providing the greatest possible individual liberty consistent with the wise use of the resources involved. These laws are respected by a large majority of the citizens of the Province and their observance becomes more and more a passport to good sportsmanship. However, despite their simplicity, we still have the law breaker, the man who continues to ignore legal restrictions and thereby takes unfair advantage of those who "play the game". It is too much to hope that we can entirely eliminate this offender, but there is good reason to believe that through our united efforts we can do much to show the careless and the thoughtless that observance of and respect for the Game and Fisheries Laws is quite an important feature in the protection and development of our wild life natural resources.

To administer and enforce the provisions of the Game and Fisheries Act the Department maintains a regular staff of Field officers throughout the Province. These men are designated Overseers or Game Wardens, and their duties consist of securing observance of the laws and regulations pertaining to fishing, hunting and trapping. Their task is a difficult one though they are invariably courteous but firm in carrying out their duties. These permanent members of our field staff constitute an important section of the protective service. However, their services are augmented by the assistance and co-operation of members of the Ontario Provincial Police Force as well as certain seasonal officers who are retained for varying periods in the matter of providing adequate patrol service along certain waters during the spring and fall fish spawning periods and protective work during the various hunting seasons.

Interested sportsmen also play a large part in the work of protecting our fish and game resources. During the year some 876 sportsmen conservationists offered their services and were accepted as Deputy Game Wardens, and as such are authorized to assist in obtaining proper observance of the Act and Regulations. The practical support and moral effect of this army of voluntary workers is of very great importance in preventing abuses of the privileges enjoyed by sportsmen.

The Department deplores the fact that it is necessary to prosecute in order to obtain proper observance of the Game and Fisheries Laws. It is hoped that through education, an enlightened public opinion, and a general knowledge of the value of our resources the law breaker will become so unpopular that his depredations will be considerably reduced. In the meantime, however, the poacher, the unscrupulous trapper and the petty lawbreaker still keep the enforcement officers busy.

During 1937-38 there were some 1362 cases in which offenders against provisions of the Game and Fisheries Act and Regulations were apprehended in their offences by members of the Field Service Staff who promptly relieved those involved of the articles of sporting equipment they carried as well as the unlawful game or fish they might have had in their possession on such occasions. From an examination of the reports supplied in these cases it is learned that action was provided by

Game and Fisheries Overseers in 1157 of these cases, by Deputy Game Wardens in 62 cases, by members of the Ontario Provincial Police Force in 48 cases, and in the remaining 95 cases by co-operative action amongst Overseers, Deputy Game Wardens, and Provincial Police Constables.

A condensed summary of the material confiscated shows the following:-

Live animals	in 7	cases
Birds, game animals and meat		
Firearms and ammunition		
Fish	in 209	cases
Nets and fishing equipment	in 213	cases
Angling equipment	in 84	cases
Pelts and hides	in 228	cases
Traps and equipment	in 166	cases
Water craft	in 29	cases
Motor vehicles		
Lights	in 21	cases
Spears	in 66	cases
Miscellaneous	in 52	cases

Duplicate entries on one seizure report, such as firearms and game; angling equipment and fish; trapping equipment and pelts, and other combinations of a similar nature account for the apparent discrepancy in the total shown by the foregoing table, viz, 1706, as compared with seizure reports numbering 1362.

Departmental records disclose the fact that during the year reported upon some 1108 cases were prosecuted through the courts, and that convictions were registered in 1045 of these cases, while charges in the remaining 63 cases were dismissed by the Magistrates who presided thereon. Game and Fisheries Overseers prosecuted in 960 cases and were successful in 913; Provincial Police Constables in 67 cases and secured convictions in 62; Deputy Game Wardens in 18 cases in 16 of which convictions were registered; while co-operative action by Overseers, Provincial Police and Deputy Game Wardens resulted in 54 convictions out of the 63 cases prosecuted.

While each officer is required to be impartial and efficient in the carrying out of his duties he is also required to use common sense and display courtesy in his treatment of the general public with whom he comes into contact. We believe that as a general rule the members of our enforcement service are guided by these requirements at all times. Public service is synonymous with criticism rather than commendation. The control which is essential to the proper administration of a trust, such as our wild life resources, is often irksome to those who object to anything in the nature of restrictions on their so-called "liberties". As a consequence enforcement frequently results in irritation. For this reason we are always glad to receive letters such as the following from one of our United States visitors who resides in the State of Ohio. He writes, "For ten years I have been coming to your Province to do my fishing and the courtesy and consideration extended to me by the officials of your bureau and the citizens of the various communities visited has been very gratifying to me."

#### THE FISH CULTURE BRANCH

Waters abounding in fish are an asset to any community. Increased fishing possibilities mean increased tourist travel; this stabilizes various business enterprises, especially in recreation centres noted for their game-fish. Apart, however, from the direct and indirect financial benefits of a rapidly increasing tourist trade, the healthful and recreational advantages associated with game-fishing are of inestimable value.

The maintenance of the commercial fishing industry is also of vital importance to the Province. Information regarding the value of this enterprise is summed up in the statistics of the fishing industry for the year in appendices 3 and 4.

The successful maintenance and increased usefulness of these interests are being developed in a variety of ways and the re-stocking of lakes and streams in a practical manner is of outstanding importance in this connection. To this end a vigorous fish cultural programme is being pursued with satisfactory results.

#### HATCHERIES AND REARING STATIONS

During the year the Department operated twenty-four fish cultural stations. The actual number of hatcheries operated was twenty; trout rearing stations, eleven; bass rearing stations, four, and additional facilities were provided as outlined in the following paragraphs.

At the Fort Frances hatchery facilities were provided for carrying lake trout to the fry and early fingerling stages.

An excellent site for bass rearing ponds was located at the outlet of Lake Manitou, Manitoulin Island, in the vicinity of Sandfield. One pond was completed before the end of the year and was used, successfully, for wintering trout fingerlings to the yearling stage.

A second bass rearing pond, approximately one acre in area, was provided at the White Lake Station, Frontenac County. Speckled trout were wintered in this new pond very successfully.

An additional trout pond was added to the series of three on the property of the Ontario Government Reforestry Station at Midhurst, and acquired for use by the Department.

The water supply from Waring's Creek, located one and one-half miles west of Picton, was used for rearing trout fingerlings. This station was provided with outside rearing troughs of portable construction.

#### SPECKLED TROUT:

The Department continued the policy of rearing large numbers of trout to yearling and older stages for distribution to suitable public waters. The results of this plan have been successful.

The following comparative distribution figures indicate the progress that is being made:

	1930	1937
Yearlings	557,270	1.167.073
A dulta	6.081	16.150
Adults	0,001	10,100

1000

In addition, 384,725 fingerling trout were planted, slightly more than one-third the number planted the previous year. The entire abandonment of the distribution of trout fry and fingerlings is contemplated, with the exception of any surplus which cannot be accommodated in our rearing stations.

#### BROWN TROUT:

Excellent progress was made in regard to rearing brown trout to the yearling stage. During the year 97,484 yearling and older brown trout were distributed as compared with 7,290 during a similar period in the preceding year.

Encouraging reports of successful angling for this species have been received and intensive re-stocking of suitable streams in southern Ontario is being pursued on the basis set forth in the two preceding reports.

#### RAINBOW TROUT:

#### (a) Steelhead Trout-

The waters chosen for the planting of steelhead trout were such as to fulfil the natural requirements of this species; the number of steelhead rainbows planted was somewhat less than the number planted in 1936, but the number of Kamloops trout (an allied species) distributed made up for this deficit.

#### (b) Kamloops trout-

This variety of rainbow trout is native to a number of lakes in the interior of British Columbia. It is an excellent sporting fish and may be taken on the fly and by trolling. Excepting during hot summer weather they are usually taken near the surface. One important characteristic is that they show very little tendency, if any, to migrate from the lakes in which they are planted.

Speckled trout lakes supplied with good tributary streams are considered suitable for Kamloops trout.

Eighty thousand fingerlings of this species were planted during the year.

Returns from previous plantings in Echo Lake (Muskoka) and a small lake adjacent to Lake Timagami, are, we hope, forerunners of greater success to be achieved from the distribution of this important variety to a number of our lakes.

#### LAND-LOCKED SALMON:

The Department was unable to secure any eggs of this species from the Province of Quebec or elsewhere. The land-locked salmon hatchery at St. Felicien, Quebec, has not operated for some time.

A small number of fry of the Atlantic salmon, a closely related species, were planted on an experimental basis.

A few excellent specimens of land-locked salmon planted in Skeleton Lake, Muskoka District, have been caught by angling.

#### LAKE TROUT:

There was an increase in the distribution of eyed eggs and fry over the number distributed in the preceding year amounting to 7 per cent. There was a decrease in the distribution of fingerlings amounting to 13.6 per cent. For the egg collection, the Department depends on the co-operation of the fishermen and the work of our own spawntaking crews. Stormy weather in the fall, either continuously or intermittently, interferes with the work; this condition was particularly detrimental during the fall of 1937.

#### WHITEFISH:

There was a decrease of approximately 9.6 per cent in the distribution of whitefish as compared with that of the previous year; this was due to the reduced collection of spawn from the North Channel and Lake Ontario whitefish.

#### HERRING:

The large decrease in the distribution of herring fry was due in the main to the reduction in the collection of eggs from Lake Ontario herring and a greater reduction in the collection from Lake Erie herring, the latter collection being practically negligible. There are very hopeful signs that the population of herring in Lake Erie is gradually increasing after the disastrous decline in 1925. If the present population is permitted to spawn at least once, and preferably twice, before they are taken commercially, there will be a decided increase of this very important commercial species. As a result large collections of spawn should be available in future years.

#### YELLOW PICKEREL:

There was a decrease of 12.4 per cent in the distribution of pickerel fry as compared with that of the preceding year, due primarily to the reduced collection of pickerel spawn in the southern portion of Lake Huron.

Following the usual practice, two million eyed eggs were handled by the Sparrow Lake hatchery, the fry being distributed to suitable areas of Sparrow Lake.

#### SMALL-MOUTHED BLACK BASS:

Excellent results were obtained in connection with the culture of small-mouthed black bass; the increased production of fry and fingerlings was 63.4 per cent and 104.5 per cent, respectively, over that of the previous year.

There was also a slight increase in the distribution of yearlings and older bass, as a result of bass harvesting from natural areas; a limited amount of this work is conducted by our hatchery officers, annually.

#### LARGE-MOUTHED BLACK BASS:

Following the previous year's practice, one pond was operated for the production of this species with satisfactory results. This pond, which is 0.64 acres in area, produced 135,000 fry and 4,120 fingerlings.

#### YELLOW PERCH:

Due to a diminished run of spawning fish, there was considerable reduction in the number of perch eggs collected by the commercial fishermen in the vicinity of the Kingsville hatchery, where the eggs are cultured to the fry stage.

#### BLUE PICKEREL:

Blue pickerel spawn was collected in the west end of Lake Erie and cultured to the fry stage in the Kingsville hatchery; this was the first time that such work was undertaken by our Department.

This is a species of considerable commercial value in Lake Erie, and artificial culture is one way by which its maintenance may be assisted.

#### MASKINONGE:

The distribution of maskinonge fry was increased 53.5 per cent over that of the preceding year, due largely to a much more satisfactory collection of eggs. One chief drawback was prevailing cold weather during the incubation period, which retarded development. This condition was followed by a sharp rise in temperature, causing too rapid development and hatching.

The difficulties surrounding the culture of this important species were outlined in the previous year's report, and the information given applies with equal force to the results obtained in 1937.

In Wisconsin the culture of maskinonge has been pursued for thirty to forty years. A large number of eggs are collected from areas where the parent fish are abundant, and a large number of fry are planted annually, but the rearing of fingerlings is a much more difficult matter; Wisconsin is reported to have reared 1,417 fingerlings of this species in 1937. New York State has likewise pursued the culture of maskinonge for over thirty years. This work is concentrated on Lake Chautauqua where parent maskinonge are plentiful and, therefore, egg collection and fry production large; in 1937 it is recorded that New York State planted 856 maskinonge fingerlings. In Minnesota progress along these lines, has been slow on account of the scarcity of the breeding fish. Small numbers of fry have been distributed, but there is no authentic or definite record of the number of fingerlings actually reared up to and including 1937.

In Ontario these activities are concentrated in the Kawartha Lakes region and for good reasons. In the first place, these waters have the necessary or essential conditions for producing maskinonge. Secondly, this area requires intensive restocking on account of the intensity of the fishing. A good indication of the capacity of these lakes to produce maskinonge is given in the statistics of catch from 1892 to 1901, when this important species was taken in large numbers, commercially.

The Department is endeavouring to maintain and to build up the maskinonge supply in a variety of ways, which may be summed up in a more or less concise manner as follows:

- 1. Restricted bag limit and restricted number of days' fishing.
- 2. Protection of the normal population in sanctuary areas, taking in waters adjacent and outside these areas only the natural increase from them. An explanation of the purposes of these sanctuaries was given in detail in the previous year's report.
- 3. The planting of fry in suitable areas.
- 4. Further studies regarding the possibilities of rearing fry to the fingerling stage.

#### CLOSED WATERS

In addition to those waters already closed for the natural protection and propagation of fish, the following closures were autnorized during the year.

#### (a) For Speckled Trout Propagation:

#### DUCHESNEY CREEK,

Townships of Commanda and Widdifield, District of Nipissing.

#### IDLWYLD STREAM,

Township of Waterloo, County of Waterloo.

#### JOHNSON CREEK,

Townships of Kowkash, Paska, and Rupert, District of Thunder Bay.

#### LITTLE JOCKO RIVER.

From Morrow's Dam, east to its outlet into Big Jocko River, District of Nipissing.

#### MALTA LAKE,

Township of Boulter, District of Nipissing.

#### NELLIE LAKE,

Townships of Calver and Aurora, District of Cochrane.

#### PATTERSON'S CREEK,

Townships of Wawanosh and Hullett, County of Huron.

#### PUMPHOUSE CREEK,

Townships of Hart and Cartier, District of Sudbury.

#### WHITEHEAD'S CREEK,

Township 67, District of Algoma,

#### (b) For Black Bass Propagation:

#### ARCAND LAKE.

Township of McBeth, District of Sudbury.

#### FOUR MILE LAKE,

Township of Widdifield, District of Nipissing.

#### GEORGIAN BAY (Portion),

- (a) An area approximately 1 mile square lying west of Electric Island.
- (b) An area approximately 1 mile square lying west of Lot 51, Concession VIII., Township of Harrison, District of Parry Sound.
- (c) An area lying east of and extending approximately 2 miles along the shore line opposite Concessions XIII. and XIV., Township of Harrison, District of Parry Sound.

#### TWELVE MILE CREEK,

Townships of Nelson and Trafalgar, County of Halton.

#### (c) For Lake Trout Propagation,

#### OTTER LAKE,

Township of Foley, District of Parry Sound (Effective from the 16th day of November in each year to the 15th day of May next following).

#### WATER LEVELS

During the past three years, marked improvement has been shown in regard to the control of water levels. Biologically, proper control is of the greatest importance, especially when we consider that bass, maskinonge, pike, sunfish, minnows, and many other species spawn in shallow water, and that their immature stages, or adult stages, or both, live in comparatively shallow water. The fall spawning fish such as lake trout, herring, and whitefish run into comparatively shallow water and spawn on suitable shoals or grounds. The spawning depth of water for these fall spawners is much greater than that required by black bass, which is about two feet, or by minnows, which is only a few inches. The withdrawal of water from these shallows is menacing to the eggs of the spawning fish, this depending on the spawning depth and the drop in water level, but quite apart from this, the withdrawal of water from the shallows destroys myriad forms of life, for example, those of sedentary habit, those temporarily attached, the algae which harbour minute life, shellfish, and insects, and aquatic plants of various kinds.

#### REMOVAL OF COARSE FISH

Between December 20th and January 16th hoop nets were operated for the removal of ling from the following waters:

- (a) In Leeds County,— Charleston, Grippen, Wolfe, and Otter Lakes.
- (b) In Lanark County,—
  Tay River and Otty Lake.

The total number of ling removed from these waters was 6,520; the average weight of the ling was 7 pounds, and the total weight of ling removed was in the neighbourhood of 45,640 pounds or 22.8 tons.

Similar operations were conducted on Lake Manitou, Manitoulin Island. During the whitefish spawntaking operations in the lake 4068 pounds of ling were taken in pound nets. The average weight of each ling was approximately six pounds. Night lines were used experimentally without satisfactory results.

During the latter part of February and in March of 1938, hoop nets and gill nets were operated and 2270 pounds of ling taken. Each of these averaged four pounds in weight.

#### BIOLOGICAL SURVEYS

Pollution surveys were conducted on the Rainy River, Maitland River, (Goderich), and the Niagara River.

Fish planting surveys were carried out on the Holland River, Bradford, and Waterworks Pond at Richmond Hill.

Extensive surveys were conducted in connection with suitable sites for black bass rearing ponds on Manitoulin Island, Muskoka District, and Peterborough County. Surveys were also conducted in the Timiskaming District in regard to a suitable site for a trout rearing station.

With the exceptions noted above, all the work of a biological nature was concentrated on the fish cultural activities carried on in our hatcheries and rearing stations.

The Ontario Fisheries Research Laboratory of the Department of Biology, University of Toronto, conducted field investigations, coupled with laboratory studies on a number of waters in Algonquin Park during the season 1937-38, and the following is a concise account of this important work:

"One of the principal functions of this laboratory is to examine the conditions in game fish producing lakes and streams. Information obtained in this way gives a better understanding of how rapidly fish grow and how a good supply can be maintained. During 1937-38 the work was carried on in the lakes and streams of Algonquin Park.

The major studies undertaken during the year included an investigation of the vertical distribution of the young of the yellow perch in relation to their availability as food for lake trout. The food of the young perch was studied in order to learn what governed the supply of this important source of trout food. The food was found to consist of 85% *Daphnia* or water fleas, 10% small insect larvae and 5% sunfish fry.

Other studies were directed to the production of insects in the lakes and streams from the point of view of their value as food for fish.

The collection of angling statistics was continued and extended. These figures are now extensive enough to make possible a preliminary estimate of the natural productivity of the Algonquin Park lakes with respect to lake trout. They have also proven their value in following the trend of speckled trout production in Red Rock lake, and have made possible the application of measures designed to keep up production in this important lake.

During the year about 200 adult lake trout were transferred to Cache lake, some by truck and some by air, with satisfactory ease and economy. Some 2,000,000 perch fry, 100,000 lake herring fry, and some minnows were planted in Cache lake. These forage fish were introduced for the purpose of increasing the food for the bass and the lake trout."

#### ACKNOWLEDGMENTS

In conclusion I desire to give expression to my appreciation of the valuable assistance and co-operation rendered the Department from many sources during the year, and more particularly from the various Fish and Game Protective Associations as such and the individual members of these organizations. The sphere of activity of these Protective Associations is extending and the interest and influence of the members of these organizations and other sincere sportsmen is sufficiently evident to warrant the assertion that it is practically impossible to estimate the benefits derived by the Department therefrom in our efforts along the lines of providing an efficient administration and supervision of the wild life natural resources of this Province. Such a measure of co-operation encourages us to intensify our endeavours to preserve unimpaired and possibly improve the opportunities which exist in this Province to those who so desire to enjoy such healthly recreation which our fish and game make available.

It might also be stated that, generally speaking, members of the Staff, both the inside and outside service, have conducted themselves and performed the duties assigned to them in the best interests of the Department and its varied activities.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries

Toronto, April 12th, 1939.

#### APPENDIX No. 1

LARGE-MOUTHED BLACK I	BASS	Carleton:	
FRY		Ottawa River	15,000
Bruce:		Rideau River	10,000
Marle Lake	5,000	Frontenac:	
Maryville Lake Saugeen Lake	$10,000 \\ 10,000$	Big Gull Lake	10,000
Saugeen Dake	10,000	Clear Lake (Kennebec)	5,000
Grey:		Fortune Lake	5,000
Mountain Lake	10,000	Long Lake (Clarendon)	5,000
Saugeen River	15,000	Mink Lake	5,000 $5,000$
Mualtalta		Sand Lake	5,000
Muskoka:	5 000	Sharbot Lake	10,000
Bass Lake	$5,000 \\ 10,000$	Sunday Lake	5,000
Wood Lake	10,000	•	
		Grenville:	
Parry Sound:		Nine Mile Reach	5,000
Limestone Lake	5,000	Hastings:	
Little Lake	5,000	Baptiste Lake	15,000
Wolf River	10,000	Crow Lake	10,000
Simcoe:		Gunter Lake	5,000
Gloucester Pool	25,000	Little Salmon River	5,000
		Moira River Stoco Lake	$10,000 \\ 10,900$
York:		Tongamong Lake	5,000
Lake Simcoe	15,000	20200-0-0	-,
FINGERLINGS		Lanark:	
Durham:		Bennet's Lake	5,000
Lake Scugog	1,000	Black Lake	5,000
	_,,,,,	Christie Lake	$10,000 \\ 5,000$
Haliburton:		Dalhousie Lake	5,000
Black Lake	500	Mississippi Lake	10,000
Nipissing:		Fagan's Lake	5,000
Blackwater Lake	1,000	Otty Lake	5,000
Blackwater Bake	1,000	Pike Lake	5,000
Norfolk:		Leeds:	
Little Lake	500	Beverley Lake (lower)	10,000
Teeterville Pond	500	Big Rideau Lake	40,000
York:		Charleston Lake	10,000
Mary Lake	510	Clear Lake Crosby Lake	5,000 $5,000$
Waterworks Pond	110	Gananoque Lake	10,000
The state of the s		Grippen Lake	5,000
ADULTS		Indian Lake	10,000
Oxford:		Newboro Lake	5,000 $10,000$
Lakeside Lake	42	Opinicon Lake Sand Lake	5,000
Maplehurst Lake	50	South Lake	5,000
SMALL-MOUTHED BLACK	BASS	Troy Lake	5,000
FRY		•	
Bruce:		Lennox:	F 000
Britain Lake	5,000	Lime Lake Long Lake	5,000 $5,000$
Burford Lake	10,000	Slave Lake	5,000
Cameron Lake	10,000	South Beaver Lake	5,000
Chesley Lake	10,000 10,000		
Isaac Lake	15,000	Muskoka:	
Miller Lake	10,000	Beaver Lake	5,000
Pearl Lake	5,000	Buck Lake	5,000
Saugeen River	15,000	Clear Lake	5,000 $10,000$
Shouldice Lake	$10,000 \\ 10,000$	Dickie Lake	5,000
Silver Dake	10,000	Transme Dane	0,000

SMALL-MOUTHED BLACK	BASS	Prince Edward:	
—Continued		East Lake	5,000
Muskoka—Continued		West Lake	5,000
Lake Joseph	25,000	Simcoe:	
Lake Stewart	15,000	Cook's Lake	10.000
Leech Lake	5,000	Gloucester Pool	40,000
Morrison Lake	10,000	Kempenfeldt Bay	25,000
Rat Lake	$\frac{5,000}{5,000}$	Little Lake (Vespra)	5,000
Wood Lake	10,000	Park Lake (Tay)	10,000
Northumberland:		Stormont:	
Bidy Lake	5.000	Nation River	15,000
Crow Bay	5,000	Victoria:	
Crow River	10,000		25,000
Rice Lake	15,000	Balsam Lake	10.000
Trent River	10,000	Burnt River	15,000
Ontario:		Cameron Lake	25,000
Lake St. John	20.000	Dalrymple Lake	15,000
Lake St. John	20,000	Head LakeLittle Mud Turtle Lake	$15,000 \\ 10,000$
Parry Sound:		Pigeon Lake	25,000
Balsam Lake	10,000	Round Lake	5,000
Bass Lake (Humphrey) .	5,000	Silver Lake	10,000
Bass Lake (Patterson)	10,000	Sturgeon Lake	25,000
Beaver Lake (Foley)	5,000	York:	
Blackstone Lake Blackwater Lake	$\frac{10,000}{5,000}$	Lake Simcoe	25,000
Clear Lake (Humphrey)	5,000	Dake Simeoc	20,000
Clear Lake (Patterson)	5,000	FINGERLINGS	
Commanda Lake	10,000		
Crane Lake	5,000	Algoma:	0 ==0
Crooked Lake Deer Lake (Lount)	$10,000 \\ 10,000$	Batchewana Bay	$\frac{3,750}{2,000}$
Deer Lake (McKenzie)	5.000	Dean Lake Desbarats Lake	1,000
Diamond Lake	5,000	Gawas Bay	1,000
Horseshoe Lake	10,000	Gordon Lake	1,000
Jackson Lake Lake Joseph	$\frac{5,000}{10,000}$	Goulais Bay	3,750
Little Long Lake	10,000	Harmony Bay Haviland Bay	$\frac{3,750}{3,750}$
Manitowaba Lake	10,000	Keichel Lake	500
Mary Jane Lake	5,000	Little Basswood Lake	1,000
Mill Lake Pickerel River	10,000	Otter Lake	500
Rankins Lake	$10,000 \\ 10,000$	Pipe Lake	$\begin{smallmatrix} 500 \\ 1.000 \end{smallmatrix}$
Restoule Lake	10,000	Round Lake	1,500
Ruth Lake	10,000	St. Joseph Channel	4,000
Sequin River	10,000	Stuart Lake	1,000
Shawanaga River Shebeshekong Lake	$10,000 \\ 5,000$	Deserts	
Shoal Lake	5,000	Brant:	1 000
Stormy Lake	5,000	Big Creek Grand River	$\frac{1,000}{2,000}$
Toad Lake	5,000	Gravel Pit at Scotland	800
Trout Lake (Humphrey). Turtle Lake	$5,000 \\ 5,000$		
Whitefish Lake	5,000	Cochrane:	
Whitestone Lake	10,000	Sesekinika Lake	1,000
Wilson Lake	5,000		
Wolf River	10,000	Frontenac:	
Peterborough:		Cox's Lake	500
Belmont Lake	5,000	Cross Lake (Kennebec) Cross Lake (Palmerston) .	$\frac{500}{2,000}$
Deer Lake (Cavendish)	5,000	Crow Lake	500
Katchawanooka Lake	15,000	Dog Lake	1,000
Pigeon Lake	15,000	Elbow Lake	1,000
Stony Lake	10,000	Farm Lake	500

SMALL-MOUTHED BLACK	BASS	Devine Lake	1,000
—Continued		Casswell Lake	$1,000 \\ 1,000$
Frontenac—Continued		Gull Lake	1.000
Horseshoe Lake	500	Lake McKay	1,000
Hotel Lake	500	Lake Rosseau	1,000
Long Lake (Hinchin-	500		
brooke)	$\begin{smallmatrix} 500 \\ 2,000 \end{smallmatrix}$	Nipissing:	
Marble Lake	500	Bear Lake	1,000
Mazinaw Lake	1,000	Bruce Lake	1,000
Mississagagon Lake	500	Cache Lake	500 500
Salmon River	500	Finlayson Lake	1.000
Swamp Lake	$\begin{smallmatrix} 500\\ 1.000\end{smallmatrix}$	McPhee Lake	1,000
White Dake (Dedicity)	1,000	Muskosung Lake	500
Grey:		Nosbonsing Lake	500
Connell's Lake	1,000	Talon Lake	500
Francis Lake	1,000	Timagami Lake	1,000
TT 121 . 4		Trout Lake	$\frac{2,500}{1,500}$
Haliburton:	500	Wickstead Lake	1,500
Beech Lake Big Boskung Lake	500	Wis-Wassie Lake	500
Davis Lake	500		
Dennies Lake	500	Oxford:	
Devils Lake	500	Thames River	1,000
Elephant Lake	1,000		•
Grass Lake	$\begin{smallmatrix} 500 \\ 1.000 \end{smallmatrix}$	Parry Sound:	
Head Lake	1.000	Ahmic Lake	1,000
Kashagawigamog Lake	1,000	Bear Lake	2,000
Koshlong Lake	500	Beaver Lake (Bethune)	2,000
Long Lake (Dudley)	500	Beaver Lake (Spence)	1,000
Long Lake (Dysart)	$\begin{array}{c} 500 \\ 500 \end{array}$	Burden Lake	1,000
Maple Lake	500	Crawford Lake Doe Lake	$\frac{1,000}{2,000}$
Misquahbenish Lake	500	Lake Cecile	1,000
North Lake	500	Lake of Many Islands	1,000
Pine Lake	500	Little Clam Lake	1,000
Pond Lilly Lake South Lake	500 500	Little Deer Lake	1,000
West Lake	500	Magnetawan River	1,000
West Straggle Lake	500	Mogonosh Lake	1,000
		Pickerel Lake	$\frac{1,000}{2,000}$
Halton:		Spring Lake	1,000
Bronte River	1,000	Spring Zano IIIIIIII	2,000
Hastings:		Peel:	
Bass Lake	500	Credit River	2,000
Moira Lake	500		· ·
Pine Lake	500	Peterborough:	
Wadsworth Lake	500	Burleigh Falls Stream	500
Lanark:		Chemong Lake	500
McGowan's Lake	500	Clear Lake (Smith)	500
medowali s Lake	500	Clear Lake (Cavendish) .	500
Lennox-Addington:		Crab Lake	500 500
Cedar Lake	500	Loon Lake	500
Loon Lake	1,000	Lovesick Lake	500
Pringle Lake Sheldrake Lake	$\frac{1,000}{500}$	Quarry Lake	500
Varty Lake	1,000	White Lake	500
	2,000		
Middlesex:		Simcoe:	
Thames River	2,000	Lake Couchiching	1,000
Muskoko		Lake Simcoe	1,000
Muskoka:  Bass Lake	1,000	Nottawasaga Lake Severn River	1,000 1,000
Dass Lake	1,000	Severif River	1,000

SMALL-MOUTHED BLACK	BASS	Renfrew:	
Continued		Black Bay	190
Q., 11		Blackfish Bay	100
Sudbury: Badger Lake	1,000	Bonnechere River Bourgneau, or Snake Lake	$\begin{array}{c} 100 \\ 102 \end{array}$
Bass Lake	1,000	Coldingham, or Green Lake	110
Frood Lake	1,000	Colton Lake	108
Lacloche Lake	1,000	Corry Lake	95
Lake Agnew	1,000	Devils Lake	100
Metagamasi Lake	$\substack{1,000\\500}$	Foster Lake Genrick's Lake	$\begin{array}{c} 25 \\ 100 \end{array}$
Ratter Lake	2,000	Hurd's Lake	100
Trout Lake (Cherriman) .	1,000	Hyde's Bay	85
,	,	Jack's Lake	90
Timiskaming:		Jamieson Lake	100
Lake Timagami	1,000	Kaminiskeg Lake	$\frac{100}{96}$
Victoria:		Lake Johnnie Long Lake	100
Cranberry Lake	500	Maskalonge Lake	96
Hurricane Lake	500	McMaster Lake	100
		Moccasin Lake	100
Waterloo:		Muskrat River	204
Conestoga River	2,000	Nakiks Lake (Madawaska River)	100
Grand River	$1,000 \\ 1,000$	Norway Lake	100
raradise Lake	1,000	Olmstead Lake	100
Wellington:		Round Lake and	
Puslinch Lake	1,000	Stoney Lake	$\begin{smallmatrix} 90\\100\end{smallmatrix}$
		White Lake (McNah) White Lake (Raglan)	100
York:	100	Whitefish Lake	100
Grenadier Pond	100		
YEARLINGS and ADUL	TS	Thunder Bay:	
	12	Cloud Lake	$\frac{110}{200}$
Haldimand:	4.00	Gull Lake	145
Grand River	100	Kashabowie Lake	100
Halton:		Lac Des Mille Lacs	100
Crawford's Lake	50	Loon Lake	110
		McKay Lake O'Brein Lake	$\frac{175}{180}$
Hastings:		Poulin Treble Lakes	110
Bennett Lake	85	Shebandowan Lake	150
Kenora:		Silver Lake	115
Basket Lake	81	37 1	
Birch Lake	82	York:	0.0
Black Sturgeon Lake	80	Grenadier Pond	28
Dogtooth Lake	81	MASKINONGE	
Lawrenson's Lake Long Lake	$\begin{array}{c} 40 \\ 74 \end{array}$		
Longbow Lake	147	FRY	
Round Lake	40	Hastings:	
		Crow Lake	20,000
Kent:		Crow River	10,000
Rondeau Bay	89	Moira Lake	10,000
Middlesex:		Moira River Sears Lake	5,000 $5,000$
Thames River	230	Stoco Lake	10,000
	200	Whitestone Lake	10,000
Norfolk:		Y 3	
Waterford Pond	100	Leeds:	10.000
Oxford:		Rideau River	$10,000 \\ 20,000$
Cedar Creek	100	St. Lawrence River	20,000
Coddi Oreck	100	Northumberland:	
Peterborough:		Cassidy's Bay	10.000
Stony Lake	100	Crow Bay	10,000

MASKINONGE—Continue	ed	Carleton:
		Ottawa River 800,000
Northumberland—Continued	10,000	Rideau River 400,000
Crow River	20,000	Cochrane:
Trent River	40,000	Bigwater Lake 200,000
		Mortimer Lake
Peterborough:	10,000	Remi Lake 500,000
Belmont Lake Buckhorn Lake	10,000	Unnamed lake—Fauquier
Chemong Lake	15,000	Tp 200,000
Deer Bay	15,000	Wilson Lake 250,000
Deer Lake	$10,000 \\ 15,000$	Frontenac:
Katchawanooka Lake Lovesick Lake	15,000	Big Gull Lake 700,000
Otonabee River	10,000	Bobs Lake
Pigeon Lake	30,000	Collins Bay 200,000
Round Lake Stony Lake	$10,000 \\ 15,000$	Cross Lake (Palmerston). 700,000
Trent River	10,000	Crotch Lake (Kennebec) . 100,000
110110 101101 1111111111111111111111111		Crow Lake 400,000 Elbow Lake 100,000
Prince Edward:		First Depot Lake 100,000
Bay of Quinte	5,000	Horseshoe Lake 100,000
Muscote Bay	5,700	Little Mississagagon 100,000
Stormont:		Long Lake (Kennebec) 50,000 Long Lake (Clarendon) . 600,000
St. Lawrence River	10,000	Long Lake (Portland) 600,000
200 200 0000000000000000000000000000000		Long Lake (Hinchin-
Victoria:		brooke) 100,000
Balsam Lake	10,000	Mississagagon Lake 400,000 Mississippi Lake 750,000
Burnt River	$10,000 \\ 10,000$	Rideau Lake 500,000
Sturgeon Lake	15,000	Rock Lake 500,000
		St. Lawrence River 250,000
PERCH		Sharbot Lake 400,000 Sydenham Lake 250,000
PERCH FRY		Sharbot Lake         400,000           Sydenham Lake         250,000           Thompson Lake         100,000
	,150,000	Sydenham         Lake         250,000           Thompson         Lake         100,000
FRY Lake Erie9,		Sydenham Lake 250,000
FRY  Lake Erie9,  YELLOW PICKEREL (Pike-		Sydenham         Lake
FRY Lake Erie9,		Sydenham Lake 250,000 Thompson Lake 100,000 Grenville:
FRY  Lake Erie		Sydenham         Lake         250,000           Thompson         Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:
FRY Lake Erie		Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000
FRY Lake Erie	perch) 150,000 150,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000
FRY Lake Erie	perch) 150,000 150,000 150,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         Grand River         2,000,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake	150,000 150,000 150,000 418,400	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         2,000,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake	perch) 150,000 150,000 150,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         Grand River         2,000,000           Haliburton:         Paudash Lake         1,200,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike- FRY  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake	150,000 150,000 150,000 418,400 200,000 400,000 150,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         2,000,000           Hastings:         1,200,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake	150,000 150,000 150,000 418,400 200,000 400,000 150,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake	150,000 150,000 150,000 418,400 200,000 400,000 150,000 100,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake	150,000 150,000 150,000 418,400 200,000 400,000 150,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Randolph Lake Rock Lake	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 150,000 150,000 150,000 200,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Rock Lake Round Lake	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 100,000 200,000 100,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Rock Lake Round Lake	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 150,000 150,000 150,000 200,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Eagle Lake         3,000,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Rock Lake Round Lake	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 100,000 200,000 100,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Eagle Lake         3,000,000           Lake of the Woods         42,985,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Round Lake Round Lake St. Mary River  Bruce: Berry's Lake	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 100,000 200,000 100,000 700,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Eagle Lake         3,000,000           Lake of the Woods         42,985,000           Log Bay         1,750,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Round Lake St. Mary River  Bruce: Berry's Lake Chesley Lake	150,000 150,000 150,000 418,400 200,000 400,000 150,000 150,000 150,000 100,000 200,000 100,000 100,000 100,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Grand River         2,000,000           Haliburton:         1,200,000           Hastings:         500,000           Moira Lake         500,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Lake of the Woods         42,985,000           Log Bay         1,750,000           Marchington Lake         1,000,000           Matheson Bay         4,800,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Rock Lake Round Lake St. Mary River  Bruce: Berry's Lake Chesley Lake Gauley's Bay	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 100,000 200,000 100,000 700,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000         Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Lake of the Woods         42,985,000           Log Bay         1,750,000           Marchington Lake         1,000,000           Stanzikihimi Lake         1,000,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Round Lake Round Lake St. Mary River  Bruce: Berry's Lake Chesley Lake Gauley's Bay Isaac Lake	150,000 150,000 150,000 418,400 200,000 400,000 150,000 150,000 150,000 100,000 200,000 100,000 100,000 100,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Eagle Lake         3,000,000           Lake of the Woods         42,985,000           Marchington Lake         1,000,000           Matheson Bay         4,800,000           Stanzikihimi Lake         1,000,000           Wabigoon Lake         1,000,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Randolph Lake Rock Lake Round Lake St. Mary River  Bruce: Berry's Lake Chesley Lake Gauley's Bay Isaac Lake Miller Lake Sauble River	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 100,000 200,000 100,000 700,000 100,000 250,000 100,000 250,000 100,000 325,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Lake of the Woods         42,985,000           Log Bay         1,750,000           Marchington Lake         1,000,000           Stanzikihimi Lake         1,000,000           Wabigoon Lake         1,000,000           Willard Lake         840,000
FRY Lake Erie 9,  YELLOW PICKEREL (Pike-FRY)  Algoma: Cummings Lake Desbarats Lake Duborne Lake Echo Lake Gordon Lake Keichel Lake Marion Lake Mud Lake Otter Lake Pipe Lake Randolph Lake Rock Lake Rock Lake Round Lake St. Mary River  Bruce: Berry's Lake Chesley Lake Gauley's Bay Isaac Lake Miller Lake Sauble River Saugeen River	150,000 150,000 150,000 150,000 418,400 200,000 150,000 150,000 150,000 100,000 200,000 100,000 100,000 100,000 250,000 500,000 250,000 100,000	Sydenham Lake         250,000           Thompson Lake         100,000           Grenville:         Rideau River         1,500,000           Grey:         Mountain Lake         250,000           Nottawasaga River         500,000           Haldimand:         2,000,000           Haliburton:         Paudash Lake         1,200,000           Hastings:         Moira Lake         500,000           Moira River         750,000           Sears Lake         100,000           Stoco Lake         250,000           Kenora:         Black Sturgeon Lake         1,000,000           Eagle Lake         3,000,000           Lake of the Woods         42,985,000           Marchington Lake         1,000,000           Matheson Bay         4,800,000           Stanzikihimi Lake         1,000,000           Wabigoon Lake         1,000,000

YELLOW PICKEREL (Pike-Per —Continued	rch)	Norfolk: Waterford, or Nanticoke	252.222
		Creek	250,000
Lanark:		North washerlands	
Black Lake 20	00,000	Northumberland:	
Christies Lake 20	00,000	Rice Lake	
Clear Lake 45	50,000	Trent River	3,250,000
	0,000	Ontorio	
Zill DDIDDIPP	0,000	Ontario:	0.50000
Otty Lake 20	0,000	Lake St. John	250,000
<b>*</b>		Oxford:	
Leeds:		Lakeside Lake	500,000
2.6	0,000	numeriae nume	000,000
	50,000 50,000	Parry Sound:	
	0,000	Ahmic Lake	500,000
	0.000	Bass Lake	150,000
St. Lawrence River 1,00		Blackstone Lake	100,000
St. Lawrence Live I I I I I I I I I I I I I I I I I I I	.,	Burden Lake	500,000
Lennox-Addington:		Clear Lake	250,000
4.0	0,000	Commanda Lake	200,000
Long Lake	0,000	Crane Lake	200,000
South Beaver Lake 40	0,000	Crawford Lake	100,000
	0,000	Crooked Lake	250,000
Willie Bane Hilliam 1	,,,,,,	Deer Lake	250,000
Manitoulin:		Doe Lake	300,000
Fraser Bay 2,00	0.00	Horseshoe Lake	150,000
Lake Helen		Isabella Lake	200,000
Linda Lake 50	0.000	Jack's Lake	50,000
MacGregor Bay. &		Lake Joseph	300,000
Bay Finn 4,00	0,000	Lake Rosseau	1,000,000
•		Little Long Lake	100,000
Muskoka:		Long Lake	250,000
Allen's Lake 10	0,000	Magnetawan River	500,000
	0,000	Manitowaba Lake McKeown Lake	$150,000 \\ 100,000$
	0,000	Mill Lake	150,000
2.0	0,000	Otter Lake	300,000
	0,000	Owl Lake	100,000
	0,000	Pickerel River	150,000
Lake Rosseau	0,000	Restoule Lake	200,000
	0,000	Sequin River	250,000
	0,000	Shawanaga Lake	250,000
Sparrow Lake*2,00	0,000	Shebeshekong Lake	150,000
Three Mile Lake 50	0,000	Shoal Lake	$150,000 \\ 100,000$
		Stormy Lake	200,000
Nipissing:		Whitestone Lake	250,000
	0,000	Wolf River	250,000
	0,000		
Herridge Lake 10	0,000	Peterborough:	
	0,000	Little Lake	250,000
	0,000	Otonabee River	1,200,000
	0,000	Rice Lake	1,200,000
	0,000	Trent River	600,000
	0,000	Date of Blancale	
	0,000	Prince Edward:	= 900 000
	0,000	Bay of Quinte	600,000
	0,000	East Lake	600,000
	0,000	West Lake	500,000
	0,000		000,000
Tomiko Lake 25	0,000	Rainy River:	
	0,000	Beaverhouse Lake	2,000,000
Wilson Lake 10	0,000	Clearwater Lake	2,000,000
Wis-Wassie Lake 25	0,000	Off Lake	1,000,000

YELLOW PICKEREL (Pike-Perch)	BLUE PICKEREL	
—Continued	FRY	
Rainy River—Continued         One Sided Lake       1,000,000         Quill Lake       2,000,000         Rainy Lake       65,000,000	Essex: Lake Erie	00,000
Sabaskong Bay3,000,000	BROWN TROUT	
Windigoostigwam Lake 1,000,000	YEARLINGS	
Russell:	Brant:	
Castor River 1,000,000	Branch Creek	$1,000 \\ 1,000$
Simcoe: Gloucester Pool 1,250,000	Bruce:	
Little Lake	Crane River	$\frac{1,200}{2,300}$
Stormont: 500,000	· Sucker Creek Vogt's Creek	1,000 1,500
St. Lawrence River 2,400,000	Carleton:	
Sudbury:	Mississippi River	3,000
Birch Lake 150,000	Rideau River	1,200
Charlton Lake	Durham:	
Frood Lake 250,000	Baldwin Creek	1,200
Ivanhoe Lake	Baxter Creek	$\frac{1,500}{2,400}$
Lake Penage	Ouvair Stream	2,100
Mattagamasi Lake 200,000 McLaren Lake 300,000	Elgin:	2 2 2 2
Ramsay Lake 1,000,000	Big Creek Little Otter	$\frac{2,200}{4,000}$
Wanapitei Lake 1,000,000 Whitefish Falls Bay &		,
River 5,000,000	Frontenac: Clyde River	1,500
Wolseley Bay 500,000 Unnamed Lake 200,000	Olyde Itivel	1,500
	Grey:	
Thunder Bay: Baril Lake	Big Head River Maxwell's Creek	$3,000 \\ 1,200$
Cordingley Lake 500,000	Potawatami River	1,000
Lake of Flats	Saugeen River Styx River	$8,000 \\ 3.000$
Savant Lake 1,000,000	Sydenham River	3,900
Thunder Bay 1,500,000	Weatherspoon Creek	500
Timiskaming:	Haldimand:	
Granite Lake	Rogers Creek	1,000
Lake Timagami 500,000	Halton:	
Lake Timiskaming 500,000 Net Lake 250,000	Bronte River	2,200
Rib Lake 200,000	Hastings:	
Sesekinika Lake 500,000 Twin Lake 250,000	Beaver Creek	1,000
	Black Creek Little Mississippi River	$1,200 \\ 1,200$
Victoria: Lake Dalrymple 500,000	Rawdon Creek	2,000
Young's Lake 250,000	Huron:	
Great Lakes:	Nine Mile River	1,100
Lake Superior	Lanark:	
Lake Huron 22,750,000	Mississippi River	3,000
Lake Ontario 750,000		0,000
*Eyed eggs supplied, and planted as fry from Sparrow Lake hatchery.	Middlesex: Medway Creek	1 200
from pparrow Dake natenery.	hiedway Oreek	1,200

BROWN TROUT—Contin	wed	Sharbot Lake	$25,000 \\ 10,000$
Muskoka:	1 000		
Indian River Kahshe River	$\frac{1,200}{800}$	Hastings:	
	000	Baptiste Lake	35,000
Norfolk:		Bass Lake	$10,000 \\ 25,000$
Big Creek Nanticoke Creek	$\frac{1,000}{1,500}$	Cedar Lake	10,000
	1,000	Devil Lake	$10,000 \\ 20,000$
Northumberland:		Eagle Lake	10,000
Bowens Pond	$\frac{1,200}{4,600}$	Gunter Lake	10,000
Grenrumie Stream	4,000	Jamieson Lake	$10,000 \\ 10,000$
Oxford:		Lake Papineau	25,000
Horner's Creek Whiteman Creek	600	Lake St. Peter L'Amable Lake	$25,000 \\ 10,000$
Winteman Creek	1,500	Little Bass Lake	10,000
Perth:		Little Salmon Lake	10,000
Halfway Stream	1,100	Little Weslemkoon Lake . Long Lake (Mayo)	$10,000 \\ 10,000$
Upper Avon River	1,100	Long Lake (Dungannon).	10,000
Peterborough:		Quinlan Lake	10,000
Deer Bay Creek	3,000	Weslemkoon Lake	$10,000 \\ 15,000$
Dickson's Creek Eel's Creek	$1,500 \\ 1,000$		
Lower Cavan Creek	600	Lanark:	
Mississauga River Nogies Creek	$\frac{1,500}{1,500}$	Silver Lake	15,000
Nogles Cleek	1,500		
Simcoe:		Leeds:	
Nottawasaga River and tributaries	C 074	Big Rideau Lake Charleston Lake	$50,000 \\ 60,000$
tilbutaries	6,874	Clear Lake	10,000
Waterloo:		Indian Lake	10,000
Alderside Pond Bridgeport Dam	600	Red Horse Lake	15,000
Dentinger Creek	$\begin{smallmatrix} 500\\1,000\end{smallmatrix}$	Lennox-Addington:	
	-,	Bark Lake	10,000
Wellington: Gerrie Creek	600	Big Lake	20,000
Speed River	1,200	Burns Lake	$10,000 \\ 10,000$
371		Little Cedar Lake	10,000
York: Humber River	2 000	Loon Lake	30,000
Private waters (Sale)	$\substack{3,000\\510}$	Mazinaw Lake Otter Lake	$\frac{5,000}{20,000}$
		Spring Lake	10,000
LAKE TROUT			
FRY		Peterborough:	<b>40000</b>
Frontenac:		Catchacoma Lake Gull Lake	$10,000 \\ 10,000$
Buckshot Lake	20,000	Jack's Lake	25,000
Crotch Lake	25,000	Long Lake	10,000
Crow Lake	$25,000 \\ 15,000$	Loon Lake	$   \begin{array}{c}     20,000 \\     10,000   \end{array} $
Dog Lake	20,000	Towens Lake	5,000
Grindstone Lake Knowlton Lake	10,000	Trout Lake	10,000
Long Lake	$10,000 \\ 15,000$	West Lake	5,000
Loughborough Lake	45,000	Great Lakes:	
Mackie Lake	$10,000 \\ 15,000$	Lake Superior 1	.800.000
Reid's Lake	10.000	North Channel	550,000
Sand Lake Schooner Lake	5,000	Lake Huron	
behooner have	15,000	Lake Ontario	357,000

LAKE TROUT—Continue	ed	Hollow Lake	10,000
FINGERLINGS		Horseshoe Lake	5,000
		Hurricane Lake	5,000
Algoma:		Kashagawigamog Lake Kingscote Lake	5,000 $5,000$
Achigan Lake	6,000	Kushog Lake	10,000
Axe Lake	11,000	Little Boskung Lake	5.000
Basswood Lake	6,000	Long Lake	5,000
Chiblow Lake	6,000	Maple Lake	5.000
Clear Lake	18,000	Moose Lake	5,000
Constin, or Trout Lake	6,000	Mountain Lake	5,000
Cumming Lake	6,000	Oblong Lake	5,000
Duborne Lake	6,000 $6,000$	Pine Lake	5,000
Grey Trout Lake	2 0 0 0	Redstone Lake	10,000
Havilah Lake Hawk Lake	5,750	Ross's Lake	5,000
Hobon Lake	5,750	South Bay	5,000
Huston Lake	10,750	Stormy Lake	5.000
Island Lake	6,000	. Twelve Mile Lake	5,000
Long Lake	6,000	YY Africano	
Loon Lake (Deroche)	6,000	Hastings:	
Loon Lake (Borden)	6,000	Clear Lake	5,000
Matinenda Lake	6,000	Lake of Islands	5,000
Mud Lake	6,000	LaValley Lake	5,000
Patton Lake	6,000	Long Lake (Lutterworth)	5,000
Petanguin Lake	6,000	Papineau Lake	5,000
Pickerel Lake	6,000	Robinson Lake	5,000
Rainbow Lake	6,000	Trout Lake (Faraday)	5,000
Rand Lake	6,000	Kenora:	
Raw Hide Lake	6,000		40.000
Red Deer Lake	6,000	Bigstone Bay	40,000
Sand Lake Stuart Lake	6,000	Blue Lake Boulder Dam	$25,000 \\ 50,000$
Tookenay Lake	$6,000 \\ 6,000$	Clearwater Bay	90,000
Trout Lake (Aweres)	6,000	Cul de Sac Lake	25,000
Trout Lake (24-12)	6,000	Dogtooth Lake	50,000
Upper Island Lake	6,000	Eagle Lake	100,000
off a same and a same	0,000	Gibbi Lake	50,000
Bruce:		Granite Lake	25,000
Dyer Bay	15,000	Lake of the Woods	72,000
Gillies Lake	15,000	Little Vermilion Lake	50,000
		Rice Lake	10,000
Cochrane:		Silver Lake	25,000
Nellie Lake	6,000	Thunder Lake	25,000
Perry Lake	6,000	Trout Lake	25,000
Watabeag Lake	6,000	Whitefish Bay	90,000
		Willard Dake	35,000
Frontenac:		Lanark:	
Crotch Lake	5,000		2 000
Desert Lake	5,000	Rideau Lake	2,000
Dog Lake	5,000	Lennox-Addington:	
Eagle Lake	5,000		F 0.00
Loughborough Lake	5,000	Thirty Island Lake	5,000
Lucky Lake	10,000	White Lake	2,000
Sharbot Lake	5,000	Manitoulin:	
TT 121			05 000
Haliburton:		Fraser Bay Lake Manitou	25,000 $33,000$
Bear Lake (Guilford)	5,000	Lake Manitou	33,000
Bear Lake (Glamorgan) .	5,000	Muskoka:	
Big Boskung Lake	10,000		1 5 0 0 0
Davis Lake	5,000	Bala Bay	15,000
Drag Lake	5,000	Bella Lake	5,000
Eagle Lake	$10,000 \\ 10,000$	Clear Lake Fairy Lake & tributaries .	5,000 5,000
East Lake	5,000	Lake of Bays &	3,000
Gull Lake	10,000	tributaries	28,000
Haliburton Lake	10,000	Long Lake	5,000
Hawke Lake	5,000	Muskoka Lake	15,000
	-,,,,,,		,

LAKE TROUT—Continu	ed	Ramsay Lake	6,000
Muskoka—Continued Oxtongue Lake	5,000	Trout Lake	6,000 6,000 6,000
Peninsula Lake & tributaries	15,000	Thunder Bay: Baril Bay	50,000
Rebecca Lake Rosseau Lake	$\begin{smallmatrix}5,000\\27,000\end{smallmatrix}$	Brown Lake	50,000
Skeleton Lake	10,000	Jarvis Bay	50,000
Trout Lake (Watt)	5,000	Lac Des Mille Lacs	$50,000 \\ 50,000$
Vernon Lake	$15,000 \\ 5,000$	Lake Nipigon	50,000
Waseosa Lake	5,000	Surprise Lake	10,000
Nipissing:		Twin Lakes	50,000
Aylen Lake	5,000	Wawon Lake	25,000
Martin Lake	$6,000 \\ 6,000$	Timiskaming:	
Source Lake	10,000	Bartle Lake	6,000
Trout Lake	6,000	Lake Timagami	6,000
		Lake Timiskaming	6,000
Parry Sound:	10.000	Net Lake	6,000 6,000
Bay Lake	$10,000 \\ 5,000$	Trout Lake	6,000
Bernard Lake	10,000	Twin Lake	6,000
Big Clam Lake	5,000	W 1.	
Clear Lake (Humphrey) .	$7,500 \\ 10,000$	York:	40.000
Clear Lake (Perry) Five Mile Bay	2,000	Lake Simcoe	40,000
Horn Lake	15,000	Great Lakes:	
Lake Joseph	5,000	Lake Superior	3,675,000
Lorimer Lake	$15,000 \\ 10,000$	North Channel	250.000
Otter Lake	10,000	Georgian Bay Lake Huron	3,933,000 5,501,100
Portage Lake	5,000	Lake Ontario	
Round Lake	5,000		
Salmon Lake	$10,000 \\ 10,000$	EYED EGGS	
Spring Lake	10,000	Exchange	3,225,000
Sucker Lake	5,000		
Sugar Lake Tea Lake	$\frac{10,000}{5,000}$	ATLANTIC SALMON	
Three Legged Lake	10,000	FRY	
Whitefish Lake	7,500	For demonstration purposes	7,200
Renfrew: Bark Lake	6,000	KAMLOOPS TROUT	
Blackfish Bay	5,000	FINGERLINGS	
Bradley Lake	10,000	Dwygot	
Carson Lake	$6,000 \\ 5.000$	Bruce: Gillies Lake	20.000
Cross Lake	6,000	Gilles Lake	20,000
Diamond Lake	5,000	Grey:	
Kaminiskeg Lake	5,000	Bass Lake	20,000
Long Lake	5,000 6,000	N.F Y	
Round Lake	6,000	Muskoka: Echo Lake	20.000
Trout Lake	6,000	Waseosa Lake	20,000
Wadsworth Lake	6,000		20,000
Simcoe:		RAINBOW TROUT	
Kempenfeldt Bay	20,000	FINGERLINGS	
Sudbury:		Algoma:	
Ella Lake	6,000	Clear Lake	5,000
Long Lake (Broder)	6,000	Garden River	5,000 $5,000$
Long Lake (Harrow) Nelson Lake	6,000 $6,000$	Mississagi River St. Mary River	2,000
Penage Lake	6,000	White River	6,440

RAINBOW TROUT—Contin	nued	Root River	2,400
Bruce:		Saddle Lake Speckled Trout Lake (176)	$\frac{1,000}{1,000}$
Sauble River	10,000	Speckled Trout Creek	600
		Trout Lake (Aweres) Twin Lake	$\frac{2,000}{7,000}$
Dufferin:	7 000	Upper Island Lake	1,600
Nottawasaga River	7,000	Wartz Lake	5,000
Elgin:		Weashkog Lake White River	$10,000 \\ 8,000$
St. Thomas City Reservoir	5,000	white tivel	0,000
Chart		Cochrane:	
Grey: Sheppard's Lake	10,600	Charlebois Lake	500
Sheppard's Lake	10,000	Croft Creek Dalton's Lake	600 500
Haliburton:		Dandurand Creek	800
Burnt Lake	5,000	Fuller Creek	500
McFadden's Lake	5,000	Grassy River Lake of Bays	500 800
Muskoka:		Legare Creek	800
Indian River	7,000	McIntyre Lake	500
Long Lake	3,000	Metagami River Ramsbottom Creek	500 500
Norfolk:		Red Sucker River	500
Patterson's Creek	3,000	Rowley Lake	800
	•	Shaw's Creek	400 500
Simcoe:	3.600	Wealthy Creek	500
Coldwater River Kempenfeldt Bay	7,000	37 6 - 11	
Sturgeon River	3,600	Norfolk:	100
Cadhama		Vittoria Creek	100
Sudbury: Unnamed lake	4,000	Renfrew:	
	-,000	Nadeau Creek	175
York:	F 000	Thunder Bear	
Humber River	5,000	Thunder Bay:	6.000
Humber River Private Waters (Sale)	5,000 3,000	Allen Lake	6,000 8,000
Humber River		Allen Lake	8,000 11,000
Humber River Private Waters (Sale)		Allen Lake	8,000 11,000 12,000
Humber River	3,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake	8,000 11,000 12,000 24,000 2,000
Humber River	3,000 8,500	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake	8,000 11,000 12,000 24,000 2,000 2,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS Algoma: Aubinadong Lake Batchewana River	3,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River	8,000 11,000 12,000 24,000 2,000 2,000 10,000
Humber River	8,500 5,000 10,000 15,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake	8,000 11,000 12,000 24,000 2,000 10,000 6,000 5,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake	8,500 5,000 10,000 15,000 8,500	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake	8,000 11,000 12,000 24,000 2,000 10,000 6,000 5,000 4,500
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake	8,500 5,000 10,000 15,000 8,500 10,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River	8,000 11,000 12,000 24,000 2,000 10,000 6,000 5,000 4,500 10,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canoe Lake Caribou Lake Carp River	8,500 5,000 10,000 15,000 8,500 10,000 15,000 3,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake	8,000 11,000 12,000 24,000 2,000 10,000 6,000 5,000 4,500 10,000 9,000 6,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canoe Lake Caribou Lake Carp River Chippewa River	8,500 5,000 10,000 15,000 8,500 10,000 15,000 3,000 5,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River	8,000 11,000 12,000 24,000 2,000 10,000 5,000 4,500 10,000 9,000 12,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Carp River Chippewa River Christman Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 3,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake	8,000 11,000 12,000 24,000 2,000 10,000 6,000 5,000 4,500 10,000 9,000 6,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canp 12 Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 5,000 5,000 4,000 1,500	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake	8,000 11,000 12,000 24,000 2,000 10,000 5,000 4,500 10,000 9,000 6,000 12,000 12,000 5,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canp 12 Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River	8,500 5,000 10,000 15,000 8,500 10,000 3,000 5,000 4,000 1,500 3,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 9,000 12,000 6,000 12,000 12,000 14,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canp 12 Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 5,000 5,000 4,000 1,500	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 9,000 6,000 12,000 12,000 12,000 14,000 12,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Caribou Lake Carp River Chippewa River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 5,000 5,000 4,000 1,500 3,000 4,000 2,000 3,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 9,000 12,000 6,000 12,000 12,000 14,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canp 12 Lake Caribou Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kawagama River	8,500 5,000 10,000 15,000 8,500 10,000 5,000 5,000 4,000 4,000 2,000 4,000 3,000 4,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek Timiskaming:	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 6,000 12,000 6,000 12,000 12,000 14,000 12,000 3,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma:  Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kawagama River Laughing Lake Loon Lake (Deroche)	8,500 5,000 10,000 15,000 15,000 3,000 5,000 4,000 1,500 4,000 2,000 3,000 4,000 7,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek  Timiskaming: Small Spot Creek	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 9,000 6,000 12,000 12,000 12,000 14,000 12,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma:  Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Caribou Lake Caribou Lake Carp River Chippewa River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kashawong Lake Kawagama River Laughing Lake Loon Lake (Deroche) Lower Island Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 5,000 4,000 1,500 3,000 4,000 2,000 3,000 4,000 7,000 7,000 1,600	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek Timiskaming: Small Spot Creek Private waters (Sale)	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 9,000 12,000 6,000 12,000 12,000 14,000 12,000 3,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma: Aubinadong Lake Batchewana River Big Bear Lake Camp 12 Lake Canpe Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kawagama River Laughing Lake Loon Lake (Deroche) Lower Island Lake Mashagami Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 5,000 5,000 4,000 1,500 3,000 4,000 2,000 4,000 7,000 7,000 1,600 10,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek  Timiskaming: Small Spot Creek	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 9,000 12,000 6,000 12,000 12,000 14,000 12,000 3,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma:  Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Caribou Lake Caribou Lake Carp River Chippewa River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kashawong Lake Kawagama River Laughing Lake Loon Lake (Deroche) Lower Island Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 3,000 5,000 4,000 2,000 3,000 4,000 7,000 7,000 1,600 10,000 400 5,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek Timiskaming: Small Spot Creek Private waters (Sale)  YEARLINGS Algoma:	8,000 11,000 12,000 24,000 2,000 10,000 6,000 10,000 12,000 6,000 12,000
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma:  Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kawagama River Laughing Lake Loon Lake (Deroche) Lower Island Lake Mashagami Lake Mashagami Lake Moose Lake Pancake River Quinn Lake	8,500 5,000 10,000 15,000 8,500 10,000 15,000 3,000 5,000 4,000 2,000 3,000 4,000 7,000 1,600 10,000 400 5,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek Timiskaming: Small Spot Creek Private waters (Sale)  YEARLINGS Algoma: Achigan Lake	8,000 11,000 12,000 24,000 2,000 10,000 6,000 4,500 10,000 12,000 6,000 12,000 12,000 12,000 3,000 14,000 250
Humber River Private Waters (Sale)  SPECKLED TROUT FINGERLINGS  Algoma:  Aubinadong Lake Batchewana River Big Bear Lake Blue Lake Camp 12 Lake Canoe Lake Caribou Lake Caribou Lake Carp River Chippewa River Christman Lake Deer Lake Horseshoe Lake Iron River Island Lake (176) Jobammeghia Lake Kashawong Lake Kashawong Lake Kawagama River Laughing Lake Loon Lake (Deroche) Lower Island Lake Mashagami Lake Moose Lake Pancake River	8,500 5,000 10,000 15,000 8,500 10,000 15,000 3,000 5,000 4,000 2,000 3,000 4,000 7,000 7,000 1,600 10,000 400 5,000	Allen Lake Blend River Cedar Creek Cummings Lake Current River Hilma Lake Johnston Lake Kaministiquia River Lenora Lake Lesage Lake Lower Pass Lake McIntyre River McKenzie River Mount Stephen Lake Neebing River North Enders Lake Ozone Waters Partridge Lake Pitch Creek Trout Creek Whitewood Creek Timiskaming: Small Spot Creek Private waters (Sale)  YEARLINGS Algoma:	8,000 11,000 12,000 24,000 2,000 10,000 6,000 10,000 12,000 6,000 12,000

SPECKLED TROUT—Continued		Michipicoten River	6,000
41 G4:		Mile 58 Lake	1,000
Algoma—Continued	1 800	Miltelm Lake	1,000
Alva Lake	$\frac{1,000}{2,000}$	Mongoose Lake	2,000
Anjigami Creek	2,000	Moose Lake (25 R.13)	2,000
Appleby Lake	1,500	Mountain Lake	500
Aubinadong Lake	1,000	Mud Lake Ned's Lake	2,500
Aweres Lake	4,000	Patton Lake	$\frac{1,500}{2,000}$
Bamagesic Lake	2,000	Pine Lake (24-R-13)	2,000
Basswood Lake	2,000	Pine Lake (U.)	500
Batchewana River	8,000	Pine Lake (25-R-11), or	000
Bellevue Creek	1,500	Prugh	2,000
Boyles Creek	2,000	Pinkney Lake	1,000
Bridgeland River	4,000	Rand Lake	2,000
Burrows Lake	2,000	Ranger Lake	1,500
Caldwell Lake	500	Reserve Dam Creek	1,000
Camp Lake	1,500	Richardson Creek	1,500
Camp 8 Creek	1,000	Rock Lake	1,000
Capp Lake	1,000	Root River	7,000
Caribou Lake	2,000	Round Lake (Grassett)	1,500
Chiblow Lake	2,000	Round Lake (1 A.)	500
Chippewa River	$\frac{4,000}{4,000}$	St. Mary River	1,000
Chub Lake	2,000	Sand Lake Creek	2,000
Clear Lake (Aweres) Clear Lake Creek (Scarfe)	1,000	Sand River	2,000
Corston Lake	1,500	Sausabic Lake	1,500
Dam Creek	1,000	Scarbo Lake	1,000
Dam Lake	4,000	Sister Lake No. 1	$7,000 \\ 500$
Deer Lake	2,000	Sister Lake No. 2	500
Devil Lake	1,000	Speckled Trout Lake	300
Diamond Lake	3,000	(1 A.)	2,000
Driving Creek	3,000	Speckled Trout Lake	2,000
Emerald Lake	1,500	(176)	1,500
Foot Lake	2,000	Speckled Trout Lake	_,
Franklin Lake	1,500	(28-R-16)	500
Garden Lake	1,000	Spruce Lake	1,500
Garden River	7,000	Sucker Lake	2,000
Goodwin Lake	2,000	Summit Lake	2,000
Goulais River	$\frac{3,000}{1,500}$	Tamarack Lake	500
Green Lake	1,500	Tawabinasay Lake	2,000
Hawk Lake	2,000	Tea Lake	2,500
Hoath, or Heydon Lake	1,000	Triple Lake	$\frac{1,000}{2,000}$
Hobon Lake	2,000	Trout Lake (167)	1,000
Hubert Lake	2,000	Trout Lake (Aweres)	3,000
Island Lake (Aberdeen)	1,500	Trout Lake Inlet	500
Island Lake (176)	2,000	Twin Lakes	5,000
Jobammeghia Lake	3,200	Two Tree River	1,500
Kennedy Lake	1,500	Upper Island Lake	7,000
Kinoch Lake	1,500	Wallace Lake	500
Laughing Lake	3,000	Wartz Lake	2,000
Little Blind River	1,000	Waterhole Lake	2,000
Little White River	5,000	Wawa Lake	2,000
Lonely Lake	2,000	White River	1,000
Long Lake (Jarvis)	1,000	Whitehead's Creek	1,500
Long Lake (Meredith) Loon Lake (Deroche)	$\frac{3,000}{3,000}$	-	
Loon Lake (24 R.13)	2,000	Brant:	0.00
Loon Lake (Z4 K.13) Loon Lake (Kirkwood)	4,000	Moody and Lyons Creek	200
Loonskin Lake	2,000	Bruce:	
Lower Island Lake	7,000	Big Bay Swamp	300
Mashagami Lake	1,500	Colpoy Creek	450
McCormick Lake	4,000	French Bay Creek	450
McCrea Lake	1,500	Hill's Spring	450
McGill Creek	1,000	Judge's Creek	3,900
McGrath Creek	2,000	Nine Mile River	1,800
McKinnon Creek	1,500	Pettigrew Spring	450
McVeigh Creek	1,500	Sauble River	900

SPECKLED TROUT—Contin	med	Deer Creek	500
Daniel Gardina 1		Eckert Creek	500
Bruce—Continued	1,350	Godwillie Creek Grange Hall Creek	500 500
Sharp's Spring Silver Creek	1.000	Howey Creek	500
Spring Creek (Amabel)	1,800	Leitch Creek	500
Spring Creek (Carrick)	900	Matthews Creek	500
Stream entering into	000	Sisken Creek	500
Paddis Bay	200	Venison Creek	3.000
Tucker's Spring	900	Wolfe Creek	500
Vance's Creek	450		
Willow Creek	800	Frontenac:	
Wilson Creek	450	Black Creek	2,400
Carbanas		Camp Lake	2,400
Cochrane: Liniment Lake	150	Grindstone Lake	4.800
Morgan Lake	150	Knowlton Lake	500
Sesekinika Creek	200	· Lucky Lake	250
geserining often	200	Sharbot Creek	250
Dufferin:		Spring Creek entering	
Boyle's Creek	500	Buckshot Lake	500
Cemetery Creek	200	Trout Lake	500
Credit River	3,100		
Grand River	1,800	Grey:	
Nottawasaga River	2,700	Beatty Saugeen River	3,600
Pine River	1,800	Beaver River	7,800
Sanderson Creek	200	Beirness Stream	250
Durham:		Bell's Lake	2,700
Ard's Creek	200	Big Head River	1,800
Austim's Creek	500	Boyd's Lake	1,800
Barton's Creek	100	Boyne River	2,700
Beatty Creek	200	Caseman Creek Christies Creek	900
Brook's Creek	500	Cook's Creek	1,800 500
Burk's Pond	1,000	Deer Creek	1.800
Cain's Stream	1,400	English Lake	$\frac{1,300}{2,700}$
Carscadden Creek	$\begin{smallmatrix}200\\200\end{smallmatrix}$	Esplen Pond	900
Cowper's Creek DeLong's Stream	400	Eugenia Pond	7,400
Drew's Creek	200	Ewart's Lake	1,800
Goodman's Creek	500	Fairbairn Creek	1,800
Graham's Creek	100	Ferguson Creek	1,800
Harris Creek	200	Finn's Creek	450
Hayden's Creek	2,500	Firth's Creek	$\frac{2,400}{2,700}$
Luxton Creek	500	Glen CreekGrand River	500
McKindley's Creek	1,000	Lawrence Creek	1.350
McLaughlin's Creek	$\begin{smallmatrix} 500 \\ 200 \end{smallmatrix}$	Manx Creek	900
Mercer's Creek Miller Creek	500	McCartney's Lake	1,800
Muldrew's Creek	100	McConnell Creek	1,000
Orono Park Pond	500	Meino Creek	1,800
Patterson's Creek	500	Miller Creek	1,000
Patton's Stream	100	Mitchell's Mill Stream	1,800
Powell's Creek	200	Mountain Lake	500
Quantreuil's Creek	200	Munshaw Lake Nigger Creek	1,800
Rowe's Pond	200	Oxenden Creek	$\frac{2,500}{3,000}$
Sowden's Creek	200	Pearce Creek	250
Sowper's Creek Stream at Manvers	200	Penner's Creek	450
Stream at Manvers Strong's Creek	$\substack{1,500\\100}$	Riley Creek	250
Thompson's Creek	200	Rob Roy Creek	1,800
I nompoon o orock	200	Saugeen River	5,400
Elgin:		Spey River	2,700
Ball Creek	1,500	Sulphur Springs	200
Bassell Creek	500	Sydenham River	3,100
Beaver Creek	500	Unnamed Creek	0.00
Buck Creek	250	(Egremont)	900
Clear Creek	500	Williams Spring	900
Clear Creek	3,000	Williams Spring	3,700

SPECKLED TROUT—Contin	nued	Kenora:	
		Raleigh Creek	1,500
Haliburton:	0.50		
Bear Lake (Livingstone) .	250	Lanark:	
Bitter Lake	$\begin{smallmatrix}250\\250\end{smallmatrix}$	Clyde River	4,800
Blue Lake Burnt River	1,200	Paul's Creek	4,800
Catchacoma Lake	600	Lennox-Addington:	
Diamond Lake	400		1 000
Drag River	750	Beaver Creek	$\frac{4,800}{2,400}$
Eagle Lake	500	Burns Lake	250
Fletcher Lake	2,950	Graham's Lake	2,400
Glidden Creek	900	Green Lake	1,000
Holland Creek Hollow Lake	$\begin{smallmatrix}250\\2,700\end{smallmatrix}$	Hyde's Creek	4,800
Hurricane Lake	500	Little Long Lake	250
Kimball Lake	250	Rainy Lake	2,400
Millichamp Lake	900	Rock Lake	$\frac{250}{2.400}$
Moon's Creek	1,200	Ruttan's Lake Shiner Lake Creek	2,400
Oblong River	1,400	Smith's Lake	250
Otter Lake	900	Snake Creek	500
Partridge Lake	250	Thirty Island Creek	250
Poverty Lake	900	Unnamed stream	
Raven Lake	$\substack{1,800\\500}$	(Denbigh)	250
Round Lake	250	White Lake	250
Slipper Lake	250	Yeoman's Creek	250
		Manitoulin:	
Halton:		Blue Jay Creek	1 500
Crawford Lake	900	Harris Creek	$\frac{1,500}{1,500}$
		Mindemoya River	1,500
Hastings:			1,000
Alexander Creek	1,000	Middlesex:	
Bartlett Creek	4,400	Cody Creek	2,190
Brett's Lake	3,400	Stream—C.13 lot 31	2,100
Carleton Creek Cedar Creek	$\begin{smallmatrix} 500 \\ 4,800 \end{smallmatrix}$	London Tp	500
Deer River	2,000	Wye Creek	1,000
Diamond Lake	1,000		
East Lake	500	Muskoka:	
Echo Lake	4,800	Big East River	9,000
Egan Creek	3,400	Bigwind Lake	900
Foster's Lake	500	Bird Lake	900
Fraser's Creek	$1,500 \\ 1,500$	Black Creek	2,000
Gin Creek	500	Boyne Creek Clear Lake (Sinclair)	$\frac{2,000}{1,200}$
Hinze's Lake	2.400	Clear Lake (Oakley)	900
Horse Lake	500	Creeks running into	300
Little Mississippi Lake	500	Fairy Lake	4,000
Little Papineau Lake	1,200	Creeks running into	
McCormick Lake	3,600	Peninsula Lake	4,000
Mud Turtle Lake Nobs Lake	$\begin{smallmatrix} 500 \\ 500 \end{smallmatrix}$	Creeks running into	c 0.00
Peel's Lake	1,000	Muskoka River Creeks running into	6,000
Rawdon Creek	4.800	Vernon Lake	4.000
Shaw Lake	500	Eastails Lake	900
Shire Creek Spurr Lake	3,400	Echo Lake	2,700
Spurr Lake	1,400	Fox Lake	3,000
Squire's Creek	4,800	Fraser's Lake	900
Vanderbeck Lake	4,800	High Lake	900
Waterhouse Lake York River	4,800	Jessups Creek	2,000
TOTA ICITEL	500	Lake of Bays	$\frac{2,800}{5,400}$
Huron:		Lake of Bays Lake Rosseau	2,000
Patterson's Creek	3,000	Little Clear Lake	600
Porter's Creek	1,500	Little East River	3,000
St. Helen's Creek	250	Long Lake (Cardwell)	1,105
Wilson's Creek	900	Long Lake (Franklin)	900

SPECKLED TROUT—Contin	nued	Mayhew's Creek O'Grady's Creek	$\frac{500}{1,500}$
Muskoka—Continued		Pegnan's Creek	2,000
Long Lake (Ridout)	900	Piper's Creek	100
Loon Lake	900	Quinn's Creek	1,000
Loon Lake Creek	350	Robin's Creek	200
Martin Lake	900	Sandy Flats Creek	2,000
McReynold's Lake	900	Spring Creek	300
Monahan Lake	900	Taylor's Creek Trout Creek	$\begin{smallmatrix} 500\\ 3.000\end{smallmatrix}$
Muskoka Lake	$\substack{1,500\\3,000}$	Valleau Creek	1,000
Muskoka River Oxtongue Lake	900	Valleau Orock	2,000
Oxtongue River	3,000	0.4.***	
Pine Lake	900	Ontario:	1 000
Poverty Lake	900	Black Creek	$\frac{1,000}{500}$
Rebecca Lake	1,350	Electric Light Pond Elgin Park Pond	500
Rill Lake	$\substack{1,055\\900}$	Eight fark fond	000
Shoe Lake	2,500	·	
Split Rock Lake	900	Parry Sound:	1 000
Tooke's Lake	1,055	Barrett's Creek	$\begin{array}{c} 1,000 \\ 200 \end{array}$
Wolf Lake	900	Bear Lake	1.250
		Beatty Creek Begsboro Creek	$\frac{1,230}{2,500}$
Nipissing:	200	Big Clam Lake	200
Boat Lake	600	Birch Lake	1,250
Bourdeaux Lake Cedar Lake	$\begin{smallmatrix}300\\250\end{smallmatrix}$	Black Creek (Strong)	2,500
Clear Lake (Lyell)	500	Black Creek (Gurd)	1,250
Clear Lake (Gooderham).	500	Cashman's Creek	200
Crooked Lake	100	Clear Lake	500
Frog Lake	500	(S. Himsworth) Clear Lake (Perry)	1,800
Gorge Lake	100	Clear Lake (Wilson)	125
Hoover's Lake	$\begin{array}{c} 900 \\ 500 \end{array}$	Clear Lake (Armour)	200
Little Madawaska River Little Tyne River	100	Commanda Creek	2,500
Long Lake	600	Compass Lake	360
Magnetawan River	200	Cummings Lake	$\begin{array}{c} 250 \\ 450 \end{array}$
McNorton Lake	800	Deer River (Lount) Distress River	1.250
Montreauil Lake	500	Dunkers Creek	1,250
Nelson's Lake	900	Eagle Lake	125
North River	$\substack{1,000\\200}$	Genesee Creek	3,000
Rocky Lake	500	Horne Lake	200
Rowan Lake	150	James Creek	360
Unnamed stream running		King Lake	$\begin{array}{c} 125 \\ 100 \end{array}$
into McPhee Lake	500	Little Lake	900
White Lake	150	Little East River Little Pickerel River	125
Norfolk:		Long Lake	900
Big Creek	1.500	Lynx Lake	400
Forestville Creek	1,250	Magnetawan River	4,310
Hay Creek	1,150	Owl Lake	200
Kent Creek	1,500	Pine Lake	100
Nanticoke Creek	1,250	Ragged Creek	360
Vittoria Creek Winter's Creek	$\begin{smallmatrix} 10\\1,100\end{smallmatrix}$	Rat Lake	360
Willier's Creek	1,100	Reasin Lake	$\begin{array}{c} 200 \\ 200 \end{array}$
Northumberland:		Rock Lake	1,250
Big Creek	500	Russell's Creek	400
Biltmore Creek	3,000	Shadow River	1,200
Black's Creek	3,000	Shell's Lake	100
Burnley Creek	$\substack{6,000\\100}$	South River	2,500
Chidley's Creek Dartford Creek	3,000	Stellar Creek	1,250
Dawson's Creek	1,500	Stirling River	1,000
DeLong's Creek	500	Stoney Lake	500
Duncan's Creek	1,500	Three Mile Lake	$\frac{200}{1.350}$
Heffernan's Creek	1,000	Trout Creek Tug-of-War Creek	200
Little Cole Creek	1,000	Tug-ot-war Oleen	200

SPECKLED TROUT—Conti	nued	Anderson Lake	
		(St. Ignace)	1,500
Peel:		Arrow River	2,000
Caledon Lake	1,000	Bass Creek	4,000
Credit River	1,900	Bat Lake	2,000
Temple Stream	500	Beaver Lake	2,000
		Bertha Lake	1,000
Perth:		Big Duck River	4,000
Avon River	3,000	Big MacKenzie River	14,000
		Boulevard Lake	3,000
Peterborough:		Bruley Creek	7,000
Big Ouse River	5,000	Camp Lake	$\frac{4,000}{11,000}$
Buchanan Creek	1,000	Centre Lake	1,000
Cavan Stream	3,000	Coldwater River	3,000
Little Ouse	6,000	Corbett Creek	5,000
Mount Pleasant	1,000	Cousineau Lake	1,000
Trennum's Creek	1,500	Crockers Lake	1,500
P. C		Current River	14,000
Renfrew:		Deception Lake	7,000
Battery Lake	1,000	Echo Lake	3,000
Black Lake	500	Fall Lake	3,000
Carson Lake	1,000	Fawn Lake	1,500
Colton Lake	500	Five Mile Lake	1,500
Dam Lake	1,000	Fog Lake	2,000
Eady's Lake	500	High Bluff Lake	500
Godin's Lake	$\substack{1,000\\500}$	Hogan Lake	1,500
Johnson Lake	1,250	Kaministiquia River	7,000
Loche Lake, or	1,200	Kowkash River Langley's Lake	$\frac{1,500}{2,500}$
Goshen Creek	2,000	Little MacKenzie River	2,000
Long Lake	1,250	Little Lake	1,000
MacKay Creek	1,200	Little Whitefish River	2,000
Nadeau Creek	700	Loftquist Lake	14,000
Paddy's Lake	2,500	Loon Creek	1,500
Rock Lake	500	Loon Lake	3,000
Round Lake	500	Loon River	5,000
Schooner Lake	1,250	Lower Pearl River	2,000
Smith Lake	500	Lower Hunter Lake	1,500
Snake Lake	1,250	Mac's Lake	1,000
Spring Creek	1,000	Maxwell Creek	1,500
Trout Lake Turner Creek	1,000	McIntyre River	7,000
Wylie Creek	170	McGregor Lake	1,000
with Creek	1,800	McVicar Creek	3,000
Simcoe:		Mirror Lake	1,500
Black Creek	200	Missed Lake	1,500
Boyne River	$\begin{smallmatrix} 300 \\ 1,200 \end{smallmatrix}$	Moose Lake	,
Corbett Creek	1,800	(near Rossport)	1,500
Greenlaw Pond	100	Moose Lake	
Mathewson's Creek	1,200	(McTavish Tp.)	3,000
Sheldon Creek	3,000	Morgan Creek	1,500
Silver Creek	2,000	Neebing River	7,000
Sturgeon River	7,000	Nipigon River	28,000
Tenth Creek	500	Oliver Lake	7,000
Willow Creek	1,200	Paquette Lake	2,500
2 11		Pass Lake	7,000
Sudbury:		Paysplatt River	3,000
Bertrand Creek	1,200	Pearl River	2,000
Ella Lake	1,050	Pickerel Lake	2.500
Pumphouse Creek	1,000	Pitch Creek	7,000
Sauble River	1,500	Raft Lake	2,000
Shiner Lake	1,000	Randolph Creek	500
Thunder Bay:		Rock Lake	1,500
-	- 0.50	Rock River	5,000
Allen Creek	1,000	Round Lake	1,000
Anderson Creek Anderson Lake (McTavish)	1,500	Samec Lake	1,000
renderson Dake (MCTavish)	1,462	Sand Lake	2,000

SPECKLED TROUT—Conti	nued	Wentworth:
Thunder Bay—Continued		Spencer Creek 4,000
Sand Lake (near		Twelve Mile Creek 800
Schreiber)	1,500	X7
Silver Lake	4,000	York:
Silver Islet Creek	1,500	Doan's Pond 500
Skillen Lake	2,000	Private waters— Sale and demonstration 8,626
Spectacle Lake Spring Creek (Dorion)	$\frac{2,000}{2,000}$	Safe and demonstration 6,020
Spring Creek (Dollon)	2,500	A DATA MO
Spring Creek No. 2	2,500	ADULTS
Spring Lake (Adrian)	1,000	Algoma:
Squaw Creek	4,000	Batchewana River 250
Trap Lake	1,000	Harmony River 250
Trout Lake (Gorham)	7,000	Heydon Lake 500
Trout Lake (Stirling)	$12,500 \\ 1,500$	Island Lake (Aweres) 330
Upper Hunter Lake Upper Pearl Lake	2,000	Lower Island Lake 800
Wanogi Lake Creek	7,000	Root River 690 Trout Lake (Aweres) 700
Walker Lake	2,000	110ut Lake (Aweres) 100
Welch Lake	1,000	Grey:
White Sand Creek	6,500	Woodland Spring 200
Whitewood Creek	7,000	Woodiana Spring
Wideman Lake	$\frac{1,500}{3,000}$	Mhunden Deve
Wolf River	3,000	Thunder Bay:
Timiskaming:		Bass Creek
Bartle Lake	500	Coldwater River 1,000
Belle Isle Lake	500	Current River 1,500
Crystal Lake	1,000	Kaministiquia River 800
Fairy Lake	1,500	Loon Lake 781
Gleason Creek	500	Lower Pass Lake 900
Halfway Lake	400	Mattawin River 800
Hooker Creek Jean Baptiste Lake	$\begin{array}{c} 400 \\ 500 \end{array}$	Neebing River         800           Pearl River         900
Lake Timagami	2,500	Pitch Creek
Little Otter Lake	500	Spring Creek (Dorion) 145
Moffatt Creek	500	Trout Lake (Gorham) 800
Munro Lake	400	Trout Lake (Stirling) 800
Pike Creek	1,250	Private waters (Sale and
South Wabi Lake	$\begin{smallmatrix}500\\1,250\end{smallmatrix}$	demonstration) 404
Trout Creek	500	
Ward Creek	500	WHITEFISH
Watabeag River	500	
Welcome Creek	500	FRY
Whitney Lake	500	Hastings:
Wintonia:		Bay of Quinte 12,000,000
Victoria: Corbin's Creek	100	Day of Quinte 12,000,000
Coloin's Creek	100	Kenora:
Waterloo:		Eagle Lake 1,000,000
Elora Stream	1,500	Lake of the Woods 32,132,500
Erbsville Creek	3,000	Marchington Lake 250,000
Idyle Wild Stream	300	Separation Lake 500 000
Mannheim Stream	3,000	Stanzihikimi Lake 250,000
Welland:		
Effingham Stream	1.500	Prince Edward:
Sulphur Springs	1,500	Bay of Quinte 39,000,000
	, ,	
Wellington:		Rainy River:
Bell's Creek	3,000	Rainy Lake 10,260,000
Bunyan Creek	2,400	
Esson Creek	$\begin{array}{c} 500 \\ 700 \end{array}$	Thunder Bay:
Saugeen River	3,000	Nipigon Lake 225,000
2345004 242.01 1111111111	0,000	

#### WHITEFISH—Continued

Vonley
York:
Lake Couchiching 1,400,000 Lake Simcoe 2,200,000
Great Lakes:
Lake Superior
Georgian Bay 46,240,000 Lake Erie
Lake Huron 20,210,000
Lake Ontario 74,000,000
EYED EGGS
Exchange 4,000,000
HERRING
FRY
Frontenac: Palmerston Lake 250,000
Palmerston Lake 250,000
Lennox-Addington:
Weslemkoon Lake 250,000
Peterborough:
Loon Lake 250,000
Prince Edward:
Bay of Quinte 1,100,000
Great Lakes:
Lake Erie 470,000
Lake Erie
Miscellaneous:
Demonstration Purposes . 150,000
EYED EGGS Demonstration purposes . 30.000
Demonstration purposes . 30,000
MISCELLANEOUS
Demonstration purposes . 3,053

#### APPENDIX No. 2

## ONTARIO DEPARTMENT OF GAME AND FISHERIES DISTRIBUTION OF FISH ACCORDING TO SPECIES—1933 TO 1937, INCLUSIVE

	1933	1934	1935	1936	1937
Large-mouthed Black Bass Fry Fingerlings Yearlings & Adults	856	35,250 4,250 197	130,000 2,153 27*	45,000 8,398	135,000 4,120 92
Small-mouthed Black Bass Fry Fingerlings Yearlings & Adults	545,000 25,750 3,471	365,500 35,750 420	696,000 153,065 3,433	780,000 69,380 5,202	1,275,000 141,900 5,893
Maskinonge—Fry		909,500	460,000	274,000	420,700
Perch—Fry		95,000,000	53,031,400	46,080,000	9,150,000
Pickerel—Eyed Eggs	20,500,000	5,000,000 278,470,000	2,000,000 229,629,000	2,000,000 300,759,500	2,000,000 263,743,400
Pickerel (Blue) Fry					1,000,000
Brown Trout—Fingerlings	483,016 674	138,000 14,500 689	109,000 9,650 6*	147,050 7,290	97,484
Lake Trout—Eyed Eggs Fry Fingerlings	200,000 1,400,000 16,012,700	402,000 1,265,000 14,045,450	7,773,034 14,564,000	3,209,400 4,165,000 18,253,244	3,225,000 4,667,000 15,782,350
Landlocked Salmon (Ouananiche) (Yearlings)			13,640	•••••	
Atlantic Salmon Fry					7,200
Rainbow Trout—Eyed Eggs	27,016	1,000 4,480 312,512 25,014	134,075 314	133,000 3,507	105,240
Kamloops Trout—Fingerlings			85,464 10,796		80,000
Speckled Trout—Eyed Eggs Fry Fingerlings Yearlings Adults	506.000 725,000 5.950,255 28,237 1,549	6,257,267 34,762 1,652	1,645,000 5,013,831 35,421 5,420	28,600 182,000 1,053,050 557,270 6,081	384,725 1,167,073 16,150
Whitefish—Fry Eyed Eggs	372,111,000	376,777,000	296,482,000	428,402,000 112,500	383,683,900 4,000,000
Herring—Fry Eyed Eggs	22,805,000	17,512,000	43,760,000	56,120,000	5,270,000 30,000
Golden Shiners		7,000	500		
Miscellaneous		*****			3,053
TOTALS	441,325,524	796,619,193	655,747,231**	862,401,472	696,395,280

<sup>\*</sup> Exhibition fish

<sup>\*\*</sup> This total does not include a distribution of 132,646,600 fry and eyed eggs during the five months immediately preceding the said report.

#### APPENDIX

#### GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of EQUIP

District	No. of Tugs Men				asoline aunches		and Boats	Gill Nets		
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	666	5	50	\$ 17,500	148	\$ 72,140	283	\$ 11,061	560.831	\$ 69,93
ake Superior	422	9	239	50,000	118	52,350	79	4,312	875,425	110,119
Torth Channel	227	11	219	65,300		32,975	62	3,205		
eorgian Bay		16	377	99,638		108,447		7,192		
ake Huron	442		463	136,695		96,180	35	1.680		
ake St. Clair			077	000 700	44	11,266	88	3,975		
ake Erie		31	877			203,995 108,500	152 194	6,852 7,431		
ake Ontarioouthern Inland Waters					16	3,075	138		1,331,130	
otals	4.440	89	2,225	\$597,633	1,092	\$688,928	1,146	\$50,255	8,350,613	\$959,36

#### APPENDIX

#### QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickerel (Blue)	Pickerel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters Lake Superior North Channel Georgian Bay Lake Huron Lake St. Clair Lake Erie Lake Ontario Southern Inland Waters	528 2,246,952 2,790 26,896 199,772 99,447 1,572,911 4,286	1,592,185 300,816 254,235 1,122,895 286,981 1,401,016 551,550 8,355	1,698,585 644,025 1,504,194 1,753,699	49,916 806 16,734 2,750 141,368	5,872 20,982 500 9,354,687	1,154,287 61,832 71,271 129,767 197,683 47,240 448,957 21,785 3,355
Totals	4,153,582	5,518,388	6,098,993	1,040,940	9,449,521	2,136,177
Price per pound	.05	.11	.11	.06	.05	.11
Values	\$207,679.10	\$607,022.68	\$670,889.23	\$62,456.40	\$472,476.05	3 234,979.47

No. 3

#### DEPARTMENT, ONTARIO

Province of Ontario, for the Year Ending December 31st, 1937.

#### MENT

	Seine Nets		Pour	Pound Nets Hoo		Nets Dip and Roll Nets		Dip and Roll Nets		Night Lines   Shears		'S					Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value	
4 45 50 9 62	10,200 13,600 2,710			25,455 38,077 76,660 81,450 12,300	50  5 13	500 1195 15,592	3 2		28 28,870 11,139	134 4,145 1,387 136 64 188	6		71 18 98 38	15,230 13,380 14,785 27,545 6,150 141,375 8,405	34 9 78 26	12,223 18,300	269,823 260,137 455,357 597,119 40,746 1,142,615 261,928
170	34,035	\$22,091	1,093	\$555,677	1,098	\$ 26,773	86	\$1,170	57,920	\$6,466	86	603	527	\$256,565	369	\$112,173	\$3,277,701

#### No. 4

#### FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
1,637 9,078 1,041 7,225 9,566		1,691,074 147,986	131,070 6,563 91,709	49 4,736 82,105 81,729 56.687	580 2,688 29,059 8,207 288,753 337,898 153,027	54,292 253,677 114,480 58,520 289,600 1,258,095 271,877	12 6 395 249 656 73	4,508,992 1,307,470 3,079,087 3,188,770 766,308	349,994.95 122,294.89 319,004.49 300,613.15 41,582.96 826,094.55 222,022.57
93,041	74,906	2,050,126	947,120	535,692	1,086,407	2,905,451	2,528	36,092,872	
.40	.07	.05	.06	.08	.05	.03	1.00		
\$37,216.40	\$5,243.42	\$102,506.30	\$56,827.20	\$42,855.36	\$54,320.35	\$87,163.53	\$2,528.00		\$2,644,163.49

APPENDIX No. 5
COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1936 Pounds	1937 Pounds	Increase Pounds	Decrease Pounds
Herring Whitefish Trout Pike Pickerel (blue) Pickerel (dore) Sturgeon Eels Perch Tullibee Catfish Carp Mixed and Coarse Caviare	4,298,562 5,790,403 6,458,730 1,158,345 6,899,501 2,393,178 106,868 61,780 1,586,959 920,155 609,488 1,166,710 2,802,028 1,906	4,153,582 5,518,388 6,098,993 1,040,940 9,449,521 2,136,17 93,041 74,906 2,050,126 947,126 535,692 1,086,407 2,905,451 2,528	2,550,020 13,126 463,167 26,965 	144,980 272,015 359,737 117,405 257,001 13,827
TOTALS	34,254,613	36,092,872	*1,838,259	

<sup>\*</sup> Net Increase

## APPENDIX No. 6 STATEMENT OF YIELD OF THE FISHERIES OF ONTARIO 1937

Kind	Quantity Pounds	Price per Pound	Estimated Value
Herring Whitefish Trout Pike Pickerel (blue) Pickerel (dore) Sturgeon Eels Perch Tullibee Catfish Carp Mixed and coarse Caviare	$\begin{array}{c} 4,153,582 \\ 5,518,388 \\ 6,098,993 \\ 1,040,940 \\ 9,449,521 \\ 2,136,177 \\ 93,041 \\ 74,906 \\ 2,050,126 \\ 947,120 \\ 535,692 \\ 1,086,407 \\ 2,905,451 \\ 2,528 \end{array}$	\$ .05 .11 .11 .06 .05 .11 .40 .07 .05 .06 .08 .05 .08	$\begin{array}{c} \$ & 207,679.10 \\ 607,022.68 \\ 670,889.23 \\ 62,456.40 \\ 472,476.05 \\ 234,979.47 \\ 37,216.40 \\ 5,243.42 \\ 102,506.30 \\ 56,827.20 \\ 42,855.36 \\ 54,320.35 \\ 87,163.53 \\ 2,528.00 \end{array}$
TOTALS	36,092,872		\$2,644,163.49

#### APPENDIX No. 7

## ESTIMATED VALUE OF ONTARIO FISHERIES FOR A PERIOD OF TWENTY YEARS 1918—1937 INCLUSIVE

1918	 3,175,110.32	1928 \$	
1919	 2,721,440.24	1929	
1920	 2,691,093.74	1930	
1921	 2,656,775.82		2,442,703.55
1922	 2,807,525.21		2,286,573.50
1923	 2,886,398.76	1933	2,186,083.74
1924	 3,139,279.03		2,316,965.50
1925	 2,858,854.79	1935	2,633,512.90
			2,614,748.49
1927	 3,229,143.57	1937	2,644,163.49

### The Nineteenth Report

of the

## Department of Labour

Province of Ontario

1938

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL NUMBER 10 - 1939.



#### TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty, 1939.



# TO THE HONOURABLE THE LIEUTENANT-GOVERNOR OF THE PROVINCE OF ONTARIO.

May it Please Your Honour:

The undersigned has the honour to present to Your Honour the Nineteenth Report of the Department of Labour of the Province of Ontario for the fiscal year ending March 31, 1938.

Respectfully submitted,

N. O. HIPEL,

Minister of Labour.

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# REPORT OF THE DEPUTY MINISTER OF LABOUR

For the Fiscal Year Ending March 31, 1938

TO THE HON. N. O. HIPEL, Minister of Labour.

SIR:

I have the honour to submit a report on the work of the Department of Labour of the Province of Ontario for the fiscal year ending March 31, 1938.

#### INDUSTRIAL CONDITIONS

A decided improvement in industrial conditions in Ontario during the fiscal year was indicated in the statistical information compiled by the Dominion Bureau of Statistics. These figures show an increase in the volume of employment by a mean index number of employment of 120.2 for the year, or an advance of 12.2 points as compared with 1937, the base of 100 being the average for the calendar year 1926.

Encouraging features regarding the situation are the facts that the improvement continued throughout the year, the index number for each month being higher than that for the corresponding month of the previous year, and the improvement was also evident in all of the thirteen divisions of industry. The greatest gains were reported for the logging, construction and mining industries, as indicated by advances of approximately 34, 33 and 25 points respectively in the index numbers, and manufacturing generally maintained a high level of activity, especially in the iron and steel industry.

Improvement in industrial conditions was also shown by a decrease in the volume of unemployment among trade union members in the Province. According to calculations made from reports received from trade union bodies, the percentage of unemployment averaged 8.4 for the fiscal year as compared with 11.4 in 1937.

Greater activity in the building trades was indicated by an increase of 10.7 per cent. in the value of building permits issued in Ontario for the fiscal year, the total amounting to \$25,531,628.

#### LEGISLATION

Four of the statutes coming under the jurisdiction of the Minister of Labour were amended at the 1938 session of the Legislature, as follows;—

THE DEPARTMENT OF LABOUR AMENDMENT ACT, 1938;—By this amendment the number of members to constitute the Industry and Labour Board was reduced from five to three, all of whom are to be officers of the Department of Labour. Provision was also made for regulations for the protection of persons engaged in the construction of coffer dams and crib work in water or other places where pressure of sand, water or soil is likely to endanger human life.

THE STEAM BOILER AMENDMENT ACT, 1938;—By this amendment regulations made under the Act need no longer be published in the Ontario Gazette but notice that they have been made is to be gazetted and the regulations are to come into force ten days after publication of the notice, instead of at a date named by Proclamation. It also provided that the inspection fee to be paid to the inspector by owners or manufacturers shall be "such fee as may be prescribed by the regulations for such inspection and the issue of such certificate", instead of a fee of \$5.

THE INDUSTRIAL STANDARDS ACT;—By a section of The Statute Law Amendment Act, The Industrial Standards Act was amended to clarify the intent of the Act, that it does not apply "in the mining or agricultural industries".

WORKMEN'S COMPENSATION ACT;—This Act was also amended by a section of The Statute Law Amendment Act to provide that "a sum not exceeding \$125 for necessary expenses for transportation and things supplied and services rendered in connection therewith necessitated by the transfer of the body of a workman from the place of death to the place of interment in Ontario". This provision is to have effect as from the first day of May, 1937.

#### LABOUR DISPUTES

During the year there were 127 strikes and lockouts reported in Ontario, in which 22,749 workers were involved in a time-loss of 294,906 working days.

Approximately 35 per cent. of the time-loss, or 102,812 working days, was due to 23 strikes in the textile and clothing industry, and approximately 24 per cent., or 71,904 days, to 9 strikes in the metal products industry, which includes the automobile firms. On the other hand, there was a decided decrease in the amount of time-loss in the logging industry, which amounted to only 4,800 days. In 1934 the time lost in this industry due to strikes was 26 times this amount, and equalled about 48 per cent. of the total for that year; whereas, this year it was only 2 per cent. of the total. One explanation of this improvement in labour relations in the logging industry is the fact that there were in operation during the year four schedules pursuant to The Industrial Standards Act, providing for wages, hours and conditions of labour satisfactory to both employers and employees concerned.

Settlement of 52 strikes, involving 13,912 workers in a loss of 222,921 days, was effected through compromise; 37, involving 3,833 workers in a loss of 23,056 days, were settled in favour of the workers; and 25, involving 2,894 workers in a loss of 42,388 days, were settled in favour of the employers. Of the remaining strikes, 9 were indefinite in outcome, and 4 remained unterminated at the end of the fiscal year.

#### CONCILIATION AND NEGOTIATION

The Chief Conciliation Officer and other officials of the Department of Labour conducted negotiations which resulted in the settlement of strikes involving approximately 75 per cent. of the total number of workers involved in strikes in the Province.

The conciliation service has been greatly extended since the appointment of the Chief Conciliation Officer at the beginning of the fiscal year. As far as possible, this Branch of the Department is kept in constant touch with industrial situations likely to result in disputes and, in instances in which the public interest might be unduly affected, the Department takes the initiative in contacting the interested parties, with a view to preventing unnecessary disputes. Effective assistance has been rendered in many cases in which there were threats of strike and satisfactory adjustments have been achieved which have avoided immediate strikes and have removed the probability of future disputes.

Through this contact a valuable link is supplied between industry and the legislation available for treatment of these questions. A result of this service is evident in the logging industry. During the fiscal year there were no strikes in this industry in the four zones where schedules pursuant to The Industrial Standards Act were in force.

#### DOMINION-PROVINCIAL YOUTH TRAINING PROGRAMME

In September 1937 the Deputy Minister of Labour was called upon to direct the

operation of schedules under the Dominion-Provincial Youth Training Programme and temporary appointments were made to provide the staff necessary to organize the project. In co-operation with the Department of Education, classes in technical schools were established in various cities and towns throughout Ontario. An earnest effort was made to induce employers in all skilled trades to enter into contracts of apprenticeship and in this way 188 apprentices were indentured. Classes for technical training were provided for them.

Many employers were also induced to employ and instruct young persons in various occupations which are not considered fully skilled yet require instruction and practice to acquire the dexterity necessary to operate machines safely and to perform other repetition jobs. Some 638 such persons were placed in employment under learnership agreements.

In addition to the 188 apprentices indentured and the 638 learners placed in industry, there were also placed through the Department of Labour 12 male nurses, 18 salesmen, 69 in retail merchandising and 29 in various other forms of employment, making a total of 954 placements under Schedule "E". The registration and selection of young persons placed in employment under the Programme were done by the offices of the Government Employment Service and the Employment Service also made all necessary arrangements for transportation for apprentices sent to training classes away from home.

Under Schelules "A", "B", "C". and "D" 520 placements were made by other Departments of the Ontario Government, making the total of placements 1,474 under the Programme for the first six-month period it was in operation.

#### ONTARIO GOVERNMENT OFFICES, EMPLOYMENT SERVICE OF CANADA

The improvement in employment conditions during the year resulted in an increase of 22 per cent. in the number of vacancies reported to the Ontario Offices of the Employment Service of Canada, and approximately 92 per cent. of them were filled. The vacancies totalled 156,506; the applications 311,188 and the placements 143,462. Approximately 70 per cent. of the placements were for work of a regular nature, that is work lasting at least two weeks, as compared with 58 per cent. last year. Of this total number of placements, 1,969 were handicapped ex-service men.

This report completes the record of twenty years of service of the Ontario Offices and in that time, from 1919 to 1938, the number of placements totalled 2,867,839.

#### FACTORY INSPECTION BRANCH

During the year 27,425 inspections and investigations were made by the inspectors of the Composite Inspection Staff, and 5,876 orders were issued relative to various requirements of The Factory, Shop and Office Building Act. In the total number of permits issued, 4,570, there was an increase of 712 as compared with the previous year, and the number of permits in connection with homework increased 848. In 1936 the section of the Act dealing with homework was amended and it now requires all homeworkers throughout the Province, instead of only those in the larger centres, to hold permits, as well as all employers giving out this class of work and who formerly were not required to have permits. Remuneration for this work is now nearer factory wage rates for similar work, because of the requirement that pay for homework must be in accordance with rates set by the Industry and Labour Board.

The estimated value of buildings for which plans were approved in the Branch totalled \$9,405,225 for the year, or an increase of \$2,615,375 as compared with 1937. Twenty of the 292 plans, having a value of \$655,600, were for new companies, which fact indicates a favorable expansion in industry in this Province.

A considerable amount of caisson and coffer dam work was carried on in Ontario during the year, the main portion of which was in connection with the two large international bridges. The caisson inspector kept in close touch with these operations to ensure that the regulations were being complied with in every respect, with the result that there were no fatalities and no cases of caisson disease on the sections of the undertakings coming under his supervision.

#### BOILER INSPECTION BRANCH

The summary of the work of the Boiler Inspection Branch indicates an increase in the demands for service which taxed the efforts of all the members of the Branch.

The number of designs and specifications of steam boilers and other pressure vessels to be constructed for use in the Province which were surveyed in the Boiler Inspection Branch totalled 418, or an increase of 135 as compared with last year. New pressure vessels which are required to be inspected during construction received 700 first inspections, 521 second and 629 final inspections, or an increase in the total of 476. Used pressure vessels being extensively repaired, sold or exchanged were given 1,310 inspections, or 269 more than in the previous year, and the number of certificates issued by the Branch totalled 2,802, as compared with 2,507 in 1937.

As a result of this greater volume of work, the total monies transmitted by the Branch to the Treasurer of Ontario amounted to \$19,599.87, an increase of \$4,345.32.

#### BOARD OF EXAMINERS OF OPERATING ENGINEERS

A greater volume of work than ever before was accomplished by the Board of Examiners of Operating Engineers. The number of candidates examined totalled 2,305, or 661 more than in 1937, and 997 of these were examined at the Toronto Office of the Board where examinations are held daily, and 1,308 were examined at outside centres, chosen for the convenience of the candidates. The certificates issued numbered 17,195, or an increase of 800 over last year, and the net revenue amounted to \$29,314.14, an increase of \$3,251.61.

In addition to the routine work, the Board undertook the complete revision of the Regulations pursuant to The Operating Engineers Act, which resulted in certain changes and a decided improvement in the general set-up of the Regulations. During the year 405 cases of infractions of the Act were dealt with, 246 of which were satisfactorily handled without resort to court action and 159 were still in process of adjustment at the end of the fiscal year.

#### INDUSTRY AND LABOUR BOARD

The five members of the Industry and Labour Board were appointed May 25, 1937, as follows;—E. J. Young, Chairman, Miss M. F. Mangan, J. C. Adams, R. B. Whitehead and Fred Bancroft. Towards the end of that year Mr. Bancroft died and Mr. Whitehead resigned to become Ontario Securities Commissioner, and no appointments were made to fill their places. The section of The Department of Labour Act authorizing the establishment of the Board was amended in 1938 to reduce the personnel of the Board to "not more than three members". The Industrial Starndards Act, The Apprenticeship Act and The Minimum Wage Act were designated by the Lientenant-Governor in Council for administration by the Board.

INDUSTRIAL STANDARDS BRANCH;—Fifty-four official conferences were held during the year and 49 schedules were approved pursuant to The Industrial Standards Act, making a total of 56 schedules in force at the end of the fiscal year. The Board collected a total of \$3,069.50 arrears of wages from 43 employers on behalf of 242 employees and the sum of \$1,297.53 arrears of wages was paid direct to employees by their employers after intervention of the Board on their behalf.

APPRENTICESHIP BRANCH;—The registration of apprentices during the year totalled 665, as compared with 310 the previous year, and the active apprentices at the end of the year numbered 1,023, as compared with 518 in 1937. Examinations were held for 786 candidates, 673 of whom were engaged in the motor vehicle trade, 99 were hairdressers and 14 barbers. The certificates issued totalled 14,942, as follows;—7,633 in the motor vehicle repair trade, 3,423 in hairdressing and 3,886 in the barbering trade. The revenue amounted to \$17,132.83.

MINIMUM WAGE BRANCH;—Pursuant to The Minimum Wage Act, 1937, a minimum wage order covering the textile industry was issued by the Industry and Labour Board and became effective March 1, 1938. It established the minimum wage for men at \$16.00 per week and for women at \$12.50, with lower rates for juveniles and beginners. The minimum wage orders, issued by the former Minimum Wage Board and which apply to female workers only, remain in force until replaced by orders under the new Act. During the year the sum of \$21,180.18 was collected as arrears of wages from 448 firms on behalf of 646 female employees and the wages of 2,183 employees were adjusted to bring them into line with minimum wage orders.

#### CONCLUSION

It is with regret that we record the death on June 5, 1938, of the Hon. Morrison Mann MacBride, who had been appointed Minister of Labour in October 1937. Always keenly interested in the welfare of the people, Mr. MacBride was a zealous worker for the promotion of harmonious relations in this Province and his death was a great loss to the public service.

The Hon. Peter Heenan, Minister of Lands and Forests, undertook the Labour Portfolio temporarily following Mr. MacBride's death.

The Hon. N. O. Hipel, Speaker of the Legislature, was appointed Minister of Labour in September 1938.

The loss by death of two officials since the publication of the last report was a matter of regret for this Department. Mr. Fred Bancroft, a member of the Industry and Labour Board since its inception in May 1937, died on November 22, 1937. Mr. Bancroft had been actively identified with organized labour for the greater part of his life and had served on Royal Commissions and also on many Boards of Conciliation and Investigation.

- Mr. J. M. Brown, who had been Chairman of the board of Examiners of Operating Engineers since 1920, died on October 5, 1937, after an illness of several months. As Chairman of the Board, Mr. Brown was largely responsible for raising the standard of power plant engineering in the Province and, through textbooks which he compiled, rendered a great service to young men entering this profession. He had been superannuated for eight months prior to his death.
- Mr. F. B. Walker was appointed Chairman to fill the vacancy caused by Mr. Brown's death.

By an Order-in-Council dated the 18th day of October, 1937, the administration of The Workmen's Compensation Act was transferred from the Department of the Attorney-General to the Department of Labour.

I have the honour to be, Sir,

Your obedient servant,

J. F. MARSH,

Deputy Minister of Labour.

10

## ONTARIO GOVERNMENT OFFICES OF THE EMPLOYMENT SERVICE OF CANADA

#### GENERAL SUPERINTENDENT-H. C. HUDSON

The improvement in employment conditions reported in 1937 continued throughout the fiscal year 1938, the number of vacancies listed by employers being 22 per cent. above those of the preceding year.

The manner in which this improvement was reflected in the work of these offices will be seen in the statistical table which appears elsewhere in this report, and in the summary of reports from the various offices. At the same time, the Ontario Government continued to employ labour on a large scale, principally on highway construction, and the employment offices had the responsibility of seeing that a proper balance was maintained in the labour supply on each job. The percentage of key men employed by contractors was increased from 15 to 25, and 50 per cent. of the labour was recruited from relief lists or needy cases, and the remaining 25 per cent. consisted of other unemployed men in the district in which the work was carried on.

The co-operation between the Ontario Offices of the Employment Service and the federal Department of Labour continued throughout the year and it is interesting to note that, during the twenty years that the Federal-Provincial Agreement has been in effect, no major difficulties have arisen between the two departments. Service was rendered to another federal Government Department when the offices were asked to co-operate in placing men under the Probational Training Plan sponsored by the Veterans' Assistance Commission.

The employment service rendered the people of Ontario was enlarged by the opening of an office in Woodstock on September 1, 1937. There were two changes among the superintendents. J. W. Ross of Belleville resigned on account of ill health and was replaced by W. D. Ross, and A. W. Taylor, the Guelph superintendent, was superannuated and his position filled by R. J. Robson. On November 15, 1937, J. Fred Marsh assumed control over both the Men's and Women's Departments of the Toronto Office. The offices of Chatham, New Toronto and Sarnia were moved to improved premises during the year.

The Employment Service played a prominent part in the Dominion-Provincial Youth Training Programme, co-operating with the special representatives appointed to canvass employers on behalf of the Programme and assisting in the selection of young men and young women for the various courses.

An idea of the volume of business transacted in local employment offices is seen by the fact that the staff of the New Toronto Office conducted 39,917 employment interviews during the year, and the Port Arthur Office, the staff of which consists of the superintendent and one clerk, placed 12,223 persons in employment, incidentally constituting a record for the office.

The manner in which a local employment office is equipped to meet an emergency was revealed at the time of the unusual ice jam and the collapse of the Suspension Bridge at Niagara Falls. Hundreds of men flocked into the district in the hope of obtaining employment which might be created by the emergency and the local authorities centralized all orders for such help in the local employment office. The result was that men residing in the district were given the preference in the special work of repairing the damage caused by the catastrophe.

With this report the Employment Service in this Province completes its second decade of usefulness and it is no exaggeration to state that few government departments have been more extensively used by the citizens of the Province than the Ontario Government Offices of the Employment Service of Canada. During the period from

1919 to 1938 more than two and three quarter million men and women have been placed in employment. Examining the table which appears below, it will be seen that the period commencing in 1929 brought the largest number of placements of any of the five-year periods. The explanation of this is not the great volume of employment available in 1929, but rather the volume of relief work carried on in 1931 and 1932.

## PLACEMENTS MADE IN THE ONTARIO GOVERNMENT OFFICES OF THE EMPLOYMENT SERVICE OF CANADA — 1919 to 1938

919	75,151	1929	159,519	
920	135,852	1930	141,841	
921	107,764	1931	261,243	
922	143,011	1932	181,533	
923	167,933	1933	134,735	
	629,711			878,871
924	149,298	1934	209,870	
925	135,454	1935	35,777	(5 month
926	135,331	1936	140,265	
927	136,897	1937	119,120	
928	153,783	1938	143,462	
	710,763			648,494
	Grand Total	_ 2,8	367,839	

## OUTLINE OF ACTIVITIES OF ONTARIO GOVERNMENT OFFICES OF THE EMPLOYMENT SERVICE OF CANADA

More than 400 men were placed on farms by the Belleville Office at wages slighly higher than during the preceding year. An exceptionally good type of young man was recruited for the forestry course under the provisions of the Dominion-Provincial Youth Training Programme. Nine highway projects in the district absorbed 520 men, and 212 men were placed on the construction of the Hydro-Electric Power Commission transmission lines.

The Brantford Office, combined with the temporary agricultural office at Simcoe, exceeded the record of any other office in filling jobs on farms and the total, 2,552, was higher than in any previous year. The branch office at Simcoe served a useful purpose in centralizing the supply and demand for tobacco workers and placed over 1,000 men on farms. The placement of 120 young men and young women under the Youth Training Programme also reflects credit on the staff of the Brantford Office and the special representatives of the Programme. The majority of the placements were made in the iron and steel industry but 15 other industries are represented in the placement of the 96 young men and the 24 women who secured employment under this programme. An improvement in construction enabled the office to place approximately 200 building tradesmen and a survey of manufacturing establishments also indicates a marked improvement. The superintendent assisted a tobacco company in recruiting its labour supply for a new facory in Norfolk County and the assistance was greatly appreciated by the officers of the company.

The Chatham Office reported that the seasonal demand for harvesting tobacco, sugar beets and tomatoes resulted in the placement of 704 single and 161 married men. The office also supervised the labour supply on various highway construction

jobs. An important development was the decision of the City Council to use the Employment Service as a means of selecting men for city work. The office was moved to improved premises at 309 King Street West during the fiscal year. Difficulty was experienced in filling orders for domestic help due largely to the opportunities for employment for young women in the various factories in the district, particularly during the summer and fall.

With placements totalling 7,500, the Fort William Office established the highest record in its history. An increase in bush and construction activities largely accounted for the splendid record made by the office. The placement of 4,832 men in bush operations was more than double that of 1937. Shortly after the conclusion of the fiscal year the death occurred of J. T. Foxton, who had been on the staff since 1924. 1924.

In June 1937 A. W. Taylor was superannuated after eighteen years of service as superintendent of the Guelph Employment Office. He was succeeded by R. J. Robson. The office participated in the Dominion-Provincial Youth Training Programme, placing boys in bakeshops, retail stores and in printing establishments, while girls were placed in textile plants in the district. In addition, 9 young women from Guelph, who were trained under this Programme for household employment, were given jobs through the Guelph Office.

Almost 100 young men and women from Hamilton took advantage of various phases of the Dominion-Provincial Youth Training Programme. The majority of these were girls who received training as household workers, and young men were placed in the classes in carpentry, welding, tool and dye-making and bricklaying. Approximately 500 men were placed on various highway projects in the district. A registration of civilian handicaps was made through the office, and no less than 600 cases came to light as a result. The Women's Department was busy during the year with slightly over 1,000 placements in regular employment and almost 2,000 in casual jobs.

The first complete twelve-month report of the Kenora Office indicates clearly that there was a definite need for employment service in the north-western section of the Province. Almost 2,000 placements were made on highway construction on the trans-Canada and Fort Frances highways, while men were also placed on mining roads, bridge and culvert construction. The larger lumber companies and pulpwood jobbers availed themselves of the service of the office, and a group of young men from Kenora and Fort Frances were placed on a forestry training project under the provisions of the Dominion-Provincial Youth Training Programme. There were 795 men from relief rolls or men certified as needy cases given employment during the year.

In spite of the fact that the better types of farm hands appear to prefer south-western Ontario on account of the higher wages offered, the Kingston Office placed 168 men on farms during the spring and summer months. A very extensive programme of highway construction in the district accounted for 3,542 placements, which were effected in co-operation with the township relief officers.

The early part of the fiscal year in Kitchener brought three rather serious industrial disputes, followed, however, by a period of activity which is reflected in the placements of the office. In co-operation with the special representative of the Dominion-Provincial Youth Training Programme in the district, 83 young men and women were placed under apprenticeship indentures and learnership agreements within the area, 2 young men were sent to the mining school at Haileybury and 2 to the horticultural class at the Ontario Agricultural College at Guelph. Eighteen of the graduates of the first class at the Braeside Home Training School were placed in Waterloo county. The Women's Department of the Kitchener Office surpassed the

previous year's placements, although a shortage of experienced domestics was noticeable throughout the year.

Wage rates in the field of agricultural employment were higher than during 1937 in the district covered by the London Office. There was an increased demand for farm help, and it is interesting to note that 90 married couples were placed on farms during the year at wages ranging from \$300 to \$400 per annum with free house, garden, etc. The harvest wages for single men ranged from \$30 to \$35 a month, with occasional orders at \$40 a month and board. The efficiency of the London Office in recruiting men was demonstrated when 150 labourers were required on short notice. The local radio station kindly announced that these jobs were available and the order was filled within a few hours of the time it was received. Slightly over 300 men were placed on road projects in the district and 191 men were selected by the office as extra helpers during the Christmas rush at the local post office. Full co-operation was given in the Youth Training Programme and 34 placements were made. Reporting on the Women's Department, the superintendent pointed out the increasing difficulty of assisting middle-aged women in securing employment of any kind and stated that even in the domestic field the demand is strictly limited.

The New Toronto Office was moved to improved premises at 131 Sixth Street, and the advantages of a location off the main street were immediately apparent. During the first eight months of the fiscal year, the office was extremely busy with its farm labour campaign, Youth Training Programme, highway and other public works projects, and in rendering service to private employers who were increasing their staffs with the recovery in general business. Later, however, there was a pronounced recession in the activities in all these fields. In cooperation with the Veterans' Assistance Commission, the local office succeeded in placing a relatively large number of ex-service men who would have found it difficult to find employment had it not been for the publicity given to the subject by the advertising programme of the Committee. Contractors working on the unemployment relief projects in the New Toronto district expressed themselves as entirely satisfied with the type of service rendered by the office, from which they were required to obtain 75 per cent. of their labour, in accordance with the terms of their contracts. It is interesting to note that the three members of the staff recorded a total of 39,917 individual interviews during the year, or an average of 133 contacts with unemployed men each day. This figure indicates the extent to which the local office is utilized by men in search of work.

A 10 per cent. increase in the number of placements in the Niagara Falls Office, as compared with the fiscal year 1937, was a reflection of the improved employment conditions. An outstanding development in the district was the increase of 100 per cent. in the personnel of firms engaged in the manufacture of aeroplanes and parachutes. The local office partipated in the selection of young men and women for training in the various projects conducted under the Dominion-Provincial Youth Training Programme. In January extraordinary ice and wind conditions caused the collapse of the International Bridge and the flooding of the Ontario Power Company's plant at the base of the Horseshoe Falls. The local employment office was asked to assume complete control of the selection of men for the emergency work involved in repairing the damage and more than 200 men, carefully selected with regard to their need for the job, were placed between January 27 and March 31. Men applying for jobs at the Ontario Power Plant had their attention called to a notice reading as follows:—"No help wanted. Apply at Ontario Employment Office."

Approximately 4,000 men were employed in 40 camps operated by lumber companies in the vicinity of the North Bay Office. A large percentage of these men were placed through the efforts of the superintendent, following a conference called by the Minister of Labour between representatives of the Department and the Lumber-

men's Association. More than 50 per cent, of the placements of the office, however, were in connection with the 25 highway contracts supervised from North Bay. In addition, workers attached temporarily to the staff of the office kept in constant touch with the contractors in order that their needs might be supplied promptly. A significant development in the North Bay district, which the superintendent describes as "Quintupletland", has been the springing up of new hotels, tea-rooms, sleeping cabins and additions to restaurants and lunch counters as a result of the influx of tourists. The demand for help in this connection was double that of the previous year. The office supervised the selection of 96 young men for training in forestry under the Dominion-Provincial Youth Training Programme.

The Home Improvement Plan was responsible for the construction of many new residences in Oshawa and every qualified building mechanic was employed steadily between April and October. The superintendent commented on the fact that, while he had registered approximately 100 men disabled due to advanced years or physical disability, employers almost invariably asked for able-bodied men even for such jobs as watchmen. This greatly complicated the problem of placing handicapped men.

With farm placements approaching the 1,400 mark, the Ottawa Office exceeded all previous records in caring for the needs of the farmers in the district. The demand was primarily for single men but it was found possible to place a few married couples. In co-operation with the authorized representatives of organized labour, building tradesmen were supplied to contractors in the field. The district representatives of the Dominion-Provincial Youth Training Programme made the Ottawa Office of the Employment Service their headquarters and the co-operation was found mutually beneficial. In selecting men for highway work, the Ottawa Office co-operated with the reeves, mayors and relief officers of the district in which the contracts were being carried out. The outstanding feature of the Women's Department was the inauguration of the Ottawa Home Service Training Centre. The Director of the Women's Department took an active part in the selection and placement of girls for this form of training. In addition, the Women's Department co-operated with the High School of Commerce in a two weeks' intensive course in salesmanship under the Dominion-Provincial Youth Training Programme. Following this training, 20 of the young women who took the course obtained temporary employment on the sales staff of local department stores during the Christmas rush. The federal representative in the Ottawa Office recorded 1,686 interviews with employers during the year on behalf of handicapped ex-service men and placed 237 veterans in employment in 43 different trades and occupations. In addition, 24 placements were made under the Probational Training Plan in co-operation with the Veterans' Assistance Commission.

Seven contractors in the Pembroke district called on the local office for 583 men during the year. In addition, 375 men were placed at the military camp and on various forestry projects, the selection being made in all cases in co-operation with the local relief authorities. Almost 400 men were chosen from the files of the Pembroke Office by the lumber companies operating in the district, and a forestry camp under the provisions of the Dominion-Provincial Youth Training Programme absorbed 20 young men. Partly as a result of the various projects outlined above, relief in Pembroke was at a lower ebb than at any time since 1931.

An employer in Peterborough addressed a letter to the superintendent, an extract from which reads as follows;—"We wish to thank you for your co-operation in securing suitable help whenever it was available and in keeping us informed as to trained workmen seeking employment." The extract is typical of the attitude of Peterborough manufacturers towards the assistance rendered to them by the local employment office. As in other centres, highway contracts in the district were supervised by the superintendent in co-operation with voluntary representatives at points distant from the city. Two somewhat unusual placements were made. The first was a young man

to play the part of Santa Claus in a department store and the second a young man, who was both deaf and dumb, and who was placed on an estate where he had the responsibility of taking care of poultry and attending to the routine work in the orchard. The local newspaper, like other newspapers throughout the Province, co-operated in giving frequent and intelligent publicity to the work of the Service.

In co-operation with the district forester, the Port Arthur Employment Office placed 30 young men from the head of the Lakes in forestry camps where they were taught the scaling of timber. The construction of a landing field for the Trans-Canada Airways, various hydraulic projects and numerous highway jobs absorbed most of the supply of construction labour during the year. No less than 14,100 men applied to the Port Arthur Office for employment and of this number 12,023 were placed in regular or casual employment. This constitutes a record for the office.

The statistical report of the St. Catharines Office showed an increase of 1,314 placements over the figures for the previous year. Employers made 4,439 requests for help, or an average of 15 per day.

In order to handle the increased volume of business incidental to the construction of the new mental hospital in St. Thomas, Frank Kelly, a member of the staff of the Toronto Office, was assigned temporarily to duty in St. Thomas. Mr. Kelly also assisted the superintendent in placing men required by bridge and highway contractors in the district.

The Sarnia Office placed 540 farm hands in jobs, which number represented a considerable increase over the previous year. The office also assumed the responsibility for the selection of labour on three highway jobs in the district and for the preliminary work on the new international bridge. One of the companies engaged in construction of the bridge expressed its entire satisfaction with the service of the Sarnia Employment Office which it had used for the first time in connection with this project. More than 600 men were placed in the transportation field, including stevedores, labourers, marine help and mechanics. The office co-operated in the Youth Training Programme, a forestry camp being located at Ipperwash. In addition, close co-operation was maintained with the Home Training Centre in Sarnia. One student was sent to each of the courses in male nursing and mining. During the year the office moved to 217 Front Street North.

The Sault Ste. Marie Office reported the best year in the past fifteen, the placements totalling well over 3,000. Highway and bush operations accounted largely for the increase in placements and 45 young men were selected for training in a forestry camp in the district. As in the case of Sarnia, activity in marine transportation resulted in many jobs for local men.

The Stratford Office superintendent submitted in his report a graded rate of pay ranging from \$10 in December and January to \$30 during the months from June to October inclusive. The schedule was designed to simplify payment of farm labour, in accordance with the farmers' ability to pay throughout the various seasons of the year. Every encouragement was given to the Youth Training Programme, which received much publicity through an address broadcast by the Deputy Minister of Labour at the beginning of the campaign, and by other officials of the Department. The supplying of labour for an extensive programme of highway work was handled by the office.

Sudbury increased by 860 the number of placements made this year as compared with last year, due to activity in mining, logging and highway work. Eighty-two young men carefully selected from needy families were given training in forestry under the provisions of the Dominion-Provincial Youth Training Programme.

Timmins is not generally regarded as a farming district, but the office was sucess-

ful in placing 160 farm hands, as compared with 98 in the preceding year. Approximately 400 men secured employment on highway projects in the district which offset a reduction in the field of mining.

The placement of 2,740 farm labourers with more than 1,300 individual employers indicates the activity in this section of the Toronto Office. It is interesting to note that these men were sent to 26 different counties. Reporting on the various activities of the office, the superintendent writes in part;—

"During the fiscal year a major change took place in the work of the Handicap Department. In May 1937 the Department was asked to take over the direction of the Probational Training Plan inaugurated by the Veterans' Assistance Commission. This necessitated the Handicap Department handling men other than disabled applicants, as any ex-service man who saw service in an actual theatre of war is eligible for benefits under the Plan, and thus greatly increased the work of this Department. To date 1,250 registrations have been made under the Plan and there were innumerable interviews with applicants who were not registered because they could not produce documentary evidence of service or were otherwise ineligible. Two hundred and sixty-nine placements were made, approximately 70 per cent. of which resulted in the trainee being permanently placed in employment. In addition, a large number of offers to train applicants were investigated but were not recommended by this Department for various reasons. The closest co-operation was maintained between this Department and the local honorary committee of the Veterans' Assistance Commission and the relations between the two offices are most cordial. A weekly summary of ex-service men placed in employment was supplied the honorary committee by the employment office, as well as a monthly report of all activities under the Probational Training Plan.

"The regular work of the Handicap Department was carried out during the year and placements showed a substantial increase over last year, despite the business recession experienced during the last six months. Registrations increased approximately 36 per cent. and 346 obtained by this Department were transferred to the general section of the office.

"During the year the Youth Division was completly reorganized. In addition to the usual placement work, 263 young men and boys were placed in training under the Dominion-Provincial Youth Training Programme."

On November 15, 1937, the Women's Department was placed under the control of Mr. Marsh, who is now responsible for the direction of the whole Toronto Office. Certain staff changes were made with a view to improving the efficiency of the Service.

Slightly higher wages in connection with farm work resulted in an increase in the number of farm placements made by the Windsor Office. Commenting on the Home Service Training Centre established in Windsor, the superintendent reported as follows:—

"Early in October 1937 a training school for domestics was opened in Windsor and 18 girls were given a three-month course. With the exception of one girl who was ill, all were placed in good positions. In January 18 more girls entered the training school and the majority of them have positions waiting for them when they graduate in April. This office has co-operated with the Committee to the fullest extent".

Close co-operation was maintained with the local office of the Veterans' Assistance Commission, resulting in 57 men being placed in permanent employment, 7 in semi-permanent and 74 in casual work.

A branch of the Employment Service was opened in Woodstock on September 1,

1937, under the direction of R. E. Poste, with office located at 12 Finkle Street. In spite of the fact that the season was almost over, the office succeeded in placing 479 farm hands before March 31. Every effort was made to interest employers in the Youth Training Programme and meetings were addressed by the General Superintendent, representatives of the Programme and others. The office was assigned the responsibility of selecting men for highway and bridge projects throughout the district. The demand for qualified cooks-general exceeded the supply but 75 placements were made during the seven-menth period.

# ONTARIO GOVERNMENT OFFICES—EMPLOYMENT SERVICE OF CANADA APPLICATIONS AND PLACEMENTS OF HANDICAPPED EX-SERVICE MEN FOR FISCAL YEAR 1938.

#### PLACEMENTS

District	Applicants	Casual	Regular	Total	Cancellations
Ottawa	1,049	62	173	235	559
Kingston	139		4	4	108
Peterborough	8			_	2
Toronto	4,046	1,132	248	1,416	2,123
Hamilton	654	145	69	214	304
Brantford	147	11	29	40	69
St. Catharines	36	4	6	10	9
London	157	10	9	19	110
Windsor	51	15	16	31	2
Fort William	1	—	_	_	1
	7,288	1,379	590	1,969	3,287

ONTARIC GOVERNMENT OFFICES — EMPLOYMENT SERVICE OF CANADA APPLICATIONS, VACANCIES AND PLACEMENTS, DURING FISCAL YEAR 1938

	Vacan-	Appli-	Placen	nents	Provincial and Interprovincial	
	cies	cants	Regular	Casual	Trans In	fers Out
Belleville	2,429	3,566	1,416	1,009	4	. —
Brantford	4,854	7,195	3,985	837	19	56
Chatham	3,095	4,031	1,610	1,457	6	7
Fort William	7,650	8,437	6,505	1,058	11	
Guelph	1,304	2,574	888	231	26	1
Hamilton, (Men)	4,861	12,925	3,274	1,559	13	82
Hamilton, (Women)	3,347	5,623	1,006	1,981	6	4
Kenora	3,135	4,814	2,539	595	1	
Kingston	5,715	6,393	4,943	525	6	2
Kitchener	3,975	5,915	1,657	1,225	19	38
London, (Men)	5,378	8,001	3,785	1,569	6	36
London, (Women)	2,501	3,645	1,150	1,268	1	
New Toronto	1,801	5,674	1,513	279	9	_
Niagara Falls	2,577	4,276	1,513	833	74	69
North Bay	6,967	7,407	5,130	632	222	867
Oshawa	3,981	6,028	764	3,158	57	4
Ottawa, (Men)	4,484	12,784	3,810	666	3	78
Ottawa, (Women)	3,267	7,486	1,877	1,286	3	_
Pembroke	3,147	4,080	1,423	990	734	224
Peterborough	2,793	3,873	2,341	368	84	1
Port Arthur	14,100	12,168	11,765	258	2,076	5
St. Cath; rines	4,932	6,351	2,369	1,999	99	67
St. Thomas	2,133	2,569	1,585	465	23	_
Sarnia	3,370	4,329	1,672	1,677	8	3
Sault Ste. Marie	3,896	6,920	2,507	914	363	5
Stratford	1,738	4,923	1,583	135	20	14
Sudbury	4,093	9,380	3,284	474	183	75
Timmins	8,973	14,511	4,020	2,923	1,633	101
Toronto, (Men)	13,587	81,449	9,850	3,708	2	424
Toronto, (Women)	16,224	28,638	4,945	6,850		109
Windsor, (Men)	3,033	7,245	1,686	1,307	16	37
Windsor, (Women)	3,453	5,622	1,806	1,590		
Woodstock	1,513	2,356	1,018	417	33	9
Totals	156,506	311,188	99,219	44,243	5,760	2,318

### LIST OF ONTARIO GOVERNMENT OFFICES OF THE EMPLOYMENT SERVICE OF CANADA AS ON NOVEMBER 1, 1938

#### H. C. HUDSON, GENERAL SUPERINTENDENT ....

Adelaide 1	211—Local 591	Residence: J	unction 0939
CITY	ADDRESS	TELEPHONE	SUPERINTENDENT
Brantford Chatham			W. D. Ross M. H. MacBride H. C. Garner A. H. Power, Jr.
	116 Carden St. E		R. J. Robson W. A. Selkirk
Kenora	40-50 John St. N Cor. 2nd St. & 4th A	ve	W. A. Selkirk G. Ritchie
Kitchener	.41 Clarence St. N	1612	H. F. Mooers M. H. Phillips
(Women)	180 King St	Metcalf 5295	H. Wray W. Wray H. N. Reid
Niagara Falls	609 Erie Ave.	1221	H. P. Hanan H. A. Desjardins
Oshawa	64 King St. E	547	Rae Halliday Geo. Hamilton
(Women)	132 Queen St	2-3158	Geo. Hamilton A. J. Kreutzweiser
Peterborough	167 Pembroke St. E 165 King St	571	P. J. Hennessy W. H. L. Mellis
St. Catharines	193 Park St	1269	A. C. Wood L. P. Cunningham
Sarnia	498 Talbot St	1154	D. A. McIntyre A. E. Palmer W. E. Hunt
Simcoe	Peel Street		J. D. Freeman (Clerk)
Sudbury	80 Ontario St	359	G. H. Langan A. E. Woods
Toronto (Men)	25½ Fourth Ave 70 Lombard St 77-79 Richmond St. E	Wav. 4581	D. Murphy J. Fred Marsh J. Fred Marsh
Windsor	365-369 Pelissier St.		A. J. Cooper M. Dickie
	12 Finkle St.		R. E. Poste

#### PRIVATE EMPLOYMENT AGENCIES

Three licensed private employment agencies transacted business in the Province during the year, according to reports received in this Department. Details of the placements of these agencies are as follows:

		PLACEMENT	rs
	Men	Women	Total
North Bay—			
Canadian Placement Agency, B. Ferro	453	_	453
Sudbury—			
Messrs, P. J. & F. W. McAndrew	974	_	974
Toronto-			
Metropolis Agency	170	1,003	1,173
Totals	1,597	1,003	2,600

No one was prosecuted under the Employment Agencies Act during the fiscal year ending March 31, 1938.

#### FACTORY INSPECTION BRANCH

#### CHIEF INSPECTOR, DEPARTMENT OF LABOUR-J. R. PRAIN

The fifty-second report of the Factory Inspection Branch covering the fiscal year 1938 will give a clear idea of the activities of the Composite Inspection Service of the Department of Labour.

Since the service was inaugurated in 1936 additional duties have been assigned to the staff, and there is no doubt that it has done away with much of the duplication and its irritating effect on employers of labour. Factory inspection takes up the major portion of the inspector's time, as there is an ever-present need for vigilance in order to keep industrial accidents down to the lowest possible minimum.

Many investigations were necessary under The Industrial Standards Act, The Apprenticeship Act and The Minimum Wage Act, and invariably resulted in important data being available for the officials entrusted with the enforcement of these acts, thereby enabling them to solve some knotty.problems. As usual the Branch assisted in the enforcement of The Steam Boiler Act and The Operating Engineers Act.

In addition to the regular inspection service, it is interesting to report that, at the request of the Provincial Secretary's Department, a yearly survey is made of government institutions to ensure that machinery is carefully guarded and other hazards controlled so that the inmates might be protected as far as possible against accidents. Inspection service is also rendered the Technical and Vocational Schools in Toronto, where many machine tools are used by the students. These machines are dangerous unless properly guarded and the inspection assists very materially in reducing the accident hazard.

It will be noted in the statistical section of this report that there was an increase in the number of males employed, as compared with last year, but a decrease in the number of females. This might be accounted for by the improvement in the metal trades in which mostly men are employed. There is shown a marked increase in the number of permits issued to homeworkers, indicating that the legislation of 1936 has had its effect and the prices being paid give this class of worker remuneration much nearer the wages paid in factories for similar work. The amendment in 1936 to The Factory, Shop and Office Building Act requires all homeworkers, as well as all employers giving out work to be done at home, throughout the Province, instead of those only in the larger centres, to obtain permits and the pay for homework must be in accordance with rates established by the Industry and Labour Board.

The number of industrial accidents, fatal and non-fatal, increased slightly, but cases of industrial diseases decreased in number. In this connection our appreciation is again expressed to the Industrial Hygiene Division of the Department of Health for their co-operation and assistance during the year.

#### CAISSON AND COFFER DAM WORK

A considerable amount of caisson and coffer dam work was carried on in Ontario during the period under review in connection with bridge construction, consisting mainly of the two large international bridges and numerous highway structures located throughout the Province. These required many visits by the inspector in charge of this type of work to Huntsville, Fauquier, Port Stanley, Ingersoll, Burk's Falls, Belleville, London, Strathroy and Thamesford. Considerable work in open sewer construction and tunnelling was also undertaken and two compressed air tunnelling jobs were in operation in connection with a large water main in Toronto. On the two large international bridge jobs it is gratifying to note that not one fatal accident occurred on work supervised by this Department. Only two serious lost-time accidents occurred on one of these bridges, one being a fall which confined the injured

man to hospital for three months and the other requiring an absence of several weeks. On the other bridge the most serious accident reported was the loss of a little finger by a worker turning over steel on the ground.

We had at all times the utmost co-operation from contractors on these jobs. Our Department was asked to investigate the necessity for installing safety nets under the main span of the Blue Water Highway Bridge during construction. After investigation it was suggested that a motor boat be kept on the river down stream from the bridge and fitted with belts and first aid equipment. The company readily agreed to this and a motor boat was in service during all hours of construction for rescue purposes only. The same arrangement was made in connection with the Thousand Island Bridge. On smaller bridges in the Province we also had co-operation from the contractors. It is our experience that the longer contractors have been in the construction business, the readier they are to provide adequately for the safety of their workmen. Small contractors who are new in this line of business do not seem to realize the danger in coffer dam construction and often undercalculate the pressure to which timber is subjected while excavation work is in progress.

An unfortunate catastrophe occurred in the collapse of a coffer dam at Port Stanley, resulting in the death of eight workmen and injuries to five others, two of which were serious. This Department had not been informed of this proposed job and at the time of our inspector's visit three months before the disaster, the excavation was complete and almost ready for the pouring of the foundation concrete. Subsequent to this visit, the plans for the pier were changed, increasing the size considerably. A new coffer dam was constructed to take care of these changes and again the Department was not notified. The coroner's jury investigated this accident and brought in the verdict "Cause of accident unknown; cause of death, accidental" and the rider recommended that in all future contracts for such work a clause be inserted requiring the contractors to notify the Department of Labour of their intention to construct a coffer dam or any type of caisson. Since that verdict all contractors before commencing operations have submitted plans showing the system of procedure to be undertaken.

The extremely hazardous nature of this type of construction work requires continued vigilance on the part of contractors, workmen and inspectors to ensure that all precautions will be taken to safeguard life. In tunnelling operations hazards are always present, particularly where compressed air is required and it is fortunate that no accidents occurred on this type of work. No cases of 'bends' or caisson disease were reported among men working under high pressure, nor among divers working in air pressure above 40 pounds, employed on the portion of the international bridge coming under the jurisdiction of this Department. The strict enforcement of the various stages of decompression as set forth in the regulations was no doubt responsible for the lack of caisson disease.

#### PLANS FOR NEW BUILDINGS

The estimated value of buildings, plans for which were approved by this Department during the year 1938, amounted to \$9,405,225, or an increase of 38.6 per cent, as compared with the previous year. The fact that the increase in the number of plans was only 12.3 per cent, indicates that some of the units involved great expenditures. Twenty of the 292 plans were for new firms and had a value of \$655,690, or 6.96 per cent, of the total value, thus indicating a favourable expansion in industry within the Province.

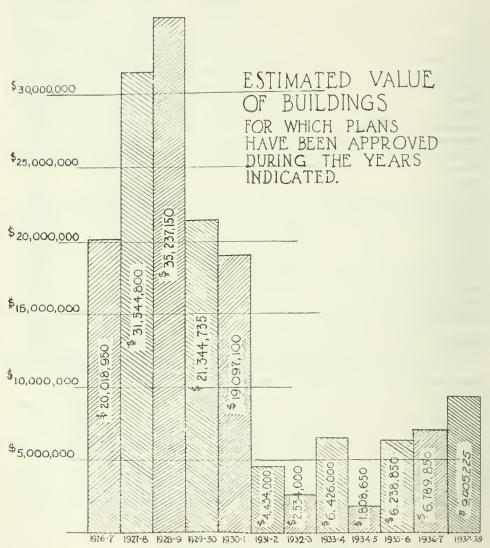
The accompanying table shows the number and value of plans according to industries. The automobile industry, which is listed under 'conveyance', showed the

greatest value and was also responsible for many other extensions listed under 'metals'.

#### CLASSIFICATION BY INDUSTRY OF PLANS APPROVED

Trade or Industry	Number of Plans	Value of Plans \$	Percentage of Total Value
Chemical	30	365,800	3.89
Clay, glass and stone	5	61,000	.65
Clothing	5	119,599	1.27
Conveyance	9	2,368,000	25.10
Food	57	1,117,450	11.91
Garages	10	322,900	3.50
Laundries and cleaning	8	70,500	.75
Leather	6	39,800	.45
Lumber	. 4	29,100	.30
Metals	47	778,200	8.28
Offices	23	674,575	7.18
Paper	9	142,000	1.51
Printing and publishing	3	1,251,000	13.34
Rubber	4	118,500	1.26
Shops	20	200,450	2.13
Textiles	22	1,138,200	12.11
Tobaceo	3	248,000	2.64
Warehouses	9	219,700	2.34
Wholesale	4	68,000	.73
Woodworking	3	62,000	.68
Unclassified	6	10,550	.01
Totals	292	\$9,405,225	100.00

The following diagram indicates the value of buildings for which plans were approved by the Factory Inspection Branch for the past twelve fiscal years.



NOTE: OWING TO THE CHANGE OF THE DATE OF THE END OF THE PROVINCIAL FISCAL YEAR FROM OCT: 31st TO MAR. 31st THE PERIOD GIVEN ABOVE AS 1934-5 REPRESENTS ONLY FIVE MONTHS.

The following is the distribution of the services rendered by the inspectors of the Composite Inspection Branch:

	1937	1938	
Factory Inspection Branch:			
First Inspection	14,229	13,762	
Second Inspection	3,015	2,809	
Special Investigations	2,204	103	
Visits re homeworkers		1,143	
Visits re exhibitions	100	93	
F			17,910
For Waga Branch			0.445
Minimum Wage Branch			2,445
Industrial Standards	7,499		1,121
Apprenticeship Branch	1,613		3,116
Main Office	694		809
Boiler Inspection Branch			1,393
Operating Engineers Board			631
Total Inspections			27,425

In addition there were investigations of accidents and the usual visits, office calls and conferences incidental to inspection

Employees in the above industries, mercantile establishments and office buildings numbered 341,421, classified as follows:—

Year	Males over 16	Males 14-16	Females over 18	Females	Total	Children under 14 dismissed
1937 1938	232,923 238,360	48 22	104,837 192,339	1,736	339,544 341,421	8 0

## HOURS OF LABOUR

	Ma	le Work	ers	Female Workers							
45	50	54	58	60	45	50	54	58	60		
154,987	30,157	21,964	1,894	15,570	71,831	12,452	8,301	719	4,067		

Also 19,529 employees, male and female, working approximately 50 hours per week.

Orders issued relating to various requirements of the Act totalled 5,876 as compared with 5,330 in 1937.

#### PERMITS

Applications for permits numbered 4,570 and were issued as follows:-

Se	ction	ıs		
03	f Ae	:t	1937	1938
Double shift	33		167	157
Overtime	32		2,381	2,088
Bakeshop	71		58	46
Fruit Camps	38		20	16
Sale of bread manufactured				
outside the Province	70		5	
Homework	51	workers	1,120	1,909
		employers	107	166
Industrial Standards schedules				188
Totals			3,858	4,570

## COMPLAINTS

One hundred and eighty one complaints were received during the year. Upon investigation 79 were upheld, 69 not upheld, 12 pending investigations and 3 did not come within the jurisdiction of the Branch. Some investigations covered more than one complaint. Susbjects of complaints were as follows:—

	1937	1938
Long hours	61	71
Inspection of boilers	5	4
Working overtime without permit	5	12
Engineers' certificates	18	4
Ventilation	2	5
Fire exits	13	11
Fumes	2	7
Half hour lunch period	_	5
Elevators	5	4
Toilet aecommodation	5	14 `
Child labour	1	4
Dust	2	3
Heat	3	7
Sanitation	3	2
Air tank inspection		1
Mechanical exhaust	7	2
Guarding machinery	5	2
Sunday work	_	1
Homework without permit		1
Lights	_	1
Miscellaneous	29	20
Totals	232	181

#### VIOLATIONS

Violations of the Acts in the enforcement of which the inspectors have a responsibility were reported as follows:—

Operating Engineers Act	57
Adolescent School Attendance Act	8
Minimum Wage Act	1,420

#### **EXPLOSIONS**

The following explosions causing injuries to employees were reported during the year:—

March 4, 1937	Stub of electrode fell into mix causing molten metal explosion
April 27	Valve blown off boiler
May 22	Tank exploded
May 28	Gas tank exploded
June 15	Combustion chamber gasses exploded
June 18	Steam boiler exploded
June 25	Gasoline storage tank blew up
July 22	A valve chest blew out
July 28	Extractor in laundry exploded
August 6	Puffing machine exploded
August 24	Glass jar in vortrap receiver exploded
October 4	Acetylene torch exploded
October 30	Gasoline explosion
December 11	Slight explosion in the cyanide pot
December 15	Residue mixing tank blew up
December 17	Victaulic coupling exploded
January 26, 1938	Test tank exploded
January 27	Drum exploded

## ACCIDENTS

Three thousand six hundred and forty six accidents were reported for the year 1938, as compared with 3,193 in 1937, of which 40 were fatal, as compared with 37 fatalities in 1937.

## Fatalities were due to:-

Burns and scalds	1
Drowning	2
Electricity	2
Elevators	3
Explosions	9
Falling substances	5
Falls	6
Flying missiles	1
Hooks, chains, cables	2
Jammed between articles	4
Other machinery	1
Rolls	1
Shafting	1
Miscellaneous	2
_	
Total	10

FA' TORY Summary of Accidents

	11	eac	Lan	d	T.	ppe	r Es	trei	nit	ies					runl			
Cause of Injury	Face	Head	Eyes	Ears	Hand	Fingers	Thumb		Shoulder			Other	Ribs	Thigh	Back	Stomach	Chest	Side
Burns and scalds Cranes and derricks Elevators. Electricity Explosions. Falling substances Falls. Flying missiles. Foreign substances in eyes. Hand tools. Hooks, chains, cables. Infected wounds. Jammed between articles. Strains and strains.  Rolls. Gears, cogs, sprockets. Belts, pulleys, shafting. Saws. Planer. Drill. Shears. Emery wheel. Press. Punch Dies Barker. Calender Cutter knives. Conveyers. Hammers. Jointers Stitcher. Loom Centrifugal machinery. Paper machinery. Spinning machinery. Grinding wheels. Lathes. Machinery connections. Wiredrawing, etc. Trucking Other machinery Miscellaneous causes. Industrial diseases Drownings	8 1 6 30 2 1 1 1	1 38 20	19 2 1 38 1 88 1 	1 1	24 3 3 28 8 5 5 266 6 1 477 42 2 6 6 9 9 2 5 1 1 1 1 1 1 1 1 1 1 6 6 6 6 6 6 6 6 6	111 1 2 40 8 14 47 3 1177 1717 1717 1717 1 1 1 1 1 3 3 3 4 8 8 20 1 1 4 5 5 1 3 3 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 1 5 2 1 1 0 6 7 7 5 9 9 2 2 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 17 5 1 13 1	2 3 15 7 6 7 1 22 1 1 1 1 1 1	2 11-11 1 2 5 1 2 1 1 1	20 2 3 4 5 5 3 3 3 7 7 2 2 1 2	38 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 1	1 1118	1 3	5 6 7	2200 55 22 11 22 600
Totals	51	87	260	1	280	778	152	120	43	69	52	17-1	63	14	169	6	35	101

INSPECTION BRANCH for the Fiscal Year 1938

Trunk	Е	Low	er nities								C	lass	of	Ind	ust	try					=
Hips Groin Abdomen		Foot		Ankle	Multiple	FATAL	Totals	Pulp and Paper Trades	Metal Trades	Rubber & Rubber Goods	Textiles	Food	Lumber	Laundries	Chemicals	Conveyances, etc.	Clay, Glass and Stone	Unclassified Trades	Leather Goods	Woodworking	Wearing Apparel
3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	1 1 39 2	1 13 2 2 9 9 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 4 5 5 1 2 4 5 5 5 1 9 9 17	1	36 2 4 4 7 16 36 5 5 2  3 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4 2 110 4 6 11 2 11 11 11 11 12	195 617 14 22 623 182 188 147 17 238 299 380 27 14 43 41 15 48 55 86 62 11 37 68 89 934 44 77 77 76 88 77 76 76 76 76 76 76 76 76 76 76 76 76	24 2 3 2 99 31 34 85 26 31 76 8 2 2 3 1 2 3 2 4 1 2 3 4 4 6 8 6 6 6 6 6 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	89 6 2 5 10 279 103 73 91 33 81 116 118 6 5 5 5 29 11 2	20 18 4 8 2 11 3 11 3 11 1 1	4			1	7 3 8 4 1 3 5 7 1	1 1 2 1 2 1 3 1 1 2 1 1 1 1 2 1 1 1 1 1	16 2 355 51 13 6 2 21 333 45 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	27 4 5 5 5 5 5 9 70 24 20 40 3 3 2 11 38 64 2 3 3 2 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	10 6 2 10 3 1 5 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 18 2 2 2 1 1
26 19 12	147	384 18	39 117	112	142	40	3,646	576	1,332	101	156	209	119	2	41	132	317	505	21	87	48

#### BOILER INSPECTION BRANCH

## CHIEF INSPECTOR, DEPARTMENT OF LABOUR—J. R. PRAIN EXAMINER OF REPORTS AND DESIGNS—J. N. BRIGGS

A survey of the work performed by the Boiler Inspection Branch during the fiscal year 1938 is gratifying. Demands for service created by the upward trend of industrial activity taxed the efforts of the staff to the utmost and resulted in an icrease in the amount of monies transferred to the Treasury Department of \$4,345.32, as compared with the previous year.

## Welding

Welding has reached a stage today where it occupies a merited place of importance in the fabrication of boilers and pressure vessels. Fundamentals of good welding technique essential in their construction are vigorously followed by many manufacturers, but unfortunately this condition is not universal. Inspectors have found it necessary to condemn welds when the factors required in the production of acceptable welds have been disregarded. Rules for qualification tests for welding operators and for the welding processes employed by the manufacturers are well established. The number of examinations held throughout the year shows a decided increase.

Steam pressures that only twenty years ago would have been regarded by engineers as dangerously high are now accepted as not only practical but desirable in power production. High steam pressures are being carried in power plant piping where fusion welding of joints has been employed. While most welders are able to produce sound and ductile welds of plain carbon steel piping, we are confronted with the problem of finding welders capable of qualifying for welding of alloy steel piping in which chrome and molybdenum are important ingredients.

#### NATIONAL BOARD OF BOILER INSPECTORS

The Department of Labour was represented at the Eleventh General Meeting of the National Board of Boiler and Pressure Vessel Inspectors held in New York City from May 25 to 29. The subjects discussed and papers read during the sessions were of the utmost importance and interest to manufacturers and others associated with boiler code work. This Board was organized in 1919 for the purpose of securing uniform approval of specific designs of boilers and pressure vessels through the adoption by various states and cities of one code of rules. The membership of the organization is restricted to inspectors or other officials charged with the enforcement of the rules of the American Society of Mechanical Engineers' Boiler Construction Code. The board also serves the purpose of promoting and maintaining an efficient standard of uniform inspections by granting commissions to inspectors having qualified by examination. This matter has already received consideration by responsible Canadian authorities enforcing Interprovincial Boiler Regulations, with a view to adopting similar standards for uniformity of inspections throughout the various provinces.

#### BOILER CODE COMMITTEE

The latter part of the fiscal year saw the first meeting of the Boiler Code Committee of the Canadian Engineering Standards Association in Toronto. This is a national organization supporting industrial standards, either British or foreign, for the benefit of Canadian industry. Members of the Boiler Code Committee include representatives of Canadian manufacturers, insurance companies and chief inspectors of the various provinces, with the exception of British Columbia and the Maritimes.

With a view to establishing uniform standards acceptable to the various government divisions of the Dominion and to the manufacturers and users of boilers and pressure vessels, the Committee recommended that the Canadian Engineering Standards Association adopt the code of the American Society of Mechanical Engineers for materials and construction of boilers and pressure vessels.

#### EXPLOSIONS

On May 27, 1937, one man was killed and two others severely burned as a result of an explosion of a gas cylinder in a garage located in St. Isidore de Prescott. This type of vessel, known as an acetylene storage tank, is commonly used when coupled with an oxygen tank for the purpose of welding and cutting of metal parts. The cause of the explosion may be attributed to a hidden defect in the welding securing the bottom head to the cylinder, allowing acetylene gas to escape in sufficient quantities to become ignited from a nearby open flame of an oxygen-acetylene torch in use at the time. The deceased man was standing approximately 40 feet away from the exploding tank, and the extent of the damage to the building indicated that a large volume of gas had accumulated when ignited. The remains of the gas cylinder were later found 220 feet from the buildings. The cylinder is of a type extensively used throughout Canada and the United States for the storage of acctylene gas under pressure of 250 pounds. Vessels coming under this classification are built to specifications required by the Dominion Railway Commission and Interstate Commission of the United States. The Boiler Inspection Branch has no jurisdiction over vessels of this type.

Investigation of an explosion of a Scotch marine type boiler which occurred on July 19 at Red Bridge revealed the cause to be the weakened condition of the flange seam joint of the front end of furnace due to corrosion. Unfortunately the fireman standing in front of the boiler was hurled about 185 feet by the blast and instantly killed. The boiler was moved from its supports about 25 feet, and the buildings and machinery were totally destroyed. Failure of the seam had apparently taken place when the pressure had risen to 45 pounds per square inch. The boiler was bought early in 1934 and the parties responsible had failed to have the required inspection made at that time, in accordance with the Regulations. If this inspection had been made by the Boiler Inspection Branch, the defective seam, which must have been scarcely less defective at the time of purchase, would have been repaired and the boiler thus rendered safe.

Propelled by a force that must have been tremendous, and travelling at a velocity impossible to estimate, an air receiver exploded on October 25, 1937, at the Toronto plant of a motor car company. The steam and sprinkler system piping was damaged and a 12 by 12-inch wooden beam splintered, but fortunately no one was hurt at the time. The vessel, 24 inches in diameter and 6 feet long, was fabricated of shell ¼ of an inch thick and heads 3-16 of an inch. It was quite evident that the operating pressure of 115 pounds proved excessive and sent the vessel on its upward flight when the bottom head failed. The safe allowable pressure for this vessel should not have exceeded 60 pounds per square inch.

An explosion on November 4 of a welded C O2 tank installed in a Toronto plant seriously injured two workmen. The vessel was comparatively new and fabricated by a local boiler and tank manufacturer to specifications furnished by the customer. The requirements of The Steam Boiler Act for submission of design of vessel for approval and inspection during fabrication were ignored. The tank was connected directly to the second stage of a compressor operating at 425 pounds per square inch, and the safety valve installed on the vessel, when tested after the explosion, did not release until a pressure of 500 pounds had been recorded. Further investigation disclosed the fact that, had the required procedure respecting approval and inspection been observed, the allowable working pressure of 97 pounds would have been the maximum for safety. Other disclosures indicated bad workmanship and disregard of

principles essential in the application of welding by the manufacturers.

Investigations failed to disclose the cause of explosions and fire that destroyed the benzol recovery plant of a steel company in Hamilton on December 15, causing \$200,000 damage and claiming the lives of three workmen. In spite of care and organization for the prevention of fire and other hazards connected with the process of distilling benzol from light oil, the residue tank of the system exploded and started fire to the benzol recovery building. Other explosions of nearby tanks followed immediately. The residue tank, 6 feet in diameter and 25 feet high, vented to atmosphere through a 6-inch pipe, was used exclusively for receiving distillate residue from the stills. The residue when mixed with tar is then pumped to the coke ovens as fuel. The officials of the company were mystified concerning the cause of the explosion, and claimed that there had been no tapse of the safety methods at the plant. Evidence submitted at the inquiry indicated that no fire would have followed the first explosion if the residue tank had been located some distance from the benzol recovery building.

Great damage to property was the result of an explosion of a 72-inch diameter steam dryer on January 24, 1938, at an abrasive plant in Brantford. Fortunately those responsible for the operation of the machine to which the exploded tank was attached were out of the room when the explosion occurred and no one was killed or injured. The vessel, being over 30 years old, was made up of a thin upper shell attached to steel heads on which trunnions were provided for the rotation of the vessel. Under present day formulae a safe working pressure from 6 to 7 pounds would have been permitted. The steam supply to the cylinder was reduced from high pressure to 15 pounds through a reducing valve. Relief valve and pressure gauge were provided on the low pressure side of the reducing valve, but owing to the faulty action of the diaphram in the reducing valve a pressure of 19 pounds would accumulate, and under these conditions the vessel was allowed to operate. Stresses produced as a result of the excess pressure sheared the rivets and tore the shell from the band securing the shell to the heads. Proper inspection by a competent inspector would have prevented what might have been a very disastrous affair.

#### TABULAR SUMMARY OF WORK

Drawings and Specifications Surveyed, Registered, and Re-Registered.

	Designs
Boilers	84
Pressure vessels	230
Steam piping layouts	41
Accessories	36
Special rulings—	
Boilers	3
Pressure vessels	14
Accessories	6
Boiler revisions	. 2
Drawings surveyed but	
not registered	2
Total	418

## New Pressure Vessels Inspected:

I:	nspections
Boilers—Ontario	211
Alberta	1
Saskatchewan	2
Manitoba	1
Quebec	26
Prince Edward Island	1
England	1
Australia	1
Pressure vessels—	
Ontario	374
Alberta	2
Saskatchewan	1
Quebec	66
New Brunswick	4
Steam piping layouts	9
Total-first inspections	700
second inspections	521
final inspections	629
Used Pressure Vessels Inspected:  In Boilers	spections 655
Pressure vessels	271
Boilers	306
Pressure vessels	76
Steam piping layouts	
Total inspections	1.010
Total inspections  Final inspections only	
Final hispections only	5U3
Certificates Issued—	
Class "A"—new pressure vessels	511
Class "B"—used pressure vessels	1,092
Class "C"—low pressure heating boilers, accepted by	
affidavit of shop forman	298
Class "D"—new pressure vessels, accepted by affidavit	
of shop foreman	794
Class "E"—new boilers under 3 H. P. accepted by	
affidavit of shop foreman	42
Duplicate	6 5

The total monies transmitted to the Treasurer of Ontario for the fiscal year ending March 31, 1938, amounted to \$19,599.87.

## BOARD OF EXAMINERS OF OPERATING ENGINEERS

CHAIRMAN-F. B. WALKER

MEMBERS-W. J. SCOTT, S. G. ROSE

The twenty-ninth report of the Operating Engineers' Board covers a period wherein has occurred the greatest volume of business in all phases of activity in the history of this Branch.

Reference to the statistical data attached hereto shows a net revenue of \$29,314.-14, an increase of \$3,251.61, or approximately 12 per cent, as compared with the previous year. More significant probably is the increase of 29 per cent, in the number of examinations conducted by the Board, there being 2,305 candidates as compared with 1,644 in the previous year.

The most important issue dealt with by the Board during the year was the complete review of the Regulations drawn under this Act. During these deliberations a survey was made of the Regulations with the result that certain minor changes were made, the most important of which was the incorporation of a provision for the certification of air compressor operators in response to a growing demand from the mining industy in Northern Ontario. Major changes were made, however, in the typographical design of this publication with a view to simplification and ready reference. The Board is pleased to report the achievement of a workable and effective regulatory scheme which has drawn commendatory comment from many quarters.

The annual renewal of certificates, which had become a problem by reason of the steadily increasing volume of work involved, received serious consideration this year. As a measure of mitigation, the Board eliminated the issuance of renewal notices to certificate holders, so that more attention may now be given the most important phase of administration, that is, the control of violations of the Act. Under a re-organized system of enforcement inaugurated in September 1937, the Board brought under review 405 cases of infractions of the Act. At the close of the fiscal year 246 had been satisfactorily adjusted, with 159 still in process of adjustment. Solutions were found in each case without resort to litigation.

A noticeable increase will be observed in the number of plant registration certificates issued. This is due to the Board's policy of rotational survey, whereby an up to date record may be available always and also to the recent inclusion of certain low pressure steam plants within the scope of the Act.

The publication of text books compiled by the Board for the assistance of engineers is now in its sixth year. Justification of this measure and the popularity of the books are attested by the fact that 11,363 copies have been distributed with a total sale value amounting to \$12,053 since the inception of this service.

Acknowledgement of the assistance rendered by the members of the Composite Inspection Service in the administration of the Operating Engineers Act is a duty we are pleased to perform. Their assistance has proved invaluable during the year.

If readiness of compliance and co-operative response upon the part of persons involved are indicative of success in the administration of this Act, the Board feels justified in reporting a most satisfactory year. With few exceptions, we have encountered a definitely favorable reaction in our innumerable contacts with plant owners, their representatives, engineers' organizations and individual engineers, which prompts us to express our appreciation of their assistance and support in the administration of the Operating Engineers Act.

## REPORT RE REVENUE FOR FISCAL YEAR 1938

Fees Collected For Certificates:	Monies Refunded On:
By         Examination         \$ 8,217.00           Re-examination         1,606.00	Examinations\$ 885.50 Renewals of certifi-
Renewals 15,610.99	cates 37.00
Provisionals 105.00	Text books 7.50
Duplicates 23.00	Penalty renewal fee 45.50
Plant registration 324.00	Miscellaneous 24.50
	Plant registration 8.00
Revenue By	Duplicate certificate 2.00
Certificates\$ 25,885.99	Unhonored cheques 2.25
Sale of books 2,620.83	Less refund
Miscellaneous 43.07	credit cheques \$3.00
Penalty renewal fees 1,773.50	
Gross Revenue	Gross Refunds
Net Revenue\$ 29,314.14	

## REPORT RE CERTIFICATES FOR FISCAL YEAR 1938

Certificates Issued

Refused

Class	By ex- amina- tion	By re- examin- ation	By pro- visional	By dup- licate	By re- newals	Total issued	Total refused
Firemen	181	23	_		339	543	57
4th class	557	109	5	2	4,781	5,454	292
3rd class	158	75	12	4	4,486	4,735	259
2nd class	18	33	2	2	2,288	2,343	122
1st class	4	8			278	290	28
Hoisting-steam	102	4	1	6	1,677	1,790	31
Hoisting-gas	80	_	_	_	67	147	8
Traction	109	1	2	6	1,068	1,186	19
Duplex	26	1	_	1	339	367	_
Plant registration						340	
	1,235	254	22	21	15,323	17,195	816
Grand To	tal Certi	ficates Is	sued			17,195	

## REPORT OF EXAMINATIONS HELD FOR FISCAL YEAR 1938

Number of Candidates Examined at Other Centres	
Total Number of Candidates Examined	2,305

Class	At Toronto	At Other Centres	Total
Firemen	74	121	195
4th class	387	598	985
3rd class	228	298	526
2nd class	108	77	185
1st class	21	21	42
Hoisting—gas	42	27	69
Hoisting—steam	69	96	165
Traction	68	70	138
Totals	997	1,308	2,305

## Examinations were held at Outside Centres as follows —

	Number	Number		Number	Number
	of ex-	of can-		of ex-	of ean-
	aminations	didates		aminations	didates
Brantford	. 1	18	Owen Sound	2	26
Belleville	. 1	17	Orillia	2	23
Brockville	. 2	16	Palmerston	1	7
Chatham	. 2	12	Pembroke	1	10
Cornwall	. 2	39	Parry Sound	1	3
Fort William	. 1	47	Peterborough	1	16
Fort Frances	. 2	19	Renfrew	1	8
Guelph	. 2	27	Sault Ste. Marie	2	52
Haileybury	. 2	21	Sioux Lookout	3	23
Huntsville	. 1	11	Sarnia	2	24
Hamilton	2	50	Sudbury	3	86
Niagara Falls	. 2	22	St. Catharines	2	15
Kapuskasing	2	28	Smith's Falls	2	11
Kenora	. 3	41	Stratford	1	11
Kirkland Lake	3	105	Timmins	3	125
Kingston	. 1	22	Port Arthur	2	85
Kitchener	2	42	Windsor	2	85
London	1	47	Other Centres	2	19
North Bay	2	26			
Ottawa		69			
Total at Outs	ide Centres			69	1,308
					997
Total during	vear				2,305

## CONCILIATION AND NEGOTIATION

#### CHIEF CONCILIATION OFFICER-LOUIS FINE

With the appointment of a Chief Conciliation Officer at the beginning of the fiscal year, the Department of Labour extended its conciliation service. This service is open to both parties of an industrial dispute, either before or after a strike has been called, and impartial assistance is given in working out a satisfactory settlement without interference with the rights of either. As far as possible, the Department is in constant touch with industrial situations likely to result in disputes and in instances in which the public interest might be unduly affected, the Department takes the initiative in contacing the interested parties with a view to preventing unnecessary industrial strife. Effective assistance has been rendered in such matters on a number of occasions and satisfactory adjustments and mutual understanding achieved, averting strikes or stoppages.

Through co-operation of the employers and employees with the Department of Labour increased numbers of agreements containing uniform rates of wages and better conditions have been negotiated. The contact afforded by the conciliation work of the Department with industrial situations supplies a valuable link between industry and the legislation available in the Province for the treatment of these questions, as for instance The Industrial Standards Act. As a result of dealing with some of the problems which have been brought to the Department, we have been able to be of assistance to both employers and employees in utilizing the provisions of the Act with the result that, in addition to settling immediate disputes, we have been the means of bringing about stabilized conditions of labour and thus avoiding the probability of future disputes. An instance of this is the case of the logging industry, so important to the welfare of a considerable portion of this Province. During the fiscal year there were no strikes in this industry in the four zones where schedules pursuant to The Industrial Standards Act were in force, so that the time-loss due to strikes in the whole industry was only approximately 2 per cent. of the total time-loss in all industries, as compared with 48 per cent. in 1934, when the time-loss in the logging industry was approximately 26 times that of 1938.

During the fiscal year the conciliation service of the Department of Labour was utilized in connection with the adjustment of many disputes in which there were threats of strikes, and satisfactory settlements were reached to the advantage of both parties and of the public interest. The following are some of the more important of such cases, which indicate the value of this service;—

#### GLASS INDUSTRY:

The Department of Labour was asked to intervene in connection with a contemplated strike of employees in two glass plants in the same centre. The employees were persuaded to postpone action until their representatives had an opportunty of meeting with a representative of the company and the Conciliation Officer of the Department. At this meeting a memorandum of agreement was drawn up, which provided that, in the event of the employers and employees failing to conclude negotiations regarding wages and hours within a stated time, the same would be decided by arbitration. The three arbitrators were the Chief Conciliation Officer, a representative of the company and the legal adviser of the employees, and their decision was accepted. Approximately 600 workers were employed in these two plants.

Later in the year a dispute arose in one of these plants regarding alleged breach of seniority provision. As settlement could not be effected by the negotiating committee, of which an official of this Department was a member, arbitration was agreed upon and the decision was rendered in favour of the employees.

The employees of five glass factories in another cenre, through a representative of the union, applied for help in bringing about an amicable settlement between members of the union and the employers. The Conciliation Officer was able to hold a meeting of employees and representatives of the employers of these firms, at which both parties co-operated in arriving at a settlement of the difficulties and a better understanding of the problems of both sides.

#### IRON AND STEEL INDUSTRY::

Representatives of the union employees of one firm advised this Department that they expected to call a strike, having failed to reach an agreement with the company. The Department declined to take action without assurance that no strike would be called before it was in possession of full particulars relating to the situation. After conferring with officials of the firm, a basis of agreement was drawn up and presented next day to union representatives. Within a fortnight matters in dispute had been adjusted and no strike was called. Later conciliation service was again requested by the union in connection with alleged discrimination, and an adjustment of this matter was brought about to the satisfaction of both parties. This firm employs 920 workers.

Upon the request of the employees of another firm, the Department of Labour intervened in connection with a dispute because of alleged discrimination for union activity. Adjustments were arranged and proper working relations established without loss of time by the employees.

In one plant five grievance cases regarding seniority were submitted to arbitration and the decision rendered was satisfacory to all concerned.

#### RUBBER INDUSTRY:

The manager of one firm called on the Department to discuss the labour problems of the plant, as the employees were to take a strike ballot later in the day. It was agreed, however, that the employees would take advantage of the service of the Conciliation Officer before taking strike action. After separate conferences with representatives of the union and with the factory manager, assistance was given in arriving at an agreement acceptable to both sides, which made provision for grievance procedure.

#### TEXTILE INDUSTRY:

In a carpet factory the Conciliation Officer was successful in bringing about an agreement providing for a five per cent. increase in rates for employees in one department, who were threatening to strike for a ten per cent. increase. There was no loss of time, the employees continuing at work while negotiations were being carried on.

In connection with a dispute in a hat factory concerning wage increases for certain employees and lay-offs, the employees returned to work and matters in dispute were settled by arbitration. The decision rendered was not in favour of increases and the question of lay-offs was to be decided later when the employees had had an opportunity of submitting suggestions to the management.

The assistance of the Department was requested in connection with dissatisfaction among the employees of a knitting factory. Negotiations were undertaken but a satisfactory conclusion had not been reached by the end of the fiscal year.

#### FURNITURE AND WOOD PRODUCTS:

Representatives of the employees of a furniture factory applied to have an official of the Department of Labour mediate between the manager and the shop committee with a view to bringing about a better understanding of points under dispute contained in the agreement between the management and the employees.

At the request of the general representative of the union, an official of this Department acted as conciliator in a dispute between the union and a match manufacturing company in an effort to forestall a strike. The employers of the two plants affected agreed to meet their employees with the result that an agreement acceptable to both parties was drawn up and signed. The agreement was a compromise, the terms of which provided for higher wages, shorter hours and no discrimination. The two plants employ 240 workers.

Conciliation service was rendered in connection with a dispute between four timber companies and the local union, when wage increases for all employees were submitted. After two meetings with representatives of both parties, and a meeting with each party separately, the Conciliation Officer was able to draw up an agreement which met with the approval of both sides. There was no loss of time for the 420 employees affected by this agreement.

#### DAIRY INDUSTRY:

A Conciliation Officer negotiated between representatives of employers and employees of this industry in a city in an effort to forestall a strike of all dairy employees. An amicable settlement of points under dispute was finally arrived at and a general strike of milk drivers averted.

The employees of one dairy applied for assitance in the settlement of grievances regarding several details of employment. After a conference the firm agreed to accept the suggestions of the employees and no strike took place.

#### RESTAURANTS:

Representatives of employers and employees in the restaurant business in a city met with an official of this Department to discuss remedies of various grievances, which threatened to lead to strike. The employees' representatives submitted proposals which were later considered at a meeting of employers' representatives, who submitted counter proposals.

#### TRANSPORT INDUSTRY:

The Department was asked by the representatives of the union to intercede in connection with a threatened strike of employees of a transport company. The employees claimed that general unfair conditions and wages were the causes of dissatisfaction affecting from 300 to 350 workers. Negotiations resulted in an agreement which prevented a stoppage of work.

In addition to negotiations which prevented strikes, the Chief Conciliation Officer or other officials of the Department of Labour conducted negotiations which resulted in the settlement of strikes affecting approximately 75 per cent. of the total number of workers involved in strikes in the Province. A table of all strikes reported in Ontario during the fiscal year 1938 will be found in the appendix of this Report.

## INDUSTRY AND LABOUR BOARD

CHAIRMAN-E. J. YOUNG

MEMBERS: MISS M. F. MANGAN; J. C. ADAMS

This report for the fiscal year ending March 31, 1938, is the first report of the Industry and Labour Board.

On March 25, 1937, the Legislative Assembly of the Province of Ontario assented to an Act to amend The Department of Labour Act, thereby empowering the establishment of the Industry and Labour Board, and on May 25 the Board was appointed. It consisted of five members, three of whom were to be officers of the Department of Labour. One of the members represented employers and one represented employees.

On November 22, 1937, Mr. Bancroft, the employees' representative, died and a short time later Mr. Whitehead, the employers' representative, resigned from the Board. No appointments were made to fill these vacancies and at the 1938 session of the Legislature The Department of Labour Act was amended to reduce the personnel of the Board to "not more than three members", all of whom were to be officers of the Department of Labour.

The Board is charged with the administration of

The Industrial Standards Act The Apprenticeship Act The Minimum Wage Act

and any other act which may be assigned to it by the Lieutenant-Governor in Council.

#### INDUSTRIAL STANDARDS BRANCH

#### A. W. CRAWFORD—CHIEF ENFORCEMENT OFFICER

The Industrial Standards Act provides for the meeting in conference of employers and employees in any designated industry within a defined zone and their agreeing on a schedule of wages, hours and days of labour. If such a schedule is agreed to by a proper and sufficient representation of those engaged in the industry, The Minister may approve the same and upon his recommendation an Order-in-Council may be passed making it effective in law and binding on all persons engaged in the industry within the zone.

At the beginning of the fiscal year there were 39 schedules in effect. Some of these were declared invalid by the courts and, as a result, doubt was cast on the enforceability of a number of others. Certain amendments were made in the Act in 1937 and it was felt that schedules established under the amended Act would have a better chance of being upheld in court than those previously in existence. The Board, therefore, decided not to enforce the doubtful schedules, but advised the various interested parties to apply for new schedules under the amended Act.

Fifty-four official conferences were held during the year and 49 schedules agreed to at conferences were approved by the Minister.

#### ARREARS OF WAGES

The Industry and Labour Board co-operates with the advisory committees which are set up in each industry in each zone for the purpose of the enforcement of these schedules. These advisory committees are composed of five persons representing employers and employees in the industry.

Under these schedules, the Board collected by negotiation a total of \$3,069.50 arrears of wages from 43 employers on behalf of 242 employees, who were reimbursed the amount of their respective arrears. In addition to this amount, the sum of \$1,297.53 arrears of wages was paid direct to employees by their employers after intervention on their behalf by the Board. A sum of \$52.80 arrears of wages collected for one employee was ordered forfeited to the Treasury because of evidence that the employee was equally guilty with the employer.

#### PUBLIC INQUIRIES

There was one public inquiry held during the year. This was held in Hamilton on April 13, 1937, in connection with the painting schedule of the Hamilton zone and there were seven witnesses.

#### ASSESSMENTS OF INDUSTRIES

The Board designated the cloak and suit industry as interprovincially competitive and approved provisions in the schedule with respect to the collection of assessment from employers and employees. The purpose of this assessment is to provide revenue for the enforcement of the schedule,

## SCHEDULES IN EFFECT AT END OF FISCAL YEAR 1938

Trades and Industries	Number of Schedules	Zones				
Barbering 35		Barrie; Belleville; Brantford; Bracebridge, Gravenhurst and Huntsville; Chatham; Cornwall; Collingwood; Essex County; Fort Frances; Galt, Hespeler and Preston; Guelph; Hamilton; Kitchener-Waterloo; Kingston; Lindsay; London; Niagara Falls; North Bay; Orillia; Oshawa; Ottawa; Owen Sound; Pembroke; Peterborourgh; Port Arthur and Fort William; St. Catharines, Port Dalhousie, Merriton and Thorold; St. Thomas; Stratford; Sault Ste. Marie; Sarnia; Trenton; Toronto; Welland; Woodstock; Windsor.				
Carpentry	7	Pembroke; Cornwall; Ottawa; Timmins; Sault Ste. Marie; Windsor; Kingston.				
Bricklaying	1	Windsor,				
Plastering	2	London; Toronto				
Electricians	1	Windsor.				
Logging	4	Massey; Rainy River; Timmins; Port Arthur Forestry Division.				
Ladies' Cloak and Suit	1	Province of Ontario.				
Men's and Boys' Clothing	1	Province of Ontario.				
Brewing	1	Province of Ontario.				
Hard Furniture	1	Province of Ontario.				
Soft Furniture	1	Toronto.				
Baking	1	Ottawa,				

## PROSECUTIONS DURING FISCAL YEAR 1938

1	Numbe	r Zone	Reason		Action taken	Fines		Result
Barbering								
1937								
August	13	Toronto	Price	1	convicted	\$25.00		Paid
				12	withdrawn			
	15		Open on	15	withdrawn			
			holiday					
September	7	Toronto	Price		convicted	\$50.00	(2)	Paid
				_	withdrawn			
October	. 4	Toronto	Price		convicted	\$55.00	(3)	Paid
		<b>.</b>			dismissed			
November	6	Toronto	Price		convicted	\$25.00		Not paid
	1		0	_	dismissed	@0 F 00		Paid
	1		Open on holiday	1	convicted	\$25.00		raid
	1	Guelph	Open	1	convicted	\$25.00		Paid
	1	Gueipii	after		Convicted	Ψ20.00		1 414
			hours					
	1	Sault Ste.	Price	1	convicted	\$25.00		Paid
		Marie	2 2 2 2 2			,		
December	2	Niagara	Price	1	withdrawn			
		Falls		1	dismissed			
	2		Open	1	convicted	\$25.00		Paid
			after	1	withdrawn			
			hours					
1938								
January	2	Toronto	Prices		withdrawn			
February	2	Toronto	Prices	_	convicted	\$10.00		Paid
					withdrawn	040.00	(0)	73. 1.1
	2	Welland	Prices		convicted	\$10.00	(2)	Paid
March	13	Toronto	Prices		convicted withdrawn	110.00	(11)	Paid
					dismissed			
	1	Chatham	Price	_	convicted	\$5.00		Paid
	1	Hamilton	Open		convicted	\$5.00		Paid
	1	Hammon	after		Convicted	φυ.υυ		1 alu
			hours					
Carpentry			210410					
							(2)	D
February	2	Windsor	Work on Saturday	2	convicted	\$10.00	(2)	Paid

#### APPRENTICESHIP BRANCH

#### FRED J. HAWES-DIRECTOR

The fiscal year has been one of increasing activity for the Apprenticeship Branch. The work commenced during the previous year in connection with the motor vehicle repair trade has continued to expand as the regulations applying to the trade have been put into operation. This trade offers a very promising field for apprenticeship. At present there are 447 registered apprentices in this trade and the number is increasing steadily.

The hairdressing and barbering trades have also received considerable attention from this Branch during the year. Trade regulations were approved in January 1937, and immediately the necessary steps were taken to put them into effect. It has required consistent effort to establish a system in the hairdressing trade whereby the proper instruction for those entering the trade will be provided and their exploitation prevented. A great deal has been accomplished in this direction already but it will be some time before this trade will be properly organized and placed on a satisfactory basis.

The barbering trade, in so far as apprentices are concerned, presents difficulties which we are endeavouring to overcome. The teaching of young men in the barber shops has practically disappeared. The trade has been accepting students of the barber schools, with the result that conditions were not satisfactory and were difficult to control. In 1937 an amendment to the Apprenticeship Act authorized the Board to license all schools professing to teach designated trades, and regulations were approved by Order-in-Council providing for the licensing of all schools teaching barbering and hairdressing in Ontario, so that all such schools are now under the supervision of the Apprenticeship Branch.

There was an increase in the number of apprentices indentured in construction trades, although numbers were not as great as we had hoped for in the early months of the year when the building trades gave evidence of increased activity. Court action was take against a building trade contractor who entered into a contract of apprenticeship not in accordance with the Act. He was fined \$10 and costs or thitry days imprisonment.

The following tables give a complete summary of statistical information regarding the work of the Branch for the fiscal year 1938.

TABLE No. 1

REGISTRATION OF APPRENTICES BY TRADES
FOR THE FISCAL YEAR ENDING MARCH 31, 1938.

	Registrations		Cancellations		Completions		
Trade	During Year	Total	During Year	Total	During Year	Total	Active
Bricklaying	8	212	1	31		165	16
Masonry	1	14	1	5	( — (	7	2
Carpentry	19	238	1	32	8	168	38
Painting and Decorating	14	146	4	16	5	76	54
Plastering	4	126	I —	19	2	99	8
Plumbing	24	614	10	147	29	360	107
Steamfitting	6	174	7	56	5	97	21
Sheet Metal Work	11	196	2	45	12	126	25
Electrical Work	34	331	4	72	9	183	76
Motor Vehicle Repairing (a)	289	394	14	15	12	12	367
(b)	23	40	1	1	-	_	39
(e)	27	44	-	_	3	3	41
Hairdressing	197	244	18	19	4	4	221
Barbering	. 8	8	-	_	-	-	8
Total, 1938	665	2,781	63	458	97	1,300	1,023
Total, 1937	310	2,116	58	385	64	1,203	518

TABLE No. 2
DISTRIBUTION OF APPRENTICES BY TRADES
FOR FISCAL YEAR ENDING MARCH 31, 1938

Trade	First Year	Second Year	Third Year	Fourth Year	Fifth Year	Total
Bricklaying	6	6 1	2	2 1	_	16 2
Carpentry		11	11	5		38
Painting and Decorating	7	18	13	16		54
Plastering	4	2	1	1 00	37	107
Plumbing	13	10	25	22	3	21
Steamfitting		2	6	6	٥	25
Sheet Metal Work	5_	9	8	3	_	76
Electrical Work		20	20	23	-	
Motor Vehicle Repairing	41	107	135	106	58	447
Hairdressing	45	120	56	_	_	221
Barbering	3	4	1			8
Total	152	310	278	185	98	1,023

#### TABLE No. 3

## REPORT OF EXAMINATIONS FOR THE FISCAL YEAR ENDING MARCH 31, 1938.

Number of candidates examined:	At Toronto	At Other Centres	Totals
Motor Vehicle Repair Hairdressing Barbering	99	489	673 99 14
Grand Totals	297	489	786

Examinations were held in Toronto and at the various centres in accordance with arrangements made through local apprenticeship committees as follows:

Motor Vehicle Repair	Centres	Number of Examinations	Number of Candidates
	Barrie	1	22
	Belleville	1	10
	Brantford	2	22
	Chatham	2	21
	Cobourg	1	5
	Guelph	2	26
	Hamilton	4	27
	Kingston	1	15
	Kitchener	2	27
	London	6	67
	Oshawa	2	9
	Owen Sound	1	. 29
	Peterborough	3	30
	St Thomas	3	47
	Sarnia	1	19
	Seaforth	1	15
	Stratford	2	12
	Toronto	37	184
	Welland	2	34
	Windsor	3	52
Totals		77	673
Hairdressing	Toronto	6	99
Barbering	Toronto	2	14
Grand Totals		85	786

# TABLE No. 4 REPORT OF CERTIFICATES ISSUED FOR THE FISCAL YEAR ENDING MARCH 31, 1938.

	Motor Vehicle Repair	Barbering	Hairdressing	Totals
First certificate	. 1,237	3,070	2,723	7,030
By examination	. 531	3	10	544
By provisional			5	5
By duplicate	9	2	1	12
By renewal	5,805	808	682	7,295
By miscellaneous	51	3	2	56
	<del></del>			
Grand Totals	. 7,633	3,886	3,423	14,942

## TABLE No. 5

## REPORT OF SCHOOL LICENSES FOR THE FISCAL YEAR ENDING MARCH 31, 1938.

I:	ssued	Pending
Barbering Trade	6	1
Hairdressing Trade	17	2
Total	23	3

## TABLE No. 6

## REPORT OF REVENUE FOR THE FISCAL YEAR ENDING MARCH 31, 1938.

Mo	otor Vehicle Repair	Barbering	Hairdressing	Totals
Examinations and re-examinations	\$2,202.00	\$ 29.00	\$ 186.00	\$ 2,417.00
First Certificate	1,214.00	3,140.00	2,902.00	7,256.00
Renewals	5,805.00	808.00	682.00	7,295.00
School licenses		35.00	95.00	130.00
Provisional			5.00	5.00
Duplicate	9.00	2.00	1.00	12,00
Totals Miscellaneous	\$9,230.00	\$4,014.00	\$3,871.00	\$17,115.00 17.83
Consul Matal				
Grand Total	***************************************			\$17,132.83

#### MINIMUM WAGE BRANCH

## A. W. CRAWFORD—CHIEF ENFORCEMENT OFFICER

The new Minimum Wage Act became effective March 25, 1937. It provides for the establishing of minimum rates of wages for all employees and minumum hourly rates of wages for overtime work, provided that such hourly rates shall not be less than one-fortieth of the weekly minimum wage. The Act further provides that the maximum number of hours of labour with respect to which a minimum weekly wage is established shall not exceed,—

- (a) 48 hours in a municipality having a population of more than 50,000;
- (b) 50 hours in a municipality having a population of from 10,000 to 50,000;
- (c) 54 hours in any other municipality, or in any locality which is not a municipality.

A minimum wage order covering the textile industry was issued and became effective on March 1, 1938. It establishes the minimum wage for men at \$16.00 per week and for women at \$12.50, with lower rates for juveniles and beginners.

#### PERMITS

Permits may be issued by the Board authorizing wages lower than the specified minimum rates upon application signed by both employer and employee where, because of age or disability, the worker is unable to compete with normal persons. These permits are issued for one year or less but renewals are granted without investigation in the case of workers over sixty years of age or where disability is permanent and handicaps the employee in the work performed.

Homework permits are issued by the Factory Inspection Branch for both employers and homeworkers, but the rates to be paid for each type of work performed outside the factory must first be approved by the Board. In every case where the same work is done in the factory, the factory rate is set for the homework. Where the homework is of a kind not done in factories, the policy of the Board is to raise the rates gradually until they reach the level of rates that would be paid if the work were performed in factories.

#### PERMITS FOR FISCAL YEAR 1938.

		Handicapped orkers	For Home- workers
	No. of Employers	No. of Employees	No. of Employers
Permits in force at	75	135	107
beginning of year  Permits issued during year  Permits expired or cancelled		18	77
during year		47 106	36 148

#### COMPLAINTS

Complaints received by the Board, either directly from employees concerned or from interested parties, numbered 707. All complaints where names are given are investigated without delay and a report made to the complainant, if action is not taken against the employer.

## COMPLAINTS RECEIVED DURING THE FISCAL YEAR 1938.

1937	Numbers
April	98
May	61
June	67
July	57
August	56
September	59
October	58
November	. 56
December	. 55
1938	
January	. 50
February	. 43
March	. 47
Total	. 707

## ARREARS. OF WAGES COLLECTED DURING FISCAL YEAR 1938.

Month 1937	No. of Employees	No. of Firms	Amount
April	69	43	\$ 2,125.69
May		35	2,336.49
June	62	40	2,013.20
July	37	29	1,346.25
August	40	33	1,686.26
September	36	31	1,163.20
October	61	36	2,768.86
November	60	45	1,194.77
December	53	42	1,479.11
1938			
January	50	36	1,893.25
February	58	38	1,328.71
March	59	40	1,844.39
Totals	646	448	\$21,180.18

## ADJUSTMENTS EFFECTED DURING FISCAL YEAR 1938.

Month	No. of Employees	No. of Firms
1937		
April	239	128
May	133	84
June	226	125
July	164	81
August	78	52
September	148	70
October	182	80
November	321	193
December	235	115
1938		
January	160	78
February	156	102
March	141	114
Totals	2,183	1,222

Wage sheets are collected at least once a year from approximately 15,000 employers in the Province who are subject to minimum wage orders, and each wage return is analysed to make sure that the provisions of the orders are complied with. This constant checking by the Board is essential to adequate enforcement of each order.

## PROSECUTIONS DURING FISCAL YEAR 1938

Month	Number	Action Taken	Arrears Awarded	Fines	Result
1937			\$	\$	•
April	. 7	4 convictions	421.64	85.00	Paid (4)
•		3 withdrawn		00.00	1 (1)
May	9	4 withdrawn	641.50		
		4 convictions		60.00	Paid (3)
		1 no judgment			` ′
June	3	3 withdrawn	307.10		
July	4	4 dismissed			
August	4	4 withdrawn	300.00		
October	4	3 withdrawn	67.00		
		1 conviction		25.00	Paid (1)
November	3	2 withdrawn	97.75		
		1 conviction		25.00	Not Paid
December	6	5 withdrawn	401.67		
		1 adjourned			
1938					
January	7	6 withdrawn	475.00		
		1 conviction		100.00	Paid (1)
February	5	2 convictions		40.00	Paid (2)
		2 dismissed	44.70		
26 3	4.0	1 withdrawn	F00.01		
March	10	7 convictions	503.61	100.00	2 paid
		2 dismissed			2 not paid
		1 withdrawn			Employer
					served jail
					terms.

The policy of the Board has been to demand immediate adjustments on first violations, to collect the full amount of arreas if adjustments are not made immediately and the law complied with in all respects after the first warning, and to prosecute where it is evident that violations are deliberate or warnings and adjustments have not had the desired effect. Occasionally first offenders are prosecuted but only where there is ample evidence that the employer is aware of the law or where he refuses to make adjustments ordered by the Board.

# APPENDICES TO REPORT OF MINIMUM WAGE BOARD APPENDIX I

The following tables indicate the number of firms reporting to the Board, the number of female employees affected by each order of the Board, and the rates of pay for female employees throughout the Province:

NEW TINES	í í		S. S.	OCTOBER.	1937			
	1936	1937	Other	Other cities	5.00	5,000 to	Und	Under 5,000
	E	4	over	over 50,000	1096	50,000	1936	1937
	TOL	Loronto	1300	1001	TOUR	1001	000	
Number of stores reporting sales help	756	869	699	693	1143	1149	ees	097
Total number of female employees	2664	3211	4099	4176	5069	5695	1375	1707
Over 18 years	2568	3113	3993	4086	4848	5458	1325	1581
	96	98	106	06	221	234	20	126
Average hours worked per week (normally)	48.5	48.3	48.5	48.3	50.6	49.7	50.1	51.5
Weekly rate of wages:								1
Under \$7.00	}	67	Ω.	1	23	12	84	97
∞ *L	4	೯೦	ಬ	9	45	40	66	109
C - X	15	20	24	12	151	94	197	217
0-10		17	39	50	432	265	381	490
10_11	112	91	240	177	720	687	315	385
11_19	111	86	66	133	1665	2289	77	102
19.13	1054	1412	2170	2119	746	878	106	140
12.5	622	761	820	8883	656	729	62	68
	481	515	422	591	443	520	35	7.5
18-up	252	285	275	307	188	178	19	2.2
4								
	2664	3211	4099	4176	5069	2692	1375	1707
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only:	900	5	900	0	1140	5 6057	760	1701 8
Sales and Office	808	32113 675 O	020	6130	1140	594 0		85.0
Office on w	00 00	270	123	266	223	290	80	174
Vo female help	47		54	1	113		148	-
Not operating	29	1	42	1	528	1	9 9 9	١
Transferred to other trades	2	.	∞	1	119		$\infty$	1
	1005		060		1569			1966
Wage sheets collected Total number of employees	1000	4156	;	5055		6576	1037	

Order No. 11 TELEPHONE EXCHANGES—RETURNS FOR DECEMBER, 1937

THE PROPERTY.	CHAN	EXCHANGES—REIORNS		FOR DECEMBER, 199	TOWNS	ILV, TOOL				
	Tol	Toronto		places	10,000	10,000-20,000	4,000-	4,000-10,000	Under 4,000	4,000
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
Number of firms reporting employees	2	15	7	6	25	25	33	34	117	239
Total number female employees	420	538	206	1962	702	872	293	321	546	006
Over 18 years	420	538	894	779	669	833	292	321	544	897
Under 18 years	1	1	13	17	က	39			2	က
Average hours worked per week (normally)	48	48	43	848	38	44	38	42	48	48
Hourly rate of wages:										
Under 12c	1	1	1		1		1	1	മ	22
12c-16c	}	1		1	1	1	1		72	221
16c-18c	1	1	1		1		9		45	92
18c-20c	J	1	1	1	17	49	13	17	61	129
20c-22c	1		38	35	33	121	28	30	53	107
22c-24c	1	20	က	15	24	94	2	30	99	51
24c-26c	1	1	40	38	71	89	36	20	120	48
26c-28c	23	21	61	23	47	54	24	13	30	123
28c-36c	28	73	621	63	454	317	156	173	72	63
36c and up	389	423	144	622	56	169	23	933	32	44
				-						
	420	538	206	962	702	872	293	321	546	006
	Employ- ers	Employ-	Employ- ers	Employ- ees	Employ- ers	Employ- ecs	Employ- ers	Employ- ees	rèmploy- ers	Employ- ees
Number reporting 1937 only:										
miniprovees on terephone exchanges	70	538 T	6.	T 967	25	872 T	34	321 T	239	1 006
4		617.0		1860		1150		59.0		0 22
Office relp only	1	1	1	1	1		1	0	1	1
Not covered etc.	1	1			1	1	I	1	520	ı
Wage sheets collected	15	L L	6	000	25	200	35	901	759	0.77
Total number of employees		1155		982		1.00		189		

Orders No. 13, 14, 15 and 16 TEXTILE TRADES—RETURNS FOR AUGUST, 1937

TEXTILE TRAD	TRADES-RETURNS		FOR AUGUST,	UST, 1937	2			
	Tor	Toronto	Other	Other cities	-0000;	5,00050,000	Unde	Under 5,000
	1936	1937	0ver 1936	1937	1936	1937	1936	1937
Virmbon of firms nanowiting own orross	70	64	26	22	92	19	63	51
Total number of female employees	2649	2257	3566	3320	6420	6271	2530	2241
Out number of female employees	2489	2040	3349	2984	5573	5210	2311	2042
Thubon 10 moons	160	217	217	336	847	1061	219	199
Average hours worked per week (normally)	44	46	49	49	20	49	55	52
Hourly rate of wages.						(	t	G
Under 12c		67	1	_	1	21	1.1	NI N
190.160	1	က	3	<u></u>	152	139	87	81
16.18.	48	30	72	99	203	127	104	98
10.000	09	00	49	49	332	303	<b>2</b> 49	168
90.99.	2 0	70 80	139	121	553	480	535	322
200-201-201-201-201-201-201-201-201-201-	00	7.4	108	113	1173	1031	386	273
225-24C	20	0.00	539	401	910	814	308	343
24C-20C	450	374	644	431	814	888	217	271
205-205	1418	1202	1758	1642	1967	2040	509	545
36e and un	427	398	254	489	316	452	118	130
	2649	2257	3566	3320	6420	6271	2530	2241
5	Employ- ers	Employ-	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting, 1937 only:	7	00 K7 T		3320 F	67	6271 F	51	2241 F
Factory help and Office help	#	47.0	i   	1		37.0	1	210
Office help only	19	51	1		1	1	1	1
Vo female hain	4	1	1	1	-1	1	1	1
Not consisting	. 21	I	1	1	1	1	23	
Transferred to other trades	1	1	1	1	1	1	1	1
Wage sheets collected Total number female employees	88	2355		3321	69	8308	ಜ	2262

Order No. 17 NEEDLE TRADES—RETURNS FOR APRIL, 1937

NEEDLE TRADES—RETURNS	RADES-	-RETURNS	FOR APRIL,	PRIL, 1937				
	Toronto	onto	Other Pover	Other cities	5,000	5,00050,000	Under 5,000	2,000
	1936	1937	1936	1937	1936	1937	1936	1937
Number of firms reporting employees	623	630	98	111	87	97	19	18
Total number of female employees	7202	7359	-1 8 2 1 2	878	2620	2667	212	198
Over 18 years	6957	7052	775	856	2372	2403	192	143
Under 18 years	245	307	[-	22	248	264	20	55
Average hours worked per week (normally)	43.2	43.6	47.04	47.8	48	48.4	49.7	51.6
Hourly rate of wages:								
Under 12 cts,		4	ಣ	ଦେ	12	2	ಣ	ო
12-16	15	18	ಬ	1	114	81	29	œ
16-18	68	108	∞	ගෙ	112	84	15	ব্য
18-20	66	86	26	1 -1	173	151	18	13
20-22	163	158	∞ co	46	228	206	38	39
22-24	168	167	60 ++	44	462	365	30	88
24-26	208	188	195	215	330	359	30	23
26-28	571	576	86	101	261	266	15	16
28-36	3765	3428	217	214	299.	674	24	32
36-up	2123	2614	158	235	261	476	10	16
	7202	7359	782	878	2620	2667	212	198
	Employ- ers	Employ- ees	Employ- ers	Employ-	Employ- ers	Employ- ees	Employ- ers	Employ-
Number reporting 1937:								
Factory and Office	630	7359 F	111	878 F	96	2667 F	18	198 F
		0 299		78 0		385 0		350
Offlice only	32	42	4	4			2	20
No female help	131		92	1	22		1	1
Not operating	78	1	2		ಣ		23	
Transferred to other trades	16	1	Η	1	61	1	1	ļ
Wage sheets collected	887		199		106		23	
Total number employees		9908		096		3052	-	253

Orders Nos. 21, 22, 23 and 24 DRUG AND CHEMICAL FACTORIES—RETURNS FOR OCTOBER, 1937

Prod And Citation Liver Contract	Tor	Toronto	Othe	Other cities	5.000	5,00050,000	Unde	Under 5,000
	1000	1097	over 1936	over 50,000	1936	1937	1936	1937
	1000	1001	0007	0	200	000	01	1.5
Number of firms reporting employees	96	144	35	98	21	27	0.1	01
Total number of female employees	896	1111	345	321	173	217	183	169
Over 18 years	855	1033	344	315	168	215	178	168
Under 18 years	41	7.8	-	9	5	C1	ro	1
Average hours worked per week (normally)	41	री री	41	44	45	44	43	91
Hourly rate of wages:								
Under 12c	1	1	1	1		1		]
12c-16c	1		-	63	<u>⊸</u>	1		
16c-18c	41	14	1	23	1	1	12	12
18c-20c	16	34	1	1		31	11	-Jr
	33	800	19	20	က	10	45	14
22c-24c	65	7.9	25	27	39	25	73	61
24c-26c	37	93	32	35	35	36	16	49
26c-28c	128	142	121	85	13	16	10	12
28c-36c	499	547	82	. 08	29	42	10	14
36c and up	7.7	164	09	69	12	98	9	ಣ
				1				
	896	1111	345	321	173	217	183	169
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ-	Employ- ers	Employ-
Number reporting 1937 only:								
Factory help and office help	144	1111 F	58	321 F	22	217 F	13	169 F
		5740		1650		53.0		510
Office help only	135	279	31	65	15	40	15	19
No female help	184	1	98	1	50		17	1
Out of business etc.	28	†	00	1	41		9	]
Transferred to other trades	20	1	4	1	9	1	I	
					1			1
Wage sheets collected	496	1064	187	r.	29	310	5]	239
rotal manner employees		1304		100		-		

Orders Nos. 25 and 26 OFFICES—RETURNS FOR DECEMBER, 1937

OFFICE	Toronto	KNS FOR	OFFICES—RELUKINS FOR DECEMBER, 195  Toronto Other cities	cities	5,00050,000	20,000	Under 5,000	0000
	1936	1937	over 5	0,000	1936	1937	1936	1937
.000					4	000	71 C	017
Number of firms reporting office employees	1458	1644	403	1.88	1.0001	1238	200	1407
Total number of female office employees	14826	17621	5024	6341	2006	5919	1895	140
Over 18 years	14679	17460	5014	6272	4987	5850	1845	1475
	147	161	10	69	15	69	∞	12
Average hours worked per week (normally)	46.7	01	42	40	45.9	11	44.6	41
Weekly rate of wages:								
Under \$7.00	11	9	2	9	21	24	17	53
7- 8	90	œ	16	တ	99	18	16	17
8-9	64	56	24	17	69	65	25	20
9-10	55	41	43	31	119	122	20	95
10-11	264	206	118	118	300	339	123	142
11-12	210	282	118	121	610	594	109	68
12-13	1523	1474	732	792	637	715	350	182
13-15	2296	2706	737	950	869	919	334	174
15-18	3823	4631	1314	1569	1154	1442	440	320
18 and up	6572	8211	1915	2734	1361	1681	389	398
	14,826	17,621	5,024	6,341	5,005	5,919	1,853	1,487
	Employ- ers	Employ- ees	Employ- ers	Employ-	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only:	769	6004	200	0066	n n	1530		r. ox
No female employees	167	F ( )	09	5	08		48	3
Not operating Transferred to other trades	ట చ		မ ဗ		121			
Times of the standard of the s							1	
Office wage sheets collected Office help from factory wage sheets	696	11597	449	4049	661	4387	165	1399
Total number of office employees		17,621		6,341		5,919		1,487

NOTE: The "Number of firms reporting" as indicated in the above table represents only employers who reported office workers only, and who had no female employees affected by any other order of the Board The "Total Number of Employees" however includes all office workers reported by all classes of employers listed under the different orders

Order No. 27

TTS AND BEFRESHMENT ROOMS—RETHRNS FOR SEPTEMBER 1937

HOTELS, RESTAURANTS AND	REFRES	HMENT RO	OMS-R	ETURNS F(	OR SEP	AND REFRESHMENT ROOMS—RETURNS FOR SEPTEMBER, 1937	137	
	To	Toronto	Other	Other cities	10,	10,000 to	4,0	4,000 to
	1936	1937	1936		1936	1937	1936	1937
Number of firms reporting employees	557	779	283	417	486	567	175	254
Total number of female employees	4159	5302	1338	1650	1991	2190	592	845
Average hours worked per week (normally)	46.	50.6	45.	49.4	49.2	53.5	51.	52.
Hourly rate of wages:								
Under 12c	1	63	1	1	4	2		9
12c-16c	ಣ	67	6	12	17	14	22	22
16c-18c	6	ro	ಣ	<u></u>	15	24	23	34
18c-20c	4	4	10	6	52	48	59	46
20c-22c	12	16	21	18	171	148	220	284
22c-24c	33	69	39	33	735	849	106	141
24c-28c	234	181	586	902	425	425	69	125
26c-28c	1512	2257	302	309	256	270	43	28
28c-36c	1872	2260	283	454	258	324	54	9.0
36c and up	480	206	85	102	58	98	11	36
	4159	5302	1338	1650	1991	2190	592	842
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only: Restaurant, hotel and office help	662	5302-R&H	417	1650-R&H 87-0	567	2190-R&H 70-0	254	842-R&H
Office help only	7	181	ಣ	- - - - -	67	)	1	) 
No female help	270		153		95		26	
Out of business etc.	151		39		54		12	
Transferred to other trades	01	-	-		1		1	
Word about collected	1000		010		1 0 1 1		900	
Wage sheets confected Total number employees	1223	5672	010	1740	118	2262	282	853

Order No. 28

LEATHER TRADE—RETURNS FOR AUGUST, 1937

LEATHER	LEADE	I KADERELOWN	I ON WORK	1 (7000				
	Tor	Toronto	Other	Other cities	5,00(	5,000-50,000	Onde	Under 5,000
	6	1000	over	over 50,000	2601	1087	1936	1937
	1936	1937	1930	1991	1990	1001	COCT	1004
M of finns vaporting amployees	56	61	9	9	∞ en	36	15	17
Number of fines tepotents compared on the state of the st	656	657	216	213	981	1055	484	208
Total number of female employees	868	607	207	199	866	931	414	428
Uver 15 years	22.00	20	6	14	115	124	0.2	80
Onder 18 years Average hours worked per week (normally)	45	20	48	47	49	49 1/2	51	20
Hourly rate of wages:								ę
Thelaw 19a	1	l		1	1	١	1	9
Under 12c	1	1	1		51	52	50	40
120-100	21	18	ಣ	က	23	23	18	19
100.000	19	21	22	4	48	47	19	25
100-200	6.6	1.9	15	9	57.8	53	114	87
20c-22c	22	18	10	∞	140	119	57	40
225-246	1 12	19	47	37	121	113	59	47
Z46-Z06	, r.	200	23	20	76 .	114	39	42
207-207	410	283	58	10 83	307	338	103	149
36c-502	65	95	55	82	136	202	25	53
	656	657	216	213	981	1055	484	208
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ-	Employ- ers	Employ- ees
Number reporting 1937 only: Factory help and office help	61	657 F 74 O	9	213 F 35 O	36	1055 F 64 O	17	508 <b>F</b> 43 O
Office help only	11	11	ಣ	œ	∞	29	63	4
No female employees Not operating, etc.	10			1	יס		-	! [
Wage sheets collected	82	742	10	256	49	1148	20	55 55 50

Order No. 29

DEPARTMENT STORES—RETURNS FOR OCTOBER, 1937

	1936	1937
Number of stores reporting	2	2
Total number of female sales help	4439	4064
Over 18 years	4263	3881
Under 18 years	176	183
Average hours worked per week (normally)	48	48
Weekly rate of wages:		
Under \$7.00	_	
7-8	_	
8- 9	62	60
9-10	17	39
10-11	77	70
11-12	58	31
12-13	1005	698
13-15	1934	1701
15-18	974	1127
18-up	312	338
Total	4439	4064

## For 1937 only:

Sales force Office force	4064 2009
Total number of female employees	6073

Order No. 30 SLECTRIC TRADE—RETURNS FOR NOVEMBER, 1937

ELECTRIC TRADE—RETURNS FOR NOVEMBER, 1937	RADE-F	RETURNS	FOR NOV	EMBER, 1	1937			
	Tor	Toronto	Othe	Other cities	-000,5	5,000-50,000	Under	Under 5,000
	1936	1937	1936	1937	1936	1937	1936	1937
Number of firms reporting employees	37	38	∞	6	18	20	9	2
Total number of female employees	1298	1294	885	776	543	671	254	276
Over 18 years	1201	1210	861	763	495	619	223	249
Under 18 years	2.6	84	25	23	48	52	31	27
Average hours worked per week (normally)	45	45	48	47	48	45	47	48
Hourly rate of wages:								
Under 12e			1	1	1	1	1	1
12c-16c	က	ł	1	1	6		4	7
16c-18c	34	14			20	භ	∞	61
18c-20c	∞	1	1	1	29	G	12	00
20e-22c	2	10	24	က	25	20	42	20
22c-24c	22	20	26	9	91	69	47	24
24c-26c	34	7.0	141	23	46	55	35	45
26c-28c	101	91	141	102	53	85	44	09
28c-36c	835	700	463	226	. 216	344	55	96
36c and up	254	382	06	416	54	56	<u></u>	14
	1998	1994	00 00 70	776	543	671	254	276
	1	1						
	Employ-	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only: Factory help and office help	ლ ∞	1294 F	G	776 F	20	671 F	ro	276 F
Office help only	29	453 O 113	16	239 O 110	то	1730	ಣ	28 O 10
No female employees   Not operating etc.	11	1	<u> </u>		<del>, ,</del>		1	1
					0		6	
Wage sheets collected	48	1860	26	1125	927	861	מ	314

Order No 31 LAUNDRY TRADE—RETURNS FOR AUGUST, 1937

		20110	Other	Other cities		0
	1936	1937	over 50,000 1936 193	1937	Under 1936	Under 50,000 936 1937
Number of firms reporting employees	112	132	87	92	135	158
Total number female employees	1585	1772	788	865	671	904
Over 18 years	1525	1702	745	008	656	855
Under 18 years	09	20	43	65	15	49
Average hours worked per week (normally)	45 1/2	77	46	47	48	48
Hourly rate of wages:						
Under 12c		21	1	1	က	H
12c-16c		П	ro	1	25.5	9
16c-18c		61	14	1	22	44
18e-20c	51	58	7	40	39	26
20c-22c	63	75	37	35	9.7	102
22c-24c		20	30	31	261	340
24c-26c		7.0	369	503	91	154
26c-28c	931	997	143	7.4	31	31
28c-36c	377	424	154	139	7.9	100
36c and up	80	123	28	443	56	50
	1585	1772	788	865	671	904
	Employ- ers	Employ-	Employ- ers	Employ-	Employ-	Employ-
Number reporting 1937 only: Factory nelp and office help	132	1772 F	92	865 F	158	904 F
		2410		0 06		1100
Office help only	4	10	12	15	63	6
Out of business etc.	99	1	46	1	36	1
Wage sheets collected	202		150		196	
Total number employees		2023		970		1023

Order No. 32 THEATRES AND AMUSEMENT PLACES—RETURNS FOR SEPTEMBER, 1937

	Toronto	onto	Other	Other cities	Rest of	Rest of Province
	1936	1937	over 1936	over 50,000 936 1937	1936	1937
Number of theatres reporting employees	89	93	40	40	103	104
Total number of female employees	194	198	109	112	188	197
Over 18 years	193	198	108	111	186	195
Under 18 years	<del>-</del> - (	1			20 20 20 20 20 20 20 20 20 20 20 20 20 2	21 0
Range of hours worked per week	2—48	3—51	4 1/4 48	2 ½48	4-0-4	3—48
Hourly rate of wages:						
Under 12 cts.	1	1	1	1	1	ļ
12-16	1	1	1	1		
16-18	j	1	1	1	1	-
18-20	}	1	1	1	1	!
20-22	1	63	i	1	က	7
22-24	П	1	1	1	67	-
24-26	1	က	10	٠	28	40
26-28	4	23	15	19	12	7
28-36	102	109	51	28	78	68
36-up	86	82	33	30	64	57
	194	198	109	112	188	197
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number renorting 1937 only:					_	
Theatre Employees	93	198	40	112	104	197
No female help	1	1	1	1	ന	1
Not operating	!	1	1	I	1	ı
Wome wheet collected	6		9		107	
Wage success conscrete Total number employees	4	198	0	112		197

Order No. 34 FOOD TRADE—RETURNS FOR MAY, 1937

	E				1	0		
	0.T.	Toronto	Othe	Other cities over 50 000	5,000	5,000-50,000	Cnde	Under 5,000
	1936	1937	1936	1937	1936	1937	1936	1937
Number of firms reporting employees	1111	120	62	65	51	52	861	388
Total number of female employees	2560	2633	942	1019	1020	1117	372	450
Over 18 years	2349	2413	885	947	926	1031	354	435
Under 18 years	211	220	09	72	94	86	18	15
Average hours worked per week (normally)	46	45	46	46	47	52	50	51
Hourly rate of wages:								
Under 12c		1			П	ಣ		7
12c-16c		1		ಣ	51 61	25	111	25.5
16c-18c	22	61	27	25	38	19	13	14
18c-20c	73	09	26	36	65	69	34	45
20c-22c	63	105	7.1	113	110	86	59	85
22c-24c	118	22	44	56	344	179	61	44
24c-26c	153	154	373	371	199	260	54	32
266-28c	787	519	154	119	104	156	49	19
286-266	1109	1268	175	228	108	264	98	139
30c and up	179	409	72	89	29	44	70	46
	2560	2633	942	1019	1020	1117	372	450
	Employ-	Employ-	Employ-	Employ-	Employ-	Employ-	Employ-	Employ-
Number renorting 1937 only.	2	7	61	5	815	Succession	s L	200
Factory help and office help	120	2633 F	- 65	1019 F	52	1117 F	38	450 F
		488 0		200 0		1360		0 09
Vince help only No female employees	80	313	20	156	118	258	64	105
Not operating, etc.	3.0		15		25		10	1
Wage sheets collected	230		130		195		112	
Total number employees		3434		1375		1511		615

193
SEPTEMBER,
FOR
TRADE-RETURNS
MISCELLANEOUS

MISCELLANEOUS	TRADE-	TRADE-RETURNS		FOR SEPTEMBER,	x, 1937			
	Toronto	onto	Other	Other cities	5,000	5,000-50,000	Under	Under 5,000
	1936	1937	1936	1937	1936	1937	1936	1937
Number of firms reporting employees	160	152	70	69	106	112	69	71
Total number of female employees	1586	1706	1049	1310	1756	1945	807	897
Over 18 wears	1480	1518	1026	1263	1593	1781	742	808
Under 18 years	106	188	23	47	163	164	65	68
Average hours worked per week (normally)	44 1/2	45	44	43	48	44	47	47
Hourly rate of wages:								
Hnder 12c	1	1		-		1	_	
12c-16c	1	1	2		18	12	35	30
16-180	50	54	11	6	11	10	31	09
186-20c	හ	44	10	9	45	63	144	155
206-226	တ	122	55	50	101	118	188	183
22c-24c	98	86	80	39	425	267	102	108
24c-26c	65	116	263	223	372	280	122	94
26c-28c	424	314	132	86	145	224	47	72
28c-36c	687	783	306	412	. 482	661	103	157
36c and up	158	187	187	472	156	310	28	37
						1		
	1586	1706	1049	1310	1756	1945	807	897
	Employ- ers	Employ-	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only:	197	1706 F	69	1310日	112	1945 F	7.1	897 F
Factory neip and otifice neip	971	527.0	ò	5130	1	5910		183 0
Office help only	386	1635	223	638	277	771	108	270
No female help Out of business etc.	122	1	17		90	1	eo ∞	1
VIV.	088		300		470		217	1
Wage sneets collected Total number employees	000	3868	000	2461	h -	3307		1350

Order No. 36 TOBACCO TRADE—RETURNS FOR DECEMBER, 1937

IOBACCO IRADE-NELONNS	WDE-W		ron DEO	11,	1001			000
	Torc	Toronto	Other cities	cities	5,000-50,000	0,000,0	Under 9,000	000,6
	1936	1937	over 50,000 1936 193	1937	1936	1937	1936	1937
Number of firms reporting employees	7	2	က	2	2	21	$\infty$	∞
Total number of female employees	264	274	307	312	261	3.48 8.48	1144	1587
Over 18 years	254	266	282	287	259	335	1058	1517
Under 18 years	10	∞	25	25	2	13	86	2.0
Average hours worked per week (normally)	11	45	44	77	47	17	70 71	49
Hourly rate of wages:								
Under 12c	1	1	1		1	21	ଧ	ಣ
12c-16c		1	1	1	1	1	55 44.00	37
16c-18c	2	1	1		ಣ	21	87	135
18c-20c	4	1	1		4	57	109	169
20c-22c	2	∞	56	39	œ	25	110	140
22c-24c	16	18	1.7	25	15	40	113	118
24c-26c	11	23	49	28	25	03	239	183
26c-28c	26	35	34	27	88	12	276	178
28c-36c	35	53	144	149	99	78	151	405
36c and up	163	137	9	13	52	100	23	219
	264	274	307	312	261	348	1144	1587
	Employ- ers	Employ- ees	Employ- ers	səə Employ-	Employ- ers	Employ-	Employ- ers	Employ- ees
Number reporting 1937 only: Factory help and office help	ಬ	274 F	23	312 F	63	348 F	∞	1587 F
Office help only	10	7 0	¢	21 0	9	0 2 2		100
No female help	2 0	,	) c	)	>			
Out of business etc.	œ		23		1	1	1	1
Wage sheets collected Total number employees	23	305	1-	888	∞	358	10	1597

Order No. 37 RUBBER TRADE—RETURNS FOR OCTOBER, 1937

RUBBER TRADE-RETURNS	KADE-K		FUR UCIUBER,	UBER, 1957				
	Toronto	nto	Other cities	Other cities	5,000-	5,000-50,000	Under	Under 5,000
	1936	1937	1936	1937	1936	1937	1936	1937
Number of firms reporting employees	9	9	1	1	11	13	3	3
Total number of female employees	448	458	78	100	1025	1515	40	20
Over 18 years	443	445	78	100	946	1379	36	48
Under 18 years	15	13	1	1	42	136	4	7
Average hours worked per week (normally)	47	45	44	40	20	20 1/2	52	51
Hourly rate of wages:								
Under 12c	1	1	1	1	1	1	1	1
12c-16c	1	1	1	1	16	∞	က	4
16c-18c	1	1	1	1	12	22	63	П.
18c-20c	П	1	1	1	20	81	16	13
20c-22c	23	1	1		42	72	1	1
22c-24c	1	67	1	1	165	92	23	67
24c-26c	9	∞	1	1	124	94	27	4
26c-28c	20	00	1	1	148	107	1	1
28c-36c	131	84	59	1	391	743	13	21
36c and up	266	356	17	66	77	296		ಬ
			1			1	1	1
	448	458	78	100	1025	1515	40	20
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only:	9	458 F	Н	100 F	13	1515 F	<del>ග</del>	50 F
4		0 2 6		190		238 0		13 0
Office help only	11	38	9	∞	1	13	1	1
No female help Out of business etc.	ಹ		1		1	_	1	ı
				_				1
Wage sheets collected	22	593	7	127	14	1766		63

Order No. 38 JEWELLERY TRADE—RETURNS FOR NOVEMBER, 1937

						0
	Tor	Toronto	Other	Other cities	Onde	Under 50,000
	1936	1937	over 1936	over 50,000 936 1937	1936	1937
Number of firms reporting employees	22	22	4	4	10	6
Total number female employees	187	182	15	22	165	188
Over 18 vears	164	141	15	21	138	153
Under 18 years	23	41	-	1	27	35
Average hours worked per week (normally)	45	45	44 1/2	45	47	48
Hourly rate of wages:						
Under 12c	l	1		1	1	1
12c-16e	28	G			19	11
16c-18c	က	17	1	1	6	1
18c-20c	$\infty$	17	1		13	15
20c-22c	17	10	1	1	22	35
22c-24c	6	2	ଦ୍ର	2	15	10
24c-26c	9.	9		9	26	45
26c-28c	32	35		-	11	15
28c-36c	67	64	ಣ	0.	31	55 57
36c and up	17	22	, ro	4	19	24
	187	182	15	22	165	188
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only:	99	100 1	_	9.9 F	c	2. 0.0 [2
accord neily and other neily	1	0 88	۲	160		35.0
Office help only	17	65	9	23	27	67
No female employees . }	¢	,	ď		·	
Not operating etc.	27		24		<del>-</del>	
Wage sheets collected	41	85 80 70	12	61	12	20.55

Order No. 39
PAPER TRADE—RETURNS FOR FEBRUARY, 1938

PAFER IN	I KADE-TEL OTAL	TOTAL	-					
	Tol	Toronto	Other	Other cities	5,000-50,000	000,00	Under	Under 5,000
	900	1097	over 50,000	50,000	1936	1937	1936	1937
	1930	1991	1000	0001	000	10	11	22
Te firm nonorting employees	196	221	74	9)	28	400	7.000	000
Number of ministeriors confession	2494	2563	974	1054	289	069	27.7	230
Total number of temale employees	2349	2401	942	1023	654	999	217	269
Over 18 years	145	162	32	31	58	24	11	21
Under 18 years	97	44	47	46	48	47	46	46
Average hours worked per week (normally)	4	•						
Hourly rate of wages:		-		-	cc	1	1	1
Under 12c	!	٦ ٥	. 1	,	6	10	6	œ
12c-16c	6	1 0	16	10	, ro	o.	9	13
16c-18c	- G	3 M	2.6	· =	29	19	2	∞
18c-20c	99	7 6	- 60	36	43	35	36	23
20c-22c	4-00	- ×	- re	67	168	162	13	12
22c-24c	0.0		277	181	98	106	16	18
24c-26c	37.6	007	666	246	94 .	52	34	31
26c-28c	1014	1306	206	444	208	171	93	124
28c-36c	767	2542	. 8	99	43	126	13	52
see and up	F 60	,						
	2494	2563	974	1054	682	069	228	290
-	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only:  Factory help and office help	221	2563 F	92	1054 F	84	690 F	33	290 F
1	146	909 0	30	345 O   133	23	263 O 81	23	63 U 48
No female help Out of business etc.	10		15	1	00	1	14	l
Ware chasts rollected	377		121	1	115		7.0	1
Total number employees		4304		1532		1034		401

	1937
	APRIL,
	FOR .
Order No. 41	-RETURNS
	M MILLINERY TRADE-
	CUSTOM

CUSTOM MILLINERY		Order No. 41 TRADE—RETURNS FOR APRIL, 1937	FOR APRIL,	1937			
	Toronto	nto	Other cities	cities	4,000-	4,000-59,000	
	1936	1937	over 50,900 1936 10	1937	1936	1937	
Number of firms reporting female employees	325	37	23	21	24	23	
Total number female employees	214	223	62	56	40	44	4
Over 18 years	209	219	62	99	40	44	
Under 18 years	73	4		1	1		
5	46	46	47	48	48	20	
Hourly rate of wages:							
Under 12c	೯೦	1			¢1		
16c	ы	∞	1	1	¢1	1	
	9	2		1	1		
	2	ಣ	1	-	¢1	1	
20c-22c	9	23	1	1	1	1	
22e-24c	67	ro			ಬ	63	
24c-26c	67	6.	14	12	ro	10	
	1.7		œ	4	ಣ	∞	
	80	36	25	26	12	12	
I u	98	148	12	13	10	10	
	214	223	62	56	40	4.1	
	Employ- ers	Employ-	£mploy-	Employ-	Employ- ers	Employ- ees	
Number reporting 1937 only: Female employees in the industry and office help	37	223 F	21	56F	53	44 F	
Office help only	1	0 1	1		I	ļ	
Out of business, etc.	c.		7		খ্যা	-	
Wage sheets collected Total number employees	47	226	28	56	27	44	

HAIRDRESSING AND BEAUTY PARLOURS—RETURNS FOR MAY, 1937 Order No. 42

	5	1	Othon	Othor cities	10 000-50 000	50 000	5 000-10.000	0.000
	Toronto	oru	Onle	50.000	-0000,01	-		
	1936	1937	over a 1936	1937	1936	1937	1936	1937
Tr. 1 P. Elmer mountaine amplations	285	323	170	180	150	153	34	44
Number of tirms reporting employees	7 1 5 4	860	356	379	222	274	44	75
Total number of temale employees	740	~ 82.8 82.8 82.8	356	379	222	274	44	22
Uver 10 years	4-	7	1	1	1	-	1	1
Avoyage hours worked per week (normally)	45	48	48	47	20	47	20	49 1/2
Hourly rate of wages:								
Index 196	ro	10	23	18	16	25	ro	7
190-16c	28	12	21	12	12	∞	23	
160-180	14	17	ಸರ	9	∞	9	1	4
186-906	19	14	∞	7	11	10	4	2
906-996	19	16	9	17	21	13	ū	9
226-246	7-	7	9	2	22	54.	4	4
246-266	18	26	105	110	ಣ	42	∞	13
266-286	260	273	63 FO	43	. 21	13	4	2
28c-36c	222	286	110	92	44	228	9	16
36c and up	162	199	28	69	34	45	9	12
	-	-						
	754	860	356	379	222	274	44	75
	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees	Employ- ers	Employ- ees
Number reporting 1937 only: Hairdressing and Beauy Parlour operators	323	098	180	379	153	274	44	75
Not operating	68	1	42	1	45	1	18	1
Wage sheets collected	412	860	222	379	198	274	62	72

ORDER No. 47 SEASONAL CANNERS—RETURNS FOR OCTOBER, 1937

	Cities over	over	5,000-	5,000-50,000	2,000	2,000-5,000	Under	Under 2,000
	50,000 except-	except- to. 1937	1936	1937	1936	1937	1936	1937
NO CAROL TOTAL	9	2	10	13	21	24	54	77
Number of Hrms reporting employees		485	808	1347	1395	2644	4286	5269
Total number of remaie employees		485	745	1280	1340	2614	4106	5017
Over 18 years			63	29	55	30	180	252
Under 18 years		09	54	26	52	50 1/2	51	26
Average mous women per meet (meeting)								
Hourly rate of Wages:		-	4	0	12	1.9	97	111
Under 12c		66	37	36	116	85	389	432
126-10c			16	41	41	28	211	202
TOC-TOC		4.8	28	49	69	98	2135	1000
186-20c		64	7.1	86	566	711	8.534	1373
206-226		156	7.0 6.0 00	580	336	351	211	862
ZZC=Z4C		7.1	7.0	272	85	208	156	588
Z4c-z0c		- c	24	62	61	65	86	165
200-200		7.5	15	203	66	473	155	412
36° and un		مر	2	6	10	268	21	124
de para con								
		485	808	1347	1395	2644	4286	5269
	Employ-	Employ-	Employ- ers	Employ-	Employ- ers	Employ-	Employ- ers	Employ-
Number reporting 1937 only: Factory help and office help	61	485 F	, 13	1347 F 13 O	24	2644 F 30 O	77	5269 F 38 O
Office help only	11	11	5 1	18	ㅋ 작	-	14	111
Wage sheets collectedTotal number of female employees	01	485	16	1378	29	2675	91	5307

APPENDIX

STRIKES AND LOCKOUTS IN ONTARIO, FISCAL YEAR 1938

(From figures published in Labour Gazette)

Industries	Number of disputes in progress	Number of persons involved	Aggregate duration in working days
Agriculture	1	40	25
Logging	4	700	4,800
Manufacturing—  Boots and shoes Fur and leather Metal products Non-metallic minerals Printing Rubber Textiles and clothing Tobacco and liquors Vegetable foods Wood products, miscellaneous	3 3 4 23 2 6	1,364 618 4,991 307 133 1,325 7,341 167 322 1,296	10,800 20,505 71,904 93 1,469 29,405 102,812 824 1,301 13,129
Miscellaneous manufacturing		388	3,954
Construction— Buildings and structures Highway		127 179	826 611
Transportation— Water Electric	10 2	1,033	17,460 206
Service— Business and personal Public administration Recreational	1	114 12 700	2,682 48 6,325
Trade	7	1,531	5,727
Totals 1938  " —1937  " —1936  " —1934  " —1933  " —1932  " —1931  " —1930  " —1929  " —1928  " —1927  " —1926  " —1925  " —1924  " —1923  " —1923  " —1923  " —1922  " —1922	50 94 39 26 18 21 43 52 25 17 21 19 16 23	22,749 13,251 9,120 18,198 7,380 2,432 2,827 4,315 5,172 5,622 4,403 1,839 2,499 3,943 1,946 2,712 10,800	294,906 148,929 78,511 256,311 109,240 50,401 66,268 50,513 75,870 59,889 56,695 46,402 27,477 95,196 198,319 367,893 521,210

#### STRIKES AND LOCKOUTS IN ONTARIO DURING FISCAL YEAR 1938

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
		Carried C	Over From Previous Year		,
Kingsville	Tobacco workers	Mar. 18 1937	For adjustment of piece rates; terminated April 6; in favour of workers; provincial negotiations.	156	780
Kitchener	Rubber factory workers	Mar. 24	For increased wages, reduced hours and recognition of union; terminated April 6; compromise.	550	2,000
Toronto	Beverage dispen- sers	Mar. 4	For union agreement with increased wages; employment conditions no longer affected by end of April; in favour of employer.	8	100
		Commenc	ed During Fiscal Year		
Hanover	Flour and feed mill workers	Apr. 10	For recognition of shop committee, increased wages and reduced hours; terminated April 17, 1937; compromise.	10 .	70
Perth	Shoe factory workers	Apr. 14	For increased wages and closed shop agreement; terminated May 15, by conciliation (Dominion); compromise on wages and agreement.	185	4,500
Brantford	Men's work clothing factory workers	Apr. 2	For increased wages and union agreement; terminated April 13; compromise.	56	460
Toronto	Knitting factory workers (silk)	Apr. 28	For union agreement with increased wages; terminated May 20; employees' committee to be recognized and wages adjusted; provincial negotiation.	300	5,000
Hanover	Furniture factory workers	Apr. 7	A gainst discharge of workers, alleged to be for union activity and for recognition of shop committee; terminated May 1 by negotiations, shop committee to be recognized and men reinstated; provincial negotiation.		1,573

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Hanover	Furniture factory workers	Apr. 9	For union recognition; terminated April 13; in favour of workers; pro- vincial negotiation.	105	420
Chesley	Furniture factory workers	Apr. 13	Against discharge of workers and for increas- ed wages; terminated April 17; compromise.	35	175
Kitchener	Furniture factory workers	Apr. 9	For increased wages and reduced hours; terminated April 10; in favour of workers; provincial negotiation.	53	106
Toronto .	Commer- cial artists	Apr. 20	For union agreement with increased wages and reduced hours; terminated May 8 by conciliation (Dominion); union agreement with several firms; compromise on wage increase.		1,175
Toronto	Commer- cial artists	Apr. 29	Sympathy with strike of artists commencing April 20; terminated May 8; compromise.		225
Cobourg	Small-arms factory workers	Apr. 1	For increase in wage and reduction in hours; terminated April 1; compromise; provincial negotiation.		16
Oshawa	Auto- mobile factory workers	Apr. 8	For union agreement; terminated April 24: compromise; provincial negotiation.		63,000
Guelph	Moulders	Apr. 20	For increased wages and reduced hours; terminated by conciliation (Crown Attorney); compromise on wage increase; May 3rd.		564
Hamilton	Structural steel workers	Apr. 12	For increased wages; terminated April 15; compromise.		30
Toronto	Longshore- men	Apr. 15	For increased wages; terminated May 15 by conciliation (Dominion) and negotiations; compromise.	1	8,500

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Hamilton	Longshore- men	Apr. 15	For union recognition, increased wages and improved conditions; terminated May 15 by conciliation (Dominion) and negotiations; compromise.	214	5,100
Point Edward	Longshore- men	Apr. 16	For increased wages; terminated May 15 by conciliation (Dominion) and negotiations; compromise.	150	2,500
Toronto	Milk wagon drivers	Apr. 14	For union agreement; terminated April 18; in favour of workers.		104
Toronto	Bottle washers	Apr. 21	For increased wages and reduced hours; terminated June 15; by negotiations; compromise.		230
Beamsville	Municipal quarry workers	Apr. 21	For increased wages; terminated April 24; compromise.	12	48
St. Davids	Cannery workers	May 27	For increased wages; terminated by negotiations the same day; compromise.	3	83
Kincardine	Knitting and spinning factory workers	May 4	Alleged lockout for union activity; partial return of workers; lapsed early in June; provincial negotiation.		2,250
Toronto	Tailors	May 20	For union recognition wage increase, etc.; employment conditions no longer affected by end of September; replacement; in favour of employer.	-  -  -  -	1,920
Tavistock	Box and barrel factory workers	May 17	For increased wages am for shop committee; ter minated May 17 by con ciliation (provincial); in favour of workers.	-	50
Toronto	Furniture factory workers	May 25	For agreement with wag increases, etc.; termin ated June 2, 3 and 16 by negotiations and conciliation (provincial); i favour of workers.	1- 5; 1-	1,100

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Windsor	Auto- mobile seat spring factory workers	May 11	For union recognition, increased wages, reduced hours; terminated May 19; conciliation (provincial); compromise.	200	1,300
Windsor	Auto- mobile castings factory workers	May 13	For increased wages, reduced hours and union recognition; terminated June 5; by conciliation (provincial); in favour of workers.	200	4,000
Toronto	Sheet metal workers	May 31	For increased wages: terminated June 10; conciliation (provincial); compromise.	85	850
New Toronto	Labourers and cement finishers	May 4	For increased wages and reduced hours; lapsed May 15; job closed down.	40	400
Toronto	Cleaners and dyers	May 11	For increased wages, reduced hours and union agreement; terminated May 11 by negotiations; compromise; hours reduced, wage increase pending.	35	30
Toronto	Rubber factory workers	June 21	A g a inst discharge of workers alleged to be for union activity; terminated September 11; return of workers; in favour of employer; provincial negotiations.	35	2,325
Toronto	Tannery employees	June 1	Against employment of a certain worker; employment conditions no longer affected by July 26; in favour of employer.	400	18,000
Renfrew	Textile factory workers (woollens)	June 14	For increased wages; terminated June 14; work resumed pending negotiations; indefinite.	75	70
Renfrew	Textile factory workers (woollens)	June 18	For increased wages: terminated June 24; by negotiation 10% increase made.	39	215

Locality	Oecu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Renfrew	Textile factory workers (woollens)	June 19	For increase in wages and reduction in hours; terminated June 24; by conciliation (provincial); compromise; wages increased 10%, committee for future adjustments.	125	600
Renfrew	Textile factory workers (woollens)	June 19	For increases in wages and reduced hours; terminated June 28; by conciliation (provincial); compromise on wages, hours and working conditions to be negotiated by committee.	110	700
Brockville	Hat factory workers	June 26	For union recognition, increase in wages and changes in working conditions; terminated August 21; conciliation (provincial); compromise.	174	10,696
Peter- borough	Textile factory workers (woollens)	June 29	For increased wages; terminated August 19 and 20; conciliation (provincial); compromise.	340	13,600
Hespeler	Enamel- ware factory workers	June 8	For increased wages and changes in working conditions; terminated June 24; by conciliation (provincial); compromise.		2,000
Oshawa	Trainmen (freight)	June 21	For increased wages; terminated June 26; conciliation (Dominion) work resumed pending negotiations.		126
Spanish	Pulpwood loaders	June 27	For increased wages, 50 cents per hour instead of niece work; terminated June 27; negotiations compromise; wages increased 40 cents,		27
Toronto	Dairy drivers	June 30	Against dismissal of worker; terminated June 30 negotiations in favour of workers; union agreement to be negotiated provincial negotiation.		18
Ottawa	Caddies (golf)	June 27	For increased wages; terminated June 30; replacement and return of workers; in favour of employer.	-	300

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Kitchener	Rubber factory workers	July 14	Against employment of non-union workers; terminated July 15; negotiations; in favour of workers.		80
Toronto	Leather garment factory workers	July 1	For renewal of agreement with increased wage rates; terminated July 3; negotiations; in favour of workers.		105
Cornwall	Cotton factory workers	July 21	For recognition of union, increased wages and improved working conditions; terminated August 21; conciliation (provincial); compromise.		45,000
Blind River	Sawmill workers	July 8	Increased wages and union recognition; terminated July 20; conciliation (provincial); compromise of wage increase and workers' committee recognized.	100	1,000
Thessalon	Sawmill workers	July 10	For increased wages; terminated July 19; negotiations; compromise.	200	1,800
Foleyet and Tionaga	Sawmill workers	July 22	For union recognition and wage increase; terminated August 19; conciliation (provincial); compromise.	150	3,400
Ottawa	Moulders	July 12	For increase in wages and against short time; terminated July 19; negotiations; in favour of workers.	6	30
Cooksville	Brick and tile workers	July 5	For increased wages; terminated July 5; negotiations; in favour of workers.	266	66
Kitchener	Button factory workers	July 26	Against changes in working conditions; terminated July 31; in favour employer.	15	90
Port Hope	Steel erectors	July 5	For extra pay for work out of town; terminated July 7; negotiations in favour of workers.	10	30

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Pelee Island	Stone crushers	July 15	For increased wages; terminated July 16; replacement of strikers: in favour of employer.	18	18
Meaford	Pulpwood loaders	July 4	For increased wages; terminated July 4; replacement; in favour of employer.	18	18
Thorold	Pulpwood loaders	July 6	For union recognition and increased wages; terminated July 13; negotiations in favour of workers; provincial negotiation.	150	1,200
Toronto	Caddies (golf)	July 1	For increased wages and certain playing privileges; terminated July 12; negotiations; compromise.		5,500
Toronto	Caddies (golf)	July 3	For increased wage rates; terminated July 7; negotiations; compromise.	100	500
Cobourg	Caddies (golf)	July 23	For increased wages; terminated July 23; negotiations; in favour of workers.	20	25
Kenora District	Road con- struction workers	July 28	For changes in working conditions; (complaints against contractor); terminated August 4; job closed down; indefinite.	91	62
Huntsville	Leather factory workers	Aug. 13	For increased wages and closed union shop; terminated August 26; conciliation (provincial); compromise.		1,550
Preston	Shoe factory workers	Aug. 11	Against dismissal of worker; terminated August 12; negotiations; in favour of workers.	140	210
Cornwall	Clothing factory workers	Aug. 25	For union recognition and against dismissal of workers alleged to be for union activity; terminated September 15; negotiations; in favour of workers; provincial negotiation.		4,500

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Cornwall	Cotton factory workers	Aug. 26	Alleged discrimination; discharge of workers; terminated August 31; conciliation (provincial); in favour of employer.	1,700	8,000
Kitchener	Brick and tile plant workers	Aug. 5	Against discharge of workers for misconduct and for increased wages: terminated August 5; return of workers; in favour of employer.		12
Milton	Brick plant workers	Aug. 3	For increased wages; ter- minated August 3; nego- tiations; in favour of workers.		15
Cornwall	Carpenters	Aug. 24	For dismissal of foreman who discharged certain employees; terminated August 24; conciliation (provincial); compromise: discharged men reinstated.		25
Coboconk	Road con- struction workers	Aug. 16	Against "no smoking" or- der; terminated August 16; negotiations; in fav- our of workers.		29
Owen Sound	Long- shoremen	Aug. 11	For increased wages; terminated August 11; return of workers; in favour of employer.		18
Toronto	Dress factory workers (child- ren's)	Aug. 2	Alleged lockout of union workers; terminated December 20; return of workers; in favour of employer.		440
Brampton	Green- house employees	Sept. 9	For increased wages; ter minated September 9 negotiations; comprom ise.	;	25
Hamilton	Bakery workers	Sept. 13	For union recognition, in creased wages, reduced hours and improved conditions; terminated September 13: negotiations in favour of workers.	d - -	38

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Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Port Colborne	Flour mill workers	Sept. 22	For recognition of union, reinstatement of discharged union worker and better distribution of work in slack periods; terminated September 29; negotiations; partially successful.	65	390
Kitchener	Rubber factory workers	Sept. 23	For increased wages, overtime rates after 10 hours, etc.; terminated November 4; conciliation (provincial); compromise.		25,000
Port Colborne	Shoe factory workers	Sept. 29	For union recognition, reduced hours and wage increase; terminated September 29; negotiations partially successful.		400
Preston	Furniture factory workers	Sept. 9	For adjustment in wage rates and union recog rition; terminated Sep tember 11; negotiations compromise.	-	180
Guelph	Moulders	Sept. 18	A gainst dismissal or workers; terminated September 21; negotia tions; compromise; pro vincial negotiation.	1	144
Graven- hurst	Brush factory workers	Sept. 23	For closed shop agree ment; terminated Octob er 13: negotiations; com promise.	-	2,664
Galt District	Labourers	Sept. 14	For increased wages; ter minated September 15 concilitation (provincial) in favour of workers.	;	80
Toronto	Dairy employees	Sept. 17	For closed shop unio agreement; lapsed b December 31; in favou of employer.	y	3,390
Sarni <b>a</b>	Grain elevator employees	Sept. 30	For increased wages an payment for waitin time; terminated October 12; replacement; i favour of employer.	g o-	72

-				Number of	Time loss
Locality	Occu- pation	Com- menced	Particulars	employees involved	in working days
Toronto	Bakery workers	Oct. 9	Against discharge of union workers; and for increased wages and reduced hours in new agreement; terminated November 13; conciliation (provincial); compromise.	20	620
Cornwall	Cotton factory workers	Oct. 14	For change from piece work basis of payment to hourly rates; terminated October 16; negotiations; in favour of employer.	11	27
Hanover	Furniture factory workers	Oct. 1	For increased wages and discharge of non-union workers; terminated Oct. 30; conciliation (local); wages increased and menjoined union; in favour of workers.		1,950
Preston	Wood factory workers	Oct. 8	For increased wages and reduced hours; terminated October 12; conciliation (provincial); compromise.		175
Toronto	Furniture factory workers Uphol- sterers	Oct. 20	For renewal of agreement with increased wages terminated October 23 negotiations; in favour of workers.		500
Toronto	Jewelry workers	Oct. 1	For renewal of agreement providing for increased wages; terminated October 8; negotiations; in favour of workers.	-	1,200
Toronto	Building trades workers	Oct. 1	For employment of union workers only; terminated October 1; replacemen in favour of employer.	- [	25
Moobeam	Truck drivers	Oct. 18	For increased contractive rates; terminated October 19; negotiations; compromise.	) <b>-</b>	52
Thorold	Steve- dores	Oct. 21	For increased wages; ten minated October 22; replacement and return oworkers; in favour omployer.	e- ef	12

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Toronto	Cleaners and dyers	Oct. 18	For continuation of expired union agreement; terminated November 6; conciliation (provincial); in favour of workers.		180
Toronto	Hotel employees	Oct. 22	For increased wages, reduced hours and improved conditions; terminated October 30; negotiations; compromise.		160
Fort Frances	Loggers	Nov. 2	Against discharge of camp steward; terminated No- vember 6; camp closed; in favour of employer.		300
Peninsula	Loggers	Nov. 8	Against charging board on Sundays; terminated November 10; concili- ation (provincial); in favour of workers.		300
Toronto	Winery employees	Nov. 3	For increased wages, shorter hours and recognition of union; terminated November 6; conciliation (provincial); in favour of workers.		44
Brampton	Shoe factory workers	Nov. 24	Alleged discrimination against union workers; terminated December 11; conciliation (provincial); compromise.		745
Cornwall	Cotton factory workers	Nov. 23	Re seniority; terminated November 27; concili- ation (provincial); in favour of employer.	22	110
Walkerton	Spool and bobbin workers	Nov. 19	For increased wages and union recognition; terminated November 27; conciliation (provincial) compromise.	90	700
Windsor	Plumbers	Nov. 15	For increased wages; terminated December 4; negotiations (provincial); compromise.	54	716
Port Arthur	Truck drivers	Nov. 10	For hourly rates of wages and reduced speed of trucks; terminated No- vember 11; negotiations; in favour of workers.	35	50

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Fort William	Deckhands and firemen	Nov. 5	For increased wages; terminated November 8; negotiations; in favour of workers.		13
Port Colborne	Shoe factory workers	Dec. 6	For increased wage rates for trimmers; terminated December 11; conciliation (provincial); in favour of workers.		2,850
Kirkland Lake	Retail store employees	Dec. 21	For union recognition and continuity of employment; terminated December 24; negotiations; compromise.		35
Toronto	Cleaners and dyers	Dec. 9	Against dismissal of union employee and for continuation of union agreement; employment conditions no longer affected by March 31; replacement; in favour of employer.	8	592
Toronto	Hotel employees	Dec. 6	Alleged lockout; re recognition of union; employment conditions no longer affected by December 31; in favour of employer.	11	242
McKirdy	Pulpwood cutters	Jan. 8	For improved living conditions; terminated January 22; conciliation (provincial); compromise.	420	4,000
McKirdy	Pulpwood cutters	<b>J</b> an. 18	For discharge of foreman; terminated January 19; negotiations; in favour of workers.	100	200
Perth	Shoe factory workers	Jan. 6	For increased wages and union recognition; term- inated February 5; re- placement and return of workers; in favour of employer	70	1,800
Toronto	Shoe factory workers	Jan. 12	For employment of union members only; terminated January 19; conciliation (provincial); in favour of workers.	35	245

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Toronto	Dress factory workers (cutters)	Jan. 21	For union agreement with increased wages; employment conditions no longer affected by March 31; replacement; in favour of employer.		708
Toronto	Dress factory workers (cutters)	Jan. 26	For recognition of union and increased wages; employment conditions no longer affected by March 31; replacement; in favour of employer.		436
Toronto	Dress factory workers	Jan. 27	For union agreement with increased wages; terminated January 27; negotiations; in favour of workers.	500	500
Toronto	Coal handlers, drivers, etc.	Jan. 19	For increased wages; terminated January 19; conciliation (provincial); in favour of workers.	200	150
Toronto	Cleaners and dyers	Jan. 3	Alleged lockout of union employees; employment conditions no longer af- fected by March 31; re- placement; in favour of employer.	22	1,378
Kitchener	Bakery drivers	Feb. 3	For closed shop union agreement with increased wages; terminated February 12; conciliation (municipal); in favour of workers.	11	100
Toronto	Shoe factory workers	Feb. 3	Alleged violation of agreement; terminated February 7; plant closed and moved; indefinite.	12	50
Cornwall	Cotton factory workers	Feb. 11	Against alleged "speed- up", discrimination and wage reductions; term- inated February 15; con- ciliation (provincial); compromise.	22	75
Woodstock	Textile factory workers	Feb. 28	Alleged lockout re increased wages and reduced hours; terminated March 26; return of workers; in favour of employer.	155	2,155

Locality	Oecu- pation	Com- menced	Particulars	Number of employees involved	
Toronto	Coal drivers and handlers	Feb. 18	For increased wages; terminated February 19; conciliation (provincial); indefinite.	1,200	1,800
Toronto	Fur factory workers	Mar. 4	Against employment of workers of another un- ion; unterminated at the end of the fiscal year.	23	550
Toronto	Fur factory workers	Mar. 17	Against sending work to shop employing members of another union; unter- minated at end of fiscal year.		300
Toronto	Cap factory workers	Mar. 2	Against lay-off of union members and for union agreement; unterminated at the end of fiscal year.		100
Cornwall	Cotton factory workers	Mar. 25	For change in working conditions; terminated March 29; conciliation (municipal); compromise.		5,250
Toronto	Commer- cial artists	Mar. 29	For renewal of union agreement; unterminated at end of fiscal year.		69
Totals			127 Disputes	22,749	294,906

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Toronto	Dress factory workers (cutters)	Jan. 21	For union agreement with increased wages; employment conditions no longer affected by March 31; replacement; in favour of employer.		708
Toronto	Dress factory workers (cutters)	Jan. 26	For recognition of union and increased wages; employment conditions no longer affected by March 31; replacement; in favour of employer.		436
Toronto	Dress factory workers	Jan. 27	For union agreement with increased wages; terminated January 27; negotiations; in favour of workers.	500	500
Toronto	Coal handlers, drivers, etc.	Jan. 19	For increased wages; terminated January 19; conciliation (provincial); in favour of workers.	200	150
Toronto	Cleaners and dyers	Jan. 3	Alleged lockout of union employees; employment conditions no longer af- fected by March 31; re- placement; in favour of employer.	22	1,378
Kitchener	Bakery drivers	Feb. 3	For closed shop union agreement with increased wages; terminated February 12; conciliation (municipal); in favour of workers.	11	100
Toronto	Shoe factory workers	Feb. 3	Alleged violation of agreement; terminated February 7; plant closed and moved; indefinite.	12	50
Cornwall	Cotton factory workers	Feb. 11	Against alleged "speed- up", discrimination and wage reductions; term- inated February 15; con- ciliation (provincial); compromise.	22	75
Woodstock	Textile factory workers	Feb. 28	Alleged lockout re increased wages and reduced hours; terminated March 26; return of workers; in favour of employer.	155	2,155

Locality	Occu- pation	Com- menced	Particulars	Number of employees involved	Time loss in working days
Toronto	Coal drivers and handlers	Feb. 18	For increased wages; terminated February 19; conciliation (provincial); indefinite.		1,800
Toronto	Fur factory workers	Mar. 4	Against employment of workers of another union; unterminated at the end of the fiscal year.		550
Toronto	Fur factory workers	Mar. 17	Against sending work to shop employing members of another union; unterminated at end of fiscal year.		300
Toronto	Cap factory workers	Mar. 2	Against lay-off of union members and for union agreement; unterminated at the end of fiscal year.		100
Cornwall	Cotton factory workers	Mar. 25	For change in working conditions; terminated March 29; conciliation (municipal); compronise.		5,250
Toronto	Commer- cial artists	Mar. 29	For renewal of union agreement; unterminated at end of fiscal year.		69
Totals			127 Disputes	22,749	294,906



### REPORT

OF THE

# Minister of Education

#### Province of Ontario

FOR THE YEAR

1938

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#### REPORT

OF THE

# Minister of Education

FOR THE YEAR 1938

To The Honourable Albert Matthews, LL.D., Lieutenant-Governor of the Province of Ontario.

Your Honour,-

I beg leave to present to your Honour the Report of the Department of Education for the year 1938.

The revision of courses of study continued to engage the attention of the Department during the year. To the new courses issued in 1937 for Grades I to VI and Grade IX, were added revised courses for Grades VII, VIII, and X. This completed the programme for the first eight grades of the elementary schools, and carried the revision in secondary schools to the end of Grade X. The counsel of classroom teachers was constantly sought as the work of revision proceeded, and every effort was made to preserve the best elements of past practice while bringing the curriculum in line with the educational thought of to-day.

Teachers, inspectors, and all interested in the new programme were invited to offer suggestions for its further improvement. In May, 1938, a questionnaire was distributed to teachers who were completing their first year's experience with the revised courses for Grades I to VI. The replies proved helpful in determining the modifications to be made before the courses were reprinted for the next school year. From the information received it would appear that the courses as a whole are meeting the needs of Ontario children, and that the schools are responding with enthusiasm to the challenge of the new programme.

Active interest is evident throughout the province in the General Shop Work and Home Economics courses which now form a part of the regular curriculum in secondary schools. Approximately one hundred boards have either introduced such instruction or have taken steps to provide it in the near future. While local financial conditions may delay progress in some communities, it is clear that opportunities for this practical training have already greatly increased.

The instructional programme introduced in Grades IX and X has a two-fold purpose—firstly, to provide a good general training; and secondly, to permit pupils to discover their special aptitudes, skills, and abilities. The end of Grade X, accordingly, represents a milestone in the individual's progress, just as the High School Entrance and Junior Matriculation have long represented academic milestones. To mark the successful completion of Grades IX and X, a new certificate, called the Intermediate Certificate, is being introduced. This certificate will be granted solely on the recommendation of the local school principal, and is

designed to provide a definite measure of achievement for the large number of students who leave secondary school after two years' attendance.

In September, 1939, new courses of study will be issued for Grade XI.

#### The High School Entrance Examination

The requirements for entrance to high school have been changed to conform with the revised programme. Under the new plan, candidates who write final departmental examinations for entrance to high school will be tested in five papers—Mathematics, English Composition and Grammar, English Literature, Spelling, and Writing. Standing in all other subjects will be determined by reports submitted by the school principals.

This arrangement represents further progress in the direction of accepting pupils' term records in place of final examination marks. It should be borne in mind, however, that a relatively small proportion of Grade VIII pupils write any departmental papers, and that approximately two-thirds of the successful candidates are granted standing on the recommendation of their school principals.

#### Teacher Training

The registration at the Normal Schools decreased from 1,087 in 1937-38 to 990 in the 1938-39 session. There is reason to believe that the low point in the enrolment of teachers-in-training has now been reached, and that the operation of the law of supply and demand will correct a situation which, if unadjusted, would result in a scarcity of qualified teachers.

The importance of preparing teachers for service in rural schools has prompted a change in the provisions made for practice teaching. All students of the 1938-39 Normal School class spent two weeks of continuous observation and teaching in rural schools located near their homes. One of these weeks followed the Christmas vacation and the other the Easter holidays. The value of this additional opportunity for practice in rural schools was so marked that the plan will continue in operation during the coming year.

The percentage of French-speaking teachers holding First or Second Class teaching certificates continues to increase. In November, 1938, the percentage of teachers so qualified was 86.24, compared with 79.46 per cent. in 1937, and with 25.11 per cent. in 1929.

A year ago I drew attention in my report to the appointment of a Supervising and Helping Teacher in Carleton County. This experiment was undertaken with a view to freeing a greater portion of the local inspector's time for the larger problems of his district, while, at the same time, providing increased help for inexperienced teachers. The success of the plan led to a similar arrangement being made in the County of Lanark during 1938. In each of these cases the appointment was accompanied by an increase in the size of the inspectoral area.

#### Legislative Grants

The final report of the Committee appointed in May, 1935, to enquire into the cost of education in the Province of Ontario appeared as an appendix to my report for the year 1937. One conclusion reached by the Committee was that the burden of taxation on real estate should be reduced, and that the appropriation made by the Legislature of the Province for educational purposes should be increased substantially. It is gratifying to be able to report that provincial grants to education have continued to increase during the past three years. The

increase in regular elementary school grants in 1936 over 1935 was 8 per cent.; in 1937 over 1936, 12 per cent.; and in 1938 over 1937, 22 per cent. Larger legislative grants not only distribute the burden of taxation between real estate and other forms of property more equally, but they tend to equalize in some degree the cost of education in areas of varying assessment.

#### Larger Units of Administration

The Public Schools Act for some years has permitted the municipal council of a township to pass a by-law placing any portion of the township or any number of school sections under one board of five trustees. The unit so formed becomes a township school area. Fourteen of these areas were in operation at the beginning of 1938, but before the end of the year this number had doubled, and twenty-eight township school areas were functioning in the province. Included in these units were 145 former individual school sections.

The acceleration towards the larger unit of administration for rural schools was due, in part, to a growing recognition of the advantages of such units in equalizing educational costs and opportunities, and, in part, to the announcement that an additional legislative grant of \$100 would be paid to each school section becoming a part of a larger area. This specific encouragement aroused action on the part of a number of trustees, ratepayers, and municipal councils, with the result that by-laws creating fourteen areas were passed and approved during the first six months of the year.

The larger units now in operation vary both in size and situation, but they are alike in that they were created by voluntary action on the part of the local municipalities. It augurs well for the future of the areas that they have been organized in communities where public opinion is favourable to the change. Their progress will be closely watched by all who are interested in education throughout the province.

#### Text-Books

Two new readers entitled Golden Windows and Gateways to Bookland were authorized during the year for use in Grades III and IV. These readers replaced the former Second Book which had been in use for sixteen years. The new books have been welcomed in the classrooms, where their generous content of suitably graded poems and stories should encourage the habit of wide and varied reading.

Arithmetic text-books for each of Grades V and VI were also introduced in the elementary schools in September, 1938. Separate books in arithmetic are now authorized for each of Grades III, IV, V, and VI. Reports indicate that these texts are proving helpful, not only in supplying a wide range of practice material, but in suggesting an effective approach to the subject.

Revised courses in Grades IX and X of secondary schools made it necessary to authorize new text-books in English, Science, Mathematics, and German.

#### Handbook on Health

Over a period of eight years an experiment in the teaching of health has been carried out by the Department of Health in conjunction with the Department of Education. The initial phase of the experiment took the form of a demonstration in the teaching of health in a selected group of the elementary schools, both rural and urban. Following the demonstration, a Joint Committee was appointed from the staffs of both departments to make recommendations for the adoption of a scientific programme of health education.

Two outstanding activities of the Committee have been the organization of a summer course in the teaching of health, and the preparation of a handbook for the guidance of teachers. The handbook was issued in June, 1938, under the title: Health. A Handbook of Suggestions for Teachers in Public and Separate Schools. A copy was supplied through the local inspectors to each classroom in the elementary schools, where its influence on the teaching of Health has been definitely beneficial. The personnel of the Joint Committee was as follows:

Department of Health: John T. Phair, M.B., D.P.H., Chief Medical Officer of Health; Mary Power, B.A., Director of Health Education; Laura W. Vrooman, Reg.N., Division of Child Hygiene.

Department of Education: V. K. Greer, M.A., Chief Inspector of Public and Separate Schools; Duncan Walker, B.A., Director of Professional Training; R. H. Roberts, M.A., Inspector of Public Schools; G. R. Smith, B.A., B.Paed., Normal School, Ottawa. In 1936, on the retirement of Mr. Walker from the position of Director of Professional Training, his successor, Dr. W. J. Karr, became a member of the Joint Committee.

#### In Memoriam

My report for the year 1938 would be incomplete without reference to the loss sustained by the Department of Education in the death of two of its most valued officials—Dr. W. J. Karr, Director of Professional Training, and Mr. H. W. Kerfoot, General Editor of Text-books.

An outline of Dr. Karr's distinguished career and a tribute to his exceptional personal qualities appear in the report of his successor in the pages that follow. In each of the important posts which he held, Dr. Karr's duties were discharged with wisdom and decision. His life was rich in accomplishment, and its influence will live on in the work of those whom he guided.

H. W. Kerfoot, B.A., B.Paed., General Editor of Text-books, died in Toronto on April 30, 1938. Born at Minesing, Mr. Kerfoot received his early education in a rural school in Simcoe County, and in Barrie Collegiate and Model School. He subsequently attended Ottawa Normal School, Queen's University, and the Hamilton School of Pedagogy. His early teaching experience was gained in the schools of his home county, but after securing his B.A. degree, he served as teacher and principal in Prescott High School and Picton Collegiate Institute. In 1922 Mr. Kerfoot was appointed to the staff of Ottawa Normal School where he taught with marked success until his transfer to the office of General Editor of Text-books in the Department of Education. Mr. Kerfoot found joy in teaching, for his work was pervaded by a keen interest and faith in the students under his care. To his editorial desk he brought sound scholarship, wise judgment, and a wealth of human understanding. He will long be remembered by his associates, not only for his service to education, but for his kindly sense of humour and steadfast strength of character.

#### Conclusion

Appended to this report will be found detailed information and statistics regarding the various branches of educational work organized in the province.

Respectfully submitted,

L. J. SIMPSON,

Minister of Education.

Toronto, November 22, 1939.

#### APPENDIX A

# REPORT OF THE CHIEF INSPECTOR OF PUBLIC AND SEPARATE SCHOOLS

# The Provincial Inspectoral Staff, 1938

#### I. IN MEMORIAM:

John M. Field, B.A., Ph.D., who had retired from active service as a Public School Inspector on December 31st, 1936, died at his home in Goderich on October 27th, 1938. In this report for 1936 a review of the life and work of Dr. Field was given. For twenty-five years he had served as Public School Inspector in Huron County and early in this experience became known as one of the leading educationists of the province.

James Gill, B.A., B.Paed., who had retired from service as a Public School Inspector in the City of Hamilton on August 31st, 1938, passed away in the Hamilton General Hospital on March 9th, 1939, at the age of seventy-four, after a brief illness. Mr. Gill was born in Smith's Falls on October 7th, 1864. His early public school education was received in Walkerville and Windsor, and his high school training in Windsor, St. Thomas, London, and St. Catharines. In 1889 he graduated from the University of Toronto with honour standing in Mathematics. During his University course, and afterwards during his high school teaching experience, he was known throughout the province as a brilliant mathematician. In 1902 he obtained the Bachelor of Pedagogy degree. For a number of years, in addition to his work as a Mathematics and Physics Master in the Hamilton Collegiate Institute, he was also a member of the lecture staff of the Ontario Normal College. Many present inspectors, Normal School Masters, high school principals and teachers, and Departmental officials remember him as a most efficient teacher, endowed with a keen interest in his students and an unusually sympathetic understanding of their problems. Mr. Gill became a Public School Inspector in Hamilton in 1911. From that time to his retirement he was recognized as one of the outstanding inspectors and educationists in the province. He was held in the highest regard by his teachers, who not only respected him as an inspector but esteemed him as a friend.

Richard Lees, M.A., who had resigned as Public School Inspector of Peterborough East on August 31st, 1930, died at his home in Peterborough on Wednesday, October 19th, 1938. Mr. Lees had been Principal of the Lindsay Model School, and also Science Master at the Brampton Collegiate Institute for seven years, and at the St. Thomas Collegiate Institute for eleven years. In July, 1905, he was appointed Public School Inspector, and in this office served until his retirement. Mr. Lees was always an educational leader, not only within his inspectorate but in the province. He was ever an active participant on the programmes of the Ontario Educational Association, and his influence through his writings and addresses in the cause of the Consolidated School movement was most effective. His schools made marked progress under his leadership.

Albert Odell, B.A., who retired as a Public School Inspector twenty years ago, died suddenly early in the year 1939. The Department of Education wishes to record the splendid services rendered by him as an inspector in earlier years. Mr. Odell received his scholastic education in Orono Public School and in the

Bowmanville High School and St. Catharines and Cobourg Collegiate Institutes. His teaching experience covered rural schools and City of Toronto Public Schools, High School work in Watford, and, as head of the Department of Mathematics, the two Collegiate Institutes in which he had previously been a student. His varied and lengthy experience in all classes of schools fitted him eminently for his duties as Public School Inspector in Northumberland County. He served this area with tact and efficiency from 1895 until 1919, when he retired prematurely owing to a defect in hearing. His warm sympathy and self-denying interest in everything that concerned the welfare of the children and the community at large earned him a lasting place in their memory.

J. C. Stothers, M.A., B. Paed., Public School Inspector in the City of London, died on September 4th, 1938. Mr. Stothers was born in Huron County on May 9th, 1887. He attended the rural schools of his native county and the high schools of Wingham and Goderich. He graduated from Model School, after which he taught in Huron County for a few years. In 1912 he entered the Faculty of Education at Toronto and, upon graduation in 1913, he accepted an appointment to the staff of the Toronto Public Schools. During the war he saw service with the 15th Battalion, C.E.F. Returning from active service in 1919. he rejoined the staff of Ryerson School. He secured the degree of Master of Arts from Queen's University, and the degree of Bachelor of Pedagogy from the University of Toronto. In January, 1924, he became Public School Inspector for Muskoka District and in September, 1925, he went to London as Inspector of Public Schools for that city. Last year he was named Assistant Superintendent of Schools by the London Board of Education. Mr. Stothers was a progressive educationist and has left a lasting influence upon the schools of London where he did such outstanding work. He was lecturer during the last two summers in the Summer School of Education conducted by the Department of Education at the University of Western Ontario, and by his kindly humour and his readiness to be of assistance to the students at all times he endeared himself to all. On several occasions he contributed articles to "The School" Magazine and, at the time of his death, was engaged in the preparation of a book providing helpful suggestions to teachers of Grade VI. One of the most successful features of his work as an inspector was the use he made of the small group conference of teachers. By means of these meetings he brought about an interchange of opinion and practice among his teachers which was of the greatest value in improving the work in the classrooms.

John Wells Marshall, M.A., attended public and high school in his native county of Welland, the former in S.S. No. 7 Willoughby and the latter in Stamford. He graduated from Queen's University in 1898 with honour standing in Classics. His initial experience as a teacher was in the rural schools of Welland County. After graduating from the Hamilton Normal College with a Specialist certificate in Classics, he taught in the Collegiate at Ridgetown and subsequently in the Collegiates at Windsor. He received his appointment as Inspector of Public Schools for Welland County in 1907. In this latter field of work he devoted his splendid abilities to the cause of education for 31 years. In 1924, owing to the growth of school attendance in Welland County, he was assigned an inspectorate which included the City of Niagara Falls and only a portion of the county. Mr. Marshall was a leader among the inspectors. His opinions always commanded respect and his gentlemanly qualities made him a host of friends. His outstanding services were not confined to education. He associated himself with every worthy cause, serving his community both faithfully and well. John Marshall was a "true friend of man."

#### II. RESIGNATIONS:

Mr. A. L. Campbell, M.A., obtained his elementary education at the Nobleton Public School and later attended the Richmond Hill High School, finishing his secondary school course in Parkdale Collegiate Institute, Toronto. He obtained his professional training in the Newmarket Model School and the Toronto Normal School. He graduated from Queen's University in 1906 with Honours in Mathematics. His teaching experience covered nine years in the rural schools of York County and fifteen years in the high schools at Fergus and Weston, with a brief period in Upper Canada College. In 1909 he became Public School Inspector in York County, a position which he retained until his retirement in September, 1938. Mr. Campbell is recognized by the Department and his colleagues in educational work as a capable teacher, a trusted adviser, and a wise administrator. He earned the grateful appreciation of boards, teachers, and communities whom he served.

Mr. J. M. Denyes, B.A., was born in Ernesttown Township in the County of Lennox. His early education was received in a rural school and in the Napanee High School. He subsequently attended Queen's University, obtaining his B.A. degree in 1895, and his High School Assistant's certificate in 1896. Ten years later he was granted a Specialist certificate in Modern Languages and, simultaneously, a Public School Inspector's certificate. Mr. Denyes' experience as a teacher began in 1892. He taught in the Vennachar and Switzerville Public Schools, the Finch Continuation School, the Newburgh High School as assistant and also as principal, the Whitby Collegiate Institute, and the Oakville High School as principal. He resigned his position as principal in this High School in 1913 to become Public School Inspector for the County of Halton. Mr. Denyes has a pleasing personality, an alert mind, a fund of good humour, a great deal of common sense, and a most conscientious attitude towards duty. All through his experience as a teacher and inspector he was admired and respected by his pupils and teachers. They regarded him as a good friend and a wise counsellor. He is being paid a true and well-merited compliment when it is said of him that few inspectors hold the respect and confidence of their fellow inspectors to the same degree as does Mr. Denyes. He took a very prominent part in securing for the inspectors the benefits of The Public Service Superannuation Act. The Department regrets that physical disability has forced him to resign from active educational work several years before the usual age of retirement.

Mr. John Hartley was born in the Township of Turnberry, Huron County. He attended a rural school, Walkerton High School, Harriston High School, and Owen Sound Collegiate Institute. His professional training was obtained in the Walkerton Model School, the Toronto Normal School, and the Ontario Normal College, Hamilton, from which be graduated in 1906 with a First Class Permanent certificate. Mr. Hartley has had forty-six years of successful service in educational work in the Province of Ontario. He taught for twenty years in his native county in rural and urban schools, for the last five years of which he was Principal of the Clinton Model School. In 1912 he was appointed Principal of the Vankleek Hill Model School for French-speaking teachers, and when that school was closed because of the opening of the University of Ottawa Normal School in 1929, he was appointed Assistant to the Chief Inspector of Public and Separate Schools. In January, 1937, he was appointed to the inspectorate of Huron East. Unfortunately, due to ill health, he was forced to retire in April, 1938. Mr. Hartley was an excellent teacher, giving splendid service in every position which he held, to pupils, to parents, and to the community. His work in

the Training School was outstanding. He was very helpful as Assistant to the Chief Inspector, and was most faithful in his work as inspector in Huron East.

Mr. Rosario Masse, B.A., Inspector of Separate Schools for R.C.S.S. Division III, with residence at Cochrane, resigned at August 31st, 1938. Mr. Masse began his duties as inspector on September 1st, 1931, coming to the work from the Winchester High School. He spent three years in R.C.S.S. Division V, with residence at North Bay, and the remaining period in the Cochrane area. In leaving the work of inspection his fellow inspectors and the Departmental officials wish him much success in his new field of activity.

Mr. M. R. Reid, M.A., obtained his early education in the rural schools of Lennox County and his secondary school training in Napanee Collegiate Institute, from which he graduated in 1893. He graduated from Queen's University in 1897 and from the Normal College in Hamilton in 1898, with Specialist standing in Science. He was Assistant Master in the Dunnville High School and in the Napanee Collegiate Institute, and Principal of the Sydenham High School until 1910. Since that time he served as Public School Inspector in Frontenac North and Addington until 1934, and thereafter in the County of Lennox until his retirement in August, 1938. His long association with education in this area, first as student, then as teacher, and finally as inspector, has left a noteworthy influence upon the life of this section of the province. The Department of Education recognizes in him one who has served faithfully and efficiently in the cause of education in all his relations with the Department and, as their representative, with teachers, boards of trustees, and the public.

Mr. J. B. Robinson, B.A., B. Paed., received his early education in a rural school in his native Township of Caistor in Lincoln County. For his secondary school education he attended Smithville High School and the Hamilton Collegiate Institute. Mr. Robinson received his Bachelor of Arts degree from Queen's University in 1902, his Bachelor of Pedagogy degree from the University of Toronto in 1906, and his Specialist standing in English and History from Queen's University in 1911. In the same year he was granted a Public School Inspector's certificate. He first taught in Binbrook and Canboro Townships. Subsequently he was principal of the following schools, -Ancaster Public School; Darling Street School, Brantford; West Avenue School, Hamilton; and the Hamilton Model School. He also taught in the Hamilton Collegiate Institute from January, 1911, to December, 1917, when he was appointed Public School Inspector for Wentworth County. Mr. Robinson possesses those qualities of mind and heart which make outstanding teachers and inspectors. He was just, faithful to duty, inspirational, sympathetic, and loyal to his teachers. He was one of the first inspectors of rural areas to urge his boards to introduce Manual Training and Household Science. He organized teachers' reading and discussion groups which were most helpful to his teachers and highly appreciated by them.

Mr. J. H. Sexton, M.A., is a native of Elgin in Leeds County. He obtained his elementary and secondary school education at the Elgin Public School, the Athens High School, and the Brockville Collegiate Institute. He graduated from Queen's University in 1898 and received his Master of Arts degree in 1902. Mr. Sexton is a specialist in Science. He obtained his experience as a teacher in the Elgin Public School, the Gananoque High School, the Kingston Collegiate Institute, and, as a principal, in the Kemptville High School, the Athens High School, and the Strathroy Collegiate Institute. He was appointed Public School Inspector in February, 1923. Mr. Sexton has had a splendid career as teacher and inspector. In addition to his qualifications as a specialist in Science, he has

a wide knowledge and fine appreciation of literature. He has a keen sense of humour and a fine sense of justice which were used to good advantage in securing for him that splendid co-operation from teachers and boards of trustees which contributed to his success.

#### III. APPOINTMENTS:

The following appointments were made to the provincial staff of inspectors during the year 1938:—

- 1. Hamilton: Mr. Robert A. Riddell, B.A., B.Paed., Principal of Bennetto Public School, Hamilton, duties beginning January 1st, 1938.
- 2. Hamilton: Mr. Vernon N. Ames, B.A., B.Paed., Principal of Adelaide Hoodless Public School, Hamilton, duties beginning January 1st, 1938.
- 3. Sarnia: Mr. T. C. White, B.A., B.Paed., duties beginning September 1st, 1938. Mr. Henry Conn, B.A., is remaining on duty also as a Public School Inspector for Sarnia to the end of the school year, June 30th, 1939.
- 4. Frontenac North: Mr. Thomas J. Thompson, B.A., B.Paed., Principal of Governor Simcoe Public School, London, to succeed Mr. T. R. McEwen, B.A., B.Paed., Sharbot Lake, duties beginning September 1st, 1938.
- 5. Glengarry: Mr. R. O. Staples, B.A., B.Paed., of the Danforth Technical and Vocational School staff, Toronto, to succeed Mr. Z. S. Phimister, B.A., B.Paed., Alexandria, duties beginning September 1st, 1938.
- 6. Hastings North: Mr. J. D. Deyell, B.A., B.Paed., Principal of Swastika Public School, duties beginning September 1st, 1938, with residence at Bancroft. A re-division of inspectoral areas was made in 1938 so as to place an inspector again at Bancroft, as had been the case in earlier years.
- 7. Huron East: Mr. James H. Kinkead, B.A., B.Paed., of the R.H. Mc-Gregor Public School, East York Township, to succeed Mr. John Hartley, Clinton, duties beginning September 1st, 1938.
- 8. Prescott and Russell: Mr. J. Campbell Webster, B.A., B.Paed., Principal of Ryerson Public School, London, to succeed Mr. C. B. Routley, M.A., Russell, duties beginning September 1st, 1938.
- 9. Simcoe South: Mr. Charles A. Lapp, B.A., B.Paed., Principal of Devonshire Public School, Ottawa, to succeed Mr. W. H. Carlton, B.A., B.Paed., Bradford, duties beginning September 1st, 1938.
- 10. Simcoe West: Mr. J. Kirk Evans, B.A., Principal of Petrolia Public School, to succeed Mr. W. F. Smith, B.A., B.Paed., Collingwood, duties beginning September 1st, 1938.
- 11. York (1): Mr. W. H. T. Mooney, B.A., B.Paed., of the Toronto Normal School staff, to succeed Mr. R. H. Roberts, M.A., Toronto, duties beginning September 1st, 1938.
- 12. District Div. VI: Mr. William MacMillan, B.A., B.Paed., Principal of the Lindsay Collegiate Institute, to succeed Mr. L. L. Skuce, B.A., B.Paed., Sudbury, duties beginning September 1st, 1938.

- 13. District Div. X: Mr. Herman H. Langford, B.A., Principal of Victoria Public School, Kingston, to succeed Mr. F. S. Rivers, B.A., B.Paed., Kirkland Lake, duties beginning September 1st, 1938.
- 14. R.C.S.S. Div. III: Mr. Remi Millette, B.A., B.Paed., of the Sturgeon Falls High School staff, to succeed Mr. Rosario Masse, B.A., Cochrane, duties beginning September 1st, 1938.
- 15. Helping Teacher: Mrs. Helen B. Paul, B.A., Principal of the Mallory-town Consolidated Public and Continuation School, was appointed a Supervising and Helping Teacher, duties beginning September 1st, 1938, to work with Mr. R. A. A. McConnell, B.A., Perth, in Lanark County.

#### IV. TRANSFERS:

In all cases the transfers took place at September 1st, 1938.

Inspector	Former Inspectorate	New Inspectorate
1. L. L. Skuce, B.A., B.Paed	District Division VI	.Halton
2. W. H. Carlton, B.A., B.Paed	.Simcoe South	Leeds and Grenville (3)
3. T. R. McEwen, B.A., B.Paed.	Frontenac North	Lennox and Hastings S.
4. Gordon Young, B.A	Leeds and Grenville (3)	Middlesex West
5. W. F. Smith, B.A., B. Paed	Simcoe West	.Peel
6. C. B. Routley, M.A	Prescott and Russell	.Wentworth
7. R. H. Roberts, M.A	York (1)	Peterborough Normal School
8. M. R. Fydell, B.A	.Peel	York (2)
9. W. W. A. Trench, B.A	York (5)	York (4)
10. J. E. Wilkinson, B.A., B. Paed.	York (2)	York (5)
11. A. Gascon, B.A	R.C.S.S. Div. VII	R.C.S.S. Div. XIX
12. L. Laplante, M.A	R.C.S.S. Div. XIX	R.C.S.S. Div. VII

#### V. LEAVE OF ABSENCE:

- Mr. Z. S. Phimister, B.A., B.Paed., Public School Inspector for the County of Glengarry, was granted leave of absence for one year beginning September 1st, 1938, to study abroad and to observe in the schools of Great Britain and the Continent of Europe.
- Mr. F. S. Rivers, B.A., B.Paed., was granted leave of absence from the North Bay Normal School in September, 1937, to serve as Public School Inspector in District Division X, with residence at Kirkland Lake. He filled this position temporarily with marked ability and satisfaction to the local communities and to the Department of Education.

#### VI. TRANSFERS TO THE DEPARTMENT OF EDUCATION:

On May 9th, 1938, immediately after the death of Mr. H. W. Kerfoot, B.A., B.Paed., General Editor of Text Books, Mr. H. E. Elborn, M.A., B.Paed., Public School Inspector for Waterloo No. 1, was asked by the Minister of Education to take charge, temporarily, of the duties as General Editor of Text Books. Mr. Elborn continued to discharge the more urgent duties of his inspectorate to December 31st, 1938, and also the duties as Editor in the Department. On

January 1st, 1939, he was appointed General Editor of Text Books, and Mr. G. H. Dobrindt, B.A., Principal of Empire Public School, Welland, became Public School Inspector for Waterloo No. 1.

On January 1st, 1939, Dr. C. E. Stothers, B.A., Public School Inspector for Prince Edward County, was appointed to the inspectoral staff of the Department of Education. Dr. Stothers will continue to give one-half of his time to the more urgent duties of the inspectorate of Prince Edward County until August 31st, 1939.

On June 1st, 1937, Mr. Robert Gauthier, B.A., Ph.L., Separate School Inspector for R.C.S.S. Division VII, became Director of French Instruction in the Department of Education. Mr. Gauthier had first come into the service of the Department on September 1st, 1926, when he was appointed as an assistant on the staff of the Vankleek Hill Teacher-Training School. On October 1st, 1927, Mr. Gauthier was appointed as a Separate School Inspector, taking up duties in the Cochrane area. Later he was transferred to the Windsor area, where he remained until his appointment as Director of French Instruction. Mr. Gauthier has also given valuable services in Summer School work at Sturgeon Falls, Vankleek Hill, Sandwich, and Windsor.

#### Lighting of Schools

During the year 1938, the Hydro-Electric Power Commission of Ontario began a free service to the schools of Ontario with respect to the lighting of school buildings. Through the department of the Supervising Lighting Engineer any elementary or secondary school board in the province may be supplied with a complete report on the lighting system in use, and recommendations in detail for the improvement of the lighting. Blue print plans are furnished with the report to the board. A large number of rural and urban elementary school boards have already taken advantage of this free service, with the result that both the natural and artificial lighting of the classrooms have been greatly improved. Where new school buildings are being erected the boards are now consulting the Hydro-Electric authorities, and in nearly all cases are following the plans and recommendations offered.

A committee composed of lighting engineers from the staff of the Hydro-Electric Power Commission and officials of the Department of Education has been revising the regulations of the Department of Education with respect to school lighting, and at an early date it is likely that more modern regulations will replace the former ones.

#### Larger Units of Administration

Sections 15 and 16 of The Public Schools Act permit any township municipal council to pass a by-law placing any portion of the township in a Township School Area for purposes of administration of the public schools. The Act provides for a board of five trustees to replace the former school-section boards of three trustees. As is shown by the list below, the number of larger units in the province is still small, but a rapid acceleration in the organization of these units took place in 1938. This was due very largely to the adoption by the Department of Education of a more vigorous policy towards this problem. As a result, the local inspectors are constantly informing the ratepayers in rural areas regarding the advantages of larger units and the steps to be taken towards the organization of these units. In all cases the action is voluntary on the part of the municipal council, and official action is taken only when there is a body of opinion in the area favourable to the change.

There is hope that each year the number of larger areas may be increased in order that the people of all parts of rural Ontario may have ample evidence of the disadvantage of the school section as compared with the advantages of the larger unit. To encourage the organization of larger units, and as a means of assisting the equalization of school rates after organization, the Department now offers an additional grant of \$100.00 per school section where a larger area is formed. This grant is paid to the individual school sections for the first year and afterwards to the Township School Area board of trustees.

The following is the list of larger units of administration in the Province of Ontario:—

Townships	Number of School Sections	County or District	Inspector	Date of Formation
1. Morrison (Township Board) 2. Blake 3. Conmee 4. Neebing 5. York North 6. York 7. Teck and Lebel (Kirkland Lake) 8. Amherst Island 9. Muskoka 10. York East 11. Macaulay 12. Medora and Wood 13. Bosanquet 14. Dysart Municipality 15. Waters 16. Kaladar, Anglesea, and Effingham 17. Griffith and Matawatchan 18. Denbigh, Abinger, and Ashby 19. Brunel 20. Cardiff 21. Glamorgan 22. Faraday 23. Oakley 24. Stanhope 25. Onondaga 26. Ryde 27. Otonabee 28. O'Connor	5 4 3 12 2 5 6 13 2 12 2 7 6 3 6 3 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	Muskoka Thunder Bay Thunder Bay Thunder Bay York York  Temiskaming Lennox Muskoka York Muskoka Lambton Haliburton Sudbury Addington Renfrew Addington Muskoka Haliburton Haliburton Haliburton Haliburton Haliburton Haliburton Hartings Muskoka Haliburton Brant Muskoka Peterborough Thunder Bay	H. R. Scovell L. J. Williams L. J. Williams L. J. Williams W. W. A. Trench A. A. Jordan and W. A. Fydell H. E. Elborn S. A. Truscott G. S. Johnson W. W. A. Trench G. S. Johnson G. S. Johnson H. B. Galpin A. F. Brown O. M. MacKillop T. R. McEwen C. W. Lees T. R. McEwen A. F. Brown A. F. Brown A. F. Brown A. F. Brown G. S. Johnson A. F. Brown C. F. Cannon G. S. Johnson A. F. Brown U. Joyce G. S. Johnson L. W. Copp L. J. Williams	1920 1925 1925 1925 1928 1932 1932 1932 1934 1935 1936 1936 1937 May 3, 1937 June 7, 1937 May 28, 1938 June 4, 1938 June 4, 1938 June 24, 1938 June 24, 1938 June 25, 1938 June 25, 1938 June 27, 1938 June 29, 1938 June 29, 1938 June 29, 1938 June 30, 1938 June 30, 1938 June 30, 1938
Total	145			

#### Correspondence Courses

This branch of the Department of Education continued to render splendid service to the children of the province who, for various reasons, are unable to attend the regular elementary schools. The lessons offered cover the complete courses of study authorized for the public and separate schools of the province up to the end of Grade X. The number of children enrolled for the year 1938 was approximately 2,800, a considerable increase over the number enrolled for the preceding year.

#### The School on Wheels

The Railway School Car is continuing to pursue its helpful way among the isolated communities scattered along the railways of Northern Ontario. The depression has depleted, to some extent, the groups depending for their occu-

pation on the timber industry, but the flexible character of the school car service enables it to accommodate itself readily to any such changes. The splendid co-ordination of railway schedules and school car movements by night and day has allowed more actual teaching time than in the regular schools.

A new car has been added to the service to operate on the Temagami division of the Temiskaming and Northern Ontario Railway. This territory is now fully organized with six car stops serving 45 pupils located along sixty-five miles of railway. Evening schools for adult education are conducted at two points. The advent of the car was hailed with pleasure by parents and children. Many of the latter had previously, even up to 'teen age, no opportunity for education. This makes a total of seven cars which are caring for the school needs of more than one thousand miles of railway.

The efficiency of the school car methods is revealed by the speed with which non-English pupils acquire speaking and reading ability. Self-learning, carefully co-ordinated with proper methods of teaching, imparts the power in a matter of a few weeks. A recent case in point is that of an English-speaking child of five who, after eighteen actual teaching days, has read five story books comprising over three hundred pages, well up to the standard of third to fifth grade.

The Railway School Car Auxiliary, comprising a group of Toronto ladies, has devoted itself to the service of helping needy homes and children in the school car areas. Their timely help brings cheer and necessary aid which has been greatly appreciated where help through organized channels is impossible.

## Interchange of Teachers

In the matter of interchange of teachers, only those of good personality, good scholarship and teaching ability, not over forty-five years of age, and who are known to be willing and able to adjust themselves to new conditions are recommended for exchange. The inspector who is familiar with the work of the teacher, whether in a secondary school or elementary school, is required to declare that the teacher is a worthy representative of the teaching profession in Ontario before consideration will be given to the teacher's application for exchange. It is expected that equal caution is observed by the authorities over those teachers who exchange with teachers in Ontario.

Two very important purposes are served through the interchange of teachers. They have proved to be promoters of goodwill among the Canadian Provinces and other Dominions of the British Empire. They return to their duties with new enthusiasm, broader vision, and additional resourcefulness. They learn, when on exchange, the methods used by others to accomplish the same ideal, good citizenship in the Empire and the world.

A summary of the exchanges arranged for the current school year (1938-39) is given below:—

- 17 Ontario Public School teachers on exchange in England.
- 2 Ontario Public School teachers on exchange in Wales.
- 6 Ontario Public School teachers on exchange in Scotland.
- 2 Ontario Public School teachers on exchange in New Zealand.
- 1 Ontario Separate School teacher on exchange in England.
- 1 Ontario Separate School teacher on exchange in Scotland.
- 29 Ontario Elementary School teachers on exchange overseas.

- 1 Ontario Public School teacher on exchange in Manitoba.
- 1 Ontario Public School teacher on exchange in Saskatchewan.
- 2 Ontario Public School teachers on exchange in Alberta.
- 3 Ontario Public School teachers on exchange in British Columbia.
- 7 Ontario Public School teachers on exchange in other provinces.
- 1 Ontario Secondary School teacher on exchange in England.
- 2 Ontario Secondary School teachers on exchange in Scotland.
- 1 Ontario Secondary School teacher on exchange in British South Africa.
- 4 Ontario Secondary School teachers on exchange overseas.
- 40 Ontario teachers, in all, on exchange for the school year 1938-39.

There were 44 Ontario teachers on exchange during each of the two preceding school years.

#### The Closing of Small Schools

During the year 1938, the determined policy of the Department to close small schools with enrolment below eight, where the children might be admitted conveniently to neighbouring schools, was pursued effectively. In 1936, 26 schools were closed; in 1937 the number closed was 28, while in 1938 some 37 schools were closed. Five schools were reopened in 1938 owing to increased numbers of pupils of school age resident in the school sections. A total of 96 schools remain closed.

The primary reason for closing these schools is that the pupils benefit by attendance in classes where the numbers are larger and by association in their play-life with a greater number of their own age-group. The secondary reason for closing the schools is that the local ratepayers effect a saving of from \$300 to \$600 in school rates for each school closed. The Department of Education is also enabled to distribute the amount saved in grants to more needy schools. It is estimated that there are still approximately one hundred schools of low enrolment which might be closed to the advantage of the pupils and in the economic interests of the local areas concerned.

#### Conclusion

During the year 1938 the chief interest of the elementary schools centred around the two new programmes of study, the one for Grades I to VI introduced on September 1st, 1937, and the other for Grades VII and VIII introduced on September 1st, 1938. Parents, trustees, teachers, and inspectors received the new courses with enthusiasm, and all co-operated splendidly in putting the changes into successful operation. In this respect the Ontario Home and School Associations were particularly helpful, due to their sponsorship of the courses in their meetings and through their activities.

More and more the inspector finds his time occupied with the advancement of new policies in education, and he finds it increasingly difficult to carry out the routine visiting of schools and the administrative duties of his office. It is becoming more evident each year that the inspector must have more clerical service and that one complete official visit per year to each school in his inspectorate, with additional visits only where most required, should prove sufficient. The inspector has not been able always in the past to give the leadership in

educational work which might be expected from his office. On the other hand, the routine work of the inspector has not always produced the results desired. An effort is being made, therefore, to free the inspector from those details which may be carried out by others and to give him, as a result, more time to meet trustees, teachers, and leading citizens so as to create a wider understanding of school problems and new policies and thus hasten changes greatly needed.

The Public and Separate School Inspectors of the province have rendered throughout the year faithful and efficient service. It is realized that while new programmes of study may be issued and new policies approved, the effectiveness of the work of the schools depends almost wholly upon the support and untiring efforts of the inspectors and the co-operation brought about between them and their teaching staffs.

I am indebted also to my colleagues in the Department of Education for their hearty co-operation throughout the year, and for their contributions to this report. To Dr. J. T. Phair, Chief Medical Officer of Health, Department of Health, to Mr. R. S. Duncan, B.S.A., Director of Agricultural Representatives, to Mr. George White, Chief Architect, Department of Public Works, and to the Supervisors of the Department of Municipal Affairs, thanks are also extended for willing co-operation and much help throughout the year.

V. K. Greer,

Chief Inspector.

Toronto, March 31, 1939.

#### APPENDIX B

# REPORT OF THE CHIEF INSPECTOR OF SECONDARY SCHOOLS

I have the honour to submit herewith the reports of the High and Continuation School Inspectors and the Director of Vocational Education, for the school year 1937-38.

G. F. Rogers,

Chief Inspector of Secondary Schools.

Toronto, August S, 1939.

## 1. Report of the Inspectors of High and Continuation Schools

At the close of the school year 1937-1938 there were in the province 70 Collegiate Institutes, 157 High Schools, and 206 Continuation Schools. There were 69 Grade A Continuation Schools, employing the time of three or more teachers, and 129 Grade B Continuation Schools. In 20 of the latter, half the time of one teacher was given to public school work. A new High School was established at Copper Cliff, and new buildings were erected for the High School at Morewood and the Continuation Schools at Lyndhurst and Florence. Additional accommodation was also provided for the Continuation School at Smooth Rock Falls. A Grade B Continuation School was established at Paincourt. In a considerable number of schools, accommodation and equipment were provided for the teaching of General Shop Work and Home Economics. In composite schools, where a technical department already existed, instruction in these courses was made available to all first-year pupils. In some larger centres arrangements were made to have first-year high school pupils receive such instruction in the local vocational school. The number of teachers employed in all the Collegiate Institutes, High Schools, and Continuation Schools of the province was 3,085, an increase of 155 campared with the number employed at the close of the preceding school year. The total number of pupils enrolled was 77,951, an increase of 1928.

#### Changes in the Staff of Inspectors

In July, 1938, Mr. J. P. Hoag, B.A., retired from the staff of secondary school inspectors after a long and useful career in connection with secondary school education in Ontario. Before his appointment as inspector of continuation schools, he served as master in the London Normal School and as public school inspector in Brantford. For many years he made a notable contribution to the establishment and progress of the continuation schools and since 1935 the high schools and collegiate institutes also had the benefit of his ability and experience as inspector.

Mr. G. L. Gray, B.A., formerly Principal of the St. Thomas Collegiate Institute, was appointed an inspector of high and continuation schools and assumed his duties on September 1, 1938. Mr. Gray has had a very successful career as a teacher and principal. He brings to his work as inspector valuable qualifications in experience and scholarship.

#### Inspection

Since the first-year courses of the revised secondary school curriculum went into effect in September, 1937, the Inspectors felt that it would be helpful to make brief preliminary visits to the schools to discuss any problems of organization or procedure that might be met. These visits were made in the first two or three weeks of the fall term and proved to be helpful to the principals and teachers.

During the school year each school received one regular visit of inspection. In addition to conferences with individual teachers, and especially with those who were beginning the work of teaching, the Inspectors endeavoured during their visits to meet the teachers in groups to discuss the progress of the pupils and aims and methods in the teaching of the various subjects. They were also able in many schools to meet the whole staff at the close of the inspection. In most cases the Board or representatives of the Board availed themselves of the opportunity for a conference with the Inspector about matters relating to the work of the school. The Inspectors feel that these conferences with Boards are a very useful feature of the visit of inspection.

In visiting the classes in the various schools, the Inspectors have continued to emphasize the importance of clear and well-formed oral answers by the pupils, neatness and accuracy in their written exercises, good posture, and effective participation by the pupils in every lesson. In general, added attention is being given to these matters by the teachers and improvement has resulted. In the teaching of the new first-year courses it has been necessary for the teachers to revise somewhat their methods and aims. This has been especially so in such subjects as French, English Composition and Grammar, and Art. On the whole, the teachers have displayed a very commendable degree of enterprise and resourcefulness in their presentation of the work in the revised courses. It is encouraging to observe the efforts being made by teachers in their lessons in the various grades of the schools to promote in the pupils those habits of clear thinking and self-reliance which will contribute to their future usefulness as citizens.

In certain schools the opportunity of special training in speech habits is provided. There is a growing interest in dramatics in the schools. In the larger schools especially, there is an increase in the number of extra-curricular activities. An effort is being made by principals to administer these activities in a manner that will contribute to the general progress and development of the pupils. Special mention should be made of the marked growth in the number of classes in which instruction in Vocal Music is provided as a part of the regular programme of studies. This instruction constitutes a valuable addition to the cultural opportunities offered by the schools.

In the conferences with Boards, the Inspectors met with much active interest in the courses in General Shop Work and Home Economics now provided for in the secondary school curriculum. They gave information concerning the nature and organization of these courses, the qualifications of the teachers required, and the grants payable to Boards in order to assist them to provide the necessary accommodation and equipment. In some instances, at the request of the Board, an Inspector attended a meeting of the ratepayers held for the discussion of these courses and gave information relating to their establishment. There appeared to be general recognition of the advantages of including this work in the programme of studies and a desire to do so as soon as warranted by local financial conditions.

It may be noted that in a considerable number of the schools, and more often in those with a large enrolment, the classes were too large to permit the best results from the teaching. In a number of cases it was necessary to lay stress upon the urgency of the problem of additional accommodation and staff.

Upon concluding the regular visits of inspection the Inspectors were able to make brief return visits to most of the schools.

The teachers and principals in the secondary schools of the province are in general to be congratulated upon the earnestness and efficiency with which they are meeting their responsible duties. There is, we believe, a genuine appreciation on the part of both teachers and Boards of the importance of providing for the boys and girls of the province a useful and thorough secondary school education which will assist them to become happy and useful citizens.

R. W. ANGLIN.
A. J. HUSBAND,
W. A. JENNINGS,
A. G. HOOPER,
S. D. RENDALL,
R. H. WALLACE,
G. L. GRAY.

Toronto, June 17, 1939.

# 2. Report of the Director of Vocational Education, 1937-38

As predicted in last year's report, the time-tables of the vocational schools have been slightly modified to meet the requirements of the first year general courses. Social Studies, Business Practice and Writing, and Music or Art are now obligatory subjects of study in Grade IX. As a result, the time allotted to the teaching of the practical subjects in Grade IX Vocational classes has been reduced from 40-50 per cent. to  $23\frac{1}{3}$  per cent., or, if French is not a subject of study, to  $33\frac{1}{3}$  per cent. The character of the instruction in the practical subjects of the vocational curriculum has not changed. The students in vocational schools and departments continue to be taught by teachers of special trade subjects, in contrast to the method followed in a General Shop, under High School Regulations, where one teacher gives instruction in several industrial subjects.

According to the reports for 1937-38, there were sixty-one schools or departments operating under Vocational Regulations. The number of pupils enrolled increased from 34,766 in 1936-37 to 36,282 in 1937-38, and the number of teachers increased from 1,447 to 1,531 in the same period. In forty-six centres evening classes provided instruction for 31,880 adult students and employed a staff of 981 teachers. This is in contrast with the record of the previous year, when only thirty-two centres operated evening classes with a total enrolment of 25,750 students and a staff of 808 teachers.

Comparative statistics for vocational schools and departments are as follows:

	1922-23	1936-37	1937-38
Number of Schools—Day  " "—Evening.  Number of Pupils—Day.  " "—Evening.  Number of Teachers—Day.  " "—Evening.  Government Grants.	9,402 35,511 337 1,097 \$638,217	60 32 34,766 25,750 1,447 808 \$959,611	61 46 36,282 31,880 1,531 981 \$1,248,334
Municipal Expenditure (Net)	\$1,233,397	\$4,334,667	<b>\$</b> 4,551,798

#### Day Schools

A demand for the vocational training of youth is clearly evident, and the experience of the vocational day schools during the past year indicates that this type of school is filling a need of the times. The prevalence of unemployment has brought the question of vocational instruction to the fore. The business and industrial world today requires from beginners some acquaintance at least with crafts and industries, in addition to grounding in the usual academic subjects. The advantage enjoyed by vocational students in obtaining employment has brought home to teachers, social workers, and the general public the value of practical training.

The general introduction of Shop Work and Home Economics in the first year of the secondary schools will probably result in more pupils enrolling in the vocational courses in higher grades. Grade IX in all secondary schools has become an exploratory or vocation-finding year.

#### Night Schools -

Evening classes for adults reached their greatest expansion in 1930-31 when 47,000 students were enrolled. The classes declined during the industrial depression until the enrolment in 1933-34 was reduced to 22,000. An upward trend has been apparent since that year. During 1937-38, the enrolment increased to 32,000. The classes provide supplementary instruction for apprentices, journeymen, foremen, salesmen, and others who are engaged in industrial or commercial pursuits during the day. While regular courses are outlined for evening classes, each student is permitted to select the subjects that will best help him to make progress in his chosen trade or profession.

#### General Shop and Home Economics

General Shop and Home Economics are the "Industrial Arts" introduced into secondary schools other than those operating under the Vocational Education Act. Because of the vocational character of these subjects, their organization and inspection have been entrusted to the Vocational Branch. The new regulations regarding Shop Work apply to any Shop in which provision is made for a modified course of practical instruction in Mechanical Drawing, Woodworking, Sheet Metal Work, Electrical Installation, Motor Mechanics, Machine Shop Practice, or any other subject approved by the Minister for pupils in secondary schools. The course for girls aims to develop sound standards of living, and an appreciation of the functions of family and community life. The course includes sections on Personal Appearance and Deportment; Foods, Shelter, and Clothing; Occupations; Community Life; Home Responsibilities, and, in general, Family Relationships.

Widespread interest has been awakened in these new courses. Approximately one hundred boards either have already introduced such practical instruction or have taken steps to provide it in the near future. The regulations governing the organization of these courses will require re-drafting in the light of the past year's experience. If schools are to be properly graded, it is desirable that an additional inspector be appointed at the earliest possible time.

#### New Vocational Buildings

Cornwall. In the autumn of 1938, the new vocational addition to the Cornwall Collegiate Institute was opened. Filling a long-felt want, the addition provides facilities for technical education in a growing industrial centre. Not

only will these new facilities prove valuable to the boys and girls, but they will open up new opportunities for self-improvement to adult citizens who are now employed.

Ottawa. In the City of Ottawa the remarkable project of substituting a new technical school for the old, without materially interfering with the instruction of the pupils, has been carried out so successfully that the task will probably be completed by September, 1939. By a great effort on the part of the principal and the staff, classes have been maintained with considerable efficiency throughout the trying period of building operations.

Toronto. An extension of the Danforth Technical School is under consideration by the Toronto Board. For some time past, this school has been overcrowded. The library, the girls' gymnasium, and cafeterias have been used as classrooms, in addition to three portable rooms. A recommendation has been made that the usual grants be paid in aid of this new extension.

No decision has yet been reached with regard to the Aircraft Annex for the Central Technical School, although the Department of Education has promised to contribute a building grant in the event of this accommodation being provided.

# Inspection

In their annual inspection tours, inspectors attempt to regulate as far as possible the ratio of pupils to teachers, the division of duties among the teachers, and the provision made for teaching the authorized courses.

In many cases, classes are overcrowded because of the limited accommodation available. With the gradual improvement of financial conditions it is hoped that this problem will eventually disappear. It has been suggested to some boards that the Heads of Departments should be authorized to supervise more thoroughly the instruction offered in their particular departments.

Encouragement has also been given to the following features of organization:

- 1. The use of special rooms for designated subjects;
- 2. The development of classroom and laboratory libraries;
- 3. The preparation, and distribution to pupils, of lesson-aid sheets, with the object of improving the character of the instruction.

Some of the teachers continue to maintain a high standard of teaching through the resourceful application of sound methods in preparing and presenting their lessons; others, it has been found, could improve by a study of such methods. At the time of inspection, discussions concerning different phases of the work are held with the teachers, individually, or in groups, in an effort to assist them, and to dissipate the idea that the sole object of inspection is criticism.

#### Conclusion

Principals and staffs generally are to be commended for their effective co-operation. The schools, on the whole, are staffed with qualified and efficient teachers, whose ability is reflected in the gratifying success of the student body not only while at school but also after leaving school.

F. S. Rutherford, Director of Vocational Education.

Toronto, March 15, 1939.

#### APPENDIX C

# REPORT OF THE DIRECTOR OF PROFESSIONAL TRAINING

#### Normal School Registration

		1938-39			1937-38	
Normal School	Men	Women	Total	Men	Women	Total
Hamilton	15	82	97	20	110	130
London	17 11	106	123 74	21 8	119 57	$\begin{array}{c} 140 \\ 65 \end{array}$
Ottawa	$\frac{26}{7}$	94	$\frac{120}{26}$	23 12	105	128 26
Peterborough	40 10	110 54	150 64	34 14	138	172 86
Stratford. Toronto	$\frac{22}{63}$	85 166	107 229	21 43	74	95
Toronto Kindergarten-Primary					182 20	$\frac{225}{20}$
Total	211	779	990	196	891	1,087

Decrease in attendance during the past three years may be ascribed to:

- 1. Low rates of remuneration paid teachers, particularly in rural communities. Indications exist that operations of the law of supply and demand are beginning to bring about readjustments in this situation.
- 2. The raising of entrance requirements from Middle to Upper School standing.
- 3. The introduction of a medical examination in determining the eligibility of candidates. Not only have several candidates been debarred each year, but others have reconsidered their intention of pursuing a vocation which so obviously demands in high degree both health and vigour. Though the two factors, last named, will doubtless continue to operate, it is felt that the superior type of entrant thus obtained will more than make up for the resulting diminution of numbers.
- 4. A surplus of certificated teachers from years during which easier entrance requirements had resulted in a flooding of all Normal Schools, particularly at a time when financial depression was causing many teachers to remain in service beyond the usual period. Though scarcity of teachers is now an actual condition in many parts of the province there still persists from other years the idea that Normal School graduates find difficulty in obtaining employment.

# Provision for Observation and Practice Teaching

During the year certain experiments were carried on more particularly in the Toronto Normal School with respect to observation and practice teaching. Arrangements were made with the Toronto Board of Education whereby critic teachers were selected from schools throughout the city instead of, as formerly, being located in one or two special schools. Arrangements were also made for two

weeks of continuous observation and teaching, one immediately after the Christmas holidays and one immediately after the Easter holidays, in rural schools throughout the several home counties of the Normal School students.

## Changes in Staffs

Thornton Mustard, B.A., B.Paed., was appointed in September to the Principalship of the Toronto Normal School in place of David Whyte, B.A., B.Paed., who retired in July. Mr. Mustard was born and received his early education in Huron County. After graduating from the faculties of arts and education, Toronto University, and teaching in Huron County and Toronto, he was appointed Headmaster of the Normal-Model and later English Master in the Normal Schools Toronto. His appointment as Principal follows a two-year leave of absence during which time he was engaged in the preparation of the new course of study for elementary schools.

J. V. McIntyre, B.A., B.Paed., Mathematical Master of the Peterborough Normal School was transferred to Hamilton to take the place of J. H. Davidson, B.A., B.Paed., retired in June. Following the death of Mr. Halnan, Mr. Davidson was asked to take over the duties of Mathematical Master in the Stratford Normal School for the remainder of the term.

Adrian Macdonald, M.A., of the Peterborough Normal School was transferred to the Toronto Normal School to take the place of W. H. T. Mooney who was appointed public school inspector for York No. 1. R. H. Roberts, M.A., was transferred from the inspectorate of York No. 1 to the Peterborough Normal School.

Miss E. G. Conover was transferred from the Ontario School for the Deaf to take the place of Miss Olga Johnston, assistant teacher of home economics in the Toronto Normal School. Miss Johnston was transferred to the Peterborough Normal School to take over the duties of Miss Elizabeth MacVannel, retired.

Miss Joicey M. Horne was appointed from the Duke of York Public School to take over the duties of Dr. Eleanor Shepherd-Thompson, Toronto Normal School, who has been granted extended leave of absence.

Miss Jean Care was appointed from Forest Hill Public School to the position of assistant kindergarten directress in the Toronto Normal-Model in place of Miss M. A. Campbell who retired in June.

Miss Dorothy Emery, Instructress in Art in the London Normal School, was assigned additional duty in the Stratford Normal School to take the place of Mrs. C. A. Mayberry who retired last June.

Miss Jean Moore of the Aylmer Public School was appointed Music Instructress in the Hamilton Normal School. She assumed the duties formerly in the charge of the late Captain H. Stares.

Dr. Louis Charbonneau has been released from the staff of the University of Ottawa Normal School to assist in the preparation of French text-books.

#### **Obituaries**

Captain Harry A. Stares, Music Instructor in the Hamilton Normal School since the time of its foundation in 1908, died at his home February 15th, 1939. Jovial, patient, kind but firm he gave unstintedly both time and effort in the

promotion of better music in the schools of the province. Apart from the field of education he had a long and distinguished career as director of music in Christ's Church Cathedral, leader of the 91st Highlanders' Band, and brigade bandmaster overseas. His genial personality no less than his mastery of music will long continue an inspiration to many teachers in Ontario.

Lemen Robert Halnan received an elementary and secondary education in Oshawa, the city of his birth. After a model school course and some years' experience as a rural school teacher, he attended Trinity College, graduating with an M.A. degree, and completed his professional training at the Ontario Normal College. He became housemaster at Pickering College, taught in the Georgetown and Brampton High Schools, and in 1922 was appointed Mathematical Master, Stratford Normal School. He continued in this position until his sudden death, November 8th, 1938. Mr. Halnan was an outstanding teacher, conscientious and painstaking in the performance of every duty, exacting of himself but patient and tolerant with others.

Dr. W. J. Karr passed away at his home in Toronto on December 18th 1938. An educationist whose life, both private and professional, exemplified in the highest degree the virtues of the Ryerson conception of education—endeavour, sincerity, scholarship, culture, moral and mental integrity. Born in Lambton County he received his early training in the Forest Public, High, and Model Schools; the Toronto Normal School; the Ontario Normal College; and successfully graduated from Queen's University with the degrees B.A., B.Paed., and D.Paed.

Beginning his teaching career in a Lambton rural school, he became in turn Principal of the Sarnia Model School, English Master in the North Bay Normal School, Assistant Principal of the English-French Model School at Ottawa; Director of Rural School Organization, Director of English Instruction in English-French schools, and in 1938 Director of Professional Training.

Devoted to duty, and loyal in all his associations, he was responsible for an effective organization in each of the several departments over which he had charge. His greatest contribution to education, however, was the life and ideals of a Christian gentleman.

H. E. Amoss,

Director of Professional Training.

Toronto, May 18, 1939.

#### APPENDIX D

# REPORT OF THE DIRECTOR OF FRENCH INSTRUCTION ON THE SCHOOLS ATTENDED BY FRENCH-SPEAKING PUPILS, 1938.

## Appointments and Transfers

Mr. Rémi Millette, B.A., B.Paed., formerly assistant principal of the Sturgeon Falls High School, was appointed to R.C. Separate Division III, with residence in Cochrane. Mr. Millette, who replaced Mr. Rosario Masse, B.A., began his duties on September 1st, 1938.

Mr. Adélard Gascon, B.A., was transferred from R.C. Separate Division VII, Windsor, to R.C. Separate Division XIX and District Division XII, Part II, with residence in Ottawa.

Mr. Lucien Laplante, M.A., was transferred from R.C. Separate Division XIX and District Division XII, Part II, Ottawa, to R.C. Separate Division VII, with residence in Windsor.

## Training of Teachers—Improvement in Qualifications

In 1937-38, there were 196 teachers-in-training at the University of Ottawa Normal School, 170 of whom were enrolled in the Second Class course, and 26 in the First Class course. As a result of the term and final examinations, 17 students were awarded First Class teachers' certificates and 121 obtained Second Class certificates.

The use of rural ungraded schools for some of the practice teaching in connection with the training of future teachers was a happy and successful innovation.

The following table shows the number of French-speaking teachers holding First or Second Class certificates in 1938, and the progress made in this regard since 1929.

Total number of teachers under French-speaking in-	
spectors, November 1938	1,316
Total number of teachers holding I or II class cer-	
tificates, November 1938	1,135
Total per cent. of teachers holding I or II class cer-	
tificates, November 1938	86.24
Total per cent. of teachers holding I or II class cer-	
tificates, November 1937	79.46
Total per cent. of teachers holding I or II class cer-	
tificates, November 1929	25.11

# Age-Grade Distribution of Pupils in Elementary Schools

The following tables present a compilation of the French-speaking School Inspectors' Annual Age-Grade Summary Reports for May 1938:—

AGE-GRADE DISTRIBUTION IN ELEMENTARY SCHOOLS ATTENDED BY FRENCH-SPEAKING PUPILS, MAY 1938 TABLE No. 1

# (A) Separate and Public Schools (i) Rural and Urban

Totals Per cent.	23.66	14.75	10.49	11.71	12.30	10.07	7.95	6.15	1.53	.93	.46	
Totals	11,216	6,992	4,974	5,548	5,828	4,775	3,764	2,913	727	443	217	47,397
19 yrs. and over									2	4	:	9
18 yrs.	:				:		-	7	× ×	19	-	36
17 yrs.	-	2		1	4	6	17	41	40	63	ಸರ	183
16 yrs.		2	4.	13	21	50	142	297	138	142	17	826
15 yrs.	ಸರ	4	26	92	162	281	457	626	211	134	74	2,056
14 yrs.	18	43	65	224	477	759	924	879	202	63	47	3,701
13 yrs.	99	120	194	454	696	1,119	1,123	727	106	15	30	4,923
12 yrs.	112	229	409	852	1,371	1,321	828	290	18	3	15	5,448
11 yrs.	218	477	736	1,282	1,512	919	247	44	2		14	5,451
10 yrs.	202	1,008	1,192	1,587	1,034	288	23	2			7	5,648
9 yrs.	1,101	1,773	1,527	865	252	28	2				9	5,554
8 yrs.	2,404	2,256	738	186	26	1		:			1	5,612
7 yrs.	3,984	1,008	82	∞								5,082
6 yrs.	2,563	70	1		:							2,634
5 yrs.	233	:						:				233
Under 5 yrs.	4		:				:				:	4
Grade	I	П	III	IV	V	VI	VII	VIII	IX	X	Auxiliary Classes	GRAND TOTALS

Nor:--Heavy lines denote ideal age spread for each grade.

(ii) Rural

Totals by Grades	5,601	2,751	1,901	1,937	2,247	1,739	1,361	1,025	203	130		18,895
Totals	3,036 2,565	1,519	1,016	1,030	1,124	820 919	618	438	65	31	9,697	
19 yrs. and over										eo :	es —	4
18 yrs.								12	- 63	3.23	က္ခ	=
17 yrs.	-					1	co c1	5.7	- x	5 17	24	51
16 yrs.		2 :	- :		2021	40	24 12	44	12 24	36	99	226
15 yrs.	1 3		2001	17	37	57 26	89	94 105	19 40	23	308 278	586
14 yrs.	010	19	26	57	109	153 95	185 163	151 198	16 48	7,1	732 605	1,337
13 yrs.	31	45 18	64 28	115 49	225 168	216 205	176 241	96 164	20	2	975 912	1,887
12 yrs.	59 21	87 45	124 68	191 131	295 261	224 302	127 201	40 56	2.23	1	1,149	2,237
11 yrs.	102	153 102	177	257 209	263 338	127 199	32 57	4 12			1,115	2,232
10 yrs.	196 115	289 196	243 218	262 273	154 234	36 76	3 7	1			1,183 1,120	2,303
9 yrs.	370 287	419 340	271 270	105	35	$\frac{2}{12}$					1,202	2,334
8 yrs.	713 563	367	98 133	26 44	3	1	• •				1,205	2,306
7 yrs.	871 869	125 149	17	3.							1,002	2,040
6 yrs.	576 563	12 13	1								589 576	1,165
5 yrs.	104										104	173
Under 5 yrs.	2										1 2	က
Sex	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	
Grade	II	II	III	IV	V	VI	VII	VIII	IX	x	Totals By Sexes	GRAND TOTALS

Norn:--Heavy lines denote ideal age spread for each grade.

(iii) Urban

Totals by Grades	5,615	4,241	3,073	3,611	3,581	3,036	2,403	1,888	524	313	217	28,502
Totals	2,994	2,064	1,645	1,935	1,764	1,533	1,227	853 1,035	206 318	152	125 92	
19 yrs. and over									1	-		2
18 yrs.								e -		= 8	- :	25
17 yrs.		1 :		-	1 3	x	=-	18	15 16	28 13	4	132
16 yrs.			e :	2 6	01	32	86 20	116	46 56	57	= 9	009
15 yrs.	- :	2	14	43	33	141 57	199	204	51 101	35 69	32 25	1,470
14 yrs.	4	10	31	120 30	186 132	299	321 255	235 295	56 82	13 26	25	2,364
13 yrs.	10	37 20	77 25	191 99	340 236	359 339	322 384	182 285	28	9	13	3,036
12 yrs.	18 14	60	138	329 201	413 402	377 418	212 288	86 108	10		11 4	3,211
11 yrs.	49 14	154 68	272 140	429 387	420 491	258 335	89	9 19	2		0.20	3,219
10 yrs.	135 61	330 193	409	511 541	254 392	54 122	7 6				r0 61	3,345
9 yrs.	277 167	527 487	487 499	254 335	53	ಬರ	1				4.2	3,220
8 yrs.	646 482	719 813	204 303	48 68	8						-	3,306
7 yrs.	1,166 1,078	325 409	10 49	4-1								3,042
6 yrs.	662 762	12 33										1,469
5 yrs.	25 35						: :					09
Under 5 yrs.	1											1
Sex	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	
Grade	I	П	шг	IV	V	VI	VII	VIII	IX	X	Auxiliary Classes	GRAND TOTALS

Nor:-Heavy lines denote ideal age spread for each grade.

(B) Separate Schools

(i) RURAL AND URBAN

	Under 5 yrs.	5 yrs.	6 yrs.	7 yrs.	8 yrs.	9 yrs.	10 yrs.	11 yrs.	12 yrs.	13 yrs.	14 yrs.	15 yrs.	16 yrs.	17 yrs.	18 yrs.	19 yrs. and over	Totals	Totals Per cent.
	4	192	2,357	3,737	2,190	973	451	195	101	63	16	721	:		:		10,283	23.41
			47	927	2,128	1,630	935	447	199	106	37	4	2	-			6,463	14.71
			-	81	705	1,427	1,094	673	371	183	62	26	4				4,627	10.53
				8	164	804	1,467	1,173	778	413	212	7.5	=	-			5,103	11.62
					19	236	626	1,409	1,260	893	448	155	17	4			5,420	12.34
		:		:	-	22	263	873	1,251	1,044	206	264	49	0			4,482	10.20
						23	19	231	782	1,051	8.14	426	134	91	-		3,506	7.98
						:	-	38	269	681	813	571	275	39	1		2,694	6.13
					:			2	17	101	199	202	137	39	\omega \cdots	2	712	1.62
									ಣ	15	62	134	141	150	19	ಣ	438	1.00
Auxiliary Classes					-	9	2	14	13	28	44	69	15	ಣ	-		201	.46
GRAND TOTALS	4	192	2,405	4,753	5,208	5,100	5,216	5,055	5,044	4,578	3,443	1,932	785	173	36	10	43,929	
														-	-	-		

Nore:--Heavy lines denote ideal age spread for each grade.

(ii) RURAL

Totals by Grades	4,827	2,409	1,699	1,656	1,962	1,559	1,190	895	197	130		16,524
Totals	2,624 2,203	1,317	914	880 776	984 978	739	542 648	382 513	63	31	8,478	
19 yrs. and over									-	e :	- 3	4
18 yrs.								12	1 2	67 89	200	=
17 yrs.						1 : .	8 67	ಬ್	∞ <del>-</del> -	51	22 25	47
16 yrs.		2	-	8	2-	000	22 10	37	12 24	36	86 120	206
15 yrs.	e :		1001	16	35	49	62 54	88	18 39	23	281 244	525
14 yrs.	000	15	23	51	92 46	129 84	159 137	131 177	16 48	71	634 535	1,169
13. yrs.	28 17	34 16	58 25	99 43	197 146	195 181	159 207	84 147	71	2	861	1,662
12 yrs.	51	70	103	161 116	249 224	213 275	1111	35 44	12	1	994	1,953
11 yrs.	84 49	136 94	157 128	228 170	234 293	114 185	25 50	ကတ			981 977	1,958
10 yrs.	163 92	249 182	216 188	218	145 207	34 60	1 6				1,026	2,003
9 yrs.	307 229	367 298	250 240	90	29 48	$\frac{1}{9}$					1,044	2,012
8 yrs.	609 473	332 320	94	17 36	1 2	1					1,053	2,008
7 yrs.	778 769	105 132	16	3							889 920	1,809
6 yrs.	500	6 5	1								507	1,012
5 yrs.	90										90	142
Under 5 yrs.	1										1.2	3
Sex	Boys Girls	Boys Girls	Boys Girls									
Grade	I	II	III	IV	V	VI	VII	VIII	IX	X	Totals By Sexes	GRAND TOTALS

Nor:--Heavy lines denote ideal age spread for each grade.

(iii) Urhan

Totals by Grades	5,456	4,051	2,928	3,447	3,458	2,923	2,316	1,799	515	308	201		27,405
Totals	2,895	2,076 1,978	1,569	1,858	1,711	1,483	1,186	813 986	203 312	1.17	109	14,050 13,355	
19 yrs. and over									1				-
18 yrs.							-	ee —	٠ ت	_ c	- :	20	25
17 yrs.		- :			- 2	∞ :	10	<u>~ =</u>	रह रह	26	es —	8.54	126
16 yrs.			e :	9 2	10	32	202	107 88	46	56 42	6.6	351 228	579
15 yrs.	-	2 :	5	41	33	137	189	191 207	51 99	35	32	774	1,407
I.1 yrs.	₹ :	10	31	116	184 126	292 201	305 243	223 282	25 E	12 26	22.22	1,253	2,274
13 yrs.	01 8	36	25	178 93	328 222	3.13	312 373	177 273	27 50	9	11	1,503	2,916
12 yrs.	18	3.5	128	313 188	388	364	212	86	10		0.4	1,593	3,091
11 yrs.	48	149	257	412 363	407	252 322	88 88	8 61	2		0.10	1,610	3,097
10 yrs.	135	315	385	494 513	2.46 381	119	7:5	-			10.03	1,637	3,213
9 yrs.	273	503 462	471	2.18 322	51 108	7.57					43	1,556 15,32	3,088
S yrs.	633 475	689 787	195 293	46	7 6						-	1,570	3,200
7 yrs.	1,131 1,059	30-1 386	10	4-								1,449	2,944
6 yrs.	623 734	28.8										631 762	50 1,393
5 yrs.	± 55 €											3.5	20
Under 5 yrs.	7											- :	-
Sex	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	
Grade		11	111	11	V	VI	VII	VIII	1X	X	Auxiliary Classes	Totals By Sexes	GRAND TOTALS

Norn:--Heavy lines denote ideal age spread for each grade.

(C) Public Schools

(i) RURAL AND URBAN

Totals Per cent.	26.90	15.25	10.01	12.83	11.77	8.45	7.44	6.32	.43	.14	.46	
Totals	933	529	347	445	408	293	258	219	15	5	16	3,468
19 yrs. and over							•			1		1
18 yrs.					:	: :					:	
17 yrs.	1	1			:		1	2	1	2	2	10
16 yrs.				2	4	1	∞	22	1	1	2	41
15 yrs.	П			4	7	17	.31	55	4		70	124
14 yrs.	2	9	က	12	29	53	80	99	က	1	က	258
13 yrs.	က	14	11	41	92	75	72	46	5		2	345
12 yrs.	11	30	38	74	111	20	46	21	1		23	404
11 yrs.	23	30	63	109	103	46	16	9			:	396
10 yrs.	99	73	86	120	55	25	4	1		:	:	432
9 yrs.	128	143	100	61	16	9			:		:	454
8 yrs.	214	128	33	22	7					:	:	404
7 yrs.	247	81	-				:		:	:	:	329
6 yrs.	206	23									:	229
5 yrs.	41								:		:	41
Grade	I	П	III	IV	Λ	VI	VII	VIII.	IX.	X	Auxiliary Classes	GRAND TOTALS

Nor:--Heavy lines denote ideal age spread for each grade.

(ii) Rural

Totals by Grades	774	342	202	281	285	180	171	130	9	2,371	
Totals	412 362	202	102	150	140	81 99	76 95	56 74	C1 4	1,221	2,371
19 yrs. and over											
18 yrs.											
17 yrs.	:							2	• •	22	4
16 yrs.				2	ee −1	- :	C3 C3	2		13	20
15 yrs.	1: 1				24	84	9	917	, 1	27 34	61
14 yrs.	2:	42	e :	6	17	24	26 26	20 21		100	168
13 yrs.	8 :	11 2	98	16	28	21 24	17 34	12 17	. 60	114	225
12 yrs.	∞ m	17	21 7	30	46	111 27	16	5 12	1	155	284
11 yrs.	18	17	20	39	29 45	13	1-1-	14		134	274
10 yrs.	2333	40	30	44	9 27	16	12	:		157	300
9 yrs.	63	52	21 30	15 27	6	3 3				158 164	322
8 yrs.	104	35 37	10	0.00	1					152 146	298
7 yrs.	93	20	-							113	231
6 yrs.	76	9 %								82 71	153
5 yrs.	14									14	31
Sex	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys	Boys	Boys Girls	Boys	Boys	
Grade	I	II.	III	IV	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	VI	VII	VIII	IX	TOTALS BY SEXES	GRAND TOTALS

Norn:-Heavy lines denote ideal age spread for each grade.

<u> </u>	9	URBAN
=	,	_
	:	=

	Totals by Grades	159	187	145	164	123	113	87	89	6	ಸು	16	1,097
	Totals	66	101	76 69	77	53	50	41 46	40	9	<u>م</u>	16	1,097
	19 yrs. and over										1		1
Ì	18 yrs.					: :			: :		: :		
	17 yrs.							1		1	2	2	9
	16 yrs.							4	9	I	1	2	21
	15 yrs.				2	1	4-1	10	13 16	2		5	63
	14 yrs.				4	2 6	11	16 12	12 13	1	1	eo :	90
	13 yrs.		1	2	13	12 14	16	10	5 12			2	120
	12 yrs.		33 1	10	16	14 14	13	11	4			2 :	120
	11 yrs.	1	5	15	17 24	13 16	13	2	1				122
	10 yrs.		15	24 17	17 28	8	48	1					132
	9 yrs.	400	24 25	16	13	24	2						132
	8 yrs.	13	30 26	9	3.23	120							106
	7 yrs.	35 19	21 23	: :		:		: :					86
	6 yrs.	39	43						: :	: :			92
	5 yrs.	27											10
	Sex	Boys Girls											
	Grade		Π	II.	IV.	ν	VI	VII	VIII	X	Χ	Auxiliary Classes	GRAND TOTALS

NorE:--Heavy lines denote ideal age spread for each grade.

#### TABLE No. 2

# ANALYSIS OF AGE-GRADE DISTRIBUTION IN RELATION TO IDEAL AGE SPREAD IN ELEMENTARY RURAL AND URBAN SCHOOLS ATTENDED BY FRENCH-SPEAKING PUPILS, MAY 1938

# (A) Separate and Public Schools

CDADE	Under Ideal Age Spread		Within Ideal Age Spread		Over Ideal Age Spread	
GRADE	Number	Per cent.	Number	Per cent.	Number	Per cent.
I	4	0.04	6,780 3,334	60.45 47.68	4,432 3,658	39.51 52.32
III	1	.09	2,347	47.18	2,626	52.73
IV	8	.14	2,638	47.55	2,902	52.31
V	26	.46	2,798	48.00	3,004	51.54
VI	29	.61	2,528	52.94	2,218	46.45
VII	25	.66	2,198	58.39	1,541	40.94
VIII	46	1.58	1,896	65.09	971	33.33
IX	20	2.75	519	71.39	188	25.86
X	18	4.06	339	76.52	86	19.41
Totals	177	0.37	25,377	53.79	21,626	45.84

Note:—The 217 pupils enrolled in Auxiliary classes are not included in the above table.

#### (B) Separate Schools

an the	Under Ideal Age Spread		Within Ideal Age Spread		Over Ideal Age Spread	
GRADE	Number	Per cent.	Number	Per cent.	Number	Per cent.
I. II. III. IV. V. VI. VIII. IX. X.	1 8 19 23 21 39 19	0.04 .02 .16 .35 .51 .59 1.45 2.67 4.11	6,286 3,102 2,213 2,435 2,624 2,387 2,064 1,763 507 337	61.13 48.00 47.83 47.72 48.41 53.26 58.88 65.44 71.21 76.94	3,993 3,361 2,413 2,660 2,777 2,072 1,421 892 186 83	38.83 52.00 52.15 52.12 51.24 46.23 40.53 33.11 26.12 18.95
Totals	152	0.35	23,718	54.24	19,858	45.41

Note:—The 201 pupils enrolled in Auxiliary classes are not included in the above table.

#### (C) Public Schools

		nder Within ge Spread Ideal Age Spread			Over Ideal Age Spread	
GRADE	Number	Per cent.	Number	Per cent.	Number	Per cent.
I II III III III III III III III III I	7 6		494 232 134 203 174 141 134 133 12 2	52.95 43.86 38.62 45.62 42.65 48.12 51.94 60.73 80.00 40.00	439 297 213 242 227 146 120 79	47.05 56.14 61.38 54.38 55.63 49.83 46.51 36.07 13.33 60.00
Totals	25	0.73	1,659	48.05	1,768	51.22

Note:—The 16 pupils enrolled in Auxiliary classes are not included in the above table.

#### TABLE No. 3

#### GRADE-ENROLMENT DISTRIBUTION IN ELEMENTARY SCHOOLS ATTENDED BY FRENCH-SPEAKING PUPILS, MAY 1938

#### (A) Separate and Public Schools

	Grades	Rural		Url	ban	Rural and Urban	
	Grades	Number	Per cent.	Number	Per cent.	Number	Per cent.
V-VIII IX-X		6,372 333	64.52 33.72 1.76	16,540 10,908 837 217	58.03 38.27 2.94 .76	28,730 17,280 1,170 217	60.61 36.46 2.47 .46

#### (B) Separate Schools

Grades	Ru	ıral	Urban		Rural and Urban	
Grades	Number	Per cent.	Number	Per cent.	Number	Per cent.
I-IV. V-VIII. IX-X. Auxiliary.	5,606 327	64.09 33.93 1.98	15,885 10,496 823 201	57.97 38.30 3.00 .73	26,476 16,102 1,150 201	60.27 36.65 2.62 .46

#### (C) Public Schools

Grades	Ru	Rural		Urban		Rural and Urban	
Grades	Number	Per cent.	Number	Per cent.	Number	Per cent.	
I–IV. V–VIII IX–X. Auxiliary.	766 6	67.44 32.31 .25	655 412 14 16	59.71 37.56 1.27 1.46	2,254 1,178 20 16	65.00 33.96 .58 .46	

While the foregoing statistical tables show some progress over the situation reported in 1937, it is evident that much remains to be done yet in order to bring about a satisfactory age-grade distribution of pupils and to check the excessive drop in enrolment in the senior grades of the elementary school. It will be observed, for instance, that while 11,216 pupils were enrolled in Grade I classes of all elementary schools attended by French-speaking pupils in 1938, only 2,913 were found enrolled in Grade VIII classes. (Table No. 1, (A), (i)). This great discrepancy between the Grade I and Grade VIII enrolments would appear to be due largely to the fact that more than 50 per cent. of the pupils enrolled in Grades II, III, IV and V are too old for their respective classes, and are likely to drop out before reaching the higher grades of the school. (Table No. 2, (A)).

Of course, it will require some time, probably seven or eight years, before the conditions obtaining at present in the elementary schools are properly adjusted to the desired standards. That teachers and inspectors are sincerely applying themselves to correct the existing situation is unquestionable. The following comparison, for instance, shows clearly the successful effort that has been put forth within the past year.

	Under	Within	Over
	Ideal Age Spread	Ideal Age Spread	Ideal Age Spread
	(per cent.)	(per cent.)	(per cent.)
Grade I	0.03	53.28	46.69
	.04	61.13	38.83
Grade II $\begin{cases} 1937 \\ 1938 \end{cases}$		36.52 48.00	63 .48 52 .00
Grade III $\left\{ \begin{array}{lll} 1937 \\ 1938 \end{array} \right.$	.02	36.13 47.83	63.87 52.15

See 1937 Report, Table No. 2, and Table No. 2, (B) of this Report.

That much progress in only one year augurs well for the future.

#### Secondary School Classes

The following table shows the number of French-speaking pupils enrolled in December 1938 in the special French courses of Collegiate Institutes, High and Continuation Schools under Departmental supervision.

Grade	IX	X	XI	XII	XIII	Total
Number enrolled	327	182	155	143	32	839

There are, besides, 1,170 French-speaking pupils enrolled in Grades IX and X of the elementary schools (Table No. 1 (A), (i)) and approximately 1,000 who are taking these same courses in private schools and colleges. An effort will be made during the coming year to verify the last figure. Thus, in the province, there would be in all about 3,000 French-speaking pupils pursuing their studies in Grades IX to XIII in which advanced courses in French Grammar, French Literature and French Composition are given. If this number of 3,000 is compared with the approximate French-speaking school population from Grades I to XIII, say 50,000, we find that about 6 per cent. of the French-speaking pupils in Ontario remain at school beyond Grade VIII. This picture is not brightened when one analyses the table given above and observes that only 20 per cent. of those entering secondary schools reach either Grade XIII or Grade XIII and that less than 4 per cent. attain Grade XIII.

Obviously, the main cause of this low and rapidly decreasing enrolment from grade to grade in the secondary schools is to be found and eradicated in the elementary school classes. Once the problem is solved in the elementary departments of the school, there should be automatic improvement in the secondary school enrolment and age-grade distribution of pupils. A continued effort should be made by teachers and inspectors to impress French-speaking parents and children with the importance of a good education. In some parts of the province, home and school clubs have been very helpful in that regard.

#### French Books in Secondary School Libraries

Marked progress was made during 1938 in the establishment and development of French libraries in the 16 secondary schools attended by French-speaking pupils. The following table, which was compiled from Principals' reports, shows the number and value of French books purchased during 1937 and 1938.

	Number	Value
French books purchased in 1937. French books purchased in 1938.		\$204.95 413.77
Total number of French books in secondary school libraries, December 31st, 1938.	3,373	1,597.97

Secondary school boards, principals and teachers are to be commended for adding so generously during 1938 to their school libraries. Such investments to provide their classes with appropriate material for supplementary reading are sound and profitable.

# Preparation and Revision of French Text-Books

The work of revising French text-books now in use in schools attended by French-speaking pupils and of preparing additional books was carried on successfully during the year. Dr. Louis Charbonneau, a member of the teaching staff of the University of Ottawa Normal School, was relieved of his ordinary duties and assigned this special task. The revision of the two authorized texts, Recueil de Morceaux Choisis and Lectures Choisies, used for teaching French Literature in Grades IX to XIII was completed. Circular 23-B, containing the details of the courses in French given at the University of Ottawa Normal School was also revised. A vast amount of preliminary work in connection with the preparation of new French readers was undertaken; a new French pre-primer entitled Frou-Frou et Fin-Fin was prepared and will be ready for the opening of schools in September 1939.

#### **Provincial Contest**

A Province-wide competition was organized during the year among the 3,000 Grade VIII French-speaking pupils. After winning preliminary tests in their own schools and inspectorates, twenty-two contestants—one boy and one girl from each of the eleven French-speaking inspectorates—took part in the finals held in Ottawa on May 25th, 1938. The four winners, who were awarded secondary school scholarships, were as follows:

1st boy: Jean-Guy Blais, 12 years old, of Sturgeon Falls; 1st girl: Gilberte Dubois, 12 years old, of Hawkesbury; 2nd boy: Roger Despatie, 12 years old, of Ottawa; 2nd girl: Jeannine Dubé, 12 years old, of Ottawa.

This contest was organized with two main objectives in view: firstly, to draw into closer co-operation the home and the school; secondly, to impress upon French-speaking parents and children the importance of secondary school education. Reports from teachers and inspectors all over the province show that this first attempt was very successful and that it should be repeated annually.

#### Teachers' Study Groups

A very interesting experiment was carried on during the year in the majority of French-speaking inspectorates. Teachers' study groups, known as Cercles pédagogiques, were organized with the special aim of acquainting the teachers thoroughly with the new Programme of Studies and other matters affecting particularly schools attended by French-speaking pupils. Inspectors report

favourably on the results obtained through the establishment of these study groups. In one of the Eastern Ontario inspectorates, for instance, the Inspector states that all the teachers under his jurisdiction are divided into four such groups, each group meeting with the Inspector once a month, on Friday evening, to study their particular school problems. In this case, of course, it means that the Inspector must spend practically every Friday evening with one-quarter of his teaching staff, but, according to this Inspector's report, the improvement noted in the classrooms is well worth the time and energy such conferences require. This spirit of co-operation between teachers and inspectors is to be highly commended.

ROBERT GAUTHIER,

Director of French Instruction.

Toronto, April 29th, 1939.

#### APPENDIX E

# REPORT OF THE PRINCIPAL OF THE ONTARIO TRAINING COLLEGE FOR TECHNICAL TEACHERS

#### Classes and Enrolment, 1937-38

In the school year beginning in September 1937, and ending in June 1938, courses for the following certificates were offered at the Ontario Training College for Technical Teachers:

Ordinary Vocational Certificate, Intermediate Manual Training Certificate, Elementary Manual Training Certificate, Type B, Part I, Elementary Home Economics Certificate, Type C, Part I.

The classes for the Elementary Manual Training and Elementary Home Economics Certificates were held on Saturdays in Hamilton and Ottawa.

The enrolment in these classes was as follows:

Ordinary Vocational Certificate	14
Intermediate Manual Training	22
Elementary Manual Training, Type B, Part I	
at Hamilton	52
at Ottawa	47
Elementary Home Economics, Type C, Part I	
at Hamilton	38
at Ottawa	
ac Ottawa	<b>T1</b>
Total	220

## Summer Session, 1938

The classes offered in the summer session of 1938 were attended by large numbers. The enrolment was as follows:

### 1. Manual Training or Shof Work:

(a)	Hamilton	
	Elementary Manual Training, Type B, Part I	158
	Elementary Manual Training, Type B, Part II	139
	Elementary Manual Training, Type A, Part I	82
	Elementary Manual Training, Type A, Part II	72
	Specialist Manual Training, Part I	28
	Specialist Manual Training, Part II	19
	Specialist Extension	20
(b)	Ottawa	
(~)	T11	0.1

2.	Home Economics:	
	(a) Hamilton	
	Elementary Home Economics, Type C, Part I 16 Elementary Home Economics, Type C, Part II	
	(b) Ottawa	
	Elementary Home Economics, Type C, Part I	85
	(c) Toronto	
	, , , , , , , , , , , , , , , , , , ,	79 37
		<b>—</b> 552
3.	Vocational Guidance	32
4	Vocational:	
1.		25
		32
	Ordinary Permanent	5
	Ordinary Interim (H.S.A.)	1
	Special	6
		35
	Sewing and Dressmaking, Part II	17
	19	 21
	Less duplicates	
		— 95 ——
	Total	1,258

The large enrolment in the courses in home economics and manual training shows an increasing desire on the part of teachers to prepare themselves for teaching such practical work. While this desire is commendable, teachers should bear in mind that two short summer courses cannot give adequate preparation for teaching the more advanced courses in these subjects. If they expect to teach in schools which are making a serious effort to extend the practical work of the new courses beyond Grade IX, they should plan to take further training. The success of the new courses in home economics and shop work depends much upon direction by well-trained teachers, skilful in performance and competent in knowledge.

The requirement of an elementary certificate in manual training for admission to the year course leading to the Intermediate Certificate is working out satisfactorily. In addition to providing some preliminary training, it has provided a means of selecting those with a natural aptitude for slop work.

The course for the Intermediate Certificate in Manual Training has been revised and extended to provide a better correlation between the training provided for the teachers and the subject matter of the new course of study.

The requirement of two summer courses in sewing and dressmaking for a permanent home economics certificate is proving its worth. The new courses in home economics provide for experience in clothing and textiles as well as in foods and nutrition. It is to meet this new emphasis that teachers are asked to obtain

additional training on what is called the domestic arts side. From the comment of teachers it is apparent that the course provided is meeting a real need.

The supply of vocational teachers, except in one or two departments, barely equals the demand. Indeed, in some departments such as drafting, electricity, sheet metal work, and welding, there are not enough teachers to meet the demand. As soon as school boards find themselves able to make much needed additions to the staffs of vocational teachers, there will be a shortage, perhaps acute, of properly qualified teachers. School authorities are already experiencing difficulty in filling certain types of positions with suitable certificated teachers.

F. P. GAVIN,

Principal.

Hamilton, August 1, 1939.

#### APPENDIX F

# REPORT OF THE INSPECTOR OF AGRICULTURAL CLASSES

Agriculture has been and still is the basic industry of Canada, but with the development of modern agricultural industries, many of the processes which were formerly an integral part of home activities have been taken over by big business. The canning industry, the meat packing industry, the dairy industries, and the milling and baking industries all represent activities formerly conducted in the home where the raw materials were prepared for use. Farming is becoming more specialized, machinery is available for operations formerly done by hand, and tractors have in many cases replaced or reduced the number of horses kept on the farm. Because of these changes, a knowledge of the sources of raw materials and their processing must come through the school since these activities no longer form a part of home life. This is true not only in urban centres, but in many rural areas where specialized farming is carried on. The need of agricultural instruction is greater now than formerly if boys and girls are to leave school with a comprehensive knowledge of how the nation's food supply is provided. The programme of instruction must be adjusted to meet the changing conditions. School gardens in which vegetables, farm crops and flowers are grown are needed more than ever. Where possible, practice in rearing and caring for chickens at the school is desirable, and greater stress should be laid upon home project activities related to gardening, care of home grounds, and farm activities.

Excellent provision for instruction in agricultural subjects is made in the new courses of study for elementary and secondary schools. The courses in Natural Science for Grades I to VI include many elementary topics on Agriculture. An optional course in Agriculture, in addition to the course in Science, is provided in Grades VII and VIII and was being taken in September 1938 in 68.8 per cent. of the elementary schools. Optional courses are provided in Agricultural Science for Grades IX and X. These were being taken in September 1938 in 167 secondary schools. It is worthy of note that there has been a total increase in the number of schools taking Agriculture from 1932 to the present, in spite of the fact that special grants to teachers have been reduced by nearly 50 per cent. During the same period, the grants paid to boards have increased, showing that more is being spent for agricultural instruction. In many rural and urban schools this increased expenditure is reflected in the planting of flower beds and shrubs and other improvement in the appearance of the school grounds. In both elementary and secondary schools the standard of instruction is improving as more qualified teachers become available, and as the necessity of laying stress upon the practical applications of different topics is more generally understood.

In April 1938, sets of coloured pictures of breeds of dairy cattle were purchased by the Department of Education, and distributed to all elementary schools, and to the secondary schools in which Agriculture was being taught. These pictures represent the ideal type of each breed approved by the type committee of each Breeders' Association. Inspectors and teachers have been enthusiastic in their praise of these pictures as a valuable means of teaching the

breeds of dairy cattle. In September, pamphlets prepared by the Ontario Department of Agriculture, and dealing with common ragweed, field bindweed, bladder campion, clover dodder, and leafy spurge, were sent to all elementary schools, and to secondary schools in which Agriculture was being taught. During the year, seeds of grasses and legumes were supplied to a number of schools where plots for such planting were established three years ago.

Beginning in September 1938, arrangements were made for a series of articles on Agriculture in "The School" magazine. The titles of the articles and the authors for the series follow: The Programme of Agricultural Instruction in the Schools of Ontario, Norman Davies, B.A., Department of Education; Agriculture and Garden Projects in a Graded School, I. W. McNaughton, Principal, Public School, Ridgetown; Practical Agricultural Projects in a Continuation School, R. O. Rilett, Lobo Continuation School, R. R. No. 2, Ilderton; Supervised Farm Practice in Vocational Agricultural Classes, H. B. Disbrowe, B.S.A., High School, Simcoe; School Ground Improvement, J. J. Neilson, B.S.A., High and Vocational School, Ridgetown; A Poultry Project in High School Agriculture, Andrew Dixon, B.S.A., High School, Hagersville; Agricultural Activities and Projects in the Ungraded School, Gordon Young, B.A., Inspector of Public Schools, Strathroy; Phases of Agricultural Instruction in the Normal School, A. J. Madill, B.A., D.Paed., Normal School, Peterborough; Uses of a Greenhouse in Agricultural Instruction, W. A. Porter, B.A., B.Paed., Scarborough Collegiate Institute, West Hill. P.O.

The subsequent paragraphs of this report deal with the progress of agricultural instruction in the elementary schools, secondary schools, summer schools and the Normal Schools:

#### **Public and Separate Schools**

The number of schools which have met the requirements of the Regulations and qualified for grants for Form III, Form IV, and Form V, since 1903, is given in the abbreviated table following:

Year	Number of	With School	With Home
	Schools	Gardens	Gardens
1903 1913 1914 1920 1928 1932 1934 1937 1938	4 159 264 1,648 3,395 4,906 5,201 5,065 4,928	208 702 1,059 1,344 1,594 1,580 1,743	

The figures for 1938 are based on the number of reports received at the Department for the school year ending June 30th, 1938, and show that agricultural instruction was given in 68.8 per cent. of all the elementary schools, and in 71 per cent. of all rural schools and 56.4 per cent. of all urban schools. The decrease in the number of rural schools is due to adjustments being made because of the introduction of the new courses in Grades IV, V and VI. There is, however, a slight increase in the number of urban schools for 1938.

No. 11

The following table shows the number of certificates held by teachers engaged in the work for the years given:

Year	Elementary	Elementary Part I	Intermediate	Intermediate Part I	Totals
1934	1,552	86	144	10	1,792
1935	1,957	106	163	16	2,242
1936	2,092	208	188	22	2,510
1937	2,351	502	218	42	3,113
1938	2,864	444	259	52	3,619

It will be noted that in 1938 there was an increase of 506 in the number of certificated teachers, and that in the 4,928 schools which reported instruction, there were 3,619 teachers who held certificates in Agriculture:

In addition to the courses for Form III and Form IV, Agriculture of the Lower School course was taken in fifth classes of 623 schools under the Regulations for Public and Separate Schools. The Lower School courses taught by a teacher holding an Intermediate Certificate are taken under the High School Regulations in the following schools: S.S. No. 7 Biddulph, Granton; Elizabeth Ziegler Public School, Waterloo; R.C. S.S. No. 6 Ellice and Logan, Kinkora; \*Hearst Public School; Hespeler Public School; Innerkip Public School; Mayfair Public School, No. 5 Sandwich East; Mono Mills Public School; Port McNicoll Public School; \*St. Andrew's West Separate School; \*St. Patrick's Lyceum Separate School, Ottawa; St. Peter's Separate School, Peterborough; St. Raphael's West Separate School; Victoria Public School, Kitchener; Tecumseh Public School; Toronto Public Schools, \*Brown, General Mercer, \*Kimberley, \*McMurrich, \*Perth Avenue.

#### Secondary Schools

Instruction in Agriculture in secondary schools is provided under three schemes as stated below and may be taken in those schools which meet the requirements of the Department of Education.

- 1. Optional classes in Lower and Middle School as a part of the course for Normal Entrance or Matriculation.
- 2. Department of Agriculture under the High Schools Act.
- 3. Department of Agriculture under the Vocational Education Act.

Under scheme (1) above, Agriculture was taught during the year in the schools listed below. Under (a) are the schools in which Lower School courses only are taken, and under (b) both Lower and Middle School courses.

# Collegiate Institutes

- (a) Clinton, Cornwall, Goderich, Ingersoll, Kitchener, Oshawa, Perth, Seaforth, York Memorial, Vaughan Road. Total 10.
- (b) Barrie, Belleville, Brockville, Cobourg, East York, Fort William, Lindsay, Napanee, Orillia, Picton, Port Arthur, Renfrew, Runnymede, Scarborough, Smith's Falls, Stamford, Strathroy. Total 17.

<sup>\*</sup>Introduced in September 1938.

# High Schools

- (a) Alexandria, Arthur, \*Blenheim, Bracebridge, Chesterville, Cobalt, Durham, Englehart, Essex, Flesherton, Forest, Harrow, \*Havelock, Kapuskasing, Lakefield, Lucan, Madoc, Markham, Mattawa, Maxville, Meaford, Merritton, Morewood, Mount Forest, Niagara, Omemee, Orangeville, Port Credit, Shelburne, \*Sydenham, Tilbury, Trenton, \*Williamstown. Total 33.
- (b) Alliston, Amherstburg, Athens, Beamsville, Bowmanville, Brighton, Burford, Burlington, Caledonia, Cayuga, Dundas, Dunnville, Elmira, Fergus, Fort Frances, Grimsby, Hagersville, Haileybury, Iroquois, Kemptville, Kincardine, Kingsville, Leamington, Listowel, Markdale, Midland, Milton, Mitchell, Nepean, Newburgh, New Liskeard, Norwich, Norwood, Oakville, Petrolia, Port Elgin, Port Perry, Rainy River, Ridgetown, Ridgeway, Saltfleet, Simcoe, Smithville, Stirling, Streetsville, Tweed, Uxbridge, Waterdown, Waterford, Watford, Whitby, Winchester. Total 52.

#### Continuation Schools

- (a) Ailsa Craig, \*Arkona, Beaverton, Bothwell, Burk's Falls, Chatsworth, Coldwater, \*Delta, Eganville, Fordwich, \*Forester's Falls, \*Hensall, Grand Valley, Inglewood, Merlin, \*Milverton, \*Richard's Landing, \*Stevensville, Thamesville, Tiverton, \*Wellesley. Total 21.
- (b) Agincourt, Ayr, Brooklin, Brownsville, Comber, Drayton, Drumbo, Embro, Florence, Ilderton, Little Britain, Lobo, Lynden, Lyndhurst, Melbourne, Merrickville, Mindemoya, Mount Albert, Mount Brydges, Mount Elgin, Mount Pleasant, New Dundee, New Hamburg, Orono, Pelham, Princeton, St. George, Sparta, Sundridge, Tamworth, Teeswater, Thamesford, Wheatley, Woodville. Total 34.

A summary of the above shows that Agriculture is now taken in twenty-seven Collegiate Institutes, eighty-five High Schools, and fifty-five Continuation Schools. During the year the work was introduced in four High Schools, and eight Continuation Schools, and was discontinued in three High Schools. Both Lower and Middle School courses are taken in one hundred and three schools.

The following abbreviated table shows the development in this phase of instruction since its beginning in 1913 and the number of schools now taking the work:

Year	Collegiate Institutes	High Schools	Continuation Schools	Total
1913. 1918. 1923. 1928. 1933. 1935. 1936. 1937.	8 8 14 24 26 26	1 13 23 44 54 67 68 83 85	1 4 4 23 33 40 43 48 55	2 25 -35 81 111 133 137 158 167

Two hundred and eighteen teachers are engaged in giving instruction in Agriculture. Of this number, one hundred and twenty-one hold the Specialist certificate, eighty-four being graduates of the Ontario Agricultural College.

<sup>\*</sup>Introduced Agriculture in September 1938.

The following schools are taking work under the scheme indicated in (2) above: Drayton, Elmira, Listowel, Port Perry, Wheatley, and Whitby. Additional time is given to Agriculture and practical phases of the subject are stressed. At Elmira, Port Perry, and Whitby provision is made for Shop Work for boys and Home Economics for girls.

Under (3) above, the following schools are qualifying for grants under the Vocational Education Act: Beamsville, Kemptville, Renfrew, Ridgetown, Stamford, and Simcoe. In all except Stamford, provision is made for instruction in Shop Work and Home Economics and the new courses in these subjects, with stress on agricultural applications, are being followed. In all centres, stress is laid upon home project activities on agricultural topics, and at Simcoe a definite programme of supervised farm practice is being carried on with pupils of the agricultural department.

#### Summer Courses

The attendance at the Summer Courses in Agriculture at Guelph and Kemptville in 1938 was less than in 1937. The course for the Specialist certificate was given. The organization of classes was the same as in 1937, but fewer students were enrolled in each class division. The character of the work done and the results obtained at both centres were quite satisfactory.

The following table shows the attendance at the Summer Courses for the past five years:

# Attendance at the Ontario Agricultural College, Guelph

Year	Elen	entary	Intermediate			Inspectors	Inspectors Farm Mechanics	
	I	11	1	11	111		Mechanics	
1934 1935 1936 1937 1938	112 188 414 368 209	95 112 223 408 307	38 61 79 88 52	45 46 72 79 101	12	1 2 3 3 3	17 24 23 21	320 409 815 969 719

#### Attendance at the Agricultural School, Kemptville

Year	Part I Elementary	Part II Elementary	Total
1934. 1935. 1936. 1937.	116 220 187	28 40 110 202 185	47 156 330 389 287

#### Normal Schools

Except in the University of Ottawa Normal School, instruction in Agriculture is a part of the regular course and the subject is taken by all students. Students who have taken four years of Agriculture in an approved school during their High School course are granted an Interim Elementary Certificate on successfully completing the Normal School course. Others must attend summer school to secure a certificate in Agriculture.

Facilities for instruction in practical phases of gardening and other topics are provided, the instructors are all qualified in Agriculture, and a good course is given as far as the time allotment on the Normal School programme will allow.

NORMAN DAVIES,
Inspector of Agricultural Classes.

Toronto, August 28, 1939.

# APPENDIX G

# REPORT OF THE INSPECTOR OF AUXILIARY CLASSES

Statistical Information for the School Year, 1937-38

Opportunity Classes.—For backward and psychopathic children and those who cannot successfully pursue the ordinary grade work, but who can be trained and whose mental age is not less than the legal school age.

Centre	Number of teachers	Enrol- ment at inspection	Boys	Girls	May Enrol- ment 1936	Percentage cared for in Opportunity Handicraft, and Special Industrial Classes	Grants
Belleville P.S. Belleville S.S. Brantford P.S. Chatham P.S. Cobden P.S. Fort Frances P.S. Fort William P.S. Galt P.S. Grimsby P.S. Guelph P.S. Hamilton P.S. Hamilton S.S. Hawkesbury S.S.	1 1 2 1 1 1 1 1 1 3 10 5 (See Pr	17 15 34 15 4 13 16 16 20 49 177 105 omotion C1	15 12 18 11 4 11 6 11 16 32 120 51 asses)	2 3 16 4 10 5 4 17 57 54	1,882 439 3,827 2,000 95 976 3,291 1,713 295 2,545 21,067 4,618 1,230	.90 3.41 .89 1.50 4.21 1.33 1.40 .93 6.78 2.79 2.25 3.90 3.90	231, 99 298, 71 419, 86 200, 00 80, 46 200, 00 222, 68 257, 87 188, 13 634, 51 1,825, 47 839, 16
Ingersoll P.S. Kingston S.S. Kirkland Lake P.S. Kitchener P.S. Kitchener S.S. Lindsay P.S. Listowel P.S. London P.S. London S.S. Midland P.S.	1 1 2 2 2 (See Pr 1 7 1 (See Pr	20 18 38 37 omotion Cl 13 7 112 20 omotion Cl	14 18 19 25 asses) 10 7 59 18 asses)	19 12 3 53 2	730 2,830 1,723 4,079 1,686 957 335 9,076 1,511 798	2.74 .64 2.21 1.86 1.07 1.36 2.09 2.34 1.32 2.26	235.51 263.22 469.31 450.00 287.96 54.55 1,742.67 266.86
Niagara Falls P.S. North Bay P.S. Oshawa P.S. Ottawa P.S. Ottawa S.S. Owen Sound P.S. Pembroke P.S. Penetanguishene P.S. Peterborough P.S. Picton P.S.	3 1 1 9 2 2 2 1 1 1 1 1	54 16 22 98 41 30 27 16 17 18	31 16 18 58 18 21 22 13 17 10	23 4 40 23 9 5 3 8	2,574 1,512 3,775 10,021 11,288 2,023 931 900 2,823 435	2.10 5.55 .58 3.03 1.31 1.48 2.90 1.78 .60 4.14	641 43 235 32 229 33 1,139 20 421 15 474 08 356 49 286 37 211 66 178 62
Port Arthur P.S. Preston S.S. Reufrew P.S. Ridgetown P.S. Sarnia P.S. Sault Ste. Marie P.S. No. 15½ Wilmot S.S. St. Catharines P.S. St. Thomas P.S. Smith's Falls P.S. Stratford P.S.	(See Pr 1 1 1 1 1 1 1 3 2 1	omotion C1 19 18 16 18 19 5 50 29 15 16	15 10 11 10 14 3 36 16 7	4 8 5 8 5 2 14 13 8 3	2,412 311 430 273 2,417 3,011 80 3,529 1,885 944 2,212	1.66 6.11 4.19 5.86 2.85 2.12 6.25 2.58 1.54 1.59	154 63 175 00 276 07 247 12 197 65 84 62 713 42 450 76 229 78 211 50

Centre	Number of teachers	Enrol- ment at inspection	Boys	Girls	May Enrol- ment 1936	Percentage cared for in Opportunity Handicraft, and Special Industrial Classes	Grants
Sudbury P.S	1	16	13	3	1,756	.91	\$81.98
Sudbury S.S	1 1	18	14	4	1,528	2.88	255.61
Swansea P.S	1	19	13	6	646	2.93	245.43
Toronto P.S	52	940	616	324	81,263	2.77	9,717.71
Toronto S.S	10	188	120	68	12,220	3.09	1,908.23
Waterloo P.S	1	15	10	5	1,047	1.43	225.00
Welland P.S	1	16	13	3	1,906	.84	152.35
No. 6 Stamford P.S	1	17	8	9	475	3.58	199.14
Windsor P.S	4	60	40	20	12,354	1.36	859.64
Windsor S.S	(See Pr		asses)		7,094	.62	
Woodstock P.S	1	17	10	7	1,396	2.51	235.01
No. 8 Etobicoke P.S	1	13	8	. 5	320	4.06	211.66
No. 16A Etobicoke P.S	1	20	16	4	498	4.02	200.00
York Township P.S	9	141	79	62	11,106	2.14	2,156.79
East York Twp. P.S	5	80	41	39	5,984	1.34	1,195.54
North York Twp. P.S	2	37	24	13	1,436	2.58	501.58
No. 10 Scarboro P.S		12	5	7	882	2.94	208.67
No. 12 Scarboro P.S	1	15	8	7 7	814	1.84	200.00
No. 15 Scarboro P.S	1	16	9		557	2.87	233.49
Totals	175	2,946	1,898	1,048			\$35,074.41

Handicraft and Special Industrial Classes.—For children thirteen years of age and over who are eligible for an Opportunity Class.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Chatham P.S. Fort William P.S. Guelph P.S. Hamilton	1 2 1 18	15 30 22 373	15 14 22 266	16	\$322.78 676.20 425.00 Paid by Tech. Education Br.
Hawkesbury S.S. Kitchener P.S. Kitchener S.S. London P.S. Midland P.S. North Bay P.S. Ottawa P.S. Ottawa P.S. Sarnia P.S. Sarnia P.S. Sault Ste. Marie P.S. St. Catharines P.S. Sudbury S.S. Toronto P.S.	2 2 1 5 1 4 10 5 2 2 2 2 2 1 52	48 39 18 100 18 68 206 107 40 51 45 41 26 1,169	24 22 18 59 18 35 131 59 20 27 27 20 26 624	24 17 	780.52 674.88 349.64 1,849.21 310.60 1,358.24 2,631.33 1,678.44 728.09 662.00 647.25 686.13 409.28 Paid by Tech.
Toronto, Church Street. Windsor P.S. Windsor S.S. Woodstock P.S. York Township P.S. No. 10 Scarboro P.S.	11 4 2 1 4	316 108 44 18 97 14	316 86 44 18 97 14	22	Education Br. 1,719.04 1,327.33 736.10 389.89 1,328.02 392.76
Totals	136	3,013	2,002	1,011	\$20,082.73

# Toronto General Hospital Polio Respirator Cases.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants	
Toronto	1	7	4	3	\$223.75	

# Oral, Lip-Reading, Hard-of-Hearing, and Speech-Correction Classes.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Hamilton Ottawa Toronto York Township	1 12	9			572.82 3,934.11
Totals	15	1,456			\$4,757.79

Sight-Saving Classes.—For children whose sight prevents them from making satisfactory progress or whose eyes would be impaired by using ordinary text-books.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Hamilton	1	15 13 16 72	8 10 4 52	7 3 12 20	\$176.00 225.00 192.57 881.50
Totals	8	116	74	42	\$1,475.07

Open Air Classes.—For delicate, anaemic, or undernourished children. Classes are held in parks, or in classrooms with one side open to the sun and air.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Toronto P.S. Toronto S.S.		352 58	139 22	213 36	\$1,058.45 353.20
Totals	13	410	161	249	\$1,411.65

Institutional Classes.—For inmates of children's homes, shelters, orphanages, etc.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Toronto	1	23	14	9	\$41.38

# Orthopedic and Visiting Teacher Classes.—For disabled children.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Fort William (Visiting teacher) Hamilton (Visiting teacher) Kitchener P.S. (Visiting teacher) Kitchener S.S. (Visiting teacher) Ottawa (Orthopedic) Toronto P.S. (Visiting teacher) Toronto P.S. (Visiting teacher) Toronto P.S. (Orthopedic) York Township (Visiting teacher) East York (Visiting teacher)	$\frac{4}{1}$	36 41 11 7 26 239 29 70 40 15			\$503.77 792.99 500.00 318.94 1,166.82 2,709.85 500.00 3,738.10 1,605.02 506.31
Totals	36	514			\$12,341.80

Hospital and Sanatorium Classes.—For children in hospitals, sanatoria, wards, or homes for the incurable.

Centre	Number of teachers	Number of pupils	Boys	Girls	Grants
Brantford Hamilton Kitchener London Toronto Windsor	1 2 1 2 7 1	18 43 24 42 225 21	8 21 10 22 85 12	10 22 14 20 140 9	\$255.26 503.91 273.10 500.00 1,687.80 265.34
Totals	14	373	158	215	\$3,485.41

# Rural Opportunity Units.

Inspectorate	Number of teachers	Number of pupils	Boys	Girls	Grants
Bruce East, Grey (in part), Huron (in part).  Bruce West	15 6 1 33 33 33 15	31 36 2 86 88 55	20 24 58 68 35	11 12 2 28 20 20	\$54.83 105.32 18.00 45.87 97.22 138.85
part) Grey North and Bruce North. Halton. Hastings North. Huron East. Huron West. Kent (No. 1) Kent (No. 2) and Elgin West. Lambton West (No. 1) Lanark. Leeds and Grenville (No. 3) and	24 1 1 1 1 25 32 24 4	24 57 1 4 2 1 71 76 68 25	15 43 1 3 2 1 51 46 44 20	20 30 24 5	3.65 19.60 142.42 122.70
Lanark (in part)	22 36 2 1 19	68 214 3 2 35	43 149 1 2 21	25 65 2 14	196.50 256.64 4.58 7.55 109.91

Inspectorate	Number of teachers	Number of pupils	Boys	Girls	Grants
Oxford South and Norfolk (in part) Peel (in part) Perth North and Wellington (in part)	1 1 30	$\begin{array}{c} 1\\2\\76\end{array}$	1 48	2 28	\$5.83 4.03 204.93
Prescott and Russell (No. 1) and Carleton Prince Edward Renfrew North Renfrew South Simcoc Centre	13 14 20 1 4	25 54 45 2 6	21 39 32 2 4	4 15 13	33.99 9.05 105.24 13.19 2.10
Simcoe East and Muskoka (in part) Simcoe South, York (in part) and Peel (in part) Waterloo (No. 1)	13 3 5 32	32 8 12 68	7 11 39	10 1 1 1 29	89.87 16.36 10.90 213.00
Wellington South York (No. 6). District Division V. District Division VI. District Division VIII.	$\begin{array}{c} 1 \\ 2 \\ 24 \\ 26 \end{array}$	1 6 87 79	1 2 53 60	4 34 19	5.94 253.89 18.59
District Division IX. District Division XII (Part I). District Division XIII. R. C. District Division X. R. C. District Division XII.	$\begin{bmatrix} 1\\1\\17\\28\\2\\35 \end{bmatrix}$	1 1 53 69 8 8	1 1 28 51 6 56	25 18 2 30	6.77 45.84 167.35 22.54
R. C. District Division XV	579	1,678	1,135	543	\$2,717.34

Rural School Home-Instruction Units.—For crippled children who cannot attend school.

Inspectorate	Number of teachers	Number of pupils	Boys	Girls	Grants
Brant and Norfolk (in part) Bruce West Durham (in part) and City of Oshawa Elgin East and City of St. Thomas Frontenac North and Addington (in part)	2 1 1 5	2 1 9 13	3 7	1 6 6	\$10.80 147.00 361.75
Grey South Halton Lambton West (No. 1) Lanark Leeds and Grenville (No. 2) Middlesex Norfolk (in part) Oxford North and City of Woodstock. Peel (in part)	1 3 2 1 1 2 3 1 5	1 3 4 1 7 4 1 6	1 3 4 3	1 2 1 1 3 1 1	99.30 142.65 16.80 6.00 60.00 186.20
Perth South and City of Stratford Prince Edward Renfrew South Simcoe Centre Simcoe East and Muskoka (in part) Simcoe South, York (in part), Peel (in part)	2 1 1 1 3 2	2 1 1 1 3	1 1 1 1 1 1 1 2		72.00 31.98 19.50
Simcoc West, Grey (in part), Dufferin (in part)	1 2	1 2 1	1	1 2	11.25 100.60

Inspectorate	Number of teachers	Number of pupils	Boys	Girls	Grants
Welland South Wellington North Wentworth York (No. 1)	$\frac{1}{3}$	2 1 1 3	3	1 1 1	\$49.80 14.25 60.00 89.50
York (No. 2).  York (No. 5).  York (No. 6).  R. C. District Division V.  R. C. District Division XVI.	3	5 4 1 2	4 2 1 1	1 2	106.20 189.60
Totals	60	90	48	42	\$1,884.37

# Sight-Saving Units in Rural Areas.

Inspectorate	Number of teachers	Number of pupils	Boys	Girls	Grants
Brant	3 4 3 4	3 4 4 4	2 1 2 2	1 3 2 2	\$10.75 1.75
Durham (in part)  Elgin  Essex (No. 1)  Frontenac and Addington	1 3 5 5	1 3 18 5	1 3 10 5	8	
Grey North and Bruce North Hastings North and Renfrew Huron East Kent (No. 2) and Elgin West	3 2 1 2 3	3 2 1 2 3	2 2 1 1	1	2.33
Lambton West (No. 1). Lambton West (No. 2). Leeds and Grenville (No. 2). Leeds and Grenville (No. 3). Lincoln.	3 4 2 4 2	3 4 2 4 2	2 2 1 1	1 2 1 3 1	3.69
Middlesex East and Elgin. Norfolk. Northumberland and Durham (No. 1) Ontario.	1 1 1 1	2 1 1 1	1 1 1	1	
Oxford North	2 1 1	2 1 1	1	1	
Carleton Prince Edward Simcoe East and Muskoka Simcoe Centre	1 1 5	1 1 5 2	1 1 4 2	1	2.20
Simcoe South	$ \begin{array}{c c} 1 \\ 3 \\ 10 \\ 8 \\ 2 \end{array} $	5 10 11 2	2 7 8 1	1 3 3 1	3.70 7.31 3.27
Wellington South York (No. I) York (No. 3) York (No. 4)	1 1 8 3	1 1 8 3	1 3 3	1 5	2.82
York (No. 5). York (No. 6). District Division I	5 2 2 1	12 3 5 1	7 2 3	5 1 2 1	11.50 7.18 3.55 1.75
District Division V.  District Division VI.  District Division IX.	$\begin{array}{c} 1 \\ 2 \\ 2 \end{array}$	1 2 5	2 2	1 3	2.05

Inspectorate	Number of teachers	Number of pupils	Boys	Girls	Grants
District Division X.  District Division XIII.  District Division XV.  R. C. District Division II.  R. C. District Division III.  R. C. District Division V.  R. C. District Division VI.  R. C. District Division VI.  R. C. District Division XIII.  R. C. District Division XIV.  R. C. District Division XV.  R. C. District Division XV.  R. C. District Division XV.	1 1 2 1 2 1 1 3 3 3 3	1 1 2 1 2 1 4 3 4 5 3 2	1 1 1 1 3 2 1 5 1	1 1 1 1 1 1 3	\$14.41
Totals	142	183	110	, 73	\$80.91

#### Urban Organization

In addition to the classes mentioned above the following new Auxiliary Classes were opened during the latter half of 1938:

Opportunity Classes.—Kirkland Lake, 1; Toronto Separate Schools, 1; S.S. No. 7 Toronto, 1; Wallaceburg, 1.

Handicraft Classes.—Stratford, 1; Ottawa Separate Schools, 1.

Speech and Lip-Reading.—Kitchener, 1.

Visiting Teacher.—Port Arthur, 1; Windsor, 1; York Township, 1.

During the year, Almonte, Cornwall, Hespeler, Port Hope, S.S. No. 7 Toronto, and Wallaceburg Separate Schools were surveyed for purposes of Auxiliary Education. With few exceptions one or several forms of auxiliary education have been established in urban centres of over 3,000 population. In the majority of these centres it is felt that all children requiring special education on account of physical or mental handicaps are being fully looked after. In several centres, however, existing facilities require extension, and, in some cases, provision has yet to be made for the education of children suffering from certain types of handicap.

#### Rural Organization

Complete surveys of the following rural inspectorates were carried out by Miss DeLaporte and myself in conjunction with the Inspectors concerned:

Inspectorate	Inspector	Number of Cases
Bruce West Middlesex East Simcoe Centre (partial survey) Simcoe South Waterloo (No. 1) Wellington South Division V Division VI Division XVI S. S. Division XII	D. G. Smith W. R. McVittie W. H. Carlton H. E. Elborn G. G. McNab D. T. Walkom L. L. Skuce	97 128 32 186 92 74 92 166 143 136

In all, some 1,146 pupils were examined and advisements made concerning their educational welfare. Through the co-operation of the local Inspector and the several school boards, special educational facilities have been provided for the large majority of those who were found to stand in need of assistance.

Up to the present time thirty-one rural inspectorates have been completely and one partially surveyed and organized. There are in operation 90 home instruction units, 183 sight-saving units, 213 speech-correction units, and 1,918 opportunity units. Some 120 sick or crippled children in rural areas who cannot attend school are being looked after by means of correspondence courses. Between 80 per cent. and 90 per cent. of the children who were afflicted through the Polio epidemic of 1937 have now returned to school, their educational progress having suffered but slight interruption during their lengthy periods of convalescence. Though the number of home-instruction units and correspondence courses for crippled children has, as a result, fallen off, it is interesting to note that efforts made in 1937 to provide for Polio cases have been the means of attracting attention to the needs of pupils suffering from other forms of illness. In March, 1938, the Department co-operated with the Toronto Board of Education to provide instruction for seven adults in the General Hospital who were still confined in the Polio Respirators. Three of these have completely recovered but four are still in receipt of special teaching. It is felt by the hospital authorities that the visiting teacher was a decisive factor in maintaining intact the mental integrity of these patients during their long struggles toward recovery.

Reports from local Inspectors concerned go to show that upwards of 50 per cent. of the pupils in opportunity units are re-adjusted to grade work; that the establishment of sight-saving units enables pupils suffering from defective vision to maintain normal grade progress, and that the provision of a home-instruction teacher for sick and crippled children has equally beneficial results.

Through the establishment of speech-correction units the attention of rural teachers has been directed to the importance of this phase of education, with the result that care is being devoted to the building up of proper speech habits among regular grade pupils as well as among those affected by speech defects.

Arrangements have been completed for surveying the following rural inspectorates in 1939.

Inspectorate	Inspector
Dufferin and Peel (in part). Essex (No. 2) and Kent (in part) Grey South. Huron West. Lambton (No. 2). Oxford South and Norfolk (in part) Peterborough East. Peterborough West and Victoria East Renfrew South Welland (in part), Lincoln (in part) Wellington North District Division VII (1). District Division XIV R. C. District Division VI	R. F. Downey C. W. Lees W. A. Marshall

It is expected that by the end of the year 1939 one-half of rural Ontario will have been surveyed, and provision made for children needing special help. In

this connection it is heartening to note that Inspectors whose areas have already been surveyed are keeping up the good work by testing incoming pupils and advising for those requiring consideration.

Summary—Urban and Rural Organization.

I. Physically Handicapped	Number of Children
1. Schools for the Blind and Deaf.	468
2. Urban Organization	2,832
3. Rural Organization	
	<del></del> 3,787
II. Mentally Handicapped	
1. Urban Organization	6,036
2. Rural Organization	1,918
	7,954
	_11,741

#### The New Courses of Study

In making surveys throughout both urban and rural areas in the province, the beneficial effects of the New Courses of Study on the educational welfare of both handicapped and normal children have been noted with interest. There is undoubtedly a new enthusiasm for school which is more particularly apparent among backward adolescents and pupils who were formerly problem cases. Much of this enthusiasm is due to the activity programme recently introduced. Pupils who are not word-minded find that they can compete on equal terms with their fellows when they are given an opportunity to express their ideas in sandtable pictures, mural decorations, and the construction of models. Ability in reading and eagerness for books, especially among adolescent pupils, are other benefits which feature the introduction of the new programme. It is noted, however, that the intelligence tests given this year record an unusual number of fantastic reproductions of the drawing test (year ten) and jumbled responses to the number-repeating tests of years seven and ten. A high correlation was found to exist between such fantastic responses and the over-promotion of pupils on the basis of age rather than achievement. Since such fantastic responses usually indicate a state of chronic or temporary mental confusion, one is forced to the conclusion that in an attempt to avoid the formation of an inferiority complex through forcing pupils to repeat grades, the sympathetically minded teacher who promotes all pupils annually irregardless of their academic fitness may be pursuing a course dangerous to the mental integrity of some of her pupils. The boy who repeats a grade is at least pursuing a course more or less within the measure of his ability, while a pupil who is seriously over-promoted finds himself frustrated and defeated in the great majority of his attempts. This is more particularly true where backwardness has as its basis an inability to read.

#### Publications

The Special Class Teacher, a magazine devoted to the interest of special education, and published by the Auxiliary Class Section of the O. E. A., has doubled its subscription list within the last three years. Its efficient and progressive staff turns out a periodical whose general articles on various phases of special education are nicely balanced by a wealth of practical suggestions from teachers engaged in actual field work.

Life and Literature, Book II, the reader for Grade VIII, was reproduced this year in 24 point type by the publishers, W. J. Gage and Co. The book is published in three volumes, printed on sight-saving paper and bound with wire-o binding which permits the book to be turned back when in use. It is hoped that the Grade VII reader may be enlarged in the same way during 1939.

Through experiments conducted by Miss Helen DeLaporte, Assistant Inspector of Auxiliary Classes, there was established the value of a six-inch semi-cylindrical magnifying glass, known as the "Ezyrede", for pupils who are partially handicapped as to eye-sight. The glass enables such pupils to consult the dictionary, to read arithmetic questions, and to make other brief use of printed matter in relatively small type. With the concurrence of the physician concerned, this magnifier is approved as equipment in sight-saving classes and units.

### Organization

All teachers of Auxiliary Classes are especially trained in a five weeks' summer course. In 1938 a tri-part course was given: I and II for teachers having at least an Interim Second Class certificate and two years' successful teaching experience in the province who wished to qualify as teachers of (1) Opportunity and Handicraft Classes, (2) Speech, Sight-Saving, Home-Instruction and Hospital Classes; (III), a general course for teachers who wished to improve their professional standing. One hundred and one took the first course, 41 the second and 32 the third.

Brief courses were given in each of the eight provincial Normal Schools to acquaint teachers-in-training with methods of dealing with auxiliary-type pupils, especially in rural schools. The many inquiries received by the Department from recently graduated teachers concerning the educational welfare of exceptional children in their charge is evidence of interest aroused by these Normal School talks.

Through the co-operation extended by their respective school boards, a great many special class teachers throughout the Province took advantage of the proximity of the meeting of the Council for Exceptional Children in Buffalo this year. The teachers from Ontario gained a great many practical ideas from their visits in the special classes of that city and renewed their enthusiasm through conferences with many of the leading educators in the neighbouring republic.

H. E. Amoss,
Inspector of Auxiliary Classes.

Toronto, February 28th, 1939.

#### APPENDIX H

# REPORT OF THE DIRECTOR OF SCHOOL ATTENDANCE

The old saying that all men are born free and equal is true only to a certain extent. 'Tis true that, in this country, all are freeborn, but all are not as fortunate in other ways. All are not endowed with the same mental ability; all have not the same advantages of environment and lineage; and all, as they develop, are not given the same care and attention. The state endeavours to do its part by providing the best facilities for the development of the child and by making it compulsory that he should attend until he is sixteen years of age.

During the academic year just closed (1937-38), there was an increase in the number of our elementary schools, the total being 7,286 composed of 6,452 Public and 834 Separate Schools. In the preceding year the corresponding figures were 6,347 and 812. The incoming year will show another increase in spite of the fact that many of the smaller schools were closed and the pupils transported to other schools, much to their advantage.

# Enrolment Table No. 1

	1935-36	1936-37	1937-38	Increase or Decrease over 1936-37
Public Schools Separate Schools High Schools and Collegiate Institutes Continuation Schools	460,785	455,365	454,509	\$56 decr.
	101,152	100,348	102,505	2,157 incr.
	67,899	67,088	68,700	612 incr.
	9,464	8,996	9,251	255 incr.
Vocational and Special Industrial Schools— Day Classes	35,418	36,256	37,748	1,492 incr.
	24,360	25,930	32,083	6,153 incr.
	699,078	693,983	704,796	10,813 incr.

The enrolment for the elementary and secondary schools in Ontario increased 10,813 and the Separate Schools 2,157 during the year, but the enrolment in the Public schools showed a decrease of 856.

### Checking Attendance

At the present time there have been appointed by various bodies 1496 attendance officers, 450 in the urban centres, 887 in the county rural sections, and 159 in the unorganized destricts. It is the duty of these officers to investigate undue absence of pupils and to take such action as they may deem advisable to have the pupils returned to school at the earliest possible opportunity. The School Attendance Act and the Adolescent School Attendance Act give them authority to summon the parents before a magistrate but this is done only when other efforts have proved unsuccessful. The Welfare Department, in cases of privation, and the Children's Aid, in cases of neglect, have been of great assistance in relieving difficulties. Big Brothers and Big Sisters, Service Clubs, Church societies, Women's groups, Neighbourhood Workers, Home Visitors, and other benevolent and charitable organizations have at various times lent a helping hand.

Table No. 2 (Showing percentage attendance since 1934-35)

Class of School	1934-35	1935-36	1936-37	1937-38	Increase in % over 1936-37
City Schools. Town Schools. Village Schools. County Rural Schools. District Rural Schools. All Urban Schools. All Rural Schools. All Elementary Schools.	92.77 91.57 89.29 87.33 91.94 88.97	91.87 91.62 91.39 88.17 86.29 91.64 87.85 90.27	92.49 92.67 91.83 87.65 87.22 92.49 89.34 90.91	92.96 93.08 91.95 88.77 86.85 92.92 89.13 91.51	.47 .41 .12 1.12 .37 decr. .43 .21 decr.

#### School Leaders in Attendance

In 1935-36	Per Cent.	In 1936-37	Per Cent.	In 1937-38	Per Cent.
City of Galt	96.85 96.51 93.41	City of Galt Town of Palmerston. Village of Port Perry. County of Waterloo. District of Algoma	96.22 96.98 93.54	City of Galt Town of Elmira Village of Mildmay . County of Waterloo . District of Kenora	97.41 96.28 93.46

The City of Galt has the distinction of having led the urban centres, and Waterloo the Counties of the Province, in percentage attendance for the past three years—an enviable record.

### Public School Attendance

#### Table No. 3

	1936-37		Days Lost per Pupil	1937-38		Days Lost per Pupil
	Ave. Att.	% Att.	per rupir	Ave. Att.	% Att.	per rupii
Rural Urban		89.16 92.28	19.98 14.92	159,092 245,790	88.96 92.74	20.09 13.82

#### Separate School Attendance

#### Table No. 4

	1936-37		Days Lost per Pupil	1937-38		Days Lost per Pupil
	Ave. Att.	% Att.	per Fupir	Ave. Att.	% Att.	per rupii
RuralUrban		90.72 93.51	17.46 12.21	20,690 73,670	90.43 93.52	18.31 10.90

# Totals-Table No. 5

	1936-37		Days Lost per Pupil	193	Days Lost per Pupil	
	Ave. Att.	% Att.	per rupir	Ave. Att.	% Att.	per rupu
Rural Urban	181,337 317,793	89.34 92.55	19.70 14.32	179,782 319,460	89.13 92.92	19.89 13.16

#### All Elementary Schools

Table No. 6

	193	1936-37 Days Lost		193	Days Lost per Pupil	
	Ave. Att.	% Att.	per rupn	Ave. Att.	% Att.	per rupn
Public Separate		91.05 92.87	16.98 13.42	404,882 94,360	91.22 92.80	16.39 12.60

The percentage attendance for all elementary schools for 1937-1938 was 91.51 and the average loss per pupil was 15.70 days.

#### Losses in the Elementary Schools .

Table No. 7

Days lost through	1937-38	Percentage Loss			
	2001	1934-35	1935-36	1936-37	1937-38
1. Illness	5,449,834 865,606 606,879 332,034 28,205 90,752 510,943 850,340	66.09 8.48 5.48 2.63 .27 .98 3.44 12.63	62.96 7.67 5.10 4.39 .24 .95 6.96 11.73	65.41 9.11 5.92 2.62 .28 1.04 4.56 11.05	62.39 9.91 6.95 3.81 .32 1.04 5.85 9.73
Total days lost		9,728,239	10,248,309	9,083,567	8,734,593
The above losses are classified—  Lawful		7,457,039 2,271,200 90.83	7,790,825 2,457,484 90.27	6,845,284 2,238,283 90.91	6,329,014 2,405,579 91.51

From the above figures it will be seen that there has been a steady decline in losses due to illness. Curiosity has led us to investigate this loss to a greater degree and while there are no statistics available showing just what these various illnesses were, yet statistics from other sources where conditions are, on the whole, quite similar, show that about 50 per cent. are due to respiratory diseases, colds, sore throat, and similar ailments; about 20 per cent. due to more prolonged diseases such as measles, mumps, whooping cough, scarlet fever, and chicken pox; 5 per cent. due to digestive disorders; 5 per cent. to headaches; and 5 per cent. due to toothaches and affections of the eyes and ears. The remainder of the absences is due to accidents and miscellaneous ailments, many of them related to or growing out of the above disorders.

With better ventilation in schools, with better care of the clothing of children, and by adequate isolation of pupils with respiratory disorders, these ailments could be considerably reduced. By vaccination and by examination on the part of the teacher and exclusion of suspects, the "common" communicable diseases (other than respiratory) would become less common. With good hygiene for which the school is now more responsible, there is hardly an excuse for digestive disorders and real headaches, while with adequate medical and dental supervision, toothache and eye troubles should almost disappear. With such prevention, illness from miscellaneous causes should diminish. On the whole, the amount

of sickness would be reduced, retardation losses lowered, physical standards raised, and a better foundation laid to resist the ills and diseases of the adult.

Losses due to Home Help and Parental Neglect are apparently growing, but on the other hand, the increase in these losses may be due to a more careful classification, thus partly explaining the decrease in "Other Reasons". Weather conditions are shown in the increase in the Physical Obstacles losses and partly in the Irregular Closing losses. Some Boards have not yet realized that they have no power to close a school and that every day a school is irregularly closed means a reduction in the grant. Schools are sometimes closed for funerals because that has been the custom in those particular sections, although the deceased may never have taken an active interest in the community at all. Schools are sometimes not opened on time because of the tardiness of the Board in making necessary repairs or engaging a teacher. They are sometimes closed a day early or opened a day late to give the teacher a little longer holiday. All such losses could and should be avoided.

### Secondary Schools

The number of Secondary Schools remains the same: Collegiates, 70; High Schools, 156; Continuation Schools, 206; Vocational Schools, 59; and Special Industrial, 5. Total, 496.

Schools	Enro	Per Cent. Attend.		
	1936-37	1937-38	1936-37	1937-38
High Schools and Collegiates	36,256	68,700 9,251 37,748 32,083 ————————————————————————————————————	94.28 91.94 *92.79	95.72 93.42 *93.34

Table No. 8

Table No. 8 shows an increase in Secondary School enrolment of 9,512. The percentage attendance has reached the high mark of 94.79.

While the vast majority of the children in Ontario are in regular attendance, yet there are some who are not so fortunate—some who live a long distance from school, as is the case with some pioneer families in the ever-extending northland; some who are handicapped through the physical infirmities of blindness and deaf-mutism, as well as natural constitutional weaknesses and the ravages due to poliomyelitis; some who through prolonged illnesses are confined to hospitals and sanatoria; some who are less mentally endowed. Such special cases are, however, being cared for in various ways. The world of to-morrow will be built by the children of to-day, and every child should be equipped in the best possible manner that he may play his part to the best of his ability in the not far distant future.

R. D. KEEFE,
Director of School Attendance.

Toronto, July 10th, 1939.

<sup>\*</sup>Day Schools only.

#### APPENDIX I

# REPORT OF THE SUPERINTENDENT OF THE ONTARIO SCHOOL FOR THE DEAF

I have the honour to submit the Annual Report of the Ontario School for the Deaf for the year ending March 31st, 1939.

#### Attendance

Enrolment by months:—		•	
	Boys	Girls	Total
April, 1938	142	140	282
May	142	140	282
June	142	140	282
September	145	141	286
October	146	146	292
November	149	147	296
December	149	147	296
January, 1939	154	151	305
February	152	151	303
March	152	152	304

Average attendance for the year—293.

# Enrolment by counties and districts:—

Algoma       10 pupils       Muskoka       3 pupils         Brant       6 "Nipissing       5 "         Bruce       4 "Norfolk       2 "         Carleton       15 "Northumberland       2 "         Cochrane       4 "Ontario       4 "         Dufferin       1 pupil       Oxford       7 "
Bruce
Bruce
Carleton
Cochrane
Dundas 3 pupils Parry Sound 6 "
Durham 2 " Peel 1 pupil
Essex
Frontenac
Glengarry 1 pupil Rainy River 4 pupils
Grenville
Grey
Haldimand 3 "Simcoe 6 pupils
Halton
Hastings 10 " Sudbury 13 pupils
Huron 3 "Thunder Bay 9 "
Kenora 3 "Timiskaming 18 "
Kent. 7 " Victoria. 1 pupil
Lanark
Leeds 6 Wellington 5
Lincoln 2 wentworth
Middlesex

Enrolment by cities:— (These pupils are also included in the enrolment by counties and districts).

Brantford	unile	Peterborough	2 nunile
Fort William 4	• •	St. Catharines	ı pupıı
Hamilton11	"	Port Arthur	3 pupils
Kingston 4	"	Sault Ste. Marie	6 "
Kitchener 7	6.6	Toronto39	9 "
London9	"	Windsor13	3 ''
Ottown 10	6.6		

Twenty-six pupils left school during the year, and forty-six new pupils were admitted.

The ages of pupils leaving school were:-

21 years	0 pupils	15 years	. 2 pupils
20 "	2 "	14 "	. 2 "
19 ''	5 "	13 "	3 "
18 "		12 "	
17 "	4 "	10 "	4 7 77
16 ''		6 "	1 "

Eight of the ten pupils under sixteen years of age, who left school during the year, are not attending any school, but may return to this school again next year.

Ages of new pupils on date of admission:-

4	years	1 pupil	12 years	0 pupils
5	"	6 pupils	13 "	2 ' "
6		: 4 * "	14 ''	3 "
7		9 "	15 "	3 "
8		5 "	16 "	0 //
9		0 "	17 ''	1 pupil
10		1 pupil	18 "	
11		7 pupils	19 "	2

Only seven of the new pupils over eight years of age had not attended any school before being admitted to the Ontario School for the Deaf. Two of these, who were nineteen years of age on admission, had no knowledge whatever of spoken or written English.

All applicants for admission were tested by means of the Ontario School Ability Examination. As a result of these tests eleven children were refused admission and the date of entrance of thirteen others was postponed for at least one year.

#### **Excerpts from Inspector's Report**

The following excerpts are taken from the report of Dr. H. E. Amoss, Inspector of Auxiliary Classes, after his annual inspection of the school:—

The boys', girls', and the junior residences are being well looked after. The sitting rooms in both the senior boys' and senior girls' residences are being improved through the addition of a number of comfortable chairs made in the furniture shop. These chairs are a credit to the vocational plant and will do much to make the barren quarters more attractive and home-like.

As noted in the 1938 report, consideration must be given in the near future to the construction of a new vocational building and gymnasium to replace the two ancient vocational buildings now in use and to provide much needed gymnasium facilities, especially during the Autumn and Spring between seasons.

It is understood that the construction of a new heating plant is being contemplated.

The various duties of the service staff are being carried out efficiently. The school plant is clean, tidy, and in a good state of repair. The children are being well cared for and there is every evidence of harmonious co-operation.

A picture of the student body is given in the following age-grade and attendance-grade tables in which connection it is noted:

- 1. Compared with the report of 1937-38:-
- (a) There is an increased attendance of 22. This increase is largely to be found in the intermediate and senior schools.
- (b) The mean age of pupils in the Junior First Preparatory forms has lowered from 8 years 3 months to 7 years 5 months. The earlier age of entry has resulted from the earnest effort of the Superintendent to get in contact with candidates throughout the Province; the rural surveys being conducted by the Auxiliary Branch; the heightened reputation of the school as an institution; the co-operation being extended by the adult deaf and the hard-of-hearing; the better placement

# AGE-GRADE TABLE—September, 1938

	1	1		1 .:	1 .:	1 .:	1 .:	1	 	1	ن ا	l si		1	1			vi.			
	4 yrs 5 yrs.	5 yrs 6 yrs.	6 yrs. 7 yrs.	7 yrs 8 yrs.	8 yrs 9 yrs.	9 yrs10 yrs.	10 yrs11 yrs.	11 yrs12 yrs.	12 yrs13 yrs.	13 yrs14 yrs.	14 yrs15 yrs.	15 yrs16 yrs	16 yrs17 yrs.	17 yrs18 yrs.	18 yrs19 yrs.	19 yrs,-20 yrs.	20 yrs21 yrs.	21 yrs22 yrs	Medial Age	Totals	TOTAL
Junior School I, Preparatory II, Preparatory III, Preparatory IV, Grade I			1	14 10 1	8 9 6	3 6 7 2	3 7 14 6	3 2 6 3	1 1										yrs mos 7-5 8-10 10-2 10-10	47 35 35 12	129
Intermediate School A1, Grade II V1, " " A2, Grade III V2, " " A3, Grade IV V3, " " A4, Grade V V4, " "							 5  1 	5 6 7  4 4	3 1  6 6 3 4 5	1 2  4 3 2 3 1	3  1  1 3								12-5 12-8 11-2 12-11 12-3 12-6 13-7 12-5		91
Senior School A1, Grade VI V1, " " A2, Grade VII V2, " " A3, Grade VIII V3, " " A4, Grade IX V4, " "					• • • • • • • • • • • • • • • • • • • •							6 1 6 2 2 4	1 3 4 1 5	1 1  2 4 2 2 5	2 2 2	2 1			15-3 14-9 15-10 17-5 17-3 16-8 17-5 17-0	14 10 11 9 12 14 5	
Totals	1	5	11	25	23	18	39	40	30	17	24	26	19	17	6	4	1		11-10	305	305

# ATTENDANCE-GRADE TABLE, 1938

	0 yrs 1 yr.	1 yr 2 yrs.	2 yrs 3 yrs.	3 yrs 4 yrs.	4 yrs 5 yrs.	5 yrs 6 yrs.	6 yrs 7 yrs.	7 yrs 8 yrs.	8 yrs 9 yrs.	9 yrs10 yrs.	10 yrs11 yrs.	11 yrs12 yrs.	Totals	TOTAL
Junior School I Preparatory II Preparatory III Preparatory IV Preparatory	1	15 5 5	3 18 6 1	2 10 17 5	1 3 5	1 2 1	1						47 35 35 12	129
Intermediate School A1, Grade II	2  5	1 1	3 1	4 4 1 1 1	3 1 1 2	2 9 1 4 3 1 2	3 2 2 4 4 1	1 2 1 6 3	2	1			11 13 12 12 14 10 12 7	91
Senior School A1, Grade VI V1, " " A2, Grade VII V2, " " A3, Grade VIII V3, " " A4, Grade IX V4, " "	4 2	1	3 1 2	3		1	2 2 1	4 1 3 2 1 2	3 1 1 3 1 1	1 1 1 1 3	1 2 1 3 1 2	2 1	14 10 11 9 12 14 5	85
Totals	47	30	40	49	22	28	25	28	13	8	10	5		305

of graduates which may in part be attributed to the introduction of a vocational guidance course and in part to the earlier age of graduation; the success which has attended the introduction and use of oral methods of instruction; and the widening interest which is being displayed throughout the Province in the welfare and well-being of the deaf.

- (c) The mean age of the entire intermediate school has been reduced from 13 years 0 months to 12 years 6 months and this in spite of the fact that attainments in reading and arithmetic throughout the school are decidedly ahead of those in 1937-38. It is to be noted that the mean age throughout the intermediate and senior schools has been reduced almost three years since September, 1934.
- (d) That the use of the Ontario School Ability Examination as a test of eligibility preparatory to acceptance for admission has been the means of eliminating the unhappy procedure of accepting pupils for entrance and returning them home as unsuitable. Some eleven children this year were refused entrance as being temporarily or permanently unable to make school progress. The school accepts all candidates not unsuitable from a physical or mental hygiene standpoint who are above five years mentally and who have an I.Q. above 50. Several pupils in a Junior II Class who are borderline cases and who have been given fair trial over periods of from one to five years might well be permanently graduated next June as being incapable of further training.
- (e) Deaf children enter the school not only without language but without conception of language as a vehicle of communication or as a means of carrying on thinking. Three years (preparatory) are devoted to the inculcation of an art possessed by every hearing child on his entrance to a public school.
- (f) Children who enter school late in life or children whose cerebral language areas are undeveloped from any cause, do not absorb language readily either as speaking, reading or thinking. Such pupils pass up through the intermediate and senior school as V classes in order that by annual promotions they may remain in contact with their age groups and receive normal training in mathematical, social and vocational departments. The A classes comprise pupils whose language facilities are comparable with those of hearing pupils of similar school grades.
- (g) The teaching of language throughout the school, but especially in the Junior Department, has improved greatly during the past four years as evidenced by the earlier age at which pupils begin to read, the superior use of English in letter-writing and composition, and the astonishing growth of a desire to read for the pleasure of reading. This improvement would seem attributable to: (1) a wider use of the synthetic (practice) method in contradistinction with the old analytic method; (2) a more extended and systematic use of hearing aids; (3) provision of libraries in the residences and of a newspaper reading room in the school; (4) the segregation of juniors in the junior residence and the consequent delay in their acquisition of the sign language; (5) the compilation of pictorial dictionaries in the fourth year junior schoolrooms.

#### The Teaching Staff

Misses V. Sheffield and N. Tett resigned in June to be married. By transferring Mr. Cunningham from the department of physical education to the senior adademic school, Miss Harris and Mr. Hodgson were appointed to fill the vacant positions.

Miss C. Connell, who had been matron of the girls' residence and director of girls' physical education for two years, resigned in June and was succeeded by Miss Maloney who had had a very wide experience in teaching.

Owing to the appointment of Miss G. Conover to the staff of the Toronto Normal School in October, Miss H. Waite was appointed as teacher of the senior sewing classes. Miss Waite had had a varied experience in practical sewing.

The increased attendance made necessary the appointment of an extra teacher and Miss M. Hill was engaged, her duties beginning on January 3rd, 1939.

The five new teachers were carefully selected for their gifts to teach handicapped children. They are taking the new Normal Training Course for Teachers of the Deaf and all have made a successful beginning in their classrooms.

#### Pasteurized Milk

With the introduction of the new law requiring that all milk sold in Ontario must be pasteurized, all milk produced on the school farm has been collected in the morning by a local dairyman, pasteurized, and returned to the school by

noon. While all milk produced is from a T. B. tested herd of pure Ayrshire cows the additional protection afforded by pasteurizing the milk is greatly appreciated.

#### **Exhibit at Canadian National Exhibition**

A display of pupils' work and a demonstration of vocational work were presented at the Canadian National Exhibition in Toronto in 1938.

The purpose of the exhibit was to demonstrate to the public the capabilities of the deaf in handling machinery in the hope that our boys and girls will have less difficulty in finding jobs after they leave school.

The exhibit under the direction of Mr. R. H. Vaughan was very successful and we express our appreciation to the A. R. Williams Machinery Company, the Singer Sewing Machine Company, and the Canadian National Exhibition Board for making this exhibit possible. Deaf boys and girls worked on machines for several hours each day of the Exhibition.

#### The School Calendar

All activities of the School are recorded in the school paper, *The Canadian*. The following calendar of events taken from its files are indicative of the broad and practical training the pupils receive:—

April 29th—A concert was presented in the auditorium of the Belleville Collegiate Institute. The following excerpts are taken from the report of the concert in the *Ontario-Intelligencer* of Belleville:

Perfect in its staging, performance and finish, the Concert given Friday evening, April 29th, by the students of the Ontario School for the Deaf won the whole-hearted admiration of a large audience in the Collegiate auditorium when one hundred and fifty children took part in dancing, dramatics, music and gymnastic display. Spectators had to re-assure themselves again and again that the little ones were really deaf, that their only response to music was through vibrations in the floor, for the presentation of the numbers was flawless.

The exhibition, however, was not merely a specially executed programme; it was more of a demonstration of the actual educational work carried out daily at the school where the development of the healthy child is aided through instruction in music, dancing and athletics.

The Toy Shop was the stellar presentation of the evening and introduced the audience to the most charming wares any toy shop could boast of.

May 5, 1938—School concert at Trenton.

May 19th—Annual boys' banquet and sports' night in assembly room. This banquet marks the culmination of the recreational programme of the entire year.

May 26th—Annual banquet of girls' athletic association and girl guides. Guests included Mrs. L. Riggs, Divisional Commissioner, Girl Guides; Mrs. Durley, District Captain; and a number of other officials of the girl guides.

June 8th—Exhibition of pupils' work from the vocational classes; Open House for visitors.

June 10th—Closing Exercises, presentation of certificates and diplomas.

June 18th to 22nd—Twenty-fourth Biennial Convention of the Ontario Association of the Deaf, held at O. S. D.

June 27th to July 1st—The Superintendent, the Directress of Professional Training and four teachers attended the 1938 Summer meeting of the American Association to Promote the Teaching of Speech to the Deaf, held in the Detroit Day School. Miss Ford read a paper on the topic "Language for the Slow Child."

October 17th—Mrs. Nellie McClung visited the school and addressed the teaching staff. An article by Mrs. McClung written later for the Toronto *Telegram* and other papers was very complimentary.

October 29th—Annual Hallowe'en Party for seniors.

November 5th—Annual Hallowe'en Party for intermediates.

November 7th—Visit of the Honourable L. J. Simpson, M.D., Minister of Education. During the day Dr. and Mrs. Simpson visited the school and observed the work being done by the pupils in the classrooms and shops. In the afternoon the Minister addressed the teachers and in the evening was guest of the Belleville Board of Education at a complimentary banquet.

December 7th—Fourth Annual Christmas Bazaar.

December 27th—Christmas Pageant in auditorium of school.

February 11, 1939—Ice Carnival.

Bursar's Report Cost per Pupil, School for the Deaf, Year ending March 31, 1939

Heading of Expenditures	Total expenditures year ending March 31, 1938	Yearly cost per pupil ending March 31, 1938	Weekly cost per pupil ending March 31, 1938	Total expenditures year ending March 31, 1939	Yearly cost per pupil ending March 31, 1939	Weekly cost per pupil ending March 31, 1939
Medicine and medical comforts. Groceries and provisions Bedding, clothing and shoes Fuel, light, power and water Laundry, soap and cleaning Furniture and furnishings Farm expenses Repairs and alterations. School supplies and equipment. Maintenance of motor vehicles. Contingencies Vocational supplies. Travelling expenses. Salaries and wages.	512.61 23,318.45 894.56 15,076.17 1,393.75 457.21 2,777.05 2,245.90 2,126.45 827.27 2,030.16 3,177.19 894.59 86,066.47	1.83 83.28 3.20 53.84 4.98 1.63 9.92 7.59 2.95 7.26 11.35 3.19 307.38	.04 1.60 .06 1.03 .10 .03 .19 .15 .15 .06 .14 .22 .06 5.91	694.32 22,498.89 1,131.34 15,915.39 1,738.29 1,995.11 2,767.30 2,357.91 2,098.54 887.63 1,356.90 2,725.26 1,086.21 86,131.09	2.37 76.79 3.86 54.32 5.93 6.81 9.45 8.05 7.16 3.03 8.04 9.30 3.71 293.96	.05 1.48 .07 1.04 .11 .13 .18 .15 .14 .06 .16 .18 .07 5.65
Total expenditures  Revenue Pay Pupils Farm Canadian Industries Miscellaneous Perquisites, Pay List  Total	3,326.00 5,515.90 64.55 324.82 475.06 6,661.15	506,42	9.74	3,375.00 5,977.15 65.50 271.88 1,008.83 6,764.87 17,463.23	492.78	9.48

Average number of pupils, 1937-38 term, 280. Annual cost per pupil, \$506.42. Weekly cost per pupil, \$9.74.

Average number of pupils, 1938-39 term, 293. Annual cost per pupil, \$492.78. Weekly cost per pupil, \$9.48.

C. B. McGuire,

Bursar.

#### Report of School Physician

The following is the report of the School Physician. Total admissions to hospital from April 1, 1938 to March 31, 1939, were 479. These included two cases of fractured arms, three cases of lobar pneumonia, one mastoidectomy, and one appendectomy.

During February and March 172 cases of influenza occurred. During the epidemic, and owing to the infection, a boy of twelve died as the result of diabetic coma.

In the course of the year 26 children were vaccinated against smallpox, 41 were given scarlet fever immunization, and 29 were given diphtheria toxoid.

R. W. TENNENT,

Physician.

Respectfully submitted, W. J. Morrison,

Superintendent.

Belleville, May 10th, 1939.

#### APPENDIX J

# REPORT OF THE SUPERINTENDENT OF THE ONTARIO SCHOOL FOR THE BLIND

#### Foreword

"The impossible is only the untried."

#### Enrolment

	Boys	Girls	Total
Enrolment, January 1, 1938	80	71	151
Admitted January 1 to June, 1938	0	1	1
•	80	72	152
Withdrawn January 1 to June, 1938	1	2	3
	79	70	149
Left June, 1938	4	9	13
	75	61	136
Admitted September, 1938	16	13	29
Admitted March 1, 1939	1	0	1
	92	74	166
Withdrawn September, 1938, to January 1, 1939	1	0	1
Withdrawn April 6, 1939	1	0	1
Enrolment, June, 1939	90	74	164

#### Graduates and Withdrawals

Age	No. Pupils	Reason for Withdrawal
8	1	Heart condition.
11	1	*Returned home after illness—brain tumour.
13	1	Remained at home on account of illness.
13	1	†Epileptic.
15	1	Went to work on father's farm.
16	1	At home on account of illness.
17	1	Remained at home to help mother.
18	1	Went to work.
19	f 4	One took Home Teacher's Course at Canadian National Institute for the Blind, Toronto, and is now employed as Home Teacher.  One went to work in Canadian National Institute for the Blind shops, Winnipeg.  One stayed at home on account of illness (diabetic).  One went to work in father's store.
21	2	One at home.  One at work in Canadian National Institute for the Blind shops, Toronto.
22	3	All three completed the course. One is employed as Home Teacher, Toronto.  One entered University of Alberta.  One completed musical training—excellent student.
	17	

<sup>\*</sup>This little girl was a very brilliant student. She had had a brain tumour operation before coming to us, and the condition again became aggravated, resulting in her death some months after she left school.

<sup>†</sup>This is the last of three pupils afflicted with epilepsy, all of whom we have had to exclude. May I again point out that I feel a home should be established for blind children who are prevented from attending school through mental disability, physical disability, or both.

<sup>‡</sup>This Alberta lad entered the University of Alberta last September. He is taking a course in Economics and History.

<sup>§</sup>All of our graduates were placed in employment with the exception of this one boy.

#### New Pupils in Age Groups

Age	No. Pupils	Age	No. Pupils	Age	No. Pupils
6 years	. 1	*13 years	4 5 1 6	19 years	1 1
12 "	1	18 "	1 1		31

<sup>\*</sup>One of these thirteen-year-old lads was a re-entry in September.

†This 22-year-old pupil lost her sight as a result of a brain tumour last year, and came to us for training and orientation to blind life. She has made a remarkable adjustment, and will unquestionably make her way upon graduation.

‡The Government of Alberta requested us to accept this girl for a year's training.

#### Mental Ratings of New Pupils

Intelligence Quotient	No. Pupils	Intelligence Quotient	:	No. Pupils
		75–90 50–75		4 3
110-120 .	 5		Total	

# Enrolment by Provinces

	January 1, 1938	January 1, 1939	
Ontario Alberta Manitoba Saskatehewan	18	117 25 7 15	
	151	164	

The increase of 13 in enrolment is made up almost equally from Alberta and Ontario.

#### Enrolment by Provinces for Past Five Years

Year	Ontario	Alberta	Manitoba	Saskatchewan	Total
January 1—	79	12	9	11	111
1935	90	15	10	11	126
1936	101	19	9	15	144
1938	111	18	8 7	14	151
1939	117	25		15	164

#### Enrolment by Grades, January 1, 1939

Grade I     13       " II     12       " III     5       " IV     12       " V     17       " VI     11	Grade VII. 16 " VIII 19 " IX 21 " X 15 " XII 12 †Specials 11
---	--

†This group of eleven students are in their graduating year, and have spent a major part of their time on one or two special subjects.

#### Age-Grade Table

	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Adults over 21	Mean Age	Ontario	Western	Total
Grade I Grade II Grade III Grade IV Grade V Grade VI Grade VIII. Grade VIII.	2	4 2  1 	1 1 2 	1 3 2 2 1 	2 2 1 3  1	1 2 1 1 2 3 1	1 1 4 2 3 1	1 1  2 1 3 3	1 3 2 3 1	1  1  2 2 8	1  1  2 3	2 1 2	1 1		1	9-6 11-0 11-0 11-4 14-6 13-6 15-4 16-6	11 10 3 7 13 9 13 13	2 2 3 5 3 2 3 6	13 12 6 12 16 11 16 19
Public School Total	2	7	5	9	9	11	12	11	10	14	7	5	2		1	13–10	79	26	105
Grade IX Grade X Grade XI							1	2	1	7 4	4 3	.1	2 2	2 3	.1	16-10 18-4	13 12	8 3	21 15
Grade XII Grade XIII.											1 1	2	2 2	3 2	5	20-6 21-0	4 8	8 2	12 10
High School Total							1	2	1	11	9	6	8	10	10	18-0	37	21	58
Grand Total	$\overline{2}$	7	5	9	9	11	13	13	11	25	16	11	10	10	11	16-2	116	47	163

#### Attendance-Grade Table

	0-1	1-2	2-3	3-4	4-5	5-6	2-9	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	Mean Attendance	Ontario	Western	Total
Grade I Grade II Grade III Grade IV Grade V Grade VI Grade VIII Grade VIII	7 3 2 1  3 5	3 5  2 4  2 4	3 4 1 5 3 1	1 1 6 2 2 1	1 1 1  4 2 1	1 3	1 2 5	1 2	1								Y.M. 0-1 1-2 2-0 2-3 2-3 4-5 4-0 3-4	11 10 3 7 13 9 13 13	2 2 3 5 3 2 3 6	13 12 6 12 16 11 16 19
Public School Total.	24	20	22	13	9	5	8	3	1								2-3	79	26	105
Grade IX Grade X Grade XI Grade XII Grade XIII .	4	3 1	1  1 2	2 1 	 2 2	3	1 1	$\begin{array}{c} 2 \\ 2 \\ \dots \\ 1 \\ 1 \end{array}$	3 3 	$\begin{array}{c} 1 \\ 3 \\ \cdots \\ 2 \end{array}$	1 2 	1  2 1	1	1			5-6 9-0 8-0 7-7	13 12  4 8	8 3  8 2	21 15  12 10
High School Total. Grand Total.	5 29	4	$\frac{4}{26}$	5 18	4 13	3 8	$\frac{2}{10}$	6 9	8 9	6	5 5	4	1 1	1 1			7-8	37	21 47	58 163

#### Comment on Age-Grade Table

The mean age in Grade I in the Ontario School for the Blind, as will be seen in the accompanying Age-Grade Table, is nine years, six months; throughout the primary schools of the Province, seven years. The mean age of Grade VIII at the Ontario School for the Blind is sixteen years, eight months; throughout

the Province, thirteen years, eight months. It is thus seen that the blind progress as rapidly through the Public School grades as do the seeing, the age-grade difference being more than accounted for by the late age of entry.

#### High School

As shown by the table "Enrolment by Grades," our High School Department is made up of Grades IX, X, XII, and a group of special students. We covered courses leading to matriculation in Music, English, French, British History, Spanish, Geography, Mathematics, Science, Typewriting, Sewing, Knitting, and Boys' Industrial Shop.

It would seem that Science and Mathematics should be very limited in a curriculum for the education of the blind. Our students do the work in Language and History quite as well as the seeing. The work in Music is much more advanced than the curriculum calls for. We train for a full A.T.C.M. degree.

Fifteen of our High School students passed a partial junior matriculation this year. One of our graduates of June, 1938, entered the University of Alberta and completed a very successful first year in Economics and History. A Saskatchewan graduate finished his Bachelor of Arts degree at the University of Saskatchewan.

# Library Report

Total enrolment	164
Number of pupils borrowing books	146
Total number of volumes read	
Average number of volumes per pupil	14.10
Number of volumes added to the Library during the year	

A number of our High School students have also been regular borrowers from the Library for the Blind in Toronto, as they have exhausted our own library.

#### Health Education

We regard education for health and the development of good physique as our first duty. To that end, every child in the school has a health education period of at least forty minutes every day. This is in addition to hikes and walks with Scouts and Guides, and free time in the open air for a minimum of an hour per day.

Miss Behrens has done extensive and efficient work with her folk dance units in the gymnasium. Last month we had an inter-school meet with the New York School for the Blind of Batavia. Some of the top figures for that meet were as follows:

Climbing a 16-foot rope	3 seconds.
Throwing the basket ball	105 feet.
75-yard dash	
Standing broad jump	
Three consecutive broad jumps	

Of the sixteen boys representing the two schools, six are totally blind. The outstanding athlete of the meet is totally blind. This lad, who is twenty years old, made four of the five records above. Except in the broad jumps, he was closely followed by the other competitors. I have given these statistics to

show that the blind can be trained to achieve top standing in lines of endeavour where seeing folk would think sight essential. Finally, I should explain that the blind boy does his sprint guided by a leather tab attached to a cable by means of a metal ring. Otherwise he could not maintain a straight course. But even with this handicap, the best do a measured 75 yards in 8 1/10 seconds.

#### Industrial Shop

During the year we have used an electrically-driven lathe. We built shields about the lathe to avoid accidents. It has been of considerable value to us in turning out material for such projects as table legs and fern stands.

During the year the boys built two full-size row-boats. These were tested and put to good use at Thayendanegea Camp during our camping week-ends in June. Indeed, the camp authorities asked us to donate one for the use of summer campers throughout the season. The boys who conceived this project and did the major part—if, indeed, not all the work—are totally blind.

A down-town friend and former Master at the Brantford Vocational School, Mr. Hudson, together with the boat builders, made a Braille graduated yard-stick with gauges suitable for the use of the blind.

The senior classes repaired school furniture and did caning for outside customers to the amount of over sixty dollars.

### Extra Curricular Activity

On June 13th, the School presented Edward German's light opera, "Merrie England." This opera demanded skill of a high order, not only in the interpretation of the spoken word, but also in the interpretation of song. The story is set in the days of "Good Queen Bess," and introduces the Queen, Sir Walter Raleigh, Essex, pages, courtiers, a May Queen scene, and some enjoyable comedy.

The opera was staged in the beautifully wooded school grounds. There was the bank of the Thames with the royal barge, and Windsor Forest. The Egyptian and English country dances were exquisitely executed for the Royal Court in Windsor Forest. Possibly the highest achievement was the costuming—over seventy people with colourful costumes all definitely in period.

Our Guides and Scouts have had busy and successful years. They both contributed largely to city-wide rallies during the year. Seventy of our senior students again used Camp Thayendanagea for long week-end camps. They went out, sexes separately, Friday at 3.00 p.m., and returned Sunday evening. They cooked their own meals, swam, rowed, danced, played ball, and came home feeling that the time had been all too short.

#### Music

In our Music Department we have given instruction as shown below:

Piano121 students
Orchestra
Individual
Choral (in three separate groups)
Musical Theory and History for Toronto Conservatory
Examinations 31 students

The following is a list of candidates who passed Conservatory examinations:

	1938
HISTORY V	TEACHERS' EXAMINATION
Oilver Ball	Elizabeth GliddonHonours
Leo Carroll First Class Honours	Tina Biluk
Counterpoint V	GRADE V HARMONY
Leo Carroll	Oliver Bell
Tina Biluk First Class Honours	** **
Elizabeth Gliddon First Class Honours	FORM V
Geraldine McGregor First Class Honours	Oliver Bell
Oliver Bell	1 M O 3 F
	A.T.C.M.
THEORY II	Geraldine McGregor Fisrt Class Honours
Oliver Bell First Class Honours	Elizabeth GliddonHonours
	1020
	1939
THEORY II	HARMONY IV
Godelieve Schamp First Class Honours	
Joyce Burrows First Class Honours	Annie Simons First Class Honours
Letty Gifford First Class Honours	
Mildred Harrison First Class Honours	
Leola McWhirter First Class Honours	Counterpoint IV
Alice Mantz	A Ciana Cian
Viola Switch First Class Honours	Annie SimonsFirst Class Honours

At the Stratford Musical Festival in February, 1939, our students won the following honours:

Small Madrigal ChoirFi	irst Prize and Stratford-Beacon Herald Trophy
Ladies' Ensemble	First Prize and Mrs. McLagen Cup
Ladies' Trio	First Prize—Gold Medals
	Second Prize—Silver Medals
Mixed Quartet	
Baritone Solo	
Soprano Solo	

Miss Helen Self, who won the gold medal in the soprano class also won the Medlyn Trophy for the finest performance of all gold medallists in the festival under twenty-one years of age. Along with the Medlyn Trophy, Miss Self won a fifty-dollar scholarship.

#### Services to the Community

The following is a list of services rendered to the community by students of our school:

English teachers on exchange in Toronto visited the city as guests of the Brantford Teachers' Federation, and were entertained at the school with afternoon tea, a tour of the school, and musical entertainment by our pupils.

One of our senior boys played a violin solo at a meeting of the Victoria Home and School Club.

One of our senior lads gave an original address on "Sir Wilfrid Laurier" at an I.O.D.E. meeting of the Brant Chapter.

A full evening's concert was presented by a group of our pupils at the United Church in Otterville.

Our musical director, Mr. Lord, is also the organist at the First Baptist Church. During his absence from the city, members of our senior choral class took over the musical part of the Sunday Church service. One of our boys played the organ throughout the whole service—for hymns, offertory, solos and anthems.

The superintendent addressed the Windsor Canadian National Institute for the Blind, giving details of the school's work in his talk.

A full evening's concert was given at the Oakville United Church by our senior pupils.

Miss Esther Murray, one of our academic teachers, gave a talk on the work of the school at Blow's Corners. She took two of our senior pupils along to give vocal solos.

Miss Sue Miller of our music staff and her choral groups presented a full evening's concert at Brantford Sydenham United Church.

Miss Esther Murray gave an address at Woodstock on the work of our school, and was assisted during the evening by musical numbers from two of our senior pupils.

Under the direction of Miss Miller, our choral students contributed to the programme of the local Canadian National Institute for the Blind.

On the night of school closing for the Christmas holidays, at the request of C.N.R. officials, our senior pupils sang carols at the C.N.R. station,—the occasion being a staff party of C.N.R. employees.

Members of our senior Girls' "Star Fourteen Club" entertained members of the Widow's Home.

One of our junior boys played the timpani at a concert given by the Colborne Street Church.

Our self-taught junior jazz band, by request played at a banquet given by Scouters of the city.

One of our junior boys read the scripture lesson at Wellington Church service,—from Braille Bible.

Members of Brant Avenue United Church attended the church supper, contributing numbers to the concert after the supper.

Dufferin Public School pupils visited our school to receive certain instruction regarding orchestral instruments from our Musical Director, Mr. Lord. He was assisted in this demonstration by some of our orchestra members.

Under the direction of Miss Sue Miller, our senior pupils presented a concert at the Scottish Rites Temple in Hamilton. Masons from Brantford drove our party to Hamilton.

One of our senior boys sang at a meeting of St. Basil's Young People's Association.

Our Senior Boys' Dance Orchestra went to Burford to play for a dance given by the Rebecca Lodge.

One of our junior orchestra members played the timpani in a concert given by a city organization at the Collegiate Institute.

The Superintendent spoke at a meeting of the I.O.D.E. on the work of the school, and took along a group of our pupils to assist with musical numbers.

During Easter week, Mr. Lord and our madrigal group went to the O.E.A. meeting. Mr. Lord gave a talk on music, and our madrigal group assisted with certain numbers.

Miss Zella Perry of our music staff addressed a meeting of the Music Teacher's Association. One of our senior students assisted her to demonstrate methods of teaching music to blind students.

Our Jazz orchestra played at a meeting of "Native Sons."

Members of our senior boys' gymnasium classes demonstrated "pyramid building" at the local Y.M, C.A. Circus. They also gave this same demonstration at a city wide Scout Rally.

Our pupils presented a concert in Hamilton under the auspices of the Hamilton C. N. I. B.

Miss Murray spoke at Fairfield United Church on the work of our school, taking with her junior pupils to demonstrate our methods of teaching.

### Acknowledgments

We wish to make acknowledgment of the following gifts and entertainment in connection with our school:

To Mr. E. Moule, Manager of the Capital Theatre, for entertainment of our pupils at various shows during the season.

To Brant Avenue Church officials for an invitation to attend a lecture on Nova Scotia.

To Mr. Lord and his Canadian Choir for an invitation to attend their concert, given on the occasion of Lieutenant-Governor Matthew's visit to Brantford.

To St. Jude's Church for the entertainment of our Girl Guides.

To Brant Avenue Church Dramatic Club for inviting forty of our pupils to attend their production of "Enchanted April."

To Mr. Burkwall, a missionary from China, for his delightful talk on China to our student body.

To Mr. Ellsworth Jaeger of Buffalo, New York, for his address to our students, on "A Woodland Symphony." Mr. Jaeger illustrated his talk by many imitations of calls of wild animals, and made it a thoroughly delightful occasion for our young folks.

To the Brantford Collegiate Institute Dramatic Club, for inviting thirty-six of our students to attend their production of "Twelfth Night."

To Mr. E. V. Brown, Principal of Lower School, Ridley College, and twelve of his students for a gift of \$50.00 to assist less fortunate boys of our school in clothing, etc.

To Ernest Cuthbertson, Secretary of the local Boy Scout Association, for entertainment of our boys at various times during the year.

To the local C.N.I.B. for entertainment of our pupils.

To the Schubert Choir for tickets for our senior pupils for their spring concert. This concert was later presented at the New York World's Fair.

To the Brant Chapter of the I.O.D.E. for the gift of a beautiful flag to our Girl Guide Troop, and for money for talking-book records and public speaking prizes.

### Canadian National Institute for the Blind

Throughout the year, the officers of the Canadian National Institute for the Blind have been of inestimable service to us in helping to finance some of our indigent students, in finding new students who should enrol, and in preparing them and their parents for their first school experience.

Most especially do we appreciate what Col. E. A. Baker and his placement staff do for our graduates. During these past difficult five years, they have given

all of our graduates employment. It seems a sort of anomaly, but nevertheless it is true, that our students during their graduating year journey more hopefully and more confidently than the seeing friends about us.

I herewith submit reports from Dr. J. A. Marquis, Physician; Dr. Norman Bragg, Ophthalmologist; Dr. J. R. Will, Dentist; and Mr. G. H. Ryerson, Bursar:—

### Report of Physician

I submit herewith a report on the health of pupils and staff of the Ontario School for the Blind from January 1, 1938, to June 30, 1939:

Total number of patients	217 ,264
Infections and boils	12
Vaccination reaction	$\frac{12}{2}$
Toxoid reaction	$\frac{1}{2}$
Colds.	$2\overline{1}$
Sore throat	5
Influenza	93
Bilious attack	22
Vertigo	3
Nervous indigestion	2
Influenza and anaemia	1
Pneumonia	1
Brain tumour	î
Heart condition	$\hat{2}$
Neuritis	ĩ
Whooping cough	3
Whooping cough with flu and strep. infection	1
Removal of coin swallowed	î
Removal of pin swallowed	î
Enucleation of eye	$\hat{3}$
Fracture of arm	$\overset{\circ}{2}$
Fracture of thumb	ī
Fracture of radius and ulna	ī
Ingrown toenail and removal	î
Sprained ankle	$\hat{2}$
Miscellaneous	33

From January 1, 1938, to January 1, 1939, we had only a total of 87 patients and 393 hospital days, as compared with 148 patients and 1,220 hospital days in the previous year. On March 17, 1939, the flu epidemic which was general throughout the city, reached our school, and over half of our pupils and staff contracted the disease. In addition to the school hospital, it was necessary to use parts of both the girls' and the boys' dormitories as hospital units, and to call in extra nurses for these patients. One patient developed pneumonia and was quite ill for a time, but she made a complete recovery. I must commend especially the work of our nurse, Miss Howell, at this difficult time.

One bright little girl who came to school in the fall of 1938, blind as the result of brain tumour, suffered a recurrence of this condition. She was cared for in our hospital for a time, but it was thought best to send her home when she was well enough to travel. Her death occurred at her home some months later.

Another young lad was sent home because of a heart condition.

Three boys with buphthalmic eyes were operated upon at the Brantford General Hospital. With this source of infection removed, they have all enjoyed improved health.

X-rays were taken of all fractures. The patients concerned have all recovered nicely.

We are continuing vaccinations, toxoid injections, and annual physical examinations. These examinations show a continued improvement in the children's physical condition during the past few years. The health programme followed at the school is developing sturdy bodies able to resist disease. This is supplemented by excellent and conscientious care during illness.

All of which I take pleasure in submitting.

J. A. MARQUIS,

Physician.

### Report of Ophthalmologist

I have the honour to report on the eye examinations of new pupils entering the Ontario School for the Blind for the year 1938-9. This class numbers 29 pupils, 16 of whom are boys and 13 girls. The results of the new examination are as follows:

### New Pupils

	Condition of Sight	Male	Female	Total
2. 3. 4.	Limited vision in both eyes	2		15 5 5 2 2
	Totals	16	13	29

We are pleased to note from the above table that the new pupils coming to the school have a better degree of sight than previous classes. In this year's class we find that there are fifteen out of a total of twenty-nine who have some visual acuity in each eye, and five who have some vision in one eye. Only two new pupils are blind in both eyes. As improvement has been noted in each class for the past two or three years, we are inclined to attribute it to increasing public interest in matters concerning blindness. Medical attention is evidently being sought before cases become too advanced.

### Diseases Causing Blindness

		Male	Female	Total
2. 3. 4. 5. 6.	Ophthalmia Neonatorum and Keratitis. Iritis, Uveitis and Sympathetic Ophthalmia. Congenital Cataract and Dislocation of Lens. Fundus Lesions, Retino-Choroiditis. Optic Atrophy. Myopia. Congenital Glaucoma and Buphthalmus.	1 3 1 4 5	3 5 2 2 1	4 8 1 6 7 3
	Totals	16	13	29

One of the most gratifying facts to be noted from the foregoing table is the total absence of any case of keratitis that might be classified as being of ophthalmia neonatorum origin. This is a definite improvement on what was found formerly, and can be construed as the happy result of better prophylactic care of the newborn child. Unfortunately, in the other class of preventable blindness, namely, class 2, there is a slight increase in the number of cases over last year's class.

In two classifications, that of optic atrophy and myopia, we find a very definite increase in this year's class. It is hard to ascribe a reason for this, but it would seem that this form of congenital lesion, certainly in the case of myopia, might be reduced if medical examination were to be enforced previous to marriage; or if myopic children were taken out of school for a definite period when it has been established that their myopic condition is of a progressive type.

In group three, there are still too many cases. Practically all of these have been operated on, and with excellent results, from a surgical point of view, but with no marked improvement from a visual standpoint. This would seem to suggest that while surgery must and should be tried, it is not entirely sufficient to deal with the situation, and that the best hope of dealing with this problem lies in improved pre-natal care.

In addition to examining all new pupils, we made a careful examination of every pupil in the school. In many cases we were pleased to note a decided improvement in vision and eye condition. We were able to change glasses for a number of pupils, and to prescribe glasses for those who had not used them. Other students were assisted by advice regarding the use and care of their eyes.

All of which is respectfully submitted.

NORMAN W. BRAGG, M.D.

### Report of Dentist

I am pleased to state that on the whole the pupils take good care of their teeth. As the result, twenty-nine pupils did not require to have their teeth cleaned, and most of the others did not require much attention in that line.

One hundred and thirty-two fillings were inserted for the boys. Seventeen permanent and seventeen deciduous teeth were extracted.

One hundred and fourteen fillings were inserted for the girls. Six permanent and sixteen deciduous teeth were extracted.

Forty-six pupils required no fillings and thirty-seven needed only one each.

Partial dentures were made for two pupils—one where the teeth had been previously removed, and the other where they were considered detrimental to good health.

The co-operation of the pupils in this work was all that could be desired.

Respectfully submitted.

J. R. WILL,

Dental Surgeon.

\$89.864.35

### Bursar's Report

### Financial Statement (April 1, 1938, to April 1, 1939) EXPENDITURES

Salaries and Wages	\$55,329,43
Travelling Expenses.	345.53
Medical Department	414.61
Groceries and Provisions	13,089.28
Bedding and Clothing	730.16
Fuel, Light, Power, and Water	9,233.97
Laundry, Soap, and Cleaning	1,255.87
Furniture and Furnishings	1,212.25
Farm and Garden	1,255.12
Repairs and Alterations	2,039.55
School Supplies, etc	2,536.85
Dental and Oculist Services	431.00
Motor Conveyances.	51.88
Contingencies	1,938.85
Total	

### CASUAL REVENUE RETURNED TO THE DEPARTMENT

Perquisites Farm Account	
Pigs sold.	
Calf sold	
Chickens sold	
"School Progress" cheque returned	
Western Fees	
Total	 19,550.44
Summary	
Total Expenditures	
Less Casual returned to Department	
Actual Expenditure	 70,313.91

Certified Correct,

G. H. RYERSON,

Bursar.

### Conclusion

May I express to you, Sir, and to Dr. McArthur, and all Department officials, my appreciation of your readiness to help us in the great work that is a constant challenge to us.

I should like to commend to you the work of the teachers and officers. They have given their best freely, in school and out. The members of the house staff have been faithful in their tasks, and kindly disposed to the students of the school.

I have the honour to be, Sir,

Your obedient servant,

H. J. VALLENTYNE,

Superintendent.

July 10th, 1939.

### APPENDIX K

### REPORT OF THE INSPECTOR OF PUBLIC LIBRARIES

### 1. The Influence of the Public Library

If education is the second line of defence of democracy—and it is difficult to see how any other view can be supported—then the public library which is the antidote to propaganda and the parent of adult education, must, in this present hour of decision, be regarded as one of the chief peaceful defences against the enemy who would destroy us.

Such being the case, the tables of library information that are the essence of this report ought, one would think, to be worth the trouble of rather wider consideration from the public—and even from those who profess to be interested in library development—than they appear, formerly, to have received.

I do not suggest that all the books used through our public libraries are of equal value from the point of view of adult education. In fact, there are still books being circulated that come perilously close to having no value whatever. But the important consideration is that the general quality of public library selection is being steadily improved; and when one tries to make for himself a picture of the whole volume of the public reading, he cannot but be impressed by the thought of how great an influence it must be exerting, day after day, upon the outlook and the frame of mind of the people of the province. This public library reading means something infinitely more than gathering facts out of text-books. It means stimulus. It means the exercise of the alert mind, the broader view of life and of contemporary problems. It means the quickened imagination, the clearer vision, the ability to arrive at more cleanly-cut decisions.

The chief thing wrong with our public library reading is that there is not enough of it. The reason will, I hope, become apparent from the brief summaries of the general statistical tables which follow.

### 2. Circulation

I do not believe it can be taken as anything but under-statement when I suggest that the people of Ontario are perfectly capable of absorbing between six and seven books per capita each year from their libraries. This would give a total of twenty-two million books.

The actual circulation, 1937, was	13,193,642
A reduction from 1936 of	193,421
A per capita use of	3.09
The per capita use in cities and towns being	5.8
And in rural districts	.6

### 3. Libraries in the Province

The following summary shows the number of public libraries operating in the Province:

Free Libraries	184
Library branches	39
Libraries listed but not reporting	5
Total number of free libraries	228
Association libraries	274
Total number of all public libraries	502

The distribution of these libraries, without including library branches and non-repeating libraries, is as follows:

In places of 500 or smaller	174
500 to 1,000	100
1,000 to 5,000	127
5,000 to 10,000	26
10,000 to 20,000	14
More than 20,000	17

During 1938, the association libraries in Haileybury and Niagara changed their status and have now become free public libraries. New association libraries were organized at Port Dalhousie and Thornton, and the association libraries at Elk Lake and Hawkesbury, both of which had been closed for some years, were reorganized. The libraries at Runnymede and Delaware have been closed and the books distributed.

### 4. The Support of Public Libraries

It would seem from the foregoing figures that we must have almost enough libraries in the province to fill the people's book needs; and if the libraries were all effective that would probably be quite true and we should reach the twenty-two million mark already mentioned. But the libraries are not all effective. Indeed, it has often occurred to me that we are undertaking this particular phase of our national defence with flintlocks. Modern weapons cost money. The Libraries Act gives to every board of a free public library the right to expend on its services a minimum of fifty cents per capita, which is bare subsistence for a library that is carrying neither debt charges not branches.

This is what the library boards do about it in their municipal appropriations:

Using less than 25c per capita, there are23	libraries
Using between 25c and 50c, there are95	"
Using the 50c minimum	"
Using between 50c and 60c27	44
Using more than 60c	66

Analyzing the situation further, we find that-

118 libraries use less than the statutory 50c per capita.

13 libraries use the statutory minimum of 50c per capita.

53 libraries use more than 50c per capita.

The per capita expenditure for the whole province is 36.8c.

Legislative grants amount to 2.9 per cent. of total expenditures.

### 5. Book Stocks

The free libraries contained in 1938	.2,624,479	books
The association libraries contained	. 617,566	" "
Total	.3,242,045	books

It is not possible to collect statistics which would throw much light upon the actual value (book value, not dollars) of these collections, but I think I should be quite safe in saying that at least forty per cent. of the books in our public library are more or less out of date, many of them completely so.

### 6. Library Users

The free libraries have	
The association libraries have	22,595 "
Total	
	or 19.2 per cent, of the population of the province.

### 7. Certification and Training of Librarians

Although the certification of librarians is not compulsory, the classes that graduate annually from the Ontario Library School continue to be almost completely absorbed into the work. It is to be noted, however, that the great majority of these graduates go to the libraries in the larger cities. The following figures are enlightening:

Total number of free libraries (with branches)	228
Chief librarians holding certificates of librarianship	33
Staff members holding certificates	234

But, since 183 of these qualified staff members are employed in the libraries of Toronto, Hamilton, London, Ottawa and Windsor, we come upon the startling fact that in all the rest of the province there are only 51 trained staff workers They are divided among 23 libraries.

During the summer of 1938 the Department carried out a successful experiment in training for small libraries. Two classes in librarianship were held, one at McMaster University and the other at the University of Western Ontario.

Twenty students were admitted to each class. The period of each class was two weeks, and admission was confined to librarians in employment in places of fewer than 2,000 people. Although such a brief time of instruction meant that training was necessarily confined to the bare rudiments of librarianship, I am able to report that practically all the forty student-librarians came away very much better equipped for their work. I have since visited a number of the libraries that sent students to these classes, and in every instance I have found the standards of librarianship and library service being materially improved.

### 8. Librarians' Salaries

The following summary shows the salaries paid to librarians in the free libraries:

Population	Number of	Highest	Lowest	Average
	Places	Salary	Salary	Salay
Not over 5,000	25 13	\$ 900 1,680 2,280	\$ 20 100 900	\$ 304 830 1,285 2,295

### 9. County Libraries

The work of the county libraries continues to progress steadily. Perhaps the most noteworthy step taken in 1938 was the appointment of a trained librarian by the Lambton County Association. In addition to the four counties now operating, Simcoe is in process of organizing itself, and a demonstration of the county co-operative is being carried out in Waterloo by the Kitchener Public Library. The 1937 reports show the following circulation from the county libraries:

Elgin 2,570	Middlesex
Lambton35,255	Oxford

### 10. The Travelling Libraries

People living in the more thinly settled parts of the province are finding the travelling libraries more and more useful each year. The latest increase in borrowing has been chiefly through schools, the local branches of the Women's Institute, and young people's clubs. Letters that indicate a keen appreciation of this service have been received from many outlying points, particularly in the north, where in several instances the cases of books have been carried by aeroplane and dog team far beyond the end of steel.

A reference library has been established for the use of rural school teachers, the work being done through the office of the travelling libraries. More than 800 books were purchased for the purpose of this service. The registration of teachers was 749 and the book circulation 1,199.

### Statistics for the travelling libraries are as follows:—

### Libraries sent out during 1938

To schools	409
To Public Libraries	216
To Women's Institutes	101
To Farmers' Clubs, etc	111
Total	837
Increase over 1937	915

### Book Circulation:

Boys' and girls'	)
Adult non-fiction	;
Adult fiction	}
Total	-80,109
Increase over 1937	15,669

Angus Mowat,
Inspector of Public Libraries.

Toronto, March 31, 1939.

FREE PUBLIC Showing Statistics, 1937, and

			1 1				1
No.	Library	Population	Borrowers	Volumes in Library	Circulation	Salary paid Librarians	Salaries paid Permanent Assistants
						* 8 c.	2
_		1.010	0.40	* 000	0.0*0		\$ c.
1	Acton	1,916	648	5,293	9,853	156 00	96 00
2	Ailsa Craig	484	204	3,960	3,069	100 00	
3	Almonte	2,362	553	4,677	17,808	430 00	
4	Amherstburg	2,900	930	7,244	28,910	900 00	nual Dancat
5	Arnprior	1.007	1.47	0.700	0.140		nual Report
6	Arthur	1,037	147	3,796	6,149	84 00	85 50
7	Aurora	2,850	823	5,921	23,504	415 00 300 00	
8	Aylmer	1,980	1,250	16,335	19,501		
9	Ayr	755	430	5,371	8,211	175 00	
10	Barrie	8,123	4,214	11,968	77,262	1 100 00	564 00
11	Beamsville	1,200	624	8,684	17,151	300 00	
12	Beaverton						nual Report
13	Beeton	* 4 70 1					nual Report
14	Belleville	14,764	5,571	16,264	115,626	1,200 00	1,540 75
15	Belmont	600	312	1,874	3,788	102 00	
16	Bothwell	647	171	2,410	4,279	104 00	
17	Bracebridge	2,497	930	5,787	18,527	600 00	0
18	Brampton	5,400	2,318	6,873	37,284	840 00	253 50
19	Brantford	30,107	13,230	42,503	246,663	1,400 00	4,867 75
20	Brighton	1,500	319	5,183	14,950	100 00	1 040 00
21	Brockville	9,903	7,428	19,777	77,584	1,680 00	1,240 00
22	Brussels	750	220	5,177	5,235	240 00	
23	Burk's Falls	818	493	2,720	5,302	180 00	
24	Campbellford	2,800	1,409	8,312	29,113	600 00	25 00
25	Cardinal	1,450	150	3,432	2,517	100 00	
26	Carleton Place	4,275	379	6,937	14,171	380 00	
27	Cayuga	700	126	2,778	4,350	60 00	
28	Chatham	16,426	3,987	26,127	106,455	1,385 61	3,206 46
29	Chesley	1,815	604	5,568	16,172	175 00	
30	Clifford	446	102	5,007	3,499	50 00	
31	Clinton	1,900	639	11,093	15,576	525 00	
32 33	Cornwall	5,700 12,870	950 2,018	12,889 11,476	24,749 45,680	720 00 900 00	437 00
00	Columbia	12,010	2,010	11,110	10,000	000 00	
34	Delhi	1,677	271	3,668	12,391	208 75	
35	Drayton	551	289	4,143	4,344	240 00	
36	Dresden	1,550	255	3,688	7,492	378 03	
37	Dryden	1,661	352	3,806	13,136	200 00	
38	Dundas	5,005	2,568	9,976	42,056	600 00	579 11
39	Durham	1,823	693	6,278	13,627	300 00	
40	Elmira	2,170	1,083	6,765	9,939	250 00	
41	Elora	1,195	480	9,806	14,822	229 16	
42	Erin	481	137	3,495	3,112	60 00	
43	Essex	1,800	772	5,253	7,318	300 00	
44	Exeter	1,652	914	5,781	17,067	350 00	
45	Fenelon Falls	1,060	265	4,938	18,428	155 21	
46	Fergus	1	660	6,552	17,284	350 00	41 00
47	Fonthill	1,000	601	7,794	3,308	180 00	
48	Forest	1,502	710	2,691	17,378	480 00	
49	Fort Erie, Main		3,562	10,470	45,151	515 00	568 00
50	South Branch.					Included	in figures of
51	Fort Frances	5,713	3,216	7,571	32,158	600 00	420 00
52	Fort William, Main		10,891	43,880	192,996	1,816 68	5,705 75
53	Ward Four Branch					Included	in figures of
			ļ				

LIBRARIES
Legislative Grants Paid in 1938

No.		ificate of ianship	Municipal Appropriation	Municipal Appro- priation	Legislative Grant Paid in	Amount Expended on	Total Expenditure	Hours Library is Open
	Libra- rian	Assist- ants		per Capita	1938	Books		per Week
1			\$ c. 657 14	. 34	\$ c. 100 37	\$ c. 231 06	\$ c. 768 70	
2			130 00	.27	32 70	50 20	190 90	5
3			600 00	.25	133 00	290 72	847 13	12
4 5	for	1937	1,850 00	. 64	131 20	473 43	2,355 03	35
6			289 23	. 28	82 51	111 25	390 20	8
7			750 00	.26	125 92	291 33	934 60	111/2
8			1,000 00	.50	122 27	431 78	1,324 17	12
9			350 00	.46	101 10	145 34	689 07	25
10	Yes		4,061 50	.50	209 00	1,267 67	4,596 36	33½
11	· · · · · · ·	1007	850 00	.71	133 05	359 31	1,017 98	15
12 13	for for	1937 1937						
14	Yes	2	5,500 00	. 37	209 00	1,550 77	6,905 01	66
15			190 00	.31	60 52	73 95	294 33	6
16			100 00	. 15	58 28	126 04	278 85	101/2
17			1,276 50	. 51	136 46	455 67	1,531 55	271/2
18 19		;	2,400 00	.44	159 00	518 32	2,687 61	3534
20		4	12,367 00 360 00	.41	209 00 79 49	4,143 76	13,833 54	66
21			5,447 15	.55	159 00	225 63 1,024 66	540 57 5,703 41	10 42
22			600 00	.80	68 87	102 54	775 43	40
23			350 00	.42	88 92	113 60	439 63	7 1/2
24	Yes		1,350 00	.48	185 82	582 95	1,813 67	39
25			300 00	.20	65 52	71 78	310 17	5
26 27			500 00	.11	83 12	89 03	592 35	22
28	Yes		100 00 8,800 00	.14	14 00 209 00	35 78	102 79	8
29			650 00	.35	131 90	2,012 81 340 05	9,659 <b>73</b> 848 <b>7</b> 3	66½ 9
30			150 00	.33	37 34	77 22	175 72	58
31	Yes		800 00	.42	197 55	335 38	1,495 98	311/2
32			2,500 00	.44	141 50	364 58	2,544 33	45
33			2,900 00	.22	155 37	962 46	3,188 17	431/2
34 35			419 25	.25	120 02	244 03	1,111 25	12
36			322 00 800 00	. 58 . 52	51 92 131 87	36 55	398 51	26
37			550 00	.33	99 00	253 35 374 60	979 98 761 94	35 6
38			2,500 00	.50	145 64	377 88	2,832 75	25
39	• • • • • •		800 00	.43	121 80	401 91	1,060 35	12
40			1,025 00	.47	147 00	247 23	1,204 40	14
41			1,252 97	1.04	130 50	634 29	1,422 03	19
42			225 00	.46	29 60	21 52	253 70	6
43			700 00 950 00	.39	93 15 128 42	197 78 369 64	847.37 1,150 27	$\frac{10}{15\frac{1}{2}}$
45			200 00	.19	43 71			
46			1,371 06	.49	138 85	65 77 375 84	289 71 1,421 18	6½ 18
47			350 00	.35	74 82	90 64	424 48	7
48			800 00	.53	102 09	134 22	904 49	31
49 50	Main	Liberton	1,750 00	.29	251 77	908 46	2,213 45	32
51	Yes	Library	2,000 00	.35	144 00	520.00	9.411.00	9.4
52	Yes	2	13,745 78	.56	419 00	532 98 2,033 58	2,411 89 15,560 62	24 108
53	Main	Library		~	110 00	2,000 00	10,000 02	100

### FREE PUBLIC

							Salaries
		Population	Borrowers	Volumes	Circulation	Salary paid	paid Permanent
No.	Library	Population	Dorrowers	in Library	Circulation	Librarians	Assistants
						\$ c.	\$ c.
54	Galt	14,119	7,769	12,458	82,657	1,500 00	1,771 75
55	Gananoque	3,421	2,015	7,009	33,588	608 00	197 85
56	Georgetown	2,250	1,298	5,063	9,702	310 00	
57	Glencoe	750	506	3,919	12,284	250 00	
58	Goderich	4,300	2,081	6,929	27,752	840 00	
59	Gore Bay	800	225	1,304	2,498	104 00	
60	Grand Valley	590	143	3,250	4,816	300 00	
61	Gravenhurst	2,000	484	2,762	14,501	150 04 660 00	
62	Grimsby	1,981	1,320	5,020	32,504	1,400 00	4,329 26
63	Guelph	21,455	8,963	35,846	230,369		
64	Hagersville	1,345	331	3,417	8,526	206 50	125 25
65	Haileybury*	2,735	82	4,760	7,093	220 00	
66	Hamilton, Main	154,052	37,420	144,484	650,824	3,725 04	42,781 13
67	Kenilworth Branch					T. 1. 1	
68	Locke St. Branch					Included	in figures of
69	Mountain Branch)	2 200	1,452	5,855	22,231	500 00	
70	Hanover	3,200 1,265	820	6,409	19,429	480 00	
$\frac{71}{72}$	Harriston	680	201	2,923	7,788	110 00	
73	Hensall	2,847	640	6,275	15,782	650 00	
74	Hillsburg	500	207	2,251	5,150	96 00	
14	Timsburg			_,			
75	Ignace	354	59	848	1,414	50 00	
76	Ingersoll	5,100	3,200	10,068	49,363	840 00	
77	Kemptville	1,250	730	4,283	11,085	180 00	
78	Kenora	8,421	3,772	7,602	56,177	1,100 00	574 10
79	Kincardine	2,464	869	5,782 33,721	17,922 252,498	430 00 2,000 00	7,352 25
80	Kingston	24,331 2,500	15,426 413	7,162	7,086	402 08	10 00
S1 82	Kingsville	32,825	10,130	38,054	242,140	2,400 00	4,828 48
		1 200	335	2,412	8,184	150 00	
83	Lakefield	1,300 719	285	2,711	6,863	75 00	30 00
84	Lanark	119	200	2,711	0,000		nual Report
85 86	Leamington	5,000	1,414	9,190	26,557	720 00	100 00
87	Lindsay	7,294	1,795	17,177	66,756	720 00	612 00
88	Listowel	2,900	839	6,804	25,096	600 00	
89	Little Britain	253	82	3,605	3,981	20 09	10 06
90	Little Current	1,100	396	1,292	1,937	50 00	
91	London, Main	76,424	26,194	105,837	532,411	3,500 00	15,133 12
92	East Branch					Tuesta 3	:
93	South Branch					Included	in figures of
94 95	South East Branch) Lucknow	1,068	331	5,390	11,054	200 00	
0.0	24 - 1 - 1 - 1 -	800	353	3,833	7,995	125 00	
96	Markdale	1	917	5,102	22,211	570 58	
97 98	Meaford Merrickville		262	2,021	14,400	120 00	
99	Merritton		855	7,881	17,502	524 04	
100	Midland	1	3,800	17,961	72,589	999 96	720 00
101	Millbrook	1	118	3,311	11,635	125 00	
102	Milton		661	6,933	10,030	300.00	
103	Milverton	1,045	257	5,814	9,383	175 09	
104	Mimico		3,182	6,431	53,197	891 00	814 25
105	Mitchell		430	5,084	14,661	250 00	455.00
106	Mount Dennis		4,840	5,930	55,518	770 00	455 00
107	Mount Forest	1,815	1,015	7,760	16,337	500 00	
108	Newcastle		356	4,425	12,018	180 00	
109	New Hamburg		753	3,771	10,539	260 00	
110	New Liskeard	. 2,968	1,194	11,189	24,934	600 00	

### LIBRARIES

	Cort	ificate						1
		of		Municipal	Legislative	Amount		77
		ianship	Municipal	Appro-	Grant	Expended	Total	Hours Library
No.			Appropriation	priation	Paid in	on	Expenditure	is Open
		1		per Capita	1938	Books		per
	Libra-	Assist-						Week
	Han	ants						
			\$ c.		\$ c.	\$ c.	\$ c.	
54	Yes	1	7,059 50	.50	209 00			0.1
	1	1				2,032 25	7,836 68	61
55			2,000 00	.58	154 72	806 90	2,393 32	36
56			1,000 00	.44	133 97	539 33	1,318 88	131/2
57			500 00	.66	96 30	234 10	722 12	221/2
58	Yes		1,900 00	.44	157 05	518 02	2,431 49	36
59			250 00	.31	108 03	103 77	307 50	
60	1		700 00	1.18				5
					29 38	60 02	740 07	9
61			526 13	.26	99 00	314 72	652 57	8
62			1,275 55	.64	136 45	623 00	2,154 19	271/2
63			10,727 50	. 50	159 00	3,263 48	11,795 62	66
64		[	550 00	.40	134 81	217 37	797 75	8
65			120 00		20 00		331 85	1
66	Yes	12	68,648 00	.44	578 71	0.001.11		18½
67	1 65	12	03,048 00	.44	3/8 /1	9,221 11	74,828 92	150
68	Main	Library						
69	1							
70			900 00	.28	134 25	465 74	1,224 67	34
71			700 00	.55	121 95	224 75	1,116 50	321/2
72			195 20	.28	97 32	219 36	375 71	
73	Yes				į.			12
			1,804 86	.63	198 67	459 48	2,074 12	19
74			219 50	.43	40 75	76 40	270 28	8
75			66 26	.18	9 00	21 00	77 30	13
76	Yes		2,377 00	.46	209 00	923 03	2,936 45	351/2
			_,,,,,		200 00	020 00	2,000 10	3572
77			550 00	.44	135 87	212 07	717 90	
		*	1				717 39	14
78			3,600 00	. 43	159 00	996 30	4,022 46	34
79			900 00	.36	95 62	331 60	1,135 94	111/2
80	Yes	3	13,200 00	. 54	209 00	3,124 73	15,851 83	66
81			700 00	.28	76 24	111 30	787 48	20
82	Yes	3	16,431 00	.50	209 00	5,659 01	17,536 79	66
			10,101 00	, , ,	200 00	0,000 01	11,000 13	00
83			250 00	. 19	190 40	00 17	407.00	_
					128 49	99 17	405 02	5
84			200 00	.27	74 13	152 49	304 04	3
85	for	1937						
86			1,800 00	. 36	141 37	633 93	2,262 07	401/2
87			3,500 00	.48	159 00	1,556 76	4,207 70	36
88			1,100 00	.37	104 60	422 84	1,352 29	42
89			65 00	.25	63 87	51 11	269 09	
90			271 06	.24	51 20		144 49	78
91						58 59		4
		11	41,300 00	.54	609 00	11,790 03	45,260 72	102
92								
93	Main	Library						
94								
95			518 00	.48	114 52	181 72	519 76	15
1								
96			257 13	.32	85 20	199 82	667 20	71/2
97			1,500 00	. 54	110 00	494 02	1,778 96	25
98			375 00	.47	58 01			
99						154 03	429 29	631/2
1			1,473 65	, 55	68 00	163 11	1,589 12	14
100		1	3,122 49	.46	140 75	779 02	3,630 72	$23\frac{1}{2}$
101			250 00	.35	107 97	44 95	302 60	7
102			500 00	.27	36 71	156 21	598 09	71/2
103			752 89	.72	110 12	255 17	878 15	12
104			3,640 00	.52	154 00	980 59	4,096 58	321/2
105			600 00	.37				
106					127 30	283 52	836 60	10
			3,165 00	.32	128 64	663 80	3,386 16	30
107	• • • • • • •		982 00	. 54	119 23	178 32	1,360 14	25
108			047.00		.7			
			345 00	. 51	140 37	389 44	969 06	7
109			750 00	. 53	134 50	409 18	1,094 05	24
110			1,400 00	.47	141 10	799 82	2,123 05	33

### FREE PUBLIC

							Salasias
No.	Library	Population	Borrowers	Volumes in Library	Circulation	Salary paid Librarians	Salaries paid Permanent Assistants
111	N	3,790	1.100	6,177	29,118	\$ c. 300 00	8 c.
111 112	Newmarket	7,095	1,100	. ,	,		1 904 90
	New Toronto		1,722 60	11,261	69,406	1,300 00	1,284 38
113	Niagara	1,651 18,526	9,058	8,520 28,607	2,662 201,366	100 00 1,350 00	4,020 95
114 115	Niagara Falls, Main  Drummond Branch	18,020	9,058	28,007	201,800	Included	
116		15,207	7,607	16,188	97,166	1,300 00	2,077 40
	North Bay	1,091	336	5,447		240 00	1
117 118	Norwich	725	255	1.583	14,454 5,118	200 00	
119	Oakville	3,950	1,500	9,505	22,582	900 00	30 00
120	Oakwood	250	110	2,670	5,640	75 00	
121	Oil Springs	500	122	1,374	13,213	50 00	
122	Orangeville	2,764	650	9,302	21,402	720 00	
123	Orillia	8,704	3,030	11,092	75,718	800 00	980 10
124	Oshawa	24,844	10,929	16,584	136,957	1,266 00	3,121 75
125	Ottawa, Main	142,852	29,414	141,373	470,352	3,925 00	28,796 50
126	Boys and Girls Branch						
127	Edinburgh Branch						
128	Rideau Branch					Included	in figures of
129	South Branch						
130	West Branch						
131	Otterville	2,457	136	3,707	3,585	104 00	
132	Owen Sound	12,562	4,127	21,410	113,387	1,047 50	1,632 91
133	Paisley	773	156	3,253	3,983	264 00	
134	Palmerston	1,410	715	4,927	8,493	360 00	
135	Paris	4,325	1,580	14,840	41,665	800 00	40 00
136	Parkhill	1,000	587	3,679	5,027	200 00	
137	Parry Sound	3,569	859	7,321	26,097	480 00	
138	Pembroke	10,326	3,637	14,793	33,755	900 00	
139	Penetanguishene	4,000	320	8,314	20,013	400 00	
140	Perth	4,183	1,045	7,277	26,760	600 00	247 70
141	Peterborough	23,619	7,250	29,574	174,295	2,370 00	4,188 21
142	Petrolia	2,600	761	1,695	14,209	220 00	1,100 21
143	Picton	3,410	2,152	9,527	39,251	800 00	
144	Porcupine-Dome	4,738	925	3,697	19,569	391 95	31 25
145	Port Arthur	20,724	9,990	16,217	114,067	1,500 00	4,385 00
146	Port Carling	506	220	2,948	5,136	225 00	4,333 00
147	_	6,348	2,189	7,155	28,531	800 00	
148	Port Colborne	1,309	560	5,339	8,093	235 82	
149	Port Elgin					750 00	135 00
150	Port Hope	4,200	1,817	12,024	25,694	175 00	133 00
151	Port Perry	1,126 665	751 203	4,025	9,332	75 00	
152	Port Rowan		1	2,414	2,595		218 20
153	Prescott	$\frac{2,850}{6,415}$	1,312	12,572	25,801	428 00 730 00	440 00
100	Preston	0,410	2,058	10,168	62,833	750 00	440 00
154	Renfrew	5,332	2,725	14,556	52,535	699-96	120 00
155	Richmond Hill	1,241	623	5,005	6,794	200 00	
156	Rittenhouse	500	283	2,498	3,384		
157	St. Catharines	27,426	9,959	31,975	277,842	2,046 00	6,282 78
158	St. Edmunds	472	316	1,840	6,120	52 00	0,202 10
159	St. Jacob's	585	348	1,952	3,204	168 00	
160	St. Mary's	4,017	1,862	7,642	21,238	600 00	
161	St. Thomas	16,428	6,736			1,680 00	3,708 17
162	Saltfleet Twp		1,833	27,285	161,877 29,485	300 00	160 00
163	Sarnia	6,158		5,840 24.505		2,280 00	3,174 25
164	Sarnia	18,155	9,216	24,595	147,747		
		23,627	8,325	18,401	113,595	1,500 00	4,002 50
165	West Branch	1.049	200	1.401	10.004	Included	_
166	Schreiber	1,243	299	1,401	10,284	150 00	
167	Seaforth	1,800	369	3,707	12,806	420 00	
168	Shelburne	1,100	310	6,458	9,912	180 00	296 75
169	Simcoe	5,826	2,735	13,944	51,379	800 00	
170	Smith's Falls	7,775	2,659	12,718	37,968	900 00	142 00

### LIBRARIES

	Certi	ificate						
	Certi	of		Municipal	Legislative	Amount		Hours
		ianship	Municipal	Appro-	Grant	Expended	Total	Library
No.			Appropriation	priation	Paid in	on	Expenditure	is Open
	Libra-	Assist-		per Capita	1938	Books		per
	rian	ants						Week
			0 -					·
111			\$ c.	21	\$ c.	\$ c.	\$ c.	
	7700	1	1,200 00	.31	128 49	621 63	1,342 93	10
112	Yes	1	5,200 00	.73	204 00	1,777 17	5,705 98	33
113			200 00	.12	146 87		209 85	6
114	Yes	3	9,264 63	.50	394 92	3,086 23	12,028 75	961/2
115	Main	Library						
116	Yes	1	6,663 87	.43	209 00	1,520 75	7,060 49	33
117			700 00	.64	120 30	276 66	1,015 42	8
118			300 00	.41	53 87	58 41	427 36	26
110			0.100.00					1
119	Yes		2,100 00	. 53	130 20	761 84	1,792 27	281/2
120			59 11	.23	35 32	65 42	153 52	6
121			150 00	.30	41.87	150 09	238 39	61/2
122			2,000 00	.72	145 75	368 28	2,171 20	36
123	Yes	1	3,800 00	.43	204 00	1,163 05	4,685 42	35
124	Yes	2	8,400 00	.34	209 00	2,691 92	9,854 58	66
125		11	69,950 00	.48	859 76	13,749 76	73,768 11	278
126							-,	
127								
128	Main	Library						
129								
130								
131					55 10	82 50	292 44	1.5
132		2	7,200 00	.57	209 00			15
102			1,200 00	.01	209 00	3,153 77	8,112 83	48
133			300 00	.38	81 55	35 20	421 94	191/2
134			1,036 59	.73	67 10	107 01	1,758 26	
135			1,900 00	.43	154 02	676 86		38½
136			529 67	,52	104 82	180 76	2,290 77	37
137			1,300 00	.36			868 80	18
138	Yes		·		99 00	748 06	1,714 55	12
139			2,600 00	.25	204 55	802 39	2,721 50	26
			1,300 00	.32	99 00	222 45	1,367 90	10½
140			1,950 00	. 46	140 57	757 49	2,428 31	33
141	Yes	3	11,566 00	.49	209 00	2,294 09	12,606 27	72
142			685 00	.26	116 87	259 79	875 27	30
143	Yes		2,558 00	.75	209 00	816 42	2,732 32	371/2
144			1,300 00	. 27	109 20	441 98	1,197 53	101/2
145	Yes	1	13,400 00	.64	209 00	1,810 24	13,080 62	72
146			310 64	. 61	52 06	77 11	377 71	8
147			1,610 88	.25	140 28	669 75	1,829 56	29
148			832 00	.63	93 28	208 24	1,629 58	25
149	Yes	1	2,000 00	.47	209 00	680 93	2,339 57	44
150			700 00	.63	87 61	183 10	970 34	12
151			330 00	.49	85 99	87 73	452 47	6
152		1	1,425 00	.50	137 67	379 58	1,617 33	12
153			3,100 00	.48	159 00	846 93	3,242 55	36
							0,212 00	0.0
154			2,900 98	.54	152 70	1,180 91	3,673 93	36
155			458 15	.36	121 37	286 39	628 66	6
156			100 09	.20	87- 08	141 58	168 73	2
							-00.0	
157		4	14,853 60	. 54	209 00	3,751 62	15,187 51	63
158			130 00	. 27	38 07	92 95	207 92	4
159			300 00	.51	66 06	96 68	573 01	10
160			1,500 00	.37	154 00	421 77	1,598 54	291/2
161	Yes	2	10,483 20	. 64	209 00	3,611 38	11,846 20	66
162			1,200 00	.19	106 87	420 95	1,218 54	29
163	Yes	1	11,500 00	.63	209 00	3,988 54	11,962 80	66
164	Yes	2	10,200 00	.43	330 00	2,159 44	10,818 07	
165	Main	Library	10,200 00	. 10	550 00	2,109 44	10,018 07	$100\frac{1}{2}$
166	ariani	Library	300 00	24	21 40	100.70	455 50	7.1
167				.24	81 40	139 73	455 56	71
	* * * * * * * * *		951 46	.52	130 02	288 54	1,335 46	$32\frac{1}{2}$
168	37		700 00	.63	128 90	306 79	846 63	12
169	1		2,750 00	.47	209 00	1,215 11	5,686 43	$32\frac{1}{2}$
170		• • • • • • • • • • • • • • • • • • • •	3,500 00	.45	159 00	1,350 78	4,033 71	42

### FREE PUBLIC

No.	Library	Population	Borrowers	Volumes in Library	Circulation	Salary paid Librarians	Salaries paid Permanent Assistants
						\$ c.	\$ c.
171	South River	825	230	1,125	2,538	50 00	
172	Springfield	400	160	2,499	3,700	100 00	
173	Stayner	1,000	364	1,941	4,095	100 00	
174	Stirling	935	507	5,236	10,777	325 00	
175	Stouffville	1,118	603	6,519	10,824	350 00	
176	Stratford	17,384	5,662	29,374	156,390	1,000 00	1,983 80
177	Strathroy	2,947	877	6,900	14,679	600 00	
178	Streetsville	626	422	3,068	8,947	216 00	
179	Sudbury	26,315	1,489	6,777	40,385	1,200 00	1,506 50
180	Sundridge	600	229	1,883	1,898	40 00	
181	Sutton	806	492	4,304	5,329	130 00	
182	Swansea	5,000	860	5,377	18,025	490 00	
183	Tara	500	130	3,086	4,154	166 00	
184	Tavistock	1,100	330	6,499	8,872	234 00	
185	Teeswater	837	150	6,224	4,823	199 98	
186	Thamesville	814	235	3,700	6,539	170 00	
187	Thorold	5,000	796	7,325	18,730	600 00	360 00
188	Tilbury						nual Report
189	Tillsonburg	3,710	1,445	7,560	33,759	660 00	63 10
190	Timmins	23,632	7,625	16,858	99,602	805 00	2,074 46
191	Toronto, Main	645,462	176,834	590,035	3,659,176	5,860 93	221,999 16
192	Beaches Branch						
193	Boys and Girls Branch						
194 195	Danforth Branch Deer Park Branch						
196	Dovercourt Branch						
197	Downtown Branch						
198	Earlscourt Branch						
199	Eastern Branch						
200	Gerrard Branch					Included	in figures of
201	High Park Branch						
202	Northern Branch						
203	Queen-Lisgar Branch						
204	Riverdale Branch						
205	Runnymede Branch						
206	Western Branch						
207	Wychwood Branch						
208	Yorkville Branch	0.470	0.400	10.000	40.001	1 040 00	400.00
209	Trenton	6,478	3,438	12,232	43,391	1,049 96	490 00
210	Uxbridge	1,325	323	7,759	11,484	60 00	
211	Walkerton	2,424	774	9,683	24,459	600 00	
212	Wallaceburg	4,537	2,277	7,142	43,663	625 00	450 00
213	Waterford	1,238	376	2,304	9,476	260 00	
214	Waterloo	8,425	3,529	16,870	59,768	1,250 00	809 05
215	Watford	975	375	5,507	10,837	300 00	
216	Welland	10,540	2,800	13,259	64,062	1,200 00	670 00
217	Weston	5,020	3,804	10,837	57,859	1,080 00	600 00
218	Whitby	3,870	1,501	7,833	19,138	500 00	00.540.00
219	Windsor, Carnegie	102,839	26,833	85,773	514,720	2,300 00	22,546 90
220 221	Willistead Branch						
221	Jno. Richardson Br Hugh Beaton Branch.						
223	Sandwich Branch					Included	in figures of
224	Prince Edward Branch					- Included	
225	Victoria Ave. Branch.						
226	J. E. Benson Branch.						
227	Wingham	2,085	934	8,864	12,587	480 00	
228	Woodstock	11,382	3,673	22,713	91,984	960 00	1,394 55
	Totals	2.012.041	636 036	2 624 470	19 336 077	116 771 96	423 037 64
	Totals	2,012,041	638,036	2,624,479	12,336,077	116,771 96	423,937 64

<sup>\*</sup>Haileybury was changed from an Association Library to a Free Library on January 3rd, 1938. Figures in Table are for 1937 when it was an Association Library.

### **LIBRARIES**

		ificate		Municipal	Logislat						***
NT.		of ianship	Municipal Appropriation	Municipal Appro- priation	Legislat Gran Paid i	t	Amou		Total		Hours Library
No.	Libra-	Assist-	Appropriation	per Capital	1938		on Book:	S	Expendit	ure	is Open
	rian	ants									Week
			\$ c.	1.5	\$	C.	8	c.	\$	c.	
171 172			125 00 75 00	.15	1	37 62	Į.	87		78 38	2 6
173			300 00	.30		13	1	54	1	86	16
174			575 90	.61	115		218		1	86	17
175 176		1	560 00 8,807 50	.50	209	82 00	2,966	23	10,116	52 04	32 66
177			1,000 00	.34	159		255		1,176		32
178			300 00	.47	119		218		532		12
179			4,700 00 88 52	.17	159 34		867	19 21	5,453		36
180 181			365 00	.45	63		167		112 490		7
182			900 00	.18	73	05	304		903		10
183			275 00	.55	59	24	69	16	392	61	22
184			660 00	.60	97		183		918		20
185 186			627 75 $250 00$	.75	50 102		188 153		742 417		24 23
187			2,400 00	.48	140		358		2,647		271/2
188	for	1937					0=4				
189 190		1	1,700 00 6,000 00	.45	111 209		371 2,832		2,027 7,300		30½ 48
191	Yes	142	477,140 00	.73	2,425		71,687		504,651		714
192											
193 194											
195											
196						}					
197											
198 199	Main	Library									
200	2.242										
201											
202 203											
204											
205											
206											
207 208											
209			2,900 00	.44	154	00	803	75	3,429	29	25
210			500 00	.30	136	55	219	17	721	65	12
211			1,200 00	.49	136	45	399	13	1,966	01	291/2
212			2,368 50	. 52	136	\$	780		2,919	96	69
213	77		619 00	.50	65		149		1,110		13
214 215	Yes		4,273 00 600 00	.50	209 103	- 1	956 212		4,959 867		30
216			4,202 72	.39	155	- 1	1,160		5,702		30
217	Yes		2,515 00	.50	186		442		2,892		25
218 219	Yes	7	1,931 11 46,312 00	.49	132 991		1,139 11,852		2,416 50,467		32½ 243
220	165	'	40,512 00	.10	331	00	11,002	00	30,107	30	210
221											
222	Main	Library									
223 224	Main	Library									
225											
226						20				0.4	0514
227 228		1	1,000 00 5,520 00	.48	143 209		273 2,459		1,221 6,480		27½ 61
		234	1,102,491 49	······	28,292	34	239,255	56	1,215,931	82	

### ASSOCIATION PUBLIC LIBRARIES Showing Statistics, 1937, and Legislative Grants Paid in 1938

No.	Library	Popula- tion	Bor- rowers	Volumes in Library	Circula- tion	Hours	Legis- lative Grant	Amount Expended on Books	Total Expendi- ture
							\$ c.	\$ c.	\$ c.
1	Agincourt	500	150	4,797	6,030	4	103 05	175 86	393 49
2	Allenford		No ann	ual report	for 1937	71/	90 70	41 00	102 50
3	Alliston	1,400 500	130 30	1,989 3,713	4,634 1,160	7 1/2	28 79 18 44	41 86 32 69	193 59 112 01
4	Alton	650	125	1,595	5,533	11	44 56	7 63	283 02
5 6	Alvinston	400	97	1,394	1,343	2	26 56	39 40	58 81
7	Arkona	400	51	3,183	2,983	5	57 05	70 87	189 94
8	Athens	700	180	4,994	3,511	3	32 05	105 98	186 21
9	Atwood	600	79	1,577	1,297	84	42 34	22 00	104 13
10	Auburn	150	50	2,087	1,159	5	40 00	10 00	199 28
11	Badjeros	300	31	912	423	33	8 92	10 86	32 16
12	Bala	450	109	1,651	814	10	25 98	70 13	174 71
13	Bancroft	914	227	4,070	11,165	8 78	124 00 33 84	315 15 50 33	525 05 139 38
14	Bayfield	400 100	112 30	1,797	2,330 330	69	35 84	62 34	114 89
15 16	Baysville	390	58	1,922	2,207	2	31 07	49 30	82 51
17	Beachville	500	32	2,871	1,486	4	17 04	27 03	106 93
18	Beechwood		32	2,643	1,147	54	33 70	50 00	82 93
19	Belmore			ual report	for 1937				
20	Belwood	200	32	3,631	1,225	14	26 13	35 50	132 36
21	Birch Cliff	1,893	119	3,065	4,951 9,653	$\frac{3\frac{1}{2}}{17\frac{1}{2}}$	89 51 93 33	77 62 224 24	161 03 885 26
22	Blenheim	1,650 2,700	185 265	7,688 2,721	6,058	51/2	109 75	190 93	318 90
24	Bloomfield	600	184	3,385	6,794	91/2	85 83	188 17	423 07
25	Blyth								
26	Bobcaygeon	985	166	4,963	4,544	10	86 28	103 33	301 52
27	Bolton	582	38	3,687	2,210	21/2	10 00	2 00	52 25
28	Bond Head	200	31	612	747	19	17 79 151 50	37 05 344 00	73 42 958 73
29	Bowmanville Bradford	1,000	347 79	8,623 2,921	18,990 5,134	8	26 60	52 86	116 34
30	Brigden	500	113	2,422	1,364	6	28 45	29 06	100 63
32	Bronte	500	56	1,626	1,981	1	29 79	85 31	103 05
33	Brooklin	500	55	2,973	2,737	10	38 08	65 49	175 44
34	Brougham	200	46	1,559	1,850	72	26 05	42 74	85 54
35	Brown's Corners	350	38	1,251	1,615	2	18 30 39 95	59 84 53 69	244 06 168 93
36	Brownsville	250 300	112 43	1,946 1,933	3,990 874	19	10 54	10 50	62 90
37 38	Brucefield	150	45	2,039	1,654	6	15 00	15 00	137 97
39	Burlington	3,500	321	5,884	21,927	8	118 15	346 65	909 43
40	Byron		93	567	2,107	21/2	25 83	37 80	75 47
41	Caledon	300	38	3,483	1,043	2	9 00	31 61	78 16
42	Caledonia		75	1,286	1,080	4	35 26	84 27	122 11
43	Callander		59	1,535	2,698	6	15 85	64 35	88 02 53 94
44 45	Cambray		47 50	3,382 1,932	2,256 1,388	7 2	10 00 46 44	31 97	73 69
46	Canfield	1	32	877	4,616	78	17 12	16 25	59 84
47	Cannington	1	54	4,234	4,761	15	34 17	34 40	181 82
48	Cargill		30	3,704	1,018	4	10 00		79 60
49	Carlisle		30	1,230	1,448	78	26 66	26 49	75 45
50	Castleton		34	562	1,127	2	10 65	18 00	46 98 241 90
51 52	Chapleau	1	142 51	2,778 1,671	6,712 3,284	66	40 35 10 00	58 37	67 09
52 53	Chatsworth		65	3,170	2,046	20	18 73	39 78	109 23
54	Chesterville		50	1,151	1,304	2	17 50	5 00	118 25
55	Claremont	1	59	3,745	1,375	12	51 92	74 58	153 15
56	Clarksburg		68	4,381	4,002	211/2	73 12	153 23	387 23
57	Clarkson	t .		ual report					
58 59	Claude			ual report					
0.0	Cobatt		1,0 4111	Lar report	100				

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No.	Library	Popula-		Volumes	Circula-	Hours	Legis- lative	Amount Expended	Total Expendi-
		tion	rowers	Library	tion		Grant	on Books	ture
			-	-			\$ c.		
60	Cobourg	5,360	264	6,578	17,236	16	\$ c. 67 63	\$ c. 251 11	\$ c. 1,037 09
61	Cochrane		99	7,626	7,277	61/2	30 00	59 52	206 75
62	Colborne	1,000	170	2,394	10,161	12	57 68	71 48	252 78
63	Coldstream	100	31	2,539	897	84	53 16	35 07	132 75
64	Coldwater	650	86	2,721	3,710	3	40 00	4 16	67 26
65	Comber	600	57	4,486	3,638	81/2	81 95	119 11	293 58
66	Coniston	1,600	87	1,830	1,028	4	43 92	76 61	88 86
67	Cookstown	550	32	2,271	1,835	4	10 00	85	34 00
68	Copleston			ual report	for 1937				
69	Copper Cliff	3,900	1,583	7,619	12,413	14	104 65	185 03	757 37
70	Cottam	300	98	2,624	3,339	8	40 30	67 24	172 78
71 72	Courtright	350	260	984	5,359	66	39 71	40 93	133 37
12	Creemore	631	50	1,374	3,529	7	11 92	5 65	120 84
73	Delta	400	59	1,975	1,495	16	13 55	21 86	94 42
74	Depot Harbour	350	86	3,322	2,656	1	25 98	84 35	107 60
75	Dorchester	500	102	2,764	3,553	21	34 90	57 08	180 92
76	Drumbo	500	37	5,232	1,046	15	15 00	3 50	131 95
77	Dundalk	666	78	2,625	2,272	631/2	25 11	23 93	133 93
78	Dungannon	500	63	2,775	5,322	54	59 05	108 37	169 34
79	Dunville	4,040	268	8,204	4,254	18½	97 52	237 84	695 98
80	Dutton	800	206	5,231	11,163	141/2	77 18	188 39	565 15
0.1	The steep Discours								
81 82	Eagle River			ual report					
83				ual report			05 00		
84	Elmwood	250	119	e-organize 2,656	2,326	6	25 00		
85	Embro	449	48	5,181	8,288	634	34 52 21 54	53 68	145 64
86	Emo	1,186	51	1,875	4,425	78	35 29	34 81 4 84	149 93 36 13
87	Englehart	1,200	35	1,040	1,859	21/2	20 04	58 63	68 19
88	Ennotville	600	59	4,560	562	2	29 71	39 63	122 67
89	Espanola	2,000	190	4,534	3,427	2	17 83	22 82	59 09
90	Ethel			ual report		-	- 00		00 00
Ì									
91	Fenwick	2,759	73	2,722	2,444	71/2	18 58	73 12	96 60
92	Flesherton			ual report				1	
93	Fordwich	240	60	949	3,331	10	16 63	50 23	128 59
94	Forester's Falls	800	32	2,776	1,182	64	10 00	20 00	76 80
95 96	Frankford	800	190	3,212	6,083	8	115 42	162 60	388 38
90	Fulton	800	30	579	570	72	21 28	44 54	53 54
97	Glamis	100	32	985	1,153	8	10 00		27 79
98	Glanworth	500	79	2,411	2,935	10	46 39	59 72	37 72 168 15
99	Glen Allan	700	40	1,233	1,452	9	10 00	12 30	33 72
100	Glen Morris	200	30	3,272	877	72	29 53	43 43	167 95
101	Gore's Landing	200	78	2,392	475	11/2	63 07	98 14	124 95
102	Gorrie	300	41	1,706	1,968	8	10 00		36 32
103	Grafton	200	72	2,654	2,663	7	45 23	122 18	186 33
104	Granton	450	56	1,504	3,440	72	23 24	61 89	152 83
10=	Halibuntan		NT-	1					
105	Haliburton	• • • • • • • • • • • • • • • • • • • •		ual report					
106	Harrietsville	90	50	3,059	1,560	60	32 94	51 26	110 89
108		100	35 71	2,680	1,328	54	30 57	45 68	87 24
109	Harrowsmith	967 150	31	2,678 1,069	2,920	9 4	55 94	75 63	356 97
110	Havelock	1,300	60	400	1,492 931	4	10 00	40.60	77 15
111	Hawkesbury			e-organize		*	10 00	40 60	63 85
112	Hepworth	340	29	825	561	111/2	15 00		66 95
113	Hickson	250	180	1,491	2,085	6	47 95	101 06	174 06
114	Highgate	350	80	2,577	3,708	21	51 79	88 77	259 21
115	Highland Creek	935	38	2,065	857	11/2	10 00		33 50
116	Hillsdale		No ann	ual report	for 1937				
117	Hilton Beach	390	89	2,378	2,315	6	16 70	20 46	151 16
	1		- 1			1			

				Volumes		1 1	Legis-	Amount	Total
No.	Library	Popula-	Bor-	in	Circula-	Hours	lative	Expended	Expendi-
		tion	rowers	Library	tion		Grant	on Books	ture
-							\$ c.	\$ c.	8 c.
118	Holstein	300	37	2,457	1,635	84	10 00		53 20
			47		773	84	17 20	14 30	40 62
119	Honeywood	100		1,381		04	17 20	14 50	40 62
120	Hornepayne			ual report				70.40	00.05
121	Humber Bay	2,250	141	2,676	3,034	2	32 52	59 49	82 67
122	Huntsville	2,737	186	4,338	7,144	12	41 38	88 40	515 36
123	Hyde Park	200	37	170	775	5	10 00	7 60	38 72
124	Hyndford	400	49	2,184	2,034	18	47 00	30 61	107 73
125	Ilderton	500	74	1,756	3,301	14	37 27	46 01	144 03
126	Inglewood		No ann	ual report	for 1937				
127	Inkerman		No ann	ual report	for 1937				
128	Inwood	203	105	1,728	3,424	11	15 00		138 79
129	Iroquois	900	52	2,994	1,942	6	30 08	44 45	158 19
130	Iroquois Falls	1,302	170	5,832	8,356	71/2	103 00	389 72	888 50
131	Islington	-,		ual report	for 1937	1			
132	Ivanhoe	550	33	843	1,320	72	17 83	23 32	60 24
102	TVAIIIOC	000	00	010	1,020		11 00	20 02	00 21
133	Jarvis	550	96	4,073	2,631	81/2	38 04	89 45	200 55
100	Jai vis	330	90	4,075	2,001	072	90 04	09 40	200 00
124	T7		NT		f 1027				
134	Kars	004		ual report		2	10 00	20.42	35 41
135	Kearney	294	52	982	4,150			20 42	
136	Kemble	280	62	2,003	1,443	3	15 83	32 20	111 36
137	Kimberley	375	90	888	1,199	2	5 00		12 31
138	Kinsale	100	53	1,064	970	3	48 16	67 72	88 52
139	Kintore	2,104	63	2,828	3,529	74	76 19	101 82	192 42
140	Kirkfield	200	66	1,928	2,691	19	45 40	89 85	104 88
141	Kirkland Lake	20,000	1,046	4,627	39,092	48	99 00	703 67	2,463 63
142	Kirkton	180	111	1,775	3,435	27	32 45	38 28	198 08
143	Komoka	200	33	2,191	1,274	72	23 70	49 70	159 79
144	Lakeside	2,000	115	1,767	4,978	84	52 48	79 97	123 61
145	Lambeth	500	65	2,236	2,257	8	26 24	14 49	147 23
146	Lefroy	2,950	37	1,956	1,303	4	14 20	25 06	45 41
147	Linwood	500	53	844	1,604	51/2	22 57	35 48	82 61
148	Londesborough	150	33	508	1,240	76	16 38	32 66	61 26
149	Lorne Park	900	39	2,068	1,092	2	20 24	32 43	55 55
150	Lucan	615	83	2,164	2,489	81/2	33 37	02 40	278 26
150	Lucan	010	00	2,104	2,400	372	00 01		210 20
151	Madoc	1,000	189	4,619	9,078	81/2	37 99	74 82	324 99
152		400	47	2,503	5,274	4	56 57	67 81	192 51
153	Mandaumin			,		19	56 15	93 47	262 17
1	Mauilla	200	112	6,679	2,138				
154	Manotick	1,000	95	2,128	1,750	41/2	12 26	51 00	89 75
155	Markham			ual report	for 1937			000 47	****
156	Marmora	1,000	438	3,577	10,368	12	110 50	226 45	592 62
157	Martintown	600	38	1,676	816	7	10 00	9 18	36 55
158	Maxville	758	38	1,432	1,263	4	18 93	18 80	73 65
159	Maxwell			ual report	for 1937				
160	Melbourne	200	55	1,380	1,681	8	15 87	19 28	111 42
161	Mildmay	764	100	1,566	399	5			29 90
162	Millbank	500	59	1,787	1,035	6	34 00		13 11
163	Millgrove	100	20	1,377	468	1	15 00		15 92
164	Minden	300	38	2,551	1,155	2	14 09	5 35	65 95
165	Monkton	400	65	1,815	1,612	6	10 00	20 00	85 75
166	Mono Road	120	40	2,251	1,440	4	10 00		89 60
167	Moorefield	250	32	1,085	973	69	11 63	28 50	59 63
168	Morrisburg	1,400	145	4,529	3,993	8	74 20	124 78	438 80
169	Morriston	200	48	2,210	1,086	54	29 42	57 40	115 30
170	Mount Albert	600	70	2,193	2,902	101/2	36 82	53 66	208 26
171	Mount Brydges	550	36	1,174	963	6	10 00	7 00	19 00
172	Mount Elgin	130	50	1,282	1,328	4	19 01	22 22	110 82
	Mount Hope					'1	13 01	22 22	110 02
173	Mount Hope		No ann	ual report	for 1937				
174	Montinolo		NTo an	uo1 =====	for 1097				
174	Nanticoke		No ann 282	ual report		28	127 27	478 90	1,524 33
175	rapance	3,416	202	8,108	20,758	20	137 37	210 00	1,021 00

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No.	Library	Popula-	Bor-	Volumes in	Circula-	Hours	Legis- lative	Amount Expended	Total Expendi-
210.	4.0.44.9	tion	rowers	Library	tion	1.0013	Grant	on Books	ture
							\$ c.	\$ c.	\$ c.
176	Napier	150	31	884	963	83	15 28	25 88	44 87
177	Newburg	420	66	3,108	4,615	4	10 00	10 00	116 42
178	Newbury	260	54	1,917	1,537	6	18 75	45 18	85 43
179	New Dundee	350	77	1,683	4,016	64	42 16	24 50	101 80
180	Newington	274	37	1,994	1,527	2	20 35	25 24	87 64
181	New Lowell	200	40	1,077	1,068	4	17 35	19 93	60 39
182	Norland	447	170	3,035	2,445	82	10 00	4 00	38 50
183	North Gower	350	52	1,588	3,023	24	31 40.	40 57	106 00
184	Odessa	700	30	1,648	1,480	73	25 75		149 26
185	Omemee	600	60	1,868	2,738	6	51 89	61 90	215 78
186	Orono	500	72	2,520	7,991	8	21 83	69 12	97 86
187	Osgoode	800	100	1,351	5,077	2	20 52	71 63	75 82
100	Dalanna	100	20	647	1 100	70	19 10	01.00	01.00
188	Palermo	100	32	647	1,192	72	13 12	21 90	21 90
189 190	Park Head	150 600	32	1,111	834	75	13 00	25 60	69 07
191	Pickering		114 30	2,703	2,088 630	11 4	58 72 10 00	83 15	227 21 45 58
191	Plattsville	405	110	2,071 1,120	2,212	21	15 00		129 65
193	Plympton	400	128	2,193	3,795	3	31 51	33 02	105 23
194	Point Edward	1,200	48	4,569	2,463	4	10 00		35 85
195	Port Credit	1,500	392	5,813	9,157	51/2	31 73	119 33	252 19
196	Port Dalhousie			ed in 1938	0,101	0/2	01 10	110 00	202 10
197	Port Dover	1,600	234	4,045	9,540	30	80 08	178 00	504 06
198	Port Lambton	1,000	42	635	1,908	72	20 84	3 49	85 91
199	Port Stanley	750	163	2,851	4,371	161/2	28 72	25 98	304 63
200	Powassan	700	125	2,428	2,560	8	23 91	36 64	129 74
201	Princeton	350	48	2,652	4,762	81/2	48 89	59 60	164 06
						1			
202	Queensville	300	33	2,901	1,360	5	10 00	9 95	70 84
-									
203	Rebecca	200	47	908	2,270	84	44 30	105 93	145 35
204	Richard's Landing		No ann	ual report	for 1937				
205	Ridgetown	1,987	260	5,284	12,113	13	126 64	304 74	643 45
206	Ridgeway	900	213	3,766	4,100	7	62 78	103 55	331 00
207	Ripley			ual report	for 1937				
208	Rodney	786	201	2,509	6,119	8	37 14	57 11	166 85
209	Romney	1,456	88	5,208	3,127	78	44 50	73 85	114 59
210	Rossdale	150	48	1,680	3,975	42	28 38	63 60	194 59
911	St Casses	000	0.4	7 - 24	0.701	6-1/	40.01	07.70	999 99
211	St. George	600	94	7,534	2,521	65½	43 31	67 78	220 23
212 213	St. Helens	200	59	2,734	816	31/2	20 69	29 30	62 95 123 87
213	Scarborough	400	45 37	7,144	2,149	2B.M	57 41 17 12	105 95 53 38	
214	Schomberg	300 400	90	726	1,925 1,731	2	21 68	23 62	102 55 149 58
216	Shedden	400	35	2,590 2,960	2,098	18 61/2	15 54	10 80	169 09
217	Sheguiandah	200	37	704	1,135	72	18 13	25 97	55 64
218	Shetland	300	43	1,827	3,309	13	12 75	12 24	100 00
219	Singhampton	401	30	461	274	84	5 00	10 50	24 08
220	Smithville	600	67	2,191	2,333	10	16 77	8 23	112 28
221	Solina	300	30	1,131	439	6	13 62	21 86	24 92
222	Sombra	400	38	1,396	872	63	30 28	21 07	118 80
223	Southampton	1,935	248	7,174	4,258	6	65 60	204 55	293 51
224	Southcote			ual report	for 1937				
225	South Mountain	250	48	974	3,091	78	10 00	10 00	58 70
226	South Woodslee	250	34	1,382	1,792	4	34 85	83 33	174 41
227	Sparta	250	49	1,411	2,287	78	22 29	18 40	103 32
228	Sprucedale	275	36	1,053	1,422	2	18 29	30 39	57 15
229	Stevensville	400	50	1,643	531	4	15 00		120 01
230	Strathcona	375	58	2,335	925	2	31 04	38 58	475 08

No.	Library	Popula- tion	Bor- rowers	Volumes in Library	Circula- tion	Hours	Legis- lative Grant	Amount Expended on Books	Total Expendi- ture
						0.14	\$ c.	\$ c.	\$ c.
231 232	Stratton	123 438	30 77	1,056 2,303	1,300 2,630	2½ 3½	45 52 17 50	11 05 93 81	78 80 156 82
232	Sunderland	650	69	3,062	6,354	12	50 69	42 70	225 34
200	Oy demiam	000		0,002	0,001	1.2	00 00	12 10	
234	Thamesford	500	87	1,489	6,535	6	67 46	111 28	265 83
235	Thedford	600	80	2,125	6,808	16	66 21	98 18	201 39
236	Thessalon	1,624	124	631	4,386	6	10 00	489 44	605 94 466 63
237 238	Thornbury	782 300	131 37	2,914 2,279	5,691 3.060	16 12½	44 80 15 00	114 68 23 80	138 92
239	Thorndale	700	75	1,036	2,601	3	51 71	73 42	99 76
240	Thornton			ed in 1938	2,001		01 11		
241	Tiverton	250	66	2,297	3,945	4	15 94	66 95	123 73
242	Tottenham	539	84	3,012	1,850	25	25 24	41 25	167 95
243	Tweed	1,350	95	4,029	4,301	51/2	37 91	95 12	356 82
244	Underwood	314	45	2,185	2,530	70	26 83	53 28	84 88
245	Unionville	600	77	2,707	4,294	2	60 26	121 23	352 23
246	Vankleek Hill	1,600	67	1,297	1,799	9	53 70	83 24	172 56
247	Varna	500	36	1,412	1,150	14	44 37 15 00	87 72 40 16	139 17 98 85
248 249	Victoria		34	3,577 900	664 550	14	15 00	40 16	28 50
250	Victoria	250	84	532	1,288	78	61 25	76 71	119 07
					,			1	
251	Walton		{	ual report					
252 253	Wardsville	243	30	2,914	3,411	6 8	32 79 15 17	45 99 11 12	127 81 105 92
254	Warkworth	500 940	78 56	2,644 1,875	4,490 2,363	6	32 84	76 63	155 46
255	Wellburn	250	48	579	694	2	18 96	25 23	48 81
256	Wellesley	500	98	2,866	3,017	31/2	31 59	36 85	160 16
257	Wellington	900	211	3,319	12,406	111/2	79 28	203 16	640 87
258	West Lorne	800	60	2,154	2,843	9	19 35	21 00	170 67
259 260	White Lake	90	30	968	469	5 5	5 00 25 17	4 85	3 70 50 01
261	Whitevale	300 1,743	55 150	1,935 4,317	1,790 3,507	301/2	66 02	76 67	384 61
262	Williamstown	1,740		ual report	,	00/2	00 02		001 01
263	Winchester	1,063	50	2,782	3,118	9	19 12	57 65	164 52
264	Woodbridge	800	60	3,722	2,826	1	25 44	40 00	155 10
265	Woodville	425	116	2,703	1,497	15	56 89	73 73	255 94
266 267	Wroxeter	400	103	6,580 3,284	2,753 10,104	6 58	34 41 119 00	48 83 192 43	164 43 359 23
207	Wyoming	528	300	0,234	10,104	33	119 00	132 43	303 20
268	Zephyr	625	44	2,084	1,001	21/2	13 84	32 78	77 33
269	Zurich		No ann	ual report	for 1937				
270	Elain County			407	9.570		220 00	346 47	416 45
210	Elgin County			407	2,570		220 00	340 41	410 40
271	Lambton County			4,265	35,255		550 00	892 53	1,332 63
272	Middleson Country			1.720	12 626		400 00	821 99	963 31
212	Middlesex County			1,730	13,636		300 00	021 99	000 01
273	Oxford County			190	1,378		88 89	175 15	208 83
274	Howick Township			637	637		34 30	101 51	107 10
	Total	190,044	22,595	617,566	857,565		9,486 96	17,771 24	47,951 76
	l	1	1	l		1		1	1

### APPENDIX L

### REPORT OF THE PROVINCIAL SUPERVISOR OF MUSIC

There has been a gratifying increase in the number of schools receiving regular music instruction. Almost all elementary schools make some provision for the subject, the majority under skilled supervision of qualified teachers. The secondary schools are generally including Music as a part of the new Programme of Studies, the number qualifying for special grants being as follows:-1935, 17; 1936, 24; 1937, 46; 1938, 141.

The public, the teachers, and the students are being gradually acquainted with the attitude of the Department concerning music instruction. During the past two years I have had the opportunity of addressing the following groups:-Trustee Boards—1937, 15; 1938, 2; Service Clubs—1937, 9; 1938, 12; Teachers' Meetings—1937, 16; 1938, 14; School Assemblies—1937, 15; 1938, 18.

Music Festivals.—Music Festivals, both competitive and non-competitive, continue to spread throughout the Province, and to stimulate interest. More than 50 Festivals were held in the spring of 1938. I attended the following:— 1937, 24: 1938, 28.

Radio.—A series of 10 radio programmes was sponsored during March and April by the Department of Education with the co-operation of the Canadian Broadcasting Corporation. Choral numbers by children from the elementary and secondary schools were broadcast from Toronto, Hamilton, Ottawa, Windsor. Kitchener, London, North Bay, Port Arthur, and Fort William.

On the Wednesday evening following Easter, in connection with the Ontario Educational Association, a concert was given in Massey Hall, Toronto, featuring the Provincial High School Orchestra, directed by I. W. Lomas, Hamilton; the Provincial High School Chorus, directed by G. R. Fenwick, Toronto; and the Provincial Public School Chorus, directed by W. B. Collier, Toronto. Approximately five hundred children from all parts of Ontario formed the various groups.

Teacher Training.—The summer sessions in Music at Toronto and London continued to grow in attendance and in the breadth of the courses offered. Comparative attendance figures are as follows:—

> 1935—Toronto, 264; London, 145. Total, 409. 1936—Toronto, 362; London, 191. Total, 553. 1937—Toronto, 481; London, 238. Total, 719.

1938—Toronto, 614; London, 356. Total, 970.

The following pamphlets have recently been prepared and distributed to the schools—Music in Rural Schools; An Introductory Course in Music Appreciation through Listening, for Elementary Schools; Operettas, Cantatas and Music Plays.

Statistics.—The following statistical information concerns the school year ending June 30th, 1938, and includes only those schools earning special grants for the teaching of Music. Many others provide a music course but are not at present qualifying for the grant.

In some parts of the Province redistribution of Inspectorates during the past few years makes it difficult to show the development of Music in those areas.

City Inspectorates	Total No.		Rooms w	ith Music	
City Inspectorates	of Rooms	1934-35	1935-36	1936-37	1937-38
Brantford. Chatham. Hamilton Kitchener. London. Ottawa.	102 56 543 104 241 285	54 546 107 210 286	8 55 546 107 242 286	9 56 546 107 245 286	102 56 543 104 241 285
Peterborough. St. Catharines. Sarnia. Toronto Welland	76 90 65 1,991 51	76 91 21 2,053 12	76 $91$ $10$ $2,053$ $12$	76 91 2,053	76 90 28 1,991
Windsor	312	315	315	315	312
Totals	3,916	3,771	3,801	3,784	3,828
Percentage of rooms with Music		94.5	95	95	97.7
County Inspectorates Brant and Norfolk (in part). Bruce East. Bruce West. Carleton. Dufferin and Peel. Dundas and Grenville Elgin F. and St. Thomas. Essex (No. 1). Essex (No. 2). Frontenac North. Frontenac South (No. 1). Frontenac South (No. 2) and Kingston. Glengarry. Grey East. Grey North and Owen Sound. Grey South. Haldimand. Halton. Hastings Centre. Hastings Centre. Hastings South and Belleville. Huron East. Huron West. Kent (No. 1). Kent (No. 2). Lambton (No. 1)	113 98 112 179 111 101 137 125 126 80 91 104 96 112 124 117 104 124 117 101 123 133 111 108	38 15 8 40 68 4 25 37 23 	47 26 31 65 98 4 27 20 38 	58 55 71 50 83 47 24 47 16 35 80 19 67 93 52 35 95 27 86 44 47 59 95 80 39	61 80 90 57 87 11 52 48 89 32 49 89 41 81 109 51 81 100 29 86 76 48 108 116 98 62
Lambton (No. 2) Lanark West Leeds and Grenville (No. 1) Leeds and Grenville (No. 2) Leeds and Grenville (No. 3) Lennox and Hastings South Lincoln Middlesex East Middlesex West Norfolk Northumberland and Durham (No. 1) Northumberland and Durham (No. 2) Northumberland and Durham (No. 3) Ontario North	109 175 92 105 112 101 112 119 123 124 103 99 113 102	20 43 45 7 7 7 1 54 55 14 72 93 42 50 29	26 45 38 7 3 1 55 66 30 67 97 61 71 27	34 71 49 20 8 18 84 78 41 77 98 85 77 50	71 85 51 54 17 32 91 105 55 89 102 91 101 42

	Total No.		Rooms w	ith Music	
County Inspectorates	of Rooms	1934-35	1935-36	1936-37	1937-38
Ontario South Oxford North and Woodstock Oxford South Peel Perth North Perth South and Stratford Peterborough East Peterborough West Prescott and Russell (No. 1) Prescott and Russell (No. 2)	100 111 115 143 110 119 100 96 66 1	56 46 56 114 49 90 46 22	56 49 74 100 73 93 66 26	62 90 88 102 90 91 64 55	50 105 109 138 95 99 77 65 28
Prescott and Russell (No. 3) Prescott and Russell (No. 4) Prince Edward Renfrew North Renfrew South Simcoe Centre. Simcoe East	18 9 95 116 115 114 123 24	17 17 12 63	29 29 12 66	26 18 23 71 36	30 30 23 85 50
Simcoe North Simcoe South Simcoe West Stormont	115 111 114	15 9	23 11	64 22 33	72 29 38
Victoria West. Waterloo (No. 1). Waterloo (No. 2) and Galt. Welland East and Niagara Falls. Welland South. Welland, Lincoln, Haldimand.	83 113 117 125 134 110	45 84 46 111 9 23	64 54 76 110 13 28	65 54 84 97 23 49	67 67 96 106 88 84
Wellington North. Wellington South and Guelph. Wentworth. York (No. 1). York (No. 2). York (No. 3).	112 124 121 118 154 156	21 80 21 31 63 44	35 80 28 35 76 122	71 84 38 41 120 122	65 99 82 53 133 129
York (No. 4) York (No. 5) York (No. 6)	163 189 182	116 44 64	105 87 77	132 87 86	163 176 96
Totals	8,495	2,803	3,371	4,295	5,491
Percentage of rooms with Music		33	40	51.5	64.7
District Inspectorates  Division I	99 105 144 141 131 118 126	11 29 19 25	12 3 108 27 28	26 37 95 32 57 29 6	44 35 96 76 71 35 46
" VIII (No. 2)	18 86 150 151 93 115	40 62 50	8 44 71 46	11 82 55 46	54 85 91 23 44
" XII (No. 2) " XII (No. 3). " XIII " XIV. " XV. " XVI.	29 96 91 93 89	16	16	12 3 10 16	21 18 28 16
Totals	1,877	269	373	517	783
Percentage of rooms with Music		15	21	28.6	41.7

Community Calcal Improcessors	Total No.		Rooms wi	ith Music	
Separate School Inspectorates	of Rooms	1934-35	1935-36	1936-37	1937-38
Division I	128 125 121 97	26 16	43 7	24 7 27	70
'' VI	146 173 110			27 24	18 38
" VII " VIII " IX " X " X " XI " XII " XIII and XIV " XV " XVI " XVI " XVIII " XVIII " XVIII " XVIII " XXIII	110 103 139 155 155 133 358 131 134 152 146 120 101	2 81 4 27 320 58	9 87 135 31 324 52 5	29 34 101 122 36 333 62 9 47	35 62 104 109 28 28 64 22 49
Totals	2,956	534	693	882	627
Percentage of rooms with Music		18	24	30	21
Grand Totals	17,244	7,377	8,238	9,478	10,729
Percentage of rooms with Music		43.2	48.2	55.5	62.2

Respectfully submitted,

G. R. Fenwick,
Provincial Supervisor of Music.

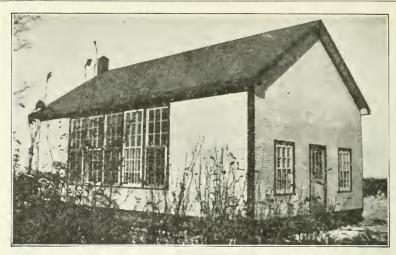
Toronto, January 12th, 1939.

### PART II

### **Statistics**

of

### The Provincially-Controlled Schools of Ontario



ONTARIO'S MOST NORTHERLY SCHOOL-MOOSONEE

Moosonee, situated at the terminus of the Temiskaming and Northern Ontario Railway on James Bay, is one of the early Hudson's Bay Company posts. The present school was built in 1934, and is well equipped. The attendance is about 15. Except in the summer months, there is a train in and out but once a month. Moosonee has telephone connection with southern points, and the radio supplies the daily news and amusement. In case of necessity a plane can be called from Cochrane in a very short time.



THE SCHOOL CAR

Six of these "Schools on Wheels" carry education and social betterment to scores of small communities seattered along the railway lines in Northern Ontario. Each car has a definite route of about 175 miles, which must be covered in at least six weeks. The length of time at each stop varies from four days to a week, depending upon the number of pupils, 90 per cent. of whom are non-English speaking. The first two days of a stop are usually spent discussing the work previously assigned. The rest of the time is well occupied with the teaching of the most difficult parts of the new work to be left as homework. Each pupil receives a detailed outline of the work he is expected to do, with a definite time-table to be followed until the car returns. Any difficulties which arise during the interval the Car is away are solved by writing the teacher, who endeavours to explain the problem by mail. Supplementary Reading is left with each pupil. The Department supplies all text books, scribblers, pens, and paper free. The School Car Auxiliary of Toronto helps the needy families. Many parents attend night classes, where not only English, spelling, writing, and arithmetic are taught them, but troublesome occurrences of daily life are discussed.

Pictures Courtesy "Canadian School Journal".

### TERMINOLOGY

- Assessment—The valuation placed upon property for tax levy purposes. The County Council generally makes an equalization annually of local assessment figures, and this equalized figure is used in the computation of Legislative grants to schools.
- Attendance Efficiency—The percentage relation of the actual days attended to the perfect aggregate.
- Auxiliary Classes—These are provided for pupils whose abilities do not lie along academic lines.
- Capital Charges—Debenture instalments, or sinking fund deposits, made on debt incurred for school buildings and equipment.
- Consolidated School—An amalgamation of two or more rural schools, or of rural schools with a village or town school, either for the purpose of strengthening the means of school support where the original schools were small or poor, or for the purpose of providing a graded school and other advantages, such as conveyance, instead of the original one-room school.
- Compulsory School Age—Children 8 to 14 must attend full time; children from 5 to 8, if enrolled, must attend full time to the end of the school term for which they are enrolled. Adolescents, 14 to 16, who have not attained University matriculation standing must attend full time; those exempted on the plea of circumstances compelling them to go to work must attend part time (400 hours a year) in municipalities where part-time courses are provided. Urban municipalities with a population of 5,000 and over, are required to provide part-time courses.
- Cost per Pupil-Day—The cost of educating one pupil of actual attendance, for one day. It is found by dividing the total cost of education of the group of pupils concerned by the actual aggregate attendance of this group for the period under consideration.
- District—The eleven defined areas of Northern Ontario which do not constitute municipal units for any purpose. With the exception of Parry Sound and Muskoka, these areas lie north of the French River and Lake Nipissing. This region is newer and more sparsely populated than Southern Ontario, and produces most of Ontario's extensive mineral and forest wealth.
- Enrolment—The number recorded on the school register as in active attendance. The school census for the Province is now taken annually on the last school day in May.
- **Free School Age**—The Public Schools are free to all residents (except Separate School supporters) between the ages of 5 and 21. The Separate Schools are free to separate school supporters.
- Fifth Classes—Grades IX and X in Elementary Schools, doing work similar to the first two grades of Secondary Schools. The majority of these classes are in rural areas.
- General Maintenance—Ordinary, current expense, as opposed to capital outlays and debenture charges.
- **Inspectorate**—The area under the supervision of a local Departmental representative.

School—Provincially controlled schools may be classified as:

- I. Elementary—Those doing the work of the first eight grades. A few have Fifth Classes (see above).
  - (a) Public-Non-sectarian.
  - (b) R.C. Separate—For the children of Roman Catholics.
  - (c) Protestant Separate—For the children of Protestants in centres preponderantly Roman Catholic.
- II. Secondary—Those doing the work of Grades IX to University Matriculation.
  - (a) Academic:
    - 1. Collegiate Institutes.
    - 3. High Schools.
    - 3. Continuation Schools.

These schools are differentiated by minimum staff requirements. Continuation Schools are located mostly in villages or rural areas. Academic Courses are designed to lead to Universities and Teacher-Training Schools.

- (b) Vocational:
  - 1. Technical High School.
  - 2. Commercial High School.

In the smaller centres the above two are combined in the one school. Vocational courses are designed to lead to industry, trade and commerce.

School District—The area over which a school board has jurisdiction.

School Year—The school year consists of two terms, September 1 to December 22, and January 3 to June 30. In addition to the intervals between these terms there is a vacation of one week following Easter. In this Report statistics cover the school year where possible. Financial data remains on the calendar year basis.

## STATISTICS OF THE PROVINCIALLY-CONTROLLED SCHOOLS OF ONTARIO

### SUMMARY FOR 1937

	ELEMF	ELEMENTARY		SECONDARY		S CINES	
	Public	Separate	Continuation	†High	Vocational	AUXILIARY	TOTALS
Day Schools—Number	6,377	832	206	227	59	ro	7,706
Day Pupils—May Enrolment, 1938.  Average Attendance for the year.  Attendance Efficiency Percentage for the year	454,509 404,882 91.22	102,505 94,360 92.80	9,251 8,774 93.42	68,700 65,502 95.72	36,282 33,099 93.34	1,449 1,234 87.19	672,696 607,851 92.28
Day Teachers—Number Male Female Percentage   Male University Graduates	14,540 3,459 11,081 23.79 76.21 585	2,953 314 2,639 10.63 89.37 60	504 249 255 49.40 50.60 290	2,581 1,355 1,226 52.50 47.50 2,450	1,531 952 579 62.18 37.82 1,117	68 355 33 48,53 18,53	121,789 16,154 115,635 28.24 71.76 14,162
Gross Municipal Operating Expenditures: (a) Teachers' Salaries. (b) Other Current Expenditures.	\$16,946,178 6,262,374	\$2,268,275 1,008,981	\$570,225 187,257	\$5,194,012 1,415,427	\$3,323,470 1,006,426	\$171,451	\$28,473,611 9,958,315
Total Current Expenditures	\$23,208,552	\$3,277,256	\$757,482	\$6,609,439	\$4,329,896	\$249,301	\$38,431,926
(c) Capital Charges	\$3,444,068	\$624,855	\$137,890	\$1,544,333	\$1,227,764	\$23,043	\$7,001,953
Total Gross Expenditures	\$26,652,620	\$3,902,111	\$895,372	\$8,153,772	\$5,557,660	\$272,344	\$45,433,879
Legislative Grants.	\$3,048,392	8728,178	\$192,374	\$654,713	8978,976	\$42,748	\$5,645,381
Net Municipal Operating Expenditures	\$23,604,228	\$3,173,933	\$702,998	\$7,499,059	\$4,578,684	\$229,596	\$39,788,498
Teacher's Salaries' percentage of Total Current Expenditure.	73.02	69.21	75.28	78.58	76.76	68.77	74.08
Capital Outlays	\$945,670	\$372,091	\$32,069	\$159,576	\$226,289	\$2,901	\$1,738,596
Fifth Classes: Schools Conducting Fifth Class Work Enrolment in these Fifth Classes Classes Qualifying for Legislative Grant. Enrolment in these Qualifying Fifth Classes Grading of Qualifying Classes—A B C	1,330 6,458 417 2,800 93 138 186	4,456 1,06 1,155 66 22 22 22 18					1,521 10,914 523 3,955 159 160
Night Schools: Number Student Enrolment Number of Teachers.	11 656 21			1,588 0,588	31,880 982	203 8	34,327 1,080
Financial data covers the calendar year 1937. Other	Other data the school year 1937-38	ear 1937-38,	†Including	Including Collegiate Institutes		†Excluding duplications.	ions.

### AVERAGE COSTS PER PUPIL-DAY, 1937, AND COMPARISON WITH 1936

### A-Elementary Schools

			Gross Cost per Pupil-Day (in cents)						
Туре	Subdivision	Curi	ent <sup>1</sup>	Cap	ital <sup>2</sup>	То	tal	Sh	are
		1937	1936	1937	1936	1937	1936	1937	1936
Public	All Rural	26.8 52.2 26.0 40.9	26.2 50.2 26.2 38.0	1.8 1.3 7.3	2.0 3.8 1.5 6.2	28.6 52.2 27.3 48.2	28.2 54.0 27.7 44.2	7.2 15.9 6.9 16.7	6.4 14.7 6.3 13.2
	urban. All Urban Town City All Public	30.5 33.9 23.8 38.4 31.1	26.4 30.7 22.3 34.2 29.0	4.6 6.6 4.1 7.7 4.6	5.0 6.5 3.9 7.7 4.8	35.1 40.5 27.9 46.1 35.7	31.4 37.2 26.2 41.9 33.8	8.5 2.0 2.3 1.6 4.1	6.9 1.5 1.9 1.2 3.4
R.C. Separate	All Rural All Urban Town City All Separate	21.0 18.0 17.2 18.2 18.6	20.4 17.5 16.7 17.8 18.1	2.5 3.9 2.5 4.5 3.6	2.5 4.1 2.4 5.0 3.8	23.5 21.9 19.7 22.7 22.2	22.9 21.6 19.1 22.8 21.9	9.7 2.6 4.4 1.6 4.1	8.2 1.9 3.4 1.1 3.3

### B-Secondary Schools

Continuation	A11	46.7	44.9	8.5	7.7	55.2	52.6	11.9	11.3
High Schools	High	50.7	47.9	12.8	10.4	63.5	58.3	9.5	7.2
and Collegiate	Collegiate	60.0	53.7	13.9	12.8	73.9	66.5	3.3	2.1
Institutes	A11	56.5	51.5	13.4	11.9	69.9	63.4	5.6	4.0
Vocational	Purely Technical	102.9	95.0	22.9	25.6	125.8	120.6	24.9	23.1
	Purely Commercial		57.2	15.0	14.9	76.6	72.1	7.1	5.9
	Combined Vocational	65.2	63.3	22.1	21.8	87.3	85.1	24.0	20.6
	AII	75,3	64.3	21.3	19.0	96.6	83.3	19.7	15.1

### C-Special Schools

Senior Auxiliary	A11	112.5	90.5	10.4	9.0	122.9	99.5	19.3	16,2

<sup>&</sup>lt;sup>1</sup>General Maintenance.

<sup>&</sup>lt;sup>2</sup>Debt Charges.

### EDUCATION CONTRASTED WITH OTHER MUNICIPAL SERVICES IN ONTARIO CITIES, 1937

### (Percentages)

Cities	Education	Debenture Debt Charges	Protection	Unemploy- ment Relief	Charity and Welfare	Administration	Health and Sanitation	Deficits and Uncollectible Taxes	Highways and Streets	Recreation	Miscellaneous	Public Services
Belleville. Brantford Chatham. Fort William. Galt. Guelph. Hamilton. Kingston. Kitchener. London. Niagara Falls. North Bay. Oshawa. Ottawa. Owen Sound. Peterborough. Port Arthur. Sarnia. Sault Ste. Marie. Stratford. Sudbury. St. Catharines. St. Thomas. Toronto. Welland. Windsor. Woodstock.	31.6 22.3 32.0 29.4 25.6 21.3 25.7 25.8 24.2 23.4 20.4 25.2 24.4 21.8 33.2 29.4 27.6 30.8 36.6 25.8 24.8 27.3 24.2 28.2 28.2 28.2	27.5 33.9 17.2 26.5 34.9 30.1 33.3 27.7 31.6 24.6 20.8 31.1 524.3 19.3 28.2 24.2 23.4 19.0 24.5 25.7 717.3 21.6 36.7 34.5 31.6 36.7	9.9 11.2 16.2 9.8 9.2 11.0 10.2 8.4 8.8 8.0 6.7 7.8 8.7 9.9 10.7 10.9 10.6 10.1 9.8 9.9 11.3 13.3 7.5 9.0 11.0	8.7 5.8 6.6 8.8 7.3 12.7 2.2 10.3 10.7 23.7 10.8 16.5 19.2 9.5 9.2 11.9 5.3 8.9 15.6 6.3 19.0	4.4 7.2 7.2 3.2 5.9 9.9 5.5 4.6 6.6 2.4 4.3 2.2 10.1 5.1 3.3 5.3 2.8 3.1 4.8 5.0 2.6 6.6 4.5	6.7 5.8 4.7 7.2 4.2 5.2 5.3 6.5 5.8 6.8 6.2 4.3 3.7 6.9 4.5 6.0 6.6 5.5 5.8 10.5 5.8 10.6 10	3.0 5.0 2.4 1.4 2.3 2.7 3.8 1.8 4.4 3.8 2.6 1.8 2.4 2.4 2.9 2.2 2.9 1.8 4.9 5.0 6.4 5.5 1.1 4.2	3.8  1.9 4.1 1.9 6.4 1.5 5.6 10.7 7.1 9.2 5.1 1.1 .4 .9 3.1 8.0 4.8 3.2 2.2 2.4 4.2 2.4 1.4 5.0 5.0 6.0	2.8 4.5 6.4 4.5 3.0 3.0 1.6 3.5 2.7 3.3 4.3 1.6 2.7 4.2 5.4 7.0 4.7 5.0 7.8 3.9 2.9 2.6 4.1	.8 1.7 3.0 1.4 1.9 2.0 .8 1.2 1.4 1.3 2.1 .9 .7 1.0 1.8 1.2 1.0 1.5 .9 2.9 .7 2.5 1.3 1.0 1.5 1.0 1.5 1.0 1.5		.8 1.7 3.0 1.4 1.9 2.0 .8 1.2 1.4 1.3 2.1 .9 .7 1.0 1.8 1.2 1.0 1.5 .9 2.9 .7 2.5 1.3 1.0 1.5 1.0 1.5
Averages	24.5	30.8	11.4	8.1	5.8	4.7	4.2	3.1	3.0	1.8	1.5	1.1

Basic figures, courtesy Dept. of Municipal Affairs.

### CONTENTS

Education-General maintenance, and debenture charges.

Debenture Debt Charges—General, local improvement, public utility, housing, etc., but excluding Schools.

Protection—Administration of justice, fire protection, hydrant rental, street lighting, traffic control.

Unemployment Relief-Cross cost, including administration.

Charity and Welfare—Charity, Child Welfare, grants, hospitalization, House of Refuge, Mothers' Allowances.
Old Age Pensions.

Administration—Auditors, tax discounts, elections, interest on loans, legal costs, maintenance of municipal buildings, grants (other than Charity and Welfare), indemnities to Mayor and Council, office expenses.

Health and Sanitation-Board of Health expenditures, garbage collections, sewer maintenance.

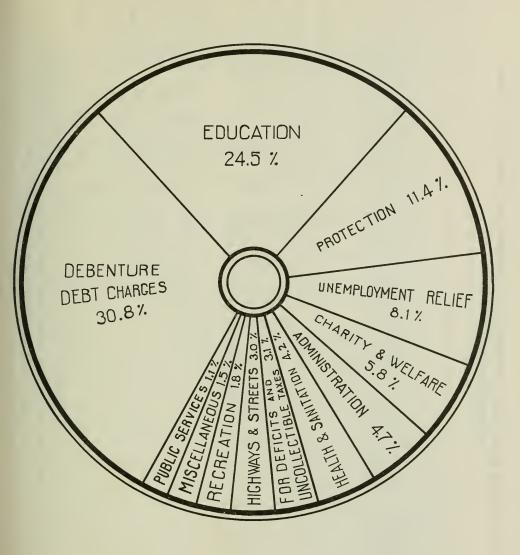
Deficits and Uncollectible Taxes—Provision for tax sale purchases, uncollected and uncollectible taxes, deficits of public Utilities.

Highways and Streets-Cleaning, watering and oiling; repairs and maintenance.

Recreation-Parks, playgrounds, rinks, etc.

Miscellaneous-Payments to other municipalities, payments to County on roads, etc.

Public Services-Cemeteries, Housing Commission deficits, Library costs.



EDUCATION CONTRASTED WITH OTHER MUNICIPAL SERVICES ONTARIO CITIES, 1937

Graph 1.

# DISTRIBUTION OF PUPILS IN ONTARIO PROVINCIALLY-CONTROLLED SCHOOLS, MAY,\* 1938

A-STANDARD GRADE PUPILS

Percent- age of Group A	2.28	1.60	13,35	10.82	7.56	7.27	10.84	10.12	9.38	8.71	99.9	4.86	3.23	2.11	1.21			
Totals	15,076	10,594	88,339	71,573	50,040	48,147	71,766	996,99	62,059	57,648	44,101	32,154	21,396	13,945	8,053			
Totals by Sexes	7,785	5,518 5,076	46,778 41,561	37,300 34,273	$\frac{26,212}{23,828}$	24,774 23,373	36,295 35,471	33,869 33,097	31,092 30,967	27,998 29,650	21,000 $23,101$	15,038 17,116	9,939	6,460 7,485	1,008 4,045	334,066 327,791	661,857	
19 and over						1			1	t~ +	40	232	628 501	753 936	1,449	3,110 2,715	5,825	88.
18 yrs.			C3 :			1	61		3 23	21	212	745 573	1,271	1,338	1,365	4,963	9,812	1.48
17 yrs.			5	2	ಣ ಣ	5	17	32	35	224 120	1,094	2,141	2,587 2,662	2,080 2,716	1,201	9,197 9,236	18,433	2.79
16 yrs.			5.4	10 8	14	19 16	79 36	186 104	610 306	1,614 1,188	3,057 2,765	4,044	3,346	1,552 1,824	227	14,765 14,935	29,700	4.49
15 yrs.			19	24 15	64	140	390 214	1,213	2,740 1,836	4,918	5,975 6,013	4,842 6,078	1,778 2,649	574 400	38 38	22,707 22,041	44,748	6.76
14 yrs.			39	80	169	407	1,507	3,168 2,198	5,506	7,937	6,644 8,043	2,591 3,529	308 440	148 26		28,504 27,587	56,091	8.47
13 yrs.		3	86 98	213	385 214	990	3,141 2,582	6,111	8,452 8,141	9,011	3,441	426 606	21 36	15		32,311 31,935	64,246	9.71
12 yrs.		111	177	436 248	998 540	2,164 1,380	5,850 4,465	8,859	9,350 10,573	3,860 5,267	497 693	17				32,219 31,826	64,045	89.6
11 yrs.		18	351 173	1,012	2,421 1,562	4,122 3,189	9,184 8,424	9,975	4,022 5,209	391 580	36	1				31,532	65,29	9.45
10 yrs.		27 16	829 421	2,949	5,428 4,058	7,128 6,213	11,468 12,830	4,099	324 404	15 28	1					32,268 31,433	63,701	9.62
9 yrs.		71 37	2,219	7,430 5,844	9,707	7,349	4,476	2111	113		5					31,478 31,006	62,484	9.44
8 yrs.	C1	291 163	7,276 5,594	15,475 14,723	6,355	2,392	180 247	14 23			-					31,986 31,373	63,359	9.57
7 yrs.	225 168	1,104	19,520 17,591	9,194	657 926	56										30,757	60,663	9.17
6 yrs.	3,458	2,769	14,881 14,797	458 649	111											21,577	42,947	6.49
5 yrs.	4,079 3,912	1,216	1,329	17												6,641	13,126	1.98
Under 5 yrs.	21	चं च	26													51	118	.02
	Boys (Girls	Boys (Cirls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys (Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys (Girls	Boys Girls	UP A	
	KINDERGARTEN	KINDERGARTEN PRIMARY	GRADE 1	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	GRADE VIII	GRADE IX	GRADE X	GRADE XI	GRADE XII	GRADE XIII	Totals By Sexes	TOTALS-GROUP	Percentages.

# B-PRE-VOCATIONAL AND SPECIAL VOCATIONAL PUPILS

	Under 5 yrs.	5 yrs.	6 yrs.	yrs. 7 yrs.	8 yrs.	10 yrs.	11 yrs.	9 yrs. 10 yrs. 11 yrs. 12 yrs. 13 yrs. 14 yrs. 15 yrs. 16 yrs. 17 yrs. 18 yrs.	13 yrs.	14 yrs.	15 yrs.	16 yrs.	17 yrs.		19 and over	Totals by Sexes	Totals	
PRE-VOCA- Boys TIONAL Girls								23	19 11	64	194	211	72 24	133	5	581 206	787	1
SPECIAL Boys VOCATIONAL Girls												63 134	149 354	214 466	387 642	813 1,596	2,409	
TOTALS-GROUP B	:			:	:			ro	30	117	269	447	599	695	1,034	3,196		

## C-JUNIOR AND SENIOR AUXILIARY CLASSES

804	,449	-
4	-	
3,270 1,534	829 620	6,253
ಸಂಬ	6	17
12	1 2 1	22
46	24	94
184	107	393
522 152	294 181	1,149
500	246 255	1,208
450 202	138 112	905
480	911	767
380		603
333		515
209		338
105 76		181
42		52
5:4		12
		:
: :		:
JUNIOR{Boys	SENIOR{Boys Girls	TOTALS-GROUP C

### SUMMARY

ļ		
6,641 21,584 30,799 32,091 31,687 32,601 31,912 32,711 32,918 29,314 23,717 15,330 9,488 5,199 3,516 339,559 6,485 21,375 29,916 31,449 31,135 31,615 31,50 32,106 32,200 28,102 22,449 15,210 9,638 5,330 3,360 331,747	13,126 42,959 60,715 63,540 62,822 64,216 63,162 64,817 65,178 57,416 46,166 30,540 19,126 10,529 6,876 671,306*	
3,516	6,876	1.02
5,330	10,529	1.57
9,488	19,126	8.55 6.88 4.55 2.85 1.57 1.02
15,330 15,210	30,540	4.55
23,717 22,449	46,166	6.88
29,314 28,102	57,416	8.55
32,918 32,260	65,178	
32,711 32,106	64,817	9.41 9.66 9.71
31,912 31,250	63,162	9.41
32,601 31,615	64,216	9.57
31,687 31,135	62,822	9.36
32,091 31,449	63,540	9.04 9.46 9.36
30,799 29,916	60,715	9.04
21,584 21,375	42,959	6.40
6,641	13,126	1.96 6.40
51 67	118	.02
Boys	GRAND TOTALS	Percentages

\*In addition, there were 1,390 Part-Time Vocational Pupils, unclassified.

## COMPARATIVE SCHOOL STATISTICS 1912-1937 I.—ELEMENTARY SCHOOLS

### 1.-Schools and Pupils

	Auxi- liary	86
		:::::
# 80 80	X8X	1.47 1.147 1.52 1.55 1.67 1.79
centa	V111 & VIIII	18.24 17.43 20.48 23.91 20.02 21.70 21.49
tion Per	> % IV	19.02 119.01 21.25 22.69 25.60 25.20 24.90
)istribu	11 % N	19.85 20.09 18.69 16.26 17.68 16.52 17.62
Grade Distribution Percentages*	1.8.1	41.42 37.77 33.86 30.75 30.19 28.82 28.73
	K.P.	2.00 2.31 2.12 2.53 1.90
	Kgn.	2.71 2.72 2.73 2.73 2.73
May	Enrolment	580,612 555,713 557,014
Attendance	Elliciency Percentage	86.80 88.49 90.09 555,7 91.51 557,0
Aver-	Daily Attend-	58.02 342,571 59.02 342,571 59.02 425,018 61.54 456,978 62.23 501,917 62.36 499,729
*		51.34 59.92 61.54 61.54 62.23 62.23 62.36
centage	(c) Rural   Urban	48.66 41.98 40.08 37.77 37.43 37.43 64
tion Per	b) Fe-	48.78 49.54 49.10 48.92 48.77 48.86
Distribu	(b) Male	51.22 50.46 50.90 51.23 51.52 51.14
Enrolment Distribution Percentages*		13.12 13.27 14.72 15.93 17.09 18.06
Enr	(a) Pub.   Sep.	86.88 86.73 85.28 84.07 82.91 81.60
Enrol-	ment for the year	830 467,022 916 527,664 988 601,485 1,034 634,592 1,010
	Total Rural Urban year	1
Schools in Operation	Rural	6,452 6,651 6,651 6,945 7,036 7,188 6,139 7,162 6,132 7,162
i	Tota	6,45 6,65 6,94 7,036 7,189 7,179 7,162
	Year	1912 1917 1922 1927 1937 1936-37

<sup>\*</sup>Commencing with 1932 these are based on May enrolment.

### 2. Teachers and Certificates

		Music		:		22	51	1135	1164	
				<u>.</u> :	:	214	314	175	191	tants.
	·L**	Auxi- liary Class		38	78	7.9	95	100	106	Assis
	SPECIAL**	Ho. Sei- ence								rs and
		Man. Tr.		33	63	75	94	106	107	† Directors and Assistants.
ites		Kin- der- gar- ten	371	376	471	491	497	519	497	+ 1
Certificates		Tem- por- ary	1,323	603	409	297	229	63	26	S.
		Perm- anent Un- grad- ed	220	213	156	129	88	56	40	Classe
	RAL*	Dis- trict	317	292	407	43	29	9	20	ıxiliary
	GENERAL*	3rd Class	1,804	1,317	1,190	009	543	249	217	es of A
		2nd Class	6,419	8,784	1,273 10,825	12,120	11,302	8,710	8,015	all typ
		1st Class	674	1,106	1,273	2,587 12,120	4,659 11,302	7,477	8,138	hers of
		versity Cradu- ates	83	140	182	252	325	549	645	‡ Teachers of all types of Auxiliary Classes.
			44.80	49.42	52.70	53.58	54.43	54.28	54.14	
	no	(c) Rural Urban	55.20	50.58	47.30	46.42	45.57	45.72	78.43 45.86	ch work
	Percentage Distribution	emale	86.42	89.68	88.30	86.14	83.82	79.24	78.43	**Listed only when holder devotes whole time to such work.
hers	entage	(b) Male F	13.58	10.32	11.70	13.86	16.18	20 76	21.57	whole ti
Teachers	Perc		11.11	11.66	13,16	14.61	15.79	16.77	16.88	evotes
		(a) Pub. Sep.	88.89	88.34	86.84	85.39	84.21	83.23	83.12	older d
		1	9,617	11,445	13,132	14,080	14,535	13,896	13,720 83.12 16.88 21.57	v when h
		Male 1	1.511	1,317	1,740	2,266	2,805	3,640	3,773	ted onl
		No. of Male Female	11,128 1,511	12,762	14,872 1,740	16,346	17,340	17,536	17,493 3,773	
		Te	:		:		:		<u>                                     </u>	*Highest Only
		Year								wheet
		A	1912	1917	1922	1927	1932	1936-37	1937–38	H*

\*\*Listed only when holder devotes whole time to such work. 

† Teachers of all types of Auxiliary Classes. 

† Excludes Itinerant Music Teachers serving town, village and rural schools. \*Highest Only.

3. Percentage Analysis of Elementary School Enrolment\*

							ACTUAL PERCENTAGES	RCENTAGES					
			Public Schools	Schools			Separate	Separate Schools		ł	VII Elemenn	All Elemenntary Schools	
GRADES	IDEAL PERCENT- AGES	Ru	Rural	Urban	ban	Rural	ral	Urban	an	Rural	al	Urban	an
		For Five Previous Years	For 1938	For Five Previous Years	For 1938	For Five Previous Vears	For 1938	For Five Previous Years	For 1938	For Five Previous Years	For 1938	For Five Previous Vears	For 1938
	18.0	18.5	18.1	15.3	15.0	27.9	26.5	19.8	18.8	19.5	19.0	16.4	15.9
I	16.5	13.1	13.3	13.8	14.1	14.7	14.6	14.8	14.3	13.2	13.4	14.0	14.1
III and IV	16.0	19.2	19.7	17.6	18.0	17.7	19.5	9.71	20.3	19.1	19.7	17.7	18.6
	14.0	14.2	14.0	14.7	14.0	12.5	12.6	14.2	13.7	14.0	13.9	14.5	13.9
	13.0	12.5	12.4	13.9	13.7	10.7	6.01	12.8	12.4	12.3	12.2	13.6	13.4
/11	12.0	11.4	11.2	13.1	13.2	8.7	8.8	11.4	11.0	11.1	11.0	12.7	12.7
7111	10.5	11.1	11.3	11.6	12.0	7.8	7.1	9.1	9.5	10.8	10.8	11.1	11.4
	100	100	100	100	100	100	100	100	100	100	100	100	100

\*May enrolment, Grades I-VIII inclusive.

### 4. Teachers' Salaries\*

				Male						]	Female			
Year				Ave	age			High-			Aver	age		
	High- est	Pro- vince	City	Town	Vill- age	Ur- ban	Rural	est	Pro- vince	City	Town	Vill- age	Ur- ban	Rural
1912 1917 1922 1927 1932 1936–37 1937–38	\$ 2,200 2,500 3,500 3,875 3,800 5,000 5,000	\$ 788 1,038 1,644 1,667 1,665 1,332 1,393	\$ 1,320 1,637 2,269 2,310 2,282 2,193 2,217	1,166 1,767 1,749 1,682	\$ 779 908 1,393 1,407 1,355 1,189 1,218	\$ 1,141 1,425 2,082 2,107 2,075 1,911 1,922	\$ 566 686 1,144 1,147 1,050 †745 †778	2,200 3,325 3,500 3,600 3,700	650 1,117 1,152 1,150 1,041	\$ 703 795 1,363 1,465 1,587 1,531 1,546	628 1,047 1,095 933 938	573 986 1,012	\$ 618 731 1,253 1,336 1,387 1,351 1,367	580 987 970

<sup>\*</sup>Public School Teachers only.

†Exclusive of large suburban and semi-urban schools.

### 5. Teachers' Experience\* Average Number of years' Teaching Experience

Year	Male	Female	All	Rural (Male and Female)	Urban (Male and Female)
1912. 1917. 1922. 1927. 1932. 1936–37†.	11.81 14.70 12.14 10.49 9.88 9.76	7.41 7.67 8.40 8.87 9.91 12.58	8.06 8.44 8.87 9.11 9.90 11.51	5.10 4.92 5.77 7.30	

<sup>\*</sup>Public School Teachers only. †Calculated as at June for the last two years; previous to that, at December.

### 6. Percentage of Male Teachers\*

Year	Rural Schools	City Schools	Town Schools	All Schools
1912	11.64	14.88	12.30	14.86
1917		10.75	10.34	10.81
1922		14.18	10.22	12.55
1927		16.90	12.63	15.06
1932		19.49	15.70	17.77
1936–37		22.17	21.12	22.77
1937–38		22.89	22.48	23.79

<sup>\*</sup>Public School Teachers only.

### 7. Receipts, Operating Expenditures, Capital Outlays (Public and Separate Schools)

			Receipts			Opera	ting Expend	litures	
Year	Legislative Grants	Local Levy	Township Grants	County Grants	Total Receipts	Curreut1	Capital2	Total	Capital Outlays
	s	\$	\$	\$	S	\$	\$	\$	\$
1912	842,278	(	9,478,887	)	14,258,052		parated	*8,328,245	
1917	907,846	10,565,886			17,269,285			*11,833,989	2,277,851
1922		19,801,609			38,624,665			*25,176,262	6,764,622
1927		22,362,305	3,174,245		41,586,106		**	*30,256,018	4,543,152
1932	3,847,696				41,600,894	27,380,826			
1936	3,165,834	23,075,287		151,645	35,042,418				925,766
1937		24,161,710	2,451,861	199,160	35,318,503	26,485,808	4,068,923	30,554,731	1,317,761

<sup>1</sup>General Maintenauce.

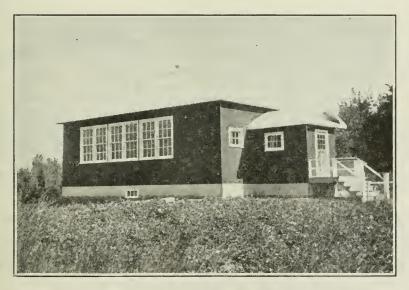
<sup>2</sup>Debt Charges.

<sup>\*</sup>Includes Temporary Loan Repayments.

### TREND IN SCHOOL BUILDINGS IN NORTHERN ONTARIO



OLD SCHOOL-S.S. No. 1 MISSANABIE



NEW SCHOOL—S.S. No. 1, MISSANABIE

This school is situated about 200 miles northwest of Sudbury. It cost \$3,241, has a classroom 24 ft. by 32 ft., teacher's room, cloak-rooms, hall and porch. It is well lighted, well ventilated, and easily heated, even at a temperature of 40 degrees below zero. It conducts a Fifth Class, has equipment valued at over \$900, and has an attendance of 36. Over half the residents of the school section are Indians. The teacher has a First Class certificate, and receives a salary of \$1,000.

Pictures Courtesy "Canadian School Journal".

### B. ROMAN CATHOLIC SEPARATE SCHOOLS

### 1. Schools, Teachers, and Pupils

Year	No. of Schools in operation	Teachers	Pupils†	Boys	Girls	Average Daily Attendance	Attendance, Efficiency, Percentage
1912 1917 1922 1927 1932 1936-37 1937-38	656 724 764 812	1,237 1,488 1,958 2,388 2,739 2,941 2,917	61,297 70,048 88,546 101,072 99,198 101,010 102,505	31,126 35,036 44,728 51,101 50,524 51,536 51,898	30,171 35,012 43,818 49,971 48,674 48,812 50,607	39,735 46,919 64,897 74,820 89,804 92,773 94,360	84.98 87.39 *91.50 *92.73 *92.80

<sup>\*</sup>Percentage of actual aggregate to perfect aggregate attendance. †Commencing with 1932 the figure given is the May enrolment.

### 2. Average Number of Years' Teaching Experience

Year	Male	Female	All	Rural (Male and Female)	Urban (Male and Female)
1930. 1932. 1934. 1936-37*.	6.05 5.37	9.81 9.98 10.44 11.83	9.53 8.77 9.88 11.23	6.31 6.39 6.36 7.91	10.67 10.89 10.42 12.44

<sup>\*</sup>Calculated as at June for the last 2 years; previously, at December.

### 3. Receipts, Operating Expenditures, Capital Outlays

		Receipts		Oper	ating Expendi	tures	
Year	Legislative Grants	County Grants and Local Levy	Total Receipts	Current	Capital	Total	Capital Outlays
1912 1917 1922 1927 1937 1936	296,277 535,111	\$ 757,255 1,066,253 2,154,985 2,889,495 2,955,779 2,850,799 3,069,846	\$ 1,186,814 1,499,726 4,049,044 5,100,879 5,720,395 4,560,246 5,023,575	\$ not se  3,108,449 3,149,164 3,277,256	\$ parated " " " " " 709,450 585,933 624,855	*719,824 *1,026,784 *2,546,886 *3,946,031 3,817,899 3,735,097 3,902,111	\$ 323,400 286,939 1,111,833 671,241 888,821 159,760 372,091

<sup>\*</sup>Contains Short Term Loan Repayments.

### C. PROTESTANT SEPARATE SCHOOLS

The following is a complete list of the Protestant Separate Schools of the Province:—No. 1 Grattan, No. 2 Hagarty, L'Orignal, and Penetanguishene (two schools).

They were attended by 246 pupils in 1937. The whole amount expended for their maintenance and permanent improvements was \$13,705.42. There were eight teachers, of whom four held First Class, three held Second Class, and one held a Kindergarten-Primary certificate.

### D. HIGH SCHOOL ENTRANCE EXAMINATION RESULTS

	Cand	lidates		•	Successful	Candidates	3		Percentage of those
Year	Number	Percentage of Grade	Ву Кссоп	mendation	By W	riting	То	tal	attempting the written test who
		VIII May Enrolment	Number	Per cent.	Number	Per cent.	Number	Per cent.	were successful
1912 1917 1922 1927 1932 1937 1938	44,121 50,280	78.05 91.82 96.84 96.18			13,977 15,751 19,656 24,381 21,604 16,514 15,922	61.63 71.67 54.43 55.26 42.97 29.86 28.77	13,977 15,751 27,560 37,451 40,718 46,969 47,717	61.63 71.67 76.31 84.88 80.98 84.92 86.21	61.63 71.67 69.67 78.51 69.32 66.45 67.59

### E. FIFTH CLASSES

	Number		Number		G	radin	g		tributio 1 Avera					
Year	of Schools Conduct-	Fifth Class Enrol-	of Fifth Classes Quali-	Enrol- ment in Quali-					Pu	blic		Sep	arate	Legis-
	ing Fifth Class Work	ment in these Schools	fying for Legis- lative Grant	fying Fifth Classes	A	В	С	Con	unties	Dis	tricts	No	Aver. Enrol.	lative Grant
			Grant					No.	Aver. Enrol.	No.	Aver. Enrol.		21101.	
1924-25 1927-28	468 760		193 254	1,878 2,231	93 92	69 98	$\frac{31}{64}$	108 128		46 78		39 48	16.0 17.7	\$28,396 35,739
1930-31 1933-34	1,316 1,553	6,618 7,323	418 587	2,790 4,746	111 149		$\frac{192}{284}$	210 331	7.1	139 149	5.4	69 107	$14.5 \\ 14.7$	55,562 62,211
1936-37 1937-38	1,715 1,521	11,621 10,914	580 523	4,188 3,955	161 159	170 160		328 271	6.7 7.4	144 146		108 106		70,367 70,857

### II. SECONDARY SCHOOLS

### A. CONTINUATION SCHOOLS

### 1. School and Pupils

					atio								Enr	olmen	t Distr	ibutio	n
Year	No. of Schools	T						Enrol- ment	Boys	Girls	Attendance Efficiency Percentage	0.1	wer 1001		ddle 100l	Up Sch	per
		1	2	3	4	5	6					No.	%	No.	%	No.	%
1912 1917-18 1922-23 1926-27 1932-33 1936-37 1937-38	137	54 13 12		2 19 29 42 46	5	 3 1		6,094 5,104 8,777 9,654 11,070 8,935 9,251	1,989 3,569 3,944 5,060 3,750	3,595 3,115 5 208 5,710 6,304 5,185 5,358	73.15 82.42 83.48 90.15 91.94	3,858 6,316 6,238 6,791 5,352	68.36 75.59 <b>71.96</b> 64.61 59.76 59.90 60.90	1,246 2,461 3,328 4,263 3,202	24.41 28.04 34.48 37.51 35.84	88 310 381	.81 

Commencing with 1932-33, enrolment is that of May instead of the entire year, and attendance efficiency is based on the percentage of actual to perfect aggregate, instead of average attendance to enrolment.

### 2. Teachers, Salaries and Experience

					Teac	hers							Sala	ries			
				Регсел	ntages			Percentages		1	Highest	t		A	Averag	e	
Year	Number of Teachers	University Graduates	Specialists	University Graduates	Specialists	Men	Women	Men	Women	Principal	Male Assistants	Female Assistants	Principal	All Assistants	All Teachers	Male Assistants	Female Assistants
1920-21 1926-27 1931-32 1936-37 1937-38 1938-39	255 422 490 478 504 529	57 93 272 290	45 118 126	13.51 18.98 56.90 57.54	$9.18 \\ 24.69$	71 137 167 235 249 265	285 323 243 255	27.84 32.46 34.08 49.16 49.40 50.09	67.51 65.92 50.84 50.60	3,000 3,550 3,550 2,700 2,800 2,800	2,300 2,400 1,800 1,700	2,400 1,600 1,950	1,824 1,427 1,468	1,332 1,372 1,048	1,548 1,577 1,213 1,243	1,383 1,378 1,080 1,098	1,061

### 3. Receipts, Operating Expenditures, Capital Outlays

			Receipts			Opera	ting Expen	ditures	
Year	Legis- lative Grants	County Grants	Town- ship Grants	Local Levy	Total Receipts	Current	Capital	Total	Capital Outlays
1912	\$ 64,081 65,732	\$ 60,352 72,541	155	\$ ,780 ,173	\$ 295,261 360,431	\$ not se	\$ parated	\$ 238,226 279,558	\$ 26,861 45,063
1922 1927 1932 1936	148,217 199,388 220,773 189,917 192,374	218,323 363,285 448,355 330,338 263,872		,548 ,819 276,524 229,027 308,958	1,038,646 1,363,646 1,459,579 1,200,074 1,165,018	944,342 752,383 757,482	141,697 129,016 137,890	611,425 950,376 1,086,039 881,399 895,372	267,006 171,628 31,631 22,442 32,069

### B. COLLEGIATE INSTITUTES AND HIGH SCHOOLS

### 1. Schools and Teachers

		School	ls						Teach	hers				
		93			8				Perce	ntage			Perce	ntage
Year	Collegiate Institutes	High Schools	Total	Coilegiate Institutes	High School	Total	University Graduates	Specialists	University Graduates	Specialists	Men	Women	Men	Women
1920-21 1926-27 1930-31 1934-35 1937-38 1938-39	47 56 65 68 70 71	121 136 142 144 156 156	168 192 207 212 226 227	664 1,025 1,201 1,420 1,530 1,563	543 774 933 941 1,051 1,078	1,207 1,799 2,134 2,361 2,581 2,641	895 1,547 1,924 2,235 2,450 2,486	629 1,326 1,588 1,850 2,019 2,075	74.15 85.99 90.16 94.66 94.92 94.13	73.81 73.71 74.41 78.35 78.23 78.57	587 837 962 1,171 1,355 1,412	620 962 1,172 1,190 1,226 1,229	48.63 46.53 44.85 49.59 52.50 53.46	51.34 53.16 55.47 50.41 47.50 46.54

### 2. Teachers' Salaries and Experience

### (a) Salaries

	1		Hig	hest								Ave	rage					
	C	Coll. Inst. High School						Coll.	Inst.			High (	School				Coll. h Sch	
Year	Principal	Male Assistant	Female Assistant	Principal	Male Assistant	Female Assistant	Principal	Male Assistant	Female Assistant	AII	Principal	Male Assistant	Fernale Assistant	All	Principal	Assistant	Male Assistant	Female Assistant
		· ·				8	<u>s</u>	8	8	S	9	<u>s</u>	8	9	2	9	\$	•
1920-21 1926-27 1930-31 1934-35 1937-38 1938-39	5,350	4,400 4,500 3,700 3,700	3,375 3,600 3,600 3,600	4,100 6,000 4,200 4,300	3,500 3,500 2,800 2,860	3,125 2,750 2,800 2,700 2,700	3,203 3,759 3,994 3,624 3,715	2,478 2,767 2,890 2,565 2,549	1,863 2,327 2,414 2,205 2,247	2,251 2,621 2,716 2,457 2,475	2,865 3,086 2,567 2,535	2,142 2,142 2,385 1,723 1,709	1,909 2,004 1,632 1,616	2,123 2,243 1,798 1,784	3,120 3,365 2,907 2,900	2,320 2,418 2,125 2,129	2,622 2,756 2,355 2,316	2,113 2,200 1,937 1,954

### (b) Average number of years' teaching experience in Secondary School work, as at June, 1938

	Male	Female	Both
Collegiate Institute Teachers.	8.57	12.11	12.11
High School Teachers.		8.57	8.57
Both		10.43	10.66

### 3. Pupils

						Eni	olment D	istribution	1	
Year	Enrol- ment	Boys	Girls	Attendance Efficiency Percentage	Lower	School	Middle	School	Upper	School
	_				Number	Per cent.	Number	Per cent.	Number	Per cent.
1912 1917-18 1922-23 1927-28 1932-33 1936-37 1937-38	32,273 29,097 44,631 55,805 68,603 67,088 68,700	14,846 12,353 21,139 26,788 34,606 32,057 32,588	17,427 16,744 23,492 29,017 33,997 35,031 36,112	62,80 78,15 86,03 85,65 91,90 94,28 95,72	19,829 20,190 29,219 34,700 36,827 36,186 37,958	61,44 69,39 65,47 62,18 53,68 53,94 55,25	9,842 7,336 12,210 16,395 22,939 23,747 23,518	30,50 25,21 27,35 29,38 33,43 35,40 34,23	2,602 1,571 3,202 4,710 8,837 7,155 7,224	8.06 5.40 7.18 8.44 12.88 10.66 10.52

Commencing with 1932-33, enrolment is that of May instead of the entire year, and attendance efficiency is based on the percentage of actual to perfect aggregate instead of average attendance to enrolment.

### 4. Receipts, Operating Expenditures, Capital Outlays

		Rece	eipts		Opera	ting Expend	litures	
Year	Legislative Grants	County Grants	Local Levy	Total Receipts	Current	Capital	Total	Capital Outlays
1912	276,889 484,978 464,882 480,484	\$ 287,719 364,052 790,518 1,475,538 1,955,045 1,459,859 1,299,513	\$ 1,439,324 1,582,128 3,099,826 4,154,487 5,789,253 5,507,312 5,918,722	\$ 2,414,128 3,051,684 7,993,999 9,755,761 9,739,616 8,655,564 9,073,448	\$ not se  6,802,931 6,249,430 6,609,439	\$ parated 1,498,770 1,447,793 1,544.333	\$ 1,576,964 2,105,661 3,972,161 7,108,527 8,301,701 7,697,223 8,153,772	\$ 376,097 313,314 2,770,714 1,691,779 388,291 489,227 159,576

### C. VOCATIONAL AND SENIOR AUXILIARY SCHOOLS

### 1. Schools, Teachers and Pupils

### (a) Day Vocational Schools

	.			Pupils	(May En	rolment)				T	eachers		
	Num- ber		Part-					Time irses		Part-			
	of Schools	Full- Time	Time and Special	Total	Male	Female	Tech- nical	Com- mercial	Full- Time	Time and Occa- sional	Total	Male	Fe- male
1918-19 1922-23 1926-27 1930-31 1936-37 1937-38	11 16 36 58 58 59	4,379 6,987 16,560 28,112 33,409 34,892	2,415 4,355 3,225 1,357 1,390	4,379 9,402 20,915 31,337 34,766 36,282	3,012 4,447 9,595 14,976 17,225 17,943	1,727 4,955 11,320 16,361 17,541 18,339	not co 16,698 16,457	mpiled 18,068 18,370	155 286 579 1,000 1,186 1,200	51 150 277 261 331	155 337 729 1,277 1,447 1,531	*361 760 938 952	*218 517 509 579

<sup>\*</sup>Full-Time only.

### (b) Evening Vocational and Day Sr. Auxiliary

	E	vening V	ocationa	l Schools			Sr.	Auxiliary	Day Sc	hools		
Year	Number		Pupils		Art.	Num- ber	Full	-Time Pt	apils	Full-T	ime Te	achers
	of Schools	Male	Female	Total	Teach- ers	of Schools	Male	Female	Total	Male	Fe- male	Total
1922-23 1926-27 1930-31 1936-37 1937-38	71 32	15,125 17,582 25,119 13,002 17,649	18,386 20,335 22,948 12,748 14,231	33,511 37,917 47,440 25,750 31,880	1,097 1,297 1,647 808 981	2 4 5 5	473 829 811 829	296 529 642 620	769 1,358 1,453 1,449	32 35 35	12 23 33 33	26 55 68 68

### 2. Teachers' Salaries

					Sala	ries*						versity and Spe		
		Voca	tional S	Schools		5	Special	lndustr	ial Scho	ols				
Year			Ave	rage				Ave	rage		Grad-	Per	Spe- cia-	Per
	High- est	Prin- cipal	Male Assist.	Fe- male Assist.	A11	High- est	Prin- cipal	Male Assist	Fe- male Assist.	All	uates	cent.	lists	cent.
1918-19 1922-23 1926-27 1930-31 1936-37 1937-38	6,600 6,600 4,800 5,000	4,168 4,132 3,674 3,785		not av not av 2,305 2,381 2,182 2,234	ailable ailable 2,562 2,574 2,409 2,458	3,500 3,900 3,500 3,500	3,000 2,950 3,058 3,098	2,130 2,188 2,447 2,461	1,891 2,064 2,198 2,235	2,091 2,197 2,380 2,409	403 799 1,067 1,130	59.79 65.55 68.57 69.80	319 580 901 978	47.33 47.58 57.90 60.40

<sup>\*</sup>Includes full-time and part-time teachers.

### 3. Receipts, Operating Expenditures, Capital Outlays

		Rece	eipts		Opera	ting Expend	litures	
Year	Legislative Grants	County Grants	Locai Levy	Total Receipts	Current	Capital	Total	Capital Outlays
	\$	\$	\$	\$	s	\$	8	\$
1918		( 1,329		690,311		parated	388,791	104,409
1922	638,217	{ 831	,861 }	2,575,598	11	**	1,307,396	564,218
1926	813,581	[ 1,997	7.011	4,276,707	"	**	3,100,185	399,205
1930	1,144,052	207,927	3,634,260	9,233,601	4,197,206	735,796	4,933,002	3,167,392
1936	1,001,040	231,817	4,249,760	6,078,126	4,317,055	1,215,185	5,532,240	36,312
1937	1,021,724	240,941	4,505,140	6,438,002	4,579,197	1,250,807	5,830,004	229,190

### III. TEACHERS AND TRAINING SCHOOLS

### A. ATTENDANCE, NORMAL AND NORMAL-MODEL SCHOOLS

Number of Teachers in Training at Provincial Normal Schools, and the Pupils at the Normal-Model Schools in connection therewith

					Norma	1						
Year					Studer	ıt-Teach	iers				Norma	l-Model
7	Teachers				lst	Class	2nd C	Class	K	-P		
		**Total	М	F	lst Yr.	2nd Yr.	1st Yr.	2nd Yr.	lst Yr.	2nd Yr.	Teachers	†Pupils
1927-28 1930-31 1933-34 1936-37 1937-38 1938-39	88 86 93 89 88 87	1,568 1,555 2,778 1,082 1,087 990	234 309 723 245 196 211	1,334 1,246 2,055 837 891 779	620 702 1,231 875 895 840	12 488	912 808 732 193 172 150	3 275	36 29 37 14 20	1 15	43 42 42 38 40 40	1,207 1,202 1,217 923 919 872

<sup>†</sup>Calendar year enrolment. \*\*Includes January enrolments.

### B. DEPARTMENTAL SUMMER COURSES ENROLMENT BY SUBJECTS IN RECENT YEARS

(The Summer Courses are conducted by the Department of Education for the benefit of Teachers, who desire to spend a part of their summer vacation in an effort to improve their academic and professional standing, and thus to become more efficient in carrying on with a modernized curriculum.)

Courses	Centre	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Agriculture	Guelph, Kempt-										
Agriculture	ville	295	363	487	513	378	350	566	1,121	1.336	965
Art	Toronto	265	232		353	183	192	223	292	321	303
Auxiliary Classes	Toronto	63	93			66	78	109	134	130	174
Cadet Corps		67	57	63		00	10	109	194	130	114
	Toronto	184	215		238	194	175	175	016	258	261
Commercial		194	210	307	238	194	110	175	216		
Education	See below	11.64.	070			1	000		668	1,385	1,213
English-French	See below	845	678	700	806	372	305	329	253	224	212
Farm Mechanics	Guelph								25	23	27
Health Teaching	Toronto					45	53	84	176	213	305
High School Assistant's	Toronto	37	38	67	99	84	79	87	51	64	82
Household Arts	See below									48	
Household Science	See below	76	88	87		24	28	55	158	365	
*Home Economics—					1	1				i	
Elementary Type B	See below										117
Elementary Type C											437
Kindergarten-Primary	London, Toronto.										
	Ottawa	267	256	308		169	205	208	279	320	308
Latin Refresher	Toronto						1				70
†Manual Training-											
(a) Elementary, Type A	Hamilton	55	84	64		32	33	62	102	231	154
(b) Elementary, Type B	Ottawa										358
(c) Specialist	Hamilton										47
(d) Extension	Hamilton								1	1	20
Middle School		12	13							1	
Music-Vocal.	Toronto, London	191	225			152	196	409	502	693	9701
Instrumental	Toronto, London		220			102	130	400	11		[}
Oral French	Ouebec	102	69			62	59	48	46		45
Physical Education	See below	377	255			314					156
Physical Education Refresher	See below	311	200	301		214	211	2/1	202	199	100
for Men.									1		19
Refresher Courses in Science	Toronto	1		0.1			1 1 1 2	* * * * * *			
	loronto	48	57	61		20	15	17			
Refresher Courses in English			37							1	}
and History	PT			56							
School Nurses	Toronto		33								
School Librarian's Course	Toronto		32	32							
Shop Work-General	Hamilton									16	
Special	Hamilton									120	
Upper School	See below					695		610		449	424
Vocational Courses	Hamilton		347				78	81		73	96
Vocational Guidance	Hamilton		22	19		12	20		6		32
and a											
Total		3,917	4,099	4,637	‡2,212	2 922	2,872	3.334	5.039	6,598	6,795
							ì				

1938 Centres: Education-Ottawa, Kingston, London, Toronto.

Physical Education-Lake Couchiching (Women); Kingston (Men).

Upper School-Ottawa, Windsor, Port Arthur, Kingston, Toronto, London, North Bay.

English-French-Ottawa, Windsor, Sturgeon Falls.

†Part I only of Type B at Ottawa, balance at Hamilton.

### C. TREND IN GRADE OF TEACHERS' CERTIFICATES IN ENGLISH-FRENCH SCHOOLS

	Number	First	Class	Secon	d Class	Third	Class	Dist	rict	Tem	porary	Perm Ungr	
Year	of Teachers	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.
1929-30 1931-32 1933-34 1935-36 1937-38 1938-39	1,202 1,257 1,298	30 72 117 155 216 221	2.76 6.50 9.73 12.33 16.72 17.04	243 319 465 710 856 914	22.36 28.79 38.69 56.48 66.25 70.47	537 442 449 293 144 97	49.40 39.89 37.35 23.31 11.15 7.48	44 25 6 4 2 3	4.04 2.26 .51 .33 .16 .23	205 232 145 81 68 50	18.86 20.94 12.06 6.44 5.26 3.85	28 18 20 14 12 12	2.58 1.62 1.66 1.11 .46 .93

<sup>\*</sup>Type C, Hamilton and Ottawa; Type B at Toronto.

In the interests of economy a curtailment was made in the number of courses offered.

### D. PROFESSIONAL CERTIFICATES ISSUED BY THE DEPARTMENT DURING THE LAST TEN YEARS IN THE FOLLOWING

Year	†High School Prin-	Hi Sch Assis	001	Fir Cla		Seco Cla			English French		Voc		†Kin- der- garten	Kind gart Prim	en .
	cipal	A	В	A	В	A	13	Grade B	Grade C	Dis- trict	A	В	Di- rector	A	В
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938	48 49 49 33 35 57 71 89 86 90	327 365 432 487 576 555 498 477 303 295	393 361 357 363 381 411 417 425 405 402	702 669 693 944 1,268 1,211 1,410 1,283 1,011 1,165	607 336 294 309 229 481 163 308 654 960	734 703 775 955 714 705 596 225 149 149	235 136 74 258	48 45 *62 *71 *91 *40	12 4		34 37 44 112 78 48 34 12 43 28	24 34 34 53 43 65 64 35 27 24	15 19 11 8 8 5 8	133 131 124 ‡48 103 127 109 96 134 124	59 62 83 99 50 32 36 33 52 52

B =Interim certificates made permanent. †Permanent certificate.

### TEACHERS' INSTITUTES

			Elemen-		Rec	eipts		Exper	ıditures
Year	Teachers' Institutes	*Members	tary School Teachers in the Province	Legis- lative Grants	Municipal Grants	Members' Fees	Receipts from all sources	Libraries	Total of all ex- penditures
1912	83 94 95 99 109 †88 103	9,913 12,460 12,910 15,249 16,789 13,498 16,908	11,128 12,762 14,872 16,345 17,340 17,536 17,493	\$ 3,800 5,475 6,900 5,600 5,975 18 18	\$ 2,100 3,701 4,459 4,656 4,125 1,039 1,336	\$ 1,961 3,821 6,540 7,322 7,748 8,192 10,556	\$ 22,120 27,712 39,759 44,547 46,422 29,314 37,198	\$ 1,359 3,173 5,743 8,092 6,244 5,730 7,362	\$ 10,120 13,977 25,810 25,535 21,274 15,877 21,011

<sup>\*</sup>Registered attendance of members. †Some of drop due to union meetings of hitherto separate Institutes

### IV. ENROLMENT AND POPULATION

### A. ENROLMENT AND EXEMPTIONS OF PUPILS OF ADOLESCENT AGE (14 AND 15 YEARS)

Year	Total Enrolment Pupils of Adolescent	Boys	Girls		mptions			lescent aploymertificat	ent	Grand Total	Percentage of Adolescents
	Age †			Urban	Rural	Total	Urban	Rural	Total		Exempted
1926. 1930. 1934. 1936. 1937. 1938.	83,821 82,106 102,741 103,118	45,445 42,754 42,038 52,109 52,435 53,031	44,122 41,067 40,068 50,632 50,683 50,551	959 984 1,190 1,475 1,435 1,234	420 385 306 787 703 496	1,379 1,369 1,496 2,262 2,138 1,730	3,901 2,831 1,300 1,996 2,244 1,693	424 320 276 294 244 214	4,325 3,151 1,576 2,280 2,488 1,907	5,704 4,520 3,072 4,542 4.626 3,637	6.37 5.39 3.74 4.42 4.48 3.51

<sup>†</sup>May enrolment.

A = Interim. \*Now called Third Class. ‡Extensive reduction in summer courses in 1932.

### B. RELATION OF COMPULSORY ENROLMENT TO TOTAL ENROLMENT AND PROVINCIAL POPULATION

1	ı
Percentage of Compulsory Age Eurolment to Total Day Eurolment	69.77 59.55 72.25 74.67 72.58
Enrolment of Pupils of Compulsory Age (8 to 15, inclusive)	479,767 451,404 490,929 502,320 485,304
Total Day Enrolment as Percentage of Population	23.07 21.07 20.75 20.08 19.79
Total Day Enrolment†	678,637 661,948 679,474 672,706 668,627
Provincial Population‡	2,941,437 3,141,633 3,275,228 3,350,139 3,377,832
Year	1926 1930 1934 1936 1937

†May enrolment.

‡Ontario Municipal Statistics.

### V. COMPARATIVE SUMMARIES

### A. PUPILS AT PROGRESSIVE STAGES

			Exami-	lates	Upper School		2,708	21,623	19.685	19,281
			mental 1	Candic	Middle		13,666	35,975	35,856	09,740
			Depart	natio	Lower		20,330 35,110	48,781	46,489	
			(h) slic		Total		2,338 46,910 5,549 79,893 7,913 106,438	108,039	07,232	10,00
			ime Pur		Grade		2,338	9,451	7,979	lacata
	School		Full-T		Grades XI &	XII	11,560 21,742 32,624	34,345	34,259	
	Secondary Schools		May Enrolment, Full-Time Pupils (h) Departmental Exami-		Grade X		13,639 20,347 26,980	27,231	27,534	
2	\ \overline{\pi}		May Er		Grade		19,373 32,255 38,921			
			ted		Total Grade Grade Grades Grade Total Lower Middle Upper XIX XIX XIII School School School School School		20,601 29,332 36,472	35,479	36,062 36,861	nued.
			Beginners Admitted		High tinua- Voca- Tot		3 3,226 2,722 2 3,477 8,543 0 4,049 13,273	12,76£ 17,004	12,770 12,326	* Discontinued.
			eginner	-	Con- tinua- tion		3,226 3,477 4,049	3,642	3,109	*
					High		14,653 17,312 19,150	19,072	20.183 $21,130$	
				Enrol- Retire-	ments (a)		16,541 17,312 13,274 19,150	12,494	13,441	l pupils.
			May	Enrol-	ment ments Grades (a)		8,196	11,618	0,002	g Specia
			7	her	Suc- cessfu		19,656 37,451 40,718	46,320	47,717	(b) Excluding Special pupils.
	chools		High	En.	trance Candi- dates	0.00	28,210 44,121 50,280	54,991	55,351	(p)
	Elementary Schools		May	Enrol-	ment Grade VIII		54,757	57,746	57.648	
	Eleme		May	Enrol-	ment all Grades		1 73,413	561,937	557,014	age limit
			Intred		Total		73,413 68,206 66,498	68,359	66,013	pulsory
		L A J	DW S IOII		Sepa- rate		12,66 12,44 11,96	12,75	11,570	hing con
		Boom	Beginners Admitted  Public Sepa- Total				60,752 55,760 54,534	55,603	54,443	(a) Upon reaching compulsory age
			Year				1926-27 1931-32 1934-35	1935-36 1936-37	1937-38	(a) U

### B. GENERAL STATISTICAL ABSTRACT

Showing the Comparative State and Progress of Publicly Controlled Education in Ontario from 1917 to 1937

	1917	1922	1927	1932	1936	1937
Population X	2,560,453	2,792,482	2,966,465	3,239,437	3,350,139	3,377,832
Number of Schools—  Public. R.C. Separate. Continuation. High. Vocational (Day). Sr. Auxiliary.	548 137 162 11	6,289 656 181 175 16	6,426 724 217 197 42	6,424 764 220 207 67	6,347 812 208 225 58	6,377 832 206 227 59 5
Total	6,961	7,317	7,606	7,682	7,655	7,706
Enrolment of Pupils†— Public (Day and Evening) R.C. Separate Continuation High (Day and Evening) Vocational (Day) (Evening) Sr. Auxiliary (Day & Evg.)	70,048 5,104 33,024 3,674 14,597	515,202 88,546 8,777 46,340 9,402 33,511	535,691 101,072 10,079 59,692 24,513 39,096	484,896 101,552 11,364 71,492 36,938 33,860	455,966 101,010 8,935 68,921 34,766 25,750 1,643	455,165 102,505 9,251 70,288 36,282 31,880 1,652
Total	584,883	701,778	770,143	740,102	696,991	707,023
Number of Teachers— Public. R.C. Separate. Continuation. High. Vocational (Day). "(Evening) Sr. Auxiliary.	1,488 241 1,051 132	12,914 1,958 323 1,420 286 1,097	13,958 2,388 454 1,875 831 1,276	14,601 2,739 493 2,307 1,480 1,173	14,595 2,941 478 2,452 1,447 805 68	14,540 2,953 504 2,581 1,531 1,080 68
Total	14,186	17,998	A 20,667	[A 21,812	А 21,644	A 21,789
Net Municipal Expenditures*— Public. R.C. Separate. Continuation. High. Vocational. Sr. Auxiliary.	\$ 11,953,393 1,250,596 258,888 2,234,887	\$ 25,481,416 3,562,756 734,214 6,465,986 1,233,397	\$ 27,073,528 4,320,995 922,616 8,315,328 2,939,171	\$ 25,057,542 3,282,788 865,306 7,836,819 4,421,097	\$ 22,999,302 3,171,078 691,482 7,216,739 4,317,722 213,478	\$ 23,604,228 3,173,933 702,998 7,499,059 B4,578,684 229,590
Total	15,697,764	37,477,769	43,571,638	‡41,463,552	138,609,801	‡39,788,492
Legislative Grants— Public. R.C. Separate. Continuation. High. Vocational. Sr. Auxiliary.	\$ 844,719 63,127 65,733 184,088	\$ 2,780,749 95,963 147,217 276,889 638,217	\$ 3,318,071 368,230 230,977 443,727 1,036,441	\$ 3,312,585 535,111 220,733 464,882 1,554,734	\$ 2,601,815 564,019 189,917 480,484 959,611 41,429	\$ 3,048,392 728,178 192,374 654,713 978,976 42,748
Total	1,157,667	4,040,035	5,397,446	6,088,046	4,837,275	5,645,381
Teachers' Salaries— Public. R.C. Separate. Continuation. High. Vocational. Sr. Auxiliary.	\$ 7,763,361 635,089 228,362 1,554,049	\$ 15,308,587 1,382,395 474,241 2,963,011 787,370	\$ 17,221,594 1,784,722 653,770 4,330,079 1,982,571	\$ 18,279,370 2,160,976 732,837 5,355,751 3,605,249	\$ 16,328,612 2,281,520 578,460 4,936,744 3,260,422 163,133	\$ 16,946,178 2,268,275 570,225 5,194,012 3,323,470 171,451
Total	10,180,861	20,915,594	25,972,736	30,134,183	27,548,891	28,473,611

XOntario Municipal Statistics figure.

\*Less Legislative Grants.

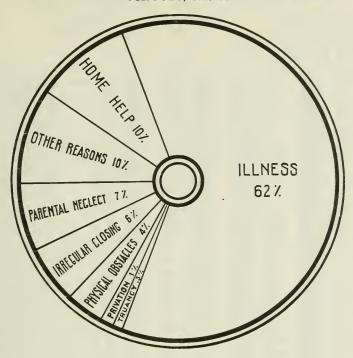
‡General Maintenance and Capital Charges in Day Schools.

Financial figures cover the calendar year specified. Commencing with 1936 all other data covers the school year ended six months after the calendar year specified. Previous to this, elementary school data covers the calendar year. calendar year.
†May enrolment, commencing with 1932.

A Without duplication.

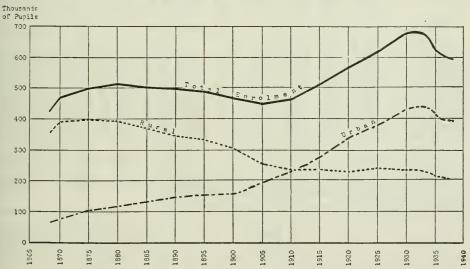
B In addition, general maintenance of Evening Schools amounted to \$252,281.

DISTRIBUTION OF ATTENDANCE LOSSES, ELEMENTARY SCHOOLS, 1937-38



Graph 2.

### TREND IN ELEMENTARY SCHOOL ENROLMENT FROM CONFEDERATION TO THE PRESENT



Basis: Total Enrolment for the Year.

Graph 3.

* RURAL	May Enrolment Pub- Sep- Total			Averag for the	e Atten School	dance Year	per	ost per Pupil Enroln	of	E	tendanc fficiency rcentag	
SCHOOLS	Pub- lie	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total
In Counties Addington Brant Bruce Carleton Dufferin Dundas Durbam Elgin Essex Frontenae Glengarry Grenville Grey Haldimand Haliburton Hastings Huron Kent Lambton Lanark Leeds Lincoln Middlesex Norfolk Northumberland Ontario Oxford Perth Peterborough Prescott Perth Peterborough Prescott Ruissell Simcoe Stormont Victoria Waterloo Welland Wellington Wentworth York  Totals and	1,279 4,815 1,872 1,176 1,622 4,693 4,173 4,173 4,173 2,970 1,648 2,516 3,536 2,506 3,566 3,716 2,515 2,240 1,107 4,689 2,506 3,716 2,515 2,240 1,107 4,088 782 2,540 1,107 4,088 783 3,315 3,335 3,315 3,315 3,315	5 300 96 2,125 622 2,167 281 527 64 417	614 2,003 3,579 4,611 1,565 1,710 2,106 2,945 6,231 3,399 4,920 1,872 1,179 4,855 4,352 5,083 3,964 2,118 2,730 3,562 1,376 2,901 4,760 3,866 2,901 4,760 2,901 3,502 3,502 3,502 3,502 3,502 3,502 4,760 3,502 3,	456 1,696 2,638 1,333 1,498 2,234 2,342 2,342 2,342 3,889 1,673 3,916 3,926 3,918 3,926 3,918 2,260 1,748 2,260 1,748 2,260 1,748 2,260 1,748 2,110 2,	57 55 4 275 76 1,919  546 2,015 256 478 53 387 	2,439 1,615 3,457 2,534 3,061 2,884	24.58 21.53 19.59 18.17 23.24 19.01 19.70 16.72 23.02 23.82 23.02 23.02 23.02 23.02 21.19 15.50 16.72 20.09 19.48 30.85 21.19 21.19 15.08 22.59 20.12 22.89 22.59 22.59 23.02 24.10 25.51 25.59 26.10 26.10 27.10 28.99 29.63	19, 42 23, 61 22, 82 20, 44 23, 91 18, 25 24, 10 19, 48 23, 64 18, 95 6, 80 21, 44 21, 32 16, 21 16, 21 19, 47 10, 88 11, 45 10, 39	21, 74 23, 82 20, 04 19, 48 30, 85 19, 27 22, 64 17, 24 23, 16 19, 76 19, 76 19, 76 19, 76 19, 76 19, 76 19, 76 11, 78 11, 78 12, 78 13, 78 14, 78 16, 78 17, 78 18, 78 18	86.64 88.41 88.91 87.74 87.51 88.77 89.18 90.51 86.90 89.36 90.20 83.70 89.36 90.72 87.31 87.56 89.21 87.80 90.72 87.31 87.56 88.21 87.80 88.40	91.22 92.37 92.66 90.62 88.84 94.29 91.17 94.73	84.56 84.96 92.07 87.88 88.76 87.15 93.46 88.45 90.39
Averages	127,880	14,519	142,399	107,400	13,193	120,593	20.96	15.87	20.44	88.44	91.52	88.77
In Districts Algoma Cochrane Kenora. Manitoulin. Muskoka. Nipissing Parry Sound. Rainy River. Sudbury. Temiskaming. Thunder Bay.	1,132 1,148 2,098 1,809 2,762 1,674 3,397 2,037	3,314 31 71 81 1,813 25 72 2,003	2,787 1,746 5,400 3,527	2,295 2,764 920 936 1,712 1,498 2,283 1,325 2,707 1,610 2,424	2,516 25 62 55 1,518 20 63 1,770 1,374	5,280 945 998 1,767 3,016 2,303 1,388 4,477 2,984	27.07 18.41 26.56 28.45 25.81 27.50 28.56 25.36 31,22	39.87 31.27 49.36 18.99 22.08 27.18 20.60	18.98 26.83 29.23 22.40 27.45 28.51 23.15 24.31	86.33 85.95 89.65 85.70 84.41 86.11 85.38 84.46 89.01 83.10	86.75 79.87 84.03 72.49 89.96 87.19 86.11 88.88 92.21	86.40 89.36 85.60 83.97 88.05 85.40 84.53 88.77 87.02
Totals and Averages	24,357	9,007	33,364	20,474	7,497	27,971	26.35	22.23	25.24	86.19	88.66	86.85
All Ordinary Rural	152,237	23,526	175,763	127,874	20,690	148,564	21.81	18.31	21.35	88.07	90,43	88.38

<sup>\*</sup>Exclusive of large fully graded rural public schools listed below.

### LARGE SUBURBAN AND SEMI-URBAN PUBLIC SCHOOLS

County	Township	School Section No.	Adjacent to	May Enrol- ment	Average Daily Attend- ance for the School Year	Days Lost per Year per pupil of May Enrol- ment	Attend- ance Efficiency Per- centage
Brant Carleton Essex Lincoln	Grantham	2 5 U5, 6	Brantford Ottawa Windsor St. Catharines Oshawa.	269 1,027 580 281 435	244 932 526 250 407	17.08 12.71 13.09 19.49 15.97	91.08 93.33 93.15 89.94 91.99

County	Township	School Section No.	Adjacent to	May Enrol- ment	Average Daily Attend- ance for the School Year	Days Lost per Year per pupil of May Enrol- ment	Attend- ance Efficiency Per- centage
Peel	Toronto. Managhan North Stamford. Stamford. Stamford. Bertie. Crowland. Thorold. Burlington Beach. Etobicoke.	7 2 4 6 7 11 3 2	Lakeview Peterborough Niagara Falls Niagara Falls Niagara Falls Ridgeway Welland Thorold Hamilton Lambton Mills Weston	504 378 301 518 293 282 647 225 244 415 308	457 318 268 434 267 248 620 210 221 371 267	17.25 19.79 20.70 13.89 15.38 22.25 11.45 6.23 21.86 14.74 13.15	89.93 89.90 89.44 92.25 92.10 88.64 94.26 96.72 89.02 91.71
	Etobicoke Etobicoke Etobicoke York. York, East York, North Scarboro Scarboro Scarboro Scarboro	8 11 16 Twp. Twp. 3 10 12 13 15	Islington Humber Bay Long Branch Toronto Toronto Toronto Toronto Toronto Toronto Toronto Toronto Toronto	331 461 495 11,350 5,814 1,417 860 860 448 560	309 440 465 10,523 5,407 1,306 802 728 408 504	13.18 8.83 13.47 10.70 11.88 12.84 12.65 11.65 11.57 15.03	92.37 94.86 92.27 93.68 93.12 92.47 93.88 92.51 93.07 91.06
	erages, Counties			29,303	26,932	12.23	93.00
District Cochrane Parry Sound Sudbury Timiskaming Thunder Bay	Tisdale Tisdale Himsworth. Chapleau Snider and Creighton. Garson Tech Schreiber	1 U, 4 1 U, 1 3 Sch. Area	Centre South Porcupine. Schumacher Callander Chapleau Creighton Mine Garson Mine Kirkland Lake Schreiher	689 699 240 181 310 213 2,097 174	630 667 214 169 295 206 1,941 164	12.34 9.92 17.77 15.56 6.61 11.60 13.64 13.25	93.56 94.94 90.79 92.22 96.58 94.14 93.00 93.33
Totals and Av	erages, Districts			4,603	4,286	12.60	.93,53
	urban and Semi-Urban			33,906	31,218	12.29	93.08

URBAN SCHOOLS

	Ma	yEnrolm	ent	Average Attendance for the School Year				Lost per er Pupi y Enrol	l of	Attendance Efficiency Percentage		
Cities	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total
In Counties Belleville Brantford Chatham Galt. Guelph Hamilton Kingston Kingston Kitchener London Niagara Falls. Oshawa Owen Sound Peterhorough. St. Catharines St. Thomas Sarnia Stratford Toronto Welland Windsor Woodstock	1,803 3,761 2,018 1,755 2,479 20,499 2,820 4,019 8,862 2,485 3,739 9,762 2,034 2,839 1,761 2,428 2,124 80,465 1,897 11,892	457 698 601 242 892 4,531 1,791 1,481 479 479 11,335 1,577 1,020 787 256 510 418 11,875 11,875 11,875 11,875	2,260 4,459 2,619 1,997 3,371 25,030 3,713 5,798 10,343 2,964 4,218 4,218 4,218 4,186 2,017 2,938 2,542 92,340 1,897 19,569	1,656 1,813 1,640 2,287 18,623 2,565 3,860 8,251 2,345 3,470 9,168 1,883 2,588 3,173 1,734 2,004 73,050 1,774 10,908	423 637 554 232 840 4,275 436 440 10,783 143 921 725 232 487 10,938 71,495	2,079 4,102 2,367 1,872 3,127 22,386 5,557 9,656 2,781 3,910 12,026 3,509 3,898 1,966 2,399 83,988 1,774 18,147	16.11 14.00 14.80 7.95 14.15 16.6 15.11 11.11 12.45 14.11 12.16 17.10 13.83 15.07 14.13 12.06 9.86 12.67 11.90 13.71	6.63 7.09	16.66 9.64 12.21 14.54 13.11 13.24 13.64 15.17 13.72 11.99 12.49 9.30 11.95 11.90 13.14	91.71 92.84 91.92 95.84 93.16 91.47 90.92 94.34 93.49 92.87 93.72 95.60 92.18 92.71 93.82 94.49 93.82 94.49 93.82 94.92 94.92 95.92 96.92	94.49 94.94 90.61 96.69 94.10 91.29 92.13 94.67 97.11 91.82 93.59 93.17 93.60 96.21 95.57	91.82 92.97 91.92 95.69 93.20 92.09 95.01 93.47 92.63 95.13 92.78 92.79 92.87 93.79 94.77 94.77 94.77 94.77 92.83
Totals and Averages	174,245	46,745	220,990	159,793	43,796	203,589	13.60	10.06	12.85	92.77	93.53	92.93
In Districts Fort William North Bay Port Arthur Sault Ste. Marie Sudbury	3,271 1,441 2,487 3,075 1,889		4,489 2,917 3,209 4,486 3,321	3,036 1,349 2,316 2,824 1,696	1,364 657 1,245	2,713 2,973 4,069	10.27 11.20 14.16 16.31 16.94	8.67 9.53 12.97 14.81 9.08	10.36 13.89 15.84	94.63 93.90 92.78 91.68 91.30	94.59 93.07 91.94	94.82 94.27 92.85 91.77 92.98
Totals and Averages	12,163	6,259	18,422	11,221	5,754	16,975	13.74	10.85	12.76	92.90	94.12	93.30
All Cities.	186,408	53,004	239,412	171.014	49,550	220,564	13.61	10.15	12.84	92.78	93.60	92.96

Towns _	Pub- Sep- Total			ige Atten ie School		pe	Lost per r Pupil Enroli	of		Attenda Efficien Percent:	icy	
	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub-	Sep- arate	Total
In Counties Alexandria Alliston Almonte Amherstburg Arnprior Aurora Aylmer Barrie Blenheim Bothwell Bowmanville Brampton Brockville Burlington Campbellford. Carleton Place Chesley Clinton Cobourg Collingwood. Cornwall Deseronto Dunnville Dunnville Dunndas Dunnville Durham Eastview Elmira Essex Fort Erie Gananoque Georgetown Coderich Grimsby Hannover Harriston Harrow Harriston Harriston Harriston Harriston Harriston Harriston Hespeler Newarane N			Total  5011 237 362 552 760 402 1,246 341 86 525 729 1,475 499 494 413 873 861 3,692 204 428 273 1,616 363 343 333 185 964 478 478 478 478 478 402 21,406 488 482 402 21,406 488 482 402 21,406 488 482 402 21,406 488 482 402 21,406 488 482 402 21,406 488 482 402 21,406 488 482 402 21,406 488 488 488 488 488 488 488 488 488 48			7 otal 458 209 352 496 716 390 360 1,122 314 458 525 209 7790 770 73,364 175 204 468 546 321 175 177 182 2174 517 192 2174 5174 5174 5174 5174 5174 5174 5174 5			Total  13.94 14.91 10.57 13.53 12.03 16.19 11.10 11.22 10.73 10.08 13.41 16.19 16.85 15.37 12.44 16.19 16.85 15.37 12.44 16.19 16.85 15.37 12.44 16.19 16.85 15.37 17.08 18.30 12.59 18.4 19.30 12.59 18.4 19.30 12.59 18.4 19.30 12.59 18.4 19.30 12.59 18.30 12.59 18.30 19.30 12.59 18.30 19.30 19.30 11.55 11.55 11.55 11.67 12.65 11.78 12.87 12.87 13.30 14.13 12.50 13.30 14.67 12.87 18.89 18.30 19.13 14.13 19.30 19.			Total  92.60 94.67 92.78 93.76 93.76 93.37 93.49 94.57 93.31 93.01 93.37 95.21 93.37 95.25 93.34 99.25 93.37 95.25 93.34 99.35 95.25 93.34 99.35 95.25 93.34 99.35 95.25 93.34 99.35 95.25 93.34 99.35 95.25 93.34 99.35 95.25 93.34 99.35 95.25 93.35 99.35

	May Enrolment			Average Attendance for the School Year		Days Lost per Year per Pupil of May Envolment				ttendar Efficien Percenta	cy	
Towns	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lie	Sep- arate	Total
In Counties Simcoe. Smith's Falls. Southampton. Stayner. Strathroy. Tecumseh Thornbury Thorold Tillsonburg Trenton Uxbridge Vankleek Hill Walkerton Walkaceburg. Waterloo Weston. Whitby. Wiarton Wingham	\$76 960 221 126 407 70 105 507 138 570 945 235 73 196 577 1,035 678 485 287	555 354 254 210 207 210 417 422 197 38	876 1,131 221 126 407 625 105 861 392 570 1,155 285 406 994 1,457 875 523 287 240	798 8822 196 118 3700 59 955 486 126 537 904 220 61 187 626 434 273 228	155 522 331 227 196 191 200 371 401 187 36	798 1,037 196 118 370 581 955 817 353 537 1,100 220 252 387 916 1,368 813 470 273 228	13.30 12.89 13.77 9.89 12.83 23.85 9.43 11.62 14.19 10.49 17.13 14.57 13.10 11.92 13.29 17.13 14.57 13.10 11.92 13.97 15.79 11.09 6.56	13.10 13.33 9.12 18.93 14.14 12.32 6.72 19.20 9.36 12.29 9.90	13.30 12.92 13.77 9.89 12.83 14.51 9.43 10.60 17.27 10.49 13.45 17.13 12.91 9.72 15.66 11.18 13.25 15.34 11.09 6.56	92.51 93.26 92.51 94.68 93.26 93.26 94.12 92.61 94.28 91.84 93.32 92.98 91.87 93.32 93.32 94.12 93.32 94.12 94.13 94.13 94.14 95.18 96.41	92.85 93.09 95.19 90.12 92.31 93.50 96.47 89.25 95.03 94.99	92.51 93.20 92.51 94.68 93.26 93.26 94.93 94.55 91.00 94.28 92.86 91.46 93.09 94.21 94.21 94.21 92.27 94.21
Totals and Averages	46,577	15,678	62,255	42,861	14,623	57,484	13.44	11.94	13.06	93,28	93.60	93.36
In Districts Bala. Bala. Bala. Bolind River. Bonfield. Bracebridge. Bruce Mines. Capreol. Capreol. Charlton. Chelmsford. Coohatt. Cochrane. Coniston. Copper Cliff. Dryden. Englehart. Fort Frances. Frood Mine. Geraldton. Gore Bay. Gravenhurst. Haileybury. Hearst. Huntsville. Iroquois Falls. Kapnskasing. Kearney. Keewatin. Kenora. Larder Lake. Latchford. Little Current. Massey. Matheson. Mattawa. Nesterville. New Liskeard. Parry Sonnd. Powassan. Rainy River. Sioux Lookout. Smooth Rock	844 2233 	349 171 147 238 330 280 400  336 195 191 242 580 231 41 82 359 89		68 189 3630 68 344 348 344 524 346 269 873 322 132 115 360 227 74 198 363 363 574 198 363 363 363 365 574 198 198 198 198 198 198 198 198	37 86 319 75 39 119	68 574 152 383 97 199 360 90 216 653 611 473 346 269 1,150 407 22 132 115 360 407 258 437 434 490 407 407 408 408 409 409 409 409 409 409 409 409		10.00 5.83 13.80 15.53 13.57 15.91 18.05 24.20 26.58 19.06 	16.27 12.65 16.68 15.60	91.31 91.35 90.49 89.84 91.32 93.14 85.96 91.43 95.61 90.52 94.22 94.22 92.30 95.64 93.43 88.34 92.15 90.22 92.30 91.57 91.57 93.20 91.57 93.20 91.57 93.20 91.57 93.20 91.57 93.20 91.57 93.20 93.43	1	91.46 93.11 91.26 91.87
Falls Sturgeon Falls Thessalon Timmins Trout Creek Webbwood	140 195 316 2,249 68 109	218 1,034 2,426	358 1,229 316 4,675 68 109	132 171 281 2,079 65 94	191 917 2,312	323 1,088 281 4,391 65 94	8.39 15.91 20.87 11.72 17.41 28.20	17.35	12.47 17.13 20.87 11.33 17.41 28.20	95.25 91.50 89.38 93.92 91.08 85.87	91.70 91.35 94.33	90.95 89.38
Totals and Averages	13,479	8,211	21,690	12,177	7,610	19,787	15.14			92.05		
Villages	60,056	23,889	83,945	55,038	22,233	77,271	13.82	12.59	13.47	92,99	93.30	93.08
In Counties Acton Ailsa Craig	269 53		269 53	251 48		251 48	13.40 15.76		13.40 15.76	93.17 91.43		93.17

	1		DIVIC	OLME		DAII				11		
****	Ма	y Enroln	ient		ige Atten ie School		pe	Lost pe er Pupil Enrolr	of	1	ttendan Efficiend ercenta	y
Villages	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub-	Sep- arate	Total	Pub- lic	Sep- arate	Total
In Counties												
Alvinston Arkona	86 79		86 79	79 69		79	17.69		17.69	90.58		90.58
Arthur	125	72	197	113	66	69 179	18.35 11.29	8.30	18.35	90.44	95.55	90.44
Athens	109		109	95		95	16.90		16.90	91.00		91.00
Ayr Bancroft	94 230		94 230	86 203		86 203	7.85 24.50		7.85	95.79		95.79
Barry's Bay	33	271	304	23	253	276	41.50		$24.50 \\ 13.97$	87.59		87.59 92.50
Bath			56	46		46	13.99		13.99	91.52		91.52
Beamsville Beaverton	198		198 146	167 125		167 125	23.17		23.17	87.76		87.76
Beeton	105	206	105		191	97	18.70 13.69		18.70 13.69	92.79		89.48 92.79
Belle River Bloomfield	8	206	214			198	12.50	12.89	12.87	93.10	93.23	93,21
Blyth	80		98 80			93 71			11.43 13.86	93.70		$92.70 \\ 92.37$
Bobcaygeon	140		140	135		135	10.57		10.57	94.58		94.58
Bolton Bradford	119		85 112	76 107		76 107	24.88		24.88	86.31		86.31
Braeside	95		95			91	13.30		13.50 13.24	93.38		$92.91 \\ 93.38$
Brighton	221		221	199		199	19.70		19.70	89,97		89.97
Brussels Caledonia	190		93 190	180		87 180	8 03		10.10 8.93	94.44		94.44 95.10
Cannington	99	1	99	96	1	96	13.97		13.97	92.72		92.72
Cardinal Casselman	268	260	268 260	255	250	255 250	12.85		12.85	93.40		93.40 95.13
Cayuga	117		117	95	200	95	8.42	9.14	9.14 8.42	94.85	95.13	94.85
Chatsworth Chesterville	58 145	42	58 187	47 140	40	47	9.03		9.03	94.67		94.67
Chippawa	194		194			180 181	14.60	13.19	13.14 14.60	92.35	93.19	93.29 92.35
Clifford Cobden	70		70	68		68	10.18		10.18	94.94		94.94
Colborne	167		91 167			85 144	22 20		$\frac{15.40}{22.20}$	88 38		92.23 88.38
Coldwater	140		140	128		128	17.50		17.50	91.03		91.03
Courtright			62 78	57		57 73	[18.98]		$\frac{18.98}{11.27}$	90.51		90.51 93.71
Delhi	313		313	272		272	-16.681		16.68	89.54		89.54
Deloro Drayton	59 69		59 69			54 66	$\frac{11.42}{11.98}$		11.42			94.09 93.97
Dundalk	98		98	0.3		93			14.66	92.65		92.65
Eganville	123 108	260	123 368	114	210	114 312	13.58 16.31	8.55	13.58 10.83	92.90 91.88	05 20	92.90 93.78
Elora	160	33	193	151	31	182		10.00	14.91	92.05	95.39 95.11	92.57
Embro Erieau	66 46		66 46			60 42			11.93 13.27	93.87 93.14		93.87 93.14
Erin	86		86	75		75	17.37		17 271			90.45
Exeter Fenelon Falls.	144		217 144	199		195 135	$\frac{12.56}{14.17}$		12.56 14.17	93.38		93.38 $92.61$
Fergus	399	26	425	389	23	412	7.13	12.52	7.46	96.38	93.45	96.21
Finch Flesherton	0/1		87 62			78 57	$\frac{20.54}{10.48}$		$20.54 \\ 10.48$	89.03 93.70		89.03 93.70
Fonthill	171		171		57	156	16.40		16.40	91.64		91.64
Forest Hill Frankford	1,203	66	1,269	1,038		1,095 152		14.71	17.86 $12.77$	89.59 93.02	90.77	\$9.32 93.02
Glencoe	132		132	122		122	14.90		14.90	92.20		92.20
Grand Valley Hagersville	$\begin{bmatrix} 76 \\ 232 \end{bmatrix}$		76 232	68		68	22.02		22.02	88.83		88.83
Hastings	104	47	151	$\frac{215}{97}$	46	215 143	11.89	13.12	11.89 14.39	93.85 92.33	93.43	$93.85 \\ 92.73$
Havelock	201		201			180	17.46		17.46	90.94		90.94
Hepworth	52		88 52			83 48	8.58		8.58			95.09 92.65
Humberstone Iroquois	534	]	534	487		487	[13.18]		13.18	92.76		92.76
Jarvis	98		98 99	90		90 94	$\frac{13.78}{11.34}$		13.78			92.91 93.74
Kemptville	208		208	181		181	11.34		11.34	93.78		93.78
Killaloe Lakefield	9051	. 111	$\frac{156}{265}$	208	94	$\frac{135}{208}$	$\begin{bmatrix} 22.23 \\ 19.32 \end{bmatrix}$		16.57 $19.32$	\$8.89 88.93	1	90.97 88.93
Lanark	119		119		108	109	10.19		10.19	94.63		94.63
Lancaster Lion's Head	80	130	174 80	$\frac{41}{72}$	108	$\frac{149}{72}$		13.85	$     \begin{array}{c c}       16.75 \\       29.84     \end{array} $		91.99	90.81 85.64
Long Branch	819].		819	742		742	15.36		15.36	90.93		90.93
L'Orignal Lucan	175		175 96	160		160	13.07 14.20		13.07 14.20	93.23 92.36		93.23 92.36
Lucknow	139		139	125		125	16.37		16.37			91.18
Madoc Markdale	191].		191 122	188		188	14.30		14.30	92.99		92.99 93.21
Markham	164		164	158	37	105 158	$\frac{11.26}{9.60}$		9.60	95.01		95.01
Marmora	185	42	227 118			204	14.04	10.76	13.43	92.28		92.57
Merrickville	141		141	126].		106 126	$\begin{vmatrix} 19.61 \\ 16.20 \end{vmatrix}$		19.61 16.20	91.60		89.82 91.60
Mildmay Millbrook	64	109	173 144	52	107	159	16.20 . 9.93	5.01	6.89	94.42	97.35	96.28
Milverton	128		128	119		109	17.42 . 8.84 .		17.42 8.84	95.05		89.50 95.05
Morrisburg Neustadt		• • • • • •	248			221 96	11.17		11.17	93.73		93.73
			3711	1913		3/01	7 05 .		7.05	95,46 .		95.46

	Ma	y Enroli	nent	Avera for th	age Atter ne School	idance Year	pe	Lost pe r Pupil Enroli	of	I	ttendar Efficienc ercenta	y
Villages	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total	Pub- lic	Sep- arate	Total
Newboro. Newburgh. Newburgh. Newburgh. Neweastle New Hamburg Norwich. Norwich. Norwood. Oil Springs. Omemee. Paisley. Point Edward. Port Dalhousie Port Dover. Port Elgin. Port McNichol Port Perry. Port Stanley. Port Stanley. Portsmouth. Richmond Hill Ripley. Rockcliffe. Rodney. St. Clair Beach Shallow Lake. Shelbourne. Springfield. Stirling. Stoney Creek. Stouffville. Stouffville. Streetsville. Sutton. Swansea Tara. Tavistock. Teeswater. Thamesville. Thedford Tiverton. Tottenham. Tweed Victoria Harb'r Vienna. Wardsville. Waterford. Waterford. Waterford. West Lorne. Westport. Wheatley. Winchester. Woodbridge. Woodbridge. Woodville. Wyoming.	68 70 81 207 178 138 138 139 140 177 182 297 182 212 161 95 50 103 1100 104 45 78 144 245 121 121 121 121 137 140 140 140 140 140 140 140 140	78 43 43 31	81 207 178 138 70 94 112	39 138 168 129 203	70 40 31 28	63 64 63 63 71 71 71 71 71 71 72 74 74 74 73 73 73 73 73 73 73 73 73 73	20. 15 7. 96 13. 77 15. 90 15. 16 19. 58 11. 89 16. 73 12. 55 17. 94 16. 00 12. 01 9. 30 15. 71 22. 19 7. 34 17. 70 9. 45 24. 82 22. 15 16. 42 19. 85 17. 52 18. 64 17. 70 18. 64 17. 70 18. 64 17. 70 18. 64 17. 70 18. 64 19. 10 19. 10 19	11.31	10.64 23.70 16.48 20.15 7.96 13.77 15.90 15.16 19.58 11.89 16.73 12.19 11.75 12.19 11.75 24.82 15.62 15.61 19.88 17.79 11.60 19.85 17.52 16.90 14.40 11.75 17.58 17.52 18.36 19.21 11.60 19.83 10.99 15.51 11.60 19.99 15.51 16.29 15.51 16.29 17.52 16.39 17.73 18.29 18.65 19.21 16.21 16.39 17.72 18.66 19.91 19.85 19.21 16.39 16.39 16.39 17.73 16.39 16.39 16.39 17.73 18.29 18.66 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 19.91 19.86 1	93.89 98.70 91.18 89.38 92.15 90.55 89.84 93.77 91.80 93.27 89.39 91.14 93.27 89.39 91.14 93.37 93.84 94.97 94.97 95.11 93.33 94.95 96.03 94.94 97.93 98.85 96.03 98.93 99.10 96.93 98.93 99.10 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30 99.30	93.67 97.30 94.51 93.82 91.87	96.03 89.48 94.94 87.76 91.93 87.62 92.74 93.36 94.79 91.06 93.36
Totals and Averages	21,214	2,057	23,271	19,120	1,865	20,985	15.60	10.73	15.17	91.80	94.14	92.00
In Districts Burk's Falls Hilton Beach Port Carling Port Sydney Rosseau South River Sundridge Thornloe Windermere Totals and	150 36 92	29	150 36 92 30 44 163 134 46 22	133 36 77 27 41 153 120 15 16	22	133 36 77 27 41 153 120 37 16	24.26 20.40 12.28	9.60	24.26 20.40 12.28 44.40 11.14 11.41 18.44 14.74 23.20	87.74 90.55 92.48	94.19	87.74 90.55 92.48 79.36 94.13 94.10 89.66 91.66 86.37
Averages	688	29	717	618	22	640	18.27	9.60	17.92	90.34	94.19	90.48
All Villages	21,902	2,086	23,988	19,738	1,887	21,625	15.68	10.72	15.25	91.75	94.14	91.95
All Urban	268,366	78,979	347,345	245,790	73,670	319,460	13.82	10.90	13.16	92.74	93.52	92,92
Grand Totals	454,509	102,505	557.014	404,882	94,360	499,242	16.39	12.60	15.70	91.22	92.80	91.51
Increase for Year		1,495	639		1.587					.70	. 07	. 60
Decrease for Year	856			2,874		1,287	, 59	.82	. 64			

### THE PUBLIC AND SEPARATE SCHOOLS

### TABLE 2—PERCENTAGE SUMMARY OF ATTENDANCE EFFICIENCY BY VARIOUS PERIODS OF THE SCHOOL YEAR, 1937-38

		Pul	olic Sel	nools			Sepa	rate So	chools		Pub	lic and	l Separ	ate Sch	ools
	Under 50 Days	50-99 Days	100-149 Days	150-199 Days (but not full teaching year)	Full Teaching Year	Under 50 Days	50-99 Days	100-149 Days	150-199 Days (but not full teaching year)	Full Teaching Year	Under 50 Days	50-99 Days	100-149 Days	150-199 Days (but not full teaching year)	Pull Teaching Year
Rural Schools	11.11	6.98	13.72	65.01	3.18	7.77	8.00	13.89	65.17	5.17	10.75	7.09	13.74	65.03	3.39
Urban "	5.55	4.48	12.01	74.30	3.66	4.59	4.41	10.97	71.19	8.84	5.35	4.46	11.79	73.65	4.75
City "	5.49	4.51	12.74	73.47	3.79	4.84	4.47	11.94	70.04	8.71	5.36	4.50	12.58	72.78	4.78
Town "	5.39	4.22	9.82	77.06	3.51	3.74	4.25	9.30	73.29	9.42	4.94	4.23	9.68	76.02	5.13
Village "	6.52	4.90	11.39	74.28	2.91	8.05	4.60	5.90	75.87	5.58	6.65	4.87	10.93	74.42	3.13
A11 "	7.88	5.53	12.72	70.41	3.46	5.37	5.29	11.69	69.71	7.94	7.45	5.49	12.55	70.29	4.22

Note.-Legal number of teaching days, 198.

TABLE 3—ADMISSIONS, TRANSFERS, RETIREMENTS, EXEMPTIONS DURING THE SCHOOL YEAR, 1937-38

	Pu	blic Schoo	ols	Sep	arate Sch	ools	Both
	Rural	Urban	Total	Rural	Urban	Total	Both
Admissions: Beginners	23,302 2,130	31,141 3,043	54,443 5,173	3,037 232	8,533 600	11,570 832	66,013 6,005
Totals	25,432	34,184	59,616	3,269	9,133	12,402	72,018
Transfers: (a) To another Section or Municipality(b) To Special Industrial, Craft	17,620	15,962	33,582	1,422	2,891	4,313	37,895
School, or Auxiliary Class (c) To another Province	253 743	1,163 1,847	1.416 2,590	23 130	255 378	278 508	1,694 3,098
Totals	18,616	18,972	37,588	1,575	3,524	5,099	42,687
Retirements: (a) On reaching 14th birthday from:  Grades I and II Grades III and IV Grades V and VI Grades VI and VIII Grades IX and X (b) Between 14th and 16th birthday from: Grades I and II Grades I and II Grades V and VI Grades V and VI Grades V and VI Grades V and VIII Grades IX and X (c) By death By disability Totals	48 127 545 1,409 377 39 60 380 1,510 559 173 491	3 12 56 135 11 17 73 464 1,219 181 205 562	51 139 601 1,544 388 56 133 844 2,729 740 378 1,053	20 61 227 251 57 12 16 73 180 70 18 113	1 8 44 60 11 6 44 264 437 164 227	21 69 271 311 68 18 60 337 617 234 76 340	72 208 872 1,855 456 74 193 1,181 3,346 974 454 1,393
Exemptions: Pupils who attended no school during the year owing to: Private Tuition. Taking Departmental Correspondence Course. Mental Disability. Physical Disability: (a) Blind. (b) Deaf. (c) Crippled. Distance from School. Other Reasons.	40 299 199 22 22 207 202 192	89 28 128 8 8 94 1 61	129 327 327 30 30 301 203 253	5 6 22 4 3 30 50 89	32 40 5 1 50 1 37	37 6 62 9 4 80 51 126	166 333 389 39 34 381 254 379
Totals	1,183	417	1,600	209	166	375	1,975

THE PUBLIC AND SEPARATE SCHOOLS

,		Grand Total		1 22 37 66	798 1,272 1,257 846 565	332 168 138 87 79	59 47 46 29 95	54 16 34 30 41	6,122
17-38			Total	10 00	24 55 77 83 49	35 21 20 10 9	8 13 7 9	16 3 5	480
3 193			6 or more					1 2 2 2	13
YEAL	۷ ۲۲۱۶	AIV	ಸು				5 1 : : :	64 66	× ×
70C	SEPADATE	NW JE	က					11 2	24
SCHO	0	2	₩.			5	4 6 4 5	m : : : :	30
CE,			63		- 00 00	3 11 8 7	00 to 01 4		64
IDAN			-		24 75 75 81	32 19 .9			350
TEACHERS AND ATTENDANCE, SCHOOL YEAR 1937-38			Total		153 196 170 100 82	53 18 19 16	8 7 6 5 12	V - 1 8 73 4	668
AND			6 or more					© 70 ₹	12
RS /		ts	7.0					1 2 : :	က
CHE		Districts	4					4	10
TE/			co				6 1 2 2 3	64	17
S BY			63		4010	7 4 9 14 6	20 20 40 40		71
OOL	LIC			33	153 196 166 98 79	46 14 10 1			786
RURAL SCHOOLS	PUBLIC		Total	1 30 30 51	621 1,021 1,010 663 434	244 129 99 61 64	43 27 33 15 53	31 12 20 32	4,734
URA			6 or more					5 19 32	56
JF R		S	ಬ					1 10	11
FICATION OF		Counties	4				L	11 11 2	34
CATI			က			: : :	34 34	10 11 11 11 11 11 11 11 11 11 11 11 11 1	69
SIFI			C1		24	30 42 60 47 61	37 26 31 9 14		385
-CLAS			1	1 3 16 30 30 51	621 1,021 1,010 659 410	214 87 39 13 2	64		4,179
TABLE 4—CLASSII		Teachers		A verage Daily Attendance 1 2 3 4 4 5	6 – 10. 11 – 15. 16 – 20. 21 – 25. 26 – 30.	31 – 35. 36 – 40. 41 – 45. 46 – 50. 51 – 55.	56 - 60 61 - 65 66 - 70 71 - 75	101 - 125 126 - 150 151 - 200 201 - 300 Over 300	Totals

### THE PUBLIC AND SEPARATE SCHOOLS TABLE 5—FIFTH CLASSES (GRADES IX AND X) 1937-38

		1		1	1					
	hools ng Fifth rk	t in	of Sees	t in g		rage Class	G	radir	ng	Legis- lative
(A) Public Schools of the County Inspectorates	No. of Schools Conducting Fifth Class Work	Fifth Class Enrolment in These Schools	Number of Qualifying Fifth Classes	Enrolment in Qualifying Fifth Classes	Enrol- ment	Daily Attend- ance	A	В	С	Grant to Qualifying Classes
Brant and Norfolk (in part)	6	18	2	13	6.5	5.8	1	1		\$215.28
Bruce East, Grev (in part), Huron	30	52	9	26	2.8	2.7		2	7	638.37
(in part)	29 9	52 26	4 3	12 17	3.0 5.7	2.8 4.2	· · · · · ·		4 2	253.45 332.00
Carleton	5	17	1	10	10.0	7.5	3.	···i		89.99
Dundas and Grenville (in part) Dufferin and Peel (in part) Elgin East and City of St. Thomas	25 5	85 21	14 2 7	71 13	$\frac{5.0}{6.5}$	4.3	3	1	10	1,039.00 234.91
Essex, No. 1 Essex, No. 2, and Kent (in part)	10 4	220	$\frac{7}{2}$	217	31.0 3.0	25.9 2.3	4	3		979.17 121.27
Frontenac North & Addington (in part)	25	86	4	34	8.5	2.3 7.5	3	i		429.16
Frontenac South, No. 1, and Lennox (in part)	18	42	2	24	12.0	10.5	1	1		253.78
(in part) Frontenac South, No. 2, and City of Kingston	15	53	3	27	9.0	8.2	1		2	334.59
nart) (in part) and Prescott (in	11	29	3	15	5.0	4.1		2	1	270.64
Grey East. Grey North and Bruce North Grey South. Haldimand (in part) and Wentworth	27 16	46 34	8	28 12	$\frac{3.5}{12.0}$	3.0 9.8		1	7	550.75 117.87
Grey South	15	48	ŝ	48	3.2	2.4	2		6	673.26
(III Dall)	5	16	4	14	3.2	2.8		3	1	333.46
Halton. Hastings Centre.	5 15	9 27	1	4 5	$\frac{4.0}{5.0}$	3.4 4.0		1 1		128.95 112.32
mastings North and Renirew (in part)	15	32 15	î	10	10.0	8.4		1		87.24
Hastings South. Huron East. Huron West. Kent, No. 2, and Elgin West. Kent, No. 1. Lambton, No. 2. Lambton, No. 1. Lanark (in part). Leeds and Grenville, No. 1. Leeds and Grenville, No. 2. Leeds and Grenville, No. 3, and Lanark (in part).	25	42	4	16	4.0	3.5	5		4	260.37
Kent, No. 2, and Elgin West	36 12	102 36	9	62 24	$\frac{6.7}{4.0}$	6.1 3.4	3	4 2	· · · · · · · · · · · · · · · · · · ·	1,074.20 604.42
Kent, No. 1	11 17	27 54	4 5	16 37	$\frac{4.0}{7.4}$	3.4 6.4	· · · · ·	4	3	414.60 459.05
Lambton, No. 1.	10	22	2	11	5.5	4.3	1	1	i	373.67
Leeds and Grenville, No. 1	20 16	30 36	2 2	10 18	$\frac{5.0}{9.0}$	3.2 8.0				78.94 360.80
Leeds and Grenville, No. 2 Leeds and Grenville, No. 3, and Lanark	13	39	1	16	16.0	14.1	1			175.20
(in part)	16 17	32 30	2 3	5 11	$\frac{2.5}{3.7}$	2.3		···i·	2 2	109.40 262.89
Lincoln (in part) Middlesex East and Elgin (in part)	5	92	4	91	22.8	18.7	3	1		560.45
Middlesex West	12	47 11	4	35 4	8.8	7.6 3.7	1	2		$\begin{array}{c} 442.56 \\ 149.35 \end{array}$
Norfolk (in part)	21 10	44 73	4 7	24 69	$\frac{6.0}{9.9}$	4.5 8.9		4	3	347.44 820.60
Northumberland and Durham, No. 2	21	60	13	49	3.8	3.2		1	12	688.61
Northumberland and Durham, No. 3, and Hastings (in part)	6	17	3	12	4.0	3.0	··i	5	3	189.95
Ontario South	$\frac{11}{2}$	52 12	8 2	48 12	6.0 6.0	$\frac{4.9}{5.4}$		2 1	2	720.78 222.30
Oxford North and City of Woodstock Oxford South and Norfolk (in part)	10 5	34 18	4	28 17	7.0 4.3	6.3 3.1	1 3	3		$\begin{array}{c} 454.28 \\ 463.52 \end{array}$
Perth North and Wellington (in part).	20	48	4 7 1	30	4.5	3.6		6	1	626.90 97.75
Perth South	28 28	30	8	21	2.6	3.2			6	515.43
Peterborough West and Victoria East. Prescott and Russell, No. 1, and	17	28	3	17	5.7			3		251.38
Carleton (in part). Prescott and Russell, No. 3. Prince Edward. Renfrew North. Renfrew South. Simcoe East.	13 1	48 15	5 1	37 15	$\frac{7.4}{15.0}$	6.7 13.0	3 1	2		567.85 173.11
Prince Edward	16 18	36 60	4 5	16 32	4.0	3.2	1	i 1	2 3	366.15 610.30
Renfrew South	22	32	1	3	$\frac{6.4}{3.0}$	2.8		3	1	74.54
	14 18	99 57	6 10	91 45	$\frac{15.2}{4.5}$	12.2	3	3	4	\$23.38 795.55
Simcoe South, York (in part) and Peel (in part)	16	36	6	22	3.7	3.0		1	5	412.74
Stormont	6	28 74	5	24 35	12.0	11.1	5			207.68 764.55
Waterloo, No. 1.	24 27	146	10	47	7.0	5.6 3.8		6.	4	854.06
Victoria West. Waterloo, No. 1 Waterloo, No. 2 Welland (in part), Lincoln (in part) and	4	76	2	72	36.0		2			353.08
Haldimand (in part)	$\frac{4}{16}$	8 33	1 3	4 16	4.0 5.3	3.6			1	80.80 271.94
Wellington South and City of Guelph.	19	56 51	5 5	33 46	$\frac{6.6}{9.2}$		i	3 4	$\hat{2}$	383.59 548.12
Wentworth	9	- 51	- 25	41)	9.2	1.01	1	4		048.12

### THE PUBLIC AND SEPARATE SCHOOLS TABLE 5—FIFTH CLASSES (GRADES IX AND X), 1937-38

	hoots ng Fifth k	ss it in nools	of g sses	t in g	Ave	rage Class	0	Gradin	ıg	Legis- lative
(A) Public Schools of the County Inspectorates	No. of Schools Conducting Fifth Class Work	Fifth Class Enrolment in These Schools	Number of Qualifying Fifth Classes	Eurolment in Qualifying Fifth Classes	Enrol- ment	Daily Attend- ance	A	В	С	Grant to Qualifying Classes
York, No. 1. York, No. 2. York, No. 6.	4 1 1	12 4 162	2 1 4	9 4 162	4.5 4.0 40.5	3.0 2.8 27.0	1 4	1	i	\$274.27 29.00 215.00
Totals and Averages, (A)	902	2,993	271	2,006	7.4	6.2	71	93	107	\$25,726.01
(B) Public Schools of the District Inspectorates										
Division No. I  "" II. "" III. "" IV. "" VV. "" VI. "" VIII. "" VIII. "" VIII. "" IX. "" XI. "" XI. "" XII(1) "" XII(3) "" XIV "" XIV "" XVI	15 42 15 20 17 30 28 19 28 27 2 35 36 36 29	52 116 288 202 50 103 84 83 52 85 49 65 6 109 103 88 59	10 13 6 6 4 14 11 11 11 8 7 8 3 2 6 6 6 18 13	46 777 17 37 18 99 53 52 39 50 37 16 6 57 51 85	4.6 5.8 6.2 4.5 7.1 4.8 4.8 7.1 4.5 3.0 5.5 8.5 4.1	3.7 5.05.1 5.16 3.16 3.66 4.88 7.7 6.98	2 3  5 1  1 2  1 2 1	5 3 2 2 1 4 3 3 4 2 4 4 4 4 4	3 7 6 3 1 6 8 9 6 2 3  2	\$2,196.60 2,675.50 1,276.50 1,276.50 1,276.50 2,000.98 1,686.06 1,211.48 1,464.50 1,765.28 561.76 230.84 1,588.06 1,214.48 2,967.00 1,723.84
Totals and Averages (B)	414	1,334	146	794	5.4	4.4	22	45	79	\$27,680.38
(C) Public Schools of the City Inspectorates Kitchener. Toronto. Windsor.	2 11 1	355 1,490 286								
Totals and Averages (C)	14	2,131								
(D) Roman Catholic Separate School Inspectorates										
Division No. I.  "" II.  "" III.  "" IV.  "" V.  "" VI.  "" VII.  "" VIII.  "" XII.  "" XI.  "" XII.	7 10 8 11 7 10 6 7 18 13 6 12 2	84 113 21 89 23 481 122 89 390 344 428 191 411	4 6 3 9 4 3 6 10 6 1 5	20 50 14 83 20 54 122 67 120 55 40 30	5.0 8.3 4.6 9.2 5.0 18.0 20.3 11.2 12.0 9.2 40.0 6.0	3.3 7.3 3.5 8.1 4.1 15.5 17.3 10.0 9.1 7.9 36.6 5.0	1 3 1 4 3 2 6 5 7 4 1 1	1 1 2 3 1 1 3 2 3	2 2 1 	\$855.64 1,338.06 692.54 1,580.96 747.48 460.92 798.46 819.63 1,521.70 824.99 137.50 549.07
" " XII. " " XIII and XIV	12 24	301 219	8 15	147 121	18.4	15.5	5	1 2	····2 8	1,063.52
" " XVII. " " XVII. " " XIX. " " XX. " " XXI. " " XXI.	13 4 1 7 7 6	486 430 8 8 88 74 64	15 17 7 7 5	8 8 88 74 42	8.1 8.0 12.6 10.2 8.4	4.6 11.0 9.3 7.6	5  7 6 5	1 	8	96.97 985.60 895.32 612.51
Totals and Averages (D)	191	4,456	106	1,155	10.9	9.5	66	22	18	\$15,677 20
Grand Totals and Averages	1,521	10,914	523	3,955	7.6	6.4	159	160	204	\$69,083.59
Increases for the year  Decreases for the year	194	707	57	233	6	4	2	iò	45	\$1,283.11

Legislative grants for equipment only, to schools whose Fifth Classes have qualified in past years, but not this year, \$1,773.90

### TABLE 6—DISTRIBUTION OF TEACHERS\* AND CERTIFICATES, 1937-38 (A) RURAL THE PUBLIC AND SEPARATE SCHOOLS

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			Home	Eco- nomics	P.		:	:	: :		:	:	:	:	:	:		:	:	:	:			:	:	:	:		:	:	:	:	
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	AT		Kindergarten	Assist- ant and Primary	P		:	-	: :	:	:	:	:	:	:	:			:	:	:	: :	:	:	:	:	:		:	:	:	:	<del>: :</del>
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# THE PUBLIC AND SEPARATE SCHOOLS TABLE 6—DISTRIBUTION OF TEACHERS AND CERTIFICATES, 1937-1938 (A) RURAL (Continued)

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TABLE 6—DISTRIBUTION OF TEACHERS AND CERTIFICATES, 1937-1938  $_{\rm (B)}$  urban THE PUBLIC AND SEPARATE SCHOOLS

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### TABLE 6—DISTRIBUTION OF TEACHERS‡ AND CERTIFICATES, 1937-1938 THE PUBLIC AND SEPARATE SCHOOLS

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M.--Male ‡Includes Supervisors in case of Urban schools. P.U.-Permanent Ungraded.

P.—Public S.—Separate. F.—Female

Itinerant Music teachers are not included. \*\*In addition to these there are 3 Teachers of Manual Arts, 2 of Household Arts, 5 of Lip Reading.

### THE PUBLIC AND TABLE 7—HIGH SCHOOL ENTRANCE EXAM-

		May Enrol-	High School		mended lidates	C	Writing andidates	
	(A) Public Schools of the City Inspectorates	ment, Grades 1-8 (inclus.)	En- trance Candi- dates	Num- ber	Per cent.	Num- ber	Num- ber success- ful	Per cent. success- ful
1	Brantford	3,338	361	329	91.14	32	32	100.00
2	Chatham	1,753	193	128	66.32	65	40	61.54
3	Hamilton	18,268	1,804	1,513	83.87	291	190	65,29
4	Kitchener	3,191	405	260 674	64.20	145 368	263	33.79 71.47
5 6	London Ottawa	7,453 8,407	1,042 1,236	782	63.27	454	222	48.90
7	Peterborough	2,543	297	196	65.99	101	66	65.35
8	St. Catharines	3,033	309	250	80.90	59	56	94.92
9	Sarnia	2,362	261	179	68.58	82	56	68,29
10	Toronto	68,762	7,980	6,028	75.53	1,952	796	40.78
11	Welland	1,717	192	100	52.08	92	66	71.74
12	Windsor	10,650	1,337	934	69.86	403	262	65.01
	Totals and Averages	131,477	15,417	11,373	73.76	4,044	2,098	51,88
()	3) Public Schools of the County Inspectorates							
1	Brant, and Norfolk (in part)	3,277	344	190	55.03	154	111	72.08
2	Bruce East, Grey (in part), Huron (in part)	2,255	242	81	33.47	161	125	77.64
3	Bruce West	2,498	298	146	48.99	152	94	61.84
4	Carleton	4,181	500	234	46.80	266	175	65.79
5	Dufferin (in part) and Peel (in part)	2,034	252	132	52.38	120	68	56.66
6	Dundas and Grenville (in part)	2,316	291	101	34.71	190	130	68.42
7	Elgin East, and City of St. Thomas	4,038	461 464	353 99	76.57	108 365	307	46.30 84.10
8	Essex No. 1	4,070 4,285	387	170	43.93	217	168	77.42
10	Frontenac North, and Addington (in part)	1,474	141	45	31.91	96	57	59.37
11	Frontenac South, No. 1, and Lennox (in part)	2,158	234	87	37.18	147	95	64.62
12	Frontenac South, No. 2, and City of Kingston	2,989	362	207	57.18	155	134	86.45
13	Glengarry (in part) and Prescott (in part)	2,097	202	75	37.13	127	80	62,99
14	Grey East	2,400	272	105	38.60	167	125	74.85
15	Grey North, and Bruce North	3,466	341	212	62.17	129	94	73.30
16	Grey South	2,827 ,2562	285 303	125 123	43.86	160 180	130	81.25
17 18	Halton	3,481	391	202	51.66	189	134	70.89
19	Hastings Centre	2,320	154	58	37.66	96	70	72.95
20	Hastings North, Renfrew (in part) and City of							
21	Oshawa	4,875 4,127	536 421	228 288	42.54 68.41	308	225 89	73.05
22	Hastings South	2,246	289	111	38,41	178	135	75.84
23	Huron West	2,859	310	165	53,23	145	104	71.72
24	Kent No. 1	4,263	421	192	45.61	229	124	54.15
25	Kent No. 2, and Elgin West	2,708	311	187	60.13	124	72	58.16
26	Lambton No. 1	2,814	335	54	16.12	281	183	65.14
27	Lambton No. 2	2,407	279	91	32.62	188	127	67.56
28	Lanark West	4,182	496	172	34.46	324	258 106	80.13
29 30	Leeds, and Grenville, No. 1	1,964 2,530	268 262	102 116	38,06 44,07	166 146	89	63.85
31	Leeds, and Grenville, No. 3 and Lanark (in part)	2,222	244	86	35.25	158	112	70.88
32	Lennox, and Hastings South (in part)	2,246	272	136	50.00	136	72	52.94
33	Lincoln (in part)	3,817	404	259	64.11	145	97	66.90
34	Middlesex East, and Elgin (in part)	3,110	335	152	45.37	183	131	71.58
35	Middlesex West	2,567	318	82	25.79	236	185	78.39
36	Norfolk (in part)	4,270	401	185	46.13	216	143	66.20
37	Northumberland, and Durham, No. 1	2,728	276	100	23.91	210	160 53	76.19 70.67
38 39	Northumberland, and Durham, No. 2 Northumberland, and Durham, No. 3, and	2,229	274	199	72.63	75	90	10.01
	Hastings (in part)	2,875	349	177	50.72	172	141	81.97
40	Ontario North, and York (in part)	2,706	291	78	26.80	213	160	75.11
41	Ontario South	2,931	366	183	50.00	183	1 137	74.86

SEPARATE SCHOOLS
INATION RESULTS BY INSPECTORATES, 1938

Total Number   Foreign   Applicants   Effect   Successful   Total Applicants   Effect   Eff	_					Succes	sful Cand	lidates				
Number   Per Cent   Appli									Desti	nation		
Cauts	9	Number	of Total	of May								
1   168					Years	Mos.	Number	Per cent.	Number	Per cent.	Number	Per cent.
3         1,703         94,40         9.32         14          1,638         96.18           65         3.82           5         937         89.92         12.57         13         10         889         94.88           48         5.12           7         262         88.22         10.30         14         1         246         99.50         1          19         1.99           9         235         90.04         9.95         13         9         227         96.59           8         3.41           10         6,824         \$5.51         9.92         14         2         5.761         84.42         718         10.52         345         5.06           11         166         86.46         9.67         13         8         1,50         99.36           16         9.41           12         1,196         89.45         11.23         13         8         1,50         99.36           16         9.44           12         1,196         89.45         11.23         13	1	361	100.00	10.81	14		309	85.38			52	14.62
4         309         76,30         9,68         13         5         34         11,00         263         85.11         12         3.89           6         1,004         81,23         11,94         13         11         984         98.01         1	2	168	87.05	9.58	13	9	156					
5         937         89.92         12.97         13         10         880         94.88           48         5.12           6         10.04         81.23         11.94         13         11         984         98.01         1          19         1.99           7         269         88.22         10.30         14         1         246         93.89           16         6.11           8         30.90         99.03         10.09         14         2         268         87.58           8         3.41           10         6,824         83.51         9.02         14         2         5,761         88.42         718         10.52         345         5.06           11         166         84.45         11.23         13         8         1,058         88.46         132         11.04         6          6           12         200         85.15         9.02         13         10         11,720         87.00         1,114         8.27         637         4.73           1         301         87.50         9.13												
6         1,004         81,23         11,94         13         11         984         98,01         1			ł									
Table   Tabl			1	1								
8         306         99,03         10,09         14         2         268         87,58          38         12,42           10         6,824         85,51         9,92         14         2         5,761         84,42         718         10,52         345         5,06           11         166         86,46         9,67         13         8         1,058         88,46         132         11,04         6         5,06           13,471         87,38         10,25         13         10         11,720         87,00         1,114         8,27         637         4,73           1         301         87,50         9,19         13         9         236         78,41         19         6,31         46         15,28           2         206         85,12         9,13         13         7         121         58,74         21         10,20         64         15,28           3         240         80,50         9,91         13         6         66,67         33         31,35         47         19,58           4         403         87,50         9,37         13         10         117         28,48												
10												
1												
12	10	6,824	85.51	9,92	14	2	5,761	84.42	718	10.52	345	5.06
1   301   87,50   9,19   13   9   236   78,41   19   6,31   46   15,28     2   206   85,12   9,13   13   7   121   58,74   21   10,20   64   31,06     3   240   80,54   9,61   13   10   160   66,67   33   13,75   47   19,58     4   409   81,80   10,02   14   4   388   94,86   13   3,18   8   1,96     5   200   79,36   9,33   13   9   157   78,50   13   6,50   30   15,00     6   231   79,39   9,97   13   6   196   84,84   6   2,61   29   12,55     7   403   87,42   9,98   13   10   354   87,84   1   25   48   11,91     8   406   87,50   9,97   13   11   265   65,27   102   25,12   39   9,61     10   102   72,34   6,92   13   9   37   36,27   49   48,03   16   15,70     11   182   77,77   8,43   13   3   120   65,93   16   8,80   46   25,27     12   341   94,19   11,41   13   11   296   86,80   17   4,98   28   8,22     13   155   76,73   7,39   13   8   97   62,58   25   16,13   33   21,29     14   230   84,56   9,22   13   9   160   69,56   49   21,30   21   9,14     15   306   89,74   8,83   14   3   238   77,78   9   2,94   59   19,25     17   266   87,79   10,38   13   7   152   59,61   25   9,80   78   30,59     18   336   85,93   9,66   14   267   79,46   1   30   68   20,24     19   128   83,11   5,52   14   2   88   68,76   16   12,48   24   18,76    20   453   84,51   9,29   13   2   380   83,88   31   6,84   42   9,28     21   377   89,54   9,13   14   33   34   49,44   73   27,14   63   23,42     22   246   85,12   10,95   13   7   162   65,85   42   17,07   42   17,08     23   269   86,77   9,00   13   14   33   34,944   73   27,14   63   23,42     24   46   85,15   10,95   13   7   162   65,85   42   17,07   42   17,08     25   259   83,28   9,56   13   3   10   133   49,44   73   27,14   63   23,42     25   26   277   70,75   8,42   13   11   149   62,86   26   10,98   62   67,79   14,70     25   26   277   70,75   8,42   13   11   149   62,86   26   10,98   62   67,79   17,08     26   237   70,75   8,42   13   11   149   62,86   26   10,98   62   67,79   68   67,79   68   67,79   68   68,80   17	11	166	86.46	9.67				1				)
1 301 87.50 9.19 13 9 236 78.41 19 6.31 46 15.28 2 206 85.12 9.13 13 7 121 58.74 21 10.20 64 31.06 3 240 80.54 9.61 13 10 160 66.67 33 13.75 47 19.58 4 409 81.80 10.02 14 4 388 94.86 13 3 3.18 8 1.96 5 200 79.36 9.83 13 9 157 78.50 13 6.50 30 15.00 6 231 79.39 9.97 13 6 196 84.84 6 2.61 29 12.55 7 403 87.42 9.98 13 10 354 87.84 1 .25 48 11.91 8 406 87.50 9.97 13 11 227 67.16 6 1.78 105 31.06 10 102 72.34 6.92 13 9 37 36.27 49 48.03 16 15.70 11 182 77.77 8.43 13 3 120 65.93 16 8.80 17 4.98 28 8.22 12 341 94.19 11.41 13 11 226 65.93 16 8.80 46 25.72 12 341 94.19 11.41 13 11 226 86.80 17 4.98 28 8.22 13 155 76.73 7.39 13 8 97 62.58 25 16.13 33 21.29 14 230 84.56 9.22 13 9 160 69.56 49 21.30 21 9.14 15 306 89.74 8.83 14 3 238 77.78 9 2.94 59 19.25 16 255 89.47 9.02 13 7 152 59.61 25 9.80 78 30.59 17 266 87.79 10.38 13 7 186 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 .30 68 20.24 19 128 83.11 5.52 14 2 88 68.76 16 12.48 24 18.76  20 453 84.51 9.29 13 14 337 89.39 18 4.77 22 5.84 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 22 246 85.12 10.95 13 7 162 65.85 18 6.96 46 17.76 23 269 86.77 9.40 13 10 133 49.44 73 27.14 63 23.42 24 36 75.06 7.41 13 9 29 13 2 380 83.88 31 6.84 42 9.28 25 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 26 237 70.75 8.42 13 11 149 62.86 26 10.98 6.90 74 17.05 28 430 8.956 77 9.40 13 10 133 49.44 73 27.14 63 23.42 29 208 77.61 10.59 13 7 162 65.85 42 17.07 42 17.05 20 453 84.51 9.29 13 2 380 83.88 31 6.84 42 9.28 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 22 246 85.12 10.95 13 7 162 65.85 28 18 6.96 46 17.76 26 237 70.75 8.42 13 11 49 62.86 26 10.98 6.90 74 17.00 30 205 78.24 8.10 13 8 163 79.51 16 7.80 6.99 74 17.20 31 198 81.15 8.91 13 10 120 57.69 19 9.14 69 33.17 33 356 88.12 9.36 13 11 257 78.35 29 8.85 42 17.07 42 17.08 34 283 84.88 9.10 13 7 198 74.15 6 2.26 68 2.40 35 208 76.47 9.26 13 10 120 57.69 19 9.14 69 33.17 33 356 88.12 9.36 13 11 257 78.35 29 8.85 42 12.09 35 208 77.61 10.59 13 11 257 78.35 29 8.85 42 12.80	12	1,196	89.45	11.23	13	8	1,058	88.46	132	11.04	6	.50
2 206 85.12 9.13 13 7 121 55.74 21 10.20 64 31.06 3 240 80.54 9.61 13 10 160 66.67 33 13.75 47 19.58 4 409 81.80 10.02 14 4 388 94.86 13 3.18.8 8 1.96 5 200 79.36 9.83 13 9 157 78.50 13 6.50 30 15.00 6 231 79.39 9.97 13 6 196 84.84 6 2.61 29 12.55 7 403 87.42 9.98 13 10 354 87.84 1 2.5 48 11.91 8 406 87.50 9.97 13 11 265 65.27 102 25.12 39 9.61 9 338 87.34 7.89 13 11 227 67.16 6 1.78 105 31.06 10 102 72.34 6.92 13 9 37 36.27 49 48.03 16 15.70 11 182 77.77 8.43 13 3 120 65.93 16 8.80 46 25.27 12 341 94.19 11.41 13 11 296 86.80 17 4.98 28 8.22 13 155 76.73 7.39 13 8 97 62.58 25 16.13 33 21.29 14 230 84.56 9.22 13 9 160 69.56 49 21.30 21 9.14 15 306 89.74 8.83 14 3 238 77.78 9 2.94 59 19.28 16 255 89.47 9.02 13 7 152 59.61 25 9.80 78 30.59 17 266 87.79 10.38 13 7 186 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 .30 68 20.24 18 22 246 85.12 10.95 13 7 162 65.85 42 17.07 42 18.70 20 453 84.51 9.29 13 2 88.66 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 .30 68 20.24 19 128 83.11 5.52 14 2 88 68.76 16 12.48 24 18.76 20 453 84.51 9.29 13 7 162 65.85 42 17.07 42 17.08 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 22 246 85.12 10.95 13 7 162 65.85 42 17.07 42 17.08 23 299 86.77 9.40 13 10 133 49.44 73 27.14 63 23.42 24 316 75.06 7.41 13 9 229 72.46 12 3.81 75 23.73 25 259 83.28 9.56 13 3 10 13 7 162 65.85 42 17.07 42 17.08 25 259 83.28 9.56 13 3 10 13 49.44 73 27.14 63 23.42 24 316 75.06 7.41 13 9 29 72.46 12 3.81 75 23.73 25 259 83.28 9.56 13 3 11 14 14 60.80 11 5.66 26 10.98 62 26.16 27 218 78.14 9.05 14 142 65.14 24 11.01 52 23.85 36 85.15 8.91 13 8 10 13 8 160 80.80 11 5.66 27 13.64 39 318 91.11 11.06 13 8 163 77.59 19 9.14 69 33.17 38 252 91.97 11.30 15 Data not available 39 318 91.11 11.06 13 8 163 67.76.57 16 6.72 35 14.71		13,471	87.38	10.25	13	10	11,720	87,00	1,114	8.27	637	4.73
2 206 85.12 9.13 13 7 121 55.74 21 10.20 64 31.06 3 240 80.54 9.61 13 10 160 66.67 33 13.75 47 19.58 4 409 81.80 10.02 14 4 388 94.86 13 3.18.8 8 1.96 5 200 79.36 9.83 13 9 157 78.50 13 6.50 30 15.00 6 231 79.39 9.97 13 6 196 84.84 6 2.61 29 12.55 7 403 87.42 9.98 13 10 354 87.84 1 2.5 48 11.91 8 406 87.50 9.97 13 11 265 65.27 102 25.12 39 9.61 9 338 87.34 7.89 13 11 227 67.16 6 1.78 105 31.06 10 102 72.34 6.92 13 9 37 36.27 49 48.03 16 15.70 11 182 77.77 8.43 13 3 120 65.93 16 8.80 46 25.27 12 341 94.19 11.41 13 11 296 86.80 17 4.98 28 8.22 13 155 76.73 7.39 13 8 97 62.58 25 16.13 33 21.29 14 230 84.56 9.22 13 9 160 69.56 49 21.30 21 9.14 15 306 89.74 8.83 14 3 238 77.78 9 2.94 59 19.28 16 255 89.47 9.02 13 7 152 59.61 25 9.80 78 30.59 17 266 87.79 10.38 13 7 186 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 .30 68 20.24 18 22 246 85.12 10.95 13 7 162 65.85 42 17.07 42 18.70 20 453 84.51 9.29 13 2 88.66 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 .30 68 20.24 19 128 83.11 5.52 14 2 88 68.76 16 12.48 24 18.76 20 453 84.51 9.29 13 7 162 65.85 42 17.07 42 17.08 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 22 246 85.12 10.95 13 7 162 65.85 42 17.07 42 17.08 23 299 86.77 9.40 13 10 133 49.44 73 27.14 63 23.42 24 316 75.06 7.41 13 9 229 72.46 12 3.81 75 23.73 25 259 83.28 9.56 13 3 10 13 7 162 65.85 42 17.07 42 17.08 25 259 83.28 9.56 13 3 10 13 49.44 73 27.14 63 23.42 24 316 75.06 7.41 13 9 29 72.46 12 3.81 75 23.73 25 259 83.28 9.56 13 3 11 14 14 60.80 11 5.66 26 10.98 62 26.16 27 218 78.14 9.05 14 142 65.14 24 11.01 52 23.85 36 85.15 8.91 13 8 10 13 8 160 80.80 11 5.66 27 13.64 39 318 91.11 11.06 13 8 163 77.59 19 9.14 69 33.17 38 252 91.97 11.30 15 Data not available 39 318 91.11 11.06 13 8 163 67.76.57 16 6.72 35 14.71												
3         240         80.54         9.61         13         10         160         66.67         33         13.75         47         19.58           4         409         81.80         10.02         14         4         388         94.86         13         3.18         8         1.96           5         200         79.36         9.83         13         9         157         78.50         13         6.50         30         15.00           6         231         79.39         9.97         13         10         354         87.84         1         .25         48         11.91           8         406         87.50         9.97         13         11         265         65.27         102         25.12         39         9.61           9         338         87.34         7.89         13         11         226         65.27         102         25.12         39         9.61           10         272.34         6.92         13         3         120         65.93         16         8.80         46         25.27           12         341         94.19         11.41         13         11         296 <td>1</td> <td>301</td> <td>87.50</td> <td>9.19</td> <td>13</td> <td></td> <td>236</td> <td>78.41</td> <td>19</td> <td>6.31</td> <td>46</td> <td>L .</td>	1	301	87.50	9.19	13		236	78.41	19	6.31	46	L .
4         400         81.80         10.02         14         4         388         94.86         13         3.18         8         1.96           5         200         79.36         9.83         13         9         157         78.50         13         6.50         30         15.00           6         231         79.39         9.97         13         16         196         84.84         6         2.61         29         12.50           7         403         87.42         9.98         13         10         354         87.84         1         .25         48         11.91           9         338         87.34         7.89         13         11         227         67.16         6         1.78         105         31.06           10         102         72.34         6.92         13         9         37         30.27         49         48.03         16         15.70           11         182         77.77         8.43         13         3         120         66.80         17         4.98         28         8.22           12         341         94.91         19         13         8		206		9.13	13					1		1
5         200         79.36         9.83         13         9         157         78.50         13         6.50         30         15.00           6         231         79.39         9.97         13         10         354         87.84         1         25         48         11.91           8         406         87.50         9.97         13         11         225         65.27         102         25.12         39         9.61           10         102         72.34         6.92         13         9         37         36.27         49         48.03         16         15.70           11         182         77.77         8.43         13         3         120         65.93         16         8.80         46         25.27           12         341         94.19         11.41         13         11         296         86.80         17         4.98         28         8.22           13         155         76.73         7.39         13         8         97         62.58         25         16.13         33         21.29           14         230         84.56         9.22         13         9			1									
6 231 79.39 9.97 13 6 196 84.84 6 2.61 29 12.55 7 403 87.42 9.98 13 10 354 87.84 1 .25 48 11.91 8 406 87.50 9.97 13 11 265 65.27 102 25.12 39 9.61 9 338 87.34 7.89 13 11 227 67.16 6 1.78 105 31.06 10 102 72.34 6.92 13 9 37 36.27 49 48.03 16 15.70 11 182 77.77 8.43 13 3 120 65.93 16 8.80 46 25.27 12 341 94.19 11.41 13 11 296 86.80 17 4.98 28 8.22 13 155 76.73 7.39 13 8 97 62.58 25 16.13 33 21.29 14 230 84.56 9.22 13 9 160 69.56 49 21.30 21 9.14 15 306 89.74 8.83 14 3 238 77.78 9 2.94 59 19.28 16 255 89.47 9.02 13 7 152 59.61 25 9.80 78 30.59 17 266 87.79 10.38 13 7 186 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 30 68 20.24 19 128 83.11 5.52 14 2 88 68.76 16 12.48 24 18.76 20 453 84.51 9.29 13 2 380 83.88 31 6.84 42 9.28 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 22 246 85.12 10.95 13 7 162 65.85 42 17.07 42 17.08 23 269 86.77 9.40 13 10 133 49.44 73 27.14 63 23.42 24 316 75.06 7.41 13 9 229 72.46 12 3.81 6.96 46 17.76 26 237 70.75 8.42 13 11 149 62.86 26 10.98 62 26.16 25 259 83.28 9.56 13 3 195 75.28 18 6.96 46 17.76 26 237 70.75 8.42 13 11 149 62.86 26 10.98 62 26.16 27 218 78.14 9.05 14 142 65.14 24 11.01 52 23.87 28 430 86.97 10.28 14 326 75.51 16 7.80 92 13.64 30 205 78.24 8.10 13 8 160 75.50 59 16.58 46 12.92 31 198 81.15 8.91 13 8 160 80.80 11 5.56 27 13.64 32 208 77.61 10.59 13 9 161 77.50 59 16.58 46 12.92 33 269 83.28 9.56 13 3 195 75.28 18 6.96 46 17.76 26 237 70.75 8.42 13 11 149 62.86 26 10.98 62 26.16 27 218 78.14 9.05 14 142 65.14 24 11.01 52 23.85 28 430 86.97 10.28 14 326 75.51 16 7.80 26 12.69 31 198 81.15 8.91 13 8 160 80.80 11 5.56 27 13.64 32 208 76.47 9.26 13 10 120 57.69 19 9.14 69 33.17 33 356 88.12 9.36 13 11 251 70.50 59 16.58 46 12.92 34 283 84.48 9.10 13 7 196 69.25 19 6.72 68 24.03 35 267 83.96 10.40 13 7 196 69.25 19 6.72 68 24.03 35 267 83.96 10.40 13 7 196 69.25 19 6.72 68 24.03 35 267 83.96 10.40 13 7 196 69.25 19 6.72 68 24.03 36 328 81.79 7.68 13 11 251 70.50 59 16.58 46 12.92 37 226 81.88 8.82 13 11 DD DATA BOLD AVAILABLE DATA BOLD A					1			1	i	1		
7         403         87,42         9,98         13         10         354         87,84         1         .25         48         11,91           8         406         87,50         9,97         13         11         227         67,16         6         1,78         105         31,06           10         102         72,34         6,92         13         9         37         36,27         49         48.03         16         15,70           11         182         77,77         8.43         13         3         120         65,93         16         8.80         46         22,27           12         341         94,19         11,41         13         11         296         86,80         17         4,98         28         8.22           13         155         76,73         7,39         13         8         97         62,58         25         16,13         33         21,29           14         230         84,56         9.22         13         9         160         69,56         49         21,30         21         9,14           15         366         89,74         8,83         14         3			1				1		L			l .
8         406         87.50         9.97         13         11         265         65.27         102         25.12         39         9.61           10         102         72.34         6.92         13         9         37         36.27         49         48.03         16         15.70           11         182         77.77         8.43         13         3         120         65.93         16         8.80         46         25.27           12         341         94.19         11.41         13         11         296         86.80         17         4.98         28         8.22           13         155         76.73         7.39         13         8         97         62.58         25         16.13         33         21.29           14         230         84.56         9.22         13         9         160         69.56         49         21.30         21         9.14           15         306         89.74         8.83         14         3         238         77.78         9         2.94         59         19.28           16         255         89.47         9.02         13         7 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td>I .</td> <td>1</td>							1		1		I .	1
9 338 87.34 7.89 13 11 227 67.16 6 1,78 105 31.06 10 102 72.34 6.92 13 9 37 36.27 49 48.03 16 15.70 11 182 77.77 8.43 13 3 120 65.93 16 8.80 46 25.27 12 341 94.19 11.41 13 11 296 86.80 17 4.98 28 8.22 13 155 76.73 7.39 13 8 97 62.58 25 16.13 33 21.29 14 230 84.56 9.22 13 9 160 69.56 49 21.30 21 9.14 15 306 89.74 8.83 14 3 238 77.78 9 2.94 59 19.28 16 255 89.47 9.02 13 7 152 59.61 25 9.80 78 30.59 17 266 87.79 10.38 13 7 186 69.92 8 3.01 72 27.07 18 336 85.93 9.66 14 267 79.46 1 .30 68 20.24 19 128 83.11 5.52 14 2 88 68.76 16 12.48 24 18.76 20 453 84.51 9.29 13 2 380 83.88 31 6.84 42 9.28 21 377 89.54 9.13 14 337 89.39 18 4.77 22 5.84 22 246 85.12 10.95 13 7 162 65.85 42 17.07 42 17.08 23 269 86.77 9.40 13 10 133 49.44 73 27.14 63 23.42 24 316 75.06 7.41 13 9 229 72.46 12 3.81 75 23.73 25.98 32 9.56 13 3 19 5 75.28 18 6.96 46 17.76 26 237 70.75 8.42 13 11 149 62.86 26 10.98 62 26.16 27 218 78.14 9.05 14 142 65.14 24 11.01 52 23.85 28 430 86.97 10.28 14 142 65.14 24 11.01 52 23.85 28 430 86.			1	1	1							
10         102         72.34         6.92         13         9         37         36.27         49         48.03         16         15.70           11         182         77.77         8.43         13         3         120         65.93         16         8.80         46         25.27           12         341         94.19         11.41         13         11         296         86.80         17         4.98         28         8.22           13         155         76.73         7.39         13         8         97         62.58         25         16.13         33         21.29           14         230         84.56         9.22         13         9         160         69.56         49         21.30         21         9.14           15         306         89.74         8.83         14         3         238         77.78         9         2.94         59         19.29           16         255         89.47         9.02         13         7         186         69.92         8         3.01         72         27.07           18         336         85.93         9.66         14 <td></td> <td></td> <td>l .</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td>			l .	1	1					1		1
12         341         94.19         11.41         13 11         296         86.80         17         4.98         28         8.22           13         155         76.73         7.39         13 8         97         62.58         25         16.13         33         21.29           14         230         84.56         9.22         13 9         160         69.56         49         21.30         21         9.14           15         306         89.74         8.83         14 3         238         77.78         9         2.94         59         19.28           16         255         89.47         9.02         13 7         152         59.61         25         9.80         78         30.59           17         266         87.79         10.38         13 7         186         69.92         8         3.01         72         27.07           18         336         85.93         9.66         14         267         79.46         1         .30         68         20.24           19         128         83.11         5.52         14 2         88         68.76         16         12.48         24         18.76 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>37</td> <td></td> <td>49</td> <td></td> <td>16</td> <td>15.70</td>							37		49		16	15.70
13         155         76.73         7.39         13         8         97         62.58         25         16.13         33         21.29           14         230         84.56         9.22         13         9         160         69.56         49         21.30         21         9.14           15         306         89.74         8.83         14         3         238         77.78         9         2.94         59         19.28           16         255         89.47         9.02         13         7         152         59.61         25         9.80         78         30.59           17         266         87.79         10.38         13         7         186         69.92         8         3.01         72         27.07           18         336         85.93         9.66         14          267         79.46         1         .30         68         20.24           19         128         83.11         5.52         14         2         88         68.76         16         12.48         24         18.76           20         453         84.51         9.29         13         2		182	77.77	8.43	13	3	120	65.93	16	8.80	46	25.27
14         230         84.56         9.22         13         9         160         69.56         49         21.30         21         9.14           15         306         89.74         8.83         14         3         228         77.78         9         2.94         59         19.28           16         255         89.47         9.02         13         7         152         59.61         25         9.80         78         30.59           17         266         87.79         10.38         13         7         152         59.61         25         9.80         78         30.59           18         336         85.93         9.66         14          267         79.46         1         .30         68         20.24           19         128         83.11         5.52         14         2         88         68.76         16         12.48         24         18.76           20         453         84.51         9.29         13         2         380         83.88         31         6.84         42         9.28           21         377         89.54         9.13         7         162	12	341	94.19	11.41	13	11	1	86.80	17	4.98	28	
15         306         89.74         8.83         14         3         238         77.78         9         2.94         59         19.28           16         255         89.47         9.02         13         7         152         59.61         25         9.80         78         30.59           17         266         87.79         10.38         13         7         186         69.92         8         3.01         72         27.07           18         336         85.93         9.66         14          267         79.46         1         .30         68         20.24           19         128         83.11         5.52         14         2         88         68.76         16         12.48         24         18.76           20         453         84.51         9.29         13         2         380         83.88         31         6.84         42         9.28           21         377         89.54         9.13         14          337         89.39         18         4.77         22         5.84           22         246         85.12         10.95         13         7			1	1	1		1		1			_
16         255         89.47         9.02         13         7         152         59.61         25         9.80         78         30.59           17         266         87.79         10.38         13         7         186         69.92         8         3.01         72         27.07           18         336         85.93         9.66         14          267         79.46         1         .30         68         20.24           19         128         83.11         5.52         14         2         88         68.76         16         12.48         24         18.76           20         453         84.51         9.29         13         2         380         83.83         31         6.84         42         9.28           21         377         89.54         9.13         14          337         89.39         18         4.77         22         5.84           21         377         89.54         9.13         14          337         89.39         18         4.77         22         5.84           21         36         86.77         9.40         13         10 <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td></td>			1	1	1				1	1	1	
17         266         87.79         10.38         13         7         186         69.92         8         3.01         72         27.07           18         336         85.93         9.66         14          267         79.46         1        30         68         20.24           19         128         83.11         5.52         14         2         88         68.76         16         12.48         24         18.76           20         453         84.51         9.29         13         2         380         83.88         31         6.84         42         9.28           21         377         89.54         9.13         14          337         89.39         18         4.77         22         5.84           22         246         85.12         10.95         13         7         162         65.85         42         17.07         42         17.08           23         269         86.77         9.40         13         10         133         49.44         12         3.81         75         23.85           24         316         75.06         7.41         13         9<			1	1							1	
18     336     85.93     9.66     14      267     79.46     1     .30     68     20.24       19     128     83.11     5.52     14     2     88     68.76     16     12.48     24     18.76       20     453     84.51     9.29     13     2     380     83.88     31     6.84     42     9.28       21     377     89.54     9.13     14      337     89.39     18     4.77     22     5.84       22     246     85.12     10.95     13     7     162     65.85     42     17.07     42     17.08       23     269     86.77     9.40     13     10     133     49.44     73     27.14     63     23.42       24     316     75.06     7.41     13     9     229     72.46     12     3.81     75     23.73       25     259     83.28     9.56     13     3     195     75.28     18     6.96     46     17.76       26     237     70.75     8.42     13     11     149     62.86     26     10.98     62     26.16       27     218     7							1	}	1		1	
19							1	1			1	i
21     377     89.54     9.13     14      337     89.39     18     4.77     22     5.84       22     246     85.12     10.95     13     7     162     65.85     42     17.07     42     17.08       23     269     86.77     9.40     13     10     133     49.44     73     27.14     63     23.42       24     316     75.06     7.41     13     9     229     72.46     12     3.81     75     23.73       25     259     83.28     9.56     13     3     195     75.28     18     6.96     46     17.76       26     237     70.75     8.42     13     11     149     62.86     26     10.98     62     26.16       27     218     78.14     9.05     14      142     65.14     24     11.01     52     23.85       28     430     86.97     10.28     14      326     75.81     30     6.99     74     17.20       29     208     77.61     10.59     13     9     161     77.40     24     11.54     23     11.06       30     205			1				1	1	1		1	1
22         246         85.12         10.95         13         7         162         65.85         42         17.07         42         17.08           23         269         86.77         9.40         13         10         133         49.44         73         27.14         63         23.42           24         316         75.06         7.41         13         9         229         72.46         12         3.81         75         23.73           25         259         83.28         9.56         13         3         195         75.28         18         6.96         46         17.76           26         237         70.75         8.42         13         11         149         62.86         26         10.98         62         26.16           27         218         78.14         9.05         14          142         65.14         24         11.01         52         23.85           28         430         86.97         10.28         14          326         75.81         30         6.99         74         17.20           29         208         77.61         10.59         13						2						
23         269         86.77         9.40         13         10         133         49.44         73         27.14         63         23.42           24         316         75.06         7.41         13         9         229         72.46         12         3.81         75         23.73           25         259         83.28         9.56         13         3         195         75.28         18         6.96         46         17.76           26         237         70.75         8.42         13         11         149         62.86         26         10.98         62         26.16           27         218         78.14         9.05         14          142         65.14         24         11.01         52         23.85           28         430         86.97         10.28         14          326         75.81         30         6.99         74         17.20           29         208         77.61         10.59         13         9         161         77.40         24         11.54         23         11.06           30         205         78.24         8.10         13									I .		1	ł .
24         316         75.06         7.41         13         9         229         72.46         12         3.81         75         23.73           25         259         83.28         9.56         13         3         195         75.28         18         6.96         46         17.76           26         237         70.75         8.42         13         11         149         62.86         26         10.98         62         26.16           27         218         78.14         9.05         14          142         65.14         24         11.01         52         23.85           28         430         86.97         10.28         14          326         75.81         30         6.99         74         17.20           29         208         77.61         10.59         13         9         161         77.40         24         11.54         23         11.06           30         205         78.24         8.10         13         8         160         80.80         11         5.56         27         13.64           32         208         76.47         9.26         13					1				1		1	
25         259         83.28         9.56         13         3         195         75.28         18         6.96         46         17.76           26         237         70.75         8.42         13         11         149         62.86         26         10.98         62         26.16           27         218         78.14         9.05         14          142         65.14         24         11.01         52         23.85           28         430         86.97         10.28         14          326         75.81         30         6.99         74         17.20           29         208         77.61         10.59         13         9         161         77.40         24         11.54         23         11.06           30         205         78.24         8.10         13         8         163         79.51         16         7.80         26         12.69           31         198         81.15         8.91         13         8         160         80.80         11         5.56         27         13.64           32         208         76.47         9.26         13									1	1		1
26         237         70.75         8.42         13         11         149         62.86         26         10.98         62         26.16           27         218         78.14         9.05         14          142         65.14         24         11.01         52         23.85           28         430         86.97         10.28         14          326         75.81         30         6.99         74         17.20           29         208         77.61         10.59         13         9         161         77.40         24         11.54         23         11.06           30         205         78.24         8.10         13         8         163         79.51         16         7.80         26         12.69           31         198         81.15         8.91         13         8         160         80.80         11         5.56         27         13.64           32         208         76.47         9.26         13         10         120         57.69         19         9.14         69         33.17           33         356         88.12         9.36         13				l .	t				1			I .
27         218         78.14         9.05         14          142         65.14         24         11.01         52         23.85           28         430         86.97         10.28         14          326         75.81         30         6.99         74         17.20           29         208         77.61         10.59         13         9         161         77.40         24         11.54         23         11.06           30         205         78.24         8.10         13         8         163         79.51         16         7.80         26         12.69           31         198         81.15         8.91         13         8         160         80.80         11         5.56         27         13.64           32         208         76.47         9.26         13         10         120         57.69         19         9.14         69         33.17           33         356         88.12         9.36         13         11         251         70.50         59         16.58         46         12.92           34         283         84.48         9.10         13				(							1	
28         430         86,97         10.28         14          326         75,81         30         6.99         74         17.20           29         208         77,61         10.59         13         9         161         77.40         24         11.54         23         11.06           30         205         78.24         8.10         13         8         163         79.51         16         7.80         26         12.69           31         198         81.15         8.91         13         8         160         80.80         11         5.56         27         13.64           32         208         76.47         9.26         13         10         120         57.69         19         9.14         69         33.17           33         356         88.12         9.36         13         11         251         70.50         59         16.58         46         12.92           34         283         84.48         9.10         13         7         196         69.25         19         6.72         68         24.03           35         267         83.96         10.40         13         <										11.01	52	23.85
30         205         78.24         8.10         13         8         163         79.51         16         7.80         26         12.69           31         198         81.15         8.91         13         8         160         80.80         11         5.56         27         13.64           32         208         76.47         9.26         13         10         120         57.69         19         9.14         69         33.17           33         356         88.12         9.36         13         11         251         70.50         59         16.58         46         12.92           34         283         84.48         9.10         13         7         196         69.25         19         6.72         68         24.03           35         267         83.96         10.40         13         7         198         74.15         6         2.26         63         23.59           36         328         81.79         7.68         13         11         257         78.35         29         8.85         42         12.80           37         226         81.88         8.28         13         11					14		326	75.81	1	6.99	1	
31     198     81.15     8.91     13     8     160     80.80     11     5.56     27     13.64       32     208     76.47     9.26     13     10     120     57.69     19     9.14     69     33.17       33     356     88.12     9.36     13     11     251     70.50     59     16.58     46     12.92       34     283     84.48     9.10     13     7     196     69.25     19     6.72     68     24.03       35     267     83.96     10.40     13     7     198     74.15     6     2.26     63     23.59       36     328     81.79     7.68     13     11     257     78.35     29     8.85     42     12.80       37     226     81.88     8.28     13     11     257     78.35     29     8.85     42     12.80       38     252     91.97     11.30     15      Data not available     Data not available       39     318     91.11     11.06     13     8     215     67.61     23     7.23     80     25.16       40     238     81.78     8.80     14	29	208	77.61	10.59	13				1			
32         208         76.47         9.26         13         10         120         57.69         19         9.14         69         33.17           33         356         88.12         9.36         13         11         251         70.50         59         16.58         46         12.92           34         283         84.48         9.10         13         7         198         69.25         19         6.72         68         24.03           35         267         83.96         10.40         13         7         198         74.15         6         2.26         63         23.59           36         328         81.79         7.68         13         11         257         78.35         29         8.85         42         12.80           37         226         81.88         8.28         13         11         257         78.35         29         8.85         42         12.80           38         252         91.97         11.30         15          Data not available         available           39         318         91.11         11.06         13         8         215         67.61										1		
33     356     88.12     9.36     13     11     251     70.50     59     16.58     46     12.92       34     283     84.48     9.10     13     7     196     69.25     19     6.72     68     24.03       35     267     83.96     10.40     13     7     198     74.15     6     2.26     63     23.59       36     328     81.79     7.68     13     11     257     78.35     29     8.85     42     12.80       37     226     81.88     8.28     13     11     257     78.35     29     8.85     42     12.80       38     252     91.97     11.30     15      Data not parallable para					1					1		
34     283     84.48     9.10     13     7     196     69.25     19     6.72     68     24.03       35     267     83.96     10.40     13     7     198     74.15     6     2.26     63     23.59       36     328     81.79     7.68     13     11     257     78.35     29     8.85     42     12.80       37     226     81.88     8.28     13     11       38     252     91.97     11.30     15      Data not available Data not available       39     318     91.11     11.06     13     8     215     67.61     23     7.23     80     25.16       40     238     81.78     8.80     14      187     78.57     16     6.72     35     14.71					1							
35     267     83.96     10.40     13     7     198     74.15     6     2.26     63     23.59       36     328     81.79     7.68     13     11     257     78.35     29     8.85     42     12.80       37     226     81.88     8.28     13     11       38     252     91.97     11.30     15      Data not available Data not available       39     318     91.11     11.06     13     8     215     67.61     23     7.23     80     25.16       40     238     81.78     8.80     14      187     78.57     16     6.72     35     14.71											1	
36 328 81.79 7.68 13 11 257 78.35 29 8.85 42 12.80 37 226 81.88 8.28 13 11 257 Data not available Data not available 39 318 91.11 11.06 13 8 215 67.61 23 7.23 80 25.16 40 238 81.78 8.80 14 187 78.57 16 6.72 35 14.71											1	
37     226     81.88     8.28     13     11     Data not available Data not available       38     252     91.97     11.30     15      Data not Data not available       39     318     91.11     11.06     13     8     215     67.61     23     7.23     80     25.16       40     238     81.78     8.80     14      187     78.57     16     6.72     35     14.71					1							
38 252 91.97 11.30 15 Data not available  39 318 91.11 11.06 13 8 215 67.61 23 7.23 80 25.16  40 238 81.78 8.80 14 187 78.57 16 6.72 35 14.71									I .			
40 238 81.78 8.80 14 187 78.57 16 6.72 35 14.71									Data not	available		
40 238 81.78 8.80 14 187 78.57 16 6.72 35 14.71	39	318	91.11	11.06	13	8	215	67.61	23	7.23	80	
41 320   87.43   10.92   14 1   275   85.93   11   3.44   34   10.63		238	81.78	8.80	1				1		1	
	41	320	87.43	1 10.92	14	1	275	85.93	11	3.44	34	[ 10.63

### THE PUBLIC AND TABLE 7—HIGH SCHOOL ENTRANCE EXAM-

		May Enrol-	High School		mended idates	Ca	Writing andidates	;
	(B) Public Schools of the County Inspectorates	ment, Grades 1-8 (inclus.)	En- trance Candi- dates	Num- ber	Per cent.	Num- ber	Num- ber success- ful	Per cent. success- ful
42	Oxford North, and City of Woodstock	3,063	402	222	55,22	180	139	77.22
43	Oxford South, and Norfolk (in part)	3,730	421	277	55.80	144	74	51.38
44	Peel (in part) and York (in part)	4,609	486	243	50.00	243	204	83.95
45	Perth North, and Wellington (in part)	3,058	312	99	31.73	213	165	77.30
46	Perth South	3,367	448	221	49.33	227	186	81.93
47	Peterborough East	2,508	297	125	42.08	172	79	45.93
48 49	Peterborough West, and Victoria East Prescott, and Russel, No. 1, and Carleton	2,250	264	141	53.40	123	102	82,92
	(in part)	1,267	124	30	24.19	94	75	79.78
50	Prescott, and Russell, No. 2	20	3			3	2	66.67
51	Prescott, and Russell, No. 3	581	31	8	25.81	23	17	73.91
52	Prescott, and Russell, No. 4	189	5			5	5	100.00
53	Prince Edward	2,039	211	138	65.40	73	34	46.57
54	Renfrew North	2,822	241	119	49.37	122	88	72.13
55 56	Renfrew South	2,878	255	41	16.08	214 182	171	79.90 53.84
57	Simcoe Centre	3,067 3,677	369 439	187 149	50.67 33.94	290	172	59.31
58	Simcoe North	963	67	34	50.75	33	19	57.57
59	Simcoe South, York (in part) and Peel (in part)	2,819	340	127	37.35	213	142	66.67
60	Simcoe West, Grey (in part) and Dufferin (in		0.50			140	114	=0.00
61	part)	2,540	256	110	42.97	146	114 191	78.08 79.25
62	Stormont	2,816	317 172	76 86	23.97	241 86	32	37.20
63	Waterloo, No. 1.	1,478 3,640	336	191	56.84	145	113	77.93
64	Waterloo, No. 2.	3,702	422	352	83.41	70	47	67.14
65	Welland East	4,561	563	264	46.89	299	233	77,92
66	Welland South	4,215	460	190	41.30	270	216	80.00
67	Welland (in part), Lincoln (in part) and Haldi-						124	61 19
68	mand (in part)	3,389	371 295	152 64	40.97	219 231	134 182	61.18 78.79
69	Wellington North	2,885 3,779	461	267	21.69 57.92	194	144	74.22
70	Wentworth	4,043	404	199	49.25	205	127	61.95
71	York, No. 1	3,899	444	156	35.13	288	219	76.04
72	York, No. 2	5,257	614	318	51.79	296	227	76.68
73	York, No. 3	5,139	605	450	74.50	155	112	72.26
74	York, No. 4	5,226	621	453	72.94	168	105	62.50
75	York, No. 5	7,200	776	546	70.36	230	184	80.00
76	York, No. 6	6,143	712	289	40.59	423	323	76.35
	Totals and Averages	234,223	25,926	12,378	47.78	13,548	9,668	71.36
(C	Public Schools of the District Inspectorates							
1	Division No. I	3,131	321	112	34.89	209	170	81.34
2	" " II	2,584	313	117	37.39	196	148	75.51
3	" " III	3,795	484	380	78.52	104	58	65.77
4	" " IV	3,869	460	307	66.74	153	39	25.49
5	" " V	3,954	463	349	75.37	114	26	22.80
6	" " VI	3,541	320	123	38.44	197	142	72.08
7	" " VII (Part 1)	3,978	441	277	62.81	164	120	73.18
8	" " VII (Part 2)	569	21			21	10	47.63
9	" " VIII	2,350	247	89	36.03	158	103	65.19
10	122	4,723	458	280	61.13	178	125	70.22
11 12	42	4,679	420	206	49.04	214 137	146 88	68.22 64.23
13	" " XI" " XII (Part 1)	2,536 3,203	243 302	106 138	43.62 45.69	164	131	79.85
14	" " XII (Part 2)	3,203	2	108	45.09	2		100.00
15	" " XII (Part 3)	625	23			23	8	34.78
16	" " XIII	2,230	230	81	35.22	149	111	74 43

### SEPARATE SCHOOLS

16

192

83.48

8.61

14

70

36.46

INATION RESULTS BY INSPECTORATES, 1938 Successful Candidates Destination Average Total Per cent. Per cent. Grade IX Elem. School Secondary Retired Age of Total of May Number from School School Successful Appli-Enrolcants ment Per cent. Per cent. Years Mos. Number Per cent. Number Number 6.66 42 361 89.80 11.78 13 8 280 77.56 94 57 15.78 351 83.37 264 75.21 16 9.56 71 20.23 43 9.41 13 11 44 447 91.97 9.72 14 2 418 93.51 29 6.49 31.06 82 45 264 84.61 8.63 13 8 118 44.69 64 24.2590.84 12.09 13 6 337 82.80 6 1.48 64 15.72 46 407 47 204 68.68 8.13 13 5 163 79.90 23 11.28 18 8.82 11.53 48 243 92.0410.80 13 8 179 73.66 36 14.81 28 49 105 84.68 8.28 13 9 71 67.62 31 29.52 3 2.86 50 2 66.67 10.00 12 2 100.00 80.66 17 51 25 4.31 13 11 68.00 8 32.009 2 40.00 52 5 100.00 2.65 14 1 1 20.00 40.00 103 32 37 21.52 172 59.88 18 60 53 81.528.44 13 11 13.04 54 207 85.89 7.34 13 9 138 66.67 42 20.29 27 55 212 83.14 7.33 13 7 118 55.66 41 19.34 53 25.00 285 77.23 9.29 203 71.22 25 8.78 57 20.00 56 14 77 23.98 57 321 73.12 8.73 14 1 184 57.32 18.70 24.53 58 53 79.13 5.51 14 6 40 75.47 13 79.12 6.69 17.47 59 269 9.54 13 9 204 75.84 18 47 14.28 9.39 60 224 87.51 8.82 13 11 171 76.33 21 32 84.22 9.48 13 235 88.00 21 7.86 11 4.14 61 267 11 62 118 68.60 7.98 13 11 55 46.61 30 25.43 33 27.96 41.77 74 24.35 63 304 90.47 8.35 13 6 103 33.88 127 285 39 9.78 75 18.79 64 399 94 54 10.78 14 71.43 33 6.64 65 497 88.27 10.89 13 8 464 93.36 10.35 66 406 88,26 9.63 14 3 364 89.65 42 210 73.42 6 2.11 70 24.47 67 286 77.09 8.43 13 11 18.70 6.91 68 246 83.39 8.53 13 3 183 74.39 17 46 69 411 89.15 10.89 13 8 315 76.64 48 11.68 48 11.68 70 265 81.29 17 5.2144 13.50 80.69 8.04 13 11 3.21 74 19.73 71 375 84.45 9.51 14 289 77.06 12 72 88.76 3 510 93.58 35 6.42 545 10.37 14 92.89 73 529 94.13 33 5.87 562 10.94 14 7.71 92.29 74 558 89.85 10.68 13 10 515 43 9.59 75 730 94.07 2 660 90.41 70 10.14 14 9.97 76 612 85.95 13 11 476 77.78 81 13.23 55 8.99 22,046 13 11 16,450 76.27 1,783 8.26 3,335 15.47 85.04 9.41 87.85 17.37 6,23 9.01 216 76.40 49 17 1 282 13 5 22 8.31 265 84.66 10.26 13 9 157 59.24 86 32.45 8.68 3 438 90.49 11.54 14 1 368 84.01 32 7.31 38 4 346 75.22 8.95 166 47.97 134 38.72 46 13.31 14 26 6.94 5 375 80.99 9.49 13 11 311 82.93 38 10.13 8.31 22 6 265 82.81 7.48 14 1 169 63.77 74 27.92 24.94 7 13 242 14.11 99 397 90.02 9.98 4 60.9556 8 9 50.00 50.00 10 47.62 1.76 13 5 5 20.83 93 9 30.73 40 192 77.73 8.18 14 48 44 59 10 13 7 354 87,40 21 5.18 30 7.42 405 88 42 8 58 11 352 83.80 7.53 14 2 315 89.49 24 6,82 13 3.69 9.28 12 2 127 49 25.26 18 194 79.83 7.65 14 65.4613 269 89.07 8.40 13 4 191 71.00 52 19.33 26 9.67 50.00 14 2 100.00 4.74 15 1 50.00 1 50.00 50.00 15 4 6 4 8 34.78 1 28 14

72

37.51

.03

50

### THE PUBLIC AND TABLE 7—HIGH SCHOOL ENTRANCE EXAM-

_								
		May Enrol-	High School		mended idates	Ca	Writing andidates	
	(C) Public Schools of the District Inspectorates	ment, Grades 1-8 (inclus.)	En- trance Candi- dates	Num- ber	Per cent.	Num- ber	Num- ber success- ful	Per cent. success- ful
17 18 19	Division No. XIV	2,109 2,209 1,892	201 248 182	98 127 38	48.76 51.20 20.87	103 121 144	67 90 102	65.05 74.38 70.84
	Totals and Averages	52,019	5,379	2,828	52.57	2,551	1,686	66.09
	(D) Roman Catholic Separate School Inspectorates							
1	Division No. I	4,178	408	321	78.68	87	43	49.43
2	" " II	4,221	276	141	51.07	135	88	65.19
3	" " III	3,868	125	51	40.80	74	36	48.65
4	" " IV	3,269	169	53	31,36	116	84	72.41
5	" v	4,910	256	132	51.56	124	71	57.26
6	" " VI	5,980	607	401	66.06	206	154	74.76
7	" " VII	3,704	238	128	53.78	110	89	80.91
8	" " VIII	3,471	261	151	57.85	110	77	70.00
9	" " IX	3,651	425	227	53.41	198	168	84.85
10	" " X	5,107	549	373	67.94	176	90	51.14
11	" " XI	4,988	525	398	75.81	127	70	55.12
12	A11	4,155	442	241	54.52	201	149	74.13
13	" " XIII }	12,961	1,476	1,146	77.64	330	125	37.88
14	" " XV	3,890	395	179	45.32	216	178	82.41
15	" " XVI	3,955	414	213	51,45	201	166	82.59
16	" "XVIII XIX	12,709	1,092	654	59.89	438	302	68.95
17	" " XX	3,132	224	63	28.13	161	106	65.84
18	" " XXI	3,910	109	31	28.44	78	62	79.49
19	" " XXII	3,531	194	44	22.68	150	90	60.00
	Totals and Averages	95,590	8,185	4,947	60.44	3,238	2,148	66.33
	Grand Totals and Averages	513,309	54,907	31,526	57.42	23,381	15,600	66.72
	Increases for the year	3,484	125	1,274	2.45	1,399	632	1.22

### SUMMARY

(This includes, in addition to the above, results of candidates from private sources.)
Eurolment Grade VIII on the last school day in May, 1938
Number of High School Entrance Candidates:
Recommended by Principal on Group II
Number taking written test on Group II
55,351
High School Entrance candidate percentage of 1938 Grade VIII Enrolment96.18%

### SEPARATE SCHOOLS

### INATION RESULTS BY INSPECTORATES, 1938

-					Succe	ssful Can	didates				
			1	1 1	rage			Dest	ination		
	Total Number Successful	Per cent. of Total Appli-	Per cent. of May Enrol-		ge		udary 1001		ade IX School		Retired m School
		cants	ment	Years	Mos.	Number	Per cent.	Number	Per cent.	Number	Per cent.
17	165	82.09	7.85	14		80	48.48	67	40,61	18	10.91
18	217	87.50	9.82	14	4	129	59.44	51	23.50	37	17.06
19	140	76.93	7.35	13	9	59	42.14	48	34.29	33	23.57
	4,514	83.91	8.68	14		3,053	67.63	921	20.40	540	11.97
1	364	89.22	8.71	14	1	271	74.45	70	19.23	23	6.32
2	229	82.97	5.43	15		91	39.74	103	44.98	35	15.28
3	87	69.60	2.25	14	1	68	78.16	8	9.19	11	12.65
4	137	81.07	4.19	14	6	71	51.82	55	40.15	11	8.03
5	203	79.30	4.13	14	10	155	76.35	14	6.90	34	16.75
6	555	91.43	9.28	14	4	271	48.83	209	37.66	75	13.51
7	217	91.18	5.86	14	5	50	23.04	147	67.74	20	9.22
8	228	87.36	6.57	13	4	129	56.58	39	17.11	60	26.31
9	395	92.94	10.82	13	9	99	25.06	210	53.17	86	21.77
10	463	84.34	9.07	13	8	169	36.50	219	47.30	75	16.20
11	468	89.14	9.38	14	1	314	67.09	112	23.93	42	8.98
12	390	88.24	9.39	13	10	268	68.72	82	21.03	40	10.25
13	1,271	86.11	9.81	14	1	912	71.75	232	18.25	127	10.00
14	357	90.38	9.16	13	8	222	62.19	114	31.93	21	5.88
15	379	91.55	9.58	13	11	255	67.28	95	25.07	29	7.65
16	956	87.55	7.52	14	6	167	17.47	729	76.26	60	6.27
17	169	75.45	5.39	13	11	31	18.34	137	81.07	1	. 59
18	93	85.32	2.38	14	3	35	37.63	48	51.61	10	11.76
19	134	69.07	3.79	14	1	79	58.96	37	27.61	18	13.43
	7,095	86.68	7.42	14		3,657	51.54	2,660	37.49	778	10.97
	47,126	85.83	9.18	13	11	34,880	74.77	6,478	13.89	5,290	11.34
	642	1.36	.06		1	1,608	1.42	293	.26	616	1.68

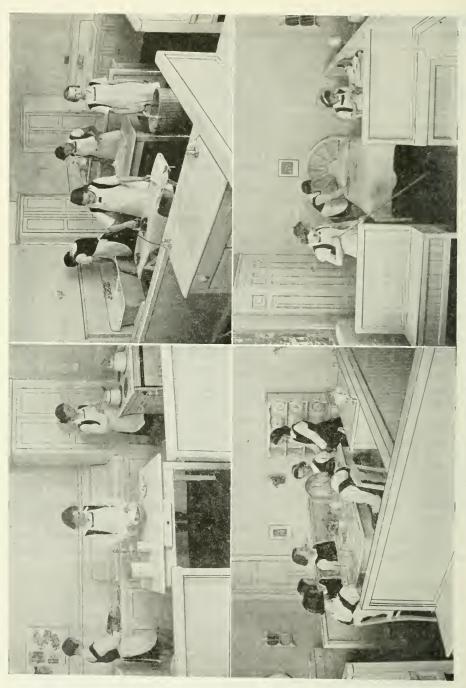
Number of candidates successful on written test on Group II:

Tot Per

By Regulation 10—(1) and (2)	4,460
(3) and (4)	656
(5)	381
(6)	178
(7)	247
_	15,922
tal Number of successful candidates	47,717
rcentage of candidates who were successful	86.21%

(66.63% by Principals' recommendation and 33.37% by passing written test.)

Courtesy "The School".



### THE PUBLIC AND SEPARATE SCHOOLS

### TABLE 8—SPECIAL SUBJECTS

AGRICULTURE, VOCAL MUSIC, ART, HOME ECONOMICS, AND MANUAL TRAINING, IN RURAL SCHOOLS FOR THE SCHOOL YEAR, 1937-38

									-		
	Schools	Schools	s which	quali	fied for of 1	a Specia the follo	l Legisla wing sul	ative G bjects	rant* fo	r the te	aching
Public School			N	lumbe	er				Per cent		
County Inspectorates	+No. of Rural	Agriculture	Vocal Music	Art	Home Economics	Manual Training	Agriculture	Vocal Music	Art	Home Economics	Manual Training
Brant and Norfolk (in part)	76	29	37	1	13	1	38.2	48.7	1.3	17.1	1.3
Bruce East, Grey (in part), Huron (in part)	80	67	63		20	3	83.7	78.8		25.0	3.8
Bruce West	82	62	63		4		75.6	76.8		4.9	3.0
Carleton	116	83	16	1	21	7	71.5	13.8	.9	18.1	6.3
part)  Dundas, and Grenville (in part) Elgin East, and City of St.	92 71	63 61	65 8		12 13	8	68.5 85.9	70.6 11.3		13.1 18.3	1.9 11.3
Thomas	51 66	31 41	20 12	3	1 2		60.8 62.2	39.2 18.2	4.5	2.0 3.0	
part)	69	47	37		1	1	68.1	53.6		1.4	1.4
ton (in part)	76	56	23		6	2	73,6	30.3		7.9	1.6
Lennox (in part) Frontenac South, No. 2, and	81	26	41		1		32.1	50.6		1.2	
City of Kingston	36	16	20		2		44.4	55.6		5.6	
cott (in part)	84	60	30		8	1	71.5	35.7		7.2	1.2
Grey East	94 56	60	63 41		12 11	2	63.9	67.0		12.8 19.7	3.6
Grey South	81	38	29		18	1	46.9	35.8		22.2	1.2
worth (in part)	77	50	56		9	6	65.0	72.7		11.7	7.8
Halton	60	36	41		10	5	60.0	68.4		16.7	8.3
Hastings Centre	72	32	12		3		44.5	16.7		4.2	
part), and C!ty of Oshawa	42	21			6		50.0			14.3	
Flastings South	35	30	12	1	6	3	85.7	34.3	2.9	17.2	8.6
Huron East	78	55	45	1	3		70.5	57.7	1.3	3.9	
Huron West,	89 87	67	71 75		2 2	2	75.3 69.0	79.8		2.2 2.3	2.2
Kent, No. 2, and Elgin West	77	52	65				67.5	84.4		2.0	
Lambton, No. 1	83	53	48		7		63.9	57.9		8.4	
Lambton, No. 2	87	60	51		6	3	69.0	58.6		6.9	3.5
Lanark West Leeds, and Grenville, No. 1	105 75	91 57	33		15	4	86.6	20.0		14.3	3.8
Leeds, and Grenville, No.2	69	52	21		20		75.4	30.4		29.0	
Leeds, and Grenville, No. 3, and Lanark (in part)	96	74	10		13	2	77.1	10.4		13.5	2.1
Lennox, and Hastings South	78	55	20		5		70.5	25,6		6.4	
Lincoln (in part)	44	34	32	3	14	9	77.2	72.7	6.8	31.8	20.4
part)	92	62	77		2	1	67.4	83.7		2.2	1.1
Middlesex West	96	79 43	35 41		3	2	82.4	36.4		3.1	2.7
Norfolk (in part)	75				11		57.4	54.7		17 5	1.6
No. 1	63	56	62		11	1	88.9	98.4		17.5	1.6

### THE PUBLIC AND SEPARATE SCHOOLS

### TABLE 8—SPECIAL SUBJECTS

### AGRICULTURE, VOCAL MUSIC, ART, HOME ECONOMICS, AND MANUAL TRAINING, IN RURAL SCHOOLS FOR THE SCHOOL YEAR, 1937-38

	Schools	Schools	which o	qualif		Special ie follow			ant* for	the tea	aching
Public School			N	umbe	r			P	er cent		
County Inspectorates	†No. of Rural	Agriculture	Vocal Music	Art	Home Economics	Manual Training	Agriculture	Vocal Music	Art	Home Economics	Mannal Training
Northumberland, and Durham,	77	47	66		8		61.1	85.7		10.4	
Northumberland, and Durham, No. 3, and Hastings (in part)	78 75	70 23	67 26		18 9	1 1	89.7 30.6	85.9 34.6		23.1 12.0	1.3
Ontario North, and York (in part) Ontario South Oxford North, and City of	60	25	29		3	1	41.7	48.4		5.0	1.7
WoodstockOxford South, and Norfolk (in	58	48	54		19	9	82.7	93.1		32.8	15.5
part) Peel (in part) and York (in part)	59 42	48 24	36 36	2	7	5 2	81.4 57.2	61.1 85.7	4.8	11.9 9.5	8.5
Perth North, and Wellington (in part)	85	77	70		3	3	90.6	82.4		3.5	3.5
Petrh South	45 73	33 48	25 47		18	2	73.4 65.8	55,6 64,4		2.2 24.7	8.9
Peterborough West, and Victoria East	58	47	29		6		81.0	50.0		10.3	
Carleton (in part) Prescott, and Russell, No. 2	49	34	14		7	3	69.4	28.6		6.1	14.3
Prescott, and Russell, No. 3	8										
Prescott, and Russell, No. 4	9										
Prince Edward	71 76	24 59	9		8 9	7	33.8	12.7		11.3	9.9
Renfrew South	83	55			2		66.3	1.0		2.4	
Simcoe Centre Simcoe East, and Muskoka (in	66	37	42		4		56.1	63.6		6.1	
part)	46	26	12		6	1	56.5	26.1		13.0	2.2
Simcoe North Simcoe South, York (in part)	6										
and Peel (in part) Simcoe West, Grey (in part)	SS		51		11	7	47.8	57.9		12.5	8.0
and Dufferin (in part)	78		24		5 2		56.4	30.8		6.4 26.3	
Stormont	76 72	l l	52		6		56.9	72.2			
Waterloo, No. 1	56		21	2	4	5	92.9	37.5	3.6	7.1	8.9
Waterloo, No. 2	28		6		1		46.4	21.4			
Welland East	15	l l	6	2	3	2	80.0	40.0	13.4	20.0	13.4
Welland South	23	6	5	1	1	1	26.1	21.8	4.3	4.3	4.3
part) and Haldimand (in part)	75	40	52	1	6	6	53.4	69.4	1.3	8.0	8.0
Wellington North			32		1		78.3	46.4		24.6	
Wellington South, and City of											
Guelph	56		32	1	16	2	87.5	57.2	1.8	28.6	3.6
Wentworth	72		26 17	2	35	22	67.2 86.1	42.7 23.6	3.3	57.4	36.1
York, No. 2			10	4	4	3	94.5	55.6	22.2	22.2	16.6
York, No. 3			9	8			100.0	90.0	80.0		
York, No. 4	8		8	7			100.0	100.0	81.5		
York, No. 5	14 34		11 5	4	5	1 4	77.6	77.6	11.8	14.7	7.1
Totals and Averages	4,769	3,201	2,334	44	544	154	67.1	48.9		11.4	3.2

### THE PUBLIC AND SEPARATE SCHOOLS

### TABLE 8-SPECIAL SUBJECTS

### AGRICULTURE, VOCAL MUSIC, ART, HOME ECONOMICS, AND MANUAL TRAINING, IN RURAL SCHOOLS FOR THE SCHOOL YEAR, 1937-38

	Schools	Schools	which	quali	fied for of th	a Specia e followi	l Legisla	ative Gr	ant* fo	r the te	aching
			N	umbe	r			I	Per cent		
Public School District Inspectorates	†No. of Rural	Agriculture	Vocal Music	Art	Home Economics	Manual Training	Agriculture	Vocal Music	Art	Home Economics	Manual Training
Division No. I	39 61 49 58 47 53 56 17 66 57 62 54 57 2 29 71 65	12 40 11 2 19 24 16 2 53 17 32 28 22 	1 11 4 3 3 33 2 3 1 1 5 5 1	1 2 4 1 1 3 1 1	1 9- 10 3 4 10	1 6 1	30.8 65.6 22.4 3.5 40.4 45.3 28.6 11.8 80.4 29.8 51.6 51.9 38.6 61.6	1.8 23.4 7.5 5.4  50.0 3.5 4.8 1.9	1.6 3.5 7.5 1.8 4.8	1.6 18.8 17.5 6.4 7.5 17.9  24.2 10.5 17.8 18.5 22.8 	1.6 2.0 3.5  1.8  12.2 1.8
" XV	58 69	31	1 1		9		75.9 44.9	1.7		17.2	
Totals and Averages	970	419	67	13	123	13	43.2	6.9	1.3	12.7	1.3
All Public Inspectorates	5,739	3,620	2,401	57	667	167	63.1	41.8	1.0	11.6	2.9
Roman Catholic Separate School Inspectorates Division No. I	9 26 58 43 21 9 10 27 32 19 1 188 7 4 29 24 10	2 2 2	1 1 2 5 5 2 1 9 1 1 2 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 3 11 4 1 2 2	2 3 3 1 5	22.2 7.7  2.3 19.1 66.7  29.7 65.6 47.4 100.0 55.6 14.3 50.0 79.3 50.0 60.0  4.2 2.3 10.0	11.1 	9.5 3.7  100.0 14.3 25.0 3.5	10.6 11.2 34.4 21.1 100.0 11.1 100.0 6.9	6.2 15.8 5.6
Totals and Averages	496	116	27	7	29	11	23.4	5.4	1.4	5.8	2.2
Grand Totals and Averages	6,235	3,736	2,428	64	696	178	59.9	38.9	1.0	11.2	2.9

<sup>\*</sup>To Board, or Teacher, or both.

	ber of		prov	er of S vide th oils' Su	e follo	s which	h	1	Numbe wi	r of Scl	hools I Follow	Equippe	d	
Rural Schools	Scho	ols in ation	Set Rea	iool ders		her books	11.	pils' ork plies	Train Recre	sical ing or ational oment		ultural pment		t Aid pment
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Counties Addington Brant Bruce Carleton Dufferin Dundas. Durham Elgin Essex Frontenac Glengarry Grenville Grey Haldimand Haliburton Hastings Huron Kent Lambton Lanark Leeds Lennox Lincoln Middlesex Norfolk Northumberland Ontario Oxford Perth Peterborouga Prescott Prince Edward Renfrew Russell Simcoe Stormont Victoria Waterloo Welliand Wellington Wentworth York  Totals	26 61 115 89 72 99 105 113 144 50 61 61 117 135 135 148 152 1106 121 105 73 112 98 50 70 1105 1105 1105 1105 1105 1105 110	1 11 23 1 28 10 17 6 7 10 2 3 2 1 1 5 2 5 1 1 6 6 1	1 1 2 3 3 8 8 9 9 2 2 2 10 0 3 3 2 2 2 2 2 2 3 3 3 3 3 2 2 2 2 3	1 1 1 1 1 2 7 7	1 1 3 2 2 3 3 9 6 6 3 3 1 3 3 1 9 9 1 4 4 4 4 3 3 2 3 3 2 1 1 6 6 7 7 2 4 9 1 1 6 3	1	2 122 111 16 6 4 4 3 3 100 22 2 111 110	2	5 15 46 32 22 33 35 66 39 21 25 41 15 83 16 59 21 25 46 33 24 46 33 24 46 30 24 46 30 24 46 30 21 46 30 46 30 46 30 46 46 46 46 46 46 46 46 46 46 46 46 46	100 2 3 3 2 2 1 4 4 1 1	9 23 120 71 75 68 83 62 48 41 51 62 48 41 108 149 144 108 149 15 41 41 60 78 78 15 41 41 60 48 149 48 48 48 48 48 48 48 48 48 48 48 48 48	8 5 5 5 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 444 955 600 400 211 633 811 755 751 851 851 851 851 851 851 851 851 851 8	111 4 4 3
Algoma Cochrane Kenora Manitoulin Muskoka Nipissing Parry Sound Rainy River Sudbury Temiskaming Thunder Bay	91 73 35 45 92 71 118 61 102 74 107	2 62 1 1 2 40 1 3 36 12 1	12 12 2 20 2 3 6 14 11 9 37	24 1 1 4	12 14 2 15 2 3 8 14 11 9 37	19	11 18 3 50 1 15 9 14 9 37	3	25 17 14 7 16 10 25 21 22 12 32	1 5 1 2 4	36 27 13 32 72 27 48 27 30 51	1 2 1 2 2 1	63 49 23 28 51 25 39 21 24 43 76	1 10  1 2  2 4
Totals, Rural	869	161	128	33	127	26	167	6	201	14	393	9	442	22
Schools	5,633	489	265	40	290	30	612	9	1,684	61	3,210	114	3,248	116
Percentages, Rural Schools			4.7	8.2	5.1	6.1	10.8	1.8	29.8	12.5	56.9	23.3	57.6	23.7

	U	rban Co followin	entres v 1g Pupi	vhich pr ls' Supp	ovide t lies free	he	υ		entres v			
Cities		iool ders		her books	W	pils' ork plies	Train Recre	sical ing or ational pment		ultural oment		t Aid oment
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Counties									ł			
							x	x	x	x	x	x
Brantford	x		х		x		x	x	x	x	x	x
Chatham							X	x	X	x	X X	X
Guelph	x		x x		X X		X X		x x	x	X	x x
Hamilton	x		x		x	x	x	x	x	x	x	x
Kingston	x				x	x	x	x		x	x	X
Kitchener	x		x		x		x	x	x	x	x	x
London			x		x		x	x	x	x	x	x
Niagara Falls							x	x		x	х	x
Oshawa					x		X		x		x	X
Ottawa Owen Sound	x		x		х		x	x	X X	X X	x x	X X
Peterborough							X	x	x	x	x	x
St. Catharines	x		x		x		x		x	x	x	x
St. Thomas					x		x	x	x	x	x	x
Sarnia							x	x	x	x	x	x
Stratford							x	x	x		x	x
Toronto	x		x		x		x	x	x	x	x	X
Welland							x		x		X	
Windsor	x	x	x x	x	x x	x	X X	x	x x	x	X X	x x
WOOdstock	X		X		, x		X		Α	X	^	1
In Districts												
Fort William	x		x		x		x	x	x	x	x	x
North Bay					x		x x	x	x x	x x	x x	x x
North Bay Port Arthur					x x		H			1		
North Bay  Port Arthur  Sault Ste. Marie	x x		x x		x x		x x x		x	x x x	x x x	x x x
North Bay Port Arthur	x		x x		x		x x	x	x x	x x	x x	x x
North Bay  Port Arthur  Sault Ste. Marie	x x		x x		x x		x x x	x x	x x x	x x x	x x x	x x x
North Bay	x x		x x		x x x		x x x x	x x	x x x	x x x x	x x x	x x x x
North Bay	x x	1	x x	1	x x x	3	x x x x	x x	x x x	x x x x 24	x x x x	x x x x
North Bay Port Arthur Sault Ste. Marie Sudbury  Totals, Cities  Percentages  Towns (Counties) Alexandria	x x	1	x x	1	x x x	3	x x x x	x x	x x x	x x x x 24	x x x x	x x x x
North Bay Port Arthur Sault Ste. Marie Sudbury  Totals, Cities  Percentages  Towns (Counties) Alexandria Alliston	13 48.1	1 3.8	14 51.8	1 3.8	x x x	3	x x x x	x x	24 88.9	x x x x 24 92.3	27 100.0	26 100.0
North Bay Port Arthur Sault Ste. Marie Sudbury  Totals, Cities  Percentages  Towns (Counties) Alexandria Alliston Almonte	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3	27 100.0	18 69.2	24 88.9	x x x x 24 92.3	27 100.0	x x x x 26 100.0
North Bay Port Arthur Sault Ste. Marie Sudbury Totals, Cities Percentages Towns (Counties) Alexandria Alliston Almonte Amherstburg	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	24 88.9	x x x x 24 92.3	27 100.0	26 100.0
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior.	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	x x x x x x x x x x	24 92.3	27 100.0	26 100.0
North Bay Port Arthur Sault Ste. Marie Sudbury Totals, Cities Percentages Towns (Counties) Alexandria Alliston Almonte Amherstburg	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	x x x x x x x x x x x x x x x x x x x	24 92.3	27 100.0 x x x x	26 100.0
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities.  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora. Aylmer.	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	24 SS. 9 x x x x x x	x x x x 24 92.3	27 100.0	26 100.0
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	x x x x x x x x x x x x x x x x x x x	24 92.3	27 100.0 x x x x x	26 100.0
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora. Aylmer. Barrie. Blenheim. Bowmanville.	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	24 88.9 x x x x x x x	x x x x 24 92.3	27 100.0 x x x x x x	x x x x 26 100.0 x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora Aylmer. Barrie. Blenheim. Bowmanville. Brampton.	13 48.1	1 3.8	14 51.8x x	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	24 88.9 x x x x x x	24 92.3	27 100.0 x x x x x x x x x	x x x x 26 100.0 xx
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora. Aylmer. Barrie. Blenheim. Bowmanville. Brampton. Brockville.	13 48.1	1 3.8	14 51.8	1 3.8	x x x 18 66.7 x x	3 11.5	27 100.0 x x x x x x x	18 69.2	24 88.9 x x x x x x x	24 92.3	27 100.0 x x x x x x x x x	26 100.0 x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities.  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora Aylmer. Barrie. Blenheim. Bowmanville Brampton Brockville. Burlington.	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0 x x x x x x x x	18 69.2	x x x x x x x x x x x x x x x x x x x	x x x x 24 92.3	27 100.0 x x x x x x x x x	x x x x 26 100.0 x x x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury  Totals, Cities  Percentages  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora Aylmer. Barrie. Blenheim. Bowmanville. Brampton Brockville. Burlington. Campbellford.	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	27 100.0  x x x x x x x x x x x x x x x	18 69.2	x x x x x x x x x x x x x x x x x x x	24 92.3 x	27 100.0 x x x x x x x x x x	x x x x 26 100.0 x x x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora. Aylmer. Barrie. Blenheim. Bowmanville. Brampton. Brockville. Burlington. Campbellford. Carleton Place.	13 48.1	1 3.8	14 51.8	1 3.8	18 66.7	3 11.5	x x x x x x x x x x x x x x x x x x x	18 69.2	x x x x x x x x x x x x x x x x x x x	x x x x x 24 92.3 x x x x x x x x x x x x x x x x x x x	27 100.0 x x x x x x x x x x x	x x x x 26 100.0 x x x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities.  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora. Aylmer. Barrie. Blenheim. Bowmanville. Brampton. Brockville. Burlington. Campbellford. Carleton Place. Chesley.	13 48.1	1 3.8	x x x 14 51.8	1 3.8	18 66.7	3 11.5	x x x x x x x x x x x x x x x x x x x	18 69.2	x x x x x x x x x x x x x x x x x x x	x x x x x 24 92.3 x x x x x x x x x x x x x x x x x x x	27 100.0 x x x x x x x x x x x x	x x x x 26 100.0 x x x x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora Aylmer. Barrie. Blenheim. Bowmanville. Brampton Brockville. Burlington. Campbellford. Carleton Place. Chesley. Clinton.	13 48.1	1 3.8	x x x 14 51.8	1 3.8	18 66.7	3 11.5	27 100.0	18 69.2	x x x x x x x x x x x x x x x x x x x	x x x x x 24 92.3 x x x x x x x x x x x x x x x x x x x	27 100.0 x x x x x x x x x x x	x x x x 26 100.0 x x x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora. Aylmer. Barrie. Blenheim. Bowmanville. Brampton Brockville. Burlington. Campbellford. Carleton Place. Chesley. Clinton. Cobourg. Collingwood.	13 48.1	1 3.8	14 51.8	1 3.8	x x x 18 66.7 x x x	3 11.5	x x x x x x x x x x x x x x x x x x x	18 69.2	x x x x x x x x x x x x x x x x x x x	x x x x 24 92.3 x x x x x	27 100.0 x x x x x x x x x x x x	x x x x 26 100.0 x x x x
North Bay. Port Arthur. Sault Ste. Marie. Sudbury.  Totals, Cities  Percentages.  Towns (Counties) Alexandria. Alliston. Almonte. Amherstburg. Arnprior. Aurora Aylmer. Barrie. Blenheim. Bowmanville. Brampton Brockville. Burlington. Campbellford. Carleton Place. Chesley. Clinton.	13 48.1	1 3.8	14 51.8	1 3.8	x x x 18 66.7 x x x	3 11.5	27 100.0  x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	x x x x 24 92.3 x x x x x x x x x x x x x x x x x x x	27 100.0 x x x x x x x x x x x x x	x x x x 26 100.0 x x x x

				hich pr s' Supp			U			hose So		re
Towns		iool ders		her books	Pur We Sup	oils' ork plies	Recrea	sical ing or ational oment		ıltural oment		: Aid oment
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Counties				\$								
Deseronto							x				x	
Dresden		[									x	
Dundas  Dunnville						x	x x	х	x	х	x	x
Durham									x		x	
Eastview					x		x		x		x	
Elmira							x		x		x	
Essex											x	x
Forest					х				x		x	
Fort Erie	, x		x		x		x				x	
Gananoque								x	x		x	x
Georgetown							x		х	x	x	x
Grimsby							x		X		x	
Hanover										x	x	x
Harriston							x		x			
Harrow											x	
Hawkesbury								x			x	
Hespeler									X		x	x
Ingersoll							X	x	X	X	x	x
Kingsville									x		x	
La Salle							x	x	x		x	x
Leamington							x	x	x	x	x	x
Leaside	x		x		x		x		x		x	
Lindsay							x	x	x	x	x	x
Listowel							x		x		x	
Meaford									х		x	x
Midland	x		x						x		x	X
Milton											x	
Mimico							x	x	x		x	x
Mitchell							x		x		x	
Mount Forest							x		x	x		
Napanee							X				X	
New Toronto					x		x		x	x	x	х
Niagara					x		x				x	
Oakville											x	x
Orangeville					x		x				x	
Orillia	x		x		x		x		x		x	
Palmerston							x		X			
Paris							X		x	x	x	X
m 1 1	1				x				X	X		x
Penetanguishene									X		x	
Perth							x		x			
Pctrolia							x		x			
Picton								x	x		x	
Port Colborne							x				x	
Present									x		X	х
Prescott					I.		E1	x	x	x	x	x
Renfrew									x		x	
Ridgetown												
			1					1				

		rban Ce followin					U		entres w			re
Towns	Sch Rea	iool ders		her oooks	Pur Wo Sup	ork	Train Recrea	sical ing or ational oment	Agricu Equip	ltural ment		Aid
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Counties												
Riverside	x		x					x	x		x	x
St. Mary's								x	×	x	х	x
Seaforth					x			x		x	x	
Simcoe							x				x	
Smith's Falls							x		x		x	
Southampton					x		x		x		x	
Stayner Strathroy									х		x	
Tecumseh							x	x			x	x
Thornbury									x		x	
Thorold							x	x		x	x	x
Tilbury								x	x	x		x
Tillsonburg											x	
Trenton					x		x	x	x	x	×	x
Uxbridge Vankleek Hill							x	x	x		x	
Walkerton							×	×	x	x	x	x
Wallaceburg									x	x	x	x
Waterloo		x			x		x		x	x	x	x
Weston					x		x		x		x	x
Whitby										x	x	x
Wiarton							x		X		x	
Wingham			x				x		x		x	
In Districts				1								
Bala					x						x	
Blind River								x				x
Bracebridge					x		x		x		x	
Bruce Mines									x		x	
Cache Bay							x				X	
Charlton							x		x		x	
Chelmsford		x		x				x				x
Cobalt	x		x		x				x		x	
Cochrane	x		x		x		x		x		x	x
Copper Cliff											x	
Coniston							X	x		x	x	×
Dryden Englehart							X		X		x	
Fort Frances	x	x	x		x		. x		x	x	x	x
Geraldton									x		x	
Gore Bay											x	
Gravenhurst									x		x	
Haileybury									x		x	
Hearst							x					x
Huntsville Iroquois Falls							x	х	x		x x	x
Kapuskasing							41	X	1			
Kearney											x	
Keewatin							x			x	x	
Kenora							x	x		x	x	x
Larder Lake									x		x	
Latchford							()					
Little Current								X	x	x	X	
-		1					11	-	1			

	U	rban Ce followin	entres w	hich pr s' Supp	ovide tl lies free	he	U		entres w			re
Towns		ool ders		her books	W	oils' ork plies	Train Recrea	sical ing or ational oment		ultural oment		t Aid oment
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Districts												
Massey									X	x		
Matheson									x		x	
New Liskeard									x		x	
Parry Sound							x				x	
Powassan											x	
Rainy River							x		x		x	
Smooth Rock Falls								x	x		x	х
Sturgeon Falls							x				x	
Timmins	х		х		х		x		х		х	
Webbwood						• • • • • •	x					
Totals, Towns	12	4	14	2	26	0	77	31	90	34	129	48
Percentages	8.3	5.1	9.7	2.6	18.1	0	52.8	39.7	62.5	43.5	88.3	61.5
Villages (Counties)												
Acton	'										х	
Ailsa Craig							x		x		x	
Arkona									x			
Arthur							x	x	x	x		
Athens											x	
Ayr Bancroft							x		x		x	
Barry's Bay									x			
Beamsville							x		x		x	
Beaverton											x	
Beeton											x	
Belle River							x		x	x	x	x
Blyth									x		x	
Bobcaygeon							x		x		x	
Bradford							x		x		x	
Braeside Brighton									x		x	
Brussels									x			
Caledonia							x		х		x	
Cannington							x		х			
Cayuga							x		x x		x x	
Chatsworth							x	x	X	х		х
Chippewa											x	
Clifford							x		х			
Coldwater							x				X	
Coldwater											x x	
Creemore											x	
Delhi											х	
Drayton									х			
Dundalk Dutton							X X				x	
Eganville							x		x		x	
Elora					х			,	х			x

	U	rban Co followin	entres w	vhich pr ls' Supp	ovide ti lies free	he	U	rban Ce equipp	entres w ed with			re
Villages	Sch Rea	ool ders		her books	W	oils' ork plies	Train   Recrea	sical ing or ational oment	Agrici Equip	ıltural oment		t Aid oment
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Counties												
Embro							x		x		x	
Erin					<i>.</i>				x		x	
Exeter		· · • · · ·							х		X	
Fenelon Falls					х		x		x		x	x
Flesherton					x				x		x	
Fonthill					x		x		x		x	
Forest Hill	x		x		х		x	x	x		x	x
	• • • • • •						x	• • • • •			x	
Glencoe				• • • • • • •	• • • • • •				x		x	
Grand Valley	• • • • • •			• • • • • •		• • • • • •	X		x			
Hagersville							x		x x		x x	
Havelock							x				x	
~~							x		х .		x	
Hepworth							x		x		x	
Humberstone							x		x		x	
Iroquois								• • • • •			x	
Jarvis	• • • • • •					• • • • • •					x	
		• • • • • •					x		х	• • • • •	x	
Lakefield				• • • • • •			x		x		x x	
_												x
T 1 TT 1							x		x		x	
Long Branch	х		x		x		x		x		x	
L'Orignal											x	
Lucan							x					
Lucknow	• • • • • •	• • • • • •					х				• • • • •	
Madoc	• • • • • • •						x				x	
Markdale	• • • • • •	• • • • • •							x x			
Marmora										x	x x	
Maxville									x			
Merrickville									x		x	
Mildmay							x	x	x	x		x
Millbrook											x	
Milverton						• • • • • •		• • • • • •	x		x	
		· · · · • •		• • • • • • •	• • • • • •		x			• • • • • •	x	
Neustadt	• • • • • •						x		x	• • • • • •	х	
	· · · · · · ·						x		x x		х	
37 1									x		x	
											x	
New Hamburg											x	
							x		x		х	
Norwood							x		x		x	
Oil Springs									x		x	
Omemee							x				X	
Paisley							x		x		x x	
Port Credit							x		x		x	
Port Dalhousie										x	x	x
Port Dover											x	
Port Elgin						}	x		x			

	U	rban C followin	entres v ig Pupil	vhich pr Is' Supp	ovide t lies free	he	U		entres v			
Villages		iool ders		her books	W	pils' ork plies	Train Recrea	sical ing or ational oment		ıltural oment		t Aid
	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.	Pub.	Sep.
In Counties												
Port Perry											x	
Port Rowan					х		X		x		x	
Portsmouth											x	
Richmond							x		x		x	
Richmond Hill							x		x		x	
											ж	
Rockcliffe	x		x		х		x		x		x	
Rodney							X		x		x	
							X					
Shallow Lake							x		X		x x	
0 1 0 11									x		X	
							x		x		x	
Stoney Creek							,		x		x	
Stouffville							x		x		x	
Streetsville							x				x	
Sutton											x	
Swansea	x		x		х		x	x	x		х	x
Tavistock											X	
Teeswater							x		X	x	x	
Thamesville							x		X			
Tiverton					x						X X	
Tweed							х	x	x	x	x	x
Victoria Harbour							x				x	
Vienna									x		x	
Wardsville									x		x	
Waterdown									X		x	
Waterford									x		x	
Watford							x		x		x	
Wellington							x		x		X	
West Lorne									х		x	
Wheatley									X		x	
Winchester									x		x	
Woodville									x		x	
Wyoming					х		x		x		x	
In Districts												
							x				x	
Port Carling					x				x		x	
Port Sydney					x				x		X	
Rosseau					x		x		x		X	
South River									X		X	
					x				X X			
Wilder Hereconstruction												
Totals, Villages	4	0	4	0	16	0	66	6	90	S	109	10
Percentages	2.7	0	2.7	0	10.7	0	42.3	28.6	59.4	38.1	69.S	47.7
Totals, All Urban Municipalities	29	5	32	3	60	3	170	55	204	66	265	84
Percentages	9.0	4.0	10.0	2.4	18.7	2.4	52.0	44.0	63.2	52.8	80.6	67.2



Good Classroom Lighting

Example of glareless but adequate sight-saving indirect illumination
as found in Brampton Public Schools.

Courtesy "Canadian School Journal".

THE PUBLIC AND TABLE 10-REPORT OF THE HEALTH SERVICES IN

	THEED TO	TELL O	01	A A A A A A		III DEIL	1020 111
(A)	Municipalities in which School Medical	No. of School		Personne	1		hese d physi- nina- ore
	or Nursing Service is sponsored by local Boards of Health	Children Enrolled	Reg. Nurse	M.D.	D.D.S.	No. of Children entering Grade I.	No. of these who had phys cal examina- tion before entering
	Cities Schools						
1	BrantfordPub, and Sep.	4,558	4	1/2	1	475	56
2	HamiltonPub. and Sep.	24,270	32	6	9	1,735	
3	KitchenerPub. and Sep.	5,850	6	1/2	1	553	406
4 5	North BayPub. and Sep. OshawaPub. and Sep.	2,885 4,300	2 4		\$ 4, ½t.	363 636	
6	OttawaSep	11,229	13		4, 721.	996	
7	Port ArthurPub. and Sep.	1,525	2		‡	195	100
8	St. CatharinesPub. and Sep.	4,254	5	1/2	1	449	
9	St. ThomasPub. and Sep.	2,110	2		p.t.	205	129
10	SarniaPub. and Sep.	2,848	3		p.t.	366	
11	StratfordPub. and Sep.	2,466	2		p.t.	228	83
12 13	TorontoPub. and Sep. WoodstockPub. and Sep.	94,485	93			8,672 204	129
13	Suburban	1,004	-			204	129
1 2	York EastPub. and Sep. Tork TownshipPub. and Sep.	6,094 11,730	4 9	2 p.t.	6 p.t.	817 *	191
	Towns			-			
1	BurlingtonPub	539	1	1/4	‡	54	
2	CochranePub., Sep. and High	861	1			82	
3	CornwallPub. and Sep.	2,745	1			492	
4 5	Dryden (a)         Pub           Dundas (b)         Sep	362 98	1		±	45 14	
6	Elmira	382	1			42	
7	Fort FrancesPub. and Sep.	1.239	1			150	
8	HaileyburyPub., Sep. and High	607	1			51	
9	IngersollPub. and Sep.	773	1	1/4	‡	75	46
10	Kirkland Lake (Teck Twp.) Pub. and Sep.	Due to	reorgan	ization	of servi	ces, no repo	rt sent in.
11	LindsayPub. and Sep.	1,028	1			130	42
12	MidlandPub. and Sep.	1,173	1		‡	122	71
13	New TorontoPub	1,238	1	1/4	p.t.	168	
14 15	Oakville (c)Pub. and Sep. OrilliaPub. and Sep.	855 1,458	1		‡	88 192	112
16	Paris	555	1		*	63	112
17	PenetanguishenePub. and Sep.	927	î		‡	75	68
18	PerthPub. and Sep.	609	1		p.t.	67	
19	Port ColbornePub	1,420	1	1/4		183	
20	RenfrewPub. and Sep.	974	1			101	
21	St. Mary'sPub., Sep. and High	791	1	1/4	p.t.	52	
22	SimcoePub	868	1			106	
23	StrathroyPub	416	1	1/		62	44
24 25	TimminsPub. and Sep. WallaceburgPub. and Sep.	4,903 981	2½	1/4	‡	581 116	
26	WestonPub. and Sep.	932	1		÷	138	
20	Villages	302	1		+	100	
1	Forest HillPub	1,221	1	1/4	p.t.	141	15
2	SwanseaPub	678	1		p.t.	90	
	Part Time						
1	Gananoque  Rural Units						
1 2	Ayr, Ntb. and Sth. DumfriesPub. Etobicoke Twp., Lambton Mills	782	1			95	
-	and IslingtonPub	855	1		p.t.	108	
3	Tecumseh and E. Sandwich Pub. and Sep.	1,814	1			166	22
4	York North Twp	2,555	1	1/4	‡	328	
5	Eastern Ontario Health Unit Pub. and Sep. Glengarry, Stormont, Russell, 387 Prescott.	15,240	8				
	(A) May 1	000 000				90.071	1 514
_	(A)—Totals	230,068	1	******		20,071	1,514

 <sup>(</sup>a) Assisted by Red Cross.
 (b) Salary paid by private individual.
 (c) Includes S.S. 12, 13, 16, 18, Trafalgar Twp. (part-time service).
 † in D.D.S. column means some dental work done by service clubs or other private agencies.
 \*Not available.

SEPARATE SCHOOLS THE PUBLIC AND SEPARATE SCHOOLS OF ONTARIO, 1938

No. of defects	(other than dental) requir- ing correction found, 1938	No. of these defects cor- rected, 1938	No. of children with dental defects found, 1938	No. of children with dental defects corrected, 1938	No. excluded because of communicable disease	No. of Grade VIII children completing course, 1938	No. of these leaving with uncorrected defects	Vision	Hearing	Tonsils	Dental	Other
1 2 3 4 5	534 4,075 1,021 244 491	180 1,359 406 54	147 422 1,023	717 5,207 2,038 465 642	597 167 328 221 463	453 2,302 573 304 437	129 * 53 108 213	12 * 2 9	3 * 1 1	88 * 15 72 186	* 9 81 113	31 * 27 26 7
6 7 8 9	418 * 445 304 233	190 8 166 47 120	3,018 305 249 542 537	744 180 474 473 289	504 200 259 181 176	* 396 265 275	* 111 26 66 .70	* 8 12 8	* 2 1	* 53 45 51	*  24 42	* 44 29 2
11 12 13	169  161	85 120	806 601	536 338	117 96	287 196	60 87	7 4	11	18 32	52  56	21
1 2	377 2,834	292 *	1,167 8,327	241 3,744	605 1,626	680 *	110 *	23	4	62 *	280	17 *
1 2 3	75 143 156	18 63 88	137 297 281	78 76 648	196 61 259	65 58 317	22 21 147	1 11 19	2 3	14 7 34	17 48 121	1 7
4 5 6 7	56 4 20 76	4 1 12 6	17 28 113 571	26 26 63 12	103 15 20 169	42 16 43 99	25 4 10 68	2 5 2	1 1	5 2 22	23 4 8 54	8
8 9 10	79 143	10 34 Due to	367 42 reorgani	46 33 zation of	54 45 services,	36 88 no report	12 21 sent in.	1	2	9	9 15	1
11 12 13 14	110 59 142 60	10 31 47 50	99 406 836 490	31 156 223 161	91 168 98 47	113 97 114 58	33 44 90 11	3 2 3	1	14 11 44 9	18 31 44	1 15 1
15 16 17	109 21 95 22	65 15 90	377 148 68	199 41 68 119	68 34 136 22	121 60 98 74	* 12 13	* 1 2 5	* 1	* 8 1	10	* 4 1
18 19 20 21	132 117 17	10 35 6 16	78 86 148 305	57 155 248	154 142 24	132 87 54	41 37 38 4	5 3		13 32 16 2	28 12 33	3 1 2
22 23 24 25	65 17 1,831 46	36 11 68 29	143  4,043 74	310 42 216 33	42 17 1,355 105	89 36 377 66	39 16 293 16	2 19 2	18	19 8 101 7	32 6 192 11	71
26 1	150 *	15 *	45 *	44 *	51 138	101 76	27	3 2		3	17	16
2	44	6	34	99	14	64	16			13		
1 2	19 78	9 51	156	81 371	32 196	87 71	26 10	1		6 8	23	3
3 4 5	162 521 2,227	39 6 821	92 168 2,764	94 11	328 63	144 251	79 62	12 8	5 4	21 37	79 20	23 29
_	18,102	4,729	29,557	19,855	9,787	9,302	2,272	207	44	1,092	1,533	395

### THE PUBLIC AND TABLE 10—REPORT OF THE HEALTH SERVICES IN

(B)	Municipalities in which School Medical	No. of		Personne	1		hese physi- nina- ore
(B)	or Nursing Service is sponsored by local School Boards	School Children Enrolled	Reg. Nurse	M.D.	D.D.S.	No. of Children entering Grade I.	No. of these who had physi- cal examina- tion before entering
	Cities						
1	BellevillePub	1,751	1		p.t.	189	
2	ChathamPub	2,000	3		‡	240	75
3	Fort William Pub  Galt Pub. and Sep.	3,319 1,921	1	1/4	‡	216 198	134
5	GuelphPub	2,508	1	24	į	260	
6	KingstonPub	2,859	2		p.t.	351	
7	London	12,553	6	1	6 p.t.	835	
8	LondonSep	1,232	1			175	
9	Niagara FallsPub. and Sep.	2,912	2		‡	323	24
10	OttawaPub	9,565	5 2	1	1	* 261	
11 12	Owen SoundPub. and Sep. PeterboroughPub	2,266 2,776	2	1/4	p.t.	270	
13	Sault Ste. MariePub	3,086	2		‡	373	
14	SudburyPub	2,200	1		p.t.	350	
15	SudburySep.,	2,277	1		‡	541	
16	WellandHigh and Pub.	1,900+	1		‡	196	
17	WindsorHigh and Pub.	27,696	10	3 p.t.	3	846	
	Towns			1 f.t.			,
1	BarriePub. and Sep.	1,317	1		p.t.	130	
2	BrockvillePub	1,218	i		‡	159	
3	CollingwoodPub	863	1			18	
4	Long BranchPub	1,098	1		p.t.	117	101
5	MimicoPub. and Sep.	1,360	1		p.t.	165	106
6	PembrokePub	1,016	1			140	24
7	PembrokeSep	936	1		+	116	40 105
8	WaterlooPub. and Sep.  Part Time	1,496	1		‡	152	103
1	Brant Co. and WaterfordPub	535	1			109	
2	BrockvilleSep	230	1		p.t.	49	
3	Etobicoke (Alderwood)Pub	541	1			62	
4	Etobicoke (Humber Bay)Pub	534	1			73	
5	GeorgetownPub	304	1		‡	53	
6 7	KingstonSep LeasidePub	904 520	1		p.t. p.t.	122 74	
8	RiversidePub	590	1			51	33
9	Scarboro Twp., S.S. 13Pub	450	1			133	47
10	Scarboro, S.S. 15Pub	560	1			62	32
11	SouthamptonPub	234	1			27	*
12	Trafalgar Twp.—See Oakville.						
13	Trenton Pub	1,026	1			112	*
14 15	RockcliffePub	130	1	1/8		22	6
10	Rural Units	100	Î	1 '			
1	Carleton County (Nepean Twp.) Pub	1,369	1		‡	166	
2	HaldimandPub	1,155	1			148	114
3	Lincoln EastPub. and Sep.	1,698	1	1		180	
4	Lincoln WestPub	1,685	1			175	
5	Peel (part) and BramptonPub	1,479	1		‡	205	42
6	Welland County (Stamford, Willoughby, Chippawa)Pub	1,700	1		:	181	14
7	Welland County (Thorold)Pub. and Sep.	1,104	1		:	98	
8	Welland County (Fort Erie) Pub. and High	1,106	1			84	
9	Welland County (Fort Erie N.) Pub. and High	950	1			64	
10	Wentworth CountyPub	2,658	2		p.t.	281	
11	York County (Scarboro,					0.10	00
	S.S. 10, 12)	1,667	1			210	38
	(B)—Totals	124,616				9,362	6,324

<sup>‡</sup> in D.D.S. column means some dental work done by service clubs or other private agencies. \*Not available.

SEPARATE SCHOOLS
THE PUBLIC AND SEPARATE SCHOOLS OF ONTARIO, 1938

								, -,				
No. of defects	(other than dental) requir- ing correction found, 1938	No. of these defects cor- rected, 1938	No. of children with dental defects found, 1938	No. of children with dental defects corrected, 1938	No. excluded because of communicable disease	No. of Grade VIII children completing course, 1938	No. of these leaving with uncorrected defects	Vision	Hearing	Tonsils	Dental	Other
1	41	35	1,500	552	104	163	61	7		23	31	
2 3	143 351	81 122	435 494	375 385	166 287	165 343	16 193	1 10	1 5	4 62	12 109	6
4	194	98	260	260	26	216	17	1	2	10		4
5	41		158	138	129	264	107	5	2	10	92	3
6	138	30	480	326	542	295	118	12	2	29	72	14
7 8	1,521 85	207 48	4,136 384	3,549 92	666 216	870 112	178 54	14	12	84	587 39	107
9	238	100	568	496	537	330	38	5	2	16 29	39	12
10	1,076	*	2,496	2,548	186	*	*	*	*	*	*	*
11	250	78	1,014	517	236	193	63	3		40	39	7
12	185	38	*	726	380	316	30		2	8	14	4
13	322	67	498	229	222	327	108	11	3	37	86	2
14	284	200	954	432	158	221	34	7	6	22	21	14
15 16	128 175	20 35	220 281	159 90	29 119	122 189	27	3 4		7 39	10 92	4
17	*	*	*	4,197	883	1,214		4		39	92	1
				1,101	000	1,214						
1	45	27	255	161	58	81	18	1	2	8	8	3
2	74	22	579	258	177	133	45	4	2	14	27	
3	30	22	45	*	26	40	3	*	*	*	*	*
4 5	93 77	29 40	593 498	346 276	100 76	83 196	49	1 1	1	8 15	48	2 7
6	235	26	178	418	374	68	33	3	1	15	28	6
7	80	20	54	88	152	47	45	6		11	25	1
8	79	57	285	207	43	126	24	7		20	15	1
1	49	* _	*	*	45 *	53	28	1		14	13	
2 3	19 55	5 13	59 *	48 32	24	24 51	8	1 12		7 5	8 37	11
4	48	14	723	38	83	57	50	26	4 5	21	44	9
5	29	9	280	52	43	27	5		1		4	
6	37	12	129	112	59	96	59	9	1	24	53	6
7	70	52	287	427	48	36	7	1		1	5	
8	27	*	303	80	40	73	22			4	21	
9	105	67	54	17	61	41	22	6		6	6	4
11	194 *	22 *	104 125	77 10	127 36	55 18	17	6	2	4	15 12	5
11			120	10	30	10				1	12	
13	*	*	387	204	19	90	5	2		3	2	
14		••••										
15	9	*	5	5		12	1	1			. 1	
1	65	8	237	108	149	145	90	6	2	15	70	
2	57	39	161	83	66	110	40			19	21	
3	130	51	236	90	39	149	139	4		17	139	
4	154	59	195	200	72	162	42	2		25	42	
5	486	55	430	121	186	153	77	10	3	50	40	17
0	0.1		4.10	000	100	100	00	_				
6 7	91 66	74 29	440	308 268	123 64	126 141	66	5 3		2	59	
8	90	46	364 201	268	21	70	74 27	1	1	14 5	64 24	4 2
9	22	11	97	37	30	34	16	1	1	8	5	1
10	163	78	371	269	153	*	*	*	*	*	*	*
11	483	44	211	75	76	151	123	8	4	51	45	13
	0 224	0.000	01.704	10.776	7 456	7.000	0.010	010	67	807	2,125	270
	8,334	2,090	21,764	19,776	7,456	7,988	2,219	218	67	807	2,125	270

### THE PUBLIC AND TABLE 10—REPORT OF THE HEALTH SERVICES IN

	TABLE 10	-KEI OI	CI OI	IIID	110110	III OLICY	1025 111
(C)	Municipalities in which School Nursing	No. of School	:	Personne	1	E besi	these d physi- nina- ore
( )	service is paid for by School Boards and given by V.O.N.	Children Enrolled	Reg. Nurse	M.D.	D.D.S.	No. of Children cutering Grade I.	No. of these who had physecal examination before entering
_	Municipality School						
1	Braeside						
2	CobaltPub. and Sep.	687	1/2			89	
3	DundasPub EastviewPub	633 247	1/4 1/4		‡	80 35	
5	HuntsvillePub	515	1/2		‡	61	
6	London Twp., S.S. 28Pub	96	1/4			8	
7	NapaneePub	475 221	1/2		‡	64 28	37
8	Nelson TwpPub  New LiskeardPub. and Sep.	555	1/4 1/2		‡	74	
10	Point EdwardPub	180	1/4			30	
11	PrestonPub. and Sep.	966	1/2			109	69
12	WalkertonPub., Sep. and High	582 20	1/4			53 19	
13 14	Westminster Twp., S.S. 22Pub	520	1/4 1/2		‡	57	
1.	Water, 1111				· · · · · ·		
	(C) Totals	5,877				707	106
	Private Agency Sponsoring Nursing Service						
1	Hespeler	279					
2	CreightonPub LevackPub	115	1				
4	Copper CliffPub	573					
5	SchumacherPub	725	1	1/8		90	
6	Sth. Porcupine and Dome Mine Pub	703	1	1/8		77	
	Totals	2,395				167	
(D)	Municipalities in which School						
	Nursing Service is given by Red Cross from Outposts						
	And 14 Sehoole	235	1/4				
1 2	Apsley	126	1/4			22	
3	AtikokanPub. 11	159	1/4			22	
4	Bancroft						
5 6	Callander         Sep. 12, Pub. 20           Coe Hill         Pub. 13	1,388	3/4 1/4			251 55	
7	Hawk JunctionPub. 8	243	14			33	*
8	HaliburtonPub. 10	235	1/4			*	*
9	Hornepayne						
10 11	Jellicoe	1,188	1/4	De	ntal	184	
11	range range	2,100	/4	1	ach	101	
12	Lion's Head, Bruce PenPub. 18	511	1/4			62	
13	Manitoulin IslandSep. 1, Pub. 44.	1,126			‡	163	
14 15	NakinaPort LoringPub. 6	234	1/4			35	
16	Quibell	250	34			61	
17	Rainy River						
18	ReddittPub. 2		1/4		+	10 56	
19 20	St. Joseph's Island		14 14		‡	35	
21	Wilberforce		14			41	
22	Toronto Twp., Port CreditPub. 7		1/2		‡	107	21
	(D) Totals	7,996				1,137	21
	Grand Totals	370,952				31,444	7,965
_				1	1		

<sup>†</sup> in D.D.S. column means some dental work done by service clubs or other private agencies. \*Not available.

SEPARATE SCHOOLS
THE PUBLIC AND SEPARATE SCHOOLS OF ONTARIO, 1938

	1 -	1	1 10	1	I U	l .	1		1	<u> </u>	1	
No. of defects	(other than dental) requir- ing correction found, 1938	9 . œ	No. of children with dental defects found, 1938	No. of children with dental defects corrected, 1938	No. excluded because of communicable disease	No. of Grade VIII children completing course, 1938	No. of these leaving with uncorrected defects					
def	tha red rect	No. of these defects cor- rected, 1938	defe	defe	lud e of nie	No. of Grade VIII children completing course, 1938	the wir		5.0			1
jo	cor d,	of cts	of frei	of lres	exc mu ase	of Ceb ple ple 'se,	of ing orre	E 0	ri	sils	tal	l l
o'	oth oun	do.	hilo oun	Liik ent	No. exc because commu	O'TI O	No. eav ince	Vision	Hearing	Tonsils	Dental	Other
		401	2002	2000	4.200	4700	4250					
												}
1			100				40	7	1	25		9
2 3	38 43	12 16	128 75	66 45	14 10	73 47	42 15	1	1	6	11	4
4	15	2	112	10	4	17	10	2			8	
5 6	17	5	19	60	19	47	7			2	6	1
	9	1	17	3	2	9	7			1	6	
7	71 17	26 9	68 92	65 27	31	36 26	12 7	4		2 3	4	4
8 9	59	17	89	35	17 36	43	12	2		3	7	3
10	20	5	52	10	25	14	. 4	3			8	1
11	108	77	129	35	23	85	33			7	25	3
12	35	18	362	157	38	43	6	2		4		
13 14	12 33	12 20	31 64	20 50	1 4	8 63	11	2		10 8	• • • • • •	5
14												
	477	220	1,238	583	224	511	166	24	2	71	79	31
1												
1	177	32	258	50	*	*	*	*	*	*	*	*
2 3	74	9	95	31	*	*	*	*	*	*	*	*
3	179	91	404	189		59	55	5	1	13	55	17
4 5	103 51	24	426 87	185 64	45 24	60 78	43 47	1 3	2	17 26	35 38	3 24
_												
	584	160	1,270	519	69	197	145	9	3	56	128	44
1	12		184	10	14	23	23			6	17	
2	14	2 2	17	10 3	1	12	9	1		4	4	2
2 3	8		111	32	13	27	14			7	8	2
4												
5	141	15	650	50	142	150	50	10	1	12 6		27
7	32 *	*	300 101	30 *	34 10	30 31	8 27	4		10	9	4
5 6 7 8	334	*	134	*	*	*	*	*	*	*	*	*
9												
10								*	*	*	*	
11	153	34	368	168	18	*	*	_ ^	7	_ ^	•	7
12	5		93	24	5	*	*	*	*	*	*	*
13	168	*	246	50	21	*						
14												
15	32	3	11	6	*	*	26	*	*	20	10	18
16 17	60	34	34	19	8	50	36			20	10	1
18	28	1	60	13	3	4	3			1	3	
19				126	*	*	*	*	*	*	*	*
	366	9	265									
20	366 18	4	126	24	30	12	9			1	8	1
21	366 18 30	4 11	126 46	24 8	3	67	4			4		
	366 18	4	126	24				1		12	34	11
21	366 18 30	4 11	126 46	24 8	3	67	4		1	4		
21	366 18 30 109	4 11 32	126 46 86	24 8 20	3 15	67 84	60	3		12	93	11

THE PUBLIC SCHOOLS
TABLE 11—AGE-GRADE DISTRIBUTION, MAY, 1938
(A) ALL SCHOOLS

_						-											
	of	Aver				1.22	1.03	.65	26.	1.00	.93	.88	.75	.93		.93	
	rement n Grad	By Sex				1.25	1 05	.61	1.01	1.02	92	8.8	87	1.08		9.66	
	Average Increment of Age between Grades					Grade I to Grade II	Grade II to Grade III	Grade 111 to Grade 1V	Grade IV to Grade V	Grade V to Grade V1	Grade VI to Grade VII	Grade VII to Grade VIII	Grade VIII to Grade IX	Grade 1X to Grade X		Average	
	Age	Aver-	5.99	6.63	7.36	8.58	9.61	10.26	11.23	12.23	13.16	14.01	14.79	15,72	12.78		
	Average Age	By	6.00 5.9s	6.58	7.43	8 . 68 4 . 48	9.73	10.13	11.36	12.38	13.28 13.04	14.16	14.76	15.84	12, 92		
		Total Enrol- ment	3,32	21	15.03	12.66	8.76	8,52	12.91	12.14	11.4	10.77	96.	.33	.×6		
	Totals c	es	15076	10594	68296	57549	30815	38715	58678	55168	51838	48945	4381	1522	3932		
		Totals	7785	5518 3	36372	30109	20860	19941	28989	27880 27288	26006	23857 25088	2740	891	2657	232946 221563	151509
	19 vrs.							-			:-	27	- 22	6.8	431	130	43
	18	yrs.			C1 :		:-	7 :	C1 :		10.00	22	13.7	13.0	12	1 25 25	96
	17	yrs.			4-		1000	104	12	21	31	12 13 13 13 13 13 13 13 13 13 13 13 13 13	39	74	38	427 275	702
	16	yrs.			I-10	-1x	10	00	57 26	118 81	420	1290 924	184 292	155 273	137	2395 1907	4302
		yrs.			122	120	23.40	30	1.10	895	2170	4120	427 760	214	403	8612 6723	15335
	14	yrs.			12	31	99	215	1009	2387 1667	4452 3526	6768 6501	558 897	123	397	16087 13641	29728
,	13	yrs.		t~80	126 88	133	195	630 302	2322	4819 3441	7070 6662	7844	347	700	369	23825 22496	16321
	12	yrs.		11.5	100	27.4	675 348	1481 849	4639 3335	7313 6937	8069 9037	3315 4564	101	-110	386	26331	51956
	=======================================	yrs.		13 13	202	635 378	1749 1018	3158 2364	7628 6788	\$634 9603	3478 4511	306	01		313	26130 25173	51603
	10	yrs.		27 16	481	2080 1229	4239 2964	5792 4889	9797	3506 1778	284 347	11			282 156	26502 25655	52157
	C	yrs.		71	1434 778	5791 4404	7932 7483	6404	3823 4940	175 328	21.22		51		1 m	25825 25276	51101
	∞	yrs.	2 :	291 163	5266 3834	12854 12075	5315 6090	2126 2969	158 216	± 2.	:-		- :		9.1	26121 25433	51554
	-1	yrs.	225 168	1104	15579 13789	7838 8524	593 806	45 92							14.00	6402 18738 25430 6258 18310 24335	49765
	9	yrs.	3458 3192	2769 2719	12081 11853	413 558	10								5.7	18738 18340	37078
		yrs.	4079 3912	1216 1170	1097 1167	10										9	10S 12660 37078 49765
	Un-	yrs.	21	नं न	23											48	108
			Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	
			Kindergarten	Kindergarten- Pri nary	GRADE 1	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	GRADE VIII	GRADE IX	GRADE X	JR AUXILIARY CLASSES	TOTALS BY SEXES	GRAND TOTALS

As the school census is taken near the end of the school year, the ideal age spread has been moved forward one year from Heavy lines denote ideal age spread for each grade, that shown in former issues.

## (B) URBAN SCHOOLS

•															
Totals by Grades	14,624	7,033	36,062	}33,838	31,342	322,067	33,652	33,099	162,18	28,862	3 2,001	619	3,3.16		
Totals	7,543	3,657	19,059 17,003	17,334	11,196	11,325	16,873 16,779	16,575	15,990 15,801	14,139	683 1,318	266 383	2,273	136,913 131,453	268,366
19 years and over									:-	2000	-8	19	4.01	10	37
18 years							-		7701	တဘ	11	-	12	33.8	59
17 years			C1 :		61	61	12.00	13	122	126 59	222	47	123	287 153	140
16 years			1000	8 24	200	84	130	74	307 178	895 619	98 190	75	120	1,616	2,890
15 years			98	10	17	-4-S	1.40	586 293	1,609	2,671	196 440	87 157	33.1	5,697	10,106
14 years			P-01	82	39	435	571 292	1,524	2,936 2,390	3,866	231 385	51	336	9,646	18,115
13 years		-	× =	19	114	296 137	1,249 989	2,837 2,266	4,160	1,536	107	104	309 138	13,663 13,086	26,749
12 years			22	95 53	305 156	761	2,596 1,956	4,236	4,760	1,888 2,475	91 92 93		336 186	15,016 11,621	29,637
11 years		44	58.83	270 185	862 537	1,751	4,263	5,156	2,041	110			277	14,804	29,275
10 years		G 61	171 68	1,077	2,313	3,320	5,672 6,603	2,070 2,803	133 145	s11			2.1.1	15,014 14,878	29,892
9 years		1101	577 251	3,314 2,670	4,442	3,734	2,282 2,911	09 1+1	\sigma \frac{1}{2}	:-	24		160	14,599	39,194
8 years		123 822	2,700 1,933	7,797 7,598	2,880	1,313	91	9	-		-		79	14,965	29,709
7 years	220 166	621 494	9,109	4,573 5,147	214	16 35							ss sc	14,791	29,169
6 years	3,342	1,985	6,183	13C 175	1								4	11,645	23,090
5 years	3,960	904	230 228	-24										5,095	9,962
Under 5 years	19													2021	100
	Boys	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	
	Kindergarten	Kindergarten-Primary	GRADE 1	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	GRADE VIII	RADE IX	GRADE X	JR. AUXILIARY CLASSES	TOTALS BY SEXES	GRAND TOTALS.

(C) RURAL SCHOOLS

1	ı	ı	ı				1	1		1	)	1			
Totals by Grades	452	3,561	32,234	323,711	18,473	} 16,618	3 25,026	\$ 22,069	30,047	\$ 20,083	2,380	873	989		
Totals	242 210	1,861	17,313	12,775 10,936	9,664 8,809	8,616	12,816 12,210	11,305	10,016	9,718	958 1,422	365 508	384 202	96,033	186,143
years and over										100		.03		mm	9
18 years			2 :		:-	:	1		1	न्त्र दर्श	1 2	13		17	37
17 years			12		- 01	\ \text{co.4}	10.00	∞ rc	14	58	15	27	12	140	262
16 years			21 21	20.00	0000	0.0	28 13	31	113	395 305	102	80	17	779	1,412
15 years			x o	10	23	27	101	306	561	1,419	231 320	127 188	72	2,915	5,229
14 years			20	31.	00 32	130	438 228	863 449	1,516	2,902 2,597	327 512	92	61	6.441	11,613
13 years		38	47 20	90	82	334 165	1,073	1,982	2,624	3,308	240	33	860	10,162	19,572
12 years		10	78 48	179 108	370 192	720	2,043	3,077 2,978	3,309	1,427 2,089	50 75	C1 F	30	11,315	22,319
11 years		14 9	163	365	887 481	1,407	3,365 2,968	3,478	1,437	166 302	ω Φ		36	11,326	22,328
10 years		21	310	1.003	1,926	2,472 2,023	4,125	1,436	151 202	13			38 26	11,488	22,265
9 years		60 27	857 527	2,477	3,490	2,670	1,541	106	4				23	11,226	21,907
8 years	2	168	2,566 1,901	5,057	2,435	813 1,169	95 125	ಬ್					15 16	11,156 10,689	21 845
years	म्ट छ। 	483 452	6,470	3,265	379 515	33							10 m	10,639 9,957	20,596
6 years	116	784 763	5,898	283	9.81								m-	7,093	13,988
5 years	119	312	867 939	6 4										1,307	2,698
Under 5 years		60.00	37											26 40	99
	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	
	Kindergarten	Kindergarten-Primary	GRADE 1	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	GRADE VIII	GRADE IX	GRADE X	JR. AUXILIARY CLASSES	TOTALS BY SEXES	GRAND TOTALS

### THE PUBLIC SCHOOLS

### TABLE 12—NUMBER OF PUPILS IN REGULAR GRADES Under Age, Normal Age, Over Age, May, 1938

### (a) All Schools

			Under A	l ge		Normal			(	Over Ag	e		
Grade	4 years	3 years	2 years	1 year	Total Under Age	Age	Total Over Age	1 year	2 years	3 years	4 years	5 years	Over 5 years
I			60	2,264	2,324	62,402	3,570	2,212	722	299	165	88	84
II			19	971	990	51,486	5,073	3,309	1,013	435	184	83	49
III			23	1,399	1,422	34,023	4,370	2,767	1,023	337	158	63	22
IV			141	5,095	5,236	29,778	3,701	2,330	932	309	101	18	11
V		2	374	8,763	9,139	43,198	6,341	4,328	1,529	381	83	18	2
VI		32	503	8,284	8,819	40,747	5,602	4,054	1,316	199	31	2	
VII	1	30	631	7,989	8,651	38,816	4,371	3,626	659	77	8	1	
VIII	4	38	805	7,879	8,726	37,696	2,523	2,214	279	20	10		
Totals	5	102	2,556	42,644	45,307	338,146	35,551	24,840	7,473	2,057	740	273	168

### (b) Urban Schools

	-		Under A	\ge		Normal			(	Over Ag	e		
Grade	4 years	3 years	2 years	1 year	Total Under Age	Age	Total Over Age	1 year	2 years	3 years	4 years	5 years	Over 5 years
I				458	458	34,387	1,217	828	239	62	39	21	28
II			3	305	308	31,099	2,431	1,713	455	148	62	34	19
III			1	505	506	18,703	2,133	1,399	461	169	66	26	12
IV			51	3,113	3,164	17,061	1,842	1,209	433	128	62	7	3
V			154	5,223	5,377	24,910	3,365	2,238	863	211	42	10	1
VI		23	210	4,873	5,106	24,338	3,765	2,742	879	124	18	2	
VII	1	20	278	4,617	4,916	23,628	3,247	2,704	485	51	6	1	
VIII	1	19	337	4,363	4,720	22,423	1,719	1,514	185	14	6		
Totals	2	62	1,034	23,457	24,555	196,439	19,719	14,347	4,000	907	301	101	63

### (c) Rural Schools

		1	Under A	ge		Normal			C	Over Ag	e		
Grade	4 years	3 years	2 years	1 year	Total Under Age	Age	Total Over Age	1 year	2 years	3 years	4 years	5 years	Over 5 years
I			60	1,806	1,866	28,015	2,353	1,384	483	237	126	67	56
II			16	666	682	20,387	2,642	1,596	558	287	122	49	30
III			22	894	916	15,320	2,237	1,368	562	168	92	37	10
IV			90	1,982	2,072	12,717	1,859	1,121	499	181	39	11	8
V		2	220	3,540	3,762	18,288	2,976	2,090	666	170	41	8	1
VI		9	293	3,411	3,713	16,519	1,837	1,312	437	75	13		
VII		10	353	3,372	3,735	15,188	1,124	922	174	26	2		
VIII	3	19	468	3,516	4,006	15,273	804	700	94	6	4		
Totals	3	40	1,522	19,187	20,752	141,707	15,832	10,493	3,473	1,150	439	172	105

### THE PUBLIC SCHOOLS

### TABLE 13—PERCENTAGE OF PUPILS IN REGULAR GRADES Under Age, Normal Age, Over Age, May, 1938

### (a) All Schools

		1	Under A	\ge		Normal			C	ver Ag	e		
Grade	4 years	3 years	2 years	l year	Total Under Age	Age	Total Over Age	1 year	2 years	3 years	4 years	5 years	Over 5 years
1 II			.09	3.31 1.69	3.40 1.72	91.37 89.46	5.23 8.82	3.24 5.75	1.06 1.76	.44	.24	.13	.12
111 1V			.06	3,51	3.57	85.45 76.91	10.98	6.95	2.57	.85	.40	.16	.05
V			.64	14.93	15.57	73.62	10.81	7.38	2.61	.65	.14	.03	(.003)
VI	(.002)		.91 1.22	15.02 15.41	15.99 16.69	73.86 74.88	10.15 8.43	7.35 6.99	2.38	.36	.06	(.004) (.002)	
VIII		.08	1.64	16.10	17.83	77.02	5.15	4.52	.57	.04	.02		
Average	(.001)	.02	.61	10.18	10.81	80.70	8.49	5.93	1.78	.49	.18	.07	.04

### (b) Urban Schools

		Į	Under A	ge		Normal			(	ver Ag	e		
Grade	4 years	3 years	2 years	1 year	Total Under Age	Age	Total Over Age	1 year	2 years	3 years	4 years	5 years	Over 5 years
1				1,27	1,27	95,36	3,37	2.29	.66	.17	.11	.06	.08
11			.01	.89	.90	91.91	7.19	5.06	1.35	.44	.18	. 10	.06
III			(.005)	2.37	2.37	87.63	10.00	6.56	2.16	.79	.31	.12	.06
IV			.23	14.11	14.34	77.32	8.34	5.48	1.96	.58	.28	.03	.01
V			.46	15,53	15.99	74.02	9,99	6.65	2.56	. 63	.12	.03	(.003)
VI		.07	. 63	14.72	15.42	73.21	11.37	8.28	2,66	.37	.05	.01	
VII	(.003)	.06	.88	14.52	15.46	74.32	10.22	8.51	1.53	.16	.02	(.003)	
VIII	(.003)	.07	1.17	15.12	16.36	77.69	5.95	5.24	.64	.05	.02		
Average	(.008)	.03	.43	9.74	10.20	81.61	8.19	5.96	1.66	.38	.12	.04	.03

### (c) Rural Schools

		Ţ	Inder A	ge		Normal	Normal Over Age							
Grade	4 years	3 years	2 years	l year	Total Under Age	Age	Total Over Age	1 year	2 years	3 years	4 years	5 years	Over 5 years	
I			.19	5.60	5.79	86.91	7.30	4.29 6.73	1.50 2.35	.74	.39	.21	.17	
III			.12	2.81 4.84	.288 4.96	\$5,98 \$2,93	11.14	7.41	3.04	.91	.50	.20	.05	
IV V		.01	.54 .87	11.91 14.15	12.45 15.03	76,39 73,08	11.17 11.89	6.73 8.35	3.00 2.66	1.09	.23	.07	.05	
VI		.04	1.33 1.76	15.46 $16.82$	16.83 18.63	74.85 75.76	8.32 5.61	5.94 4.60	1.98	.34	.06			
VIII		.09	2.33	17.51	19.95	76.05	4.00	3.48	.47	.03	.02			
Average	(.002)	.02	.85	10.77	11.64	79,48	8.88	5.89	1.95	.64	.25	.10	.05	

Note:-Figures in brackets are disregarded in totals.

### ONTARIO — SOUTH AFRICA — AUSTRALIA — UNITED STATES TABLE 14—COMPARATIVE PUPIL STATISTICS THE PUBLIC SCHOOLS

	n and	Rtd.	9.1	6.0.7-0. 4.4.4.8	3.5	15.4 19.5	7.1 8.8 6.1 5.5
	Acceleration and Retardation	Nml.	79.5	78.3 81.0 78.7 86.0	86.6 90.2	84.2	83.9 90.3 93.3
	Accel Re	Acl.	11.4	16.3 13.6 13.9 8.2	9.9	7.6	9.0
	ade	VIII	11.7	12.3 11.2 13.0	5.5	11.6	12.8 12.4 7.8 12.4
	ich Gr	VII	13.5 12.8	13.0 12.3 13.2 12.7	9.5	12.5	13.8 12.5 7.9 12.5
	Per cent, of Total Enrolment in each Grade	VI		13.2 12.5 13.5 13.1	14.8	12.3	13.6 12.7 14.4 12.8
	rolmer	Λ	10.5 14.1	13.7 13.9 13.6 12.5	13.5	12.6	11.2 12.6 14.5 12.5
w	al En	ΛΙ	10.5	13.3 13.4 13.0	12.4	12.6	9.7 12.6 14.2 12.2
ILVSI	of Tot	111	7.4	13.0 13.5 12.9 11.1	12.4	12.6 13.0	11.1 12.3 14.0 11.6
ANA	cent.	11	13.3	9.3 10.4 9.0	19.6 12.3 15.6 14.8	12.3	13.9 12.1 13.8 12.0
RADE	Per	I	16.7	12.2 12.8 11.7 11.7	19.6 15.6	13.5	13.9 12.8 13.4 14.0
AGE-GRADE ANALYSIS		AII	10.0	10.6 10.6 10.8 10.8	13.9 10.7 14.1 10.2	10.4	10.8 10.8 10.8
A		VIII	14.0	14.1 14.1 14.6 14.8		14.0	14.2 14.4 14.4 14.0
	ade	VII	13.1	13.1 13.2 13.4 13.3	13.1	13.1	13.2 13.5 13.4 13.0
	Average Age per Grade	1/	12.2	12.1 12.2 12.3 12.3	12.0	12.2	12.12.2 2.4.21.2 12.0.21
	e Age	Λ	11.3	11.0	11.0	11.1	11.2 11.4 11.4 10.9
	verage	ΛI	10.2	9.9 10.0 10.2	9.9	10.0	10.3 10.3 9.8
	V	111	2.6	9 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	8.8	0.68	9.5
		11	8.7	8.2.8	7.7		8 8 8 7 4 9 9 7
		-	7.4	2.7.	6.5	6.6	7.3 7.0 7.1 6.5
Com-	pulsory School Age		8-14-16	7-16 (A) 7-16 (A) 6-16 (A) 7-15 (A)	7-14 6-14	8-16 7-15	8-16 7-16 7-16 7-16
At-	_	ciency	91.1	х х х 92.1	87.7	93.0	92.5 86.9 92.9 93.0
Enrol-			28.6	22.9 26.2 31.0	33.8	36.5	31.0 31.3 36.9 41.2
	Rank per * Tea-		10.0	3.1 22.9 3.1 26.2 .9 31.0 .6 16.6	8.4	34.9	
	Province or State		ONTARIO: Public Schools	SOUTH APRICA: Cape of Good Hope (B) Transvaal Orange Free State Natal (B)	AUSTRALIA: New South Wales South Australia	United States: Pennsylvania Virginia (Whites)	City of Boston

Notes:—I. Wherever possible, average age has been adjusted to correspond with Ontario School census date.

2. Ontario standard for Normal Age as shown on Public School Age-Grade Table has been applied in each case.

\*Ranks. I. For Provinces and States comparison is on basis of enrolment in Grades I to VIII. Ontario considered as 10.

2. For City Systems City of Toronto considered as 10.

(a) Limit is for European children. May leave school sooner under certain conditions.

\*X. Data not available.

## THE PUBLIC SCHOOLS

TABLE 15—EIGHT MEASURABLE EFFICIENCY TESTS APPLIED TO CITY SCHOOLS, 1937-38

Average Age for Each Crade (on May 31)  Average Age for Each Age for Each Crade (on May 31)  Average Age for Each Ag		_	C)	33				4				2	9	7		00	
Crade   Crad	Cities		ui:	e Effi-		Averag	e Age for	Each Gra	de (on Ma	ıy 31)		t, Grades	sss polding	a gariblod	Cost o Pupi	f Educatic Il-Day (cer	n per 1ts)
37.6         18.6         91.7         7.1         8.4         9.7         11.4         12.2         12.7         14.0         9.6         52.1         4.0         24.6         32.8         16.3         91.2         16.4         92.8         6.4         9.8         11.1         12.1         13.0         14.0         9.6         32.1         9.6         7.2         8.3         9.8         11.0         12.1         13.0         14.0         9.6         32.2         10.5         32.1           38.9         16.3         94.6         7.2         8.4         9.8         11.0         12.1         13.0         14.0         9.6         32.2         10.6         8.0         32.2         10.0         12.1         13.0         14.1         10.6         8.0         30.2 <td< td=""><td></td><td></td><td>Enrolment</td><td>Attendanc riency Per</td><td>Grade I</td><td>Grade II</td><td>Grades III and IV</td><td>Grade V</td><td>Grade VI</td><td>Grade V11</td><td>Grade</td><td>Enrolmen</td><td>Teachers a First Cl</td><td>Teachers l</td><td>Current</td><td>Capital</td><td>Total</td></td<>			Enrolment	Attendanc riency Per	Grade I	Grade II	Grades III and IV	Grade V	Grade VI	Grade V11	Grade	Enrolmen	Teachers a First Cl	Teachers l	Current	Capital	Total
35.8         16.4         92.8         6.4         8.6         9.8         11.1         12.1         13.0         14.0         10.8         42.8         6.7         33.1         12.1         13.0         14.0         10.8         40.5         32.1         13.0         13.0         14.0         10.8         40.5         32.1         13.0         13.0         13.0         13.0         13.0         13.0         13.0         13.0         10.0         4.0         30.8         13.0         13.0         13.0         13.0         13.0         10.0         8.0         22.9         30.8         10.0         13.0         13.0         13.0         13.0         13.0         13.0         13.0         13.0         10.0         8.0         22.9         30.8         10.0         11.2         13.0         13.0         10.0         10.0         8.0         22.9         30.8         10.0         11.0         12.1         13.0 <td>Belleville.</td> <td>37.6</td> <td>18.6</td> <td></td> <td>7.1</td> <td></td> <td>9.7</td> <td>11.4</td> <td>12.2</td> <td>12.7</td> <td>14.1</td> <td>9.9</td> <td></td> <td>4.0</td> <td></td> <td>10.0</td> <td>34.6</td>	Belleville.	37.6	18.6		7.1		9.7	11.4	12.2	12.7	14.1	9.9		4.0		10.0	34.6
18.5   1.6	Brantford	35.8	16.4		6.4		9.8	11.1	12.1	13.0	14.0	10.8		6.7		4.8	35.3
38.1         16.3         94.6         7.5         8.4         9.8         11.0         12.5         18.0         14.1         12.3         31.6         9.0         9.0         9.1         9.0         9.1         9.0         9.1         9.0         9.1         9.0         9.1         9.0 <t< td=""><td>Chatham</td><td>38.1</td><td>21.6</td><td></td><td>7.2</td><td></td><td>9.7</td><td>11.0</td><td>12.1</td><td>13.3</td><td>14.0</td><td>9.6</td><td></td><td>10.5</td><td>32.1</td><td>1.4</td><td>33.5</td></t<>	Chatham	38.1	21.6		7.2		9.7	11.0	12.1	13.3	14.0	9.6		10.5	32.1	1.4	33.5
38.1         18.5         9.5         7.2         8.4         9.5         11.0         12.1         10.0         13.7         10.9         30.7         22.9           38.9         15.6         92.6         7.2         8.4         9.5         11.2         12.4         18.7         10.9         30.7         22.9           38.9         16.4         91.5         7.2         8.4         9.9         11.2         12.4         18.7         10.9         30.7         22.9           38.9         16.0         94.3         7.4         8.8         9.8         11.0         12.1         14.0         11.5         38.6         44.4         22.9           38.0         18.1         93.9         7.4         8.8         10.0         11.7         11.7         17.7         38.6         44.4         22.9           45.5         10.0         93.7         7.3         8.4         9.8         11.0         12.1         13.7         14.7         38.7         37.7           45.5         10.0         93.7         7.3         8.4         9.8         11.0         11.2         11.4         11.4         11.4         11.4         11.4         11.4	Fort William	35.9	16.3		7.5		8.6	11.0	12.5	13.0	14.1	12.3		0.4	30.8	10.2	97.3
39.3         15.6         92.0         7.5         8.4         9.6         11.2         12.4         13.4         14.1         9.3         9.1         13.7         14.2         12.4         14.1         9.3         9.1         13.7         14.2         12.2         13.1         14.0         11.5         38.6         44.4         29.3           42.1         18.7         90.9         7.7         8.8         9.8         11.2         12.7         11.7         9.7         38.6         44.4         29.3           38.8         18.1         9.8         11.2         12.1         13.1         13.8         12.4         57.5         7.7         37.7         7.6         8.8         10.0         11.2         12.1         13.1         13.8         11.2         44.5         57.8         29.3         29.5         11.2         12.0         11.2 <t< td=""><td>Galt</td><td>38.1</td><td>18.5</td><td>95.8</td><td>2.2</td><td></td><td>o c</td><td>11.0</td><td>1.21</td><td>10.01</td><td>10.0</td><td>10.0</td><td>30.7</td><td>0.0</td><td>0 66</td><td>9.6</td><td>25.55</td></t<>	Galt	38.1	18.5	95.8	2.2		o c	11.0	1.21	10.01	10.0	10.0	30.7	0.0	0 66	9.6	25.55
93.9         18.7         90.9         7.7         8.8         9.8         11.2         12.2         13.1         14.0         11.5         38.6         44.4         29.3           38.3         16.0         94.3         7.4         8.3         9.5         11.2         12.7         13.7         9.7         37.6         29.1           38.0         22.4         92.9         7.3         8.4         9.8         11.2         12.1         13.1         13.8         12.4         40.6         3.8         29.1           38.0         22.8         92.9         7.3         8.4         9.8         11.2         12.1         13.1         13.2         11.2         40.6         3.8         24.5           38.0         93.7         7.6         8.8         10.0         11.6         12.2         14.1         10.0         33.7         27.8         36.9           38.1         95.6         7.4         8.7         10.0         11.6         12.5         13.2         14.1         10.0         33.7         27.8         36.9           38.2         9.2         7.4         8.7         10.0         11.6         12.5         14.1         10.0	Guelph	39.3	10.6	92.0	s. r		7.0	11.9	19.4	13.4	14.1	0.01	59.1	23.5	29.2	7.2	36.4
38.3         16.0         94.3         7.4         8.3         9.5         10.5         11.7         12.7         13.7         9.7         37.6          29.1           38.8         18.1         93.5         7.3         8.5         9.8         11.0         12.1         13.3         11.2         57.5         7.7         37.7         37.7           38.8         22.4         92.9         7.3         8.4         9.8         11.2         12.0         11.2         12.0         11.9         18.4         57.5         3.7         24.5           43.5         16.0         93.7         7.6         8.8         10.0         11.2         12.0         13.0         14.0         11.5         57.8         3.9         24.0         3.8         10.0         11.2         12.0         14.0         11.5         57.8         3.9         24.0         3.8         10.0         11.0         11.0         14.0         11.5         57.8         3.0         3.0         10.0         11.0         11.0         11.0         11.0         33.7         20.7         22.0         3.0         3.0         10.0         11.0         11.0         11.0         11.0         11.0	Timeston	49.1	18.7	0.10	1 .		8 6	11.2	12.2	13.1	14.0	11.5		44.4	29.3	0.9	35.3
38.0         18.1         93.5         7.3         8.5         9.8         11.0         12.1         13.1         13.8         12.4         57.5         .7         37.7         37.7         38.8         22.4         9.8         11.2         12.1         13.3         14.2         11.2         57.8         3.7         37.7         38.9         20.9         11.2         12.0         13.2         14.1         10.0         33.7         20.7         22.0         39.9         38.9         10.0         11.2         12.0         11.5         47.0         57.8         20.7         22.0         30.9         30.9         30.9         30.9         30.9         30.9         30.9         30.9         30.9         30.9         30.9         30.9         30.0         30.9         30.9         30.0         30.9         30.0         30.9         30.0         30.9         30.0         30.0         30.9         30.0         30.0         30.0         30.9         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0 </td <td>Kitchener</td> <td>38.3</td> <td>16.0</td> <td>94.3</td> <td>7.4</td> <td></td> <td>9.5</td> <td>10.5</td> <td>11.7</td> <td>12.7</td> <td>13.7</td> <td>9.7</td> <td>37.6</td> <td></td> <td>29.1</td> <td>7.7</td> <td>36.8</td>	Kitchener	38.3	16.0	94.3	7.4		9.5	10.5	11.7	12.7	13.7	9.7	37.6		29.1	7.7	36.8
38.8         22.4         92.9         7.3         8.4         9.8         11.2         12.1         13.3         14.2         11.9         40.6         3.8         24.5         32.0         32.	London	38.0	18.1	93.5	7.3		8.6	11.0	12.1	13.1	13.8	12,4	57.5	7.	37.7	8.5	46.2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Niagara Falls.	38.8	22.4	92.9	7.3		9.8	11.2	12.1	13,3	14.2	11.2	40.6	3,00	24.5	61	26.7
43.5         16.0         93.7         7.6         8.8         10.0         11.2         11.6         13.2         14.1         10.0         33.7         20.7         22.0           38.3         15.0         95.6         7.3         8.5         9.8         10.0         13.1         14.2         11.9         58.7         22.0         22.0           36.3         21.5         92.6         7.4         8.7         10.2         11.6         12.3         13.2         14.1         10.3         44.1         14.7         34.4           36.3         21.5         92.5         7.4         8.7         10.2         11.6         12.3         14.1         10.3         44.1         14.7         34.4           37.8         18.5         92.5         7.4         8.6         10.0         11.1         12.1         12.1         14.2         14.3         14.7         34.4           37.8         18.5         92.5         7.4         8.6         10.1         11.2         12.5         13.5         14.2         10.4         43.0         13.7         34.4           35.2         14.4         93.3         7.0         8.3         9.7         11.0	:	32.0	21.8	93.9	7.3		9.8	11.2	12.0	13.0	14.0	11.5	57.8		30.9	9.0	39.9
38.3         15.0         95.6         7.3         8.5         9.8         10.8         12.0         13.1         14.2         11.9         58.7         37.1         48.6           36.3         24.1         92.6         7.4         8.4         10.0         11.6         12.5         13.6         14.5         11.1         69.9         13.7         35.8           36.9         22.2         7.4         8.6         10.0         11.1         12.1         13.2         14.3         11.1         69.9         13.7         33.1           37.8         18.5         92.5         7.4         8.6         10.1         11.2         12.5         14.2         10.4         43.0         13.7         33.1           37.8         18.5         93.1         7.2         8.4         9.8         10.6         12.5         13.0         10.4         43.0         13.7         33.1           38.4         14.7         94.8         7.3         8.3         9.6         10.6         11.6         12.7         13.7         13.4         10.3         13.1           38.4         14.7         94.8         7.3         8.3         9.6         10.6         11.6	Oshawa	43.5	16.0	93.7	7.6		10.0	11.2	11.6	13,2	14.1	10.0	33.7	20.7	55.0	8.0	30.0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ottawa	38.3	15.0	92.6	7.3		9.8	10.8	12.0	13.1	14.2	11.9	58.7	37.1	48.6	10.1	58.7
36.9         21.5         92.2         7.4         8.7         10.2         11.6         12.3         18.2         14.1         10.3         44.1         14.7         34.4         34.4         14.7         34.4         14.7         34.4         10.3         34.1         14.3         10.3         34.4         34.4         34.4         36.8         8.0         8.0         10.0         11.1         12.5         13.5         14.2         10.4         43.0         30.8         30.9         40.9         10.9         11.2         12.9         14.2         10.3         44.4         30.9         40.	Owen Sound	36.3	24.1	95.6	7.4		10.0	11.6	12.5	13.6	14.5	8.	35.7		25.8	:	25.8
34.1         19.7         98.8         8.0         8.9         10.0         11.1         12.1         13.2         14.3         11.1         09.9         13.7         30.8         35.1         35.1         35.1         13.7         10.4         43.0         13.7         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         30.8         31.9         30.8         31.9         30.8         31.9         30.8         31.9         30.8         31.9         30.9         31.9         30.9         31.9         30.9         31.9         30.9         31.9         30.9         31.9         30.9         31.9         30.9         32.9         31.9         30.9         32.9         3	Peterborough	36.9	21.5	92.2	7.4		10.2	11.6	12.3	13.2	14.1	10.3	44.1	14.7	34.4	6.5	40.9
37.8         18.5         92.5         7.4         8.6         10.1         11.2         12.5         13.5         14.2         10.4         43.0          30.0         28.7         93.1         7.2         8.4         9.8         11.5         12.5         13.0         14.0         8.0         42.0         10.3         31.9         32.0         38.7         38.9         30.0         11.5         12.8         13.0         10.9         32.5          27.1         38.9         9.7         11.0         12.3         13.1         13.9         10.9         32.5          27.1         38.9         32.5          27.1         38.9         32.5          27.1         38.9         32.5          27.1         38.9         32.5          27.1         38.9         32.5         10.9         32.5         10.9         32.5         32.9         32.9         32.1         32.2         44.4          36.9         32.5         43.1         32.3         44.4          36.9         32.2         43.9         32.2         43.2         32.9         43.9         33.1         32.2         43.2         43.2	Port Arthur	34.1	19.7	98.8	8.0		10.0	11.1	12.1	13.2	14.3	11.1	6.69	13.7	33.1	0.11 -	96.0
32.0         23.6         93.1         7.2         8.4         9.8         11.5         12.5         13.0         14.0         8.6         91.8         11.5         12.5         13.0         8.6         91.3         11.0         12.5         13.0         8.6         91.3         11.0         12.3         13.7         13.4         92.5         92.7         11.0         12.7         13.7         13.4         32.5         92.6         10.6         11.6         12.7         13.7         13.4         32.3         27.1         29.6           43.1         22.4         91.2         7.4         8.0         9.0         11.6         12.2         12.9         14.2         11.3         44.4         22.5         48.6           42.3         15.6         93.1         7.4         8.6         9.0         11.2         12.4         13.5         14.2         11.3         44.4         25.0         29.9           85.8         92.0         11.2         12.4         13.5         14.3         9.9         46.7         25.0         29.9           86.9         19.9         11.3         12.4         13.4         47.4         10.9         22.6         89.9         11	St. Catharines	37.8	18.5	92.5	7.4		10.1	11.2	12.5	13.5	14.2	10.4	43.0	:	30.3 1	0 F	2.00
35.2         14.4         93.3         7.0         8.3         9.3         10.6         11.8         12.8         13.7         13.4         93.3         7.0         8.3         9.7         11.0         12.3         13.1         13.7         13.4         92.5         10.5         13.7         13.4         92.3         10.5         92.5         10.5         92.5         10.5         92.6         92.6         92.6         11.6         12.2         12.9         14.2         11.3         44.4         10.3         26.2         29.6         29.6         20.6<	St. Thomas	32.0	23.6	93.1	7.5		8.0	11.5	12.5	13.0	14.0	o. 0	01.3		20.1	9 kg	27.4
Maric	Sarnia		14.4	93.3	2.0		n 1	10.6	11.8	27.3	13.7	9.0	42,0	10.0	0.1.0	3 0	26. 17
35.4     14.7     94.8     7.3     8.3     9.6     10.6     11.6     12.7     13.4     13.4     32.9       43.1     22.4     91.2     7.4     8.6     9.9     11.6     12.2     12.9     14.2     11.3     12.4     13.4     44.4     25.5     48.6       42.3     15.6     93.1     7.2     8.4     10.1     11.3     12.3     13.2     14.0     9.7     38.5     5.0     29.9       58.9     10.8     9.9     11.3     12.4     13.3     14.2     11.2     41.7     16.9     33.1       6.9     19.4     92.3     7.6     8.6     9.9     11.1     12.0     12.7     13.4     47.4     16.9     24.1       ges     7.3     8.5     9.9     11.1     12.3     13.3     14.2     10.4     47.6     9.2     38.4       10.0     10.0     6.9     8.1     9.3     10.5     11.7     12.9     14.1     8+     10.4     47.6     9.2     38.4	Sault Ste, Marie		17.3	91.7	7.4		9.7	11.0	12.3	13.1	13.9	6.01	0.20	:	00 00	# C	27.0
43.1     22.4     91.2     7.4     8.0     9.9     11.0     12.2     12.9     14.2     10.7     11.0     12.2     12.9     14.2     10.3     14.2     10.3     14.2     10.3     12.4     13.5     14.0     9.7     25.5     4.5     4.5     9.9       38.9     22.6     92.9     7.4     8.4     10.1     11.3     12.4     13.3     14.0     9.7     38.5     5.0     29.9       36.9     19.4     92.3     7.6     8.6     9.9     11.1     12.0     12.7     13.4     47.4     16.9     33.1       s.     39.7     17.5     92.8     7.3     8.5     9.9     11.1     12.3     13.3     14.2     10.4     47.6     9.2     38.4       s.     41.0     16.0     100.0     6.9     8.1     9.3     10.5     14.1     8+	Stratford	35.4	14.7	94.8	. 7		9.6	10.6	9,11	12.7	13.7	13.4	0.70	:	0.82	9.00	48.7
42.3         15.6         93.1         7.4         8.6         9.9         11.2         12.4         13.5         14.5         9.9         49.7         22.6         9.9         11.3         12.3         13.2         14.2         11.2         41.7         16.9         33.1           36.9         92.6         92.9         7.4         8.4         9.9         11.1         12.0         12.7         13.4         11.2         41.7         16.9         33.1           36.9         19.4         92.3         7.6         8.6         9.9         11.1         12.0         12.7         13.4         47.4         17.7         24.1           s         39.7         17.5         92.8         7.3         8.5         9.9         11.1         12.3         13.3         14.2         10.4         47.6         9.2         38.4           s         41.0         16.0         100.0         6.9         8.1         9.3         10.5         11.7         12.9         14.1         8+	Sudbury	43.1	22.4	91.2	7.4		ກຸ	0.11	12.2	12.9	7.57	0.11	1 1	. 11	40.2	0.0	67.0
35.8     19.8     93.1     7.2     8.4     10.1     11.3     12.3     13.2     14.0     9.7     10.9       38.9     22.6     92.9     7.4     8.4     9.9     11.1     12.4     13.3     14.2     11.2     47.4     10.9     24.1       36.9     19.4     92.3     7.6     8.6     9.9     11.1     12.0     12.7     13.4     47.4     10.9     24.1       s.     36.7     17.5     92.8     7.3     8.5     9.9     11.1     12.3     13.3     14.2     10.4     47.6     9.2     38.4       s.     41.0     16.0     100.0     6.9     8.1     9.3     10.5     11.7     12.9     14.1     8+	Toronto	42.3	15.6	93.1	7.4		6.6	11.2	4.2.4	13.5	14.0	3 6	40.1	0.02	90.0	10	35.9
38.9 22.6 92.9 7.4 8.4 9.9 11.3 12.4 13.3 14.2 11.2 41.1 10.9 55.1 36.9 19.4 92.3 7.6 8.6 9.9 11.1 12.0 12.7 13.4 13.4 47.4 24.1 11.1 12.3 13.7 14.2 10.4 47.6 9.2 38.4 41.0 16.0 100.0 6.9 8.1 9.3 10.5 11.7 12.9 14.1 8+	Welland	35.8	19.8		7.2		10.1	11.3	12.3	13.2	14.0	9.7	00.00	0.0	0.00		40.00
36.9 19.4 92.3 7.6 8.6 9.9 11.1 12.0 12.7 13.4 13.4 47.4 24.1 17.5 92.8 7.3 8.5 9.9 11.1 12.3 13.3 14.2 10.4 47.6 9.2 38.4 41.0 16.0 100.0 6.9 8.1 9.3 10.5 11.7 12.9 14.1 8+	Windsor	38.9	22.6		7.4		6.6	11.3		13.3		11.2	41.7	10.9	00.1	0 4	90.3
39.7     17.5     92.8     7.3     8.5     9.9     11.1     12.3     13.3     14.2     10.4     47.6     9.2     38.4       41.0     16.0     100.0     6.9     8.1     9.3     10.5     11.7     12.9     14.1     8+	Woodstock	36.9	19.4		7.6		9.9	11.1		12.7	13.4	13.4	47.4		24.1	4.2	70.07
41.0 16.0 100.0 6.9 8.1 9.3 10.5 11.7 12.9 14.1 8	Averages	39.7	17.5		7.3		6.6	11.1				10.4			38.4	8.5	46.9
	*Ideal.	41.0	16.0	100.0	6.9												

Table 16-Promotion and Retardation in Cities, Large Towns and Certain Suburban Areas, for the School Year 1938-39-Percentages.

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\*Data for B not available,

# REASONS FOR NON-PROMOTION—Percentages

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i.u.	lines	400046466666664446666446666446666666666	43.4	44854677684446666744666776677767776777677776777777	36	42.0
Less than regular time in	Grade	2 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -	11.6	925729-831- <u>F</u> -8 95 0	ייים	7 1
Cities		Betleville. Brantford Chatham. Galt Galth Galth Hamilton. Kingston Kingston Kingston Kingston Kingston Kingston Korth Bay Oshawa Ottawa Ottawa Ottawa Sarnia St. Catharines St. Catharines St. Thomas Sarnia Sarnia Sarnia Sarnia Sarnia Sarnia Sarnia Sarnia Windsor Woodstock	Averages	Barrie. Brockville Cornwall Kenora. Kirkland Lake Lindsay. Midland Mimico. New Torono. Orillia. Pent Colborne. Port Colborne. Preston. Smith's Falls. Timmins Trenton. Waterloo.	York East Twp	Averages

### THE PUBLIC SCHOOLS

### TABLE 17—TEACHERS' SALARIES,† 1937-38

Highest, Lowest, Average

			[ale			Fa	male	
		IV.	Laic			re	maic	
Rural Schools*	Highest	Lowest	Average	Increase in Average Over Last Year	Highest	Lowest	Average	Increase in Average Over Last Year
In Counties Addington Brant Bruce Carleton Dufferin Dundas Durham Elgin Essex Frontenac Glengarry Grenville Grey Haldimand Haliburton Hastings Huron Kent Lambton Lanark Leeds Lennox Lincoln Middlesex Norfolk Northumberland Ontario Oxford Peel Peterborough Prescott Prince Edward Renfrew Russell Simcoe Stormont Victoria Waterloo Welland Wellington Wentworth York	900 750 1,000 900 950	\$ 600 550 550 550 550 600 500 600 500 600 500 650 65	\$ 707 806 692 876 700 704 715 731 793 705 608 605 720 680 734 680 767 679 678 673 647 679 678 885 702 7146 788 885 702 7146 788 885 702 714 696 798 781 687 783 687 783 687 783 687 783 687 798 783 687	\$ 41 9 55 -77 388 130 62 488 244 220 288 715 65 54 39 177 488 15 228 317 46 441 244 22 111 0 36 662 488 232 344 40 106 252 33	\$ 900 1,000 750 1,260 800 900 1,1000 950 1,000 1,000 1,000 1,000 1,200 1,050 1,000 1,000 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 800 800 800 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,355 1,150 1,350 1,350 1,350	\$ 500 550 500 500 500 500 500 500 500 50	\$ 681 725 630 702 632 632 628 676 648 649 614 625 668 632 740 651 630 709 643 584 621 657 657 657 657 657 657 657 657 657 657	\$ 20 18 13 23 18 11 36 32 39 21 38 23 39 21 38 23 33 34 46 49 16 81 31 35 40 24 43 29 28 24 12 44 35 20 13 14 21 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 12 14 30 -1 12 14 30 -1 12 12 14 30 -1 12 14 30 -
Averages	2,000	500	754	35	1,400	500	666	27
In Districts Algoma Cochrane Kenora. Manitoulin Muskoka Nipissing. Parry Sound Rainy River Sudbury. Temiskaming. Thunder Bay.	1,100 1,500 1,500 950 1,300 1,100 1,500 1,100 1,800 1,800 1,800	500 600 600 600 600 650 525 618 500 600	779 932 980 729 801 759 812 796 944 895 891	12 26 -53 22 65 34 27 19 -19 52 -18	1,100 1,200 1,200 1,000 1,008 900 1,000 1,500 1,500 1,200	400 500 500 550 500 500 500 500 500 500	663 784 798 678 703 706 693 783 775 738 808	2 -4 -4 19 32 13 40 19 15 16 21
Averages	1,800	500	856	14	1,500	400	732	14
Averages for Counties and Districts	2,000	500	778	33	1,500	400	675	25
Increase for the year			33				25	
Large fully-graded rural schools	3,500	800	1,436	7	2,500	700	1,151	21

<sup>†</sup>All regular full-time teachers.

<sup>\*</sup>Exclusive of large suburban and semi-urban schools.

<sup>-</sup> Decrease.

### THE PUBLIC SCHOOLS

### TABLE 17—TEACHERS' SALARIES,† 1937-38

### Highest, Lowest, Average

			Male				Female	
City Schools	Highest	Lowest		Average		Highest	Lowest	Average
			All	Principals	Assistants			
In Counties	\$	\$	\$	8	8	8	8	\$
Belleville	2,200	800	1,515	2,175	1,222	1,300	800	1,079
Brantford	2,500	1,150	1,919	2,215	1,425	1,575	1,000	1,360
Chatham	2,517	975	1,627	2,443	1,445	2,422	975	1,327
Galt	1,900	1,000	1,595	1,862	1,443	1,300	1,025	1,174
Guelph	2,300	900	1,438	1,833	1,100	1,300	800	1,129
Hamilton	3,270	1,072	1,928	2,777	1,194	1,901	900	1,319
Kingston	2,400	1,000	1,920	2,250	1,425	1,650	800	1,277
Kitchener	2,500	900	1,614	2,171	1,408	1,550	800	1,207
London	2,475	1,050	1,927	2,478	1,637	2,100	700	1,295
Niagara Falls	2,167	850	1,495	1,983	1,089	2,049	750	1,189
Oshawa	2,465	1,025	1,572	2,122	1,322	1,640	750	1,176
Ottawa	3,800	1,300	2,347	3,360	2,069	3,600	800	1,803
Owen Sound	2,150	750	1,600	1,960	1,343	1,270	772	1,073
Peterborough	2,700	945	2,053	2,625	1,710	1,530	700	1,406
St. Catharines	2,525	900	1,922	2,359	1,604	1,675	800	1,258
St. Thomas	2,150	750	1,498	1,975	1,180	1,400	800	1,119
Sarnia	2,500	1,150	1,855	2,280	1,600	1,700	900	1,317
Stratford	2,185	800	1,606	1,914	1,335	1,300	800	1,201
Toronto	3,900	1,600	2,633	3,567	2,461	3,700	970	1,861
Welland	1,800	1,000	1,485	1,800	1,170	1,400	1,000	1,251
Windsor	3,200	935	1,734	2,763	1,403	2,200	880	1,389
Woodstock	2,275	1,000	1,453	1,585	1,287	1,200	800	1,006
Averages	3,900	750	2,251	2,796	2,066	3,700	700	1,566
In Districts								
Fort William	2,682	1,021	1,856	2,584	1,468	1,615	633	1,334
North Bay	2,200	1,000	1,673	2,068	1,277	1,300	880	1,143
Port Arthur	2,700	1,140	1,665	2,024	1,306	1,615	1,000	1,389
Sault Ste Marie	2,250	950	1,544	1,891	1,154	1,407	600	1,239
Sudbury	2,420	900	1,901	2,222	1,100	1,430	990	1,180
Averages	2,700	900	1,721	2,098	1,324	1,615	600	1,276
All Cities	3,900	750	2,217	2,722	2,032	3,700	600	1,546
Towns	3,500	600	1,619	1,719	1,526	2,200	600	982
Villages	5,000*	650	1,218	1,220	1,214	3,050	500	858
All Urhan Schools	5,000	600	1,982	2,140	1,897	3,700	500	1,367
All Schools (Rural and Urban)	5,000	500	1,413			3,700	500	1,049
Increase for Year			46				100	8

<sup>†</sup>All regular full-time teachers.

<sup>\*</sup>Forest Hill Village

-	Group	ent-	3.70	9.25	9.20	23.34	8.14	14.10	8.01	19.64	4.62	
		Totals	2236	1,340	1,334	3,383	1,180	2,043	1,162	2,846 19	029	
ols							1-	25,0	1			:
All Schools	Total		253 253 355 149 162 163 164 164 164 164 164 164 164 164 164 164	84 105 776 245 130	127 226 280 280 218 483	543 619 664 664 503	562 618	157 348 138 753 114 533	1,031	176 668 216 1,786	87 333 35 213 2	14,494
A	Permale Totals		000-00466	18 62 723 168 65	70 123 197 135 395	454 444 478 533 533 430 362	484	137 244 111 552 91 410	97 803	143 555 169 1,508	78 291 27 190 190	11,047
	Male		102 102 108 108 1035 1035 1035 1035 1035	66 43 77 77 65	57 103 83 88 88	89 80 141 131 100 141	78 146	20 104 27 201 23 123	34 228	33 113 47 278	24 82 82 83	3,447
	Group Per-		7.24	17.96	16.95	33.63	10.26	10.95	1.63	1.27	11.	
		Totals	526	1,304	1,231	2,442	745	795	118	92	∞	
	Totals		10 10 10 10 10 10 10 10 10 10 10 10 10 1	80 101 771 237 115	124 211 265 199 432	44 3991 4885 405 302	434	133 174 81 237 56	91	20 31 15 26	400	7,261
chools	Villages	Female	*		2 : 11	20828	40 55	20 20 20 20 20 20 20 20 20 20 20 20 20 2	37	15 21 21	400	441
Urban Schools	Ville	Male	* * * *			10 141 26 6 9 9 14	66	15 20 1 5	67 10	:		187
	Towns	Female		- 5	17 7 13	19 27 65 130 115 119	202 114	4857455 5445 535 535 535 535 535 535 535 535	17 38	2000		1,235
	To	Male	0,000	48268 133	17 19 16 24 22	14 8 24 17 119 23	17 17	20 20 10 10 10	8	1 1		355
	ties	Female	0.488-68	18 62 718 167 65	70 120 196 125 345	353 313 266 286 214 109	155 101	27 28 12 49 9	m m	2-4-		3,885
	Cities	Male	28 18 18 18 18 28 90 129 147	86 86 86 86 87 87 87	37 67 44 38 33	33 33 36 40 17	11 15	2 2 2				1,158
	Group Per-	cent-	41.	.51	1.42	13.01	6.01	17.25	14.43	38.08	9.15	
	Group	Totals	10	36	103	941	} 435	1,248	1,044	$\left. \left. \left. \left. \left. \left. 2,754 \right. \right. \right. \right. \right. \right. \right.$	662	
sloc	Totals			44500	15 15 19 51	106 133 197 179 125 201	128 307	24 174 57 516 58 419	104	156 637 201 1,760	87 329 33 211 2	7,233
Rural Schools	raded	Female			1 22 23	70 91 113 79 69 89	37 51	24 2 9	3 -			628
Ru	Fully Grad	Male		4 4 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 6 111 10 10	18 17 20 32 13 13	ကတ	3 7				222
	Ungraded and Partly Graded	Female			3	10 26 28 24 79	50 151	298 298	72	124 526 154 1,483	78 287 25 188	4,858
	Ungrad	Male				14 15 38 40 19 66	36 96	58 19 153 21 110	31 215	32 111 47 277	42 88 23 	1,525
	Salary Range		\$5,000 \$3,800 \$3,700 \$3,700 \$3,300-\$1,699 \$2,100-\$1,099 \$2,700-\$2,899	\$2,400-\$2,499. \$2,300-\$2,399. \$2,200-\$2,299. \$2,100-\$2,199. \$2,000-\$2,099.	\$1,900-\$1,999. \$1,800-\$1,899. \$1,700-\$1,799. \$1,600-\$1,699. \$1,500-\$1,599.	\$1,400-\$1,499. \$1,300-\$1,390. \$1,200-\$1,299. \$1,100-\$1,199. \$1,001-\$1,099.	\$901–\$999	\$851-\$899 \$850 \$801-\$849 \$751-\$799 \$750	\$701–\$749 \$700	\$651-699 \$650. \$601-\$649	\$551-\$599 \$550 \$501-\$549 \$500	Totals 1,525

\*In Toronto Suburban Area.

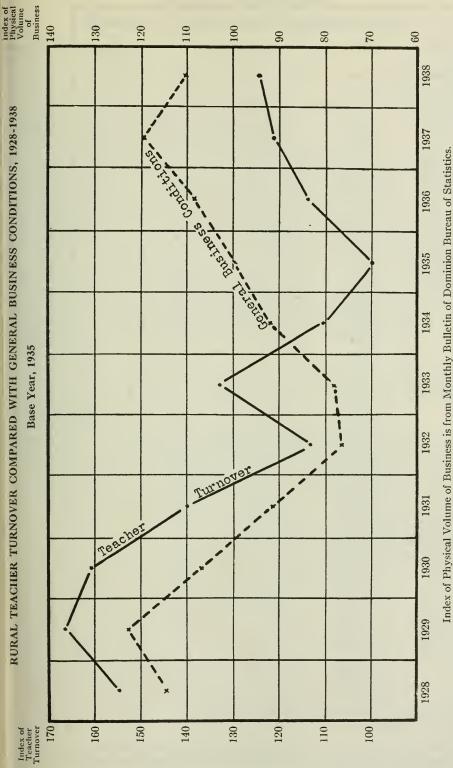
(c) Cumulative Percentage of Total Rural Teachers.

(b) Percentage this Group is of Total Rural Teachers.

TABLE 19-TREND IN THE LOWER SALARY RANGE OF RURAL TEACHERS THE PUBLIC SCHOOLS

	1	_ 1	02	82	\$1	92	45	82
		(2)	9.92 73.70	7.73	6.78 77.81	6.69 77.76	3.71 71.45	8.81 71.28
\$800	\$2.67	(g)	9.92	7.7	6.78	6.68	3.7	
		(я)	206	556	491	484	518	637
6		(c)	7.36 63.78	6.34 70.05	1.03	5.98 71.07	6.68 64.32	9.11 62.47
\$750-\$799	\$2.67	(p)	7.36	6.34	5.67	5.98	6.68	9.11
69		(a)	524	456	411	432	484	659
63		(2)	7.98 40.99 1,098 15.43 56.42	9.16 48.85 1,069 14.86 63.71	934 12,90 65,37	875 12.10 65.09	795 10.95 43.22 1,047 14.42 57.64	53.36
\$700-\$749	\$2.50	(q)	15,43	14.86	12.90	12.10	14,42	22.71
\$		(a)	1,098	1,069	934	875	1,047	1,642
<u>o</u>		(2)	40.99	18.85	8.84 52.47	9.5252.99	13,22	30.65
\$650-\$699	\$2,33	(b)	7.98	9.16	8.84	9.52	10.95	14.44
\$67		(a)	568	629	640	688	795	1.42 1,069 14.79 16.21 1,044 14.44 30.65 1,642 22.71 53.36
6		(9)	33.01	39,69	43.63	43,47	32.27	16.21
\$600-\$649	\$2.17	(p)	17.29	19.32	20.34	20.59	23,13	14.79
99\$		(a)	1,231	1,390	1,473	1,489	9.14 1,679 23.13 32.27	1,069
6		(0)	4.64 15.72 1,231 17.29 33.01	7,46 20.37 1,390 19.32 39.69	9,42 23.29 1,473 20.34 43.63	10.82 22.88 1,489 20.59 43.47		1.42
\$550-\$599	\$2.00	(p)	4.64]	7.46	9.45	10.85	5.74	.94
\$55		(a)	330	537	682	782	417	89
-		(i)	52 11.08	15.91	13.87	12.06	3.40	.48
\$501-\$549	\$1.83	(q)	.52	1.03 12.91	1.27 13.87	1.38 12.06	.47	60.
\$50	0,	(a)	37	7.4	92	100	34	9
		(2)	10.56	11.88	12.60	10.68	2.93	.39
\$500	\$1.67	(p)	7.46 10.56	8.77 11.88	12.52 12.60	10.61 10.68	2.89	.39
		(a)	531	631	206	767	210	28
\$500	ow 67	ê	3.10	3.11	80.	.0.	0.	00.
Below \$500	Below \$1.67	(a)	221	224	9	ಬ	က	0
Salary	Maximum Daily Earnings*	Уеаг	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39

(a) Number of Teachers in this Salary Group. \*On the basis of a 300 day working year



Rural Teacher Turnover is the percentage of rural teachers who changed positions at the end of each school year. The high in 1933 is due to an enforced second year Normal course.

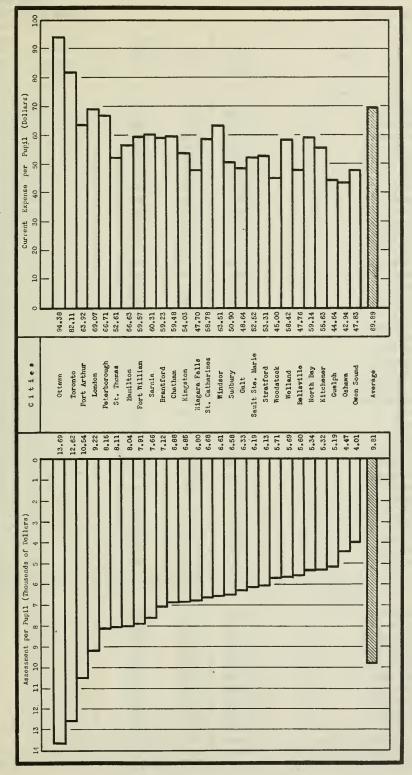
### THE PUBLIC SCHOOLS Table 20—Percentage Teacher Turnover in Rural Schools

Ta	able 20—Percent	age '	[each	ier T	urno	ver i	n Ru	ral S	Schoo	ls		
Group	County or District	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	10 year* Average
Metropolitan Area:	1 York	18.5	17.7	13.4	9.1	12.1	10.3	9.6	11.3	11.7	12.4	12.6
Toronto-Hamilton- Niagara Area:	2 Welland 3 Wentworth 4 Lincoln 5 Brant 6 Peel 7 Halton	34.2 31.9 27.7 31.2 32.0 40.0	29.5 31.3 37.9 36.3 31.1 24.6	34.0 33.3 30.9 25.0 33.3 29.8	19.0 26.8 20.0 21.2 17.0 19.4	19,5 21.5 16.2 41.8 34.3 34.3	17.1 12.3 23.5 16.5 19.6 17.1	13.7 18.7 18.1 16.5 18.3 20.0	17.5 12.9 21.6 17.7 23.3 22.9	17.8 18.3 16.5 19.0 23.1 22.9	17.3 18.7 25.2 35.4 29.0 21.4	22.8 23.1 24.8 26.2 26.2 26.5
Lower Average Group:	8 Middlesex 9 Stormont 10 Glengarry 11 Ontario 12 Dundas 13 Northumberl'd. 14 Carleton 15 Durham	27.9 37.2 35.5 40.7 27.2 44.4 37.2 40.0	36.8 29.1 30.0 36.0 32.1 32.2 33.1 35.0	27.6 27.9 27.5 34.9 21.0 29.6 31.1 28.0	24.6 25.6 20.0 17.8 35.4 27.0 26.4 30.0	29.4 33.8 26.7 35.0	20.9 27.1 26.6 28.8 19.7 21.7 21.0 24.4	23.2 12.7 20.3 24.9 24.7 18.3 26.7 18.0	26.7 23.3 21.5 24.6 24.7 22.5 22.1 29.0	28.0 28.9 32.0 20.4 22.2 25.2 25.3 25.0	29.0 34.1 23.0 23.5 23.8 19.1 26.9 22.7	27.6 27.8 27.8 27.9 28.1 28.2 28.7 29.6
Average Group:	16 Elgin. 17 Oxford. 18 Huron. 19 Waterloo. 20 Essex. 21 Bruce. 22 Haldimand. 23 Perth. 24 Norfolk. 25 Lambton.	38.7 32.0 48.5 45.6 34.4 39.3 40.3 33.6 36.1 42.7	26.8 37.7 33.7 41.7 36.8 45.8 41.5 35.3 45.4 41.6	28.4 31.8 29.2 33.0 32.7 29.8 28.4 37.8 35.2 41.4	27.4 26.9 22.7 28.0 26.3 27.4 31.7 35.8 39.8 29.6	28.8 36.5 43.9 35.0 33.3	29.0 23.1 25.2 23.6 28.4 25.4 30.5 35.0 26.0 35.9	24.6 22.3 29.2 24.8 21.3 22.9 29.3 17.5 26.4 25.3	25.0 31.9 27.8 35.0 35.0 34.6	26.6 41.2 31.8 25.3 35.3 40.6	25.6 28.0 30.5 27.3 29.3 43.3 45.2 33.6 38.2 35.3	30.0 30.2 31.1 31.4 32.4 32.9 33.8 34.1 34.4 34.9
Higher Average Group:	26 Grenville	40.3 49.1 40.6 42.3 42.6 45.0 43.7 50.5 51.1 45.2 44.8 33.7 44.1 51.0	47.4 42.2 44.5 41.9 47.5 42.3 44.6 46.9 48.3 46.3	43.3 31.3 39.1 43.5 34.7 34.2 33.7 48.4	27.4 28.6 26.4 32.6 38.9 29.6 33.3 35.2	31.6 38.8 43.5 37.2 36.7 35.3 34.4 34.0 43.3 55.6 44.4 39.2	26.5 36.3 22.7 29.1 30.1 43.1 31.9 30.6 33.8 31.4 36.8 29.0	32.9 36.5 22.9 47.7 28.8 29.1 27.0 30.0 31.2 27.1 27.8 29.9 26.1 26.8	35.7 37.2 29.9 35.9 28.9 20.7 33.1 31.6 30.7 38.2 32.2 37.8	37.4 39.8 37.8 37.6 32.0 32.7 46.0 26.5	23.6 34.5 30.6 33.8 38.7 40.2 37.0 31.7 28.8 32.9 35.3 41.4 39.8 33.8	35.1 35.3 35.6 36.2 36.6 37.0 37.4 37.4 37.7 38.0 38.1 38.4
District Group:	40 Lanark	46.8 52.1 52.0 52.7 55.2 61.3 55.5 59.2 65.6 51.0 73.0 65.6 65.6 64.9 67.1	59.4 54.0 53.0 47.7 63.4 60.1 61.4 49.1 52.7 47.0 54.8 68.8 52.7	45.8 45.9 40.9 40.7 44.5 53.6 52.5 39.2 50.0 61.3 46.1 50.0	33.0 37.2 30.6 46.5 35.0 35.2 38.6 40.7 53.0 49.4 41.3 40.0 42.9 60.5	40.6 50.3 44.6 37.9 46.2 50.0 47.4 48.6 41.1 37.4 49.0 45.2 65.6 35.0	33.9 45.1 40.7 37.0 33.0 40.3 39.8 39.2 41.9 49.5 45.2 35.5 50.0	33.7 33.1 36.9 31.5 34.5 29.6 36.9 45.2 51.3 35.3 40.6	33.3 33.5 45.9 41.1 32.2 36.7 28.9 31.7 39.2 33.3 39.2 21.2 46.9 34.1	36.4 46.4 51.8 38.5 34.9 37.5 35.4 44.0 35.2 52.9 42.4		43.2 43.5 44.6 45.0 46.1 46.3 46.4
Average, All Co	ounties	38.9	37.8	33.0	26.5	31.7	26.0	23.1	25.5	29.0	26.3	30.8
Average, All Di	stricts	59.8	55.8	49.6	41.6	44.7	38.2	37.6	36.9	39.8	40.3	45.6
Grand Average		41.9	40.4	35.3	28.6	33.6	27.8	25.2	28.7	30.6	31.2	33.0

<sup>\*</sup>Based on years 1928 to 1937 inclusive.

THE PUBLIC SCHOOLS

RELATION OF CURRENT EXPENSE TO ASSESSMENT IN CITIES, 1937



Graph 5.

### RURAL SCHOOLS

### THE PUBLIC TABLE 21—FINANCIAL

	As	ssess-	No. of	A.D.A.c	A, D.A.c	1	Major Sources
Ordinary A	me C	nt per lass- omb	Class- rooms	for Calen- dar Year	per Class- room	Section Levye	Township Grant
In Counties		8				\$	8
1 Halton	1	1,911	68	1,440	21	39,156	32,725
2 Perth		1,241	119	2,775 2,889	23 26	43,723 65,472	55,880 40,270
3 Wentworth		7,310 0,735	111 206	4,044	20	89,103	96,613
5 Brant		7,993	73	1,737	24	43,525	32,920
6 Kent		1,255	153	3,950	26	83,500	72,150
7 Essex		4,709	136	3,848	28	70,951	57,754
8 Elgin		4,231	125	2,482	20	51,752	58,734
9 Oxford		1,253	132	3,084	23	65,796	58,491
10 Norfolk		0,934	110	2,922	27	33,898	44,831
11 Huron		0,477	202	3,731	18	63,845	93,592
12 Waterloo		5,098	109	3,036	28	53,777	44,811
13 Wellington		2,884	154 91	2,924 2,415	19 27	52,956 42,051	72,549 58,607
14 Welland		5,891 4,944	199	5,719	29	155,644	90,208
16 Lambton		1,293	179	3,384	19	58,283	84,247
17 Lincoln		0,187	90	2,393	27	73,562	41,910
18 Simcoe		6,733	243	4,698	19	77,165	110,883
19 Peel		6,381	98	2,149	22	65,049	42,744
20 Victoria	133	3,892	112	1,673	15	32,957	47,716
21 Ontario	133	3,571	139	2,991	22	73,599	61,392
22 Prince Edward		9,475	74	1,235	17	15,431	35,043
23 Bruce		4,344	168	2,623	16	44,322	73,958
24 Haldimand		3,718	80	1,550	19	23,662	38,040
25 Dufferin		2,694	92	1,348	15 18	27,532	46,659 46,236
26 Durham		6,616 6,193	101 138	1,782 2,693	20	35,844 62,506	58,314
28 Stormont		3,115	90	1,871	21	30,741	37,751
29 Northumberland		2,225	115	2,154	19	36,088	50,618
30 Grey		3,133	224	4,216	19	58,728	103,457
31 Russell		9,817	33	630	19	7,822	13,855
32 Lennox		6,308	87	1,416	16	15,783	36,355
33 Dundas	8	3,180	81	1,500	19	26,308	36,218
34 Renfrew		3,312	169	3,313	20	34,926	55,354
35 Glengarry		8,307	78	1,464	19	18,959	33,680
36 Peterborough		6,352	100	1,907	19	28,653	32,025
37 Lanark		4,795	126 55	1,731 945	14 17	20,132 10,606	50,101 22,682
38 Prescott		4,254 4,002	199	3,959	20	50,882	62,160
40 Grenville	1	3,327	72	1,061	15	15,362	31,266
41 Leeds		2,075	146	2,243	15	37,101	56,809
42 Frontenac		1,292	151	2,570	17	32,433	40,780
43 Addington	2	1,771	31	476	15	3,427	9,177
44 Haliburton	1	6,454	60	960	16	7,661	14,257
Totals and Averages	13	7,006	5,319	107,931	20	1,980,673	2,283,822
In Districts							
1 Cochrane		1,789	77	2,062	27	87,318	660
2 Thunder Bay	- 1	9,457	122	2,419	20	102,569	5,662
3 Muskoka		4,802	104	1,727	17	41,676	14,439
4 Timiskaming		3,501	82	1,644	20	52,515	9,055
5 Algoma		9,587	104 115	2,364	23 24	62,398 73,843	6,795 3,262
6 Sudbury 7 Rainy River		2,451 2,380	74	2,717 1,324	18	53,141	5,645
8 Kenora		0,365	43	906	21	32,962	383
9 Manitoulin		8,319	48	952	20	19,343	4,976
10 Parry Sound		8,269	129	2,321	18	59,222	10,354
11 Nipissing		5,801	74	1,638	22	26,619	3,370
Totals and Averages		9,356	972	20,074	21	611,606	64,601
							1

### SCHOOLS STATISTICS, 1937

			1						
of F	Receipts		Disburs	sements	Cost per	Pupil-Da	y (cents)	Debenture In	idebtedness H
	County Grant	Legislative Grant	Currents	Capitals	Current	Capital	Total	Amount	Per \$1000 of Assess- ment
	8	\$	\$	S				8	\$ c
1	2,390	13,605	81,430	4,708	25.4	1.4	26.8	41,021	2.06
2	4,081	18,543	118,413	777	22.6	.1	22.7		
3	2,444	21,995	127,878	8,108	23.1	1.4	24.5	110,226	4.37
4	4,419	30,980	207,632	9,190	27.1	1.2	28.3	63,835	1.40
5	2,497	13,622	81,556	4,209	24.4	1.3	25.7	11,924	7.49
6	5,700	30,877	168,259	6,576	23.1	.9	24.0	23,273	7.56
7	4,061	27,395	160,570	7,538	21.8	1.0	22.8	999,511	37.74
8	3,978	39,239	119,158	7,002	26.6	1.5	27.7	45,898	1.89
9	3,933	23,487	144,028	8,661	24.4	1.5	25.9	57,863	2.29
10	4,244	19,211	106,816		19.4		19.4	3,777	.19
11	7,160	31,259	186,317	2,328	26.6	.3	26.9	26,143	.72
12	3,377	21,229	125,594	8,829	21.5	1.5	23.0	76,531	4.00
13	4,758	25,562	152,462	943	26.8	.2	27.0	3,200	.12
14	1,961	24,646	115,694	12,136	24.9	2.6	27.5	121,090	8.53 12.54
15 16	6,300	49,726 24,875	249,428	36,689 6,234	24.8 25.6	3.7	28.5 26.6	386,739 30,823	1.22
17	3,312	23,775	164,672 121,964	9,662	26.3	2.1	28.4	26,618	2.10
18	2,639 8,752	47,977	240,356	9,517	27.3	1.1	28.4	51,956	1.56
19	3,102	21,222	116,524	19,496	29.5	.4.9	34.4	126,814	9.49
20	2,030	21,064	101,962	4,271	32.2	1.4	33.6	45,355	3.02
21	3,157	24,578	139,185	20,609	24.2	3.6	27.8	201,690	10.86
22	1,536	11,248	65,238	768	27.3	.3	27.6	9,510	.99
23	4,747	36,029	152,233	809	30.4	.1	30.5	6,325	.30
24	1,233	15,510	79,514		27.6		27.6	2,625	.27
25	3,396	14,672	84,490	604	33.5	.3	33.8	6,121	.54
26	5,671	21,847	102,280	3,897	30.6	1.2	31.8	13,500	1.15
27	3,815	26,986	143,385	12,881	27.4	2.5	29.9	90,336	5.63
28	2,419	16,438	79,394	8,774	21.8	2.4	24.2	51,535	5.06
29	3,298	23,811	108,888	4,448	26.2	1.1	27.3	30,125	2.56
30	7,654	41,160	201,647	3,338	25.2	.4	25.6	14,685	.70
31	1,727	7,319	32,166	247	26.9	.2	27.1	72	.02
32	1,055	13,364	67,124		31.4		31.4		
33	2,013	16,557	75,561	4,430	26.6	1.6	28.2	12,743	1.89
34	3,934	42,028	138,985	3,362	15.3	.4	15.7	12,220	.87
35	2,172	16,575	68,195	1,494	24.6	.5	25.1	6,575	1.07
36	2,485	32,880	90,879	2,564	24.5	.7	25.2	21,280	2.79
37	1,925	23,708	95,709	950	28.6	.3	28.9	11,289	1.20
38	1,133	9,836	43,657		24.2		24.2	65	.01
39	6,210	62,969	173,492	6,665	22.8	.9	23.7	24,618	1.67
40	899	14,950	63,311	545	32.0	.3	32.3	2,120	2.85
41	2,025	30,874 54,488	124,002	4,950	29.0	1.2	30.2	30,021 23,625	3.79
42 43	2,313	15,402	126,798	3,002	30.9 30.6	1.2	31.6	12,020	17.81
44	1,100	31,778	27,998 51,300	1,157 1,046	28.1	.6	31.8 28.7	4,794	4.86
44	•••••	31,776	31,300	1,040	20,1	.0	20.1	1,101	1.00
	147,055	1,135,296	5,226,144	253,414	25,3	1,2	26.5	2,840,491	3.91
1		54,418	125,715	15,315	32.2	3.9	36.1	148,830	26.92
2		72,274	156,476	14,147	33.9	3.0	36.9	82,023	13.59
3		52,467	102,657	4,556	30.6	1.4	32.0	44,137	9.47
4		46,334	101,694	5,918	32.4	1.9	34.3	28,696	8.04
5		46,222	111,962	1,681	25.4	3.8	29.2	35,083	8.52
6		69,961	134,530	1,198	25.8	2.3	28.1	148,064	39.67
7		52,171	89,529	15,443	35.0	6.1	41.1	137,490	57.38
8		31,210	60,101	3,663	35.0	2.1	37.1	35,272	27.01
9	• • • • • • • • • •	25,234	45,386	3,601	24.7	2.0	26.7	31,275	23.01
10	• • • • • • • • • • • • • • • • • • • •	72,439	132,292	4,985	28.9	1.1	30.0	24,566	6.73
11	• • • • • • • • • • • • • • • • • • • •	43,059	68,975	4,609	21.9	1.5	23.4	33,315	17.45
		565,789	1,129,317	75,116	29.4	1.9	31.3	748,751	19.57
	147.055	1,701,085	6,355,461	328,530	26.0	1.3	27.3	3,589,242	4.70
_	171,000	1,101,000	0,000,101	020,000	, 20.0	1.0	27.0	, 0,000,212	

### THE PUBLIC

### TABLE 21—FINANCIAL

RURAL SCHOOLS

Large Suburban and Semi-Urban	Township	School Section No.	Adjacent to	Assessment per Class- room B	No. of Class- rooms	A.D.A.c for Calen- dar Year	A.D.A. per Class- room
In Counties							
	- · · ·		D 1	\$	_	0.50	0.00
1 Brant	Brantford	3	Brantford	103,658	7	250	37
2 Carleton	Nepean	2	Ottawa	104,378	26	926	36
3 Essex	Sandwich East	5	Windsor	45,849	13	467	36
4 Lincoln	Grantham	U5, 6	St. Catharines	77,748	8	239	30
5 Ontario	Whitby East	10	Oshawa	53,166	10	399	40
6 Peel	Toronto	7	Lakeview	74,814	12	446	37
7 Peterborough.	Monaghan North	2	Peterborough	73,159	10	335	34
8 Welland	Stamford	4	Niagara Falls	106,400	8	269	34
9	Stamford	6	Niagara Falls	69,142	13	425	33
10	Stamford	7	Niagara Falls	509,296	9	274	30
11	Bertie	11	Ridgeway	197,755	9	244	27
12	Crowland	3	Welland	108,315	19	615	32
13	Thorold	2	Thorold	239,806	10	275	28
14 Wentworth	Burlington Beach		Hamilton	311,578	6	191	32
15 York	Etobicoke	3	Lambton Mills	229,726	11	355	32
16	Etobicoke	5	Weston	161,426	7	260	37
17	Etobicoke	8	Islington	151,605	9	274	30
18	Etobicoke	11	Humber Bay	89,575	14	438	31
19	Etobicoke	16	Long Branch	50,683	14	454	32
20	York	Twp.	Toronto	93,183	315	10,314	33
21	York East	Twp.	Toronto	97,608	153	5,571	36
22	York North	3	Toronto	136,339	37	1,303	35
23	Scarboro	10	Toronto	55,745	25	795	32
24	Scarboro	12	Toronto	48,270	23	733	32
25	Scarboro	13	Toronto	155,803	11	187	17
26	Scarboro	15	Toronto	95,013	16	501	31
Totals and	Averages, Counties			104,232	795	26,540	33
7 7.1.1.1.							
In Districts	/m/* * *		0 11 70 1	00000		200	0.0
1 Cochrane	Tisdale	1	South Porcupine.	93,948	19	600	32
2	Tisdale	2	Schumacher	122,258	19	639	34
3 Parry Sound	Himsworth	U4	Callander	20,506	8	221	28
4 Sudbury	Chapleau	1	Chapleau	90.777	7	187	27
5	Snider and Creighton.	U1	Creighton Mine.	139,560	8	283	35
6	Garson	3	Garson Mine	20,462	6	175	29
7 Timiskaming.	Teck	Sch. Area	Kirkland Lake	95,612	53	1,773	33
8 Thunder Bay.	Schreiber	1	Schreiber	75,811	6	177	30
Totals and	Averages, Districts			92,791	126	4,055	32
Totals and Averages, All Large Urban and Suburban Schools				102,666	921	30,595	33

SCHOOLS STATISTICS, 1937

	Majo	r Sources	of Receip	ots	Disburs	ements	Cost per	Pupil-Da	y (cents)	Debent Indebte	ure dness H
	Section Levye	Town- ship Grant	County Grant	Legis- lative Grant	Currentr	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Assess- ment
_	\$	\$	\$	\$	S	\$				\$	\$ c
1	6,956	2,400	222	2,293	10,289	2,472	21.7	5.2	26.9	10,702	14.75
2		9,120	671	10,785	49,951	2,928	27.8	1.6	29.4	29,287	9.20
3		4,000	40	4,279	17,839	D	19.7	D		117,437	191.13
4		3,960	314	4,247	12,540	4,152	27.6	9.1	36.7	25,000	42.97
5		3,360	78	3,657	11,701	7,359	15.2	9.6	24.8	72,302	133.80
6		4,160	671	5,980	21,569	10,784	28.9	14.4	43.3	111,210	123.87
7	,	3,520	231	4,124	13,882	2,487	- 21.3	3.8	25.1	18,588	30.69
8		8,000	510	3,368	14,038	-,	26.9		26.9	28,464	33.44
9	-,	12,000	726	6,805	22,593	3,157	27.3	3.8	31.1	64,227	71.46
10		8,000	380	3,120	18,887		35.4		35.4		
11		4,200	162	2,142	14,066	10,870	30.5	23.6	54.1	96,949	53.88
12		8,200	395	5,313	26,003	8,535	21.9	7.3	29.2	61,918	31.84
13	,	8,600	435	2,403	20,961	7,199	39.1	13.5	52.6	67,948	27.90
14				987	10,068		27.1		27,1		
15	,	3,680	801	3,678	22,151	D	36.8	D		43,529	24.06
16		2,400	205	4,505	12,131	D	24.1	D		44,067	70.07
17		3,040	629	4,191	17,191	D	32.5	D		84,590	76.54
18		4,800	654	8,242	28,989	D	39.1	D		104,184	96.62
19	.,	4,800	341	8,153	23,050	D	31.1	D		117,019	150.03
20			10,100	199,899	596,889	70,309	34.3	4.0	38.3	2,181,689	96.02
21			5,327	72,229	271,106	35,154	28.8	3.7	32.5	1,223,897	81,95
22		12,640	1,283	12,601	60,510	6,646	27.5	3.0	30.5	228,323	45.26
23	,	7,840	894	10,592	34,439	D	25.6	D		174,038	100.65
24	,	7,520	174	10,407	31,436	D	25.5	D		117,557	91.93
25		3,520	248	2,566	19,367	D	30.8	D		82,239	49,25
26	,	1,120	23	1,250	27,241	D	36.8	D		99,778	64.15
_											
_	1,087,199	130,880	25,514	397,816	1,408,887	172,106	30.3	4.51	34.81	5,204,942	68.61
1		1,520		11,736	45,097	3,342	38.7	2.9	41.6	26,685	17.28
2	38,000			6,805	44,507		34.8		34.8		
3	1,475	488		8,903	12,062	1,475	28.3	3.4	31.7	13,153	
4				2,669	12,322	5,449	33.8	15.0	48.8	81,730	114.36
5				3,510	14,944		27.3		37.3		
6	-,	550		4,455	7,730		23.4		23.4		
7				23,352	101,062	28,186	29.5	8.2	37.7	141,897	33.79
8	6,911			2,588	9,509	710	27.7	2.1	29.8	707	1.50
	217,244	2,558		64,018	247,233	39,162	31.3	5.0	36.3	264,172	25.21
	1,304,443	133,438	25,514	461,834	1,656,120	211,268	30.5	4.6r	35.1r	5,469,114	63.34

### THE PUBLIC

### TABLE 21—FINANCIAL

### URBAN SCHOOLS

Cities	County	Assessed Population J	No. of Class- rooms	Local Assess- ment per Class- room	A.D.A. c for the Calendar year	A.D.A. c per Class- room
-				_		
GROUP A 1 Toronto	York	648,309	1,902	\$ 483,921	72,952	38
GROUP B						
2 Hamilton	Wentworth	153,527	527	288,251	18,883	36
3 Ottawa	Carleton	142,852	255	478,243	9,046	35
4 Windsor	Essex	102,704	306	240,313	11,132	36
5 London	Middlesex	74,281	233	326,828	8,257	35
o Mondon I I I I I I I I I I I I I I I I I I I	- Industry					
Totals and Averages,	Group B	473,364	1,321	318,355	47,268	36
GROUP C						
6 Kitchener	Waterloo	32,550	105	195,966	3,865	37
7 Brantford	Brant	31,282	105	241,948	3,496	33
8 St. Catharines	Lincoln	27,426	90	234,458	3,157	36
9 Oshawa	Ontario	24,844	86	291,084	3,447	40
10 Kingston	Frontenac	24,331	67	242,257	2,477	37
11 Peterborough	Peterborough	23,450	77	273,179	2,582	34
	_		63	189,228	2,332	36
12 Guelph	Wellington	21,333	- 63	189,228	2,290	30
Totals and Averages,	Group C	185,216	593	238,286	21,320	36
GROUP D						
13 Sudbury	Sudbury	26,315	45	206,862	1,564	35
14 Fort William	Thunder Bay	24,020	91	264,735	3,047	33
15 Sault Ste. Marie	Algoma	23,627	80	212,876	2,750	34
16 Port Arthur	Thunder Bay	20,302	73	334,312	2,315	32
17 North Bay	Nipissing	15,287	45	156,142	1,371	30
1. North Day	Tripissing	10,201		100,112	1,011	
Totals and Averages,	Group D	109,551	334	245,097	11,047	33
GROUP E						
18 Niagara Falls	Welland	18,747	64	251,836	2,369	37
19 Sarnia	Lambton	18,155	69	247,985	2,235	33
20 Stratford	Perth	17,615	60	205,522	2,022	34
21 St. Thomas	Elgin	16,208	55	240,500	1,751	32
22 Chatham	Kent	16,153	53	238,878	1,840	35
23 Belleville	Hastings	14,560	48	198,339	1,642	34
24 Galt	Waterloo	14,410	46	228,550	1,662	36
25 Owen Sound	Grev	13,118	56	136,012	1,886	34
26 Woodstock	Oxford	11,382	38	200,439	1,250	33
27 Welland	Welland	10,924	53	185,795	1,730	33
Totals and Averages,	Group E	151,272	542	214,184	18,387	34
Totals and Averages,	All Cities	1,567,712	4,692	359,169	170,974	36

Group A—Cities with population over 200,000.

Group B— " " " " 50,000 and under 200,000.

Group C— " " " 20,000 and under 50,000.

Group D— " in Districts.

Group E— " with population under 20,000.

SCHOOLS STATISTICS, 1937

	Major So Rece		Disburs	ements	Cost per	Pupil-Da	y (cents)	Debenture Ind	ebtedness H
	School District Levy E	Legis- lative Grants	Current F	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Local Assessm't
1	<b>\$</b> 6,996,921	\$ 151,920	\$ 5,990,312	\$ 1,127,633	48.6	9.1	57.7	\$ 13,850,817	\$ c. 15.05
2	1,252,486	74,080	1,069,342	264,535	29.2	7.2	36.4	1,258,446	8.28
3	970,738	43,924	853,758	176,768	48.6	10.1	58.7	3,055,180	25.05
4	671,160	25,398	706,948	19,200ĸ	33.1	8.9 K	42.0	4,180,562	55.34
5	683,912	23,153	570,307	128,925	37.7	8.5	46.2	751,175	9.86
	3,578,296	166,555	3,200,355	589,428	35.3	6.5	41.8	9,245,363	21.98
6	246.917	22,977	215.018	56,793	29.1	7.7	36.8	573,685	27,88
7	218,592	16,159	207,063	32,597	30.5	4.8	35,3	271,000	10.67
8	216,328	11,709	185,555	32,560	30.8	5.4	36.2	235,138	11.14
9	191,130	12,366	148,031	53,875	22.0	8.0	30.0	283,460	11.32
10	150,362	7,187	133,820	27,494	29.3	6.0	35.3	303,010	18.67
11	189,510	9,508	172,239	32,610	34.4	6.5	40.9	467,150	22.21
12	107,602	7,516	102,483	11,824	22.9	2.6	25.5	80,345	6.74
	1,320,441	87,422	1,164,209	247,753	28.4	6.0	34.4	2,213,788	15.67
13	139,774	3,740	79,603	62,274	26.2	20.5	48.7	143,331	15,40
14	229,090	10,561	181,510	59,755	30.8	10.2	41.0	813,000	33.75
15	187,208	8,414	144,439	50,221	27.1	9.4	36.5	647,130	38.00
16	192,842	6,583	147,965	53,045	33.1	11.9	45.0	224,687	9.21
17	93,568	6,931	77,885	22,738	30.9	9.0	39.9	119,919	17.07
	842,482	36,229	631,402	248,033	29.7	11.7	41.4	1,948,067	23.80
18	140,350	6,543	113,007	34,118L	24.5	2.2	26.7	201,572	12.50
19	149,349	8,701	134,788	23,246	31.9	5.5	37.4	145,183	8.48
20	128,246	7,279	107,797	29,995	29.6	8.2	37.8	157,122	12.74
21	102,774	4,713	92,125	17,729	28.7	5.5	34.2	21,797	1,65
22	104,260	10,165	109,448	5,021	32.1	1.5	33.6		
23	103,619	4,383	78,417	31,989	24,6	10.1	34.7	412,254	43.30
24	81,517	4,623	80,837	6,017	25.4	1.9	27.3	20,848	1.98
25	90,020	8,189	90,203		25.8		25.8	90,000	11.82
26	59,647	3,067	56,250	9,817	24.1	4.2	28.3	86,622	12.13
27	135,266	6,103	101,069	20,309	30.0	6.0	36.0	281,697	28.61
	1,095,048	63,766	963,941	178,241	27.8	7.9	35.7	1,417,095	12.21
	13,833,188	505,892	11,950,219	2,391,088	38.4	7.7	46.1	28,675,130	17.07

### THE PUBLIC TABLE 21—FINANCIAL

				IADLE .	ZI—FINA	NGIAL
Towns	County	Assessed Population J	No. of Class- rooms	Assess- ment per Class- room B	A.D.A. c for the Calendar year	A.D.A. c per Class- room
GROUP A 1 Cornwall	Stormont	12,870 10,364 9,983 8,704 8,425	22 26 33 31 31	\$ 327,667 138,579 181,854 176,366 224,380	821 854 1,130 1,131 966	37 33 34 36 31
6 Barrie	Simcoe. Lanark. Victoria. Carleton. York.	8,135 7,626 7,294 7,275 7,095	31 25 27 7 30	170,986 163,843 181,064 59,760 154,512	965 875 867 195 1,040	31 35 32 28 34
11 Mimico	York. Simcoe. Hastings Waterloo Welland.	6,940 6,669 6,480 6,415 6,348	28 22 21 17 32	136,189 212,981 147,703 217,647 142,883	994 747 895 632 1,285	36 34 42 37 40
Totals and Averages,	Group A	120,623	383	178,176	13,397	35
GROUP B 16 Hawkesbury 17 Simcoe 18 Fort Erie 19 Brampton 20 Collingwood	Prescott	5,912 5,826 5,757 5,638 5,478	20 33 20 21	155,485 247,805 133,548 172,680 116,015	113 800 856 679 736	28 40 26 34 35
21 Leamington 22 Renfrew. 23 Ingersoll. 24 Cobourg. 25 Riverside	Essex Renfrew Oxford Northumberland Essex	5,446 5,328 5,177 5,125 5,090	20 12 19 19 19	176,588 190,948 150,398 140,749 85,914	724 387 658 614 524	36 32 35 32 35
26 Weston	York	5,048 4,955 4,904 4,577 4,537	20 15 15 16 16	146,282 175,473 111,366 152,887 100,299	617 559 500 625 544	31 37 33 39 35
31 Goderich	Huron. Brant. Lanark Lanark Simcoe.	4,488 4,325 4,278 4,183 4,177	15 16 16 12 22	120,217 184,368 91,343 126,892 57,234	516 470 599 404 793	34 29 37 34 36
36 Arnprior	Renfrew Perth Haldimand	4,133 4,017 4,004	11 14 11	141,042 159,631 90,909	374 416 452	34 30 41
Totals and Averages,	Group B	112,403	382	140,264	12,960	34
GROUP C 39 Oakville	Ontario	3,850 3,828 3,706	14 14 13 13 14	249,118 171,993 141,060 162,704 217,113	455 504 525 422 458	32 36 40 32 33
44 Gananoque 45 Newmarket 46 Picton 47 Hanover 48 Napanee	York Prince Edward Grey	3,526 3,410 3,191	10 15 12 13 11	181,420 126,843 242,375 84,846 103,454	371 496 427 426 392	37 33 36 33 36
49 Strathroy	Essex	2,869 2,850	11 11 7 9	153,392 119,033 234,997 138,029 173,226	376 379 193 291 307	34 35 27 32 34
54 Hespeler 55 Aurora 56 Meaf rd 57 Petrolia 58 Merritton	York Grey Lambton	2,750 2,719 2,711	12 10 10 11 9	161,291 137,684 89,250 92,182 155,944	434 386 268 354 298	36 39 27 32 33
59 Leaside 60 Orangeville 61 Kincardine 62 Kingsville. 63 Almonte.	Dufferin	2,479 2,458 2,363	10 9 9 11 7	323,143 138,437 84,557 197,817 130,219	312 301 329 360 250	31 33 37 33 36
64 Walkerton			6 8	100,119 201,736	179 278	30 35

### SCHOOLS STATISTICS, 1937

317	11151103	5, 1737							
	Major So Rece		Disburs	ements	Cost per	Pupil-Da	y (cents)	Debenture Ind	ebtedness H
	School District Levy E	Legis- lative Grant	Current F	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Assessm't
1 2 3 4 5	\$ 47,040 39,199 52,600 49,367 69,498	1,636 3,078 3,088 2,827 4,859	\$ 34,814 43,432 57,005 46,764 54,371	\$ 10,766 D 900 4,979 18,974	23.3 26.2 27.4 22.5 29.0	7.2 D .4 2.4 10.1	30.5 27.8 24.9 39.1	\$ 126,554 173,794 900 37,279 219,836	\$ c. 17.55 48.24 .15 7.19 31.61
6 7 8 9 10	50,748 39,251 37,126 3,966 81,079	2,792 3,021 2,150 1,535 4,404	45,376 38,725 34,325 11,370 61,367	2,641 6,992 5,678 26,079	26.4 23.0 21.0 30.2 33.9	1.5 4.2 3.5 	27.9 27.2 24.5 30.2 48.3	45,661 29,838 12,794 138,133	8.61 7.28 2.62 29.80
11 12 13 14 15	47,890 29,127 37,367 27,488 72,598	4,062 1,986 2,479 1,226 4,232	51,946 33,316 31,697 26,925 55,547	D D 7,283 3,180 22,598	30.7 23.0 19.0 23.2 23.6	D D 4.4 2.7 9.6	23.4 25.9 33.2	203,666 71,615 46,035 5,870 121,679	53.41 15.29 14.84 1.58 26.61
	690,344	43,375	626,980	110,070	25.2	5.5	30.7	1,233,654	18.05
16 17 18 19 20	7,457 26,053 48,320 37,225 24,233	322 1,462 2,955 1,981 2,120	8,016 23,953 53,354 31,570 26,591	D 7,649	38.0 16.8 45.6 26.9 19.2	D 6.5	38.0 16.8 	231,377 57,735	51.98 16.72
21 22 23 24 25	25,423 19,742 40,665 31,712 20,775	1,810 1,161 2,258 2,181 2,227	27,068 18,352 27,054 28,249 23,645	2,342 15,779 6,016	19.5 24.5 21.3 21.9 23.5	3.1 12.4 4.7	27.6 33.7 26.6	79,232 6,377 32,961 20,425 273,213	22.43 2.79 11.53 7.64 212.00
26 27 28 29 30	28,547 24,481 21,707 25,588 23,906	1,503 1,283 2,255 1,385 2,309	31,042 20,967 24,481 23,140 21,382	0 6,181 D 4,588 5,160	29.8 19.7 25.2 20.4 21.8	5.8 D 4.03 5.3	25.5 24.4 27.1	82,468 30,313 97,110 34,704 51,798	28.19 11.51 58.15 14.19 32.29
31 32 33 34 35	20,535 21,700 15,688 17,615 15,008	1,772 2,041 2,292 2,435 5,707	20,989 23,230 20,282 17,366 26,603	1,534 688 1,838 D	22.6 25.4 17.4 22.5 34.5	1.6 6 2.4 D	24.1 25.4 18.0 24.9	4,219 6,906 4,300 10,221 <sub>H</sub>	2.34 4.74 2.82 8.12
36 37 38	16,190 22,815 18,769	1,020 1,019 2,125	13,868 18,861 16,383	4,035 5,815 3,269	19.4 25.2 20.3	5.7 7.8 4.1	25.1 32.9 24.4	39,399 74,802 30,387	25.40 33.48 30.39
	554,154	45,623	546,446	64,894	23.0	3.91		1,167,947	21.75
39 40 41 42 43	21,011 20,373 16,650 21,838 25,235	1,038 1,125 1,355 1,047 1,113	21,158 19,415 18,899 16,622 22,364	1,373 7,088 4,235	24.0 22.1 19.8 20.3 25.3	1.6 8.6 4.8	24.0 23.7 19.8 28.9 30.1	18,504 53,322 63,355	7.68 25.21 20.84
44 45 46 47 48	13,007 24,750 19,118 14,300 13,600	869 2,688 1,797 1,905 1,402	14,242 20,712 18,075 16,462 14,695	1,257 5,750 1,993 1,635	20.6 22.9 22.7 21.8 21.2	1.8 6.3 2.0 2.2	22.4 29.2 24.7 24.0 21.2	55,463 47,477 19,306 6,885	30.57 24.96 6.71 6.24
49 50 51 52 53	13,300 13,850 14,047 14,017 11,890	854 1,140 673 993 790	13,450 13,665 12,750 11,969 11,214	1,301 2,657 1,090	18.4 19.9 34.0 34.0 20.4	3.5 7.5 2.8	18.4 19.9 37.5 41.5 22.4	3,543 10,255 8,594	2.16 8.25 5.51
54 55 56 57 58	20,657 14,000 13,544 13,842 17,410	2,294 1,419 996 1,341 704	18,645 16,277 12,968 14,463 14,566	6,277 1,917 3,853	22.5 22.9 27.5 21.7 27.4	7.6	30.1 22.9 31.6 21.7 34.0	17,953 838 40,048	9.28
59 60 61 62 63	36,696 11,603 10,182 12,730 7,720	1,046 1,202 991 685 743	19,005 12,262 10,896 13,032 9,114	20,196 576	36.2 25.0 17.3 18.6 19.0	38.5 .9	74.7 25.0 18.2	1,014,689 8,500 47,216	314.05 11.69 21.70
64 65	7,880 12,507	935 655	9,530 12.449	807	28.0 25.0	1.6	28.0 26.6		

### THE PUBLIC TABLE 21—FINANCIAL

Towns	County	Assessed Population J	No. of Class- rooms	Assess- ment per Class- room B	A.D.A. c for the Calendar year	A.D.A. c per Class- room
GROUP C—(Cont.) 66 Tecumseh	Essex Russell Huron Waterloo	2,245 2,103 2,085 2,069	2 1 8 8	\$ 167,387 73,035 111,356 234,542	56 18 225 322	28 18 28 40
Totals and Averages,	Group C	89,145	307	161,340	10,392	34
GROUP D 70 Aylmer	Elgin . Lincoln . Kent . Kent . Wellington .	1,998 1,981 1,980 1,956 1,946	10 9 4 8 5	182,296 156,433 107,997 106,737 165,131	350 270 128 248 180	35 30 32 31 36
75 Alexandria 76 Clinton 77 Durham 78 Essex 79 Chesley	Glengarry	1,919 1,901 1,852 1,833 1,815	2 7 8 8 6	88,143 109,924 63,476 130,951 121,534	27 198 237 264 221	15 28 30 33 37
80 Milton 81 Blenheim 82 Wiarton 83 Seaforth 84 Niagara	Halton Kent. Bruce. Huron. Lincoln	1,791 1,775 1,743 1,708 1,651	8 8 8 7 5	239,791 98,786 73,779 108,726 161,500	229 281 271 174 174	29 35 33 25 35
85 Mitchell. 86 Uxbridge 87 Forest. 88 Dresden. 89 Palmerston	Perth. Ontario Lambton Kent Wellington	1,607 1,527 1,502 1,477 1,410	6 7 5 6 6	157,121 38,507 114,120 94,433 136,875	209 233 170 195 189	35 33 34 33 33
90 Alliston 91 Vankleek Hill 92 Deseronto 93 Harriston 94 Southampton	Simcoe. Prescott. Hastings Wellington Bruce.	1,340 1,302 1,300 1,266 1,202	7 3 6 5 6	135,130 207,313 62,501 177,174 83,505	221 56 189 187 169	32 19 31 37 28
95 Stayner. 96 Parkhill. 97 Harrow. 98 La Salle. 99 Thornbury. 100 Bothwell.	Simcoe. Middlesex. Essex. Essex. Grey. Kent.	1,034 997 984 812 788 643	4 3 5 1 3 2	210,250 172,176 163,980 400,570 93,125 104,550	115 124 175 26 101 78	29 41 35 26 34 39
Totals and Averages,	Group D	47,040	178	129,254	5,689	32
GROUP A 101 Timmins	District Cochrane	23,622	52	109,087	2,018	39
GROUP B	Kenora	8,421 5,713 4,782 3,780 3,577	28 27 6 16 15	163,047 125,745 198,516 324,249 108,481	996 872 174 470 559	36 32 29 29 29 37
107 Kapuskasing. 108 Cochrane. 109 Cobalt. 110 New Liskeard. 111 Huntsville.	Cochrane Cochrane Timiskaming Timiskaming Muskoka.	3,499 3,214 3,022 2,968 2,707	13 12 13 12 12	197,576 109,855 67,734 134,778 98,919	363 368 353 406 445	28 31 27 34 37
112 Haileybury 113 Bracebridge. 114 Blind River. 115 Coniston. 116 Gravenhurst.	Timiskaming, Muskoka, Algoma, Sudbury, Muskoka, Nipissing,	2,600 2,493 2,375 2,069 2,052 2,012	8 10 6 4 11 1	132,662 103,771 55,579 78,781 77,625 149,144	216 386 191 88 361 63	27 39 32 22 33 63
Totals and Averages,	Group B	55,284	194	140,665	6,311	33
GROUP C 118 Sioux Lookout	Kenora. Sudbury Kenora. Algoma Kenora.	1,901 1,730 1,661 1,624 1,483	9 10 9 8 7	78,993 81,655 168,635 76,944 197,582	302 360 329 273 211	34 36 37 34 30
123 Iroquois Falls. 124 Rainy River. 125 Englehart. 126 Little Current.	Cochrane Rainy River Timiskaming Manitonlin	1,302 1,298 1,219 1,115	6 5 8 4	320,087 97,660 57,788 63,500	196 148 266 113	33 30 33 28
Totals and Averages,	Group C	13,333	66	116,444	2,198	31

### SCHOOLS STATISTICS, 1937

		1							
	Major So Recei		Disburs	ements	Cost per	Pupil-Day	(cents)	Debenture Inde	ebtedness H
	School District Levy E	Legis- lative Grant	Current F	Capital G	Current	Carital	Total	Amount	Per \$1,000 of Assess- ment B
66 67 68 69	\$ 2,546 783 9,410 10,000	\$ 245 90 1,871 608	\$ 2,997 961 11,294 11,395	\$ D	27.6 27.6 26.8 18.2	D	27.6 26.8 18.2	\$ 14,825	\$ c. 44.38
	458,496	34,614	435,546	62,005	22.8	3.4	26.2	1,430,773	
70 71 72 73 74	13,489 12,919 2,962 9,919 5,600	1,391 2,243 772 1,929 607	13,173 13,710 5,822 10,591 6,239	1,204 566 310	20.6 26.3 23.4 1.0 17.3	1.9 1.1 1.2	22.0 27.4 24.6 	10,832	5.95
75 76 77 78 79	2,496 9,115 5,500 9,414 6,900	275 1,291 1,846 914 1,095	2,469 8,612 7,802 8,917 8,669	1,965 D 449	47.5 22.4 17.0 17.4 20.5	D 1.0	47.5 	21,000 297,959 1,630	27.31 284.42 2.24
80 81 82 83 84	7,717 10,164 10,210 7,847 7,163	693 1,383 2,156 1,335 827	9,393 10,850 10,019 8,604 7,046	724 414 710 299 616	21.6 21.7 19.0 26.5 29.7	1.7 .8 1.3 .9 2.6	23 3 22.5 20.3 27.4 32.3	5,425 2,944 3,170 299 1,058	2.83 3.73 5.37 .39 1.31
85 86 87 88 89	8,564 6,100 5,490 6,492 5,562	722 1,327 810 852 923	7,305 8,276 5,962 6,825 6,791	2,064 674 240 585	18.1 18.3 18.0 18.7 19.1	5.1 1.5 .7 1.6	23.2 19.8 18.7 20.3 19.1	11,730 2,695 1,283 5.487	12.44 10.00 2.22 9.63
90 91 92 93 94	7,117 3,000 5,521 5,054 6,267	975 573 1,038 755 1,501	8,513 3,594 6,590 6,454 7,232	980 816 981 339	21.2 32.7 18.0 17.7 21.9	2.4 2.2 2.7 1.0	23.6 32.7 20.2 20.4 22.9	6,990 3,540 4,079 1,764	7.39 9.44 4.61 3.52
95 96 97 98 99 100	9,805 3,400 4,500 5,157 3,046 1,863	289 412 838 87 341 662	4,422 3,751 6,048 5,207 2,845 2,648	2,305 D	20.4 16.1 17.9 103.8 14.8 18.7	10.6  D	31.0 16.1 17.9  14.8 19.5	21,810	25.94
	208,353	30,862	224,379	16,354	20.9	1.6	22.5	449,996	19.56
101	170,450	9,145	111,277	27,856	28.6	7.2	35.8	199,331	10.40
102 103 104 105 106	59,478 55,700 9,703 25,033 21,409	2,507 3,175 378 1,200 1,784	39,526 44,353 11,385 30,157 20,904	11,989 16,810 3,154	20.5 26.2 33.8 32.2 19.4	6.2 9.9	26.7 36.1 33.8 32.2 22.3	89,503 96,844 30,585	19.61 28.52  18.80
107 108 109 110 111	27,117 20,861 19,649 21,638 12,558	3,390 2,060 6,774 1,423 1,278	24,072 21,618 25,915 19,248 14,529	8,600 1,765 4,538	34.2 30.2 37.8 24.5 17.5	12.2 2.5 5.8	46.4 32.7 37.8 30.3 17.5	102,781 36,450 21,046	40.01 27.65 13.01
112 113 114 115 116 117	12,419 11,972 5,785 5,709 15,272 1,100	1,308 1,162 762 1,022 2,553 97	12,055 12,622 5,866 6,185 13,751 1,322	1,431 759 5,272	29.4 18.8 15.8 36.1 21.9 10.9	3.5 1.1 8.4	32.9 19.9 15.8 36.1 30.3 10.9	2,862 2,511 26,335	2.70 2.42 30.86
	325,403	30,873	303,508	54,318	25.1	4.5	29.6	408,917	14.98
118 119 120 121 122	20,116 15,860 20,092 8,142 16,468	2,834 2,203 1,272 1,364 745	17,777 13,366 13,511 7,906 9,529	2,408 4,780 4,693 1,626 4,184	30.8 19.3 21.2 14.9 23.3	4.2 6.9 7.4 3.1 10.2	35.0 26.2 28.6 18.0 33.5	43,283 13,315 41,886 2,927 21,476	60.88 16.30 27.59 4.8 15.53
123 124 125 126	11,825 7,759 7,871 3,000	846 1,545 7,974 1,080	12,389 9,234 11,371 9,325	8,832		8.5	41.1 32.4 31.2 42.6	70,902	
	111,133	19,863	104,408	31,194	24.6	6.0	30.6	237,867	29.18

### THE PUBLIC TABLE 21—FINANCIAL

			year	room
939 790 789	2 4 4 3 3	\$ 74,572 97,701 72,123 84,811 30,341	63 118 157 107 77	32 30 39 35 26
418 396 382	3 4 3 2 2	48,667 32,250 80,950 48,949 245,713	94 101 98 65 67	31 25 33 33 34
325 325 265 201	4 1 2 2 3 1	61,892 34,007 39,018 27,234 32,360 169,802	97 48 73 56 69 19	24 48 37 28 23 19
	43	68,884	1,309	30
	939 790 789 658 648 418 396 382 360 344 325 325 265 201 175	939 4 790 4 789 3 658 3 648 3 418 4 396 3 382 2 360 2 344 4 325 1 325 2 265 2 201 3 175 1	978 2 74,572 939 4 97,701 790 4 72,123 789 3 84,811 658 3 30,341 648 3 48,667 418 4 32,250 396 3 80,950 382 2 48,949 360 2 245,713 344 4 61,892 325 1 34,007 325 2 39,018 201 3 32,360 175 1 169,802 7,993 43 68,884	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Counties—Group A—Towns with population over 6,000.

"B—"" 4,000 and under 6,000.

"C—"" " 2,000 "" 4,000.

"D—"" " under 2,000.

Villages	County	Assessed Population J	No. of Class- rooms	Assess- ment per Class- room B	A.D.A. c for the Calendar year	A.D.A. c per Class- room
GROUP A 1 Forest Hill 2 Swansea 3 Rockcliffe Park	York York Carleton	10,208 5,831 1,162	34 20 5	\$ 392,089 173,000 473,324	1,056 596 106	31 30 21
Totals and Averages,	Group A	17,201	59	324,707	1,758	30
GROUP B 4 Long Branch 5 Fergus 6 Humberstone	York	4,029 2,785 2,629	20 10 14	79,585 171,878 53,370	745 385 480	38 39 34
Totals and Averages,	Group B	9,443	44	92,219	1,610	37
GROUP C 7 Acton 8 Morrisburg 9 Port Credit 10 Delhi 11 Exeter	Halton. Dundas. Peel. Norfolk Huron.	1,916 1,819 1,751 1,677 1,652	8 6 8 7 6	161,598 120,179 162,791 ,213,105 120,350	255 212 275 257 195	32 35 34 37 33
12 Port Dover	Norfolk Lincoln Grenville Waterloo Haldimand	1,640 1,565 1,529 1,441 1,410	7 6 6 6 6	222,037 91,957 82,390 150,667 41,667	241 185 251 200 182	34 31 42 33 30
17 Brighton 18 Lakefield 19 Hagersville 20 Port Elgin 21 Tweed	Haldimand	1,366 1,332 1,307 1,293 1,256	6 6 6 5 6	118,567 94,868 77,333 85,638 135,520	191 218 218 167 185	32 36 36 33 31
22 Richmond Hill 23 Waterford 24 Norwich 25 Madoc. 26 Kemptville	Oxford	1,238 1,212 1,210	7 5 5 6 5	96,914 183,350 121,160 88,605 65,000	243 173 162 202 169	35 35 32 34 34
27 Chippawa 28 Havelock. 29 Point Edward 30 Elora. 31 Beamsville.	Peterborough	1,164 1,161 1,149	5 6 5 5 5	145,328 51,035 67,761 133,265 144,400	171 182 171 163 166	34 30 34 33 33
32 Port Perry33 Markham			5 4	129,244 109,997	156 116	31 29

### SCHOOLS STATISTICS, 1937

	Major So Rece		Disbursements		Cost per	Pupil-Da	y (cents)	Debenture Inde	Debenture Indebtedness H	
	School District Levy E	Legis- lative Grant	Current F	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Assess- ment B	
127 128 129 130 131	\$ 1,790 11,542 3,331 3,816 1,954	\$ 246 624 1,505 818 1,097	\$ 2,151 9,644 4,451 3,006 2,994	3,609 1,308 1,816 154	17.7 42.2 15.2 14.7 20.4	15.8 4.5 8.7 1.5	17.7 58.0 19.7 23.4 21.9	\$ 44,700 15,693 30,875 463	\$ c. 114.37 54.39 121.35 5.08	
132 133 134 135 136	3,137 3,066 2,706 1,212 3,000	1,308 1,681 911 1,036 535	3,945 4,760 3,522 2,235 3,468	1,211	21.6 24.2 18.5 17.8 29.4	6.4	21.6 24.2 24.9 17.8 29.4	18,162	74.78	
137 138 139 140 141 142	5,246 600 2,632 1,021 2,853 2,549	1,876 280 1,195 1,201 3,269 116	6,541 828 2,792 2,245 5,723 1,490	299	36.0 8.8 19.9 21.6 42.5 40.0	16.5	52.5 8.8 19.9 21.6 42.5 40.0	1,698	6.84	
	50,455	17,698	59,795	8,397	23.9	3.3	27.2	111,591	37.68	
	2,557,380	232,053	2,402,320	375,079	23.8	4.1	27.9	5,240,076	21.96	

DISTRICTS—Group A—Towns with population over 10,000.

"B—""" 2,000 and under 10,000.

"C—""" 1,000 "" 2,000.

"D—""" under 1,000.

	Major So Rece		Disburs	ements	Cost per	Pupil-Da	y (cents)	Debenture Inc	debtedness
	School District Levy E	Legis- lative Grant	Current F	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Assessm't
1 2 3	\$ 130,430 47,473 14,103	\$ 4,303 6,393 699	\$ 90,828 41,223 13,463	\$ 37,214 11,521 1,100	52.8 41.1 67.3	21.6 11.5 5.5	74.4 52.6 72.8	\$ 473,793 106,978 59,611	\$ c. 35.52 30.91 25.19
	192,006	11,395	145,514	49,835	49.8	17.1	66.9	640,382	33.43
4 5 6	41,774 11,000 22,647	4,570 1,416 5,582	29,605 12,650 20,600	16,800	23.7 16.9 23.4	13.4	37.1 16.9 31.9	158,000	99.27
	75,421	11,568	62,855	24,297	21.9	8.4	30.3	214,216	52.79
7 8 9 10 11	9,094 7,910 18,365 9,400 2,587	1,059 1,258 2,036 1,113 847	9,919 7,896 14,996 8,243 6,685	423 5,231	19.9 20.7 32.5 16.5 18.0	.8	20.7 20.7 43.8 16.5 18.0	2,253 47,862	1.74
12 13 14 15 16	7,413 5,964 5,397 6,299 5,457	833 1,740 1,465 886 2,314	7,725 9,372 6,884 7,308 7,659	1,573 385	17.6 27.0 14.8 18.8 23.3	3.6	21.2 27.0 14.8 19.7 23.3	8,387 1,926	5.40
17 18 19 20 21	6,790 8,800 5,920 5,780 9,257	1,009 1,938 2,196 882 3,792	6,876 8,128 8,023 6,578 12,204	1,290	18.0 19.2 19.0 22.3 36.1	3.3	21.3 19.2 19.0 22.3 38.6	13,534	19.02  5.27
22 23 24 25 26	12,095 5,865 5,397 5,016 5,212	1,806 858 949 2,020 2,693	10,612 7,081 7,096 7,795 6,792	2,295	25.7 21.1 22.3 20.3 20.7	4.7	30.4 21.1 22.3 20.3 25.9	10,365	15.27
27 28 29 30 31	8,929 4,365 8,556 5,475 6,293	1,161 2,278 1,502 871 983	9,235 6,106 7,749 5,950 7,302	1,029 504 2,259 497	27.8 17.3 23.3 18.9 22.7	3.1 1.4 6.8 1.6	30.9 18.7 30.1 20.5 22.7	3,113 3,572 6,796 2,380	4.28 11.66 20.06 3.57
32 33	6,955 3,660	845 447	6,262 3,996	1,755 30	20.8 17.7	5.8	26.6 17.8	19,654 906	30.41 2.05

### THE PUBLIC TABLE 21—FINANCIAL

Villages	County	Assessed Population J	No. of Class- rooms	Assess- ment per Class- room B	A.D.A. c for the Calendar year	A.D.A. c per Class- room
GROUP C—(Cont.) 34 Stouffville 35 Shelburne 36 Victoria Harbour	York Dufferin Simcoe.	1,115 1,099 1,092	5 4 6	\$ 108,748 142,548 24,500	145 119 201	29 30 34
37 Chesterville	Dundas Renfrew Victoria Renfrew Dundas	1,068 1,066 1,061 1,051 1,050	4 3 4 1 5	112,419 123,723 134,492 46,213 127,187	138 97 128 23 99	35 32 32 23 20
42 Winchester 43 Tavistock 44 Lucknow 45 Arthur 46 Marmora	DundasOxford.Bruce.Wellington.Hastings.	1,041 1,037 1,036 1,035 1,014	5 4 4 4 5	129,501 140,223 80,438 175,985 45,963	169 123 126 112 143	34 31 32 28 29
47 Milverton. 48 Bradford. 49 Bobcaygeon. 50 Bancroft. 51 Watford.	Perth. Simcoe. Victoria Hastings Lambton	1,006 988 985 983 975	4 3 4 6 4	160,289 189,973 131,831 34,950 100,750	126 116 139 206 128	32 39 35 34 32
52 Colborne	Northumberland Ontario Hastings Prescott Simcoe	964 949 938 928 911	4 4 4 7 7	135,028 117,115 123,664 25,160 84,714	143 132 133 165 133	36 33 33 23 19
57 Wellington. 58 Waterdown. 59 Sutton. 60 Stoney Creek. 61 Frankford.	Prince Edward. Wentworth. York. Wentworth Hastings.	907 885 852 847 838	6 4 5 6 4	276,116 255,434 	134 207 183 201 146	22 51 37 33 36
62 Teeswater	Bruce. York Welland. Frontenac. Kent.	831 829 826	3 4 5 2 4	95,325 100,261 101,449 91,528 124,742	78 146 152 85 123	26 36 31 43 31
67 Belle River	Essex. Middlesex. Elgin Elgin Grey.	784	1 4 4 4 4	159,403 179,776 193,624 161,032 83,141	9 126 114 144 102	9 31 29 36 25
72 Brussels 73 Merrickville 74 Paisley 75 Cannington 76 Hastings 77 Maxville 78 Ayr	Grenville	776 773 764	3 4 3 3 2 4 3	123,030 68,750 121,373 139,276 134,730 91,036 139,000	81 118 105 93 100 106 81	27 29 35 31 50 26 27
Totals and Averages	Group C	78,293	341	121,587	10,984	32
GROUP D 79 Mildmay. 80 Wheatley. 81 Port Stanley. 82 Rodney. 83 Norwood.	Kent Elgin	744 741	2 4 4 3 5	77,648 214,954 248,186 212,524 89,217	59 133 94 101 131	30 33 24 34 26
84 Westport. 85 Millbrook. 86 Lanark. 87 Athens. 88 Newcastle.	Durham	704 702 691	2 3 3 4 3	90,661 122,709 64,798 56,995 106,100	58 97 102 92 69	29 32 34 23 23
89 Hensall 90 Streetsville 91 Dundalk 92 Bloomfield 93 Cayuga	Grey Prince Edward	672 666 666	3 4 3 3 4	111,933 75,515 104,833 220,956 33,750	79 135 93 78 98	26 34 31 26 25
94 Port Rowan 95 Blyth 96 Alvinston 97 Creemore 98 Killaloe Station	Lambton	652 650 632	3 3 3 2	167,743 105,917 100,633 151,083 48,962	78 71 85 67 43	26 24 28 22 22
99 Cobden	Renfrew		4 2	96,859 133,500	103 91	26 46

### SCHOOLS STATISTICS, 1937

	Major So Rece		Disburs	ements	Cost per	Pupil-Day	(cents)	Debenture Inde	btedness H
	School District Levy E	Legis- lative Grant	Current F	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Assessm't
34 35 36	\$ 6,589 5,350 3,275	\$ 913 472 3,209	\$ 5,953 5,937 6,707	\$ 1,799 520	21.0 25.8 17.2	6.3	27.3 28.1 17.2	\$ 10,216 9,889	\$ c. 18.79 17.34
37 38 39 40	4,001 4,065 4,186 616	757 451 537 134	5,069 3,295 3,808 626	2,210	19.5 17.6 15.8 14.0	11.8	19.5 29.4 15.8 14.0	13,783	37.13
41 42 43 44 45	5,697 7,401 4,709 4,891 3,122 3,663	598 946 549 758 416	5,550 5,889 5,326 4,557 4,344	554 1,952 1,101	18.0 22.7 19.0 20.1	6.0	32.0 24.0 22.7 24.6 20.1	2,000 23,418 2,047	3.14 36.17
46 47 48 49 50	3,784 3,850 3,683 4,928	1,596 1,030 466 849 2,352	6,285 4,968 4,589 5,054 4,863	628	20.1 20.8 21.8 19.3 12.1 18.1	1.6	20.1 20.8 21.8 19.3 13.7	8,786	41.90
51 52 53 54 55 56	4,200 3,570 4,775 4,813 1,600 8,000	701 308 907 2,397 2,351	4,452 4,686 4,199 5,157 4,780 10,266	1,871 613	16.9 17.1 19.9 15.3 26.1	7.6 2.3	20.0 16.9 24.7 22.2 15.3 26.1	3,099 29,901 1,660	7.69 63.82 3.35
57 58 59 60 61	12,919 5,900 4,251 8,907 4,366	3,636 765 537 1,339 850	11,378 6,664 5,634 9,612 4,411	5,504 6,490 2,064	27.8 25.6 14.5 24.7 15.5	13.5 25.0 	41.3 50.6 14.5 24.7 22.7	88,064 32,451 21,445	53.16 31.76  65.74
62 63 64 65 66	5,809 2,950 5,922 2,573 4,746	442 1,217 1,127 585 744	3,009 5,412 7,536 2,560 4,579	2,616 585 1,046	10.5 19.5 26.1 16.6 19.3	9.2	19.7 19.5 28.1 16.6 23.7	11,632 1,594 5,225	40.67 3.15 10.48
67 68 69 70 71	1,775 3,493 4,314 3,705 4,354	75 424 483 635 1,316	1,257 4,611 4,351 4,152 5,466	500	71.3 18.8 19.8 15.2 30.2	2.0	71.3 20.8 19.8 15.2 30.2	26,400	36.71
72 73 74 75 76 77 78	2,600 3,787 4,390 3,430 2,286 3,862 3,397	563 954 637 434 396 676 356	3,744 4,447 3,643 3,231 2,810 3,903 3,739	1,187 1,301 637	24.6 19.4 17.4 18.6 14.8 20.3 22.5	5.2 6.2 3.7 4.8	24.6 24.6 23.6 22.3 14.8 20.3 27.3	12,459 7,528 2,795	45.31 20.67 6.64
	392,755	81,286	436,981	54,309	15.2	2.6	17.8	463,668	11.18
79 80 81 82 83	1,365 2,701 5,813 2,805 2,791	540 390 731 323 1,377	1,977 3,937 6,414 3,008 6,058		18.4 15.7 36.0 16.0 23.8		18.4 15.7 36.0 16.0 23.8		
84 85 86 87 88	2,280 3,981 1,453 3,300 3,258	476 556 641 758 702	2,530 3,975 2,755 4,506 3,819		22.1 21.1 13.3 25.0 28.4		22.1 21.1 13.3 25.0 28.4		
89 90 91 92 93	2,587 5,571 3,300 3,620 4,021	502 763 867 459 2.283	3,089 5,640 4,325 3,491 5,609	651	$\begin{array}{c} 22.2 \\ 21.6 \\ 24.1 \\ 22.7 \\ 31.5 \end{array}$	3.6	$\begin{array}{c} 22.2 \\ 21.6 \\ 24.1 \\ 22.7 \\ 35.1 \end{array}$	3,000 1,826	4.53 13.52
94 95 96 97 98	1,866 2,339 2,930 4,140 1,394	301 366 299 306 430	2,716 2,743 2,833 3,338 1,361	357 712 669		2.3 6.0 7.9	18.0 20.8 20.5 34.0 24.5	8,210 6,669 8,033	27.19 14.71 82.03
100	4,459 1,875	1,717 280	6,929 2,753		35.4		35.4 16.7	<u> </u>	

### THE PUBLIC TABLE 21—FINANCIAL

				1111111111		
Villages	County	Assessed Population J	No. of Class- rooms	Assess- ment per Class- room B	A.D.A. c for the Calendar year	A.D.A. c per Class- room
GROUP D—(Cont.) 101 Grand Valley 102 Omemee 103 Thedford	Dufferin Victoria Lambton	600 598 593	3 2 2	\$ 115,845 224,615 78,500	76 90 82	25 45 41
104 Coldwater	Simcoe. Glengarry. Peel Simcoe. Wellington.	589 588 567 555 551	4 2 3 3 2	63,000 95,112 130,387 127,200 213,729	135 43 72 94 67	34 22 24 31 34
109 Wyoming	LambtonSimcoeHaldimandWellingtonRenfrew.	528 526 505 481 479	2 3 3 2 3	79,750 102,629 60,000 209,287 70,425	60 76 98 70 92	30 25 33 35 31
114 Ailsa Craig. 115 Tara. 116 Oil Springs. 117 Newburgh. 118 Flesherton.	MiddlesexBruceLambtonLennoxGrey	472 472 470 468 447	2 2 2 2 2 2	137,663 101,984 68,500 58,991 105,560	52 54 59 61 61	26 27 30 31 31
119 Clifford	Wellington. Grey. Bruce. Oxford. Carleton.	446 441 432 428 419	2 3 2 2 2	184,172 66,943 151,369 126,450 84,953	68 105 39 56 50	34 35 20 28 25
124 Woodville. 125 Arkona. 126 Lion's Head 127 Springfield. 128 Hepworth.	Victoria. Lambton. Bruce. Elgin. Bruce.	418 406 398 378 376	2 2 2 3 2	44,645 72,750 60,130 144,905 44,645	47 70 71 73 57	24 35 36 24 29
129 Finch	Stormont	371 355 346 376 334	2 2 2 2 2	111,878 63,549 55,500 62,443 96,520	79 66 44 67 54	40 33 22 34 27
134 Chatsworth. 135 Deloro. 136 Newbury. 137 Erieau. 138 Tiverton.	Grey	321 288 279 273 260	2 2 2 2 1	84,634 36,136 105,356 101,000 160,134	43 53 32 42 39	22 27 16 21 39
139 Wardsville	Middlesex Elgin Essex	243 205 110	2 2 1	108,948 77,619 561,756	37 44 36	19 22 36
Totals and Averages,	Group D	32,362	160	108,495	4,571	29
GROUP E 142 South River 143 Burk's Falls 144 Sundridge 145 Port Carling 146 Rosseau	District Parry Sound Parry Sound Parry Sound Muskoka Parry Sound	827 742 543 506 300	5 4 3 3 2	52,805 94,083 77,182 119,142 65,149	159 150 125 76 36	32 38 41 25 18
147 Hilton Beach	Algoma Timiskaming Muskoka Muskoka	207 131 128 109	2 1 1 2	29,455 14,766 83,723 31,985	48 16 16 26	24 16 16 13
Totals and Averages,	Group E	3,493	23	64,404	652	28
Totals and Averages, All	Villages	140,792	627	133,201	19,575	31
Totals and Averages, All		2,179,666	6,928	289,748	244,823	35
Grand Totals and Averag	es	11,234,567	14,140	202,894	403,423	29

County Villages: Group A—Suburban Villages.

"B—Villages with population over 2,000.
"C—"" from 750 to 2,000.
"D—"" "under 750. District Villages: Group E

A Ordinary schools limited to those with less than six teachers.

B Figure is Local Assessment for the Districts (and all municipalities therein), all Cities, and the seven Separated Towns—Equalized Assessment in all other cases.

C Average Daily Attendance

D In default.

### **SCHOOLS** STATISTICS, 1937

		, 2701							
	Major So Rece		Disburs	ements	Cost per	Pupil-Day	y (cents)	DebentureInde	ebtedness H
	School District Levy E	Legis- lative Grant	Current F	Capital G	Current	Capital	Total	Amount	Per \$1,000 of Assessm't
101 102 103	\$ 2,364 2,618 1,150	\$ 394 290 332	\$ 3,063 2,891 1,735	\$ 299	20.8 17.4 10.9	.8	20.8 18.2 10.9	\$ 299	\$ c.
104 105 106 107 108	3,650 882 2,388 2,148 2,352	1,001 377 443 422 234	4,735 2,199 3,178 3,444 2,595	654	18.0 26.9 22.4 19.8 20.2	3.7	18.0 $26.9$ $22.4$ $23.5$ $20.2$	6,350	16.69
109 110 111 112 113	2,200 3,124 4,950 3,938 2,960	455 460 1,790 230 576	2,573 3,126 3,374 2,672 3,228	1,618 1,565	22.5 23.4 22.8 20.6 18.2	10.9 12.1	22.5 23.4 23.7 32.7 18.2	22,169 12,340	123.16 29.48
114 115 116 117 118	2,166 1,300 1,430 1,600 2,525	210 302 554 518 529	2,196 2,530 2,606 2,093 2,808	466	23.2 24.7 23.4 17.7 27.1	4.4	27.6 24.7 23.4 17.7 27.1	5,580	20.27
119 120 121 122 123	2,023 1,880 2,100 1,625 2,343	216 1,119 217 232 198	1,836 3,236 2,145 2,038 1,957	423	13.9 15.7 28.5 18.7 15.3	3.2	17.1 15.7 28.5 18.7 15.3	3,580	9.72
124 125 126 127 128	3,000 1,125 1,474 3,798 1,500	224 771 454 175 579	2,293 1,878 1,944 3,061 1,963	1,799	25.6 14.0 14.0 22.2 17.7	13.1	$\begin{array}{c} 25.6 \\ 14.0 \\ 14.0 \\ 35.3 \\ 17.7 \end{array}$	17,992	41.38
129 130 131 132 133	2,110 1,736 1,500 1,471 1,197	237 563 488 810 341	2,387 1,981 2,123 2,583 2,043		16.0 15.5 25.0 22.9 19.5		16.0 15.5 25.0 22.9 19.5		
134 135 136 137 138	2,136 2,200 841 3,158 900	335 1,086 208 558 177	2,494 3,267 1,765 3,043 1,287	758	29.2 31.2 14.8 37.6 17.2	9.4	29.2 31.2 14.8 47.0 17.2	5,308	26.28
139 140 141	204 1,959 898	180 278 69	1,445 2,102 1,085		20.6 26.4 15.8		20.6 26.4 15.8		
	152,772	33,699	184,808	10,714	21.2	1.2	22.4	113,954	6.5
142 143 144 145 146	6,632 4,934 2,779 3,921 1,881	2,301 1,452 1,851 411 957	4,965 6,306 4,557 3,377 3,079	4,332	16.3 21.7 20.4 25.2 44.4	9.1	30.5 21.7 20.4 34.3 44.4	5,132 9,765	19.44
147 148 149 150	1,335 266 1,700 1,033	725 781 582 520	2,072 1,075 1,324 1,854	335	22.6 36.2 42.0 41.2	3.7	26.3 36.2 42.0 41.2	3,681	62.48
	24,481	9,580	28,609	5,888	23.4	4.8	28.2	18,578	12.54
	831,165	147,528	858,767	138,103	23.4	3.8	27.2	1,029,578	12.33
	,312,618	885,473	15,196,971	2,904,270	33.9	6.6	40.5	34,944,784	17.45
21	,118,455	3,048,392	23,208,552	3,444,068	31.1	4.6	35.7	44,003,140	15.41

Includes debenture levy.
General Maintenance.
Debenture Charges.
Including any arrears.
Exclusive of those in default.
Includes both Public and Roman Catholic Separate School supporters.

Includes both Public and Roman Catholic Separate School Supportion Payment.

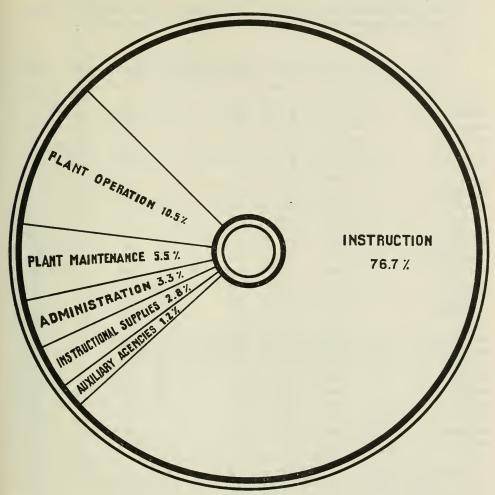
In addition, all arrears, totalling \$65,206, were paid off.

Of this, \$4,128 is for Protestant Separate School, and \$6,094 for Roman Catholic Public School. Against the latter debt there is a reserve of \$3,387.

### THE PUBLIC SCHOOLS INDEX TO TABLE 21—FINANCIAL STATISTICS, 1937

то	WNS	VILLA	GES
	- 11		25-1 0
lexandria 75	Leaside	Acton	Madoc
lliston 90	Lindsay8	Ailsa Craig 114	
lmonte 63	Listowel53	Alvinston 96	
mhersthurg 51	Little Current 126	Arkona	Marmora 4 Maxville 7
rnprior 36	Manager 121		Merrickville 7
urora55	Massey		Mildmay 7
ylmer	Matheson 137	Ayr 78	
100	Mattawa	Bancroft 50	Millbrook 8 Milverton 4
ala 136		Barry's Bay 40	Morrisburg
arrie	Merritton 58 Midland 12	Bath	Monisburg
	Milton	Beamsville 31	Neustadt 12
lind River 114		Beaverton 53	Newboro 13
othwell	Mimico	Beeton 107	Newburgh 11
racebridge 113	Mount Forest 74	Belle River 67	Newbury 13
	Modiff Porese	Bloomfield 92	Newcastle 8
rampton 19 rockville 3	Napanee 48	Blyth 95	New Hamburg
ruce Mines 134	Nesterville 138	Bobcaygeon 49	Norwich
	New Liskeard 110	Bolton 106	Norwood
ırlington 43	Newmarket 45	Bradford 48	
ache Bay 127	New Toronto 10	Braeside 113	Oil Springs 1
ampbellford 50	Niagara 84	Brighton 17	Omemee 10
apreol 119		Brussels 72	Paisley
arleton Place 33	Oakville 39	Burk's Falls 143	Point Edward
narlton 141	Orangeville 60		Port Carling 14
nesley	Orillia 4	Caledonia 16	Port Credit
inton		Cannington	Port Dalhousie
obalt	Palmerston 89		Port Dover
obourg 24	Paris 32	Cayuga 93 Chatsworth 134	Port Elgin
ochrane 108	Parkhill96	Chesterville 37	Port McNicol
ollingwood 20	Parry Sound 106	Chippawa 27	Port Perry
oniston 115	Pembroke 2	Clifford119	Port Rowan
opper Cliff 105	Penetanguishene 35	Cobden99	Port Stanley
ornwall 1	Perth 34	Colborne	Port Sydney 1
	Petrolia 57	Coldwater 104	Portsmouth
eseronto 92	Picton 46	Courtright 133	
resden 88	Port Colborne 15	Creemore 97	Richmond 1
ryden 120	Port Hope 29		Richmond Hill
undas 27	Powassan 129	Delhi9	Ripley 1
unnville 38	Prescott 52	Deloro 135	Rockcliffe Park
urham 77	Preston 14	Drayton 108	Rodney
		Dundalk 91	Rosseau 1
stview9	Rainy River 124	Dutton 69	St. Clair Beach 1
mira 69	Renfrew 22	Eganville 38	Shallow Lake 1
nglehart 125	Ridgetown 73	Elora 30	Shelburne
ssex	Riverside 25	Embro 122	South River 1
. 0 #	Rockland 67	Erieau 137	Springfield 1
prest	C+ 34	Erin 112	Stirling
ort Erie	St. Mary's 37 Seaforth 83	Exeter 11	Stoney Creek
ort Frances 103			Stouff ville
ood Mine 142			Streetsville
ananoque 44	Sioux Lookout 118	Fergus	Sundridge 1
	Smith's Falls 7 Smooth Rock Falls. 128	Finch	Sutton
eorgetown 65 oderich 31	Southampton 94	Fonthill 64	Swansea
ore Bay 130	Stayner95	Forest Hill 1	Tana 1
ravenhurst 116	Sturgeon Falls 104	Frankford	Tara
rimsby	Strathroy 49		Tavistock Teeswater
	Detacatoj	Glencoe	Thamesville
aileybury 112	Tecumseh 66	Grand Valley 101	
anover 47	Thessalon 121	Hagersville 19	Thedford
arriston 93	Thornbury 99	Hastings 76	
arrow 97	Thorold 28	Havelock 28	Tiverton
awkesbury 16	Tilbury 72	Hensall 89	Tweed
earst	Tillsonburg 41	Hepworth 128	1 weed
espeler	Timmins 101	Hilton Beach 147	Victoria Harbour
untsville 111	Trenton 13	Humberstone 6	Vienna 1
	Trout Creek 135		
gersol1 23		Iroquois 41	Wardsville 1
oquois Falls 123	Uxbridge 86	Jarvis 111	Waterdown
		Kemptville 26	Waterford
apuskasing 107	Vankleek Hill 91		Watford
earney 140			Wellington West Lorne
eewatin122	Walkerton 64	Lakefield 18	West Lorne
enora 102	Wallaceburg 30	Lanark 86	Westport
incardine 61	Waterloo 5	Lancaster 105	Wheatley
ingsville 62	Webbwood 133	Lion's Head 126	Winchester
0	Weston 26	Long Branch 4	Windermere 1
a Salle 98	Whitby 42	L'Orignal 55	Woodbridge
		Lucan 100	Woodville 1
atchford 139	Wingham 68	Lucknow 44	Wyoming 1

### PERCENTAGE ANALYSIS OF CURRENT EXPENDITURES—CITIES, 1937



Graph 6.

### CLASSIFICATION OF CURRENT EXPENDITURES

- 1. Cost of Instruction—Actual payments made for salaries and expenses of Inspectors, Supervisors, Principals and Teachers (regular, supply and special).
- 2. Cost of Instructional Supplies—Pupils' supplies, teachers' supplies, text books, library books, maps, blackboards.
- 3. Cost of Administration—Salaries, office supplies and expenses of Administrator, Secretary-Treasurer, Attendance Officers and Auditor; expenses of Principals' offices in schools; upkeep of administration buildings, legal fees, expenses for O.E.A. and Teachers' Institute, interest on temporary loans and charges for renewal.
- 4. Cost of School Plant Operation—Salaries, expenses and supplies of caretaker and engineer, fuel, gas, water, electricity, telephone, rent.
- 5. Cost of School Plant Maintenance—Repairs to buildings and care of grounds, repairs and annual additions to school furniture, bookcases, etc., care of portable buildings, temporary class rooms, insurance.
- 6. Cost of Auxiliary Agencies—Medical, dental and nursing services, student organizations, recreational equipment, transportation of pupils, school fairs and exhibitions, hot lunches, contributions, prizes, scholarships, medals, cadet corps.

### THE PUBLIC SCHOOLS

### TABLE 22—PERCENTAGE ANALYSIS OF CURRENT EXPENSES IN CITIES, AND IN TOWNS OVER 6,000 POPULATION, FOR THE YEAR 1937

Cities	Assessed Population	Teachers' Salaries	Plant Operation	Plant Main- tenance	Adminis- tration	Instruc- tional Equip- ment	Auxiliary Agencies
Toronto	648,309	77.4	9.1	6.1	4.5	2.6	.3
Hamilton	153,527	82.3	10.4	3.1	2.1	2.0	.1
Ottawa	142,852	80.8	8.4	4.1	1.7	2.4	2.6
Windsor	102,704	69.4	14.7	6.2	2.9	3.4	3.4
London	74,281	70.7	10.8	7.8	2.5	3.9	4.3
Kitchener	32,550	76.5	11.1	4.4	2.3	4.1	1.6
Brantford	31,282	75.7	12.5	6.1	1.4	4.2	.1
St. Catharines	27,426	71.7	11.8	5.6	2.4	4.4	3.1
Sudbury	26,315	73.6	14.1	4.7	2.4	3.2	2.0
Oshawa	24,844	76.2	14.4	5.4	1.9	1.7	.4
Kingston	24,331	70.8	12.9	9.2	2.4	2.9	1.8
Fort William	24,020	78.7	13,3	2.0	1.4	2.2	2.4
Sault Ste. Marie	23,627	72.1	16.4	3.8	2.7	2.5	2.5
Peterborough	23,450	73.8	11.0	6.5	1.8	3.3	3.6
Guelph	21,333	73.5	13.3	6.4	3.3	3.3	.2
Port Arthur	20,302	69.8	15.1	8.2	2.3	3.7	.9
Niagara Falls	18,747	74.2	12.6	6.6	2.3	1.4	2.9
Sarnia	18,155	75.7	13.5	4.4	2.7	3.2	.5
Stratford	17,615	76.3	15.6	3,3	1.5	2.6	.7
St. Thomas	16,208	73.6	13.1	6.9	2.1	3.6	.7
Chatham	16,153	80.8	8.2	3.1	2.3	3.3	2.3
North Bay	15,287	73.3	21.4	2.1	1.4	1.8	
Belleville	14,560	73.1	12.4	4.8	2.9	3.9	2.9
Galt	14,410	74.7	13.0	3.9	1.8	3.0	3.6
Owen Sound	13,118	71.9	12.5	3.6	2.2	2.8	7.0
Woodstock	11,382	74.6	15.1	2.8	2.0	5.1	.4
Welland	10,924	70.9	16.0	5.8	2.3	3.0	2.0
Averages		76.7	10.5	5.5	3.3	2.8	1.2
Towns							
Cornwall	12,870	82.1	14.2	.7	2.0	.7	.3
Pembroke	10,364	65.3	16.0	9.5	2.6	3.7	2.9
Brockville	9,983	68.5	13.5	7.5	.8	7.4	2.3
Orillia	8,704	69.5	17.3	7.5	2.0	3.2	.5
Waterloo	8,425	72.7	11.2	8.0	1.6	3.8	2.7
Barrie	8,135	70.0	16.7	5.2	1.5	4.2	2.4
Smith's Falls	7,626	80.2	11.8	3.3	2.0	.8	1.9
Lindsay	7,294	80.6	14.6	2.3	1.0	1.3	.2
Eastview	7,275	65.0	20.4	7.8	2.0	3.5	1.3
New Toronto	7,095	67.0	15.4	6.9	3.0	3.9	3.8
Mimico	6,940	74.5	12.6	5.5	2.3	1.4	3.7
Midland	6,669	71.2	16.1	4.0	4.2	2.6	1.9
Trenton	6,480	73.6	17.1	2.9	1.7	2.2	2.5
Preston	6,415	75.5	13.8	5.0	1.3	2.7	1.7
Port Colborne	6,348	74.4	10.1	7.0	4.5	4.0	
Averages		72.6	14.2	5.8	2.2	3.2	2.0

THE PUBLIC SCHOOLS
TABLE 23—CONSOLIDATED SCHOOLS, 1937-38

No. in Con- tinuation School		25.5 44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	304
No. in Fifth Class	8 2 6 7 8 8 8	0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	126
Attendance Bificiency Percentage	94.2 87.1 87.1 80.5 80.5 92.1 89.7 89.7 89.9 87.0 87.0	88.8 94.3 89.5 90.0 87.7 90.0 87.7 96.7 96.7 96.7 96.7 97.8 97.7 98.6 98.6 98.6 98.6 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7	89.94
Average Attend- ance	64 48 48 116 . 68 75 269 68 108 251 56 267 267	110 93 94 170 64 131 23 48 48 67 155 98 172 280 70 36	3,125
No. Con-	20 59 32 32 50 83 83 15 15 100 100	44 44 44 74 48 89 89 89 89 89 89 89 89	1,536
Burol- ment	85 59 125 97 97 320 83 142 79 79 305 28	129 100 100 121 211 69 69 154 35 57 57 172 172 172 172 172 172 172 172 172 17	3,834
Grade of Certificate I II	ଳ ପ ପରସେଷୟଳ ୫	0101 01 00 01 0	44
Grade of Certificat	1 Q Q H Q R H R R R	0101 1101410110000 4111	64
No. of Teachers	∞ ∞ ∞ ∞ ∞ ∞ ∞ ∞ ≈ ~ ~ ~ 4	44 8537-100589 600	108
Assess- ment	\$101,090 99,420 64,215 97,081 87,119 4,848,095 33,153 513,172 441,750 146,700 615,800 57,430 437,500	239,837 87,495 175,013 483,372 216,198 322,600 274,675 222,440 222,40 722,40 722,40 723,60 799,288 1,524,584 33,690 30,835	12,318,722
Sections	4, 11, 12 Barwick.  1, 2 Burriss.  2, Wallbridge, I Henvey.  2, 4 Dack, Charlton Town.  7, 9 Stamford.  2, 4, 5 Glamorgan.  3, 15 Nepean.  5, 6 Grantham.  Iludson Township.  5 Etobicoke (3 schools).  1, 5 Armour.  6½, 7 Cuelph.  4, 5, 6 Front of Yonee. 19 Front.	. 4 3 - 0 1 - 0 0 0 4 5 6 - 5 8 5 1	Totals
County or District	Rainy River Rainy River Parry Sound Temiskaming Thunder Bay Welland Haliburton Carleton Lincoln Temiskaming York Parry Sound Wellington Leeds.	sland	
Consolidated	Barwick Burriss Byug Inlet Charlton Dorion Falls View Gooderham Grant Grant Hunbor Heights. Katrine Madlorytown	Mindemoya Morley Nipigon Nobel Pointe au Baril Quibell Savard Savard Tamworth Tweed Wellington West Cuilford	
N. o.	1	115 116 117 117 118 119 119 119 122 222 223 224 224 225 225 226 227 227 228 228 228 228 228 228 228 228	

\*Average attendance. †Students use regular public transportation facilities. ‡No data,

THE PUBLIC SCHOOLS

TABLE 23—CONSOLIDATED SCHOOLS, 1937-38

			Ő	Cost of Operation	u(				Legislative Grants	rants		Cost per Pupil of Average Attendance	er Pupil of Av Attendanee	erage
o'N	Consolidated School	Teachers' Salaries	Transportation	Total Current	Capital Charges	Gross	General	Transportation	Special on Salaries and Equipment	Fifth Class and Con- tinuation School	Total	To	To Govern- ment	Total
		o 89	99	99	υ «»	O	υ 99	υ •÷	69	o	69	99	66	96
_	Barwick	2,619.00	0.	38.	38.	36.	-	0.0	-	0.	-		-	98.46
7	Burriss	2,550.00	2,327.00	6,176.25	1,452.98	7,629.23	2,189.07	1,501.26	300.00	318.50	4,308.83	68.81	89.30	158.11
ಣ	Byng Inlet	3,200.00	882.00	6,226.95	348.74	6,575.70	3,667.18	529,29	300.00	188.96	4,685.43	16.25	40.27	56,52
4	Charlton	2,400.00	1,741.25	6,061.32	:	6,061.32	1,498.58	1,016.10	300.00	329.14	3,143.82	42.74	46.07	88.81
10	Dorion	2,550.00	2,251.00	6,776.14	983.71	7,759.85	2,580.86	1,377.60	300.00	152.32	4,410.78	44.65	58.81	103.46
9	Falls View	10,414.10	1,756.00	20,775.05	:	20,775.05	2,524.24	526.80	800.00		3,851.04	62.82	14.29	77.11
-1	Gooderham	2,000.00	2,224.20	5,103.85	:	5,103.85	1,520.96	1,334.52	300.00	233.76	3,389.24	25.14	49.69	74,83
00	Grant	3,900.00	335,50	7,881.23	6,192.49	14,073.72	1,163.24	201.38	300.00		1,664.62	114.98	15,42	130,40
0	Grantham	7,708.58	1,000.00	13,543.35	:	13,543.35	3,305.81	300.00	800.00	159.75	4,565.56	35.84	18.22	54.06
01	Hudson	1,500.00	2,013.89	4,705.77		4,705.77	629.43	1,136.85	213.75		1,980.03	48,34	35.11	83,45
=	Humber Heights	7,126.00	1,161.00	11,424.76	6,210.41	17,635.17	3,024.62	350.03	700.00		4,074.65	50.81	15.26	66.07
12	Katrine	1,050.00	830.27	2,153.04	:	2,153.04	443,48	498.16	107.08		1,048.72	55.35	52.57	107.92
13	Macdonald	4,654.83	99.35	7,672.02		7,672.02	1,476.87	29.81	400.00		1,906.68	55.51	18,36	73.87
14	Mallorytown	4,530.00	2,085.00	9,211.60	2,615.55	11,827.15	567.24	957.08	447.20	1,399.72	3,371.24	77.18	30.77	107 95
15	Mindemoya	3,790.00	1,086.40	6,877.53	1,541.00	8,418.53	1,401.42	615.84	400.00	1,355.90	3,773.16	50.77	39.99	90.76
16	Morley	2,300.00	2,923.29	6,407.57	1,220.52	7,628.09	1,140.29	1,753.97	300.00		3,194.26	46.99	33,85	80.84
17	Nipigon	5,762.50	1,806.05	11,920.28	1,887.86	13,808.14	1,480.36	1,083.63	520.00	1,043.83	4,127.82	57.04	24.32	81.36
18	Nobel	2,347.40	2,700.00	6,530.27	805.86	7,336.15	1,019.86	1,529.35	200.00	213.76	2,962.97	67.82	45.95	113.77
19	North Mountain	7,050.00	3,618.20	13,874.65	4,383.28	18,257.93	904.66	1,649.46	700.00		3,254.12	114.10	24.74	138.84
50	Pointe au Baril	1,100.00	1,464.95	3,768.42	596.39	4,364.81	249.37	878.97	100.00		1,228.34	137,44	53.82	191.26
21	Quibell	1,500.00	2,316.25	4,465.20	178.30	4,643.50	1,238.70	1,389.75	200.00	226.40	3,054.85	32.94	63.35	96.29
22	Savard	1,865.00	3,772.62	11,049.82	1,002.62	12,052.44	1,696.67	2,263.57	200.00	246.26	4,406.50	113.41	65,35	178.76
23	Sundridge	4,950.00	955.50	7,698.07	:	7,698.07	1,462.89	645.91	500.00	1,395.87	4,004.67	25.79	23.79	49.58
2.1	Tamworth	2,500.00	2,215.50	5,414.20	:	5,414.20	916.02	1,383.00	300.00	1,546.24	4,145,26	12,94	42.28	55.22
25	Tweed	5,240.00	4,173.30	10,991.20	871.80	11,863.00	1,390.97	1,445.04	00.009		3,436.01	49.00	19.98	68.98
26	Wellington	9,561.00	3,768.00	17,969.55	8,256.00	26,225.55	1,097.77	1,236.30	900.00	757.30	3,991.37	79.38	14.24	93.62
27	West Guilford	1,400.00	1,350.00	3,203.42	:	3,203.42	1,246.12	810.00	200.00	150.98	2,407.10	11.32	34,23	45.55
28	Wilberforce	1,700.00	392.00	2,392.05	:	2,392.05	1,700.00	235.20	200.00	179.52	2,314.52	2.14	63.84	65.98
	Totals	107,268,41	47.379.28	225.011.77	40.145.83	265 157 60	43.742.01	27 193 87	10 888 03	10 218 21	92 049 19	55 54	38 71	94.31
										A		-0.00		3

### THE PUBLIC SCHOOLS TABLE 24—LOW ATTENDANCE SCHOOLS, CALENDAR YEAR, 1937 (A) Distribution

					Avera	ge Atten	dance				
Counties	1	2	3	4	5	6	7	8	9	10	75-4-1
	1								9		Total
Addington				1		1		2		2	6
Brant										1	1
Bruce	1		2	1	5	$\frac{2}{1}$	6	$\frac{6}{2}$	7 3	13 4	43 13
Dufferin				3	5	2	1	5	1	5	22
1						1		3	4	4	12
Durham				1			2	5	2	5	15
-					1	1	1	4	3	4	14
Essex			5	6	6	7	6	6	6	8	1 50
					1	1	1	2	3	4	12
Grenville			1	2		3	3	5	6	3	23
		1		2	1	7	3	$\frac{2}{2}$	5 2	6	27 6
					2	6	3	3		4	18
Halton								1	1		2
					2	3	2	2	2	10	21
				2	3	5	4	5	5	11	35
		1			1	2	7	1 3	4	4	1 22
		2	4	1	5	8	1	6	9	6	42
Leeds						2	1	5	6	4	18
					1	1	2	1	. 6	3	14
Lincoln				2	4	2	6	4	9	3	4 36
							2	5	5	1	13
								1		1	2
Ontario			1		3	1	3	1			9
						1	2	2	1	1 3	6
Perth						1	1	1	4	1	8
			2	4	3	1	1	3	3	3	20
Precott						3		2	2	3	10
Prince Edward Renfrew	1			1	1 1	5	2 4	2 4	3 6	2 5	16 22
Russell				1					2	1	4
Simcoe					2	1	1	4	5	9	22
							2	1	3	5	11
Victoria			1	1	2	3	8	3	7	10 1	35 2
Waterloo									1		1
					1			3	7	6	17
Wentworth									1	1	2
York	'		• • • • • •	• • • • • •				• • • • • •		1	1
Totals	2	4	16	28	50	73	79	109	135	167	663
Districts											
					1	1	1	1	1	3	8
					1			1	2	1	5
				1				1		3	5
Manitoulin						3	3 6	1	1	1	9 13
Muskoka Nipissing		1			$\frac{2}{2}$			3	4 2	1 1	7
Parry Sound		1		2	4	4	5	8	5	6	35
Rainy River						5	1	3	2	2	13
Sudbury			1		1	2	2	4 2	6	3 2	17 7
Timiskaming Thunder Bay					1	1	1	3	3	1	10
Totals		2	1	3	10	17	19	27	26	24	129
Grand Totals	2	6	17	31	60	90	98	136	161	191	792

### THE PUBLIC SCHOOLS

# TABLE 24—LOW ATTENDANCE SCHOOLS, CALENDAR YEAR, 1937

### (B) Costs

### (I) Schools with an Average Attendance of 1 to 5

	for all Rural Schools in the Province	
(in cents) c only)	Total	87.42 85.92 87.20
Cost per Pupil-day (in cents) (Gen. maintenance only)	To Gov't.	28.79 45.80 31.22
Cost per (Gen. r	To Local (Net)	58.63 40.12 55.98
	Legisla- tive Share	\$ 22,771 6,036 28,807
ie Vear	Total	\$ 69,328 11,476 80,804
Current Disbursements for the Year	Capital Charges	\$ 74 477
rent Disburs	Capital Outlays	\$ 194 78 272
Cur	General Main- tenance	\$ 69,134 11,324 80,458
Average	Daily Attend- ance per School	4.20 4.31 4.22
	Pupil- Days Attended	79,085 13,179 92,264
	Number of Schools	100
		Counties Districts

### (II) Schools with an Average Attendance of 6 to 10

46.25	53.57	49.20	
<u> </u>	32 43	14,62	
37 90	21.14	34,58	
\$ 100 001	57.884	159,919	
46.7.261	96.473	561,854	
900	7,000	1,086	
91 650	872	22,552	
439 G15	95.601	538,216	
0 27	× 19	8.40	
015 464	178 470	1,093,934	
562	113	929	
	Districts	Province	

### (III) Schools with an Average Attendance of 1 to 10

\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	* 994,549 7.81 51 100,040,040 7.71 100,040 7.70 611,186,198 7.79												
994,549 7,81 511,749 21,874 1,086 534,709 124,806 38,91 12,55 51,46 191,649 7,71 106,925 950 74 107,949 63,920 22,44 33,35 55,79 13,86 198 7,79 618,674 22,824 1,160 642,658 188,726 36,25 15,91 52,16	994,549         7.81         511,749         21,874         1,086         534,709         124,806         38.91         12.55         51.46           191,649         7.71         106,925         950         74         107,949         63,920         22.44         33.35         55.79           1,186,198         7.79         618,674         22,824         1,160         642,658         188,726         36.25         15.91         52.16				66	66	65	65	64				
191,649 7.71 106,925 950 74 107,949 63,920 22.44 33.35 55.79 1186 198 7 79 618,674 22,824 1.160 642,658 188,726 36.25 15.91 52.16	191,619         7,71         106,925         950         74         107,949         63,920         22.44         33,35         55.79           1,186,198         7,79         618,674         22,824         1,160         642,658         188,726         36,25         15,91         52,16	663	994,549	7.81	511,749	21,874	1,086	534,709	124,806	38.91	12,55	51.46	25.3
1 186 198 7 7 9 618 674 22.824 1.160 642 658 188 726 36.25 15.91 52.16	1,186,198 7,79 618,674 22,824 1,160 642,658 188,726 36,25 15,91 52,16	129	191,619	7.71	106,925	950	7.4	107,949	63,920	22,44	33,35	55,79	29.4
		792*	1.186,198	7.79	618,674	22,824	1,160	642,658	188,726	36,25	15.91	52,16	26.0

\*This figure is a decrease of 73 schools over last year.

### THE PUBLIC SCHOOLS TABLE 25—PROTESTANT SEPARATE SCHOOLS, 1937

	S.S. 1 Grattan (Renfrew)	S.S. 2 Hagarty (Renfrew)	L'Orignal Village (Prescott)	Penetanguishene Town (Simcoe)	Totals
Number of Schools	1	1	1	6	5
	.; 69		ં છ		%
Receives:  Balances from 1936  Legislative Grants  School District Levy	431.24 141.37 616.25 91.18	12.39 282.38 294.37 259.01	355.28 201.15 600.00 2.25	1,130.04 8,292.87 2,947.84	798.91 1,754.94 9,803.49 3,300.28
Totals.	1,280.04	848.15	1,158.68	12,370.75	15,657.62
Expenditures: Teachers' Salaries Other Current	502.40 205.46	522,40 131,11	600.00	5,616.82 2,597.08	7,241.62 3,108.02
Total Current	707.86	653.51	774.37	8,213.90	10,349.64
Capital OutlaysRepayment of Temporary Loans	200.00	188.00		3,155.78 17.41	3,355.78
Totals	907.86	841.51	774.37	11,387.09	13,910.83
Balance on hand, December 31, 1937	372.18	6.64	384.31	983.66	1,746.79
Cost of Education per Pupil-Day (in cents)	15.4	21.5	59.2	31.1	29.3(Av.)
*Тилсния»: Male Female. Certificates Regular Salaries.	1 II \$500.00	1 I \$550.00	1 I \$600.00	1 4 2(I); 2(II); 1(K-P) \$4,920.00	1 7 4(I); 3(II); 1(K-P) \$6,570.00
*Puprus: Total Enrolment.  Boys. Girls.  Average Attendance.	33 17 16 25	19 8 11 16	© 10 44 17	185 100 85 157	246 130 116 205

\*School Year, 1937-38.

## THE ROMAN CATHOLIC SEPARATE SCHOOLS TABLE 26—AGE-GRADE DISTRIBUTION, MAY, 1938 (A) ALL SCHOOLS

	Age	Aver-		1.29	}1.07	.87	.75	16. {	98. {	77. {	77. {	3.92		16. {	
	ent of rades	By		1.34	1.07	.81	89.	.89	89	17.82	.75	.91		.91 16.	
	Average Increment of Between Grades			Grade I to Grade 11	Grade 11 to Grade 111	Grade III to Grade IV	Grade 1V to Grade V	Grade V to Grade VI	Grade VI to Grade VII	Grade VII to Grade VIII	Grade VIII to Grade 1X	Grade 1X to Grade X		Аустаке	
	e Age	Aver-	7.67	8.96	10.03	10.90	111.65	12.56	313.42	14.18	14.95	15.87	13.28		
	Average Age	By	7.76	9.10	$\frac{10.17}{9.87}$	$\frac{11.14}{10.68}$	11.82	12.75 12.37	13.57 13.26	14.28 14.10	15.03	15.95 15.82	13.46 12.87		
-	Per-	Enrol- ment	19.55	13.68	9.98	9.20	12.77	11.51	9.97	8.49	2.41	1.59	. S.		
-		Grade	20043	14024	10225	9.132	\\ 13088	\$11798	10221	8703	3 2466	1633	872		
	1000		10-106 9637	7191	5352	4833 4599	6606	5989 5809	5086	4141	978	703	613 259	51898 50607	19 102505
	19 yrs					1: 1	: :			1 :	- 03	6.0		= x	19
1	o o		::		::	::	::			117	15	31	2 :	59 36	95
	17		H :	. 1	:-	:	1 2	11	çi **	40	52	86	∞ <del></del>	220 191	=======================================
	91	yrs		1	4-1	10	10	68 23	190	324	147 269	212	47	1026	1857
-	r.	years	· .	40	24 8	69	149	321	570 380	798 712	258 405	205 343	119	2522 2145	4667 1857 411
-	2	D)	12	28 14	70	192	498 336	781 531	1054 913	1109 1271	312	145	103	4364	8191
	2	vears	43	80 46	190	360	819 576	1292 1014	1382 1479	1167 1498	166 273	18	38	5598 5243	10841
	0.1	years	77	162	323 192	683 531	1211 1130	1546 1572	1281 1536	545 703	31	-21	94	5954 5903	11857
	=	<u>×</u> _	149	377	672 544	964	1556 1636	1341 1626	544	82	9.6		67	5757	0950 11986 11721 12058 11495 11857 10841
	9	years	348	869 634	$\frac{1189}{1094}$	1336 1324	1671 1819	593 822	40				51 26	6098 5960	12058
	c	years	785 584	1639 1440	1775 1699	945 1201	653 869	36					28 16	5862 5859	11721
	0	years	2010 1760	2621 2648	1040	266 433	31	5:					11	5970 6016	11986
	1	years	3941 3802	1356 1645	120	13								5369 5581	10950
	9	years	2800	45 91	:									2846 3035	466 5881 1
	tu	years	232 215	12										239	1
	Un-	der 5 yrs.	13	: :		::		:::		::	::			7.3	10
			Boys Girls	Boys	Boys Girls	Boys Cirls	Boys Girls	Boys Girls	Boys	Boys	Boys Girls	Boys Girls	Boys Girls	Boys	
			GRADE I	GRADE II	GRADE 111.	GRADE IV.	GRADE V	GRADE VI.	GRADIS VII	GRADEVIII	GRADE IX.	GRADE X	Jr. Auxiliary Classes	Torals By Sexes	Grand Totals

Heavy lines denote ideal age apread for each grade. As the school census is taken near the end of the school year, the ideal age spread has been moved forward one year from that shown in former issues.

(B) URBAN SCHOOLS

Totals by Grades	14,059	10,727	767,7	7,421	10,242	9,325	8,242	7,123	1,894	1,301	848		
Totals	7,183	5,397	4,0.15 3,752	3,787	5,192 5,050	4,731	4,155	3,431	1,132	600	597 251	39,880 39,099	626'82
years and over				-				- :	m :	\$1 PD		∞ <del>4</del>	12
18 years								0.80	13	29 18	C1 :	25	78
17 years	1	- :			5-	3	21	35	32 40	92 94	∞	189	330
16 years		-	ಣ⊶	10	20	61 20	160	27.4	121	180	47	876 660	1,536
15 years	m :	00 03	10	53 18	1111	265 138	485 305	677 593	202 315	179 275	119	2,116	3,862
14 years	400	13	47	141	394 285	627 429	833 733	945	250 354	1118	100	3,472	6,517
13 years	15	30	118	246	597 412	929 783	1,115	969	122	15	77	1,248	8,323
12 years	25 19	85 51	205 126	481 400	893 858	1,200	1,018	452 566	19 46		90	4,499	9,046
11 years	1987	229	478 390	739	1,201	1,108 1,293	454 555	68 53	-00		65 29	4,403	8,742
10 years	177 85	564 438	874 843	1,093	1,378	499 685	38				49 25	1,673	9,245
9 years	414 339	1,176	1,368 1,318	184 986	572 733	33.23					27 16	4,374	8,879
8 years	1,295	2,087 2,125	879 917	233 370	21 26						116	1,526	9,191
7 years	2,952 2,777	1,150	50.00	96								4,163	8,441
6 years	2,106	37 80										2,143	4,475
5 years	129 146	12.7										136 158	294
Under 5 years	1 2											11	œ
	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI\(\text{Roys}\)	GRADE VII	GRADE VIII	GRADE IX. (Boys	GRADE X. Girls	JR. AUXILIARY CLASSES Boys	TOTALS BY SEXES	GRAND TOTALS

(C) RURAL SCHOOLS

Totals by Grades	5,984	3,297	2,428	2,011	2,846	2,473	1,979	1,580	572	332	2.1		
Totals	3,223	1,794	1,307	1,046	1,414	1,258	931	710 870	216 356	103	8.0	12,018 11,508	23,526
19 years and over									-	m m		55 <del>-1</del>	1-
18 years								C1	6122	0112-		911	17
17 years							25 61	0.00	27 85	10 38		31 50	<u>x</u>
16 years		€1 :	- :		e1 —	1-10	30	50	26 48	55.23		150	321
15 years	C1 :		70.64	16	38	56 25	75	121	56 90	26 68	-	406 399	805
14 years	∞ e₁	15 10	8001	51 15	101	154 102	221 180	22.1 261	62	27 43	es :	892 782	1,674
13 years	27 Z	35 16	72 26	114	222 164	363 231	267 304	198 268	44 87	24	40	1,350 1,168	2,518
12 years	52 18	77 36	118 66	202	318 272	346	233	93	12 16	-	7-	1,455	2,811
11 years	88 52	148 98	194 154	225 196	355 392	2333 3333	90	17 28	0.5		C3 C3	1,354	2,753
10 years	171 95	305 196	315 251	243 291	293 397	94	17				- 12	1,425	2,813
9 years	371 245	463 364	407	161 212	81 136	16					- :	1,488	2,842
8 years	715 545	534 523	161 213	833	-10:	. 61						1,444	2,795
7 years	989	206 248	10 26	- 4					1			1,206	2,509
6 years	694 692	∞ <u>Π</u>	- :						: :			703	1,406
5 years	103 69											103	172
Under 5 years	2 :											2	C1
- 62	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI	GRADE VII	GRADE VIII	GRADE 1X(Boys	GRADE X(Boys Girls	JR. AUXILIARY CLASSES (Boys Girls	TOTALS BY SEXES	GRAND TOTALS

### THE ROMAN CATHOLIC SEPARATE SCHOOLS

TABLE 27—TEACHERS' SALARIES, 1937-38

		Ma	ale			Fen	nale	
Rural Schools	No. of Teachers	Highest	Lowest	Average	No. of Teachers	Highest	Lowest	Average
In Counties		s	\$	\$		\$	8	\$
Addington					2	800	600	700
Bruce	1	700	700	700	14	1,000	550	762
Carleton	2	700	600	650	19	1,000	350	676
Dundas					1	675	675	675
Essex	1	750	750	750	53	1,200	425	753
Frontenac	2	850	750	800	8	850	500	600
Glengarry	3	800	525	658	23	1,600	500	800
Grey	1	487	487	487	7	1,000	500	603
Hastings	1	700	700	700	6	1,050	600	716
Huron					9	1,200	500	812
Kent	4	950	650	862	10	900	500	730
Lambton					2	600	600	600
Lanark					3	700	500	600
Leeds					2	500	450	475
Lennox					1	600	600	600
Middlesex					5	550	500	530
Norfolk		• • • • • • • •			3	700	600	633
Northumberland					5	650	500	540
Ontario	1	700	700	700	1	600	600	600
Peel					1	675	675	675
Perth					17	1,300	500	891
Peterborough	1	625	625	625	4	600	550	562
Prescott	14	1,100	600	742	36	700	350	552
Renfrew	2	750	640	695	57	1,100	460	672
Russell	6	950	525	662	70	1,000	200	586
Simcoe	1	900 800	900	900 800	8 16	850	550	725 751
Stormont	1 1	600	800 600	600	2	1,200 750	475 600	675
Victoria	1	600	600	600	14	800	630	709
Waterloo					7	800	350	600
Wellington					3	850	425	566
York	2	1,425	1,425	1,425	49	1,140	500	975
10fk		1,420	1,420	1,420	43	1,110		3.0
Totals and Averages	44	1,425	487	754	458	1,600	200	708
In Districts								
Algoma		1.000		000	3	1,000	900	933
Cochrane	23	1,300	600	823	65	1,000	600	751
Kenora	1	1,000	1,000	1,000				000
Manitoulin	1	900	900	900	1	800	800	800
Muskoka	10	850 800	550 600	700	47	1,000	500	710
Nipissing	10	850	850	850	2	800	700	750
	23	1,400	600	816	43	1,200	600	858
Sudbury	3	800	750	792	17	1,200	500	812
Thunder Bay					1	800	800	800
Totals and Averages	64	1,300	550	811	179	1,200	500	775
All Rural Schools	108	1,425	487	788	637	1,600	200	727
Cities	149	2,375	600	914	1,274	1,400	380	727
Towns	149	1,650	500	943	645	1,500	350	755
Villages	2	900	600	750	48	1,450	500	773
All Urban Schools		2,375	500	920	1,967	1,500	350	737
For the Province	313	2,375	487	875	2,604	1,600	200	735
Increase for the Year.				. 17				. 6

### THE ROMAN CATHOLIC TABLE 28—FINANCIAL

	Assess- A	No, of	А. D. А.в	А. D. А. в	Major S	ources of R	eceipts
Rural Schools	ment per Class- room	Class- rooms	for the Calendar Year	Per Class- room	School District Levy c	County Grant	Legisla- tive Grant
							-
In Counties	8	_			\$	\$	\$
1 Middlesex	150,700	5	59	12	2,986	89	617
2 Huron	144,878	9	170	19	4,914	892	2,663
3 Kent 4 Lambton	142,391 138,167	14	355 33	25 17	12,498 1,406	878	3,191 360
5 Norfolk	135,400	3	105	35	2,822	250	730
6 Peel	129,117	1	4	4	648	19	165
7 Victoria	122,801	3	56	19	1,831	165	635
8 Wellington	117,935	7	113	16	3,335	186	1,372
9 Bruce	115,181	15	448	30	10,267	596	4,083
10 Waterloo	107,249	14	399	28	6,637	592	3,403
11 Perth	107,137	16	301	19	9,342	1,213	5,230
12 Essex	104,383	54	1,449	27	36,155	5,225	14,018
13 Ontario	92,821	2	54	27	605	123	556
14 Peterborough	92,811	5	78	16	2,014	174	976
15 Simcoe	90,264	9	247	27	7,651	461	2,892
16 Frontenac	85,305	9	142	16	5,719	294	2,267
17 Grey	67,141	8	95	12	3,588	294	1,549
18 Prescott	66,393	79	1,954	25	41,405	2,729	15,456
19 Russell	63,412	77	2,001	26	34,648	2,059	15,603
20 Lanark	62,405	3	38	13	1,395	73	821
21 Addington	60,881	2	46	23	1,200	147	633
22 Hastings	60,005	7	150	21	3,961	189	1,990
23 Northumberland	58,703	5	55	11	2,647	206	1,217
24 Carleton	56,264	43	1,245	29	25,801	452	13,650
25 Dundas	51,546	1	28	28	561	55	250
26 Renfrew	49,491	28	586	21	8,650	1,308	13,272
	47,609	49	1,779	36	6,860	1,269	37,411
28 Stormont	26,864 25,690	16 1	475 10	30	7,321 227	661 54	5,802 407
30 Leeds	23,003	2	20	10			601
31 Glengarry	23,003	2 25	571	10 23	533	859	9,066
32 Wentworth	17,718	4	73	18	13,508 505	185	1,483
Totals and Averages	73,975	518	13,139	25	261,640	21,705	162,279
In Districts							
1 Thunder Bay	45,045	1	25	25	670		355
2 Manitoulin	35,830	2	63	32	950		
3 Cochrane	30,181	88	2,769	33	65,760		79,240
4 Rainy River	27,101	3	60	20	1,542		1,882
5 Temiskaming	26,837	47	1,304	28	32,719		42,983
6 Kenora	20,000	1	28	28	325		976
7 Nipissing	19,017	57	1,592	28	16,139		37,549
8 Sudbury	16,858	61	1,767	29	32,366		46,155
9 Parry Sound	16,750	1	20	20	265		395
10 Muskoka	15,200 7,292	2 3	55 77	28 26	216 995		1,780 3,144
Totals and Averages	23,747	266	7,760	29	151,947		214,459
Totals and Averages, All Rural	56,353	784	20,899	27	413,587	21,705	376,738

### SEPARATE SCHOOLS

### STATISTICS, 1937

	Disburser	nents	Cost per	Pupil-Da	y (cents)	Debenture In	debtedness	Other Inde	btedness
	Current E	Capital F	Current	Capital	Total	Amount	Per \$1,000 of Assess- ment	Amount	Per \$1,000 of Assess- ment
1	\$ 2 475	8	21 6		21.6	\$	\$ c.	\$	\$ c.
2	3,475 11,127		31.6 36.0		31.6 36.0			1,350	1.04
3	16,264	3,313	24.5	5.0	29.5	1,194	.60	1,550	1.04
4	1,847		29.6		29.6				
5	3,320		16.9		16.9				
6	863		128.6		128.6				
7 8	2,657 5,067		26.2 23.6		26.2 23.6				
9	15,100	399	20.4	.5	20.9	1,471	.85	187 1,330	.23
10	13,754		18.2		18.2	1,411	.00	446	.30
11	19,373	1,582	36.1	2.9	39.0	13,220	7.71	6,920	4.04
12	57,380	2,691g	21.0	1.0g		60,579	10.75	3,838	.60
13	1,805		18.6		18.6				
14 15	4,327	1.041	29,0		29.0				
16	9,306 8,309	1,241	20.3 32.6	2.7	23.0 32.6	6,771	8.33	720	.89
17	5,646		31.9		31.9				
18	57,038	1,746	15.5	.5	16.0	9,300	1.77	4,591	.88
19	54,103	1,937	14.4	.5	14.9	4,200	.86	200	.04
20	2,177		29.6		29.6				
21	1,677		19.2		19.2			• • • • • • • • • • • • • • • • • • • •	
22 23	5,781 4,127		20.7 39.3		20.7 39.3		• • • • • • • • • •		
24	36,291	2,851	15.5	1,2	16.7	18,303	7.57	400	.17
25	724		13.7		13.7				
26	27,399	1,459	24.0	1.3	25.3	13,247	9.56	10,582	7.64
27	83,733	38,426	24.9	11.4	36.3	408,650	175.17	12,870	5.52
28 29	15,784	1,008	17.7	1.1	18.8	2,508	5.84	991	2.31
30	704 1,080		36.9 28.5		36.9 28.5				• • • • • • • • •
31	28,012	1,492	28.6	1.5	30.1	8,933	16.28	3,024	5,51
32	2,012		14.5		14.5			284	4.01
_		I				[ <del></del>			
	500,262	58,145	20.4	2.7	23,1	548,376	14.31	47,733	1.24
1	1,169		24.4		24.4			110	2.44
2	1,021		22.8		22.8		• • • • • • • • • • • • • • • • • • • •		
3	113,552 3,018	14,166 290	21.6	2.7	24.3	136,415	51.36	15,585	5.87
5	63,380	9,881	25.6	4.0	29.1	994 89,443	12.23 70.91	12,110	9.60
6	1,172	211	22.4	4.0	26.4	1,883	94.15	12,110	9.00
7	51,861	2,489	17.0	.8	17.8	11,797	10.88	14,435	13.32
8	76,331	3,795	24.8	1.2	26.0	91,537	89.02	21,190	20.61
9	706		18.3		18.3				
10 11	1,808 3,362		17.0		17.0 26.5			500	16.45
	3,302	• • • • • • • • • • • • • • • • • • • •	26.5		20.5				
	317,380	30,832	22.1	2.2	24.2	332,069	54.16	63,930	10.45
	817,642	88,977	21.0	2.5	23.5	880,445	19.93	111,663	2.52

### THE ROMAN CATHOLIC TABLE 28—FINANCIAL

						IADLE 20	-FINA	NOIAL
		ment per	Class-	for the	per	Major So	urces of R	eceipts
Cities	Counties	Class- room	rooms	Calendar Year	Class- room	School District Levy c	County Grant	Legis- lative Grant
		\$				8	8	\$
1 Transito	York	160,557	304	11.054	36	603,212		24,029
1 Toronto	Welland	157,430	11	442	40	16,741		1,064
3 St. Catharines	Lincoln	143,399	21	710	34	31,245		1,842
4 St. Thomas	Elgin	141,541	7	229	33	7,876		374
5 Chatham	Kent	132,748	14	550	39	13,818		847
6 Kitchener	Waterloo	124,841	45	1,657	37	67,053		3,734
7 Kingston	Frontenac	113,319	24	801	33	25,521		2,133
8 Owen Sound	Grey	111,909	4	147	37	4,603		266
9 Windsor	Essex	111,760	180	6,518	36	189,430		8,636
10 London	Middlesex	111,661	54	1,475	27	54,259		3,287
11 Stratford	Perth	107,398	13	411	32	16,530		814
12 Sarnia	Lambton	107,224	15	465	31	17,775		1,006
13 Hamilton	Wentworth	100,958	134	4,380	33	155,366		12,574 3,875
14 Brantford	Brant	94,591 93,837	17 21	664 841	40	25,675 25,305		1,960
15 Guelph	Carleton	89,552	335	10,853	32	433,788		55,076
17 Belleville	Hastings	87,469	13	410	31	13,246		1,104
18 Woodstock	Oxford	87,189	4	135	34	2,993		270
19 Peterborough	Peterborough	83,300	31	930	30	31,777		2,440
20 Oshawa	Ontario	74,989	11	418	38	13,189		902
21 Galt	Waterloo	72,597	6	228	38	5,745		610
Totals and Averages		116,133	1,264	43,318	34	1,755,147		126,843
	Districts							
1 Fort William	Thunder Bay	165,567	28	1,109	40	44,084		2,562
2 Port Arthur	Thunder Bay	147,443	19	651	34	27,323		1,392
3 Sudbury	Sudbury	81,532	56	1,978	35	102,436		9,334
4 North Bay	Nipissing	62,832	36	1,338	37	43,451		4,354
5 Sault Ste. Marie	Algoma	61,095	33	1,061	32	45,828		6,505
Totals and Averages		94,547	172	6,137	36	263,122		24,147
Totals and Averages	All Cities	113,547	1,436	49,455	34	2,018,269		150,990
Towns	Counties							
1 Barrie	Simcoe	178,884	3	100	33	4,386		201
2 Collingwood	Simcoe	168,253	1	27	27	1,380		81
3 Lindsay	Victoria	129,564	6	168	28	5,939		639
4 Mount Forest	Wellington	121,468	2	43	22	1,303		149
5 Orillia	Simcoe	112,614	5	161	32	4,215		1,004
6 Waterloo	Waterloo	112,044 107,142	11	407 31	37 31	14,591		68
7 Hespeler 8 Dundas	Wentworth	107,142	3	102	34	2,902		161
9 Picton	Prince Edward	98,928	2	46	23	1,213		87
10 Seaforth	Huron	97,550	2	49	25	1,466		492
11 Oakville	Halton	95,726	2	43	22	1,674		113
12 Leamington	Essex	93,913	3	88	29	2,130		239
13 St. Mary's	Perth	92,506	2	44	22	1,966		174
14 Brockville	Leeds	92,170	8	222	28	7,000	60	714
15 Parkhill	Middlesex	89,000	1	25	25	603		127
16 Smith's Falls	Lanark	86,950	6	162	27	4,154		493
17 Prescott	Grenville	86,801	4	87	22	3,000		338
18 Whitby	Ontario Renfrew	86,532 84,902	2 15	43 537	22 36	1,731		1,247
20 Preston	Waterloo	84,812	9	300	33	9,190		982
21 Ingersoll	Oxford	\$3,333	3	75	25	2,995		330
22 Trenton	Hastings	80,484	6	197	33	5,891		768
23 Tilbury	Kent	79,085	7	251	36	6,397		2,307
24 Campbellford	Northumberland		2	68	34	1,689		210
25 Paris	Brant	74,885	2	47	24	1,235		270
26 Cobourg	Northumberland	74,235	5	176	35	4,316		405

### SEPARATE SCHOOLS STATISTICS, 1937

1	Disburse	ements	Cost per	Pupil-Da	y (cents)	Debenture In	debtedness	Other Inde	btedness
	Current E	Capital F	Current	Capital	Total	Amount	Per \$1,000 of Assess- ment	Amount	Per \$1,000 of Assess- ment
	\$	\$				s	\$ c.	\$	\$ c.
1	451,163	,	21.4	7.7	29.1	647,206н	13.26	42,000	.86
2	17,598 30,779		21.0		21.0 22,8			8,000	4.62
4	7,568		18.5		18.5			2,000	2.02
5	11,094	1,590	11.2	1.6	12.8	26,100	14.04	4,000	2.15
6	47,800	6,447	15.6	2.1	17.7			131,658	23.43
7	28,074	500	19.7		19.7				
8 9	4,642 206,799	500 D	16.6 16.9	1.8 D	18.4	8,000 2,635,4121	17.87 131.01	60,000	2.98
10	46,493	18,259	19.5	7.7	27.2	135,933	22.54	5,937	.98
11	12,201	5,287	16.1	7.0	23.1	. 70,000	50.14	3,500	2.51
12	14,508	3,347	16.9	3.9	20.8	43,513	27.05		
13	122,667	28,933	14.7	3.6	18.3	355,024	26.24	36,936	2.73
14	20,293	9,690	16.9	8.1	25.0	68,081	42.34	27,241	16.94
15 16	20,825 388,504	10,401 116,369	12.5 18.6	6.2 5.6	18.7 24.2	39,128 1,630,000	19.86 54.33	9,704	4.92
17	13,342	176	17.1	.2	17.3	4,400	3.87	400,000	13.33
18	3,944		15.5		15.5	1,100	0.01		
19	28,822		16.4		16.4			5,151	1.99
20	12,200	2,000p	15.3	2,5	17.8				
21	6,252	1,674	14.5	3.9	18.4	21,755	47.96	1,300	2.87
	1,495,568	366,905	18.3	5.8	24.1	5,684,552	38.73	737,427	5.02
1	35,424	11,098	16.9	5.3	22.2	129,000	27.83		
2	22,102	5,013	17.9	4.1	22.0	30,949	11.05	3,100	1.11
3	74,761	19,812	19.9	5.3	25,2	309,754	77.93		
4 5	35,666 33,783	11,039 7,989	14.0 16.8	4.3	18.3 20.8	100,110 24,500	44.26		
							12.15		
	201,736	54,951	17.3	4.7	22.0	594,313	36.50	3,100	.19
	1,697,304	421,856	18.2	4.5	22.7	6,278,865	38.50	740,527	4.54
1	3,134	Ω	18.4	Q		7,000	13.04		
2	1,744		35.6		35.6				
3	7,267		23.5		23.5				
4	1,678		20.2		20.2			602	2.48
5	5,692		19.3		19.3				
6 7	11,375 1,191	4,358	14.9 20.5	5.7	20.6 20.5	74,102	60.12	200	1.07
8	2,277		11.7		11.7			200	1.87
9	1,598		18.5		18.5			2,500	12.64
10	2,503		27.8		27.8				
11	2,263		27.7		27.7			850	4.44
12	2,473		14.6		14.6				
13	1,956	027	23.7	9 1	23.7	7.531	10.91		
14 15	8,817 743	837	22.3 16.5	2.1	24.4 16.5	7,531	10.21		
16	3,038	2,408	16.3	7.8	24.1	19,265	36.93		
17	3,762	2,200	23.9		23.9				
18	2,108		26.1		26.1				
19	12,710	8,915	12.5	8.8	21.3	127,000	99.72	514	.40
20	11,129		20.7		20.7			23,250	30.46
21	3,403		24.4	12 7	24.4		170.70	F.040	10.44
22 23	6,506 8,352	4,816 2,065	18.2	13.5 4.3	31.7	86,695 33,025	179.52 59.66	5,040	10.44
24	2,043	2,000	17.5 16.9	1,0	21.8 16.9	33,023	39.00		
25	2,707		29.0		29.0				
26	4,643		14.0		14.0				
******				-					

### THE ROMAN CATHOLIC

### TABLE 28—FINANCIAL

		A	NY f	4 D 4 =	A D A 5	Major So	ources of R	eceipts
Towns	Counties	Assess-A ment per Class- room	No. of Class- rooms	A.D.A.B for the Calendar Year	A.D.A.B per Class- room	School District Levy c	County Grant	Legis- lative Grant
	Leeds	71,062	4	124	32	2,531		336
27 Gananoque	Huron	70,000	2	56	28	1,466		235
28 Goderich	York	65,679	2	46	23	2,381		251
29 Newmarket	Lincoln	65,504	2	65	33	1,832		201
30 Merritton	Welland	62,779	8	348	44	7,377		931
32 Amherstburg	Essex	60,975	10	310	31	8,390	800	516
33 Cornwall	Stormont	58,930	58	2,435	42	46,093		7,631
43 Perth	Lanark	58,849	5	138	28	4,793		679
35 Hanover	Grey	58,759	2	67	34	2,471		493
36 Amprior	Renfrew	56,361	11	348	32	9,549		1,260
37 Mimico	York	55,515	7	282	40	8,226		894
38 Blenheim	Kent	48,497	1	24	24	402		490
39 Weston	York	46,605	5	189	38	6,184		1,679
40 Wallaceburg	Kent	45,410	12	283	24	8,856		3,088
41 Walkerton	Bruce	44,510	6	183	30	3,090		1,029
42 Midland	Simcoe	43,873	10	403	40	2,090		2,915
43 Essex	Essex	43,445	2	37	18	563		1,231
44 La Salle	Essex	42,561	5	159	32	3,130	366	1,128
45 Riverside	Essex	41,515	14	495	35	16,433	718	1,870
46 Pembroke	Renfrew	37,470	29	862	30	14,696		4,819
47 Alexandria	Glengarry	32,891	13	417	32	10,029		3,128
48 Almonte	Lanark	32,576	5	99	20	1,179		1,424
49 Tecumseh	Essex	32,436	15	511	34	7,428	836	5,354
50 Vankleek Hill	Prescott	32,236	6	194	32	1,854		1,597
51 Eastview	Carleton	28,644	23	906	39	19,279	153	7,423
52 Hawkesbury	Prescott	27,665	32	1,187	37	22,349		10,898
53 Clarkstown K	Carleton	21,042	11	395	36	7,853		4,966
54 Rockland	Russell	20,166	15	457	30	6,807		4,262
Totals and Averages		56,196	428	14,519	34	339,332	2,933	82,900
	Districts							
55 Cochrane	Cochrane	75,034	8	259	32	9,804		2,296
56 Fort Frances	Rainy River	74,289	9	283	31	10,965		639
57 New Liskeard	Timiskaming	69,615	3	74	25	4,600		531
58 Kenora	Kenora	55,189	7	222	32	4,065		907
59 Coniston	Sudbury	53,111	10	371	37	12,826		4,430
60 Iroquois Falls	Cochrane	52,337	7	235	34	17,056		2,648
61 Sioux Lookout	Kenora	45,269	4	119	30	3,978		2,449
62 Timmins	Cochrane	45,079	62	2,145	35	96,649		30,376
63 Hearst	Cochrane	37,710	5	157	31	4,625		2,582
64 Rainy River	Rainy River	35,242	2	38	19	1,855		737
65 Sturgeon Falls	Nipissing	35,217	25	253	38	19,985		5,817
66 Haileybury	Timiskaming	32,561	7	179	26	3,250		3,926
67 Blind River	Algoma	28,415	11	386	35	9,528		2,441
68 Charlton	Timiskaming	26,815	1	21	21	613		789
69 Keewatin	Kenora	26,568	2	38	19	437		485
70 Kearney	Parry Sound	25,283	1	23	23	315		326
71 Cache Bay	Nipissing		4 7	133	33	2,600		1,497
72 Chelmsford	Sudbury	24,884		236	34	4,150		5,315
73 Massey	Sudbury	23,506	2	82	41	650		1,790
74 Mattawa	Nipissing	22,702	9	325	36	4,847		4,617
75 Cobalt	Timiskaming	18,568	10	308	31	7,130		8,477
76 Smooth Rock Falls.	Cochrane	17,823	6 4	178	30	6,261		7,051
77 Bonfield	Nipissing Manitoulin		2	150 37	37 19	1,955 242		3,765 1,727
Totals and Averages			208	6,952	33	228,386		95,618
			636	21.471	24	567.719	2.032	179 519
Totals and Averages	All Iowns	51,038	1 050	21,471	34	567,718	2,933	178,518

### SEPARATE SCHOOLS

### STATISTICS, 1937

	Disbursen	nents	Cost per	Pupil-Da	y (cents)	Dehenture In	idebtedness	Other Inde	btedness
	Current E	Capital F	Current	Capital	Total	Amount	Per\$1,000 of Assess- ment	Amount	Per \$1,000 of Assess- ment
	\$	\$				\$	\$ c.	\$	\$ c.
27	4,100	2,408	18.2	10.7	28.9	27,082	95.36		
28 29	2,325		21.8		21.8			1,500	10.71
30	1,986 2,071		23.5 18.3		23.5			2,918	22.21
31	8,533		12.9		12.9	31,7991	63.31		
32	8,160	1,850	13.9	3,1	17.0	01,,000	00.01	32,800	53.79
33	56,128		13.0		13.0				
34	6,747		26.0		26.0				
35	2,221	1,452	19.6	12.8	32.4	. 23,248	197.82		
36 37	10,262	0.119	15.8 18.0	17.3	15.8			300	.48
38	8,448 1,316	8,113	31.8	11.3	35.3 31.8			57,000 424	146.68
39	6,233		19.9		19.9			424	.01
40	11,537	3,249	17.2	4.8	22.0	58,206	106.82	3,500	6.42
41	6,682		19.9		19.9			7,987	29.90
42	9,998	2,530	13.1	3.3	16.4	13,769	31.38	21,000	47.87
43	2,426		33.5		33.5			8,450	97.25
44	4,509	D	14.9	D		68,872	323.64		
45 46	17,987 23,727	D D	19.0 14.5	D D		160,019 57,750	275.38 53.15	176	10
47	9,389	628	12.0	.8	12.8	3,000	7.02	176 1,200	.16 2.81
48	4,040		21.3	l	21.3	0,000	1.02	1,200	2.01
49	18,327	D	18.7	D		77,165	158.60	3,851	7.92
50	4,361		11.8		11.8				
51	22,884	3,244	13.3	1.9	15,2	45,000	68.30		
52	32,980		15.2		15.2				
53 54	9,307 10,535	900	12.4	1.0	13.1	63,822	275.74 19.83		
	10,555	500	12.1	1.0	13.1	0,000	19.55		
	424,331	47,773	15.7	1.8	17.5	990,350	41.18	174,062	7.24
55	11,600	Q	22.4	Q		Q			
56	8,309	4,427	15.4	8.2	23.6	85,222	127.46	11,371	17.01
57 58	4,064	1,072	28.7	7.6	36.3	16,082	77.00	600	2.87
59	5,442 16,170	300	12.9 23.2	.7	13.6 23.2	22,000L	56.95ц	1,055	2.73
60	15,236	7,895	34.1	17.7	51,8	13,183	35.98		
61	5,698	1,891	24.8	8.2	33.0	34,639	191.30	1,033	5.70
62	85,374	31,563	19.9	7.4	27.3	306,686	109.73	1,237	.44
63	5,905	1,280	20.1	4.4	24.5	19,282	102.26	6,463	34.28
64	2,054	677	28.4	9.4	37.8	6,611	93.79	19	.27
65	25,929	D	14.3	D		70,901	80.53		
66 67	8,326	D	24.4	D		22,232	97.54	2,066	9.06
68	11,979 1,276	D	17.8 32.2	D	32.2	29,981	9.59	4,612	65.88
69	1,002		13.9		13.9			500	9.41
70	838		18.9		18.9			300	11.87
71	3,554		14.0		14.0				
72	9,521	1,170	21.9	2.7	24.6	13,577	77.94	1,400	8.04
73	3,417		22.1		22.1			1,000	21.27
74	9,760	802	15.8	1.3	17.1	8,042	39.36		
75 76	15,562	1,203	26.6	2.1	28.7	12,036	64.82		
76 77	13,424 4,090	1,447	37.6 13.8	4.9	37.6 18.7	20,220	40.64	• • • • • • • • • • • • • • • • • • • •	
78	2,418	1,771	34.1	4.3	34.1	20,220	40.04		
_	270,948	53,727	20.2	4.0	24.2	680,694	80.96	30,601	3.64
	695,279	101,500	17.2	2.5	19.7	1,671,044	51.48	204,663	6.31
	000,210	102,000			20.1	-,0,1,011	01.10	201,000	0.01

### THE ROMAN CATHOLIC

### TABLE 28—FINANCIAL

			Assess-A	No. of	А. D. А. в	А. D. А. в	Major S	ources of F	Receipts
	Villages	Counties	ment per Class- room	Class- rooms	for the Calendar Year	per Class- room	School District Levy c	County Grant	Legis- lative Grant
			\$				8	\$	\$
1	Forest Hill	York	535,810	1	51	51	5,358		87
2	Arthur	Wellington	141,657	2	68	34	1,997		376
3	Belle River	Essex	97,507	7	173	25	5,617	635	712
4	Port Dalhousie	Lincoln	85,392	2	67	34	3,450		717
5	Elora	Wellington	85,093	1	28	28	642		110
6	Westport	Leeds	76,266	2	80	40	1,710		245
7	Swansea	York	71,790	1	30	30	1,499		613
8	Tweed	Hastings	71,393	3	107	33	1,765		819
9	Fergus	Wellington	70,349	1	20	20	607		126
	Mildmay	Bruce	68,228	3	104	35	2,047	180	1,335
11	Hastings	Northumberland	61,140	2	53	26	1,143	143	576
12	Teeswater	Bruce	60,122	1	29	29	701		123
13	Chesterville	Dundas	52,233	2	40	20	1,213		559
14	Eganville	Renfrew	49,801	4	106	27	1,263		582
15	Portsmouth	Frontenac	44,528	1	43	43	599		237
16	Marmora	Hastings	42,571	2	41	22	1,235		802
17	Barry's Bay	Renfrew	40,545	7	241	34	4,377	175	4,136
18	Lancaster	Glengarry	30,352	4	112	28	1,362	256	2,566
19	Casselman	Russell	29,433	9	260	29	5,000	387	2,763
20	Killaloe	Renfrew	29,052	5	95	19	1,641	177	4,050
	Totals and Averages		65,037	60	1,748	29	43,226	1,953	21,534
21	Thornloe	Districts Temiskaming	30,223	1	24	24	455		398
_	Totals and Averages	, All Villages	64,466	61	1,772	29	43,681	1,953	21,932
	Totals and Averages	, All Urban	93,514	2,133	72,698	34	2,629,668	4,886	351,440
	Grand Totals and A	verages	83,526	2,917	93,597	32	3,043,255	26,591	728,178

A Local Assessment in the case of Cities, Separated Towns, and the Districts; in all other cases Equalized Assessment.

c Includes levy for Capital Charges.

### INDEX TO TOWNS AND VILLAGES—TABLE 28

Towns			
Alexandria       4         Almonte       4         Amherstburg       3         Arnprior       3	8 Collingwood	Kearney	70 69
Barrie       3         Blenheim       3         Blind River       6         Bonüeld       7	8 Eastview	Little Surjess of the second s	12 3
Brockville.         1           Cache Bay         7           Campbellford         2           Charlton         6	Goderich	Merritton	74 30
Chelmsford.         7           Clarkstown.         5           Cobalt.         7           Cobourg.         2	3 Hearst	Transcoll I I I I I I I I I I I I I I I I I I	4 57

в Average Daily Attendance.

D In default.

E Operating costs only.

F Debt charges.

G Essex County partly in default.

### SEPARATE SCHOOLS

### STATISTICS, 1937

	Disbursements		Cost per Pupil-Day (ceuts)			Debenture In	debtedness	Other Indehtedness		
	Current E	Capital F	Current	Capital	Total	Amount	Per\$1,000 of As sess- ment	Amount	Per \$1,000 of Assess- ment	
	\$	s				s	\$ c.	s	\$ c.	
1	1,971	1,840	20.2	18.8	39.0	м				
2	2,969		22.9		22.9					
3	5,847	1,744	17.7	5,2	22.9	22,668	33.21	1,500	2.20	
4	4,680		37.9		37.9					
5	761		14.4		14.4					
6	1,848		12.4		12.4					
7	1,671	740	29.1	12.8	41.9	N				
8	3,338		16.1		16.1					
9	777		20.3		20.3					
10	3,974	1,156	20.2	5.8	26.0	. 6,936	33.90	37	.18	
11	2,127		21.5		21.5			500	4.09	
12	731		12.8		12.8			1,500	24.9	
13	2,162		29.0		29.0					
14	3,082		15.3		15.3					
15	841		11.0		11.0			26	.58	
16	1,920	523	25.7	7.0	32.7	2,485	29.19	2,227	26.1	
17	8,686	1,955	19.6	4.4	24.0	35,202	124.03			
18	5,122		24.1		24.1					
19	7,632	1,041	15.8	2.1	17.9	14,039	53.00	1,590	6.00	
20	5,748	3,523	32.5	19.9	52.4	5,615	38.65		• • • • • • • • • • • • • • • • • • • •	
	65,887	12,522	20.1	6.7	26.8	86,945	52.18	7,380	1.89	
21	1,144	D	23.7	D		1,111	36.76			
	67,031	12,522	20.1	6.7	26.8	88,056	51.90	7,380	1.88	
	2,459,614	535,878	18.0	3.9	21.9	8,037,965	40.30	952,570	4.78	
	3,277,256	624,855	18.6	3.6	22.2	8,918,510	36.60	1,064,233	4.37	

While this debt is a liability of the Separate School supporters of the City of Toronto it covers the Separate Schools of Toronto, the villages of Forest Hill and Swansea, and the Townships of York, East York, and Scarborough.

Debt Remaining, 1,868,442; Arrears, 961,832; Reserve, 194,862.

Clarkstown is Ward 6 of Eastview

L. Capital loan of \$12,000 plus unpaid interest.

Debt of \$20,000 with Sinking Fund of \$4,063. Included in figure for Toronto.

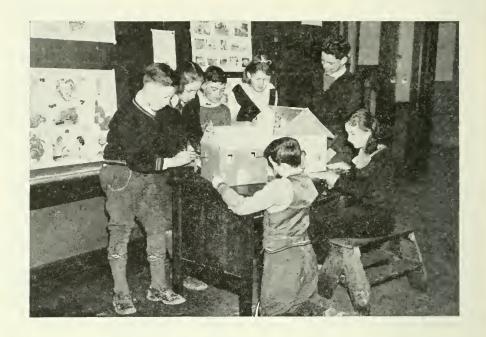
Debt of \$8,000 with Sinking Fund of \$1,883. Included in figure for Toronto.

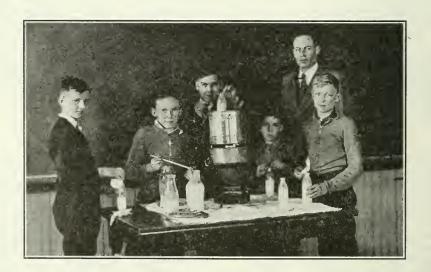
Rent.

Q. No return received.

### INDEX TO TOWNS AND VILLAGES-TABLE 28-Continued

Oakville 11	Sturgeon F	alls	65	Chesterville	٠.	13
Orillia 5	Tecumseh.		49	Eganville		14
Paris 25	Thorold		31	Elora		5
Parkhill	Tilbury		23	Fergus		9
Pembroke 46	Timmins		62			
Perth 34	Trenton		22	Forest Hill		
Picton9	Vankleek I	Hill	50	Hastings	• •	11
				Killaloe	:	20
Prescott				Lancaster		18
Preston 20		g				
Rainy River 64	Waterloo		6	Marmora		16
Renfrew 19	Weston		39	Mildmay		10
Riverside 45	Whitby		18	Port Dalhousie		4
Rockland		Versions		Portsmouth		15
St. Mary's		VILLAGES		Swansea		7
Seaforth	Arthur		2	Teeswater	:	12
Sioux Lookout	Barry's Ba	y	17	Thornloe	:	21
Smith's Falls	Belle River		3	Tweed		8
Smooth Rock Falls 76	Casselman		19	Westport		6





EXAMPLE OF PROJECT METHODS UNDER NEW COURSE OF STUDY

### THE SECONDARY SCHOOLS

### TABLE 29—CLASSIFICATION OF ACADEMIC PUPILS BY SUBJECTS OF STUDY, 1937-38

	~	02020		01021, 1701 00							
SUBJECTS	High Schools and Collegiate Institutes	Continu- ation Schools	Totals	SUBJECTS	High Schools and Collegiate Institutes	Continu- ation Schools	Totals				
Lower School											
English Composition English Literature. British History. Physiography. General Mathematics. Geometry.	41,363 36,773 21,553 15,539 22,036 15,655	5,574 5,582 3,502 2,425 3,392 2,346	46,937   42,355   25,055   17,964   25,428   18,001	French Special French Greek German Manual Training Household Science	402 57 1,575 3,946	4,986 14 60 63	39,909 416 57 1,575 4,006 4,722				
Arithmetic English Grammar Art Geography General Science	14,978 14,056 21,134 21,140 13,639	2,178 2,092 3,511 3,564 2,648	17,156 $16,148$ $24,645$ $24,704$	Vocal Music  Business Practice  Health and Physical	17,644 21,454	2,095 3,268 5,177 46	19,739 24,722 38,554 1,624				
Agriculture and Horti-	5,824 7,841	1,210 981	16,287 7,034 8,822	Civics Library Science Penmanship and Spelling Social Studies Commercial History	127		1,771 137 127				
culture II	4,451 13,971	513 1,966	4,964 15,937	Music Appreciation	268		268				
			Middle	School							
English Composition. English Literature. Algebra. Geometry. Physics. Chemistry.	17,885 18,947 15,459 12,722 10,717 9,595	2,820 2,770 1,816 1,657 1,243 1,417	20,705   21,717   17,275   14,379   11,960   11,012	French Special French German Spanish Manual Training Household Science	169 150	3,583	24,827 358 2,483 129 169 150 91				
Agriculture and Horti- culture I Agriculture and Horti- culture II. Canadian History Ancient History	2,652 1,937 15,300	245 269 1,687	2,897 2,206 16,987	Art Vocal Music. Bookkeeping and Penmanship Stenography and Typing	974	4 18	974 128 179				
Ancient History	10,931 19,547 115	1,581 2,151	12,512   21,698   115	Business Practice Library Science	.] 9		129				
				School							
Englsh Composition. English Literature. Algebra. Geometry. Trigonometry. Modern World History. Physics. Chemistry. Botany.	7,959 7,615 4,279 4,497 5,461 3,614 2,675 2,908 2,210	376 394 198 186 202 201 119 94 98	8,335 8,009 4,477 4,683 5,663 3,815 2,794 3,002 2,308	Zoology Latin Greek French Special French German Spanish Music	2,394 47 5,296 103 486 10	92 79 211 211	2,263 2,473 47 5,507 103 486 12 80				
		C	ommerc	elal Course							
Literature (including Oral	i	1	1	Commercial Geography.	319		319				
Reading)	1,392 541	70 43	1,462 584	Arithmetic (including Rapid Calculation) Penmanship and Spelling Bookkeeping (including	1,564 1,571	78 87	1,642 1,658				
Business Corresp'dence Canadian History and Civics	1,260 712	39 30	1,299 742	Business Forms) Office Practice (including Business Law)	1.014	72 28	1,634 1,042				
Civics British History Shorthand	120 1,610	81	120 1,691	Typewriting Physiography French German	$\begin{array}{c c} 1,673 \\ 642 \\ 270 \end{array}$	86 9 9	1,761 651 279 8				
A Com:	merclal C	ourse Cl:	ass was	enrolled in the followin	g Schools						
COLLEGIATE INSTITUTES  Cobourg Collingwood Goderich Lindsay Orillia Smith's Falls Ingersoll  Morrisburg Scarborough Windsor (Sandwich) York Memorial											
Almonte Burlingto Amherstburg Carleton I Chapleau Beamsville Dundas Blenheim Dunnville Bowmanville Elmira Brampton Fergus	Place Grim Hage Hand Kend	anoque ishy ersville over ora nington	Markda Meaford Merritt Midland Mitchel Mimico Nepean	d Newmarket Ric on Oakville Ric d Orangeville Sal ll Paris Stu Port Colborne Th	rt Hope chmond Hill lgeway tfleet crgeon Falls orold bridge	Walker Wallace Waterd Whitby Wiarton Winche Wingha	eburg own 1 ster				

CONTINUATION SCHOOLS

Long Branch

Dunnville Elmira Fergus

Pelham

Preston

### THE SECONDARY SCHOOLS

### TABLE 30—ADMISSIONS AND DESTINATIONS OF SECONDARY SCHOOL PUPILS, 1937-38

Beginners to Secondary Schools		Collegiate Institutes and High Schools		Continuation Schools		Vocational Schools		Totals	
Admitted from	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.	
Publicly-controlled Elementary Schools Private Schools. Other Sources.	20,334 165 631	96.2 .8 3.0	3,303 1 101	97.0	11,450 488 388	92.9 4.0 3.1	35,087 654 1,120	95.2 1.8 3.0	
Totals	21,130		3,405		12,326		36,861		
Destination of Pupils leaving Secondary School during or at the end of the School Year 1937-38									
Commerce Agriculture Agriculture Normal School College or University Business College Private School Trades Other Occupations Without Occupation By Death or Disability Unknown	1,092 502 971	12.1 9.7 3.8 10.9 6.9 3.1 6.1 17.4 17.2 1.3 11.5	159 624 32 64 156 40 137 559 497 25 92	6.7 26.2 1.3 2.7 6.5 1.7 5.7 23.4 20.8 1.2 3.8	2,634 292 11 127 249 90 1,483 2,216 2,587 166 2,867	20.7 2.3 3 1.0 1.9 11.6 17.4 20.3 1.3 22.5	4,718 2,458 657 1,923 1,497 632 2,591 5,539 5,816 388 4,790	15.2 7.9 2.1 6.2 4.8 2.0 8.3 17.8 18.7 1.6	
Totals	15,902		2,385		12.722		31.009		

### TABLE 31—ANNUAL DEPARTMENTAL EXAMINATION RESULTS, 1938

(a) Statement showing Number of Pupils Recommended for Standing in Grade IX and Lower School Subjects, June 1938, under the provisions of Circular No. 84, 1938.

### 

Circular No. 84.

### MEMORANDUM

To Principals of Collegiate Institutes, High, Continuation and Vocational Schools, and Fifth Classes of the Public and Separate Schools.

Notice is hereby given that the Lower School examinations are abolished, and former regulations relating to them are cancelled. Hereafter, Lower School standing will be granted to pupils under the following conditions:

- that the principals and teachers certify that these pupils have completed satisfactorily the prescribed courses of study of Grade IX and of the second form of the Lower School, which fulfil the Lower School requirements for admission to Normal,
- (2) that the pupils have passed the tests given by the teachers concerned.
- (3) that the inspectors report favourably upon the teaching and organization of the classes in which these pupils are enrolled.

In June, principals will forward to the Department of Education upon a form supplied by the Department the names of students who are planning to attend the Normal Schools, and who are recommended for standing.

Toronto, May 25th, 1938.

509

Total Number of Centres.....

## (b) June Middle School

	Z	Candidates Recommended	dates	Can	Candidates Writing	ting		Appeals	eals	1000	Per Cent.	Sent.
Subjects	of Candidates	Total Number	Per cent. Recom- mended	Total Number	Number Passing	Per cent. Passing	Aegrotat	Total Number	Number	Number Successful	1938	1937
English Composition	16,895	3,865	22.88	12,982	6,973	53.71	48	131	39	10,925	64.66	58.91
English Literature	15,162	4,642	30.62	10,483	5,713	54.50	37	88	16	10,408	68,65	70.54
Canadian 11istory	17,987	5,579	31.02	12,382	5,751	46.45	26	171	35	11,391	63,33	68,45
Ancient History	13,252	4,545	34.30	8,680	4,506	51.91	27	138	34	9,112	68.76	79.15
Algebra	15,649	5,208	33.28	10,411	6,919	66.46	30	73	6	12,166	77.74	80.18
Geometry	13,889	4,761	34.28	9,092	5,161	56.76	36	105	34	9,992	71.95	71.24
Physics	12,596	4,286	34.03	8,273	5,015	60.62	37	91	31	9,369	74.38	80.70
Chemistry	11,514	3,836	33.32	7,642	5,180	67.78	36	69	6	9,061	78.70	84.46
Latin Authors	10,055	3,379	33.61	6,635	4,346	65.50	41	82	36	7,802	77.59	76.81
Latin Composition	10,558	3,433	32.52	7,069	4,661	65.94	26	87	18	8,168	77.36	74.90
French Authors	11,224	4,016	35.78	7,162	4,378	61.13	46	62	13	8,453	75.31	80.64
French Composition	11,492	3,054	26.58	8,394	5,132	61.14	44	85	24	8,254	71.82	75.58
German Authors	1,085	869	64.33	384	251	65.36	က	7	61	954	87.93	94.81
German Composition	1,097	498	45.40	595	335	56.30	4	ಣ	:	837	76.30	88.52
Special French Literature	414	54	13.04	358	239	92.99	23	4	2	297	71.74	64.00
Special French Composition	405	35	8.64	367	255	69.48	က	0	က	296	73.09	67.60
Greek Authors	19	30	58.85	21	13	61.90	:	:		43	84.31	94.92
Greek Accidence	53	24	45.28	53	20	96.89	:		:	44	83.02	91.53
Spanish Authors	103	39	37.86	64	47	73.44	:		:	98	83.50	72.00
Spanish Composition	118	19	16.10	66	99	66.67	:		:	85	72.03	68.18
Italian Authors	ಣ	:	:	9	ಣ	100.00	:		:	က	100.00	37.50
Italian Composition	25	:		es	es	100.00	:		:	e	100.00	25.00
Agriculture I	2,099	851	40.54	1,239	933	75.30	6	7	ಣ	1,796	85.56	80.04
Agriculture II	1,661	1.09	36.36	1,044	811	69.72	13	ū	-	1,429	86.03	89.98
Music	42	25	59.52	17	15	88.24	:		:	40	95.24	95.24
Technical Arithmetic	292	66	37.08	168	71	42.26	:	_	:	170	63.67	66.91
Household Science I	94	51	54.26	43	53	67.44	:		:	80	85.11	91.89
Household Science II	63	21	33.33	42	28	66.67	:	1		49	77.78	74.47
Special Arithmetic	9	-1	16.67	2	4	80.00	:			rO	81.25	87.50
Special Zoology	6	61	22.22	2	Z,	71.43	:		:	7	77.78	63,64
Commercial Physics	22	21	95.45	1	:		:		:	21	95.45	78.57
Commercial Chemistry	16	77	87.50	2			:			14	87.50	86.67
Commercial Geography	50	21	72.41	oc	20	62.50	:			26	89.66	88.00
Business Arithmetic	21	16	76.19	ra	cc	00.09	:		:	19	90.48	62.90
Totals	167,934	53,727	31.99	113,709	66 871	58.81	498	1 220	309	121,405	72.29	74.90

Total Number of Candidates..... 35,745

(c) June Upper School

	Number	Candidates Recommended	lates		Candidates Writing	s Writing				Appeals		Total	Per Cent.	ent.
Subjects	Candi- dates	Total Number	Per cent. Recom- mended	Total Number	Number	Per cent. Passing	Number Granted M. S. Standing	Aegrotat	Total Num- ber	Num- ber Sust'd.	Number Granted M. S. Standing	Success- ful	1938	1937
English Composition	10,762	2,508	23.30	8,226	5,607	68.16	124	28	104	56	15	8,169	75.91	68.18
English Literature	9,326	2,793	29.95	6,511	3,058	46.97	73	22	170	28	20	5,901	63.27	69.58
Modern History	4,553	1,406	30.88	3,132	1,635	52.20	:	15	128	37	:	3,093	67.93	72.04
Algebra	5,296	1,600	30.21	3,686	2,379	64.54	61	10	69	25	ಣ	4 014	75.79	67.70
Geometry	5,605	1,784	31.83	3,803	2,456	64.58	15	18	74	14	4	4,272	76.22	90.29
Trigonometry	6,682	2,484	37.17	4,177	2,508	60.04	:	21	99	7	:	5,020	75.13	27.66
Rotany	2,522	848	33.66	1,668	964	57.79	:	ນ	44	15	:	1,832	72.64	78.98
Zoology	2,609	066	37,95	1,610	1,030	63.98	:	6	38	13		2,042	78.27	75,49
Physics	3,330	1,112	33.39	2,205	1,635	74.15		13	36	15	:	2,775	83.34	70.80
Chemistry	3,646	1,149	31.51	2,483	1,565	63.03	9	14	45	1.5	1	2,742	75.21	85.65
Latin Authors.	2,934	983	33.50	1,943	931	47.92	16	00	7.1	27	4	1,949	66.43	68.51
Latin Composition	2,905	778	26.78	2,115	1,234	58.35	7	12	09	16	ಣ	2,040	70.22	72,45
French Authors	6,639	2,259	34.03	4,350	3,181	73.13	33	30	112	38	9	5,508	82.96	77.80
French Composition	6,552	1,703	25.99	4,823	3,096	64.19	64	56	157	09	00	4,885	74.56	77.73
German Authors	583	315	54.03	566	241	90.60	:	23	2		:	558	95.71	90.21
German Composition	809	251	41.28	354	282	79.66	rc	က	9	_	:	537	88.32	80.73
Greek Authors	34	11	32.35	23	20	86.96	:	:			:	31	91.18	92.00
Greek Composition	38	12	31.58	26	22	84.62	:	:		:	:	34	89.47	86.27
Spanish Authors	47	19	40.43	28	18	64.29	-1	:	_		:	37	78.72	90.38
Spanish Composition	47	15	31.91	32	27	84,38	:	:	-		-	42	89.36	92.16
Special French Literature	175	11	6.29	164	95	57.93	2		7	-	-	107	61.14	59.42
Special French Composition	258	13	5.04	2.15	132	53.88	:		7	ಣ		148	57.36	53.65
Italian Authors	10			10	6	90.00					:	6	90.00	89.47
Italian Composition	10			10	6	90.00	:				:	6	90.00	88.89
History of Commerce	20	16	80.00	71	C)	50.00	:		:	:	:	18	90.00	77.78
Totals	75,191	23,060	30.67	51,894	32,136	61.93	348	236	1,188	340	29	55,772	74.17	73.89

Total Number of Candidates..... 19,281

Total Number of Centres..... 480

## (d) August Middle School

		Number				Appeals	.ls	Total		Per Cent.	nt.
Subjects		of Candidates	Number Passing	Per cent. Passing		Total Number	Number Sustained	Number	Ssful	1938	1937
English Composition.		12	10	83.33				10		83.33	79.31 62.96
Canadian History	:	38	20	52.63		-			_	52.63	58.97
Ancient History	:	17	œ	47.06		-			~~	47.06	64.29
Algebra	:	16	6	56.25		1		6	_	56.25	98.79
Geometry	:	25	16	64.00		-	1	17		00.89	64.29
Physics		9	9	100.00	: : : : : :				:	. 00.001	
Special French Literature	:	9	9	100.00	:	:				100.00	41.67
Special French Composition	:	7	4	57.14	:	:		•	4	57.14	61.54
Totals and Averages		139	98	61.87		9	1	87	1	62.59	64.22
Total Number of Candidates	lidates		91		Total N	Total Number of Centres,	Centres		7		
			(e) Augus	(e) August Upper School	chool						,
Z	Number	Number	Number				Appeals		Total	Per	Per cent.
Subjects	of Candidates	Writing		Passing	Aegrotat	Total Number	Number Sustained	M. S. Standing	Number Successful	1938	1937
English Composition	209	209	140	66.99	1	6			141	67.47	64.25
	151	151	108	71.52	-	10	6.	:	118	78.15	73.52
Modern History	247	247	161	65.18	:	14	:	:	161	65.18	49.58
	194	194	95	48.97		18	က	:	66	51.03	83,59
	224	224	37	16.52	<b>-</b>	13	m ·	:	41	18.30	47.73
	257	257	119	42.41	m	[2]	4	:	120	49.02	80.19
	169	109	129	71 77	: -	ာ ဖ		:	150	73 69	76 17
Dhweise	22.00	100	30	67 24		o 6:	٦ -		40	68.97	60.21
	22	22	64	83.12		1 41			64	83,25	64.77
	23	23	14	. 60.87		63	:	_	14	60.87	51.61
	22	22	12	54.54	:		:	:	12	54.54	48.84
French Authors	73	73	53	72.60	:	9	က	:	26	76.71	52,63
	83	83	59	71.08	:	4	61	:	61	73.46	65.52
German Authors	-1	1	1	100.00	: : : : : : : : : : : : : : : : : : : :	:	:	:		100.00	100.00
	67	61	Ç1	100.00	:		:		ଷ୍ଟ	00.001	50.00
<u>:</u>	83	80	55	66.26	:	ro ·	-	: : : : : : : : : : : : : : : : : : : :	900	67.47	19.00
Special French Composition	71	71	54	76.06		5			54	76.06	79.63
Totals and Averages	2,107	2,107	1,267	60.13	∞	117	28	1	1,295	61.46	67.28
Total Number of Candidates.	idates		1,381		Total N	Total Number of Centres	entres		71		

## THE SECONDARY TABLE 32—SALARY RANGE, SECONDARY

		Со	ntinuat	ion Sch	ools		11		Hig	h Schoo	ols	
Range	Р.	M.A.	F.A.	Total	Group Total	Group Per- cent- age	P.	M.A.	F.A.	Total	Group Total	Group Per- cent- age
\$5,000. \$4,900-\$4,999. \$4,800-\$4,899. \$4,700-\$4,799. \$4,600-\$4,699. \$4,500-\$4,599. \$4,400-\$4,499. \$4,300-\$4,399. \$4,200-\$4,299. \$4,100-\$4,199. \$4,000-\$4,099.							1			1	1	.10
\$3,900-\$3,999 \$3,800-\$3,899 \$3,700-\$3,799 \$3,600-\$3,699 \$3,500-\$3,599							2 2 3 3			2 2 3 3	10	.98
\$3,400-\$3,499 \$3,300-\$3,399 \$3,200-\$3,299 \$3,100-\$3,199 \$3,000-\$3,099							1 3 2 3 10			1 3 2 3 10	19	1.86
\$2,900-\$2,999 \$2,800-\$2,899 \$2,700-\$2,799 \$2,600-\$2,699 \$2,500-\$2,599	1			1	2	.42	5 10 13 8 15	1 2 3	2	5 11 15 10 19	60	5.88
\$2,400-\$2,499 \$2,300-\$2,399 \$2,200-\$2,299 \$2,100-\$2,199 \$2,000-\$2,099	1 1 1 4 4			1 1 1 4 4	11	2.28	12 13 13 11 10	4 12 11 11 17	1 14 9 18 20	17 39 33 40 47	176	17.25
\$1,900-\$1,999 \$1,800-\$1,899 \$1,700-\$1,799 \$1,600-\$1,699 \$1,500-\$1,599	5 13 16 23 28	1 1 4	1 1 1 3	6 14 18 24 35	97	20.12	2 7 2 1 3	32 31 29 35 53	37 54 61 80 79	71 92 92 116 135	506	49.62
\$1,400-\$1,499 \$1,300-\$1,399 \$1,200-\$1,299 \$1,100-\$1,199 \$1,000-\$1,099	28 20 36 8 10	4 9 11 19 25	1 11 19 31 68	33 40 66 58 103	300	62.24	1	32 15 12 6 3	71 44 36 17 8	104 59 48 23 11	245	24.02
\$900-\$999. \$500-\$899. \$700-\$799. Below \$700.	2 4 	14 6 3 1	31 6 1 4	47 16 4 5	72	14.94			2	1 2	3	.29
Total Teachers	206	98	178	482			156	309	555	1,020		
Median Salary		\$1,100		\$1,200					\$1,600			
Average Salary  Increase in Average over last year		\$1,098	\$1,061	\$30			\$2,535	\$1,709	\$1,616	\$1,784		

P.—Principal.

M.A.-Male Assistant.

F.A.—Female Assistant.

## SCHOOLS SCHOOL FULL-TIME TEACHERS, 1937-38

	C	ollegiate	lnstit	utes				Vocat	ional S	chools*		A	ll Schoo	ls
Р.	M.A.	F.A.	Total	Group Total	Group Per- cent- age	P.	M.A.	F.A.	Total	Group Total	Group Per- cent- age	Total Teach- ers	Group Total	Group Per- cent- age
			26 1 1 4 6 2 3	25	1.64	3 2 1 1 2	1		1 3 2 1 2 2	11	.97	3 9 3 1 6 8 4 3	37	.89
4 4 5 3 4	10 34 45	15 35	4 4 15 52 84	159	10.45	2 1 1	1 5 27 47	7	3 5 35 65	108	9.50	4 9 22 90 152	277	6.66
2 3 3 6 2	39 19 33 28 41	11 5 7 8 7	52 27 43 42 50	214	14.07	1 3 1	32 15 30 27 40	8 8 9 2 11	41 26 39 30 51	187	16.45	94 56 84 75 111	420	10.10
1 3 3 1	24 28 44 29 45	4 25 32 15 24	29 56 79 44 70	278	18.28		46 44 37 40 55	16 18 17 13 20	62 62 54 53 75	306	26.91	96 130 148 107 165	646	15.53
1	31 38 27 51 43	31 29 35 39 51	63 67 62 90 94	376	24.72		16 42 41 49 32	14 28 15 32 27	30 70 56 81 59	296	26.03	111 177 152 215 204	859	20.65
	55 45 42 38 8	69 64 50 .38 23	124 109 92 76 31	432	28.40		24 40 32 17 1	27 31 27 10 14	51 71 59 27 15	223	19.61	252 286 261 243 216	1,258	30.24
	7 2 1 1	15 5 5	22 7 5 1	36	2.37		1	1	3 1 2	6	.53	162 107 119 84 115	587	14.10
		1	1	1	.07							49 16 6 5	76	1.83
70	808	643	1,521			19	743	375	1,137			4,160		
\$3,750	\$2,500	\$2,100	\$2,367			\$4,100	\$2,600	\$2,300	\$2,544	1				
\$3,715	\$2,549	\$2,247	\$2,478	5		\$4,037	\$2,618	\$2,380	\$2,564	1				
\$128	\$25	\$44	\$36	6		\$83	\$84	\$97	\$95	2				

<sup>\*</sup>Whole-time teachers in Vocational work. Vocational teachers who spend part-time in High School (or Collegiate Institute) and the balance of the in time the Vocational School are shown in the High School (or Collegiate Institute) section.

## MODERN COMPOSITE SCHOOLS



KEMPTVILLE HIGH AND PUBLIC SCHOOLS

The corner-stone of this new composite school was laid by Dr. L. J. Simpson, Minister of Education, on December 21st, 1936. Built of fireproof construction throughout, at a cost of \$103,000, it contains five standard classrooms in each of the Public and High Schools, and in addition has a combination gymnasium and assembly hall, with seating capacity of 600, a general science laboratory, a household science room, and a general shop. The Public and High Schools have separate entrances, separate cloak rooms, separate toilets for both schools, separate playgrounds and gardens. With non-glare lighting, heat maintained at even temperature, and well-equipped science rooms, this is one of the most modern schools in Eastern Ontario.



Lyndhurst Public and Continuation School

A modern school building, erected in 1937, at a cost of \$35,000. It contains two public school classrooms, two high school classrooms, a manual training room, a home economics room, a room for men teachers, and one for the women teachers. The cost of equipment in the home economics room and general shop was \$2,650. The school has accommodation for 125 pupils, and its present enrolment is about 70. Two school buses, at a total monthly cost of \$125 provide transportation from the surrounding school sections. The total cost of the school was spread over twenty years, and debentures were issued for \$20,000.

Pictures Courtesy "Canadian School Journal".

## THE CONTINUATION SCHOOLS TABLE 33—ATTENDANCE, GRADE ENROLMENT, ENROLMENT BY AREAS, 1937-38

		1										11		
			ΑΊ	TENI	DANCE	:	G	RADE	ENRO	LMEN'	T	ENR BY	OLMEI AREA	NT S
SCHOOLS	Grade	May Enrolment	Male	Female	Average Daily Attendance for the Year	Percentage Attendance Efficiency	Grade IX	Grade X	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties Acton Agineourt Asisa Craig Allenford Allenford Alvinston Arkona Aultsville Ayr Bancroft Bath Beachburg Beaverton Beeton Belmont Bethany Blackstock Blyth Bobcaygeon Bothwell Bobcaygeon Bothwell Brownsville Brownsville Brownsville Brownsville Brownsville Brownsville Caledon East Cannington Cardinal Carp Castleton Chalk River Chatsworth Claremont Clifford Codden Coddwater Comber Comber Comber Consecon Cookstown Cookstown Cookstown Cookstown Delta Delta Denbigh Dorchester Drumbol Eganville Eganville Eganville Eganville Eganville Fenelon Falls Feversham Fitzroy Harbour Fitzroy Harbour Fingal Fitzroy Harbour Fingal Fitzroy Harbour Forester's Falls Frankford Grand Valley Hallbutton Hallville Harrow Hensall Hepworth Highgate Holstein	A B A B B B B B B B B B B B B B B B B B	63 112 22 27 56 16 22 27 16 22 23 43 43 43 41 41 41 41 41 41 41 41 41 41	27 544 263 31 144 260 233 240 100 404 404 241 242 252 299 244 57 111 153 33 34 141 155 222 229 245 57 111 115 115 116 117 117 118 118 119 119 119 119 119 119	$\begin{array}{c} 368\\299\\133\\133\\8\\83\\269\\188\\631\\13\\31\\4\\22\\23\\4\\4\\19\\7\\13\\22\\20\\8\\8\\31\\31\\4\\25\\20\\8\\38\\31\\31\\31\\21\\21\\31\\31\\31\\31\\31\\31\\31\\31\\31\\31\\31\\31\\31$	67 111 23 23 15 24 46 51 24 51 24 51 51 51 51 51 51 51 51 51 51 51 51 51	$\begin{array}{c} 95.84\\ 94.46\\ 93.24\\ 95.26\\ 93.36\\ 94.52\\ 96.33\\ 96.39\\ 94.54\\ 99.351\\ 94.54\\ 99.351\\ 94.54\\ 99.351\\ 94.69\\ 93.51\\ 94.69\\ 93.51\\ 94.69\\ 93.51\\ 94.69\\ 94.69\\ 94.69\\ 94.69\\ 95.77\\ 96.38\\ 96.39\\ 96.49\\ 96.39\\$	23 411 211 14 155 70 18 18 18 23 111 30 13 115 23 116 23 117 12 23 117 12 23 117 12 23 117 12 23 117 12 23 14 14 15 15 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	13 28 14 4 66 16 9 6 8 15 10 10 16 8 9 9 10 20 9 13	11 24 102 155 11 11 11 11 11 11 11 11 11 11 11 11	9 13 7 2 2 2 7 4 6 6 7 4 4 6 10	7 6 6	43 45 218 17 24 8 15 19 40 10 17 18 3 3 5 5 11 12 13 40 12 13 13 14 14 15 16 16 17 18 18 18 18 18 18 18 18 18 18	17 67 31 10 32 6 6 6 6 6 6 11 5 10 29 20 29 20 6 30 8 15 15 19 25 10 12 13 15 19 25 19 25 19 25 19 25 19 26 19 27 27 27 27 27 27 27 27 27 27 27 27 27	3 2 1 2 1 3 3 3 3 15 17 11 14 11 14 11 1

## THE CONTINUATION SCHOOLS TABLE 33—ATTENDANCE, GRADE ENROLMENT, ENROLMENT BY AREAS, 1937-38

			AT	TENI	DANCE		GR	RADE	ENROI	LMEN'	r		OLMEI AREA	
SCHOOLS	Grade	May Enrolment	Male	Female	Average Daily Attendance for the Year	Percentage Attendance Efficiency	Grade IX	Grade X	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties Honeywood Ilderton. Inglewood Jarvis. Jockvale. Kars. Kenmore. Kinburn. Kars. Kenmore. Kinmount. Lambeth. Lanark. Lansdowne. Lefroy. Lion's Head. Little Britain. Lobo. Lyndhurst. Malakoff. Mallorytown. Manotick. Melbourne. Merrickville. Merrickville. Millbrook. Milverton. Minden. M	C B B B B B B B B B B B B B B B B B B B	18 62 27 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	444 298 8101 177 35 20 20 20 20 39 22 25 17 18 14 19 28 19 20 20 20 20 20 20 20 20 20 20 20 20 20	37 17 17 17 11 103 16 16 13 3 5 3 5 3 5 3 5 4 2 5 5 6 6 6 6 20 20 20 3 3 4 3 3 3 5 5 6 6 6 6 2 2 2 3 3 1 18 18 18 18 18 18 18 18 18 18 18 18 1	28 27 9 49 49 53 54 49 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 40 54 54 54 54 54 54 54 54 54 54	89, 42 97, 77 94, 83 93, 92 98, 48 94, 28 96, 64 95, 06 92, 43 96, 63 91, 20 92, 70 97, 27 97, 27 99, 34 94, 90 93, 71 91, 93 94, 96 89, 29 91, 51 88, 28 88, 48 88, 48 88, 49 88, 40 88	9 122 144 100 355 44 333 188 104 107 200 115 119 16 15 18 8 112 115 19 19 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	\$ 23 10 20 6 9 7 7 13 2 2 6 3 8 1 1 1 1 1 1 2 1 2 2 6 3 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111 100 102 113 110 100 102 111 111 100 102 111 111 111	6 11 24 4 4 122 8 10 10 10 10 10 10 10 10 10 10 10 10 10	144 144 133 9 122 100 8 8 67 7	27 39 56 38 17 12 18 12 4 42 22 11 25 18 32	8 40 15 15 16 15 16 16 16 16 16 16 16 16 16 16 16 16 16	

## THE CONTINUATION SCHOOLS TABLE 33—ATTENDANCE, GRADE ENROLMENT, ENROLMENT BY AREAS, 1937-38

			ATT	END	ANCE		G1	RADE	ENRO:	LMEN'	ľ	ENR BY	OLME AREA	NT S
schools	Grade	May Enrolment	Male	Female	Average Daily Attendance for the Year	Percentage Attendance Efficiency	Grade IX	Grade X	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties Stouffville Sunderland Sutton West Tamworth Tara. Tavistock Teeswater Thamesford Thamesville Thedford Thornbury Thorndale Thornton Tiverton Tottenham Wales. Warkworth Wellesley Wellington West Lorne Westmeath Westport Westport CR.C.) Wheatley Wilberforce Wolfe Is. Woodville Wooler Wroxeter Wyoming	A B B B B B B B B B B B B B B B B B B B	977 555 899 766 433 577 611 622 188 1099 355 166 223 364 433 144 711 712 122 600 299 288	466 199 355 366 188 288 244 211 177 166 300 111 766 122 355 288 710 1010	511 366 44 40 25 29 28 37 41 11 11 11 11 11 11 11 11 11 11 11 11	93 54 90 69 40 51 61 61 61 61 61 61 61 61 61 61 61 61 61	94.83 80.01 93.48 91.67 94.77 95.80 94.54 77 92.46 94.54 78.80 95.48 92.10 92.14 91.12 85.97 92.10 93.83 94.54 91.13 92.14 91.13 92.14 91.14 91.15 91.	36 24 34 23 22 21 18 29 6 6 6 14 13 16 16 11 16 14 25 3 3 3 16 23 3 16 23 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	18 18 18 18 11 14 19 17 77 17 13 3 9 9 17 7 7 9 17 17 12 2 4 4 6 6 19 15 7 9	22 100 111 122 9 16 9 26 8 8 9 9 12 11 13 13 13 14 4 4 14 4 3 3 	9 100 211 15 100 111 16 8 8 8 8 8 8 8 7 7 6 2 15 11 1 5 5 9 2 2	122 5 8 8 11 13 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1	400 255 577 288 344 388 389 299 336 457 211 21 12 62 23 23 23 33 33 12 12 15 15 15 15 16 16	500 300 311 388 199 100 233 330 299 122 64 199 144 8 8 8 8 26 21 22 2 2 166 111  8 8 24 47 199 121	7 7 1 100 8 133 133 122 12 12 12 12 12 12 12 12 12 12 12 12
Totals		8,272	3,453	4,819	7,851	93.52	2,787	2,230	1,587	1,324	344	4,289	3,551	432
In Districts Blind River Bruce Mines Burk's Falls Coniston Emo Espanola Fraserdale Hornepayne Little Crescent MacTier Manitowaning Missey Milford Bay Mindemoya Nipigon Port Carling Powassan Red Lake Richard's Landing Schreiber Sioux Lookout Smooth Rock Falls South River Sprucedale Sundridge White River	A A	67 357 57 57 24 267 9 33 45 27 18 24 25 24 10 61 32 36 39 19	32 185 24 111 125 25 113 133 133 136 166 200 6 6 166 388 499 211 133 5 17	35 20 32 33 42 7 24 21 30 14 14 41 29 36 57 7 7	666 377 555 553 677 9 9 311 325 325 24 20 225 8 8 19 108 317 377 377 378 318	93.25 96.05 94.47 89.36 93.69 97.72 91.76 93.35 87.58 93.35 87.58 93.167 91.62 93.11 95.47 92.95 86.60 94.42 91.02 93.90 89.71 98.69 97.38 88.90 97.38	20 17 24 22 3 27 14 4 10 4 10 11 14 14 12 3 3 3 3 3 14 4 4 8 8	199 8 15 11 21: 38 77 12 6 5 9: 11 17 17 18 36 8 7 7 11 16 6	14 55 12 13 6 55 10 1 1 1 8 3 3 3 3 1 4 4 9 4 9 5	99 77 74 100 1 1	5 6 4	63 24 37 55 177 56 9 9 33 31 45 8 21 18 19 33 38 8 25 73 104 26 33 31 19	4 14 14 19 27 711	i
Totals		979	440		923	92.61	358	260	190	148	23	839	138	2
Grand Totals		9,251	3,893		8,774	93,42	3,145	2,490	1,777	1,472	367	5,128	3,689	434
Decreases for year		316		173	184	1.48		81	68	91	14	156	135	25
Decreases for year Percentages			42.08	57.92	94.84		34.00	26.92	19.21	15.91	3.96	55.43	39.88	4.69
					-,01		31,00	20.02	10.21	10.01	0.00	00, 10	00.00	

THE CONTINUATION SCHOOLS
TABLE 34—AGE-GRADE DISTRIBUTION, MAY, 1938

		1.1	1.9	13	4	<u>.</u>	91	17	01	01	06	91 20005		Crada
		years	years	years	years	years	years	years	years	years	years	and over	Totals	Totals
The state and	Boys	C1	51	277	482	391	147	51	13	8			1,409	
GRADE IA	Girls	5	7.9	431	681	393	115	25	7				1,736	0,143
	Boys		4	36	208	412	246	106	30	7			1,046	007.0
GRADE A	Girls		¢1	22	355	531	336	123	32	œ			1,444	2,4300
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Boys			8	39	173	267	153	28	12	3	က	711	1111
OKADE AL	Girls		:	4	70	300	403	209	55	12	2	9	1,066	1,111
The American	Boys				60	29	142	218	135	44	12	ro.	588	1430
GRADE ALL	Girls			:	ಣ	63	237	327	161	89	55	8	884	7,412
DADS WIII	Boys					1	5	45	40	25	17	9	139	2,62
	Girls	:	:			က	55	6.5	73	45	14	9	228	
	Boys	63	55	316	732	1,006	807	573	268	88	32	14	3,893	
TOTALS BY SEXES	Girls	23	81	492	1,109	1,290	1,113	749	328	133	43	15	5,358	
GRAND TOTALS		2	136	808	1,841	2,296	1,920	1,322	596	221	75	50	9,251	
	-													

			200			1000					
	Average		Major Sourc	Major Sources of Receipts		Disbur	Disbursements	Cost	Cost per Pupil-Day (in cents)	-Day	
Schools	Daily Attend- ance (A)	Legislative Grants	County	Township	School District Levy (B)	Current	Capital	Current	Capital	Total	Debenture (n) Indebtedness
In Counties		so.	₩	so.	es.	69	so				69
Acton	72	919	2,907		2,875	4,926	2,247	35.5	16.2	51.7	17,349
Agincourt	106	1,005			9,332	8,147	2,198	40.8	11.0	51.8	58,512
Ailsa Craig	49	1,099	650		1,997	3,661	697	42.3	8.0	50.3	8,915
Allenford	32	833	2,084	521	655	2,744	655	50.1	12.0	62.1	7,211
Alton	22	870	169		567	2,965	567	65.7	12.6	78.3	890'9
Alvinston	51	912	2,939	:	1,321	4,279	914	45.4	9.7	55.1	11,749
Arkona	17	214	353	:	570	1,255		36.9	:	36.9	
Aultsville	19	852	1,053	089	473	2,889		82.6	:	82.6	
Ayr	92	1,034	1,247	:	1,555	3,837	:	44.7	:	44.7	
Bath	38	906	1,190		200	2,976		41.2	:	41.2	
Beachburg	22	692		800	1,955	2,923	1,005	63.9	22.0	85.9	5,016
Beaverton	94	926	1,452	:	3,728	5,730	430	33.0	2.5	35.5	805
Beeton	45	893	757		2,194	3,402	654	41.4	8.0	49.4	6,350
Belmont	40	880			2,200	3,225		34.1	:	34.1	
Bethany	12	185	1,470	400		1,319		58.8		58.8	
Blackstock	43	904	3,441	:	1,120	4,729	699	58.9	8.3	67.2	3,840
Blyth	32	881	1,084	:	1,511	2,931	876	48.6	14.5	63.1	831
Bobcaygeon	46	698	1,516	:	3,022	4,547	1,203	52.8	14.0	8.99	11,306
Bolton	26	888	1,425	428	1,200	3,173	1,088	0.69	23.7	92.7	5,434
Bothwell	47	950	1,156	:	1,763	4,533	113	53.7	1,3	55.0	
Bowesville	4	123	123	480	427	1,114		125.4	:	125.4	
Brooklin	44	937	1,303	008	1,376	3,366	1,376	41.3	16.9	58.2	22,018
Brownsville	30	942		400	208	3,579	:	50.1		50.1	
Brussels	92	906	1,657	:	150	4,934		36.0	:	36.0	
Burgessville	23	811	2,110	:	1,882	3,193	1,605	71.1	35.8	106.9	12,393
Caledon East	33	856	1,273	:	677	2,913	229	48.9	11.4	60.3	2,375
Cannington	46	968	2.2	:	545	3,322	637	27.3	5.5	32.5	2,795
Cardinal	99	874	208	:	503	4,673	2,180	38.3	17.9	56.2	5,562
Carp	28	968	1,746	1,120	944	4,773	944	31.1	6.1	37.2	9,544
Castleton	24	885	1,974	200	991	2,878	1,864	63.6	41.3	104.9	19,010
Chalk River	06	730		380	1,250	2,403		42.3	:	42.3	
Chatsworth	54	755	1,347		1,095	3,402		71.1	:	71.1	
Claremont	31	784		:	1,951	2,655	1,651	43.7	28.4	72.1	16,290
Clifford	27	753	691	633	784	2,730	784	54.1	15.5	9.69	3,265
Cobden	18	361	727	:	669	1,824	:	54.2	:	54.2	
Coldwater	37	898.	689	1 550  .		3,341		45.6		45.6	

		444				1000					
	Average		Major Sources of Receipts	s of Receipt	s	Disbur	Disbursements	Cost p	Cost per Pupil-Day (in cents)	)ay	
Schools	Daily Attend- ance (A)	Legislative Grants	County	Township Grant	School District Levy (B)	Current	Capital	Current	Capital	Total	Debenture (u) Indebtedness
In Counties		000	000	00	99	00	00				69
Comber	29	917	2,364	1,050	1,308	5,127	1,308	38.9	9.9	48.8	10,462
Consecon	27	635		480	c878	1,994		39.0	:	39.0	
Cookstown	46	808			2,166	3,016		35.0	:	35.0	
Cooksville	38	905	1,295	800	1,478	5,040	086	72.4	14.1	86.5	4,305
Creemore	53	919	2,230		1,840	4,516	712	47.8	7.5	55.3	699'9
Cumberland	22	593		720	149	2,010	149	48.4	3.5	51.9	2,555
Delaware	22	750	725	800		2,651		107.1	:	107.1	
Dellii	48	998	1,425	:	2,549	3,425	2,549	37.4	27.8	65.2	
Delta	53	200	972	:	1,406	3,354		56.7	:	26.7	
Denbigh	16	575	363	315	498	1,809	253	61.2	8.5	69.7	8,600
Dorchester	36	892		400	1,668	2,750	1,674	39.0	23.7	62.7	10,606
Drayton	09	1,643	2,963		1,423	6,232		55.8	:	55.8	
Dresden	123	868	3,540		2,682	6,789	585	31.1	2.6	33.7	5,487
Drumbo	26	1,013	608		2,000	3,982		80.0	:	80.0	
Eganville	36	806	889		783	3,982		56.4	:	56.4	
Eganville R.C	58	092	516		616	3,385		31.2	:	31.2	
Elgin	58	916	3,201	:	1,445	4,744	1,445	45.7	13.9	59.6	6,257
Elmvale	20	914	1,347	800	1,020	4,078		44.6	:	44.6	
Embro	46	995			4,768	4,761	1,043	55,6	12.1	67.7	10,325
Ennismore	28	269	1,096	624		2,420		45.8	:	45.8	
Erin	43	916	1,514	:	3,756	3,788	1,565	49.3	20.3	9.69	12,340
Fenelon Falls	71	920	4,186	:	4,634	6,702	3,119	49.8	23.2	73.0	29,972
Feversham	25	747	1,503	800		2,677	5.18	57.6	11.8	69.4	3,288
Fingal.	53	752	934			2,695		51,4	:	51.4	
Fitzroy Harbour	54	843	113	750		2,815		62.3	:	62.3	
Flinton	18	539	675	127		1,851		55.3	:	55.3	
Florence	44	2,531	1,601	:		3,358		45.1	:	45.1	55,000
Fordwich	20	867	3,565	180		2,942	722	82.1	20.1	102.2	4,179
Forester's Falls	27	584	267	480		2,259		40.4	:	40.4	
Frankford	62	957	1,767	:	200	4,599	2,064	38,8	17.4	2.92	in P.S.
Grand Valley	51	106	1,747	:	1,954	4,909		51.5	:	51.5	
Haliburton	18	1,605	206	975		2,122	772	8.09	22.1	85.9	3,539
Hallville	44	1,621	556	096	3,197	5,883	1,461	73.1	18.2	91.3	880'9
Наггом	80	824	6,419	:	4,105	6,402	1,605	40.6	10.2	50.8	14,198
Hensall	33	878	1,735		1,728	3,325	1,292	57.8	22.4	80.2	4,300
Hepworth	33	286	2,642		305	3,266	305	51.9	4.8	26.7	9,437
Highgate	33	842	1,610		963	3,117	896	47.7	14.7	62.4	6,227

	Average	4	Major Sources of Receipts	of Receipts		Disbur	Disbursements	Cost	Cost per Pupil-Day (in cents)	-Day	
Schools	Daily Attendance ance (A)	Legislative Grants	County	Township Crant	School District Levy (B)	Current	Capital	Current	Capital	Total	Debenture (11) Indebtedness
In Counties		9	a	4	8	8	9				9
Holstein	21	898	1.311	800	585	2.979	585	74.1	14.6	88.7	10.538
Honeywood	20	781	1,348		1,224	2,517	841	69.6	23.4	93.0	7.319
Itderton	52	928			208	2,759		27.6		27.6	
Inglewood	28	643	1,652	:	832	2,772	932	50.5	17.0	67.5	7,024
Jarvis	55	799	1,413	:	911	3,373	1,618	40.5	19.4	59.9	22,168
Jockvale	27.5	414	136	450	352	1,370		56.7	:	56.7	
Kars	31	815		:		2,713		47.2	:	47.2	:
Kentnore	25	878	598		551	3,531		74.9	: 1	74.9	
77.	G 1	500	1,102	000		0,300	077	47.0	7.7	49.7	8,080
Ninmount.	8 8	798	/3	400	1 264	1,564 3,899	:	33.5 54.5	:	33.5	
Lanark	20	968	1.088		976	3 109		0 0 0 0	:	0.10	
Lansdowne	32.0	841	1.223	089	2 000	3.521		25.00		20.00	
Laurel	13	86	737	480	41	1.279		49.7		49.7	
Lefroy	23	672	846	1,000	401	2,928	401	62.9	8.6	71.5	2.852
Lion's Head	28	757	1,892		737	2,533	682	47.8	12.9	60.7	7.080
Little Britain	35	868	2,043	800	1,407	3,463	1,805	54.4	28.4	85.8	19,860
Lobo	34	896	1,432	:	805	4,159		56.4	:	56.4	
Long Branch	226	915	9,775	:	8,006	14,245	4,472	38.8	12.2	51.0	47,894
Lynden	25	885	1,718	833	963	3,075	963	62.7	20.0	82.7	15,412
Lyndhurst	25	906	1,438	089		3,423	:	73.6	:	73.6	
Malakoff	∞ .	519		540		1,834	:	91.0	:	91.0	
Mallorytown	53	915	2,292	:	1,308	3,936	1,308	38.4	12.7	51.1	3,923
Manotick	55	849	1,338	:	1,038	3,505	830	34.8	21	43.0	1,812
Melbourne	34	1,080	82:1	:	669	3,573		56.9	:	56.9	
Merlin	54	874	800	:	107	4,398		43.6		43.6	
Materia	000	1,014	5,522	:	1 500	3,789	553	37.4	5.3	42.7	0,230
Millsoot	2 4 7	910	4.741	:	1,509	201,2		90.4		50°.4	202 60
Milverton	73	923	77.71.		4.953	5.923	2,236	44.9	17.0	6.19	24.601
Minden	123	927	3.422	100	769	1.785		42.1		42.1	
Minesing	14	551		720	580	1,852		65.7		65.7	
Mount Albert	32	1,081	3,609	1,000	331	4,181	1,629	67.4	26.2	93.6	20,411
Mount Brydges	53	800	642		501	3,237		30.4	:	30.4	
Mount Blgin	42	812	1,152		2,874	3,470	1,616	45.7	21.2	6.99	11,182
Mount Pleasant	50	962	2,848		1,828	3,893	1,828	0.79	31,4	98.4	20,103
Navan	25	831		008	1,536	2,719	726	19.1	5.1	24.2	4,056

	Average	N	Major Sources of Receipts	s of Receipts		Disbu	Disbursements	Cost	Cost per Pupil-Day (in cents)	Day	
Schools	Daily Attend- ance (A)	Legislative Grants	County	Township Grant	School District Levy (B)	Current	Capital	Current	Capital	Total	Debenture (u) Indebtcdness
In Counties		00	99	89	66	66	0/9				69
New Dundee	30	944	546	400	1,514	2,99.4	1,003	51.6	17.8	69.4	11,033
New Hamburg	65	942			3,019	3,790	434	31.0	3.5	34.5	1,300
North Augusta	27	714	1,319	089	377	2,925	265	63.7	5.8	69.5	1,200
North Gower	40	783			200	2,786		37.1	:	37.1	
Odessa	30	902	1,194		539	3,376	:	58,8	:	58.8	
Oil Springs	33	835	702	247	270	2,705		44.5		44.5	
Orono	28	166	3,461	1,120	192	5,761	1,138	52.6	10.4	63.0	11,094
Otterville	25	813	2,327		1,339	3,159	1,339	65.6	23.6	89.2	13,389
Paisley	62	917	2,749		1,872	5,040		42.6	:	42,6	
PaincourtE	38				2,993	1,502		55.7		55.7	
Pakenham	37	998	930	800		2,923		40.8		40.8	
Palmerston	22	006	147		3,593	5.235		37.4		37.4	
Pelee Island	10	1,721		640	858	2,207	408	110.0	20.4	130.4	747
Pelham	106	1,181	13,952		3,95.1	14,362	3,852	8.89	18.5	87.3	27,377
Pickering	47	912	1,839	800	1,849	3,377	1,502	36.1	16.1	52.2	10,470
Plattsville,	51	914		:	1,000	4,706	:	49.4	:	49.4	
Port Burwell	31	216	879	800	2,013	3,760	1,305	66.5	23.1	89.6	15,655
Preston	221	905	862		18,367	14,363	6,473	35.6	16.1	51.7	47,538
Princeton	35	1,081	1,247			3,272		8.09	:	50.8	
Richmond	7.1	879	2,476		1,298	5,273	1,278	37.8	9.5	47.0	13,699
Ripley	41	876	2,661		1,130	4,606	430	59.7	5.6	65.3	2,147
Rockwood	40	606	725	800	1,215	3,305	1,548	35.3	16.5	51.8	14,114
Rodney	54	912	656	445	1,000	3,722		37.4	:	37.4	
Kussell	29	893	1,395	492	1,407	4,627		36.4	:	36.4	
St. George	96	1,122	2,505	:	5,355	5,942	1,626	53.4	14.6	68.0	110,011
Schomberg	40	838	2,548		1,249	3,424	1,210	43.8	15.4	20.5	15,079
Scotland	\$20	888	2,253			2,950	1,157	53.7	21.0	74.7	5,644
Seeley's Bay	8 0	862	1,366	637	963	3,218	963	57.4	17.1	74.5	14,443
Delkirk	888	833	1,594	200	200	2,859	200	41.3	7.2	48.5	
Severn Bridge	56	1,340		800	435	2,973	435	59.6	. v	68.3	4,891
Singhampton	20	576	511	0+9	962	1,995	436	55.3	12.1	67.4	5,231
Southampton	42	925	2,274		961	3,795	526	46.2	2.7	48.9	1,176
South Mountain	48	606	564	089	285	4,244	285	46.0	3.1	49.1	569
Sparta	22	896	1,921	400	:	3,645		0.06	:	0.06	
Spencerville	20	882	1,993	096	009	5,128		52.3	:	52.3	
Springfield	37	831	1,520	:	2,499	2,907	1,799	40.8	25.2	0.99	17,992
Stayner	89	914	2,591		2,305	5,381	2,305	44.0	18.8	62.8	21,810

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THE	TABLE 25

	Average	M	Major Sources of Receipts	of Receipts		Disbur	Disbursements	Cost	Cost per Pupil-Day (in cents)	Day	
Schools	Daily Attend- ance (A)	Legislative Grants	County	Township Grant	School District Levy (B)	Current	Capital	Current	Capital	Total	Debenture (H) Indebtedness
In Counties		69	69	œ	69	69	69				69
Stella	14	479			1,213	1,718		62.8		62.8	
Stevensville	37	606	3,179		1,920	4,982	2,006	71.0	28.5	99.5	16,663
Stouffville	93	912	4,822		1,799	5,702	1,799	37.6	11.9	49.5	10,216
Sunderland	42	006	318	800	100	3,025		36.4	:	36.4	
Sutton West	77	923	5,239		3,600	5,707	3,234	37.4	21.2	58.6	41,636
Tamworth	51	1,002	2,706	800	1,500	6,063	:	63.1	:	63.1	
Tara	34	832	2,080	:	:	3,132		49.1	:	49.1	
Tavistock	51	606	735	:	2,800	4,662		46.1		46.1	
Teeswater	56	1,128	4,781	:	1,687	6,470	1,308	61.1	12.3	73.4	5,816
Thamesford	56	668	2,026	:	1,311	3,416	1,311	33.0	12.7	45.7	11,802
Thamesville	92	190	2,105	:	1,961	4,579	1,046	33.2	7.6	40.8	6,664
Thedford	20	753	1,963	:	1,703	2,906	1,204	74.1	30.6	104.7	10,094
Thornbury	86	916	3,118	:	2,984	7,023	:	37.5	:	37.5	
Thorndale	30	811	835	800	562	2,812		51.6	:	51.6	
Thornton	29	882	376	750	651	2,888	651	60.2	13.6	73.8	14,311
Tiverton	21	622	1,554	:		2,716		71.4	:	71.4	
Tottenham	61	837	629	:	376	2,870		28.7	:	28.7	
Wales	34	860	1,100	089	:	3,105	398	48.4	6.2	54.6	1,194
Warkworth	49	901	2,413	:	176	4,855		52.3	:	52.3	
Wellesley	14	603	30	:	727	2,232	:	87.2	:	87.2	
Wellington	72	924	787	:	7,201	6,168	2,752	44.1	19.6	63.7	44,032
West Lorne	33	698		1,000	795	2,916	:	44.6	:	44.6	
Westmeath	17	632	119	892	300	2,250	:	65.2	:	65.2	
Westport	43	841	736	:	1,485	2,992	:	38.7	:	38.7	
Westport R.C	35	880	823	:	748	3,495		53.5	:	53.5	
Wheatley	92	926	2,705	:	4,204	6,391	2,616	49.2	20.1	69.3	9,063
Wilberforce	11	923	85	10	175	1,315		64.3	:	64.3	
Wolfe Island	12	149	331	:	320	1,032		49.8	:	49.8	
Woodville	47	985	2,008	:	1,910	3,550	1,569	38.0	16.8	54.8	23,530
Wooler	47	763	1,255	:	1,272	4,318	:	49.3	:	49.3	
Wroxeter	58	737	1,136	800		2,721	:	55.4	:	55.4	
Wyoming	33	643	1,895		200	2,491	D	39.7	Ω		1,943
Totals and Averages	7,869	153,428	263,872	47,838	253,408	671,761	127,768	46.3	8.8	55.1	1,154,882

Schools		Average	N	Major Sources of Receipts	of Receipts		Dishu	Dishursements	Cost	Cost per Pupil-Day (in cents)	-Day	
In Districts         \$ <t< td=""><td>Schools</td><td>Daily Attend- ance (A)</td><td>Legislative Grants</td><td>County</td><td>Township Grade</td><td>School District Levy (B)</td><td>Current</td><td>Capital</td><td>Current</td><td>Current Capital</td><td>Total</td><td>Debenture (n) Indebtedness</td></t<>	Schools	Daily Attend- ance (A)	Legislative Grants	County	Township Grade	School District Levy (B)	Current	Capital	Current	Current Capital	Total	Debenture (n) Indebtedness
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	7: 10:		6	6	0	e	6					
36         1,651         2,763         3,652           50         1,913         2,666         4,496           52         1,822         3,850         1,410         3,080           68         1,822         3,601         4,087         r1           8         1,749         320         3,931         4,087         r1           25         1,768         2,200         4,089         r1           29         1,703         2,200         4,089         r1           20         1,749         2,200         4,089         r1           20         1,749         2,200         4,089         r1           21         1,749         2,200         4,089         r1           22         1,471         2,200         2,067         2,034           22         1,471         2,500         2,067         2,034           23         1,771         2,31         1,800         2,131           34         1,273         4,000         2,131         1,834           4         1,085         2,212         4,100         2,612         1,7           4         1,182         3,149         7,170 <t< td=""><td>Ver Under Contracts</td><td>95</td><td>1.847</td><td>6</td><td>9</td><td>2 617</td><td>5 296</td><td>e c</td><td>45.6</td><td>ē</td><td></td><td>39 907</td></t<>	Ver Under Contracts	95	1.847	6	9	2 617	5 296	e c	45.6	ē		39 907
50         1,913         2,666         4,496           52         1,822         3,850         6,436           68         1,822         3,850         6,436           8         320         1,497         8,850           8         320         1,822         3,931         4,087           8         320         1,768         1,861         4,097         1,830           20         1,703         2,067         3,998         1,890         2,067         3,998           9         1,250         2,007         2,067         3,998         2,633         1,898         3,398         1,898         3,998         1,898         3,998         1,898         1,898         1,898         2,633         1,998         1,899         1,898         1,898         1,899         1,899         1,899	nes.	36	1.651			2,763	3.052	605	44.9	σ α	53.1	4 118
52         1,822         3.850         3,850         5,436         8.080           8         1,749         350         1,410         4,087         P1, 3080           8         320         1,768         285         1,893         P1, 3080           25         1,768         2,200         3,098         P1, 309         P1, 309           30         1,540         2,000         2,034         P1, 398         P1, 309           1,250         1,250         2,034         2,034         P1, 309         P1, 309           1,250         1,471         2,231         1,601         2,034         P1, 309           1,273         1,471         2,231         1,601         2,034         P1, 309           1,171         2,27         400         2,034         P1, 309         P1, 309           1,182         2,31         1,695         2,612         P1, 309         P1, 309           1,182         3,006         2,001         2,601         P1, 309         P1, 309           1,182         3,006         2,639         2,612         P1, 309         P1, 309           1,182         3,006         2,639         2,639         P1, 309         P1, 309 <td>alls.</td> <td>20</td> <td>1,913</td> <td></td> <td></td> <td>2,666</td> <td>4,496</td> <td></td> <td>48.8</td> <td></td> <td>48.8</td> <td>4,110</td>	alls.	20	1,913			2,666	4,496		48.8		48.8	4,110
30         1,749         350         1,410         3,080         rt,1           8         1,822         3,931         4,087         rt,1           25         1,763         2,20         1,801         3,630           29         1,703         2,200         2,067         3,998           33         1,540         2,067         3,998         3,998           17         1,415         2,00         2,067         3,998           17         1,416         2,00         2,067         3,998           17         1,416         2,03         2,034         2,034           18         1,210         2,59         3,308         2,634           19         1,273         2,31         1,601         2,197           10         2,67         2,678         2,633         1,833           10         2,678         4,00         2,633         1,695           11         2,678         4,100         2,653         1,695           11         3,22         4,100         2,659         1,770           11         3,69         3,69         2,659         1,571           11         3,69         3,186 <td></td> <td>52</td> <td>1,822</td> <td></td> <td></td> <td>3,850</td> <td>5,436</td> <td></td> <td>54.5</td> <td></td> <td>54.5</td> <td></td>		52	1,822			3,850	5,436		54.5		54.5	
68         1,822         3,931         4,087         r1,83           25         1,768         1,863         1,803         r1,83           29         1,703         2,200         4,099         1,893           33         1,540         2,067         3,998         1,893           1,250         2,067         3,998         1,893         1,893           1,270         1,270         2,034         2,034         1,893           1,271         1,415         2,31         1,600         2,533           1,273         2,57         1,893         3,308         1,893           1,273         1,273         2,828         1,893         3,308           1,274         2,678         2,828         1,834         1,834           1,274         1,085         400         2,828         1,834           1,112         2,212         4,100         2,639         6,780           1,81s         1,823         3,066         2,659         1,571           1,81s         1,823         1,390         3,186         1,571           1,81s         1,823         1,490         2,659         1,571         1,571           1,81s<		30	1,749		350	1,410	3,080	260	54.0	4.6	58.6	781
25         1,768         1,893         1,893           29         1,768         2,300         2,300         4,099           29         1,540         2,000         3,998         2,034           9         1,250         2,000         2,034         2,034           17         1,415         2,21         1,200         2,034           22         1,471         2,31         1,200         2,034           22         1,471         2,31         1,601         2,034           22         1,471         2,31         1,200         2,034           22         1,471         2,31         2,034         2,197           22         1,471         2,23         1,80         2,197           32         1,311         2,278         1,83         2,38           41         2,278         4,100         2,612         1,83           41         2,212         4,100         2,659         1,57           4Averages         36         1,859         3,066         2,659         1,57           4Averages         8,809         192,374         2,63,872         1,431         55,550         85,721         10, <td>aa</td> <td>89</td> <td>1,822</td> <td></td> <td></td> <td>3,931</td> <td>4,087</td> <td>F1,200</td> <td>30.6</td> <td>0.6</td> <td>39.6</td> <td></td>	aa	89	1,822			3,931	4,087	F1,200	30.6	0.6	39.6	
25         1,768         1,861         3,630         4,099         4,099         2,200         4,099         4,099         1,703         2,200         4,099         1,981         3,998         1,250         2,067         3,998         1,998         1,250         2,034         2,034         2,034         1,203         2,034         1,200         2,034         1,203         2,034         1,203         2,034         1,203         2,034         1,203         2,034         1,203         2,034         1,203         2,034         1,203         2,034         1,103         1,103         1,103         2,131         1,833         1,834         1,834         1,834         1,834         1,163         1,	ale	œ	320			285	1,893		117.1	:	117.1	
29         1,703         2,200         4,099         4,	tyne	25	1,768			1,861	3,630		75.0		75.0	
1,540   2,067   3,998   1,540   2,067   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,034   2,137   2,131   1,601   2,197   2,132   2,132   2,1330	urrent	29	1,703			2,200	4,099		74.3	:	74.3	
1,250   2,034   1,250   2,004   2,004   2,034   1,200   2,553   1,471   1,200   2,553   1,471   1,601   2,197   2,197   1,200   2,553   1,801   2,197   1,271   1,802   2,828   2,828   1,311   1,802   2,612   2,828   1,311   1,802   2,612   2,828   1,311   1,802   2,612   2,828   1,320   2,612   1,802   2,612   1,804   1,824   1,822   2,212   1,695   2,601   1,571   1,695   1,823   1,823   3,196   2,659   1,571   1,695   1,823   1,823   3,196   1,571   1,571   1,571   1,695   1,823   1,823   1,390   3,186   1,571   1,300   3,186   1,823   1,431   55,550   85,721   1,431   2,55,550   85,721   1,431   2,55,550   1,390   3,186   1,571   1,5		33	1,540			2,067	3,998	610	63.2	9.6	72.8	6,102
1,471   1,200   2,553   1,477   1,415   1,200   2,553   1,501   2,197   2,19	vaning	6	1,250		200	200	2,034		114.3	:	114.3	
17   1,415   231   1,601   2,197   2,197   1,415   2,107   2,500   1,893   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,308   3,623   3,623   3,623   3,623   3,623   3,623   3,623   3,606   3,639   3,639   3,186   3,639   3,186   3,639   3,186   3		22	1,471		:	1,200	2,553		59.5		59.5	
1,710   250   1,883   3,308   1,882   2,828   2,828   2,649   2,678   2,612   2,828   2,828   2,678   2,678   2,613   2,131   3,622   2,828   2,678   2,678   2,671   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,212   2,213	Bay	17	1,415		231	1,601	2,197	464	8.77	16.4	91.2	
ding.         1,273         1,822         2,828           20         1,311         1,800         2,612           64         2,678         940         293         1,834           ding.         23         1,085         400         293         1,834           112         2,212         400         5,399         6,780           Falls.         37         1,823         3,494         7,170           1823         37         1,625         3,494         7,170           13         37         1,625         3,660         2,659           4 Averages.         940         38,946         1,431         55,550         85,721           4als and Averages.         8,809         192,374         263,872         49,269         308,958         757,482         1	oya	25	1,710		250	1,893	3,308	793	62.0	16.2	78.2	5,424
ding.         20         1,311         1,800         2,612         2,612         3,623         3,612         3,612         3,612         3,612         3,612         3,612         3,612         3,613         3,623         3,623         3,623         1,834         3,634         1,695         3,678         3,678         3,678         3,678         3,678         3,678         3,678         3,678         3,604         2,650         3,604         3,689         3,186         3,		18	1,273	:		1,822	2,828	240	79.4	6.5	85.9	
ding         64         2,678         2,131         3,623           ding         23         1,085         400         2,131         1,834           1         2,22         400         2,71         1,695           Falls         37         1,823         5,399         6,780           Falls         37         1,625         5,494         7,170           A Averages         36         1,823         3,666         2,659           4,100         2,610         2,650         2,650         3,186           4 Averages         940         38,946         1,431         55,550         85,721           4als and Averages         8,809         192,374         263,872         49,269         308,958         757,482         1	ling	20	1,311			1,800	2,612		7.97	:	76.7	
ding. 23 1,085 400 293 1,834  7 1320 6,780 6,780 8,4100 2,601 1,811 1,310 1,811	пп	64	2,678		:	2,131	3,623	1,308	31.1	11.2	42.3	15,693
Name	's Landing	23	1,085		400	293	1,834		42.5	:	42.5	
Falls   S4   1,822   5,399   6,780   1,281   1,823   1,823   1,823   1,823   1,823   1,823   1,824   1,710   1,710   1,710   1,710   1,823   1,859   1,824   1,431   55,550   85,721   1,830   1,92,374   263,872   49,269   308,958   757,482   1		2	320		:	G571	1,695	:	122.6		122.6	
Palls   112   2,212   4,100   2,604   7,170   1,823   3,494   7,170   1,7170   1,859   1,859   1,859   1,859   1,859   1,8509   1,823   1,830   1,830   1,830   1,830   1,830   1,830   1,831   1,830   1,431   55,550   85,721   1,830   1,830   1,831   1,		84	1,822		:	5,399	6,780	2,752	40.8	16.6	57.4	26,797
Falls 30 1.823 5,494 7,170 31 1.625 3.06 2,659 3.06 1,571 3.859 3.06 1,390 3,186 3.186	ookout	112	2,212		:	4,100	2,604		123.8	:	123.8	
d Averages	Rock Falls	30	1,823			5,494	7,170		119.1	:	119.1	
d Averages 940 8,809 192,374 263,872 49,269 308,958 1,571 1,481 1,482 1,572 1,390 1,571 1,481 1,481 1,481 1,482 1,4	iver	37	1,625			3,066	2,659	1,890	39.3	27.8	67.1	2,500
d Averages 940 38,946 1,431 55,550 85,721 tals and Averages 8,809 192,374 263,872 49,269 308,958 757,482 1	ale	13	957		:	640	1,571		63.9	:	63.9	
940 38,946 1,431 55,550 85,721 8,809 192,374 263,872 49,269 308,058 757,482 1	ge	36	1,859			1,390	3,186		50.4	:	50.4	
8,809         192,374         263,872         49,269         308,958         757,482	als and Averages	940	38,946		1,431	55,550	85,721	10,122	49.7	5.9	55.6	93,702
=	and Totals and Averages	8,809	192,374	263,872	49,269	308,958	757,482	137,890	46.7	8.5	55.2	1.248.584
	,											

A Average Daily Attendance for the calendar year. n Includes levy for capital charges. c Transferred from Public School funds. n In some cases this may include the Public School. G Community donations.

		ATT	ENDA	NCE		GI	RADE	ENROI	LMEN	т	ENR BY	OLME AREA	NT S
COLLEGIATE INSTITUTES	May Enrolment	Male	Female	Average Daily Attendance for the Year	Attendance Efficiency Percentage	Grade IX	Grade X ,	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties Barrie. Belleville. Brantford. Brockville. Chatham. Clinton. Cobourg. Collingwood. Cornwall. Galt. Goderich. Guelph. Hamilton—Central Delta. Westdale Ingersoll. Kingston. Kitchener-Waterloo Lindsay. London—Central. Sir A. Beck South. Morrisburg. Napanee. Niagara Falls. Orillia. Oshawa. Ottawa—Glebe Lisgar. Owen Sound. Pembroke. Perth. Peterborough. Picton. Renfrew. St. Mary's. St. Thomas. Sarnia. Scarborough. Seaforth. Smith's Falls. Stamford. Stratford. Stratford. Stratford. Stratford. Humberside. Jarvis. Lawrence Park Malvern. North. Oakwood. Parkdale. Riverdale. Vankleek Hill. Windsor—Kennedy Patterson. Sandwich. Walkerville	484 1,011 660 635 143 224 455 463 1,616 1,015 403 2211 269 536 173 284 847 309 651 672 433 1,55 415 373 777 170 603 1,172 993 1,286 827 993 1,286 1,48 1,48 1,48 1,48 1,48 1,48 1,58 1,58 1,58 1,58 1,58 1,58 1,58 1,5	250	271 306 781 491 196 107 134 4283 447 172 231 86 231 232 232 242 425 449 449 449 449 449 449 449 44	459 596 433 462 155 304 4317 253 577 246 802 472 472 4887 623 134 424 305 1575 305 115 1260 505 1164 804 804 805 806 1,215 1,266 1,26	$\begin{array}{c} 95.23\\ 94.24\\ 93.96\\ 94.87\\ 96.39\\ 94.87\\ 96.39\\ 94.98\\ 96.31\\ 95.59\\ 94.91\\ 95.40\\ 96.17\\ 96.72\\ 95.52\\ 95.97\\ 95.42\\ 95.55\\ 97.59\\ 94.24\\ 95.55\\ 97.59\\ 94.24\\ 95.55\\ 97.59\\ 94.24\\ 95.55\\ 97.59\\ 94.24\\ 95.55\\ 97.59\\ 94.24\\ 95.23\\ 95$	240	109 123 93 1203 124 67 80 134 68 74 154 156 166 94 116 116 91 127 345 252 91 40 416 116 116 116 116 117 70 116 117 118 119 119 119 119 119 119 119 119 119	90 103 154 72 107 28 61 92 62 50 116 134 169 232 158 148 20 34 133 97 232 158 24 35 148 20 57 122 51 125 125 125 125 125 125	74 74 74 74 74 74 74 74 74 74 74 74 74 7	622 677 493 3255 380 255 388 3122 1166 266 682 889 866 258 40	405	172 151 132 277 1488 466 484 131	23333
Memorial Runnymede. Vaughan Rd. York East Twp York North Twp	864 1,121 821 275	338 454 588 487 127	311 410 533 334 148	650 828 1,082 930 279	<u> </u>	372 258 458 331 78	126 182 244 249 87	69 175 202 124 60	160 139 81 30	33 89 78 36 20	638 642 1,013 806 194	9 216 107 14 81	6 1 1
In Districts Fort William North Bay Port Arthur Sault Ste. Marie	708 468 358 725	320 228 162 327	388 240 196 398	677 402 338 683	95.11 96.39 95.25 96.04 93.70	219 146 216	9,656 187 125 109 194	121 93 111 136	64 114 67 122	67 40 71 57	35,803 651 421 340 659	4,889 57 26	21 18
Totals All Coll. Institutes	2,259	1,037	1,222	2,100 41,234	95.21	581 13,184	615	461 8,699	367 6,663	235 4,634	2,071 37,874	149 5,038	

		ATT	ENDA	NCE		GF	RADE	ENROI	MEN	Т		OLME AREA	
HIGH SCHOOLS	May Enrolment	Male	Female	Average Daily Attendance for the Year	Attendance Efficiency Percentage	Grade IX	Grade X	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties													
In Counties Alexandria Alliston Almonte Amherstburg Arnprior Arthur Athens Aurora Avonmore Aylmer Beamsville Blenheim Bowmanville Bradford Brampton Brighton Burford Carleton Place Cayuga Chesley Chesterville Colborne Deseronto Dundalk Dundas Dunnville Durham Dutton Elmira Elora Embrun Essex Etobicoke Exeter Fergus Finch Flesherton Forest Fort Erie Gananoque Georgetown Glencoe Grimsby Hagersville	124 133 123 147 338 151 131 186 72 170 193 182 282 282 282 164 194 205 89 126 120 109 78 87 254 131 78 88 114 131 78 88 114 131 173 298 188 199 199 199 199 199 199 199 199 1	1500 744 85 31 500 47 132 69 56 55	54 73 69 46 32 145 166 99 126 61 322 79 136 115 76 78 8	249 181 844 109 131 73 46 223 255 155 211 844 80 121 250 174 131 153 216 163	91.46 96.80 97.09 96.25 95.93 95.11 97.24 95.28 92.59 94.09 92.48 95.05 96.72 94.47 93.93 96.67 92.90 97.51 94.88 94.80 95.36 96.37 96.47 91.05 93.77 94.64 95.11 95.49 95.42 94.89 95.42 94.80	64	16 69 49 22 23 48 25 10 57 90 40 55 22 21 21 21 85 59 59 59 59 59 59 59 59 59 59 59 59 59	24 25 24 20 20 24 34 39 14 24 24 20 20 20 24 39 39 14 39 49 61 33 36 33 36 33 36 32 20 21 49 49 49 49 49 49 49 49 49 49 49 49 49	19 11 13 16 38 17 17 24 20 18	18 14 17 12 16 15	66 255 134 86 41 89 76	129 5 87 74 73 60 12 39 37 85 65	9 1 20 49 3 11 14 20 1 11 11 8 7 9 5 9 11 11 9 7 9
Hanover Harriston	148 94	39	55	93	96.38	30	26	3 12	9	17	56	34	4
Havelock Hawkesbury(Eng.)	68 90	1	1	1		28	23	3 15	1		11	22	12
(Fr.) Iroquois	107	I.	1	1	1	11				1	101 45	1	1
Kemptville	130	58	3 72	129	93.01	36	38	3 13	24	19	56	63	3 11
Kincardine Kingsville				1	1			1	1	1			
Lakefield	87	3:	5 5:	2 88	92.39	23	3 2:	2 24	10	8	50	37	7
Leamington	322	2 149	9 17	324	94.25	11 122	8	11 58	38	1 28	198	114	10

		ATT	'ENDA	NCE		GI	RADE	ENROL	MEN	T	ENR BY	OLME AREA	NT AS
HIGH SCHOOLS	May Enrolment	Male	Female	Average Daily Attendance for the Year	Attendance Efficiency Percentage	Grade IX	Grade X	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties													
Listowel Lucan	212 86	73 37	139 49	190 73	95.55 $92.79$	67 34	49 25	52 13	18 9	26 5	91	106 53	15
Lucknow	104	43	61	95	93.55	31	20	17	22	14	42	18	44
Madoc	125 85	57	68 53	129 75	96.34 96.15	43 29	35	23	14	10	124	1	
Markdale Markham	172	32 73	99	165	94.54	53	11 41	24 30	7 21	14 27	38	47 107	21
Marmora	101	45	56	99	91.81	37	30	14	12	8	58	42	1
Maxville	123	57	66	115	93.00	34	- 25	19	23	22	33	40	50
Meaford	180 151	84 67	96 84	162 153	96.59 94.98	· 45	57 46	33 39	26 14	19 6	116 110	60 41	4
Midland	393	177	216	389	96.17	133	111	74	39	36	312	75	6
Milton	161	71	90	146	93.52	53	41	31	16	20	71	90	
Mimico	686	345	341	701	96.28	212	215	158	66	35	349	337	
Mitchell	171 42	$\frac{65}{21}$	106 21	167 37	96.88 90.79	38 18	39	49	20 5	25 1	70 20	100 16	1 6
Mount Forest	117	45	72	117	96.61	45	27	19	13	13	73	23	21
Nepean	471	201	270	442	94.05	150	115	111	49	46	428	42	1
Newburgh	66	33	33	64	92.30	21	13	9	12	11	11	55	
Newcastle Newmarket	35 278	19 127	16 151	34 267	89.98 95,29	12 107	10	9 58	4 36	17	144	21 123	11
Niagara	64	29	35	66	94.81	22	17	14	6	5	45	19	
Norwich	115	54	61	108	93.06	28	30	25	15	17	56	52	7
Norwood	103	44	59	109	90.95	30	21	21	17	14	38	53	12
Oakville	250 55	104	146 32	242 53	94.69	71 18	80 17	44 12	27 8	28	130 28	120 21	6
Orangeville	157	70	87	154	94.90	42	36	41	19	19	98	40	19
Paris	191	88	103	188	95.06	60	50	36	18	27	133	48	10
Parkhill Penetanguishene	95 155	37 60	58 95	89 153	94.70 94.24	22 66	29 30	11 31	17 28	16	32	57	6 2
Petrolia	191	85	106	174	93.81	58	38	44	26	25	138 111	15 80	
Plantagenet	108	39	69	106	94.06	24	20	24	26	14	75	32	1
Port Colborne	334	138	196	333	96.52	121	101	53	37	22	218	116	
Port Credit Port Dover	368 82	142 34	226 48	361 76	94.11	124 34	115 21	45 21	44	40	95 60	273 20	2
Port Elgin	87	27	60	82	96.21	29	16	14	9	19	44	43	
Port Hope	244	102	142	231	95.55	90	60	56	19	19	180	53	11
Port Perry	125	57	68	112	95.60	38	31	21	17	18	60	63	2
Port Rowan	27 167	11 80	16 87	27 166	91.65 92.87	15 51	6 43	4 25	2 25	23	11 125	16 42	• • • • •
Richmond Hill	198	95	103	187	92.53	73	49	35	24	17	57	141	
Ridgetown	157	64	93	144	94.71	36	33	32	27	29	78	76	3
Ridgeway	114 97	47 32	67 65	110 86	92.34 96.08	38 30	26 18	27 24	15 25	8	79	35 27	
Saltfleet	202	90	112	199	91.07	69	45	56	15	17	69 164	37	1
Shelburne	128	61	67	122	94.22	32	22	24	23	27	58	69	1
Simcoe	325	132	193	282	94.66	108	77	44	51	45	184	137	4
Smithville Stirling	90 97	35 40	55 57	91 99	94.98 96.28	31	23 16	16 21	11 13	9	58	32	
Streetsville	50	19	31	49	95.92	14	15	7	14	13	95 22	24	2 4
Sydenham	126	57	69	126	95.78	32	29	23	23	19	126		
Thorold	301	137	164	302	94.80	131	87	48	18	17	249	52	
Tillsonburg	118 261	58 111	60 150	114 262	92.49 95.66	42 72	28 83	23 42	17 30	8 34	64 145	39 46	15 70
Trenton	250	98	152	257	95.76	83	51	49	34	33	198	24	28
Tweed	140	58	82	132		43	30	37	16	14	58	76	6
Uxbridge Vienna	137 26	60	77 18	142 22	94.61 96.88	37 9	21 5	37 6	17	25	55	75 3	7
Walkerton	138	61	77	136			36	25	6 19	7	22 79	58	1

		ATTI	ENDAN	CE		GR	ADE E	NROL	MEN'	Т		OLME: AREA	
HIGH SCHOOLS	May Enrolment	Male	Female	Average Daily Attendance for the Year	Attendance Efficiency Percentage	Grade IX	Grade N	Grade XI	Grade XII	Grade XIII	Resident Pupils	County Pupils	Non-Resident Pupils
In Counties													
Wallaceburg. Wardsville Waterdown. Waterford. Watford. Welland. Weston.	207 30 153 119 129 376 395	82 11 59 49 58 188 204	125 19 94 70 71 188 191	210 26 149 122 120 331 381	94.79 93.27 94.08 95.25 94.33 95.93 95.23	66 15 56 38 34 115	52 5 24 30 27 88 90	41 3 43 17 21 73 88	27 7 14 26 21 65 52	21  16 8 26 35 35	137 8 122 45 46 244 247	48 16 21 70 78 132 142	22 6 10 4 5
Whitby	190	82	108	193	95.30	65	46	28	16	35	131	59	
Wiarton	101 125	35 54	66 71	101 108	95.08 94.78	25 36	33 28	18 25	14 22	11 14	74 123	14	13 1
Winchester	127	56	71	121	95.96	32	33	21	18	23	49	62	16
Wingham	154	50	104	149	97.69	55	33	31	22	13	80	72	2
Totals	20,651	8,888	11,763	19,796	94.86	6,639	5,136	4,018	2,645	2,213	12,224	7,606	821
In Districts													
Bracebridge	189	75	114	188	96.05	59	41	31	30	28	113	73	3
Capreol	91	42	49	83	93.89	23	31	20	11	6	77	14	
Chapleau	152	61	91	158	94.04	67	33	23 25	17	12	140	10 43	2
Cobalt	146 146	72 63	74 83	141 152	87.77 95.75	66 61	29 34	28	14 13	12 10	103 133	13	
Copper Cliff	157	74	83	146	96.03	74	40	27	16		138	19	
Dryden	99	37	62	106	96.23	36	21	14	12	16	78	21	
Englehart	72	24	48	69	93.06	24	17	18	9	4	68	4	
Fort Frances	238	99	139	236	95.94	49	56	76	38	19	198	40	
Gore Bay Gravenhurst	55 88	25 38	30 50	55 85	94.69 91.06	10 33	12 24	15 13	7 13	11 5	39 64	$\frac{16}{22}$	2
Haileybury	85	28	57	79	93.00	36	16	9	18	6	67	17	1
Huntsville	134	55	79	132	94.73	47	31	24	17	15	86	48	
Iroquois Falls	119	57	62	120	97.32	59	25	18	14	3	57	62	
Kapuskasing	161	71	90	151	95.79	65	38	27	21	10	148	11	2
Keewatin	79 393	34 162	45 231	77 382	93.42 96.48	33 149	23 92	12 70	11 52	30	78 377	1 14	2
Kenora Kirkland Lake	248	102	139	214	92.33	101	61	36	30	20	245		3
Mattawa	68	30	38	70	94.62	28	15	12	5	8	61	7	
New Liskeard	200	65	135	200	93.42	62	48	53	27	10	124	74	2
Parry Sound	191	71	120	178	83.04	53	46	39	30	23	166	25	
Rainy River Sturgeon Falls	101 222	49 104	52 118	100 212	94.72	31 89	27 51	21 25	19 34	3 23	95 169	6 49	4
Sudbury	371	161	210	364	94.73	81	76	98	83	33	330	33	8
Tessalon	95	39	56	81	93.44	28	27	23	6	11	65	30	
Timmins	441	194	247	439	95.19	169	111	82	44	35	427		14
Tisdale Twp.—	1.50	0.0	=0	1.57	00.04	co	20	20	0.4	0.4	1	10	
Schumacher South Porcupine	159 98	80 41	79 57	157 97	96.84 96.03	60 50	29 31	22 17	24	24	147 75	12 23	
Totals	4,598	1,960		4,472	94.06	1,643		878	615	377	3,868	687	43
Totals, all High Schools.	25,249	10,848	14,401	24,268	94.71	8,282	6,221	4,896	3,260	2,590	16,092	8,293	864
Grand Totals	68,700	32,588	36,112	65,502	95.72	21,466	16,492	13,595	9,923	7,224	53,966	13,331	1,403
Increases for year	801		1,123	739	2.21	1,964		69			487	432	
Decreases for year		322	1				383		111	738			118
D		17 40	E0 ==	05.01		21.01	94.00	10.50	11 44	10.50	70 55	10 40	2.05
Percentages		47,43	52.57	95,34		31.24	24.00	19.79	14.44	10.53	78.55	19.40	2.05

THE COLLEGIATE INSTITUTES AND HIGH SCHOOLS

1938	
MAY.	
DISTRIBUTION, MAY,	
AGE-GRADE DI	
TABLE 37—AC	

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_	-	-													
	y 1	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	21 years and over	Totals	Grade Totals
	Boys		19	317	2,036	3,537	2,755	1,228	363	7.5	6	1	2	10,343	007.00
GRADE IX	Girls	:	30	385	2,606	4,112	2,629	1,056	252	44	4	3	2	11,123	21,400
	Boys	:	:	6	308	1,682	2,709	1,821	662	218	55	10	9	7,617	16 409
GRADE X	ris	:	1	30	408	2,194	3,226	1,961	992	219	43	14	13	8,875	10,432
	Boys				17	235	1,313	2,250	1,579	653	200	34	30	6,311	12 505
GRADE XI	Girls	:	:	:	31	332	1,880	2,617	1,566	612	174	45	27	7,284	10,000
	Boys				2	10	216	1,046	1,678	1,099	435	149	50	4,685	0 003
GRADE XII	Girls	:	:		:	23	311	1,367	1,981	1,040	394	98	24	5,238	9,920
	Boys						26	217	845	1,250	803	343	148	3,632	7 994
GRADE XIII	Girls	<u>:</u>					31	275	1,089	1,258	625	221	93	3,592	E 971
Boys	)ys	1	19	326	2,363	5,464	7,019	6,562	5,264	3,295	1,502	537	236	32,588	
TOTALS BY SEXES	Girls		31	415	3,045	6,661	8,077	7,276	5,654	3,173	1,240	381	159	36,112	
GRAND TOTALS	   :		50	741	5,408	12,125	15,096	13,838	10,918	6,468	2,742	918	395	68,700	
-	-	-													

	Average	Major	Major Sources of Receipts	sceipts	Disburs	Disbursements	Cost	Cost per Pupil-Day (in cents)	Day	Debenture Indebtedness	lebtedness
Collegiate Institutes	Daily Attend- ance	Legislative Grant	County	School District Levy (B)	Current	Capital	Current	Capital	Total	Amount (including Arrears)	Per \$1,000 of equalized assessment
In Counties		99	90	90	69	<b>\$</b> ⊕				69	569
Barrie	538	3,484	16,272	29,353	39,332	13,921	42.2	14.9	57.1	c100,860	21.17
Belleville	458	2,434		38,552	46,380	2,789	51.6	3.1	54.7	236,850	22.35
Brantford	797	2,40.1	:	58,775	63,701	11,346	42.8	7.6	50.4	c308,319	11,55
3rockville	200	4,651	10,590	37,000	51,255	26,078	58.6	29.7	88.3	c231,143	28.57
Сhatham	465	2,468	9,926	34,920	46,641		55.6	:	55.6		
Clinton	156	2,916	8,595	8,235	12,345	5,833	41.7	19.7	61.4	65,478	85.09
Cobourg	294	4,970	15,070	15,124	31,114	1,524	53.6	2.6	56.2	13,513	44.63
Collingwood	277	4,006	4,575	23,111	23,028	8,586	46.4	17.3	63.7	100,942	37.99
Cornwall	492	2,688	13,340	36,810	32,042	7,775	37.1	0.6	46.1	c81,703	84.09
Galt.	347	2,190	6,693	33,221	38,871	4,763	67.0	8.2	75.2	13,693	1.24
Goderich	233	3,666	5,738	16,976	21,011	3,990	52.0	8.6	61.9	43,457	22.97
Guelph	585	2,709		48,054	49,491	15,034	58.2	17.7	75.9	c428,650	22.97
Hamilton (3)	2,489	6,461	:	339,575	266,078	37,611	6.99	8.0	74.9	713,306	4.33
Ingersoll	251	3,160	2,308	19,235	25,953		52.7		52.7		:
Kingston	707	4,480		66,328	50,609	5,555	52.0	4.0	56.0	70,400	3.71
Kitchener-Waterloo	547	2,128		47,123	43,412	12,561	42.4	12.2	54.6	134,180	3.95
Lindsay	441	5,203	14,355	24,393	36,463	5,393	45.3	6.7	52.0	45,772	10.74
London (3)	2,240	10,558	:	285,045	245,227	84,598	65.9	21.7	84.6	505,672	6.17
Morrisburg	138	3,156	8,481	8,165	13,970	4,553	57.0	18.6	75.6	51,961	72.06
Napanee	199	4,160	9,819	10,058	20,551	2,405	60.3	7.0	67.3	c40,000	35.15
Niagara Falls	423	1,915	135	60,851	43,101	E5,353	51.9	6.4	58.3	95,559	118.34
Orillia	477	4,454	10,759	23,802	33,761	5,49.1	39.3	6.4	45.7	53,227	9.12
Oshawa	00 00	2,282		76,008	53,666	30,873	48.1	27.7	75.8	c374,507	14.23
Ottawa (2)	2,560	4,570		350,990	287,855	74,260	61.7	15.9	9.77	568,789	3.72
Owen Sound	371	1,951	6,227	26,000	35,609		50.9		50.9	c242,000	90.04
rembroke	243	2,035	4,210	5,812	19,194	D	40.0	Ω		C1/9,/32	49,0 <del>4</del>
Perth	298	3,989	9,888	8,104	22,768	3,715	39.1		45.4	22,222	12.41
Peterborough	208	2,047	:	53,433	60,253	3,708	64.0	3.9	67.9	34,678	14.24
Picton	157	2,075	2,690	1,632	13,430	2,419	45.1	8.1	53.2	c1,239	.41
Renfrew	253	2,850	609'2	008'6	23,323	9,633	48.7	20.1	8.89	100,964	31.01
St. Catharines	684	3,853	14,281	71,973	71,876	20,099	56.1	15.7	71.8	c333,166	14.03
St. Mary's	321	3,861	:	15,883	22,003	3,783	37.5	6.4	43.9	34,923	14.82
St. Thomas	624	3,037	11,976	43,304	58,080	3,763	52.5	3.4	55.9	14,726	26.
Sarnia	658	2,728	14,066	72,911	64,898	23,244	54.4	19.4	73.8	53,413	2.88
Scarborough	341	2,704	14,259	16,740	33,505	Q	54.2	Q	:	c273,132	35.41
Seaforth	130	2,555	6,319	5,708	13,944		54.5	: : : : : : : : : : : : : : : : : : : :	54.5		: : : : : : : : : : : : : : : : : : : :
Smith's Falls	434	5,694	999'9	25,628	36,613	4,553	44.5	5.5	20.0	17,061	3.77
Stamford	377	2,566	15,866	12,520	33,070	9,413	44.6	12.7	57.3	c108,870	13.69

			ABLE 30—FI	FINANCIAL STATISTICS, 1737	SIGILOIS	100, 100					
	Average	Major	Major Sources of Receipts	eceipts	Disbur	Disbursements	Cost 1	Cost per Pupil-Day (in cents)	Day	Debenture Indebtedness	debtedness
Collegiate Institutes	Daily Attend- ance	Legislative Grant	County	School District Levy(B)	Current	Capital	Current	Capital	Total	Amount (including Arrears)	Per \$1,000 of equalized assessment
In Counties		99	\$	66	&è	649				69	69
		5,611	3,814	63,309	60,106	12,146	44.3	8.9	53.3	c92,645	6.75
Strathroy		2,859	7,387	9,102	17,837	2,602	53.9	7.8	61.7	15,612	9.25
Toronto (10)	œ	23,462		1,620,617	1,318,182	333,422	87.2	22.0	109.2	4,179,923	42.91
Vankleek Hill		2,640	12,496	3,000	16,763	1,036	55.1	3.4	58.5	2,278	1.80
Windsor (4)	က်	12,517		304,259	309,616	16,202	54.1	2.8	56.9	Ĺ	The
Woodstock		4,126	6,731	29,200	39,460	2,413	44.2	2.7	46.9	c35,800	4.80
		8,170	36,752	41,802	73,125	12,253	55.6	9.3	64.9	c332,621	22.87
		2,462	17,717	29,103	26,791	29,497	59.7	65.7	125.4	177,179	42.57
York Township (3)	2,219	20,112	120,981	109,147	189,614	58,635	52.8	16.3	69.1	c1,033,423	35.21
Totals and Averages	38,393	215,017	456,597	4,273,721	4,155,917	c922,831	60.7	13.6	74.3	11,321,608	90.9
In Districts											
	695	7.999		97.979	70,895	35,445	52.5	26.3	78.8	484,250	16.86
		4.933		37,899	34,379	8,375	41.5	10.1	51.6	109'99	7.00
		4.324		47,022	44,101	10,244	67.2	15.6	82.8	18,987	.72
Sault Ste. Marie.		7,985		17,435	56,224	23,491	41.4	17.7	59.1	279,700	14.68
Totals and Averages	2,158	25,241		200,335	205,599	77,555	49.6	18.7	68.3	849,538	10.16
All Collegiate Institutes	40,551	240,258	456,597	1,174,056	4,361,516	g1,000,386	0.09	13.9	73.9	12,171,146	7.30
High Schools											
In Counties											
Alexandria	138	1,408		7,721	11,702		46.3	:	46.3		
Alliston	136	2,173	5,458	5,110	9,623	1,660	41.2	7.1	48.3	10,000	14.13
Almonte	117	2,399	4,434	9,387	12,405	5,582	55.7	25.1	80.8	000'69	69.45
Amherstburg	132	1,733	7,005	11,732	12,085	8,033	47.4	31.6	79.0	28,977	14.86
Arnprior	290	4,332	9,181	12,936	22,330	3,991	41.5	7.5	49.0	45,242	23.67
Arthur	132	1,794	3,634	2,636	9,243	265	39.0		40.1	797	1.25
Athens	115	2,100	5,296	3,274	10,861	3,274	62.6	18.9	81.5	32,345	141.87
Aurora	169	2,904	16,018	6,822	16,382	7,293	54.5	24.2	78.7	79,290	57.57
	89	1,244	1,603		7,430		59.9		9. G		
Aylmer	170	1.644	6,813	5,150	13,955	222	49.6	0.0	30.4 50.4	9,861	9.01
Bancroft	57	785	744	1,293	2,832	209	26.6	J 1.	63.4	2,920	2.01
Beamsville	136	2,902	12,213	5,278	15,433	1,591	07.0	n	51.0	33 363	41.81
Dienineim	001	7,017	001,0	ll OTE'D	TAPOT.	x,010	2		>	2	

	Aworogo	Major	Major Sources of Receipts	eccipts	Disbur	Disbursements	Cost	per Pupil-Day (in cents)	Day	Debenture Indebtedness	ndebtedness
fligh Schools	Attend- ance	Legislative Grant	County	School District Levy(B)	Current	Capital	Current	Capital	Total	Amount (including Arrears)	Per \$1,000 of equalized assessment
In Counties		49	99	99	69	0/9				00	66
Bowmanville	266	3,746	14,086	14,446	23,516	17,447	46.7	34.7	81.4	996'88	36.90
Bradford	107	1,805		6,801	8,836	3,784	46.5	19.9	66.4	39,592	69.47
Brampton	351	3,769	12,758	22,391	30,255	7,391	48.6	11.9	60.5	64,955	18,91
Brighton	105	1,369	5,212	2,307	7,855	1,307	38.0	9.9	44.6	8,120	11.78
Burford	75	1,726	6,724	7,434	8,162	5,270	54.6	35.2	8.68	42,800	11.28
Burlington	288	4,132	15,682	16,229	27,693	11,170	50.3	20.3	9.02	109,797	39.68
Caledonia	165	3,857	8,355	7,221	17,052	7,221	56.3	23.8	80.1	34,963	139.85
Campbellford	186	2,715	13,205	10,514	22,879	8,462	69.7	25.8	95.5	20,977	55.23
Carleton Place	205	2,753	9,264	14,256	21,849	8,256	55.9	21.2	77.1	87,932	43.48
Cavuga	88	1,657	7,886	6,401	9,793	6,102	63.4	39.6	103.0	30,514	234.72
Cheslev	125	2,339	5,333	4,800	12,704		55.3	:	55.3		:
Chesterville	122	1,623	3,93.1	2,186	7,263		31.9	:	31.9		:
Colborne	95	1,514		2,005	7,237	3,487	37.9	20.2	58.1	14,690	27.13
Descronto	78	1,333	145	3,000	7,315	:	47.7	:	47.7		
Dundalk.	84	1,755	5,177	2,025	7,430	325	45.1	3,3	48.4	975	3.82
Dundas	258	1,966	9,854	15,433	19,138	9,219	38.4	18.5	56.9	81,818	20,67
Dunnville	198	4,320	7,508	9,420	20,853	1,831	60.5	5.3	65.8	6,189	6.10
Durham	100	2,636	5,190	8,179	10,761	3,179	57.5	17.0	74.5	17,612	43.56
Dutton	112	1,802	6,728	4,871	10,988	3,707	53.3	17.9	71.2	46,208	60.02
Elmira	131	2,587	3,801	7,700	13,984		57.7	:	57.7		
Elora	89	1,075	1,931	1,833	6,156	497	46.7	က တ	50.5	3,098	4.63
Embrun	26	978	2,834	2,292	4,608		38.6	:	38.6	000000	
Essex	229	3,009	5,753	6,266	13,607	Ω	31,5	Q		83,003	69.99
Exeter	160	2,139	4,782	4,200	10,765	885	38.4	3.7	42.1	7,823	9.13
Etobicoke	268	3,200	16,135	19,340	30,903	8,201	68.1	18.1	20.7	113,059	27.00
Fergus	199	2,773	8,346	11,605	17,948	6,505	45.6	16.5	62.1	81,652	08.00
Finch	91	1,973	6,304	1,774	8,962		58.2	:	58.3		:
Flesherton	81	1,311	4,373	3,442	8,251		65.1	:	65.1		
Forest	119	2,246	00'9	7,709	10,893	3,209	47.9	14.4	62.3	26,661	40.72
Fort Erie.	195	1,889	14,001	22,232	24,759	Q	65.0	Q	:	146,555	31.40
Сапаподие	175	2,078	2,107	13,750	17,171		54.8	:	8.15		
Georgetown	125	1,795	6,501	6,260	14,123	1,260	6.1.9	5.8	70.7	5,882	3,04
Glencoe	117	1,956	3,973	2,478	10,285	:	43.7	:	43.7		
Grimsby	151	2,371	9,647	9,482	14,102	7,483	50,6	26.9	77.5	80,803	58,34
Hagersville	159	3,249	6,636	6,849	14,010	3,049	46.7	10.1	26.8	28,967	115.86
Hanover	133	2,863	8,116	11,516	15,003	4,816	66.4	27.	87.6	626'09	61.19
Harriston	84	1,306	1,702	2,852	8,142		51.5		51.5		7 00
Havelock	20	1,051	2,937	2,050	4,789	305	37.0	2.3	59.6	2,140	00.

	Average	Major	Major Sources of Receipts	eceipts	Disbur	Disbursements	Cost	Cost per Pupil-Day (in cents)	Day	Debenture Indebtedness	ndebtedness
High Schools	Daily Attend- ance A	Legislative Grant	County	School District Levy (B,	Current	Capital	Current	Capital	Total	Amount (including Arrears)	Per \$1,000 of equalized assessment
In Counties		49	₩	99	69	so.				€€	<b>\$</b>
Hawkesbury (2)	500	3,362	5,731	15,779	21,725		58.4	: t	58.4		
Iroquois	110	2,425	6,597 6,996	3,507	15,387	2,007	54.1 62.3	7.6	83.8 0.09	3,732	64.04
Kincardine	140	2,597	5,967	5,745	14,290		55.7		55.7		
Kingsville.	139	1,722	3,737	6,082	12,162	Q	44.2	Ω	:	38,092	22.04
Lakefield	82	2,122	4,446	4,800	11,787		6.89		68.8		:
Leamington	310	2,091	6,043	9,522	19,759	Ω	34.0	Ω		43,692	10.45
Listowel	194	2,883	7,384	7,376	15,743	1,376	44.6	3.0	48.5	10,371	99.9
Lucan	69	1,898	3,684	3,200	8,625		67.7	:	67.7		
Lucknow	93	1,543	3,738	1,399	6,505		36.8		36.8		:
Madoc	125	2,166	2,641	4,820	9,730	2,820	43.8	12.7	56.5	27,755	99.02
Markdale	95	1,741	4,146	2,100	7,939		66.4		66.4		
Markham	165	2,342	068'6	2,790	14,510	2,072	46.4	9.9	53.0	5,261	11.95
Marmora	102	1,625	4,194	2,410	7,535	589	40.1	3.1	43.2	1,769	7.39
Maxville	112	1,835	6,343	2,531	8,349	1,331	41.4	9.9	48.0	6,836	20.67
Meaford	165	3,196	7,199	8,500	15,388	3,531	48.8	11.2	60.0	34,971	39.18
Merritton	148	1,797	8,060	006,11	13,758	5,0,0	03.1	4.65.4	0.07	64,343	34.93
Midland	375	3,140	7,692	23,302	26,238	9,174	53.0	96.9	50°.4	60 085	23.39
Mimico	701	11 9 7	44 898	17 198	51,015	16 308	44 6	14.3	0 85	926 497	55.96
Mitchell	147	2,042	7.147	6,162	11.957	3.562	43.9	13.1	57.0	36,000	38.19
Morewood	36	1,072	2,695	705	6,562		0.86	:	0.86		:
Mount Forest	109	1,709	2,348	4,400	269'6		45.0	:	45.0		:
Nepean	465	2,904	8,451	33,586	31,590	15,036	36.7	17.5	54.2	151,727	20.71
Newburgh	62	1,709	4,505	1,100	7,233		62.6		62.6		
Newmarket	240	5,325	22,989	9,640	28,732	9,640	60.7	20.4	81.1	53,000	22.61
Nigora	227	1 464	5,000	1,241	4,195		76.4	: -	89.8	5 790	7 17
Norwich	117	2,356	6,564	6,290	11,460	2.833	49.4	12.2	61.6	22,991	37.95
Norwood	104	2,375	9,394	771	10,161		51.5	:	51.5		:
Oakville	234	1,766	15,189	10,459	23,270	4,944	50.6	10.5	61.1	38,873	11.14
Omemee	20	747	1,249	1,657	3,966	149	43.2	1.6	44.8	149	.40
Orangeville	151	2,693	3,860	7,886	14,691	460	53.7	1.7	55.4	1,266	1.09
Paris.	208	2,299	11,585	9,206	20,195	2,786	51.5	7.1	58.6	2,800	1.89
Parkhill	94	1,508	2,458	3,800	8,275		48.8		48.8		
Penetanguishene	136	1,920		9,743	9,403	1,493	35.0	5.6	40.6	4,485	3.70
retrolla	1//	910,6		19,200	11,042	0,,00	00.0	1.07	6.01	02,000	30.14

		avi	IABLE 36—FI	INDINGINE	FINANCIAL SIAIISIICS, 1981	GS, 1937					
	Average	Major	Major Sources of Receipts	eceipts	Disbur	Disbursements	Cost	Cost per Pupil-Day (in cents)	Day	Debenture Indebtedness	debtedness
High Schools	Daily Attend- ance A	, Legislative Grant	County	School District Levy(B)	Cu rent	Capital	Current	Capital	Total	Amount (including Arrears)	Per \$1,000 of equalized assessment
In Counties		66	69	66	69	00				660	49
Plantagenet	107	1,428	7,346	5,335	8,422	2,006	44.4	10.6	55.0	27,984	17.91
Port Colborne	283	2,393	18,019	16,255	30,160	12,255	53.9	21.9	75.8	93,767	20.71
Port Credit	338	5,056	24,158	11,182	25,189	13,073	46.0	23.8	8.69	168,316	130.88
Port Dover	22	1,105	1,494	3,368	5,929	674	42.7	4.8	47.5	3,594	2.71
Port Elgin.	79	1,859	4,982	2,900	8,088		56.7		56.7		:
Port Hope	231	3,638	12,898	10,335	23,764	2,561	59.3	6.4	65.7	29,658	11.67
Port Perry	122	4,316	5,227	6,108	13,063	3,008	57.4	13.3	70.7	. 31,447	49.17
Port Rowan	26	801	1,237	1,877	3,916		78.3		78.3		
Preseott	173	2,632	1,197	11,200	15,336	6,783	8.64	22.1	71.9	88,256	55.66
Richmond IIill	147	3,263	17,466	1,623	12,279	7,034	42.4	24.2	9.99	73,791	80.16
Ridgetown	147	2,995	5,901	7,718	16,072		58.7		58.7		
Ridgeway	114	2,021	9,168	15,010	13,050	7,536	61.8	35.7	97.5	93,228	52.24
Roekland	91	1,920	2,781	3,169	7,111		41.6	:	41.6		:
Saltfleet	217	1,800	7,154	10,795	15,593	6,419	36.6	15.1	51.7	49,568	8.90
Shelburne	122	2,304	5,515	5,323	9,693	2,732	40.2	11.3	51.5	51,910	91.08
Simcoe	288	2,177	10,427	14,136	20,813	6,129	40.6	12.0	52.6	c71,644	16.46
Smithville	95	1,624	4,201	5,624	8,661	1,924	51.4	11.4	62.8	13,472	19.03
Stirling	102	2,375	3,681	2,251	10,317	1,251	56.2	8.9	63.0	5,434	14.37
Streetsville	20	1,520	2,762	2,368	6,807		65.0		65.0		
Sydenham	116	1,435	:	9,600	11,002		48.2		48.2		:
Thorold	294	3,078	9,719	8,457	22,318	Q	40.8	Q		77,157	27.34
Tilbury	122	1,030	1,350	4,200	809'9	12,000	33.6	10.2	43.8		
Tillsonburg	256	3,288	7,143	11,613	19,201	2,613	41.8	5.7	47.5	24,589	13.62
Trenton	263	2,041	3,550	18,973	19,929	4,231	42.8	9.1	51.9	30,445	8.77
Tweed	128	2,231	3,192	8,903	10,062	3,138	42.1	13.1	55.2	3,138	6.29
Uxbridge	113	1,729	5,808	7,243	11,061	6,330	48.8	28.0	8.92	64,506	42.27
Vienna	22	792	1,509	820	3,214		81.7	:	81.7		
Walkerton	114	2,556	7,278	006'9	13,721		61.5		61.5		
Wallaceburg	500	3,124	5,243	12,193	18,513	2,893	49.6	7.8	57.4	7,552	4.16
Wardsville	18	707		677	2,633		0.07	:	20.0		:
Waterdown	152	1,928	6,204	10,677	14,736	4,293	49.6	14.6	64.2	86,258	24.85
Waterford	121	2,225	8,020	3,700	11,280	5,078	50.2	22.6	72.8	38,700	50.80
Watford	117	2,478	5,842	4,300	9,223	3,209	41.7	14.5	56.2	32,197	77.27
Welland	354	1,879		35,774	39,776	7,329	59.7	11.0	70.7	71,200	7.23
Weston	383	5,515	24,607	9,912	38,847	1,562	0.89	27.4	95.4	c192,169	c6.57
Whitby	180	3,475	200	18,635	19,989	4,135	57.1	11.8	68.9	44,872	19.94
Wiarton	113	1,997	4,833	3,755	9,001	1,255	48.5	9.9	55.1	11,343	20.10

		IVI	TABLE 30-FI	FINANCIAL.	SIMISIOS,	1991 1991					
	Average	Major	Major Sources of Receipts	eceipts	Disbur	Disbursements	Cost	Cost per Pupil-Day (in cents)	Day	Debenture Indebtedness	debtedness
High Schools	Daily Attend- ance	Legislative Grant	County	School District Levy (B)	Current	Capital	Current	Capital	Total	Amount (including Arrears)	Per \$1,000 of equalized assessment
In Countes Williamstown Winchester Wingbam	109 133 144	\$ 1,306 2,656 2,923	\$ 459 6,328 6,493	\$ 6,850 2,420 6,040	\$ 8,617 12,091 13,993	\$ 420 340	43.3 47.8 53.9	16.6	43.3 64.4 67.0	\$, 2,105 1,518	3.91
Totals and Averages	19,825	302,501	842,916	975,199	1,794,965	397,852	49.5	11.5	61.0	4,287,188	21.31
Bracebridge In Districts  Gapreol	177	7,711 2,133 3,597		12,321 7,229 14 440	13,420 7,508 15,345	6,108 2,604 3,440	45.2	20.5 15.3	65.7 59.3 66.2	68,916 14,829 38,689	66.41
Cobalt	14.1	4,212		11,055	15,653	D 4,012	58.1	12.8	61.2	39,757	58.51 16.97
Copper Cliff(k)	156 97	2,406		34,137	8,048	12,814	72.2	115.0	187.2	212,911	41.05
EnglehartFort Frances	213	2,085 6,521		5,317	7,058 21,727	10,597	54.3	26.6	81.3	c111,464	c23.64
Gore Bay	3 22 53	2,615		6,074	8,507	010'1	69.5		69.5		49.04
Huntsville	125	3,003 10,697		5,563 13,194	9,718	1,961 J5,620	42.9	8.6 27.3	51.5	16,392	13.82
Kapuskasing	146	4,036 2,173		23,798	22,066 6,924	4,046	80.3	14.7	95.0 45.5	87,053	21.93
Kenora	351 200 66	3,763		34,530 32,974 3 279	29,903 26,784 4 437	3,923	71.6	14.9	82.1 82.1 83.5	141,600 c69,463	28.60 c12.62
New Liskeard	180	7,913 3,136		16,117	21,970 21,970 14,866	617	61.5	1.7	63.2	2,140 1,040	1.23
Rainy River	105 234	2,560		5,769	8,439 38,984	24,669	38.1	50.3	38.1 129.8	103,761	14.97
Sturgeon Falls.	88 298	7,905	: :	10,276 31,776	18,330 39,448	D 2,276	43.1	р 38.9	106.3	8,280 2,276	4.05
ThessalonTimmins	103	3,088		5,551	6,920 48,607	1,071 9,251	36.0	5.6	41.6	29,501 104,012	48.26
Totals and Averages	4,185	111,954		469,467	452,958	c106,095	56.2	16.8	73.0	1,094,163	
All High Schools	24,010	414,455	842,916	1,444,666	2,247,923	c543.947	50.7	12.8	63.5	5,381,351	
Grand Totals	64,561	654,713	1,299,513	5,918,722	6,609,439	61,544,333	56.5	13.4	6.69	17,552,497	
<ul> <li>A Average Daily Attendance for the Cale</li> <li>B Includes Debenture Levy,</li> <li>For Combined School,</li> </ul>	lendar Year.	11. FF D	In addition, \$10,77 Not reported. Excluding defaults.	\$10,779.59 was faults.	In addition, \$10,779.59 was paid on arrears of principal Not reported. Excluding defaults.	rs of principal.		I Count J Rent. K Opene	y Grant <sub> </sub> d Septem	County Grant paid direct to Town, Rent, Opened September 1, 1937,	own.

## THE VOCATIONAL TABLE 39-DAY SCHOOLS-TEACHERS; PUPILS; MAY

	Ī		Teac	chers					
	lool	Fu Tir		Part-' an Occas	d	Con	mplete Ma	y Enrolm	ent
Schools	Type of School	Male	Female	Male	Female	Totals	Male	Female	Percentage Attendance Efficiency
In Counties	AC A.AGR. ACT AC T T COM. ACT AC AC ACT ACT ACT ACT ACT ACT ACT A	10 18 21 18 13 13 13 13 13 13 14 1 12 41 1 10 9 7 1 1 10 9 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 	1 4 7 125 5 3 2 2 4 6 4 3 3 4 4 2 2 1 1 1 4 7 4 4 5 4 4 2 2 1 5 2 6 3 3 1 4	1 3 3 6 3 1 3 3 5 2 6 4 4 2 4 2 4 2 4 2 2 3 3 3 4 2 2 4 3 2 3 3 3 5 5 7 2 3 4 4 2 2 3 3 3	55 22 206 553 66 463 173 174 265 401 1,426 1,022 456 1,675 60 382 227 456 1,650 1,312 277 118 97 75 456 138 22 175 118 97 118 97 118 97 119 119 119 119 119 119 119 119 119	24 177 77 259 25 216 57 88 136 217 1,091 231 434 434 293 126 43 192 21 195 24 43 44 31 192 21 195 24 44 37 185 185 185 185 185 185 185 185 185 185	31 5 129 314 41 1247 116 86 129 184 335 791 175 243 86 1,019 45 56 46 212 227 200 45 56 46 212 227 40 107 40 110 110 110 110 110 110 110	91. 91 82. 77 93. 83 94. 46 92. 11 95. 25 95. 25 95. 30 95. 30 95. 30 95. 30 95. 30 95. 88 94. 40 95. 89 95. 89 92. 86 94. 40 95. 32 95. 81 96. 14 96. 14 97. 33 98. 89 98. 89 98 98. 89 98 98. 89 98 98 98 98 98 98 98 98 98 98 98 98 9
Totals		679	368	171	139	32,618	16,055	16,563	93.45
In Districts  1 Fort Frances  2 Fort William  3 Haileybury  4 Kirkland Lake  5 North Bay  6 Port Arthur  7 Sault Ste. Marie  8 Sudbury  9 Timmins	AC CT AM ACT ACT CT CT ACT	18 2 12 10 16 12 13 6	7 12 8 3 12 7 9 4	2 1 1 1 1 1 3	1 2 4 1	155 726 70 194 437 739 590 495 258	67 354 70 105 257 363 273 263 136	88 372 89 180 376 317 232 122	96.97 88.93 90.85 92.93 94.45 95.49 91.82 91.82 93.41
Totals		91	62	11	10	3,664	1,888	1,776	92,48
Grand Totals		770	430	182	149	36,282	17.943	18,339	93.34
Increases for the year			36	46	34	1,516	718	798	. 55
Decreases for the year							40.45	FO FF	
Percentages							49.45	50.55	

Type of school:—ACT
AC
CT

ACT —Composite (academic, commercial and technical.)
AC —Combined academic and commercial.
CT —Combined Vocational (commercial and technical.)
A. AGR.—Academic, and Vocational Agricultural School.

com.—Commercial.

T —Technical.

N —Navigation.

AM —Academic, and

Mining School.

SCHOOLS ENROLMENT, ATTENDANCE, GRADE DISTRIBUTION, 1937-38

						Pupils				_			
Full-	Time Ma	y Enroli			Grade D	istributi	on of Fu	ıll-Time	Pupils			plete Er t by Ar	
Total	Male	Female	Average Daily Attendance	Pre- Vocational	Grade IX	Grade X	Grade XI	Grade XII	Grade XIII	Special	Resident	County or District	Non- Resident
1 55 2 22 3 206 4 553 5 66 6 463 7 173 8 174 9 265 10 401 11 1,296 12 1,022 13 815 15 586 16 1,675 17 60 20 1,536 20 1,536 20 1,536 20 1,536 20 1,536 20 1,312 22 234 49 352 23 118 24 97 25 392 26 60 27 138 28 75 29 352 21 151 33 71,522 31 504 42 11,536 21 1,536 21 1,536 21 1,536 21 1,536 21 1,536 21 1,536 21 1,536 21 1,536 22 151 33 27 1,522 31 504 42 1,536 42 1,536 42 1,536 42 1,536 42 1,536 42 1,536 42 1,536 42 1,536 42 1,536 43 1,536 44 1,536 45 1,536 47 5,529 48 132 49 14 1,704 41 1,704 41 1,704 41 1,704 41 1,704 41 1,704 42 1,165 43 50 44 1,704 44 1,704 45 1,806 46 115 47 529 48 132 49 136 50 221 51 197	244 177 777 239 255 216 577 888 136 217 961 233 1434 433 293 104 433 293 293 207 213 1,493 293 104 43 43 43 43 43 43 43 43 192 20 82 22 9 140 195 1,745 1,108 1,106 7,745 1,108 1,106 7,745 1,108 1,106 7,745 1,106 1,10	31 5 129 314 41 247 116 86 86 81 129 184 135 135 135 135 135 135 135 135	50 21 182 561 68 347 190 165 268 350 1,347 1,022 817 637 1,376 1,376 1,376 1,376 361 1,257 1,332 209 95 37 363 118 75 363 118 75 367 435 529 202 202 203 1,347 1,500 1,710 1,7	209 37 141 47 	231 138 72 89 102 180 542 412 3378 148 532 154 223 486 478 73 61 122 152 47 40 141 219 30 39 85 970 619 9742 422 595 745 498 172 196 582 219 77	30 10 118 135 31 1055 53 63 83 76 2990 314 2399 157 20 122 122 122 1240 382 388 70 299 25 140 388 177 117 134 82,5 86 50 50 50 56 56 37 40 40 40 40 40 40 40 40 40 40 40 40 40	25 12 43 131 18 81 148 64 161 1148 102 79 115 109 109 23 21 20 20 20 20 20 20 21 4 86 75 55 22 25 34 22 25 34 25 25 25 25 25 25 25 25 25 25 25 25 25		111 34 28 124 16 73 20 29	39 39 39 31 74 73 53 31 52 262 21  114  26 34 44 44  31 93 34 406 15 177 98 158 158 158 158 158 158 158 15	39 6 165 55 290 100 170 194 347 1,007 769 24 384 1,431 1,271 103 36 102 288 283 302 288 288 149 175 2,663 1,078 1,766 1,766 1,766 1,766 1,766 1,767 1,767 1,767 1,768 1,	16 16 33 107 11 166 67 72 49 15 49 175 63 302 21 28 14 49 95 50 30 30 46 70 115 131 149 52 131 149 52 15 30 30 30 30 30 30 30 30 30 30	11 17 11 19 14 11 19 12 24 41 11 19 12 21 11 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
31,289	15,567	15,722	29,770	787	11,248	8,929	5,376	2,269	354	2,326	29,107	3,112	399
1 155 2 726 3 70 4 194 5 432 6 739 7 534 8 495 9 258	67 354 70 105 252 363 228 263 136	88 372 89 180 376 306 232 122	150 713 72 195 367 622 431 493 286		75 358 24 84 144 209 166 254 81	41 163 29 66 155 229 134 145 126	27 96 10 38 95 175 77 79 51	109 7 6 117 25 17	9 99	38	138 646 30 187 359 699 538 384 224	17 38 57 40 51	80 2 7 21 1 111 34
3,603	1,838	1,765	3,329		1,395	1,088	648	281	108	83	3,205	203	256
34,892	17,405	17,487	33,099	787	12,643	10,017	6,024	2,550	462	2,409	32,312	3,315	655
1,483	660	823	2,162			1,064	784	480	19	209	1,288	116	112
				98	975								
	49.88	50.12	94.86	2.28	36.23	28.71	17.26	7.30	1.32	6,90	89.06	9.14	1.80

THE VOCATIONAL SCHOOLS

TABLE 40—AGE-GRADE DISTRIBUTION OF FULL-TIME DAY PUPILS, May 1938

		111	12	13	14	15	16	17	18	19	30	21 vears		orade
		years	and over	Totals	Totals									
TAINOTHA CON HAIR	Boys		89	19	64	194	211	72	13	4	-		581	
	Girls		2	11	53	7.5	39	24	2			:	206	787
CD ADE IV	Boys	7	32	615	1,755	2,144	1,351	597	110	16	9	67	6,629	
	Girls	es	99	962	1,883	1,826	1,093	275	89	es	:	_	6,014	12,643
y navao	Boys	:	1	30	433	1,302	1,610	1,076	456	95	29	6	5,041	
	Girls		က	63	635	1,633	1,530	765	284	48	œ	1	4,976	10,017
CD A DE VI	Boys			1	34	292	829	855	560	240	59	47	2,917	
	Girls			1	38	469	966	887	486	178	33	19	3,107	6,024
CDADE VII	Boys					13	135	329	364	184	104	58	1,187	
	Girls			1		26	220	408	381	178	8	29	1,363	2,550
CDADE VIII	Boys					8	75	47	7.5	50	31	56	237	
CANDLE ALLE	Girls					77	20	47	52	36	82	38	500	462
SpiCIAI	Boys						63	149	214	176	117	F6	813	007
	Girls						134	354	466	300	148	194	1,596	2,409
Toras av Savae	Boys	4	36	665	2,286	3,948	4,204	3,125	1,792	765	344	236	17,405	
	Girls	ಣ	7.1	872	2,609	4,033	4,032	2,760	1,739	743	299	326	17,487	
GRAND TOTALS		1	107	1,537	4,895	7,981	8,236	5,885	3,531	1,508	643	562	34,892	

## THE VOCATIONAL SCHOOLS

## TABLE 41—DAY SCHOOLS—CLASSIFICATION OF STUDENTS BY SUBJECTS OF STUDY, 1937-38

												1	
schools	English	Mathematics	Science	History and Civics	French	Draughting	Shopwork	Art and Design	Domestic Science	Domestic Arts	Commercial Work	Agriculture	Music
In Counties													
Barrie Beamsville. Belleville. Brantford. Brockville. Chatham. Cornwall. Fort Erie Galt. Guelph. Hamilton— Technical	55 22 198 553 66 420 173 174 263 370	117 474 66 420 120 89 257 401	22 90 427 31 269 89 158 221	22 143 342 35 284 145 131	21 31 18 159 111 102	753 180 155	218 19 172 79 109	88 31 165	209 30 87 73 49	48 209 86	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	72	29 74  72 89
Commerce Westdale Kingston Kitchener-Waterloo London Napanee Niagara Falls	949 779 625 516 1,336 60 382	1,391 782 770 555 340 1,241 19 382 432	456 238 911	735 611	150 369 220	340 327 215 597	88 340 327 208 713	361 345 142 157 20 154	626 230 242 328 357	230 242 394	1,022 380 200 435 827 60 128		133 341 379 152  154 223
Ottawa— Technical Commerce Owen Sound Pembroke Perth Peterborough Picton Renfrew Ridgetown St. Catharines St. Thomas Scarboro Simcoe Stamford Toronto—	1,422 1,312 176 101 97 385 52 107 75 352 335 504 148 77 2188	1,422 356 186 86  388 19 69 58 352 388 504 119 69 2722 2722	755 164	1,422 1,279 180 109 97 380 60 40 352 398 353 136 48 157	861 844 	43 153 91	95 43 187 31 29 91 195 224	589 60 61	151	30 129 155	148 118 97 134 62 117 18 231 135 343	31	881 757 75 22  141 219 77 48 135
Central Technical. Danforth Technical Western Technical. Central Commerce. Eastern Commerce Western Commerce Worth'n Vocational Welland. Weston. Windsor Woodstock. York East. York North.	2,441 1,522 1,140 1,704 1,733 1,151 2,324 496 374 1,991 70 491 132	2,144 1,430 1,108 1,704 1,443 959 1,902 372 372 3407 1,484 115 388 99	2,555 1,438 1,046 1,346 839 1,965 461 461 41,114 42 314 110	2,152 1,505 999 1,498 1,636 1,095 1,965 449 397 1,505 70 474 132	223 362 283 1,352 1,595 390 1,365 	1,556 1,019 739 325 186 215 915	1,739 1,032 736  110 463	977 827 589 175 748 113 1,077 33 107 166	550 297 267 267 333 405 153 119 118	429 297 249  405	1,129  531 1,704 1,733 1,165 1,515 1,515 164 152 734 115 529 132		771 709 524 595 748 191 689 374 374 229
Runnymede Vaughan Road York Memorial	136 221 174	101 88 60	35 118	75 184 118	184 174						136 221 197		
Totals	30,429	26,166	21,523	26,823	10,950	10,776	11.867	9,983	6,526	4,804	18,347	421	9,890
In Districts Fort Frances Fort William Haileybury Kirkland Lake North Bay Port Arthur Sault Ste. Marie Sudbury Timmins	143 735 59 192 432 708 501 495 274	148 751 61 137 356 606 407 495 274	92 402 70 120 290 708 267 378 185	112 740 46 178 430 730 372 445 245	27 23 144 175 106 180	282 63 96 205 290 201 229 128	48 281 102 240 302 219 212 128	37 227  169 240 54	27 260 88 124 197 125 136 57	260 29 197 125	73 340  155 287 278 343 245 89		592 471 172 232 84
Totals	3,539 33,968	3,235 29,401	2,512 24,035	3,298 30,121	655	1,494 12,270	1,532 13,399	727 10,710	7,540	668 5,472	1,810 20,157	421	1,551

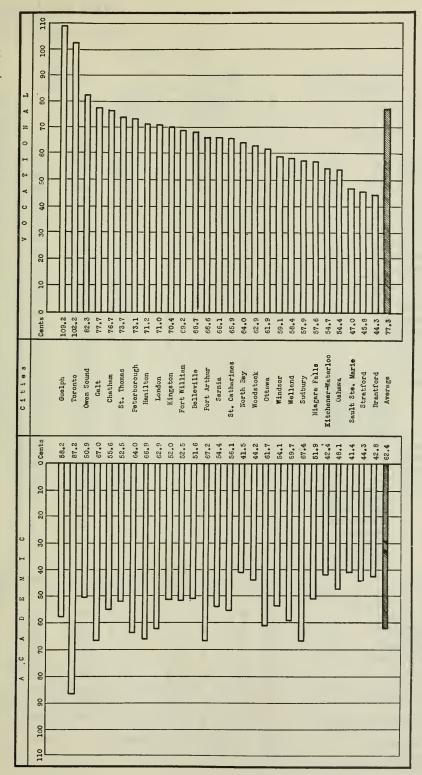
## THE VOCATIONAL SCHOOLS

## TABLE 42—FINANCIAL STATISTICS, DAY SCHOOLS, 1937

		Major S	ources of	Receipts	Disburs	sements	Cost Da	per P	upil- ts)	Debentu Indebtedi (Including Arrears	ness any s)
Schools	Average Daily Attendance A	Legislative Grants 11	County Grant	School District Levy B	Current	Capital	Current	Capital	Total	Amount	Per \$1,000 of Equalized Assessment
In Counties Barrie Beamsville. Belleville Brantford. Brockville. Chatham. Cornwall. Fort Erie. Galt. Guelph. Hamilton(3). Kingston.	57 52 297 595 37 332 184 97 261 3,155 341	\$ 627 2,352 17,642 14,633 1,395 16,804 1,202 1,164 32,259 17,587 8S,480 18,029	\$ 1,807 4,794  9,963 7,125 7,001 5,953	\$ 3,643 2,672 3,275 43,889 7,400 39,370 9,500 8,018 28,300 39,093 498,218 43,568	\$ 5,806 6,529 40,176 51,108 8,464 46,833 16,135 9,454 37,709 40,603 394,784 50,655	\$ 1,591 12,602 12,165 19,012 29,743 20,762 207,294 23,963	58.9 64.4 68.7 44.3 128.8 176.7 50.1 49.5 77.7 109.2 71.2 70.4	D 61.2 55.8 36.4	58.9 79.8 90.1 54.8 128.8 107.8 50.1  138.9 165.0 107.6 103.7	\$ c 236,850 c c 38,024 c 73,278 157,551 c 1,816,142 366,803	22.35 2.65 15.74 14.30 11.03 19.33
Kitchener- Waterloo London Napanee Niagara Falls Oshawa Oshawa Ottawa(2) Owen Sound Pembroke Perth Peterborough Picton Renfrew Ridgetown St. Catharines St. Thomas Sarnia Scarborough Simcoe Stamford Toronto(6) Welland Weston Windsor Woodstock York East York North York Township(3)	671 1,299 96 387 471 2,339 247 788 66 411 93 113 688 543 3433 529 209 227 187 710,197 458 448 448 496 496	18,957 33,882 7,388 20,173 30,173 44,469 699 19,311 6,313 36,313 10,337 1,536 4,822 1,289 305,711 15,157 10,357 25,028 1,013 3,467 5,663 6,197	3,767 2,811 2,472 1,608 3,804 5,652 10,163 11,574 10,517 8,770 3,107 10,578 954 2,407 23,740 6,225 49,087	59,130 152,902 4,887 54,990 42,134 1,742 4,262 3,508 53,914 6,529 9,738 2,954 61,822 60,558 54,510 12,536 4,924 9,988 17,683 1,948,744 39,042 175,373 175,373 13,953 25,506 10,118 37,963	68,683 169,837 8,881 43,785 48,935 279,424 33,270 9,118 6,857 56,630 11,831 66,945 58,501 63,995 19,392 10,571 26,722 15,113 1,762,596 54,759 49,701 195,938 17,236 44,648 8,442 8,442 8,445	14,246 41,251 1,169 E13,726 25,442 25,442 51,207 21,438 929 23,300 4,806 19,114 19,558 17,378 1,532 6,275 3,037 398,109 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 13,099 14,477 15,477 10,364 21,672	54.7 71.0 53.6 61.9 62.3 45.3 45.3 76.9 93.4 48.5 93.4 48.5 76.7 65.1 65.7 65.7 65.9 73.7 65.1 65.9 73.7 65.1 65.9 73.7 65.9 73.7 65.9 73.7 65.9 73.7 65.9 73.7 65.9 73.7 65.9 75.9	7.2 30.1	84.1 51.1 75.2 74.0 55.0 125.3 72.3 80.6 61.9	138,088 294,709 c 45,834 c 232,636 c 7,408 298,000 c 50,482 c 212,002 39,933 c c c c c c c c c c c c c c c c c c c	4.14 12.25 15.51
Totals and Averages	28,686	787,515	240,941	3,906,941	3,934,752	1,055,413	76.9	20.6	97.5	к9,804,622	
In Districts Fort Frances Fort William. Haileybury Kirkland Lake North Bay Port Arthur Sault Ste. Marie Sudbury Timmins	148 651 69 201 312 602 489 525 282	4,640 38,321 13,190 8,603 25,169 36,164 19,728 25,763 19,883		16,703 97,600 3,899 27,475 33,977 75,787 53,329 42,559 32,858	13,712 87,924 9,596 25,298 39,405 76,013 45,031 58,215 39,950	7,583 45,606 3,996 3,923 21,228 33,569 27,210 17,470 11,766	49.8 69.2 71.0 67.6 64.0 66.6 47.0 57.9 72.0	29.6	105.1 100.6 78.1 98.4 96.0	c 520,242 49,161 c 284,435 405,719 193,900 153,722 141,509	18.12 37.53 29.89 15.41 10.19 11.51 17.41
Totals and Averages	3,279	191,461		384,187	395,144	172,351	62.4	27.2	89.6	к1,748,688	
Grand Totals and Averages	31,965	978,976	240,941	4,291,128	4,329,896	1,227,764	75.3	21.3	96.6	к11,553,310	

- A Average Daily Attendance for the calendar year.
- в Includes Debenture
- c Combined Debt. See High School Financial Table.
- D In default.
- E In addition, \$24,455 was paid on arrears.
- F Partial payment.
- G Not reported
- н Including grants on Capital Charges.
- к Total of Vocational Schools in separate buildings, and vocational portion of composite schools where indebtedness has been divided between High and Vocational.

CURRENT EXPENSE PER PUPIL-DAY, FOR ACADEMIC AND VOCATIONAL SECONDARY SCHOOLS IN CITIES, 1937



Graph 7.

## THE VOCATIONAL

TABLE 43—

	11				lı .	1741	3LL 43-
		Tea	chers			Students	
	7	lale	Fe	emale		Enrolment	t
Schools	Total	No. who taught in Day School	Total	No. who taught in Day School	Total	Male	Female
(Counties)							
1 Barrie	4	2	3	3	90	23	67
2 Belleville	10	8	7	6	897	519	378
3 Brantford	8	8	6	5	674	425	249
4 Chatham	8	7	3	2	412	266	146
5 Galt	10	3	1	1	276	224	52
6 Kingston	8	7 6	6	5	481 603	245	236
8 London	26	21	9	5	1,142	389 653	214 489
9 Napanee	4	2	4	1	92	61	31
10 New Toronto	3	3	3	2	204	73	131
11 Niagara Falls	7	6	5	2	407	270	137
12 Oshawa	16	14	10	4	1,048	676	372
13 Ottawa—Technical	26	15	14	2	1,677	1,031	646
Commercial	17	16	6	4	1,141	318	823
15 Owen Sound	7	6	5	5	344	174	170
16 Pembroke	9	4	5	2	289	89	200
18 Renfrew.	20	12	6 3	2 3	855 85	504	351 71
19 St. Catharines.	11	11	6	2	537	341	196
20 St. Thomas.	7	7	2	2	289	192	97
21 Sarnia	13	12	4	4	507	298	209
22 Stratford	9	7	5	2	475	273	202
23 Toronto—Central Technical	92	57	33	6	3,924	2,349	1,575
24 Danforth Technical	54	41	26	6	2,391	1,321	1,070
25 Western Vocational	46	42	18	5	1,891	1,061	830
26 Northern Vocational 27 Central Commerce	62	50	31	15	2,788	1,188	1,600
27 Central Commerce	29 26	22 24	5 1	4	1,374	615 680	759 732
29 Welland	9	7	5	1	1,412	376	227
30 Weston	9	8	8	7	404	245	159
31 Windsor	43	32	10	9	1,504	1,098	406
32 York, East	3	3			94	60	34
33 York Twp.—Runnymede	1	1	2	1	96	45	51
34 Vaughan Road	2	2	3	3	212	88	124
35 York Memorial	3	3	2	2	108	58	50
36 †Humbercrest	1		3 2	2 1	55 69	2	55 67
38 †Rawlinson	2	2	3		123	43	80
39 †Silverthorn			1		28	10	28
40 †Warren Park	1	1			18	18	
Totals	617	472	268	128	29,619	16,305	13,314
(Districts)							
1 Fort William	22	12	12	8	810	493	317
2 Kirkland Lake	10	5	2	1	310	234	76
3 North Bay	6	5	5	3	259	112	147
4 Port Arthur	18	11	11	7	463	250	213
	7	6	3	3	419	255	164
Totals	63	39	33	22	2,261	1,344	917
Grand Totals	680	511	301	150	31,880	17,649	14,231
Increases for the Year	118	78	55	31	6,130	4,647	1.483
Percentages		75.15		49.83		55.36	44.64
tEvening vocational classes held in put	12 1	1.		11			

†Evening vocational classes held in public schools.

SCHOOLS NIGHT SCHOOLS, 1937-38

			Studer	its					
		Beginners			Nationality	,	Aggregate Student Hours	No. of Nights School	No. of Classes
	Total	Male	Female	Canadian	British	Others	Attendance	was Open	
1	70	15	55	85	3	2	6 929	40	
2	886	514	372	805	81	11	6,232 35,100	46	6 33
3	573	361	212	570	37	67	37,880	86	12
4	260	161	99	250	126	36	17,988	45	11
5	195	161	34	216	48	12	9,306	80	10
6	367	181	186	406	66	9	10,782	45	10
7	326	218	108	514	15	74	25,559	66	30
8	872	478	394	927	148	67	52,346	78	37
9	57	32	25	90	2		5,428	44	9
10	196	68	128	166	29	9		34	5
11	277	181	96	299	56	52	12,232	39	15
12	921	584	337	813	121	114	51,303	44	40
13 14	825 877	349 262	476 615	1,456	159	62	67,267	97	52
15	239	125	114	1,046 329	62 15	33	44,826	94	49
16	131	49	82	285	2	2	12,560	48	18 14
17	527	287	240	784	56	15	34,722	106	38
18	66	10	56	85			5,836	57	8
19	336	219	117	414	76	47	24,181	109	30
20	150	85	65	239	32	18	13,790	42	11
21	334	189	145	433	44	30	19,648	45	23
22	329	179	150	423	38	14	17,567	83	28
23	2,155	1,249	906	2,735	605	584	187,304	112	212
24	No	record	kept	1,831	493	67	104,494	112	106
25	1,251	692	559	1,641	179	71	81,024	90	93
26 27	1,687	743 412	944	2,373	328	87	118,058	85	137
28	957 967	412	545 520	1,152 1,214	114 166	108 32	53,279	90	64
29	383	239	144	476	39	88	25,736	90	54
30	226	139	87	351	43	10	14,115	39	26 31
31	1,192	893	299	1,040	204	260	72,086	90	50
32	81	53	28	79	15		5,126	47	6
33	55	25	30	84	11	1	4,268	44	6
34	187	69	188	173	29	10	8,608	44	10
35	101	52	49	95	11	2	12,064	44	4
36	• • • • • • • • •			50	3	2	4,652	61	3
37	• • • • • • • • • •			49	20		4,536	63	3
38				84	31	8	9,868	83	7
39 40	•••••			22 16	6 2		1,344	24	1
40				10	2		1,476	41	1
	18,056	9,721	8,405	24,100	3,515	2,004	1,212,591		1,303
1	588	350	238	685	70		24.000	F0	0.77
2	291	221	70	254	30	55 26	34,903	58 50	37
3	184	82	102	231	22	6	14,095 13,298	50 40	15 11
4	324	169	155	368	44	51	25,081	81	33
5	352	208	144	371	25	23	10,276	38	10
	1,739	1,030	709	1,909	191	161	97,653		106
	19,795	10,751	9,114	26,009	3,706	2,165	1,310,244		1,409
	4,434	2,788	1,716	5,339	435	356	294,803		223
	*62.09	54.31	45.69	81.58	11.62	6.80			

<sup>\*</sup>Of Total Enrolment.

## THE VOCATIONAL SCHOOLS

## TABLE 44-NIGHT SCHOOLS-Classification of Pupils by Subjects of Study, 1937-38

## I. ACADEMIC

1	. ACADE	MIC	
1. English for New Canadians. 2. Reading. 3. Literature. 4. Composition and Spelling. 5. Grammar. 6. Public Speaking.		RAL 7. History and Civics. 8. Current Events. 9. French. 0. Orchestral Music. 1. Dramatic Art.	11 32 306 11 74
1	B-PRACTI	CAL	
1. Arithmetic 2. Algebra. 3. Geometry.	613 382 251	4. Trigonometry	120 108 415
II. VOCATIO	ONAL AN	D INDUSTRIAL	
A	DOMESTIC	ARTS	
1. Cooking	185 241 1 91 1 207 1	8. Textiles. 9. Embroidery and Lace-Making. 0. Knitting. 11. Appreciation of Dress. 2. Period Furniture. 3. Household Accessories.	34 9 34 58 58 97
1	в-сомме	RCE	
1. Writing 2. Stenography 3. Typewriting 4. Business English 5. Journalism 6. Rapid Calculation 7. Business Machines 8. Business Forms 9. Filing	352 4,696 5,881 107 42 27 591 376	10. Office Routine	183 2,132 40 50 223 187 735 22 49
C—ART, I	DRAFTING	AND DESIGN	
(a) Pure Art 1. History of Art 2. Elementary Art 3. Elementary Drawing and Design 4. Colour Study	79 64 74 510	5. Still Life Drawing. 6. Life Drawing. 7. Modelling. 8. Perspective. 9. Antique Drawing.	139 322 57 61 155
(b) Applied Art  1. Illustrating  2. Lettering and Show Cards	204 378	3. Interior Decorating	392 200 7
(c) Industrial Drafting and Design 1. Mechanical Drawing. 2. Industrial Design 3. Blue Print Reading. 4. Architectural Drawing.	1,075 221 184 282	5. Electrical Drawing 6. Machine Drawing and Design 7. Tool Design 8. Sheet Metal Drawing 9. Watchmaker's Drafting	18 252 29 185 12
	D—CRAF	TS	
1. Handicrafts 2. Woodcarving 3. Cabinet Making 4. Pottery 5. Rug Making.	86 17 168 36 58	6. Art Metal Work	37 244 40 40
E—SCIEN	ICE AND E	NGINEERING	
(a) Science 1. Chemistry 2. Industrial Chemistry 3. Chemistry for Nurses 4. Photography	331 218 39 88	5. Mineralogy and Geology. 6. Metallurgy and Assaying. 7. Applied Mechanics. 8. Electricity.	$\begin{array}{c} 21 \\ 67 \\ 6 \\ 757 \end{array}$
(b) Engineering  1. Marine.  2. Heating and Ventilating  3. Refrigeration and Air Conditioning.	30 12 49	4. Aviation	26 141 18
F—TR.  1. General Woodworking. 2. Carpentry and Building. 3. Painting and House Decorating. 4. Machine Shop Work. 5. Plumbing. 6. Acetylene Welding. 7. Auto Mechanics.	594 369 106 1,676 350 886	INDUSTRY  8. Air Craft 9. Electric Wiring 10. Electric Construction 11. Radio (Construction and Repairs) 12. Glove Making 13. Yarn Making	655 478 57 298 31 29
III.	MISCEL	LANEOUS	
1. First Aid	10S 560	3. Gymnasium	881 32

# THE SENIOR AUXILIARY SCHOOLS

1937-38
19
ETC
SILIDILS
TEACHERS, PUPILS, ETC.
TEAC
HOOLS
5-SC
TABLE 45—SCHOOLS, 7
H

										•							
Schools	H,	Full-Time Teachers		Full-Time Enrolment	Aver- age Daily	Attend- ance Effici-	Ye Fu	Year Classification of Full-Time Enrolment	ificatio Enroln	n of tent	Part-	Begin- ners admitted	Reti	Retirements during the Year while in	ts during while in	the Yea	
	M	Male Female	ale Male	e Female	24	ency Per- centage	1st year	2nd 3.	3rd 4th year year	ı 5th	Enrol- ment	during the year	lst year	2nd year	3rd year	4th i	5th year
Hamilton—Boys' Handicraft	<u>:</u>	10	1 242	92	216	85.61 87.43	131	100	11			125 54	50	64	61		
Toronto—Boys' Senior Auxiliary Girls' '' (Groves)		25 15	587	294	502 259 177	87.77 89.44 83.40	249 86 101	177 102 102 16 16 16	121 101 59	0 1 10	14	260 133 129	33	59	110 76 165	24	10
Totals		35 33	829	620	1,234	87.19	612	489 30	302 35	11	17	701	66	148	376	24	10
	TABLE	46—	AGE-GRADE		DISTRIBUTION	TION	OF F	FULL-TIME	TIME	PUPILS,	LS, MAY,	Y, 1938					
	11 Years	12 Years	s 13 Years	urs 14 Years	irs 15 Years		16 Years	17 Years		18 Years 1	19 Years	20 Years	21 and Over		Totals	Year Totals	otals
First Year[Boys {Girls}		111	136	150 78		36	9	21							380 232	612	81
Second Year			810	85 118	121 71	55	61	<b>⊳</b> 31	- :	:				: :	277	489	6
Third Year			96	10		82 74	30 26	P 10			1 :		1		132 170	302	01
Fourth Year						14	0 %	20 03		: :			e :		30	60	35
Fifth Year							-	70			2 :	1	- :		10	-	11
Totals by Sexes(Boys		9	138 112	246 255	294		107	24		21-	m :	1	5.		829 620		
Grand Totals		20	250	501	475	_	158	33		3	3	-	10	<u>                                      </u>	1,449		1
			TABLE		47—FINANCIAL		STAT	STATISTICS, 1937	S, 193	7							
Schools			Average Daily		Major Items of Receipts	Receipts		Disbu	Disbursements	s,	ŭ	Cost per Pupil-Day (Cents)	il-Day (	(Cents)	I	Debenture Indebtedness	re 1ess
		,	Attendance	Legislative Grant		School District Levy		Current	్లు	Capital	Current		Capital	Total		Total	
Hamilton—Boys' Handicraft.  Cirls' Toronto—Boys' Senior Auxiliary (Groves) Girls' Senior Auxiliary (Groves) Girls' Senior Auxiliary (Bolton)	roves)		216 80 502 259 177	22,078 7,649 5,856	554 111 778 56	25,325 9,945 91,736 43,504 43,502	0101	33,141 13,989 102,435 56,683 43,053	= 0	79 126 13,356 162 9,320	77.1 77.5 119.8 135.1 130.3			77.2 78.2 135.4 138.9 158.5	0040	125,886 2,159 49,947	
Totals and Averages			1,234	42,748		214,012	24	249,301	22	23,043	112.5		10.4	122.9		177,992	2

TABLE 48 - Professional Certificates Issued by the Department of Education during the Calendar Year 1938

A-General

				Classi	ication of	Classification of Certificates			
Training Schools	Pu	Public and Separate School	parate Scho	100	High School	chool	Vocation	Vocational School	Grand
	*First Class	Class	Second Class	Class	Interim	Interim Perman-	Interim	Permanent	
	Interim	Interim Perm. Interim	Interim	Perm.	Assistant	Assistant	Ordinary Specialist	Ordinary Specialist Ordinary Specialist	ı
Ontario College of Education. Normal Schools. Ontario Technical Training College.	1138		149		295		1.0	7	1,287
Interim Certificates Issued Interim Certificates Made Permanent Total Number of Certificates Issued	1,165	096	1.19	242	295	105	19 9	17	1,637 1 628 3,265

\*Valid in Continuation Schools also, under certain conditions.

5 Vocational Principals' certificates and 1 provisional certificate were granted, in addition to the above Ordinary and Specialist.

B-Special

	Specialist	20 28 28	88	50 50 50		106 tant 37
	Blementary Intermediate & Supervisor	110	2:16	21 22		Kindergarten-Primary Oral French Provisional High School Assistant
er School	Elementary	509 161	38 503		201	164   Kindergarten-Primary 213   Oral French 26   Provisional High School Assi. 305
(2) Summer School	Subject	Agriculture and Horticulture	Commercial Subjects	Physical Culture	Manual Training	
	Specialist	Perm.	101			
	Spec	lut.				
	ediate	Perm.	90			
Course	Intermediate	Int.	85.53	:		School.
(I) One-Vear Course	ıtary	Perm.				to Normal of Educati
1)	Elementary	Int.		618	322	the Toron
	Subject		Household Science	*Art.	*Vocal Music	Kindergarten 18, taken at the Toronto Normal Schoul, *Taken at the Ontario College of Education.

Nors 1.—In addition to the above, 72 Interim certificates in Elementary, Agriculture and Horticulture, I in Elementary Physical Culture, I in Elementary Art, and 2 in Interioralist Cortificates and I in Elementary Vocat Music were granted an pro tanto standing.

Nors 2.—During the year Household Science Drincipuls' Certificates, were granted, and the following interim certificates in various subjects were made permanent:—580 Elementary, 97 Intermediate and Supervisors', 31 Auxiliary Class, and 52 Kindergarten-Primary.

## C-Temporary

R.C. Separate Inspectorates.—Divisions—II, 4; III, 13; IV, 4; V, 2; VII, 1; XVIII, 3; XIX, 2; XX, 5; XXI, 2; XXII, 5. Public District Inspectorates—Division VI, Part II, 1; IX, 1; XII, Part III, 5. Thescott and Russel IV, 1. The Total Temporary Public County Inspectorates—Sincoe North 1; Prescott and Russel III, 1; Prescott and Russel IV, 1. Total Temporary

Total Temporary Certificates, 42,

TABLE 49—CLASSIFICATION OF SCHOOL CENTRES BY COUNTIES AND DISTRICTS, SEPT. 1938

The type of Secondary Schools is shown thus: Collegiate Institute (CI); High School (H); Continuation School (C); Technical School (T); Commercial School (Com); Composite (academic, commercial and technical) (ACT); Combined academic and commercial (AC); Combined Vocational (commercial and technical) (CT); Combined academic and mining school (AM).

Senior Auxiliary Schools shown thus: (SA); Navigation Schools shown thus: (SA); Navigation Schools shown thus:

Selliot Auxiliary Schools S	8- (/)			
Counties	Citirs	Towns	INCORPORATED VILLAGES	OTHER CENTRES WHERE SECONDARY SCHOOLS ARE LOCATED
Brant	Brantford (ACT)	Paris (H)		Burford (II), Mount Pleasant (C), St. George (C), Scotland (C)
Bruce		Chesley (H). Kincardine (H), Southampton (C), Walkerton (H), Wiarton (H).	Hepworth (C), Lion's Head (C), Lucknow (H), Middmay, Paisley (C), Port Elgin (H), Ripley (C), Tara (C), Teeswater (C), Tiverton (C)	Allenford (C).
Carleton	Ottawa (2 CI) (T) (Com.)	<b>Eastview</b>	Richmond (C), Rockliffe	Bowesville (C), Carp (C), Fitzroy Harbour (C), Jockvale (C), Kars (C), Kennore (C), Kinburn (C), Manotick (C), Metcaffe (C), Nepean (H), North Gower (C), Pierce's Corners*(C)
Dufferin		Orangeville (H)	Grand Valley (C), Shelburne (H)	Honeywood (C), Laurel (C)
Dundas			Chesterville (H), Iroquois (H), Morrisburg (C.I.), Winchester (H)	Hallville (C) Morewood (H), South Mountain (C)
Durham		Bowmanville (H) Port Hope (H)	Millbrook (C), Newcastle (H)	Bethany (C), Blackstock (C), Orono (C)
Elgin	St. Thomas (CI)	Aylmer (H)	Dutton (H), Port Stanley, Rodney (C). Springfield (C), Vienna (H), West Lorne (C)	Belmont (C), Fingal (C), Port Burwell (C), Sparta (C)
Essex	Windsor (4 CI) (CT)	Amherstburg (H), Essex (H), Harrow (H), Kingsville (H), La Salle, Leamington (H), Riverside, Tecumseh.	Belle River, St. Clair Beach	Comber (C), Pelee Island (C)
Frontenac	Kingston (CT)		Portsmouth	Sydenham (H), Wolfe Island (C)
Glengarry		Alexandria (H)	Lancaster, Maxville (H)	Williamstown (H)
Grenville		Prescott (H)	Cardinal (C), Kemptville (H). Merrickville (C)	North Augusta (C), Spencerville (C)
Grey	Owen Sound (ACT)	Durham (H), Hanover (H), Meaford (H), Thornbury (C)	Chatsworth (C), Dundalk (H), Flesherton (H), Markdale (H), Neustadt, Shallow Lake	Feversham (C), Holstein (C)
Haldimand		Dunnville (H)	Caledonia (H), Cayuga (H), Hagersville (H), Jarvis (C)	Selkirk (C)
Haliburton				Haliburton (C), Minden (C), Wilberforce
Halton		Burlington (H), Georgetown (H), Mil- Acton (C) ton (H), Oakville (H)	Acton (C)	

\*Malakoff Continuation School

TABLE 49—CLASSIFICATION OF SCHOOL CENTRES BY COUNTIES AND DISTRICTS, SEPT. 1938

COUNTIES Hastings Huron Kent Lambton Lanark Leeds Lincoln Middlesex Norfolk Norfolk Onthumberland	Crruss  Belleville (ACT)  Chatham (CT)  Sarnia (ACT)  St. Catharines (ACT)  London (3 C1)  Coshawa (ACT)	Towns  Deseronto (H), Trenton (H)  Clinton (C.I.), Goderich (CI), Seaforth (CI), Wingham (H), Bothwell (C), Dresden (C), Ridgetown (A.Agr.), Tilbury (II), Wallaceburg (H)  Forest (H), Petrolia (H)  Almonte (H), Carleton Place (H), Perth (AC), Smith's Falls (CI)  Brockville (AC), Gananoque (II)  Napanee (AC)  Simcoe (ACT)  Campbellford (H), Cobourg (CI)  Whitby (H), Uxbridge (H)	INCORPORATED VILLAGES  Bancroft (C), Deloro, Frankford (C), Madoc (H), Marmora (H) Stirling (H), Tweed (H) Hensall (C), Brussels (C), Exeter (H), Ericau, Highgate (C), Thamesville (C). Wheatley (C), Alvinston (C), Arkona (C) Courtright, Oil Springs (C), Point Edward, Thed- ford (C), Watford (H), Wyoming (C) Lanark (C)  Lanark (C)  Athens (H), Newboro, Westport (2C) Athens (H), Newboro, Westport (2C)  Bath (C), Newburgh (H)  Bearnsville (A.Agr.), Port Dalhousie  (H), Waterford (H)  Brighton (H), Colborne (H), Hastings  Brighton (H), Colborne (H), Hastings  Braverton (C), Cannington (C), Port  Braverton (C), Cannington (C), Port  Beaverton (C), Cannington (C), Port  Perry (H)	OTHER CENTRES WHERE SECONDARY SCHOOLS ARE LOCATED  Merlin (C), Paincourt (C)  Pakenham (C)  Delta (C), Elgin (C), Lansdowne (C), Lydhurst (C), Mallorytown (C) Seely's Bay (C), Mallorytown (C), Seely's Bay (C), Mallorytown (C), Seely (C), Tinton (C), Lobo (C), Snithville (H)  Delaware (C), Dorchester (C), Ilderton (C), Lambeth (C), Lobo (C), Melbourne (C), Mt. Bridges (C), Thorn dale (C), Lambeth (C), Lobo (C), Melbourne (C), Mt. Bridges (C), Thorn dale (C), Claremont (C) Pickering (C), Sunderland (C), Sunderland (C), Sunderland (C)
Oxford	Woodstock (AC)	Ingersoll (CI), Tillsonburg (H)	Embro (C), Norwich (H), Tavistock (C)	Brownsville (C), Burgessville (C), Drumbo (C), Mt. Elgin (C), Otterville (C), Princeton (C), Thanesford (C)
Peel		Brampton (II)	Bolton (C), Port Credit (H), Streetsville	Alton (C), Caledon East (C), Cooksville (C), Inglewood (C)
Perth Peterborough	Stratford (AC) Peterborough (ACT)	Listowel (H). Mitchell (H), St. Mary's (Cl)	Milverton (C)  Havelock (11), Lakefield (H), Norwood Ennismore (C)	Ennismore (C)

TABLE 49—CLASSIFICATION OF SCHOOL CENTRES BY COUNTIES AND DISTRICTS, SEPT. 1938

Counties	Стив	Towns	INCORPORATED VILLAGES	OTHER CENTRES WHERE SECONDARY SCHOOLS ARE LOCATED
Prescott		Hawkesbury (2H), Vankleek Hill (CI)	L'Original	Plantagenet (II)
Prince Edward		Picton (AC)	Bloomfield, Wellington (C)	Consecon (C)
Renfrew		Arnprior (H), Pembroke (AC), Renfrew (ACT)	Barry's Bay, Braeside. Cobden (C) Eganville (2C), Killaloe	Beachburg (C), Chalk River (C), Forester's Falls (C), Westmeath (C)
Russell		Rockland (II)	Casselman	Cumberland (C), Embrun (H), Navan (C), Russell (C)
Simcoe		Alliston (II), Barrie (AC), Collingwood (C.I.), (N), Midland (H) (N), Orillia (CI), Penetanguishene (H), Stayner (C)	Beeton (C), Bradford (H), Coldwater (C), Creemore (C), Port McNicoll, Tottenham (C), Victoria Harbour	Cookstown (C), Elmvale (C), Lefroy (C), Minesing (C), Severn Bridge (C), Singhampton (C), Thornton (C),
Stormont		Cornwall (AC)	Finch (II)	Aultsville (C), Avonmore (II), Wales (C)
Victoria		Liodsay (C.I.)	Bobcaygeon (C), Fenelon Falls (C), Omenice (H), Woodville (C)	Kinmount (C), Little Britain (C)
Waterloo	Galt (A C T), Kitchener (ACT)	Elmira (II), Hespeler, Preston, Waterloo	(C), Ayr (C), New Hamburg (C)	New Dundee (C), Wellesley (C),
Welland	Niagara Falls (ACT) Welland (ACT)	Fort Erie (AC), Port Colborne (II), Thorold (II)	Chippawa, Fonthill, Humberstone	Pelham (C), Ridgeway (II), Stevensville (C), Stamford (AC)
Wellington	Guelph (ACT)	Harriston (H), Mount Forest (H), Palmerston (C)	Arthur (H), Clifford (C), Drayton (C), Blora (H), Erin (C), Fergus (H)	Rockwood (C)
Westworth	Hamilton (2CI), (Com ), (T), (2 SA), (ACT)	Dunday (H)	Waterdown (II), Stoney Creek (H)	Lynden (C)
York	Toronto (10 Cf), (3SA), (2T) (2 Com.)	Aurora (H), Leaside, Mimico (II), Newmarket (II), New Toronto, Weston (ACT)	Forest Hill. Long Branch (C) Markham (H), Richmond Hill (H), Stouffyille (C), Sutton (C), Swansea, Woodbridge	(a) In York Twp. Runnymede (AC) Aughan Rd. (AC) York Memorial (AC) (c) In North York "Willowdie(AC) (d) In Scarboro "Sarboro (AC) (e) In Btobicoke "Etobicoke (H) Agincourt (C), Mt. Albert (C), Schomber (C)

TABLE 49—CLASSIFICATION OF SCHOOL CENTRES BY COUNTIES AND DISTRICTS, SEPT. 1938

Districts	Cities	Towns	Incorporated Villages	OTHER CENTRES WHERE SECONDARY SCHOOLS ARE LOCATED
Algoma	Sault Ste. Marie (CI) (CT)	Blind River (C), Bruce Mines (C), Hilton Beach Nesterville, Thessalon (H)	Hilton Beach	Hornepayne (C), Richard's Landing (C), White River (C)
Cochrane		Cochrane (H), Hearst, Iroquois Falls(H), Kapuskasing (H), Matheson, Smooth Rock Falls (C), Timmins (ACT)		South Porcupine (H), Schumacher (H)
Кепога		Dryden (H) Keewatin (H), Kenora (H), Sioux Lookout (C)		Red Lake (C)
Manitoulin		Gore Bay (H), Little Current (C)		Manitowaning (C) Mindemoya (C)
Muskoka		Bala, Bracebridge (H), Gravenburst Port Carling, (C). Port Sydney, Rosseau. MacTier (C), Milford Bay (C) Windemere	Port Carling, (C), Port Sydney, Rosseau, Windemere	MacTier (C), Milford Bay (C)
Nipissing	North Bay (ACT)	Bonfield, Cache Bay, Mattawa (H), Sturgeon Falls (H)		
Parry Sound		Kearney, Parry Sound (H), Powassan Burk's Falls (C), South River (C), Sun dridge (C)	Burk's Falls (C), South River (C), Sun dridge (C)	Sprucedale (C)
Rainy River		Fort Frances (AC), Rainy River (H)		Ето (С)
Sudbury	Sudbury (II) (T.)	Capreol (H), Chelmsford, Coniston (C), Copper Cliff, Frood Mine, Massey (C), Webbwood		Chapleau (II), Espanola (C)
Timiskaming		Charlton. Cobalt (H), Englebart (H). Haileybury (AM), Latchford, New Liskeard (H)	Thornloe	Fraserdale (C) Kirkland Lake (H).
Thunder Bay	Fort William (CI) (CT) Port Arthur (CI) (CT)			Nipigon (C), Schreiber (C)

### TABLE 50—INSPECTORS AND INSPECTORATES, AS OF DECEMBER 31, 1938

### A—ELEMENTARY SCHOOLS

V. K. Greer, M.A., Chief Inspector, Public and Separate Schools J. D. Campbell, B.A., Assistant Chief Inspector, Public and Separate Schools	
J. B. MacDougall, B.A., D.Paed., Assistant Chief Inspector, Public	
and Separate Schools	
Neil McDougall, B.A., General Inspector, Public and Separate	
	Parlia
Robert Gauthier, B.A., Ph.L., Director of French Instruction	
H. E. Amoss, B.A., D.Paed., Inspector of Auxiliary Classes	
L. Helen De Laporte, B.A., B.Paed., Assistant Inspector of Auxiliary Classes.	
R. D. Keefe, B.A., Provincial School Attendance Officer	
G. R. Fenwick, Mus. Bac., Provincial Supervisor of Music	
N. Davies, B.A., Inspector of Agricultural Classes	
, — — — — — — — — — — — — — — — — — — —	

Parliament Buildings, Toronto.

### (1) CITY—PUBLIC

Inspectorate	Inspector	Address
Brantford	Russell Reid, B.A., B.Paed	Brantford.
Chatham		01 - 11
Hamilton	Superintendent of Schools Frank E. Perney, B.A., B.Paed.,	
	Superintendent of Schools V. N. Ames, B.A., B.Paed E. T. Seaton, B.A., D.Paed R. A. Riddell, B.A., B.Paed	
Kitchener		Kitchener.
London		
	dent of Schools	
	A. B. Lucas, B.A., B.Paed	[]
Ottawa		
	Chief Inspector	
Peterborough		
Sarnia		
St. Catharines	C. A. Brown, M.A., B.Paed	St. Catharines
	W. E. Hume, B.A., D.Paed	
	P. F. Munro, M.A., D.Paed	
	A. G. Leitch, B.A., B.Paed	
	G. W. McGill, M.A., D. Paed	
	D. D. MacDonald, B.A., D.Paed.	
	H. E. Cavell, M.A., B.Com.,	
	B.Paed A. W. R. Doan, M.A., D.Paed	
	J. L. McCullough, B.A., B.Paed	
Welland	. John Flower, B.A	Welland.
Windsor	. G. S. Campbell, B.A., Superin-	
	tendent of Schools	
	A. R. Davidson, B.A	]

### (2) County—Public

Inspectorate	Inspector	Address
Brant and Norfolk (in part); Town of Paris;	W. Joyce, B.A.	Brantford.
Bruce East; Grey (in part); Huron (in		Diametora:
part); Towns of Chesley, Walkerton, Villages of Mildmay, Tara	J. M. Game, B.A., B.Paed	Walkerton.
Bruce, West; Towns of Kincardine, South- ampton; Villages of Lucknow, Paisley,		
Port Elgin, Ripley, Teeswater, Tiverton. Carleton; Town of Eastview; Villages of		
Rockcliffe Park, Richmond  Dufferin (in part); Peel (in part); Town of Orangeville; Villages of Grand Valley,	T. P. Maxwell, B.A	Ottawa. 39 Glen Ave.
Shelburne	A. F. Hansuld, B.S.A	Orangeville.
Chesterville, Iroquois, Morrisburg and Winchester	W. J. Stewart, B.A., B. Paed	Winchester.
Durham (in part) and City of Oshawa; Town of Bowmanville	C. F. Cannon, B.A., B.Paed	Oshawa.
Elgin East; City of St. Thomas; Town of Aylmer; Villages of Port Stanley,		
Springfield, Vienna	J. C. Smith, B.A	St. Thomas.
ma		Windson 165
Essex, Harrow, Riverside, Tecumsen, Viliage of Belle River	D. M. Bagle.	California Ave.
of Wheatley	W. L. Bowden, B.A	Kingsville.
Frontenac, North, and Addington (in part)	1. J. Thompson, B.A., B.Paed	Snarbot Lake.
Kingston	F. P. Smith, M.A	Kingston.
Villages of Bath, Portsmouth	S. A. Truscott, M.A	Kingston.
Glengarry (in part) and Prescott (in part); Town of Alexandria; Villages of Lan-		
caster, Maxville		
Village of Chatsworth	S. A. Morrison, B.A	Meaford.
Owen Sound; Town of Wiarton; Villages of Hepworth, Lion's Head, Shallow Lake.		Owen Sound
Grey, South; Towns of Durham, Hanover;		Owen Sound.
Villages of Dundalk, Flesherton, Mark- dale, Neustadt	G. E. Pentland, M.A	Hanover.
Haldimand; Town of Dunnville; Villages of Caledonia, Cayuga, Hagersville, Jarvis		
Halton; Towns of Burlington, Georgetown, Milton, Oakville; Village of Acton		
Hastings, Centre; Villages of Madoc, Stirling, Tweed		
Hastings North, and Renfrew (in part):		
V llages of Bancroft, Deloro, Marmora Hasitings, North; Renfrew (in part); City of Oshawa; Village of Bancroft	J. D. Deyell, B.A., B.Paed	Bancroit.
Hastings, South, and City of Belleville:		
Town of Trenton; Village of Frankford Huron, East; Towns of Clinton, Seaforth,	H. J. Clarke, B.A	Belleville.
Wingham; Villages of Blyth, Brussels	J. H. Kinkead, B.A., B.Paed	Goderich.
Huron, West; Town of Goderich; Villages of Exeter, Hensall.	E. C. Beacom, B.A	Goderich.
Kent, East; Elgin (in part); Towns of Both- well, Ridgetown; Villages of Dutton,		
Rodney, Thamesville, West Lorne	To be appointed	
Wallaceburg; Village of Ericau Lambton, East; Town of Petrolia; Villages	G. A. Pearson, B.A	Chatham.
of Alvinston Arkona, Oil Springs,		Petrolia
Watford	J. J. Edwards, D.A	i etiona.

### (2) COUNTY—PUBLIC

	1	1
Inspectorate	Inspector	Address
Lambton, West; Town of Forest; Villages		
of Courtright, Point Edward, Thedford,		
Wyoming	H. B. Galpin, B.A., B.Paed	Sarnia.
Lanark; Towns of Almonte, Carleton Place, Perth, Smith's Falls; Village of Lanark		Perth
Leeds and Grenville (No. 1); Town of		r crun.
Gananoque; Villages of Newboro, West-		
Leeds and Grenville (No. 2); Town of	James F. McGuire, M.A	Gananoque.
Brockville; Village of Athens	W C. Dowsley M.A	Brockville.
Leeds and Grenville (No. 3); Town of Pres-		
cott; Villages of Cardinal, Kemptville,		Dua 44
Merrickville	W. H. Carlton, B.A., B.Paed	Prescott.
Towns of Deseronto, Napanee; Village of		
Newburgh	T. R. McEwen, B.A., B.Paed	Napanee.
Lincoln (in part); Towns of Grimsby, Merritton, Niagara; Villages of Beams-		
ville, Port Dalhousie	Geo. A. Carefoot, B.A., B.Paed	St Catharines.
Middlesex, East; Elgin (in part); Village of	D. G. Smith, B.A	London,
Lucan		155 Thornton Ave.
Middlesex, West; Towns of Parkhill, Stra- throy; Villages of Ailsa Craig, Glencoe,		Ave.
Newbury, Wardsville	Gordon Young, B.A	Strathroy.
Norfolk (in part); Town of Simcoe; Villages		
of Delhi, Port Dover, Port Rowan, Waterford		Simone
Northumberland and Durham (No. 1);	Trank Cook, B.H	billiege.
Towns of Cobourg, Port Hope; Villages		
of Newcastle, Millbrook	E. E. Snider, B.A	Port Hope.
Town of Campbellford; Villages of		
Brighton, Colborne, Hastings	A. A. Martin, B.A., B.Paed	Brighton.
Ontario, North, and York (in part); Town of Uxbridge; Villages of Beaverton,		
Cannington, Sutton West	T. R. Ferguson, M.A	Uxbridge.
Ontario South; Town of Whitby; Village		
of Port Perry	R. A. Hutchison, B.A	Whitby.
Oxford, North, and City of Woodstock Villages of Embro, Tavistock	Geo. M. Mather, B.A	Woodstock.
Oxford, South, and Norfolk (in part)		,, odabeoen,
Towns of Ingersoll, Tillsonburg; Village		7
of Norwich		ingersoil.
Credit, Long Branch, Streetsville		Brampton.
Perth, North, and Wellington (in part):		
Towns of Listowel, Mitchell; Village of Milverton	A. E. Nelson, B.A	Stratford
Perth. South, and City of Stratford: Town		
of St. Mary's	G. N. Edwards, B.A., B.Paed	Stratford.
Peterborough, East; Villages of Havelock, Lakefield, Norwood	L W. Copp, B.A., B.Paed	Peterborough
Peterborough, West, and Victoria, East	W. Copp, B.A., B.I acu	l ctcrborough.
Town of Lindsay: Villages of Bobcay-		
geon, Omemee	K. F. Downey, B.A. B.Paed	Peterborough.
Hawkesbury, Rockland, Vankleek Hill.		
Village of L'Orignal (Prot. Sep. Sch.)	J. C. Webster, B.A., B.Paed	Russell.
Prescott and Russell (No. 2)	F. Choquette, B.A	Ottawa, 121 Frank St.
Prescott and Russell (No. 3); Village of		
L'Original (Pub. S.)  Prescott and Russell, (No. 4); Glengarry	J. S. Gratton	Plantagenet.
Prescott and Russell, (No. 4); Glengarry (in part)	Joseph Lapensee R A	Plantagenet
Prince Edward: Town of Picton: Villages of		
Bloomfield, Wellington	C. E. Stothers, B.A., D.Paed	Picton.

### (2) COUNTY—PUBLIC

	(2) 000111 200210				
Inspectorate	Inspector	Address			
Renfrew, North; Town of Pembroke, Village of Cobden	Norman Campbell, M.A	Pembroke.			
frew; Villages of Barry's Bay, Braeside, Eganville, Killaloe Station	Colin W. Lees, B.A., B.Paed	Renfrew.			
Simcoe, Centre; Towns of Barrie, Penetanguishene (Prot. Sep. Sch.)	W. R. McVittie, B.A	Barrie.			
Midland, Órillia; Villages of Coldwater, Port McNicoll, Victoria Harbour	J. A. Gibson, B.A., B.Paed	Orillia.			
Simcoe, North; Town of Penetanguishene (Pub. S.)	H. J. Payette, B.A	Chatham.			
Simcoe, South; York (in part); Peel (in part); Town of Alliston; Villages of Beeton, Bolton, Bradford, Tottenham	C. A. Lapp, B.A., B.Paed	Bradford.			
ner; Village of Creemore	J. K. Evans, B.A	Collingwood.			
Stormont; Town of Cornwall; Village of Finch	James Froats, M.A., B.Paed	Finch.			
Victoria, West; Villages of Fenelon Falls, Woodville.	E. W. Jennings, B.A	Lindsay.			
Waterloo, North; Towns of Elmira, Waterloo.	G. H. Dobrindt, B.A	Kitchener.			
Waterloo, South; City of Galt; Towns of Hespeler and Preston; Villages of Ayr, New Hamburg	Lambert Norman, B.A  To be appointed	Galt.			
Welland, South; Towns of Fort Erie, Port Colborne; Village of Humberstone	James McNiece, B.A	Welland. 65 Bald St.			
Welland (in part); Lincoln (in part); Town of Dunnville; Village of Fonthill	W. A. Marshall, B.A., B.Paed	Welland, 18DennistounSt.S.			
Wellington, North; Towns of Fergus, Harriston, Mount Forest; Palmerston; Villages of Arthur, Clifford, Drayton, Elora. Wellington, South; City of Guelph; Village	L. P. Menzies, B.A., B.Paed				
of Erin	G. G. McNab, M.A., D.Paed	Guelph.			
Waterdown, Stoney Creek	C. B. Routley, M.A	Hamilton.			
market; Villages of Markham, Wood bridge	W. H. T. Mooney, B.A., B.Paed	Toronto, 200 Douglas Drive.			
York (No. 2); Towns of Mimico, New Toronto, Weston	M. R. Fydell, B.A	Toronto,			
York (No. 3); Village of Swansca	W. A. Fydell, B.A., B.Paed	6 Olympus Ave. Toronto, 8 Olympus Ave.			
York (No. 4)	W. W. A. Trench, B.A J. E. Wilkinson, B.A., B.Paed	Richmond Hill.			
York (No. 6); Town of Leaside; Villages o Forest Hill, Richmond Hill, and Stouff ville	_				

### (3) DISTRICT—PUBLIC

Inspectoral Division	Inspectorate	Inspector	Address
I	Kenora and Thunder Bay (in part); Towns of Dryden, Keewatin, Kenora and Sioux Lookout		Kenora.
11	Rainy River; Towns of Fort Frances, Rainy River	W. E. Eade, B.A., B.Paed.	Fort Frances.
III	Thunder Bay (in part); City of Fort William	L. J. Williams, B.A	Fort William.
v	Arthur		
VI	Algoma (in part); Nipissing (in part); Parry Sound (in part); Sudbury (in part); Towns of Capreol, Coniston,		Saure Sec. Marie
	Copper Cliff	Wm. MacMillan, B.A., B.Paed.	Sudbury
	Algoma (in part); Sudbury (in part); City of Sudbury; Towns of Blind River, Frood Mine, Massey, Webbwood	O. M. MacKillop, B.A.,	Sudbury.
Part II	Sudbury (in part)		Sudbury. 10 Beech St.
VIII	Algoma (in part); Manitoulin; Towns of Bruce Mines, Gore Bay, Little Cur- rent, Nesterville, Thessalon		Gore Bay.
IX	Cochrane (in part); Towns of Cochrane, Hearst, Smooth Rock Falls, Timmins.	W. F. Hiscocks, B.A	Iroquois Falls.
X	Cochrane (in part), and Temiskaming (in part); Towns of Englehart, Iroquois Falls, Matheson		Kirkland Lake.
XI	Timiskaming (in part); Towns of Charlton, Cobalt, Haileybury, Latchford New Liskeard; Village of Thornloe		Haileybury.
XII, Part I	Nipissing (in part) and Parry Sound (in part); City of North Bay; Towns of Cache Bay, Mattawa, Sturgeon Falls.	f	North Bay
Part II	Nipissing (in part)	A. Gascon, B.A.	Ottawa, 135 Blackburn Ave.
Part III	Nipissing (in part); Sudbury (in part).	C. Charron, B.A	
XIII	Muskoka (in part); and Nipissing, South (inpart); Parry Sound; (in part) Towns of Kearney, Powassan, Trout Creek Villages of Burk's Falls, South River Sundridge		
XIV	Muskoka (in part), and Parry Sound (in part); Town of Parry Sound; Vill	B.Paed	
	age of Rosseau		Parry Sound
XV	Muskoka (in part); Towns of Bala Bracebridge, Gravenhurst; Villages o Port Carling, Windermere	f	. Bracebridge
XVI	Haliburton and Muskoka (in part) Town of Huntsville	; Albert Brown, B.A	. Haliburton.

### (4) SEPARATE

Inspectoral Division	Inspectorate	Inspector	Address
Ī	Districts of Algoma, Kenora, Manitou- lin, Rainy River, Sudbury (in part), Thunder Bay; Cities of Fort William, Port Arthur, Sault Ste. Marie (in part), Sudbury (in part); Towns of Fort Frances, Keewatin, Kenora, Little Current, Rainy River, Sioux Lookout		Port Arthur.
II	Districts of Nipissing (in part); Sudbury (in part); Cities of Sudbury (in part), Sault Ste. Marie (in part); Towns of Blind River, Chelmsford, Coniston, Massey		288 Harrington. Ave. Sudbury,
III	District of Cochrane (in part); Towns of Cochrane, Hearst, Iroquois Falls, Smooth Rock Falls.		10 Beech St.  Cochrane, Court House.
IV	Districts of Nipissing (in part); Parry Sound (in part); Sudbury (in part); Towns of Bonfield, Cache Bay, Kearney, Sturgeon Falls		Sturgeon Falls.
V	Districts of Cochrane (in part); Timis- kaming (in part); Towns of Charlton, Cobalt, Haileybury, New Liskeard, Timmins; Village of Thornloe		Haileybury.
VI	Counties of Essex (in part); Lambton; Cities of Sarnia, Windsor (in part); Towns of Amherstburg, Essex, Leam- ington, Riverside (in part)		Windsor, 1509 Dufferin Place.
VII	County of Essex (in part); Cities of Windsor (in part); Towns of La Salle, Riverside (in part); Village of Tecumseh		Windsor, 1346 Benjamin Ave.
VIII	Essex (in part); Kent, Muskoka District; Simcoe Co. (in part); City of Chat- ham; Towns of Barrie, Blenheim, Collingwood, Midland, Orillia, Til- bury, Wallaceburg; Village of Belle River		
tχ	Counties of Bruce, Huron, Middlesex, Norfolk, Perth; Cities of London, Stratford, St. Thomas, Woodstock; Towns of Goderich, Ingersoll, St. Mary's, Seaforth, Walkerton, Park- hill; Villages of Mildmay, Teeswater.		
X	Counties of Grey, Waterloo, Wellington; Cities of Brantford, Galt, Guelph, Kitchener, Owen Sound; Towns of Hanover, Hespeler, Mount Forest, Paris, Preston, Waterloo; Villages of Arthur, Elera, Fergus		Kitchener, St. Mary's Sch.,
XI	County of Wentworth; Cities of Hamilton, St. Catharines; Town of Dundas		Young St.  Hamilton, 208 Holton Av., S.

### (4) SEPARATE

	(4) SEPARA	15	
Inspectoral Division	Inspectorate	Inspector	Address
XII	Counties of Northumberland and Durham, Ontario, Peel, Peterborough, Victoria, York (in part); Cities of Niagara Falls, Oshawa, Peterborough; Towns of Campbellford, Cobourg, Lindsay, Merritton, Mimico, Newmarket, Oakville, Picton, Thorold, Trenton, Weston, Whitby; Villages of Hastings, Port Dalhousie		Toronto, 325 Rose Park Dr
XIII	City of Toronto (in part); York (in part); Villages of Forest Hill, Swansea	W. J. Lee, B.A	·
XIV	City of Toronto (in part); York (in part)	J. M. Bennett, M.A., Ph.D.	Toronto, 47
XV	Counties of Frontenac, Hastings (in part); Glengarry (in part); Lennox and Addington, Stormont (in part); Cities of Belleville, Kingston; Towns of Alexandria (in part), Brockville, Cornwall (in part), Gananoque, Prescott; Villages of Chesterville, Marmora, Tweed, Portsmouth		Browning Ave  Kingston, 98
XVI	Counties of Lanark, Leeds, Renfrew (in part); Nipissing District (in part); City of North Bay (in part); Towns of Almonte, Arnprior, Pembroke (in part); Perth, Renfrew, Smith's Falls; Villages of Barry's Bay, Eganville, Killaloe Station, Westport	B.Paed	William St. W.
XVII	County of Carleton (in part); City of Ottawa (in part); Town of Eastview (in part)	F. J. McDonald, M.A.,	Ottawa, 860
XVIII	City of Ottawa (in part), Clarkstown	C. A. Latour, B.A	Ottawa, 67
XIX	Counties of Carleton (in part); Renfrew (in part); Nipissing (in part); Cities of North Bay (in part); Ottawa (in part); Towns of Mattawa, Pembroke (in		Osgoode St.
	part)	Adelard Gascon, B.A	Ottawa, 74 Morleau Ave.
XX	Counties of Carleton (in part); Dundas; Russell (in part); Stormont (in part); Town of Eastview (in part); Village of Casselman		
XXI	Counties of Prescott (in part); Russell (in part); Towns of Cornwall (in part); Rockland; Village of Lancaster		Frank St.
XXII	Counties of Glengarry (in part); Prescott (in part); Russell (in part); Stormont (in part); Towns of Alexandria (in part); Hawkesbury; Vankleek Hill		Plantagenet.

### B—SECONDARY SCHOOLS

G. F. Rogers, B.A., LL.D.—Chief Inspector

### Secondary School Inspectors

R. W. Anglin, M.A. G. L. Gray, B.A. A. J. Husband, B.A. S. D. Rendall, B.A. W. A. Jennings, B.A. R. H. Wallace, M.A. A. G. Hooper, M.A.

### Vocational School Inspectors

F. S. Rutherford, B.A.Sc.
Miss A. M. Hamill, B.A.
Miss A. W. Cameron, B.A.
Miss E. D. McKim, B.A.
L. S. Beattie, B.A.
A. M. Moon, B.A.Sc.
Norman Davies, B.A.
D. W. Gordon

Address of above Secondary School Inspectors—Parliament Buildings, Toronto. Registrar of Trade Schools—W. S. Kirkland, M.A., LL.D.

### TABLE 51—PUBLICATIONS OF THE DEPARTMENT OF EDUCATION

### Reports

- 1. Report of the Minister
- 2. Report of Staffs of Public and Separate Schools
- Report of Staffs of Collegiate Institutes, High Schools, Continuation Schools, Vocational Schools, Normal Schools and Normal-Model Schools
- 4. Report of the Committee of Enquiry into the Cost of Education in the Province of Ontario (1938)
- Sixth Report of the Actuary on the Condition of the Teachers' and Inspectors' Superannuation Fund (1937)

### Acts\*

- 1. The Department of Education Act (1934)
- 2. The Public Schools Act (1936)
- 3. The Separate Schools Act (1936)
- 4. The High Schools Act (1938)
- 5. The Continuation Schools Act (1938)
- 6. The Vocational Education Act (1930)
- 7. The School Attendance Act (1938) and The Adolescent School Attendance Act (1938)
- 8. The Boards of Education Act (1938)
- 9. The School Sites Act (1934)
- 10. The Auxiliary Classes Act (1936)
- 11. The Public Libraries Act (1928)
- 12. The University Act (1928)
- 13. The School Law Amendment Acts (1936) (1937) (1938)
- 14. The Community Halls Act (1927)
- 15. The Teachers' and Inspectors' Superannuation Act (1936)

\*Price 25c each

### Regulations

- 1. General Regulations, Public and Separate Schools (1938)
- 2. Regulations of the High Schools and Collegiate Institutes (1939)
- 3. Regulations of the Continuation Schools (1938)
- Recommendations and Regulations for the Establishment, Organization, and Management of Vocational Schools, and Vocational Departments in Continuation Schools, High Schools and Collegiate Institutes (1936)
- 5. Regulations, Examinations, and Courses of Study of the Normal Schools (Cir. 23) (1939)
- 6. Special Regulations and Courses of Study of the University of Ottawa Normal School (Cir. 23-B) (1938)
- 7. Extracts from the Statutes for Use in the Normal Schools (1939)
- 8. Regulations for the Administration of the Consolidated Schools (Cir. 40) (1935)
- 9. Regulations for Auxiliary Classes (Cir. A.C. 6) (1939)
- Regulations respecting the Application of the School Attendance Act and the Adolescent School Attendance Act (Cir. A.A. 1) (1938)
- Regulations respecting Medical and Dental Inspection of Public and Separate Schools (Cir. 56-D) (1928)
- Instructions to School Inspectors re the Apportionment of the Legislative Grant among the Public and Separate Schools (Instr. 12) (1938)
- 13. Regulations respecting Special Departmental Grants to Public and Separate Schools (Cir. 56) (1936)
- 14. Regulations respecting Special Departmental Grants in Agriculture for Public and Separate Schools (Cir. 56-E) (1939)
- 15. Regulations for Inspectors' Certificates (Cir. 37) (1936)
- Instructions to Presiding Officers and Candidates regarding the Annual Departmental Examinations (Instr. 5)
- 17. Regulations of The High School Entrance Examination (Cir. 48)

### PUBLICATIONS OF THE DEPARTMENT OF EDUCATION—Continued

### Regulations-Continued

- 18. General Regulations for Teachers' Institutes (Cir. 60) (1930)
- 19. Regulations respecting Permanent Certificates (Kindergarten-Primary, Second Class, First Class) (Cir. 72) (1939)
- 20. Recommendations and Regulations for the Establishment, Organization and Management of Home Economics and General Shop Work Courses in Secondary Schools and in Grades IX and X of the Public and Separate Schools
- 21. Recommendations and Regulations for the Establishment, Organization, and Management of Manual Training Courses in Public and Separate Schools (1939)
- 22. Recommendations and Regulations for the Establishment, Organization, and Management of Home Economics Courses in Public and Separate Schools (1939)
- 23. Recommendations and Regulations for the Establishment, Organization, and Management of Home Economics and Manual Training General Shop Courses in Secondary Schools and in Grades IX and X of the Public and Separate Schools (1939)
- 24. Regulations relating to Subjects of Study for Grades IX, X, XI and XII in Collegiate Institutes, High, Vocational and Continuation Schools and for Grades IX and X in Public and Separate Schools (1939)

### Courses of Study

- 1. Programme of Studies for Grades I to VI of the Public and Separate Schools (1938)
- 2. Programme of Studies for Grades VII and VIII of the Public and Separate Schools (1938)
- 3. Courses of Study for Grades IX and X (Lower School and Fifth Classes) in Collegiate Institutes, High, Vocational, and Continuation Schools, and Public and Separate Schools (1938)
- 4. Courses of Study, Middle and Upper School, and Examinations of the High Schools, Collegiate Institutes and Continuation Schools (1938)
- Suggested Courses of Study for Commercial High Schools and Departments established under the Vocational Education Act (1932)
- 6. Courses of Study and Examinations in Schools Attended by French-Speaking Pupils (Cir. 46) (1938)
- 7. Courses in Agriculture for Public and Separate Schools (Cir. 56-F) (1935)
- 8. Music in Rural Schools (1937)
- 9. An Introductory Course in Music Appreciation through Listening, for Elementary Schools (1938)
- 10. Operettas, Music Plays, Cantatas (1938)

### **Text Books**

- Text Books Authorized and Recommended, and Text Book Regulations for Public, Separate, Continuation and High Schools and Collegiate Institutes (Cir. 14) (1939)
- 2. Text Books Authorized and Approved for Vocational Schools (Cir. 52) (1939)
- 3. Supplementary Reading for Departmental Examinations (Cir. 58) (1939)
- 4. Suggested Books for Supplementary Reading in English Literature, Grades IX and X (1938)
- 5. Teachers' Manuals, etc. (1937)
- 6. Upper School Requirements in Modern Languages (Cir. 69) (1936)
- 7. A Graded List of French Supplementary Reading Books (Prepared for Schools which are Attended by French-Speaking Pupils, and in which French is a Subject of Instruction with the Approval of the Minister)

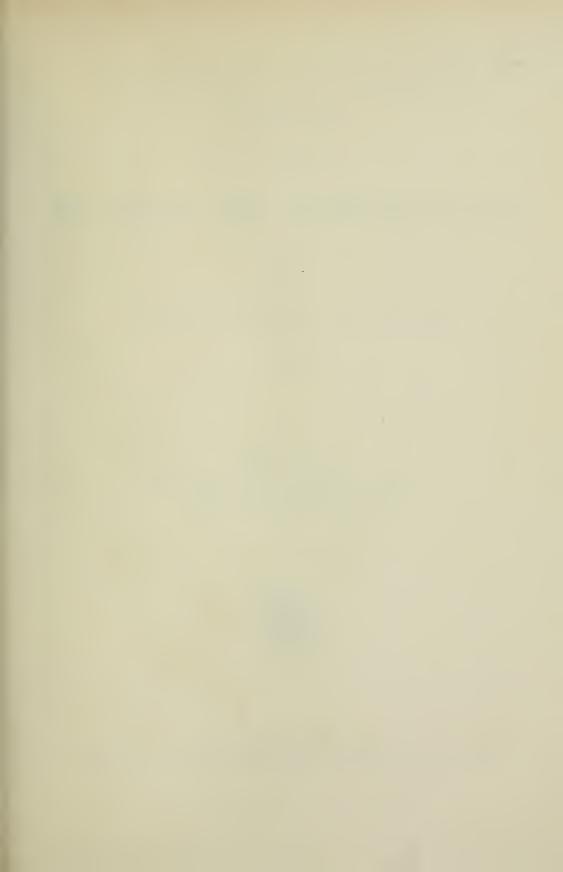
### Miscellaneous

- 1. General Announcement of Summer Courses
- 2. School Year and Holidays (Form 94)
- 3. Bible Readings for Schools (3 Volumes)
- 4. Selected Scripture Readings
- 5. Teachers' Library for Rural Public and Separate School Teachers (1938)
- 6. Health Handbook for Teachers in Public and Separate Schools (1938)











### UNIVERSITY OF TORONTO REPORT

OF THE

### BOARD OF GOVERNORS

FOR THE

## YEAR ENDED 30th JUNE 1938

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 12, 1939



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### UNIVERSITY OF TORONTO

### REPORT

OF THE

### BOARD OF GOVERNORS

FOR THE YEAR ENDED 30TH JUNE, 1938

To His Honour the Lieutenant-Governor-in-Council:

The Governors of the University of Toronto have the honour to present their thirty-second annual report, which includes the President's extensive review of the academic work of the University and its Colleges for the Session 1937-38, the reports of various officers and departments, and a number of appendices and statistics dealing with the manifold activities of the institution.

There are also included in the report the customary statements covering the funds and assets, including investments, as they stood at the close of business on 30th June, 1938, together with statements in detail of the receipts and expenditures of the Board for the fiscal year which ended on that date, and the certificate of audit thereof by Mr. G. T. Clarkson of the firm of Clarkson, Gordon, Dilworth and Nash.

During the year under review the Board purchased out of funds available from the Whitney Bequest the property known as No. 104 St. George Street, having an area of 12,885 square feet with a substantial brick house thereon, for the sum of \$22,500. The premises have been altered and renovated to suit the needs of the Department of Psychology which is now in occupation.

The general revenue for the year amounted to \$1,699,382. There were also credited to revenue the Special Legislative Grant of \$900,000 and a Supplementary Grant of \$200,000 (voted in lieu of \$300,000 applied for), making a gross total of \$2,799,382. The deduction from this sum of \$66,388, representing interest credited to certain scholarship and trust funds, left available for expenditure for salaries and general maintenance \$2,732,994.

The expenditure under the appropriations made by the Board for these purposes, exclusive of the Ontario College of Education which is maintained by a separate vote) the estimates for which were approved by the Minister of Education, totalled \$2,830,590. There was consequently an excess of expenditures over receipts of

\$97.596. to which there has to be added the small debit balance of \$14.105 brought forward from the previous year, making a total deficit to 30th June, 1938, of \$111,701.

The Board begs leave to observe that it has no means of absorbing this deficit and has therefore to look to your Honour-in-Council to provide a grant to cover the same.

All of which is respectfully submitted.

D. Bruce Macdonald, Chairman.

Toronto. 20th December. 1938.

### PRESIDENT'S REPORT

1937-1938

To the Governors of the University of Toronto:

### GENTLEMEN:

I have the honour to present herewith my report on the academic work of the University and University College for the twelve months ending on the 30th June, 1938:

### Introduction

The year's academic work has been marked by co-operation among the staff, thorough and stimulating teaching, much publication of the results of investigations, the carrying on of innumerable researches, and in the main, serious and successful work by the students. This university has attained among educational institutions a high reputation for scholarship, teaching and research. That reputation can be maintained only by retaining and securing instructors and investigators of the highest rank. On the teaching staff the real importance and worth of a university depends. The university still stands in the front rank of those agencies of society which are engaged in "the task of putting intelligence, rationality and spirituality into living."

The detailed report of the different faculties and departments of the University are apended and deserve careful attention. In my commentary on the work of the year, I can given only supplemental information and a summary treatment of

special features.

Owing to the epidemic of poliomyelitis the University opened one week later

than normal. Lectures began on October 6th.

There has been a slight diminution in the registration, mainly in the Faculties of Art and Medicine. If we look over the registration for the last few years, we shall find relatively slight variations from year to year. This probably means that there is no need in our country at the moment for a larger annual supply of graduates in the professional schools. So far as a general arts education is concerned, the life of the individual is enriched by it; he ought to be reasonably equipped with that combination of knowledge, discrimination, and sound judgment which universities seek to provide. In that case, no country can have too many men and women so trained and disciplined, no matter in what field of national life they may be found.

The hall-mark of a university is and always should be quality rather than quantity; the chief aim should be to improve the quality of work rather than merely increase the number of students, "intensification of effort rather than extension of

enrolment."

### ATTENDANCE

The total number of students enrolled was 7,841, of whom 4,889 were men and 2,952 women; 7,232 being registered in the colleges and faculties, and 628 in the departments. The number of students proceeding to degrees were 6,374 and to diplomas 813. Of the students in attendance 3,786 came from Toronto, and 3,251 from other parts of the Province of Ontario. Every country is represented. There has been a decrease in registration of 295.

### THE STAFF

The total staff of the University and University College numbered 914. of whom 119 were professors. 77 associate professors. 93 assistant professors, 226 lecturers, associates (in medicine and dentistry) and instructors in the Ontario College of Education. 1 director, 2 assistant directors, 296 demonstrators, fellows and instructors with sessional appointments.

In the Federated Colleges there are 117. The total number in the complete staff is 1031.

During the year we have suffered the loss of members of the staff in the past

and present. The list is as follows:

Adam Carruthers, M.A., professor emeritus. faculty of arts; G. R. Pirie, M.B., F.R.C.P. (London), associate in paediatrics, faculty of medicine; C. A. Kennedy,

D.D.S., associate professor, faculty of dentistry.

On Nov. 12, 1937, Professor Emeritus Adam Carruthers passed away in his 81st year. He was one of the few remaining links with the University of earlier days. Of Scottish birth and Canadian training he graduated, through University College. as gold medallist in classics in 1880, and was one of the best pupils of Dr. McCaul. After qualifying as a barrister he was drawn back to the study and teaching of Greek and Latin. He taught at Seaforth and Parkdale, and then began his long connection with the staff of University College. In 1893 he was appointed lecturer in Greek, associate professor in 1908. and in 1918 professor. Here he taught his classes faithfully and quietly till his retirement in 1923. He possessed and required a thorough knowledge of the grammar and syntax of Greek and Latin as a basis for appreciation of their literature and their legacy to modern times. With Professor J. C. Robertson of Victoria College he was the joint author of various Latin grammars and readers, some of which have been used in our secondary school for the past forty-five years. He carefully studied the influence of classical authors on English poets, especially on Tennyson. He may be said to have laid the foundations of a department of classical archaeology in our University. His three sons are graduates of this University; one of them is on the classical staff at McGill. A retiring, studious teacher, of fine character. he left a deep impression for good on the successive groups of undergraduates who attended his classes.

On May 5, 1938, died Dr. George R. Pirie, associate in paediatrics, at the age of 58. He graduated in Medicine from this University in 1901, did post-graduate work in New York and practised in Calgary. In 1913 he again went abroad, this time to London, for further experience and study. While in England he was head of the Great Ormond Street Hospital for Sick Children and received his licentiate of the Royal College of Surgeons and his membership in the Royal College of Physicians. Later, after his return to Canada, he received his fellowship in the Royal College of Physicians. He served on the staff of the Hospital for Sick Children. Toronto, and in the department of paediatrics in this University. A good teacher and skilful physician he was held in high esteem by his colleagues, his students and his patients.

Dr. C. Angus Kennedy of the Faculty of Dentistry died suddenly during the summer vacation of 1937 in his sixty-third year. A graduate of the Royal College of Dental Surgeons, he served for years as associate professor of orthodontia in the Faculty of Dentistry and was librarian of the Faculty. The high esteem in which he was held by the members of his profession is shown by his election to be President of the Ontario Dental Association and a member of the Board of Directors of the Royal College of Dental Surgeons of Ontario. A tablet to his memory has been erected in the faculty building by the profession of dentistry in the Province, and is inscribed in honour of one who was to students and colleagues "teacher, librarian and friend." The Library is his abiding monument.

Under the age limit Herbert Austin Fricker retired from the Faculty of Music. After being organist for the city of Leeds, England, from 1898 to 1917, organist and chorus master of the Leeds Musical Festival and conductor of the Leeds Philharmonic Society and of the Leeds Symphony Orchestra, he came to Canada in 1917.

He was a Master of Arts of Leeds University, a Bachelor of Music of Durham, an honorary Doctor of Music of Toronto, and a Fellow of the Royal College of Organists. Ever since his arrival in Canada he has been organist and choir master of the Metropolitan Church, Toronto, and conductor of the Famous Mendelssohn Choir founded by Dr. A. S. Vogt. On the establishment of a faculty of music in this University in 1918, Dr. Fricker became a member of the staff, lecturing on choral and orchestral work. A competent and kindly teacher, he added distinction to the Faculty of Music.

The following resigned their positions:

W. C. Ferguson, B.A., professor of methods in modern languages, Ontario College of Education; Miss I. M. Biss. M.A. (Bryn Mawr, Camb.), assistant professor political economy; T. C. Graham, B.A.Sc., lecturer, mechanical engineering; Miss E. M. Stuart, lecturer, School of Nursing; Miss H. Stantial, S.B. (Simmons), M.A., Ph.D., lecturer, chemistry; V. Lange, M.A. (Tor.), Ph.D. (Leipzig), lecturer in German; J. A. Kinnear, M.D., C.M., associate in obstetrics and

gynaecology.

At the end of August, 1937, Professor William Chalmers Ferguson retired from the Staff of the Ontario College of Education after nearly half a century of service in the schools of Ontario. Graduating from this University in 1839 he taught successively in Uxbridge, St. Mary's, London and Riverdale, Toronto. In 1910 he returned to his alma mater as lecturer in methods of teaching modern languages in the faculty of education, and chief instructor in French and German in the University Schools. His success in training teachers led to a full professorship of methods in modern languages, to membership in the Senate of the University, and in various educational commissions. In 1935 he was appointed chairman of the committee on text-books for provincial schools in French is a language of instruction. He has exercised a fine influence on the modern language teachers of the Province, combining enthusiasm, scholarship and practical power of instructing.

Miss Irene Mary Biss resigned at the end of the year to be married and take up residence in England. A graduate of Cambridge University she came as a lecturer to Bryn Mawr College and in 1929 was appointed a lecturer in political economy in the University of Toronto. She was promoted to be an assistant professor in 1934. She was an excellent teacher, combining research with instruction. During the summer vacation she travelled over Canada investigating the economic

aspects of various industries, notably of the pulp and paper industry.

Dr. James Alexander Kinnear, has been a demonstrator in obstetrics and gynaecology from 1907-8 to 1913-14, and an associate since 1914. After long and efficient service he has resigned and taken up practice in Timmins in Northern Ontario.

These and junior members of the staff who have gone to other positions deserve our heartfelt thanks for their services. Some who have been with us for years have given to the university and its students the full measure of their energies and abilities.

Leave of absence was granted to:

For the session: F. A. Mouré. Mus. Doc., bursar; D. C. MacGregor, B.A., assistant professor, political economy; G. A. Cline, M.A., instructor in University Schools.

For one term: W. H. Martin, M.A., Ph.D., F.R.S.C.. associate professor chemistry; E. A. Dale, M.A. (Ox), professor, Latin; A. Brady, B.A. (Ox), M.A., Ph.D., associate professor, political economy; T. M. C. Taylor, B.A. (B.C.), M.S. (Wisc), Ph.D., assistant professor, botany; R. D. C. Finch, B.A., assistant professor, French; Miss H. L. Bryans, B.A., instructor in physical education, Ontario College of Education.

The following new appointments and promotions were made during the year:

In the Faculty of Arts:—Appointments: E. S. Moore, M.A., Ph.D. (Chic), F.R.S.C., head of the department of geology; F. B. Kenrick. M.A.. Ph.D. (Leip),

F.R.S.C., head of the department of chemistry; H. A. Innis, M.A. (McM), Ph.D. (Chic), F.R.S.C., head of the department of political economy; G. B. Langford, B.A.Sc., Ph.D. (Corn), professor of mining geology; M. A. Peacock, M.A. (Harv), Ph.D., D.Sc. (Glas), associate professor mineralogy; R. M. Dawson, M.A. (Dal), A.M. (Harv), M.Sc., D.Sc. (Lond), associate professor political economy; E. K. Brown, B.A., D. es L. (Paris), associate professor English; L. S. Russell, B.Sc. (Alberta), M.A., Ph.D. (Princ), assistant professor palaeontology; K. C. Fisher, B.A. (Ac), M.A., Ph.D., assistant professor experimental biology; C. D. Rouillard, A.B. (Bowdoin), M.A., Ph.D. (Harv), assistant professor French; G. F. Wright, B.S., Ph.D. (Iowa), special lecturer chemistry; J. J. Rae, B.A. (McM), M.A., Ph.D., special lecturer chemistry; F. J. Westcott, B.A. (Brandon), special lecturer political economy; D. B. DeLury, M.A., Ph.D., lecturer mathematics; V. B. Meen, M.A., Ph.D., lecturer in mineralogy; P. Nash, A.B. (Wisc), Ph.D. (Chic), lecturer, anthropology.

Promotions: J. T. Burt-Gerrans, Phm.B., M.A., Ph.D., from an associateprofessorship to a professorship in chemistry; L. J. Rogers, B.A.Sc., M.A., from an associate-professorship to a professorship in chemistry; D. S. Ainslie, M.A., Ph.D., from an assistant-professorship to an associate-professorship in physics; H. J. C. Ireton. M.A., Ph.D., from an assistant-professorship to an associate-professorship in physics; G. deT. Glazebrook. B.A., M.A. (Ox), from an assistant-professorship to an associate-professorship in history; J. O. Whilhelm. B.Sc. (Sask) M.A., from a lectureship to an assistant-professorship in physics; M. F. Crawford, B.A. (West), M.A., Ph.D., from a lectureship to an assistant-professorship in physics; A. Pitt, B.A. (Houghton), from a lectureship to an assistant-professorship in physics: Miss M. A. Fritz. B.A. (McG), M.A., Ph.D., from a lectureship to an assistant-professorship in palaeontology: D. C. MacGregor. B.A., from a lectureship to an assistant-professorship in political economy; A. F. W. Plumptre. B.A., M.A.. (Camb), from an lectureship to an assistant-professorship in political economy; K. S. Bernhardt, M.A., Ph.D. (Chic). from a lectureship to an assistant-professorship in psychology; C. R. Myers, M.A. Ph.D., from a lectureship to an assistant-professorship in psychology; J. R. MacGillivray. M.A., Ph.D. (Harv), from a lectureship to an assistant-professorship in English: H. Boeschenstein, Ph.D. (Rostock), from a lectureship to an assistantprofessorship in German.

In the Faculty of Medicine:—Appointments: W. Boyd, M.D. (Edin), F.R.C.P., professor, pathology and bacteriology; W. W. Jones, B.A., M.B., honorary professor, surgery; C. G. Smith. M.Sc. (West), M.D., Ph.D., lecture, anatomy; Miss M. I. Tom, B.A., M.B., lecturer pathology and bacteriology; K. G. Gray, M.B., B.Sc. (Med), lecturer, medical jurisprudence; W. L. Robinson, B.A. (McM), M.B., F.R.C.P. (C), lecturer, medical jurisprudence; B. Hannah, M.B., F.R.C.P. (C), associate, medicine and clinical medicine; J. Hepburn, M.B., F.R.C.P. (C), associate, medicine and clinical medicine; T. Owen, M.B., M.R.C.P. (Lond), F.R.C.P. (C), associate, medicine and clinical medicine; T. A. Robinson, M.D.C.M. (McG), associate in surgery and clinical surgery; J. W. Ross, M.B., M.S. (Minn), associate in surgery and clinical

surgery.

Promotions:—A. W. Ham, M.B., from an assistant-professorship to an associate-professorship in anatomy; G. L. Duff, M.A., M.D., Ph.D., from a lectureship to an assistant-professorship in pathology and bacteriology; K. G. McKenzie, M.B., F.R.C.S. (C), from an associateship to an assistant-professorship in surgery.

In the Faculty of Applied Science: - Appointments: S. E. Wolfe, M.A.Sc.,

lecturer in mining engineering; H. Carver, special lecturer, town planning.

Promotions:—C. F. Morrison, B.E. (Sask), M.Sc. (McG), from a lectureship to an assistant-professorship in civil engineering; W. L. Sagar, B.A.Sc., C.E., from a lectureship to an assistant-professorship in civil engineering.

In the Faculty of Dentistry:—Appointments:—L. A. Kilburn, D.D.S., associate professor, dental praxis: W. D. Cavanagh, D.D.S., lecturer, dentistry; C. V. Fisk, D.D.S., associate, dentistry; J. Kreutzer, D.D.S., B.Sc. (Dent), associate, dentistry; F. Martin, D.D.S., associate, dentistry; G. W. Spinks, D.D.S., associate, dentistry;

R. L. Twible, D.D.S., B.Sc. (Dent), associate, dentistry.

In the Department of Social Science:—Promotion:—A. E. Grauer, B.A. (B.C.Ox.) Ph.D. (Cal), from an associate-professorship to a professorship and

directorship.

In the Ontario College of Education: Appointments:—Miss H. B. St. John, B.A.. assistant professor of modern languages; A. T. McLachlan, lecturer in shopwork and instructor in University Schools; H. McGuire, B.A. (Qu), B.Paed.. instructor in University Schools.

Promotion:-B. C. Diltz, M.A. (Qu). from an assistant-professorship to an

associate-professorship of methods in English and history.

Medical Research—Banting:—Promotion:—C. C. Lucas, M.A.Sc. (B.C.). Ph.D., from an assistant-professorship to an associate-professorship.

Honours were conferred upon members of the staff:

Dr. William Boyd, professor of pathology and bacteriology, was invited to give three lectures under the Porter Lectureship in Medicine at the University of Kansas; Professor E. F. Burton. professor of physics, was invited to give lectures on "Low Temperature" at the Bell Telephone Laboratories. New York, at Cornell University, at the University of Rochester, and at the Massachusetts Institute of Technology; Dr. W. E. Gallie, Dean of the Faculty of Medicine, was invited to give the Founders' Lecture in Vancouver to the North Pacific Surgical Society, and the Mayo Foundation lecture; Professor T. J. Meek, department of Semitics, was elected president of the Mid-West Section of the Society of Biblical Literature, and an honorary member of the Eugene Field Society; Professor E. K. Brown, department of English, was visiting professor of English at the University of Minnesota; Professor Griffith Taylor, department of geography, has been appointed joint editor of the "International Zeitschrift für Rassenkinde" (Stuttgart), contributing editor of "Economic Geography" (Worcester, Mass), director, American Polar Society (New York), and President (Section E) British Association for the Advancement of Science at Cambridge, England; Sir Ernest MacMillan, Dean, Faculty of Music, was guest conductor of the Philadelphia Orchestra, of the National Symphony Orchestra at Washington, D.C., of the Ford Sunday Evening Hour in Detroit for five concerts. and for one of the series of Les Concerts Symphoniques in Montreal: Professor C. H. Best, professor of physiology, was elected a Fellow of the Royal Society of England; Dr. Gordon Murray, department of surgery, has been appointed Hunterian Professor in the Royal College of Surgeons of England for his work on "Heparin": Professor Homer A. Thompson, department of classical archaeology, was elected Vice-President of the Archaeological Institute of America, and lectured in the Universities of Oxford, Cambridge and London on "Excavations in the Agora"; Dr. J. D. Fitzgerald, professor of hygiene and preventive medicine, was elected a Vice-President of the International Association of Microbiologists.

The University owes much to Herbert Edward Terrick Haultain, C.E., who has been associate professor since 1908. and professor, since 1910. of mining engineering in the Faculty of Applied Science. Graduating from Toronto, he took further work at the famous mining academy in Freiberg in Saxony. He has had experience as a mining engineer in Ireland, Bohemia, South Africa, British Columbia, the Western United States and Canada. He was held in high esteem by the mining leaders of Northern Ontario and from them obtained for his department assistance in money and equipment. In 1925 he was elected President of the Association of Professional Engineers of Ontario. He was among the founders of the Technical Service Council. established to place graduates of our technical training institutions in Canadian industry. He was awarded in 1937 the Randolph Bruce Gold Medal in recognition of his research work in mining engineering. He retired at the end of this academic year in order to pursue certain investigations in his own field for which his heavy teaching duties did not allow him the necessary time. In grateful acknowledgment of his distinguished services to the University and the mining industry of Canada, he was made a professor emeritus. He will carry on his researches in the Mill building.

which was erected during his term of office by the Ontario Department of Mines to provide the additional accommodation needed for his steadily growing department. A vigorous and stimulating personality, he has won the respect of his students and of the whole mining community.

### New Appointments for 1938-39

In the Faculty of Arts the following major appointments have been made for the coming year:

T. A. Goudge has been made a lecturer in philosophy. A graduate of Dalhousie University he held an open fellowship in Toronto in 1934-5, and the Royal Society Fellowship held at Harvard in 1936-7. He taught at Queen's University in 1935-6, and in 1937-8 took the work of Professor Vlastos of Queen's during his year of absence.

Miss J. C. Romeyn graduated with first class honours in chemistry and took special work in micro-analysis in the University of the City of New York. She succeeds Miss Stantial as lecturer in Micro-analysis in the department of chemistry.

We have been very fortunate in securing for a lectureship in applied mathematics Dr. Leopold Infeld. Born in Poland, he received his doctor's degree at the University of Cracow in 1921. He collaborated in research work with the eminent mathematicians, or theoretical physicists, Drs. Born and Einstein. He has been joint author with the latter of "The History of Relativity," and has issued other publications in his special field of research. He is warmly recommended to us by Professor Einstein and Professor H. P. Robertson of Princeton University.

The department of geography has grown so rapidly that, in view of a fresh group of students in the first year, it has been necessary to secure a full-time lecturer. After long searching, it was decided to appoint Dr. Stephen B. Jones, Bachelor of Science of the University of Washington; Master of Arts of Harvard in 1929, and Ph.D. of Harvard 1934. At Harvard he took courses in geology, geography, mineralogy, palaeontology and meteorology. After teaching experience in Harvard. Kansas State University and Lehigh University, he was appointed to the department of geography in the University of Hawaii. He has travelled widely and published valuable papers in the Geographical Review. His coming will relieve the already over-burdened but ever-enthusiastic head of the department, Professor Griffith Taylor.

In succession to Mr. Victor Lange, who resigned his lectureship in German to accept a position on the staff of Cornell University, Dr. Martin Joos of the University of Wisconsin has been appointed. He is of Swiss-German stock. He has specialised on the philological side of German and strengthens the department in

teaching the history of the language.

To the department of political economy, Dr. Harold Amos Logan brings special authority on problems of labour and industrial relations. A graduate of Acadia University, he took postgraduate work at Yale and Chicago. He has taught in Purdue University, Brandon College, Randolph Macon College, and the University of Western Ontario as professor of economics and political science. He comes to us as associate professor of political economy. He served in the Great War in the Artillery and with the Army of Occupation on the Rhine. He has written "The History of Trade Union Organisation in Canada" (1928) and "Labour Costs and Standards" in the volume on "Labour" in the series on "Canadian American Relations" (1937), as well as articles in various economic journals. He will strengthen our economics department in the important field of labour questions.

For some years we have sought to find a suitable professor of mediaeval history. For the coming year we have appointed Dr. B. Wilkinson of the University of Manchester. England. a pupil of the well-known mediaevalist. Professor James Tout. Professor Wilkinson took his M.A. and Ph.D. at Manchester, his undergraduate career was interrupted by three years of army service, 1916-19. From 1923 to 1930, he was lecturer in history in University College, Exeter; and from 1930-8 lecturer in

constitutional history in Manchester University. He has written much on the mediaeval period—including volumes entitled "The Chancery under Edward III" (1929), "The Mediaeval Council of Exeter" (1931, and "Studies in Constitutional History" (1937), and contributions to the English Historical Review, History, the Law Quarterly Review and other historical journals. Through the Institute of Mediaeval Studies at St.Michael's and the special equipment of Dr. Wilkinson in the constitutional history of mediaeval England, this University should continue to make valuable contributions to the interpretation of the Middle Ages in relation to present day problems.

In the Faculty of Medicine Dr. J. K. W. Ferguson has been appointed assistant professor of pharmacology under Professor V. E. Henderson. He graduated from this University in arts in 1928 and in medicine in 1932. After serving as interne in the Toronto General Hospital, he went to the University of Cambridge as a research scholar, working with Professor F. J. W. Roughton (who deals with the physicochemical aspects of physiology). He returned to be assistant in physiology at the University of Western Ontario, and after two years was appointed to the department of physiology in the State University of Ohio at Columbus. He has shown a steady development in the breadth of his interests and in his knowledge of techniques. He has been a successful teacher in Ohio, and will doubtless prove equally influential in our department of pharmacology.

In the Faculty of Engineering important appointments have been made for the next academic year:

Charles G. Williams has been appointed to the professorship of mining engineering in succession to Professor H. E. T. Haultain. This appointment has met with universal approval from our own mining graduates and from the mining men in Northern Ontario. Professor Williams graduated from the School of Practical Science in 1903, having spent summers in the machine shop and practical milling work of the Canadian Corundum Company, and in land surveying in Saskatchewan. In 1904 he was a fellow in chemistry in this University with summer work underground in Calumet and Hecla Mine, Michigan. In 1905 he won the degree of B.A.Sc. with honours from the University of Toronto. His engineering experience has been wide and various. In the pulp and paper industry he has been chemist and superintendent; he has prospected in our north country; he has held positions of responsibility in connection with the Buffalo Mine, Cobalt; the Otisse Mine, Elk Lake, and the Nova Scotia Mine, Cobalt, he has been general manager of the Deister Machine Company, Fort Wayne, for the making of concentrating machinery; and from 1913 to 1928 he has been associated with the Hollinger Consolidated Gold Mine—serving as the general superintendent for twelve years. On retiring from the Hollinger he has been a consulting mining engineer in Toronto. The esteem in which his colleagues hold him is shown by his election to the presidency of the Professional Engineers of Ontario, the vice-presidency of the Canadian Institute of Mining and Metallurgy, and the presidency of the Toronto Branch of the Institute. In Professor Williams we believe we have found one who combines scientific knowledge with practical experience and who will transmit to students the stimulus of his own enthusiasm. He will keep his department in close touch with the mining development of our Northland.

Robert Ferguson Legget has been appointed assistant professor of civil engineering. He was trained in the University of Liverpool, receiving the degrees of Bachelor and Master of Engineering. He had a broad experience on the staff of the famous firm of consulting civil engineers, S. Meik and Buchanan of London, England. He prepared contract documents for hydro-electric schemes in Scotland, Greece, Italy and Finland, and was engaged on dock, harbour and general civil engineering work. As assistant to the chief resident engineer, he was associated with the construction of the Lochaber Water Power works in Scotland. From 1929 to 1932 he was employed as engineer with the Power Corporation of London and as resident engineer and assistant to the construction superintendent of the Upper Notch Water Power plant

(probably the largest automatic plant in Canada); from 1932-6 he was engineer for

the Canadian Sheet Piling Company.

In 1928 he was awarded the James Forrest medal and the Joule medal of the Institution of Civil Engineers, and later on the Society's Premium and the Telford Premuim of the same institution. For the last two years he has been in the engineering department of Queen's University. Kingston. He is a brilliant young engineer; and, by reason of his English training and varied achievements in the world of construction, he will make a fine contribution to the teaching strength of our Faculty of Applied Science.

Robert B. McIntyre comes as lecturer in applied mechanics to aid Professor T. R. Loudon in his many duties. In 1936 he graduated from this university as B.A.Sc. in mechanical engineering. Awarded a Massey fellowship he proceeded to the University of Cambridge (St. John's College) when he studied aeronautical engineering under the Mond professor of this subject, B. Melvill Jones, learning British methods and technique, especially on the side of research and development. In the vacations he has worked in the Royal Aircraft establishment in Farnborough. He will be of special value to members of the projected course in aeronautics.

Until this year we have not been able to secure a suitable person to take the work carried on by Dr. T. R. Rosebrugh, the former head of electrical engineering. Now we are glad to appoint to an associate-professorship Gordon F. Tracy (a son of Emeritus-Professor F. Tracy of the department of ethics in University College).

Mr. Tracy's undergraduate course in Toronto was broken by three years of Overseas Service in the Great War. In 1921 he graduated with honours in electrical engineering. He remained here for three years as research assistant to Professor H. W. Price. He went to the Massachusetts Institute of Technology and obtained his Master of Science degree, by work mainly on the theory of electrical machinery and circuits. He was appointed to the staff of the University of Wisconsin and has served there from 1926 to 1938, as teacher, superviser of laboratories and director of graduate students in electrical engineering. Out of this work grew two publications accepteds by the American Institute of Electrical Engineers-"Power Transients in A.C. Motors" and "Split Phase starting of 3-Phase Motors" (a thorough study of the performance of such motors in unbalanced conditions of electrical supply). During the past five years he has been employed during the summers in the A.C. Design Department of the Allis-Chalmers Mfg. Co. of Milwaukee, in developing new methods of predicting by calculation the performance of large synchronous motors during both running and starting conditions. In Professor Tracy we feel we shall have a thoroughly competent instructor, both in electrical theory and application.

In the Faculty of Music, Dr. Healey Willan and Mr. Leo Smith have been appointed professors. Both have been lecturers in this faculty for some years. Dr. Willan is a skilled organist and choir leader and a composer of world-wide fame. Mr. Leo Smith is the first cellist in the Toronto Symphony Orchestra and a noted

composed of chamber music.

In the Library School, Miss M. E. Silverthorn has been appointed an assistant professor. A graduate of the University of Alberta, she served two years in the Public Library of Calgary, and then went to the University of Illinois where she received the degree of Bachelor of Library Science. After seven years of work in large public libraries in the State of Michigan she was appointed assistant professor of library science in the Carnegie Library School at Pittsburgh, from which she will come to us. She will bring to the work of our Library School the best experience and teaching power of the first class libraries and library schools of the United States.

### THE UNIVERSITY IN GENERAL

Under authority of the University Act. the Senate with the approval of the Board of Governors made some additions to its membership in order that all groups of graduates might be adequately represented. Medicine will be represented by three additional elected graduates, engineering by two, dentistry by two, agriculture by one;

while household science, education, and veterinary science will have one each, and pharmacy two—these four groups being previously unrepresented; the department of university extension will be represented by the director for the time being; the department of social science and the school of nursing will be represented by one member appointed by their Councils. By these changes I believe all groups of graduates will be fairly represented on the Senate.

New buildings on the west side of St. George Street have been purchased, which provide accommodation for psychology and for the Workers' Educational Association. Owing to the large number of students who take pschology in nearly all faculties it had become necessary to secure additional space for experimental and practical work. Additional space has been granted to the Canadian Medical Association to house the secretary of the allied Associations for Cancer Control.

The agreement with the Ontario College of Pharmacy for providing instruction in certain subjects has been extended for two years. In all probability the pharmacy authorities will raise the standard of admission to conform with the general university requirements, and will lengthen the course. It has been agreed for the present that a degree in pharmacy will not be an indispensable condition for licensing to practice. The question of degree or degrees will be dealt with later.

Dr. F. A. Mouré, the bursar, who has been connected with the University for nearly half a century, was absent on leave during the session. During his absence Mr. Charles Higginbottom, the assistant bursar, efficiently discharged the duties in a

year which unexpectedly called for much extra time and work.

One of the outstanding events of the year was the special Convocation held on October 22nd, 1937, to confer an honorary degree on the Hon. Cordell Hull, Secretary of State for the United States. Lord Tweedsmuir, his host in Ottawa, accompanied him to Toronto, as did also the Rt. Hon. Mackenzie King, the Prime Minister of Canada, and the American Minister to Canada, Mr. Armour. The occasion was historic. Mr. Hull's comprehensive address on the reign of law as against the reign of force was published in all the leading newspapers of the Continent.

The University and the Royal Ontario Museum made a striking display at the Canadian National Exhibition. An actual demonstration was given of the method by which the skeleton of a dinosaur is separated by patient chiselling from the encrustations which surround it. The vivarium or collection of living creatures from the museum of biology drew great crowds. To Mr. Dunlop, the Director of University Publicity, we owe this successful effort to ling up the work of the University with

the general life of the Province.

A large delegation of College Presidents and Trustees and business men from the State of Georgia visited this University last May, under the guidance of Dr. Jackson Davis, associate director for Southern Education of the General Education Board of the Rockefeller Foundation. They represented various neighboring institutions in and around the City of Atlanta, such as Emory University and Agnes Scott College, and came to investigate the practical working of the system of college federation established here by the Act of 1887. We showed them all we could and

they seemed happy in their visit.

Among visitors to the University who have gone over our buildings, even though they have not given lectures, are the following: Lord Eustace Percy (formerly President of the Board of Education, Great Britain, and new Rector of King's College, Newcastle, in the University of Durham), Archbishop Day of Armagh, Dr. T. R. Glover (Public Orator of the University of Cambridge), Rt. Hon. Lord Queenborough, the Lord Bishop of Leicester, England, Baron Silvercruys (the Belgian Minister to Canada), Prof. Kaye of the National Physics Laboratory of London, Dean Landis of the Harvard Law School, Viscount Cecil of Chelwood (awarded the Nobel Peace Price in 1937), Dr. Brüning (former Chancellor of Germany). Lord Hewart (the Lord Chief Justice of England), Rev. Dr. Henry Sloan Coffin (President of Union Theological College, New York), Dr. John A. Mackay (President of Princeton

Theological Seminary), President Valentine (of Rochester University), Count Robert de Dampierre (French Minister to Canada), Dr. Liu (President of Che-loo University,

Tsinan, China), and Hon. Augus Macdonald (Premier of Nova Scotia).

Mr. W. B. Brander, Secretary of the Bureau of the Universities of the Empire, established in London, paid a visit to Canadian universities and to our University, among others. His observations bore on the contents of the *Universities Year Book* issued by the Bureau. This Bureau is a clearing-house of information on all phases of higher education.

### FACULTY OF ARTS

Dr. Henry B. Ward, emeritus professor of biology of the University of Illinois, the most distinguished limnologist of North America, and a past president of the American Association for the Advancement of Science, recently visited the Fisheries Research Laboratory in Northern Ontario, which is carried on in connection with our department of biology. The credit for the success of this laboratory should go to Dr. Clemens (now director of the Pacific Biological Station) who organised it and Professor Harkness of our own biological staff who now directs it. Dr. Ward writes to Professor E. M. Walker, head of the department of biology:

"I want to congratulate you on the splendid work which is being done by the Fisheries Research Laboratory. I came expecting to spend four or five days, but the work was so interesting and the contact with Professor Harness so appealing that I allowed his blandishments to persuade me and spent as many weeks with him. He has the best co-ordinated program for freshwater biology that I know of and he is getting fundamental results that far surpass those obtained by people who work on their own problems without any regard for what the other fellow is doing. I have always felt that the profitable attack on biological problems would be made in the future through co-operating investigators, and this seems to show it. I hope that that work may have the support it deserves. If then it can be effectively applied by the people in Ontario and in Canada who control the fisheries service, I am sure you will find a return far exceeding the outcome of our previous and disjointed attacks on the problem where everybody seemed to be going his own way and little attention was given to the real significance of even those results which were secured by investigators."

This is indeed high praise from the highest authority.

Professor Homer Thompson spends one half of the year with us in Toronto and the other half in Athens, where he is actively engaged in excavation work carried on under the American School.

During the spring he took an active part as assistant director in the eighth annual campaign in the excavation of the ancient Agora at Athens. The work of laving bare the Market Square itself, the public buildings, sanctuaries and private houses that surround it, is now nearing completion; though several more years will be required for the detailed investigation of the principal buildings. The activities of the past season included the exploration of the Klepsydra, the spring on the shoulder of the Acropolis which is repeatedly referred to by Greek authors; of the Eleusinion or sanctuary of Demeter and Kore, one of the most venerable in Athens; and of the roadway by which the Panathenaic Procession made its way from the lower city to deliver her now robe to Athena in the Parthenon. As in previous years, much sculpture has been found, coins, inscriptions and pottery dating from the Neolithic period through the Middle Ages. Professor Thompson spent most of the season in completing the exploration around the Council House and the adjacent Tholos which served as the office and club-house of the Councillors. It has been possible to recover the history of these buildings from their first beginnings in the time of Solon in the early years of the sixth century B.C. to their final abandonment in the sixth century of our era. The results are of interest not only for Athens, but for Greece at large. In no other city of Greece has it been possible to trace the history of the public buildings in such detail or to so early a beginning. The publication dealing with this

group of building should be ready next summer.

During the summer Professor Thompson spent some time in preparing the publication of the results of excavations carried out under his direction during the previous several summers on the Pnyx Hills. The material includes almost a mile of the city walls of Athens, not previously explored, much pottery, terracotta figurines and other small finds. In this work he enlisted the co-operation of several members of the American School of Classical Studies.

Two of our graduates in classics and archaeology, Carl Roebuck of University College and W. A. McDonald of Victoria College, have gone to Athens this year and are taking part in the excavations. Roebuck has a fellowship from the University of

Chicago and McDonald one from the Royal Society of Canada.

I feel that our students in classical archaeology enjoy a rare privilege in receiving tuition from one who is in constant touch with the actual work of excavation and to whom the storied land of Greece is as familiar as his homeland.

Sociology is being gradually separated from anthropology and will probably

become an independent department under Professor C. W. Hart.

For the first time, the department of anthropology has been able to send out an expendition to excavate an ancient Indian site in this Province. Dr. Nash, who has had much experience of excavation among the Mississippi Valley Mounds, conducted a small group from the Museum to a property near Aylmer, which proved to be the site of a prehistoric village. The details of the discoveries made will appear in next year's report, suffice it to say that the remains of a house-structure of the Iroquois "long-house" type have been found, and 3,000 specimens have been recovered from a pile of refuse, which when carefully studied will enable archaeologists to reconstruct a picture of life in a prehistoric Canadian village.

This year the Department of Political Economy completed fifty years of teaching and research. In 1888-9 Professor Wm. J. (later Sir William) Ashley delivered the first lectures in the new department of political economy. His successors were Professor James Mayor (1894-1923), Professor R. M. MacIver (now of Columbia University) (1924-1927), and Professor E. J. Urwick (1928-1937). This department has shared in the establishment of later departments which reflect the necessary specialisation in the social services, such as law, sociology and geography; it still gives the courses in economics, political science and commerce and finance. To celebrate this jubilee, a series of lectures was planned to commemorate the work of the successive heads of the department itself and of the related departments, both in this University and in sister institutions, and to describe current trends in economic and political thought. Through distinguished alumni this department has played a great part in the life of Canada. The President gave an introduction to the series and the following lectures were given: By Prof. J. M. Clark (Columbia University)-"Industrial Stabilisation"; By Prof. A. P. Usher (Harvard University)—"Sir Wildiam Ashley"; By Prof. C. A. Ashley (University of Toronto)—"Sir William Ashley and The Rise of Commerce Schools"; By Prof. H. R. Kemp (University of Toronto)
—"Prof. James Mavor"; By Prof. E. J. Urwick (University of Toronto)—"The Unity of the Social Sciences"; By Prof. R. M. MacIver (Columbia University) -"Social Sciences at the University of Toronto"; By Prof. J. Viner (University of Chicago)—"Classical Economics and Laissez-Faire"; By Prof. R. M. Dawson (University of Toronto)—"Democracy in the Modern World"; By Prof. H. A. Logan—"Labour Problems in Canada"; By Prof. Chester Martin (University of Toronto)—"Professor George M. Wrong"; By Prof. W. A. Mackintosh (Queen's University)—"Adam Shortt"; By Prof. H. A. Innis—"Professor Stephen Leacock".

In the department of economics and political science and in commerce and finance, caurses have been instituted in public and in business administration. These courses begin to differentiate in the fourth year and are carried on for a post-graduate year. On the whole it has seemed wiser to our staff to lay a broad foundation of general economic history and theory before dealing too specifically

with practical problems of administration and business. The famous School of Business Administration at Harvard is entirely a graduate institution.

The two thousandth anniversary of the birth of the Roman Emperor Augustus was commemorated last December by the Classical departments of the College. Principal M. W. Wallace presided over a well-attended gathering at which addresses were delivered by Professors Norwood. DeWitt and Homer Thompson, on the political, literary and social aspects of this great period of ancient history. The publication of the Governor-General. Lord Tweedsmuir's excellent study of the life of Augustus added much public interest to this commemoration.

The Law Club. at its annual dinner in March, celebrated the coming of Lord Durham a hundred years ago. Professor Kennedy gave a succinct account of the constitutional aspects of the famous Report, and the Governor-General, Lord Tweedsmuir, spoke vividly on the character and achievements of Lord Durham himself.

Professor Lash Miller, who retired last year from the chair of chemistry, which he had held with distinction for many years, generously presented to the University his splendid private library. This contains rare books on chemistry, modern treatises, and a priceless collection of chemical journals. This library will be under the immediate charge of the professor of chemistry, and the University Library will spend \$200 a year in keeping the scries of journals up to date. The University gratefully acknowledges Professor Miller's valuable gift.

### THE FACULTY OF MEDICINE

There are several features of the year's work to be noted:

The number of students to be admitted must not be too large for the available clinical material and for the comfort of the patients in the teaching hospitals. A selective process has been adopted at the end of the first year, and will be applied in the session 1938-39. Students who fail in their first year (including supplemental examinations) will not be allowed to re-register in the first year. By this regulation the perpetual "repeaters" will drop out at the beginning, both to their own advantage and to the general advantage of the classes. A general standard of knowledge and ability will be secured sufficient to meet the exacting demands of medical training. But every consideration will be given to the first year students, lest any injustice be done them. Term work will be carefully recorded; test examinations will be given through the year, so that the teachers may have full opportunity of knowing the ability and the diligence of each student. When the results of the final examinations in the first year are known, the case of those who fail will be reviewed in the light of their whole record both in the secondary schools and throughout the university vear. Even if a student, after this full consideration, fails, his time is not thrown away, as he can still register in some other course in the University. The adoption of this selective method, approved both by the Board of Governors and the Senate, is an important landmark in the development of the Medical Faculty.

The whole medical curriculum has been under review for some time by a committee of the Faculty and important changes for the better have been made. There is a general reduction in the number of hours devoted to lectures and laboratories, so that the student may have more time for individual study and reading and for clinical practice and observation. The aim of the teaching in the pre-clinical period is to introduce the student to scientific methods and the scientific habit of mind, to give him proper habits of learning and a stimulus to independent inquiry, and to equip him with such scientific knowledge as will be an adequate foundation for his strictly professional studies. In the clinical years, there will be a better correlation of lectures with laboratories. Some courses are being re-arranged, and there is a general increase in the practical training, notably in obstetrics. There

is increased teaching of physical therapy on a scientific basis.

This committee of review will continue to work by investigating the curriculum for each year as a unit rather than for a departmental standpoint, and by broadly

defining the objectives to be kept in view both in the basic medical sciences and in

the clinical years.

Postgraduate courses, lasting for one week of intensive study in special branches of medicine and surgery, have now become a regular part of the work. This year the subjects dealt with were heart diseases, physical therapy and fractures. Medical practitioners attended, about thirty in each class, from various parts of the Province and even beyond its boundaries. One came from China and another from Peru!

The Governors purchased the valuable pathological library of the late Professor Oskar Klotz and have added it to the Medical Library. Professor William Boyd has made certain rearrangements of the objects in the Pathological Museum which

facilitate the teaching and examination of specimens.

The enlargement of St. Michael's Hospital, one of our teaching hospitals, adds

to the general clinical facilities of the Faculty of Medicine.

Dr. Bruno Mendel, who is working in the department of medical research on the fundamental problems of cancer, has been greatly aided by chemical results obtained through Dr. Hermann Fischer, research professor of organic chemistry, and his assistants, Dr. Baer and Dr. Grosheintz. All these members of the staff, together with others from the department of physiology and the Connaught Laboratories, attended the International Association of Physiologists held at Zurich this year.

As a result of the epidemic of poliomyelitis last autumn, Dr. Hall and Mr. Leibel of the department of medical research devised a respirator which has proved of value

in many cases, and may have a wider use in cases of resuscitation.

#### FACULTY OF APPLIED SCIENCE AND ENGINEERING

Because of the material development of the country, young engineers are still in demand. In 1935 there were in attendance 766; in 1936 there were 789; in 1937 there were 833. It is probable that there will be a further increase next year, even though numbers are stationary or even less in other faculties. Many graduates find occupation in business and in executive positions. An engineering training develops resourcefulness, adaptability and accuracy—qualities of value in every walk of life.

The course in engineering physics has had its first graduating class and because of its stiff requirements, attracts students who have a special aptitude for mathematics and physics. Another new course just established is that in mining geology, embracing two years of mining and engineering and two devoted mainly to geology.

There is an urgent need for more accommodation and equipment for chemical and mechanical engineering (especially for hydraulies). Laboratories are over-

crowded and equipment cannot be properly placed.

It is my earnest hope that in the near future a new building may be erected to house chemical engineering in juxtaposition to the chemistry building of the Faculty of Arts. The removal of chemical engineering to a new building would leave vacant much needed space in the present mining building. Those chemical students accommodated in the economics building on Bloor Street could be brought back to the general chemical family, and their removal would make room for large accommodation required for geography and psychology. A sub-committee of the Board of Governors has the whole question of these additions under consideration.

#### Music

The honour course in music in the Faculty of Arts is now well launched and promises to develop healthily. Professors Willan and Leo Smith, appointed to the University Faculty of Music, and the Dean of the Faculty, Sir Ernest MacMillan, will have charge of the instruction both theoretical and practical. The relations between the University and the Conservatory of Music have become closer. Mr. Ernest Hutcheson of the Jouillard Foundation, New York, made a comprehensive survey of our whole musical situation. He enumerated the function of a Conservatory as three: (a) to be a training school for professional musicians; (b) to be a general

public school of music; (c) to be a public academical body closely connected with a university and exercising an important influence on the general musical life of the community through its examination system and by other means.

There has been an increase of 300 in the registration at the Conservatory; the

number of candidates for its examinations has been 13,482.

#### FACULTY OF FORESTRY

Disastrous forest fires emphasize periodically the need for well-trained foresters to prevent vast loss of life and property. Since this Faculty of Forestry was established, thirty years ago, 409 students have registered and 258 have completed the course. They are working mainly in forestry and allied fields. Pulp, paper, and lumbering have absorbed about half of them. Thirty-three are in the Forest Service of the Province and seventeen in that of the Dominion. Eight are teaching in universities.

Two new courses of great practical importance were given during the year—one on fish and game preservation, and the other on the scaling of timber (this latter at

the Faculty Camp).

# THE SCHOOL OF GRADUATE STUDIES

The special direction in which the University of Toronto should grow is that of providing advanced instruction for graduate students. All universities are not equipped to do this, but some Canadian institutions must assume this responsibility, unless we wish to see all our able graduates who desire to carry on additional research work going to the universities in the United States. Our University ought to develop this side of academic work. We are ready and able to do this if adequate funds can be found for this purpose.

In the Graduate School were registered 583, a small decrease from last year's numbers. Of these 421 came from Ontario. From 59 institutions these students have come, and from all the Provinces of Canada, as well as from Great Britain, China. Japan, the Bahamas, India, Newfoundland, Ireland, Switzerland and the United States. Of these students 178 have held positions on our staff as demonstrators

or instructors.

The chief need of this School is an increase in the number of open fellowships. By means of the Reuben Wells Leonard bequest six additional open fellowships have been established, and these have been awarded to students from outside Ontario, in fulfilment of the generous donor's desire that, through the meeting of young men from various parts of Canada in one centre of research, the unity and higher life of the Dominion might be promoted and enriched.

#### FACULTY OF DENTISTRY

From England. Australia, New Zealand and India students have been enrolled. This Faculty stands high in the esteem of the dental colleges of the world, both for its sound fundamental scientific basis and for its progressive application of principles to practice. Valuable postgraduate work is being carried on in the ceramic department and under Dr. Harold Box.

The books of the late Dr. A. E. Webster (a former Dean of the Faculty) have

been given to the Library and make a substantial addition to its contents.

#### THE SCHOOL OF HYGIENE

This School is now recognized as the chief centre of graduate teaching in public health, both in Canada and abroad. Since its opening in 1927, 182 medical graduates have received the diplomas of Public Health and are now leaders in the field of preventive medicine in various parts of our Dominion and beyond its borders. To

enable suitably qualified men and women to attend the school, 74 Rockefeller fellowships and 41 Connaught Laboratory fellowships have been given. Inasmuch as it is generally accepted today that nutrition is closely linked with the maintenance of good health, special research work is being prosecuted in the field of nutrition. The director, Dr. Fitzgerald, on behalf of the Rockefeller Foundation, was absent throughout the year, making a survey of the teaching of preventive medicine to medical students in Europe and North America. Much more attention is likely to be devoted to this phase of medical instruction in the future. Dr. Fitzgerald expresses his belief that "the future progress of preventive medicine depends as much upon an enlightened and alert medical profession as upon organised community effort conducted by departments of health."

The present building, once enlarged to double its original size, is already becoming crowded—so rapid has been the development of preventive medicine, and

so vast the increase in the products of the Connaught Laboratories.

### LIBRARY

The number of books in the Library is 352,155, and of pamphlets 135,395, a total of 487,550, and an increase of 16,380 over last year. We seem to have reached the peak of the extraordinary increase in the circulation of books among undergraduates that has taken place during the last few years. The total circulation for staff, graduates and undergraduates for the current year has been 360,223. This number takes no account of the large circulation of books in some of the departmental libraries.

The Library is open throughout the day and in the evening.

The late Inspector G. H. Armstrong of Toronto left a valuable library of books

relating to education, Canadian history and geography.

The \$500.00 prize won by our team in the Putnam Mathematical Competition from among similar teams from sixty universities in North America, has been handed over to the Library for the extension of the mathematical section.

The congestion in the stack room increases every year.

#### University Extension

This evergrowing department has completed its eighteenth year of service to the University and the Province under the energetic guidance of Mr. Dunlop. The number of adults who have taken continuous courses is 6712—3562 men and 3150 women. Through 182 extension lectures delivered by members of the university staff throughout Ontario probably 25,000 persons were reached. The evening tutorial classes, 52 in number, were attended by 3225 persons. The Workers' Educational Association had an enrolment of 1442 and were conducted in sixteen Ontario cities and towns.

For the third season an intensive course in Public Administration was conducted. with an attendance of 158. We are indebted to the Ontario Department of Municipal Affairs, under the Hon. Eric Cross, for generous and helpful cooperation.

Correspondence courses of various kinds are taken by 797 students.

The courses in occupational and physical therapy are the only ones of the kind provided in Canada. The increasing enrolment will soon call for larger accommodation. The demand for these trained workers still exceeds the supply. In the pass course for teachers 908 are registered. This year classes were held at Brampton and at Port Arthur and Fort William.

The last course to be added, under this department, is a two-year diploma course in Aerial Navigation. The curriculum closely resembles that in the British Air Colleges and the well-known Boling School of Flying in the United States. The physical standards for admission are set by the Federal Department of Transport: the subjects to be taught include mathematics, electricity and magnetism, applied astronomy, meteorology, map construction, navigation, aircraft-engines, radio and

the theory of flight. Conversational French will also be taught. Practical flying will be taught elsewhere. Probably many who take this course will find a career on the ground as meteorologists, radio operators, despatchers, in the traffic business or mechanical departments. In any field these graduates will be fitted for the most responsible posts. There will be great developments in aerial navigation and any advance will make new demands on the men in aviation. This course should provide thoroughly trained experts. It will be our duty to keep this course in close relation to every advance which aerial navigation is so rapidly making. The first class will probably be about twenty in number. Our staff will give the necessary instruction. Among the teachers will be Mr. Robert McIntyre, who returns to us from a course in aeronautic engineering at Cambridge and from the practical experience of Farnborough. Professor T. R. Loudon has for years sought to develop such a course at this, and now sees his hopes fulfilled.

## SOCIAL SCIENCES

Dr. Grauer has satisfactorily completed his first year as director. Professor Urwick continues to give valuable voluntary help. The department is seeking to keep the happy mean between scientific theory and practical work. It is important that a field worker in a pupil social service agency should have a high standard of training, such as can best be given in connection with a university. In university circles in the United States the problem of training social workers is receiving marked attention, in order to meet the demands of the State social services for trained workers. The best judgment there seems to be that it is wise to concentrate training in a few of the more important universities, which can provide students with a good foundation in the social sciences.

The Sadowski scholarships in Sociology and in this Department of Social Science

will prove a stimulus to the best students.

Intensive courses for social workers in the field are being planned for next year. As soon as funds permit, the staff should be strengthened on the side of research in the social sciences. A professor to direct research on general social problems would be of value both to the students immediately under his care and to the community at large. Research in the social sciences lags sadly behind research in the physical sciences, but is even more urgently required.

#### SCHOOL OF NURSING

The large enrolment in the various classes is taxing the accommodation of the School to the uttermost. In refresher courses 187 nurses registered. Miss Russell, the director of the School, was absent for some months at the request of the Rockefeller Foundation to aid in a project of reorganising nursing education in London, England. There is good hope that some permanent endowment for this School may be obtained. Its methods of training are exerting an influence outside its own walls. As people realise that it is easier and wiser to maintain health than to cure disease, the sphere of preventive medicine and the public health nurse will be enlarged and appreciated.

# MILITARY STUDIES

The total registration was 136. Students in the special classes may obtain through the C.O.T.C. and the War Office in London, qualifications for commissions in the various Imperial Services. The results of the War Office examinations held in March showed that 76 per cent, of the candidates were successful. Major Barry Watson, the director, notes that owing to the increasing preference for university men in the Regular Army and Air Force, and the attractive conditions offered, a number of our graduates are adopting military work as a profession.

I hope that we may soon be able to provide more commodious quarters for this

work, as numbers and interest are increasing.

#### HEALTH SERVICE

Dr. George Porter states that the number of men examined was 2296—the largest on record—because of 710 senior students coming in for health certificates. Only 19 were unfit for physical training. The average height of our first year students is 5 ft. 9\frac{1}{4} in. and their average weight 144\frac{1}{2} lbs. This is our highest average. Our freshmen stand first in height among eleven of the best American Universities and second in weight. In the last sixteen years there is a general

upward trend—due probably to good nutrition and bodily exercise.

Dr. Edith Gordon reports that of the women entering University College, medicine and household science, 214 were examined and 83.2 per cent. were fit for gymnasium and swimming requirements. From the other years and from other colleges, 306 were examined, including 66 who voluntarily came for a re-examination before leaving college. Intercutaneous tuberculin tests were made on all incoming students, and on those whose previous tests had been negative. Two cases of active tuberculosis were discovered among those entering for the first time and both are now receiving treatment in sanatoria.

Tests of hearing were made as an experiment and will probably become a

regular part of the physical examination.

The Tuberculin tests so successfully and helpfully applied to women students

will, I hope, in the near future be applied to all students in the University.

The question of the Health Service is engaging the careful attention of the Governors and committees are considering necessary improvements and enlargements.

# RESEARCH

The spirit of research permeates the whole university. Details of the various investigations in progress will be found in the reports that follow. Some are in the field of pure science and some in the applications of science to health, and industry. It is notable that more and more researches are being carried on by groups; and co-operation of related departments is essential to progress.

I may refer particularly to the work of Sir Frederick Banting and his colleagues in silicosis and in fundamental cancer problems; to the continued testing of heparin in the treatment of human beings; to the experiments at the Sick Children's Hospital and in other departments on the relation of nutrition to health; and to the romantic

and amasing development of the Connaught Laboratories.

This kind of work is necessarily expensive and requires adequate funds and accommodation. This leads me again to state that one of our immediate needs is the addition of two storeys to the Banting Institute. Dr. Banting's work is undoubtedly being hindered by lack of space both for his research colleagues and for the animals required in experiment. Professor Hermann Fischer and his two colleagues in organic chemistry are at present housed in this already crowded building, until we can get the money to erect an extension to the chemistry building. Splendid work is, however, being carried on in spite of the limitations of space. After all it is the man, more than the material structure, that counts.

I have elsewhere noted that provision should be made for more research facilities in connection with the social sciences. It is easier to master matter than to master ourselves. The social sciences are the formulation of those human relations by which we master ourselves and are able to live happily and helpfully

together.

#### INSTITUTE OF CHILD WELFARE

The St. George School, financed by the Rockefeller Foundation and conducted by a committee appointed by the Board of Governors, is being put upon a new basis. The present School is being made an institute of child study under the direction of a Council appointed by the Board. The committee felt that as a separate entity the services of the staff of the St. George School could be made more readily available

to the various faculties and departments interested in the study of child development. This change has been made on the following grounds: (1) Such an institute is and has already made distinctive contributions to the understanding of the training and problems of the young child; (2) It is the only school in Canada where teachers of children of pre-school age can obtain the necessary education in this field: (3) It is the only centre from which the theory and technique of parent education can be studied and presented. The results already obtained are seen to be of great value to the teachers in our Public School systems: (4) Instruction in the field of child care is increasingly demanded in public and private school services and social welfare work. Formal courses in the University are now given in the following Departments: The faculty of household science, the departments of social science, psychology, occupational therapy, nursing and psychiatry. Forty-five students who have worked in this school have obtained the degree of M.A. and one the degree of Ph.D. Of the graduates working in the field of Child Study in the community nine are in government services, seven in nursery school and kindergarten positions, three in personal advisory work, two are principals of private schools and one is in social welfare.

Sixty-seven students completed the course for professional leaders in Parent Education and sixty groups have been conducted during the college year, attendance

at which has reached the total of two thousand.

The committee recommended that the following departments be represented on the Council of the Institute of Child Study; two from the College of Education, and one each from the departments of psychology, social science, household science and medicine, together with the Director of the Institute, Dr. W. E. Blatz, and the President of the University. The Board of Governors have duly confirmed this recommendation of the committee.

The importance of the pre-school age in relation to the child's subsequent development is being increasingly recognized. This Institute of Child Study is

really doing pioneer work in an important field.

#### THE LIBRARY SCHOOL

As a result of the inspection made last year by the American Library Association. it has been decided to strengthen the staff of the School by the addition of a full-time instructor.

The course is now so arranged that one-third of it is given to basic technical knowledge, one-third to knowledge of books, and one-third to administrative problems and special lectures.

## SCHOLARSHIPS. BURSARIES AND LOANS

I am glad to note that the list of scholarships, bursaries and loans in all colleges and faculties is increasing. The help which these can give often makes the difference between attendance at the University or non-attendance, continuance or non-continuance. Both in number and in amount our scholarships might well be extended. The problem created by the increased cost of education differentiates against the non-urban population. The rural population cannot as well afford higher education as once it did. Thus educational opportunities for city and country can but be equalised by scholarships and bursaries specially allocated to students from outside the university centre. Yet we must not forget that brilliant students from the city may also stand in need of financial help.

# FALCONER LECTURESHIP

Friends of Sir Robert Falconer, President-Emeritus, of this University have raised a sum of money to establish a lectureship in his honour. The lectures will be given every second year and the subject will be some phase of international relations. Our special lectureships are being steadily increased. In Medicine are

the Mickle and the Balfour lectures and in Arts the Marfleet (on Canadian-American relations), the Alexander (on English literature), and now the Falconer.

#### ATHLETICS AND STUDENT ACTIVITIES

Owing to the athletic fee, which the students themselves asked to be imposed, the students have been able in greatly increased numbers to be present at the Intercollegiate Games and to engage in various sports previously out of their reach, and, best of all, the gymnasium and swimming pool have been opened at night.

The Senior Rugby Team lost the championship by one point to their old and gallant rivals of Queen's University.

The new athletic fee has given greatly increased facilities for exercise and recreation to the women students, notably in connection with golf and riding.

The new athletic building for women is still in the future. Our financial resources do not allow us to proceed with its erection at present. The gift of such a building would be of inestimable benefit to the health of the women and would provide accommodation for a more thorough course in physical education. Here is an opportunity for a generously disposed friend of the young women of the Province.

In the regrettable absence of the Warden of Hart House, Mr. J. B. Bickersteth, Mr. J. R. Gilley, the Controller, acted in his stead. Mr. Bickersteth has made such progress to recovery that his return is expected for the coming year. Mr. Gilley and his assistants have "carried on" admirably. In his report will be found the details of the social, intellectual, recreational, artistic and religious work of the House. The Hon. Vincent Massey, our High Commissioner in London, never loses his interest in Hart House. He has sent out a "coronation chair", used by one of the peeresses in Westminster Abbey at the Coronation Service, and this has been placed in the Hart House Library. He has also sent one of the plaster of paris lions, holding a shield with Canada's arms upon it, which adorned the temporary annex built at the west end of the Abbey for coronation convenience. This has been set up on a pedestal in the Debates Room.

One of the most interesting reports is that presented by Mr. E. A. Macdonald, secretary of the Students Administration Council, on the varied and increasing activities of this organisation, which represents the whole student body. I cannot speak too warmly of its work and of the help I have received from Mr. Macdonald, its kindly, competent and efficient executive officer.

It publishes a Students' Handbook, the *Varsity*—the student newspaper, and *Torontonensis*, the annual year book containing the photographs of the graduating class and a description of all student activities. It bore half the cost of printing the *Directory*—a charge that should properly be borne by the University. It finances inter-collegiate debates, the band, the orchestra, and other student projects.

It has established a loan fund which has been a wonderful help to students. These loans have been so well repaid that it has been possible to loan in all about \$18,000. Boarding houses for students are inspected and listed. An employment bureau has been in existence since 1933, to secure for students summer, Christmas and part-time work. Last year 1486 students were referred to positions, and this year the number is even larger. Owing to the increased activities of the Council, the Governors provided additional accommodation in Hart House.

## DAVID DUNLAP OBSERVATORY

The famous 74 inch telescope continues to operate most efficiently. The number of clear working hours was 1273, and during this period 1216 photographic plates were taken. The publication of results will soon begin.

The 19 inch telescope has been put into operation.

# ROYAL ONTARIO MUSEUM

The report of the various directors are full of interest. The Sigmund Samuel Gallery has been opened to receive the great collection of Chinese books, called the "H. H. Mu Library." over 50,000 volumes.

The archaeological section has acquired several treasures of mediaeval art and

sculpture.

A study of the fauna of Ontario. made by the museum of zoology, is being

continued by summer surveys in various remote parts of this huge Province.

In the galleries of the museum of palaeontology have been installed a magnificent series of mural paintings, the work of the eminent artist, Mr. G. A. Reid. R.C.A. These portray the history of the world from its misty beginnings to the ordered world, as we know it to-day.

The total attendance at the Museum during the vear ending on the 30th June

was 268.872.

#### THE PRESS

Mr. Gordon Burns, for some years assistant manager, has been appointed manager of the Press. A new press of large size, new binding machinery, and much new type have been purchased, and the whole interior has been cleaned and more conveniently arranged. Every year new books, written by members of our staff, are being published. The Oxford University Press and the University of Chicago Press are handling our publications in Britain and in the United States.

#### ALUMNI FEDERATION

The Alumni Federation under its secretary, Mr. Byron Wood, continues to keep the graduates in touch with their Alma Mater. The University Monthly is full of interesting news and should be read by all graduates. During the year I addressed gatherings of our Alumni at Ottawa and at Chicago. Branches of the Federation have been revived at these centres. I hope that an increasing number from the very day of graduation will enroll as members of the Federation and help to form a public opinion, which recognises the value of higher education to the nation and which especially rallies to the support of our own University.

## University Buildings

Col. Le Pan, the superintendent of buildings, has charge of the material fabric of the University and carries on a work of supervision, repair and construction, the extent of which is scarcely realised but which reflects the magnitude of the institution. On his office staff fourteen persons are employed. The number of buildings (not including buildings of the Federated College) is 53. The number of employees (carpenters, painters, electricians, plumbers, tinsmiths, labourers, cleaners and caretakers) is 274; their salaries and wages (including services rendered to the Connaught Laboratories. Hart House, the Athletic Association, the Royal Ontario Museum and the Federated Colleges) amounted to \$324,000. Customs entries for equipment and books for all departments reached a total of 1336. The turnover in the Post Office was \$36,000. The cost of coal was \$105,000. Repairs and renewals amounted to \$33,000 (which is less than one-half of one per cent. of the value of the buildings). The capital expenditure at the Royal Ontario Museum, the Hygiene Building and the Connaught Laboratories Farm amounted to \$60,000. The number of accounts on which work was done for separate financial entities was 6.170.

The addition to the Royal Ontario Museum has been completed, and provided space for the Chinese Library and additional offices. The money for this was given by the Ontario Government, Dr. Sigmund Samuel and Sir Robert Mond, and the new

galleries are named "The Samuel Galleries".

We congratulate Trinity College on its new residence for women under-

graduates. This seemly and commodious building—St. Hilda's—will accommodate 73 students and will be ready for occupation for the session 1938-9.

# VISITING LECTURERS

During the year the following special lectures were delivered:

On the Alexander Foundation a course of five lectures by Dr. Carleton Stanley, President of Dalhousie University, on "Matthew Arnold"; the Donald C. Balfour lecture in surgery by Dr. Gordon Gordon-Taylor, senior surgeon Middlesex Hospital, London, England, on "Gastric Haemorrhage": a lecture by Professor Hugh S. Taylor of Princeton University, on "Holes in liquids and their consequences"; a lecture by Professor Harold C. Urey of Columbia University on "Isotopes"; a lecture by Professor Morris Ginsberg. of the department of sociology, University of London, England, on "Social Development"; a lecture by Mr. Harrison Brown, correspondent for the British Broadcasting Corporation, on "The Successes and Failures of the Fascist Bloc"; a lecture by Dr. W. E. Gve, Director of the Imperial Cancer Research Fund. London, England. on "Cancer Research"; a lecture by Dr. Donald D. Van Slyke, Charles Mickle Fellow for 1936, on "Neutrality regulation of the organism"; a lecture by Professor E. J. Dent, Professor of Music, Cambridge University, on "Music in university life"; a lecture by Dr. Hans Simons, New School of Social Research. New York, on "Europe of to-day and the world of to-morrow"; a lecture by Mr. Frank Rising, editor of "Business Week," on "Trade Unions in the United States"; a lecture by Dr. Alfred C. Lane, Boston, Mass., on "Recent work on the measurement of geological time"; a lecture by Dr. W. I. Jennings, of the Faculty of Law, University of London, on "The Law and Custom of Cabinet Government in England".

In connection with the Department of Physics two special courses of lectures on "The Physical Principles of Television Tubes" and "Refrigerated Storage and Transport" were arranged, and nine lectures delivered by Dr. W. H. Kohl of the Research Laboratory of Rogers Radio Tubes, Ltd., and special lecturer in the department of physics on "The History of Television"; "The Cathode Ray Tube"; "The Iconoscope"; "The Kinescope"; "The Electron Multiplier"; "The Photoelectric Image Tube"; "The Electron Gun"; "High Intensity"; "Fluorescent Screens"; "Secondary Emission": five lectures by Dr. W. H. Cook, of the Division of Biology and Agriculture of the National Research Council, Ottawa, on "General Refrigerated Storage and Transport"; "Temperature"; "Humidity"; "Atmospheric Composition";

"Special Problems".

University College, Department of English, arranged an exchange with Professor W. C. DeVane, head of the English Department. Cornell University, and with professor Herman J. Weigand, head of the Department of German, Yale University.

Professor E. K. Brown visited Western Reserve University at Cleveland. His subjects were: "Matthew Arnold and the Eighteenth Century"; "Mr. Eliot and his enemies"; "Higher Studies in English at the Sorbonne".

The following lectures were given in Convocation Hall under the auspices of

the Royal Canadian Institute:

By Professor J. Ellis Thomson, Professor of Mineralogy, University of Toronto, on "Presidential Peregrinations to the Pacific"; Mr. Matthew William Stirling, Smithsonian Institute, Washington, D.C., on "By Airplane to Pygmy-land"; Dr. Karl K. Darrow, Research Laboratory of the Bell Telephone Co.. New York, on "Transmutation"; Dr. Harold E. Edgerton. Assistant Professor of Electrical Measurements, Massachusetts Institute of Technology, on "Seeing the Unseen with high-speed Photography"; Dr. George M. Sutton, Curator of Birds at Cornell University, on "A year with the Eskimos of Southampton Island"; Mr. J. A. Wilson. Department of Transport, Ottawa, on "The Trans-Canada Airways"; Professor H. E. T. Haultain, department of mining engineering, University of Toronto, on "From Rock to Dollars"; Dr. Laurence M. Gould, Professor of Geology, Carleton College, Northfield, Minn., on "Antarctic Geological Adventures"; Dr. Guildford B. Reed, Queen's University, Kingston, on "Man and his Microbes"; Mrs. Mary Vaux Walcott, Wash-

ington. D.C.. on "Wild Flowers of the Canadian Rockies": Professor K. B. Jackson, University of Toronto, on "Aerial Photographic Surveying"; Dr. Harold C. Urey. Columbia University. on "The Isolation of "Isotopes"; Dr. W. H. Cook, National Research Council. Ottawa, on "Food Preservation"; Professor L. J. Rogers, University of Toronto, on "Scientific Crime Detection"; Dr. W. B. White, American Steel and Wire Company, Chicago, on "Musical Sounds and Their Engineering"; Mr. Denton Massey, M.P.. Toronto, on "The Social Experiments in Sweden and Denmark"; Dr. Robert Chambers, New York University. "The Cell as the Architectural Unit of the Body"; Dr. William Boyd, University of Toronto, on "Growth—innocent and malignant"; Dr. Hugh S. Taylor, Princton University, on "Chemistry and your Automobile"; Mr. Lionel E. Taylor, Plant Explorer, on "Plant Hunting in South Africa."

#### LEARNED SOCIETIES

The following Learned Societies met at the University:

The American Physical Society: The American Association of Physics Teachers; The American Society of Mechanical Engineers.

# Special Convocations

Two special convacations were held, when honorary LL.D. degrees were conferred, October 22nd, upon The Honourable Cordell Hull, Secretary of State, Washington, D.C., and March 21st, upon Sir Howard d'Egville, K.B.E., of the Empire Parliamentary Association, London, England.

## BENEFACTIONS

During the year the University has received the following benefactions,

totalling \$185,932.72:

From the estate of the late Reuben Wells Leonard, \$57,350.69; Rockefeller Foundation: Child Research and Parent Education, \$15.009.90, School of Nursing, \$9,993.99; Eaton Endowment. \$25,003.89; Sir Robert Falconer Foundation, \$16,115; Ontario Mining Association grant for research in silicosis, \$10,000; Carnegie Corporation: Fine Art, \$4,995.51, Workers' Educational Research, \$1,498.59, Physiology research, \$552.06; E. A. Wallberg Memorial Fund. \$7,036.57; Anonymous, for organic chemistry, \$5,000; For J. S. McLean Fellowships: Canada Packers, \$2,500, Mr. J. S. McLean, \$2,500; Reuben Wells Leonard Fellowship and Scholarships, \$3,700; W. P. Mustard Scholarship, \$3,000; Geophysics Research Fund, \$2,400; Eli Lilly Fellowship, \$2,002.19; Graduate Fellowships: Estate of the late Sir Edward Kemp, \$1,000, Imperial Oil Ltd., \$500, Sir Joseph Flavelle, \$250; Flavelle-Peacock Retiring Allowance. Sir Joseph Flavelle, \$750, Sir Edward Peacock, \$750; Bickle Bursary, \$1040; D. A. Dunlap Memorial Scholarships, \$1000; Arthur Cohen Scholarship. \$1000: Standard Brands, research fund for chemistry. \$999.07; Medical Society Bursary, \$600: William Lowell Putnam Prize Fund. \$505.31; J. W. L. Forster Library Fund, for fine art, \$500; Emerson Wickett Memorial Scholarship, \$500; Sadowski Scholarships, \$500; John Northway Memorial Fellowship, \$500; Sir Edmund Walker Scholarship, \$450; Robert Simpson Company Scholarships, \$450; University College Alumni Matriculation Scholarship, \$400; Gertrud Davis Exchange Fellowship, \$400; Robert Bruce Scholarship, \$387.64; Johannesburg Chamber of Mines Donation, \$351.75; J. A. Findlay Scholarship, mechanical engineering, \$330; Toronto League for Race Betterment Scholarship, \$300; School of Nursing Undergraduate Bursary Fund, \$300: S. R. Parsons Scholarship, commerce and finance. \$250; Mr. Robert A. Bryce. U.T.S. Engineering Scholarship, \$250; J. B. Willmott Scholarships in Dentistry, \$250; Percy Hermant Scholarship, \$250; Anonymous, for Mary Keenan Award, \$200; Delta Phi Epsilon Bursary, \$200: Pan-Hellenic Association Prizes, \$150; Boiler Inspection and Insurance Company Scholarship, mechanical engineering, \$150; Anonymous, for special research in

biochemistry, \$125; Sir John Eaton Memorial Scholarship, University Schools, \$120; University College Alumnae Scholarship, \$100; Maurice Hutton Matriculation Scholarship, \$100; University Tours Association Scholarship, \$100; Darling and Pearson Prizes in architecture, \$100; Herbert Willson Scholarship, \$100; Toronto Brick Company Prizes, architecture, \$100; Ontario Association of Architects Scholarship, \$100; George Kennedy Scholarship, \$83.10; Sarah Kennedy Scholarship, \$83.10; St. Margaret's College Alumnae Scholarship, \$75; Ramsay Wright Scholarship, \$53.36; Hollywood Theatre Prizes in French, \$50; Dr. R. A. Reeve Prize in Medicine, \$50; Toronto Women's League of the United Synagogue Scholarship, medicine, \$50; Public Speaking Association Bursary, \$50; F. W. Jarvis Bursaries, \$50; Hon. Charles McCrae, for Dent McCrea Scholarship, \$50; Hon. Justice Riddell, for Riddell Scholarship in law, \$30; Lambda Chi Alpha Alumni of Toronto, for Saddington Medal, \$26.75; Hon. Dr. J. A. Faulkner, for Faulkner Medal, \$26.53; Labour Research Institute Prize, \$25; Engineering Institute of Canada Prize, \$25; Ontario Medical Association Prize, \$25; U.C. French Society Prize, \$25; American Society of Heating and Ventilating Engineers, \$25; University College Alumni Prize, \$25; B.A.A.S. Fund, \$21.31; Maurice Cody Memorial Scholarship, University Schools, \$10; Alumnae Prize in English, \$10.

## OUR NEEDS

A, living institution like a university always has needs. As far as I can see at present, we have filled the gaps in our teaching staff. But our first need is for an adequate annual maintenance, if the efficiency of the institution and its service to all Canada are not to be impaired. In regard to buildings, we require, in my opinion, as soon as the necessary funds can be found:

Two additional storeys for Medical Research on the Banting Institute.

A new unit for Chemical Engineering.

An enlargement of the present Chemistry Building in the Faculty of Arts.

An addition to the Mechanical Engineering Building, for hydraulics and other purposes.

An Athletic Building for the women of the University.

A new residence for University College.

More space and more books for our Central Library.

#### GENERAL CONSIDERATIONS

Those who are interested in education are pointing out that it must have two objectives. First it must insure to the mass of our young people adequate training for the actual problems of living they will meet—that is, the mental discipline necessary to make a living and to enjoy life itself; and secondly, it should provide opportunities for the limited group who possess the natural ability which will qualify them for leadership and higher service in the community and the world of science. Some selective process for university education seems inevitable. Some kind of test of fitness, usually an examination, is applied. Much attention must be given to devising the best type of examination for choosing those students who will profit most by the discipline of higher education. Closely connected with this problem of selection is the problem of giving financial assistance to students of ability whose family or individual resources are insufficient. No economic group in the community should be excluded from the benefits of the highest education. Hence the necessity for an adequate scholarship policy throughout the university. There will always be a place for student self-reliance and self-help, but opportunities for finding work in vacations are not as great as they used to be, and there is a keener realisation of the cost to health and well-rounded development at which a student has too often obtained his university and professional training. President Conant of Harvard sums up the case in these words: "With the increasing emphasis on the importance of having a student's scale of living commensurate with physical well-being and the growth of a

well-adjusted personality, the need for scholarships and other forms of aid becomes more pressing." I note with great satisfaction the growth of scholarships, bursaries and loan funds in our own university, but more are needed.

The universities of Canada are powerful influences on behalf of the unity of Canada. They are engaged in the common task of imparting, widening, distributing and enjoying the content of knowledge. Professors pass freely from one university to another. Students often exchange universities in their third year. There is an organised conference of Canadian universities. At the same time no institutions do more to foster an imperial and an international outlook, in contradistinction to that doctrine of blood and race and extreme nationalism that is wrecking the unity of the world, in spirit of exclusiveness, suspicion and hate. In Canada today we need to emphasise those factors that make for unity, even amid the widest diversity of resource, tradition and interest. One of these factors is our common loyalty to the Crown and to British institutions, another is our community of educational and religious ideals.

It will always be difficult in educational curricula to keep the happy mean between specialisation and a broader general training. In some way we must combine the good in each. Here we have not a case of "either—or", but of "both—and". The specialised courses, for which this University has become famous, must be built upon a foundation of liberal culture. For our specialised undergraduate courses, we have probably reached a reasonable limit. Further specialisation can best be carried on in the postgraduate school. A common first year in science, in applied science, and in philosophic and social studies, is becoming the rule. As I have already stated, our courses in public and business administration are based upon a foundation of economic, political and philosophic studies.

Among the aims of a true education are a reasonable knowledge of facts, the ability to think clearly, willingness to learn, and a sense of the fitness of things. The broader a man's education is the better able is he to deal with the problems of today. Specialisation may be carried to the point where the law of diminishing returns becomes operative and where the number of professional and business men,

politicians and educators who have a broad outlook is definitely limited.

Among the unifying factors at the University athletics must take a high place. All colleges and faculties are represented on the teams, which uphold the honour of the University of Toronto on the field. The Varsity, the undergraduate newspaper—itself a great potential and actual influence for university consolidation—has editorially remarked: "Beside the benefits gained by the participants themselves, there is that intanglible thing called college-spirit which comes to the fore when undergraduates get together in a student section to cheer their team on to victory. College-spirit may be defined as the desire to cooperate for the good of the college." University-spirit is the desire to cooperate for the good of the whole university. When there are so many and so varied groups on our campus, there is danger of disintegrating tendencies, nothing better integrates the student body than common interest and pride in an athletic team which bears the name of the University of Toronto.

It is well to remember that there is no such thing as "painless education" and that sturdy mentality and character will not be reared by too much humouring of individual taste. A shrewd observer of educational tendencies—himself a great captain of industry—has expressed his conviction that undue emphasis is placed on the interest factor, as opposed to the factor of mental discipline. Undoubtedly if mental effort is to be fully effective there must be interest; but to eliminate the element of mental discipline and to assert that, when there is no interest (at least at the outset), it is futile to attempt to educate, is a doctrine of doubtful validity. It is probable that effort will create interest just as frequently as interest creates effort. We value most those things for which we worked hardest. The Headmaster of the Leys School at Cambridge, England, used words of boys which are as applicable to university students: "A system of education which allows boys to leave school with-

out ever having had to do things which they disliked and without ever having had a face real difficulties is not calculated to produce a very effective type of citizen." If a youth never learns that the supreme values in life have to be struggled for mentally, morally and physically, he will not be well equipped to meet the problems of life. Can any one learn anything worthwhile without consistent effort—without, in Newton's phrase, "thinking about it all the time"? Further, is there not a danger that our youth, if nurtured mainly on the motive of interest, will conclude that the "great achievements of civilisation are a God-given right to which they are justly entitled, almost irrespectively of personal effort"? Perhaps, as in most fundamental antinomies, the answer is found in the effort to combine interest and discipline.

How far can education prove a bulwark of sound democracy in our country? Only so far as educated men actively participate in public affairs. An American university president, the Chancellor of New York University, describes his fellowcitizens in words that may in some measure be applied to ourselves: "We are a tolerant people. We are also an apathetic people when it comes to public affairs. We are good citizens to a degree. We pay our taxes when we can. We are orderly and law-abiding. Many of us go to the polls on election day. But we do not concern ourselves with matters of government as we should. . . . . Few of us get very much excited about such matters, at least until things begin to tumble about our ears. We are pretty good followers, we college-trained men and women, but seldom do we show inclination toward public leadership. . . . We now and again feel ourselves the 'forgotten' class, forgetting it is mainly our own fault. An educational programme that fails to sek improvement of this state of affairs is missing something." We in Canada should rather follow the British tradition and practice of using higher education as an approach to and equipment for public service. The State pays a substantial part of the cost of university education, it has a right to the intelligent service of its privileged sons and daughters. I believe that many of these would gladly serve if the opportunity were open to them. Many of the courses we are now offering in the University directly help to fit men for public administration and public life. The general effect of a university course should be to deepen that sense of public responsibility without which higher education would fail to become a factor in preserving the ideals and principles of democracy. A sane democracy can be maintained only if the citizens are intelligent, interested, honest and religious. Democracy based only some inherent right of man is everywhere imperilled. I believe it can survive only if it is rooted in the religious faith of a people, such a faith as recognises the worth of the individual in the sight of God. To men and women whom education has fitted for some kind of leadership the challenge comes: What are we doing with our democracy? Are we using it to best advantage? Are we making it work? Are we keeping it pure?

This is the testing time for democracy. Just because our system is based on freedom, the responsibilities of the individual are greater than they are in totalitarian states, where a man must do it every detail what the authorities tell him to do, whether he likes it or not. We do not want wholesale regimentation, but we must practice self-discipline. We want a people, not apathetic, but capable of showing enthusiasm over something, a people with sense of public as well as of private duty, a people conscious of responsibility to safeguard freedom both at home and in all parts of the world. Courage, discipline, efficiency and leadership are as necessary to democracy as to dictatorship, and will be used in a nobler cause.

#### Conclusion

It is no light task to administer the academic affairs of this University and to bear the anxieties about expenditures which limitation of funds necessarily creates. But my helpers have been many. To the teaching staff, to the administrative officers, to the benefactors, to the fine body of loyal and self-disciplined students, to the chairman and members of the Board of Governors, who have given help, wisdom and encouragement, and to the Government of the Province which has largely provided for our yearly maintenance, I offer a full measure of gratefulness.

All of which is respectfully submitted.

H. J. Cody, President.

November 10, 1938.

#### APPENDIX A

- (1) Report of the Dean of the Faculty of Arts
- (2) Report of the Principal of University College
- (3) Report of the Dean of the Faculty of Medicine
- (4) Report of the Dean of the Faculty of Applied Science and Engineering
- (5) Report of the Dean of the Ontario College of Education
- (6) Report of the Secretary of the Faculty of Household Science
- (7) Report of the Dean of the Faculty of Forestry
- (8) Report of the Dean of the Faculty of Music
- (9) Report of the Dean of the School of Graduate Studies
- (10) Report of the Dean of the Faculty of Dentistry
- (11) Report of the Director of the School of Hygiene
- (12) Report of the Librarian
- (13) Report on Research
- (14) Publications
- (15) Report of the Director of University Extension and Publicity
- (16) Report of the Director of the Department of Social Science
- (17) Report of the Director of the School of Nursing
- (18) Report of the Director of the Department of Military Studies
- (19) Report on Health Services
- (20) Report on Athletics and Physical Training
- (21) Report of the Warden of Hart House
- (22) Report of the Director of the Connaught Laboratories
- (23) Statement regarding the Museum of Archaeology
- (24) Statement regarding the Museum of Biology
- (25) Statement regarding the Museum of Geology
- (26) Statement regarding the Museum of Mineralogy
- (27) Statement regarding the Museum of Palaeontology
- (28) Statement regarding the educational work of the Royal Ontario Museum
- (29) Report of the Director of David Dunlap Observatory
- (30) Report of the O.C. The Canadian Officers' Training Corps
- (31) Report of the Secretary-Treasurer of the Students' Administration Council

# (1) REPORT OF THE DEAN OF THE FACULTY OF ARTS

(Professor S. Beatty)

The honour course in Music got under way in 1937-38, with 8 students in the first year. The enrolment in the third year of the general course was almost three times the average of that in preceding sessions, while for the fourth year the corresponding enrolment was nearly doubled. The increase in attendance during 1937-38 over the earlier figures is due to the provision whereby successful students in the second or third years of honour courses, as well as certain types of these not successful, may be transferred to the next higher year of the general course. The original arrangement remains in force, whereby students who have adequate standing in the second year of the pass course may enter the third year of the general course. It will be interesting to watch the development of the general course, particularly in relation to the type of student taking it and the affect which it may have on standards in the second and third years of honour courses.

The Council has always given a great deal of consideration to the system of honour courses, both in the abstract and in relation to the reactions of students. Naturally, there must be a balance between these two, in the sense that both must be taken into account. It is to be expected that individual departments will assume more and more responsibility for adjusting the content and manner of their courses to the capacity of their students, always keeping in mind that conviction rather than merely formal assent is what must be looked for in these who are to profit by the

instruction which they receive.

It is gratifying to realise that the schedules of scholarships and bursaries in the various Colleges are constantly expanding. In several cases, bursaries make the difference between attending and not attending the University. The system of loans to students by Alumni organisations is a significant and valuable development, both for what it accomplishes and for the contact which it implies between the Alumni and the life of the University.

## (2) REPORT OF THE PRINCIPAL OF UNIVERSITY COLLEGE

(Professor M. W. Wallace, M.A., Ph.D.)

I have the honour to submit my annual report as Principal of University

College:

Last year I had to report the resignation of Professor H. J. Davis of our English Department who accepted a post as head of the department of English in Cornell University. Once more the same American university has taken one of the most able of the younger members of our staff—Dr. Victor Lange, lecturer in the department of German, who has been appointed associate professor of German in Cornell. Dr. Lange came to us in 1930 as the first German student on the Gertrud Davis Exchange Fellowship. In 1933 he joined the staff of the college as lecturer in German. Dr. Lange has rendered admirable service to his department,—as a productive scholar, a highly successful teacher, and a wise and intelligent interpreter of the literature and history of his native land. We regret his departure exceedingly. He carries with his new position the warmest good wishes of his colleagues in Toronto.

Professor E. A. Dale was granted leave of absence during the Easter term for study in Greece and Italy. Professor C. N. Cochrane will spend next session in London and Oxford supervising the publication of a volume which deals with Roman history during the early centuries of our era, and which is to be brought out by the Clarendon Press. Professor Winnett of the department of Oriental Languages will spend the Michaelmas term in research work in Palestine and Arabia, and Professor Endicott of the department of English the Easter term at the Huntingdon Library in

Pasadena. California.

As usual many members of the graduating class have won fellowships in other

universities where they will pursue graduate studies. Mr. A. H. Jarvis of the department of philosophy was appointed Rhodes Scholar for Ontario; this is the fifth successive year in which this honour has come to University College. Mr. W. C. Smith of the department of Oriental languages secured the Massey Scholarship in the University of Cambridge, Mr. G. D. A. McPherson the J. S. McLean Fellowship in the University of London, Miss Constance Lailey the Gertrud Davis Fellowship in the University of Leipzig and Mr. H. C. Keenan the Leonard Fellowship in the University of Toronto.

Perhaps the most striking testimony to the high scholarship of our undergraduate body has been furnished by the department of Mathematics. In April of this year the Mathematical Association of America conducted a competition open to teams of three, or to individual contestants, from colleges and universities in the United States and Canada. Altogether there were 163 individual contestants from 67 institutions. When the results were announced the University of Toronto stood first, California second and Columbia third. The Toronto team was composed of A. J. Coleman and N. S. Mendelsohn of the third year and I. Kaplansky of the fourth year. Mr. Kaplansky also secured the highest standing of any individual student in the competition. All three of the successful candidates were students of University College.

The benefactions of graduates of the college continue on the ample scale to which we have become accustomed. Among the gifts received during the present session are the following:

(a) Two scholarships in the honour course in sociology, one in the second and one in the third year, of the value of \$125.00 each, the gift of Mr. B. Sadowski who graduated from the college in 1918 in the honour course of mathematics.

(b) The Herbert Willson Scholarship in the second year of the honour course in biology and medicine of the value of \$100.00, the gift of Miss Alice Willson of

the class of 1894 in memory of her brother, Dr. Herbert Willson.

(c) The Wilfred P. Mustard Scholarship in Classics to be paid from the income of a sum of \$3000.00 given by Dr. J. W. Mustard and his two sisters in memory of their brother, Professor Wilfred P. Mustard, for many years head of the department of classics in Johns Hopkins University, and a graduate from University College in 1886.

(d) The Maude Charleton Gibson Scholarship to be paid from the income of a sum of \$1500.00 bequeathed to the college by Mrs. W. A. Charlton in memory of her daughter who was the wife of Mr. John J. Gibson, a member of the

Board of Governors.

(e) The renewal for a fourth year of the prize of \$50 in oral French, the gift of the Hollywood Theatre.

(f) A prize of \$50 given by the Public Speaking Association of Toronto and to be awarded at the discretion of the College Council.

(g) A prize of \$25 given by the Alumni Association of the college, and to be awarded at the discretion of the Council.

(h) A scholarship of \$150, given by Mr. Arthur Cohen. K.C., and his wife. to be awarded to a student of University College in English at the end of the first year.

A course of five lectures on Matthew Arnold was delivered by President Carleton Stanley of Delhousie University in Hart House on January 31st and the first four day of February. The lectures will be published during the summer by the University Press. The regular college course of public lectures was given during the Michaelmas term on Aspects of the Victoria Era. The lectures were Professors Mackay, Endicott, MacCallum. Coventry, Urwick, Bladen and Creighton.

We have continued our recent practice of informally exchanging lectures with other universities. During the present session we have had visit of two or three days from Professor DeVane, recently appointed Dean of Yale College, and Professor Weygand, head of the department of German in Yale. In return Professor Fairley of our German department visited Yale and Professor Brown of our English

department visited Western Reserve University. It seems unnecessary to stress the value of this plan for keeping the members of our staff in touch with the work that is being done in similar institutions.

# (3) THE ANNUAL REPORT OF THE DEAN OF THE FACULTY OF MEDICINE

(W. E. Gallie, M.D., F.R.C.S. Eng.)

The many letters received from graduates who have read recent annual reports from the Faculty of Medicine have indicated clearly that the plan of issuing it in the form of a letter designed to keep them in touch with all the activities of the Faculty is much appreciated and should be continued. As in last year's report, therefore, the Dean will comment upon matters of general interest to the whole faculty, and the heads of the various departments will discuss those subjects, both scientific and administrative that have been of interest in their particular fields.

As indicated in the report of last year the Faculty Council has been much concerned with the increasing numbers of students who desire to register in this Faculty and with the low level of scholastic aptitude shown by many of them. As it is quite impossible to keep up the standard of clinical instruction in the three final years if the hospitals are overrun with students, all possible ways of keeping the numbers within reasonable limits have been considered and every suggestion studied which

might lead to a selection of those who are most likely to be successful.

As this question of how many students shall be accepted and who they shall be is of the utmost importance to the Faculty and as a definite policy in regard to it has now been decided upon, it would seem that the time is ripe for a frank discussion

of the subject with the graduates.

Twenty years ago. from seventy to a hundred freshmen who held the matriculation standing of that time were admitted from Ontario and the other provinces, with an occasional student from the United States and other foreign countries. By the time they graduated the numbers had usually diminished by ten per cent. Then came the Rockefeller report on medical education and the almost immediate closing of hundreds of medical schools on this continent and the enormous raising of standards of both premedical and medical education. In Toronto the matriculation was raised from the pass to the honour standing and the medical course was lengthened first from four to five years and then to six. Many schools have required that students entering medicine shall hold a degree in the natural sciences. but so far we have not insisted on this but have attempted in a six year course to give the student an adequate training in the medical sciences and a slight contact with some of the purely cultural arts subjects. With this changing of the curriculum has come an enormous improvement in the courses given in both the preclinical and the clinical years, so that our Faculty has been able to reach and to maintain a position, as indicated by the Rockefeller reports, among the best schools on the continent.

Coincident with the sharp reduction of the number of schools and the general raising of the standards of medical education throughout America, many of the School abruptly reduced the number of freshmen accepted to 50 or 60, the number that could be handled satisfactorily in their associated hospitals. Naturally the selection committee picked out those applicants who appeared to be the best. I understand that nowadays such Schools as Western Reserve, Rochester and Buffalo select 50 or 60 freshmen from nearly a thousand applicants who hold their entrance qualifications and the result has been that we have been finding it increasingly difficult to compete with these Schools in the average of the intelligence of the

students.

With this great general reduction in the opportunity for registration there has been a steadily increasing pressure for admission to Toronto and some years ago it became necessary to increase the restrictions. Bearing in mind that this Faculty is supported by the Province of Ontario, these restrictions have not yet been applied to

its citizens. They have, however, been applied stringently to the citizens of other countries and to a lesser degree to citizens of our sister provinces. Thus each year we have approximately five hundred applications from Americans who cannot get into the Grade A schools at home, and these are all declined. There are a certain number of applications from sons and daughters of our own graduates who live in the United States or elsewhere and from these we select only those who show aptitude for a prolonged course of study. This has caused some resentment on the part of some of our graduates but we hope that they will appreciate the great changes that have developed since their day and accept the general principle that this Faculty must serve primarily the citizens of Ontario.

Besides providing educational opportunity for young men and women from this Province, we must also lend assistance to the other provinces, particularly those who have no medical schools. In the case of British Columbia and New Brunswick, which have no medical schools, we accept graduates in arts who have covered the natural sciences and also students who have taken the first two years of that course. Such students are accepted into our second year if their academic record indicates that they may be expected to make satisfactory progress. With the University of Alberta we have an agreement by which students in either school may transfer to the other, provided all subjects in the previous year have been completed. The University of Saskatchewan has a course which coincides fairly well with our preclinical years. It is a four year course leading to a B.Sc. or a B.A. degree. We accept such graduates into our fourth year if their records are satisfactory. We also accept into our second year some students from Saskatchewan and Western Ontario who have completed satisfactorily their first two years, provided the number registered in our second year is not already excessive. In the case of St. Francis Xavier and Acadia Universities in Nova Scotia, and McMaster and Ottawa in Ontario, we accept into our second year graduates or students who have completed courses equivalent to our first year. From Alberta, Manitoba, McGill, Dalhousie and Queen's we consider applications for admission to the next higher year at Toronto provided equivalent courses have been completed and the applicant's record has been without stain. failures or poor reports from his school.

Before the period of overcrowding of our medical schools began, the previous record and aptitude of applicants from other Universities and provinces were not considered very carefully. but for the past few years this has to be changed and now no students are accepted from outside Ontario who cannot be classified as good students. They always may be found in the upper third of the class.

But in spite of these restrictions, lengthenings of the course and general raising of standards, the overcrowding has continued. Three years ago there were 450 students in the three clinical years. This is an intolerable condition from many standpoints but from two in particular. First, it is difficult if not impossible in a city of the size of Toronto to give an adequate training in the principles of medicine, surgery and obstetrics to 450 students. Secondly, it is not fair to the patients in our public wards to force them to submit to continual use as clinical material for teaching. The Faculty determined, therefore, that in some way or other the number of students in the clinical years must be reduced to approximately 100 in each year.

In examining the plan of selection of freshmen in the Class A Schools in the United States and such Canadian Schools as McGill, Queen's. Western Ontario. and Manitoba, we found the method simple. Each school has a definite limit to the number of freshmen who will be accepted, usually between 25 and 75. and from the mass of applications the requisite number of the brightest students are selected. The choice is based on previous scholastic record, recommendation by head masters of schools, personal interview and standing in the so-called "Scholastic Aptitude Test" concerning which something will be said later. This method could not be adopted in the University of Toronto, however, as here we have a definite matriculation standard which gives any Ontario student who has it, no matter how long he took to obtain it, the right to register.

In searching for other plans of selecting students a study of the whole scholastic and academic records of large groups was made by the assistant dean, Dr. E. S. Ryerson. This showed conclusively that students with poor records in high school and in arts courses almost invariably did badly throughout their medical course and that students who had failures in their freshman year almost always had failures in subsequent years and either failed to graduate or did so only after repetition of whole courses of study. It was determined, therefore, that while no limit could be placed on the number of students from Ontario who might wish to register in the freshman year (provided they had their senior matriculation). it would be wise to allow only those to advance to the second year who had shown aptitude for medical studies. It must be agreed that the kindest way to deal with the poor student and his parents is to drop him at the earliest possible moment from a course of study for which he has no aptitude.

As indicated above, the freshman year is really a premedical year during which the student studies in lecture hall and laboratory the fundamental sciences, physics, chemistry and biology. In addition he elects one arts subject, usually French or German and he attends a course of lectures on the history of science and civilisation. It is a full year and forms an excellent educational basis for the medical course.

The first step in developing a plan of selection consisted of raising the passing standard of the first year in the three sciences. Previously a mark of 50% in each subject constituted a pass. This has been changed in that while 50% is still the passing mark in each subject, an average of 60% must be obtained in the total of the three sciences. No supplemental examinations are allowed in these three subjects. While this does not appear to be an important change, it nevertheless reduced the number with a clear pass to a level that could be handled in the clinical years. We were annoyed to find, however, that the following autumn most of those who had been ploughed returned for re-registration in the first year in spite of strong advice to the contrary, and as there was no way of preventing this re-registration, the first year was larger than ever. As might be expected, these repeaters nearly all scraped through in the following spring examination, for only mental defectives could fail to pass this examination after two whole years of preparation for it.

This experience demonstrated that nothing short of strict methods of selection could be effective and it was accordingly determined to add to the existing regulations that students who failed in their first year examination could not re-register in the first year. This regulation comes into force this year and it should do something towards reducing the number of students to a level where each can expect to receive adequate training and where the general standard of intelligence will be equal to the

work for which they are to be trained.

This final step in establishing methods of selection was taken only after grave consideration and with full realisation that occasional mistakes might be made in dropping from the Faculty students who might ultimately have achieved success in their studies and practice. To reduce this chance to a minimum, a system of recording the term work has been established and a series of test examinations introduced in order that the instructors may acquire early some knowledge of the application and ability of the students. When the results of the final examinations are considered, the whole record of these students who have failed, throughout high school and medical college, is reviewed and every effort made to eliminate mistakes. To lessen the hardship to those who have failed simply because they had selected the wrong course, the way is still open for them to register in the first year in any other course in the University, or, if they have obtained a 50% standing in the subjects of the freshman year in medicine, to apply for admission to the second year of the pass arts course.

In determining the fate of borderline students, the Scholastic Aptitude Test of the Association of American Medical Colleges is likely to prove helpful. This test is applied to applicants for admission to most Class A American Medical Schools, during their premedical years in college. Last year we submitted our first year to the test early in December and were much interested to find that the standing obtained by the students in this very general test of intelligence, memory, powers of observation, general information, and so on, agreed very closely with students' records throughout the year and at the final examination. The test should be useful, therefore, in helping us to make the best selections for promotion to the second year.

Two years ago a committee of the Faculty was appointed to study the whole medical curriculum and to recommend whatever changes might lead to its improvement. At the end of the first year of the study the committee reported on the curriculum of the first, second and third years and recommended a general reduction of the number of hours devoted to both laboratories and lectures. They formed the opinion that with the passage of time, the various departments had tended to introduce much that was of special and advanced character into their courses and had forgotten that for the average medical student a firm grasp of principles is what is desired. In view of the committee the objects of the whole preclinical period of a medical curriculum ought to be (1) to introduce the student to scientific method and to imbue him with the scientific habit of mind, (2) to induce in him correct habits of learning and the faculty of independent inquiry, and (3) of course, to equip him with such a body of fully assimilated scientific information as will form an adequate and enduring basis for his later, more purely professional studies. Each department has sought to elaborate its courses to the fullest possible extent, and with this object has sought the largest attainable share of the student's time. The result is that the curriculum has become overloaded in content, and overcrowded in time. The student has no time for individual study and reading—no encouragement therefore to teach himself. His one duty he feels, and is practically made to feel, is to commit to memory a certain mass of information; and, having discharged this at an examination, to replace it as completely as possible by another. The Faculty is convinced that the results of this system are not good and that a general reduction of the time devoted to lectures and laboratory classes would probably produce an improvement. remedy is not simple.

One of the most important changes has been made at the request of the professor of pathology, Dr. Wm. Boyd. Hitherto, pathology has been taught in the fourth and fifth years synchronising with the clinical teaching, but according to the new plan it has been moved back into the third and fourth years. This was made possible by the reduction of the time devoted to chemistry, physiology and anatomy and it has the great advantage that when the student commences his clinical work at the beginning of the fourth year, he has some knowledge of the principles of pathology and when he enters the fifth year, which is the year of intensive study of disease, he had already

covered the special pathology of those diseases.

This year the Committee on Curriculum completed its study of the three clinical years and made the same criticism as in the report on the primary years, that while the courses have been, on the whole, of excellent quality, some of them have been over-elaborated so that the student, busy in the acquisition of a mass of detail, loses sight of the principles of the subject and of its real place in the science and art of medicine. The changes recommended and adopted were as follows:—

- 1. Bacteriology (third year)—A reduction from 165 hours to 120 hours, a change that partly balance the introduction of 45 hours of pathology in the third year.
- 2. Pathological Chemistry: A reduction of the laboratory course from 60 hours to 40 hours. The lecture course will be of the same length but will begin in the third trimester of the fourth year and be completed in the first trimester of the fifth year. This change has two advantages; first, that it correlates more closely the lectures with the laboratory work, and second, it relieves to a certain extent the already overcrowded fifth year. This change will facilitate the student beginning the clinical study of certain types of cases in the department of medicine in the third trimester of the fourth year instead of the beginning of the fifth year.
- 3. Radiology: A reduction of the number of didactic lectures from 40 to 30 hrs.
- 4. Obstetrics: In this subject the most important changes have been introduced. Last

year the didactic course on normal obstetrics was moved back into the fourth year and the timetable so planned that all didactic work would be completed by the end of the fifth year. At the same time arrangements were made with St. Michael's and the Western Hospitals whereby each fifth year student will have five weeks intensive practical training in one of these hospitals. During this period he will either live in hospital or be on call continuously. He will be excused from all other work except afternoon lectures. In the sixth year he will again have five weeks practical training in obstetrics and gynaecology, during part of which time he will live in the General Hospital and take part in the routine work as in general practice. This very great increase in the practical training in obstetrics should remove what has hitherto been a serious weakness in our course.

5. Physical Therapy: The increasing popularity of various empirical forms of physiotherapy led the committee to recommend greater attention to the teaching of this subject. Under the direction of Dr. W. J. Gardiner in the department of therapeutics, the teaching of physiotherapy has been established on a scientific basis and each student is given an opportunity to acquire both theoretical and practical training in the essentials.

The work of the Committee on Curriculum has prove so valuable that the Faculty decided to continue it for another year with the idea that it might investigate the schedule for each year as a unit, in contrast with the former approach from the departmental standpoint, and also that it might define along broad lines the objectives to be kept in view in the basic medical sciences and the clinical divisions of the course as a whole.

The summer courses for volunteer students from the sixth year was continued in surgery and obstetrics and again proved very successful. These students were distributed among the various services as externs and received a practical training very similar to that of a hospital intern. When the trimester comes in the regular term, during which they should be studying the subject covered during the summer, special appointments will be given to them in work in which they feel weak or in which they are specially interested. Thus, two will have appointments as externs at the Hospital for Sick Children, one at the Emergency Department of the General Hospital, one in the Urological Department and one on the Cancer Wards.

Accounts of the many important researches at present being conducted in this Faculty will be found in the reports of the various departments. Some of these are of the utmost importance and indicate that this University hold a strong position

among the great centres of learning.

The outstanding medical contribution of the year came in response to the challenge of the epidemic of infantile paralysis which swept through Toronto and Ontario last Autumn. The whole staff of the Hospital for Sick Children rose to this emergency and in conjunction with the Departments of Health of the Province and City did excellent work in the diagnosis and treatment of the disease. The size of the epidemic made it possible to observe in large numbers of cases the effect of convalescent serum. The consensus of opinion was that it was of no value. The suggestion, supported by experimental evidence on monkeys, that spraying the olfactory mucous membrane with zinc sulphate solution would prevent infection with the virus of the disease was tested out in a mass experiment on 5,000 children. A study of the results showed that the method as carried out was of no value.

A feature of the epidemic was the surprising number of adults that were affected. This presented an emergency at the General Hospital which was ably handled by the

medical staff.

In both the children and the adults a very high percentage showed involvement of the muscles of respiration and to meet the situation the mechanical department at the Children's Hospital supplied large numbers of Drinker respirators which proved of great value to both children and adults.

The postgraduate courses on manipulation therapy, cardiovascular diseases and fractures, held in the latter part of September, were well attended and successfully

carried out. This year the courses will be on metabolic and endocrine disorders and on cancer. These short courses of one week of intensive study of special branches of medicine and surgery are proving very attractive to the graduates of both this School and others and will be continued as a part of the regular University work,

This year the Donald C. Balfour Lecture was delivered on Lister Day by Mr. Gordon-Taylor of Middlesex Hospital in London, England. His subject was "Gastric Haemorrhage". Mr. Gordon Taylor made the journey from England specially to give this lecture and so brought to fruition the founder's hope that in this lectureship our students might, from time to time, have an opportunity to hear distinguished surgical teachers from abroad.

The practice of inviting the Charles Mickle Fellow to deliver a lecture to the students and Faculty has proven very successful and has given us an opportunity to meet intimately the most distinguished practical research workers of their time. Last year we had a most interesting lecture from Dr. Donald D. Van Slyke on "Neutrality regulation of the Organism". This year the award has been made to Dr. George Hoyt Whipple of the University of Rochester for his work on pigment metabolism and regeneration of haemoglobin.

Well deserved honour has come this year to Professor C. H. Best, Head of the Department of Physiology, who was elected a Fellow of the Royal Society of England. Dr. Gordon Murray of the Department of Surgery has been much honoured also in his appointment as an Hunterian Professor in the Royal College of Surgeons

of England for his work on "Heparin".

I regret to have to record the death of a member of the Faculty, Dr. George R. Pirie, of Dr. George C. McIntyre, a former teacher in the department of surgery, and of Dr. E. A. Gray, the medical superintendent at the Toronto General Hospital.

Doctor Pirie was a distinguished member of the medical staff of the Hospital for Sick Children and an excellent teacher of paediatrics. Dr. McIntyre was an exceedingly popular young surgeon whose retirement some years ago because of ill health was regretted by all. Doctor Gray was known to all interns and students and was a valued friend of the University.

# (4) REPORT OF THE DEAN OF THE FACULTY OF APPLIED SCIENCE AND ENGINEERING

(C. H. Mitchell, C.B., C.M.G., C.E., D.Eng.)

The past session has been noteworthy in this Faculty because of the steady and serious application to work by the students, with their consequent excellent academic results.

Notwithstanding the general unrest which is abroad, and the apparent unconcern and inattention of present-day youth to serious things, the young men of this Faculty appear to have successfully resisted the slackness which seems to so generally prevail. This has been observable both in their academic work and their student activities, and is a tribute not only to their own determination and judgment, but, I believe, to the faculty staff as well, in its special efforts to meet these prevailing conditions.

The number of students in attendance continues to increase. The upswing which recently became apparent has now definitely developed and is a natural result of the recovery of general conditions and activities in the country following the conclusion of the depression, the low point of which was reflected by the number (766) registered in this Faculty in 1935. Since then there has been a distinct rate of increase, there being 789 in 1936 and 833 in 1937. A similar rate of increase will doubtless now continue for a time.

The present "recession", as it has been called, has noticeably affected the activities of industry and some fields of engineering in this country the past year, and this may temporarily influence the attendance in certain of the engineering courses. In the long view, however, it is reasonable to expect a still greater attendance in this Faculty in the next few years. This is desirable because the country

still needs young engineers-highly and carefully educated technical and technical-

business men.

It is worthy of record at this time, and with respect to the foregoing, that in the past few years the number of young men taking applied science courses in this Faculty who go out into business and work other than engineering, has steadily been increasing. Whereas ten years ago only a small percentage of applied science graduates did this, there are now many more who do so immediately upon graduation. More than ever do young men come for applied science courses who never intend to follow engineering. In the usual course of graduates' progress, it has been noticeable, moreover, that the percentage of those who have been out five and ten years, who have departed from purely professional work and gone into the business side, has very much increased and continues to do so. Engineering graduates from this Faculty are now to be found in large numbers in executive positions in very many industries where they are more concerned with finance, economic, and commercial operations than with technical. A great many have also gone on into banking, finance, law, and purely commercial enterprises, a number into teaching, and some into church and foreign missionary work.

The relative distribution of numbers of students into the various graduating departments is now regaining a proportion more appropriate to the country's probable needs. Those in civil engineering are definitely increasing, which is desirable, as a shortage of young men in this important branch of the profession has already been manifested. The numbers entering mechanical engineering should also increase in proportion, as there is always a strong demand in this field and it will continue. The result of the small numbers which have been entering architecture, a five-year course, now begins to be felt in a distinct shortage, and this will be accentuated with the impetus given the construction industry by the new legislation.

A study of the results of examinations in this Faculty over a period of time, say ten years, discloses several interesting features with respect to the number of students entering and the failures in the first and succeeding years. Emerging from such study, the following observations may be made:—

(1) That when students crowd into a faculty of course, the ratio of failure tends to increase, a natural consequence of attraction to such a course by a greater

number of students of diverse abilities.

(2) That ratios of failures in the first year were high in 1931 and again in 1935 and 1936, the former being with a large number in the year on the entrance of the depression, and the latter on its approaching exit, with a hundred students less, but with the first full effect of the operation of the "recommending" process of entrance to the University.

(3) That in the past two years the first year failures have declined, and

(4) That in the past two years the failures in the second, third, and fourth years have also noticeably declined, and for this year it is pleasing to note an increased percentage taking honours, especially in the first two years.

This session the first group of students taking the course in engineering physics established four years ago completed their fourth year, six in number, and graduate this spring. While this is a difficult course, requiring high attainment especially in mathematics, it appears to have attracted a fair number of students, there having been passed this session twelve in the first, ten in the second, and six in the third years.

The course in mining geology, established a year ago, which combines the first two years of mining engineering with the last two devoted mainly to geology and kindred subjects, has already attracted a few students, there having been, this session,

seven in the first, one in the second, and two in the third years.

, The provision of increased building accommodation is still the outstanding necessity in this Faculty. Hopes have long been entertained that additional facilities could be provided, especially for mechanical and chemical engineering. As each year passes, difficulties, due to lack of space and appropriate equipment, become more acute.

In mechanical engineering the scope and further development of instruction in newer directions is being seriously hindered due to lack of or delay in providing these facilities. The phases of expansion greatly desired, and indeed necessary if the University is to even reasonably keep pace with growing requirements in this field, lie in new laboratories for machine design and open channel hydraulics, and in means of conducting experimental studies by models of river channels and harbours. These latter have now become of great importance with respect to flood control and the resulting property damage. Additional provision is greatly needed for expansion of facilities for instruction and experimental study regarding heat insulation, a subject now much to the front in this country.

In chemical engineering, the necessity of providing increased accommodation has rapidly become more urgent. During the past few years the crowded condition of laboratories in this department, due to greatly increased numbers of students, has become steadily worse. Not only does this crowded condition seriously obstruct the normal course of instruction, but it makes almost impossible the installation of new and much needed equipment, even if the requisite funds for such were forthcoming.

Each succeeding session, the increasing numbers of students moving up into higher years in chemical engineering have very greatly added to difficulties of instruction and have limited its scope. Attention has been drawn to this condition each of the past eight years or more as the members of the staff and the students of this Faculty and department have continuously experienced these conditions becoming more acute, notwithstanding all the efforts, devices, and makeshifts which both staff and students have continued to keep necessary instruction going. These conditions can, in the end, have only one result, even apart from the discouragements which ensue. The efficiency must suffer. Attention has frequently been called to this possibility, almost yearly, having been first reported in 1930.

It is with great regret that, now, after every means appear to have been exhausted, the department of chemical engineering, contemplating the very large classes coming into their third and fourth years, all members needing specific personal facilities, reports that in the forthcoming session the efficiency of instruction will definitely and seriously be impaired. This is most unfortunate in such an

important field of education.

Accommodation for metallurgical engineering is now being taxed in a manner that threatens results similar to those already described. This department was provided with accommodation in its earlier days for not more than thirty or forty students in all years. An endeavour is now being made to compress into the same space over twice this number—there being eighty students the past session, and nearly a hundred coming next year. These figures apply only to those registered in the department, and have no relation to the large numbers in those which this department also services.

Research in this Faculty has proceeded as usual during the past session, although under great restriction, due to lack of funds with which to prosecute most desirable researches. The Committee of Management of the School of Engineering Research has held many meetings, particularly during the past term, and a result its structure has been considerably improved, with its membership doubled and its operations provided for by more comprehensive arrangements. Its report on the

work of the session is presented separately, but concurrently with this.

It will be observed that thirty-five researches have been carried on by thirty-four different researches, including professors, lecturers, instructors, and specially appointed research assistants. These researches are all carried out in applied science fields directed towards objectives which are hoped to be of specific use in various industries, with which the work in this Faculty is concerned. While all this research effort has produced a degree of satisfaction on the part of the School of Engineering Research and the members of the staff, there is much more to be desired if funds and opportunity in point of available time on the part of the researchers were available. A difficulty encountered in this respect in this Faculty is that the

normal and routine work of instruction absorbs so much of the time of the staff during the session that their efforts are limited, and after the session is ended there is but a short time left before this report of the year's work requires to be presented. Many researchers work steadily throughout most of the summer holidays as a

consequence.

In the retirement of Professor H. E. T. Haultain at the end of this session, this Faculty loses a most valuable member. Professor Haultain has been head of the department of mining engineering for the past thirty years, since he first came onto the staff. His great ability as a teacher and administrator has resulted in building up a department of which the University and the Province may well be proud. His close contact with the mining profession and the industry generally, and the foundations he has laid in this respect, have been of the greatest value. His efforts and his long and painstaking work in connection with the provision of the new mining mill in 1930 will long be remembered. Perhaps, however, Professor Haultain's greatest contribution has been in his deep interest in the young men going through his department and his concern for them after graduation; this after all is one of the finest attributes upon which a university professor can be congratulated.

# (5) REPORT OF THE DEAN OF THE ONTARIO COLLEGE OF EDUCATION

(Dr. J. G. Althouse)

Registration in the Ontario College of Education was slightly lower than in the previous session. Including extramural students the total number of registered was 628, as against 653 in 1936-37. The decrease occurred mainly in the High School Assistants' course, but the proportion of students in this course seeking specialist

standing continues to increase.

The current revision of the High School courses of study necessitated the establishment of two new supplementary courses for teachers: home economics and shop work. The supplementary course in music again attracted a large group of students, and the class for Intermediate Certificates in home economics was much larger than usual. On the other hand, the enrolment in physical education and in the public school course was reduced.

The Librarians' course continues to attract classes to the capacity of the school. A revision of the course of training, which has been in process for some time, was greatly accelerated by the decision of the Board of Governors to add a full-time instructor to the staff. The course now devotes approximately one-third of the time to basic technical knowledge and skills, one-third to knowledge of books, and one-

third to special lectures and administrative problems.

During the year the Department of Educational Research published Bulletin No. 10. Bibliography of Canadian Education. Two forms of a World Geography test were published for use in the elementary school, and two intelligence tests, one for high school grades and the other for the middle grades of the elementary school, were made ready for standardisation. Preliminary work was done on an achievement test in French. Several minor researches were carried out: a study of grades awarded by critic teachers to teachers-in-training; the influence of economic factors on student-teacher enrolment; the reliability of test-item validities. Members of this department participated in a Dominion-wide conference on national research in education. in preparation for the biennial meeting of the Canadian Educational Association.

Mr. G. A. Cline's continued ill-health prevented him from assuming his duties throughout the entire session.

The Board of Governors made the following additions to the staff:

Miss Mary E. Silverthorn, M.A., Assistant Professor of Library Science in the Carnegie Library School at Pittsburgh, to be assistant professor of library science in the College of Education;

Miss Ruth E. Ratz, B.A., head of the department of home economics in Jarvis Collegiate Institute, Toronto, to be lecturer in home economics in the College of Education.

# (6) REPORT OF THE SECRETARY OF THE FACULTY OF HOUSEHOLD SCIENCE

(Professor C. C. Benson)

The work of the Faculty of Household Science has proceeded much as usual this session.

The registration has been about the same as last year, with the majority of the students coming to us from Macdonald Institute, and a few from other universities. With the present entrance requirements and arrangements of courses, it is undoubtedly wiser for most of the students who wish to study Household Science and who come to the university from the secondary schools of the province, to take their work in the Faculty of Arts and to graduate from the course in household economics. In that course, the increase of household science work in the schools has already shown a larger number in attendance here, but the registration in this Faculty is not likely to greatly increase for the present. We are, however, glad to be able to offer opportunity to obtain a household science degree to graduates of Macdonald Institute, and to others from other colleges and universities.

There have been requests during the session for an arrangement for extension work, but as yet it has not seemed advisable to undertake this. The numbers wishing such work are small and the cost would be considerable, but it may be necessary to arrange for summer courses in the future.

# (7) REPORT OF THE DEAN OF THE FACULTY OF FORESTRY

(Dr. C. D. Howe)

This years graduates from the Faculty of Forestry, six in number, have all found positions, four in governmental services and two with pulp and paper companies. Nearly ninety per cent. of the undergraduates who passed their examinations are employed in forestry work for the summer, being divided about equally between the Government and private companies. The so called recession in the business uptake in the United States has reflected itself adversely on the pulp and paper industry in this country and so on the employment of forestry graduates compared with the conditions a year ago when the Faculty could not supply the demand from the industry. The present situation is undoubtedly a temporary condition in the industry and the former demand for graduates will be restored. The demand for foresters in the governmental services is slowly increasing.

The two new courses introduced into the curriculum last year, namely the course on fish and game conservation and the one on the scaling of timber, the latter given at the Forestry camp, have been carried on with increasing success during the

current year.

We had occasion to make a statistical study of our students' origin, preuniversity education and employment after graduation, covering the first thirty years of the Faculty's existence. We found that since its establishment four hundred and nine students registered in the Faculty. Of these seventy-seven per cent, came from Ontario and nine per cent, from the other provinces and Newfoundland. Outside of Ontario, New Brunswick has contributed seven students and six each have come from British Columbia, Manitoba and Quebec. Five came from Alberta. Nova Scotia has furnished four, Saskatchewan two, and Prince Edward Island and Newfoundland one each. Fifty-seven students, fourteen per cent, of the whole number, have come from other countries among which Great Britain and possessions lead with twentytwo men, followed by the United States, Holland, Finland and Norway. Around forty-four per cent. of the three hundred and nineteen students from Ontario came from Toronto and this city has contributed a little more than a third of the students as a whole. The Parkdale Collegiate made the largest contribution to the Faculty, twenty-five men. Jarvis and North Toronto stand next with seventeen and sixteen men respectively. Humberside Collegiate furnished thirteen, Riverdale and the University of Toronto Schools eleven each. Nine of the entrants came from Harbord, seven from Oakwood, five from Malvern, and four each from Bloor and West Toronto Collegiates. The Central Technical School furnished three men. Among the private schools in the city. Upper Canada College leads with eight men, St. Clements contributed two, St. Michael's and De la Salle one each.

It is a significant fact that the Toronto schools furnishing the largest number of men to the Faculty are those that have had principals or science masters with more

than the usual interest in the conservation of our natural resources.

Other towns than Toronto in Ontario have contributed one hundred and seventy-seven men representing seventy-six different preparatory schools. Forty-five of these, however, sent only one man each to the Faculty during the past thirty years. Ottawa leads with twelve men. Aurora, Clinton, Kitchener, London and Sault Ste. Marie furnished five men each while Belleville, Brampton, Galt, Hamilton, Peterboro and

Woodstock contributed four men apiece.

Of the four hundred and nine men who began the study of forestry in the past thirty years, only two hundred and fifty eight, or sixty-three per cent., completed the course and received degrees. Failure to meet the academic requirements was the chief cause of the men dropping out. Comparing the number entering from Toronto with that from the Ontario towns outside of the city, one can find practically no difference in the number completing the course in the two groups; it is less than one

per cent. in favor of Toronto.

The number of living graduates is two hundred and forty-four: of these one hundred and eighty-six or over seventy-six per cent. are employed in forestry or related fields. Pulp and paper, lumbering and allied industries have absorbed nearly one half the forestry group. The various governmental forest services employ about one-third of the remainder. In the next largest group, a little over ten per cent., are included the men who are working in forest entomology, forest pathology, nursery inspection and so forth in other governmental organisations and engaged in aerial patrol, timber estimating, and saw-milling for private companies. Eight of the graduates are teaching forestry in universities, four in this University and four in the United States, one each at the University of Michigan, the University of Washington (state), Purdue University in Indiana, and the New York State College of Forestry at Syracuse University.

Under the classification of pulp and paper, lumbering and allied industries, the distribution of the men is as follows: Ontario forty-seven, Quebec twenty-three. British Columbia six, Manitoba three, New Brunswick two. Newfoundland three,

England one, and United States four—eighty-nine men in all.

Ontario leads in the number of men in government forest service with thirty-three men. The Dominion Forest Service comes next with seventeen men. The Forest Branch of British Columbia has six of our graduates, Manitoba three, Saskatchewan two and Alberta one.

The figures given above are based on conditions in December, 1937. The shiftings of the past six months have changed them somewhat but not in essential character.

#### (8) REPORT OF THE DEAN OF THE FACULTY OF MUSIC

## (Sir Ernest MacMillan)

An important step has been taken this year in the appointment of Dr. Healey Willan and Mr. Leo Smith as professors in the Faculty of Music. The extension of musical activity in the University, particularly in connection with the new Arts Course, has rendered full time appointments necessary. As the appointments have been made with the support and co-operation of the Board of the Conservatory of Music, a closer relationship between the University and the Conservatory seems assured for future years.

Dr. H. A. Fricker, who has been a lecturer of the Faculty of Music since the Faculty was constituted in its present form in 1918, retires this year. His colleagues

will greatly regret the loss of his valuable advice and co-operative spirit.

Eight students were registered in the new Music Course in the Faculty of Arts and indications point to an increased interest in this course in years to come. Instruction will be undertaken, as heretofore, by members of the Faculty of Music.

During the years 1937-38 the number of students registered for the Mus.B. degree was forty-nine. Eight of these were registered in the first year, sixteen in the second, and twenty-five in the third. The degree of Bachelor of Music was conferred on nine students. No doctorates in music were conferred. The usual series of lectures have been given by members of the Faculty and fourteen students were registered for special tutorial classes.

Four organ recitals have been given in Convocation Hall, arranged by Dr. Healey Willan: one each by Mr. David Ouchterlony, Mr. Maitland Farmer, Dr. Charles

Peaker, and Mr. Frederick Silvester.

Early in the autumn, the Carnegie Corporation of New York, at the request of the President of the University and the Conservatory Board, asked Mr. Ernest Hutcheson of the Juilliard Foundation to undertake a survey of the activities of the Toronto Conservatory of Music, and in the light of his experience of similar institutions, to make suggestions which might further the interests of the Conservatory. In spite of the short time at his disposal, Mr. Hutcheson was able to cover a great deal of ground and his report has been of notable value in suggesting direction of future activities. The division of the functions of the Conservatory into three categories has become somewhat clarified:

(1) Training school for professional musicians.

(2) General public school of music.

(3) A public academic body closely connected with the University and exercising an important influence in the general musical life of the community through its examination system and otherwise.

While no drastic changes are contemplated for the present, it is probable that in the course of time these functions will be more sharply differentiated. In the meantime a Summer School has been announced, to be held in July, 1938, and during the coming year courses for full time professional students of the Conservatory are being planned on a broader basis than heretofore in order to establish a definite Senior School.

The sale of the Academy property on Spadina Road should result in easing somewhat the financial problems of the institution and in enabling a greater degree

of concentration of its activities.

The Conservatory Choir has appeared in Convocation Hall in the annual performance of Bach's "Saint Matthew Passion" on April 12, and has also sung Mendelssohn's "Elijah" and extracts from Act III of Wagner's "Parsifal" and from Act III of "Die Meistersinger" in Massey Hall with the Toronto Symphony Orchestra. The Choir sang also Pierne's "The Children's Crusade" with the Philadelphia Symphony Orchestra in Massey Hall in May. The Conservatory Orchestra, under the direction of Mr. Ettore Mazzoleni, appeared twice in Massey Hall, and twice in Convocation Hall. Other Conservatory organisations, notably the Conservatory String Quartet, have made valuable contributions to the musical season in Toronto. A new Chamber Music Club formed in the early fall has already attracted a large membership.

At the end of May, 1938, registration for tuition at the Toronto Conservatory of Music showed an increase of nearly three hundred over figures for the previous year. The number of candidates for examinations for the present season has been 13,482.

The musical activities of Hart House have been as extensive as ever and the Hart House Glee Club, under Dr. Charles Peaker, continues to progress. It has been decided to concentrate the Carillon recitals from the Memorial Tower, by J. L. Richardson, into a shorter season in order to enable a larger number of enjoy them during the warmer months.

## (9) REPORT OF THE DEAN OF THE SCHOOL OF GRADUATE STUDIES

# (Professor G. S. Brett)

The number of students registered in the School of Graduate Studies for the year 1937-8 was 583. As compared with the enrolment for 1936-7 this is equivalent to a decrease of 54. The number registered for the Ph.D. was 118. as compared with 134 in the previous year: for the M.A. the number was 173, an increase of 33 over the previous total. The significance of these figures is made uncertain by the fact that students who are in reality proceeding to the M.A. may be registered as graduate students: a total of 205 students were so registered in the current year. The number of men enrolled was 432, showing a decrease of 32 from the previous year: the number of women increased from 137 to 151. It is possible that the decrease in the total enrolment reflects the effect of raising the fees. The decrease of candidates for the D.Paed. accounts for 46 out of the total 54, which shows that the fluctuations in the other subjects was not great.

The number of students resident in the Province of Ontario was 421, a decrease of 51; the number from Toronto was 259 (a decrease of 43) and from the other parts of the Province 162 (a decrease of 8). (For detailed distribution see Appendix B (K).) The number of students from other Province of Canada was as follows:—Quebec 6, Manitoba 28, Saskatchewan 23, Alberta 11, British Columbia 12, New Brunswick 14, Nova Scotia 17. The number from other countries increased from 48 to 51. distributed as follows: Great Britain 2. China 9, Japan 1, Bahamas 1. India 2.

Newfoundland 1. Ireland 1. Switzerland 1. Germany 1. U.S.A. 32.

The number of institutions represented in the School was 59. This number includes 17 Canadian institutions, 26 institutions in the United State, 4 English and 12 situated in other countries. The number of students from universities in Ontario other than Toronto was 83, including 31 from McMaster, 27 from Queen's and 25 from Western Ontario. The number of students who had taken their first degree at Toronto was 335.

The distribution of the candidates for the different degrees was as follows:—

Ph.D	118
M.A	173
M.S	3
M.A.Sc	
C.E	
Mech.E.	
D.Paed	
M.Sc. (Dent.)	
M.S.A	
Mus. Doc.	3

The distribution of the candidates according to the major subject was:—Anatomy 1. anthropology 5. applied mathematics 5. architecture 1. biochemistry 13. biology 30. botany 21. chemistry 40. chemical engineering 10, Chinese archaeology 3. civil engineering 2. classics 18. dentistry 1, education theory 2, electrical engineering 2, English 53, food chemistry 3, geography 2, geology and palaeontology 15. Germanic languages and literature 8. history 31, household science 3, hygiene and preventive medicine 4, law 4, mathematics 10, mechanical engineering 5, mineralogy 3, music 3, pathological chemistry 4, pedagogy 46, pharmaeology 3, philosophy 59, physics 36, physiology 9, physiological hygiene 3, political science and economics 23, preventive dentistry 2, professional degrees 2, psychiatry 1, psychology 39, romance languages 27, semitics 8, surgery 3, special committees 20.

The number of students recommended for degrees was:-

	Ph.D 35	
	M.A 117	
	M.S	
	M.A.Sc	
	C.E 1	
	E.E	
0	D.Paed 1	
	M.S.A 9	
	D.V.Sc 2	

Fellowships:—Nine Open Fellowships and Scholarships were awarded by the Council of the School on the recommendation of the Scholarship Committee. Other awards, noted below, were made by the Council on the recommendation of the departments or committees concerned.

F. E. L. Priestley, M.A. Alberta, department of English.

Miss M. B. Ellis, M.A. British Columbia, department of romance languages.

A. F. Graham, B.A.Sc. Toronto, department of chemistry.

L. H. Turl, B.A. Toronto, department of physics.

W. Robbins, M.A. British Columbia, department of English.

M. Long, M.A. Toronto, department of philosophy. W. Paterson, B.A. Manitoba, department of history.

B. M. Springbett. B.A. Alberta, department of philosophy. Miss M. E. Biehn, B.A. Queen's, department of biochemistry.

Alexander Mackenzie Fellowships:-

W. B. Ross, B.A. Dalhousie, B.A. Oxford, department of history. D. D. W. Irwin, B.A. Manitoba, department of political science.

Ramsay Wright Scholarship:-

Miss G. W. Workman, B.A. Toronto.

George Paxton Young Fellowship:-

J. G. L. Pearson, B.A. Toronto.

Nipissing Mining Company Research Fellowship:-

D. A. J. McDonald, B.A.Sc. Toronto.

Fellowships tenable in the University of Toronto by students undertaking graduate research were awarded by the respective Committees of Award as follows:—

War Memorial Fellowships:— E. E. Minett, B.A. Toronto. J. O. Gorman, B.A.Sc. Toronto.

Maurice Cody Fellowship:—

F. J. Westcott, B.A. Brandon; department of political science.

A Fellowship of the value of \$500 has been established for research in problems of personality. This fellowship, to be known as the John Northway Memorial Fellowship, will be awarded annually on the recommendation of the department of psychology. For the year 1938-9 the fellowship has been awarded to Miss M. L. Northway, Ph.D.

Staff Appointments: The number of graduate students holding positions as

demonstrators or instructors during the session 1937-8 was 178.

## (10) REPORT OF THE DEAN OF THE FACULTY OF DENTISTRY

(Arnold D. Mason, D.D.S.)

It is with regret that I report the passing of Dr. C. Angus Kennedy, associate professor of orthodontia, in July, 1937. His unexpected death was a great shock to me as well as the other members of the Faculty. Dr. Kennedy had given years of constructive service not only to the faculty and the dental library, but also in his associations with the general activities of the profession of dentistry. A suitable tablet is being erected to his memory by the Board of Directors of the Royal College of Dental Surgeons and the Ontario Dental Association.

One hundred and eighty-six students registered in the regular dental course this year, three of whom were young women. Twenty young women enrolled in the class in Dental Nursing. Four candidates were registered for the degree of B.Sc. (Dent.), and two of them were awarded the degree this year. In addition to the Ontario students, three students from the Western provinces were enrolled as well as one from New Brunswick and two from the United States. Six graduates from Australia attended the final year, and one graduate of Calcutta Dental College, India, was admitted to the fourth year.

During the year, four graduates attended for post-graduate instruction, one

being from London, England, and one from Nova Scotia.

Eleven members of the Faculty have addressed dental associations in various phases of dentistry at twenty-two different centres throughout the province. The Board of the Royal College of Dental Surgeons assisted in the financing of this service

to the profession, augmenting the university appropriation.

When Dr. Fulton Risdon was in Winnipeg in February in connection with the Medical Association, he addressed the Winnipeg Dental Society. Dr. Roy Ellis on his way to Aklavik gave lectures and clinics to dental associations at Winnipeg, Saskatoon and Edmonton. When Dr. Frank M. Lott is returning from the Pacific Coast Dental Conference in July, he will speak to dental groups at Lethbridge, Calgary, Moose Jaw, Winnipeg, Port Arthur and Sault Ste. Marie.

The meeting of the American Association of Dental Schools was held at Minneapolis from March 14th to 16th. This faculty was represented by Dr. C. A. Corrigan and myself. En route we visited the faculties of dentistry in Chicago, as

well as the dental faculty of the University of Minnesota.

As usual the dental library has been extensively used by the students and the members of the profession. Copies of most of the new dental publications have been purchased. The family of the late Dr. Albert E. Webster has kindly presented his personal library to this faculty. The stack room has been renovated and many duplicate copies of serial journals have been donated to other libraries.

The Graduate Consultation Service has been much appreciated by the profession

and 178 dentists have availed themselves of this service during the past year.

Following last year's intensive study of the report of the Curriculum Survey Committee of the American Association of Dental Schools, a study was made of the methods of presenting dental techniques. This has brought closer co-operation and understanding between the teachers in the departments teaching various phases of dentistry, resulting in better instruction to the student. The rearranged time-table has adjusted the hours of teaching in this faculty to coincide with those in other departments of the University and has met with the universal approval of the staff and students.

I believe the feeling between the students and staff of this faculty is very cordial and that this harmonious relationship produces the best possible results.

#### (11) REPORT OF THE DIRECTOR OF THE SCHOOL OF HYGIENE

(J. G. FitzGerald, M.D., LL.D.)

The School of Hygiene was formally established in 1925, but complete organisation was not affected until two years later. That occasion was marked by the opening of the Hygiene Building in June, 1927, funds for the building of which were provided by the Rockefeller Foundation. The demands which were likely to be made upon the School in providing instruction, graduate and undergraduate, in preventive medicine were of course unknown. Modest estimates were made of the accommodation which would probably be required for the School and for the University Section of Connaught Laboratories. Within three years it became manifest that the original building was entirely inadequate in size. So quickly did expansion occur that before the end of 1932 the building was extended to double its original size. The growth of the School and its associated unit. Connaught Laboratories, has amply

demonstrated the wide field of service open to them in the Dominion of Canada. The School is now recognised not only as the centre of graduate teaching of public health in this country but also as a training centre for all the provinces and for students from other countries as well. This is the eleventh annual report of the School of Hygiene, and a brief review of some of the developments of the past decade may be recalled.

Since 1927, the number of medical graduates who have completed the course leading to the diploma in public health is 182. These have come from all Canadian provinces and from elsewhere. They are distributed as follows: Prince Edward Island, 1; Nova Scotia, 4; New Brunswick, 9; Quebec, 42; Ontario. 65; Manitoba, 15; Saskatchewan, 5, Alberta, 8; British Columbia, 15; elsewhere, 18. This large group of trained public health workers is now engaged in whole-time service in the field of preventive medicine. This has made for vast improvement in the quality and scope of work undertaken in one of the most important of the social services.

For many years past the Rockefeller Foundation has aided governmental authorities in many part of the world to obtain the services of properly trained persons through the provision of public health fellowships. These have enabled suitably qualified men and women to spend varying periods of study in the School of Hygiene and in similar institutions in other countries. In Canada this arrangement has been supplemented by the creation and award of Connaught Laboratories fellowships in public health. Reference to these has been made in the report of the Director of the Laboratories. Since 1927 no less than seventy-four Rockefeller Foundation and forty-one Connaught Laboratories fellowships have been granted.

This year there has again been an increase in the number of students proceeding to the Diploma in Public Health, the enrolment being greater than in any previous

year.

The departments of the School, namely, hygiene and preventive medicine, epidemiology and biometrics, physiological hygiene and the sub-department of chemistry in relation to hygiene have during the session of 1937-1938 provided instruction for 423 students who were enrolled in the following courses:—

A.	Graduates Candidates for Diploma in Public Health Candidates for the degree of Ph.D. Candidates for the degree of M.A. Occasional students	18 4 3 2
В.	School of Nursing	57
C.	Undergraduates Faculty of Medicine, 5th year Faculty of Household Science, 2nd and 3rd years Faculty of Arts, 2nd and 3rd years Second-year Pharmacy Fourth-year Physical Training	31 63

Students in the D.P.H. course came from Alberta (1), British Columbia (3), Manitoba (2), Ontario (2), Quebec (4), New Brunswick (1), Nova Scotia (1), United States (1), India (1), and China (2).

Many important investigations have been undertaken in the various departments of the School during the year. The lines of inquiry have been of two general sorts. In hygiene and preventive medicine the studies of certain aspects of infection and immunity in pneumonia, diptheria, scarlet fever, etc., have been extended in various directions. Many of these undertakings have been carried on in collaboration with health departments in various parts of Canada. This approach to many outstanding problems of the specific prevention of disease has many advantages. It is frequently possible to ascertain facts of theoretical interest and importance while developing practical means of more effectively controlling certain communicable diseases. Despite the great advances of the last two or three decades the number of preventable

deaths and the amount of invalidity reported yearly from such diseases as tuberculosis indicate how much remains to be accomplished. Patient, systematic and prolonged inquiry in the laboratory and in the field should in the years to come yield substantial returns. To that end much of the work in this School is directed.

In epidemiology and biometrics very valuable results have been secured in the field of research which bear most pertinently upon the day-to-day problems of the health departments, federal, provincial and municipal, of this country. It is no exaggeration to state that the most stimulating and helpful agency in the promotion of improved public health methods and procedures is that provided by Professor R. D. Defries and his colleagues and associates in their work in epidemiology and cognate branches.

In physiological and industrial hygiene much has been accomplished. In general the scope of activities may be defined as the study of certain physiological functions and the influence of various environmental factors upon them. Naturally attention is directed primarily to the study of those aspects of human physiology which may lead to a better understanding of the factors which maintain and promote health. In the present state of knowledge a most important field of research is that concerned with more exact definition of the normal. This may be approached by repeated, systematic and thorough examination of healthy persons for long periods of time. Just such work is being carried on in the School. Another avenue of approach. experimental rather than purely observational, is also occupying the attention of Professor Best and his colleagues in their studies in cardiology. Then again, the exceedingly important subject of nutrition is receiving more and more attention. and in this field Dr. E. W. McHenry and his group have made highly important additions to present knowledge. The work has been conducted in the laboratory under experimental conditions and dietary surveys have also been carried out in collaboration with other workers. The exceedingly important rôle which nutrition plays in the maintenance of sound health and full bodily vigour is coming more and more to be recognized as being supremely important for the individual and the state. Undernutrition and malnutrition are complex problems which, because of their economic and social aspects, are of very especial interest to those concerned in the promotion of physiological hygiene.

In industrial hygiene further work has been done by Dr. J. G. Cunningham and Dr. H. M. Barrett in the elucidation of health hazards in certain industries. Dr. Barrett and Mr. Johnston have also made a valuable contribution to knowledge of the

probable mode of action of certain toxic agents which are widely employed.

The researches to which brief reference has here been made have, in the main, been supported by substantial grants from Connaught Laboratories. More detailed consideration of investigations which have been carried on in those Laboratories will be found in the report of the Director. Some work has of course been done partly in the School and partly in Connaught Laboratories where such an arrangement has been deemed desirable.

During the previous year the Director of the School was engaged in an extended study of the teaching of preventive medicine to medical students in various countries in Europe and North America. The work was undertaken on behalf of the Rockefeller Foundation. An endeavour was made to assertain the extent and character of preventive teaching in medicine at the present time. Altogether more than twenty-five countries were visited, and almost everywhere there is a clear appreciation of the significance of the preventive function of medicine. There appears also to be a determination to extend and improve facilities for suitable instruction of future medical practitioners in hygiene, public health and the preventive aspects of the various clinical branches. To facilitate and promote such efforts some of the great foundations in the United States are contributing very substantially.

The future progress of preventive medicine, as is now clearly realised, depends as much upon an enlightened and alert medical profession as it does upon organised community effort conducted by departments of health. Therefore the school or

faculty of medicine has a role to play not second to that of the school of hygiene, in this and every other university, in affording the medical student every opportunity of familiarising himself with his duties, responsibilities and opportunities as a

practitioner as well as of curative medicine.

Many visitors from various countries have visited the School during the year. They came from Belgium, Canada, Ceylon, China, England, France, India, Hungary, Jamaica, Japan, Korea, Panama, Roumania, Scotland, South Africa, Sweden, the United States of America, and Yugoslavia. They have always been most welcome, and the interchange of information and opinions has been highly advantageous to members of the staff of the School.

To my colleague Professor R. D. Defries I am deeply indebted for discharging the duties of director during the session 1936-1937.

#### (12) REPORT OF THE LIBRARIAN

(W. S. Wallace, M.A.)

I beg to submit the following report on the work of the University Library for

the year ending June 30, 1938.

The number of volumes added to the Library during the year has been 12,894; the number of pamphlets, 3,486; making the total number of accessioned volumes in the Library 352,155, and the total number of pamphlets, 135,395—or a grand total of 487,550.

The following are the statistics of the use of the Library by undergraduates, in comparison with various years:

	1921-22	1926-27	1934-35	1936-37	1937-38
Reading-room books  Overnight books  Week books	18,998	106,485 39.779 13.104	186,605 107,559 23,399	206,694 111,572 22,820	194,708 102,675 21,233
Totals	65,718	159,278	317,541	341,086	318,616

The following is a statement showing the circulation in the medical, political science, University College, and law reading-rooms, in comparison with other years:

	1934-35	1935-36	1936-37	1937-38
Medical reading-room:				
reading-room books	10,761	11,195	12.814	11,333
over-night books	11,386	12,219	12.425	10,072
week	3.606	3.622	4,188	3,069
Totals	25,753	27,036	29,427	24,474
	20,100	,,,,,		,,,,
Political Science:				
reading-room books	12,567	11.208	9.088	8,956
over-night books	6.890	6.338	4.865	5.438
T-1-1-	19,457	17.546	13.953	14.394
Totals	19.437	17.540	19,933	14,594
University College:				
reading-room books	33.325	30,746	30,992	28.310
over-night books	17,943	16,466	15.923	13.514
week				593
Totals	51.268	47.212	46,915	42,417
1 otals	31,200	4212	40,913	42,417
Law reading-room:				
reading-room books	8.822	15,585	22,985	25,981
over-night books	2,870	4,368	4,004	4,302
week	251	524	373	499
T 1.	11.042	20.477	27 269	30,782
Totals	11.943	20,477	27,362	50,762

The decrease here shown in circulation of books among undergraduates, which is the first noted in the Library for many years, is probably due in part at least to the fact that the University opened last autumn, because of the epidemic of infantile paralysis, a week late. This, however, does not wholly explain the decrease, since the circulation during the term itself showed a decline, except in the law readingroom. It would seem that we have now reached the peak of the phenomenal increase in the circulation of books among undergraduates that has taken place during the last twenty years.

The following is a statement showing the total circulation in the Library during recent years:

•	1925-27	1934-35	1936-37	1937-38
To undergraduates To professors and graduates		317.541 40.843	341.086 39.437	318,616 41,067
Totals	179,278	358,384	380.523	360.223

These figures are exclusive of books taken for consulation from the reference shelves. of which 23.092 have been replaced by the library assistants in the main library during the past year; and of course they take no account of the very considerable circulation of books in some of the departmental libraries.

The number of interlibrary loans continues to increase. During the year the Library has handled 851 interlibrary loans, as against 742 last year; 497 of these books being lent, and 354 books borrowed.

During the past year the binding and mending department prepared for binding 3.787 volumes, mended 2.301 volumes, and placed in pamphlet binders or boards 1.502 volumes. Library of Congress cards filed, temporary file, 40,667; permanent file, 85.045.

In addition to their ordinary work, the staff of the circulation department in the Library have this year revived the Canadian Periodical Index, which ceased publication in 1931. The staff had already embarked on the preparation of a card index of Canadian periodicals for their own use in reference work, when Mr. Angus Mowat, the recently appointed inspector of public libraries in the province of Ontario, kindly offered to print a Canadian periodical index in the Ontario Library Review. If any library would undertake to provide him with the copy. The circulation staff of the University Library took up his challenge, and the first quarterly installment of the revived index appeared in the Ontario Library Review for March, 1938. Already we have had numerous letters of congratulation and expressions of gratitude from librarians not only all over Canada, but in the United States. It would seem to be everywhere regarded as a genuine contribution to reference literature. It is hoped that at the end of each year the quarterly issues of the index will be cumulated.

Since I submitted my report last year the University Library has installed a library projector for reading microfilms. The growth of the use of microfilms in place of interlibrary loans made the installation of this projector a necessity, and it has proved its usefulness on a number of occasions. Its use, however, has yet been such as to suggest that microfilm is going to work the revolution in libraries that some people have anticipated.

During the past year the University Library has received from Dr. J. B. Tyrrell a valuable collection of geological periodicals; and by bequest from the late Mr. George H. Armstrong, the author of *The Origin of place-names in Canada* a remarkably fine collection of books relating to Canadian history and geography, as well as to education. I should like also to report that during the past three or four years a graduate of the University has annually placed at the disposal of the Library a sum of money for the purchase of books in psychology or law; and the Department of Mathematics is placing at the disposal of the Library the sum of \$500 received by it as a prize won in the William Lowell Putnam Mathematical Competition. In this connection I should like to explain that special bookplates with appropriate inscrip-

tions are inserted in books bought out of such special funds, and that there are few ways in which a name may be more suitably commemorated.

Once again I beg to bring to your attention the increasingly congested conditions in the University Library, both as regards space for books, space for readers, and space for library workers; and to commend to you the faithful service of my assistants in the Library, rendered in circumstances which are becoming increasingly difficult.

## (13) REPORT ON RESEARCH

Anatomy, under direction of Professor J. C. B. Grant

During the summer vacation the head of the department made an anthropological study of the Stonley Indians who live in Alberta. He also completed a text-book of Anatomy on which he had been engaged for some years. This was published by Messrs. William Wood & Company, and is entitled, "A Method of Anatomy, Descriptive and Deductive".

Dr. R. K. George has collected many data on details of anatomical interest, e.g., the numbers and locations of the valves in the spermatic veins; pelvic diameters in

relation to inguinal hernia.

Dr. C. G. Smith carried out experiments on rats to determine the effect on the olfactory mucous membrane of zinc sulphate solution used as a prophylactic in the poliomyelitis epidemic. It was found that this treatment led to a rapidly progressing degeneration of the olfactory sensory area culminating in sloughing of the olfactory nerve cells or in their complete degeneration and removal by the end of one week. Following this the surface was relined by non-sensory ciliated columnar epithelium. (This was completed by the end of the second week.) Observations were continued for two months after the treatment but no regeneration of the sensory olfactory cells could be recognised. The olfactory centres of the brain at the end of two months were markedly atrophic. Since the survey of the cases which received the zinc sulphate treatment during the epidemic last summer reveals a number with permanent loss of the sense of smell, it would appear that the injurious effects found in these animals occurs also in man, and that the treatment should be appreciated as being far from harmless.

Mr. H. E. Lemasurier in collaboration with the Poultry Department of the O. A. C. of Guelph, has made a radiological study of the growth of the skeleton of the chicken to six weeks of age. This work resulted in three reports (in press) with the following titles:—(1) A radiological study of the development of the fowl to six weeks of age on a mineral deficient ration. (2) The relation of the mineral supplement consumption to the normal skeleton development in males and females of various breeds of fowl to six weeks of age. (3) Some observations on the development of the fowl to six weeks of age.

Under Dr. A. W. Ham's direction:

Dr. K. Baldwin has been studying the various transitions in the histological structure of the alveoli of the lung from early foetal life until the time of birth, in rats, rabbits and guinea pigs, with a view to determining whether intra-uterine breathing motions, which distend the foetal alveoli do so by stretching the alveolar epithelium or by bursting through into the mesenchyme. This study is being pursued.

Miss Chapman, a graduate student and Dr. Ham have been trying to find a means whereby the growth stimulating effects evinced by certain hormones in vivo could be studied in vitro, their purpose being to learn something of the mechanism by which this influence is exerted. In pursuing this study it was first necessary to find a means whereby some hormone could be caused to accumulate in the blood in concentration sufficient to allow a small quantity of blood to remain active in this respect for several hours. Trial experiments have been successful. This study is being pursued.

Mr. Keenan and Miss Winston, students in Histology Option Course, investigated the possibility of a uterine hormone being concerned in the oestrus cycle by removing

uteri and studying daily vaginal smears. They found, in contrasts to some results reported by similar studies in other animals, that the oestrus cycle was not markedly altered.

Miss Fleming, taking the same option, with Dr. Ham and Dr. George, investigated the effect of longitudinal growth of bone on the position of tendon insertions and muscle origins.

This year, as last year, the scope of the research of the department has been considerably enlarged by co-operative research with the department of paediatrics. With Dr. Tisdall and Dr. Drake, of that department, Dr. Ham has engaged in several experimental studies, e.g., on the cause of parathyroid gland hypertrophy: the action of vitamin D in large doses which is being studied by chemical analysis and histological studies of the same tissues.

## Applied Mathematics, under direction of Professor J. L. Synge

- B. A. Griffith, Ph.D.: Investigations are being conducted on the theoretical stability of viscous liquid contained between a rotating cylinder and a coaxial cylinder suspended by a torsion-fibre, as in a standard method employed in the measurement of viscosity.
- G. E. Hay, M.A.: By the use of elliptic functions, last year's work on the torsion of certain prisms has been shortened and improved.

Teeth are held in their sockets by the thin periodontal membrane, which may be regarded as an elastic solid of small compressibility. The stress in the membrane and the displacement of the tooth under load have been investigated. and the results compared with those previously obtained by Professor Synge for an incompressible membrane. These investigations have been carried out under a scholarship of the National Research Council of Canada.

- W. D. Rannie, M.A.: Various approaches to the problem of the stability of a viscous liquid flowing between fixed parallel planes have been tried, and work is now in progress on a method in which the characteristic functions of the problem are approximated to by polynomials.
- A. F. Stevenson. Ph.D.: The variational method which has been much used in approximate calculations in quantum mechanics furnishes an upper limit to the theoretical energy levels. It is desirable to find also a lower limit in order to estimate the error. A method due to Weinstein for obtaining such a lower limit has been put on a somewhat more rigorous basis and the technique of the method improved. Calculations have been made, in collaboration with Professor M. F. Crawford of the department of physics, for the normal state of helium, with satisfactory results.
- J. L. Synge, Sc.D.: New sufficient conditions have been obtained for the stability of a viscous liquid flowing between fixed parallel planes.

The preparation of an address on "Hydrodynamical Stability" for the Semi-Centennial of the American Mathematical Society has provided an opportunity to collate the various methods which have been employed and to suggest approaches to the discussion of general types of disturbance.

For liquid contained between two rotating coaxial cylinders, a sufficient condition for stability has been obtained without assuming the distance between the cylinders small, as in the work of G. I. Taylor.

# Astronomy, under direction of Professor R. K. Young

#### General Programme

At the David Dunlap Observatory the programme of radial velocities of 500 stars in and near the Kayteyn areas is nearing completion. During the progress of this work 26 new spectroscopic binaries have been discovered and 69 others are suspected of being variable in velocity. 1125 plates were secured on this programme and the measurement of these plates and arrears from the last two years have been

completed by Miss Northcott, Miss Patterson and Mr. MacRae. A comparison of the results of about 50 stars which have been observed elsewhere shows that the systematic errors are small and that the probable error is satisfactory.

During the year five papers were presented at various astronomical meetings.

Spectroscopic Work

Dr. Hogg has completed the four binary orbits H.D. 25638, 25639, 206155, 183794 and taken plates for the improvement of the orbit of H.D. 34762 and for testing short period variations in H.D. 58715. Dr. Millman has made a photometric study of the surface features of Mars and finds that the dark markings are relatively rich in blue and violet light but that the results lend no support to the generally accepted view that this represents chlorophyll reflection. Dr. Heard has completed the orbit determination of H.D. 142926 and obtained plate for an orbit of H.D. 219634. Dr. Heard has also continued his investigations on the spectrum of y Cassiopeiae.

#### Newtonian Focus

Dr. H. S. Hogg with the assistance of Dr. F. S. Hogg and others has obtained 91 direct photographs of globular clusters. About a dozen new variable stars have been found from D.D.O. plates in the important clusters N.G.C. 6205, 6366, 6779. A few more periods have been derived in the cluster N.G.C. 6402, but as this is a difficult object, with 72 known variables, it is expected that work on this cluster will extend over several years. The period of two variable stars in Messier 10 and 12 have been determined. A catalogue of all variables known in globular clusters has been made, giving data and magnitudes, periods and positions.

#### Meteor Research

The photographic and visual observation of the major meteor showers was carried out by Dr. Millman as in other years. One meteor spectrum was photographed as a result of exposure times totalling 53 hours with the meteor spectrograph, and eight direct meteor trails were secured in a total exposure of 23 hours. Five of the above photographs were secured with the rotating shutter. Twelve direct photographs were also secured at co-operating stations. Instrumental

During the year a self-recording microphotometer was constructed in the observatory workshop. It is hoped that this instrument will be of great help in analysing the spectra already secured. The upper end of the 19-inch reflector has been remodelled so that it is rotative. This makes the instrument much more convenient to operate.

Biochemistry, under direction of Professor H. Wasteneys

Directed by Professor Wasteneys:

Mr. B. F. Crocker and Dr. Paul Hamilton have continued their investigations on digestion in dogs. They have confirmed their previous observation that as to the amount of protein fed to the animals is increased, the time required for digestion increases while the percentage digestion decreases.

The addition of fat to a protein meal was found to increase the time needed for

digestion and also the amount of digestion.

They are now investigating a method of labelling the food protein in order to distinguish the products of its hydrolysis from those of the proteins in the digestive secretions.

Dr. H. B. Collier, professor of biochemistry, West China Union University, and now on leave of absence, has been engaged in a study of the factors determining the rate of synthesis of 'plastein' by the enzyme papain.

Directed by Professor G. F. Marrian:

Dr. G. C. Butler has continued his studies on the nature of the steroids present

in the urine of women suffering from virilism of adrenal origin. A sufficient number of new steroids have been isolated and chemically characterised to enable an attempt to be made to outline some of the main metapolic paths of these compounds in the body. These researches promise not only to throw much light upon the etiology of adrenal virilism, but also to establish facts of considerable fundamental importance bearing on the problem of steroid metabolism.

Dr. A. D. Odell has continued his research on the constitution of the substance (C7H<sup>12</sup>O)<sup>n</sup> which occurs in the urine of pregnant mares. Evidence has been obtained which very strongly suggests that this substance is a pregnane or allopregnane-3 (a), 6,20-triol formed by reduction and addition of water from the hormone of the corpus luteum-progesterone. Dr. Odell has been granted a Banting Fellowship for three months to enable him to continue and extend this work during the summer months.

- Mr. B. Schachter, who is in receipt of a Banting Research Fellowship, is completing his research on the methods of isolation and the identification of the conjugated oestrogens in the urine of pregnant mares. Several new crystalline substances have been isolated which it is hoped will shortly be fully characterised. Mr. Schachter has also been engaged in attempts to isolate in a pure state the gonadotropic factor present in the urine of pregnant women.
- Mr. W. Fishman has been successful in elaborating an efficient method for the extraction and purification of the enzyme *B*-glucuronidase from spleen and other organs. He has made a study of the distribution of this enzyme in various tissues and organs, before and after the administration of glucuronogenic substances. The results he has obtained are of considerable significance in the whole problem of the detoxification mechanisms in the animal body. Mr. Fishman will shortly be applying some of his findings to certain problems in connection with sex-hormone metabolism.

Mr. M. Darrach has obtained results which indicate that the coloured substance formed in the Kober test for oestrogens is an oxonium salt of 16,17-diketo-3-hydroxyoestratriene. This finding has enable him to elaborate several qualitative tests which make it possible to detect oestriol in the presenc of other oestrogens. One of these tests has been found suitable for quantitative work. Preliminary experiments suggest that 16,17-diketo-3-hydroxyoestratriene may be a normal end-product of oestrogen metabolism in the animal body.

During the past year a special laboratory has been equipped with apparatus for the micro-determination of carbon, hydrogen, sulphur, nitrogen, sodium and potassium, in organic compounds, in order to facilitate the identification of new compounds isolated in the research laboratories. Miss Dorothy Skill has been in charge of the work and has organised it with very commendable efficiency. This new departure has been of the utmost value in the various research problems in progress in the department.

## Directed by Professor A. M. Wynne

Miss E. Macpherson B.A. studied methods of increasing the purity of preparations of pancreatic lipase, with the aim of using the enzyme in an investigation of its synthetic action.

F. L. Root, M.A. (Stanford), has investigated the improvement and application of methods for the analysis of mixtures of volatile fatty acids and of alcohols

occurring in fermenting media.

J. Tuba, M.Sc. (Sask.), has undertaken a study of factors which affect the amount of enzymes such as phosphatase and invertase formed by yeasts and moulds during their growth in synthetic culture media.

# Biology, under direction of Professor E. M. Walker

The following summary includes investigations in progress, published or in course of publication, for the year 1937-1938:

Vertebrate Anatomy

By Professor W. H. T. Baillie—Studies on the eye reactions of fishes, amphibians, reptiles and mammals; beginning of the eye movements in developing fishes and amphibians; position and relationship of the semicircular canals of the ear in elasmobranchs and their homologies in the mammalia; investigations of a skin outgrowth in an amphibian that simulated an anterior limb with defective development of the muscular and bony parts.

Invertebrate Zoology (including entomology and parasitology)

By Professor E. M. Walker—Cervical and thoracic exoskeleton and musculature of Grylloblatta (completed); faunistic and distributional studies of Odonata of British Columbia, Saskatchewan and Ontario.

Under the direction of Professor E. M. Walker:

C. G. Bucher—Anatomy of Monodontomerus dentipes, a chalcid parasite of the

pine sawfly Diprion simile.

Mrs. E. Kuitunen-Ekbaum—Life history of *Philometra americana*, a dracunculid nematode parasite of certain flounders, blennies and clingfish (completed); experimental infection of dogs and cats with plerocercosid larvae of Diphyllobothrium sp. from lake trout.

G. M. Neal—Distribution of pelagic Rotifera in British Columbia.

H. H. J. Nesbitt—Anatomy of the nervous system of insects.

H. B. Wressell—Effect of temperature on egg-laying in the European Corn Borer.

#### Marine Biology

By Professor A. G. Huntsman—Movements of Canadian Atlantic salmon kelts, as shown by tagging experiments and in relation to the environment.

Under the direction of Professor A. G. Huntsman:

A. A. Blair—Factors affecting the growth of salmon parr and smolts, principally as shown in the scales.

P. F. Elson—Factors determining movement of the trout, Salvelinus fontinalis,

particularly the effect of temperature.

C. J. Kerswill—The Oyster fishery of the Bras d'Or region of Cape Breton Island; the Pteropoda of the Belle Isle Strait Expedition of 1923 and the Canadian Fisheries Expedition of 1915.

H. M. Rogers—Marine fauna of the eastern Canadian Arctic (field work with the Eastern Arctic Patrol); the life history of the capelin, Mallotus villosus,

of the Miramichi region, New Brunswick.

Mr. H. C. White of the staff of the Fisheries Research Board of Canada was given accommodation in the laboratory for the study of the food of king-fishers and mergansers of the Margaree River. Cape Breton.

## Vertebrate Embryology

Under the direction of Professor A. F. Coventry:

S. H. Chambers-Comparative study of the umbelical hernia and its relation to

the definitive arrangement of the coils of the alimentary canal.

Miss A. M. Ironside—Study of the corpus luteum of *Peromyscus* with special reference to its behaviour during immediately successive pregnancies and in different seasons.

# Animal Bionomics, Mammalogy and Ichthyology

By Professor A. F. Coventry—Continuation of studies of population of small mammals in Ontario. Data have been collected in the neighbourhood of Toronto, in Algonquin Park, in Temagami and in Kapuskasing.

By Professor J. R. Dymond—Taxonomy and distribution of the fishes of Algonquin Park and Ottawa Valley; ecology and distribution of fishes of King

Township; York County. Ontario.

Under the direction of Professor J. R. Dymond:

A. H. Carter—Life history of fishes of the genus Nocomis.

Miss I. Limbert—Distribution of fishes in Ontario.

J. M. Speirs—Studies of bird migration at Toronto (completed).

### Genetics and Human Biology

By Professor J. W. MacArthur—Methods of diagnosis of twins and multiple birth sets by the use of skin ridges and other characters.

By Professor J. W. MacArthur in collaboration with Professor Norma Ford—

Studies of the Dionne quintuplets, an identical set.

By Professor J. W. MacArthur in collaboration with L. Butler—The mode of

inheritance of a quantitative character (size).

By Professor J. W. MacArthur in collaboration with Dr. A. N. Langford—Development at Vineland of a commercial greenhouse tomato immune to brown mould.

### Under the direction of Professor J. W. MacArthur:

L. Butler—Analysis of fruit size inheritance in the tomato.

Miss V. Engelbert—Reproduction, cytology, genetics and species relationships in a group of species of blue grass (*Poa*).

Mrs. M. Richardson—Intelligence quotients in social problem children and their sibs and parents.

A. Wilkes—Causes of varying sex ratios in parasitic Hymenoptera (Monodontomerus).

Mrs. F. H. Miller—Comparison of human hand and foot prints.

By Professor Norma Ford—A study of two sets of quintuplets loaned by the Royal College of Surgeons. England. (Examinations have been made of their dermal ridges and other physical characters and x-ray photographs to determine whether the sets are mono- or polyzygotic); assembling of data regarding two unpublished cases of quintuplet births. Canadian and Italian; further investigation of the blood vascular system in the placentae of multiple births, correlating the findings with the degree of similarity of the twins or triplets (in co-operation with four Toronto hospitals).

By Professor Norma Ford in collaboration with Professor J. W. MacArthur—A

biological study of the Dionne quintuplets, an identical set.

Under the direction of Professor Norma Ford:

Miss M. Macdonald—Plantar patterns in mongolian idiots compared with their palmar patterns.

Miss G. Workman—Palmar patterns in mongolian idiots and the occurrence of similar patterns in normal individuals.

## Comparative Neurology

By Professor E. H. Craigie—Morphology of the capillary supply in the brains of amphibians (completed): quantitative study of the vascularity of the frog's brain and of the hypophysis of the frog (completed): vascular supply of the hypophysis of tailed amphibia: summarisation of existing literature on the Comparative anatomy and embryology of the capillary bed of the central nervous system.

### Limnology

By Professor W. J. K. Harkness—Comparative limnological studies of trout waters in the districts of Nipissing, Muskoka and Southern Ontario.

Under the direction of Professor W. J. K. Harkness:

F. E. J. Fry and W. A. Kennedy—The life history and controlling factors in the production of the lake trout (*Cristivomer namaycush*) in the lakes of Algonquin Park.

R. R. Langford, W. R. Martin and V. E. F. Solman—Seasonal variation of plankton populations; comparative measurements of vertical distribution of plankton; plankton, small fish relations and vertical movements of small fish.

K. H. Doan—Ecology of small-mouthed black bass. R. B. Miller—Ecology of lake living Chironomidae.

By Dr. F. P. Ide—Quantitative determination of insect population of Costello Creek, Algonquin Park, Ont. J. B. Buchanan assisted in the making of collections under direction.

**Experimental Biology** 

By Professor K. C. Fisher—Investigations on the nature and mechanism of the rhythmicity of the heart; effect of temperature on heart rate; development of apparatus to follow spectroscopically the rate of certain chemical reactions inside living cells which are concerned with the mechanism of oxygen utilisation.

By Professor K. C. Fisher in collaboration with Dr. D. W. G. Murray of the Toronto General Hospital—Possible application to the control of intravenous injection of the electron tube relay with a time delay feature.

By Professor K. C. Fisher in collaboration with Dr. John Cameron University of Missouri—Relation of light intensity and temperature to the rate of the carbon monoxide poisoned heart.

By Professor K. C. Fisher in collaboration with Dr. Richard Ohnell of Stock-holm—Relation of cyanide concentration to the heart rate.

Under the direction of Professor K. C. Fisher:

C. Armstrong—Respiratory mechanism of the frog heart; specificity of sodium azide, a new respiratory inhibitor, on the embryo fish heart.

Miss R. D. C. Martin—Measurement of the respiratory exchange of damsel fly nymphs; a method to investigate the inter-relations of temperature and oxygen partial pressure and the stage of development.

W. B. Stallworthy—Assembling of apparatus for the maintenance of constant known humidities to be used in the investigation of the water balance in land Isopodo in relation to the distribution of species.

# Botany, under direction of Professor R. B. Thomson

# Phanerogamic Botany and Genetics

Anatomy and Experimental Morphology

Bannan, M. W.—A study of the variations in wood structure in the native conifers and determination of the relationships between such variations and the ecological conditions under which the trees grow.

Haldenby, C. N.—The origin and distribution of horizontal resin canals in the

coniters.

Hull, Kathleen L. & Thomson, R. B.—The anatomical organisation of *Lycopodium* and *Selaginella*.

Thomson, R. B.—The comparative anatomy of the male and female cone scales of the conifers.

Thomson, R. B. & Hull, Kathleen L.—The organisation of the sporeling of Osmunda and of the lower vascular plants.

Wright, J. Gertrude—The nature of the pit-closing membrane in the higher gymnosperms.

#### Taxonomy

The total number of specimens identified, mounted, stamped, recorded and actually distributed in the herbarium during the year was 11,472.

Krotkov, P.—Plant survey work in the Bruce Peninsula; revision of the herbarium material; special study of Ontario willows and golden rods.

Taylor, T. M. C.—(1) A critical study of the genus Woodsia.

(2) Plant survey work in the Thundred Cape and Schreiber areas, in co-operation with the National Museum of Canada. A report on the collection from the former area has been completed, and in connection with the latter a report is in course of preparation.

Genetics

Wright, J. Gertrude—A study of abnormal types of Linaria vulgaris and their heredity.

Mycology, Forest Pathology and Cryptogamic Botany (Under the direction of Professor H. S. Jackson)

Bier. J. E.—A study of Hypoxylon Canker of *Populus*. Cain. R. F.—A taxonomic study of Ontario Sordariaceae and related Sphaeriales. Groves, J. W.—Cultural studies of certain canker forming species of Dermatea, Pezicula, Godronia and related forms. (In part submitted for publication.)

Jackson, H. S.—(1) The mycological flora of the Toronto region and of the Temagami Forest Reserve.

(2) A taxonomic study of Ontario Thelephoraceae.

Lehmann, A. J. V .- A study of the nuclear phenomena of the germination of teliospores of certain species of Lepto-Puccinia.

Macrae, Ruth—A study of phosphorescence in *Panas stipticus*.

Skolko, A. J.—A cultural study of Aleurodiscus.

There have been 4,735 specimens added to the Mycological herbarium this year and the collection now totals 63,470.

Plant Ecology and Seed Studies

(Under the direction of Professor H. B. Sifton)

Structural Ecology

McPherson. D. C.—On the structure, form and development of air spaces in roots. Sifton, H. B.—Leaf development in Labrador Tea.

Watson, W. R.—Development studies of leaf structure as related to light. Seed Studies

Anderson, E. C.—Longevity of weed seeds.

Hamly, D. H.—New apparatus for the investigation of light relationships in seeds.

Stereo-photomicrography of seeds.

McGugan. Jean E.—Identification of seeds and seedlings of the Genus Brassica. Sifton, H. B.—Effects of temperature, light, water and oxygen supply on the germination of Typha seeds.

Collection and identification of seeds. During the year 2,120 additions were

made to the reference collection. Total, 13.675.

From the seed laboratory, two papers were presented by special invitation during the year. The first, by D. H. Hamly on the subject of seed photography was given before the 1937 convention of the International Seed Testing Association at Zürich, Switzerland, while the second, by H. B. Sifton, on seed collections, is to form a section of the manual on seed testing being compiled by the Association of Official Seed Analysts of North America. Both these associations are composed of professional Seed Analysts and they rarely ask for contributions except from their own members.

Plant Physiology

(Under the direction of Professor G. H. Duff)

Brodie. Anne B.—Tissue protein impairment induced by starvation has been studied in its effect upon respiration, respiratory quotient, water relations and chlorophyll content. The results have been presented in a thesis submitted in partial fulfilment of the requirements for the Ph.D. degree.

Clendenning, K. A.—The metabolism of the tomato fruit in relation to its storage. Biochemical studies of the proteins, carbohydrates and acids of the fruit have begun in collaboration with the Cold Storage Research project of the Ontario Agricultural College. Special acknowledgment is made of the financial support and facilities provided for the summer work by the College.

Duff, G. H.—The sugars of the wheat leaf, their concentration gradients and

relation to cell heterogeneity within the leaf.

Duff, G. H. & Forward, Dorothy F.—The rate of inversion of non-reducing, reserve sugar as a determinant of metabolic activity.

### Plant Pathology

(Under the direction of Professor D. L. Bailey)

Except where otherwise stated, these researches are being carried on in cooperation with the Vineland Horticultural Experiment Station.

Bailey, D. L.—(1) Strawberry root-rot.

(2) Disease of ornamentals.

(a) Cytospora disease of Koster's blue spruce.

(b) Suspected virus diseases of lilies and Gladiolus.

Langford, A. N.—The development of a suitable greenhouse tomato resistent to Cladosporium fulvum.

Mead, H. W.—A comparative study of some seed-borne diseases of barley. In co-operation with the Dominion Plant Pathological Laboratory, Saskatoon, Sask.

Newell, P. G.—Bacterial leaf spots of tobacco. In co-operation with the Dominion Plant Pathological Laboratory, St. Catharines.

Simmonds, S. A.—Factors influencing the fungous flora of raspberry roots. Wooliams, G. E.—Fusarium wilt of Zinnia. In co-operation with the Dominion Plant Pathological Laboratory, Summerland, B.C.

### Cytology

(Under the direction of Dr. L. C. Coleman)

Coleman, L. C.—(1) The cytology of Gasteria and Gasteria X Aloe hybrids.

(2) The cytology of Veltheimia viridifolia.

(3) The preparation of Basic Fuchsin for the Feulgen stain (note ready for publication).

Coleman, L. C. & Haldenby, C. N.—The cytology of Scilla species. Hillary, B. B.—(1) The Feulgen nucleal stain and its use in Cytology.

(2) Permnanet preparations from rapid cytological technics (in press).

# Chemistry, under direction of Professor F. B. Kenrick

Forty-two students were engaged in research during last winter under the

direction of members of the staff of the Department of Chemistry.

The degree Master of Arts was conferred on twelve of these, viz:—Messrs L. D. Finlayson, W. G. O. Hines, E. A. Hollingshead, F. L. W. McKim, J. H. Michell, W. A. Patterson, G. W. Rogers, Miss J. C. Romeyn, Messrs. J. Seath. G. A. Stewart, M. H. Thomas. G. E. Willey; also on Mr. J. H. Johnston, who worked under Dr. Barrett in the department of physiological hygiene, and on Mr. M. O. O'Sullivan who worked under Dr. Franks in the department of Banting medical research.

The Degree of Master of Science in Agriculture was conferred on Messrs K. G. McPhee, C. P. Rivaz, A. O. Walberg who worked in the laboratories of the Ontario

Agricultural College under the direction of Professor Ruhnke.

The Degree of Doctor of Philosophy was conferred on Mr. H. J. Bernstein, whose research was done under Professor W. H. Martin, and on Mr. K. K. Kay who worked under Dr. Barrett in the department of physiological hygiene.

The following were the subjects of research:

R. W. Allgood-The transport numbers of magnesium chloride in aqueous solution.

Professor F. Beamish—Estimation of Ruthenium in ores;

The determination of the efficiency of pot assays for the platinum metals.

H. J. Bernstein, M.A.—The Raman effect and the chemical bond.

H. D. Bett—The photodecomposition of chlorine dioxide in carbon tetrachloride solution.

A. McG. Birks—Preparation of ethyl aminofuroate picrate.

W. H. Brown. B.A.—New reactions and new types of formic esters.

W. K. Buchanon—Sour taste of buffers.

D. M. Burpee—Analysis of lead-assay button. M. Cohen, M.A.—Adsorption of gases on solids.

B. D. Deacon-The condensation of acetoacetic acid with glyceric and glycolic aldehydes.

L. D. Finlayson, B.A.—The solubility of carbon dioxide in various solutions.

Prof. H. O. L. Fischer—Chemistry of trioses; optically active fats; derivatives of glyceric acid.

I. G. Goddard—The germination of mushroom spores.

Prof. A. R. Gordon—Calculation of thermodynamic quantities from spectroscopic data.

Miss E. A. Grant—The Williamson ether synthesis with ethylene chlorohydrin.

W. G. O. Hines, B.A.—The activity coefficient of magnesium salts in aqueous solution.

E. A. Hollingshead, B.A.—Differential diffusion constants of electrolytes in aqueous solutions.

W. A. James, M.A.—The differential diffusion coefficients of electrolytes in aqueous solutions.

A. A. Janis, M.A.—The Vapour tensions of aqueous solutions of non-volatile salts by the Isopiestic method.

L. F. King. M.A.—The rates of reaction of alcohols and esters in an alkaline medium.

A. H. Klopp—Bromination of furan.

D. J. LeRoy, M.A.—The transport number of the alkaline acetates in aqueous

Prof. F. Lorriman—The alkaline reduction of 9-nitro-anthracene.

Miss H. G. Macmorine—The preparation of 3-hydroxy acenaphthene.

C. Marchant. M.A.—Bios.

J. W. McCutcheon, M.A.—The isomers of linolenic acid.

F. L. W. McKimm. B.A.—The preparation of solids by centrifuging in neutral liauids.

R. N. Meals, M.A.—The mechanism of the Fuziwara Reaction. J. H. Michell, B.A.—The synthesis of various glycerides.

J. L. Monkman—Presence of cvanide in cadaveric material.

W. M. Orchard. B.Sc.—The paration and properties of coniferin and related substances.

M. A. Partridge—The use of citraconic anhydride in the Diels-Alder Reaction.

W. A. Patterson, B.A.—The effect of temperature change on the diffusion of copper in a solution of copper sulphate.

Dr. J. J. Rae—The role of phosphoric esters in metabolism with particular reference to their occurrence in urine and their possible significance in mental cases.

G. W. Rogers, B.A.—The vapour pressures of volatile liquids and adsorption

R. G. Romans. M.A.—Photochemical reactions.

Miss J. C. Romeyn, B.A.—The sporulation of yeast.

Miss C. J. Sanderson, M.A.—The influence of inositol, 0-alanine, 1-leucine and Bios IIB on different varieties of yeast.

J. Seath, B.A.—Analytical methods for the determination of metals of the platinum group.

S. Shankman, M.A.—Vapour tensions of sulphuric acid solutions.

R. S. Soanes. M.A.—Carbon arcs.

Dr. Helen Stantial—Purification of Bios IIB. G. A. Stewart, B.A.—Base-exchange in zealites.

M. H. Thomas, B.Sc.—The kinetics of isomerization of 2-butene.

M. Wayman, M.A.—Purification of Bios IIB.

Dr. F. E. W. Wetmore—Electric thermoregulators.

G. E. Willey, B.A.—Distribution of potential in the carbon arc.

Dr. G. F. Wright—Synthesis and properties of coniferyl alcohol;

Isolation of the carbohydrate from the pine lignincarbohydrate complex.

## Food Chemistry, under direction of Professor C. C. Benson

The research work in this department during the present session has, as usual,

been concerned with the chemistry and analysis of foods.

Two students have completed work for the Master's degree. One of them working on the distribution of pectin in apples during ripening and storage, and the other trying different methods of estimation of carbon dioxide in baking powders and making studies of rates of reaction of such materials.

Other students in this department have been concerned with analysis of foods

which have not yet been sufficiently tested, and this work is being continued.

## Household Science, under direction of Professor J. B. Brodie

During the session 1937-38 there were four graduate students doing work in this department. Three of them were engaged in research and one was granted her M.A. degree.

Miss A. M. Musgrave began work on "Baking Tests for Baking Powders."

Miss E. F. Lamon, working under the direction of Miss Roberts in textiles, has made good progress in her studies on Canadian cottons with respect to their suitability for household use as determined by physical and chemical analyses. She

plans to continue this work next year.

Miss G. H. Donald has completed her work on the calcium content of some Canadian vegetables. The first part of the study dealt with the variation of calcium content in vegetables grown on different soils while the second part of the study was a determination of the change in calcium content due to cooking. This study is of practical value and already some of the figures have been used.

# Geology and Palaeontology, under direction of Professor E. S. Moore

## Field investigations in geology:

Professor E. S. Moore—Atikokan area. for Ontario Department of Mines.

Professor A. MacLean—Continuation of study of the eastern part of the Kirkland Lake area, for Ontario Department of Mines.

Professor L. S. Russell—Geology of Southern Alberta, for the Geological Survey of Canada.

Dr. J. Satterly—Geology and ore deposits of the McInnes (Sandy) Lake area, for Ontario Department of Mines.

Dr. V. J. Okulitch—Stratigraphy and palaeontology of the Black River group, between Montreal and Quebec.

V. K. Prest, B.Sc., M.Sc., (Man.)—Geology of the Miminiska Lake area, for Ontario Department of Mines.

M. W. Bartley, B.Sc., (Man.), M.A.—Geology of northern and eastern sections of the Screiber Map area, for Ontario Department of Mines.

### Laboratory investigations:

Professor E. S. Moore—The formations of the Steeprock series.

Professor Madeline Fritz—Comparison of the Middle Silurian coral genera Desmidopora and Multisolenia, Microfossils from oil wells in southwestern Ontario, and their bearing on structural features.

Professor L. S. Russell—Preparation of detailed report on four seasons field work in southern Alberta. The skull of Hemipsalodon, a giant carnivorous

mammal from the Oligocene of Saskatchewan.

Dr. V. J. Okulitch—Columella-like structure in the Corallites of *Tetradium* fibratum Safford.

Interference wave marking in the Dundas formation at Toronto.

A revision of the Black River corals.

V. K. Prest, M.Sc. (Man.)—Wall-rock alteration in the Porcupine area.

W. P. Corking. B.A.—Genesis of the Sherritt Gordon ore deposits.

J. W. Britton, B.A.—Genesis of the Iron formations and their relation to gold deposits in the Patricia District.

G. P. Crombie, B.Sc. (Man.)—Carbonate alteration in the rocks of the Larder Lake area.

## Department of Medical Research (Banting), under direction of Sir Frederick Banting

For some years the Department of Medical Research has had the co-operation of members of the mining group on the silicosis problem. During the past year the work has been continued as a general problem of the department.

On January 3, 1937, Mr. J. J. Denny and Dr. W. D. Robson, of the McIntyre Porcupine Mine, came to the Department of Medical Research and presented the results of their preliminary experiments by which they had shown (1) that the addition of small quantities of metallic aluminum dust almost completely inhibited the solubility of siliceous material in a laboratory beaker and that (2) rabbits dusted with quartz to which less than one per cent, metallic alluminum dust had been added showed practically no fibrosis, while control rabbits, which had been dusted with quartz alone, showed well developed silicosis. The lungs and other organs of the animals of these experiments had been sent to Dr. D. A. Irwin, of this department, for pathological examination.

These preliminary experiments seemed to warrant a large scale investigation, and during the year Dr. Irwin and Mr. H. L. Collins, of this department, have carried

on this work in collaboration with Mr. Denny and Dr. Robson.

It has now been shown that rabbits exposed for six months to an atmosphere containing quartz dust developed a silicosis which continued to progress after cessation of the dust exposure. Rabbits exposed to similar concentrations of quartz to which had been added 1 per cent. of metallic aluminum dust did not develop silicosis, after an exposure of a year. These animals showed no evidence of silicosis after being removed from the dust for a period of a year. Metallic aluminum has been found to effectively inactivate the quartz retained by the lung when inhaled as a mixture with quartz or when inhaled alone.

Considerable evidence has been obtained concerning the mechanism by which metallic aluminum inactivates quartz in the lung. The relation that exists between the solubility of quartz powder in vitro, the tissue response produced by the injection of quartz powders of varying solubility, the amount of aluminum necessary to inactivate quartz and the period for which aluminum will continue to intivate quartz

has been studied. The practical application of metallic aluminum to the prevention of silicosis in industry is now under way.

The following investigations have been carried out with the co-operation and the financial assistance of the Technical Silicosis Research Committee of the Ontario Mining Association:

Miss H. Williams and Dr. Irwin have completed a study showing that the silicates commonly found in silicotic lungs are not leached to any appreciable extent

by animal tissues up to periods of six months.

A study of the solubility of samples of quartz has been made by Miss Williams and Dr. Irwin. The samples were collected underground from the mining areas of Ontario by Mr. C. S. Gibson, of the above Committee. Professor H. E. T. Haultain, of the Department of Mining Engineering, ground the quartz in a ball mill especially constructed to avoid contamination and fractionated the resulting powder by means of the infrasizer he has developed.

Mr. C. S. Gibson and Dr. Irwin have investigated the toxicity of the various types of quartz encountered in the mining industry of this Province, and found them

to be practically the same.

Dr. R. C. Sniffen and Dr. Irwin have demonstrated that certain silicates modify

the action of quartz to increase or decrease its toxicity.

An X-ray diffraction pattern study of the crystalline siliceous materials present in silicotic lungs has been conducted by Dr. C. M. Jephcott, (Division of Industrial Hygiene, Provincial Department of Health), Mr. W. M. Gray (Department of Physics) and Dr. Irwin.

A detailed study of a rare case of simple silicosis uncomplicated by infection or the presence of siliceous dust other than quartz has been made by Dr. A. R. Riddell and Dr. Jephcott (Division of Industrial Hygiene, Provincial Department

of Health) and Dr. Irwin.

A study of the shadows produced by various dusts in X-ray films of the chest is being carried out by Dr. R. C. Sniffen and Dr. Irwin, with the co-operation of

Professor G. E. Richards (Department of Radiology).

Mr. B. S. Leibel and Dr. G. E. Hall have developed a greatly modified form of thermostromühr, by means of which accurate registrations of blood flow in arteries and veins may be made. Using this stromühr, changes in blood flow in the coronary vessels as a result of nervous influences are being studied.

These workers are also studying the effects of autacoids, hormones and drugs upon the coronary blood flow, ventricular output and total work of the heart in the

isolated heart preparation, as well as in animals with denervated hearts.

Mr. G. W. Manning and Dr. Hall have conducted a serious of experiments in which different branches of the coronary arteries have been ligated. The resulting myocardial changes have been studied at varying intervals so that specific time relationships are available in connection with the development of the progressive pathological changes. They have also found that sudden occlusion of a branch of the coronary artery in the unanaesthetised dog is usually fatal whereas in the anaesthetised animals no deaths occurred. The obvious influences of cardiac afferent nerves are thus being studied.

Mr. Manning has prepared many fine cleared specimens of human hearts as well as various types of animals. By these it has been possible to specifically note the differences in coronary artery distribution as well as the differences in anastomosis

between the various branches.

Mr. Manning, Miss J. Lang and Mr. M. Allan have studied the changes in blood sugar, serum choline-esterase, blood sugar and heart-rate following the administration of parasympatheticomimetic drugs in normal animals and in animals in which this enzyme system has been inhibited by prostigmine, physostigmine or miotine.

Dr. Hall is studying the inotropic and chronotropic cardiac stimulation in animals deprived of their cardiac sympathetic control as well as in completely

sympathectomized animals.

Dr. Hall is continuing the work on coronary artery and myocardial damage following the daily intravenous injection of acetylcholine in dogs. He has also produced atherosclerotic lesions in rats following long-continued daily subcutaneous injections of the same drug.

During the progress of the above experiment an inordinate number of spontaneous tumours have been found. These have been reported on by Dr. Hall and Dr. W. R. Frank, who are continuing to study the possible relationship of acetylcholine to the oestrogenic and carcinogenic substances.

Mr. D. W. Lougheed and Dr. Hall have been conducting a large series of experiments in an endeavour to apply the intravenous injection of oxygen and of oxygen and carbon dioxide to clinical patients. The use of intravenous oxygen in carbon monoxide poisoning appears to be reasonable. The use of carbon dioxide and oxygen together with sodium bicarbonate may be of benefit in decreasing the alveolar carbon dioxide and increasing the oxygen of arterial blood.

Dr. S. Gordon and Dr. Hall are continuing the work on experimental nephritis. At the present time special attention is being paid to antigen-antibody relationship as produced by an injection of virulent streptococci in an animal already treated with many injections of a non-virulent culture of human haemolytic streptococci.

The results are very encouraging.

Dr. Hall, Mr. D. Lloyd, Mr. J. Goodwin and Mr. B. Leibel have been engaged on the problem of the physiological significance of metrazol and insulin shock therapy in the treatment of schizophrenics. This is a division of a similar general problem undertaken by the Department in conjunction with the Department of Psychiatry and Public Health, as well as the Committee on Mental Hygiene.

Mr. Leibel and Dr. Hall have studied the changes in the blood flow to and from

the brain during experimentally produced insulin and metrazol shock.

Mr. J. Goodwin, Mr. D. Lloyd and Dr. Hall have studied the changes in the bio-electric potentials as recorded from the exposed area striata of the cortex during similarly produced shock. These potentials were recorded on the electroencephalogram which has been constructed in this Department by Mr. Goodwin.

Dr. Hall is conducting a series of experiments where groups of animals are subjected to repeated insulin and metrazol shocks for many weeks. Blood sugars, glucose tolerance tests, etc. are being carried out on these animals which will later be used by Goodwin. Lloyd and Hall in a comparative series of electro-encephalographic studies of the effect of such chronic convulsions on the brain potential.

Mr. J. E. Goodwin and Dr. H. H. Hyland (of the Department of Medicine) are continuing their electroencephalographic studies of epileptic and other neurological

cases from the Toronto General Hospital.

Mr. J. E. Goodwin and Dr. W. A. Hawke (of the Department of Paediatrics) are continuing their investigations of the brain potential changes in "behaviour problem" children as well as in the different convulsive states. They are studying, also by electroencephalographic recordings, the effects of hyperventilation, etc. in normal and abnormal children.

Mr. Lloyd has been working on the various phases of ganglionic activity in the autonomic nervous system with special reference to the following: (a) the excitability cycle of ganglion cells following activity; (b) the conduction of impulses by fibres which course directly through a ganglion; (c) retrograde transsynaptic electrotonus and (d) the slow potential waves set up by preganglionic and antidromic stimulation. Experiments have been started on the action potentials of a smooth muscle system (arrectores pili) excited by stimulation of the motor nerve supply. Recent developments from this work and by other workers in the field of nerve cell physiology have opened up many new questions for further experimental analysis.

Mr. L. Lawson and Mr. Lloyd have made a study of the potentials recorded from various parts of the cat's brain by means of the Horsley-Clarke instrument, both

under normal conditions and under the influence of convulsive drugs.

In the biochemical division of the Department of Medical Research, Dr. C. C.

Lucas has been studying the conditions necessary for the quantitative removal of cystine from protein hydrolysates, by a method which will not introduce any substances interfering with a subsquent separation of the remaining amino-acids. Mr. J. Beveridge and Dr. Lucas have been engaged in a study of the chemical make-up of human and other hairs. Mr. L. B. Macpherson has continued his work on the synthesis of phosphoric esters related to the phospholipids.

During the summer months of 1937, Dr. J. J. Rae, while holding the James Page Rutherford Fellowship, did further work on the phosphoric esters in normal human urine.

In collaboration with Dr. G. E. Hall and Dr. D. R. Mitchell (of the Department of Urology) Dr. Lucas has studied the physiological and biochemical properties of mandelic acid in connection with its use in the treatment of cystitis and pyelitis. Some hazards (such as acidosis and stone formation) have been found to be associated with the use of mandelic acid as a urinary antiseptic. It has been possible to discover the clinical conditions in which the drug is contra-indicated; in other cases the drug is a valuable bacteriostatic agent of great value in controlling urinary infections. Miss J. M. Lang and Miss M. E. Wheatley gave valuable technical assistance by their careful analysis for usinary calcium and phosphorus, respectively.

An outgrowth of the above research was a collaborative study of the use of sulphanilamide in urology—Dr.D.R. Mitchell contributed the following clinical data, Dr. Philip Greey (of the Department of Bacteriology) studied the effects of the drug upon pathogenic micro organisms, both in vivo and in vitro, and Dr. C. C. Lucas, with the technical assistance of Miss Wheatley, conducted the biochemical control. The effect of the drug upon several species of animals, as well as upon healthy humans has been also studied. Dr. Hall has collaborated in some of the animal experiments where surgical, physiological and pathological assistance was required. It is particularly gratifying to record that as a result of the cordial inter-departmental co-operation the research progressed most favorably and for an exhibit at the recent Ontario Medical Association Convention, showing the results of the above collaborative research, Drs. Mitchell, Greey and Lucas were awarded a gold medal. The work is being continued and the program has been expanded.

Dr. Lucas and Dr. Mitchell have also commenced a collaborative study of kidney and bladder stones.

Dr. Lucas has given some time to furthering the cancer research program: several batches of very pure sodium ferricyanide and a quantity of glucuronic acid were prepared in this laboratory.

The following work has been carried out under the direction of Dr. W. R. Franks:

The work on the synthesis of chemoantigens from non-immunising compounds concerned in the pathogenesis of disease has been continued. As applied to carcinogenesis, immunisation of mice with antigen formed by linking dibenzanthracene to casein gives evidence of yielding protection against the carcinogenic action of the dibenzanthracene. The influence of such a procedure on spontaneous carcinogenesis in mice is under investigation.

The anthranyl and dibenzanthranyl isocyanates prepared by Dr. H. J. Creech in the above coupling to protein were identified by reaction with alcohols. The former substance and the B anthryl derivative are being used for possible cross-immunity against the carcinogens. Arrangements have been completed whereby the preparation of more suitable derivatives for anti-carcinogenic antigen formation will be conducted by taking advantage of the proffered co-operation of Professor L. F. Fieser, of Harvard University. To this end a grant has been obtained from the International Cancer Research Foundation to enable this phase of the work to be carried on by Dr. H. J. Creech under Professor Fieser's direction at Harvard.

The application of the above principle to tuberculosis carried on with the co-operation of Mr. M. O'Sullivan has been confined to testing linkage of organic

iodo derivatives to sulphydryl groups of reduced keratin which itself shows some

antigenic activity.

With the assistance of Miss M. M. Shaw, the in vivo activity of the isomers of glyceric aldehyde have been tested for possible synergistic activity with the toxic action of irradiation on tumors. The d- and the l-glyceric aldehyde were prepared by Dr. E. Baer, under the direction of Dr. H. O. L. Fischer, and the irradiation carried out in co-operation with the Department of Radiology.

Dr. E. M. Hearne Creech has continued her studies on the in vitro activity of

water soluble carcinogenic substances on growth and cell division.

With the co-operation of Mr. G. A. Meek, the characteristics of mono-molecular films of the above carcinogenic and related derivatives on surfaces are being studied.

With the assistance of Mr. A. E. Byrnes and Dr. L. D. Proctor, the influence of acute B<sup>1</sup> deficiency on glyoxalase has been studied. The glutathionne content of brain in insulin hypoglycaemia has been similarly investigated.

Dr. E. M. Hearne Creech has studied in vitro the influence of phagocytosed

silica on cell division.

Dr. Franks has studied the influence of the admixture of actively phagocytosed

manganese dioxide on the development of experimental silicosis.

In co-operation with Dr. N. L. Easton, Director of Research of the Ontario Hospitals, Dr. Banting and Dr. Franks have been studying the development of certain refractory states to insulin, following prolonged administration of large doses of the latter.

Dr. Bruno Mendel, with the assistance of Miss F. Strelitz and Miss Mundell, has continued the study of the effect of glyceric aldehyde on the respiration of tumour cells. They found that d-glyceric aldehyde had no effect on the aerobic glycolysis of tumour cells. More recently they found that all the activity of racemic glyceric aldehyde was in the laevo rotatory form of the substance. Both the d- and l-glyceric aldehyde for this work was synthesised by Dr. H. O. L. Fischer and Dr. E. Baer.

Dr. Mendel has also tested a large number of chemical substances for their effect on the respiration and fermention of the tumour cell. and has continued his

investigation of sodium ferricyanide.

The facilities of the laboratory were extended to Dr. H. Krebs, Professor of Biochemistry, Sheffield University, England, during his three weeks' visit, for the purpose of investigating the effect of pancreatectomy on the metabolism of muscle.

Miss H. Ball continued the investigation of tuberculosis, using tuberculin treated

with glyceric aldehyde.

## Medicine, under direction of Professor Duncan Graham

During the past two years Dr. Cleghorn has been studying the functions of the sympathetic nervous system in adrenal insufficiency. It has been found that the functions of the sympathetic nervous system and the effect of pressor drugs are normal in adrenalectomised animals receiving adequate quantities of cortical extract. In adrenalectomised animals maintained on a high salt low potassium diet, the functions of the sympathetic nervous system appeared to be normal but the effect of pressor drugs showed marked qualitative differences. A report of this work is being published. Preliminary studies on the relation of surgical shock to adrenal insufficiency have been made. This work is being continued.

Drs. Cleghorn and Hyland, in association with Drs. Linell and Mills of the division of neuropathology, have published a most complete clinical and pathological study of a case of tumour of the pineal gland. As little is known of the function of the pineal gland, this report is an important contribution to our knowledge of the mechanism responsible for the production of the more important signs and

symptoms present in this case.

Dr. Hyland, working in co-operation with the department of medical research, has made definite progress in the study of electroencephalograms from patients suffering from neurological conditions such as migrane and epilepsy.

The 1937 epidemic of poliomyelitis presented an opportunity for the study of a number of problems concerning the treatment of acute anterior poliomyelitis. Twenty-six patients in the pre-paralytic stage of the disease were treated with convalescent serum, but this treatment seemed to have no effect in preventing the development of paralysis or in modifying the course of the disease. In the treatment of respiratory paralysis different types of artificial respirators were tried. The Drinker respirator was by far the most effective during the acute phase of the illness and in cases where prolonged treatment was necessary. With a view to obtaining more accurate records of the progress of respiratory muscles showing paralysis, estimations of the vital capacity were made. Estimation of the vital capacity at intervals has proved to be a valuable aid for determining (1) the severity of the paralysis of the respiratory muscles at the onset; (2) the period of time each day a patient should be allowed out of the respirator after the acute phase of the disease is over; and (3) the length of time respiratory treatment should be continued. Unfortunately the method is not applicable in children suffering from poliomyelitis.

The results of repeated estimations of the vital capacity clearly show that prolonged immobilisation of the spine and ribs definitely impede the recovery of the paralysed muscles. It has been shown that the institution of suitable remedial exercises at an appropriate time promotes the recovery of paralysed respiratory muscles and thereby lessens the tendency towards the development of deformities. The application of similar measures in the treatment of paralysed skeletal muscles

would appear to be indicated.

Drs. Hyland, Gardiner, Heal, Oille and Solandt will publish shortly a report of the clinical findings and results in treatment of sixty-six adult cases of acute

anterior poliomyelitis.

Drs. Cleaver and Maltby have published a report on the results of medical treatment in forty cases suffering from gastric ulcer. The average age of the patients was fifty-five years. After approximately five years thirty-three patients were free of symptoms, seven had symptoms suggestive of gastric ulcer, but only three of the

forty patients presented X-ray evidence of an active gastric ulcer.

In 1931 Dr. Farguharson and the head of the department reported the first cases of Simmonds' disease discovered on this continent. At a recent meeting Dr. Farquharson, in association with Drs. Belt and Duff of the department of pathology, reported the results of a clinical and pathological study of four cases of this rare disease. The clinical manifestations of Simmonds' disease are closely simulated by those found in anorexia nervosa. Many of the cases reported as Simmonds' disease are evidently cases of anorexia nervosa. Drs. Farguharson and Hyland will publish shortly a report calling attention to differences in the clinical and pathological findings in these two conditions.

The effect of different vitamin deficiencies are being investigated. Dr. Wallace Graham has determined the vitamin C content of the urine in a variety of diseases. Cases presenting evidence of vitamin C deficiency have been given liberal quantities of ascorbic acid and its effect on the clinical condition of the patient observed. Changes in the gums and teeth in such conditions as diabetes mellitus, arthritis and nephritis are being studied.

Mineralogy and Petrography, under direction of Professor A. L. Parsons

Professor A. L. Parsons has carried on during the year the following investigations:

A study of the relations between the wave surfaces of light and the corresponding index surfaces in crystals.

A further study of the semi-precious stones of Canada.

Professor Ellis Thomson was engaged in the investigation of the ore minerals of the Denison Nickel Mine.

Professor M. A. Peacock completed the following:

A description of Goldschmidtine, a new antimonide of silver.

A new theorem with a convenient graphical solution, for rapidly finding the

spacing of any set of lattice planes in any lattice whose elements are known.

Assisted by Mr. L. G. Berry, a study of the crystallography and optics of four new salts prepared by Dr. J. G. Breckenridge and Mr. O. C. Smith in the department of chemical engineering.

In collaboration with Mr. M. C. Bandy, Llallagua, Bolivia. he completed a

description of Ungemachite and Clino-ungemachite, new minerals from Chile.

Professor Peacock and Mr. L. G. Berry have completed the following in-

vestigation:

A study of the mineral copiapite. With the help of x-ray measurements made on our new Weissenberg X-ray Goniometer, they have determined the structural lattice and constitutional formula of the mineral and have revised the optics of the species. They are much indebted to Professor E. F. Burton and Professor H. J. C. Ireton of the department of physics who extended the facilities of the x-ray apparatus of the McLennan Laboratory for their use.

Dr. V. Ben Meen has been engaged in the following studies:

Cleavage-luminescence in mica from Kilmar. Quebec.

An investigation of Cancrinite from Bancroft, Ontario.

The examination of a meteorite from Chile.

Mr. A. T. Prince completed a study of the mineral Sphene from Lake Clear,

Renfrew County, Ontario and 16 Island Lake, Argenteuil County, Quebec.

A part of Dr. Peacock's time has been devoted, in co-operation with the departments of mineralogy in Harvard University and Yale University, to the revision of Dana's System of Mineralogy. This involves, not merely a compilation from the literature, but in many cases a complete re-examination of the minerals, with optical and röntgenographic measurements. The addition of a universal stage for the petrographic microscope and a part of the x-ray equipment necessary for the study of crystal structures has facilitated such work. With the installation of the complete x-ray equipment for structural investigations the department will be admirably fitted to carry on this most important phase of mineralogy.

During the year the Walker Mineralogical Club was organised in affiliation with the department of mineralogy and petrography. Graduates from this university and colleagues in our sister universities and in the government service were consulted and asked to become members. The response has been very encouraging, for we have an organisation of two honorary members, fifty-one ordinary members and nine student members. A full account of the organisation appears in "Contributions to Canadian Mineralogy" for 1938.

So far as publication of results is concerned, the work of the department has been further supplemented by papers from members of the Walker Mineralogical Club, as shown below, which will be published in "Contributions to Canadian Mineralogy" for 1938.

Brownell, G. M. (University of Manitoba). Zeolites at the Sherritt Gordon Mine.

Osborne, F. F. (McGill University). Preliminary Notes on Pseudomorphs after Spinel from Kilmar, Quebec.

Poitevan, E. (Geological Survey of Canada). Natrolite from the Eastern Townships, Quebec.

Rutherford, R. L. (University of Alberta). Crystal Habit of the Orthoclase in the Crowsnest Volcanics at Coleman, Alberta.

Wilson, M. E. (Geological Survey of Canada). The Keewatin Lavas of the Noranda District, Quebec.

Obstetrics and Gynaecology, under direction of Professor W. A. Scott

Dr. J. R. McArthur returned in the fall from study abroad, and is assisting

Dr. Cosbie in the radiological treatment of carcinoma of the genital tract in collaboration with the Institute of Radio-therapy.

Dr. M. C. Watson has continued his work in the study of Endocrinology and

has again published an interesting paper on that work.

### Paediatrics, under direction of Professor Alan Brown

As in the past, the staff of the Department of Paediatrics, University of Toronto. has been actively engaged in studies on the prevention and cure of the various

diseased conditions encountered during infancy and childhood.

Work in conjunction with the Connaught Laboratories has resulted in the perfection of whooping-cough vaccine which is now being made available to the physicians of Ontario. The results obtained with this vaccine have been so striking that the routine use of whooping-cough vaccine for the immunisation of children against this dread disease is now advocated by practically all paediatricians in Ontario. During the year 1936, there were no less than 29 deaths in the Province of Ontario from whooping-cough. As the results with this vaccine indicate that 98 per cent. of the children inoculated are rendered immune, the universal use of this vaccine will be the means of saving the lives of many little children.

Also in conjunction with the Connaught Laboratories, a serum has been developed for the treatment of influenzal meningitis. Formerly this disease was invariably fatal. Through the use of this serum, in the last 50 cases at the Hospital for Sick Children, 12 recovered and are now perfectly normal. This means that

these twelve children owe their lives to the use of this serum.

It is well known that certain infections such as measles and chickenpox are disseminated by the causative factors being carried through the air. With this in mind, extensive investigations are under way to study air-contamination and means for its control. In one of the hospital operating-rooms, installation of special ventilation and special ultraviolet lamps resulted in a reduction of the bacteria in the air much below that which has been previously obtained.

In recent years, it has been recognised that many forms of asthma are caused by minute particles of different materials in the air being inhaled by the patient. From studies conducted in the Hospital for Sick Children, it has been found that in certain refractory cases the offending substance has been house dust. Accordingly, extracts have been made up from house dust which have been effectively used in

the treatment of these distressing cases.

Studies have resulted in an improvement of our methods of treatment of bronchiectasis, pyelitis, nephritis and diabetes. A continuous study of these and other conditions is constantly necessary in order to evaluate the newer therapeutic measures which are being developed elsewhere as well as here. The study of heart disease in children is giving encouraging results of a most practical nature. It is now possible to determine fairly accurately the degree of activity of the disease and just how much physical exertion the child can safely undertake.

The mental health of the child is not being neglected in our studies. Extremely interesting results are being obtained in a study in co-operation with the Banting Institute of the electrical currents in the brain in different diseased conditions. These measurements are being made by means of the electro-encephalograph, which records and measures exceedingly minute electrical currents in different parts of

the brain.

About the middle of August. 1937. it was evident that Toronto and Ontario were in the initial stages of an epidemic of anterior poliomyelitis. This dread disease rapidly spread through most of the province and to other parts of the Dominion. The staff and research facilities of the department of paediatrics were immediately placed at the disposal of the health authorities of the province and city, and took an active part in the prophylactic and curative measures which were instituted. In co-operation with the School of Hygiene, the Department of Health of the Province of Ontario, and the oto-laryngologists of all the city hospitals, the

prophylactic value of the zinc-sulphate nasal spray was investigated. It involved the spraying of some 5,000 children and the careful comparison of the results obtained on this group and on a control group of children living in the same sections of the city and of the same age who had not received the spray. Unfortunately the results obtained indicate that this procedure as followed was not effective as a prophylactic measure. In the treatment of the disease, no evidence was found that convalescent human serum was of any benefit. In the course of the epidemic many emergency cases arose in which the unfortunate patients suffered from a paralysis of the respiratory muscles. To combat this phase of the disease no less than 27 mechanical respirators (iron lungs) were rapidly manufactured by the Hospital for Sick Children and used not only by the Department of Health of the Province but also were shipped to other parts of the Dominion.

There is no one factor in our daily lives which has a greater influence on health than proper nutrition. During the past year investigations have been undertaken on the need of vitamin A, vitamin C, iron and calcium. The utilisation of iron and calcium in various Canadian foods has been studied. These investigations are giving information that is of importance not only in the prevention and cure of obvious nutritional deficiencies but when applied generally this knowledge will result in an increased resistance to disease, a higher level of health, and increased

longevity.

## Pathology and Bacteriology, under direction of Professor W. Boyd

I have dealt in my report to the Dean of the Faculty of Medicine with the difficulty of following in the footsteps of so distinguished a predecessor as the late Professor Oskar Klotz. The various changes which have been introduced in methods of teaching and in the development of the museum have also been considered in that report. In the present report reference will be made only to investigative work

being done in the department.

Dr. G. Lyman Duff has analysed a rather large series of cases of carcinoma of the body and tail of the pancreas with the object of drawing attention to the tendency of these tumours to spread in such a manner as to produce misleading clinical symptoms and signs which have not hitherto been recognised as common in this disease. He has also collaborated with Dr. R. F. Farquharson of the department of medicine in a clinical and pathological study of 4 cases of Simmonds' disease which have come to autopsy in this department within recent year, and has assisted Dr. H. A. Dixon, also of the department of medicine, in his study of an unusual case of melanotic sarcoma. With the collaboration of Dr. D. E. Magner, Dr. Duff has continued and extended the experiments commenced a year ago on the effects of different protein derivatives upon the vascular systems of various animal species. Dr. M. O. Klotz has continued and completed his study of the association of silicosis and primary carcinoma of the lung, and he has also written an extensive review of the literature dealing with primary pulmonary cancer. Dr. D. E. Magner has made a study of various types of subacute myocarditis of unknown aetiology, and has prepared for publication a report of one case encountered at autopsy during the past year. Dr. H. C. Hair has been engaged in an histological study of infarcts of the lung with a view to establishing criteria for the determination of their age, while Dr. L. M. Gray has undertaken a study of testicular tumours which he will bring to completion during the coming year.

In the division of bacteriology the study of sulphanilamide and related compounds has been continued by Dr. P. H. Greey both on the experimental side as to their effort in tuberculous infections in animals and, in co-operation with the staff of the Toronto General Hospital, on the clinical use of these substances. The Ontario Medical Association at the annual meeting this year awarded a gold medal to Dr. P. H. Greey, Dr. C. C. Lucas of the Banting and Best department of medical research and Dr. D. R. Mitchell of the department of surgery for their exhibit on sulphanilamide treatment in urinary tract infections. Dr. W. L. Holman has published a

masterly review of all the work that has been done on sulphanilamide up to the present time, a contribution to which all investigators will turn as a source of information for many years to come. Dr. Greey continued his research on bacterial synergism, has studied the heterophil aggultinins in infection mononucleosis, and with Dr. Marion Ross has been determing the incidence of anaerobic streptococci in puerperal and other infections. Dr. D. R. E. McLeod investigated certain phases of the lysis of red blood cells. Dr. R. Margarite Price as part of her valuable work on tuberculosis has been correlating the results of the tuberculin tests which she has done since 1932 on the third year medical students and has retested the non-reactors (about half the class) during the next three years. The problem of bovine tuberculous infections in children has continued to attract her interest and the factors leading to the decreasing incidence, established by her diagnoses, are being better understood.

The division of surgical pathology has had to curtail its research activities somewhat due to the extra burden of routine work occasioned by the taking over of gynaecological pathology from the department of obstetrics and gynaecology. However work is still continuing on the problem of gastric and duodenal ulcers and it is hoped in the near future to have some interesting observations for publication. Experimental work was started on the aetiology of mixed tumors of the parotid gland, which it is hoped will clarify to a degree the vexed problem of their conglomerate nature.

The division of neuropathology has been strengthened during the past year by the appointment of Dr. J. Clifford Richardson as fellow in neuropathology and by the addition of Dr. E. H. Botterell to the staff in neurological surgery. Dr. Richardson has undertaken a detailed study of the pathology of acute anterior poliomyelitis, and is also engaged in investigating oedema of the brain. Botterell, in addition to adding important surgical material to the files of the division, is interesting himself particularly in studying injuries to the nervous system. Dr. K. G. McKenzie and Dr. Linell in collaboration with Dr. W. L. Robinson are continuing their investigations in this field, and Dr. Botterell will prove a valuable addition to the team. Dr. Mary I. Tom has collaborated with Dr. D. Y. Solandt and Dr. Botterell in a histological investigation of regeneration of nerve and voluntary muscle following nerve-suture. Dr. Linell is engaged with Dr. E. Hall in an experimental investigation of the histological changes to be observed in the brain following insulin and metrazol injections. Dr. Burns Plewes has investigated and reported upon an interesting case of cervical cord injury. Other subjects which will be found in the list of publications are hypogonadism associated with pineal tumour. intracranial aneurysms, spontaneous haematomyelia and cranio-cerebral injuries.

# Pathological Chemistry, under direction of Professor Andrew Hunter

Drs. Nicholson, Urquhart and Selby, supported by a grant from the Banting Research Foundation, have continued on an extended scale their investigation of kidney function as affected by experimental nephrosis. One phase of this study has already been brought to a satisfactory completion. The degenerative changes in the cells of the proximal convoluted tubules have been shown to involve changes in permeability, which explain many of the functional derangements observed.

As part of the same general problem Dr. Nicholson and Mr. Gornall have studied the production of urinary ammonia in experimental nephrosis, and have obtained evidence that the site of ammonia formation is not the proximal convoluted tubule.

Dr. Hunter has completed his study of the action of arginase upon carbamidoarginine and has identified the products as urea and the hitherto unknown alphacarbamido-ornithine. An anhydride of this substance, also new, has been prepared, and has been shown to be probably a piperidone. Attempt at the synthetic preparation of these substances are in progress. The general problem of the specificity of arginase is being explored in several other directions. Dr. Hunter has devised methods for the preparation of arginine and ornithine by the use of appropriate enzymes. As a result ornithine in particular has been made much more accessible than it was, and considerable quantities of that substance have been prepared for research purposes.

In connection with the work on the specificity of arginase, Dr. Woodward has devised a new and simple method for the preparation of carbonido- and methyl-

carbamida-arginine.

Mr. Gornall has completed a useful study of the behaviour of carbamido-

compounds in the Van Slyke method for the determination of amino groups.

Dr. Lawford has worked out a method of preparing partly purified and highly concentrated solutions or arginase, by the use of which he has been able to improve and greatly to shorten the method for the enzymatic determination of arginine.

## Pharmacology, under direction of Professor V. E. Henderson

The research in the department has proceeded satisfactorily. Dr. Bonnycastle continued the work on adrenalin begun by Prof. Lucas last year, and the material is ready for press. He has also begun a study of spinal anaesthesia, intending to settle the dispute in regard to the danger of direct poisoning of the respiratory centre by a local anaesthetic rather than a poisoning of the phrenic roots. This study has also made good progress.

Dr. Rice has continued some studies begun last year on the reflexes controlling respiration and the effects of drugs on the respiratory mechanism. A good deal of very excellent material has been obtained and a preliminary communication was presented before the American Society for Pharmacology and Experimental Therapeutics in April. A series of papers dealing with this work is in course of

preparation.

Dr. Lucas has made a study of the oral absorption of bismuth, taking a new bismuth compound, bisiodide, in order to obtain a thorough insight into the literature not only of the oral but of the intramuscular use of bismuth in the treatment of syphilis. His work was not only on animals, but owing to the co-operation of Drs. A. MacKay, W. B. Edmonds and E. B. Hardy he was able to follow the excretion in a series of clinical cases. The study has been of value not only in giving this department a thorough insight into methods and the literature, but also as a means of informing some members of the clinical staff of the problem and its literature. A

paper dealing with this study has already been published.

Owing to the kindness of the Ohio Chemical Company, the department was provided with specimens of monochlor and dichlor cyclopropane. Both these are liquids, the boiling points approximating ether and chloroform respectively. Unfortunately these substances proved to be quite unstable in the animal body giving rise to marked lung lesions, and are of no value as anaesthetic agents. This study enabled the Head of the Department to complete an investigation of the more obvious possibilities of improving cyclopropane and led to the presentation before the Royal Society of a paper reviewing the historical progress of our knowledge of chemical substances have anaesthetic actions. It showed the disadvantages of the various anaesthetic reagents at present available and enabled certain deductions as to the possible physical and chemical characteristics of substances which would prove suitable anaesthetics. Papers dealing with these two topics are in press.

# Physics, under direction of Professor E. F. Burton

Low Temperature Laboratory:

The following members of the staff and graduate students have co-operated in the work: Professors J. O. Wilhelm. H. Grayson Smith, and Arnold Pint. Dr. A. H. Woodcock, demonstrator, Mr. K. C. Mann, holder of a War Memorial Graduate Fellowship, H. E. John, National Research Council Bursary. J. C. Findlay, R. W. Leonard Graduate Fellowship, and H. M. Bryant, assistant demonstrator. The fol-

lowing problems have been studied,—the effect of magnetic fields on persistent currents flowing in closed superconducting circuits, and the relaxation effects connected with the transition between the superconducting and non-superconducting states; the refractive indices of liquid helium I and II; the flow of liquid helium I and II through capillary tubes; the velocity of sound in liquid helium, and its compressibility resistance and gas thermometers for use at liquid hydrogen and liquid helium temperatures; development of apparatus for the measurements of the magnetic susceptibilities of finely divided superconductors.

Spectroscopy:

The experimental investigation of hyperfine structure has been continued by M. F. Crawford, R. Richmond, and W. M. Gray. A light source which emits very narrow spectral lines has been developed and is being used to study the small hyperfine structures of the light elements.

The atomic spectra of mercury and lead have been analysed by M. F. Crawford and A. B. McLay, with the co-operation of A. M. Crooker and M. W. Johns formerly

members of this department, but now engaged elsewhere.

Two theoretical researches on hyperfine and multiplet structures have been

completed.

The spectroscopic determination of the amount of zinc in tissues that was undertaken some time ago for the Connaught Laboratories was completed during the year by S. Bateson. Several similar analyses are now in progress.

#### Geophysics:

Research in Geophysics has been carried on by Professor L. Gilchrist, A. R. Clark, C. H. Acheson, and M. J. S. Innes, as follows:

Laboratory Research

The determination of the average intensity of magnetisation and the equivalent susceptibilities of magnetic ore bodies.

A theoretical study of a useful collection of equivalent magnets as an aid to

the magnetic exploration of ore bodies.

Results of combining electrical self potential methods with magnetic methods in geophysical exploration of magnetic ore bodies in the field.

Research in the Field

Field work carried out near Kenora, Ontario, in co-operation with the North-field Mining Corporation.

Field work carried out near Kenora, Ontario, in co-operation with the Coniagas

Mine Company.

Field work carried out near Maskwa Lake, Manitoba, in co-operation with the

Stanmore Mining and Smelting Corporation.

During the year, as a result of a donation by Mr. T. Lindsley, of Ventures, Limited, Dr. Arthur Brant has held a fellowship in geophysics which enabled him to devote his whole time to research in this department. During the summer of 1937 he was in the field with a party under the Department of Mines carrying out geophysical investigations, and has already left with another party, under the same department, for further work during the summer of 1938. During the year he prepared, at the request of the Department of Mines, a comprehensive report on the use of the ordinary dip needle.

#### Colloidal Solutions:

Two graduate students were working in this field during the year.—Miss A. M. Crutcher, with a Bursary, and L. T. Newman with a studentship from the National Research Council at Ottawa; Miss Crutcher was investigating the problem of density of lyophobic solutions, particularly with reference to Bredig gold colloids to determine the actual density of gold in the colloidal state, and Mr. Newman the spectrochemical analysis of adsorbed ions in colloidal solutions.

Electron Microscope:

Mr. James Hillier, assistant demonstrator, and Mr. Albert Prebus, under a bursary from the National Research Council have been working jointly on the construction of an electron microscope with very promising results. This work has been given some assistance by the National Research Council.

Research with Quartz Crystal:

Mr. D. W. R. McKinley has carried out a research on the problem of finding the velocity of light by the use of an oscillating quartz crystal.

Other Investigations:

Dr. John Satterly, with the cooperation of Mr. O. A. Gilmore, carried on a further study of the inclined water jet, by applying Bernoulli's principle to show that the pressure in the jet never varies greatly from atmospheric. This definitely disproves Levi-Civita's original theory. Parabolic projectile paths have been plotted with the same initial conditions as the jet and in all cases the jet falls short of the projectile path. Assuming this to be due to the viscous resistance of the air, an estimate has been made of the thickness of the air carried along on the moving fluid. Velocity measurements within the jet have been made with a Pitot tube of small dimensions and results compared with computed velocities from flows and cross sections.

Professor H. A. McTaggart has been working on the measurements of the ellipticity of light reflected from thin films of oriented molecules. His experiments and observations call attention to the changes produced in the ellipticity of the light reflected from a number of monolayers of Barium Stearate placed on glass. A complete theory based on the ordinary laws of reflection and refraction at such surfaces would be necessarily a complicated one. Two experimental facts may be emphasised in cases where the light is plane polarised.

Films built up of oriented molecules on glass may be used to vary the ellipticity

—from positive to negative values—of light reflected from them.

Certain thicknesses of film may be found which give plane polarised light at all

angles of incidence.

Professor H. J. C. Ireton, with Dr. H. L. Welsh cooperating, has carried out a study of atomic collisions in caesium vapour and of the reflection of the caesium resonance lines from the surface of the vapour.

Dr. H. L. Welsh, worked independently, on an investigation designed to measure

the efficiency of atomic collisions of the second kind in sodium vapour.

Mr. C. K. Cheng, graduate student, continued his work on dielectric constant measurements.

Mr. W. F. Oliver has completed a study on vitreous ice on which he has been

working for the last two years.

The students listed below have been carrying on work under the following awards:

Miss A. M. Crutcher —Bursary from the National Research Council

K. C. Mann —War Memorial Fellowship from the Alumni Association

H. E. Johns
L. T. Newman
Albert Prebus

—Bursary from the National Research Council
—Bursary from the National Research Council

S. Levine —A Royal Society of Canada Fellowship—held at Cam-

bridge, England

A. D. Misener —1851 Exhibition Science Research Fellowship held at Cambridge (second year)

# Psychiatry, under direction of Professor C. B. Farrar

Further work has been done in collaboration with the Department of Medical Research on the intermediate products of carbohydrate metabolism in certain acute

phychoses; also on the biochemistry of hypoglycemic shock. These studies are still in progress. In the out-patient service, a study of factors in the psychoneuroses is being conducted.

## Psychology, under direction of Professor E. A. Bott

Fifty-seven graduate students took instruction in the department of psychology in 1937-8 of whom eight were enrolled from four other departments. Two candidates completed the requirements for the Ph.D. degree and eleven for the M.A. degree. The names of these candidates and the subjects of their theses are as follows:

For the degree of Doctor of Philosophy:

Long, Eleanor R.: A Study of Children's Appreciation of Consequences. Northway, Mary L.: Bartlett's Concept, 'Schemata'.

For the degree of Master of Arts:

Bailey, Nora: An Analysis of Camp Records.

Bensen, Margaret: An Analysis of the Imitative Behaviour of Thirty Preschool Children.

Brown, Isabel: An Exploratory Study of Teasing.

Carson, Marjorie, E. C.: An Investigation of the Predictive Value of Intelligence Tests of Preschool Children in Foster Homes.

Lamon, Helen: A Study of the Color Selection of Young Children.

LeBas, Margaret: The Validity of Items of Preschool Tests.

Loeb, Nora: A Critical Study of McQuitty's Concept of Concomitance.

Ord, Violet: An Analysis of the Method of Art Instruction used at the Children's Art Centre. Toronto.

Rintoul, Dorothy F.: An Experimental Study of Laughter and Smiling in Preschool Children.

Sparling, Margaret: Variation and Predictive Value of the Intelligence Quotients of Preschool Children.

Stewart, Margaret C.: The Application of a Theory of Discipline in a Private Home Setting.

The increase in enrolment of undergraduates in psychology classes during recent sessions necessitated this year enlargement of laboratory accommodation and the re-organisation of some of our large classes. This has been facilitated by the University securing the double house, 102 and 104 St. George St. for our purpose. As a result a more effective classification of our students in each year of the pass course will be possible; Professor Ketchum's social studies laboratory in 100 St. George St. will be enlarged to provide for practical work with honour students in sociology and psychology; suitable quarters for the vocational studies laboratory of Professor Cosgrave will be provided in 102 St. George St. as well as a laboratory for Professor Chant's advanced experimental psychology. These needed changes will permit more intensive work with graduate students as well as with undergraduates.

During the past session our staff have been engaged upon a number of special

investigations.

Electrical equipment for the study of encephalograms has been completed by Professor Bott and Mr. H. C. H. Miller, also photographic equipment for the study

of ocular behaviour with special reference to proficiency in reading.

Professor Chant has extended his investigations in the selection of educational adjustment of undergraduates through a special program relating to students in the first and second years of medicine which is being conducted in co-operation with the assistant dean of that faculty. Professor Chant has also advanced his previous studies in the psychology of reasoning and is continuing his work in conjunction with the Committee on Accident Prevention of the Canadian Public Health Association.

Professor Line's work upon psychological problems at the public school level has furnished valuable leadership both for teachers and graduate students who are

interested in the operation of the new courses of study in Ontario Schools; the relation between children's thought processes and their personality traits, also the validity of certain pre-school tests of intelligence have received his special attention.

Professor Cosgrave in collaboration with Mr. V. S. Stevens, vocational counsellor of the Western Technical and Commercial School, has been engaged on a study in vocational guidance with approximately 1000 Grade IX pupils. Material has been compiled for a special course of instruction on occupations which should assist such pupils in the choosing of a vocation and in planning the educational steps necessary to pursue it. In addition 30 persons of various ages have been systematically examined and vocationally advised during the year in his vocational laboratory. These cases have been referred individually from schools and social organisations in Toronto which co-operate regularly with our department for this purpose. At the request of the Director of the School of Nursing Dr. Cosgrave has also devised a series of selective tests for first year students in nursing. This study is planned over a period of years as a means of predicting aptitudes for work in nursing.

The psychological material which Professor Ketchum has collected over a period of years from students' life histories is now an invaluable source of data for analysis and research by advanced students. Our increased accommodation for social psychology will permit more adequate analysis of these and other social data

bearing upon personality development.

Professor Bernhardt in cooperation with Professor MacArthur of the department of biology is supervising a study on the inheritance of certain behavior traits in mice in his comparative psychology laboratory. This study is planned to continue through several animal generations. Dr. Bernhardt has also assisted in supervising some of the graduate researches in child psychology in St. George's School.

Last year Professor Myers took a notable part in the planning and carrying out of the extensive statistical study which the Ontario Department of Health conducted relating to the incidence and results in treatment of cases of poliomyelitis in Ontario. The recent report of the Department of Health upon this study has received wide

attention.

The graduate work of our department has been greatly stimulated through the generous gift at this time of a research fellowship by an anonymous donor, establishing the John Northway Memorial Fellowship at \$500 per annum for a period of five years for advanced research in the field of personality development. The department aims to secure additional research fellowships of a similar kind for other essential phases of psychological work. The fields of vocational guidance, speech and reading disability, delinquency and penology, are examples of areas which await exploration if graduate students can be assisted through research fellowships.

# Physiology, under direction of Professor C. H. Best

The various teaching courses proceeded in much the same manner as last year. New plans for the teaching of the practical work in third year medicine have been made so that the trimester system, to be introduced next year, can be utilised to the greatest advantage.

The researches carried on under the general direction of the head of the department were those of Mr. Louis Jaques in heparin and blood clotting and those of

Mr. James Campbell on fat and carbohydrate metabolism.

Mr. Jaques has continued his researches on the purification and properties of fibrinogen and thrombin and the physiology of heparin. Promising results have been obtained in the purification of these proteins. He has also confirmed and extended his previous findings on the nature of the fibrinogen-fibrin reaction and has determined the solubility of fibrin.

With regard to the physiology of heparin the reaction of protamine with the anticoagulant has been studied. Chargaff's finding that protamine neutralises the

action of heparin has been confirmed and the phenomenon extended to other basic proteins some of which have been found to have the same action. The reaction has been studied in vitro and characterised as a simple salt formation. On the basis of this work, a quantitative test for heparin has been devised. In collaboration with Dr. Waters, this has been applied to the blood of dogs in anaphylactic and peptone shock. The incoagulability of the blood in these conditions has been shown to be due to heparin or a closely related substance released by the liver during the shock. These findings provide further evidence that heparin is a physiological substance. The studies on the relation between heparin dosage and effect on clotting time have been completed.

The investigation of the relation of the anterior pituitary gland to fat metabolism has been continued by Mr. Campbell. During the visit of Dr. I. A. Mirsky to Toronto last June, attempts were made to find the immediate effects of adrenalectomy on the ketonaemia produced in rabbits by the injection of anterior pituitary extracts. This study is as yet incomplete.

In co-operation with Miss J. H. Ridout, it has been found that a fasting ketosis occurs in rats whose livers have been made fatty by high-fat low-choline diets but this does not occur in normal rats. An "adaptation" to this ketosis occurs, but by the injection of anterior pituitary extracts a greatly increased ketonuria is produced to which the animals may again become adapted. There is no constant relationship between the ketonuria and the level of liver fat. The ketonuria produced by anterior pituitary extract during fasting is greatly in excess of the fasting ketonuria after high-fat low-choline diets although the level of liver fat may be the same in both cases.

The "diabetogenic" action of anterior pituitary extract on normal dogs has been studied. In several animals the "diabetogenic effect" described by Houssay and his collaborators has been produced. In one a slight, apparently permanent diabetes was produced. In another an intense diabetes was produced which persisted after discontinuing the injections. Subsequent findings strongly indicate that the diabetes had been produced by a degeneration of the islets of Langerhans of the pancreas.

Tests whereby the various physiological activities of anterior pituitary extracts may be assayed have been developed and others are in the process of development. A method of assaying the potency of anterior pituitary extracts in increasing liver

fat has already been described.

Fractionation of anterior pituitary extracts has already thrown some light on the nature of the substance present in such extracts which increase liver fat.

Mr. Campbell has also been helping Dr. N. B. Taylor with certain experiments

where anterior pituitary extracts have been used.

For the past year Dr. R. E. Haist and Miss L. E. M. Roddy have been engaged in research under Professor N. B. Taylor's direction. Research assistance was given by Dr. T. H. Clarke of London, Ontario, who spent from September 1st to January 1st in the laboratory. His time was devoted mainly to experimental work on intestinal obstruction. Problems connected with intestinal obstruction continue to interest Professor Taylor and his collaborators, and a fair proportion of the time available for experimental work has been given over to this research. Dr. Haist is carrying out another series of experiments to determine the relation, if any, of the general effects of intestinal obstruction to the level of the plasma potassium. Among other researches at present under way is a study by Dr. Haist of the behaviour and reactions of decorticated animals. Studies upon calcium metabolism are being continued. The action of parathyroid extract upon the serum calcium of nephrectomised animals has been investigated. It has been stated that such animals fail to show the usual effects of the parathyroid hormone. No substantiation for the claim was obtained from this investigation. The effects of parathyroid extract and of viosterol have also been studied in pupplies in which rickets had been induced by the administration of beryllium carbonate; animals in which the rickets is well marked are resistant to the action of the hormone, and also, but to a less extent, to viosterol. The relationship of parathyroid function to the action of prolactin upon the crop glands of pigeons is under study. Some interesting and suggestive observations have already been made. The pathogenesis of gastric and duodenal ulcer is a question upon which some light may be thrown from the experimental side. With this end in view, the actions of colchicine and cinchophen upon the gastric mucosa have been under investigation. Chronic ulcers in the pyloric region have been produced in a large proportion of dogs treated perenterally with the latter drug.

Professor Taylor, as co-author with the head of the department, has just published "The Living Body", a junior text in physiology requested by Messrs. Holt

and Company for use in American colleges.

In the department of physiology the section in biophysics, under the direction of Dr. D. Y. Solandt, has carried out physiological research along a variety of lines. Mr. J. W. Scott has been working on the so-called reaction of degeneration in denervated muscle. A method of measuring the time constant of accommodation in human nerve using linearly rising exciting currents has been perfected, thereby greatly simplying the clinical measurement of this factor. Work started in the previous year on the excitation of single muscle fibres and its relation to neural connections has been carried further. Dr. E. H. Botterell and Dr. Solandt have collaborated on the measurement of the excitability constants in normal and in regenerated mammalian nerve. Through Dr. Botterell and Dr. T. S. Pernett this section has co-operated with the department of surgery and the section of urology in certain clinical investigations. Mr. F. L. Robinson has worked with the section in biophysics on the construction of a double cross-circulation pump of novel design. Mr. J. D. Brown has built an electronic device with several new features for the rapid measurement of hydrogen ion concentration by the glass electrode method. During the epidemic of anterior polionmyelitis in the summer and autumn of 1937 the section in biophysics collaborated with the department of paediatrics in the Toronto Hospital for Sick Children and the department of medical research in testing devices for the artificial respiration of patients with respiratory impairment. Collaboration of this section with the staff of the department of physiological hygiene in a study of the effect of heparin on coronary thrombosis produced in dogs is outlined elsewhere.

Dr. E. T. Waters and Dr. I. A. Mirsky of Cincinnati joined in an investigation on the utilisation of *B*-hydroxybutyric acid by the mammalian heart-lung preparation. Briefly, it was shown that there was no semblance of a fixed ratio between the amounts of carbohydrate and of *B*-hydroxybutyric acid used by the heart and lung; also that

there appeared to be preferential utilisation of carbohydrate.

Further investigations have been made by Dr. Waters and Mrs. J. P. Fletcher on the effect of fructose on the glucose tolerance curve. A number of other substances have been used instead of fructose; so far sorbitol is the only substance which gives an effect similar to fructose on the glucose tolerance curve. Sorbitol is even more potent than fructose. Sorbitol appears to be absorbed from the intestinal tract only very slowly and this fact accounts, partly at least, for earlier reports that sorbitol cannot be utilised by the mammalian organism. It is now demonstrated that perenteral injection of a solution of this substance into a fasting rat leads to a rapid accumulation glycogen in the liver, and at a considerably faster rate than in control animals receiving an equal quantity of glucose.

Dr. Waters in collaboration with Dr. J. Markowitz has conducted investigations on anaphylaxis in the dog. It has been shown that, contrary to general belief, the anaphylactic reaction can still be obtained in a sensitised dog under ether anaesthesia,

even after complete removal of the liver.

Dr. Fidlar has collaborated with Dr. Waters in experiments which had to do with the relationship of the respiratory quotient to the blood sugar level and the response to sugar feeding. With Dr. McHenry, experiments were made in the hope of obtaining from the respiratory quotient some evidence of the effect of vitamin B<sup>1</sup> in the metabolic change of carbohydrate into fat. With Miss Ridout, experiments were carried out to determine the metabolic rates of groups of rats under various conditions. Observations were made with Dr. Haist on a hemidecorticate dog in the

fasting state and with Mr. Campbell on a fasting "pituitary diabetic" dog. Dr. Fidlar's co-operation with his various colleagues has been greatly appreciated by them

and by the head of the department.

The head of the department gave the Nathan Hatfield Lecture at the College of Physicians and Surgeons in Philadelphia on April 6th, and lectures in Cincinnati, Indianapolis and Dallas during the academic year. He is to give the Stephen Paget Memorial Lecture on June 9th in London, England.

During the past year the head of the department has acted as Chairman of the

Scientific Advisory Committee on Nutrition to the Dominion Council of Health.

### Surgery, under direction of Professor W. E. Gallie

For the assistance of students and instructors the department is proceeding this year with the development of a museum of applied anatomy. Dr. Ross McKenzie who is attached to both the department of anatomy and the department of surgery has been detailed to make dissections under the supervision of Professor Grant, which will provide permanent demonstration of those anatomical fields that are of interest to the surgeon. Those will be of great value in both undergraduate and graduate

teaching.

Through the courtesy of Sir Frederick Banting and the willing co-operation of the Superintendent and Board of Trustees of the General Hospital, an electroencephalographic machine has been built and installed by the department of medical research in a room adjacent to the neuro-surgical operating room. It is hoped that this apparatus will prove of value in the definite localisation of brain tumours. Having the apparatus close to the operating room will make it possible for the surgeon to apply electrodes directly to the surface of the brain and so obtain records of the changes in bio-electric potentials associated with tumours. Throughout the coming year an attempt will be made by the departments of medical research, medicine and surgery to determine the clinical value of the apparatus.

Dr. Gordon Murray has continued throughout the year the study of the clinical applications of "heparin." An adequate supply of this expensive biological product has been provided through the generosity of Mr. J. Stanley McLean and the Connaught Laboratories. It is now definitely established that it is of great value in all operations on blood vessels and the heart, in preventing thrombosis, and the results in spontaneous venous thrombossis suggest that it is of value in preventing the extension of thrombus. The clinical experiment described last year to determine its value as a preventive of post-operative pulmonary embolism has been continued

and is giving encouraging results.

Encouraged by the definite value of heparin in preventing thrombosis at the site of operations on blood vessels, Dr. Murray has enlarged the field of blood vessel suture to include free transplants of veins to replace gaps in arteries. This can be done with a high percentage of success in animals and its possibilities in wounds of great vessels and in tumours and aneurisms are highly interesting. He has also made some progress in an attempt to replace damaged heart valves.

In recognition of his work on heparin, Dr. Murray has been appointed Hunterian Professor in the Royal College of Surgeons of England and he will lecture on the

subject in London early in the spring of 1939.

The study conducted by Dr. W. S. Keith on the use of free transplants of nerves that have undergone Wallerian degeneration has now reached a stage where it can be shown that following such operations there is a return of function in animals and that there is a down-growth of axis cylinders through the degenerated graft. No opportunity has occurred in the general surgical service to make use of the principle involved but encouraging results have been reported by Dr. J. A. Sullivan in lesions of the facial nerves in temporal bone. Dr. Keith's work has been supervised by Dr. Linell of the department of pathology.

Dr. Stuart Gordon has continued his experimental studies of the influence of refrigeration on free transplants of skin, fascia and bone. He is also engaged, in

conjunction with the department of radiology, in studying the influence of x-ray, such as is used in the treatment of cancer, on skin grafts. These studies have important clinical bearings.

At St. Michael's Hospital, Dr. C. H. Watson and Dr. T. R. Sarjeant have conducted a study of the effect of the sterilamp in preventing the infection of wounds.

This study is approaching completion.

Dr. D. R. Mitchell of the department of urology in collaboration with Dr. G. E. Hall, Dr. C. C. Lucas of the department of medical research and Dr. Philip Greey of the department of bacteriology have conducted an exhaustive and successful study of the uses of mandelic acid and sulphanalamide in infection of the kidneys and bladder and urethra. For this work they were awarded a gold medal by the Ontario Medical Association.

In addition to the laboratory studies several important clinical researches have been going on. Drs. R. I. Harris. Charles B. Parker and R. M. Janes have conducted an exhaustive follow up and analysis of the cases of biliary disease encountered in a period of years. Dr. H. W. Wookey has undertaken a study of total oesophagectomy for cancer, which has already yielded encouraging results. An original suggestion that the approach should be made from the right side and include ligation and section of the vena azyos major has proved helpful. Dr. Botterel is engaged in a careful study of the sensation in a patient on whom Dr. K. G. McKenzie did a hemidecortication. Dr. Keith Welsh is continuing his studies of staphyloccus infection. Dr. R. I. Harris has studied the clinical results of the treatment of hernia by sclerosing fluids and has presented interesting experimental and autopsy material illustrating the effects. Dr. E. E. Shouldice has been studying the effect of the use of fascia lata in reconstructing and supporting the transverse metatarsal arch. Dr. R. R. Graham has continued his efforts to find a way to make total gastrectomy for cancer a safer operation. Dr. F. I. Lewis and the head of the department have interested themselves in an effort to induce union of ununited fractures of the neck of the femur by reduction of the displacement and the introduction of a Smith-Peterson nail and a bone graft, without a major operation.

As in former years combined studies in the follow-up clinics have been conducted by this department in conjunction with the department of radiology. These include studies of oral carcinoma, carcinoma of the breast, malignancies of various kinds in the genito-urinary tract, and sarcoma, wherever it may occur. These combined studies have proved most interesting and are leading to a mass of accurate observations upon

which authoritative opinions can be based.

The epidemic of infantile paralysis which occured in Toronto in the autumn of 1937 gave the surgical staff at the Hospital for Sick Children a wonderful opportunity for service under pressure. Their particular contribution consisted of the development of a type of splint which could be easily applied and which would prevent, to a large degree, the deformations which so quickly follow the acute stage of the disease. In conjunction with the medical staff they organised and managed successfully a large special hospital devoted solely to poliomyelitis and altogether did an excellent piece of work.

# Therapeutics, under direction of Professor R. F. Farquharson

As formerly, research work in the department of therapeutics has been closely associated with similar activities in the department of medicine, particular attention being paid to certain aspects of the therapy of various haemopoietic and endocrine diseases.

Report of the School of Engineering Research

The following researches have been in progress during the past year.

Department of Civil Engineering

Under the direction of Professor C. R. Young

A research on the lateral supporting force for steel columns and struts has been

continued. An analysis of the experimental results has been completed and a paper reporting these results is in preparation.

Under the direction of Professor T. R. Loudon

A research has been in progress into the effect of "cut outs" in monocoque construction fuselages by means of the Photo Elastic method. This problem was suggested by the Department of Transport through the Aeronautic Committee of the National Research Council. The preliminary results have been presented in a paper to the Aeronautics Sections of the American Society for the Advancement of Science.

## Department of Mining Engineering

Under the direction of Professor H. E. T. Haultain

The study of size analysis of fine powders has been continued.

Under the direction of Professor J. T. King

(with S. E. Wolfe)

The investigation on methods for the determination of gold in cyanide solutions was continued. A paper on this was presented in Canadian Mining Journal, January, 1938.

(with S. E. Wolfe and M. Hewer)

Further study of the iron-nail method of assay was made, using additional reagents, with the objective of improving the method.

(with M. Hewer)

A research was commenced on the determination of impurities in silver beads from cupellation.

Under the direction of Professor F. C. Dyer

An adaptation of ore dressing methods to the treatment of soil for the concentration of seeds for analysis. This research has been completed and will appear in the July number of Scientific Agriculture.

The development of a new dry process for the separation of particles, in particular some kinds of seeds, has been brought to a semi-commercial stage.

# Department of Mechanical Engineering

By Professor R. W. Angus

The investigation on water hammer which was in progress last year has been continued. This problem has become very important indeed in connection with hydro-electric plants on account of the sudden and great variations in load which frequently occur in connection with these plants. Any variation in load is accompanied by a change of velocity of the water in the penstocks, draft tubes and other passages, and this change of velocity always gives rise to abnormal pressures which may, and often do, become very dangerous.

Some of the operating and designing companies have had so much difficulty that they have spent much time determining the pressure rises which occur and have conferred with Professor Angus on the solution of their problems. The work formerly had to do with single pipes of uniform and of variable diameter, but during the past year the investigation was carried out so as to apply the method devised to branched pipes, as well as pipes with surge tanks and various complicated

system of piping.

In addition to the application to hydro-electric plants, the methods developed have been used in connection with waterworks systems, and studies have been made for some of the municipal waterworks engineers, and the results have been used by

them in designing their systems.

As a result of the investigation, three papers have been published and appear in the transactions of engineering societies and in the Canadian Engineer. The work is being continued throughout the next session and further papers are in preparation. Under the direction of Professor R. W. Angus (with G. Gung)

During the session a postgraduate student, Mr. George Gung, carried out investigations, under the direction of Professor Angus, on flow in open channels and on other subjects. The first investigation was the determination of discharge coefficients for siphon spillways and a study of the connection of these coefficients with the Reynolds number. For this investigation, two models of the same spillway were made, one of the models being twice the size of the other, and a study of the flow conditions through them was made, and is still in progress.

A further investigation was carried out on flow over weirs, to determine the effect of the width of the crest on the coefficients and behaviour of the weirs. For this purpose, weirs of different crest width from one inch up to twelve inches were set up in the glass trough in the hydraulic laboratory, and the results of these studies have been compiled and a report is about ready. This study, however, will have to be continued, as only the preliminary work has been done in connection with it.

The investigation included the effect of submersion of the crest, the water being carried to different depths below the weir. In this same connection, an attempt was made to determine the nature of flow in a long channel with horizontal floor, a flat plate being set in the glass trough, and conditions of flow over it were studied. While a good deal of progress was made with this investigation as well, much still remains to be done and a study of this will be continued during the next session.

There has been need of information with regard to the action of valves in pipe lines, and to determine this, three valves were set up in succession in a pipe line and the coefficients for these were determined, as well as the pressure drop for different gate opening, in each case. This study proved of very great interest and it will be of value in connection with hydraulic practice, so that it will also be continued during the next session with larger sized valves and with other types. A report of the work done during the present session has been prepared.

Under the direction of Professor E. A. Allcut (with F. C. Ewens and R. J. Birss)

The investigations on the properties of heat insulating materials were continued, with particular reference to air infiltration and the influence thereon of the density and structure of commercial materials. Studies were also made on heat transmission across air spaces of various shapes and sizes.

#### School of Architecture

Under the direction of Professor E. R. Arthur

Research has been continued on the old buildings of Ontario.

In connection with the restoration of St. Andrew's, Niagara-on-the-Lake, research of an historical nature was undertaken. Papers, drawings, etc., were examined in the Provincial archives and in the Niagara Historical Museum. Letters were sent to the descendants or relatives of former ministers.

The church has in its possession the minutes of Vestry Meetings back to 1792 and records of baptisms of an even earlier date.

As a result of this research a brochure, "St. Andrew's Church", was published under the auspices of the School of Engineering Research.

There seems to be a growing interesting in the subject of the early architecture of the Province. Many people have written to the School offering or seeking information.

A brochure on the Early Buildings of Ontario, by E. R. Arthur, with a foreword by John Alford, is being published at the University Press under the auspices of the Ontario Department of Education.

### Department of Applied Physics

Under the direction of Professor K. B. Jackson

The research on a new form of light source for the inspection of specular surfaces has been continued and extended.

(with D. H. Hamley and L. E. Jones)

The research on photographic sensitometry has been continued.

## Department of Chemical Engineering

Under the direction of Professor J. W. Bain

(with B. Marks)

An investigation has been in progress for the purpose of determining the nature of the reaction which was found to take place between sodium sulphide and lignin.

(with N. R. Fasken)

A study was made of the oxidation of lignin with periodic acid and some interesting data have been obtained.

(with G. V. Jansen)

The research on an investigation of the chlorination of spruce wood, and of the resulting chlorolignin was completed and published in the July, 1937, issue of the *Canadian Journal of Research*.

Under the direction of Professor M. C. Boswell

(with W. H. Rapson)

The use of glucose as a source of methyl groups in the methylation of glycin was investigated. This research is still in progress.

Under the direction of Professor E. G. R. Ardagh

(with G. T. Eaton)

A research into the reactions of thiophene has been continued and it is expected that results which will warrant publication will be obtained in the not distant future.

Under the direction of Professor E. A. Smith

(with W. L. Phene)

An investigation has been in progress on the solvent refining of lubricating oils, with special reference to Athabasca bituminous oil.

(with G. V. Jansen and E. DeLuca)

A study of the penetration of dyes on conditioned silk has been in progress. The results of the investigation will be published in the near future.

Under the direction of Professor R. R. McLaughlin

(with G. P. Beal)

A research on the ageing of rubber due to the presence of copper salts has been completed and the reason for the deleterious action determined. Results will be published in the near future.

# Department of Electrical Engineering

Under the direction of Professor H. W. Price

Absolute reliability of automatic electric control circuits is a matter of great importance. If the relays employed must operate with contact closing force of the order of 1 gram, unreliability in closing low voltage small current control circuits becomes a serious trouble. An investigation is in progress in the hope of finding the cause and method of avoiding such failures.

(with C. Kent Duff)

An investigation was undertaken of the conditions to be met in automatically regulating the frequency of alternators driven by direct current motors, when subject

to sudden and large changes in load. Regulators have been developed, constructed and proved in service to meet the requirements in performance and reliability.

By J. E. Reid

Mr. Reid has discovered an ingenious and simple method of obtaining automatically drawn graphs of the torque exerted by any type and size of electric motor during the starting period. It will be reported in detail when proved experimentally on a variety of motors.

Under the direction of Professor V. G. Smith

The principles on which a cathode Ray Oscillographic Wattmeter could be made to operate were studied and an investigation into the suitability for the purpose of some commercial vacuum tubes was made. This research will be continued.

A theoretical study of transformer leakage inductance and its relation to the equivalent circuits, particularly with respect to its division into primary and secondary components, was completed.

secondary components, was completed.

Under the direction of Professor B. deF. Bayly

A research on the analysis and synthesis of complex alternating current wave forms is in progress. The first part of this problem requires the development of a string oscillograph which is characterised by ease of operation and more accurate and comprehensive response than has been hitherto obtained. The design of the optical system is one of the main problems of such a piece of equipment. This part of the work is practically complete.

The numerical value of an integral can be found very exactly by a method due to Gauss. So far the constants have only been known up to ten ordinates. The values of these constants for twelve ordinates were calculated to sixteen significant figures. These results are of great usefulness in statistical work. They have been

published.

## Report on Research in the Faculty of Dentistry

Research in dental problems has been very active during the past year and although definite conclusions have not been reached in these intricate questions, still

satisfactory progress has been made.

In the Department of Periodontology Dr. Harold K. Box carried out certain investigations on the physiological properties of saliva and an attempt was made to correlate these findings with the lesions known as erosion and cervical caries, and with calculus formation. Salivary enzymes concerned with the degradation of starch were studied, and the relation of these enzymes to the retention of carbohydrate debris on the teeth was investigated. A paper on the relation of the liquefying amylase of saliva and amylopectin to dental caries is now ready for publication.

Certain studies on the internal microflora of cereal grain foods as an acidogenic factor in dental caries have also been conducted in the department. The results of

this investigation are to be published in the near future.

Dr. Frank M. Lott has continued his research on glass as a denture base, and on the anatomy of the temporo-mandibular joint in connection with mandibular movements. He has also made a study of the past and present conditions of the Dental Corps of the armies of Britain, United States, Australia, New Zealand and Canada to assist in the reorganisation of the Canadian Army Dental Corps.

Miss Doris Berry has continued her work on Phosphatase Activity of mixed, (resting and stimulated) saliva—clinical application of method, and also the importance of dietary correction in arrest of dental caries—clinical observations.

Dr. Elmer C. Purdy and Dr. Arthur W. Ham have continued their investigation into the relationship of the mineral content of teeth to disturbances of the calcium and phosphorus metabolism.

Dr. T. C. Whang, of West China Union University, who was awarded the B.Sc. (Dent.) degree, made a study of Dental Ceramics: the composition and properties of

dental porcelain together with a technique for the construction of crowns and inlays. He intends to write a text-book in Chinese on Dental Ceramics.

Dr. D. P. Sutton completed his research on the extrusive influence of epidermal processes on the teeth and alveolar tissues, and was awarded the B.Sc. (Dent.) degree.

Candidates proceeding to the B.Sc. (Dent.) degree are carrying on the following

research:

Dr. Wm. Garard: An investigation to establish the relative toxicity of Monocaine and Procaine Hydrochloride, in the Department of Pharmacology under the direction of Professor Henderson and Dr. Lucas.

Dr. M. N. Rockman: An investigation of the effect of x-rays on blood, bone

marrow and skin, using animals in his experimental work.

Dr. T. N. Scott who is proceeding to the M.Sc. (Dent.) degree is making a study of the anatomy and histology of the semi-edentulous and edentulous mouth.

## Report of work carried on under the wind tunnel committee

A research has been conducted during the year into the effect of carrying canoes on the lower wing of a biplane. The results obtained are being tabulated and it is hoped to issue a report at an early date.

A calibration of thermometers in varying wind speeds was conducted for the Dominion Meteorogical Service by Mr. Middleton of that department by use of the

University of Toronto Wind Tunnel.

Certain model tests were also conducted for the de Havilland Aircraft of Canada

Limited.

At the present time, tests are being made on the model of a small low wing single seat monoplane which has been designed at the University in an effort to solve the problem of a reasonably priced light plane for sport flying.

### (14) PUBLICATIONS

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# (15) THE REPORT OF THE DIRECTOR OF UNIVERSITY EXTENSION AND PUBLICITY

(W. J. Dunlop, Esq., B.A., B.Paed.)

University Extension, now completing its eighteenth year of activity, has experienced a particularly good session—in many respects, its best. 6,712 is the number of adults who studied in continuous courses or classes, whether their instruction was that which leads to a degree or a diploma or was of the sort that is taken solely with the purpose of adding to the student's intellectual equipment. As usual, this number included more men than women, there being 3,562 of the former and 3.150 of the latter.

In addition, 182 Extension Lectures were delivered by members of the staff of the University in various cities, towns, and villages in Ontario. These lectures were for the most part single lectures delivered to service clubs, or literary societies, or similar organisations, though in some cases a series of six to ten was delivered by the same professor to the same audience in successive weeks. It is difficult, really impossible, to keep a record of the number of persons who listen to these lectures, but a conservative estimate would be 25,000. The Extension Lecture is generally regarded as a good, though perhaps an informal, university service because it enables thoughtful people to obtain reliable and recent information on subjects that may be of interest to them. Extension Lectures or "local lectures", as they are sometimes termed, have been available in this University since 1894. The number varies considerably from year to year, being larger in times of prosperity and smaller when economic conditions are not of the best.

Evening Tutorial Classes numbered 52 and were attended by 3,225 men and women. The subjects of instruction were: Accounting, advertising, air conditioning, camp education, chemistry, cost accounting, economics. English, French, German, gymnastics, industrial organisation, interior decoration, investments, Italian, journalism, lip reading, mercantile law, metallurgy, modern international relations, music appreciation, nutrition, parent education, psychology, public speaking, purchasing, secretarial practice, Spanish, traffic and transportation, town planning, natural history. In some of these subjects there were several classes. This is a form of extension service which might easily be extended to a greater extent throughout the Province. For these classes there are no admission requirements except mature age; there are no examinations; no certificates; degrees or diplomas. It is most gratifying that so many men and women find this type of instruction interesting and suited to their needs.

The Workers' Education Association Classes had an enrolment of 1442. These

classes, to which only manual workers are admitted, were conducted in the following sixteen localities: Brantford, Fergus, Guelph. Hamilton, Kingston, Kitchener. London. Oshawa, Peterborough, Preston, Sault Ste. Marie, St. Catharines, Stratford, Toronto, Windsor, and Woodstock. The subjects of instruction are usually economics, psychology, public speaking, English literature and composition.

In co-operation with the Department of Social Science a short course for social workers was conducted with an enrolment of 72. It would appear that more of these courses may be required because those engaged in social service seem to be especially

alert and always desirous of keeping abreast of the newest and best methods.

For the third time a week's course in Public Administration was conducted with an enrolment of 158. This course is becoming increasingly popular. The Department of Municipal Affairs of the Government of Ontario was most generous in cooperating to the utmost in providing lectures and in assisting with arrangements.

A gratifying indication of an increasing desire for education on the part of men and women engaged in business is to be seen in the fact that there were 137 students in the correspondence courses conducted for the Canadian Credit Institute; 168 in the courses conducted for the Chartered Life Underwriters' Association of Canada; and 108 in the Certified Public Accountants' Association courses. These courses constitute a valued service to the organisations which sponser them and the arrangements are almost ideal. This department conducts the courses while the organisations mentioned conduct their own examinations and award their own diplomas.

In the correspondence courses which are prescribed as preparation for the work of the Summer Session there were 206 teachers, most of them preparing two to three subjects. In the Upper School correspondence courses there were 94 teachers, most of whom wrote their examinations in June. In the correspondence courses which are intended to assist teachers who wish to become commercial specialists there were 84 teachers. This makes a total of 797 students taking correspondence courses of some

kind with this department.

In the summer courses in pedagogy, which are nominally included in our

Summer Session, there were 107 teachers.

The two-year diploma courses in Occupational Therapy and in Physiotherapy are proving to be, in every respect, satisfactory. These are difficult courses, for which the admission requirements are the same as for courses in Arts, and they provide the training necessary for positions which qualified young women find interesting and remunerative. These are the only courses of the kind in Canada. They are probably unique in the fact that, according to information given me, there is not a qualified therapist, a graduate of this course, who is unemployed. Indeed, the demand for

these graduates still exceeds the supply.

Every year there is something new in University Extension but one of the oldest of its activities, the Pass Course for Teachers, never fails to attract its quota of ambitious teachers and remains, throughout the years, a most substantial and enduring piece of work. In November, nine graduates of this course were awarded the degree of Bachelor of Arts and at the June Convocation there were 35. A graduating class of 44 would not be considered small in some colleges in Canada. There were 908 teachers, and others, enrolled in the Summer Session and in Teachers' Classes during the year now closing. A Teachers' Class was held in Brampton, the subject being first year economics, and the results of the examinations were particularly good. In order to make a beginning in serving teachers in that part of Northwestern Ontario, which has its centre at Port Arthur and Fort William, a Teachers' Class was commenced, under a special arrangement, with ten students. Many others wished to enrol but lacked some part of the admission requirements. students worked so faithfully in first year pass English, under the tuition of a graduate of this University, that every one of them was successful at the May examinations, three taking (A) standing and two (B) standing in the subject. The Pass Course for Teachers offers a wonderful opportunity for study with a definite goal in view. Men and women who are not teachers may take advantage of the facilities offered to take the instruction and to write the examinations required to obtain a B.A. degree which is of a standard exactly the same as that of the Pass

Course in Arts in this University.

Each year brings, as has been said above, something new in University Extension. This year it has been the establishment by the Senate and the Board of Governors of a two-year diploma course in Aerial Navigation which was recommended by the Committee on University Extension. Like the two-year diploma courses now available for young women, this new course will provide an opportunity for young men to obtain training which should fit them for posts which are and will be numerous. This is the first course of its kind in Canada. Already nearly one hundred applications have been received but it is hoped that it may be possible to limit the first class to 25.

University publicity has been carried on as in previous years. Announcements in the newspapers from time to time (almost daily), articles written for newspapers and other periodicals, the exhibit at the Canadian National Exhibition, the placing of the university's advertising, visits to normal schools and collegiate institutes, are the principal features of this work. As always, the daily and weekly newspapers and

the Canadian Press have given cordial co-operation at all times.

University extension and university publicity are so inter-locked and inter-related that one is often merely the expression of the other. The underlying principle is that the citizens of Ontario, the proprietors of this University, should know what the University offers them and should be able to take advantage of what it offers if they care to do so. Every man and woman in Ontario could study with the Department of University Extension if he or she had the inclination and were willing to engage in the type of study peculiar to the function of a university. University Extension does what it can to disseminate knowledge. Interest is the basis of education and it is gratifying to realise that so many thousands of adult men and women are anxious for a glimpse into the sphere of higher learning. To meet the needs of such men and women, to give adults who require it a "second chance", to enable others to improve their academic and professional status—such is the chief function of University Extension.

# (16) REPORT OF THE DIRECTOR OF THE DEPARTMENT OF SOCIAL SCIENCE

(Professor A. E. Grauer, Ph. D.)

This year marked a change in the directorship of the Department; but the blow of Professor Urwick's retirement was softened by his willingness to continue with his previous lecture courses. Thus staff and students alike are still able to enjoy his wise counsel and inspiring words.

The Department was strengthened by the promotion of Mr. D. G. McCullagh from a part-time to a full-time member of the staff. Mr. McCullagh will act as supervisor of group work studies and his presence will mean that this rapidly developing field of social work will receive more attention in the future. In the field of medical and psychiatric treatment, Miss Emory and Miss Millman of the School of Nursing have cooperated in giving a badly needed new course on the health aspects of social treatment; and Dr. H. Cruikshank delivered a valuable series of lectures on the social problems occasioned by disease, a series which he has consented to give regularly in the future.

The Department strengthened its relations with social welfare agencies in the province by organising an evening refresher course throughout the winter months in cooperation with the Canadian Association of Social Workers and the Department of University Extension, and is continuing this policy by arranging, in cooperation with the Department of University Extension, for a short course in case work during the summer for qualified social workers under the direction of a leading American case worker. The Department feels that such activities are but a small return for the

many things that the public and private agencies do for it, especially the valuable

voluntary supervision given the students in field work.

A survey of job-turnovers, age-distribution, income-distribution, and other important facts relating to the employment of social workers throughout Canada was begun in December and will be completed by the summer. This information will be of value to those intending to enter welfare work as a career, as well as to social workers in the field.

There were 64 students registered in the Department this year, divided as follows: 25 in the first year, 16 in the second year, and 23 occasionals. It is interesting to note the national character of the enrolment; 22 students were from the four western provinces, and six from those east of Ontario. Students were in attendance from every province in Canada except Prince Edward Island and New Brunswick.

# (17) REPORT OF THE DIRECTOR OF THE SCHOOL OF NURSING (Miss E. K. Russell)

Five years ago the School was established for the purpose of organising an adequate training course in public health nursing and it has taken all this time to get this new work well started. A good beginning has been made and order is appearing now out of chaos, but long and patient study lie ahead if this School is to proceed satisfactorily. The nature of the work which we call public health nursing must be better understood before we can afford to be dogmatic about the education and training of the worker. Thus the School should continue quietly with the research upon which it has started. The School was given, first, a trial period of five years which is now ended, and arrangements have been made to proceed with continued financial help from the Rockefeller Foundation. Permanent endowment is required in order to get the institution properly established: it is hoped that there will be much understanding of the need for well prepared public health nurses so that this necessary support will be forthcoming. Students are enrolling in the new course in increasing numbers although registration must be restricted because of the very limited accommodation at the disposal of the School.

This new course resembles in type certain courses that are being given in several European schools but it is a type that is strange and little understood, as yet, in this country. Hitherto the prospective public health nurse has prepared herself for her task by taking a post graduate year at the end of three years of hospital training. Now this School is offering a basic training course so organised that it becomes a well-sustained preparation for public health nursing throughout the three years of its extent, while, at the same time, a thorough training in bedside nursing is interwoven

with this as an essential part of the whole.

The certificate courses for graduate nurses continue to develop satisfactorily and to attract students in increasing numbers. The large enrolment in these classes is straining the small resources of the School.

# The statistical report for the year is as follows:

Undergraduate course	33
Graduate nurses in the certificate courses	73
Occasional students, including undergraduates from Toronto hospitals	173
Enrolment in refresher courses	187

# (18) REPORT OF THE DIRECTOR OF THE DEPARTMENT OF MILITARY STUDIES

(Major M. Barry Watson, B.A.Sc., C.E., M.E.)

I have the honour to report as follows on the work carried on in this Department during the academic year, 1937-38.

Due to the fact that this subject is an option for academic credits in the pass arts course and two years of the course in medicine only, and that time table

arrangements did not permit of students in the latter course taking this option, the number of students taking Military Studies as an academic subject was small.

The enrolments in the special classes (Courses 4 to 7 in the Calendar) however, was gratifying in view of the fact that these classes are voluntary, extra to the curricula and regular time table periods. The total registrations in all classes was 136.

This voluntary enrolment is no doubt due to the realisation by a considerable proportion of the student body that Canada must carry her share of the defence burden of the Empire. as well as to the large number of professional opportunities now offered for men of university standing in the defence forces of the Empire. Students in these special classes may obtain, concurrent with their university courses, through the Canadian Officers Training Corps, and the War Office in London, qualifications for commissions in various forces throughout the Empire. The relative numbers taking this extra work also indicates that the inclusion of Military Studies as an optional subject in other courses would be well received by the male students.

Attendance has been well maintained in all classes throughout the year, and the interest displayed was most encouraging. The attendance at the various courses of lectures overtaxed the capacity of the available quarters, and rooms in the engineering

building were used for this purpose.

The results of the War Office examinations held in March. 1937, for qualification for commisions in the defence forces, showed 76 per cent of the candidates being successful; which retains the position of this University as above the average of all Canada and all Great Britain. The actual number of successful candidates being exceeded only in the University of Alberta.

Due to the increasing preference for university men, especially Canadians, as officers in the Regular Army and Air Force. and the very attractive conditions offered,

a number of our graduates are adopting military work as a profession.

Some changes in the curriculum in this Department are being introduced which it is expected will enhance its value. These include the substitution of more work in military history and the geography, trade and economics of the British Empire, replacing the more detailed tactical and strategical studies.

## (19) REPORT OF THE UNIVERSITY HEALTH SERVICES (MEN)

(George D. Porter, M.B., Director)

T

The report of the year shows that there have been

Examinations:—

Second	- 44	student:		 	 		 	 	 		 		 			 72	8
		Tot	ał.		 		 	 	 			 	 			 229	- 6

There were also fifteen re-examined by specialists.

This is the largest number so far examined due to the extra number of senior

students coming in for health certificates.

The results of the examinations this year were very satisfactory. The physical conditions of a large majority of students is excellent, only nineteen being unfit for physical training. This is the best record we have ever had.

Results:

Those found fit for physi-	ical training	. 96 %
	oility requiring corrective or light exercises	
Those unfit for physical	training	11/2%
Those unfit for physical	training	. 1 1/2 5

Nineteen students were exempted for the following causes:—

Operations	7	Duodenal ulcer 1
Infantile paralysis	2	Arthritis 1
		Nephritis 1
Spinal trouble	1	Osteomyelitis 1

The average height of our first year students is 5 ft.  $9\frac{3}{4}$  in. and their weight  $144\frac{1}{2}$  lbs. This makes our highest average.

It may be interesting to note that our freshmen stand first in height as compared with those of Eleven American Universities, and second in weight, and that the general upward trend in height and weight is very noticeable in the past sixteen years.

Improvement in the physical condition of the second year students is shown in the majority of cases. Twenty-eight per cent. of those below category A.I. in their first year had their rating raised during the year, while only five per cent. in all categories had their rating lowered; these latter were lowered owing to illness or accident during the year.

The great majority of senior students coming in for examination for athletics also show improvement in their physical condition. We were very fortunate in having no cases of infantile paralysis or any other serious infectious diseases during the year, and apart from the usual, but comparatively mild epidemic of influenza, the general health of the student body has been excellent.

There were 105 students enrolled in the special classes under Mr. Martin for the correction of such defects as round shoulders, flat feet, and spinal curvature, and 55 others for period of from one to six weeks on account of injuries or disabilities, and those recovering from illness which prevented their taking the regular P.T.

Dr. Charles Gossage attended a large number of students for injuries received on the campus, and in the gymnasium, as will be seen in his report to the Athletic Association.

Personal advice to may students, and lectures on personal hygiene to those in the first year taking physical training, were given by the Director of Health Service. These were well attended as they have been in previous years.

We are greatly indebted to Prof. Andrew Hunter, professor of pathological chemistry, for undertaking the supervision of the uranalysis, in connection with the physical examination of the students.

Illnesses and accidents for which temporary absence from physical training were allowed. This is the best record we have ever had regarding exemptions, and noteworthy for the absence of serious infectious diseases.

Colds         241           Influenza         16           Bronchitis         2           Pharyngitis         18           Laryngitis         5           Tonsillitis         3           Sinusitis         5           Gastritis         9           Neuritis         1           Appendicitis         4           Migraine         4           Epistaxis         3           Otitis Media         4	Mastoid       2         Torticollis       1         Transfusion       1         Lumbago       3         Jaundice       3         Local Infection       9         Ingrowing toe nail       2         Cardiac       1         Dental trouble       5         Hernia       1         Nephritis       1         Vaccination       1
Operations         4           Tonsils         4           Nasal         3           7	Foot
Injuries         Fractures       5         Dislocations       5         Abrasions       9         19	Sprains       36         Cuts       2         Contusions       7         45

kin Diseases	
Furunculosis	. 1
Scabies 1 Athlete's foot	1
<u>—</u>	
16	2
Total	

## (19) REPORT OF MEDICAL ADVISER OF WOMEN

(Dr. Edith Gordon)

H.

1 beg to submit the report of the Medical Adviser of Women for the year 1937-1938.

The work of the Medical Office began early in September, and continued through to nearly the end of June. Physical examinations of the students of the School of Nursing necessitated the early opening and late closing. Their term begins before that of the University proper, and re-examinations are made at the end of the year

on all the graduate group.

Physical examinations were made on entering students in University College, Medicine, and Household Science to the number of 214. These young women are required to take physical training during the first year of their attendance. Of these, 83.2% were fit and able for the gymnasium and swimming requirements; 2% were asked to attend one or two special corrective classes weekly for a part of the whole of the year. Re-examinations were made of these students in January. Only 5.6% were exempted from physical activities of some kind, because of temporary or permanent disabilities. This group reported twice weekly to the medical office for rest periods or walks. In this way the first year students most needing it, were given the closest supervision. 306 students from the other years of University College, Medicine and Household Science, as well as from Trinity, Victoria and St. Michael's Colleges, and other faculties and departments were examined. Included in this group were 66 women of the graduating class who responded to an offer for a re-examination before leaving college. For some years the Medical Advisor of Women has been attempting to interest all the women of the graduating class in such a check over in the spring of the year. This year saw the largest response so far. Of these 62% showed some improvement over their physical condition on entrance; 14% showed no appreciable difference; and 24% were not in as good condition as on their initial

Participants in the various sports are required to present to their managers a certificate of physical fitness before taking part in the games. 226 such certificates

were issued after examining the would-be players.

Intercutaneous tuberculin tests were performed on all the entering students, and on those whose previous test had been negative. 43.6% gave positive reactions. These were X-rayed. The filming was done in the department of anatomy. I am indeed grateful to Dr. Grant and his staff for their cooperation in this work. Two cases of active tuberculosis were discovered. These were entering students, and both are at present in sanatoria undergoing treatment.

With the help of the five young women in the final year of the Diploma in Physical Education course, and one young woman from the fourth year of the Faculty of Medicine, a beginning was made on a study in posture using the line of gravity apparatus which was built some years ago for Dr. Cates of the department of anatomy. This work proved most interesting, but was too time-consuming to permit the attention it merited. A graduate in physical education could well give a year to investigation on this problem.

Another interesting study was provided through the courtesy of Dr. B. L. Guyatt of the department of anatomy. He arranged for a high vitamin and chlorophyll product in sufficient quantities to give to students whose haemoglobin was 70% or lower, and who were not, or did not wish to be under treatment elsewhere. More than

50 students were included in this group. Haemoglobin, red cell count and differential count were done monthly on those taking the product. The result in many cases was

gratifying and in a few instances was almost spectacular.

In the spring of the year, the Medical Adviser was approached by Miss Helen McMurrich of the extension department, and Mr. Thos. Cole, the representative of the Northern Electric Co. for their hard of hearing appliances and audiometers, with the suggestion that a survey be made among the women students to discover the percentage of hard of hearing. Through the courtesy of Miss Coventry who gave over a physical training class period for this work, and Miss Russell of the School of Nursing who arranged to have the post graduate students given the opportunity for being tested, 142 were tested. 106 were undergraduates, and 36 were graduates. Of these, 27 of the undergraduates showed a distinct loss of hearing in one or both ears, and 15 of the graduate nurses were similarly affected. I am hoping to include this hearing tests in the regular entering examination next fall.

The number of students coming into the Medical Office daily for consultation re health problems, and for treatment for minor ailments continues to be large. 36

vaccinations were performed, and 160 urinalyses were made.

During the final examination period in May the Medical Office cares for students who are too ill to write their papers in the regular examination halls. 61 women students wrote papers in the medical office, and 160 papers all told were written.

Lecture courses were given to the students in the Diploma in Physical Education course. To the first year, 25 lectures in personal hygiene and first aid were given. In addition to the final tests by the Medical Adviser, this group tried the examinations of the St. John Ambulance Association, and all passed successfully. To the fourth year, 20 hours of lectures and demonstrations in the diagnosis of physical defects were given. Three health talks were given to the entering women, following the completion of their physical examinations, and based upon their findings. In March, four lectures in personal hygiene were given to the Public Health Nursing class.

It was a great disappointment to realise that the erection of the Women's Gymnasium Building had again to be postponed. The need of adequate accomodation for physical training and recreation for the women is so pressing that it can

hardly be too much emphasised.

hysical Examinations, 1937-1938:	
University College (entering students)	181
University College (others)	79
Victoria College	37
Trinity College	28
St. Michael's College	12
Medicine (entering students)	12
Household Science (entering students)	21
Household Science (others)	2
School of Nursing (undergraduate)	25
School of Nursing (postgraduate)	67
Social Science	30
Physiotherapy	5
Occupational therapy	6
College of Education	2
Graduate School	6
Optometry	2
Special	5
Total	520
Margaret Eaton School	53
-	
Grand Total	573
Students required to take Physical Training: first year University College,	
Medicine, and Household Science	214
Grades A1 and A2; physically able to participate in the required gym-	
nastic and physical activities	83.2%
Grade B1; needing special corrective work	11.2%

Senior students of University College and Household Science who were examined in the spring of 1938. Compared with their examination upon entrance to the University.

Showing improvement 62. % Showing no improvement 14. % Showing retrogression 24. % Total examined ... 66.

## (20) REPORT ON ATHLETICS AND PHYSICAL TRAINING

(T. A. Reed, Mus.Bac., Secretary. Athletic Association)

(1) MEN

I have the honour to submit the following report on the acitivities of the Department of Athletics and Physical Training for the season 1937-38.

The work has followed the usual course under the able supervision of Mr. Warren Stevens, our director of athletics. In this he has been loyally supported by the regular instructors, Messrs. W. H. Martin, J. E. McCutcheon, W. W. Winterburn and Charles Zwygard.

A most gratifying feature has been the greater interest and participation in our intramural programme initiated last year and now being developed under Mr. McCutcheon to a greater degree of efficiency and participation. The opening of the Gymnasium and Swimming Pool in the evenings has meant a greater number availing themselves of the facilities and allowing for more group competition in the indoor activities. 1555 male students or 45 percent of those eligible participated in this programme. The Committee in charge, consisting of the presidents of athletics in the faculties and colleges with W. M. Sprules (Trin. III) as Chairman, proved a most valuable advisory council to the Athletic Directorate in the administration of the intramural programme.

The imposing of an athletic fee by the Board of Governors was also attended by satisfactory results. The privileges granted the students, both men and women, were varied. Of prime importance was the opening of the Gymnasium and Swimming Pool in the evenings, the expenses being met by the Athletic Association out of receipts from that fee. This removed a grievance long felt by the senior men in the professional faculties where, due to long hours in laboratory work, they could not reach the Gymnasium before closing time. Other privileges made possible by the fee were admission to all university rugby and hockey games; to the outdoor skating rink each afternoon and two evenings a week; instruction in figure skating and golf: affiliations with a golf club and riding club for reduced fees and accommodation for skiing during the winter months.

## Physical Training

The number of students in the first and second years taking Physical Training was slightly smaller than the previous year. In addition to the Danish gymnastics, upon which the training is based, gymnastic apparatus and mat work was included. The urging of first year students to learn to swim and qualify for the Royal Life Saving awards was reflected in the increased number joining these classes. Enrolment in our contingent of the Canadian Officers Training Corps again proved popular, their being a slight increase in the number voluntarily choosing this as an option.

#### Enrolment

Men students in the first and second years	1761
From third and fourth years (being deficient in previous years)	21
	-

From this total must be deducted those:  (a) With credit for two years physical training but repeating academic work  (b) Exempt on medical and other grounds	206 43 23 13	$\frac{285}{1497}$
These 1497 elected to take their Physical Training as follows:		
In Physical Training classes In the Canadian Officers' Training Corps In Special Classes for those physically deficient In the following Intercollegiate and Interfaculty Sports (part-time):	1084 215 87	
Rugby       198         Soccer       41         Track and Harrier       98         English Rugby       5         Lacrosse       35         Volleyball       99         Boxing, Wrestling and Fencing       44         Swimming and Water Polo       88         Indoor Baseball       161         Basketball       190         Hockey       177         Rowing       33         Gymnastics       31         Tennis       4         Figure Skating       7         Jui Jitsu       13	1224	
	2600	
Less those participating in two or more activities	1103	1497

There were twenty-five class periods each week in the Gymnasium, of which the majority were conducted by Mr. Chas. Zwygard. The average class attendance was 44 although some were as high as 135. The programme consisted of Danish calisthenics, elementary apparatus, games and mat work. Mr. Martin conducted special classes for the 87 students physically unfit to take the more strenuous work in the Gymnasium. Mr. Martin also supervised the instruction in boxing, fencing and wrestling. In swimming Mr. Winterburn conducted 251 Learn-to-Swim classes or 11 per week. 185 students were taught to swim, 59 students were enrolled in the intermediate classes of which there were 3 per week and 434 in the 20 life saving classes. There were 225 awards granted by the Royal Life Saving Society. Mr. Winterburn also supervised the water polo competitions in the Interamural programme and the various swimming meets, besides acting as assistant coach of the University swimming and water polo teams.

## Intercollegiate Athletics

The University of Toronto was represented in all branches of intercollegiate sport. The senior championships were the track, tennis, English rugby, golf, swimming, gymnastics and the boxing and wrestling. The individual Gymnastics championship also was won by W. J. Lester, (Ap. Sc. II) of Toronto. In boxing and wrestling we again retained our own "Tom Gibson Cup" and in Track competition wrested from McGill the Tait Mackenzie Trophy after their seven years of unbeatable superiority.

During the year the Athletic Association decided it was high time to recognise the valuable services of Mr. Charles Walters who, for the past twenty years has given gratuitously of his time and talents to promote the cause of intercollegiate fencing. It was therefore decided to offer to the Canadian Intercollegiate Athletic Union a trophy for team competition in senior fencing and a smaller individual trophy for the fencer winning the highest points at the annual intercollegiate meet. Both these

trophics bear the name of Charles Walters. The individual championship was won by A. L. Garcia, (Ap. Sc. II) of Toronto and the team championship by McGill University.

Of intermediate championships we won the soccer, tennis, hockey, basketball, swimming and fencing.

In adition to our annual competition in the Canadian Intercollegiate Athletic Union, several of our senior teams continued the pleasant athletic relationships established with many U.S. Colleges. The hockey team met Harvard, Yale, Princeton and Dartmouth, as well as the two leading teams of the mid-west, University of Minnesota and University of Michigan. The heavy crew completed their season by rowing against Syracuse University. In basketball we competed with Cornell, Syracuse, Buffalo, Rochester, Assumption, Detroit, Canisius, St. Lawrence, Clarkson and Niagara. The boxing, wrestling and fencing teams met the U.S. Coast Guard Academy, Cornell, Alfred, Rochester, Buffalo, St. Lawrence and Wayne. The swimming team had a fine year meeting Rochester, Syracuse, Buffalo and Canisius. The English rugby team enjoyed a fast game with the Chicago Rugby Club and the lacrosse team ended the season by meeting Dartmouth, Syracuse and Springfield. The international fraternising was of inestimable value both as to experience and in upholding the honour of our University in contests across the border.

## Intramural Competition

The schedule herewith indicates the interest on the part of the students, for while 284 represented the University in intercollegiate competition, 1372 men turned out on college and faculty teams.

		Int	erfaculty	ř.
Series	Name of Cup	Winner	teams	Players
Rugby	.Sir William Mulock	Victoria	10	252
Track		S.P.S.		45
Soccer	. Arts Faculty	Victoria	10	153
Harrier	.J. Brotherton	Wycliffe		51
Hockey		Victoria	17	265
Basketball		Med. III	22	314
Lacrosse		Sr. S.P.S.	9	105
Sr. Boxing, Wrest. & Fencing.		S.P.S.		44
Jr. Boxing, Wrest. & Fencing.		S.P.S.		67
Indoor Baseball		Dents	21	369
Sr. Swimming		S.P.S.		48
Jr. Swimming	· H D E L L	S.P.S.	2.2	61
Water Polo	Toward Color Club	Sr. Vic.	11	149
Indoor Track		Victoria		75
Tennis	(for University champion)	W. P. Pigott (S.P.S. III)	,	37
Gymnastics	. H. A. Wilson	S.P.S.		27
Volleyball	. Victoria College Staff	Dents	18	224
Individual Swimming	. H. Durnan	G. H. Clawson (U.C. I)		16
				2307
Less those participating in to	wo or more sports			. 935
Number of contestants				. 1372

#### Special Awards

The John C. H. Copp Memorial Trophy, awarded each year to the worthiest member of the senior rugby team, was won by C. C. (Cam.) Gray, Med. V. an outstanding member of last year's team. The Don Barton trophy, established in memory of our former physical director, and awarded annually to the gymnast showing the greatest improvement during the year, was awarded to L. A. Patterson (Ap. Sc. II).

In the summer of 1937 one of our most promising students and athletes, T. H. Bickle, Trinity class of '38, lost his life by unselfishly going to the assistance of some friends. During the session his parents established a Bursary to bear his name which

was, by unanimous decision awarded to M. W. Murphy (U.C. '35) of Wycliffe College, a team mate and member of the senior intercollegiate swimming team.

The Varsity Arena was again used during the summer for the Promenade Symphony Concerts which now, in the fifth year of their existence, have become established in the musical life of the community. It has afforded facilities for a great mass of people to hear symphony concerts for the small sum of 25c. There were twenty concerts given with an average attendance of 4,500 people. As the charges for the building are placed at the lowest possible figure to cover out of pocket expenses, it means that the University is continuing to contribute generously to the musical life of Toronto.

## The Athletic Directorate

The Athletic Directorate for 1937-38 consisted of Dr. J. A. McCollum (President), Professor T. R. Loudon, Professor S. Beatty. Dr. W. Easson Brown, Messrs. M. F. Williams (Vice-President), J. P. N. Holden, L. G. O'Connor, H. B. Shipman, T. W. Sullivan, E. B. Tovee, and *ex officio*, Dr. G. D. Porter, Medical Director; Warren Stevens, Director of Athletics and T. A. Reed, Financial Secretary.

# (20) REPORT OF THE DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN STUDENTS

(Miss I. G. Coventry)

## (II) WOMEN

In the past academic year 1937-1938 there were 238 women students registered in the physical education classes and approximately 787 class periods of instruction were given by the Physical Director and her assistant Miss J. M. Forster and Mrs. M. Graham.

Required Physical Training: The required physical training class with an enrolment of 216 students was subdivided into 15 class periods a week. This plan, as formerly, assisted principally in accommodating the students who presented varied academic time-tables and also lessened the congestion in the one small gymnasium and the over-crowded dressing-room quarters.

The students enrolled in the regular classes were required to take the final tests in general gymnastics and corrective exercises at the end of the year. The annual report of these examinations was submitted to the Registrar of the University.

Corrective and Remedial Classes: Class periods of corrective and remedial gymnastics were given to the students who were medically advised to take the special course arranged for their benefit and welfare. The Physical Director personally supervised this essential part of health physical training. Frequently such good results were obtained that it enabled the students to return to the regular classes.

Number	of	students	from	University College	192
44	44	44	66	Faculty of Medicine	15
44	44	66	66	Faculty of Household Science	. 6
66	66	44	44	Victoria College	3

Swimming: There were 212 students from all colleges, faculties and departments and over 240 periods of instruction in elementary and advanced swimming and life saving given by Miss A. Cochrane and Mr. A. L. Cochrane during the session of 7 months.

Number	of	students	from	University College	123
		44		Victoria College	
		44	66	Faculty of Medicine	
66	44	4.	66	Physical Education Course	
66	44	44	44	Faculty of Household Science	
46	44	44	64	Trinity College	
44	44	66	66	School of Nursing	
66	44	44	44	Social Science	2
Adminis	tra	tive Staff			24

Four Year Diploma Course in Physical Education (with the Pass Arts course): There were 24 students registered in this course and approximately 722 class periods of lectures, theory and instruction were given during the college year. Periods of theory subjects numbered 272 and of practical subjects 450.

The women graduates who have been granted the diploma in physical education by the University of Toronto continue to be appointed physical directors or instructors

in the Ontario schools.

## (20) REPORT ON ATHLETICS FOR WOMEN

(Miss A. E. M. Parkes)

III.

The Women's Athletic Association is happy to report a considerable increase in participation in athletics by the women undergraduates for the year 1937-38. This is particularly noticeable in the recreational sports which do not involve organised competition. This development may be traced almost entirely to the increased facilities provided by the new athletic fee which has been welcomed by the women as well as the men. Due to the affiliations made with golf and riding clubs. it became financially possible for a large number of women to enjoy these forms of exercise. Similarly the skiing grounds and cabin were much appreciated. Class instruction in figure skating and golf was also provided and approximately twentyfive women enrolled for each course. An amount proportionate to that used to keep the athletic wing of Hart House open at night was turned over to the Women's Directorate. It was decided by that body that the major portion should be held in trust to be used for certain purchases of athletic equipment. etc.. which would become necessary when a new women's athletic building is erected. With the remainder, bowling alleys were rented and made available to women students at a minimum charge. Afternoon hours only could be obtained which limited the numbers, but approximately forty students bowled for one hour a week for ten weeks under the scheme.

The regular programme of competitive sports was carried out as usual and provided great enjoyment for all participants. In the field of intercollegiate sport, championships were well divided. Western retaining the basketball, while Queen's won the tennis, with McGill providing the individual champion, and McMaster won its first intercollegiate championship of any kind in the newly-organised badminton tournament. Toronto won a sweeping victory in the swimming meet, coming first and second in all events and setting four new records.

With the University, tournaments in tennis, badminton and swimming were conducted by each college in addition to the regular intramural competition. A golf tournament was held in the fall as well as the intramural series in basketball and baseball, and the hockey series was conducted in the winter term. Students taking part in one or more of these activities or in the bowling tournament were registered in University. Victoria, Trinity and St. Michael's Colleges, the Faculty of Medicine, the School of Nursing, the Department of Household Science, Occupational and Physiotherapy and Physical Education. Several students registered in the Ontario College of Education and in the Department of Physical Education also acted as coaches. Championships were much more evenly divided than last year, with Victoria retaining the tennis and baseball University College the swimming, while St. Hilda's won the hockey and University College the badminton. The championship most generously applauded by all concerned was that won in basketball for the first time by St. Michael's College.

In the actual intramural competitions sponsored by the Association, entries were as follows: tennis, 30; basketball, 130; hockey, 58; swimming, 48; badminton, 30; baseball, 27; bowling, 40; golf, 16.

The women are indebted to the men's Directorate and to officials of the Athletic Association and the Superintendent's Office for assistance and co-operation on many occasions.

The Women's Athletic Directorate for the year 1937-38 consisted of Dr. C. C. Benson, President, Mrs. W. A. Kirkwood, Mrs. W. B. Elsley, Dr. Edith Gordon, and the Misses J. M. Forster, M. E. Best, M. J. Brownlee, M. F. Davidson, M. I. McLaughlin, K. G. Mayes, J. A. Rea, and A. E. M. Parkes, Financial Secretary.

## (21) REPORT OF THE ACTING WARDEN OF HART HOUSE

(Mr. J. R. Gilley)

THE WARDEN

During the summer of 1937 Mr. J. B. Bickersteth had a recurrence of the illness from which he suffered for several years after the war and on the advice of his doctors in England did not return to Hart House last September. He was granted leave of absence for the academic year 1937-1938 and it is gratifying to know that he has now almost regained his health and will be able to resume his duties in August. For seventeen years Mr. Bickersteth has whole-heartedly flung himself into the life of Hart House. His energy and devotion to the affairs of the House are reflected in the steady growth of its various activities during this period. In view of the absence of the Warden it was inevitable that the life of the House would suffer a severe blow. This handicap, however, has been overcome to a certain extent by the willing and sincere co-operation of the various committees and all member of the staff.

#### GENERAL

The opening of the University in September was postponed one week on account of the poliomyelitis epidemic which made necessary the change of date or the cancellation of various meetings and functions. The Massey Foundation continue to show keen interest in all phases of the life of the House. Realising that for some years the Faculty Union required additional accommodation, the Foundation generously provided funds for the construction of a new sitting-room on the third floor, for the much needed renovation of and new equipment for their serving room and alterations in their dining-room. These improvements are greatly appreciated

by all members of the Faculty Union.

A unique gift in the form of a historical and pictorial map was formally presented to Hart House by Mr. Vincent Massey on behalf of the Massey Foundation in October, 1937. This map 6' x 5' is an excellent example of the work of the well-known artist, Mr. A. Scott Carter. Done in vivid colours it presents a complete survey of the University property and includes the heraldry of various colleges, benefactors and persons connected with the University. Another acquisition was a plaster representation of the coat of arms of Canada, with its heraldic supporter, which formed part of the decoration of the temporary building known as the annex erected at the west end of Westminster Abbey for the Coronation of Their Majesties King George VI and Queen Elizabeth on 12th May, 1937. It was presented by H. M. Office of Works to Mr. Vincent Massey and was given by him to Hart House, having now found a place in the debates room.

For several years it has been known that the accommodation in Hart House for the Students Administrative Council has been totally inadequate and steps have now been taken to enlarge these quarters by the addition of the room immediately to the west of their present location: at the same time the partition between the new room and that occupied by the General Secretary-Treasurer of the S. A. C. has been removed. This necessitated alterations to the Hall Porter's desk and the room adjoining it. The expense of these structural changes has generously been borne

by the Board of Governors.

There was a slight increase in the membership of Hart House during the past year, there being 3717 undergraduates and 726 senior members with a total of 4443.

The Shop where light refreshments and sundry articles are sold had a most satisfactory year. An additional room in which students may eat their lunches was provided and it with the other two were decorated in attractive colours. As in past vears many large and small functions were held during the winter including the Engineering Society Dinner, the Athletic Association Dinner, the University College Follies, School Night, Alumni Night, the Faculty of Forestry At-Home, the Trinity College Conversazione, the Commerce Club Dinner, the Law Club Dinner and the C. O. T. C. Ball. The tickets for the Graduates Ball on New Year's Eve were in good demand which showed that this annual function still retained its popularity among the senior members of the House. The first Visitors' Day of the term in October was as last year for the general public as well as for members of the House and over 1500 persons availed themselves of the opportunity to make a tour of the building. Again this year the University Settlement Party was held in the last week of the Michaelmas term when about 300 men and boys were the guests of Hart House. At the Warden's Christmas Dinner held on the first evening of the Christmas vacation approximately 70 men, all of whom would not be spending any part of their vacation at home, were

#### ART

An exhibition of the work of Mr. A. Y. Jackson and Mr. E. H. Holgate opened the series held in the art gallery during the academic year. Other exhibitors were Professor Barker Fairley (a faculty member of the House), Mr. F. S. Panabaker, Mr. Bertram Brooker, Mr. L. F. Casey, Mr. A. J. Casson, Mr. André Bieler, Dr. Gordon Pearson and Mr. Louis Muhlstock. Among the members great interest was shown in the paintings of these artists as there was also in the photographic exhibition arranged by the Camera Committee. The exhibition in February of work done by the undergraduates included drawings and paintings together with a mural executed in the arts and crafts room under the supervision of the instructor, Mr. Carl Schaefer, and etchings, lino-cuts, wood-carving and sculpture also done there. The graduate members and members of the faculty showed their work in the gallery in March when several exhibitors, formerly unknown to the committee as artists, showed their work for the first time. Reproductions of paintings by landscape artists as well as those by Spanish. French and Modern Masters were shown in the print room. On two occasions Mr. Arthur Lismer reviewed exhibitions in the gallery the first being that of children's work done at the Art Gallery of Toronto and the other that of the work of the undergraduates. This was the first time that the undergraduates exhibition had been reviewed and this event drew about one hundred students to the gallery to hear the criticisms of Mr. Lismer. After Christmas Mr. André Bieler and Dr. Gordon Pearson each reviewed his own pictures while on view in the gallery. Mr. H. S. Palmer again conducted the weekly art class in which nineteen members were enrolled and attended regularly. Mr. A. Y. Jackson and Mr. F. H. Brigden were re-appointed for a three year period as the Advisory Committee of Artists. On their recommendation two pictures-"Draped Head" by Jack Humphrey and "The Saw Mill" by André Bieler—were added to the Hart House collection. Through the courtesy of its Director, Mr. Eric Brown, the two sketches by Tom Thomson were repaired at the National Gallery during the past summer and at present four canvases are there for cleaning and minor repairs. It was found necessary to add a section to the bookcase in the gallery to accommodate the art library to which additions are made from time to time through gifts and as funds become available for this purpose.

#### Music

As in the past the Sunday Evening Concerts held during the year were exceedingly popular and on the occasion of each concert the Great Hall was filled to capacity. We are indebted to the following musicians for the programmes: Mrs. Wilma Stevenson Dohler, Mr. Albert Pratz and Mr. Leo Barkin, Mme. Emmy Heim, the Hart House String Quartet (on their return from an extensive European concert

tour), the Hart House Glee Club and Miss Margaret Oliver, and the Conservatory String Quartet (using viols and modern instruments) with Mr. Alberto Guerrero (playing the harpsichord). The Friday Afternoon Recitals attracted a large number of students. These informal recitals provide all members of Hart House-undergraduates, graduates and members of the faculty—with an excellent opportunity to acquaint themselves with and to enjoy chamber music in an ideal setting. During the past winter Sir Ernest McMillan, Mr. George Lambert, the Toronto Trio, Mr. Viggo Kihl, Miss Marion Copp, the Philharmonic String Quartet and Dr. Harvey Doney were among those who contributed to the success of the recitals. Under the direction of Mr. J. Campbell McInnes the Songsters had a splendid season with a most satisfactory attendance. Members are deeply grateful to Mr. Ross Workman who has so ably conducted the popular Midday Sing Songs. To the musicians of Toronto who through their generosity have made possible such outstanding musical events in the life of the House during the past academic year is owing a real debt of gratitude. Under the direction of Dr. Charles Peaker the Hart House Glee Club has developed at the same time maintaining their membership of one hundred men. Before the close of the first term the club sang carols one evening during dinner in the Great Hall and in February with Miss Margaret Oliver (pianist) they performed at a Sunday Evening Concert. In addition to these two functions they sang on several occasions outside the University.

#### DEBATES

Again five debates were held during the year when the motions before the House dealt with the influence of the rearmament of Great Britain on peace, the effect of the expansion of Japanese foreign trade on the Far East, the narrow outlook gained through the study of science, the final manifestation of a decadent civilisation as illustrated by Canada and the policies of Anthony Eden. The Hon. Visitors included Rabbi Maurice N. Eisendrath, representatives from the University of Melbourne and McGill University, Mr. J. D. Gibson (a graduate of University College, now an economist with the Bank of Nova Scotia) and Dr. H. B. Speakman. The attendance at the debates was not as large as it was hoped it would be, but those who came were very enthusiastic and showed much interest and on no occasion was the Speaker able to allow all those to speak who wished to do so.

#### STUDENT CHRISTIAN MOVEMENT

The most outstanding activity of the Movement in Hart House this year was the Wednesday noon-hour addresses in the music room on the general theme "Christianity Faces a New World." The addresses aroused considerable interest and were well attended. Among the speakers were Shoran Singha of India, Dr. W. C. Lockhart, Mr. Woo Da Ling of China, Dr. Stanley Russell, Professor T. W. Isherwood, the Rev. E. S. Lautenslager, the Rev. J. D. Parks, the Rev. W. L. Smith, the Venerable Archdeacon Fotheringham, the Rev. G. Cragg, the Very Rev., the Dean of Toronto, Dr. J. R. P. Sclater, Dr. Crossley Hunter, Professor G. Wilson Knight, Dr. S. Sisco, the Rev. E. J. McCorkell and Dr. Richard Roberts. In the Chapel, which is used by a number of undergraduates for private prayer and meditation, there was an early Sunday morning celebration of Holy Communion on the second Sunday of the month. Every Tuesday during term a short midday service lasting twenty minutes took place there and on Thursday at noon a group met in Wycliffe College for prayer. Archbishop Owen spoke at the Lenten services during March which the Rev. Philip Beattie conducted. There are signs that during the past year not a few undergraduates have reached a deeper realisation of the value of prayer and meditation. The Movement played an active part in promoting the National Conference of University Students which met at Winnipeg during the Christmas vacation. The Dean of Exeter Cathedral and Professor Reinhold Niebuhr of New York were among the main The Dean visited the University on his way to Winnipeg. Among other prominent leaders the S. C. M. brought to the University during the academic year were Mr. Max Yergan, Dr. John Mackay, the Rev. W. Paton, Dr. T. Z. Koo, Mr. E. K.

Higdon, MHe. Suzanne de Dietrich, Miss Rose Terlin and Dr. Sherwood Eddy. The S. C. M. further were largely responsible for the appeal in the University for the relief of Chinese students, \$547.16 being raised from undergraduates and members of the faculty.

#### THEATRE

This season, for the first time in the history of the theatre, there was no Director on the theatre staff. As a result no regular series of plays was presented nor was there a play entered in the Dominion Drama Festival. However, the entire technical and business staff was retained to keep the auditorium open for rental business. This was larger than in any previous year and twenty-three organisations not including university groups held productions in the theatre. For the second year in succession the University Drama Festival was held, the entries being more numerous and the entire festival more successful. The University College Dramatic Society once again won the award given by the President of the University. A series of lectures on the theatre was sponsored by the University Drama Committee. This was the first time that anything of this nature was attempted and proved to be very popular with the students. It is to be hoped that the years to come will find even more activities of a similar nature interesting the student body. This committee produced a play under the direction of Mr. Edgar Stone, the members of the cast being drawn from the various colleges and faculties in the University. The enthusiasm shown in this venture and the quality of the work would seem to guarantee its continuance. It is interesting to note that the following dramatic societies and faculties in the University made use of the theatre during the year: the University College Alumnae Association, L'Alliance Française, the Trinity College Dramatic Society, the University College French Club, the Victoria College Dramatic Society, the Medical Society, the Engineering Society, the University College Literary and Athletic Society. the Faculty of Dentistry Students' Parliament and the University Drama Committee.

#### Visitors

Among the visitors to Hart House during the past twelve months were Miss Zoe Lavallin Puxley, Mr. Walter S. Allward, Mr. H. E. Wimperis, Miss Mary Trevelyan, Mr. R. B. Bennett (Rector of the Grammar School at Jedburgh, Scotland), Captain Griffiths Powell. Professor E. J. Dent, Professor K. H. Bailey, Dr. W. Bryden, Mr. Thomas Mann and Mr. F. Ashton-Gwatkin.

#### COMMITTEES AND STAFF

During the Warden's absence in the past year Hart House was specially fortunate in the President's appointment of Dr. H. Wasteneys as Chairman of the Board of Stewards. His long association with the House and its committees made Dr. Westeneys the ideal choice as Chairman of the Governing Body of the House. The new House Committee which is an amalgamation of the former House and Hall Committees performed their duties in an excellent manner and there is no doubt that the joining of these two committees is amply justified. Through their wise counsel in this their second year the Glee Club Committee have fully merited their status as a Special Committee of the House. It is keenly regretted that three senior members of the committees have found it necessary to resign this year—Professor T. F. McIlwrath from the Chairmanship of the House Committee. Professor A. F. W. Plumptre as a faculty member of the Debates Committee and Mr. A. B. Ward from the Chairmanship of the Graduate Committee. To these and indeed to all senior members of the committees Hart House owes a deep debt of gratitude for their valuable assistance in its affairs year by year.

The Warden's absence necessitated the temporary appointment to the staff of Mr. J. R. Johnson, a former secretary of the House, whose wide knowledge of the

House made his services invaluable. Hart House was fortunate also in being able to retain Mr. D. L. Emond as assistant secretary for another year. This spring Mr. J. A. Bartholomew, who has been superintendent of the dining hall department since 1932, resigned and has been succeeded by Miss Muriel Ransom, a graduate in Household Science in 1934.

The Acting Warden wishes to convey his sincere thanks to the President of the University and to the staff and the members of the committees of Hart House for

their whole-hearted co-operation during the past year.

## (22) REPORT OF THE DIRECTOR OF CONNAUGHT LABORATORIES

(J. G. FitzGerald, M.D., LL.D.)

This is the twenty-fourth annual report of the Director of Connaught Laboratories. It is a review of the work carried on during the year 1st July, 1937, to 30th June, 1938.

During a part of this time, in the absence of the Director, his responsibilities devolved upon Professor R. D. Defries and Professor C. H. Best. and grateful appreciation is here extended to them for generously assuming additional burdens

and duties.

It has been a year of further progress and development. It is a fine tribute to my colleagues and associates that, despite a slight reduction in the numbers of the scientific staff, research and investigation have been prosecuted on a more extensive

scale than in any previous year.

The fundamental purposes for which the Laboratories exist. namely, extension of the boundaries of knowledge in the broad field of preventive medicine, cooperation with public health agencies throughout the Dominion of Canada, the production and distribution of biological products, and the support and encouragement of postgraduate teaching in public health, have always been kept in view.

Reference has already been made in earlier reports to the Connaught Laboratories Fellowships in Public Health, made available each year to a certain number of medical graduates in the various provinces. Perhaps no other aspect of the work of the Laboratories has been more generally commended or widely appreciated than this. As a result of co-operation with federal and provincial public health authorities, the Laboratories continue to occupy an important place in the public health organisation of this country. Further consolidation of the mutually helpful and profitable co-operation with the University of British Columbia has been maintained. The Western Division under the guidance of Dr. C. E. Dolman has been most active in the prosecution of research. A review in greater detail of the work of the various sections of the Laboratories appears later in this report.

## Staff Changes

During the year Dr. Geoffrey Rake resigned his position to take up an appointment in the United States.

Dr. J. S. Kitching resigned from the staff in February to undertake new duties in the Metropolitan Health Board of Vancouver. During the three years in which Dr. Kitching was a member of the staff he made substantial contributions in his special field of work and discharged his routine duties in a most satisfactory fashion.

Dr. F. O. Wishart, for several years past a research fellow working with Dr. James Craigie, has resigned to assume the duties of lecturer in hygiene and preventive

medicine in this University.

Dr. M. Doreen Smith, a research assistant in Professor Moloney's section since the autumn of 1931, is leaving this year. It is a pleasure to record the high opinion in which Dr. Smith is held as a hard-working and conscientious investigator, and her services to Connaught Laboratories are gratefully acknowledged.

Dr. R. J. Gibbons, research assistant in Western Division, resigned to enter the

service of the Department of Pensions and National Health as a Bacteriologist. Dr. Gibbons' services were warmly appreciated and are here acknowledged with gratitude.

Dr. K. K. Kay, first research assistant in industrial hygiene and more recently an assistant in the office of the Comptroller, has resigned to accept a fellowship in the Harvard School of Public Health.

During this period there have been many changes in the personnel of the Farm

Section. These are set out hereunder.

John Fulton, resident engineer for seven and a half years, returned to Ireland in 1937. His position has been filled most satisfactorily by his first assistant, John Follansbee.

Gavin Martin, a most valuable technician, who had served in that capacity for six years, resigned in September, 1937, to enter the course in mechanical engineering in the Faculty of Applied Science and Engineering in the University of Toronto.

Edward Perkins, another most reliable technician. after eight years' service

resigned to enter upon other activities.

Thomas Perry and Richard Aldom, who had a much shorter association with this institution, returned to their university courses which were interrupted during the depression.

Dr. Donald Heard, who had charge of oestrin research, resigned and accepted a position on the staff of the department of biochemistry, Dalhousie University.

Halifax.

Dr. Arthur Charles transferred from the University to the Farm Section in the laboratory vacated by Dr. Heard in September. 1937, since when he has carried on

his investigation in the production and purification of heparin.

The tragic death of Christopher Smith, one of the earliest members of the laboratory staff at the Farm, was deeply regretted by all who knew him. He had been employed for twenty-one years, and was accidentally killed while coming to work on the morning of 12th July, 1937.

### Appointments

The appointment of Dr. Kenneth F. Brandon as a research assistant (parttime) in Western Division was made on 1st June. A former member of the staff of the School of Hygiene and for the past year a member of the staff of the Metropolitan Health Board of Vancouver. Dr. Brandon's appointment is a further step in the development of even closer relations with the University of British Columbia. In his new position he will also be a member of the staff of the University of British Columbia, and it is confidently believed that in addition he will find a useful field of service in epidemiology in the Metropolitan Health Board of Vancouver.

## Section of Bacteriology and Immunology

In the section of bacteriology and immunology, under the general direction of Professor Donald Fraser, studies previously reported have been extended and new projects initiated. The study of the duration of antitoxic immunity in response to three doses of diphtheria toxoid in children has been in progress for a number of years. This research has been time-consuming and has entailed the co-ordination of efforts of Dr. Alan Young in the field as well as our own in the laboratory. It has been abundantly shown that for the purpose of this study the Schick test is inadequate, since the results so obtained are not quantitative and thus fail to reveal the changes in antitoxin level in the children subsequent to immunisation. addition, the Shick test itself acts as an antigenic stimulus, which fact alone precludes its use when spontaneous changes in antitoxin levels are being followed. Our results obtained subsequent to publication in 1937 indicate that of 107 children, given three doses of diphtheria toxoid two years previously, virtually all have shown a drop in antitoxin level from that attained at three or six months after immunisation: nine had less than 1/100 units; non however have completely lost their autitoxin. Of the total of 244 children whose blood has been titrated at any interval of time subsequent to immunisation, three only have shown no detectable antitoxin (<1/500 unit) following three doses of toxoid. It is anticipated that when the group of children tested at the four-year interval is completed, more will have lost their

antitoxic immunity.

Dr. FitzGerald carried out a study to determine the effect of repeated Schick tests on persons with no demonstrable antitoxin (<1/1000 unit) in their blood serum. The Schick test, with an antitoxin titration previous to performing the test, has been done at four-week intervals. In all six Schick tests and seven titrations have been done on each person. There has been no evidence of antitoxic response. One additional individual, in contrast with the above group, with an initial titre of >1/1000<1/500 unit, showed an increase in antitoxin one month after the Schick test alone. The antitoxic response to this small antigenic stimulus was strikingly great, namely three-quarters of a unit.

With the co-operation of Dr. Beverley Hannah of the Riverdale Isolation Hospital, diptheria antitoxin assays have been carried out on sera from persons admitted as diphtheria cases, carriers and suspected diphtheria. Cultures from those persons have also been examined, and correlated with the antitoxin titre of the serum. In some instances the results have been of assistance in arriving at the

final diagnosis.

In co-operation with Dr. Grant Fleming. McGill University, Montreal, titrations have been done on the sera of children who have been immunised some years previously. Blood samples were obtained at the time of Schick testing. Serum samples from 49 originally Schick positive children, drawn three months after the administration of alum precipitated toxoid, were titrated. The numbers in each group were small, but the results indicated that two doses of 0.5 cc. amounts were better than one dose of 0.5 cc. or of 1 cc. alum precipitated toxoid.

Dr. Ruth Dow, Alexandra Hospital, Montreal, has been co-operating by sending sera from patients diagnosed as diphtheria and from carriers. Titrations have been

compared with the results of examination.

The diphtheria carrier survey of school children in Toronto has been continued in co-operation with the Department of Public Health, City of Toronto. Of approximately 1400 cultures taken in 1938 none were found to be virulent. Routine cultures have been isolated from cases and carriers from the Riverdale Isolation Hospital and from the Hospital for Sick Children. They have been tested for virulence and carbohydrate reactions and dried and added to the collection of

diphtheria cultures.

Dr. Brown has carried out an investigation on the use of the Tuberculin Patch In the preliminary trials it is evident that the test is specific. Thus of 382 persons positive to tuberculin as shown by the intracutaneous (Mantoux) test a reaction was not noted with the patch test in any person who failed to react to a Mantoux test. It appears that the patch test is as sensitive as 0.01 mg. of old tuberculin intracutaneously administered and only slightly less sensitive than 0.05 mg. Various modifications of the patch test are being tried in order to obtain data on the most suitable form of application. Dr. Brown is continuing his studies of the pneumococcus with particular reference to the production of rabbit serum for clinical use and the typing of strains. The study of seven groups of the typhoid bacillus as delimited by Dr. James Craigie with bacteriophage has recently been undertaken. The keeping qualities of typhoid vaccine under varying conditions is being followed. The typing of 500 strains of the tubercle bacillus isolated by Dr. A. L. MacNabb of the Department of Health, Ontario, has shown that the incidence of bovine tuberculosis in man is low in this province. The investigation and typing of salmonella strains isolated in Canada is being continued.

Dr. Frieda Fraser and Dr. D. L. MacLean have investigated the use of the tannic acid precipitate of scarlet fever toxin kindly furnished by Dr. M. V. Veldee of the National Institute of Health, Washington. The investigation of the virulence and immunity against different strains of haemolytic streptococci in certain laboratory animals is being continued. Dr. Helen Plummer has compared a strain of haemolytic

streptococcus with the well-known N.Y. 5 strain to determine whether the former may advantageously be substituted for the latter in the routine production of antitoxin. Of 161 stoxigenic strains of haemolytic streptococci, 87 per cent. were distributed throughout 22 agglutinative types. Of approximately 500 strains of Group A haemolytic streptococci 93 per cent. have been placed in one or other of 22 types by Griffith's slide agglutination test. It is suggested that this test is of practical use in epidemiological investigations. Dr. Plummer has been pursuing the investigation of certain of the anaerobes.

Dr. Ronald Hare, with the assistance of Dr. C. H. Yen of Peiping, has made a detailed study of three of the eight strains of influenza virus isolated in 1937 in Toronto. These three strains were the only ones which were successfully adapted to mice. Based upon preliminary investigation it would seem that, upon antigenic analysis, the Toronto strains are alike and closely resemble the New York strains whereas there is an apparent different between the Toronto strains and those isolated in 1933 in London and in 1934 in Porto Rico. The response in complement fixing and virus neutralizing antibodies in human beings have been studied during an epidemic in cases and contacts. Active immunization of mice has been successful with both living and formalin killed cultures and studies are directed to determine the antigenic value of different strains, living and inactivated virus, and the best methods of inactivation and preservation of the vaccines. Experimental infection in mice has been treated with convalescent serum from ferrets, also from other experimental animals and man whose sera possess a high titre in neutralizing the experimental infection in mice. In collaboration with Dr. Hurst Brown and Dr. Feasby of the Western Hospital 100 nurses are being kept under close clinical supervision and all cases of respiratory tract infection are being investigated clinically and bacteriologically in an attempt to establish methods of accurate diagnosis of these conditions.

During the year the investigation of meningococcus carrier rates in contact and non-contact groups of individuals has been continued by Dr. Silverthorne. The strains of meningococcus isolated from these groups have been studied in respect of their virulence and type distribution. All of the contact carrier strains have been shown to possess fairly high degrees of virulence for mice in contrast to the majority of non-contact carrier strains which are avirulent. The strains from both groups have been found to be largely Type II. Clinical studies of meningococcic meningitis

have been pursued and the bactericidal properties of serum investigated.

The production of a dried bactericidal guinea-pig serum using freshly isolated meningeal strains of H. influenzae has been continued. This serum which is high in complement value, has been used with anti-influenzal horse serum in the treatment of cases of influenzal meningitis with a few gratifying results. Strains of H. influenzae isolated from the spinal fluid of cases of meningitis have been subjected to bacteriological investigation. The typing and virulence tests on these strains have revealed that they are a homologous series and that for the most part are virulent in mice.

The studies on whooping cough by Dr. Silverthorne have been extended. The use of duplicate cough plate cultures in the bacteriological diagnosis of the disease in its early stages has been found to be most reliable. Our studies on active immunization of children using a freshly isolated strain pertussis vaccine have shown that children may be successfully immunized, as compared with an unvaccinated group of controls. The results are promising and the trial is being continued and extended. During the past year a satisfactory lethal test has been developed by producing a fatal septicaemia with H. pertussis in a high percentage of mice. Pertussis vaccines used in the prevention and treatment of whooping cough have been tested for their protective value by inoculating previously vaccinated mice with freshly isolated strains of H. pertussis suspended in mucin. This test would seem to be of practical value in the laboratory control of the antigenicity of pertussis vaccines.

Dr. J. S. Kitching and Dr. Leone Farrell have contributed two papers (published

in the Journal of Immunology) dealing with the stability, antigenicity of staphylococcus toxoid and with alum toxoid respectively. Other studies in this field dealt with the rate of absorption and excretion of staphylococcus antitoxin; changes in antitoxin following infection in animals and in collaboration with Dr. Wm. Keith, Hospital for Sick Children, in children; staphylococcus antitoxin content of age groups; toxigenicity of strains of staphylococcus and an analysis of their toxins. Mr. R. J. Wilson has investigated a number of strains of staphylococcus from a foodpoisoning outbreak. He was able to show the identity of cultures obtained from cases, from food handlers in a bakery and from the incriminated food.

Section of Chemistry in Relation to Hygiene

Under the direction of Dr. P. J. Moloney the routine production of diphtheria toxoid and Schick test toxin has been carried on as in previous years. Certain changes have been made in the procedure of assaying the toxoid for antigenicity and toxicity. This work has been concentrated in a period of the year in which experience has shown that there is the least likelihood of failure in satisfactorily completing the requisite test of the product.

Investigations carried on by Professor Moloney and Mr. M. D. Orr have been concerned with the following:—

1. The stability of purified diphtheria toxoid.

Very interesting results have already been obtained in the study of the stability of purified diphtheria toxoid, but there would not seem to be at the present time sufficient evidence to warrant the adoption of a method to purify toxoid for general distribution.

2. Further studies of the use of amine precipitated toxoid.

Inconsistencies have been encountered in the antigenicity of amine precipitated toxoid but thus far the precise reasons for them have not been discovered.

3. The reactivity for various diphtheria prophylactics.

This study has been carried to the point where a publication of results seems desirable. A brief summary of the report indicates that "of all the diphtheria prophylactics only toxoid-antitoxin floccules and certain of our amine precipitated toxoids show a lowered reactivity, as judged by either skin reaction or anaphylaxis on guinea pigs highly sensitized to diphtheria toxoid. Moreover, it was shown clearly for toxoid-antitoxin floccules that the lowered reactivity was not due to purity of the toxoid associated with the floccules, but was more likely due to insolubility or slow dissociation of the floccules in the body fluids."

4. The purification of tetanus toxoid: its stability and the possible use of amine precipitated tetanus toxoid.

Dr. Edith M. Taylor has during the year investigated methods for the removal of iron in hog's stomach autolysate-maltose medium which is used for the production of diphtheria toxin. It would appear that iron occurs naturally in both the autolysate and the maltose. Dr. Taylor's results may be summarised as follows:—

- 1. Broth for diphtheria toxin production prepared from hogs' stomachs may be sterilised by autoclaving rather than by Seitz filtration without impairing toxin production. It is now apparent that failure to reduce the iron content of the autolysate to suitable concentration prior to autoclaving has been responsible heretofore for the difference in results obtained by the two methods of sterilisation.
- 2. In order to produce toxin of high potency, iron must be removed from the broth. This has been accomplished by treatment of the broth with infusorial earth.
- 3. Maltose suitable for diphtheria toxin production has been prepared by a simple and inexpensive method from corn starch.

Dr. M. Doreen Smith, in collaboration with Dr. Joseph Daly and Professor Moloney, has completed a study of the detoxifying action of human bile on diphtheria toxin. It was found that certain samples of human bile possess a heatlabile detoxifying activity similar to that of ox bile, and that the activity is not due to diptheria antitoxin. Further it was shown that the heat-labile component of this detoxifying system may be replaced by the heat-labile component of ox bile, which alone is inactive. Dr. Smith has also succeeded in improving the method of separating the labile components of the detoxifying system and similarly has effected an improvement in the method of testing bile.

Section of Filterable Viruses, Epidemiology, and Biometrics

In the section of filterable viruses, epidemiology, and biometrics a series of interesting studies in virus diseases has been conducted under the direction of Professor R. D. Defries.

Dr. James Craigie and Dr. F. O. Wishart have continued their study of the serology and immunology of vaccine and smallpox viruses. The lability of the immunising fraction of the complex antigen of vaccine virus has been further demonstrated by an examination of the ability of the virus or soluble antigens to combine with neutralising antibody. It has been confirmed that a gross and variable multiple of the amount of virus required to absorb specific agglutinins and precipitins is required to remove neutralising antibody from vaccine-immune serum. The amount of virus required to absorb a given quantity of neutralizing antibody varies from 1.000 to 100,000th of the amount of virus neutralised by the same quantity of neutralising antibody. Further studies are in progress to elucide this apparent paradox. The investigation has been facilitated by technical advances in the preparation of the large quantities of pure suspensions of vaccine virus necessary for absorption tests. It has been found possible to obtain yields of 1011 virus particles from a single rabbit under favourable circumstances. Further improvements in the application of in vitro serological tests to the study of vaccine virus have been effected as a result of the study of the influence of the concentration of various electrolytes and of pH on the agglutination and precipitin reactions. For example, the optimal concentration of NaCl for these reactions with vaccine virus has been found to be 1/10 to 1/20 that generally employed in serological reactions. Following a study of vaccinia-infected cells by dark-field observation, ultraviolet photography, and fluorescent microscopy. Dr. Craigie has evolved a staining method whereby the virus of the infected process can be studied in fixed tissue sections. This method permits a much more rapid and extensive examination of infected tissue than has hitherto been possible.

Dr. Craigie has carried out a special study of human blood samples obtained in the pre-paralytic stage of poliomyelitis. These samples were fractionated to exclude the possibility of the making of circulating virus by neutralising antibody. The negative results obtained even after fractionation of the blood confirm the observations of others that the virus of poliomyelitis does not occur in the blood in any

significant amount.

Dr. Craigie and Dr. C. H. Yen have continued their investigation of phages whose range of activity is limited to the V or virulent form of *B. typhosus*. They have made a special study of Type II typhoid phage which they had previously found to exhibit a high specificity for the type of strain of *B. typhosus* on which it was propagated. The reactions of some 500 strains of *B. typhosus* to various Type II phage preparations have been studied by special methods elaborated for this purpose. It has been found that by "phage typing" V form strains of *B. typhosus* can be classified into seven main groups and that the results thus obtained show remarkable correlation with epidemiological data. Although surpassing in sensitivity the usual fermentative and serological tests, and permitting a differentiation of strains of *B. typhosus* unobtainable by these methods, the phage-typing method yields results of absolute consistency. The types of *B. typhosus* thus determined appear to

remain fixed on human or mouse transfer. The examination of strains obtained from England show that the same seven types occur in England as well as in various parts of Canada. The type of B. typhosus isolated from a case or carrier has been found to be identical with the type occurring in the individual whom he has infected. Outbreaks and epidemics due to each of the seven types of B. typhosus have been observed and all, with one exception, have been single-type epidemics. This exception was one in which two different types were recognised in samples of suspected water. The methods which have been elaborated in this study not only provide a new and useful tool for the epidemiological study of typhoid fever but also provide a basis for a serological re-investigation of B. typhosus and the possible development of improvements in the specific prophylaxis and treatment of this disease. Another aspect of this study deals with problems concerning the nature and behaviour of typhoid phages as problems in the virus field. Concerning the behaviour of Type II phage, the only satisfactory hypothesis which can be put forward to explain the observed phenomenon is that Type II phage exhibits a regular "mutation" rate and that the various "mutants" of this type of phage are capable of attacking only one of the observed types of B. typhosus. The subjects of mutation and cell specificity of viruses are both significant problems in the field of virus research and the investigation is being continued in this direction.

Dr. Defries has continued his studies of rabies virus, confirming the observation that rabbits which have received rabies vaccine by intraperitoneal injection become highly resistant to rabies, even when the virus is inoculated intracerebrally. These studies have shown that a similar immunity can be developed if large doses of vaccine are administered intramuscularly. Practical use has been made of these observations in providing a method to determine the protective value of various preparations of rabies vaccine. It has permitted also the obtaining of definite information concerning the deterioration of vaccine when stored, the effect of temperatures, and the

action of various chemicals.

In studying rabies virus, several methods of tissue culture have been studied and observations made of several strains of virus. Successful cultivation of the virus according to the method of Webster has been conducted and one strain has been carried through 28 culture-passages. The successful cultivation of the virus permits of study of its antigens and affords the possibility of an improved type of rabies vaccine. For the past two years rabies vaccine for veterinary use has been supplied to the Government of Trinidad for use in controlling a serious outbreak of rabies among cattle. The supplying of the vaccine has permitted the obtaining of interesting data and the study of a strain of virus from Trinidad.

The occurrence of a severe outbreak of poliomyelitis in certain sections of Ontario, including Toronto, afforded the department the opportunity to conduct several studies. Data were obtained by Dr. J. S. Kitching concerning 500 children, examined at the clinics and not considered to be suffering from poliomyelitis. Subsequent inquiry concerning 335 of these children showed that in only two instances had paralytic symptoms developed. Reference has also been made to the study of Dr. Craigie of blood samples from suspected and known cases of poliomyelitis. An investigation of cerebrospinal fluid from early cases was made by Dr. N. E. Mc-Kinnon, with negative findings. The virus of lymphocytic choriomeningitis, also, was not found.

Through funds made available by the Department of Health. Ontario, a field study was conducted to determine the possible value of a prophylactic nasal spray, consisting of one per cent. zinc sulphate, one per cent. pontocaine, and one-half per cent. of sodium chloride. The observations were made possible through the cooperation of the Hospital for Sick Children and the Department of Public Health of the City of Toronto. A total of 4,713 children received two sprayings, an interval of ten days elapsing between the sprayings. A statistical analysis of the results, with the study of a suitable control group, indicated that the nasal spraying, as conducted, had no protective value and further that it could not be considered a practical public health procedure.

Dr. Mary Ross made a detailed analysis of the data concerning a survey of Schick testing conducted in Toronto by Dr. Alan Young and Dr. D. T. Fraser, involving the study of 7.668 Schick tests. A similar analysis was made by Dr. Ross for Dr. Grant Fleming and Dr. B. Benjamin. of Montreal, concerning a group of 1.536 Schick tests. The Department has continued to collaborate with the Department of Public Health of Toronto in the analysis of data concerning children receiving diphtheria toxoid in Toronto. A study was made of the records for the year 1935-6-7, as relating to 40,000 children who received three doses of toxoid. Records are now available concerning more than 150,000 children who have received diphtheria toxoid in Toronto, thus making possible observations of great value in the determination of the effectiveness of diphtheria toxoid in the prevention of diphtheria. Of this number, 119,443 received three doses. Dr. McKinnon has continued his investigation with Dr. Ross of the trends of the mortality from heart disease and cancer. Through the co-operation of a group of representative hospitals, Dr. A. H. Sellers has obtained records of foetal deaths in which autopsies had been made. As a result of this study, recommendations of a suitable classification of the causes of stillbirths have been published. Dr. Defries and Dr. Sellers have prepared a revision of the classification of the causes of morbidity for use in Canada. This work was undertaken in collaboration with the Department of Pensions and National Health, and the Dominion Bureau of Statistics.

Section relating to Hormones, Vitamins. and other Physiological Substances (under the direction of Professor C. H. Best)

The effect of heparin on thrombosis of the coronary arteries produced in dogs by the injection of sodium ricinoleate into the lumen of the vessel has been studied by Dr. Best and Dr. Solandt. In the animals which did not receive heparin, thrombosis of the main artery or its branches was consistently observed. In the heparinised animals the incidence of thrombus formation was greatly reduced. Dr. D. L. MacLean carried out the extensive histological studies which formed an important part of this investigation. Mr. L. Jaques in cooperation with Dr. Best has extended the researches on the methods of administration of heparin. Dr. William Thalhimer of New York and Dr. Solandt and Dr. Best have studied the effect of the so-called "exchange transfusions" on the nitrogen retention of nephrectomised dogs. Using a special pump with which 16 litres of blood per hour may be exchanged in each direction between the normal and nephrectomised animals, it has been found that the excess urea may be rapidly excreted by the kidneys of the normal animal.

One phase of the work utilising deuterium-containing fats has been completed by Dr. H. M. Barrett, Miss Ridout and Dr. Best. The sources of the excess fat accumulating in the liver under many different conditions have been determined. Miss Ridout and Dr. Best have continued their work on choline and liver fat. Papers on "Undernutrition and Liver Fat" and "The Relative Potency of Various Factors

Affecting Deposition of Fat in the Liver" are in press.

During the past year much of Dr. Scott and Dr. Fisher's time has been spent on new arrangements for the extraction, purification and testing of insulin. Recently the Connaught Laboratories have made regular use of frozen as well as fresh pancreas for the extraction of the hormone. Investigations on the various stages of the purification of this hormone have been continued and these have resulted in the development of a process which is more economical in time and materials than that formerly employed. As a result of the year's work four papers are now ready for publication, namely, "Studies on the Pancreas and Liver of Normal and Zinc-Fed Cats..." "The Ash Content of Nickel-Insulin Crystals", "The Insulin and the Zinc Content of Normal and Diabetic Pancreas" and "The Preparation of Insulin". Steps have been taken to prepare a quantity of zinc-insulin crystals and make a solution of these available for general clinical trial.

A new process for the preparation of a purified concentrated solution for

intramuscular injection has been developed by Dr. E. W. McHenry. The procedure eliminates 90 per cent. of the impurities present in extracts prepared by former procedures and gives a solution effective in small dosage. Clinical testing has been made possible by the very helpful co-operation of members of the staffs of the Toronto General and Western Hospitals. During the development of the new procedure a study has been made of the properties of the anti-anaemic factor. Mr. D. W. Overend has determined the free amino-acids present in an active liver fraction. Sufficient information is now available to characterise the factor as a proteose.

Dr. G. A. McVicar has examined several tissues for the possible presence of the cortical hormone and has found it to be absent from foetal adrenal tissue, adult kidneys and ovaries. He is continuing an investigation of the rôle of histamine in

adrenal insufficiency.

In connection with a study of food consumption by low-income families, Dr. McHenry and several members of his laboratory are co-operating with the committee in charge of the survey. Miss Gavin and Miss Barber have been responsible

for the laborious calculations of food values.

Dr. McHenry and Miss Gavin began last fall an investigation of the relation of several of the B-vitamins to fat metabolism. They have secured evidence in rats and in pigeons that vitamin B<sup>1</sup> causes fat synthesis from carbohydrate. This vitamin, riboflavin, and vitamin B<sup>6</sup> have complementary effects upon body weight in young rats; the increase in weight is partially due to an increase in body fat

presumably synthesised from carbohydrate.

Mr. E. J. Reedman continued his study of vitamin C under Dr. McHenry's direction until January 1 when he left to accept a position in the United States. He has secured evidence of the existence of a protein-ascorbic acid complex in certain tissues. Repetition of the work of Szent-Györgyi on vitamin P gave inconclusive results although there is some evidence that such a factor exists. In paired feeding experiments Mr. Reedman found that ascorbic acid caused the weight of guineapigs to be greater than in the control, deficient group. Since Mr. Reedman's departure, the work on vitamin C has been continued by Miss Margaret Sheppard. She has amply confirmed the effect of ascorbic acid in paired feeding experiments and, in collaboration with Dr. Fidlar of the Department of Physiology, has shown that the difference in weight is due to alterations in metabolism. The oxygen consumption of C-deficient guinea-pigs is markedly greater than that of animals receiving the vitamin with the same amount of food. Using the paired feeding technique, Miss Sheppard and Dr. McHenry are studying various effects previously attributed to vitamin C deficiency to determine whether these are caused by vitamin deficiency or Indebtedness is gratefully expressed to the Banting Research Foundation for generous grants to Mr. Reedman and Miss Sheppard.

Mr. Philip Bouthillier of the University of Montreal was a guest in the department from April 4 to May 19. In collaboration with Dr. McHenry and Miss Sheppard

he studied the estimation of ascorbic acid in urine.

Dr. McHenry's expert collaboration with members of the Scientific Advisory Committee on Nutrition in the construction of a Canadian dietary standard and a report on methods for dietary surveys has been of great assistance in these projects.

The results of an investigation of the radiation factor in the heating of Canadian homes has been published by Dr. Partridge and Dr. MacLean. In this study information regarding all the factors—temperature, air movement, humidity, and radiation—was obtained from dwellings in Toronto and in the rural area. The findings were expressed in terms of effective temperature, equivalent temperature and equivalent warmth. The data for Canadian homes were compared with the values for comfort in English dwellings. The amount of heat loss of a subject by radiation and convection under the ventilation conditions which apply in Canadian houses had been calculated.

Dr. Partridge has continued to use the high gain amplifier to study the function of the various fibres of the vagus nerve and has shown that cardiac depressor fibres

may be identified in certain pulmonary branches of the vagus and that these fibres may act to hasten breathing. Dr. Partridge has another series of experiments in progress which are designed to study the effect on cats of a diet deficient in vitamin B<sup>1</sup>. The study has particular reference to the cardiac changes and the effect of this diet on the nerves of the heart. Amplified records are being made to show the effect of vitamin B<sup>1</sup> deficiency on nerve impulses which have been discovered in a pressor branch of the vagus arising in the right auricle.

In the section of industrial hygiene, Dr. Barrett, in collaboration with Dr. MacLean and Dr. McHenry, secured data which confirmed Forbes, Neale and Scherer's observations of the protective action of xanthine in carbon tetrachloride

poisoning.

Dr. Barrett and Mr. J. H. Johnston have continued the work on the fate of trichlorethylene in the body. It has been shown definitely that trichlorethylene conjugates in the body in such a way that the steam distillate of urine from animals that have been exposed to trichlorethylene vapour contains chloroform. Some progress has been made in isolating the conjugated material.

A new reaction for the identification of carbon tetrachloride has been discovered. The reaction is being used in developing a method for the quantitative determination

of carbon tetrachloride in air.

#### Farm Section (under the direction of Dr. N. E. McKinnon)

As in previous years the Farm Section has been responsible for the production of various biological products, namely. diphtheria. tetanus. scarlet fever. perfringens and staphylococcus antitoxins, anti-meningococcus and anti-pneumococcus sera, diphtheria toxoid, smallpox vaccine and rabies vaccine. In addition certain experimental sera, including anti-dysentery, anti-B. influenzae and anti-influenza virus, have been prepared.

Distinct improvements in the production of anti-pneumococcus serum have been effected. During the past year very considerable quantities of rabbit anti-pneumococcus sera (types I, II, V, VII, VIII) have been prepared. Therapeutic trials of certain of these sera have been made under the direction of Professor Duncan Graham at the Toronto General Hospital, and in certain other medical clinics. The results thus far obtained suggest that rabbit anti-pneumococcus serum as presently prepared can be given to patients without producing any immediate reaction.

The flocculation test is now used for the preliminary testing of the titre of scarlet fever antitoxin with satisfactory results. The large-scale production of rabies vaccine has been continued. The preparation of heparin is now being carried on under the direction of Dr. Arthur Charles. Greatly improved yields of the material are now being obtained. There is at present great interest in the use of heparin clinically. The recovery of volatile solvents has been carried on, on an even greater scale than in previous years, in the special laboratory constructed for the purpose.

The guinea-pig, rat, mouse and ferret colonies have been maintained most satisfactorily. A very marked increase in the size of the guinea-pig, rat and mouse shipments has been recorded for the present year.

shipments has been recorded for the present year.

Investigation of various problems closely related to production has been under-

taken in the past year.

Dr. Cameron has overcome some of the difficulties encountered in his earlier attempts to repeat Rane's work on the flocculation of scarlet fever toxin and antitoxin; this procedure is now used to titrate "trial bleeds" and toxin.

Dr. Siebenmann has continued his study of the discoloration of silver foil in the cultures of certain bacteria. He has given considerable attention to investigation of meningococci, their virulence, the lethel potentialities of culture filtrates and their anti-genicity, the titration of anti-meningococcus serum, and the extraction of specific fractions of meningococci. His observations so far show that the filtrate from prolonged culture of meningococci in liquid medium is highly toxic and lethel for

animals, including horses, when administered cisternally or intravenously, that it serves as an efficient antigen for the bacterial antibody but that it does not elicit any antibody which will protect against itself. This work is being carried further. Dr. Siebenmann has made a full chemical investigation of the new well water, its iron content and removal, its aggressiveness, etc., and has now undertaken a more complete chemical investigation of the problems associated with diphtheria toxin production.

Dr. French has studied certain aspects of the nature of antitoxin and toxinantitoxin union. His obesrvations fail to substantiate the suggestion that refinement
of antitoxin by peptic digestion yields antitoxin in purer state or in a smaller
molecule than that achieved by other forms of purification. He has studied the
fractionation and concentration of the pneumococcus protective antibody in both
horse and rabbit immune serum. The complete solubility of the rabbit pneumococcus
antibody in distilled water or in low salt concentrations is in marked contrast to the
complete insolubility of the horse pneumococcus antibody. This offers the possibility
of obtaining very high potency material, in other words a large dose in very small
volume, from rabbit serum; an investigation of this possibility is under way. The
results of various methods of concentration will be published in the near future.
They show that a combination of sodium chloride and ammonium sulphate is
superior to other agents.

#### The Library

Connaught Laboratories library, which each year is being added to, is accessible not only to members of the staff of the Laboratories but also to graduate and undergraduate students in the School of Hygiene, Faculty of Medicine, School of Nursing and other faculties and departments. Each year Miss Olga Somerville, the Librarian. has recorded an increased attendance of those desirous of availing themselves of the facilities of the library. The files of bound periodicals now numbering 2,425, and the collection of reprints and pamphlets, are particularly valuable for research workers and others interested in the original publications of many of the classical contributions in the fields of bacteriology, immunology, public health, vital statistics, physiology, biochemistry and epidemiology.

During the past year the library fortunately come into possession of a number of especially valuable reprints of early articles by Robert Koch. For these the Laboratories are indebted to the "Robert Koch Institute for Infectious Diseases" in Berlin. As in previous years the library is under obligation to the Canadian Public Health Journal for a number of current periodicals received in exchange by the Journal. Volume IX of the Studies from Connaught Laboratories appeared in February. It consisted of no less than fifty reprints of articles published during the

year by members of the staff of the Laboratories.

The translation service carried on by Miss Pichler has been of great assistance to many members of the staff. The collection of translations has been catalogued according to the subjects for reprints, and many translations of earlier and much used papers have been revised and retyped. The bi-weekly indexes have been continued and are most helpful. Current periodicals are sent to the Farm section for the use of the staff, they remain there a brief period and are then replaced by the current numbers of the journals. In this way the library serves as a valuable unifying influence between the University and Farm sections of the Laboratories.

The products made available by the Laboratories were:—diphtheria, antitoxin, tetanus antitoxin, perfringens antitoxin, scarlet fever antitoxin, staphylococcus antitoxin, anti-meningococcus serum, anti-pneumococcus sera, antianthrax serum. diphtheria toxoid, staphylococcus toxoid, Schick-testing preparations, scarlet fever toxins, typhoid vaccines, pertussis vaccines, vaccine virus, rabies vaccines. old tuberculin, pneumococcus typing-sera, preparations of heparin, liver extracts, Insulin, Protamine Zinc Insulin, adrenal cortical extract, pituitary extract (posterior lobe), and epinephrine hydrochloride solutions.

Connaught Laboratories have been happy to receive, during the year, visitors from the following countries:—Canada (Alberta, British Columbia, Manitoba, Nova

Scotia. Ontario, Quebec and Saskatchewan); U.S.A. (California, Idaho, Illinois, Massachusetts, Missouri. New Jersey, New York and Tennessee); Belgium; Ceylon; China; England; France; India; Hungary; Jamaica; Japan; Korea; Panama; Roumania; Scotland; South Africa: Sweden; Yugoslavia.

Western Division (under the direction of Dr. C. E. Dolman)

On October 1st, 1938, the Western Division of Connaught Laboratories will have completed three years of operation, with quarters borrowed from the department of bacteriology and preventive medicine in the Science Building of the University of British Columbia. In this period it has created for itself a position of unique importance in the life of the University, of the medical profession, and of the public health services, of the Province. This position has been attained through rigid adherence to the pursuit of useful but disinterested researches in bacteriology, immunology, and epidemiology; through consultative advice freely given to practising physicians and surgeons, to the honorary medical staffs of hospitals, and to public health organisations; and through the prestige which undoubtedly accrues to the Western Division from its close affiliation with the University, and with the Provincial Board of Health, of British Columbia.

Staff.—The staff numbered five, as in previous years. Dr. C. E. Dolman, as research member of Connaught Laboratories, continued to give one-third of his time to supervising, and taking part in, the work of Western Division. In December, 1937, Dr. R. J. Gibbons accepted an appointment as chief bacteriologist to the Laboratory of Hygiene. Department of Pensions and National Health, Ottawa, and commenced his new duties on January 1st. 1938. This loss of so loyal and industrious a colleague was tempered by the satisfaction of knowing that his appointment to this important post was in no way hindered by the period of over two years spent as research assistant in the Western Division. In place of Dr. Gibbons, Dr. K. F. Brandon was appointed, commencing June 1st, 1938, as research assistant in Connaught Laboratories, attached to Western Division. Dr. Brandon will devote two-thirds of his time to research in bacteriology, immunology, and epidemiology, under Western Division auspices. For the remaining one-third of his time, Dr. Brandon will carry certain administrative duties as Epidemiologist to the Greater Vancouver Health Committee, and will also act as Director of the University of British Columbia Health Service.

The laboratory technicians. J. Polglase and V. Bjarnason, continued to give invaluable assistance throughout the year; while the other technician. M. McClellan. who left in May to join the Royal Canadian Air Force. after two years of most

satisfactory service with us. has lately been replaced by F. Jefferies.

Research Work—Dr. Dolman has now completed the seventh year of research, under Connaught Laboratories' auspices, into the complex pathogenic and antigenic properties of staphylococcus toxins. During the year under review, the kitten test for staphylococcus enterotoxin, first developed in Western Division, appears to have achieved general recognition as the best available method for detecting this substance. In collaboration with Mr. R. J. Wilson, who held tenure until September 30th, 1937, of a much-appreciated grant from the Banting Research Foundation, Dr. Dolman published the results of further work on the enterotoxin. Evidence bearing on the specific antigenic nature of the enterotoxin was presented, based upon animal experiments, and also upon flocculation reactions in which absorbed reagents were used.

Considerable work has been done upon the mehanism underlying the hot-cold lysis of sheep cells by certain staphylococcus filtrates, a phenomenon which has been attributed to the *B* toxin of staphylococci. Some highly interesting observations have been made regarding the action upon both rabbit and sheep red cell suspensions of staphylococcal filtrates containing a mixture of the *a* and *B* toxins. The important fact appears to have emerged that sheep erythrocytes which have been acted upon by the *B* toxin are rendered to some extent resistant to the action of *a* toxin, and vice versa. The bearing of these findings upon the haemolytic effects which develop

around certain strains of staphylococci growing on blood agar plates has been investigated. The results of this work on the haemolysins, as well as of the work on the enterotoxin, were presented in preliminary form at the Christmas meeting of the Laboratory Section of the Canadian Public Health Association in Toronto. Arising out of these presentations, requests have been received from centres all over the world for strains of staphylococci having characteristics therein described.

Staphylococcus antitoxin and toxoid continue to be used in the Province with marked success under appropriate circumstances. The close contact and happy relations which Dr. Dolman has been able to maintain with doctors in charge of cases of severe staphylococcal infection at both the large hospitals has led to some remarkable recoveries from staphylococcal blood stream infection, which it is hoped may later be published in collaboration with the doctors concerned. Dr. J. R. Naden in particular, of the Vancouver General Hospital visiting staff, has demonstrated a keen appreciation of the principles involved in staphylococcus antitoxin therapy. In three or four instances, over a million units of staphylococcus antitoxin have been administered by the intramuscular route. In one recent case, a young girl desperately ill with a septicaemia received about four million units of staphylococcus antitoxin, and eventually made a recovery which could not possibly have been anticipated in the absence of serum therapy. Dr. Naden has gallantly supported the cost of such treatment entailed to the hospital concerned, by the irrefutable argument that the value of a human life saved cannot be measured in terms of dollars spent upon a specific biological product.

In addition to the work on staphylococcus, Dr. Dolman has been very much concerned during the past year with the problem of *Brucella abortus* infection. In collaboration with the staff of the Provincial Board of Health Laboratories, and with graduate students of the department of bacteriology and preventive medicine, important facts bearing upon the Brucellosis situation in and around Vancouver have been discovered. These findings were also presented, in collaboration with Miss V. Hudson, at the Laboratory Section meeting of the Canadian Public Health Association, and have since been published in the "Journal." These findings have lent great weight to the campaign which we have continued to press for the compulsory

pasteurisation of all milk sold in Vancouver.

Prior to his resignation from the staff of Connaught Laboratories, Dr. Gibbons completed a valuable trial of the relative merits of the old microscopic smear method and of the new cultural method of determining residual or doubtful gonococcal infection. His findings, which were presented at the Annual Meeting of the Canadian Public Health Association in Ottawa in June, 1937, were published in the "Journal" during the year under review. As a result of his work, the Provincial Board of Health Laboratories decided to make facilities available to the Division of Venereal Disease Control of the Provincial Board of Health for gonococcus culture in suitably selected cases. The technique has proved a most valuable addition to public health diagnostic laboratory methods. This fittingly illustrates what has been pointed out in previous reports—the practical advantages of coordinated activities in the broad field of preventive medicine to all the participating organisations.

Since commencing duties in Western Division, Dr. Brandon has started promising researches into two main fields; first, the epidemiology and bacteriology of typhoid fever. with special reference to the applicability of Dr. Craigie's method of grouping by use of specific Vi phages; and secondly, the epidemiology, bacteriology, and immunology of scarlet fever. This latter disease is always present in Vancouver. The specific biological agents available for its treatment and prophylaxis have not been properly and adequately used by local physicians and institutions, and there are many controversial points in the field of public health administration which have arisen around the problem of the control of scarlet fever. It is believed that useful results, both direct and indirect, would accrue from Dr. Brandon's researches in this field. His position as City Epidemiologist will, of course, facilitate his tracing of the clinical aspects of the problem which he pursues to conclusion in the laboratory,

while the Provincial Laboratories will prove a valuable source of strains of typhoid

bacilli and of haemolytic streptococci for his investigations.

In conclusion, it may be pointed out that the Western Division, as it exists at present, is still gravely handicapped through lack of accommodation, while any possibility of future expansion of its activities must be contingent upon more space becoming available. The prestige which Connaught Laboratories holds in the eyes of the University of British Columbia authorities, of public health officials, and of the medical profession in this Province, was never higher, and has unquestionably been enhanced since the establishment of the Western Division. If the opinion of any representative of the foregoing groups were asked, there could be no doubt of their emphatic endorsement of the establishment of the Western Division, and of their desire that it should prosper and expand.

The Director is indebted to the members of the Connaught Laboratories Committee of the Board of Governors for continued support throughout the year; and to his colleagues and to the members of the staff of the Laboratories generally, he is

greatly indebted for their collaboration and assistance.

# (23) STATEMENT REGARDING THE MUSEUM OF ARCHAEOLOGY (Professor C. T. Currelly)

During the year 1937-38, the steady growth of the Museum collections continued.

Ninety-one donors presented a large number of objects. Many of these were of very considerable artistic and monetary value: others, while lacking intrinsic value, had distinct importance in relation to objects already in the Museum collections.

Perhaps the most outstanding acquisitions were in the field of European scultpure. Following the 13th century Spanish Madonna and Child reported last year, we obtained three other extremely important pieces, one 12th century Spanish, one 13th to 14th century French, the third 16th century French. One of the interesting Nottingham alabaster carvings of the 14th century, a "Coronation of the Virgin," was also received. Another addition of the highest importance was a carved oak reredos, Flemish work of the 16th century. A masterly piece of carving, it embodies all the chief features of late Gothic art, and is therefore a marvellous teaching piece.

The Egypt Exploration Society as usual sent us some of its finds of the previous season's excavations, in recognition of Sir Robert Mond's contribution to its work; these consisted of thirty-nine objects from Sesebi, Nubia. University College. London, also presented over a hundred Egyptian weights, through the kindness of

Professor S. R. K. Glanville.

A few pieces of metalwork were obtained, the best of which were a French-Canadian silver chalice of the early 19th century, a Sheffield plate dish-ring, and three pieces of pewter. A church desk of fine design and workmanship and a comb-back Windsor chair were added to the French-Canadian room.

In the department of European ceramics, especially interesting accessions were a beautiful 17th century pottery plate made at Nevers and an early Sevres soft-paste cup and saucer. A dozen pieces of English porcelain included Worcester.

Spode. Rockingham and Swansea wares.

Great good fortune attended the glass collection. During the preceding year we had been offered a rare opportunity to acquire a large collection of the finest Irish and English glass of the 18th and 19th centuries. When this collection, nearly three hundred pieces, was put on view, Mrs. R. Y. Eaton very generously paid for it. Through the gift of Lieut, Col. S. R. Heakes, nine more pieces of English and Irish glass of equally high quality were received.

Gifts to the textile department included several 19th and early 20th century dresses and hats, a lace-trimmed linen nightgown and paid of silk stockings worn by Queen Victoria, four pieces of lace, a late 18th century cope of French brocade, and two important Stuart needlework pictures in petit point and other stitches.

presented through the kindness of Mrs. H. J. Cody.

One of the most exciting events of the year was our acquisition of a Japanese sutra printed about the year 770. By order of the Empress, a million of these charms were printed, encased in a million tiny wooden pagodas, and presented to a number of the temples. They are the earliest piece of printing known, and though numbers of them survive in Japanese temples. only half-a-dozen are in the possession of European and American museums. Other additions in the department of printing and the book were a work on anatomy from the press of Christopher Plantin, 1566, bound in beautifully tooled leather in 1567. a gift from the late Mr. T. D. M. Burnside; an illuminated manuscript on parchment; a leaf from a French 14th century antiphonary, with a beautifully illuminated miniature painting of the Resurrection; thirteen prints by contemporary Canadian and American artists; the copper-plate for the mezzotint portrait of General James Wolfe by R. Houston after Hervey Smith, the gift of Sir Robert Mond. The Post Office Department continued to deposit in the museum a specimen of each new issue of Canadian postage stamps; and a large number of stamps was received through the enthusiasm and energy of Mr. Paul Hahn.

An early bronze libation cup, a "Temmoku" pottery jar, a small iron-rust porcelain vase, and a number of lithographs were the only additions to the Chinese collection. Outstanding in the Japanese department was the acquisition of sixty drawings by Hokusai. Other additions of special interest were twenty-two handsome brocades of the 18th and 19th centuries, seven silver vessels and seventeen pottery tea bowls and jars.

The Near Eastern collections were augmented by two 13th century Persian pottery bowls and three fine Persian miniatures. An interesting Indian miniature was also obtained; and a valued gift was a small plaster head from Afghanistan, illustrating the Graeco-Buddhist sculpture of the 2nd century.

In the ethnological department, a few pieces were acquired by purchase and a large number through the usual steady stream of gifts. The following stand out as specially important: an effigy stone pipe from Ontario; a red obsidian spearpoint from Saskatchewan; six masks and an exquisitely woven cedar basket from British Columbia; Eskimo material from King William Land and Victoria Land; a Nasca pot; a collection of Indo-Chinese material from Laos; a number of S'ora artifacts; and a collection of Central Australian material.

The work of the Museum carpenter shop was concentrated as much as possible on the making of mounts for the ethnological collections and the cabinets of pull-out drawers for the Northern American Indian Study Room, where many thousands of specimens have been arranged geographically. A good start was also made on the storage cupboards, for which the making of gallery cases and mounts had left no time since the reopening of the Museum.

Beside the regular cleaning and preservation of specimens, the preparator's department was able to carry out the special task of cleaning our hundred Paul Kane paintings, which seem to be used more each year in connection with the study of the Indians of Ontario and the West a century ago. A great deal of mounting was also carried out, mainly for the ethnological department.

Satisfactory progress was made in the printing of permanent labels, and in the accession catalogue and the pen-and-ink drawings for the scientific catalogues. Thanks to two new part-time appointments, we were able to give more help to Miss Home in the teaching of the constantly increasing number of groups of schoolchildren and adults who came to the Museum for instruction.

Publication of the Bulletin was resumed after a lapse of five years due to shortage of funds. No. 12 appeared in July, containing Dr. White's description of one of our great Chinese temple frescoes. The other two frescoes will be published

in succeeding Bulletins.

Two exhibits of two cases each were arranged to take part in the Royal Ontario Museum's travelling loan exhibits. In the spring we again loaned a gallery for the annual exhibition of the Canadian Guild of Potters.

The two great highlights of the year were connected with the East Asiatic department. One was the opening of the Sigmund Samuel Gallery, housing the great Professor H. H. Mu Library of Chinese books. The other was the Rockefeller Foundation's presentation of a grant, to be paid over a five year period, for the development of teaching and research in Far Eastern subjects. Under the first year's grant, we have been singularly fortunate in securing the services of the Rev. J. M. Menzies, without a peer in his knowledge of early periods of Chinese archaeology.

A hope of many years has been realised in our start at scientific excavation. During the spring it became feasible to plan for two months' work on an Ontario Indian site; and at the beginning of July, a small group under the leadership of Dr. Nash will leave for Aylmer, where a promising site on the farm of Mr. John Pound has been kindly placed at our disposal. I trust that next year's report will announce finds of sufficient scientific interest to have made an auspicious start at what I hope may become a regular part of our year's work.

# (24) STATEMENT REGARDING THE ROYAL ONTARIO MUSEUM OF ZOOLOGY

### (Professor J. R. Dymond)

A new series of exhibits illustrating various biological principles constitute the most outstanding addition to our gallery during the year. The first three of these illustrate the role of the predator, pyramid of numbers and periodic fluctuations. The exhibit illustrating the economic value of Canada's fisheries has been reconstructed and made much more attractive. A series of enlarged models of small animals including house fly, grasshopper, spider and wood louse should prove of interest. Additions have also been made to the systematic collection of mammals, birds, reptiles, fish, etc.

Additions to the mammals mounted under the Reuben Wells Leonard bequest include grizzly bear, Stone's mountain (black) sheep and four outstanding specimens

of the following breeds of dogs.—Saluki, beagle. and Kerry blue terrier.

During the year several temporary exhibits were arranged including work of Technical School are students done in the Museum, Australian shells, nature projects by children, wild-life photographs, aquarium show and tropical butterflies and moths.

The scientific collections shown steady growth as a result of field work, donations and incidental purchases to fill gaps in material obtained by other means. The number of specimens of the more important groups added during the year were as follows: mammals 1217, birds 2322, reptiles 100, amphibians 258, fish (lots) 1286, insects and spiders 11,530, molluscs and other invertebrates (lots) 4585.

Accessions to the library were 210 books and 3440 pamphlets. The library now

contains 2204 books and 15,615 pamphlets.

Some of the more outstanding donations received during the year were:

Australian Museum. Sydney, Australia (through Miss H. Bain). Collection of 40 species of Australian shells.

Boggs, C. D., International Petroleum Company, Negritos, Peru. Collection of

234 bird skins and 4 sets of eggs from Peru.

Chant, Professor C. A., Richmond Hill, Ontario. Collection of 267 shells, representing 110 species collected in Australia and 1 shell rescued from the university fire of 1890.

Cook, Marshall A., Toronto, Ontario. Mounted sailfish.

Coventry, Professor A. F., Toronto, Ontario, 'Collection of 73 small mammals, 15 fish, 3 birds' nests and 2 snakes.

Hahn, Paul. Toronto. Ontario. Passenger Pigeon.

Kerr, Charles J., Hamilton, Ontario. 18 journals of his father and brother. John W. and Fred Kerr, Fisheries Inspectors of Hamilton, 1864-1898; 39 early reports of the Fisheries Department at Ottawa, 14 other government reports and 5 books.

Marsh, Rev. D. B., Eskimo Point, N.W.T. Skin, skull and antlers of a barren ground caribou, 9 fish, 10 birds and 115 insects.

MacGillivray, G. A., Toronto, Ontario. Diary of Chas. Fothergill.

McIlwraith, Estate of the late T. F., Hamilton, Ontario. 12 mounted birds including Passenger Pigeon, Mississippi Kite, and Eskimo Curlew.

National Parks Bureau, Ottawa, Ontario. One Grizzly Bear and skeleton. Quentin, Rev. A. P., Toronto, Ontario. 130 skins of birds from West China.

Toronto Parks Department, Toronto, Ontario. 10 birds, 11 mammals, 9 reptiles, including 2 South American alligators, 2 gila monsters and black and green iguanas.

The Museum study of the fauna of Ontario is being continued through summer surveys in various parts of the province. Our area is in a particularly strategic position so far as certain zoogeographic problems are concerned.

The loan of material to other institutions for use in connection with their researches is increasing year by year. During the past year material has been loaned to the following: Carnegie Museum, Pittsburgh; Philadelphia Zoological Society; Philadelphia Academy of Natural Sciences; University of Minnesota; United States Bureau of Biological Survey; California Academy of Sciences; Dr. H. C. Oberholser.

The Museum is being called on more and more for the identification of material by a great variety of organisations and individuals. Following are some of those for whom material has been identified during the past year; Entomological Branch, Department of Agriculture, Ottawa; Fisheries Department, Ottawa; Dr. C. H. D. Clarke, National Parks Bureau, Ottawa; Dr. D. S. Rawson, University of Saskatchewan; R. A. McKenzies, Biological Board of Canada; Museum of Zoology, University of Michigan.

Through the cooperation of naturalists, sportsmen and other correspondents, the Museum is keeping an annual record of changes in the numbers of many kinds of animals. Such a record will be of increasing value in the future, in researches on animal population. During the past year 369 correspondents supplied such information. Of these 312 came from Ontario.

For the past two years various nature projects with children have been carried out at the Museum. Such projects are especially suited to the new Public School curriculum which emphasises activity on the part of the pupils. Exhibits of the results of these projects which have been held in our gallery have created much interest in this type of work and it is probable as a result that such natural history project work will find its way into the schools.

The number of persons seeking information is steadily increasing as is also the demand for the loan of lantern slides, and other forms of service offered by the Museum.

# (25) STATEMENT REGARDING THE ROYAL ONTARIO MUSEUM OF GEOLOGY

(Professor E. S. Moore)

In addition to the regular work of the Museum, the staff participated in a number of public activities during the year. Three lectures were provided for the Tuesday afternoon series of lectures on Natural History: The Origin and Decay of Mountains, by the director, The Romance of Silver, by the assistant director, and The History of the Porcupine Gold Camp, by Professor G. B. Langford of the university staff. The Museum joined with the Museum of Mineralogy in providing an exhibit which has been displayed in some of the Ontario towns and cities. Several hundred young people, from various centres in the province, have been provided with instruction in geology in connection with excursions to Toronto.

The following additions have been made to the collections:

Donations: Mica from Pontiac country, Quebec, by Dr. E. W. Shaw. Tourmaline from an Ontario locality, by Mr. John Jacob.

Striated boulders of unusual type from Ohio, by Mr. K. R. Taylor. Ripple marked sandstone from the Don Valley, by Dr. V. J. Okulitch.

Exchanges: One hundred typical British rocks, from City of Liverpool Free Public Museums, Dr. D. A. Allan, Director.

Purchases: Ores, concretions, petrified wood, meteorite, ornamental stones, and other specimens from eleven states in the United States, and from Mexico, Brazil, Bolivia, England, Germany, Czechoslovakia, Roumania, Siberia, Australia, New Zealand and South Africa. Books for the Museum library.

Collections: Collections of rocks and ores were made by the Director in western Ontario and Haliburton county, and a specimen of folded iron formation by the Assistant Director, in the Kenora district, Ontario.

A very interesting and instructive geological relief model, showing the Lake Iroquois shore line, the topography and the geology in the Toronto-Hamilton-Niagara area, was constructed in the Museum and placed on exhibit.

# (26) STATEMENT REGARDING THE ROYAL ONTARIO MUSEUM OF MINERALOGY

(Professor A. L. Parsons)

It is with great regret that the retirement of Professor T. L. Walker as director of this museum is here recorded. His work from the founding of the Museum has been a work of love. During the academic year all his time that could be spared from his university work was devoted to the service of the Museum, and most of his summer holidays were given up to collecting abundantly from Canadian mineral localities. He was ever the first on hand and the last to leave and was a continual source of inspiration to his colleagues in their work.

His work in the past twenty-five yeas has augmented a good university collection of minerals and rocks, until the Museum has now not only one of the finest gallery displays in America but also a collection which in point of completeness is excelled by few museums in the world. When the history of the Museum, which is now in contemplation, is written, the extent of his services can be better set out. As director *emeritus*, it is hoped that we may have the benefit of his judgment and advice for

many years.

Dr. V. Ben Meen devoted the months of July and August to a collecting trip in Northern Ontario and Quebec, securing some striking exhibition specimens which have been put on display and a large quantity of material which is to be used in our

exchanges with other institutions.

In addition, our collections have been further enriched by purchase, exchange and donations by friends. Further additions of fine specimens of gem stones have been made from the money provided by the bequest of the late Reuben Wells Leonard. Esq. Additional semi-precious stones from Canada have been added by donations from Dr. J. Satterly and J. C. Rogers, Esq., as well as by purchase from H. L. Richardson, Esq.

The collections have been enriched in new species by a continuing exchange with Harvard University. An exceptionally fine series of minerals from the eryolite deposit at Ivigtut, Greenland, has been received from the Philadelphia Commercial Museum following an expedition of the director, C. R. Toothaker, Esq. Our most extensive exchange has been with the New York State Museum from whom we receive

about two tons of calcite crystals from Sterlingbush, New York, to be used in the reconstruction of a calcite cave. The largest of these crystals weighs 476 pounds. At present most of the crystals have a white or grey coating which must be removed before the final reconstruction of the cave. After the removal of this coating the crystals are bluish purple in reflected light and a beautiful pink in transmitted light. It is expected that the installation of this exhibit may be completed in about a year.

At the request of the Department of Trade and Commerce, the Museum loaned a collection of Canadian semi-precious stones to be incorporated in the Canadian exhibit at the Paris Exposition. A similar lot was displayed in the Museum's exhibit at the Canadian National Exhibition. In collaboration with the Royal Ontario Museum of Geology a collection of minerals, rocks and ores was exhibited at Kitchener and Stratford as a part of the Museum's policy of encouraging loan

exhibits in other parts of Ontario.

The automatic balopticon with its series of pictures relating to the mineral industry continues to be anattraction to young and old alike. The exhibit of flourescent minerals is a never-failing attraction where thousands can see the different effect of ordinary light and ultra-violet light in producing colour in certain minerals. An ever increasing number of students are making use of the systematic collections of minerals and rocks and the paragenetic collections, with most gratifying results.

During the past year several special excursions of school children from other centres in Ontario have come to the museum on Saturdays. This involves extra work by members of the staff of the museum to give instruction to groups in the gallery. Arrangements are being made to continue this extremely important phase of the museum's work during the coming year, which may possibly involve the employment

of assistants for the work.

The growth of the educational activities of the Museum as a whole has necessitated the giving up of a portion of our storage space so as to provide room for a children's museum and office quarters for the teaching staff. If the present policy of the Museum is to be continued it will be necessary in the near future to

provide additional safe storage for duplicate material.

The routine work of the Museum has been well carried on by the two paid non-scientific assistants, and the part-time scientific assistant curator, Dr. V. Ben Meen. has completed an investigation of an unusual type of cancrinite from Bancroft, Ontario. By special leave he was able to take advantage of the gracious permission of the Assistant Secretary of the United States National Museum to work under the direction of Dr. W. F. Foshag during the month of May and part of June, in improving his knowledge of museum technique and mineral analysis. In the best interests of the Museum it is desirable that this scientific work should be augmented by the assistance of a qualified man who should devote his entire time during the winter months to the service of the Museum.

#### (27) STATEMENT REGARDING THE ROYAL ONTARIO MUSEUM OF PALAEONTOLOGY

#### (Madeleine A. Fritz)

Considerable attention has been focused on this Museum during the past year owing to the installation in the galleries of invertebrate palaeontology of a magnificent series of mural paintings, the work of the eminent Canadian artist Mr. G. A. Reid. These murals, which are being provided from the funds of the Reuben Wells Leonard bequest, depict in a most sriking manner the history of the world from its misty beginnings to the more or less well ordered world as we know it to-day.

Other outstanding exhibits place in the galleries during the past year include:

(1) A Pleistocene mammal group from the asphaltic deposits near Los Angeles. This group consists of a sabre tooth tiger, two extinct wolves, and a giant sloth. It is accompanied by a painting which greatly aids the imagination in reconstructing a scene in California characteristic of the time when the skeletons, here displayed, were parts of living animals.

- (2) The skull of a carnivorous dinosaur from the Cretaceous of Alberta.
- (3) Two cases in which Jurassic and Cretaceous sea life may be seen diagrammatically illustrated by a series of life-like models.
- (4) A case showing calcaregous structures thought to be formed through the agency of algae that lived during various geological periods. Accompanying the specimens are photographs illustrating extensive limestone formations built up almost entirely of these structures, as well as a map of North America indicating their geological distribution.

In connection with the Museum's general educational program, members of the palaeontological staff have taken care of twenty-one lectures and demonstrations to children from out of town schools, in addition to four Saturday morning lectures to groups of over four hundred Toronto children.

In the series of popular public lectures sponsored by the Committee of Directors the Museum of Palaeontology contributed two.

The following lists indicate the chief acquisitions to the Museum during the past year:

### By exchange

Specimen of the extinct Dodo for an unprepared skull of dinosaur (Anchiceratops)—Dr. T. Barbour, Harvard University.

Collection of Australian sponges for a kull of fossil rhinoceras (Coenopus) and the skull of an oreodont (Merycoidodon)—R. Bedford, Esq., Kyancutta Museum, South Australia.

Collection of Permian brachiopods from India for a set of Ontario brachiopods
—Dr. Charles Schuchert, Yale University, New Haven.

A series of Southern Methodist University publications for collection of publications by Dr. W. A. Parks and others—Dr. C. C. Albritton, Southern Methodist University, Dallas, Texas.

### By donation

Two specimens of Devonian fish—Mr. R. G. Stewart, 54 Wychwood Park. Toronto.

Two coral specimens from Pembroke, Ontario—Dr. V. J. Okulitch, Royal Ontario Museum.

Algal structure—Mr. M. Frank, Jarvis Street. Toronto.

Fine specimen of trilobite, Calymene niagarensis—Mr. C. E. H. Dowler. 9 Prince Arthur Ave.. Toronto.

Six blastoid specimens from Mt. Coleman, Alberta—Professor A. P. Coleman. Royal Ontario Museum, Toronto.

## By purchase

Large collection of invertebrate fossils—Mr. J. E. Narraway. Ottawa. Ontario. Large collection of calcareous algae—Dr. C. L. Fenton. West Liberty. lowa.

## By collection

Collection of Humber fossils—Fourth year students.

# (28) STATEMENT REGARDING THE EDUCATIONAL WORK OF THE ROYAL ONTARIO MUSEUM

(Helen Reynar, Secretary-Treasurer)

Owing to the poliomyelitis epidemic last autumn the educational programme planned for the year was considerably upset. Notwithstanding the delay of six weeks in commencing school classes at the Museum, reports on the year's work show a decided increase in attendance over last year.

Out-of-town-Groups

67 groups of school children (6.131 in all) visited the Museum from towns and cities outside of Toronto: Woodstock. Preston. Ridgeway, Elmira, Uxbridge, St. Catherines, Welland, Oshawa, Collingwood, Sudbury, Peterboro, among others. Included in this number were five large parties from Paris and Brantford, Trinity College School, Port Hope, London, Guelph, and Hastings County who enjoyed one of the popular "Museum Days" inaugurated last year. Assisting on these occasions were members of the Boy Scout Association who gave excellent service in conducting groups from one lecture to another.

#### Saturday morning lectures and movies

The Saturday morning illustrated lectures for children were carried on successfully, with a total attendance of 7,269. To prevent overcrowding, a plan was devised whereby the schools of the city were divided into three groups to come to the Museum on the first three Saturdays of the month, the fourth Saturday being reserved for separate and private schools of the city and for schools in the suburbs. Talks followed by moving pictures were given by members of the staff on the exhibits in the museum: "Fishing in the Prehistoric Past"—movie: "The Lost World; This Changing World"—movie: "Volcanoes, Glaciers, etc."; "Life in Egypt"—Movie: "Daily Life of the Egyptians"; "The Beaver"—Movie: "Grey Owl films".

#### Open Evenings

Six "Open Evenings" were held during the season, with an attendance of 998. The first Wednesday evening of the fall and winter months is reserved for clubs and societies who arrange in advance for special lectures in the galleries, one floor being open each evening. Among the groups were the following: The Runnymede Dramatic Reading Club, University Chapter of Royal Arch Masonry. Workers Educational Association, Boy Scout Leaders, Ontario Hunters and Game Protectors Association, the Zonta and Soroptomist clubs.

## Travelling Exhibits

Special selected exhibits have been sent on loan to Kitchener and Stratford in rotation for display in the public libraries. In connection with a zoology exhibit, Mr. Lester L. Snyder lectured in both cities on "The Effects of Civilization on North American Bird Life"; Professor Ellis Thomson spoke on "Gems" and Dr. V. Ben Meen on "Minerals as a Hobby" the former at Kitchener, the later at Stratford when the mineralogy exhibit was opened; in connection with the "Arms and Textiles" exhibit, Dr. Currelly lectured at Kitchener on "The Romance of your own Job", and in Stratford, with the Egyptian exhibit, on "Egyptian Tombs". At present there is a representative collection of Chinese objects in Kitchener. These loan exhibits are creating a great deal of interest and are attracting many visitors, as well as serving as excellent illustrative material for the schools.

### Pay Courses

Following her usual practice, Miss Ruth M. Home arranged two pay lecture courses, one on Pottery and Porcelain" with a registration of 62: the other on "The Modern House" with 35 in attendance.

In order to assist the teachers of Grade IV in new work required under the New Curriculum, a special course of 12 lectures was arranged for Thursday afternoons, with Professor T. F. McIlwraith and Miss Home in charge. 72 teachers availed themselves of this opportunity to gain information about "The African Negro", "Peoples of the Pacific", "The Eskimo", "Men of the Old and New Stone Age", "The Coming of Metal", "Communication", "Invention of Writing", etc.

### Tuesday public lectures

For the fifth consecutive season the popular Tuesday afternoon lectures were continued under the auspices of the Committee of Directors, a series of seven archaeological lectures before Christmas, followed by ten on natural history subjects after Christmas. There was an attendance of approximately 3,500 at these lectures.

### Miss Payne's public school classes

During the school year Miss Lilian J. Payne, teacher at the Museum under the Board of Education, lectured to 22.885 children in 601 classes. Four classes from the VII and VIII Grades visit the Museum daily. The pupils of other Grades are

taken care of by Miss Home and Mr. F. A. Urquhart.

To meet the steadily increasing demands for lectures especially from the lower grades of the public schools and schools from out of town, the Board of Trustees appointed Miss Sylvia Hahn and Mrs. Stella Gould for part-time service during the busy months, and for the coming year Miss Ella Martin, M.A., Oxon. has been added to the staff as full-time assistant to Miss Home.

Steadily increasing use of the Museum is being made in connection with undergraduate university classes and by students in the School of Graduate Studies. This

applies in particular to the students registered in Fine Arts.

The total attendance at the Museum during the year ending 30th June, 1938, was 268,872.

#### (29) REPORT OF THE DIRECTOR OF THE DAVID DUNLAP OBSERVATORY

## (Professor R. K. Young)

During the year 1937-38 the 74-inch telescope as constructed by the Sir Howard Grub Parsons & Co. has continued to operate efficiently. At the time of its construction no facilities were available for coating the large mirror with the newly discovered aluminum or chromo-aluminum coating. Since the opening of the observatory we have used the chemical method of a silver deposit on glass. Apart from the labour involved in the latter process which has to be repeated two or three times per year the aluminum is a much superior reflector and lasts for several years. At least one company in the United States is now prepared to handle disks as large as 76 inches and we hope to be able to coat the mirror with aluminum in the not too distant future. If time is available a suitable apparatus of doing the secondary mirrors will be constructed in our own workshops.

As mentioned in the report of last year the need is felt of subsidiary pieces of apparatus. During the year we have put the 19-inch telescope into operation and made the upper end of the tube rotative. A self-recording microphotometer has been constructed in the workshops and the temperature control of the Hilgerspectrograph

is being converted to the Wheatstone bridge method.

The number of clear working hours was about the same as last year, 1275 and during this time 1216 plates were secured. During the year there were 2730 visitors

to the observatory.

Accessions to the library number 207 as follows: gifts 68, purchase 38, exchange 14, from R.A.S.C. 87. There are now 3296 volumes in the library of which 1702 are on loan from the Royal Astronomical Society of Canada.

On the afternoon of Tuesday, April 25th, four oak trees were planted in front of the observatory. The ceremony was informal. Trees were planted by Mrs. Jessie Donalda Dunlap, the donor of the observatory, Sir William Mulock, Mr. Moffat Dunlap and Professor Chant. This forms an auspicious start to the eventual reforestating of the large observatory grounds.

A bi-weekly seminar has been inaugurated by members of the staff to facilitate covering recent astronomical literature.

#### (30) REPORT OF THE OFFICER COMMANDING THE U.O.T. C.O.T.C.

 $(Lt.-Col.\ H.\ H.\ Madill,\ V.D.)$ 

I have the honour to report on the activities of the University of Toronto Contingent of the Canadian Officers Training Corps for the academic year 1937-38 as follows:

The membership in the contingent, which showed a slight increase over the previous year, was distributed as follows:

Headquarters	7
"A" Coy (University College)	45
"B" Coy (Medicine & Dentistry)	75
"C" Coy (App. Science & Forestry)	94
"D" Boy (Arts other than U.C.)	70
Attached from other units for instruction	15
Attached from other units for duty	3
-	
	309

Enlistment in the corps is voluntary and the primary object of the training is to prepare candidates for War Office Examinations for Certificates "A" (lieutenant) and "B" (captain) in the various Arms of the Service. This training is obtained with the least possible interference with a civil career and in case of a national emergency holders of these specialised qualifications may perform the service for which they are best suited and which would be of the greatest benefit to the country, while their liability for service is no greater than that of any other Canadian citizen.

The examination consist of Part I, practical, and Part II, written, and cannot be taken before the second year of service. In 1937, seventy-six per cent. of the U. of T. candidates were successful in obtaining certificates. The 1938 results are not yet available, but 62 candidates took the Part II examinations and the following were successful in the practical examinations:

"A", Artillery       8         "B", Artillery       5         "A", Arty Survey       1         "A" Engineers       4         "A", Signals       3	"A". Infantry "B". Infantry "B". Machine Gun "A", Medical "B". Medical	10 1 6
Other qualifications obtained were,—		
Signals—Visual Telegraphy 8 Wireless " 2	Line Telegraphy	12
Canadian Small Arms School.—"A	A" Wing1	

The parades were held by companies twice a week of one hour duration and a battalion parade in uniform was held once a month at the University Avenue Armouries.

The course in rifle shooting was conducted for all ranks on the miniature range in Hart House and three prices presented in each company and one to the best shot in the contingent.

The Contingent was honoured in having Sergeant G. H. Elms selected as a member of the Canadian Contingent which took part in the ceremonies in London at the

Coronation of Their Majesties. King George VI and Queen Elizabeth on 12th May. 1937.

The Annual Inspection was held on Friday, 18th March, by Brigadier W. H. P. Elkins, C.B.E., D.S.O., and his staff who, after the ceremonial parade, inspected the members of the corps while conducting their work in the various arms. Brigadier Elkins presented the prizes for shooting and expressed himself as well pleased with the work which is being conducted.

# (31) REPORT ON THE ACTIVITIES OF THE STUDENTS' ADMINISTRATIVE COUNCIL

(E. A. Macdonald, B.A.. Secretary-Treasurer)

Provision was made in the University Act of 1906 for the Students Administrative Council to act as the representative body of the students of the University of Toronto and to afford a recognised means of communication between the university authorities and the student body. Since that date the scope of its activities has greatly increased.

The Students' Administrative Council is composed of the presidents or the elected heads of every official undergraduate body, both men and women, of every college and faculty which go to make up the University of Toronto. It is, therefore, a thoroughly representative university organisation and is a powerful unifying force in the University. In addition, there are two members of the staff appointed by the President as his representatives on the Council. Professor S. N. F. Chant, and Professor J. R. Cockburn; there is also the president who must be a graduate of not more than five years standing, the general secretary-treasurer and the associate secretary.

The work of the Council is carried on by five important sub-committees, the Publications Committee, the Finance Committee, the Debates Committee, the Sporting Activities Committee and the Loan Committee. The committees meet previous to each meeting of the Council and present their reports to the Council for their approval.

The publications of the Council include the Students' Handbook, which is given free of charge to every undergraduate on registration in the fall. coptains much valuable information about the University having the names, addresses and telephone numbers of every officer of every undergraduate society and organisation of every faculty and college in the University. The advertising which the book contains covers the cost of the book and allows as well a small profit on the book. A hundred issues of the Varsity are published throughout the term, five days per week. Approximately 6,000 copies are printed per day. A staff of 125 students is responsible for the news and feature writing and the technical work of producing the paper which is supervised by the Publications Committee of the Council. The editor of the Varsity and the associate editors, heads of departments. are paid salaries by the Students Administrative Council. Torontonensis, the annual year book, is produced each year, 1,350 copies being printed. Each member of the graduating class receives a book which is a very important historical record of undergraduate activities of the University. It contains the photograph and biography of every member of the graduating class, messages from the President and from the Deans of Faculties and Heads of Colleges, a photograph of every undergraduate organisation in the University as well as every athletic team in the University. It is a books very dear to every student in the graduating class. Both the Varsity and Torontonensis are great unifying forces in the University as students from every college and faculty in the University are on the staff of both these publications.

The Council again this year paid for one half the cost of printing the university directory of staff and students amounting to \$756. Financial aid was given to the University Drama Committee and a contribution was made to the Student Conference in Winnipeg, in December. The Council holds membership in the National Federation of Canadian University Students and is, by far, the largest financial contributor to this organisation. The Debates Committee was responsible for arranging debates with other Universities. A debating team from the University of Melbourne, Australia, visited the University of Toronto in the fall, a contribution to their expenses being made by the Students' Administrative Council and they were entertained by the Council while visiting the University of Toronto. In co-operation with the Osgoode Hall Legal and Literary Society, the Council financed and made arrangements for a debate with two representatives from Laval University. This Debate was held in the Trinity College Library. The Council sent two representatives to McGill University to take part in an intercollegiate debate there. The Committee on Sporting Activities looked after the organisation and administration of the University of Toronto band. New uniforms were provided for the band at a cost of \$1500 during the past year. The band has a membership of 55 students and is also a representative university organisation as students from every part of the University are members of the band. The Council sent the band to the out of town games with the football team and arranged for special excursions for students to these games as well. The band played at all the home games. The cheerleaders and the skits at half time at the Rugby games come directly under this Committee. In consultation with the men's and women's athletic directorates, the Students' Administrative Council recommended that a three dollar fee be imposed on all students which would cover their admission to football and hockey games to the stadium rink on certain days, the opening of Hart House athletic facilities at night and those of a women's building should such become available, as well as affiliations with outside clubs for certain sports for which the University lacks facilities. The undergraduate body voted by a great majority in favour of the plan and upon the request of the Council the Board of Governors imposed a fee for the 1937-38 session.

To train students in the field of symphonic music, the Students' Administrative Council organised the University of Toronto Symphony Orchestra, and purchased for this orchestra a valuable musical library to which additions are made each year. The orchestra is conducted by an undergraduate in the University and has more than 75 members at the present time, who like the members of the University band are selected from every constituent part of the University. The orchestra gives a concert, free of charge, for the student body in Convocation Hall each year.

The Council was host to a party of students from Finland comprising the Helsinki University Chorus in January. These students were welcomed by the President in the Senate Chamber and were given tea in Hart House by the Council. It was also host to a party of German Exchange students who visited the University in April.

The Loan Committee of the Council is composed of a member of the Board of Governors, Mr. J. J. Gibson, and the permanent officers of the Council. Mr. Gibson acts as chairman of the Committee. A total appropriation of \$8500 has been made from the surplus funds of the Council for the purposes of loans. This has been of the greatest help to a large number of students making it possible for them to complete their university course and graduate. That this assistance has been greatly appreciated is shown by the fact that students make these loans a first charge on their earnings after they have become established, and repayments have been so satisfactory that to date it has been possible to loan \$18000. The Council wishes to record the great debt it owes Mr. Gibson and to express its sincere thanks to him for his help in the administration of this fund. He has given freely of his time in interviewing students who apply for loans, and his judgment and wide experience are responsible more than any other single factor for the successful operation of this fund.

In addition to this loan fund a number of services have been carried on in the office of the Students' Administrative Council which have been of great value to the student body. The housing service is proving a great benefit to a large number of students. Rooms in boarding houses adjacent to the University are given a most rigid inspection during the summer months and the information is recorded on a card index in the Council office. As the Council is responsible to the owners of the houses for the students whom they send to them it is possible to get a much lower rate than the individual student could obtain. Each year, during the inspection a number of homes are recorded as not being proper places in which the students should live. Parents, of the first year students particularly, rely to a very great extent on the Students' Administrative Council to get the proper accommodation for their sons and daughters. One result of this activity has been that each year a number of homes are obtained who will provide free board and room in exchange for services about the house and this is of the greatest help to students who are in difficult financial circumstances. This was made possible for fifty-six students attending the University during the past year.

Recognising the need for some vocational guidance and employment service for students in the University, in 1933 an Employment Bureau was established. Contacts with employers were made first through the advertisers in the Council's publications. This year the employment bureau has become well known amongst employers owing to the fact that the persons sent to fill the various positions available were selected with care of proved satisfactory. The employment bureau is becoming one of the most important activities of the Students' Administrative Council. Many students rely to a great extent on this service to finance their university course. The bureau is chiefly concerned with providing summer, Christmas and part-time work, but in the past few years a number of permanent positions covering a wide field have been obtained for students when they graduate. During the past academic year, 1486 students were referred to positions and this year the number will be even larger. It is proposed next year to establish a permanent committee of the Council on Student Employment and Assistance.

The employment bureau, the loan fund and the housing service have made possible a large number of students continuing their university course, finally graduating and becoming established in a profession which otherwise would not have been possible. So much have these services been appreciated by certain students, that, entirely unsolicited, this year a sum of money amounting to \$900 was given to the Secretary-Treasurer of the Students' Administrative Council, without condition, to help worthy students who require assistance. The Council wishes to record its most grateful thanks to the donors of this money.

The activities of the Council so greatly increased that the office space in Hart House was not adequate to cope with the large number of students using the facilities of the Council. Consequently the Board of Governors provided increased accommodation in Hart House, and the Council now enjoys larger rooms which are satisfactory in every particular. The Council would like to record here its grateful appreciation to the President of the University for his whole-hearted and kindly interest in its affairs which is responsible in no small degree to larger space being provided. They also wish to record their appreciation and their sincere thanks to the Board of Governors of the University who provided the accommodation and to the acting Warden of Hart House. Mr. J. R. Gilley, and the Board of Stewards of Hart House for their interest and their co-operation in this matter.

At the opening of term in October the members of the Council were guests of the President and Mrs. Cody at dinner. Members of the Council representing the student body took part in the service of remembrance at the Hart House tower on November 11th.

Dr. W. Bryden, Warden of the Students' Union of the University of Melbourne, Australia, visited the Council and attended a meeting in December. Dr. Hannah of

the Associated Medical Services also attended a meeting of the Council and explained to them the work of his department.

The Council this year were again hosts at the Garden Parties given on June 9th and 10th following the conferring of degrees. The President and Mrs. Cody, President of the Council, the Vice-Presidents of the Council, the President of the Engineering Society, the President of the Medical Society, and the President of the Dental Parliament received the guests at the Thursday Garden Party. At the Friday Garden Party, the President and Mrs. Cody, and the President and Vice-President of the Students' Council received the guests. Through the co-operation of the Council, the graduation ball was again held in Hart House on Friday, June 10th. This was again by far the largest social event of the year. 2.693 guests attended it. The arrangement for this function was carried out in the Council office.

A second hand Book Exchange is operated in the women's office for the benefit of all women students and many hundreds of books are brought in and resold each year.



#### APPENDIX B

#### REPORT OF THE REGISTRAR

(A. B. Fennell, Esq., M.A.)

I beg to submit the following statistics for the year ending June 30th, 1938:-

- (a) Distribution of the staff of the University and University College (furnished by the Bursar).
- (b) Distribution of the staffs of the federated Arts Colleges (furnished by the Registrars of the colleges).
- (c) Registration of students by faculties and years.
- (d) Enrolment in the Arts Colleges (furnished by the Registrars of the colleges).
- (e) Enrolment in the university department in Arts (furnished by the departments).
- (f) Registration in courses in the Faculty of Arts.
- (g) Registration in courses in the School of Graduate Studies (furnished by the Secretary of the School).
- (h) Results of annual examinations (furnished by the Secretaries of the faculties).
- (i) Admission to degrees.
- (j) Admission to diplomas and certificates.
- (k) Geographical distribution of students (furnished by the Secretaries of the faculties).

### (a) Distribution of the Staff of the University and University College:

	Professors	Associate Professors	Assistant Professors	Associates	Lecturers	Directors	Assistant Directors	Instructors	Other Sessional Appointments
University (Faculty of Arts)	42	33	34		30	_		_	136
University College	15a	8	10	_	8		_	_	3
Faculty of Medicine	27b	12	30	28	19c		_	_	190
Faculty of Applied Science and									
Engineering	14	11	12	_	21				51
Faculty of Household Science	2	_	2	_	5		_	_	8
Ontario College of Education	8	4	4	—	26a			26	_
Faculty of Forestry	2	2	1		1	-	_	_	
Faculty of Music	_	_			4	_	_	—	_
Faculty of Dentistry	10	7	1d	23	3d				6
Social Science	1	-	No. of Contract	-	17e	_	1	_	_
School of Nursing				-	46f	1	1	2	_

a 1 also in University

## (b) Distribution of the Staffs of the Federated Arts Colleges:

	Victoria College	Trinity College	St. Michael's College
Professors	11	13	14
Associate professors	6	4	7
Assistant professors	5		1
Lecturers	10	3	16
Instructors	4		13
Fellows	5	2	
Readers	1	2	

b 1 also in Arts

c 2 also in Dentistry; 1 also in Applied Science; 1 also in Ontario College of Education

d 1 also in Medicine

e 1 also in Arts; 1 also in Dentistry

f 1 also in Arts; 20 also in Medicine; 1 also in Dentistry; 2 also in Ontario College of Education

#### (c) Registration of Students by Faculties and Years:

The number of students registered in the university, in colleges and faculties, in the session 1937-38 was 7,232, distributed as follows:

	Men	Women	Total
Faculty of Arts	2,239	1,724	3,963
University of Toronto	_,		0.00
University College			
Victoria College			
Trinity College 227 136 363			
St. Michael's College			
Faculty of Medicine	771	72	843
Faculty of Applied Science and Engineering	832	1	833
Faculty of Household Science		41	41
Ontario College of Education	379	330	709
Faculty of Forestry	31		31
Faculty of Music	28	21	49
School of Graduate Studies	432	151	5 <b>8</b> 3
Faculty of Dentistry	190	22	212
Registered twice	22	10	32
=			
	4.880	2.352	7.232
In departments there were registered 628, distributed as	s follows	;:	
Department of Social Science	9	55	64
School of Nursing		466	466
Physical Education for Women	• • • •	24	24
University Extension (Occupational Therapy)	• • •	40	40
University Extension (Physiotherapy)	• • •	34	34
- Chirefoldy Extension (Thysiotherapy)	• • • •	94	94
	9	619	628

The grand total of registration for the whole university was 7.841, of whom 4.889 were men and 2,952 were women.

In addition there were 5,801 persons registered in the Department of University Extension in courses and at provincial centres which are referred to in detail in Appendix A (14).

The figures may be further analysed as follows:

#### Faculty of Arts

University of Toronto			
	Men	Women	Total
Teachers' Classes and Summer Session	447	478	925
Occasional Arts students	286	38	324
77.1	733	516	1,249
University College	3.6	3377	m 1
	Men	Women	Total
First year undergraduates	191	191	382
Second year undergraduates	165	145	310
Third year undergraduates	156	103	259
Fourth year undergraduates	90	55	145
Occasional students	8	8	16
***	610	502	1,112
Victoria College	3.6	****	
	Men	Women	Total
First year undergraduates	129	139	268
Second year undergraduates	121	122	243
Third year undergraduates	96	128	224
Fourth year undergraduates	67	60	127
Occasional students	2	$\frac{2}{2}$	4
Exchange Students	1	2	3
	416	453	869

T-inity Callena			
Trinity College	Men	Women	Total
First year undergraduates	56	56	112
Second year undergraduates	78	32	110
Third year undergraduates	61	33	94
Fourth year undergraduates	30	14	44
Occasional students	2	1	3
	227	136	363
St. Michael's College			
	Men	Women	Total
First year undergraduates	107	37	144
Second year undergraduates	54 76	37 35	91 111
Fourth year undergraduates	16	8	24
_			
	253	117	370
Faculty of Medicine			
raciny of medicine	Men	Women	Total
First year undergraduates	128	15	143
Second year undergraduates	124	13	137
Third year undergraduates	134	10	144
Fourth year undergraduates	128	10	138
Fifth year undergraduates	125 103	11 10	136 113
Candidates for Degree of B.Sc. (Med.)	4		4
Candidates for Diploma in Psychiatry	4	2	6
Candidates for Diplomas in Public Health	17	1	18
Candidate for Diploma in Radiology	1 3		1 3
-	771	72	843
	111	14	040
Franky of Applied Science and Eugi	n oomin o		
Faculty of Applied Science and Engi			
	Men	Women	Total
First year undergraduates	Men 276	Women	276
First year undergraduates	Men 276 226	Women	276 227
First year undergraduates Second year undergraduates Third year undergraduates	Men 276 226 174	Women 1	276 227 174
First year undergraduates	Men 276 226	Women	276 227
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates	Men 276 226 174 148 8	Women 1	276 227 174 148 8
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates	Men 276 226 174 148	Women 1	276 227 174 148
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates	Men 276 226 174 148 8	Women 1	276 227 174 148 8
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates	Men 276 226 174 148 8	Women 1	276 227 174 148 8
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates Fifth year undergraduates Faculty of Household Science	Men 276 226 174 148 8	Women 1	276 227 174 148 8
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates Fifth year undergraduates  Faculty of Household Science First year undergraduates	Men 276 226 174 148 8	Women  1  1  Women 6	276 227 174 148 8 8 833
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates Fifth year undergraduates  Faculty of Household Science First year undergraduates Second year undergraduates	Men 276 226 174 148 8 8 832	Women 1 1 Women 6 5	276 227 174 148 8 8 833
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Third year undergraduates	Men 276 226 174 148 8 8 832 Men	Women 1 1 Women 6 5 24	276 227 174 148 8 8 833 Total 6 5 24
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates Fifth year undergraduates  Faculty of Household Science First year undergraduates Second year undergraduates	Men 276 226 174 148 8 8 832 Men	Women 1 1 Women 6 5	276 227 174 148 8 8 833
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fourth year undergraduates	Men 276 226 174 148 8 8 832	Women 1 1 Women 6 5 24 4 2	276 227 174 148 8 833 Total 6 5 24 4 2
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fourth year undergraduates	Men 276 226 174 148 8 8 832 Men	Women  1 1  Women 6 5 24 4	276 227 174 148 8 833 Total 6 5 24 4
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First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Third year undergraduates Fourth year undergraduates Occasional students  Ontario College of Education	Men 276 226 174 148 8 8 832 Men	Women  1  Women 6 5 24 4 2 41	276 227 174 148 8 833 Total 6 5 24 4 2 41
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Third year undergraduates Fourth year undergraduates Occasional students  Ontario College of Education  Students in attendance	Men 276 226 174 148 8 832 Men	Women  1  Women 6 5 24 4 2  41  Women 218	276 227 174 148 8 833 Total 6 5 24 4 4 2 41
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Third year undergraduates Fourth year undergraduates Occasional students  Ontario College of Education  Students in attendance Extra-mural students	Men 276 226 174 148 8 8 832 Men	Women  1  Women 6 5 24 4 2 41	276 227 174 148 8 833 Total 6 5 24 4 2 41
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Occasional students  Ontario College of Education  Students in attendance Extra-mural students Students in B.Paed course	Men 276 226 174 148 8 8 832 Men	Women  1  Women 6 5 24 4 2  41  Women 218 93	276 227 174 148 8 833 Total 6 5 24 4 2 41 Total 341 184
First year undergraduates Second year undergraduates Third year undergraduates Fourth year undergraduates Fifth year undergraduates  Faculty of Household Science  First year undergraduates Second year undergraduates Third year undergraduates Third year undergraduates Fourth year undergraduates Occasional students  Ontario College of Education  Students in attendance Extra-mural students	Men 276 226 174 148 8 8 832 Men	Women  1  Women 6 5 24 4 2  41  Women 218 93 20	276 227 174 148 8 833 Total 6 5 24 4 2 41 Total 341 184 190

T L CT				
Faculty of Fores	stry	Men	Women	Total
First waar undergraduates		8		
First year undergraduates		12	• • •	8 12
Third year undergraduates		5		5
Fourth year undergraduates		6		6
		31		31
Faculty of Mus	io			
racuity of Mus	ic	Men	Women	Total
First year undergraduates		6	2	8
Second year undergraduates		13	3	16
Third year undergraduates		9	16	25
			27	40
		28	21	49
Salarah at Carl	S 1: .			
School of Graduate	Studies	Man	W/0 m 0 m	T-t-1
Condidates for Donner of Dl. D		Men	Women	Total
Candidates for Degree of M.A.		101 116	17 57	118 173
Candidates for Degree of M.A.  Candidates for Degree of M.S.		3	ə <i>t</i>	3
Candidates for Degree of M.A.Sc.		12		12
Candidates for Degree of C.E		1		1
Candidates for Degree of Mech. E		1		1
Candidates for Degree of D.Paed		45	1	46
Candidates for Degree of M.Sc. (Dent.)		1		1
Candidates for Degree of M.S.A.  Candidates for Degree of Mus. Doc.		20 3		20 3
Graduate students		129	76	205
Stadulic Stading				
		432	151	583
Faculty of Dentis	strv			
·	•	Men	Women	Total
First year undergraduates		31		31
Second year undergraduates		47	1	48
Third year undergraduates		39		39
Fourth year undergraduates		35 32	1	36 33
Fifth year undergraduates		5		5 5
Candidates for Diploma in Dental Nursing			19	19
Occasional student		1		1
		100		910
		190	22	212
	_			
Department of Universit	y Exten	sion		0.
B.A. Course	11	W/	T 1	Grand
Summer Session	Men	Women	Total	Total
Regular students	142	167	309	210
Occasional students	4	5	9	318
Toronto:				
Regular students	319	301	620	
Occasional students	21	7	28	
Brampton:	0	1.1	90	
Regular students	9	11	20	• • •
Regular Students	2	8	10	678
Specialists' Courses	_	· ·	10	0.0
Summer Session:				
Regular students	13	4	17	17
Registered twice	63	25	88	88
	447	479	925	925
	447	478	920	920

## Department of Social Science

	Men	Women	Total
First year full-time students Second year full-time students Part-time students			25 16 23
	9	55	64

# School of Nursing

	Men	Women	Total
Full-time students Part time students		106 360	106 360
Tare time sendents		466	466

## (d) Enrolment in the Arts Colleges

## (1) University College:

	English	Ethics	French	German	German (Sc.)	Greek	Greek and Roman History	Ladin	Oriental History	Oriental Languages	Oriental Literature
First Year—Pass	181	14	217	39	54	8	19	11	1	20	107
Honour	55		39	18		4	22	24	3	1	
Second Year— Pass Honour	152 29	21 15	154 26	25 13	31	6	12 4	3 13	14 2	8	109
Third Year— Pass	99	93	60	8		9	28	17 1 11	13 1 2	9 2	87
Honour  Fourth Year— Pass General Honour	23  2 24	32  2 8	16  2 21	8  16		5  3	6 26  3		·· ·· 3	3	55
Totals— Pass	432 4 131	128 2 55	431 3 102	72  55	85 	28  15	85  35	21 1 58	28 1 10	37 ·•	358
Teachers' Classes Graduate Studies Other Faculties	137 63		33 18 149	5 8 217		4	3	6 4		8	
Grand Total	767	194	736	357	85	47	123	90	39	51	358

# (2) Victoria College:

	English	Ethics	French	German	German (Se.)	Greek	Greek and Roman History	Latin	Oriental History	Oriental Languages	Religious Know.
First Year— Pass	118	16	133	16	37	3	29	6	3	3	103
Honour	40		39	18		7	14	24	2		
Second Year—											
Pass	80	37	78	10	30	7	9	5	$\frac{2}{2}$	3	100
Honour	33	9	38	26		5	5	15	2	2	
Third Year-											
Pass	94	36	51	13		6	36	4	.3	4	98
General	11	1	8	4		1	1	1			
Honour	25	18	19	14		1	1	10			
Fourth Year—					•						
Pass		17					20				55
General	1	2	1	1			1				
Honour	22	12	18	16		8	7	8			
Totals—											
Pass	292	106	262	39	67	16	94	15	8	10	356
General	12	3	9	5		ĩ	2	1			
Honour	120	39	114	74		21	27	57	4	2	
Teachers' Classes	60		25								
Graduate Studies	14		23 4	5		i	i	5	i	i	
Grand Total	498	148	414	123	67	39	124	78	13	13	356

# (3) Trinity College:

	English	Ethics	French	Сегтап	German (Sc.)	Greek	Greek and Roman History	Latin	Oriental History	Oriental Languages	Religions Know.
First Year— Pass Honour	48 17	2 2	77 10	12 5	14	2	7 3	2 5			96
Second Year— Pass Honour	44 12	17 4	28 4	3 8	4		1 3	2 3			99
Third Year— Pass	23 1 13	12 1 4	21 2 7	2 1 7		i i	1 1 1	1 1 2			86
Fourth Year— Pass	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	• •	••	 1 5	1 5	 1 5			40 
Totals— Pass General Honour	115 1 49	31 1 12	126 2 25	17 1 20	18	2 2 8	8 2 12	8 2 15			321
Grand Total	165	44	153	38	18	12	22	25			321

# (4) St. Michael's College:

	English	Ethics	French	German	German (Sc.)	Greek	Greek and Roman History	Latin	Philosophy	Religious Know,
First Year— Pass Honour	65 17	23	59 8	3 2	12	2 2	5 10	41 10	59 11	112
Second Year Pass Honour	47 5	27 4	35 12	5 2	1	7 1	• • 7	26 8	48 4	72
Third Year— Pass Honour	52 11	36 14	44 6	10 2		3	2	33 4	46 14	87
Fourth Year— Pass Honour	· . 5	6	5	4		2		4	1 6	19
Totals— Pass Honour	164 38	86 24	138 31	18 10	13	12 5	5 19	100 26	154 35	290
Grand Total	202	110	169	28	13	17	24	126	189	290

# (e) Enrolment in the University Departments in Arts:

The following tables exhibit the numbers attending lectures in the university departments in the Faculty of Arts, together with the number of those taking the practical work in the laboratories:

# Department of Anthropology

	Pass	Pass and Honour	Honour
Faculty of Arts—			
First Year	137	80	24
Second Year		7	23
Third Year		1	16
Fourth Year		38	14
School of Graduate Studies			12
Department of Social Science—			
First Year			13
Totals	137	126	102

# Department of Applied Mathematics

	Pass	Pass and Honour	Honou
	1 033	Honout	11011011
Faculty of Arts—			
First Year	8		
Second Year	5		30
Third Year	• •		27
Fourth Year			17
Occasional Students			1
Faculty of Applied Science and Engineering—			
Second Year		35	
Third Year		6	
Fourth Year		6	
School of Graduate Studies	• •		17
Totals	13	47	92

# Department of Archaeology

Faculty of Arts— First Year Second Year	1 or 2 or 3 hours
First Year	Honour
First Year	
Second Year	. 10
	. 17
Third Year	. 7
Fourth Year	. 16

# Department of Astronomy

	Pass	Pass and Honour	Honour	Laboratory
Faculty of Arts— First Year Second Year Third Year Fourth Year	12 7 5	35 ::	 16 8	12 7 21 1
Faculty of Applied Science and Engineering— Second Year			14	
Totals	42	35	38	41

# Department of Biology

		Lecture	Courses	Y .1	
	1 or 2	or 3 hours	4 or 5 or 6 hours		oratory irses
	Pass	Honour	Honour	Pass	Honour
Faculty of Arts-					
First Year	208	113		97	113
Second Year	72	93		72	93
Third Year	57	32	9	57	24
Fourth Year		12	2		15
Occasional Students		2			2
Facility of Madiaina					
Faculty of Medicine— First Year		145			145
Third Year		7	• •	• •	140
Imid Tear		'	• •		1
Faculty of Household Science—					
First Year		8			8
D 1 4 D					
Faculty of Forestry—		0			0
First Year	• •	8	* *		8
Fourth Year		6	* *		6
School of Graduate Studies					38
School of Oraquate Studies	• •	• •	**	• • •	00
Faculty of Dentistry—					
First Year		31			31
Cl l (N)	3.5			15	
School of Nursing	15		• •	15	
College of Optometry of Canada		34			34
-					
Totals	352	491	11	241	518

# Department of Botany

	Lectur	e Courses	1.1	C
	1 or 2	or 3 hours	- Laborate	ory Courses
	Pass	Honour	Pass	Honour
Faculty of Arts—				
First Year	9	122	9	122
Second Year	14	14	14	14
Third Year	13	5	13	5 5 7
Fourth Year		5		5
Occasional Students	2	7		7
Faculty of Applied Science and Engineering— First Year			68	
Faculty of Household Science— First Year	7		7	
Faculty of Forestry—				
First Year		8		8
Fourth Year				6
School of Graduate Studies		21		
Ontario Agricultural College		2		
Ontario College of Pharmacy				
First Year	121		121	
Second Year	104	• •	104	
Totals	270	184	336	167

# Department of Chemistry

	Pass	Pass and Honour	Honour	I -1
	rass	11011011	попоиг	Laboratory
Faculty of Arts—				
First Year	195		167	253
Second Year	56		93	121
Third Year	37		26	56
Fourth Year	1		15	15
Occasional Students			7	1
Faculty of Medicine—				
First Year		150		150
Second Year		126	• •	104
	••	120	••	101
Faculty of Applied Science and Engineering—				
First Year	• •	83		83
Second Year	• •	87	• •	86
Third Year	• •	125	• •	123
Fourth Year		11	• •	11
Faculty of Household Science—				
First Year		6		6
Second Year		4		
Ele- (F				
Faculty of Forestry— First Year	8			0
Second Year	11	• •	• •	8 3
Second real	11	• •	• •	J
School of Graduate Studies			64	26
E				
Faculty of Dentistry— First Year		31		9.7
Second Year	• •	51 47	• •	31 47
Third Year	• •	39	• •	39
Innu Ital	• •	09	• •	39
Ontario College of Pharmacy—				
First Year	122			122
Second Year	104	• •		104
m . 1	704	700	072	1.000
Totals	534	709	372	1,389

# Department of Fine Art

	Pass	Pass and Honour	Honour
Faculty of Arts—			
First Year	26		8
Second Year	33	17	6
Third Year	31	22	
Fourth Year		24	
Occasional Students	5		••
School of Graduate Studies	5		
Totals	100	63	14

# Department of Food Chemistry (Faculty of Household Science)

	Pass	Pass and Honour	Honour	Laboratory
Faculty of Arts—				
Second Year	31			31
Third Year	14			14
Fourth Year			28	28
Faculty of Household Science—				
Second Year		5		5
Third Year	18			18
Fourth Year			4	4
School of Graduate Studies			4	4
Totals	63	5	36	104

# Department of Geography

	Pass	Pass and Honour	Honour	Laboratory
Faculty of Arts—				
First Year		170		170
Second Year		75		75
Teachers' Classes		125		125
Ontario College of Education	250			
School of Graduate Studies		• •	1	
Totals	250	370	]	370

# Department of Geology and Palaeontology

	Lecture Courses					T 1	- Laboratory	
		2 or 3	4 or 5 or 6 hours		7 or more hours			
	Pass	Honour	Pass	Henour	Honour	Pass	Honour	
Faculty of Arts—								
First Year	128	57						
Second Year	45	23				24	23	
Third Year	9			12		9	12	
Fourth Year				5	4		10	
Teachers' Classes	117					117		
Occasional Students	2							
Faculty of Applied Science and								
Engineering—	0.2							
Second Year	92					34		
Third Year	50		2			32		
Fourth Year	32		• •			32		
Faculty of Forestry—								
Second Year	12							
Third Year	5							
School of Graduate Studies				8	10		19	
Totals	492	80	2	25	14	248	64	

# Department of History

	Lecture Courses								
	1 or 2 or 3 hours								7 or more hours
	Pass	Honour	Honour	Honour					
Faculty of Arts—									
First Year	117	140							
Second Year	120	26	55						
Third Year	80		79	10					
Fourth Year	2		39	5					
Teachers' Classes	56								
Occasional Students	2	1	2						
School of Graduate Studies		10	22						
Department of University Extension Evening Classes	50								
Totals	427	177	197	15					

# Department of Household Science (Faculty of Household Science)

	Pass	Pass and Honour	Honour	Laboratory
Faculty of Arts—				
First Year			56	
Second Year	16		33	49
Third Year	9	3	30	42
Fourth Year			26	26
Faculty of Household Science—				
First Year		5		
Second Year		5		5
Third Year	18		5	23
Fourth Year			4	4
School of Graduate Studies			3	1
Totals	43	13	157	150

# Department of Italian and Spanish

	Italian		Spa	nish
	Pass	Honour	Pass	Honour
Faculty of Arts—				
First Year	30	10	90	22
Second Year	18	7	77	33
Third Year	16	4	49	14
Fourth Year		5	2	4
School of Graduate Studies		2		8
Totals	64	23	218	81

# Department of Law

	Pass	Honour
Faculty of Arts-		
First Year		106
Second Year		31
Third Year		28 30
Fourth Year		30
Faculty of Applied Science and Engineering— Third Year	50	
Faculty of Forestry— Third Year	8	
School of Graduate Studies		9
Department of University Extension— Evening Classes	35	
Bachelor of Laws Course		12
Totals	93	216

# Department of Mathematics

	Lecture Courses						
_		r 2 or 3 ours	4 or 5 or 6 hours			or more hours	
	Pass	Honour	Pass	Honour	Pass	Honou	
Faculty of Arts							
First Year	95	70				60	
Second Year	90	6				25	
Third Year	60	4				23	
Fourth Year		5				8	
Teachers' Classes	15						
Occasional Students	1	1				1	
Faculty of Applied Science and Engineering-							
First Year	237		13				
Second Year	130		10				
Faculty of Forestry—							
First Year	10						
School of Graduate Studies		8		10			
College of Optometry of Canada	20						
Totals	658	94	23	10		117	

# Department of Military Studies

	Pass	Pass and Honour
Faculty of Arts—		
First Year	14	14
Second Year	8	8
Third Year	8	3
Fourth Year	4	1
Faculty of Medicine—		
First Year	7	
Second Year	9	
Third Year	1	
Fourth Year	i	
Fifth Year	4	
Sixth Year	2	
Faculty of Applied Science and Engineering—		
First Year	23	
Second Year	12	
Third Year	2	
Fourth Year	3	
Faculty of Forestry—		
Second Year	1	
School of Graduate Studies	3	• •
Faculty of Dentistry—		
First Year	1	
Fifth Year	i	
	_	• •
Ontario College of Pharmacy—		
First Year	5	
Second Year	1	
Totals	110	26

# Department of Mineralogy and Petrography

	Pass	Pass and Honour	Honour	Laboratory
Faculty of Arts—				
First Year	12			12
Second Year	2		29	31
Third Year		4	19	16
Fourth Year			10	9
Teachers' Classes	116			116
Occasional Students	1			1
Faculty of Applied Science and Engineering—				
First Year		157		157
Second Year		57		57
Third Year		29		29
Fourth Year		6		6
Faculty of Forestry-				
Second Year		6		13
School of Graduate Studies			11	11
Totals	131	266	69	458

# Department of Music

	Lecture Courses
	4 or 5 or 6 hours
	Honour
Faculty of Arts— First Year	. 8
Total	. 8

# Department of Philosophy

	Pass	Honour
Faculty of Arts—		
First Year	50	103
Second Year	129	65
Third Year	185	83
Fourth Year	21	54
Teachers' Classes	36	
School of Graduate Studies		61
Department of Social Science— First Year	9	
Totals	430	366

# Department of Physics

	D.	Pass and	11	I -1
	Pass	Honour	nonour	Laboratory
Faculty of Arts—				
First Year	192		170	237
Second Year	29		69	81
Third Year	30		41	66
Fourth Year			36	28
Candidates for Specialists' Certificates, Summer				_
Session			5	5
Faculty of Medicine—				
First Year		149		149
Diploma in Radiology		1		1
Faculty of Applied Science and Engineering—				
First Year			16	16
Second Year			13	13
Third Year			6	6
Fourth Year	• •	• •	6	6
Faculty of Household Science—				
First Year			6	6
Candidates for Specialists' Certificates	• •		1	1
Faculty of Forestry—				
First Year	8			8
School of Graduate Studies			57	32
Faculty of Dentistry—				
First Year		31		31
Department of University Extension—				
Physiotherapy	19			19
College of Optometry of Canada		35		35
- Section of Sandala International Control of Sandala Internationa				
Totals	278	216	426	740

# Department of Political Science

Lecture Courses										
					or more hours					
Pass	Honour	Pass	Honour	Pass	Honour					
148	108		73							
169	19				83					
144	37				77					
35	29			1	61					
36										
2	1	1								
4										
	• •	• •	• •		• •					
• •	• •		• •	• • •	• •					
4				• •						
					28					
553	194	1	73	1	249					
	148 169 144 35 36 2 4 11	148 108 169 19 144 37 35 29 36 2 1	1 or 2 or 3 hours     4 or 3 hours       Pass     Honour     Pass       148     108        169     19        144     37        35     29        36         2     1     1       4         4         4	1 or 2 or 3 hours     4 or 5 or 6 hours       Pass     Honour     Pass     Honour       148     108      73       169     19         135     29         2     1     1        4          4          4          4          4          4	1 or 2 or 3 hours         4 or 5 or 6 hours         7 or 6 hours           Pass         Honour         Pass         Honour         Pass           148         108          73            169         19              144         37              35         29              2         1         1             4               4               4					

# Department of Psychology

			Lecture Cours	es-	Υ 1	
		r 2 or 3	4 or 5 or 6 hours	7 or more hours		oratory ourses
	Pass	Honour	Pass	Honour	Pa	Honou
Faculty of Arts— First Year	191	50		::	.::	• •
Second Year Third Year Fourth Year	89 25	36 33	- <del>-</del>	14 11 8	152	32 11 8
Teachers' Classes Teachers' Classes,	118		* *	• •	• •	
Correspondence Occasional Students	34				2	• •
Faculty of Medicine— Second Year	142				•:	
Third YearFourth Year	13	• •	• •		9	
Faculty of Household Science— First Year	24					
School of Graduate Studies	40					24
Faculty of Dentistry— Graduate Students	1					
Department of Social Science— First Year	15					
Second Year	15	• •		• •	• •	• •
School of Nursing	67	• •	• •	• •	• •	• •
Department of University Extension— Occupational Therapy	38 21					
Centralised Pupil Nurses Evening Classes Workers' Educational Education	290 259 99				• •	• • • • • • • • • • • • • • • • • • • •
College of Optometry of Canada	66	• •				
Totals	1,547	119	11	33	163	7.5

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	Courses		Pass General Classics Enclish Language and Literature.	Greek and Hebrew Hebrew and Ancient History	Latin (French or Greek Option) Div. I. Latin (French or Greek Option) Div II.		English and History Fine Art. Law	Music Social and Philosophical Studies	Modern History	Philosophy (English or History Option)	Psychology. Sociology.	Mathematics and Physics (Div. I)	Physics Physics (	Mathematics and Physics (Div. V)	2,	Biological and Medical Sciences. Biology	Biology and Physics	Chemistry, Mineralogy and Geology, Div. I. Chemistry, Mineralogy and Geology, Div. II	Food Chemistry Geology and Mineralogy Household Economics	Physics Physiology and Biochemistry	Science (Ceneral)	Exchange Students	Totals

# (g) Registration in Courses in the School of Graduate Studies

Totals	Special Committees	Surgery	Semitic Languages	Komance Languages	Psychology	Psychiatry	Professional Degrees	r reventive Dentistry	Denote Denote	Political Science	Physiological Hygiene	Physiology	Physics	Philosophy	Pharmacology	Pedagogy	Pathological Chemistry	Music	Mineralogy	Mi	Modernatics	Viothamatica		Hygiene and Preventive Medicine.	old Science	History	Germanic Languages	Geology and Palaeontology	Geography	Food Chemistry	English	Electrical Engineering	Educational Theory		Classics	Civil Engineering	Chinese Archaeology	Chemical Engineering	Chemistry	Botany	Brotogy	Rial and Riversity	Richamian.	Applied Mathematics	Anthropology	Anatomy	Department	
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# (h) Results of the Annual ExaminationsFaculty of Arts

First Year

Course	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	TOTALS	Passed	Conditioned	Failed	Transferred	Aegrotat	Debarred
Pass		140	111	50	94	395	254	70	71		6	77
Supplementals		37	17	10	13	77	52	25		•••		• • •
Classics		3	6		1	10	8	1	i	• •	• •	• •
English Language and Literature		18	20	4	5	47	36	2	9	9	• •	2
Latin (French or Greek Option)		1	2	$\hat{2}$	2	7	7	_			• •	
Modern Languages		21	13	7	7	42	31	4	7	5	• •	• •
Oriental Languages	• •	ĩ		•	•	1	01	ī	•	J	• •	• •
Fine Art	• •	5	2	• •	i	8	7	1	· i	i	• •	i
Law	• •	26	5	i	î	33	27	5	1	i	• •	3
Social and Philosophical Studies	• •	47	16	14	5	82	56	13	13	10	2	2
Music	• •	1 4	7	11		8	6	1.0		2	4	2
Philosophy (English or Hisory Option)		4	4	2	6	16	11	2	2	3	• •	4
Mathematics and Physics	• •	17	19	5	4	45	29	10	6	1	• •	2
Science	• •	25	12	8	6	51	39	6	6	2	• •	2
Household Economics	• •	28	18	4	5	55	39	9	9	8	3	3
Commerce and Finance	• •	38	19	13	3	- 55 73	38	17	18	8	- O	- J
Occasional Students	5	3	19	13	1	9	оо 8	1	10	Ö	1	4
Occasional Students	J	3		• •	1	9	Ö	1	• •			
Totals	5	414	271	121	148	959	648	164	147	50	12	98

# Second Year

Course	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	TOTALS	Passed	Conditioned	Failed	Aegrotat	Debarred
Pass Supplementals Classics English Language and Literature Greek and Hebrew Latin (French or Greek Option) Div. I. Modern Languages Oriental Languages Oriental Languages Fine Art Law Modern History Philosophy Philosophy Philosophy (English or Hist. Option) Political Science and Economics Psychology Sociology Mathematics and Physics Physics and Chemistry Biological and Medical Sciences Biology Biology and Physics Chemistry Chemistry Mineralogy and Geology Geology and Mineralogy Household Economics Physiology and Biochemistry Commerce and Finance Occasional Students Registered twice		1477 244 3 100 116 3 144 88 3 3 117 77 112 2 77 77 11 11 5 5 2 3 3 116 11 22 2 3 3	900 8 3 177 1 1 2 2 199 2 2 2 6 6 5 1 1 1 1 1 2 7 7 5 5 1 6 6 7 7 5 1 16 1 13 1	52 11 3 1  3  4 11  2 1 1  1  1  1  1  1  1  1  1  1	65 61 1 1  6 5  1 1  1  1 	354 49 10 29 1 1 9 43 2 6 6 27 18 6 8 8 32 13 16 24 4 2 12 10 10 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	259 41 10 21 1 7 35 2 6 6 24 18 5 7 24 13 14 13 16 6 5 2 2 2 2 4 1 3 1 6 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1	65 8 2 1 1 2 6 6 3 2 2 2 2	30 6 2 2 2 166 110 22211 33344712	10	19
Totals	5	332	243	119	93	792	591	101	100	21	28

Third Year

Course	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	TOTALS	Passed	Conditioned	Failed	Aegrotat	Debarred
Pass Supplementals General Classics Latin (French or Greek Option), Div. 1 Modern Languages Oriental Languages English and History Law Modern History Philosophy Philosophy (English or History Option) Political Science and Economics Psychology Sociology Mathematics and Physics, Div. I Mathematics and Physics, Div. II Mathematics and Physics, Div. III Mathematics and Physics, Div. IV Chemistry Chemistry Chemistry Chemistry Chemistry Chemistry Mineralogy and Geology, Div. II. Geology and Mineralogy Household Economics Physics Physics Physiology and Biochemistry Commerce and Finance Occasional Students		1000 677 661 1152 66233 4415 511663 3114422 4433 22155 2233 2331	92 8 16 1 3 16  12 2 2 4 4 5 6 5 8 8 3 1  6 1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	36 4 5 1 8 8 3 3 4 1 1 1 1 1 1 1 1 2 2 1 1 2 7	755 2 4 4 8 7 1	303 18 31 7 7 7 43 2 25 28 10 14 19 25 10 13 5 8 1 1 1 2 5 6 6 4 4 3 6 6 6 7 7 6 8 8 8 8 8 8 8 8 8 8 8 8 8	2366 7742 244255 10019 24477 133 11156653 32112 43553	46 6	21 3 1 1 1 2 3 2 3 3 3		
Totals	. 2	266	231	99	110	708	577	89	42	4	6

# Fourth Year

Course	University of Toronto	Univ. Coll.	Vic. Coll.	Trin. Coll.	St. M. Coll.	TOTALS	Passed	Conditioned	Failed	Aegrotat	Degree with-
Classics Latin (French or Greek Option), Div. I Latin (French or Greek Option), Div. II. Modern Languages Oriental Languages English and History Law Modern History Philosophy Philosophy Philosophy (English or History Option) Political Science and Economics Psychology Sociology Mathematics and Physics, Div. I. Mathematics and Physics, Div. III Mathematics and Physics, Div. III Mathematics and Physics, Div. IV Mathematics and Physics, Div. V Physics and Chemistry Biological and Medical Sciences Biology Chemistry Chemistry, Mineralogy and Geology, Div. II. Chemistry, Mineralogy and Geology, Div. II. Geology and Mineralogy Household Economics Physics Physics Physics Physiclogy and Biochemistry Science (General) Commerce and Finance Occasional Students		5 2 1 222 3 9 177 1 2 4 4 177 3 5 5 4 4 3 1 1 9 1 1 3 2 1 7 7 20	111 4 3 17 100 66 3 1 1 100 4 4 8 2 2 2 1 1 3 1 5 1 2 2 15 1 2 1 6 6	2 5 2 1 3 4 4 1 2 6 6 1 1 2 2 2 1 1 1 2 1 2 2	1 1 · · · · · · · · · · · · · · · · · ·	18 12 3 4 4 4 4 4 4 4 2 8 8 5 7 7 18 8 8 8 13 3 16 6 2 2 10 0 1 4 4 4 2 2 2 2 1 3 1 1	17 12 3 4 44 28 5 7 17 28 8 13 8 5 1 1 3 1 4 4 2 4 2 8 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1		1		
Totals	1	143	125	43	24	336	332	1	3	3	11

# Pass Course for Teachers

	Passed	Conditioned	Total
August Examination May Examination	528 313	126 93	654 406
	841	219	1,060

# Faculty of Medicine

	Passed	Conditioned	Failed
First Year	68	8	64
Second Year	83	21	16
Third Year	74	44	9
Fourth Year	114	21	2
Fifth Year	116	18	1
Sixth Year	104	4	5
Candidates for Degree of B.Sc. (Med.)	6		
Candidates for Diploma in Public Health	18		
Totals.	583	116	97

# Faculty of Applied Science and Engineering

	Passed with			
	Honours	Passed	Conditioned	Failed
First Year—				
Civil Engineering	2	10	9	8
Mining Engineering	2	26	าำ์	8
Mechanical Engineering	$\tilde{5}$	22	14	8
Architecture	2		i	ĭ
Engineering Physics	8	3	1	3
Chemical Engineering	9	17	20	20
Electrical Engineering	7	7	11	9
Metallurgical Engineering	5	5	5	3
Mining Geology		4	3	• •
Second Year—				
Civil Engineering	2	5	5	1
Mining Engineering	10	20	10	2
Mechanical Engineering	3	8	14	5
Architecture	. 1	2	• ;	
Engineering Physics	2	2	6	3
Chemical Engineering	10	9	25	8
Electrical Engineering Metallurgical Engineering	3 4	11	15	5
Mining Geology	4	20 1	5	4
	• •	1		
Third Year—				
Civil Engineering	1	7	8	3
Mininig Engineering	4	15	10	1
Mechanical Engineering	4	8	5	3
Architecture	• •	2	•:	
Engineering Physics	2	3	1	• • •
Chemical Engineering	8	26	17	4
Electrical Engineering Metallurgical Engineering	6 4	9	-	1
Mining Geology	4	4 2	5	1
	• •	2	• •	• •
Fourth Year—				
Civil Engineering	1	3		
Mining Engineering	4	18	7	
Mechanical Engineering	4	11	9	
Architecture	3	3	• •	
Engineering Physics	2	2	2	
Chemical Engineering	14	23	3	
Electrical Engineering Metallurgical Engineering	5 1	13 11	4	1
	1	11	• •	• •
Fifth Year—				
Architecture	3	5	1	
Totals	144	337	234	102
10(a)	144	337	234	102

# Faculty of Household Science

	Passed	Conditioned	Failed
First Year	2	1	2
Second Year	$\bar{2}$		3
Third Year	12	5	5
Fourth Year	3	1	
Occasional Students	1		
Supplementals	1	1	
Totals	21	8	10

# **Ontario College of Education**

	Passed	Failed
*High School Assistants' Course	252	
*High School Assistants' Course Specialists' Courses	117	
First Class Public School Course	36	
Elementary Art Course	22	
Elementary Commercial Course (passed in part)	29	
Elementary Home Economics	18	
Elementary Music Course	36	
Elementary Physical Education Course	52	• •
Elementary Shop Work	7	• •
Intermediate Art Course	5	
Intermediate Home Economics	21	• •
Intermediate Music Course	36	• •
	90	• •
Librarians' Course—	50	
Candidates for Degree of B.L.S	50	
Candidates for Diploma	8	
Bachelor of Pedagogy Course—		
Candidates for Degree of B.Paed.	27	
Passed in part	75	
Number who failed in whole or part		158
Totals	791	158

<sup>\*</sup> Many of these are included among those who passed or failed in the other courses in this list.

# **Faculty of Forestry**

	Passed	Conditioned	Deferred	Failed
First Year Second Year Third Year Fourth Year	9 4		1 1	3 2
Totals		••	2	5

# Faculty of Music

	Passed	Conditioned	Failed
First Year Second Year Third Year	6 12 10	3 9 7	3 7
Totals	28	19	10

# Faculty of Dentistry

	Passed	Conditioned	Failed
First Year	22	9	
Second Year	38	11	
Third Year	25	13	1
Fourth Year	32	4	
Fifth Year	31	2	1
Dental Nurses	18	1	
Total	166	40	2

# Departments

The numbers examined in the different departments of the University, including those persons granted standing for military service, were as follows:

Arts:	
Fourth Year 336	
Third Year	
Second Year	
First Year 959	
Pass Course for Teachers	
Graduates (Specialist Standing)	0.000
-	3.909
Medicine:	
Sixth Year 113	
Fifth Year 135	
Fourth Year 137	
Third Year	
Second Year 120	
First Year	
Candidates for Degree of B.Sc. (Med.)	
Candidates for Diploma in Public Health	
—	796
Applied Science and Engineering:	
Fifth Year	
Third Year 171	
Second Year	
First Year 269	
<u> </u>	815
W. 1.110.	
Household Science	38
Education	628 31
Forestry Music	51 57
Graduate Studies	500
Dentistry	208
Social Science	61
School of Nursing	106
Physical Education for Women	24
University Extension:	
Occupational Therapy	40
Physiotherapy	34
Law	7
Pharmacy	248
Agriculture	117
Local Examinations in Music	54 13.482
Local Examinations in Music	13.462

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183

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25

218

(i) Admission to Degrees:		17"	m . 1
	Men	Women	Total
LL.D. (Honorary)	2		2
Ph.D.	30	_5_	35
M.A	83	37	120
M.S	3		3
M.A.Sc	5		5
C.E	1		1
E.E.	1		1
D.Paed.	1		1
M.S.A	9	***	9
B.A	326	296	622
B.Com.	30		30
M.D.	121	10	131
B.Sc. (Med.)	6		6
B.A.Sc.	164	• • •	164
B.Arch.		2 16	11
B.H.Sc. B.Paed	25	2	27
B.L.S.	1	49	50
B.Sc.F.	6	49	6
Mus. Bac.	3	6	9
D.D.S.	30	1	31
D.Sc. (Dent.)	3	1	31
LL.B.	ĭ	• • •	1
B.S.A.	105	i	106
B.V.Sc.	51	í	52
D.V.Se.	i		1
Phm.B.	85	6	91
1 11112			
Totals	1,102	432	1,534
(j) Admission to Diplomas and Certif	ficates		
	Men	Women	Total
Dental Nursing		21	21
Librarianship		8	8
Occupational Therapy	• •	16	16
Physical Education		5	5
Physiotherapy		15	15
Psychiatry	9	1.5	9
Public Health	17	• •	17
Public Health Nursing	1.	101	101
Radiology	i	101	1

# (k) Geographical Distribution of Students FACULTY OF ARTS

Social Science .....

Totals....

	University of Toronto	University College	Victoria College	Trinity College	St. Michael's College	Totals
Ontario: (1) Province	564	436	349	126	98	1.573
(2) Toronto	642	606	485	224	148	2,105
Nova Scotia		2	1			10
New Brunswick		1	1			3
Prince Edward Island						
Quebec	3	5	5	1	1	15
Manitoba	9	4	1	1		15
Saskatchewan		14	8	1		30
Alberta		13	2	1	6	30
British Columbia	7	5	2	3	3	20
United States	1	14	3	2	112	132
Elsewhere		12	12	4	2	39
Totals	1.249	1.112	869	363	370	3,963

# THE UNIVERSITY

	Faculty of Arts	Faculty of Medicine	Faculty of Applied Science and Engineering	Faculty of Household Science	Ontario College of Education	Faculty of Forestry	Faculty of Music	School of Graduate Studies	Faculty of Dentistry	Department of Social Science	School of Nursing	Physical Education for Women	Occupational Therapy	Physiotherapy	Registered Twice	TOTALS
Ontario:																
(1) Province	1,573	296	328	20	461	13	20	162	90	15	248	4	24	11	14	3,251
(2) Toronto		459	466	15	189	13	18	259	72	20	160	19	10	12	31	3,786
Nova Scotia	10	2	1		11			17		3	6		ī	~~	01	51
New Brunswick	3	6			4		• •	14	1	ĭ	6	• • •	•	••	i	34
Prince Edward Island										î			• •	• • •	•	3
Ouebec	15	2 8	3		3	3	4	6	i	î	5	• •	2	• • •	i	50
Manitoba	15	4	7		6	ĭ	î	28	8	9	8	• •	ī	3		91
Saskatchewan	30	25	9	2	14	î	•	23	22	7	17	• • •	i	7	• •	158
Alberta	30	9	8	ī	3	1	• •	11	1	2	3	• •	1	í	i	68
British Columbia	20	19	3	3	13	• •	3	12	2	4	2	i	1	1	1	83
United States	132	4	5	_	10	• •	3	32	6		2	1	1			184
Elsewhere	30	9	3	• •	5		3	19	9	i	9	• •			3	82
List where	30	7	3		O.			19	9	1	9	• •	• •		3	84
Totals	3,963	843	833	41	709	31	49	583	212	64	466	24	40	34	51	7,841

# THE PROVINCE OF ONTARIO

	Faculty of Arts	Faculty of Medicine	Faculty of Applied Science and Engineering	Faculty of Household Science	Ontario College of Education	Faculty of Forestry	Faculty of Music	School of Graduate Studies	Faculty of Dentistry	Department of Social Science	School of Nursing	Physical Education for Women	Occupational Therapy	Physiotherapy	Registered Twice	FOTALS
Algoma Brant Bruce Carleton Cochrane Dufferin Dundas Durham Elgin Essex Frontenac Glengarry Grenville Grey Haldimand Haliburton Hastings Huron Kenora Kent Lambton Lanark Leeds Lennox & Addington Lincoln Manitoulin Middlesex Muskoka Nipissing Norfolk Northumberland Ontario Oxford Parry Sound Peel Perth Peterborough Prescott Prince Edward Rainy River Renfrew Russell Simcoe Stormont Sudbury Thunder Bay Timiskaming Victoria Waterloo Welland Wellington Wentworth York Toronto					6 6 6 6 29 1 4 5 11 29 5 3 3 3 13 5 8 7 3 6 4 4 8 2 5 9 6 6 4 3 14 7 5 5 4 1 6 2 2 8 2 1 5 6 6 4 19 13 10 55 7 18 9 6 50	1		100 110 110 110 110 110 110 110	2 56 2 1 3 4 1 1 2 2 3 1 3 4 2 4 4 3 3 3 1 1 2 1 3 1 3 1 5 2 7 162		2 7 2 16 1 2 3 6 6 4 4 6 6 6 6 2 1 1 3 2 2 3 3 13 4 5 5 1 1 1 1 2 6 6 3 9 4 4 10 1 1 4 9 2 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		1 1	1	1 4	42 77 48 159 33 32 12 41 36 117 20 9 10 84 27 58 57 24 26 9 106 4 83 36 66 62 9 105 80 57 29 105 80 57 29 105 80 57 80 80 80 80 80 80 80 80 80 80

# UNIVERSITY OF TORONTO

SUPERINTENDENT'S OFFICE

# SUPERINTENDENT'S REPORT

1937-38

# New Construction

There has been no new construction of a major nature started during the year, but additions to the Royal Ontario Museum, the Hygiene Building, and at the Connaught Laboratories Farm bring the expenditure under this item to approximately \$60,000.00.

# Buildings (Maintenance)

The expenditure for Repairs and Renewals on University buildings and the Royal Ontario Museum amounted to approximately \$83,000.00, which is less than one-half of one percent. of the value of the buildings. Until such time as this amount, which is used largely in maintaining the fabric and mechanical services, can be increased, such items as lighting and decoration cannot be kept up to the desired standards.

The regular yearly practice of testing all fire hose has been followed, and the necessary replacements made. Chemical extinguishers have all been inspected and special extinguishers provided for unusual hazards. I wish to acknowledge the cooperation of the Toronto Fire Department in dealing with our problems.

In addition to the 58 buildings directly supervised by my office, heat and electricity are supplied to Victoria University, Wycliffe College and Knox College, and a small amount of power to Trinity College.

The expenditure for fuel was approximately \$105,000.00. The consumption of electricity continues to increase. Due to the lack of funds and the inadequacy of our generating and distribution systems, this growth is checked as much as possible, even to the extent of lagging behind accepted practice. Funds are being made available next year which will enable us to increase the voltage on some of our system, where low voltage due to overload has made the lighting very poor.

## EMPLOYEES AND WORKSHOPS

The average number of employees working for the office, exclusive of contracts, was 274, tradesmen accounting for 80 of this number. The merchandise distributed through the Superintendent's Stores amounted to approximately \$101,000.00. The salary and wage items amounted to approximately \$324,000.00. This figure includes

services rendered through my office to Connaught Laboratories, Hart House, the Athletic Association, etc., the Royal Ontario Museum, and the colleges.

## PURCHASING

During the year, 9,509 departmental orders and 7,293 Superintendent's Stores and work orders, a total of 16,802, were sent out, and in consequence 23,265 accounts were passed for payment. These purchases involved the passing of 1,336 customs entries handled within the office. In addition, 6,381 accounts for work done for separate financial entities were sent out for payment. Accounts are passed promptly for payment, so that all possible discounts are obtained. Every effort is made to obtain the benefits to which the University is properly entitled under the Customs, Sales and Excise Acts.

## POST OFFICE

During the year, the turnover in the branch Post Office in the University amounted to approximately \$36,600.00, of which the sale of postage stamps amounted to approximately \$23,800.00. The University derived a revenue of \$1,158.95 from this office.

# POLICE AND WATCHMEN

Again the Police Force has been successful in handling the problems created by the public, and its relationship with the student body has been cordial and effective at the same time. The watchmen's service has been carefully supervised and daily reports are carefully checked.

I wish also to acknowledge our continued indebtedness to the City Police for their willing co-operation at all times.

### CENTRAL PLANT

Each year the inadequacy of our present plant, built in 1911, and the necessity for a new plant, becomes more apparent. With inadequate generating and distribution capacity for both steam and electricity, we have had to provide separate units and services with consequently increased operating costs. We see no solution except a major expenditure for a new plant.

The amount of radiation heated from the Central Plant, exclusive of high pressure service, was 351,359 square feet, as against 348,140 square feet for the previous year. The total cost of operation was \$144,385.35, as against \$134,894.94 for the previous year. The total unit cost for heat and light was 41.0 cents per square foot of radiation, as against 38.7 cents for the previous year. The amount of 41.0 cents was made up of 23.4 cents for heat and 17.6 cents for light and power. The average temperature, October to May inclusive, was 3.1 degrees above the average, against 3.3 degrees above the average for the same period in the previous year. The increased cost is accounted for by the higher price of coal and increased demands for electrical energy.

Comparative tables, showing the operation of the Central Plant and the distribution of charges for 1936-37 and 1937-38, are attached.

A. D. LEPAN, Superintendent.

October 28th, 1938.

# POWER HOUSE

COAL	1936-37	1937-38
Maximum daily consumption	90 tons	96 tons
Maximum weekly consumption	527 tons	569 tons
Average daily consumption— September	13 tons	26 tons
October	40 tons	43 tons
November	60 tons	55 tons
December January	61 tons 61 tons	66 tons 75 tons
February	65 tons	72 tons
March	62 tons	63 tons
April	50 tons	48 tons
May	25 tons 10 tons	29 tons 10 tons
Consumption—Central Plant	13,315 tons	14.221 tons
Auxiliary Plant. Museum Area	1,174 tons	1,127 tons
Total consumption	14.489 tons	15.348 tons
Total cost of Operation	\$134.894.94	\$144.385.35
Load in square feet of radiation	348.140	351.359
Light and Power Charges Cost of Heat	\$ 58.152.83 \$ 76.742.11	\$ 62.038.46 \$ 82.346.89
Cost of heat per square foot of radiation	22.0c	

NOTE: In this distribution of cost, no allowance is made for high pressure steam supplied.

193	6-37	1937-38	
November         34.3           December         31.5           January         31.2           February         27.9           March         28.6           April         43.2           May         56.5	<ul> <li>1.7 below average</li> <li>5.3 above average</li> <li>9.4 above average</li> <li>5.7 above average</li> <li>0.1 below average</li> <li>2.0 above average</li> <li>4.0 above average</li> </ul>	47.4 — 0.8 above 38.6 — 2.6 above 27.4 — 1.2 above 22.3 — .5 above 27.2 — 5.0 above 35.8 — 7.1 above 46.2 — 5.0 above 35.2 — 2.8 above 37.5 — 3.1 above	average average average average average average average

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~	age Light Heat Light Charge	5.450 \$ 922 02 \$ 4,259 19 \$ 1,141	10,478 76	102 07	522 20 2,118 08	1,766 40 2,620 87		933 40 2,329 12	341 40 1,291 57	131 06 135 07	2,302 80 3,669 04 2	208 00 1,274 69	1 173 86 1 271 01 1 427	80 2.367 49 2.348	925 80 2,368 26 858	2,636 80 2,165 95 2,768	207 00 780 95 175	80 2,016 01	946 42 1,798 07	201 52 175	18 3,523 23 10,512	130 00	40 219	00	12	00	88	20 1,210 06 1	53 3,075 53	20 742 91	60 771 57
	Radiation	14,958				11,099 (	8.454	9,608	4,991	748	15,180	5,704	502,0 6,440	11.284	9,253	9,230)	3,328 /	8,130	9,527	16 011	110,01							6,196	15,748	3,804	070
1936–37 So Ft Percent	Radiation age Charge	14,958 5.550	29,309 9.275		_	:	8.389 2.195				•	5,704 1.661	~	11.284 3.085	က	: ::: /	ر ج	8,130 2.627	્યં	:	19,957 4.091							6,196	15,748	6,804	000
BUILDING		University College	Hart House	Memorial Tower	John Transport	Anatomy (	Biological	Engineering	Chermodynamics	Deservatory	Mining	Mill	Simcoe Hall	Botany	Men's Residences	Whitney Hall	C. Women's Union f	Household Science	electrical	Electrical Engineering Department	No 45 St. Coords	Military Studies	J. C. Men's Residence.	No. 43 St. George	Baldwin House	Conomics	arounds	Jemical	WcLennan Lab.	Cores	D. C.

BITTI DINC	1026	27	1027	56	100	26 97	100	- 00
	Sq. Ft.	Percent-	Sq. Ft.	ř	061	10-006	190	1991-99
	Radiation ag	age Charge	Radiation	age Charge	Light	Heat	Light	Heat
Museum	46,401	10.005	48,760	10.821	\$ 5,378 00	\$ 7,678 05		1
Arena	2,564	1.053	3,164	1.204	3,573 12	808	3,736 26	91 166
Stadium		:						
Hart House Dining Hall		:						
Wycliffe College.	13,122	4.071	13,122	4.047				
Knox College	16,071	4.545	16,071	4.512	_	3,487 93	1,926 80	3,715 49
Trinity College								
Victoria College.	8,430)		8,430		_		438 50	
Victoria College Library	3,854	:	3,854			903 75		928 56
Burwash Hall (Turney)	8,659 }	:	8,659	:				
Burwash Dining Hall ∫								
Emmanuel College	008'9		008'9		_			
Emmanuel College Residence	6,695	10.523	6,695	10 076	601 00	1,569 95		1,613 05
Annesley Hall	4,630	1 628	4,630	1.603	_			
	348,140	100.000	351,359	100.000	\$ 58,152 83	\$ 76,742 11	\$62,038 46	\$ 82,346 89

# AUDITOR'S CERTIFICATE

Toronto, 25th November, 1938.

To the Governors of the University of Toronto:

# GENTLEMEN:

I have verified the attached Balance Sheet of the University dated 30th June, 1938, and Schedules 1 to 10, and report that all the transactions of the year upon the

Revenue and Capital Accounts have been duly audited and found correct.

The securities representing your investments are held in safekeeping by your bankers. The Canadian Bank of Commerce, and were produced for my examination on 30th June. 1938, and also at another time during the year and found to be in agreement with the records kept by the Bursar. Your securities consist largely of bonds issued or guaranteed by the Dominion of Canada and by the Province of Ontario and bonds of Ontario municipalities, and also certain corporation and other securities received as bequests. Their approximate market value as at 30th June, 1938, was greater than their book value by \$875,432.56.

Bonds of the following municipalities which are included in your investments are in arrears of interest from one to six years or interest payments are being

received at reduced rates:

	Par Value	Book Value
Town of Mimico		
$5\frac{1}{2}\%$ 1942-1945	\$21,000.00	\$21,919.25
Essex Border Utilities		
$5\frac{1}{2}\%$ 1945-1947	19,047.60	19.802.72
Town of Weston		
5% 1936-1953	51,041.94	50.519.25
Town of Bridgeburg		
5½% 1936-1946	23,104.01	23.746.75
Township of East York		
5% 1944-1946	30,000.00	29,829.76
Township of York		
5% 1935-1936	16.000.00	15,942.20
Township of Scarborough		
5% 1943 1957	73.697.27	74.765.96

I also report that no income was received from certain non-trustee securities which came to you from the Wallberg and Whitney bequests.

The Bursar's records are well kept and all Endowment and Trust Funds properly accounted for.

Yours faithfully,

G. T. CLARKSON, F. C. A.,

Auditor.

# FINANCIAL STATEMENT

### BALANCE SHEET, 30th JUNE, 1938

# FUNDS AND LIABILITIES

General Endowment	Schedul	e 1\$	13,248.791	61
Specific Endowments (Scholarships, Prizes, et	(c.) "	2	537,488	62
Trust Funds		3	6,820.960	43
Pension and Retirement Funds				
Annuity Debentures		5	1.133.704	27
Contingent Funds, etc		6	89.750	81
Fees paid in advance				00
Royal College of Dental Surgeons			50,000	00

\$23.044.111 67

# Assets

C: I I D :11:	C.1 1.	1- 7	010 00F 661	49
Site Lands, Buildings and Contents				
Unproductive Lands		8	58,622	40
Leased Properties		9	724.385	71
Investments, Cash and Accounts Receivable	** * *	10	9.426.026	15
Royal Ontario Museum Investment			248.376	30
Ontario Government Annuities (16 George V,	Cap. 69).		78.004	75
Ontario Government Annuities (18 George V,	Cap. 55).		402,747	83
Superintendent's Stores	.Appendix	x IV	10.287	10
				\$23.044,111 67

NOTE: This statement does not include any assets or liabilities of The Toronto Conservatory of Music.

# SCHEDULE 1

0 7	
GENERAL ENDOWMENT	
Additions for 1937-38:	
Annuity debentures:	
Portion of 1937-38 instalments reducing principal:	
Twenty-ninth instalment, issue of July, 1909\$ 15,777 34	
Twenty-seventh instalment, issue of January, 1911 3,790 00	
Twenty-seventh instalment, issue of January, 1911 8,746 00	
Twenty-third instalment, issue of April, 1915 2,705 48	
Fourteenth instalment, issue of July, 1924 7,106 80	
Ninth instalment, issue of January, 1929 35.744 08	
<del></del>	70
Convocation Hall Advance:	
Restoration from proceeds of Wild Lands Sales, thirty first	
instalment 91	37
Land and building, No. 104 St. George Street, purchased from Miles	
Vokes, area 12,885 sq. feet, at net cost (Schedule 7)	27
Hygiene and Public Health Building, increase in valuation after con-	
struction of addition at South-east corner (Schedule 7) 25,817 (	06
Library proper:	
Additions for year less depreciation (Schedule 7)	93
Contra	
Reduction in valuation hitherto carried for Scott Street property (Schedule 9)	30.000 00
reduction in valuation inflicto carried for Scott Street property (Schedule 77	50,000 00
	§ 121.783 33
Return of 30th June, 1937	4 1211100 00
rectain of ooth june, 1997	10.121,000 20
Return of 30th June, 1938	\$13 248 791 61
teetan or oom june, 1700	

# SCHEDULE 2

# SPECIFIC ENDOWMENTS

# (Scholarships, Prizes, etc.)

A. A. S. Scholarship (Physics, etc.)	\$2.350	00
Aggett, Harvey. Memorial (Applied Science)	1.650	25
Aikens (English Literature)	5,305	20
Alexander Lectureship (English Literature)	14.777	17
All Souls' Historical Essay Prize	3.055	52
Armstrong, George H., (History)	2.370	50
B. A. A. S., Medals, etc	15	94
Bain, H. R., (Matriculation, Applied Science)	600	00
Balfour Lectureship (Surgery)	4.679	84
Balmer, Jean (Science)	1,239	23
Bankers' (Political Science)	1,306	41
Baptie, Margaret W., (Medicine and Science)	4.047	47
Bastedo, Alma Anderson, Memorial Prize (English)	538	65
Bickle, T. H. Bursary	1,008	15
Blake (Matriculation)	31.291	72
Blake (Science and Moderns)	3,750	00
Boiler Inspection and Insurance Company (Applied Science)	150	00
Booth (University Schools)	1.000	51
Brickner, Rabbi (Social Science)	1.034	11

Brock, Margaret A., (Matriculation, English and History)	1,033 44
Brown, George, Memorial (Medical Science)	11,222 88
Brown, George (Modern Languages)	1,128 34
Bruce Robert (Arts and Medicine)	1,372 22
Chappell, Walter F., Prize (Medicine or Surgery)	501 77
Cockburn, G. R. R., (Greek)	1,050 00
Cody, Florence (Matriculation)	2,539 91
Cody, Henry John (Matriculation)	2,541 22
Cody, Maurice. Memorial (Modern Ilistory)	3,355 15
Cody. Maurice. Memorial Prize	1,320 76
Cody, Maurice, Memorial (University Schools)	262 91
Cohen, Arthur (English)	1,000 21
Coleman, Medal (Geology)	500 00
Copp, John, Memorial Fund (Mcdicine)	5,198 08
Crawford, Allan Rudyard (University Schools)	525 00
Crawford, Henry Job (University Schools)	1,049 61
Darling & Pearson Prize (Architecture)	100 00
Delta Phi Epsilon Bursary	100 00
De Lury, Alfred T., (Mathematics)	3.547 65
Dickenson, Marion E. (Household Science)	5,971 22
Dunlap, David, Memorial (Psychology)	1.325 00
Falconer, Sir Robert, Lectureship	16,417 88
Findlay, J. A. (Mechanical Engineering)	2,351 27
Fulton. Alexander T (Mathematics and Science)	3,351 30
Gibson (Matriculation)	3,940 81
Gibson (Pass Matriculation)	5,195 28
Glen Mawr Old Girls' Association (English and History)	2.301 52
Goldsmith, Perry (Oto-Laryngology)	3,064 04
Graduate Fellowships (Sundry)	500 00
Grasett Memorial (Classics)	5,360 83
Hardie, William (Matriculation)	2,300 00
Harris, James (Matriculation, University College)	26,101 62
Hastings (Public Health and Nursing)	11,757 19
Henderson, Joseph, Memorial (Matriculation)	2,225 13
Hendry, William John (Obstetrics)	3.008 90
Hollywood Theatre Prizes (French)	50 00
Hutton, Maurice (Classics)	5,521 42
International Mathematical Congress, 1924 (Medals)	2,864 87
Irwin, Herbert W., Memorial (Modern Languages)	1,031 38
Isserman, Rabbi, Prize (Social Science)	899 36
Jenkins (Engineering)	200 00
Kennedy, George (Philosophy)	4 55
Kennedy, Sarah (Household Economics)	4 55
Khakhi University Memorial	3,421 43
Labour Research Institute (Law)	25 00
Laurier, Sir Wilfrid, Memorial (French)	2.222 61
Lawler, Gertrude, Memorial (English and History)	3,207 82
Lawler, Gertrude, Prize (English)	303 97
Lilly, Eli (Medicine)	89 69
Lindsley Fellowship (Geophysics)	400 00
Lister Prize (Surgery)	5,328 70
Lyle Medal (Orientals)	655 41
McCaul Medal (Classics)	543 06
McCharles, AEneas. Prize	21,912 89
McCrae, John (Matriculation)	10,961 19
McCrea, Dent (Law)	100 00
Macdonald, John (Philosophy)	2.380 00
Mackenzie, Alexander, Memorial (Political Science)	16.425 00
Mackenzie, J. J., Fellowship (Pathology)	5.706 87
McLean, J. S., Fellowship (University College)	$1.250 \ 00$
McLean, J. S., (Matriculation, University College)	8.300 00
MacLennan-MacLeod Memorial Prize (Applied Science)	512 50
MacMurchy, Angus, Medal (Law)	1.036 51
McPhedran, Alexander, Research Fellowship) (Medicine)	30,142 45
Marfleet Pearson Kirkman, Lectureship	8 583 30
Mickle, Charles, Fellowship	28.8"8 40
Mickle, Ellen, Fellowship	28,953 95
Moss (Classics)	2.000 00
Mulock, Mary (Classics)	2.838 74
Mulock, William (Classic and Mathematics)	2.000 00
Mustard, Wilfred P., (Classics)	3,000 00

Neelands, Florence M., Prize (French)		
	516 25	
Nesbitt, Wallace, Medals (University Schools)	589 26	
Nipissing Research Fellowship (Mining)	21,684 20	
Northway, John (Psychology Research)	500 00	
Ontario Association of Architects	100 00	
Ontario Hockey Association War Memorial (Matriculation)	2,025 00	
Pakenham Memorial Prize	1,008 07	
Pan-Hellenic Association Prizes (University College)	150 00	
Peters, George A., (Surgery)	3.702 63	
Porter, T. M., (University Schools)	6,017 08	
Porter, T. M., (Corrigan gift) University Schools	1,000 00	
Prince of Wales (Matriculation)		
Dublic Smalring Association Dumanus	1,050 00 50 00	
Public Speaking Association Bursary		
Putnam, William Lowell, Prize (Mathematics)	505 31	
Quebec Bonne Entente Prize (French)	1,000 00	
Ramsay, William (Physics)	1.136 19	
Ramsay, William (Political Economy)	1,367 00	
Ransom, A. C., (Applied Science)	5.146 36	
Reeve, Anna Howe, Prize (Household Science)	676 53	
Reeve, R. A., Prize (Medicine)	50 00	
Richardson, James H., Research Fellowship (Anatomy)	10,000 00	
Rossin, Julius (Modern Languages)	1,000 00	
Rowell, Langford (Law)	1,012 06	
Rowell, Langford (University Schools)	2,000 00	
Saddington, Ronald S., Medal (Pathology)	80	
Sadowski (Sociology and Social Science)	500 00	
St. Margaret's College Alumnae (Social Science)	75 00	
St. Margaret's College Alumnae Prize (Public Speaking)	625 32	
School of Nursing Bursary	302 86	
Squair French Prose Prize	310 16	
Starr Bequest, Medals	7.852 62	
Strang, Hugh Innis, Memorial (Classics)	2.796 59	
Toronto Women's League of United Synagogue Prize (Medicine)	50 00	
Tracy (Philosophy)	896 35	
Ubukata (Japanese students)	10.670 02	
	50 00	
University College Alumni Scholarship (Matriculation)	25 00	
University College Alumni Prize (Commerce and Finance)		
University College French Society Prize	25 00	
U. T. S. Engineering	250 00	
Vander Smissen (German)	2.664 68	
Wickett, Emerson, Memorial (Applied Science)	500 00	
	0.057.50	
Wickett, Morley (Matriculation, English and History)	2.271 73	
Willson, Herbert (Biology and Medicine)	100 00	
Wilson, Herbert (Biology and Medicine)	100 00 2.000 00	
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology)	100 00 2.000 00 17,712 95	
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History)	100 00 2.000 00 17,712 95 3,749 64	
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology)	100 00 2.000 00 17,712 95	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)	100 00 2.000 00 17,712 95 3,749 64 6,325 53	
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938 Return of 30th June, 1937. \$509,364 83	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Willson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938 Return of 30th June, 1937. \$509,364 83	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) \$59,034 64 Interest credited to endowments. 6.231 99	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) \$59,034 64 Interest credited to endowments. 6.231 99	100 00 2.000 00 17,712 95 3,749 64 6,325 53	537,488 62
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) 59,034 64 Interest credited to endowments. 6,231 99  Expended for scholarships, prizes, etc.	100 00 2.000 00 17.712 95 3,749 64 6,325 53 \$ \$574,631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) \$59,034 64 Interest credited to endowments. 6.231 99	100 00 2.000 00 17.712 95 3,749 64 6,325 53 \$ \$574,631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) 59,034 64 Interest credited to endowments. 6,231 99  Expended for scholarships, prizes, etc.	100 00 2.000 00 17.712 95 3,749 64 6,325 53 \$ \$574,631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	100 00 2.000 00 17.712 95 3,749 64 6,325 53 \$ \$574,631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) 59,034 64 Interest credited to endowments. 6,231 99  Expended for scholarships, prizes, etc.	100 00 2.000 00 17.712 95 3,749 64 6,325 53 \$ \$574,631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	100 00 2.000 00 17.712 95 3,749 64 6,325 53 \$ \$574,631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	\$574.631 46 37,142 84	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M. (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) 59,034 64 Interest credited to endowments. 59,034 64 Interest credited to endowments. 6231 99  Expended for scholarships, prizes, etc.  Return of 30th June, 1938.  SCHEDULE 3  TRUST FUNDS  Banting Research Foundation.	\$574.631 46 37,142 84 \$713.215 22	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	\$574.631 46 37,142 84 \$713.215 22 12,956 58	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	\$574.631 46 37,142 84 \$713.215 22 12,956 58 45 60	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	\$713.215 22 12,956 58 45 60 6,058 47	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) \$59,034 64 Interest credited to endowments. \$59,034 64 Interest credited to endowments. 6.231 99  Expended for scholarships, prizes, etc.  Return of 30th June, 1938  SCHEDULE 3  TRUST FUNDS  Banting Research Foundation (Reserve) Canada Packers' Donation (Heparin Research) Carnegie Corporation, Educational Research Carnegie Corporation, Physiology Research	\$574.631 46 37,142 84 \$713.215 22 12,956 58 45 60 6,058 47 2 36	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) \$59,034 64 Interest credited to endowments. \$59,034 64 Interest credited to endowments. \$6.231 99  Expended for scholarships, prizes, etc.  Return of 30th June, 1938.  SCHEDULE 3  TRUST FUNDS  Banting Research Foundation Banting Research Foundation (Reserve) Canada Packers' Donation (Heparin Research) Carnegie Corporation, Educational Research Carnegie Corporation, Physiology Research Carnegie Corporation, Library, University College.	\$574.631 46 37,142 84 	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937	\$574,631 46 37,142 84 \$713,215 22 12,956 58 45 60 6,058 47 2 36 1,715 85 954 95	
Wilson, Herbert (Biology and Medicine) Wilson, Daniel (Natural Science) Wright, Ramsay (Zoology) Wrong, George M., (Modern History) Young Memorial (Philosophy)  Ledger Balances on 30th June, 1938.  Return of 30th June, 1937. \$509,364 83 Additions to funds during year (including income from investments) \$59,034 64 Interest credited to endowments. \$59,034 64 Interest credited to endowments. \$6.231 99  Expended for scholarships, prizes, etc.  Return of 30th June, 1938.  SCHEDULE 3  TRUST FUNDS  Banting Research Foundation Banting Research Foundation (Reserve) Canada Packers' Donation (Heparin Research) Carnegie Corporation, Educational Research Carnegie Corporation, Physiology Research Carnegie Corporation, Library, University College.	\$574.631 46 37,142 84 	

Dunlap Bequest (Medical Research)	108,611 4 45,173		
Engineering Society Donation	181	93	
Fairclough, William Erving, Memorial. Fasken, David, Trust	24,709 5 5,012		
Forster, J. W. L., Fine Art Donation	360		
Fulford Estate Donation	3,244		
Geophysics Research. Honor, John. Bequest (Arts).	2,216 10,851		
Horton, John Hughes, Bequest (not allocated)	816		
Hoskin, John, Bequest (Residences)	13,583		
Insulin Committee. Surplus. Langton, John, Memorial.	882,603 30		
Leonard. Reuben Wells, Bequest	137,327		
Abbott Dental	37		
King Alfred Millenary	10.073		
Phillips Stewart	1.000		
John Squair (French) No. 2	1,005	07	
Graduates' Deposits	3,617 272,261		
Massey Foundation	30.379		
Medical Research, Banting	175.257		
Medical Research, Best	107.580 3.322		
McLennan, Sir John, Bequest (Scientific Research)	2.022		
Ontario Archaeology—Special Research	741		
Porter, T. M., Bequest	12.154 17.164		
Rockefeller (Medical Endowment)			
Rockefeller (Hygiene Endowment)	863.882	15	
Rockefeller (Child Research)	5		
Rutherford, Dr. James P., (Medical Research)	6,256		
Seldon, Lauretta M., Bequest	54		
Simpson, Mary A., Bequest	103	29 54	
Stewart, John A., (Pernicions Anaemia)	2,462		
Walker, E. C., Bequest (Residences)	61.677		
Walker, J. Harrington, Bequest (Residences)			
Wallberg, E. A., Memorial (Loan Fund)	6.025		
Whitney, E. C., Beauest			
Wintercorbyn, Mrs. E. A., Bequest	9,578	63	
Ledger balances on 30th June, 1938			20.960 43
Return of 30th June. 1937			
Additions to funds during year (including income from investments) Interest credited to endowments			
Expenditures and transfers from funds	\$7.395,854 574,893	12 69	
Return of 30th June, 1938		\$6.8	20 960 43
Return of ooth June. 1500			
SCHEDULE 4			
Pension and Retirement Funds			
1. Pension Fund (Academic) (Commenced 1 July, 1929):	@110.025	7.1	
At credit of account on 30th June, 1937	\$410.835 44,588		
Interest credited	18,484		
	\$473,908	79	
Withdrawals			
		\$1	54,548 59

2. Pension Fund (Employees) (Commenced 1 October, 1929): At credit of account on 30th June, 1937. \$502.603 62 Contributions during year 70,209 56 Interest credited. 21,369 36  Withdrawals \$594.182 54 17,906 20  3. Estimated accrued liability as per Actuary's report at quinquennial revaluation in 1934. \$800.000 \$100.0000 \$100		00
SCHEDULE 5		
Annuity Debentures		
Issue of July, 1909. \$500.000. repayable in forty equal annual amounts of \$25,260 each. Value as on 30th June, 1938, of the eleven outstanding instalments	\$221.289 65.588 3,284	00
Value as on 30th June, 1938, of the thirteen outstanding instalments	151.356 7.578	
Value as on 30th June, 1938, of the seventeen outstanding instalments	69,950	67
Issue of July, 1924, under R.S.O., 1914, Cap. 279, for construction of Forestry building. \$124,622, repayable in twenty equal annual amounts of \$10.000 each.  Value as on 30th June, 1938, of the six outstanding instalments	1,244 50,756 533.234	90
Accrued on 30th June, 1938, of tenth payment and charged to Revenue, 1937-38	29,421	80
	\$1.133.704	27
SCHEDULE 6		
CONTINGENT FUNDS, ETC.		
Contingent Fund (Investment Reserve): Balance brought forward from 1937.  Organ Fund: Balance on 30th June, 1937.  Expenditure on upkeep of organ. less receipts.  \$3.464 03		
University Press:	3,270	94
At credit of accounts as per Appendix III  Ontario College of Education: At credit of account (Appendix V)  Sundry Legislative Grants:	7.246 34.865	
Administration Building:  Balance brought forward from 1937	283	15
Botanical Building: Balance brought forward from 1937  David Dunlap Observatory (Construction Account):	1	65
Balance brought forward from 1937	237	35
	\$218.066	49

Sundry ledger balances, items in suspense, etc.: Residence, Laboratory and Key deposits		
Fire Insurance Premiums paid in advance. \$21,424 56 Workmen's Compensation Board deposit. 134 10 Banting Institute. 133 34	\$5,078 22	
	21,692 00	16,613 78
Balance at debit of Revenue on 30th June, 1937, brought forward	\$14,105 00 97.596 90	\$201,452 71 111,701 90
SCHEDULE 6a		\$89,750 81
Revenue, 1937-38		
Receipts	T .	A
Legislative Grant, University Act, 1906	Estimate \$500,000 00 7,000 00 10,000 00 795,000 00 30,000 00	Actual \$ 500,000 00 7,000 00 10,000 00 798,971 57 24,025 40
On Dominion and Provincial Government Bonds. On Ontario Government Annuities. On Debentures. On Loans. On Bank Balances.	160,000 00	108,770 92 26,018 62 3,073 59 3,260 61 2,381 43
Rentals: University Park ground leases. City of Toronto payment. Business properties. Sundry houses and land earnings.  Men's Residences:		11,393 00 6,000 00 12,278 76 2.420 36
(General, \$14,974.94; University College, \$2,743.10)	17,000 00	17.718 04 62,883 26
University College Women's Union:	68,000 00	
(Membership fees, \$2,062; rooms and meals, \$5,196.67)		7.258 67
Press and Book Department Photographic Service and Casual Revenue	50,000 00 30,000 00 5.000 00	57,039 68 30,000 00 8,888 11
	.672,000 00 900,000 00 375,785 00	\$1,699,382 02 900,000 00 200,000 00
\$2	2.947.785 00	\$2,799.382 02
Expenditures		
Under appropriations as per Appendix II	2.882.785 00 65.000 00	\$2,830,590 60 66,388 32
\$2	2.947,785 00	\$2,896,978 92
Receipts as above		2,799,382 02
Excess of expenditures over receipts carried to Schedule 6		.\$ 97,596 90

#### SCHEDULE 7

SCHEDULE 7		
SITE LANDS, BUILDINGS AND CONTENTS		
Site Lands:		
2,423,843 sq. feet @ forty cents per foot	\$969,537	20
332,549 sq. feet @ cost price		
18,000 sq. feet @ estimate	40,000	
2,774,392 sq. feet		\$1.456.881 43
Buildings:		., ,,
Anatomical building	\$482,388	37
Baldwin House	12,000	
Banting Institute	813,129 129,745	
Biological building	516,998	
Chemical building	77,469	
Convocation Hall	214,866	
Dental building	350,000	00
Economics building	76,350	
Electrical building	346,699	
Engineering building	50,000 122,359	
Geodetic Observatory building	12,000	
Hart House (not appraised)		
Household Science building	455,000	00
Hygiene and Public Health building	852,682	
Library building	327,425	
McLennan Laboratory	363,945 119,017	
Mechanical building	200,000	
Men's Residences	217,670	
Military Studies building	8,239	
Mining building	384,736	
Mill building	229,972	
Ontario College of Education	703,390	
President's House	38,767	00
Psychology buildings	22.333	
Simcoe Hall	399,055	
University College building	450,000	
University College Women's Union	70,059	19
Women's Residences: Whitney Hall	407.000	27
Hutton House	487,988 24,723	
St. George Street properties:	24,120	
Numbers 43	30.054	25
45	39,079	
47	10.172	
49 96	25,007 22,692	
98	16,708	
100	17,776	
104	22,498	27
106	10.034	15
	20 752 042	10
Less balance of purchase money yet to be paid on No. 104	\$8,753,042	10
St. George Street		00
		\$8.744.992 10
Library		668.079 04
Organ		24.000 00 375,153 99
Furniture and Furnishings, various buildings		43,565 13
Arena		223,070 40
Athletic Field Stadium and equipment		11,817 88
Aura Lee Grounds and equipment (Ontario College of Education)		
Gymnasium equipment		7,620 19
Surveying Practice Camp, Lutterworth Township. (land, \$1,250. bui \$10,000)		
David Dunlap Observatory (land, \$41,750, building, \$163,700, teles		
etc \$225.000)		430,450 00

Connaught Laboratories (Farm, buildings and equipment). Connaught Laboratories (Hygiene building plant). Central Power Plant. Printing Plant. General Museum Specimens. Dining Hall equipment.			81.500 00 1 00 1 00 1 00 1 00 1 00
Total valuation		\$1	2,095,661 43
Return of 30th June, 1937	\$22,498 27	.026,148 85	
\$688.741.28 20.662 24	29,506 93		
Less payment yet to be made on No. 104 St. George Street	\$77,822 26 8.050 00	69.772 26	
•			12,095,921 11
Women's Residences Furniture written down by application Wild Lands set apart for Women's Residences			259 68
Return of 30th June. 1938			12,095.661 43
SCHEDULE 8			
UNPRODUCTIVE LANDS U. C. C. block on King Street		\$50.425 40 8.045 00 152 00	
(No transactions during y Return of 30th June, 1938	rear)		\$58,622 40
SCHEDULE 9			
Leased Properties			
Land leased to City of Toronto  Park Lots leased (including Federated Colleges Sites)  Toronto business properties  Spadina Avenue houses (Nos. 719-721)  Caradoc Farm		\$120,000 00 402,992 20 183,000 00 8,023 51 3,000 00	e-1-01c -1
Rentals and City of Toronto payment accrued		\$7.295 00 75 00	\$717.015 71 7,370 00
		=	\$724,385 71
Return of 30th June, 1937	Scott Street.	\$752.975 71 30,000 00	
Difference in rentals past due		\$722.975 71 1,410 00	
Return of 30th June, 1938			\$724,385 71

## SCHEDULE 10

## INVESTMENTS, CASH AND ACCOUNTS RECEIVABLE

INVESTMENTS, CASH AND ACCOUNTS RECEIVABLE		
Dominion of Canada Bonds and guaranteed issues		51
Province of Ontario Bonds and guaranteed issues	\$2,756,246 18,135	—\$3.516,446 52 31 67
Other Government Bonds	\$482,994	— 2,774.381 98 52 79
Municipal debentures.  Interest accrued.	\$639.675	— 484.059 31 36
University of Toronto debentures (guaranteed) Toronto Conservatory of Music debentures Corporation debentures Sundry stocks Investments in trust for Banting Research Foundation Loan to Athletic Association Loan to Hart House Accounts Receivable: University Press Department of Photography.	\$190 182	201,898 42 35,351 00 108,539 62 709,980 61 55,000 00 5,000 00
Labour and material. Central Power Plant. Eaton Endowment.	28,795	14
Less Royal Ontario Museum balances and miscellaneous items at credit		
		10,110 10
Canadian Bank of Commerce, on deposit		314,645 71
Canadian Bank of Commerce, on deposit	• • • • • • • •	
Canadian Bank of Commerce, on deposit	• • • • • • • •	314,645 71 \$9,426.026 15
Canadian Bank of Commerce, on deposit	•••••	
Transactions, 1937-38	\$9,399 16,920 35,744 43,263 1,020 12,000 34,391 4,596,184	\$9,426.026 15  00 46 08 00 65 00 80
Transactions, 1937-38  Inwards  Dominion and Provincial Government Bonds.  Municipal debentures.  University of Toronto debentures.  Toronto Conservatory of Music debentures.  Corporation debentures.  Athletic Association and Hart House loans.  Banting Research Foundation Investments.	\$9,399 16,920 35,744 43,263 1,020 12,000 34,391 4,596,184	\$9,426.026 15  00 46 08 00 65 00 80 70
Transactions, 1937-38  Inwards  Dominion and Provincial Government Bonds.  Municipal debentures.  University of Toronto debentures.  Toronto Conservatory of Music debentures.  Corporation debentures.  Athletic Association and Hart House loans.  Banting Research Foundation Investments.  Withdrawals from Canadian Bank of Commerce.	\$9,399 16,920 35,744 43,263 1,020 12,000 34,391 4.596,184  \$423,462 1,873 361 1,970 30,954 33.099 4,469,577 792	\$9,426,026 15  00 46 08 00 65 00 80 70 —\$4,748,923 69  24 66 42 65 62 92 30 68
Transactions, 1937-38  Inwards  Dominion and Provincial Government Bonds. Municipal debentures. University of Toronto debentures.  Toronto Conservatory of Music debentures. Corporation debentures. Athletic Association and Hart House loans. Banting Research Foundation Investments. Withdrawals from Canadian Bank of Commerce.  Outwards  Dominion and Provincial Government Bonds. Municipal debentures. Toronto Conservatory of Music debentures. Corporation debentures. Sundry stocks. Banting Research Foundation Investments. Deposits in Canadian Bank of Commerce. Increase in accrued revenue.	\$9,399 16,920 35,744 43,263 1,020 12,000 34,391 4,596,184  \$423,462 1,873 361 1,970 30,954 33.099 4,469,577 792 36,007	\$9,426,026 15  00 46 08 00 65 00 80 70 \$-\$4,748,923 69  24 66 42 65 62 92 30 68 29 4,998,099 78 \$249,176 09

## APPENDIX 1

# Fees, 1937-38

Balance brought forward, 1936-37. Total of fees collected, 1937-38.	\$617 00 1.015.238 47
	1,015,855 47
Distribution thereof: Sundry refunds during year. Share of fees paid to the following: Hart House. Students' Administrative Council. Athletic Fee. Medical Society. Dental Students' Parliament. Foresters' Club. Graduate Students' Union. University College Literary and Athletic Society. University College Women's Undergraduate Association. Medical Women's Undergraduate Association. Teachers' Course Association.	\$5.173 00  43.796 25 15.233 00 15.972 00 3.163 00 1.504 00 93 00 452 00 1.772 00 1.481 00 122 00 974 00
Royal College of Dental Surgeons   St. Michael's College (Household Science)   Toronto Conservatory of Music   Hospitals:   Toronto General   \$9,675 00   Toronto General (Burnside)   904 00   \$10,579 00   St. Michael's   1,510 00   Sick Children's   1,245 00   Toronto Western   1,280 00	1.870 00 55 00 980 00
Credited to Sundry Accounts: Ontario College of Education. University College Women's Union. School of Nursing. St. George's School for Child Study. Laboratory Deposits. Fees paid in advance for 1938-39. Balance to Revenue Account (Schedule 6a).	14.614 00 64,323 64 2.062 00 15,958 00 2.447 50 22,947 51 1,891 00 798,971 57
8	1.015.855 47

DETAILS OF FEES RECEIVED

Total	5,444 00 \$ 595,981 32 2,348 00 31,661 64	4,101 50 545 00 670 00 820 00			777 00	8,212 00	1,229 00 4,378 00 22,947 51	_	1,005 00 41,288 25 13,685 00		1,504 00 93 00	85 \$ 861,662 22
Household Science	\$6 · ·	170	203 203 00	287 00		:	24 00 25 00 476 85	_	166 00			7,485
Music	\$ 1,220 00	25 00 20 00 120 00					5 00		12 00			\$ 2,303 00 \$
Forestry	\$ 4,144 00	2 00	395 00 50 00	217 00		85 00	20 00		00 98 00 88 00 00 00 88		93.00	\$ 5,583 00 \$
Education and Pedagogy	\$ 26,319	380 00	2,089 00 765 00					35 00	1,570 00			\$ 68,515 64
Dentistry	586 00 673 00	115 00 30 00 180 00	2,205 690	1,302 00	:	410 00	104 00 3,146 65	<del>-1</del>	2,228 00 504 00		1,504 00	33 \$ 57,326 65 \$
Applied Science	49 \$ 173,841 33 \$ 43	75		5,831 00		2,180 00	50 00 852 00 4,987 75	<del>.</del>	10,135 25 2,252 00 9,496 00			04 \$ 214,816 33
Medicine		25 00 55 00 150 00		5,726 00		1,110 00	52 00 1,217 00 5,071 55	27	8,924 00 2,036 00 2,367 00	3,163		50 \$ 237,667 04
Commerce and Finance	50 \$ 23,463 50 \$ 193,437	2 00	2,130 00 330 00	1,449		507 00	177		2,236 00 522 00 600 00	278		\$ 31,755
Arts	\$ 124,525 50		29,669 6,632 00 4,640	17,605	777 00	3,920 00	1,099 00 1,888 00 9,264 71	1,838	15,793 00 7,452 00 7,452 00 7 195 00	1,494		\$ 236,179 21
	General Tuition	Registration Matriculation	Examinations. Degrees & Hon. Cert.	Library	(Diploma)	(Men) & Phy. Tr.	(Women) Penalties Laboratory Deposits	Women's Undergraduate	Association Hart House Students' Adm. Council. Athletic Fee	Literary and Athletic Society. Medical Society.	Dental Students' Parlia- ment Foresters' Club	

DETAILS OF FEES RECEIVED—Continued

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	Total	\$ 52,868	11,904	750	21,206	177	=======================================	100	1	280	285	213		999	35	189,11	526	÷ :	0,043	39	763	105	508	2.00 8.00 1.00 1.00 1.00 1.00 1.00 1.00 1	45.9	974	50 \$ 153,576
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			. :	: (	5 :	Occupational Therapy.				Art of the Theatre	Public Admistration.	. · · · · · · · · · · · · · · · · · · ·	:				Degrees & Hon, Cert.	aboratory Supplies					:	Students' Adnı. Council	Athletic Fee	e As	
		:.	Tuition	. 0	eachers' Course	E	. yc	Aerial Navigation	S:	The	nist	Social Workers	:	n		S	on,	dne		a III a		Women's Union.	:	n.	: -	u. c	
1		: 0	n	ts.,		ona	erat	Nig	urse	the	Ad	10/1	100	atio	em.	tion	$\Xi$	rry ?		, (u.		Un	use.	, Ac	F ce	30	
		uition	Tuition	alis	hers	pati	ioth	Z isi	ပိ	t of	Dic	cial	strat	icul	nuc	nina	ees	rate	LY.	(Women)	lties	en's	Ho	ents	Stic	hers	
		uiti	Tu	Specialists	eac	ccn	Physiotherapy.	eria	Short Courses:	A	n <sub>d</sub>	So	Registration.	Matriculation.	Ad Eundem	Examinations	egr.	abo	Jbrary		Penalties.	Von	Hart House	tud	Athletic Fee	eac	
		L	7	SC	7	0	<u> </u>	A.F	S				~	-	V.		<u> </u>	<u> </u>		-	0	-	1	S.	£ (		,

## CLASSIFICATION OF SERVICES

Commerce and Finance					
Tuition, etc.:     Arts			Potunds		
Arts.		Receipts	Refunds	Deductions	Amount
Arts.					
Arts.	Tuition, etc.:				
Commerce and Finance		\$124,525 50	\$1,138 50		\$123,387 00
Applied Science		23,463 50	128 50		23,335 00
Applied Science	Medicine	195,112 49	9 307 00	14,614 00	180,191 49
Education         32,950 00         254 00         32,696 00					173,349 33
Forestry	Dentistry			1,870 00	42,355 00
Forestry				32,696 00	
Forestry			_ ]	31,627 64	
Household Science					4,144 00
Post Graduate					
University Extension					
Social Science					
Pharmacy					
School of Nursing         16,128 00         170 00         15,958 00         St. George's School         2,447 50         2,447 50         2,682 00         2,682 00         2,682 00         2,682 00         2,682 00         2,682 00         3,30 00         20 00         1,310 00         815 00         816 00         815 00         816 00         816 00         816 00         816 00         816 00         818 10         816 00         818 10<		,			
St. George's School         2,447 50         2,447 50         2,682 00         2,682 00         2,682 00         2,682 00         2,682 00         1,310 00         20 00         1,310 00         845 00         20 00         1,310 00         845 00         845 00         845 00         845 00         845 00         855 00         90 0         845 00         845 00         845 00         845 00         845 00         90 0         8466 00         90 0         8466 00         90 0					,
Registration       2,682 00       2,682 00         Matriculation       1,330 00       20 00       1,310 00         Ad Eundem       855 00       10 00       845 00         Examinations       67,485 00       755 00       66,730 00         Degrees and Honour Certificates       18,783 25       166 50       18,616 75         Laboratory Supplies       4,678 00       12 00       4,666 00         Library       38,060 50       79 00       37,981 50         Physical Education Diploma       777 00       777 00         Med. Exam and Phy. Tr. (Men)       8,212 00       34 00       8,178 00         Med. Exam and Phy. Tr. (Women)       1,268 00       1,268 00       1,268 00         Penalties       5,141 00       5 00       5,136 00         Women's Union       2,062 00       2,062 00         Women's Undergraduate Association       1,481 00       1,481 00         Medicine       122 00       1,481 00         Hart House       43,796 25       43,796 25         Students' Administrative Council       15,233 00       15,233 00         Athletic Fee       15,972 00       15,972 00         Literary and Athletic Society       1,772 00       1,772 00					
Matriculation       1,330 00       20 00       1,310 00         Ad Eundem       855 00       10 00       845 00         Examinations       67,485 00       755 00       66,730 00         Degrees and Honour Certificates       18,783 25       166 50       18,616 75         Laboratory Supplies       4,678 00       12 00       4,666 00         Library       38,060 50       79 00       37,981 50         Physical Education Diploma       777 00       777 00         Med. Exam and Phy. Tr. (Men)       8,212 00       34 00       8,178 00         Med. Exam and Phy. Tr. (Women)       1,268 00       1,268 00       1,268 00         Penalties       5,141 00       5 00       5,136 00         Women's Undergraduate Association University College       1,481 00       1,481 00         Women's Undergraduate Association Medicine       1,481 00       15,233 00       15,233 00         Hart House       43,796 25       43,796 25       43,796 25         Students' Administrative Council       15,233 00       15,932 00         Athletic Fee       15,972 00       1,772 00         Literary and Athletic Society       1,772 00       1,772 00         Medical Society       3,163 00       3,163 00					0.000.00
Ad Eundem.       855 00       10 00       845 00         Examinations.       67,485 00       755 00       66,730 00         Degrees and Honour Certificates.       18,783 25       166 50       18,616 75         Laboratory Supplies.       4,678 00       12 00       4,666 00         Library.       38,060 50       79 00       37,981 50         Physical Education Diploma       777 00       777 00         Med. Exam. and Phy. Tr. (Men)       8,212 00       34 00       8,178 00         Med. Exam and Phy. Tr. (Women).       1,268 00       1,268 00       1,268 00         Penalties.       5,141 00       5 00       5,136 00         Women's Union       2,062 00       2,062 00       3,136 00         Women's Undergraduate Association Medicine       1,481 00       1,481 00       1,481 00         Women's Undergraduate Association Medicine       122 00       15,233 00       15,233 00         Hart House       43,796 25       43,796 25       43,796 25         Students' Administrative Council       15,972 00       15,972 00         Literary and Athletic Society       1,772 00       1,772 00         Medical Society       3,163 00       3,163 00         Dental Students' Parliament       1,504 00 <td></td> <td></td> <td></td> <td></td> <td></td>					
Examinations       67,485 00       755 00       66,730 00         Degrees and Honour Certificates       18,783 25       166 50       18,616 75         Laboratory Supplies       4,678 00       12 00       4,666 00         Library       38,060 50       79 00       37,981 50         Physical Education Diploma       777 00       777 00         Med. Exam. and Phy. Tr. (Men)       8,212 00       34 00       8,178 00         Med. Exam and Phy. Tr. (Women)       1,268 00       1,268 00       1,268 00         Penalties       5,141 00       5 00       5,136 00         Women's Union       2,062 00       2,062 00       2,062 00         Women's Undergraduate Association University College       1,481 00       1,481 00         Women's Undergraduate Association Medicine       1,481 00       1,481 00         Hart House       43,796 25       43,796 25         Students' Administrative Council       15,233 00       15,233 00         Athletic Fee       15,972 00       15,972 00         Literary and Athletic Society       1,772 00       3,163 00         Medical Society       3,163 00       3,163 00         Dental Students' Parliament       1,504 00       93 00         Foresters' Club <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Degrees and Honour Certificates.					
Laboratory Supplies       4,678 00       12 00       4,666 00       37,981 50         Library       38,060 50       79 00       37,981 50       777 00         Med. Exam. and Phy. Tr. (Men)       8,212 00       34 00       8,178 00         Med. Exam and Phy. Tr. (Women)       1,268 00       1,268 00       1,268 00         Penalties       5,141 00       5 00       5,136 00         Women's Union       2,062 00       2,062 00         Women's Undergraduate Association University College       1,481 00       1,481 00         Women's Undergraduate Association Medicine       122 00       1,481 00         Hart House       43,796 25       43,796 25         Students' Administrative Council       15,233 00       15,233 00         Athletic Fee       15,972 00       15,972 00         Literary and Athletic Society       1,772 00       1,772 00         Medical Society       3,163 00       3,163 00         Dental Students' Parliament       1,504 00       1,504 00         Foresters' Club       93 00       93 00         Graduate Students' Union       452 00       974 00         Laboratory Deposits       22,947 51       22,947 51	Degrees and Hangur Cortification				
Library	Laboratory Supplies				
Physical Education Diploma         777 00         777 00           Med. Exam. and Phy. Tr. (Men)         8,212 00         34 00         8,178 00           Med. Exam and Phy. Tr. (Women)         1,268 00         1,268 00           Penalties         5,141 00         5 00         5,136 00           Women's Union         2,062 00         2,062 00         2,062 00           Women's Undergraduate Association University College         1,481 00         1,481 00         1,481 00           Women's Undergraduate Association Medicine         122 00         122 00         122 00           Hart House         43,796 25         43,796 25         43,796 25           Students' Administrative Council         15,932 00         15,233 00           Athletic Fee         15,972 00         15,972 00           Literary and Athletic Society         1,772 00         3,163 00           Medical Society         3,163 00         3,163 00           Dental Students' Parliament         1,504 00         1,504 00           Foresters' Club         93 00         93 00           Graduate Students' Union         452 00         974 00           Laboratory Deposits         22,947 51         22,947 51					
Méd. Exam. and Phy. Tr. (Men)       8,212 00       34 00       8,178 00         Med. Exam and Phy. Tr. (Women)       1,268 00       1,268 00       1,268 00         Penalties       5,141 00       5 00       5,136 00         Women's University College       1,481 00       1,481 00       1,481 00         Women's Undergraduate Association Medicine       122 00       122 00       122 00         Hart House       43,796 25       43,796 25       5,333 00       15,233 00       15,233 00       15,972 00       15,972 00       15,972 00       17,72 00       Medical Society       1,772 00       3,163 00       3,163 00       3,163 00       0					
Med. Exam and Phy. Tr. (Women).       1,268 00       1,268 00         Penalties.       5,141 00       5 00       5,136 00         Women's Undergraduate Association University College.       1,481 00       1,481 00       1,481 00         Women's Undergraduate Association Medicine.       122 00       122 00       122 00         Hart House.       43,796 25       43,796 25       43,796 25         Students' Administrative Council       15,972 00       15,972 00         Athletic Fee.       1,772 00       1,772 00         Medical Society.       3,163 00       3,163 00         Dental Students' Parliament       1,504 00       1,504 00         Foresters' Club       93 00       93 00         Graduate Students' Union       452 00       452 00         Teachers' Course Association       974 00       974 00         Laboratory Deposits       22,947 51       22,947 51					
Penalties	Med Exam and Phy Tr (Women)				
Women's Union         2,062 00         2,062 00           Women's Undergraduate Association         1,481 00         1,481 00           Women's Undergraduate Association         122 00         122 00           Medicine         122 00         15,233 00           Hart House         43,796 25         43,796 25           Students' Administrative Council         15,233 00         15,233 00           Athletic Fee         15,972 00         15,972 00           Literary and Athletic Society         3,163 00         3,163 00           Medical Society         3,163 00         3,163 00           Dental Students' Parliament         1,504 00         1,504 00           Foresters' Club         93 00         93 00           Graduate Students' Union         452 00           Teachers' Course Association         974 00         974 00           Laboratory Deposits         22,947 51         22,947 51		,	5.00		
Women's Undergraduate Association University College.         1,481 00         1,481 00           Women's Undergraduate Association Medicine.         122 00         122 00           Hart House.         43,796 25         43,796 25           Students' Administrative Council         15,233 00         15,233 00           Athletic Fee         15,972 00         15,972 00           Literary and Athletic Society         1,772 00         1,772 00           Medical Society         3,163 00         3,163 00           Dental Students' Parliament         1,504 00         1,504 00           Foresters' Club         93 00         93 00           Graduate Students' Union         452 00         452 00           Teachers' Course Association         974 00         974 00           Laboratory Deposits         22,947 51         22,947 51				2.062.00	
University College. 1,481 00 1,481 00 1,481 00 Women's Undergraduate Association Medicine 122 00 122 00 122 00 143,796 25 43,796 25 43,796 25 544,796 25 15,233 00 15,233 00 15,233 00 15,972 00 15,972 00 15,972 00 15,972 00 15,972 00 17,7	Women's Undergraduate Association			2,002 00	
Women's Undergraduate Association Medicine.         122 00         122 00           Hart House.         43,796 25         43,796 25           Students' Administrative Council         15,233 00         15,233 00           Athletic Fee.         15,972 00         15,972 00           Literary and Athletic Society         1,772 00         1,772 00           Medical Society         3,163 00         3,163 00           Dental Students' Parliament         1,504 00         1,504 00           Foresters' Club         93 00         93 00           Graduate Students' Union         452 00         452 00           Teachers' Course Association         974 00         974 00           Laboratory Deposits         22,947 51         22,947 51			1	1.481 00	
Medicine         122 00         122 00           Hart House         43,796 25         43,796 25           Students' Administrative Council         15,233 00         15,233 00           Athletic Fee         15,972 00         15,972 00           Literary and Athletic Society         1,772 00         1,772 00           Medical Society         3,163 00         3,163 00           Dental Students' Parliament         1,504 00         1,504 00           Foresters' Club         93 00         93 00           Graduate Students' Union         452 00         452 00           Teachers' Course Association         974 00         974 00           Laboratory Deposits         22,947 51         22,947 51		1,101 0		1,101 00	
Hart House     43,796 25     43,796 25       Students' Administrative Council     15,233 00     15,233 00       Athletic Fee     15,972 00     15,972 00       Literary and Athletic Society     1,772 00     1,772 00       Medical Society     3,163 00     3,163 00       Dental Students' Parliament     1,504 00     1,504 00       Foresters' Club     93 00     93 00       Graduate Students' Union     452 00     452 00       Teachers' Course Association     974 00     974 00       Laboratory Deposits     22,947 51     22,947 51		122 00	)	122 00	
Students' Administrative Council     15,233 00     15,233 00       Athletic Fee     15,972 00     15,972 00       Literary and Athletic Society     1,772 00     1,772 00       Medical Society     3,163 00     3,163 00       Dental Students' Parliament     1,504 00     1,504 00       Foresters' Club     93 00     93 00       Graduate Students' Union     452 00     452 00       Teachers' Course Association     974 00     974 00       Laboratory Deposits     22,947 51     22,947 51				43,796 25	
Athletic Fee     15,972 00     15,972 00       Literary and Athletic Society     1,772 00     1,772 00       Medical Society     3,163 00     3,163 00       Dental Students' Parliament     1,504 00     1,504 00       Foresters' Club     93 00     93 00       Graduate Students' Union     452 00     452 00       Teachers' Course Association     974 00     974 00       Laboratory Deposits     22,947 51     22,947 51					
Literary and Athletic Society     1,772 00     1,772 00       Medical Society     3,163 00     3,163 00       Dental Students' Parliament     1,504 00     1,504 00       Foresters' Club     93 00     93 00       Graduate Students' Union     452 00     452 00       Teachers' Course Association     974 00     974 00       Laboratory Deposits     22,947 51     22,947 51					
Medical Society     3,163 00     3,163 00       Dental Students' Parliament     1,504 00     1,504 00       Foresters' Club     93 00     93 00       Graduate Students' Union     452 00     452 00       Teachers' Course Association     974 00     974 00       Laboratory Deposits     22,947 51     22,947 51		1,772 00	0		
Dental Students' Parliament     1,504 00     1,504 00       Foresters' Club     93 00     93 00       Graduate Students' Union     452 00     452 00       Teachers' Course Association     974 00     974 00       Laboratory Deposits     22,947 51     22,947 51	Medical Society	3,163 00	0		
Graduate Students' Union       452 00       452 00         Teachers' Course Association       974 00       974 00         Laboratory Deposits       22,947 51       22,947 51	Dental Students' Parliament	1,504 00	0	1,504 00	
Graduate Students' Union       452 00       452 00         Teachers' Course Association       974 00       974 00         Laboratory Deposits       22,947 51       22,947 51	Foresters' Club	93 00	0	93 00	
Laboratory Deposits	Graduate Students' Union	452 00	0	452 00	
	Teachers' Course Association				
\$1,015,238 47 \$5,173 00 \$209,819 90 \$800,245 57	Laboratory Deposits	22,947 5	1	22,947 51	
\$1,015,238 47 \$5,173 00 \$209,819 90 \$800,245 57					
		\$1,015,238 47	\$5,173 00	\$209,819 90	\$800,245 57

#### RECAPITULATION

University Fees Proper	131,049 5	1,138 50	\$209,819 90	129,911 00
	\$1,015,855 4	\$ 5,173 00	\$209,819 90	\$800,862 57
Less paid in advance for 1938-39				1,891 00
·				\$798,971 57

#### APPENDIX II Revenue Expenditures, 1937-38

	Appropriat	ion	Supple- mentary	Unused	Total
Administration:     I. Salaries	\$112,300	00	\$1,485 17		\$113,785 17
ances	103,700			\$2,688 42 1 72	
4. Bursar's Office	5,700	00	684 90		6,384 90
5. Registrar's Office	4,600	00		338 92 881 35	
7. Convocation and Simcoe Halls 8. President's House				926 35 159 20	11,998 65 40 80
II I'h	\$246,425	00	\$2,170 07	\$4,995 96	\$243,599 11
11. Library: 9. Salaries				\$825 48	
10. Maintenance 11. Building			765 89	487 49	55,465 89 4,632 51
	\$118,540	00	\$765 89	\$1,312 97	\$117,992 92
III. 12. Royal Ontario Museum	\$77,848	00		\$ 50	\$77,847 50
IV. Athletics, Physical Training, Military Studies, etc.:	-				
13. Athletics and Physical Train ing—Men	16,160	00		66 55	16,093 45
14. Athletics and Physical Train ing—Women		00		53 23	6,546 77
15. Health Service—Men 16. Health Service—Women	8,250		26.00	129 32	8,120 68 4,836 98
17. Military Studies	3,080		8 85		3,088 85
18. Hart House (share of mainten ance)	10,200	00	1,747 39		11,947 39
19. Women's Building (44 Hoskin Avenue)	1.120			290 80 86 12	
20. Minitary Studies Building	\$51,560		\$1,793 22	\$626 02	
V. 21. Examinations, etc				\$1,374 33	
VI. Faculty of Arts:					
22. Salaries				\$ 2,811 20	
23. Mathematics	. 900			416 28 121 99	
25. Physics				150 64 138 50	
27. Geology	. 1,300	00		34 44	1,265 56
28. Mineralogy			788 59	47 43	
30. Biology			100 02		5,320 88
31. Botany				40 07	6,409 93
32. History				13 17 5 50	
34. Archaeology	. 400	00	18 93		418 93
35. Fine Art			174 18	49 90	1
37. Political Économy	2,350	00		48 33	2,301 67
38. Law				$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
40. Psychology	4,075	00		1 84	4,073 16
41. Italian and Spanish	-		1		
ments	ıl				
Expenses				509 07 893 80	
45. McLennan Laboratory (Physics)	6,375	00		209 72	6,165 28

REVENUE EXPENDITURES, 1937-38—Continued

	Appropriation	on	Supple- mentary	Unused	Total
<ul> <li>46. Chemical Building</li> <li>47. Biological Building</li> <li>48. Botany Building</li> <li>49. Baldwin House (History)</li> <li>50. No. 43 St. George St.</li> <li>51. No. 45 St. George St. (Law)</li> <li>52. No. 47 St. George St. (Applied Mathematics)</li> <li>53. Economics Building</li> <li>54. Psychology Buildings</li> <li>55. David Dunlap Observatory</li> </ul>	2,905 ( 1,105 ( 1,735 ( 1,170 ( 11,450 ( 3,390 ( 4,000 (	00 00 00 00 00 00 00	96 17	288 97 181 11 467 89 332 60 553 36 708 56 407 73	5,821 17 5,501 00 2,616 03 923 89 1,267 11 837 40 10,896 64 2,681 44 3,592 27
	\$866,769 (	001	\$ 1,181 28	\$9,733 46	\$858,216 82

	Appro- priation	Supple- mentary	Unused	Eaton, Rockefeller and Wall- berg Funds	Total
VII. Faculty of Medicine: 56. Salaries 56a. Post Graduate Courses 57. Anatomy 58. Pathology and Bacteriology. 59. Pathological Chemistry. 60. Pharmacy and Pharmacology 61. Bio-Chemistry (including	5,600 00 8,025 00 2,250 00	\$1,686 52	264 60 47 31 175 06	\$79,107 76	5,335 40 7,977 69 2,074 94
Zymology)	3,650 00	)	56 12		3,593 88
63. Hygiene and Preventive Medicine. 64. Medicine. 65. Paediatrics. 66. Surgery. 67. Obstetrics and Gynaecology. 68. Ophthalmology. 69. Oto-Laryngology. 70. Therapeutics. 71. Psychiatry. 72. Medical Jurisprudence.	1,280 00 550 00 500 00 300 00 200 00	346 72	449 04 449 20 215 35	2,997 80 1,491 94	1,626 72 100 96 50 80 84 65 201 08 5 67
73. Radiology. 74. Art Service 75. General Expenses 76. Medical Building. 77. Banting Institute 78. Anatomical Building. 79. Hygiene Building.	1,000 00 4,150 00 4,500 00 8,800 00 23,150 00 5,135 00		60 11 83 30 81 952 73 715 68 1,012 84		999 40 4,138 17 4,469 19 7,847 27 22,434 32 4,122 16
	\$ 360,060 00	\$3,348 04	\$5,581 57	\$ 83,597 50	\$ 441,423 97
VIII. School of Hygiene: 80. Salaries				\$33,865 45 1,090 34	
				\$34,955 79	\$34,955 79

on menta	ary	
00 00	11 67	3,311 67
	00 00	\$5,975 73 00 00

## REVENUE EXPENDITURES, 1937-38—Continued

	Appro- priation	Supple- mentary	Unused	Eaton, Rockefeller and Wall- berg Funds	Total
86. Civil Engineering: Surveying and Geodesy 87. Mining Engineering 88. Metallurgical Engineering 89. Chemical Engineering and	3,900 00		403 69		4,304 44 3,496 31 933 45
Applied Chemistry 90. School of Architecture. 91. Engineering Drawing. 92. Applied Physics. 93. General Expenses. 94. Photographic Service.	905 00 625 00 1,775 00 3,260 00		60 15 30 92 200 33		8,945 31 801 93 564 85 1,744 08 3,059 17 7,954 67
95. Mining Building (including Mill Building)					10,808 09 5,702 50
Wind Tunnel)					6,634 56 233 38
Of which chargeable to Wallberg	\$358,428 00 20,000 00				
	\$338,428 00	\$ 11 67	\$ 10,108 60	\$ 20,000 00	\$348,331 07
X. Faculty of Dentistry: 99. Salaries 99a. Post Graduate Courses 100. Laboratory and Infirmary				• • • • • • • • • • • • • • • • • • • •	\$86,280 34 381 71
Supplies, etc	2,250 00	24 95			22,924 92 2,274 95 12,780 10
XI. Faculty of Household Science:	\$125,697 00	\$ 406 66			\$124,642 02
103. Salaries	1,900 00 2,000 00		331 92 141 53 53 47		\$28,112 50 2,843 08 1,758 47 1,946 53 4,580 71
XII. Faculty of Forestry:	\$40,775 00		\$ 1,533 71		\$ 39,241 29
108. Salaries	\$23,000 00 2,500 00 2,335 00		557 37		\$22,925 00 1,942 63 2,008 66
	\$27,835 00		\$ 958 71		\$26,876 29
	Appro- priation	Supple- mentary	Unused	Eaton, Rockefeller and Wall- berg Funds	Total
XIII. Faculty of Music: 111. Salaries					\$1,750 00 207 02
	\$2,050 00		. \$ 92 98		\$1,957 02
XIV. School of Graduate Studies: 113. Salaries			25 57		\$3,950 00 599 43
	\$4,575 00	0	\$ 25 57		\$4,549 43

## REVENUE EXPENDITURES, 1937-38—Continued

priation mentary Unused a	Rockfeller and Wall- erg Funds	Total
XV. School of Nursing:  115. Salaries	39,184 22	46,684 22
Proportion chargeable to Revenue	39,184 22	46,684 22
XVI. Social Science: 121. Salaries		\$13,045 00 824 42
\$13,950 00 \$ 80 58 .		\$13,869 42
XVII. University Extension and Publicity: 123. Salaries		\$18,366 67 60,876 04
\$72,450 00 \$6,876 04 \$83 33.		\$79,242 71
XVIII. Men's Residences: \$16,590 00 \$1,034 56.		\$15,555 44
XIX. Women's Residences and Union:		
126. Maintenance of Buildings       \$10,175 00       \$ 865 42         127. Housekeeping Account       58,275 00       7,026 59		\$ 9,309 58 51,248 41
\$68,450 00 \$ 7,892 01 .		\$ 60,557 99
<b>XX</b> . 128. Central Power Plant \$ 150,600 00 \$ 6,217 93 .		\$ 144,382 07

	Appro- priation	Supple- mentary	Unused	Total
XXI. Miscellaneous and General: 129. Central Stores 130. Grounds 131. Protective Service 132. Telephones 133. Insurance 134. Law Costs 134a. Taxes 135. Auditor's Fees 136. Travelling Expenses 137. Receptions to Societies and University Visitors 138. Convocation Expenses 139. Aid to Publications and Societies 140. Senate Elections 141. Bursaries 142. Contingencies	20,300 0 17,200 0 14,000 0 22,000 0 1,000 0 3,200 0 3,000 0 600 0 4,100 0	5,068 43	\$ 414 55 920 14 1,547 75 62 01 1,865 89 60 00 85 08	19,885 45 16,279 86 12,452 25 24,197 98 937 99 5,068 43 3,000 00 3,237 58 1,134 11 540 00 4,014 92
	\$126,500 0	\$ 7,303 99	\$25,918 28	\$107,885 71

	Appro- priation	Supple- mentary	Unused	Total
XXII. 143. Capital Account Charges	\$119,653 00			\$119,653 00
XXIII. Special Research: 144. Departmental Appropriations 145. Banting and Best	16,230 00 10,000 00			19.211 45 10,000 00
	\$26,230 00	\$2,981 45		\$29,211 45

#### RECAPITULATION

	Appro- priation	Supple- mentary	Unused	Eaton, Rockefeller and Wallberg Funds	Total
I. Administration II. Library III. Royal Ontario Mu-	118,540 00				\$243,599 11 117,992 92
III. Royal Ontario Mu- seum IV. Athletics, Physical Training, Military	77,848 00	)	50		77,847 50
Studies, etc V. Examinations, VI. Faculty of Arts	51,560 00 20,300 00		1,374 33		52,727 20 18,925 67 858,216 82
VII. Faculty of Medicine. VIII. School of Hygiene. IX. Faculty of Applied	360,060 00			\$83,597 50	441,423 97
Science	338,428 00 125,697 00		10,108 60 1,461 64	20,000 00	348,331 07 124,642 02
hold Science XII. Faculty of Forestry XIII. Faculty of Music	40,775 00 27,835 00	)	958 71		39,241 29 26,876 29 1,957 02
XIV. School of Graduate. Studies XV. School of Nursing	4,575 00 7,500 00	)	25 57	39,184 22	4,549 43 46,684 22
XVI. Social Science XVII. University Extension and Publicity	13,950 00 72,450 00	)	80 58 83 33		13,869 42 79,242 71
XVIII. Men's Residences XIX. Women's Residences and Union	68,450 00	)	7,892 01		15,555 44 60.557 99
XX. Central Power Plant XXI. Miscellaneous and General		7,303 99	·		144,382 07 107,885 71
XXII. Capital Account Charges XXIII. Special Research (in-	119,653 00	<b>)</b>			119,653 00
cluding Banting and Best)	26,230 00	2,981 45			29,211 45
	\$2,882,785 00	\$ 26,838 31	\$ 79,032 71 26,838 31	\$ 177,737 51	\$3,008.328 11
	52,194 40	-	52,194 40		
Charged to Revenue Charged to Eaton, Rockefeller and Wallberg Funds					
Total expenditure as above		-			

## I. ADMINISTRATION

# 1. SALARIES

1. Chairmac		
(All salaries, except where otherwise stated, are for 12 months to	30 June, 19	38)
President's Office	******	
Hon. H. J. Cody, LL.D., President	\$15,000 00	
Miss A. W. Patterson, President's Secretary (paid also \$250 as Secretary,		
Faculty of Music)	2,500 00	***
		\$17,500 00
Bursar's Office		
F. A. Mouré, Bursar (on leave of absence 1937-38)	\$6,500 00	
C. E. Higginbottom, Accountant and Acting Bursar	4,200 00	
Accounts Branch:		
I. A. Gair. Assistant	2,000 00	
Miss E. Long, Appropriations Ledger Clerk	1,600 00	
Miss R. Mahood, Assistant Appropriations Ledger Clerk	1,050 00	
Clerks:		
Miss J. Branton	1,350 00	
J. R. Prince	1,000 00	
Miss E. Crookshanks	1,000 00	
Miss F. M. Quinlivan	850 00	
Miss V. Whitehead	850 00	
Fees Branch:		
Miss E. B. Goodwin, Chief Clerk	2,100 00	
Gordon M. Grant, Cashier	1,500 00	
Record Clerks:		
Mrs. Edith M. Hardy	1,100 00	
Miss F. J. Rorke	900 00	
Secretarial Branch:		
Miss A. M. Gall, Chief Clerk	2,050 00	
Miss M. Burns, Assistant	1,650 00	
Miss M. Austin, Pensions Clerk	1,550 00	
Clerk:		
Miss H. Malone, to 31 January, \$612.50; 2 month's salary upon		
resignation, \$175	787 50	
Miss D. W. Haggart, 3 January to 30 June @ \$16 per week	410 67	
(see also University Extension Dept.)	410 67	
Honoraria for extra services during the Bursar's absence:	500 00	
C. E. Higginbottom	150 00	
J. A. Gair	100 00	
Miss A. M. Gall	100 00	
Miss E. B. Goodwin	50 00	
Miss E. Long	50 00	
Miss E. Crookshanks.	50 00	
MISS E. CIOURSHAIRS		
	\$33,448 17	
Less charged to clerical assistance	1,000 00	
-		\$32,448 17
Registrar's Office		
A. B. Fennell, Registrar	\$5,000 00	
A. T. Laidlaw, Assistant Registrar.	4,100 00	
Assistants:	1,100 00	
Miss A. MacGillivray	2,000 00	
Miss E. Hargreaves	1,900 00	
Miss I. E. Fraser	1,300 00	
Graduates' Register:		
Clerks:		
Miss B. G. Van Allen	1,450 00	
Miss M. F. Thompson	1,450 00	
Miss Ruth D. Wythe (on leave of absence without salary from		
1 Jan. to 30 June)	475 00	
Miss A. I. Firth. 3 Jan. to 30 June @ \$18 per week (substitute)	462 00	
Miss J. L. Stephens	950 00	
Miss Margaret E. Smith	750 00	
Clerks:	7 700 00	
Miss A. S. Meen	1,700 00	
Miss M. M. Lavell	1,100 00	
Miss E. M. Sharpe, Secretary to Registrar	1.650 00	

Stenographers:	3.450.0	00
Miss E. M. Fasken	1.450 (	
Miss Dorothy Woods	950 0 750 0	
wm. Calladine, riling Clerk	750 0	- \$27,437 00
		021,101 00
Superintendent's Office		
A. D. LePan, Superintendent of Buildings and Grounds	\$6,500 0	00
W. H. Bonus, Assistant Superintendent	4.500 0	00
Assistants:	0.700.0	
G. D. Maxwell	3,500 0	
E. G. Moogk	2,500 0 2,400 0	
J. Shortreed	2,350 (	
Miss M. D. Chisholm, Stenographer	1.350 (	
Clerks:		
Miss A, K. Wynn	1,350 (	
Miss E. Nicklin	1,350 0	
Miss R. E. Cannon	1,000 ( 950 (	
Miss R. M. Rankin	900 (	
Miss M. R. LeGrow.	800 (	
Aliss III. R. Ecolowiii.		- \$29,450 00
741 27		
Miscellaneous		
J. B. Bickersteth, Warden, Hart House (with living valued @ \$675;		
on sick leave from 1 October)	\$4.500 (	00
J. R. Gilley, Acting Warden during absence on sick leave of Warden		
Bickersteth (salary paid by Hart House as Comptroller)		•
J. R. Johnston, Assistant to Acting Warden from 1 October to 30 March,	1,350 (	00
\$1.200, plus bonus. \$150	1,100 (	
Econard Smith, Deder, also Attendant and Pressenger, Freeheard Smith		- \$6,950 00
		\$113.785 17
		\$115.765 17
2. Pensions and Retiring Allowances		ф113.703 17
		ф113.703 17
2. Pensions and Retiring Allowances University's contribution to Pension Funds for the year ending 30 June, 1938:		ф113.700 17
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Associa-		\$113.703 Tr
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances		\$113.703 Tr
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)		\$115.700 T
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances	\$31,230,3	
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	\$31.230 3 32.000 0	37
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	\$31.230 3 32.000 0 26,993 7	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)\$31.673 01 Less returned	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan).  Less returned	32.000 0	37 00
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan).  Less returned	32.000 0	37 00 71
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan).  Less returned	32.000 C 26,993 7	37 00 71
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 C 26,993 7	37 00 71
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 C 26,993 7	37 00 71
University's contribution to Pension Funds for the year ending 30 June, 1938:  Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan).  Less returned	32.000 C 26,993 7	60 - \$101.011 58
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 C 26,993 7	37 200 21 30 - \$101.011 58
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 C 26,993 7	50 - \$101.011 58
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 C 26,993 7 10.787 5 823 8 81 0	50 - \$101.011 58
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan)	32.000 C 26,993 7 10.787 5 823 8 81 0 12 0	37 30 30 30 30 30 30 30 30 30 30 30 30 30
University's contribution to Pension Funds for the year ending 30 June, 1938: Remitted to Teachers' Insurance and Annuity Association, New York, for credit of retiring allowances funded there (original contributory plan).  Less returned	\$23.000 C 26,993 7 7 10.787 5 \$23.8 81 0 12 0 713 5	37 100 71 30 

#### 4. Bursar's Office

Office supplies, postage, printing and incidentals (\$2,867.77):		
Bostitch Ltd., stapler and staples	\$14 00	
Burroughs Adding Machine Co., maintenance service	55 28	
Canadian Photo Copy Co., charts	20 56 248 50	
Grand & Toy, cheques, etc	32 40	
Office Specialty Mfg. Co., steel cabinet, transfer cases, guides, etc	249 55	
Postage	525 00	
Robbins & Townsend, typewriter inspection	54 80	
Underwood-Elliott-Fisher Ltd., maintenance service and paper	48 70	
University Press, printing and stationery	1,189 63	
Accounts under \$10 (9)	33 82	
The Bursar, disbursements:		
Meals for staff-overtime work, \$292.50; hire of car for office		
business for one year, \$75; exchange on cheques and postal		
notes, \$84.61; sundries, \$14.41; \$466.52. less credit on exchange, \$101.25.	365 27	
Superintendent's Dept., labour, \$21.41; material, \$8.85	30 26	
Clerical assistance (\$2.297.33):	00 20	
Mrs. H. Lilly, 4 weeks @ \$20	80 00	
Mrs. I. McCormick, 29-1/3 weeks @ \$18	528 00	
H. Pouwels, 28½ weeks @ \$20, \$586.66; 4 weeks, 4 days, @ \$22,		
\$102.67	689 33	
Honoraria for extra services as detailed under Salaries	1,000 00	
Stamp taxes and bank service charges	1.219 80	\$6 204 00
_		\$6,384 90
5. Registrar's Office		
Stationery and office supplies (\$2,612.57):	0175 45	
Addressograph Sales Agency, speedaumat cabinet, drawers and plates P. E. Hyde, subscriptions to daily papers	\$175 45 21 75	
Might Directories Ltd., city directory	43 20	
Mimeograph Co ink and stencils	28 85	
Murdock Stationery	83 25	
Office Specialty Mfg. Co., cabinet, desk, chair, cards, transfer		
cases, etc	442 42	
Postage	1,100 24	
Pobling & Townsond tunoumiton inspection		
Robbins & Townsend. typewriter inspection	18 40	
E. G. Taylor, addressograph inspection	18 40 14 65	
E. G. Taylor, addressograph inspection	14 65	
E. G. Taylor, addressograph inspection	14 65 183 92	
E. G. Taylor, addressograph inspection	14 65 183 92 390 67	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc University Press, printing and stationery. Accounts under \$10 (6).	14 65 183 92	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar.	14 65 183 92 390 67 23 75	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579):	14 65 183 92 390 67 23 75 12 28 73 74	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries)	14 65 183 92 390 67 23 75 12 28 73 74 150 00	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours.	14 65 183 92 390 67 23 75 12 28 73 74 150 00 41 50	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth, 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McOuance, 2-2/3 weeks @ \$15.	14 65 183 92 390 67 23 75 12 28 73 74 150 00 41 50 40 00	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth, 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs, F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth, 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth, 10 weeks @ \$15 (see also Salaries) Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs, F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17	
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth, 10 weeks @ \$15 (see also Salaries) Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth, 10 weeks @ \$15 (see also Salaries) Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.  Less credits for clerical work, record cards, stencils, etc.  6. Superintendent's Office Office supplies, printing, postage and incidentals (\$2,005.46): Brown Bros., ledger sheets.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Wiss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc  Less credits for clerical work, record cards, stencils, etc  6. Superintendent's Office Office supplies, printing, postage and incidentals (\$2.005.46): Brown Bros., ledger sheets. R. G. Dalton Co., photostats and paper.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.  Less credits for clerical work, record cards, stencils, etc.  6. Superintendent's Office Office supplies, printing, postage and incidentals (\$2.005.46): Brown Bros., ledger sheets. R. G. Dalton Co., photostats and paper. Domestic Brake Service, car repairs.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24 12 50	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons. etc. University Press. printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks \$\mathscr{a}\$ \$\mathscr{a}\$ \$\mathscr{b}\$ \$\mathscr{a}\$ \$\mathscr{b}\$ \$\mathscr{c}\$	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24 12 50 22 95	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons. etc. University Press. printing and stationery. Accounts under \$10 (6). Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods. 19-2/3 weeks @ \$15. University Press. printing Arts calendar, curricula, etc.  Less credits for clerical work, record cards. stencils. etc  6. Superintendent's Office Office supplies, printing. postage and incidentals (\$2.005.46): Brown Bros., ledger sheets. R. G. Dalton Co., photostats and paper. Domestic Brake Service, car repairs. Grand & Toy, binder. McMullin Publishers Ltd., tariff service.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24 12 50 22 95 25 00	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.  Less credits for clerical work, record cards, stencils, etc.  6. Superintendent's Office Brown Bros., ledger sheets. R. G. Dalton Co., photostats and paper. Domestic Brake Service, car repairs. Grand & Toy, binder. McMullin Publishers Ltd., tariff service. National Motors Ltd., car repairs.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24 12 50 22 95 22 95 25 00 10 58	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks \$\alpha\$ \$\square\$ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks \$\alpha\$ \$\square\$ \$15. W. G. P. Merrifield, 3½ weeks \$\alpha\$ \$\square\$ \$15. University Press, printing Arts calendar, curricula, etc.  Less credits for clerical work, record cards, stencils, etc.  6. Superintendent's Office Office supplies, printing, postage and incidentals (\$2.005.46): Brown Bros., ledger sheets. R. G. Dalton Co., photostats and paper Domestic Brake Service, car repairs. Grand & Toy, binder McMullin Publishers Ltd., tariff service. National Motors Ltd., car repairs. Office Specialty Mfg. Co., shelves and transfer cases	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24 12 50 22 95 25 00	\$5,811 08
E. G. Taylor, addressograph inspection. Underwood-Elliott-Fisher Ltd., typewriter, \$141.75, less allowance on old machine, \$30; paper, ribbons, etc. University Press, printing and stationery. Accounts under \$10 (6) Sundry disbursements by Registrar. Superintendent's Dept., labour. Clerical assistance (\$579): Miss A. I. Firth. 10 weeks @ \$15 (see also Salaries). Mrs. F. P. Lloyd, 68½ hours. K. M. McQuance, 2-2/3 weeks @ \$15. W. G. P. Merrifield, 3½ weeks @ \$15. Miss J. E. Woods, 19-2/3 weeks @ \$15. University Press, printing Arts calendar, curricula, etc.  Less credits for clerical work, record cards, stencils, etc.  6. Superintendent's Office Brown Bros., ledger sheets. R. G. Dalton Co., photostats and paper. Domestic Brake Service, car repairs. Grand & Toy, binder. McMullin Publishers Ltd., tariff service. National Motors Ltd., car repairs.	14 65  183 92 390 67 23 75 12 28 73 74  150 00 41 50 40 00 52 50 295 00 2,695 17  \$5,886 74 75 66  \$63 21 16 24 12 50 22 95 25 00 10 58 86 12	\$5,811 08

Remington-Rand Ltd., typewriters, \$283.50, less allowance on old		
machines, \$78,50; inspection, etc	226 00	
Robbins & Myers, electric fan	33 66	
D 11: 0 T manufacture in most in and on home	68 60	
Robbins & Townsend, typewriter inspection and carbon		
Salem's Brake Service, car repairs	30 96	
Superintendent's travelling expenses re installation of new boilers		
at McGill and meeting of University Superintendents at Harvard.		
etc	162 56	
University Press, printing and stationery	761 93	
Accounts under \$10 (15)	67 13	
	07 13	
Sundry disbursements:	20 50	
Telegrams, etc., \$13.59; car license, \$7	20 59	
Superintendent's Dept., labour, \$30.80; material, \$57.12	87 92	
Incidental expenses re work on buildings:		
Labour, \$193.98; material, \$7.47	201 45	
Drafting assistance (\$1,085.84):		
II. Stevenson, 36 weeks, ½ day	992 50	
II. Stevenson, 30 weeks, ½ day		
A. H. Taylor, 4½ weeks	93 34	
Clerical assistance (\$472.65):		
Miss G. Cottrell, 26 days	58 51	
Miss R. M. Coulter, 3 days	6 75	
Miss C. Hocking, 11 weeks, 2½ days	160 38	
Mis G. Hotking, 11 weeks, 2/2 days		
Miss M. G. Sonley, 15 weeks	247 01	
	\$3,765 40	
Less credit for Customs entry fees	46 75	
		\$3,718 65
7. Convocation Hall and Simcoe Hall		00,120 00
	\$4,281 60	
Heat and light		
Gas, \$80.20; water. \$79.44	159 64	
Caretaker's supplies (\$517.67):		
M. Langmuir Mfg. Co., bags	26 00	
Superintendent's Dept., material	491 67	
Cleaning (\$4,958.88):	171 01	
Cleaning (94,500,007).	29 70	
Advance Window Cleaning Co		
Allen Mfg. Co., laundry	42 29	
Toronto Window Cleaning Co	5 00	
Superintendent's Dept., labour	4.881 89	
Repairs and renewals (\$2.673.77):		
Wm. Bartlett & Son, awnings and shades	99 83	
	953 00	
Canadian Johns-Manville Co., sanacoustic tile		
Johnson Temperature Regulating Co., thermostat repairs	14 00	
Langley's Ltd., cleaning curtains	56 00	
Provincial Treasurer, public hall license	10 00	
Roberts & Son, frames	28 00	
John Smith, cushion repairs	16 00	
Accounts under \$10 (3)	10 52	
Superintendent's Dept., labour, \$1,129.29; material, \$357.13	1.486 42	
	1.400 42	
Installing amplifiers (\$852.08):	000 00	
Baldwin International Ltd., microphones	330 80	
Stromberg-Carlson Telephone Mfg. Co., amplifiers	96 80	
Accounts under \$10 (2)	1 99	
Superintendent's Dept., labour, \$238.78; material, \$183.71	422 49	
Acting Postmaster and Chief Messenger, H. R. Chenev, 12 mos	1,400 00	
Messenger and Post Office service (\$1.846.61):	1,100 00	
Messengers @ \$8.50 to \$15 per week:	<b>****</b>	
J. Monkhouse, 52 weeks	780 00	
W. Sherman, 51 weeks	475 00	
J. R. Wilson, 50½ weeks	461 25	
T. Partridge, 8 weeks	68 00	
A. Mackie. 1 week.	8 52	
L. Smith, 2 days.	2 84	
Carfares	51 00	
_		
	\$16.690 25	
Less heat and light charged to Central Power Plant \$4.281 60		
Contribution by Royal Canadian Institute to-		
ward cost of amplifiers		
Credit for cleaning	1.601.60	
	4.691 60	\$11,998 65

#### 8. President's House

8. President's House			
Repairs and renewals: Superintendent's Dept., labour. \$29.52; material, \$11.28	\$40 80	\$40 8	0
	-	\$243.599 1	- 1
II. LIBRARY	=		=
9. SALARIES	er 500 00		
W. S. Wallace, Librarian (paid also \$60 in Ontario College of Education) Miss H. G. B. Woolryche, Assistant Librarian (paid also \$50 in Ontario College of Education)	\$5,500 00 2,400 00		
Miss A. H. Young, Reference Librarian	2,000 00		
Heads of Departments: Miss M. L. Newton (Circulation — paid also \$25 in Ontario College			
of Education)	2,200 00		
Miss E. V. Bethune (Cataloguing)	2,100 00 1,800 00		
Assistants:	1,000 00		
Miss A. E. Stennett	1,750 00		
Miss E. Creighton	1,700 00		
Miss J. Jarvis	1,650 00		
Miss E. Aldridge	1,650 00 1,550 00		
Miss J. Rathbun.	1,550 00		
Miss I. Trowern	1,450 00		
Miss A. Leonard	1,450 00		
Miss D. Dignum. Miss M. L. Hewitt	1,400 00 1,400 00		
Miss E. L. Alexander	1,400 00		
Miss G. Williams	1,350 00		
Miss K. Ball	1,350 00		
Miss I. C. Hill (on leave of absence from 1 October to 31 May)	459 34		
Miss D. Shiell	1,350 00 1,300 00		
Miss D. Tod.	1,300 00		
Miss M. Robinson	1,250 00		
Miss Edith Cook	1,250 00		
Miss K. Wales	1,250 00 1,200 00		
Miss R. Haldenby	1,200 00		
Miss F. E. Bertram	1,200 00		
Miss J. Knowlton	1.200 00		
Miss J. McBeth	1,200 00 1,200 00		
Miss Sheila Bell.	1,200 00		
Miss M. Buchan (part time)	500 00		
Miss S. Tisdall, 4 mos. from 1 July	400 00		
Miss M. Rose, 8 mos. from 1 Nov	800 00 1,000 00		
Miss E. Wilson, 2 mos. from 1 May	200 00		
James A. Patterson, Attendant (with rooms, heat and light valued at			
\$420 as Caretaker of building)	1,150 00		
Wm. Fryer, Messenger, 41 weeks, 2 days	330 66		
Stanley South, 12 mos	707 42 468 33		
Arthur Taylor, 1 month	60 00		
John Jeanneret. 23 days	37 10		
Bruce Brammer, 19 days	31 67	\$57.894 5	2
10. LIBRARY MAINTENANCE General Library Appropriation (Current Account):			
Books and periodicals (\$35,609.75):			
Affiliated Music Corporation	\$342 65		
Edw. G. Allen & Son	3,982 89 122 72		
Thos, Allen	77 38		
American Dental Association	60 86		

American Institute of Mining and Metallurgical Engineers	33 22	2
American Journal of Physiology	27 54	
American John and Thysiology	100 15	
American Library Association		
American Medical Association	82 25	
American Society for Testing Material	48 39	)
D. Appleton Century Co	25 74	1
Baker, Taylor Co	1,786 87	7
Benday Books	31 71	
Benday Books		
Biological Abstracts	25 44	
B. H. Blackwell Co	95 57	(
A. Bonnier Publishing Co	117 61	l
R. R. Bowker	53 21	ŀ
Braus-Riggenbach	152 00	
Brais-Riggenbacu		
F. A. Brockhaus	9.251 57	
Burroughs & Co	26 25	
Butterworth & Co	71 50	)
Cadmus Book Shop	41 43	3
Cambridge University Press	146 18	
Cambridge University Press		
Canada Law Book	68 00	
Canadian Law List Publishing Co	26 10	)
Carswell & Co	282 78	3
B. E. Case	31 16	5
D. L. Casu.	74 45	
Honore Champion		
Citizens' Research Institute of Canada	25 00	
Clark, Irwin & Co	536 96	)
Copp, Clark Co	34~06	6
Gaston E. Dau	53 89	)
Daylor & Ding Pook Shop	28 40	
Dauber & Pine Book Shop		
Dawson Subscription Service	216 05	
J. M. Dent & Sons	52 71	
Walter de Gryter & Co	91 87	7
Doubleday, Doran & Gundy	42 99	)
G. Ducharme	126 79	
G. Ducharme		
Egypt Exploration Society	42 30	
Engineering Index Inc	50 63	)
F. W. Faxon Co	751-68	3
Henry George Fiedler	257 36	í
Gustav Fock	562 92	
Gustav Fock		
Garnet & Bell	30 00	
Gauthier & Villars	183 59	}
Paul Geuthner	109 41	l
P. Gilbert	25 00	)
Commerce & Lankson	56 86	
Gurney & Jackson		
H. M. Stationery Office	34 26	
Harper Bros	40 11	l
Hirschwaldsche Buchhandlung	108 95	5
Ulrico Hoepli	47 24	1
	84 66	
Henry Holt & Co		
Johns Hopkins Press	63 45	
International Labour Office	40 28	3
Journal of Biology and Chemistry	38 47	7
Journal Press	50 24	1
The Kingsland Co	39 00	
The Kingsland Co		
Otto Lange	878 96	
Librairie E. Droz	663 71	
J. B. Lippincott Co	54 12	2
Longmans, Green & Co	200 11	l
Luzac & Co.	110 92	
	49 78	
McAinsh & Co		
McGraw-Hill Book Co	376 23	
Geo. J. McLeod Ltd	53 20	)
MacMillan Co	1.092 08	3
Masson & Cie	100 44	
Malan I amman Association of Association	33 90	
Modern Language Association of America		
Musson Book Co	162 08	
Thos. Nelson & Sons	238 72	2
N. V. Martinus Nijhoff	532 45	5
A. Nizet & M. Bastard.	531 39	
	50 24	
J. A. Owen		
Oxford University Press	66 62	
Peabody Museum	26 71	i

	20 ##
Sir Isaac Pitman & Sons	28 57
Psychological Review Co	34 64
G. Reuschel	55 72
Ryerson Press	173 11
S. J. R. Saunders	203 28
Simpkin, Marshall Ltd	1.653 27
Recueil Sirex	58 64
G. E. Stechert & Co	302 97
Superintendent of Documents, Washington	75 84
N. V. Swetz & Zeitlinger	1.232 99
Chas. C. Thomas	57 29
Thoms & Eron	33 22
John Tiranti & Co	127 37
Trans-Canada Press	27 75
Trustees, British Museum	26 97
University Associates of Canada	41 25
University of Chicago Press	88 62
Friedr, Viewig & Sohn	68 08
Dr. T. L. Walker	100 00
Frederick Welly	27 02
E. Weyhe	25 06
John Wiley & Sons	204 28
Williams & Wilkins Co	109 33
H. W. Wilson Co.	154 47
Wistar Institute of Anatomy and Biology	137 07
Wittenborn & Co	71 37
S. A. Nicola Zanichelli	29 96
Samuel M. Zwemer.	50 55
University Press	1,201 86
	2,976 77
Accounts under \$25 (425)	2,910 11
General Expenses (\$12.035.18):	
Library of Congress, cards	193 56
Library of Congress, cards	229 03
Lowe-Martin Co cards	311 49
Office Specialty Mfg. Co., cabinets, desks, truck, etc	
Parker's Dye Works, cleaning rug	37 10
Postage	513 00
Rekordak, Ltd., projector	185 00
Remington-Rand Ltd typewriters, \$267.30, less allowance on old	020 61
machines, \$67.30; labels, etc	239 61
Robbins & Townsend. typewriter inspection	112 00
University Press, printing and stationery	9,403 57
Accounts under \$25 (10)	62 20
Superintendent's Dept., freight, \$513.78; labour. \$128.09;	740 (0
material, \$106.75	748 62
_	047 (44 02
1 1 . (1 1 1 . 1 1	\$47,644 93
Less replacement of books lost by departments. \$92.11: sundry	105.00
credits, \$13.78	105 89
	\$47,539 04
Of which charged to sundry funds as follows:	\$47,539 04
Carnegie Library, University College \$906 98	\$47,539 04
Carnegie Library, University College \$906 98 Dental, Harry R. Abbott	\$47,539 04
Carnegie Library, University College \$906 98 Dental, Harry R. Abbott	\$47,539 04
Carnegie Library, University College\$906 98 Dental, Harry R. Abbott494 94	\$47.539 04
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12	
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97	\$47.539 04 1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97	
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian:	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68: credit-	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2 96 12 King Alfred Millenary 351 97 Phillips Stewart Bequest 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68: credited from fines. \$612.25; replacement of books lost,	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68: credited from fines. \$612.25; replacement of books lost, \$92.84; miscellaneous. \$24.17; graduates' de-	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68: credited from fines. \$612.25; replacement of books lost, \$92.84; miscellaneous. \$24.17; graduates' deposits, \$974.52. \$1,873 46	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68: credited from fines. \$612.25; replacement of books lost, \$92.84; miscellaneous. \$24.17; graduates' deposits, \$974.52. \$1,873 46 Deposits refunded. \$641; miscellaneous, \$2.09;	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68; credited from fines. \$612.25; replacement of books lost, \$92.84; miscellaneous. \$24.17; graduates' deposits, \$974.52. \$1,873 46 Deposits refunded. \$641; miscellaneous, \$2.09; left in Librarian's hands to be accounted for,	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68: credited from fines. \$612.25; replacement of books lost, \$92.84; miscellaneous. \$24.17; graduates' deposits, \$974.52. \$1,873 46 Deposits refunded. \$641; miscellaneous, \$2.09;	1,884 99
Carnegie Library, University College. \$906 98 Dental, Harry R. Abbott. 494 94 John Squair Fund No. 2. 96 12 King Alfred Millenary. 351 97 Phillips Stewart Bequest. 34 98  Transactions by Librarian: Balance in his hands 1 July, 1937, \$169.68; credited from fines. \$612.25; replacement of books lost, \$92.84; miscellaneous. \$24.17; graduates' deposits, \$974.52. \$1,873 46 Deposits refunded. \$641; miscellaneous, \$2.09; left in Librarian's hands to be accounted for,	1,884 99

Transferred to Trust Funds (Schedule 3) balance of graduates' deposits		
Credited to this account	800 00	\$44.854 05
Assistance:		\$44,004.00
At \$80 to \$85 per month:  Miss F. English  Mrs. P. Richardson	\$1,020 00 71 05	
At \$60 to \$75 per month: Miss J. Arnold	621 79	
Miss M. Bealy	48 00	
Miss I. Brand	142 10 496 00	
Miss Mary Cash	720 00 184 17	
Miss E. Fleury	420 00	
Mrs. J. G. Gibbons	7 25 27 10	
Miss E. Heighington	837 77	
Miss I. Keys	560 00 756 45	
Miss E. McLean	27 10	
Miss R. McRostie	631 40 406 46	
Miss M. Rose	212 80 544 22	
Miss M. Slater	636 77	
Miss B. Strong	276 78 673 40	
Miss E. Wilson	503 40	
At \$35 to \$50 per month: E. J. Brower	29 70	
J. K. Brower	11 60 29 62	
Miss E. Day	6 45	
Mrs. D. Lewis	10 00 20 65	
At 25c to 75c per hour:		
Miss E. E. Atkin. Miss A. J. Bennett	12 00 28 50	
Miss E. M. Murray	24 00	
Miss M. Porter	30 00 56 00	
Miss R. Reid	44 00	
Less credits	\$10,126 53 509 24	
\$9,617.29 charged as follows:		4.0
Occasional assistance, including opening Library in evenings  Special grant for re-classification		6.910 52 2,706 77
Alterations and fixtures (\$994.55):		
Office Specialty Mfg. Co., cabinets, etc	\$195 50 799 05	994 55
		\$55,465 89
II. Library Building	00.405.41	\$30,403 07
Heat and light. Gas, \$55.44; water, \$90.46.	\$3.485 61 145 90	
Caretaker's supplies: Superintendent's Dept., material	385 48	
Allen Mfg. Co., laundry	15 36	
Canadian Cleaning Co., cleaning windows	35 00 1.964 58	
Repairs and renewals (\$2.095,49): Wm. Bartlett & Son, awnings	38 61	
City Treasurer, elevator license	5 00	
T. Eaton Co., decorating	58 94	

El a la	72 15	
Electrolux Ltd., cleaner repairs	17 54	
Italian Mosaic & Tile Co., tiling	40 95	
Johnson Temperature Regulating System, heating system repairs	13 19	
Premier Vacuum Cleaner Co., cleaner repairs	12 00	
Routery Bros., plaster repairs		
Superintendent's Dept., labour, \$1,304.42; material, \$532.69	1,837 11	
Caretaker, with living quarters valued at \$420 (paid from salaries as		
Library Attendant)		
	#0.107.40	
7 1 121 1 1 0 1 D D1 00 405 (1	\$8,127 42	
Less heat and light charged to Central Power Plant \$3,485 61 Sundry credits		
Sundry credits 9 30	2 404 07	
	3,494 91	
-		\$4,632 51
	-	
	_	\$117,992 92
III. 12. Royal Ontario Museum	=	
University's share of maintenance advanced to the Trustees of the Ro	oval Ontario	
Museum under R. S. O. 1927, Cap. 343		\$77.847 50
	=	
·		
IV. ATHLETICS, PHYSICAL TRAINING. MILITARY ST	JDIES. ETC	
13. Athletics and Physical Training — Men		
(a) Salaries:	ØF 500 00	
T. A. Reed, Secretary, Athletic Directorate	\$5,500 00	
Gymnasium Instructors:		
W. H. Martin, also Supervisor of Compulsory Physical Training.	2 2 6 2 2 2	
10 mos., \$2,700; additional allowance granted, \$160	2.860 00	
J. E. McCutcheon, also Supervisor of Interfaculty Activities,		
10 mos	2,600 00	
C. Zwygard, 6 mos	1,000 00	
W. W. Winterburn, Swimming Instructor, 10 mos	2,600 00	
Part-time Instructors (Sessional):		
H. Phillips	400 00	
L. W. Black. C. Chilcott	250 00	
C. Chilcott \honoraria	250 00	
M. Glionna	200 00	
T. Matsumoto J	25 00	
Locker Attendants:		
W. Rimmer, Chief Locker and Attendance Clerk	2,100 00	
C. Carruthers, 8 mos	800 00	
J. R. Rimmer, 34 weeks @ \$15	510 00	
A. Jordan, 28 weeks @ \$15	420 00	
M. R. Depew, 25 weeks @ \$15	375 00	
Miss K. Boyd, Clerical Assistant, 10 mos	750 00	
miss R. Boyd, Cicrical resistant, to most	100 00	
	\$20,640 00	
Less Secretary's salary charged to Athletic Association		
Less Secretary's salary charged to Attribute Association	5,500 00	\$15,140 00
(b) Maintenance of Department:		Ψ10,110 00
Attendance records. card system (\$128.72):		
Office Specialty Mfg. Co., cabinet	\$19 50	
Postage	9 15	
Thomas & Corney Typewriters Ltd., share of cost of typewriter	30 00	
University Press, printing and stationery	70 07	
Gymnastic appliances and repairs to equipment (\$824.73):		
Aikenhead Hardware Ltd., bardware	10 62	
Canadian Fairbanks-Morse Ltd., casters	10 88	
Harold B. Kennedy. basketballs	38 25	
L. Parkin, mat repairs	10 00	
E. Siemonsen, apparatus	210 00	
Robt. Simpson Co., attendants' jackets	10 80	
Toronto Radio & Sports Co., uniform and balls	41 70	
John T. Walters, repairs to balls and gloves	16 65	
Harold A. Wilson, balls, gloves, fencing and gymnasium	10 00	
equipment	308 58	
Accounts under \$10 (3)	13 75	
Superintendent's Dept., labour, \$104.97; material. \$48.53	153 50	
Superimendent's Dept., landtr, \$104.97; material. \$40.55	133 30	\$953 45

14. Athletic and Physical Training — Women		
(a) Salaries: Miss I. G. Coventry, Physical Director	\$2.000 00	
Miss J. M. Forster, Assistant Physical Director, 8 mos. (paid also	1,300 00	
\$150 for Extension Work)		
Miss A. Cochrane, 7 mos. (paid also \$150 for Extension Work) A. L. Cochrane, Assistant, 7 mos.  Mrs. Margaret Graham, Clerical and Gymnasium Assistant, 8 mos.	1.200 00 300 00	
(paid also \$50 in Diploma Course; \$278 as Pianist; \$86.50 in Ontario College of Education, and \$40 for Extension Work)  Miss A. E. M. Parkes, Secretary-Treasurer, Women's Athletic Directorate (Sessional — paid also \$900 by Students' Administrative	300 00	
Council)	350 00	SE 150 00
(b) Maintenance of Department:		\$5,450 00
Sundry expenses (\$555.82):	600.00	
Allen Mfg. Co., laundry	\$23 09 42 00	
Mrs. Margaret Graham. pianist. 278 hours	278 00	
Grand & Toy, filing cabinet	45 70 134 78	
Harold A. Wilson, vaulting box, hurdles, arrows, balls. etc University Press, printing and stationery	17 84	
Accounts under \$10 (3)	3 50	
Superintendent's Dept., labour, \$4.90; material, \$6.01  Janitor service at night classes, A. J. Maycock	10 91 48 25	
_	\$604 07	
Less credit for towel service at swimming pool	57 30	\$546 77
(c) Course for Diploma in Physical Education:		6040 11
Honoraria to Instructors: Dr. H. D. Ball, Anatomy (see also Anatomy)	\$150 00	
Miss K. McMurrich, Anatomy and Kinesiology (see also	\$100 00	
Anatomy)	150 00	
D. Y. Solandt. Physiology (see also Physiology)	150 00 50 00	
Mrs. Leslie Jones. Voice Training	50.00	
		\$550 00
15. Health Service — Men		\$6.546 77
(a) Salaries:		
G. D. Porter, Director	\$5,250 00 1,000 00	
J. M. Thomas. Office Assistant, 8 mos.	1,000 00	\$6,250 00
(b) Maintenane of Department: Examining Physicians (\$1,180):		
R. G. Armour	\$10 00	
Noble Black	100 00	
A. H. W. Caulfeild	10 00 100 00	
C. B. Farrar	100 00	
Frank Hassard	100 00	
Ross A. Jamieson	20 00	
A. G. McPhedran	200 00	
S. J. Magwood. John Oille	100 00 20 00	
Frank Park	100 00	
D. E. Robertson.	20 00	
W. E. L. Sparks	100 00	
Addison Taylor	100 00	
G. Wright Young	100 00	
J. A. MacFarlane	200 00	
R. H. Thomas	200 00	
tions (\$290.68):	114 28	
J. F. Hartz Co., medical supplies Toronto General Hospital, bandages	10 37	

Toronto Western Hospital, X-Rays	106 00 40 85 19 18	\$1,870 68 \$8,120 68
16. Health Service — Women		00.120 00
(a) Salaries: Dr. Edith H. Gordon, Medical Advisor (paid also \$19 for Extension Work) Miss M. Jackes, Office Assistant, 8 mos	\$3,400 00 1,150 00	
(b) Maintenance of Department:  Expenses of Medical Office and examining room, including consultants, X-Ray, etc.:  Allen Mfg. Co., laundry.  Ingram & Bell, medical supplies.  H. E. LeMasurier, lantern plates.  Office Specialty Mfg. Co., steel file.  Owl Drug Stores, chemicals.  Sani-Tread Co., shower slippers.  Women's College Hospital, X-Rays.  University Press, printing and stationery.  Accounts under \$10 (7).  Superintendent's Dept., labour.	\$18 25 53 84 11 25 64 75 21 40 17 50 15 00 46 52 31 34 7 13	\$4,550 00 \$286 98
	_	\$4.836 98
(a) Salaries: Major M. B. Watson, Director (paid also \$200 for Extension Work) W. A. Baughurst, Assistant, 10 mos.  (b) Maintenance of Department: Office and general expenses: Roneo Co., paper, etc. University Press, printing and stationery. Accounts under \$10 (13) Superintendent's Dept., labour, \$9.82; material, \$8.29.	\$2.000 00 980 00 \$19 50 24 65 46 59 18 11	\$2,980 00 \$108 85
	_	\$3.088 85
18. Hart House — Share of Maintenance Heat and light Cleaning, etc., of Gymnasium Wing: Comptroller. Hart House. Repairs and renewals (\$7,747.39): City Treasurer, elevator licenses Italian Mosaic & Tile Co., tiling Routery Bros., plaster repairs. Sanitary Products Co., floor finish, etc. Vulcan Asphalt & Supply Co., mastic floor Accounts under \$10 (2) Superintendent's Dept., labour, \$5,222.28; material, \$2,074.37.	\$18,455 64 4,200 00 15 00 11 96 174 20 108 90 134 45 6 23 7,296 65	
Less heat and light charged to Central Power Plant	\$30,403 03 18,455 64	\$11.947 39
Maintenance: Fuel (\$232.66): Central Coal Co P. Burns Co Superintendent's Dept., labour. Gas, \$13.72: electric current, \$53.48; water, \$8 Caretaker's supplies: Superintendent's Dept., material.	\$221 11 10 10 1 45 75 20 30 03	

Cleaning and furnaceman (\$370.16): Accounts under \$10 (2).	9	08	
Superintendent's Dept., labour	361	80	
Repairs and renewals: Superintendent's Dept., labour, \$97.20; material. \$23.95	121	15	5000 00
_			\$829 20
20. Military Studies Building			
Maintenance:			
Light	\$151	82	
Fuel (\$466.07): P. Burns Co	60	60	
Central Coal Co.	405		
Gas, \$19.56; water, \$15.01	34	57	
Caretaker's supplies:			
Superintendent's Dept., material	58	14	
Cleaning (\$304): New York Window Cleaning Co	4	00	
Superintendent's Dept., labour	300		
Repairs and renewals (\$401.10):			
Charles H. Brooks, blackboard lighting	12		
City Treasurer, meter repairs	384	05	
Superintendent's Dept., labour, \$209.54; material, \$174.71	304		
	\$1,415	70	
Less light charged to Central Power Plant	151	82	
-			\$1.263 88
			\$52,727 20

## V. 21. EXAMINATIONS

	Remuneration to Examiner	Presiding Officer	Attendance	Totals
Adams, S. M	11 00			11 00
Adelman, M	0 20	97.00	6 00	6 00
Ainslie, D. S	8 38 2 63	21 00		29 38 2 63
Allcut, E. A	17 75			17 75
Anderson, F. H	5 25			5 25
Anderson, P. G	12 75 9 75			12 75 9 75
Andison, J. G	2 50			2 50
Angus, R. W	21 75			21 75
Anthor R C	20 75		7 50	20 75
Anthes, R. G	17 12		7 50	17 12
Armour, R. G				45 00
Armstrong, H. G	44 25	39 00		44 25 39 00
Arnold, R. K	1 75	24 00		25 75
Assie, G. L		24 00		24 00
Auld, F. C	17 00 12 00			17 00 12 00
Bailey, H. M	12 00		22 50	22 50
Bailey, Miss N			24 00	24 00
Baillie, W. H. T	6 25	69 00		75 25 6 75
Bain, J. W	5 25			5 25
Balthazard, Miss I. G	9 63	24 00		33 63
Banks, E. A. H	7 25			7 25 11 00
Barker, A. E.	11 00	21 00		21 00
Batt, H. E	18 50			18 50
Bayly, B. deF	5 50			5 50 11 25
Beamish, F. E Beatty, S	11 25 32 75			32 75
Benson, Dr. C. C.	2 75			2 75
Best, C. H	11 00		0.00	11 00
Beynon, C. E	45 00		9 00	9 00 45 00
Birss, R. J	10 00		10 50	10 50
Black, E. C	2 75			2 75
Blackwood, W. C Bladen, V. W	18 00 1 75			18 00 1 75
Blake, Miss P. M	8 50			8 50
Blatz, W. E	5 25	24.00		5 25
Boeschenstein, H	83 50	24 00 18 00		107 50
Boswell, M. C	16 25	10 00		16 25
Bott, E. A	6 25		700 #0	6 25
Bowen, A. J	26 25		139 50	139 50 26 25
Brauer, R	20 20	24 00		24 00
Bridgland, C. J.	2.60		9 00	9 00
Brieger, P Britnell, G. E	2 63 5 25	12 00		14 63 5 25
Brooks, E. F.	45 00			45 00
Brown, Alan	38 25			38 25
Brown, G. W	5 50 5 25	27 00		5 50 32 25
Brown, R. J Brown, W. Hurst	45 00	27 00		45 00
Bryant, L. R	21 75	45 00		66 75
Burden, H. J	9 75	12 00		12 00 9 75
Burk, J. D Burt-Gerrans, J. T	5 50			5 50
Burton, E. F	6 25			6 25
Cameron C. C.				9 75 28 50
Cameron, G. C	28 50			20 00

	Remuneration to Examiner	Presiding Officer	Attendance	Totals
Campbell, A. A	50 00 50 00 2 00	21 00		50 ( 50 ( 23 (
Cano. J	45 00	21 00	18 00	45 ( 18 (
Carswell, J. M		27 00 45 00	10, 00	27 ( 45 (
asten. C. H. ates. H. A. avanagh, W. D.	8 25 9 75	33 00		41 3
hant, S. N. F	2 50 2 75			$\frac{2}{2}$
lark, C. C	36 00		13 50	36 ( 13 .
larkson, F. A	13 50 8 25	54 00		13 62
patsworth, Miss H. Rbburn, Miss K. H	5 50 5 25			5 5
ochrane, C. Nockburn, J. R	8 50 10 50			8
ole, Miss A. C	2 50 50 00	48 00		50 50
onboy, F. Jook, Miss A. L	35 75 5 00		= 50	35 <u>5</u>
ook, H. Hosbie. W. G	45 00	19.00	7 50	45 45
osgrave, G. P	13 25 51 50	12 00		12 13 51
ouch, J. H	63 25 24 13			63 24
ox, M. A	5 75 5 50	21 00		26 5
rerar. S. R			28 50	28 19
arrelly, C. Talrymple, D	1 75		25 50	1 25
aniells, J. Ranis, J. T	5 00			5 45
auphinee, J. Aavey. A	65 70			65 21
etweiler, H. K	. 94 75		27 00	94 27
ore, Rev. J. W	. 10 00			5 10
uff. G. L uff. T. A. J	. 84 00			1 84
unbar, W. Bwight, T. W		36 00 10 00		41 10
yer, F. Cdgar, P	. 1 25	24 00	22 50	24 1 22
dwards, G. Rlliott, H. C	10 00	20.00		10 30
nglish, B. Rvans, K. C		30 00 18 00		18
wens, W. Ealconer, J. Garquharson, R. F	. 50 00		, 30	50 95
arrar, C. B	. 44 65		15 00	44 15
ergnson, F. Linkelman, J	. 7 00			7 17
inlayson, L. D		24 00	1 50	1 29
Tetcher, A. A	. 45 00		1	45 1
Ford, Dr. Norma	. 11 25		10 50	11 10
Fowler, W. J. R	.] 18 50		1	18

	Remuneration to Examiner	Presiding Officer	Attendance	Totals
Fraser. Miss J. A	.[		1 50	1 50
Fricker, H. A	79 24		6.00	79 24
Fry, J. W Frye, H. N			6 00 19 50	6 00 19 50
Fulmer, H. L	11 00		17 00	11 00
Funnell, W. S				5 50
Gaby, R. E				45 00 10 25
Galloway, S. H	1		6 00	6 00
Gardiner, W. J	11 50			11 50
Garvey, Rev. E. C	6 25 16 00	12 00		6 25
George. Ruggles	52 75	12 00		28 00 52 75
Glover, J. S				18 50
Goggio, E		21 00		26 25
Goldsmith. P. G Gould, S. H	45 00 5 25	30 00		45 00 35 25
Graham, Duncan	5 00			5 00
Graham, J. W	6 00			6 00
Graham, R. R	54 75 13 25			54 75 13 25
Gray, K. G	12 90			12 90
Gray, W. M		93.00	24 00	24 00
Griffith, B. A	5 50 24 25	21 00		26 50 24 25
Gunvaldsen, K. M.	31 25			31 25
Haffey, Rev. H. J	5 25			5 25
Hagerman, A. R	45 00	6 00		45 00 6 00
Hallman. G. L		0 00	13 50	13 50
Hally, G. H		18 00		18 00
Ham, A. W	2 10		0	2 10 7 50
Hamer, I. M	9 75	45 00	7 50	54 75
Hamilton, P. B		18 00		18 00
Hare, F. A	3 50	10.00	47.00	3 50
Hargreaves, Miss M. M	45 00	12 00	45 00	57 00 45 00
Harris, R. I	51 00			51 00
Hart, C. W. M	6 75		3= =0	6 75
Hartmanshenn, Miss H. M	5 75		25 50	25 50 5 75
Havelock. E. A		21 00		21 00
Hawkins, W. B	73.50		7 50	7 50
Haygarth, Miss F. M	11 50 8 38		25 50	37 00 8 38
Hedman, T	10 00			10 00
Helwig. C. E	12.50		6 00	6 00
Henderson, V. E	13 50		6 00	13 50 6 00
Hepburn. J	90 25			90 25
Hewer, W. A. M	22.00		6 00	6 00
Hicks, R. K	33 00		6 00	33 00 6 00
Hodgins. L. C. A	7 25		0 00	7 25
Hogg, F. S	18 88			18 88
Holman, W. L	7 00		7 50	7 00 7 50
Hosie, R. C.	6 00	17 00	1 30	23 00
Houle, A. U			7 50	7 50
Houpert, J. A	2 50 10 50			2 50 10 50
Howland, G. W.	45 00			45 00
Humphreys, H. L	3 50			3 50
Hunter, A	5 50 136 75			5 50 136 75
Ide, F. P	5 25			5 25
Ireton, H. J. C		27 00		27 00

	Remuneration to Examiner	Presiding Officer	Attendance	Totals
Jackson, K. B	16 25		6 00	16 25 6 00 25 50
Jacobs, E. L  Janes, R. M  Jennings, S. A	50 00		25 50 25 50	50 00 25 50
Jones, L. E	7 25 7 75		9 00	9 00 7 25 7 75
Kennedy, W. P. M	11 50 27 75			7 00 11 50 27 75
Ketchum. J. D	27 50 5 25	45.00		6 00 27 50 5 25
Kingston, Rev. G. F Kirkwood, W. A	6 00 3 25	45 00 24 00		50 75 30 00 3 25
Knox. R. G. Kreutzer. J. Krieger, Miss C. C.	12 25 45 12 16 75 19 00	15 00 3 00		12 25 60 12 19 75 19 00
Krueger, L. F Kuitunen, Mrs. E Lacey, A		24 00	33 00	33 00 24 00 2 50
La Flamme, Estate of A. K.  Laing, Miss J. C.  Lamon, Miss F. E.  Lange, V.	5 25	15 00 6 00 24 00	27 00	20 25 33 00 24 00
Langford, R. R. Lauchland, L. S. Lazier, M. J. C.	. 12 50		7 50	12 50 7 50 12 00
LeBel. Rev. E. C	16 50	24 00 30 00		34 75 30 00 16 50
Lewis, E. P	25 90 45 00 13 25			25 90 45 00 13 25
Loudon, J. D	11 75	24 00		45 00 11 75 24 00
Lowry, W. H McAndrew, W. J MacArthur, J. W	4 50 2 88			50 00 4 50 2 88 8 75
MacCallum, H. R McConkey, O McCorkell, Rev. E. J	16 00	30 00		16 00 19 25 35 75
McCullogh, W. S McCurdy, W. J MacDonald, D. I Macdonald, E. W	. 8 75	24 00		32 75
Macdonald, J. F McDonald, J. L MacDonald, Miss M. D	. 8 00 45 00			8 00 45 00 6 25
Macdonald, Miss M. M	. 17 50		21 00 7 5	21 00 17 50
Macdougall, L. G	45 00 10 50			45 00 10 50 21 00
MacGillivray, J. R	. 37 00 11 50			37 00 11 50 5 00
McInnis, E. W	. 30 75 . 5 50		0	30 75 5 50 35 13
MacKay, L. A. Mackenzie, A. J. McKinley, D. W. R.	45 00	)	27 0	45 00 27 00
McLaughlin, R. R	5 50 5 28			5 50 5 25

UNIVERSITIO	TORON	TO TOR	1700	
	Remuneration to Examiner	Presiding Officer	Attendance	Totals
McLean, E. C MacMillan, Sir Ernest. McMurrich, Miss K. I McPhedran, A. G McPhedran, J. H McPhedran, W. F McPherson, W. J.	17 12 71 75 5 25 45 00 45 00 45 00		25 50	17 12 71 75 5 25 45 00 45 00 45 00 25 50
Macrae, H. M	45 00 15 50 1 75 9 70 45 00	27 00	1.00	45 00 15 50 28 75 9 70 45 00
Marks, B Martin, W. H Meek, T. J	8 25 22 25		6 00	6 00 8 25 22 25 1 50
Meen, Miss M. K	5 25		1 50	5 25
Miller, H. C. H. Millman, P. M. Mitchell, C. H. Moffatt, R. C.	5 25 5- 25 30 00	24 00	31 50	31 50 29 25 5 25 30 00
Mohun, W. A Montgomery, A. E Montgomery, R. J Moore, E. S	12 50 5 25 1 00	30 00	6 00	6 00 12 50 35 25 1 00
Morley, Miss S. G	5 25	54 00 21 00	7 50	54 00 21 00 7 50 5 25
Mueller, Miss V. E. Murphy, Miss A. Murray, D. W. G. Myers, C. R. Needler, Miss M. C.	4 88 45 00 31 00 5 75	27 00		27 00 4 88 45 00 31 00 5 75
Newcombe. J. A.  Nolan, Miss L. E.  Okulitch. V. J.  Ozburn, R. H.  Parker, C. B.  Parker, J. H.	10 50 2 88 5 25 10 50 45 00 11 50	39 00	30 00	49 50 2 88 5 25 10 50 45 00 41 50
Parker, W. E. B	11 00		6 00	6 00
Parkes, Miss A. E. M		27 00		27 00
Parkinson, J. F	9 75 15 25 34 00 3 15	3 00		9 75 15 25 34 00 3 15 3 00
Porter, Miss M. E Potter, H. R Pounder, I. R Pratt, E. J	18 50 26 75 11 50	20.00	28 50	28 50 18 50 26 75 11 50
Pratt, Miss V. L Preston, R. A Price, H. W	6 50	39 00 24 00	3	39 00 24 00 6 50
Price, Dr. R. Margarite. Quinlan, Miss F. M. Rae, C. A. Rae, J. J. Raithby, G. E.	12 50 45 00 31 50 15 50	27 00 48 00		27 00 60 50 45 00 31 50 15 50
Rannie, W. D Rapson, W. H Reed, Miss E. J		6 00	22 50 19 50	22 50 19 50 6 00
Reid, J. E	45 00	27 00	13 50	13 50 45 00 27 00
Rice, H. V. Ricker, E. A.		27 00	6 00	6 00
Riddell, R. G Riddle, Miss W. C.	5 25	21 00 60 00		21 00 65 25

Riese, Miss L.		Remuneration to Examiner	Presiding · Officer	Attendance	Totals
Risdon, F. E. 6 75	Riese, Miss L		27 00		27 00
Roberts, J. A.					
Robertson, D. E.	Roberts, J. A			3 00	3 00
Robertson, II, C.					
Robinson D. A. F.   23 25   21 00   7 50	Robertson, H. G	4 13	24 00	n/ 00	28 13
Robinson, C. deB.			21 00	36 00	
Robinson, W. L.	Robinson, G. deB	7 50			7 50
Rose borough M.         33 00           Ross J. W.         50 00           Ross J. W.         50 00           Ross J. W.         50 00           Rous C. C.         5 75           Rowe, T. L.         28 00           Ruhnke, G. N.         28 00           Ryerson, E. S.         65 75           Rykert, H. E.         45 00           Sagar, W. L.         21 00           Satterly, Prof. J.         10 75           Satterly, Prof. J.         10 75           Satterly, Prof. J.         10 75           Satterly, J         15 50           Saunders, R. M.         24 00           Scarrow, A. N.         24 00           Scarrow, A. N.         24 00           Scarrow, A. N.         24 00           Scott, Miss, L.         5 00           Scott, Miss, L.         5 00           Scott, Win, A.         117 50           Scott, Win, A.         117 50           Shepherd, M. E.         5 00           Shepherd, M. E.         5 00           Shepherd, M. E.         6 25           Shepherd, N. E.         6 25           Shifth, H. B.         9 75           Smith, C. G.         27 75					
Ross. J. W.   50 00   25 50   25 50   25 50   Rotus. C. C.   5 75   8					
Rous, C. C.         5 75         9 00         9 70           Rowe, T. L.         28 00         28 00         28 00           Rykert, H.         45 00         21 00         21 00           Sagar, W. L.         21 00         21 00         21 00           Sagar, W. L.         21 00         21 00         21 00           Satterly, Prof. J.         10 75         10 75         10 75           Satterly, J.         15 50         24 00         24 00           Saunders, R. M.         24 00         24 00         24 00           Scarow, A. N.         24 00         24 00         24 00           Schoffeld, F. W.         42 50         5 00         5 00           Scott, Wink, A.         117 50         117 50         117 50           Scott, Win, A.         117 50         117 50         117 50           Shenstone, N. S.         5 00         5 00         5 00           Shepherd, A. L.         27 00         27 00         28 50         28 50           Shepherd, M. E.         6 25         27 50         5 6 25           Shepherd, M. B.         6 75         9 75         5 75         5 75           Sinth, H. B.         6 75         9 75	Ross, J. W	50 00			50 00
Rowe, T. L.         28 00         9 00         28 00           Ruhnke, G. N.         28 00         28 00         28 00           Ryerson, E. S.         65 75         45 00         21 00         21 00           Sagar, W. L.         21 00         21 00         21 00         21 00         21 00           Satterly, Prof. J.         10 75         15 50         15 50         15 50         10 75         15 50         24 00         26 00         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50 <t< td=""><td></td><td>5 75</td><td></td><td>25 50</td><td></td></t<>		5 75		25 50	
Ryerson, E. S.         65 75           Rykert, H. E.         45 00           Sagar. W. L.         21 00           Satterly, Prof. J.         10 75           Satterly, J.         15 50           Saunders, R. M.         24 00           Scarrow, A. N.         24 00           Scarrow, A. N.         24 00           Schofield, F. W.         42 50           Scott, Miss, L.         5 00           Scott, Paul.         65 50           Scott, Wim. A.         117 50           Scott, Wim. A.         117 50           Shanks, G.         9 70           Shanks, G.         9 70           Shepperd, A. L.         27 00           Sheppherd, A. L.         27 00           Sheppherd, Miss, K. C.         28 50           Sheppherd, N. E.         6 25           Shutt, D. B.         9 75           Sifton, H. B.         9 75           Smith, Miss A.         4 50           Smith, Miss A.         4 50           Smith, E. A.         2 63           Smith, H. G.         8 63           Smith, H. G.         8 63           Smith, H. G.         8 63           Smith, V. G.         1 50	Rowe, T. L			9 00	9 00
Rykert, H. E.         45 00         21 00         21 00           Sagar, W. L.         10 75         21 00         21 00           Satterly, Prof. J.         15 50         15 50         15 50           Saunders, R. M.         24 00         24 00         24 00           Scarrow, A. N.         24 00         24 00         24 00           Schofield, F. W.         42 50         5 00         5 00           Scott, Wiss L. C.         5 00         5 00         65 50           Scott, Win A.         117 50         117 50         117 50           Shanks, G.         9 70         9 70         50 00           Shenstone, N. S.         50 00         50 00         50 00           Shepherd, A. L.         27 00         28 50         28 50           Shepherd, Miss K. G.         27 00         28 50         28 50           Shepherd, M. E.         9 75         9 75         9 75           Suffon, H. B.         6 75         9 75         9 75           Smith, Miss A.         9 75         9 75         9 75           Smith, Miss A.         26 3         2 63         2 63           Smith, H. G.         8 63         8 63         8 62					
Satterly Prof. J.   10 75   15 50   10 75   15 50   24 00   25 00	Rykert, H. E	45 00	21.00		
Saunders, R. M.         24 00         24 00         24 00           Scarrow, A. N.         42 50         42 50         42 50           Scott, Miss L. C.         5 00         5 00         5 00           Scott, Paul.         66 50         65 50         117 50         117 50           Scott, Wm. A.         117 50         9 70         9 70         9 70           Shaw, J. E.         5 00         5 00         5 00         5 00           Shenstone, N. S.         50 00         27 00         50 00           Shepherd, A. L.         27 00         28 50         28 50         28 50           Sheppard, N. E.         6 25         28 50         28		10 75	21 00		
Scarrow, A. N.         42 50         24 00         24 00           Schofield, F. W.         42 50         5 00         5 00           Scott, Wiss L. C.         5 00         65 50         65 50           Scott, Wm. A.         117 50         117 50         117 50           Shanks, G.         9 70         9 70         9 70           Shenstone, N. S.         50 00         50 00         50 00           Shepherd, A. L.         27 00         28 50         28 50           Shepherd, Miss K. G.         27 00         28 50         28 50           Sheppard, N. E.         6 25         9 75         9 75           Shutt, D. B.         9 75         9 75         9 75           Smith, H. B.         6 75         9 75         9 75           Smith, Miss A.         4 50         4 50         4 50           Smith, Miss F. A.         2 63         8 63         8 63           Smith, H. G.         8 63         8 63         8 62           Smith, W. G.         12 25         24 00         36 25           Smith, V. G.         12 25         24 00         30 00           Spinks, G. W.         16 75         39 00         39 00           Sp		15 50	21.00		
Scott, Paul.         5 00           Scott, Paul.         65 50           Scott, Wm. A.         117 50           Shanks, G.         9 70           Shanks, G.         9 70           Shanks, G.         9 70           Shanks, G.         9 70           Shenstone, N. S.         50 00           Shepherd, A. L.         27 00           Shepherd, Miss K. G.         28 50           Sheppard, N. E.         6 25           Shutt, D. B.         9 75           Shutt, D. B.         9 75           Smith, M. B.         6 75           Smilfleld, H. A.         9 75           Smith, Miss A.         27 75           Smith, Miss F. A.         26 33           Smith, Miss F. A.         2 63           Smith, H. G.         8 63           Smith, V. G.         12 25           Smeath, J.         1 50           Sneath, J.         30 00           Sneath, J.         39 00           Spence, J. J.         39 00           Spinks, G. W.         16 75           Sproule, W. H.         19 50           Stallworthy, W. B.         16 50           Staples, W. E.         5 25	Scarrow, A. N				24 00
Scott. Paul					
Shanks, G.         9 70           Shaw, J. E.         5 00           Shenstone, N. S.         50 00           Shepherd, A. L.         27 00           Shepherd, Miss K. G.         28 50           Sheppard, N. E.         6 25           Shutt, D. B.         9 75           Sifton, H. B.         6 75           Smilfield, H. A.         9 75           Smith, Miss A.         4 50           Smith, Miss F. A.         2 63           Smith, H. G.         2 63           Smith, H. G.         8 63           Smith, V. G.         12 25           Smith, V. G.         12 25           Smeath, J.         1 50           Sneath, J.         1 50           Snell, H. B.         22 50           Spence, J. J.         39 00           Spinks, G. W.         16 75           Sproule, W. H.         19 50           Stallworthy, W. B.         16 50           Stallworthy, W. B.         28 50           Stobie, W. C.         28 50           Stobie, W. G.         28 50           Stobie, W. G.         28 50           Stone, R. E.         13 00           Synge, J. L.         5 50	Scott. Paul	65 50			65 50
Shenstone, N. S.         50 00           Shepherd, A. L.         27 00           Shepherd, Miss K. G.         28 50           Sheppard, N. E.         6 25           Shutt, D. B.         9 75           Sifton, H. B.         6 75           Smilfield, H. A.         9 75           Smith, Miss A.         4 50           Smith, C. G.         27 75           Smith, Miss F. A.         5 25           Smith, H. G.         8 63           Smith, V. G.         12 25           Smith, V. G.         12 25           Smith, V. G.         15 0           Smith, V. G.         15 0           Smith, V. G.         15 0           Smith, V. G.         12 25           Smeath, J.         1 50           Sneath, J.         1 50           Snell, H. B.         22 50           Spence, J. J.         39 00           Spinks, G. W.         16 75           Sproule, W. H.         19 50           Stallworthy, W. B.         16 50           Stallworthy, W. B.         28 50           Stobie, W. G.         28 50           Stobie, W. G.         28 50           Stobe, R. E.         13 00 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Shepherd, A. L.       27 00         Shepherd, Miss K. G.       28 50         Sheppard, N. E.       6 25         Shutt, D. B.       9 75         Sifton, H. B.       6 75         Smith, Miss A.       9 75         Smith, Miss A.       4 50         Smith, C. G.       27 75         Smith, E. A.       2 63         Smith, H. G.       8 63         Smith, Leo.       86 62         Smith, V. G.       12 25       24 00         Sneath, J.       1 50       36 25         Sneath, J.       1 50       30 00         Spinks, G. W.       16 75       39 00         Spinks, G. W.       16 75       15 0         Spoule, W. H.       19 50       16 50         Stallworthy, W. B.       16 50       29 25         Stevenson, O. J.       17 13       17 13         Stillwell, E. C.       15 50       45 00         Stobie, W. G.       28 50       28 50         Stobe, R. E.       13 00       30 00         Stope, J. H.       30 00       30 00         Stope, J. H.       30 00       5 50         Tait, M. D. C.       10 50       18 00 <td></td> <td></td> <td></td> <td></td> <td></td>					
Sheppard, N. E.       6 25         Shutt, D. B.       9 75         Sifton, H. B.       6 75         Smallfield, H. A.       9 75         Smith, Miss A.       4 50         Smith, C. G.       27 75         Smith, Miss F. A.       2 63         Smith, H. G.       8 63         Smith, Leo.       8 63         Smith, Leo.       86 62         Smith, J.       1 50         Sneath, J.       1 50         Sneath, J.       22 50         Sneath, J.       22 50         Sneath, J.       39 00         Spinks, G. W.       16 75         Sponce, J. J.       39 00         Spinks, G. W.       16 75         Sponder, W. H.       19 50         Stallworthy, W. B.       16 50         Stallworthy, W. B.       16 50         Stables, W. E.       5 25       24 00         Stables, W. C.       28 50       28 50         Stobie, W. G.       28 50       28 50         Stone, R. E.       13 00       30 00         Synge, J. L.       5 50       5 50         Tait, M. D. C.       10 50       18 00       28 50	Shepherd, A. L	30 00	27 00		27 00
Shutt. D. B.     9 75       Sifton, H. B.     6 75       Smallfield, H. A.     9 75       Smith, Miss A.     4 50       Smith, C. G.     27 75       Smith, E. A.     2 63       Smith, Miss F. A.     2 63       Smith, H. G.     8 63       Smith, Leo.     86 62       Smith, V. G.     12 25       Sneath, J.     1 50       Snell, H. B.     22 50       Spence, J. J.     39 00       Spinks, G. W.     16 75       Sproule, W. H.     19 50       Stallworthy, W. B.     16 50       Staples, W. E.     5 25       Stevenson, O. J.     17 13       Stillwell, E. C.     15 50       Stobie, W. G.     28 50       Stobe, R. E.     13 00       Sunley, J. H.     30 00       Synge, J. L.     5 50       Tait, M. D. C.     10 50     18 00		6 25		28 50	
Smallfield, H. A.       9 75         Smith, Miss A.       27 75         Smith, C. G.       27 75         Smith, E. A.       2 63         Smith, Miss F. A.       5 25         Smith, H. G.       8 63         Smith, Leo.       86 62         Smith, V. G.       12 25         Sneath, J.       1 50         Snell, H. B.       22 50         Snyder, E. S.       26 25         Spence, J. J.       39 00         Spinks, G. W.       16 75         Sproule, W. H.       19 50         Stallworthy, W. B.       16 50         Stayers, W. E.       5 25         Stevenson, O. J.       17 13         Stillwell, E. C.       13 00         Stobie, W. G.       28 50         Stone, R. E.       13 00         Sunley, J. H.       30 00         Synge, J. L.       5 50         Tait, M. D. C.       10 50	Shutt. D. B.				
Smith, C. G.     27 75       Smith, E. A.     2 63       Smith, Miss F. A.     5 25       Smith, Miss F. A.     8 63       Smith, Leo.     8 63       Smith, Leo.     86 62       Smith, V. G.     12 25       Sneath, J.     1 50       Sneath, J.     1 50       Sneath, J.     22 50       Sneath, J.     22 50       Sneath, J.     22 50       Sneath, J.     39 00       Snyder, E. S.     26 25       Spence, J. J.     39 00       Spinks, G. W.     16 75       Sproule, W. H.     19 50       Stallworthy, W. B.     16 50       Staples, W. E.     5 25       Stevenson, O. J.     17 13       Stillwell, E. C.     15 50       Stobie, W. G.     28 50       Stobe, R. E.     13 00       Sunley, J. H.     30 00       Synge, J. L.     5 50       Tait, M. D. C.     10 50       18 00     28 50	Smallfield, H. A	9 75			9 75
Smith. E. A.       2 63         Smith, Miss F. A.       5 25         Smith, H. G.       8 63         Smith, Leo.       86 62         Smith, V. G.       12 25         Sneath, J.       1 50         Snell, H. B.       22 50         Snyder, E. S.       26 25         Spence, J. J.       39 00         Spinks, G. W.       16 75         Sproule, W. H.       19 50         Stallworthy, W. B.       16 50         Staples, W. E.       5 25         Stevenson, O. J.       17 13         Stillwell, E. C.       15 50         Stobie, W. G.       28 50         Stone, R. E.       13 00         Sunley, J. H.       30 00         Synge, J. L.       5 50         Tait, M. D. C.       10 50				4 50	
Smith, H. G.       8 63         Smith, Leo.       86 62         Smith, Leo.       12 25         Smith, U. G.       12 25         Sneath, J.       1 50         Sneath, J.       1 50         Snell, H. B.       22 50         Snyder, E. S.       26 25         Spence, J. J.       39 00         Spinks, G. W.       16 75         Sproule, W. H.       19 50         Stallworthy, W. B.       16 50         Staples, W. E.       5 25       24 00         Stayerson, O. J.       17 13         Stillwell, E. C.       15 50       45 00         Stobie, W. G.       28 50       28 50         Stone, R. E.       13 00       30 00         Sunley, J. H.       30 00       30 00         Synge, J. L.       5 50       5 50         Tait, M. D. C.       10 50       18 00       28 50	Smith, E. A	. 2 63			2 63
Smith. V. G.     12 25     24 00     36 25       Sneath. J.     1 50     1 50       Snell, H. B.     22 50     22 50       Snyder, E. S.     26 25     39 00       Spence. J. J.     39 00     39 00       Spinks. G. W.     16 75     16 75       Sproule. W. H.     19 50     19 50       Stallworthy, W. B.     16 50     16 50       Staples. W. E.     5 25     24 00     29 25       Stevenson, O. J.     17 13     17 13       Stillwell, E. C.     15 50     45 00     60 50       Stobie. W. G.     28 50     28 50       Stone, R. E.     13 00     30 00       Sunley, J. H.     30 00     30 00       Synge, J. L.     5 50     5 50       Tait, M. D. C.     10 50     18 00     28 50					
Sneath, J.     1 50     1 50       Snell, H. B.     22 50     22 50       Snyder, E. S.     26 25     39 00       Spence, J. J.     39 00     39 00       Spinks, G. W.     16 75     16 75       Sproule, W. H.     19 50     16 50     16 50       Stallworthy, W. B.     16 50     29 25       Stevenson, O. J.     17 13     17 13       Stillwell, E. C.     15 50     45 00     60 50       Stobie, W. G.     28 50     28 50       Stone, R. E.     13 00     30 00     30 00       Sunley, J. H.     30 00     30 00     30 00       Synge, J. L.     5 50     5 50       Tait, M. D. C.     10 50     18 00     28 50			24 00		
Snyder, E. S.     26 25       Spence, J. J.     39 00       Spinks, G. W.     16 75       Sproule, W. H.     19 50       Stallworthy, W. B.     16 50       Staples, W. E.     5 25       Stevenson, O. J.     17 13       Stillwell, E. C.     15 50       Stobie, W. G.     28 50       Stone, R. E.     13 00       Sunley, J. H.     30 00       Synge, J. L.     5 50       Tait, M. D. C.     18 00	Sneath, J		2100		1 50
Spence, J. J       39 00         Spinks, G. W.       16 75         Sproule, W. H.       19 50         Stallworthy, W. B.       16 50         Staples, W. E.       5 25       24 00         Stevenson, O. J.       17 13         Stillwell, E. C.       15 50       45 00         Stobie, W. G.       28 50       28 50         Stone, R. E.       13 00       30 00         Sunley, J. H.       30 00       30 00         Synge, J. L.       5 50       5 50         Tait, M. D. C.       10 50       18 00       28 50				22 50	
Sproule, W. H.     19 50       Stallworthy, W. B.     16 50       Staples, W. E.     5 25       Stevenson, O. J.     17 13       Stillwell, E. C.     15 50       Stobie, W. G.     28 50       Stone, R. E.     13 00       Sunley, J. H.     30 00       Synge, J. L.     5 50       Tait, M. D. C.     10 50       18 00     28 50       28 50     28 50       28 50     28 50       28 50     28 50       30 00     30 00       30 00     30 00       28 50     28 50       28 50     28 50	Spence. J. J		39 00		
Staples, W. E.     5 25     24 00     29 25       Stevenson, O. J.     17 13     17 13       Stillwell, E. C.     15 50     45 00     60 50       Stobie, W. G.     28 50     28 50     28 50       Stone, R. E.     13 00     30 00     30 00       Sunley, J. H.     30 00     30 00       Synge, J. L.     5 50     5 50       Tait, M. D. C.     10 50     18 00     28 50	Sproule, W. H				19 50
Stevenson, O. J.     17 13       Stillwell, E. C.     15 50       Stobie, W. G.     28 50       Stone, R. E.     13 00       Sunley, J. H.     30 00       Synge, J. L.     5 50       Tait, M. D. C.     10 50       18 00     28 50       28 50     28 50       13 00     30 00       5 50     5 50       5 50     5 50       28 50     28 50		5 25	24 00	16 50	
Stobie, W. C.     28 50       Stone, R. E.     13 00       Sunley, J. H.     30 00       Synge, J. L.     5 50       Tait, M. D. C.     10 50       18 00     28 50       13 00     30 00       5 50     5 50       28 50     28 50	Stevenson, O. J	17 13			17 13
Stone, R. E.       13 00         Sunley, J. H.       30 00         Synge, J. L.       5 50         Tait, M. D. C.       10 50         18 00       28 50		. 15 50	45 00		
Synge, J. L       5 50         Tait, M. D. C       10 50         18 00       28 50		. 13 00			
	Synge. J. L			30 00	5 50
Taylor, Grillith	Tait, M. D. C	10 50 5 50	18 00		28 50 5 50
Taylor, T. M. C	Taylor, T. M. C			97.00	10 25
Thomas, J. K 27 00 27 00 Thomson, J. E 5 75	Thomson, J. E			27 00	5 75
Tomlinson, A. H			21.00		
Treadgold, W. M		1			

CIVIT ERBITT OF	101011	10 1010		
	Remuneration to Examiner	Presiding Officer	Attendance	Totals
Treloar, J. B.			6 00	6 00
Turner, R. M	15 00	3 00		18 00
Turrall, W. T			6 00	6 00
Underhill, F. H	27 00			27 00
Urquhart, R. W. 1	9 65			9 65
Van Wyck, H. B	21 50			21 50
Waddell, Miss M. E. G	6 50	24 00		30 50
Waines, W. J.	13 00			13 00
Walker, Miss E. I	2 75			2 75
Walker, E. M	2 88	3 00		5 88
Walker, G. E			3 00	3 00
Walton, W. M.			28 50	28 50
Wardell, A		39 00		39 00
Warner, W. P	80 80	~		80 80
Wasteneys, H	27 75			27 75
Waters, E. T	8 00			8 00
Watt, J. C	23 25			23 25
Weatherburn, A. S	20 20		6 00	6 00
Welsh, W. K.	50 00			50 00
Wetmore, F. E. W	16 00			16 00
Wey, J. C.	6 75			6 75
White, J. H		12 00		12 00
White, Rt. Rev. W. C	1 75	12 00		1 75
Whiteside, W. H				7 00
Wilhelm, J. O.		24 00		24 00
Willan, Healey	87 12	21 00		87 12
Williams, C. H. M	34 00			34 00
Williams, D. C	01 00		27 00	27 00
Wilson, G. E.	45 00		21 00	45 00
Winnett, F. V	6 00			6 00
Wiren. R. C	.0 00	18 00		18 00
Woodcock. J. N.	4 13	10 00		4 13
Woodley, C. J	7 10		6 00	6 00
Woodside, M. St. A	11 75	42 00	0 00	53 75
Wookey, H. W	45 00	72 00		45 00
Workman, Miss G. W.			25 50	25 50
Wright, W. J. T.	5 75		20 00	5 75
Wright, W. W.				5 00
Vorrill E H	3 00		30 00	30 00
Yarrill, E. H. Young, C. R.	16 00		30 00	16 00
Zimmer, A. R.		27 00		49 00
Zimmer, A. R			01 476 00	\$10,393 45
	\$6,508 45	\$2,409 00	\$1,476 00	\$10,595 45

#### APPORTIONMENT

	Remuneration to Examiner	Presiding Officer	Attendance	Totals
Arts	\$952 57	\$1,152 00	\$876 00	\$2,980 57
Medicine	3,103 90	183 00	166 50	3,453 40
Applied Science	462 25	498 00	322 50	1,282 75
Dentistry	578 00	87 00	58 50	723 50
Household Science	5 50	12 00		17 50
Forestry	27 75	54 00		81 75
Music	277 99	54 00		331 99
School of Graduate Studies	46 74			46 74
School of Nursing	5 00	30 00	16 50	51 50
Social Science		39 00	3 00	42 00
University Extension	46 50			46 50
Pedagogy		24 00		24 00
Pharmacy	263 00	66 00	33 00	362 00
Agriculture	521 75	183 00		704 75
Veterinary Science	172 00	27 00		199 00
Law	4 7 70			45 50
	\$6,508 45	\$2,409 00	\$1,476 00	\$10.393 45

Remuneration to examiners (as detailed above)		\$6,508 45
Presiding and attendance (as detailed above)		3,885 00
Honoraria for special services as a Revising Committee: Prof. W. J. McAndrew, \$100; Prof. H. Bennett, \$100; Prof. J. N.		
\$100; Rev. B. F. Sullivan, \$100	· · · · · · · · · · · ·	400 00
Examination supplies and sundries (\$2,541.80): Engrossing diplomas, etc: S. Harrod, \$293; G. B. Pritchard. \$408.	\$701.00	
University Press, Pseudonym books, etc	1.756 15	
Accounts under \$10 (2) Superintendent's Dept., labour, \$78.18; material. \$1.27	5 20 79 45	
Superintendent's Dept., fabour, \$10.10, inaterial, \$1.21	17 40	2,541 80
Printing examination papers and class lists: University Press		5,835 85
University Press		
Less credit for sale of examination books, etc		\$19,171 10 245 <b>43</b>
Less credit for sale of examination books, etc		
	=	\$18,925 67
VI. FACULTY OF ARTS		
22. Salaries		
(1) Departments in University of Toronto (\$590,302	80)	
	,	
Dean's Office		
S. Beatty. Dean (paid also \$5.500 as Professor)	\$1,000 00	\$1.000 00
Mathematics		<b>\$1,000</b>
Professors: S. Beatty (see also above	67 700 00	
I. R. Pounder (paid also \$376 for Extension Work)	\$5.500 00 4.500 00	
Associate Professors: W. J. Webber.	4.000.00	
N. E. Sheppard	4.000 00 3.800 00	
Assistant Professors: D. A. F. Robinson	2 400 00	
J. D. Burk.	3,400 00 2.700 00	
G. deB. Robinson	2.700 00	
Richard Brauer (paid also \$300 for Extension Work)	2.700 00 2.700 00	
Lecturers (Sessional):	0.100.00	
Miss C. Krieger (paid also \$28 for Extension Work)	2.100 00 2.000 00	
D. B. DeLury	1.800 00	
Fellows (Sessional): DeLury Barber (paid also \$46.80 for clerical assistance)	700 00	
R. H. Bruck	700 00 700 00	
S. A. Jennings. J. M. Kingston	700 00	
J. Carson Mark	700 00 87 50	
W. J. Mayne, 1 month	01 30	\$41.487 50
Applied Mathematics		
J. L. Svnge, Professor. A. F. C. Stevenson, Associate Professor.	\$6,000 00 3,700 00	
B. A. Griffith, Lecturer (Sessional)	2.050 00	
Fellows (Sessional): W. D. Rannie.	700 00	
P. R. Wallace.	700 00	
		\$13.150 00
Professors:		
E. F. Burton, also Director of Laboratory	\$5,500 00	
J. Satterly L. Gilchrist	5.000 00 4.350 00	
Associate Professors:		
H. A. McTaggart	4.300 00 3,200 00	
H, J, C. Ireton	3,200 00	

Assistant Professors:		
H. Grayson Smith	3,100 00	
J. O. Wilhelm (paid also \$41.50 for Extension Work)	2,900 00	
C. Barnes	2,700 00	
M. F. Crawford	2,500 00	
A. Pitt (paid also \$170 for Extension Work)	2,350 00 2,100 00	
Miss E. J. Allin, Lecturer (Sessional)	1,600 00	
	1,000 00	
Special Lecturers (Sessional): W. H. Kohl	200 00	
A. B. McLay	200 00	
D. C. Archibald		
A. F. Chisholm		
A. F. Chisholm		
W. E. K. Middleton		
John Patterson		
Andrew Thomson		
Fund) Fundstey renow, Geophysics (paid \$1,200 from Special		
Bernhard Haurwitz, Carnegie Fellow (paid \$600 from Special Fund)		
Demonstrators (Sessional):		
Miss K. M. Crossley	1,600 00	
J. M. Anderson (paid also \$300 for Extension Work)	1,200 00	
R. Richmond (paid also \$75 for Extension Work)	1.200 00	
H. L. Welsh	1,200 00	
A. H. Woodcock (paid also \$20 for Extension Work — resigned 31	077	
December)	375 00	
S. Bateson (resigned 31 December)	300 00	
A. R. Clark	600 00	
H. M. Bryant	500 00	
O. A. Gilmore	500 00	
W. M. Gray (paid also \$100 for laboratory assistance and \$75 in		
Medical Research — Banting)	500 00	
J. Hillier ) paid also \$100 for lahoratory assistance and \$31 for		
Extension Work)	500 00	
D. W. R. McKinley	500 00	
F. A. O. Banks) Miss E. Cohen E. H. Vestine. 4 mos	350 00 350 00	
Miss E. Collell		
E. H. Vestine 4 mos		
E. H. Vestine. 4 mos	250 00	
Class Assistants (Sessional — Easter Term):		
Class Assistants (Sessional — Easter Term): C. K. Cheng	250 00 125 00 100 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng	250 00 125 00 100 00 100 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love.	250 00 125 00 100 00 100 00 80 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford.	250 00 125 00 100 00 100 00 80 00 80 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait.	250 00 125 00 100 00 100 00 80 00 80 00 80 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant.	250 00 125 00 100 00 100 00 80 00 80 00 80 00 2,000 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait.	250 00 125 00 100 00 100 00 80 00 80 00 80 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians:	250 00 125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson	250 00 125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson. J. Ward.	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson J. Ward G. T. Woodward	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,900 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant. Miss B. M. Savage, Clerical Assistant (resigned). B. Clark, Mechanician. Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting).	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant. Miss B. M. Savage, Clerical Assistant (resigned). B. Clark, Mechanician. Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting). Albert Owen (paid also \$37 for Extension Work).	250 00  125 00 100 00 100 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00 960 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant. Miss B. M. Savage, Clerical Assistant (resigned). B. Clark, Mechanician. Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting).	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00	
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower	250 00  125 00 100 00 100 00 80 00 80 00 2,000 00 1,500 00 1,900 00 1,500 00 1,500 00 2,700 00 2,700 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant. Miss B. M. Savage, Clerical Assistant (resigned). B. Clark, Mechanician. Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting). Albert Owen (paid also \$37 for Extension Work). R. H. Chappell, Glass-blower. P. Blackman, Laboratory and Lecture Assistant.	250 00  125 00 100 00 100 00 80 00 80 00 2,000 00 1,500 00 1,900 00 1,500 00 1,500 00 2,700 00 2,700 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson J. Ward G. T. Woodward F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower P. Blackman, Laboratory and Lecture Assistant	250 00  125 00 100 00 100 00 80 00 80 00 2,000 00 1,500 00 1,900 00 1,500 00 1,500 00 2,700 00 2,700 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower. P. Blackman, Laboratory and Lecture Assistant  Astronomy R. K. Young, Professor, also Director of David Dunlap Observatory	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00 960 00 2,700 00 1,600 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance). A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant. Miss B. M. Savage, Clerical Assistant (resigned). B. Clark, Mechanician. Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting). Albert Owen (paid also \$37 for Extension Work). R. H. Chappell, Glass-blower. P. Blackman, Laboratory and Lecture Assistant.  Astronomy R. K. Young, Professor, also Director of David Dunlap Observatory. F. S. Hogg. Assistant Professor (paid also \$210 for Extension Work).	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00 2,700 00 1,600 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng. A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait. Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower. P. Blackman, Laboratory and Lecture Assistant  Astronomy  R. K. Young, Professor, also Director of David Dunlap Observatory. F. S. Hogg, Assistant Professor (paid also \$210 for Extension Work) Lecturers (Sessional):	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,900 00 2,700 00 1,600 00 2,850 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson J. Ward G. T. Woodward F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower P. Blackman, Laboratory and Lecture Assistant  Astronomy R. K. Young, Professor, also Director of David Dunlap Observatory F. S. Hogg, Assistant Professor (paid also \$210 for Extension Work) Lecturers (Sessional): P. M. Millman	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00 2,700 00 1,600 00 2,850 00 2050 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson J. Ward G. T. Woodward F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower P. Blackman, Laboratory and Lecture Assistant  Astronomy R. K. Young, Professor, also Director of David Dunlap Observatory. F. S. Hogg, Assistant Professor (paid also \$210 for Extension Work) Lecturers (Sessional): P. M. Millman J. F. Heard (paid also \$210 for Extension Work)	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,900 00 2,700 00 1,600 00 2,850 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love P. J. Sandiford G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson J. Ward G. T. Woodward F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower P. Blackman, Laboratory and Lecture Assistant  Astronomy R. K. Young, Professor, also Director of David Dunlap Observatory F. S. Hogg, Assistant Professor (paid also \$210 for Extension Work) Lecturers (Sessional): P. M. Millman	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00 2,700 00 1,600 00 2,850 00 2050 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanician Assistant Mechanicians: J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower. P. Blackman, Laboratory and Lecture Assistant  Astronomy  R. K. Young, Professor, also Director of David Dunlap Observatory. F. S. Hogg, Assistant Professor (paid also \$210 for Extension Work) Lecturers (Sessional): P. M. Millman. J. F. Heard (paid also \$210 for Extension Work) Computers:	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,500 00 2,700 00 1,600 00 2,850 00 1,800 00	\$71.750 00
Class Assistants (Sessional — Easter Term): C. K. Cheng A. B. Rotenberg. L. H. Turl (paid also \$47.25 for laboratory assistance) A. W. Love. P. J. Sandiford. G. W. C. Tait Miss A. T. Reed, Secretary and Class Assistant Miss B. M. Savage, Clerical Assistant (resigned) B. Clark, Mechanicians J. Anderson. J. Ward. G. T. Woodward. F. M. Shepherd (paid also \$25 in Medical Research — Banting) Albert Owen (paid also \$37 for Extension Work) R. H. Chappell, Glass-blower P. Blackman, Laboratory and Lecture Assistant  Astronomy  R. K. Young, Professor, also Director of David Dunlap Observatory. F. S. Hogg, Assistant Professor (paid also \$210 for Extension Work) Lecturers (Sessional): P. M. Millman. J. F. Heard (paid also \$210 for Extension Work) Computers: Miss R. J. Northcott.	250 00  125 00 100 00 100 00 80 00 80 00 80 00 2,000 00 1,500 00 2,100 00 1,900 00 1,900 00 1,900 00 1,500 00 2,700 00 1,600 00 2,850 00 2,850 00 1,150 00	\$71.750 00

Mrs. Helen S. Hogg, Research Assistant, 8 mos	300 00	
Miss E. M. Fuller, Secretary-Librarian.	1.150 00	
G. F. Longworth, Night Assistant and Machinist	1.300 00	
O. 1. Longworth, 10ght Passed and State and St		\$17.200 00
Geology		
Professors:	0= =00 00	
E. S. Moore (paid also \$100 for Summer Field Work)	\$5,500 00	
G. B. Langford, Mining Geology	4,800 00	
A. MacLean	4.200 00	
Assistant Professors:	2,500 00	
L. S. Russell (paid also \$160 for Extension Work)	2.300 00	
Dr. Madeleine A. Fritz (part time - paid also in Royal Ontario	850 00	
Museum)  J. Slatterly, Lecturer (Sessional — paid also \$200 for Extension Work)	1.800 00	
V. J. Okulitch, Instructor (Sessional — paid also \$50 for Summer Field	1.000 00	
Work and \$200 for Extension Work)	1,500 00	
Class Assistants (Sessional):	1,000 00	
VI. W. Bartley	250 00	
J. W. Britton	250 00	
W. P. Corking	250 00	
G. P. Crombie	250 00	
M. C. Gardiner	250 00	
V. K. Prest	250 00	
R M Sternberg	250 00	
D. Monteith. Laboratory Attendant, 9 mos	675 00	
		\$23,575 00
25.		
Mineralogy		
Professors:	\$4,700 00	
A. L. Parsons	4,100 00	
M. A. Peacock, Associate Professor.	4.000 00	
V. B. Meen, Lecturer (Sessional — paid also in Royal Ontario Museum	1.000 00	
and \$50 for Extension Work)	1,600 00	
Assistants (part time — Sessional):	1,000 00	
L. G. Berry (paid also \$100 for Extension Work)	400 00	
A T Prince	400 00	
Wm. Wightman, Laboratory Attendant, 8 mos. (paid also \$40 for		
Extension Work)	800 00	
and the state of t		\$16.000 00
Chemistry		
Professors:		
F B Kenrick	\$5,500 00	
Hermann Fischer, Research — Organic Chemistry (paid \$5.000 from		
Special Fund)		
I. T. Burt-Gerrans, Electro-Chemistry	4,500 00	
L. J. Rogers	4.500 00	
Associate Professors:		
	1 4000 000	
J. B. Ferguson	4,400 00	
J. B. Ferguson	4.200 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term)	4.200 00 4.200 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon.	4.200 00 4.200 00 4.200 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon. F. B. Lorriman.	4.200 00 4.200 00 4.200 00 3.600 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon. F. R. Lorriman F. E. Beamish, Assistant Professor.	4.200 00 4.200 00 4.200 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon. F. R. Lorriman. F. E. Beamish, Assistant Professor. Special Lecturers (Sessional):	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon. F. R. Lorriman F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright	4.200 00 4.200 00 4.200 00 3.600 00 2,900 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman. F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting).	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman. F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional):	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman. F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.600 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman. F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis. F. F. W. Wetmore.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman. F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish. Assistants (Sessional):	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish Assistants (Sessional): Miss E. V. Eastcott	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00 2.100 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon. F. R. Lorriman. F. E. Beamish. Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting). Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis. F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish. Assistants (Sessional): Miss E. V. Eastcott. R. G. Romans. H. L. Bernstein.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00 3.00 00 2.100 00 1.800 00 1.295 00 799 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term). A. R. Gordon. F. R. Lorriman. F. E. Beamish. Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting). Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis. F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish. Assistants (Sessional): Miss E. V. Eastcott. R. G. Romans. H. J. Bernstein. L. F. King, 3 weeks (vice H. J. Bernstein on sick leave).	4.200 00 4.200 00 4.200 00 4.200 00 3.600 00 2.900 00  3.000 00 2.100 00 2.100 00 300 00 1.800 00 1.295 00 799 00 70 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman F. E. Beamish. Assistant Professor. Special Lecturers (Sessional): G. F. Wright. J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis. F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish. Assistants (Sessional): Miss E. V. Eastcott. R. G. Romans. H. J. Bernstein. L. F. King, 3 weeks (vice H. J. Bernstein on sick leave). M. Cohen.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00 1.800 00 1.295 00 799 00 799 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis. F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish Assistants (Sessional): Miss E. V. Eastcott R. G. Romans. H. J. Bernstein. L. F. King, 3 weeks (vice H. J. Bernstein on sick leave) M. Cohen. W. H. Brown.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00 3.000 00 2.100 00 799 00 725 00	
J. B. Ferguson W. S. Funnell W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon F. R. Lorriman F. E. Beamish, Assistant Professor Special Lecturers (Sessional): G. F. Wright J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis F. E. W. Wetmore S. O. Thomson, temporary Assistant to Professor Beamish Assistants (Sessional): Miss E. V. Eastcott R. G. Romans H. J. Bernstein L. F. King, 3 weeks (vice H. J. Bernstein on sick leave) M. Cohen W. H. Brown L. Seath	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00 2.100 00 1.800 00 1.295 00 799 00 799 00 725 00 725 00	
J. B. Ferguson. W. S. Funnell. W. H. Martin (on leave of absence for Michaelmas Term) A. R. Gordon. F. R. Lorriman F. E. Beamish, Assistant Professor. Special Lecturers (Sessional): G. F. Wright J. J. Rae (paid also \$200 in Medical Research — Banting) Lecturers (Sessional): Dr. Helen Stantial, Micro-Analysis. F. E. W. Wetmore. S. O. Thomson, temporary Assistant to Professor Beamish Assistants (Sessional): Miss E. V. Eastcott R. G. Romans. H. J. Bernstein. L. F. King, 3 weeks (vice H. J. Bernstein on sick leave) M. Cohen. W. H. Brown.	4.200 00 4.200 00 4.200 00 3.600 00 2.900 00 3.000 00 2.100 00 2.100 00 3.000 00 2.100 00 799 00 725 00	

R. N. Meals	724 00	
Miss C. J. Sanderson (paid also \$66.67 from Special Fund)	724 00	
S. Shankman	724 00	
G. A. Stewart	724 00	
E. A. Hollingshead	650 00	
F. L. McKim	650 00	
J. H. Michell.	650 00	
W. M. Orchard	650 00	
W. A. Patterson	650 00	
G. W. Rogers	650 00	
Miss J. C. Romeyn	650 00	
G. E. Willey.	650 00	
C. Marchant (paid also \$466.66 from Special Fund and \$100 for	030 00	
	221 00	
Extension Work)	324 00	
M. Wayman (paid also \$466.67 from Special Fund)	324 00	
W. G. Hines (paid also as Demonstrator)	75 00	
D. J. LeRoy (paid also as Demonstrator)	75 00	
Demonstrators, Electro-Chemistry (Sessional):		
W. A. James	824 00	
D. J. LeRoy	824 00	
W. G. Hines	750 00	
Laboratory Assistants:		
R. Fortescue (with rooms, heat and light valued @ \$420 as caretaker		
of building)	1.200 00	
W. Banton (paid also \$20 for Extension Work) \$1,450; Lecture		
Assistant, \$200	1.650 00	
Laboratory Attendants @ \$10 to \$14 per week:		
H. Renwick, 52 weeks, 1 day	730 34	
H. Davis, 40 weeks, 4 days	488 00	
A. Van Winckel, 40 weeks, 4 days	406 66	
P. Rowley, 8 weeks, 4 days	104 73	
F. H. Twigg, 146 hours @ 42c to 44c per hour	65 39	
1. 11. 1 wigg, 140 nours @ 420 to 440 per nour	09 39	\$70.974 12
		310,914 12
Biology		
Biology		
Professors:		
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Professors: E. M. Walker, Invertebrate Zoology	\$5,500 00	
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E. M. Walker, Invertebrate Zoology	2,550 00	
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E. M. Walker. Invertebrate Zoology.  W. H. Piersol, Histology and Embryology, @ \$5,100 of which half charged to Anatomy.  A. G. Huntsman, Marine Biology (without salary).  Associate Professors:  A. F. Coventry, Vertebrate Embryology.  J. R. Dymond, Systematic Zoology (paid also \$10 for Extension Work).  W. H. T. Baillie, Mammalian Anatomy.  J. W. MacArthur, Genetics.  E. H. Craigie, Comparative Anatomy and Neurology.  Assistant Professors:  W. J. K. Harkness, Limnobiology.  Dr. Norma H. C. Ford, Human Biology.  K. C. Fisher, Experimental Biology.  F. P. Ide, Lecturer.  Demonstrators (Sessional):  C. W. J. Armstrong (paid also \$166.66 in Medicine).  Miss V. Engelbert.  F. E. J. Fry (paid also \$1,100 in Special Research).  R. R. Langford (paid also \$1,100 in Special Research).  Assistants (Sessional):  P. Elson.  A. A. Blair.  H. M. Rogers.  Miss R. D. C. Martin.  G. E. Bucher  K. Graham.  Miss G. Workman.  D. A. McLulich.  Dr. Kathleen M. Bartley.	2,550 00	
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E. M. Walker. Invertebrate Zoology.  W. H. Piersol, Histology and Embryology, @ \$5,100 of which half charged to Anatomy.  A. G. Huntsman, Marine Biology (without salary).  Associate Professors:  A. F. Coventry, Vertebrate Embryology.  J. R. Dymond, Systematic Zoology (paid also \$10 for Extension Work)  W. H. T. Baillie, Mammalian Anatomy.  J. W. MacArthur, Genetics.  E. H. Craigie, Comparative Anatomy and Neurology.  Assistant Professors:  W. J. K. Harkness, Limnobiology.  Dr. Norma H. C. Ford, Human Biology.  K. C. Fisher, Experimental Biology.  F. P. Ide, Lecturer.  Demonstrators (Sessional):  C. W. J. Armstrong (paid also \$166.66 in Medicine).  Miss V. Engelbert.  F. E. J. Fry (paid also \$1,100 in Special Research).  R. R. Langford (paid also \$1,100 in Special Research).  Assistants (Sessional):  P. Elson.  A. A. Blair.  H. M. Rogers.  Miss R. D. C. Martin.  G. E. Bucher.  K. Graham.  Miss G. Workman.  D. A. McLulich.  Dr. Kathleen M. Bartley.  Miss A. M. Ironside.  S. H. Chambers.	2,550 00  4,100 00 3,950 00 3,950 00 3,950 00 3,600 00  3,550 00 2,800 00 2,800 00 900 00 900 00 900 00 450 00 450 00 450 00 450 00 450 00 300 00 300 00 300 00 300 00 200 00 160 00 150 00	
E. M. Walker. Invertebrate Zoology.  W. H. Piersol, Histology and Embryology, @ \$5,100 of which half charged to Anatomy.  A. G. Huntsman, Marine Biology (without salary).  Associate Professors:  A. F. Coventry, Vertebrate Embryology.  J. R. Dymond, Systematic Zoology (paid also \$10 for Extension Work)  W. H. T. Baillie, Mammalian Anatomy.  J. W. MacArthur, Genetics.  E. H. Craigie, Comparative Anatomy and Neurology.  Assistant Professors:  W. J. K. Harkness, Limnobiology.  Dr. Norma H. C. Ford, Human Biology.  K. C. Fisher, Experimental Biology.  F. P. Ide, Lecturer.  Demonstrators (Sessional):  C. W. J. Armstrong (paid also \$166.66 in Medicine).  Miss V. Engelbert.  F. E. J. Fry (paid also \$1,100 in Special Research).  R. R. Langford (paid also \$1,100 in Special Research).  Assistants (Sessional):  P. Elson.  A. A. Blair.  H. M. Rogers.  Miss R. D. C. Martin.  G. E. Bucher.  K. Graham.  Miss G. Workman.  D. A. McLulich.  Dr. Kathleen M. Bartley.  Miss A. M. Ironside.	2,550 00  4,100 00 3,950 00 3,950 00 3,950 00 3,600 00 2,800 00 2,800 00 2,300 00 900 00 900 00 900 00 450 00 450 00 450 00 450 00 450 00 300 00 300 00 300 00 300 00 200 00 160 00	

\$59,595 00

J. M. Speirs	
	50 00
Y	
J. Spizizen	40 00
W. M. Sprules	40 00
W. R. Martin (paid also \$200 in Special Research)	30 00
V. E. F. Solman (paid also \$200 in Special Research)	30 00
V. E. F. Solman (paid also \$200 in Special Research)	30 00
Technical Assistants:	
A. Quantrill	1.200 00
S. Clare	900 00
Thos. Stovell	900 00
Miss A. H. Bell, 10 mos. (paid also in Royal Ontario Museum)	750 00
	360 00
Miss M. Sewell, 9 mos. (half time)	
E. C. Cross, Secretary (paid also in Royal Ontario Museum)	1,750 00
W. J. LeRay, Curator of Vivarium	1,700 00
D. G. LeRay, Assistant in Vivarium (paid also \$50 in Psychology)	520 00
A W'll Cl' f I almost A sister A	1.000 00
A. Wilson, Chief Laboratory Assistant	
Wm. Smith, Laboratory Attendant and Stores Assistant	600 00
A. Prince, Laboratory Assistant, 33-1/3 weeks @ \$9	300 00
Secretarial Assistants:	
Mrs. Helen Jackson (paid also \$9.50 in Geology)	1,150 00
Miss E. Caesar, 9 mos	675 00
Miss P. Foreman, Stenographer and Librarian	1,000 00
Miss F. Foreman, Stenographer and Librarian	1,000 00
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D. D	
Botany	
Professors:	
R. B. Thomson, Plant Morphology	\$5.500 00
It. B. Thomson, Tall Morphology	
II. S. Jackson, Mycology	5.200 00
Associate Professors:	
D. L. Bailey, Plant Pathology (2/3rds time)	3.500 00
G. H. Duff, Plant Physiology	4.100 00
G. H. Dull, I fall I hystology	
H. B. Sifton, Plant Morphology and OEcology	4,100 00
Assistant Professors:	
Dr. J. Gertrude Wright	3.000 00
T. M. C. Taylor (on leave of absence, Easter Term — paid also \$440	0.000
1. M. C. Taylor ton leave of absence, Easter Term — paid also \$440	2.000.00
for Extension Work)	2.800 00
W. R. Haddow, Special Lecturer (Sessional — without salary)	
A. J. V. Lehmann, Senior Demonstrator (paid also \$140 in Special	
	1,600 00
Research)	1,000 00
Class Assistants (Sessional):	
Miss D. F. Forward (paid also \$80 in Special Research)	900 00
D. F. Putnam (paid also \$175 in Special Research and \$260 for	
	650 00
Extension Work)	
	600 00
M. W. Bannan (paid also \$60 in Special Research)	
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special	575.00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research)	575 00 550 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research)  D. C. McPherson (paid also \$150 in Special Research)	550 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research)  D. C. McPherson (paid also \$150 in Special Research)  Miss A. B. Brodie (paid also \$60 in Special Research)	550 00 500 00
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D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell	550 00 500 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning	550 00 500 00 500 00 450 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson	550 00 500 00 500 00 450 00 450 00
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D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenly (paid also \$150 in Special Research) G. W. Hope. Miss G. S. Taylor (paid also \$175 as Clerical Assistant, Botanic Garden, and \$150 in Special Research)	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00
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D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$175 as Clerical Assistant, Botanic Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens.	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$175 as Clerical Assistant, Botanic Garden, and \$150 in Special Research) Technical Assistants:	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$175 as Clerical Assistant, Botanic Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens.	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenly (paid also \$150 in Special Research) G. W. Hope. Miss G. S. Taylor (paid also \$175 as Clerical Assistant, Botanic Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens. Miss C. B. Ross. R. F. Cain	550 00 500 00 500 00 450 00 450 00 450 00 450 00 425 00 425 00 425 00 1.800 00 1.400 00 1.650 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Mariou A. Lent, 2 mos.	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00 1.400 00 1.650 00 150 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$175 as Clerical Assistant, Botanic Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @ \$360)	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1,800 00 1,400 00 1,500 00 1,500 00 2,200 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$120 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Carden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @ \$360) L. Van Cleemput, Gardener	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00 1.400 00 1.650 00 150 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$120 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Carden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @ \$360) L. Van Cleemput, Gardener	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00 1.400 00 1.650 00 1.50 00 2.200 00 1,450 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenhy (paid also \$120 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @ \$360) L. Van Cleemput, Gardener	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1,800 00 1,400 00 1,500 00 1,500 00 2,200 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @\$360) L. Van Cleemput, Gardener J. Van Beek, Assistant Gardener	550 00 500 00 500 00 500 00 450 00 450 00 450 00 450 00 425 00 425 00 425 00 1,800 00 1,650 00 1,650 00 1,450 00 1,450 00 1,450 00 1,450 00 1,400 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @\$360) L. Van Cleemput, Gardener J. Van Beek, Assistant Gardener Clerical Assistants: Miss L. Alward	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00 1.400 00 1.650 00 1.450 00 1,450 00 1,450 00 1,400 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @\$360) L. Van Cleemput, Gardener J. Van Beek, Assistant Gardener Clerical Assistants: Miss L. Alward	550 00 500 00 500 00 500 00 450 00 450 00 450 00 450 00 425 00 425 00 425 00 1,800 00 1,650 00 1,650 00 1,450 00 1,450 00 1,450 00 1,450 00 1,400 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued \$360) L. Van Cleemput, Gardener J. Van Beek, Assistant Gardener Clerical Assistants: Miss L. Alward Miss Hilda Lent (resigned 18 June)	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00 1.400 00 1.450 00 1.450 00 1.450 00 1.450 00 1.450 00 1.450 00 1.450 00 1.450 00 1.450 00
D. H. Hamly (paid also \$450 in Applied Physics and \$265 in Special Research) D. C. McPherson (paid also \$150 in Special Research) Miss A. B. Brodie (paid also \$60 in Special Research) P. G. Newell K. Clendenning L. T. Richardson S. A. Simmons (paid also \$150 in Special Research) A. J. Skolko (paid also \$150 in Special Research) W. R. Watson (paid also \$120 in Special Research) C. N. Haldenby (paid also \$150 in Special Research) G. W. Hope Miss G. S. Taylor (paid also \$150 in Special Research) Garden, and \$150 in Special Research) Technical Assistants: Miss M. B. Givens Miss C. B. Ross R. F. Cain Mrs. Marion A. Lent, 2 mos. A. Simpson, Horticulturist (with living quarters valued @\$360) L. Van Cleemput, Gardener J. Van Beek, Assistant Gardener Clerical Assistants: Miss L. Alward	550 00 500 00 500 00 450 00 450 00 450 00 450 00 450 00 425 00 425 00 1.800 00 1.400 00 1.650 00 1.450 00 1,450 00 1,450 00 1,400 00

Laboratory Attendants:		
R. Lynn	1,150 00	
S. G. Smith.	1,000 00	\$55,350 00
History		\$00.000 OO
Professors: Chester Martin (paid also \$3 from University Press)	\$5,500 00	
R. Flenley (paid also \$30 from University Press)	4.700 00	
F. H. Underhill (paid also \$10 from University Press)	4,700 00	•
University Press)	4,500 00	
G. deT. Glazebrook, Associate Professor (paid also \$262.75 for Extension Work).	3,600 00	
Assistant Professors: D. G. Creighton (paid also \$75 for Extension Work and \$29 from		
University Press)	2.700 00	
Edgar McInnis (paid also \$820 for Extension Work and \$3.50 from University Press)	2,600 00	
D. J. McDougall (paid also \$360 for Extension Work) Lecturers (Sessional):	2,600 00	
R. M. Saunders (paid also \$378 for Extension Work and \$1.50 from	2.070.00	
University Press)	2,350 00 2,000 00	
Miss M. MacLaren, Reader (Sessional)	250 00	
R. G. Riddell, Tutorial Assistant (Sessional - without salary)		\$35,500 00
- Anthropology		\$55.500 00
T. F. McIlwraith, Professor (paid also \$12 from University Press)	\$4,500 00	
C. W. M. Hart, Assistant Professor, also Supervisor of Studies for Course	\$4,500 00	
in Sociology (paid also \$200 for Extension Work)	2,900 00	
P. Nash. Lecturer (Sessional)	2,000 00 1,000 00	
J. Hallz, Histrictor, Sociology (Sessional)		\$10,400 00
Archaeology		
C. T. Currelly, Professor (part time - paid also in Royal Ontario	0.4.700.00	
Rt. Rev. W. C. White, Associate Professor, Chinese Archaeology (paid	\$4.500 00	
also in Royal Ontario Museum)	2,500 00	
time)	1,700 00	
Rev. Jas. M. Menzies. Research Assistant, Chinese Archaeology (Sessional — without salary)		
sional — without salary /		\$8.700 00
Fine Art		
John Alford, Professor (paid \$5,000 from Special Fund)		
Lecturers: Peter Brieger (paid \$2,400 from Special Fund)		
F. S. Haines, Lecturer (part time — Sessional; without salary)		
Peter Haworth, Instructor (Sessional)	600 00	\$600 00
Music		\$000 titl
Instructors in musical subjects in Honour Courses: Healey Willan (paid also \$250 in Faculty of Music)	\$420 00	
Leo Smith (paid also \$250 in Faculty of Music)	\$420 00	
Toronto Conservatory of Music	160 00	** ***
- Caranalu		\$1.000 00
Geography  Griffith Taylor. Professor (paid also \$2.500 in Ontario College of Educa-		
tion and \$300 for Extension Work)	\$4.000 00	
Demonstrators (Sessional): A. H. Clark (paid also \$120 for Extension Work)	1.200 00	
Miss E. K. M. Sims (paid also \$386 for Extension Work)	1.200 00	
the University Press)	1,200 00	
Miss M. Brookstone (paid also \$240 for Extension Work)  Student Demonstrators (Sessional):	1,000 00	
F. Auburn	150 00	
N. B. McElheran	150 00	\$7,700 00
		Q.,,.00 00

# Political Economy

Political Economy		
Professors:	\$4.500 00	
H. A. Innis (paid also \$10 from University Press)	4,900 00	
Associate Professors:	1,500 00	
W Bladen, also Supervisor of Studies in Political Economy (paid		
also \$75 for Extension Work and \$400 from University Press)	4,100 00	
H R Kemp	4,100 00	
A. Brady (on leave of absence, Easter Term — paid also \$75 from	2.000.00	
University Press)	3,800 00	
R. M. Dawson (paid also \$10 from University Press)	3,600 00	
Assistant Professors: Lorne T. Morgan (paid also \$200 for Extension Work)	3,700 00	
J. F. Parkinson (paid also \$420 for Extension Work)	2,600 00	
Miss I. M. Biss (paid also \$8 from University Press — resigned		
30 June)	2.600 00	
Donald C. McGregor (on leave of absence from 1 February to 30		
June without salary)	1.516 67	
A. F. W. Plumptre (paid also \$225 for Extension Work and \$19 from	2.600 00	
University Press)	2.000 00	
Lecturers (Sessional): V. F. Coe (paid also \$247.50 for Extension Work and \$32 from		
University Press	2,400 00	
University Press)	,	
University Press)	2,000 00	
F. I. Westcott, Special Lecturer (Sessional — paid also \$662 for Ex-	7 000 00	
tension Work and \$10 from University Press)	1.800 00	
J. G. Perold, Instructor (Sessional — paid also \$170 for Extension Work)	1,500 00 1,000 00	
W. T. Easterbrook, Assistant (Sessional)	1,000 00	
Junior Assistants (Sessional): R. H. Fleming	500 00	
Miss I. Wilson (resigned 31 December)	187 50	
I. McDonald	156 25	
W. J. McPherson	156 25	
Special Lecturers (including expenses):		
A. P. Usher	57 30	
J. M. Clark	52 45	
R. M. MacIver	50 00 48 36	
Kenneth Boulding	22 35	
W. A. Mackintosh	15 35	
H. A. Logan	8 70	
Accounting:		
W. S. Ferguson, Professor (part time - paid also \$20 for Exten-	2 7 7 2 2 2	
sion Work)	2,550 00	
C. A. Ashley, Associate Professor, \$3,250; Supervisor of Studies in Commerce and Finance, \$600.	3,850 00	
F. R. Crocombe, Assistant Professor (paid also \$50 for Extension	3.030 00	
Work)	3.450 00	
-		\$57,821 18
· Law		
Professors:		
W. P. M. Kennedy. Constitutional Law (paid also \$275 from		
University Press)	\$5.700 00	
N. A. M. MacKenzie, Public and Private International Law	4,400 00	
F. C. Auld, Roman Law and Jurisprudence	4.200 00	
Jacob Finkelman, Assistant Professor, Administrative and Industrial	2 500 00	
Law (paid also \$210 for Extension Work)	2.500 00 1.600 00	
K. G. Gray. Honorary Lecturer (Sessional — without salary)	1,000 00	
		\$18,400 00
Philosophy		
Professors:		
G. S. Brett. \$6.000, of which \$1.000 paid in Ethics (paid also \$1.000		
as Dean of Graduate Studies; \$30 in Ontario College of Educa-		
tion, and \$7.50 from University Press)	\$5.000 00	
F. H. Anderson.	4.600 00	
Associate Professors: H. R. MacCallum (paid also \$30 from University Press)	4,200 00	
E. W. Macdonald (paid also \$400 for Extension Work)	3,300 00	

W. Jarvis McCurdy, Assistant Professor (paid also \$620 for Extension		
Work)	2,900 00	
J. K. Thomas, Assistant (Sessional)	1.500 00	\$21.500 00
Psychology		*======================================
Professors: E. A. Bott, also Director of Laboratory	\$5,000 00	
W. E. Blatz (part time — paid also \$2,500 from St. George's School and \$50 for Extension Work)	2,500 00	
Associate Professors: S. N. F. Chant (paid also \$400 for Extension Work)	3,900 00	
Wm. Line (paid also \$300 for Extension Work)	3.600 00	
J. D. Ketchum (paid also \$10 for Extension Work)	2,700 00	
G. P. Cosgrave (paid also \$422 for Extension Work) K. S. Bernhardt (paid also \$450 from St. George's School; \$200 for	2,600 00	
Instruction to Optometry students, and \$520 for Extension Work)	2.350 00	
C. R. Myers (paid also \$720 for Extension Work)	2,050 00	
K. H. Rogers, Special Lecturer (Sessional — paid also \$100 for Extension Work)	300 00	
Instructors (Sessional):		
H. C. H. Miller (paid also \$200 for Extension Work) G. W. Anderson (paid also \$150 in Psychiatry)	600 00 100 00	
Miss D. D. Hearn, Class Assistant (paid also \$550 as Laboratory	100 00	
Attendant)	600 00	
Class Assistants (Sessional): Miss M. Northway (paid also \$200 for Extension Work)	400 00	
Miss M. D. Salter (paid also \$100 for Extension Work)	400 00	
G. H. Turner (paid also \$350 for Extension Work)	400 00	
D. C. Williams (paid also \$400 for Extension Work) Miss N. Loeb	400 00 300 00	
Miss D. Millichamp (paid also \$1,300 from St. George's School)	300 00	
Miss A. M. Benson	200 00	
J. H. Sunley	200 00 200 00	
Miss N. Bailey	100 00	
E. L. Jacobs	200 00	
Miss M. Mason	200 00	
Instruction for Optometry students:  K. S. Bernhardt, Special Lecturer (see above)	200 00	
Miss D. F. Rintoul, Class Assistant	200 00	
G. C. Cooper, Technician	2,300 00	
	\$32.300 00	
Less paid by School of Nursing	300 00	#22 000 00
Italian and Spanish		\$32,000 00
Professors: M. A. Buchanan	\$6,000 00	
J. E. Shaw	6.000 00	
Emilio Goggio (paid also \$200 for Extension Work)	4,400 00	
G. C. Patterson	3,600 00	
Instructors (Sessional):		
Miss F. M. Haygarth	1,500 00 1,500 00	
		\$26.600 00
(2) Departments in University College (\$160,550	)	
Classics		
Gilbert Norwood, Professor, also Director of Classical Studies (paid also		
\$10 from University Press)	\$6,250 00	
(a) Greek: E. T. Owen, Professor	4,700 00	
Associate Professors:	4,700 00	
D. E. Hamilton	4.200 00	
M. D. C. Tait (paid also \$470 for Extension Work)	3.600 00	

(b) Latin:		
Professors:		
G. Oswald Smith (paid also \$150 for Extension Work)	5.000 00	
E. A. Dale (on leave of absence, Easter Term)	4.500 00	
Louis A. MacKay, Assistant Professor (paid also \$430 for Extension	0.100.00	
Work)	3.100 00	
(c) Greek and Roman History:		
C. N. Cochrane, Professor (also Dean of Residence with free house,	4.500.00	
heat and light valued @ \$300)	4,500 00	
Miss Mary C. Needler, Assistant Professor	2,700 00	
B. R. English, Instructor (Sessional — paid also \$150 for Extension Work)	1,500 00	
WOIK/	1,500 00	\$40,050 00
		010.000.00
English		
Professors:		
M. W. Wallace (paid also \$1,500 as Principal of University College)	\$6,000 00	
R. S. Knox (paid also \$15 from University Press)	4,700 00	
J. F. Macdonald (paid also \$150 in Ontario College of Education		
and \$580 for Extension Work)	4,500 00	
Associate Professors:		
W. H. Clawson (paid also \$560 for Extension Work)	3,900 00	
A. S. P. Woodhouse (paid also \$320 from University Press)	3,700 00	
E. K. Brown (paid also \$300 for Extension Work and \$300 from		
University Press)	3,700 00	
Assistant Professors:		
N. J. Endicott (paid also \$452 for Extension Work)	2.800 00	
J. R. MacGillivray (paid also \$404 for Extension Work)	2,700 00	
A. E. Birney, Lecturer (Sessional - paid also \$300 for Extension Work	2 000 00	
and \$20 from University Press)	2,000 00	
D. V. LePan. Reader	750 00	004 770 00
_		\$34,750 00
French		
Professors:		
F. C. A. Jeanneret	\$5,500 00	
J. S. Will.	5,000 00	
St. E. de Champ (paid also \$200 for Extension Work)	4,500 00	
Associate Professors:	1,000 00	
W. J. McAndrew (paid also \$800 as Registrar of University College)	3,700 00	
H. L. Humphreys (paid also \$420 for Extension Work)	3,600 00	
Assistant Professors:		
J. G. Andison (paid also \$426 for Extension Work)	3,300 00	
R. D. C. Finch (on leave of absence, Easter Term	3.100 00	
C. D. Rouillard	3.000 00	
Lecturers (Sessional):		
Miss A. C. Cole (paid also \$308 for Extension Work)	2.350 00	
Jean A. Houpert (paid also \$300 for Extension Work)	2.000 09	
G. L. Assie (paid also \$320 for Extension Work)	1,900 00	
Miss M. D. MacDonald (paid also \$200 for Extension Work)	1,800 00 1,800 00	
MISS M. D. MacDonald (paid also \$200 for Extension work)	1,000 00	\$41,550 00
		\$41.550 00
German		
Barker Fairley, Professor	\$6,000 00	
Thure Hedman, Associate Professor	4.000 00	
Assistant Professors:	1,000	
G. E. Holt	3.450 00	
H. Boeschenstein (paid also \$500 for Extension Work)	2.700 00	
Victor Lange, Lecturer (paid also \$30 in Ontario College of Education		
and \$200 for Extension Work - resigned 30 June)	2.000 00	
		\$18,150 00
Semitics		
Professors:	0= =00 00	
W. R. Taylor	\$5,500 00	
T. J. Meek (paid also \$30 from University Press)	5,350 00	
F. V. Winnett, Assistant Professor. W. S. McCullough, Lecturer (Sessional)	2,800 00 2,400 00	
M. T. Newby, Fellow (Sessional)	500 00	
	300 (//	\$16,550 00
		210,000 00

Ethics		
G. S. Brett, Professor (see also Philosophy)	\$1,000 00	A7 000 00
- University College General		\$1.000 00
M. W. Wallace, Principal (see also English)	\$1,500 00	
Miss Marion B. Ferguson, Dean of Women (with living valued @ \$400) W. J. McAndrew, Registrar (see also French)	2.500 00 800 00	
Miss R. Gregory, Registrar's Assistant	1,000 00	
Miss C. Tocque, Stenographer in University College	1.400 00	
Miss M. Blackburn, Secretary in Registrar's Office	1.300 00	\$8.500 00
	_	
00.36		<b>\$</b> 750.852 80
23. Mathematics Class room supplies (\$100.32):		
American Mathematical Society, dues	\$25 28	
Photographic Service, slides	6 55	
University Extension, paper and stencils	40 91	
University Press, printing and stationery	27 58	
de Lury Barber, 78 hrs. @ 60c (see also salaries)	46 80	
University Extension, making stencils	36 60	0.100 = 2
24. Applied Mathematics		\$183 72
Class room supplies (\$278.01):		
Hirschwaldsche Buchhandlung, text books	\$31 74	
Murdoch Stationery, paper Office Specialty Mfg. Co., cabinet and guides	27 00	
Postage	38 10 15 00	
Roneo Co. of Canada. stencils, ink and paper	46 35	
Waverly Press, reprints	13 76	
University Press, printing and stationery	53 03 51 62	
Superintendent's Dept., freight, 36c; labour, \$1.05	1 41	
Clerical assistance:		
Donald W. Robertson, 41-2/3 weeks @ \$12	500 00	\$778 01
25. Physics		Ø110 UI
Laboratory and workshop supplies (\$5,694.31):		
Geo. Adams, screws, nuts, etc	\$29 35	
Aikenhead Hardware Ltd., hardware	117 95	
Allen Mfg. Co., laundry	37 22	
American Hard Rubber Co., rubber. Anaconda American Brass, Ltd., rod.	13 94 196 58	
Baird & Tatlock, terminals, etc	50 75	
Bakelite Corporation, bakelite	10 15	
Baker Platinum Co., lead and tin wire Bausch & Lomb Optical Co., prisms.	49 75 11 27	
Charles Besby & Co., tubing	16 17	
W. E. Booth, lantern and photo plates	105 99	
Brown Engineering Corporation, grinding babbits	15 00	
Cambridge Instruments Co., repairing thermometers	35 22 56 58	
Canada Metal Co., castings and tubing	104 62	
Canada Wire & Cable Co., wire	26 09	
Canadian General Electric Co., lamps and resistors	133 97 23 79	
Canadian Laboratory Supplies, glassware and chemicals	81 52	
Canadian Liquid Air Co., testing cylinders	13 88	
Canadian National Carbon Co., carbons and batteries	50 42 14 33	
Walter A. Carveth, quartz wedge	14 33	
Central Scientific Co., glassware, tubing, etc	442 12	
Corning Glass Works, tubing. Crane Ltd., safety valve.	19 69	
F. C. Dannat, repairing cell	23 89 13 54	
Diamond State Fibre Co., fibre	36 68	
Ditto of Canada, Ltd., carbon sheets	32 21	
Dominion Oxygen Co., gas	379 17	

Driver Harris & Co., wire	10 14
Eastman Kodak Stores, plates and chemicals	12 19
Eastman Photographic Stores, plates and chemicals	84 57
The Control of the Co	13 34
T. Eaton Co., baskets, stools and chemicals	
Exide Batteries, batteries	104 72
Garlock Packing Co., rings	11 03
General Electric X-Ray Corporation, rod	10 23
Const. De li C. Linding mosts	13 45
General Radio Co., binding posts	
Gevaert Co., photo paper	44 20
Griffin & Tatlock glassware	167 20
Gutta Percha & Rubber Co., tubing and sleeves	22 77
Office I fella & Rubbel Co., tubing and Access	24 00
Hammer Laboratories, lamp	
Hardwicks, Hindle Inc., electrical units	18 30
Adam Hilger Ltd., chemicals, etc	192 33
Imperial Oil Ltd., oil	30 68
Thiperial Off Eta, Off.	
International Resistance Co., resistors	28 89
Johnson, Matthey & Co., contacts	16 20
Kimball Glass Co., tubing	82 03
P. J. Kipp & Zonen, tube	18 74
I. J. Ripp & Zonen, tube.	
Lake Simcoe Ice & Fuel Ltd., ice	40 97
J. R. Langstaffe, sockets	16 73
McBain Foundry, castings	45 97
W. R. McKee, electrical repairs	31 50
w. R. McRee, electrical repairs.	
D. W. R. McKinley, quartz unit	25 00
Geo. A. Matthews Co., rewinding armature	12 50
Matthews, McCutcheon & Co., lamps, etc	501 28
Nichels Chamical Co. acids	37 61
Nichols Chemical Co., acids	
Northern Electric Co., tubes	18 90
Peckover's Ltd., rods	10 77
Postage	43 50
Pratt & Lambert, paint	18 98
Pratt & Whitney, drills, reamers, etc	50 72
W. G. Pye & Co., wire	14 83
Radio Trade Supply Co., voltmeters and ammeters	24 65
Radio Trade Supply Co., Voltmeters and ammeters	
Radio Valac Co., transformers and condensers	75 00
Roneo Co., stencils, paper and ink	32 69
Robbins & Townsend, typewriter inspection	11 40
L' Slaver flaments	10 35
K. Slemay, filaments	
Stupakoff Laboratories, filaments	14 41
Toronto Hydro-Electric System, current	179 10
Viedor-Root of Canada, counters	14 54
Walker's Metal Products, wire	36 92
Westinghouse Electric Mfg. Co., tubes, etc	31 20
Wholesale Radio Co., radio parts	122 29
A. R. Williams Machinery Co., tractor, etc	26 50
I. C. Williams Machinery Co., Hactor, etc.	
J. C. Williams, film	16 50
University Press, printing and stationery	257 80
Accounts under \$10 (43)	206 04
Sundry disbursements by department:	
Continue of the land of the land of the state of the stat	61.06
Seminar teas. \$24.06; hardware, \$19.43; sundries, \$20.57	64 06
Superintendent's Dept., freight, \$132.27; labour, \$153.73; material.	
\$329.75	635 75
pparatus (\$3.503.73):	
Bliley Electric Co., crystals	28 68
billey Electric Co., crystais.	
Canadian General Electric Co., lamps	11 85
Canadian Marconi Co., wave meter	69 50
Walter A. Carveth & Co., micro enlarger	325 00
Central Scientific Co., pumps, heaters, galvanometers, etc	308 99
Cl. 1 D. 1 C., pumps, neaters, garvanometers, etc	
Clough-Brengle Co., voltmeters	44 83
Chas. W. Cook & Sons, electroscope	95 03
G. Cussons Ltd., modulus apparatus	22 49
W. Edwards & Co., water pumps	104 92
P. 1 C.1 Commention along Cl.	
Fish-Schurman Corporation, glass filters	5 94
General Radio Co., condenser	12 08
Griffin & Tatlock, weights, microscope and thermometers	103 21
Adam Hilger Ltd., tubes, condensers, illuminators, etc	1,259 50
Matthews, McCutcheon & Co., meters, fuses and lanterns	141 45
Seeman Laboratory, spectrograph, \$804.35 (one half paid by	
Radiology)	402 17
Radiology) Underwood-Elliott-Fisher Ltd., typewriter, \$133.65; less allowance	
on all machine \$7.50	126 15
on old machine, \$7.50	120 10

W		
Weston Electrical Instrument Co., meter relay, ammeters, etc	57 94	
Zenith Electric Co., resistances	74 35	
Superintendent's Dept., labour, \$234.15; material, \$75.50	309 65	
Experimental tables, cases, books, charts, fittings, etc. (\$736.57):	002 00	
Engineering, subscription	14 75	
H. M. Stationery Office	32 16	
Macmillan & Co., subscription	14 45	
K. C. Mann, graphs and diagrams	16 00	
National Research Council, reprints	21 90	
University Press, printing and stationery	83 17	
Accounts under \$10 (10)	49 43	
Superintendent's Dept., labour. \$262.55; material, \$242.16	504 71	
Laboratory and workshop assistance (\$1,497.25):		
J. Love. 41 weeks, 3 days	372 00	
R. Hipgrave, 37 weeks	333 00	
C. Beaumont, 33 weeks, 4 days	303 00	
J. Hillier, 4 weeks (see also salaries)	100 00	
W. Gray, 4 weeks (see also salaries)	100 00	
K. C. Mann. 6 weeks	96 00	
A. Preuls, 6 weeks	96 00	
S. Collins. 4½ weeks	50 00	
L. H. Turl, 63 hours (see also salaries).	47 25	
Research apparatus (\$2,209.35):		
Askania Werke Aktungessllschaft, balance	935 71	
Canadian General Electric Co., motor generator set	1.240 00	
Superintendent's Dept., freight	33 64	
-	010 (41 01	
T	\$13.641 21	
Less charged to Sir John McLennan Fund \$2,209 35		
Credits: Laboratory deposits, \$729.90; sale of		
material, \$102.60	2.041.05	
	3.041 85	210 =00 26
26. Astronomy		\$10,599 36
At University:		
Supplies (\$279.46):		
Canadian General Electric Co., lamps and transformer	\$16 63	
University Press, printing and stationery	29 80	
Accounts under \$10 (7)	33 92	
Sundry disbursements by department:		
Express and postage, \$8.93; hardware and sundries. \$16.07	25 00	
Superintendent's Dept., freight, \$19.63; material, \$154.48	174 11	
At Observatory:		
Supplies and apparatus (\$1,984.77):		
Supplies and apparatus (\$1,984.77): Aikenhead Hardware Ltd., hardware	10 33	
Supplies and apparatus (\$1,984.77): Aikenhead Hardware Ltd., hardware	10 33 70 91	
Supplies and apparatus (\$1,984.77): Aikenhead Hardware Ltd., hardware	70 91 30 00	
Supplies and apparatus (\$1,984.77): Aikenhead Hardware Ltd., hardware. Art Metropole. monocular paper. Birks., Ellis, Ryrie Ltd., watches. W. E. Booth Co., plates and films.	70 91 30 00 104 98	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.	70 91 30 00 104 98 33 12	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.	70 91 30 00 104 98 33 12 17 12	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc.	70 91 30 00 104 98 33 12 17 12 53 97	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc.  Canadian Westinghouse Co., refrigerator.	70 91 30 00 104 98 33 12 17 12 53 97 131 80	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc.  Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc.  Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian Ceneral Electric Co., motors, wire, etc.,  Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc.,  Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks, Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian Ceneral Electric Co., motors, wire, etc.,  Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian Ceneral Electric Co., motors, wire, etc.,  Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks, Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring  McBain Foundry, plate and castings.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks, Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet.  H. W. Petrie, grinders.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63 37 69	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet.  H. W. Petrie, grinders.  Polaroid Corporation, disc.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63 37 69 104 00	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks, Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet.  H. W. Petrie, grinders.  Polaroid Corporation, disc.  Postage	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63 37 69 104 00 118 50 13 10 13 00	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks, Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet.  H. W. Petrie, grinders.  Polaroid Corporation, disc.  Postage  Shallcross Mfg. Co., shunt.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63 37 69 104 00 118 50 13 10 13 00 22 13	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole. monocular paper.  Birks., Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian Ceneral Electric Co., motors, wire, etc., canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet  H. W. Petrie, grinders.  Polaroid Corporation, disc.  Postage  Shallcross Mfg. Co., shunt.  Sheppard & Gill Lumber Co., lumber.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63 37 69 104 00 118 50 13 10 13 00 22 13 85 93	
Supplies and apparatus (\$1,984.77):  Aikenhead Hardware Ltd., hardware.  Art Metropole, monocular paper.  Birks, Ellis, Ryrie Ltd., watches.  W. E. Booth Co., plates and films.  F. Y. W. Braithwaite, hardware.  British Liquid & Meter Co., meter.  Canadian General Electric Co., motors, wire, etc., Canadian Westinghouse Co., refrigerator.  Chicago Gear Works, gears.  Davies Dry Goods & Millinery, material.  Dominion Oxygen Co., gas tank.  Eastman Photographic Stores, plates, paper and filter glass.  Gaetner Scientific Corporation, measuring engine.  G. M. Laboratories Inc., galvanometer relay.  Sir Howard Grubb-Parsons, mirrors aluminizied.  J. F. Hartz Co., silver nitrate.  P. J. Kipp & Zonen, galvanometer repairs.  Leeds & Northrup Co., galvanometers.  E. P. Lena & Son, steel ring.  McBain Foundry, plate and castings.  Office Specialty Mfg. Co., filing cabinet.  H. W. Petrie, grinders.  Polaroid Corporation, disc.  Postage  Shallcross Mfg. Co., shunt.	70 91 30 00 104 98 33 12 17 12 53 97 131 80 12 02 12 89 15 00 25 98 600 81 52 97 101 32 19 95 22 55 15 94 10 63 37 69 104 00 118 50 13 10 13 00 22 13	

Accounts under \$10 (10)	50 85	
Superintendent's Dept., freight, \$24.12; telephone, \$4.77; labour,		
\$10.50; material, \$110.97Library, including binding and mending (\$490.06):	150 36	
F. A. Brockhaus, books.	20 88	
Walter de Gruyter & Co., books	10 68	
Harvard University, books	36 23	
Hirschwaldsche Buchhandlung, books	23 23	
Macmillan Co., subscriptions	20 76	
Royal Astronomical Society, reprints	22 00 307 64	
University Press, books and binding	48 64	
Travelling allowances (\$300):	40 04	
J. F. Heard	80 00	
F. S. Hogg.	80 00	
P. M. Millman	80 00	
Miss F. S. Patterson	60 00	
Attendants and incidentals (\$88.79):		
T. Mackenzie, caretaker's overtime services	61 25	
Superintendent's Dept., labour, \$25.73; material, \$1.81	27 54	
_	\$3,143 08	
Less door receipts, \$147.50; allowance for apparatus damaged	¢3,143 00	
in transit. \$34.08	181 58	
- th transit, ψο ποο		\$2,961 50
27 (		
27. Geology		
Maintenance and equipment (\$738.53):		
Bansch & Lomb Optical Co., cover glasses	\$11 76	
Geological Survey, U.S., maps	20 30	
Grand & Toy, chairs, table, desk and trays	123 10 25 18	
Thos. Pocklington Co., compass and cases	33 00	
Postage	16 00	
Spence Air Photos, lantern slides	30 19	
Taylor Instrument Co., hydrometers	16 19	
University Press, printing and stationery	186 12	
Accounts under \$10 (14)	74 34	
Superintendent's Dept., freight, \$18.22; labour, \$86.82; material,	000 05	
\$97.31	202 35	
Summer Field work, travelling expenses, etc. (\$579.03):	152.00	
American Paulen System, altimeter	153 20	
Prof. A. P. Coleman, travelling expenses	114 19 14 40	
Prof. E. S. Moore, honorarium, \$100; expenses, \$8.69	108 69	
V. J. Okulitch, honorarium, \$50; expenses, \$4.58	54 58	
Thos. Pocklington, compass repairs	34 50	
Provincial Treasurer, car license	2 00	
Salems Garage, car repairs	26 94	
University Press. printing and stationery	62 86	
Superintendent's Dept., material	7 67	
Less credit from sale of material	52 00	
-		\$1,265 56
28. Mineralogy		
Maintenance and equipment (\$1,168.49):		
Art Metropole, drawing hoards, etc	\$24 80	
Canadian Laboratory Supplies, glassware and weights, etc	22 40	
Canadian Liquid Air Co., gas and valve	12 31	
Walter A. Carveth, microscope.  Central Scientific Co., glassware and chemicals.	46 00 125 72	
French Ivory Products, sheeting.	32 40	
Grand & Toy, desks, chairs, etc.	83 25	
Johnson, Matthey & Co., crucibles	86 35	
John H. Klein & Co., charcoal blocks	98 80	
Office Specialty Mfg. Co., file	34 25	
Photographic Service, prints and slides	23 18	
Spencer Lens Co., illuminator	14 17	
Ward's Natural Science Establishment, specimens	92 66	

Clerical assistance:	00.07	
Miss H. Dalton, 66½ hrs. @ 50c	33 25	
Miss M. Rutledge, 4½ days	15 75	
University Press, printing and stationery	169 60	
Accounts under \$10 (14)	73 06	
Sundry disbursements by department	17 70	
Superintendent's Dept., freight, \$42.44; labour, \$76.46; material,	157.04	
\$38.94	157 84	
Special X-Ray equipment (\$1,287.96):	041.00	
American Instrument Co., X-Ray tubes	241 22	
C. L. Berger & Sons, goniometer with attachment	695 93	
Central Scientific Co., pump and glassware	98 71	
A. S. Hunt, coils	25 00	
G. T. Woodward, comera, powder, etc	106 00 5 02	
Accounts under \$10 (2)		
Superintendent's Dept., labour, \$78.56; material, \$37.52	116 08	
Student microscopes:	537 12	
Art Metropole, microscopes	337 12	
_	\$2,002,57	
I 1: I live I live I live I live 1 months and 1 months an	\$2,993 57 291 00	
Less credits: Lahoratory deposits, \$228.25; sale of material, \$62.75.	291 00	@9.709.E7
		\$2,702 57
29. Chemistry		
Maintenance:		
Chemistry:		
Chemicals, glassware, apparatus, etc. (\$9,982.75):		
Aikenhead Hardware Ltd., hardware	\$12 88	
Baker Platinum Co., wire	26 60	
Barrett Co., chemicals	11 47	
Bausch & Lomb Optical Co., plate	29 97	
Belle Ewart Ice & Fuel Co., ice	12 00	
W. E. Booth & Co., photo plates	27 38	
British Drug Houses, chemicals	249 42	
Canadian Kodak Co., chemicals	826 83	
Canadian Lahoratory Supplies, chemicals, glassware, etc	3,024 07	
Central Scientific Co., glassware, etc	313 40	
R. H. Chappell, glassblowing	49 80	
Chemicals, Ltd., chemicals	13 20	
Day Sign Co., transformer	14 00	
Dominion Oxygen Co., gas	26 15	
T. Eaton Co., grinder, stools, table, etc	22 53	
Gustav Fock, text books	28 79	
Paul Haack, glassware	82 88	
Hart House, tomato juice	29 44	
J. F. Hartz Co., chemicals, etc	30 36	
Adam Hilger, refractometer, rods, etc	296 03	
Ingram & Bell, glassware, clamps, thermometers, etc	550 89	
W. H. Kubbinga, clamps, containers, etc	40 12	
Leeds & Northrup, resistor and coils	42 99	
Mallinckrodt Chemical Works, chemicals	218 54	
Medicine Hat Pottery Co., crocks and pans	16 80	
Merck & Co., chemicals, etc	468 25	
National Drug & Chemical Co., acids and chemicals	40 05	
Nichols Chemical Co., chemicals and containers	647 50	
Ontario Cork Co., corks	155 81	
Staatleche Porzellan, crucible	14 81	
Postage	25 50	
Richardson, Bond & Wright, cards, etc	35 92	
Schering, A.G., acids	15 63	
Shawinigan Chemicals, Ltd., chemicals	14 22	
Standard Chemical Co., chemicals	73 90	
Stephens Sales Ltd., stencils, paper and ink	136 72	
Textile Products, towels	206 40	
E. M. Tozer, rock sample and crushing ore	28 25	
Wall Chemicals Ltd., oxygen	20 00	
Williams & Wilson, elements and crucibles	72 40	
Wilson Scientific Co., hurners, glassware, chemicals, etc	688 69	
University Press, printing and stationery	603 06	
Accounts under \$10 (23)	130 30	

Sundry disbursements by department:		
Hardware, \$47.26; telegrams, express and stationery,		
\$17.41; glassware, \$10.61; sundries, \$54.64 Superintendent's Dept., freight, \$108.70; labour, \$177.30;	129 9	02
material, \$192.88	478 8	38
Repairs and renewals (\$436.15):		
Canadian Laboratory Supplies, balance repaired	39 2 27 0	
General Motors, overhauling frigidaire	11 8	
Superintendent's Dept., labour, \$274.99; material, \$83.14	358 1	3
Clerical assistance (\$72.41):	( )	17
Mrs. R. Fortescue, 2½ days H. S. Funnell, 1 week, 2 days	6 2 21 3	
Miss L. Reeves, 2 hours	1 0	00
Miss M. Sonley, 2 weeks, 4 days	43 8	31
	\$10.491 3	1
Less credits: Laboratory deposits, \$3,884.46; containers returned. \$217.60; assays, etc., \$317	4.419 0	16
turneu. \$217.00, assays, etc., \$517	4.419 0	\$6,072 25
Physical Chemistry:		,
Supplies, chemicals, etc.:		
American Institute of Physics, reprints	\$21 6	4
Canada Metal Co., castings	13 2	
Canadian Kodak Co., chemicals	37 3	1
mometers, etc	227 6	2
Central Scientific Co., oven	37 7	
R. H. Chappell, glassblowing	51 9 39 1	
Johnson, Matthey & Co., silver dishes	32 1	
W. H. Kubbinga, electrical work	25 3	
C. LeRoy, frame	10 0 55 2	
Macalstu, Bicknell Co., apparatus	50 3	
Merck & Co., benzine	17 2	3
Accounts under \$10 (11)	52 3	9
material, \$7.06	24 1	0
- CI - CI		- \$695 48
Electro-Chemistry:		
Supplies (\$1,387.38):		
Aikenhead Hardware Ltd., hardware	\$16 0	
American Institute of Physics, reprints	11 4 12 0	
Canadian Asbestos Ltd., asbestos, cement, paper, etc	28 5	
Canadian Laboratory Supplies, glassware, etc	86 3	
Central Scientific Co., glassware, etc	111 3	
R. H. Chappell, glassblowing.  Dominion Oxygen Co., regulator.	60 2 13 7	
Electro-Chemical Society, reprints	16 6	
G. A. Hardie & Co., towels	26 1	
A. H. Heatly, line drawings	27 0	
Liquid Carbonic Corporation, dry ice	14 9 12 5	
Ontario Rubber Co., tubing	75 0	
Photographic Service, slides, etc	34 3	
Radio Trade Supply Co., radio parts Richardson, Bond & Wright, cards and graph sheets	54 8 106 4	
Synthetic Drug Co., glassware	48 0	
Wall Chemicals Ltd., oxygen	15 0	0
University Press, printing and stationery	171 3 69 0	
Sundry disbursements by department:	09 0	•
Hardware. \$21.46; chemicals and stationery. \$8.51:		-
sundries, \$10.10	40 0	7
material. \$263.41	336 3	9

Apparatus (\$1,086,21):			
Central Scientific Co., glassware. air pump, crayons, etc	611	53	
R. H. Chappell, glassblowing	34	10	
General Motors Laboratories, galvanometer	59	45	
W. H. Kubbinga, electrical and machine work	53	74	
W. R. McKee, apparatus repairs	40	95	
Pryal & Nye, batteries	15	58	
Leeds & Northrup Co., potentiometer	74	50	
Williams & Wilson, crucibles	84	63	
Accounts under \$10 (4)	26	70	
Superintendent's Dept., freight, \$9.61; labour, \$59.59;			
material, \$15.83	85	03	
	\$2,473	59	
Less credit: Laboratory deposits	102	80	
<u> </u>			\$2.370 79
			\$9,138 52
30 Biology			

#### 30. BIOLOGY

aboratory and lecture room supplies, museum specimens, supplies and	
catalogue (\$4,530.82):	
Agfa Ansco Ltd., chemicals and film	\$12 10
Aikenhead Hardware Ltd., hardware	97 90
Allen Mfg, Co., laundry	88 74
Art Metropole, lamp casing	46 31
Baird & Montgomery, boxes	13 26
Bausch & Lomb Optical Co., magnifier discs	21 56
Biological Board of Canada, chemicals	10 95
Biological Supply Co., specimens	88 47
W. E. Booth Co., chemicals and plates	42 28
Braun-Knecht-Haimann Co., oxygen apparatus	18 22
Canadian Kodak Co., chemicals, lamp, etc	14 20
Walter A. Carveth, microscope, camera, stands, epidiascope, etc	270 75
Central Scientific Co., apparatus, glassware. chemicals etc	643 58
R. H. Chappell, glassblowing.	23 60
Coleman & Bell, chemicals	11 17
Corbett-Cowley Ltd., laboratory coats	66 62
Eastman Photographic Stores, film	10 95
T. Eaton Co., cotton, watch repairs, etc	19 82
C. Emmett, animals	253 40
Fisher Scientific Co., balance	11 76
J. A. Fontaine, frogs.	63 00
Freyseng Cork Co., corks	
Genera Insectorum, subscription	12 35
General Biological Supply House, specimens	67 84
General Radio Co., condenser and potentiometers	12 17
D. Costatnon Ltd. ink and stansile	63 11
D. Gestetner Ltd., ink and stencils	170 12
Gevaert Co., plates, paper and glassware.  J. F. Hartz Co., chemicals, glassware, needles, etc	89 99
Harvard Apparatus Co. beart levers	199 40
Harvard Apparatus Co., heart levers	13 93
Holliday Flint Glass Works, vials	20 81
Ingram & Bell, stain	12 54
Keenan-Woodenware Mfg. Co., pickle kits	10 08
Kelley Feed & Seed Co., feed	22 70
W. J. LeRay. travelling and collecting expenses	102 08
Lever Bros glycerine	34 31
Jos. McDowell & Co., rental of calculating machine.	75 00
Mallinckrodt Chemical Works, chemicals	51 49
Maple Leaf Milling Co., flour and feed	21 68
Marine Biological Laboratories, specimens	76 10
Matthews, McCutcheon & Co., lamps	17 20
Merck & Co., chemicals, etc	24 37
Murphy's Drug Store, films	57 40
New York Scientific Supply Co., specimens	18 17
Office Specialty Mfg. Co., card cabinet	13 25
Ontario Agricultural College, eggs	11 10
Thos. Pocklington, paper	39 00
Postage	16 00
David Richardson, specimens	48 01
Robbins & Townsend, line-a-time rebuilt	14 00

Royal Ontario Museum, hand book	13 00	
Standard Chemical Works, chemicals	28 75	
Standard Chemical Works, Chemicals		
Stephens Sales Ltd., paper and coupons	158 10	
T. II. Stovell, travelling and collecting expenses	50 00	
Taylor Instrument Co., thermometers and charts	34 37	
Arthur H. Thomas, control valve, etc	12 52	
S. S. White Dental Mfg. Co., resistors	25 75	
Wholesale Radio Co., radio parts	97 67	
University Press, printing and stationery	171 27	
Accounts under \$10 (37)	172 93	
Sundry disbursements by department:		
Animals, fruit and vegetables, \$28.13; hardware, \$11.52;		
sundries, \$30.28	69 93	
Sinuties, \$60,20	02 30	
Superintendent's Dept., freight, \$91.86; labour, \$94.72; material.		
\$367.11	553 69	
Marine laboratories, collecting:		
T. H. Stovell	\$49 88	
F	\$47 00	
Furnishings, fittings and equipment (\$1,131.38):		
Aikenhead Hardware Ltd., hardware	2 95	
Bay Salvage Co., chair and pad	12 00	
D. Gestetner Ltd., electrifying machine	245 00	
Robbins & Townsend, rebuilt typewriter	75 00	
Wilson Stationery & Printing Co., files	20 00	
Superintendent's Dept., labour, \$481.19; material, \$295.24	776 43	
Messenger service:	***	
	950 00	
Arthur Jeffreys, 35 weeks, 4 days	250 00	
Incidentals (\$453.55):		
Munson Supply Co., typewriter keys	11 00	
Postage	68 00	
Robbins & Townsend, typewriter inspection	15 75	
Arthur Taylor, cleaning books	10 00	
University Press, printing and stationery	302 50	
Accounts under \$10 (2)	13 30	
	15 50	
Sundry disbursements by department:		
Telegrams, etc., \$4.33; stationery and drugs, \$13.21; sundries.		
	30 00	
\$12.46	30 00	
	30 00 3 00	
\$12.46	3 00	
\$12.46		
\$12.46	3 00	
\$12.46 Superintendent's Dept., labour  Less credits: Laboratory deposits. \$896.13; sale of material, etc.,	\$6,415 63	
\$12.46	3 00	
\$12.46 Superintendent's Dept., labour  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62	\$6,415 63	
\$12.46 Superintendent's Dept., labour  Less credits: Laboratory deposits. \$896.13; sale of material, etc.,	\$6,415 63	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material. etc., \$198.62	\$6,415 63	
\$12.46 Superintendent's Dept., labour  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany Laboratory, office supplies, labour, etc. (\$3,619.83):	3 00 \$6,415 63 1,094 75	
\$12.46 Superintendent's Dept., labour  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry.	\$6,415 63	
\$12.46 Superintendent's Dept., labour  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry.	3 00 \$6,415 63 1,094 75 \$22 77	
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\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry, Barnstead Still & Sterilizer Co., heating elements.  W. E. Booth Co., films and plates.	\$6,415 63 1,094 75 \$22 77 20 17 39 09	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material. etc., \$198.62  31. Botany  Laboratory, office supplies. labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates British Drug Houses, chemicals Brown Bros., books, envelopes, etc.	\$6,415 63 1,094 75 \$22 77 20 17 39 09	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry, Barnstead Still & Sterilizer Co., heating elements.  W. E. Booth Co., films and plates.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material. etc., \$198.62  31. Botany  Laboratory, office supplies. labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material. etc., \$198.62  31. Botany  Laboratory, office supplies. labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry.  Barnstead Still & Sterilizer Co., heating elements.  W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc.  Mrs. A. Chilton, laundry.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 61 14 75	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry, Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc. Mrs. A. Chilton, laundry. Fred Cogo, soil.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 61 14 75 18 30	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material. etc., \$198.62  31. Botany  Laboratory, office supplies. labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Liquid Air Co., gas. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware. etc. Mrs. A. Chilton, laundry. Fred Cogo, soil. Defender Photo Supply Co., films and negatives.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 61 14 75	
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\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc. Mrs. A. Chilton, laundry. Fred Cogo, soil. Defender Photo Supply Co., films and negatives. Eastman Photographic Stores, films, paper, etc. T. Eaton Co., razor blades.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61 14 75 18 30 10 11 51 63 20 88	
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\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Liquid Air Co., gas. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc. Mrs. A. Chilton, laundry. Fred Cogo, soil. Defender Photo Supply Co., films and negatives. Eastman Photographic Stores, films, paper, etc. T. Eaton Co., razor blades. Fisher Scientific Co., stoppers and wax Julien P. Friez & Sons, charts.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61 14 75 18 30 10 11 51 63 20 88 66 64 13 69	
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\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc. Mrs. A. Chilton, laundry. Fred Cogo, soil. Defender Photo Supply Co., films and negatives. Eastman Photographic Stores, films, paper, etc. T. Eaton Co., razor blades. Fisher Scientific Co., stoppers and wax Julien P. Friez & Sons, charts. Gevaert Co., lantern plates. Grand & Tov, folders, papers, etc. Fred W. Halls Paper Co., paper	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61 14 75 18 30 10 11 51 63 20 88 66 64 13 69 25 00 67 05 45 09	
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Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Liquid Air Co., gas. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc Mrs. A. Chilton, laundry. Fred Cogo, soil. Defender Photo Supply Co., films and negatives. Eastman Photographic Stores, films, paper, etc. T. Eaton Co., razor blades. Fisher Scientific Co., stoppers and wax Julien P. Friez & Sons, charts. Gevaert Co., lantern plates. Grand & Tov, folders, papers, etc. Fred W. Halls Paper Co., paper J. F. Hartz Co., slides, covers, etc. L. E. Jones, negatives and slides. Kelvinator Ltd., refrigerator repairs	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61 14 75 18 30 10 11 51 63 20 88 66 64 13 69 25 00 67 05 45 09 39 60 16 08 48 48 45	
\$12.46 Superintendent's Dept., labour.  Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc. Mrs. A. Chilton, laundry. Fred Cogo. soil. Defender Photo Supply Co., films and negatives. Eastman Photographic Stores, films, paper, etc. T. Eaton Co., razor blades. Fisher Scientific Co., stoppers and wax Julien P. Friez & Sons, charts. Gewaert Co., lantern plates. Grand & Tov. folders, papers, etc. Fred W. Halls Paper Co., paper J. F. Hartz Co., slides, covers, etc. L. E. Jones, negatives and slides Kelvinator Ltd., refrigerator repairs Kilgour's Ltd., bags.	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61 14 75 18 30 10 11 51 63 20 88 66 64 13 69 25 00 67 05 45 09 39 60 16 08 48 45 11 41	
Less credits: Laboratory deposits. \$896.13; sale of material, etc., \$198.62  31. Botany  Laboratory, office supplies, labour, etc. (\$3,619.83): Allen Mfg. Co., laundry. Barnstead Still & Sterilizer Co., heating elements. W. E. Booth Co., films and plates. British Drug Houses, chemicals. Brown Bros., books, envelopes, etc. Canadian Laboratory Supplies, chemicals. Canadian Liquid Air Co., gas. Canadian Johns-Manville Co., felt. Canadian Pad & Paper Co., paper. Central Scientific Co., chemicals, glassware, etc. Mrs. A. Chilton, laundry. Fred Cogo. soil. Defender Photo Supply Co., films and negatives. Eastman Photographic Stores, films, paper, etc. T. Eaton Co., razor blades. Fisher Scientific Co., stoppers and wax Julien P. Friez & Sons, charts. Gevaert Co., lantern plates. Grand & Tov. folders, papers, etc. Fred W. Halls Paper Co., paper J. F. Hartz Co., slides, covers, etc. L. E. Jones, negatives and slides Kelvinator Ltd., bags. W. H. Kubbinga, machine work	\$6,415 63 1,094 75 \$22 77 20 17 39 09 21 81 137 07 59 86 27 80 17 35 15 66 266 61 14 75 18 30 10 11 51 63 20 88 66 64 13 69 25 00 67 05 45 09 39 60 16 08 48 45 11 41 47 87	
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Marine Biological Laboratory, specimens	26 87
Merck & Co., chemicals	52 19
Nichols Chemical Co., acids, etc	22 77
Parisian Laundry Co., laundry	84 30
J. Patterson, specimens	18 00
Photographic Service, prints, slides, etc	
Doctor Service, prints, sindes, etc	36 22
Postage	105 33
Robbins & Townsend, typewriter inspection	14 80
Telfer Paper Box Co., filing cases	41 85
F. Verdoorn, subscription	42 91
Edward Wick & Co., razor	16 75
Theodor Oswald Weigal, subscription	27 83
Wilson Scientific Co., chemicals and glassware	134 59
Louis O. Williams, specimens	25 21
Laboratory assistance:	
W. M. C. Chilton, 176 hours	48 40
D. S. Hull, 393½ hours	157 40
Miss M. Stevens, 8 weeks	100 00
University Press, printing and stationery	566 97
Accounts under \$10 (29)	123 31
Travelling expenses, members of staff:	120 01
H. S. Jackson	78 95
Dr. J. Gertrude Wright	18 50
H. B. Sifton	17 85
D. L. Bailey	15 00
Sundry persons	31 40
Sundry disbursements by department:	
Drugs and stationery, \$30.01; hardware, \$13.54; supplies,	
\$15.59; telegrams, etc., \$26.96; sundries, \$25.74	111 84
Superintendent's Dept., freight, \$70.75; labour, \$233.98; material,	
\$231.90	536 63
Herbaria, Bear Island Laboratory:	
Cases, labour, supplies, etc. (\$849.15):	
R. F. Cain, travelling expenses	60 10
T. Eaton Co., paint	33 43
J. P. Lanvoi, boat repairs, wood, and painting	73 50
J. W. Magnus Co., valve pin, etc	2 61
Office Specialty Mfg. Co., cases	480 00
Provincial Treasurer, rental of Bear Island lot	
	10 00
R. C. Russell, seed and specimens	24 67
Miss M. Steven, clerical assistance	12 50
Miss J. E. Tilden, index cards	61 11
P. Train, specimens	50 24
L. Williams, specimens	31 22
Superintendent's Dept., labour, \$7.36; material, \$2.41	9 77
Botanic Gardens and Greenhouse supplies and labour (\$1,615.31):	
Assistant Gardeners:	
W. M. C. Chilton, 2,032½ hours	583 00
D. S. Hull, 606½ hours	242 60
Wm. A. Clark, 614 hours	122 80
Dale Estate, peat and fibre	12 00
Alex. McKay Co., sand	25 08
Medicine Hat Pottery Co., flower pots	50 64
Ocean Chemicals Ltd., fumigating	45 30
A. Simpson, travelling and collecting expenses	90 40
M'ss G. S. Taylor. clerical assistance, 8 mos	175 00
W. P. Warner, soil and fertilizer	31 50
Ed. Webb & Sons, plants, charcoal, etc	34 65
Wilson & Bunnell, photostats	10 00
Accounts under \$10 (13)	68 42
Sundry disbursements by department:	00 42
Hardware, \$7.72; seeds, \$5.45; supplies, \$11.61: sundries,	
	22 24
\$8.46	33 24
Superintendent's Dept., labour. \$29.59; material, \$61.09	90 68
Apparatus and equipment (\$1,194.82):	20 (2
Anchor Cap & Closure Corporation, caps	23 48
R. H. Chappell, glassblowing	72 00
Consumers' Glass Co., bottles	33 42
Dominion Glass Co., bottles	16 20
Instruments Ltd., repairs to equipment	25 75
Matthews, McCutcheon Co., microscopes and photometer	521 95

Motor Meter Co., thermometer	32 93	
Office Specialty Mfg. Co., file and steel connection	106 75	
Accounts under \$10 (4)	17 83	
Superintendent's Dept., labour, \$226.47; material, \$118.04	344 51	
- Superintendent o Depth tabent, #-2007, married -		
	\$7,279 11	
Less credits: Laboratory deposits, \$547.67; sale of material,		
\$321.51	869 18	46.400.00
	-	\$6,409 93
32. History		
Class room supplies (\$194.28):	896 75	
Denoyer-Geppert Co., maps	\$36 75 31 21	
Houghton, Mifflin Co., maps	20 00	
Postage University Press, printing and stationery	80 23	
Accounts under \$10 (5)	23 47	
Superintendent's Dept., freight	2 62	
Secretarial assistant:		
Miss F. Hahn, 9 mos	900 00	
Research expenses (\$92.55):		
Travelling expenses:		
Miss S. Hankin	17 55	
Miss E. Frumhartz	15 30	
Mrs. D. P. Plaunt	15 30	
Miss M. M. Clark	13 30	
W. H. Fowler	13 30 13 30	
E. P. Ray	4 50	
L. J. Curnoe	4 50	\$1,186 83
33. Anthropology		41,100 00
Class room supplies:		
Photographic service, lantern service	\$5 00	
Purchase of Indian manuscript:		
Prof. T. F. McIlwraith, re-imbursement for Indian manuscript	50 00	
Sociology Course:		
Supplies:		
Miss B. Ginsberg, clerical assistance	3 00	
University Press, printing and stationery	11 50	\$69 50
24. 4		309 30
34. Archaeology		
Class room supplies: Board of Education, prints	\$10 42	
W. F. Moore, slides	8 00	
Photographic Service, slides and prints	350 35	
United Church Publishing House, slides	11 75	
University of London, slides	14 97	
University Press, printing and stationery	23 44	
		\$418 93
35. Fine Art		
Equipment (\$151.16):		
Art Gallery of Toronto, drawing supplies	\$11 22	
Laidlaw Lumber Co., models	24 30	
Matthews, McCutcheon & Co., projector	72 10	
Office Specialty Mfg. Co., chair and cabinets	43 54	
College Art Association, membership fee	10 21	
Mellors Fine Arts Ltd., mounting prints	46 85	
Photographic Service, prints, slides and lantern service	322 95	
Postage	12 00	
Norman S. C. Reid, mounting prints	50 00	
University Press, printing and stationery	19 44	
Accounts under \$10 (4)	21 30	
Sundry disbursements by department	10 00	
Superintendent's Dept., labour. \$5.08; material. \$3.61	8 69	
Occasional assistance in Library: Miss E. A. Hudson, 8 mos	450 00	
Books, pictures, etc. (\$898.02):	430 00	
Professor John Alford, book	15 00	
Art Gallery of Toronto, catalogue	11 25	
Mellors Fine Arts Ltd., prints, framing, etc	398 07	

Pallas Gallery Ltd., pictures	257 83 209 61	
Accounts under \$10 (2) Superintendent's Dept., freight	5 18 1 08	
_	\$2,000 62	
Less charged to J. W. L. Forster Fund	900 52	
	900 32	\$1,100 10
36. Geography		
Maintenance (\$550.68): Aikenhead Hardware Ltd., hardware	\$13 05	
Art Metropole, tracing paper, brushes, etc	42 50	
Denoyer-Geppert Co., maps	74 67	
Grand & Toy, transfer cases	32 50 44 90	
Moyer School Supplies, Ltd., blackboards, instruments, maps. etc	61 15	
Photographic Service, prints and slides	50 50	
University Press, printing and stationery	123 75 40 15	
Accounts under \$10 (11)	40 19	
Superintendent's Dept., freight, \$2,34; labour, \$11.37; material,	10 17	
\$13.61	27 32	
Art Metropole, cabinet and drawing material	67 62	
Canadian Laboratory Supplies, barometers and planimeter  Griffin & Tatlock, theodolate measurers, etc	85 75 40 45	
Moyer School Supplies Ltd., carpenter's bench	27 25	
Geo. Philip & Son, globes and maps	105 14	
Robt. Simpson Co., tables	218 70 27 50	
Accounts under \$10 (2)	6 79	
Superintendent's Dept., freight, \$1; labour, \$23.77; material, \$19.53.	44 30	01 174 10
37. POLITICAL ECONOMY		\$1.174 18
Office and class room supplies (\$579.10):		\$1.1 <i>14</i> 10
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale	\$37 25	Φ1.174 10
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale	11 75	\$1.174 TO
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale		\$1.17 <del>4</del> 10
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection.  Photographic Service, slides and lantern service.  Postage	11 75 28 00 17 20 153 50	\$1.114 10
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage Robbins & Townsend, typewriter inspection.	11 75 28 00 17 20 153 50 19 75	\$1.114 10
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils.	11 75 28 00 17 20 153 50 19 75 45 79	\$1.174 10
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage  Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery.	11 75 28 00 17 20 153 50 19 75	\$1.174 10
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files  Jas. McDowell & Co., calculator inspection.  Photographic Service, slides and lantern service.  Postage  Robbins & Townsend, typewriter inspection.  Stephens Sales Ltd., ink. paper and stencils.  University of Toronto Commerce Club. journal.  University Press, printing and stationery.  Accounts under \$10 (10)	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33	\$1.174 10
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23	\$1.174 10
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage  Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52):	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03	\$1.114 10
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage  Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery. Accounts under \$10 (10). Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03	\$1.174 10
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00	\$1.114 10
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage  Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery. Accounts under \$10 (10). Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03	\$2.305 62
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection.  Photographic Service, slides and lantern service.  Postage  Robbins & Townsend, typewriter inspection.  Stephens Sales Ltd., ink. paper and stencils.  University of Toronto Commerce Club. journal.  University Press, printing and stationery.  Accounts under \$10 (10)  Sundry disbursements by department.  Superintendent's Dept., freight.  Clerical assistance (\$1,726.52):  Miss Jean I. Horrell, 10 mos.  Miss J. E. Leitch, 9 mos., 18 days.  Miss J. Arnold, 14½ hours (paid also in the Library)	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00 6 52	
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage  Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club. journal. University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department. Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library)  Less credit from sale of material.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00 6 52	\$2.305 62
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage  Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club. journal. University Press, printing and stationery. Accounts under \$10 (10). Sundry disbursements by department. Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library)  Less credit from sale of material.  38. Law  Office and class room supplies:	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1,000 00 720 00 6 52	\$2.305 62
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club. journal. University Press, printing and stationery. Accounts under \$10 (10). Sundry disbursements by department. Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library) Less credit from sale of material.  Office and class room supplies: Postage	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00 6 52	\$2.305 62
Office and class room supplies (\$579.10):  Grand & Toy, reconditioned desk and scale.  Lytle & Lytle, files.  Jas. McDowell & Co., calculator inspection.  Photographic Service, slides and lantern service.  Postage  Robbins & Townsend, typewriter inspection.  Stephens Sales Ltd., ink. paper and stencils.  University of Toronto Commerce Club. journal.  University Press, printing and stationery.  Accounts under \$10 (10).  Sundry disbursements by department.  Superintendent's Dept. freight.  Clerical assistance (\$1,726.52):  Miss Jean I. Horrell, 10 mos.  Miss J. E. Leitch, 9 mos., 18 days.  Miss J. Arnold, 14½ hours (paid also in the Library)  Less credit from sale of material.  38. Law  Office and class room supplies:  Postage  University Press, printing and stationery.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1,000 00 720 00 6 52	\$2.305 62
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club. journal. University Press, printing and stationery. Accounts under \$10 (10). Sundry disbursements by department. Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library) Less credit from sale of material.  Office and class room supplies: Postage	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00 6 52 3 95	\$2.305 62 \$2,301 67
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal. University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library) Less credit from sale of material.  Office and class room supplies: Postage University Press, printing and stationery Accounts under \$10 (2) Superintendent's Dept., labour, \$21.28; material, \$19.36.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00 6 52 3 95	\$2.305 62
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service. Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club. journal. University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos. Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library) Less credit from sale of material.  Office and class room supplies: Postage University Press, printing and stationery. Accounts under \$10 (2) Superintendent's Dept., labour, \$21.28; material, \$19.36.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03  1.000 00 720 00 6 52 3 95  \$71 00 40 02 11 10 40 64	\$2.305 62 \$2,301 67
Office and class room supplies (\$579.10): Grand & Toy, reconditioned desk and scale. Lytle & Lytle, files. Jas. McDowell & Co., calculator inspection. Photographic Service, slides and lantern service Postage Robbins & Townsend, typewriter inspection. Stephens Sales Ltd., ink. paper and stencils. University of Toronto Commerce Club, journal University Press, printing and stationery. Accounts under \$10 (10) Sundry disbursements by department Superintendent's Dept., freight. Clerical assistance (\$1,726.52): Miss Jean I. Horrell, 10 mos Miss J. E. Leitch, 9 mos., 18 days. Miss J. Arnold, 14½ hours (paid also in the Library) Less credit from sale of material.  Office and class room supplies: Postage University Press, printing and stationery Accounts under \$10 (2). Superintendent's Dept., labour, \$21.28; material, \$19.36.	11 75 28 00 17 20 153 50 19 75 45 79 18 50 196 23 34 33 13 77 3 03 1.000 00 720 00 6 52 3 95	\$2.305 62 \$2,301 67

Clerical assistance:		
Miss H. DesBrisay, 104 hours	52 00	
R. Jacques, 60½ hours	38 00	\$122 83
40. Psychology		Q122 00
Supplies (\$1,390.62):	A C 0 = 0	
Aikenhead Hardware Ltd., hardware	\$68 79 26 75	
Beardmore Leathers Ltd., belting	11 79	
Canadian National Telegraphs	13 69	
Eastman Photographic Service, films	14 39	
T. Eaton Co., oilcloth	21 60 145 92	
Kelley Feed & Seed Co., feed	16 85	
Lockhart's Camera Exchange, chemicals, plates, etc	20 00	
Mayetta Apparatus Co., tests	20 51	
Postage	58 00 17 60	
Prest-O-Lite Storage Battery Co	41 78	
Robbins & Townsend, typewriter inspection	10 80	
John B. Smith & Sons, lumber	102 13	
University Press, printing and stationery	411 48	
Accounts under \$10 (25)	121 63	
Drugs, stationery, etc., \$7.98; hardware, \$12.85; sundries, \$9.17	30 00	
Superintendent's Dept., freight, \$3.52; labour, \$31.32; material, \$202.07	236 91	
Apparatus (\$608.06):		
R. C. Bush, stop-watch repairs, etc	22 00	
Canadian Fairbanks-Morse Co., drill	28 00	
Canadian General Electric Co., motors	62 82 37 96	
Central Scientific Co., tubes, gears and galvanometer	38 58	
Adelbert Ford, films	43 07	
J. F. Hartz Co., dynamometer and esthesiometer	20 00	
Harvard Apparatus Co., magnets	25 22 93 19	
McBain Foundry, castings	15 81	
Office Specialty Mfg. Co., file	13 75	
Radio Trade Supply Co., amplifier	53 86	
R.C.A. Victor Co., gramaphone	15 96	
A. R. Williams Machinery Co., parts	25 05 24 00	
Accounts under \$10 (11)	44 00	
Superintendent's Dept., labour, \$27.72; material, \$17.07	44 79	
Clerical assistance:	1.050.00	
Mrs. W. Mussen, 12 mos	1,050 00	
Miss D. D. Hearn, 12 mos. (paid also \$600 as Class Assistant)	550 00	
Miss G. Evans, 12 mos. (paid also \$350 from Child Research)	400 00	
Laboratory cleaning (\$74.48): D. G. LeRay	50 00	
A. Welsh	3 00	
Superintendent's Dept., labour	21 48	
41. Italian and Spanish		\$4.073 16
Class room supplies and clerical assistance:		
Robbins & Townsend, typewriter inspection	60	
Clerical assistance:		
Miss E. Rigg, 179 hours	126 70 51 80	
Miss R. Langhurst, 74 hours	11 55	
University Press, printing and stationery	33 81	
	·	\$224 46
42. University College Departments		
Class room supplies: Classics (\$204.43):		
Grand & Toy, wax seal	\$2 75	
Office Specialty Mfg. Co., cards	14 60	
Remington-Rand Ltd., typewriter	65 00	

Miss C. E. Stubs. typing	63 94	
University Press, printing and stationery	58 14	
English:	0 76	
University Press, printing and stationery French (\$160.19):	3 56	
H. L. Humphreys, gramophone needles	50	
Librarie Garneau, book	18 85	
G. E. Stechert & Co., books	22 30	
University Press, printing and stationery	117 94	
Superintendent's Dept., freight	60	
German (\$73.55): Office Specialty Mfg. Co., filing cabinets	27 25	
Accounts under \$10 (2)	9 05	
University Press, printing and stationery	37 25	
Semitics (\$74.98):		
Chas. Potter, slides	15 00	
Photographic Service, prints	10 80	
University Press, printing and stationery	49 18	\$516 71
		Ψ310 11
· ·		
43. University College General Expenses		
0.55		
Office supplies, stationery, printing and incidentals (\$546.28):  D. Gestetner Ltd., stencils and paper	\$81 70	
Herbert J. Nott, photographs	37 00	
Postage	165 00	
Robbins & Townsend, typewriter inspection	12 00	
University Press, printing and stationery	217 97	
Accounts under \$10 (3)	15 18	
Superintendent's Dept., labour, \$10.97; material, \$6.46	17 43	
C. Collinson, 42 weeks, 5½ days	440 00	
C. Beatty, 20 hours	10 00	
Sundry expenses of the Principal (\$133):		
Dunlop's Ltd., funeral wreath	10 00	
Robt. Simpson Co., First Year Reception and Scholarship Tea	116 00	
Accounts under \$10 (2)	7 00	
	\$1,129 28	
Less credit from sale of material		
-		\$1.090 93
44. University College Building		
Heat and light	\$5,629 49	
Gas, \$90.29; water, \$157.05	247 34	
Caretaker's supplies:	161 66	
Superintendent's Dept., material	464 66	
Allen Mfg. Co., laundry	31 27	
New York Window Cleaning Co	47 00	
Superintendent's Dept., labour	4.846 24	
Repairs and renewals (\$5.201.63):	20.65	
Acme Achitectural & Ornamental Co., fire screens	28 65 30 27	
T. Eaton Co., chairs.	136 00	
Grand & Toy, desk	32 00	
Italian Mosaic & Tile Ltd., tiling	7 53	
Ocean Chemicals Ltd., exterminator	15 00	
Routery Bros. plaster repairs	52 40	
Superintendent's Dept., labour, \$3,829.91; material, \$1,069.87 Caretaker, A. Bain, (ob. 18 Feb.) 8 mos. (and overtime \$178)	4,899 78 1.000 00	
- and ordinate of the state of the ordinate of	1.000 00	
	\$17,467 63	
Less heat and light charged to Central Power Plant \$5.629 49		
Sundry credits: Repairs, \$329.10; cleaning,		
\$392.06; supplies, \$93.03; sale of material, \$17.75 831 94	6.461 43	
	0.701 40	\$11.006 20

## 45. McLennan Laboratory (Physics)

Tot Intelligent In		
Heat and light	\$5,347 14 598 37	
Caretaker's supplies: Superintendent's Dept., material	143 21	
Cleaning (\$1,471.14): Allen Mfg. Co., laundry	12 00	
New York Window Cleaning Co	40 50	
Superintendent's Dept., labour	1,418 64	
Repairs and renewals (\$2,526.56):	92.00	
Wm. Bartlett & Son, shades.  J. B. Buckham, acousti celotex.	23 28 305 76	
City Treasurer elevator license	5 00	
Johnson Temperature Regulating Co., heating system repairs	38 86	
Routery Bros., plaster repairs	11 70 2.141 96	
Superintendent's Dept., labour, \$1,465.36; material \$676.60	1,450 00	
- Carctaker, 11. 11111, 12 mos. (and overtime, wro)	11100 00	
	\$11,536 42	
Less heat and light charged to Central Power Plant \$5,347 14		
Sundry credits: Cleaning, \$19; key deposits, \$5 24 00	5,371 14	
_		\$6,165 28
46. Chemical Building		
Heat and light	\$2,578 02	
Gas, \$360.58; water, \$344.52	705 10	
Caretaker's supplies:		
Superintendent's Dept., material	142 53	
Cleaning (\$1,613.08): Allen Mfg. Co., laundry	22 80	
New York Window Cleaning Co	18 50	
Superintendent's Dept., labour	1,571 78	
Repairs and renewals (\$1.797.27):	2.00	
Wm. Bartlett & Son, shade repairs	$\begin{array}{ccc} 2 & 00 \\ 1.795 & 27 \end{array}$	
Superintendent's Dept., labour, \$1,200.34; material, \$594.93 Caretaker (paid as laboratory assistant with rooms, heat and light valued	1,195 21	
at \$420, chargeable against building and included in above		
Landard Hall should be Control Down Plant \$2,579,02	\$6,836 00	
Less heat and light charged to Central Power Plant \$2,578 02 Credit for cleaning		
Cream for creaming	2,582 52	
-		\$4,253 48
47. BIOLOGICAL BUILDING		
Heat and light	\$2,723 52	
Gas, \$79.66; water, \$171.52	251 18	
Caretaker's supplies:	100.0=	
Superintendent's Dept., material	180 07	
Cleaning (\$1,829.86): Advance Window Cleaning Co	26 95	
Allen Mfg. Co., laundry	15 72	
Superintendent's Dept., labour	1,787 19	
Repairs and renewals (\$2,477.56):	23 82	
Wm. Bartlett & Son, shades  Dustbane Products Ltd., floor polisher	210 00	
Routery Bros., plaster repairs	238 15	
Superintendent's Dept., labour, \$1,441.90; mat. \$563.69	2,005 59	
Caretaker, A. J. Wright, 12 mos. (with rooms, heat and light valued at	1 100 00	
\$300) (and overtime, \$1)	1,100 00	
	\$8.562 19	
Less heat and light charged to Central Power Plant \$2,723 52		
Sundry credits	2.741 02	
	2,(41 02	\$5,821 1

## 48. BOTANICAL BUILDING

Heat and light	\$4,782 1 526 6	
Superintendent's Dept., material	192 8	34
Allen Mfg. Co., laundry	19 1	
New York Window Cleaning Co	2,063 2	
Repairs and renewals (\$1,361.60):	2,000 2	-1
Italian Mosaic & Tile Co., tiling. H. W. Petrie Co., boiler repairs.	59 2 11 4	
Service Station Equipment Co., furnace repairs, etc	95 2	
Window Shades & Fittings, blinds	55 6	
Accounts under \$10 (2)	9 9 1,130 1	
Caretaker, Wm. V. Walker, 12 mos. (and overtime, \$42)	1.300 (	
_	\$10.290	 15
Less heat and light charged to Central Power Plant \$4,782 15	\$10.270 I	
Credit for cleaning	4.700.3	-
	4,789 1	- \$5,501 00
		<b>\$0,001</b>
49. Baldwin House (H:story)		
Light Fuel (\$515,95):	\$177 9	96
P. Burns & Co	40 6	50
Central Coal Co	475 3	
Gas, 9.92; water, \$17.08	27 0	00
Superintendent's Dept., material	47 5	50
Cleaning and furnaceman (\$181.51): Advance Window Cleaning Co	8 3	13
Superintendent's Dept., labour	173 1	
Repairs and renewals:	506.0	\ <del>-</del>
Superintendent's Dept., labour, \$438.35; material. \$87.72	526 0 1,350 0	
Less light charged to Central Power Plant \$177 96	\$2,825 9	9
Credit for cleaning		
	209 9	96 \$2,616 03
		- \$2.010 03
50. No. 43 St. George Street		
Light	\$18 5	0
P. Burns & Co	20 4	.0
Central Coal Co	220 9	
Gas, \$7.58; water, \$8.81.	16 3	60 9
Caretaker's supplies:		
Superintendent's Dept., material	43 7	7
Accounts under \$10 (2)	9 7	-
Superintendent's Dept., labour	420 2	0
City Treasurer, meter repairs	3 2	4
Superintendent's Dept., labour, \$170.39; material, \$19.28	189 6	7
_	\$943 3	9
Less light charged to Central Power Plant \$18 50	4710 0	
Credit for cleaning	19 5	0
_	19 0	- \$923 89

51 No. 15 Co. Change Course (Law)		
51. No. 45 St. George Street (Law) Light	\$44 96	
Fuel (\$393,50):	¥ >0	
P. Burns & Co	60 60	
Central Coal Co	331 45 1 45	
Gas. \$26.44; water, \$11.77	38 21	
Caretaker's supplies:		
Superintendent's Dept., material.	50 49	
Cleaning (\$431.20): New York Window Cleaning Co	4 50	
Superintendent's Dept., labour	426 70	
Repairs and renewals:		
Superintendent's Dept., labour, \$246.32; material, \$111.89	358 21	
	\$1.316 57	
Less light charged to Central Power Plant \$44 96	<b>#1.010 0.</b>	
Credit for cleaning	40.45	
	49 46	\$1.267 11
52. No. 47 St. George Street (Applied Mathematic	·s1	61,207 11
Fuel (\$277,47):		
P. Burns & Co	\$20 20	
Central Coal Co	257 27 64 30	
Electric current, \$56.30; water, \$8	04 30	
Superintendent's Dept., material	22 04	
Cleaning, furnaceman, etc. (\$222.08):	3.00	
Toronto Window Cleaning Co	2 90 219 18	
Superintendent's Dept., labour	219 10	
Wm. Bartlett & Son. shades	2 26	
Routery Bros., plaster repairs	17 30	
Superintendent's Dent Johann S201126, material \$35.10	237 45	
Superintendent's Dept., labour, \$201.26; material, \$36.19		
	\$842 90	
Less sundry credits	\$842 90 5 50	
Less sundry credits		\$837 40
Less sundry credits	5 50	\$837 40
Less sundry credits		\$837 40
Less sundry credits	\$6 00 1.879 39	\$837 40
Less sundry credits	\$6 00	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68.	\$6 00 1.879 39 1.270 99	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13):	\$6 00 1.879 39 1.270 99 273 99	\$837 40
Less sundry credits.  53. Economics Building  Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept. material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry.	\$6 00 1.879 39 1.270 99 273 99 30 96	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co.	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07):	\$6 00 1.879 39 1.270 99 273 99 30 96	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades.	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades. Dustbane Products Ltd., floor polisher.	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd., floor polisher T. Eaton Co., chairs.	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept. material. Cleaning and fireman (\$3,250.13); Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd., floor polisher T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum.	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50	\$837 40
Less sundry credits.  53. Economics Building Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd floor polisher T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2)	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54.	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62):	\$6 00 1.879 39 1.270 99 273 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd floor polisher T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy. desk. Accounts under \$10 (2) Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd air compressor rental, tools and	\$6 00 1.879 39 1.270 99 273 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85 1.465 21	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1,106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept., material. Cleaning and fireman (\$3,250.13); Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator	\$6 00 1.879 39 1.270 99 273 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd floor polisher T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy. desk. Accounts under \$10 (2) Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd air compressor rental, tools and	\$6 00 1.879 39 1.270 99 273 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85 1.465 21	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator Livingstone Stokes Ltd., installing and wiring stoker. Superintendent's Dept., labour, \$61.80; material. \$59.32. Caretaker, Jas. McCormack, 12 mos. (with rooms valued @ \$100 (and	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85 1.465 21 12 50 1.050 00 121 12	\$837 40
Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator Livingstone Stokes Ltd., installing and wiring stoker. Superintendent's Dept., labour, \$61.80; material. \$59.32.	\$6 00 1.879 39 1.270 99 273 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85 1.465 21 12 50 1.050 00	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator Livingstone Stokes Ltd., installing and wiring stoker. Superintendent's Dept., labour, \$61.80; material. \$59.32. Caretaker, Jas. McCormack, 12 mos. (with rooms valued @ \$100 (and	\$6 00  1.879 39 1.270 99  273 99  273 99  30 96 27 50 3.191 67  84 76 210 00 93 75 73 50 32 00 16 85 1.465 21  12 50 1.050 00 121 12 1.100 00	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son, shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator Livingstone Stokes Ltd., installing and wiring stoker. Superintendent's Dept., labour, \$61.80; material. \$59.32. Caretaker, Jas. McCormack, 12 mos. (with rooms valued @ \$100 (and	\$6 00 1.879 39 1.270 99 273 99 30 96 27 50 3.191 67 84 76 210 00 93 75 73 50 32 00 16 85 1.465 21 12 50 1.050 00 121 12	\$837 40
Light Fuel: Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dustbane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator Livingstone Stokes Ltd., installing and wiring stoker. Superintendent's Dept., labour, \$61.80: material. \$59.32. Caretaker, Jas. McCormack, 12 mos. (with rooms valued @ \$100 (and overtime, \$122.25)	\$6 00  1.879 39 1.270 99  273 99  273 99  30 96 27 50 3.191 67  84 76 210 00 93 75 73 50 32 00 16 85 1.465 21  12 50 1.050 00 121 12 1.100 00  \$10.940 19	\$837 40
Light Fuel:  Milnes Coal Co. Gas. \$95.30; electric current. \$1.106.01; water, \$69.68. Caretaker's supplies: Superintendent's Dept. material. Cleaning and fireman (\$3,250.13): Allen Mfg. Co., laundry. New York Window Cleaning Co. Superintendent's Dept., labour. Repairs and renewals (\$1,976.07): Wm. Bartlett & Son. shades. Dusthane Products Ltd., floor polisher. T. Eaton Co., chairs. Jes Git Floor Finishers, re-surfacing linoleum. Grand & Toy, desk. Accounts under \$10 (2). Superintendent's Dept., labour. \$1,032.67; material. \$432.54. Sundries—Mechanical stoker (\$1.183.62): Compressed Air Equipment Ltd., air compressor rental, tools and operator Livingstone Stokes Ltd., installing and wiring stoker. Superintendent's Dept., labour, \$61.80: material. \$59.32. Caretaker, Jas. McCormack, 12 mos. (with rooms valued & \$100 (and overtime, \$122.25).	\$6 00  1.879 39 1.270 99  273 99  273 99  30 96 27 50 3.191 67  84 76 210 00 93 75 73 50 32 00 16 85 1.465 21  12 50 1.050 00 121 12 1.100 00	\$837 40 \$10,896 64

#### 54. Psychology Buildings

94. 1 STellio E ou 1 Del El II. 103		
Light	\$04-82	
Fuel (\$673.94):		
P. Burns & Co	10 10	
Central Coal Co	663 84	
Gas, \$15; electric current, \$65.73; water. \$24	104 73	
Caretaker's supplies:		
Superintendent's Dept., material	58 69	
Cleaning, furnaceman, etc. (\$993.61):		
Accounts under \$10 (2)	14 40	
Superintendent's Dept., labour	979 21	
Repairs and renewals (\$850.47):		
Wm. Bartlett & Son, shades	4 22	
Routery Bros., plaster repairs	44 95	
Superintendent's Dept., labour, \$614.82; material, \$186.48	801 30	
-		
	\$2,776 26	
Less light charged to Central Power Plant	94 82	
		\$2.681 44
55. David Dunlap Observatory		
Fuel:		
Milnes Coal Co.	\$491 47	
Electric current	715 71	
Caretaker's supplies:	110 11	
Superintendent's Dept., material	32 72	
Repairs and renewals (\$614.34):	52 12	
Vacu-Draft Ltd., installing vacu-draft in caretaker's apartment	73 00	
Superintendent's Dept., labour, \$458.85; material, \$82.49	541 34	
Sundries (\$1.083.03):	341 34	
Bowden Lumber & Coal Co., sewer repairs	32 68	
L. Freeborn, vacu-draft repairs	4 50	
J. Jarvis, sand and gravel	17 25	
E. F. Roberts, installing pump.	102 50	
Sheridan Nurseries, trees.	12 00	
Telephone:	12 00	
	55 00	
Bell Telephone Co., service		
Superintendent's Dept., labour, \$725.55; material, \$133.55	859 10	
Caretaker, T. McKenzie, 12 mos. (with quarters valued @ \$180) (and	700.00	
overtime, \$37.50)	780 00	
	00 717 07	
I I'. II . I' I . (D ( Cl) 070.75 1	\$3,717 27	
Less credits: Heat, light and water (Prof. Chant) \$72.75; share of	105.00	
pump repairs (paid from Insurance) \$51.25; cleaning, \$1	125 00	#0 F00 07
		\$3.592 27
		\$858,216 82

#### VII. FACULTY OF MEDICINE

## 56. SALARIES

#### Administration

W. E. Gallie, Dean (paid also \$10,000 as Professor of Surgery) E. S. Ryerson, Assistant Dean and Secretary of Faculty and Assistant	\$1,000 00	
Professor of Surgery (paid also \$400 in Dentistry and \$10 for Post		
Graduate Courses)	5,000 00	
Assistants:		
Miss M. W. Jones.	1,850 00	
Miss O. Russell	1,800 00	
Miss A. Perry	1,550 00	
H. Saunders, Messenger	850 00	
Hospital Theatre, Toronto General Hospital:		
C. Hart, Attendant	1.550 00	
R. Murray, Attendant in Cloak Room	500 00	
· ·		\$14,100 00

## Anatomy

Thatomy		
Professors:	\$7,000 00	
J. C. B. Grant	61,000 00	
W. H. Piersol, Histology and Embryology, @ \$5,100. of which half	2.550 00	
charged to Biology	4.800 00	
J. C. Watt	4.000 00	
Associate Professors:	0.050.00	
A. W. Ham	3.850 00	
H. A. Cates	4.050 00	
R. K. George, Assistant Professor	3,100 00	
G. C. Smith, Lecturer (Sessional)	2.000 00	
Demonstrators (Sessional):		
Miss K. I. McMurrich (paid also \$150 in Athletics and Physical		
Training — Women)	700 00	
M. C. Watson	500 00	
C. P. McCormick (paid also \$400 in Physiology)	350 00	
M. J. Wilson (paid also \$400 from Medical Research - Best Fund)	400 00	
H. D. Ball (paid also \$150 in Athletics and Physical Training —		
Women, and \$150 for Extension Work)	500 00	
H C Elliott	500 00	
F. P. Dewar (paid also \$250 from Medical Research — Best Fund)	250 00	
M. W. Hicks (paid also \$200 from Medical Research — Best Fund)	200 00	
R. H. Flett	175 00	
I. D. Kitchen	175 00	
A. N. McKillop	175 00	
R. G. MacKenzie (paid also as Prosector)	125 00	
Miss E. H. Britton	150 00	
F. L. Lawson	55 00	
W. E. L. Sparks (paid also \$100 in Health Service)	55 00	
A. E. Montgomery, Dental Anatomy	300 00	
	000 00	
Prosectors (Sessional):	150 00	
Brock R. Brown		
Freda Richardson	75 00 75 00	
R. G. McKenzie (see also above)	75 00	
H. E. LeMasurier, Senior Technical Assistant (paid also \$125 for X-Ray	3 000 00	
work)	1.800 00	
H. F. Whittaker, Technical Assistant (paid also \$120 in Dentistry)	750 00	
G. A. L. Ross, Animal Caretaker	700 00	
Miss G. Dowsley. Clerical Assistant	1.300 00	
Laboratory Assistants:	7 700 00	
H. McCormick (paid also \$15 in Post Graduate Courses)	1.700 00	
S. George (paid also \$5 in Post Graduate Courses)	1.500 00	
B. L. Guyatt, Museum Curator (part time)	1.000 00	
Chas. E. Storton, Laboratory Boy	650 00	
_		
	\$41.660 00	
Less paid by School of Nursing	200 00	047 460 00
_		\$41,460 00
Pathology and Bacteriology		
Professors:	00 000 00	
Wm. Boyd	\$8.000 00	
W. L. Holman. Bacteriology, also Associate Director of Applied		
Bacteriology	5.000 00	
W. L. Robinson. Pathology, also Associate Director of Applied		
Pathology	2.200 00	
Assistant Professors:		
G. Shanks Pathology	250 00	
C. Lyman Duff	2.250 00	
W. Magner, Special Lecturer, Pathology (Sessional)	750 00	
Lecturer (Sessional):	300 00	
I H Frb Pathology	200 00	
P. H. Greev. Bacteriology	1.800 00	
R. Margarite Price. Bacteriology and Serology	3.000 00	
Fellows (Sessional):		
VI O Klotz	1,200 00	
F O Magner	1.000 00	
D R F Macleod	1.000 00	
L. M. Gray, Museum. 11 mos	1.000 00	

H. C. Hare, Pathology	Demonstrators (Sessional):		
E. J. Clifford	H. C. Hare, Pathology	500 00	
Marion Ross (without salary)  Assistants in Laboratory:  Miss N. W. Simpson. Pathology.  Miss M. G. Hein, to 31 August (transferred to Neuropathology  Division from 1 September).  Miss M. G. Hein, to 31 August (transferred to Neuropathology  Division from 1 September).  Miss M. G. Hein, to 31 August (transferred to Neuropathology  Division from 1 September).  Miss M. A. Alvey. Special Technician.  Laboratory attendants for preparing Media:  Miss E. A. Gordon, 11 mos.  Miss E. A. Cordon, 11 mos.  Miss E. A. Gordon, 11 mos.  A. Vowles.  600 00  Miss M. Jackson.  400 00  Miss G. R. Boyd. Secretary  1,200 00  Miss H. M. Hammond. Librarian and Assistant Secretary.  1,200 00  Miss H. M. Hammond. Librarian and Assistant Secretary.  1,200 00  Miss P. L. McKinnon, Museum Stenographer.  1,200 00  Miss P. L. McKinnon, Museum Stenographer.  1,200 00  Miss Margaret Wightman. Autopsy Recorder.  960 00  Miss G. F. Johnston, Autopsy Technician.  960 00  Division of Neuropathology:  E. A. Linell, Professor.  4,500 00  Dr. Mary I. Tom, Lecturer (Sessional)  J. C. Richardson, Fellow (Sessional)  J. C. Richardson, Fellow (Sessional)  J. C. Richardson, Fellow (Sessional)  Miss M. G. Hein (vice Miss Tett—see also above)  Technician. P. Tett (resigned 1 September)  Miss H. Rogers (vice Miss Howitt)  Miss H. Rogers (vice Miss Howitt)  Miss C. A. Bell, Secretary  Andrew Hunter, Professor (paid also by Connaught Laboratories)  Fellows (Sessional):  D. L. Eylby.  Andrew Hunter, Professor (paid also by Connaught Laboratories)  Follows (Sessional):  J. C. Richardson, Fellow (Sessional)  D. B. Boddington.  J. Start Wilson  A. G. Gornall.  Sound Of the Mission (Sessional)  Sound Of the Mission (Sessional)  Fund—respect of the Mission (Sessional)  Sound Of the Mission (Sessional)  J. C. Richardson, Fellow (Sessional)	E. J. Clifford		
Miss M. W. Simpson. Pathology.   1,500 00	Marion Ross (without salary)		
Miss H. M. Boyd, Bacteriology. Technician:  Miss M. G. Hein, to 31 August (transferred to Neuropathology Division from 1 September)		1,500 00	
Miss M. G. Hein, to 31 August (transferred to Neuropathology Division from 1 September)	Miss H. M. Boyd, Bacteriology	1.020 00	
Miss C. M. Westlake (vice Miss Hein) 780 00  Laboratory attendants for preparing Media: 780 00  Laboratory attendants for preparing Media: 780 00  Miss E. A. Gordon, 11 mos. 1200 00  Miss M. Jackson 840 00  A. Vowles. 600 00  Miss G. K. R. Boyd. Secretary. 1260 00  Miss H. M. Hammond. Librarian and Assistant Secretary 1200 00  Miss V. L. McKinnon, Museum Stenographer 1260 00  Miss V. L. McKinnon, Museum Stenographer 1260 00  Miss Erna Eck. Junior Attendant in Museum. 600 00  Miss Erna Eck. Junior Attendant in Museum. 600 00  Miss G. F. Johnston, Autopsy Technician. 960 00  Miss G. F. Johnston, Autopsy Technician. 960 00  Miss G. F. Johnston, Autopsy Technician. 960 00  Division of Neuropathology: 843,340 00  Technician: 945,000 00	Miss M. G. Hein, to 31 August (transferred to Neuropathology		
Miss A. Alvey. Special Technician	Division from 1 September)		
Miss E. A. Cordon, 11 mos.   1,200 00	Miss A. Alvey. Special Technician		
A. Vowles	Laboratory attendants for preparing Media: Miss E. A. Gordon, 11 mos	1.200 00	
Miss G. K. R. Boyd. Secretary       1,260 00         Miss H. M. Hammond. Librarian and Assistant Secretary       1,260 00         Miss V. L. McKinnon, Museum Stenographer       1,260 00         J. F. Payne, Preparator       1,600 00         Miss Erna Eck, Junior Attendant in Museum       600 00         Miss Margaret Wightman. Autopsy Recorder       960 00         Miss G. K. Johnston, Autopsy Technician       960 00         Division of Neuropathology:       \$43,340 00         E. A. Linell, Professor       4,500 00         Dr. Mary I. Tom, Lecturer (Sessional)       1,950 00         J. C. Richardson, Fellow (Sessional)       1,950 00         J. C. Richardson, Fellow (Sessional)       1,000 00         Technician:       Miss H. P. Tett (resigned 1 September)       183         Miss M. G. Hein (vice Miss Tett—see also above)       950 00         Technician. Medicine and Surgery:       800         Miss K. Howitt (resigned 14 April)       807 50         Miss H. Rogers (vice Miss Howitt)       140 00         Miss C. A. Bell, Secretary       1,100 00         Demonstrators (Sessional):       1,100 00         Demonstrators (Sessional):       1,000 00         D. L. Selby       600 00         D. L. Selby       600 00         O. P.	Miss M. Jackson		
Miss H. M. Hammond. Librarian and Assistant Secretary         1,220 00           Miss V. L. McKinnon, Museum Stenographer         1,260 00           J. F. Payne, Preparator         1,800 00           Miss Erna Eck, Unnior Attendant in Museum         600 00           Miss Margaret Wightman. Autopsy Recorder         960 00           Miss G. F. Johnston, Autopsy Technician         960 00           Division of Neuropathology:         \$43,340 00           E. A. Linell, Professor         4,500 00           Dr. Mary I. Tom, Lecturer (Sessional)         1,950 00           J. C. Richardson, Fellow (Sessional)         1,000 00           Technician:         Miss H. P. Tett (resigned 1 September)         183 34           Miss M. G. Hein (vice Miss Tett — see also above)         950 00           Technician. Medicine and Surgery:         807 50           Miss H. Rogers (vice Miss Howitt)         140 00           Miss C. A. Bell, Secretary         1,100 00           Pathological Chemistry           Andrew Hunter, Professor (paid also by Connaught Laboratories)         \$6,000 00           T. F. Nicholson, Associate Professor         3,345 00           R. W. I. Urquhart, Lecturer (Sessional)         1,000 00           Demonstrators (Sessional):         600 00           D. L. Selby         600 00 <td></td> <td></td> <td></td>			
J. F. Payne, Preparator   1,800 00	Miss H. M. Hammond. Librarian and Assistant Secretary	1,020 00	
Miss Erna Eck, Junior Attendant in Museum         660 00           Miss Margaret Wightman, Autopsy Recorder         960 00           Wiss G. F. Johnston, Autopsy Technician         960 00           Division of Neuropathology:         \$43,340 00           D. Mary I. Tom, Lecturer (Sessional)         1,950 00           J. C. Richardson, Fellow (Sessional)         1,000 00           Technician:         183 34           Miss H. P. Tett (resigned 1 September)         183 34           Miss M. G. Hein (vice Miss Tett — see also above)         950 00           Technician, Medicine and Surgery:         183 34           Miss K. Howitt (resigned 14 April)         807 50           Miss H. Rogers (vice Miss Howitt)         140 00           Miss C. A. Bell, Secretary         1,100 00           Pathological Chemistry         86,000 00           Andrew Hunter, Professor (paid also by Connaught Laboratories)         \$6,000 00           R. W. I. Urquhart, Lecturer (Sessional)         1,000 00           Demonstrators (Sessional):         600 00           D. H. Boddington         250 00           J. Stuart Wilson         250 00           G. P. Hamblin, Assistant (part time — Sessional)         250 00           Fellows (Sessional):         550 00           H. E. Woodward (vice F. H. Lawfo			
Miss Margaret Wightman. Autopsy Recorder.       960 00         Miss G. F. Johnston, Autopsy Technician.       960 00         Division of Neuropathology:       4.500 00         E. A. Linell. Professor.       4.500 00         Dr. Mary I. Tom, Lecturer (Sessional)       1.950 00         J. C. Richardson, Fellow (Sessional)       1.000 00         Technician:       Miss H. P. Tett (resigned 1 September)       183 34         Miss M. G. Hein (vice Miss Tett — see also above)       950 00         Technician. Medicine and Surgery:       807 50         Miss H. Rogers (vice Miss Howitt)       140 00         Miss H. Rogers (vice Miss Howitt)       140 00         Miss H. Rogers (vice Miss Howitt)       1100 00         Miss C. A. Bell, Secretary       553.970 84         Pathological Chemistry         Andrew Hunter, Professor (paid also by Connaught Laboratories)       \$6.000 00         T. F. Nicholson, Associate Professor.       3.450 00         T. F. Nicholson, Associate Professor.       3.450 00         T. S. Urquhart, Lecturer (Sessional)       1000 00         Demonstrators (Sessional):       250 00         D. H. Boddington       550 00         J. Stuart Wilson       250 00         G. P. Hamblin, Assistant (part time — Sessional)       250 00			
Miss G. F. Johnston, Autopsy Technician	Miss Margaret Wightman, Autopsy Recorder		
Division of Neuropathology:   E. A. Linell, Professor		960 00	
E. A. Linell. Professor	Division of Neuronathology	\$43.340 00	
Dr. Mary I. Tom. Lecturer (Sessional)   1,950 00	E. A. Linell, Professor	4.500 00	
Technician:   Miss H. P. Tett (resigned 1 September)   183 34     Miss M. G. Hein (vice Miss Tett—see also above)   950 00     Technician. Medicine and Surgery:   Miss K. Howitt (resigned 14 April)   807 50     Miss K. Howitt (resigned 14 April)   140 00     Miss C. A. Bell, Secretary   1,100 00     Miss C. A. Bell, Secretary   1,100 00     Pathological Chemistry   2,53,970 84     Pathological Chemistry   2,53,970 84     Pathological Chemistry   3,450 00     R. W. I. Urquhart. Lecturer (Sessional)   1,000 00     Demonstrators (Sessional)   5,00 00     D. H. Boddington   500 00     D. H. Boddington   500 00     J. Stuart Wilson   250 00     G. P. Hamblin. Assistant (part time — Sessional)   250 00     Fellows (Sessional)   5,00 00     H. E. Woodward (vice F. H. Lawford)   600 00     A. G. Gornall   800 00     C. E. Downs, Technician   1,100 00     Laboratory Attendants   1,100 00     Laboratory Attendants   1,100 00     Laboratory Attendants   1,100 00     Miss C. A. Shannon. Secretary   5,50 00     Miss C. A. Shannon. Secretary   5,50 00     Pharmacy and Pharmacology   5,000 00     V. E. Henderson. Professor   5,000 00     Pharmacy and Pharmacology   5,000 00     V. E. Henderson. Professor   5,000 00     Pharmacy (Sessional)   1,500 00     U. V. Rice   1,500 00	Dr. Mary I. Tom, Lecturer (Sessional)		
Miss M. G. Hein (vice Miss Tett — see also above)       950 00         Technician. Medicine and Surgery:       Miss K. Howitt (resigned 14 April)       807 50         Miss H. Rogers (vice Miss Howitt)       140 00         Miss C. A. Bell, Secretary       1.100 00         Pathological Chemistry         Andrew Hunter, Professor (paid also by Connaught Laboratories)       \$6,000 00         T. F. Nicholson. Associate Professor       3.450 00         R. W. I. Urquhart. Lecturer (Sessional)       1.000 00         Demonstrators (Sessional):       600 00         D. L. Selby       600 00         D. H. Boddington       500 00         J. Stuart Wilson       250 00         G. P. Hamblin. Assistant (part time — Sessional)       250 00         Fellows (Sessional):       550 00         F. H. Lawford (paid also \$270 from Medical Research — Banting Fund — resigned 31 January)       550 00         H. E. Woodward (vice F. H. Lawford)       600 00         A. G. Gornall       800 00         C. E. Downs, Technician       1,500 00         Harrison Downs, Laboratory Assistant       1,100 00         Laboratory Attendants:       750 00         Mrs. C. McCallum (paid also \$155.52 from Medical Research — Banting Fund)       350 00         Miss C. A. Shannon. Secre		1.000 00	
Technician, Medicine and Surgery:   Miss K, Howitt (resigned 14 April)   140 00     Miss H, Rogers (vice Miss Howitt)   140 00     Miss C, A, Bell, Secretary   1,160 00     Pathological Chemistry     Andrew Hunter, Professor (paid also by Connaught Laboratories)   \$6,000 00     T, F, Nicholson, Associate Professor.   3,450 00     R, W, I, Urquhart, Lecturer (Sessional)   1,000 00     Demonstrators (Sessional):   500 00     D, L, Selby.   600 00     D, H, Boddington   500 00     J, Stuart Wilson.   250 00     G, P, Hamblin, Assistant (part time — Sessional)   250 00     Fellows (Sessional):   550 00     F, H, Lawford (paid also \$270 from Medical Research — Banting Fund — resigned 31 January)   550 00     H, E, Woodward (vice F, H, Lawford)   600 00     A, G, Gornall   800 00     C, E, Downs, Technician   1,500 00     Harrison Downs, Laboratory Assistant   1,100 00     Laboratory Attendants:   750 00     Mrs, C, McCallum (paid also \$155.52 from Medical Research — Banting Fund)   350 00     Mrs, C, McCallum (paid also \$155.52 from Medical Research — Banting Fund)   350 00     Miss C, A, Shannon, Secretary   1,200 00     Pharmacy and Pharmacology   \$6,000 00     C, H, W, Lucas, Associate Professor   3,800 00     Fellows (Sessional):   1,500 00     H, V, Rice   1,500 00     H, V, Rice   1,500 00			
Miss H. Rogers (vice Miss Howitt)   140 00   1.160 00   1.160 00     1.160 00	Technician, Medicine and Surgery:	930 00	
Miss C. A. Bell, Secretary	Miss K. Howitt (resigned 14 April)		
Pathological Chemistry			
Andrew Hunter, Professor (paid also by Connaught Laboratories)	-		\$53.970 84
T. F. Nicholson. Associate Professor. 3.450 00 R. W. I. Urquhart. Lecturer (Sessional) 1.000 00 Demonstrators (Sessional): 600 00 D. L. Selby 600 00 D. H. Boddington 500 00 J. Stuart Wilson 250 00 G. P. Hamblin. Assistant (part time—Sessional) 250 00 Fellows (Sessional): F. H. Lawford (paid also \$270 from Medical Research—Banting Fund—resigned 31 January) 550 00 H. E. Woodward (vice F. H. Lawford) 600 00 A. G. Gornall 800 00 C. E. Downs, Technician 1.500 00 Harrison Downs, Laboratory Assistant 1.100 00 Laboratory Attendants: Mrs. J. Faulds 750 00 Mrs. C. McCallum (paid also \$155.52 from Medical Research—Banting Fund) 350 00 Miss C. A. Shannon. Secretary 1.200 00  Pharmacy and Pharmacology V. E. Henderson. Professor \$6,000 00 G. H. W. Lucas. Associate Professor 3.800 00 Fellows (Sessional): D. D. Bonnycastle. 1.500 00 H. V. Rice 1.500 00 H. V. Rice 1.500 00		24 000 00	
R. W. I. Urquhart. Lecturer (Sessional) 1.000 00  Demonstrators (Sessional): 600 00  D. H. Selby 600 00  D. H. Boddington 500 00  J. Stuart Wilson 250 00  G. P. Hamblin. Assistant (part time — Sessional) 250 00  Fellows (Sessional): 550 00  H. E. Woodward (paid also \$270 from Medical Research — Banting Fund — resigned 31 January) 550 00  H. E. Woodward (vice F. H. Lawford) 600 00  A. G. Gornall 800 00  C. E. Downs, Technician 1.500 00  Harrison Downs, Laboratory Assistant 1.100 00  Laboratory Attendants: 750 00  Mrs. C. McCallum (paid also \$155.52 from Medical Research — Banting Fund) 750 00  Mrs. C. McCallum (paid also \$155.52 from Medical Research — Banting Fund) 750 00  Miss C. A. Shannon. Secretary 1.200 00  Pharmacy and Pharmacology  V. E. Henderson. Professor \$6,000 00  G. H. W. Lucas. Associate Professor 3.800 00  Fellows (Sessional): 1.500 00  H. V. Bice 1.500 00	Andrew Hunter, Professor (paid also by Connaught Laboratories)		
Demonstrators (Sessional):   D. L. Selby	R. W. I. Urquhart. Lecturer (Sessional)		
D. H. Boddington       500 00         J. Stuart Wilson       250 00         G. P. Hamblin. Assistant (part time — Sessional)       250 00         Fellows (Sessional):       550 00         F. H. Lawford (paid also \$270 from Medical Research — Banting Fund — resigned 31 January)       550 00         H. E. Woodward (vice F. H. Lawford)       600 00         A. G. Gornall       800 00         C. E. Downs, Technician       1,500 00         Harrison Downs, Laboratory Assistant       1,100 00         Laboratory Attendants:       750 00         Mrs. J. Faulds       750 00         Mrs. C. McCallum (paid also \$155.52 from Medical Research — Banting Fund)       350 00         Miss C. A. Shannon. Secretary       1,200 00         V. E. Henderson. Professor       \$6,000 00         G. H. W. Lucas. Associate Professor       3,800 00         Fellows (Sessional):       1,500 00         D. D. Bonnycastle       1,500 00         H. V. Rice       1,500 00	Demonstrators (Sessional):	600.00	
J. Stuart Wilson.       250 00         G. P. Hamblin. Assistant (part time — Sessional):       250 00         Fellows (Sessional):       550 00         F. H. Lawford (paid also \$270 from Medical Research — Banting Fund — resigned 31 January).       550 00         H. E. Woodward (vice F. H. Lawford)       600 00         A. G. Gornall       800 00         C. E. Downs, Technician       1.500 00         Harrison Downs, Laboratory Assistant       1.100 00         Laboratory Attendants:       750 00         Mrs. J. Faulds       750 00         Mrs. C. McCallum (paid also \$155.52 from Medical Research — Banting Fund)       350 00         Miss C. A. Shannon. Secretary       1.200 00         Pharmacy and Pharmacology         V. E. Henderson. Professor       \$6,000 00         G. H. W. Lucas. Associate Professor       3800 00         Fellows (Sessional):       1.500 00         H. V. Rice       1.500 00	D. H. Boddington		
G. P. Hamblin. Assistant (part time — Sessional)	J. Stuart Wilson		
F. H. Lawford (paid also \$270 from Medical Research — Banting Fund — resigned 31 January)	G. P. Hamblin. Assistant (part time — Sessional)	250 00	
H. E. Woodward (vice F. H. Lawford) 600 00 A. G. Gornall 800 00 C. E. Downs, Technician 1.500 00 Harrison Downs, Laboratory Assistant 1.100 00 Laboratory Attendants: Mrs. J. Faulds 750 00 Mrs. C. McCallum (paid also \$155.52 from Medical Research—Banting Fund) 350 00 Miss C. A. Shannon. Secretary 1.200 00  ————————————————————————————————	F. H. Lawford (paid also \$270 from Medical Research - Banting		
A. G. Gornall	Fund — resigned 31 January)		
C. E. Downs, Technician			
Harrison Downs, Laboratory Assistant			
Mrs. J. Faulds.       750 00         Mrs. C. McCallum (paid also \$155.52 from Medical Research—Banting Fund)       350 00         Miss C. A. Shannon. Secretary       1,200 00         Pharmacy and Pharmacology         V. E. Henderson. Professor       \$6,000 00         G. H. W. Lucas. Associate Professor       3,800 00         Fellows (Sessional):       1,500 00         D. D. Bonnycastle       1,500 00         H. V. Rice       1,500 00	Harrison Downs, Laboratory Assistant		
Mrs. C. McCallum (paid also \$155.52 from Medical Research— Banting Fund)		750 00	
Miss C. A. Shannon. Secretary.       1,200 00         Pharmacy and Pharmacology         V. E. Henderson. Professor.       \$6,000 00         G. H. W. Lucas. Associate Professor.       3,800 00         Fellows (Sessional):       1,500 00         H. V. Rice.       1,500 00	Mrs. C. McCallum (paid also \$155.52 from Medical Research -	250.00	
Pharmacy and Pharmacology   V. E. Henderson. Professor.   \$6,000 00	Miss C. A. Shannon, Secretary.		
V. E. Henderson. Professor.       \$6,000 00         G. H. W. Lucas. Associate Professor.       3.800 00         Fellows (Sessional):       1.500 00         H. V. Bice.       1.500 00         1.500 00       1.500 00	-		\$18,900 00
G. H. W. Lucas. Associate Professor		06 000 00	
Fellows (Sessional):  D. D. Bonnycastle			
H V Rice	Fellows (Sessional):		
A. Brock. Technical Assistant	D. D. Bonnycastle		
	A. Brock. Technical Assistant.		

Chester Coduct. Laboratory Attendant.   1.160 00   A. C. Morrison, Cleaner.   750 00   Miss D. Caldecott. Clerical Assistant.   550 00   S17,360 00   Miss D. Caldecott. Clerical Assistant.   550 00   S17,360 00   Coduct. Clerical Assistant.   550 00   Coduct. Clerical Assistant.   550 00   Coduct. Clerical Assistant.   550 00 00   Coduct. Clerical Cl			
A. C. Morrison. Cleaner	Chester Codner Laboratory Attendant	1.160_00	
Professors:   Bio-Chemistry   S6,000 00   S17,360 00	A. C. Morrison, Cleaner.		
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Professors:			\$17,360 00
Professors:	Bio-Chemistry		
G. F. Marian			
A. M. Wynne. Associate Professor. 3,300 00 B. F. Crocker, Lecturer. 1,800 00 Fellows (Sessional): G. C. Butler (paid also \$200 in Special Research) 1,000 00 A. D. Odell 900 00 W. H. Fishman (paid also \$200 in Special Research) 850 00 Paul Hamilton (paid also \$200 in Special Research) 850 00 Miss E. A. McPherson. 800 00 Miss M. Delamere, Secretarial Assistant 1,155 00 Feshicians: 1,155 00 L. Shan. 1,165 00 Miss D. I. Skill. 1,100 00 Miss D. I. Skill. 1,100 00 Mrs. Ethel Wilkie, Laboratory Attendant 750 00 Mrs. Brajor. 1, Waster (paid also \$550 for Extension Work) 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		\$6,000 00	
B. F. Crocker, Lecturer   1,800 00			
Fellows (Sessional):   G. C. Butler (paid also \$200 in Special Research)   1,000 00     A. D. Odell   900 00     W. H. Fishman (paid also \$200 in Special Research)   850 00     Paul Hamilton (paid also \$200 in Special Research)   850 00     Miss E. A. McPherson   800 00     Miss E. A. McPherson   1,550 00     Technicians:   1,550 00     Laboratory Assistant   1,650 00     L. Shan   1,650 00     Miss D. I. Skill   1,000 00     Laboratory Assistants:   1,050 00     Laboratory Assistants:   1,050 00     Mrs. Ethel Wilkie, Laboratory Attendant   750 00     W. Clough   1,050 00     Mrs. Ethel Wilkie, Laboratory Attendant   750 00     Mrs. Taylor   750 00   750 00     Mrs. Taylor   750 00   750 00   750 00     E. T. Waters (paid also \$150 in Athletics and Physical Training   750 00			
G. C. Butler t paid also \$200 in Special Research   1,000 00   A. D. Odell   900 00   W. H. Fishman (paid also \$200 in Special Research   350 00   Paul Hamilton (paid also \$200 in Special Research   350 00   Miss E. A. McPherson   360 00   Miss E. A. McPherson   1,350 00    Technicians   1,350 00    Technicians   1,550 00   L. Shan   1,650 00   L. Shan   1,650 00   L. Shan   1,650 00   J. H. McClary   1,100 00   Miss D. I. Skill   1,050 00   Laboratory Assistants   1,050 00   Miss D. I. Skill   1,050 00   Laboratory Assistants   1,050 00   W. Clough   1,050 00   Wrs. Ethel Wilkie, Laboratory Attendant   750 00    **Substant Professors   1,050 00   **Substant Professors   1,050 00    **Physiology**  Professors:   2, Y. Solandt (paid also St50 in Athletics and Physical Training   4,500 00    **E. H. Botterell, Lecturer, Neuro-physiology (paid also \$1,500 in Surgery and \$20 for Extension Work   2,900 00    E. H. Botterell, Lecturer, Neuro-physiology (paid also \$1,500 in Surgery and \$20 for Extension Work   2,900 00    E. Fidlar, Lecturer and Research Associate   1,500 00    C. K. Gunn, Demonstrator Sessional — resigned 31 July   133 33    R. E. Haist, Research Mesearch Associate   1,500 00    G. F. McCormick (part time)   4,000 00    Miss Doris Second, Secretarial Assistant ( 1,250 00    Miss Doris Second Secretarial Assistant ( 1,250 00    A. Elliott, Mcchanician   1,250 00    Miss Doris Second Secretarial Assistant ( 1,250 00    Miss Doris Second Secretarial Assistant and Class-blower ( 1,250 00    Miss Doris Second Secretarial Assistant and Class-blower ( 1,250 00    Miss Doris Second Secretarial Assistant and Class-blower ( 1,250 00    Miss Doris Second Secretarial Assistant and Class-blower ( 1,250 00    Miss Doris Second Secretarial Assistant and Endoratories ( 1,250 00    Miss Doris Second of Hygiene   1,250 00    Miss Doris Second Secretarial A		1,800 00	
A. D. Odell.  W. H. Fishman (paid also \$200 in Special Research)  Paul Hamilton (paid also \$200 in Special Research)  Miss E. A. McPherson.  850 00  Miss M. Delamere, Secretarial Assistant.  1,350 00  Technicians:  J. W. Fletcher, Senior.  L. Shan.  1,650 00  L. Shan.  1,100 00  Miss D. I. Skill.  1,100 00  Miss D. I. Skill.  1,100 00  Miss D. I. Skill.  1,050 00  Laboratory Assistants:  G. Lumbard.  W. Clough.  W. Clough.  Mrs. Ethel Wilkie, Laboratory Attendant.  Physiology  Professors:  C. H. Best (paid also by Connaught Laboratories and \$2,500 from Medical Research—Best Fund).  M. S. Taylor.  Assistant Professors:  D. Y. Solandt (paid also \$150 in Athletics and Physical Training—Women)  E. T. Waters (paid also \$350 for Extension Work).  E. T. Waters (paid also \$350 for Extension Work).  E. T. Waters (paid also \$350 for Extension Work).  E. Fidlar, Lecturer. Neuro-physiology (paid also \$1,500 in Surgery and \$20 for Extension Work).  E. Fidlar, Lecturer and Research Associate:  C. K. Gunn. Demonstrator (Sessional)—resigned 31 July).  C. K. Gunn. Demonstrator (Sessional)—resigned 31 July).  133 33  R. E. Haist, Research Assistant (Sessional)—resigned 31 July).  L. B. Jaques.  J. W. Scott.  G. P. McCormick (part time).  Miss Mabel Cory, Departmental Librarian.  1,250 00  Miss Mabel Cory, Departmen		1.000.00	
W. H. Fishman (paid also \$200 in Special Research)			
Paul Hamilton (paid also \$200 in Special Research)			
Miss L. A. McPherson. 800 00  Miss M. Delamere, Secretarial Assistant 1,350 00  Technicians: 1, W. Fletcher, Senior 1,650 00  L. Sloan 1,650 00  L. Sloan 1,650 00  J. H. McClary. 1,100 00  Miss D. I. Skill 1,050 00  W. Clough 1,050 00  W. Clough 1,050 00  Mrs. Ethel Wilkie, Laboratory Attendant 750 00  Physiology  Professors: C. H. Best (paid also by Connaught Laboratories and \$2,500 from Medical Research Best Fund) 86,000 00  N. B. Taylor 8,500 00  Assistant Professors: D. Y. Solandt (paid also \$150 in Athletics and Physical Training Women) 3,500 00  E. T. Waters (paid also \$350 for Extension Work 1, 2,900 00  E. T. Waters (paid also \$350 for Extension Work 1, 2,900 00  E. H. Botterell, Lecturer, Neuro-physiology (paid also \$1,500 in Surgery and \$20 for Extension Work 1, 1,500 00  E. Fidlar, Lecturer and Research Associate 1,500 00  E. Fidlar, Research Assistant (Sesional — vice C. K. Gunn; paid also \$100 from Medical Research Best Fund) 1, 33 33  R. E. Haist, Research Assistant (Sesional — vice C. K. Gunn; paid also \$100 from Medical Research — Best Fund) 1, 1, 1, 250 00  Miss Mablel Cory, Departmental Librarian 1, 1, 250 00  Miss Mablel Cory, Departmental Librarian 1, 1, 250 00  Miss Mablel Cory, Departmental Librarian 1, 1, 250 00  Miss Mablel Cory, Departmental Librarian 1, 1, 250 00  Miss Mablel Cory, Departmental Librarian 1, 1, 250 00  Miss Mablel Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental Librarian 1, 1, 250 00  Miss Mable Cory, Departmental 1, 2, 2, 2, 2, 2, 2, 2, 2, 2	Paul Hamilton (paid also \$200 in Special Research)	850 00	
Technicians:	Miss E. A. McPherson	800 00	
J. W. Fletcher, Senior	Miss M. Delamere, Secretarial Assistant	1,350 00	
L. Sloan		7 470 00	
J. H. McClary   1,100 00			
Miss D. I. Skill   1,050 00			
Laboratory Assistants:   G. Lumbard.   1,050 00     W. Clough.   1,050 00     W. Clough.   1,050 00     W. Clough.   1,050 00     Wrs. Ethel Wilkie, Laboratory Attendant.   2750 00     Professors:   Physiology     Professors:   C. H. Best (paid also by Connaught Laboratories and \$2,500 from Medical Research — Best Fund)   4,500 00     Assistant Professors:   D. Y. Solandt (paid also \$150 in Athletics and Physical Training — Women)   3,500 00     E. T. Waters (paid also \$350 for Extension Work)   2,900 00     E. H. Botterell, Lecturer. Neuro-physiology (paid also \$1,500 in Surgery and \$20 for Extension Work)   1,500 00     E. Fidlar, Lecturer and Research Associate   1,500 00     E. Fidlar, Lecturer and Research Associate   1,500 00     E. Fidlar, Search Assistant (Sessional — resigned 31 July)   133 33     R. E. Haist, Research Assistant (Sessional — vice C. K. Gunn; paid also \$100 from Medical Research — Best Fund)   1,465 67     Fellows (Sessional):   1,250 00     J. W. Scott   600 00   1,250 00     G. P. McCormick (part time)   400 00     Miss Mabel Cory, Departmental Librarian   1,250 00     Miss Mabel Cory, Departmental Librarian   1,250 00     Miss Morit Secord, Secretarial Assistant   1,250 00     A. Elliott, Mechanician   1,250 00     F. L. Robinson, Technical Assistant and Glass-blower (paid also \$500 from Medical Research — Best Fund)   2,000 00     J. D. Brown, Technical Assistant Riophysics   1,500 00     W. Huntley, Laboratory Assistant for Teaching Laboratories (resigned 23 May)   1,298 00     G. L. Robinson, Animal Caretaker   1,500 00     A. D. Crouch, Assistant Animal Caretaker   1,500 00     P. J. Moloney, Associate Professor (see also School of Hygiene)   1,000 00     P. J. Moloney, Associate Professor (see also School of Hygiene)   1,000 00     P. J. Moloney, Associate Professor (see also School of Hygiene)   1,000 00     Mssitant Professors (paid also by Connaught Laboratories)   1,000 00     Mssitant Professors (paid also by Connaught Laboratories)   1,000 00     Mssitant Professors (pai			
C. Limbard   1,050 00		1,000 00	
W. Clough	G. Lumbard	1.050 00	
Mrs. Ethel Wilkie, Laboratory Attendant			
Professors:   C. H. Best (paid also by Connaught Laboratories and \$2.500 from Medical Research — Best Fund)	Mrs. Ethel Wilkie, Laboratory Attendant	750 00	
Professors:   C. H. Best (paid also by Connaught Laboratories and \$2.500 from Medical Research — Best Fund)	manus de la companya		\$30.650 00
Professors:   C. H. Best (paid also by Connaught Laboratories and \$2.500 from Medical Research — Best Fund)	Physiology		
C. H. Best (paid also by Connaught Laboratories and \$2.500 from Medical Research—Best Fund)			
Medical Research — Best Fund			
N. B. Taylor	Medical Research — Best Fund)	\$6.000 00	
D. Y. Solandt (paid also \$150 in Athletics and Physical Training—		4.500 00	
Women   3,500 00			
E. T. Waters (paid also \$350 for Extension Work)		2.500.00	
E. H. Botterell, Lecturer. Neuro-physiology (paid also \$1,500 in Surgery and \$20 for Extension Work).  E. Fidlar, Lecturer and Research Associate.  C. K. Gunn. Demonstrator (Sessional—resigned 31 July).  R. E. Haist, Research Assistant (Sessional—vice C. K. Gunn: paid also \$100 from Medical Research—Best Fund).  L. B. Jaques.  L. B. Jaques.  L. B. Jaques.  L. B. Jaques.  C. P. McCormick (part time).  Miss Mabel Cory, Departmental Librarian.  L. B. Dought Medical Research—Best Fund).  Miss Doris Secord, Secretarial Assistant.  L. B. Jaques.  L. B. Jaques.  L. B. Jaques.  L. B. Jaques.  J. J. D. Brown. Technical Assistant and Glass-blower (paid also \$500 from Medical Research—Best Fund).  J. D. Brown. Technical Assistant and Glass-blower (paid also \$500 from Medical Research—Best Fund).  J. D. Brown. Technical Assistant for Teaching Laboratories (resigned 23 May).  C. L. Robinson. Animal Caretaker.  A. D. Crouch. Assistant Animal Caretaker.  Professors (paid also by Connaught Laboratories):  J. G. FitzGerald (part time—see also School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries Hygiene and Epidemiology (part time—paid also \$2.500 in School of Hygiene).  R. D. Defries Hygiene and Epidemiology (part time—paid also \$2.500			
and \$20 for Extension Work)		2.900 00	
E. Fidlar, Lecturer and Research Associate	and \$20 for Extension Work)	1.500.00	
C. K. Gunn. Demonstrator (Sessional — resigned 31 July)       133 33         R. E. Haist, Research Assistant (Sessional — vice C. K. Gunn; paid also \$100 from Medical Research — Best Fund)       1,465 67         Fellows (Sessional):       1.000 00         L. B. Jaques       1,000 00         J. W. Scott       600 00         C. P. McCormick (part time)       400 00         Miss Mabel Cory, Departmental Librarian       1,250 00         Miss Doris Secord, Secretarial Assistant       1,250 00         A. Elliott, Mechanician       1,800 00         F. L. Robinson, Technical Assistant and Glass-blower (paid also \$500 from Medical Research — Best Fund)       2,000 00         J. D. Brown, Technical Assistant, Biophysics       1,500 00         W. Huntley, Laboratory Assistant for Teaching Laboratories (resigned 23 May)       1,298 00         G. L. Robinson, Animal Caretaker       1,250 00         A. D. Crouch, Assistant Animal Caretaker       1,250 00         A. D. Grizgerald (part time — see also School of Hygiene)       834,798 00         Professors (paid also by Connaught Laboratories):       1,000 00         D. T. Fraser       4,500 00         P. J. Moloney, Associate Professor (see also School of Hygiene)       1,000 00         Assistant Professors (paid also by Connaught Laboratories):       1,000 00         M. H. Brown <t< td=""><td></td><td></td><td></td></t<>			
R. E. Haist, Research Assistant (Sessional — vice C. K. Gunn; paid also \$100 from Medical Research — Best Fund)	C. K. Gunn, Demonstrator (Sessional — resigned 31 July)	133 33	
Fellows (Sessional) :   L. B. Jaques	R. E. Haist, Research Assistant (Sessional - vice C. K. Gunn: paid also		
L. B. Jaques		1,465 67	
J. W. Scott.		1 000 00	
C. P. McCormick (part time)			
Miss Mahel Cory, Departmental Librarian			
Miss Doris Secord, Secretarial Assistant. 1,250 00 A. Elliott. Mechanician. 1,250 00 F. L. Robinson. Technical Assistant and Glass-blower (paid also \$500 from Medical Research — Best Fund). 2,000 00 J. D. Brown. Technical Assistant, Biophysics. 1,500 00 W. Huntley. Laboratory Assistant for Teaching Laboratories (resigned 23 May) 1,298 00 G. L. Robinson, Animal Caretaker. 1,250 00 A. D. Cronch. Assistant Animal Caretaker. 950 00 Hygiene and Preventive Medicine  Professors (paid also by Connaught Laboratories): J. G. FitzGerald (part time — see also School of Hygiene). R. D. Defries, Hygiene and Epidemiology (part time — paid also \$2,500 in School of Hygiene) 1,000 00 D. T. Fraser. 4,500 00 P. J. Moloney. Associate Professor (see also School of Hygiene) 4,500 00 Assistant Professors (paid also by Connaught Laboratories): M. H. Brown. 1,000 00	Miss Mahel Cory Departmental Librarian		
A. Elliott. Mechanician	Miss Doris Second, Secretarial Assistant.		
F. L. Robinson. Technical Assistant and Glass-blower (paid also \$500 from Medical Research — Best Fund).  J. D. Brown. Technical Assistant, Biophysics.  W. Huntley. Laboratory Assistant for Teaching Laboratories (resigned 23 May).  G. L. Robinson, Animal Caretaker.  A. D. Crouch. Assistant Animal Caretaker.  Professors (paid also by Connaught Laboratories):  J. G. FitzGerald (part time — see also School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time — paid also \$2,500 in School of Hygiene).  P. J. Moloney. Associate Professor (see also School of Hygiene).  Assistant Professors (paid also by Connaught Laboratories):  M. H. Brown.  1,000 00	A. Elliott. Mechanician		
J. D. Brown, Technical Assistant, Biophysics	F. L. Robinson, Technical Assistant and Glass-blower (paid also \$500		
W. Huntley. Laboratory Assistant for Teaching Laboratories (resigned 23 May)  G. L. Robinson, Animal Caretaker.  A. D. Cronch. Assistant Animal Caretaker.  Hygiene and Preventive Medicine  Professors (paid also by Connaught Laboratories):  J. G. FitzGerald (part time — see also School of Hygiene).  R. D. Defries, Hygiene and Epidemiology (part time — paid also \$2,500 in School of Hygiene).  D. T. Fraser.  J. Moloney. Associate Professor (see also School of Hygiene).  Assistant Professors (paid also by Connaught Laboratories):  M. H. Brown.  1.298 00 1.250 00 950 00  — \$34,798 00	from Medical Research — Best Fund)		
May) G. L. Robinson, Animal Caretaker. A. D. Crouch, Assistant Animal Caretaker.  Hygiene and Preventive Medicine  Professors (paid also by Connaught Laboratories): J. G. FitzGerald (part time—see also School of Hygiene). R. D. Defries, Hygiene and Epidemiology (part time—paid also \$2,500 in School of Hygiene). D. T. Fraser.  P. J. Moloney, Associate Professor (see also School of Hygiene). Assistant Professors (paid also by Connaught Laboratories): M. H. Brown.  1,000 00	ANT TE	1,500 00	
G. L. Robinson, Animal Caretaker		1 202 00	
A. D. Crouch, Assistant Animal Caretaker			
Hygiene and Preventive Medicine  Professors (paid also by Connaught Laboratories): J. G. FitzGerald (part time — see also School of Hygiene)			
Professors (paid also by Connaught Laboratories):  J. G. FitzGerald (part time — see also School of Hygiene)  R. D. Defries, Hygiene and Epidemiology (part time — paid also \$2,500 in School of Hygiene)  D. T. Fraser	The second and the second and the second sec		\$34,798 00
Professors (paid also by Connaught Laboratories):  J. G. FitzGerald (part time — see also School of Hygiene)  R. D. Defries, Hygiene and Epidemiology (part time — paid also \$2,500 in School of Hygiene)  D. T. Fraser			
J. G. FitzGerald (part time—see also School of Hygiene)	Hygiene and Preventive Medicine		
J. G. FitzGerald (part time—see also School of Hygiene)	Professors (paid also by Connaught Laboratories):		
R. D. Defries, Hygiene and Epidemiology (part time — paid also \$2,500 in School of Hygiene)			
D. T. Fraser	R. D. Defries, Hygiene and Epidemiology (part time - paid also		
P. J. Moloney. Associate Professor (see also School of Hygiene)			
Assistant Professors (paid also by Connaught Laboratories): M. H. Brown			
M. H. Brown	Assistant Professor (see also School of Hygiene)		
	M. H. Brown	1,000,00	

D (C . 1)		
Demonstrators (Sessional):  F. O. Wishart (paid also by Connaught Laboratories)	1.400.00	
	1,400 00 1,137 50	
J. M. Corkill (resigned 15 April)	400 00	
J. S. Kitching.	217 85	
Miss H. C. Plummer (paid also by Connaught Laboratories)	500 00	
R. Hare (paid also by Connaught Laboratories)	300 00	
E. B. Struthers, Special Instructor (Sessional)	100 00	
Fellows (Easter Term):		
L. Laberge	500 00	
R. J. Wilson	500 00	
Class Assistants (Sessional):		
Miss M. E. Collins	720 00	
Miss E. M. Parr	720 00	
A. J. Bishop, Technician (paid also by Connaught Laboratories)	300 00	
Miss E. Barr, Secretarial Assistant	1.150 00	03 m 4 4 m 0 m
Medicine and Clinical Medicine		\$15,445 35
Duncan Graham, Professor	10,000 00	
Assistant Professors:	,	
Part-time:		
H. K. Detweiler	300 00	
G. W. Howland (paid also \$10 for Post Graduate Courses and		
\$60 for Extension Work)	300 00	
J. D. Loudon	300 00	
J. A. Oille (paid also \$82 for Post Graduate Courses and \$20		
in Health Service)	300 00	
E. J. Trow (in charge of Dermatology)	300 00	
R. F. Farquharson @ \$3,000, of which \$1,000 charged to		
Therapeutics	2:000 00	
W. F. McPhedran (half time)	500 00	
Associates: W. R. Campbell	2.500.00	
Part-time:	2.500 00	
R. G. Armour (paid also \$10 in Health Service and \$40 for		
Extension Work)	250 00	
J. H. Elliott (paid also \$700 as Professor of History of Medi-	250 00	
cine; \$40 in School of Nursing, and \$30 for Extension Work)	250 00	
A. A. Fletcher (paid also \$10 for Post Graduate Courses and	200 00	
\$20 for Extension Work)	250 00	
Beverley Hannah (paid also \$210 in School of Nursing and by		
Connaught Laboratories)	250 00	
J. Hepburn (paid also \$91 for Post Graduate Courses)	250 00	
A. G. McPhedran (paid also \$200 in Health Service)	250 00	
H. C. Parsons	250 00	
F. W. Rolph	250 00	
T. Owen (half time)	500 00	
Senior Demonstrators (Sessional):		
Part-time: Gordon Bates (paid also \$20 in School of Nursing)	200 00	
	200 00	
G. F. Boyer	200 00	
E. E. Cleaver	200 00	
H. A. Dixon	200 00	
A. J. McKenzie	200 00	
J. H. McPhedran	200 00	
W. E. Ogden	200 00	
Half-time:		
W. P. Warner	1.000 00	
G. W. Lougheed	500 00	
Junior Demonstrators (Sessional):		
Part-time:		
E. F. Brooks	150 00	
E. A. Broughton	150 00	
W. Hurst Brown.	150 00	
J. Gilbert Falconer (paid also \$50 for Extension Work)	150 00	
A. G. Hagerman.	150 00	
F. C. Hamilton (paid also \$55 for Post Graduate Courses)	150 00	
Lawrence M. Murray	150 00 150 00	
DATES J. Hendergast	150 00	

22.20		
Half-time:	1,000,00	
11. H. Hyland (paid also \$10 for Post Graduate Courses)	1.000 00	
lan Macdonald	1,000 00	
E. J. Maltby	1,000 00	
Harris M. Gray, Clinical Microscopy	250 00	
Full-time:	200 00	
R. A. Cleghorn	3,000 00	
J. A. Dauphinee, also Senior Demonstrator, Clinical Microscopy	2.500 00	
H. E. Rykert (paid also \$92 for Post Graduate Courses)	2.500 00	
J. W. Graham	1,800 00	
Fellows (Sessional):		
C. W. J. Armstrong (paid also \$900 in Biology—resigned 31 August)	166 66	
D. C. Austen (vice C. W. J. Armstrong)	810 00	
F. C. Heal.	1.000 00	
R. C. Dickson (paid \$1.000 from Special Fund)		
Research Assistants:	1 000 00	
Miss M. I. Hanna	1.380 00	
N. W. Simmons Miss S. H. Clutton, Secretarial Assistant	1,200 00	
Miss B. M. Calvin, Assistant Secretary.	1,440 00 385 00	
Miss N. R. Hearn. Technician. Applied Physiology	1.320 00	
R. H. Wilson, Laboratory Attendant	500 00	
_		\$45,551 66
Paediatrics		V.5.001 00
Alan Brown, Professor—part time (paid also \$160 in School of Nursing)	\$350 00	
Associates:	\$000 00	
F. F. Tisdall, also Director of Paediatric Research Laboratories	2.000 00	
Part-time:		
A. W. Canfield	250 00	
E. A. Morgan	250 00	
G. R. Pirie	250 00	
Senior Demonstrators (Sessional):		
T. G. H. Drake	2.000 00	
Part-time:		
Gladys L. Boyd	500 00	
A. P. Hart.	200 00	
G. E. Smith	200 00	
Pearl Summerfeldt	500.00	
Pearl SummerfeldtPart-time:	500 00	
Part-time:		
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories)	300 00	
Part-time:	300 00 300 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling	300 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough.	300 00 300 00 200 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary).	300 00 300 00 200 00 200 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also	300 00 300 00 200 00 200 00 150 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary).  E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work).	300 00 300 00 200 00 200 00 150 00 	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time).	300 00 300 00 200 00 200 00 150 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary) E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time):	300 00 300 00 200 00 200 00 150 00  200 00 200 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00	
Part-time:  L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00	
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional—part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional—part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss R. M. Herbert.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 200 00	
Part-time:  L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00	\$9.150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional—part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional—part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss R. M. Herbert.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 200 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary) E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).	300 00 300 00 200 00 200 00 150 00  200 00 200 00 200 00 200 00 500 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary) E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 200 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss E. McNamara. Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery W. E. Gallie. Professor (paid also as Dean). Assistant Professors: W. W. Jones.	300 00 300 00 200 00 200 00 150 00  200 00 200 00 200 00 200 00 500 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss E. McNamara. Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery W. E. Gallie. Professor (paid also as Dean). Assistant Professors: W. W. Jones.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 500 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary) E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery W. E. Gallie. Professor (paid also as Dean) Assistant Professors: W. W. Jones. T. A. J. Duff (paid also \$25 for Post Graduate Courses) R. R. Graham.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 500 00 \$10.000 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery W. E. Gallie. Professor (paid also as Dean). Assistant Professors: W. W. Jones. T. A. J. Duff (paid also \$25 for Post Graduate Courses).	300 00 300 00 200 00 200 00 150 00  200 00 200 00 200 00 200 00 500 00 \$10.000 00	\$9,150 00
Part-time:  L. N. Silverthorne (paid also by Connaught Laboratories)  C. E. Snelling.  W. A. Hawke.  J. R. Ross.  W. W. Barraclough.  J. D. Griffin (without salary).  E. Chant Robertson, Research Fellow (Sessional—part time; paid also \$200 for Extension Work).  S. H. Jackson, Research Assistant (Sessional—part time).  Technicians (part time):  Miss M. E. Doyle.  Miss E. McNamara.  Miss R. M. Herbert.  Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery.  W. E. Gallie. Professor (paid also as Dean).  Assistant Professors:  W. W. Jones.  T. A. J. Duff (paid also \$25 for Post Graduate Courses).  R. R. Graham.  K. G. McKenzie (paid also \$15 for Post Graduate Courses).  R. Pearse.	300 00 300 00 200 00 200 00 150 00  200 00 200 00 200 00 200 00 500 00 \$10.000 00 300 00 300 00	\$9,150 00
Part-time:  L. N. Silverthorne (paid also by Connaught Laboratories)  C. E. Snelling.  W. A. Hawke.  J. R. Ross.  W. W. Barraclough.  J. D. Griffin (without salary).  E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work).  S. H. Jackson, Research Assistant (Sessional — part time).  Technicians (part time):  Miss M. E. Doyle.  Miss E. McNamara.  Miss R. M. Herbert.  Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery  W. E. Gallie. Professor (paid also as Dean).  Assistant Professors:  W. W. Jones.  T. A. J. Duff (paid also \$25 for Post Graduate Courses).  R. R. Graham.  K. G. McKenzie (paid also \$15 for Post Graduate Courses).  R. Pearse.  D. E. Robertson (paid also \$20 in School of Nursing; \$20 in Health	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 500 00 \$10,000 00 300 00 300 00 300 00 300 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery W. E. Gallie. Professor (paid also as Dean). Assistant Professors: W. W. Jones. T. A. J. Duff (paid also \$25 for Post Graduate Courses). R. R. Graham. K. G. McKenzie (paid also \$15 for Post Graduate Courses). R. Pearse. D. E. Robertson (paid also \$20 in School of Nursing; \$20 in Health Service, and \$25 for Post Graduate Courses).	300 00 300 00 200 00 200 00 150 00  200 00 200 00 200 00 200 00 500 00 \$10,000 00 300 00 300 00 300 00 300 00 300 00	\$9,150 00
Part-time:  L. N. Silverthorne (paid also by Connaught Laboratories)  C. E. Snelling.  W. A. Hawke.  J. R. Ross.  W. W. Barraclough.  J. D. Griffin (without salary).  E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work).  S. H. Jackson, Research Assistant (Sessional — part time).  Technicians (part time):  Miss M. E. Doyle.  Miss M. E. Doyle.  Miss R. M. Herbert.  Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery  W. E. Gallie. Professor (paid also as Dean).  Assistant Professors:  W. W. Jones.  T. A. J. Duff (paid also \$25 for Post Graduate Courses).  R. R. Graham.  K. G. McKenzie (paid also \$15 for Post Graduate Courses).  R. Pearse.  D. E. Robertson (paid also \$20 in School of Nursing; \$20 in Health Service, and \$25 for Post Graduate Courses).  N. S. Shenstone.	300 00 300 00 200 00 200 00 150 00 200 00 200 00 200 00 200 00 500 00 \$10.000 00 300 00 300 00 300 00 300 00 300 00 300 00	\$9,150 00
Part-time: L. N. Silverthorne (paid also by Connaught Laboratories) C. E. Snelling. W. A. Hawke. J. R. Ross. W. W. Barraclough. J. D. Griffin (without salary). E. Chant Robertson, Research Fellow (Sessional — part time; paid also \$200 for Extension Work). S. H. Jackson, Research Assistant (Sessional — part time). Technicians (part time): Miss M. E. Doyle. Miss E. McNamara. Miss R. M. Herbert. Miss M. L. Cassidy, Secretarial Assistant (part time).  Surgery and Clinical Surgery W. E. Gallie. Professor (paid also as Dean). Assistant Professors: W. W. Jones. T. A. J. Duff (paid also \$25 for Post Graduate Courses). R. R. Graham. K. G. McKenzie (paid also \$15 for Post Graduate Courses). R. Pearse. D. E. Robertson (paid also \$20 in School of Nursing; \$20 in Health Service, and \$25 for Post Graduate Courses).	300 00 300 00 200 00 200 00 150 00  200 00 200 00 200 00 200 00 500 00 \$10,000 00 300 00 300 00 300 00 300 00 300 00	\$9,150 00

Associates:		
R. E. Gaby	250 00	
R. I. Harris (paid also \$250 for Post Graduate Courses)	250 00	
A. B. LeMesurier (paid also \$25 for Post Graduate Courses)	250 00	
T. A. Robinson (paid also \$15 for Post Graduate Courses)	250 00	
J. W. Ross	250 00	
H. W. Wookey	250 00	
Senior Demonstrators (Sessional):		
G. S. Foulds	200 00	
C. W. Harris (paid also \$25 for Post Graduate Courses)	200 00	
R. M. Janes.	200 00	
J. C. McCelland	200 00	
R. J. A. McComb	200 00	
J. L. McDonald (paid also \$10 in School of Nursing; \$25 for Post	200.00	
Graduate Courses, and \$40 for Extension Work)	200 00 200 00	
C. B. Parker	200 00	
S. Reid	200 00	
	200 00	
Health Service)	200 00	
H. G. Armstrong (paid also \$25 for Post Graduate Courses)	150 00	
J. W. Brennan	150 00	
W. G. Carscadden (paid also \$25 for Post Graduate Courses)	150 00	
J. H. Couch	150 00	
C. Crompton	150 00	
J. T. Danis (paid also \$25 for Post Graduate Courses)	150 00	
A. W. Farmer (paid also \$10 in School of Nursing)	150 00	
F. I. Lewis (paid also \$70 for Post Graduate Courses and \$20 for		
Extension Work)	150 00	
J. A. McFarlane (paid also \$25 for Post Graduate Courses and \$200		
in Health Service)	150 00	
D. R. Mitchell	150 00	
D. W. G. Murray (paid also \$25 for Post Graduate Courses)	150 00	
D. W. Pratt (paid also \$25 for Post Graduate Courses)	150 00	
E. E. Shouldice	150 00	
R. M. Wansbrough (paid also \$10 in School of Nursing)	150 00	
C. H. Watson.	150 00	
A. W. M. White	150 00	
Fellows (part time):		
F. C. Kergin.	1,800 00	
R. C. Laird (paid also \$25 for Post Graduate Courses)	1,500 00	
E. H. Botterell (see also Physiology)	1,500 00	
W. K. Welsh	900 00	
W. S. Keith (paid also \$40 for Post Graduate Courses)	720 00 600 00	
S. D. Gordon (paid also \$70 for Post Graduate Courses)  Fellows (Resident — Sessional):	000 00	
W. D. Smith (paid also \$10 for Post Graduate Courses)	400 00	
B. W. Stevens	400 00	
S. A. Thomson (paid also \$25 for Post Graduate Courses)	400 00	
Assistant Fellows (Resident — Sessional):	100 00	
W. S. Anderson (resigned 1 May)	262 50	
F. L. Shipp (vice W. S. Anderson)	75 00	
Jessie Gray	300 00	
A. D. McLachlin	300 00	
J. R. F. Mills	300 00	
T. S. Perrett	300 00	
J. F. Roberts	300 00	
T. M. Steele	300 00	
F. H. Wigmore	300 00	
G. F. Pringle, Laboratory Technician	1,080 00	
Miss T. W. MacLaren, Secretary	1.440 00	001.077.50
_		\$31,277 50
Obstetrics and Gynaecology		
William A. Scott, Professor	\$5,000 00	
Assistant Professors:	90,000 00	
N. D. Frawley	300 00	
H. B. VanWyck (paid also \$115 in School of Nursing)	300 00	
R. W. Wesley	300 00	
J. A. Kinnear. Associate, Obstetrics	250 00	

Senior Demonstrators (Sessional):		
W. G. Cosbic	200 00	
W. W. Lailey	200 00	
D. M. Low	200 00	
S. J. N. Magwood (paid also \$100 in Health Service)	200 00	
Junior Demonstrators (Sessional):	150.00	
L. T. Armstrong	150 00	
W. A. Dafoe J. C. Goodwin	150 00 150 00	
H. W. Johnston.	150 00	
John Mann	150 00	
II. K. Manning.	150 00	
W. T. Noonan	150 00	
F. J. O'Leary	150 00	
G. L. Watt	150 00	
W. H. Murby (without salary)		
A. D. T. Purdy (without salary)		
Fellows:	7 700 00	
J. R. McArthur	1,500 00	
D. N. Henderson	1.000 00	
Miss M. Bonham, Laboratory Technician	1,100 00	
Miss H. Carson, Secretary	900 00	\$12,800 00
		ψ12,000 00
Ophthalmology		
W. H. Lowry, Professor	\$700 00	
Associates:		
F. A. Aylesworth	200 00	
C. E. Hill	200 00	
Mortimer Lyon.	200 00	
W. W. Wright	200 00	
A. E. MacDonald (part time)	1.200 00	
Assistants (Sessional): J. F. A. Johnston	000 00	
L. J. Sebert (without salary)	800 00	
Junior Demonstrators (Sessional):		
H. M. Macrae	200 00	
A. L. Morgan	200 00	
Miss Mary Gray. Secretarial Assistant, @ \$1.000, of which half charged	200 00	
to Oto-Laryngology	500 00	
-		\$4,400 00
Oto Larynuology		
Oto-Laryngology	6700 00	
Perry Goldsmith, Professor	\$700 00	
G. M. Biggs, Associate Professor	350 00 250 00	
Senior Demonstrators (Sessional):	230 00	
C. A. Rae	200 00	
D. E. S. Wishart	200 00	
A. H. Veitch (without salary)		
Junior Demonstrators (Sessional):		
H. W. D. McCart	150 00	
Gregor McGregor	150 00	
Angus M. McLeod	150 00	
C. E. Snell.	150 00	
W. B. Stark	150 00	
J. G. Strachan. J. A. Sullivan.	150 00	
P. E. Ireland (full time)	150 00 1,900 00	
H. II. Burnham, Senior Demonstrator (Sessional)	700 00	
Miss Mary Gray, Technician (see also Ophthalmology)	500 00	
		\$5,850 00
		***************************************
Therapeutics		
R. F. Farquharson, Assistant Professor (see also Department of		
Medicine)	\$1,000 00	
H. J. Shields, Associate in charge of Anaesthesia	250 00	
W. J. Gardiner, Associate in charge of Physical Therapy	250 00	
C. E. Cooper Cole, Senior Demonstrator, Therapeutics (Sessional)	200 00	

Junior Demonstrators, Anaesthesia (Sessional): W. Easson Brown	150 00	
S. M. Campbell.	150 00	
S. J. Evelyn	150 00	
K. E. Hollis.	150 00	
C. H. Robson	150 00	
Assistants, Anaesthesia (without salary):	100 00	
G. R. Balfour		
C. G. Bryan		
N. S. Clark		
R. Hargrave		
K. M. Heard		
A. R. Wilkins.		
Assistants, Therapeutics (Sessional):		
Irwin Hilliard	50 00	
A. M. Large	50 00	
N. B. McGillivray	50 00	
A. H. Squires, Research Fellow, 8 mos	800 00	
· /		\$3.400 00
Psychiatry		
C. B. Farrar, Professor (paid also \$15 for Post Graduate Courses and	ME 000 00	
\$100 in Health Service)	\$5.000 00	
E. P. Lewis, Assistant Professor	1,900 00	
Demonstrators (Sessional):		
G. W. Anderson	150 00	
Ruth M. Franks (paid also \$200 for Extension Work)	150 00	
Mary V. Jackson	150 00	
B. T. McGhie	150 00	
C. G. Stogdill	150 00	
C. H. McCulaig (without salary)		
S. G. Chalk, Junior Demonstrator (Sessional)	150 00	
Fellows (Sessional):		
K. G. Gray, Forensic Psychiatry (without salary)		
J. A. Hannah, Neuropathology (without salary)		
Miss A. F. Abbott. Secretarial Assistant (without salary)		0.000
		\$7.800 00
Medical Jurisprudence		
Lecturers (Sessional):	125 00	
K. G. Gray (see also Psychiatry)	125 00	
W. L. Robinson (see also Pathology and Bacteriology	125 00	#aro 00
D 1! . 1		\$250 00
Radiology	250 00	
G. E. Richards, Professor	250 00	
A. C. Singleton, Associate	250 00	
Senior Demonstrators (Sessional):		
Senior Demonstrators (Sessional): M. R. Hall	200 00	
Senior Demonstrators (Sessional): M. R. Hall	200 00 200 00	
Senior Demonstrators (Sessional): M. R. Hall	200 00 200 00 100 00	
Senior Demonstrators (Sessional): M. R. Hall	200 00 200 00	\$1.500.00
Senior Demonstrators (Sessional): M. R. Hall. A. H. Rolph. A. W. Blair. Junior Demonstrator (Sessional) J. Somers, Assistant (Sessional — part time)	200 00 200 00 100 00	\$1.500 00
Senior Demonstrators (Sessional): M. R. Hall	200 00 200 00 100 00	\$1.500 00
Senior Demonstrators (Sessional): M. R. Hall. A. H. Rolph. A. W. Blair. Junior Demonstrator (Sessional) J. Somers, Assistant (Sessional — part time)	200 00 200 00 100 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall.  A. H. Rolph.  A. W. Blair. Junior Demonstrator (Sessional).  J. Somers, Assistant (Sessional — part time).  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research).	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph  A. W. Blair. Junior Demonstrator (Sessional)  J. Somers, Assistant (Sessional — part time)  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research)  Special Lectures	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph  A. W. Blair. Junior Demonstrator (Sessional)  J. Somers, Assistant (Sessional — part time)  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research)  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph  A. W. Blair. Junior Demonstrator (Sessional)  J. Somers, Assistant (Sessional — part time)  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research)  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of Medicine and School of Nursing)	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph  A. W. Blair. Junior Demonstrator (Sessional)  J. Somers, Assistant (Sessional — part time)  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research)  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of Medicine and School of Nursing).  Special Lecturers (Sessional):  E. J. Pratt, English (paid also \$360 in Dentistry and \$30 in Ontario	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph  A. W. Blair. Junior Demonstrator (Sessional)  J. Somers, Assistant (Sessional—part time)  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research)  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of Medicine and School of Nursing)  Special Lecturers (Sessional):  E. J. Pratt, English (paid also \$360 in Dentistry and \$30 in Ontario College of Education).	200 00 200 00 100 00 500 00 \$700 00	\$1.500 00 
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph  A. W. Blair. Junior Demonstrator (Sessional)  J. Somers, Assistant (Sessional — part time)  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research)  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of Medicine and School of Nursing)  Special Lecturers (Sessional):  E. J. Pratt, English (paid also \$360 in Dentistry and \$30 in Ontario College of Education).  D. M. Tanner, Dentistry (see also Faculty of Dentistry)	200 00 200 00 100 00 500 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall	200 00 200 00 100 00 500 00 \$700 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall	200 00 200 00 100 00 500 00 \$700 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph.  A. W. Blair. Junior Demonstrator (Sessional).  J. Somers, Assistant (Sessional — part time).  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research).  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of Medicine and School of Nursing).  Special Lecturers (Sessional):  E. J. Pratt, English (paid also \$360 in Dentistry and \$30 in Ontario College of Education).  D. M. Tanner, Dentistry (see also Faculty of Dentistry).  Science and Civilization:  A. F. Coventry (paid in Biology).  H. Wasteneys (paid in Bio-Chemistry). without	200 00 200 00 100 00 500 00 \$700 00	\$1.500 00 
Senior Demonstrators (Sessional):  M. R. Hall	200 00 200 00 100 00 500 00 \$700 00	\$1.500 00
Senior Demonstrators (Sessional):  M. R. Hall  A. H. Rolph.  A. W. Blair. Junior Demonstrator (Sessional).  J. Somers, Assistant (Sessional — part time).  Research Professor  Sir Frederick Banting (paid \$5,000 in Special Research).  Special Lectures  Professor J. H. Elliott, History of Medicine (see also Department of Medicine and School of Nursing).  Special Lecturers (Sessional):  E. J. Pratt, English (paid also \$360 in Dentistry and \$30 in Ontario College of Education).  D. M. Tanner, Dentistry (see also Faculty of Dentistry).  Science and Civilization:  A. F. Coventry (paid in Biology).  H. Wasteneys (paid in Bio-Chemistry). without	200 00 200 00 100 00 500 00 \$700 00	
Senior Demonstrators (Sessional):  M. R. Hall	200 00 200 00 100 00 500 00 \$700 00	\$1.500 00  \$1,200 00

 Less charged to:
 849.906 10

 Rockefeller Fund.
 29.201 66

\$79,107 76

\$270,755 59

### 56a. Post Graduate Courses

Jod. 1 Oct Orapeath Control	
Cardio-vascular disease (\$398.25):	
llonoraria to Instructors:	
Duncan Graham	\$27 00
F. C. Hamilton	55 00
J. Hephurn	91 00
J. A. Oille	82 00
II. E. Rykert	82 00
Sundry expenses:	
Hart House, dinner to class	30 75
Toronto General Hospital, meals and supplies	30 50
Fractures (\$916.87):	
Honoraria to Instructors:	95.00
H. G. Armstrong	25 00 25 00
R. Chenoweth	10 00
J. T. Danis.	25 00
T. A. J. Duff	25 00
W. E. Gallie	50 00
S. D. Gordon	70 00
Chas. W. Harris	25 00
R. I. Harris	25 00
W. S. Keith	25 00
R. C. Laird	25 00 25 00
F. J. Lewis	70 00
J. L. McDonald.	25 00
J. A. MacFarlane	25 00
K. G. McKenzie	15 00
D. W. G. Murray	25 00
D. W. Pratt	25 00
D. E. Robertson	25 00
T. A. Robinson	15 00
W. D. Smith	10 00 25 00
R. H. Thomas Stuart A. Thomson.	25 00
G. E. Wilson	25 00
Sundry expenses:	_0 00
W. E. Gallie, gratuities to assistants	70 00
St. Michael's Hospital, meals and supplies	51 57
Hospital for Sick Children, meals and supplies	25 46
Toronto General Hospital, meals and supplies	78 44
Toronto Western Hospital, meals and supplies	26 40
Physical Therapy (\$371.40):	
Honoraria to Instructors:	
C. B. Farrar	15 00
A. A. Fletcher	10 00
W. J. Gardiner	240 00
G. W. Howland	10 00
H. H. Hyland	10 00
W. S. Keith	15 00
E. S. Ryerson.	10 00
H. E. Rykert	10 00 10 00
R. H. Thomas	10 00
Sundry expenses:	20.00
Hart House, dinner to class	30 00 11 40
Toronto General Hospital, mears and supplies	11 40

\$1,686 52

## 57. Anatomy

Anatomical material (\$2,831.89):		
Bates & Dodds	\$30 00	
E. E. Bolton.	390 00	
Brampton Funeral Service	36 75	
Canada Packers	14 08	
Connaught Laboratories.	88 75 13 30	
E. Cullen	12 80	
Eric Glaesner	128 00	
Gordon, MacKay Co	33 35	
C. Hunt	70 00	
Ingram & BellLever Bros	313 45	
Mallinckrodt Chemical Works	101 22 44 55	
F. W. Matthews Co.	930 39	
H. R. Ranks	30 00	
Riverdale Lumber Co	32 83	
Roadhouse & Ross	36 75	
S. Rogers	85 00	
W. M. Speers	30 00 11 46	
Prof. J. C. B. Grant, models.	75 50	
Superintendent's Dept., labour, \$142.78: material. \$180.93	323 71	
General equipment and incidentals (\$2,836.79):	020 11	
Aikenhead Hardware Ltd., hardware	65 24	
Allen Mfg. Co., laundry	141 78	
Art Metropole, drawing paper, etc	21 22	
Bausch & Lomb Optical Co., balopticon, etc	73 01	
Dr. Brock Brown, illustrations for book by Prof. Grant	105 00	
Carnegie Institution of Washington, film	39 23	
Walter A. Carveth, strops, etc	13 25 50 10	
Cine Laboratory Inc., films.	40 89	
Corbett-Cowley Ltd., laboratory coats	62 06	
Dennison Mfg. Co., labels, etc	12 80	
Gevaert Co., films, plates, etc	167 21	
Gordon MacKay & Co	27 80	
Grand & Toy, chairs, guides and cards	47 25	
J. F. Hartz Co., pencils, tubing, etc Imperial Oil Co., oil	11 35 15 85	
Ingram & Bell, chemicals, glassware, etc	114 98	
Journal of Bone & Joint Surgery, cuts for reprints	10 72	
H. E. LeMasurier, honorarium for work in connection with X-Rays		
of students	125 00	
H. K. Lewis & Co., text books	15 70	
Mallinckrodt Chemical Works, chemicals	36 37	
Mrs. J. Pattie, statistical calculating	23 41 44 57	
Postage	297 54	
J. Frank Raw Co., drawing paper	26 00	
Riverdale Lumber Co., lumber	34 70	
Robbins & Towsend, typewriter inspection	37 20	
Stephens Sales Ltd., ink	10 20	
Victor X-Ray Corporation, fluoroscopic screen, installing X-Ray	275 00	
control board, etc	275 09 40 63	
Wistar Institute of Anatomy & Biology, subscriptions University Press, printing and stationery	314 31	
Accounts under \$10 (28)	138 27	
Sundry disbursements by department:		
Hardware, \$27.86; medical supplies, \$38.06; telegrams, station-		
ery, etc., \$19.35; food supplies and sundries, \$33.76	119 03	
Superintendent's Dept., freight, \$19.57; labour, \$74.01; material,	250 00	
\$185.45	279 03	
_	\$5,668 68	
Less credits: X-Ray fees, \$251; sale of material, \$48.03; laboratory	<b>99,000 0</b> 0	
deposits, \$31.25	333 28	
		<b>\$5,335</b> 40

#### 58. PATHOLOGY AND BACTERIOLOGY

6 - 1:	
Supplies and apparatus (\$5,399.87):  John Allen, meat	79 45
American Medical Association, reprints	23 81
W. T. Avery, Ltd., overhauling scale	19 11
Bassani Processes Ltd., photography outfit	20 79
Bausch & Lomb Optical Co., balopticon and lamp	128 14 37 60
British Journal of Surgery, text books	10 78
Walter A. Carveth, projector lens, screens, etc	1,241 75
Central Scientific Co., comparator, slides, trays, etc	92 81
Diamond Cleanser & Soaps Ltd., soap	39 80
Eastman Photographic Stores, chemicals, paper, etc	253 71
T. Eaton Co., crocks, draw cords. etc	21 19
Extension Print. reprints	15 12 23 94
General Motors Sales Corporation, frigidaire service	66 48
J. F. Hartz Co., chemicals and glassware	321 69
Hind & Dausch Paper Co., paper	22 41
Hoffman & La Roche Ltd., chemicals	15 19
Ingram and Bell, chemicals, slides and glassware	770 86
Kilgours, Ltd., paper	11 85
Lea & Febiger, reprints Liquid Carbonic Canadian Corporation	67 72 12 00
Donald McLean, towelling	22 43
Medical Research Dept., animals	127 45
David Meller, meat	23 84
Mimeograph Co., stencil paper	12 28
Munson Supply Co., speed keys	11 00 66 00
Postage	00 00
machine. \$27.50; typewriter inspection. etc. \$74	221 50
Stephens Sales Ltd., manuals and class notes	332 35
Toronto General Hospital, laundry	218 11
University Press, printing and stationery	439 01
Accounts under \$10 (25)	112 80
Sundry disbursements by department: Stationery, etc., \$31.52; hardware, \$35.33; food supplies, \$15.14;	
sundries. \$33.01	115 00
Superintendent's Dept., freight, \$7.81; labour, \$209.20; material.	
\$184.89	401 90
Museum supplies (\$1.733.05):	
British Xylonite Co., bexoid	47 04
Grand & Toy, index strips	14 00 168 65
Ingram & Bell, chemicals and glassware	150 66
Queen City Glass Co., plates	219 00
Accounts under \$10 (4)	17 32
Superintendent's Dept., labour, \$816.15; material. \$300.23	1,116 38
Clerical assistance:	225 00
Mrs. M. Walkden, 3 mos	225 00
Neuropathology:	
Supplies and apparatus (\$1.001.75):  Allen Mfg. Co., laundry	57 82
Art Metropole	25 50
Central Scientific Co., microtone	253 24
Corbett-Cowley Ltd., laboratory coats	31 33
Dictaphone Sales Corporation, electrical shaver, \$106.19; type-	110 60
writer inspection, \$12.50	118 69 149 78
Ingram & Bell, chemicals, etc	58 83
Liquid Carbonic Corporation, gas	72 00
Office Specialty Mfg. Co., cabinet	54 00
Postage	21 00
Robbins & Townsend, typewriter inspection	13 20 20 00
University Press, printing and stationery	55 19
Accounts under \$10 (6)	24 62

Superintendent's Dept., freight, .04c; labour. \$8.70; material.	46 77	
\$37.81	46 55	
=	20 250 67	
I	\$8.359 67	
Less credits: Laboratory deposits, \$284.24; sale of material,	201.00	
\$97.74	381 98	\$7,977 69
59. Pathological Chemistry		31,911 09
Supplies and apparatus:		
Allen Mfg. Co., laundry	\$105 01	
American Type Culture Collection, cultures	14 81	
British Drug Houses, chemicals	294 12	
Canadian Laboratory Supplies, glassware	121 05	
Central Scientific Co., chemicals and glassware, etc	656 06	
R. H. Chappell, glassblowing	63 00	
Dewey & Almy Chemical Co., soda	40 80	
Dominion Glass Co., glassware	69 52	
T. Eaton Co., cheesecloth	30 75	
A. Gallenkamp, thermometers and glassware	93 66	
General Motors Sales Corporation, frigidaire service	19 19	
Grand & Toy, desk and chairs	78 40	
Lowe-Martin Co., file	22 25	
Medical Research Dept., animals	35 50	
Office Specialty Mfg. Co., cabinets	19 50	
Photographic Service, slides	16 60	
Robbins & Townsend, typewriter inspection	10 60	
Roneo Co., stencil paper, ink. etc	12 58 88 30	
University Press, printing and stationery	77 92	
Accounts under \$10 (16)	11 92	
Stationery and postage, \$29.14; food supplies, \$19.45; sundries,		
\$26.41	75 00	
Superintendent's Dept., freight. \$2.29: labour, \$106.28; material.	.0 00	
\$154.26	262 83	
_		
	\$2,207 45	
Less credits: Laboratory deposits, \$62.85; sale of instruction sheets,		
etc., \$69.66	132 51	
	132 51	\$2.074 94
etc., \$69.66.	132 51	\$2.074 94
etc., \$69.66	132 51	\$2.074 94
etc., \$69.66		\$2.074 94
etc., \$69.66	\$52 72 30 00	\$2.074 94
etc., \$69.66	\$52 72	\$2.074 91
etc., \$69.66	\$52 72 30 00	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals.	\$52 72 30 00 60 00 303 70 26 72	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc.	\$52 72 30 00 60 00 303 70 26 72 250 14	\$2.074 94
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83	\$2.074 94
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation. bakelite. B. F. Breux. frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters. Grand & Toy, desk and chair.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters. Grand & Toy, desk and chair. Harvard Apparatus Co., clamps and clips.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters. Grand & Toy, desk and chair. Harvard Apparatus Co., clamps and clips. F. W. Humphrey Co., fish.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters. Grand & Toy, desk and chair. Harvard Apparatus Co., clamps and clips. F. W. Humphrey Co., fish. Ingram & Bell, chemicals, instruments, etc.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology  Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters. Grand & Toy, desk and chair. Harvard Apparatus Co., clamps and clips F. W. Humphrey Co., fish. Ingram & Bell, chemicals, instruments, etc. Kelvinator of Canada, cooling tank rebuilt.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50	\$2.074 91
60. Pharmacy and Pharmacology Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs.  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60	\$2.074 91
etc., \$69.66.  60. Pharmacy and Pharmacology Supplies (\$1,923.06): Aikenhead Hardware Ltd., hardware. Bakelite Corporation, bakelite. B. F. Breux, frogs. Allan Brock, animals. Canadian Kodak Co., chemicals. Canadian Laboratory Supplies, chemicals, glassware, etc. T. Eaton Co., chair, etc. Electric Specialty Co., motors. Kenneth A. Evelyn, filters. Grand & Toy, desk and chair. Harvard Apparatus Co., clamps and clips. F. W. Humphrey Co., fish. Ingram & Bell, chemicals, instruments, etc. Kelvinator of Canada, cooling tank rebuilt. John McGillian, carrots. National Drug & Chemical Co., chemicals, etc.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50	\$2.074 91
60. Pharmacy and Pharmacology Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs.  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs.  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware  Bakelite Corporation, bakelite.  B. F. Breux, frogs.  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.  Richards Glass Co., glassware.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75 10 80	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs.  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.  Richards Glass Co., glassware.  Riseborough & Jackson, feed.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75 10 80 12 20	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.  Richards Glass Co., glassware.  Riseborough & Jackson, feed.  Rubicon & Co., filter.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75 10 80 12 20 15 45	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.  Richards Glass Co., glassware.  Riseborough & Jackson, feed.  Rubicon & Co., filter.  Scientific Glass Apparatus Co., thermometer.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75 10 80 12 20 15 45 11 34	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware  Bakelite Corporation, bakelite.  B. F. Breux, frogs.  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.  Richards Glass Co., glassware.  Riseborough & Jackson, feed.  Rubicon & Co., filter.  Scientific Glass Apparatus Co., thermometer.  Taber Laundry Works.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75 10 80 12 20 15 45 11 34 15 66	\$2.074 91
60. Pharmacy and Pharmacology  Supplies (\$1,923.06):  Aikenhead Hardware Ltd., hardware.  Bakelite Corporation, bakelite.  B. F. Breux, frogs  Allan Brock, animals.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, chemicals, glassware, etc.  T. Eaton Co., chair, etc.  Electric Specialty Co., motors.  Kenneth A. Evelyn, filters.  Grand & Toy, desk and chair.  Harvard Apparatus Co., clamps and clips.  F. W. Humphrey Co., fish.  Ingram & Bell, chemicals, instruments, etc.  Kelvinator of Canada, cooling tank rebuilt.  John McGillian, carrots.  National Drug & Chemical Co., chemicals, etc.  Ontario Rubber Co., tubing.  Photographic Service, slides and prints.  Queen City Dental Mfg. Co., oxygen.  Renold-Coventry Ltd., wire.  Ralston Purina Co., feed.  Richards Glass Co., glassware.  Riseborough & Jackson, feed.  Rubicon & Co., filter.  Scientific Glass Apparatus Co., thermometer.	\$52 72 30 00 60 00 303 70 26 72 250 14 18 83 25 80 30 00 57 50 11 10 32 00 34 84 45 50 12 60 169 11 40 82 13 55 45 00 10 43 61 75 10 80 12 20 15 45 11 34	\$2.074 91

Waverlay Prace reprints	27 2	7
Waverley Press, reprints		
Wilson Scientific Co., glassware	15 4	
University Press, printing and stationery	67 0	
Accounts under \$10 (8)	39 68	3
Sundry disbursements by department:		_
Food supplies, \$11.34; hardware, \$4.07; sundries, \$6.59	22 0	)
Superintendent's Dept., freight, \$18.25; labour, \$129.75; material.		
\$138.86	286 8	6
Apparatus (\$374.27):		
Bausch & Lomb Optical Co., petrographic microscope	274 0	3
B. H. R. Smith, electric pulse recorder	100 1	9
		- \$2.297 33
61. Bio-Chemistry (including Zymology)		
Supplies and apparatus:	1	
Acme-Farmers' Dairy	\$79 2	
Aikenhead Hardware Ltd., hardware	95 7	9
Allen Mfg. Co., laundry	36.5	4
Annual Review of Bio-Chemistry, reprints	27 5	3
J. Blood, meat, vegetables, etc	141 7	0
Bordon Co., milk powder	60 0	
British Drug Houses, chemicals	158 4	
Canada Packers Ltd., meat	276 7	
Canadian General Electric Co., wire and units	14 7	
Canadian Industries Ltd., chemicals	47 9	
Canadian Kodak Co., ether	32 7	
Canadian Laboratory Supplies, chemicals, glassware, etc	930 8	
Canadian Liquid Air Co., gas and rental of cylinders	86 7	
Canadian Shredded Wheat Co., feed	20 6	
Central Scientific Co., pump, glassware, etc	328 2	2
R. H. Chappell, glassblowing	209 1	5
Corbett-Cowley Ltd., laboratory coats	64 2	4
Corning Glass Works, burettes	20 2	
T. Eaton Co., batting, etc	25 5	6
J. F. Hartz Co., needles, catgut, etc	42 0	
Johnson, Matthey & Co., forceps, crucibles, etc	12 4	
	19 7	
Journal of Biological Chemistry, subscription and reprints		
Kennedy Mfg. Co., chemicals	95 7	
Mead, Johnson & Co., cod liver oil and yeast	38 4	
Merck & Co., chemicals	261 5	
National Electric Tool Co., speed reducer	10 1	
Nichols Chemical Co., acids	24 5	8
Photographic Service, blue-prints and slides	16 6	5
Quinte Milk Products, casein	33 6	6
Rubicon & Co., micro-colorimeter and filters	336 8	0
Dr. 1. A. Schoeller, chemical analyses	58 5	1
L. Sloan, motor transportation	17 2	5
Stephens Sales Ltd., ink and stencils	15 3	
Toronto Elevator Co., feed	82 5	
Wholesale Radio Co., radio parts	42 9	
University Press, printing and stationery	110 0	
Accounts under \$10 (21)	100 7	
	100 /	
Sundry disbursements by department:		
Animals, \$85; collecting expenses, \$54.70; food supplies. \$16.01;	200 5	
postage, \$25; telegrams, etc., \$8.35; sundries, \$19.52	208 5	8
Superintendent's Dept., freight, \$56.91; labour, \$158.89; material,		
\$529.06	744 8	b
-		_
	\$1.929 6	3
Less credits: Laboratory deposits, \$281.90; sale of material, \$48.77;	4 2	
material returned. \$8	338 6	
		\$4,591 01
material returned. \$8		
material returned, \$8		
material returned, \$8	338 6	\$4,591 01
material returned, \$8	338 6 	\$4,591 01
material returned, \$8	\$162 76 41 60	\$4,591 01 6
material returned, \$8	\$162 77 41 60 48 3	\$4.591 01 65 7
material returned, \$8	\$162 77 41 60 48 3 22 8	\$4,591 01
material returned, \$8	\$162 77 41 64 48 3 22 8 15 18	\$4,591 01
material returned, \$8	\$162 77 41 60 48 3 22 8	\$4,591 01

Canadian Fairbank-Morse Co., hardware	206 44 26 72 34 12	
Central Scientific Co., chemicals, glassware. etc	349 49 200 73	
E. Cullen, animals  Eastman Photographic Stores, acids and paper	102 50 20 38	
T. Eaton Co., gauze, laboratory coats, towelling, etc	322 27 23 62	
J. F. Hartz Co., needles, etc	22 05	
Ingram & Bell, chemicals, instruments, catgut, etc Frank Jennings, sawdust	285 99 12 00	
Johnson, Matthey & Co., chemicals, etc	34 70 120 06	
Langley, Harris Co., dog biscuits	218 37 76 53	
New Standard Foundry, castings	22 69 25 65	
Paquin Camera Exchange, bellows. Photographic Service, slides.	10 00 15 95	
Postage	35 00	
Powerlite Device Ltd., speed indicator, etc	10 05 18 35	
Robbins & Townsend, typewriter inspection	10 80 16 00	
Toronto Elevators Ltd feed	15 11 24 00	
H. F. Whittaker, slides	14 00 25 46	
W. Lloyd Wood Ltd., serum, etc	14 66 141 87	
Accounts under \$10 (29)	145 02	
Sundry disbursements by department:  Laundry, \$298.61; postage, telegrams, etc., \$25.65; hardware, \$25.42; food supplies, \$18.29; sundries, \$22.03  Superintendent's Dept., freight, \$85.08; labour, \$36.60; material.	390 00	
Superintendent's Dept., Treight, \$65.06; labour, \$50.00; material.		
\$288.26	409 94	
\$288.26	\$3,819 66	
\$288.26		\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.	\$3,819 66	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27):  Art Metropole, micrometers, etc.	\$3,819 66 225 78 \$62 87	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27):  Art Metropole, micrometers, etc.  Canadian Office and School Furniture Ltd., stools.  Walter A. Carveth, microscope stages, repairs and clips.	\$3,819 66 225 78 225 78 \$62 87 56 00 154 00	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27):  Art Metropole, micrometers, etc	\$3,819 66 225 78 225 78 \$62 87 56 00	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc  Canadian Office and School Furniture Ltd., stools  Walter A. Carveth, microscope stages, repairs and clips  Central Scientific Co., scissors, forceps, etc  Connaught Laboratories, vaccine, glassware and maintenance of animals.	\$3,819 66 225 78 225 78 \$62 87 56 00 154 00	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc  Canadian Office and School Furniture Ltd., stools  Walter A. Carveth, microscope stages, repairs and clips.  Central Scientific Co., scissors, forceps, etc  Connaught Laboratories, vaccine, glassware and maintenance of animals.  General Biological Supply House, slides and specimens  Grand & Toy, shelves	\$3,819 66 225 78  \$62 87 56 00 154 00 64 23  1,192 87 28 65 39 00	\$3,593 88
Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc Canadian Office and School Furniture Ltd., stools. Walter A. Carveth, microscope stages, repairs and clips Central Scientific Co., scissors, forceps, etc Connaught Laboratories, vaccine, glassware and maintenance of animals General Biological Supply House, slides and specimens. Grand & Toy, shelves. Gray Coach Lines, hire of coaches to Connaught Laboratories Farms J. F. Hartz Co., cover glasses.	\$3,819 66  225 78  \$62 87  56 00  154 00  64 23  1,192 87  28 65  39 00  120 00  18 00	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27):  Art Metropole, micrometers, etc.  Canadian Office and School Furniture Ltd., stools.  Walter A. Carveth, microscope stages, repairs and clips.  Central Scientific Co., scissors, forceps, etc  Connaught Laboratories, vaccine, glassware and maintenance of animals.  General Biological Supply House, slides and specimens.  Grand & Toy, shelves.  Gray Coach Lines, hire of coaches to Connaught Laboratories Farms J. F. Hartz Co., cover glasses.  Lockhart's Camera Exchange, film packs.  Mimeograph Co., ink, paper and stencils.	\$3,819 66  225 78  \$62 87  56 00 154 00 64 23  1,192 87 28 65 39 00 120 00 18 00 11 70 81 37	\$3,593 88
Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc Canadian Office and School Furniture Ltd., stools. Walter A. Carveth, microscope stages, repairs and clips Central Scientific Co., scissors, forceps, etc Connaught Laboratories, vaccine, glassware and maintenance of animals. General Biological Supply House, slides and specimens Grand & Toy, shelves Gray Coach Lines, hire of coaches to Connaught Laboratories Farms J. F. Hartz Co., cover glasses Lockhart's Camera Exchange, film packs Mimeograph Co., ink, paper and stencils. Office Specialty Mfg. Co., filing cabinet Ontario Laundry Co	\$3,819 66  225 78  \$62 87  56 00  154 00  64 23  1,192 87  28 65  39 00  120 00  18 00  11 70  81 37  45 95  27 25	\$3,593 88
\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc Canadian Office and School Furniture Ltd., stools. Walter A. Carveth, microscope stages, repairs and clips Central Scientific Co., scissors, forceps, etc Connaught Laboratories, vaccine, glassware and maintenance of animals.  General Biological Supply House, slides and specimens. Grand & Toy, shelves. Gray Coach Lines, hire of coaches to Connaught Laboratories Farms J. F. Hartz Co., cover glasses.  Lockhart's Camera Exchange, film packs. Mimeograph Co., ink, paper and stencils. Office Specialty Mfg. Co., filing cabinet. Ontario Laundry Co Postage Harry H. Sparks, field-work reports.	\$3,819 66  225 78  \$62 87  56 00 154 00 64 23  1,192 87 28 65 39 00 120 00 18 00 11 70 81 37 45 95 27 25 16 00 74 01	\$3,593 88
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\$288.26  Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc Canadian Office and School Furniture Ltd., stools. Walter A. Carveth, microscope stages, repairs and clips Central Scientific Co., scissors, forceps, etc Connaught Laboratories, vaccine, glassware and maintenance of animals.  General Biological Supply House, slides and specimens. Grand & Toy, shelves. Gray Coach Lines, hire of coaches to Connaught Laboratories Farms J. F. Hartz Co., cover glasses.  Lockhart's Camera Exchange, film packs. Mimeograph Co., ink, paper and stencils. Office Specialty Mfg. Co., filing cabinet. Ontario Laundry Co Postage Harry H. Sparks, field-work reports.	\$3,819 66  225 78  \$62 87  56 00 154 00 64 23  1,192 87 28 65 39 00 120 00 18 00 11 70 81 37 45 95 27 25 16 00 74 01 156 80	\$3,593 88
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Less credits: Charged to School of Nursing, \$200; laboratory deposits. \$23.70; material returned, \$2.08.  63. Hygiene and Preventive Medicine  Supplies and apparatus (\$2,923.27): Art Metropole, micrometers, etc Canadian Office and School Furniture Ltd., stools. Walter A. Carveth, microscope stages, repairs and clips Central Scientific Co., scissors, forceps, etc Connaught Laboratories, vaccine, glassware and maintenance of animals. General Biological Supply House, slides and specimens. Grand & Toy, shelves. Gray Coach Lines, hire of coaches to Connaught Laboratories Farms J. F. Hartz Co., cover glasses. Lockhart's Camera Exchange, film packs. Mimeograph Co., ink, paper and stencils. Office Specialty Mfg. Co., filing cabinet. Ontario Laundry Co. Postage Harry H. Sparks, field-work reports. Wilson Scientific Co., incubator University Press, printing and stationery. Accounts under \$10 (8). Sundry disbursements by department.	\$3,819 66  225 78  \$62 87  56 00 154 00 64 23  1,192 87 28 65 39 00 120 00 18 00 11 70 81 37 45 95 27 25 16 00 74 01 156 80 579 32 24 68 10 00	\$3,593 88
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## 64. MEDICINE

Supplies and chemicals (\$2,203.39):   Academy of Medicine, reprints
Academy of Medicine, reprints.
Acme-Farmers' Dairy, milk
Allen Mfg. Co., laundry.  Beckett & Corroy, laboratory coats.  20 20 89 R. F. Breux, frogs.  R. F. Breux, frogs.  Canadian Debuses, casein and chemicals.  Canadian Medical Association, reprints.  Canadian Medical Association, reprints.  Canadian Public Health Association, reprints.  T. Eaton Co., chair pads, uniforms, and food supplies.  Hoffman-La Roche Ltd., chemicals.  68 80 Ingram & Bell, chemicals, cotton, etc.  147 96  Journal of Biological Chemistry, reprints.  31 06  Medical Research Dept., animals and maintenance.  224 100  C. V. Mosby Co., reprints.  31 06  Medical Research Dept., animals and maintenance.  224 100  C. V. Mosby Co., reprints.  31 06  W. Lloyd Wood Ltd., serum.  22 79  Postage.  W. Lloyd Wood Ltd., serum.  31 50  University Press, printing and stationery.  32 12  Accounts under \$10 (11).  48 25  Sundry disbursements by department:  Food supplies, \$8.46; stationery, etc., \$11.35; sundries, \$10.19.  Superintendent's Dept., freight, \$16.28; labour. \$10; material. \$87.68  Apparatus (\$867.604):  Baker Platinum Ltd., crucibles.  Canadian Laboratory Supplies, glassware, etc.  22 32  Eastman Photographic Stores, kodadelector, kodachrome, etc.  37 22  Harvard Apparatus Co., clamps and boards  Ingram & Bell, slides, instruments, etc.  23 22  Harvard Apparatus Co., clamps and boards  Ingram & Bell, slides, instruments, etc.  24 37  Nett Mfg. Co., colorimeter and plunges  Office Specialty Co., cabinet  C. F. Palmer Ltd., paper.  15 375  Office Specialty Co., cabinet  C. F. Palmer Ltd., paper.  15 22  Robbins & Townsend, typewriter inspection  10 20  Wilson Scientific Co., glassware, etc.  17 68  Accounts under \$10 (7).  Superintendent's Dept., labour, \$56.61; material, \$28.09.  84 70  Books and periodicals (\$699.72):  Canadian Medical Association, reprints.  29 00  J. B. Lippincott Co., book  McAinsh & Co., book and subscription.  38 25  Thos, Nelson & Sons, renewal papers.  15 17  Photographic Service, slides and prints.  27 95  University Press, printing and stationery.  56 85  Accounts under \$10
Beckett & Corroy, laboratory coats   20 39
R, F. Breux, frogs.       20 00         British Drug Houses, casein and chemicals       38 92         Canadian Laboratory Supplies, chemicals and filter paper       95 28         Canadian Medical Association, reprints       15 14         T. Eaton Co., chair pads, uniforms, and food supplies       24 54         Hoffman-La Roche Ltd., chemicals       68 80         Ingram & Bell, chemicals, cotton, etc.       147 96         Journal of Biological Chemistry, reprints       11 27         Journal of Medicine, reprint       31 06         Medical Research Dept., animals and maintenance       241 00         C. V. Mosby Co., reprints.       22 79         Nichols Chemical Co., acids       22 79         Postage       40 12         W. Lloyd Wood Ltd., serum       31 50         University Press, printing and stationery       135 21         Accounts under \$10 (11)       48 25         Sundry disbursements by department:       Food supplies, \$8.46; stationery, etc., \$11.35; sundries, \$10.19       30 00         Superintendent's Dept., freight, \$16.28; labour, \$10; material, \$87.68       113 96         Apparatus (\$676.04):       8       17 46         Canadian Laboratory Supplies, glassware, etc.       27 32         Central Scientific Co., cups, glassware, etc.       27 32
British Drug Houses, casein and chemicals   33 92
Canadian Laboratory Supplies, chemicals and filter paper.         95 28           Canadian Medical Association, reprints.         25 00           Canadian Public Health Association, reprints.         15 14           T. Eaton Co., chair pads, uniforms, and food supplies.         24 54           Hoffman-La Roche Ltd., chemicals.         68 80           Ingram & Bell, chemicals, cotton, etc.         147 96           Journal of Biological Chemistry, reprints.         21 27           Journal of Medicine, reprints.         31 06           Medical Research Dept., animals and maintenance.         241 00           C. V. Mosby Co., reprints.         29 43           Nichols Chemical Co., acids.         22 79           Postage         40 12           W. Lloyd Wood Ltd., scrum.         31 50           University Press, printing and stationery.         135 21           Accounts under \$10 (11)         48 25           Sundry disbursements by department:         Food supplies, \$8.46; stationery, etc., \$11.35; sundries, \$10.19         30 00           Superintendent's Dept., freight, \$16.28; labour, \$10; material, \$87.68         113 96           Apparatus (\$67.6.04):         17 46           Canadian Laboratory Supplies, glassware, filter paper, etc.         153 72           Central Scientific Co., cups, glassware, etc.         27 32
Canadian Medical Association, reprints.         25 00           Canadian Public Health Association, reprints.         15 14           T. Eaton Co., chair pads, uniforms, and food supplies         24 54           Hoffman-La Roche Ltd., chemicals         68 80           Ingram & Bell, chemicals, cotton, etc.         147 96           Journal of Biological Chemistry, reprints         11 27           Journal of Medicine, reprints         31 06           Medical Research Dept., animals and maintenance         241 00           C. V. Mosby Co., reprints         29 43           Nichols Chemical Co., acids         22 79           Postage         40 12           W. Lloyd Wood Ltd., serum         31 50           University Press, printing and stationery         135 21           Accounts under \$10 (11)         48 25           Sundry disbursements by department:         Food supplies, \$8.46; stationery, etc., \$11.35; sundries, \$10.19         30 00           Superintendent's Dept., freight, \$16.28; labour, \$10; material, \$87.68         113 96           Apparatus (\$67.604):         8         11 46           Canadian Laboratory Supplies, glassware, etc.         27 32           Central Scientific Co., cups, glassware, etc.         27 32           Eastman Photographic Stores, kodaffector, kodachrome, etc.         37 22
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T. Eaton Co., chair pads, uniforms, and food supplies
Hoffman-La Roche   Ltd., chemicals.   147 96
Ingram & Bell. chemicals, cotton, etc.
Journal of Biological Chemistry, reprints
Journal of Medicine, reprints
Journal of Medicine, reprints
Medical Research Dept., animals and maintenance.
C. V. Mosby Co. reprints.       29 43         Nichols Chemical Co., acids       22 79         Postage       40 12         W. Lloyd Wood Ltd., serum.       31 50         University Press, printing and stationery       135 21         Accounts under \$10 (11)       48 25         Sundry disbursements by department:       48 25         Food supplies, \$8.46; stationery, etc., \$11.35; sundries, \$10.19       30 00         Superintendent's Dept., freight, \$16.28: labour, \$10; material, \$87.68       113 96         Apparatus (\$676.04):       17 46         Canadian Laboratory Supplies, glassware, filter paper, etc.       153 72         Central Scientific Co., cups, glassware, etc.       27 32         Eastman Photographic Stores, kodaflector, kodachrome, etc.       37 22         Harvard Apparatus Co., clamps and boards       11 38         Ingram & Bell, slides, instruments, etc.       72 37         Klett Mfg, Co., colorimeter and plunges       153 75         Office Specialty Co., cabinet       40         C. F. Palmer Ltd., paper       15 22         Robbins & Townsend, typewriter inspection       10 20         Wilson Scientific Co., glassware, etc.       17 68         Accounts under \$10 (7)       31 02         Superintendent's Deot, labour, \$56.61; material, \$28.09
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Apparatus (\$676,04);   Baker Platinum Ltd., crucibles.   17 46     Canadian Laboratory Supplies, glassware, filter paper, etc.   153 72     Central Scientific Co., cups. glassware, etc.   27 32     Eastman Photographic Stores, kodaflector, kodachrome, etc.   37 22     Harvard Apparatus Co., clamps and boards   11 38     Ingram & Bell, slides, instruments, etc.   72 37     Klett Mfg. Co., colorimeter and plunges   153 75     Office Specialty Co., cabinet   44 00     C. F. Palmer Ltd., paper   15 22     Robbins & Townsend, typewriter inspection   10 20     Wilson Scientific Co., glassware, etc.   17 68     Accounts under \$10 (7)   31 02     Superintendent's Dent., labour, \$56.61; material, \$28.09   84 70     Books and periodicals (\$699.72):   29 00     J. B. Lippincott Co., book   16 00     McAinsh & Co., book and subscription   38 25     Thos, Nelson & Sons, renewal papers   15 17     Photographic Service, slides and prints   27 95     University Press, printing and stationery   565 85     Accounts under \$10 (3)   7 50
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Central Scientific Co., cups. glassware, etc.         27 32           Eastman Photographic Stores, kodaflector, kodachrome, etc.         37 22           Harvard Apparatus Co., clamps and boards         11 38           Ingram & Bell, slides, instruments, etc.         72 37           Klett Mfg. Co., colorimeter and plunges         153 75           Office Specialty Co., cabinet         44 00           C. F. Palmer Ltd., paper         15 22           Robbins & Townsend, typewriter inspection         10 20           Wilson Scientific Co., glassware, etc.         17 68           Accounts under \$10 (7)         31 02           Superintendent's Dent., labour, \$56.61; material, \$28.09         84 70           Books and periodicals (\$699.72):         29 00           Canadian Medical Association, reprints         29 00           J. B. Lippincott Co., book         16 00           McAinsh & Co., book and subscription         38 25           Thos, Nelson & Sons, renewal papers         15 17           Photographic Service, slides and prints         27 95           University Press, printing and stationery         565 85           Accounts under \$10 (3)         7 50
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Photographic Service, slides and prints. 27 95 University Press, printing and stationery. 565 85 Accounts under \$10 (3)
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University Press, printing and stationery.         565 85           Accounts under \$10 (3)
Accounts under \$10 (3)
The comment of the contract of
Laboratory cleaning:
Miss E. Bailey, 52 weeks
Miss E. Daney, 32 weeks.
(Charged to Eaton Endowment) \$2,997 80
(Charged to Laten Endowment)
7* D
65. Paediatrics
Supplies and chemicals (\$999.14):
Association International, reprints
Bausch & Lomb Optical Co., hemoglobinometer repairs
Bordon & Co., powdered cream
British Drug Houses, chemicals
Canadian Laboratory Supplies, chemicals, filter paper, etc
Contained State of Company of the Co
Canadian Medical Association, reprints
Canadian Medical Association, reprints
Canadian Medical Association, reprints
Canadian Medical Association, reprints.24 50Ditto of Canada Ltd., carbon, etc18 37Mead, Johnson & Co., yeast powder.31 85C. V. Mosby Co., reprints.22 91
Canadian Medical Association, reprints.       24 50         Ditto of Canada Ltd., carbon, etc.       18 37         Mead, Johnson & Co., yeast powder.       31 85         C. V. Mosby Co., reprints.       22 91         Postage       80 28
Canadian Medical Association, reprints.       24 50         Ditto of Canada Ltd., carbon, etc.       18 37         Mead, Johnson & Co., yeast powder.       31 85         C. V. Mosby Co., reprints.       22 91         Postage       80 28         Ouinte Milk Products, casein.       80 45
Canadian Medical Association, reprints.       24 50         Ditto of Canada Ltd., carbon, etc.       18 37         Mead, Johnson & Co., yeast powder.       31 85         C. V. Mosby Co., reprints.       22 91         Postage       80 28         Quinte Milk Products, casein.       80 45         Society for Experimental Biology and Medicine, reprints.       12 11
Canadian Medical Association, reprints.       24 50         Ditto of Canada Ltd., carbon, etc.       18 37         Mead, Johnson & Co., yeast powder.       31 85         C. V. Mosby Co., reprints.       22 91         Postage.       80 28         Quinte Milk Products, casein.       80 45         Society for Experimental Biology and Medicine, reprints.       12 11         Wistar Institute of Anatomy and Biology, reprints.       11 91
Canadian Medical Association, reprints.       24 50         Ditto of Canada Ltd., carbon, etc.       18 37         Mead, Johnson & Co., yeast powder.       31 85         C. V. Mosby Co., reprints.       22 91         Postage       80 28         Quinte Milk Products, casein.       80 45         Society for Experimental Biology and Medicine, reprints.       12 11

Sundry disbursements by department:		
Stationery, postage, etc., \$7.39; food supplies, \$6.42; sundries,	20.00	
\$6.19	20 00 134 00	
Canadian Laboratory Supplies, glassware. etc	119 94	
Central Scientific Co., glassware and crucibles	37 15	
Superintendent's Dept., labour, \$200.57; material, \$140.36	340 93	
_	\$1.497 16	
Less credit for sale of reprints	5 22	
(Charged to Eaton Endowment)	\$1.491 94	
66. Surgery		
Supplies and apparatus (\$1.381.93):	\$22 02	
Allen Mfg. Co., laundry	14 90	
Beckett & Conroy, laboratory coats	10 44	
Burke Electric & X-Ray Co., remodelling apparatus	22 00	
Connaught Laboratories, reprints	14 73	
Corbett-Cowley Ltd., laboratory coats	49 10 13 61	
T. Eaton Co., chemicals, films, etc	42 57	
Robert D. Falconer, making instruments	199 50	
Grand & Toy, stationery	20 05	
Home Cinema Supplies Co., lighting unit	12 85	
Hospital for Sick Children, surgical supplies	25 00 20 00	
J. B. Lippincott Co., reprints	18 51	
Lockhart's Camera Exchange	158 92	
Medical Research Dept., animals	135 50	
Mimeograph Co., paper	11 53	
C. V. Mosby Co., subscription	10 73 50 16	
St. Michael's Hospital, surgical supplies	73 20	
Stephens Sales Ltd., stencils and paper	32 24	
Surgical Publishing Co. of Chicago, subscription	12 16	
Williams Gold Refining Co., latex	10 58	
Dr. R. C. McKenzie, expenses in connection with bringing		
patient from Chatham	37 70	
Myers-Elliott, ambulance service	12 00	
Dr. G. E. Richards and Dr. A. C. Singleton, X-ray slides and	24 20	
prints	34 20 10 00	
Toronto General Hospital, instruments and expenses in connec-	10 00	
tion with patient	207 90	
University Press, printing and stationery	10 05	
Accounts under \$10 (9)	46 06	
Stationery, telegrams, etc., \$20.27; sundries, \$14.73	35 00	
Superintendent's Dept., labour, \$3.30; material, \$5.42	8 72	
Museum of Applied Anatomy (\$244.79):		
T. Eaton Co., films, bulbs, etc	125 10	
Lockhaft's Camera Exchange, Inters, plates, etc	119 69	\$1.626 72
67. Obstetrics and Gynaecology		V11020 12
Supplies and apparatus:	017	
Corbett-Cowley Ltd., laboratory coats	\$17 72	
Ingram & Bell, slide boxes, etc	19 53 19 80	
University Press, stationery and supplies	12 91	
Accounts under \$10 (7)	31 00	
68. Ophthalmology		\$100 96
Supplies and apparatus:		
Pathology Dept steel shelving	\$7 00	
Photographic Service. prints, etc	37 30 6 50	
		\$50 80

69. Oto-Laryngology			
Supplies and apparatus:	\$12	15	
McAinsh & Co., text books	21	88	
Accounts under \$10 (2)	10 40		601 65
70. Therapeutics			\$84 65
Supplies and apparatus: Avearst, McKenna & Harrison, drugs and chemicals	\$88	65	
British Drug Houses, drugs	17 11		
Office Specialty Mfg. Co., coat hanger	13	20	
Seemor Selmor System Ltd., show case	30 28		
Accounts under \$10 (2) Sundry disbursements by department	2 10		
_		_	\$201 08
71. Psychiatry Supplies and apparatus:			
University Press, stationery	• • • • • • •		\$5 67
72. Medical Jurisprudence (Nothing spent)			
73. Radiology			
Supplies and apparatus: Seeman Laboratory, one half of cost of spectrograph (balance paid			
by Physics)	\$402 343		
Toronto General Hospital, X-ray supplies, etc	253	82	\$999 40
74. Art Service			\$377 TO
(a) Salaries: Miss M. T. Wishart, Director	\$2,500	00	
Miss D. Foster, Assistant Artist	1.350	00	
Part time assistance (\$94.50): Miss E. Blackstock, 121 hours	81	95	
Sundry persons (2)	13		
Supplies (\$218.27): Art Metropole, brush	38		
Bark & Mortimer, insurance on exhibit at Royal York Hotel University Press, stationery	10 14		
Accounts under \$10 (7)	30	42	
Laundry, \$10.01; stationery and art supplies, \$26.65;	10	00	
sundries, \$12.34	49		
\$70.03	75		
Less sundry credits	\$4,162 24		
75. General Expenses			\$4,138 17
Sundry expenses of the Dean:			
Luncheons, teas and dinners in connection with visiting lecturers, etc.	\$183	80	
Office supplies, stationery, printing, etc. \$2,823.96): Association of American Medical Colleges, aptitude tests	145	24	
"Globe and Mail," subscription	12 41		
Office Specialty Mfg. Co., cabinet, stool and file	97	70	
Photographic Service, prints, slides and lantern service Postage	85 426		
Geo. G. Renneker Co., reprints	41 33		
Simmons & Sons, funeral wreaths	20	00	
Underwood-Elliott-Fisher Ltd., copy holder and typewriter stand, etc.	68	25	

Window Shades & Fittings, shades	45 36	
University Press, printing and stationery	1,291 51	
Accounts under \$10 (18)	63 28	
Carefare and postage, \$9.42; telegrams, etc., \$14.75; sundries,	25.00	
\$10.83	35 00	
\$21.04	46 93	
Clerical assistance: Miss D. Waugh, 8 weeks, 4 days (paid also \$95 from Medical		
Research)	216 65	
Mrs. T. P. Lloyd	3 50	
H. McClary, messenger service, 2 weeks	20 00	
Denisteel Corporation.	130 68	
Publications, Calendar, Dean's Report, Medical Bulletin, Lister Lecture (\$670.51):		
Postage	102 54	
University Press, printing and stationery	567 97	
Maintenance and equipment of Lecture Theatre (\$97.40): Art Metropole, balopticon	43 74	
Bausch & Lomb Optical Co	1 47	
Office Specialty Mfg. Co., lockers	13 90	
Superintendent's Dept., labour, \$16.07; material, \$22.22	38 29	
Birks, Ellis, Ryrie Ltd engraving	6 93	
John Pinches, medals	36 59	
Association of American Colleges:  Membership fees	150 00	
Alterations to Secretary's Office:		
Superintendent's Dept., labour, \$224.60; material, \$275.40	500 00	\$4,469 19
76. Medical Building		91,100 17
Heat and light	\$4,434 40	
Gas, water and occasional fuel (\$1,517.79):	\$4,454 4U	
Gas, \$629.28; water, \$826.72	1,456 00	
Gas, \$629.28; water, \$826.72 Central Coal Co	29 25	
Gas, \$629.28; water, \$826.72 Central Coal Co Conger Lehigh Coal Co		
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies:	29 25 32 04 50	
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material.	29 25 32 04	
Gas, \$629.28; water, \$826.72.  Central Coal Co  Conger Lehigh Coal Co  Superintendent's Dept., labour.  Caretaker's supplies:  Superintendent's Dept., material.  Cleaning (\$1,997.70):  Advance Window Cleaning Co	29 25 32 04 50	
Gas, \$629.28; water, \$826.72.  Central Coal Co  Conger Lehigh Coal Co  Superintendent's Dept., labour.  Caretaker's supplies:  Superintendent's Dept., material.  Cleaning (\$1,997.70):  Advance Window Cleaning Co  Allen Mfg. Co., laundry.	29 25 32 04 50 126 44 \$49 00 21 12	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour	29 25 32 04 50 126 44 \$49 00	
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling.	29 25 32 04 50 126 44 \$49 00 21 12	
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer.	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer Routery Bros., plaster repairs. Accounts under \$10 (5).	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1.818.87; material, \$817.35.	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer Routery Bros., plaster repairs. Accounts under \$10 (5).	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5) Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co. sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5) Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5) Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00	
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co. sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5) Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co. sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5) Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)  Less heat and light charged to Central Power Plant 4.434 40 Credit for cleaning 34 00	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00 \$12,315 67 4,468 40	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co Allen Mfg. Co., laundry. Superintendent's Dept., labour Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3).  Less heat and light charged to Central Power Plant 4.434 40 Credit for cleaning 77. Banting Institute  Heat, Dept. of Public Works, Province of Ontario Gas, \$974.54; electric current, \$4.324.28; water, \$591.53.	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co. sprayer Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3).  Less heat and light charged to Central Power Plant. 4.434 40 Credit for cleaning. 34 00  77. Banting Institute  Heat, Dept. of Public Works, Province of Ontario. Gas, \$974.54; electric current, \$4,324.28; water, \$591.53. Caretaker's supplies (\$569.54):	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00 \$12,315 67 4,468 40 \$6.000 00 5,890 35	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co Conger Lehigh Coal Co Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3).  Less heat and light charged to Central Power Plant. 4.434 40 Credit for cleaning. 34 00  77. Banting Institute  Heat, Dept. of Public Works, Province of Ontario. Gas, \$974.54; electric current, \$4.324.28; water, \$591.53 Caretaker's supplies (\$569.54): Electrolux Ltd., machine and parts.	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00 \$12,315 67 4,468 40 \$6.000 00 5,890 35	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3).  Less heat and light charged to Central Power Plant.  4.434 40 Credit for cleaning.  77. Banting Institute  Heat, Dept. of Public Works, Province of Ontario. Gas, \$974.54; electric current, \$4.324.28; water, \$591.53. Caretaker's supplies (\$569.54): Electrolux Ltd., machine and parts. Superintendent's Dept., material. Cleaning (\$5,427.40):	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00 \$12,315 67 4.468 40 \$6.000 00 5.890 35 78 17 491 37	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1,997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer Routery Bros., plaster repairs. Accounts under \$10 (5) Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3)  Less heat and light charged to Central Power Plant. Credit for cleaning.  77. Banting Institute  Heat, Dept. of Public Works, Province of Ontario. Gas, \$974.54; electric current, \$4.324.28; water, \$591.53 Caretaker's supplies (\$569.54): Electrolux Ltd., machine and parts Superintendent's Dept., material. Cleaning (\$5,427.40): Advance Window Cleaning Co.	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00 \$12,315 67 4,468 40 \$6.000 00 5,890 35 78 17 491 37 63 70	\$7,847 27
Gas, \$629.28; water, \$826.72. Central Coal Co. Conger Lehigh Coal Co. Superintendent's Dept., labour. Caretaker's supplies: Superintendent's Dept., material. Cleaning (\$1.997.70): Advance Window Cleaning Co. Allen Mfg. Co., laundry. Superintendent's Dept., labour. Repairs and renewals (\$2,839.34): Italian Mosaic & Tile Co., tiling. Kennedy Mfg. Co., sprayer. Routery Bros., plaster repairs. Accounts under \$10 (5). Superintendent's Dept., labour, \$1,818.87; material, \$817.35. Caretaker, F. P. Mottram, 12 mos. (and overtime \$3).  Less heat and light charged to Central Power Plant.  4.434 40 Credit for cleaning.  77. Banting Institute  Heat, Dept. of Public Works, Province of Ontario. Gas, \$974.54; electric current, \$4.324.28; water, \$591.53. Caretaker's supplies (\$569.54): Electrolux Ltd., machine and parts. Superintendent's Dept., material. Cleaning (\$5,427.40):	29 25 32 04 50 126 44 \$49 00 21 12 1.927 58 21 08 127 47 28 00 26 57 2.636 22 1,400 00 \$12,315 67 4.468 40 \$6.000 00 5.890 35 78 17 491 37	\$7,847 27

Repairs and renewals (\$3,135,38):  City Treasurer, elevator license.  Compressed Air Equipment Ltd., rental.  Robt. Simpson Co., curtain.  Accounts under \$10 (2).  Superintendent's Dept., labour, \$2.031,20; material, \$1,043,17.  Caretaker, H. L. Vickery, 12 mos.  Less credit for cleaning, etc	15 20 15 10 3.074 1,500 \$22,522 88	62 20 19 37 00 —
78. Anatomical Building		
Heat and light	\$2.373	5.4
Gas, \$20.48; water, \$37.14.	57	62
Superintendent's Dept., material	258	67
Advance Window Cleaning Co	34	
Allen Mfg. Co., laundry	21 1.819	
Wm. Bartlett & Son, shades	13	
City Treasurer, elevator license	10 ( 15 (	
Roofers' Supply Co., blackboards	10	
Superintendent's Dept., labour. \$356.34; material. \$128.43	484	
Caretaker, M. J. Shepherd, 12 mos, (paid also \$10 in Surgery Dept.)	1.400	JU 
Less heat and light charged to Central Power Plant \$2.373 54 Credit for cleaning	\$6,500	70
Credit for creating	2,378	
-		- \$4,122 16
79. Hygiene Building		
	\$14.288 ¢	13
Heat and light Gas. \$1.299.23; water. \$2.614.46	\$14,288 a	
Heat and light		69
Heat and light. Gas. \$1,299.23; water, \$2.614.46.  Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$7,790.69):	3.913 ( 766 )	69 84
Heat and light. Gas. \$1,299.23; water, \$2.614.46.  Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$7.790.69): Advance Window Cleaning Co Allen Mfg. Co., laundry.	3.913 6 766 8 63 72 4	69 84 70 48
Heat and light. Gas. \$1,299.23; water, \$2.614.46.  Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$7.790.69): Advance Window Cleaning Co	3,913 ( 766 )	69 84 70 48
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$7.790.69): Advance Window Cleaning Co Allen Mfg. Co., laundry. Superintendent's Dept., labour.  Bepairs and renewals (\$2.311.18):	3.913 ( 766 8 63 7 72 7,654 9	69 84 70 48 51
Heat and light Gas. \$1,299.23; water, \$2.614.46.  Caretaker's supplies:     Superintendent's Dept., material.  Cleaning (\$7.790.69):     Advance Window Cleaning Co.     Allen Mfg. Co., laundry.     Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):     Wm. Barlett & Son, shades repaired.	3.913 6 766 8 63 72 4	69 84 70 48 51
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co.,    Allen Mfg. Co., laundry,    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer, elevator license.    Italian Mosaic & Tile Co., tiling.	3,913 6 766 8 63 72 6 7,654 8	69 84 70 48 51 50 00 03
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co.,    Allen Mfg. Co., laundry,    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer, elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.	3,913 6 766 8 63 72 7,654 8 11 3 20 6 14 4 3	69 84 70 48 51 50 00 03 28
Heat and light Gas. \$1,299.23; water, \$2.614.46.  Caretaker's supplies:     Superintendent's Dept., material.  Cleaning (\$7.790.69):     Advance Window Cleaning Co.     Allen Mfg. Co., laundry.     Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):     Wm. Barlett & Son, shades repaired.     City Treasurer, elevator license.     Italian Mosaic & Tile Co., tiling.     Johnson Temperature Regulating Co., repairs to heating system.     Routery Bros., plaster repairs.	3,913 6 766 8 63 72 6 7,654 8	69 84 70 48 51 50 00 03 28 55
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co.,    Allen Mfg. Co., laundry,    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer, elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.	3,913 ( 766 8 63 72 7,654 8 11 8 20 ( 14 4 9 8	69  34  70  48  51  50  00  03  28  55  82
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co    Allen Mfg. Co., laundry.    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer. elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.    Routery Bros., plaster repairs.    Superintendent's Dept., labour, \$1,716.01; material, \$468.81.  Caretaker, James Irwin, 12 mos. (and overtime \$1).	3,913 ( 766 8 63 72 7,654 8 11 8 20 ( 1 0 44 2 49 9 2,184 8	69 84 70 48 51 50 00 03 28 82 00
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co    Allen Mfg. Co., laundry    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer, elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.    Routery Bros., plaster repairs.    Superintendent's Dept., labour, \$1,716.01; material, \$468.81.  Caretaker, James Irwin, 12 mos. (and overtime \$1).  Less heat and light charged to Central Power Plant \$14.288 43    Credits for cleaning, and for share of gas, water	3,913 ( 766 8 63 72 7 7,654 3 11 3 20 ( 1 0 44 3 49 3 2,184 8 1,400 (	69 84 70 48 51 50 00 03 28 82 00
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co    Allen Mfg. Co., laundry.    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer. elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.    Routery Bros., plaster repairs.    Superintendent's Dept., labour, \$1,716.01; material, \$468.81.  Caretaker, James Irwin, 12 mos. (and overtime \$1).	3,913 ( 766 8 63 72 7 7,654 3 11 3 20 ( 1 0 44 3 49 3 2,184 8 1,400 (	69  84  70  48  51  50  90  93  28  55  82  90   33
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co    Allen Mfg. Co., laundry    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer, elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.    Routery Bros., plaster repairs.    Superintendent's Dept., labour, \$1,716.01; material, \$468.81.  Caretaker, James Irwin, 12 mos. (and overtime \$1).  Less heat and light charged to Central Power Plant \$14.288 43    Credits for cleaning, and for share of gas, water	3,913 ( 766 8 63 72 7 7,654 8 11 8 20 ( 1 0 44 9 2.184 8 1.400 ( \$30,470 8	69  84  70  48  51  50  00  03  28  55  82  00  33
Heat and light. Gas. \$1.299.23; water, \$2.614.46.  Caretaker's supplies:    Superintendent's Dept., material.  Cleaning (\$7.790.69):    Advance Window Cleaning Co    Allen Mfg. Co., laundry    Superintendent's Dept., labour.  Repairs and renewals (\$2.311.18):    Wm. Barlett & Son, shades repaired.    City Treasurer, elevator license.    Italian Mosaic & Tile Co., tiling.    Johnson Temperature Regulating Co., repairs to heating system.    Routery Bros., plaster repairs.    Superintendent's Dept., labour, \$1,716.01; material, \$468.81.  Caretaker, James Irwin, 12 mos. (and overtime \$1).  Less heat and light charged to Central Power Plant \$14.288 43    Credits for cleaning, and for share of gas, water	3,913 ( 766 8 63 72 7 7,654 8 11 8 20 ( 1 6 44 8 49 8 1,400 ( \$30,470 8	69  84  70  48  51  50  00  03  28  55  82  00   33   \$10,055  70   \$357,826  47

# VIII. SCHOOL OF HYGIENE

## 80. Salaries

	OU. SALARIES		
(1)	Administration:		
	J. G. FitzGerald, Director, @ \$5,000 (on leave of absence without		
	salary to 30 September; paid also by Connaught Laboratories)	\$3,750 00	
	J. Craigie, Secretary (paid also \$500 as Assistant Professor — see	***************************************	
		500.00	
	below, and by Connaught Laboratories)	500 00	
	Keith M. Kerns, Office Assistant (part time - paid also by Con-		
	naught Laboratories)	350 00	
(2)	Epidemiology and Biometrics:		
(2)	R. D. Defries, Associate Director, School of Hygiene, and Professor		
	of Hygiene and Epidemiology (see also Department of Hygiene —		
	paid also by Connaught Laboratories)	2,500 00	
	paid also by Connaught Laboratories)		
	(paid also by Connaught Laboratories)	1.000 00	
	(partialso by Connarght Laboratories)	1,000 00	
	J. Craigie, Assistant Professor, Epidemiology (see Administration		
	above)	500 00	
	Lecturers (Sessional):		
	Miss Mary A. Ross, Biometrics	2,400 00	
		2,400 00	
	A. E. Berry, Public Health Engineering (see also Civil Engineer-		
	ing: Municipal and Structural)	500 00	
	Special Lecturers (Sessional):		
	F. Adams	21 45	
	D. V. Currey	20 00	
		20 00	
	Clinical Associates, Epidemiology (Sessional — part time):		
	J. T. Phair (paid also \$40 in School of Nursing)	300 00	
	A. L. McKay	250 00	
	A. H. Sellers, Demonstrator, Biometrics (Sessional - paid also by	200 00	
		250 00	
	Connaught Laboratories)	350 00	
	Laboratory Assistants, Biometrics:		
	S. Raven	890 00	
	W. Moore	700 00	
	M:- C D M-Cll		
	Miss S. R. McCausland	384 00	
	Robert Randall, Secretary	1,100 00	
(3)	Physiological Hygiene:		
	C. H. Best, Acting Head of Department (without salary - see also		
	Department of Physiology and Special Research)		
	Assistant Professors (paid also by Connaught Laboratories):		
	D. S. McLean	2.900 00	
	E. W. McHenry (part time)	1.100 00	
	J. G. Cunningham, Lecturer, Industrial Hygiene (Sessional)	1,000 00	
		1,000 00	
	Research Associates:		
	H. M. Barrett, Industrial Hygiene	2,700 00	
	Mrs. Ruth C. Partridge, @ \$2,100, of which \$1,100 charged to		
	Medical Research — Best Fund	1.000 00	
	J. H. Johnston, Research Assistant, Industrial Hygiene		
		500 00	
	Miss E. L. Mahon, Secretary, 11 mos	1,100 00	
	C. R. Cowan, Senior Technical Assistant, @ \$2,000, of which \$500		
	charged to Medical Research — Best Fund	1,500 00	
	Technical Assistants:	1,000 00	
		050.00	
	W. Staples	950 00	
	C. L. Skelding (resigned 31 March)	547 50	
	Kenneth Roseblade (vice C. L. Skelding — paid also \$30.41		
	from Medical Research — Best Fund)	182 50	
(4)	Chamistay in Polation to Harisman	104 30	
(4)	Chemistry in Relation to Hygiene:		
	P. J. Moloney, Associate Professor (paid also by Connaught		
	Laboratories)	2,800 00	
	Miss E. M. Taylor, Demonstrator (Sessional - paid also by Con-	_,	
	naught Laboratories)	E00 00	
	D. M. D. C. J. Cl. A. J. C. J.	500 00	
	Dr. M. Doreen Smith, Class Assistant (Sessional - part time; paid		
	also by Connaught Laboratories)	200 00	
	Technical Assistants:		
	George Kimm	920 00	
	D I Mana	830 00	
	R. L. Moore	540 00	
	_		\$33,865 45
	81. Maintenance of Department		
(1)	Administration (\$528.17):		
` - /	Mimeograph Co. paper pade ink ata	011 40	
	Mimeograph Co., paper, pads, ink. etc	\$11 46	
	Postage	40 98	
	Telephone service	339 16	

University Press, printing and stationery	118 58	
Accounts under \$10 (3)	17 99	
(2) Epidemiology and Biometrics (\$284.40):		
Canadian Public Health Association, reprints	20 09	
Mimeograph Co., stencils, paper, etc	79 66	
Postage	33 00	
University Press, printing and stationery	114 85	
Accounts under \$10 (3)	17 05	
Sundry disbursements by department	19 75	
(3) Physiological Hygiene (\$407.47):		
Connaught Laboratories, maintenance of animals, laboratory coats,		
filter paper. etc	362 81	
Hoffman-La Roche Ltd., chemicals	17 94	
Matthews. McCutcheon & Co., kodachrome	10 25	
New York Academy of Medicine, photostats	5 88	
Superintendent's Dept., material	10 59	
(4) Chemistry in Relation to Hygiene (\$270.30):		
British Drug Houses, chemicals	23 17	
Canadian Laboratory Supplies, chemicals and glassware	155 41	
E. Hookway Glass Works, glassware	41 50	
Wilson Scientific Co., chemicals and glassware	25 16	
Accounts under \$10 (4)	14 46	
Sundry disbursements by department	10 00	
Superintendent's Dept., freight	60	
	\$1,490 34	
Less paid by School of Nursing	400 00	
		\$1.090 34
(Channel to Book follow Ford Horizona)	-	621.055.70
(Charged to Rockefeller Fund. Hygiene)		\$34,933 19

### IX. FACULTY OF APPLIED SCIENCE

## 82. Salaries

C H M. I II D	06.000.00	
C. H. Mitchell, Dean	\$6.000 00	66,000,00
-		\$6,000 00
Electrical Engineering		
H. W. Price, Professor.	\$5,500 00	
A. R. Zimmer, Associate Professor (paid also \$10 for Extension Work)	4.200 00	
Assistant Professors:		
V. G. Smith	3,500 00	
B. deF. Bayly	3.000 00	
Lecturers (Sessional):		
R. J. Brown	2.100 00	
J. E. Reid	1.600 00	
L. S. Lanchland, Instructor (Sessional)	1.400 00	
Demonstrators (Sessional):		
E. A. Ricker	1.125 00	
C. J. Bridgland	1.100 00	
S. H. Galloway	1.025 00	
A. U. Houle	1.025 00	
W. B. Morrison	1.025 00	
R. C. Anthes	1,000 00	
G. L. Hood	1.000 00	
L. G. Macdougall	1.000 00	
C. H. Salvadge, 2 mos	100 00	
J. W. Lawson, Mechanician	2.000 00	
W. R. McKee, Electrician	2.000 00	
W. L. Bakewell, Assistant Electrician.	1.100 00	
Miss H. L. Redmond, Office Assistant and Librarian. (4 \$1.000, of which	500.00	
half charged to Civil Engineering: Municipal and Structural	500 00	625 200 00
_		\$35,300 00

Mechnical Engineering		
Professors:		
R. W. Angus	\$6.000 00	
E. A. Allcut (paid also \$200 for Extension Work)	4.500 00 3,600 00	
W. G. McIntosh. Assistant Professor.	3,400 00	
Lecturers (Sessional):		
G. R. Lord	2,500 00	
T. C. Graham (resigned 31 December)	975 00	
G. H. Hally.	1.900 00 1.900 00	
Demonstrators, Thermodynamics (Sessional):	11,500 00	
R. J. Birss (paid also \$330 in Special Research)	1,100 00	
C. E. Beynon	1,000 00	
A. S. Foreman	1,000 00	
Demonstrators, Hydraulics (Sessional):	1,000,00	
J. W. Fry Wm. D. Smith	1.000 00 857 15	
Demonstrators. Machine Design (Easter Term):	2007 10	
J. B. Treloar	660 00	
W. E. B. Parker	580 00	
W. A. Higgins (from 19 January)	435 00	
F. Hickey, Engineer and Machinist	2,000 00	
Arthur Savage, Assistant Machinist, 1,574 hours @ 70c.  Earl Burt, Fireman, 1,540 hours @ 50c.	1,108 80 770 00	
W. Odd. Laboratory Attendant (resigned 30 June)	1,200 00	
Miss M. Burt, Office Assistant and Librarian	1,150 00	
		\$37,635 95
Civil Engineering: Municipal and Structural		
Professors:		
C. R. Young, Civil Engineering	\$5.500 00	
T. R. Loudon, Applied Mechanics	5.000 00	
Assistant Professors: C. F. Morrison	2.600 00	
W. L. Sagar	2,600 00	
M. J. C. Lazier, Lecturer, Applied Mechanics (Sessional)	2,400 00	
Special Lecturers (Sessional — part time):		
A. E. Berry (paid also \$500 in School of Hygiene)	1,000 00	
J. N. Goodier  Demonstrators (Sessional):	800 00	
C. E. Helwig, Civil Engineering (paid also \$300 in Special Research)	1.250 00	
I. M. Hamer, Applied Mechanics	800 00	
W. Kubbinga, Mechanician	1.100 00	
J. Brown, Laboratory Assistant	1,100 00	
Engineering)	500 00	
		\$24,650 00
Civil Engineering: Surveying and Geodesy		
Givit Engineering. Surveying and Geodesy		
W. M. Treadgold. Professor (paid also \$562.50 for Summer Camp)	\$4.500 00	
Associate Professors: S. R. Crerar (paid also \$500 for Summer Camp)	4.000 00	
E. W. Banting (paid also \$475 for Summer Camp)	3.800 00	
J. W. Melson (paid also \$450 for Summer Camp)	3,600 00	
T. L. Rowe, Instructor (Sessional — paid also \$125 for Summer Camp)	1,450 00	
S. A. J. Hopper, Demonstrator (Sessional)	375 00	
Physics (paid also \$120 in Special Research)	425 00	
Miss R. Cave, Office Assistant and Librarian, @ \$1.225, of which \$500		
charged to Applied Physics and \$100 to Photographic Service	625 00	@10.77F 00
		\$18,775 00
Mining Engineering		
H. E. T. Haultain. Professor	\$6.000 00	
Associate Professors: F. C. Dyer	4.100 00	
J. T. King.	4,100 00	
S. E. Wolfe, Lecturer, Assaying (Sessional)	2,000 00	

T. Fraction   1,100 00	Demonstrators (Socienal)		
W. A. M. Hewer.   1,100 00   W. H. H. Junker.   1,100 00   W. T. Turrall (paid also \$011.10 as Nipissing Research Fellow and \$65 from Medical Research—Banting Fund.   1,100 00   E. Tozer, Laboratory Assistant and Mechanician.   1,500 00   C. Waybrant, Laboratory Attendant, Assaying.   1,230 00   H. J. Reilly, Assistant Mechanician (Sessional—part time)   960 00   Laboratory Helpers of \$14.28 per week:   400 00   C. Rickard, 28 weeks.   400 00   C. Rickard, 28 weeks.   400 00   Miss J. Bradshaw, Office Assistant and Librarian.   1,100 00   Metallurgical Engineering   5,700 00   Associate Professors.   3,700 00   Associate Professor.   3,700 00   J. E. Toomer, Assistant Professor.   3,600 00   J. E. Toomer, Assistant Professor.   3,450 00   Hector Ross, Laboratory Attendant (Sessional—paid also \$40 for messenger service)   0,000   Miss A. Hay, \$25, of which 3 5ths charged to Secretary's Office)   10 00   Miss A. Hay, \$25, of which 3 5ths charged to Secretary's Office)   157 30   Miss A. Hay, \$25, of which 3 5ths charged to Secretary's Office   157 30   M. C. Boswell, Organic Chemistry   4,900 00   E. G. R. Ardagh, Applied Chemistry   4,900 00   M. C. Boswell, Organic Chemistry   4,000 00   M. C. Boswell, Organic Chemistry   4,000 00   M. C. Boswell, Applied Chemistry   4,000 00   M. C. Boswell, Organic Chemistry   4,000 00   M. C. Bos	Demonstrators (Sessional): T. A. Frankish	1.100 00	
W. T. Turrall (paid also \$611.10 as Nipissing Research Fellow and \$65 from Medical Research— Banting Fund   1.100 00			
Section   1.100 00		1.100 00	
E. Tozer, Laboratory Assistant and Mechanician		1 100 00	
C. Waybrant. Laboratory Attendant, Assaying			
II. J. Reilly, Assistant Mechanician (Sessional — part time)			
D. Edwards 28 weeks		960 00	
C. Rickard, 28 weeks	Laboratory Helpers @ \$14.28 per week:	400.00	
Miss J. Bradshaw. Office Assistant and Librarian   1,100 00			
Associate Professors			
C. A. Guess, Professor:   \$5,700 00			\$26,210 00
Associate Professors:   J. A. Newcombe (paid also \$340 for Extension Work)   3.700 00		\$5,700,00	
R. J. Montgomery. Ceramics   3,600 00     J. E. Toomer, Assistant Professor   3,450 00     Hector Ross, Laboratory Attendant (Sessional — paid also \$40 for messenger service)   10 00     Miss A. Hay, \$25, of which 3/5ths charged to Secretary's Office)   10 00     Miss A. Hay, \$25, of which 3/5ths charged to Secretary's Office)   10 00     Miss V. N. Righer, from 27 September @ \$61 per month, of which 3 5ths charged to Secretary's Office   157 30     Chemical Engineering and Applied Chemistry   157 30     Chemical Engineering and Applied Chemistry   157 30     M. C. Boswell, Organic Chemistry   157 30     A. S. Smith, Chemical Engineering   157 30     R. R. McLaughlin, Applied Chemistry   157 30     A. M. Fitzgerald   157 30     A. M. Fitzgerald   157 30     J. G. Breckenridge   157 30     H. Boeschenstein, Technical German (without salary)   157 30     Demonstrators (Sessional)   157 30     W. H. Rapson (paid also \$220 in Special Research   157 30     W. H. Rapson (paid also \$450 in Special Research   157 30     D. F. Fraser (resigned 31 October)   150 00     M. Adelman   157 30   157 30     M. A. S. Weatherburn (paid also \$575 in Special Research   150 00     M. A. S. Weatherburn (paid also \$75 in Special Research   150 00     M. A. S. Weatherburn (paid also \$75 in Special Research   150 00     M. A. S. Weatherburn (paid also \$75 in Special Research   150 00     M. L. Hammond Lecture Assistant   150 00     M. Patterson, 28 weeks   149,		95,100 00	
J. E. Toomer, Assistant Professor.   3.450 00			
Hector Ross, Laboratory Attendant (Sessional — paid also \$40 for messenger service)			
Seenger service		3.450 00	
Office Assistant and Librarian:         Miss A. Hay, \$25, of which 3/5ths charged to Secretary's Office)         10 00           Miss V. N. Rigler. from 27 September 60 \$61 per month, of which 3/5ths charged to Secretary's Office         157 30           Chemical Engineering and Applied Chemistry           Professors:         4,900 00           M. C. Boswell, Organic Chemistry         4,900 00           E. A. Ardagh, Applied Chemistry         4,900 00           Assistant Professors:         3,300 00           E. A. Smith. Chemical Engineering         3,000 00           Instructors (Sessional):         1,600 00           A. M. Fitzgerald         1,600 00           G. P. Beal (paid also \$325 in Special Research)         1,300 00           J. G. Breckenridge         1,300 00           H. Boeschenstein, Technical German (without salary)         1,200 00           W. C. Macdonald (paid also \$220 in Special Research)         1,200 00           W. H. Rapson (paid also \$450 in Special Research)         1,50 00           N. R. Fasken (paid also \$50 in Special Research)         1,50 00           D. F. Fraser (resigned 31 October)         1,50 00           A. S. Hunt, Lecture Assistant and Glass-blower         1,000 00           A. S. Hunt, Lecture Assistant (Glass-blower)         1,000 00           F. Westhead, La		700 00	
Miss V. N. Rigler, from 27 September & \$61 per month, of which 3.5 ths charged to Secretary's Office.   157 30	Office Assistant and Librarian:		
Sths charged to Secretary's Office.   157 30	Miss A. Hay, \$25, of which 3/5ths charged to Secretary's Office)	10 00	
Professors:   J. Watson Bain, Chemical Engineering and Applied Chemistry	Miss V. N. Rigler, from 27 September " \$61 per month, of which 3 5ths charged to Secretary's Office	157 30	
Professors:   J. Watson Bain, Chemical Engineering   S5.500 00	5 oths charged to Secretary's Office	137 30	\$17.317 30
J. Watson Bain, Chemical Engineering. \$5,500 00 M. C. Boswell, Organic Chemistry. 4,900 00 E. G. R. Ardagh, Applied Chemistry. 4,500 00 Assistant Professors: E. A. Smith, Chemical Engineering. 3,300 00 R. R. McLanghlin, Applied Chemistry. 3,000 00 Instructors (Sessional): A. M. Fitzgerald. 1,600 00 G. P. Beal (paid also \$325 in Special Research) 1,300 00 J. G. Breckenridge. 1,300 00 J. G. Breckenridge. 1,300 00 H. Boeschenstein, Technical German (without salary) 1,300 00 W. H. Rapson (paid also \$220 in Special Research and \$100 for Extension Work) 1,150 00 W. H. Rapson (paid also \$450 in Special Research and \$100 for Extension Work) 1,150 00 D. F. Fraser (resigned 31 October) 1,150 00 M. Adelman 1,000 00 A. S. Weatherburn (paid also \$75 in Special Research) 1,000 00 B. Marks (vice D. F. Fraser — paid also \$250 in Special Research) 1,000 00 B. Marks (vice D. F. Fraser — paid also \$250 in Special Research) 1,000 00 F. Westhead, Laboratory Assistant 1,100 00 F. Westhead, Laboratory Assistant 1,100 00 F. Westhead, Laboratory Assistant 1,100 00 M. L. Hammond, Lecture Assistant 1,100 00 M. L. Hammond, Lecture Assistant 1,100 00 M. L. Hammond, Lecture Assistant 1,100 00 M. W. Bolton, 42 weeks 1,100 42,100 42,100 43,100 64	Chemical Engineering and Applied Chemistry		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M. C. Boswell, Organic Chemistry			
E. G. R. Ardagh, Applied Chemistry. 4.500 00  Assistant Professors: E. A. Smith. Chemical Engineering. 3.300 00 R. R. M. Claughlin, Applied Chemistry. 3.000 00  Instructors (Sessional): A. M. Fitzgerald. 1.600 00 G. P. Beal (paid also \$325 in Special Research) 1.300 00 J. G. Breckenridge. 1.300 00 H. Boeschenstein, Technical German (without salary)  Demonstrators (Sessional): W. C. Macdonald (paid also \$220 in Special Research) 1.200 00 W. H. Rapson (paid also \$450 in Special Research) 1.200 00 N. R. Fasken (paid also \$450 in Special Research) 1.050 00 D. F. Fraser (resigned 31 October) 1.50 00 D. F. Fraser (resigned 31 October) 1.50 00 M. Adelman. 1.000 00 A. S. Weatherburn (paid also \$75 in Special Research) 1.000 00 B. Marks (vice D. F. Fraser — paid also \$250 in Special Research) 1.000 00 F. Westhead, Laboratory Assistant 1.200 00 M. L. Hammond, Lecture Assistant 1.200 00 M. L. Hammond, Lecture Assistant 1.200 00 M. L. Hammond, Lecture Assistant 1.200 00 M. A. Duggan, 35 weeks 1 day 900 00 W. Bolton, 42 weeks 1 day 900 00 W. Bolton, 42 weeks 1 day 900 00 W. Bolton, 42 weeks 1 day 900 00 M. Server 1.50 00 Miss D. Birkett, Office Assistant and Librarian, 48 \$1.250, of which \$200 00 Miss D. Birkett, Office Assistant and Librarian, 48 \$1.250, of which \$200 00 Miss D. Birkett, Office Assistant and Librarian, 48 \$1.250, of which \$200 00 M. L. Barden, Assistant Professor 1.000 00 M. L. Barden, Assistant Professor 1.000 00 M. E. W. Patterson, 28 weeks 1.000 00 M. School of Architecture  Professors: H. H. Madill 1.000 00 M. E. R. Arthur, Architectural Design 1.000 00 M. E. C. Carswell, Lecturer (Sessional) 1.000 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and 1.000 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and 1.000 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and 1.000 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and 1.000 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and 1.000 00 Miss J. C. La			
Assistant Professors:   E. A. Smith. Chemical Engineering	F. G. R. Ardagh. Applied Chemistry.		
R. R. McLaughlin, Applied Chemistry   3,000 00	Assistant Professors:	11000	
Instructors (Sessional):   A. M. Fitzgerald   1,600 00     G. P. Beal (paid also \$325 in Special Research)   1,300 00     J. G. Breckenridge   1,300 00     H. Boeschenstein, Technical German (without salary)   1,300 00     H. Boeschenstein, Technical German (without salary)   1,300 00     W. C. Macdonald (paid also \$220 in Special Research   1,200 00     W. H. Rapson (paid also \$450 in Special Research and \$100 for     Extension Work   1,150 00     N. R. Fasken (paid also \$250 in Special Research   1,050 00     D. F. Fraser (resigned 31 October   150 00     M. Adelman   1,000 00     A. S. Weatherburn (paid also \$75 in Special Research   1,000 00     B. Marks (vice D. F. Fraser — paid also \$250 in Special Research   1,700 00     F. Westhead, Laboratory Assistant   1,200 00     M. L. Hammond, Lecture Assistant   1,200 00     M. L. Hammond, Lecture Assistant   1,000 00     L. Hammond, Lecture Assistant   1,000 00     L. Hammond, Lecture Assistant   1,000 00     A. Duggan, 35 weeks   420 00     A. Duggan, 35 weeks   420 00     A. Duggan, 35 weeks   350 00     H. Neill, 34 weeks   340 00     E. W. Patterson, 28 weeks   280 00     T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)   100 00     Miss D. Birkett, Office Assistant and Librarian, (assistant \$1,250, of which \$200     charged to Secretary's Office   1,050 00     School of Architecture   1,050 00     School o	E. A. Smith. Chemical Engineering		
A. M. Fitzgerald		3,000 00	
G. P. Beal (paid also \$325 in Special Research)		1,600 00	
J. G. Breckenridge	G. P. Beal (paid also \$325 in Special Research)		
Demonstrators (Sessional) :   W. C. Macdonald (paid also \$220 in Special Research)   1,200 00     W. H. Rapson (paid also \$450 in Special Research and \$100 for Extension Work)   1,150 00     N. R. Fasken (paid also \$250 in Special Research)   1,050 00     D. F. Fraser (resigned 31 October)   150 00     M. Adelman   1,000 00     A. S. Weatherburn (paid also \$75 in Special Research)   1,000 00     B. Marks (vice D. F. Fraser — paid also \$250 in Special Research)   855 00     A. S. Hunt, Lecture Assistant and Glass-blower   1,700 00     F. Westhead, Laboratory Assistant   1,200 00     M. L. Hammond, Lecture Assistant   1,000 00     Laboratory Attendants @ \$10 to \$17 per week:	J. G. Breckenridge	1.300 00	
W. C. Macdonald (paid also \$220 in Special Research)       1,200 00         W. H. Rapson (paid also \$450 in Special Research and \$100 for Extension Work)       1,150 00         N. R. Fasken (paid also \$250 in Special Research)       1,050 00         D. F. Fraser (resigned 31 October)       150 00         M. Adelman       1,000 00         A. S. Weatherburn (paid also \$75 in Special Research)       1,000 00         B. Marks (vice D. F. Fraser — paid also \$250 in Special Research)       855 00         A. S. Hunt, Lecture Assistant and Glass-blower       1,700 00         F. Westhead, Laboratory Assistant       1,200 00         M. L. Hammond, Lecture Assistant       1,000 00         Laboratory Attendants @ \$10 to \$17 per week:       900 00         W. Bolton, 42 weeks, 1 day       900 00         A. Duggan, 35 weeks       350 00         H. Neill, 34 weeks       340 00         E. W. Patterson, 28 weeks       280 00         T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)       100 00         Miss D. Birkett, Office Assistant and Librarian, @ \$1,250, of which \$200       1,050 00         Charged to Secretary's Office       1,050 00         School of Architecture       1,050 00         W. E. Carswell, Lecturer (Sessional)       4,400 00         H. J. Burden, Assistant Professor			
W. H. Rapson (paid also \$450 in Special Research and \$100 for Extension Work)       1,150 00         N. R. Fasken (paid also \$250 in Special Research)       1,050 00         D. F. Fraser (resigned 31 October)       150 00         M. Adelman       1,000 00         A. S. Weatherburn (paid also \$75 in Special Research)       1,000 00         B. Marks (vice D. F. Fraser — paid also \$250 in Special Research)       855 00         A. S. Hunt, Lecture Assistant and Glass-blower       1,700 00         F. Westhead, Laboratory Assistant       1,200 00         M. L. Hammond, Lecture Assistant       1,000 00         Laboratory Attendants @ \$10 to \$17 per week:       900 00         W. Bolton, 42 weeks       420 00         A. Duggan, 35 weeks       350 00         H. Neill, 34 weeks       340 00         E. W. Patterson, 28 weeks       280 00         T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)       100 00         Miss D. Birkett, Öffice Assistant and Librarian, @ \$1,250, of which \$200       1,050 00         charged to Secretary's Office       1,050 00         E. R. Arthur, Architectural Design       4,400 00         H. J. Burden, Assistant Professor       3,100 00         W. E. Carswell, Lecturer (Sessional)       2,450 00         Miss J. C. Laing, Librarian and Instructor, Architectural H		1.200 00	
Extension Work   1,150 00     N. R. Fasken (paid also \$250 in Special Research   1,050 00     D. F. Fraser (resigned 31 October   150 00     M. Adelman   1,000 00     A. S. Weatherburn (paid also \$75 in Special Research   1,000 00     B. Marks (vice D. F. Fraser — paid also \$250 in Special Research   855 00     A. S. Hunt, Lecture Assistant and Glass-blower   1,700 00     F. Westhead, Laboratory Assistant   1,200 00     M. L. Hammond, Lecture Assistant   1,000 00     Laboratory Attendants   10 to \$17 per week   1,000 00     W. Bolton, 42 weeks   420 00     A. Duggan, 35 weeks   420 00     A. Duggan, 35 weeks   350 00     H. Neill, 34 weeks   340 00     E. W. Patterson, 28 weeks   280 00     T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)   100 00     Miss D. Birkett, Office Assistant and Librarian,   1,250, of which \$200     charged to Secretary's Office   1,050 00     School of Architecture   1,050 00     F. R. Arthur, Architectural Design   4,400 00     H. J. Burden, Assistant Professor   3,100 00     W. E. Carswell, Lecturer (Sessional)   2,450 00     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450 00     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450 00     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450 00     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450 00     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450 00     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450     Miss D. C. Laing, Librarian and Instructor, Architectural History and   2,450     Miss D. C. Laing, Librarian and Librarian   2,450     Miss D. C. Laing, Librarian   2,450     Miss D. C. Laing, Librarian		1,200 00	
D. F. Fraser (resigned 31 October)	Extension Work)		
M. Adelman.       1,000 00         A. S. Weatherburn (paid also \$75 in Special Research)       1,000 00         B. Marks (vice D. F. Fraser — paid also \$250 in Special Research)       855 00         A. S. Hunt, Lecture Assistant and Glass-blower       1,700 00         F. Westhead, Laboratory Assistant       1,200 00         M. L. Hammond, Lecture Assistant       1,000 00         Laboratory Attendants @ \$10 to \$17 per week:       900 00         T. Storton, 52 weeks, 1 day       900 00         W. Bolton, 42 weeks       420 00         A. Duggan, 35 weeks       350 00         H. Neill, 34 weeks       280 00         E. W. Patterson, 28 weeks       280 00         T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)       100 00         Miss D. Birkett, Office Assistant and Librarian, @ \$1.250, of which \$200       1,050 00         charged to Secretary's Office       1,050 00         School of Architecture         Professors:       1,050 00         H. H. Madill       \$1,500 00         E. R. Arthur, Architectural Design       4,400 00         H. J. Burden, Assistant Professor       3,100 00         W. E. Carswell, Lecturer (Sessional)       2,450 00         Miss J. C. Laing, Librarian and Instructor, Architectural History and			
A. S. Weatherburn (paid also \$75 in Special Research)			
B. Marks (vice D. F. Fraser — paid also \$250 in Special Research). 855 00 A. S. Hunt, Lecture Assistant and Glass-blower. 1.700 00 F. Westhead, Laboratory Assistant. 1.200 00 M. L. Hammond. Lecture Assistant. 1.000 00 Laboratory Attendants @ \$10 to \$17 per week:  T. Storton, 52 weeks, 1 day. 900 00 W. Bolton, 42 weeks. 420 00 A. Duggan, 35 weeks. 350 00 H. Neill, 34 weeks. 350 00 E. W. Patterson, 28 weeks. 280 00 T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional). 100 00 Miss D. Birkett, Office Assistant and Librarian, @ \$1.250, of which \$200 charged to Secretary's Office. 1.050 00  School of Architecture  Professors: H. H. Madill. \$4.500 00 E. R. Arthur, Architectural Design 4,400 00 H. J. Burden, Assistant Professor. 3,100 00 W. E. Carswell, Lecturer (Sessional) 2,450 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and	A. S. Weatherburn (paid also \$75 in Special Research)		
F. Westhead, Laboratory Assistant. 1,200 00 M. L. Hammond, Lecture Assistant. 1,000 00 Laboratory Attendants @ \$10 to \$17 per week: T. Storton, 52 weeks, 1 day. 900 00 W. Bolton, 42 weeks 420 00 A. Duggan, 35 weeks 350 00 H. Neill, 34 weeks 350 00 E. W. Patterson, 28 weeks 280 00 T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional) 100 00 Miss D. Birkett, Office Assistant and Librarian, @ \$1,250, of which \$200 charged to Secretary's Office. 1,050 00  School of Architecture  Professors: H. H. Madill. \$4,500 00 E. R. Arthur, Architectural Design 4,400 00 H. J. Burden, Assistant Professor. 3,100 00 W. E. Carswell, Lecturer (Sessional) 2,450 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and	B. Marks (vice D. F. Fraser — paid also \$250 in Special Research).		
M. L. Hammond, Lecture Assistant.       1,000 00         Laboratory Attendants @ \$10 to \$17 per week:       900 00         T. Storton, 52 weeks, 1 day       900 00         W. Bolton, 42 weeks       420 00         A. Duggan, 35 weeks       350 00         H. Neill, 34 weeks       340 00         E. W. Patterson, 28 weeks       280 00         T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)       100 00         Miss D. Birkett, Office Assistant and Librarian, @ \$1.250, of which \$200       1,050 00         charged to Secretary's Office       1,050 00         School of Architecture         Professors:         H. H. Madill       \$4,500 00         E. R. Arthur, Architectural Design       4,400 00         H. J. Burden, Assistant Professor       3,100 00         W. E. Carswell, Lecturer (Sessional)       2,450 00         Miss J. C. Laing, Librarian and Instructor, Architectural History and			
Carry Attendants @ \$10 to \$17 per week:   T. Storton, 52 weeks, 1 day			
W. Bolton, 42 weeks       420 00         A. Duggan, 35 weeks       350 00         H. Neill, 34 weeks       340 00         E. W. Patterson, 28 weeks       280 00         T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)       100 00         Miss D. Birkett, Office Assistant and Librarian, @ \$1.250, of which \$200       1,050 00         charged to Secretary's Office       1,050 00         School of Architecture         Professors:         H. H. Madill       \$4,500 00         E. R. Arthur, Architectural Design       4,400 00         H. J. Burden, Assistant Professor       3,100 00         W. E. Carswell, Lecturer (Sessional)       2,450 00         Miss J. C. Laing, Librarian and Instructor, Architectural History and	Laboratory Attendants @ \$10 to \$17 per week:		
A. Duggan, 35 weeks	T. Storton, 52 weeks, 1 day		
H. Neill, 34 weeks			
E. W. Patterson, 28 weeks. 280 00 T. Linsey Crossley. Special Lecturer. Pulp and Paper (Sessional) 100 00 Miss D. Birkett. Office Assistant and Librarian, @ \$1.250, of which \$200 charged to Secretary's Office. 1,050 00  School of Architecture  Professors: H. H. Madill. \$4,500 00 E. R. Arthur, Architectural Design 4,400 00 H. J. Burden, Assistant Professor. 3,100 00 W. E. Carswell, Lecturer (Sessional) 2,450 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and			
T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)	E. W. Patterson, 28 weeks		
charged to Secretary's Office.         1,050 00           School of Architecture           Professors:           H. H. Madill.         \$4.500 00           E. R. Arthur, Architectural Design.         4,400 00           H. J. Burden, Assistant Professor.         3,100 00           W. E. Carswell, Lecturer (Sessional)         2,450 00           Miss J. C. Laing, Librarian and Instructor, Architectural History and	T. Linsey Crossley, Special Lecturer, Pulp and Paper (Sessional)	100 00	
School of Architecture   S39,145 00		1.050.00	
School of Architecture	charged to Secretary's Office	1,030 00	\$39,145 00
H. H. Madill.       \$4,500 00         E. R. Arthur, Architectural Design.       4,400 00         H. J. Burden, Assistant Professor.       3,100 00         W. E. Carswell, Lecturer (Sessional)       2,450 00         Miss J. C. Laing, Librarian and Instructor, Architectural History and			
E. R. Arthur, Architectural Design. 4,400 00 H. J. Burden, Assistant Professor. 3,100 00 W. E. Carswell, Lecturer (Sessional). 2,450 00 Miss J. C. Laing, Librarian and Instructor, Architectural History and		\$1.500.00	
H. J. Burden, Assistant Professor			
Miss J. C. Laing, Librarian and Instructor, Architectural History and	II. J. Burden, Assistant Professor	3.100 00	
		2.450 00	
1,000 00		1.850.00	
		1,000	

T (C 1		
Instructors (Sessional — part time): C. W. Jefferys, Painting	1,500 00	
F. Coates, Modelling (paid also \$75 for Extension Work)	950 00	
Mackenzie Waters, Special Instructor, Architectural Design, 6 mos  Special Lecturers (Sessional — part time):	1,000 00	
A. S. Mathers, 7 mos	900 00	
W. S. Wilson, Architectural Economics (see also Secretary's Office) H. Carver, Town Planning	250 00	
H. B. Dunnington-Grubb, Landscape Architecture	200 00 100 00	
Engineering Drawing)		
G. A. Arksey, Attendant in Drafting Room (Sessional)	800 00	
charged to Engineering Drawing)	500 00	\$22,500 00
Engineering Drawing		Ψ22,300 00
	<b>#5 000 00</b>	
J. R. Cockburn, Professor, Descriptive Geometry	\$5,000 00	
W. J. Smither, Structural Engineering	4,100 00	
English) Assistant Professors:	3,900 00	
W. B. Dunbar	2,750 00	
A. Wardell Lecturers (Sessional):	2,700 00	
P. V. Jermyn	2.400 00	
J. J. Spencelnstructors (Sessional):	2,000 00	
R. M. Clark. G. R. Edwards.	1,500 00	
Demonstrators (Sessional):	1,500 00	
J. M. Carswell	1,400 00	
H. H. Cook. W. E. Ewens.	1.000 00 1.000 00	
C. J. Woodley (part time)	700 00	
D. C. McNevan, from 27 November	600 00	
G. Brown, Attendant in Drafting Rooms, 9 mos	1,100 00 340 00	
-		\$31,990 00
Applied Physics	<b>#9.400</b> .00	
K. B. Jackson, Assistant Professor.  Instructors (Sessional):	\$3,400 00	
V. L. Henderson	1,750 00	
W. J. Jackson  Demonstrators (Sessional):	1,550 00	
L. E. Jones (paid also \$525 in Special Research)	1.300 00	
W. A. Mohun	450 00	
D. H. Hamly (see also Botany and Special Research)	450 00	
Surveying and Geodesy)	500 00	
C. T. Harding, Mechanician (see also Civil Engineering: Surveying and Geodesy)	500 00	
_		\$9,900 00
Special Lectures		
Special Lecturers (Sessional):		
R. E. Laidlaw, Engineering Law	\$500 00	
tension Work)	300 00	
W. J. T. Wright, Technical Drawing (see also Engineering Drawing) F. H. Kirkpatrick, Public Speaking (paid also \$400 for Extension	300 00	
Work)	250 00	\$1,350 00
— Secretary's Office		\$1,000 UU
W. S. Wilson, Secretary (paid also \$250 in School of Architecture)	\$3.200.00	
W. S. Wilson, Secretary (paid also \$250 in School of Architecture)  Miss E. Birkett, Assistant Secretary	\$3.200 00 1,650 00	

Stenographers:	200 00	
Miss D. Birkett (see also Chemical Engineering)	200 00	
Miss A. Hay (see also Metallurgical Engineering)	15 00	
Miss V. N. Rigler (resigned 9 April) (see also Metallurgical	206.00	
Engineering)	236 00	00 451 00
		\$6,451 00
	_	\$277,221 25
83. Electrical Engineering		\$211.221 20
Supplies (\$2,251.26):		
Aikenhead Hardware Ltd., hardware	\$190 24	
Canadian Durex Abrasives Ltd., cloth	29 91	
Canadian General Electric Co., cement, varnish and lamps	52 62	
Canadian Johns-Manville Co., asbestos panels	14 86	
Canadian National Carbon Co., batteries, etc	83 32	
Canadian Westinghouse Co., sockets and tubes	35 34	
Canadian Wire & Cable Co., wire	10 31	
W. A. Carveth & Co., objectives, eye pieces, etc	65 50	
Central Scientific Co., magnets	15 68	
Diamond State Fibre Co., tubing	35 37	
Driver, Harris Co., wire	30 91	
T. Eaton Co., brushes, gasoline and stain	13 77	
General Radio Co., radio parts	452 31	
D. Gestetner Ltd., stencils, ink and paper	123 79	
George Gorton Machine Co., cutters	24 64	
Grand & Toy. holders	12 00	
Leeds & Northrup Co., scales	20 18 18 77	
Mitchell, Rand Insulation Co., tubing	28 52	
Photographic Service, slides and prints	40 00	
Pratt, Whitney Co., hardware	58 36	
G. W. Sadler Co., belting	15 75	
Weston Electric Instrument Co., washers, coils and springs	47 71	
Wholesale Radio Co., radio supplies	195 59	
Worr Foundry Co., castings	17 57	
University Press, printing and stationery	105 65	
Accounts under \$10 (18)	114 89	
Sundry disbursements by department:		
Hardware. \$24.55; stationery, etc., \$15.55; sundries, \$9.84	49 94	
Superintendent's Dept., freight, \$69.21; labour, \$136.33; material,	0.17 76	
\$142.22	347 76	
Apparatus (\$1.055): , Aikenhead Hardware Ltd., hardware	42 09	
Canadian General Electric Co., rectifier	51 10	
Eppley Laboratory Inc., cells	42 00	
General Radio Co., radio parts	577 49	
E. Hoffman Machinery Supply Co., motor	15 00	
Keuffel & Esser Co., slide rules	32 16	
Robbins & Myers Co., fan	56 25	
Weston Electrical Instrument Corporation, meters	238 91	
Furniture, printing and incidentals:		
University Press	59 51	
the state of the s	\$3,365 77	
Less credits: Laboratory deposits, \$46.25; material returned, \$7.85	54 10	A0 011 (7
-		\$3.311 67
84. Mechanical Engineer ng		
Supplies (\$810.33):	007.06	
Aikenhead Hardware Ltd., hardware	\$95 06	
Canadian Laboratory Supplies, chemicals, etc	31 09	
Dominion Bridge Co., metal plate	16 50	
Arthur S. Leitch, cocks	15 36 74 46	
	24 00	
PostageRobbins & Townsend, typewriter inspection	13 00	
Scythes & Co., waste	19 76	
Taylor Instrument Co., thermometers	11 46	
Worr Foundry Co., grate bars	27 22	
Accounts under \$10 (4)	27 20	
Sundry disbursements by department	15 90	

Superintendent's Dept., freight, \$2.31; labour, \$142.43; material,	440.00	
\$295.48	440 22	
Crane Ltd., steel	14 21 12 00	
meter Leyland Motors Ltd., muffler, etc	2.975 82 27 75	
Tinius Olsen Testing Machine Co., balancing machine	3.404 31	
Storey Pump & Equipment, gasoline engine	463 99 7 40	
Wankesha Motor Co., compressor	2.519 61	
\$105.64	526 26	
Aikenhead Hardware Ltd., hardware	25 27	
Coulter Copper & Brass Co., brass	21 28 29 00	
Arthur H. Leitch, indicators, etc	24 50 16 00	
Monarch Belting Co., belting	15 25	
Superintendent's Dept., labour, \$41.57; material, \$61.08 Proportion of fuel for Experimental Plant:	102 65	
W. H. Cox Coal Co Furniture, printing and incidentals (\$252.74):	543 43	
Bernard Cairns, stamp pad	4 56	
Keuffel & Esser. slide rules	24 54 42 29	
University Press, printing and stationery	174 16 7 19	
-	\$11,791 80	
Less credit from sale of material	88 90	
- OF C P		\$11,702 90
85. Civil Engineering: Municipal and Structura Supplies (\$569.51):	L	
Aikenhead Hardware Ltd., hardware	\$89 45	
British Xylonite Co., xylonite	78 88 14 85	
British Xylonite Co., xylonite	78 88	
British Xylonite Co., xylonite  Dunlop Tire & Rubber Co., cushions  McBain Foundry, castings  Photographic Service. prints and slides	78 88 14 85 13 23 16 78 32 72	
British Xylonite Co., xylonite.  Dunlop Tire & Rubber Co., cushions.  McBain Foundry, castings.  Photographic Service. prints and slides.  Postage  E. E. Verbeck. tables.	78 88 14 85 13 23 16 78 32 72 42 00 44 10	
British Xylonite Co., xylonite.  Dunlop Tire & Rubber Co., cushions.  McBain Foundry, castings.  Photographic Service. prints and slides.  Postage  E. E. Verbeck. tables.  University Press. printing and stationery.  Accounts under \$10 (8)	78 88 14 85 13 23 16 78 32 72 42 00	
British Xylonite Co., xylonite.  Dunlop Tire & Rubber Co., cushions.  McBain Foundry, castings.  Photographic Service. prints and slides.  Postage  E. E. Verbeck. tables.  University Press. printing and stationery.  Accounts under \$10 (8).  Superintendent's Dept., freight. \$4.21; labour, \$32.33; material,	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97 Apparatus (\$373.25):	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co., torch, parts, etc C. A. Hogentogler, plasticity needle.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8). Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc. C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25 19 90	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8). Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co., torch, parts, etc. C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cabinet	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co., torch, parts, etc. C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25 19 90 70 32	
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc W. S. Tyler Co., sieves and scales.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25 19 90 70 32 36 80	\$909 51
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc. W. S. Tyler Co., sieves and scales. Accounts under \$10 (2)  Less credit from sale of manuals.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25 19 90 70 32 36 80 9 25	\$909 51
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc. C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc. W. S. Tyler Co., sieves and scales. Accounts under \$10 (2)	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25 19 90 70 32 36 80 9 25	\$909 51
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8). Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc. C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc. W. S. Tyler Co., sieves and scales. Accounts under \$10 (2)  Less credit from sale of manuals.  86. Civil Engineering: Surveying and Geodesy Supplies (\$469.95): Aikenhead Hardware Ltd., hardware. Art Metropole, taper and refills.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51 75 29 71 81 54 63 35 25 19 90 70 32 36 80 9 25 942 76 33 25 942 76 33 25 818 25 70 50	\$909 51
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8) Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc W. S. Tyler Co., sieves and scales. Accounts under \$10 (2)  Less credit from sale of manuals.  86. Civil Engineering: Surveying and Geodesy Supplies (\$469.95): Aikenhead Hardware Ltd., hardware. Art Metropole, taper and refills. D. Gestetner Ltd., stencils and ink. Langmuir Mfg. Co., drawing boards.	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45  119 51  75 29 71 81 54 63 35 25 19 90 70 32 36 80 9 25  942 76 33 25  \$18 25 70 50 16 38 27 65	\$909 51
British Xylonite Co., xylonite. Dunlop Tire & Rubber Co., cushions. McBain Foundry, castings. Photographic Service. prints and slides. Postage E. E. Verbeck. tables. University Press. printing and stationery. Accounts under \$10 (8). Superintendent's Dept., freight. \$4.21; labour, \$32.33; material, \$82.97  Apparatus (\$373.25): B. C. Ames & Co., gauges. Canadian Liquid Air Co torch, parts, etc. C. A. Hogentogler, plasticity needle. Office Specialty Mfg. Co., filling cahinet. Radio Supply Co., robot key. Sprague & Henwood, sampler. etc. W. S. Tyler Co., sieves and scales. Accounts under \$10 (2)  Less credit from sale of manuals.  86. Civil Engineering: Surveying and Geodesy Supplies (\$469.95): Aikenhead Hardware Ltd., hardware. Art Metropole, taper and refills. D. Gestetner Ltd., stencils and ink	78 88 14 85 13 23 16 78 32 72 42 00 44 10 83 54 34 45 119 51  75 29 71 81 54 63 35 25 19 90 70 32 36 80 9 25  942 76 33 25  942 76 33 25  \$18 25 70 50 16 38	\$909 51

The state of the state of the control of the state of the	112 75	
University of Toronto Engineering Society, field books and supplies		
University Press, printing and stationery	64 11	
Accounts under \$10 (5)	22 73	
Sundry disbursements by department	10 00	
Superintendent's Dept., labour. \$7.37; material, \$2.64	10 01	
Apparatus:		
Instruments Ltd., stereoscope, \$1,092.50; less \$342.50 to be paid in		
1938-39	750 00	
Summer Survey Camp — Maintenance (\$6,039.34):		
Instructional Staff (\$2.510.80):		
W. M. Treadgold, services, \$562.50; living expenses, \$67.50;		
travelling expenses, \$20; supplies, \$2.20	652 20	
S. R. Crerar, services, \$500; living expenses. \$51.25; travelling	004 40	
S. R. Cretar, services, 3000; fiving expenses, 331.23; flavelling	572 60	
expenses, \$20; supplies, \$2.35	573 60	
E. W. Banting, services, \$475; living expenses, \$67.50; travel-	=(0, =0	
ling expenses. \$20.	562 50	
J. W. Melson, services, \$450; living expenses, \$67.50; travelling		
expenses, \$20	537 50	
T. L. Rowe, services. \$125; living expenses, \$50; travelling		
expenses, \$10	185 00	
Sundry expenses (\$2.697.44):		
Britnell's Bakeries, bread	56 35	
T. E. Campbell, firewood	74 50	
Coleman Lamp & Stove Co., mantels and generators	22 49	
Currie Products Ltd., roofing	149 64	
Easton's Meat Market, meat	39 03	
T. Eaton Co., utensils and crockery	106 51	
A. Fisher, vegetables	57 45	
Geology Dept., notebooks and supplies	39 00	
Gurney Foundry Co., stove	25 09	
Hewitt Bros., cartage	94 07	
G. W. Hudson, drafting tables	80 00	
Kawartha Lumber Co., lumber	44 37	
Kermath Mfg. Co., rebuilding marine engine	150 00	
A. Langdon, stakes, etc	21 25	
W. A. Lindop, gasoline and oil	71 33	
Loblaw Groceterias, provisions	1.002 72	
Mrs. J. Minto, milk and eggs	45 20	
A. R. Moss, lumber	32 64	
T. L. Rowe, cartage	25 00	
	180 20	
C. Trumbell, milk		
S. W. Welch, hardware, etc	240 51	
Accounts under \$10 (3)	7 45	
Superintendent's Dept., freight, \$1.28; labour, \$20.13; material,		
\$111.23	132 64	
Payments to Help (\$831.10):		
J. E. Minto, caretaker. 12 mos., \$240; building and boat repairs.		
\$85.60; ice supply, \$35; cutting wood, \$48.50	409 10	
Mrs. J. E. Minto, cook	395 00	
D. Campbell, hauling	27 00	
_		
	\$7.259 29	
Less credits: Board at Summer Camp, \$2.657.25; laboratory		
deposits, \$297.60.	2,954 85	
deposits, \$221.00	2.701 00	\$4,304 44
on Mr		71. FOG.TQ
87. Mining Engineering		
Supplies (\$2,170.77):		
Aikenhead Hardware Ltd., hardware	\$79 55	
Canadian Laboratory Supplies, chemicals, glassware, etc	234 97	
Central Scientific Co., chemicals and glassware	213 47	
Denver Fire Clay Co., crucibles, etc	252 26	
T. Eaton Co., stools, utensils, etc	105 57	
A. S. Hunt, glassblowing	39 95	
Imperial Oil Ltd., fuel oil	44 70	
Ingram & Bell, forceps and cotton	10 95	
McBain Foundry, castings	10 06	
Nichols Chemical Co., acids	17 21	
Ontario Rubber Co., tubing. etc	25 10	
Postage	20 00	
Safety Supply Co., respirators	12 30	
Safety Supply Co., respirators	12 00	

T. S. Simms Co., varnish	59 92	
Sturtevant Mill Co., grinding discs	18 40	
W. S. Tyler Co., sieves	78 65	
University Press, printing and stationery	360 80	
Accounts under \$10 (20)	98 64	
Sundry disbursements by department	17 70	
Superintendent's Dept., freight, \$93.93; labour, \$144.86; material,		
\$231.78	470 57	
Apparatus (\$1,569.57):	3= 00	
Jas. G. Biddle Co., rheostat	17 99	
Canadian Laboratory Supplies, stop watch and thimbles	16 47	
Walter A. Carveth & Co., microscope parts and stage	176 32	
C. F. Casella Co., precipitator equipment	281 24 39 40	
Corning Glass Works	10 80	
Grand & Toy, cabinet	73 70	
Morgan Crucibles Co., scorifiers	78 98	
Office Specialty Mfg. Co., shelving	44 40	
J. W. Ritchie. motors	36 00	
Fletcher Russell Co., furnace parts	123 27	
Wettlaufer Machinery Co., crusher	137 80	
Accounts under \$10 (5)	20 40	
Superintendent's Dept., cable, \$2.13; freight, 48c; labour, \$314.94;		
material, \$195.25	512 80	
-		
	\$3,740 34	
Less credits: Laboratory deposits, \$203.90; breakages, \$40.13	244 03	
		\$3,496 31
88. METALLURGICAL ENGINEERING		
Supplies (\$435.75):		
Canada Metal Co., lead, tin. etc	\$15 11	
Canadian Atlas Steels Ltd., metal bars	11 69	
Canadian Laboratory Supplies, chemicals, glassware, etc	192 88	
Canadian Liquid Air Co., cylinder rental	11 00	
Denver Fire Clay Co., fire clay, etc	27 88	
Eastman Photographic Stores, plates and paper	86 86	
Fisher Scientific Co., emery paper	29 40	
University Press, printing and stationery	11 39	
	21 40	
Accounts under \$10 (6)	31 40	
Superintendent's Dept., freight, 09c; material, \$18.05	31 40 18 14	
Superintendent's Dept., freight, 09c; material, \$18.05	18 14	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc	18 14 60 27	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc  Bansch & Lomb Optical Co., plate holders, etc	18 14 60 27 15 98	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc	18 14 60 27 15 98 54 49	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc	18 14 60 27 15 98 54 49 10 35	
Superintendent's Dept., freight, 09c; material, \$18.05	18 14 60 27 15 98 54 49	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35): Canadian Laboratory Supplies, hot plates, etc	18 14 60 27 15 98 54 49 10 35 168 65	
Superintendent's Dept., freight, 09c; material, \$18.05	18 14 60 27 15 98 54 49 10 35 168 65 2 60	
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc.  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85	
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc.  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85 108 44	
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc.  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour. \$53.56; material, \$32.34	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85 108 44 \$948 10	
Superintendent's Dept., freight, 09c; material, \$18.05  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85 108 44	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc  Bausch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit  T. Eaton Co., utensils  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bausch & Lomb Optical Co., plate holders, etc.  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour. \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemister Supplies (\$7,682.31):	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85 108 44 \$948 10 14 65	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc  Bansch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit.  T. Eaton Co., utensils  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Supprintendent's Dept freight. \$22.54; labour. \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre  Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks  British Drug Houses, chemicals, etc	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc  Bausch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit  T. Eaton Co., utensils  Fletcher, Russell & Co., furnace parts  W. H. Kubbinga, machine work  W. R. McKee, meter repairs  Weston Electrical Instrument Co., meters  Williams & Watson, bricks  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks  British Drug Houses, chemicals, etc  Canada Packers Ltd., oil.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65   Y \$58 03 132 16 35 29	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc.  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks.  British Drug Houses, chemicals, etc.  Canada Packers Ltd., oil.  Canadian Industries Ltd., acids, etc.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65  (Y) \$58 03 132 16 35 29 39 16	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks.  British Drug Houses, chemicals, etc.  Canadian Industries Ltd., oil.  Canadian Industries Ltd., acids, etc  Canadian Kodak Co., chemicals.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65   Y \$58 03 132 16 35 29	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65   35 29 39 16 28 13	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc  Bausch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit.  T. Eaton Co., utensils  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks  Superintendent's Dept., freight, \$22.54; labour. \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks  British Drug Houses, chemicals, etc  Canadian Industries Ltd., acids, etc  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, electrometer, thermometers, chemicals and glassware.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65  (Y) \$58 03 132 16 35 29 39 16	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks.  British Drug Houses, chemicals, etc  Canadian Industries Ltd., acids, etc  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, electrometer, thermometers, chemicals and glassware  Canadian Liquid Air Co., rental of cylinders and gas.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65   (Y) \$58 03 132 16 35 29 39 16 28 13 2,198 92	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc  Bausch & Lomb Optical Co., plate holders, etc  Central Scientific Co., heating unit  T. Eaton Co., utensils  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks  Superintendent's Dept., freight, \$22.54; labour, \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks  British Drug Houses, chemicals, etc  Canadian Industries Ltd., oil  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, electrometer, thermometers, chemicals and glassware.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44  \$948 10 14 65  47 \$58 03 132 16 35 29 39 16 28 13 2,198 92 124 19	\$933 45
Superintendent's Dept., freight, 09c; material, \$18.05.  Apparatus (\$512.35):  Canadian Laboratory Supplies, hot plates, etc.  Bansch & Lomb Optical Co., plate holders, etc.  Central Scientific Co., heating unit.  T. Eaton Co., utensils.  Fletcher, Russell & Co., furnace parts.  W. H. Kubbinga, machine work.  W. R. McKee, meter repairs.  Weston Electrical Instrument Co., meters.  Williams & Watson, bricks.  Superintendent's Dept., freight, \$22.54; labour. \$53.56; material, \$32.34  Less credit for material returned.  89. Chemical Engineering and Applied Chemistre Supplies (\$7,682.31):  Armstrong Cork & Insulation Co., corks.  British Drug Houses, chemicals, etc.  Canadian Industries Ltd., oil.  Canadian Kodak Co., chemicals.  Canadian Laboratory Supplies, electrometer, thermometers, chemicals and glassware.  Canadian Liquid Air Co., rental of cylinders and gas.  Central Scientific Co., glassware, etc.	18 14 60 27 15 98 54 49 10 35 168 65 2 60 14 10 62 62 14 85  108 44 \$948 10 14 65   (Y) \$58 03 132 16 35 29 39 16 28 13 2,198 92 124 19 821 36	\$933 45

31

Dominion Oxygen Co., gas	53 01	
Eister Electric Corporation, electrodes	18 55	
Fidea & Co., watch repairs	18 00 13 20	
General Steel Wares Ltd., parts	61 15	
B. Greening Wire Co., wire	16 21	
O. W. Herzberg, chemicals	110 86	
Ingram & Bell, gylcerine, cotton, etc	12 69 46 59	
Lake Simcoe Ice & Fuel Ltd., ice	12 00	
Lorie Ltd., gold plating	126 75	
McIntyre & Taylor, tripods, etc	18 24	
W. R. McKee, electrical repairs	54 45 40 94	
Mallinckrodt Chemical Works, chemicals	267 43	
Jas. Morrison Brass Co., ganges repaired	42 05	
Nichols Chemical Co., chemicals and containers	580 88	
Photographic Service, slides and prints	34 73	
Thos. Pocklington Co., balance repairs, etc	123 50 17 90	
Robbins & Townsend, typewriter inspection	187 05	
Twisswire Brushes Ltd., brushes	26 40	
University Library, Books replaced	36 41	
Weston Electrical Instrument Co., cell	20 80	
Wilson Scientific Co., glassware, etc	186 72 14 63	
University Press, printing and stationery	327 11	
Accounts under \$10 (25)	127 99	
Sundry disbursements by department:		
Hardware, \$11.91; stationery. postage, etc \$28.20; sundries,	59 85	
\$19.74	39 03	
\$637.10	1,545 38	
Apparatus (\$2.511.85):		
Canadian Laboratory Supplies, colorimeters, weights, viscosimeter,		
etc	1,435 28	
Central Scientific Co., pump	166 60	
Foster, Wheeler Ltd., packing, etc	15 52 63 01	
Italian Mosaic & Tile Co., tiling	92 00	
Leeds & Northrup Co., electrodes, meters, etc	170 35	
Alex. Wright & Co., saturating tower	54 61 514 48	
Superintendent's Dept., labour, \$333.79; material, \$180.69	514 48	
	\$10,194 16	
Less credits: Laboratory deposits, \$1,223.35; sale of material, \$25.50	1.248 85	
-		\$8,945
90. School of Architecture		
Supplies (\$492.71):		
Aikenhead Hardware Ltd., hardware	\$12 66	
Art Metropole, prints and brushesBeaux Arts Institute of Design, programme service	10 34 25 18	
Wm. Dawson Subscription Service	25 50	
Photographic Service, slides and prints	99 72	
Postage	28 00	
Robbins & Townsend, typewriter inspection	20 20 11 00	
C. L. Todd, subscriptions	15 74	
University of Toronto Engineering Society, drawing supplies	11 80	
University Press, printing and stationery	82 78	
Accounts under \$10 (12)	61 03	
Superintendent's Dept., freight, \$1.67; labour, \$37.04; material, \$50.05	88 76	
	00 10	
Apparatus (\$195.14): Artists' Supply Co., canvasses	54 00	
T. Eaton Co., chair	18 00	
Laidlaw Lumber Co., models	24 30	
Accounts under \$10 (3)	19 21	
Superintendent's Dept., labour, \$55.87; material, \$23.76	79 63	

M. J.J. C., P.C. Cl		
Models for life Class: Prof. H. H. Madill, reimbursement for payments made Staff expenses — outdoor sketching classes:	24 00	
Prof. H. H. Madill, expenses (three members of staff)	96 48	
Less credit from laboratory deposits	\$808 33 6 40	\$801 93
91. Engineering Drawing		4002 30
Supplies (\$312.70):		
Blackie & Son, text books.  D. Gestetner Ltd., stencils and paper.	\$10 00	
Photographic Service, prints and slides.	20 53 31 31	
J. Frank Raw & Co., drawing instruments	54 00	
University Press, printing and stationery	46 34	
Accounts under \$10 (9)	37 65 112 87	
Apparatus: Robbins & Townsend, rebuilt typewriter, desk and chair	120 00	
Printing Instruction Sheets (\$147.75):		4
D. Gestetner Ltd., stencils, ink and paper University Press	60 54 87 21	
	\$580 45	
Less credit from laboratory deposits	15 60	e=64 0=
		\$564 85
92. APPLIED PHYSICS Supplies (\$687.69):		
Aikenhead Hardware Ltd., hardware	\$53 15	
F. Baker, caretaker's overtime services	11 00	
British Aluminum Co	10 64	
Brown Bros., paper	12 72	
Coulter Copper & Brass Co., metal.	31 35 17 25	
T. Eaton Co., chemicals, films, etc	10 65	
Exide Batteries of Canada, battery	10 00	
D. Gestetner Ltd., ink and stencils	11 76	
Office Specialty Mfg. Co., guides and folders	14 50 139 72	
Radio Trade Supply Co., radio supplies	16 96	
Geo. Rathbone Lumber Co., masonite, etc	15 53	
University of Toronto Engineering Society, tracing paper and re-		
prints	17 28	
Wholesale Radio Co., radio supplies	17 05 58 91	
Accounts under \$10 (21)	58 95	
Sundry disbursements by department:		
Stationery, \$5.75; postage, \$5.34: sundries, \$11.91  Superintendent's Dept., freight, \$23.97; labour, \$22.05; material,	23 00	
\$111.25	157 27	
Apparatus (\$1,268.24): American Hard Rubber Co., rod	10 98	
American Instrument Co., regulator	10 68	
American Transformer Co., transformers	48 97	
Beck Bros., rheostats, etc	30 40	
Canadian General Electric Co., oscillograph, lamps, projector, etc	119 82	
Walter A. Carveth & Co., projector	46 75 283 80	
G. M. Laboratories, rheostats	43 35	
Howard Furnace Co., furnace parts	98 10	
International Resistance Co., resistors	42 46	
Leeds & Northrup Ltd., resistors	152 25	
Northern Electric Co., transmitter, etc	56 45 47 75	
Robt. Simpson Co., tripod.	22 50	
Struthers & Dunn, relay	10 17	
University of Toronto Engineering Society, graph paper	12 37	
Weston Electrical Instrument Co., motor and voltmeter	46 47	

NOTE: Receipts for photographic work done for various (including Accounts Receivable, \$182.84) amounted		\$7.954 67
\$9.41	21 66	\$1.454 67
Supplies:  W. E. Booth Co., chemicals, films and paper Canadian General Electric Co., projector, lamp, etc Eastman Photographic Stores, paper, plates, etc T. Eaton Co., camera repairs, carriers, etc Favor, Ruhl & Co., colours. Gevaert Co., chemicals, plates, etc Instruments Ltd., blue-print paper, etc J. Frank Raw Co., paper, etc Rectigraph Co., paper University Press, printing and stationery. Accounts under \$10 (4). Superintendent's Dept., freight, \$5.50; labour, \$6.75; material.	134 88 34 78 435 96 40 17 10 22 317 06 70 17 39 34 205 80 132 36 12 27	
Fred Sayer, Messenger and Studio Assistant (and overtime \$6)  (h) Expenses:		\$6.500 00
Mrs. R. E. Morley, Bookkeeper	1.150 00 100 00 650 00	
C. Crowther (and overtime \$5)  Mrs. Muriel Milne.  Frank Stark. 10 mos.  W. Vance	\$1.450 00 1.200 00 1.000 00 950 00	
94. Photographic Service  (a) Salaries: Professor G. R. Anderson, Manager (without remuneration)		
Less credit from laboratory deposits	\$3.096 57 37 40	\$3.059 17
H. Ross. 4 weeks (paid also as Laboratory Attendant in Metallurgical Engineering)	40 00	
Messenger service (\$822.50):	782 50	
Clerical Assistance (\$151.70):  Miss P. E. McLaughlin, 3 weeks	54 00 16 70 81 00	
Grand & Toy, chair Office Specialty Mfg. Co., stools	25 50 6 00	
Superintendent's Dept., labour, \$48.18; material, \$2.49.  Furniture, fixtures, books, etc. (\$216.50):  T. Eaton Co., linoleum.	50 67	
Thomas & Corney Typewriters, Ltd., typewriter repairs. University Press, printing and stationery. Accounts under \$10 (5)	18 00 1.303 10 23 65 15 00	
D. Gestetner Ltd., stencils Photographic Service, slides and prints	34 00 227 47 196 00	
Stationery, printing. Calendar, office supplies and incidentals (\$1,905.87): Canadian National Telegraphs	\$17 98 20 00	
93. General Expenses		\$1.744 08
Less credits: Laboratory deposits. \$200.75; sale of material, etc., \$11.10	\$1.955 93 211 85	
Accounts under \$10 (11)	57 39 127 58	

95. Mining Building (including Mill Building)		
Heat and light	\$7.962	
Gas, \$1.115.83; water, \$313.13	1.428 9	96
Superintendent's Dept., material	254 5	58
Cleaning (\$3,721.67):	97. (	00
Allen Mfg. Co., laundry New York Window Cleaning Co.	37 ( 35 (	
Superintendent's Dept., labour	3.649 5	
Repairs and renewals (\$3.274.88):	57.0	) 1
Wm. Bartlett & Son, shades, lantern screen, etc	57 9 15 0	
T. Eaton Co., cleaning and filling linoleum	10 (	00
Johnson Temperature Regulating Co., heating system repairs  Accounts under \$10 (2)	50 2 7 0	
Superintendent's Dept., labour, \$1.890.06; material, \$1.244.59	3.134	
Alterations to Room 84:	=00	
Superintendent's Dept., labour, \$462.73; material, \$237.27  Caretaker, A. Clarke, 12 mos. (and overtime \$152)	700 ( 1,450 (	
Caretaker, A. Ciarke, 12 mos. (and overtime \$152)	1,450 (	
	\$18.792 7	78
Less heat and light charged to Central Power Plant \$7,962 69		
Credit for cleaning, etc	7,984 6	59
-		- \$10,808 09
96. Engineering Building		
Heat and light	\$3,401 5	58
Gas. \$33.42; water. \$201.48	234 9	90
Caretaker's supplies: Superintendent's Dept., material	187 6	57
Cleaning (\$1,782.83): Allen Mfg. Co., laundry	17 4	10
New York Window Cleaning Co	44 5	50
Superintendent's Dept., labour	1,720 9	93
Wm. Bartlett & Son, shades.	19 6	59
Robt. Simpson Co., linoleum	79 0	
Superintendent's Dept., labour, \$1,553.91; material, \$637.84  Caretaker, F. Baker. 12 mos. (and overtime \$153)	2.191 7 1.400 0	
- Carctaker, 1. Daker. 12 mos. vand overtime #1557	1.400 (	
T 1 1311 1 1 C 1 D D1 20 100 T	\$9.297 4	19
Less heat and light charged to Central Power Plant \$3,401 58 Credit for cleaning, etc		
	3,594 9	9
-		- \$5,702 50
97. Electrical Building (including Mechanical Buil and Wind Tunnel)	LDING	
Heat and light	\$4.458 1	16
Fuel for Experimental Plant (\$1,088.47): W. H. Cox Coal Co	1.00= =	
Superintendent's Dept., labour	1,087 7	5
Gas, \$86.34; water, \$412.08	498 4	
Caretaker's supplies:	110.0	.=
Superintendent's Dept. material	113 0	) (
Allen Mfg. Co., laundry	22 8	18
New York Window Cleaning Co	66 5	
Toronto Window Cleaning Co	20 0 1,904 3	
Repairs and renewals (\$1,491.92):	1,701 0	
Wm. Bartlett & Son, shades	24 6	
Canadian Powers Regulating Co., repairs to controls, etc	9 8 10 0	
Homes Welded Metals Co., hot-water tank	17 5	0
Superintendent's Dept., labour, \$878.17; material, \$551.74	1.429 9	
Caretaker. F. F. Hitchcock, 12 mos	1,450 0	_
	\$11.113 7	2

Less heat and light charged to Central Power Plant \$4,458 16 Credit for cleaning	4.479	16	<b>\$6.634 56</b>
98. Geodetic Observatory Building			
Heat and light	\$294 16		
Caretaker's supplies: Superintendent's Dept., material	18	56	
Cleaning (\$124.91): Advance Window Cleaning Co Superintendent's Dept., labour.	4 120	41 50	
Repairs and renewals: Superintendent's Dept., labour, \$70.54; material, \$3.17	73	71	
Less heat and light charged to Central Power Plant	\$528 294		<b>\$</b> 233 38
Charged to Revenue, 1937-38			\$328,331 07 20.000 00
		=	\$348.331 07

### X. FACULTY OF DENTISTRY

### 99. SALARIES

(a) Regular Staff	
A. D. A. Mason, Dean (paid also as Professor)	<b>\$1.000 00</b>
A. D. A. Mason, Operative Dentistry (paid also \$45 for Extra Mural	
Lectures)	5.000 00
F. M. Lott, Prosthetic Dentistry (paid also \$30 for Extra Mural	
Lectures)	5,000 00
T. Cowling. Dental Technology and Metallurgy	2.000 00
G. C. Cameron, Dental Pathology and Bacteriology	3.000 00
C. A. Corrigan, Orthodontia (paid also \$40 for Extra Mural	
Lectures)	2.500 00
E. W. Paul, Dental Surgery and Anaesthesia (also Librarian from 1	040.00
September)	840 00 400 00
F. J. Conboy, Dental Praxis	400 00
S. S. Crouch. Dental Anatomy (paid also \$600 as Lecturer, Ortho-	250 00
dontia) I. H. Ante. Crown and Bridge Prosthesis (without salary — paid \$75	230 00
for Extra Mural Lectures and \$320 for Post Graduate Courses 1.	
Associate Professors:	
Dentistry:	
W. G. Switzer	4.000 00
H. A. Hoskin	4.000 00
R. J. Godfrey	3.800 00
R. G. Ellis (paid also \$30 for Extra Mural Lectures)	3.800 00
F. A. Clarkson, Medicine	360 00
Fulton E. Risdon, Oral Surgery	180 00
L. A. Kilburn, Dental Praxis	150 00
E. S. Ryerson, Assistant Professor, Surgery (see also Faculty of	400 00
Medicine)	400 00
Associates: Dentistry:	
S. M. Richardson	3,300 00
L. F. Krueger (paid also \$160 for Extra Mural Lectures)	1.500 00
G. H. Coram	1,400 00
H. A. Ross	500 00
G. D. Beierl	750 00
F. L. Cole (paid also \$60 for Extra Mural Lectures)	670 00
J. H. Duff (paid also \$25 for Extra Mural Lectures)	705 00
W. T. Holmes	1.000 00
W. L. Hugill	560 00
F. Martin (paid also \$60 for Extra Mural Lectures)	630 00

G. V. Morton (paid also \$50 for Extra Mural Lectures)	670 00	
J. M. Sheldon	670 00	
R. R. Walker	670 00	
R. S. Woollatt	670 00	
R. L. Twible	540 00	
D. M. Tanner (paid also \$292 as Demonstrator and \$100 in	340 00	
	50.00	
Faculty of Medicine)	50 00	
G. Vernon Fisk, Orthodontia (paid also \$150 in St. George's School)	200 00	
Miss W. C. Riddle. Histology, Bacteriology and Pathology	2.160 00	
G. W. Spinks, Dental Anatomy	700 00	
Preventive Dentistry:		
J. Kreutzer, also Demonstrator in Operative Dentistry (Ses-		
sional)	1.100 00	
M. A. Cox.	600 00	
J. H. Johnson, Dental Surgery and Anaesthesia (paid also \$15 for	000 00	
Extra Mural Lectures)	3.400 00	
C. H. M. Williams, Periodontia (half time)	1,208 00	
Demonstrators, Assistants, etc. (Sessional):		
Demonstrators:	40 - 00	
P. G. Anderson	495 00	
J. H. G. Harwood (part time)	240 00	
D. M. Tanner, Peridontology (see also above)	292 00	
Miss D. F. J. Berry. Preventive Assistant	1,300 00	
Lecturers:	*-	
C. C. Rous. Applied Chemistry and Metallurgy (see also Office		
Staff)	300 00	
W. D. Cavanagh, Dentistry	540 00	
S. S. Crouch, Orthodontia (see also above)	690 00	
E. J. Pratt, Special Lecturer, English (see also Faculty of	262.00	
Medicine and Ontario College of Education)	360 00	
Instructors:		
E. M. Rigsby, Dental Technology	240 00	
R. S. Hosking, English Expression (paid also \$200 for Extension		
Work)	100 00	
Laboratory Assistants:		
Technicians:		
	1.000.00	
W. V. Byrne. Dentistry, 10 mos	1.900 00	
Miss I. A. Bumby. Bacteriology and Pathology	1.100 00	
H. F. Whittaker (see also Anatomy)	120 00	
Mrs. M. Gratton. Histology (part time) 34 weeks	306 00	
H. Aylward, Infirmary (paid also \$33 for overtime)	1.250 00	
_		\$69,476 00
(b) Infirmary Staff (including Nurses)		
Nurses:		
Miss L. A. Cameron, Supervisor, Dental Nurses in Training, 10 mos.	\$1,300 00	
Miss L. E. Tutt, 10 mos	900 00	
Miss A. H. Rose, 9 mos.	840 00	
Miss F. G. Whitehead, 8 mos	800 00	
Miss A. E. Phipps, 10 mos	800 00	
Miss G. Kyle, 10 mos	700 00	
Miss E. G. Singer, 10 mos	700 00	
Miss M. M. Brown. 10 mos	700 00	
R. M. Turner, Instructor in Typewriting for Dental Nurses	100 00	
Mrs. L. Barraclough, Laundress, 42 weeks @ \$16.45	691 00	
Ties. B. Bulluciongli, Lutilidices, 12 weeks in pro-10.	021 00	\$7,531 00
		Q1.001 00
(c) Office Staff		
	63 000 00	
C. C. Rous, Secretary (see also above)	\$3.000 00	
Miss F. A. Cook, Secretary to the Dean	1.700 00	
Miss R. C. Hopkins, Assistant to Secretary (resigned 31 August)	216 66	
Miss E. B. Mimms, Assistant in Library	1.100 00	
Fraser Mimms, Assistant in Library (Sessional - part time)	140 00	
Miss L. Park, Cashier in Infirmary, 10 mos	1.100 00	
Miss F. Ward. Stenographer, 2 mos. to 31 August @ \$1,100 per annum;		
Assistant to Secretary @ \$1.200 from 1 September (vice Miss Hopkins)	1.183 34	
Miss M. D. Hill, Clerk in Secretary's Office from 1 September (vice	21200 01	
Miss Ward, promoted	833 34	
mice ward, promoted	000 04	\$9,273 34
		ψ2.210 0 <del>4</del>

99a. Post Graduate Course		
Dr. I. II. Ante, honorarium as Instructor	\$320 00	
Allan & Rollaston, vulcanizing dentures	12 00	
Photographic Service, slides, etc	2 70	
University Press, printing	22 01 25 00	
Sundry expenses	25 00	\$381 71
100. Laboratory and Infirmary Supplies		9501 11
Aikenhead Hardware Ltd., hardware	57 41	
Ash Temple Co., dental supplies	1,189 31	
Wm. Bartlett & Son, shade and lantern screen	15 21	
Bausch & Lomb, microscope repairs	20 92	
W. E. Booth & Co., film filters	26 32	
Burke Electric & X-Ray Co., films	26 46	
Bernard Cairns, tags	11 76 19 80	
Canadian Laboratory Supplies, slide boxes, etc	54 03	
Canadian Laundry Machinery Co., ironer	193 30	
Canadian Tumbler Co., glasses	14 40	
Canadian Westinghouse Ltd., refrigerator unit	369 77	
L. D. Caulk Co., dental compound	75 55	
Central Scientific Co., glassware, chemicals, etc	121 85	
Chemistry Dept., laboratory and sundry supplies	313 85 66 78	
Columbia Dentoform Corporation, dental supplies	21 70	
Denco Ltd., gold	920 78	
Dental Co., heater	27 11	
Dental Products Corporation	10 75	
De Velbess Mfg. Co., cut offs, with tubing	203 84	
H. S. Dodd. furnace alterations	25 00	
Dominion Dental Co., dental supplies	347 79	
Eastman Photographic Stores, films, chemicals, etc	493 15 136 87	
Florentine Co., models	43 90	
Ed. Green Dental Supplies, dental supplies	66 84	
Hall Mfg. Co., dental forms and masks	49 04	
J. F. Hartz Co., needles, cat gut, gloves, etc	129 31	
Interlake Tissue Mills, paper napkins	90 00	
Andrew Jergens Co., soap	11 33 247 93	
Johnson & Johnson, absorbent cotton, etc	1,751 58	
Kelley Feed & Seed Co., feed	13 10	
Mrs. C. A. Kennedy, model trimmer	12 50	
Leiman Bros., polishing outfit	225 33	
Medico Co., syringes	35 48	
Melton Hardware, dental plaster	89 18	
Metal Craft Co., stools	180 00 32 40	
Minneapolis-Honeywell Regulator Co., electrical controls, etc	18 72	
National Drug & Chemical Co., chemicals	2,078 60	
National Refining Co., gold, furnace castings, porcelain, etc	3,178 02	
Office Specialty Mfg. Co., guides, desk, etc	78 13	
Photographic Service, slides and prints	180 79	
Physics Dept., laboratory supplies	34 15 10 24	
E. L. Platt, oxygen machine, repairs, gas, etc	31 10	
Thos. Pocklington & Co., chart paper	16 00	
Prophylactic Brush Co., tooth brushes	18 04	
Alfred Quantrell, ent-off repairs	15 00	
Reeves & Sons, pictures framed	11 25	
Richards Glass Co., bottles	10 33 35 00	
Miss M. Sewell, charts	175 00	
Robt. Simpson Co., curtains and fittings	207 59	
Ella Skinner, uniforms	494 26	
Wallace C. Sproule, lettering labels and signs	24 75	
Stanley Mfg. Co., name plates	17 10	
Stevens Companies, sterilizers, drums, instrument tables, etc	1,565 46 346 64	
Toronto Dental Dealers, dental supplies	45 00	
Cinca Da ince Centra, Operate Lentaria		

Less credits: Laboratory deposits, \$1,375.97; gold sweepings, \$58.20;	64 4 1,377 6 49 0 37 0 981 0 61 1 197 8 155 0 4.931 0	91 00 00 09 50 39 33 33 54
sale of material, \$20.99	1.455	6 - \$22.924 92
101. General Expenses		- #22.924 92
Stationery, printing, Calendar, office supplies and incidentals (\$1,899.95):		
C. P. R. Telegraphs.  Postage  Robbins & Townsend. typewriter inspection.  Waller Multigraphing Letter Co., multigraphing.  University Press, printing and stationery.  Accounts under \$10 (3)  Sundry disbursements by Secretary.  Extra-Mural Lectures (\$650):  I. H. Ante.  F. L. Cole.  C. A. Corrigan.	\$32 8 145 8 60 7 10 0 1,618 6 17 0 15 5 75 0 40 0	50 75 10 10 10 10 10 10 10
J. H. Duff. R. G. Ellis J. H. Johnson L. F. Krueger F. M. Lott F. Martin A. D. A. Mason G. V. Morton American Association of Dental Schools, dues	25 ( 30 ( 15 ( 160 ( 55 ( 95 ( 45 ( 75 ( 75 ( 75 ( 75 ( 75 ( 75 ( 75 ( 7	00 00 00 00 00 00 00 00 00
Less received from Royal College of Dental Surgeons, account extra-		
mural lectures	350 0	- \$2,274 95
Fuel:		- φ2,214 93
	\$1.673 6 3.274 4 577 3	8
Cleaning (\$2,205,56):		
New York Window Cleaning Co Superintendent's Dept. labour. Repairs and renewals (\$2,987.68):	30 0 2,175 5	6
Wm. Bartlett & Son, shade repairs	34 2	
City Treasurer, elevator licenses	10 0 37 5	
Routery Bros., plaster repairs	26 0	
Accounts under \$10 (2)	14 8	
Superintendent's Dept., labour, \$2.077.41; material. \$787.61 Caretaker, Robt. Eades, 12 mos. (and overtime \$2.50)	2.865 0 1.400 0	
Fireman, Superintendent's Dept., labour	810 0	
The second secon		_
Less credits: Fuel, \$8.85; cleaning, light, etc., \$4.75; sale of scrap,	12.928 7	0
\$135	148 6	0
		- \$12,780 10
		\$124,642 02

# VI. FACULTY OF HOUSEHOLD SCIENCE

TENCETTY OF HOUSEHOLD SCIENCE		
103. Salaries		
(a) Household Science:		
Miss Jessie Brodie, Professor (with rooms, heat and light valued at \$280 per annum).	\$4,000 00	
Assistant Professors:	01,000 00	
Miss Alice C. Willard	3.450 00	
Miss E. W. Park. Lecturers (Sessional):	2.700 00	
Miss K. E. Bennett	2,500 00	
Miss J. S. Roberts	2,300 00	
M'ss D. E. Mulholland.	1,800 00	
Miss H. R. Coatsworth (part time)	1,000 00	
Miss F. E. Lamon	900 00	
Miss A. Musgrave	800 00	
Miss G. H. Donald. Research Assistant	1,000 00	
	\$20,450 00	
Charged to Massey Treble Bequest	3.000 00	
_		\$17,450 00
(b) Food Chemistry:		
Dr. C. C. Benson. Professor, also Secretary of Faculty (with rooms, heat and light valued at \$280)	\$4.200 00	
Miss J. R. Panton, Lecturer (Sessional)	2.250 00	
Instructors (Sessional):		
Miss E. I. Walker	1.600 00	
Miss D. Lindsley (part time—paid also \$475 as Clerical Assistant)	400 00	
Assistants (Sossional):	400 00	
Miss E. J. Reed	1.100 00	
M'ss D. Chapman	900 00	
Miss M. M. McCarthy (4 mos., 1 week)	212 50	\$10.662 51
		. 10.00_ 0
	_	
	_	\$28.112 50
101 Household Science Bedaptnent		\$28.112 50
104. Household Science Department	-	\$28.112 50
Laboratory supplies (\$1,374.28):	eau 70	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk	\$211 50 192 61	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk	\$211 50 192 61 145 20	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers' Dairy, milk.  Canadian Laboratory Supplies, chemicals, etc  T. Eaton Co., mops, brushes, linen, etc  Lever Bros., soap.	192 61 145 20 10 60	\$28,112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers' Dairy, milk.  Canadian Laboratory Supplies, chemicals, etc  T. Eaton Co., mops, brushes, linen, etc  Lever Bros., soap.  Nichols Chemical Co., acids.	192 61 145 20 10 60 31 56	\$28,112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers' Dairy, milk.  Canadian Laboratory Supplies, chemicals, etc.  T. Eaton Co., mops, brushes, linen, etc.  Lever Bros., soap.  Nichols Chemical Co., acids.  Alex. Provan, provisions.	192 61 145 20 10 60 31 56 628 77	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions F. Simpson & Sons, meat. Accounts under \$10 (7)	192 61 145 20 10 60 31 56	\$28.112 50
Laboratory supplies (\$1,374.28):  Acme-Farmers' Dairy, milk.  Canadian Laboratory Supplies, chemicals, etc.  T. Eaton Co., mops, brushes, linen, etc.  Lever Bros., soap.  Nichols Chemical Co., acids.  Alex. Provan, provisions.  F. Simpson & Sons, meat.  Accounts under \$10 (7)  Sundry disbursements by department.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03	\$28.112 50
Laboratory supplies (\$1,374.28):  Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material.	192 61 145 20 10 60 31 56 628 77 102 15 24 96	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers' Dairy, milk.  Canadian Laboratory Supplies, chemicals, etc.  T. Eaton Co., mops, brushes, linen, etc.  Lever Bros., soap.  Nichols Chemical Co., acids.  Alex, Provan, provisions.  F. Simpson & Sons, meat.  Accounts under \$10 (7).  Sundry disbursements by department.  Superintendent's Dept., material.  Laboratory attendance (\$1,521,66):	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90	\$28.112 50
Laboratory supplies (\$1,374.28):  Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03	\$28.112 50
Laboratory supplies (\$1,374,28): Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids Alex, Provan, provisions F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department Superintendent's Dept., material Laboratory attendance (\$1,521,66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 422 3 weeks Mrs. E. Graham, 39 weeks.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers' Dairy, milk.  Canadian Laboratory Supplies, chemicals, etc.  T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap.  Nichols Chemical Co., acids. Alex, Provan, provisions.  F. Simpson & Sons, meat. Accounts under \$10 (7).  Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521,66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 422 '3 weeks. Mrs. E. Graham, 39 weeks. Eguipment and incidentals (\$151,51):	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids. Alex, Provan, provisions F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department Superintendent's Dept., material Laboratory attendance (\$1.521,66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 422 3 weeks Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151,51): Walter A. Carveth & Co., microscope repairs.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids Alex. Provan, provisions. F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521.66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42.2 3 weeks. Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs. Thos, Pocklington Co., overhauling balances, etc.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids Alex, Provan, provisions. F. Simpson & Sons, meat Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521.66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42 2 3 weeks Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8) Superintendent's Dept., freight, \$10; labour, \$41.10; material, \$5.30.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers Dairy, milk. Canadian Laboratory Supplies, chemicals, etc  T. Eaton Co., mops, brushes, linen, etc Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions. F. Simpson & Sons, meat. Accounts under \$10 (7). Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521,66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42 2'3 weeks. Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151,51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8). Superintendent's Dept., freight, \$10; labour, \$41,10; material, \$5,30. Books and special equipment (\$650,44):	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 66 683 00 145 00 36 00 39 11 56 40	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc. T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids Alex, Provan, provisions. F. Simpson & Sons, meat Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521.66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42 2 3 weeks Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8) Superintendent's Dept., freight, \$10; labour, \$41.10; material, \$5.30.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk Canadian Laboratory Supplies, chemicals, etc T. Eaton Co., mops, brushes, linen, etc Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions. F. Simpson & Sons, meat Accounts under \$10 (7). Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521.66): Miss A. Conacher. 44 weeks. 2 days Mrs. E. Stroud, 42.2.3 weeks Mrs. E. Graham. 39 weeks Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs Thos. Pocklington Co., overhauling balances, etc Accounts under \$10 (8). Superintendent's Dept., freight, \$10; labour, \$41.10; material, \$5.30. Books and special equipment (\$650.44): British Cotton Industries Research Association. Canadian General Electric Co., irons Canadian Westinghouse Co., irons	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11 56 40 17 84 13 12 15 79	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers Dairy, milk. Canadian Laboratory Supplies, chemicals, etc.  T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions  F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521,66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42 2'3 weeks. Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151,51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8) Superintendent's Dept., freight, \$10; labour, \$41,10; material, \$5,30. Books and special equipment (\$650,44): British Cotton Industries Research Association. Canadian General Electric Co., irons. Canadian Westinghouse Co., irons. Walter A. Carveth & Co., microscope and parts	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11 56 40 17 84 13 12 15 79 191 50	\$28.112 50
Laboratory supplies (\$1,374,28): Acme-Farmers' Dairy, milk. Canadian Laboratory Supplies, chemicals, etc T. Eaton Co., mops, brushes, linen, etc Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions F. Simpson & Sons, meat. Accounts under \$10 (7). Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1.521.66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 422 '3 weeks. Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8). Superintendent's Dept., freight, \$10; labour, \$41.10; material, \$5.30. Books and special equipment (\$650.44): British Cotton Industries Research Association. Canadian Westinghouse Co., irons. Canadian Westinghouse Co., irons. Walter A. Carveth & Co., microscope and parts. T. Eaton Co., curtains, linen, slip covers, chair, mattress, etc.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11 56 40 17 84 13 12 15 79 191 50 255 88	\$28.112 50
Laboratory supplies (\$1,374,28):  Acme-Farmers Dairy, milk. Canadian Laboratory Supplies, chemicals, etc.  T. Eaton Co., mops, brushes, linen, etc. Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions  F. Simpson & Sons, meat. Accounts under \$10 (7) Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521,66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42 2'3 weeks. Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151,51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8) Superintendent's Dept., freight, \$10; labour, \$41,10; material, \$5,30. Books and special equipment (\$650,44): British Cotton Industries Research Association. Canadian General Electric Co., irons. Canadian Westinghouse Co., irons. Walter A. Carveth & Co., microscope and parts	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11 56 40 17 84 13 12 15 79 191 50	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk Canadian Laboratory Supplies, chemicals, etc T. Eaton Co., mops, brushes, linen, etc Lever Bros., soap. Nichols Chemical Co., acids. Alex. Provan, provisions. F. Simpson & Sons, meat Accounts under \$10 (7). Sundry disbursements by department. Superintendent's Dept., material. Laboratory attendance (\$1,521.66): Miss A. Conacher. 44 weeks. 2 days Mrs. E. Stroud, 42.2/3 weeks. Mrs. E. Graham. 39 weeks. Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc Accounts under \$10 (8). Superintendent's Dept., freight, \$10; labour, \$41.10; material, \$5.30. Books and special equipment (\$650.44): British Cotton Industries Research Association. Canadian General Electric Co., irons. Canadian Westinghouse Co., irons. Walter A. Carveth & Co., microscope and parts. T. Eaton Co., curtains, linen, slip covers, chair, mattress, etc J. B. Lippincott Co., books. McFarlane Mfg. Co., ironing stands. Nutrition Abstracts Review, subscription.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11 56 40 17 84 13 12 15 79 191 50 255 88 10 04 11 02 10 61	\$28.112 50
Laboratory supplies (\$1,374.28): Acme-Farmers' Dairy, milk Canadian Laboratory Supplies, chemicals, etc T. Eaton Co., mops, brushes, linen, etc Lever Bros., soap. Nichols Chemical Co., acids Alex. Provan, provisions. F. Simpson & Sons, meat. Accounts under \$10 (7). Sundry disbursements by department. Superintendent's Dept., material Laboratory attendance (\$1.521.66): Miss A. Conacher, 44 weeks, 2 days. Mrs. E. Stroud, 42.2/3 weeks. Mrs. E. Graham, 39 weeks. Equipment and incidentals (\$151.51): Walter A. Carveth & Co., microscope repairs. Thos. Pocklington Co., overhauling balances, etc. Accounts under \$10 (8). Superintendent's Dept., freight, \$10; labour, \$41.10; material, \$5.30. Books and special equipment (\$650.44): British Cotton Industries Research Association. Canadian General Electric Co., irons. Canadian Westinghouse Co., irons. Walter A. Carveth & Co., microscope and parts. T. Eaton Co., curtains, linen, slip covers, chair, mattress, etc. J. B. Lippincott Co., books. McFarlane Mfg. Co., ironing stands.	192 61 145 20 10 60 31 56 628 77 102 15 24 96 19 03 7 90 693 65 683 00 145 00 20 00 36 00 39 11 56 40 17 84 13 12 15 79 191 50 255 88 10 04 11 02	\$28.112 50

University Press, books	24 28	
Accounts under \$10 (19)	78 42	
	\$3,697 89	
Less credits: Laboratory deposits\$204 37		
Charged to Massey Treble Bequest		
	854 81	
		\$2,843 03
105. Food Chemistry Department		
Maintenance (\$825.85):		
British Drug Houses, chemicals	\$12 79	
Canadian Kodak Co., chemicals	20 46	
Canadian Laboratory Supplies, filter paper and glassware	226 31	
Walter A. Carveth & Co., oil immersion lens	30 00	
Central Scientific Co., glassware, etc	75 97	
T. Eaton Co., towels, brushes. etc	24 78	
Leeds & Northrup Co., electrodes	21 08	
Nichols Chemical Co., acids, etc	25 87	
Thos. Pocklington Co., balance repairs	27 65	
Service Station Equipment Co., refrigerator service	10 38	
Wilson Scientific Co., glassware, etc	58 31 11 93	
University Press, printing and stationery	41 32	
Accounts under \$10 (11)	41 52	
Sundry disbursements by department:	69 61	
Stationery, utensils, etc., \$47.30; food supplies, \$21.31 Superintendent's Dept., labour, \$94.82; material, \$74.57	169 39	
	109 39	
Laboratory attendance (\$1,082.37):	<b>700 70</b>	
Mrs. I. Scott, 42 weeks, 3 days	700 70	
Mrs. R. Berry, 38 weeks, 1 day	381 67	
•	A1.000.00	
	\$1.908 22	
Less credit from laboratory deposits	149 75	03.550.45
•		\$1,758 47
106. General Expenses		
Stationery, printing, office supplies and incidentals (\$284.03):	Ø11 10	
Stationery, printing, office supplies and incidentals (\$284.03): D. Gestetner Ltd., paper	\$11 10	
Stationery, printing, office supplies and incidentals (\$284.03): D. Gestetner Ltd., paper	21 00	
Stationery, printing, office supplies and incidentals (\$284.03): D. Gestetner Ltd., paper	21 00 18 90	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper.  Postage  Robbins & Townsend, typewriter inspection.  University Press, printing and stationery.	21 00 18 90 205 78	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3)	21 00 18 90 205 78 14 75	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.	21 00 18 90 205 78	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50):	21 00 18 90 205 78 14 75 12 50	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3) Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos.	21 00 18 90 205 78 14 75 12 50	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry).	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00	
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3) Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos.	21 00 18 90 205 78 14 75 12 50	@1.04C.72
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry).	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00	<b>\$1,94</b> 6 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper Postage Robbins & Townsend, typewriter inspection University Press, printing and stationery Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos Miss D. Lindsley, 20 weeks (paid also in Food Chemistry) Miss D. Chapman, 1½ mos. (paid also in Food Chemistry)	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00	\$1,946 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry).	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper.  Postage  Robbins & Townsend, typewriter inspection.  University Press, printing and stationery.  Accounts under \$10 (3)  Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50):  Miss E. E. Cross, 10 mos.  Miss D. Lindsley, 20 weeks (paid also in Food Chemistry)  Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50	\$1,9 <del>4</del> 6 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building Heat and light.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building Heat and light. Gas, \$248.88; water, \$341.55.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building  Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies:	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building  Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept. material.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66	<b>\$1,94</b> 6 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley. 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept. material. Cleaning (\$1,612.02):	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12	\$1,946 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley, 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building  Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept. material. Cleaning (\$1,612.02): Advance Window Cleaning Co.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46	\$1,946 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley. 20 weeks (paid also in Food Chemistry). Miss D. Chapman, 1½ mos. (paid also in Food Chemistry).  107. Household Science Building Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept. material. Cleaning (\$1,612.02):	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley. 20 weeks (paid also in Food Chemistry). Miss D. Chapman. 1½ mos. (paid also in Food Chemistry)  107. Household Science Building  Heat and light. Gas, \$248.88; water, \$341.55 Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$1,612.02): Advance Window Cleaning Co. Superintendent's Dept., labour.  Repairs and renewals (\$1,150.94):	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper.  Postage  Robbins & Townsend, typewriter inspection University Press, printing and stationery. Accounts under \$10 (3) Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos.  Miss D. Lindsley, 20 weeks (paid also in Food Chemistry) Miss D. Chapman, 1½ mos. (paid also in Food Chemistry)  107. Household Science Building  Heat and light. Gas. \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$1,612.02): Advance Window Cleaning Co. Superintendent's Dept., labour.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56	\$1,946 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper. Postage Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley. 20 weeks (paid also in Food Chemistry). Miss D. Chapman. 1½ mos. (paid also in Food Chemistry).  107. Household Science Building  Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$1,612.02): Advance Window Cleaning Co., Superintendent's Dept., labour.  Repairs and renewals (\$1,150.94): Federal Floor Furnishing Co., surfacing gymnasium floor.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98	<b>\$1,94</b> 6 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper.  Postage  Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley. 20 weeks (paid also in Food Chemistry). Miss D. Chapman. 1½ mos. (paid also in Food Chemistry).  107. Household Science Building  Heat and light. Gas, \$248.88; water, \$341.55. Caretaker's supplies: Superintendent's Dept., material.  Cleaning (\$1,612.02): Advance Window Cleaning Co., Superintendent's Dept., labour.  Repairs and renewals (\$1,150.94): Federal Floor Furnishing Co., surfacing gymnasium floor. Johnson Temperature Regulating Co., heating system repairs.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98 24 10	\$1,946 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98 24 10 20 35	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper.  Postage  Robbins & Townsend, typewriter inspection. University Press, printing and stationery. Accounts under \$10 (3). Sundry disbursements by Secretary.  Clerical assistance (\$1,662.50): Miss E. E. Cross, 10 mos. Miss D. Lindsley. 20 weeks (paid also in Food Chemistry). Miss D. Chapman. 1½ mos. (paid also in Food Chemistry).  107. Household Science Building  Heat and light. Gas. \$248.88; water. \$341.55. Caretaker's supplies: Superintendent's Dept. material.  Cleaning (\$1,612.02): Advance Window Cleaning Co. Superintendent's Dept., labour.  Repairs and renewals (\$1,150.94): Federal Floor Furnishing Co., surfacing gymnasium floor. Johnson Temperature Regulating Co., heating system repairs. Accounts under \$10 (4). Superintendent's Dept., labour, \$782.52; material. \$295.99. Sundries (\$904.43): John Smith, settee repairs.	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98 24 10 20 35	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98 24 10 20 35 1.078 51	<b>\$1,946</b> 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98 24 10 20 35 1.078 51 18 00 107 24	\$1,946 53
Stationery, printing, office supplies and incidentals (\$284.03):  D. Gestetner Ltd., paper	21 00 18 90 205 78 14 75 12 50 1.100 00 500 00 62 50 \$2.653 66 590 43 139 12 26 46 1.585 56 27 98 24 10 20 35 1.078 51 18 00	\$1,946 53

Caretaker, A. J. Maycock (with rooms, heat and light valued at \$420) (and overtime \$70.50)	1.100 00	
tand overtime \$70.507	1.100 00	-
	\$8.150 60	)
Less heat and light charged to Central Power Plant. \$2,653-66 Credit for cleaning. 11-80 Charged to Massey Treble Bequest. 904-43	2.540.00	
	3.569 89	\$1,580 71
		\$39.241 29
XII. FACULTY OF FORESTRY		
108, Salaries		
Professors:		
C. D. Howe, Dean of the Faculty	\$6,000 00 4,800 00	
J. H. White	4.000 00	,
T. W. Dwight	4.200 00	
Gordon G. Cosens	3.700 00 3.000 00	
R. C. Hosie, Assistant Professor F. S. Newman, Special Lecturer	25 00	
Miss G. McAree, Secretary in Dean's Office	1.200 0	0
-		- \$22,925 00
100 M		
109. Maintenance of Department		
Laboratory supplies and apparatus (\$515.94):	221 0	_
Photographic Service, prints, etc	\$21 9. 23 0	
Accounts under \$10 (15)	48 1	
Sundry disbursements by department:		
Stationery and subscription, \$26.06; sundries, \$12.59	38 6 384 1	
Superintendent's Dept., labour, \$254.45; material, \$129.67	504 1.	2
Office supplies, printing. Calendar, postage and incidentals (\$396.71):	19 2	0
Lowe-Martin Co., transfer cases	21 0	
Postage	50 0	0
Robbins & Townsend, typewriter inspection	34 0	
Telfer Paper Box Co., filing boxes	33 1/ 11 5/	
University Press, printing and stationery	212 5	1
Accounts under \$10 (2)	3 6	
Sundry disbursements by department	11 3	
Collecting material for class work (\$76.57):  R. C. Hosie, travelling expenses	52 5	0
Accounts under \$10 (3)	24 0	7
Laboratory assistance:		
Hugh Campbell, 42-2/3 weeks	372 0	0
Practice Camp supplies, travel, etc. (\$1.166.61):		
Disbursements through the Dean:		
Travelling and hotel expenses, \$136.95; telephone, 50c; sundries, \$12.76	150 2	1
Alvin Dunne, travelling expenses re telephone construction work	28 5	
T. Eaton Co., bowls, jars, etc	11 2	
C. H. Irwin, students' and instructors' board and use of canoes  Lufkin Rule Co., log rules	851 3 38 9	
Northern Electric Co., wire, spikes, screws, etc	49 9	
Accounts under \$10 (8)	34 1	
Superintendent's Dept., labour	2 2	5
	\$2.527 8	
Less received from students for board	585 2	
		- \$1.942 63

110. Forestry Building		
Heat and light	\$883 42	
Gas, \$9.22; water, \$8. Caretaker's supplies:	17 22	
Superintendent's Dept., material	70 44	
Advance Window Cleaning Co Allen Mfg. Co., laundry	14 70	
Superintendent's Dept., labour	6 36 285 76	
Repairs and renewals: Superintendent's Dept., labour, \$194.58; material, \$28.60	223 18	
Caretaker, E. G. Payne, 12 mos. (and overtime \$75.50)	1.400 00	
Less heat and light charged to Central Power Plant 883 42	\$2,901 08	
Less heat and light charged to Central Power Plant 883 42 Credit for cleaning, etc	000 40	
-	892 42	\$2.008 66
	-	\$26,876 29
XIII. FACULTY OF MUSIC	=	
111. Salaries		
Honoraria to Dean and Lecturers:	*****************	
Sir Ernest McMillan, Dean	\$250 00 250 00	
Leo Smith	250 00	
Healey Willan J. Leland Richardson, Carillonneur	250 00 500 00	
Miss A. W. Patterson, Secretary to Faculty (paid also as President's Secretary)	250 00	
112. Maintenance of Department		\$1,750 00
Printing, Calendar, postage and incidentals:		
Heintzman & Co., piano rental	\$26 50	
Chivesely 1 less, printing and stationery	180 52	\$207 02
	-	\$1,957 02
XIV. SCHOOL OF GRADUATE STUDIES	=	
113. Salaries		
G. S. Brett, Dean (see also Philosophy)	\$1,000 00	
Miss N. MacKenzie, Secretary. Miss D. R. Bond, Stenographer.	2,000 00 950 00	
114. Maintenance of Department		\$3.950 00
Stationery and office supplies (\$548.32):		
Office Specialty Mfg. Co., cabinet and cards	\$131 70 45 00	
University Press, printing and stationery	354 43	
Accounts under \$10 (4)	17 19	
Miss Estelle Ridge, Secretariat, Board of Examiners for Professional Degrees, \$50; postage, \$1.11	51 11	
Degrees, gov, postage, graff		\$599 43
		\$4,549 43
XV. SCHOOL OF NURSING	=	
115. Salaries		
Miss F. H. M. Emory, Assistant Director.	\$3,600 00	
Lecturers and Instructors (Sessional):	3,000 00	
Miss W. L. Chute, Science and Nursing	2,200 00 2,100 00	
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Nursing:		
Miss D. M. Percy	2,100 00	
Miss N. D. Fidler	2.000 00	
Miss E. M. Stuart (resigned 31 March)	1.425 00	
Miss M. Jean Wilson (vice Miss Stuart) 3 mos. from 1 April. \$270; Resident Nurse to 30 March, \$630	900 00	
Miss E. N. L. Mortimer, Secretary-Librarian	1.800 00	
Miss M. G. Barnes, Clerical Assistant	1.140 00	
Miss Marion Waddell, Dietitian-Housekeeper (with living valued at		
\$400) 10 mos	900 00	\$21,165 00
		\$21,105 00
116. Special Teaching		
Critic Teachers in City Schools, etc., for practice-teaching purposes (\$448):		
Board of Education	\$439 00	
Separate School Board	9 00	
University Departments and Special Lecturers (\$4,042.85):		
School of Hygiene	400 00	
Psychology	300 00	
Anatomy Physiology	200 00	
Social Science	200 00	
Lecturers:	200 00	
Dr. Norma H. C. Ford. Biology (see also department) W. K. F. Kendrick, Science of Education (paid also \$300 for	300 00	
Extension Work)	200 00	
C. E. Phillips, Principles of Education (see also O. C. E.)	30 00	
J. A. Long, for Refresher Course (see also O. C. E.)	30 00	
Mrs. Florence E. Woodcock (see also University Extension)	75 00	
Mrs. Jean Hampson (paid also \$100 for Extension Work)	10 00	
E. Fidlar, Physiology (see also department)	300 00	
Medicine (see also department):	115 00	
Trevor Owen	20 00	
Beverley Hannah	210 00	
J. H. Élliott	40 00	
Gordon Bates	20 00	
Alan Brown, Paediatrics (see also department)	160 00	
Surgery (see also department): W. K. Welsh	115 00	
A. W. Farmer	10 00	
J. L. MacDonald	10 00	
D. E. Robertson	20 00	
R. M. Wansborough	10 00	
11. B. Van Wyck, Obstetries (see also department)	115 00 30 00	
Perry Goldsmith, Oto-Laryngology (see also department)	45 00	
W. E. Brown , Anaesthesia (see also department)	10 00	
C. G. Stogdill, Mental Hygiene (see also Psychiatry)	100 00	
J. T. Phair (Child Hygiene (see also School of Hygiene)	50 00	
A. H. Sellars (see also School of Hygiene) D. T. Fraser (see also School of Hygiene)	10 00 20 00	
A. D. A. Mason, Oral Hygiene (see also Dentistry)	40 00	
Harvey Agnew	20 00	
Miss M. Bell	15 00	
Miss E. Hickey	20 00	
Miss Edna Moore	20 00 15 00	
Miss J. Knisely.	15 00	
Miss M. MacKay	10 00	
W. J. Dobbie	30 00	
L. A. Pequegnat	20 00	
G. H. Stevenson (including travelling expenses, \$6.10)	16 10	
Miss Frances King (including travelling expenses \$31.75) Miss Gretta Ross	81 75 10 00	
Miss B. Boulter	180 00	
Miss D. E. Shantz	25 00	

H : 1   D   H   H   D   : .: (0000)		
Hospitals and Public Health Organizations (\$685):	300.00	
Miss Margaret Murray	180 00	
Miss E. Longman	170 00 90 00	
Toronto General Hospital.	70 00	
Canadian Red Cross Society	55 00	
Neighbourhood Workers' Association	40 00	
Toronto Western Hospital	40 00	
Brantford General Hospital	10 00	
Hamilton General Hospital	10 00	
St. Michael's Hospital	10 00	
St. Elizabeth Visiting Nurses' Association	10 00	
_		\$5,175 85
117 C M		
117. School Maintenance		
Office supplies, printing, postage and incidentals (\$753.34):		
D. Gestetner Ltd., ink and stencils	\$51 54	
Grand & Toy, transfer cases, etc	11 05	
Office Specialty Mfg. Co., cabinet	35 50	
Postage	170 00	
Robbins & Townsend, typewriter inspection	11 40	
Miss H. Weeks, clerical assistance, 9 days	24 75	
University Press, printing and stationery	369 55	
Accounts under \$10 (6)	35 07	
Sundry disbursements by Director:		
Stationery, \$11.22; telegrams, etc., \$18.04; sundries, \$15.22	44 48	
Class room equipment and supplies, library and advertising (\$444.05):	35.60	
Central Scientific Co., chemicals	15 62	
Clay. Adams Co., model	22 95	
T. Eaton Co., chairs, bed mattress, etc	120 04 52 08	
Geo. M. Henry Co., blackboard	11 03	
Ingram & Bell, chemicals, thermometers, gauze, etc	16 05	
MacLean Publishing Co., advertising.	37 80	
Physicians' Record Co., books	20 04	
University Press, printing and stationery	19 10	
Accounts under \$10 (28)	105 61	
Sundry disbursements by Director:		
Drugs, \$11.59; pamphlets and sundries, \$12.14	23 73	
Graduation expenses and fellowship payments (\$182.68):		
Birks. Ellis, Ryrie Ltd graduation pins	67 50	
Accounts under \$10 (4)	15 18	
Internships:		
Miss Isobel Hobbs	50 00	
Miss Marion Tresidder	50 00	
Travelling and entertainment, extra-curricular activities, and physical		
examination for domestic staff (\$207.81):  Home Smith & Co., suppers	20 00	
Star Taxi Co., taxis.	20 00 17 60	
F. Sylvester, musical services.	60 00	
Travelling expenses:	00 00	
Miss Florence H. M. Emory	10 00	
Miss B. M. Millman	13 25	
Miss E. K. Russell	49 25	
Accounts under \$10 (7)	37 71	
_		\$1.587 88
118. Residence Maintenance		
Residence Physician:		
Dr. J. G. Falconer	\$200 00	
Wages, food, laundry and miscellaneous (\$11,527.22):		
Pay lists, wages of maids, etc	3,779 60	
B. Amodeo & Son. fruit and vegetables	100 45	
Bowes Co., butter	171 13	
Bredin's Bread	45 39	
Canada Bread Co	217 07	
Canada Packers Ltd., meat, etc	781 29	
Christie's Biscuits	115 28	
Club Coffee Co., tea	61 20	
Coles Ltd., cakes, etc	18 50	

\$46 684 22

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Donlands Dairy	151 2		•
T. Eaton Co., kitchen utensils and provisions			
John J. Fee. eggs	247 9		
S. Gumpert Co., jelly powders	25 0		
Samuel Harris, meat	386 1		
Ingram & Bell, chemicals and drugs	16 9		
Kelvinator of Canada, refrigerator repairs	23 5		
Kraft Distributors Ltd., cheese	19 6		
Kraft Pheonix Cheese Co., cheese	15 5	5	
Langley's Ltd., cleaning rugs and curtains	70 2	20	
Loblaw Groceterias, provisions	1.460 3	39	
Michie & Co., provisions	53 5	66	
Wm Neilson Ltd. ice cream	121 7	9	
Nicolo's Fruit Store, fruit and vegetables	424 1	5	
Pacific Mills, paper	14 0	00	
Parisian Laundry	425 1	18	
St. Lawrence Fish Market	92 8		
Robt. Simpson Co., labels and coffee	12 (		
Slichter's Ltd., flowers	39 9		
Standard Brands, coffee	128		
Standard Brands, conee	105		
Wm. Unser, cakes			
White & Co., fruit and vegetables	606 2		
John Wickson, meat	657 6		
G. H. Wood & Co., paper dishes, drinking cups, and napkins	92 5		
Accounts under \$10 (16)	49 5	01	
Sundry refunds of fees:			
Miss J. E. Ives	55 (		
Miss F. Jones	35 (		
Miss G. Ross	5 (	00	
Miss J. E. Watson	75 (	00	
Sundry disbursements by Director:			
Hardware. \$17.77; food. wages and drugs. \$31.75; sundries.			
\$28.93	78 -	45	
Superintendent's Dept., labour, \$21.26; material. \$2.25	23	51	
Furnishings (\$1.211.59):	43	05	
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers	43		
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers	1.133	00	
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt, Simpson Co., pyrex, linens, etc	1.133	00 93	
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers	1.133 11 23	00 93 61	\$12.038.81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt, Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.	1.133	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt, Simpson Co., pyrex, linens, etc	1.133 11 23	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.	1.133 11 23	00 93 61	<b>\$</b> 12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt, Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.	1.133 11 23	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.	1.133 11 23	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.	1.133 11 23	00 93 61	<b>\$</b> 12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park	1.133 11 23	00 93 61	<b>\$</b> 12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works.	1.133 11 23	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Flias Rogers Co.	1.133 11 23 23	00 93 61 —	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Flias Rogers Co.	1.133 11 23 23 \$1,200	00 93 61 — 00 15	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19.	1.133 11 23 \$1,200 36	00 93 61 — 00 15	<b>\$</b> 12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19.	1.133 11 23 \$1,200 36	00 93 61 	<b>\$</b> 12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material.	\$1,200 \$1,200 \$6 972	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt, Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas, \$340.19 Caretaker's supplies: Superintendent's Dept., material.  Repairs and renewals (\$1.565.48):	\$1,200 36 972 225	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas. \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades.	\$1.200 \$1.200 225 14	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades. Builders' Supplies Ltd., flagstone and plaster	\$1.200 \$1.200 36 972 225 14 18	00 93 61 	<b>\$</b> 12.938 81
Fuerishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas. \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win. Bartlett & Son. shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump.	\$1.200 \$1.200 36 972 225 14 18 27	00 93 61 	\$12.938 81
Fuer (\$1.236.15):  Canadian Tumbler Co., tumblers.  T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas. \$340.19. Caretaker's supplies: Superimendent's Dept., material. Repairs and renewals (\$1.565.48): Win. Bartlett & Son. shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards.	\$1,200 \$1,200 36 972 225 14 18 27 24	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt, Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Enel (\$1.236.15): Department of Public Works. Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superimendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards. B. W. Miller & Co., plants.	\$1,200 \$1,200 36 972 225 14 18 27 24 24	00 93 61 00 15 42 00 25 52 22 50 45	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards. B. W. Miller & Co., plants. Routery Bros., plaster repairs.	\$1,200 \$1,200 36 972 225 14 18 27 24 24 130	00 93 61 00 15 42 00 25 52 22 50 45 80	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards. B. W. Miller & Co., plants. Routery Bros., plaster repairs. Superintendent's Dept., labour, \$369.92; material, \$455.82.	\$1,200 \$1,200 36 972 225 14 18 27 24 24	00 93 61 00 15 42 00 25 52 22 50 45 80	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades Builders' Supplies Ltd., flagstone and plaster C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards B. W. Miller & Co., plants Routery Bros., plaster repairs Superintendent's Dept., labour, \$369.92; material, \$455.82. Sundries:	\$1.200 \$1.200 36 972 225 14 18 27 24 24 130 1.325	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards. B. W. Miller & Co., plants. Routery Bros., plaster repairs Superintendent's Dept., labour, \$369.92; material, \$455.82. Sundries: Bell Telephone Co., scrvice.	\$1,200 \$1,200 36 972 225 14 18 27 24 24 130	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Enel (\$1.236.15): Department of Public Works. Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win. Bartlett & Son. shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards. B. W. Miller & Co., plants. Routery Bros., plaster repairs. Superintendent's Dept., labour, \$369.92; material, \$455.82. Sundries: Bell Telephone Co., service. Grounds (\$100):	\$1,200 \$1,200 36 972 225 14 18 27 24 24 130 1,325 457	00 93 61 00 15 42 00 25 52 22 22 50 45 80 74	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers. T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material. \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works. Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas. \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Wm. Bartlett & Son. shades. Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards. B. W. Miller & Co., plants. Routery Bros., plaster repairs. Superintendent's Dept., labour, \$369.92; material, \$455.82. Sundries: Bell Telephone Co., service. Grounds (\$100): F. Hogg Nursery Co., bulbs, etc.	\$1,200 \$1,200 36 972 225 14 18 27 24 24 130 1,325 457	00 93 61 	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades Builders' Supplies Ltd., flagstone and plaster C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards B. W. Miller & Co., plants Routery Bros., plaster repairs Superintendent's Dept., labour, \$369.92; material, \$455.82. Sundries: Bell Telephone Co., service. Grounds (\$100): F. Hogg Nursery Co., bulbs, etc., W. P. Warner, fertilizer.	\$1,200 \$1,200 36 972 225 14 18 27 24 130 1,325 457	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4,43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1,236.15): Department of Public Works Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1,565.48): Win, Bartlett & Son, shades Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards B. W. Miller & Co., plants. Routery Bros., plaster repairs. Superintendent's Dept., labour, \$369.92; material, \$435.82. Sundries: Bell Telephone Co., service. Grounds (\$100): F. Hogg Nursery Co., bulbs, etc., W. P. Warner, fertilizer. Superintendent's Dept., labour.	\$1,200 \$1,200 36 972 225 14 18 27 24 24 130 1,325 457 17 15 67	00 93 61	\$12.938 81
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4.43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1.236.15): Department of Public Works Elias Rogers Co Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1.565.48): Win, Bartlett & Son, shades Builders' Supplies Ltd., flagstone and plaster C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards B. W. Miller & Co., plants Routery Bros., plaster repairs Superintendent's Dept., labour, \$369.92; material, \$455.82. Sundries: Bell Telephone Co., service. Grounds (\$100): F. Hogg Nursery Co., bulbs, etc., W. P. Warner, fertilizer.	\$1,200 \$1,200 36 972 225 14 18 27 24 130 1,325 457	00 93 61	
Furnishings (\$1,211.59): Canadian Tumbler Co., tumblers T. Eaton Co., radio, curtains, furniture, upholstering, etc Robt. Simpson Co., pyrex, linens, etc Superintendent's Dept., labour, \$4,43; material, \$19.18.  119. Contingencies (nothing spent)  120. Maintenance of Building (No. 7 Queen's Park Fuel (\$1,236.15): Department of Public Works Elias Rogers Co. Water, \$169.42; electric current, \$462.81; gas, \$340.19. Caretaker's supplies: Superintendent's Dept., material. Repairs and renewals (\$1,565.48): Win, Bartlett & Son, shades Builders' Supplies Ltd., flagstone and plaster. C. A. Dunham, assembling pump. Fitzgerald-McAvoy Ltd., screen guards B. W. Miller & Co., plants. Routery Bros., plaster repairs. Superintendent's Dept., labour, \$369.92; material, \$435.82. Sundries: Bell Telephone Co., service. Grounds (\$100): F. Hogg Nursery Co., bulbs, etc., W. P. Warner, fertilizer. Superintendent's Dept., labour.	\$1,200 \$1,200 36 972 225 14 18 27 24 24 130 1,325 457 17 15 67	00 93 61	\$12.938 81 \$5.816 68

Charged to Revenue, 1937-38	• • • • • • • • • • • • • • • • • • • •	\$7.500 00 39,184 22
	=	\$46,684 22
XVI. SOCIAL SCIENCE		
121. SALARIES		
A. E. Grauer, Director and Professor	\$4,500 00	
Miss A. C. McGregor, Assistant Director  Miss Barbara Finlayson, Lecturer (Sessional)	2,400 00 2,400 00	
D. G. McCullagh, Assistant (Sessional)	1,500 00	
Miss E. B. Bambridge, Secretary-Librarian	1,400 00	
Special Lecturers (Sessional):		
Miss K. Gorrie	150 00	
Miss F. Held	150 00	
R. E. Mills	150 00 110 00	
G. B. Chisholm	80 00	
St. George's School for Child Study	75 00	
School of Nursing	75 00	
Miss M. Bell	60 00	
Miss Charlotte Whitton	50 00	
Mrs. Helen Lawrence	45 00	
Miss M. Gould	25 00 25 00	
R. S. Hosking (paid also in Dentistry)	15 00	
K. H. Rogers (paid also in Psychology)	10 00	
W. G. Scott	5 00	
H. C. Cruikshank.	20 00	
Less paid by School of Nursing.	\$13,245 00 200 00	
-		\$13,045 00
122. Maintenance of Department		
Office supplies, printing, Calendar, postage and incidentals (\$670.90):		
T. Eaton Co., chair, pad, frames, etc	\$36 40	
Postage	103 00	
Robbins & Townsend, typewriter inspection	13 30	
Travelling and field work expenses:	10.15	
Miss Barbara Finlayson	10 15 11 23	
University Press, printing and stationery	315 35	
Accounts under \$10 (8)	23 96	
Sundry disbursements by department:		
Books, \$10.68; stationery, postage, etc., \$21.18; telegrams, etc.,		
\$19.43; sundries, \$13.92 Superintendent's Dept., labour, 70c; material, 01c	65 21	
Clerical assistance:	71	
Miss E. H. Bayes. 2 weeks, 1 day	32 76	
Mrs. Lillian Kay. 3 weeks, 2 days	58 83	
Library (\$153.52):		
Department of Labour, book	20 00	
University Library, books replaced	11 21 22 30	
Accounts under \$10 (25)	100 01	
-		\$824 42
	-	
	=	\$13,869 42
XVII. UNIVERSITY EXTENSION AND PUBLICATION	TY	
123. Salaries		
W. J. Dunlop, Director	\$5.250 00	
B. W. Sharpe, Assistant Director	2.700 00	
Assistants:		
Miss D. deF. Milner (paid also \$70.50 as Attendant, Evening Classes)	1.400 00	
Mrs. M. Joyce J. Mudge	1,350 00	
Miss Grace Anderson	1,350 00	

Mrs. H. G. Petersen. Clerk (paid also \$93 as Attendant, Evening Classes) Stenographers:	1.300 00	
Miss L. B. Alexander (paid also \$72 as Attendant, Evening Classes)	1,050 00	
W. A. Munro (paid also \$84 as Attendant, Evening Classes)	1,050 00	
Mrs. Annie D. Beacock (paid also \$78 as Attendant, Evening	7 000 00	
Classes)	1.000 00	
R. P. Brown, 11 mos. (paid also \$85 as Attendant, Evening Classes)	916 67	
W. John Dunlop (paid also \$84 as Attendant, evening Classes) Workers Educational Association Assistant, Drummond Wren. @ \$2,500	1,000 00	
paid from Special Fund)		
-		\$18,366 67
124. Extension and Publicity Departments		
(a) Extension:		
Instructors (\$47,452.82):	\$535 00	
D. S. Ainslie	200 00	
E. A. Allent		
J. M. Anderson	300 00	
J. G. Andison	426 00	
R. G. Armour	40 00	
G. L. Assie	320 00	
H. deW. Ball	150 00	
W. G. Baird	52 50	
W. Banton	20 00	
L. S. Beattie	71 00	
W. H. Becking	150 00	
W. G. Bennett	162 50	
K. S. Bernhardt	520 00	
A. E. Berry	10 00	
A. E. Birney	300 00	
V. W. Bladen	75 00	
H. Boeschenstein	500 00	
W. E. Blatz	50 00	
E. H. Botterell	20 00	
Miss E. Bowling	50 00	
R. Brauer	300 00	
G. S. Brett	100 00	
E. K. Brown	300 00	
G. W. Brown	342 00	
S. D. Brown	10 00	
W. J. Brown	184 50	
C. Buck	200 00	
M. A. Campbell	10 00	
J. Cano	200 00	
E. W. Carpenter	150 00	
W. R. Castell	300 00	
H. B. Chalmers	10 00	
S. N. F. Chant	400 00	
W. H. Clawson	560 00	
Miss K. H. Coburn	200 00	
Miss A. Cochrane	150 00	
V. F. Coe	247 50	
Miss A. Cole	308 00	
R. S. Colter	10 00	
G. P. Cosgrave	422 00	
D. G. Creighton	75 00	
A. G. Croal	27 00	
F. R. Crocombe	50 00	
R. M. Dawson	10 00	
T. M. Dean	20 09	
V. de Beaumont	420 00	
St. E. de Champ	200 00	
S. S. Dhani (including expenses \$94.05)	569 05	
Miss D. J. Dobbie	10 00	
Rev. J. W. Dore	388 00	
J. R. Dymond.	10 00	
J. H. Elliott	30 00	
J. M. Elson.	800 00	
N. J. Endicott	452 00	
B. R. English	150 00	

J. G. Falconer	50 00
W. S. Ferguson	20 00
J. Finkelman	210 00
A. A. Fletcher	20 00
Miss J. M. Forster	150 00
Mrs. R. M. Franks	200 00
W. G. Frisby	400 00
W. J. Gardiner	500 00
Rev. E. C. Garvey	420 00
G. P. deT. Glazebrook	360 00
T. B. Godfrey	$200 \ 00$
E. Goggio	200 00
Dr. Edith H. Gordon	19 00
Miss Christine Graham.	25 00
Miss M. C. Graham	40 00
H. A. Grainger	75 00
R. R. Grant	200 00
L. A. Haak	200 00
Miss J. Hampson.	100 00
C. W. M. Hart.	200 00
H. G. Harvey	106 00
J. F. Heard	210 00
A. S. Hill (including expenses \$109)	309 00
G. E. Hobbs.	100 00
F. S. Hogg.	210 00
Miss R. M. Home	190 00
F. J. Horwood	410 00
R. S. Hosking	200 00
Hospital for Sick Children	30 00
J. A. Houpert.	
	300 00
J. E. Howes.	10 00
G. W. Howland	60 00
H. L. Humphreys. M. Inman (including expenses \$34).	420 00
M. Inman (including expenses \$34)	234 00
G. W. Jacobi.	10 00
E. Johnson	200 00
W. K. F. Kendrick	200 00
J. D. Ketchum	10 00
F. H. Kirkpatrick	400 00
Miss C. Krieger	28 00
A. Lacey	350 00
Transfer Tra	
V. Lange	200 00
B. Laskin (including expenses \$75.45)	625 45
Miss N. Lea	100 00
W. J. LeRay	15 00
Miss Helen P. LeVesconte, 8 mos	1.000 00
F. I. Lewis	
	20 00
W. Line	300 00
A. Lismer	$200 \ 00$
Miss I. Loudon	640 00
W. J. Lougheed	66 00
R. N. McCormick.	10 00
W. J. McCurdy	
	620 00
E. W. Macdonald	300 00
J. F. Macdonald	580 00
J. L. McDonald	40 00
Miss M. D. MacDonald	200 00
W. L. Macdonald	420 00
D. J. McDougall.	
	360 00
J. R. MacGillivray	404 00
E. W. McInnis	820 00
J. C. McInnis	400 00
W. A. McKague	10 00
L. A. MacKay	430 00
C. D. McKinnon.	
Miss A T MoLoshlan	10 00
Miss A. T. McLachlan	300 00
G. A. McMullen	600 00
Miss Helen McMurrich	200 00
C. B. Macpherson	50 00
S. F. Maine (including expenses \$6.80)	46 80
control of the contro	40.00

C. Marchant	100 00
H. C. H. Miller	200 00
J. H. Mills.	63 00
A. Moellman.	50 00
L. T. Morgan	200 00
AT T AT 1	114 00
N. L. Murch	720 00
J. A. Newcombe	
	340 00
Miss O. Noble	300 00
Mrs. M. L. Northway	200 00
T. W. Oates	106 50
V. J. Okulitch	200 00
Ontario College of Art	300 00
J. F. Parkinson	420 00
Miss A. H. Parsons	400 00
Miss V. Peene	200 00
J. G. Perold	180 00
W. C. Perron	200 00
C. R. Philp (including expenses \$30)	230 00
A. Pitt	170 00
A. F. W. Plumptre	225 00
I. R. Pounder	376 00
R. A. Preston	285 00
G. Price (including expenses \$38.65)	238 65
A. E. Prince	200 00
D. F. Putnam (paid also as Class Assistant)	75 00
W. H. Rapson	100 00
A. L. Richardson	200 00
R. Richmond	75 00
E. C. Robertson	200 00
J. D. Robins	200 00
K. H. Rogers (including expenses \$36.90)	236 90
Miss E. M. Rutledge	66 50
J. R. Ryan	200 00
M. D. Salter	100 00
	200 00
J. Satterly	378 00
R. M. Saunders	
C. Silvertz (including expenses \$63.42)	263 42
H. L. Seymour.	200 00
Miss Rebecca Shilton, 8 mos	1.800 00
A. A. Sbuyler	200 00
Miss E. K. Sims (paid also as Class Assistant)	256 00
Dr. Florence A. Smith	720 00
G. O. Smith	150 00
H. T. Sprang	10 00
G. II. Stevenson (including expenses \$25.55)	185 55
St. George's School for Child Study	400 00
St. John's Ambulance Association	177 00
M. D. C. Tait	470 00
Griffith Taylor	300 00
T. M. C. Taylor	440 00
Miss D. A. Thompson	60 00
J. E. Thomson	100 00
S. C. Thompson.	160 (0
Toronto Conservatory of Music	200 00
G. H. Turner (paid also as Class Assistant)	200 00
	420 00
Miss M. E. G. Waddell	
W. J. Waines	420 00
A. B. Ward	200 00
L. Warshaw (including expenses \$77.20)	477 20
E. T. Waters	350 00
M. Barry Watson	200 00
F. J. Westcott (including expenses \$45.50)	707 50
B. Wilson (including expenses \$11.40)	61 40
J. D. Wilson (including expenses \$84.90)	284 90
Mrs. Florence E. Woodcock. 8 mos	1.200 00
Mrs. A. R. Whittemore	20 00
Miss C, E, Whitton	30 00
D. C. Williams	200 00
A. Wingfield	200 00

M. Winspear	200 00
G. M. Young	10 00
A. R. Zimmer	10 00
Class Assistants (\$1,775):	
G. Berry	100 00
Miss M. Brookstone	240 00
A. H. Clarke	120 00
M. K. Macdonald	160 00
V. B. Meen	50 00
Miss F. S. Patterson	150 00
D. F. Putnam (see also above)	185 00
N. W. Radforth	150 00
L. S. Russell	160 00
Miss E. K. Sims (see also above)	120 00
G. H. Turner (see also above)	150 00
Miss D. M. Walker	150 00
W. Wightman	40 00
Reader, D. C. Williams	200 00
Attendants (\$1.751.13):	
Miss L. B. Alexander	72 00
A. Bain	147 50
Mrs. A. D. Beacock	78 00
Miss J. Bemrose	12 00
R. P. Brown	85 50
A. Clarke	152 00
W. John Dunlop	84 00
Mrs. C. C. Grant	78 00
Miss D. Haggart	30 00
J. Harding	117 25
Miss M. Hargreaves	52 50
R. Hill.	10 50
A. Keel	83 50
J. McCormack	126 75
A. J. Maycock	22 25
Miss D. deF. Milner	70 50
W. A. Munro	84 00
E. G. Payne	70 50
Mrs. H. G. Petersen	93 00
Mrs. M. Thomas	21 75
G. Town.	63 00
W. Van Ark	79 25
W. V. Walker	42 00
A. Worsley	22 50
Sundry persons.	52 88

\$51,178 95

	Summer Session Arts	Teachers' Classes	Corres- pondence Courses	Evening Classes	W. E. A.	Short Courses	Occupa- tional Therapy	Physio- Therapy
Instructors\$ Class Assistants Readers	9,440 00 600 00	\$7,512 50 1,175 00 200 00	\$3.671 50	\$11.694 00	\$6,950 00	\$80 00	\$3,490	\$3,882
Attendants Travelling	32 50	348 10		1,110 78	259 75			
Expenses		45 50			687 32			•
	10.072 50	\$9.281 10	\$3,671 50	\$12.804 78	\$7.897 07	\$80 00	\$3.490	\$3,882

Sundry expenses (\$842.12):
Evening Classes:
Superintendent's Dept., labour, \$250.04; material, \$1.46...
Occupational Therapy:
Superintendent's Dept., labour, \$259.04; material, \$1.46... 260 50 260 50

Physiotherapy:	8 07
Allen Mfg. Co., laundry	60 00
Madsen Mfg. Co., gymnasium and massage, plinths	485 00
Social functions for Courses and Classes (\$183.25):	.00 00
Geo. Coles Ltd., catering	150 00
University Women's Club	33 25
Books for loan to Extension students (\$95.62):	
Rverson Press	32 20
Accounts under \$10 (15)	63 42
Office expenses (\$2,742.13):	
C. P. R. Telegraphs	17 32
D. Gestetner Ltd., ink, paper and pencils	1,015 26
Grand & Toy, desk	32 00
Leatherdale Studio. prints	5 00
Postage	615 00
Robbins & Townsend, typewriter inspection and overhauling	132 30 865 09
University Press, printing and stationery	003 09
Sundry disbursements by Director: Carfare, \$7.25; telegrams, etc., \$28.32; sundries, \$9.60	45 17
Superintendent's Dept., labour, \$14.32; material, .67c	14 99
Extra clerical assistance (\$870.67):	11 //
Mrs. C. C. Grant, 41 weeks, 5 days	670 67
Miss D. Haggart (paid also in Bursar's Office) 12½ weeks	200 00
Tites D. Haggart (para also in Butear o Omeo, 1272 weeker to	
	\$55,912 74
(b) Publicity:	
Advertising and announcements (\$1.588.55):	
American Physical Society	\$10 00
Ashbury College	15 00
Belleville Collegiate and Vocational School	10 00
Canadian Association of Occupational Therapy	40 00
Canadian Association of Social Workers	12 00
Canadian Federation of University Women	20 00 49 00
Canadian Newspaper Service	22 50
Canadian Society of Forest Engineers	50 00
Cap & Gown	15 00
College Times, Upper Canada College	15 00
Curtain Call	12 00
Daily Times-Journal	27 60
Dufferin School Old Boys Association	15 00
Educational Courier	28 00
Educational Publishing House	24 00
Evening Telegram	210 95
Freemason	20 00
Glebe Collegiate Institute	15 00
Globe & Mail	174 10 27 95
Globe Printing Co	26 00
Greenway Press	10 00
Humberside Collegiate	20 00
Kitchener & Waterloo Collegiate	15 00
Labour Leader	20 00
Legionary	26 25
Lisgar Collegiate Institute	26 00
Masonic Sun	25 00
News Chronicle Publishing Co	30 20
North Bay Nugget	10 50
Ontario Curling Association	25 00
Ontario School Trustees & Ratepayers Association	25 00 12 50
Peterboro Collegiate & Vocational School	10 00
Sault Ste. Marie Collegiate Institute	30 00
"The School," Ontario College of Education. "The Torch," Normal School, Ottawa.	12 00
Toronto Daily Hebrew Association	10 00
Toronto Normal School	20 00
Toronto Daily Star	198 55
"The Twig"	11 00
Wilson Publishing Co	17 00

	Accounts under \$10 (31)	195 45	
	(\$4.059.66): Alumni Federation, reprints and announcements	139 00	
	Art Gallery of Toronto, portion of cost of catalogue re exhibit by Department of Fine Art	250 00	
	Canadian Press Clipping Service	35 00	
	International Press biographies for "Who's Who"	196 00	
	Photographic Service, slides and prints	111 20 1,030 00	
	Services in connection with exhibit at Canadian National Exhibition:	1,050 00	
	S. Collins, 129 hours	64 50	
	J. Hillier, 62 hours	31 00 37 00	
	J. O. Wilhelm, 71 hours, \$35.50; use of car. \$6	41 50	
	A. Woodcock, 40 hours	20 00	
	University Press, printing and stationery	1.950 04 17 25	
	Superintendent's Dept., labour, \$113.85; material, \$23.32	137 17	
	Travelling expenses of organizers and speakers: W. J. Dunlop	230 45	
		\$61,791 40	
	Less credit from sale of bulletins, star maps, etc		
	-		\$60.876 04
		_	\$79,242 71
		. =	
	XVIII. MEN'S RESIDENCES		
	125. Maintenance of Buildings		
)	University (North, East and South Houses):		
	Heat and light	\$3,343 20	
	Fuel: P. Burns & Co	60 60	
	Water	177 74	
	Caretaker's supplies (\$545.58):	7.00	
	Electrolux Ltd., vacuum cleaner repairs	1 00 544 58	
	Cleaning and house service (\$6,792.84):	011 00	
	Allen Mfg. Co., laundry	473 77	
	Superintendent's Dept., labour	6,319 07	
	Wm. Bartlett & Sons, shades	18 43	
	T. Eaton Co., couch and chairs	213 15	
	Routery Bros., plaster repairs	93 90 204 00	
	Accounts under \$10 (2)	12 34	
	Superintendent's Dept., labour, \$1.659.99; material, \$1,111.57 Caretaker H. Brown, 12 mos	2,771 56 1,300 00	
	Caletaker II. Brown, 12 mos.		
	I 1 . 12 1. 1	\$15,533 34	
	Less heat and light charged to Central Power Plant Credit from sale of furniture, cleaning, etc 33,343 20 302 99		
		3.646 19	
. 1	University College (No. 73 St. George Street):		\$11.887 15
, ,	Light	\$219 20	
	Fuel (\$707.63):	6217 20	
	P. Burns & Co	121 20	
	Central Coal Co	586 43 70 48	
	Caretaker's supplies:		
	Superintendent's Dept., material	120 53	
	Allen Mfg. Co., laundry	134 88	
	Superintendent's Dept., labour	2,039 43	

(a

(b

Repairs and renewals (\$608.68):		
John Smith, furniture repairs. Superintendent's Dept., labour, \$429.76; material, \$171.92	7 00 601 68	
Less light charged to Central Power Plant \$219 20	\$3.900 83	
Credit for repairs	232 54	\$3.668 29
	=	\$15,555 44
XIX. WOMEN'S RESIDENCES AND UNION		
126. Maintenance of Buildings		
Whitney Hall: Heat and light.	\$5.059 44	
Fuel (\$141.90):		
P. Burns & Co Central Coal Co	91 05 31 10	
Elias Rogers Co	19 75	
Gas, \$429.24; water, \$476.31 Repairs and renewals (\$2.556.69):	905 55	
Kelvinator Ltd., refrigerator repairs	143 25 15 00	
Edward Milner, refrigerator lining	118 80	
H. W. Petrie Co., boiler and incinerator repairs	28 93 16 55	
Accounts under \$10 (3)	15 06	
Superintendent's Dept., labour, \$1,752.46; material. \$466.64 Furnace and boiler man:	2.219 10	
Superintendent's Dept., labour	293 73	
Less heat and light charged to Central Power Plant	\$8,957 31 5.059 44	
92 and 94 St. George Street:		\$3.897 87
Fuel (\$742.81):		
P. Burns & Co	\$141 60	
Central Coal Co Elias Rogers Co	588 31 10 00	
Superintendent's Dept., labour, \$2.25; material, 65c	2 90	
Gas, \$36.20; electric current. \$120.82; water. \$50.27	207 29	
Routery Bros., plaster repairs	4 92 19 85	
Superintendent's Dept., labour, \$607.77; material, \$277.11	884 88	
Superintendent's Dept., labour	127 51	\$1.987 26
49 St. George Street: Fuel (\$435.29):		91.701 ZU
P. Burns & Co	\$81 10	
Central Coal Co	333 89	
Superintendent's Dept., labour, 25c; material, 20c.	19 85 45	
Gas. \$22.72: electric current, \$121.96; water. \$33.54	178 22	
Wm. Bartlett & Son, shades	12 61	
City Treasurer, water service construction	89 48 352 32	
Furnace and boiler man:		
Superintendent's Dept., labour	71 28	\$1,139 20
University College Women's Union:		¢1,109 20
Heat and light	\$1.001 61	
	\$1.001 O1	
Fuel (\$22,38):	20 50	

\$2,285 25 \$9.309 53

Repairs and renewals (\$743.33): Robt. Simpson Co., linoleum repairs. Accounts under \$10 (2). Superintendent's Dept., labour, \$553.22; material, \$171.21. Caretaker, Leo Cole, 12 mos.	11 7 724 1,350	80 43
Less heat and light charged to Central Power Plant	\$3.286 1,001	
		-
127. Housekeeping Account		
a) Combined General Charges:		
Provisions (\$23,309.20):		
Acme-Farmers Dairy	\$2,164	
B. Amodeo & Son, fruit and vegetables	2.868	
Arcade Florist, flowers.  Barker's Bread.	261	90
Belle-Ewart Ice & Fuel Co., ice	41	
J. Blood, meat and provisions	31	
Bowes Ltd., butter and provisions	416	
Bredin's Bread	65	
Canada Bread Co	275 121	
Canada Packers Ltd	5.125	
Christie, Brown & Co., biscuits	84	
City Dairy	428	
Geo. Coles Ltd., cake and biscuits	14	
Everest Bros., fruit and vegetables	194	
John F. Fee, eggs	672 57	
G. C. Hardy, cheese	103	
Samuel Harris, meat and cheese	811	
H. J. Heinz & Co., canned goods	110	
Harry Horne Co., jelly powder	88	
Frank Hunnisett. Jr., meat	41	
Hunt's Ltd., confectionery		02
Ideal Bread Co	554 1,566	
James Lumbers Co., tea	312	
McCormick Mfg. Co., biscuits	320	91
D. McIntyre Co., fish	236	
MacIver Co., meat	789	
National Grocers Co., provisions	3,369 590	
Ontario Honey Producers, honey		75
Purity Bread		94
Red Wing Orchards, apples and juice		90
Sani-Sealed Dairies	367	
M. J. Smith, fruit and vegetables		53 80
F. Wells & Sons, poultry.	623	
George Weston Ltd., biscuits		15
George Weston Bread & Cake Co., bread		46
Accounts under \$10 (9)	52	06
Cleaning and house service (\$7,752.49):	90	40
Baker Carpet Cleaning Co., cleaning drapes T. Eaton Co., cleaning supplies, etc		40 57
Miss Marion B. Ferguson, sundry disbursements		91
A. Guinness & Co., paper doilies, napkins, etc	90	73
Dr. H. Gibson Hall, medical examination of maids		00
Robt. Simpson Co., sheeting		55
Stewart-Le Grice Ltd., candles		80
Accounts under \$10 (2)		50
Pay lists, wages of maids, etc	7.421	
Superintendent's Dept., labour, \$25.85; material, .86c		71
Furnishings and sundry renewals (\$923.69):	=0	1.4
Canadian Wm. A. Rogers Ltd., silverware	12	14

Cassidy's Ltd., dishes and glassware	207 07	
T. Eaton Co., table linen, utensils, etc	371 07	
	6 25	
Hobart Mfg. Co., mixer parts		
Persian Arts & Crafts, samover repairs	10 00	
Robt. Simpson Co., silverware repairs and towelling	60 70	
Wrought Iron Range Co., pots, knives, brushes, etc	37 80	
Superintendent's Dept., labour, \$147.96; material, \$10.70	158 66	
Office supplies, infirmary service, etc. (\$166.51):		
T. Eaton Co., medical supplies, pencils, pads, etc	27 75	
	21 10	
Miss Marion B. Ferguson, disbursements:	40.00	
Telegrams, etc., \$4.67; drugs, etc., \$11.13; postage, \$25	40 80	
Office Specialty Mfg. Co., cabinet	17 87	
University Press, printing and stationery	51 56	
Accounts under \$10 (6)	28 53	
Staff salaries (additional to Dean of Women charged under Univers-		
ity College General):		
Dietitians (with living valued @ \$400 each):		
Miss V. R. Murphy, 12 mos		
Summer Assistant:		
Miss Ruth Jenkins, 2 weeks		
Miss Margery Porter, $4\frac{1}{2}$ weeks		
Miss M. Russell, 9 weeks, 1 day		
Secretary-Hostess, Mrs. L. R. Howard, 12 mos.		
(with living valued @ \$400)		
Nurse-Housekeeper, Mme. J. Ledoux. 12 mos. (with		
living valued @ \$400)		
\$4,942 29		
Charged as follows:		
Combined General Charges \$3.942 29		
Women's Union		
Whitney Hall		
whitney Han	2 049 90	
	3,942 29	
	006.004.30	
	\$36,094 18	
Less credits: Napkin rings, keys, etc	\$36,094 18 6 50	
Less credits: Napkin rings, keys, etc		\$36,087 68
-		\$36,087 68
(b) University College Women's Union:		\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09):	6 50	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs	\$27 68	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs	6 50	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs	\$27 68 74 00	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25	\$27 68 74 00 29 65	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes.	\$27 63 74 00 29 65 96 69	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25	\$27 63 74 00 29 65 96 69 122 08	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co.	\$27 63 74 00 29 65 96 69	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co.	\$27 63 74 00 29 65 96 69 122 08 12 00	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co Toronto Window Shade Cleaning Co. Accounts under \$10 (3).	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58: material, \$183.29.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3) Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88):	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87	\$36,087 68
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(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co Toronto Window Shade Cleaning Co Accounts under \$10 (3). Pay lists, wages of maids, etc. Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5 Robt, Simpson Co., curtains, linen, etc.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co Toronto Window Shade Cleaning Co Accounts under \$10 (3). Pay lists, wages of maids, etc. Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5 Robt, Simpson Co., curtains, linen, etc.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00	\$36,087 68
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(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired, Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3).	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40	\$36,087 68
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and hench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc. Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90):	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co Toronto Window Shade Cleaning Co. Accounts under \$10 (3). Pay lists, wages of maids, etc. Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt. Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired, Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired, Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired, Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired, Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements, Heintzman & Co., piano tuning and moving.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50	\$36,087 68
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75	\$36,087 68
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired, Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired, Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements, Heintzman & Co., piano tuning and moving.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50	\$36,087 68
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75	\$36,087 68 \$2.570 87
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75	
(b) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3) Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired, Heintzman & Co., piano and bench, \$245; tuning, \$5, Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired, Accounts under \$10 (3), Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements, Heintzman & Co., piano tuning and moving, A. J. Sherman, cartage. Share of salaries detailed under Combined General Charges.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75	
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and bench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc., Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage. Share of salaries detailed under Combined General Charges.  (c) Whitney Hall: Cleaning and house service (\$7.877.25):	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75 400 00	
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3). Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and hench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage. Share of salaries detailed under Combined General Charges.  (c) Whitney Hall: Cleaning and house service (\$7.877.25): Advance Window Cleaning Co.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75 400 00	
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co. Accounts under \$10 (3). Pay lists, wages of maids, etc. Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and hench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage. Share of salaries detailed under Combined General Charges.  (c) Whitney Hall: Cleaning and house service (\$7.877.25): Advance Window Cleaning Co. T. Eaton Co., cleaning supplies.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75 400 00	
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc., Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co., Accounts under \$10 (3) Pay lists, wages of maids, etc., Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired, Heintzman & Co., piano and bench, \$245; tuning, \$5, Robt, Simpson Co., curtains, linen, etc., Turco-Persian Rug Renovating Co., rugs, repaired, Accounts under \$10 (3), Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements, Heintzman & Co., piano tuning and moving, A. J. Sherman, cartage, Share of salaries detailed under Combined General Charges.  (c) Whitney Hall: Cleaning and house service (\$7.877.25): Advance Window Cleaning supplies. Miss Marion B. Ferguson, sundry disbursements.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75 400 00 \$39 20 27 84 24 74	
(h) University College Women's Union: Cleaning and house service (\$1,579.09): Arts & Crafts, cleaning rugs. Baker Carpet Cleaning Co., cleaning drapes, mattresses, etc. Miss Marion B. Ferguson, disbursements: Drugs, \$7.70; postage, \$13.70; sundries, \$8.25. Langley's Ltd., cleaning drapes. Parisian Laundry Co., Toronto Window Shade Cleaning Co. Accounts under \$10 (3). Pay lists, wages of maids, etc. Superintendent's Dept., labour, \$57.58; material, \$183.29. Furnishings and sundry renewals (\$548.88): Brown's Upholstery, chesterfield and chairs repaired. Heintzman & Co., piano and hench, \$245; tuning, \$5. Robt, Simpson Co., curtains, linen, etc. Turco-Persian Rug Renovating Co., rugs, repaired. Accounts under \$10 (3). Superintendent's Dept., material. Piano, magazines, etc. (\$42.90): T. Eaton Co., magazines, etc. Miss Marion B. Ferguson, petty disbursements. Heintzman & Co., piano tuning and moving. A. J. Sherman, cartage. Share of salaries detailed under Combined General Charges.  (c) Whitney Hall: Cleaning and house service (\$7.877.25): Advance Window Cleaning Co. T. Eaton Co., cleaning supplies.	\$27 63 74 00 29 65 96 69 122 08 12 00 15 68 960 44 240 87 63 81 250 00 195 78 19 65 18 40 1 24 21 15 2 50 17 50 1 75 400 00	

Langley's Ltd., curtains and drapes cleaned	209 4	R
Parisian Laundry Co	1.124 4	
Singer Sewing Machine Co., machine repairs and hemstitching	g. 13 3	8
Accounts under \$10 (3)	6 5	5
Pay lists, wages of maids. etc	5,487 1	7
Superintendent's Dept., labour, \$378.12; material, \$547.68	925 8	0
Furnishings and sundry renewals (\$1,201.38):		
Brown's Upholstery, chesterfield and chairs repaired, etc		
T. Eaton Co., linen, utensils. etc		
Lionel Rawlinson, refinishing furniture		
Robt. Simpson Co., material, linens, etc		
Accounts under \$10 (2)		
Superintendent's Dept., labour, \$59.69; material, \$34.33		
Piano, magazines, etc. (\$24.83):	,. ,	_
Miss Marion B. Ferguson, sundry disbursements	2 3	3
Heintzman & Co., piano tuning		0
Share of salaries detailed under Combined General Charges	600 0	0
		_
	\$9,703 4	
Less credit from students' damages, etc	350 4	
1) 04 5. 6 5.		- \$9,353 04
d) 94 St. George Street:		
Cleaning and house service (\$1,576.60): Allen Mfg. Co., laundry	\$120 8	0
Baker Carpet Cleaning Co., chesterfield and chairs cleaned	43 6	
T. Eaton Co cleaning supplies	18 1	
Langley's Ltd., rug and chair cleaned	45 5	
Persian Arts & Crafts, rugs washed	12 3	
Toronto Window Cleaning Co	10 0	
Accounts under \$10 (2)	6 0	5
Pay lists, wages of maids, etc	1.190 0	
Superintendent's Dept., labour. \$9.42; material. \$120.52	129 9	4
Furnishings and sundry renewals (\$391.15):		
Brown's Upholstery, mattresses		
T. Eaton Co., linen	26 0	
Robt, Simpson Co., beds, linen and curtains		
Piano:	14 4	o
Heintzman & Co., tuning	75	0
Meals for Resident Head.	144 0	
Total Total Control of the Control o		- \$2.119 25
e) 49 St. George Street:		
Cleaning and house service (\$904.44):		
Allen Mfg. Co., laundry	\$66 1	
Baker Carpet Cleaning Co., drapes cleaned		
T. Eaton Co., cleaning supplies	13 2	
Langley's Ltd., rugs and curtains cleaned	27 9 19 5	
Accounts under \$10 (3)	697 5	
Superintendent's Dept., labour. \$27.50; material. \$27.75	55 2	
Furnishings and sundry renewals (\$205.63):	55 2	0
Brown's Upholstery, chairs and sofa repaired	91 0	5
T. Eaton Co., linen, etc		
Robt. Simpson Co., linen, fabric, etc	51 3	5
Ward. Price Ltd., rug		
Accounts under \$10 (2)	78	6
Piano:		0
Heintzman & Co., tuning	7 5	
		- \$1,117 57
		\$51,248 41

\$60,557 99

## XX. 128. CENTRAL POWER PLANT

XX. 128. CENTRAL POWER PLANT		
Fuel (\$83.831.46):		
British American Oil Co	\$190 00	
Cities Service Oil Co	150 00	
Imperial Oil Ltd	140 00	
McColl-Frontenac Oil Ltd	150 20	
Milnes Coal Co	83.189 13	
Superintendent's Dept., labour, \$6.88; material, \$5.25	12 13	
Hydro-Electric current, \$28,136.67; water, \$545.36	28.682 03	
Repairs and renewals, engineers' supplies and miscellaneous items		
(\$12.031.95):		
D. Anderson, valves	12 05	
Babcock-Wilcox & Goldie-McCulloch, furnace parts	262 26	
Beldam's Ashestos Packing & General Mfg. Co., gaskets, rope, etc	181 76	
Canadian Allis-Chalmers Ltd., springs	19 77	
Canadian Charts & Supplies. charts	26 88	
Canadian Fairbanks-Morse Co., scale repairs	59 92	
Canadian Gasket Co., gaskets, etc	29 15	
Canadian General Electric Co., couplings	195 00	
Cryer & Trap & Valves Co., balls	22 55	
Darling Bros brass assembly and filter cloths	34 83	
Dearborn Chemical Co., treatments	475 95	
Diamond Specialty Ltd., elements, tubes and bearings	132 64	
Dominion Carbon Brush Co., brushes	10 73 376 94	
Dominion Wheel Foundries Ltd., grates, etc		
Elliott & Co., cutters, etc	53 50 365 41	
Foster & Wheeler, bricks, grates, etc	72 08	
Garlock Packing Co., coils and spools		
Gutta Percha & Rubber Co., washers and hose	35 09 16 20	
Hamilton Gear & Machine Co., spur	426 83	
McColl-Frontenac Oil Ltd., oil	104 00	
	46 92	
Robinson Clay Products, bricks	319 90	
G. F. Sterne & Sons, cement	103 72	
United Steel Corporation, machine work and bearings	98 90	
Warren Steam & Pump Co., pump and parts	125 83	
Accounts under \$10 (4)	24 97	
Advertising for coal tenders	47 50	
University Press, printing and stationery	18 29	
Superintendent's Dept., freight, \$92.29; labour, \$6,481.10; material.		
\$1,758.99	8,332 38	
Engineers, assistant engineers, firemen and trimmers (\$20,139.43):		
Chief Engineer, C. S. Moseley. 12 mos	2,900 00	
Assistant engineers, each 12 mos.:		
L. McMaster	1.800 00	
W. Smith.	1.800 00	
A. McHugh	1.680 00	
S. Simpson	1,560 00	
Firemen @ \$110 to \$117.50 per month:		
Sundry persons	6.220 85	
Trimmers, boiler cleaners and pump attendants @ \$90 to \$117.50		
per month:		
Sundry persons	4,178 58	
	\$144.684 87	
Less sale of cinders, etc	302 80	******
		\$144,382 07
XXL MISCELLANEOUS AND GENERAL		
129. Central Stores		
Storekeeper, C. A. Johnston, 12 mos.	\$1,900 00	
Assistant Storekeeper, S. Tipping, 12 mos	1.150 00	
Clerk, Miss J. Taylor, 12 mos.	1.050 00	
Heat and light	387 02	
	\$4,487 02	
Less heat and light charged to Central Power Plant	387 02	A
		\$4.100 00

## 130. Grounds

Foreman Gardener, R. R. Corbett, 12 mos	\$1.800 00	
Lighting account	300 42	
Labour, gravel, roadways, granolithic walks, flowers, shrubs, and general		
expenses (\$17,236.37):	F9. 00	
Aikenhead Hardware Ltd., hardware	53 08	
P. Burns & Co., coal	15 15	
Canadian Industries Ltd., fertilizer	219 02	
Cedarvale Tree Experts, treating tree	10 00	
City Treasurer, repairs to water main, basin, frames, etc	147 12	
Connaught Laboratories, feed	12 31	
Grant Contracting Co., sidewalks	1,201 99	
Gutta Percha & Rubber Co., tires	99 32	
Joe Hampson, sand	40 50	
F. Hogg Nursery Co., bulbs and shrubs	84 25	
Johnston Haulage Co., cartage	67 50	
B. W. Miller & Son, plants	258 26	
P. Mulholland & Co., hay	37 45	
N. L. Piper Railway Supplies, sprinklers	32 00	
Provincial Treasurer, truck license	48 50	
Hugh Reid, horse-shoeing	44 15	
Rennie's Seeds, spike disc with power mower attachment	55 00	
Riseborough & Jackson, feed	80 38	
Salem's Garage, truck repairs	30 30	
W. G. Stephenson, surfacing roadway, etc	1.700 64	
S. A. Stinson & Son.	15 57	
Toronto Salt Works, rock salt	33 48	
W. P. Warner, fertilizer and sod	493 25	
York Nurseries, bulbs and plants	21 30	
Accounts under \$10 (8)	46 84	
Superintendent's Dept., labour, \$11,040.26; material, \$1,348.75	12.389 01	
Alterations in Men's Residence quadrangle (\$1,000):	<b>500.00</b>	
Chestnut & McGregor, building walls	593 00	
W. P. Warner, sod.	115 00	
Superintendent's Dept., labour	292 00	
Loss light abayed to Control Down Dlant 6200 40	\$20,336 79	
Less light charged to Central Power Plant \$300 42	\$20,336 79	
Less light charged to Central Power Plant\$300 42 Credit for cartage		
Less light charged to Central Power Plant\$300 42 Credit for cartage	\$20.336 79 451 34	\$10.885.45
Less light charged to Central Power Plant\$300 42 Credit for cartage		\$19.885 45
Credit for cartage		\$19.885 45
Less light charged to Central Power Plant\$300 42 Credit for cartage		\$19.885 45
Credit for cartage		\$19.885 45
Credit for cartage		\$19.885 45
Credit for cartage	451 34	\$19.885 45
Credit for cartage		\$19.885 45
Credit for cartage	\$1,950 00 1.550 00	<b>\$</b> 19.885 45
Credit for cartage	451 34 \$1,950 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00	\$19.885 45
Credit for cartage. 150 92  131. PROTECTIVE SERVICE  Pay of Constables and Nightwatchmen (\$16,043.13): Constables, each 12 mos.: R. D'Arcy. W. J. Scott. H. V. Spence. C. Scruby. Nightwatchmen: W. A. Evans, 12 mos. W. Hunter, 12 mos. W. Lotto, 12 mos. J. C. Smith, 12 mos. A. Smith, 11 mos., 4 days. J. Kirkwood, 10½ mos.	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 00	\$19.885 45
Credit for cartage. 150 92  131. PROTECTIVE SERVICE  Pay of Constables and Nightwatchmen (\$16,043.13): Constables, each 12 mos.: R. D'Arcy. W. J. Scott. H. V. Spence. C. Scruby Nightwatchmen: W. A. Evans, 12 mos. W. Hunter, 12 mos. W. Lotto. 12 mos. J. C. Smith, 12 mos. A. Smith, 11 mos., 4 days. J. Kirkwood, 10½ mos. W. Gordon, 9 mos., 20 days.	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 00 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00 3 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,264 49 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00 3 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00 3 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00 3 00	\$19.885 45
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00 3 00	
Credit for cartage	\$1,950 00 1,550 00 1,500 00 1,260 00 1,260 00 1,260 00 1,260 00 1,260 49 1,155 00 1,014 64 1,029 00 138 00 69 00 108 00 3 00	\$19.885 45 - \$16.279 86

## 132. Telephones

132. Telephones		
Bell Telephone Co., service to 30 June  Less receipts from sub-services.  residences  slot machine  37 49	\$12,474 57	
slot machine	4,184 86	
-		
Switchboard operators (\$4,162.54):	\$8.289 71	
Mrs. J. Hoddinott, 11 mos., 12 days.  Miss E. M. Crawford, 12 mos.  Miss M. Maher, 12 mos.	988 00 936 00 907 19	
Relicf: Miss J. Brown Miss M. Burgess. Miss H. Gardiner Mrs. I. Morrison Miss L. Reed. Miss F. Findlay Miss B. Grozelle.	788 10 199 50 196 30 80 65 54 80 7 50 4 50	<b>\$</b> 12.452 25
133. Insurance		
Fire:		
Balance of premiums on general Schedule as renewed for three years from 1 January, 1937, brought forward		
from 1936-37		
Charged to Revenue, 1937-38	\$16.387 92	
Of which one-half charged to Revenue, 1937-38 (balance carried forward)	5.036 64	
Connaught Laboratories: Commercial Union Assurance Co	500 00	
Economics Building: Employers' Liability Assurance Corporation	141 83	
Patriotic Assurance Co	121 68 121 68	
Stadium Grandstand and Bleachers:	121 00	
North British & Mercantile Insurance Co	825 00	
North British & Mercantile Insurance Co	20 22 20 22	
Gull Lake property: Home Insurance Co	153 35	
AEtna Insurance Co	153 35	
Home Insurance Co	25 00	
Biological specimens loaned by Royal College of Surgeons: Western Assurance Co	62 50	
Accounts under \$25 (9)	83 46	
Dominion of Canada General Insurance Co., University-owned cars, \$200.30; non-ownership coverage, \$160.	360 30	
Hydro-Electric Power Commission:		
Permit and inspection fee	50 00	
One year's charge for guarantee re safe-keeping of securities	150 00	
	\$24.213 15	
Less rebates on cancelled policies	15 17	\$24,197 93
134. Law Costs		
Hamilton Cassels, K.C., taxed costs as Solicitor to the University		\$937 99

134a. Tanes		1
City Treasurer, taxes on No. 188 Yonge Street		\$5,068 43
135. Aud.tor's Fees		
Clarkson, Gordon, Dilworth and Nash. annual remuneration		\$3,000 00
136. Travelling Expenses		
President and Academic Staff (\$2,568.28):		
President H. J. Cody	\$123 85	
Miss A. A. Alvey	22 55	
F. H. Anderson	75 00 50 50	
S. Beatty	40 00	
G. S. Brett	58 45	
E. K. Brown	25 25	
E. F. Burton	30 63 50 00	
H. S. M. Coxeter.	40 00	
E. H. Craigie	40 00	
G. L. Duff	40 00	
R. C. Ellis.	50 00 100 00	
B. Fairley	32 00	
Miss Marion B. Ferguson	40 00	
K. C. Fisher Duncan Graham	20 00	
W. J. K. Harkness.	27 05 20 00	
C. W. M. Hart	40 00	
H. S. Jackson	40 00	
F. C. A. Jeanneret F. B. Kenrick	45 00 33 85	
D. G. McCullagh	140 00	
W. S. McCullough	29 00	
N. A. M. MacKenzie	40 00	
C. Marchant	22 50 50 00	
T. J. Meek	70 00	
V. B. Meen	26 67	
C. H. Mitchell. E. S. Moore.	40 00	
P. Nash.	59 90 40 00	
M. A. Peacock	26 67	
L. S. Russell	40 00	
E. S. Ryerson	290 00 75 00	
Griffith Taylor	200 00	
J. Ellis Thomson	26 67	
R. B. Thomson	40 00	
M. W. Wallace. F. V. Winnett.	$     \begin{array}{r}       57 & 74 \\       250 & 00     \end{array} $	
Out-of-Town Members of the Senate (\$669.30):	200 00	
Judge J. S. Campbell	95 50	
Judge D. J. Cowan	39 40	
H. C. Griffiths.	13 35 20 00	
J. H. Hardy	15 20	
Dr. C. D. McGilvray	31 00	
Dr. T. M. Mulligan. J. P. S. Nethercott.	167 20 33 00	
Colonel W. N. Ponton	30 00	
Dr. J. B. Reynolds	49 65	
H. S. Robertson W. J. Salter	49 25	
H. J. Sims.	27 50 15 45	
L. F. Stephens.	17 40	
A. R. Walker	38 00	
Sundry persons (5)	27 40	\$3 227 59
		\$3.237 58

# 137. Recept ons to Societies and University Visitors

TOTAL TELEVISION OF THE PARTY O		
Expenses re sundry public lectures (\$412.56):		
American Physical Society	\$50 00	
E. J. Dent	75 00	
Institute of International Education	100 39	
Dr. W. I. Jennings	50 00	
Prof. Alfred C. Lane	44 00	
Dr. Hans Simons	50 00	
Dr. Il. J. Weigand	43 17	
Catering on sundry occasions (\$721.55):		
Coles Ltd., Cordell Hull convocation	26 00	
Hart House, President's teas and luncheons, \$261; sundry guests, \$38	299 00	
Royal Ontario Museum. teas: Federation of University Women,		
\$43.75; American Association of Teachers of Physics and Physical		
Society, \$60	103 75	
York Club, luncheons; Cordell Hull, \$174.05; Sir Howard d'Egville.		
\$58.45	232 50	
University College Women's Union: President's dinner for Students'		
Administrative Council	41 25	
Accounts under \$10 (4)	19 05	
Accounts under \$10 (17		\$1,134 1;
		Q1,101 11
138, Convocation Expenses		
Hoods, gowns, printing programmes, invitations, etc.:		
Harcourt's Ltd., hood	\$22 50	
S. Harrod, engrossing	17 05	
G. B. Pritchard, engrossing	3 10	
Walter & Son, hoods and gowns	260 50	
University Press, printing and stationery	236 85	
_		\$540 00
100 A D		
139. Aid to Publications and Societies	******	
Alumni Federation	\$2,500 00	
Royal Astronomical Society	150 00	
Royal Society of Canada	400 00	
Universities Bureau of the British Empire	299 76	
British School of Archaeology, Jerusalem	100 00	
American School at Athens	200 00	
American School of Oriental Research, Jerusalem	100 00	
American School of Oriental Research, Bagdad	100 00	
Association of American Universities	50 00	
Society for Promotion of Engineering Education	15 16	
Students' Administrative Council (re student lodgings)	100 00	
_		\$4,014 92
140 C F		
140. Senate Elections		
(nothing spent)		
141. Bursaries		
Awards to sundry students:		
Faculty of Arts	\$7,270 00	
Faculty of Medicine	3,175 00	
Faculty of Dentistry	100 00	
rucinty of Denderty	700 00	
	\$10,545 00	
Less portion charged to donation:	w10,010 00	
Medical Society	600 00	
-		\$9,945 00
142. Contingencies		
	202.00	
Canadian Bank of Commerce, charge re registration of securities	\$82 90	
Chartered Trust & Executor Co., commission on collection of postponed	30 60	
fees of students	10 69	
Geo. Coles Ltd., catering re Ontario Education Association Convention.	157 50	
Hart House, catering re Social Science Convention	37 50	
Dunlop's Ltd., flowers for funerals	46 00	
Wm. Janes, damages to car caused by fire hose	10 50	
Klotz Library Fund, purchase of library of the late Professor Klotz	1.500 00	

Manufacturer's Life Insurance Co., interest on mortgage, No. 104 St.				
George St	27	80		
Provincial Treasurer, portion of cost of printing University Report	129			
Remembrance Day Committee, wreath for Tower Memorial Service	12	50		
Charles H. Riches & Sons, Canadian and United States Patents:				
Respirator, Dr. Hall and B. S. Leibel \$219 00				
Bellows Oscillating Means				
	\$582	00		
Accounts under \$10 (3)	17	70		
Workmen's Compensation:				
Workmen's Compensation Board, to cover allowances paid to em-				
ployees, etc	336	62		
Medical services for injured employees, etc.:				
Toronto General Hospital	53	00		
Dr. Roy H. Thomas	52	50		
Sundry doctors (6)	35	50		
-			\$3,092	14
		-	0107.005	~-
		_	\$107.885	/1
XXII. 143. CAPITAL ACCOUNT CHARGES				
AMI. 145. CATTIAL ACCOUNT CHARGES				
Accountant, Supreme Court of Ontario, twenty-ninth annual				
payment on debenture issue of 1909\$25.260 00				
Less portion charged to Ontario College of Education. 10.000 00				
Less portion charged to Omario conege of Education. 10.000 00	\$15,260	വ		
Accountant, Supreme Court of Ontario, twenty-third annual payment on	\$10,200	00		
debenture issue of 1915 re Hart House	5,975	വ		
Accountant, Supreme Court of Ontario, fourteenth annual payment on	0,710	00		
debenture issue of 1924 re Forestry Building	10,000	വ		
Toronto General Hospital, twenty-seventh annual payment on debenture	10,000	00		
issue of 1911 re grant to Toronto General Hospital	15,157	nn		
Toronto General Hospital, twenty-seventh annual payment on debenture	10,107	00		
issue of 1911 re old Pathological Building	6.568	nn		
University of Toronto (Rockefeller Endowment — Medicine) ninth an-	0,500	00		
nual payment on debenture issue of 1929 re Banting Institute	64,193	00		
Royal College of Dental Surgeons, interest on liability of \$50.000	2,500			
Royal College of Delital Surgeons, interest on hability of \$50,000	2.500		\$119,653	00
		=	@119,033	00
XXIII. SPECIAL RESEARCH				

# 144. Departmental Appropriations

144. DEPARTMENTAL APPROPRIATIONS		
(a) Arts:		
Biology:		
Research Assistants:		
A. Wilkes, 8 mos	\$650	00
L. Butler, 11 mos	600	00
C. J. Kerswill, 8 mos	400	00
K. H. Doan, 8 mos. (paid also \$200 in Fisheries Research)	300	00
Miss A. M. Ironside (paid also \$160 in department)	300	00
H. H. I. Nesbitt, 8 mos	300	00
H. B. Wressell, 8 mos	300	00
Assistant in Vivarium, W. Whitehead, 1 July to 31 August	72	00
Expenses (\$535.21):		
Agfa Ansco Ltd., acetal	10	38
S. Bane, scale	10	00
Central Scientific Co., chemicals and glassware	32	16
Crabtree-Gravure, reprints	38	88
Human Biology, reprints	16	17
Dr. W. E. Hurlburt, labour and material for sparrow aviary	21	55
Kelley Feed & Seed Co., feed	30	70
Lake Simcoe Ice & Fuel Co., ice	10	00
R. Laidlaw Lumber Co., sawdust	18	00
H. E. LeMasurier, prints	11	20
Maple Leaf Milling Co., feed	61	06
Photographic Service, prints	15	00
Arthur H. Thomas Co., dishes, powder, etc	28	11
University Press, printing and stationery	24	41
Accounts under \$10 (17)	76	52

Sundry disbursements by department:		
Food supplies, \$30.93; hardware, etc., \$12.29; drugs.		
\$8.16; sundries, \$23.57	74 95	
Superintendent's Dept., labour, \$40.22; material, \$15.90	56 12	
	\$3,457 21	
Less credits: Sale of material, \$76.78; material returned, 93c	77 71	
	62 270 50	
Fisheries Research: Research Assistants:	\$3,379 50	
F. E. J. Fry, 12 mos. (paid also \$900 in department)	\$1,100 00	
R. R. Langford, 12 mos. (paid also \$900 in department)	1,100 00	
W. A. Kennedy, 3 mos	300 00	
K. H. Doan, 3 mos. (see also above)	200 00 200 00	
W. R. Martin, 3 mos. (paid also \$30 in department) V. E. F. Solman, 3 mos. (paid also \$30 in department)	200 00	
Expenses (\$1,197.08):	200 00	
W. J. K. Harkness, disbursements:		
Provisions, \$368.27; travelling and hotel expenses,		
\$146.56; car and boat service, \$121.30; gas and		
oil. \$217.99; hardware and lumber. \$203.54: sundries. \$42.58	1,100 24	
Borden Co., milk powder	30 87	
Postage	26 26	
University Press, printing and stationery	19 80	
Accounts under \$10 (4)	12 69	
Superintendent's Dept., material	7 22	\$7,676 58
Botany:		Ç1,013 00
Research Associate, L. C. Coleman, 12 mos	\$2,000 00	
Research Assistants:	210 00	
B. B. Hillary, 3 mos	210 00	
D. F. Putnam, 3 mos D. C. McPherson, 3 mos.	175 00 150 00	
S. A. Simmons, 3 mos paid also in	150 00	
S. A. Simmons, 3 mos paid also in	150 00	
Miss G. S. Taylor, 3 mos.	150 00	
C. N. Haldenby, 3 mos	150 00	
A. J. V. Lehmann, 3 mos	140 00 120 00	
D. H. Hamly, 2 mos. (paid also in Departments of	120 00	
Applied Physics and Botany, and Special Research,		
Applied Physics)	90 00	
N. W. Radforth, 2 mos. (paid also \$150 for Extension Work)	90 00	
Miss D. F. Forward, 2 mos)	80 00	
Miss A. B. Brodie, 1 month. paid also in department	60 00	
M. W. Bannan, 1 month	60 00	
Expenses (\$209.87):	10 76	
Canadian Liquid Air Co., rental of cylinders and gas R. H. Chappell, glass-blowing	18 76 11 00	
Prof. H. S. Jackson, expenses re trip to Cambridge for	11 30	
research work on Fungi	65 12	
Lancaster Press, reprints	47 04	
National Research Council of Canada, reprints  Accounts under \$10 (4)	16 15 17 93	
Superintendent's Dept., material	33 87	
Superintendent's Dept., material		\$3.984 87
(b) Medicine:		
Organic Chemistry:		
Erich Baer, Assistant Professor, Research in Organic Chemistry, 12 mos.	\$3,000 00	
12 mos		\$3,000 00
Bio-Chemistry:		
Research Assistants:	0.200 60	
G. C. Butler, 2 mos	\$200 00	
W. H. Fishman, 2 mos.   paid also in department	200 00 200 00	
ram trammon, 2 mos. /		
	600 00	

Experimental Medical Research: Clief Technical Assistant, W. Cowan, 12 mos	\$1,700 00
Head of Animal Quarters, J. Minshull, 12 mos.	600 00
Assistants in Animal Quarters:	000 00
C. Lee, 12 mos	660 00
L. Hughes, 12 mos	595 32
Expenses (\$2,795.64):	
Allen Mfg. Co., laundry	120 27
Corbett-Cowley Ltd., uniforms	49 19
E. Cullen, animals	707 60
Francis, Hankin & Co., incinerator bars	11 00
Ingram & Bell, chemicals, needles, drugs, etc	543 32
Kelley Feed & Seed Co., straw and feed	80 51
Langley, Harris Co., dog biscuits	50 00 61 20
Mallinckrodt Chemical Works, ether.	68 82
Maple Leaf Milling Co., feed	328 50
Ralston, Purina Co., feed	473 23
West Disinfecting Co., disinfectant	25 06
Accounts under \$10 (5)	15 38
Superintendent's Dept., labour, \$87.70; material, \$173.86	261 56
_	
	\$6.950 96
Less credits: Anonymous donation	
Sale of animals and feed 967 95	1 000 05
	1,092 95
_	05.050.01
Charged to Dunlap Bequest\$3,975 00	\$5,858 01
Charged to Dunlap Bequest	
Charged to Reeve Dequest 1.005 01	5,858 01
(c) Applied Science:	•••
Applied Physics:	
Research Assistants:	
L. E. Jones, 3 mos. (paid also \$1.300 in department)	\$525 00
D. H. Hamiy, I month (see also department)	175 00
D. H. Hamly, 1 month (see also department)	175 00
	175 00 120 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00 3 12
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film	120 00 3 12
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film	120 00 3 12 76 76
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00 3 12
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00 3 12 76 76 25 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00 3 12 76 76 25 00 15 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00 3 12 76 76 25 00 15 00 15 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)	120 00 3 12 76 76 25 00 15 00 15 00 6 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture: Expenses: Clerical Assistant, J. F. Brennan Draughting assistance: S. B. Barclay. F. P. Meschino Cripps Studio, prints Photographic Service, prints	120 00 3 12 76 76 25 00 15 00 15 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture: Expenses: Clerical Assistant, J. F. Brennan Draughting assistance: S. B. Barclay. F. P. Meschino Cripps Studio, prints Photographic Service, prints A. S. Whyte, photographs.	120 00 3 12 76 76 25 00 15 00 15 00 6 00 26 97
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay  F. P. Meschino  Cripps Studio, prints  Photographic Service, prints  A. S. Whyte, photographs  Chemical Engineering:  Research Assistants:	120 00 3 12 76 76 25 00 15 00 15 00 6 00 26 97
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay  F. P. Meschino  Cripps Studio, prints  Photographic Service, prints  A. S. Whyte, photographs  Chemical Engineering:  Research Assistants:	120 00 3 12 76 76 25 00 15 00 15 00 6 00 26 97
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture: Expenses: Clerical Assistant, J. F. Brennan. Draughting assistance: S. B. Barclay. F. P. Meschino. Cripps Studio, prints. Photographic Service, prints. A. S. Whyte, photographs  Chemical Engineering: Research Assistants: W. H. Rapson, 3 mos. (paid also \$1.150 in department) G. T. Eaton, 3 mos.	120 00 3 12 76 76 25 00 15 00 15 00 6 00 25 97 10 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture: Expenses: Clerical Assistant, J. F. Brennan Draughting assistance: S. B. Barclay. F. P. Meschino Cripps Studio, prints Photographic Service, prints A. S. Whyte, photographs.  Chemical Engineering: Research Assistants: W. H. Rapson, 3 mos. (paid also \$1.150 in department) G. T. Eaton, 3 mos. L. J. Rubin, 3 mos.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy)  Expenses (\$79.88):  W. E. Booth, film Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture: Expenses: Clerical Assistant, J. F. Brennan Draughting assistance: S. B. Barclay. F. P. Meschino Cripps Studio, prints Photographic Service, prints A. S. Whyte, photographs.  Chemical Engineering: Research Assistants: W. H. Rapson, 3 mos. (paid also \$1.150 in department) G. T. Eaton, 3 mos. L. J. Rubin, 3 mos.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 26 97 10 00  450 00 412 50 375 00 325 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department)  G. T. Eaton, 3 mos.  L. J. Rubin, 3 mos.  Ch. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  Paid also	120 00  3 12 76 76  25 00  15 00 15 00 6 00 26 97 10 00  450 00 412 50 375 00 325 00 250 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson. 3 mos. (paid also \$1.150 in department)  G. T. Eaton, 3 mos.  L. J. Rubin. 3 mos.  Ch. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  Paid also in dept.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film  Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department).  G. T. Eaton, 3 mos.  L. J. Rubin, 3 mos.  Ch. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  B. Marks, 2 mos.  W. C. Macdonald, 3 mos.  I in dept.  W. C. Macdonald, 3 mos.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 220 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department).  G. T. Eaton, 3 mos.  L. J. Rubin, 3 mos.  L. J. Rubin, 3 mos.  Chemical Engineering:  Paid also  B. Marks, 2 mos.  Paid also  B. Marks, 2 mos.  A. S. Weatherburn, 1 month.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department).  G. T. Eaton, 3 mos.  L. J. Rubin, 3 mos.  C. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  N. R. Fasken, 2 mos.  W. C. Macdonald, 3 mos.  A. S. Weatherburn, 1 month.  Expenses:	120 00  3 12 76 76  25 00  15 00 15 00 6 00 26 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 220 00 75 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department).  G. T. Eaton, 3 mos.  L. J. Rubin, 3 mos.  C. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  N. R. Fasken, 2 mos.  A. S. Weatherburn, 1 month.  Expenses:  Canadian Laboratory Supplies, acids.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 220 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson. 3 mos. (paid also \$1.150 in department)  G. T. Eaton, 3 mos.  L. J. Rubin. 3 mos.  C. P. Beal, 2 mos  N. R. Fasken, 2 mos  N. R. Fasken, 2 mos  A. S. Weatherburn, 1 month.  Expenses:  Canadian Laboratory Supplies, acids.  Civil Engineering:	120 00  3 12 76 76  25 00  15 00 15 00 6 00 26 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 220 00 75 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film  Superintendent's Dept., labour, \$36.60; material, \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay  F. P. Meschino  Cripps Studio, prints  Photographic Service, prints  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department)  G. T. Eaton, 3 mos  L. J. Rubin, 3 mos  L. J. Rubin, 3 mos  S. P. Beal, 2 mos  N. R. Fasken, 2 mos  Dead also  B. Marks, 2 mos  V. C. Macdonald, 3 mos  A. S. Weatherburn, 1 month  Expenses:  Canadian Laboratory Supplies, acids  Civil Engineering:  Research Assistants:	120 00  3 12 76 76  25 00  15 00 15 00 6 00 26 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 220 00 75 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson. 3 mos. (paid also \$1.150 in department)  G. T. Eaton, 3 mos.  L. J. Rubin. 3 mos.  C. P. Beal, 2 mos  N. R. Fasken, 2 mos  N. R. Fasken, 2 mos  A. S. Weatherburn, 1 month.  Expenses:  Canadian Laboratory Supplies, acids.  Civil Engineering:	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 250 00 250 00 6 37
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant, J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson, 3 mos. (paid also \$1.150 in department)  G. T. Eaton, 3 mos.  L. J. Rubin, 3 mos.  L. J. Rubin, 3 mos.  C. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  N. R. Fasken, 2 mos.  A. S. Weatherburn, 1 month.  Expenses:  Canadian Laboratory Supplies, acids.  Civil Engineering:  Research Assistants:  C. E. Helwig, 2 mos. (paid also \$1,250 in department)  R. D. Hiscocks, 2 mos., 2½ weeks.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 250 00 250 00 6 37  300 00
Machinist, C. T. Harding, 4 weeks (see also Department of Civil Engineering: Surveying and Geodesy).  Expenses (\$79.88):  W. E. Booth, film.  Superintendent's Dept., labour, \$36.60; material. \$40.16  Architecture:  Expenses:  Clerical Assistant. J. F. Brennan.  Draughting assistance:  S. B. Barclay.  F. P. Meschino.  Cripps Studio, prints.  Photographic Service, prints.  A. S. Whyte, photographs.  Chemical Engineering:  Research Assistants:  W. H. Rapson. 3 mos. (paid also \$1.150 in department).  G. T. Eaton, 3 mos.  L. J. Rubin. 3 mos.  C. P. Beal, 2 mos.  N. R. Fasken, 2 mos.  N. R. Fasken, 2 mos.  A. S. Weatherburn, 1 month.  Expenses:  Canadian Laboratory Supplies, acids.  Civil Engineering:  Research Assistants:  C. E. Helwig, 2 mos. (paid also \$1,250 in department).  R. D. Hiscocks, 2 mos., 2½ weeks.	120 00  3 12 76 76  25 00  15 00 15 00 6 00 25 97 10 00  450 00 412 50 375 00 325 00 250 00 250 00 250 00 250 00 6 37  300 00

Electrical Engineering:			
Expenses:	70.0		
Art Metropole, achromatic objector, etc	72 7		
Baker & Co., spool. etc	8 2		
British Drug Houses, chemicals	12 5		
Walter A. Carveth Co., microscopes, etc	228		
J. W. Fecker, lens	15 3		
Robbins & Townsend, motor	30 (		
Spencer Lens Co., magnifier	14 3	32	
Mechanical Engineering:			
Research Assistants:			
F. G. Ewens. 2 mos	350 (	00	
G. Gung. 5 mos	350 (	00	
R. J. Birss, 2 mos. (paid also \$1,100 in department)	330	00	
Expenses (\$116.43):			
American Society for Mechanical Engineers, publications	4		
Keuffel & Esser, tracing cloth	23	35	
McGregor-McIntyre Iron Works, infiltration apparatus	42		
W. R. McKee, potentiometer repairs	12	75	
University Press, printing and stationery	10	70	
Superintendent's Dept., labour. \$18.52; material, \$4.36	22	88	
Printing Bulletins, etc.:			
Wm. Clowes & Sons, reprints	29		
Grand & Toy, book	8		
National Research Club of Canada, reprints	13	75	
Postage	10	00	
University Press, printing and stationery	428	98	
-			
	\$5,914	26	
Charged to Wallberg Bequest	5.864	26	
			\$50 00
(d) Dentistry:			
Professor of Periodontology, H. K. Box, 12 mos. (half time)	\$3.000	00	
Laboratory Technician, A. F. Fenton	1.500	00	
			\$4.500 00
			\$19,211 45
145. Banting and Best Research			
145. BANTING AND BEST RESEARCH			
(a) Banting Research:	\$5,000	00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos	\$5,000	00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.:	\$5,000 3.600		
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks	3.600	00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin		00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. F. Hall.	3.600 3.600 3.500	00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks D. A. Irwin G. E. Hall C. C. Lucas, Assistant Professor. 12 mos	3.600 3.600	00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos  Besearch Associates, each 12 mos.:	3.600 3.600 3.500 3,200	00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns.	3.600 3.600 3.500 3,200 2,160	00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz.	3.600 3.600 3.500 3,200	00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants:	3.600 3.600 3.500 3,200 2,160	00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos.	3,600 3,600 3,500 3,200 2,160 2,040	00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor, 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680	00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos.	3.600 3.600 3.500 3,200 2,160 2,040 1.800	00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380	00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380 1,200	00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos Miss J. M. Lang, 12 mos D. P. C. Lloyd, 12 mos Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380 1,200	00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380 1,200	00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. B. C. Sniffen, 10 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380 1,200 1,200 1,000	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos Miss J. M. Lang, 12 mos D. P. C. Lloyd, 12 mos Dr. E. Marie Hearne, 12 mos Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380 1,200 1,000 1,000	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,200 1,000 1,000 900	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos.	3,600 3,600 3,500 3,200 2,160 2,049 1,800 1,680 1,400 1,200 1,200 1,000 900	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,400 1,200 1,200 1,000 900 900 825	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos Miss J. M. Lang, 12 mos D. P. C. Lloyd, 12 mos Dr. E. Marie Hearne, 12 mos Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. M. O'Sullivan, 10 mos. Miss M. Wheatley, 10 mos. Miss M. Wheatley, 10 mos. Miss M. Wheatley, 10 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,200 1,000 1,000 900 920 825 750	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos Miss J. M. Lang, 12 mos D. P. C. Lloyd, 12 mos Dr. E. Marie Hearne, 12 mos Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. M. O'Sullivan, 10 mos. Miss M. Wheatley, 10 mos. Miss M. Wheatley, 10 mos. Miss M. Wheatley, 10 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,400 1,380 1,200 1,000 1,000 900 900 825 750 750	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos Miss J. M. Lang, 12 mos D. P. C. Lloyd, 12 mos Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos Miss H. E. Ball, 11 mos J. M. R. Beveridge, 10 mos. M. O'Sullivan, 10 mos. Miss M. Wheatley, 10 mos. Miss M. B. B. Mundell, 15 September to 30 June	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,200 1,200 1,000 900 900 825 750 750	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos H. L. Collins, 12 mos Miss J. M. Lang, 12 mos D. P. C. Lloyd, 12 mos Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. M. M. Sh. M. Wheatley, 10 mos. Miss M. Wheatley, 10 mos. Miss D. B. Mundell, 15 September to 30 June D. W. Lougheed, 9 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,200 1,000 1,000 900 825 750 750 712	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. M. O'Sullivan, 10 mos. Miss M. Wheatley, 10 mos. Miss D. B. Mundell, 15 September to 30 June D. W. Lougheed, 9 mos. G. W. Manning, 4½ mos. F. L. Lawson, 4½ mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,200 1,000 1,000 900 825 750 750 750 712 675	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. Miss M. Wheatley, 10 mos. Miss D. B. Mundell, 15 September to 30 June. D. W. Lougheed, 9 mos. G. W. Manning, 4½ mos. F. L. Lawson, 4½ mos. F. B. Thomson, 4 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,200 1,000 1,000 900 900 825 750 750 750 712 675 450	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. Miss M. Wheatley, 10 mos. Miss D. B. Mundell, 15 September to 30 June. D. W. Lougheed, 9 mos. G. W. Manning, 4½ mos. F. L. Lawson, 4½ mos. F. B. Thomson, 4 mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,680 1,400 1,380 1,200 1,000 1,000 900 900 825 750 750 750 750 712 675 450 360	00 00 00 00 00 00 00 00 00 00 00 00 00	
(a) Banting Research: Professor of Research in Medicine. Sir Frederick Banting, 12 mos Associate Professors, each 12 mos.: W. R. Franks. D. A. Irwin. G. E. Hall. C. C. Lucas, Assistant Professor. 12 mos Research Associates, each 12 mos.: Miss S. Gairns. J. M. Grosheintz. Research Assistants: J. E. Goodwin, 12 mos. H. L. Collins, 12 mos. Miss J. M. Lang, 12 mos. D. P. C. Lloyd, 12 mos. Dr. E. Marie Hearne, 12 mos. Miss M. M. Shaw, 12 mos. Dr. Sheila M. Gordon, 10 mos. R. C. Sniffen, 10 mos. Miss H. E. Williams, 12 mos. Bernard Leibel, 12 mos. Miss H. E. Ball, 11 mos. J. M. R. Beveridge, 10 mos. M. O'Sullivan, 10 mos. Miss M. Wheatley, 10 mos. Miss D. B. Mundell, 15 September to 30 June D. W. Lougheed, 9 mos. G. W. Manning, 4½ mos. F. L. Lawson, 4½ mos.	3,600 3,600 3,500 3,200 2,160 2,040 1,800 1,400 1,200 1,200 1,000 900 825 750 750 7750 7712 675 450 360 300	00 00 00 00 00 00 00 00 00 00 00 00 00	

77 7600 17	
H. Miller, 18 weeks	288 00
F. H. Lawford, 3 mos. (paid also \$550 in Department of	
Pathological Chemistry)	270 00
M. L. Allan, 3 mos	180 00
W. K. Kerr, 1½ mos	112 50
R. C. Smith, 1 month	75 00
Miss S. Brydon, 1 month	75 00
G. J. Millar, 1 month	50 00
Research Fellows:	
H. J. Creech, 12 mos	1,200 00
L. B. Macpherson. 10 mos	800 00
Lorne D. Proctor, 3 mos	300 00
J. J. Rae, 2 mos	200 00
W. M. Gray, 1 month (paid also \$500 in Department of Physics)	75 00
Chemical Assistants:	
Raymond MacDougall, 15 November to 30 June	448 83
H. N. MacFarland, 1 month, 14 weeks	235 00
D. Barton, 12 weeks	150 00
Technicians:	
L. C. Brock, 12 mos	1,380 00
H. M. Douglas, 12 mos	1,200 00
J. Conboy, 12 mos	1,140 00
T. Walker, 12 mos	1,140 00
C. Lott, 11 mos	825 00
G. Parkes. 12 mos	780 00
D. Snow. 12 mos	720 00
Miss N. H. Davy. 12 mos	660 00
W. J. Watson, 12 mos	593 33
Miss G. Mulholland. 2 mos.	130 00
Technical Assistant, G. Johnston, 6-2/3 weeks	93 33
Secretarial Assistants:	20 00
Miss M. J. Millar, 12 mos.	1.080 00
Miss D. Waugh, I week (paid also \$70 from Medical Research	1.000 00
— Best Fund)	25.00
Assistants in Animal Quarters:	25 00
K. Sims, 7½ mos	275 16
	375 16
F. Simpson, 4½ mos	247 50
S. Smith, 12 mos	660 00
A. Stello, 12 mos	605 00
Laboratory Attendant, Mrs. C. McCallilm, 484 nours (paid also	355.50
\$350 in Pathological Chemistry)	155 52
Cleaner, Mrs. Allison Moffatt, 12 mos	640 00
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E (210 012 (0)	\$58,641 67
Expenses (\$18,812.69):	0.5
Abbott Laboratories, powder	35 73
Aikenhead Hardware Ltd., hardware	18 21
Allen Mfg. Co., laundry	330 36
Aluminum Co., sheet aluminum	17 28
American Journal of Cancer, subscription	31 48
Bausch & Lomb Optical Co., condenser	11 27
B. A. Bayley, stimulator	35 00
Borden & Co., milk powder	10 31
British Aluminum Co., aluminum	52 04
British Drug Houses, acids	39 23
Fred Broom, meat	183 96
Burger's Battery Co., batteries	61 71
Prof. E. F. Burton, analyses of aerial dusts	35 00
Cambridge Instrument Co., lamp	13 11
Cambridge University Press, reprints	27 42
Canadian General Electric Co., radiotrons	23 63
Canadian Industries Ltd., acids	19 77
Canadian Kodak Co., chemicals	140 55
Canadian Medical Association, reprints	77 33
Canadian Westinghouse Co., radio parts	145 43
Carswell Co., books	32 36
Central Scientific Co., chemicals, glassware, etc	1,840 02
R. H. Chappell, glass-blowing	54 50
Connaught Laboratories, animals	15 00
Corbett-Cowley Ltd., uniforms	100 96

A. C. Cossor, tubes	68 36
Coulter Copper & Brass Co., still repairs	26 00
E. Cullen, animals	1,478 26 29 50
Culling Ltd., paper	29 50 77 67
T. Eaton Co., pans, sealers and trays	12 76
Fisher Scientific Co., chemical apparatus	71 12
A. Gallenkamp Co., spatules	33 44
General Motors Sales Corporation, refrigerator repairs	62 22
Gevaert Co., lantern plates	60 49
Albert M. Grass, oscillograph	450 91
B. L. Guyatt. animals	27 90
Hammond Mfg. Co., transformer chokes	51 70
Francis Henker Co., incinerator repairs	76 50 75 00
J. F. Hartz Co., slides	93 37
Hoffman-La Roche Ltd., chemicals  E. Hooking Glass Works, glassware	32 63
A. S. Hunt, glass-blowing	13 75
Ingram & Bell. chemicals, tubing, needles, etc	631 70
Instruments Ltd., thermometer	15 50
International Resistance Co., resistors, etc	172 75
Roscoe B. Jackson Memorial Laboratories, animals	437 61
Jackson, Howe, Brooks Co., tubing	12 00
Janetto Mfg. Co., wave filter	108 90
Frank Jennings, sawdust	48 00
Journal of Biological Chemistry	16 12 21 68
L. Light & Co., chemicals	45 81
Lowe- Martin Co., transfer cases	19 20
John McGillian, carrots	40 80
W. R. McKee, galvanometer, etc	67 10
Mallinckrodt Chemical Co., ether	23 27
Mead. Johnson Co., yeast powder	12 75
C. V. Mosby Co., reprints	20 00
National Grocers Co., salmon	13 60
Naylor & Naylor, insulators and respirators	105 00 11 <b>6</b> 21
Northern Electric Co., condensers, etc	13 63
Ontario College of Agriculture, eggs and poultry	442 35
Ontario Rubber Co., tubing	11 66
Physics Dept., X-Ray examination of mine dust	10 00
Phileo Products Ltd., wire kit	19 95
Postage	55 16
Radio Equipment Ltd., radio parts	88 45
Ralston Purina Co., feed	731 49
Risebrough & Jackson, feed	616 18 28 00
Rogers Radio Tubes Ltd., radio parts	25 00
Schering Ltd., glycerine aldchyde	105 42
Arthur H. Thomas Co., glassware, etc	79 23
E. Tozer, crushing ore	26 50
W. T. Turrall, services in connection with adapting infra-sizer	65 00
Walden & Jennings, sawdust	44 00
Waverley Press. reprints	12 99
Weston Electrical Instrument Corporation, selectors, etc	41 19 94 84
S. S. White Co., oxygen, etc	150 72
Will Corporation, microtome knife	27 31
Harold A. Wilson Co., stop watch	16 00
Wilson Scientific Co., glassware	73 90
G. T. Woodward thermo units	96 00
University Press, printing and stationery	141 30
Honoraria for work in connection with Infantile Paralysis:	
Leonard Brock	100 00
John Conley	100 00
G. E. Hall	100 00
Bernard Leibel	100 00
F. M. Shepherd, mechanic's overtime services	25 00
Accounts under \$10 (30)	160 82

Physiology: Research Associate. J. Markowitz (sessional). Research Assistants (Sessional): R. E. Haist, 1 month (paid also \$1,466.67 in department) M. J. Wilson. 4 mos. (part time — paid also \$400 in Department of Anatomy). Mrs. Jean P. Fletcher. 12 mos Demonstrators (Sessional — part time): C. E. Walker, 6 mos F. P. Dewar (paid also \$250 in Anatomy). M. W. Hicks, 4 mos. (paid also \$200 in Anatomy). Fellow. B. H. B. Hallam, 3 mos. (part time).	100 00 100 00 400 00 900 00 500 00 250 00 200 00 240 00
(b) Best Research:  Research Associate. C. H. Best. 12 mos. (see also Department of Physiology)	2.500 00
	\$7.556 24 \$7.500 00
Silicosis Committee	~~~~~
Credited from Banting Research Foundation. \$15,000 00 Ontario Mining Association. 10,000 00 McIntyre-Porcupine Mines. 7,886 22 Medical Research — Best Fund. 5,000 00 Eli Lilly Research Fellowship. 1,912 50	\$85,056 24
University Press, printing and stationery	17 07 29 66 89 37
Ingram & Bell, ether, etc  W. H. F. Kuhlmann, balance. C. H. Taylor, autoclave repairs. S. S. White Co gas. Wilson Scientific Co glassware, chemicals, etc	178 21 213 50 107 07 566 20
etc	570 00 1.257 56 167 05 39 65
Equipment: Allen Mfg. Co., laundry. Baker Platinum Co., chlorides. British Drug Houses, chemicals. Canadian Industries Ltd., acid. Canadian Laboratory Supplies, oven, glassware, filter paper,	24 11 54 00 381 50 28 03
Alterations to Banting Institute (\$7,601.88):  Building:  Superintendent's Dept., labour, \$2.313.30; material. \$1.423.70  Grand & Toy, lockers, etc	3.737 00 141 90
telegrams. etc., \$13.63; food supplies, \$29.33; sundries. \$27.97  Superintendent's Dept., telephone, \$20.40; freight. \$154.40; labour. \$1,927.02; material, \$2,760.10.  Contribution to Pension Funds.	150 00 4.861 92 816 96
D. A. Irwin P. C. Lloyd C. C. Lucas Sundry disbursements by department: Hardware, \$34.39; drugs and stationery, \$44.68; postage,	124 30 552 35 53 90
W. R. Franks. J. E. Goodwin. G. E. Hall. H. E. T. Haultain.	189 82 99 76 64 90 51 00
Travelling expenses: Sir Frederick Banting	175 30 48 75

Technical Assistants:	
F. L. Robinson, Head of Technical Staff, 12 mos. (share of	
salary charged to Research — see also department)	500 00
Miss G. I. Harpell, 12 mos	1,000 00
G. Scattergood, 12 mos	1,000 00
L. V. Hodgins, 10 mos., 3 weeks	831 25
Charles Scattergood, 12 mos	720 00 720 00
Miss M. L. Palmer, 2 mos	200 00
S. McCracken, 7 weeks.	138 00
Secretarial Assistants:	
Miss Doris Secord, 3 mos. (paid also \$1,250 in department)	100 00
Miss Dorothy Waugh, 3 weeks (see also Medical Research	70.00
—Banting)	70 00
Physiological Hygiene: Research Associates, each 12 mos.:	
Miss J. H. Ridout	2.200 00
Mrs. Ruth C. Partridge (see also School of Hygiene)	1.100 00
Research Assistants, each 12 mos.:	
Miss E. F. Dudley Martin	1,250 00
J. Campbell, Jr	1.600 00
Technical Assistants: C. R. Cowan, Senior (share of salary charged to Research	
— see also School of Hygiene!	500 00
I. Scattergood, 12 mos	1.000 00
Miss M. Luxton, 12 mos	850 00
Miss M. E. Hocking, 12 mos	800 00
J. G. Truax, 12 mos	300 00 750 00
Miss A. Jaffray, 12 mos	70 83
Kenneth Roseblade. ½ month (see also School of Hygiene)	30 41
Technician. C. L. Skelding, 1 month (see also School of	
Hygiene)	20 00
-	\$21,440 49
Expenses (\$15,912.78):	\$21,440 49
•	
Aikenhead Hardware Ltd., hardware	93 96
American Medical Association, reprints	12 87 57 81
Art Metropole, lamps, etc	26 08
Booth Canadian Films Ltd., developing	10 64
Borden Co., casein, etc	138 46
British Drug Houses, drugs and chemicals	125 31
F. J. Burns Co., frogs	62 34 15 19
Cambridge University Press, reprints	181 88
Canadian Kodak Co., chemicals	386 81
Canadian National Carbon Co., batteries	24 99
Canadian Office & School Furniture Ltd., table and cupboards	328 00
Canadian Tire Corporation, tubes, resistors, sockets, etc	25 85
Walter A. Carveth & Co., microscope repairs	61 50 400 22
Central Scientific Co., chemicals, glassware, thermometers, etc R. H. Chappell, glass-blowing	175 75
Chicago Wheel & Mfg. Co., grinder	24 04
Warren E. Collins Inc., soda lime	40 28
Connaught Laboratories, reprints, alcohol, heparin solution and	2 061 00
maintenance of animals	1,261 83 729 21
Joseph Cooper, meat	28 51
E. Cullen, animals	1.081 90
C. Emmett, animals	16 80
F. W. Fisher, filing boxes	48 60
J. A. Fontaine, frogs	35 00
General Radio Co., condensers and potentiometer	133 00
General Steel Wares, instrument cabinet	
Ingram & Bell chemicals sutures needles etc	32 93
Ingram & Bell, chemicals, sutures, needles, etc	
Johnson-Matthey Co., gold chloride	32 93 77 97 23 00 62 50
Johnson-Matthey Co., gold chloride	32 93 77 97 23 00

APPENDIX III  UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	\$244.257 15.000 1.304 1.723 854	77 00 36 39 33	\$29,211 45 \$22,851 58 247,534 35 \$270,385 93 \$263,139 85 \$7,246 08
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	\$244.257 15.000 1.304 1.723	77 00 36 39 33	\$22,851 58 247,534 35 \$270,385 93
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	\$244.257 15.000 1.304 1.723	00  77 00 36 39	\$22.851 58 247.534 35
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30.000 \$244.257 15.000	00  77 00	\$22.851 58 247.534 35
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30.000 \$244.257 15.000	00  77 00	\$22.851 58 247.534 35
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30.000 \$244.257	00  77	\$22.851 58 247.534 35
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30,000	00	\$22.851 58 247.534 35
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30,000	00	\$22.851 58 247.534 35
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30,000	00	\$22,851 58
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937	30,000		
UNIVERSITY PRESS  Ledger Balances (net) as at 30 June, 1937			
UNIVERSITY PRESS Ledger Balances (net) as at 30 June, 1937	\$52,851	58	\$29,211 45
UNIVERSITY PRESS	egapea		\$29,211 45
		-	\$29,211 45
			\$29,211 45
			020 023 45
			\$10,000 00
	\$2,500	00	
Charged to Insulin Committee Grants	34,853	27	
	\$37,353		
Contributions to Pension Funds	282	09	
(2 years)	5.000		
material, \$715.18	1.260	02	
Superintendent's Dept., freight, \$20.97; labour, \$523.87;			
supplies and sundries, \$62.03	160	00	
Sundry disbursements by department: Postage, \$63.67; telegrams, etc., \$22.73; stationery, \$11.57;			
D. M. Wrench	37		
R. Schoenheimer	40 75		
D. Y. Solandt	414	90	
corrected in 1938-39) E. Fidlar	50 50		
J. Campbell (\$23.89 returned, credited to Banting Fund,			
C. H. Best H. M. Barrett	5!5 75		
Travelling expenses:	<b>515</b>	0.4	
University Press, printing and stationery	124		
Dr. Madelyn Womack, preparing methionine	16 287		
Wholesale Radio Service, radio parts	955		
Tordoff Electric Co motor	10 26		
Superior Instruments Co., generator, etc	44		
Rolls & Darlington, chemicals	16 20		
Robbins & Townsend, typewriter inspection	10	20	
Rainbow Lantern Slide Co., slides	32 10		
Queen City Brass Foundry, castings	20		
Photographic Service, slides and prints	79		
Office Specialty Mfg. Co., cabinets and guides	100 24		
New Standard Foundry Co., castings	13		
James Morrison Brass Mfg. Co., floats	201 17		
Merck & Co., chemicals	62		
Mallinckrodt Chemical Works, ether	21		

### NOTE

The above figures cover the accounts passing through the Bursar's Office. Supplementary thereto the Manager of the Press reports on hand, inventories, etc. (including work in progress) \$34,715.92; accounts receivable (less reserve) \$12.058.01; office furniture, etc., \$661; less sundry liabilities (net) \$1.316.68; making with the above cash balance of \$7.246.08, a total surplus over liabilities of \$53,364.33.

## DETAILS OF EXPENDITURE

Salaries and wages (\$90,528.15):	
A. Gordon Burns, Acting Manager, 12 mos	\$3,600 00
Miss E. M. Walker, Secretary, 12 mos	1,950 00
Miss E. Baguley, Cashier, 12 mos	1.350 00
Miss I, E. McTaggart, Chief Clerk, Book Department, 12 mos	1,350 00
Clerks, each 12 mos.:	
Miss W. Hills	1.140 00
Mrs. Florence Friendship	1,092 00
Miss I. Westwood	1.050 00
Miss M. Storey	1,000 00
Miss R. Buchan	936 00
Miss M. D. Carter	884 00
Miss A. Mullowney	884 00
Miss I. Potter	850 00
Miss M. Beattie, 7 mos. @ \$112.50; 4 mos. @ \$56.25	1,012 50
Geo. Edwards, Caretaker, 12 mos	1,550 00
A. Bigwood, Messenger, 7 mos	393 75
Pay lists, wages of employees.	71,485 90
Editorial Services (\$5,150.00):	1 000 00
Miss Alison Ewart, General Editor, 12 mos	1,900 00
Miss Mary L. Thompson, Assistant to General Editor, 12 mos	1,200 00
G. W. Brown. A. S. P. Woodhouse.	500 00
	400 00
V. W. Bladen E. K. Brown	400 00
W. P. M. Kennedy.	400 00 250 00
A. Brady.	100 00
Payments to contributors to publications	1.622 50
Payments of royalties and returns from sales	7.082 02
Supplies and general operating expenses (\$139,875,10):	1.002 02
Aikenhead Hardware Ltd., hardware	45 13
Alexander & Cable, lithographing diplomas	119 00
H. E. Allin Bros., gilding	121 84
D. A. Balfour Co., carbon paper and stencils	54 37
Barber-Ellis Ltd., envelopes, paper, etc	2.675 13
Bostitch Ltd., staples	65 00
R. Bourne & Son. covers	115 00
Brigden's Ltd., maps, zincs. etc	162 90
L. R. Brooks, drawings	26 75
Brown Bros., paper, ink, binders, etc	3.356 06
Buntin-Reid Co., paper, etc	352 07
Chas. Bush Ltd., ink	813 34
Bernard Cairns, rubber stamps	40 62
Canada Carbon & Ribbon Co., coupons	189 00
Canada Metal Co., metal	1,115 42
Canada Paper "Wholesale" Ltd., paper	294 19
Canadian Cleaning Co., window cleaning	42 60
Canadian Linotype Ltd., type	47 69
Canadian Pacific Railway Co., telegrams	51 08
Canadian Pad & Paper Co., paper and portfolios	150 34
Eugene E. Carroll, sharpening knives	38 90
Carroll's Canadian Metals, metal	132 84
	194 43
Delang & Pettit, glue	149 69 482 16
Ditto of Canada Ltd., ink	54 00
Dixon Pencil Co., pencils.	32 13
Dominion Blank Book Co., note books.	570 16
Dominion Electro-typers and Engravers Ltd., zinc and copper half-	010 10
tones	271 24

Dominion Envelope & Cartons Ltd., envelopes	147	69
Eberhard Faber Pencil Co., pencils		93
E. B. Eddy Co., paper	5,933	
A. E. Edwards, book ends Elliott Addressing Machine Co., stencils	30 49	
J. E. Emerson, electrical repairs		12
W. J. Gage & Co., envelopes, card cabinets, squares. covers, etc	1,845	
D. Gestetner Ltd., ink, paper and stencils	174	
Grand & Toy, cards, paper, covers, etc	310	24
Miss F. Hahn, mimeographing	38	00
G. A. Hardie & Co., wipers		40
W. E. Hardman & Co., ruling	56	
L. D. Hawthorne, commissions	114 380	
Howard Bros., gilding and stamping	387	
Imperial Oil Ltd., gas and oil	59	70
C. H. Johnson & Son, cartage	178	00
F. Roy Kemp, post cards	37	
Keuffel & Esser, graph paper, etc	203 174	
The Levi's, wipersLuckett Loose Leaf Ltd., covers and refills	1,187	
Lumley & Hewitt, ruling	59	
A. J. McCrae & Co., drawing pencils	52	
Gordon MacKay Co., cloth	45	
Meredith, Simmons & Co., paste	41	
Mono-Lino Typesetting Co., typesetting	325 786	
Moyer School Supplies, maps	67	
National Stationers Ltd., paper	27	
Nichols Advertisers Ltd., pads	59	88
Office Specialty Mfg. Co., folders and guides	29	
Paper Sales Ltd., paper	97	
Parker Fountain Pen Co., pens, pencils and repairs	389 133	
R. A. Phillips Ltd., crests and pennants	100	72
		0.7
etc	1,033	25
Photogelatine Engraving Co., Christmas cards and prints	318	34
Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd engraving, prints, etc	318 1.828	34 94
etc. Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper.	318 1.828 10,939	34 94 83
etc. Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper Queen City Paper & Twine Co., paper and twine	318 1.828 10,939 280	34 94 83 41
etc. Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc	318 1.828 10,939	34 94 83 41 24
etc. Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd engraving, prints, etc Provincial Paper Ltd., paper Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd., engraving zincs, dies, etc	318 1.828 10,939 280 32	34 94 83 41 24 91
etc. Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc	318 1.828 10,939 280 32 98 1,811 342	34 94 83 41 24 91 42 71
etc. Photogelatine Engraving Co., Christmas cards and prints Premier Engravers & Electrotypers Ltd engraving, prints, etc Provincial Paper Ltd., paper Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter.	318 1.828 10,939 280 32 98 1,811 342 60	34 94 83 41 24 91 42 71 00
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection.	318 1.828 10,939 280 32 98 1,811 342 60 179	34 94 83 41 24 91 42 71 00 03
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection Ryerson Press, binders, adhesive cloth, paper, etc	318 1.828 10,939 280 32 98 1,811 342 60 179 182	34 94 83 41 24 91 42 71 00 03 54
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper.	318 1.828 10,939 280 32 98 1,811 342 60 179	34 94 83 41 24 91 42 71 00 03 54 45
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58	34 94 83 41 24 91 42 71 00 03 54 45 97 32
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc. W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 264	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04 50 68
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc. Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc. Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc. Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc. W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 264 1.086	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04 68 64
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes. Toronto Graphic Arts Council, dues.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 1.086 496	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04 50 68 64 50
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd engraving zincs, dies, etc Reliance Engravers, half-tones, etc Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc. W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes. Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 264 1.086	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04 50 68 64 50 95
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes. Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc Townsley Printers' Supply & Machinery Co., type, blades, rules, etc. Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 264 1.086 496 130 38 178	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 64 50 95 59 25
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper. L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery Toronto Envelope Co., envelopes. Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc. Trownsley Printers' Supply & Machinery Co., type, blades, rules, etc. Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc. United Paper Mills paper.	318 1.828 10,939 280 32 98 1.811 342 60 179 182 666 3,977 58 185 414 86 278 145 94 264 1.086 496 130 38 178 4.200	34 94 83 41 24 71 00 35 45 97 32 95 18 99 48 64 50 95 59 59 58 59 58 59 59 59 59 59 59 59 59 59 59 59 59 59
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper. Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter. Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing Stephens Sales Ltd., stencils Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf Thomson Co., stationery. Toronto Envelope Co., envelopes Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc Townsley Printers' Supply & Machinery Co., type, blades, rules, etc. Underwood-Eiliott-Fisher Ltd., typewriters, ribbons, paper, etc United Paper Mills paper. United Paper Mills paper. Universal Thread Co., silk.	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 264 1.086 496 130 38 178 4.200 45	34 94 83 41 24 91 42 71 00 35 44 57 32 95 18 99 48 64 50 59 55 83 58
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc. W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes. Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc Townsley Printers' Supply & Machinery Co., type, blades, rules, etc. Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc United Paper Mills paper. Universal Thread Co., silk. Victoria Paper & Twine Co., cups, twine, etc	318 1.828 10,939 280 32 98 1,811 342 60 179 182 666 3,977 58 185 414 866 278 145 94 264 1.086 496 130 38 178 4.200 45 365	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04 50 68 64 50 50 50 50 50 50 50 50 50 50 50 50 50
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc. W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils. Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc. Townsley Printers' Supply & Machinery Co., type, blades, rules, etc. Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc. United Paper Mills paper Universal Thread Co., silk. Victoria Paper & Twine Co., cups, twine, etc. H. W. Wetter, commissions	318 1.828 10,939 280 32 98 1,811 342 60 179 182 66 3,977 58 185 414 86 278 145 94 264 1.086 496 130 38 178 4.200 45	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 04 50 68 64 50 95 95 95 95 95 95 95 95 95 95 95 95 95
etc. Photogelatine Engraving Co., Christmas cards and prints. Premier Engravers & Electrotypers Ltd., engraving, prints, etc Provincial Paper Ltd., paper. Queen City Paper & Twine Co., paper and twine. Raine Engraving Co., dies, etc Ratcliffe Paper Co., paper Reed Canadian Engravers Ltd., engraving zincs, dies, etc Reliance Engravers, half-tones, etc. Remington-Rand Ltd., typewriter Robbins & Townsend, typewriter rental and inspection. Ryerson Press, binders, adhesive cloth, paper, etc. W. A. Sheaffer Pen Co., repairs. Howard Smith Paper Mills, paper L. C. Smith & Corona Typewriter Co., portable typewriter. Spicers Ltd., book paper. Standard Embossing Co., embossing. Stephens Sales Ltd., stencils Sun Gravure Ltd., Christmas folders. Telfer Paper Box Co., boxes. B. & F. H. Thompson Co., gold leaf. Thomson Co., stationery. Toronto Envelope Co., envelopes. Toronto Graphic Arts Council, dues. Toronto Type Foundry Co., brushes, wire, etc Townsley Printers' Supply & Machinery Co., type, blades, rules, etc. Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc Underwood-Elliott-Fisher Ltd., typewriters, ribbons, paper, etc United Paper Mills paper. Universal Thread Co., silk. Victoria Paper & Twine Co., cups, twine, etc	318 1.828 10,939 280 32 98 1,811 342 60 179 182 666 3,977 58 185 414 86 278 145 94 264 1.086 496 130 38 178 4.200 45 365 33	34 94 83 41 24 91 42 71 00 03 54 45 97 32 95 18 99 48 64 50 55 95 59 59 59 59 59 59 59 59 59 59 59

Wilson, Munroe Co., paper	1.527 72
Books, etc.:	
Thomas Allen & Co	65 14
Alleyn & Bacon	26 69
American Book Co	178 98
American Chemical Society	40 70
American Institute of Steel Construction	151 27 213 34
American Medical Association.	99 11
American Public Health Association.	42 71
Angus & Robertson	91 02
Annual Review of Biochemistry	60 00
D. Appleton Century Co	539 79
Baker & Taylor Co	71 49
Barnes & Noble	344 20
P. Blakiston, Son & Co.	218 02 774 03
Blue Ribbon Books	31 14
R. R. Bowden Co.	104 77
F. A. Brockhaus	118 09
Bureau of Publications, Teachers' College	44 74
Butterworth & Co	36 60
Canadian Dental Research Foundation	35 90
Canadian Geographical Society	208 50
Canadian Medical Book Co	33 42
Canadian Nurses' Association	26 00 65 25
Canadian Political Science Association.	119 20
Carswell Co.	137 07
Cassell & Co.	230 77
W. R. Chambers Ltd	59 38
Chemical Rubber Co	338 00
J. A. Churchill & Co	178 44
Clarke, Irwin Co	2.370 49
Columbia University Press	127 78
Commissioner of Patents	30 00 65 42
Cooper Ornithological Club.	37 78
Copp. Clark & Co	1.707 14
Council on Foreign Relations	34 30
Thos. Y. Crowell Co	57 30
Wm. Dawson & Son	44 05
J. M. Dent & Sons	845 98
Dental Items of Interest	170 08 35 55
Dodd, Mead & Co.	1,229 23
Doubleday, Doran & Co	71 10
Encylopaedia Britannica Ltd	212 98
Family Welfare Association	28 45
Farrar & Rinehart	98 36
Forest Press	103 20
W. J. Gage & Co	150 66 341 39
Ginn & Co.	3 463 05
Harcourt. Brace & Co.	497 89
Harper Bros	148 11
Harvard Law Review Association	86 06
Harvard University Press	206 02
Paul B. Haehner Inc	32 86
Henry Holt & Co	1.570 75
H. M. Stationery Office	73 90 556 29
International Correspondence Schools	140 74
Johns Hopkins Press	51 84
Dr. W. Junk	25 34
Koehler, Volckman & Co	624 94
Otto Lange	67 21
Lea & Febiger	2.054 58
H. K. Lewis & Co	26 97

	27.20	
Life Underwriters' Association of Canada	27 20	
J. B. Lippincott Co	162 83	
Longsman, Green & Co	1,249 25	
J. B. Lyon Co	28 00	
McAinsh & Co	3,901 47	
McClelland & Stewart	259 52	
McGraw-Hill Book Co	2.786 70	
Geo. J. McLeod Ltd	86 11	
Macmillan Co	6,260 92	
Miss Janet B. Merrill	30 00	
Musson Book Co	876 91	
National Educational Association	36 37	
National Research Council	119 25	
Thos. Nelson Co	481 20	
Oxford University Press	87 55	
A. F. Pattee	76 84	
George Philip & Son	198 07	
Sir Isaac Pitman & Sons	950 89	
Prentice, Hall, Inc	365 31	
Princeton University Press	41 37	
Receiver-General of Canada	53 32	
Reinhold Publishing Co	70 98	
Ritter Dental Mfg. Co	33 60	
H. M. Rowe Co	46 56	
Ryerson Press	551 26	
Russell Sage Foundation	26 29	
S. J. Reginald Saunders	34 34	
Carl Schoch	25 31	
Charles Scribners Sons	225 00	
Simpkin, Marshall Ltd	2,860 10	
Southwestern Publishing Co	178 98	
Stamford University Press	26 14	
Star Book Co	32 17	
G. E. Stechart & Co	234 12	
Sutherland International Despatch	57 11	
Chas. E. Thomas	59 28	
University of Chicago Press	347 10	
University of Minnesota Press	34 76	
University of North Carolina	28 85	
University of Pennsylvania Press	32 36	
University Prints	119 38	
University Society	34 17	
D. Van Ostrand & Co	699 69	
Visible Records Ltd	38 16	
George Wahr & Co	40 93	
Warwick & Rutter	41 95	
John Wiley & Sons	2,494 44	
Williams & Wilkins	6,105 40	
H. W. Wilson & Co	87 03	
World Book Co	27 72	
Yale University Press	152 06	
Accounts under \$25 (422)	2,469 60	
Sundry purchases, second hand books	442 68	
,,		
A. G. Burns, travelling expenses	89 90	
Microscopes	8,058 60	
Advertising, \$735.31; postage and excise stamps, \$3,245.69; bank	0,100	
exchange, \$132.81; cleaning, \$148.80; freight, etc., \$465.31; meals		
for night work, \$153; sundries, \$178.27		
	5 059 19	
II 01 006 20 -1 0057 40 0200 02 - 1 1	5,059 19	
Heat, \$1.086.30; electric current, \$857.40; gas, \$320.93; telephone,	,	
\$362.70; water, \$95.12	5,059 19 2,722 45	
\$362.70; water, \$95.12	2,722 45	
\$362.70; water, \$95.12	,	
\$362.70; water, \$95.12	2,722 45	
\$362.70; water, \$95.12	2,722 45	
\$362.70; water, \$95.12	2,722 45 2,757 15	
\$362.70; water, \$95.12	2,722 45 2.757 15 250 00	

\$244,257 77

A 11th and a subsequent and a subsequent				
Additions to plant and equipment:  Canadian Linotyne Ltd., type	115	29		
Harris, Seybold, Potter, Ltd., stitcher, perforating machine, etc	910			
Linotype Parts Co., parts	43			
Moore Type Foundry Co., cabinet cases and type	266			
Monotype Co., matrices, cases, etc	1.132	81		
National Cash Register Co., cash register	676			
Toronto Type Foundry Co., folder, feeder, stamper and attachments	11.255			
Townsley Printers' Supply & Machinery Co., type, press, locks, etc	248			
W. Wareham, overhauling and adjusting linotypes	59			
Accounts under \$25 (3)	$\frac{30}{261}$			
Superintendent's Dept., labour	201		\$15,000	00
Alterations to Building, etc.:			\$ 10.000	00
T. Eaton Co., chairs, tables, couch, etc	\$53	64		
T. H. Hancock, hoxes	132	22		
Superintendent's Dept., labour, \$714.33; material, \$404.17	1,118	50		
			\$1.304	36
Accumulated appropriations for School of Engineering Research, written	n hack	10	1 700	20
General Revenue		• •	1,723 : 854 :	
Interest charged on debit balances			004 (	33
			\$263,139	85
		=	¢200,107	=
APPENDIX IV.				
SUPERINTENDENT'S STORES AND SUNDRY LABOUR A	CCOU	T		
Ledger Balance, 30 June, 1937			\$14.477	50
Purchases made during 1937-38:			WATER .	00
Aikenhead Hardware Ltd., hardware	\$2,179	97		
Aluminum Co., paste, castings, etc	158			
Armstrong Cork & Insulation Co., cork insulating, etc	78	64		
Armstrong Door Co., sashes and doors	25	92		
Associated Chemical Co., chemicals, etc	180			
Baines & David, steel tubing, plates, etc	519			
Beardmore & Co., belting	180			
Beldam's Asbestos Packing & General Mfg. Co., packing. etc Berry Bros., paint, varnish, etc	249			
Black & Dacker Mfg. Co., hammers, drills, etc.	309 148			
Boake Mfg. Co., lumber	564			
Boeckh & Co., brnshes	57			
British Aluminum Co., aluminum	61			
Brown Boggs Foundry & Machine Co., shears	348	65		
Builders' Flooring Millwork Ltd., lumber	71			
Builders' Supplies Ltd., stone, gravel, etc	186			
Robert Bury & Co., lumber	2.048			
Canada Building Materials, concrete, gravel and gyproc  Canada Hardware Ltd., hardware	293 92			
Canada Metal Co weights, solder, etc	340			
Canada Wire & Cable Co., wire	460			
Canadian Allis-Chalmers Ltd., electrical supplies	112			
Canadian Asbestos Ltd., asbestos, lumber, etc	339	88		
Canadian Blower & Forge Co., fan and blower	104			
Canadian Brass Co., brass	61			
Canadian Durex Abrasives Ltd., paper, cloth, etc	137			
Canadian Fairbanks-Morse Co., swivel vice, lathes, mop truck, etc	217 396			
Canadian General Electric Co., electrical supplies Canadian Germicide Co., towels, soap, etc	352			
Canadian Industrial Alcohol Co., alcohol	79			
Canadian Industries Ltd., chemicals, varnish, paint. etc	273			
Canadian Johns-Manville Co., insulation, flexboard, etc	115			
	263			
Canadian National Carbon Co., brushes, batteries, flash lights. etc				
Canadian National Institute for the Blind, brushes, brooms, etc	184			
Canadian National Institute for the Blind, brushes, brooms, etc  Canadian Ornamental Iron Co. steel frames	184 94	75		
Canadian National Institute for the Blind, brushes, brooms, etc  Canadian Ornamental Iron Co. steel frames  Canadian Power Regulator Co., thermostats	184 94 88	75 05		
Canadian National Institute for the Blind, brushes, brooms, etc Canadian Ornamental Iron Co. steel frames Canadian Power Regulator Co., thermostats Canadian S. K. F. Co., bearings	184 94 88 44	75 05 50		
Canadian National Institute for the Blind, brushes, brooms, etc Canadian Ornamental Iron Co. steel frames Canadian Power Regulator Co., thermostats Canadian S. K. F. Co., bearings Canadian Sirocco Co., electrical supplies	184 94 88 44 322	75 05 50 58		
Canadian National Institute for the Blind, brushes, brooms, etc Canadian Ornamental Iron Co. steel frames Canadian Power Regulator Co., thermostats Canadian S. K. F. Co., bearings	184 94 88 44 322 1.643	75 05 50 58		

Century Chemical Products Co., polish	51 94
Chadwick Electric Co., electrician's supplies	1.457 12
Colling Tire Shop, casings, tires, etc	180 13
Commercial Lithograph Co., lithographing	138 46 108 55
Consolidated Plate Glass Co	305 84
Continental Can Co., cans	36 34
Corbett-Cowley Ltd., uniforms, coats and shirts	466 58
Cordage Distributors Ltd., rope	43 28
Corning Glass Works	359 40
Coulter Copper & Brass Co., tubes	31 40
Crane Ltd., plumber's supplies	1,969 35
Cross Polishers Ltd., furniture polish	25 44
Crown Diamond Paint Co., brushes and paint	1,452 10 306 57
W. H. Cunningham & Hill Ltd., plumber's supplies  Currie Products Ltd., pitch, cement, etc	205 06
Darnell Corporation, sockets and casters, etc	178 92
Dean Bros., castings and locks	36 12
Diamond Cleanser & Soaps Ltd., cleansers	591 02
W. E. Dillon & Co., steel grilles, etc	75 07
Henry Disston & Sons, saw blades, etc	170 51
Harvey E. Dodds Ltd., sponges and chamois	148 90
Dominion Bridge Co., plates, bars, etc	173 31
Dominion Carbon Brush Co., brushes	107 54
Dominion Glass Co., bottles and jars	45 27
Dominion Linseed Oil Co	337 71
Dominion Oxygen Co	250 95 435 22
Downing & Co., fuses, etc	391 11
Drew, Brown Ltd., wax	153 90
Drummond, McColl & Co., steel	146 56
C. A. Dunham & Co., plumber's supplies	469 87
Dunlop Tire & Rubber Goods Co., rubber supplies	180 50
T. Eaton Co., wall paper, linoleum, cheesecloth, towels, etc	352 77
Electrolux Ltd., cleaning unit, etc	82 73
Empire Brass Mfg. Co., plumber's supplies	206 54
Enterprise Sales & Distributors, reflector buttons	57 74
Evans & Co., chamois	28 71 175 68
E. B. Fielding & Co., turpentine.	711 08
Thos. Firth & John Brown Ltd., steel	260 15
Firestone Tire & Rubber Co., durometer, dampers, etc	36 76
Fitzgerald, McAvoy Wire Goods, wire boxes	36 26
Flexible Shaft Co., joints, etc	79 00
Garage Supply Co., batteries, etc	30 77
Garlock Packing Co., packing	39 90
General Dry Batteries Ltd., batteries	276 25
General Steel Wares Ltd., cans, baskets, pails, etc	338 06
Good Specialties Ltd., hardware	172 96 8,746 80
Goodyear Tire & Rubber Co., bose, friction tape, etc	79 16
Gratton Ltd., condenser, changing tanks, etc	116 57
B. Greening Wire Co., zinc	126 44
Grinnell & Co., plumber's supplies	1,994 60
Gunite Waterproofing Ltd., ferrotile	97 50
Gurney Foundry Co., radiators, fire pots, grates, etc	323 00
Gutta Percha & Rubber Ltd., gaskets, hose, couplings, etc	193 65
Hamilton Gear & Machine Co. reducer	85 50
Joe Hampson, cement and sand	66 00
C. A. Hardie & Co., cheesecloth	67 50 102 51
W. Harris & Co., glue	50 22
Geo. H. Hees, Son & Co., venetian blinds, etc	86 39
Geo. M. Hendry & Co., blackboards and chalk	48 02
John T. Hepburn Ltd., valve assemblies	42 94
Edmund Hind Lumber Co., cement, etc	60 36
Hoover Co., vacuum cleaner, etc	93 89
Huntington Laboratories Ltd., seal-o-san, etc	35 63
Hydro-Electric Power Commission of Ontario, current	2,928 98
Imperial Oil Ltd., oil, wax, etc	90 32

Imperial Varnish & Color Co., paint and enamel	31 70
Italian Mosaic & Tile Co., tiling	480 39
Samuel Jardine, soap and oil	696 78
Johnson Temperature Regulating Co., heating system control repairs	29 50
Geo. Keith & Sons, grass seed	270 25
Walter Kiddie & Co., fire extinguishers	30 80
Kilgour's Ltd., towels, plates, etc	3.195 06
La France Fire Engine & Foamite Ltd., extinguishers	830 62
R. Laidlaw Lumber Co., lumber	80 98
J. S. Lawson, flashing	25 00
Arthur S. Leitch & Co., cooler pump, filters, etc	355 70
J. H. Lock & Son, refrigerator, etc	677 50
Lowe Bros. Co., paint. enamel and varnish	249 42
McBain Foundry, castings	74 80
McBean & Verrall, lumber	109 56
MacCallum Mfg. Co., sweeping compound	45 00
McColl-Frontenac Oil Co., oil	1.897 27
S. McCord & Co., cement, etc	307 30
McDermid Bros., builder's material	217 78
MacDonald Mfg. Co., wax	55 86
McGregor-McIntyre Iron Works, supplying and erecting platform	
extension	221 00
McIntyre & Taylor, steamfitters' supplies	35 56
Alex. McKay & Co., stone, cement, etc	71 37
Frank G. MacKay & Co., chalk	42 93
Masco Co., electrician's supplies	2,013 49
A. Middleton & Co., paint and varnish	449 25
Minneapolis-Honeywell Regulator Co., thermostats, blowerstats,	420.02
dampers, switches, etc	438 93
Moffat, Ltd., stove, elements, etc	173 06
Monarch Belting Co., belting	141 57 641 55
Wallie Moore Paint Co., paint and enamel	
Mount Royal Metal Co.	1.177 84 60 33
Moyer School Supplies. chalk	77 36
A. Muirhead Co., paint and varnish	251 97
J. Muldoon, Ltd., cement and plaster paris	45 17
Mundet Cork & Insulation Ltd., pipe covering and cork board	101 17
Alexander Murray Co., roofing and builder's supplies	103 19
National Drug & Chemical Co., chemicals, etc	125 05
National Grocers Co., matches, sugar, etc	198 67
National Sewer Pipe Co., pipe	34 50
John Nelson & Son, plastering	75 00
Neptune National Meters, meters	41 32
New Sanitary Wipers & Waste Co., cheesecloth, etc	271 30
Nichols Chemical Co., soad ash, ammonia. etc	241 26
Northern Electric Co., electrician's supplies	172 90
O'Cedar of Canada, polish	66 92
Office Specialty Mfg. Co., transfer cases	33 00
Oliver Lumber Co., lumber	145 78
Ontario Ready Mix Concrete Ltd., concrete	65 54
Ontario Rubber Co., tubing. etc	35 24
Otis-Fensom Elevator Co., parts	26 31
Pacific Mills Ltd., paper	850 00
Pannill Door Co., doors, lumber, etc	101 25
Pease Foundry Co., firepot and cement Peckover's Ltd., steel	141 27 424 57
Perrin & Turner, valves, gauges, etc	42 48
H. W. Petrie Ltd., machine work.	124 85
Phippen & Son, bricks	120 30
Pilkington Bros., plumber's supplies.	1.405 05
Presco Co., paint	51 45
Proctor & Gamble Co., soap.	339 57
Provincial Treasurer of Ontario, truck license, \$36; mixing wax	307 31
license, \$1.80	37 80
Robert T. Purves & Co., packing, asbestos, etc	116 64
Geo. Rathbone Lumber Co., lumber	1.771 97
Renold-Coventry Ltd., speed reducer	228 24
Robbins & Myers Co., motor, fan, bearings, etc	89 89
James Robertson & Co., plumber's supplies	541 80

Robinson Clay Products	37 53
Roelfson Elevator Co., elevator repairs and tractor drum	120 99
Roofers' Supply Co., roofing material	1.396 16
Routery Bros., plastering	510 70
Rollery Bros., plastering	
Salem's Garage, repairs to truck	99 79
G. W. Sadler Co., belting	47 68
Samuel Son & Co., steel, iron, zinc, etc	1,363 69
Sangamo & Co., motor repairs	81 75
Satin Finish Hardwood Flooring Ltd., lumber	424 51
Satin Finish Hardwood Flooring Ltd., lumber	
Scarfe & Co., paint and varnish	259 52
Scythes & Co., rope. twine. etc	25 31
Shannon Bros., lumber	1.170 45
Shaw & Wright, hardware	701 60
Sheldon's Ltd., ventilating apparatus, cooling coils, etc	1,209 26
Shell Oil Co., gasoline	1,762 80
W. Sherwood & Son, repairs to motors	480 60
Shipway Iron & Wire Co., screens	287 58
	248 60
T. S. Simms & Co., brushes and brooms	
Robt. Simpson Co., linen, chairs, tumblers, linoleum, etc	684 41
Singer Sewing Machine Co., machine	68 72
Charles A. Smith Ltd., soap	421 80
John B. Smith & Sons. lumber	1,911 93
Soclean Ltd., floor cloths and dusters	68 38
Square D Co., electrician's supplies	1,042 81
G. F. Sterne & Sons, cement, floor finish, etc	132 45
S. F. Stinson & Son, lumber	103 86
Stewart & Wood, glue, paint and enamel	235 33
Michael Stuart Co., traps and bellows	125 61
Sturgeon's Ltd., paints, etc	35 48
B. F. Sturtevant & Co., fans.	
B. F. Sturrevant & Co., Tans	496 31
Sun Oil Co., oil	395 88
Superior Electric Supply Co., electrician's supplies	1.586 00
Supertest Petroleum Corporation, gasoline	684 00
J. A. M. Taylor Tool Co., drills	25 71
Taylor-Forbes Ltd., radiators	211 94
Taylor Instrument Co., thermometers	42 98
Textile Products Ltd., cheesecloth, mops, factory cotton, etc	926 47
Therew's Ltd. goodline and all	
Thayer's Ltd., gasoline and oil	4,158 20
Toronto Asphalt Roofing Co., roofing	197 58
Toronto Iron Works	38 88
Trelco Ltd., varnish and oil, etc	59 91
Truscon Steel Co., wire mesh	45 12
Turnbull Elevator Co., fire door, etc	171 38
United Steel Corporation, belts. collars, pulleys, etc	132 78
Vacu-Draft Ltd., installing vacu-draft	139 35
Victoria Paper & Twine Co., towels	670 00
C. C. Wakefield & Co., oils	736 60
Wayne Co., meter pump	216 00
West Disinfecting Co., disinfectant	297 87
White's Hardware Ltd., hardware	789 84
A. C. Wild & Co., blocks, pipes, cement, etc	401 44
W'll V . I . I . I . I	
Wilkinson-Kompass Ltd., hardware	67 28
A. R. Williams Machinery Co., cutter	34 40
J. A. Wilson & Co., electrician's supplies	331 98
Window Shades & Fittings, venetian blinds	149 00
Window States & Littings, venetian binness.	- 11
Wonderful Soap Co., soap	40 50
G. H. Wood & Co., soap, drinking cups. etc	108 05
A. L. Wynston Jr. Ltd., electrician's supplies	2.750 09
University Press, printing and stationery	98 39
	1.467 34
Accounts under \$10 (166)	1.407 54
Superintendent's Dept., freight. \$214.03; labour, \$5,477.46; material.	
\$1,120.69	6,812 18
Less credits: Dominion Government refund of tax on	\$105,773 28
1 1 4	0100,770 20
alcohol \$8,581 65	
Ontario Government refund of tax on	
gasoline and varsol 98 72	
Sundries	8 600 50
	8.690 52

Sundry labour as per pay lists: Trade mechanics and general workmen. Firemen, nightwatchmen, etc. Cleaners and miscellaneous.		\$130.367 69 52.082 06 107.286 08	289.735 83
			\$401,296 09
Apportionment of the foregoing:	Labour	Material	
Administration (\$11,070.74):			
Bursar's Office	\$21 41 73 74	\$8 85	
Registrar's Office	1,783 27	61 59	
Convocation Hall and Simcoe Hall	8,045 57	1.032 51	
President's House Library (\$5,221.06):	29 52	11 28	
Maintenance	633 91	399 98	
Building	3,269 00 44,453 67	918 17 3,156 05	
Royal Ontario Museum	41,433 07	3,130 03	
Athletics and Physical Training — Men	104 97	48 53	
Athletics and Physical Training — Women	4 90 7 13	6 01	
Health Service — Women	9 82	8 29	
Hart House	5,222 28	2,074 37	
Women's Building (44 Hoskin Avenue) Military Studies Building	459 73 509 34°	53 98 232 85	
Examinations	78 18	1 27	
Faculty of Arts (\$41,581.76):	3.07		
Applied Mathematics	1 05 650 43	647 41	
Astronomy	36 23	267 26	
Geology	86 82	104 98	
Mineralogy	155 02 583 09	76 46 562 32	
Biology	578 91	662 35	
Botany	497 40 5 08	413 44 3 61	
Fine ArtGeography	35 14	33 14	
Law	21 28	19 36	
Psychology	80 52 10 97	219 14 6 46	
University College Building	8.676 15	1,534 53	
McLennan Laboratory	2,884 00	819 81	
Chemical BuildingBiological Building	2,772 12 3,229 09	737 46 743 76	
Botany Building	2,933 66	452 55	
Baldwin House	611 53 591 09	135 22 63 05	
No. 45 St. George Street	674 47	162 38	
No. 47 St. George Street	420 44	58 23	
Economics Building	4.286 14 1.594 03	765 85 245 17	
David Dunlap Observatory	1.184 40	248 76	
Faculty of Medicine (\$31,921.11):	216.70	0.66, 00	
Anatomy Pathology and Bacteriology	216 79 1.034 05	366 38 522 93	
Pathological Chemistry	106 28	154 26	
Pharmacy and Pharmacology	129 75	138 86	
Bio-Chemistry (including Zymology) Physiology	158 89 36 60	529 06 288 26	
Hygiene and Preventive Medicine	102 27	56 46	
Medicine	66 61 200 57	115 77 255 34	
Surgery	3 30	5 42	
Ophthalmology	4 50	2 00	
Oto-Laryngology Art Service	28 23 4 10	11 85 70 03	
General Expenses	264 24		

Medical Building	3,746		943 79	
Banting Institute	7.334		1,534 54	
Anatomical Building	2,176		387 10	
Hygiene Building	9.370	52	1,235 65	
School of Hygiene			10 59	
Faculty of Applied Science (\$20,470.19):				
Electrical Engineering	136	33	142 22	
Mechanical Engineering	368	43	462 59	
Civil Engineering: Municipal and Structural	32	33	82 97	
Civil Engineering: Surveying and Geodesy	27	50	113 87	
Mining Engineering	459	80	427 03	
Metallurigcal Engineering	53	56	50 39	
Chemical Engineering and Applied Chemistry	1,188		817 79	
School of Architecture	92		73 81	
Engineering Drawing	87		25 10	
Applied Physics	100		160 68	
General Expenses	48	18	2 49	
Photographic Service	6		9 41	
Mining Building (including Mill Building)	6,002	38	1,736 44	
Engineering Building	3,274		825 51	
Electrical Building	2,783		664 81	
Geodetic Observatory Building	191	04	21 73	
Faculty of Dentistry (\$11,307.79):				
Laboratory and Infirmary Supplies, etc	2,998	88	1,881 03	
Dental Building	5,062	97	1,364 91	
Faculty of Household Science (\$3,806.07):				
Household Science Department	441		392 45	
Food Chemistry Department	94	82	74 57	
Household Science Building	2,368	80	435 11	
Faculty of Forestry (\$966.10):				
Maintenance of Department	256		130 02	
Forestry Building	480	34	99 04	
School of Nursing (\$2,925.26):				
Residence Maintenance	25		21 43	
Building, No. 7 Queen's Park	2,197		680 82	
Social Science		70	01	
University Extension and Publicity	406		34 69	
Men's Residences	10,448	25	1,948 60	
Women's Residences and Union (\$6,310.97):		_		
Maintenance of Buildings	3,683		994 70	
Housekeeping Account	706		926 37	
Central Power Plant	26.627	41	1,764 24	
Miscellaneous and General (\$34.066.87):				
Central Stores	1,150			
Grounds	11,332		1,348 75	
Protective Service	16,052		20 81	
Telephones	4,162			
Special Research (including Banting and Best)	5,428	66	5,338 50	
University Press (\$2,748.52):	<b>500</b>		==0 00	
Operating	589		778 83	
Plant	261			
Alterations	714		404 17	
Ontario College of Education	12.630	97	2,485 01	
Work done for University organizations, members of				
staff, sundry incidental accounts, etc. (including Ac-	44.457	3.5	40.004.50	
counts Receivable on 30 June, \$6.091.06)	44,471		49,804 50	
Cash sales		٠.	781 38	
	6000 707		0303 070 51	
	\$289,735	83	\$101,273 16	<b>#</b>
				\$391,008 99
Ledger Balance, 30 June, 1938				\$10.907.10
Lenger Dalance, of June, 1950			• • • • • • • • • • • • • • • • • • • •	\$10,287 10

(Superintendent's Inventory Value, \$20,277.57)

\$43,857 62 201.675 00 64,323 64 600 00 \$310.456 26 275.590 78 \$34.865 48

3,900 00 4,000 00

4.000 00

#### APPENDIX V.

## ONTARIO COLLEGE OF EDUCATION

ONTARIO COLLEGE OF EDUCATION	
Balance on hand 30 June, 1937	
Receipts, 1937-38:	
Legislative Grant	
Fees of Students	
Aura Lee Grounds	
	-
F 15 ( 1 to 1	0
Expenditure for salaries and maintenance for the year ending 30 June, 193	D
Balance on hand 30 June, 1938	
2	===
Salaries	
J. G. Althouse, Dean (paid also \$350 for Extension Work)	\$6.000 00
Professors:	
P. Sandiford, Educational Psychology, and Director of Educational	5 700 00
Research (paid also \$140 for Extension Work)	5.700 00
Extension Work)	4,700 00
G. A. Cornish, Methods in Science.	4,700 00
W. C. Ferguson, Methods in Modern Languages (resigned 31	
August)	783 34
G. M. Jones, Methods in English and History	4,700 00
J. O. Carlisle, Methods in Classics, also Supervisor of Practice-	<b>5</b> 000 00
Teaching W. J. Lougheed, Methods in Mathematics (paid also \$66 for Exten-	5,000 00
sion Work)	4,400 00
Associate Professors:	4,400 00
Miss W. G. Barnstead, also Director of Library School (paid also	
\$80 for Summer Session and Graduate Work)	4,000 00
Miss L. L. Ockley. Household Science	4.200 00
W. G. Bennett. Methods in Commercial Subjects (paid also \$162.50	
for Extension Work)	4.200 00
B. C. Diltz, Methods in English and History	3,950 00
Assistant Professors: Miss Bertha Bassam, Library Science in Library School (paid also	
\$80 for Summer Session and Graduate Work)	2,800 00
Miss Helen B. St. John, Modern Languages	3.800 00
J. A. Long, Educational Psychology (paid also \$210 for Extension	
Work and \$30 in School of Nursing)	3,600 00
Lecturers, also Instructors in University Schools:	0.337.00
Miss A. Marsh, Art	3.125 00 4.000 00
G. N. Bramfitt, Music F. Halbus, Physical Training	3,625 00
A. T. McLachlan. Shopwork (paid also \$300 for Extension Work)	3.200 00
Miss H. L. Bryans, Physical Training, at \$3,300 (on leave of absence	
at half salary from 1 October to 31 January)	2,750 00
Mrs. Norma B. Laing, Physical Instructor, 4 mos. from 1 October	
(substitute for Miss Bryans)	500 00
Miss A. E. Robertson, Lecturer, Household Science	3,300 00
School	1,500 00
Instructors in University Schools:	1,000 00
A. C. Lewis, Headmaster	4,600 00
R. F. S. Baird, Teacher-Librarian	3,400 00
G. A. Cline, 61 \$4,000 (on leave of absence without pay from 1	1 000
November)	1.333 33
A. G. Croal (paid also \$27 for Extension Work) E. L. Daniher	3,600 00 4,000 00
J. L. Gill.	3,800 00
H. A. Grainger (paid also \$75 for Extension Work)	4,000 00
J. A. Irwin.	4,000 00
II. McGuire	3.200 00
Norman McLeod	3.900 00

Norman McLeod. J. H. Mills (paid also \$63 for Extension Work).....

N. L. Murch (paid also \$114 for Extension Work).....

L. H. Newell	2.600 00	
P. A. Petrie	3.950 00	
C F Phillips (paid also \$400 as Instructor in Pedagogy; \$200 in		
School of Nursing. \$350 for Extension Work)	3.750 00	
W. L. C. Richardson	4.000 00	
W. R. Stewart	2,850 00	
J. G. Workman	4,000 00	
G. W. Cochrane, Instructor in Swimming and Supervisor of U.T.S.	2 = 00 00	
Athletic Field and Sports	2,500 00	
Special Instructors in Library Science:		
Angus Mowat, Administration (paid also \$20 for Summer Session		
	150 00	
and Graduate Work)	450 00	
W. S. Wallace, College and University Libraries (paid also as	100 00	
University Librarian, and \$60 for Summer Session and Graduate		
Work)	350 00	
Miss Jean Merchant, School Libraries	150 00	
Miss M. Edna M. Poole, Special Libraries	150 00	
C. R. Sanderson, Circulation of Books	150 00	
Miss Frances Trotter, Story-Telling	150 00	
Occasional Lecturers:	150.00	
J. F. Macdonald (paid also in Faculty of Arts)  Miss I. Locheed (including expenses \$5)	150 00 50 00	
Miss F. Waldon (including expenses \$5)	50 00	
J. A. Lowe (including expenses \$16.20)	46 20	
F. Landon (including expenses \$17.70)	40 25	
Miss K. Moyer (including expenses \$9.50)	39 50	
Miss D. Carlisle (including expenses \$17.50)	32 50	
E. C. Kyte (including expenses \$15.50)	30 50	
V. Lange (paid also in Faculty of Arts)	30 00	
E. J. Pratt (paid also in Faculties of Medicine and Dentistry).	30 00	
Miss M. Tremaine	30 00	
F. H. Walter	30 00	
G. S. Brett (paid also in Faculty of Arts and Graduate Studies) Miss I. Cole (including expenses \$7.90)	30 00 22 90	
H. C. Gourlay (including expenses \$4)	19 00	
Miss Mabel Dunham (including expenses \$4)	19 00	
Miss Blanche Weber	15 17	
Mrs. L. Lyle	5 00	
Griffith Taylor. Special Lecturer in Geography (paid also \$4,000 in		
Faculty of Arts)	2.500 00	
Norman Davies, Lecturer in Methods of Agriculture	300 00	
	000	
Supply Teachers:	7.670.00	
S. B. McCready, 167 days	1,670 00	
G. S. Coward.	60 00 37 50	
M. Sniderman, 5 days.	37 50	
R. B. Hays. 2 days	15 00	
Miss D. A. Thomson, Librarian (paid also \$60 for Extension Work)	2,400 00	
Miss D. Walter. Assistant Librarian	1.500 00	
Clerical Staff:		
Miss L. Swinarton. Secretary	2.050.00	
Clerks:	2.050 00	
Miss E. G. Seldon	1.550 00	
Miss G. Potter	1.450 00	
Miss J. M. Jeffrey	1,350 00	
Miss G. M. Harvey	1.200 00	
D. d.d. All		\$170,356 69
Retiring Allowances:		
Teachers' Insurance and Annuity Association, contribution of Col-	2.140.71	
lege for year ending 30 June, 1938, to fund for retiring	3.140 74	
Pension Fund — Employees	1.038 00	
	1.030 00	\$4,178 74
Charges on Investment:		91,110 17
Accountant, Supreme Court of Ontario, proportion of annual pays	nent on de	
benture issue of 1909 for interest and sinking fund		\$10,000 00

M. C.		
Maintenance of Building:		
Fuel: Milnes Coal Co	\$3.272 83	
Gas. \$275.60; electric current, \$2,313.80; water. \$223.21; telephone	00.212 00	
service, \$331.85	3.144 46	
Caretaker's supplies:		
Superintendent's Dept., material	546 63	
Cleaning (\$5,569.37):	70.00	
Canadian Window Cleaning Co	70 00	
Superintendent's Dept., labour	5.499 37	
Repairs and renewals (\$3.752.52):  Wm. Bartlett & Sons, shades and lantern screen	27 52	
Canadian Powers Regulator Co., repairs to temperature controls	17 29	
I. R. Clancy Co., lead blocks	63 91	
Engineering Equipment, enamel	90 00	
H. W. Petrie Co., boiler repairs	17 27	
Provincial Treasurer, public hall license	10 00	
Robt. Simpson Co., supplying and laying linoleum	137 06	
Superintendent's Dept., freight, \$28.66; labour, \$2,509.30;	0.000.47	
material, \$851.51	3,389 47	
Grounds:	050 00	
Superintendent's Dept., labour, \$825.14; material, \$33.74	858 88	
Caretaker and Engineer, J. Harding, 12 mos. (and overtime, \$192.25) Fireman, G. Thompson, 38 weeks	1.500 00 836 00	
Nightwatchmen (\$1,449.28):	030 00	
H. McLeod, 12 mos	1,260 00	
W. Gordon, 32 nights	110 44	
A. Smith, 22 nights	78 84	
_		
T	\$20.929 97	
Less credits: Cleaning, etc., \$415.05; fuel, light, etc., \$203; tele-	C19 70	
phone. \$25.65	643 70	ean and ar
Maintenance of Aura Lee Grounds:		\$20.286 27
Fuel (\$271.69):		
P. Burns & Co	20 20	
Central Coal Co	251 49	
Gas, \$24.20; electric current, \$47.99; water, \$64.60; telephone ser-		
vice. \$107.40	244 19	
Caretaker's supplies:		
Superintendent's Dept., material	4 01	
Repairs and occasional labour (\$873.63):	0.1.00	
George Gilliyn, erecting fence	84 00 789 63	
Caretaker, G. Cruikshank, 12 mos. (with living quarters valued a	109 00	
\$200)	1.150 00	
	\$2,543 52	
Less credits: Part cost of erecting fence, \$42; sundries, \$12.04	54 01	
N		\$2.489 43
Maintenance of Instruction:		
Use of City Schools: Board of Education, City of Toronto	\$31 387 50	
Use of Rural School (\$389):	\$34.301 30	
Honoraria as critic teachers — Agriculture:		
Principal R. H. King	50 00	
D. G. McBain.	150 00	
W. A. Porter	150 00	
Dean Althouse, expenses of students, Specialists in Agriculture.	39 00	
St. John's Ambulance Association, instruction in first aid to teachers-		
in-training	795 00	
Payment to Librarians who assist in practical work (\$825):	70.00	
Miss E. L. Alexander	50 00	
Miss H. Armstrong	50 00 50 00	
Miss G. Boyle	50 00 50 00	
Miss M. Brady	50 00	
Miss H. Dean.	50 00	
Miss M. Forman.	50 00	
Miss V, Hyland	25 00	

Miss J. McCally	50 00	0
Miss M. McGregor	50 00	0
Miss E. MacIntosh	50 00	0
Miss M. L. Newton	25 00	
Miss E. St. John.	50 00	
Miss B. Steele	25 00	
Miss R. Stock	50 00	-
Miss H. Stubbs	50 00	0
Miss J. Thomson	50 00	0
Miss H. G. B. Woolryche	50 00	0
Laboratory and library assistance and pianist's services (\$198.70):	50 00	9
	110.00	^
Mrs. S. McKerrighan, 343 hours	112 20	
Mrs. M. Graham, 86½ hours	86 50	0
Office supplies (\$2,022.40):		
Miss Alice Elliott, clerical assistance, 7 weeks, 4 days	153 33	3
W. J. Gage & Co., paper	48 0	
W. J. Gage & Co., paper		
D. Gestetner Ltd., stencils	127 2	
Grand & Toy, files, wardrobe and cupboard	116 20	
Office Specialty Mfg. Co., guides, folders and drawers	108 - 5	0
Postage	320 0	0
Robbins & Townsend, typewriter inspection	24 6	
	24 0	U
Thomas & Corney Typewriters Ltd., typewriter, \$129.60; less	101 0	_
allowance on old machine, \$10; repairs, \$1.45	$121 \ 0.$	
University Press, printing and stationery	816 2	7
Accounts under \$10 (3)	4 7	5
Sundry disbursements by department	10 8	
Superintendent's Dept., labour, \$91.13; material, \$80.37	171 5	
Superintendent's Dept., labour, \$91.13; material, \$00.57	171 5	U
Office supplies for Library School (\$250.17):		
Bookshelf & Bindery	25 - 0	5
Grafton & Co., books	5 5	7
Grand & Toy, filing cabinet	36 70	
Postage	21 0	
Dalling 9 Tanana da marata		
Robbins & Townsend, typewriter inspection	27 4	
Miss Hazel Williamson, clerical assistance, 3 weeks, 4 days	55 0	
University Press, printing and stationery	69 4	5
Sundry disbursements by department	10 0	0
General supplies and apparatus for class room use (\$8,011.04):		
Aikenhead Hardware Ltd., hardware	216 7	6
Thomas Allar back		
Thomas Allen, book	20 0	
Art Metropole, set square, paper and colours	70 3	
Artists' Supply Co., charcoal, easels, brushes and paper	79 0	7
Belle Ewart Ice & Fuel Ltd., ice	16 0	0
British Drug Houses, chemicals	56 4	
Canadian General Electric Co., lamps, etc	13 5	
Canadian Laboratory Supplies, glassware	87 5	
Gus Cancilla, fruit and vegetables	167 3	
Central Scientific Co., chemicals and glassware	$330 \ 1$	8
Cinelab. Inc., silent print	27 9	1
City Dairy, milk	20 8	8
Clarke, Irwin Co., books	18 7	
Copp, Clark Co., chalk	37 6	
W. C. I. C.		
Wm. Dawson Subscription Service	55 0	
J. M. Dent & Sons, books	24 4	0
Dictaphone Sales Corporation, adjusting machine	14 4	0
Dominion Glass Co., glassware	14 6	2
Doubleday, Doran & Co., books	16 7	
T. Eaton Co., sewing machine, lathes, tools, linoleum, cloth.	10 4	-
	0.3= 0	
food supplies, etc	827 0	
Easy Washing Machine Co., machine	75 0	
W. J. Gage & Co., books	90-8	2
A. Gallenkamp & Co., magnifiers and test glasses	131 2	
Grand & Toy, guides and paper	17 2	
Guild of All Arts, loom and book	29 4	
Haintaman & Co. piono pontal college delle		
Heintzman & Co., piano rental and record albums	64 5	
R. Laidlaw Co., lumber	59 8	
Longmans, Green & Co., books	21 4	8
James Lumbers Co., matches	36 0	
George J. McLeod Ltd., text books	16 4	
Macmillan Co., books.		
Map Mounters Ltd., mounting charts.	45 0: 133 8	

Matthews, McCutcheon & Co., carbons, films, objectives and	
books	806 25
Moyer's School Supplies Ltd., globe, map, books, etc	223 05
Musson Book Co., books	11 41
Martinus Nijhoff's Bockhandel, charts	69 43
J. II. Payne, meat	17 57
Sir Isaac Pitman & Sons, books	18 04
Preston Woodworking Machinery Co., driver machine and chuck	498 69
Reyort Biological Supplies, specimen's, aquarium, etc	71 06
Ryerson Press, books and protectors	40 39 91 91
Singer Sewing Machine Co., electric machine	34 78
J. B. Smith & Sons. lumber	65 20
Leslie Victor Smith, lettering certificates	129 43
G. Tamblyn Ltd., soap	18 40
"The Times" namplets	11 06
"The Times." pamphlets	11 00
ance on old machine. \$12.50; typewriter rental, \$308.75	429 90
Warwick Bros. & Rutter, paper	126 24
Whaley, Royce & Co., music, pitch pipe and batons, etc	16 23
H. W. Wilson Co., book	13 30
P. B. Yates Machine Co., drill press	213 08
Payments to Examiners, extra-mural candidates:	
J. G. Althouse, \$16.50; J. O. Carlisle, \$13.12; G. A. Cornish,	
\$33.75; B. C. Diltz, \$25.50; W. C. Ferguson, \$15; G. M.	
Jones, \$24,37; J. A. Long. \$10.12; W. J. Lougheed. \$15	153 36
University Press, printing and stationery	473 67
Accounts under \$10 (45)	146 37
Sundry disbursements by department:	
Glassware, stationery, etc., \$12.10; art supplies. \$14.85:	
sundries \$6.13	33 08
Superintendent's Dept., freight, \$19.77; labour, \$723.30;	
material, \$720.59	1.463 66
Supplies and equipment for Library School (\$735.25):	
American Library Association, books and subscriptions	57 31
Association of American Library School, membership and pub-	0, 01
lications	10 20
Clarke, Irwin & Co., books	13 04
Columbia University Bookstore, library service	12 64
Dodd, Mead & Co., books	11 20
Gordon & Gotch, subscription	95 69
Grafton & Co., text books	18 65
Dora Hood's Book Room, books	51 00
Lowe-Martin Co., cards	22 26
Macmillan Co., books	56 34
Postage	14 00
Ryerson Press, books	64 52
L. C. Smith & Corona Typewriters Ltd., typewriter rental	30 00
11. W. Wilson Co., books and subscriptions	60 08
University Press, printing and stationery	113 33
Accounts under \$10 (26)	100 29
Superintendent's Dept., lahour	4 70
Library books, periodicals, etc. (\$864.40):	
Bookshelf Bindery, binding	22 72
Clarke, Irwin & Co., books	16 90
Grand & Toy, cabinets, etc	212 00
Library of Congress. cards. etc	25 69
Lowe-Martin Co., cards, etc	45 54
Ryerson Press, books and labels	275 45
H. W. Wilson Co., books, subscriptions, etc	53 29
University Press, printing and stationery	117 65
Accounts under \$10 (22)	90 16
Physical training, including care of grounds, Field Day Sports, etc.	20 10
	<i>50</i> 10
(\$407.29):	<i>50</i> 10
(\$407.29): Lackie Mfg. Co., cups and shields	133 50
Lackie Mfg. Co., cups and shields	133 50 100 00
Lackie Mfg. Co., cups and shields	133 50 100 00 122 28
Lackie Mfg. Co., cups and shields	133 50 100 00

Lunchroom equipment (\$85.45):		
Cassidy's Ltd., crockery and tumblers	65	83
Accounts under \$10 (3)	19	
Graduate Courses and Summer Session (\$2,370):		_
Instructors:		
J. G. Althouse	350	00
Miss W. G. Barnstead	80	
Miss B. Bassam	80	00
M. A. Cameron	210	00
F. E. Coombs	350	00
J. A. Long	210	00
A. Mowat	20	00
C. E. Phillips	750	00
Miss M. E. M. Poole	20	
C. R. Sanderson	100	00
P. Sandiford	140	00
W. S. Wallace	60	00
Department of Educational Research:		
Assistant Professor, M. A. Cameron (paid also \$210 for Ex-		
tension Work)	3,000	00
Research Assistants (\$3,133.33):		
C. B. Conway, 12 mos	1.800	00
A. H. Smith, 10 mos. (resigned)	833	33
M. Sniderman, 8 mos. (paid also \$37.50 as supply teacher)	500	00
Secretary, Miss K. M. Hobday, 12 mos	1,700	00
Clerical assistance (\$2,100):		
Miss M. Graham, 12 mos	1,100	00
Miss M. Spalding, 12 mos	1,000	
Office supplies, printing, etc. (\$1,893.52):		
D. Gestetner Ltd., ink, stencils, etc	37	60
Grand & Toy, cabinet, etc	45	70
Lowe-Martin Co., cards, paper, etc	37	30
Office Specialty Mfg. Co., shelving	161	00
Postage	106	50
Robbins & Townsend, typewriter inspection	21	00
Wholesale Radio Co., radio parts	4	13
University Press, printing and stationery	1,207	59
Sundry disbursements by department:		
Stationery, books, etc., \$10.66; sundries, \$9.34	20	00
Superintendent's Dept., freight, \$141.93; labour, \$60.90;		
material, \$49.87	252	70
Publication of "The School" and distribution in Training Schools:		
"The School," subscriptions	5,000	00
Contingencies (\$111.55):		
American Library Association, travelling expenses incurred in		
the inspection of the Library by the Board of Education for		
Librarianships	82	70
Miss W. G. Barnstead, travelling expenses to Pittsburgh	28	85
_		<b>— \$68</b>

\$68.279 60

\$275.590 78



























# REPORT

RELATING TO THE REGISTRATION OF

# BIRTHS, MARRIAGES AND DEATHS

IN THE

# PROVINCE OF ONTARIO

FOR THE

YEAR ENDING 31st DECEMBER

1938

(BEING THE SIXTY-NINTH ANNUAL REPORT)

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 13, 1939



TORONTO
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1940



SIR:

I have the honour to submit for your approval the Sixty-Ninth Annual Report made in conformity with and under the provisions of the Act respecting the Registration of Births, Marriages and Deaths in the Province of Ontario, for the year ending December 31st, 1938.

I have the honour to be, Sir,

Your obedient servant,

F. V. JOHNS,

Deputy Registrar-General.

To the Hon. H. C. Nixon,

Registrar-General of Ontario.



To His Honour the Lieutenant-Governor of the Province of Ontario

MAY IT PLEASE YOUR HONOUR:

I herewith beg to present for your consideration the Sixty-Ninth Annual Report of the Registrar-General, relating to the Registration of Births, Marriages and Deaths in the Province of Ontario during the year 1938.

Respectfully submitted,

H. C. NIXON,
Registrar-General of Ontario.



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## REPORT UPON

# Births, Marriages and Deaths

For the Year 1938

# BEING THE SIXTY-NINTH ANNUAL REPORT OF THE REGISTRAR-GENERAL

#### ESTIMATED POPULATION, 1938

	Males	Females	Totals
Totals	1,901,320	1,829,680	3,731,000
Jnder 1	32,322	31,288	63,610
1	32,513	31,470	63,983
2	34,604	33,666	68,270
3	34,984	34,398	69,382
4	35,365	33,849	69,214
Totals under 5 years	169,788	164,671	334,459
5- 9	183,477	178,577	362,054
10-14	175,682	170,343	346,025
15–19	177,583	169,062	346,645
20–24	160,471	156,072	316,543
25–29	147,732	139,970	287,702
30–34	139,937	134,116	274,053
35–39	136,705	131,554	268,259
40–44	128,340	120,210	248,550
45-49	117,501	106,670	224,171
50-54	99,440	93,679	193,119
55–59	76,433	72,638	149,071
60–64	62,743	62,210	124,953
65-69	50,195	50,500	100,695
70–74	38,407	39,338	77,745
75–79	21,485	22,139	43,624
80–84	10,077	11,344	21,421
85–89	3,613	4,757	8,370
90 and over	1,141	1,464	2,605
Not stated	570	366	936

The population is distributed as follows:-

Cities, Towns and Villages of 10,000 population and over 1,661,188. Towns and Villages of 5,000 to 10,000 population 192,238. Rural (including all other municipalities) 1,877,574.

#### BIRTHS

There were registered 65,564 living births during the year 1938, being a rate of 17.6 per 1,000 of population. This being a numerical increase of 3,919.

#### BIRTHS

There were 33,605 boys, or 51.2% of the total number; and 31,959 girls, or 48.7% which represents 95.1 male to 100 female births.

#### NUMBER OF BIRTHS AND RATE PER 1,000 OF POPULATION

	1938	3	1937	7
	Number	Ratio	Number	Ratio
Province	65,564	17.6	61,645	16.6
Cities	35,194	21.1	32,430	19.6
Towns	4,542	23.6	4,164	22.5
Rural	25,828	13.7	25,051	13.3

#### NUMBER OF BIRTHS AND RATE FOR 10 YEARS

Year	Number	Ratio	Year	Number	Ratio
1929. 1930. 1931. 1932. 1933.	71,263 69,209 66,842	20.2 19.2	1934. 1935. 1936. 1937.	63,069 62,451 61,645	17.5 16.9 16.6

#### STILL BIRTHS

Year		Ratio per 1,000 Total Births	Year	Registered as Births	Ratio per 1,000 Total Births
1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927.	2,495 3,234 3,015 3,028 2,594 2,780 2,812 2,758	32.2 33.3 41.7 40.5 41.4 34.9 38.1 39.9 39.5	1929 1930 1931 1932 1933 1934 1935 1936 1937	2,713 2,652 2,377 2,161 2,091 2,140 2,034 1,988	38.8 36.6 36.9 34.3 32.7 32.5 32.7 31.5
1928	2,793	39.2	1938	2,015	29.8

#### **BIRTHS**

#### AGE OF MOTHER

Year	12	13	14	15	16	17	18	19	20	21	22	23	24	25	12-25	Others
1929 1930 1931	2	3 5 6		103 101 104	321 349 361	766 835 847	1636 1720	2498 2457	3042 2937	3441 3401	3749 4004 3820	4129 3984	4176 4118	4010 4017	28262 27800	41409
1932 1933 1934		5 5	24 16	106 97 79	318 288	783 750 709	1647 1661 1476	2276	2843 2783	3220 3221	3596 3421 3471	3631 3484	4058 3765 3688	3507	26909 25350 25003	37231
1935 1936 1937		3 5 5 9	25 14	103 104 97 87	312 294 306 342	1	1497 1497 1521 1796	2270 2269 2258 2395	2946 2779	3391 3308	3629	3682 3791	3732 3745 3756 4137		26002	36507 35643
Total	-	_	213												265020	

<sup>43.0%</sup> of living births were of mothers under 25 years of age and 56.9% of mothers 25 years and over.

#### ILLEGITIMATE BIRTHS

#### Rate per 1,000 living Births

190714.8	191521.9	192322.5	193140.0
190814.9	191620.9	192424.0	193242.3
190913.9	191719.5	192526.8	193343.8
191019.3	191821.0	192626.9	193440.2
191119.4	191919.8	1927 29.0	193541.8
191221.3	192020.5	192831.7	193644.6
191321.6	192121.5	192934.6	193745.3
1914 22 . 1	192221.2	193037.2	193846.6

#### ILLEGITIMATE BIRTHS

#### By Ages of Mothers

Year	12	13	14	15	16	17	18	19	20	21	22	23	24	25	12-25	Over 25	Total	Rate
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938	1	3 5 6 3 4 5 3 5 8 47	12 16 24 12 13	52 38 49 60 58 51	146 152 124 144 96 123 107 119	198 235 212 209 190 186 179 199 213	256 249 292 310 314 226 248 261 244 286	268 294 313 320 331 272 278 298 261 304	293 233 286 268 251 259 271 239 275	202 200 229 257 256 233 265 266 260 281	164 207 202 172 200 198 187 225 215 226	143 171 165 144 139 184 179 173 219	145 137 151 128 123 139 153 142 171	83 97 90 103 97 104 103 121 126 126	1860 2076 2154 2166 2164 1887 2040 2149 2053 2291	575 619 668 622 613 602 639 743 770	2651 2773 2834 2786 2500 2642 2788 2796	37.2 40.0 42.5 43.8 40.2 41.8 44.6

In the case of illegitimate births 74.8% of the mothers were under 25 years of age and of the total 3,061 such births, 1,583 or 51.7% were boys and 1,478 or 48.2% girls.

#### MULTIPLE BIRTHS

There were 682 cases of twin births. Of these 703 were males and 661 females.

There were 6 cases of triplets, 6 boys and 12 girls.

Table 15 will give a detailed explanation of the multiple births.

#### CONFINEMENTS

Multiple births	 64,269
, and the second	66,885

Other tables dealing with births will be found from Table No. 1 to Table No. 15.

#### MARRIAGES

#### NUMBER AND RATE PER 1,000 OF POPULATION

	1938	3	1937	
	Number	Ratio	Number	Ratio
Province Cities. Towns Rural	17,733 1,911	8.1 10.6 9.9 5.5	29,893 17,796 1,842 10,255	8.1 10.8 9.9 5.4

#### NUMBER AND RATIO PER 1000 POPULATION FOR 10 YEARS

Year	Marriages	Ratio	Year	Marriages	Ratio
1929. 1930. 1931. 1932. 1933.	25,605 23,771 22,224	8.3 7.6 6.9 6.4 6.4	1934. 1935. 1936. 1937. 1938.	26,843 27,734 29,893	7.3 7.5 7.5 8.1 8.1

The tables dealing with marriages from various angles are numbered 16 to 22.

#### DIVORCES-YEARS AT MARRIED LIFE

								e			
Years Married	1934	1935	1936	1937	1938	Years Married	1934	1935	1936	1937	1938
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	3 7 9 13 16 23 21 28 23 34 19 16 12 21 16 14 13 14 11 5 11 7 4 4 4	6 8 6 16 33 42 38 33 24 23 37 26 22 19 21 8 10 11 14 9 4 6 7 3 6	4 15 15 13 33 30 35 30 31 36 34 27 26 20 22 29 21 21 9 11 9 4 10 8 8 2 7	2 9 16 19 31 30 47 53 45 45 45 30 32 30 21 18 18 26 11 18 9 11 4 6	4 14 20 27 38 33 56 63 54 57 42 46 49 39 29 35 37 24 30 19 13 10 15 6	27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 Total Rate per 1,000 marriages	5 1 1 1 1  1 3      	4 5 2 2 3 3 2 2 2 1	6 3 3 2 2 3 1 1 1 1	3 2 3 3 3 1 2 1 1 2 1 3 1 1 1	7 2 4 5 4 3 5 2 2 1 1  1  824

<sup>824</sup> divorce returns were filed with the Registrar-General in 1938.

<sup>294</sup> granted to men and 530 to women.

The above figures are compiled from information sent to the Registrar-General by the Registrars of the Supreme Courts of Ontario.

#### DEATHS

	19	938	19	37
	Number	Ratio	Number	Ratio
Province. Cities. Towns. Rural.	18,783 2,393	9.9 11.3 12.4 8.3	38,475 19,298 2,419 16,758	10.4 11.7 13.1 8.9

## DEATHS AND RATE PER 1,000 OF POPULATION FOR 10 YEARS

Year	Deaths	Ratio	Year	Deaths	Ratio
1929		11.4 11.0		35,119 36,317	9.9 10.1
1931 1932	35,705	10.4 10.5	. 1936		10.2
1933		10.0		36,890	9.9

#### TEN HIGHEST CAUSES OF DEATH IN EACH YEAR PER 100,000 OF POPULATION

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Organic heart disease	5,891 176.7	5,634 166.1				7,066 198.3				7,354 197.0
Pneumonia (all forms)	2,402 78.1	2,279		2,388	2,175	2,145 60.2	2,417		2,595	2,495 66.8
Influenza	2,394	854	1,084	1,544	1,240	580	958	722	1659	618
Tuberculosis		1,791	1,728	1,604		1,337	1,303		1,315	16.5
Cancer		52.8 3,635				37.5 4,034				$\begin{vmatrix} 33.1 \\ 4,472 \end{vmatrix}$
Violent or accidental deaths		107.2 $2,774$				113.2 2.535				119.8
Cerebral hemorrhage, cerebral	81.2	81.8	82.1	73.9	64.6	71.1	74.2	89.4	76.8	73.8
embolism and thrombosis		1,219 36.0				1,229 34.5				790 21.1
Diseases of the arteries	3,270	3,628	3,165	3,559	3,574	3,793	4,109	4,621	4,633	4,745
Infantile diarrhoea	740		821	483	571	509	310	362		127.1
Nephritis	22.2 1,760			1,810	1,754	1,700	1,848	1,892	1,946	8.3
Diabetes	52.8	,	39.0	1		47.7	FO.4			50.9
							14.5		15.6	15.6

<sup>\*</sup>Revised.

#### COMMUNICABLE DISEASES

Rates per 100,000 of population

	192	29	19	930	193	1	193	2	193	33	19	34	193	35	19	36	193	37	193	38
Typhoid fever Smallpox Measles Scarlet fever Whooping cough Diphtheria Influenza Poliomyelitis.	97 1 143 74 194 262 2394 46	5.9 8.0 73.1	1 95 111 180 202	6.1 25.7	1 29 54 174 157 1084	4.5 31.6	118 40 132 89 1544	1.6 3.3 1.1 3.7 2.5 44.4 0.6	40 1240	1.0 1.2 3.3 1.1 35.1	5 58 178 23 580	1.4 0.1 1.6 4.7 0.6 16.2 1.9	33 958	2.5 1.6	84 79 112 31 722	1.0 2.3 2.1 3.0 0.9 19.5 0.6	30 1659	0.9 0.8 1.3 2.8 0.8 44.6 3.2	39 31 49 88 11 618 25	1.0 0.8 1.3 2.3 0.2 16.5 0.6

#### **TUBERCULOSIS**

The following Table showing deaths and rates over a fifty year period is shown for comparison and indicates the effectiveness of effort to wipe out this disease.

Year	Number	Rate	Year	Number	Rate
1888 1898 1908	3,291	152.2	1918 1928 1938	1,832	89.6 52.9 33.1

#### DEATHS IN ONTARIO FROM TUBERCULOSIS BY AGES, 1929-1938

Year	Total	Ratio per 100,000	0-1	Inde	2	year 3	s 4	5-9	10-14	15-19	20-29	30-39	40-49	50-59	69-09	70-79	80 and over	Not stated	Total deaths from all causes.
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938	1,703 1,791 1,728 1,604 1,465 1,337 1,303 1,327 1,315 1,237	51.1 52.8 50.4 46.1 41.5 37.5 36.2 35.9 35.4 33.1	39 25 26 23 14 15 12	28 13 17 24	15 8 12 14 17	16 16 8 10 14 13	6 10	42 55 33 32 30 29 25 37 27 24	46 55 46 32 32 23 36 28 28 29	164 159 132 130 101 93 88 93 72 76	415 463 458 387 375 307 264 285 299 246	306 312 337 290 259 260 230 241 230 225	261 238 228 218 223 202 205 202 201 199	157 182 178 212 168 149 186 168 177 160	131 140 134 132 111 135 114 129 132	75 79 68 73 70 65	13 15 16 11 11 12 13 16	1 1 1 1	37,313 35,705 36,469 35,301 35,119 36,317 37,571 38,475

#### TUBERCULOSIS

### Number of Deaths in each Age Group and Rate per 100,000 Population

	1933 1934					19	935		1	936		1937	,		19	938	
Male	Rate	Female Rate	Male Rate	Female	Male	Rate	Female	Male	Rate	Female	Male	Rate	Female	Male	Rate	Female	Rate
1 " 18 2 yrs. 18 3 " 7 4 " 8 5 to 9 " 10 10 " 14 " 13 15 " 19 " 3 20 " 24 " 7 35 " 29 " 7 35 " 39 " 17 40 " 44 " 6 6 60 " 69 " 6 60 " 69 " 6 70 " 79 " 3 80 yrs. and Not stated	58.6 1 27.5 2 21.1 2 23.9 9.2 1 7.8 2 21.4 6 21.4 6 25.7 2 25.7 2 25.	62 48.8 55 44.2 46 40.5 50 49.6 59 37.5 49 46.0 36 61.7 5 30.0 1	6 19.4 6 19.3 5 15.1 7 20.9 4 11.8 14 7.9 10 5.9 27 15.9 62 40.4 7.9 56.0 67 50.1 78 59.7 64 52.2 63 56.1 101 160.1 85 78.8 39 68.1	85 57.0 81 60.6 74 57.8 41 32.6 36 31.3 39 31.4 48 28.5 50 46.3 34 59.4	10 2 8 3 16 20 35 46 53 61 60 85 50 126 75 40	35.3 31.9 5.9 23.7 8.8 9.0 11.8 30.4 29.7 37.3 45.2 45.5 68.7 44.1 74.3 68.9 69.3	4 13.3 7 22.9 10 30.8 5 15.0 2 6.1 19 11.0 16 9.7 55 332.5 87 57.7 78 57.8 62 47.9 47 37.0 43 37.1 27 26.2 60 37.4 33 30 50.4 6 35.3	17 7 10 3 24 13 37 60 57 60 76 64 64 123 80 38	•	1 3.2 7 22.3 7 21.0 1 2.9 2 5.9 13 7.3 15 8.9 56 33.3 86 55.7 82 59.2 45 34.4 39 36.9 45 27.3 44 43.9 27 44.4 8 45.2 578 31.9	6 1 7 2 3 1 1 1 3 1 1 1 2 9 1 6 1 3 5 6 3 6 2 4 7 1 5 6 4 5 7 9 6 6 1 3 6 7 7 3 9 6 6 1 3 6 7 7 8 7 7 7 8 7 8 7 7 8 7 8 7 7 8 7 8 7 7 8 7	8.2 101 8.1 81 4.5 49 2.2 48 0.1 34 7.6 24 7.7 41 7.4 45 5.4 35 3.8 11	19.1 29.8 8.7 7.8 10.0 25.5 65.0 58.2 36.7 36.6 28.4 22.6 24.7 40.1 57.2	10 7 4 3 4 9 111 28 50 54 67 69 54 69 108 82 42 5 2	30.9 21.5 11.5 8.5 11.3 4.9 6.2 15.7 31.1 36.5 47.8 50.4 42.0 58.7 61.4 72.6 70.2		

#### TUBERCULOSIS

Death Rates from T.B. by Age Groups for 10 Years, 1929-1938 (Rate per 100,000 Population)

Unde	er 1 Ye	ear	1 Y	ear	2 Ye	ears	3 Ye	ears	4 Y	ears	5-	.9	10-	14	15-	19	20	-24
Year	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1931 1932 1933 1934	71.1 57.2 46.5 42.5 19.4 35.3 34.4 31.1	28.9	43.3 67.1 46.2 58.6 19.3	19.1	10.4 12.6 21.7 27.5 15.1	30.8	13.1 21.7 12.2 21.1 20.9 23.7 28.8 8.6	13.6 29.4 28.4 12.4 9.2 21.3 15.0 2.9 8.7 20.3	2.6 6.0 12.2 23.9 11.8 8.8 8.5 2.8	13.6 16.2 9.6 6.3 6.2 3.0 6.1 5.9 8.9 11.8	15.0 7.6	10.6 14.9 12.1 13.2 8.3 8.7 11.0 7.3 7.8 8.4	11.2 11.6 7.3 7.8 5.9 11.8 7.4	12.6 11.8 7.9 9.7 8.9 10.0	39.7 22.8 30.0 30.8 21.4 15.9 30.4 21.0 16.4 15.7	58.0 65.0 53.3 50.1 40.7 40.8 32.5 33.3 25.5 28.4	75.2 56.9 51.5 48.1 40.4 29.7 37.8 38.2	65.6 83.2 102.4 77.8 80.6 57.0 57.7 55.7 65.0 46.1
	25-29		30	-34	35-	-39	40-	-44	45-	<b>-4</b> 9	50-	-59	60-	-69	70	-79		and
Year	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938	71.6 82.4 68.3 50.1 56.0 37.3 39.0 38.1	78.0 89.2 79.0 85.5 60.6 57.8 59.2 58.2	73.2 62.3 78.4 71.3 52.9 50.1 45.2 43.3 44.5 47.8	80.0 69.7 60.8 48.8 57.8 47.9 45.2 36.7	82.3 75.7 54.0 62.8 55.7 59.7 45.5 56.2 52.2 50.4	61.1 67.8 33.4 44.2 32.6 37.0 34.6 36.6	97.3 80.1 63.6 65.3 49.5 52.2 68.7 50.4 50.1 42.0	62.4 41.6 42.8 40.5 31.3 37.1 29.4 28.4	92.6 72.8 71.2 50.2 60.4 56.1 44.1 55.1 67.6 58.7	65.3 63.4 30.5 37.3 49.6 31.4 26.2 36.9 22.6 35.6	74.7 81.1 65.6 60.1 74.3 70.6 77.7	37.3 51.1 37.5 28.5 37.4 27.3	58.1 78.8 68.9 71.6 77.4	52.6 59.8 54.3 46.0 46.3	83.2 107.4 83.5 69.9 56.5 68.1 69.3 64.1 65.4 70.2	50.4 44.4 57.2	47.6 43.9 36.6 65.9 14.1 41.9	58.6 57.2 55.7 65.9 30.0 63.5 35.3 45.2 62.9 34.1

#### DEATHS FROM TUBERCULOSIS, 1938

Counties (Exclusive of Cities, Towns and Villages of 5,000	Place Occurre		Place Reside		Cities, Towns and Villages of 5,000	Place o Occurre		Place Reside	
and over.)	Number	Rate	Number	Rate	and over.	Number	Rate	Number	Rate
	Number  2 13 25 9 3 28 1 8 4 4 24 7 7 6 3 3 8 19 3 7 6 2 3 17 13 68 60 7 2 4 6 4 3 2 2 3 11 1 3 6 6 6 13 5 15 8 21 1 21	Rate  26. 8 49.0 93.8 49.0 93.8 6 15.8 8.5 12.9 119.1 139.1 19.1 139.1 10.4 7.0 21.2 25.9 24.0 25.2 25.3 112.4 25.3 112.4 25.3 26.3 27.1 26.3 27.0 21.2 22.9 26.3 27.0 21.2 22.9 26.3 27.0 21.2 22.9 26.3 27.0 21.2 22.9 26.3 27.0 21.2 22.9 26.3 27.0 21.0 21.1 21.1 21.1 21.1 21.1 21.1 21	Number  4 17 15 13 7 16 1 1 10 7 10 4 19 8 8 10 2 11 7 10 29 8 9 6 5 4 5 15 10 6 14 6 6 14 2 8 8 17 9 16 10 27 20 8 4 7	Rate		Number  1 4 2 3 2 4 10 2 1 1 2 29 2 14 6 9 17 2 5 1 5 1 1 4 86 2 8 2 7 2 1 1 2 1 1 4 86 3 2 4 3 2 4 10 1 5 6 19 6 19 6 19 6 19 6 19 6 19 6 19 6 10 10 10 10 10 10 10 10 10 10 10 10 10	Rate 12.0 27.1.1 3.5.7 20.0 27.1.1 3.5.7 20.0 16.9 9.5 20.0 16.9 9.0 16.9 9.0 16.7 74.7 27.5 20.0 16.9 9.0 16.1 15.0 17.7 15.5 23.1 16.1 16.1 16.1 16.1 16.1 16.1 16.1 1	Number  2 6 7 2 6 1 1 11 3 1 2 2 10 5 4 555 6 2 6 10 6 7 7 2 3 1 1 1 4 3 1 6 73 6 8 3 5 2 4 4 9 14 16 6 4 12 2	Rate  24.0 40.6
Waterloo, Welland Wellington Wentworth York Outside of Ontario	2 5	59.5 4.7 12.0 229.3 48.8	9 8 8	19.8 21.1 19.3 15.5 26.0	Thorold Timmins Toronto Trenton Waterloo Welland Weston Whitby Windsor Woodstock Outside of Ontario	143  1  3 30 1	27.9 22.0  9.0  54.1 28.8 8.7	13 225 1  3  2 24 1 6	39,9 51.8 34.7 14.6  36.0 23.0 8.7

#### CANCER

The following Table shows how deaths and the death rate from Cancer have increased in the last half century:

1888	
1898	975— 45.1
1908	
1918	
1928	3,441—106.5
1938	4,4/2-119.8

CANCER

#### Number of Deaths and Rate per 100,000 Population by Age Groups

		19.	34			1	935			193	16			193	37			19	938	
	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate
Inder 5 yrs. 5 to 9 yrs. 0 " 14 " 0 " 24 " 5 " 29 " 0 " 34 " 5 " 39 " 0 " 44 " 0 " 54 " 0 " 64 " 5 " 69 " 0 " 64 " 5 " 79 " 0 " 64 " 5 " 79 " 0 " 89 " 0 " 10 tstated .	140 44	423.9 617.5 889.0 1243.2 1456.6 1275.3 1652.8	229 280 263 321 226 130 59 20	545.3 854.6 1068.9 1200.3 1298.6 1430.6	201 269 294 293 275 175 48 8	1801.1 1378.4 1454.5	135 71 14	1132.9 1112.7 1602.9 988.0	182 63	888.9 1392.1 1832.2 1726.9 1899.3	162 68 18	3.6 1.1 0.5 2.9 8.4 7.2 23.3 50.7 104.2 163.9 239.8 364.5 491.1 1376.1 1439.9 1491.1 1198.4	300 319 332 297 183 61 13	1390.4 1826.3 1697.2 114 <b>5</b> .3	274 305 337 307 150 71 22	3.6 2.2 1.7 2.9 5.7 13.6 29.2 48.1 152.6 254.3 357.0 442.6 607.1 86.1.1 1394.0 1329.7 1500.3 1510.9	168 74 10	2 .9 1 .0 3 .4 3 .9 5 .6 6 .9 .4 14 .2 .2 23 .4 43 .6 84 .2 .2 154 .8 243 .3 417 .5 663 .4 1668 .2 2048 .1 876 .4	160 72 16	3.6 2.8 4.1 2.3 7.6 10.0 32.0 58.5 97.3 163.2 229.2 427.4 633.6 818.6 1215.4 1410.9 1513.5 1092.8
Cotal	1885	103.8	2149	122.8	1952	106.5	2262	128.3	2050	109.0	2391	132.1	2173	114.9	23/4	130.4	2083	109.3	2389	130.6

#### CANCER

Table showing the distribution of deaths from various types according to class and rates per 100,000 of population as follows:

	19	29	19	30	19	31	19	32	19	33	19	34	19	35	19	36	19	37	19	38
Buccal cavity	155	4.7	124	3.7	183	5.3	155	4.4	192	5.4	172	4.8	167	4.6	131	3.5	166	4.4	157	4.2
Peritoneum	1139 627		1200 629	36.2 18.9	1889	55.0	1979	56.9	2063	58.5	2092	59.7	2123	59.0	2250	59.7	2314	62.3	2227	59.5
Female genital organs	3 <b>5</b> 5	10.8		12.3		10.7		11.4		12.4				13.0		12.7			516 496	14.0 13.2
BreastSkin.	333 75	10.2 2.3		12.5 2.6		11.3 3.0		11.9 2.4		11.5 2.0		11.2		11.7 2.4	525 99	14.2 2.6		2.3		2.2
Other or Un- specified	718	22.0	780	23.5	794	23.1	793	22.8	871	24.7	795	22.3	941	26.1	965	26.1	1026	27.6	993	26.6
Total	3402	102.1	3635	107.2	3726	108.6	382 <b>5</b>	110.0	4044	114.7	4034	113.2	4214	117.1	4441	120.3	4547	122.5	4472	119.8

#### CANCER

### Rates per 100,000 of population

	19	34	19.	35	193	36	19.	37	19;	38
	Num- ber	Rate								
Buccal cavity. Digestive tract. Respiratory organs Uterus. Female genital organs. Breast. Male genito-urinary organs Skin. Not specified organs.	172 2,092 114 374 116 401 320 84 361	4.8 59.7 3.1 10.4 3.2 11.2 8.9 2.3 10.1	167 2,123 156 353 118 424 369 87 417	4.6 59.0 4.3 9.8 3.2 11.7 10.2 2.4 11.5	131 2,250 170 343 128 525 408 99 387	3.5 59.7 4.6 9.2 3.4 14.2 11.0 2.6 10.4	166 2 314 204 356 132 464 415 89 407	4 4 62.3 5.4 9 5 3 5 12.5 11.1 2.3 10.9	157 2,227 190 381 135 496 399 83 404	4 . 2 59 . 3 5 . 0 10 . 2 3 . 6 13 . 2 10 . 6 2 . 2 10 . 8
Total	4,034	113.2	4,214	117.1	4,441	120.3	4,547	122.5	4,472	119.

#### CANCER

## Rates per 100,000 of population

		193	4			1935			1936				
	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate	
Buccal cavity Digestive tract Respiratory organs Uterus Female genital organs Breast		8 0 61 7 3 9  0 2	26 971 42 374 116 396	1 4 55 5 2 4 21 4 6 6 22 6	1,119 112	7.2 61.0 6.1	35 1,004 44 353 118 418	1.9 56.9 2.4 20.0	1,181	5.7 62.8 5.6	22 1,069 63 343 128 517	1.2 59.0 3.4 17.9 7.0 28.5	
Male genito-urinary organs. Skin Not specified organs Total	320 56 165 1,885	17.6 3.0 9.0 103.8	28 196 2,149	1 6 11.2 123 0	163	20 1 2 7 8 8 106 5	36 254 2,262	2.0 14.4 128.3	66 171	21.7 3.5 9.0 109.0	216	1.8 11.9	

#### CANCER

## Rates per 100,000 of population

		193	7			19	38	
	Male	Rate	Female	Rate	Male	Rate	Female	Rate
Buccal cavity Digestive tract Respiratory organs Uterus Female genital organs Breast Male genito-urinary organs Not specified organs	131 1,247 147 5 415 52 176	6 9 64 9 7.7  0.2 21.9 2.7 9.3	35 1067 57 356 132 459	1.9 58 6 3.1 19 5 7.2 25.2 2.0 12 6		6.6 63.1 6.7  0.1 20.9 2.4 9.5	31 1,027 62 381 135 494	1.6 56.1 3.3 20.8 7.3 27.0 2.0 12.1
Total	2,173	114.9	2,374	120.4	2,083	109.5	2,389	120.6

#### CANCER

The following table shows the difference in rates for the years 1918, 1928 and 1938:

	19	18	19	28	19	038
Total Buccal cavity Stomach and liver Peritoneum and intestines Female genital organs	No. of Deaths  2,103 77 647 281 148	Rate  74.8 2.7 23.0 9.9 5.2	No. of Deaths  3,441 132 1,205 605 337	Rate  104.8 4.0 36.7 18.4 10.2	No. of Deaths  4,472 157 2,227 516	Rate  119.8 4.2 59.5 14.0
Breast	129 71 750	4 5 2.5 26.6	344 72 746	10.4 2.1 23.7	496 83 993	13.2 2.2 26.6

#### DEATH RATES BY AGE GROUPS PER 100,000 POPULATION FROM CANCER

	1933-	1937	19	38
	No. of Deaths	Rate	No. of Deaths	Rate
Under 30. 30-39. 40-49. 50-59. 60-69. 70-79. 80 and over.	432 764 2,101 4,103 5,726 5,868 2,286	4.4 29.0 91.6 247.4 523.8 996.8 1,417.2	93 172 446 845 1,181 1,235 500	4.6 31.7 94.3 246.9 523.4 1,018.1 1,500.1

#### INFANT MORTALITY

#### DEATHS OF CHILDREN UNDER ONE YEAR—STATED CAUSES OF DEATH

#### (A) TOTAL DEATHS

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	Mean
Total	5,204	5,260	4,833	4,133	3,804	3,523	3,515	3,416	3,382	3,245	4,031.5
1. Whooping cough	121	127	117	86	84	122	95	78	59	60	94.9
2. Influenza	208	85	130	102	108	49	88	72	131	65	103.8
3. Convulsions	64	57	55	39	32	34	29	32	22	26	39.0
4. Respiratory diseases	576	595	557	485	419	411	409	426	415	421	471.4
5. Diseases of digestive											
tract	795	989	815	509	544	507	337	381	411	336	562.4
6. Malformations	459				455				428	446	444.5
7. Diseases of early in-	2,460	2,403	2,276	2,051	1,813	1,660	1,801	1,637	1,618	1,625	1,934.4
fancy											
8. All others	521	550	420	380	349	330	341	356	298	266	381.1

#### (B) RATE PER 1,000 LIVING BIRTHS

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	Mean
Total	76.0	73.7	71.0	61.0	59.6	56.6	55.7	54.4	54.8	49.1	60.9
1. Whooping cough	1.8		1.6								1.4
<ul><li>2. Influenza</li><li>3. Convulsions</li></ul>	0.9		0.7	0.5		0.5	0.4	0.5	0.3	0.9	1.5 0.5
<ol> <li>Respiratory diseases</li> <li>Diseases of digestive</li> </ol>		8.3	8.0	7.2	6.5	6.6	6.4	6.8	6.7	6.4	7.1
tract								6.1	6.6	5.1	8.4
<ul><li>6. Malformations</li><li>7. Diseases of early in-</li></ul>		6.4	8.4	7.1	7.1	6.6	6.6	6.9	6.9	6.8	6.9
fancy	35.9	33.7	32.8	30.6	28.5	26.9	28.6	26.2	26.2	24.7	29.4
8. All others	7.7	7.7	6.0	5.6	5.5	5.3	5.5	5.6	4.8	4.0	5.7

#### Of these infant deaths:

831 or 25.60 per cent. lived less than one day.

701 or 21.60 per cent. lived less than one week. 355 or 10.93 per cent. lived less than one month.

463 or 14.26 per cent. lived less than three months. 429 or 13.22 per cent. lived less than six months. 264 or 8.13 per cent. lived less than nine months. 202 or 6.22 per cent. lived less than one year.

# INFANT MORTALITY IN CITIES, TOWNS AND VILLAGES OF 10,000 AND OVER. ONTARIO, 1934-1938.

				10, 173	1-1700.					
		Death	ıs Unde	r 1 Yea	r	Rat	e per	1000 L	ive Bi	rths
Cities										
	1934	1935	1936	1937	1938	1934	1935	1936	1937	1938
Belleville	17 26	25	31	18	24	46.3	63.3	72.0	47.2	48.6 56.5
Brantford Chatham	26	35 35	31 28	31 29	33 59	45.2 51.4	58.0 66.2	46.5 48.4	51.1 43.0	77.2
CornwallFort William	53 20	32	50 27	52 14	29 21	122.1	53.3	88.8 55.6	89.5	47.3
Galt	16	16	10	7	14	55.3	57.5	37.4	23.7	43.6
Guelph	17 148	16 135	11 115	13 106	12	51.9	46.9	36.7	43.9	36.2
Kingston	37	29	46 34	34 45	50 34	61.0	42.2	68.2 67.4	46.9	66.2
Kitchener	36	34	34	34	46	49.5	44.8	45.7	46.3	57.7
London Niagara Falls	64 22	70 20	77	54 14	72 17	47.8	49.0	54.6 23.4	36.6	45.3
North Bay	24 34	18 22	28 31	27	28 29	65.2	46.1 42.0	71.4 59.1	70.1 58.0	67.3
Oshawa Ottawa	200	286	267	255	191	66.6	94.0	84.8	85.4	60.8
Owen Sound Pembroke	15 17	11 22	12 24	17 25	17 26	46.1	34.3	36.6	52.1 96.8	46.7
Peterborough	23	36	45	27	31	42.2	63.0	72.4	42.9	44.2
Port Arthur St. Catharines	28 28	13 20	21 34	20 19	40 33	58.7 46.2	24.8 36.5	38.8 58.9	35.3	61.6
St. Thomas	17 21	18 22	17 22	10 22	18 21	52.6 52.5	60.6	58.4 50.8	33.7 52.6	43.9
Sault Ste. Marie	27	20	40	40	37	54.7	37.6	72.2	76.6	59.2
StratfordSudbury	13 45	23 55	73	18 80	14 74	40.6	65.7	25.8 74.5	48.6	32.9 55.8
Timmins	60 517	53 538	55 527	74 472	57 500	101.7	84.0 51.3	80.0 50.6	91.1	65.2
Welland	17	13	18	15	18	66.9	42.8	57.5	48.3	49.4
Windsor	89 10	99	93	103 14	79 14	46.2	48.7	44.0	51.1	35.5

# PUERPERAL Deaths From Specified Puerperal Causes by Age—1938

Total 10-49	10-14 years	15-19 years	20-24 years	25-29 years			40-44 years		55-59 years
251		18	42	66	54	46	23	1	1
26			7	8	8	3			
9			1 3	3 3	1	1 1	3 3		
3 22			1 3	7	4	4	1 4	1	
50 45		7 9	10 5	9 8	12 10	10	2 4		
9 41		1	1 6	3 15	2 9	2 8	3		
35		1	5	10	. 7	8	3		1
	251 26 9 11 3 22 50 45 9	10-49 years  251  26  9 11 3 22 50 45 9	10-49 years years  251 18  26  9 11  3	10-49     years     years     years       251      18     42       26      7       9      1       11      3       32      3       50      7     10       45      9     5       9      1     1       41      6	10-49     years     years     years     years       251     18     42     66       26     7     8       9     11     3       11     3     3       22     3     7       50     7     10     9       45     9     5     8       9     1     1     3       41     6     15	10-49         years         years <th< td=""><td>10-49         years         <th< td=""><td>10-49         years         <th< td=""><td>10-49         years         <th< td=""></th<></td></th<></td></th<></td></th<>	10-49         years         years <th< td=""><td>10-49         years         <th< td=""><td>10-49         years         <th< td=""></th<></td></th<></td></th<>	10-49         years         years <th< td=""><td>10-49         years         <th< td=""></th<></td></th<>	10-49         years         years <th< td=""></th<>

# Deaths From Specified Puerperal Causes per 100 Deaths from All Puerperal Causes by Age—1938

	Total 10-49		15-19 years	20-24 years		30-34 years		40-44 years		55–59 years
Total puerperal causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Abortion with septic condition Abortion without sep-	10.35			16.66	12.12	14.81	6.52			
tic condition	3.58			2.38	4.54	1.85	2.17	13.04		
Ectopic gestation Other accidents of										
pregnancy Puerperal haemorrhage						7.40				
Puerperal septicaemia.	19.92		38.88	23.80	13.63	22.22	21.73	8.69		
Puerperal albuminuria. Other toxemias of preg-			50.00							
nacy				i						
Puerperal phlegmasia. Other accidents of						16.66				
childbirth Others or not specified	13.94		5.55	11.90	15.15	12.96	17.39	13.04		

# DEATHS FROM PUERPERAL CAUSES AND FROM ALL CAUSES OF FEMALE DEATHS (Showing percent from Puerperal Causes)

Ages 1938	All Causes	Puer- peral	% 19 <b>3</b> 8	1929	1930	1931	1932	1933	1934	1935	1936	1937	Mean
10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59	148 196 266 341 332 419 499 632 765 1046	18 42 66 54 46 23 1	9.18 15.78 19.35 17.26 10.97 4.60 0.15	7.21 13.88 17.05 17.06 16.19 7.19 0.14	9 .80 21 .51 23 .57 20 .04 16 .53 6 .12 1 .31	7.95 12.42 20.92 21.15 12.98 7.01 0.95	9 99 15 72 20 15 17 83 13 21 6 18 0 89	1.36 5.24 20.28 19.80 21.92 13.72 5.20 0.43	0.66 8.22 19.38 22.53 20.26 13.33 6.59 0.82	0.65 5.83 16.82 18.93 19.07 15.32 4.31 0.48	9 04 19.59 22.75 20.14 13.74 7.54 0.47	0.68 8.86 16.52 20.00 20.02 14.91 4.78 0.44	0.33 8.13 17.19 20.50 19.47 14.09 5.95 0.60

### Number of Puerperal Deaths and Rate per 1,000 Living Births

	Province				Cities			Towns		Rural			
	Births	Deaths	Rate	Births	Deaths	Rate	Births	Deaths	Rate	Births	Deaths	Rate	
1929 1930 1931 1932 1933 1934 1935 1936 1937	68,485 71,263 69,209 66,842 63,646 62,234 63,069 62,451 61,645 65,564	440 372 343 346 348 313 355 319	5.4 6.2 5.4 5.0 5.4 5.6 4.9 5.6 5.1 3.8	32,478 34,380 33,217 33,018 31,107 30,309 31,700 32,425 32,420 35,194	242 213 208 203 210 246 211 195	6.9 7.0 6.4 6.3 6.5 6.9 7.7 6.5 6.0 4.4	6,288 6,456 5,998 4,178 4,114 3,876 3,943 4,044 4,164 4.542	37 49 36 25 27 24 24 30	6.0 5.7 8.1 8.6 6.0 6.9 6.0 5.9 7.2 5.7	29,692 30,380 29,994 29,646 28,425 28,049 27,426 25,982 25,051 25,8 28	161 110 99 118 111 43 120 94	3.6 5.3 3.6 3.3 4.1 3.9 1.5 4.6 3.7 2.7	

### MATERNAL MORTALITY, ONTARIO, 1938

	To	otal.	Insti	tutional	Non-ir	Non-institutional		
Cities, Towns and Villages (5,000 population and over)	Live births	Deaths from puerperal causes	Live births	Deaths from puerperal causes	Live births	Deaths from puerpera causes		
Barrie	228		172		56			
Belleville	493 232	5	411	4	82 15	1		
BramptonBrantford	584	· · · i	217 437	1	147			
Brockville	344	5	330	5	14			
Chatham	764	1	626	1	138			
Cobourg	147	3	123	3	24			
Collingwood	176	1	98	1	78			
Cornwall	612 157	3	488	3	124 157			
Eastview	4				157			
Fort Erie	101	1	82		19	i		
ort Francis	160		27		133			
ort William	533	5	428	5	105			
alt	321	1	224		97	1		
Guelph	331 2.989	13	249 2,394	12	82 595			
lamilton	213	1 1	37		176	i		
lawkesburyngersoll	139	3	93	2	46	i		
kenora	285	4	275	3	10	1		
Lingston	755	3	686	3	69			
lirkland Lake	724	3	398	3	326			
litchener	796 193		621		175			
eamington	242	1 1	111 205	1 1	82 37			
indsay	1,587	7	1,335	7	252			
ondonlidland.	192	2	124	í	68	i		
limico	111	1	70		41			
ew Toronto	67				67			
liagara Falls	421		313		108			
North Bay	416	2	247	2	169			
rillia	305 582	2 2	225 397	2 2	80 185			
shawattawa	3,140	19	2,644	18	496	i		
wen Sound	364	2	223	2	141			
embroke	260	3	167	3	93			
eterborough	700	4	595	4	105			
ort Arthur	649	5	620	5	29			
ort Colborne	83 66				83 66			
reston	151		115		36			
enfrewiverside	32				32			
t. Catharines	641	5	422	4	219	1		
t. Thomas	410	3	382	3	28			
arnia	489	1	396	1	93			
ault Ste. Marie	625 344	2 1	376 295	2 1	249 49			
imcoe	169	1	148	1	21	1		
miths Fallstratford	425	2	368	2	57			
udbury	1,325	4	804	4	521			
wansea	14				14			
horold	64		28		36	2		
immins	873 10,514	6 40	266 8,510	36	607 2,004	4		
oronto	151	40	0,310		151	**		
renton	48				48			
Velland	364	2	268	2	96			
eston	110				110	1		
hitby	18 2,220	oi.	1 252		18	1		
'indsor	2,220	10	1,353	1	867 43	1		
Voodstock			240					
otal cities, towns and villages of 5,000 and over	39,736	181	29,663	163	10,073	18		
Remainder of Province	25,828	70	5,709	26	20,119	44		

#### Deaths of Women Not Classified to Pregnancy or Child-Bearing but Returned as Associated Therewith, Ontario, 1938

Int. List No.	Causes of Death	Number
List No.  2 8 11 16 23 48 54e 55d 59 72a 78 89a 91b 92a 93a 93b 94b 96 107a 108 109 112 114c 117a 118 121 125a 126 156a 163–171 173–175 181, 186	Paratyphoid fever Scarlet fever Influenza Poliomyelitis and polioencephalitis (acute) Tuberculosis of the respiratory system Cancer of the uterus Non-malignant tumours of the thyroid gland Tumours of the brain, nature not specified Diabetes mellitus Luekaemia Encephalitis (non-epidemic) Otitis Endocarditis unspecified (under 45 years of age) Endocarditis, specified as chronic, and other valvular diseases. Acute myocarditis Myocarditis, unspecified (under 45 years of age) Embolism and thrombosis of the coronary arteries Aneurysm (except of the heart) Bronchopneumonia Lobar pneumonia Lobar pneumonia, unspecified Asthma Other diseases of the respiratory system (tuberculosis excepted) Ulcer of the stomach Other diseases of the stomach Appendicitis Yellow atrophy of the liver Biliary calculi Diseases of the joints (tuberculosis and rheumatism excepted) Suicides Homicides	1 3 2 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
101, 100	Accidental deaths	59

# SPECIAL CLASSES OF ACCIDENTAL DEATHS IN ONTARIO, 1938 (Included also under the numbers of the International List.)

Int. List No.	Cause of Death	Male	Female
178 181 183 186 194	A.—Accidents in mines and quarries. Accidental absorption of toxic gases. Accidental burns (conflagration excepted) Accidental drowning. Accidental injury by fall, crushing or landslide. Other accidents	54 3 3 1 43 4	
183 185 186 193	B.—Accidents causes by machines  Accidental drowning.  Accidental injury by cutting or piercing instruments.  Accidental injury by fall, crushing or landside.  Accidents due to electric currents	45 1 5 37 2	1 1 
186	C.—Railway accidents	64 64	3 3
186	D.—Street car accidents	9	3 3
178 180 181 182 183 185 186 190	E.—Automobile and motorcycle accidents Accidental absorption of toxic gases Conflagration Accidental burns (conflagration excepted) Accidental mechanical suffocation Accidental drowning Accidental injury by cutting or piercing instruments Accidental injury by fall, crushing or landslide Excessive cold Other accidents	500 5 6 2 2 13 1 468 1 2	177 1 1 6  6
183 186	F.—Other land transportation	34 3 31	5  5
183 186	G.—Water transportation Accidental drowning Accidental injury by fall, crushing or landslide	83 80 3	2 2
183 186	H.—Air transportation Accidental drowning Accidental injury by fall, crushing or landslide	8 2 6	

# VIOLENT OR ACCIDENTAL DEATHS (EXCLUDING SUICIDES)

### RATES PER 100,000 OF POPULATION

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Automobiles Burns Drowning Falls Fractures Railroads Other Accidents*	124 3.72 302 9.06 384 11.52 93 2.84 159 4.77	117 3 46 341 10.08 450 13.31 63 1.86 163 4.82	117 3.41 369 10.75 	97 2.79	114 3.23 314 8.91 86 2.44	115 3.22 271 7.68 91 2.55	109 3.03 269 7.47 83 2.30	113 3.06 230 6 23 97 2.62	93 2.50	107 2.86 287 7.69 67 1.79

#### **SUICIDES**

In 1938 there were 360 suicides. The rate per 100,000 of population was 9.6, just 0.2 less than for 1937.

Of these, 274 or 76.11 were males and 86 or 23.88 females.

	Total		Under 20		20-39		40-59		60 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%
Males	274	100	8	2.91	84	30.65	127	46.34	55	20.07
Females	86	100	3	3.48	35	40.69	35	40.69	13	15.11
Total	360	100	11	3.05	119	33.05	162	44.99	68	18.88

Method of suicide over a ten-year period is shown in the following table:

	Total	Rate	Poison	Gas	Hanging	Drowning	Shooting	Cutting	Jumping	Crushing	Others
1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938	285 320 404 426 423 366 360 367 398 366 360	8.7 9.6 11.9 12.4 12.2 10.3 1C.1 10.2 10.7 9.8 9.6	61 68 02 03 192 186 90 73 68 71 71	25 25 38 33 53 41 31 41 33 36 41	78 74 90 95 74 88 61 82 90 75 81	33 60 50 68 66 38 55 43 65 53 46	55 53 70 74 92 68 71 63 79 72 64	22 21 33 24 29 29 32 27 25 26 21	4 7 12 13 23 12 11 27 23 23 23 26	2 5 4 3 4 1 4 5 6 3 5	2 2 2 3 3 5 6 9 7 5



Table 1—General Summary of Births, Deaths and Marriages in the Province of Ontario by County Municipalities (including Cities, Towns, and Villages), 1938

		BIRTHS (exclusive of ed stillbirths)						I	DEA	TH	s				Jo O			Jo O
COUNTIES	Esti- mated popula- tion	(exc	lusive	of	per 1,000 ulation	A	ll age	s		der		-4 ars		ears over	Ratio per 1,000 population	Stillbirths	Marriages	tatio per 1,000
		Totai	М	F	Ratio p	Total	М	F	M	F	М	F	M	F	Ratio	Still	Marı	Ratio
Total	3,731,000	65,564	33,605	31,959	17.6	36,890	19,814	17,076	1,850	1,395	369	359	17,595	15,322	6.9	2,015	30,080	8.1
Addington. Algoma Brant Bruce Carleton. Cochrane Dufferin Dundas Durham Elgin Essex. Frontenac Gengarry Grenville Grey Haldimand Haliburton Hastings Huron Kenora (including	7462 50369 58204 45891 185058 63054 16043 17534 27983 47384 173865 173865 17390 622 20147 17909 62681 23132 6313 28729 64173 49249	253 289 371 703 3210 1000 298 185 982 297 172 265 1312 758	135, 147, 183, 363, 1650, 519, 153, 94, 485, 142, 85, 127, 664, 384,	501 447 367 1822 1100 118 142 188 340 1560 481 145 91 497 155 87 138 648 374	20.1 14.7 10.3 15.6 12.8 27.1 9.2 20.4 15.3	63 455 672 481 2000 515 187 154 308 506 1321 744 201 679 204 55 525 650 530	28 275 357 274 1010 302 96 83 179 270 703 392 104 105 392 32 117 359 282	35 180 315 207 990 213 91 71 129 236 618 352 100 96 287 105 23 108 291 248	2 48 25 17 121 66 5 11 16 15 68 33 9 7 26 3 3 2 29 20	2 20 23 22 90 68 7 7 7 8 8 12 54 4 5 18 4 4 5 11	9 6 3 20 18  1 2 15 11 1 3 5 1 1 2 2 1 5	7 6 1 21 18 1 3 19 6 6 3 1 1 1 9 4	26 218 326 254 869 218 91 72 162 253 620 348 94 95 27 113 325 261	879 127 84 64 120 221 545 317 90 91 266 100 18 105 247	10.4 10.8 8.1 11.6 8.7 11.0 10.6 7.5 14.9 10.1 11.2 10.8	33 25 12 115 74 10 7 13 19 89 34 7 7 42 7 8 8 8 44 23	36 417 438 316 1419 678 106 104 166 358 1436 407 134 128 397 174 37 231 508 293	4 .8 8 .2 8 .2 6 .8 7 .6 .6 5 .9 5 .9 7 .5 8 .2 8 .2 6 .6 7 .1 3 7 .5 5 .8 8 .0 7 .9 5 .9
Patricia) Kent Lambton Lanark Leeds Leeds Lennox Lincoln Manitoulin Middlesex Muskoka Nipissing Norfolk Northumberland Ontario Oxford Parry Sound Peel. Perth Peterborough Prescott Prince Edward Rainy River Renfrew Russell Simcoe Stormont Sudbury Thunder Bay Timiskaming Victoria Waterloo Welland Wellington Wentworth York	28355 68277 59323 38818 38429 13059 58950 11566 128720 22759 44772 33952 34325 64919 51965 47757 26863 17909 19028 56711 20147 91036 35445 63427 791036 35445 63427 7952 89917 63054 206697 931631	1446 1411 422 1623 1393 1051 3210	228 553 348 272 272 475 329 481 371 138 234 519 206 790 536 1264 723 711 221 848 719 543 1631	654 481 331 611 454 148 990 188 583 342 2475 4434 432 4474 434 434 434 434 437 700 201 1154 674 674 674 674 675 674 675 674 675	17.3 28.8 38.1 20.3 30.0 15.0 16.6 15.4 16.6 15.5	238 740 624 381 1489 1088 613 136 61615 278 8408 625 636 625 636 8249 534 546 625 636 625 637 932 233 158 516 618 537 932 249 8249 248 848 848 848 848 848 848 848 848 848		92' 304' 315' 1766 238 53' 279' 365' 7588 125' 7588 125' 167' 184' 176' 309' 311' 3275' 262' 1122' 119' 44' 23' 33' 155' 166' 446' 322' 966' 446' 322' 966' 446' 33' 32' 966' 39' 39' 39' 39' 39' 39' 39' 39' 39' 39	31 54 23 9 51 13 32 9 51 14 13 22 6 15 14 18 21 18 21 32 9 7 43 43 44 41 41 41 41 41 41 41 41 41 41 41 41	22 27 21 10 12 23 34 14 14 7 9 22 25 7 18 20 66 32 33 24 14 14 25 25 14 25 25 14 25 25 25 25 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	5 8 8 3 1 6 1 5 5 6 1 5 5 6 1 5 7 1 2 2 6 6 1 1 1 4 4 7 1 6 5 5 1 1 1 1 4 1 1 5 4	8 6 2 1 1 1 4 7 7 1 4 4 5 1 0 6 3 3 4 4 7 7 1 1 1 1 4 3 2 2 6 1 2 1 1 0 7 7 1 8 6 1 0 5 3 5 5 5 1 2 6 2	110 374 283 190 225 53 306 56 791 137 7179 185 1283 296 301 212 240 258 78 104 47 3 321 130 258 130 121 258 130 130 130 130 130 130 130 130 130 130	292 165 50 252 46 710 106 161 161 1294 291 105 226 94 110 488 480 480 480 149 140 152 152 153 153 153 154 155 155 155 155 155 155 155	8 .3 .10 .8 .10 .10 .5 .10 .6 .6 .12 .7 .7 .12 .5 .12 .2 .10 .3 .11 .1 .3 .10 .4 .9 .5 .3 .11 .1 .4 .9 .5 .5 .10 .7 .7 .8 .2 .2 .11 .1 .3 .7 .7 .8 .2 .2 .10 .13 .0 .13 .0 .13 .0 .13 .10 .7 .7 .8 .2 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	6 41 16 18 35 28 23 10 17 28 13 3 12 40 43 45 40 36 91	618	$\begin{array}{c} 7.6 \\ 8.2 \\ 7.3 \\ 6.2 \\ 8.2 \\ 7.7 \\ 8.4 \\ 6.3 \\ 8.6 \\ 6.0 \\ 9.0 \\ 11.2 \\ 9.0 \\ 9.0 \\ 12.9 \\ 8.7 \\ 12.9 \\ 8.6 \\ 7.8 \\ 8.6 \\ 1.1 \\ 1.2 \\ 9.0 \\ 9.0 \\ 1.2 \\ 9.0 \\ 1.2 \\ 9.0 \\ 9.0 \\ 1.2 \\ 9.0 \\ 9.$

Table 2—Number of Births, Deaths and Marriages, and the ratio per 1,000 of population in each County (excluding Cities, Towns, and Villages of 5,000 population and over), Ontario, 1938

-					jo							_			jo			jo
	Esti-		RTH usive					1.	DEA'	IHS			1		000			98
COUNTIES	mated popula-		births		per 1,000 lation	Al	l age	8	Une 1 ye		1- yea		5 y	ears over	per 1,	ths	ges	tatio per 1,000 population
	tion				Ratio p				_						Ratio p	Stillbirths	Marriages	Ratio p
		Total	M	F	Ra	Total	М	F	М	F	M	F	M	F	Ra	Sti	ŭ	Ra
	,000	64	0.5	59		06	4	26		ıc			35	22		2	80	
Total, including all municipalities	3,731,000	65,564	33,605	31,959	17.6	36,890	19,81	17,076	1,850	1,395	369	359	17,595	15,322	6.6	2,015	30,080	8.1
T-4-1ludinidi	.574 3					_				<u>'</u>	<u> </u>		<u> </u>					
Total, excluding cities, towns and villages of 5,000 and over	877.5	25,828	13,105	,723	2.7	15,714	,588	7,126	6.	و	0	oc	7,709	6,422	~;	7	10,436	ıc
or 5,000 and over	1,8	25	13	12,	13.	155	œ	7,	729	556	150	148	7,	9	8.3	722	2	70
Addington	7462 26516	116 442	60 239	56 203	15.5 16.6	63 218	28	35 77	2	2			26	33	8.4	19	36	4.8
Algoma Brant	26655	320	153	167	12.0	256	141 147	109	23 11	8	6	3	112 135	66 104	8 2 9.6	4	132 105	4.9 3.9
Bruce	45891 33600	742 288	375 132	156	16.1 8.6	481 242	274 121	207 121	17	22	3	1 2	254 113	184 115	10.4	12	316 159	6.8
Carleton	38035	1372	698		36 0	337	201	136	37	40	12	14	152	82	8.8	42	325	8.5
Dufferin Dundas	16043 17534	253 289	135 147	118 142		187 154	96 83	91 71	11	7 7			91 72	84 64	$\frac{11}{8} \frac{6}{7}$	10	106 104	6.6
Durham	27983	371	183	188	13.2	308	179	129	16	8	1	1	162	120	11 0	13	166	5.9
Elgin	30992 59138	293 765	150	143	9.4	285	165	120	5	4	1	3	159	113	9.1	6	198	6.3
EssexFrontenac	25291	245	369 113	132	$\frac{12.9}{9.6}$	343 222	193	150 95	17	19	1	1	175 120	130 89		11	304 98	5.1
Glengarry	20147	298	153	145	14 7	204	104	100	9	4	1	6	94	90	10.1	7	134	6.6
Grenville	179 <b>0</b> 9 49244	185 618	94 323	91 295	10.3	201	105	96	7	5	3	· · · i	95	91 200	11.2	7	128	7.1
Haldimand	23132	297	142	155	12.3 12.8	477 204	266	211 105	17	10	3	1	246 95	100	9.6	24	258 174	5.2 7.5
Haliburton	6343	172	85	87	27 1	55	32	23	3	5	2		27	18	8.6	8	37	5.8
Halton Hastings	28729 42566	265 668	127 353	138	9.2 15.6	225 355	206	108 149	2 16	17	2	1 4	113 189	105 128	7.8	18 18	231 240	8.0
Huron Kenora, including	49249	758	384		15.3	530	282	248	20	11	1	4	261	233	10.7	23	293	5.9
Kenora, including	19879	336	177	150	16.0	149	0.0		10	4.0				2.5	~ 4		107	
Patricia Kent	51696	575	276		16.9 11.1	407	88	61 167	19	18	4 5	6	65 222	37 155	7.4	5	127 344	6.3
Lambton	41054	507	269	238	12.3	384	184	200	12	11	3		169	189	9.3	13	246	5.9
Lanark	28192 28446	443	224	219		267	144	123	11	6	1	· · · i	132	117	9.4	14	188	6.6
Leeds Lennox	13059	364 119	188 58	176 61	9.1	292 108	147	145 53	8	5	1	1	138 53	139 50	10.2	7	145 95	5.0
Lincoln	31303	306	166	140	9.7	269	151	118	7	6	1	1	143	111	8.5	7	201	6.4
Manitoulin	11566 52582	276 466	128 242		23.8 9.1	136 509	71 290	65 219	9	12	6	7	56 279	46 211	11.7 9.6	11 18	66 245	5.7
Muskoka	22759	416	228		18.2	278	153	125	13	14	3	5	137	106	12.2	6	177	7.7
Nipissing Norfolk	29364	720	344	376	24 . 5	238	143	95	31	26	12	5	100	64	8.1	26	196	6.6
Northumberland	27900 28448	346 356	169 197	177 159	12.4 12.5	264 262	142	122	8	10	2	1 2	134 124	117 118	9.4	12	217 154	7.7
Ontario	34620	344	176	168	9.9	270	127	143	7	4 7	2	1	118	138	7.7	12	162	4.6
Oxford	35293 27983	528 611	268 329		14 9 21.8	336	169	167	13		2	6	154	154		17	284	8.0
Parry Sound	24956	152	75	77	6.0	238 170	148 93	90 77	15	14	3	1	130 84	75 72	8.5 6.8	23	184 139	6.5
Perth	38806	396	196	200	10.2	306	145	161	9	4	1	1	135	156	7.8	9	211	5.4
Prescott	23611 20810	215 484	103 258	112	9.1	183 174	101	82 87	7 30	5 16	2	1	92 56	76 68		5	95 144	6.9
Prescott Prince Edward	17909	292	138		16.3	233	114	119	8	7	2	3 2 5	104		13.0	3	92	5.1
Rainy River	13143	294	145	149	22.3	108	64	44	10	15	6	5	48	24	8.2	8	40	3.0
Renfrew	40923 20147	607 408	314 206	293 202	14.8 20.2	263 139	145 76	118 63	24 18	13 14	5	4	116 57	101 48	6.4	18 11	179 110	4.3
Simcoe	61814	677	327	350	10.9	553	308	245	19	16	8	8	281	221 71	8.9	24	302	4.8
Stormont	22068 36964		217	194	18.6	176	93	83	14	9	1	3	78	71	7.9	16	81	3.6
Sudbury Thunder Bay	24390		549 136		29.5 10.8	344 119	224 79	120 40	49	40 7	8	8	167 70	72 30		23	259 93	7.0
Timiskaming	18336	687	351	336	37.4	243	142	101	22	14	4	4	116	83	13.2	18	245	13.3
Victoria Waterloo	20689 35265	180 392	209	93	8.7	171	90 150	81	5	2	2	4	83	75	8.2	4	103	4.9 5.6
Welland	42511		185	175		267 229	122	117 107	10	6	4	2	136 111	113	7.5	12 8	198 218	5.6
Wellington	41340	720	359	361	17.4	479	247	232	17	12	3	4	227	216	11.5	22	219	5.2
Wentworth York	51421		121	100		511	286	225	9	4	2		275	221		2	203	3.9
AVARIATION	245868	2303	1275	1230	8.3	1292	672	620	38	24	6	6	628	590	5.2	89	930	3.7
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Table 3—General Summary of Births, Deaths and Marriages in the Province of Ontario for Cities, Towns, and Villages of 10,000 Population and Over, 1938

		ВІ	R <b>T</b> H	ıs	00 of			I	DEA	THS	8				00 of			00 od
CITIES, TOWNS, AND VILLAGES	Esti- mated Popula- tion		lusive Ilbirtl		tatio per 1,000	A	ll age	s	Une 1 y	der ear		-4 ars		ears over	tatio per 1,000 population	Stillbirths	Marriages	Ratio per 1,000 population
		Total	М	F	Ratio	Total	М	F	M	F	М	F	М	F	Ratio	Still	Маг	Ratio
Total	1,661,188	35,194	18,121	17,073	21.1	18,783	9,994	8,789	1,006	744	193	187	8,795	7,858	11.3	1,143	17,733	10.6
Belleville Brantford Chatham Cornwall Forest Hill Fort William Galt Guelph Hamilton Kingston Kirkland Lake Kitchener London Niagara Falls North Bay Oshawa Owen Sound Pembroke Peterborough Port Arthur St. Catharines St. Thomas Sault Ste. Marie Stratford Sudbury Timmins Toronto Welland Windsor Woodstock	14764 31549 16581 13377 11117 25050 14219 21714 155276 24331 21959 33309 76138 18928 15408 24756 144202 13437 10412 24146 21449 27647 16392 18269 23853 17159 236463 25019	493 584 764 612 43 331 2989 755 724 796 1587 421 416 364 410 440 441 441 450 649 649 649 649 649 649 649 649 649 649	186 1147	280 3555 293 1 1259 1644 147 1479 349 364 381 766 203 207 256 322 126 314 197 243 298 203 361 426 5054 1073	22 5 15 2 31 0 32 9 23 9 20 8 22 2 27 0 23 5 21 7 27 1 24 9 30 2 23 1 24 0 26 7 26 2 24 0 34 9 16 2 34 9	248, 416, 333, 3205, 344, 213, 189, 1106, 233, 170, 202, 181, 365, 224, 241, 240, 237, 469, 476, 476, 476, 476, 476, 476, 476, 476	135 210 196 112 15 123 74 130 797 265 82 217 121 98 112 873 126 94 185 150 94 183 105 123 144 170 101 3728 86 454 4112	113 206 137 93 19 90 741 1257 54 162 257 854 76 87 180 103 114 104 105 115 90 90 90 90 90 90 90 90 90 90 90 90 90	12 14 41 18 5 10 64 26 63 11 42 15 22 21 11 10 9 15 14 12 12 11 12 12 13 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	12 19 18 11 7 9 2 48 15 30 3 13 7 8 11 17 18 8 10 12 26 28 21 29 10 10 10 10 10 10 10 10 10 10 10 10 10	4 5 3 6  3 2 1 1 1 1 1 2 2 3 3 1 3 5 4 4 2 2 4 4 5 5 2 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 5 3 4 1 1 1 1 1 1 2 5 6 6 2 2 10 1 5 3 3 1 2 4 4 3 2 4 4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1199 1911 1522 888 155 1066 677 1199 7177 2288 644 183 512 102 799 888 745 1155 1666 1266 1266 1266 3400 777 739 1144 663 3400 777 777 1149 1149 1149 1149 1149 1149 1	182 116 78 19 82 105 87 681 2288 30 145 499 108 54 77 754 66 67 77 754 681 108 108 108 108 108 108 108 108 108 1	9 9 9 21 4 6 1 11 3 14 .5 12 .3 11 .0 8 .0 11 .9 15 .0 17 .3 15 .1 11 .7 12 .4 13 .4 13 .1 9 .9 .9 15 .0 .3 7 .1 10 .7 13 .9 8 .4	22 20 22 58 14 15 23 102 18 12 23 18 11 31 8 36 32 346 13	333 220 2388 6 300 1244 206 1471 312 810 197 179 198 123 202 203 225 287 160 203 285 176 453 353 7197 197 197 197 197 197 197 197 197 19	8.9 9.4 12.6 12.3 9.3 10.6 10.4 11.6 7.9 8.3 10.3 6.9 12.5 10.3 9.7 11.1 11.9 11.1

Table 4—General Summary of Births, Deaths and Marriages for Towns and Villages of 5,000 to 10,000 Population, in the Province of Ontario, 1938

			RTH		,000 of			Ι	ÞΕΑ	TH	S				o 000,			Jo 00
TOWNS AND VILLAGES 5,000 to 10,000 population	Esti- mated Popula- tion		usive lbirth		per 1 lation	A	ll age	s		der		-4 ars	5 ye		per 1 ation	Stillbirths	Marriages	tatio per 1,000 population
		Total	М	F	Ratio	Total	M	F	М	F	М	F	М	F	Ratio	Stillb	Мап	Ratio
Total	192,238	4,542	2,379	2,163	23.6	2,393	1,232	1,161	115	95	26	24	1,091	1,042	12.4	150	1,911	6.9
Barrie Brampton Brockville Cobourg Collingwood Eastview Fort Erie Fort Frances Hawkesbury Ingersoll Kenora Leamington Lindsay Midland Mimico New Toronto Orillia Port Colborne Preston Renfrew Riverside Simcoe Smiths Falls Swansea Thorold Trenton Waterloo Weston Whitby	8310 5638 9983 5877 5322 7256 5898 5885 6053 5186 5630 7012 8664 8921 6503 6422 5376 6696 6696 6843 8537 7626 6684 8537 7509 8644	232 344 147 176 157 101 160 213 139 285 193 242 191 67 305 83 66 151	107 112 189 75 97 76 53 89 113 68 147 112 134 41 101 55 41 115 48 41 71 71 79 97 92 97 64 44 41 101	1555 722 799 811 488 711 1000 711 1388 81 1088 91 566 266 1477 355 800 1065 72 55 355 755 22	41 1 34 4 25 0 33 0 21 6 17 1 27 1 35 1 26 7 33 6 34 2 33 1 28 7 15 8 7 7 7 34 1 12 7 7 10 2 28 0 6 2 5 6 8 22 1 22 1 22 0	126 79 197 95 112 31 62 50 68 87 89 80 150 95 25 115 166 27 72 20 20 122 21 14 30 47 61 61 61 62 61 62 61 62 61 62 61 62 61 61 62 62 63 64 64 64 64 64 64 64 64 64 64 64 64 64	68 43 104 49 62 16 33 30 33 34 45 46 12 20 20 15 34 11 12 23 18 30 17 77	58 36 93 46 50 15 29 20 35 43 37 85 49 76 62 53 13 13 13 13 13 13 15 15 15 15 15 15 15 15 15 15	1	4 3 7 2 2 2 5 5 2 3 9 1 4 2 2 7 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 5 5 1 1 1 3 3 3 3 2 1 1 1 2 1 1 1 1 2 2 1 1	1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	666 37 87 44 456 111 322 25 224 40 45 37 54 37 56 11 56 15 30 11 15 11 17 77	33 86 43 47 10 27 16 26 41 12 58 86 67 5 20 33 6 49 48 81 24 22 29 13	15. 11 14. 0 19. 7 16. 1 21. 0 4. 2 10. 5 8. 4 11. 2 20. 5 14. 2 3. 5 5. 6 13. 3 20. 1 14. 9 4. 9 7. 1 6. 8 14. 9 7. 1 6. 8 7. 1 6. 7 6. 8 7. 1 6. 8 7. 1 7. 1	6 5 13 6 9 7 7 2 4 4 7 7 5 9 6 9 9 7 7 5 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	45 119 58 55 56 90 45 35 45 90 61 61 64 59 55 55 23 71 64 47 64 89 77	7.8 12.9 9.8 10.3 7.7 15.2 7.6 5.7 8.6 10.6

Table 5—General Summary of Births, Deaths and Marriages in the Province of Ontario for Towns and Villages of 1,000 Population and under 5,000—1938

	Feet		RTHS					EA					_	e I	1	68	5
Fowns and Villages 1,000 and over	Esti- mated	(excl	usive	of oo					der	1-	4	1 5 y	ears	Ratio pe	till- births	Marriages	Ratio per
and under 5,000	popula- tion	Total	births)	⊕		ll ages			ear	yea		and	over	Zati 1,0	Still-	farı	ati
3,000	Cion	lotai	M	F   ×	Total	M	F	M	F	M	F	M	ı F	114	101	1 2	122
otal	290031			406 23.8		1926		172	145	30	29		1622	12.8	218	3603	
cton	1869 1971	28 55	30	13 14 .9 25 27 .9	21 21	8 12	13	· · · i				10		11.2 10 6		12 31	
lliston	1405	97	50	47 69.0	50	24	26	3	1	1		20		35.5		17	12
lmonte	2259	116	67	49 51 .3	32	18	14	1	1			17	13	14.1	3	31	
mherstburg	2755 3995	62	28	22 11 9 34 15 .5	20	8 14	12	2	2 2			6 14		7.2 6.0		39	
rnprior	1017	19	9	10 18 6	24 17	10	7	1				9	7	16.7	1	21	
urora	2770	1	1.	0.3	30	20	10					20	10	10.8		24	
ylmer arry's Bay	2156 1101	29 34	19 15	10 13 .4 19 30 .8	36	21	15 1	· · · i				21		16.6 1.8		10	
Beamsville	1161	23	15	8 19.8	15	6	9			1		5		12.9			
Slenheim	1758	25	15	10 14.2	22	10	12					10	12	12.5		22	12
Blind River Bowmanville	2375 38 <b>5</b> 0	103	59 69	44 43 .3 64 34 .5	36 74	25 41	11 33	7	5 4	1	· · · i	15 34		15.1 19.2		21 42	
Bracebridge	2575	96	55	41 37 . 2	56	29	27	4	2		1	24		21.7			
Brighton	1454	12	6	6 8.2	17	10	7	1				9	6	11.6		16	11
Burlington	3679 142 <b>5</b>	27	14	13 7.3 10 9.8	21	9	12		1			9		5.7			
Caledonia Campbellford	2876	74	43	31 25 7	11 41	11	30	2	3			2 9	27	14.2	4		
apreol	1670	23	7	16 13 7	10	7	3	1				6	3	5.9		16	9
Cardinal Carleton Place	1556 4278		18 23	20 24 .4 17 9 .3	24	12	12		1			12		15.4	1	35	
Chesley	1815	39	22	17 21.4	36 19	17	19 12		2	1		17		8.4		19	
hesterville	1083	21	10	11 19 .3	15	9	6	1				8	6	13.8	1	11	10
Chippawa Clinton	1140 1888		35	$\begin{array}{c c} 3 & 6.1 \\ 41 & 40.2 \end{array}$	8 37	5 15	3			1		15		7.0		14 32	
Cobalt	2872		33	46 27 .5	29	17	22 12	3	1	1	· · · · · · · · · · · · · · · · · · ·	13		10.0		42	
Cochrane	2907	122	60	62 41.9	55	30	25	2	7	i	1	27		18-9	2	47	16
Coniston	2118 3855	49	20 26	29 23 . 1	4	3	1	2	1			1		1.8		19	
Copper Cliff Delhi	2083		8	15 10.6 15 11.0	30 27	24 14	6 13		1		1	13	12	7.7	111	87 55	
Deseronto	1209	10	4	6 8.2	14	- 8	6		1			8	5	11.5		11	9
Oresden	1574		18	14 20.3	29	13	16					12		18.4		22	
Oryden Oundas	1556 4770		72	64 87 .3 14 5 .0	41 61	27 32	14 29				2	31		26 3 12.7		41 49	
Ounnville	4041		48	54 25 . 2	43	23	20		1			22				46	
Ourham	1864		28	25 28 . 4	37	21	16	1		1		19		19.8		19	
Eganville Elmira	1005		10	9 18.9	8 19	12	4 7	i		1		11		7.9		12 21	
Elora	1187	7	4	3 5.8	11	5	6					5				17	
Essex	1854	27	13	14 14 .5	17	10	7	1				9				25	
Exeter Pergus	1649 2732		19 31	20 23 .6 40 25 .9	15 46	19	11 27	3	3	1		16				14 25	
orest	1520	17	7	10 11.1	18	8	10					8	10	11.8	3 1	23	
ananoque	3549		49	44 26 . 2	39	17	22				1	1 17	21	10.9		48	
GeorgetownGoderich	2362 4407		51	7 5 9 48 22 4	20 79	11 46	33	1 2			· · · i	10		17.5		16	
Gravehurst	2135	51	23	28 23 .8	18	7	11	1			1					35	
Grimsby	1981		32	21 26 . 7	24	12	12	2	1			10		12.1		39	
Hagersville Haileybury	1355 2752		19 28	14 24 .3 33 22 .1	16 68	35	12 33	3	6			32				22 43	
Hanover	3215	66	32	34 20.5	36		13					21		11.		37	
Harriston	1269		11	9 15 .7	21	11	10		1			11				16	
Havelock Hespeler	1147 2828		22	14 31.3 10 6.7	18 19	8	9 11		2			8				17 60	
Humberstone	2738	42	22	20 15 3	14	8	6					8				22	
Huntsville	2727 1078		45	40 31.1	26	16	10		1			16				47	
roquoisroquois Falls	1391		34	11 18 .5 33 48 .1	8 25	21	5		1		1	19	4			13	
Capuskasing	3522	145	69	76 41 1	25		13				4		3			33	3   9
Ceewatin	1460		3	1 2.7	9	4	5	1				4				10	
Kemptville Kincardine	1218 2464		4 5	6 8.2 2.8	15	5 6	10	1	1 2			5				37	
Kingsville	2359	27	14	13 11 .4			7	1					2 7	8.	1	40	0 10
Lakefield	1308		2	2 3.0	17		6		1					12.9			5 1
Listowell Little Current	2773 1049			44 30.6 10 18.1	39 15		25		1 2		2	11	24	14.0		24	1 2
Long Branch	4140		14	24 9 1			7		1	1	1				3 2	36	
Lucknow	1034		7	24 9 1 1 7.7	5	4						4	l i	4.8	3	11	1   10
Madoc Markham	1108			6 14 . 4 14 20 . 8		10	7		1			3		15.	3.1	19	1 1
Mattawa	2126	5 70	29	41 32.9			15		3	3	1			17.8			2 10
Meaford	2811	85	45	40 30 . 6	36	19	1.7	1	1			18	3 10	12.8	8 2	22	2 :
Merritton Milton	2656 1848			5 6.0 12 12.9			8		1			. 5		4.5	8	18	3 6
Milverton	1010			6 10.8									7	1 11 .	4 1 8 1		2 1
Mitchell	1615	5 18	8	10 11.1	29	13	16	2				1 1	1 10	5 17 .	9	22	2 1.
Morrisburg	1853			7 11.8	15	5	10						5 10	8.0	0	19	2 1
Mount Forest Napanee				19 26 .6 21 12 .0						1 1	1	4.5		3 19 2 11 .		51	7 1
				7 9.6	12			. 1					8	8	2	1.3	3
New Hamburg	1 450																
New Liskeard	298	7 66	45	21 22.0	15	7	8	3 1	<u> </u>				5	8.3	0 1	53	3 1
New Hamburg New Liskeard Newmarket Niagara	298 356	7 66 5 219	45 120		15	28	43	3 3	1			2.	5 4.	3 19 6 3 16	9 8	53	3   1 2   1

Table 5—General Summary of Births, Deaths and Marriages in the Province of Ontario for Towns and Villages of 1,000 Population and under 5,000, 1938—Continued

					La ,								• .	1	00 1	l-s
Towns	Esti-		RTHS		1,000			L	EATHS			2	1,000	ill- births	Marriage	Ratio per 1,000
1,000 and over	mated	(Excl	usive of	of	으취		11	1	Under	1-4	5 yea	rs c	2	, "	ia	ಂತ
and under	popula-	still	births)	1 13	= = =	A	ll age	s	1 year	years	and ov	er 🛱	: :: I		5	. <del> </del>
5,000	tion	Total	MI	F	2	Total	M 1	F	MIF	MIF	MI	F 2		Still- bir	1a	2
		Totali	747	A. 1.		Total	IVI	T. 1	TAT 1 T.	141 / 1.	TAT .	I. (-			4	
Oakville	3864	38	19	19	9.8	33	21	12	1		20	12	8.5	2	5.2	13.4
Orangeville	2660	115	62	53 4		81	41	40			20		30.4		37	13.4
Palmerston	1406	44	19	25 3		30	17	13			4.00		21.3		11	7.8
Paris	4369	88	45	43 2		55	24	31	2	1	22		$\frac{1.5}{2.5}$		39	8.9
Parry Sound	3599	218		102 6		67	36	31	3 3	i			12.5	11	60	
Penetanguishene	4689	145	64	81 3		69	40	29			0 4	25 1		6	37	7.8
Perth	4182	151	61	90 3		76	45	31		7 7 7 7 7	201		18.1			13.8
Petrolia	2747	108	60	48 3		60	26	34			0.5		lo. 1 29.8			11.6
Picton	3429	197		104 5		93	42	51			2.1		27.1			11.0
Point Edward	1177	10	4		8.4	8	5	31				3	6.7			13.5
Port Credit	1901	13	5		6.8	11		7			2	7	5.7			17.3
Port Dalhousie	1590	6	6.		3.7	10	4 7	3				3				
Port Dover	1705	35	15	20 2		18	8	10					6.2		11	6.9
Port Elgin	1321	28	16	12 2		20	11	9	1 4		10		15.1		22 13	9.8
Port Hope	4724	134	67	67 2		68	42	26			20	111				
Port Perry	1118	37	15	22 3		20	9				0		4.3		42	
Prescott	2925	18	12		6.1	26	11	11 15		1	10		17.8 8.8			6.2
Rainy River	1326	68	32	36 5		18	11	7	2 2						51	
Richmond Hill	1317	22	8	14 1		16	9.	7			1 5		l3.5 l2.1			14.3
Ridgetown	1984	20	12		0.0	12	5	7			5	7				
Rockcliffe Park	1276	1 1	12		0.7	10	3	7			3	7	6.0 7.8			14.1
Rockland	2042	45	23	22 2		18	10	8				7	8.8		20	
St. Mary's	4017	22	10		5.4	45	17	28		1	4.7		ه.ه 11.2		33	
Seaforth	1705	97	50	47 5		36	23	13					21.1		17	9.9
Shelburne	1043	40	24	16 3		20	7	13			7		19.1 19.1			12.4
Sioux Lookout	1901	63	34	29 3		21	10	11					19.1		2.4	17.8
Southampton	1441	21	9	12 1		19	10	9			4.0		13.1		94	
Stayner	1043	16	10		5.3	15	7	8		1	7		14.3			23.9
Stouffville	1160	49	27	22 4		36	18	18			4.7		31.0			18.9
Strathroy	2917	106	54	52 3		64	35	29	0	1 0 1			21.9			10.9
Sturgeon Falls	4783	198		105 4		56	29	27		4	10		11.7	10	47	
Tavistock	1063	6	4		5.6	14	6	8		1 1			13.1		7	
Tecumseh	2245	48	24	24 2		8	4	4		1	3		3.5		30	
Thessalon	1719	71	32	39 4		27	16	11		i i			15.7			10.4
Tilbury	1980	37	20	17 1		8	4	4			1 2		4.0			16.1
Tillsonburg	3945	245		127 6		89	49	40					22.5			24.0
Tweed	1228	15	7		2.2	16	8	- 8					13.0			10.5
Uxbridge	1509	25	17		6.5	14	4	10			3	10	9.2			10.6
Vankleek Hill	1474	45	28	17 3		27	10	17					18.3			12.8
Victoria Harbour	1023	17	7	10 1		5	4	1				1	4.8		8	
Walkerton	2442	83	39	44 3		57	41	16			11		23.3		29	
Wallaceburg	4715	57	32	25 1		37	23	14			0.0		7.8			10.8
Waterford	1216	8	4		5.7	12	5	7	1 1			7	9.8			13.1
Wiarton	1723	51	21	30 2		27	13	14	1 1		1 40		ء. و 15 . 6			18.5
Winchester	1040	12	5		1.5	21	13	8		1	4.2		20.1			18.2
Wingham	2123	7.5	47	28.3		30	14	16			1.0		14.1			10.8
		"		-0	0		* *	10	-   -	1	12	- 4			20	1.0.0

Table 6-Births (exclusive of Stillbirths) by Months, Classified as Rural and Urban, in the Province of Ontario, 1938

							MON	THS					
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Ontario	65564	5225	5010	5761	5554	5802	5569	5823	5539	5686	5348	5082	5165
RuralUrban	18746 46818	1538 3687	1441 3569	1660 4101	1630 3924	1630 4172	1631 3938	1659 4164	1544 3995	1647 4039	1478 3870	1404 3678	1484 3681
Addington	116 116 1067	8 8 89	14 14 80	8 8 77	10 10 109	10 10 103	5 5 97	11 11 94	13 13 90	7 7 97	12 12 80	5 5 78	13 13 73
Rural. Urban. Sault Ste. Marie, c, Blind River, t	268 799 625 103	15 74 56 13	25 55 47 5	20 57 46 7	23 86 66 12	36 67 50 11	27 70 44 13	20 74 58 8	19 71 63 3	22 75 52 14	24 56 46 5	16 62 53 6	21 52 44 6
Thessalon, t	71 904	5 68	3 79	4 80	8 83	6 70	13 74	8 77	5 80	73	5 68	3 74	2 78
Rural Urban Brantford, c Paris, t	232 672 584 88	23 45 38 7	14 65 61 4	24 56 49 7	23 60 55 5	15 55 49	18 56 46 10	23 54 44 10	18 62 52 10	54 43	17 51 46 5	20 54 48 6	18 60 53 7
Bruce	742 505 237	63 50 13	48 31 17	63 33 30	67 44 23	75 56 19	69 46 23	56 37 19	56 37 19	67 45	62 37 25	57 42 15	59 47 12
Chesley, t Kincardine, t Southampton, t Walkerton, t	39 7 21 83	1 1 1 2	1 1 10	4	3 1 8	6	3 7	1 1 8	1 1 7	4	1 2 3 9	3 1	2 2 7
Wiarton, t Lucknow, vl Port Elgin, vl	51 8 28	1 3 1	2	6 2 5	5 1 5	7 2	6	2	4	3	10		1
Carleton	3585 287 3298 3140 157		283 27 256 244 12	300 300 286	22 268	313 24 289 273 11	28 271 260	300 14 286 268 18	320 25 295 283 12	25 283 269	272 25 247 234 12	282 22 260 248 12	289 20 269 257 12
Eastview, t. Rockcliffe Park, vl Cochrane Rural	2245 1038	179	182	212		199	180	200		174	150 69	192	187
Urban Cochrane, t Iroquois Falls, t	1207 122 67	89 7 5	88	113 18 10	112 11 6	105 10 4	99 14 5	109 16 7	88 7 6	96 7 4	81 4 4	118 10 11	109 9 4
Kapuskasing, t Timmins, t Dufferin Rural	145 873 253 98	61 15 10	65 18	79 22	77 26	70 29	68 20	7 79 30 9	23	78 20	11 62 20 6	13 84 15 7	11 85 15 10
Urban Orangeville, t Shelburne, vl	155 115 40	4	7 2	9	14	17	12 8 4	21 15 6	17 12 5	12 10 2	14 10 4	8 6 2	5 3 2
Dundas	289 214 75	14 5	20	21	19	23	11 7	27 18 9	10	24 9	19 14 5	4	23 18 5
Chesterville, vl Iroquois, vl Morrisburg, vl Winchester, vl	21 20 22 12	1	1	2	2		4	2 2 4 1	4 2	1 3	1 2 1	1 1 2	2 2 1
Durham Rural Urban	371 104 267	27 14 13	27	25	15 25	33 8 25	22 2 20	37 11 26	40 16 24	30 7 23	28 9 19	5 22	23 5 18
Bowmanville, t	133 134 703	10 41	11 50	12	10 50	11 55	63	12 14 78	12 69	17 61	11 8 55	61	10 8 54
Rural Urban St. Thomas, c Aylmer, t	264 439 410 29	29 26	28 28	43	25 23	29 26	45	29 49 43 6	37	39	19 36 35	44	19 35 33 2
RuralUrban.	3210 630 2580	282 54	265 4-	287	246	241	272	277	265 50	279 53	281 46 235	259 51	256 49 207
Windsor, c Amherstburg, t Essex, t	27	5 2		3 2	· · · · · i	1 2	2 4	. 3	4	4 3	1	2	2
Kingsville, t Leamington, t. Riverside, t. Tecumseh, t	193	11 3	20	14	17	1-	20	18	17	1 3	1 18 2 4	2	
FrontenacRuralUrhan	1000 238 762	77 3 15 2 62	8. 2. 6.	98 3 19 2 79	82 28 54	97	7 77 5 29 1 48	88 14 3 74	81 . 18	84 17 67	71 16 55	86 19 67	74 14 60
Kingston, c	298	3 17	2	2	30	19	27	36	20	28	23	25	2.3
Rural Urban Alexandria, t	. 53	5	. (	5 4		1	7 20 2 7	33	3 19	7 11 7 11	3	2	

Table 6—Births (exclusive of Stillbirths) by Months, Classified as Rural and Urban, in the Province of Ontario, 1938—Continued

							MON	THS					
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Grenville Rural Urban Prescott, t. Cardinal, vl Kemptville, vl Grey Rural Urban Owen Sound, c. Durham, t. Hanover, t. Meaford, t. Haldimand Rural Urban Dunnville, t. Caledonia, vl Hagersville, vl Haliburton Rural Halton Rural Urban Burlington, t. Georgetown, t. Milton, t. Oakville, t. Acton, vl Hastings Rural Urban Belleville, c. Deseronto, t. Trenton, t. Madoc, vl Huron Rural Urban Clinton, t. Goderich, t. Seaforth, t. Wingham, t. Exeter, vl Kenora, including Patricia Rural Urban Dryden, t. Kewatin, t. Kenora, t. Sioux Lookout, t. Kent Rural Urban Chatham, c. Blenheim, t. Dryden, t. Keent Rural Urban Chatham, c. Blenheim, t. Dryden, t. Ridgetown, t. Tilbury, t. Ridgetown, t. Tilbury, t. Rural Urban Rural Urban Rural Urban Rural Urban Chatham, c. Blenheim, t. Dresden, t. Ridgetown, t. Tilbury, t. Ridgetown, t. Tilbury, t. Sarnia, c. Forest, t. Petrolia, t. Pet	185 119 666 188 388 100 9822 4144 568 366 855 297 1488 149 102 144 248 1312 627 77 144 248 388 3722 685 493 100 151 166 155 758 372 386 766 99 97 755 39 621 133 488 136 42 285 333 1339 404 935 764 44 935 764 64 766 1166 160 77 188 188 189 199 197 199 191 191 191 191 191 191 19	1 1 63 36 27 18 4 4 1 17 9 8	87 35 52 38 6 6 35 20 111	9 3 3 1 1 2 2	18 18 10 8 8 1 1 6 6 1 1 955 355 600 447 7 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	155 7 7 7 8 8 4 4 4 4 4 4 1 1 1 2 1 1 2 1 2 1 2 1 2 1	166 111 55 144 1 188 388 388 388 135 122 11 12 188 188 299 355 112 11 11 103 344 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	159 9 6 6 2 2 1 1 3 3 8 5 6 3 6 6 9 9 2 9 9 4 4 8 8 8 8 3 7 7 1 5 5 5 1 1 2 2 2 5 5 2 2 1 1 1 1 1 1 2 2 2 5 5 2 2 1 1 1 1	7	9 2 1 1 1 84 28 566 377 3 11 5 34 17 17 10 4 3 3 12	188 122 66 62 23 3 3 1 80 80 66 67 7 100 100 17 7 7 100 100 17 7 7 100 100	100 55 5 2 2 2 2 1 1 899 366 66 66 122 133 3 67 75 5 40 100 266 66 33 3 3 66 66 330 399 35 5 14 88 8 5 66 66 300 300 399 35 5 14 88 8 5 66 66 300 300 399 300 300 300 300 300 300 300	255 166 99 11 77 187 355 366 6 55 5 5 266 55 5 5 266 133 133 99 1 33 77 77 188 33 37 77 78 1810 43 36 11 10 43 36 11 10 43 36 11 10 10 10 10 10 10 10 10 10 10 10 10

Table 6—Births (exclusive of Stillbirths) by Months, Classified as Rural and Urban, in the Province of Ontario, 1938—Continued

							MON	THS	_				
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Lincoln	947 175 772 641 53	84 16 68 51	10 66 60 3	17 66 56 2	3	79 18 61 53 2	80 11 69 62 5	88 13 75 58 9	77 19 58 46 4	56 45 5	81 18 63 50 5	60 52 3	81 14 67 53 8
Merritton, t Niagara, t Beamsville, vl. Port Dalhouse, vl.	16 33 23 6	5	1	3 4 1		5	1 i	5 2 1	1 3 4	3 2 1	3 2 3		4 1 1
Manitoulin Rural Urban Little Current, t	276 257 19 19	25 24 1 1	12	26	25	17 16 1	20 16 4 4	26 23 3 3	27 27	34 32 2 2	26 26	16 14 2 2	17 16 1
Middlesex. Rural. Urban. London, c. Parkhill, t	2053 353 1700 1587	191 34 157 150	121 116	36 123	180 34 146 133	192 22 170 160	170 35 135 124 1	182 41 141 137	168 29 139 123	178 25 153 142	150 25 125 120	167 24 143 131	172 25 147 136
Strathroy, t. Muskoka . Rural Urban Bracebridge, t. Gravenhurst, t. Huntsville, t.	106 416 184 232 96 51	35 21 14 4 2	24 9 15 7 2	34 16 18 5 7	23 30 17 4	7 6	10 29 17 12 7 2	4 30 10 20 9 5	15 18 4 6	8 25 9 5	4 36 12 24 14 5	12 33 17 16 5 6	10 40 21 19 8 1
Nipissing	85 1136 430 706 416 22 70	88 39 49 25 3	80 31 49 34	101 35 66 36	99 44 55 34 2	106 38 68 33 5	3 91 41 50 31 3	60 101 35 66 40	100 24 76	90 41 49 37 1	5 97 32 65 39 1 4	5 82 30 52 35	10 101 40 61 30 3
Sturgeon Falls, t Norfolk Rural Urban Simcoe, t Delhi, vl Port Dover, vl	198 690 280 410 344 23 35	15 55 24 31 27	11 46 17 29 24	21 66 32 34 28	15 55 21 34 29 1	19 65 26 39 33 3	15 54 26 28 23 2	23 54 23 31 28 2	21 54 22 32 25 2	9 61 24 37 31 2	21 54 20 34 28 1	9 57	19 69 27 42 35 3
Waterford, vl	503 259 244 74 147	42 22 20 3 13	38 18 20 7	3 46 24 22 4 17	1 52 24 28 7 18	54 30 24 10	1 38 21 17	36 14 22 8 12	42	1 51 30 21 10	1 27 16 11 2 7 2	1 46 26 20 7 10 2	31 12 19 5 11
Colborne, vl. Ontario Rural Urban Oshawa, c Uxbridge, t Whithy, t	11 944 282 662 582 25	2 62 18 44 39 2	82 16 66 59	93 20 73 67	2 81 21 60 55 3	2 84 22 62 53	91 30 61 53 3	2 83 25 58 50 4	78 26 52 46 1 4	31 44 38 1	90 30 60 56 1	1 55 15 40 33 2	70 28 42 33 2
Port Perry, vl. Oxford Rural Urban Woodstock, c Ingersoll, t. Tillsonburg, t.	37 950 221 729 283 139 245	1 73 17 56 24 8 18	2 53 11 42 21 8	4 72 19 53 20 9	2 67 22 45 16 14	3 81 24 57 17 13 23	4 68 18 50 20 11 15	4 88 19 69 21 15 24	1 91 17 74 29 15 26	89 18 71 30 6 31	102 20 82 35 21 23 3	4 79 14 65 24 11 23 6	6 87 22 65 26 8 23
Norwich, vl. Tavistock, vl. Parry Sound. Rural. Urban Parry Sound, t.	611 393 218 218 384	1 43 30 13 13 36	35 23 12 12	1 45 26 19 19	49 33 16 16	1 48 32	52 35 17 17 17 33	58 34 24 24 33	66 45 21	51 29 22 22 22 37	54 34 20 20 34	1 55 35 20 20 38	55 37 18 18 23
Rural. Urban. Brampton, t. Port Credit, vl. Perth. Rural.	139 245 232 13 821 260	14 22 22  76 29	50 25 23 2 50 14	8 15 14 1 66	9 18 18	12 21 21 	13 20 20 20  77 25	12 21 20 1 77 24	13 24	15 22 20 2 70 20	10 24 24 67 21	19 17 2 64 17	9 14 12 2 64 32
Urban. Stratford, c. Listowell, t. Mitchell, t. St. Mary's, t	561 425 85 18 22	47 36 4 1 5	36 26 4 3 2	45 31 5 4	52 35 17	53 39 11 1 2	52 42 7	53 45 6	48 34 8 2 2	50 37 9 2 1	46 34 5 3	47 39 6 1	32 27 3 1
Milverton, vl Peterborough Rural Urban Peterhorough, c. Havelock, vl Lakefield, vl	915 175 740 700 36	77 13 64 58 6	67 19 48 46 1	81 17 64 62 2	82 19 63 60 3	86 12 74 70 4	1 82 16 66 63 3	76 17 59 58 1	78 18 60 56 4	1 60 10 50 46 2 2	76 12 64 60 3	67 11 56 51 5	1 83 11 72 70 2

Table 6—Births (exclusive of Stillbirths) by Months, Classified as Rural and Urban, in the Province of Ontario, 1938—Continued

							MON	NTHS					
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Kural	411 286 213 454 28 292 95 197 454 426 6228 160 688 492 260 151 344 19 408 363 45 1578 402 1176 97 1023 411 612 612 2418 980 1438 1325 2418 980 1411 383 179 98 61 66 644 1182 242 1180 242 1180 242 1180 242 1180 242 1180 242 1180 242 1180 2444 1182 1180 1184 1188	202 21 7 7 14 14 14 17 23 24 16 6 8 91 15 10 1 1 25 10 11 3 3 4 4 10 6 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	27 121 32 72 3 1 6 5	355 200 44 68 188 188 58 34 4211 33 366 4415 5 1 1 334 4 4 132 21 137 95 8 22 13 11 25 15 15 17 2 4 8 114 25 15 15 17 2 1 2 4 8 114 25 15 15 17 2 1 2 1 3 3 4 8 9 3 7 7 1 12 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	38 15 13 2 2 3 4 4 4 4 4 4 6 6 6 1 1 2 2 6 1 1 1 2 2 3 1 1 3 2 1 2 2 3 1 1 3 2 2 1 1 1 1	51   300   21   5   4   4   14   14   14   14   14	36 30 33 32 31 111 111 477 108 107 108 107 108 107 108 107 108 107 108 107 108 109 109 109 109 109 109 109 109	22 14 6 2 25 12 13 13 36 17 19 11 18 8 87 7 10 28 10 28 10 28 11 10 28 11 1		76 43 33 35 5 28 77 211 422 19 23 314 9 86 43 43 43 43 43 88 229 9 4 8 26 22 1477 366 111 122 5 18 12 24 8 1 20 39 51 51 116 2 25 121 116 2 2 121 116 2 2 121 116 2 2 121 116 2 2 121 116 2 2 121 116 121 116 116	25 300 21 6 3 19 5 54 4 14 14 11 11 10 10 6 6 4 4 6 4 4 6 4 6 6 4 4 6 6 6 4 1 1 1 1	484 277 211 19 1 1 20 6 6 14 4 12 5 2 11 1 11 1 1 4 1 2 2 2 6 6 1 1 1 1 3 4 2 9 5 5 1 1 0 2 7 1 1 1 3 4 2 9 5 5 5 1 1 0 2 7 1 1 1 3 4 2 9 5 5 5 1 1 0 2 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	44 30 144 77 4 3 31 1 7 14 14 18 8 4 11 1 7 7 3 28 8 4 5 5 5 18 8 9 2 6 8 4 13 13 10 16 9 2 1 1 2 2 5 5 7 7 2 9 8 9 11 5 1 2 2 4 8 9 8 1 10 3 3 4 5 5 1 2 2 4 8 9 8 1 15 1 2 2 4 8 9 8 1 15 1 2 2 4 8 9 8 1 1 5 1 2 2 4 8 9 8 1 1 5 1 2 2 4 8 9 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Table 6—Births (exclusive of Stillbirths) by Months, Classified as Rural and Urban, in the Province of Ontario, 1938—Continued

							MON	THS					
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Wellington Rural Urban Guelph, c Harriston, t. Mount Forest, t. Palmerston, t. Arthur, vl. Elora, vl. Fergus, vl. Wentworth Rural Urban. Hamilton, c. Dundas, t. York. Rural Urban. Company of the month	1051 510 541 331 20 49 44 19 7 71 3210 197 3013 2989 24 13325 2152 11173 10514 1 38 111 219 67 110 44 44 44 46 47 47 47 47 47 47 47 47 47 47	16 246 245 1 10500 177 873 811  2 122 129 9 9	212 209 3 1058 196 862 802  2 13 25 5 9 3 1	966 511 455 244 11 7 7 66 22	87 43 44 23 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2	85 50 29 3 3 5 3 3 1 1 1 8 256 6 17 160 1031 976 1031 976 1031	933 444 499 300 2 2 5 5 1 1 6 293 25 2688 267 2116 1116 187 929 875 6 6 16 1 1 4 4 1	977 499 488 36 302 17 2855 284 11 114 33 33 22 44 11	86 47 39 26 6 1 1 5 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 265 264 1 1151 203 948 882	700 366 344 23 3 1 1 5 5 2516 252 252 252 2000 959 9 910 18 8 1 1 4 4 4 1 1 2 2 4 4 1 1	824	9 9 44 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Table 7—Total Live Births and Live Births in Institutions, Showing the Number of Mothers Non-resident in the Province of Ontario, 1938

	· ALL LIV	E BIRTHS	In Inst	ITUTIONS
	Total	Births to mothers non-resident in Province	Total	Births to mothers non-resident In Province
Total for the Province	65,564	316	35,372	258

Table 8—Births (exclusive of Stillbirths) to Resident and Non-Resident Mothers, and Births in Institutions, in the Cities, Towns, and Villages of Ontario of 5,000 Population and over, 1938.

		ALL	Births		Bir	THS IN	INSTITUT	nons	BIRT		WHERE	
Cities, Towns, and Villages	m . 1	Resi- dent	Mother resident town, or where occurr	in city, village birth	Tanal	Resi-	Mother resident town, or where occurr	in city, village birth	Total	Resi- dent	Mother resident town, o where occurre	in cit <b>y</b> r village birth
	Total	moth- ers	Resident in Province	Non- resi- dent in Prov- ince	Total	moth- ers	Resident in Province	Non- resi- dent in Prov- ince	Total	moth- ers	Resi- dent in Prov- ince	Non- resi- dent in Prov- ince
Cities: Belleville Brantford Chatham Fort William. Galt. Guelph. Hamilton Kingston Kitchener London Niagara Falls North Bay Oshawa Ottawa Owen Sound Peterborough Port Arthur St. Catharines St. Thomas Sarnia Sault Ste. Marie Stratford Sudbury Toronto Welland Windsor Woodstock	493 584 764 533 321 331 2,989 755 796 1,587 421 416 582 3,140 364 47 60 649 641 410 489 622 1,322 1,512 364 2,220 283	479 333 379 237 2,528 471 557 1,178 331 316 480 2,253 508 429 233 359 6 1,038 8 8,291 1 198	105 431 148 84 104 459 282 238 406 90 94 102 549 111 192 21 176 129 114 179 286 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 2,198 6 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 2 2 1 3 3 6 1311 1 1 1 2 2 5 2 2 2 2 2 2 2 2 2 2 2 2 2	313 247 397 2,644 223 595 620 422 382 396 376 368 804 8,510 268 1,353	1,974 1,957 409 386 943 235 1,974 1,974 405 393 258 207 267 287 1,974 1,	389 78 83 98 543 82 190 227 163 174 128 88 179 256 2,142 165 282	2 2 2 2 1 3 3 5 127	175 252 108 169 185 496 141 1055 29 219 28 93 93 94 57 521 2,004 867	157 181 486 112 103 27 171 171 26 92 222 57 491 1,948	55 177 24 244 177 122 111 66 299 22 248 488 26 56 56	
Towns: Barrie. Barampton. Brockville. Cobourg. Collingwood Cornwall Eastview. Fort Erie. Fort Francis. Hawkesbury. Ingersoll. Kenora. Leamington. Lindsay. Midland. Mimico. New Toronto. Orillia. Pembroke. Port Colborne. Preston. Renfrew. Riverside. Simcoe. Smiths Falls. Thorold. Timmins. Trenton. Waterloo. Weston. Whitby.	10 10 16 21 13 28 19 24 19 11 6 30 26 8 8 6 6 6 6 7 15 4	2 1097 7 777 777 777 154 2 407 1 154 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	123 123 135 15 15 15 15 15 15 15 15 15 15 15 15 15	4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	217 336 198 488 488 227 93 5, 275 111 205 122 70 225 3 165	94 94 95 96 97 98 98 98 98 98 98 98 98 98 98	1 123 1 333 1 69 5 88 5 189 6 8 7 8 7 1 22 6 9 6 0 12 7 1 22 6 0 56 6 5 8 6 5 8 7 1 22 6 5 8 7 1 22 6 6 8 7 8 7 12 8 7 12	120	15 14 22 25 15 76 16 16 16 16 16 16 16 16 16 16 16 16 16	15	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 4 4 3 3 2 2 2 3 3 2 1 1 1 5 5 5 5 3 3
Villages: Forest Hill Kirkland Lake Swansea	. 72	4 64	4 2 7 4	1 8		8 319	7	1	320	323		3

Table 9—Births (exclusive of Stillbirths) Classified as Legitimate or Illegitimate and as Single or Plural by Sex, for Cities, Towns, and Villages of 5,000 and over, 1938

F. Total	M.	F	Total	M.	F	Total	M.	17.	Total	M.	F. To	Total M.		F. Total
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	10	75	169	8	4	7	92	73	165	*	9.	9	:	:
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	105	198	393	7	6	23	200	201	410	:	0	33		
	145	139	284	13	00	21	156	143	299	2	7	3	:	:
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	236	228	46.1	10	15	251	240	235	475	9	-8	7	-:	-: -:
		228 493 493 493 493 493 493 493 493	65564         32022         30481           493         228         246           493         226         246           493         226         246           584         290         261           744         396         246           744         396         246           744         396         247           117         694         77           147         68         47           157         306         238           158         331         149           158         331         149           169         84         70           170         84         70           188         143         135           208         331         149           208         331         149           208         331         149           208         143         134           210         143         134           211         52         149           22         149         34           24         11         56           40         20         34	228 109 209 209 209 209 209 209 209 209 209 2	65564         32022         30481         62503         1           228         103         112         215         472           493         226         246         472         472           584         100         218         472         473           764         396         267         473         473           764         396         267         473         473           764         396         267         473         473           764         396         267         473         473           764         374         374         374         474           766         84         47         474         474           767         84         47         474         474           768         84         70         154         328           208         143         149         144         328           208         143         144         154         328           208         143         134         144         328           208         143         134         134         134      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32         32         32         32         32         32         32         <td< td=""><td>228         30.22         30.481         6.2503         158.3         1478         30.61         3.297.2         31.348         643.20         6.27           49.3         2.26         2.46         4.72         9         1.2         2.1         2.35         48.7         3         4.87         3         4.87         3         4.87         3         4.87         4.87         3         4.87</td><td>228         103         112         215         478         3061         3.972         31348         64320         627         599           228         103         112         215         246         472         3         12         21         31348         64320         627         599           232         100         118         275         3         12         21         31348         64320         627         599           384         100         118         30         27         349         12      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599           384         100         118         30         27         349         12         27         441         3         441         349         441         349         441         349         441         349         441         349         441         349         441         349         441         349         441         441         349         441</td><td>65564         320.2         30481         62503         1583         1478         3061         32972         31348         64320         627         599         613           228         103         112         215         4         1         1         1         1         2         21         31348         64320         627         599         613           232         103         112         215         4         1         2         21         225         487         3         4         4         2         1         1         2         2         1         4         3         3         4         4         3         3         4         4         3         4         4         3         4         4         4         3         4         4         4         4         3         4</td></td<>	228         30.22         30.481         6.2503         158.3         1478         30.61         3.297.2         31.348         643.20         6.27           49.3         2.26         2.46         4.72         9         1.2         2.1         2.35         48.7         3         4.87         3         4.87         3         4.87         3         4.87         4.87         3         4.87	228         103         112         215         478         3061         3.972         31348         64320         627         599           228         103         112         215         246         472         3         12         21         31348         64320         627         599           232         100         118         275         3         12         21         31348         64320         627         599           384         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206	332	191	400	1250	14	28	830	9749	147	47	352	100	17	2008	270	_
206	332	191	400	1250	14	28	830	9749	147	47	352	100	17	2008	270	_
	332	191	400	1250	14	28	830	9749	147	47	352	100	17	2008	270	_
284 5961	159 332	191 69	193 409	573 1250	5 14	33 58	407 839	4690 9749	74 147	21 47	168 352	601 99	7, 17	1026 2098	135 270	_
284 5961	159 332	191 69	193 409	573 1250	5 14	33 58	407 839	4690 9749	74 147	21 47	168 352	601 99	7, 17	1026 2098	135 270	_
284 5961	159 332	191 69	193 409	573 1250	5 14	33 58	407 839	4690 9749	74 147	21 47	168 352	601 99	7, 17	1026 2098	135 270	_
206	159 332	191 69	193 409	573 1250	5 14	33 58	407 839	4690 9749	74 147	21 47	168 352	601 99	7, 17	1026 2098	135 270	
312 284 596	173 159 332	92 69 161	216 193 409	677 573 1250	9 5 14	25 33 58	432 407 839	5050 4690 9749	73 74 147	26 21 47	184 168 352	43 66 109	10 7 17	1072 1026 2098	135 135 270	_
312 284 596	173 159 332	92 69 161	216 193 409	677 573 1250	9 5 14	25 33 58	432 407 839	5050 4690 9749	73 74 147	26 21 47	184 168 352	43 66 109	10 7 17	1072 1026 2098	135 135 270	_
312 284 596	173 159 332	92 69 161	216 193 409	677 573 1250	9 5 14	25 33 58	432 407 839	5050 4690 9749	73 74 147	26 21 47	184 168 352	43 66 109	10 7 17	1072 1026 2098	135 135 270	_
284 5961	173 159 332	92 69 161	216 193 409	677 573 1250	9 5 14	25 33 58	432 407 839	5050 4690 9749	73 74 147	26 21 47	184 168 352	43 66 109	10 7 17	1072 1026 2098	135 135 270	
625 312 284 596	344 173 159 332	169 92 69 161	425 216 193 409	1325 677 573 1250	14 9 5 14	64 25 33 58	873 432 407 839	10514 5050 4690 9749	151 73 74 147	48 26 21 47	364 184 168 352	110 43 66 109	18 10 7 17	2220 1072 1026 2098	283 135 135 270	
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625 312 284 596	344 173 159 332	169 92 69 161	425 216 193 409	1325 677 573 1250	14 9 5 14	64 25 33 58	873 432 407 839	10514 5050 4690 9749	151 73 74 147	48 26 21 47	364 184 168 352	110 43 66 109	18 10 7 17	2220 1072 1026 2098	283 135 135 270	
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298 625 312 284 596	165 344 173 159 332	72 169 92 69 161	203 425 216 193 409	610 1325 677 573 1250	5 14 9 5 14	35 64 25 33 58	426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	22 48 26 21 47	178 364 184 168 352	66 110 43 66 109	8 18 10 7 17	1073 2220 1072 1026 2008	144 283 135 135 270	
625 312 284 596	165 344 173 159 332	72 169 92 69 161	203 425 216 193 409	610 1325 677 573 1250	5 14 9 5 14	35 64 25 33 58	426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	22 48 26 21 47	178 364 184 168 352	66 110 43 66 109	8 18 10 7 17	1073 2220 1072 1026 2008	144 283 135 135 270	
298 625 312 284 596	165 344 173 159 332	72 169 92 69 161	203 425 216 193 409	610 1325 677 573 1250	5 14 9 5 14	35 64 25 33 58	426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	22 48 26 21 47	178 364 184 168 352	66 110 43 66 109	8 18 10 7 17	1073 2220 1072 1026 2008	144 283 135 135 270	
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298 625 312 284 596	165 344 173 159 332	72 169 92 69 161	203 425 216 193 409	610 1325 677 573 1250	5 14 9 5 14	35 64 25 33 58	426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	22 48 26 21 47	178 364 184 168 352	66 110 43 66 109	8 18 10 7 17	1073 2220 1072 1026 2008	144 283 135 135 270	
298 625 312 284 596	165 344 173 159 332	72 169 92 69 161	203 425 216 193 409	610 1325 677 573 1250	5 14 9 5 14	35 64 25 33 58	426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	22 48 26 21 47	178 364 184 168 352	66 110 43 66 109	8 18 10 7 17	1073 2220 1072 1026 2008	144 283 135 135 270	
298 625 312 284 596	165 344 173 159 332	72 169 92 69 161	203 425 216 193 409	610 1325 677 573 1250	5 14 9 5 14	35 64 25 33 58	426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	22 48 26 21 47	178 364 184 168 352	66 110 43 66 109	8 18 10 7 17	1073 2220 1072 1026 2008	144 283 135 135 270	
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327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
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327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
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327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
327  298  625  312  284  596	170 165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5460 5054 10514 5050 4690 9749	76 75 151 73 74 147	26 22 48 26 21 47	352 188 178 364 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	139 144 283 135 135 270	
298 625 312 284 596	165 344 173 159 332	97 72 169 92 69 161	222 203 425 216 193 409	715 610 1325 677 573 1250	9 5 14 9 5 14	29 35 64 25 33 58	447 426 873 432 407 839	5054 10514 5050 4690 9749	75 151 73 74 147	26 22 48 26 21 47	352 184 168 352	44 66 110 43 66 109	10 8 18 10 7 17	1147 1073 2220 1072 1026 2008	144 283 135 135 270	

\*In the case of one twin confinement, one child (female) was born in the rural part of Grey County, the other child in Collingwood town.

Table 10-Births (exclusive of Stillbirths) Classified

Age of Father Under 16 years	Total	12	1															
16 years 17 "		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
16 years 17 "																		
1/	3				1		1				1							
10 4	20	1		1		2	8	3	2	3		1						
18 "	113				3	7	27	29	24	9	5	3	4	1		1		
19 " 20 "	205				6 3	19 23	42 54	95 139	65 130	22 120	23 83	8 52	5 13	12	1	1	2	
1 "	645 1,172	1 11			7	37	77	206	210	191	169	112	72	43	26	6	6	
2 "	1,761		i	3	3	27	85	181	242	291	288	269	156	85	54	35	16	
3 "	2,453				2	19	83	177	268	364	386	372	322	190	113	65	32	
4 "	2,820	-			4	22	62	142	220	308	401	438	397	316	206	133	60	
5 "	3,142				3	14	48	143	208	289	351	416	458	379	353	197	106	
.0	3,341	- 1			1	14	39	76	162	258	281	366	435	454	430	314	185	
	3,549	-				- 8	26	82	120	171	277	343	417	427	442	389	308 391	
8 "	3,779	100		1	1	13	15 21	62 39	112 85	150 122	227 169	283 232	362 290	414 356	439 387	418 399	391	33
0 "	3,601				1	5	12	28	49	103	127	183	218	275	320	361	360	
1 "	3,236					2	7	22	40	72	111	116	171	190	257	325	295	33
2 "	3,236			1		2	8	25	36	51	89	117	154	190	206	234	277	30
3 "	2,963						4	12	30	36	55	76	118	144	171	193	211	29
4 "	2,747					1	6	11	19	32	52	56	72	129	117	143	193	21
	2,506	1				2	6	10	14	19	30	46	67	89	101	118	120	
6 "	2,121						1	12	14	10	27	34	42	47	68	101	108	13
8 "	2,092						5	4	11	16	14	23	33	39	55 52	89 67	116 78	11
9 "	2,066 1,576					1	2	1 2	6	13	21 6	26 11	31 16	46 24	32	52	45	5
0 "	1,473					- 1	1	2	7	5	6	13	7	27	33	27	35	5
1 "	1,135						1	1	i	3	4	6	11	16	11	21	16	3
2 "	1,204	1					1		1	7	4	9	7	14	13	26	21	4.
3 "	929								1	4	5	1	10	12	12	22	18	2
4 "	846								1	2	4	7	6	8	14	11	12	2
J	709							1	3	1	2	4	6	6	8	11	8	1
6 "	574					2						- 1	2	6	6	11	5	
8 "	464								· · · · i	1	2	1 2		1	6 4	8	4	1
9 "	370							2	1	1	1		6	1	3	2	4	
0 "	285									i	2	i	2	2	2	6	3	
1 "	196									1					1	1	2	
2 "	187									1	1	2	3		3	3	3	
3 "	149							2	1	2	1	1		1	1	1	3.	
14 "	92									1	1		2	1	2	2	2	
i5 "	79								;		1		2	1		2		
57 "	72 52								1			1		1	1 2	3	1	
8 "	50								1			1	1	3	1	3	1	
9 "	43												î	2		3		
50 "	33													1		1	1	
1 "	19										1							
52 "	17												1	1	2			
3 "	11											:		1			1	
5 and over	18 38											1		2		1	2	
Not stated	102						i	1	2	2	2	1 2	2	1	2	2	1	
Children born to married	-	-	-		-	-												_
mothers			1	6	36	225	643	1510	2091	2688	3230	3640	3924	3966	3966	3812	3460	360
Children born to unmarried	02,000		1	0	00	223	313	1010		2000	200							
mothers	3,061	1	8	13	51	117	213	286	304	275	281	226	219	171	126	112	91	10
Children born to all mothers	65,564	1	9	19	87	342	856	1796	2395	2963	3511	3866	1113	4137	4092	3924	3551	370

## according to Age of Parents, Ontario, 1938

Table 11-Births (exclusive of Stillbirths) Classified according to Raciai Origin of Parents, Ontario, 1938

	Not specified	252 8 : E : : : : : : : : : : : : : : : : :	502 245 257
	Other	8 4 8	26 26 29
	Ukrainian*	2355 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	917
	Syrian	4,04,0,	55 23
	esiw2	25 25 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 9 9
j	Swedish	22. 11. 11. 12. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13	216 121 95
	Serb and Croat		200
	Russian	244 . 6 . 6 . 6 . 6 . 7 . 7 . 7 . 7 . 7 . 7	888
	Roumanian	0000-1	103
	Polish	800 000 000 000 000 000 000 000 000 000	946 490 456
	Norwegian	808 6 2004 1 71 1	118
	Negro	7	125 65 60
	Jewish	4.28	872 442 430
~	lapanese		:
RACIAL ORIGIN OF MOTHER	Italian	3. 7. 1. 1. 1. 1. 2. 2. 2. 3. 3. 4. 4. 3. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	1004 500 504
IOT	nsibal	22 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	684 311 373
≥ .	Jeelandie	44w	13
0	Hungarian	*4e	306 151 155
GIP	ubniH	0444	
ORI	G166k		5 104 5 50 5 54
AL O	German	1 1 1 2 2 3 3 3 3	3146 1616 1530
CIV	Finnish	2222231 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	427 219 208
2	Dutch	284416	737 395 342
	Danish	7. 7	33
	Czech and Slovak	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	298 140 158
	Chinese	524	27 111 16
	Bulgarian		118
	Belgian	10 5 6 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	167 88 79
	Austrian	<u>ανο := :4 </u>	92 51 41
	Armenian		11 47
	Етепсһ	888 1787 1714 1714 1714 1714 1715 1715 1715 171	9512 4838 4674
	Melsh	3	252 9 129 4 123 4
		24774 3173336 3173336 3173336 3173336 317334 31744 31744 31744 31744 31744 31744 31744 31744 31744 31744 31744 31744 31744 317	
	Scottish	7-7	8437 4395 4042
	Itish	27727-2 10107-0 10107-	10201 5301 4900
		· · · · · · · · · · · · · · · · · · ·	442 47 95
	English	29966 29966 29666 20066 2012 2012 2012 2016 2016 2016	226 115 110
	Total	22,090   14383   10,544   2966   8,815   2966   8,815   2966   701   104	62,503 22642 32,022 11547 30,481 11095
			F.Y.
	Racial Origin of Father		тап
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3,061	M. 1,583 586	1,478	T. 65,564 23690	3 605	F. 31.959 11557 5131		1 (11)
Children born to unmarried mothers T. 3,061 1048 447	M.	Children born to all mothers	T.	>	F		and the state of t

\*Including "Galician" and "Bukovinian."

Table 12-Legitimate Births (exclusive of Stillbirths) Classified

																AGE	e of
Racial Origin of Mother	Total	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
English Irish Scottish Welsh French Armenian Austrian Belgian Bulgarian Chinese Czech and Slovak Danish Dutch Frinnish German Greek Hindu Hungarian Itelandic Indian Italian Japanese Jewish Negro Norwegian Polish Roumanian Roumanian Roumanian Roussian Serb and Croat Swedish Swiss Syrian Ukrainian* Other Not specified	22,642 10,201 8,437 25,2 9,512 11 11 92 167 18 27 72 3,146 103 13 684 1,004 1,004 1,004 1,004 1,005	1	1 3 3	15 7 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	944 288 244 377 22 11 12 12 11 11 12 11 11 12 11 11 11	2322 1077 622 3 1211  4 4  9 5 5 311 118 4 4  2 5 5  2 5 5	629 2066 1777 5 2500 1 1 4 4 3 3 1 14 4 7 7 5 4 1 1 1 1 1 1 1 1 2 1 1 2 1 1 1 1 1 1 1	803 3306 215 6 381  7 4 4 322 14 81 5 5  15 15 15  15 15 15  15 15  15  15  15  15  15  15  15  15  15  15  15  15  15  15  15  15  15  15	997 406 313 9 463  2 4 4  15  15  29 36 6 7 41 16 5 9 9 17 9 18 9 18 9 19 19 19 19 19 19 19 19 19 19 19 19 1	1188 525 373 8 545 	1427 561 408 9 593 1 1 5 7 7 55 36 152 9  41 10 9 53 63  41 10 9 9 9 10 10 10 10 10 10 10 10 10 10	1512 593 493 493 600 11 7 7 12 2 7 8 8 7 7 7 8 8 10 17 7 8 10 17 8 10 17 8 10 17 8 10 17 8 10 17 8 10 17 8 10 17 8 10 17 17 18 10 17 18 18 10 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1 1 1 1 1 1 1 1 3 3 5 7 7 1 5 1 9 4 4 2 7 6 6 6 1 2 2 1 1 3 3 3 3 4 4 6 7 7 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1518	14165925399 1885833 1 1 4 4 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	579 496 12 494 5 7 7 2 12 6 39 6 149 6 10 38 61 38 81 33 20 7 7 28	3 9 3 16 5 41 23 196 6 6 6 6 6 6 7 7 9 7 7 3 5 11 2 8 5 5 2 2 5 5 5 5 3 3 3
Total	62,503	1	6	36	225	643	1510	2091	2688	3230	3640	3924	3966	3966	3812	3460	3601

<sup>\*</sup>Including "Galician" and "Bukovinian".

# according to Age and Racial Origin of Mothers, Ontario, 1938

мот	CHE	2																				
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 and over	Not stat- ed
1205 517 4688 12 424 425 52 11 18 66 42 17 152 2 17 152 30 40 40 65 44 45 55 12 22 21 21 21 21 21 21 21 21 21 21 21	177 4  12 1 32 43  59	899 455 373 144 1 1 288 7 365 133 1488 3 3  124 23 5 5 6 6 14 7 7 6 6 14 7 7 7 8 8 8 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	898 459 3855 11 16 6 8 8 1 1 1 18 2 2 2 8 2 4 4  15 8 15 15 15 15 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	7400 3877 3366 100 3522 77  1 366 244 1300 3 3  295 255 3 3 3 5 2 2 5 7 7 1 2 3 3 3 3 2 2 4 1 3 3 5 2 2 5 5 5 6 7 7 1 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2	282 1 26 6  1 23 4 22 9 109 3  20 2 24 34 34  26 3 3 4 3 1 5 1 1 2 1 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1	576 346 265 8 237  6 221 11 17 7 2 2 106 5 5  2 18 2 20  23 4 4 3 29 2 4 9 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	534 2722 2211 4 233 1 6 6 100 4 4  12 2 2 16 11 10 94 3 3  16 16 16 16 16 16 16 16 16 16 16 16 16	4455 2800 2388 5 5 2155  38 1 1  177  10 122 699 66  11 188 29 20 20 11 14 14 15 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	4592544188844811002215567711111111111111111111111111111111	10 50 54  4 17 15 17 4	2822 145 124 5 145 11  3  4 1 1 9 3 3 4 5  10  11 19  11 19  11 19 19 19 19 19 19 19 19 19 19 19 19	1755 1377 799 3999 2 22 2355 11 4 42 774	1511 811 722 22 866  22 22  4 4 22 27  9 9 9  6 6 2 2 1 1  1 1 1 1 1 1 1 1 1 1 1 1 1 1	1111 477 522 2 699 	666 477 244 1 35 35  2 1 4 1 1 12  2 6 6  1 1 4 4  1 1 2	411 144 114 118 118 118 118 118 118 118	166 77 77 66	5 8 8 4 4 1 1 9	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22		5 9 6 6 115 1 1 2 2 1 1 6 1 1 5 5 3 3 3 3 6 3 3 6 3 6 6 7 1 1 5 5 3 3 3 6 3 6 7 1 1 1 5 5 3 3 3 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
3176	3092	2587	2630	2267	2021	1766	1567	1447	1355	1025	860	585	471	337	212	114	50	30	12	2		98

Table 13-Births (exclusive of Stillbirths) Classified

													1	BIRT	HPL	ACE
						Cana	da						Brit	ish Is	les	
Birthplace of Father	Total	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba .	Saskatchewan	Alberta	British Columbia	Province not specified	England	Ireland	Scotland	Wales	Other
Canada Prince Edward Island Nova Scotia New Brunswick. Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Province not specified	47,445 43 393 244 3,047 42,138 667 536 192 88 97	29 4 4 2 1 17 1 	238 73 7 6 141 4 5 1	 4 57 16	2686 2 21 40 1278 1303 14 14 8 4 2	38,077 29 197 101 1,509 35,423 321 293 129 56 19	638 1 8 6 22 398 155 36 5 6	569 1 2 4 25 362 52 113 7 3	199 4 11 4 153 13 8 14 2	111 3 1 5 86 2 4 4 4 6	38	2032 2 24 9 54 1858 30 23 11 3 18	262 1 9 10 230 4 3 2	738  12 2 36 652 14 5 3	77 3 1 	3
British Isles. England Ireland Scotland Wales Other	8,383 5,248 1,025 1,888 186 36		48 38 1 7 2	22 16 2 4	154 108 16 28 2	4,632 3,051 508 944 104 25	115 83 17 14 1	65 43 6 16	34 24 3 6 1	14 8 4 2	47 33 3 10 1	1575 1229 91 222 27 6	421 100 253 62 6	874 269 90 499 13 3	56 23 4 11 18	7 5 i
British Possessions	247 139 108		8 2 6	2 2	9 4 5	122 67 55	3 2 1	3	2	i		24 12 12	2 2	7 5 2		
Europe. Austria Belgium. Denmark Finland France. Germany Holland. Hungary Italy Norway Poland. Roumania Russia* Sweden Other	4,818 235 163 90 208 31 184 135 276 7655 52 1,098 182 491 118		14 2  2 1  3  1	1	84 3 3  13 2 18 7 13 3 14	1,132 55 43 32 51 15 82 60 23 256 23 195 39 105 54	119 23 5 1 1 1 3 4 4 1 2 1 39 2 2 23 7 6	107 9 3 2 3 2 6  4 1 5 30 15 18 1	16 1 1 1 5 2 1 1	1 1 1 1	15 2  1 1  7 1	75 2 3 4 1 1 13 1 11 4 9 2 4 4 2	16  1 1  5 2  2  1	36 3 2 5 2 5 3 5	1	1
Asia. China. Japan. Other.	106 52 1 53			1 i	10 3 	41 23 18		1 1	2 2	9	1 1	1 1		1 1		
United States. Various. Not specified.	1,415 23 66		10	7	83 1 1	930 15 20	26 1 1	24	11	6	3 1	80	7	25 2 1	4	
Children born to married mothers	62,503	1	318	211		44,969	903	771	264	147	105	3787 150	1	1684	139	12
Children born to all mothers.	65,564	46	343	222	3171	47,303	972	830	273	150	120	3937	725	1730	143	15

<sup>\*</sup>Including the Ukraine.

### according to Birthplace of Parents, Ontario, 1938

#### OF MOTHER

Brit Pos sic	tish sses-								Euro	pe								Asia	ı	Γ		
Newfoundland	Other	Austría	Belgium	Denmark	Finland	France	Germany	Holland	Hungary	Italy	Norway	Poland	Roumania	Russia*	Sweden	Other	China	Japan	Other	United States	Various	Not specified
69  8 1 157 1 1 255 220 2 2 3 3 39 39 39 	30	1266 966	11 11 3  1 7 4 	32 32 11 11 11 11 11	31	9933355	267 55 22 11 11 11 11 11 11 11 11 11 11 11 11	15 1 1 7 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	241 3 3 1 1 5 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 2 1 7 1 1 1 1	34	166	622 433 111 22 11 1	\$88.22 33.33 461100	303 8 8 3 4 5 7 7 229 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	1	1 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3	1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 166 8 8 533 144 2 2 2 3 3 186 118 199 140 8 8 1 1 148 2 15 4 12 15 4 12 13 3 14 3 3 17 7 2 2 13 3 1 1 2 3 1 1 1 1 1 1 1 1 1 1 1	8	23 1 22 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1		2	3		7	1	1 1		2	2				1	1	2			2	164 1 2	i	38
136	80	138	121	40	224 16	23	97 6	57	251	466	24	896 29	96 1	3 <b>5</b> 6	45	603 9	17	4	31	1628 38	1	69
141	83	142	124	41	240	24	103	58	257	469	27	925	97	368	46	612	18	4	31	1666	15	93

Table 14—Legitimate Births (exclusive of Stillbirths) Classified

										` _								
		_															AGI	E OF
Birthplace of Mother	Total	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Canada Prince Edward Island Nova Scotia New Brunnswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Province not specified	318 211 3,028 44,969 903 771 264 147	1	4	34	5	 1 3 17	1 7 4 54	8 6	12 7 97 2250 37 69	1 19 4 140 2633 66 64 15 6	3 21 11 186 2912 72 66 21 13	19 10 185 3152 74 77 33 14	29 13 186 3108 80 74 28 16	3019 86 70 27	3 18 19 192 2777 60 65 23 7	21 17 160 2410 50 44 21 12	23 10 150 2489 53 33 17	2 19 14 144 2138 36 34 11 6
British Isles England 1reland Scotland Wales Other	6,330 3,787 708 1,684 139		1		2 1 	20 12 1 4 3	56 33 8 12 3	99 63 9 23 4	62	107 7 34		161 99 20 38 4	192 105 22 58 6	153 18 83 5	189 32 117	212 49 99	261 61 96	250 62
British Possessions Newfoundland Other	216 136 80						2 1 1	1 1	3 1 2	5 5	4 3 1	11 7 4	9 5 4	8	4	14 8 6	9	
Europe Austria Belgium Denmark Finland France Germany Holland Hungary Italy Norway Poland Roumania Russia* Sweden Other	40 224 23 97 57 251 466 24 896 96 356 45		1		1	22 2 1 6 1 6	42 1 1 3 3 1 10 6 7 3 7	61 26 2 1 1 1 2 11 4  10 1 6 3 11	41 1  5 1 1 7 1 1 7 1 1 4 1 9	47 1 2  3  7 12  7	80 2 3 8 1 1 7 6 15 1 13 1 8 1 13	94 1 7 1 3 2 9 17  19 1 16 1 14	136 4 3 1 1 3  2 5 11 18  44 3 16 1 25	6 9 1 8  1 2 9 30  38 3	7 8 1 7	2266 7662 1333663388301 1788442663336633	5 6 3 15 4 10 2 14	205 13 4 4 8 2 5 3 14 20 1 65 4 22 2 38
China. Japan. Other.	17 4							]		1	1	1 2	1 2		1 4	2	2	1 2
United States	69				325	14	29	40	53	63	78	77 1 1	83	· · · · i		1	109	103
Total	62,503	1	6	36	225	043	1510	2091	2688	3230	3040	3924	3900	3900	3812	3460	3601	31/0

<sup>\*</sup>Including the Ukraine.

## according to Age and Birthplace of Mothers, Ontario, 1938

мот	CHEF	2																			
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 and over	Not stat- ed
2342 2 17 12 144 2072 54 27 7 5 2	4 14 8 157 1690 35 16 4 8 3	1902 1 12 9 118 1697 28 19 7 6 5	3 11 5 135 1439 21 11 3 2	20 9 2 7 3	1244 2 5 4 80 1123 20 1 2 3 4	1 1 7 105 981 10 9	2 1 1	921 4 4 79 813 11 2 2 3 3	663	53 541 1	3 38 374 1 1 1 1	290 1 2 	202 26 202 4 1 1	152 1  16 134 1	6 70	1 1 33	3 19		2		3 39
398 222 46 118 12	196 39	392 239 49 97 7	372 217 52 96 4 3	5	285 170 34 76 5	254 160 24 66 4	261 151 26 76 6 2	265 162 37 63 3		111 11 32 5	1	89 60 4 22 3	41 5 12 2	38 28 3 6 1	1	6	1 2	2			5 1 1 3
17 10 7	9 6 3	21 12 9	10 5 5	5 2 3	10 7 3	9 6 3	8 5 3	5 4 1	4	1	5	4				1 1					
213 10 3 15 15 5 2 10 29 17 67 55 25 23 37	205 5 5 5 5 10 2 6 4 14 15 2 58 10 17 2 50 17 2 50 17 2 10 11 11 11 11 11 11 11 11 11	222 13 6 1 17 2 16 32 2 64 6 15 4 37	1 19 5 4 11 19 466 721 44	7 4 4 8  9 1 16 26 2 55 4 14 4	168 6 5 1 13  9 18 2 45 6 19 2 37	3 29 4 10 4 26	144 7 8 1 12 15  12 28 1 10 1 28 1  1	124 4 4 2 166 3 7 1 10 17 2 19 3 12 2 2 2 2 2	66 6 3 11 44 114 12 2 4 2 8 8	7 3 1 4 1 3  10 17  16 2 9	3  3 4 7 2 5 1 3	5 7	1 3 6 2	17 1 1 1 2 4 1 2 3	3 1 1	2	1	3 1			11
114	83 1	88		57	51 3 2	····i	44	36					2	5	1		2				38
3092	2587	2630	2267	2021	1766	1567	1447	1355	1025	860	585	471	337	212	114	50	30	12	2		98

Table 15—Plural Births Classified to Show Number of Children Born Alive and Stillborn by Sex, for the Province of Ontario, 1938

CLASSIFICATION OF BIRTHS	Total
Twin Births.  Two males (both living).  One male and one female (both living)  Two females (both living)  One male living and one male stillborn  One male living and one female stillborn  One male stillborn and one female stillborn  One female living and one female stillborn  Two males (both stillborn).  One males (both stillborn).  Two females (both stillborn)  Two females (both stillborn)  Two females (both stillborn)	682 212 203 198 20 11 5 15 8 4
Triplet births. Three males (all living. One male and two females (all living) Three females all living).	6 1 3 2
Total multiple births	688 709 673
Fotal single live births	64,269 32,94 <b>1</b> 31,328
Total single stillbirths	1,928 1,049 879
otal confinements	66,885

MARRIAGES

## Table 16-Marriages in the Province of Ontario by Months, 1938

	Total Mar- riages		Months												
	riages	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
Total for the province	30,080	1,642	1,685	1,361	2,394	2,150	4,040	2,784	2,567	3,406	3,406	2,433	2,212		

# Table 17—Marriages—Conjugal Condition of Contracting Parties, in the Province of Ontario, 1938

		MARRIAGES BETWEEN										cent	of	Per cent. of		
	Total	Bachelors Widowers and and						Divorced men and			Bridegrooms who were			Brides who were		
	Mar- riages	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Bachelors	Widowers	Divorced	Spinsters	Widows	Divorced
Total for the province	30,080	29,355	91	31	219	279	15	75	4	11	98.0	1.7	0.3	98.6	1.2	0.2

Table 18—Marriages Reported in Rural and Urban Parts of Counties, in the Province of Ontario, 1938

	1		1		1	1	
COLUME	m 1	D 1	77.1	COTTATALES	m 1	D 1	** 1
COUNTIES	Lotai	Rural	Urban	COUNTIES	Total	Rural	Urban
			i				
Total for the province	30,080	6,749	23,331	Manitoulin	66	59	7
Addington	36	36		Middlesex	1,055	198	857
Algoma	417	93	324	Muskoka	177	55	122
Brant	438		372	Nipissing	305	116	259
Bruce	316	166 157	150	Northumberland	288 212	124	164
Carleton	1,419	214	1,262	Ontario	414	139	121 275
Dufferin	106	56	50.	Oxford	449	161	288
Dundas	104	42	62	Parry Sound	184	124	60
Durham	166	82	84	Peel	184	106	78
Elgin	358	171	187	Perth	387	123	264
Essex	1,436	170	1,266	Peterborough	397	62	335
Frontenac	407	95	312	Prescott	179	106	73
Glengarry	134		31	Prince Edward	92	54	38
Grenville	128	48	80	Rainy River	85	21	64
Grey	397	180	217	Renfrew	306		185
Haldimand	174	89 37	85	Russell	110	90	20 408
Haliburton	231	70	161	Simcoe	623 319	215 81	238
Halton	508		311	StormontSudbury			575
Huron	293	173	120	Thunder Bay	618		525
Kenora including Patricia	217	42	175	Timiskaming	516		432
Kent	564		375	Victoria			90
Lambton	449	176	273	Waterloo		104	666
Lanark	264			Welland			614
Leeds	264		167	Wellington	425	112	313
Lennox	95		51	Wentworth	1,674		1,520
Lincoln	488	95	393	York	8,350	782	7,568
	1		1				

Table 19-Marriages-Ages of Bridegrooms and Brides, Ontario, 1938

Physical Tends   Tends		1+5	
Color   Colo		Not Stat-	
AGE OF RRIDE    10		and ove	
ACE OF PRIDE   1		55 70	227.
10   1   18   10   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   35   37   38   39   40   41   42   44   45   46   47   48   95   35   48   48   48   48   48   48   48   4		09	10   1   1   1   1   1   1   1   1   1
OPE   17   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   36   37   38   39   40   41   42   434   45   46   47   48   45   46   47   48   45   46   47   48   48   48   48   48   48   48			
AGE OF RRIDE    10		50	243 1 5 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
AGE OF BRIDE    10			8
ACE OF BRIDE   19   20   21   22   23   24   25   26   27   28   29   30   31   22   33   34   35   63   77   38   79   40   41   42   44   44   56   60   77   73   73   73   73   73   73   7			88   6
AGE OF RRIDE   10   10   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   36   37   38   30   40   41   12   43   44   12   43   44   12   43   44   12   43   44   12   43   44   45   45   44   45   45   44   45		10	2
AGE OF BRIDE    10			2 :- : : : : : : : : : : : : : : : : : :
Color   Colo		53	2 : : : : : : : : : : : : : : : : : : :
AGE OF IRIDE   15   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   37   38   30   40   40   40   40   40   40   40			
4 12 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 30 30 58, 81 30 159 100 20 21 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Color   Colo			
Act   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   33   43   36   37   38   36   37   39   39   39   39   39   39   39			
4			2
10			7
12   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   32   33   32   34   35   34   34			
12   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   32   33   32   34   35   34   34	Œ		
12   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   32   33   32   34   35   34   34	3811		
4         12         13         14         15         20         21         22         23         24         25         26         27         28         29         30           4         12         13         14         16         3         1	)F 1		:: 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2
4         12         13         14         15         20         21         22         23         24         25         26         27         28         29         30           4         12         13         14         16         3         1	3E (	$\overline{}$	
4 12 13 14 6	V		25   12   12   12   13   14   15   15   15   15   15   15   15
A			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
4 12 13 14 6			2.00
4 12 14 18 19 20 21 22 23 24 25 26           16cr 16 17 18 19 20 21 22 23 24 25 26           16cr 16 17 18 19 20 21 22 23 24 25 26           1 2 2 30 56 84 36 16 29 25 30 25 18 11 3 2           2 30 56 84 10 5 20 31 31 31 31 31 31 31 31 31 31 31 31 31			
10		27	
10		26	152 33.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.
10		25	11111111111111111111111111111111111111
10		24	1111 1111 1111 1111 1111 1111 1111 1111 1111
10			22222222222222222222222222222222222222
10			2
10			12826223232323232323232323232323232323232
4 12 13 14 6 8 8 19 16 17 8 19 16 8 19 16 17 8 19 17 18 19 10 17 18 19 10 19 19 19 19 19 19 19 19 19 19 19 19 19		21	
		20	100 100 100 100 100 100 100 100 100 100
		61	1306 1306
			884 1132 1133 1133 1133 1134 1138 1
			20000804004440040040
			2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2
			40xr0xx0d0v4xdd := 2
## Age of Total Stroom		- Ge	
Bride- groom si groom si Un- der 18 Un- der 18 Un- 22 22 22 23 22 23 23 33 33 33 33 33 34 40 41 41 42 43 44 44 44 44 44 44 44 44 44 44 44 44		Fota.	2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.
118	J.	- E	
	Age	Brid	183 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Table 20-Marriages-Denominations of Contracting Parties, 1938

1	Not stated	:== := : : : : : : : : : : : : : : : :	91
	Other sects	34- 16- 16- 17- 17- 17- 17- 17- 17- 17- 17- 17- 17	302
ł	No religion		2
	Oriental religions		8
	United Church	12053 332 13 5 13 5 13 6 10 7 10 7 10 7 10 7 10 7 10 7 10 7 10 7	9221
	United Brethren		
	Unitarians	<u> </u>	
	Salvation Army	111111111111111111111111111111111111111	146
	Roman Catholica	44 44 64 64 64 64 64 64 64 64 64 64 64 6	2916 619 6644
	Protestants	20	619
DE	Presbyterians		
BRIDE	Pentecostal		144
OF ]	Mormons	2	69
	Mennonites	444	137
DENOMINATION	Lutherans		780
INA	Jews	631.1.1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	648
OM	Holiness Movement	25 :	20
EN	Greek Orthodox	33	180
"	Greek Catholica	101 101 101 101 101 101 101 101 101 101	233
	Friends	<u> </u>	25
	Evangelicals	12	107
	Disciples		5 26
	Church of Christ	8.6	38
	Christian Science	100000000000000000000000000000000000000	55
	Christians	31.00	30
	Втеthтеп	3,40	78
	Baptists	22 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1690
	Anglicans	28.5 28.5 28.5 28.5 28.5 28.5 28.5 28.5	5952
	Adventists	∞ κ · · · · · · · · · · · · · · · · · ·	18
	Total	79 79 79 79 79 79 79 79 79 79	30,080
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	Denomination of Groom	Adventists Anglicans Braptists Braptists Braptists Christians Christian Science Church of Christ Friends. Frien	Total Brides
	Ω	nn n. n. n. n. n. n. n. n. n. n. n. n. n	
		iien iien iien iien iiien iiien iiien iiien iiien iiiien iiiien iiiiien iiiiiiii	
		strs.  10	ride
		mutis in the control of the control	l Br
		Adventists Anglicians Brethren Brethren Christians Science Christian Science Christian Science Christian Science Christian Science Christian Science Christian Science Christian Science Christian Science Christian Science Christians Evangeicals Friends Greek Catholics Greek Catholics Greek Catholics Mormonites Mormonites Mormonites Mormonites Mormonites Christians Presbyterians Presbyterians Presbyterians Presbyterians Presbyterians United Structsant United Structsant United Structsant Orietedian Army	ota
'		NON OULCONMANASELTHOOMMAP	_

Table 21-Marriages-Birthplace of Bridegrooms and Brides, 1938

	1	Not specified	_	: :::::		
		suoinsV	T : : : : : T : : :			
		United States	326 + 4 + 4 13 13 281 10 10 10	43 25 7 11	- :-	7
		Other	4 : : : : : : : : : : : : : : : : : : :			
	Asia	Japan				
		China	m	. == : : :		
		Осрет	2 : : : 2 : : : : : : : : : : : : : : :	:		2
		Sweden	w			4 : : : : : : : : : : : : : : : : : : :
		*sissuA	22 21			2 2
		Roumania	∞ ∞		: : :	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
-		Poland	566 : 1		: : :	174
		Norway	7		: : :	-::::::::::::::::::::::::::::::::::::::
		Italy	17			5
	Europe	Hungary	1	:::		4 : - : : : : : : : : : : : : : : : : :
	Eur	Holland	9:::9:::	m ≈ = : : :	:::	2 :1 : 7
		Сеттапу	o : : : ∞ − : : :		: : :	4-:::-:
		France	м · · · · · · · · · · · · · · · · · · ·	21 :1 : :	:::	
DE		Finland	33.33	- : :- : :	:::	52 - 1 - 1 - 1 - 1 - 1 - 1
BRI		Denmark	יי מי	2::	: : :	6 : : 6 : : : : : : : :
OF		Belgium	10 11 110	::::::	: : :	1:0:::2::::
臣		Austria	o : : : ∞ - : : :	7 <del></del>	: : :	210
BIRTHPLACE OF BRIDE	c 1	Other	7	98 84	rv : rv	-::::::::::::::::::::::::::::::::::::::
CHP	British Posses- sions		222		₩ 4 − :	
HRI	P.G.	Newfoundland		::		
"		Vales	22 20 20 20 20 20 20 20 20 20 20 20 20 2	3 10	:::	=
	British Isles	Scotland	325 2 2 2 2 2 3 3 3 5 2 5 2 3 8 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	554 18 81 3	:	
	ish			33 33 1	<del>:</del>	4
	Bri	Ireland		291 24 59 59 1	22 = :	22 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
		England	631 144 144 144 144 144 144	25.23		7
		Province not specified	4	mm : : : :	- : : :	2
		Alberta British Columbia	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	69-7		O
		Saskatchewan	303 219 115 58 58 3	10 10 10 10 10 10 10 10 10 10 10 10 10 1	: : :	29 6 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	e l	Manitoba	297 3 3 5 8 8 1195 2 17 17	31 6 6 15 11 15	2:2	27. 1. 1. 1. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.
	Canada	Ontario	22762 5 65 45 383 21817 164 164 83	1538 969 145 383 37	45 24 21	418 13 13 13 13 13 13 13 13 13 13 13 13 13
		Оперес	504 3 132 132 13 13 2 2	41 27 2 9 9	2: 2	4 :- : : : : : : : : : : : : : : : : : :
		New Brunswick	57 1 1 7 7 7 7 7 8 3 	871 :::	:::	2
		Nova Scotia	85 8 5 2 2	111 12 ::	:	9 - : : : : : : : : : : : : : : : : : :
-		Prince Edward Island	911 10 9 2 99 2 73 11 589 11 391 5 309 45 1	11 : : : :	333	24 27 27 77 77 77 77 77 77 77 77 77 77 77
		Birthplace of Bridegroom Total	25,	2,347. 1,464 246 579 52 6		1,1
		шоо	Canada Prince Edward Island Nova Scolids New Brunswick Outbec Ontario Saskatchewan Alberta Province not specified.	itish Isles England Ercland Sredland Wales		
		degr	nada. Prince Edward Island. Nova Scotia. Nova Scotia. Ouchec. Ontario. Manitoba. Assakatchevan. Abberta British Columbia. Province not specified.	British Isles England Freland Scotland Wales Other	British Possessions Newfoundland Other	Europe. Austria Belgium Belgium Denmark Finland France France Hungary Italy Norway Poland
		Bri	warc ia swic		land	
		te of	Edy Scot 3run 3run 60 oba cher a	sles nd d	Posse	ark. mark. id
		nplac	ada. ince ova ew E uebe ntari anit iskat lbert itish	itish Isle England Ireland Scotland. Wales	ish I ewfo	Marting Anticology Ant
		Birth	PRASMOONA	E E E E E E E E E E E E E E E E E E E	Brit	PARQEEQHERZS

Russia**         Solution         2         1         4         7         1         4         7         14         1	7     14     41     2       6     3     1     3       6     3     1     1     10       3     1     1     1     4     2       3     1     3     2     1     4     1       1     1     1     4     1     1       1     3     2     1     8     1       249     34     84     8     104     5     9     494     2     1
128   2   1   44   7   2   2   2   1   1   1   2   1   1   2   1   1	17     14     41     2       6     3     1     3     10       6     3     1     3     11     11       3     1     3     2     1     4     1       3     1     3     2     1     80     1       4     1     1     1     1     1       1     3     2     1     1     80     1       249     34     84     8     104     5     9     494     2
128   2   1   44   7   2   2   2   1   1   1   2   1   1   2   1   1	17 14 41 2 6 3 1 3 71 10 10 10 10 3 1 3 71 1 10 3 1 3 2 1 1 80 1 2 2 2 10 1 1 1 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
128   2   1   44   7   2   2   2   1   1   1   2   1   1   2   1   1	17 14 41 2 6 3 1 3 77 1 3 1 3 1 1 1 4 1 1 1 1 4 1 2 2 1 1 1 1 2 49 34 84 8 104 5
\$\frac{56}{128}\$ \tag{2}	17 14 41 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
\$\frac{56}{128}\$ \tag{2}	11 14 41 2 2 2 3 4 8 8 4 8 8 104 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	7 14 11 2 11 1 41 3 2 6 3 1 3 771 6 3 1 3 771 3 3 1 3 2 1 1 3 2 249 34 84 8 104
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	11
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	7 14 11 14 11
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	7 14 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	249
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	7
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	· · · · · · · · · · · · · · · · · · ·
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	:: : : : : : : :
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	4 · · · 2 · · · · · 1 · · · 0
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	9
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	93
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	245
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	32.
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	5 : : : : : : : : : : : : : : : : : : :
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	<u>:::::::::::::::::::::::::::::::::::::</u>
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	=
\$\frac{56}{128}\$ \tau \frac{2}{1} \tau \frac{1}{1} \frac{1}{2} \frac{1}{1} \frac{1}{2} \fr	9 1 2 2 1 1 2 2 1 2 2 1 3 3 1 3 1 3 1 3 1
56	
56	18
56	24
56	
56	545
56	
56	36 : : : : : : : : : : : : : : : : : : :
Roumania         56         2         1         44           Russia*         125         2         1         44           Sweden         164         1         5         49           Other         19         3         23           Sia         19         3         23           China         19         2         1           Japan         19         2         1           nited States         587         1         2         1           arious         5         5         -         4           Total brides         30,080         11         100         60         579         25195	396
Russia**  Russia**  23  Sweden  Other  Japan  Other  Japan  Total brides  Source  30,080 111 109 60 579 2	117 444 449 114 113 113 119 44 44 44 45
Roumania         56         2           Russia**         125         2           Sweden         123         1           Other         164         1           Sia         19         19           China         19         19           Other         19         1           nited States         5         1           arious         5         5           Total brides         30,080   11   109   69   55	24 .12 6 .42 7 . 5
Roumania         56         2           Russia*         125         2           Sweden         123         2           Other         164         1           sia         40         1           China         19         1           Japan         2         2           Other         19         1           nited States         587         1           arious         5         5           Total brides         30,080 111 100 0	50 : 2 :
Roumania 56 Russia* 125 Sweden 23 Other 164 China 19 Japan 19 Other 19 arious 587 Total brides 30,080	000
Roumania 56 Russia* 125 Sweden 23 Sweden 23 Subject 164 Sia 164 China 19 Japan 19 Other 19 nited States 587 arious 587	
Roumania Russia* Sweden Sweden Other Japan Japan nited States arious. Total brides 30,	56 125 23 23 164 40 19 2 19 2 19 587 587 5
Roumania Russia* Sweden Stweden Street China Japan nited States arious.  Total brides	30,
3 5 5	Roumania Russia* Sweden Other China Japan Other United States Various Total brides

\*Including the Ukraine.

Table 22—Marriages—Literacy of Bridegrooms and Brides in Ontario, Classified by Birthplace, 1938

	I	Bridegroom	s		Brides	
Birthplace	Total	Illiterate	Per cent. Illiterate	Total	Illiterate	Per cent. Illiterate
Total	30,080	45	0.1	30,080	20	0.1
Canada. Prince Edward Island. Nova Scotia. New Brunswick. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia. Province not specified.	25,911 9 99 73 589 24,391 309 288 108 45	1 32	0.1	26,882 11 109 69 579 25,195 390 362 111 54 2	9 2 7	0.3
British Isles England Ireland Scotland Wales Other	2,347 1,464 246 579 52 6			1,838 1,115 189 501 33		
British Possessions	66 33 33			57 37 20		
Europe. Austria Belgium Denmark Finland France Germany Holland Hungary Italy Norway Poland Roumania Russia* Sweden Other	1,124 42 29 24 77 4 48 32 51 123 13 313 313 56 125 23 164	12 1 1 7	1.1 2.4 	792 32 24 14 93 6 14 17 60 50 3 249 34 84 8		1.4 3.1
Asia. China. Japan. Other.	40 19 2 19			14 5 9		
United States	587			494		
Various	5			2		
Not specified				1		

<sup>\*</sup> Including the Ukraine. † Less than one-tenth of one per cent.

Table 23—Deaths of Children under One Year (exclusive of Stillbirths) in Ontario, by Months, Classified as Rural and Urban, 1938

							MON	NTHS					
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Ontario	3,245	282	260	313	286	271	250	234	262	308	279	227	273
Rural Urban	961 2,284	101 181	88 172	107 206	89 197	68 203	57 193	67 167	67 195	92 216	66 213	65 162	94 179
AddingtonRural	4 4	1		2 2	1 1								
AlgomaRural	68 10	4			7	9 1	7 3	6	8	9	5		1
Urban	58 37	3 2	5	2 2	6 5	8 5	3	6 3	7 5	7	5		2 2
Blind River, t	14 7 48	6			1	5	i i	1	2	2 2	1		1
BrantRuralUrban	13 35	3		6 2 4	5 - 2 3	2	2	;	3 1 2	5 1 4	2	2	6
Brantford, c Paris, t	33	3		4	3	3	1 1	1	2	3	2		6
Bruce	39. 29	4 2		3	7	3	1	3	3	8 7	5	2	
Urban	10			1	1		1	2		1	î	î	•
Kincardine, t Southampton, t	2 1			· · · · i									
Walkerton, t	2						· · · · i	1				1	
Lucknow, vl	1										· · · · i		
Carleton	211 11 200	23	17	11	16	21	22	13	19	17	24	16	12
Urban. Ottawa, c. Eastview, t.	191	23 21 2	16 16	10 9 1	13 12 1	20 20	21 19	13 13	18 17	16 16	23 23	15	12 11
Rockcliffe Park, vl	134	12	13	13	15		6	3	16	11	13	1	<u>1</u>
Rural. Urban.	56 78	7 5	7	7	7 8	3	1 5	1 2	7	3 8	5 8	11 6 5	12
Cochrane, t	9	1	1	2	2	i			í		1	1	
Kapuskasing, t Timmins, t	9 57		2 3	3	2	3 2	1 3	2	1 7		7	4	10
Dufferin	12 6	2 2		2		1			2				<b>.</b>
Orangeville t	6					1	1		1	1	1		 
Shelburne, vl	18		····i		· · · · i		1 2	2	· · · · i	3	2	· · · · i	2
Rural	16 2						1 1		i	3	2		
Chesterville, vl	1						····i						
Morrisburg, vl	24	2	3	3	3	5			2				
Rural Urban	8	1	1 2	1 2	3	5	i	2	1 1	1			
Bowmanville, t	11	î	2			4	1	2					1
Rural	27. 9	4	1	1	2	2		5	2	1 1	3	1	5 2
Urban	18 18	3		1	1	1		5	1		2 2		3
Essex	122	7		11	18	7	11		10	···ii	9	13	8
Rural	29 93	3	7	ii	14	3 4	4 7	3 5	1 9	10	7	10	3 5
Windsor, c	79 4	4	3		12				7		6	1.	
Essex, t Kingsville, t	1 1 7				1								
Leamington, t	<u>'</u> [												
FrontenacRural	62 12	4	5	8 2	7 3	10	3	4	4	5	4	i	7
Urban	50 50	4	4	6	4	2 8 8	2 2	3	4	4 4	4 4	i 1	6
Portsmouth, vl	13	i	i		· · · · · i	····i	i	4					2
Rural Urban	11 2 2	î	<u>î</u>	2 2	· · · · i	î	· · · · i	4					2
Alexandria, t	2		!		ī		î1	]		.		} .	

Table 23—Deaths of Children under One Year (exclusive of Stillbirths) in Ontario, by Months, Classified as Rural and Urban, 1938—Continued

	Total						MON	ITHS					
	10141	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Grenville	12 10		2 2	2		2 2	1				1	1	
Urban	2				1								
Prescott, t Cardinal, vl	1												
Kemptville, vl	i												
Grey	44 21	4 4	1	6	3		2 1 1 1	3	4		4	5 3	
Rural Urban	23	*	1	3	1	1	1	3 2	3	3	4	2	
Owen Sound, c	17		1			1	1	2	1		4	2	
Durham, t	1 3			1	· · · · · i			· · · · i	1				
Meaford, t	2								1				
Haldimand	5		2							1			
Urban							1			1			
Dunnville, t	1												
Hagersville, vl													
Haliburton	8		2					1	2		2		
Rural Halton	8		4	1				1	2	1		1	
Rural	1									1			
UrbanBurlington, t				1		1						1	
Georgetown, t	i			1									
Milton, t	;												
Oakville, t	1					1							
Hastings	64	5	6	7	6		2	3	7	7	5	7	
Rural	29 35										3 2		
Urban	24		2	1									
Deseronto, t	1											1	
Madoc, vl	7			1 -		1			3	1			
Tweed, vl	2									1			
HuronRural	31 19			3	1	3 2	1	2 2	1	1	2 2	2 2	
Urban	1 12	1 3	4	1	· · · · i	1 1			1	1			
Clinton, t	1	1											
Goderich, t Seaforth, t	2 5	1	3		i	1			1				
Wingham, t.	4	1								1			
Exeter, vl	53		6	10	4	3	3	5		2	5		
Rural	16							1		1		_	
Urban	37	6					3			1	5	3	
Dryden, t Keewatin, t	14	2	1	3	2			2			2	2	
Kenora, t	16	3				1	2	2				1	
Sioux Lookout, t Kent	7 81	1 4		1 12		5	1 8			10	3 5		
Rural	17		4			2			2	3	1		
Urban	64	4						1		7	4		
Chatham, c Blenheim, t	59	4	3	10	7	3	5	1	6	7	3	6	
Dresden, t	i						1						
Ridgetown, t									· · · · i				
Wallaceburg, t	2				1						1		
LambtonRural	44 19	4	2 2	4 3			3	6 2			4		
Urban	25			1		3		4			1 3		
Sarnia, c	21	3				2					3		
Forest, t Petrolia, t	· · · · · · · · · · · · · · · · · · ·							· · · · · i					
Point Edward, vl													
Lanark	24 6	2		3		2	2	3		1	2		
Urban	18			2		2	2			1	i		
Almonte, t								2					
Carleton Place, t Perth, t	2 2 7	1		1		1 1	· · · · i		2				
Smiths Falls, t	7			i			1			1	1		
Leeds	32 13	2	2	1				2			2		
Urban	19	1 1	2			2		1	2	6	1		
Brockville, t	19	1	2			2			2		1		
Gananoque, t	3							1				1	
Rural Urban	2							1				1	
	1	1											

Table 23—Deaths of Children under One Year (exclusive of Stillbirths) in Ontario, by Months, Classified as Rural and Urban, 1938—Continued

		MONTHS													
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec		
Lincoln	46 4	4	3	4	4	5	4	4	7	4	3	1			
RuralUrban	42	3	3	3	4	4	4	3	7	4	3	i			
St. Catharines, c	33	2	3	3	4	2		3	5	2	1	1	3		
Grimsby, t	1										1				
Niagara, t	3					1			2						
Beamsville, vl Port Dalhousie, vl		ii								i					
Manitoulin	21	4		4	1	1	3		2 2	2 2	3				
Rural Urban	18	4		4	1		2			2	1				
Little Current, t	3		;			;	2		,		1				
MiddlesexRural.	85 11	8 2	11	5	11	4	10	1	6 2		1	1			
Urban	74	6	11	4	- 10		10	4	4	7	3	6			
London, c Parkhill, t	72	6	11	4	10	4	10	4	3	7	3	6			
Strathroy, t	2								1						
Muskoka	27 15	5	6 2	1	2 2	1			2	1	3	1			
RuralUrban	12	4	4			· · · · i			1		2				
Bracebridge, t	6	1	1			1					2				
Gravenhurst, t Huntsville, t	5		1						1						
Nipissing	85	6	7	6	9	7	7	11	8	9	4	5			
RuralUrban.	29 56	3	3 4		4 5		6	5	2 6		1 3	2 3	:		
North Bay, c	28	3	4			6		3	1	3	2	2			
Cache Bay, t	1				1	;				2	:				
Mattawa, t	18			1 1	3	1	4	1	1 4		1	· · · · · i			
Norfolk	26		1	3	3	3	5		2	5	2				
Rural Urban	7 19			1 2	2	3	5		2	5	1 1				
Simcoe, t	16			2	î		5		2	4					
Delhi, vl Port Dover, vl	2		1					1		;					
Waterford, vl										1					
Northumberland	25	2		3	4	4		2	4	1		3	:		
RuralUrban	10 15	2		1 2		1 3		2	1 3			1 2			
Campbellford, t	5			1		1			2			ĩ			
Cobourg, t Brighton, vl	7 2			1		1 1		2	1			1			
Colborne, vl	1				i										
Ontario	40 10	1	7	3 2	2	4	4	3	3	3	4	2			
Rural Urban	30	1	7	1	2	1 3		2	3	2	3				
Oshawa, c	29	1	7	1	2	2	3	1	3	2	3	2			
Uxbridge, t	1					1									
Port Perry, vl															
OxfordRural	39 13			3	6 2	1 1	1	2	1	3 2	1	2			
Urban	26			3	4		1	2			6	3			
Woodstock, c	14 5			1	1 3		1	1	1	1	3	3			
Tillsonburg, t	6			î				i	i		3				
Norwich, vl	1									,					
Tavistock, vl	29	3	2	3	3	1	1	3	2	4	3	2			
Rural	23	3	2	3		1	:	1	2	4	2	2			
UrbanParry Sound, t	6 6				1		1 1	2 2			1				
Peel	21	2	3	1		2	î	ī	3	2		1			
Rural Urban	12 9	$\begin{bmatrix} 1\\1 \end{bmatrix}$	1 2	1		2	1	1	1 2	2					
Brampton, t	8	i	1						2	2		1			
Perth	1 27	4	1	3	5	4				2	2				
Rural	6	1	1		1	4	1			1	1				
Urban	21	3		3	4	4	2		1	1	2				
Stratford, cListowel, t	14 4	2		1	3	3	2		1	1	2				
Mitchell, t	2			2											
St. Mary's, t		;													
Peterborough	43	3	1	5	2	7	6	4	2	2	1	5			
Rural	8	3		3		1	1	2	2		1				
UrbanPeterborough, c	35 31	2	1	2 2	2 2	6		2 2				5 4			
Havelock, vlLakefield, vl	3						1			1		1			

Table 23—Deaths of Children under One Year (exclusive of Stillbirths) in Ontario, by Months, Classified as Rural and Urban, 1938—Continued

	Total						MON	THS					
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	De
PrescottRural	66	11 8	5 4	11		6	7 4	4 2	2		2	4 2	
I 'rhan	25	3	1			2 2	3	2	2	3	1	2	
Hawkesbury, t Vankleek Hill, t L'Orignal, vl.	20 2	2							1		1		
L'Orignal, vl	3 15	1	1					3	1		2		
rince Edward	4		1			1					2		
Urban	11	1	3			2 2		3		1 1		1 1	
ainv River	33	4	2	3	5	3	3	1		5	1		
Rural	21 12	$\frac{3}{1}$	1		4	1 2		····i			1		
Urban	8	1	· · · · i		1		1		1				
Rainy River, tenfrew	67	10	7		7	8	6	4	1	7	2	3	
RuralUrban	34										1 1		
Arnprior, t	2			1	1								
Pembroke, t	26 4		3	1	2		3				1		
Renfrew, t Barry's Bay, vl Eganville, vl	1		1										
ussell	32	5	4	2 2	1	1		2	3		3	3	
RuralUrban	29				1	1	2		3		3	3	
Rockland, t	3	1	i	1			1						
imcoe	79		4	7	4	8							
Urban	56	6	4	6			6	4	. 4	4	8	3	
Alliston, t Barrie, t	4 5		1	1 2			1		1	i		1	
Collingwood, t	8	3 1			. 1		i	1	. 1	1	1		
Midland, t Orillia, t	14			2 2	2 1	2	4	2	1 4		1 2		
Penetanguishene, t						2			1	1	3	3	
Stayner, t													
tormont	52			3	3				3	3			1
Rural	23	3 2			2 1					2 3		1 2	2
Urban	. 29	4	4	l 1		. 5	1		!	1 3	4	19	
udburyRural	163 85				1 1						) 6	5 8	
Urban	78 74				7 5					7 10			
Sudbury, c	1												
Connercliff t	3	3						1					
Coppercliff, t hunder Bay	7.5			5	' '	/ i	2						i
RuralUrban	14			2 2	2 1		2			2 4			i
Fort William, c	. 21	1 3		il 3			1		2 2	2			
Port Arthur, c	40			3 4	1 1		1 1			5 5		1	1
Rural	2	1 1	i  :	2 2	2 1	1 2	2 2		2	2 1			1
Urban	49			1	2	3	3	10	1		2		
Englehart, t	3	2		,						1			
Haileybury, t New Liskeard, t		1								. 1			
Kirkland Lake	34			2	3	3	3 2	1 8		3 1		5	5
Rural		7 1			2					2 1			
Urban	15		-	1	1 1		2			3 3	3	2	
Vaterloo	. 78	8 5		1		7 2	1 9			5 7	1 9	5 5	5
Rural	. 6.			1 10	0		1 5		7	4	7 3	1	5
Galt, c	. 14	4	1	.  :	5	!	1 2	2	3	1			
Kitchener, c Elmira, t	. 40			3	5	5	3 2		3	3			<b>.</b>
Hespeler, t													
Preston, t Waterloo, t	:  ;	3	:						i		1		i
New Hamburg, vl				5 1								8	2
Rural	. 1.	3	1	1	2	3			2		1		
Urban Niagara Falls, c	. 4.	5 .				3	2	2	5		1	8 :	2
Welland, c	. 1	8	4	1	4 4	2	1	1	3			2	
Fort Erie, t Port Colborne, t		3				i	1		1		i	il.	1
Thorold, t		3	1		i							1	
Chippawa, vl Humberstone, vl													

Table 23—Deaths of Children under One Year (exclusive of Stillbirths) in Ontario, by Months, Classified as Rural and Urban, 1938—Continued

							MON	THS					
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Wellington Rural Urban. Guelph, c. Harriston, t. Mount Forest, t. Palmerston, t. Arthur, vl. Elora, vl. Fergus, vl. Wentworth Rural Urban Hamilton, c. Dundas York Rural Urban Control, c. Aurora, t. Long Branch, t. Mimico, t. New Toronto, t. Weston, t. Forest Hill, vl. Markham, vl. Richmond Hill, vl. Stoufville, vl. Swansea, vl.	 i	12 44 7 37 37	9 29 29	200 3 3 17 16 14 47 5 5 422 41 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 11 11 11 11 11 49 3 466 466	1	77 77 522 4 48 48	10 22 8 8 8 8 4 39 38 1	2 9 9 42 3 39	2 13 13 13 2 50 6 7 7 43 41	56	77777	444

Table 24—Total Deaths (exclusive of Stillbirths) and Deaths in Institutions of Children Under One Year of Age, Showing the Number Non-Resident in the Province of Ontario, 1938

		All Dea	aths un	der One	Year	In Institutions								
		Total			n-resid Provin			Total		Non-resident in Province				
	Total	M.	F.	Total	M.	F.	Total	М.	F.	Total	М.	F.		
Total for the Province	3,245	1,850	1,395	22	13	9	1,729	994	735	19	12	7		

Table 25—Total Deaths (exclusive of Stillbirths) and Deaths in Institutions of Cities, Towns and Villages of Ontario

		ALL DEATHS UNDER ONE YEAR													DEATHS			
Cities, Towns and Villages		Total			Residents			Non-resident in City, Town or Village where Death Occurred and					Total					
Cities, fowns and villages							Resident in Province			Non-resident in Province								
	Total	М.	F.	Total	М.	F.	Total	м.	F.	Total	М.	F.	Total	м.	F.			
Cities: Belleville. Brantford Chatham. Fort William. Galt. Guelph. Hamilton. Kingston. Kitchener. London. Niagara Falls. North Bay. Oshawa. Ottawa. Owen Sound. Peterborough. Port Arthur. St. Catharines. St. Thomas. Sarnia. Sanit Ste. Marie. Stratford. Sudbury. Toronto. Welland Windsor. Woodstock.	244 333 599 211 144 122 1122 500 466 722 177 311 400 333 188 299 191 147 4500 147 149 149 149 149 149 149 149 149 149 149	14 5 10 64 26	122 199 188 77 99 22488 224 155 300 33 137 77 81 18 177 188 100 122 55 226 2219 100 33 55	25 22 15 12 7 91 31 27	10	5 155 9 7 8 1 39 166 100 166 3 3 100 7 7 66 66 7 7 100 8 8 7 7 100 111 110 110 110 110 110 110 110	144 88 377 66 22 55 21 199 355 3 3 100 66 300 66 610 22 21 120 8 155 4	7 44 288 66 11 44 122 111 114 114 221 15 22 77 70 33 37 7 22 114 700 2 88 2	774499 1119988551443399177777500667722	13	7		19 29 49 17 11 11 9 94 47 43 67 7 15 10 21 171 12 22 5 36 27 13 47 21 21 22 13 426 10 10	9 111 355 122 4 8 8 566 300 16 9 9 20 20 14 9 9 8 8 15 9 9 30 30 14 9 14 9 15 9 16 9 16 9 16 9 17 9 18 9 18 9 18 9 18 9 18 9 18 9 18	10 188 14 5 7 1 138 227 2 2 9 5 5 7 5 7 5 7 6 6 16 13 4 4 9 9 7 7 4 18 19 19 19 19 19 19 19 19 19 19 19 19 19			
Towns: Barrie Brampton Brockville. Cobourg Collingwood. Cornwall. Eastview. Fort Erie. Fort Francis. Hawkesbury. Ingersoll. Kenora. Leamington. Lindsay. Midland. Mimico. New Toronto. Orillia. Pembroke. Port Colborne. Preston. Renfrew. Riverside. Simcoe. Smiths Falls. Thorold. Timmins. Trenton. Waterloo. Weston. Whitby.	5 5 8 8 19 7 7 8 8 20 9 9 5 166 7 7 15 14 4 1 1 1 7 266 4 4 4 1 1 1 1 7 7 3 3 5 7 7 7 3 3 2 2	1 5 12 5 6 6 18 4 4 1 1 5 5 8 8 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 3 7 2 2 111 5 2 3 3 9 1 4 2 7 7 8 8 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 5 5 111 15 4 4 121 5 7 7 18 4 4 122 5 5 7 7 15 4 4 13 3 5 3 3 7 3 3 1 1	1 1 3 3 5 5 3 3 4 4 12 2 4 4 9 9 3 8 3 5 5 5	3 2 6 2 2 3 9 5 2 3 3 9 9 1 4 2 2 2 4 4	1 3 8 8 2 4 4 7 7 1 1 1 4 4 2 2 8 8 5 1 1 1 1 3 3	2 7 7 2 2 2 5 5 1 4 2 2 3 1 1 1 5 5 5 1 4	1 1 1 1 2 2 2 2 3 5 4 4 1	2	2  1 		3 6 6 6 6 6 26 3 1 1 5 2 2 14 4 4 13 9 1 14 18 8 14 18 18 17 7 14 17 7 17 7 17 7 17 7 17 7 17 7 17 7 17 7 17 7 17 7 17 7 18 7	51 11 4 4 4 15 15 10 3 7 7 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	3 1 4 4 2 2 2 111			
Villages: Forest Hill Kırkland Lake Swansea	34	16	18	30		15		i					24	11	13			

## Children under One Year of Age, Classified according to Residence of Decedents in of 5,000 Population and Over, 1938

n Ins	TITUT	ions								I	DEAT	HS ELS	EWH	ERE	THAN	n In	STITU	TIONS		
Res	sident	8	Moth	ers N	on-re Villag Occur	esident ge Whe rred ar	in (ere D	City, eath	To	otal		Re	siden	ts	Moth	ers N	Non-r Villag Occurr	esident e Whe ed and	in C re De	City,
				dent ovinc		Non in F	-resid	lent nce								dent			resid	
Total	М.	F.	Total	м.	F.	Total	м.	F.	Total	м.	F.	Total	м.	F.	Total	М.	F.	Total	М.	F.
6 21 13 13 13 9 4 73 28 28 24 24 10 16 129 6 6 6 6 6 22 22 10 10 11 11 11 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10	6 5 8 7 17 164 2 28	3 144 5 5 5 6 13 2 2 6 6 5 6 1 3 9 9 6 4 4 4 9 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	3 6 10 2 19 120 8	6 4 4 1 1 1 1 1 1 4 4 1 1 1 1 1 1 4 2 1 1 1 3 6 5 5 1 1 5 2 2 7 7 1 1 0 3 3 3 7 7 0 2 2 8 8 2 2	77 44 99 88 85 144 33 33 33 66 500 66 77 22	13	7	66	55 44 10 4 33 33 18 33 55 22 9 8 8 20 55 6 6 5 5 1 1 2 9 7 4 4 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33 36 21 12 88 1 55 66 144 11 55 22 11 31 10 3	2 1 4 2 2 1 1 100 3 3 2 2 6 4 4 1 2 2 4 4 4 1 1 2 2 1 1 1 2 2 4 1 1 1 2 2 1 1 1 2 2 1 1 1 2 1 2	4 4 4 9 2 3 3 18 3 3 5 5 2 2 8 7 7 7 9 5 6 6 5 4 4 6 5 5 4 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2 3 5 5 1 2 8 8 1 1 2 1 4 4 5 1 4 1 5 2 2 1 3 3 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	22 11 44 22 11 100 33 22 55 44 11 22 44 44 11 100 28 28 11	1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2 2	1			
2 2 3 3 7 7 4 4 2 2 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	2 2 2 100 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	223 223 33 4.11 1.11 1.11 2.11 1.12 2.11	38 22 44 66  1 1 4 2 2 8 5 5 1 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1	5 4	555	2	2		2 2 2 4 4 1 1 2 2 3 3 3 2 2 5 5 5 5 5 5 6 4 1 1 2 2 4 4 2 2 4 4 2 2 4 2 2 4 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2 2 2 2 4 2	1 2 2 3 4 4 9 9 9 2 2 2 2 1 1 2 2 3 3 5 5 3 3 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 3 3 6 6 1 1 1 3 3 1 1 1 1 1 1 1 1 1 1 1	1 3 7 4 1 1 2 3 3 3 9 7 7	2 2 2 4 4 9 9 2 2 2 2 2 2 1 2	3 6 1 1 1 3 3 1 1 1 2 2 2 1	1 1	i	i			
21		10	3		3				10	5	5	9	4	5	i i	i				

Table 26—Deaths of Children under One Year (exclusive of Stillbirths), by Age at Death, in the Province of Ontario, 1938

Ages			
M. 1,852   M. 1,813   M. 4,843	Ages		Total
Under I day.	All infants	·м.	1,850
1 day.	Under 1 day		831
2 days	1 day	F.	343 252
3 days.       M. 92         4 days.       M. 53         5 days.       F. 60         5 days.       F. 32         6 days.       M. 22         6 days.       M. 22         Under 1 week.       M. 22         Under 2 weeks.       M. 884         1 week and under 2 weeks.       M. 884         2 weeks and under 3 weeks.       M. 68         3 weeks and under 1 month.       F. 63         3 weeks and under 2 months.       M. 43         Under 1 month       M. 43         F. 815       M. 1072         1 month and under 2 months.       M. 134         2 months and under 3 months       M. 134         3 months and under 4 months       M. 134         4 months and under 5 months       M. 134         5 months and under 6 months       M. 124         5 months and under 6 months       F. 85         5 months and under 7 months       F. 34         6 months and under 8 months       M. 65         7 months and under 9 months       M. 67         8 months and under 9 months       M. 65         9 months and under 10 months       F. 34         9 months and under 10 months       F. 34         10 months and under 11 months <td>2 days</td> <td></td> <td>101</td>	2 days		101
M. 53   F. 61   M. 54   F. 32   M. 54   F. 32   M. 54   F. 32   M. 54   F. 32   M. 54   F. 32   M. 54   F. 32   M. 54   F. 32   M. 54   F. 32   M. 54   M. 54   F. 20   M. 54   M. 55   M. 5			92 69
4 days.	3 days		53
5 days.         M. 22           6 days.         F. 22           Under 1 week         F. 20           Under 1 week         1,532           I week and under 2 weeks.         M. 884           1 weeks and under 3 weeks.         F. 648           2 weeks and under 3 weeks.         F. 65           3 weeks and under 1 month         F. 65           3 weeks and under 2 months         F. 81           4 Under 1 month         1,887           5 month and under 2 months         1,887           6 months and under 3 months         1,42           2 months and under 3 months         1,42           2 months and under 4 months         1,24           4 months and under 5 months         1,89           4 months and under 5 months         1,89           5 months and under 6 months         1,24           6 months and under 7 months         1,24           7 months and under 8 months         1,24           8 months and under 9 months         1,24           9 months and under 10 months         1,24           10 months and under 10 months         1,24           10 months and under 11 months         1,24           10 months and under 12 months         1,24           10 months and under 12 months	4 days	м.	86 54
6 days	5 days		44 22
Under 1 week	6 days		44
F. 648	Under 1 week	F.	20 1,532
2 weeks and under 3 weeks       128         3 weeks and under 1 month       F. 65         3 weeks and under 1 month       M. 43         Under 1 month       F. 88         Under 1 month and under 2 months       M. 1,072         1 month and under 3 months       241         2 months and under 3 months       222         M. 134       F. 88         3 months and under 4 months       Isl         4 months and under 5 months       F. 89         4 months and under 6 months       F. 45         5 months and under 7 months       F. 45         6 months and under 8 months       F. 33         7 months and under 8 months       F. 33         8 months and under 9 months       F. 32         8 months and under 10 months       F. 32         9 months and under 11 months       F. 36         10 months and under 11 months       F. 36         11 months and under 12 months       F. 30         11 months and under 12 months       M. 30	1 week and under 2 weeks		648
M. 63   F. 65   81			82 64
Standard   Standard	2 weeks and under 3 weeks		63
Under 1 month       1,887         M. 1,072       F. 815         I month and under 2 months       241         2 months and under 3 months       222         M. 134       F. 88         3 months and under 4 months       181         M. 92       F. 89         4 months and under 5 months       124         M. 79       F. 45         5 months and under 6 months       124         M. 71       F. 33         6 months and under 7 months       99         M. 65       F. 34         7 months and under 8 months       72         8 months and under 9 months       M. 40         8 months and under 10 months       F. 34         10 months and under 11 months       F. 36         10 months and under 12 months       F. 36         11 months and under 12 months       M. 30         11 months and under 12 months       M. 30         11 months and under 12 months       M. 30	3 weeks and under 1 month	м.	81 43
The stand and under 2 months   F.   815	Under 1 month		1,887
2 months and under 3 months       F. 99         222       M. 134         F. 88       F. 88         3 months and under 4 months       M. 92         4 months and under 5 months       M. 79         5 months and under 6 months       124         M. 71       F. 45         6 months and under 7 months       M. 65         7 months and under 8 months       F. 34         7 months and under 9 months       F. 34         9 months and under 9 months       F. 32         8 months and under 10 months       F. 36         10 months and under 11 months       F. 36         11 months and under 12 months       F. 36         11 months and under 12 months       M. 30         11 months and under 12 months       M. 30         11 months and under 12 months       M. 30         11 months and under 12 months       M. 36	1 month and under 2 months		815 241
3 months and under 4 months.       F. 88         4 months and under 5 months.       M. 92         5 months and under 6 months.       F. 45         5 months and under 7 months.       M. 71         6 months and under 7 months.       99         7 months and under 8 months.       72         M. 40       F. 32         8 months and under 9 months.       M. 40         9 months and under 10 months.       F. 32         10 months and under 11 months.       M. 42         10 months and under 12 months.       60         11 months and under 12 months.       M. 30         11 months and under 12 months.       M. 30         11 months and under 12 months.       M. 36	2 months and under 3 months.	F.	99 222
4 months and under 5 months       M. 92         5 months and under 6 months       F. 45         6 months and under 7 months       124         7 months and under 8 months       M. 65         7 months and under 8 months       F. 34         7 months and under 9 months       F. 32         8 months and under 9 months       F. 32         9 months and under 10 months       F. 46         9 months and under 11 months       F. 36         10 months and under 11 months       F. 36         11 months and under 12 months       F. 30         11 months and under 12 months       M. 30         11 months and under 12 months       M. 30         11 months and under 12 months       M. 36	3 months and under 4 months		88
5 months and under 6 months.       M. 79         F. 45       124         M. 71       F. 53         6 months and under 7 months.       99         7 months and under 8 months.       F. 34         7 months and under 9 months.       F. 32         8 months and under 9 months.       93         M. 47       F. 46         9 months and under 10 months.       M. 42         10 months and under 11 months       60         M. 30       F. 36         11 months and under 12 months.       M. 30         11 months and under 12 months.       M. 36			92 89
5 months and under 6 months.       124         M. 71       F. 53         6 months and under 7 months.       M. 65         7 months and under 8 months.       72         M. 40       F. 32         8 months and under 9 months.       M. 47         9 months and under 10 months.       F. 46         10 months and under 11 months       M. 42         F. 36       M. 30         In months and under 12 months.       F. 36         11 months and under 12 months.       M. 30         11 months and under 12 months.       M. 30         11 months and under 12 months.       M. 36	4 months and under 5 months		79
6 months and under 7 months.  7 months and under 8 months.  7 months and under 8 months.  8 months and under 9 months.  93  M. 47  9 months and under 10 months.  M. 47  9 months and under 11 months.  M. 42  F. 36  10 months and under 11 months.  60  M. 30  F. 30  11 months and under 12 months.  M. 36	5 months and under 6 months	M.	124 71
7 months and under 8 months.  8 months and under 9 months.  9 months and under 10 months.  9 months and under 10 months.  10 months and under 11 months.  11 months and under 12 months.  M. 30 F. 30 M. 30 F. 30 M. 30	6 months and under 7 months	M.	99
8 months and under 9 months.  9 months and under 10 months.  9 months and under 10 months.  10 months and under 11 months.  11 months and under 12 months.  M. 30 F. 30 F. 30 M. 30 F. 30 M. 30 F. 30 M. 30 F. 30 M. 30 F. 30 M. 30	7 months and under 8 months		72
9 months and under 10 months.  M. 42 F. 36 10 months and under 11 months.  M. 30 F. 30 11 months and under 12 months.  M. 36	8 months and under 9 months.	F.	32 93
M. 42 F. 36 10 months and under 11 months. 60 M. 30 F. 30 11 months and under 12 months. 64 M. 36	9 months and under 10 months.		46
M. 30 F. 30 11 months and under 12 months			42 36
11 months and under 12 months			30
	11 months and under 12 months	M.	64 36

Table 27—Deaths of Children under One Year of Age (exclusive of Stillbirths) Classified According to Racial Origin of Decedents, in the Province of Ontario, 1938

	Racial Origins	Total
	All origins	3,245
	English	1,104
	Irish	461
	Scottish	340
	Welsh	15
	French	680
	Armenian	1
	Austrian	14
	Belgian	7
	Bulgarian	3
	Chinese	2
	Czech and Slovak	19
	Danish	2
	Dutch	38
	Finish	19
	German	127
	Greek	9
	Hindu	
	Hungarian	16
	Icelandic	
	Indian	117
	Italian	51
	Japanese	
	Jewish	23
	Negro	11
	Norwegian	8
	Polish	48
	Roumanian	7
	Russian	4
	Serb and Croat	20
	Swedish	14
	Swiss	2
	Syrian	1
	Ukrainian*	41
	Other	5
	Not specified	36
_		

<sup>\*</sup>Including "Galician" and "Bukovinian."

Table 28—Deaths of Children under One Year of Age (exclusive of Stillbirths) Classified According to Birthplaces of Parents, in the Province of Ontario, 1938

	-		Not specified	m::=:2:::::	: : : : : :	: : :	
			Various		: : : : : :	:::	
-			Other United States	84	V4 .v. : :	: : :	4
		Asia	Japan				
			China		: • • • • •	1.1.1	
			Other		::::::		8
			Sweden			: : :	2
			*sissuA			: : :	12: 1: 1: 2
			Roumania		::::::	:::	0 : : : : : : : : : : : : : : : : : : :
			Poland	N : : : : = : : : : =	:::	::::	22 26 25 25 27 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
			Norway	= := : : : : : : :		: : :	2
		4)	Italy	<del></del>			2
		Europe	Hungary				<u> </u>
		Eu			<u> </u>	- : : :	2
	-		Holland			::::	
	2		Сегшапу			: : :	
	HE		France	::::		: : :	10
	OF MOTHER		Finland			: : :	2
	y M		Denmark			:::	
	ĬO.		Belgium	2	- : :- : :	: : :	7
	CE		Austria			: : :	44
	PL/	British Posses- sions	Other		- : : : :	7 :-	
	TH	Brit Pos sio	Newfoundland	2 2		ww:	
	BIRTHPLACE		Other		. 1 . : : :	11.	
		les	Wales	n : : : : : : : : : : : :	- : :- : :	:::	
		British Isles	Scotland	22 23 23 23	43 17 7 22 1	::::	
		ritis	Ireland	E : = : : = = : : : :	21 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		
		М	England	69	588 :	:	0 H H H H
				26	20-2-		3- 7 7 7
			Province not specified	4	= - :	- : : :	
			British Columbia	4		: : :	
			Alberta	100 100 100 100 100 100 100 100 100 100		:::	7
			Saskatchewan		~ · · · · ·	:::	∞~····=···=∞
		ada	Manitoba	20	::::	: : :	
		Canada	oinstaO	1026 8 5 104 1773 16 7	197 119 27 27 41 8	984	2
			Specific	180	44 : : : :		4
			New Brunswick	4 2 . 2	:::	: : :	
			Nova Scotia	£ :42 :4 :11 :1	77 : : :	: : :	:::::::::::::::::::::::::::::::::::::
			Prince Edward Island			: : :	
	_	1		394 111 112 113 113 114 144 444	368 222 49 83 10	90.	216 10 10 10 10 11 10 11 88 33 36 25 25 25
			Total Fathers	2 : 2	₩.₩		2
			BIRTHPLACE OF FATHER	Canada Prince Edward Island Nova Scotia News Brunswick Ouebec. Ontario Manitoba Saskatchewan Alberra British Columbia Province not specified.	British Isles. England England Scotland. Wales Other	British Possessions	Europe. Austria Austria Belgium Demmark Frinland France Germany Holland Hungary Italy Norway Poland. Roumana Russia*
					_	_	

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		ASI				Un	No	

\*Including the Ukraine.

Table 29—Deaths of Children (exclusive of Stillbirths) from Certain Specified Causes in First Year of Life by Sex and Calendar Month of Death, Ontario, 1938

	215 12 210 11	18	94 1	42	6 6	∞ ∞	10	12	21 21	==	11	20	7	7.7	-99	00	-00	4 7	99	12	66	10	-00	∞ ∞	23	
(F) No cause given, no doctor in attend- ance	Ŋ	٠,	2	2	:	:	:	:	:	:	:		<u>:</u>	<u>:</u>	<u>:</u>	:		:	:	:					-	
173–175. Homicide	9	4	2	1:	1	:	-	:	-	:	:	:	-	:	1 .	1	:			:	:	-			:	
176–198. Other external causes	35	40	18	S	-	3	3	3	4	2	4	2	9	-		_	2	_	:	4	2	2		33	-	
Other specified causes	97	55	42	4	5	9	1	4	œ	-	-	, N	50	oc	~	7		4	_	2	3	9	-	œ	2	
199-200. Unspecified or ill-defined causes	×	100	35	:		:	:	:	2		:	: :	:		:	:	:		2	:	2	-	:		:	

Table 30-Deaths of Children (exclusive of Stillbirths) from Certain Specified

	ı	1									
CAUSES OF DEATH	Total		under ear		der 1 ay	& u	lay nder reek	& u	eek nder eeks	& u	eeks inder eeks
	Iotai	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ALL CAUSES. Total.	3,245	1,850	1,395	488	343	396	305	82	64	63	65
7. Measles. 8. Scarlet fever 9. Whooping-cough 11. Influenza 13. Dysentery 15. Erysipelas 18. Epidemic cerebrospinal meningitis 23. Tuberculosis of the respiratory system 24. Tuberculosis of the meninges and central nervous system	4 1 60 65 7 5 5 4	3 1 27 36 4 3 1 3	33 29 3 2 4 1				1			1	1 2 1
25-32. Tuberculosis, other forms	6	3				1					
34. Syphilis. 36. Purulent infection, septicaemia 67. Diseases of the thymus gland. 79. Simple meningitis. 86. Convulsions. 89. Diseases of the ear and mastoid process. 105A. Croup. 106. Bronchitis. 107. Bronchopneumonia	17 2 38 14 26 24 3 13 272	9 2 20 8 16 12 3 8	8 18 6 10 12 5 122			2 · · · · · · · · · · · · · · · · · · ·	4 5 5	1 1	1 i 	1 1 1	1 1 1 4
108, 109. Pneumonia	107	71	36			2	2	2		2	1
115. Diseases of the buccal cavity and annexa and of the pharynx and tonsils (including adenoid vegetations)	8	6	2								
116-118. Diseases of the stomach	9	6	3				1	1			
119. Diarrhoea and enteritis. 122. Hernia, intestinal obstruction. 130. Nephritis. 157. Malformations (A) Congenital hydrocephalus. (c) Congenital malformations of the heart (B, D, E) Others under this title. 158. Congenital debility. 159. Premature birth. 160. Injury at birth. 161. Other diseases peculiar to early infancy (under	285 21 2 446 40 168 238 111 1,010 289	159 16  222 22 80 120 65 582 187	126 5 2 224 18 88 118 46 428 102	28 6 7 15 20 311 88	41 7 14 20 14 209 42	1  67 1 28 38 15 157 74	2 51 2 21 28 5 133 48	2  19 1 5 13 2 33 6	23 1 10 12 1 16 6	5  13  4 9 1 25 3	13  2 11 1 26 2
3 months).  (A-E) Specified diseases.  (F) No cause given, no doctor in attendance	215 210 5	121 118 3	94 92 2	32 31 1	32 31 1	59 59	43 42 1	10 9 1	6	6	5 5
173–175. Homicide	6	4	2	4	1						
176–198. Other external causes	58	40	18			1					
Other specified causes	97	55	42	1	3	5	3	3	3	2	
199, 200. Unspecified or ill-defined causes	8	3	5	2	1					1	

## Causes in First Year of Life, by Sex and Age at Death, Ontario, 1938

							AGE	АТ	DEA	ТН													
3 we & ur 1 me	eeks nder onth	1 mo & un 2 mo	onth ider inths	2 mo & ur 3 mo	nths ider inths	3 mo & un 4 mo	nths ider nths	4 mc & ur 5 mc	nths der onths	5 mo & un 6 mo	nths ider inths	6 mo & un 7 mo	nths der nths	7 mo & un 8 mo	nths der nths	8 mo & un 9 mo	der nths	&un 10	ths der	mon & unc 11 mon	ths der	& un 12	der ?
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
43	38	142	99	134	88	92	89	79	45	71	53	65	34	40	32	47	46	42	36	30	30	36	28
i i i	i	2	6 2	4 4	3 2 	4 5	5 3 1	2 4	6 4	 3 5	3 2	1 2 3 1	1 4	2 4 2	1 1	1 2 4	3 3 1	1 1 4 1	1 1	3	1 1 1	i i	· · · · · · · · · · · · · · · · · · ·
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			1	10	4	11	1		1	1		1				1		1		1	3		
1		2					2	1														1	···
4  9 4 22 33 33 9 2	3 8	31	17 17 1 4 12 4 17 2	16 1 5 10 11	8	3 5 1 1 3 2	11 11 7 3 5 6	1 8 5 3 3	2 2 2 2	16 3 5 1 3 1	10 2	18 5 4 1 2 1	9 2 1 	9 4 1 2 1	11 11 6 4 2	9 1 4 1 2 2 1 1	12 1 1 2 1  1	12	8 1  6 1 2 3	4 2	3	3 3 4 1 1 2 1 1	7 2 1 1
1	3		4		1 1																1		
		3	9	-	3		1	6	1 3	6		1 3	-	1	1 3	1 4	4	1 4	2				3
							1				1						2						

Table 31—Total Deaths (exclusive of Stillbirths) and Deaths in Institutions, Showing the Number Non-Resident in the Province of Ontario, 1938

			All De	aths				I	n Insti	tutions		
		Total			-residen Province			Total			-resider Provinc	
	Total	м.	F.	Total	м.	F.	Total	м.	F.	Total	м.	F.
Total for the Province	36,890	19,814	17,076	188	122	66	14,073	8,022	6,051	119	73	46

Table 32—Total Deaths (exclusive of Stillbirths) and Deaths in Cities, Towns and Villages of

					ALL	DEA	THS							DE	ATHS
Cities and Towns	7	otal		Res	ident	5	Resi	reside ge wh	in an		Town Occur residerovin	ent		Γotal	
	Total	м.	F.	Total	м.	F.	Total	М.	F.	Total	М.	F.	Total	М.	F.
Cities:  Belleville.  Brantford Chatham Fort William Galt. Guelph. Hamilton Kingston Kitchener London Niagara Falls. North Bay Oshawa Ottawa Ottawa Owen Sound Peterborough. Port Arthur St. Catharines St. Thomas. Sarnia Sault Ste. Marie Stratford Sudbury Toronto Welland Windsor Woodstock	237 228 274 6947 154	210 1966 1233 74 130 797 265 217 567 121 98 812 873 126 185 150 125 134 114 170 3728 86 454	113 206 137 90 115 90 741 1257 162 539 112 87 76 180 103 161 116 115 103 3219 68 424 101	176 254 165 198 187 190 184 5879	103 130 68 101 106 95 110 3068 52 383	69 179 81 64 89 67 670 182 114 408 88 102 54 70 722 61 137 73 124 97 74 81 81 82 84 84 84 84 84 84 84 84 84 84 84 84 84	105 59 150 69 37 60 170 171 126 299 28 55 54 40 256 48 85 74 90 56 42 42 48 88 81 57 71 88 81 81 83 83 84 84 85 85 85 85 87 87 88 88 88 88 88 88 88 88 88 88 88	43 111 38 100 97 78 168 18 37 23 153 33 42 45 53 37 24 24 26 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28	444 277 566 266 222 770 722 488 131 100 18 17 103 32 99 37 71 19 18 22 22 19 30 406 406 406 406 407 407 407 407 407 407 407 407 407 407	1 2 4 4 2 59 3 2 1 1 1 2 1 1 1 2 1 1 1 2 1	30	29	147 210 229 148 766 119 8700 3622 235 714 120 104 89 1088 81 197 196 188 127 196 104 166 3703 91 473 130	83 108 136 86 32 70 487 197 143 377 74 655 583 59 105 115 103 74 49 264 73	64 102 93 62 44 49 383 105 5 92 337 46 39 32 505 52 92 92 44 44 45 45 45 45 45 45 46 46 47 48 48 48 48 48 48 48 48 48 48 48 48 48
Towns: Barrie Brampton. Brockville. Cobourg. Collingwood Cornwall Eastview. Fort Erie. Fort Francis Hawkesbury Ingersoll. Kenora Leamington. Limdsay. Midland. Mimico. New Toronto Orillia. Pembroke. Port Colborne Preston Renfrew. Riverside. Simcoe. Smiths Falls Thorold Timmins Trenton. Waterloo Weston.	79 1977-95 112 2055 31 622 50 68 887-89 80 150 95 25, 115 115 127-7 20 122 114 49 178-8	43 104 49 62 112 116 33 33 33 44 588 43 655 466 90 94 20 115 344 31 31 31 31 31 31 31 31 31 31 31 31 31	35 433 31 37 859 76 87 21 38 76 25 33 26 72 29 31	544 1322 699 655 1393 31 60 41 52 688 588 677 95 690 203 3988 111 115 235 355 357 469 969 979 979 979 979 979 979 979 979 9	16 31 23 36 36 36 33 10 11 11 48 54 11 21 48 21 89 16	12 50 57 7 20 29 6 33 44 22 74 28 30 10	13 55 26 92 67 57 1 18 3 68 23 61 15	23 37  2 77 1 1 8 17 9 29 13 32 2 2 4 5 4 4 1 1 1 2 9 2 9 1 3 1 2 2 1 2 1 1 2 1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1	19 9 24 12 23 3 3 11 11 9 4 4 26 25 13 3 3 4 7 2 19 9 2 9 19 2 9 19 19 19 19 19 19 19 19 19 19 19 19 1	12 5 5 1 13 13	1 8	4	588 344 129 499 688 1411 233 177 222 280 200 866 411 105 288 622 622 622 622 622 622 622 622 622	39 15 41 20 16 52 55  2 13  44 26 45 45	23 5 45 21  47 39 50  1 15  22 20 6 29
Villages: Forest Hill Kirkland Lake Swansea	. 136	82	54	104	64	40	31	18		1	1	i i	87		1

## Institutions, Classified according to Residence of Decedents Ontario of 5,000 Population and Over, 1938

IN In	STIT	UTIO	vs.						1		DEAT	HS EL	SEWI	HERE	THAN	ın I	NSTIT	UTIONS	<del></del>	
Re	siden	ts	Villa.	resid ge w	here ar	1	, Tow Occi	urred		Total		Re	esider	nts		reside	a	City, Death nd	Tow Occu	
				rovin		in	Provi	nce								ovin			-resic Provi	
Total	м.	F.	Total	М.	F.	Total	М.	F.	Total	М.	F.	Total	М.	F.	Total	М.	F.	Total	М.	F.
49 155: 81 88 48 60 712 196 111 420 93 53 57 795 38 114 123 103 66 68 81 127 13 65 66 68 81 27 40 66 54	266 799 444 511 24 343 393 655 2099 566 42 33 365 28 644 711 71 197 28	233 766 377 377 244 266 3199 346 22111 377 224 200 3800 500 522 49 34 29 24 21 21 21 21 22 24 25 21 21 21 21 21 21 21 21 21 21 21 21 21	966 555 1488 600 288 1566 1622 277 500 322 2422 443 435 554 355 544 355 567 76	555 2992 355 8 366 933 788 1666 188 355 200 1433 311 441 433 499 355 606 555 606 311 677 45	411 266 566 255 200 222 633 699 466 1266 999 15 12 422 288 365 199 288 375 24	2 2 4 4 5 5 1	2 2 2 5 1 1 2 2 7 7 1 1	1 1 3 3 266 1 1 2 2	101 206 104 65 113 101 668 160 144 392 113 66 110 639 121 168 57 156 94 138 125 124 138 125 124 138 128 128 128 128 128 128 128 128 128 12	522 1022 600 377 422 600 3110 688 744 1900 477 800 335 552 2900 67 800 311 67 666 644 588 749 1554 37 1900 3900 3900 3900 3900 3900 3900 3900	499 104 444 28 28 -711 411 358 92 202 666 33 358 222 766 63 771 59 60 50 1690 26 215 444	92 202 102 56 104 99 654 151 112 385 112 61 116 63 151 192 133 121 122 103 3166 401 76	466 999 588 299 588 303 622 74 1888 477 31 522 2755 65 79 65 64 62 55 1507 32 186 34	466 1033 444 277 655 411 3511 889 688 1977 55 63 68 57 660 488 16599 266 2155 42	9 44 22 9 9 2 14 4 9 9 2 7 1 5 8 14 5 2 2 5 5 7 5 2 4 7	6 6 3 2 2 8 8 3 2 2 7 6 6 2 3 3 100 2 1 1 2 2 2 2 2 3 3 4 4 1 2 4 5 5	3 3 1 1 6 6 · · · · · · · · · · · · · · · ·	8	5	3
29 9 71 124 24 27 78 30 10 15 37 9 35 18  33 41  20 25 55 61 	17 5 37 11 15 39 15 6 6 3 11 21 7 14 9 9 	122 44 334 133 9 339 6 33 7 7 4 166 22 211 6 6 13 14 3 3 26 6 6	29 25 588 43 61 2 2 8 4 4 13 23 11 51 23 19 90 588 51 6 66 20 5 5 13	166 1336 1336 222 366 117 7 166 8 8 27 111 1 44 35 28 7 7 7 14 1 2 10 54	133 9 222 112 255 2 3 6 6 7 7 3 24 4 12 46 23 23 46 6 3 3 3 550	8 2 	55 2 2	3	688 455 688 466 444 341 339 333 466 454 222 770 604 544 222 27 756 688 339 104 47 611 322 339	355 222 311 255 244 366 116 118 244 226 111 110 388 399 201 313 116 355 117 116	33 37 21 20 28 15 22 33 31 52 24 40 28 37 77 77 20 23 37 20 24 40 24 40 25 40 26 40 27 27 27 27 27 27 27 27 27 27 27 27 27	61 45 61 45 41 61 31 33 32 42 53 32 21 58 60 60 65 70 25 32 41 117 34 65 38 46 59 46 59 46 59 46 59 46 59 46 59 46 59 46 59 59 59 59 59 59 59 59 59 59 59 59 59	344 222 266 224 335 166 177 211 225 227 224 410 9 311 355 181 181 111 144 355 166 177 181 181 181 181 181 181 181 181 181	27 23 35 21 18 26 6 15 23 31 38 6 6 31 35 7 7 10 11 34 35 7 7 9 23 30 19 19 23 30 19 24 31 31 31 31 31 31 31 31 31 31 31 31 31	77 1 3 3 2 2 4 4 3 3 4 4 2 2 9 6 6 2 2 1 1 2 2 3 3 1 1 2 2 1 3 3 3 1 1 2 2 1 3 3 3 3	1	6 2 2 1 1 3 3 1 1 3 2 2 1 1 5 2 2	1 3 3	3 3 3	· · · · · · · · · · · · · · · · · · ·
57	35		30	17	13				34 49 30	15 30 12	19 19 18	32 47 28	14 29 10	18 18 18	2 1 2	1 1 2	1	1		i

Table 33—Deaths (exclusive of Stillbirths) by Single Years of Age and by Age Groups in the Province of Ontario, 1938

	TOTAL	FOR PRO	VINCE		TOTAL	FOR PRO	OVINCE
AGES .	Total	Male	Female	AGES	Total	Male	Female
All ages. Under 1 year. 1 year. 2 years. 3 " 4 "	36,890 3,245 329 164 128 107	19,814 1,850 165 84 65 55	17,076 1,395 164 80 63 52	50 years	374 295 373 402 440	229 161 229 234 266	145 134 144 168 174
Total under 5 years	3,973	2,219	1,754	55 years. 56 "	429 470 461 571	255 263 264 324	174 207 197 247
6 " 7 " 8 " 9 "	74 72 59 53	43 35 35 37	31 37 24 16	58 " 59 " Total 55-59 years	2,449	297	1,046
Total 5-9 years	356 80	214 47	142 33	60 years.*	508 512 607 581	308 288 344 335	200 224 263 246
11 " 12 " 13 " 14 "	51 67 67 93	24 39 40 60	27 28 27 33	64 " Total 60-64 years 65 years	2,803 693	314 1,589 400	1,214
Total 10-14 years  15 years	358 83 88	52 56	148 31 32	66 "	646 698 837 785	357 395 471 430	289 303 366 350
17 " 18 " 19 "  Total 15-19 years	92 121 107 491	61 66 60 295	31 55 47	Total 65-69 years 70 years 71 "	3,659 855 767	2,058 464 408	1,601 391 359
20 years	94 111 124 128	57 59 64 72	37 52 60 56	72 " 73 " 74 "	918 931 924 4,395	474 517 485 2,348	444 414 439 2,047
23 "	125	316	266	Total 70-74 years 75 years	919 898	478 473	441 425
25 years	133 137 138 142 150	53 73 79 75 79	80 64 59 67 71	77 " 78 " 79 " Total 75-79 years	936 944 890 4,587	484 461 443 2,339	452 483 447 2,248
Total 25-29 years	700 138	359 75	341	80 years. 81 "	820 703 732 606	397 331 371 313	423 372 361 293
31 " 32 " 33 " 34 "	136 155 164 144	84 79 92 75	52 76 72 69	Total 80-84 years	3,469	1,710	1,759
Total 30-34 years 35 years	737 150 166 160	405 74 98 94	332 83 68	85 years 86 " 87 " 88 " 89 "	514 461 437 335 282	227 215 192 158 124	287 246 245 177 158
37 " 38 " 39 "	219 179	111 85	66 108 94	Total 85-89 years	2,029	916	1,113
Total 35-39 years 40 years	881 207 190	112 107	95 83	91 " 92 " 93 " 94 "	147 123 106 81	59 50 37 26	88 73 69 55
42 " 43 " 44 "	233 234 249	128 139 128	105 95 121	Total 90-94 years	693	272	421
Total 40-44 years 45 years	1,113 264 270	614	499 117	95 years	58 47 46 16	20 19 16 8	38 28 30 8
47 "	290 332	165 166 206 185	114 124 126 151	99 "	184	67	117
Total 45-49 years		869	632	100 years and over Not stated	24 22	13 17	11 5

Table 34—Deaths (exclusive of Stillbirths) Classified according to Racial Origin of Decedents in the Province of Ontario, 1938

		ONTARIO				Ontario	
RACIAL ORIGIN	Total	Male	Female	RACIAL ORIGIN	Total	Male	Female
ALL ORIGINS	36,890	19,814	17,076	Hungarian	97	61	36
English	13,479	7,187	6,292	Icelandic			
Irish	8,075	4,195	3,880	Indian	518	262	256
Scottish	6,137	3,190	2,947	Italian	319	189	130
Welsh	196	107	89	Japanese			
French	3,109	1,725	1,384	Jewish	420	218	202
German	1,703	912	791	Negro	111	62	49
Armenian	14	9	5	Norwegian	50	33	17
Austrian	90	55	35	Polish	284	176	108
Belgian	50	32	18	Roumanian	64	43	21
Bulgarian	7	6	1	Russian	94	69	25
Chinese	70	67	3	Serb and Croat	73	50	23
Czech and Slovak	68	47	21	Swedish	95	64	31
Danish	29	16	13	Swiss	33	17	16
Dutch	601	343	258	Syrian	35	25	10
Finnish	236	143	93	Ukrainian*	177	119	58
Greek	48	37	11	Other	32	22	10
Hindu				Not specified	•576	333	243

Table 35—Deaths (exclusive of Stillbirths) Classified according to Birthplace of Decedents for the Province of Ontarlo and for Citles, Towns and Villages of 10,000 Population and Over, 1938

1	1	Not apecified	115	95	50	10	1 :	1 : :	1:	1 : :	1:	1 : :	1:	1::	:	:: :
		Various	4	4 :		·	1:		1	1 : :	1		1 :	1::	1:	
		United States	890	472	500	243	1 80	1 :00	101	100	17	10	9	140	100	1
	,ce	Other	4	27	35	24	1:	-	1:	::	1:	1::	-	1-:	1:	1::
	Asia	China	1 99	65 1	57 1	56 1	:	1 : :	:	1 : :	1:	: :	1:	: :	1:	: :
		Other	1616	1246	96	72 5	1 -	1 ::		1	10	17-	1	1	1	: :
			55 10	42 1	28	188	+:		1	1 ::	1	1	1:	1 : :	:	: :
		Sweden	1.	1			1:	1	:	1 :::	1 :	1::	1:	1 : :	1:	:::
		*siseu A	89 313	50 209 39 104	74 253	1 162 3 91	1 :	: :	<u>                                     </u>	:	1:	1 : :	:	: :	-	:
		Roumania				9 33	1	1:	1 -	:	2	12		:	:	: :
		Poland	2 327	2 204 0 123	2 235	9 146	1:	1::	1	:		:	:		<u> </u>	:
		Norway	1 32	22	12		1:		1:		1:	1 : :	:	::	1:	
	Europe	Italy	201	127	164	86	:	1 : :	:	1 : :	1 :		8	2	:	: :
	Eur	Hungary	80	51 29	57	35	:	1 : :	3	3.	:	: :	:		:	: :
		Holland	20	17	=	00 m	:	::	:	: :	2		:	::	:	
TY		Сегтапу	209	105	106	52	:	1 : :	1	: 1	-	- :	:	::	:	::
DECEDENTS		France	23	13	=	∞ ~	:	::	:	::	-	7 :	:	1 : :	:	::
CE		Finland	193	121	100	63	:		1:	::	:	1 : :	1 :	1 : :	:	::
DE		Denmark	17	0 ∞	12	99	1:	1 : : :		::	:	::	:	1:	:	
OF		Belgium	35	23	15	5.	:		:	::	2	5:	:	::	:	
		Austria	93	63	65	44	-	- :	:	::		::	:	::	:	
BIRTHPLACE	ah.	Other	89	34	53	24		::!	-	<del>-</del> :		- :	:	:::		-
HP	British Posses- sions	Newfoundland	-69	35	52	23		:-	-	:-	:	: :	÷	::	-	-:
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\*Including the Ukraine.

Table 35—Deaths (exclusive of Stillbirths) Classified according to Birthplace of Decedents for the Province of Ontario and for Citles, Towns and Villages of 10,000 Population and Over, 1938—Continued

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\*Including the Ukraine.

Table 36-Deaths (exclusive of Stillbirths) Classified according to Birthplaces of Parents of Decedents in the Province of Ontario, 1938

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\*Including the Ukraine.

TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938

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		100 and over	24	13		:		
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		80 to 84	3469	1710 1759		26	37	
		75 to 79	4587	2339		119	67	1
		70 to 74	4395	2348		166	78	
		65 to 69	3659	2058 1601		145	93	
		00 to 64	2803	1589 1214		122	79	
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	AGES-YEARS	45 to 49	1501	869		154	98	100
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		35 to 39	881	462		129	83	4 4 3 2 2 20 2
		34	737	405		151	86	ma
		25 to 29	200	359		155	72 72 83	
		20 to 24	1 582	316		3 154	67	
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			9 164	5 84 4 80		65 4	27 38 2	- : : : : : : : : : : : : : : : : : : :
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		Total	36890	19814 17076		2441	1338	
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		CAUSES OF DEATH	DEATHS—ALL CAUSES. Total		Class 1.—Infectious and Parasitic Diseases	Total		1. Typhoid fever. 2. Paratyphoid fever. 3. Undulant fever. 7. Measles. 8. Scarlet fever. 9. Whooping-cough. 10. Diphtheria. 11. Influenza. 11. Nith bronchitis. 11. With proumonia. 11. With other diseases of the respiratory system. 11. With other causes. 11. With other causes.

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TABLE 37-CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938-Continued

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S	55 to 59	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	186 290	11 118 102 102 2 1 1 102 299
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	CAUSES OF DEATH	36. Purulent infection, septicaen (non-puerperal)	45-53. Cancer and other maligna tumours	45. Cancer of the buccal cavity and pharynx
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46c. Of the rectum	47c. Of the mediastinum	50. Cancer of the breast.  51. Cancer of the male genito- urinary organs  51a. Of the bladder.  51b. Of the kidney  51c. Of the prostate gland  51c. Of the restictes and annexa.	518. Of other male genito-urinary organs. 52. Cancer of the skin. 53. Cancer of other or unspecified organs.	53c. Of the glandular system	536. Of the spine and spinal cord 53a. Of the neck 53b. Of the abdomen 53b. Of other specified organs 53c. Multiple cancer

TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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		53M 54A 54B 54B 54B 54B 54B 55B 55B 55B 55B			56 59 61 62
	Not stat- ed		:		
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	85 to 89		8	108	370
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	CAUSES OF DEATH	53M. Of unspecified or unknown location	CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRING GLANDS AND OTHER GENERAL DISEASES TOTAL		56. Acute rheumatic fever 57. Chronic rheumatism, osteo-arthritis 59. Diabetes mellitus 61. Beriberi 62. Pellagra
		53M. O 53M. O 54M. O 54M. O 54M. O 54M. O 54M. O 54M. O 54M. O 54M. O 55	CLASS DISEA THE OTI		56. Ac 57. CF 59. Di 61. Be 62. Pc

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63. Rickets	CLASS IV.—DISEASES OF THE BLOOD-FORMING ORGANS  Total
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TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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	80 to 84						: : :				140	69
ONI 1930	75 to 79	- : : -	2	2	2 :::	: 5	::::				228	98
5	70 to 74	4.6	20	4-	4 : :	. 4 :		<b>-</b> : :			257	135
	65 to 69	42 : 2	9	9	6 : 1						163	70
	60 040	7 : : : :	4	4 :	° :	2	-				140	78
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	50 to 54		12	=-	== :	:=-	: : :	: : :			79	38
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	CAUSES OF DEATH	72B. Aleukaemia (Hodgkin's disease)	CLASS V—CHRONIC POISONINGS AND INTOXICATIONS Total		75. Alcoholism	75a. Other alcoholic intoxications.	ganic Substances	76B. Chronic cocainism. 76b. Other organic poisoning. 77. Chronic poisoning by mineral substances.	77a. Lead (including occupational) 77c. Others under this title	CLASS VI.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE	Total	

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78. Encephalitis (non-epideniic) 79. Simple meningitis 80. Progressive locomotor ataxia (tabes dorsalis)	Cerebral haemorrhage, cerebral embolism and thrombosis      S2A. Cerebral haemorrhage      S2B. Cerebral embolism and thrombosis	82b. Hemiplegia and other paralysis, cause not specified	84. Dementia praecox and other psychoses	86. Convulsions (under 5 years of age)	87c. Paralysis agitans	87E. Others under this title 88. Diseases of the ear and mastoid process
78. Encephalitis (non-epidemic) 79. Simple meningitis 80. Progressive locomotor ataxia (tabes dorsalis)	ge, cer	in fred . he ins	B4. Dementia praecox and other psychoses	age)	tis	s of n
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Ene. Sirr. Pro	ال الا كى الا	c. So D. H	<ul><li>84. Dementia prapsychoses</li><li>84a. Dementia pr</li><li>84b. Other psycho</li><li>85. Epilepsy</li></ul>	Con Con Con Con Con Con Con Con Con Con	C. P. S. O. S. S. S. S.	E. O Dis . D
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TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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		65 to 69	1527	872	592 371	::	1		56	44	112	104	: :	70	39	406
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TABLE 3/-CA		CAUSES OF DEATH	CLASS VII.—DISEASES OF THE CIRCULATORY SYSTEM		90-95. Diseases of the heart	90. Pericarditis	91A. Endocarditis, specified as acute	of B. Prodocarditis, unspecified (under 45 years of age)	92. Chronic endocarditis, valvular diseases	92A. Endocarditis specified as chronic and other valvular diseases	92B. Endocarditis, unspecified (45) years and over)	93A. Acute myocarditis	93n. Myocarditis, unspecified (under 45 years of age)	93c. Chronic myocarditis and myo- cardial degeneration	93b. Myocarditis, unspecified (45 years and over)	94. Diseases of the coronary arteries and angina pectoris

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94a. Diseases of the coronary_arteries		104. Diseases of the nasal fossae and annexa

TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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	TH	105B. Other diseases of the larynx.	106. Bronchitis		:	100c Unspecified		107B. Capillary bronchitis	<ol> <li>Lobar pneumonia</li> <li>Pneumonia, unspecified</li> </ol>		111. Congestion and haemorrhagic infarct of the lung, etc	111A. Pulmonary embolism and thrombosis	111n. Others under this title	112. Asthma	114. Other diseases of the respira-	tofy system (tuberculosis ex- cepted)	Chronic interstitial pneumonia including occupational diseases of the respiratory	systemGangrene of the lung	114c. Others under this title
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1X.—Diseases of Digestive System	Total		iseases of the buccal cavity and annexa, and of the pharynx and tonsils (includ ing adenoid vegetations)	Diseases of the buccal cavity and annexa	ers un	fleer of the stomach or duo	er of	their diseases of the stollach ijarrhoea and enteritis (under 2 years of age)	years and over)	eratic	ia, in nia	estina r dise	osis c	spec r dise
CLASS 1X.—DISEASES OF THE DIGESTIVE SYSTEM	Tot		Disea and pha ing		Oth	Ulcer	Ulec	Diarr 2 ye	120. Diarrhoea and years and over	1208. Ulceration of the intestines.	Hern	122b. Intestinal obstruction	124. Cirrhosis of the liver 124A. Specified as alcoholic	Not
CL			115. Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations)	115A. Diseases of the buccal cavity and annexa	115c. Others under this title 116. Diseases of the oesophagus	117. Ulcer of the stomach or duodenum	117a. Ulcer of the stomach 117a. Ulcer of the duodenum	119. Diarrhoea and enteritis (under 2 years of age)	120. Diarrhoea and enteritis (2 years and over)	120b. Ulceration of the	122. Hernia, intestinal obstruction.	122в.	<ul><li>124. Cirrhosis of the liver</li><li>124A. Specified as alcoholic.</li></ul>	124B. Not specified as alcoholic

TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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	CAUSES OF DEATH	125a. Yellow atrophy of the liver 126b. Biliary calculi 127. Other diseases of the gall-bladder and biliary passages. 128. Diseases of the pancreas 129. Peritonitis, cause not specified CLASS X.—Diseases of THE GENITO-URINARY SYSTEM	Total		130. Acute nephritis (including unspecified, under 10 years of age) 131. Chronic nephritis 132. Nephritis, unspecified (10 years and over) 133. Other diseases of the kidneys and urcters 134. Calculi of the urinary pussages 135. Diseases of the bladder (tumours excepted) 136. Diseases of the urethra, urinary adseases of the urethra, urinary ary abscess, etc
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136A. Stricture of the urethra 136B. Others under this title 137. Diseases of the prostate	130 Diseases of the female genital	organs (not specified as venereal).	139A. Of the ovary, Fallopian tube and parametrium		CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE	Total	140. Abortion with septic condiditions. 140A. Abortion. 140B. Self-induced abortion.	141. Abortion without mention of septic conditions (haemorrhage included)	141A. Abortion. 141B. Self-induced abortion. 142. Ectopic gestation	142B. Without mention of septic	143. Other accidents of pregnancy (haemorrhage excluded) 144. Puerperal haemorrhage 144A. Placenta previa 1444. Other haemorrhages	Puerperal septicaemia specified as due to abor	145a. Puerperal septicaemia and pyaemia	147. Other toxagnias of pregnancy	dolens, embolism or sudden death (not specified as septic)	148a. Phlegmasia alba dolens and thrombosis. 148b. Embolism. 148c. Sudden death. 149. Other accidents of childbirth,

TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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	CAUSES OF DEATH	149A. Caesarean operation	CLASS XIIDISEASES OF THE SKIN AND CELLULAR TISSUE	151. Carbuncle	153. Other diseases of the skin and annexa and of the cellular tissuc	CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION  Total		154. Ostcomyelitis

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155. Other diseases of the bones (tuberculosis excepted)	CLASS XIV.—CONGENITAL MALFORMATIONS Total		(stillbirths excluded) 187A. Congenital hydrocephalus 187B. Spina bifida and meningocele 187C. Congenital malformations of the heart 187D. Monstrosities	CLASS XV.—DISEASES OF EARLY INFANCY		
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TABLE 37—CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938—Continued

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le der er)	ASS XVII,—VIOLENT ACCIDENTAL DEATHS				id or osorpt inces.	sonot	ging	166. Suicide by drowning	167. Suicide by firearms	uicide by cutting or instruments	nping	170. Suicide by crushing	ler me	173-175. Homicides	ireari
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TABLE 37-CAUSES OF DEATH BY SEX AND AGE IN THE PROVINCE OF ONTARIO, 1938-Continued

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	CAUSES OF DEATH	174. Homicide by cutting or piercing ing instruments	176-198. Other violent deaths	176. Attack by venomous animals.	178. Accidental absorption of toxic gases	179. Other acute accidental poison- ings (except by gas)	Conflagration	181. Accidental burns (conflagra- tion excepted)	182. Accidental mechanical suffoca-	183. Accidental drowning	184. Accidental injury by intearins. 185. Accidental injury by cutting piercing instruments	186. Accidental injury by fall, crushing or landslide	188. Injuries by animals		192. Lightning	rents	194. Other accidents
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		174.	176-	176.	178.	179.	180.	181.	182.	183.	185.	186.	188. 190.	191.	192.		194. 194A

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1948. Others under this title M. 195. Violent deaths of which the nature (accident, suicide, homicide) is unknown F.	:			Total		: 5	5 :
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Ott Viole nat hor	198. Capital punishment		CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH	To		199. Sudden death	ill-defined
94B.	.86		CL			99. 5	
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SPECIAL CLASSES OF ACCIDENTAL DEATHS (Included also under the numbers of the International List above)

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	nts i. nts c	ıy ac	car	obile	nts.	land	tran	nspo
	cide	ilwa	reet-	ntoin	der	Her	ater	r tra
	A. Accidents in mines and quarries.  B. Accidents caused by machines	c. Railway accidents	D. Street-car accidents	E. Automobile and motorycle acci-	Č	F. Other land transportation	G. Water transportation	H. Air transportation
	-4, 344		-					щ.

						С	ONJU	GAL	CONI	OITIO	N			
CAUSES OF DEATH	Sor	Total			Si	ngle					Marr	ied		
CAUSES OF DEATH	Sex	Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
DEATHS—ALL CAUSES														
Total		36890	4687	882	945	1272	2447	6	186	2369	6143	7491	4	10350
	M F	19814 17076	2643 2044	566 316	656 289	794 478	1179 1268	5 1	41 145		3666 2477	5141 2350	3	3900 6450
Class I.—Infectious and Parasitic Diseases														
Total		2441	483	207	208	93	92	2	54	351	371	229		348
	M F	1338 1103	232 251	104 103	144 64	71 22	51 41	2	9 45	177 174	248 123	168 61		129 219
1. Typhoid fever	M F	27	1	4 3	7	1			1	7	3 2	2		1
2. Paratyphoid fever	M F	2							1	1 1	1			
5. Undulant fever	M F	1								1				
7. Measles	M F	14 17	14 17											
8. Scarlet fever	M F	21 28	16 17	3	1				í	1 3				
. 9. Whooping-cough	M F	38 50	37 50	1										
10. Diphtheria	M F	5 6	5 5											
11. Influenza	M F	322 296	53 53	11	8	8 6	29 21			25 17	42 27	94		52 121
11a. Sole cause	M F	18 20	5 9			i	2			i		6		3 9
11B. With bronchitis	MF	13 16	2		·····i		1 3			1	3	3		3 6
11c. With pneumonia	MF	173 129	23 16	6 4	7 2	6 2	15 10			16 13		48 24		27 43
11D. With other diseases of the respiratory system.		19	1 1	1		i	1 3			1	3	6 2		6 9
11E. With intestinal complications		22	7 9	2		<sub>i</sub>	1			1	1 2	8		2 16
11F. With other causes	MF	77 83	15 17		1 3	1 2	3			5 4	10	23 6		11 38
13. Dysentery	MF	20 16	10	2			1			1	1	5		2 6
15. Erysipelas	MF	19 15	3 4	2	i	i i	3			3		2		5
16. Poliomyelitis and polio- encephalitis (acute)		15 10	7 6	6	1					i i	1 1			
17. Lethargic or epidemic encephalitis	M F	6 8	2 1	<sub>i</sub>	<sub>i</sub>	2					1	2		1 2
18. Epidemic cerebrospinal meningitis	M	9	7	1						1				
22. Tetanus	F M F	10 3	3		3		····i		· · · · · i	1 1 1	1	· · · · · i		
23-32. Tuberculosis	M F	678 559	48 64		110 57	40 14	4.2	2	8 39		155 77	46 16		52 67
23. Tuberculosis of the respiratory system	M	599			105	37	15	)				45		46
24. Tuberculosis of the meninges and central nervous system		31	25	73	52	13	9		34	122	64	13		61
25. Tuberculosis of the intes-	F	34			1	1			2		3 2	1		1
tines and peritoneum.  26. Tuberculosis of the verte-	F	14	4	2					í	4	1	1		i
bral column	M F	11 14	2	1	3		i			2	6			3
column excepted)	M F M	4 2 1		1			1			i	<sub>1</sub>	1		

## DITION, NATIVITY, AND MONTH OF DEATH—ONTARIO, 1938

		NA	TIVIT	Y							MON	THS						
Not stat- ed	Can- ada	Brit- ish	Fore	eign Other	N o t stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
108	27538	6387	890	1960	115	3638	3014	3270	3171	3234	2892	2801	2792			2881	3349	
96 12	14457 13081	3513 2874	472 418	1277 683	95 20	1909 1729	1604 1410		1767 1404	1758 1476	1573 1319	1546 1255	1421 1371	1544 1291	1622 1391	1606 1275	1741 1608	
3		301	53	185		299	195	236	234	203	183	168		185	188		220	
3	983 914	188 113	29 24	133		150 149	109 86	133 103	139 95	93	98 85	107	77 84	97	102 86	110 59	115	
	222 77 11 11 11 11 12 17 17 17 17 17 17 17 17 17 17 17 17 17	1 41 43 1 1 3 1 2 2 2 4 1 8 2 3 3 2 7 7 1 1 1 1 0 0 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 1 1 1 1 2 2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 3 2 3 1 1 3 3 3 3 1 4 2 2 0 12 5 4	44 43 22 22 311 66 31 11 11 10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 20 18 1 10 7 10 7 3 3	4 3 6  1 142 2 1 1 2  7 10	3	33 1 1 6 6 · · · · · · · · · · · · · · · ·	2 5 5 5 5 1 16 16 15 5 1 1 2 2 1 1 1 1 1 6 6 1 1 3 3 6 2 2 4 4 5 5 1	1	20 177 11 1 1 7 2 2 2 6 6 5 3 3 3 3	33 34 7 33 31 2 2 15 17 12 2 3 3 12 2	1 2 5 7 8 9 10 11 11 11 11 11 11 11 11 11 11 11 11
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						С	ONJU	JGAL	CONI	OITIO	N			
CAUSES OF DEATH	Sex	Total			Si	ingle					Marr	ied		
checks of BEATH		Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
27A. Of joints	M F	3 2		1			1			· · · · i	1	· · · · i		
and sub-cutaneous cel- lular tissue		1								1				
excepted)	M F M	1 1								3	3			1
31. Tuberculosis of other organs	F	12	i	1	2	1	1		1	3	3			
32. Disseminated tuber-culosis	F M	12	3	1	1	1	1			1	2			3
32a. Acute	M F F	8 4 3 1	1 3		i		1		1	i				1
32c. Not specified	M F M	8 4 110	2 1 11	1	12	18	1 1 2		1	6	31	1 14		16
35. Gonococcus infection and other venereal diseases		50	10	1		1	1			13	12	2		9
36. Purulent infection, septicaemia (non-puerperal)	F M F	22 10	9	2	1	1	1		1	1 1 2	6	1		3
38. Malaria	M F	2								1		1		1
39. Other diseases due to protozoal parasites	M F	2 4	<sub>i</sub>				1					1		2
41. Hydatid cysts	M M M	1 1 4	  1								1 1 2	i		
44. Other infectious or parasitic diseases	F M F	9	5 6	1		· · · · · i				1	2			
44A. Chicken-pox	M F	2	1	1										
44c. Others under this title	F F	6	5			1					2			
CLASS 11.—CANCER and OTHER TUMOURS														
Total		4780	48	33	73	228	319	1	8	346	1267	1138		1313
	M F	2188 2592	22 26	19 14	30 43	96 132	153 166		2 6	104 242	567 700	733 405		457 856
45-53. Cancer and other malignant tumours	M F	2083 2389		14 11	28 32	92 126	151 155		2 5	92 204	545 646	704 381		436 810
45. Cancer of the buccal cavity and pharynx	M F	126 31				5 1	11			5.4	27	43		33
46. Cancer of the digestive tract and peritoneum.	M F	1200 1027		5	17 6	62 40	90 79		· · · · · i	44 48	316 225	418 214		245 409
46a. Of the oesophagus 46b. of the stomach and duodenum	M F M	60 31 524			5	34	2			20	15 4 141	6		108
46c. Of the rectum	F M F	335 162 91		· · · · · i	2 3 2	5 3	28 16			12 9 6	70 41 15	51		151 39 34
46E. Of the pancreas	M F M	101 165 63		2 2	i	5 8	7 8 1 8			1 8 3 3	30 40 25 14	35 42		21 60 7 31

		N/	ATIVI	TY						Ν	10NT	HS						
Not stat- ed	Can-	Brit-	For		Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
			<u> </u>															
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	5 3 69 35	16 4	1 3	21	i	 6 4			· · · · · · · · · · · · · · · · · · ·	12 5	11	13	3 8 5	4	6 4	 8 2	13	32c 34
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2	759 720 34 19	309 228 20 8	23	56		86 5	90	93	72	101	89	92	95 4	86	74	64	101 85 5 2	46A
2	325	131	127	1	6 	30	32 32	51 33 11	46 24 15	47 34 19	53 32 14	47 30 13	35 30 9	41 23 14	50 23	48 17 18	44 27 13 10	
	61 108 39 44	26 34 13	3 5 3		-	10 13	8 13 4	10 17 6	5 16 3	5 21 4	14 14 7	6 12 11	13 12 8	11 15 4	10 9 5	12 11 3	7 12 1	46D

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CAUSES OF DEATH	Sor	Total			Si	ngle					Marr	ied		
CAUSES OF DEATH	Sex	Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
466. Of the peritoneum	M F M F	4 7 286 327	i	2 2	 7 2	12 17	1 25 26			1 2 9 15	1 2 63 80	1 1 106 66		1 61 118
47. Cancer of the respiratory organs	M F	128 62	· · · · i	1 2	1 3	11 5	4		1	12	57 23	25 4		16 14
47a. Of the larynx	F M	34 8 72				6	2			10	11 3 35	10 1		7 4 7
47c. Of the mediastinum	F	38 7		i i	2	4	3			3	16 2	1 2		8 2
47D. Of other organs of the respiratory system	M E	6 15 10	;	· · · · · i		1	1			2	9 3	2		
48. Cancer of the uterus 48A. Of the uterus 48B. Of the cervix uteri 49. Cancer of other female	F F F F	381 241 140			5 3 2	18 16 2	14 12 2		1	54 21 33	129 81	45 31 14		115 76 39
genital organs 50. Cancer of the breast	F M F	135 2 494	1		5	13 37	12 31		1	17 5i	1	14 1 54		39  137
51. Cancer of the male genito- urinary organs	M M M M	399 107 25 249		2	3	6 4			1	5 3		164 39 6 117		103 27 2 73
annexa	M M M F	13 5 46 37		1	3	2	5			2	4 8	16		1 15 25
53. Cancer of other or unspecified organs	M F	182 222	16	4	1	8			1	24 22		37 35		24 62
53a. Of the eye and orbit 63c. Of the glandular system	M F M F	5 6 44 31	1		3		1 1 2 3			5		12		3 7 9
53b. Of the female urinary organs	F	62 25 24	2 2 2	2	1		4 2			3	13 7 5 4	17 5		21 1 6 2
53G. Of the spine and spinal cord	M			3						10	_	2		3 2
53H. Of the neck	M M F	14	1	3			1			1	5	3		2 1 8
53 <sub>K</sub> . Multiple cancer	M F M F	14	1			1				3	3	1		3 7 3 1
53m. Of unspecified or un- known location	M										1 4	1 2		1 2
54. Non-malignant tumours. 54a. Of the ovary54B. Of the uterus	F	18	1		3 1	1 6	2 2		1	36	7 14 5 47 2 7	23 19		19 41 8 12
54D. Of the brain		2.	5		3						5 7 5	1		2
54E. Of the thyroid gland 54F. Of the prostate gland	. M	5.	7			1	2				3 20	10		15
54G. Of other or unspecified sites	· M			2	2			·			1 4 4 5	1 3		. 7
55. Tumours, nature no specified	· M	3 2	2	1							5 8	1 5	5	. 5
55B. Of the uterus 55D. Of the brain	. N	1 1		1			2				4 6	5 4	1	
55g. Of other or unspecified sites	. N	í	8	1		1					2 3		2	2

		NAT	IVIT	Y						МС	NTH	S						
			Fore	eign														
Not stat- ed	Can- ada	Brit- ish	USA	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	2 6 183 233	2 1 82 81	6	15 9		39 20	1 21 27	26 25	20 19	1 25 28	12 30	3 15 31	1 18 38	1 18 33	1 32 24	29 24	31 28	46F 46G
	47 45 15 8 26 24	59 13 15 33 12	1	12		2 2 7 1	8 2 5 2 2	9 1 3 3	11 4 3 1 7 2	16 3 4 2 11	11 10 2 6 8	12 6 2 9 5	9 8 3 2 4 4	7 5 2 5 3	12 8 3 ·····	11 5 3	1 2 1 5 3	47 47A 47B
	3 3 9 255 167	4 1 7  02 54	10	5 1 24		1 3 37 20	1 30 19	2 41 27	1 1 33 19	1 1 26 22	1 1 2 1 33	1 1 32 22	1 2 1 30	1 30	1 2 1 2 26 15	1 33	2	47c 47d 48
····i	86 2 354	38 38 109	3 4 10	7		17	13	14 9 38	19 14 12 1 39	14	24 9 7 1 47	14	19 11 8	20 10 8 41	9	16 17 10 41	12 16	48A 48B 49 50
i	285 74 15 184	93 27 8 54	5	14 5 2 6		31 9 2 18	35 8 3 22	29 7 3 19	37 11 3 21	43 12 1 27	30 8 1 19	9	20 4 2 13	34 9 3 21	31 5 3 22	35 11 2 22	14 1 26	51 51A 51B 51C
	38 29	<b>5</b> 8	1 1	i	i	1 5 5	1 5 1	2	2 2	1 6 3	1 4 1	5 5	5 4	1 3 3	4 6	3	3 4	51D 51E 52
	125 178 4 5 31 27	37 29 1 7 3	1 1			12 18 1		12 15 2 5 5	20 22 1 6 3	16	23 16 1 6 3	12	26 1 2	2 5	11 18 i 1	10 17 3 5	13	53 53A 53C
	54 16 18 26 31	5 4 3 13 7	2 1	5		4 2 2 2 2 4	3 3	2 1 1		2 1 3 3	3 2 4 2	1 9	2 6 2 3 5	2	6 5 3 3 3	7 1 2 4 1	1 1	53D 53E 53F
	11 8 4 10 10 16 13 5	1 1 3 4 4 4	2	1 1 1 1 1		2 2 2 2 1 2 3 2	1 2 3 1	1 1	2	1 1 2 1 2 3 1 1	3 1 1 3 2 6 1	1 1 1 1	1 1	1 3	1	1	2	53G 53H 53I 53J 53K
····	2 6 57 135 33 29	2 2 18 27 4 10	1 1 11 2 2	8 3		7 14 2 4	11 11 9	26 8 4	1 7 16 4	2 7 22 4		2 6 10 1 3	2 4 14 6	1 5 14 3 4	 1 5 17 4	7 12 1 2	7 14 5 2	53N 54 54A 54B
1	11 6 47 19	3 3 1 6 7				1 1 1 5 3	3 1 1 4	11 3	3 2 1 2 3			4	1 1 5 1	2 2 1 1	2 1 1 5 1	1 8 1	1 4	54E 54E 54F
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CAUSES OF DEATH	Sex	Total			Si	ngle					Marr	ied		
Choose of Benth		Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES														
Total		1095	125	50	22	34	52		6	89	239	205		273
	M F	418 677	61 64	28 22	11 11	19 15	21 31		6	34 55	84 155	101 104		59 214
56. Acute rheumatic fever	M	84	20	19	6	4	;		3	14	13	5		3
57. Chronic rheumatism, osteo-arthritis	F M	81 19	18	14	7	1	6		3	22	12	3		2
59. Diabetes mellitus	F M	27 230	2	5	1 3	1 13	5 14			1 9	2 49	3 88		14 47
61. Beriberi	F	354 1	8	4			18		1	14	85 1			144
62. Pellagra	F M F	1 8 7	····· 7 6	1										
64. Osteomalacia	F	1									1			
gland	M F	1 7	2							· · · · · i	1 2			2
66. Diseases of the thyroid and parathyroid glands	M	40	5	1	1	1	1			8	15	4		4
66a. Simple goitre	F M F	149 3 21	7 1	3		1			2	13	46	21 1 5		43 2 6
66B. Exophthalmic goitre	M F	29 111	<sub>i</sub>		1 3	1 2	1 4			8 11	13 38	3		2 34
66c. Myxoedema, cretinism 66D. Tetany	F	10 6	1 5	1 1						2	2	1		2
66E. Others under this title	F M	4 2	4											
67. Diseases of the thymus	F M	24	24				1				1			1
68. Diseases of the adrenals	F	21	21											
(Addison's disease)	M F	2 5								1 2	· · · · i			2
69. Other general diseases	M F	10 23	3 2	· · · · i						1 2	4	1 5		7
69A. Fatty or amyloid degeneration	M F	5 10	1								3	4		1 3
69c. Others under this title	M F	5 13	2 2	i						1	1.3	1		4
CLASS IV.—DISEASES OF THE BLOOD AND BLOOD-FORM- ING ORGANS														
Total		500	35	20	19	20	43		2	38	80	114		129
	M	231 269	21	11	9	15	21 22			13 25	37 43	66		38 91
70. Haemorrhagic conditions		5		1		1					2			1
70A. Simple purpura	M	11				1					3			1
70в. Haemophilia	F M F	10	3	· · · · i						2	3			1
71. Anaemia	M F	129 180	6 2	2 4	2 4		17 20		· · · · · i	1 6	14 25	50 42		28 74
71a. Pernicious anaemia	M F	116 155	3	2 3	1 4	8	15 17			1 6	13 20	47		26 65
71B. Others under this title	M F	13 25	3		1	1 1	2 3				1 5	3		2 9
72. Leukaemia and aleukae- mia	M	86	14	7	6	4	4			7	20	16		8
72A. Leukaemia		64 61 54	13 8	4 6 4	6 5 3	1 4 1	1 2			11 3 10	14 11 14	11 2		14 6 10
72B. Aleukaemia (Hodgkin's disease)	F M	25	1	1	1		2		1	10	9	5		2
discase)	F	10			3					1				4

		NIAT	IVIT	v	-						MONT	ruc						
		NAI								1	INION	113			1			
Not stat- ed	Can- ada	Brit- ish	USA	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	814	182	24	74	1	119	96	93	92	84	84	81	66	88	100	92	100	
	314 500	60 122	8 16			47 72	31 65	34 59	39 53	35 49	32 52	33 48	27 39	34 54	36 64	34 58	36 64	
	65 62	10 13	3			11 7	7 12	7 8	7 7	8 6		7 7	6 4	3 5	8 7	4 6	4	56
	14 20 163 250	2 7 39 72 1			· · · · · i	2 1 24 44		20		1 19 31	11	3 19			1 3 18 38	23	4 2 18 31	57 59 61
	 8 7		1			· · · · · · · · · · · · · · · · · · ·		1 2		1 1	1	1 2	i 1		2 i	i	i	63 64
	4	1				1 2	1			1				1		1	1	6.5
	30 116 1 17	24	2		7	2	14	11 1 3	10	8	11	11	12	15	13	11	18	60
· · · · · · · · · · · · · · · · · · ·	21 85 8 6 4 2	19			5	1 11 1 1 1	11	5	8	3		8 1	8	10	9	9	16	60
 	24				i	4		3				2				1	5	6
	1 1 4 9 16				3	1 1 2						1	1	1	2	3	i 2	6:
	4 6 5	1			2										2	2 2	1	i 6
• • • •					1					2								
	371	10	1	9 1	9	. 6-	40	0 49	3	6 2	8 49	40	3	1 3:	-			-1
	175 196			3 1	2									2 11				0
		2	2		2		2	1	i					2		1		1 7 1 7
		5 3 1	2		2		2		1		1	: : : : :		1	7 1.	1	i	1 ,
	134 92 111 121	4 4 1 7 3 2	0 8 2	4	4 2 4 2 	. 2 1 1	1 1. 4 7 1	3 2 7 1 3 1	0 1 2 7 1	5 1	2 1 7 1 1 1	2 1	6 7 4 2 2 2 2	8 2 5 1 2	7 1.	3 1	1 2	1 0 7
		8 2 4 1 5 1	1	i	7 3 2	. 1	6 1	3 1	6	4	2 1	6 0 5	6 5 5	5	4 1: 2 : 2 : 1 :	8	1 1	0 7 8 7 8
			8	i	4	1	6	1	i	2		1 2	1	2	2	4	2	3 7

						C	DINC	GAL	COND	(OITIO	ī		
CAUSES OF DEATH	Sav	Total			Si	ngle					Marri	ed	
CAUSES OF DEATH	Cell	Iotal	Un- der 15	15-24	25-44	45-64	65 and over		15-24	23-44	45-64	65 and over	Wid- owed
73. Diseases of the spleen	M	11	1	1	1					5 5	1	· · ·	 1
74. Other diseases of the blood and blood-forming organs	F									1			 1
CLASS V.—CHRONIC POISON- AND INTOXICATIONS													
Total		65	2		9	9	4		1	9	13	1/2	9
	M	58 7			8				1	7 2	17	3	 3
75. Alcoholism	M	54			8					6	16		 -
75A. Delirium tremens	J.	3			1					2	1	· · · · i	 1
75B. Other alcoholic intoxications.	F M F	51			 8 1	8				6	15	2	
<ol> <li>Chronic poisoning, by other organic sub- stances</li></ol>	м	3				1			1	1			 
76a. Chronic morphinism	F M F	1											 
76B. Chronic cocainism 76D. Other organic poisoning 77. Chronic poisoning by	M	1 1									1		 
mineral substances 77A. Lead including occupa-	F	1 2	2										 
tional	F M	2									i		
CLASS VI.—Diseases of the Nervous System and of the Organs of Special Sense													
Total		1724	156	41	82	96	13 2		4	82	273	361	 494
	M F	881 843	87 69						. 2			238 123	 15: 33:
78. Encephalitis   non-epi- demic	M F		4 2			2	1				3		
79. Simple meningitis	F	21 27	14							3 5	3		 
<ol> <li>Progressive Iocomotor ataxia (tabes dorsalis).</li> </ol>	. M	12										1	
<ul><li>81. Other diseases of the spinal cord</li><li>82. Cerebral haemorrhage.</li></ul>	M					5 4				···· 3	15 10	18	 
cerebral embolism and	i M		1	1		16	36		. 1	. 13	57	145	 91
82a. Cerebral haemorrhage	. M	312	1	1	5	14	28		1		46	147	 (7,
82B. Cerebral embolism and	1 21	30				1	. 6			1	7	14	 . 1
82c. Softening of the brain.	. M	4									7	2	 
82D. Hemiplegia and other paralysis, cause not specified	M	20				1	}	2		1	2 7	5	
83. General paralysis of the	. M	50			6			2		9	24	3	 . 2
84. Dementia praecox and other psychoses	F	13		. 1						1		3	
Other paychoses	F	80			. 7	15		3		747	12	11	 . 21

		NAT	TIVIT	Y							MON	rhs						
			For	eign														
Not stat- ed	Can- ada	Brit- ish	USA	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	8	2 2		1		4	1				2	1 1	1 3	1		2 2	1	73
	3	1				1				1		1	1					74
1	47	9		8	1	5	3	8	4	7	7	2	5	3	7	7	7	
1	42 5	8				3 2	3	8	4	7	7	2	4	3	6	6	5 2	
1	2 3 1			1	7 1		3	6 1 5	4	7	6		1	3	61	6 1 5	4 1 1	75 75A 75B
	1 1 1 1 1 1	1				2		1 i			1		1		i i	1		76 76A 76B 76D 77
		1 .														1	ł	77A 77C
7	7 1310	26	1 3	8 10	3 (	5 188	3 152	2 158	140	158	3 14	1 13	5 116	135	139	124	135	
- 5	659				0 3	89		79									63	
	. 1	7	1	i	2 1 1	i	1	1 1	2 2	2 3	3	2	1		5 4			78 79 2 80
	4	2	9	4	2		6	9	3	1	7		6		4 5	5	3	81
•••	1 26 1 31 1 22 24	5 7 5 6 3 6 9 5	7 6 2	5 2 4 1 4 1 9 1	27 17 18 12	1 3 2 5 1 3 2 4	6 3 3 4 1 2	9 29 1 3- 3 20 4 2	3 4 3 6 7 2	2 3 3 6 2 3 2	2 7 5 8 3 3 3 3 3 3	0 2 6 3 6 1 0 2	2 5 9 2 8 2 2	3: 70 20 11 20 21	5 3: 7 39 8 2: 0 30	2 3 2 2 4 2 5 1	3 4 5 5 6 3	2 82 5 82A
•••	i 2 3	6 4 3	6 5	i	6		6 i	4 3 1	24		7 4	3 3	1		5	4 2	2	2 82B 4 82C
• • •	. 3	3 1 1	5	2	2 4 		2 5 3 2	4	7	1	5 6	1 3 4	6	2	3	4	3	3 82D 4 83
• • •	- 1		3 9 12 7	••	1		2 1 3 9 11	1		9	2 7 9 3 7	5 7 4 7	1 4 5 4 2	1 ,	1		6	3 84 2 84A

						С	ONJU	GAL	CONI	OITIO	N			
CAUSES OF DEATH	Sav	Total			Sin	gle					Mai	ried		
CAUSES OF DEATH	Sex	Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
84B. Other psychoses	M F M	12 19 37	6	<sub>7</sub>	12	2	22			3 3	1	2 4 1		2 5 2
86. Convulsions (under 5 years of age)	F M F	36 17 14	17	6	7		3		1	1	5			
87. Other diseases of the nervous system	M F	148 136	14 7 10	1 4	7	4 5	9			3 6	31 18	59 24		26 57
87A. Chorea	M F	1 2		2										
<ul><li>87B. Neuralgia and neuritis.</li><li>87c. Paralysis agitans</li></ul>	M F M	11 12 72	1 2	1	3	1 i	1 7			1 2	1 2 12	4 1 35		2 4 14
87p. Sclerosis (other than of the spinal cord)	F	50 42			2	1	3			2	10	12		10
87E. Others under this title	F M F	44 22 28	6 8		2 2 2	3 1 1	1 1 3			4	8 8	6 4 5		19
88. Diseases of the organs of vision	M F	11 7			1		3			1 1	1	3		1 2
89. Diseases of the ear and mastoid process	M F M	66 38 39	37 18 24		2 1 1	····i			1 1 1		12 5 5	3 3 3		4 2 3
89B. Diseases of the mastoid	F	25	13		1				ı	3	3	1		2
process	M F	27 13	13	3	1	i				1 2	7 2	2		1
CLASS VIIDISEASES OF THE CIRCULATORY SYSTEM														
Total		12296	33	39	100	402	1076	1	7	356	2101	3387	1	4746
	M F	6606 5690					504 572		5		1343 758	2340 1047	i	1824 2922
90-95. Diseases of the heart.	M F	4237 3117	12 19				285 308		1 4			1375 559	i	1046 1495
90. Pericarditis	M F	8									3	· · · · i		5
91. Acute endocarditis	M F	44 37	2	5		1 2	1			13		5 2		3
91A. Endocarditis, specified as acute	M F	36 27	1 3				1 1			10		5 2		2 2
92B. Endocarditis, unspeci- fied (under 45 years of age)	MF	8		3	1				1	3 3				
92. Chronic endocarditis, valvular diseases	M	507	3	-		21	44 46			35	105	143		135
92A. Endocarditis specified as chronic and other val- vular diseases		411 406	3				36			35		115 73		96 173
92B. Enodcarditis, unspeci- fied (45 years and over)		96				7	8				14	28		39 44
93. Diseases of the myocar- dium	MF	1058	6 7	4		40	104			26	133	369 185		350 633
93A. Acute myocarditis	MF	62	1	1	. 2	3	5			2	11	21		15 32
93B. Myocarditis, unspecified (under 45 years of age)	M	26 23	5	2	6					12				1
93c. Chronic myocarditis and myocardial degeneration	M	614		1 1						12		213		207 383
93D. Myocarditis, unspecified (45 years and over)		685 356		1	3	17					45			127
(10 years and over/	F					12			1	:::::		68		

		NAT	TIVIT	Y							MON	THS						1
Not stat- ed	Can- ada	Brit- ish	USA	eign Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	10 17 34 32	2 1 1 3		2		2 2 1 3	2 2 3	2 1 1 4	5 1	4 2 2 2	<u>3</u>	3 5 1	3 5 9	4 3 2	1 1 3	5 3	1 2 1	84B 85
	17 14					2 2	2	5.4		2		2	3	1 3	1	2		86
1	118 104	20 24	6	8 2 1		14	9 10	12 15	14 10	15 14	17 11 1	11 16	10 9	12 14	9		9	87 87A
	2 7 10 60 39	3 8 8	1 1 2	3		3 1 5 4	1 5 2	28 8	3 2 4 5	1 1 7 6	 2 11 3	2 5 6	1 6 3	7	4 2	1 1 1 6 3	2	87в 87с
1 	32 30 19 23	7 13 2 3	1 1 2	· · · · i		4 4 2	1 4 2 4	3 3 1 5	4 2 3 1	5 5 3 1	4 3 1 3	5 6 1 2	3 2 1 3	2 5 2 3	2 5 3 2	3 2 1 3	3	87D 87E
	9 5	2	····i			1 2	1	2	2	2		· · · · i		· · · · · · · · · · · · · · · · · · ·	1	2	· · · · i	88
1	55 34 32 23	7 3 6 1	1	1		5 7 5 5	5 5 2 2	7 2 2 1	7 5 4 4	4 1 3	5 4 3 3	64	3	5 2 3 2		2 2	2	89 89a
1	23 11	1 2	1	2		2	3 3	5 1	3	1 1	2	2	<u>i</u>	2	3		4	89в
47	8832	1361	350	351	38	660	526	615	597	586	945	898	865	885	982	992	1188	
33	2887 2255	936 638	153 121 87	264	29	430 319	336 244	379 301	386 257	356 278	356	326	289	387 294	337	341		90-95
2	5 4 30	3	4	7		1 1 4	1 i	 ····· <sub>7</sub>	13	3	223	228	15	200	1 6	260	2	90 91
	28 23 22	7 3 4	3			3 1	1 1 1	7 6 5	6 1 3	3 3 3	1 4 1	3 2 2	5 1	3	5 4	1 4 1	3 2 2	91A
8	7 6 370	3	12	20				1 2 47	2 3 41	43	41	3 1 35	34	39	1 1 34	37		91B 92
	369 299	86	-		5	53		38	39	37	35	34	30 25	32	27	38		92A
	299 71	75 17	3	5		42 9	14	42 9	36 8	6	26 10	27	22 9	28 7	39 7	28		92A 92B
10 1 1	831 43	232 241 12	23 27 1	72 46 5	7 2 1	134 9	88 77 6	117 109 7	3 94 89 4	88 101 6	78 80 3	81 84 3	70 81 7	62 76 3	94 87 5	85 98 6	98 131 3	93
	48 20 17		2			10 3 3	2	5 4 1	5 4 1	3	3 2 	1 5	8 1 2	3 2	5 2 1	1 3	3	93в
8	409 494	141 151				52 82	47 43	68 64	55 52	50 63	58 49	51 50	35 49	37 43	52 49	50 51	59 90	93c
	252 272	77	5 12	20 14		39 39		38 39	31 31		15 28	26 27	27 22	19 30		28 38		93 <b>D</b>

						С	ONJU	GAL	CONI	OITIO	N			
CANCES OF DEATH	Sav	Total			Si	ngle					Marri	ied		
CAUSES OF DEATH	Sex	Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
94. Diseases of the coronary arteries and angina pectoris	M F	2413 1280	i	2	23	128	118 117	1	1 1	90 45	730 245	809 257	1	498 569
94A. Diseases of the coronary arteries	M	83 40			1	9	2 3			5	25 11	25 7		14 18
94B. Embolism and thrombosis of the coronary arteries	M F	2073 1093	· · · · · i	1 1	21	106 33	105 101	1	1	76 42	630 213	692 210	·····i	429 487
94c. Angina pectoris 95. Other diseases of the	M F	257 147		1	1	13	11 13			3	75 21	40		55 64
heart	M F	207 156	1 3	3 2		11 5	18 18			10	51 15	49 29		56 73
heart	M F M	34 32 173	 i	1 3		1 3 10	2 3 16			1 1 9	10 5 41	4 37		6 15 50
96. Aneurysm (except of the heart)	F M	124	3	1	1	3	15		1	8	10			58
97. Arteriosclerosis (of coronary arteries except-	F	22		1		1	1				209	1		
ed)	F M	62			i	35	196 230 5				153 3	381 26		1154
99. Other diseases of the arteries	F M	20				3	1				2	7		5
100. Diseases of the veins (varices, haemorrhoids, phlebitis, etc)	F M	33				2	1			2	9	12		
101. Diseases of the lym- phatic system (lym-	F	41					2			1	11	8		15
phangitis, etc)  102. Idiopathic abnormalities	M F	5 3		1		1				1				1
of blood pressure  103. Other diseases of the cir-	M F	297 477			3				i	12 18				
culatory system	F F	1 2										1		1
CLASS VIII.—DISEASES OF THE RESPIRATORY SYSTEM														
Total		3004	I			-			-					
	F F	1662 1342						3		84				
104. Diseases of the nasal fossae and annexa 105. Diseases of the larynx 105a. Croup	M F M F M	25 16 18	10 14	2		i i					6 2 1 1 1	1		. 2
105B. Other diseases of the larynx	M F M	1	4	l	3						1 1 5	9		. 6
106A. Acute	F M F	23 19	10	5		i						2		. 15 . 3 . 7
106B. Chronic	F	16					. 1	2			1	5 2		. 6
107. Bronchopneumonia	F	658	21	13	i 10	18	42	2			73		ó	. 130
107A. Bronchopneumonia 107B. Capillary bronchitis	M F M	656	212 168	2 13	3 10	5 18	42	2		1 4	1 73	135	5	. 129

		NAT	'IVIT'	Y							MON	THS						
Not stat- ed	Can-	Brit- ish	USA	eign Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
13	1615 913 48 23	556 270 22 15	79 44	148 52 10	3		188 100 2 4	192 127 4 5	224 107 6 2	197 114 5 4	217 97 9	96	161 93 4 4	7	106	204 115 10 3		
11	1391 777 176 113	471 228 63 27	69 38 10 5	8 2		89 21 21	86 19 10		193 95 25 10	168 93 24 ,17	90 26 7	79 18 13	139 76 18 13	65 7 4	95 17 9	169 100 25 12	118 32 16	94c
1  2 1	143 110 29 22 118 88	8 6 34 28	2 i	9 1 3 16	1 2	15	13 2 3	16 8 3 4 13 4	4 3	25 16 2 6 23 10	4 1 10	9 4 2 15	18 14 3 3 15 11	15 1 1	18 2 4 23	2 1 9	14 1 2	95a 95b
	26 14	10 8	1	5	1	3	4	4	2	8	5	1 1	2 5		2 4		2 4	96
2 3 	1478 49 38		3	54 2 2	3	178 7 11	170 5 3	156 7 3	183 4 4	207 5 5	153 3 4	139 10 3	5	142 4 3	154	· 159 4 4	3	98
	15 11 21	3 4 7		1		3		3 4					1 1		2		1	99
	28	8		5		1		2	9	2	2		3				4	
4 1	2 216	53 76	10	16	2	32 47	21	23	26	21	31	22	23	24 32		29	19	102
<u></u>	1 2					i					1						i	103
8	2261	519	62	159	3	411	271	298	271	281	207	179	137	149	223	224	353	
6 2		312 207				224 187												
	18 15 17 5 3	1 1		2	2	3 1	2 2 1	2 2 1 1 1	1	1 2	1	1 1	1	1 1	5	3 3	1 1 1	104 105 105A
i	4.0	1 5 6			2	4 5 1 5 2	3	1 10 2 6 1	5 6 4 2	2	4 4 2 1		i	1 3 1 1 1 2	3	3 10 5 3	1 2 6	105B 106 106A 106B
4 1	495 484 493 482	110 90	0 16	4. 24. 4. 4.		80 84 86 84	57 58 57	59 56 59 56	62 51 61	61 60 61 60	43 39 43	49 33 49	28 41 28	44 28 44	1 2 44 49 49	1 1 56 41 55	75 74 75 74	

						С	ONJU	GAL	CONI	OITIO	N			1
					Sin	gle					Mai	rried		
CAUSES OF DEATH	Sex	Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
108. Lobar pneumonia 109. Pneumonia, unspecified 110. Pleurisy	M F M F M	554 402 149 118 40	58 54 52 26 4	22 8 1 3 2	18 8 5 3	22 11 4 3 2	25 22 13 15		2 5	51 49 4 4 6 3	18 5 19	61 25		90 142 28 46 4 7
111. Congestion and haemorr- hagic infarct of the lung, etc		31 45	6			i i	1 6			1				12 33
<ul> <li>111A. Pulmonary embolism and thrombosis</li> <li>111B. Others under this title.</li> <li>112. Asthma</li> <li>113. Pulmonary emphysema.</li> </ul>	M F M F M F	8 4 23 41 98 70 4		4	4	1 6 1	1 1 5 4 6			1 2 6 1	20	2 6 5 27 10 1		1 3 11 30 20 22 1
<ul> <li>114. Other diseases of the respiratory system (tuberculosis excepted)</li> <li>114a. Chronic interstitial pneumonia including occupational diseases</li> </ul>	M F	37 11	5 1	1	1	3	1		1	1 3	11 3	8		4 3
of the respiratory system	M M F M	9 1 1 27 10	5 1	1	i	1 2 1	1			1 1 2				3
CLASS IX.—DISEASES OF THE DIGESTIVE SYSTEM														
Total	M F	2355 1318 1037	525 293 232		46	100 62 38	38		1 8	112	298	235		168 313
<ul> <li>115. Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations)</li> <li>115a. Diseases of the buccal cavity and annexa</li> <li>115b. Diseases of the tonsils.</li> </ul>	M F	87 71 32 26 25	19 19 2 10	7 5 1 1 1 4	i	4 3 2	3 2 3 2		1	13 5 1 1 5 3	16 10 9 4	111 5 7	9	14
115c. Others under this title.  116. Diseases of the oeso-phagus	M F M F	30 27 2 5	12	2		1			i	7 1 1	5 3	3		4
<ul> <li>117. Ulcer of the stomach or duodenum</li></ul>	M F M F M	253 42 120 31 133 11	1	2	8	3	3 2 7			29 6 11 5 18 1	11 48 8 52	5 21 2 29		14 16 12 14
<ul><li>118. Other diseases of the stomach</li></ul>	M F M	27 19 174	174			2	3		1		4			8
<ul><li>120. Diarrhoea and enteritis (2 years and over)</li><li>120a. Diarrhoea and enteritis</li></ul>	M F	99 97 66 70	21 12 20	37	4	2	5				10	22 11 4		18 37 15
120B. Ulceration of the intes-		33	1			2				5				3 7

		NAT	IVIT	Y							MON'	THS					_	
			Fore	eign														
Not stat- ed	Can- ada	Brit- ish	USA	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
i	384 312 118 97 26 16	121 64 21 16 7 3	3 2	2	i	94 64 23 23 23	47 46 17 8 1	59 39 23 18 2	37 12 5 3	57 33 13 12 7 2	36 29 8 5	19	11 16 4 8 3 3	23 12 6 7 3	37 29 7 6 4	43 19 8 7 4 2	59 19 15	108 109 110
	24 34	7 9	i	····i		1 5	2 2	1 3	1 2	3 5	3 2	4 4	4	3 2	2 6	3	5	111
	7 3 17 31 62 54 2	1 6 9 24 13 2	1 3 2			1 1 4 8 4	2 2 8 5	1 3 10 4	2 5		1 2 15 10	3 4 8	5	1 2 2 9 3 1	1 1 1 5 8 8	3 4 5 4 1	1 3 5 9	111A 111B 112 113
1	21 5	9		7		2	4 4			4 1	3		2	2	3	4		114
i	4 1  16 5	4 1 5 3		6		2	4 4	1 2					1	2	2 1 1	3		114A 114B 114C
6	1800	375	51	125	4	185	175	181	176	192	171	183	249	268	195	183	197	
6	987 813	212 163	28 23			101	102 73	104 77		102 90	92 79		142 107	160 108	105 90	98 85	112	
	68 57 23	10 7 5	2 2	5		9 9 4	6 7 2	5	5	7	5	3	3	3	6 3	3	12	115 115A
• • • •	20 22 15 23 22	3 2 3 4	1 i	3		3 1 4 4 2	2 1 2 3 3	2 3 1 3 2	3	1 3	2 3 1 4 2	3	2 1	1 1 2 2	2 3 2 1	1 1	5	115B 115C
	2 5						····i	· · · · i			· · · · i	1		····i		1		
1 i		69 24 7 45 2	3 1	13	1	10	19 4 8 1 11 3	3 11 3 11		30 7 16 7 14	10	19 3 6 2 13 1	18 3 8 3 10	24 2 13 1 11 11	24 3 i2 1 12 2	17 1 7 i0 1	19 7 10 7 9	117 117A 117B
	21 15	2		4		3	3	4 2	6 2	1 1	2 2	1 2	1 1	1 2	2	2 2	4	118
	138		1			5 10	15 4	9 7	8	9 5	9 7	17	29 22	45 39	16 20	9	2	
 1		9 5 7	4 1 2	4	1 1	4 4 4 2	3 3 2 2	4 6 3 5	8 1 5	9	2 3	1 3	17 10 16	16 18 13	10 6 9	9 9 5		120 120a
		2	1 2	2	2		1 1	1	3	1 5	3	3	1	7 3	2	5 4	6 4	120в

						C	ONJU	GAL	CONI	OITIO	N		-	
CAUSES OF DEATH	Sex	Total				Single				1	Marrie	d		
Choose of Bentin		Total	Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45–64	65 and over		Wid- owed
121. Appendicitis	M F	202 128	41 32	36 12	13 6	2 8	1 1		1 4	30 16	52 24	19		7 20
122. Hernia, intestinal obstruction	M F	226 160	23 11	7	7 2	15 8	13 12			16 17	41 30	51 17		52 63
122A. Hernia	M F M	109 62 117	2 3 21	3	3	7 2 8	8 4 5			2 2 14	23 18 18	7 7 24		33 26 19
123. Other diseases of the intestines	F M	98 22	8 2	1	2	6	8			15	12	10 7		37
124. Cirrhosis of the liver	F M F	25 89 65	2		1 5 2	1 9 5	1			4 7	7 29 16	3 22 6		10 20 27
124A. Specified as alcoholic	M F	8			1 1	1				· · · · i	1 1	2		3
124B. Not specified as alcoholic	$_{\mathrm{F}}^{\mathrm{M}}$	81 61		· · · · i	4	8 5	· · · · i			4 6	28 15	20 6		17 26
125. Other diseases of the liver	M F	25 27	3 4	1		1 3	2			3 5	5 4	7 3		3 6
125A. Yellow atrophy of the liver	M F	5 7	1 1							1 3	1 2	7		2
<ul><li>125B. Others under this title.</li><li>126. Biliary calculi</li></ul>	M F M	20 20 47	3	1	· · · · · · i	1 2 3	2 1 1			2 2 3	4 2 13	3		6 6
127. Other diseases of the gall- bladder and biliary	F	118				4	3		1	14	28	21		47
passages	M F M	49 114 6		 1 1	2 2 1	3	7			5	15 16 3	18 23		8 59 1
129. Peritonitis, cause not specified	F	10	4		1				1	2 2	1	1		2
opecined	F	20	8		i		1			4	3			3
CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM														
Total		2780	46	39	44	78	231	1	3	158	443	810		927
	F	1676 1104	25 21	18 21	34 10	51 27	134 97		3	54 104		632 178		453 474
130. Acute nephritis (including unspecified, under 10 years of age)	M F	35 28	9		1 1	2	1 2			7 6	6 3	3		5 3
<ul><li>131. Chronic nephritis</li><li>132. Nephritis, unspecified</li></ul>	F	728 671	4 3		16	23 17	53 70		2	26 49		254 123		181 292
(10 years and over)  133. Other diseases of the	M F	235 203	2 3			8 7	19 11		· · · · i	11 9	39 22	85 34		63 110
kidneys and ureters  134. Calculi of the urinary	M F	70 79	7 6	1		1 2	7 8			3 5	13	20 9		33
passages	M F	40 11		1		2	2			2 2		11 2		7 2
(tumours excepted)	M F	50 41	2	2	3		4 5			1 4	4	15 7		15 21
136. Diseases of the urethra, urinary abscess, etc	M F	18				3	3				5	5		2
136A. Stricture of the urethra 136B. Others under this title.	M F	15 3 2				2	3				5	1		2
<ul> <li>137. Diseases of the prostate</li> <li>138. Diseases of the male genital organs (not specified as venereal).</li> <li>139. Diseases of the female genital organs (not specified as venereal).</li> </ul>	M	493	1	2	1	8	45			1 29	2	1		1 13

	LOIN				12141	141(	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. Or				IAK	10, 1	730	Cont	mued	1	
		NAT	TIVIT	Y			1				MON	THS						
Not			For	eign	Not													
stat- ed	Can- ada	Brit- ish	USA	Other	stat-	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	162 106	31 16	3 3			16 7	11 8	17 10	19 10	13 12	15 18	17 10	28 13	18 11	13 9	14 9	21 11	121
1	165 107 73 34 92 73	38 38 24 21 14 17	4 4	8 3 10		24 20 9 7 15 13	24 9 11 5 13 4	21 12 11 5 10 7	22 12 14 5 8 7	13 16 7 10 6 6	15 8 7 3 8 5	19 18 5 6 14 12	21 17 6 5 15 12	16 7 9 3 7 4	14 15 9 5 5 10	14 12 7 1 7 11	14 14 7	122 122A 122B
	14 18 57 45 5	19 18	2	1 11		3 3 11 6	1 6 10 5 2	1 8 3	7 3	3 - 4 - 5	1 2 7 3 1	1 4 4 9 2	3 2 10 6 1	1 2 7 8	2 3 7 4 1	4 1 8 7	1 6 6	123 124 124A
	52 44			11		11 6	8 4	8 2	7 3	4	6		9 5	7 8	6 4	8 7	5 6	124в
	16 23					2 4	2 3	2	3		2		3	2 1	4	1 3	2 2	125
· · · · · · · · · · · · · · · · · · ·	2 5 14 18 28 85	3 1 7	1	3 1 8	1		1	2 5 15	2 3 4 15	4	2 1 3 10	1 1	1 2 4 9		1 1 3 3 5 9	1 1 2 5 9	2 1	125A 125B 126
1	84 6 4	3	i 4	4		12		10	5 4 1 1	12	10 1	7	4 6 1 2	8 2 1	4 7	6 15	13	127 128 129
	15	2 4		1		1	1			3	2		4		2	2		129
	0 5 7	340	38	68	3		137	124		169	131	116		127	149	142		
	28 541	138	13	3			60	67	60	77	56	61	62	46	58	64	57	130 131
				5 12	2	24 18												132
	51				1	8	1 .							-			9	133
	26			3	2		2 4			2 3	3	5 5			7		1	134
	35				1	i		5 5				4 5			3 1	1 3	2	135
• • •	. 1	1 3	3		1 1 4		3	2 1		1 40		8 2		3		i i		136 136A 136B 137
		5	2					1	1	1	1			. 1	١		. 1	138
	. 5:	2 1	2	1	4	.1	4	4		5	2	3	1	7 8	8 6	5 (	5 1	139

TABLE 3		I	LS C	)r D	EATI		OR E	ACH	SEA	. вх	CON	4300	AL	
						С	ONJU	GAL	CONI	OITIO	N			
CAUSES OF DEATH	Sex	Total			Sir	igle					Mai	rried		
			Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
139A. Of the ovary, Fallopian tube and parametrium 139B. Of the uterus 139C. Of the breast	F	25 42 2		1 1						16	12	1 2	• • • • •	
CLASS X1.—DISEASES OF PREGNANCY, CHILDBIRTH, AND THE PUERPERAL STATE														
Total		251		11	8				49	181	1			1
140. Abortion with septic conditions	F F F	26 12 14							5 2 3	17 10 7				
tion of septic conditions (haemorrhage included)  141A. Abortion	FFFFF	9 8 1 11 3		1	1 1					8 7 1 7 2				
142B. Without mention of septic conditions  143. Other accidents of pregnancy (haemorrhage excluded)	F F	8 3 22							3 1 2	5				
144a. Placenta praevia 144b. Other haemorrhages. 145. Puerperal septicaemia (not specified as due to abortion)	F	10 12							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9				
145A. Puerperal septicaemia and pyaemia 146. Puerperal albuminuria	F	50		2	1				15	33				
and eclampsia  147. Other toxaemias of preg-	F	45		4	1				10	30				
nancy	F	41		1	1		• • • • •		2	34				
148A. Phlegmasia alba dolens and thrombosis	F	13							5	12				
148B. Embolism	F		• • • • •						3	13				
birth	F	35 6		* * • • •	3				6 3	25				1
delivery	F F 	6 14 9			2				1 1 1					i
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE														
Total		76	13	7	3	4				6	10			18
	F F	40 36	9	3	2	4				. 2	6	11		6 12
<ul><li>151. Carbuncle</li><li>152. Cellulitis, acute abscess.</li></ul>	M F M F	16 11 9 13	2	3 1 1 1	1 1	2				2 1 2 1	2	2		1 6 1 3
153. Other diseases of the skin and annexa and of the cellular tissue	M F	15 12	4	· · · · · i	1	1					1 2	5 .		4 3

		NAT	IVIT	Y						:	MONI	THS	1					
Not stat- ed	Can- ada	Brit- ish		eign Other	Not stat- ed		Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	20 30 2	111	1	3 1		6 7 1	2 2	3 6		1 1	1 2	2 2	2 5	4 4	1 5	2		139A 139B 139C
	204	30	4	12	1	23	20	20	23	. 22	17	17	30	21	21	20	17	
	16 8 8			3 3	1	2 1 1	1	2	2 1 1	2 1 1	1 1	3 2 1	3 1 2			6 3 3	2	140 140 <sub>A</sub> 140 <sub>B</sub>
	8 8 9 2 7	1 1 1 1		1		1 1	2	1 1 3 1 2	1 1 2		1		i 1			1 1		141 141A 141B 142 142A
	2 21 10 11	1 1 i				1 2 2	3 2 1	1 1 1	2 2	3 1 2	1	1 2 2	4 2 2			4 1 3		143 144 144A 144B
	37 37 40 8	7 7 3 1	2 2 1	4		6 6 2	2 2 3	3 6	5 5 2 1	4 4 4	4	1 2	6 6 5	6 6 4	7 7 4 2	2 2	3	145 145A 146 147
	37 12 16 9	3 1 2		1		2	2 2	i	6 2 2 2 2	5 2 2 1 1	i	3 1	5 2 1 2	32 1	3 1 1 1 5	1 1	3 1	148 148A 148B 148C
	26 5 10 6	6 1 1 2 2	1	· · · · · · · · · · · · · · · · · · ·			3 1 1	1 i	1		2		2 2 2	1	2	1 2		149а 149в 149с
	62	6	2			7				6		9	8	14	3	1	2	
	34 28 	3 3 2 1 1 1	1 1 1 1 1	1 1		1 1 1 2	3		1 1 1 1 2	3 1 1		3 3 2 2 2 1	3 2	2 1	1	1	2	151 152
	14 10	i		1		1 2	2	4 2	2	<sub>i</sub>		1	1 1	2 3			i	<b>15</b> 3

						С	ONJU	GAL	CONI	OITIO	N			
CAUSES OF DEATH	Sar	Total			Si	ngle					Marr	ieđ		
CAUSES OF DEATH	Sex	Total	Under 15	15- <b>2</b> 4	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION														
Total		108	34	12	6	1	2			10	14	11		18
	M F	67 41	2 <b>5</b> 9	11 1	3	1	2			6	7 7	7 4		9
154. Osteomyelitis	M F	37 15	14	8	_					3	3 3	2		5-2
155. Other diseases of the bones (tuberculosis ex-	-	13	<b>'</b>	1						1	3	1		-
cepted)	M F	9 14	3		3		· · · · i				2	2 3		7
156. Diseases of the joints and other organs of loco-motion		21	8	3						1	2	3		2
56A. Of the joints (tubercu-	F	12					i			5	4			
losis and rheumatism excepted)	M	11								1				
156B. Of other organs of loco- motion	F M	10	-		1	ŀ				2	1 2	1		
	F	- 8								3	3			
CLASS XIV.—CONGENITAL MALFORMATIONS  Total	F	249 250 249 250 30 244 63 60 93 98 3 6 60 62	243 243 243 243 243 29 23 62 59 90 96 3 69 59	444411111111111111111111111111111111111	1 2 2	1					1			
CLASS XV.—DISEASES OF EARLY INFANCY  Total	M F M F M F M F	102	955 670 65 460 582 428 428 187 102											

		NA	TIVIT	Y							MON?	rhs						
Not stat- ed	Can- ada	Brit- ish	Fore	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	87 -56 31 -30 11 8 10 -18 10 -9 3 7	1	····i	5 2 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4		9 7 2 3 1 1 1 1 1 2	3 3 1 3 2 2 1	3 3 1 1 2 2 2	7 3 5 1 1 2	2	1 1 2	1		1	3	156 156A
	30 24 63 60 92 97 3 6	2 2		1		19 23 3 2 2 5 3 3 8 10	25 15 15 15 5 5 15 6	266 266 266 267 267 267 267 267 267 267	166 233 11 22 266 44 1229 33	26 12 26 12 2	388 177 211 177 213 5 7 7 4 4 5	21 20 21 20 4 4 4 7 3 6 6 9	25 24 25 24 4 1 11 11 11 11	15 22 1 3 3 6 4 4 3 12 5 3 3	19 15 19 15 4 3 3 4 4 8 6 6 	23 24 23 24 3  9 11 8 8 4	25 1 4 5 5 7 8 2 1	157A 157B 157C 157C 157D
	1624 955 669 65 46 582 428 187 101 4 183 101				i	129 77 52 3 2 40 34 20 7	125 83 42 8 2 55 25 11 7	153 77 76 6 4 45 49 16 11	151 90 61 4 5 55 36 10 9	9 1 18	141 83 58 3 4 55 40 18 7 2 16 7	122 69 53 8 3 46 34 9 6	125 69 56 4 3 39 38 20 11	146 80 66 4 3 58 45 11 11 12	146 89 57 6 10 48 29 23 9 1 22 9	116 74 42 8 3 42 28 14 2	3 46 35 16 12	158 159 160 160A

						C	ONJU	IGAL	CONI	OITIO	N			
CAUSES OF DEATH	80-	Total	-			Single				1	Marrie	d		
CAUSES OF DEATH	Sex	Iotai	Un- der 15	15-24	25-44	45–64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
161. Other diseases peculiar to early infancy (under 3 months)	M F M F M F M F M F	121 94 42 31 14 18 16 6 6 2 55 40	121 94 42 31 14 18 1 6 6 2 55 40											
CLASS XVI.—SENILITY  Total	M F M F M F	475 190 285 190 285 90 116 100 169					32 55 32 55 15 24 17 31					70 35 70		282 87 195 87 195 29 68 58 127
CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS  Total	 M	2754	398	254	231	117	135	1	34	361	414	264	3	515
163-171. Suicides	F	850	123	38	29	22	77		13	70	91	79		307
<ul> <li>163. Suicide by solid or liquid poisons or by absorption of corrosive substances</li></ul>	F M F M F M F M F	39 32 28 13 72 9 31 15 52 62 2 20 1		1 2 4 2 2 3 3 · · · · · · · · · · · · · · · ·	7 6 1 1 1 1 4	2 1 6 1 5 2 3 1 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	15 6 4 4 13 4 5 3 8 8	18 8 7 10 2 21 3 10 3 24 1	6		3 6 3 6 2 3 5 5
<ul><li>170. Suicide by crushing</li><li>171. Suicide by other means</li></ul>	M F M F	4 1 1 4		1	1 i	1				1 i	2			

		NA	TIVIT	ΥΥ							MON	THS						
			For	eign														
Not stat- ed	Can- ada	Brit- ish	USA	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	121 94 42 31 14					14 9 3 3	9 8 2 1	12 4	21 11 8 4 3 4	1 1	7 7 3 2 1		6 4 3 4	7 6 4 1 1	12 9 5 2 1 4	10 9 4 5 3	3	161 161A 161B
	1 1 6 2					1 1						1		1 1	· · · · · i			1
	55 40 3					7 5	7 3		3	4	2 4	6	3				4 2	161E 161F
	2									1							1	
	242	404				40	50	40	26	422	2.4	35	30	4.1	34	36	52	
1	137	40	5	8		17	21	18	36 11 25	21 21 21	11 23	12	9 21	21 23	13	17	19	
1	137	40	5	8		23 17	21	18	11 25	21 21 21	11 23	12	9 21	21 23	13	17		162
1	206	17	2	4		23 5 8	31 7 7	10		12	5 10	5	5 10	11	7	7		162A
	70 121	24 23 37	3 7	4		12 15	14 24	8	4	9	6	7	4	10		10 15		162в
••••																		
27 26	1996	361	103			198	225 152		223 165				299	156		196	132 75	
- 3	165	114	28	37	2	71	73	77	26	70		72	94	54	81	19		163-
	57	17	4			7	5				6		11	4	5	10	5	171
1	22 19 19 7		1	3	3	5 5 1 1	2	1 4 1 2	1 4	3	1 1	2	6 3	2	4	4		163 164
1	6	2 7 2 4		1 1 1 1 1 1	2	1	3	1 8	2 2 1	4 1 9	1 2 3	4 1 6	7	2 4 1 5	2	3	1 1 1 4	166
				. 3	3	2	1	2	5			2	1	1		4		168
	9 8 3 1		1	1			4 2	1 2 1	i	1			1	1	1	3 1 1	i	169 170 171

CAUSES OF DEATH	Sex	Total												
CAUSES OF BEATH	Sex	Local			Sin	gle					Mar	ried		
			Un- der 15	15-24	25–44	45–64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wid- owed
173-175. Homicides	M F	32 12	7 2		4 3	4			1	6 3	6 2	2		2
<ul> <li>173. Homicide by firearms</li> <li>174. Homicide by cutting or piercing instruments</li> <li>175. Homicide by other</li> </ul>	M F M	10 1 2			3	1				3	3			1
means	M F M F	1598 752	268 121	192	1 3 156 18		54 74	1	19		234 71	165	3	180 298
176. Attack by venomous animals	M M F	1 2 2	1 2								i	i		
<ul><li>178. Accidental absorption of toxic gases</li><li>179. Other acute accidental poisonings (except by</li></ul>	M F	17 6	2		2	1 2			····i	3 1		2		4
gas)	M F M F	20 9 37 24	9 4 14 12	3	3 1 6 2	1 1	1 1 2 2		1 2		1 5 1	1 1		2
flagration excepted)  182. Accidental mechanical suffocation	M F M F	49 58 48 14	22 15 34 14	3	2	1	6		2	2	5 7	3		14
183. Accidental drowning  184. Accidental injury by firearms	M F M F	250 37 33 5	82 19 2 2	8	31 3				3 1 1 1	37 2 9 1	18 2 4 1	7	2	4 3
<ul> <li>185. Accidental injury by cutting or piercing instruments.</li> <li>186. Accidental injury by fall,</li> </ul>	M F	15	4		2					1	4	2		····i
crushing or landslide  188. Injuries by animals 190. Excessive cold	M F M M F	973 550 32 9	80 50 1 2	19	90	10	58		13	20 2 1	177 57 5	127 61 9 1	1	137 262 5 1 2
<ul><li>191. Excessive heat</li><li>192. Lightning</li><li>193. Accidents due to electric</li></ul>	M F M F	18 16 4 1		1	1 1	1	3			1 1	1	3 5 1		5
currents	M F M F M	20 1 51 18 6	10	6	5		2	1	1	5 1 11 1	6	3 6		6 9
<ul><li>194B. Others under this title.</li><li>195. Violent deaths of which the nature (accident, suicide, homicide) is</li></ul>	M F	45 18					2	1	1	11 1		3 6		6 9
unknown	F	16 7 3							ii		2			1
CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH														
Total	 M	62	20				5			4		10		8
199. Sudden death	F	29	11	1			3			2	3	5		7

		NAT	IVIT	₹							MON	THS						
			Fore	eign													_	
Not stat- ed	Can- ada	Brit- ish	USA	Other	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	19 7	3	1	7	2		3	5		3	4		2	3	3	2	1	173- 175
	4	2		3			2		2	1	1	1		1	1		1	173
		1		2 2	ì				1 2	2	1 2		2	2	2			
23	1143	$\frac{\frac{1}{3}}{200}$	64	1	1	105	1	1				4		1			• • • • •	176-
	605	94	24				67											198
	1 2 2						i		· · · · · · i		1	·····i	i					
	11 6	2	2	2		3	2	1 2	2		1	2		2			1 2	178
	15 7 28	3 1 3		1 1 2			3	I.	1	2	1	. 1				4	1	179 180
1	21 39	1 5	2			1	2	2	1	2	1				11		4	
1	51			3		4	5	10	4	4	. 5	2	2	4	3	8	7	182
4		17		is		1 4	9	2	: 3	36	36	55	1 42	15	1 1	7	1 6	183
• • • •	29 4	1	1	. 2		3	1	i		2	1	1	3	3				184
	12	1			2	3			. 3	2	2 2	2	4	ļ 		1		185
7	652	159 81	34	1 119		61	86	45	5 38	3 48	3 4:	1 38	59	41	52	32	52	
i	9 3	3				3	3 2								3	1	2	190
	15 13 3	2			i 							1 8	5 8	3				191 192
	19									2	1	3			3			193
	34 17 6	1		1		. 1		2	2			6	1 1	l 2	2	3 2	: 2	194 194a
• • • •	28 17	2		1	i	1 4	1 1	2	2			6 3	3 5	5 8	3 2	2 1		194в
8	S 5	1		1	3 0	5			i	3	1	1	1 2	2 1				195
••••	2			-	1		2					1						198
	2 52	2	5	1	3	1	6	8 :	2		4	1 0	5 4	1 (	5	7 5	4	
	2 23	7	3		1	1	4 .	3	2	5 4	1	1	3 3	2	1 4			-
	2 14	1	3		1	1	3	2		2	i	1	2	1 :	1 3	3		199

						С	ONJU	GAL	CONE	OITIO	N			
CAUSES OF DEATH	Sex	Total				Single				2	Marrie	d		
			Un- der 15	15-24	25-44	45-64	65 and over	Age not stat- ed	15-24	25-44	45-64	65 and over	Age not stat- ed	Wld- owed
200. Cause of death not specified or ill-defined	M F	13 18	8 11	1 1						1	1 2	1 3		1

#### SPECIAL CLASSES OF

(Included also under the numbers

ONTARIO,

Accidents in mines and quarries	M	54	1	5	13			 1	31	3		 
. Accidents caused by mach-				_						4.0		
ines	M	45	1	5	6	5		 1	11	12		
Railway accidents	M	64	2	7	4	4	1	 1	13			 1
	F	3	1					 	;	1		
Street-car accidents	M	3	1	1		1	1		1	2	1	 
Automobile and motor-	1	ا"			1			 			^	
cycle accidents	M	500	62	77	55	18		 10	80	90		
Other land transportation	M	177 34	45	19	5	6	2	 0	20	39		 3
Other land transportation	F	5	3	1				 		1		
Water transportation	M	83	19	14	18			 1	24			
Air transportation	M	2	1	1				 	2			 

		NAT	TIVIT	Y							MON	THS					
Not stat- ed	Can- ada	Brit- ish	For	1	Not stat- ed	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						1 2	1 2	2	3 3			1 2	1 1	3	1 3	1	1 2

#### ACCIDENTAL DEATHS

of the International List above)

1938

1																		
	19	3	3	29		3	7	8	3	4	5	3	3	6	2	3	7	A
	29	10		6		7	3	3	5	4	5	4	3	6	1	3	1	В
i	39	9		14	2	4	4	7	6	8	6	10	5	2	5	3	4	С
	4	2				4	4			4		4		i	- 1			D
	252																	
	353 133	68 22	13	9	5				10	24 11	20	46 15	19	50 23	56 24	48	19	E
	27		· · · · i							1		5		1		1	1	F
· · · ·	61	10							15			13	11 1			1		G
	4	1	2			- 1				1	1	3		1				Н

## TABLE 39—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

								_							-			(			-			
CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora; incl. Patricia	Kent	Lampton
Total	15,714	6.3	218	256	481	242	337	187	154	308	285	343	222	204	201	477	204	55	225	355	530	149	407	384
Class 1.—Infectious and Parasitic Diseases																								
Total	1321	5	19	29	24	9	44	12	8	22	13	12	13	29	11	35	10	2	11	13	23	3 27	15	14
1. Typhoid fever. 5. Undulant fever. 7. Measles. 8. Scarlet fever. 9. Whooping-cough. 10. Diphtheria. 11. Influenza. 11a. Sole cause. 11B. With bronchitis. 11C. With pneumonia. 11D. With other diseases of the respiratory system. 11E. With intestinal complications. 11F. With other causes.	16 10 21 43 367 29 18 160 20 35 95	33 1			1 3 11  6 1	1 1 2	3 1 3	100	2	2	1 8 7	1 1 1  7 1 1 3	77	3	3	25 3 1 11 2	1	2	5 . 1	 8  4 1	12 1	1 3 2 3 2	1 2 2 2 4 2	3
<ul> <li>13. Dysentery</li> <li>15. Erysipelas</li> <li>16. Poliomyelitis and polioencephalitis (acute)</li> <li>17. Lethargic or epidemic encephalitis</li> <li>18. Epidemic cerebrospinal meningitis</li> <li>22. Tetanus</li> </ul>		5						1	1	i			1							i		1	1 1	
23-32. Tuberculosis	74	2 :	2 1.	3 25	9	3	28	3	1	8	3 4		4	24	7	7	6		3	3	8	19	3	7
Tuberculosis of the respiratory system.     Tuberculosis of the meninges and central nervous system.     Tuberculosis of the intestines and peritoneum.     Tuberculosis of the vertebral column.	2	1 .		1 24		3	3 21	5	1	1			1	ļ.,		5	1		3	3		18	2	6
Tuberculosis of the bones and joints (vertebral column excepted).      Tuberculosis of the lymphaticsystem(bronchial, mesentericand retroperitoneal glands excepted)      Tuberculosis of the genito-		1 .													1					1	1			
urinary system. 32. Disseminated tuberculosis. 32a. Acute	5			i 2		1		1	2	i		1					1					1		
36. Purulent infection, septicaemia (non-puerperal). 38. Malaria. 39. Other diseases due to protozoal parasites. 43. Mycoses. 44. Other infectious or parasitic diseases. 44. Others under this title		2					1							1								1	1	
CLASS II.—CANCER AND OTHER TUMOURS Total	1719	5) -	8 19	27	62	36	21	16	18	29	28	44	27	21	28	61	26	6	31	45	68	3 12	49	32

## CITIES, TOWNS AND VILLAGES OF 5,000 AND OVER)—ONTARIO, 1938

Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
267	292	108	569	136	509	278	238	264	262	270	336	238	170	306	183	174	233	108	263	139	553	176	344	119	243	171	797	229	479	511	1,292	
11	16	6	25	34	78	65	21	10	7	13	17	21	10	11	7	20	13	13	23	9	37	10	38	9	35	12	25	12	24	135	154	
			 'i	i	1		1 2 4	i	1  1		2 1 1 	  i	··· ··· i			· · · · · · · · · · · · · · · · · · ·		1	 1 3	i	1 ····2 ····4		3 6		2	1	1	4		····	i	1 5 7 8 9
	11 1 1 5	i	6	4	 1	i  i	1 3 1	5	i	6 4	 1 3	17 4 1 9		 1 3	 1 3	8	6 3	1 7 5	 1 4	 1	10 1 4		2		· 7 · · · · · · 3	ió 1 1 7	3	 4  1 1	15 3 4	10 2 	11	11B 11C
1 	2 2			3 11 1	1		1 1 1	1 1 2 	1	···· 2 ··· 1	4	1 2	··· ·· i 1	2 2 		1 ···	1 1	1 1 1 1 1	1 2 3	1	2 2 4	1	··· 2 1 1		2 2	· · · · · · · · · · · · · · · · · · ·	2	2	1 7 2	i	1 7	11E 11F 13 15
• • •							1										1						1 2	1								16 17 18
6	2	-	17	13		60	7 5	2	4	6	4	3	2	2	3	11	1	3	6	6	13	5	15		21	1	21	2			120	22 23–3
6	1		14	13	03	60	3	2	2	5	1	2	2	2	2	11	1	3	6	6	10		12		21	1	20	2	*	110	113	
	1	1	1		1						1	1											2	3								24 25
			1		1		1			1	1					٠.											1		1		4	26
																																27 27в
												٠.																				29
	2	· · · · · · · · · · · · · · · · · · ·	1 1 1		1 1 1 	i		···i	· · · · · · · · · · · · · · · · · · ·		1				1		···· ··· i				1 1 2	i	1	i				· · · · · · · · · · · · · · · · · · ·		4	1 2 1 1 8	
																	2				i									l.		
	1																															14 14c
35	27	15	35	3	57	29	20	32	31	21	40	21	25	39	19	12	28	3	30	12	48	8	13	5	21	29	31	23	71	41	181	

### TABLE 39—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

REPORT OF THE

TABLE 39—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE)													IVI	上 (	)F									
CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lampton
45-53. Cancer and other malignant tumours	1630	7	19	25	62	33	19	16	16	29	28	39	26	20	28	58	25	6	29	44	60	11	47	29
<ul> <li>45. Cancer of the buccal cavity and pharynx</li> <li>46. Cancer of the digestive tract and peritoneum</li> <li>46A. Of the oesophagus</li> <li>46B. Of the stomach and duo-</li> </ul>	850	5	1	14	36	15	11	8	1	1		22		8	3	28	15	3	15	24 1	39 2	4		13
denum 46c. Of the rectum 46b. Of the liver and biliary ducts 46c. Of the pancreas 46d. Of other organs 47. Cancer of the respiratory	376 88 102 43 220	2	1 1 1	4	15 5 5 2 9	3 1 4				1		5 2	2	3	1 1 1 1	12 5 2 3 6	5	1	6 3 1 1 3	3	18 3 5 3 8	1	10 3	1 1 6
organs  47A. Of the larynx  47B. Of the lung  47C. Of the mediastinum  47D. Of other organs of the respiratory system	50 7 32 2				2 1 1	1		1 1		1		2 1 					1			1 i				2 1 1
48. Cancer of the uterus. 48A. Of the uterus. 48B. Of the cervix uteri. 49. Cancer of other female genital organs. 50. Cancer of the breast	122 93 29 36 182		2	3 2 1 1 4	5	4 3 1 2	1		1 1 1	1	1 2	2 2	1 1 5	3	2 1 1 2	4 4  1 5			1 1 1 2	1 1 3	1 4	1	3 2 1	1 1
51. Cancer of the male genito- urinary organs			1		5 2 3	6 4	1		2 1 1	4		3 1 2	5	1	6	10 3			5 4 1	4	6 1 5		5	4 2
nexa. 51E. Of other male genito-urinary organs. 52. Cancer of the skin. 53. Cancer of other or unspecified organs. 53A. Of the eye and orbit.	5 47 137	1	1 2	2	6	4	3	1 2	i 1	2 2	2	1	1	1				1	3	4	4	1 3.	1	2
53c. Of the glandular system 53b. Of the female urinary organs. 53c. Of the bones and joints. 53c. Of the brain. 53c. Of the spine and spinal	28 20 21 19	1	1 1	1	1 	 2 i	1	1		i		1			i 	2 1			1	2 1 1	1	1 1	3	· · · · · · · · · · · · · · · · · · ·
cord	9 2 9 16 5	-:			2	1	1		1	i			1		2	1  i		1	i		1	1	1	
known location 54. Non-malignant tumours 54a. Of the ovary 54B. Of the uterus 54b. Of the brain 54c. Of the thyroid gland 54f. Of the prostate gland	5 81 13 14 11 28 5			1 1		3	1					5 1 1 2	1 1			3 1 	i		2	i	8 1 4 2	1	i 1	· · · · · · · · · · · · · · · · · · ·
546. Of other or unspecified sites	10 8 6	1		1					1					1		1					1		1 1	1 1
CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES	2																							
Total	411	1	9	11	16	6	10	3	8	12	8	10	3	4	2	14	6	1	12	4	12	2	11	10
56. Acute rheumatic fever 57. Chronic rheumatism, osteo- arthritis	58 26		1	1 2	1		!		1	1	1			-					2					2

CITIES, TOWNS AND VILLAGES OF 5,000 AND OVER)—ONTARIO, 1938—Con														tint	ued																	
Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	Vork	
34	26	13	34	3	54	29	19	32	30	20	36	19	23	34	18	11	28	3	29	12	47	6	13	5	19	29	30	22	63	37	176	45-53
2	1		2		1	1				2	1	2		1		1	1			1	4				3		2		3	4	4	45
20	10	5	20		27 2	16	13	16 1	18	11 2	23	8	10	20	10		12		22		28	1	6	2	6	15	15	14	26	15	97 2	
6	2 2	2	6 5		7 4	10	8 2	6	10		8	4	3	13	5 2	3	8		12		20		3	1		7	5 2	5 2	7 2	5 4		46в 45с
6 3 5	  5	1	1 1 7		1 2 11	4	3	4 1 4	1 1 4	4 	4 5 3	3	1 2	1 4	1 2	1	· · · · · · · · · · · · · · · · · · ·		3 2	1 2	2 2 4				· · ·	4 2 1	2 2 3	5	1 2 14	1 5	3	46D 46E 46G
2	1		1		5	3		1	1	2	1	2	2		1		1		 	1					1				3	2	7	47 47A
			1		3	1						1	2		1					1												47в 47с
	1 3 3		1 1	1	1 1 1	1 2 1		 7 6	1 1	1 1 1	 2 1	 2 2	3	3	1 1	1 1	 5 5		i	1 1	1 1		 1 1	3 2	2 2	4	1	2	5	3	20 12	48A
			2 2			1		1	1		1				1						2 5			1	3	1		1	2		4	48B 49
6	5	3	3		6 8		3	2	3		3	1	2 1	4	2 2	2	2	1	2	2	5	2 1	2		2	2	7	3	6	3	20 11	51
<u>.</u>	· · · i		1 1 1		1 1 3	1	1	2	3		3	1.	1 		2		2	· · · · · · · · · · · · · · · · · · ·		2	· · · · · · · · · · · · · · · · · · ·	1				1	1	 i	2	2	1	51A 51B 51C
				٠.	3												· · · •		 							1			1		- 1	51D
	2	3		i	1			· · · i		1			1			i	• • •	i		i	4	1	i				1	2	2	3	2	51E 52
1					4  1	1	2	1			3	3	1	6 1 2	1	2	<u>i</u>		4		2	1	2		2	5	3	2	2	3	11 1 2	53 53a 53c
	2				1				1 1						i				2							1 2	1				2	53D 53E
			2				1				1			1		1									1		1		1	1		53F 53G
i	 i	i			  1				1			  1	1	i							 1				1	1			· · · i	1	1	53н 531 53J
						1												1								1			1		1	53к 53м
1 	1	1			3		1		1	1	2	1	2	5 2		1			1 1	 		2			2				8 2	4	4	54 544 54B
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- 1																1				٠.					1		1	- 1	- 1		- 4	
											1	1					 	 														55 55D
		1																					-									55G
5	6	1	7	3	9	5	13	6	4	8	10	6	3		_					-	11	5	9	3	4	7	11	3				
1			1	1		1		2		1	2	4		1 2		2	1		1		3	1	1						- 1		5	

### TABLE 39—CAUSES OF DEATH FOR COUNTIES (EXCLUSIVE OF

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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton
59. Diabetes mellitus 63. Rickets	214 10		3	7			3	1						1	. 1	9		1			6	1		7
gland	49 5 2 2		• •	1 1	3 2 1		3	1 1 	1 1	3	1  1 		2 1 1	1			2 1 1		2  1 1	1	2 1 1	1	1	
<ul> <li>68. Diseases of the adrenals (Addison's disease)</li> <li>69. Other general diseases</li> <li>69A. Fatty or amyloid degeneration</li> </ul>	13 9				2			• •		···i				• •	• •				1			• •		i
69c. Others under this title	4		-				-			i				-					1					<u>i</u>
CLASS VI.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS																								
Total	186	1	1	1	5	1	2	3	1	8	7	3	3	1	1	5	4	2	2	9	6		6	5
70. Haemorrhagic conditions. 70a. Simple purpura 70b. Haemophilia 71. Anaemia 71a. Pernicious anaemia 71b. Others under this title 72. Leukaemia and aleukaemia 72a. Leukaemia (Hodgkin's	19 31 25	1		1 1	4 4		2 1 1	3	1		5		3 2 1	1	1 1	4 4	1	1 1	1 1 1	6 3		1	1 3 2 1 2 2	
disease). 73. Diseases of the spleen. 74. Other diseases of the blood and blood-forming organs.						1				1						1								
									_					_										
CLASS V.—CHRONIC POISON- INGS AND INTOXICATIONS  Total	20		1		1		2									1	1			2	1	1	2	2
75. Alcoholism	18	╌	1		1		2	-	-							1	-			-	1	-	2	-
75B. Other alcoholic intoxica- tions	16		1		1		2									1				2	1	١.	2	1
organic substances 76A. Chronic morphinism 76B. Chronic cocainism		1																						-
CLASS VI.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE																								
Total	75	8 6	5 9	11	31	11	6	11	7	8	11	13	23	7	9	39	4	2	6	18	21	6	20	17
<ul> <li>78. Encephalitis (non-epidemic)</li> <li>79. Simple meningitis</li> <li>80. Progressive locomotor</li> </ul>		5	i				1	i	1											1	2	2	1	
ataxia (tabes dorsalis).  81. Other diseases of the spina	1	3 :	1			1		. 4		. 1		. 1				1		1				. 1	1	
82. Cerebral haemorrhage, cerebral embolism and thrombosis	38.	3 2	2 4					1 3	5 5	2		9		6		16	2	1 1	1			3	9 8	9 7

CI	ΓIF	ES,	Т	O	WN	IS	AN	1D	VII	LLA	GI	ES	0	F 5	,0(	00	AN	D	ov	EI	R)-	-O	N'	ГА	R	Ю	, 19	938-	—C	ont	inu	ıed
Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
4	5		4	. 1	4	2	3	4	2	6	4	2	1	7	2	4	4	1 1	2	1	3 2	2	7	1 1	3	3	5	1			17	59 63
	1 1		1 1 	1 1	3 1 2		2 1 1		2 1 1		2  1 1		1 1	1 	2	3 2	2 1 1				2	1	1 1			· · · · · · · · · · · · · · · · · · ·	2	1 1	3		6	65 66A 66B 66C 66D 66E
•••			1			1	1																	1		1				2	2	67
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2	6	2	1	1	9	2	1	4	5	3	2	1	4	_ 2	4	2	3	2.	2	2	9	3	3		2	1	5		5	3	18	
 1 1 1	 4 2 2 1 1	1 1 1 1		:: 1 1 ::	5 5 5			3 3	5 4 1	3 2 1	2 2	1 1	4 3 1	 2 2 	3 3	2 1 1	3 2 1	2 2	2 2	1 1 1 1	8 7 1 1	3 3	1 1 1 1		1 1 1	1	 4 4  1		4 2 2 1 1		12	70а 70в
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7 6	3	6 3	15 14	2 2	15 13	1	3		11 11		10 7			12 11							11				9 7		10		20 17	10	25 18	82 82 <sub>A</sub>

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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lampton
82B. Cerebral embolism and	2 4			İ				2																
thrombosis								2																
paralysis, cause not specified	30		1		3		1	1							,	1				2			1	1
83. General paralysis of the insane	30	1			1	1		2	٠.				3			1		٠.,					2	1
other psychoses 84A. Dementia praecox	56 41												9								2			
84B. Other psychoses	15 44			i						. 1		i							i	· · · i	1			· · · · · · · · · · · · · · · · · · ·
of age)	24		2	• •	2										1	1	1			1		3		1
vous system	129		1	1			1	2			- 1					14		1	3		3			2
876. Neuralgia and neuritis 87c. Paralysis agitans 87b. Sclerosis (other than of	56 56		i		4	3	i	i								7			i		1 2		3	i
the spinal cord) 87E. Others under this title	34 28				1 3			1		1	· · i			 1		3			· :				3	···i
88. Diseases of the organs of vision	4	١.														1					1			1
mastoid process 89A. Otitis	17 16		1	1						1						1								
89B. Diseases of the mastoid process	,	ı																						
CLASS VII.—DISEASES OF THE																								
CIRCULATORY SYSTEM																								
CIRCULATORY SYSTEM  Total	561	7 21	68	86	180	97	46	70	51	125	129	125	80	72	78	175	95	18	98	137	215	24	176	169
Total			-	86 57	180	97		70 39	51	125	129	82			78  40	94		-	98 50		215	-		169
Total	3333	5 11	46	_									45		40			-	-			18		
Total	5611   3333   111   121	5 11	46	57	107	56	30	39	27 	63	77	82	45	43 'i	40	94	44	16	50	92	125	18	109	
Total	5611 3333 11 11	5 11	46	57	107	56	30	39	27	63	77	1 1 1	45	43 'i	40	94	44	16	50	92	125	18	109	95
Total	5611   3333   111   121	5 11	46	57	107	56	30	39	27	63	77	1 1 1	45	43 'i	40	94	44	16	50	92	125	18	109	
Total	5611 3333 11 12 526 418	55 111 14	1 16	57	25	56	30 1 1 1 6 5	39	27	63	77	82 1 1 1  8	45	1 1 15 7	5	94	11	16	50	92	125	18	17	95
Total	5611 3333 11 12 526 418 108	55 111 77 22 55 55 11888	1 46	57	25	56  4 1	30 1 1 1  6	39	27  4 3 1	63	77	82 1 1 1  8	45	1 1 15 7 8	5	94	11 4	1 1	50	92	125 1 1 16 12 4	7	17 10 7	95  7
Total	5611 3333 11 12 526 418 108	55 111 77	1 16	57	107  25 23 2 35	56	30 1 1  6 5 1	39	27	63	77	82 1 1 1  8	45	1 1 15 7 8	5	94	11 4	16 1	50	92	125 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7	17 10 7	95  7
Total	5611 3333 11 520 411 107 5.2 2.	55 111 77 22 55 11888	1 17 15 2 17 2	57	25 23 2 35 	56  4 1 3 27 1 2	30 1 1  6 5 1 7	6 6	3 1 9 1	63  11 8 3 22 2	77  9 8 1 20 3	82 1 1 1 8 7 1 222	45	1 1 15 7 8 16 2	5 5 1 1	94  21 18 3 29	44 	16	8 7 1 13 1	922	125 1 1 16 12 4 41 1	7 7 3 1	109  17 10 7 44 1	95  7 7  36 2
Total	5611 3333 11 526 413 107 5. 2 62	5 111 77	1 17 15 2 17 2	57 -2 2  6 6  20 3	25 23 2 35 	56  4 1 3 27 1 2 9	30 1 1  6 5 1 7  1 2	6 6	27  4 3 1 9 1	63  11 8 3 22 2	77 77 9 8 1 20 3	82 1 1 1 8 7 1 222	45 4 4 4 15	1 1 15 7 8 16 2	5 5 1 1 4	94  21 18 3 29	44 	1 1	8 7 1 13 1	922	125 1 1 16 12 4 41 1 1	7 7 3 1	109  17 10 7 44 1	95  7 7  36 2
Total	5611 3333 11 526 411 100 1076 5. 2. 622 388	55 111 77 22 55 55 11 688 688 69 .	1 17 1 15 2 17 2 18 2 19 2 19 2 19 2 19 2 19 2 19 2 19	57 	25 23 23 35  1 24 10	56  4 1 3 27 1 2 9 15	30 1 1 6 5 1 7  1 2 4	6 6	27   4 3 1 9 1  4	63  11 8 3 22 2 2  14 6	77  9 8 1 20 3 1 11 5	82 1 1 1 8 7 1 22 	45 45 4 4 4 15 12 3	1 1 15 7 8 16 2  4	5 5 1 1 4 1	94  21 18 3 29  18	41 	1 1	50  8 7 1 13 1 1 1	922  111 100 1 39 4 4  24	125 1 1 16 12 4 41 1 1 28	7 7 3 1 2	109 17 10 7 44 1  29	95  7 7  36 2 25 9
Total	56113 3333 1111 520 413 1007 55 2. 622 388	55 111 77 77 77 77 77 77 78	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	57 	25 23 2 35  1 24 10	56  4 1 3 27 1 2 9 15	30 1 1 6 5 1 7  1 2 4	6 6	27  4 3 1 9 1  4	63  11 8 3 22 2 2 14 6	777 9 8 1 20 3 1 11 5 45	82 1 1 1  8 7 1 22  10 12 49	45  4 4  15  12 3	43 	5 5 1 1 4 1 25	94  21 18 3 29  18 11	111 44 7 155 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 6 3	50  8 7 1 13 1 1 10 26	922  111 100 1 399 4  244 111	125 1 1 16 12 4 41 1 1 28 12	7 7 3 1 2 2	109 17 100 7 44 1 1 29 14 44	95  7 7 7  25 9
Total	5611 3333 11 520 413 1007 5.2 62 38 154 4 127	55 111 11 11 11 11 11 11 11 11 11 11 11	1 46 	57 2 2  6 6  13 4  24	25 23 23 35  1 24 10	56  4 1 3 27 1 2 9 15 24	30 1 1  6 5 1 7  1 2 4 11 	39   6  8 3 20 	27   4 3 1 9 1  4 4 13	63  111 8 3 22 2  14 6	777 9 8 1 20 3 1 111 5 45	82 1 1 1  8 7 1 22  10 12 49  39	45 	43 11 15 7 8 16 2  4 10 9 11 2	5 5 7 1 1 25	944  211 188 3 29  18 111 39 2 355	444 	1 1 1 6 3 6 4	50  8 7 1 13 1 1 10 26 2 20	922 111 100 1 39 4 4 4 11 40 1 31	125 11 11 16 12 4 41 11 12 28 12 15 15 15	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	109 17 10 7 44 1  29 14 44 1 37	95  7 7 7  25 9 48 3 41
Total  90–95. Diseases of the heart  91. Acute endocarditis  91. Endocarditis specified as acute  918. Endocarditis unspecified (under 45 years of age)  92. Chronic endocarditis, valuar diseases  92. Endocarditis specified as chronic and other valuar diseases  928. Endocarditis, unspecified (45 years and over)  93. Diseases of the myocarditis  93. Acute myocarditis  931. Myocarditis, unspecified (under 45 years of age)  930. Chronic myocarditis and myocardial degeneration  931. Myocarditis, unspecified (45 years and over)  94. Diseases of the coronary arteries and angina pectoris  941. Diseases of the coronary arteries  942. Angina pectoris  943. Chronic myocarditis  944. Diseases of the coronary arteries  945. Other diseases of the heart	5611 3333 11 520 4111 1007 5. 2. 62 38 154 4 4 127 22 16	5 111 77	1 46 	57 2 2  6 6  13 4  24 	25 23 2 35  1 24 10 40	56  4 1 3 27 1 2 9 15	30 1 1  6 5 1 7  1 2 4 11 	39   6  8 3 20 	3 1 9 1  4 4 13  8 5	63  11 8 3 22 2 2  14 6	777 9 8 1 20 3 1 11 5 45	82 1 1 1  8 7 1 22  10 12 49 	45 	43 11 15 7 8 16 2  4 10 9 11 2 6	5 5 7 1 1 4 1 25	94  21 18 3 29  18 11 39 2	111 44 7 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	16 1 1 6 3 6	50  8 7 1 13 1 1 10 26 2 20	922  111 100 1 1 39 4 4 111 400 1 1 31 8	125 11 16 16 12 4 41 11 1 28 12 12 15 16 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	109 17 10 7 44 1  29 14 44 1 37 6	95  7 7  36 2  25 9 48 3 41 4
Total  90–95. Diseases of the heart  91. Acute endocarditis  91. Acute endocarditis  91. Endocarditis specified as acute  918. Endocarditis specified as gente  92. Chronic endocarditis, valvular diseases  92. Endocarditis specified as chronic and other valvular diseases  92. Endocarditis, unspecified (45 years and over)  93. Diseases of the myocarditis  938. Myocarditis, unspecified (under 45 years of age)  930. Chronic myocarditis and yocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and angina services and over)  94. Diseases of the coronary arteries and angina pectoris  94. Diseases of the coronary arteries  94. Diseases of the coronary arteries  94. Angina pectoris  95. Other diseases of the heart  95. Other diseases of the heart  95. Other and unspecified	5611 3333 111 526 413 107 5.2 622 388 1544 4 127 222 16 214	55 111 77 22	1 46   1 17 1 15 2 2 8 2 2 9 3 11 	57 2 2  6 6  20 3  13 4  24  21 3 5	107  25 23 2 35  1 24 10 40  344 67	56  4 1 3 27 1 2 9 15 24  222 2	30 1 1  6 5 1 7  1 2 4 11  10 15 15 10 10 11 11 11 11 11 11 11 11	39  6 6  11  8 3 20 	27   4 3 1 9 1  4 4 13  8 5 1	63  11 8 3 22 2 2 14 6	777 9 8 1 20 3 1 11 5 45	82 1 1 1  8 7 1 22  10 12 49  39 10 11 	45 	43 	5 5 1 1 25  24 1 3	944 	111 44 77 155 11 17 3 122 2 1 1	16   1 1  6  6 	50  8 7 1 1 1 1 1 1 26 2 20 4	922 	125 16 16 12 4 41 11 15 12 12 12 12 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	109 	95 7 7 7 25 9 48 3 41 4 4 4 1
Total  90–95. Diseases of the heart  91. Acute endocarditis  91. Acute endocarditis specified as acute  918. Endocarditis specified as acute  919. Endocarditis unspecified (under 45 years of age)  92. Chronic endocarditis, valvular diseases  92a. Endocarditis specified as chronic and other valvular diseases  92b. Endocarditis, unspecified  (45 years and over)  93. Diseases of the myocarditis  93b. Myocarditis, unspecified  (under 45 years of age)  93c. Chronic myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis and myocarditis despensation  93b. Myocarditis, unspecified  (45 years and over)  94. Diseases of the coronary arteries and angina pectoris  94c. Angina pectoris  95b. Other diseases of the heart  95b. Other and unspecified  96c. Aneurysm (except of the heart)	561: 333: 11: 526: 41: 107: 5. 62: 38: 154: 4: 127: 22: 16: 21: 14: 14: 15: 15: 15: 16: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18	5 11 1 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 466 1 1 17 1 1 15 2 2 8 2 8 2 9 3 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	57 2 2 6 6 6 20 3  13 4  24  5	25 23 2 35  1 24 10 40  344 67	566 	30 1 1  6 5 1 7  1 2 4 11  10 15 15 10 10 11 11 11 11 11 11 11 11	39  6 6  11  8 3 20  19 1 2	27  4 3 1 9 1  4 4 13  8 5 1 1	63  111 8 3 22 2 2  14 6 28 	777 9 8 1 200 3 1 111 5 45 333 12 3 2	82 1 1 1  8 7 1 22  10 12 49  39 10 11 	45 	43 	5 5 7 1 1 25  24 1 3	944  21 18 3 29  18 11 39 2 35 2 5	111 44 77 155 11 17 3 122 2 1 1	16 1 1 1 1  6 3 6 	50  8 7 1 1 1 1 1 1 26 2 20 4 3	922 	125 16 16 12 4 41 11 15 12 12 12 12 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	109 	95 7 7 7 25 9 48 3 41 4 4 4 1
Total  90–95. Diseases of the heart  91. Acute endocarditis  91. Endocarditis specified as acute  918. Endocarditis specified as acute  919. Chronic endocarditis, valuardiseases  920. Chronic endocarditis, valuardiseases  921. Endocarditis specified as chronic and other valuar diseases  922. Endocarditis, unspecified  925. Endocarditis, unspecified  926. Endocarditis, unspecified  927. Diseases of the myocarditis  938. Myocarditis, unspecified  939. Chronic myocarditis  930. Chronic myocarditis  930. Chronic myocarditis and myocardid degeneration  930. Myocarditis, unspecified  941. Diseases of the coronary arteries and anginary pectoris  942. Diseases of the coronary arteries  943. Diseases of the coronary arteries  944. Diseases of the coronary arteries  945. Embolism and thrombosis of the coronary arteries  946. Angina pectoris  957. Other diseases of the heart  958. Other and unspecified  96. Aneurysm (except of the heart)  97. Arteriosclerosis (of coronary arteries excepted)  98. Gangrene	5611 3333 520 413 100 107 5. 2. 62 38 154 4 127 22 16 21 14 186 4 4	5 11 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 466 1 177 1 br>2 2  6 6  20 3  13 4  24  5 	107 	566 4 1 3 27 1 2 9 15 24 222 1 1 366	30 	39 	27   4 3 1 9 1  4 4 13  8 5 1 1	63  11 8 3 22 2 2 14 6 28  26 2 2 2	777 9 8 1 20 3 1 11 5 45 333 122 3	82 1 1 1  8 7 1 22  10 12 49  39 10 11  36	45 	43 	5 5 7 1 1 25  24 1 3	94 21 18 3 29 18 11 39 2 35 2 5 65	444 111 44 7 155 1 17 3 122 1 11 45	16	50  8 7 1 13 1 1 10 26 2 20 44 3 1	922 	125 11 16 12 4 41 11 1 56 12 56 11 12 9	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	109  177 100 7 444 1 1 299 144 44 137 66 44	95 7 7 7 25 9 48 3 41 4 4 1 3 1	
Total  90–95. Diseases of the heart  91. Acute endocarditis  91. Acute endocarditis specified as acute  918. Endocarditis specified as acute  919. Chronic endocarditis, valuardiseases  920. Chronic endocarditis, valuardiseases  921. Endocarditis specified as chronic and other valuar diseases  922. Endocarditis, unspecified as chronic and other valuar diseases  928. Endocarditis, unspecified (45 years and over)  930. Diseases of the myocarditis  931. Myocarditis, unspecified (under 45 years of age)  932. Chronic myocarditis  933. Myocarditis, unspecified (45 years and over)  94. Diseases of the coronary arteries and angina pectoris  94. Diseases of the coronary arteries  94. Diseases of the coronary arteries  94. Diseases of the coronary arteries  94. Angina pectoris  95. Other diseases of the heart  958. Other and unspecified  96. Aneurysm (except of the heart)  97. Arteriosclerosis (of coron-  97. Arteriosclerosis (of coron-	5611 3333 11 52 411 107 5. 62 38 154 4 127 72 16 21 14 11 186 4	5 11 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 466 1 1 17 1 1 15 2 2 8 2 8 2 9 3 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	57 2 2  6 6  20 3  13 4  24  5 	107 	566 4 1 3 27 1 2 9 15 244 222 1 1 366 2	30 1 1  6 5 1 7  1 2 4 111  10 15  5  9   9  9   9   9  9  9  9  9  9  9  9   9                   	39 	27   4 3 1 9 1  4 4 13  8 5 1 1	63 111 8 3 22 2 144 6 28 26 2 2 1 1 2 40	777 9 8 1 20 3 1 11 5 45 33 122 3 1 17 47	82 1 1 1  8 7 1 22  10 12 49  39 10 11  36	45 	43 	40 	94 21 18 3 29 18 11 39 2 35 2 5 65	444 111 44 7 155 1 17 3 122 1 11 45	16	50  8 7 1 13 1 1 10 26 2 20 43 3 1 40	922 	125 11 16 12 4 41 11 12 56 11 15 12 12 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	109  177 100 7 444 1 1 29 144 4 1 37 6 4 4 4 4  5 3 3	95 7 7 7 25 9 48 3 411 4 4 4 1 3 1 1 62

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01 48  5 4 1 22  12 10	80 2  16 15 1 20 5 1 11 3 38 2 27 9	32 6 2 4 7  5 2 15	58     22  13 9 28  25	26      8 4  5	172 107  17 12 5 32 1  12 19 56 	888 466    7 6 1 14   111 3 22 	47 34   7 2 5 11  2 4 5	999549963311156632	102 58  2 1 1 31 2  20 9	59 55 4 16 2  30 1	135 78  10 6 4 33 2 1 19 11 35 1	81 50  2 2 31 1 14 7	38   8 7 1 3  2 1 24  21	137 82 1 1 10 9 1 25 1  15 9 42 	79 51   8 7 1 1 29 3  16 10	1 1 1 1 5 4 1 1 1 1 2 8 4 8	84 48  14 13 1 14  11 3	13  3 2 1 2  2 5	555  15 9 6 21 1 1 2 8 18	27 · 2 2 2 · 3 3 3 · 13 2 1 2 8	1117  17 16 1 29 1 2 21 5 67 1 64	42 · · · · · · · · · · · · · · · · · · ·	65   110 8 2 114  1 10 3 3 38 2	23 · · i 1 1	15 4 2 2 18 1 1 2 5	69 44  10 9 1 10  6 4 24 	96 47 1 1 8 5 3 112  5 7	101 51  4 2 2 19  11 8	163 109  2 23 21 2 32 2 1 15 14 46 7	146 63  5 5  19  10 9	454 288 3 2 1 41 377 4 677 1 6 48 12 157 7	90-91 914 918 92 928 93 93A 93B 93C 93D 94 948
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01 48   5 4 1 22  12 10 19  18 1 2 1	80 2  16 15 1 20 5 1 11 3 38 2 27 9 4	32 	58       	26   9  8 4  5 	172 107  17 12 5 32 1  12 19 56  48 8 2	88 46  7 6 1 14  11 3 22  19 3 3 3	47 34  7 2 5 11  2 4 5 9 1 4 4 7 7 1 6 6 	99 54  9 6 3 111  5 6 32 1 27 44 2	102 58  2 1 31 2  20 9 24  17 7 1	59 55 4 16 2  10 4 31 31	135 78  10 6 4 33 2 1 19 11 35 1 25 9 	2 2 2 3 1 1 14 7 19 1 14 4 6 6	38   8 7 1 3  2 1 24  21 3 3 	137 82 1 1 1 10 9 1 25 1 1 15 9 42  34 8 3	79 51  8 7 1 29 3  16 10 12 	44 31 1 1 1 5 4 1 15 1 1 2 8 4 8	84 48  14 13 14  11 3 15 	13 	555 	27 2 2 3 3 3  13 2 1 2 8	1117  17 16 1 29 1 2 21 5 67 1 64 2 4	42  13 8 5 18 1  3 14 9  6 .3 2 	65  110 8 2 14  1 10 3 3 3 5 1 3  3	23 · i 1 1	15 4 2 2 18 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	69 44 10 9 1 10 6 4 19 5	96 47 1 1  8 5 3 12  5 7 25  21 4 1	101 51  4 2 19  23 23 23 1	163 109  2 23 21 2 32 2 1 15 14 46 7 35 46 6 2 4	146 63  5 5 5  10 9 1 29 9	454 288 ; 3 2 1 41 37 4 67 1 6 48 12 157 7 135 20 4 16	90-4 90 91 91A 91B 92A 92B 93A 93B 93C 93B 94A 94B 94C 95 95A

No. 13

IAD	LE	39.		JA.	US	ES	U	Г	v	EA	III	ь	1 (	10	O1	111	LES	, (	Li 43	LOI	100	, 10	L	OF
CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton
100. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)  101. Diseases of the lymphatis system (lymphangitis, etc.)  102. Idiopathic abnormalities of blood pressure  103. Other diseases of the circulatory system	25	1		4	9	3		2		7	3	5	2		3	9	4		7	6	1 18	. ,	12	2 6
CLASS VIII.—DISEASES OF THE RESPIRATORY SYSTEM	117.1	11	16	16	30	13	31	17	12	28	21	10	17	1 8	1.1	30	- 12	7	12	23	4.1	22	30	27
Total	3			16			1	1	1			18		1	-	30				1	1	1	30	<del>27</del> :::
larynx 106. Bronchitis 106a. Acute 106B. Chronic 106c. Unspecified 107. Bronchopneumonia 107a. Bronchopneumonia 107b. Capillary bronchitis 108. Lobar pneumonia 109. Pneumonia, unspecified 110. Pleurisy 111. Congestion and haemorrhagic infarct of the lung,		5 5 4	4 4 6 4	1	···· 2 ··· 2 11 11 ··· 9 3	1 4 4  4 3	13 12 1 9 4	9 9		16 15 1 7 1	10 10	7 7 7		1  2 2 2  8 3	3 3 4 2	1 1 9 9 11 11	7 7 7	3 3	 6 6 5 1	8 8 7 5	2	 5 5 11 1		9 9 12 2 1
etc.  111A. Pulmonary embolism and thrombosis  111B. Others under this title. 112. Asthma  113. Pulmonary emphysema. 114. Other diseases of the respiratory system (tuber-culosis excepted)  114A. Chronic interstitial	4 31 80 2	1		2		1 1	1 2	2 1	1	<sub>i</sub>	1	2	i 	2			2	2		1 1 1	i	1	1	· · · · · · · · · · · · · · · · · · ·
pneumonia including occupational diseases of the respiratory system. 114B. Gangrene of the lung 114C. Others under this title	4 1				i		i			2	1	· · · i	• • •									 i	i	· · · · · · · · · · · · · · · · · · ·
CLASS 1X.—DISEASES OF THE DIGESTIVE SYSTEM  Total	701	2	9	13	20	15	28	14	4	13	10	9	6	12	6	18	7	2	8	14	31	7	13	26
115. Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations)	39 20 9 10 2 83 48 35 26 127	3	3 3	1	 1	2 2	2 2 11	3 1 2	2	3 2 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	1	1 1 3 5	2 2	1		1	 2 1	1 1	2 1  7 3 4	1 1		1 1 5

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Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Ninissino	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Roiny River	Renfrew	Russell	Simcoe	Stormont	Sudburv	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	Vork	
9	3	3	5	4	7			7	2	9	7	7	4	5	4	2	1 5		10	2		2	4	4	4	1	1 4	6	7	9		100 101 102 103
	21	-	17	7	39	20	21	26	19	26	27	21	9	14	9	14	19	6	17	9	39	19	41	6	15	16	18	21	36	54	-	104
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 i	1 				2		2	2	1 1 1	4 1 3	2	  i		3		2	1 1 2			2	1 		 i	• •		3	· · i		3 1 2 5	1  1 2 1	2	111A 111B 111B 112
			1	• •	1				1										1				1	1	1							
			1 		 i	::			 i										 i				· · · i	1	1							114A 114B 114C
10	7	2	6	12	17	12	22	12	8	10	18	10	11	9	5	11	10	5	13	13	34	10	15	5	20	7	10	6	23	7	54	
1	1		1	1 1	3 1 2	3	1 1 4		1 1	2 1 1	4 4	1 1	1	1 1	2	1 .	5	1 4	1 1 1	1 1 2		3 1 2 1 3	1 1	1 1 2	1 . 1 . 5	1 .	2 1 1 . 1 .	1 1	1	2 2  1  1	1 1 1 2 4 5	115 115A 115B 115C 116 117 117A 117B 118 119

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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora incl. Patricia	Kent	Lambton
120B. Ulceration of the intestines	18 66		·i		1 4	i	6	2 2			 i		2 1			1 2	2			1 1	2 3			1
122. Hernia, intestinal obstruction	84 39	1 1	1	1	1	2	1	1		3 2				1	1	5	2		2		3	1	2	5
122B. Intestinal obstruction. 123. Other diseases of the intestines	10	1				1					1									1	2	1	1	4
124. Cirrhosis of the liver 124A. Specified as alcoholic. 124B. Not specified as alcoholic 125. Other diseases of the liver	14			2		2	1	i		· · i		3					2		1 1	1 i	1			2 2 1
125a. Yellow atrophy of the liver	13				0	3		1 1		 i					· · · · · · · · · · · · · · · · · · ·				1 1		1 2		i	13
bladder and biliary pas- sages	49					2	3		1					1		3			1	2	2			2
129. Peritonitis, cause not specified	ı				1		-	1								_1	 				1			· · ·
CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM																								
Total	1207	3	14	23	51	18	30	8	17	21	19	36	10	19	24	40	12	1	14	31	41	5	20	42
130. Acute nephritis (including unspecified, under 10	1						2							_										
years of age)	669	3		1	34	6	17	4	13 2	· · · · · · · · · · · · · · · · · · ·	10	22		7 8	17 5	22	3	1	7	19	21		8	21
years and over)  133. Other diseases of the kidneys and ureters	49		4	2	1	2		1	1	2	1	1	-	1	1	3	3		1		11	-	-1	1
134. Calculi of the urinary passages		1			1	1	1			2	1								1					
135. Diseases of the bladder (tumours excepted)								1	1	2	1									2	1		1	
136. Diseases of the urethra, urinary abscess, etc	4											1												2
<ul><li>136A. Stricture of the urethra</li><li>136B. Others under this title.</li><li>137. Diseases of the prostate.</li><li>138. Diseases of the male</li></ul>	175	2	1		13	3	3	1		2	4	4			1	6	4			3	8		6	1 11
genital organs (not spe- cified as venereal) 139. Diseases of the female	4	1					. 3																	
genital organs (not spe- cified as venereal) 139A. Of the ovary, Fallopian	21										1								١.					
tube and parametrium 139B. Of the uterus 139C. Of the breast 139C.	15	5					. 2				1	1								1				
CLASS XI.— DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE			Ì																					
Total	70	0		2 3	4		2 7		2	_1				1		1	1		2	1	3	1		1
140. Abortion with septic conditions	-	4	- - .].																		1			
140A. Abortion	S	2 .																			. 1	i		
(haemorrhage included		2 .																						
142. Ectopic gestation 142A. With septic conditions. 142B. Without mention of sep tic conditions	-	2	. -					ļ				1		1					1					
144. Puerperal haemorrhage		ۋا: ا	.1:			:1	1	.1.	Ι	1			.1	. [.	1	1	1 1	μ,,	1		1	.   .	1,	l:::

CITIES, TOWNS AND VILLAGES OF 5,000 AND O	OVER)—ONTARIO, 1938—Continued
Lanark Leeds Leeds Lennox Lincoln Manitoulin Middlesex Muskoka Norfolk Norfulk Norfulk Norfulk Parry Sound Peel Perl Perl Perl Perl Perl Perl Perl	Renfrew Russell Simcoe Simcoe Stormont Sudbury Thunder Bay Temiskaming Victoria Waterloo Welland Wellington Wellington Wentworth
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21 12 14 21 8 54 9 21 13 28 18 29 20 10 35 10 13 22 9 2	27 14 58 15 17 5 10 14 21 20 35 16 89
1 1 4 3 2 11 2 5 2 2 3 2 2 3 4 2 5 1 3	2 1 12 33 12 7 4 4 4 14 10 16 7 45 131 6 1 7 . 6 . 1 2 5 7 7 3 16 132 1 . 5 2 2 2 1 2 133
1 1 3 1 2 1 1 2 1 1	1
1 3 2 4 1 5 2 2 2 1 4 8 2 2 1 1 4	4 1 7 1 1 3 4 2 2 8 3 12 137
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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora incl. Patricia	Kent	Lambton
144A. Placenta praevia	4																		1					
145. Puerperal septicaemia (not specified as due to abortion)	10				1		2														2			
145A. Puerperal septicaemia pyaemia 146. Puerperal albuminuria	1																							
and eclampsia  147. Other toxaemias of preg-	12		v		1		4			1										1				1
nancy				1																				
den death (not specified as septic)	19			2		1	1		1					1			-							
and thrombosis 148B. Embolism 148C. Sudden death	5 9 5			1		1								1										
149. Other accidents of child- birth	11		2		2				1										1			1		
149A. Caesarean operation 149c. Dystocia	8 2		2		1				i 										i 			i		
							_							-										
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE																								
Total	32	-	-	-			<u> </u>	-								1	-	-	-	1			1	· · ·
<ul><li>151. Carbuncle</li><li>152. Cellulitis, acute abscess</li><li>153. Other diseases of the skin and annexa and of the cellular tissue</li></ul>	1						1	1					1				1			1				
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION																								
Total	12	-		2	$-\frac{2}{2}$		1			3 1		1				1		-	-					
154. Osteomyelitis	1									1						1							2	
cepted)																								
motion	3			1						1	1													
excepted)	2							1		1			 											
locomotion		-		_			-		-					-					-					
Class XIV.—Congenital Malformations																								
Total	193	1		6	4	_1	11	2	3		_2	7	2	4	3	4	2	2	_1	12	9	2	5	_2
157. Congenital malformations (stillbirths excluded)	193	1		6	4	1	11	2	3		2	7	2	4	3	4	2	2	1	12	9	2	5	2
157A. Congenital hydroce- phalus	21			1					1			1	1	٠.	1		2				1		1	
gocele	45			1	2	1				• • •		1		1 2		1		1		5	3 5	2		2
tions of the heart 157D. Monstrosities 157E. Others under this title	88 2 37	1		4	i		3		1		1 	4  i	1	1	2	2				1 5	!		i	

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Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Ninissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Deterborough	Prescott	Dringe Educad	Point Dinor	Renfrew	D	Kussell	Simone	Sudburge	Thunder Raw	Temiskamino	Victoria	Waterloo	Welland	Wellington	Wentworth	Vork	
						i						 											1 1			::						144A 144B
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				2																												156
				1																												156A
				1																												156в
3	3		4		3	6	2	4	4	3	4	1	3	3	2	5	1	1	4	4	7	2	7	1	1		4	2	7	3	14	
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3			4			6		1							1	- 1											**	1	1		- 1	157 <sub>A</sub>
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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora incl. Patricia	Kent	Lambton
Class XV.—Diseases of Early Infancy										ı														
Total	638	1	17	7	18	5	37	6	10	12	4	16	4	4	9	15	3	5	2	12	16	17	9	12
158. Congenital debility	69 362 104 1		1 12 2 		5 8 2	1 1 2 	5 20 5 	1	8 1	9	1 2 1	12 3	2 1 1	1 1 1		10 3	2  1	2 1 1	1	7 1	1 10 3	5	3 4	10 1
161. Other diseases peculiar to early infancy (under 3 months)	103 29 15 1 8	1	1	1 3		1	1 3	1	1	3		1		1	1			1		2	2	i 	2	1  1
CLASS XVI.—SENILITY  Total	108	-	4 3	4	5 5	6 3	-	4		2 2			8	-	3	12	3	-	2 2	4 3	6 3	1	7 7 4	7 7 3
(70 years and over)  CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS  Total	163							19		24					12	25			21	28	31	22	39	18
163–171. Suicides	165	-	3	2	4	3	7	1		4	3	6	5	2	1	1	1		2	4	5	6	2	
163. Suicide by solid or liquid poisons or by absorption of corrosive substances 164. Suicide by poisonous gas 165. Suicide by hanging or strangulation	16 13 53 28 39		2	1 1			2	1			1 1	2 2	1	1	i	1				1	2	6	1	
173-175. Homicides	17		1	-		1	2								1	1			-		1			
<ul> <li>173. Homicide by firearms</li> <li>174. Homicide by cutting or piercing instruments</li> <li>175. Homicide by other means</li> </ul>		l.,	1			1	2								i	1					1			
176-198. Other violent deaths		-	22	13	23	17	39	18	8	20	16	42	19	7	10	23	15	6	19	24	25	16	37	18
177. Food poisoning	1	1			1		3	1																

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Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
12 1 6 4	8 6 1		7 1 4 2	8		12		1  1	8  5 2	8  7 		<u> </u>	4  1 3	8  2 4	11 2 7	27 2 14 9	6  2 2	15 3 6 4	1 11	2 9		-	_	_	21 15 3	2 1 1	9 1 5 2	1	18	2		158 159 160
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$-\frac{8}{8}$ 2 -6	16 16 11 5	7	6 1 5	2 2 1	-4 -4 1 -3	2		111 3 8	5 1 4	8 5 3		3	2 2 1	2 2 1	5	3 3	6 5 1	3 3 —	4 1 3	3	12 12 3 9	1 1	1 1 1	2 2	 		10 10 2 8	2 2	11 11 5 6	18 18 17 1	1	162 162a 162B
19 5	21		26 6	7	34	20	30	27	20	23 2	18	2	7	16	_	3 2	17	25 1	13 2	3	48	12 1	65	42	36 2	9	13	28	4	3	~_	163- 171
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14	i 17	4	1	• •	 i	19	1—	23	19	21 		_		1  1 13			15							  			11	20	1	29	93	173- 175 173 174 175 176- 198 177

## TABLE 39—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora incl. Patricia	Kent	Lampton
180. Conflagration	27 37 225 23 5 645 19 7 18 5 5 14 36 3 33		2 11  7  1	7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5	2 8  1 14 1 1  2	10111211	5	15 1	9 1	24	1 10	4	1		10	3	1 1 1	3 1 2	16  1 2	2		14
CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH Total	22			1 1	1			-			1			1				-		1 1			2	

#### SPECIAL CLASSES OF ACCIDENTAL DEATHS BY COUNTIES

(Included also under the numbers

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A. Accidents in min		1																				
quarries		1					10			 						 				. 2		
B. Accidents caused		1									}											
ines					1																	
c. Railway accidents	40		2			1	2		1	 			1			 	1	2		. 1		
D. Street-car acciden										 	1					 				!		
E. Automobile and n		1	1			1										1						
accidents					2																	
F. Other land transpo					2					 		1			1	 			1 2		1	
G. Water transportat																						
H. Air transportation							1	1		 	1					 				1		
							ì												Į		1	1

#### CITIES, TOWNS AND VILLAGES OF 5,000 AND OVER)—ONTARIO, 1938—Continued

Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoc	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
1		1		1					1			1						17			1			4	1		1					180
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	2					i	i		i	i		i		1							2		3		i						3	194A 194B
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#### (EXCLUSIVE OF CITIES AND TOWNS OF 5,000 AND OVER)

of the International List above)

1938

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# TABLE 40—CAUSES OF DEATH FOR TOWNS AND VILLAGES OF

THERE IS CITEDED OF PERIOD	FOR					7 12		, 50	-
CAUSES OF DEATH	Total	Barrie	Brampton	Brockville	Cobourg	Collingwood	Eastview	Fort Erie	Fort Frances
DEATHS—ALL CAUSES. Total	2,393	126	79	197	95	112	31	62	50
						-			
Class 1.—Infectious and Parasitic Diseases									
Total	134	3	5	6	2		2	2	5
1. Typhoid fever 2. Paratyphoid fever 7. Measles. 8. Scarlet fever 9. Whooping-cough. 11. Influenza 11B. With bronchitis. 11C. With pneumonia 11E. With intestinal complications. 11F. With other causes. 13. Dysentery. 15. Erysipelas. 16. Poliomyelitis and polioencephalitis (acute). 17. Lethargic or epidemic encephalitis. 18. Epidemic cerebrospinal meningitis. 22. Tetanus. 23–32. Tuberculosis.	2 1 3 3 1 3 4 2 2 1 1 2 9 5 5 7 2 2 2 1 1 2 2 1 1 1 - 6 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 3 .	2 · · · · · · · · · · · · · · · · · · ·	i i			1 1 1	1 1 1 2 2 2
Z4. Tuberculosis of the meninges and central nervous system     Tuberculosis of the intestines and peritoneum     Tuberculosis of the vertebral column.     Tuberculosis of the bones and joints (vertebral column excepted).     S7B. Of joints     Syphilis     Purulent infection, septicaemia (non-puerperal).     Malaria.	5 2 1 2 2 4 2 2			1 1					
CLASS 11.—CANCER AND OTHER TUMOURS									
Total	279	18	6	29	6	18	2	4	4
45-53. Cancer and other malignant tumours	257	15	6	27	5	17	2	3	4
46. Cancer of the digestive tract and peritoneum 46A. Of the oesophagus 46B. Of the stomach and duodenum 46C. Of the rectum 46D. Of the liver and biliary ducts 46E. Of the pancreas. 46G. Of other organs. 47. Cancer of the respiratory organs. 47A. Of the larynx 47B. Of the lurg 48 Cancer of the uterus 48A. Of the uterus. 48A. Of the verix uteri 49. Cancer of other female genital organs 50. Cancer of the breast 51. Cancer of the male genito-urinary organs 51A. Of the bladder. 51B. Of the kidney 51C. Of the prostate gland 52. Cancer of other or unspecified organs 53A. Of the eye and orbit 53C. Of the glandular system 53D. Of the female unitary organs 53F. Of the benale unitary organs 53F. Of the benale unitary organs 53F. Of the benale unitary organs 53F. Of the bones and joints 53F. Of the bones and joints 53F. Of the brain 53G. Of the spicin and spinal cord 53I. Of the specified organs 53K. Multiple cancer 54. Non-malignant tumours 54A. Of the ovary	132 47 16 19 5 5 41 16 2 2 4 10 30 27 6 6 2 2 2 2 2 9 6 6 6 3 3 3 3 3 3 3 3 3 2 2 2 2 2 2 2 2	1 1 2	2 2 2 1 1	122 13 22 14 			i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
54B. Of the uterus 54D. Of the brain	5				i				

5,000 TO 10,000 POPULATION IN THE PROVINCE OF ONTARIO, 1938

5,00	0 1	U 10	3,000	PU	PUI	LAI	ION	IIN	TH	EP	RO	INC	JE C	Jr (	JNI	ARI	υ,	1938			
Hawkesbury	Ingersoll	Kenora	Leamington	Lindsay	Midland	Mimico	New Toronto	Orillia	Port Colborne	Preston	Renfrew	Riverside	Simcoe	Smith's Falls	Swansea	Thorold	Trenton	Waterloo	Weston	Whitby	
68	87	89	80	150	95	25	115	166	27	36	72	20	122	114	30	49	47	61	32	156	
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## TABLE 40—CAUSES OF DEATH FOR TOWNS AND VILLAGES OF

TABLE 40—GAUSES OF DEATH	FOR	10	1 44 14	5 A	ND	VII	LA	JES	OF
CAUSES OF DEATH	Total	Barrie	Brampton	Brockville	Cobourg	Collingwood	Eastview	Fort Erie	Fort Frances
54E. Of the thyroid gland 54F. Of the prostate gland 54G. Of other or unspecified sites 55. Tumours, nature not specified 55D. Of the brain 55G. Of other or unspecified sites	5 1 3 5 2 3			i 1					
CLASS 111.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE EXPOCRINE GLANDS AND OTHER GENERAL DISEASES  Total.  56. Acute rheumatic fever. 59. Diabetes mellitus 63. Rickets 65. Diseases of the pituitary gland 66. Diseases of the thyroid and parathyroid glands 66a. Simple goitre. 66b. Exophthalmic goitre 66b. Tetany. 67. Diseases of the thymus gland 69. Other general diseases 69c. Others under this title.	60 299 2 1 155 1 122 2 5 5 2 2		3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 3 1 1 	2 2	i	1	2	1
CLASS IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS  Total	31 1 1 25 20 5 4 4 3 1 1	3 3	· · · · · · · · · · · · · · · · · · ·	i	1 1 1	· · · · i			
CLASS V.—CHRONIC POISONINGS AND INTOXICATIONS  Total	2 2 2		7				3	3	
Total.  78. Encephalitis (non-epidemic). 79. Simple meningitis. 80. Progressive locomotor ataxia (tabes dorsalis). 81. Other diseases of the spinal cord. 82. Cerebral haemorrhage, cerebral embolism and thrombosis. 82a. Cerebral haemorrhage. 82b. Cerebral haemorrhage. 82c. Detemplegia and other paralysis, cause not specified. 83. General paralysis of the insane. 84. Dementia praecox and other psychoses. 84a. Dementia praecox. 84b. Other psychoses. 85. Epilepsy. 86. Convulsions (under 5 years of age). 87. Other diseases of the nervous system. 87b. Neuralgia and neuritis. 87c. Paralysis agitans.	2 1 1 1 8 44 38 3 3 10 52 45 7 6 6 1 1 1 3 6	1		2 1	5 5	1 1 1 1 1 1 1 1 1 1	1	1 1 1	2 2 2

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Hawkesbury Ingersoll	Kenora	Leamington	Lindsay	Midland	Mimico	New Toronto	Orillia	Port Colborne	Preston	Renfrew	Riverside	Simcoe	Smith's Falls	Swansea	Thorold	Trenton	Waterloo	Weston	Whitby	
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#### TABLE 40-CAUSES OF DEATH FOR TOWNS AND VILLAGES OF

TABLE 40—CAUSES OF DEATH	FOR	TO	WN	S A	ND	VIL	LAC	GES	OF
CAUSES OF DEATH	Total	Ваггіе	Brampton	Brockville	Cobourg	Collingwood	Eastview	Fort Erie	Fort Frances
87D. Sclerosis (other than of the spinal cord) 87E. Others under this title	3 3 2 1 1						1		
Total  90–95. Diseases of the heart  91. Acute endocarditis  91a. Endocarditis, specified as acute  91b. Endocarditis, unspecified (under 45 years of age)  92. Chronic endocarditis, valvular diseases  92a. Endocarditis, unspecified (45 years and over)  93. Diseases of the myocardium  93a. Acute myocarditis  93b. Myocarditis, unspecified (under 45 years of age)  93c. Chronic myocarditis and myocardial degeneration  93b. Myocarditis, unspecified (45 years and over)  94. Diseases of the coronary arteries and angina pectoris  94a. Diseases of the coronary arteries  94c. Angina pectoris.  95. Other diseases of the heart  95b. Other diseases of the heart  95b. Punctional diseases of the heart  95b. Other and unspecified  96. Aneurysm (except of the heart)  97. Arteriosclerosis (of coronary arteries excepted)  98. Gangrene  99. Other diseases of the arteries  100. Diseases of the lymphatic system (lymphangitis, etc.)  102. Idiopathic abnormalities of blood pressure	782 454 66 67 54 13 1400 88 33 79 500 2233 88 189 266 188 133 244 44 132	300 54 41 166 11 55 177 22 21	18 6 6 6 2 2 8 7 1	32 2 1 1	2 2 2 11  9 2 14 2 7 5 	1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 4 3 1 1 1 3 	1	55
CLASS VIII.—DISEASES OF THE RESPIRATORY SYSTEM  Total.  104. Diseases of the nasal fossae and annexa. 105. Diseases of the larynx. 105a. Croup. 105B. Other diseases of the larynx. 106. Bronchitis. 106a. Acute 107a. Bronchopneumonia. 107b. Bronchopneumonia. 107 Bronchopneumonia. 108. Lobar pneumonia. 109. Pneumonia, unspecified. 110. Pleurisy. 111. Congestion and haemorrhagic infarct of the lung, etc. 111B. Others under this title. 112. Asthma. 114. Other diseases of the respiratory system (tuberculosis excepted). 114c. Others under this title.	191 2 2 2 1 1 1 5 2 2 3 866 866 566 200 3 7 7 7 9 9 1 1 1	5 5 2	1 1 2	77 73 33 33	1 1 1 2 2 2 5 1 1	2 2 1 3 1 1	1	1 1	2
CLASS IX.—DISEASES OF THE DIGESTIVE SYSTEM.  Total  115. Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations).  115a. Diseases of the buccal cavity and annexa.  115b. Diseases of the tonsils.  115c. Others under this title.  117. Ulcer of the stomach or duodenum	104 3 3 24	1 1				2			1 1

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Hawkesbury	Ingersoll	Kenora	Leamington	Lindsay	Midland	Mimico	New Toronto	Orillia	Port Colborne	Preston	Renfrew	Riverside	Simcoe	Smith's Falls	Swansea	Thorold	Trenton	Waterloo	Weston	Whitby	
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<u>11</u> 8	27 15	19	32		28	13 8	21	46	9 7	15	30	5	23	32	15	20 11	19	32	16	52 30	9 <b>0</b> -93
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#### TABLE 40-CAUSES OF DEATH FOR TOWNS AND VILLAGES OF

TABLE 40—CAUSES OF DEATH	FOR	TO	WN	SA	ND	VII	LAC	GES	OF
CAUSES OF DEATH	Total	Ваггіе	Brampton	Brockville	Cobourg	Collingwood	Eastview	Fort Erie	Fort Frances
117A. Ulcer of the stomach. 117B. Ulcer of the duodenum. 118. Other diseases of the stomach. 119. Diarrhoea and enteritis (under 2 years of age). 120. Diarrhoea and enteritis (2 years and over). 120A. Diarrhoea and enteritis. 120B. Ulceration of the intestines. 121. Appendicitis. 122. Hernia, intestinal obstruction. 122A. Hernia. 122B. Intestinal obstruction. 123. Other diseases of the intestines. 124. Cirrhosis of the liver. 124B. Not specified as alcoholic. 125B. Other diseases of the liver. 125B. Other diseases of the liver. 125B. Other diseases of the liver. 126B. Bliary calculi. 127. Other diseases of the gall-bladder and biliary passages. 128. Diseases of the pancreas. 129. Peritonitis, cause not specified.	32 18 14	1 1	1 1	4	2	6 3 3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM  Total  130. Acute nephritis (including unspecified, under 10 years of age). 131. Chronic nephritis 132. Nephritis, unspecified (10 years and over). 133. Other diseases of the kidneys and ureters. 134. Calculi of the urinary passages. 135. Diseases of the bladder (tumours excepted). 137. Diseases of the prostate. 138. Diseases of the male genital organs (not specified as venereal). 139. Diseases of the female genital organs (not specified as venereal). 139. Of the overy, Fallopian tube and parametrium.	3 80 30 4	11 6 1	7 	8 1 6	3	10	1 i	7	
CLASS XI.—DISEASES OF PREGNANCY, CHILDEIRTH AND THE PUERPERAL STATE  Total.  140. Abortion with septic conditions. 140A. Abortion 140B. Self-induced abortion. 141. Abortion without mention of septic conditions (haemorrhage included). 141A. Abortion 142. Ectopic gestation 142A. With septic conditions. 142B. Without mention of septic conditions. 143. Other accidents of pregnancy (haemorrhage excluded). 144. Puerperal haemorrhage. 144A. Placenta praevia 144B. Other haemorrhages. 145. Puerperal septicaemia (not specified as due to abortion). 145A. Puerperal septicaemia and pyaemia. 146. Puerperal albuminuria and eclampsia. 147. Other toxaemias of pregnancy. 148. Puerperal phlegmasia alba dolens, embolism or sudden death (not specified as septic). 148A. Phlegmasia alba dolens and thrombosis. 148B. Embolism 148C. Sudden death. 149. Other accidents of childbirth. 149E. Others under this title.	26 3 2 1 1 2 1 1 1 1 3 3 2 1 1 4 4 4			55 11 11 11 11 11 11 11 11 11 11 11 11 1	33	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	
CLASS XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE  Total  151. Carbuncle. 152. Cellulitis, acute abscess. 153. Other diseases of the skin and annexa and of the cellular tissue	8								

5,00	0 T	0 10	,000	PC	PU	LAT	ION	IN	TH	E P	ROV	VIN	CE (	OF (	ONT	'AR	IO,	1938	3—C	onti	nued
Hawkesbury	Ingersoll	Kenora	Leamington	Lindsay	Midland	Mimico	New Toronto	Orillia	Port Colborne	Preston	Renfrew	Riverside	Simcoe	Smith's Falls	Swansea	Thorold	Trenton	Waterloo	Weston	Whitby	
2	1 1 1 3 1 2 2	2 2 1 1	2 1 1	1 1 2 2 2 1 1 1 1 1	····i	1	2 2 1 1 1 1	1 4 4 2 2 3 3 1 2 2 1 1 1 1	1 1	3 3	3 2 1 1		1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 2 2	1 1 1	2 1 1 1 1 1 1		1 2 1 1	117A 117B 118 119 120A 120B 121 122 122A 122B 123 124 1245 125B 125 125B 126 127 128 129
5	8	2	10 4 5 5	9 3 2 1 1 	2 2 1	1 1 1	1	21 6 4 2 8		2	1 1 1	2 	10 4 1 1 3 3 1 1 1	16 7 3  1 5		7 2	6 3	2	i	7	130 131 132 133 134 135 137 138 139 139A 139B
1																					140 140a 140a 141 141a 142a 142a 144a 144a 144a 145a 145a 146
	1 1				1			1		1 1	1		2								148 148A 148B 148C 149 149E

## TABLE 40—CAUSES OF DEATH FOR TOWNS AND VILLAGES OF

TABLE 40—CAUSES OF DEATH			1	15 71		V 11	1	3123	OI.
CAUSES OF DEATH	Total	Barrie	Brampton	Brockville	Cobourg	Collingwood	Eastview	Fort Erie	Fort Frances
CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF									
Locomotion Total	4	1							
154. Osteomyelitis. 155. Other diseases of the bones (tuberculosis excepted). 156. Diseases of the joints and other organs of locomotion. 156A. Of the joints (tuberuclosis and rheumatism excepted).	2 1 1 1	1							
CLASS XIV.—CONGENITAL MALFORMATIONS									
Total	I			6			2		
157a. Congenital malformations (stillbirths excluded) 157a. Congenital hydrocephalus 157b. Spina bifida and meningocele 157c. Congenital malformations of the heart 157b. Monstrosities 157b. Others under this title	32 3 8 12 2 7			4	· · · · i		1		1 1
CLASS XV.—DISEASES OF EARLY INFANCY									
Total	114	3	6	9	3	6	4	2	4
158. Congenital debility. 159. Premature birth 160. Injury at birth 160B. Without mention of caesarean operation. 161. Other diseases peculiar to early infancy (under 3 months). 161A. Atelectasis. 161B. Icterus of the new-born. 161E. Others, including lack of care.	9 68 26 26 11 1 3 7		5 1 1 1	1		1	3 1 1	1 1 1	3 1 1
CLASS XVI.—SENILITY Total	44	1		3	1	2			1
162. Senility 162a. With senile dementia (70 years and over) 162b. Without senile dementia (70 years and over)	44 30 14	1 1 		3 1 2	1 i	2 2			1 i
CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS  Total	205	10	8	28	6	10		7	12
163–171. Suicides	20				1				
<ul> <li>163. Suicide by solid or liquid poisons or by absorption of corrosive substances.</li> <li>164. Suicide by poisonous gas.</li> <li>165. Suicide by hanging or strangulation</li> <li>166. Suicide by drowning</li> <li>167. Suicide by firearms</li> <li>168. Suicide by cutting or piercing instruments</li> <li>169. Suicide by jumping from high places</li> </ul>	4 1 1 4 4 3 3 3			2 1 i					· · · · · · · · · · · · · · · · · · ·
173–175. Homicides	7		1	4					
173. Homicide by firearms	2.5		1	 4					
176–198. Other violent deaths	178	10	7	18	5	10		7	11
178. Accidental absorption of toxic gases. 179. Other acute accidental poisonings (except by gas). 180. Conflagration 181. Accidental burns (conflagration excepted). 182. Accidental mechanical suffocation. 183. Accidental drowning. 184. Accidental injury by firearms. 185. Accidental injury by cutting or piercing instruments. 186. Accidental injury by fall, crushing or landslide. 188. Injuries by animals.	1 1 4 9 2 18 5 1 124	16 2	7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2	2		1 1 5	1 2 1 1 1 1 5 1

5,00	0 Т	O 1	0,000	0 PC	)PU	LAT	ION	IN	TH	IE F	PRO	VIN	CE	OF	ONT	ΓAR	10,	193	8—C	Conti	nued
Hawkesbury	Ingersoll	Kenora	Leamington	Lindsay	Midland	Mimico	New Toronto	Orillia	Port Colborne	Preston	Renfrew	Riverside	Simcoe	Smith's Falls	Swansea	Thorold	Trenton	Waterloo	Weston	Whitby	
	····			1	1 1			1 1													154 155
				1																	156 156A
	1 1	1	3 3 1 1 1 1 1	1 1	5 2 1 2			1	<u> </u>				1 1 1	2			1 1	1 1	1 1 1		157 157A 157B 157C 157D 157E
15 2 3 7 7 7 3  1 2	1 1 1	7	1 2 2 1 1	1 6 2 2 1	4 1 1 2		1	14 8 3 3 2  1 1	2		2 1 1 1 		3 1 1	1 1		2	2				158 159 160 160B 161 161A 161B 161E
	11	1 1 1		3 2 1	l		9 9						1 1 1	4		1 1 1	2 2 2		1 1 1	12 12 11 1	162 162A 162B
6	7	10	8	13		1	3	13	3	1	1	6	22	5	2	1	1	2	1	3	163- 171
		1		1			i		i	i	i		1					1	1	1 1 1	163 164 165 166 167 168 169 173
6	7	9	8	11 11	5	1	2	13	2	1	1	6	21		2	1	1	2		6	173 175 176- 198 176 178 179
5	6	2 1	8	1 1 1 7		i	2	1 1 1	2	i	1	4	1 2  17 1	1 4	1	i	1	1		6	180 181 182 183 184 185 186 188

## TABLE 40-CAUSES OF DEATH FOR TOWNS AND VILLAGES OF

CAUSES OF DEATH	Total	Barrie	Brampton	Brockville	Cobourg	Collingwood	Eastview	Fort Erie	Fort Frances
191. Excess heat. 193. Accidents due to electric currents 194. Other accidents. 194B. Others under this title	1 1 4 4	1 1				1			
CLASS XVIII.—ILL-DEFINED CAUSES OF DEATH									
Total	2							1	
199. Sudden death	2							1	

#### SPECIAL CLASSES OF ACCIDENTAL DEATHS FOR

(Included also under the numbers

ONTARIO,

B. Accidents caused by machines. C. Railway accidents E. Automobile and motorcycle accidents.	51 2	6 2	3
F. Other land transportation		1	

## 5,000 TO 10,000 POPULATION IN THE PROVINCE OF ONTARIO, 1938-Continued

Hawkesbury	Ingersoll	Kenora	Leamington	Lindsay	Midland	Mimico	New Toronto	Orillia	Port Colborne	Preston	Renfrew	Riverside	Simcoe	Smith's Falls	Swansea	Thorold	Trenton	Waterloo	Weston	Whitby	
				1 1				1 1										i			191 193 194 194B
••••	• • • •								••••		• • • •	••••		1		• • • •	• • • •	• • • •			199

#### TOWNS AND VILLAGES OF 5,000 TO 10,000 POPULATION

of the International List above)

1938

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			 	 	٠.	١			٠	1	  -	٠.	-	٠.	٠.	• •	٠.	1.	٠.		2	٠.,			٠.	٠.	٠.	١	٠.	 	 ٠		٠.		٠.	٠.	G

TABLE 41—CAUSES OF	DEAL		ON	CI	LIES	, 1	0 111	NO 11	IND	VIL	LA	JES .
CAUSES OF DEATH	Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
	Ĭ,	Be	_ <u>s</u>	Ö	ŭ	표	FC	Ğ	ŭ	H	2	12
DEATHS—ALL CAUSES. Total	18,783	248	416	333	205	34	213	189	220	1538	522	136
Class 1.—Infectious and Parasitic Diseases												
Total	986	14	19	17	17	1	36	2	7	59	32	6
Typhoid fever Paratyphoid fever Undulant fever Measles Scarlet fever Whooping-cough Diphtheria Influenza	17 3 1 18 27 42 9 209		4	· · · · · · · · · · · · · · · · · · ·	1			1	1	5 1 2	i 1	1 1 1
11a. Sole cause 11B. With bronchitis 11c. With pneumonia 11D. With other diseases of the respiratory system. 11E. With intestinal complications. 11F. With other causes. 13. Dysentery 15. Erysipelas	10 107 10 13 60 14 22	2	1 2 i	5					2	1 9 2 1 3	3	1
Poliomyelitis and polioencephalitis (acute)     Lethargic or epidemic encephalitis     Epidemic cerebrospinal meningitis     Tetanus	8 10 9	4	1 3	1 1		1				2 1		2
23–32. Tuberculosis	430				9					14	<del>17</del>	
<ul> <li>23. Tuberculosis of the respiratory system</li> <li>24. Tuberculosis of the meninges and central nervous system</li> <li>25. Tuberculosis of the intestines and peritoneum.</li> <li>26. Tuberculosis of the vertebral column</li> <li>27. Tuberculosis of the bones and joints (vertebral column excepted)</li> </ul>	335 39 13 10				1		2					2
<ul> <li>27A. Of bones</li> <li>27B. Of joints</li> <li>28. Tuberculosis of the skin and sub-cutaneous cellular tissue</li> <li>29. Tuberculosis of the lymphatic system (bronchial, mesenteric and retroperitoneal glands excepted)</li> </ul>	1 2											
30. Tuberculosis of the genito-urinary system 31. Tuberculosis of other organs 32. Disseminated tuberculosis 32a. Acute 32b. Chronic 32c. Not specified	13 4 11 4 1 6									1	1 1 2	
<ul> <li>34. Syphilis</li> <li>35. Gonococcus infection and other venereal diseases</li> <li>36. Purulent infection, septicaemia (non-puerperal)</li> <li>39. Other diseases due to protozoal parasites</li></ul>	104 4 23 2 1 1	1 1	3		1							1
44. Other infectious or parasitic diseases 44a. Chicken-pox 44c. Others under this title	12. 3 9									1 1	2 1 1	
Class II.—CANCER AND OTHER TUMOURS	2.500	0.0		46	2.5		2.0	20	2.0	242	0.5	0
Total	2,782	27	60 54	40 	25	5	34	27	33	196	95	7
45-53. Cancer and other malignant tumours.  45. Cancer of the buccal cavity and pharynx  46. Cancer of the digestive tract and peritoneum  46A. Of the oesophagus  46B. Of the stomach and duodenum  46C. Of the rectum  46E. Of the parcreas  46F. Of the peritoneum  46C. Of ther organs  46F. Of other organs  47. Cancer of the respiratory organs	2,585 88 1,245 66 436 149 145 86 11 352 134	12	1 21 6 3 1 2	1 16 5 2 3	15 4 2 3 1	3 1	1 14 4 2 3	2 16  7  2 3	19 1 6 3 2 1 1 6 1	5 100 8 26 15 9 9	7 39 2 13 2 5 4 1 12 3	5 1 1 1 

OF	10,0	000	PO	PUL	ATI	ION	AN	D (	OVE	R—	ON.	ΓAR	IO,	193	8						
Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste. Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
379	1106	233	170	199	1727	202	181	365	253	344	221	240	237	228	274	178	6947	154	878	213	
13	48	9	5	13		-	16	10		-	5	14	21	7		14		12		4	
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4	7 1 5 1	3  1	1	1	1 15  7 1 3	2 1	1	1 1 1	2	1 1 1	i i	1 2 1 4	6	2 1 1	1 2 3	i :; 2	2 5 21 1 3 19 6 6 4	3	10  2 1 1 2	1 1 	11B 11C 11D 11E 11F 13 15 16
5	18	2	1 1	4	1 1 86	2	8	2	7	3	2	i	10	2	1 	7	143	1	30	1	18 22 23–32
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						1		••••													28
1 1	1				1		1		i	1 1				1			6 1 6 3		1	• • • • •	29 30 31 32 32A 32B 32C
	1		1	2	17 1 1	i	i		3	1				i	1	3	42 2 12	i i	3		34 35 36 39 41
1			i		2 1 1														1 1		41A 43 44 44A 44C
	153	34	26	24	254	21	24	46	33	44	31	36	31	32	21		1163	16	117	34	45-53
58	140	29	24	22	13	20	21	3	32	42	26 1	34	27 1	31	19	1	39	14	111	1	45
30 1 17 2 4  6 1	74 1 29 12 7 5	11 5 4 2	7	12 8 2 1 1	103 6 35 15 9 6 1 31	12 5 2 4 1	13 6 1 1 1	22 3 5 4 2  8	19 3 10 2 1	- 11	11 2 2	18 9 4 1 1	3 2 1 5	14 4 1 1 8 2	2	3	511 36 168	6 2 1 1 2	50 1 21 10 3 1 	2 3	46A 46B 46C 46D 46E 46F 46G

Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
74 111 165 245 1388 107 89 284 228 63 15 143 36 25 25 100 4 200 17 11 18 163 28 25 25 25 25 25 27 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 4 4 6 6 1 1 1 4 4 1 7 7 2 2 1 1 2 1 1 2 1 1 2 1 1 1 1 2 1	6 6 6 6 1 1 5 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 5 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 66 11 11 11 11 11 11 11 11 11 11 11 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 144 166 66 1 9	8 4 4 2 11 9 1 1 7	1
			• • • •								
101 200 341 1 1 1 3 1 5 101 8 79 5 6 6 3 3 27 5 18	3	3	5	1		1	3		14 13	3 3 3	7
283 111 9 2 139 125 14	3	3	7 2 2 2 4 4	2	2		1  i 1	4	23 1 1 1 12 10 2	3 3	• • • • • • • • • • • • • • • • • • • •
	3 3 3 4 4 1 1 1 1 6 2 4 5 5 5 1 8 8 6 6 2 4 5 1 1 1 1 5 5 1 1 1 1 1 1 1 1 1 1 1 1	33	333 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33	33	Te	33	333	33		33

# OF 10,000 POPULATION AND OVER-ONTARIO, 1938-Continued

	1	1		1	1		1		1	1	1	,		7		T T	·				
Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste. Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
1 1 1 1 0 6 6 1 1 1 3 3 4 4	2 2 2 1 1 1 1 6 5 5 3 3 7 7 9 2 2 1 1 1 1 2 2 4 4	3 3 3 1 1 1 10 1 1 1 2 2	1 1 1 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1	1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	6	11 11 11 11 11 11 11 11 11 11 11 11 11		8833 122 144 133	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	44 22 22 22 13 3 11	3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i i i 2 2	188 377 4 100 104 500 554 42 2 1188 8 1022 2 2 166 133 111 127 7 7 1 12 4 5 5 6 6 16 10 13 13 112	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 14 14 15 10 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	47A 47B 47C 47D 48 48A 48A 48B 551 551 551 551 552 53 53C 533C 533C 533C 533C 533C 533
	1	5		5 2 1 1 1 1 1	2	1				111 1 6 3 1 2 1 1	3 2	8 1 6 1 1 1 1	7 2 3 3 1 1 1 1 1 1			5	2 . 8 . 2 .		1	i 1	68
1	12	1 1		3 1 1 1 2 2	19 18	2 1 1 1 1 1		2 2	2 2	i			8 4 4 2 2	1 3 3 3		1 1	2 .	i 1 1	2 2		71A 71B

TRIBLE 41—CRUSES OF		1		1		1	1	1 5 2		V 11	1	
CAUSES OF DEATH	Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
73. Diseases of the spicen	15			1						3		
74. Other diseases of the blood and blood-forming organs	3											
Class V.—Chronic Poisonings and Intoxications												
Total	43		3							5		1
75. Alcoholism 75a. Delirium tremens. 75b. Other alcoholic intoxications 76. Chronic poisoning, by other organic substances. 76a. Chronic morphinism 76b. Other organic poisoning 77. Chronic poisoning by mineral substances. 77a. Lead (including occupational) 77c. Others under this title.	2		1 1 1 1 1 1							5		i
Class VI.—Diseases of the Nervous System and of the Organs of Special Sense												
Total	826	6	24	12	6	2	2	6	8	42	23	4
78. Encephalitis (non-epidemic)	10 51		2	1	1				1	2	1 1 3	
thrombosis	363 280 47 2	1	10		1 1				3 2		5 2	3 2
S. General paralysis of the insane.     Dementia praecox and other psychoses.     Dementia praecox.     S. Foliansy.     This process.     This process.     This process.     This process.	34 23 48 39 9 23		1								1	1
86. Convulsions (under 5 years of age). 87. Other diseases of the nervous system. 87B. Neuralgia and neuritis. 87C. Paralysis agitans. 87D. Sclerosis (other than of the spinal cord).	6 142 14 60 49		4	5 1	3 1 2		1	i	3 1 1	8	3	i
87E. Others under this title  88. Diseases of the organs of vision  89. Diseases of the ear and mastoid process  89a. Otitis  89b. Diseases of the mastoid process	47		1 4				1			3 4 2 2		
Class VII.—Diseases of the Circulatory System												
Total	5,897	64	146	80	42	17	51	68	83	543	136	20
90-95—Diseases of the heart	3,565	39	82	30	26	12	33	38	54	280	73	14
90. Pericarditis. 91. Acute endocarditis. 91a. Endocarditis specified as acute. 91b. Endocarditis, unspecified (under 45 years of	8 58 49					1 1		1 1	2 2	6 5		1 1
age). 92. Chronic endocarditis, valvular diseases. 92. Endocarditis specified as chronic and other valvular diseases.	407	i	20	7 5	5		9	3	7	28 26	11	i 1
93. Diseases of the myocardium	62 986 64 21	14	3	2 5	6		3	1	2	71 3 3	14	3
<ul> <li>93c. Chronic myocarditis and myocardial degeneration.</li> <li>93b. Myocarditis, unspecified (45 years and over).</li> <li>94. Diseases of the coronary arteries and angina</li> </ul>	600 301	5 7	5 2	2 2	2 4	1	2	5 8	5 15	34 31	10	1 2
pectoris	1,928 71	18	52	15	14	7	20		22	160 7	42	9

OF 10,000 POPULATION AND OVER—ONTARIO, 1938—Co
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Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste. Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
					1			2		1							7				73
																	2				74
	5			2	4										1	2	18	1		1	
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	3			2	2										1	2	17	1		1	75в 76
	····i																				76A 76D
					2	 											1 1				77 77A
					1	• • • •										• • • •					77c
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7	31 26 2	3 2 1	1	3	16 7	2 2	3	5	4 3 1	8 6 1	7 7	8 6 2		6 5 1	4		126 21		9.		82A 82B
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	3 10			1	6		3	1		1			1				9 12			3	82D 83
	17 16				5							i	2				22				84 84A
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16	91 16	4		8	90	14	8	27	6	17	13	9	16	16	11	7	402 25	7	41	13	93 93A
····i	2		1	• • • •	2				i	1	• • • •	i		i	1	1	3		1		93в
6 9	63 10				56 30	10 1			3 2	6 8	11 2	6 2	12 12	11 4	6 4	4 2	272 102	6 <b>1</b>	25 12	11 2	93c 93p
41	73	32	21	24	155		10	29	26 10				11		19	16 1	846 31	11	91 1	17	94 94A

	-						1	1			1	
CAUSES OF DEATH	Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
94B. Embolism and thrombosis of the coronary arteries. 94c. Angina pectoris. 95. Other diseases of the heart. 95a. Functional diseases of the heart. 95b. Other and unspecified. 96. Aneurysm (except of the heart). 97. Arteriosclerosis (of coronary arteries excepted) 98. Gangrene. 99. Other diseases of the arteries. 100. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.). 101. Diseases of the lymphatic system (lymphangitis, etc.). 102. Idiopathic abnormalities of blood pressure. 103. Other diseases of the circulatory system.	1,701 156 178 37, 141 51 1,723 60 19 45 5,428	1 5 1 4 1 16	48 3 2 2 2 44 2 1 1	14 1 3 1 1 2 1 35 1 1 1 2	1 1 1 1 3	3	13	2 27 1	24	141 12 15 2 13 14 195 4 1 5	34 5 6 1 56 2 1 1	2
Class VIII.—Diseases of the Respiratory System												
Total	1,639	29	28	29	15		20	9	17	140	34	15
104. Diseases of the nasal fossae and annexa. 105. Diseases of the larynx 105a. Croup 105B. Other diseases of the larynx 106. Bronchitis 106a. Acute 106b. Chronic 106c. Unspecified 107. Bronchopneumonia 107a. Bronchopneumonia 107b. Capillary bronchitis 108. Lobar pneumonia 109. Pneumonia, unspecified 110. Pleurisy 111. Congestion and haemorrhagic infarct of the lung, etc 111a. Pulmonary embolism and thrombosis 111b. Others under this title 112. Ashma 113. Pulmonary emphysema 114. Other diseases of the respiratory system (tuberculosis excepted) 114a. Chronic interstitial pneumonia including occupational diseases of the respiratory system 114B. Gangrene of the lung 114C. Others under this title	24 19 22 177 399 255 122 720 7199 19 555 98 39 34 88 266 79 9 3	1 1 8 8 8 13 4 1	15 15 15 15 10 1	14 14  11 3  1		2	88 8 7 3	5 5 5	4	2	1 2 2 2	1
System  Total	1,490	33	36	39	19		18	16	20	123	46	15
115. Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations).  115a. Diseases of the buccal cavity and annexa	109 344 51 188 93 95 17 161 88 48 40 240 270 114 156 36 105	1  3 1 2 2 3 1 1 2 10 6 3 3 3 2 2 2	2 1 1 1 2 1 1 5 5 2 2 2 1 1 2 6 6 6 3 3 2	7 3 4 4 3 3 1 6 6 3 2 1 6 6 1 1 7 4 1 1 1 1	1 1 1 3 3 1 1		5 5 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 2 3 2 1 5 2 2	2 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 22 26 11 14 59  68 85 3 155 19 11 8 2 16	3 2 1 4 1 3 3 4 1 1 3 2 2 1 8 8 10 2 2 1	2 2 2 3 2 1  2  5 2

# OF 10,000 POPULATION AND OVER-ONTARIO, 1938-Continued

	10,	30		1		<u> </u>	1						-,			)	1	-	- 1	1	
Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste. Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
35 6 2 2 30 6	59 11 17 2 15 4 103 5	31 1 1 1  27  2	19 2 2 2 2 1 1 2	20 2 2 22 1	137 12 10 2 8 3 153 12 3	1 26 3	12	26 3 6  6 1 40  1		23 1 2  2 1 33 	29	300 1	5 5 4	26 2 3 1 16 2	16 1 1	14 1  1 4	759 56 80 23 57 16 639 23 9 17	11 i 10 10	85 5 9 2 7 	14 3  15 1 	94B 94C 95 95A 95B 96 97 98 99 100 101 102 103
322	3 2 1		18	2 2	2		15	38 		36	1 1	3 3	21	15	37 1 2  2 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	628 20 3 12 8 4	15	53	26  i i 13	104 105 105A 105B 106 106A 106B 106C 107
133	53 29 8 3	8 5 1 3 1 2	6			6 2 1	8 3	16	100 1 2 2 2 2 2	111 3 3	6 3	10	11	1 1 1	10 2	16  10	294 192 27 15 14 3 11 35 1	1 12	25 9 1	13 8 2 2	107A 107B 108 109 110 111 111A 111B 121 113
34	76	29	1 24	18	162	17	26	2		29	14	17	20	23	38	1 22	423		82	15	114A 114B 114C
4 2 2 2 4 4 4 4 2 2 2 2 2 2 2 2 3 3 1 1 2 2 2 2 3 3 1 2 2 3 3 1 2 3 3 1 3 1	66 11 22 33 11 144 9 55 11 17 77 77 77 144 158 8	6 2 4 2 2 2 1 4	2 1 1 1  11 1 1 1 3 5 5 2 3	2 1 1 3 3 1 1 1 5 2	333 11 118 108 88 60 22 24 27 20 33	2 1 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 1 1 1 1 1 1 3 5 4 4 1 1 2 2 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 4 4 4 5 3 3 2 2 2 1 1	2 1 1 1 3 2 8 8 3 5 2 1	1 1 1 2 2 3 4 4 3 3 1 1	1  1 1 2 1 1 1 1 3 3 2	1  2 1 1 1 6 1 1 1  2 4 4 1 3	1 1 2 2 1 1 3 3 3 1 2 2 4	2 1 1 3 3 3  19  8 1 1	333333344444	26 8 8 10 2 73	2 1 1 1 1 1 1 2	12 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2 1 1 1  2 1 1 1  1 3 5 1	117 <sub>A</sub> 117 <sub>B</sub>

TABLE 41—CAUSES OF	DEA	111	TON	· UI	116	, 1		13 /	IND	V 11.	LA	
CAUSES OF DEATH	Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
125. Other diseases of the liver	11	1	1 1 2	1	1		2		3	2 7 9	1 1 4	1
Class X.—Diseases of the Genito-Urinary System										1		
Total	1,398	25	36	26	24	3	14	21	17	106	60	10
130. Acute nephritis (including unspecified, under 10 years of age) 131. Chronic nephritis. 132. Nephritis, unspecified (10 years and over) 133. Other diseases of the kidneys and ureters. 134. Calculi of the urinary passages. 135. Diseases of the bladder (tumours excepted) 136. Diseases of the urethra, urinary abscess, etc. 136a. Stricture of the urethra. 136B. Others under this title. 137. Diseases of the prostate. 138. Diseases of the male genital organs (not specified as venereal).	39 650 198 96 34 41 16 13 3 279	4	7 	7			5	3	2	1 24 1 4	7 2  1  19	1
139A. Of the ovary, Fallopian tube and parametrium 139B. Of the uterus.	16 24	1	2							3		1
Class XI.—Diseases of Pregnancy, Childbirth and the Puerperal State												
Total	155	5	1	1	3		5	1		13		3
140. Abortion with spetic conditions.  140a. Abortion  140b. Self-induced abortion.  141. Abortion without mention of septic conditions (haemorrhage included).  141a. Abortion  141b. Self-induced abortion.  142. Ectopic gestation.  142a. With septic conditions.  142b. Without mention of septic conditions.  142c. Without mention of septic conditions.  143. Other accidents of pregnancy (haemorrhage excluded).  144. Placenta praevia.  144b. Placenta praevia.  145b. Puerperal septicaemia (not specified as due to abortion).  145a. Puerperal septicaemia and pyaemia.  146. Puerperal albuminuria and eclampsia.  147. Other toxaemias of pregnancy.  148. Puerperal albuminuria and eclampsis or preparations.	11 4	1 1 1 1				1				1 5 5 1 2		1 1
sudden death (not specified as septic).  148A. Phlegmasia alba dolens and thrombosis.  148B. Embolism.  148C. Sudden death.  149. Other accidents of childbirth.  149A. Caesarean operation.  149B. Other surgical operations and instrumental delivery.  149C. Dystocia.  149C. Others under this title.  CLASS XII.—DISEASES OF THE SKIN AND	6 6 4 23 5	1	1		i i		1	1		2		
CELLULAR TISSUE	20									2		
Total	15		1 1	2				• • • •		3		• • • •
152. Cellulitis, acute abscess		l::::										

# OF 10,000 POPULATION AND OVER-ONTARIO, 1938-Continued

Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste, Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
1 1 1 5	4 7 3	1 3 3 5 1	1	3		3	2	2	2	1 2	1 1 1 3			1 3		1	1 .		1	7 i	125 125A 125B 126 127 128 129
38	88	19	6	9	-	-	3 1	5 40	6 1	0 3	4 1	8	8 2	5 17	10	8	399	14	113	-	
14 7 3 3 1	50 7 7 2 1 2  2	133 22 1	4 1	3 2 1	4 5 1				2			1	3 1.	1		2	12 156 46 40 13 19 , 8 8	6 2	165	11 1	130 131 132 133 134 135 136 136A 136B 137
		<sub>2</sub>			3 2 1	1 1		2		1 :			1 2		1 	2 1 1	11 3 8	1 1	1 1		138 139 139A 139B
	7		2	2	19	2	3	4	5	5	3	3 1	2	2	4	6	40	2	10	1	
	1 i	• • • •	• • • •	<sub>i</sub>	1 1				1						1	2 1 1	8 2 6	• • • •			140 140a 140b
	1			• • • •		• • • •	2 2					1			1 1		2 1 1 4 1 3				141 141A 141B 142 142A 142B
					1 1	• • • •	• • • •							i 1	• • • •	2 1 1	2	• • • • {	1 2 1 1		143 144 144a 144B
			i	1	4 4 10	1 1	1 1	2 2 2	1 1 1	2 2 2	1	••••	1 1 1		2	1	6 6 5 1	1	3 3 2		145 145A 146 147
	2				2 1 1 1	1			1 i 1 1		i 1	• • • • •		1 1 		1	4 1 2 1 8 2	i	2		148 148a 148B 148C 149 149A
					i				i	i							3 .	i			149в 149с 149е

163. Suicide by solid or liquid poisons or by absorption of corrosive substances.  164. Suicide by poisonous gas.  165. Suicide by hanging or strangulation  166. Suicide by drowning  176. Suicide by drowning  187. Suicide by rearms  188. Suicide by cutting or piercing instruments  199. Suicide by cutting or piercing instruments  100. Suicide by grupping from high places  110. Suicide by crushing  121. Suicide by crushing  122. Suicide by crushing  133. Suicide by crushing  140. Suicide by crushing  151. Suicide by crushing  152. Suicide by crushing  163. Suicide by crushing  164. Suicide by crushing  165. Suicide by crushing  166. Suicide by crushing  176. Suicide by crushing  177. Suicide by crushing  178. Suicide by other means  179. Suicide by crushing  179. Suicide by crushing  179. Suicide by crushing  179. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing  170. Suicide by crushing	TABLE 41—CAUSES OF	DEA	1 111	- ON	GI	LIES	, 1	0 11	10 1	IND	VIL	LAC	JES
CLASS NIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTOS   Total	CAUSES OF DEATH	Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
CLASS NIII.	153. Other diseases of the skin and annexa and of the cellular tissue	12											
154 Obscompelitis   155 Other olieses of the bones (tuberculosis excepted)   156 Other olieses of the joints and other organs of locomotion   156 Other olieses of the joints and other organs of locomotion   156 Other olies (tuberculosis and rheumatism excepted)   157 Other olies (tuberculosis and rheumatism excepted)   156 Other olies (tuberculosis and rheumatism excepted)   157 Other olies olies of locomotion   156 Other olies olies olies olies   157 Other olies olies   157 Other olies olies   157 Other olie													
15.0   Discussion   1   1   1   1   1   1   1   1   1	Total	74		1		1					8	3	1
156. Diseases of the joints and other organs of locomotion   27	154. Osteomyelitis	i									2		
150. Of the joints (tuberculosis and rheumatism excepted)	156. Diseases of the joints and other organs of											1	
CLASS XIV.—CONGENITAL MALFORMATIONS	156A. Of the joints (tuberculosis and rheumatism)												1
Total	156B. Of other organs of locomotion	16									3		<u>i</u>
157. Congenital malformations (stillbirths excluded)   274   8   3   4   4   1   2   4   33   6   6													
157A. Congenital hydrocephalus	Total	274	8	3	4	4	1		2	4	33	- 6	6
157E, Spina bifida and meningocele	157. Congenital malformations (stillbirths excluded) 157A. Congenital hydrocephalus									4			
157b. Monstrosities	157B. Spina bifida and meningocele	70			1		1				8	2	1
Class XV.—Diseases of Early Infancy	157D. Monstrosities	5	_ 2								1		
Total	and the tree tree tree tree tree tree tree												
158. Congenital debility	CLASS XV.—DISEASES OF EARLY INFANCY												
159, Premature birth	Total	873	9	11	34	15		14	8	6	56	22	17
3 months    101	159. Premature birth 160. Injury at birth 160a. With mention of caesarean operation 160b. Without mention of caesarean operation	580 159 3 156	8	1	19	13		11 2			36 13	10 5	13
Total	3 months) 161A. Atelectasis 161B. Icterus of the new-born 161C. Sclerema and oedema	101 43 14 1		1	1				i		3	1 3	
Total	CLASS XVI.—SENILITY												
162. Senility	Total	160	1	3	1	1			3	1	13	9	
162a. With senile dementia (70 years and over)   68	162. Senility											9	
Total         1231         18         32         31         22         1         18         14         14         102         36         22           163-171 Suicides         175         4         1         3         3         4         1         11         6         2           163. Suicide by solid or liquid poisons or by absorption of corrosive substances         51         1	102A. With senile dementia (70 years and over)	68		1		1			3		3		
Total         1231         18         32         31         22         1         18         14         14         102         36         22           163-171 Suicides         175         4         1         3         3         4         1         11         6         2           163. Suicide by solid or liquid poisons or by absorption of corrosive substances         51         1	. CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS												
163-171 Suicides.       175       4       1       3       3       4       1       11       6       2         163. Suicide by solid or liquid poisons or by absorption of corrosive substances.       51       1       1       1       1       3       1       2         164. Suicide by poisonous gas.       27       1       2       1       1	Total	1231	18	32	31	22	1	18	14	14	102	36	22
163. Suicide by solid or liquid poisons or by absorption of corrosive substances.  164. Suicide by poisonous gas.  165. Suicide by hanging or strangulation  166. Suicide by drowning  167. Suicide by drowning  177. Suicide by frearms  188. Suicide by cutting or piercing instruments  199. Suicide by cutting or piercing instruments  100. Suicide by grupping from high places  171. Suicide by crushing  172. Suicide by other means  173-175. Homicides  200. 1 1 2 2 2 2		175		4				3	4	1	11	6	2
tion of corrosive substances. 51 1 1 1 1 3 3 1 2 164. Suicide by poisonous gas. 27 1 1 1 1 1 4 1 165. Suicide by hanging or strangulation 27 1 1 1 1 4 1 166. Suicide by drowning. 14 1 1 1 1 1 17. Suicide by frearms. 21 1 2 1 2 1 2 168. Suicide by cutting or piercing instruments. 10 1 1 2 169. Suicide by cutting or piercing instruments. 21 1 2 1 2 170. Suicide by crushing. 2 1 171. Suicide by other means. 2 1 1 2 2 173–175. Homicides. 20 1 1 2 2 2			-			-							
170. Suicide by crushing       2         171. Suicide by other means.       2         173–175. Homicides.       20         1       1         2       2         2       1         1       2         2       2         2       1         1       2         2       2         1       2         2       2	tion of corrosive substances.  164. Suicide by poisonous gas.  165. Suicide by hanging or strangulation.  166. Suicide by drowning.  167. Suicide by grearms.  168. Suicide by cutting or piercing instruments.	51 27 27 27 14 21		1 1 1		2		1 1	1 1		4 1 1	1 1 2	2
	170. Suicide by crushing	1 2											
173. Homicide by firearms 3				1		1		2			2		
O. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	173. Homicide by firearms	3									2		

#### OF 10,000 POPULATION AND OVER-ONTARIO, 1938-Continued

				,							1	1	,							1	
Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste. Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
1	1				2	,											6				153
					3	1														• • • •	133
1	5	2			6	1		1	2	4	2	1	2	2	1		27	1	2		
1	3				4	1			1	3	1	1		1	1		15	1	1		154
	2	2		Ф	2			1	1	1	1		2	1			3		1		155 156
	2	2									1						4		1		156A 156B
																					13075
6	10	1	3	3	22	1	5	3	4	5	4	2	$-\frac{2}{2}$	<u>4</u>	5 	$-\frac{2}{2}$	106	3 3	11 11	$-\frac{1}{1}$	157
2 3	1 1	i	1	· · · · i	7		2 3	···· i	î	 1 1	2	<u>i</u>	1	1	2	· · · i	12 28 39	<u>1</u>	3 3	· · · · · · · · · · · · · · · · · · ·	157 157A 157B 157C 157D 157E
i	6		2	2	6	····i		1	3	3	1 1	· · · · · i		2	2	· · · · · i	27		2		157D 157E
22	41	9	11	15	81	11	9	16	18	23	13	10	18	6	34	23	259	10	42	10	
			1		3	1	1 7	1	2 13	1 15	7			1 4	3 20	1	3 183	3 3 3		 1 7 1	158 159
11 5 1 4	23 11 1	6	1	6		3		11	1	4	3	2 5 2 2			8	15 5 5	40		28 13	<sub>i</sub>	160 160 <sub>A</sub>
6		3	1	6	14	1	1	4	2	3	3	1	3	1	8	2 2	39	3	13	1	160в 161
4	1				1 2				2 2	1		····i	····i	1	1	2	16		1		161A 161B 161C
	i				3	i	i	2		2	2		2		i		15				161E
2	28	4		2		1	2	11	2	2	2			1	1		41	1	2	5	
2 2	28 20 8	1 3		2 2	21 6 15	1	2 2	11 	2 1 1	2 1 1	2 2			1	1		41 14 27	1	2	<sub>5</sub>	162 162а 162в
25	50		12	10		1.0		0.3	21	26	12	23	18	24	26	12	415	11	65	15	
$\frac{25}{2}$		<u> </u>					8	$-\frac{22}{4}$	3				4	1	1	3		1	10		163- 171
1	3				5			1	1	3				1	1	1	22		2		163
1	3												1 2				211	· · · · i	2 2 2	i	164 165 166
		i	i 1					1			· · · · i		· · · · i			· · · · · i	4		· · · i		167 168
			···i	1				· · · · · · · · · · · · · · · · · · ·													169 170 171
	1	·			2												7		3		173- 175
		i															1		j.		173

## TABLE 41—CAUSES OF DEATH FOR CITIES, TOWNS AND VILLAGES

						,						
CAUSES OF DEATH	Total	Belleville	Brantford	Chatham	Cornwall	Forest Hill	Fort William	Galt	Guelph	Hamilton	Kingston	Kirkland Lake
174. Homicide by cutting or piercing instruments 175. Homicide by other means			i		1		1					
176-198. Other violent deaths	1036	18	27	30	18	1	13	10	13	89	30	20
176. Attack by venomous animals. 177. Food poisoning. 178. Accidental absorption of toxic gases. 179. Other acute accidental poisonings (except by gas). 180. Conflagration. 181. Accidental burns (conflagration excepted). 182. Accidental mechanical suffocation. 183. Accidental drowning. 184. Accidental injury by frearms. 185. Accidental injury by gutting or piercing instruments. 186. Accidental injury by fall, crushing or landslide. 188. Injuries by animals. 190. Excessive cold. 191. Excessive heat. 193. Accidents due to electric currents. 194. Other accidents. 1944. Other accidents. 1954. Foreign body. 194B. Others under this title. 195. Violent deaths of which the nature (accident, suicide, homicide) is unknown.	10 754 6 5 15 6 29 3 26	14	1 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 3 2 1 21	1 3 2 1 9	1	3	7	10	1 3 2 3 1 1 71  2	1 2 3 1	111117777777777777777777777777777777777
Class XVIII.—Ill-Defined Causes of Death												
Total	12	1		2	1					1		
199. Sudden death	7 5			1 1	1	::::				· · · i		

#### SPECIAL CLASSES OF ACCIDENTAL DEATHS FOR

(Included also under the numbers of the

D. Street-car accidents.       9       1 </th <th>1 2 1</th> <th>17 20 2 1 1 1 1</th>	1 2 1	17 20 2 1 1 1 1
F. Other land transportation 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 3 33 7	338 8 9 12 4 6 5
G. Water transportation 2 3		13 1 1 1
H. Air transportation 1 1		

# OF 10,000 POPULATION AND OVER-ONTARIO, 1938-Continued

Kitchener	London	Niagara Falls	North Bay	Oshawa	Ottawa	Owen Sound	Pembroke	Peterborough	Port Arthur	St. Catharines	St. Thomas	Sarnia	Sault Ste. Marie	Stratford	Sudbury	Timmins	Toronto	Welland	Windsor	Woodstock	
23	51	14	11	10	71	18	8	18	18	23	12	23	14	23	25	10	321	1	···· <u>3</u>	13	174 175
	2					 i		1		i					i	i	1 7				176 176 177 178
i :	5	1 2	1 1 	i	1 4 4 5	1  2	1 1  1	2	i	i i		i	1 2		1 3 2 3	2	6 5 18 10 11 3	1	1 7 1 1	5 1	179 180 181 182 183 184
20	39	7	2 4 1	9	51 1 		5		12 	19			9		11 1	6	243 1 7 3 4	8	36	5 1	185 186 188 190 191 193
···i		3	i		1 				· · · i		1	i 	· · · i		· · · · · · · · · · · · · · · · · · ·		1 1		2	i	194A 194B 195 198
····		1			2 2				••••	1							2 1 1		1 · · · i	· · · · ·	199 200

# CITIES, TOWNS AND VILLAGES OF 10,000 POPULATION AND OVER

International List above), ONTARIO, 1938

		1												1		1									2		4	1						
		1							2						- !	1		- 1				- 1						6	1	- 1			1	В
		1			٠.				1		٠.		- 1		2	1			٠.		1	2	1					4		1	1			С
				ŀ					1 23				٠٠;	ŀ	-	4		iò		E.		4		٠.			٠.	107			10		;	D
1	} -	0			4		4	1			1			1	0		1	1		3	5	-1	1		5		4	2		3	10	ì	4	E
		- 1	- 1			1			- 1	1		1		1	- 1		1	- 1			1							1	Į.		i			G
																					 	 	 			٠.								Н

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenae	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton	Lanark
Total	36,890	6.3	455	672	481	2,000	515	187	154	308	206	1,321	744	204	201	629	204	55	225	650	530	238	740	6.24	381
CLASS 1.—INFECTIOUS AND																									
Parasitic Diseases  Total	2441	5	40	48	24	159	58	12	8	22	18	90	45	29	11	49	10	2	11	27	23	44	32	28	24
Typhoid fever	35	ı				3	-	-	-			4		-	-		-	-	1	1	1	-		1	
Paratyphoid fever     Undulant fever	4 2							1				1 1													
7. Measles	31 49 88	::			1 3				1		1 1					4			1 1	1 2		3	1 2 3	1	
9. Whooping-cough	618	١				4			4	12		2			3					1			11	11	10
11a. Sole cause	38 29	1		1		1						1				3			1		1	2		· · · i	7
11c. With pneumonia 11p. With other diseases of the	a 302			2	١.	1	1	١.	١.												6		7	3	7
respiratory system 11E. With intestinal complica-	36	ı					1	]	1	1		3	1			3			1	1 4	1			1	1
cations	53 160 36	1		1	. 2	:   8	3 1	1	1	4		2	7			7	1			2	3	1	3		2
15. Erysipelas				1 4		1 .				1		1	1	1									1		
cephalitis (acute) 17. Let hargic or epidemic ence-									1			2					1				٠٠.	1	1		1
phalitis																1							1		
meningitis	16					j														i	1	1	i	i	
23–32. Tuberculosis	1237	2	2.	28	9	9.	35		1	8	6	31	21	24	7	9	6		3	7	- 8	28	7	11	11
23. Tuberculosis of the respiratory system	1070		19	26	7	79	24		1	6	5	26	14	23	6	6	4		3	6	6	22	5	10	11
24. Tuberculosis of the meninges and central nervous	65				,																				
25. Tuberculosis of the intes-	25		1	1		١.	7 8			1			2				1			1		1	1	1	
tines and peritoneum.  26. Tuberculosis of the vertebral column	25			1		١,						١.,					1								
27. Tuberculosis of the bones and joints (vertebral	l .					'						-		-		•									• • •
column excepted) 27A. Of bones	1	ı.													1										
27B. Of joints	5														1										
and sub-cutaneous cellu- tissue																1									
phatic system (bron- chial, mesenteric and																									
retroperitoneal glands excepted)	2	2																			1				
30. Tuberculosis of the genito- urinary system	19	,		. :			1					1	1								1		1		
31. Tuberculosis of other organs.	4												1												
32. Disseminated tuberculosis.	7					1				1					1			l				1 1			
32B. Chronic	12 160	١				18	7	i	2	1		8	5			1				···i		· i	3	2	 i
<ol> <li>Gonococcus infection and other venereal diseases.</li> </ol>	1									1					1										
<ol> <li>Purulent infection, septi- caemia (non-puerperal).</li> </ol>		1			1		1						1									1 [	- 1	- 1	
38. Malaria	i	1	1	1														l i				1			
tozoal parasites																									
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## TOWNS AND VILLAGES OF 5,000 AND OVER)—ONTARIO, 1938

Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
489 L	108 L	<u>:</u>	136 N	1,615 M	278 N	408 N	386 N	357 N	625 0	0 989	7 P.		534 Pe	548 P	242 Pr	1	1	516 R	139 R	1,052 Si	381 St	819 Sı	T 785	379 T	321 V	932 W	754 W	1	2,049 W		1
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22	6	34	34	126	65	26	18	9	32	24	21	15	18	17	28	13	18	42	9	46	27	57	62	41	22	44	38	31	194	483	
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2	2	15	13	76	60	5	2	2	11	2	2	4	• 3	4	16	1	5	13	6	11	14	17	36	23	6	23	6	6	130	243	23
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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton	Lanark
42 Other diseases caused by Helminths 43. Mycoses. 44. Other infectious or parasitic diseases 44A. Chicken-pox 44c Others under this title	5 16 3 13					1 1						1 1													
CLASS II.—CANCER AND OTHER TUMOURS  Total	4780	8	50	87	62	292	29	16	18	29	59	170	122	21	28	82	26	6	31	78	68	18	89	68	51
45-53. Cancer and other malignant tumours  45. Cancer of the buccal cavity and pharynx  46. Cancer of the digestive tract and peritoneum  46A. Of the oesophagus  46B. Of the stomach and duodenum  46C. Of the rectum  40D. Of the liver and biliary ducts  40F. Of the paritoneum  46E. Of the pancreas  40F. Of the peritoneum  46C. Of other organs  47C. Cancer of the respiratory organs  47A. Of the lung  47B. Of the lung  47D. Of other organs of the respiratory system  48 Cancer of the nterus  48 Cancer of the uterus  49. Cancer of other female genital crgans  50. Cancer of the breast  51. Cancer of the male genitourinary organs  51a. Of the bladder  51b. Of the kidney  51c. Of the prostate gland	157 2227 91 859 253 266 134 11 613 190 42 110 13 381 241 140 135 496 399 107 25 25 391 291 291 291 291 291 291 291 291 291 2	2	46 2 23 1 8 3 2 1 1  8	79 2 35  10 3 5 3  14 2  1 14 11 13 2 8 6 6 11 11 4	2	1 2 222 13 9 10 29 29 8	1 14  9 1 1  3 1  1 2 1 1 1 	8 · · · · · · · · · · · · · · · · · · ·	9 1 1	1 1  1 4 6 1	54 2 27  10 1 5 1 10  7 5 2 2 10 1	2 777 1 1 333 12 8 3 3 20 8 1 5 5 2 166 7 7 9 9 • 7	3	1 3 3 3	3 12  8 1 1 1 1  2 6 1	78 40  7 6 3  7 1  7 7 7  1 5 1 1 3  8	1  2 1 1 3	1 3 2 1	29 2 15 1 6 3 3  1 1 1 1 1 2 5 4 1	10 9 1 2 7 10 4	1 39 2 18 3 5 3 8 1 1 4 6 6	15 7 1 3 1 1 1 2	86 3 37  15 5 9  8 1  9 8 1  15 15 11 11 11 11 11 11 11 11	63 3 31 14 5 2 1 1 2 1 2 1 1 7 6 3 1 7 7	48 3 28  9 1 7 4 4  7 3 1 2   2 4 7 4      
51D. Of the testicles and annexa. 51E. Of other male genitourinary organs. 52. Cancer of the skin. 53. Cancer of other or unspecified organs. 53A. Of the eye and orbit. 53C. Of the glandular system. 53D. Of the female urinary organs. 53E. Of the bones and joints. 53F. Of the brain. 53F. Of the brain. 53F. Of the brain. 53G. Of the spine and spinal cord. 53H. Of the neck. 53I. Of the abdomen. 53J. Of other specified organs. 53K. Multiple cancer. 53M. Of unspecified or unknown location. 54N. Of unspecified or unknown location. 54N. Of the ovary. 54D. Of the train. 54E. Of the thyroid gland. 54F. Of the prostate gland. 54G. Of other or unspecified sites. 55T. Tumours, nature not specified.	13 5 83 404 111 75 62 49 84 21 6 31 35 17 13 261 42 44 40	1	7 1 1 3 1	1 9 2 2 1 1 1 2 1 7 2 1 1 2 1 1	6 2 1 2 2	1 3 32 7 9 4 5 2 1 1 1 2 3 3 3 2 6 6 7	1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 1 1 1	2 3 1 1 1 1 1 5 1	13 3 13 1  2	2 14 13 3 1 5 2 1 1 2 1 1 1	1	3 1	3 9  3 1 2 1  2	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3	4 1 1	4 5 1 1 2 2 8 1	1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 8 1 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 4 1 2	1 1 1 1 2

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Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	Vork	
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56	15	79	-	210		46	48	37	60		-	31	71	65	17	_	7		-	113	33	34		30	47	139	_			1378	
53	13	76 —-	3	194	29	43	45	35	57	77	19	29	65	59	_	28	7	59	-		29	32		26	46	129	77	95		1293	
2 22 2	5	46 2		6 101 3	16 16	1 24	2 21 1	21	3 31 2	47	8	12	34	32	7	12	4	39		62	16	1 16	35	11	26	69 3	35	45	115	43 620 39	
5 4	2	15 6			10	15 4	9	11 2	16 1	18	4	5 3	17	10	4	8	3	1 18 6		32	5 2	10	15	6	9	31	14	1 13 5	31 19	217	
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1 7	3	3 6	ì	4 23	14	8	2 5	1 4	1 9	1 8	· .	4	1 6	10	2	14		1 7		4 12	1 1	6	•• 7	3	2 2	2 26	2 6	3 10	10 18	48 144	49 50
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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lampton	Lanark
55B. Of the uterus	1 26 20			· · · · · · · · · · · · · · · · · · ·		i			1														· i	2	i 1
CLASS 111—RHEUMATIC DIS- EASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES	1005		14	20	16	67	15	2	0	10			16		2	20			12		1.2	2	10	* 0	
Total	1095				16		_	-		12			16						12			3	19	18	
56. Acute rheumatic fever 57. Chronic rheumatism, osteo-arthritis 59. Diabetes mellitus	165 46 584	ì	6	3 11	1 	13 1 34	2 4	1		1 · · · · · · · · · · · · · · · · · · ·	7	4 2 27			·i	2 1 11	1 3		2 1 6	5	3 6	1	13	13	1 5
61. Beriberi 62. Pellagra 63. Rickets 64. Osteomalacia 65. Diseases of the pituitary	1 15 1	•	1									1									1				
gland  66. Diseases of the thyroid and parathyroid glands  66A. Simple goitre  66B. Exophthalmic goitre	189 24 140		4 3 1	4 1 2	3 2	13	3		1 1	3	2 1 1	6		1	1	4	2 1		2	1	2 1 1	1	1	1	
66C. Myxoedema, cretinism 66D. Tetany 66E. Others under this title 67. Diseases of the thymus	10 10 5			 1	1	1				1		2							1						
gland 68. Diseases of the adrenals (Addison's disease) 69. Other general diseases 69a. Fatty or amyloid degene-	45 7 33		1 1		2	2				· · · · · · · · · · · · · · · · · · ·		1				 1 1			· · · · i				2	i	1
ration	15 18	-	i		2	1				i					-	1			i				i	i	
CLASS IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS																									
Total	500	1	9	4	5	.30	5	3	1	- 8	10	10	7	1	1	8	4	2	2	12	- 6		13	7	8
70. Haemorrhagic conditions. 70a. Simple purpura. 70b. Haemophilia. 71. Anaemia 71a. Pernicious anaemia. 71a. Others under this title 72. Leukaemia and aleukaemia 72a. Leukaemia (Hodgkin's disease).	16 12 4 309 271 38 150 115	1 1	5 5 5 2 2	3 2 1 1	4 4 1	2 2 19 18 1 7 6	1 2 1 1 2	3		7 6 1	8 8 8	1 1 5 5 5	1 1 1	1	1	6 5 1 1 1 1	3 3	2 1 1	1 1 1 1	11 8 3 1 1	1 1  3 2 1 2 2		2 1 7 6 1 2 2	7 7	6 6
73. Diseases of the spleen 74. Other diseases of the blood and blood-forming organs	21									1	· i					1						• •			
CLASS V.—CHRONIC POISON- INGS AND INTOXICATIONS																									
Total	65		1	3	1	4	4				٠			. ,		1	1			2	1	3	2	2	
75. Alcoholism 75a. Delirium tremens. 75B. Other alcoholic intoxica- tions.	58 4 54		1	2 1	1	2					• • •			٠.,						2			2	1	
76. Chronic poisoning, by other organic substances. 76a. Chronic morphinism. 76b. Chronic cocainism. 76b. Other organic poisoning	4 2 1			1													1					1			

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Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
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1	1								1					1				1				1							5	7	55G
111  8 1 1		188 2 100 41 13 3 2	1 :: :: ::	45 2 3 3 3 0  8 2 6 	1 1 2	166 5 1 5 5	2 7	8 	15 3 1 7  2  2 	200 44 22 99  4 	4	6 1  1 2 1 1 1	1 2 13 	10	3 2	1	1	3 5  3  1	1	29 5 1 11  2  5   3	13 6 1 1 2 2	222 3 1 15  3 	211 2 2 9  1  3  1 4	2	9 1 5 2 2 1	36 9 1 16  8 8  2	2	288 5 4 13 1 1 3 	13	2711 45 55 1566  1 4 39 1 30 2 4 2 9 9	56 57 59 61 62 63 64 65 666 66B 66C 66D 66E 67
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7	2	5	1	26	2	2	5	7	6	8	1	6	7	11	4	3	2	3	2	17	5	5	5	2	4	16	6	9	26	138	
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																															76B 76D

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CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton	Lanark
77. Chronic poisoning by mineral substances 77A. Lead (including occupational)	. 3		ļ			2																			
77c. Others under this title	1								-							1								1	
CLASS VI.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE																									
Total	1724	6	15	35	31	82	10	11	7	8	24	54	46	7	9	42	4	2	6	26	21	10	32	30	16
78. Encephalitis (non-epidemic)	30 48		2	3		5	1		i			1	1							1		1 2	2		
80. Progressive locomotor ataxia (tabes dorsalis). 81. Diseases of the spinal cord 82. Cerebral haemorrhage,	15			2		3		4	i	··· i	1	6	6		3	2				3	3	1	2	1	
cerebral embolism and thrombosis	790 636							3	5	2 2		23 21	13			18 16	2 2	1	2 2		9		11 8	17 13	8
82B. Cerebral embolism and thrombosis	81			1	1		i .	2				2	4			1								3	1
82D. Hemiplegia and other paralysis, cause not specified			2		3	6	1	1								1				3			2	1	1
83. General paralysis of the insane		1			1																		2	1	
other psychoses.  84a. Dementia praecox.  84B. Other psychoses.  85. Epilepsy.	156 125 31 73		1 1 1	···i	1 3	3				···i						4				· · · · · · · · · · · · · · · · · · ·	1	1		1 2	···· ···i
86. Convulsions (under 5 years of age)	31 284		2	5	2 8	1 17			• •	2		11	2	1	1	1	1			1			3	2	
87a. Chroea	3 23 122			···i		2						4				1 7		1	 i		···i		1 3	- 1	
87p. Sclerosis (other than of the spinal cord) 87E. Others under this title	86 <b>50</b>			2 2	1 3	4		1		_1	1 2	3			- 1	3	1		2				7	i	1
88. Diseases of the organs of vision	18						2	1													1		٠	1	
mastoid process 89A. Otitis	104 64		2 2	3 2		11 8				1	3 2	8 4	5 2		: :								3		
process	40		• • •	1		3	1		-		1	4	3										1	1	
CLASS VII.—DISEASES OF THE CIRCULATORY SYSTEM																									
Total	12296	21	124	232	180	613	81	70	51	125	211	395	216	72	78	249	95	18	98	220	215	43	256	248	133
90-95. Diseases of the heart	7354	11	85	139	107	360	54 —	39	27	63	127	259	118	43	40	132	44	16	50	139	125	31	139	140	69
90. Pericarditis 91. Acute endocarditis 91a. Endocarditis specified as		· ·		2		2				• • •	1				- 1						i			2	
928. Endocarditis, unspecified (under 45 years of age)	63 18			2		1	1					4		1				• •			1	1			
92. Chronic endocarditis, valv- ular diseases 92a. Endocarditis specified as	1000	1	25	26	25	46				11	13	20	15		5	26	11		8	12	16	10	24	16	12
chronic and other valvu- lar diseases	817	1	22	23	23	32	5	6	3	8	12	18	14	7	5	23	4	1	7	11	12	10	15	13	10
(45 years and over) 93. Diseases of the myocardium	183		33	3 28	35	14 118	1 14	11	1 9	3	33	70	1 29	8		3	7		1	1 56	41		9	3 45	2 24

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Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
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									: : :					::				::												77A 77C
7	36	5	108	3	12	21	25	.61	40	13	14	25	26	8	10	3	21	3	36	14	15	13	20	11	35	28	35	89	433	
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· .	3	1	5	· .	···i	··· <u>·</u> 2		6	···i	: :	··i		· · · · · · · · · · · · · · · · · · ·	'n					6	2				1	3	<u>i</u>	··· i	2	30 30	80 81
6	23 20	2 2	46 39	1	4	12 10	16 16	16 13	21 15	7 5	7 5	18 16	15 13	2 2	4 3	2	14	2 2	16 13	7 5	9	5 4	12 9	6 4	22 16	8	23 19	30 25	188 149	82 82A
1				1		2		2												2				1			1 1		25 3	82 <b>B</b> 82C
1	1		4	1				1	5	2			1				3		1		1		2		6		2	3	11	82
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	1										1		2															3	5	88
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2	9	9	22	6	7	6	3	13	9	2	13	11	15	6	13	3	16	3	32	13	10	19	3	14	11	12	28	31	176	92A
1	1				ł			1											F		1		1							92в 93
	77	7 36	7 36 5	7 36 5 108	7 36 5 108 3	7 36 5 108 3 12	7 36 5 108 3 12 21	7 36 5 108 3 12 21 25	7 36 5 108 3 12 21 25 61	7 36 5 108 3 12 21 25 61 40	7 36 5 108 3 12 21 25 61 40 13	7 36 5 108 3 12 21 25 61 40 13 14	7 36 5 108 3 12 21 25 61 40 13 14 25	7 36 5 108 3 12 21 25 61 40 13 14 25 26	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36  4 11 1 1 1 1 1 1 4	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20  1 3 1 5 1 1 2 6 1 1 2 1 1 2 1 6 1 2 6 1 1 2 1 6 1 1 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 1 1 2 2 1 6 2 2 2 1 1 6 2 2 2 2 1	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20 11	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20 11 35	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20 11 35 28	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20 11 35 28 35	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20 11 35 28 35 89	7 36 5 108 3 12 21 25 61 40 13 14 25 26 8 10 3 21 3 36 14 15 13 20 11 35 28 35 89 433

TABLE 42—CAUSES OF DEATH BY COUNTIES (INCLUDING CITIES,

95. Cherd diseases of the heart   363   1   5   7   7   12   5   2   1   2   5   11   7   2   3   5   1   3   8   11   1   7   4   3   95. Functional diseases of the heart   297   1   5   7   7   8   5   2   1   1   1   8   6   2   3   5   1   3   8   11   1   7   4   3   95. Other and unspecified   297   1   5   7   7   8   5   2   1   1   1   8   6   2   3   5   1   3   8   11   1   7   4   3   96. Anterioselerosis (of coronary arteries excepted)   3871   9   32   69   60   1911   32   719   49   70   103   88   23   53   14   5   14   59   64   9   88   92   54   96. Chargenes   3871   9   32   69   60   1911   32   719   49   70   103   88   72   35   71   45   14   0   59   64   9   88   92   54   97. Other diseases of the original of the wins publish; etc.   74   3   4   1   1   1   1   1   1   2   1   1   1																										
93e. Myocarditis, unspecified (under 48 years of ago) 3c. Chronic myocarditis and ton.  1290   2   12   18   24   65   68   8   4   14   22   37   22   4   4   28   9   6   1   31   28   2   31   31   33   33   34   34   34   34	CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	100	Kent	Lampton	Lanark
100. 129   21   12   24   65   68   84   14   22   37   22   4   4   28   9   6   1   31   28   23   33   13   33   33   34   35   35   35   36   36   36   37   28   36   37   30   30   30   30   30   30   30			2		4		3			1	2	3	3	1	2	1	3	1		1	7	1	1	1	2	1
100. Myocarditis unspecified 94. Diseases of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary arteries and angina per great of the coronary of t	(under 45 years of age).	49				1	4	2				1	2			1				1		٠	1	1	1	
46. Systems and overy  47. Diseases of the coronary  48. Diseases of the coronary  49. Diseases of the coronary  49. Diseases of the coronary  49. Diseases of the coronary  40. Diseases of the coronary  40. Anxian percoris  40. 31 0 69 34 160 24 19 8 26 38 135 54 224 51 12 4 20 52 50 11 1 3 2 3 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tion	1299	2	12	18	24	65	6	8	4	14	22	37	22	4	4	28	9	6	1	31	28	2	31	31	13
Osta Other and unspecified.  Osta Other and u	(45 years and over) 94. Diseases of the coronary	732	2	21	6	10	46	6	3	4	6	7	28	6	10	1	12	5	3	10	18	12	1	16	11	10
## arteries   123   1   1   6   1     1   1   4   1   2   3   2   1   1   1   3   2   ## Debois of the coronary of the	_toris	3693	3	22	76	40	182	27	20	13	28	75	153	67	9	25	58	17	6	26	62	56	14	59	73	30
arteries	94B. Embolism and throm-	123		1	1		6	1	• •	٠.		1	1	4	1		2	3		2	1	1		1	3	2
95. Functional diseases of the heart   363   1   5   7   7   12   5   2   2   2   1   7   2   3   5   1   3   8   11   1   7   4   3   95. Functional diseases of the heart   66   7   7   12   5   2   1   1   4   3   1   1   7   2   3   5   1   3   8   11   1   7   4   3   95. Functional diseases of the heart   66   7   7   12   7   8   5   2   1   1   1   8   6   2   3   5   1   3   8   11   1   7   4   3   95. Functional diseases of the heart   66   7   7   12   7   8   5   2   1   1   1   1   8   6   2   3   5   1   3   7   9   1   1   1   1   1   1   1   1   1							15		1		2			9	6		5	2			9					
958. Other and unspecified. 959. Aneurysm (except of the heart) 95. Other diseases of the vins (varices, haemorrhoids, phlebits, etc.) 96. Other diseases of the veins (yarices, haemorrhoids, phlebits, etc.) 97. Aneurosm (hymphangtis, etc.) 97. Aneurosm (hymphangtis, etc.) 98. Other diseases of the veins (yarices, haemorrhoids, phlebits, etc.) 98. Other diseases of the life of heart (hymphangtis, etc.) 99. Aneurosm (hym	95. Other diseases of the heart 95A. Functional diseases of the			5	7	7		5	2	1					2	3	5	1		3			1	7	4	3
97. Arteriosclerosis (of coronage and Corona	95B. Other and unspecified			5	7	7		5	2						2	3	5	1		3		9	1	6	3	
98. Gangrene. 112	97. Arteriosclerosis (of coron-							1 1			1				1											
arteries	98. Gangrene										3					- 1							1 1			24
phlebitis, etc.)	arteries	35	٠.		1	2	3			1	٠	٠		1		• •	٠					2	1	1	٠	
etc.)  102. Idiopathic abnormalities of blood pressure  774	phlebitis, etc.)	74			4	1	1	1	1		1	1	2	1			1	1		٠	2			3	3	
of blood pressure 774	etc.)	8																٠				1				
CLASS VIII.—DISEASES OF THE RESPIRATORY SYSTEM  Total	of blood pressure 103. Other diseases of the cir-			7	15	9		10	2	4	7	6	29	4	4	3	15	4	1	7	17	18	2	22	8	
Total	culatory system	3		• • •												-										1
104. Diseases of the nasal fosses are and annexa																										
Sae and annexa	Total	3004	11	37	44	30	136	63	17	12	28	35	76	51	18	14	40	12	7	13	58	44	28	59	52	27
105. Diseases of the larynx	sae and annexa	41	_			1		1	1	1					1						2	1	1			
larynx	105. Diseases of the larynx							0																		
106A Acute	larynx					٠٠.	2	. ;					- 5						· ;		1	<sub>i</sub>	- ;			
106. Unspecified	106A. Acute	42				1	1 2	1		- 1		- 4		3	4		1								4	1
107B. Capillary bronchitis.       4         1       <	106c. Unspecified	1272				11	58	29			16		18	23	2	3	10	- 1	3	6						
100	107в. Capillary bronchitis	4						1			1															
etc	109. Pneumonia, unspecified 110. Pleurisy	267	1	4	1	3	11	6			1	9	13	4	3	2	3	2		1	10	2	12	5	2	2
thrombosis	hagic infarct of the lung, etc	76		1			2	1	2	1	1	2	1	2		1	1		2		1	1		1		
112. Asthma.       168       1       2       3       3       4       2       1       1       1       6       2       2       4       6       2       2       3       3       1	thrombosis	12 64		<sub>i</sub>			· · · · · · · · · · · · · · · · · · ·	· .	2	i	 i		i	2		i	1.				i	<sub>i</sub>				
spiratory system (tuber-culosis excepted) 48 1 2 2 1 2 1 1 1  114A. Chronic interstitial pneumonia including occupational diseases of the respiratory system 9 1	112. Asthma	168		2		3	-4	2	1	1	1	1	6		2	4	6	2	]		2	3			- 1	
pneumonia interstitial pneumonia including occupational diseases of the respiratory system 9	spiratory system (tuber- culosis excepted)	48				1		2			2	1	2										1	1	1	
	pneumonia including occupational diseases of																									
	the respiratory system 114B. Gangrene of the lung . 114C. Others under this title.	2				i																				

_	_											-	- 1				-				1	1				1			1	- 1	
Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Pertli	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
5		2		17				2	3	2	1		1	6	1			1	2	2	1			1		2	4	2	. 3	27	93A
1		1		2	2	3				1	1		1		2				1	3		2	1	• •		1		2	3	9.	93B
24		19	1	-		11	8		32		14	4	26	27		11		16	2	29	5	16	7		11	17	25	20	44	324	93c
5	2	17	4	29	3	7	9	11	7	19	7	3	13	23	5		4	15	8	14	18	7	3	7	8	29	14	29	40	115	93 <sub>D</sub>
49		55		129	,	30			1		19	32	70	41	11	15	6	32	9	119	23	57	62 15	29	33	99	85	68	199	1041 38	94 94 <sub>A</sub>
2		3			3					1	1							20									0.1				
36 11 4	7		3 5 1	10	7 19 9 3 9 3	23	4	12	3	12	14 4 6	28 4 3	60 10 6	6	4		3	30 2 3		111 5 8	15 8 3	54 1 3	45 2 5	3	26 6 4	84 14 6	81 4 6	7	170 21 15	931 72 102	94B 94C 95
4	4		1		2 2	2 1		. i	3		6	3	1 5	8	2	5	1 2	1 2		1 7	3	3	 5	1 2	1 3	6	2	2	2 13	28 74	95A 95B
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79 2			2 12	15	8 30			1 4		73	23	32	65			30	13	49	14	136 2	36	24 1		14	37	122 1	99	71 1	267 4	785 25	97 98
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	-	-	- -	-	- -	-					-			-	-	-		-	-	1				-							103
3	4	1 5	3	7 1-	15 2	0 3	9 4	0 2	9 58	6	2 2	1/2	2 29	4	7 20	0 19	10	4	1 9	78	3 34	78	49	30	32	65	65	53	194	718	
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	5 .		1 3	2	14 4	1	3 2.	2 1	3 2	4	7	3	2 1	2	5 2 .	2	4	1	6	. 1	3	4 6	5	6 3	3	12	2	3 (		37	
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					10 2	3	2	3	1	2	5	i		4	4	2	2	2		2	1		3	4		3 4	1			5 4	112
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TABLE 42—CAUSES OF DEATH BY COUNTIES (INCLUDING CITIES,

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton	Lanark
Class IX.—Diseases of the Digestive System																									
Total	2355	2	29	49	20	179	50	14	4	13	24	93	52	12	6	35	7	2	8	49	31	15	52	43	16
115. Diseases of the buccal cavity and annexa, and of the pharynx and tonsils (including adenoid vegetations	158 58 43 57 7		1 i	2		3		1			2 1 1	4 5 5	· · · · · · · · · · · · · · · · · · ·		1 1	2	• • • •			4	3 2 1	1	8 3 1 4	2	• • • •
duodenum.  117A. Ulcer of the stomach.  117B. Ulcer of the duodenum.  118. Other diseases of the stomach.  119. Diarrhoea and enteritis (under 2 years of age).	295 151 144 46 312		5 4 1 3 8	3 1 2 1 6	4 2 2	10 8 4	5	2		3 2 1 1	3 1 2	3 2	1	i		••••	1		2 1 1	4 2 2 5	7 3 4	3 2	6 2 4 1	- 0	 2 
120. Diarrhoea and enteritis (2 years and over) 120A. Diarrhoea and enteritis	196 136		1	7 7	3 2	10		3		2 2	2	6	8	5		3				5 2	6	1	9	6	2
120B. Ulceration of the intestines	60 330		3	2	1 4	25	iò	2 2			3	. 12	5 3			2	2			3 11	2 3	1	1 6	2 2	1 3
struction	386 171 215		5 2 3	13 7 6	i	29 8 21	5			3 2 1	4 3 1	6 10				4	2		2 1 1	6 3 3	3 1 2	3 2 1	13 8 5	8 2 6	22
testines.  124. Cirrhosis of the liver.  124. Specified as alcoholic.  124B. Not specified as alcoholic  125. Other diseases of the liver  125A. Yellow atrophy of the	47 154 12 142 52		i 	4		13 13 3	1	i	: :	i 	1	15 3 12	2 1 1		1		2		1 1	4			i i	4	1 1 1 1
liver	12 40 165		i	İ	2	1 2 20		1		i	3	7				4			i 1	3	1 2		1	6	i 1
sages	163 14	• •			- 1		1	٠.	٠.,		٠			• •		• • •		• •	1	• • •	2		1	3	2
specified	30	•••			1			1	• •							1				1	1				1
CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM	2700	2	30	50	E 1	161	70	0	17	21	27	161	70	10		E0	12			62	41	7	16	50	27
Total	2780	3	39	59	31	161	36	8	1/	21	37	101	70	19	-	58	12	1	14	62	41	7	46	50	37
unspecified, under 10 years of age)  131. Chronic nephritis 132. Nephritis, unspecified (10 years and over)  133. Other diseases of the kid-	63 1399 438		1 22 8	32 9	1 34 1	5 72 31	2 19 4	4	13	9	20	1 92 39	1 36 9	1 7 1	7 5	2 27 9	3	i .	· ; 7				2 16	1 24 7	2 20 4
neys and ureters  134. Calculi of the urinary	149		1	1	1	13	1	1	1	2	1	9	2	1	1	6.			1	1	1.		1	1	3
passages	51 . 91 .					5	1	1	1	2	1	2	1 .							2	1 .		2		1
urinary abscess, etc  136A. Stricture of the urethra.	20 15			1		]				:::]:		1								:: :	:: :	: ::		2 .	

Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskamıng	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
21	2	35	12	93	12	46	23	16	32	39	10	16	32	21	16	10	11	47	13	80	29	53	51	35	16	68	56	43	130	482	
	1 1 1 1	2 1 1 1 5 3 2 2 2 1 1 3 3 3 3	1 1 8 1 1	6 1 2 3 3 1 1 177 10 7 7 1 6 6 9 3 3 6 15 16 9 7 7	3 2 2 2	4 2 2 2 3 2 2 3 3 2 2 3 3 3 5 2 3 3 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 7 4 4 4 4	2 1 1 3 2 2 2 1 1 2 2 1 1	111111111111111111111111111111111111111	1 2 1 1 6 5 1 1 6 2 1 1 1 6 6 1 1 2 2 2 2	5 2 2 2	1 3 1 2 2 1 1 1 1 2 2 2 2 2 1 1 2 2	1 1 1 1 1 3 1 2 3 3 1 2 3 1 2 3 1	2 1 3 3 3 3 2 2 2 2	3   1	1 1	1 1 1 1 6 	55 22 12 22 22 22 11 11 12 64 42 22 11 11 	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 333  6 11111 8 1789 1	 4 22 2 2 6 6 1 3 4 4 3 1 1 1 1 1 1	3 1  4 4 4  1 25 1 1 2  2 1 1 2  2 1 1 2 1 2 1	100 9 1 1 9 1 8 7 4 3 3 2 2 1 1 4 4	2 · · · · · · · · · · · · · · · · · · ·	1 2 4 4 4 1 2 1 1 2 1 1 1 2 1	1 1 1 	8 1 2 2 5 5 6 4 4 2 2 1 1 1 1 7 7 8 1 7 7 1 4 1 1 1 4 1 1 1 4 1 1 1 1 1 4 1	6 3 2 1 1 1 5 3 3 2 11 4 1 3 1 4 1 1 3 1	9 2 7 9	83 322 51 8 23 29 12 17 83 74 33 41	115 115a 115b 115c 115c 117c 117a 117a 117a 117a 119 120a 120a 120a 122a 122a 122a 122b 123a 124a 124a 124b 125b 126 127 127
200	4	2 28 10 1	3 2 2	18	1 3 2	1 16 6 1	111	24	34 13 7 3	2 28 9 	14 2 1	1		1	i i o 5 2		• 5		12		28 1 5 1 2	2 13 7	1	20		44		522 3 24 10 2 2		13 205 64 43 14 26	130 131 132 133 134 135 136 136A

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton	Lanark
136B. Others under this title. 137. Diseases of the prostate. 138. Diseases of the male geni-	5 493		5	12	13	1 27	4	i		2	10	14	21	2	·i	12	4		3		8		13	1 14	6
tal organs (not specified as venereal)	7						3																		
139. Diseases of the female genital organs (not specified as venereal)	69		2	2		3	4				2	1				1			1	2				1	
139A. Of the ovary, Fallopian tube and parametrium.	25		2			2	1												1	1				1	
139B. Of the uterus 139C. Of the breast	42						3			• • •						1	• • •			1					
CLASS XIDISEASES OF PREGNANCY, CHILDBURTH AND THE PUERPERAL STATE																									
Total	251		4	4	_4	21	13		_2	1	3	11	3	1		3	1		2	6		5	1	2	2
140. Abortion with septic conditions	26 12	l					1 1	2												1	1	1			
140B. Self-induced abortion 141. Abortion without mention of septic conditions (haemorrhage included)	14							1				1								1	1				
141A. Abortion																				1				- 1	
142. Ectopic gestation 142A. With septic conditions 142B. Without mention of sep-																								· · ·	
tic conditions																									
excluded)		٠.				2	2					1 3 1							1						
<ul><li>144B. Other haemorrhages</li><li>145. Puerperal septicaemia (not specified as due to</li></ul>	12						1					2					1		1						
abortion)	50		1		1	4						3								2					
and pyaemia	50 45		1		1	10						2				1				1			1		
147. Other toxaemias of preg-	9			1																					
148. Puerperal phlegmasia alba dolens, embolism or sud- den death (not specified as septic)	41			2		3	2		1					1		1				1		2			1
and thrombosis	13			1		1	1									1				1					1
148B. Embolism 148c. Sudden death 149. Other accidents of child-	18 10					1			i																
birth 149A. Caesarean operation 149B. Other surgical operations and instrumental deliv-	3 <b>5</b>		2		1	1			1		1	1													1
ery	6 14 9		2	1	1				i					: :					· · · i			1			i
149E. Others under this title		-						-	-					-				-							
CLASS X11.—DISEASES OF THE SKIN AND CELLULAR TISSUE																									
Total	76			2		5	4	2			1		1			3	1		2	1	2	1			1
<ul><li>151. Carbuncle</li><li>152. Cellulitis, acute abscess</li><li>153. Other diseases of the skin and annexa and of the cellular tissue</li></ul>						3	1	1			1		i			1	1		2		2	1	1	i	1

Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
4		io	· i	2 24	2	3	5	i	8	<u>'</u>	· · · · · · · · · · · · · · · · · · ·	2	6	6	1			9	1	۱.	··· <u>·</u> 2	3	17	3	6	16	4	10		107	136B 137
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		1					1	3		1	1	1		2	1		1					2	2	1		1	5	1	4	16	139
								1 1 1		i		i		2			1			2		1	1	1		1	4	i	3	3 12 1	139A 139B 139C
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			• •	1											1					1	1	1								3	142в
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		2				1	1							2		1		1	1		1						2		5		145
						1	1							2				1											5	7	145A
						1								2	. ,					2		2	3						2	6	146 147
																									;						
3										1	1					1							1	1		1			2		148 148A
1 2					• •	··i	• • •			• • •						1						1	1					i	1	1	148B 148C
						• • •				1		• • •																		8 2	149 149A
															1						1						···i	 1		3 2	149B 149C 149E
	-	1						1																1				1			1476
															4	4						2			2	2	1		18		
1	-		-				-4 1	1		1			1	• • •		1 - 1				1			1						3	5 7	151 152
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	!		1	1	1		1						!		1				'	2						1	!		11	-01	100

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora incl. Patricia	Kent	Lampton	Lanark
CLASS XIIIDISEASES OF THE BONES AND ORGANS OF LOCOMOTION																		The same of the sa							
Total	108		2	3	2°	6	1			3	3	3	4			2	1						2	1	1
154. Osteomyelitis	52 23 33			1 1	2	4				1 1	1	1 1 1	3			1	1						2	1	1
tion 156A. Of the joints (tuberculosis and rheumatism excepted 156B. Of other organs of locomotion	15 18			1		2				1	1	1													
Class XIV.—Congenital Malformations																									
Total	499	1	2	9	4	25	13	2	3		6	21	8	4	3	5	2	2	1	21	9	3	9	4	5
157. Congenital malformations (stillbirths excluded)	499	1	2	9	4	25	13	2	-		6	21	8	4	3	5	2	2	1	21	9	3	9	4	5
157A. Congenital hydrocephalus	54 123		1	1	2	3			1		2	5			1			2			1 3		1	2	
157c. Congenital malformations of the heart 157b. Monstrosities	191 9			6		6	5		1		1 1	8	2	2	2	1		1	1	9 3	5	3	5	2	2
157E. Others under this title	122	1		1	1		4	-			2	4		1		3				7				1	
Class XV.—Diseases of Early Infancy																									
Total	1625	1	35	18	18	90	60	6	10	12	17	62	<u> </u>	-	9	26	3	5	2	23	16	24	43	22	15
158. Congenital debility 159. Premature birth 160. Injury at birth 160a. With mention of caesar-	111 1010 289		2 23 5	1 11 1	5 8 2	62 17	6 35 10	 4 1	8	9	1 9 4			1		3 16 6	2 	1 4	1	2	1 10 3	15	23 9	15 3	2 7 4
ean operation  160B. Without mention of caesarean operation  161. Other diseases peculiar to	285	1	5	1	2	17	.10	1	1		4	18	6	1	1	6	1	1		2	3	5	9	3	4
early infancy (under 3 months).  161A. Atelectasis. 161B. Icterus of the new-born. 161c. Selerema and oedema 161D. Athrepsia	215 73 32 2 8		5	5 1 	3	7 1 2	2	: :	1 i				i		1 1					4 1 2		1		2 i	2
161E. Others, including lack of care 161F. No cause given, no doctor in attendance	95		1	3			3			2												1			2
CLASS XVI.—SENILITY																									
Total	475		4	7	5	27		4	5	2	14	3	17	2	3	13	3	1	2	7	6	2	8	7	12
162. Senility	475	1	4 3	7 2	5 2	27		4	5	2	14			2	3	13	3	1	2	7		2	8	7	12
162B. Without senile dementia (70 years and over)	1		1	5	3			4							3		3		2	4	3		4	4	8

Leeds	Lennox	Lincoln	Manitoulin	Mıddlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Pecl	Perth .	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoc	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	Vork	
		5 3 2	1										3 2 1	1	1	1 1		1		3 2 1	2 1 1 1	1	1 1	1	1 1	1 1	3 1 2 2	1	9 3 1 5 2 3	5 9 4	154 155 156 156A 156B
9 1 2 6		99 22 4		13 13 1 1 9	6 2 2 1	5 1 1 3	5 1 2 1 1	6 3 2 1 1	2	6 1 5	1	3 1 2	7 2 3	5 1 1 2 1 1	5	1	2	9 1 3 5	4	13 13 3 2 1 7	6 1 3 2	12 12 1 4 3 4	55 11 11 33	7 1 2	1 1	13 13 1 6 5 	8 1 2 4 1	111 11 1 2 3	36 5 9 8 1 13	34 45	157 157A 157B 157C 157D 157E
• • •	2 2	2 19 6 6 3 1 1	5 1  1	2 24 12 1 11 11 9 5 1	1	3 1 	2	3 1 1 	6	4 10 5 5 2 1	1 1		1 6 4  4 	3 18  6 4 	-4 17 16  16  1 1 3	2 2 2	 5 2 1	419 7 7 7 4 1 1 j	3 3	6	3 16 4  4  1	3 3 1 2 5	33033	28 4 1 3 3 1 1 1	1 7 3  3	1 22 8 1 7	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6 2 2	1 38 13  13 6 3 2 	204 41 1 40 40 18 5	
19	7 7 4	8 2	2 2	32 32 21	2		12	6 1		12	3	2 2 1	1	16	3	6 5	4	6	3	16 16 6	2 2 1	2 2 1	4 1		3	15 15 7	8 4	12		60 60 25	

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patricia	Kent	Lambton	Lanark
CLASS XVII.—VIOLENT OR ACCIDENTAL DEATHS																									
Total	2754	3	44	47	27	101	61	19	8	24	32	127	60	9	12	43	16	6	21	47	31	32	70	41	24
163-171. Suicides	360		7	6	4	10	10	1		4	4	16	11	2	1	1	1		2	4	5	7	3		5
163. Suicide by solid or liquid poisons or by absorption of corrosive substances. 164. Suicide by piosonous gas. 165. Suicide by hanging or strangulation. 166. Suicide by drowning 167. Suicide by frearms. 168. Suicide by cutting or piercing instruments. 169. Suicide by jumping from high places	71 41		1 4 1	1 1 2 1 1	1 1	6 1 1 1 1	3 2 2			1 1 2	1  1 1	2 3 4 4 1 1 1 1	1 1 2 1 3 1	1	· · · · · · · · · · · · · · · · · · ·	i	1		1	3	2		1		1 1 2 2
170. Suicide by crushing 171. Suicide by other means.	5 5						1						1								1		 i		
173-175. Homicides	44		1	1		3	2					3			1	1		-							
173. Homicide by firearms 174. Homicide by cutting or piercing instruments	11		1				2		-							1									
175. Homicide by other means				1		3						3			1						1				
176-198. Other violent deaths.	2350	3	36	40	23	88	49	18	8	20	28	108	49	7	10	41	15	6	19	43	25	25	67	41	19
176. Attack by venomous animals	1 4 23																								
179. Other acute accidental poisonings (except by gas) 180. Conflagration	29 61 107		1 1 4	1 1	1	1 4	1 3	1				6 7	1 1 2	1	1	1				1	i 1				1 1
182. Accidental mechanical suf- focation. 183. Accidental drowning. 184. Accidental injury by fire- arms.	62 287 38	1	12	5	1	14	4 9	1 1	1	3	··. 5	12	6		i	1 1 2		1 2	1	4	· · · · · · · · · · · · · · · · · · ·	1 7 2	17	1 3	2 1
185. Accidental injury by cut- ting or piercing instru- ments	16			1	1	2	1						1								1		1		
crushing or landslide 188. Injuries by animals 190. Excessive cold 191. Excessive heat 192. Lightning 193. Accidents due to electric	1523 32 12 34 5	• •	16	24	14 1 1	1 i	20	1	5	15 1 	19	68	28 1 1 2 1	4		30	10		16	26	16	15	37	35	12
currents 194. Other accidents 194A. Foreign body 194B. Others under this title 195. Violent deaths of which the nature (accident, suicide, homicide) is un-	69 6 63	2	2	1	i i	2 1 	1 2 2	1 1	1		1 1	2	1 1		i	2			1	5 2 3	2		3	i	
known 198. Capital punishment	23				1	1	3					4	2												
Class XVIII.—ILL-DEFINED CAUSES OF DEATH																									
Total	62		4	1	1	2	10				1	1		1	1					2	1				2
199. Sudden death	31 31		4	1			10							1						1			3		2

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Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	Vork	
49	6	52	7	92		43	49	26	44	40		23	40	38	9	17		23		86	34	91	81	-		58	65		134	532	
<del></del>	2	9				2			7	5	2	7				_2		3	3	7	4	4	12	4	1	11	11	5	14	105	163– 171
2 1 1 1 1 1	2	3 1 3 2		3 4 1	1 	i	3	2	1 1 2 2	3 1	1 	3 3	1  1	 1 1 1		2	.:  1	1  1 1	1 2	1 4  1	1 2	1	6 2 2	2 1 1	i	2 2 1 1	2 6 3	1	4 1 1 1	25 13 6 12	163 164 165 166 167
5		1		2		i 	1		1 			 1 1	1	1 							1	3	2	··· 	1	. i	1	1 1	3  2 -2	7	169 170 171 173- 175 173
35	4	42	7	82	19	41	44	24	37	35	22	15	 1 36	33	7	15	35	20	1	79	1 29	84	67	 2 52	20	47	53	39	118	6	174 175 186- 198
	· i			2					1						1					1		í		• • •					1	1	176 177 178
···i	1		1		2	1		1	1		· .						18	1 1		2		1	4	1 2		<u>i</u>	· · · i			6 5	179 180
1		1		6	1		2	3	1	6			1	3			2			3	3	3	1	3		1	2	1	3		181 182
3		7	4	6	6	13	3		5	3 2	5 2		1	5		1	2 2	1		2 9 6	2	21	12	8	3	2	13	2	5 7	25	183 184
26						3							30								1		2		1 12		30	31	1 90		185 186
1	2	31	· · · · · · · · · · · · · · · · · · ·	63	8	16 	2	11	27	20		13	1	23	5 1 	13	7 2 1	15		42 3 2 1	13	1	1	1	12	1		2	3	i	188 190 191 192
1 2 					 1  1	···· 2		2	1 1	 1 	1 1 		1 1 						1 1	3 4 4		5	2 1 1	1 1	1 1 	3			1 4 4		193 194 194 <sub>A</sub> 194 <sub>B</sub>
•••									1															i			5		1		195 198
• • •		1							1	2	1	1				1	1			2	3	4	2			1	2	1	1	7	
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SPECIAL CLASSES OF

(Included also under the numbers

Counties of Ontario (including cities, towns

IN THE PROVINCE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora, incl. Patrica	Kent	Lampton	Lanark
A. Accidents in mines and quarries B. Accidents caused by machines C. Railway accidents D. Street-car accidents E. Automobile and motorcycle accidents. F. Other land transportation. G. Water transportation. H. Air transportation.	544 466 677 12 6777 39 85		5		1  2 2	2 2 1 25 	14	7 1	1	9	9	 1 1 45  4	11 2 2	2	1	15 2	5	1	 1 1  8  1	 5 	3  4 2	2 1 1 8 2 1	25 25 24	11 11	1 1 1 1

#### ACCIDENTAL DEATHS

of the International List above) and villages of 5,000 and over), 1937 Ontario, 1938

Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Temiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	
1	2	1 2 1 15 1 3		29 3 1 1	1	2 1  11 3 7	16 2	5	11 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5	5 1		 2  8	1	4 2	 4	 1 3  5 1		18 1 2 1	1 6	19 2 5  11	4 2 10 2 14 2 6	11 1  15 1 3		19	2 3  15 	 1  8 1 1	2 4 1 45 1 4 1	1 7 5 6 142 3 2	A B C D E F G H

## TABLE 43—DEATHS FROM CERTAIN CAUSES IN TOWNS AND

	Typhoid and paratyphoid fever			-5			P s					-				
	771			ä			and					he para				
	and		Scarlet fever	Whooping-cough	.e		Poliomyelitis and polioencephalitis (acute)	Epidemic cerebrospinal meningitis		Tuberculosis		Diseases of the thyroid and parathyroid glands	on	ia		_ ~
	Typhoid and	GS.	t fe	ping	Diphtheria	Influenza	nye nce	Epidemic cerebrospir meningitis	ns	cul	.8	d a	Bronchitis	Pneumonia	sy	era
	pho	Measles	arle	1000	pht	Aue	Poliom polioen acute)	oide cbr	Tetanus	ber	Syphilis	sea yroi	onc	eur	Pleurisy	erp
	Ty	M	S	3	Ū	ii.	Po (ac	E E	T	Tr	Sy	고급급	Br	H.	P	Puerperal septicaemia
Total towns and villages of 1,000 population and under 5,000	11	3	3	5	!	77	2		1	83	13	18	10	243	6	6
Acton		!												1		
Alexandria Alliston									: :					4	1	
Almonte														0		
Amnerstourg										1				2		
Arnprior													2	1		
Aurora										1		1		2		
Barry's Bay																
Beamsville														2		
Blind River Bowmanville						2 3				1	1	1		5 3		
Bracebridge				::::	: :					4				3		
Brighton														2		
Burlington	1				• •											
Campbellford	1									1				1		
Capreol						[			: :			· · · · · · i		3	::	
Carleton Place Chesley										2			1	2		
Chesterville											1			1 3		
Chippawa														2 2		
Clinton		1				1				1			1	2		
Cochrane										7	2	i		- 6		
Cochrane Coniston Copper Cliff Delhi				1										1		
Delhi														4		
Deseronto																
Dryden						i	1					1		5 2	1	
Dundas					٠.,					1						
Durham.						3				1			1	2		
Eganville Elmira.										1				2		
Elora						1								1	1	
Essex Exeter						1								· · · · · · · · · · · · · · · · · · ·		
						i								2		
Forest Gananoque												*****	1	1 2		
Georgetown				1								i				
Goderich						3				1				5		
Grimsby														2		
Hagersville	2					1 2				20		* * • • • •		1 6		
Hanover	2			1					: :					1		
HarristonHavelock										1				1		
Hespeler									: :			i		1		
Humberstone						1								1 4		
														1		
Iroquois Iroquois Falls						1				1		• • • • • • •		3		
Keewatin	1									2				2		
Kemptville														- 1		
Kingsville			1	1					::					2		
Lakefield Listowel												i				
Little Current		1								1				1		
Long Branch.														1		
Lucknow									• • •		• • • •		1			

# VILLAGES OF 1,000 POPULATION AND UNDER 5,000—ONTARIO, 1938

	Typhoid and paratyphoid fever	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Poliomyelitis and polioencephalitis (acute)	Epidemic cerebrospinal meningitis	Tetanus	Tuberculosis	Syphilis	Diseases of the thyroid and parathyroid glands	Bronchitis	Pneumonia	Pleurisy	Puerperal septicaemia
Madoc	1					2								2		
Markham										4				4		
Meaford						3								2		
Merritton						1								1		
Milton														1		
Mitchell																
Morrisburg										٠;				1		
Mount Forest										1		1		1		
New Hamburg														i		
New Hamburg. New Liskeard						1				٠.						
Newmarket						3				1	1			3		1
Norwich						1							٠.	1		
Oakville													1::	1	1	
					٠.	2						1		3	1	
Palmerston					٠.	1				٠.,				3		
Palmerston Paris Parry Sound Penetanguishene Perth						7							1	6		
Penetanguishene	;					2				5				4		
Perth	;					2				1				6		
retrona	1				٠.					1				11		
Picton . Point Edward											· · · · · i		1			
Port Credit														1		
						1										
						2				1				· · · · i		
Port Hope						3				i		1		12		
Port Perry										2				2		
Prescott						1				1				1		
Richmond Hill	1				٠.									3		
Rainy River Richmond Hill Ridgetown																
Rockcliffe Park										1				1		
Rockland						;										1
St. Mary's						1				1				3	1	1
Shelburne						3					· · · · · · i					
Sioux Lookout										1	1			3		
Southampton										1		,				
Stayner										1		1				
Strathroy	i											1		14		
Strathroy				1		1			1	1				2	1	
Tavistock		i								1				2		
Tecumseh		1								• •				2		
Tilbury														1		
Thisonourg	4					4				2		1		3		
Tweed					٠.									2		
Uxbridge Vankleek Hill						1						2		2		
Vankleek Hill Victoria Harbour Walkerton						1										
Walkerton						1								2		1
wanaceourg										1			٠.	1		
Waterford														1		
Winchester						1				1						
Wingham														1		1







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