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PERSONAL.

Mr. Geo. A. Carpenter has been appointed City Engineer of Pawtucket, R. I.

Mr. Louis G. Hester has been elected Engineer and Secretary of the Southern Bridge & Construction Co., of Houston, Tex.

Mr. J. R. Kearney has been appointed Superintendent of Car Service of the Baltimore & Ohio R. R., with offices at Camden Station, Baltimore, Md.

Mr. George Simpson, Assistant Civil Engineer, Northern Pacific R. R., has resigned his position to accept the position of Chief Engineer of the Province of Ontario, to succeed Mr. J. A. McDonald.

Mr. Harry M. Pfagler, Chief Mechanical Inspector of the Pullman Car Co., has been appointed Superintendent in charge of all repairs, repair shops and mechanical matters of the company.

Mr. A. D. Page has been appointed Bridge Engineer of the Great Northern Ry., to succeed Mr. Max Toltz, who has been transferred to other service. Mr. Toltz will also act as Consulting Bridge Engineer.

Mr. George W. Stevens has been elected President of the Chesapeake & Ohio Ry., to succeed Mr. M. E. Ingalls, and Mr. Decatur Axtell has been elected First Vice-President of the same road to succeed Mr. George T. Bliss, who has resigned.

Mr. H. Fay Allen, formerly of the U. S. Deep Waterways Survey, and Mr. M. S. Darrow, late assistant to Prof. Williams, of Cornell, have recently been appointed recorders in the U. S. Engineer Department, Chicago, Ill., under Mr. Jas. A. Seddon, U. S. Assistant Engineer.

Mr. H. H. McClintie, Vice-President and General Manager, and Mr. Chas. S. Marshall, Secretary and Chief Engineer of the Shifler Bridge Co., Pittsburg, Pa., have resigned and will engage in the manufacture of structural steel under the name of the McClintie-Marshall Construction Co., with offices at 404 Park Bldg., Pittsburg.

Mr. Harry W. Early, General Freight and Passenger Agent of the Salt Lake & Ogden R. R., has resigned, and his position has been taken by Mr. J. Fogarty. Other changes which have been made in the official staff of the company are the appointment of Mr. J. E. Bamberger as Vice-President, and of Mr. J. H. Kirk as General Superintendent.

Mr. Alfred M. Quick, Assoc. Mem. Am. Soc. C. E., formerly Assistant Engineer of the Baltimore Water Department, has been appointed by Mayor Hayes Chief Engineer of the Department and President of the Water Board. Under the new city charter he will also be a member of the Boards of Estimates and of Public Improvements.

Mr. Marvin H. Dey, who was Engineer of Track Elevation in 1899 for the joint work of the Chicago, Rock Island & Pacific Ry. and the Lake Shore & Michigan Southern Ry., is now Engineer in Charge of Construction of the Gowrie & Northwestern Ry., with office at Gowrie, Ia. This is a branch of the C., R.-I. & P. Ry. from Gowrie to Sibley, 110 miles.

Mr. Edwin R. Holden, for many years Vice-President of the Delaware, Lackawanna & Western R. R., has resigned. Mr. Holden has had particular charge of the company's coal interests, but for some time much of the work has been turned over to his son. Mr. Holden is 70 years of age, and his retirement is due to his advanced years and failing health.

Mr. Thomas Rodd, M. Am. Soc. C. E., Chief Engineer of the Pennsylvania Co. and Consulting Engineer for the Westinghouse interests, has sailed for Europe with the plans for the new plant of the British Westinghouse Co., at Manchester, England. Mr. Rodd expects to be gone six weeks, and in that time it is probable that bids for the work will be asked for from Pittsburg contractors. A contract for a \$500,000 re-equipment of a street railway is already in the hands of the company.

Rear Admiral F. V. McNair, U. S. N., who has been Superintendent of the Naval Academy at Annapolis since July, 1898, has been detached from duty on sick leave for an indefinite period. Admiral McNair is the ranking Rear Admiral of the Navy, being second only to Admiral Dewey, and has had continuous service for 42 years, of which nearly 21 years were passed at sea. Commander Richard Wainwright has been designated by the President to succeed Admiral McNair as Superintendent of the Naval Academy. Commander Wainwright was the officer

in charge of the auxiliary cruiser "Gloucester" which did such effective work in fighting the Spanish torpedo-boat destroyers at the battle of Santiago Harbor.

OBITUARY.

Mr. Nathaniel A. Boynton, President of the Boynton Furnace Co., of New York city, died on Feb. 10 at the age of 77 years.

Mr. Charles Martin and Mr. George R. Black, civil engineers, of Escanaba, Mich., were killed in a railway wreck on the Chicago & Northwestern Ry. on Feb. 8.

Mr. James McCartney, Commissioner of Street Cleaning of New York city, died on Feb. 6, aged 45 years. Mr. McCartney was appointed Commissioner of Street Cleaning on Jan. 1, 1898, to succeed Col. Geo. E. Waring. Mr. Percy E. Nagle has been appointed to succeed Mr. McCartney.

Mr. Brandt, of the firm of Brandt, Brandau & Co., the contractors for the Simplon tunnel now under construction through the Simplon Alps, between Italy and Switzerland (Eng. News, May 27, 1897), died recently. Mr. Brandt had become famous as a tunnel engineer through his work on the Ariberg tunnel in 1867, and for his many inventions of excavating and drilling machinery for tunnel work. The Simplon tunnel, 12.2 miles long, was his greatest undertaking, and his death will be a serious loss to this enterprise as well as to the engineering world in general.

Lieut.-Col. William H. H. Benyard, U. S. Engineer Corps, died in New York city on Feb. 9. Lieut. Col. Benyard was born in Pennsylvania. As soon as he was graduated from the Military Academy at West Point in 1863, he was made a first lieutenant in the corps of engineers. He was brevetted captain on August 1, 1864, for gallant service before Richmond, and a major on April 1, 1865, for meritorious service at the battle of Five Forks. He was engaged in construction work on defenses at Pittsburg and Portland Harbor, and in engineering work with the Army of the Potomac during the latter part of the war. He was assistant professor of engineering at West Point for three years. He was made a captain on May 1, 1866, a major on March 4, 1879, and a lieutenant-colonel on June 2, 1889. The death of Lieut.-Col. Benyard has caused the following promotions in the corps of engineers: Maj. William S. Stauton at Boston, to be Lieutenant Colonel; Capt. George W. Goethals at West Point, to be Major; First Lieut. Charles Keller at St. Louis, to be Captain; Second Lieut. Frank C. Boggs at Tampa, Fla., to be First Lieutenant.

Mr. Andrew Reasoner, the veteran ex-Superintendent of the Delaware, Lackawanna & Western R. R., died at his home in Arlington Ave., East Orange, on Feb. 9, from a complication of diseases. He had been ill for a long time with a chronic stomach complaint and indigestion, and this finally affected his head. The immediate cause of death was the hardening of the blood vessels in the brain. He suffered greatly in the last few months of his illness. Mr. Reasoner was born in South Egremont, Mass., in 1823. He received his early education in his native town, where he was graduated from the academy. He came to New York city and secured a place as purser on one of the boats of the New York and South Norwalk line. Subsequently he was interested in a cable line that ran in Broadway. He finally entered the employ of the Hudson River R. R. Co., and was soon placed in charge of the freight transportation department in New York. He was next appointed superintendent of the Long Island R. R., a place which he held only a short time, resigning it to become superintendent of the Chicago, Milwaukee & St. Paul Ry. He had charge of the building of the line from Portage to Watertown. After some years he resigned and came east. Samuel Sloan in 1869 placed him in charge of the double tracking of the main line of the Lackawanna. He pushed this with such energy that when the Morris and Essex road was absorbed by the Lackawanna in 1871 he was made general superintendent, and held the office until last spring, when the new management of the road took charge. He was then retired on a pension. Mr. Reasoner married Miss Abbie Euphemia Byxbee, of South Norwalk, Conn., in 1849, and she survives him.

ENGINEERING SOCIETIES.

COMING GENERAL MEETINGS.

AMERICAN PAPER AND PULP ASSOCIATION.
Feb. 14-15. Annual meeting at New York city. Secy., C. W. Bantout, 101 Times Building, New York city.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Feb. 20. Annual meeting at Washington, D. C. Secy., R. W. Raymond, 99 John St., New York city.

ASSOCIATION OF ONTARIO LAND SURVEYORS.
Feb. 27 to Mar. 1. Annual meeting at Toronto, Can. Secy., A. J. Van Nostrand, Yonge St. Arcade, Toronto, Can.

INTERNATIONAL MINING CONGRESS.
June 19 to 23. Annual meeting at Milwaukee, Wis. Secy., Irwin Mahan, Sentinel Building, Milwaukee, Wis.

COMING LOCAL MEETINGS.

ENGINEERS' CLUB OF COLUMBUS.
Feb. 17. Secy., H. M. Gates, 12 1/2 North High St., Columbus, O.

ENGINEERS' CLUB OF PHILADELPHIA.
Feb. 17. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

PACIFIC COAST RAILWAY CLUB.
Feb. 17. At San Francisco, Cal. Secy., E. A. Gilbert, West Oakland, Cal.

MONTANA SOCIETY OF CIVIL ENGINEERS.
Feb. 17. At Helena. Secy., Albert S. Hovey, Helena, Mont.

ENGINEERS' CLUB OF CINCINNATI.
Feb. 20. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Feb. 20. At Pittsburg, Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

NEW YORK RAILROAD CLUB.

Feb. 20. At New York city. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

WESTERN RAILWAY CLUB.
Feb. 20. At Chicago. Secy., J. W. Taylor, 667 The Rookery, Chicago, Ill.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Feb. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Feb. 21. At New York. Secy., C. W. Hunt, 220 W. 57th St., New York city.

ENGINEERS' CLUB OF ST. LOUIS.
Feb. 21. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

FRANKLIN INSTITUTE.
Feb. 21. At Philadelphia, Pa. Secy., Wm. H. Wahl, 138 Seventh St., Philadelphia, Pa.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
Feb. 28. At New York city. Secy., Ralph W. Pope, 26 Courtlandt St., New York city.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.—At the annual meeting of the club, held at Louisville, Ky., Jan. 15, the following officers were elected to serve during the ensuing year: Chas. Hermany, President; Henry Vogt, Vice-President; Marshall Morris, Secretary; Directors: W. A. Anderson, J. M. Johnson, Soren Thurstensen, Jos. McWilliams, Pierce Butler. The Bank of Commerce, Treasurer. Col. Thomas W. Bullitt will read a paper at the February meeting on "1900—Retrospect and Prospect." Marshall Morris, Secy.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.—The regular meeting of the society was held Feb. 5. Mr. C. F. Loweth read a paper on "Moving Horizontally a 361-ft. Railroad Bridge Spau with Oak Wedges." Mr. A. W. Munster described his experience in raising heavy weights with wedges. To cite one case: A steel tower 130 ft. high supporting deep spans and resting on masonry pedestals, two of which had settled. To plumb the tower, thin steel wedges, 42 to a pedestal, were alternately driven and shimmed by eighths of an inch, thus lifting about 300 tons an inch and a half without damage to the bridge, masonry or to the wedges. The wedges were 18 ins. long, 3 1/2 ins. wide, rising 3/8-in. in 12 ins., and were forged under a steam hammer from locomotive springs taken from the scrap heap. C. L. Anuan, Secy.

INTERNATIONAL CONGRESS OF NAVIGATION.—This society will hold its eighth meeting in Paris, from July 25 to Aug. 3, 1900. The members of the Congress will include delegates of the French and foreign governments, delegates accredited by chambers of commerce, cities, navigation and towing companies, railway and transportation companies, and technical, scientific and industrial societies and syndicates and individuals who have signified their intention of becoming members to the Organizing Committee before the opening of the session. All members shall pay an assessment of \$5, which entitles them to all the publications of the Congress. The office of the Committee of Organization is in the Chamber of Commerce, Place de la Bourse, No. 2, Paris, France. The program of the Congress calls for the following topics: "Effect of Regulating Works Upon the Regimen of Rivers," "Progress Made in Mechanical Application to the Feeding of Canals," "Utilization of Natural Navigable Waterways of Restricted Depth above their Maritime Section," "Progress made in Mechanical Applications in the Operation of Navigable Waterways—Privileged Traction Companies," "Institutions to Pension and Instruct the Personnel of the Boat Crews," "The latest Improvements in Lighting and Buoying Coasts and Harbor Entrances," "The Most Recently Constructed Works in the Principal Coastwise or Maritime Ports," "Facilities to be Given to Ports to Meet the Demands of Ocean-Going Ships (dimensions to be given to the principal works and the general unaviable conditions required)," "Progress in Mechanical Applications to the Plants and Other Facilities of the Ports."

NEW PUBLICATIONS.

THE RAILWAYS IN INDIA.—Administration Report for 1898-99. Part 2. By A. Brereton, Director of Railway Traffic and Statistics. Paper boards; 4to.; pp. 622, map.

This part of the annual report forms a bulky volume and deals with the traffic and finances of the various roads during the year. There are voluminous tables of traffic statistics, distribution of receipts and expenses, etc., and at the end is a description list of all the railways, with the dates of opening and particulars of the construction. Other tables give the dimensions, etc., of the principal bridges and tunnels. All the financial statements are given in Indian currency.

REPORT, MAINE STATE RAILROAD COMMISSION, 1899.—J. B. Peaks, Frederic Danforth and Benj. J. Chadbourne, Commissioners. Cloth, 5 1/2 x 9 ins.; pp. 412; illustrated.

The report shows that on June 30, 1899, there were 1,871.85 miles of steam railway in Maine, of which 124.51 miles had been built during the year. Of this mileage 154.17 miles were narrow gage. The mileage of street railway on the same date was 240.20, of which 71.48 miles were added during the year. Substantial gains are shown for the year in traffic and earnings. One of the features of the report is a series of half-tone views from photographs of roadbed, structures and natural scenery along the various railways of the state.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1/2 x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

POWER STATION CONSTRUCTION.—Arnold Electric Power Station Co., 1540 Marquette Bldg., Chicago, Ill. Cloth; 11 x 8 ins.; pp. 21; illustrated.

The "Arnold System" of connecting engines and electric generators is described in this book, which is a neatly bound volume of blue-prints. Reproductions of drawings and photographs are given showing power plants built and designed by the above company.

WELL DRILLING.—L. Wilson, 225 Dearborn St., Chicago, Ill. Paper, 3 1/2 x 5 ins.; pp. 8.

This contains a list of some of the water, gas, oil and salt wells driven, with the location and depth of each.

BOLTS, NUTS AND WASHERS.—American Iron & Steel Mfg. Co., Lebanon, Pa. Paper; 6 x 9 ins.; pp. 88; illustrated.

This is a catalogue and price list of bolts, nuts, rivets and kindred articles.

BADGES AND RIBBONS.—Whitehead & Hoag Co., Newark, N. J. Paper; 1 1/2 x 7 1/2 ins.; pp. 50; illustrated.

By means of colored photogravures this catalogue illustrates a great variety of badges made in metal, celluloid and ribbon for parades or club gatherings.

STEAM ENGINE.—The George B. Sennett Co., Youngstown, O. Paper; 9 x 6 ins.; pp. 16; illustrated.

This pamphlet describes a slide-valve throttling engine of 30 to 50 HP., adapted for places where a substantial and reliable engine is needed.

STEEL TOOLS AND DIES.—Crescent Steel Co., Pittsburg, Pa. Paper; 3 x 6 ins.; pp. 130; illustrated.

This book contains a list of the exhibits of steel tools manufactured by the above company at the National Export Exposition at Philadelphia.

ARTISTS' MATERIALS.—Frost & Adams Co., 37 Cornhill, Boston, Mass. Paper; 6 1/2 x 4 1/2 ins.; pp. 197; illustrated.

This priced catalogue refers to the multitude of things used by the artist, engineer and student. Illustrations and text plainly describe each and give the price.

ELECTRICAL INSTRUMENTS.—Whitney Electrical Instrument Co., 243 Broadway, New York City. Paper; 3 x 6 ins.; pp. 29; illustrated.

Portable and switchboard electrical instruments for direct and alternating currents are described with price-lists in this catalogue.

CORLISS ENGINES.—Bates Machine Co., Joliet, Ill. Paper; 9 1/2 x 19 ins.; pp. 61; illustrated.

The Bates-Corliss engine is fitted with the 4-valve trips invented by Albert J. Bates, which are placed on the rods connecting the admission valves with the wrist plates. The engine is described and illustrated in detail.

DRAWING TABLES.—R. E. Kidder, 28 Hermon St., Worcester, Mass. Paper; 7 1/2 x 4 1/2 ins.; pp. 7; illustrated.

These drawing tables are intended for civil engineers, artists, draftsmen and architects. They have a wheel lift, can be raised or lowered, revolved or inclined at any angle. Dimensions and prices are given.

FEED WATER HEATERS AND PURIFIERS.—Bates Machine Co., Joliet, Ill. Paper; 6 x 9 ins.; pp. 51; illustrated.

This pamphlet is devoted to the Cookson devices, including feed water heater, purifier, filter, oil separator and condensation receiver. Testimonials and a list of users are given.

TROLLEY TRACKS.—Coburn Trolley Track Mfg. Co., Holyoke, Mass. Paper; 9 x 6 ins.; pp. 32; illustrated.

These trolley tracks are for carrying purposes in factories, shops, etc., and the illustrations show various applications of the system, and separate detail sheets show just how the tracks are built and operated.

CORDAGE.—Samson Cordage Works, 115 Congress St., Boston, Mass. Paper; 6 x 3 1/2 ins.; pp. 18; illustrated.

Braided cord for all manner of use is here illustrated and described. These products include sash cord, clothes lines, railway signal cord, ventilator and awning cord, etc. With the cord itself are all sorts of fittings and connections.

BOILER FLUE PLUG.—Reinhold Betterman, Johnstown, Pa. Paper; 3 x 6 ins.; pp. 6; illustrated.

This pamphlet describes a device for temporarily stopping up leaky boiler flues. Metallic plugs are placed in the two ends of the flue and are then drawn up tight by means of a rod passing through the tube and the plugs and provided with a thread and nut at one end.

FLUSH TANKS.—Walker Flush Tank Co., 916 Baltimore Ave., St. Louis, Mo. Paper; 5 1/2 x 8 ins.; pp. 16; illustrated.

The Walker flush tank siphon has double iron bell or dome, and a vent pipe is carried up inside the tank, formed by a segmental wall of brick built against the side of the tank. It has been in use on the Pacific coast since 1895.

PAINTS FOR WOOD AND STEEL.—The Goheen Mfg. Co., Canton, Ohio. Paper; 9 x 6 ins.; pp. 23; illustrated.

This is a treatise on the preservation of wood and metal surfaces; illustrates the effects of exposure upon iron, and points out the special advantages claimed for the Carbonizing Coating made by this firm; together with testimonials from users as to its qualities in resisting rust, corrosion, acids, alkalis and gases.

CEMENT COATING.—New England Cement Coating Co., Boston, Mass. Chicago Cement Coating Co., 737-8 Monadnock Block, Chicago, Ill. Paper; 12 1/2 x 9 1/2 ins.; pp. 20; illustrated.

This cement coating is a water and frost-proof covering applied to exterior or interior rough brick walls; it has been in use for 15 years, and the work is guaranteed for a period of years. The catalogue shows buildings upon which it has been used and refers to those who have tried it.

PUMPS AND HYDRAULIC MACHINERY.—Sclipe Pump Co., 107-109 North Third St., Philadelphia, Pa. Paper; 6 1/2 x 4 ins.; pp. 96; illustrated.

This is an illustrated price list of a great variety of pumping machinery, from small pumps for wells to duplex steam pumps. Among the special machines made are deep-well, vertical steam pumps, Rider and the Ericsson pumps, odorless force pumps, centrifugal pumps, electric pumps, etc. The same firm furnishes steel wind-mills, water-tanks and towers, pipes and fittings, etc.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Table with columns: Bids to be opened, Work, Location, Date. Includes entries for Fire boat, Buildings, Paving material, Reservoir, Foundations, Sanitarium, Cement and pier, Electric plant, Ammunition boats, Jettes, Water-works material, Brick sewer, Dredging, Electric plant, Air-lift plant, School house, Electric light, Iron castings, Drainage, Naval supplies, Drainage, Live-saving plant, School, Electric lights, Sewer bonus, Drainage line, Bridge, Electric franchise, Fire hose, Paving, Electric lighting plant, Pier extensions, Water pipe, Improvement ponds, Building plans, Corporation cocks, Steel bridge, Power house, Bridges, Gasoline gas plant, Jail, Building, Pier, Water-works, Court house, Sewers, Advertised, Paving, Street improvements, Well, Government building, Residence, Asphalt paving, Dredging, Water pipe, Canal improvements, Fire hydrants, Gate valves, Naval supplies, Water pipe, School, Building, Paving, Court house, Railway, Bridge, Vessel, Refrigerating plants, Pier extension, Water pipe and castings, Cast-iron sewer, Cement, Sewage pumping plant, Grading, Brick sewers, Power building, Electric plant, Electric machinery, Plans municipal bldg., Water-works, Court house, Electric plant, Sewer, Vessel, Church, Road roller, Building, Pipe sewer, Excavating, Electric plant, Brick paving, Water-works and ice plant, Iron, Electric r'y, Railway, Building, Mill equipment.

RAILWAYS.

(For foreign railway news see under "Foreign Contracts and Export News.")

BENWOOD & WHEELING.—This company was incorporated in West Virginia on Feb. 1, with \$1,000,000 capital stock, to build a connecting road with various railroads at Benwood and Wheeling. The line will probably be built this spring. J. M. Vance, F. J. Hearne and N. B. Scott, of Wheeling, are interested.

CANADA.—The Pontiac-Pacific Junction Ry. Co. has applied for the right to construct a line from Quebec or Exceeding 30 miles. H. S. Maitly, Secy and Treas., not St. James St., Montreal.—A company has been incorporated at Amherst, N. S., to build a road from Frensham Harbor, by the Dalton Trail, to Fort Seabark and on to Dawson. Logan, Jenks & Outhwaite, Amherst, are interested.—The Algoma Commercial Co. Ltd., Sault Ste. Marie, Ont., has been incorporated. Capital \$100,000, work mines, etc. Francis H. Clerque, Mgr. Sault Ste. Marie Pulp Co., is interested.

CANADA.—Reports state that it is proposed by a company, which is now seeking incorporation of the Parliament, to build a railway through the Yale district. The line will probably be built from Carson City, in a northerly direction, with a terminus at Phoenix. Spurs are proposed to Summit, Greenwood, Central and Snyark Camp and a branch to Wellwood. S. C. Briggs, Toronto, is solicitor for the applicants.

CANADIAN PACIFIC.—It is reported that W. T. Engr., has asked for bids for constructing a line between Nelson and Balfour, B. C., about 50 miles.

CHICAGO, INDIANA & EASTERN.—Reports state that work will soon be started on the extension of the line from Matthews to Muncie, Ind., and thence to Richmond. Fremont Wilson, Ch. Engr., Matthews, Ind.

CHICAGO, ROCK ISLAND & PACIFIC.—W. E. Dancy, Ch. Engr., Chicago, Ill., informs us that there is no intention of extending the Des Moines & Statens Division. A line is now being built from Gorwie, which is between Des Moines and Ruthven, and extending to Sidney, at which grading has been completed and eight miles of track laid.

CHICAGO, WEST PULLMAN & SOUTHERN.—This company has been incorporated in Illinois with \$500,000 capital stock, to build a railway from Chicago to East St. Louis, as a means of transport for the products of the steel companies to the Mississippi river. Wm. H. Jones, Pres.; Chas. E. Sheldon, Vice-Pres., West Pullman, Ill.

DAVENPORT, ROCK ISLAND & NORTHERN.—It is reported that this company has decided to extend its line from Davenport, Ia., to Peoria, Ill., extending through the coal lands owned by the company. C. R. Dearborn, Ch. Engr., Davenport, Ill.

DELAWARE, LACKAWANNA & WESTERN.—W. R. McFarlin, Ch. Engr., Hoboken, N. J., informs us that the proposition of track extension of the company's line through Newark, N. J., is now before the council of that city. Plans have not been definitely decided upon.

DES MOINES, IOWA FALLS & NORTHERN.—It is reported that a second survey will be made by this company preparatory to beginning the construction on the road from Des Moines to Iowa Falls. Arrangements for financing the company are now being made.

DULUTH, SOUTH SHORE & ATLANTIC.—This company, it is stated, will soon begin the construction of its Montreal branch from Mass City through to a connection with main line of the road at Lake Gogebic. The work of completing the survey for this line was begun by W. W. Olney, Engr., on Feb. 1. H. J. Payne, Ch. Engr., Marquette, Mich.

ERIE & EASTON.—Ed. Heuer, Secy and Treas., Erie, Pa., informs us that the ordinance for a franchise to enter Erie, Pa., and build to Harbor Pond, has been passed by the council of that city and accepted by the company. Nothing towards the construction has been done. J. F. Downing, Pres., Erie, Pa.

FLORIDA & GEORGIA.—H. C. McCrary, Ch. Engr., Gainesville, Fla., confirms the report in our issue of Feb. 1 that the contract for constructing this line from Welburne to White Springs, nine miles, has been let to Wheldon & McCrary. Mr. McCrary states that surveys and about four miles have been completed, and that further extensions are contemplated.

FORT DODGE & SOUTHEASTERN.—This company has been organized in Iowa with about \$250,000 capital stock to build a railway from Fort Dodge to Story City, Iowa, about 40 miles. A. R. Loomis, Geo. N. Mason and G. L. Rich, of Fort Dodge, are interested.

GREAT NORTHERN.—It is reported that a cutoff will be built by this company from the Mesaba iron range, in Minnesota, to the head of the lake, about 50 miles, saving about 36 miles. The line has been located and will cost about \$1,200,000. J. F. Stevens, Ch. Engr., St. Paul.

KANSAS.—B. J. Hammond, Salina, Kan., it is stated, will file a charter with the secretary of state for the incorporation of a company, with \$5,000,000 capital stock, to build a railway from Salina to Sabine Pass, for which the rights of way have been secured and the route surveyed.

LITTLE RIVER VALLEY.—S. L. Morrow, Ch. Engr., Horatio, Ark., informs us that 20 miles of this line have been surveyed and right of way secured. About 250 miles of horseback survey has been made. Negotiations are now being made for the capital. The line between Neal Springs and Lockport, 16 miles, is being constructed by J. P. Lahey, Horatio, as stated in our issue of Dec. 7, of which eight miles are in operation. The entire line will extend from Little Rock, Ark., to Chickasha, Ind. Ter., 350 miles.

MONONGAHELA & WESTERN.—John A. Romine, Ch. Engr., McKeesport, Pa., informs us that the location for this line from Millisboro to Clarksville, via Ten-Mile Creek, 3 1/2 miles, has been adopted by the company.

MORGANTOWN & KINGWOOD.—It has been announced by Geo. C. Sturgis, Pres., Morgantown, W. Va., that the company's road would be extended to Bellingham, W. Va., to penetrate the timber region, according to reports.

NORTHERN SUSQUEHANNA.—This company has been incorporated, according to reports, with \$150,000 capital stock, to build a line from the mouth of Bailey River to the Sinnamahoning, about 16 miles, connecting with the Buffalo & Susquehanna and the Philadelphia & Erie at the latter place.

PORT DOVER, BRANTFORD, BERLIN & GOODRICH.—This company is reported to have been recently incorporated with \$2,600,000 capital stock to build a road to extend across the Province of Ontario, from Lake Erie to Lake Huron. The road will be operated by steam and electricity, generated by the water powers along the line, and will conduct a freight and traffic business, and operate a line of steamships on Lake Erie for the Pennsylvania coal and iron trade in Canada. David W. McNair, Pres., Warsaw, N. Y.

PORT HURON & SOUTHERN.—This company is reported to have been incorporated, with \$50,000 capital stock, to build six miles of standard gage road from Port Huron to a point on the St. Clair River.

Supp... PORT... line... will... four... mile... capital... SILVER... writes... corporate... 35... miles... capital... and... CITY... SOUTH... name... of... been... way... on... Union... 17... miles... operation... operation... UNION... construct... (at... J... Feb... 8)... UTAH... of... Prev... a... circle... WAYC... section... 5... miles... miles... to... Pittsburgh... Branch... Waveros... WISCO... an... Ch... vers... have... the... line... via... Union... 7... J... balance... ago... III... ST... (For... LEWIS... that... the... the... Wick... to... all... priv... as... soon... comm... MIL... was... Feb... 8)... Roberts... have... in... syndi... probab... MAN... Manche... to... Goff... by... W... GREEN... Green... been... up... but... the... line... will... miles... MILP... Mill... here... of... towns... capital... L... Cott... an... W... TOR... have... H... Torr... on... wh... Connec... system... WILL... the... ra... of... the... will... will... p... Haven... BRO... tion... Const... steam... torate... both... h... inspec... a... PHO... was... v... use... of... red... f... and... RIVER... Three... A... Three... ROD... road... extend... and... W... W... grant... R... CO... BL... be... c... wick... houses... across... Mark... MO... Conn... thro... \$2,000... oper... SH... for... Hub... town... W... Cons... Ry... Fran...

PORT HURON SOUTHERN.—M. R. Wood, Ch. Engr., Port Huron, Mich., writes us that the surveys for this line have been made and the rights of way obtained. The line will extend from the Port Huron Salt Co.'s plant, four miles from Detroit, Mich., to connect with the Grand Trunk Ry. Contracts will be let within 25 days. The capital has been secured. J. W. Cooper, Pres., St. Paul.

SILVERTON RY. CO.—P. W. Geer, Silverton, Ore., writes that this company has been organized, but not incorporated, to build a railway from Salem through Silverton, Mammoth, Scotts Mills and Willnot Springs, about 35 miles. The right of way has been obtained, but more capital is needed. It will probably cost \$150,000 to build and equip the road. It is proposed to build to Oregon and eventually connect with the line to Portland.

SOUTHERN INDIANA.—F. W. Ranno, Engr., Manteo, N. C., writes us that grading has been practically completed and bridging is well under way on the extension of this line from Elnora through Linton, Jasonville to Terre Haute, about 46 miles. About 17 miles of track has been laid, and the road is now in operation as far as Linton. The entire line will be in operation by June. John Q. Walsh, Pres., Chicago, Ill.

UNION PACIFIC.—It is reported that the contract for constructing the tunnel through Sherman Hill has been let to J. B. Berry, Ch. Engr., Omaha, Neb. (See issue of Feb. 8.)

UTAH.—A franchise has been granted by the council of Provo to E. J. Ward & Son to construct and operate a circle railway through the city.

WAYCROSS AIR LINE.—We are informed that the extension of this line has been completed to Douglas, and six miles of right of way has been secured and seven miles graded. Preliminary survey has been made through Fitzgerald, Ga., 28 1/4 miles. The work is being done by Birch & Schiare, Fitzgerald. Alex. Bonnyman, Ch. Engr., Waycross, Ga.

WISCONSIN, MICHIGAN & NORTHERN.—B. C. Gowen, Ch. Engr., Peshigo, Wis., informs us that the survey for this line has been made and 35% of the grading finished. The line extending from Fethorn Junction to Quinnesec, via Vulcan, Lauretta and Norway, about 18 miles. The contract for constructing the first seven miles was let to T. J. McGrath, Green Bay, Wis., and the contract for the balance will soon be awarded. S. M. Fisher, Pres., Chicago, Ill.

STREET AND ELECTRIC RAILWAYS.

(For foreign street railway news see under "Foreign Contracts and Export News.")

LEWISTON, ME.—John A. Jones, Ch. Engr., writes us that preliminary surveys have been made for the line of the Lewiston, Brunswick & Bath St. Ry., from Brunswick to Yarmouth, via Freeport, about 17 1/2 miles, and all private right of way obtained. Contracts will be let as soon as the location is approved by the state railroad commission. A. H. Shaw, Pres., Bath.

MILLBRIDGE, ME.—It is reported that an electric railway from Cherryfield to Millbridge is proposed. W. A. Roberts and E. A. Hubbard, of Biddeford, are said to have inspected the proposed route in the interest of the State which is prosecuting the line. A company will probably be formed, capitalized at \$300,000.

MANCHESTER, N. H.—Local papers state that the Manchester St. Ry. will probably build an electric road to Goffstown. Inspections of the route have been made by W. A. Tucker, Pres., and J. Brodie Smith, Mgr.

GREENFIELD, MASS.—Messrs. Clapp & Abercrombie, Greenfield, Mass., write us that preliminary surveys have been made for the Greenfield and Deerfield St. Ry. Co., but the construction capital has not been secured. The line will extend from Greenfield to Deerfield, about 10 miles.

MILFORD, MASS.—A company to be known as the Milford, Upton & Grafton St. Ry. Co. is reported to have been organized to build an electric line between those towns, about 12 1/2 miles in length. The company will be capitalized at \$125,000. John Kelly, Somerville; Charles L. Cotton, Dedham; S. B. Fliske, Upton, and H. E. Merzan, Milford, are interested.

TORRINGTON, CONN.—A new survey is reported to have been made last year for the proposed line of the Torrington Tramway Co. from Torrington to Terryville, on which the company will probably begin work soon. Connections will be made at Bristol with the third rail system for Hartford. Noble E. Pierce is interested.

WILLIMANTIC, CONN.—It is reported that an electric railway from this place to Baltic, meeting the lines of the Norwich St. R. R. system, and connecting Willimantic and Norwich, 16 miles, is projected, and if built will parallel the New London Northern and the New Haven systems.

BROOKLYN, N. Y.—Local reports state that the question of re-equipping the Brooklyn Elevated and Kings County systems with electricity, to supplant the present steam motive power, is being considered by the directors of the Brooklyn Rapid Transit Co., which controls both lines. Clinton L. Rosster, Pres., is said to have inspected the electric elevated railway in Chicago with a view to making the change.

PHOENIX, N. Y.—At a citizens' meeting on Feb. 2 it was voted in favor of granting a franchise to the Syracuse & Oneida Lake Traction Co. to build an electric road from Syracuse to Three Rivers, by way of Schroepfel and Phoenix. Surveys have been started, and the road will be in operation between Syracuse and Three Rivers by July 1 and will reach Phoenix by July 1, 1901. A steel bridge will be erected over the Oneida River at Three Rivers.

ROCHESTER, N. Y.—It is reported that an electric road, to be built by Detroit capitalists, is projected to extend from this city to Canandaigua. O. N. Crane, Canandaigua, is said to be interested.

WATERPOUR, N. Y.—The highway commissioners have granted a franchise to the Stillwater & Mechanicville R. R. Co. for the extension of its line in this town.

BLOOMSBURG, PA.—A 25-mile electric railway is to be constructed between Danville, Bloomsburg and Berwick. The work also involves the building of a power house, two new bridges, and strengthening of a bridge across the Susquehanna River. Preliminary surveys have been completed. J. C. Stulen & Co., Engrs., 14 So. Market St., Harrisburg.

MOUNT PLEASANT, PA.—The council has granted the Appellaville & Uniontown Electric Ry. Co. a right of way through this borough, for which the company has paid \$2,000 and proposes to have the new electric line in operation within 18 months.

SHARON, PA.—Rights of way are now being obtained for the proposed electric line to connect Youngstown, Hubert, Sharon and Sharpville. J. D. Milligan, Youngstown, is interested.

WASHINGTON, D. C.—A bill has been introduced in Congress to incorporate the East Washington & Benning Ry. Co. to construct an electric line in this city.

BALTIMORE, MD.—A bill was introduced in the council on Feb. 5 to grant the Maryland Electric Ry. Co. franchises on certain streets.

CUMBERLAND, MD.—Local papers state that an electric railway from Cumberland to Westminster is proposed. John W. Burchinal and J. E. Hooten, of Moundsville, are the chief projectors.

NASHVILLE, TENN.—The Nashville St. Ry. Co., the Citizens' Rapid Transit Co., the Nashville & Suburban Co. and the Nashville Ry. have been consolidated under the name of the Nashville Ry., with \$6,500,000 capital.

CLEVELAND, O.—The Little Consolidated St. Ry. Co. has asked for an extension of franchises for 25 years, and in return offers to expend \$1,000,000 in changing the Superior and Payne Ave. cable lines to electric lines. The company has also offered \$200,000 from which the city's share for eliminating two grade crossings and building a boulevard arch is to be taken.

GREENSBURG, IND.—R. P. Hamilton, Greensburg, informs us that steps are being taken to organize a company to obtain a charter to build an electric railway from Madison through Versailles, Oswood, Napoleon and Greensburg, about 48 miles. A charter will be asked as soon as organized.

LOGANSPORT, IND.—Local papers state that the Indian Ry. Co., owning the electric lines connecting Goshen, South Bend and Elkhart, has executed a mortgage for \$1,000,000 for the purpose of extending the line from Goshen to Lake Wawasee and Warsaw, connecting with the Logansport, Rochester & Northern Traction Co. at the latter place.

DETROIT, MICH.—F. J. McMurtrie, Secy., 29 State St., Detroit, writes us that 45 miles of the Detroit, Rochester, Romeo & Lake Orion Ry. has been surveyed, and 27 miles is in operation, the balance being under construction. The Detroit Construction Co. has the contract. John Winter, Pres.; H. P. Strang, Ch. Engr., 29 State St.

BELVIDERE, ILL.—Local papers state that it is proposed to build the Sveamore, Geneva & Southern Electric R. R., which is projected to extend from Morris, Ill., to Lake Geneva, Wis., through this place. Judge Kellum, Sveamore, representing the company, is now negotiating for right of way.

MILWAUKEE, WIS.—The Milwaukee Electric Ry. & Light Co. wants 100 tons of second-hand flat horse-car rail, 5 ins. wide, weighing from 40 to 50 lbs. per yd.

SEATTLE, WASH.—The council is considering the question of granting franchises for extension of the trolley service on certain streets in this city, as petitioned for by Ed. P. Tremper and W. H. White.

SPOKANE, WASH.—Local papers state that the contracts for constructing the Seattle & Tacoma Electric Ry. Co.'s line will be let in a few days. The line will be 33 miles in length. It is proposed to begin operations by Aug. 1. General Manager Bucey is reported as stating that rails are being laid on Eleventh St. and Pacific Ave. in Tacoma, where the terminus of the line will be.

ELECTRIC LIGHT AND POWER.

(For foreign electric plants see under "Foreign Contracts and Export News.")

AMESBURY, MASS.—The council is discussing the question of erecting a municipal plant.

MANVILLE, R. I.—The question of additional lights is being discussed, according to reports.

BUFFALO, N. Y.—Alderman Kissinger, Chm. Lamp Com., is reported to be securing data for a municipal plant.

MOUNT VERNON, N. Y.—A bill has been presented to the legislature authorizing this city to issue bonds to purchase the plant of the East Chester Electric Co. and also to issue \$40,000 in bonds to purchase or erect fire houses. Edwin Fliske, Mayor.

WILETTS POINT, N. Y.—The following bids were received Feb. 3 by Maj. W. L. Marshall, U. S. Engr., Army Bldg., N. Y., for furnishing a 33-K-W, 125-volt compound dynamo; General Electric Co., 44 Broad St., N. Y., \$1,075, 45 days; Thresher Electric Co., Dayton, O., \$800; Northern Engineering Co., 39 Cortlandt St., N. Y., \$978, 60 days; Siemens & Halske Electric Co. of America, 26 Cortlandt St., N. Y., \$1,150, 100 days; Henry B. Newhall, 26 Cortlandt St., N. Y., \$970, 45 days.

ASBURY PARK, N. J.—A bill has been introduced into the legislature providing for the issue of \$31,000 in bonds for a plant.

FREELIOLD, N. J.—The borough commissioners are considering the awarding of a franchise to a local company.

OCEAN CITY, N. J.—Isaac Ferros, Geo. Barrett and J. C. Coxe, Camden, are said to be interested in a company which will erect a plant here.

PASSAIC, N. J.—M. P. Slade, Secy., writes us that the plant of the Billings Water Co. is already built.

EASTON, PA.—B. Rushfield writes us that the city has no idea of erecting a new plant. R. H. Leach, Supt.

SHAMOKIN, PA.—The Shamokin Light, Heat & Power Co. will erect a plant to cost about \$250,000. Plans are now being prepared.

STEWARTSTOWN, PA.—The Chief Burgess writes us that the council has let the contract for a plant; work has not yet started. A report states that Edw. H. Griffith, Baltimore, Md., has been granted the franchise.

WILMINGTON, DEL.—The council has granted a franchise to the Universal Conduit, Light, Heat & Power Co. Edmund Mitchell, Jr., Pres.; H. H. Billany, Secy.

WILMINGTON, DEL.—Bids are asked until March 6 for erecting a power house and underground passageway at Greenbank, and a prison and workshop at New Castle, as stated in our advertising column. J. N. Gawthrop, Pres. Bd. Trustees; J. F. Ball, Secy.

WINONA, MISS.—R. A. Allison writes us that the Winona Electric Light, Power & Ice Co. will receive information for constructing a plant to cost about \$25,000, running 50 2,000-c. p. arc and 2,000 16-c. p. incandescent lights, operated by steam. F. Jesty, Chm. Com.

JENNINGS, LA.—R. S. Stearns writes us that the contract for the machinery for the plant of the Jennings Electric Light & Power Co. has been let to the Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Baiters, Chandler & Taylor Co., Engrs.

GRAYSON, KY.—Peter Brown, Police Judge, writes us that an election was called for Jan. 23 to vote on the issue of bonds for a plant, but none was held. There will be no plant unless the people vote to bond the town.

OWENSBORO, KY.—W. P. Small, Mayor, writes us that the council has \$40,000 on hand for a plant, capacity 150 2,000-c. p. arc and 5,000 incandescent lights, and will receive proposals from bidders.

ALLIANCE, O.—The question of issuing \$35,000 in bonds for building a municipal plant will soon be voted on.

BEREA, O.—F. J. Quayle, Mayor, writes us that the village has purchased the plant of the Berea Milling Co., and have purchased a 120-K-W Westinghouse generator and a 150-HP. Buckley engine. F. M. Dorland, Engr.

CLEVELAND, O.—The committee, composed of Chairman Hoffman, Blackstone Bldg., Councilmen Billsman, Green and Lapp, is securing data for the proposed municipal plant, to have a capacity for about 2,500 arc lights.

CARTHAGE, IND.—The trustees are considering the question of erecting water-works and a plant.

ELWOOD, IND.—It is stated that the Union Traction Co. will erect a sub-power house, car barns, repair shop, etc., here. Phillip Matler, Pres., 1026 Meriden Ave., Anderson.

ROCKVILLE, IND.—The city has purchased the local plant and will enlarge it so as to include water-works, according to reports.

WASHINGTON, IND.—M. F. Burke, Treas., writes us that the city has purchased the plant already in operation.

BERRIEN SPRINGS, MICH.—It is stated that South Bend parties propose to build a power dam and street railway at this place.

GRAND RAPIDS, MICH.—It is said that J. W. Spooner is preparing plans for a large power dam, to cost about \$250,000. W. T. Powers is interested.

MUSKEGON, MICH.—C. S. Gamble, Cy. Engr., writes us that an election will be held in the spring to vote on the question of issuing \$10,000 for turning the pumping station into an electric plant. The city may also vote on raising about \$200,000 for repaving the streets with brick.

SAGINAW, MICH.—The question of issuing \$75,000 in bonds for a municipal plant will be voted on shortly.

SOUTH HAVEN, MICH.—M. T. French, Pres. of Village, writes us that the people voted Feb. 7 to purchase a 250-HP. tandem Corliss engine, two 150-HP. high-pressure boilers and one 3,000-light alternator; bids will be received within three weeks. S. A. Bridges, Engr.

CHICAGO, ILL.—A. P. Trost, Vice-Pres., Chicago & Milwaukee Electric Ry. Co., writes us that there is no truth in the reported consolidation of plants between Evanston and Wheeling.

ELGIN, ILL.—Wm. F. Sylla writes us that the committee on electric lighting have advertised for bids for Feb. 12 for a 75-K-W single-phase, alternating dynamo.

LONG PRAIRIE, MINN.—W. S. See, Village Recorder, writes us that the village has secured the plant of the Electric Light & Milling Co. for \$10,000. It is likely that supplies will be wanted.

MILWAUKEE, WIS.—It is stated that the Christensen Engineering Co. will erect a power house, to cost about \$12,000. O. C. Nehling, Arch., 330 Grove St.

ELKADER, IOWA.—Schmidt Bros. & Co. have applied for a franchise for a plant, according to reports.

TOPEKA, KAN.—The city engineer will prepare plans for a lighting plant for the suburb of Potlona, to cost about \$25,000. P. L. Wise, Cy. Engr.

DENVER, COLO.—J. D. Vaughn, Secy., writes us the Longs Peak Electric Co. has secured title to storage lakes and reservoir sites on the St. Vrain River and is building a road along the river.

LOVELAND, COLO.—L. B. Harter, writes us that McCann & Co. have applied for a 20-year franchise. The council is considering this and the question of building a municipal plant.

HELENA, MONT.—Bids are asked until Feb. 19 for 100 alternating arc lamps, three 25-K-W high-potential transformers, 20 miles No. 4 weather-proof copper wire, 400 poles 33 ft., 170 45-ft. poles, western cedar, cross-arms, etc. Edw. Horsky, Cy. Clk.

STILLWATER, OKLA. TER.—W. R. McGeorge, Mayor, writes us that an election will be held March 13 to vote on the issue of \$30,000 in bonds for water-works. A plant to cost \$7,000 may also be built.

WINNIPEG, MAN.—It is stated that Edward Irwin, Hamilton, Ont., is preparing plans for a plant to develop 3,000 HP. for the St. Andrews Falls Power Co.

TORONTO, ONT.—W. T. Stewart has submitted to the fire and light committee estimates of the cost of a municipal plant.

SHERBROOKE, QUE.—The Sherbrooke Gas & Water Co., 4 Wellington St., will install new machinery in their plant to increase its capacity.

DARTMOUTH, N. S.—This town will build a plant to cost about \$40,000, according to reports.

NEW COMPANIES.—Sidell Electric Light & Cold Storage & Ice Co., Sidell, Ill.; \$12,000; W. Bowen, J. H. Herron.

Tillamook Electric Light Co., Tillamook, Ore.; \$30,000; J. C. Haverly, J. F. Watt.

Consumers' Heat, Light & Ice Co., Newport News, Va.; \$100,000; Alex. Brown & Son, Baltimore, Md.

Kinston Electric Light Co., Kinston, N. C.; \$10,000; S. H. Abbott, L. Harvey.

Greenboro Water & Light Co., Greenboro, Ala.; \$30,000; C. E. Waller, L. I. Webb.

La Grande Electric & Water Co., La Grande, Ore.; \$10,000; Jos. Palmer, J. F. Venalar.

Nun Creek Reservoir & Supply Ditch Co., Fort Collins, Colo.; \$100,000; P. Harrington, J. L. Smith.

Stuart Power & Motor Co., Jersey City, N. J.; \$100,000; J. H. Whitten, W. Denny.

Electro Chemical Light & Heat Co., Camden, N. J.; \$1,000,000; F. C. Dowd, I. L. Gethins.

Toms River & Island Heights Electric Light & Power Co., Toms River, N. J.; \$20,000; S. B. Applegate, C. A. Holmes.

Consolidated Ice & Electric Co., Charlottesville, Va.; \$40,000; T. O. Troy.

River District Light, Heat & Power Co., New York, N. Y.; \$50,000; J. Douglass, Hudson Park; C. H. Dodge, Riverdale.

Municipal Light, Heat & Power Co., Hoboken, N. J.; \$300,000; J. Bruning.

Manhattan Light, Heat & Power Co., St. Paul, Minn.; \$1,000,000; L. L. C. Brooks, A. W. Zahn.

Guernsey Incandescent Light Co., St. Louis, Mo.; \$100,000; D. W. Guernsey, S. T. Price.

BRIDGES.

EAST LONG MEADOW, MASS.—Wm. H. Hall, Ch. Selectman, writes us that the town has petitioned the general court to abolish the gate crossing at Robeson Crossing. Plans and estimates for the improvement have been prepared and will be submitted at the next hearing.

PROVIDENCE, R. I.—O. F. Clapp, Cy. Engr., writes us that a committee has been appointed to consider the advisability of abolishing the Acorn and Teft Sts. grade crossings, but nothing further has been done.

BUFFALO, N. Y.—Local papers state that the board of public works has decided that the Delaware, Lackawanna & Western R. R. shall build a girder bridge over its cross-

ing on North Main St. The company was recently ordered by a decision of the court of appeals to replace the present structure with a bridge which will not encroach upon the street.

CORNING, N. Y.—Local papers state that the Delaware, Lackawanna & Western R. R. has offered to give \$25,000 towards the construction of the West Lackawanna Ave. viaduct, providing the city will close up that part of the avenue over which the viaduct will extend.

NEW YORK, N. Y.—The contract for the borings and soundings on the sites of the towers of the New Manhattan-Brooklyn Bridge has been let to Bernard Rolf, 39 Cortlandt St., at \$7,500. (See bids under Contract Prices in our issue of Feb. 1.)

ROCHESTER, N. Y.—Plans have been discussed by the West End Improvement Association, for the proposed bridge over the canal at West Ave., to cost about \$75,000. The structure will probably be built next winter.—The project for a bridge over the Genesee River, connecting the Ridge road, is being revived, according to reports.

UTICA, N. Y.—The bridges over the Mohawk River at Genesee St. and Park Ave. have been examined by Chas. F. Stowell, Engr., Albany, who has condemned them as unfit for traffic. Preliminary steps are being taken by the council to issue \$65,000 for replacing both structures by new ones.

CHESTER, PA.—The Baltimore & Ohio R. R. has presented plans to the council for moving the abutment of the Kerlin St. bridge back 17 ft., so as to enable the widening of the street.

EMPORIUM, PA.—J. K. Hockley, Clk. Comrs., informs us that no action has been taken towards the construction of the proposed iron and stone bridge over Portage Creek. Plans will be prepared by V. A. Brooks, Des. Engr., Sinnermahoning, Pa.

HARRISBURG, PA.—Local papers state that the construction of the proposed new bridge over the railroad yards at Maclay St., will soon be commenced.

OGONTZ, PA.—It is reported that bids will soon be asked for the construction of an iron and concrete bridge at this place, to cost \$15,000.

PHILADELPHIA, PA.—Local papers state that the councils' committee on bridges has inspected the bridge over Frankford Creek in Frankford, with a view to constructing a new bridge, as requested by the residents of that district.

PITTSBURG, PA.—Plans for the new bridge to be erected from the extension of Wilnot St., over Panther Hollow to Schenley Park, have been prepared. The structure will cost about \$100,000, and work will be started as soon as the bonds have been sold.

WASHINGTON, D. C.—The plans submitted by Geo. S. Morison, 35 Wall St., New York; Leffert L. Buck, 84 Broadway, New York; Wm. H. Burr, 151 West 74th St., New York; and Wm. R. Hutton, 35 Broadway, New York, for the proposed memorial bridge across the Potomac River, will be examined by the board appointed by the Secretary of War, as follows: Lieut.-Col. Chas. T. Allen, U. S. Engr.; Maj. T. W. Symons, U. S. Engr.; Capt. David Dub. Gaillard, U. S. Engr.; Asst. Engr. Comr., Stanford White, Arch., New York, and James Hill, Arch.

BALTIMORE, MD.—J. E. Grelner, Engr. of Bridges, B. & O. R. R., informs us that no steps have been taken towards the construction of the proposed new bridge at Bellaire, O.

CLEVELAND, O.—Local papers state that the Big Consolidated Ry. Co. has decided to build a bridge and trestle running north from Windermere barns, abandoning the tracks on Lake Front Ave., East Cleveland, to connect the line on Hayden Ave. with the Euclid Ave. line. The structure will be of timber, and will cost about \$20,000.

THREE RIVERS, MICH.—J. E. Bunn, Clk., writes us that the construction of the proposed bridge at this place will not be started this year.

CHICAGO, ILL.—Bids are asked until March 28 for constructing the superstructure of a Scherzer rolling lift-bridge, to be erected over the main drainage channel. The bridge will be an eight-track structure for the use of the Chicago & Northern Pacific Ry. Co., and the Union Stock Yards & Transit Co. Wm. Holdenweck, Pres. Bd. Trustee of the Sanitary District.—The plans prepared by the sanitary district engineers for a bascule bridge at Canal St., have been approved by the city officials.

KANKAKEE, ILL.—Bids are asked until March 2 for constructing a cement-concrete bridge over the Kankakee River at Washington Ave., in this city, as stated in our advertising columns. H. C. Clarke, Pres. Bd. Local Improvements.

CHAMBERLAIN, S. DAK.—It is reported that the Sioux Falls & Pacific R. R. has completed plans for a bridge at this place, spanning the Missouri River, for which bids will be asked this spring. S. A. Teal, M. M., Missouri Valley.

DES MOINES, IA.—We are informed that bids were received on Feb. 14 for constructing the abutments of stone, brick and concrete, for the bridge at East 6th St. Geo. M. King, Des. Engr., Cy. Engr.; G. A. Eberhart and C. E. Campbell, Bd. of Pub. Wks.

LINCOLN, NEB.—An ordinance providing that the railroad companies shall maintain the O St. viaduct, and build another structure within five years, was passed by the council on Feb. 5.

DEVILS LAKE, N. DAK.—N. S. Russell, Des. Engr., Grand Fork, informs us that the contract for constructing the bridge over Devils Lake at Pelican Point, was let on Feb. 8 at \$6,000. Mr. Russell states that a contract will be let about April 1 for a 100-ft. steel pile trestle, 16 ft. wide, to be erected at Church's Ferry. E. S. Elch, County Aud.

MALVERN, ARK.—Bids are asked until March 6 for constructing the superstructure of a bridge at Rock Point on the Ouachita River, to be 510 ft. long and 16 ft. wide, with three spans of iron and steel on rock foundation. O. N. Childs, Des. Engr., St. Louis, Mo.; D. S. McCray, Comr., Malvern.

PUEBLO, COLO.—An appropriation of \$10,000 will be made by the council for the construction of a viaduct on South Main St., to connect with the mesa.

REDWOOD CITY, CAL.—The contract for constructing a concrete bridge over Pilarettas Creek, near Half Moon Bay, has been awarded to R. C. Mattingly, San Francisco, at \$7,498.

OTTAWA, ONT.—The Ottawa Improvements Commission have decided to spend \$35,000 on a new iron bridge across the Rideau River at the foot of King St.

BUILDINGS.

HANOVER, N. H.—The Davison Block was destroyed by fire Feb. 8, loss about \$50,000. F. W. Davison, Pres.; Dartmouth Savings Bank, owner.

CAMBRIDGE, MASS.—H. B. Ball, 2 Park St., Boston, has prepared plans for a six-story brick apartment house at Massachusetts Ave. and Amherst St., for the Riverbank Court, Trust, to cost about \$700,000.—Chas. Wm. Elliot, Pres., Harvard University, writes us that the university will soon erect five buildings. Shaw & Hunnewell,

9 Park St., Boston; A. W. Longfellow, Tremont Bldg., Boston, and McKim, Mead & White, 160 Fifth Ave., New York, are the architects; specifications for two buildings are completed.

REVERE, MASS.—Wm. H. Taylor, 6 Beacon St., Boston, has prepared plans for a new school house, to cost about \$40,000. T. F. Coughlan, Secy. Bldg. Com.

ELMWOOD, CONN.—Bids are asked until Feb. 22 for erecting a two-story addition to the school house. Chas. E. Lord, Chn. Bldg. Com.

HARTFORD, CONN.—Bids are asked until Feb. 19 for erecting a two-story school house. H. C. Dwight, Chn.

PLANTSVILLE, CONN.—The question of erecting a public library building is said to be under consideration.

ALBANY, N. Y.—Wm. J. Oheanus, Arch., 48 N. Pearl St., writes us that the contract for erecting a building for Burdick & Son, equipped with elevator, gas, electricity, a 50 HP. boiler and stove-making machinery, has been let to the M. L. Ryder Building Co.

BROOKLYN, N. Y.—Building No. 7 at Navy Yard was destroyed by fire Feb. 11, loss about \$100,000.

BROOKLYN, N. Y.—Jennings & Welstead, 1762 Broadway, N.Y., submitted the lowest bid Feb. 13 to the department of Education, 59th St. and Park Ave., New York, for erecting Public School No. 78, at Winfield, at \$66,716.

HORNELLVILLE, N. Y.—The Mayor writes us that the question of issuing bonds for a city hall, to cost about \$30,000, will be voted on March 6.

NEW YORK, N. Y.—Plans have been filed by Jas. McCutcheon, Greenwich, Conn., for a ten-story brick loft building at 3 to 7 W. 22d St., to cost about \$185,000. J. B. Baker, 154 5th Ave.; by J. Robitsek & Bro., for a two-story brick factory at Eastern Boulevard and Westchester Creek, to cost about \$50,000. W. C. Dickerson, Arch., 534 Willis Ave.; by W. B. Franke, owner and architect, 2291 Broadway, for a nine-story brick apartment house at 79th St. and West End Aves., to cost about \$255,000; by J. S. Kennedy, 31 Nassau St., for an eight-story brick flat at 26 and 28 West 55th St., to cost about \$125,000. J. B. Baker, Arch., 154 5th Ave.; by Geo. W. Flagg, for five two-story dwellings at Tinton Ave., rear 168th St., to cost about \$50,000. M. J. Garvin, Arch., 3307 3d Ave.; by Patrick McMorrow, for a seven-story apartment house at 107th St., near Central Park West, to cost about \$130,000. Neville & Bagee, Archs., 217 W. 125th St.

NEW YORK, N. Y.—P. J. Carlin, 26 Court St., Brooklyn, submitted the lowest bid to the Department of Correction, Feb. 8 for constructing a portico to the city prison, at \$10,974.

NEW YORK, N. Y.—It is stated that Steffens, Searles & Hirsch, 131 Euclid Ave., Cleveland, O., will prepare plans for a 24-story office building in this city.

PEEKSKILL, N. Y.—Reports state that the Depew Opera House, owned by Senator Chauncey M. Depew, was recently destroyed by fire, loss about \$75,000.

SYRACUSE, N. Y.—The High School Commission has decided to ask for more money for the high school building. A. Russell, 321 The Bastable, has prepared plans.

TOMPKINSVILLE, N. Y.—The contract for erecting a light-house to cost about \$60,000 has been let to the West Side Foundry, Watervliet. J. F. Moore, Supt. State Bd. of Light-House Inspectors.

TROY, N. Y.—Plans have been prepared by H. L. Warren, 9 Park St., Boston, Mass., for a chapel for the Troy Orphan Asylum on Spring Ave., to cost about \$35,000.—W. A. Stewart, 10 First St., is receiving bids for two additional wings to the Samaritan Hospital building, to cost about \$50,000.

ATLANTIC CITY, N. J.—It is stated that plans are being completed for a high school building, to cost about \$100,000, and for a city hall and jail to cost about \$100,000.

CHELSEA, N. J.—Hewitt Bros., Bullitt Bldg., Philadelphia, are said to be preparing plans for the Seaview Hotel, to cost about \$700,000.

MILDTOWN, N. J.—The car sheds of the Brunswick Traction Co. were destroyed by fire, 22 cars and two sweepers were burned; loss, about \$40,000.

ORANGE, N. J.—Mr. and Mrs. Jos. W. Stiekler have offered \$40,000 to the Y. M. C. A. for a new building.

PASSAIC, N. J.—The American Compressed Food Co. will, it is stated, erect a building to cost about \$50,000. I. W. English, Pres., Paterson.

ATHENS, PA.—The question of building a new school house is being discussed. Frank Weller, Secy. School Bd.

BUTLER, PA.—We are informed that no plans have yet been prepared, but that two new schools will probably be built this year.

CONNELLSVILLE, PA.—Andrew Carnegie has offered \$50,000 for erecting a public library building.

CONNELLSVILLE, PA.—Plans are being prepared by J. T. Steen, Smith Bldg., Pittsburg, for a five-story building at Pittsburg and Main Sts., for the Title & Trust Co., of Western Pennsylvania, to cost about \$60,000, according to reports.

GERMANTOWN, PA.—The contract for erecting a 2-story battery building for the Union Traction Co., has been let to Thos. M. Seeds, Jr., 1216 Race St., Philadelphia.

GREENSBURG, PA.—It is stated that a court house, to cost about \$500,000, will be erected under the direction of the Bar Association.

LANCASTER, PA.—The contract for erecting the science building for Franklin & Marshall College, has been let to G. W. Beard, 53 Court St., Reading, at about \$60,000. Rev. J. S. Stahr, Pres.

LANCASTER, PA.—H. W. Gibson, Secy., 22 S. Queen St., writes us that the contract for erecting a 4-story Y. M. C. A. building, 64 x 252 ft., to cost about \$90,000, has been let to Herman Wolbrosen. Plans are being prepared for a 12-story office building on Penn. Ave., for H. M. Bennett, to cost about \$160,000.—The contract for the extension to the plant of the Westinghouse Electric & Mfg. Co. in East Pittsburg, to cost about \$400,000, has been let to W. F. Trimble & Sons, 25 Greenwood St., Allegheny.

LEESBURG, PA.—W. G. Eckles, New Castle, is preparing plans for a Presbyterian church at Summer and one at Greenfield, to cost about \$5,000 each. He has prepared plans for a Presbyterian church at New Wilmington, to cost about \$12,000.

PITTSBURG, PA.—The question of a new morgue and additions to the jail are being discussed.

SCRANTON, PA.—Bids are asked until about March 15 for erecting a 7-story brick building, 80 x 185 ft. for the Y. M. C. A., to cost about \$200,000, will probably have direct and indirect steam heat and electrical elevators. Seymour Davis, Arch., 90 Walnut St., Philadelphia; G. G. Maby, Gen. Secy.—The trustees of the City Guard have decided to build an armory on Myrtle St., to cost about \$140,000. Col. H. M. Boles, Col. E. H. Ripple, Trustees.

NEW CASTLE, DEL.—Bids are asked until March 6 for erecting a prison and workhouse and also for a power house and underground passageway at Greenbank, as stated in our advertising columns. J. N. Gawthrop, Pres. Bd. Trustees; J. F. Ball, Secy., Wilmington.

WILMINGTON, DEL.—Reports state that the Pennsylvania R. R. will erect a new depot, to cost about \$100,000.

WASHINGTON, D. C.—An appropriation of \$20,500 is asked for replacing the steam elevator in the Washington Monument by an electric one.—The Chief Engineer has recommended that the original limit of \$2,000,000 for the new printing office be increased to \$2,420,000 on account of increased price of material and the enlarging of the building.

RICHMOND, VA.—Albert F. Hunt, 1301 E. Main St. has prepared plans for a 3-story building at 1438 and 1438 1/2 Main St., for Chas. E. Hunter.

STATENVILLE, GA.—Bids are asked until Feb. 24 for erecting a new jail. C. B. Zeigler, Chn.

MOBILE, ALA.—Reports state that the Battle House will be altered at a cost of about \$150,000. Address Wm. J. Vizard, 58 N. Commercial St.—J. K. Glennon & Co. will erect a 6-story hotel to cost about \$250,000.

BRISTOL, TENN.—Bids are asked until March 5 for installing a wiring system in the U. S. Custom House. J. K. Taylor, Supv. Arch.

CANTON, O.—Bids are asked until March 5 for installing an extension to the heating apparatus in the Post Office building. J. K. Taylor, Supv. Arch.

CINCINNATI, O.—The trustees of the Evangelical Protestant Deacons Home will, it is said, erect a hospital building, to cost about \$75,000.

GLENNVILLE, O.—The board of education has decided to erect a new school house to cost about \$50,000.

TOLEDO, O.—Plans have been filed by T. H. Walbridge for a 12-story office building at Madison and Huron Sts., to cost about \$300,000, and for a Y. M. C. A. building on Michigan St., to cost about \$100,000.

BLOOMINGTON, IND.—Wiley Hall, one of the buildings of the Indiana University, was destroyed by fire last about \$55,000. Jos. Swain, Pres.

CRAWFORDSVILLE, IND.—L. A. Foote, Secy. of Lodge, writes us that the site has been purchased but no plans have yet been prepared for the proposed mansion temple.

INDIANAPOLIS, IND.—Plans have been prepared by H. C. Hendrickson, 120 E. Market St., for a flat house at Meriden and Michigan Sts., for H. E. Martens, to cost about \$85,000.

CHICAGO, ILL.—The Lexington Ave. Baptist Church has had plans prepared for a new church building at 62d St. and Lexington Ave.

EAU CLAIRE, WIS.—An insane asylum, to cost about \$55,000, is to be built. C. T. Eagles, Secy., Bldg. Comr.

MADISON, WIS.—The following contracts have been awarded for erecting the engineering building at the University of Wisconsin: Frederickson & Sons (complete except heating and electrical work), \$77,352; Mueller Furnace Co., Milwaukee (heating), \$13,372; P. F. Hachler (electrical work), \$6,190. C. K. Adams, Pres.

MARIETTE, WIS.—It is stated that the Wisconsin Telephone Co. has decided to rebuild the exchange here, to cost about \$33,000.

PORT WASHINGTON, WIS.—Bids are asked, according to reports, until Feb. 25, for erecting a four-story house, to cost about \$40,000. Fred. Graf, Jr., Arch., Matthews Bldg., Milwaukee.

RAYNARD, WIS.—Bids are asked until March 5 for erecting a brick building, etc., on the site of the proposed Indian school. W. A. Jones, Comr.

WEST BEND, WIS.—Van Ryn & De Gelleke, 36 Merrill Bldg., Milwaukee, have prepared plans for a new city hall building for this city.

SPENCER, IA.—Bids are asked, according to reports, by the County Clerk until March 15 for erecting a court house, to cost about \$50,000. Kinney & Detweiler, Archs., Austin, Minn.

FORT SNELLING, MINN.—Bids are asked until March 1 for constructing complete one set of hospital staff quarters. G. E. Pond, Chief Q. M.

NORTH PLATTE, NEB.—Bids are asked until Feb. 17 for erecting a school building. B. L. Robinson, Pres. Bd. Education; L. B. Isenhardt, Secy.

MADISON, S. DAK.—Bids are asked until March 1 by Tobin & Daly for erecting a 2-story brick building.

BUTLER, MO.—The question of issuing bonds for a court house, to cost \$60,000, will be voted on at the next election.

KANSAS CITY, MO.—Reports state that the Prudential Life Insurance Co. will renovate the Centronals Hotel to cost about \$75,000.—The New England National bank is said to be planning a 7-story office building, to cost about \$200,000. J. F. Downing, Pres.—Chas. A. Smith has prepared plans for a school house at 14th and Washington Sts., to cost about \$50,000, and one at Brighton and Independence Aves., to cost about \$40,000, according to reports.

OAKLAND, CAL.—The council has decided to submit the question of issuing \$250,000 in bonds for school buildings and sites to the people at a bond election.

SAN FRANCISCO, CAL.—Hale Bros. will erect a five-story building on Market St., near Sixth to cost about \$150,000. Reid Bros., Archs., Spreckles Bldg.

PHOENIX, ARIZ.—Bids are asked until Feb. 23 for constructing additions to several buildings, and for furnishing about 60,000 ft. lumber, 30,000 shingles, 20,000 lb. 100 barrels of lime, steam pump, suction pipe, lubricator, injector, belting, etc. S. M. McCowan, Supt.

CHATHAM, N. B.—Bids are asked until Feb. 28 for erecting a school building. G. Stohart, Secy. Bd. School Trustees.

MEDICINE HAT, ASSA WEST, CANADA.—Bids are asked by the department of public works, Ottawa, Ont., for erecting a heating apparatus in the court house. J. R. Roy, Acting Secy., Ottawa.

WATER-WORKS.

(For foreign water-works see under "Foreign Contracts and Export News.")

ESSEX JUNCTION, VT.—Bids are asked until Feb. 25 for constructing gravity works. J. S. Reynolds, Chn. Comr., writes us that it was supposed that the hydrant pipe, etc., had been let, but the matter is now in doubt.

NEEDHAM, MASS.—Bids are asked until March 5 for sinking a supply well, as stated in our advertising columns. L. E. Hawes, Engr., 751 Tremont Bldg., Boston; G. A. Adams, Secy. Comrs.

NEW HAVEN, CONN.—Local papers state that the New Haven Water Co. has voted to increase its capital stock for extending its supply to West Haven, building new reservoirs, and a tunnel to connect Lake Saltonstall with Farm River, etc. An official of the company in answer to our inquiry wrote us on Feb. 10, after the company's meeting, which was on Feb. 6, that there was nothing to report. Ell Whitney, Pres.

WESTERLY, R. I.—Thos. McKenzie, of Westerly, has submitted a report for furnishing a water supply to

Watch Hill. Two projects are recommended, one to cost \$107,115, and the other to cost \$85,316. Address Councilman Sweeney.

BROOKLYN, N. Y.—The water supply committee has agreed to report in favor of laying additional 48, 36 and 28-in. distributing mains in Brooklyn; estimated cost, \$1,056,000.

LANSINGBURG, N. Y.—We are informed that bids will be asked at once for extending the works for an additional water supply. The work will consist of 4½ miles of 12-in. pipe, reservoir, a dam of the curved gravity type, valves, etc. Specifications may be seen at the office of Engineering News, 220 Broadway, New York. C. E. Hicks, Engr., Lansingburg.

NEW JERSEY CITY, N. J.—C. A. Van Keuren, Ch. Engr. Sr. and Water Bd., has submitted estimates to the commissioners for furnishing and installing 25,800 water meters throughout the city; estimated cost, \$475,000; setting, etc., \$100,000.

NEW JERSEY CITY, N. J.—This city voted Feb. 13 in favor of making a contract with Patrick H. Flynn, Montague St., Brooklyn, for works to furnish a water supply of 50,000,000 gallons a day. The city may purchase the works at once on completion or it may take 5, 10 or 15-year options, the price to be \$7,595,000.

PATERSON, N. J.—Plans for the works for the People's Water Co. are being prepared, but it is not expected that the preliminary work will be completed until spring.

PERTH AMBOY, N. J.—Councilmen Campbell, Johansen and Gerns have been appointed a committee to secure options on a site for a new reservoir. The contract for furnishing 255 lengths of 8-in. water pipe, special castings, etc., has been let to Fox & Engel, 253 Broadway, New York, as noted under Contract Prices. Jos. G. Burns, Supt.

MASON TOWN, PA.—Bids for constructing works to cost \$250,000 are reported to have been received by the Huron Water Co.

NORRISTOWN, PA.—The Pure Water Co. of Pennsylvania will apply for a charter Feb. 23 to build works here. Wm. H. Richardson, A. D. Hallman and J. F. Finney are interested.

SHAMOKIN, PA.—The Montandon Water Co. has been incorporated with a capital of \$30,000 by M. H. Kulp, D. C. Kaseman and H. W. Shuman.

LAUREL, MD.—Edward Phelps, Mayor, writes us that the question of works will be voted upon April 2; estimated cost, about \$30,000.

BLACKSTONE, VA.—W. A. Laud, Mayor, writes us that a committee has been appointed to secure information and cost of building works. If the works can be built for \$10,000 the bonds will probably be voted. A stand-pipe will be required. Population, 1,000.

DOUGLAS, GA.—W. W. McDonald, Mayor, writes us that bids will probably be wanted about March 20 for works and an electric plant to cost \$2,500.

APALACHICOLA, FLA.—Bids are reported as being considered by the Apalachicola Water-Works Co. for building works. J. T. McGinniss, Engr.

BOYCE, IA.—Bids are asked by J. E. Blackburn, Boyce, for furnishing the materials and for constructing works and an ice-making plant, combined or separate. Payment to be made in 15-year 8% bonds. Mr. Boyce has a 25-year franchise and 5-mile tax voted for ten years.

YAZOO CITY, MISS.—H. B. Smith, Secy. Michigan Pipe Co., Bay City, Mich., writes us that the Yazoo Improvement Co. has succeeded in securing a good flow of water from artesian wells, and 500,000 gallons are now being obtained from a 6-in. well. Three additional wells are to be driven at once.

PULASKI, TENN.—The Pulaski Water Co. is reported to have let the contract at about \$11,000 for boring an artesian well, covering the reservoir, etc., to the Pneumatic Engineering Co., of New York, who has sublet a portion of the work to Ervin & Canfield, of St. Louis.

DAYTON, O.—The water-works trustees have asked for an appropriation for additional mains, equipment, etc.

CARTHAGE, IND.—We are informed that the board of trustees are considering the question of works and an electric plant.

TERRE HAUTE, IND.—The council has adopted Mayor Steegs recommendation that efforts be made to secure the passage of a law allowing the city to have municipal works.

PLINT, MICH.—Arbitrators have been appointed to fix a value on the works and electric plant which the city wants to purchase. H. A. Crawford, Mayor.

BELVIDERE, ILL.—Bids are asked until Feb. 26 for sinking an 8-in. well to a depth of 1,500 ft. Prices should be given for the price per foot, for 1,300 ft., 1,500 ft., or more, if required. Wm. Marean, Ch. Engr.; D. E. Foote, Chn. Com.

EVANSTON, ILL.—A postal card vote is proposed to secure the sentiment of the people on a plan for a water filter plant. The installation of a filter in every house, flat, school building and public building in Evanston was advised by the water committee. The city will rent the filters for 12 years at a cost of \$20,000 per year, and this is to be paid out of the water rentals. Such an arrangement would be satisfactory to a filter plant concern of St. Louis. The fact that Evanston uses 5,000,000 gallons of water a day and that less than one-half of 1% of this quantity is used for domestic purposes prevented the consideration of a municipal filtering scheme. Address Alderman W. N. Green.

BURLINGTON, IA.—The committee has submitted its report on the municipal ownership of the works. The committee suggests that immediate steps be taken to adjust the differences between the water company and the city. J. A. Kleppisch, Chn.

DUBUQUE, IA.—C. W. Berg, Mayor, writes us that nothing regarding the ownership of the works can be done until after the election on Feb. 28, when the question will be voted upon.

MINNEAPOLIS, MINN.—Bids are asked until Feb. 23 for furnishing corporation cocks for use in 1900. L. A. Lydiard, Ch. Ck.; G. W. Sublette, Cy. Engr.—The council has directed the city engineer to prepare plans and estimates for an additional pumping station and filter beds. If electric power is to be used a new dam would be constructed across the Mississippi River at Coon Creek by parties owning the privilege.

EUREKA, S. DAK.—It is stated that this place is considering the question of extending its works.

CARTHAGE, MO.—The works have been sold to parties represented by W. D. Boyer, of Scranton, Pa., according to reports. Certain improvements will be made. O. M. Lance, Supt.

STILLWATER, OKLA. TER.—W. R. McGeorge, Mayor, writes us that an election will be held March 13 to vote on the question of issuing \$30,000 of 20-year 6% bonds for works. It is likely that an electric plant will be put in at an additional cost of \$7,000.

DENVER, COLO.—Bids are asked until Feb. 23 for the purchase of \$200,000 of 3¼% water bonds, being a part of the \$4,700,000 of bonds recently authorized. J. W. Shackelford, Pres. Bd. Pub. Wks.

TRINIDAD, COLO.—W. E. Condon, Civil Engr., writes us that the city is locating a site for an auxiliary reservoir to be built this spring. C. H. Knickerbocker, Cy. Engr.

BAKER CITY, ORE.—This place has voted to issue \$100,000 in bonds to purchase Elk Creek water right and to lay ten miles of mains to this city.

SONOMA, CAL.—It is stated that an election will soon be held to vote on the question of issuing \$25,000 in bonds for municipal works. R. A. Poppe, Cy. Ck.

OGDEN, UTAH.—The question of selling the works of the Ogden Water Co. to local parties for \$450,000 is being considered. David Eccles and Thos. D. Dee, Ogden, and J. P. Smith, of Baltimore, Md., are interested.

SALT LAKE CITY, UTAH.—The committee has recommended the mayor be authorized to purchase the water rights at Big Canyon; that bids be asked for completing the 13th St. reservoir, and also for laying a 16-in. water main from 5th South St. to Parley's conduit, and other mains; that the main from City Creek be enlarged; that City Engineer Kelsey be authorized to prepare plans for enlarging and extending the East Jordan Canal, etc. All this work is estimated to cost \$450,000.—Plans for a water supply for the mining camps of Deer Lodge, Nev., and Stateline and Pikes, in Lincoln county, Utah, have been prepared; estimated cost, \$100,000. About 20 miles of pipe will be wanted. Judge Henry Rives, a mining attorney, is reported as interested.

TORONTO, ONT.—In the water-works department the engineer has asked for \$1,030,920, three-fourths of which is entirely new expenditure, as against \$154,572 expended last year. The great items of increase are construction specials, a few being: Waste prevention, \$10,000; concreting, Rosehill reservoir, \$20,000; 10,000,000-gallon engine and boilers, main pumping station, \$55,000; 5,000,000-gallon engine and boilers, high-level pumping station, \$25,000; improvement to water supply tunnel scheme, tunnel, including screen, valve chambers, etc., \$325,000; 6-ft. steel pipe from short crib to opposite Island basin, including necessary connections, \$87,500; 6-ft. steel pipe from opposite Island basin to tunnel shaft, including 5-ft. connection to existing 5-ft. steel pipe, \$96,250; 36-in. main on Bathurst, Dupont, Yonge, Stas., from College St. to Rosehill reservoir, \$176,536; 24-in. main on East Front St., from Church to George St., 1,050 ft., \$9,924.

IRRIGATION.

BIG STONE, S. DAK.—It is stated that E. M. Bennett is interested in the plan to convert Big Stone and Traverse Lakes into reservoirs.

NORTH YAKIMA, WASH.—W. T. Clark and G. S. Rankin will, it is said, build a canal, 21 miles long, irrigating about 5,500 acres of land, to cost about \$50,000.

PORTLAND, ORE.—The Southern Oregon High Line Ditch Co. will soon ask for bids for constructing a ditch, 93 miles long, according to reports.

SAN FRANCISCO, CAL.—The California Water & Forest Association will soon take steps toward the storage of the flood waters in the state.

NEW COMPANIES.—Oregon Land, Irrigation & Power Co., Pueblo, Colo.; \$300,000; H. C. Gibbons, H. A. Case, Bijon Irrigation Co., Greeley, Colo.; \$200,000; J. Work, S. A. Campbell, Greeley.

Pohyanna Water Storage & Supply Co., Houser Mills, Pa.; \$1,000; W. A. Erdman, A. R. J. Wallace, Stroudsburg.

Pioneer Water Co. of Kern County, San Francisco, Cal.; \$25,000; C. H. Phillips, J. W. Wright.

Omer Canal & Reservoir Co., Fowler, Colo.; \$20,000; G. P. Davenport, C. A. Watson.

Greeley & Loveland Irrigation Co., Loveland, Colo.; \$166,800; combining the New Loveland & Greeley Irrigation & Land Co.

SEWERAGE.

RIDGEFIELD, CONN.—T. H. McKenzie, Engr. State Board of Health, Hartford, has been engaged to prepare plans for a system.

AMSTERDAM, N. Y.—Bids are asked until March 1 for constructing about 875 ft. of 30-in. pipe sewer, as stated in our advertising columns. F. E. Crane, Supt.

UTICA, N. Y.—Plans for 15 and 12-in. pipe sewers in certain streets in Ward 7 are being prepared. Address City Surveyor Schultze.

ATLANTIC CITY, N. J.—We are informed that the Prindle Engineering Co., 120 Liberty St., New York, has received the contract for the pumping machinery for the Atlantic City Sewerage Co., which is controlled by Wallace & Robinson, 123 East 23d St., New York. It is very likely that further extensions to the plant will be made next year. Reginald P. Bolton, Engr., 35 Nassau St., New York.

COLLINGSWOOD, N. J.—The Collingswood Sewerage Co. has been granted a franchise for a system. The Hadson Sewerage Co. also applied for a franchise, but it was not considered by the council, according to reports.

SEA ISLE CITY, N. J.—The council has granted a franchise to the Sea Isle City Sewerage Co., organized by J. J. Burleigh, Camden, and others. The company will expend about \$10,000 on its system.

OIL CITY, PA.—Bids are asked until Feb. 26 for building certain sewers and for paving in three streets, as stated in our advertising columns. G. F. Roess, Cy. Engr.; S. W. Barnhart, Controller.

WAYCROSS, GA.—The Mayor writes us that the proposed system will be built under the direction of the Water-Works and Sanitary Committee, but no contracts have yet been let. Waring, Chapman & Farquhar, Engrs., 874 Broadway, New York.

NEWBERRY, S. C.—J. C. Gogans, Ck. and Treas., writes us that the matter of putting in a system has not yet taken definite steps.

OXFORD, MISS.—W. B. Cowan, Mayor, writes us that \$20,000 has been voted for sewers.

COLUMBUS, O.—Mayor Swartz has prepared a bill for a \$325,000 bond issue for the new system, which will be voted upon by the citizens. It is intended to locate the sewage disposal plant on the south side. The question of issuing \$350,000 in bonds for a new market house is being considered. Alvord & Shields, Consult. Engrs., The Rockeey, Chicago. O. A. Miller, Jacob Lind and Councilman Wleehers are on the committee.

TOLEDO, O.—Plans have been prepared for \$43,761 worth of sewers so far this year. One of these will be a main sewer in Treadwell and Wheeling Sts. Legislation for other sewers have also been passed, and there is said to be other sewer work projected.

WINTON PLACE, O.—Louis G. Dittol, Ck., writes us that the proposition to issue \$55,000 in bonds for sewers was defeated at the recent election.

CRAWFORDSVILLE, IND.—This town will build about one mile of sewers and lay about two miles of brick or asphalt paving this season. T. Hoffman, Cy. Engr.

MARTINSVILLE, IND.—F. A. Gageby, Cy. Engr., writes us that the contract for constructing sewers has been let to J. P. Thompson & Co., Greensburg, Ind., at \$43,799. The bids which were received on Feb. 9 will likely be published next week.

INDIANAPOLIS, IND.—The board of works proposes to build a main sewer in East Michigan St., from the Belt R. R. to the Pokues Run Intersecting sewer. The sewer will drain 620 acres and also Crooked Creek, and will cost \$300,000. The total length will be 12,122 ft., and of this 3,220 ft. will be 8-ft. circular brick.

GRAND RAPIDS, MICH.—Bids are asked until 2.30 p. m. Feb. 16 for constructing 4,800 ft. of 44 to 30-in. brick and 22 and 15-in. pipe sewers in Godfrey Ave., check, 5½% of bid; estimated cost, \$17,000. Bids for a sewer in Logan St. were opened Feb. 9. F. A. Twanley, Ck.

PARIS, ILL.—The question of building the system at an early date is being considered; estimated cost, \$150,000. Address Mayor Baum and City Engineer Fisher.

PIPESTONE, MINN.—Bids are asked until March 7 for furnishing the materials and for constructing a system at the Indian school, W. A. Jones, Indian Comr., Washington, D. C.; D. S. Harris, Supt.

DENVER, COLO.—The board of public works has approved the estimate of \$29,000 for the Capitol Hill sewer.

MONTE VISTA, COLO.—H. W. Horn, Mayor, writes us that the city is figuring on putting in a system as well as an electric plant.

EMERYVILLE, CAL.—Plans have been prepared for 20,000 ft. of 6-in. to 2-ft. sewers to cost about \$10,000.

PASADENA, CAL.—Herman Dyer, Cy. Ck., writes us that the council is discussing the question of holding an election for sewerage the city. W. B. Clapp, Cy. Engr.

TRURO, N. S.—F. C. Coffin, 53 State St., Boston, is reported as preparing plans for a system.

SYDNEY, N. S.—Waring, Chapman & Farquhar, 874 Broadway, New York, are to make examinations, plans, etc., for sewerage of township of the Dominion Iron & Steel Co., Ltd.

TORONTO, ONT.—The Committee on Works has recommended that the sum of \$7,000 be appropriated for securing information about sewage disposal. Further appropriations will be: macadam, \$8,000; cedar block, \$7,000; sidewalks, \$18,000; street cleaning, \$40,000; scavenging, \$65,000; street watering, \$25,000; maintenance and repairs to sewers, \$15,000; cleaning and flushing, \$10,000; tools and miscellaneous, \$5,000; repairs to bridges, \$9,300; King St. subway, \$2,500; sand pump, \$6,000; level crossings, \$5,000.

GARBAGE DISPOSAL—STREET CLEANING.

WATERBURY, CONN.—The Board of Health is considering the question of building a crematory, to cost about \$15,000. Dr. C. W. Frost, Health Inspector.

ROCHESTER, N. Y.—It is stated that the board of contract is considering the question of advertising for bids for the collection of garbage, and to rescind the contract with Thos. Holahan on Feb. 28.

COATSVILLE, PA.—The health officers have, it is said, advised the erection of a crematory.

BALTIMORE, MD.—Street Commissioner Bye has recommended that the block system be substituted for the present "zang" system of street cleaning.

WASHINGTON, D. C.—Dr. Wm. C. Woodward, Health Officer, writes us that it is likely that the bill will pass authorizing the district commissioners to make a contract for the collection and disposal of garbage and dead animals. Immediately after its passage bids will be asked. Bidders will submit their own schemes for disposal. The contract will be for five years from July 1.

CHICAGO, ILL.—Bids were to be received Feb. 14 for the privilege of picking over and sorting the city's refuse. L. E. McGann, Comr. Pub. Wks.

JOLIET, ILL.—The council has rejected the bids for erecting the proposed crematory, and has directed the city clerk to advertise for bids for a 30-ton crematory, including furnaces and approaches, but without buildings.

MILWAUKEE, WIS.—The question of building a crematory is reported as about to be definitely settled. Some of the members of the board of public works are in favor of first adopting a system of cremation and then calling for bids for constructing a similar system. Address Mayor Rose.

MINNEAPOLIS, MINN.—Plans, bids, etc., are asked until March 9 for cremating kitchen garbage for three years. City to purchase plant or renew contract at the end of that time. The proposed crematory is to be able to destroy 100 tons of garbage every 24 hours, and at the same time generate steam power. Check \$500. A. K. Norton, Health Comr.; L. A. Lydiard, Cy. Ck.

LOS ANGELES, CAL.—The health officer is in favor of having the city burn the garbage.

OAKLAND, CAL.—The garbage disposal question has been settled by the committee deciding to let the scavengers carry the refuse beyond the city limits.

STREETS AND ROADS.

BUFFALO, N. Y.—Bids are asked until Feb. 21 for paving, repaving and improving several streets. R. G. Parsons, Secy. Bd. Pub. Wks.—The following were the lowest bids received by the Board of Public Works, Feb. 8, for asphalt paving: Barber Asphalt Paving Co., Ellitcott Sq. Bldg., Orton Pl., \$3,546; Clinton St., \$7,467; Keystone St., \$23,345; Lewis St., \$5,072; Ketchum Ave., \$3,239; Wells St., \$4,231; Michigan St., \$12,841; Lock St., \$1,951; American Contracting Co., Trowbridge St., \$14,750; Dole St., \$8,100; Prenatt St., \$3,130; German Rock, Asphalt & Cement Co., D. S. Morgan Bldg., Marion Ave., \$6,298.

NEW YORK, N. Y.—Bids are asked by the Department of Highways, 2 Park Row until Feb. 21 for paving a portion of 81st St. with asphalt, for regulating and paving portions of West 136th St., West 57th St. and 12th Ave., and for paving a portion of West 139th St. with granite.

WELLSVILLE, N. Y.—Bids are asked until Feb. 26 for paving Main St. with brick, as stated in our advertising columns; check, \$1,000. Grant Duke, Pres.; F. A. Dunham, Engr. in charge.

PATERSON, N. J.—The council has passed an ordinance providing for an issue of \$150,000 in bonds for permanent street improvements.

PLAINFIELD, N. J.—A. J. Garrett, Cy. Surv. and St. Comr., writes us that there will probably be the usual amount of macadamizing done this year and some brick or asphalt, few, if any, sewers, and no bridges.

OIL CITY, PA.—Bids are asked until Feb. 26 for street improvements and sewers, as described in our advertising columns. S. W. Barnhart, Controller.

ALLEGHENY, PA.—D. L. Fulton, Supt. Highways and Sewers, writes us that the following contracts were let Feb. 6 for paving and sewers; all local bidders: Thos. Prosser, lateral sewer on Clayton Ave., \$615; from Forsythe to Eckert Sts., \$386; on Morrison Ave., \$1,310 Cronin & O'Herron, lateral sewer on Ohio St., \$960. Keeling & Ridge, lateral sewers near Shady Ave., \$995; from Charles St. to Chester Ave., \$1,110; on Chester Ave., \$2,570; on Irwin Ave., \$823; on Duquesne Ave., \$4,045; on Richmond and Richards Sts., \$1,140; 3-ft. main sewer on Woods Run Ave., \$9,575; 24-in. main sewer on Shady Ave., \$445; grading (Kufner) Alley, \$195; J. Carson & Co., grading Shelby St., \$1,120. North Side Coal & Sand Co., grading Forsythe St., \$3,607. Jas. McAfee & Co., grading Valley St., \$8,400; grading and paving with brick

Hughes Alley, \$395. Sicilian Asphalt Paving Co., grading, curbing and asphaltizing Termon Ave., \$28,108. For grading, paving and curbing O'Heern St., Keeling & Rigge submitted the lowest bid on Hogler block at \$753, and H. C. Howard was lowest on brick at \$678.

PITTSBURG, PA.—The council has passed an ordinance authorizing the grading of Bennett St. and the paving of Diana Alley.

NEWPORT NEWS, VA.—Bids are asked until Feb. 27, postponed from Feb. 19, for paving several streets, as stated in our advertising columns. J. F. Hughes, Chm. St. Com.; J. A. Maasle, Cy. Clk. Postponed because specifications were not printed in time for proper distribution.

PARKERSBURG, W. VA.—A special election will be held March 13 to vote on the issue of \$300,000 in bonds for brick and macadam paving in the county. C. H. Turner, Mayor.

COLUMBUS, GA.—Mayor Chappell writes us that no paving contracts will be let at present, the board will probably appropriate \$15,000 or \$20,000 for paving during 1900.

TAMPA, FLA.—It is stated that the question of paving Water St. is being discussed.

NEW ORLEANS, LA.—Bids are asked until Feb. 19 for paving three streets with blocks, one with asphalt, and one for laying a brick sidewalk on one street. W. S. Douglas, Comptroller.

BELLEVUE, KY.—E. M. Shinkle, Cy. Engr., writes us that the council is discussing the question of laying 16,500 sq. yds. of brick or granite paving and 75,000 ft. of curbing and gutter in Fairfield Ave.

AKRON, O.—Bids are asked until March 10 for laying about 35,000 sq. yds. of sheet or block asphalt, to cost about \$135,000. J. W. Payne, Cy. Engr.

CINCINNATI, O.—Bids are asked until Feb. 21, according to reports, for grading and macadamizing a portion of McMicken Ave. G. H. Spellmire, Clk. Bd. Cy. Affairs. T. B. Punshon, Ch. Engr., writes us that John Sullivan submitted the lowest bid Feb. 7 for laying about 1,000 lin. ft. of macadam paving in Delta Ave.

HYDE PARK, O.—A special election will be held Feb. 26 to vote on the question of issuing \$115,000 in bonds for street improvements.

LAKEWOOD, O.—Bids are asked until Feb. 19 for improving the boulevard, as follows: 185,000 cu. yds. excavating, 45,000 cu. yds. excavating handled twice, 22,000 cu. yds. excavating in trench, 37,600 lin. ft. curbing, 350 cu. yds. brick masonry, 1,200 lin. ft. 15 to 30-in. sewer pipe laid. John French, Cy. Clk.

NORWOOD, O.—A special election will be held Feb. 19 to vote on the question of issuing \$151,000 in bonds for street and sewer work, etc.

SPRINGFIELD, O.—Chas. J. Bowen, Mayor, writes us that the question of paving will be taken up by the Board of Public Affairs about Feb. 22; contract will be let in about 90 days; one local sewer will be constructed in about 60 days. Wm. Sharon, Engr.

TOLEDO, O.—The following is a list of lowest bids received by the board for paving: East Broadway, Garrison Bros., block \$20,714, asphalt \$24,730; J. W. McMahon, Athens brick \$20,240, brown granite \$20,355; Trimbale block \$20,460; Trinidad asphalt \$27,804; G. H. Bolette, Buckeye brick \$20,533, Logan brick \$19,154, Michigan St., G. H. Bolette, Buckeye block \$2,397, Metropolitan block \$2,424, Rosewood Ave., Garrison Bros., brick \$10,995.

CRAWFORDSVILLE, IND.—F. Hoffman, Cy. Engr., writes us that the city will probably lay about two miles of brick or asphalt paving and one mile of brick sewers.

MICHIGAN CITY, IND.—Bids are asked, according to reports, until Feb. 26 for paving Wabash St. E. J. Heise, Cy. Clk.

DETROIT, MICH.—The Board of Public Works has asked for an appropriation of \$300,000 for paving for this year.

MUSKOGON, MICH.—C. S. Gamble, Cy. Engr., writes us that the people may vote on an issue of about \$200,000 for repaving streets with brick.

ELGIN, ILL.—Wm. F. Svila writes us the contract for paving Chicago St. with brick has been let to A. E. Rutledge, of Rockland, work is to start April 15.

WAUKEGAN, ILL.—The council has taken preliminary steps towards laying about two miles of macadam, to cost about \$100,000.

CLAY CENTER, NEB.—Bids are asked, according to reports until Feb. 15 for grading for 1900. Geo. Mitchell, County Clk.

KANSAS CITY, MO.—Bids are asked until Feb. 21 for constructing several street improvements. H. A. Wise, Cy. Engr.

REDONDO, CAL.—S. D. Barkley, Clk., writes us that an election will be held about March 5 to vote on the issue of \$40,000 for sidewalks and sewers.

STOCKTON, CAL.—The Board of Public Works has recommended the macadamizing of several streets.

BRANDFORD, ONT.—Bids are asked until March 1 for a 12 and 15-ton double engine, road roller, R. Waddington, Secy. Bd. Pub. Wks.; H. F. Leonard, Clk.

MANUFACTURING PLANTS.

(For foreign manufacturing plants see under "Foreign Contracts and Export News.")

FORESTVILLE, CONN.—E. A. Freeman, Pres., informs us that the contract for constructing the factory building for the E. N. Welch Mfg. Co., manufacturers of clocks, has been awarded to B. H. Hibbard, New Britain, at \$50,000. Theo. B. Beck, Arch., Waterbury. Contracts for the equipment were divided between the Atlas Engine Co., Indianapolis, Ind., and the General Electric Co., Schenectady, N. Y.

NORWICH, CONN.—Local papers state that the factory of the Hopkins & Allen Arms Co., which was recently destroyed by fire, will be rebuilt.

NEW YORK, N. Y.—Press reports state that the consolidation of the Troy Steel Works, the Albany Iron Works, the Bessemer Steel Works, the Rensselaer Iron Works, and Witherbee, Sherman & Co., under one company capitalized at \$17,000,000, is a project of J. P. Morgan & Co. It is proposed to double the output of these concerns, which now aggregate 250,000 tons of steel and iron per annum.

McKEESPORT, PA.—The contract for erecting the plant of the National Tube Co., near this place, to cost about \$300,000, will be let in March, according to reports.

MONACA, PA.—It is reported that the Pittsburgh Opalite Tile Co. will erect large works at this place to cost about \$40,000.

NEW CASTLE, PA.—The American Tinplate Co. is reported to be considering the proposition of erecting a mill at this place.

PHILADELPHIA, PA.—It is reported that William Wharton, Jr., & Co., will erect a large addition to their factory at 25th and Ellsworth Sts. The structure will be 115 x 49 ft., of brick and steel.

PITTSBURG, PA.—Local papers report that a \$5,000,000 steel plant will probably be erected by John Walker, Henry Phillips, Jr., and others, in the Monongahela Valley. A site of 850 acres of land has been purchased near Elizabeth for the plant.

READING, PA.—Plans have been completed by the Philadelphia & Reading R. R. Co. for a locomotive building plant, to be erected at this place, to cost about \$1,000,000. Wilson Bros. & Co., Archs., 1036 Drexel Bldg., Philadelphia. L. B. Paxson, Consulting Mech. Engr.

NORFOLK, VA.—The Norfolk Shipbuilding & Dry-Dock Co. has been incorporated to erect a shipbuilding plant and a dry-dock at this place. Capital stock, \$500,000. Andre Motter, Pres.; H. W. Anderson, Vice-Pres., Exeter, Mass.

WILLIAMSBURG, VA.—A committee composed of J. B. Snencer, L. W. Lane, Jr., and H. N. Phillips has been appointed by the Business Men's Association to investigate the advisability of erecting a \$100,000 knitting mill to employ 300 hands.

WILLIAMSBURG, VA.—It is reported that a knitting mill is to be erected in this place. A. M. Bowling, Baltimore, Md., is the chief promoter.

HENDERICKSON, N. C.—Reports state that a cotton mill is proposed for this place to cost about \$150,000.

KERSHAW, N. C.—This town is reported to have offered to raise \$75,000 if J. R. Barron, Rock Hill, will contribute a like amount to build a \$150,000 cotton mill.

LEXINGTON, N. C.—It is reported that \$100,000 has been subscribed towards the proposed \$200,000 cotton mill for this place.

RALEIGH, N. C.—The Harriett Cotton Mills, Henderson, were incorporated on Feb. 9 with \$150,000 capital stock, and will soon begin the construction of a plant.

SALISBURY, N. C.—We are informed that the contract for a brewery of the Salisbury Hosiery Mills has been let and the equipment purchased.

CHARLESTON, S. C.—It is reported that Armour & Co. has purchased valuable phosphate lands near Charleston, where a \$1,000,000 fertilizer plant will be erected.

LESLIEVILLE, S. C.—A company is being organized at this place to build and operate a \$100,000 cotton mill. D. M. Crossman is the chief promoter.

CEDEARTOWN, GA.—It is stated that a \$100,000 mill will probably be erected in this town. L. S. Ledbetter, Mayor, may be addressed.

GENEVA, GA.—Plans are being prepared, according to reports, for a cotton mill, to be erected here, for which \$40,000 has been subscribed.

ENSLEY, ALA.—Reports state that the Tennessee Coal Iron & R. R. Co. proposes to erect a steel rail mill here, adjacent to its steel plant and wire rod mill.

MORILE, ALA.—Local papers state that a site has been secured for the Barker cotton mill, which will be erected this year. About \$213,000 has already been subscribed.

ROYCE, LA.—Bids are asked for the erection of an ice plant and a system of water-works, by J. E. Blackburn.

CHATTANOOGA, TENN.—The chamber of commerce on Jan. 25 decided to build a \$100,000 cotton mill for which \$10,000 has already been subscribed. A committee composed of W. B. Mitchell, John C. Griffin and J. A. Patten has been appointed to investigate the matter.

HUMBOLDT, TENN.—Bids are asked for plans, for constructing, and for equipping a cotton mill to be erected here, work to commence about March 1. Address H. C. Burnett, Pacific Bldg., Washington, D. C.

ALLIANCE, O.—The Morgan Engineering Co. has been incorporated with \$3,000,000 capital stock, to build a plant at this place, to manufacture hydraulic, electric, pneumatic, gas and fire machinery.

STUBENVILLE, O.—The American Axe & Tool Co. is said to be negotiating for the purchase of a tract of land on the Ohio River, near this place, for the purpose of consolidating its plant.

BRISTOL, IND.—The Monolith Cement Co. has been incorporated with \$2,500,000 capital stock, and will erect a plant here.

FORT WORTH, TEX.—Talbot O. Bateman, Secy. Bd. of Trade, Ft. Worth, writes us that a one-million dollar cotton mill is proposed for this place, but nothing definite has been done.

HENDERSON, TEX.—We are informed that \$60,000 has been subscribed toward the proposed \$200,000 cotton mill to be erected by the people of Rusk county. A charter will be applied for this month.

SMITHVILLE, TEX.—It is reported that bids are wanted for erecting a 25-ton oil mill for the Smithville Oil Mill Co., which has applied for a charter. Emil Buescher, Gen. Mgr.

TORONTO, ONT.—Reports state that the Canada Steel Co., recently incorporated, with \$18,000,000, will soon make application for a charter. The company proposes to erect works at Welland and Port Arthur, Ont. The ore for the smelters will be obtained from the West Hill and Lake Superior mines. F. E. Hinckley, New York, N. Y.; A. C. Pew, Toronto, Ont., and H. J. Hardbecke, Kankakee, Ill., are interested.

MONTREAL, QUE.—The Pittsburg Reduction Co., Pittsburgh, Pa., it is said, will erect a large plant here.

GAS PLANTS.

NEWBURYPORT, MASS.—The Newburyport Gas Co. will erect a new gas holder, capacity about 60,000 cu. ft., to cost about \$25,000.

ALBANY, N. Y.—The N. Y. C. & H. R. R. Co. will erect a new Pintsch gas plant here shortly. F. H. Harrington, Supt.

MOORESTOWN, N. J.—The River Shore Gas Co., of Riverton, has asked for permission to extend its lines to this city.—The American Investment Co., owning plants at Mt. Holly, Moorestown, Merchantville and Hadfield, has applied for a franchise.

DAVENPORT, IA.—G. T. Baker, Mayor, writes us that the People's Light Co. will erect an entire new gas plant. The order for 800 tons of 4-in. to 12-in. pipe has just been let. A. W. Vanderveer, Pres.

KICKAPOO CITY, KAN.—Bids are asked until Feb. 4 for erecting a gasoline gas plant at the Kickapoo reservation. W. A. Jones, Comr. Indian Affairs, Washington.

LOS ANGELES, CAL.—G. W. Frame and G. A. F. Wells, Los Angeles, and J. D. Jones, Whitier, have purchased 20 acres of land on Vermont Ave., and will form a company, with a capital of \$100,000, and will sink five wells. It is stated that the same parties will develop 80 acres near Newhall.

NEW COMPANIES.—Cleveland Gas & Illuminating Co., Cleveland, O.; \$10,000; S. Stewart, C. A. Chapman.

MISCELLANEOUS CONTRACTS.

PARK.—New York, N. Y.—The Park Board will build a park at Ave A and 23d to 24th St.

PARKS.—Tacoma, Wash.—The Mayor writes us that nothing has yet been done toward parks in the North End.

TELEGRAPH.—New York, N. Y.—The Western Union Telegraph Co. will issue \$20,000,000 in 4½% bonds for improvements, etc.

PARK.—Topeka, Kan.—The city will build a park on the bank of the Missouri River, to cost about \$10,000, and will want a steam roller and a grader. P. L. Wise, Cy. Engr.

WHARF.—Philadelphia, Pa.—The Terminal Land Co. will, it is stated, build a wharf and shed on the Delaware River, to cost about \$250,000.

TELEPHONE.—Cheyenne, Wyo.—The Bell Telephone Co. will spend about \$100,000 in extending its lines into Colorado, Utah and other states.

ORE DOCKS.—Fairport, O.—Reports state that M. A. Hanna & Co., Cleveland, have purchased land and will erect several large ore docks.

PARK WORK.—Philadelphia, Pa.—Bids are asked until Feb. 21 for completing Lincoln Ave. Drive, in Fairmount Park, etc. J. T. Vodges, Supt.

IMPROVEMENT BONDS.—Wyoming, O.—A special election will be held Feb. 19 to vote on the issue of \$70,000 in bonds for local improvements.

RIVER IMPROVEMENTS.—Cleveland, O.—The city proposes to improve and widen Cuyahoga River, to cost about \$200,000. Jas. Ritchie, Cy. Engr.

PARK.—Detroit, Mich.—It is stated that the Park Board has selected a park site at Belle Isle and will erect an aquarium and horticultural building.

ELEVATORS.—Boston, Mass.—Bids are asked until March 3 for installing four electric elevators at the navy yard. M. T. Endicott, Ch. Bureau Yards and Docks.

CANAL WORK.—Murray, N. Y.—The contract for work on the Erie Canal, to cost about \$20,000, has been let to J. A. Doolittle, 179 Church St., New Haven, Conn.

MACHINERY.—New York, N. Y.—Bids are asked until March 6 for furnishing a quantity of machinery at the navy yard. A. S. Kenny, Paymaster-General, U. S. N.

DREDGING.—Portland, Me.—Bids are asked until March 14 for dredging in Narragansett River, as stated in our advertising columns. Maj. S. W. Roessler, U. S. Engr.

CEMENT, SAND, ETC.—Fort Hamilton, N. Y.—Bids are asked until March 15 for furnishing a quantity of cement, sand, broken stone, etc. Maj. W. L. Marshall, U. S. Engr.

NAVAL SUPPLIES.—Boston, Mass.—Bids are asked until Feb. 20 for furnishing a quantity of steel plates, etc., at the navy yard. A. S. Kenny, Paymaster-General, U. S. N.

PARK.—Chicago, Ill.—Alderman John B. Math writes us that the board is trying to acquire land, partly dry and partly submerged, for a park at the north end of Calumet Lake.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until Feb. 20 for furnishing a quantity of lumber, brass wire, etc., at the navy yard. A. S. Kenny, Paymaster-General, U. S. N.

TELEPHONE.—San Antonio, Tex.—The council has granted a 25-year franchise to H. M. Aubrey, F. C. Smith and others, who will, it is said, build a telephone system, to cost about \$250,000.

FIRE HOSE.—New York, N. Y.—Bids are asked by the fire department, 157 E. 67th St., until Feb. 21 for furnishing about 4,000 ft. of 3½-in. rubber and duck woven fire hose. J. J. Seannell, Comr.

CANAL.—Buffalo, N. Y.—F. V. E. Bardol, Ch. Engr., writes us that nothing has been done in regard to the proposed canal to the Lake from Buffalo River, further than to order plans prepared.

TELEPHONE.—Gloversville, N. Y.—The Hudson River Telephone Co. has applied for a franchise for laying underground wires, it also contemplates making extensive alterations to its central station.

PIER EXTENSION.—Frankfort, Mich.—Bids are asked until March 15 for extending and repairing piers, as stated in our advertising columns. Capt. C. Harding, U. S. Engr., 57 Park St., Grand Rapids.

HARBOR IMPROVEMENTS.—Buffalo, N. Y.—The Buffalo Dredging Co., D. S. Morgan Bldg., submitted the lowest bid Feb. 10 for improvements in the harbor at \$200,178. Mal. T. W. Symons, U. S. Engr.

TUNNEL.—New York, N. Y.—It is stated that the Long Island R. R. Co. has invited seven contractors to bid on the construction of a tunnel between New York and Long Island City. W. H. Baldwin, Jr., Pres.

TUNNEL.—Bakersfield, Cal.—The Secretary of the Interior has granted the Power Development Co. permission to build a tunnel 800 ft. long in the forest reserves in Kern River Canyon to cost about \$100,000.

AMMUNITION HOISTS.—Fort Delaware, Del.—Bids are asked until March 12 for furnishing five chain ammunition hoists, as stated in our advertising columns. Lieut.-Col. C. W. Raymond, U. S. Engr., Philadelphia.

IRON CASTINGS, ETC.—Montreal, Que.—Bids are asked until Feb. 20 for furnishing a quantity of castings, iron snikes, bolts, etc., and about 8,000 tons of steam coal. D. Seath, Secy. Harbor Comrs., 57 Common St.

PIER SUPERSTRUCTURE.—Duluth, Minn.—Bids are asked until March 12 for building a concrete superstructure on north pier Duluth Ship Canal, as stated in our advertising columns. Maj. C. B. Sears, U. S. Engr.

TELEPHONE.—Fort Edward, N. Y.—The board of trustees have granted a franchise to Chas. W. Forbes, of Albany, to build a telephone line in this city; the line will probably be extended to Glens Falls and Sandy Hill.

REMOVING ROCK.—Albany, N. Y.—John Dunfee, Dunfee Bldg., Syracuse, N. Y., who has been awarded the contract for removing rock along the Hudson River, from Albany to Troy, will erect a plant here; he has purchased machinery valued at \$100,000.

EXCAVATION, ETC.—Rumford, Me.—Bids are asked until March 1 by the Oxford Paper Co., Portland, or Tower & Wallace, 1123 Broadway, New York, for excavation, brick and stone masonry, and timber grillage, as stated in our advertising columns.

TELEPHONE.—Gloucester, C. H., Va.—L. C. Catlett, Supt. Tidewater Telephone Co., writes us that the line will extend from Gloucester, C. H. to Newport News, and cost about \$3,000. Contract for poles has been let, other work will be done by the company by day labor.

TILE DRAINAGE.—Champaign, Ill.—Bids are asked until Feb. 20 for furnishing and laying about 4,000 ft. of 18-in., 7,000 ft. of 16-in., 2,900 ft. of 15-in., 1,200 ft. of 14-in., and 4,000 ft. of 12-in. drain tile in the Long Point Slough Special Drainage District. J. L. Ray, Attorney.

BOILER AND TANK.—Tombkinsville, N. Y.—Bids are asked until March 2 for furnishing a new boiler and tank for the launch "Nettle," as stated in our advertising columns. Specifications may be seen at the office of Engineering News, 220 Broadway, New York, and Monodnock Block, Chicago, Ill. Lieut.-Col. D. P. Heap, U. S. Engr.

REPAIRING JETTY, ETC.—Portsmouth, N. H.—Bids are asked until March 14 for repairing jetty at the mouth of Saco River, Me.; dredging and removing boulders in Exeter River, N. H., and for dredging in Little Harbor, N. H., and in Essex River, Mass., as stated in our advertising columns. Maj. W. L. Flisk, U. S. Engr.

TROLLEY.—Fort Hamilton, N. Y.—The following bids were received by Maj. W. L. Marshall, U. S. Engr., New York, on Feb. 1, for constructing a trolley system for motor batteries at Fort Hamilton: Greenlee, Wyatt & Co., 499 Water St., New York, \$2,179; time, 90 days. Post & McCord, Frost and Clay Sta., Brooklyn, \$2,850; time not stated. Robert S. Bishop, 33 Broadway, New York, \$2,300; time, 70 days. New Jersey Foundry & Machine Co., 26 Cortlandt St., New York, \$2,730; time, 75 days.

RAPID TRANSIT TUNNEL.—New York, N. Y.—J. B. McDonald, Jerome Park Reservoir, New York, will ask for bids next week for subletting the contracts for constructing the proposed rapid transit tunnel.

FOREIGN CONTRACTS AND EXPORT NEWS

ARGENTINE.—Reports state that Hopkins, Gardom & Teley, Engrs., of Calle 25 de Mayo No. 130, Buenos Ayres, have the contract for completing the Iraisandue R. Y. This line will be on the Argentine side of the Andes about 20 miles, and on the Chilean side about 22 miles long, most of which route is through the mountains.

RUSSIA.—Reports from St. Petersburg, Russia, state that the construction of the Trans-Persian railway has been decided upon. The line will be 1,300 miles long, and will cost 10,000,000 roubles (Turkistan). The route will be from Dshuhlia, by way of Tareez, Hamadan, Isfahan and from Dshuhlia, by way of Tareez, Hamadan, Isfahan, Kerman, and Chah Abbas. V. A. Messyodoff-Ivachoff, Chief Engr., of the Administration of Railways, Poutanka 117, St. Petersburg. Reports state that parties from Russia propose to build railways in Finland, including railway stations, a bridge over the Neva, etc.

COSTA RICA.—Reports state that the contract for 25,000 steel ties has been let to the Railway Track Supply & Equipment Co., London, by the Ferro-Carril de Costa Rica and that further contracts will be let for extending the line about 25 miles. Livesey, Son & Henderson, Engrs., 29 Broad St. Ave., E. C., London, Eng. W. H. Bird, Res. Engr., San Jose, C. R.

MEXICO.—The Conquista Coal Railway Co. has been incorporated with a capital stock of \$80,000 by J. T. Gardner, J. L. Elliott and C. J. Peabody, 27 Pine St., all of New York.

FRENCH AFRICA.—Bids are wanted by the Salle des Seances of the Permanent Market Commission, 4bis rue Jean Nicot, Paris, until Feb. 16 for constructing a railway between Niakary and the Niger. The work will be done in two sections, and will cost about \$1,544,000.

SUDAN, AFRICA.—Reports state that surveys are to be made by the French government for a railway in the French Sudan, west of the Nile Valley. The Ministry of Colonies, 3e Direction, 2e Bureau, Salle 106, Paris.

NEWCASTLE-UPON-TYNE, ENG.—Bids are asked until March 2 for furnishing 150 tramway car bodies and trucks, and the electrical equipment. Check for forms, etc., \$25. Hopkins & Talbot, Engrs., 26 Victoria St., London.

LULL, ENG.—Bids are wanted at once, according to reports, for 10 additional motor cars by the works committee of the corporation. It is said that about 100 cars will be wanted later on.

CALAIS, FRANCE.—It is reported that this city will establish an electric tramway. The Compagnie des Tramways de Calais is operating six miles of line. The officials of Bordeaux also propose to put in two short lines. A company, it is stated, will build an electric road in Neuen.

LIVERPOOL, ENG.—R. W. Blackwell & Co., 39 Victoria St., London, S. W., and 120 Liberty St., New York, were awarded the contract last month for equipping 100 miles of the corporation electric railway. About 20 miles of the tramway have been built and about 30 miles are yet to be let. The same company has a contract for building 10 miles of electric road in Rheims, France, work on which has been begun. John O'Neil, Mgr. Liverpool Tramway.

WORMS, GERMANY.—The council decided Jan. 2 to erect an electric plant and an electric railway. Vlotho has decided to erect a gas and electric plant.

HANOVER, GERMANY.—Gebr. Korting, of 60 Bodenstedterstrasse, this city, will erect an electric plant in Duderstadt; estimated cost, \$85,000 marks.

HILO, HAWAII.—Application for a charter has been made by the electric light and cold storage company, capital, \$200,000, with permission to increase to \$500,000. Chas. H. Fairer, Esq., care H. Davies & Co., Ltd., this city.

COLOGNE-EHRENFELD, GERMANY.—We are informed that in the Province of Posen, an electric plant, with the necessary wiring, is being built, which will supply the larger estates and agricultural centers with power. The construction and financing of the work is being conducted by the financial department of the Helios Elektrizitäts-Aktiengesellschaft, of this city.

INDIA.—The government of Mysore has decided to build a line from the Mysore and Hassan districts, to the West Coast. Col. D. McNeil Campbell, Ch. Engr., and Secy. to Governor, Bangalore, will make the surveys, etc. The South Indian Ry. (meter gauge), has completed surveys for a line from Kalkiri, west of Pakala Junction to Royachoti, about 35 miles. Sir Geo. Bruce, Consult. Engr., 3 Victoria St., London, S. W.—The Madras Ry. will build lines from Tirupathur Station to Krishnagiri, about 25 miles; from Salem to Salem-town, and the foot of the Shevaroy Hills, 8 miles, with a possible extension to Attoor, 35 miles. Col. Sir W. S. S. Bisset, Indian Office, Gov. Dir., London, S. W.; E. W. Stoney, Ch. Engr.

CHINA.—A military railway is to be built between Hsiao-chau to Peking, about 50 miles. Jung Ln, Comptroller of Board of Revenue and War, Peking.—A Belgian syndicate has petitioned the Bureau of Mines and Railways Wang-Wen-shao, Senior High Comr., Peking, for permission to build a line from Tnngchau to Kalgan, about 125 miles.

WARSAW, RUSSIA.—A report from the Austro-Hungarian Consul-General at Warsaw says motor cars will soon be in demand for private and commercial uses of communication between the various provincial towns.

LONDON, ENG.—C. J. Stewart, Chk. London County Council, writes us that the council's application for powers to construct electrical tramways and light railways have not yet been heard, and it is improbable that they will be for some months to come, and any information as to them given at this stage would be very indefinite. When the council shall have obtained the necessary powers, tenders for the supply of the materials requisite for the construction and equipment of the tramways and light railways will be invited by public advertisement, and it will be open for any persons or firms—American as well as others—to send in tenders. The council possesses the necessary powers for the construction of the proposed new sewage outfall works; but it has not yet been decided whether the council will itself carry out these works, or whether it will invite tenders for the works being executed under contract.

LIVERPOOL, ENG.—The corporation is reported to have received permission to extend the electric plant at a cost of about \$1,500,000. A. B. Holmes, Cy. Elec. Engr.; A. Clough, Mgr.

PIEDRAHITA (AVILA), SPAIN.—Bids are asked by the city authorities until Feb. 15 for a concession for lighting this city for 15 years, according to reports. Population, 5,000.—It is proposed to erect an electric light plant at Villa-marchante. The water power of the Huria is to be utilized.

GABLONTZ, AUSTRIA.—A concession has been granted to Rumpel & Waidek, of H. Hibernergasse 8, Prague, for water-works to cost \$203,642 gulden, and to be completed by Nov. 30.

SHIMONOSEKI, JAPAN.—The assembly has approved the construction of water-works and work on same is to be commenced immediately. Population, 38,000. Address Mayor Hara, or Mr. Sepiya, Vice-Chn. City Assembly.

ST. PETERSBURG, RUSSIA.—It is proposed to supply this city with water from Lake Ladoga, 40 miles east. The pipe to be laid along the banks of the Neva River. Address His Excellency the Stattholder of St. Petersburg.

CENTELLAS (BARCELONA), SPAIN.—The Axuntellento (council) invites tenders for constructing water-works. Jose Walsh, Secy. Councils.

SALTILLO, COAHUILA, MEX.—Felipe Cardenas, of Coahuila, and F. H. Dillon, of Mackin & Dillon, of Saltillo, have sold \$235,000 of public bonds to construct sewers and water-works, a market and a slaughter-house for all of which Mr. Dillon's firm hold the contracts.

LONDON, ENG.—The East London Water-Works Co., which has about completed two new reservoirs at a cost of \$1,750,000, will also make further extensions at a cost of about \$6,000,000. W. B. Bryan, Engr., Lea Bridge.

MEXICO, MEX.—It is reported that the city council has rejected the three bids received last November for about \$2,000,000 worth of asphalt paving in about 100 streets. The matter will be taken up on a new basis.

CIENFUGOS, CUBA.—Reports state that a second ice-making plant will be built by the Cubau-Americana Ice Co., of this city. A. K. Grant, Pres.; O. H. Dockman, Secy.

PARRAL, MEX.—It is stated that T. T. Lane will establish cold storage and ice plant at Parral, and that J. S. Uderhill will establish a steam laundry at Tampico.

BRESLAU, GERMANY.—Wackeron and Deter, of 15 Kaiser, Wilhelmstrasse, will establish works for the manufacture of light railway plant.—Schuckert & Co., of 94 Landgrabenstrasse, Nuruerg, are preparing plans for an iron foundry.

VIENNA, AUSTRIA.—Schustala & Co., 8 Kolowratring, will erect a railway plant, cars, trucks and vans, in Freiberg, Moravia.

ASFKRAKHAN, RUSSIA.—Reports state that the governor of this city has authorized the issue of \$4,120,000 in bonds for sanitary improvements; population, 10,000.

ZABORZE, GERMANY.—The Douenarsmarkhutte Oberchiesische Kohlen und Eisenwerke Apt-Gez. will erect large steel works and foundry here.

LONDON, ENG.—It is intended to begin work late in the spring on the proposed manufacturing establishment, power plant, etc., to be erected near London; estimated cost, about \$500,000. The buildings, of which there will likely be six with steel frames, will cover about four acres. About 600-H.P. dynamos, etc., will be put in. The plans and specifications are being prepared by Chas. J. Goldmark, Des. Engr. and Arch., 29 Broadway, New York. Mr. Goldmark will likely sail for Europe in connection with the scheme inside of a few months.

CIVITA VECCHIA, ITALY.—The government is about to improve the harbor here by deepening, constructing a new breakwater and extending the old breakwater, at a cost of \$778,640. Lacava Comm. Avv. Pietro, Minister Pub. Wks., Rome.

VALPARAISO, CHILI.—Congress has passed an act empowering the expenditure of \$420,000 in repairing the Valparaiso breakwater and in providing it with electric light. Francisco de B. Valdes Cuevas, Industries and Public Works, Alameda 219, Santiago, Chili.

BERLIN, GERMANY.—Reports state that the construction of a canal between Berlin and Stettin will cost 42,000,000 marks.

CHINA.—Press reports state that F. Sutterle, Sr.; R. H. Parker and L. F. L. Garrison, Min. Engr., 321 Clinton St., all of Philadelphia, Pa., and Louis Spitzel, Min. Engr., London, Eng., have sailed for China to examine certain coal fields. The fields, which lie as yet undeveloped, are on the banks of the Yang-tze-Kiang River, and it is proposed to supply with fuel the large cities of the Chinese interior. It is expected also to open rich gold prospects which are said to exist in the vicinity.

KINGSTON, JAMAICA.—It is reported that the Caledonia Bay Canal Survey Commission has made surveys 12 miles for the canal and river improvements.

GREAT BRITAIN.—The following list of projected work in the towns of Great Britain is condensed from the "Surveyor and Municipal and County Engineer," of London: Aberdeen, Scotland.—Wm. Dyack, Surv., will present a bill in Parliament asking for authority to equip the tramway with electricity, and also to extend it to the beach, over 2 1/2 miles, and to reconstruct at once 1 1/2 miles of the present line; estimated cost, \$355,000. A water supply from the River Avon to cost about \$90,000 is also proposed. Alfreton.—E. Houlton, Surv.—electric light plant. Aston Manor.—H. Richardson, Engr.—reconstructing Cuckoo Road bridge, to cost \$12,500; refuse destructor, \$70,000. A bill will be presented to Parliament asking authority to purchase the tramways belonging to the city of Birmingham and the Birmingham and Aston Tramway Companies, and also to construct other lines. Pritchard & Co., Engrs., Birmingham, and 1 Victoria St., Westminster, S. W., London. Bacup.—Francis Wood, Engr.—electric plant, \$110,000. Barking Town.—C. J. Dawson, Surv.—bids for a light railway to Beckton and a bridge over Barking Creek will soon be wanted. Barrow-in-Furness.—W. H. Fox, Engr.—refuse destructors, additions to sewage pumping plant, increased water supply from River Duddon, 1,000 new houses, etc. Batley.—O. J. Kirby, Engr.—electric tramway, \$500,000. Bilston.—C. L. N. Wilson, Surv.—two miles of 4 and 4 1/2 in. water main, and combining the electric plants. Birmingham.—John Price, Cy. Engr.—\$5,190 ft. of 6 and 7-ft. brick sewer. Bognor.—O. A. Bridges, Surv.—electric plant, Bradford.—J. H. Cox, Cy. Surv.—15 miles of new electric tramways, new refuse destructor, extension of cold storage, new bridge, a \$200,000 memorial hall, acquisition of gas works, extension of water-works, etc. Bredbury and Romiley.—R. Hardman, Surv.—three miles of tramways and electric plant. Bridgend.—M. Williams, Surv.—refuse destructor. Bridlington.—E. R. Matthews, Engr.—electric lighting. Brighton.—F. J. C. May, Engr.—17 miles of electric tramways. Bristol.—T. H. Yabloom, Cy. Engr.—main drainage to cost about \$3,500,000, bridge, \$25,000. Brownhills.—J. H. Shaw, Surv.—electric traction. Burley-in-Wharfedale.—Jos. Southworth, Surv.—water-works, \$75,000. Burley.—G. H. Pickles, Surv.—to convert 11 miles of tramways, of which seven miles are steam, into electric traction and to extend the line over four miles; estimated cost, \$750,000; cold stores, \$30,000; technical institute building. Cardiff, Wales.—W. Harpur, Engr.—main outfall sewer seven miles long and to cost about \$900,000; to equip about 13 1/2 miles of tramway with electricity, to cost \$1,300,000; several bridges. Besides the above the corporation has permission to begin at once work on 8 1/4 miles of electric tramway, to cost about \$1,300,000, and two sets of destructors. Carlisle.—H. C. Marks, Cy. Engr.—electric plant extensions. Work on equipping the tramways with electricity is about completed. Chesterfield.—John Frith, Engr.—extending water-works, \$300,000. Coalville.—L. L. Baldwin, Surv.—water-works, \$180,000, and drainage, \$85,000. Dartford.—W. Harston, Surv.—electric plant. Darwen.—R. W. Smith-Saville, Engr.—contracts let for converting existing steam tramways to electric, estimated cost, \$150,000, work to begin in the spring. The lines will be extended later in the year. Devonport.—J. F. Burns, Surv.—electric plant and tramways. Dewsbury.—Henry Dearden, Engr.—electric tramway by a private company. Doncaster.—W. H. R. Crab-

tree, Surv.—seven miles of light railways, to cost \$350,000. Eastbourne.—K. M. Gloynne, Engr.—additional air compressing machinery. Eccles.—A. C. Turley, Engr.—extending electric plant and reconstructing tramway for electric traction. Exmouth.—W. D. Harding, Towu Surv.—electric plant, to cost \$80,000; R. Hammond, Engr., Westminster, London. Gainsboro.—Henry Riley, Surv.—bids will soon be asked for new pumping engines, etc., for the well now sunk by Percy Griffith, 34 Parliament St., N. W., London, to a depth of 1,040 ft. Gateshead.—J. Bower, Surv.—reconstructing atom tramways to electric. Glasgow, Scotland.—A. B. McDonald, Engr.—besides the reconstruction of the tramways noted in our issue of Feb. 1, the corporation will build about 10 miles of main sewerage and new sewage disposal plant, complete a large hospital, the total cost of above to be about \$5,000,000. There will also be made extensions to the electric plant, and work on the tramways will continue. Gloucester.—R. Read, Cy. Surv.—the question of purchasing and converting the tramways into electric traction at a cost of \$500,000, is being considered. Glemsford.—H. L. Taylor, Surv.—plans for a new water scheme is being prepared by E. W. A. Hayward, of Sudbury. Godalming.—J. H. Norris, Surv.—the water-works will come into possession of the town on March 24, for which \$120,000 was paid, after which improvements will be made. The electric lighting order has been sold to a private company, who will erect a plant inside of 18 months. Gosport and Alverstoke.—Herbert Frost, Surv.—electric plant, to cost \$150,000. Grays.—A. C. James, Engr.—electric plant, \$65,000. Guilford.—C. G. Mason, Surv.—increased water supply. Halesowen.—Wm. Whitworth, Surv.—The British Electric Traction Co. and the Midland Electric Lighting Co. have applied for franchises for an electric tramway and electric plant. Haslingden.—J. S. Green, Engr.—plans for an electric plant are being prepared by Lacey, Curregh & Sillar, and refuse destructors are proposed in connection with the plant. Hobburn-on-Tyne.—J. B. Renton, Surv.—electric lighting. Hemel Hempstead.—W. B. Locke, Surv.—electric tramway and light plant. Hendon.—S. S. Grimley, Engr.—plans for an electric plant, to cost \$230,000, are being prepared by Robt. Hammond, Westminster, and the Middlesex county council will ask permission to build several miles of electric tramways in the district. Hereford.—John Parker, Cy. Surv.—additional machinery for the new electric light plant may be wanted.

CONTRACT PRICES.

STONE CURBING.—Lawrence, Kan.—Holland Wheeler, Cy. Engr., writes us that Gustafson & Pain, and O. G. Olson have been awarded the contracts for 10,000 ft. of 3 x 2 in. stone curbing at 43 cts. a lin. ft.

PAVING.—Toledo, O.—The following contracts have been let for brick paving: Michigan St. (one block)—Geo. H. Bodette, grading, 29 cts.; brick, \$1.44 to \$1.48. East Broadway.—G. H. Bodette, grading, 24 cts.; paving with Logan block, \$1.32; next lowest bid, \$1.43. Rosewood Ave.—Garrigan Bros., grading, 16 cts.; paving, \$1.38; next lowest bid, \$1.44. Fronty Ave.—No award, H. J. Bowen, grading, 18 cts.; paving, \$1.42; Garrigan Bros., grading, 20 cts.; paving, \$1.42; Jas. T. McKinney, paving, \$1.42 (informal). The other bidders for paving were William McIntosh (irregular), Chas. W. McKinney (irregular), J. J. Lett, Carlaud & Warner, H. C. Jenkinson, H. P. Streicher, W. J. McMahon, Thos. J. Kelly, John McMahon, Cleveland Asphalt Paving Co., and the Warren-Scharr Asphalt Paving Co.

CEMENT SIDEWALKS.—St. Paul, Minn.—The following bids were received Jan. 29, 1900, for laying 150,000 sq. ft. of cement sidewalks: L. G. Washington, 9 cts. (the secured the contract last year at 8 1/2 cts.); W. B. Curtis, 10 cts.

SEWERS, CASTINGS, SEWER PIPE, SIDEWALKS, ETC.—Atlanta, Ga.—We are informed that the following bids were received Feb. 5, 1900, for sewer work, city furnishing materials, etc., during the year:

Table with 5 columns: Quantities, W. A. Hancock & Co., Frank E. Lake, W. W. Griffin. Rows include Brick, Rub'le masonry, Cut stone, Flagger, Lumber, Excavation, etc.

Total \$21,485 \$22,922 \$20,743
Sewer pipe.—Sciples Sons: 8-in. pipe, 9 cts., Y's, 49 cts. each; 10-in., 13 cts., Y's, 65 cts.; 12-in., 17 cts., Y's, 85 cts.; 15-in., 25 cts., Y's, \$1.25; 18-in., 34 cts., Y's, \$1.70; 20-in., 45 cts., Y's, \$2.25; 22-in., 55 cts., Y's, \$2.75; 24-in., 65 cts., Y's, \$3.25. V. H. Kreighshooper: 8-in., 45 cts., Y's, \$2.03 each; 10-in., 65 cts., Y's, \$2.55; 12-in., 85 cts., Y's, \$3.53; 15-in., \$1.25, Y's, 5.63; 18-in., \$1.70, Y's, \$7.65; 20-in., \$2.25, Y's, \$10.13; 22-in., \$2.75, Y's, \$12.38; 24-in., \$3.25, Y's, \$14.63; less 80% discount. Curbing.—Walsh & McCarty, 3 1/2 cts. per lin. ft.; W. J. Bishop & Sons, 35 cts.; W. W. Griffin, 28 3/4 cts.; J. D. Robbins & Co., 34 cts. Sidewalks (Brick)—R. S. Rust, 3 1/2 cts. per sq. yd.; Frank E. Lake, 3 3/4 cts.; W. A. Hancock, 40 cts.; W. W. Griffin, 42.8 cts. (Cement)—V. H. Kreighshooper, 3 3/4 cts. per 100 lbs.; Sciples Sons, 3 3/4 cts.; Randall Bros., 36 cts. Castings.—Atlanta Machine Works, 2 1/4 cts., a lb.; Manley Mfg. Co., 2 1/4 cts.; Fulton Foundry & Machine Works, 2 1/4 cts.; W. S. Withers, 1 1/2 cts.

WATER PIPE AND VALVES.—Perth Amboy, N. J.—The following bids were received Feb. 5, 1900, for furnishing 255 lengths of 8-in. cast-iron water pipe and fittings and valves: Jos. G. Burns, Supt., M. J. Drummond, New York Pipe, \$28.85 per gross ton; castings, 5 1/2 cts. a lb.; 8-in. valve, \$16.50; 6-in. valve, \$10.70. Fox & Engel, 55 Broadway, New York—Pipe, \$25.00 a net ton (accepted); castings, 2 1/4 cts.; valves—8-in. \$16.50, 6-in. \$10.50. Warren Foundry & Machine Co., New York—Pipe, \$28.90 a gross ton; castings, 2 1/4 cts.; valves—8-in. \$28, 6-in. \$19. P. H. & F. M. Roots & Co., Connersville, Ind.—Pipe, \$28; castings, 2 1/4 cts.; valves—8-in. \$19, 6-in. \$12.75. R. D. Wood & Co., Philadelphia—Pipe, \$25.89 net ton; castings, 2 1/4 cts.; valves—8-in. \$18, 6-in. \$12. U. S. Cast-Iron Pipe & Foundry Co., Chicago—Pipe, \$29.00 a net ton; castings, 2 1/4 cts. The Michigan Brass & Iron Works, Detroit—Castings, 3 3/4 cts.; valves—8-in. \$17, 6-in. \$10.50.

INDUSTRIAL NOTES.

THE NEW YORK FILTER MFG. CO., 26 Courtlandt St., New York, has a contract for furnishing one of its filtering plants for the Clarion Water Co., Clarion, Pa.

THE T. A. GILLESPIE CO., Pittsburg and New York, is reported to have a \$40,000 contract for riveted steel pipe for Honolulu, and a similar contract from the city of Mexico.

THE ROBBINS & MYERS CO., Springfield, O., announces that the increased demand for its fans, motors and dynamos has made it necessary to add a new factory containing 30,000 sq. ft. to its plant for the use of this department.

THE PHOENIX PAINT CO., 661 Freeman Ave., Cincinnati, O., has been established to manufacture "mica" asphalt paints for use on wooden or metal surfaces. Mr. C. W. Klayer and Mr. J. H. Cunningham are interested in the company.

J. D. McILWAIN & CO., Pittsburg, have removed to 3 Wood St., Conestoga Bldg., where they will handle levelling and belting and supplies, Norton bridge and railway jacks, Clancy hose clamps, Buckeye portable lamps, Swain lubricators and metallic packing, shafting, hangers, split pulleys, etc.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., has just completed two large highway bridges at Long Lake, N. Y., and is now putting up a 200-ft. span at Stuyvesant Falls, N. Y.; a large highway bridge at Hillsboro, N. H., and a two-span trolley bridge across the Naugatuck River at Waterbury, Conn.

MR. JOHN S. NOWOTNY, 105 E. Pearl St., Cincinnati, announces that he has purchased the good will, patents, etc., of the Nowotny Electric Co. in the manufacture of Nowotny's enclosed arc lamps and other electrical specialties, and now has much better and increased facilities for their manufacture.

THE ACME ROAD MACHINERY CO., Frankfort, N. Y., has been organized, with a capital stock of \$100,000, to build road building machinery of all kinds. Pres., Philander Pollock; Vice-Pres., Julian Schell; Secy.-Treas., James W. Jones, Gen. Mgr., Walter A. Cook, Jr. Mr. Cook and Mr. Jones and several other members of the new company have for several years been identified with the Climax Road Machine Co., Marathon, N. Y.

THE SPRAGUE ELECTRIC CO., New York, has equipped one of the old Dominion line steamers with a quantity of Lundell fans, finished in white and gold to correspond with the cabin decorations. The fans are mounted to run in an inverted position, the motors being attached to the ceiling. The company reports also that the N. Y. Belting & Packing Co. has ordered a 75-K-W. direct connected generator for its new factory in Passaic, N. J., and that the E. S. Ward & Co., has equipped its new factory in Waverly, N. J., with the Lundell apparatus, having ordered one 25-K-W. and 75-K-W. generator, belted type, of 250 volts, and 15 motors ranging from 2 to 20 HP.

THE CLING-SURFACE MFG. CO., Buffalo, N. Y., has just been incorporated under the laws of the state of New York, retaining the same name as heretofore with Albert B. Young as President and General Manager and Wm. D. Young as Vice-President and Secretary. The company reports a large and increasing demand for "Cling-Surface." The company has branches in Boston, New York and Chicago, with others just opening in St. Louis and New Orleans, while the well-known importing house of W. J. Moxham & Co., of Sidney, Australia, has ordered a large shipment of "Cling-Surface," with the exclusive right to handle it in Australia.

NEW COMPANIES.—Jewett Car Co., Newark, O.; \$200,000; H. S. Sands, Wheeling; C. E. Krebs, Jewett, O. Munger Vehicle Tire Co.; Corporation Trust Co. Bldg., Jersey City, N. J.; \$600,000; Henry C. Quimby. Melyn Iron Works, Chicago; \$145,000; N. W. Hacker, W. B. Ward.

Bristol & Joplin Lead & Zinc Mining Co., Corporation Trust Co. Bldg., Jersey City; \$100,000; W. W. Gooch, Wilkeson, R. York.

White River Lumber & Mineral Co., Portland, Me.; \$350,000; J. S. Healey, Boston, Mass.; W. K. Longee, Providence, R. I.

Electric Boiler Protection Co., New York, N. Y.; \$100,000; William W. Brauer, J. T. Lynch.

Willard & Frick Co., Rochester, N. Y.; \$250,000; William H. Reid.

Atlantic Iron & Steel Co., Jersey City, N. J.; \$10,000,000; Chas. A. Porter, Kennedy Crossan.

Lehigh Power Co., Jersey City, N. J.; \$500,000; Geo. W. Griffiths, C. M. King.

Rotary Motor Vehicle Co., Kittery, Me.; \$400,000; W. R. Waling, Boston; N. S. H. Sanders, Danvers, Mass.

Baracchi Impregnating Co., Perth Amboy, N. J.; \$100,000; Albert G. Wanier, Perth Amboy.

Electric Regulator Co., 234 Bloomfield Ave., Montclair, N. J.; \$125,000; Eri F. Wilson, Charles H. Shelton.

Universal Water Lift Co., New York, N. Y.; \$500,000; G. A. Crofutt, F. W. Barker.

Monarch Stove & Manufacturing Co., Mansfield, O.; \$100,000; E. C. Baxter, S. N. Lord.

Southern Navigation Co., Denver, Colo.; \$100,000; H. W. Mitchell.

Nonparell Instantaneous Water Heater Co., San Francisco, Cal.; \$300,000; L. I. Brown, A. F. Vogelsang.

Hansburg Water Co., Johannesburg, Cal.; \$100,000; H. A. Darling, A. E. Snot.

National Mfg. & Contracting Co., Philadelphia; \$1,000,000; J. W. Ellis, E. E. Conrad.

Automobile Co. of Los Angeles, Los Angeles, Cal.; \$50,000; L. B. Dockweiler, H. E. Carter.

Pacific Oil Mining & Development Co., San Francisco, Cal.; \$500,000; F. Cutting, Oakland; G. C. Alferitz.

Sunset Oil Mining & Development Co., San Francisco, Cal.; \$500,000; A. J. Rausch, G. C. Alferitz.

Lisbon Telephone Co., Lisbon, Ia.; \$10,000; W. C. Stuckelger, J. Anbacher.

Wood Bros. Steel Self-Feeder Co., Des Moines, Ia.; \$40,000; O. F. Dorrance, G. H. Sherwood.

Martin-Fel Telephone Co., 28 Warren St., Jersey City; \$200,000; Wm. B. Lightfoot, New York, N. Y.; John Martin, Paris, Tex.

J. S. Metcalf Co., Chicago, Ill.; \$50,000; contracting; J. S. Metcalf, F. G. Adams, T. K. Webster.

United States Clay Mfg. Co., Newark, N. J.; \$240,000; H. M. Keasbey, Orange, N. J.; R. W. Allison, Pittsburg.

The Yellowstone Park Telephone & Telegraph Co., Bozeman, Mont.; \$10,000; Frank A. Hall, George W. Boyce.

Chicago Pipe Line Refrigerating Co., Chicago, Ill.; heating and refrigerating plants; \$100,000; S. J. Howe, S. Schooler.

Brake Adjuster Mfg. Co., Minneapolis, Minn.; \$50,000; L. Knowles, J. Casey.

Minnesota & Ontario Bridge Co., Minneapolis, Minn.; \$300,000; H. Baxter, C. H. Childs.

Eureka Automobile Transportation Co., San Francisco, Cal.; \$500,000; C. L. Fair, S. Bennett.

Berks County Telephone Co., Wilmington, Del.; \$300,000; S. D. Debert, F. M. Yeager, Reading, Pa.

Dakota City Roller Mill Co., Dakota City, Neb.; \$15,000; S. T. Ferrine, L. G. Royce.

Columbia Iron & Steel Foundry Co., Pittsburg, Pa.; \$25,000; G. P. Loomis, C. C. Lee, Oaknut, Pa.

Reilly Brake & Finder System Co., Newark, N. J.; \$2,500; T. Reilly, Mary E. Lynch.

Penn Slate Construction Co., Camden, N. J.; \$50,000; J. MacCarroll, J. W. Perry.

Ransome Concrete Construction Co., Oakland, Cal.; \$20,000; T. R. Hutchinson, B. Ransome.

Electric Fire Engine Co. of America, Des Moines, Ia.; \$50,000; T. Johns, W. B. Shaffer.

National Liquid Air Co., New York, N. Y.; \$5,000,000; G. J. O'Doherty, F. A. Lynch, Boston, Mass.

Ferguson Brick Co., Troy, N. Y.; \$40,000; O. W. Ferguson, H. A. Stone.

Western Engineering & Construction Co., Dover, Del.; \$100,000; T. M. Moe, C. S. Cleaver.

Usoma Portland Cement Co., San Francisco, Cal.; \$500,000; G. R. Inglis, C. Rickoff.

Vandegrift Construction Co., Riverside, N. J.; \$100,000; J. A. Vandegrift, H. A. Clark.

National Tinplate Co., Pittsburg, Pa.; \$5,000,000; J. C. McDowell, Philadelphia, Treas.; A. B. Daly, Dir.

Kentucky & Indiana Telephone & Telegraph Co., Henderson, Ky.; \$250,000; H. K. Cole, Owensboro; J. H. Carter, Henderson.

American Independent Telephone Co., Dover, Del.; \$100,000; E. F. Canby, Wilmington.

Colonial Sugar Refining Co., Dover, Del.; \$100,000; J. L. Wolcott.

Eastern Shore Telegraph & Telephone Co., Denton, Md.; \$100,000; T. L. Day, F. R. Owens.

Colorado Electric Light Co., Colorado, Tex.; \$10,000; R. M. Webb, B. S. Vantuyl.

Municipal Light, Heat & Power Co., Hoboken, N. J.; \$300,000; J. Bruning.

S. B. Alexander, Jr., Electric & Supply Co., Charlotte, N. C.; \$25,000; S. B. Alexander, Jr., J. F. Robertson.

Oklahoma City Electric, Gas & Power Co., Oklahoma City, Okla. Ter.; \$150,000; E. H. Cooke, A. B. Baird.

Chesapeake Electric Co., Baltimore, Md.; electrical supplies; B. C. Howard.

Mt. Pleasant Electric Co., Mt. Pleasant, Tenn.; \$15,000; C. H. Ingram, H. D. Ruhm.

Consumers' Light, Heat & Ice Co., Richmond, Va.; \$100,000; W. C. Stuart, Pres.

Roslyn Light & Power Co., of Roslyn, North Hempstead, N. Y.; \$50,000; R. D. Winthrop, Westbury.

People's Water & Power Co. of Red Lion, Red Lion, Pa.; \$1,000; J. A. Miller, C. E. Mayes.

Notice.

As Thursday, Feb. 22, is a holiday, Engineering News of that date will be issued on Wednesday, the last pages going to press on Tuesday. No advertisements or news items can be published next week unless received by us not later than Tuesday morning.

PAVING AND SEWERS.

OIL CITY, PA.
Sealed proposals for the construction of the following improvements, will be received by the City Controller, for the City of Oil City, Pa., until 4 p. m., Feb. 26, 1900:
Main St., repaving; bond, \$1,200; North Petroleum St., paving; bond, \$800; Seneca St., paving; bond, \$10,000; Central Ave., sewer extension; bond, \$600; Cowell St., sewer; bond, \$800.
Bonds must accompany all bids. Plans and specifications can be seen, and printed forms be obtained at the City Engineer's office. The right is reserved by the city to reject any or all bids.
S. W. BARNHART,
7-2t Controller.

GATE VALVES.

CLEVELAND, O., Jan. 27, 1900.
Sealed proposals will be received at the office of the Clerk of the Board of Control, No. 105 City Hall, until 12 o'clock m. February 26, 1900, for furnishing, delivered free on board of cars in the City of Cleveland, O., such water gates, of sizes from 3 inches to 48 inches, inclusive, as may be required during the year 1900 by the Water-Works Division of Department of Public Works of the City of Cleveland.
Specifications may be seen and blank proposals can be obtained at the office of the Superintendent of Water-Works.
Each proposal must contain the full name of the party or parties making the same, and all persons interested therein, and must be accompanied by a certified check of One Thousand (\$1,000.00) Dollars on a solvent bank in the city, made payable to the Director of Public Works of Cleveland, O., as surety that if the proposal be accepted a contract will be entered into.
No proposal will be entertained unless made on the blanks furnished by the Superintendent of Water-Works and delivered at the office of the Clerk of the Board of Control, No. 105 City Hall, previous to 12 o'clock m. on day specified.
The City reserves the right to reject any or all bids.
JOHN VANDEVELDE,
6-3t Deputy Director of Public Works.

PROPOSALS FOR PILE AND TIMBER DOCK.

CLEVELAND, O., Feb. 6, 1900.
Sealed proposals will be received at the office of the Clerk of the Board of Control, No. 105 City Hall, until 12 o'clock m., Thursday, March 8th, 1900, for furnishing the material and performing the labor for the construction of a pile and timber dock and shore protection on the Cuyahoga River, between the Middle and Lower Bridges of Seneca St., in the City of Cleveland, O., and for excavating that portion of the River front from the present dock line to the new line of the dock to be constructed.
Plans and specifications may be seen and blank proposals can be obtained at the office of the Chief Engineer, after February 12th, 1900.
Each proposal must contain the full name of the party or parties making the same, and all persons interested therein, and must be accompanied by a certified check for Two Thousand (\$2,000.00) Dollars, on a solvent bank in the city, as surety that if the proposal be accepted a contract will be entered into.
No proposals will be entertained unless made on the blanks furnished by the Chief Engineer, and delivered at the office of the Clerk of the Board of Control, No. 105 City Hall, previous to 12 o'clock m., on the day specified.
The city reserves the right to reject any or all bids.
JOHN VANDEVELDE,
6-3t Deputy Director of Public Works.

30-IN. PIPE SEWER.

AMSTERDAM, N. Y.
Sealed proposals will be received at the office of the Sewer Commissioner, Amsterdam, N. Y., until 8 p. m., March 1, for the construction of 875 feet of 30-inch pipe sewer. Proposal bond or certified check, \$300.
7-2t F. E. CRANE, Superintendent.
U. S. ENGINEER OFFICE, Army Building, New York, N. Y., Feb. 13, 1900.—Sealed proposals for furnishing and delivering CEMENT, BROKEN STONE and SAND, at Fort Hamilton, N. Y., will be received here until 12 m., March 15, 1900, and then publicly opened. Information furnished on application. W. L. MARSHALL, Maj, Engrs. 7-4t

SEWER WORK.

HOUSTON, TEXAS.
Sealed proposals addressed to Wm. Baugh, City Secretary, and properly endorsed, will be received at the City Council Chamber, Houston, Texas, until 4 p. m., on Wednesday, February 28th, and opened immediately thereafter, for the construction of certain pipe and brick sewers and appurtenances, in connection with the proposed improvements to the sewerage system.
The work comprises approximately, the laying of 7,200 feet of from 15 to 30-inch pipe sewers and 1,375 feet of 42-inch brick sewers with appurtenances, including two inverted siphons and the laying of about 2½ miles of 24-inch cast-iron force main.
Plans and specifications can be seen at the office of the Consulting Engineer, 157 Broadway, New York, and in Houston, and specifications can be secured from the City Secretary, City Hall, Houston, on or after 12th February.
The City reserves the right to reject any and all bids or to accept that one which in their judgment is for the best interests of the City of Houston.
Each proposal must be accompanied by a certified check for \$5,000.00 on some bank in Houston.
S. H. BRASHEAR, Mayor.
WM. BAUGH, City Secretary.
ALEXANDER POTTER, Consult. Engr. 6-3t

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., Feb. 10, 1900.—Sealed proposals for DREDGING Narragausus River, Maine, will be received here until 12 m., March 14, 1900, and then publicly opened. Information furnished on application. S. W. ROESSLER, Maj., Engrs. 7-4t

U. S. ENGINEER OFFICE, Duluth, Minn., Feb. 10, 1900.—Sealed proposals for setting in place concrete footing blocks, and building in place concrete superstructure on north pier, Duluth ship canal, will be received here until noon, March 12, 1900, and then publicly opened. Information furnished on application. CLINTON B. SEARS, Major, Engrs. 7-4t

SEALED PROPOSALS will be received at the office of the Light-house Engineer, Tompkinsville, N. Y., until 12 o'clock m., March 2d, 1900, and then opened, for furnishing new BOILER and TANK for LAUNCH "NET-TLE." Information may be had upon application to D. P. HEAP, Lieut.-Col., Corps of Engrs., U. S. A. 7-2t

SUPPLY WELL.

TOWN OF NEEDHAM, MASS., OFFICE OF THE BOARD OF WATER COMMISSIONERS, February 8, 1900.
Sealed proposals for constructing a Supply Well will be received by the Board until 12 m., Thursday, March 8, 1900. Plans and specifications may be seen at the office of the Engineer, Room 751, Tremont Building, Boston, and samples of borings at the Needham Pumping Station. Each proposal must be based upon a personal inspection of the site of the well, be accompanied by a certified check for \$200, made payable to the Town Treasurer of Needham, and enclosed in a plain envelope addressed to the Water Board, George A. Adams, Secretary.
The right is reserved by the Board to reject any and all bids as deemed necessary for the Town's interest.
FREDERICK G. TUTTLE,
EDMUND G. POND,
Water Commissioners.
LOUIS E. HAWES, Engineer. 7-3t

PRISON AND WORKHOUSE.

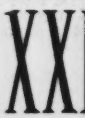
GREENBANK, DEL.
Sealed proposals will be received by the Board of Trustees of the New Castle County Workhouse, until 11 o'clock a. m., March 6th, 1900, for building a prison with workhouse and appurtenances also for the building of a powerhouse and underground passageway at Greenbank, Delaware, near the City of Wilmington.
Plans can be seen and specifications and form of proposals may be had by applying at Board of Trade Rooms, in Equitable Building, Wilmington, Del., on and after February 20th, 1900.
The Board of Trustees reserve the right to reject any and all bids.
J. N. GAWTHROP, President.
J. FRANK BALL, Secretary. 7-2t

AMMUNITION HOISTS.—U. S. Engineer Office, Philadelphia, Pa., Feb. 9, 1900.—Sealed proposals for furnishing and delivering at Fort Delaware, Del., five chain ammunition hoists will be received here until 12 noon, March 12, 1900, and then publicly opened. Information furnished on application. C. W. RAYMOND, Lieut.-Col., Engrs. 7-4t

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If you have anything to sell or to rent, we suggest that you advertise for a few weeks on one of our "For Sale" pages



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