

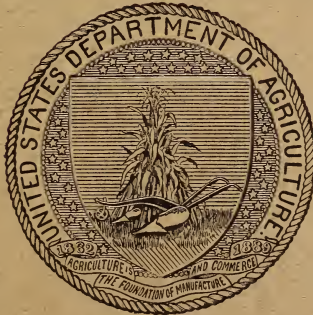
## U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS—BULLETIN NO. 155.

A. C. TRUE, Director.

AGRICULTURAL INSTRUCTION FOR ADULTS  
IN THE BRITISH EMPIRE.

BY

JOHN HAMILTON,  
FARMERS' INSTITUTE SPECIALIST.WASHINGTON:  
GOVERNMENT PRINTING OFFICE.

1905.

## LIST OF PUBLICATIONS OF THE OFFICE OF EXPERIMENT STATIONS ON FARMERS' INSTITUTES.

- Bulletin No. 79. Farmers' Institutes: History and Status in the United States and Canada. By L. H. Bailey. Pp. 34.
- Bulletin No. 110. Proceedings of the Sixth Annual Meeting of the American Association of Farmers' Institute Workers, held at Buffalo, N. Y., September 18 and 19, 1901. Edited by A. C. True, D. J. Crosby, and G. C. Creelman. Pp. 55.
- Bulletin No. 120. Proceedings of the Seventh Annual Meeting of the American Association of Farmers' Institute Workers, held at Washington, D. C., June 24-26, 1902. Edited by A. C. True and D. J. Crosby for the Office of Experiment Stations and G. C. Creelman for the association. Pp. 119.
- Bulletin No. 135. Legislation Relating to Farmers' Institutes in the United States and the Province of Ontario, Canada. By John Hamilton, farmers' institute specialist. Pp. 53.
- Bulletin No. 138. Proceedings of the Eighth Annual Meeting of the American Association of Farmers' Institute Workers, held at Toronto, Ontario, June 23-26, 1903. Edited by W. H. Beal for the Office of Experiment Stations and G. C. Creelman for the association. Pp. 119.
- Bulletin No. 154. Proceedings of the Ninth Annual Meeting of the American Association of Farmers' Institute Workers, held at St. Louis, Mo., October 18-20, 1904. Edited by W. H. Beal and John Hamilton for the Office of Experiment Stations and G. C. Creelman for the association. Pp. 91.
- Circular No. 51. List of State Directors of Farmers' Institutes and Farmers' Institute Lecturers of the United States. By John Hamilton. Pp. 30.
- Farmers' Institutes in the United States. By D. J. Crosby. Reprint from Annual Report of the Office of Experiment Stations for the year ended June 30, 1902. Pp. 25.
- Farmers' Institutes in the United States. By John Hamilton. Reprint from Annual Report of the Office of Experiment Stations for the year ended June 30, 1903. Pp. 57.
- Farmers' Institutes in the United States. By John Hamilton. Reprint from the Annual Report of the Office of Experiment Stations for the year ended June 30, 1904. Pp. 63.
- Farmers' Institutes. By John Hamilton. Reprint from Yearbook, Department of Agriculture, 1903. Pp. 149-158, 519, 580, 581.
- Farmers' Institutes in the United States. By John Hamilton. Prepared for distribution at the Louisiana Purchase Exposition. Pp. 20.
- Farmers' Institute Lecture No. 1. Syllabus of Illustrated Lecture on the Care of Milk. By R. A. Pearson. Pp. 12.
- Farmers' Institute Lecture No. 2. Syllabus of Illustrated Lecture on Potato Diseases and Their Treatment. By F. C. Stewart and H. J. Eustace. Pp. 30.
- Farmers' Institute Lecture No. 3. Syllabus of Illustrated Lecture on Acid Soils. By H. J. Wheeler. Pp. 28.
- Farmers' Institute Lecture No. 4. Syllabus of Illustrated Lecture on Profitable Cattle Feeding. By F. B. Mumford. Pp. 21.

## U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS—BULLETIN NO. 155.

A. C. TRUE, Director.  

---

AGRICULTURAL INSTRUCTION FOR ADULTS  
IN THE BRITISH EMPIRE.

BY

JOHN HAMILTON,  
FARMERS' INSTITUTE SPECIALIST.WASHINGTON:  
GOVERNMENT PRINTING OFFICE.

1905.

## OFFICE OF EXPERIMENT STATIONS.

A. C. TRUE, Ph. D.—*Director.*

E. W. ALLEN, Ph. D.—*Assistant Director and Editor of Experiment Station Record.*

W. H. BEAL—*Chief of Editorial Division.*

WALTER H. EVANS, Ph. D.—*Chief of Division of Insular Stations.*

JOHN HAMILTON—*Farmers' Institute Specialist.*

C. E. JOHNSTON—*Chief Clerk.*

### EDITORIAL DEPARTMENTS.

E. W. ALLEN, Ph. D., and H. W. LAWSON—*Chemistry, Dairy Farming, and Dairying.*

W. H. BEAL—*Agricultural Physics and Engineering.*

WALTER H. EVANS, Ph. D.—*Botany and Diseases of Plants.*

C. F. LANGWORTHY, Ph. D.—*Foods and Animal Production.*

J. I. SCHULTE—*Field Crops.*

E. V. WILCOX, Ph. D.—*Entomology and Veterinary Science.*

C. B. SMITH—*Horticulture.*

D. J. CROSBY—*Agricultural Institutions.*



## LETTER OF TRANSMITTAL.

---

U. S. DEPARTMENT OF AGRICULTURE,  
OFFICE OF EXPERIMENT STATIONS,  
*Washington, D. C., May 10, 1905.*

SIR: The act of Congress making provision for the appointment of a farmers' institute specialist in the Department of Agriculture defines his duties to be "to investigate and report upon the organization and progress of farmers' institutes in the several States and Territories, and upon similar organizations in foreign countries, with special suggestions of plans and methods for making such organizations more effective for the dissemination of the results of the work of the Department of Agriculture and the experiment stations, and of improved methods of agricultural practice."

The condition of the farmers' institute work in the States and Territories of this country has been to some extent ascertained, and its principal features have been presented in the several reports of the institute specialist to the Director of the Office of Experiment Stations and in circulars and bulletins of information issued by the Office. Suggestions have also been offered, accompanied with plans and methods for rendering the institutes more effective for the dissemination of the results of the work of the Department of Agriculture and the experiment stations.

Compliance with the remaining specification of duty enjoined by the act of Congress, namely, "to investigate and report upon the organization and progress of similar institutions in foreign countries," has been delayed owing to the difficulties attending the conducting of foreign correspondence and to the pressure of other duties connected with the work of the institute specialist.

The accompanying manuscript, entitled "Agricultural Instruction for Adults in the British Empire," gives the result of such investigations as the farmers' institute specialist of this Office has been able to make respecting the methods that have been adopted by the various governments included in the British Empire in the dissemination of agricultural information among their rural populations.

In some instances it has seemed necessary, because of the relation that unites this form of instruction with the general system of public education adopted by the respective governments, to discuss with some particularity the higher institutions of learning, at least so far as their work is associated with that of agricultural instruction of adult farmers.

The manuscript is recommended for publication as Bulletin 155 of this Office.

Respectfully,

A. C. TRUE,  
*Director.*

HON. JAMES WILSON,  
*Secretary of Agriculture.*

## CONTENTS.

---

	Page.
Introduction.....	7
Australia.....	11
New South Wales.....	12
Queensland.....	12
South Australia.....	13
Tasmania.....	15
Victoria.....	18
Western Australia.....	23
Canada.....	23
British Columbia.....	24
Manitoba.....	33
New Brunswick.....	35
Northwest Territories.....	48
Ontario.....	50
Quebec.....	61
Great Britain.....	65
Ireland.....	84



## INTRODUCTION.

---

The position that agriculture occupies in the British Empire is one of first importance, and for many years the Government has given special attention to its development. The unusual interest manifested is no doubt partly due to the fact that those who control British legislation are, for the most part, landed proprietors, and are therefore personally injured by the decline of this industry and profited by its proper advancement. Aside from this motive of self-interest, there is also the great national problem of feeding the multitude of working men who are engaged in manufacturing occupations throughout the British Isles.

Special attention by the Government to this industry has been necessary also by reason of the diverse character of the British possessions. Located as they are in every continent, with every variety of soil, climate, and production, with densely populated districts, as England and Ireland, and those sparsely settled just emerging from primitive conditions, as portions of Australia and the Northwest Territories of Canada, the British Government has been compelled to carefully study the entire field of agricultural production, and devise means whereby the interests of this great industry can best be advanced in all of the countries under her control, and endeavor to put in operation such agencies as would most effectually assist in increasing agricultural production and in economizing its cost.

Her problems have been to discover how in her older settled districts the fertility of her lands may be increased while producing abundant crops, and in her newer provinces how primitive soils may be economically brought to tillage conditions and their productive capacity not only be maintained but gradually increased.

The conclusion reached years ago by Great Britain's wisest statesmen was that the only solution of the question of improving agriculture sufficiently to enable those who pursue it as a calling to maintain themselves in comfort for all time to come, and at the same time to produce a surplus sufficient for the use of those engaged in other occupations, lies in the proper education of those who conduct its operations.

Accordingly the Government established schools and colleges of agriculture at home many years ago, and has since encouraged their erection in all of her dependencies until now agricultural education



in some form or other is given in almost every country under British rule. State departments of agriculture have been established and equipped with scientific apparatus, and officered by expert officials who devote all of their time to the interests of agriculture. Universities, colleges, normal schools, academies, secondary schools, common schools, and numerous special classes are everywhere in operation. In almost all of them the giving of instruction in agriculture is made obligatory.

Although the purpose of this publication is to present the methods in use in providing for the education in agriculture of the adult rural population through the agency of itinerant teachers, it has been found that this instruction work is in many instances so combined with the system of general education that prevails as to be practically inseparable from it. In some of the countries, for example, the institutions for higher education engage in the dual service of instructing the youth in agriculture in fixed schools, as universities, colleges, and high schools, and also in the work of carrying information to the adult agricultural population by means of traveling schools and itinerant teachers who visit localities, hold institute meetings, and instruct temporary classes in special farming subjects.

Where this method is adopted as in England, it has been necessary, in order to its proper understanding, to give with considerable particularity the details of the entire educational system, and also the connection that exists between the form of instruction conducted by the universities and colleges, and that organized and operated by the district governments.

The giving of instruction in agriculture to adults by itinerant methods is no longer an experiment in foreign countries, and work in this direction is regarded by educators and the public generally as being equally important with that performed in the class rooms of the colleges and higher technical institutions. It has become a recognized part of their educational system, as necessary as the college, the high school, or the university, and the character and qualifications of the instructors engaged in this form of education are in most of the countries fully equal to those of the professors in the old-established institutions.

The high estimation in which peripatetic instruction is held abroad is shown by the following memoranda on this subject by the Right Hon. Horace Plunkett, vice-president of the department of agriculture and technical instruction for Ireland, who was a member of the recess committee of Parliament appointed to visit continental countries and make investigations and report upon the various systems of agricultural education in use in these countries. He says:

If there is one feature of agricultural education which, having been tested to the utmost in every country of the world, has stood that test better than any

other, it is the itinerant instructor. In our searches, at the time of the recess committee, this was a feature which in every country the demonstrator and educationist laid stress upon as showing, invariably, the most fruitful results, and all of the experience of the department since has confirmed us in the faith, which experience both in England, Scotland, the Continent, and in Canada and America had implanted in our minds.

The methods in use in the British Empire for disseminating agricultural information among the rural population are worthy of careful study by the farmers' institute workers and other agricultural teachers of the United States. They are the result of many years of experiment in agricultural education by the most capable and practical agriculturists and scientific experts of the Old World. Out of this long experience and careful study there have been evolved the present forms of agricultural education that have stood the test of years of actual operation, and have had their value demonstrated by the results that have been accomplished in the improvement of agriculture wherever they have been fairly tried. They have supplemented the elementary and primitive forms by which farmers undertook to instruct themselves through neighborhood meetings for conference and exchange of views, substituting for these disputatious methods, which too often left the audience in doubt and the contestants unconvinced, local and itinerant schools of instruction, taught by capable specialists of acknowledged attainment and experience, whose statements are substantiated by results secured on experiment farms and demonstration fields.

In preparing this bulletin for the use of farmers' institute workers of the United States, the value of the methods adopted by the several governments in providing for agricultural education and for distributing agricultural information, as compared with those in use in this country, is so much a matter of individual judgment that no discussion of that feature has been attempted, it being thought best to simply collect the facts and leave the determination of their value to the individual student who may wish to perfect the methods in use in his own State or locality.

A comparison of the farmers' institute systems that prevail throughout the United States with the methods of instruction found to be most satisfactory in the countries comprising the British Empire will no doubt convince the student that there is room for improvement in our American methods, and perhaps will induce some of those in charge of the institute work in the United States to adopt so much of that which has been successful abroad as our conditions and circumstances seem to justify.

JOHN HAMILTON.



# AGRICULTURAL INSTRUCTION FOR ADULTS IN THE BRITISH EMPIRE.

## AUSTRALIA.

In order to properly understand and appreciate the value of the methods used in Australia in reaching the rural population with suitable information adapted to the diverse agricultural conditions that exist throughout the Commonwealth, knowledge of the variety of crops grown, the extent of the population, and the vast area of territory to be covered is necessary.

The six States that compose the Commonwealth had in 1901 a population of 3,773,370 and a total area of 2,973,076 square miles. This is about equal in extent to that portion of the United States which lies east of the Rocky Mountains. The sparse settlement of the country is better realized by comparing the areas of the several States with that of Ohio, which contains 41,060 square miles and has a population of 4,157,545:

State:	Area in square miles.
New South Wales.....	310, 700
Queensland .....	668, 497
Victoria .....	87, 884
Western Australia.....	975, 920
South Australia.....	903, 690
Tasmania.....	26, 385
Total.....	2, 973, 076

The eastern section has an abundance, and in some localities a superabundance, of rainfall, but the interior and western parts are very deficient in this respect, the annual rainfall varying in these sections from 20 inches to almost nothing. The agriculture of the country, therefore, necessarily varies according to the locality. The east, with its mild and moist climate, the annual rainfall averaging from 50 to 80 inches, is devoted largely to the production of cattle and sheep; the south and west to the growing of grain.

Each State has a department of agriculture engaged in endeavoring to solve the particular agricultural problems that are peculiar to it. Among these is that of disseminating information among farming

people of a kind that will aid them in overcoming the obstacles that confront them in their agricultural operations. In undertaking this, various methods have been adopted by the several States, the manifest intention being to adopt such methods as are best adapted to the peculiar conditions that prevail as to climate, crops, and population.

The following table giving the acreage under cultivation in each of the States and the percentage of each crop grown exhibits the diversity of condition that prevails, and is of interest as showing the variety of products that can be grown in this island continent :

*Acreage and percentage of each crop grown in Australia.*

	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Cultivated acreage .....	1, 426, 166	2, 165, 693	52, 527	1, 821, 137	84, 516	64, 328
Wheat.....per cent..	58.4	68.6	12.5	81.3	45.4	28.6
Corn.....do.....	8.8	.3	26.2	-----	.1	.1
Barley.....do.....	.3	2.5	1.8	.7	2.1	3.4
Oats.....do.....	1.2	8.6	.2	.9	2.1	20.0
Potatoes.....do.....	1.4	1.8	2.5	.4	1.5	12.0
Hay.....do.....	22.7	14.3	14.0	13.9	42.3	18.8
Vines.....do.....	.4	.9	.5	.9	1.7	-----
Sugar cane.....do.....	.9	-----	26.3	-----	-----	-----
Other crops.....do.....	5.9	3.0	16.0	1.9	4.8	17.1
Total.....do.....	100.0	100.0	100.0	100.0	100.0	100.0

There is no national system of farmers' institutes in Australia. The organization and control of the work is altogether committed to the agricultural departments of the several States. These departments have not united upon a single method, but each has formulated a separate and distinct system.

In order, therefore, that the various methods in use may be clearly presented, it becomes necessary to take them separately and discuss them under the names of the States with which each is identified.

#### NEW SOUTH WALES.

Nothing corresponding to the farmers' institute system of the United States is in operation in New South Wales.

#### QUEENSLAND.

Queensland has no system of instruction for farmers corresponding to that of the farmers' institutes of the United States. There is a State department of agriculture and there are local agricultural societies, but the function of the local societies is principally confined to the holding of an annual show. The State department occasionally sends out one of its members to address an agricultural meeting, but this work of instruction is not organized so as to be a part of the educational system. The department, however, is equipped with a corps of specialists, who give advice to farmers and visit various



sections to study the agricultural conditions that exist, with a view to suggesting methods of improvement. This force consists of the principal of the Queensland Agricultural College, the agricultural chemist, the botanist, entomologist, an instructor and assistant instructor in fruit culture, a viticulturist, tobacco expert, instructor in coffee culture, a quarantine inspector, the director of the botanical gardens, the manager of the State nursery at Kamerunga, the manager of the State farm at Westbrook, manager of the State farm at Hermitage, manager of the State farm at Biggenden, manager of the State farm at Gindie, and the chief inspector of stock.

The honorable secretary of agriculture for Queensland, in his report for the year 1901, in commenting upon the lack of organization for agricultural improvement in that State, makes the following statement:

The two causes assigned for the satisfactory condition of agriculture in the more progressive States of Europe are the extent to which cooperation and combination prevail among the farmers and the extent to which the principles of scientific tillage are diffused among them.

Queensland has many agricultural societies, but there seems to be no machinery by which they may be brought to combine readily for any purpose; no central body empowered to speak in behalf of all or even a majority of the societies has yet been called into existence.

It is to be added that, beyond holding shows and bestowing prizes for exhibits not exclusively agricultural, these societies have done little or nothing to reproduce here in any fullness the continental model.

### **SOUTH AUSTRALIA.**

In South Australia the work of disseminating agricultural information among farmers is in the hands of an agricultural bureau. This bureau is a subordinate division in the department of agriculture and consists of a board of twelve members, who hold office by appointment and serve without salary. Each member of this central bureau or board is a specialist distinguished for service in some important line of agricultural industry.

The bureau upon application of at least six residents of a district is authorized to appoint subordinate branches, distributing them throughout the country at points not nearer than 12 miles from any established branch. The membership of a branch is limited to 15, but there can be an unlimited number of honorary members. The difference between the two is that the honorary members are not eligible to hold office, to be appointed as official delegates to the annual congress of branches, or to receive free the *Monthly Journal* of the department.

The members of the branches are appointed by the central bureau, known as the "council of agriculture." Beyond this, and in being

debarred from discussing purely political questions, they are self-governing.

The branches usually meet monthly, except during the harvesting seasons. At these meetings they discuss papers prepared by their own members or criticise papers by other branches or reports of the departmental work and experiments. No special officer or officers of the state department are appointed to visit these meetings, but whenever possible the different experts attached to the department do what they can in this direction.

In addition to the ordinary meetings, neighboring branches in various districts combine to hold a conference to which the department always endeavors to send one or more representatives. The branches also arrange for field trials of implements, shows of produce and stock, pruning demonstrations, meetings at homesteads, factories, etc., where information of value is likely to be obtained.

Each year in the spring a general congress of the bureaus is held in Adelaide, and the department provides free railway transportation for two representatives from each branch. This gathering extends, as a rule, over three days, and occurs on the occasion of the spring show of live stock and implements, held under the auspices of the Royal Agricultural and Horticultural Society.

Generally the bureau may be termed a cooperative organization for the dissemination of information through the interchange of experiences of the members. The branches find their own meeting rooms, light, etc., while the department finds stationery and postage, and provides such agricultural literature as is available and also arranges at different times for experiments with manures, seeds, spraying of trees, etc.

No member of the bureau receives pay in any shape or form from the department, and the members of the subordinate branches likewise perform such service as the organization requires without compensation.

The bureau has been in existence since 1888. In 1899 there were 1,400 active members connected with the various branches, and in 1901 106 branches were reported.

The twelfth annual conference, held in 1900, was attended by 215 representatives of the branches. The secretaries furnish reports of the monthly meetings to the department. In 1901 806 such reports were made to the central bureau for that year. These are condensed and published in a monthly journal called the *Journal of Agriculture and Industry*, a copy of which is sent free each month to every member of each branch. The membership are thus kept in touch with what is being done by the various branches elsewhere throughout the State.

The State appropriates for the use of the bureau annually about \$4,000, which is used in the publication of the official journal, for postage expenses incurred by the several branches, and for other administrative items. About \$2,500 additional is also appropriated for salaries of the secretary, clerks, and other employees engaged by the bureau in administering its work.

A feature of the system that is distinctive is the gathering and publishing of the papers and addresses presented before the various branches in a monthly journal, which is distributed to the active membership in all of the branches throughout the State. By this means there is kept up a degree of interest and mutual helpfulness that has been found to be of great service.

The practice of assembling representatives from all of the branches in a general conference each year is also worthy of careful consideration. Perhaps the most radical departure from the methods usually adopted in the forming of local organizations is in the "appointing" of the active membership by the central bureau and limiting the number to 15 in any one branch. By this means those responsible for the work of the branches are selected from among the most successful and intelligent farmers. This insures efficient administration. At the same time the system of honorary membership permits the general farming public also to have the advantage of the educational work of the association.

#### TASMANIA.

The methods employed for the improvement of agriculture in Tasmania are much the same as those in use in South Australia. Each has a central administrative board and a system of branch boards extending throughout the rural districts with limited membership and holding monthly meetings for the discussion of practical matters relating to agriculture. The organization was created by act of Parliament in 1891 and is officially known as the council of agriculture. It consists of eleven members elected by the local branches for a period of two years. The president of the council is chosen by the members from among their number. The secretary is appointed by the governor on the recommendation of the council and must not be a member of that body. The council is required to meet at least once every two months, and the proceedings of these meetings are published in the official journal of the council.

The act provides that the powers and duties of the council shall be—

(1) To appoint boards of agriculture, nominated by five persons in any district in which no board of agriculture exists, and to maintain correspondence and cooperation with all boards of agriculture with a view to advance the interests of agriculture generally.

(2) To collect and publish, by means of the press and by aid of the boards of agriculture, information of every kind calculated to prove beneficial to colonists



engaged in agricultural, horticultural, pastoral, and other pursuits connected with the culture of the soil.

(3) To employ from time to time, with the approval of the governor in council, persons competent to give instruction of a practical character in matters appertaining to agricultural or horticultural science, and to arrange for occasional lectures on subjects of interest to cultivators of the soil.

(4) To furnish, under restrictions and regulations authorized by the council and approved by the minister, analyses of soils and manures free of cost to agriculturists.

(5) To supply, under the direction of an expert, small parcels of seeds, plants, trees, and manures for experimental purposes to such persons as are willing to undertake the conduct of experiments in accordance with regulations promulgated by the council.

(6) To arrange for holding occasionally an agricultural congress, at which the council and the boards of agriculture may be represented, for the purpose of advancing generally the objects of the council.

(7) To furnish annually to the minister, for presentation to Parliament, a general report of the proceedings of the council, together with an audited account of the receipts and expenditures for the year.

In carrying out the provisions of the above act the members of the council direct the expenditures voted by Parliament in aid of agriculture, and also pass upon the qualifications of persons recommended for membership in the various branches, receive reports of the proceedings of the meetings of the branch boards, and publish abstracts of these reports in the *Monthly Agricultural Gazette*, which it edits and distributes free to the members of the various branches. The board likewise has prepared from time to time and publishes circulars of information and pamphlets upon agricultural subjects, which it supplies to the membership free of cost.

The council has now in its employ four persons whom it sends out to lecture before the branch meetings. One gives instruction in dairy husbandry, one in poultry rearing, one is an entomological expert, and the fourth lectures upon agricultural chemistry. These lecturers are employed by the year and are paid by the State from appropriations made for that purpose.

In addition to the work of lecturing before the branch boards these experts are sent to give advice to individual farmers whenever requests are made which the council deems worthy of special attention. When visits of this character are made notice is usually published in advance throughout the neighborhoods where the visits occur, and farmers from the surrounding country are invited to be present and witness whatever takes place. For some years a traveling dairy school has been in operation, equipped and sent out under the direction of the council. The conditions upon which a course of instruction in dairying is granted are the following: The committee applying—

must provide transportation of the plant from the nearest railroad station; must furnish free a building at least 20 by 15 feet in which to work the sepa-

rator; also a daily supply of 50 gallons of milk; a laborer to assist in the rough work, and a sufficiency of clean water for washing the butter and cleaning up.

The society must nominate 10 pupils, either male or female, for a course of special instruction. The dairy will be in operation ten days at each place in the district, and will operate at all places required in that district before leaving for another. The product of the milk will be returned to the society committee.

### BRANCH BOARDS.

The branch boards are organized and governed, as has been stated, in much the same way as those of South Australia, except that in this State the membership is not limited, but the recommendation of the council to the local board is that "twelve is a sufficient number for administrative purposes." Monthly meetings are required and regular reports to the central council. Occasional conferences, composed of a number of boards in neighboring districts are frequently held, and a general convention of delegates from all of the boards assembles annually at the capital.

### HOW TO FORM A BRANCH BOARD.

The following method of procedure has been recommended by the council for the formation of a local branch board:

An active, progressive, and practical farmer resident in any district at a reasonable distance from any existing branch board, who may desire to assist himself and his brother farmers, should communicate with four or five other residents of the neighborhood and arrange for holding a meeting, preferably at his own house.

When met together they can select any number of farmers within an area not too large to act with them. The names and addresses of the gentlemen chosen should be sent to the secretary of the central council for submission to the council for approval. After approval the secretary will send to the secretary of the branch board a minute book and the necessary stationery and instructions for the working of the branch. The board must provide a place of meeting at its own cost. When once started a sufficient number of copies of the Journal of the Council of Agriculture and such other publications as may be issued by the council will be forwarded for free distribution among the members of the branch, and all seeds, plants, etc., distributed by the council will be sent through the branch and every facility offered for carrying on its work.

The powers and duties of the branch boards, as prescribed by the central council, are as follows:

- (1) Record names and addresses of persons to whom seeds, cuttings, plants, etc., have been or may be supplied for experiment.
- (2) Ascertain if any reports are due from persons to whom plants, cuttings, seeds, etc., have been distributed.
- (3) Ascertain if any strange or alien plants or fungi, insects, or other pests exist in the district; if unknown, procure specimens and forward to the council for identification, if possible.



- (4) Record any means adopted for eradicating pests and results.
- (5) Record observations upon all kinds of crops cultivated in the district, weather, rainfall during the month, character of soil (where new kinds of crops are cultivated), progress, and prospects.
- (6) Inquire whether any diseases or ailments exist among live stock in the district.
- (7) Report all observations to the council, in order that they may be included in the periodical reports.
- (8) Consider any suggestions calculated to advance the prosperity of the district.
- (9) Send as soon as possible report of all practical conclusions, digest of discussions, papers read, etc., to the secretary of the council for communication by him to the press, and for publication in the Journal of the Council.

The branches from time to time recommend to the council matters of importance and of interest to agriculture for its consideration. If the council approves the recommendation, it transmits the same to the government for legislative action.

In 1903 there were 48 branch bodies in the State, all holding monthly meetings and sending in reports regularly to the central council for publication.

By means of these boards the council of agriculture is able to reach the leading farmers of the State with information that is of value and to secure their cooperation in its efforts to procure legislative assistance for the advancement of the agricultural interests of the State. The fact that the membership of the several boards is composed of the most influential and intelligent farmers in each community adds very greatly to the strength of any recommendation that may come up to the council for its approval, and the frequent reports that are made of the condition of agriculture and its needs in the various districts, published and distributed to all of the branches, provides an educative means that might well be adopted by every country that is endeavoring to assist agricultural people.

#### VICTORIA.

Short courses of instruction in agriculture for farmers and farmers sons were inaugurated in 1902 by the director of agriculture for Victoria. The classes were to be held during the winter months, as being less likely to then interfere with farming work than at any other season. In organizing the classes, use was made of existing agricultural societies in the several districts, whose cooperation was solicited by inviting them to secure the names of farmers and farmers' sons or persons working on farms who were desirous of having short courses established in their district.

The first class was organized at Tatura, August 26, 1902. The course extended through two weeks. Three classes only were held during that year.

In 1903 there were six classes and the courses were extended to four months. The average attendance of students at the several points was 42, 25, 19, 47, 35, and 20. These averages do not include the numerous visitors who were present at most of the meetings.

In 1904 classes were held in seven centers, each class continuing four weeks, with an average daily attendance at each center of 55, 38, 33, 26, 65, 35, and 52. Eighteen lecturers were employed in giving instruction, each representing some specialty in agriculture. The meetings were held during the afternoon hours, with an occasional lantern lecture in the evening.

At the completion of each course there is an examination, any pupil being at liberty, however, to take it or not, as he prefers. If he elects to take it, and passes, a certificate of the fact that he has passed is given to him, and he is then in position to contest for certain prizes that are offered for the best examination papers presented.

The following schedule of regulations prescribed for the short courses of instruction for farmers and farmers' sons, held in 1903, in the towns of Horsham, Boort, Kyneton, Ballarat, Geelong, Shepparton, Maffra, and Warrnambool, explains the conditions under which these classes are conducted:

Instruction will continue for a period of four weeks in each center.

Three lectures will be delivered in the afternoon of each day for five days a week.

No charge will be made for instruction.

Farmers and farmers' sons, or men who have worked at least one year on the land, are eligible for admission.

Those attending may be of any age over 16 years.

No entrance examination will be held.

A final examination in every subject will be held, but attendance at this examination will be optional.

Those who pass the final examination with credit will be awarded a certificate.

The Australian Natives' Association will present a gold medal to the most successful student of all those attending the short courses of instruction.

A free library, consisting of approved text-books, will be available, under regulations, during the month at each center.

Classes will be formed at the above-mentioned towns if the following conditions are complied with:

(1) At least 40 eligible students must be enrolled before May 15.

(2) The agricultural society or some local body must bear all local expenses, such as providing a suitable hall, advertising in local papers, etc.

If the above conditions are not complied with no class will be held in that particular center this year.

These classes are not intended for local students only. Any farmer or farmer's son in the State of Victoria may attend.

Arrangements have been made with the railway department that return tickets available for one month will be issued to those traveling to attend the classes at holiday-excursion fares.

Such tickets will be obtainable on presenting a certificate to the station master, signed by the secretary of agriculture, stating that the passenger is a student proceeding to attend a course of instruction at one of the centers.

The secretaries of agricultural societies will prepare a list of respectable and comfortable lodgings.

Intending students should, consequently, correspond with the secretaries of agricultural societies regarding rooms.

A comfortable room with board can be had for 17s. to £1 a week in each center.

During the course at Geelong instruction will be given in analytical chemistry and wool sorting for three hours in the forenoon, viz, from 10 a. m. to 1 p. m., during five days in the week. This addition to the course is for the purpose of occupying the whole time of the students who come from a distance and lodge in the town. Consequently those who attend from other parts of the State should select Geelong.

As accommodation is limited for analytical work and wool sorting, preference will be given, first, to students coming from a distance; and, secondly, to those who travel to Geelong daily by train.

A charge of 6s. will be made for chemical apparatus, payable only by students who take the class in analytical chemistry.

The following programme of a four-weeks' course of the agricultural class held at Nhill shows the order in which the several topics are presented:

#### PROGRAMME OF LECTURES.

##### First week.

March.

Tuesday, 1, 3-4 p. m. Introductory lecture on the principles of manuring.

Wednesday, 2, 10.30 a. m. Land surveying, stack and dam measurement.

2-3 p. m. Farmyard manure.

3-4 p. m. Introductory lecture on principles of chemistry.

4-5 p. m. Insect pests and plant diseases.

Thursday, 3, 10.30 a. m. Land surveying, stack and dam measurement.

2-3 p. m. Lime and its functions in agriculture.

3-4 p. m. Theoretical chemistry.

4-5 p. m. Insect pests and plant diseases.

Friday, 4, 10.30 a. m. Land surveying, stack and dam measurement.

2-3 p. m. How to cultivate for wheat growing.

3-4 p. m. Theoretical chemistry.

4-5 p. m. Insect pests and plant diseases.

##### Second week.

Monday, 7, 2-3 p. m. Commercial fertilizers.

3-4 p. m. Theoretical chemistry.

4-5 p. m. Valuation of artificial manures.

Tuesday, 8, 10 a. m.-1 p. m. Demonstration of breaking and handling horses.

2-3 p. m. Theoretical chemistry.

3-5 p. m. Veterinary science.

Wednesday, 9, 10 a. m.-1 p. m. Demonstration of breaking and handling horses.

2-3 p. m. Theoretical chemistry.

3-5 p. m. Veterinary science.

8-10 p. m. Veterinary science.

- Thursday, 10, 10 a. m.—1 p. m. Demonstration of cattle spaying.  
 2—3 p. m. Manures for the northern areas.  
 3—4 p. m. Agricultural chemistry.  
 4—5 p. m. Seeds—structure and development.
- Friday, 11, 2—3 p. m. Rotations and their possibilities in the north.  
 3—4 p. m. Agricultural chemistry.  
 4—5 p. m. The plant—stem, bud, leaves, and their functions.

## Third week.

- Monday, 14, 2—3 p. m. The principles of stock feeding.  
 3—4 p. m. Agricultural chemistry.  
 4—5 p. m. Flowers—arrangement, structure, and fertilization.
- Tuesday, 15, 2—3 p. m. Food requirements of the working horse.  
 3—4 p. m. Agricultural chemistry.  
 4—5 p. m. Fruit—structure and methods of seeding.
- Wednesday, 16, 10 a. m.—1 p. m. Care of foals—treatment of feet.  
 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Importance of poultry industry, locality, etc.
- Thursday, 17, 10 a. m.—1 p. m. Shoeing, surgical shoes, fitting, etc.  
 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Breeds of poultry, food and feeding, etc.
- Friday, 18, 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Poultry diseases—cause and cure; chickens, etc.  
 8—10 p. m. The poultry industry.

## Fourth week.

- Monday, 21, 2—3 p. m. Diseases of cereals.  
 3—4 p. m. Agricultural chemistry.  
 4—5 p. m. Diseases of cereals.
- Tuesday, 22, 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Demonstrations in poultry dressing.  
 8—10 p. m. Demonstrations in poultry dressing.
- Wednesday, 23, 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Sheep breeding, wool shearing, preparation.
- Thursday, 24, 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Large clips, skirting, rolling, etc.
- Friday, 25, 2—3 p. m. Agricultural chemistry.  
 3—5 p. m. Small or farmers' clips, classing, etc.

A report by the officer intrusted with the management of the classes for the year 1904 contains the following statement:

I have been much impressed by the evident desire of the students at all centers to learn. The lectures were closely followed and notes made by the majority of the students. \* \* \* It is not too much to assume that the short course system of lectures has proven a success. Three years only has it been on trial, and yet it is safe to say that it has thoroughly commended itself to the practical mind of the farmer.

The director of the agricultural department of Victoria, in discussing the subject of agricultural education in his annual report of the



department for 1904, takes up the question of the education of the adult rural population along agricultural lines. He states that—

The department of agriculture has for years had officers on the staff whose duty it has been to give single lectures on agricultural subjects to meetings of farmers held under the auspices of agricultural societies. This work, although useful and interesting, can not be called very educational, as the information given in one lecture does not lead to a better understanding of the next. To meet this difficulty I have had classes of instruction for farmers and farmers' sons, extending over several weeks, held during the last two seasons, and this winter the classes are more popular than ever. \* \* \* This method of instruction has come to stay in Victoria and will extend over the whole of Australia. Inquiries have reached me from other States, and it is only a matter of time before Australian agriculturists will realize that this is the best method of instruction for the greatest number which can be had at the least sacrifice of time and money. However excellent this system may be, the winter season as a rule is the only time farmers and their sons can devote their days to lectures and study. To meet all demands for classes during the winter months the department would be required to maintain for a whole year the staff of lecturers, who would work for three or four months only, or depend upon picking up suitable men for the work during the winter season.

Engaging men specially can be done to a small extent, but if it were attempted on any large scale failure would be the result. I, therefore, after a great deal of consideration and consultation, matured a plan of keeping the lecturers employed throughout the year. The method I propose is to hold evening classes of two weeks' duration at farmhouses, the number of farmers attending at any center to be from 10 to 12 and the classes to be held the year round, excepting in the winter time, when the officers would be engaged at the farmers' classes held in each township, as is being done at present.

The lectures would be held in the evening, say one and one-half hours' lecture and one-half hour devoted to the asking and answering of questions. Four lecturers would be required; one, who would arrive on a Monday and stay three days, giving lectures and discussing such subjects as manuring suitable to the district, tillage, rotation of crops, and kindred topics. On the fourth day he would leave for another center, say 20 miles away, and would be replaced by an officer competent to lecture on farm stock, their breeding and management. In two days the second lecturer would leave, being replaced by a third, who might lecture upon poultry. Two days later this lecturer would be replaced by a fourth, who would lecture on other agricultural subjects. The course of instruction at this farmhouse would then terminate after ten days' duration.

Four classes, therefore, would be in progress at one time in farmhouses sufficiently far apart to prevent overlapping, and yet near enough for the officer to reach the next center and lecture on the same day.

I propose that these farmhouse classes should be tried in August, when the farmers' classes held for a month in townships are finished and the officers are available to do the work.

By this method it is proposed to overcome the difficulty that now confronts institute directors in almost all countries—that of securing a sufficient number of capable men for the work of instruction. By employing them for the entire year institute teaching will become a profession, and many will doubtless find it to their advantage to prepare themselves for it and adopt it as a career. Day schools for adult



farmers during the winter months and night schools during the summer months is a possible solution of the difficulty.

#### WESTERN AUSTRALIA.

No organized system of agricultural instruction for adult farmers has been adopted in Western Australia. The department of agriculture occasionally sends out experts to farmers' meetings and to individuals who apply for specific information. In addition to these a course of lectures on agricultural subjects is given by officers of the agricultural department during the winter months in the museum of the department of agriculture at Perth.

The course for 1904 extended from June 3 to September 2, one lecture each week.

The acting director of agriculture states that—

Farms and orchards are visited by the officers of the department and instruction given on the spot. In the centers of the various farming districts lectures are given at irregular intervals. At these lectures discussion is encouraged, and when possible they are illustrated by models, views, or lime-light lantern slides.

#### CANADA.

The farmers' institutes of Canada are not conducted under the direction of the general government, but each provincial territorial authority organizes its work independently.

The Provinces and territories having institute organizations are the Northwest Territories—British Columbia, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island.

The Dominion department of agriculture has undertaken to aid the Provinces in their institute work by acting in an advisory capacity. The live-stock commissioner of the department is the official to whom has been committed the work of furnishing expert advice to the several Provinces and of aiding the institutes so far as the general government has gone in giving this movement official recognition.

In order to encourage the provincial directors, the Dominion department agrees, on condition that certain forms of institute organization are effected and certain prescribed rules observed by the several Provinces, to send out expert speakers to aid in institute work, paying the salaries and expenses of these lecturers from the time they leave home until they reach the confines of the Province requiring their services, and the Province requiring the services of these men pays their salary and expenses from the time they reach the confines of the Province until they return thereto on their return trip.

The purpose of the department in requiring the Province to bear a share of the expenses of these lecturers is to cause them to economize their time and to lay out their series of meetings so as not to cause undue traveling or expenses.

The Dominion department requires that full reports of the work done at each meeting by each speaker shall be made out by the institute director and be forwarded to the Dominion superintendent of institutes. The national department of agriculture is endeavoring to secure closer relations with the provincial directors of institutes by arranging to pay to the deputy minister of agriculture or the acting superintendent of farmers' institutes a certain annual sum in aid of the institute work.

### BRITISH COLUMBIA.

The farmers' institute system in British Columbia was inaugurated in 1897, and, as in the other Canadian Provinces, it is in connection with and under the supervision of the deputy minister of agriculture. The superintendent of institutes is appointed by the lieutenant-governor in council, and is charged with the duties imposed by the several acts establishing the farmers' institute system of the Province. Inasmuch as the details of the entire system are fully set forth by the various acts of the provincial assembly providing for institute instruction, they are herewith presented in consolidated form as arranged for convenience of reference by the deputy minister of agriculture and superintendent of institutes.

### ACTS OF ASSEMBLY RESPECTING THE ESTABLISHMENT OF FARMERS' INSTITUTES.

Her Majesty, by and with the advice and consent of the legislative assembly of the Province of British Columbia, enacts as follows:

#### SHORT TITLE.

1. This act may be cited as the "Farmers' Institutes and Cooperation Act."

#### INTERPRETATION.

2. In the construction of this act, and the rules and regulations framed under the authority thereof, the following words and expressions shall have the meanings hereby assigned to them, unless the same be repugnant to or inconsistent with the context (that is to say):

"The department" shall mean the department of agriculture of the Province of British Columbia.

"The minister" shall mean the minister of agriculture of the Province of British Columbia.

"The superintendent" shall mean the superintendent of the farmers' institutes in the Province of British Columbia.

"Division" shall mean a division as set forth in Schedule A<sup>a</sup> of this act containing districts.

---

<sup>a</sup> Schedule omitted from this publication.

"District" shall mean the district composed of the municipalities or other limitations set forth in Schedule A <sup>a</sup> of this act.

"Regular meetings" are those at which delegates sent by the department are present and whose expenses are paid by the department.

"Supplementary meetings" are those conducted by the local officials.

"Regular delegates" are those sent annually to assist local officers to hold regular meetings.

"Supplementary speakers" are those sent at the request of the local officers to assist said officers to hold supplementary meetings.

3. The minister may authorize the organization of farmers' institutes in any electoral or other division into which this Province now is or may hereafter be divided. The authority for the organization of farmers' institutes may be given after a petition, duly filled up and signed by at least fifteen persons who are resident in the said district, and who have paid in to the secretary-treasurer pro tem. not less than fifty cents each, has been filed in the department in the form set forth in Schedule B hereto.

4. The objects of such farmers' institutes shall be the dissemination of information in regard to agriculture, and shall include the encouragement and improvement of agriculture, horticulture, arboriculture, manufactures, and the useful arts:

(a) By holding meetings for the discussion of and hearing lectures on subjects in connection with the theory and practice of improved husbandry or other industrial purposes.

(b) By promoting the circulation of agricultural, horticultural, arboricultural, and mechanical bulletins and reports.

(c) By importing and otherwise procuring and distributing seeds, plants, and animals of new and valuable kinds.

(d) By offering prizes for essays and questions of scientific inquiries relating to agriculture, horticulture, arboriculture, manufactures, and the useful arts, and for shows or displays of agricultural-products.

(e) For disseminating information regarding bee keeping.

(f) By cooperation for carrying on any industry or for any purpose relating to agriculture within the district, as provided for in section 15 of this act.

5. In granting authority for the formation of a farmers' institute under section 3 of this act, the minister shall appoint the place within such division and fix the day and hour at which the first meeting for the organization of the institute shall be held, of which the minister shall give at least one month's previous notice by advertisement in the British Columbia Gazette and in writing to the secretary-treasurer pro tem. of the proposed institute, who shall thereupon cause to be posted up, at not less than five of the most frequented places in the district, notices containing full particulars as to the object, place, date, and hour of the meeting. At such meeting the persons present who signed the petition, as provided in section 3, and such others as may have paid at least fifty cents each to the secretary-treasurer pro tem. prior to the time appointed for the meeting, for the receipt of which subscription the secretary-treasurer pro tem. shall be in attendance at the place of meeting at least one hour prior to the time for which it may be called, shall elect from among members such officers as are required to be elected at the annual meeting of such institute, which officers shall remain in office until the date of the next ensuing annual election.

6. The lieutenant-governor in council, upon recommendation of the minister, may subdivide divisions and districts in which institutes are organized under this act.

<sup>a</sup> Schedule omitted from this publication.

7. Each farmers' institute organized under this act shall be known as the "[here insert the name of the district] Farmers' Institute," under which name each institute shall be a body politic and corporate.

8. The officers shall consist of a president, vice-president, and secretary-treasurer, and such number of directors as may be provided in the rules and regulations framed under the authority of this act, who shall be elected annually, and who together shall constitute a board of directors, the majority of which shall be practical farmers.

9. The superintendent of farmers' institutes shall be an officer appointed by the lieutenant-governor in council, to whom shall belong the duties assigned in the rules and regulations passed under the authority of this act.

10. Each member of an institute shall be entitled to receive a copy of all publications published by or issued under the authority of the department of agriculture for the Province of British Columbia.

11. The legislative assembly may each year set apart a certain sum of money for aiding farmers' institutes whose returns have been transmitted and who have complied with the provisions of this act and the rules and regulations that may be passed by the lieutenant-governor in council. To each institute whose membership is shown to amount to from fifteen to one hundred a sum of fifty cents for each paid-up member up to one hundred, and twenty-five cents for each paid-up member over one hundred will be allowed: *Provided*, That in case the amount so voted or set apart shall not be sufficient to cover the total amount of apportionment in this manner, then the apportionment shall be made pro rata on the same basis.

12. The council of any municipality may grant money in aid of any duly organized farmers' institute.

13. Every farmers' institute shall be entitled to receive the moneys provided for in section 11 of this act from the treasury of the Province upon the following conditions:

(a) That the number of members is at least fifteen, each paying an annual fee of not less than fifty cents.

(b) That the provisions of this act and the rules and regulations approved by the lieutenant-governor in council shall have been carefully observed.

(c) That all reports or returns required to be made under the provisions of this act shall have been received to the satisfaction of the department.

(d) That at least two regular meetings and two supplementary meetings shall be held during the year.

14. The funds of the farmers' institutes, howsoever derived, shall not be expended for any object inconsistent with those mentioned in section 4 of this act, and shall not be paid out except authorized at a meeting of the board of directors and upon an order signed by the president, or in his absence by two of the directors and the secretary-treasurer. In case payments are made by cheque issued upon a chartered bank the cheque shall be signed by the president, or in his absence by two directors and the secretary-treasurer.

15. Notwithstanding the provisions of any act in force in this Province upon application to the minister of ten or more resident and bona fide farmers of the district, such applicants may engage in and carry on, on a cooperative basis, any of the following, viz: (a) A farmers' exchange for buying and selling farm produce; (b) a cheese factory; (c) a creamery; (d) a fruit-canning, preserving, or evaporating factory; (e) a mutual credit association for the purpose of receiving deposits and loaning money to its members; (f) or in any other enterprise that may be approved by the lieutenant-governor in council as coming among the objects and within the meaning of this act, and such appli-



cants shall be construed "provisional directors" and shall possess the powers and authority mentioned in and conferred by any order in council for managing the affairs of the association until the first annual election of officers, and under this act the association shall possess all the powers of an incorporated company under the "Companies act, 1897," to hold property, to sue and be sued, make by-laws, and do all things necessary and purtenant to the carrying on of any business for the mutual benefit and profit of the members subscribing and holding stock: *Provided always*—

(a) That a notice of incorporation containing the names of such applicants be published in the British Columbia Gazette, for which a fee of ten dollars shall be charged;

(b) That no subscriber may hold or thereafter acquire more than one-tenth of the stock allotted by the association;

(c) That twenty-five per cent of the capital stock be subscribed at the time of making application;

(d) That all elections shall be by ballot, and each member shall be entitled to one vote only.

15A. Every farmers' institute organized prior to the 20th day of May, 1893, and every association incorporated prior to said 20th day of May, 1898, under section 15 of this act, shall be deemed to have been duly and completely organized or incorporated, as the case may be, according to law, and to have complied with and fulfilled every condition and requirement made and imposed by law in that behalf.

16. It shall be the duty of the secretary of the association so organized to make a return to the superintendent within thirty days after the first of January in each year, containing a full statement of the affairs of the association for the year last past, which shall include a duly audited and certified balance sheet, the number of stockholders and the amount of stock held by each, the paid-up capital, assets, and liabilities, the number and class of employees, the rate of wages paid in each case, the quantity and value of output, and the quantity and value of goods sold and exported. Such statement shall be certified to by the secretary as correct and by the president, or in his absence by two of the directors.

17. The procedure for the liquidation, winding up, and disposal of the business of any association under this act shall be that prescribed by the lieutenant-governor in council by order in council from time to time in that behalf.

18. The penalty for infraction of section 16 of this act shall be a fine of not less than one dollar and not more than twenty dollars for each offence upon summary conviction before a stipendiary magistrate or two justices of the peace having jurisdiction in the district, who shall have power to impose costs and order distraint in default of payment.

19. It shall be competent for any agricultural, horticultural, or dairyman's association at present in existence to be incorporated or amalgamated with the district farmers' institute in which such association is situated upon the majority vote of the members of such association at the regular meeting being passed in its favor, providing that prior to the holding of such regular meeting at least sixty days' notice shall be given in writing to the members of the intention to move a resolution to that effect, and if thought advisable by a notice published in a newspaper circulating in each division; and in case of such incorporation or amalgamation the combined associations and district institute shall be entitled to any moneys voted by the legislature in support of any association or institute so incorporated or amalgamated, and shall, in addition to its proper rights, powers, and privileges, have, and may exercise, all the corporate rights, powers, and privileges of such combined associations and institutes: *Always*



*provided*, That all funds belonging to the society so affiliated be applied exclusively to the purposes of that society.

20. For the purposes of this act the Province shall be divided into divisions, containing districts as set forth in Schedule A.<sup>a</sup>

21. The minister of agriculture may employ a portion of the legislative grant, not to exceed twenty-five per cent thereof, for the promotion and assisting in the objects and aims of a farmers' central institute for the whole of the Province; such institute to be formed by delegates from the district institutes, who shall be elected at the annual meetings, as may be provided by the rules and regulations. The central institute shall be subject to the rules and regulations made under authority of this act, and its meetings shall be held not oftener than once a year, the place of meeting to be designated by the superintendent.

22. It shall be the duty of the secretary-treasurer of each district to prepare each year a full report of the work of his institute during such year, which shall include a list of members, a statement of the receipts and expenditures, and a statement of the number and place of meetings held during the year, a programme of the meetings, and the attendance at the same, such report to be transmitted to the department within thirty days after the 31st of December of each year. The secretary-treasurer of each institute shall have a salary of not less than twenty-five dollars, to be voted by the legislative assembly.

22A. The lieutenant-governor in council may each year appoint, from among the delegates to the central institute, members of a board to be known as the "advisory board." The said board shall consist of six members, two from Vancouver Island, two from the lower mainland, and two from the upper mainland. The said board shall meet at the times and places designated by the minister, and shall advise the minister upon all matters of interest to the agricultural community. The members of the board shall receive no remuneration for their services, but shall be paid their actual traveling expenses.

23. The minister shall frame rules and regulations as a recommendation to the lieutenant-governor in council, which shall define the procedure for the organization of institutes not otherwise provided for in this act, the number and duties of officers of institutes, the date and programme of and procedure governing annual and other regular and general meetings, and provide for all other things necessary for the proper working of farmers' institutes, not inconsistent with any of the provisions of this act, and the lieutenant-governor in council may authorize such rules and regulations, which shall be published in the British Columbia Gazette immediately thereafter.

24. This act shall come into force on the day of its being assented to.

#### RULES AND REGULATIONS.

##### ORGANIZATION OF INSTITUTES.

1. Subject to the provisions of sections 6 and 7 of the act, each institute shall have a distinct name.

2. It shall be the duty of the secretary-treasurer to notify without delay the superintendent of farmers' institutes as soon as organization is completed, and to forward to him a list of the names and addresses of all the members and officers and directors.

3. Membership shall terminate with the 31st day of December each year, but the membership of persons joining during the months of October, November,

---

<sup>a</sup> Schedule omitted from this publication.

and December just preceding, and whose fees are paid, shall extend to and be good for the whole of the following year.

#### OFFICERS.

4. In addition to the officers referred to in section 8 of the act, there shall be one director for every ten members up to fifty, to be elected as hereinafter provided, the number of directors, however, in no case to exceed five until the membership shall reach one hundred, after which there may be an additional director for every additional twenty members.

5. One delegate to the central institute, who shall be a practical farmer actively engaged in farming or superintending a farm, shall be elected by ballot by each district institute at the annual meeting as provided by section 21 of the act.

6. There shall be elected annually two auditors to audit the accounts of the institute.

7. An executive committee of three may be appointed from the board of directors as a whole to manage any matters within the powers of the said board to perform, their duties to be those assigned to them by the said board.

8. In case the presidency is vacant, or the president does not take action within ten days, the vice-president shall act in his stead.

9. In case of the secretary-treasurer resigning or refusing to perform the duties of his office, or if by any other reason his office becomes vacant, the president, or in his absence the vice-president, shall perform the duties of the secretary-treasurer until the vacancy be filled.

9A. In case of any vacancy occurring amongst the officers or directors of the institute the secretary, or in case of that office being vacant, the president, or in his absence the vice-president, shall immediately call the board of directors together by giving ten days' notice in writing, and it shall be the duty of the board of directors, at the time and place of meeting, to fill the vacancies by ballot from amongst the members of the institute.

10. Any change in the personnel of the directorate or executive shall be reported to the superintendent forthwith by the secretary-treasurer, or other officer acting in his stead.

#### ANNUAL MEETINGS.

11. The institute year shall begin January 1 and end December 31. The annual meeting shall be held in the month of January of each and every year. At this meeting the officers provided for shall be elected for the ensuing year. Elections shall be by ballot. No person shall be eligible for office or entitled to vote who has not paid his fees in full for the current membership year. The executive officers for the current institute year shall, through the secretary, present to the meeting in writing, a carefully prepared report of the proceedings of the year, in which shall be stated the number of institute meetings held, the attendance at each, the total number of papers read and addresses delivered. The treasurer's report for the current year shall be presented, but shall first be audited and certified to by the auditors. The annual meeting shall be called by mailing to each member, at least ten days before the meeting, an announcement of the meeting, said announcement to specify the date, place, and hour of the meeting, and shall contain a programme of the meeting. In addition to this, if the executive deem it desirable, they may advertise the meeting by posters, or in newspapers circulating in the district.

## PROGRAMME OF ANNUAL MEETING.

12. (a) President's report and discussion.
- (b) Report of executive committee.
- (c) Treasurer's report.
- (d) Auditor's report.
- (e) Suggestions as to holding of regular and supplementary meetings.
- (f) Election of officers.
- (g) Suggestions as to institute work.
- (h) Addresses, papers, etc.

13. At the close of the annual meeting the new board of directors shall meet and transact such business as may be necessary.

14. Memorandum of proceedings shall be entered in the secretary's minute book, and a copy of the same shall be sent by the secretary to the superintendent, and shall be presented as a part of the report of the annual meeting.

15. In case any institute shall from any cause fail to hold its annual meeting at the time appointed the secretary may appoint a time for holding the same, the same procedure to be observed as in the foregoing.

## OTHER GENERAL MEETINGS.

16. All institutes organized under the act shall be strictly nonpartisan and nonsectarian, and no institute shall operate in the direct interest of any party, sect, or society, but for the equal good of all citizens of the farming community, and no subject shall be presented at any institute or any discussion allowed of a political or sectarian nature, nor shall any speaker be allowed in his lecture, essay, or speech, or in any discussion to advertise wares or schemes in which he has a direct or indirect pecuniary interest.

17. It is not intended that regular delegates shall attend more than two meetings in any institute district in one year at the expense of the department of agriculture, and officers and directors are expected to lighten, as far as possible, the expenses of the delegates while in their districts, but a greater number may be arranged for if convenient and desirable.

18. Should any institute require speakers at any other period of the year to assist in holding supplementary meetings, application for such assistance shall be made to the superintendent, and, if granted, the institute requiring the services of such speakers shall pay all legitimate expenses of such persons while attending said meetings.

19. All requests to the minister for assistance to hold agricultural, horticultural, live stock, or dairy meetings shall, if possible, be made through the secretaries of the district institutes, applicants stating what subjects they wish the speakers to discuss.

20. Every meeting of an institute, except the annual meeting, shall be advertised by issuing posters, on which shall appear a programme of the meeting, giving date and place of meeting, hour of opening, the names and addresses of the speakers, the topic to be discussed by each, and all other particulars. A copy of the poster shall be sent, two weeks previous to the date of the meeting, to each postmaster and schoolmaster and to all places of public resort in the district, and copies of the programme should be sent to each member of the institute, and it shall be the duty of officers and directors to exercise due care to insure the proper posting and distribution of said bills. A copy of each poster and each programme shall be sent as soon as published to the superintendent and to each speaker advertised.

21. It shall be the duty of the board of directors, or executive committee appointed by them, to complete all arrangements within due time for the holding of the meeting.

#### DUTIES OF OFFICERS.

22. The board of directors shall have full control of the affairs of the institute. They shall arrange time and places of meetings, and shall outline the work and the policy of the institute.

23. The executive committee shall, if appointed, carry into effect the plan of work decided upon by the board of directors, and shall arrange the details of the same.

24. The president shall preside at all meetings of the board of directors and executive committee, and in his absence the vice-president shall preside, and in the absence of both, then a chairman shall be elected from amongst the members present.

25. The secretary shall have the powers of managing director, acting under the control and with the approval of the executive committee. He shall call all meetings of the executive committee and board of directors upon the authority of the president or of any two officers or directors, give notices of all meetings as required by these rules, make returns, keep correct minutes of the proceedings, and conduct all correspondence in the name of the institute. All reports and returns required by the superintendent shall be made upon forms specially provided and in the manner indicated.

26. The secretary shall keep a book in which shall be entered the names and addresses of members in alphabetical order, also a book to be used as a mailing list, which shall contain the names of parties to whom posters, programmes, etc., may be sent.

27. It shall be the duty of the secretary to prepare and submit to the executive committee the annual report and to present the final report to the annual meeting. Not later than ten days after the annual meeting he shall forward to the superintendent, by registered mail, a copy of said report, together with a copy of the treasurer's report, the name and address of each officer and director elected for the ensuing institute year.

28. On or before the 30th day of January of each year the secretary shall send a revised list of members for the current membership year to the superintendent, and quarterly thereafter he shall forward the name and address of each additional person who has since the previous return become a member of the institute. The capita grant, as provided by the act, shall be paid on membership as returned by the secretary on the 30th day of June of the current year.

29. Within one week after the close of each institute meeting or series of meetings the secretary shall forward to the superintendent a detailed report of said meeting or meetings, in which shall be stated the name of the place or places where sessions were held, the number of persons present at each session, the name and address of each person who read a paper or gave an address, and the title of the address or paper.

30. The secretary shall, when possible, retain the manuscript of all papers read at meetings of the institute by local talent, in order that he may, when required, furnish the superintendent with the same. Each institute is required to forward at least two such papers each year, which may be published as the superintendent decides. Secretaries or essayists are not required to rewrite papers before sending them to the superintendent, but may forward them as read at the local meeting.



31. It shall be the duty of the treasurer to receive and account for all moneys belonging to the institute and disburse the same under the instructions of the executive committee, without whose order no money shall be paid out. He shall also prepare in detail and present to the annual meeting a duly audited statement of receipts and expenditures.

32. He shall use such cash and receipt books, membership tickets, etc., as may be required by the superintendent.

33. An officer or director who has not during the current year attended any meeting held in his district (except when prevented by sickness), or otherwise rendered valuable assistance to the institute, shall not be eligible for reelection to office for the ensuing year.

34. It shall be the duty of the superintendent to generally conduct the correspondence relating to the institutes and to supervise the work so far as provided for under the acts and rules and regulations. Acting under the instructions of the minister, it shall be his duty to arrange for regular and supplementary delegates to be present and address regular and supplementary meetings at the request of farmers' institutes, to prepare circular letters, to receive and publish reports, to supply all forms, books, etc., to local secretaries required under these rules, and to prepare and issue from time to time suggestions to officers and directors of the institutes.

35. Every officer and director shall promptly answer all official communications addressed to him by the superintendent, and should make diligent efforts to furnish any information required of him relative to the affairs of the institute.

#### PROCEDURE, ORDER OF MEETINGS, ETC.

36. At any meeting of an institute, if duly advertised as set forth in these rules, 10 members shall form a quorum to do business at an annual or other general meeting when the membership is over 32. At a directors' meeting half of total number of board of directors shall form a quorum—half of five to be reckoned as three, and the half of seven as four. At an executive committee meeting three shall form a quorum. If at any meeting a quorum is not present, those present shall adjourn, and the meeting shall again be called, as prescribed in these rules.

37. The officers and directors shall act as far as practicable upon the recommendations of the superintendent, and shall submit to him, through the secretary, all questions relating to the welfare of the institute upon which advice may be required.

38. (a) Except by permission of the presiding officer, no member or other person shall speak other than to ask a question or to introduce or to speak to a motion.

(b) In the discussion following the introduction of a subject, no person shall speak more than twice, nor for a longer time than five minutes, except by a vote of the meeting.

(c) When a question is under consideration no motion shall be in order except the following: (1) To adjourn, (2) to postpone, (3) to amend; these motions taking precedence in the order named, and the first two shall be decided without debate.

(d) Before the vote is taken on any motion or amendment the president shall ask, "Is the meeting ready for the question?" The question shall not be put so long as any member desires to speak and is in order. Any member desirous of asking a question on the subject introduced may do so verbally; but if he desires to ask more than two questions, he must submit them to the secretary in writing.



39. Every member is entitled to the following privileges :

(a) To protest against any decision of the institute, and request his objection to be recorded in the minutes.

(b) To protest against the decision of the chair and appeal to the meeting, stating the grounds of appeal, which shall then be put without debate in these words: " Shall the decision of the chair be sustained? "

40. A motion to reconsider any question decided by the institute shall be in order, providing such motion be not made on the same day on which the resolution is carried.

41. Order of business for general meetings other than the annual :

(1) Calling the meeting to order by the president.

(2) Reading and disposing of communications.

(3) Reports of committees.

(4) Programme of the day and discussion.

(5) Question drawer.

(6) Adjournment.

42. Any change of address or any failure to receive the bulletins and reports issued by the agricultural department should immediately be reported to the superintendent.

43. The blank books used shall be those authorized by the department. Blank forms for reports of meetings, financial statements, list of members, membership books, mailing books, cashbooks, etc., shall be supplied by the superintendent.

#### MANITOBA.

The farmers' institutes of Manitoba are made a part of the work of the local agricultural societies. The societies are incorporated organizations with power to " lease, sell, alienate, and convey, or otherwise dispose of any real or personal property of the society, to borrow any money for the purposes of the society, and for the purpose of securing the repayment thereof may hypothecate, mortgage, or pledge the real or personal property of said society."

The lieutenant-governor in council is empowered to authorize the organization of agricultural societies, which authorization may begin after a petition, duly filled out and signed by at least 50 members (none of whom shall be a member of any other agricultural society), and who must have actually paid to the secretary-treasurer pro tempore not less than \$1, has been filed in the department in a form prescribed by the department of agriculture of the Province, promising to continue to pay to the treasurer of the society, so long as they remain members of it, not less than \$1 each annually.

The meeting for organization is called by the lieutenant-governor in council, who selects the time and place at which it is to be held. It then becomes the duty of the minister of agriculture to give public notice of the meeting by advertisement in the Manitoba Gazette and in writing to the secretary-treasurer pro tempore of the proposed society, who is directed to post up throughout the district notices con-

taining full particulars as to the object, date, place, and hour of meeting.

When the meeting convenes those who have paid \$1 to the secretary-treasurer pro tempore shall nominate and elect from among their own members 10 directors and 1 auditor. The directors so elected are required to meet within one week therefrom and elect from among themselves a president and a first and second vice-president, and either from among themselves or otherwise a secretary-treasurer, and from outside their number an auditor, who shall not be the auditor elected at the meeting by the members. A copy of the minutes of this meeting must be sent to the provincial department of agriculture within two weeks after the annual meeting. Failure to so report deprives the society of its portion of the provincial grant for the year next following that meeting.

These societies were originally organized for the purpose of holding agricultural fairs, and each society whose total receipts in any year from this source amount to from \$150 to \$350 shall be entitled to an equal amount from the provincial fund in aid of agricultural societies, except that "from and after the year 1900 the sum of \$50 of the provincial grant shall be withheld by the minister of agriculture from those societies not engaged in farmers' institute work.

When the farmers' institute idea was taken up in the Province, instead of erecting an independent organization for conducting them they were attached to the local agricultural societies, and it was made a part of their duty to conduct the work.

The following regulations, approved by the lieutenant-governor in council, show the relation that exists between the institutes and the agricultural societies:

I. Each agricultural society shall hold at least three meetings every year other than the annual meeting, the exhibition, and the meetings specially arranged by the department.

II. At these meetings papers shall be read or addresses delivered on topics relating to agriculture, horticulture, dairying, or kindred subjects. Free discussion shall be encouraged.

III. The order of meeting is to be similar to the regular meetings of the society and under the management of the directors of the society.

IV. The department will endeavor to supply speakers to address two extra meetings each year.

V. The directors of each society shall arrange for places of meeting, advertising meetings, and pay all expenses incurred thereby.

VI. The secretary of the society shall compile all reports regarding institute work as required by the department.

Failure on the part of any agricultural society to hold institute meetings as provided forfeits \$50 of the provincial grant for that year, the same being required to be withheld by the minister of agriculture from such society. The deputy minister of agriculture is the superintendent of farmers' institutes of the Province.

## NEW BRUNSWICK.

Farmers' institutes were held in the Province of New Brunswick as early as 1888, but it was not until 1897 that the work was assumed by the provincial department of agriculture and a superintendent of institutes provided. The law places this work under the immediate direction of the deputy commissioner of agriculture. The system provides for local organizations in each county, no limit being fixed to the number, several counties having as many as seven, each having a president, vice-president, and secretary-treasurer, and known under a specific name and by a number received at the date of its acceptance as an institute society by the provincial superintendent.

Under the amended regulations of the agricultural act of 1888, approved June 4, 1901, it is provided that—

Where agricultural societies now existing, or hereafter incorporated under the agricultural act of 1888 or amendments thereto, will undertake to hold meetings under regulations made by the lieutenant-governor in council under section 3 of this act, they shall in their districts be considered as farmers' institutes.

The general policy of the government in the matter of forming independent institute organizations or associating them with existing agricultural societies is set forth in the agricultural act of 1888. The act says:

It is desirable that all agricultural societies should conduct institute work and so avoid the necessity of two organizations in one district. For this a special grant of \$15 will be given by the department, and 25 cents of each membership fee received by the society shall, with the said grant, form a fund for the carrying on of the work under the institute act.

The following rules and regulations approved by the lieutenant-governor in council have the effect of law, and inasmuch as the details of the system in use in this Province in institute work are fully set forth by this, they are therefore given in full:

## RULES AND REGULATIONS.

[Approved by the lieutenant-governor in council.]

1. The New Brunswick legislature having voted a sum of money for the establishment of farmers' institutes throughout the Province, a grant of fifteen dollars will be given to one institute in each district, on such conditions as are hereinafter contained.

2. The object of each local institute shall be the dissemination of agricultural knowledge in its district and the development of local talent. The officers shall endeavor to bring the rank and file of the farmers into touch with the most successful local men, that the masses may become more conversant with the best and most profitable methods of farming, stock raising, dairying, fruit culture, and all branches of business connected with the industry of agriculture. It is desirable that agricultural societies should take up this work, rather than that two organizations should be formed in the same district.

## ORGANIZATION OF INSTITUTES.

3. One institute may be organized in each district of the Province, or in such other divisions as the lieutenant-governor in council may authorize.

4. The organization meeting may be called by the superintendent of farmers' institutes, or by any five farmers of the district; and at least two weeks' previous notice shall be given by advertisement in two newspapers published in the district, or by placard, in which shall be stated the object, time, and place of meeting.

5. As soon as organization is completed the superintendent shall be notified, and the names and addresses of the officers and directors shall be forwarded to him.

6. All membership shall terminate the 30th of November each year. (See clause 57.)

7. Each institute shall be known by a distinctive name and number.

## OFFICERS.

8. The officers shall consist of a president, a vice-president, and a secretary-treasurer, and one or more directors from each parish included in the institute district, except in new or thinly settled districts, when directors may be elected irrespective of the parishes. The president, vice-president, and directors shall be elected annually, and together with the secretary-treasurer shall constitute a board of directors, the majority of whom shall be practical farmers.

9. There shall be an executive committee composed of the president, the vice-president, and the secretary-treasurer.

10. There shall be elected annually an auditor to audit the accounts of the institute.

11. If the secretary-treasurer resigns, or for any cause does not perform the duties of his office, or if he removes from the district, the president shall immediately issue a letter calling the officers and directors together, giving each at least ten days' notice. In the meantime the president shall perform the duties of the secretary-treasurer. At the time and place appointed the officers and directors present shall appoint a secretary-treasurer. In case the presidency is vacant, or the president does not take action within ten days, the vice-president shall assume the power of president. Other vacancies shall be filled in like manner.

12. Any change in the personnel of the executive or directorate shall be reported to the superintendent forthwith.

## ANNUAL MEETING.

## DATE AND PLACE OF HOLDING.

13. The institute year shall begin December 1 and end November 30.

14. The annual meeting of each institute shall be held on some date to be selected between the 1st and 30th of November of each and every year. (See clauses 16, 17, 18, and 19.)

15. The newly elected board of directors shall take office at the close of the annual meeting. The old board shall remain in office until this time.

16. Each year a meeting of the directors shall be called by the secretary to meet some time before the 15th of September. The special business of this meeting shall be to arrange for holding the annual meeting.



17. If it is thought desirable by the directors present at this meeting that a delegate or speaker be in attendance at the annual meeting the same may be arranged for through the superintendent. (See clause 34.)

18. If it is decided that a request be sent to the superintendent for a speaker to attend the annual meeting, the directors shall, in addition, select the place for holding above meeting, the date being selected by the superintendent, as in the case of winter meetings. If, however, it is decided not to ask for a speaker through the superintendent, the directors shall select both date and place for holding annual meeting, conforming with clause 14.

19. A full report of this directors' meeting shall be forwarded by secretary to the superintendent on or before the 1st day of October.

#### BUSINESS AT ANNUAL MEETING.

20. At the annual meeting the directors and auditor shall be elected for the ensuing year. (See clauses 8 and 10.)

21. At the annual meeting the method of election shall be by ballot or otherwise, as decided by the members present. No person shall be eligible for office or be entitled to vote at the annual meeting who has not paid his fees in full for the membership year beginning 1st December next following date of such annual meeting. (See clause 6.)

22. At the annual meeting members may suggest points in the district where institute meetings may be held during the succeeding institute year, first as to regular, and secondly, as to supplementary meetings.

23. At the annual meeting the executive officers for the past institute year shall, through the secretary-treasurer, present to the meeting in writing a carefully prepared report of the proceedings of the year, in which shall be stated the number of institute meetings held since the last annual report, the attendance at each session, the total number of papers read and addresses delivered, and a statement of the financial condition of the institute. The financial statement shall first be audited and certified thereto by the auditor.

24. The annual meeting shall be devoted to the business of the institute as specified in clauses 20, 21, 22, and 23, and in carrying out the programme of the annual meeting, and in considering ways and means whereby the institute can be improved.

25. The annual meeting shall be advertised by mailing to each member, at least ten days before the date thereof, an announcement calling the members together. Said announcement shall specify the date, place, and hour of meeting, and shall contain a programme of said meeting. If the executive committee deem it in the interest of the institute, posters and newspaper advertising may also be employed to make this meeting publicly known.

#### ORDER OF BUSINESS FOR ANNUAL MEETING.

26. (1) President's report.
- (2) Discussion thereon.
- (3) Report of the executive committee presented in writing by the secretary-treasurer.
- (4) Auditor's report presented in writing.
- (5) Suggestion of points at which to hold regular meeting.
- (6) Suggestion of points at which to hold supplementary meeting.
- (7) Election of directors, election of auditor.
- (8) Suggestions as to how the institute can be improved or made more useful, if it has not already been considered by the president in his opening address and in the discussion following.
- (9) Addresses, etc.



27. At the close of the annual meeting the new board of directors shall meet and elect from among themselves a president and a vice-president, and shall finally decide at what points in the district regular and supplementary meetings shall be held during the current institute year. The points selected shall be entered on page C of the secretary's minute book, and a copy of this page shall be sent to the superintendent and shall be considered as part of the report of the annual meeting.

28. The board of directors shall, at the close of the first annual meeting, and when afterwards necessary, appoint from among themselves or otherwise a secretary-treasurer, who shall remain in office during pleasure.

29. In case an institute shall, through any cause, fail to hold its annual meeting within the time specified, the superintendent may appoint a date for holding same, the meeting to be called as provided for the regular annual meeting, and this meeting shall, in all particulars, be taken as the annual meeting of the institute.

#### OTHER GENERAL MEETINGS.

30. In addition to the annual meeting, each institute shall hold at least two meetings each year, at which papers shall be read or addresses delivered on topics relating to agriculture, horticulture, dairying, or kindred subjects. Free discussion shall be encouraged.

31. All institutes organized under the act shall be strictly nonpartisan and nonsectarian in every phase of their work, and no institute shall be operated in the interest of any party, sect, or society, but for the equal good of all citizens and the farming community.

32. No subject shall be presented at an institute meeting, or discussion allowed, of a political or sectarian nature; nor shall any speaker be allowed in his lecture, essay, or speech, or in any discussion, to advertise wares, or schemes in which he has a direct or indirect pecuniary interest. The delegates and officers of the institutes shall see that the exercises are not subordinate to any low or frivolous entertainments, or to the aggrandizement of any individual, party, or sect.

33. The regular delegation shall visit two points only in one year in each institute district, or when said delegation spends two days at one place, that point only shall be visited. The government will defray the cost of sending these delegates, but officers and members of institutes are expected to lighten as far as possible the expenses of delegates while in their district.

34. Should any institute require a speaker or speakers at any other period during the year to assist in holding supplementary meetings, application for assistance shall be made to the superintendent at the time of reporting the annual meeting. The department will pay for the services of such supplementary speaker or speakers for two days in each year for each institute district, but the institute requiring the services of said speaker or speakers shall pay all legitimate expenses from the time said person or persons leave home until they return thereto. When a delegate or delegates address meetings in more than one district, the expenses will be equitably divided between said institutes and collected from the institute or deducted from their grant.

35. If an institute decides to hold supplementary meetings other than those asked for at the time of reporting the annual meeting, or for more than four days during one year, said institute shall pay all expenses and wages. This clause shall not apply to the annual meeting.

36. If a regular or supplementary meeting has been granted, and the time and place published in the annual bulletin, no change shall be made in said time or

place. Any institute failing to hold a supplementary meeting, published as aforesaid, shall be required to pay the expenses notwithstanding.

37. All requests for assistance to hold agricultural, horticultural, live-stock, or dairy meetings shall be made through the secretary of the district institute. Applicants should state what subjects they wish the speaker to discuss.

38. Every meeting of an institute, except the annual meeting, should be advertised by issuing posters, not less than 14 by 20 inches, on which should be printed an attractive programme of the meeting, giving date and place of meeting, hour of opening, the name and address of the speakers, topics to be discussed by each; also the hour at which each speaker will address the meeting, the time to be occupied by each address, and such other information as the executive deems necessary. A copy of said bill should be sent at least two weeks previous to the date of meeting to each postmaster, each schoolmaster, each miller, each blacksmith, and to other places of public resort in the district, which are within a radius of 10 miles of the place of meeting, with a request to post in a conspicuous place. It shall be the duty of the officers and directors to exercise diligence to insure the proper posting of said bills. In addition thereto, a programme of convenient size, containing similar information, should be distributed so as to reach its destination at least ten days previous to the date of meeting. A copy of said programme should be sent to each member of the institute, to farmers, journalists, public men, and others in the district who reside within 10 miles of the place of meeting. Such posters and programmes should announce that all interested are welcome, whether members of the institute or not. Copies of said programmes should be sent to the school-teachers in the district, with the request that they be carefully distributed among the children.

39. A copy of each poster and each programme shall be sent as soon as published to the superintendent and to each speaker advertised.

40. When institutes are notified of the dates assigned for their meetings, and are furnished with the names of the speakers and a list of topics, the executive committee should proceed to complete arrangements according to these rules. They should finally engage the hall, select local talent, etc. At least half of the time of each meeting should be occupied by local talent. The hall or other buildings to be used for the holding of the institute meetings should be lighted and heated, when such is necessary, at least half an hour before the time advertised. When light and heat are not required said places should be opened and prepared for holding the meeting at least one-half hour before the time advertised.

41. The time allowed speakers should be from five to thirty minutes, to vary according to the subject and the ability of the speaker. It is no breach of courtesy to limit each speaker to the time allotted him in the programme. When the programme has been carefully prepared on that basis no speaker should be allowed to exceed the time, to the embarrassment or detriment of the speakers who are to follow him. If the speakers are held down to their time, the work of the institute, as a rule, will be benefited. Sessions should not be too long.

42. No one should be named on a programme who has not agreed to do the specific thing he is advertised to do.

43. At each meeting of the institute a committee should be appointed to canvass the audience for members.

#### BOARD OF DIRECTORS.

44. The board of directors, under these rules and regulations, shall have full control of the affairs of the institute. They shall arrange time and places of meeting when not otherwise arranged for and shall outline the work and policy of the institute.

45. The directors of each local institute shall convene each year, in the month of September, for the purpose of arranging for the annual meeting. (See clause 16.) At this meeting the order of business shall be as follows:

(1) Selection of a place for holding the annual meeting.

(2) Shall a request be sent to the superintendent for a delegate to attend the annual meeting?

(3) If it is decided not to send a request to the superintendent for the services of a delegate, the director shall select a date on which to hold the annual meeting, which shall be between the 1st and 30th of November. (See clauses 14, 16, 17, and 18.)

#### EXECUTIVE COMMITTEE.

46. The executive committee shall carry into effect the plan of work decided upon by the board of directors and shall arrange the details of the same. (See clauses 9 and 66.)

#### NOTICE OF MEETINGS.

47. A meeting of the directors or of the executive committee may be held at any time, provided one week's notice by letter be given to each director in the case of a directors' meeting, and a similar notice to each executive officer in case of an executive committee meeting. Meetings of the executive officers or of the directors may be held on shorter notice, provided each director or executive officer be otherwise notified and agrees thereto. (See clause 25.)

#### DUTIES OF OFFICERS.

##### PRESIDENT.

48. It shall be the duty of the president to preside at all meetings of the board of directors and of the executive committee. In the absence of the president the vice-president shall preside, and if both are absent a chairman shall be appointed by the committee.

##### SECRETARY-TREASURER.

49. The secretary-treasurer shall have the powers of a managing director, acting under the control and with the approval of the executive committee.

##### SECRETARY.

50. It shall be the duty of the secretary to call meetings of the executive committee and board of directors, upon the authority of the president or any two officers or directors, to give notice of all meetings as required by these rules, and keep correct minutes of the proceedings.

51. All official correspondence relating to the institute shall be conducted by the secretary or in the name of the secretary.

52. In all correspondence relating to the institute the name of the institute shall be given in full after the signature of the officer, except in cases where an official heading is used, giving the name of the institute.

53. All reports and returns required by the superintendent shall be made upon forms especially provided and in the manner indicated.

54. The secretary shall keep a book in which shall be entered the names and addresses of members in alphabetical order, also a book to be used as a mailing list, which shall contain the names of parties to whom posters, programmes, etc., may be sent.

55. It shall be the duty of the secretary to prepare and submit to the executive committee the annual report, as set forth in clause 23, and to present the final report to the annual meeting.

56. Not later than 1st day of December in each and every year he shall forward to the superintendent by registered mail, or otherwise, copy of said report, together with a copy of the financial statement, and the name and address of each officer and director elected for the ensuing institute year, and also a list of members for ensuing year.

57. On or before the 10th day of March of each year the secretary shall send a revised list of members for the current membership year to the superintendent, and on or before the 10th day of each succeeding month he shall forward the name and address of each additional person who has since the previous return become a member of the institute. (See clause 6.)

58. Within one week after the close of each institute meeting or series of meetings the secretary shall forward to the superintendent a detailed report of said meeting or meetings, in which shall be stated the name of the place or places where sessions were held, the number of persons present at each session, the name and address of each person who read a paper or gave an address, the title of the address or paper, and a comment upon its value—whether good, fair, or indifferent. (Use Form A of secretary's minute book for making returns required by this clause.)

59. On or before 1st day of October the secretary shall report to the superintendent—

(1) The name of place selected for holding the annual meeting, also the name of the hall in which it will be held.

(2) The decision of the directors as to whether or not they wish the superintendent to arrange that a speaker address their annual meeting.

(3) The date chosen for holding the annual meeting if section 2 is decided in the negative.

60. The secretary shall, when possible, retain the manuscript of papers read at a meeting of the institute by local talent, in order that he may, when required, furnish the superintendent with same. Each institute is required to forward at least two such papers each year, which may be published as the superintendent decides. Secretaries or essayists are not required to rewrite papers before sending them to the superintendent. Forward them as read at local meetings.

61. All reports, names, post-office addresses, etc., should be written in a plain, legible hand, or they may be typewritten.

#### TREASURER.

62. It shall be the duty of the treasurer to receive and account for all moneys belonging to the institute, and disburse the same under the instructions of the executive committee, without whose order no money shall be paid out. He shall also prepare in detail and present to the annual meeting a duly audited statement of receipts and expenditures.

63. He shall use such cash and receipt books, membership tickets, etc., as may be required by the superintendent.

64. The funds of the institute as received by the treasurer shall, when possible, be deposited in a chartered bank to the credit of the institute.

#### DIRECTORS.

65. Each parish in the district shall be divided annually between the directors representing the same, whose duty it shall be to make a thorough canvass for members each year. This division of territory shall be arranged at a directors' meeting held immediately after the close of the annual meeting.

66. As soon as it is decided to hold an institute meeting in a parish the directors elected to represent that parish shall form part of the executive com-



mittee until after the close of said meeting. The duties of the said directors shall be to assist, to the best of their ability, the other members of the executive committee, to the end that a successful meeting may be held in their district.

67. It shall be the duty of the officers and directors to be present at the meetings of the institute. An officer or director who has not during the current year attended the meetings held in his parish (except when prevented by sickness), or otherwise rendered valuable assistance to the institute, shall not be eligible for reelection to office for the ensuing year.

68. Every officer and director shall promptly answer all official communications addressed to him by the superintendent, and should make diligent efforts to furnish any information required of him relative to the affairs of the institute.

69. The officers and directors shall act as far as practicable upon the recommendations of the superintendent and shall submit to him through the secretary all questions relating to the welfare of the institute upon which advice may be required.

#### EXPENDITURE OF INSTITUTE FUNDS.

70. All moneys received, whether as membership fees, legislative grant, or otherwise, shall be spent within the district in which the institute operates: (1) To defray actual expenses of meetings such as are heretofore described; (2) to employ suitable persons to address said meetings; (3) to assist in circulating agricultural, horticultural, live-stock, and dairy literature or periodicals among the members, or to establish a circulating agricultural library for the use of members; (4) to remunerate the secretary and others for services rendered.

#### QUORUM.

71. At all meetings of the institute or of the officers, if duly advertised as set forth in these rules, ten members shall form a quorum to do business at an annual or other general meeting. At a directors' meeting five shall be a quorum. At an executive committee meeting two shall be a quorum. If at any meeting a quorum is not present, those present shall adjourn, and the meeting shall again be called as prescribed by these rules. (See clauses 25 and 47.)

#### GENERAL RULES.

72. Each member of an institute shall be entitled to receive the publications issued by the department of agriculture for the Province of New Brunswick. Any change of address or any failure to receive the publications issued by the agricultural department should be reported immediately to the superintendent. The names of all officers and directors shall be included in the list of members.

73. The blank books used shall be those authorized by the department. Blank forms for reports of meetings, financial statements, and lists of members, membership books, mailing books, cashbooks, etc., may be had from the superintendent.

74. All institute returns shall be made to the superintendent.

#### ORDER OF MEETINGS.

75. (a) Except by permission of the presiding officer, no member or other person shall speak other than to ask a question or to introduce or speak to a motion.



(b) In the discussion following the introduction of a subject, no person shall speak more than twice nor for a longer period than five minutes, except by a vote of the meeting.

(c) When a question is under consideration, no motion shall be in order except the following: (1) To adjourn, (2) to postpone, (3) to amend, and (4) those motions taking precedence in the order named, and the first two shall be decided without debate.

(d) Before the vote is taken on any motion or amendment, the president shall ask: "Is the meeting ready for the question?" The question shall not be put so long as any member desires to speak and is in order. Any member desirous of asking a question on the subject introduced may do so verbally, but if he desires to ask more than two questions he must submit them to the secretary in writing.

76. Every member is entitled to the following privileges:

(a) To protest against any decision of the institute, and request his objection to be recorded in the minute book.

(b) To protest against the decision of the Chair and appeal to the meeting, stating the grounds of appeal, which shall then be put without debate in these words: "Shall the decision of the Chair be sustained?"

77. A motion to reconsider any question decided by the institute shall be in order.

78. Order of business for general meetings other than the annual:

- (1) Calling the meeting to order by the president.
- (2) Reading and disposing of communications.
- (3) Reports of committees.
- (4) Programme of the day and discussion.
- (5) Question drawer.
- (6) Adjournment.

#### SUGGESTIONS TO OFFICERS OF FARMERS' INSTITUTES.

There is no general system regarding the payment of secretaries and other officers. This is a matter that must be left entirely in the control of the local officers; yet it is desirable that, if possible, a uniform system be adopted throughout the Province. The following plan is respectfully suggested:

If the institute has a membership of 50, that the secretary receive ten dollars annually and all legitimate expenses while attending meetings, whether of the institute, the directors, or the executive officers. In addition to this, he may receive five dollars for each additional fifty persons who join the institute. By this plan an institute with a membership of 200 will pay its secretary twenty-five dollars net for his services. As a rule the success or failure of an institute depends upon the secretary. If an institute has a good secretary, it will flourish; if the secretary is not up to the mark, the institute will sooner or later go to the wall; therefore the best available man should be chosen for this position, and he should be liberally dealt with.

It is not necessary for the directors to meet frequently; probably once or twice a year is often enough, viz, just before and just after the annual meeting; but the executive officers (see clauses 9 and 66) should meet much more frequently, and if the funds of the institute will allow of it, they should be paid their actual expenses when attending meetings or when engaged in institute work.

In order to increase the membership and interest, each district should be canvassed annually, as provided for in clause 75. In order to meet the expenses of each director so engaged, a commission of 25 per cent may be allowed on each subscription taken by him in the section of the parish he represents. In a

thickly settled district an industrious man should take at least 20 names a day. His commission would be \$1.25.

Officers whose expenses are paid otherwise than by commission should be required to exercise strict economy. A statement of all such expenses should be presented in detail at the annual meeting.

If the officer's expenses are paid while attending a meeting, he should not be allowed a commission and expenses also.

Posters and programmes should be printed in the most attractive manner possible. Each institute should adopt and constantly use a certain color of paper, ink, and a certain typographical arrangement, which would soon become familiar to the people, and therefore recognized and noticed wherever seen. Red ink on white paper makes a bill noticeable. The bill and the programme should each give, as far as possible, the same information, and the typographical appearance should be the same, the only difference being the size of the type and the size of the paper used.

The most desirable size for the poster is about 27 inches long by 14 inches wide. The paper used for posters should be not lighter than 50 pounds to the ream nor more than 60 pounds; the latter is the best weight. When tacked on a wall or pasted on boards, bills of this weight last much better than the lighter ones. They are stiffer and hang better from a cord when put up in stores.

Programmes should be printed on paper 50 pounds to the ream, and may vary in size from 5 by 10 inches to 6 by 12 inches, according to the size of the sheet from which they are cut. Sheets of this size printed on one side only will be found cheaper and just as useful as smaller folders printed on both sides.

When an officer or director is canvassing for members each should take with him copies of the publications sent free to members during the past year. By showing these many more subscriptions can be obtained.

Each person becoming a member should be given an annual membership ticket or badge, the latter preferred. When badges are used each member should be requested to wear same whenever he or she is attending institute meetings. This will tend to advertise the institute and will make more easy and effectual the work of those selected to canvass the meeting.

When possible the institute should take the form of a farmers' club. Public meetings should be held in each parish at least once during each year; more frequently if practicable.

A sample member's card given below is a very good form :

FARMERS' INSTITUTE NO. 1.	
ADDINGTON AND ELDON, RESTIGOUCHE COUNTY.	
1901.	
----- -----	} MEMBER'S TICKET ..... 25 cents.
Mr .....	
Sold by .....	
	_____, <i>Secretary.</i>

This card entitles holder to all publications issued by the department for agriculture of New Brunswick.

## RULES GOVERNING DELEGATES.

1. Each speaker is expected to be thoroughly acquainted with the act and the rules governing farmers' institutes.

2. Each delegate is requested to study carefully the conditions and needs of the district to which he is sent as a speaker, and to prepare his addresses or papers accordingly.

3. The person whose name is placed first on the list in each division is chairman of that delegation, and is expected wisely to direct and control the work of that delegation, also the institute meetings to which he is sent.

4. Each delegate is requested to do all in his power to cause full and free discussion after each paper or address has been delivered, and to procure and forward to the superintendent the name and address of each successful local speaker or essayist, and to obtain all the information possible concerning such persons; also to inform the superintendent concerning the peculiar needs of the district visited as far as the institute work is concerned; also to forward a short report of each meeting. Was each gathering successful? If not, why not? After the meetings are thus reported the superintendent will be pleased to receive from each delegation or speaker suggestions or advice regarding institute work in general or with regard to any particular section. How can the efficiency of this important department of agricultural education be increased and made more valuable to the country? Each delegate or delegation is expected to give the superintendent and the officers of institutes generally the full benefit of this experience.

5. The dates of the institute meetings delegates are to attend will be published. Each delegate is expected to arrive at each place for which he is advertised at the hour named or a little before, and to continue in attendance during said meeting and enthusiastically and promptly to do his duty irrespective of what others may do. Should sickness or other serious cause intervene, the chairman of the deputation of the delegation shall telegraph the superintendent, in order that the vacancy may be promptly filled.

6. Long speeches or those calculated to advertise the property of the speaker are contrary to the rules governing institutes. Party politics in any form must be avoided by each speaker. The chairman of each delegation and the officers of each institute are expected to see that nothing of this kind occurs. Institute speakers are expected to teach practical agriculture, nothing else.

7. A check for a suitable sum to pay actual expenses of the deputation will be forwarded by the superintendent to the chairman of each deputation before the opening of the first meeting.

8. Each delegate shall pay his expenses to the opening meeting. The chairman of each respective deputation will refund said sum and will thereafter pay all expenses of the deputation. If a delegate does not know the way to reach the first place of meeting most quickly, the necessary information may be obtained by writing to the superintendent or, better still, by calling on the nearest railroad ticket agent, who will give the necessary information.

9. As soon as a delegate completes the work assigned to him he shall forward to the superintendent a bill for his time. Each delegate is also required to forward to the superintendent a copy of at least one of his addresses (the one which has proved most acceptable to the hearers preferred or the one chosen by the superintendent), and if possible a synopsis of the debate thereon and questions and replies thereto, which may be published in the annual report of the farmers' institutes or elsewhere, as decided by the superintendent. Some speakers withhold their best addresses, not wishing them published, fearing that

it would detract from their future usefulness. This is a mistake. The publication of an able address increases the demand for the speaker and the public desire to hear that particular address delivered.

10. As soon as the work of a deputation or speaker is completed the chairman shall forward to the superintendent all aforesaid reports on forms provided for the purpose. The financial statement shall be furnished in duplicate. All sums of \$1 and upward must be verified by a voucher.

11. The necessary expenses of each delegate are paid by the department from the time he leaves home until said persons return thereto; but each is expected to exercise due economy. Each delegate will receive a daily remuneration for services for the time absent from home, Sundays excepted, but each must go and return by the shortest and quickest route. A check in payment for services will be sent each delegate as soon as the work assigned him or her is completed and the required returns and a copy of an address prepared by said delegate is received by the superintendent.

12. *Finally remember:* Thorough preparation is the key to success as an institute worker. If you have had but little experience as a public speaker, carefully write your papers and make them short. Use these papers to assist you when addressing a meeting. The speakers should be careful to ascertain the time limit assigned them on the programme and be sure to keep within said limit. The papers and talks should be illustrated as far as possible by means of blackboard work, charts, diagrams, models, specimens, etc. Discuss themes on which you are thoroughly and practically well informed, and use your own experience and that of others to confirm what you say. Avoid personalities. Be courteous; be helpful. Hold yourself in readiness to promote the success of the institute in every way possible. Every time you speak aim to enforce some practical lesson adapted to the needs of the audience.

#### SPECIAL INSTRUCTIONS AND EXPLANATIONS TO INSTITUTE OFFICERS AND DELEGATES.

##### DELEGATES.

The farmers' institute system is nonpolitical in the strictest sense. (See clauses 31 and 32 of the acts and rules governing farmers' institutes.) Persons sent as delegates and officers and directors of institutes are instructed to enforce these rules to the very letter. Delegates are expected not to discuss, either directly or indirectly, political or sectarian questions while engaged as delegates, either before, after, or during the meetings. It is not necessary for them when acting as delegates even to make public their political allegiance. It is the policy of the department to send only two delegates as a deputation, and in some cases only one, but it will sometimes be found necessary to do otherwise.

The greatest care is exercised in choosing speakers. The services of specialists are obtained as far as possible, persons who have been successful in special lines, or those who are well qualified to explain profitable methods not generally followed. No attention is paid to politics, religion, or nationality when choosing delegates; they are chosen because of their qualifications only.

In some cases the delegates may not be prepared to discuss the subject the local officers deem of greatest interest. In such cases the officers should employ additional persons to deliver addresses of the character desired. These additional speakers may be chosen from the list of available delegates or elsewhere. A list of available delegates will be prepared and published each year.

If, from sickness or any other cause, a delegate who is advertised can not fulfill his engagements, another person competent to discuss similar subjects



will be sent in his place. But every precaution will be taken to prevent the necessity of changes. When changes are necessary, substitutes will be chosen from among the lists of available delegates.

Delegates are not expected to deliver more than two addresses each day, and in no case to occupy more time than is allotted to them in the programme issued by the local officers. The officers of local institutes are expected to employ other speakers or essayists.

The department defrays the cost of sending regular delegates to the regular meetings; but officers, directors, and members of institutes are expected to lighten, as far as possible, the expenses of the delegates by meeting them at the railway station and conveying them free of expense to the place of meeting and returning them again to the station or forwarding to the next place of meeting.

#### OFFICERS AND DIRECTORS.

Institute officers and other interested parties are urged to make themselves familiar with the act and rules governing farmers' institutes and delegates, and to conduct the respective institutes as nearly as possible on the lines there laid down.

Institute officers should hold meetings of farmers and business men at points where meetings are to be held at least four weeks before the said meeting convenes for the purpose of engaging a hall and providing an evening's programme; also to secure some of the best farmers to read papers on branches of farming in which they excel, and two or three ladies to give papers on some phases of home life or domestic economy.

Delegates and officers are urged to do all they can, by the use of the question drawer and otherwise, to draw out in discussion as many as possible of those present. Call upon them personally and urge them to speak. Frequently those best qualified are least inclined to take part. Try in each case to make the discussion interesting by engaging some experienced man to follow each address and thus open the discussion. Do not allow one or two to monopolize the discussion, but make all feel that they have a part in the proceedings.

Let it constantly be borne in mind that one of the chief aims of the institution is the development of local talent and the bringing of the rank and file into close touch with the most successful local men and their methods. Do not depend altogether on the delegates; if home talent is not developed the chief benefit of the institute system is lost sight of. When a popular evening's programme is desirable (which is the case in many places) it should be entirely supplied by local talent. In every district in New Brunswick there are many young people who could be employed to assist in such meetings, and if so engaged would in all probability thereafter take a keener interest in the work of farmers' institutes. Business and professional men and their families should not only be cordially invited to take part in these meetings and help to make them a success, but they should be urged to do so. It is reasonable to expect their assistance, for the success of all classes depends on the farmer. When he is prosperous all other classes flourish.

Institute officers are urged to do all in their power to forward the interests of their local institute, and to make such suggestions to the superintendent as they think are in their interest. He is always glad to receive suggestions and advice and is grateful to the sender, but institute officers are respectfully requested not to interfere, directly or indirectly, with the affairs or conduct of neighboring or distant institutes. Each local institute is quite capable, with the aid of the department and the superintendent, of conducting its own affairs. Interference by outsiders accomplishes no good purpose and invariably does

much harm. The officers and directors of each local institute are responsible for the success of the work of their respective institute districts only. The superintendent is responsible for the work throughout the Province.

In order to accommodate the farmers two series of institutes are held—one during the months of January and February and one in October and November. For institute purposes the Province is divided into three divisions, with separate sets of lecturers for each division. The Dominion department of agriculture each season sends lecturers to assist the local and provincial lecturers in giving instruction.

A feature of the work in this Province is that of holding field meetings in orchards or fields, where experts give practical demonstrations of the methods which they advocate, whether it be pruning, plowing, cultivating, grazing, budding, or planting. Over 20 per cent of the meetings held in 1903 were of this practical character.

Another peculiarity of the system is that the secretaries of the local institute societies receive compensation for their services. The amount is not very much, varying from \$5 to \$30 per year. No doubt this salary, small as it is, has much to do with insuring the success of the work, and gives the provincial superintendent a hold upon the local society that he would not have without it.

In 1903, 162 institute meetings were held, attended by 7,149 persons. The membership in the societies reporting ranges from 24 to over 800. Thirty-six had between 50 and 100 members, eleven between 100 and 200, and three over 200. The average cost per meeting was \$8.28.

The superintendent in his report for that year states that—

The interest in these meetings is constantly increasing, but very much of their success depends upon the local officers. If they are active men, interested in the work, and take the trouble to advertise and talk up the institute, the result has always been a good attendance. On the other hand, when the local officers are indifferent the result is generally poor.

#### **NORTHWEST TERRITORIES, CANADA.**

The farmers' institutes in the Northwest Territories of Canada are under the general direction of the territorial commissioner of agriculture, who is authorized to appoint a superintendent of fairs and institutes. The institute work is combined with that of the local agricultural societies. Where no agricultural society exists the superintendent of institutes gets some person in the neighborhood to make such local arrangements for the meetings as may be necessary. In all cases the department pays for the advertising and the rent of the halls for institute meetings.

The objects of a local agricultural society are defined in the territorial ordinance to be "to encourage improvement in agriculture, horticulture, manufactures, and the useful arts."

I. By holding meetings for the delivery of lectures and for the discussion of subjects connected with the theory and practice of any of the said industries.

II. By promoting the circulation of agricultural, pastoral, horticultural, arboricultural, and mechanical periodicals, and by the formation and maintenance of the reference library on such subjects for the use of its members.

III. By importing and otherwise procuring seeds, plants, and animals of new or valuable kinds.

IV. By holding exhibitions, as hereinafter provided, at which prizes may be awarded for—

(a) Excellence in the raising or introduction of live stock.

(b) The invention or improvement of agricultural machines or implements.

(c) The production of grain and all kinds of vegetables, plants, animals, fruits, home manufactures, and works of art, and generally for excellence in any agricultural production or operation.

V. By offering prizes for essays on subjects relating to agriculture, including the prevention of prairie fires and the eradication of noxious weeds.

VI. By taking action to eradicate poisonous and noxious weeds and to exterminate such animals as are found to injure or impede agriculture.

VII. By carrying on experiments in the growing of crops, the feeding of stock, or any branch of agriculture, or by testing any system of farming.

VIII. By affiliating and cooperating with associations organized to improve live stock or encourage grain growing, dairying, forestry, fruit growing, or promote the study of plant life or the destruction of injurious insects or pests.

The societies are organized by not less than 50 persons over 18 years of age and not belonging to any other agricultural society signing an application to the commissioner of agriculture and by each paying at least \$1 as a membership fee, or as part of his first annual subscription to the funds of the proposed society. If the commissioner approves of the application, he declares the subscribers to be organized into an agricultural society and issues a certificate to that effect. Thereupon the society becomes a corporation, with power to hold real estate necessary for the business of the society.

The officers of the society consist of a president and 2 vice-presidents, who are ex-officio directors, and 9, 12, or 15 additional elected directors as may be determined by the society, a secretary, and a treasurer, and 2 auditors. The president, vice-presidents, directors, and auditors hold office for one year. The secretary and treasurer are appointed from time to time by the directors to hold office during pleasure. The societies are required to hold an annual meeting within the first ten days of December in each year.

Each society thus constituted is entitled to receive grants made by the legislative assembly in aid of agriculture: One dollar for each paid-up member; \$5 for each agricultural experiment conducted by the society under the direction of the territorial department, and where a society holding an agricultural exhibition expends a sum in excess of \$250 for prizes an amount equal to 66 $\frac{2}{3}$  per cent of the amount actually paid for such prizes not exceeding \$1,000.



A list of the officers elected at the annual meeting and a copy or summary of each report and statement presented thereat is required to be transmitted to the department by the secretary on or before the 23d day of December in each year, and in case these particulars are not transmitted from any agricultural society within this date it can not receive any portion of the legislative grant unless the commissioner is satisfied by the explanations given that such delay was unavoidable or inadvertent, in which case he may pay the grant after deducting \$5 for each week of such delay.

The institute meetings are usually of one day's duration and often consist of but a single session. There is no regular staff of lecturers, but the superintendent depends upon securing from time to time the services of such men as he may discover to be available.

The first institute meetings, 19 in number, were held in 1899. The number has increased until in 1903 there were 106, and the amount expended for institute purposes for that year was \$8,200.

The methods followed by the Territories do not differ materially from those in use in the United States, namely, meetings of farmers to which lecturers are sent by the department, who discuss various subjects relating to agriculture. The system, however, is worthy of the special attention of institute workers from the fact of its coordinating the institute work with that of the agricultural society, and also because of the extent of the supervisory power exercised by the department over these local societies. This method consolidates the agricultural organizations into a single society in each county or district and empowers it to be the recipient of Government grants, and at the same time makes it subject to governmental supervision and control by the department of agriculture.

Instead, therefore, of being weakened by having many societies or a society for each specialty in agriculture, all subjects are included in one organization and recognized in the organization by classifying them and thus securing for each the interest and support of all of the members of the society, the farmers' institutes having the interest and help of the farmers' associations and the farmers' associations in turn having the aid of the institutes.

#### ONTARIO.

The farmers' institute movement in Ontario was organized by Dr. James Mills, president of the Ontario Agricultural College. The first meetings were held in January, 1885. The next year 26 meetings were held and the third year there were 40 institutes. In 1890 the Province was divided for institute purposes into seven districts, and to each institute meeting held in these districts three lecturers were sent—a professor from the agricultural college, a leading farmer,



and a leading fruit grower. In 1894 the work had reached such proportions as to require the entire time of a superintendent.

The movement has steadily grown until the number of meetings reported by the superintendent for the year ended June 30, 1904, had reached 833, consisting of 1,623 sessions and having a total attendance of 106,719 persons. The membership for the first six months of 1904 was 20,957. Thirty-eight lecturers were in the employ of the provincial superintendent last year, who spent from two to ten weeks in the work.

One of the special features of the farmers' institutes in Ontario is the women's institute. In 1899 the superintendent of institutes addressed a letter to the women of the Province, asking their cooperation in the formation of women's institutes. The response was such that 20 organizations were formed the first year, and in May, 1902, the number had reached 44, with a membership of 2,816. The movement had now become an assured success and was regarded as entitled to the same recognition and support by the Government as the regular institute. Accordingly, in 1902, Parliament passed the following amendment to the original farmers' institute act:

The formation of women's institutes for the purpose of improving rural home life and imparting information in regard to woman's work upon the farm shall be permitted under this act. The lieutenant-governor in council may, upon the recommendation of the minister of agriculture, adopt rules and regulations in regard to the organization of women's institutes, the general guidance or direction of such institutions, their relation to the farmers' institutes and the department of agriculture, and the grants of money to which they shall be entitled, with the conditions for payment of the same.

The result has been remarkable. The superintendent of institutes for the Province states under date of September, 1904:

At present we have organizations in 57 electoral districts, and each of these districts has from 1 to 8 branches, making a total of about 200 places where regular monthly or bimonthly meetings are held. During the past year 960 meetings were held, at which 1,848 papers and addresses were given. The total attendance was 44,698.

The institutes in this Province had the advantage of having been organized by a leading educator in agriculture and in having had in their development the active support of the faculty of the agricultural college at Guelph and the provincial department of agriculture, whose members devoted a large amount of their time to giving instruction in institute meetings.

Much of the success of the work has been due to the wisdom displayed in the construction of the system under which the institutes are organized and to the choice of officers to take control of the work.

That the system has operated remarkably well is evidenced by the interest and success that has distinguished the work from the beginning. Through the instrumentality of the institutes 40,000 persons

visited the agricultural college at Guelph in the month of June, 1903. These visitors were mostly farmers and their families, who took a day to go to the college and see the work that is being done in their interest on the experiment farm and to become acquainted with the president and members of the college faculty of instructors.

The work of the institutes has extended so as to include the improvement of the local fairs with a view to making them more highly educational and directly useful.

The methods pursued in carrying on the institute work are fully outlined in the accompanying act of the provincial Parliament providing for their organization.

### FARMERS' INSTITUTES OF ONTARIO, 1899.

In the construction of the farmers' institutes act and of the rules—

(1) "The department" shall mean the department of agriculture of the Province of Ontario.

(2) "The minister" shall mean the minister of agriculture of the Province of Ontario.

(3) "The superintendent" shall mean the superintendent of farmers' institutes for the Province of Ontario.

(4) "District" shall mean a district composed of municipalities as set forth in Schedule A<sup>a</sup> of the act, rules, and regulations.

(5) "Regular meetings" are those at which delegates sent by the superintendent are present and whose expenses, etc., are paid by the department.

(6) "Supplementary meetings" are those conducted by the local officers.

(7) "Regular delegates" are those sent annually to assist local officers to hold regular meetings.

(8) "Supplementary speakers" are those sent at the request of local officers to assist said officers when holding supplementary meetings.

### FARMERS' INSTITUTE ACT.

SEC. 46. The formation of farmers' institutes for the purpose of disseminating information in regard to agriculture shall be permitted under this act, one for each district as given in Schedule "A"<sup>a</sup> to this act, but the lieutenant-governor in council may, upon the recommendation of the minister, authorize the organization of additional farmers' institutes or make changes in the limits of the various districts, so far as farmers' institutes are concerned, in order to increase their efficiency.

SEC. 47. The lieutenant-governor in council may, upon recommendation of the minister, adopt rules or regulations for the general guidance or direction of such farmers' institutes.

SEC. 48. Every farmers' institute shall be entitled to receive such money out of the unappropriated funds in the hands of the provincial treasurer as the legislature may grant; provided—

(a) That the number of members is at least 50, each paying an annual fee of not less than 25 cents.

(b) That the rules or regulations approved by the lieutenant-governor in council have been carefully observed.

(c) That all reports or returns required to be made to the superintendent have been made to the satisfaction of the minister.

<sup>a</sup> Schedule omitted from this publication.

## AMENDMENTS PASSED IN 1902.

Section 46 of the said act is amended by adding the following:

(a) The formation of women's institutes for the purpose of improving rural home life and imparting information in regard to women's work upon the farm shall be permitted under this act.

Section 47 of the said act is amended by adding the following:

(a) The lieutenant-governor in council may, upon the recommendation of the minister, adopt rules and regulations in regard to the organization of women's institutes, the general guidance or direction of such institutes, their relation to the farmers' institutes and the department of agriculture, and the grants of money to which they shall be entitled, with the conditions for payment of the same.

## RULES AND REGULATIONS.

[Approved by the lieutenant-governor in council.]

1. The Ontario legislature has voted an appropriation for farmers' institutes for a grant of \$25 to one institute in each district, on condition that an equal sum be granted by the county council or the municipalities in which the institute is organized, and on such further conditions as may be imposed by regulations of the minister of agriculture.

2. The object of each local institute shall be the dissemination of agricultural knowledge in its district and the development of local talent. The officers shall endeavor to bring the rank and file of the farmers into touch with the most successful local men, that the masses may become more conversant with the best and most profitable methods of farming, stock raising, dairying, fruit culture, and all branches of business connected with the industry of agriculture.

## ORGANIZATION OF INSTITUTES.

3. One institute may be organized in each district of the Province, exclusive of cities, or in such other divisions as the lieutenant-governor in council may authorize.

4. The organization meeting may be called by the superintendent of farmers' institutes, by the head of a municipality, or by any five farmers of the district; and at least two weeks' previous notice shall be given by advertisement in two newspapers published in the district, or by placard, in which shall be stated the object, time, and place of meeting.

5. As soon as organization is completed the superintendent shall be notified, and the names and addresses of the officers and directors shall be forwarded to him.

6. All memberships shall terminate the 31st of December of each year. (See clause 57.)

7. Each institute shall be known by a distinctive name.

## OFFICERS.

8. The officers shall consist of a president, a vice-president, and a secretary-treasurer, and one or more directors from each municipality included in the institute district, except in new or thinly settled districts, when directors may be elected irrespective of the municipalities. The president, vice-president, and directors shall be elected annually, and, together with the secretary-treasurer,

shall constitute a board of directors, the majority of whom shall be practical farmers.

9. There shall be an executive committee composed of the president, the vice-president, and the secretary-treasurer.

10. There shall be elected annually two auditors to audit the accounts of the institute.

11. If the secretary-treasurer resigns, or for any cause does not perform the duties of his office, or if he remove from the district, the president shall immediately issue a letter calling the officers and directors together, giving each at least ten days' notice. In the meantime the president shall perform the duties of the secretary-treasurer. At the time and place appointed the officers and directors present shall appoint a secretary-treasurer. In case the presidency is vacant, or the president does not take action within ten days, the vice-president shall assume the power of president. Other vacancies shall be filled in like manner.

12. Any change in the personnel of the executive committee or directorate shall be reported to the superintendent forthwith.

#### ANNUAL MEETING.

##### DATE AND PLACE OF HOLDING.

13. The institute year shall begin June 1 and end May 31.

14. The annual meeting of each institute shall be held on some date to be selected between the 1st and 20th of June of each and every year. (See clauses 16, 17, 18, and 19.)

15. The newly elected board of directors shall take office at the close of the annual meeting. The old board shall remain in office until this time.

16. Each year a meeting of the directors shall be called by the secretary to meet some time before the 1st of March. The special business of this meeting shall be to arrange for holding the annual meeting.

17. If it is thought desirable by the directors present at this meeting that a delegate or speaker be in attendance at the annual meeting, the same may be arranged for through the superintendent, in which case the local institute shall pay the actual traveling expenses of the delegate or speaker from the time he or she leaves home until he or she returns thereto. (See clause 34.)

18. If it is decided that a request be sent to the superintendent for a speaker to attend the annual meeting, the directors shall, in addition, select the place for holding above meeting, the date being selected by the superintendent, as in the case of winter meetings. If, however, it is decided *not* to ask for a speaker through the superintendent, the directors shall select both date and place for holding annual meeting, conforming with clause 14.

19. A full report of this directors' meeting shall be forwarded by the secretary to the superintendent on or before the 1st of March.

##### BUSINESS AT ANNUAL MEETING.

20. At the annual meeting the directors and auditors shall be elected for the ensuing year. (See clauses 8 and 10.)

21. At the annual meeting the method of election shall be by ballot or otherwise, as decided by the members present. No person shall be eligible for office or be entitled to vote at the annual or any other meeting who has not paid his fees in full for the current membership year. (See clause 6.)

22. At the annual meeting members may suggest points in the district where institute meetings may be held during the succeeding institute year, first as to regular and secondly as to supplementary meetings.



23. At the annual meeting the executive officers for the past institute year shall, through the secretary-treasurer, present to the meeting, in writing, a carefully prepared report of the proceedings of the year, in which shall be stated the number of institute meetings held since the last annual report, the attendance at each session, the total number of papers read and addresses delivered, and a statement of the financial condition of the institute. The financial statement shall first be audited and certified thereto by the auditors.

24. The annual meeting shall be devoted to the business of the institute, as specified in clauses 20, 21, 22, and 23, and in carrying out the "programme of the annual meeting," and in considering ways and means whereby the institute can be improved.

25. The annual meeting shall be advertised by mailing to each member, at least ten days before the date thereof, an announcement calling the members together. Said announcement shall specify the date, place, and hour of meeting, and shall contain a programme of said meeting. If the executive deem it in the interest of the institute, posters and newspaper advertising may also be employed to make this meeting publicly known.

#### ORDER OF BUSINESS FOR ANNUAL MEETING.

26. (1) President's report.

(2) Discussion thereon.

(3) Report of the executive committee, presented in writing by the secretary-treasurer.

(4) Auditors' report, presented in writing.

(5) Suggestion of points at which to hold regular meetings.

(6) Suggestion of points at which to hold supplementary meetings.

(7) Election of directors; election of auditors.

(8) Suggestions as to how the institute can be improved or made more useful, if this has not already been considered by the president in his opening address or the discussion following.

(9) Addresses, etc.

27. At the close of the annual meeting the new board of directors shall meet and elect from among themselves a president and a vice-president, and shall finally decide at what points in the district regular and supplementary meetings shall be held during the current institute year. The points selected shall be entered on page C of the secretary's minute book, and a copy of this page shall be sent to the superintendent and shall be considered as part of the report of the annual meeting.

28. The board of directors shall, at the close of the first annual meeting, and when afterwards necessary, appoint from among themselves or otherwise a secretary-treasurer, who shall remain in office during pleasure.

29. In case an institute shall, through any cause, fail to hold its annual meeting within the time specified, the superintendent may appoint a date for holding same, the meeting to be called as provided for the regular annual meeting, and this meeting shall, in all particulars, be taken as the annual meeting of the institute.

#### OTHER GENERAL MEETINGS.

30. In addition to the annual meeting, each institute shall hold at least four meetings each year, at which papers shall be read or addresses delivered on topics relating to agriculture, horticulture, dairying, or kindred subjects. Free discussion shall be encouraged. (See explanation, p. 61, clause B.)

31. All institutes organized under the act shall be strictly nonpartisan and nonsectarian in every phase of their work, and no institute shall be operated

in the interest of any party, sect, or society, but for the equal good of all citizens and the farming community.

32. No subject shall be presented at an institute meeting or discussion allowed of a political or sectarian nature; nor shall any speaker be allowed in his lecture, essay, or speech, or in any discussion, to advertise wares or schemes in which he has a direct or indirect pecuniary interest. The delegates and officers of the institute shall see that the exercises are not subordinated to any low or frivolous entertainments or to the aggrandizement of any individual, party, or sect.

33. The regular delegation shall visit two points only in one year in each institute district, or when said delegation spends two days at one place that point only shall be visited. The government will defray the cost of sending these delegates, but officers and members of institutes are expected to lighten as far as possible the expenses of delegates while in their district.

34. Should any institute require a speaker or speakers at any other period during the year to assist in holding supplementary meetings, application for assistance shall be made to the superintendent at the time of reporting the annual meeting. The department will pay for the services of such supplementary speaker or speakers for four days in each year for each institute district, but the institute requiring the services of said speaker or speakers shall pay all legitimate expenses from the time said person or persons leave home until they return thereto. When a delegate or delegates address meetings in more than one district the expenses will be equitably divided between said institutes and collected from the institute or deducted from their grant.

35. If an institute decides to hold supplementary meetings other than those asked for at the time of reporting the annual meeting, or for more than four days during one year, said institute shall pay all expenses and wages. This clause shall not apply to the annual meeting.

36. If a regular or supplementary meeting has been granted and the time and place published in the annual bulletin, no change shall be made in said time or place. Any institute failing to hold a supplementary meeting published as aforesaid shall be required to pay the expenses notwithstanding.

37. All requests for assistance to hold agricultural, horticultural, live-stock, or dairy meetings shall be made through the secretary of the district institute. Applicants should state what subjects they wish the speaker to discuss.

38. Every meeting of an institute, except the annual meeting, should be advertised by issuing posters, not less in size than 15 by 20 inches, on which should be printed an attractive programme of the meeting, giving date and place of meeting, hour of opening, the name and address of the speakers, topics to be discussed by each; also the hour at which each speaker will address the meeting and the time to be occupied by each address; also the time allowed for discussion after each address, and such other information as the executive committee deems necessary. A copy of said bill should be sent at least two weeks previous to the date of meeting to each postmaster, each schoolmaster, each miller, each blacksmith, and to other places of public resort in the district which are within a radius of 10 miles of the place of meeting, with a request to post in a conspicuous place. It shall be the duty of the officers and directors to exercise diligence to insure the proper posting of said bills. In addition thereto, a programme of convenient size, containing similar information, should be distributed so as to reach its destination at least ten days previous to date of meeting. A copy of said programme should be sent to each member of the institute, to farmers, journalists, public men, and others in the district who reside within 10 miles of the place of meeting. Such posters and programmes should announce that all

interested are welcome, whether members of the institute or not. Copies of said programmes should be sent to the school-teachers in the district, with the request that they be carefully distributed among the children.

39. A copy of each poster and each programme shall be sent, as soon as published, to the superintendent and to each speaker advertised.

40. When institutes are notified of the dates assigned for their meetings, and are furnished with the names of the speakers and a list of topics, the executive committee should proceed to complete arrangements according to these rules. They should finally engage the hall, select local talent, etc. At least half of the time of each meeting should be occupied by local talent. The hall or other building to be used for holding the institute meetings should be lighted and heated, when such is necessary, at least half an hour before the time advertised. When light and heat are not required, said places should be opened and prepared for holding the meeting at least one-half hour before the time advertised.

41. The time allowed speakers should be from five to thirty minutes, to vary according to the subject and the ability of the speaker. It is no breach of courtesy to limit each speaker to the time allotted him in the programme. When the programme has been carefully prepared on that basis, no speaker should be allowed to exceed the time, to the embarrassment or detriment of the speakers who are to follow him. If speakers are held down to their time the work of the institutes, as a rule, will be benefited. Sessions should not be too long.

42. No one should be named on a programme who has not agreed to do the specific thing he is advertised to do.

43. At each meeting of the institute a committee should be appointed to canvass the audience for members.

#### BOARD OF DIRECTORS.

44. The board of directors, under these rules and regulations, shall have full control of the affairs of the institute. They shall arrange time and places of meetings, when not otherwise arranged for, and shall outline the work and policy of the institute.

45. The directors of each local institute shall convene each year in the month of February for the purpose of arranging for the annual meeting. At this meeting the order of business shall be as follows:

- (1) Selection of a place for holding the annual meeting.
- (2) Shall a request be sent to the superintendent for a delegate to attend the annual meeting?
- (3) If it is decided not to send a request to the superintendent for the services of a delegate, the directors shall select a date on which to hold the annual meeting, which shall be between the 1st and 20th of June. (See clauses 14, 16, 17, and 18.)

#### EXECUTIVE COMMITTEE.

46. The executive committee shall carry into effect the plan of work decided upon by the board of directors and shall arrange the details of the same. (See clauses 9 and 66.)

#### NOTICE OF MEETINGS.

47. A meeting of the directors or of the executive committee may be held at any time, provided one week's notice by letter be given to each director, in the case of a directors' meeting, and a similar notice to each executive officer in case of an executive committee meeting. Meetings of the executive officers or of the directors may be held on shorter notice, provided each director or executive officer be otherwise notified and agrees thereto. (See clause 25.)

## DUTIES OF OFFICERS.

## PRESIDENT.

48. It shall be the duty of the president to preside at all meetings of the board of directors and of the executive committee. In the absence of the president the vice-president shall preside, and if both are absent a chairman shall be appointed by the committee.

## SECRETARY-TREASURER.

49. The secretary-treasurer shall have the powers of a managing director, acting under the control and with the approval of the executive committee.

## SECRETARY.

50. It shall be the duty of the secretary to call meetings of the executive committee and board of directors upon the authority of the president or any two officers or directors; to give notice of all meetings as required by these rules, and keep correct minutes of the proceedings.

51. All official correspondence relating to the institute shall be conducted by the secretary or in the name of the secretary.

52. In all correspondence relating to the institute the name of the institute shall be given in full after the signature of the officer, except in cases where an official heading is used giving the name of the institute.

53. All reports and returns required by the superintendent shall be made upon forms especially provided and in the manner indicated.

54. The secretary shall keep a book in which shall be entered the names and addresses of members in alphabetical order, also a book to be used as a mailing list, which shall contain the names of parties to whom posters, programmes, etc., may be sent.

55. It shall be the duty of the secretary to prepare and submit to the executive committee the annual report as set forth in clause 3, and to present the final report to the annual meeting.

56. Not later than the 1st day of July of each and every year he shall forward to the superintendent, by registered mail or otherwise, copy of said report, together with a copy of the financial statement and the name and address of each officer and director elected for the ensuing institute year.

57. On or before the 10th day of January of each year the secretary shall send a revised list of members for the current membership year to the superintendent, and on or before the 10th day of each succeeding month he shall forward the name and address of each additional person who has since the previous return become a member of the institute. (See clause 6.)

58. Within one week after the close of each institute meeting or series of meetings the secretary shall forward to the superintendent a detailed report of said meeting or meetings, in which shall be stated the name of the place or places where sessions were held, the number of persons present at each session, the name and address of each person who read a paper or gave an address, the title of the address or paper, and a comment upon its value, whether good, fair, or indifferent. (Use Form A of secretary's minute book for making returns required by this clause.)

59. On or before the 1st day of March the secretary shall report to the superintendent—

(1) The name of place selected for holding the annual meeting; also the name of the hall in which it will be held.



(2) The decision of the directors as to whether or not they wish the superintendent to arrange that a speaker address their annual meeting.

(3) The date chosen for holding the annual meeting if section 2 is decided in the negative.

60. The secretary shall, when possible, retain the manuscript of all papers read at meetings of the institute by local talent, in order that he may, when required, furnish the superintendent with the same. Each institute is required to forward at least two such papers each year, which may be published as the superintendent decides. Secretaries or essayists are not required to rewrite papers before sending them to the superintendent; forward them as read at local meetings.

61. All reports, names, post-office addresses, etc., should be written in a plain, legible hand, or they may be typewritten.

#### TREASURER.

62. It shall be the duty of the treasurer to receive and account for all moneys belonging to the institute, and disburse the same under the instructions of the executive committee, without whose order no money shall be paid out. He shall also prepare in detail and present to the annual meeting a duly audited statement of receipts and expenditures.

63. He shall use such cash and receipt books, membership tickets, etc., as may be required by the superintendent.

64. The funds of the institute as received by the treasurer shall, when possible, be deposited in a chartered bank to the credit of the institute.

#### DIRECTORS.

65. Each municipality in the district shall be divided annually between the directors representing the same, whose duty it shall be to make a thorough canvass for members each year. This division of territory shall be arranged at a directors' meeting held immediately after the close of the annual meeting.

66. As soon as it is decided to hold an institute meeting in a municipality, the directors elected to represent that municipality shall form part of the executive committee until after the close of said meeting. The duties of the said directors shall be to assist to the best of their ability the other members of the executive committee, to the end that a successful meeting may be held in their municipality.

67. It shall be the duty of the officers and directors to be present at the meetings of the institute. An officer or director who has not during the current year attended the meetings held in his municipality (except when prevented by sickness), or otherwise rendered valuable assistance to the institute, shall not be eligible for reelection to office for the ensuing year.

68. Every officer and director shall promptly answer all official communications addressed to him by the superintendent, and should make diligent efforts to furnish any information required of him relative to the affairs of the institute.

69. The officers and directors shall act as far as practicable upon the recommendations of the superintendent, and shall submit to him, through the secretary, all questions relating to the welfare of the institute upon which advice may be required.

#### EXPENDITURE OF INSTITUTE FUNDS.

70. All moneys received, whether as members' fees, legislative grant, grant from the county councils or from municipalities, or otherwise, shall be spent within the district in which the institute operates: (1) To defray actual expenses of

meetings such as are heretofore described; (2) to employ suitable persons to address said meetings; (3) to assist in circulating agricultural, horticultural, live-stock, and dairy literature or periodicals among the members, or to establish a circulating agricultural library for the use of members; (4) to remunerate the secretary and others for services rendered; (5) to make an annual grant (not exceeding \$10) to the women's institute in the district:

#### QUORUM.

71. At all meetings of the institute or of the officers, if duly advertised as set forth in these rules, 10 members shall form a quorum to do business at an annual or other general meeting. At a directors' meeting five shall be a quorum. At an executive committee meeting two shall be a quorum. If at any meeting a quorum is not present, those present shall adjourn and the meeting shall again be called as prescribed by these rules. (See clauses 25 and 47.)

#### GENERAL RULES.

72. Each member of an institute shall be entitled to receive a copy of such publications as the following, issued by the department of agriculture for the Province of Ontario:

Report of the Ontario Agricultural College and Experimental Farm.

Report of the Ontario Agricultural and Experimental Union.

Report of the Butter and Cheese Association of Eastern Ontario.

Report of the Butter and Cheese Association of Western Ontario.

Report of the superintendent of farmers' institutes.

Report of the Dominion cattle, sheep, and swine breeders' associations.

Report of the poultry associations, east and west.

Report of the good roads instructor.

Bulletins of the agricultural college and experimental farm.

Any change of address or any failure to receive the bulletins and reports issued by the agricultural department should be reported immediately to the superintendent.

The names of all officers and directors shall be included in the list of members.

73. The blank books used shall be those authorized by the department. Blank forms for reports of meetings, financial statements, and lists of members, membership books, mailing books, cashbooks, etc., may be had from the superintendent.

74. All institute returns shall be made to the superintendent.

#### ORDER OF MEETINGS.

75. (a) Except by permission of the presiding officer, no member or other person shall speak other than to ask a question or to introduce or speak to a motion.

(b) In the discussion following the introduction of a subject, no person shall speak more than twice nor for a longer time than five minutes, except by a vote of the meeting.

(c) When a question is under consideration, no motion shall be in order except the following: (1) To adjourn; (2) to postpone; (3) to amend—these motions taking precedence in the order named, and the first two shall be decided without debate.

(d) Before the vote is taken on any motion or amendment, the president shall ask: "Is the meeting ready for the question?" The question shall not be put so long as any member desires to speak and is in order. Any member desirous

of asking a question on the subject introduced may do so verbally, but if he desires to ask more than two questions he must submit them to the secretary in writing.

76. Every member is entitled to the following privileges :

(a) To protest against any decision of the institute, and request his objection to be recorded in the minute book.

(b) To protest against the decision of the Chair and appeal to the meeting, stating the grounds of appeal, which shall then be put without debate in these words: " Shall the decision of the Chair be sustained?"

77. A motion to reconsider any question decided by the institute shall be in order, providing such a motion be not made on the same day on which the resolution is carried.

78. Order of business for general meetings other than the annual :

- (1) Calling the meeting to order by the president.
- (2) Reading and disposing of communications.
- (3) Reports of committees.
- (4) Programme of the day, and discussion.
- (5) Question drawer.
- (6) Adjournment.

#### EXPLANATIONS.

A. In framing the act and rules special care has been taken to lessen rather than increase the work of the local secretaries.

B. (See clause 30.) The four meetings referred to in clause 30 may include the regular and supplementary meetings of the institute; picnics, if addresses on agricultural subjects are given, or if the point visited is one of agricultural interest, such as an experimental station, a noted farm, etc.; also official meetings called to meet the superintendent. A meeting continuing two days may be counted as two meetings. Each of the aforesaid meetings should be reported as set forth in clause 58.

#### LEGISLATIVE GRANTS.

C. The reports of the annual meetings must be sent to the superintendent not later than July 1. As soon as these have been completed in satisfactory form, the superintendent will notify the minister of agriculture, and the legislative grants will be paid as soon as convenient. If all reports are made out and forwarded in accordance with these instructions, the officers will receive the grants about August 1, or within a few days thereafter.

#### QUEBEC.

The farmers' institute work in the Province of Quebec is organized in the form of incorporated farmers' clubs. The club has the power "to acquire and possess lands for holding exhibitions, for establishing agricultural schools or model farms, and may sell, lease, or otherwise dispose of the same, but can not own more than 200 acres of land at a time."

Any agricultural club may have "animals of improved breed, sold by auction or otherwise, without paying the duties required by law, provided the purchasers undertake to keep such animals within the territorial district of the club during such time and upon such conditions as the club may determine."

The clubs are empowered to "promote and favor experiments in farming, manuring, and improved agricultural machinery and implements; encourage the study of the best methods of fattening cattle, the production of milk or manufacture of butter or cheese, and the improving and draining of lands."

The funds the clubs derive from subscription of its members and from public grants are not allowed to be expended for refreshments, visits, entertainments, or anything similar thereto.

#### FORMATION OF CLUBS.

The statutes provide that—

(1) One or more farmers' clubs may be formed in any territorial division erected for the purpose of establishing agricultural societies, and such clubs shall enjoy all of the advantages and privileges of such societies.

(2) There can not be more than one club in any parish whatever may be the number of municipalities in such parish, nor more than one club in either municipality or township.

(3) The club must have at least 25 members who have subscribed the total amount of \$30 and who signed the following agreement and transmitted the same to the minister of agriculture:

"We, whose names are subscribed hereto, agree to form ourselves into a club, under the provisions of the law respecting agriculture and colonization, to be called the ——— Farmers' Club (of the parish or municipality, as the case may be) of ———; and we hereby and severally agree to pay to the treasurer yearly while we continue members of the club the sums set opposite our respective names, and we further agree to conform to the rules and by-laws of the said club."

If the minister of agriculture deems it expedient to authorize the formation of the club, he immediately causes a notice of its formation to be published in the Quebec Official Gazette.

(4) The club is composed of the persons who have signed such declaration as long as they continue to pay an annual subscription, and of all persons who in the future shall pay such annual subscription.

(5) The amount of the annual subscription to become a member of the club is fixed at \$1, but members may subscribe more if they wish so to do.

(6) If more than \$2 is paid by any one member, the board of managers is authorized to give him seed and fertilizers, or any other thing calculated to aid in his farming operations, to an amount equal to the additional sum paid by him.

#### MEETINGS OF CLUBS AND ELECTIONS OF DIRECTORS.

1675*n*. An annual general meeting of the members of every club shall be held on the second Wednesday in December in each year, and, in the territorial districts where there is no club, a meeting for the formation of a club may be held on the same date.

1675*o*. Such meeting shall be convened by notice posted up or read at the church doors, or at any other public place in the territorial district of the organized or projected club, at least eight days before such meeting, by order of the president of the club or, in his absence, of the vice-president of the society; and in districts where no club has yet been organized the same shall be done by order of the mayor or a councilor of a municipality, and the person who



shall have called the said meeting shall be entitled to preside at the said meeting until a president is elected.

1675p. At such meeting the club elects seven directors, who must be chosen from amongst the members of the club.

1675q. At its first meeting after the annual general meeting, or on the day of the annual meeting, if all the directors are present, the board of directors elects a president and a vice-president from amongst the directors, and a secretary-treasurer, who must be taken from outside of the board of directors, and who, after his election, does not form part of such board.

1675r. The meeting for the formation of a club or the election of directors of a newly organized club, may be held at any time after notice published in the manner indicated in article 1675o; but no club is entitled to any share of the grant for the year during which it was organized unless the organization and election of directors have taken place before the 1st of May of such year.

1675s. The officers and directors of each club shall, during the year immediately following the annual meeting, and until the election of their successors, exercise all the powers conferred on the club by this section.

In case of vacancies during the year among the officers or directors, such vacancies shall be filled up by the board of directors.

1675t. They shall hold their meetings according to the terms of the adjournment or to a notification in writing, forwarded to each of them by order of the president, or, in his absence, by order of the vice-president, or of the president pro tempore, three days at least before the day fixed for the holding of such meeting.

1675u. At any meeting four shall form a quorum.

1675v. The officers and directors shall have full power, at every meeting, to make regulations and by-laws for the government of the club and to modify and repeal the same: *Provided always*, That such regulations and by-laws be consistent with those published by the council of agriculture and be submitted in every case for the approval of the minister of agriculture.

1675w. The directors shall, whenever the minister of agriculture deems expedient, convene a general meeting of the members of such club, at which lectures on agriculture shall be given.

The public shall be admitted to such lectures.

In default of holding such meetings when required by the minister of agriculture, the provincial grant may be taken away.

During the fifteen days following such meeting the president and secretary shall sign and transmit to the minister of agriculture a report setting forth the date of the meeting, the name of the lecturer or lecturers, the subjects dealt with, and the approximate number of persons present.

1675x. The directors shall draw up and submit, at the annual meeting, a detailed report of their operations during the year that is about to end, declaring and showing the names of all the members of the club, the amount subscribed and paid by each of them, the names of all persons to whom prizes shall have been awarded, the amount of each such prize, and the name of the article or head of cattle for which the prize was awarded, the number and date of the general meetings, the name of the lecturer or lecturers, the subjects treated and the approximate number of persons present, together with such other remarks on the agriculture of the county and the improvements which either have been or may be introduced into the same, as the board of directors is in a position to offer.

1675y. They shall further submit at the said meeting a detailed statement of the receipts and expenditures of the club during the year.

1675z. The said report and statement, when approved by the meeting, shall be entered in the journal of the club kept for such purpose, which entry shall

be signed by the president or vice-president, as faithful and correct, and a copy thereof, attested by the president, vice-president, or secretary, for the time being, shall be transmitted to the minister on or before the 1st day of January following.

Each club is entitled to an annual grant of 50 cents per member, taken from the sum appropriated to the payment of grants to agricultural societies, and every member is further entitled to receive the Journal of Agriculture and Horticulture, notwithstanding no club shall receive in any year less than \$25 nor more than \$50 in addition to the Journal of Agriculture and Horticulture, and no grant can be given to a club unless \$30 have been subscribed and paid to its treasurer by at least 25 members.

1675*ll*. The grant shall be due and payable to each club so soon as the report, statement of accounts, and scheme of operations thereof shall have received the approval of the minister, and so soon as the president and secretary-treasurer or any other officer of the club shall have transmitted to the minister an affidavit, in the form of Schedule F<sup>a</sup> of this section, sworn to before a justice of the peace, setting forth the members then forming part of the club whose subscriptions for the current year have been paid into and are in the hands of the treasurer.

The said affidavit shall be sent by registered letter to the department of agriculture on or before the 1st of September in each year. If it be not transmitted at such date or within the thirty days following the grant for that year may be suppressed; but it shall be the duty of the secretary of the council of agriculture to give notice on the 1st day of July in each year to all clubs, by a registered letter addressed to the secretary-treasurer of each such club, that its grant for the year will not be allowed if the affidavit required by this article has not been transmitted by registered letter to the said department, as by law required.

1675*qq*. If a club neglects for two years to comply with the requirements of the present section the minister may declare it dissolved, realize its property, and employ the proceeds in paying the debts of such club, and use the surplus of the assets over the liabilities for encouraging agricultural institutions and for promoting the general interests of agriculture in the county in which such club existed.

1675*bbb*. After an existence of five years such society may at any time be dissolved by the minister upon petition of the majority of the clubs composing the same.

The minister may, if he orders the dissolution, take possession of the property of the dissolved society, realize it, pay the debts, as well out of the proceeds of its property as out of the grants to the clubs of the county, and if there is any surplus may distribute it among the agricultural institutions of the same county or territorial division.

1675*ccc*. Every club forming part of a society and not having the amount of subscriptions and the number of members required by law may, however, continue to exist and to receive its grant, provided it has at least 15 members and \$15 of subscriptions.

1675*ddd*. All the provisions of the revised statutes respecting clubs and agricultural societies apply to clubs' societies and to the clubs composing them, in so far as they are not inconsistent with this section.

The deputy minister of agriculture for the Province, who has direction of the institute work, reports that over 600 farmers' clubs

---

<sup>a</sup> Schedule omitted from this publication.

were in operation in the Province in 1902, of which number 555 complied with all of the conditions imposed by the law, and received altogether \$22,427.50 from the government grant.

The institute lecture force consists of two permanent lecturers appointed by the provincial government, assisted by specialists and good practical farmers. Lectures are also given by experts sent in by the Dominion government. The institute meetings are not confined to any particular season of the year, but may be held at any time convenient for the farmers of the locality.

The number of members in 1902 was 48,294, and to each of these the *Journal of Agriculture and Horticulture* was sent gratuitously twice a month. The superintendent states also: "We consider farmers' clubs to be more effective as they are organized than if they were mere institutes. The lectures and the increased circulation of the *Journal of Agriculture*, as well as the purchase of improved live stock, has greatly contributed to the improvement of agriculture in the Province." Most of these clubs own standard breeds of stock, and in 1902 they bought high-bred animals to the value of \$11,239.37.

#### EXTRACTS FROM BY-LAWS.

ARTICLE 53*a*. Article 53 of the by-laws of the council of agriculture is applicable to the farmers' clubs in fixing the total value of the distribution at an amount which shall not exceed the subscription of each member, except in altogether special cases, of which the council shall be the judge.

ARTICLE 53*b*. In the case where clubs should consider it advantageous to hold a competition for the best-kept farms, such clubs shall be obliged to offer not less than five prizes, viz: First prize, \$5; second prize, \$4; third prize, \$3; fourth prize, \$2; fifth prize, \$1. Each club may, nevertheless, offer prizes of a greater value. These prizes shall only be paid in books treating of agriculture, in improved agricultural implements, in seeds, or high-class breeding stock, as the directors may decide.

ARTICLE 53*c*. Every member of a club who shall have paid his subscription of \$1 and an additional special entry of 25 cents before the 1st of May shall have the right to compete in the competitions for the best-kept farms.

ARTICLE 92. No competitor shall be entitled to more than one prize in the same class, and no animal can compete in more than one class except for prizes offered for the best herds.

ARTICLE 121*a*. Agricultural societies and clubs have the power in competitions for the best-kept farms to admit or to refuse to admit to the next competition the person who carried off the first prize at the last competition, as they may consider it most advantageous to their respective associations.

#### GREAT BRITAIN.

The movement in aid of agriculture in Great Britain culminated in 1887 in the appointment by Parliament of a departmental commission, for the purpose of "inquiring into and reporting upon agricultural and dairy schools in Great Britain, which may appropriately

receive Government grants, and to advise as to the department which should be charged with the administration of such grants."

In an elaborate report dated December 9, 1887, and in a subsequent final report, under date of February 27, 1888, the commission outlined a system of agricultural instruction which was substantially adopted by Parliament the same year. The report recommended the extending of Government aid to certain institutions, charging them with the duty of providing instruction in agriculture, the distribution of the parliamentary grants to be in the hands of a board of agriculture, to be created for this purpose.

The plan contemplated the establishing of a collegiate center in each of the five produce districts of England, and with two additional for Scotland. The produce districts referred to were each made up of a number of counties which the agricultural department treat as a unit in making estimates of crops.

The first annual grant was £5,000, and was appropriated in 1888. It was made the duty of the college receiving aid from the Government grant to provide not only for giving instruction in agriculture indoors, but to extend its work through the particular produce district or area of which it was the recognized educational center.

#### MIGRATORY SCHOOLS.

In providing agricultural instruction for the outlying counties, "migratory schools" under the direction of the collegiate centers were organized. The conditions under which these schools are operated vary somewhat in the different districts. The report of the inspector appointed to visit and report upon the work of the traveling schools in the Swindon district gives the details of the method that is pursued in establishing and conducting a traveling dairy school. The report states that—

The society (Bath and West of England Society) with the assistance of a local committee organizes the school and provides teachers and necessary appliances. The local committee guarantees suitable premises free of charge, also as much milk and cream as may be required, together with the attendance of not less than ten students. The society gives, as a rule, two complete courses of instruction of ten days each, charging:

	£	s.	d.
For the entire course of ten days or over.....	1	1	0
For one week's instruction.....		15	0
For one day's instruction.....		5	0

The manufactured produce is in all cases the property of the local committee.

During the year 1889 this society organized and conducted 8 such schools, aggregating one hundred and sixty days of instruction and attended by 218 students. Similar peripatetic schools were conducted during this period by the University College of North Wales,



the Leicester Educational Committee, the Eastern Counties Dairy Institute, and the British Dairy Farmers' Institute.

As has been stated, the board of agriculture, in organizing the work of agricultural education for Great Britain, adopted the plan of grouping the counties, establishing an agricultural college or high school in each group, the work of agricultural education in each to be largely under the general direction of the central institution.

In 1890 an important modification of the work of providing for agricultural instruction was brought about through the passage of an excise act by Parliament, whereby the local authorities, known as county councils, were afforded large additional resources derived from local taxation, and were intrusted with discretionary power to use the funds thus supplied, in providing such forms of agricultural teaching as were embraced in the technical-instruction act of 1889. Until this time financial support for local agricultural institutions was from the Government grant, and the formation of the courses of study was in the hands of the central college established for the district. The legislation of 1890 rendered the counties independent of Government aid in carrying on their agricultural education work and enabled them to inaugurate a system of instruction of their own.

The sums thus placed at the disposal of the county councils are quite considerable. In 1901-2 the receipts from the excise tax, available for technical instruction in England and Wales, amounted to £708,517. Of this sum £88,893 were used directly in 1902-3 in aid of agricultural education. The distribution for that year was as follows:

General expenditures .....	£7, 223
Dairy instruction .....	12, 845
Agricultural lectures .....	5, 715
Poultry keeping .....	3, 284
Farriery and veterinary science.....	2, 542
Bee keeping.....	1, 380
Horticulture .....	10, 562
Manual processes .....	1, 511
Miscellaneous .....	4, 743
Scholarships .....	10, 800
Colleges and schools.....	28, 288
Total .....	88, 893

When the Government grant for agricultural education was first made and for two years thereafter the board of agriculture aided the county councils from this general grant, but when the act of 1890, making provision for agricultural educational work in the counties, became effective the funds belonging to the parliamentary grant were devoted exclusively to the aid of the colleges which had been established as centers of education in agriculture in the various districts,

and the counties were left to carry on their work from the proceeds of the excise fund.

For a time the county councils appropriated the entire excise fund to local purposes, but later they also assisted the agricultural colleges of their respective districts and aided as well a considerable number of secondary agricultural schools. In 1899-1900, the latest classified date given in the reports of the board of agriculture and fisheries, the assistance given to the agricultural colleges and schools in England and Wales by the county councils amounted to £25,616, and £8,256 additional was devoted to meeting the expenses of scholarships of students sent to agricultural colleges by the respective counties.

In that year the county councils of England and Wales contributed to the maintenance of 23 local secondary schools in which agriculture was taught, and to 37 collegiate centers. Ten of these collegiate centers had been established by Cambridge University, 5 by Reading College, 3 by Durham College, 4 by Nottingham University, 2 by Southeastern Agricultural College, 3 by Yorkshire College, 5 by the University of North Wales, and 5 by the University College of Wales.

It will thus be seen that the work of agricultural education in Great Britain is divided, part being intrusted to the colleges and schools of agriculture supported from the general grant by Parliament distributed by the board of agriculture and part placed under the control of county councils, who meet the expenses of their maintenance from the local tax or excise fund.

The county councils at first constructed courses of study in agriculture for these local schools independent of outside aid. Now, however, they are cooperating with the board of agriculture and are availing themselves of the assistance of the board in its advisory capacity respecting their educational purposes. The secretary of the board in his report for 1901, in discussing the cause that led to this cooperation, says:

It is satisfactory to be able to report that county councils are evincing an increasing desire to avail themselves of the assistance of the board in its advisory capacity in the development of their educational schemes so far as these bear upon agriculture and rural science. The advice and guidance which the board have been thus able to give have resulted not only in the fuller utilization of existing machinery, but as well in the avoidance of duplication of local agencies. Without such central coordinating influence there is a tendency on the part of the local authorities to proceed without due regard to developments outside their own area, whereas joint action may often result in improved efficiency concurrently with greater economy.

When the traveling schools were introduced the policy was adopted of concentrating the instruction upon one subject. Dairying was accordingly selected, and all the strength of the teaching force was concentrated in that direction. Gradually the policy was widened to

include bee keeping, farriery, poultry keeping, horticulture, gardening, and other branches of agriculture.

The details of the various methods pursued and scope of the work now being done by the county councils in promoting agricultural education can best be understood from the reports of the several inspectors of the board of agriculture, whose duty it is to visit the counties periodically and inspect their work. Reports from several of the counties are presented for purposes of comparison.

The following statement is by the inspector for the county of Bedford for 1899-1900:<sup>a</sup>

#### COUNTY OF BEDFORD.

The county provides a farm school at Ridgmont, near Woburn, for sons of small farmers and laborers, to whom instruction is given in agriculture, market gardening, bee keeping, and poultry keeping; a grant is also given to the agricultural department, Cambridge University. There is accommodation at the school for 20 students, all of whom must have been actually engaged on the land and must hold county scholarships which entitle them to two years' board and residence with instruction free. In 1899-1900 there were 14 resident scholars and 2 ex-scholars were retained to assist in the work of the farm.

Lectures are given throughout the county in horticulture and poultry keeping, while demonstrations and competitions are organized in various manual processes. Classes in general agriculture are also held in the villages.

Particulars of the work done in these subjects in 1899-1900 are furnished below:

*Agriculture.*—Classes were held at 26 centers during the winter, and 568 pupils received instruction, of whom 427 were farm lads, the teachers being drawn from the elementary schools.

*Horticulture.*—Practical gardening classes by the county staff instructor were held at 2 centers; lectures were given at 9 centers and at a reformatory school.

*Poultry keeping.*—Courses of lectures were given at 5 centers by the master of the farm school.

*Manual processes.*—Demonstrations and competitions were held in sheep-shearing, horseshoeing, plowing, hedging and ditching, and stacking and thatching.

*Scholarships.*—Seven agricultural scholarships, tenable at the Ridgmont Farm School, were awarded in 1899-1900. In addition, 10 scholarships were awarded to enable teachers to attend the three weeks' summer course at Cambridge.

#### COUNTY OF BERKSHIRE.

The county works in conjunction with the Reading College, to which it makes an annual grant of £200, together with an additional grant of £50 for field experiments.

Local classes were held in 1900 at a number of centers, in poultry keeping and horticulture. Particulars of these classes are given below.

---

<sup>a</sup> It is proper to explain that the data presented in this statement of the educational system of Great Britain, as well as those respecting the systems in use in other countries, have been selected from such reports as seem to most satisfactorily exhibit the methods in use, although in some instances not the latest publications upon the subject.

*Horticulture.*—Courses of six lectures each on this subject were given. The last lecture of the series is usually on some such subject as "Soils and manures," and given by one of the staff of Reading College.

At one center a long course of 15 lectures was given, for which 25 pupils, gardeners, and allotment holders entered, 8 of whom afterwards sat for the Royal Horticultural Society's examination and received certificates. At one other center only 2 lectures were given.

*Poultry keeping.*—Ten courses of 4 lectures each, with an average attendance of 29, were held in different parts of the county, and 6 classes for practical instruction in poultry trussing were also held.

*Bee keeping.*—The technical education committee makes an annual grant of £50 to the Berks Beekeepers' Association. The county has been twice covered by the bee-van tours, and in 1900 the work was confined to a general tour of the county by experts, who gave practical advice when it was needed and collected statistics as to the progress made in bee keeping.

*Manual processes of agriculture.*—No provision has hitherto been made for this class of instruction in the county, but the technical education committee are prepared to give careful consideration to any application from a district for instruction of this character.

*Scholarships.*—Four agricultural and horticultural senior scholarships of £50 each, four agricultural exhibitions of £35 each, and ten dairy scholarships of £10 each were offered in 1899-1900. The agricultural scholarships are tenable at Reading College, the dairy scholarships are tenable at the British Dairy Institute, and those on horticulture are tenable at the horticultural college, Swanely. There were no candidates for the agricultural scholarships and exhibitions. One horticultural scholarship and seven dairy scholarships were awarded.

The agricultural exhibitions of £35 each were tenable at the Dauntsey Agricultural School, West Lavington, but it is in contemplation to replace these by four agricultural exhibitions of £30 each, tenable at Reading College for a six months' winter course. They will be open to candidates between the ages of 16 and 25, and are intended for those already familiar with the general routine of farm work who aim at becoming practical farmers.

Since 1893 16 senior scholarships in agriculture and 4 in horticulture have been awarded.

*Experiments.*—Manurial and other experiments were carried out at eight centers.

#### COUNTY OF CHESHIRE.

There are in this county two principal centers maintained by the county council, viz, the Agricultural and Horticultural School at Holmes Chapel and the Dairy Institute at Worleston.

The Holmes Chapel School was opened in 1895. It provides a complete agricultural course lasting three years, a diploma or certificate being granted to successful students at the end of the course. The number of county council scholarships, which cover board and fees, held at this school in 1899-1900 was 29, and the total number of pupils in April, 1900, amounted to 45. Various experiments are carried out on the farm attached to the school, and nearly the whole area of the farm, which amounts to 100 acres, is now under experiments. The experimental work in 1899-1900 included the cultivation of potatoes, grain crops, roots, grasses, etc.; the spraying of charlock, and experiments in tuberculosis with the cattle at the Holmes Chapel and Worleston schools. For instruction in horticulture a garden of 7 acres, with greenhouses, is provided.

The Dairy Institute at Worleston was taken over by the county council in 1891. To it is attached a grass farm of 170 acres, maintaining a milking herd



of nearly 60 cows. Resident accommodation is provided for 18 pupils. There were 57 pupils during the years 1899-1900, the average length of their stay being twelve and one-half weeks. Scholarships tenable at this school are granted by the technical instruction committee, usually for ten weeks, but this period will in future be extended to twelve weeks. The total of such scholarships (10s. a week) held in 1899 amounted to 36. There were also 18 domestic scholarships (£4 10s. each), which include instruction in butter making, held at the institute in 1899-1900.

Lectures are given in the county on general agriculture, dairying, horticulture, veterinary science, and bee keeping. Particulars of these for 1899-1900 are as follows:

*Agriculture.*—Two lecturers were employed by the technical instruction committee to give 10 lectures a week each. Classes in the principles of agriculture were held in secondary schools (average number in class 15) and similar instruction was also given in a few good elementary schools, where there was a sufficient number of boys of a suitable standard: 5 such schools were visited, the class averaging 33. Evening courses of 6 lectures were given at 13 centers (average attendance 23) and of 1 lecture at 6 centers (average attendance 34), and there were also special courses of two to three months or more at 3 centers.

*Dairying.*—This form of instruction is given at farmhouses where possible. Classes for both dairying and butter making lasting four days each were held at 7 centers, the average attendance of pupils being 9; classes for butter making only, lasting eight days, were held at 13 centers, the average attendance being 13. A butter-making competition, at which students who made 5 or more attendances were eligible to compete, was held in April. A dairy demonstration was also held at the Cheshire Agricultural Society's show at Northwich in August.

*Horticulture.*—Courses, usually of three lectures, were held at 8 centers (the average attendance was 44), and a special lecture on fruit growing was given to the members of the Nantwich Farmers' Club.

*Veterinary science.*—Courses of 3 lectures were given at 5 centers: the average attendance was 30.

*Bee keeping.*—Lectures were given at 8 centers.

*Scholarships.*—In 1899-1900 there were 29 agricultural and horticultural scholarships held at the Holmes Chapel School. These scholarships, which cover the expenses of board and fees, are granted for one year, but are renewable for a second and third year if the reports as to progress and conduct are satisfactory. At the Worleston Dairy Institute 36 dairy scholarships and 18 domestic scholarships were held. The former are for a ten weeks' course in dairy work, while the latter are for a nine weeks' course in butter making, bread baking, cookery, laundry work, dressmaking, needlework, and sick nursing.

*Experiments.*—Experiments were carried out under the direction of the staff of Holmes Chapel Agricultural School in the manuring of mangolds and swedes, in the cultivation of different varieties of grain and potatoes, in charlock spraying, and in seeding for grass. Separate reports, in pamphlet form, of the first four were prepared and circulated. Invitations were issued to agricultural bodies in the county to inspect the experimental plats at the farm, which were freely accepted. Lectures in connection with the experiments were given at 6 centers.

#### COUNTY OF CUMBERLAND.

Direct agricultural instruction is provided by the maintenance, in conjunction with Westmoreland, of a dairy farm and school at Newton Rigg, near Penrith, by a traveling dairy school and by migratory lecturers on various subjects. The

Newton Riggs School provides systematic and practical instruction in cheese and butter making, rearing of live stock, rearing and dressing of poultry, and general farm work. A cheese dairy has been recently added. There is accommodation for 10 resident pupils at a time. The course for male pupils lasts sixteen weeks and that for females for half this period.

The county scheme provides for two county agricultural scholarships of £50, tenable for two or three years, at the agricultural college, Aspatria, or any college in receipt of aid from the board of agriculture; one exhibition of £35 from the Newton Rigg School to a special course for farmers' sons at the Durham College of Science, and also for 20 farm studentships, of the value of £4 and £5 each, tenable for periods of from eight to sixteen weeks at the county dairy farm and school.

Field experiments are conducted by arrangement with the Durham College of Science under the direction of the professor of agriculture at that college.

The work performed during 1899-1900 was as follows:

*Agriculture.*—Lectures were given at 16 centers before an average audience of 25. Each lecture dealt with some particular subject, but calf rearing and turnip growing were most frequently selected.

*Dairying.*—Owing to a vacancy in the post of teacher, the traveling dairy van did not go out in the spring and summer, but an autumn course was held, when 5 centers were visited, with an attendance of 60 pupils.

*Horticulture.*—Lectures are delivered on this subject in every alternate month by the lecturer in horticulture at the Durham College of Science in virtue of an arrangement between the county councils of Cumberland and Northumberland with the authorities of the college; 75 centers were visited, and the attendance averaged 26, more hearers being generally attracted in the spring and summer than in the winter.

*Poultry keeping.*—One, two, or three lectures on poultry rearing and management were given at 29 centers, the attendance being 33 on the average.

*Scholarships.*—No major agricultural scholarships were awarded during the year, but nine studentships of £5 each, one of £4 10s., six of £4, and one of £3 were awarded at the Newton Rigg Farm School.

*Experiments.*—The field experiments were continued on much the same lines as before and have been noticed in connection with the work done by the Durham College of Science.

#### COUNTY OF ESSEX.

The technical education committee have established county technical laboratories at Chelmsford. In connection with these "schools" of horticulture and agriculture have been organized. Two courses in agriculture, each of three weeks' duration, are held in the autumn and winter at the laboratories, while there are three weeks' elementary courses in horticulture in the summer, autumn, and winter, as well as a more advanced course of four weeks in the spring. A garden has been acquired and is divided into four main divisions, viz, botanical, vegetable, fruit growing, and experimental.

Arrangements have also been made for the analysis, at the county laboratories, of fertilizers, feeding stuffs, soils, milk, butter, water, etc., and for the examination of seeds and diseases of plants, etc., for Essex farmers at moderate fees.

Ten days' courses of practical lessons in butter and soft cheese making are provided by a traveling dairy school, which visits various centers. These classes are limited in each case to 10 pupils, but visitors are admitted as spectators. Lectures are also given on the bacterial contaminations and on the

chemistry of milk, and instruction is also provided in dressing and trussing poultry.

Field experiments are carried out at various centers throughout the county.

Arrangements are made for supplying farriery instruction at suitable centers.

Agricultural, horticultural, dairying, and poultry scholarships, tenable at various institutions, are awarded by the technical education committee. The county also contributes to the maintenance of the agricultural department of Cambridge University by means of an annual grant.

Particulars of the work carried out in 1899-1900 are as follows:

*Central laboratories.*—The two agricultural courses at the county laboratories, Chelmsford, were attended by 10 and 9 pupils, respectively; the three elementary horticultural courses were attended by an average of 11 pupils, and the advanced course of four weeks attracted 10 students.

*Agriculture.*—Courses of from 4 to 8 lectures were given on chemistry as applied to agriculture at 11 centers (average attendance, 20) and of 5 lectures on agricultural biology at 3 centers (average attendance, 15).

*Dairying.*—The traveling dairy school visited 9 centers; the number of pupils was 102, of whom 82 took the full course of nine days. Lectures on dairy bacteriology and the chemistry of milk were given at each class.

*Horticulture.*—Courses of 1 to 6, and in one case 10, lectures were given on horticulture at 41 centers (average attendance, 18).

*Poultry rearing.*—Lectures, usually 4 each, were given at 14 centers; the average attendance was 27.

*Manual processes.*—Instruction was given at 12 centers in plowing, sheep-shearing, hay binding, and farriery, a second class being held at one of them. The number of lessons varied from 5 to 12; the total number of students was 172.

*Visit to Holland.*—An excursion to Holland was organized by the technical education committee for Essex farmers with the object of studying agricultural education and the organization and practice of the agricultural industry in that country.

*Local committees.*—In addition to the above, classes and lectures were organized by local committees throughout the county, consisting of 5 on bee keeping, with 160 students; 6 on farriery, with 111 students, and 3 on live stock, with 52 students.

*Scholarships.*—Two horticultural scholarships of £45 each, tenable for two years at the Swanley Horticultural College or the Royal Horticultural Society's gardens, at Chiswick, were awarded in 1899-1900. Four dairy scholarships, tenable for five weeks at the British Dairy Institute, Reading, and five poultry scholarships for the three weeks' course at the Eastern Counties Dairy Institute, Ipswich, were also awarded.

*Experiments.*—Experiments were made on the treatment of rotation crops and permanent pasture, the residual value of manures, the prevention of clover sickness, etc., at 21 centers. Explanatory lectures were given, and an exhibition of specimens of the experimental crops was arranged at the agricultural show.

#### COUNTY OF KENT.

The principal center for agricultural instruction in the county is the South-eastern Agricultural College, Wye, which is supported by the county in conjunction with Surrey. During the year 1899-1900 20 students from Kent attended the college, and, with one exception, were present throughout that period. In addition, the college undertakes to deliver a certain number of out-

side lectures in the county during the session and to provide instruction in farriery by means of a traveling van fully equipped with forges, tools, etc.

The county also makes use of the horticultural college at Swanley, offering each year 12 horticultural scholarships of £60 each, tenable at this institution for two years. Four were awarded in 1899-1900. Six students from Kent passed the Royal Horticultural Society's examination, and numerous successes were gained by the county scholars in the board of education's examinations in agriculture, botany, chemistry, and geology.

The remainder of the work done in the county is performed by the council directly.

Particulars of the lectures provided and work done in 1899-1900 are furnished below.

*Horticulture.*—Courses of six lectures were given at 60 centers. At 55 of these centers competitions were held, limited to scholars who had attended at least 4 out of the 6 lectures, and prizes were awarded to the successful candidates. Boys' gardens are maintained at 20 centers. The gardens are divided into plats of about 1 square rod each, and they are cultivated by boys admitted as pupils, each boy having a separate plat. The number of boys admitted at each center is 15. The plats are under the supervision of a local instructor specially appointed by the committee, the county superintendent making an inspection three times annually, when prizes are awarded to the most meritorious cultivators.

Thirty lectures on garden science were delivered at 10 centers in the county by lecturers from the Southeastern Agricultural College.

*Poultry keeping.*—Courses of 4 lectures were provided at 25 centers. Prizes were offered for competition among the students, and the first annual competition was held at a county show.

*Bee keeping.*—In this subject a pioneer lecture is given in February at each center which it is intended to visit, and is followed in the summer by demonstrations in practical management by means of an experimental apiary set up at some point in the parish. Visits were made to 12 centers during the season, the classes averaging 10 pupils. The instruction was succeeded by apiary competitions in five cases, the average number of entries being 7.

*Farriery.*—Classes were held at 2 centers, and 51 pupils received instruction. An annual competition was also held in connection with a local agricultural show.

*Scholarships.*—Four £60 horticultural scholarships tenable at the Horticultural College, Swanley, and two scholarships of the value of £60 each and two of the value of £30 each, tenable at the South Eastern Agricultural College for two years, were awarded in 1899-1900.

*Experiments* in the manurial treatment of hops were carried on at four stations under the superintendence of the South Eastern Agricultural College, full accounts of which were given in the college journal. An experiment was also conducted by the county superintendent of horticulture in the preservation of fruit by means of cold storage. A report on the same was published in the thirty-third quarterly report of the technical education committee.

The work of the county councils, as exhibited in the foregoing reports, has been conducted since 1890 with continually increasing interest and profit. The movable school, it will be observed, is the distinguishing feature of their educational methods for agricultural improvement, and its popularity and value are due to the systematic and efficient way in which these schools are conducted. Instead of



numerous meetings of only two or three sessions each, fewer are held, but these are continued for at least ten to fifteen days. Instead of presenting many subjects for consideration, but one or at the most two are discussed, and these are treated in a carefully planned course of lectures, accompanied with practical demonstrations. Instead of large and motley assemblages of people being addressed, a fewer number are taught, and these are instructed in regular classes that meet day after day throughout the entire course.

The traveling schools are thoroughly equipped. They are provided with the newest and best apparatus in order that the scholars may have the advantage of seeing and using the latest and best machinery and most approved methods in use in the special line of work treated.

An examination of the reports also shows that the organization of the work providing for peripatetic instruction for farmers has been planned most carefully not only with respect to its present efficiency, but with the view also to its permanency and future development. The matter of continual and adequate support has been amply provided for. The county, out of its revenues from the excise fund, meets the largest part of the expense; at the same time each locality and individual directly benefited is required to bear a proper share of the cost.

The general policy controlling and directing the work has a like degree of permanency that contributes to the strength of the work. No change of national administration or depression in business or temporary political or social upheaval among the people can suddenly overthrow it. At the same time there is a degree of flexibility permitted in carrying out the scheme that permits of such gradual change and improvement as experience may show to be necessary.

#### COLLEGE WORK IN AGRICULTURE.

As has been stated, the funds provided under the original grant for agricultural education made by Parliament in 1888 were widely distributed. They were used to aid not simply the colleges and higher institutions of learning, but were likewise given for the support of the local schools established by the county councils. Later, when the counties became the recipients of aid from the excise fund, the parliamentary grant was withdrawn and given to the institutions which had been chosen by the board of agriculture in the several produce districts as centers for agricultural education.

In 1903-4 there were sixteen of these institutions receiving aid from the grant of the General Government. The University College of North Wales, at Bangor; Yorkshire College, at Leeds; Durham College of Science, at Newcastle-on-Tyne; Cambridge University, at Cambridge; South Eastern Agricultural College, at Wye; University

College of Wales, at Aberystwyth; University College, at Reading; Midland Agricultural and Dairy Institute; Harper Adams Agricultural College; British Dairy Institute, Reading; Agricultural and Horticultural School, Holms Chapel; Agricultural and Horticultural College, Wickfield; Harris Institution, Preston; Eastern Counties Dairy Institute, at Ipswich; National Fruit and Cider Institute; and Cumberland and Westmoreland Farm School.

Each of these is a center and acts for one or more counties. The University College of North Wales, at Bangor, is a center for the counties of Anglesey, Carnovan, Flint, Denbigh, and part of Montgomery. The Durham College of Science is a center for the counties of Northumberland, Durham, and Cumberland, and the other institutions act as centers for similar groups.

These institutions, besides giving instruction in agriculture in their regular courses indoors, leading to appropriate academic degrees, engage likewise in "external" instruction work out in the counties that compose their respective districts. This work consists of courses of lectures and demonstrations before classes in various localities or centers made up of farmers or farmers' boys.

The parliamentary grant was declared to be in "aid of agricultural and dairy schools and for agricultural experiments." It is therefore applicable to all forms of agricultural instruction, such as the training of teachers and local lecturers, the equipment of dairy schools, the conducting of experiment farms, and fields of demonstration.

The general educational scheme of such a collegiate institution is outlined in one of the reports of the secretary of the board of agriculture as follows:

- I. The training of agricultural teachers.
- II. The imparting of direct education in the sciences bearing on agriculture to resident pupils.
- III. The diffusion of general knowledge and a promotion of a spirit of inquiry among those already engaged in agricultural work by means of peripatetic lectures and evening classes.
- IV. The technical training of pupils or of actual workers in special forms of agricultural industry, such as dairy work, forestry, fruit growing, etc.
- V. The conducting of experiment work, affording in different centers means of illustrating the bearing of scientific research on exemplary agricultural practice.

The special purpose of the Government in organizing these "collegiate centers" is outlined in a report of the board of agriculture for 1895. The report states that—

The collegiate centers are intended to provide efficient and regularly organized indoor training for a certain more or less necessarily limited number of students pursuing a continuous course of study for two or more consecutive years. They also offer a variety of other and more temporary courses of instruction.

The educational staff and machinery of the center is also made available for the work of the surrounding county authorities and in part for the conduct of

*itinerant or local classes* and for the direction of field demonstration or feeding experiments.

The University College of North Wales, at Bangor, was the first to originate such a typical school and to supply a "complete and very extensive system of agricultural instruction for a group of counties." The plan has now been adopted by all of the ten institutions receiving aid from the parliamentary grant.

#### EXTERNAL WORK OF THE COLLEGES.

The external work varies somewhat in its details among these institutions, but conforms nevertheless to one general plan. The plan consists in the establishing and maintaining, in whole or in part, of secondary schools at which instruction in agriculture is given by professors from the central college; in the conducting of traveling schools of agriculture that meet classes of pupils at numerous centers throughout the district over which the influence of the college extends; in arranging and maintaining in the several counties experiment farms and demonstration fields and farms where agricultural operations of the latest and most approved character are conducted.

The methods employed in organizing and conducting the traveling schools are substantially those in use by the county councils. The classes are organized in different centers and are given instruction in but one subject. The series of lectures and demonstrations upon that subject constitute a course which usually requires about ten days to complete.

By this method of devoting all of the time to a single topic experience has shown that better results are secured than where the course consists of lectures upon several subjects. By concentrating upon one topic reasonably thorough instruction can be given in that branch, whereas by the other method of treating several subjects a vague and unsatisfactory impression is too frequently the only result.

Inasmuch as the colleges receiving aid from the Government grant for agricultural instruction are the agents of the board of agriculture in its work of aiding the farming people by means of traveling schools, no statement of the system of peripatetic instruction in Great Britain is complete that fails to show what these institutions are doing outside of their stated indoor work at the collegiate centers. And since the methods used by the several institutions in conducting their movable schools differ quite materially from each other, it has been deemed advisable to present somewhat in detail the work of those whose systems differ most widely.

The following extracts from the reports of the inspectors appointed by the board of agriculture to visit the collegiate centers for the year

which ended March 31, 1901, have been selected as showing what is being done and the methods which each collegiate center referred to has adopted in carrying on its "outside" work:

UNIVERSITY COLLEGE OF NORTH WALES.

EXTERNAL WORK.

*Dairying.*—At the dairy school at Lleweni Hall, near Denbigh, instruction was given, as in previous years, in cheese making, butter making, and in dairying generally. The total pupils were in excess of former years, having numbered 101, of whom 74 came for periods of six weeks. A considerable number of these, viz, 36, came with county scholarships from Flint, Denbigh, and Anglesey, half of them under the regular schemes whereby those who have shown themselves proficient at the traveling classes during the year are awarded scholarships to the fixed school, and half under a special scheme in the counties of Flint and Denbigh to encourage persons to avail themselves of the lengthened courses in cheese and butter making held at the school.

At the Bangor dairy school, opened as usual at the college, 14 pupils attended a special fortnight's course in butter making, all having been awarded scholarships for this purpose by the councils for Anglesey and Carnarvonshire, after they had shown aptitude as pupils at the traveling schools held in those two counties.

Examinations were held twice during the year at the Denbigh school and once at the Bangor school. The awards at these examinations were—

Advanced certificates in dairy work-----	5
Ordinary certificates in cheese making-----	14
Ordinary certificates in butter making-----	41

Traveling schools for butter making instruction were held as follows:

In Anglesey there were courses of ten days' instruction given at 2 centers. The pupils numbered 23, and of these 18 took the full course.

In Carnarvonshire instruction was given at 3 centers, a second course being held at one of them. Forty-two pupils attended, of whom 34 took a full course.

In Flintshire courses of ten days' instruction were held at 3 centers. At 2 of these the instruction was on cheese making, and at the other on butter making. The courses were attended by 19 persons, all of whom remained for the full period of instruction.

In Denbighshire similar courses were held at 3 centers, those at 2 centers being on butter making, and at the remaining center on cheese making. The total pupils who attended numbered 30, of whom all but two took the full course.

*Field demonstrations.*—In Anglesey, irrespective of the college farm, experiments were conducted at 5 centers. At 3 of these the experiments were of a manurial character, the crops being swedes or pasture; at the remaining 2 centers the experiments had reference to the suitability of different seed mixtures in laying land down to grass.

In Carnarvonshire experiments on the manuring of swedes and pasture took place at 5 centers, while the interesting series of experiments on the improvement of rough hill pasture, referred to in previous reports, was continued at 5 centers. Charlock spraying experiments took place at 3 centers.

In Flintshire experiments were conducted at 4 centers, all on grass land, one set being on the hill pasture just mentioned, while in Denbighshire pasture experiments were in progress at 2 centers.



In Montgomeryshire there was an experiment on hill pasture at 1 center.

*Lectures.*—In Anglesey courses varying from 2 to 8 lectures each were delivered at 7 centers on one or other of the various subjects offered by the college. The lectures were attended by an average of 34.

In Carnarvonshire courses of from 2 to 5 lectures were given at 6 centers, but a second course was given at 1 of these, and no less than 4 courses (making in all 22 lectures) at another center. The average attendance was 34.

In Denbighshire courses were given at 6 centers, the average attendance being 47, while in Flintshire a course of 5 lectures on farm crops and their cultivation was given in an intermediate school to a class of 12 boys.

In Montgomeryshire the centers where lectures were given numbered 8, and those who attended them averaged 40 at each center.

#### YORKSHIRE COLLEGE, LEEDS.

##### EXTERNAL WORK.

*Dairying.*—The traveling butter school was only at work in the West Riding, where 10 centers were visited, at 1 of which a second course was held. A total of 92 pupils came under instruction, of whom 69 took the full course of ten days.

*Field demonstrations.*—As mentioned in last year's report, these are all arranged so as to have some connection with those conducted under the most careful supervision at the county farm. The number of centers in the East and West Ridings at which they were conducted amounted last year to 24, comprising 44 experiments with cereals, roots, and grass. In every instance a lecture was given at the center, explaining the results.

*Lectures.*—In the East Riding courses of lectures on general agricultural subjects were given at 7 centers, and single lectures on the results of experiments at 12 centers. Courses on horticulture were given at 8 centers, and on poultry keeping at 2 centers. The average attendance at all these lectures was 38.

In the West Riding the centers where courses on agricultural subjects were delivered numbered 10, and where single lectures were given numbered 18, of which 5 were places where courses had also been given, the lecture in this case, as in most others, dealing only with the results of the field experiments. Horticultural instruction was given at 19 centers, the courses at 17 of these being of 5 lectures, while a second course, similar in length, was given at 1 of them. Lectures on poultry keeping, consisting in most instances of a course of five lectures, were delivered at 11 centers. The average attendance per center was 39, and on this basis the total number attending these lectures must have been over 2,300 persons.

In the North Riding courses in agricultural subjects were given at 14 centers, and a second course at 2 of them, 6 of the courses consisting of lectures and the remainder of 5 lectures. Those on horticulture, all of which were 5 in number, were given at 21 centers, and those on poultry keeping of similar length, at 12 centers. The average attendance at each center was 36.

It is now nearly ten years since lecture work at local centers was undertaken in Yorkshire by this college, and it was thought a few years ago that the interest they called forth would gradually cease. The contrary seems to be the case, and the lecturers report that not only are the best centers those where lectures have been held before, but that amongst farmers generally in the county there is now an altogether higher scale of intelligence from a scientific point of view, and matters can now be profitably discussed amongst them which it would have been impossible to treat upon six or eight years ago.

It must be noted that in the East and West Ridings the work of horticulture is not confined to lectures. Gardens are started in a variety of places, as mentioned in last year's report, for the young, by means of "school" gardens in connection with the evening continuation schools, and for those who are older by means of what are termed "education" gardens. In each case, however, the gardens are under the general supervision of the horticultural staff at the college, and thoroughly useful work seems to be performed.

#### CAMBRIDGE UNIVERSITY.

##### EXTERNAL WORK.

*Field demonstrations.*—These, which have consisted of experiments on a variety of crops, have been conducted in conjunction with the various county councils, as follows:

In Cambridgeshire, at 7 centers, 2 of the experiments being on a rotation of crops. The manurial treatment of fruit trees formed the subject of experiment at 3 centers.

In Hertfordshire experiments were carried out at 2 centers. At one of these the experiment was on the hay crop; at the other 3, separate rotation experiments were conducted.

In Huntingdonshire an experiment was conducted at 1 center on the hay crop, and at another, of 8 acres, on various mixtures for laying down to grass.

In the Isle of Ely experiments on the potato crop were carried out at 2 centers.

In Norfolk experiments were conducted at 2 centers on laying down land to grass, while at one of them a second trial was made on the growth of sugar beet.

In Northamptonshire an experiment was carried out at 1 center on manuring for the hay crop.

In East Suffolk the county station at Bramford, together with a fresh one in a different part of the county, came under the supervision of the agricultural department of Cambridge. An experiment on a rotation of crops was also commenced by the department at the Colonial College, Holllesley Bay.

In West Suffolk, at 2 centers, a rotation experiment was carried on.

In addition to these, experiments on the influence of manures on the production of mutton were commenced at 4 centers. In Northamptonshire, on an area of over 30 acres, the trial was conducted on behalf of the board of agriculture on precisely the same lines as the original experiment in Northumberland. In Cambridgeshire, on an area of 16 acres; in Essex, of 18 acres; and in Norfolk, of 20 acres, an experiment was commenced which was a modification of the original one. During the past year on all these stations the grazing tests were of a preliminary character, without the application of manures. In Norfolk a further experiment was commenced in the growth of 10 acres of swedes for a bullock-feeding experiment.

Addresses in connection with the various experiments were delivered before several chambers of agriculture.

#### MIDLAND AGRICULTURAL AND DAIRY INSTITUTE, KINGSTON.

##### EXTERNAL WORK.

*Dairying.*—A traveling butter school has visited 8 centers in Derbyshire and 3 in Nottinghamshire. The numbers attending in the former county were 77 and in the latter 29. In every case the pupils remained for the full ten days' course.

*Field demonstrations.*—In Lincolnshire these were conducted at 5 centers, the experiments in one instance being on potatoes and in the others on barley.

In Nottinghamshire experiments were conducted at 4 centers, two or three sets being carried out at 3 of them. The crops concerned were potatoes, barley, and swedes. In addition there were various charlock spraying demonstrations, while the experiment on cropping a poor sandy soil with a view of endeavoring to increase its fertility, which was commenced some few years back, is being continued.

In Leicestershire an experiment was conducted at 1 center to test the influence of manures on the mangel crop.

*Lectures.*—In Lincolnshire courses of 5 or 6 lectures on general agricultural or dairy subjects were delivered at 9 centers, the average attendance being 15. Courses of 6 lectures on veterinary subjects were given at 2 centers to an average audience of 35. Horticultural lectures, numbering 3 or 4 at each place, were given during the winter at 10 centers, the average audience being 24, while in the previous summer 2 lectures each were delivered at 5 centers to an average audience of 26.

In Nottinghamshire courses of 3 or 4 lectures on general agricultural subjects were given at 3 centers, while single lectures were delivered at 3 other centers, the average audience numbering 30. Veterinary lectures were given at 4 centers, the course consisting of 6 lectures at 2 of the centers and 4 at the others, the audience averaging 38. Horticultural lectures or demonstrations were given in the summer at 6 centers to an average audience of 24 persons, while courses of 3 or 4 lectures in winter were given at 10 centers to an average audience of 44. Courses of 3 lectures on poultry keeping were given at 6 centers, the audience averaging 50.

In Derbyshire courses of 4 lectures on general agricultural subjects were given at 8 centers to an average audience of 18, while courses of 3 lectures on poultry keeping were given at 10 centers to an average audience of 47. Lectures on horticulture by the county instructor, who is now also on the general staff of the institute, were given at 19 centers during the winter, the average audience being 44. During the summer demonstrations were given on the two county fruit plats and in gardens or allotments at 13 other places. They were attended by an average audience of 46 persons.

In Leicestershire single lectures on dairying were given at 3 centers to average audiences of 36. Courses of 4 lectures each on veterinary subjects were given at 3 centers to average audiences of 32, while courses of 3 or 4 lectures on poultry keeping were given at 4 centers to audiences averaging 41. Horticultural courses of (with one exception) 4 lectures each were given at 6 centers. The average audience was 25. Summer lectures or demonstrations were also given at 2 centers, being attended by an average audience of 27 persons.

The other collegiate institutions aided by Parliament conduct similar operations. The four here given are, however, typical of the practice of all.

It is manifest that these colleges regard the external work that they have undertaken in aid of agriculture as most important, for in endeavoring to fulfill their mission, which is to occupy the entire field of agricultural instruction, they have had the courage to break away from the traditional practice of colleges of learning in the past that

confined their teaching to the walls of the class rooms of the institutions themselves, and have extended their aid to men and women unable to leave their homes and go to school.

An interesting and important feature of the traveling school of instruction is indicated in the courses prescribed by the county councils under the designation "manual processes." These are taught in courses adapted to each subject and constitute an important branch of education. They comprise bee keeping, farriery, veterinary science, dairying, fruit culture, market gardening, cider and vinegar making, sheep shearing, plowing, stacking, ditching, thatching, care of live stock, pruning, milking, etc. The usefulness of knowledge and skill in the performance of all of these processes is acknowledged, but, as has been stated, it is only recently that the higher agricultural institutions of learning have come to realize that part of their duty is to see that information respecting these and kindred subjects is made accessible to the mass of country people.

The effect of the new departure in giving instruction in agriculture in Great Britain is strikingly exhibited by comparing a statement made in the report of the parliamentary commission appointed in 1887 to investigate the condition of agricultural education in Great Britain with a corresponding statement by the board of agriculture made in 1895. The commission called attention to the fact that a Scotch witness stated that certain associations of farmers desiring to improve their systems of dairying endeavored to obtain a skilled teacher in the art of butter making, and "that they had to send to Denmark and engage a Dane to come to the district and teach them to make butter." It was also stated that scarcely two years prior to 1887 "the managers of the Cheshire Dairy School could find no efficient teacher of butter making in Great Britain, and had to engage the services of a skilled dairy maid, who had been instructed at the Merster Dairy School near Cork." Contrast this with the report made by the secretary of the board of agriculture of Great Britain seven years later—in 1895. The secretary states that "dairying is now taught in some form or other under the county councils of all of the counties of England and Wales, excepting London and Middlesex. Similar instruction is now given in more than half of the administrative counties of Scotland."

The change in this brief period in this one industry has been wrought through the new methods of education which were begun in 1888, which consist in conveying valuable, practical instruction in agriculture, by means of skilled teachers, to people at work upon the land without requiring them to leave their homes or neglect their daily duties in order to receive the information which is offered.



## SUMMARY.

The institutions in Great Britain charged with carrying on the work of giving agricultural instruction may be grouped into two distinct classes, not including the board of agriculture, which is the head of the entire system.

The first is composed of the agricultural colleges and schools acting as centers for groups of counties, and confining their efforts for the most part to the development of education in the areas which have been assigned to them. Their work consists in:

I. The giving of advanced class-room instruction to resident students.

II. The establishing of secondary schools of agriculture throughout their respective districts, usually confining the work of instruction to a single subject.

III. The equipping of peripatetic schools which visit various localities and give instruction to classes for periods of from one week to ten or fifteen days, each course being limited to the treatment of but one branch of agriculture.

IV. The establishing and maintaining of experiment and demonstration farms throughout their several districts.

The second class is made up of the county councils, who are in control of technical education work in the several counties. Under their direction are established:

I. Secondary schools of agriculture maintained wholly or in part by the county councils out of the excise fund.

II. Itinerant schools which visit various parts of the several counties and give short courses of lectures and demonstrations to classes on agricultural subjects.

III. Demonstration farms for testing the effects of various fertilizers, the adaptability of seeds, the value of various breeds of live stock, methods of culture, etc.

The county councils also:

I. Establish and maintain scholarships in agriculture in the collegiate centers of their districts, available to young men of merit who wish to secure an agricultural education.

II. They likewise grant premiums for meritorious work in agriculture in their several counties.

III. They aid their agricultural colleges by making annual appropriations for their support from the excise fund.

IV. They cooperate with the board of agriculture of Great Britain in devising and introducing improvements in agricultural education throughout the Kingdom.

The marked features of the system as a whole are:

I. That it reaches all classes of farmers in all parts of the country with valuable instruction, and does this systematically and every year.

II. That the universities and colleges have extended their activities to the outlying communities. They have recognized their duty to the farming people, who are unable to leave their farms to attend classes at the collegiate centers, by carrying instruction to them at their homes.

III. That each county is provided with means to carry on its educational work independent of support from the general government, and that a capable and responsible body in each county is intrusted with the oversight and control of the work, and with the disposition of the public money contributed in its behalf.

IV. That it is equipped with teachers who are expert authorities in some one branch of agriculture.

V. That it is organized upon a firm and substantial basis, and is recognized by both local and national authorities as an important part of the general system of public instruction.

VI. That it is adapted to future improvement and expansion as knowledge increases and the requirements of agriculture demand.

#### IRELAND.

The control of the work of providing instruction in agriculture in Ireland is under the supervision of a department constituted by act of Parliament in 1899. The act provides that "there shall be established a department of agriculture and other industries and technical instruction for Ireland, with the chief secretary as president thereof, and a vice-president appointed by and removable at the pleasure of one of Her Majesty's principal secretaries of state."

The department is authorized "to make, or cause to be made, or aid in making such inquiries, experiments, and research, and collect or aid in collecting such information as they may think important for the purposes of agriculture and other rural industries," and with the consent of the lord lieutenant and the treasury "to appoint or employ a secretary, two assistant secretaries, one in respect of agriculture and one in respect of technical instruction, and such inspectors, instructors, officers, and servants as the department may require.

For the purpose of assisting the department in carrying out the objects of this act it is provided that "there shall be established (a) a council of agriculture; (b) an agricultural board; (c) a board of technical instruction."

*The council of agriculture* is composed of "two persons appointed by the county councils of each county (other than a county borough) in each province, and a number of persons resident in each province equal to the number of counties (exclusive of county boroughs) in the province to be appointed by the department." The members representing each province "shall constitute separate committees

on the council and shall be styled the provincial committees of the respective provinces."

*The agricultural board* consists of two persons appointed by the provincial committees of each province and four persons appointed by the department.

*The board of technical instruction* consists of (a) "3 persons appointed by the county councils of each of the county boroughs of Dublin and Belfast; (b) 1 person appointed by a joint committee of the councils of the several urban districts in the county of Dublin, such committee to consist of 1 member chosen out of the body by the council of each such district; (c) 1 person appointed by the council of each county borough not above mentioned; (d) 1 person appointed by the provincial committee of each province; (e) 1 person appointed by the commissioners of national education; (f) 1 person appointed by the intermediate education board; (g) 4 persons appointed by the department."

The duties of the council and of the several boards are defined by the act, as follows:

I. The council of agriculture shall meet at least once a year, for the purpose of discussing matters of public interest in connection with any of the purposes of this act.

II. The agricultural board shall advise with the department with respect to all matters and questions submitted to them by the department in connection with the purposes of agriculture and other rural industries.

III. The board of technical instruction shall advise the department with respect to all matters and questions submitted to them by the department in connection with technical instruction.

The corporate name of the department is "The Department of Agriculture and Technical Instruction for Ireland," and it is clothed with the power to acquire and hold land for the purposes of the act and may sue and be sued as in case of other corporate bodies. Parliament by this act places at the disposal of the department funds derived from a number of separate sources, and also prescribes the method of their apportionment.

There is also established by this act a committee of 5, known as a "consultative committee," for the purpose of coordinating educational administration. The committee is composed of the vice-president of the department, who is *ex officio* its chairman; 1 person appointed by the commissioners of national education; 1 person appointed by the intermediate education board; 1 person appointed by the agricultural board, and 1 person appointed by the board of technical instruction.

*The council of agriculture* consists of 104 members, 68 of whom are appointed by the county councils and 34 by the department from the several provinces, with the president and vice-president of the depart-

ment as ex officio members. The members of this council hold office for three years.

*The agricultural board* as constituted consists of 12 members, 8 appointed by the provincial committees and 4 by the department of agriculture.

*The board of technical instruction* consists of 21 members, who hold office for three years, whose duties, as in the case of the agricultural board, are advisory. They "advise the department with respect to all matters and questions submitted to them by the department in connection with technical instruction."

*The consultative committee of education* is composed of 5 members, and their duty is to "coordinate educational administration." The importance of the functions of such a committee is manifest, for the educational work of the department as respects agriculture is intimately associated with that of primary as well as secondary and higher education. The harmonizing of these systems so far as the work relates to agricultural industry is therefore the important duty assigned to this committee. All work, therefore, relating to agriculture or instruction in agricultural subjects in Ireland is performed under the supervision of the department of agriculture and technical education.

The act, nevertheless, provides for local cooperation. County and urban district councils are authorized to raise annually a sum not exceeding 1 penny per pound on the ratable value of such ratable or rural district, and may apply the revenue that is derived for the purposes of agriculture or "for any other purposes for which they are authorized by the act to expend money."

The six county boroughs are authorized to formulate their own schemes of agricultural instruction, and the counties outside of the county boroughs are, under the administration of the act, intrusted by the department with the local administration of such schemes of instruction as they, in consultation with the department, may adopt, the declared purpose being to "strengthen the spirit of economic and social self-help among the people" by bringing "the local bodies thus into contact with the difficulties of the problems to be dealt with."

The council in each county has authority, under the agriculture and technical instruction act of 1889, to appoint a county committee to have charge of the work of technical instruction in agriculture, which committee has authority to select the districts at which lectures shall be given and to appoint district committees each with a local secretary. This local secretary is charged with the duty of selecting the building for meeting and arranging for the hiring, warming, and lighting of the hall.

Assistance in local organization is rendered by the department by sending representatives to visit and confer with every local authority



and, after careful inspection and examinations of the local conditions, aid by offering them expert advice. The purpose of this dual organization is to encourage, on the one hand, local initiative and responsibility, and on the other, to guard against the indiscriminate multiplication of unrelated local organizations by providing a central authority to see that the work is coordinated so as to promote the best interests of the country as a whole.

The method pursued by the department in organizing and conducting itinerant schools is given in the following scheme of instruction in agriculture:

(1) The department is prepared, provided a suitable instructor in agriculture can be obtained, to approve of the appointment of at least one such person for each county in Ireland.

(2) The department will, as far as possible, assist the county committee in obtaining an instructor, by supplying the names of persons qualified for the post.

(3) The remuneration of the instructor shall not, except in special cases, exceed £200 per annum, inclusive of maintenance and hotel expenses, in addition to expenses of locomotion, which include second-class railway fare, car hire when necessary, or a bicycle allowance of 2d. per mile in lieu thereof.

(4) The appointment of the instructor shall be terminable at any time by three months' notice in writing on either side.

(5) It will be the duty of the instructor to deliver courses of lectures on agricultural subjects, such as soils, manures, seeds, pastures, crops and their cultivation, breeding, feeding, and management of live stock; to visit farms; to conduct such experiments and demonstrations in spring and summer as may be approved by the department; to select suitable land for this purpose; to supervise the sowing of the seeds and manure and the keeping of the plats free from weeds; to weigh the produce, tabulate the figures, and prepare a report on the results; to reply to letters from farmers seeking information; to advise farmers how they may avail themselves of the department's live-stock schemes and of the department's seed-testing station; to make known the provisions of the fertilizers and feeding stuffs act; to advise farmers how they can best avail themselves of all schemes which may be adopted by the county committee and by the department, and how they may take advantage of agricultural organization; to report to the department and to the county committee regarding the progress of his work as may be required; and, generally, to give his whole time to the work and do all in his power to further the interests of agriculture in the county.

(6) For the purposes of this scheme the county should be divided into circuits, each comprising not less than 5 centers. The instructor should work for at least four weeks in each circuit, and deliver one lecture per week at each center during that time. The instructor will, when invited to do so, visit, either on the day of the lecture or on the following day, any of the farms in the neighborhood, and give such information on practical subjects as the circumstances of the case may suggest.

The county committee are alone responsible for the selection of centers and arrangement of lectures. No work of this nature should be undertaken by the instructor, though it is desirable that he should be consulted.

(7) It will be the duty of the county committee to select centers at which the lectures will be given and to appoint a local committee, with an honorary secretary at each center, who should select the school or other building and

arrange for the hiring, lighting, and warming of the room in which the lectures will be delivered.

It will also be the duty of the county committee to undertake the responsibility of seeing that the instructor's time is fully and usefully employed.

The county committee shall keep a separate account of all expenditure under this scheme and shall furnish detailed statements of such expenditure as may from time to time be required by the department.

(8) Lectures should be arranged to be given in schoolrooms in the evenings, and should be held in rural centers. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those lectures which are given in the rural parts of the county, especially when the lectures are delivered in a district where the greatest number of farmers is to be found. The local committee at each center should be responsible for appointing a representative chairman for each lecture, as well as for the distribution of the short syllabus of the lectures, which will be prepared by the lecturer as soon as he is appointed. The local committee should undertake to have posters, which will be supplied by the secretary of the county committee, effectively displayed throughout their district. Each lecture should be followed by a discussion, during which farmers will be invited to ask questions relative to their business.

(9) The lectures should commence early in autumn and be continued until the end of the first week in March.

(10) No action shall be taken by the county committee toward putting this scheme, or any part thereof, into operation until the sanction of the department has been obtained in writing.

It will be observed that while the instructor in any agricultural subject is selected by the committee of the county in which he is to work, the choice of the committee is not final until the department has been satisfied as to the qualifications of the person selected and has sanctioned the appointment in writing. This insures that only capable teachers will be engaged in instruction work in itinerant schools.

Two classes of instructors are employed by the department in its technical instruction work in agriculture. The first is composed of what are known as itinerant instructors, who conduct short courses in some subject, such as poultry keeping, dairying, bee keeping, etc. These are trained men who are thoroughly qualified for the work which the subjects require.

The second class is composed of what are known as pioneer lecturers, sent out by the department for the purpose of giving a series of pioneer lectures upon practical agriculture—dairying, poultry keeping, horticulture, and kindred topics—in counties which have been unable to secure itinerant instructors.

In the case of the pioneer lecturers the department pays out of the funds at its disposal the fees and traveling expenses of these lecturers. In the case of the itinerant instructors in agriculture, the department pays their full salaries, but the cost of traveling through the county is defrayed out of the local fund raised by the county council from the rate of 1 penny in the pound on the valuation of the county prop-

erty, supplemented by at least an equal amount from the department funds. The salaries and expenses of all other instructors are defrayed out of this joint fund, which is administered by the county committee.

The itinerant instructors in agriculture are employed, as a rule, all the year round. In some counties, however, the instructors in poultry keeping, horticulture, bee keeping, etc., are employed for nine months of the year only. During the winter months the instructor is employed five evenings in the week in lecturing. He also replies to letters from farmers in the county under his charge, who ask advice on matters relating to farming operations, and visits during the daytime farmers in the vicinity in which the lectures are held. The visits are made for the purpose of enabling the instructor to acquaint himself with the character of the farm land in the district under his charge, thus enabling the lecturers to select suitable land for the purpose of the variety and manurial tests which they conduct during the spring and summer months. These visits are also of value in providing opportunity for farmers to consult an expert respecting the local difficulties which affect them.

The county committee is required to see that the instructor's time is fully and properly employed, and that a short syllabus of each lecture is prepared by the lecturer and distributed among the people.

The assistant secretary of agriculture of Ireland reports that there were at work on the 31st day of March, 1904, 80 county instructors distributed over 33 counties. The following table exhibits the character and extent of this work:

*Number of instructors in agricultural subjects at work in Ireland during the year 1903-4 and the number of lectures delivered and average attendance thereat.*

Scheme.	Number of counties at work.	Number of itinerant instructors.	Number of lectures.	Average attendance.
Agriculture.....	14	15	1,159	64
Poultry keeping.....	31	32	2,820	90
Butter making.....	10	12	1,594	52
Horticulture.....	14	<sup>a</sup> 14	550	70
Bee keeping.....	13	7	65	60

<sup>a</sup> Of these, 6 gave instruction in bee keeping also.

The expense for conducting this work during the year amounted to \$152,355.24, of which amount \$53,786.62 was derived from the local tax of 1 penny on the pound referred to, and \$98,568.62 from the department funds.

In addition to the courses of lectures delivered, the department from time to time issues leaflets on agricultural subjects. These leaflets are distributed free to applicants, and also to a regular mail-

ing list of farmers whose names have been listed by the department. The subjects cover a varied and wide range of topics, as charlock spraying, fluke in sheep, wireworms, contagious abortion in cattle, prevention of potato blight, the use and purchase of manures, etc.

In order that the exact character of the itinerant schools may be understood, the following schemes, taken from reports of county committees on agriculture for the year 1904, are presented:

SCHEME OF INSTRUCTION IN POULTRY KEEPING FOR ITINERANT SCHOOLS OF AGRICULTURE IN THE COUNTY OF KILDARE, IRELAND.

Mr. ——— has been appointed instructor in poultry keeping at a salary of £3 per week, with necessary expenses of locomotion in the county, which includes third-class railway fare, car hire when necessary, or a bicycle allowance of 2d. per mile in lieu thereof.

The appointment of the instructor shall be terminable at any time by four weeks' notice in writing on either side.

DUTIES OF INSTRUCTOR.

The instructor's duty shall be to deliver courses of lectures on poultry keeping, including the selection of breeds; the hatching and rearing of chickens; the feeding and housing of poultry generally, and the marketing of the produce; to visit poultry runs and give such practical advice as may be desired by poultry keepers; to inspect egg-distributing stations; to report to the department and to the county committee regarding the progress of his or her work as may be required; and generally to give his or her whole time toward promoting improvement in the poultry keeping in the county.

CENTERS.

For this purpose the county will be divided into five circuits, viz, Naas, Athy, Carbery, Celbridge, and Kildare, each comprising not less than five centers.

The instructor shall work for at least four weeks in each circuit, and deliver one lecture per week at each center during that time.

The county committee shall select the centers at which the lectures will be given, and appoint an honorary secretary and a local committee at each center, who should select the school and arrange for the hiring, lighting, and warming of the room in which the lectures will be given.

These lectures shall be arranged as far as possible to be given in schoolrooms, and to be held in rural centers. Unless in exceptional circumstances, no lecture will be arranged for in a large village or town.

Lectures will commence in November and be continued until May.

The county committee undertake the responsibility of seeing that the instructor's time is fully and usefully employed.

DISTRIBUTION OF SETTINGS OF EGGS OF PURE BREEDS.

There shall be offered twelve premiums of £5 each to select applicants who distribute at least 60 settings of eggs each; those who distribute less will be paid in proportion to the number distributed. When the demand for settings of eggs is not pressing the owner may set eggs for his own use, but such settings of eggs will not count toward a premium.



Applicants for premiums must be prepared to comply with the following conditions, viz:

(1) To keep one pure breed of poultry only. One of the following breeds of hens and ducks must be selected:

*Laying breeds.*—Minorcas, White Leghorns, Brown Leghorns.

*General-purpose breeds.*—Houdans, Plymouth Rocks, Orpingtons, Faverolles.

*Ducks.*—Aylesbury, Rouen, Pekin, Indian Runner.

(2) To sell or destroy any existing fowl on the farm of which the instructor or the department may disapprove, and not to bring on the farm fowl of any description without the approval of the instructor or of the department.

(3) To keep no male birds on the farm other than those used for stock purposes of the breed or breeds of fowl approved of.

(4) When a premium is claimed for hens alone, to keep not less than 30 nor more than 60 of the selected breed. If the premium is claimed in respect of hens and ducks, to keep not less than 20 nor more than 60 hens or pullets of the selected breed, and not less than 10 nor more than 30 ducks of the selected breed. One cock or cockerel must be kept for every 10 hens or pullets, and 1 drake for every 6 ducks.

(5) To provide proper housing where such does not already exist.

(6) To feed and care for the birds in such a manner and in such a way as the instructor and the department may require.

(7) To supply settings of eggs from these birds to any person in the county at 1s. per dozen, and to replace infertile eggs that are returned within one month from the date on which they were sent out.

(8) To stamp all eggs given out with a stamp provided for the purpose by the county committee.

(9) To keep in a special book provided by the county committee an accurate account of all eggs laid and distributed. This book must be sent to the secretary of the county committee or to the department when asked for by either of these bodies. The books should be returned to the secretary of the county committee at the end of the hatching season, which will commence on the 1st of January and terminate on the 31st of May.

(10) To permit the instructor or the department to inspect the birds at any time.

Any infringement of the above rules may entail the cancellation of the premium.

An additional grant of 50 per cent of the actual cost, but in no case exceeding £2, may be made to the selected persons who provide themselves with portable wooden fowl houses approved by the department. This will only apply to persons who are taking up the scheme in 1903-4 for the first time.

The county committee will invite applications from persons in the county who already possess, or are willing to purchase, pens of the approved pure breeds of fowls or ducks, or to keep one or more pure-bred turkey cocks, as above, and who are prepared to comply with the above conditions. When these applications have been received the county instructor in poultry keeping will, as soon as possible, inspect and report to the county committee as to the number of suitable applicants. The names of the selected applicants, with full particulars as to the breeds, number of birds, and housing, should then be submitted for the approval of the department, who may thereupon further inspect the selected farms and submit a list of those of which they approve to the county committee for their final selection.

The county committee will not consider applications in respect of premiums under this scheme later than the 1st of December, 1903.

On account of the difficulty of procuring stock birds of pure breeds late in the season, it is recommended that selected applicants who intend to adopt this scheme should, if possible, have all arrangements completed prior to the 1st of January, 1904.

Not later than the 10th of June the selected applicants for premiums should forward to the secretary of the county committee the record books referred to above, accompanied by a statutory declaration certifying that the entries in these books are correct, and that all the conditions of this scheme have been complied with.

As soon as the department are satisfied as to the fulfillment of the conditions of this scheme, the secretary of the county committee will be notified that payment may be made by the committee of the premiums or part premiums payable under this scheme.

Forms for the declaration required may be had on application to the secretary of the county committee.

#### TURKEY PREMIUMS.

Five premiums of £3 are offered to persons who are prepared to comply with the following conditions:

(1) To keep one or more pure-bred American bronze stock turkey cocks for the service of turkey hens, the property of any persons residing in the county, at a fee of 6d. per service. Each cock must serve 20 hens, exclusive of the owner's. If a smaller number are served, the premium will be proportionately reduced. The turkey cock will require to be at least twelve months old, and not less than 23 pounds in weight.

(2) To provide proper housing accommodation, and to feed and care for the bird or birds in such a manner as the instructor or the department may require.

(3) To keep in a special book, provided by the county committee, an accurate record of services. This book must be sent to the secretary of the county committee or to the department when required, but otherwise returned to the secretary of the county committee at the end of the season, which will commence on the 1st of January and will terminate on the 31st of May.

(4) To permit the instructor or the department to inspect the birds at any time.

Any infringement of the above rules may entail the cancellation of the premium.

An applicant will be eligible for only one premium, either for hens or for hens and ducks combined, but he will, in addition, be eligible to hold a premium for turkeys. No premium, however, will be given for ducks alone.

#### SCHEME OF INSTRUCTION IN BUTTER MAKING FOR ITINERANT SCHOOLS OF AGRICULTURE IN THE COUNTY OF KILDARE, IRELAND.

##### DUTIES OF INSTRUCTOR.

The instruction shall take the form of daily lectures on dairying, accompanied by practical instruction in butter making.

Each course shall extend for a period of not less than two and not more than four weeks. Not more than 12 pupils shall be admitted to each class. Pupils must undertake to attend regularly.

On the first day of visiting each center, the instructor shall give a public lecture and demonstration, and during the remainder of the course at that center shall conduct a class daily, in which pupils only shall take part, but which shall be open to the public.

These classes shall be held, as far as possible, in schoolrooms and other suitable buildings in rural centers. Unless in very exceptional circumstances no class shall be held in a large village or town.

The county committee undertake the responsibility of seeing that the instructor's time is fully and usefully employed.

## CENTERS.

For this purpose the county will be divided into the same five circuits as for poultry keeping.

Instruction will commence in May and be continued through the summer.

The county committee will select eight suitable centers at which classes will be held, and appoint at each center an honorary secretary and a committee, who will be responsible for the local arrangements necessary for the proper carrying out of the work, and who will be required to comply with the annexed conditions.

A total sum, not exceeding £8, will be set aside for prizes, to be given to the most successful students at the close of the course of instruction at each center—three prizes of the value of 10s., 6s., and 4s., respectively, to be given at each center.

## CONDITIONS REQUIRED OF LOCAL COMMITTEES.

(1) To secure premises suitable for a working dairy, if possible not less than 25 feet by 18 feet or other dimensions affording similar floor space. Either a public room, schoolroom, or barn with a good floor would be suitable for the purpose.

(2) To secure a sufficient supply of water.

(3) To provide on the premises means of heating at least 15 gallons of water at one time, for use in cleaning utensils, etc.

(4) To provide sufficient milk and cream for use in the school, the local committee taking responsibility for the sale of butter. After the opening day at each center, about 3 gallons of milk and 6 gallons of cream will be required for each day's work. Arrangements should be made to have the milk and cream delivered in the morning.

(5) To guarantee not less than 6 and not more than 12 pupils to attend on each of the days over which the course of instruction extends.

(6) To arrange for the carriage of the utensils from one center to another. The weight of the utensils is usually from 25 to 30 hundredweight and they are somewhat bulky.

*List of utensils of traveling dairy school of six churns.*

	£	s.	d.
6 end-over-end churns, at £3.....	18	0	0
6 butter workers, at 37s. 6d.....	11	5	0
6 butter boards, at 2s.....	0	12	0
4 larger butter boards, at 3s. 6d.....	0	14	0
6 scoops, at 1s.....	0	6	0
6 sieves, at 2s. 6d.....	0	15	0
6 pairs Scotch hands, at 2s. 6d.....	0	15	0
6 squeegees, at 1s.....	0	6	0
6 scrubbing brushes, at 1s.....	0	6	0
6 thermometers, at 1s. 6d.....	0	9	0
6 white enameled buckets, at 5s. 6d.....	1	13	0
6 iron buckets, at 4s. 6d.....	1	7	0

	£	s.	d.
4 shallow tins (cream), at 4s.....	0	16	0
1 pair scales.....	0	19	0
1 set iron weights (7, 4, 2, 1, $\frac{1}{2}$ , and $\frac{1}{4}$ pound).....	0	4	6
1 set brass weights (2, 1, $\frac{1}{2}$ , and $\frac{1}{4}$ ounce).....	0	5	6
1 set creamometers.....	0	6	6
1 lactometer.....	0	1	6
1 Gerber butter-fat tester (2 bottles), about.....	2	10	0
1 two-quart measure.....	0	2	6
4 quart measures, at 1s. 9d.....	0	7	0
4 pint measures, at 1s. 3d.....	0	5	0
2 skimmers, at 8d.....	0	1	4
1 hand separator (9 gallons per hour).....	5	10	0
		<hr/>	
	47	16	10

SCHEME OF INSTRUCTION IN HORTICULTURE FOR ITINERANT SCHOOLS OF AGRICULTURE IN THE COUNTY OF KILDARE, IRELAND.

Mr. ——— has been reappointed instructor in horticulture at a salary of £3 per week, with expenses of locomotion in the county (third-class railway fare), car hire, or bicycle allowance, as in the case of the agricultural instructor.

His appointment shall be terminable at any time by four weeks' notice in writing on either side.

DUTIES OF THE INSTRUCTOR.

His duties shall be to give lectures in the evenings, and personal advice to fruit, vegetable, and flower growers, in a similar manner to that described in the case of the itinerant instructor in agriculture; to visit orchards and gardens during the daytime, and to give practical demonstrations in planting, pruning, grafting, etc.; to report to the department and to the county committee on his work, as may be required, and, generally, to give his whole time to the work and to do all in his power to further the interests of horticulture in the county.

CENTERS.

Centers of instruction shall be fixed by the county committee, who shall also determine the length of the courses of lectures at each center.

The county has been divided in the same five circuits as for agriculture and poultry instruction. In each of these circuits one demonstration plat will be selected for the purpose of growing vegetables, flowers, and fruit, and showing improved methods of cultivation. A total sum not exceeding £36 has been set aside to cover the cost of seeds, manures, fruit trees, and, if necessary, fencing and labor, the labor, whenever practicable, to be given gratuitously by the person or persons providing the plats and the produce to be the property of the same persons. In cases in which such an arrangement is found to be impracticable the committee may employ hired labor, retaining the produce.

The plat in the Celbridge district may be situated in the Union grounds, as these are surrounded by at least 20 cottages. The selection of the different plats will be made by Mr. ———, subject to the approval of the committee and the department.

DISTRIBUTION OF FRUIT TREES.

The committee may purchase fruit trees in bulk and resell to farmers and cottages in the county, provided no loss is incurred in the transaction.



SCHEME OF INSTRUCTION IN BEE KEEPING FOR ITINERANT SCHOOLS OF AGRICULTURE IN THE COUNTY OF KILDARE, IRELAND.

An instructor in bee keeping, who must satisfy the department as to his qualifications, shall be appointed by the county committee, with the approval of the department. Preference shall be given to local bee keepers if qualified.

A sum of £27 has been set aside for this purpose.

DUTIES OF THE INSTRUCTOR.

His duties shall be :

(1) To give instruction on the principles and practice of modern bee keeping by means of lectures and demonstrations at any center where application is made for his services.

(2) To deal with bee diseases.

(3) To give advice generally and to assist in the promotion of the industry in such a manner as the county committee, with the approval of the department, may direct.

The examples given show the methods in operation in conducting itinerant schools. It is manifest that the scheme may be extended and adapted to include other agricultural specialties as rapidly as the money and teachers necessary can be secured for the purpose.

The system as outlined is a distinct advance upon the method of holding a few meetings in each county, in which a number of lecturers are employed to appear and deliver lectures of thirty to forty minutes, each lecture treating of a different topic. The new plan aims to do a few things well rather than many in a superficial and indifferent way. Each endeavors to develop the educational feature of the farmers' institute, so as to make it of permanent and of direct and immediate use to the farming population in improving their practice.

Provision is also made for the profitable employment of the institute instructors during the entire year by making it their duty, in connection with their work as teachers, to select and recommend locations for the carrying on of demonstration experiments throughout the several counties in which they work. When the individuals who are to conduct these experiments are selected by the county committee and have been approved by the department, the lecturer is expected to take charge of the work of organizing these experiment plats, to visit them from time to time and give advice as to their management, to keep records of their progress, and to report to the county committee the results.

The experiment plats are each one-twentieth of an acre in extent. Subjects and methods of experiment are prescribed by the department. Some of these subjects experimented upon in 1902 were oats, barley, potatoes, cheese making, calf feeding, seed testing, tobacco growing, flax growing, turnip growing, hay and pasture grasses, vegetable and fruit preserving, etc.

The experiments in crops were chiefly manurial and variety tests, except that those conducted with reference to hay and pastures in-

cluded various mixtures of seeds with a view of securing the best varieties for these purposes.

The county committees are also utilized by the department in its efforts to improve the live stock of the county, in its distribution of prizes, in the encouragement of agricultural fairs, in securing the establishment and proper conducting of creameries, and in all of its other operations in the interests of agriculture in the several counties.

The county committee, therefore, is the executive of the entire system, without which no part of the work could possibly be effective. The moving force in the county committee is its secretary—a live, capable, active, and discreet secretary in every county is a necessity; without this all of the machinery of the system like that of a locomotive without an engineer will lie idle and useless, eventually to become fit only for the rubbish heap. On the other hand, with an effective secretary in every county the work of agricultural education and rural development will be rapidly and successfully advanced.