

CONTENTS OF SUPPLEMENT.

PERSONAL	57
Obituary	57
ENGINEERING SOCIETIES	57
Coming Technical Meetings	57
NEW PUBLICATIONS	57
Trade Publications	58
CONSTRUCTION NEWS:	
Condensed List of Contracts Pending	58
Railways	58
Street and Electric Railways	59
Electric Light and Power	59
Bridges	60
Buildings	60
Water-Works	61
Sewerage	61
Garbage Disposal and Street Cleaning	62
Streets and Roads	62
Manufacturing Plants	62
Miscellaneous Contracts	62
Contract Prices	63
INDUSTRIAL NOTES	64

PERSONAL.

Dr. W. F. Blunt, of Lockhart, Tex., has been appointed a member of the State Board of Health of Texas, to succeed Dr. R. M. Swearingen, deceased.

Mr. Charles H. West has been elected Chief Engineer of the Mississippi Levee District, Greenville, Miss., to succeed Mr. William Starling, M. Am. Soc. C. E.

Mr. John D. King, for several years Superintendent of the New Brighton Water Co., New Brighton, Pa., has resigned. Mr. Bonbright Kennedy has been appointed to succeed him.

Mr. William E. McClintock, M. Am. Soc. C. E., formerly of the firm of McClintock & Field, civil engineers, of Brockton, Mass., has begun the practice of law at 644 Tremont Building, Boston, Mass.

Mr. J. F. Coleman, civil engineer, of New Orleans, La., expects to leave for Cuba and Porto Rico about Sept. 15 on a prospecting tour to investigate the outlook for civil engineers and contractors in those islands. He intends spending about 30 days on the trip.

Mr. William Forsyth, M. Am. Soc. M. E., Mechanical Engineer, of the Chicago, Burlington & Quincy R. R., with headquarters at Aurora, Ill., has accepted the position of Superintendent of Motive Power of the Northern Pacific Ry., with headquarters at St. Paul, Minn., to succeed Mr. E. M. Herr, resigned.

Mr. Thomas G. Long, M. Am. Soc. C. E., formerly of the Union Bridge Co., New York, is now Second Vice-President of the R. P. & J. H. Staats Co., lately reorganized and incorporated, with offices at 29 Broadway, New York. The company's work, as engineer and contractor, covers docks, bridges, buildings, foundations, masonry, etc.

Mr. L. N. Case, General Superintendent of the water department of Detroit, Mich., has ceased to hold that position, owing to its abolition by the Board of Water Commissioners, and has instead been appointed Acting Secretary during the absence of the Secretary. Mr. Case has been connected officially with the water department for over 30 years.

Mr. A. G. Menocal, M. Am. Soc. C. E., formerly Civil Engineer, U. S. Navy, whose "suspension from duty on furlough pay for three years" as a result of his trial in consequence of the failure of Dry Dock No. 3 at the New York Navy Yard, was noted in our issue of June 9, has been pardoned by President McKinley, who restores him to his former status in the navy. Mr. Menocal will be retired from active service Sept. 1 on account of the age limit.

OBITUARY.

Mr. Jacob Guest Jones, contractor, of Washington, D. C., died Aug. 16, aged 62.

Mr. Joseph A. Barstow, contractor, of Atlantic City, N. J., died Aug. 15, aged 71.

Mr. Joseph Clark, contractor, died at his home in Hazel Green, Ky., last week, aged 77.

Mr. David M. Smith, huilder and contractor, of Brooklyn, N. Y., died Aug. 21, aged 80.

Mr. William Reed, contractor, of Allegheny, Pa., died in Wilkesburg, Pa., Aug. 13, aged 85.

Mr. Edward H. Moore, Water Commissioner, of Stoneham, Mass., died Aug. 18, aged 47.

Mr. C. J. Gardner, President of the Utica Cement Co., Utica, N. Y., died at Colorado Springs, Colo., Aug. 18, aged 63.

Mr. Albert A. Pancoast, President of the Philadelphia & Reading Coal & Iron Co., Philadelphia, died at Elberon, N. J., Aug. 19, aged 58.

Mr. Robert A. Stranahan, formerly well known in the South as a constructor of gas works, died at his home in Boston, Mass., Aug. 9.

Mr. William E. Davis, Superintendent of the Clinton Bridge Co., Clinton, Ia., accidentally shot and killed himself Aug. 18 in that city. He was born at Athens, Pa., in 1872, and was educated at Cornell University, Ithaca, N. Y. Since then he has been connected with the Elmira Bridge Co., Elmira, N. Y., the Adirondack & St. Lawrence R. R., the Phoenix Iron Co., Phoenixville, Pa., R. W. Hildreth & Co., New York, and the Union Bridge Co., Athens, Pa. He was a son of Mr. George E. Davis, Superintendent of the last-named company.

Mrs. Sophia Braeuulich, Business Manager of the Scientific Publishing Co., New York, publishers of "The Engineering and Mining Journal" and "The Mineral Industry," died at Sault Ste. Marie, Mich., Aug. 11. She was born on Long Island, July 2, 1854, and was the first woman graduate of Packard's Business College, New York. She entered the service of the above company Dec. 11, 1879, and in 1888 she became Secretary and Treasurer of the same. She was appointed Business Manager Jan. 1, 1890. Mrs. Braeuulich was the first American woman elected a Fellow of the Imperial Institute of London.

Mr. Edward Dexter Brown, M. Am. Inst. E. E., died in the military hospital at Fort Meyer, near Washington, D. C., July 16, aged 30. He was born in Reading, Mass., and graduated from the Massachusetts Institute of Technology, Boston, Mass., in 1890. Since 1891 he had been with the American Telephone & Telegraph Co., with offices at 18 Cortlandt St., New York city, and since 1895 was the General Inspector, having risen through the lower engineering grades. On April 30, last, he resigned this position in order to go to the front with Troop C, New York Volunteer Cavalry, of which he had been a member for two years, holding the post of Corporal. He was taken sick with typhoid fever while at Camp Alger, Va.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

NATIONAL IRRIGATION CONGRESS.
Sept. 1-3. Annual convention, Cheyenne, Wyo. Secy., J. C. Harpham.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Sept. 2. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

GERMAN-AMERICAN TECHNICAL SOCIETY.
Sept. 3-7. Annual meeting, Philadelphia Section, Reading, Pa. Secy., A. Schumann, 532 North 4th St., Philadelphia, Pa.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Sept. 5. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

AMERICAN STREET RAILWAY ASSOCIATION.
Sept. 6-9. Annual convention, Boston, Mass. Secy., T. C. Pennington, 2020 State St., Chicago, Ill.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Sept. 7. Secy., C. W. Hunt, 220 W. 57th St., New York city.

CENTRAL RAILWAY CLUB.
Sept. 9. Secy., H. D. Vought, 114 5th Ave., New York city.

MONTANA SOCIETY OF ENGINEERS.
Sept. 10. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
Sept. 12. "Evolution of Structural Design," F. T. Lively, Secy., J. F. Coleman, 712 Union St., New Orleans, La.

ASSOCIATION OF EDISON ILLUMINATING COMPANIES.
Sept. 12-13. Annual meeting, Sault Ste. Marie, Mich. Secy., Wilson S. Howell, Newark, N. J.

NORTHWEST RAILWAY CLUB.
Sept. 13. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Sept. 13. Secy., Wm. H. Searles, Case Library Bldg., Cleveland, O.

NEW YORK STATE STREET RAILWAY ASSOCIATION.
Sept. 13-14. Annual meeting, Brooklyn, N. Y. Secy., H. A. Robinson, New York city.

DENVER SOCIETY OF CIVIL ENGINEERS.
Sept. 13. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

THE RAILWAY SIGNALING CLUB.
Sept. 13. Secy., Earl M. Seltz, C. & N. W. Ry., Chicago, Ill.

ENGINEERS' CLUB OF CINCINNATI.
Sept. 15. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

BROOKLYN ENGINEERS' CLUB.
Sept. 15. Secy., A. J. Prevost, Jr., 191 Montague St., Brooklyn, N. Y.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
Sept. 16. D. W. Meeker, St. Paul, Minn.

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

ENGINEERS' CLUB OF COLUMBUS.
Sept. 17. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' CLUB OF MINNEAPOLIS.
Sept. 19. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Sept. 19. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Sept. 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburgh, Pa.

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

WESTERN FOUNDRYMEN'S ASSOCIATION.
Sept. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

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

CENTRAL STATES WATER-WORKS ASSOCIATION.
Sept. 27-29. Annual meeting, Springfield, O. Secy., John Fisher, 11 Riley St., Hamilton, O.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENT.
Oct. 12. Annual meeting, Washington, D. C. Secy., D. L. Fulton, Bureau of Highways and Sewers, Allegheny, Pa.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Oct. 18. Annual meeting, Buffalo, N. Y. Secy., R. W. Raymond, P. O. Box 223, New York city.

NEW ENGLAND ROADMASTERS' ASSOCIATION.—The 16th annual meeting of this association was held at Boston, Mass., Aug. 17-18, and the program was carried out as announced in Engineering News of July 23.

THE LOUISIANA ENGINEERING SOCIETY.—A regular meeting of this society was held Aug. 8. Mr. C. H. Chamberlain, Assistant Engineer, T. & P. R. R., read an interesting paper on "Deep Bridge Foundations on the Atchafalaya River."

The society decided to apply for membership in the Association of Engineering Societies, and the Secretary was instructed to file the necessary application. An outing will be taken in September consisting of a tour of inspection of the drainage stations and canals now being constructed in and about New Orleans.

ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.—The Committee on Turntable Construction recently issued a list of questions, with the request that they be answered and returned as early as possible to Mr. Onward Bates, 1100 Old Colony Bldg., Chicago, Ill. The following are the questions:

1. How many turntables are under your care?
2. Description of your turntable? (Style and name of maker.)
3. Diameter of turntable pits?
4. Depth of pits at center?
5. Depth of pits at perimeter?
6. Diameter of circular track for balancing table?
7. Kind of foundation for center of table?
8. Kind of foundation for circular track?
9. Kind of pit walls?
10. Kind of curbing on pit walls?
11. Kind of paving in pit?
12. Method of draining pit?
13. Are any of your pits covered, and in what manner?
14. What is the length of your lougest engine from center of forward truck wheel to center of rear tender wheel?
15. What is the weight of your heaviest engine including tender, in running order, with coal and water?
16. How long a table is required to balance these engines?
17. What is the distance from center of table to end of turning lever?
18. How many men does it take to turn your heaviest engine?
19. Give following particulars of turntables:
 - (a) Deck or through girders or gallow's frame?
 - (b) Kind of centers (wheels, conical rollers, balls or pins)?
 - (c) Method of balancing and adjusting height of center?
 - (d) Number and diameter of balance wheels?
 - (e) Method of adjustment at ends?
 - (f) Kind of floor?
 - (g) Kind of latch?
 - (h) Kind of supports for rails at ends of table and on pit walls?
20. Do you have trouble with steel or iron tables rusting?
21. What kind of paint do you use on metal tables?
22. Are engines allowed to blow off steam while standing on tables?
23. Are you troubled with snow in pits?
24. Are you required to keep the tables locked when not in use, so that they cannot be turned by trespassers?
25. If you have tables turned by power, describe its application?
26. Please state your opinion as to the durability and wearing qualities of the turntables that have come under your observation?

NEW PUBLICATIONS.

STATE BOARD OF HEALTH OF MICHIGAN.—Report for the Year Ending June 30, 1896. Henry B. Baker, Lansing, Mich., Secretary. Cloth; 6 x 9 ins.; pp. CC. + 523; tables.

This report contains a vast mass of statistical information relating to meteorology, sickness and death in Michigan for the year 1895. Besides this an account is given of the detailed work of the board during 1896 and a number of papers on health matters are included.

STATE BOARD OF HEALTH OF NEW YORK.—Report for 1896. Baxter T. Smelzer, M. D., Secretary, Albany, N. Y. Cloth; 6 x 9 ins.; pp. 620; many tables and folding maps, 32 of the latter being in a separate case.

Under the laws of New York all plans for sewerage and sewage disposal systems must be presented to the State Board of Health for approval. A large part of the report before us is made up of plans and descriptions of such proposed work. Besides this there are some special reports on sewerage, water supply, garbage disposal and other subjects, and copies of the rules and regulations established by the board for the sanitary protection of certain water supplies. Most of the tables are composed of detailed mortality statistics for the state and its subdivisions.

COMMISSIONER OF EDUCATION.—Report for the Year 1896-97. Vol. I., Part I. Wm. T. Harris, Commissioner, Washington, D. C.; Pub. Doc. Cloth; pp. 1,136; tables and illustrations.

This thick volume treats of a wide range of subjects, including such diverse ones as Sunday schools and nitrifying organisms. It is a review of educational work in a variety of phases both in this country and abroad. Some of the chapter headings indicating the matter in the volume most likely to be of interest to our readers are as follows: "The Curriculum of the Land Grant Colleges;" "Requirements for Admission to the Freshman Class in Colleges, Universities and Schools of Technology;" "Entrance Requirements for Engineering Colleges;" "Some Recent Contributions of Biology, Sociology and Metallurgy to the Curriculum of Colleges Endowed by the Federal Government for the Benefit of Agriculture and the Mechanic Arts;" "Educational Directory."

EXPERIMENTAL TREE PLANTING IN THE PLAINS.—By Charles A. Keffer, Assistant Chief of the Forestry Division. Pub. Doc. Bulletin No. 18, Division of Forestry, U. S. Department of Agriculture, Washington, D. C. Paper, 8vo.; pp. 94; illustrated.

The experiments have been made to test the adaptability of various species in different regions, to develop methods of cultivation and to demonstrate forestry methods. Most of the plantations are in the Western plains, and the author discusses the advantage of such plantations as well as the conditions affecting tree growth. Reports are given of the several plantations in South Dakota, Nebraska, Kansas, Colorado, Utah and Minnesota, some of which are under the care of the state agricultural colleges.

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.)

DUMPING WAGONS.—Wm. Beckert, 340 Ohio St., Allegheny, Pa. Paper; 6 x 9 ins.; pp. 10; illustrated. This catalogue contains illustrated descriptions of dumping wagons for hauling garbage, brick, stone, gravel, dirt and other materials.

ELECTRIC GENERATORS AND MOTORS.—The Crescent Electric Machine Co., 643-647 Kent Ave., Brooklyn, N. Y. Pamph.; 9 1/2 x 5 1/2 ins.; pp. 29.

This is an illustrated pamphlet describing the types of generators and motors manufactured for special service by this company. Tables of sizes and letters from users of the "Crescent" apparatus are also included.

FIRE-PROOF AND RUST-PROOF PAINTS.—Chicago Fireproof Covering Co., Chicago, Ill. Paper, 5 x 6 1/2 ins.; pp. 8.

This pamphlet describes the results of tests made by coating iron plates with various compositions and immersing them in water for 45 and 100 days. The company's specialties are a galvanic varnish for ironwork that is submerged or exposed to acids or gases, and "asbestos-clad," which is a fireproof paint for woodwork.

FIREPROOF CONSTRUCTION.—John A. Roebling's Sons Co., New York, N. Y. Pamph.; 9 x 6 ins.; pp. 73; illustrated.

This is a very neatly gotten up pamphlet, illustrating and describing in considerable detail the different forms of fireproof floor systems, ceilings, partitions and column protections in cinder concrete and wire lath, which the John A. Roebling's Co. manufacture and erect. Tables of weights, detail specifications and other information useful to designers accompany the description of each type of construction.

RECENT BALDWIN LOCOMOTIVES.—Baldwin Locomotive Works, Philadelphia, Pa. Pamph.; 9 x 6 ins.; pp. 32; illustrated.

This is No. 6 of the series of pamphlets, which the Baldwin Locomotive Works is publishing, illustrating and describing the locomotives recently built to fill its American and foreign orders. The locomotives illustrated in this number comprise, besides several ten-wheel simple and compound engines, a four-wheeled electric mining locomotive, a six-wheeled coupled mining locomotive, a rack locomotive built for the Leopoldina Ry. of Brazil, a six-wheeled suburban locomotive, and a number of American type engines.

STEEL FREIGHT CARS.—Schoen Pressed Steel Co., Pittsburgh, Pa. Cloth; 9 x 12 ins. Not paged. Numerous full-page illustrations.

This book, which is a fine specimen of the printer's and engraver's art, contains half-tone cuts of the company's extensive shops, which cover 24 acres of ground, and of the boilers, trucks and complete cars of different styles, made entirely of pressed steel. One of the photographs is an instantaneous view of a train in motion with 35 cars loaded with iron ore, the average load in each car being 108,000 lbs. The Schoen Pressed Steel Co. began ten years ago in a small way the manufacture of pressed steel articles, to take the place of cast iron in car construction. By degrees every piece entering into a car was designed, made and perfected, and after this work was complete the manufacture of entire cars was undertaken. Already some 4,000 of these steel cars are in use, of from 80,000 to 110,000 lbs. capacity.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Table with columns: Bids to be opened, Work, Place, See Eng. News. Includes entries for sheet asphalt, coal house, business building, pipe sewers, storage dam, ventilating plant, city hall, lighthouse, school building, filling sewage beds, bridge work, sewers, electric light plant, sheet metal work, rebuilding sewer, pavements, barracks, water-works, electric light plant, pump engines, buildings, school buildings, unloading scows, grading, school building, extending power dam, road work, bridge, grading, paving, cement sidewalks, cedar block paving, asphalt paving, buildings, water-works, cemetery.

Table with columns: Date, Description, Location, See Eng. News. Includes entries for brick paving, brick paving, paving, pumping eng., macadam paving, high school building, sewers, brick paving, iron bridge, brewing plant, traveling cranes, grading, water-works, gravel roads, gas mains, pipe sewers, school building, street bonds, hospital, coal handling plant, bridge building, dredging, custom house, lavatory building, paving, grading, school building, brick paving, charity building, paving, adding to pumping station, paving, levee work, grading, pavements, electric plant, water pump, filter plant, heating, ventilating, sewerage system, drainage system, electric light plant, bridges, water-works, electric lighting, dam, wooden bridge, water gate, state road, brick paving, heating apparatus, sewers, electric lighting, brick sewer, pipe sewers, repaving, pier, street work, gas lighting, jail, hospital building, sewage pumping plant, smokeless powder, dredging, bridge, steel mill, construction materials, macadam road, brick paving, dynamo and engines, plans for market house, grading and paving, water supply, brick paving, paving brick stone, street bonds, gravel road, paving, water supply, water-works, macadamizing, electric light plant, bridge, bridge and repairs, heating, bonds, pipe sewer, street work, bridge bonds, improving road, street bonds, bridge, bridge, heating and ventilation, water-works, bridge, water tanks, sewer system, brick dormitory, court house, plumbing and heating, brick paving, granditold walks, macadam paving, bridges, dykes, rubber suction, sea walls, water bonds, school building.

Table with columns: Date, Description, Location, See Eng. News. Includes entries for bridges, brick paving, street improvements, highways, improving road, paving, water and sewer bonds, grading, lake outlet, bridge, bonds, bridge, paving, aqueduct, bridge, bridge work, Capitol building, brick sewer, repairing bridge, hospital building, enlarging court house, fire alarm system, light-house, engine, iron bridge, brick and pipe sewer, supplies, cement, storm sewer, headstones, heating and ventilating, hospital plans, jail, bridge bonds, viaduct, canal, supplies, bonds, arc lighting, monitors, school building, coal conveyors, bridge superstructure, markets, jetties, school building, city hall plans.

RAILWAYS.

BALTIMORE & OHIO.—Press reports state that this company contemplates tunneling through the heavy grade at Mt. Airy. The grade is the heaviest between Harpers Ferry and Baltimore, Md., and to make the tunnel would necessitate the expenditure of about \$1,000,000. W. T. Manning, Ch. Engr., Baltimore.

CHICAGO & WABASH VALLEY.—Benj. J. Gifford, Pres., Kankakee, Ind., informs us that the right of way has been obtained and the ties and rails secured for this proposed railway from his farm lands, mostly in Jasper county, to a connection with the Eastern Illinois Ry., a distance of about ten miles. No towns will be passed through. S. B. Hodges, Kinross, Ind.

COLUMBIA SOUTHERN.—E. E. Cooper, Ch. Engr., Wasco, Ore., informs us that the grading has been completed on this proposed railway from Wasco to Moro, Ore., 17 miles, and that five miles of track on the same has been laid. Pres., E. E. Lytle, Wasco.

EAST CAROLINA.—Work has been completed on this new line from Tarboro to Davison, N. C., and is being further extended seven miles south from Davison to Crisp. Pres., Henry Clark Bridges; Engr., W. J. Burnett, both of Tarboro, N. C.

GOLDSBORO, SNOW HILL & EASTERN.—This company was incorporated in North Carolina Aug. 15, with a capital stock of \$300,000, to construct a railway from Snow Hill, Green county, to Pantego, Beaufort county, N. C., through Greene and Pitt counties, a distance of about 60 miles. The officers are, J. W. Lynch, Pres., of Suffolk, Colonel Alexander S. Bacon, Vice-Pres., of New York; Colonel J. H. Maclear, Gen. Mgr., of Suffolk; Dr. J. T. McCormick, Treas., of New York; Director, George W. Suggs, of Snow Hill, N. C.

DELAWARE.—We are informed that this company has been organized to build a 15-mile line of railway from Delhi to Andes, N. Y., and that arrangements have been made with a strong New York corporation to handle the bonds. A contract has been made with Thomas Murray, of Plainfield, N. J., to construct the road. Strong & Totten, 125 Liberty St., New York, are associated with him in the contract, and the grading, tracklaying and bridges have been sublet to Richardson & Reed, of Owego, N. Y.; E. F. Musson, 4 Sheildon St., Norwich, N. Y., is chief engineer. Construction will begin at once, and the contract calls for completion before Jan. 1, 1899. Pres., Henry Davie, Delhi, N. Y.

HAWTHORNE, NEBAGAMON & SUPERIOR.—F. Weyerhaeuser, Chippewa Falls, Wis., informs us that this is a proposed logging railway to be built in Wisconsin for a distance of 35 miles. Grading has just been begun. No officers have yet been elected.

IOWA, MINNESOTA & NORTHERN.—This company was incorporated in Iowa Aug. 17, with a capital stock of \$200,000, with headquarters at Mason City, Ia. The officers are, Pres., A. C. Frost, Chicago; Vice-Pres., David Secor, Winnebago City, Minn.; Treas., W. E. Brice, Mason City; Secy., J. S. Linn, Clear Lake, Minn.

KANSAS, OKLAHOMA CENTRAL & SOUTHWESTERN.—J. H. Bartels, Pres., Bartlesville, Ind. Ter., informs us that 60 miles of this railway line have been located and cross-sectioned, and the right of way for the same obtained. The Toledo Construction Co. has 30 miles of the route graded and now has 270 teams at work; 60 miles will be graded by Oct. 1. It is proposed to construct the whole 350 miles of railway, from Cherryvale, Kan., to Verona, Tex., before quitting work, after which preparations will be made towards the further extension from Vernon to San Antonio, Tex.

KEARNEY & BLACK HILLS.—This railway property was sold under foreclosure at Kearney, Neb., Aug. 18, to the Union Pacific R. Co., at \$150,000. The length of the line is 65.4 miles.

LEAD BELT.—This company was incorporated in Missouri Aug. 9, with a capital stock of \$4,000, to construct and operate a standard gauge railway from the Mississippi River (at Bonne Terre R.) at Central Station to the Central Lead Co.'s plant, a distance of four miles, all in St. Fran-

cola county. The incorporators are, J. H. Bethune, Arthur Thatcher, W. E. Guy, F. H. Ludington, H. J. Cantwell, W. T. Gould and C. S. Rodgers, all of St. Louis, Mo.

LOUISVILLE, HENDERSON & ST. LOUIS.—R. N. Hudson, Ch. Engr., Cloverport, Ky., informs us that there is no immediate intention of completing the extension of this line from West Point to the present terminus, to Louisville, Ky. The grading between these points was done in 1893.

MASSACHUSETTS.—Philip D. Borden, Cy. Engr., Fall River, Mass., writes us that the railway company and the city have agreed upon a general plan for abolishing the grade-crossings in this city, and are now at work upon the details. It is not likely that any more street work will be begun before 1899.

MINNESOTA TRANSFER.—Reports state that McLeod & Co. have been awarded a contract for the construction of two miles of track, an office building, etc., to cost about \$28,000. Improvements are also contemplated at the Twin City stock yards. Pres., John R. Hastings, St. Paul, Minn.

MUSCATINE NORTH & SOUTH.—Stirling Birmingham, Vice-Pres. and Secy., 120 Broadway, New York, informs us that the surveys have been made, most of the right of way obtained and the capital secured for the construction of this railway from Muscatine to Elrick via Grandview and Wapello, Ia., a distance of about 30 miles. Contracts have been submitted to Balch, Peppard & Johnson, of Minneapolis, Minn., by the Tennis Construction Co., Pres., Edgar A. Tennis, of Philadelphia, Pa., which is building and equipping the line under contract with the railway company. About five miles have already been graded, and a connection made with the Iowa Central at Elrick. Pres., Wm. B. Stewart, 11 Broadway, New York; Ch. Engr., W. L. Willis, Wapello, Ia.

NEW YORK, NEW HAVEN & HARTFORD.—Patrick Fitzgerald, New London, Conn., is said to have received the contract for building the Groton extension of the Norwich division of the Consolidated road from the New London Navy Yard to a point 1½ miles from the Thames River drawbridge.

OHIO SOUTHERN.—Reports from Lima, O., state that the sale of this railway has been postponed from Aug. 20 until Sept. 20.

OKLAHOMA CENTRAL.—This company was incorporated in Oklahoma Aug. 15, with a capital stock of \$15,000,000. The road will run from Oklahoma City northwest through Canadian, Kingfisher, Blaine and Wood counties. It is reported that eight grading outfits, which have finished contracts on the St. Louis & Oklahoma City Ry. in Lincoln county, have gone north to Pawhuska, where they were to have begun, on Aug. 20, grading on the Kansas & Oklahoma Central from Coffeyville, Kan., to Guthrie. The incorporators are, O. P. Hamilton, Saline, Kan.; Herman Bruen, New York; Paul Cooke, Kansas City; S. C. Burrell and Phillip Koch, Watonga, Okla.; Thomas H. Davis, Saline, Kan., and McGregor Douglas, Oklahoma City.

ONTARIO & RAINY RIVER.—McKenzie & Mann, Toronto, Ont., are reported to have been awarded the contract for the construction of the first 25 miles of this proposed railway in the south central portion of Canada, near Lake Superior.

OREGON SHORT LINE.—Reports state that the construction of an extension of this railway, from Milford, Utah, to the Nevada state line is assured. J. C. O'Melveny, Ch. Engr., Salt Lake City, Utah.

ST. ANTHONY & NATIONAL PARK.—This company was incorporated in Idaho Aug. 12, with a capital stock of \$50,000, to build a railway to St. Anthony, Fremont county, a distance of 30 miles. The directors are, C. H. Moon, Pres.; S. R. Finley, Secy.; M. E. Jamison, Treas.; G. C. Baker, C. P. Bartlett and R. J. Costlett, of St. Anthony, Idaho; M. J. Kerr, of Ora, Idaho.

TEMPLE & SALADO.—C. J. Grainger, Pres., Palestine, Tex., informs us that the survey has been made and the right of way obtained for this proposed railway from Temple to Salado, Tex., 16 miles. One-half of the capital, or \$50,000, has still to be secured by the sale of 5% 20-year guarantee bonds. The company expects to begin construction work as soon as these bonds are disposed of. T. Cronin, Supt. of Construction, Palestine.

VERA CRUZ & PACIFIC.—It is announced that this company will soon be in the market for a quantity of material, as it expects to begin work about Oct. 1 on the construction of the proposed railway from Cordoba, on the Mexican Ry., southeasterly to a connection with the Tehuantepec National Ry., 200 miles. Principal offices, Calle Medinas, No. 6, Mexico City, Mexico.

WESTMORELAND JUNCTION.—This company was incorporated in Pennsylvania Aug. 22 with a capital stock of \$60,000, to construct a steam railway from North Irwin, Pa., to or near Griffiths Station on the Baltimore & Ohio R. R., a distance of five miles. The incorporators are A. Frank, Pres.; J. D. Brown, T. P. Herron, D. A. Kelley and J. Arthur Jones, all of Irwin, Pa.

STREET AND ELECTRIC RAILWAYS.

LACONIA, N. H.—At a meeting of the directors of the Laconia & Lakeport St. Ry., the following officers were elected: Harry L. Pierce, Pres.; Chas. T. Foster, Treas., both of Leominster, Mass.; Edmund Little, Clerk, of Laconia; Lewis S. Pierce, Supt., Leominster. It was also voted to proceed at once with the construction of the electric system and to raise the roof of the car house six ft., that being necessary in order to admit of the housing of the new electric cars.

MONTPELIER, VT.—F. C. Kennedy, Pres. Mad River Valley Electric R. R. Co., Burlington, Vt., informs us that the capital is now being secured for the construction of the proposed electric railway from Montpelier to Warren, via Middlesex, Moretown and Waitsfield, a distance of about 26 miles. The route is through the valley of the Mad River, with a connection with the Central Vermont R. R. at Middlesex and Montpelier, and it is expected to carry a large amount of produce to these places. The line will be built by the Burlington Construction Co., of which Mr. Kennedy is president. V. K. Nash, Ch. Engr., Woonsocket, R. I.

DEDHAM, MASS.—David Neal, Chn. of Selectmen, Dedham, informs us that the location of the Norfolk Western St. Ry. through this place, has been granted by the town and accepted by the company, and a bond of \$5,000 deposited. The proposed route is from Dedham to Medfield, via Westwood, a distance of nine miles. Pres., W. W. Metcher, Medfield, Mass.; Ch. Engrs., Hodges & Harrington, Boston, Mass.

CATSKILL, N. Y.—The Catskill Electric Ry. Co. has been granted permission by the railroad commissioners to increase its capital stock from \$30,000 to \$400,000. The line was originally built to be operated only for a distance of two miles through the streets of Catskill Village, but it is now proposed to extend to Windham and Cairo, making a line 16 miles in length.

ROCHESTER, N. Y.—The Rochester & Sodus Bay Ry. Co. was incorporated in New York, with a capital stock of \$1,000,000, as stated in our last issue under Railways, to construct a railway to be operated by other power than

steam. Thos. J. Nicholl, Pres., 267 State St., Rochester, informs us that this will be an electric line running from Webster to Sodus Point, via Sodus, Ontario, Union Hill, Williamson and Sodus, a distance of about 42 miles. The preliminary survey has been made, and most of the right of way obtained. Le Grand Brown, Ch. Engr., 267 State St., Rochester.

CRANFORD, N. J.—The township committee has postponed the public hearing on the petition of the Elizabeth & Westfield St. Ry. Co. for a franchise to build a trolley line through the township, until Sept. 12. Pres., A. A. Gaddis, Westfield, N. J.

ELIZABETH, N. J.—F. J. Hubbard, County Engr., Plainfield, N. J., informs us that the preliminary survey has been made and the right of way is now being obtained for the proposed electric railway to be built by the Elizabeth City Horse R. R. Co. between this city and Plainfield, via Cranford, Westfield and Fanwood, 12 miles, as noted in our last issue. Union county receives \$250,000 for the franchise, which sum is to be expended in the construction of a boulevard, 100 ft. wide, and work upon which is expected to begin this fall. Contracts for building the railway will be let as soon as the necessary consents are secured. John Kean, Pres., Elizabeth.

DOYLESTOWN, PA.—The Newtown Electric St. Ry. Co. was granted a franchise, Aug. 15, to construct a line through the borough on Green St. to Main St. This company proposes to extend its line from Newtown to Doylestown, via Wrightstown, Penn's Park, Wycomb, Forestville and Furlong, 13¾ miles. Pres., Thos. P. Chambers, Newtown, Pa.

HATBORO, PA.—The Hatboro & Horsham Electric Ry. Co. was incorporated, Aug. 18, to construct a trolley line between the towns named, a distance of 1¼ miles. The directors are: James Crawford, Alfred R. Gandy and Magnus Heilmann, Pres., all of Philadelphia; S. Edward Hagar, Doylestown; John B. Peddle, Woodbury, N. J.

PHILADELPHIA, PA.—It is reported that the Southwestern Passenger Ry. Co., which received a franchise in April to construct a line through that portion of Philadelphia lying between Moyamensing Ave. and the county line, has begun the work of track laying. The road will start at Otsego and Mifflin Sts. to Jackson and 5th Sts., to Moyamensing Ave., to Penrose Ferry Road, to Schuylkill Bridge, thence across the bridge to State Island Road and Bow Creek, to the county line. It is said that the road will be constructed on the most approved plan. Pres., Edgar A. Tennis.

STROUDSBURG, PA.—Frank H. Smith, Pres., Stroudsburg, informs us that the Stroudsburg Passenger Ry. Co. expects to change the motive power on its 2¼ miles of railway between Stroudsburg and East Stroudsburg from steam to electricity. An extension, two miles in length, is contemplated. No contracts will be let, but the work will be done by the company.

WASHINGTON, D. C.—The Ferguson Contracting Co., 69 Wall St., New York, has been awarded the contract for constructing the remaining section of the Washington & Chesapeake Beach R. R., 15 miles in length. Work will begin at once and be completed by Jan. 1.

ELLICOTT CITY, MD.—Reports state that the final arrangements for the completion of the electric railway between Ellicott City and Baltimore, which have been so long interfered with by financial troubles, have now reached a point that gives assurance of the success of the enterprise. Mr. Yakel, the president of the Columbia & Maryland Ry. before its purchase by the Consolidated Ry. Co., is interested.

HAGERSTOWN, MD.—We are informed that the Hagerstown Electric Ry. Co. is building a large engine and boiler house, the structural steel work for which will be erected by the North Penn Iron Co., North Penn Junction, Philadelphia, Pa.

ERLANGER, KY.—L. Morelli, A. Victor and D. Riggs have been appointed a committee by Erlanger to solicit \$12,000 in subscriptions for the electric line which it is proposed to build from Erlanger to Ludlow.

CLEVELAND, O.—The county commissioners, Aug. 17, granted a five-year franchise to the Cleveland Electric Ry. Co. to extend the Cedar Ave. line on the Coventry Road.

DUNKIRK, IND.—It is reported that the contract for building an electric railway between Redkey and Dunkirk for the Dunkirk & Redkey Traction Co., whose incorporation was noted in our last issue, has been awarded to the Electrical Installation Co., of New York and Chicago, and that the work is to be commenced at once and completed by Nov. 15. The line will probably be extended to Pennville.

MICHIGAN CITY, IND.—The Northern Traction Co. was incorporated in Indiana Aug. 19, with a capital stock of \$150,000, to build an electric railway from Michigan City to Laporte. The incorporators are: John W. Lovett, W. W. Huffman, W. E. and C. W. Hooven and George Nichol.

DURAND, MICH.—The council granted a franchise to the Long Lake, Durand & Corunna Electric St. Ry. Co., Aug. 12, for the construction of a line from Corunna through Durand to Long Lake, and thence to Detroit. The power house and car barns are to be located here. Wm. E. Avery, of Detroit, is at the head of the company.

JACKSON, MICH.—Reports state that a decree has been entered in the circuit court ordering the sale of the street railway, naming the time after Aug. 31, to satisfy the mortgage held by the Fidelity Loan & Trust Co., amounting to \$171,830. The property has been in the hands of a receiver for the past year.

SAGINAW, MICH.—The Saginaw & Frankenmuth Ry. Co. has been incorporated, with a capital stock of \$50,000, to build an electric line between Saginaw and Frankenmuth, a distance of 14 miles. The officers are: James B. Peter, Pres.; H. C. Potter, Jr., Treas.; S. G. Higgins, Secy., all of Saginaw.

OREGON CITY, ORE.—Reports state that W. R. Burghard, representing capitalists who desire to build an electric railway from Oregon City to a point on the High and Road 8 miles east of the Willamette River, has petitioned the county court for a franchise to build the line. The court is said to be in favor of granting the franchise, but has postponed action until next month.

MONTREY, CAL.—The Monterey & Pacific Grove St. Ry. Co. is contemplating the project of running its cars by an improved system that will greatly lessen the time of trip between the two towns. The line is now operated by horse-power. Mgr., Juan Malarin.

ELECTRIC LIGHT AND POWER.

WATERVILLE, ME.—The Union Gas & Electric Co. has commenced work upon its water power of the Messalonskee River where Bushey & Son will put in a stone dam which will furnish about 1,000 HP., for which it is reported a manufacturing concern doing a large business and giving employment to 1,000 men is negotiating.

MYSTIC, CONN.—Bids will be asked about Sept. 1 for constructing a plant to cost about \$25,000 for the Mystic Electric Light & Gas Co. We are informed that the plant

will have arc and incandescent lights, 150-HP. steam plant with engine, and 15,000 light alternator, line, poles, etc. Nyc contracts have been let yet. The plant will light Mystic and Stonington. Thos. C. Perkins, Gen. Mgr. and Des. Engr., Hartford (not Danforth), Conn., as stated last week.

ATLANTIC CITY, N. J.—The council is reported to have adopted an ordinance giving to John H. Rothermel & Co., Reading, Pa., the franchise for constructing and operating an electric light plant in this city. The Rothermel Company was recently awarded a 5-year contract for furnishing the electric lights for the entire city at \$105 a year.

COLUMBIA, PA.—It is stated that the engineer of the Martie Water & Power Co., which intends rebuilding the dam, is making surveys at the foot of Walnut St. It is probable that the power house for generating electricity will be located on the Wrightsville side of the river.

LANSLOWNE, PA.—Bids are asked until Sept. 2 for lighting the streets with electricity for one or five years from Oct. 1. H. L. Warren, Secy., P. O. Box 275.

NORRISTOWN, PA.—Local papers state that a proposition is being considered to build a plant near the dams of the John Hancock Ice Co., one of them at Greenlane, the other three-fourths of a mile higher up this stream, covering 40 acres, the latter having been constructed a year ago. At a cost of about \$12,000, a plant could be erected, which would furnish light to Greenlane, East Greenville, Pennsburg, Red Hill and Sumneytown.

ROYERSFORD, PA.—The council is reported to have awarded the contract for lighting the borough to the Schuylkill Valley Electric Lighting Co., of Phoenixville, the present contractors. The committee will place additional arc lights in the borough.

HAGERSTOWN, MD.—Press reports state that the contract for the erection of a new power house in Hagerstown has been let to the Conococheague Brick Co., Williamsport, Md., operated by Victor Cushman & Sons.

OAKLAND, MD.—It is reported that arrangements are being made for the proposed municipal plant to cost \$14,000.

NEWPORT NEWS, VA.—Local papers state that W. J. Payne, Richmond, Va., who has just purchased the plant of the Chesapeake Light & Power Co., will soon begin to make a number of improvements to it. Gen. Mgr. and Secy., Segar Whiting.

WINCHESTER, VA.—Bids will probably soon be asked for building a plant of two 50-light arc dynamos of 2,000 c. p.; 71 arc lights of 2,000 c. p. The foundations for the dynamos are to be erected by the city. Wm. R. Willis, Secy. Com.

CHARLESTON, W. VA.—It is reported that the Wilson Aluminum Co., which was chartered some years ago, and which purchased the land on each side of the Kanawha River at Kanawha Falls, began Aug. 23 to construct a water power plant to generate electricity for manufacturing plants in the Kanawha Valley.

EDENTON, N. C.—W. D. Pruden, R. F. Cheshire and others, of the Edenton Cotton Mills Co., organized recently, are in the market for a plant as part of the equipment of the new cotton mill to be erected at this place at once.

BENNETTSVILLE, S. C.—D. D. McCall, G. S. McCall and others, of the new cotton mill company organized recently to build a manufacturing plant, will soon purchase a light plant for the mill.

COLUMBUS, GA.—The Columbus Power Co. has awarded the contract for building the power plant to Hathaway, Jones & Co., Baltimore, Md., at about \$115,000.

TALLAHASSEE, FLA.—The council is considering the question of building a plant, according to reports.

FULTON, KY.—The plant of the Fulton Electric Light & Power Co., it is reported, will be extended. Supt., F. Carden.

MINSTER, O.—August Schunds, Village Clk., writes us that the following contracts were let Aug. 16 for furnishing and erecting the plant: Boiler and engine, Minster Machine Co., Minster, \$2,495; dynamos, switchboard, etc., F. Bissell & Co., Toledo, O., \$1,485; poles, wire, etc., Ambros Construction Co., Cleveland, O., \$3,250.

CHURUBUSCO, IND.—The Seckner Contracting Co., The Rookery, Chicago, has been awarded the contract for building a plant and water-works at \$18,500. Secy. and Treas., J. H. Brown, Chicago.

EVANSVILLE, IND.—The council has decided to levy a tax for the proposed municipal plant. W. M. Akin, Jr., Mayor.

MIDDLETOWN, IND.—A franchise has been granted for a plant to cost about \$5,000.

VEEDERSBURG, IND.—The contract for building a plant and water-works at Veedersburg has been let to the Seckner Contracting Co., 351 The Rookery, Chicago, Ill., at \$26,950. J. H. Brown, Secy. and Treas.

DECATUR, MICH.—Bids are asked until Sept. 6 for furnishing and building a plant. Engr., Geo. S. Pierson, Kalamazoo, Mich.; Clk., E. J. Rawson.

MOUNT PLEASANT, MICH.—R. S. Graham, Supt. Indian School, writes us that the specifications for the proposed plant, with a capacity of 8 arc and 350 incandescent lights, have not yet been issued.

SAULT STE. MARIE, MICH.—The American Lake Superior Power Co. has let the following contracts for furnishing the materials and for building the proposed power plant, as advertised in Engineering News: E. D. Smith & Co., Philadelphia, all the rock and earth excavation, known as sections 1, 2 and 3; total, about \$1,000,000; Mason, Hoge & Co., Chicago, power house and forebay section; total, about \$500,000; H. W. Hubbell & Co., Saginaw, intake section, dredging, \$80,000. There are other contracts connected with the enterprise that will make the total cost of construction \$2,000,000 in round numbers, and may exceed that sum. The turbines for the power house will alone cost about \$300,000. Ch. Engr., H. von Schon, Sault Ste. Marie.

GRAND RAPIDS, WIS.—E. W. Orblson, Des. Engr., Appleton, Wis., writes us that bids for the proposed plant for the Consolidated Water Power Co., noted last week under Grand Rapids, Mich., will be received in the early spring. The land along the Wisconsin River for a distance of three miles has been secured by the company. The dam will cost about \$80,000, and will furnish 6,000 HP. The power will be used for various purposes. N. Johnson and J. D. Walter, Grand Rapids, Wis., are in charge of the contemplated work.

GAYLORD, MINN.—We are informed that Triumph Electric Co., Chicago, has been awarded the contract for furnishing the dynamos, etc., and that A. I. Ide & Son, Fort Wayne, Ind., has been awarded the contract for the engine and steam plant. The other bidders were the General Electric Co., Schenectady, N. Y.; Fort Wayne Electric Corporation, Fort Wayne, Ind.; W. I. Gray & Co., Minneapolis; Twin City Iron Works, Minneapolis; Westinghouse Electric Mfg. Co., Chicago.

PERHAM, MINN.—This place is reported to have voted to issue bonds for a plant.

WATERTOWN, S. DAK.—O. M. Kislin & Co. have been awarded a franchise for lighting this city with electricity.

MASON, TEX.—L. Gengenheim, president of the new electric light company, writes that the contract for the plant has been let to W. G. Schuwirth & Co., San Antonio, Tex.

OAKLAND, CAL.—H. S. Bullock has been granted a franchise for a plant on Sutter Creek and a line into Alameda county and Oakland.

SAN FRANCISCO, CAL.—The Merchants' Association of San Francisco is considering the question of a municipal plant. The sum of \$250 has been set aside for the committee on public affairs to employ experts and devise means whereby the city can acquire its own lighting plant.

IDAHO FALLS, IDAHO.—This place voted Aug. 9 not to issue \$5,000 in bonds for a plant.

QUEBEC, QUE.—Press reports state that the American company which is going to develop the water power of the Jacques Carder River for electric light and power purposes for the benefit of this city in opposition to the Montmorency company, has acquired the chartered rights as regards Quebec of the Standard Light & Power Co., Montreal. It has a capital of \$500,000. Pres., Emerson McMillan, of the banking firm of Emerson McMillan & Co., Wall St., New York.

BARRIE, ONT.—This place voted Aug. 16 to build a municipal plant at a cost of about \$35,000. E. Downell, Town Clk. and Treas.

ROCHDALE, ENGLAND.—Bids are asked until Sept. 6 for furnishing and building a plant. Jas. Leach, Town Clk.

BRIDGES.

HERKIMER, N.Y.—The town board has annulled the contract made with the Oswego Bridge Co., Oswego, N. Y., to build the bridge over West Canada Creek in this place for \$7,500, according to reports. New bids will be called for shortly. Commissioner Cross may be addressed.

MOUNT VERNON, N. Y.—M. J. Donlon, Highway Comr. of Pelham, N. Y., has been appointed a committee to procure estimates for the construction of the proposed new bridge between this city and Pelham, according to report.

UTICA, N. Y.—The Half-Way bridge has been declared unsafe for the passing over of the Belt Line Co.'s electric cars, and will probably be replaced by a new one, according to report.

JERSEY CITY, N. J.—Work has been begun in tearing down the old Pacific Ave. bridge. W. G. Triest, 39 Cortlandt St., New York, has the contract to build the new one.

NEW BRUNSWICK, N. J.—Permission has been granted the Brunswick Traction Co. to erect an additional bridge 10 ft. wide at its own expense adjoining the Green Brook bridge. Edward H. Kadel, Secy. Brunswick Traction Co.

PATERSON, N. J.—A new stone arch or steel arch bridge is projected to replace the present one at Main St. over the Passaic River. It will be 40 ft. wide, including 7-ft. sidewalks, and plans are asked for until Aug. 25 by the freeholders.

CONNELLSVILLE, PA.—Permission has been granted to the Youghiogheny Bridge Co. to erect a bridge in Main St., according to report.

HARRISBURG, PA.—It is reported that a new bridge will be erected over the Conococheague, between St. Thomas and Antrim townships.

NORRISTOWN, PA.—The following contracts have been awarded by the county commissioner: Sparks & Evans, stone bridge over Saw Mill Run, \$6,995; Philadelphia Bridge Works, iron bridge over Manatowney Creek, at Pottstown, \$3,062; Patton & Evans, masonry of same, \$3,516; Schuykill Bridge Works, iron bridge over Perkiomen Creek, at Godshall's Mill, \$1,875; Willoughby H. Smith, masonry of same, \$1,435; Schuykill Bridge Works, iron bridge over Perkiomen Creek, at Yerkes, \$3,375; Patton & Evans, masonry of same, at \$4.77 per cu. yd.; W. H. Smith, masonry of bridge over the same creek at Palm Station, \$1,442.

PHILADELPHIA, PA.—Chas. Nolan received the contract Aug. 19 for the masonry and the Phoenix Bridge Co. for the iron superstructure of the new bridge over Cedar and Richmond branches of the Philadelphia & Reading Rys. H. K. Nichols, Ch. Engr.—Sparks & Evans have received the contract, according to report, for the erection of the Van Kirk St. bridge on the New York division of the Pennsylvania R. R. W. A. Pratt, Engr. of Bridges.

PITTSBURG, PA.—The Schultz Bridge & Iron Co., McKees Rocks, Pa., was given the contract, Aug. 16, according to report, to remove the Schenley Park bridge, at \$60 and the material of the structure.

WARREN, PA.—Bids are asked until Sept. 12 for the construction of a bridge across the mill-race on Pennsylvania Ave. Plans are also desired for the same until Sept. 7. L. T. Borchers, Chn. Bridge Comrs.; A. Rogers, Engr.

ANNAPOLIS, MD.—The Structural Iron Co., Baltimore, has been given the contract at \$2,700, to construct the draw of the Severn River bridge, according to report. W. J. Sauer, Secy. and Treas.

BALTIMORE, MD.—The Wrought Iron Bridge Co., Canton, O., was awarded the contract Aug. 17, to build two bridges over Charles Run, at Monkton Mills, at a cost of \$724 and \$748. The contract for the masonry work on both bridges was given to John T. Diven for \$932. W. H. Mays, Supt. of Bridges.

NEWPORT NEWS, VA.—Bids are asked until Sept. 6 for the purchase of \$40,000 bridge bonds; check, \$1,000. J. A. Massie, Cy. Clk.

CHARLESTON, S.C.—Maj. E. H. Ruffner Corps of Engrs., U. S. A., will give a public hearing Aug. 25, on the application of the Wappoo Bridge Co. to build a bridge across Wappoo Cut.

WHITE SPRINGS, FLA.—Bids are desired on the construction of a 125-ft. bridge of wood or iron, on tubular abutments 32 ft. high. Address, C. F. Cone, White Springs.

JACKSON, MISS.—A. A. Falke has been awarded the contract at \$33,961 to build a brick arch bridge on Capitol St., according to report.

NATCHITOCHES, LA.—Bids are asked until Sept. 15 by the police jury for the construction of an iron bridge across Johnson Cbute. Geo. W. Kline, Pres. Police Jury.

DAYTON, TENN.—The county commissioners are reported to be preparing to let the contract for a steel bridge over Little Richland Creek, at Allen's Mill, according to report.

LEXINGTON, KY.—Bids are asked until Sept. 1 for the construction of a 50-ft. wooden bridge. J. K. Gray, Comr.

CHILLICOTHE, O.—The county commissioners have decided to readvertise for bids for the construction of the iron bridge over the Scioto River, the contract for which had been let to the King Bridge Co., Cleveland.

COLUMBUS, O.—Bids are asked until Sept. 13 for 15,000 cu. yds. of fill and embankment and 1,815 cu. yds. of gravel top dressing on the approaches of the Clinkenger bridge,

Also for 260 perch of limestone masonry, 48 lin. ft. new limestone wheelcourses, 875 cu. yds. of excavation, 700 cu. yds. of fill and back fill, 2,250 ft. B. M. white oak lumber, 3,232 lbs. steel I beams, etc., for the rebuilding of a bridge over a run on the Amly pike. W. H. Halliday, Clk. County Comrs.

CINCINNATI, O.—Separate bids are asked until Sept. 20 for the construction of masonry and of the superstructure of a steel railway viaduct across the valley of Lick Run, east of the Little Miami River; bond, \$500, with each bid. Aug. Herrmann, Pres. Water-Wks. Comrs.

LIMA, O.—Bids are asked until Sept. 12 for the construction of a bridge over the Ottawa River in Sugar Creek township. J. C. Cronley, County Engr.

GRAND RAPIDS, MICH.—E. H. Barnes, Res. Engr., writes us that the contract for the masonry of the new 105-ft. plate girder bridge to be built over the Muskegon River, near Upper Big Rapids, at a cost of \$21,000, has been given to H. W. Tapp, Fort Wayne, Ind., and the contract for the superstructure to the Detroit Bridge & Iron Works, Detroit, Mich.

BARABOO, WIS.—W. G. Kirchhoffer, Cy. Engr., is reported to have made a survey and to be at work upon plans for a large iron bridge to be constructed across the Baraboo River at Elroy.

OSHKOSH, WIS.—Oscar Sanne, Engr., Milwaukee, writes us that the contracts for the steel bridge to be erected at this place were not let, as the bids were too high and not in conformity with the engineer's estimate. Bids are again asked until Sept. 6.

ALMA, NEB.—The following bids were received Aug. 9 for constructing nine county bridges: Canton Bridge Co., Canton (accepted), \$3,365; Missouri Valley Bridge Co., Leavenworth, Kan., \$3,500; Elizabeth Bridge Co., Elizabeth, Ill., \$3,450; Geo. E. King, Des Moines, Ia., \$3,400; Wrought Iron Bridge Co., Canton, O., \$3,415; A. McLouth, McLouth, Kas., \$3,600; Sbeely Bridge Co., Lincoln, Neb., \$3,440; Marsh Bridge Co., Lincoln, Neb., \$3,560; Parks Bridge Co., Cedar Rapids, Ia., \$3,440; St. Louis Iron & Bridge Works, St. Louis, Mo., \$3,412; Dildine Bridge Co., St. Louis, \$3,606; Kansas City Bridge Co., Kansas City, Mo., \$3,520; and the Stark Bridge Co., Kansas City, \$3,475. S. L. Roberts, County Clk.

WICHITA, KAN.—Bids are asked until Sept. 10 for building three steel bridges. A. M. Denny, County Clk.

MISSOULA, MONT.—O. E. Peppard, of this place, has been awarded the contract to build a 200-ft. steel bridge at Grantsdale, at a cost of \$4,025, according to report.

PRINEVILLE, ORE.—Bids are asked until Sept. 7 for the construction of a 125-ft. bridge over Grand Ronde River at Island City. G. W. Benson, Clk. County Comrs.

CALUSA, CAL.—Bids are asked until Sept. 6 for building a new bridge on Princeton road, for removing a bridge and for repairing a bridge. Geo. K. Ford, Clk. of Bd.

PLACERVILLE, CAL.—Bids are asked until Sept. 6 for the construction of a combination deck bridge over the North Fork of Cosumnes River at Wisconsin Bar. A. S. Bossuit, Clk. of Bd. of Supervisors.

WILLOWDALE, ONT.—Bids are asked until Aug. 27 for the construction of the steel superstructure of a bridge over River Rouge, consisting of two 64-ft. span, 14 ft. wide. Peter S. Gibson & Son, Willowdale, Engrs.

EDMONTON, N. W. TER.—Bids are asked until Sept. 13 for the construction of the superstructure of a railway and general traffic bridge at Edmonton; check, \$7,000. Address, E. F. E. Roy, Secy. Dept. of Pub. Wks., Ottawa.

BUILDINGS.

ST. ALBANS, VT.—Bids are asked by the supervising architect, Washington, until Sept. 19, for the steam heating and ventilating apparatus for the U. S. building in this city, as stated in our advertising columns.

BEVERLY, MASS.—The contract for the construction of a school building in this town is reported to have been let to S. R. Dexter, of Beverly, at \$39,701. Bolger & Regan received the heating contract at \$4,250.

BOSTON, MASS.—Plans are being prepared, according to reports, for a brick and stone dwelling to be erected at Beacon and Hereford Sts., for E. C. Swift, 46 Ames Bldg., at a cost of about \$75,000. Archs., McKim, Mead & White, 160 5th Ave., New York.

NORTH ADAMS, MASS.—It is reported that Porter & Harnum, of North Adams, has been awarded the contract for the erection of a \$125,000 hotel building on State St. for P. J. Boland.

ITHACA, N. Y.—Plans are stated to have been completed for the new chemical laboratory to be erected for Cornell University, to cost about \$45,000. Work is expected to begin at once, and to be completed by June, 1899.

NEW YORK, N. Y.—Bids are asked by the department of public charities, foot of East 26th St., until Aug. 30, for the materials and work required for alterations to the old building on the pier of the department, foot of East 26th St. Archs., Horgan & Slatery, 1 Madison Ave.—Plans have been filed by Levi P. Morton, for a 12-story brick office building at 110 to 116 Nassau St., to cost \$250,000. Archs., Clinton & Russell, 32 Nassau St.; by Peter Wagner, 215 West 106th St., for four 4-story brick dwellings on 95th St., west of Central Park, to cost \$80,000. Arch., G. Fred. Pelham, 503 5th Ave.; by Wm. H. Lake, Yonkers, N. Y., for five 3-story brick dwellings at 154th St. and St. Nicholas Ave., to cost \$75,000. Arch., Henri Fouchaux, 11th Ave. and 162d St.; by Bell & Groth, 81 East 125th St., for three 5 and 6-story brick flat buildings, at 3d and Boston Aves., to cost \$125,000. Arch., C. A. Millner, 81 East 125th St.; by M. L. Fane, 239 East 22d St., for a 5-story and basement brick store and loft building at 8th Ave. and 36th St., to cost \$75,000. Arch., F. P. Dinkelberg, 3 Union Square West; by Stewart & Smith, 459 Boulevard, for seven 5-story brick dwellings at 106th St. and Riverside Drive, to cost \$140,000. Arch., Clarence True; by E. B. Grigsby, for a 5-story brick and stone dwelling at 59 East 67th St., to cost \$50,000. Archs., Cable & Lucas, 1183 Broadway.—Thos. J. Reilly, 170 5th Ave., is reported to have been awarded the contract for the construction of a 11-story fireproof hotel building at 5th Ave. and 45th St., for the Matthew Byrnes Estate, to cost about \$750,000. Archs., J. O'Rourke & Sons, 7 Clinton St., Newark, N. J.

NEW YORK, N. Y.—Bids are asked by the department of charities, foot of East 26th St., until Sept. 6, for the removal of old chimney and three old boilers, erection of self-supporting steel stack, four new down-draft boilers, erection of derrick and coal yard, and certain repairs, additions and alterations to steam-heating apparatus at Alms-house, Blackwell's Island; two bonds required, \$8,000 each.—Press reports state that a 17-story brick and stone hotel building will soon be erected for a syndicate at southwest corner of Park Ave. and 42d St., to cost about \$1,000,000. Plans are now being finished. Arch., Bruce Price, 1133 Broadway.

TOMPKINSVILLE (S. I.), N. Y.—Bids are asked until Sept. 15 for erecting the Plum Beach light-house. R. L. as stated in our advertising columns. LA.—Col. D. P. Heap, U. S. Engrs.

CAMDEN, N. J.—Plans will be received by the commissioners of public instruction, at Broadway and Clinton Sts., until Aug. 30, for a new high school building to be erected at Haddon and Newton Aves. Chn., Cornelius Sheperkott.

ELIZABETH, N. J.—It is reported that plans are being prepared for a new gothic church building, 130 x 70 ft., to be erected for the Central Baptist Church on Jersey Ave. Pastor, Dr. E. T. Tomlinson; Archs., A. F. Leicht and F. T. Camp, 97 Cedar St., New York.

LONG BRANCH, N. J.—At the election held in this city Aug. 16 it was voted to appropriate \$45,000 for the erection of a new high school building.

PATERSON, N. J.—The following bids were received by the supervising architect, Washington, D. C., Aug. 22, for a low pressure, return circulation, steam heating and ventilating apparatus for the post-office building at Paterson: Edward Joy, Syracuse, N. Y., \$6,500 3 mos. Frank Dohson, New York, 7,335 90 days. Evans, Almiral & Co., New York, 6,723 90 days. Borges Bros. & Co., Columbus, O., 5,344 90 days. D. R. Burns, Philadelphia, Pa., 5,980 90 days. Jno. F. Dalton, Savannah, Ga., 5,335 90 days. McIlvain, Unkefer & Co., Pittsburg, Pa., 6,187 90 days. Gaylord & Eitapence, Binghamton, N. Y., 5,960 90 days. Blake & Williams, New York, 6,596 90 days. Phila. Heating & Vent. Co., Phila., Pa., 7,939 9 weeks. E. Rutzler, New York, 7,345 75 days. A. A. Sanborn, Boston, Mass., 6,672 *Working days.

LANCASTER, PA.—McLaughlin & Gersell, 220 East Walnut St., Lancaster, have received the contract for the construction of a building for the Lancaster Insane Asylum, at \$71,956, according to reports.

PITTSBURG, PA.—The Central Methodist Episcopal Church, of which Dr. C. E. Mogy is pastor, contemplates the erection of a new church building at Academy and Franklin Sts., on property recently purchased.

VILLA NOVA, PA.—It is reported that the preliminary work for the erection of new monastery and college buildings at this place will begin next month; total estimated cost, \$250,000 to \$300,000.

WOODVILLE, PA.—The following bids were received by the commissioners of Allegheny county Aug. 16 for the construction of the new insane asylum building at the county home: John H. Trimble & Bros., \$241,900; William Kerr & Sons, \$240,000; H. L. Kreusler, \$239,900; George A. Cochrane, \$238,814; W. F. Trimble & Son, \$238,000; Deeds Bros., \$237,000; Roas & Fisher, \$236,000; Kerr & Fox, \$235,971; Murphy & Hamilton, \$234,950; D. P. Osterling, \$231,000; Jackson & Fulton, \$228,450; A. & S. Wilson, \$225,877; McIlvain, Unkefer & Co., \$223,700. On the former set of bids received Aug. 3, D. P. Osterling was the lowest bidder, at \$237,600. The contract was let to A. & S. Wilson, of Pittsburg, Pa.

WASHINGTON, D. C.—The following bids have been received by the district commissioners for the construction of an additional story to police station No. 8 U. S. St., between 9th and 10th Sts. N. W.: George W. Corbett, \$3,411; N. H. Thomas & Son, \$5,370; Pavanini & Greer, \$5,100; J. M. Dunn, \$4,900.

BALTIMORE, MD.—The following bids were received by the supervising architect, Aug. 22, for modifications and repairs to the heating and ventilating apparatus, etc., of the U. S. building at Baltimore: Wells & Newton Co., Baltimore, Md., \$2,475, 6 days; Crookborner & Co., Baltimore, Md., \$1,727, Sept. 15; Thos. C. Basshor & Co., Baltimore, Md., \$1,874, 30 days; Philadelphia Heating & Ventilating Co., Philadelphia, Pa., \$1,957, Sept. 25.

RALEIGH, N. C.—J. D. Elliott, Hickory, N. C., was awarded the contract Aug. 20, by the trustees of the North Carolina Institution for the Blind, for erecting a new brick dormitory at the negro department, to cost \$11,500; and also for the erection of a power house, the machinery for which is to be bought later, and a new dormitory at the white department, to cost \$45,000.

GROVE HILL, ALA.—The commissioners of Clarke county have decided to erect a \$15,000 court house.

CHAMPAIGN, ILL.—It is reported that the Illinois Central R. Co. has awarded the contract for building a new station at Champaign to Swift & Co., who are now erecting the Big Four shops in Urbana. The structure is to be patterned after the Illinois Central station at Kankakee, but will be 50 feet longer.

CHICAGO, ILL.—The Northwestern Terminal Elevator, at Market St. and the Chicago River, was destroyed by fire Aug. 20, causing a total loss of \$350,000. Of this amount \$30,000 fell upon the Chicago & Northwestern Ry. Co., whose freight yards are nearby.—The Falkenberg Construction Co., 1116 Chicago Stock Exchange, has been awarded the contract for the construction of a 6-story fireproof building, 40 x 100 ft., to be erected at 252 and 254 5th Ave., for Charles Yondorf, at a cost of about \$35,000. Arch., Dankmar Adler, 27 Auditorium Bldg.—A permit has been granted to the Illinois Central R. Co. for a 2-story brick roundhouse, 64 x 80 ft., and a 2-story machine shop to be erected at the foot of 27th St.; cost, \$50,000.

CHICAGO, ILL.—Bids are asked by the department of public works until Sept. 1 for the steam heating apparatus, including boiler, for the 47th St. police station, now being erected at 47th and Paulina Sts. Comr., L. E. McGann.—Bids are asked by the board of education, Schiller Bldg., until Aug. 26, for the sheet metal work at workshop at 161 West Monroe St.

LAHARPE, ILL.—Bids are asked until Sept. 9, according to reports, for erecting a 2-story brick school building, 77 x 75 ft., at this place, to cost about \$12,000. Archs., Geo. W. Payne & Son, Carthage, Ill.

MANITOWOC, WIS.—Bids are asked until Sept. 8 for the plumbing and steam heating in the building of St. Francis Hospital.

SPRING VALLEY, WIS.—Bids are asked by the school board until Aug. 26 for the erection of a 4-room brick school building. Address W. G. Spence, Spring Valley.

MORRIS, MINN.—Bids are asked until Sept. 7 for the erection of a brick dormitory building for the Morris Indian Industrial School. Supt., W. H. Johnson.

DES MOINES, IA.—The Capitol City Brick & Pipe Co., of Des Moines, has been awarded the contract for the construction of the west wing of the Iowa State Memorial Historical & Art building, according to reports, at \$47,651.

OMAHA, NEB.—The following bids were received by the supervising architect, Washington, D. C., Aug. 16, for two hydraulic passenger elevators, one hydraulic mail lift and one hydraulic ash lift for the U. S. Building at Omaha: Otis Crane Elevator Co., Chicago, Ill., \$10,000, 90 days; Otis Bros. & Co., New York, \$13,150, 90 days; Eaton & Prince Co., Chicago, Ill., \$10,100, 120 days.

HOT SPRINGS, ARK.—A fire in this city, Aug. 20, destroyed the National and Windsor Hotel buildings, causing a reported loss of \$75,000.

SEATTLE, WASH.—Bids are asked until Aug. 29 for constructing two houses at Point Wilson. Harry Taylor, Capt. Engrs., Burke Bldg., Seattle.

MONTREAL, QUE.—It is reported that plans are being prepared for Wm. J. McDermott, of Craig St., for a building to replace the old Irish National Hall, to cost about \$80,000.

ST. THOMAS, ONT.—Bids are asked until Sept. 7 for remodeling and enlarging the court house of Elgin county in this city. Clk., K. W. McKay; Arch., N. R. Darragh, St. Thomas.

WATER-WORKS.

AUBURN, ME.—E. S. Paul, Pres. Water Com., writes us that all the work for a better water supply is being done by the day, under the management of the superintendent of water-works.

ALEXANDRIA BAY, N. Y.—Col. O. G. Staples writes us that a special meeting to consider the question of works has been called.

AMSTERDAM, N. Y.—J. R. Snell, Supt., informs us that the city is getting bids for the following iron and vitrified pipe. The plans and specifications for dams and laying pipe, etc., are not quite ready. The quantities of pipe are as follows: 270 lengths of 24-in. iron pipe, 2,120 lbs. to length; 280 lengths of 24-in. iron pipe, 2,349 lbs. to length; 280 lengths of 24-in. iron pipe, 2,580 lbs. to length; 197 lengths of 36-in. iron pipe, 4,070 lbs. to length; 10 lengths of 16-in. iron pipe, 1,152 lbs. to length; 100 lengths of 20-in. iron pipe, 1,924 lbs. to length; 25 tons specials. All pipe to be cast bell ends down, coated by Smith process, to be good, sound castings, tested to 300 lbs. pressure; weight in total to average as above, but a limit of variation in individual pipe of 4%. All f. o. b. Amsterdam. 20% limit of variation in reducing or enlarging order. Note price for delivery beginning Sept. 1 and ending April 1, 1899; 50% to be delivered before Dec. 1. Also price for winter delivery to begin April 1 and end July 1, 1899.

BUFFALO, N. Y.—The residents of Kenmore have asked this city to supply the suburb with water.

BUFFALO, N. Y.—Bids are asked until Aug. 31 for making repairs and additions to the pumping station, to cost about \$10,000. R. G. Parsons, Secy. Bd. Pub. Wks.

DEERFIELD, N. Y.—The town board has accepted the proposition of the West Canada Creek Water Co. to supply this place with water. Secy., E. D. Mathews; Clk., P. D. Condon.

WHITESBORO, N. Y.—This place will probably soon vote on the question of building gravity works.

CALDWELL, N. J.—The Caldwell Water Co., incorporated Aug. 8 to supply this section with water, has asked the borough council for a franchise to establish works. Capital stock, \$50,000, with \$2,000 paid in. It is proposed to get a supply from driven wells, which would be at least 500 ft. in depth. The promoters of the company will meet a committee appointed by Mayor Jacobus. Pres., James Bowers; Secy. and Counsel, Walter Lindsley. M. B. Lindsley, Treas., writes us that the company proposes to supply Caldwell township of Caldwell, North Caldwell, townships of Verona and Livingston; population, 5,000.

FLEMINGTON, N. J.—The council proposes to build city works, at a cost of about \$40,000, according to reports. Edward B. Allen, Furman Williamson and Geo. H. Large are interested.

HIGHBRIDGE, N. J.—This place is considering the question of building works.

JERSEY CITY, N. J.—The street and water board received but one bid Aug. 18 for furnishing a new water supply. It was from Patrick H. Flynn, Brooklyn. He offered to furnish water by any one of three plans. The first names as the source of supply the Rockaway River, at Old Bonton, with one reservoir. The price of a million gallons varies from \$36 for 25,000,000 gallons to \$20 for 70,000,000 gallons. The price named for the completed works is \$7,505,000 for a 50,000,000 gallon pipe line, or \$8,745,000 for a 70,000,000 gallon pipe line. The second plan is the same except that it contemplates three reservoirs. The water is to be furnished by gravity at a pressure of 210 ft. above mean tide. The third bid was informal and was not considered.

SALEM, N. J.—Joseph H. Young and C. J. Young, 4618 Chester Ave., Philadelphia, have been awarded the contract for building the filtration plant of 500,000 gallons capacity at Salem, as advertised in Engineering News, Engr., C. Hungerford, 116 West 60th St., New York.

BEAVER FALLS, PA.—The People's Water Co., it is reported, will proceed with the construction of its proposed works, which was prevented during the summer by the supreme court; estimated cost, \$100,000.

EVANS CITY, PA.—Bids are asked until Aug. 29 for furnishing and laying 13,600 ft. of 4 to 8-in. water pipe, a pumping station, reservoir, a 200,000-gallon pump, a gas engine, etc. Engrs., J. P. Leaf, Rochester, Pa.; Pres. Council, Geo. Fehl.

HARRISVILLE, PA.—This place voted Aug. 23 on the question of issuing \$7,000 in bonds for works.

MILLHALL, PA.—A charter and franchise have been granted to the Millhall Water Co. The company will issue 5% bonds and start with enough takers to pay interest on bonds and running expenses. Capital wishing an investment with proper bonus can address Jas. P. Hardie, Williamsport, Pa., or Thomas Harmon, Lock Haven, Pa.

PATTON, PA.—The Patton Water Co. has asked for bids for furnishing and laying a 6-in. main in several streets. Supt., E. C. Brown.

PORT GRIFFITH, PA.—James P. Hardie, Williamsport, Pa., water-works contractor and builder, has just completed the laying of 1,150 ft. of 6-in. cast-iron pipe across the Susquehanna River, and several hundred feet on land, connecting with mains leading to the Pennsylvania Coal Co.'s breaker at Port Griffith, Pa. The river pipe was laid in four days' time with a gang of five men; average depth of water, 3½ ft. Fred. Dittmar, of Williamsport, Pa., did the calking.

CUMBERLAND, MD.—Bids are asked until Sept. 5 for furnishing 9 dozen ¾-in. corporation cocks; 9 dozen 1-in. stop; 2 dozen 1-in. cocks; 2 dozen 1-in. stop-cocks; 5,500 ft. of pipe, valves, boxes, packing, etc. H. M. Fuller, Clk.

POCOMOKE CITY, MD.—Bids are asked until Sept. 7 for furnishing and constructing works and a sewerage system, as stated in our advertising columns. Engrs., Pownall & Minshall, 150 Nassau St., New York; Mayor, R. M. Stevenson.

LURAY, VA.—The question of building works is being considered.

MARION, N. C.—J. A. McDonald, Mayor, writes us that a private company is making estimates for works; population, 5,200. J. D. Burgin, Old Fort, N. C., may be addressed.

ARLINGTON, GA.—The question of issuing bonds for works and a light plant will probably soon be voted on.

COLUMBUS, GA.—L. H. Chappell, Mayor, writes us that no plans or appropriation has yet been made for artesian wells for a new water supply. The mayor wishes to secure the services of a party who will sink the well at his own risk.

GREENSBORO, GA.—This place is reported to have voted Aug. 9 to issue \$22,000 in bonds for works. J. B. Williams, Mayor.

BESSEMER, ALA.—Councilman W. J. Long writes us that the contract for increasing the supply, enlarging reservoirs, etc., of the works of the Bessemer Water-Works Co. was recently let to Henry F. De Bardeleben at \$5,000.

DICKSON, TENN.—The question of securing a water supply from Pain Spring is being considered by the Dickson Business League.

MOUNT STERLING, KY.—The council is reported as arranging for the construction of the proposed works. Mayor, Geo. W. Baird; Chn. Com., R. M. Burbridge.

CHURUBUSCO, IND.—The Seckner Contracting Co., The Rookery, Chicago, has been awarded the contract for building works and a light plant at \$18,500.

CLARKSVILLE, IND.—Press reports state that the aldermen are making arrangements to put in a filtration plant and to improve the works at a cost of about \$25,000.

EAST CHICAGO, IND.—The contract for extending the works has been let to the Seckner Contracting Co., Chicago, at \$36,960.

EVANSVILLE, IND.—H. A. Mansfield, Indianapolis, Ind., submitted the lowest bid Aug. 15 for building the boiler house, engine house and stack at \$43,600.

LAKE ODESSA, MICH.—This place voted Aug. 16 to issue \$11,000 in bonds for works.

PAW PAW, MICH.—Wm. H. Mason, Clk., informs us that the following bids were received Aug. 17 for building works: James W. Pearl, Boston Harbor, Mich., \$16,300; T. C. Brooks & Sons, Jackson, Mich., 16,396; Alexander & Shaw, Chicago, Ill., 17,900; Kalamazoo (Mich.) Supply & Construction Co., 17,500.

CHICAGO, ILL.—Bids are asked until Sept. 1 for constructing a 7-ft. cast-iron water gate, etc., for the Chicago Ave. tunnel connection. L. E. McGann Comr. Pub. Wks. —Bids are asked until Sept. 7 for installing water tanks at the Chicago Public Library. W. B. Wickersham, Secy.

GALFVILLE, WIS.—This place is reported to have voted to build new works, to cost \$5,000.

KAUKAUNA, WIS.—C. W. Weeks & Co., Chicago, and Luther Lindauer, Kaukauna, have been awarded the contract for building the works for the Kaukauna Water-Works Co., to cost about \$75,000. The work is to be completed by Oct. 1.

OSCEOLA, IA.—J. W. Brown, Mayor, writes us that a committee has been appointed to decide upon plans for works. L. W. London, Chn. Com.

LANSBORO, MINN.—Bids are asked until Sept. 5 for furnishing and building complete works. O. M. Halberstad, Villars Bldg.

SPARTA, MINN.—Bids are asked until Sept. 9 for the purchase of \$1,750 6% water bonds. E. McHale, Pres.

SPARTA, MINN.—The Virginia Iron Works, Virginia, Minn., and Jas. Dowling, Eveleth, Minn., submitted the only bids for building works at \$7,992, and \$5,450, respectively. Clyde Bender, Recdr.

WALNUT GROVE, MINN.—This place has voted to build works to cost about \$3,500.

WAMEGO, KAN.—H. V. Hinckley, Topeka, Kan., has been engaged to prepare plans and specifications for works, and to superintend the construction.

WELLINGTON, KAN.—S. N. Brooks, Mayor, writes us that nothing definite has yet been decided upon in regard to works. The city is yet figuring on works. Population, 3,600.

TFHAMAH, NEB.—An election will soon be held to vote on the question of issuing \$2,000 in bonds for extending the works.

SIOUX FALLS, S. DAK.—It is estimated that municipal works can be built for about \$90,000.

ANACONDA, MONT.—Bids are asked until Sept. 5 for furnishing this city with a water supply for five years. About 50 hydrants are now used, but this number will be increased. T. O'Leary, Cy. Clk.

ST. JOSEPH, MO.—J. R. Rackliffe, Cy. Engr., writes us that the city is ready to make a contract for the construction of the proposed new works, under either private or municipal ownership. The works will include two low-service pumps of 8,000,000 gallons each; three high-pressure of 5, 8 and 10,000,000 gallons capacity; a stand-pipe, three settling basins, a filter with a capacity of 15,000,000 gallons, 11,000 tons of iron pipe, 600 hydrants, 225 tons of special castings, 500 valves, and a number of meters; estimated cost, \$800,000.

WICHITA FALLS, TEX.—Chas. Carrol, Sedalla, Mo., has applied for a franchise for works and a light plant.

FLORENCE, COLO.—Hiram Phillips, Oriol Bldg., St. Louis, Mo., has been engaged to prepare plans for works. The source of supply is Newton Creek Canon, about 11 miles distant, and 2,500 ft. above the city. The plans will be completed about Oct. 1, and the proposition to issue bonds will then be voted on. Estimated cost, \$100,000.

FOSSIL, ORE.—The council will probably soon begin the construction of the proposed works, to cost about \$6,000.

MEDFORD, ORE.—A committee has been appointed to consider the advisability of building a reservoir and of enlarging the works.

PORTLAND, ORE.—Residents of Woodstock and Ivanhoe are circulating petitions to have the Bull Run main tapped. It is estimated that a 4-in. pipe would supply the present demands, and it is proposed to bring the line from the main connected with the upper reservoir along the Milwaukee Road for a distance of two miles. From this line the Ivanhoe and Woodstock pipe systems may be connected and residents supplied.

STENT, CAL.—The question of securing a water supply from one of the nearby cities is being considered.

WHITTIER, CAL.—The question of issuing \$40,000 in bonds for new city works is being considered.

FARMINGTON, UTAH.—E. A. Vail writes us that this village is having plans prepared for works which it is expected to build this year. There will be required about 6,500 ft. of 16-in. pipe and 2½ miles of smaller pipe.

IDAHO FALLS, IDAHO.—At the election held Aug. 9 this place voted a tie on the question of issuing \$20,000 in bonds for works.

ATWOOD, ONT.—The "Bee" is urging the construction of works for fire protection.

PRESCOTT, ONT.—This place voted Aug. 18 to build works.

WINNIPEG, MAN.—Owing to arrangements not being completed, bids will not be opened Sept. 6 for a system of wells and pumping plant, as advertised in our issues of Aug. 11 and 18. H. N. Rutian, Cy. Engr.; C. J. Brown, Cy. Clk.

BIRMINGHAM, ENGLAND.—Bids are asked until Sept. 13 for building 17¼ miles of the aqueduct from Cleobury Mortimer to Hagley. The contract consists principally of providing and laying two lines of cast-iron pipe and laying only two lines of steel pipe, 41 ins. in diameter. Engr., Jas. Mansergh, 5 Victoria St., Westminster, London; Town Clk., Edward Orford Smith.

SEWERAGE.

BOSTON, MASS.—The following bids were received Aug. 18 for building brick and pipe surface drain in Seiden St. passageway and Capen St., Dorchester. T. H. Connolly, \$8,531; J. P. O'Connell, \$10,501; Collins & Ham, \$11,358; T. H. & G. W. Byrne, \$12,117; J. J. Falvey, \$12,317; D. E. Lynch, \$12,933; Jones & Meahan, \$13,570; H. P. Nawo, \$14,457.

CLINTON, MASS.—Bids are asked by the Metropolitan Water Board, 3 Mount Vernon St., Boston, until Sept. 1 for constructing sections one and two of the system, as stated in our advertising columns. Wm. N. Davenport, Secy.

EVERETT, MASS.—The council has appropriated \$10,000 for a sewer in Hendersonville.

SPRINGFIELD, MASS.—The council is arranging to construct a sewer in Worthington St., at a cost of about \$15,000.

BUFFALO, N. Y.—Bids are asked until Sept. 2 for constructing 63 to 44-in. brick sewers in Hampshire St., and for a 12-in. pipe sewer in Kenmore Ave. R. G. Parsons, Secy. Bd. Pub. Wks.

DUNKIRK, N. Y.—Bids are asked until Sept. 6 for building a 15-in. pipe sewer in Railroad Ave. W. C. Baugartner, Cy. Clk.

OSWEGO, N. Y.—The board of health has asked the city engineer to prepare plans for a sewer in East Bridge St., to cost about \$1,200.

NEWARK, N. J.—The board of works has published notices of intention to build the proposed brick and pipe main sewer in Clinton Ave. from Chadwick Ave. to Clinton Place, with laterals in a number of streets, and for 10 and 8-in. sewers in about 20 streets to connect with the East Branch intercepting sewer.

WOODBIDGE, N. J.—Press reports state that bids will be asked by the township committee at once for building a portion of the proposed system. Des. Engr., C. C. Hommann.

MANSFIELD, PA.—Councils are reported to have voted to begin at once the construction of 15 to 10-in. pipe sewers for the proposed system.

McKEE'S ROCKS, PA.—E. F. Hughes has been awarded the contract at \$5,000 for building certain sewers.

OAKMONT, PA.—This place has voted to issue \$37,000 in bonds for local improvements; of this amount \$21,000 will be for sewers and \$16,000 for streets.

PHILADELPHIA, PA.—The residents of the 17th, 18th and 20th Wards are agitating the question of larger sewers in that section of the city.

SHERADEN (ALLEGHENY COUNTY) PA.—This place has voted to spend \$8,000 for sewers and \$8,000 for streets.

POCOMOKE CITY, MD.—Bids are asked until Sept. 7 for furnishing the materials and for constructing a system and water-works, as stated in our advertising columns. Engrs., Pownall & Minshall, 150 Nassau St., New York; Mayor, R. M. Stevenson.

RICHMOND, VA.—W. E. Cutshaw, Cy. Engr., writes us that the committee on streets will hear allegations for the construction of certain sewers, after which its recommendations will be submitted to the council for action. It is probable that bids will be asked about the middle of September.

GAINESVILLE, GA.—Survey and estimates for a system, it is reported, will soon be made.

NASHVILLE, TENN.—The city engineer has asked for bids for building a 10-in. pipe sewer in Public Square.

HENDERSON, KY.—Bids are asked until Sept. 6 for constructing a sewer in Washington St. W. I. Thompson, Mayor.

MANSFIELD, O.—Bids are asked until Sept. 17 for building a 30 and 27-in. storm water sewer in certain streets. J. C. Burns, Chn. Com.

TIFFIN, O.—Bids are asked until Sept. 5 for changing the main sewer in the 4th ward. J. B. Ehrenfeld, Cy. Clk.

YOUNGSTOWN, O.—Bids are asked until Sept. 5 for the purchase of sewer bonds. F. C. Brown, Clk.

CICERO, IND.—Bids are asked until Aug. 27 for constructing a sewer in Spring St. G. J. Holl, Town Clk.

KOKOMO, IND.—The council is reported by local papers to have voted to build a 4-ft. brick sewer in Union St.

RICHMOND, IND.—Bids are asked until Sept. 16 for building the North E St. brick and pipe trunk sewer to be 2,500 ft. long; bond, \$10,000. J. H. Winder, Clk.; H. L. Weber, Cy. Engr.

COLDWATER, MICH.—Bids are asked until Sept. 1 for building 18 to 10-in. pipe sewer, etc., in certain streets, to cost about \$900, and for paving to cost about \$9,000. We are informed that the bids received for this work Aug. 16 were rejected. P. H. Sweeney, Clk.

LAURUM, MICH.—This place, which voted July 23 to issue \$35,000 in bonds for a system, will probably ask for bids in December for the construction. Des. Engr., Chas. F. Loweth, 94 E. 4th Ave., Minneapolis, Minn.; Clk., Jos. R. Murphy.

OWOSSO, MICH.—The city engineer writes us that it is proposed to build a mile of 24 to 8-in. pipe sewer at a cost of \$5,500. Des. Engr., H. E. Riggs, The Nashby, Toledo.

KENOSHA, WIS.—Bids are asked by the city clerk for constructing 50 catchbasins.

RACINE, WIS.—It has been decided to build a sewer in 16th St. at a cost of about \$4,000.

WAUKESHA, WIS.—Bids are asked until Sept. 2 for furnishing the material and constructing pipe sewers in certain streets. H. E. Blair, Cy. Comptroller.

SOUTH OMAHA, NEB.—It is proposed to build sewers in certain streets in South Omaha.

ANACONDA, MONT.—Patrick Walsh has been awarded the contract for building sewers in Districts 7, 8, 10 and 11, at \$4,630.

DENTON, TEX.—This place is reported as considering the question of building a system.

SAN SABA, TEX.—Bids are asked until Sept. 1 for constructing a sewer to the river; check, \$500. Jno. Seiders, County Judge.

INDEPENDENCE, MO.—Andrew Rosewater, Bee Bldg., Omaha, is reported to have recommended a system which will collect the sewage of the city at two or more points and dispose of it in air-tight tanks and by filtration. Estimated cost of two stations, \$35,000; estimated cost of main sewers inside the city limits, \$40,000. Mr. Rosewater's plan is for the city to issue \$75,000 in bonds, build

the plant for disposing of sewage and all the sewers necessary in the city. The council will take the report under consideration and probably call a special election.

ST. LOUIS, MO.—Bids are asked until Aug. 26 for reconstructing about 1,025 ft. of the bottom of the Mill Creek main sewer. B. H. Colby, Sewer Comr., 311 New City Hall.

GRASS VALLEY, CAL.—The city trustees will probably soon call an election to vote on the question of building a system.

CHARLOTTETOWN, P. E. I.—The council is reported as arranging for the construction of the proposed system, for which \$50,000 in bonds will be issued at once. Two sewage pumping stations will be built.

MONTREAL, QUE.—The aldermen are considering the question of the better disposal of the sewage. T. J. O'Neill, Secy. Road Com., and Aldermen Dupre and Wilson may be addressed.

GARBAGE DISPOSAL—STREET CLEANING

PORTCHESTER, N. Y.—The question of a better method for the disposal of the garbage, waste, etc., is being considered, according to reports.

HAZLETON, PA.—The council is considering the question of garbage collection, etc. Councilman Ferry may be addressed.

KNOXVILLE, TENN.—The question of building a plant is being considered, according to reports.

BAY CITY, MICH.—The question of securing a garbage disposal plant is being considered.

LOS ANGELES, CAL.—The council will ask for bids at once for sweeping the streets. Bids will be asked under three specifications. The first provides for the sweeping of the business section by machines; the second for the sweeping of the business district by hand, and the third provides for sweeping of that portion of the city outside the given business area by machines.

STREETS AND ROADS.

PORTLAND, ME.—The county commissioners received the following bids Aug. 15 for paving the approach of Portland bridge, as noted in our issue of Aug. 11: W. L. White labor, \$6,811; material, \$4,521; Maine & New Hampshire Granite Co., labor, \$2,136, material, \$4,279; T. F. Griffin & Bro., labor, \$2,362; material, \$3,888; Geo. S. Staples, labor, \$5,528; Fernald Bros. & Higgins, material, \$1,467. The contract has been awarded to the Maine & New Hampshire Granite Co. for the labor and to T. F. Griffin & Bro. for material. An arrangement is said to have been made between the latter two concerns by which the work will all be done by T. F. Griffin & Bro., at the rate bid, \$6,024. W. B. Allen, Cbn. County Comrs.; Geo. N. Fernald, Comr. Pub. Wks.

BOSTON, MASS.—The street commissioners have decided to lay out and pave Rockford and Nottingham Sts., at Dorchester and will grant a public hearing Sept. 1.

SOMERVILLE, MASS.—Bids are asked until Aug. 29 by the Metropolitan Park Commission for 1,000 cu. yds. of earth grading, 2,000 sq. yds. of gravel walk surfacing and 4,200 sq. yds. of roadway foundation and broken stone surfacing on Middlesex Ave. Wm. T. Pierce, Engr., 13 Exchange St., Boston.

BRISTOL, CONN.—Bids are asked until Aug. 31 by the board of selectmen for grading and graveling a section of road between this place and Plymouth; check, \$500. Hobart A. Warner, Fred. N. Manross and Anson G. Perkins, Selectmen.

HADDAM, CONN.—Bids are asked until Aug. 31 by the board of selectmen for constructing and grading about 1,500 ft. of highway; bond, \$1,000. E. P. Arnold, Willis A. Bonfoey and Chas. B. Northam, Selectmen.

LITCHFIELD, CONN.—Bids are asked until Sept. 5, by the board of selectmen for grading and telfordizing a section of road from this place to Morris. Chas. Merriman, Pat. C. Burke, Newton G. Tyler, Edgar D. Beach and Jerome D. Wheeler, Selectmen.

NORTH BRANFORD, CONN.—Bids are asked until Aug. 31 by the selectmen for constructing pavements; bond, \$1,000. A. B. Hill, Engr., 82 Church St., New Haven.

ALBANY, N. Y.—Bids are asked until Sept. 5 by the board of contract and appointment for 11,000 sq. yds. of vitrified brick paving; 6,520 lin. ft. of 6-in. granite curbing; 270 lin. ft. of circular granite curbing; 60,000 sq. ft. of new brick sidewalk; 10,000 sq. ft. of new 4-ft. flag sidewalk and six receiving basins for Elm St., from Grand St. to Delaware Ave. Horace Andrews Cy. Engr.

BUFFALO, N. Y.—The commissioners of public works Aug. 18 received the following lowest bids: For surfacing Ferry St., from Niagara to Massachusetts Sts., Barber Asphalt Paving Co., New York, \$14,533; for repaving Babcock St. with brick, L. H. Gipp, \$20,000, with asphalt, Henry P. Burgard, \$23,000, R. G. Parsons, Secy. Bd.

BUFFALO, N. Y.—Bids are asked until Sept. 2 for street work in Niagara Square. Address G. H. Selkirk, Secy. Park Com.

LITTLE FALLS, N. Y.—Hallman Bros. have been awarded the contract to construct Ray St., and construct, pipe, sewer and grade Locust St., at \$14,430. The only other bid was that of Jas. Creagh, \$15,369. S. E. Babcock, Cy. Engr.

NEW ROCHELLE, N. Y.—The board of trade held a special meeting Aug. 11 to consider the proposition to bond the town for highway purposes. Action was deferred. C. W. S. Wilson, Village Engr.; G. R. Olney, Supt. Pub. Wks.

PORTCHESTER, N. Y.—Bids are asked until Sept. 6 by the village trustees for 19,850 sq. yds. of brick paving in three streets. J. A. Kirby, Engr.

ROCHESTER, N. Y.—The council is preparing to improve portions of Maple St., Post St., Front St., Center St., Chili Ave., Immel Place and Hudson Ave., by grading, paving, curbing and sidewalk.—The Warren-Scharf Asphalt Paving Co., New York, has been awarded the contract to construct an asphalt pavement on Clarissa St., from the river to Plymouth Ave., at \$11,565, according to report. Edwin A. Fisher, Cy. Engr.

SCHENECTADY, N. Y.—Bids are asked until Sept. 1 for the improvement of the two miles of the Troy and Schenectady Turnpike, from the city line of Schenectady, easterly. C. W. Adams, State Engr., Albany, N. Y.

TROY, N. Y.—Bids are asked until Aug. 30 for brick paving on Harrison St., etc. E. Ogden Ross, Secy. Contracting Bd.

ATLANTIC CITY, N. J.—A paving ordinance is under consideration by the city council which provides for the macadamizing of all the cross avenues between Connecticut and Missouri Aves., twenty in number. Before amendment the ordinance provided for vitrified brick paving on certain streets. John P. Ashmead, Cv. Engr.

HASBROUCK HEIGHTS, N. J.—Bids are asked until Sept. 6 for macadam paving, etc., as stated in our advertising columns. Engr., Lemuel Lozier, Hackensack, N. J.; Ck., G. H. Ramsden.

CONSHOHOCKEN, PA.—The town council has passed an ordinance requiring owners of real estate on Cherry St. between Elm St. and the Pennsylvania R. R. to pave, curb and gutter in front of their property. Jos. W. Cavanaugh, Pres.; Harry B. Heywood, Ck.

LANSDOWNE, PA.—The citizens will soon vote on a proposition to borrow \$15,000 for the purpose of improving the streets. Thos. G. Janier, Borough Surv.

MAUCH CHUNK, PA.—The town council has voted to spend \$1,500 in the construction of about 700 yds. of macadamized streets, according to report.

PHILADELPHIA, PA.—Bids are asked by the department of public works until Aug. 30 for sundry paving, grading, etc., in this city. Director, Thos. M. Thompson.

PHILIPSBURG, PA.—Hugh E. Crilly, Allentown, has been given the contract to pave 1½ miles of streets with brick at \$30,000, according to report.

PITTSBURG, PA.—Bids are asked until Aug. 27 by the county commissioners for the improvement of the Beaver road, the Library road and the Sparsburg and Kintanning road in Allegheny county; bond, \$60,000 for each of the three contracts. F. W. Patterson, County Road Engr., 29 Court House, Pittsburg.

READING, PA.—The board of public works received bids Aug. 18 for 15,000 lin. ft. of curbing and 41,500 sq. yds. of asphalt paving, as noted in our last issue. The bidders were: Pennsylvania Asphalt Paving Co., Philadelphia; Alcatraz Co., New York; Richardson & Ross, and the Barber Asphalt Paving Co., New York.

WILMINGTON, DEL.—John Jacoby has been awarded the contract by the board of health to pave Lord St., between Poplar and Lombard Sts. with brick. Simmons & Bro. were the only other bidders.

ANNAPOLIS, MD.—Jos. Jewell was awarded Aug. 16 the contract to pave Prince George, Bladen and Compromise Sts. and Market Space, around the City Park. His bid was: Prince George St., \$2,710; Compromise St., \$460; Market Space, \$745, and Bladen St., \$393. Geo. Jewell, Cy. Comr.

CUMBERLAND, MD.—Bids are asked until Sept. 5 for furnishing vitrified paving brick, sand for street work, curbing and crossing stone and resetting curbing now in use, terra cotta pipe and oak and pine lumber. Howard M. Fuller, Ck.

ROCKVILLE, MD.—The county commissioners decided Aug. 19 to readvertise for bids for macadamizing 8 miles of the Rockville Pike. The appropriation is \$25,000.

MONROE, LA.—Bids are asked until Sept. 8 for 7,788 sq. yds. of vitrified brick paving on 6 ins. of concrete. A. A. Forsythe, Mayor.

NEW ORLEANS, LA.—Bids are asked until Aug. 29 for asphalt paving in Rampart St. P. A. Raboulin, Comptroller.

FRANKFORT, KY.—Bids are asked until Aug. 26 for the construction of an artificial stone or cement pavement at the corner of Main or Montgomery and St. Clair Sts. W. S. Dehoney, Mayor; Ben. Marshall, Cy. Ck.

HENDERSON, KY.—Bids are asked until Sept. 6 for 2,000 cu. yds. of conglomerate gravel. Mayor, W. I. Thompson.

LOUISVILLE, KY.—The Assyrian Asphalt Co., Chicago, was awarded the contract Aug. 10 to pave three squares of Hepburn Ave. and one square of Von Borries Ave., with asphalt at about \$21,000. Louis A. Mehler has been awarded the contract to reconstruct and pave 28th St., from Chestnut St. to Broadway and Magazine St., from 26th to 28th Sts., with vitrified brick. G. W. Gosnell received the contract to reconstruct several alleys and Frank Safran the contract to lay the sidewalks on 9th St., from Grayson to Walnut Sts. Chas. F. Granger, Cbn. Bd. Pub. Wks.

BOWLING GREEN, O.—A. Graham was awarded the contract Aug. 9 for paving North Grove St. at \$4,732. The other bids were: J. C. Carland, Toledo, \$4,976; W. C. Blystone, \$4,980, or \$4,866, according to which block was selected.

COSHOCKTON, O.—Bids are asked until Sept. 5 for the purchase of 15 street bonds aggregating \$22,500, which are issued for the purpose of paving Main St. with vitrified brick. Bids are also asked until Sept. 10 for 11,000 cu. yds. of excavation; 21,000 sq. yds. of brick paving; 6,900 lin. ft. of curbing. F. F. Wagner, Village Ck.

DAYTON, O.—Bids are asked until Aug. 29 for grading, graveling and paving with boulders, the alley south of Germantown St., from Summit to Greencastle Sts. J. L. Baker, Pres.; J. E. Gimplering, Cy. Comptroller.

NELSONVILLE, O.—Bids are asked until Sept. 10 for improving Chestnut St., as stated in our advertising columns. Asher Buckley, Mayor; Jas. Sharp, Village Ck.

TOLEDO, O.—Bids are asked by the commissioners of Lucas county, until Sept. 13 for 1,225 cords of crushed limestone. Wm. M. Godfrey, County Audr.

YOUNGSTOWN, O.—Bids are asked until Sept. 12 for the paving of Scott St., between Wuck and Belmont Avenues. H. W. Calvin, Cy. Ck.

INDIANAPOLIS, IND.—Bids are asked until Aug. 29 for grading and laying cement sidewalks on 13th St., from Illinois St. to Capital Ave., and for grading and brick paving the first alley east of New Jersey St., from St. Clair to Pratt Sts. M. A. Downing, Cbn. Bd. Pub. Wks.

LAFAYETTE, IND.—The Indiana Construction Co., Don M. Roberts, Mgr., Terra Haute, has been awarded a contract for nine miles of cement sidewalk at \$22,000, according to report. W. K. Eldridge, Cy. Engr.

LOST CREEK, IND.—Bids are asked until Sept. 5, according to report, by the county commissioners for the construction of new gravel roads in Lost Creek township.

ROCKVILLE, IND.—Bids are asked until Sept. 10 for the improvement of six highways in Parke county, aggregating a total length of 16 miles, including grading, draining, bridging and graveling. E. H. Owen, Auditor.

COLDWATER, MICH.—The council has rejected the bids received Aug. 16 for furnishing the material and constructing a brick pavement on concrete foundation on Chicago St., as advertised in Engineering News. New bids are asked until Sept. 1. The bidders were: J. J. Granville, Saginaw; John McLaughlin, Detroit; and W. McLane, Coldwater. P. H. Sweeney, Cy. Ck.

CHICAGO, ILL.—Bids are asked until Aug. 31 for grading, curbing, and paving in a number of streets. L. E. McGann, Pres. Bd. Local Improvements.

MANSFIELD, O.—Bids are asked until Sept. 12 for \$13,600 six per cent. street improvement bonds, according to report; deposit, 10%. F. M. Remy, Cy. Ck.

MILWAUKEE, WIS.—Theo. C. Froemming has been awarded the contract for macadamizing Galena St., from 4th to 7th Sts., \$3,914, according to report.—The park board is planning to extend the Highland Boulevard, thus uniting West Park with the present boulevard. G. H. Benzenberg, Cy. Engr.

CEDAR FALLS, IA.—The Likes Improvement Co., Des Moines, has received the paving contract amounting to \$32,315, according to report.

KEOKUK, IA.—Bids are asked until Sept. 5 for 5,761 sq. yds. of brick, and 5,338 sq. yds. of macadam paving, etc. G. M. Walker, Cy. Engr.

OMAHA, NEB.—Bids are asked until Sept. 2 for repaving and resetting curbs on Poppleton Ave., from 24th Ave. to 32d St. John H. Butler, Cbn. Bd. Pub. Wks.; Wm. Coburn, Secy.

KANSAS CITY, MO.—Contracts were awarded Aug. 11 by the public improvements committee of the council as follows: Walter Hickman, paving two alleys, \$1,133; A. L. West, grading on Victor St., \$801; G. K. White, grading on 29th St., \$1,772; Wm. Trebey, grading on Lockridge St., \$428; Jos. Gastl, curbing on Walnut St., \$1,647; M. Schoonmaker, brick sidewalks, \$504; Kansas City Cement Sidewalk Co., granitoid sidewalks, \$929; Parker-Washington Co., granitoid sidewalks, \$1,028; Bandera Co., natural stone sidewalks, \$1,440. R. W. Godfrey, Secy. Bd.

ST. LOUIS, MO.—Bids are asked until Sept. 8 for constructing a granitoid walk in Hyde Park; deposit, \$150. Also for constructing a granitoid walk in Benton Park; deposit, \$120. M. L. Holman, Pres. pro tem.; Emory S. Foster, Secy.

SEDALIA, MO.—Bids are asked until Aug. 29 for paving Ohio Ave. with cedar blocks. Jos. Starr, W. L. Jones, T. J. Brown, Com. on Sts. and Alleys.

SPOKANE, WASH.—Geo. Latham was awarded the contract Aug. 10 for grading Mission Ave., from Division to Standard St., at \$1,147, and Fife & Conlan the contract for grading Chestnut St., from 2d to 4th Aves., at \$57.

SAN FRANCISCO, CAL.—The City Street Improvement Co. has been awarded the contract to asphalt Market St., from 2d to 6th St., at \$13,776. Thos. Ashworth, Supt.

ANACONDA, MONT.—Arnold Mickels has been awarded the contract, at \$2,150, to construct 12 miles of wagon road between Lincoln gulch and Helmville, along the Little Blackfoot River, according to report.

OWEN SOUND, ONT.—It is reported that the ratepayers will vote Aug. 25 on the proposition to borrow \$10,000 for the purpose of macadam roads, for repairs and to buy a steam road roller.

MANUFACTURING PLANTS

PYRITES, N. Y.—The plant of the High Falls Sulphur Pulp & Mining Co., at Pyrites, was destroyed by fire Aug. 21. The loss is placed at \$300,000; insurance, \$50,000.

LODI, N. J.—John W. Ferguson is said to have been awarded the contract for the erection of a new silk mill for Boetager Bros., to cost between \$75,000 and \$100,000.

CHESTER, PA.—It is reported that Robert Wehrill & Co., engine builders, will erect a large foundry in this city in the fall. It will be built on Seventh St., and will be 145 x 65 ft.

SIEGFRIED, PA.—We are informed that the Lawrence Cement Co. expects to erect a number of fireproof mill buildings and stock houses at this place for a new plant to have a daily capacity of 2,000 bbls. of Portland and common cements. Plans are now being prepared by Lathbury & Spackman, 1619 Filbert St., Philadelphia. No contracts have yet been let.

BENNETTSVILLE, S. C.—A company composed of C. S. McCall, D. D. McCall, C. M. Weatherly, M. A. J. Moore and others, has been organized with a capital stock of \$100,000, to operate a cotton mill. It is said that 20% of the capital stock will be subscribed in order to begin at once the erection of a new mill.

LEXINGTON, MISS.—The Lexington Compress & Oil Mill Co. will soon erect a cotton compress at this place, to cost about \$30,000. Pres., R. E. Wilburn; Secy., W. H. Durden.

CINCINNATI, O.—The Lodge & Shipley Machine Tool Co. informs us that bids were to be received until Aug. 24 for the erection of a brick and steel building, 300 x 50 ft., to cost \$18,000. A 100-HP. engine and a 125-HP. boiler will be installed. Arch., Bert Baldwin, Race and 5th Sts.

DAYTON, O.—A fire in this city, Aug. 14, damaged the plant of the Pasteur-Chamberlain Filter Co., causing a loss of about \$30,000.

LORAIN, O.—Bids are asked until Aug. 27 for the erection of a new factory building for F. C. Whitmore. Arch., H. O. Wurmsler, of Lorain.

NORWALK, O.—The Sprague Umbrella Co., whose plant was burned Aug. 9, causing a loss of about \$30,000, writes us that it is not yet ready to consider bids for the reconstruction of the plant.

PAINESVILLE, O.—The Robison Basket Co., of Painesville, informs us that bids are now being received for the construction of a new basket plant to replace the one totally destroyed by fire Aug. 7, and valued at \$72,000. It is expected to erect three 2-story iron covered buildings, 40 x 200 ft., and one 1-story structural iron building, 100 x 100 ft. Bids will also be received in 30 days on the necessary equipment, including a 150-HP. Corliss engine, an electric light plant and general equipment for wood working machinery.

WELLSTON, O.—Lathbury & Spackman, Consulting Engrs., 1619 Filbert St., Philadelphia, has been retained by the Alma Portland Cement Co., of Wellston, as engineers to design and furnish specifications and to superintend the erection of a plant to have an ultimate capacity of 1,000 bbls. a day. Construction is now under way and most of the contracts for machinery awarded.

MISCELLANEOUS CONTRACTS.

WHARF.—Chester, Pa.—The New Chester Wharf Co. proposes to build a wharf in this city this fall.

BONDS.—Buffalo, N. Y.—Bids are asked until Sept. 6 for the purchase of \$466,004 of 3½% tax loan bonds. E. C. Knight, Comptroller.

ENGINE.—New Orleans, La.—Bids are asked until Sept. 15 for furnishing a 150-HP. engine for the mint. C. W. Boothby, Supt. Mint.

BONDS.—Tarentum, Pa.—Bids are asked until Aug. 31 for the purchase of about \$25,000 of 30-year 5% improvement bonds. F. A. Ready, Ck.

LEVEE.—St. Joseph, La.—Bids are asked until Aug. 31 for building the Kempe levee, below St. Joseph. Maj. J. H. Willard, U. S. Engr., 3232 Prytanla St.

SUPPLIES.—Watervliet, N. Y.—Bids are asked until Sept. 23 for furnishing iron, steel, hardware, etc. Col. A. Mordecai, Ordinance Dept., Watervliet.

BONDS.—Dayton, O.—Bids are asked until Sept. 26 for the purchase of \$150,000 of levees and \$50,000 of 4% water bonds. J. E. Gimplering, Cy. Comptroller.

PIER.—New York, N. Y.—Bids are asked until Sept. 2 for building a new pier at the foot of Watts St., North River, Manhattan. J. S. Cram, Comr., Pier A.

COAL CONVEYORS AND TANKS.—Chicago, Ill.—Bids are asked until Oct. 4 for furnishing and erecting coal conveyors, etc., at certain pumping stations, as described in our advertising columns. L. E. McGann, Comr. Pub. Wks.

DREDGING.—Oakland, Cal.—The council is considering the ordinance for dredging Lake Merritt, at a cost of about \$80,000. Councilman Brosnahan may be addressed.

HEADSTONES.—Boston, Mass.—Bids are asked until Sept. 17 for purchasing 10,000 American white marble headstones in slabs. J. McE. Hyde, Q.-M., 195 Summer St., Boston.

JETTIES.—Portland, Ore.—Bids are asked until Oct. 25 for constructing jetties for improving Saquima Bay, Ore., as stated in our advertising columns. Maj. W. L. Fisk, U. S. Engrs.

DAM.—Pittsburg, Pa.—Bids are asked until Aug. 25 for constructing a coffer dam, at Heers Island, Allegheny River, according to reports. Maj. Chas. F. Powell, U. S. Engr., Federal Bldg.

SUPPLIES.—Fortress Monroe, Va.—Bids are asked until Sept. 16 for furnishing cement, broken stone, yellow pine lumber, steel beams, etc. Capt. Thos. L. Casey, U. S. Engr., 106 Cranby St., Norfolk, Va.

DOCKS.—Conneaut, O.—Reports state that the Pittsburg, Bessemer & Lake Erie R. Co. has purchased about 200 acres of land at Conneaut Harbor, for dockage purposes, to cost about \$350,000. J. H. Reed, Pres., Pittsburg, Pa.

SUPPLIES.—Norfolk, Va.—Bids are asked until Sept. 16 for furnishing and delivering cement, broken stone, lumber, steel beams, etc., at Fort Monroe, as stated in our advertising columns. Capt. Thos. L. Casey, U. S. Engrs.

LAKE OUTLET.—Lake Manitoba, Can.—Bids are asked until Sept. 12 for excavating for a supplementary outlet for increasing and regulating the overflow at Lake Manitoba; check, \$4,000. Res. Engr., W. F. Gouin, Winnipeg; Secy., Pub. Wks., E. F. E. Roy, Ottawa, Ont.

CANAL.—Chicago, Ill.—Bids are asked until Sept. 21 for constructing about eight miles of feeder of the Illinois & Mississippi Canal, as stated in our advertising columns. L. L. Wheeler, Asst. Engr., Sterling, Ill.; Maj. W. L. Marshall, U. S. Engrs., 1636 Indiana Ave., Chicago.

CEMETERY.—La Crew, Ia.—Bids are asked until Aug. 29 for preparing and enclosing a cemetery about three miles from this town. It will be 529x547 ft. There will be required about 3,100 ft. of 6 and 4-in. drain tile, a 3-rail iron fence 2 1/2 ft. high, etc. Address W. B. Seeley, La Crew, Ia.

FIRE ALARM SYSTEM, ETC.—Dallas, Tex.—The District Messenger & Fire Alarm Co., granted a franchise for 25 years, and want to install a complete messenger service, fire and police call system, desires bids on boxes, indicators and registers, wire and construction material. O. G. Gorman, in charge of construction, is receiving bids on material. R. H. Gamble, Secy.

DRY DOCK, ETC.—Vancouver, B. C.—Press reports state that arrangements are now being made for a marine railway and dry dock. Reports have been received here that the British government intends to send a regiment of infantry to be stationed at Vancouver, and that it will build a dry dock here and place the harbor in a defensive condition.

DRY DOCK.—West Superior, Wis.—The American Steel Barge Co. has decided to build another dry dock at the plant in this city. Several months ago the company projected the dock, but owing to the fact that there was not sufficient channel room for vessels to reach the site selected, construction could not be commenced until the council voted to extend the sluices. After a bitter fight in the council between the conflicting property interests, the aldermen voted last night to make the necessary alterations and secure the dry dock for this city. A meeting of the company's officials will be held Aug. 27 to approve the plans.

CONTRACT PRICES.

ASPHALT PAVING.—New Orleans, La.—The following bids were received Aug. 8 for asphalt paving in certain streets; the Barber Asphalt Paving Co.'s bid was for Trinidad Lake Asphalt, while that of the Southwestern Acatraz Asphalt & Construction Co. was for Santa Barbara, Cal., asphalt, and the General Asphalt Co. will use rock asphalt; A. C. Bell, Cy. Engr.

Bids Received at New Orleans, La., Aug. 8, 1898, for Asphalt Paving.—Canal St. from Delta to Liberty.

Table with columns for Items, Quantities, and various contractors (Barber Asphalt Paving Co., Alcatraz Asphalt & Construction Co., Ayers Asphalt Paving Co., Belden & Seely, General Asphalt Co.).

The bids for the work on Claiborne Ave., between Canal and Toulouse Sts., were the same as those for Camp St., except that of the General Asphalt Co., whose bid for rock asphalt pavement on concrete was \$2.43 a sq. yd.; bids were submitted for 800 ft. of 18-in. glazed sewer pipe as follows, with totals for the whole work: Barber company, \$1 a ft., \$27.24; Alcatraz company, 80 cts., \$25.58; Ayers company, 74 cts., \$25.16; Belden & Seely, 61 1/2 cts., \$26.27; General Asp. Co., \$1.36, \$24.67. The quantities are as follows: Asphalt pavement on concrete, 8,000 sq. yds.; concrete gutter bottoms, 50 sq. yds.; new stone wings, bonds and curbing, 4,650 sq. ft.; old curbing relined and reset, 1,000 lin. ft.; cypress lumber, 3,500 ft. B. M.; brick, 10,000; cast iron, 11,200 lbs.; wheel guards, 10.

ARTESIAN WELL.—Frostburg, Md.—The council has awarded the contract to the Curry-West Co., Cumberland, Md., to drill a 5 1/2-in. well about 600 ft., at \$2 a ft.

IRON WORK.—Portland, Me.—The following bids were received by Maj. R. L. Hoxie, U. S. Engr., 537 Congress St., for the iron work, etc., for batteries; G. M. Stanwood & Co. bid 3.7 cts. a lb. for ammunition cranes complete; Scaife Foundry & Machine Co., Pittsburg, Pa., bid \$1.20 a lin. ft. for 5-in. I-beams for trolley rail, etc., or \$30.00 for each trolley complete; Union Foundry & Machine Co., bid \$1.25 a lb. for ammunition cranes complete, \$35.70 for Yale & Weston blocks for ammunition cranes, each, and \$26.25 for same make of triplex blocks of 1/2-ton capacity each, and 1.6 cts. a lb. for roof beams, connection angles, etc.; Thomas Marshall bid 1.9 cts. a lb. for roof beams, connection angles, anchor bolts, and wall plates:

Bids Received at Portland, Me., for Iron Work for Batteries.

Table with columns for Items, Portland Co., Megquier & Jones Co., T. Carlin's New Jersey Foundry & Sons, Allegheny Mach. Co., New York, Pa., and Pittsburg, Pa.

*8-in. deck beams for double trolley rails, including cast-iron hangers every 16 ft. for fastening to roof, and splice-pieces per lin.ft. of double track, per drawing accompanying. †City pattern manhole, per print. ‡Price a lb.

BRICK PAVING.—Olean, N. Y.—E. E. Allen, Supt. Sts., informs us that the following bids were received Aug. 12, 1898, for brick paving, as advertised in Engineering News; B. U. Taylor & Co. was awarded contract:

Table with columns for Quantities and various contractors (Sheehan & Mc-Ghan, Bradford, Pa.; J. McCloud & Co., Williamsport, Pa.; J. K. Van Camp, N. Y.; W. H. Simpson, Olean, N. Y.; B. U. Taylor & Co., Olean, N. Y.).

*Concrete foundation. REPAIRING ASPHALT PAVEMENT.—Brooklyn, N. Y.—The commissioners of highways received bids Aug. 2 for repairing and maintaining about 16 miles of asphalt streets from Cranford & Co., the Brooklyn Acatraz Asphalt Co. and the Eastern Bermudez Asphalt Paving Co., as follows: For

Norfolk, Va., \$5.85. Dredging and rock excavation: Item 1, Rappahannock River, dredging; 2, the same river, rock excavation; 3, Urbanna Creek dredging, a cu. yd.; A. M. Clegg and M. A. Dugan, Washington, item 1, 2 3/4 cts.; 2, \$3; 3, 18 cts.; John Miller, Washington, item 1, 2 3/4 cts.; 2, \$4.90; 3, 19 cts.; Chas. W. Johnson, Lewes, Del., item 1, 29 cts.; 2, \$6.45.

HIGHWAY.—Truro, Mass.—The following contract was let Aug. 18, 1898, to C. W. Snow, Taunton, Mass., for building a road in Truro; A. B. Fletcher, Secy. Massachusetts State Highway Commission, Boston: 600 cu. yds. of excavation at 20 cts. a cu. yd.; clay, 600 cu. yds., \$1.20; broken stone in place, 800 tons, \$2.00; total, \$2,494.

PROJECTILES.—Washington, D. C.—The following bids were received last week by the navy chief of ordinance for furnishing the following projectiles: Cast Steel—1,000 13-in., 1,000 12-in., and 600 10-in. Forged Steel—3,000 8-in., 5,000 6-in., 5,000 5-in., and 5,000 4-in. The Midvale Steel Co., Philadelphia, 13-in., \$101; 12-in., \$81.50; 10-in., \$52.50; 8-in., \$26.14; 6-in., \$10.25; 5-in., \$5.35; 4-in., \$3.99. Alternate, all of cast steel and part of forged steel, as follows: 13-in., \$97.80; 12-in., \$82.10; 10-in., \$50.80; 8-in., \$26.14; 6-in., \$10.25; 5-in., \$5.38; 4-in., \$3.99. If awarded the entire contract, the prices will be as follows: 13-in., \$88.90; 12-in., \$78.19; 10-in., \$47.89; 8-in., \$25.77; 6-in., \$10; 5-in., \$5.30; 4-in., \$3.93; time, begin in 45 days and deliver 130 8-in. steel a week or the equivalent in weight of any size. Isaac G. Johnson & Co., Spynett Duyvil (P. O., New York), N. Y., 13-in., \$90; 12-in., \$81; 10-in., \$49; commence in 60 days and 12 each a week thereafter. American Ordnance Co., Bridgeport, Conn., 4-in., \$4.05, 300 a week after 60 days; 5-in., \$5.20, 300 a week after 90 days; 6-in., \$10, 250 a week after 60 days; 8-in., \$22.50, 200 a week after 90 days. Taylor Iron & Steel Co., High Bridge, N. J., 13-in., \$102.82; 12-in., \$78.96; 10-in., \$46.56; commence in three weeks and deliver 100 a week and 200 if necessary. Cumberland Steel & Tin Plate Co., Cumberland, Md., 13-in., \$95.40; 12-in., \$79.35; 10-in., \$49.20; commence in 90 days and 20 a week thereafter or 60 a week of any one size. Driggs-Seabury Gun & Ammunition Co., New York, 13-in., \$106, 100 in 80 days, 30 a week; 12-in., \$85, 100 in 80 days, 30 a week; 10-in., \$55.20, 100 in 75 days, and 40 a week. Mannesman Tube Co., 6 Dupont Circle, Washington, 13-in., \$106; 12-in., \$89.50; 10-in., \$57.60; 8-in., \$27.50; commence in 70 days and 120 a week. United States Projectile Co., New York, 8-in., \$22.50, 150 to 200 a week after 9 to 10 months; 6-in., \$9.75, 175 to 250 after 7 to 8 months; 5-in., \$5, 250 to 300 after 9 to 10 months; 4-in., \$3, 300 to 400 after 6 to 7 months.

MACADAM ROAD.—Lunenburg, Mass.—The Massachusetts State Highway Commission, Boston, received the following bids Aug. 18, 1898, for building a macadam road in Lunenburg; contract was awarded C. H. Kelleher; A. B. Fletcher, Secy.:

Table with columns for Quantities and various contractors (C. H. Kelleher, Newburyport; A. J. Wellington, Boston; F. E. Ellis, Melrose; A. A. Goddard, Worcester).

Totals \$3,782 \$4,589 \$4,448 \$4,213

ELECTRIC LIGHTING.—Brooklyn, N. Y.—The following bid was received from the Edison Electric Illuminating Co. for lighting the Borough of Brooklyn, for the ensuing year: For each 1,200-c. p., 34 cts., and 17 cts. for each 600-c. p.—this is for 3,500 lights or more; for any less number, 35 cts. for each 1,200-c. p., and 18 cts. for each 600-c. p.; for all electric current required for lighting offices in public buildings, 10 1/2 cts. a K-W. power of current. The price of 34 cts. a 1,200-c. p. is the same as that of old contracts under which this company has been lighting Brooklyn. There are at the present time about 3,500 electric lights in Brooklyn, and Deputy Commissioner Walton has 500 Weisbach lights which he is intending to substitute for the electric lights in the residential streets, in which event the price of 35 cts. will prevail. This will make a difference of about \$12,000 a year to the city.

Class No. 1—13 cts. a sq. yd., 1 1/2 cts. and 13 cts., respectively; new bridge stones, 40 cts. a sq. ft., 47 cts. and 50 cts., respectively; new curb stones, 75 cts. a lin. ft., 78 cts. and 80 cts., respectively; restoring opening made in pavement, \$3.00 a lin. yd., \$3.15 and \$3.25. Class No. 2—Repairing, etc., 13 cts., 12 cts. and 14 1/2 cts.; Class No. 3—20 cts., 26 cts. and 23 cts.; Class No. 4—18 cts., 20 cts. and 21 1/2 cts.

DIKE, DREDGING, ETC.—Virginia.—The following bids were received by Lt.-Col. Chas. J. Allen, U. S. Engr., Washington, D.C., Aug. 6, 1898, for constructing a dike and dredging, etc., as advertised in Engineering News: Dike in York River, Va., W. B. Bradley, Manchester, Va., \$6 a lin. ft.; B. P. Sweeten & Son, Camden, N. J., \$6.54; A. M. Clegg, Washington, \$8.28; The Degnon-McLean Construction Co., 1 Broadway, New York, \$6.50; Sanford & Brooks Co., 21 S. Gay St., Baltimore, \$6.73; Justin McCarthy,

BRIDGE MASONRY.—Greenfield, Mass.—The following bids were received recently by the county commissioners for the masonry work for the Northfield bridge: Engr., E. S. Shaw, Boston:

Table with columns: Bidder, Filling, Bank, Masonry piers, grading, protect'n, etc., complete, a cu. yd. a sq. yd.

*Awarded Chicago for masonry piers and cylinder piers for abutments; total, \$9,200. †Awarded contract for grading, filling, bank protection, etc., total \$1,496. The N. J. Steel & Iron Co., Trenton, has been awarded the contract for the substructure at \$23,255. ‡Totals.

CURBING, CROSSING, ETC.—La Porte, Ind.—The following bids were received by the council Aug. 4, 1898, for curbing, stone closing slabs and gutter stone for crossings sets; the price for the stone closings and gutter stone is for a lin. ft.:

Table with columns: Bidder, Curbing, Stone Gut- (inches, a lin ft., closer), cts. cts. cts. cts. cts. cts.

SEWERS.—Kansas City, Mo.—The following bids were received by Henry A. Wise, Cy. Engr., Aug. 11, for building brick and pipe sewers in District No. 175: M. Walsh's bid was accepted; M. Kinlin's bid was declared informal:

Bids Received at Kansas City, Mo., Aug. 11, 1898, for Building Brick and Pipe Sewers in District No. 175.

Table with columns: Quantities, Bidder, Pipe sewer, 12-in. pipe catchbasin connections, 30-in. brick sewer, Manholes, Special manhole, Flushtanks, Catchbasins, Rock excavation, Lumber, Concrete, 1/2-in. water pipe.

SAND, CONCRETE, ETC.—Washington, D. C.—The bid of the Columbia National Sand Dredging Co. to furnish the city 2,250 cu. yds. of paving sand at 45 cts. a cu. yd., and that of John B. Lord to furnish the city with 4,000 cu. yds. of concrete sand at 59 cts. a cu. yd.; 1,000 cu. yds. of building sand at 65 cts. a cu. yd., and 4,000 cu. yds. of screened gravel at 69 cts. a cu. yd., have been accepted by the commissioners.

DREDGING.—Norfolk, Va.—It is stated that the secretary of war has awarded the contract for dredging the channel from the sea to the Norfolk navy yard to the American Dredging Co., Philadelphia, Pa., at 14 1/2 cts. a cu. yd. The appropriation for the work amounts to \$300,000, and provides for a channel 28 ft. deep and 450 ft. wide, a width of 150 ft. to be obtained first. This work is to be completed by Dec. 1. The department was authorized to let the contract without advertising, and received an offer to do the work at 16 cts. a yd. By advertising and extending the time for the completion of the work until December a lower bid was obtained.

RAILWAY SUPPLIES.—China.—It is reported by Consul-General Goodnow that A. S. Forbes & Co., Tientsin, has been awarded the contract for furnishing 7,000 tons of railway supplies: Rails, \$29.20 a ton; fish plates, \$43.80; bolts, \$65.70, and spikes, \$58.40 a ton. In our issues of June 30 and Aug. 4, were published the bids for the various supplies.

ASPHALT STRIPS.—Brooklyn, N. Y.—Wm. N. Shannon, Deputy Comr. of Highways, received the following bids Aug. 16 for laying asphalt strips from 34th St. and Astoria ferries in Long Island City, to connect with the road roads in Queens leading out on Long Island: (1) being for the roadway of Fulton Ave., Boulevard, Broadway and Newtown Road, from the southerly side of Mills St. to Jackson Ave., Borough of Queens; and (2) for the roadway of Borden Ave., Jackson Ave., and Thomson Ave., from the southerly side of Front St. to Woodside Ave., Queens, the foundation, stone block and wooden leaders being the same for both roadways excepting that of the Warren-Scharf Co.; Warren-Scharf Asphalt Paving Co.—Asphalt a sq. yd., (1) \$4.50, (2) \$3.80; concrete foundation, a sq. yd., (1) \$4.50, (2) \$4.25; stone block, a sq. yd., (1) 38 cts., (2) 35 cts.; wooden leaders, 1,000 ft., (1) \$22.00, (2) \$22.00. Barber Asphalt Paving Co.—As-

THE THACKERAY INCINERATING & FERTILIZING Co., San Francisco, Cal., has established a subsidiary corporation at Cincinnati, O., for the states of Ohio, Kentucky and Indiana and has also just formed another for the New England States, with offices in Boston, which will begin operations Sept. 1. Mr. Charles J. Okell, Secy., and Treas., is now in New York for the purpose of establishing a branch office of the parent company. The company announces that it has in San Francisco the largest incinerator in the United States, and that the cost of incinerating garbage in that city is only 10 cts. a ton, owing to the fact that no fuel is required, the only expense being the cost of labor and repairs.

LATHBURY & SPACKMAN, 1619 Filbert St., Philadelphia, consulting engineers, have been retained by the Alma Portland Cement Co., Westport, O., as engineers to design and furnish specifications and to superintend the erection of a plant in that place to have an ultimate capacity of 1,000 blbs. a day. Construction is now under way, and the contracts for machinery nearly all let. They have also been engaged by the Lawrence Cement Co., of Pennsylvania, as engineers for the erection of its new plant at Slegried, Pa., which will have a capacity of about 2,000 blbs. a day of Portland and common cements. Large fireproof mill buildings and stock houses will be erected and the latest improved machinery installed. No contracts have yet been let. The firm has also finished plans and specifications for the enlargement and reconstruction of the Portland Cement Co., Salt Lake City, Utah, which was totally destroyed by fire last June. Contracts for steel buildings and all machinery have been let, and the construction is well under way. Plans and specifications for the introduction of the rotary system of burning cement at the large works of the Aalborg Portland Cement Co., Copenhagen, Denmark, have also been finished. The machinery is being constructed in this country, and will be shipped in the course of a month. In all of the above plants the system of burning in rotary kilns using pulverized coal as a fuel will be introduced.

THE GENERAL ELECTRIC CO., Schenectady, N. Y., has begun work on its new machine shop, to cost \$175,000, which will form an important addition to the manufacturing facilities of the company. Contracts have been let to the Pencil Iron Works, Philadelphia, for the steel construction, and to J. J. Turner, of Amsterdam, N. Y., for the masonry, etc. The building will face on the central avenue, opposite Building No. 15, and will be 65 x 165 ft., divided into three aisles, the central one having a width of 65 ft. and the side ones each being about 50 ft. wide. The total floor space, it is claimed, will be at least 144,250 sq. ft., and the building will contain the machinery necessary to handle large apparatus. It is expected that the shop will be completed before the end of 1898. The machinery will be driven by current transmitted from Mechanicsville, 17 miles distant. In addition to the shop, several important extensions to other buildings are being made. The foundry, recently begun, is ready to receive the iron work, as the support for the large traveling crane has been ordered. This building when finished will contain, it is claimed, the largest foundry under one roof in the world. The government of Victoria, Australia, has placed an order with the company for six Thomson recording Watt meters of 100 volts and varying capacities, which will be placed in the Electrical Bureau of the home office, Victoria, to be used, it is claimed, as the official standards by which all meters used in the colony will be tested.

NEW COMPANIES.—R. P. & J. H. Staats, Hoboken, N. J.; \$100,000, with all paid in; to construct bridges, piers, tunnels, railways and canals; Roht. P. Staats, 149 West 85th St., New York; John H. Staats, Morristown, N. J.; Thos. J. Long, 7 West 43d St., New York; Dickinson W. Richards, 190 Park Ave., Orange, N. J.; Walter E. Castle, Fordham, New York.

Gordan Battery Co., Portland, Me.; \$350,000, commencing with \$250; to generate and deal in electricity; Pres. Arthur S. Pinkham; Treas., Charles E. Lockwood, both of New York.

Eberle Construction Co., New York, N. Y.; \$24,000; to construct and equip railways to be operated by electricity and steam; David Longecker, Charles R. Eberle, Philadelphia; Edwin C. Stout, Alva Oatman, Thomas A. Matthews, New York.

International Electric Co., Cleveland, O.; \$10,000; to manufacture and deal in electrical appliances; A. W. Mayers, E. H. Shaw, W. R. Studebaker, W. S. Hale and Charles Seaton.

Pulling Springs Quarry & Construction Co., East St. Louis, Ill.; \$5,000; F. W. Hackman, Sr., Francis Kirsch and Fred Brandt.

Pasadena Construction Co., Pasadena, Cal.; \$50,000; to construct roadways for motor vehicles; J. H. Campbell, J. E. Smythe, T. Lowe.

Richmond Construction Co., New York; \$25,000; to do a general contracting business; John B. Newhall, Ernst Crossman, James McQuigham, Guy A. Huhhard, and Chas. J. Worth, New York.

National Iron Co., 525 Main St., East Orange, N. J.; \$100,000, with \$1,000 paid in; to manufacture architectural and structural iron work; Alfred O. Dunk, James D. Mattison and Geo. W. Carrick, all of 525 Main St., East Orange, N. J.

Gardner Mfg. Co., Baltimore, Md.; \$5,000; to manufacture gas machines for generating gas; Joshua G. Gardner, Andrew G. Steiman, James Russell, Laurence O. Wright Ward and Edw. L. Ward.

Payne Mfg. & Engineering Co., Elmira, N. Y.; \$600,000, with \$140,000 paid in; to manufacture engines, boilers, army and navy supplies.

Sanford & Brooks Co., Baltimore, Md.; \$200,000; to build bridges, piers, etc.; Jos. B. Sanford, Newark, N. J.; Walter B. Brooks, Jr., Wm. H. Taylor, J. Frank Sinton and William H. Dorsey, Baltimore.

Angleton Telephone Co., Alvin, Tex.; \$2,000; A. W. Wilkinson, W. A. Leonard and F. J. Bush.

INDUSTRIAL NOTES.

THE GILLETTE-HERZOG MFG. CO., Minneapolis, Minn., has opened a new branch office at Spokane, Wash. THE JACKSON & WOODIN MFG. CO., Berwick, Pa., is reported to have an order from the Buffalo, Rochester & Pittsburg Ry. for 200 gondola cars.

TIPPETT & WOOD, Phillipsburg, N. J., have just completed a smoke stack, 140 ft. high, and a large water tower for the public buildings at Collins, N. Y.

H. K. PORTER & CO., Pittsburg, are reported to have the contract for a complete compressed air haulage and power plant for the Pennsylvania Coal Co., Pittston, Pa.

THE RICHMOND LOCOMOTIVE & MACHINE WORKS, Richmond, Va., is reported to have a contract for 12 locomotives for the Plant System, and for four locomotives for the Georgia & Alabama Ry.

THE NORTH PENN IRON CO., North Penn Junction, Philadelphia, has the contract for the structural steel work of the new engine and hoiler house of the Hagerstown Electric Ry. Co., Hagerstown, Md.

THE LEBCHURG FOUNDRY & MACHINE CO., Leechburg, Pa., will, it is stated, move its plant from that place to Homestead, Pa., before the end of the year. Mr. Geo. Mesta is President of the company.

THE GROTON BRIDGE & MFG. CO., Groton, N. Y., is about to open an office in Porto Rico, and is desirous of handling a line of first-class sugar and coffee machinery. The company will be glad to correspond with manufacturers.

THE CARNEGIE STEEL CO., Homestead, Pa., is reported to have a contract from England for 30,000 tons of 2 1/2-in. steel billets, to be used in the manufacture of bolts; also an order for 10,000 tons of plates for the city water-works, Sidney, Australia.

THE BETHLEHEM IRON CO., South Bethlehem, Pa., reports that it has been asked to bid on the forgings for the engine and shafting of a torpedo boat to be built in Japan for the Imperial Japanese Navy. The line of shafts, including the thrust and crank shafts are to be hollow. The company states that it is the only American concern that has been asked to bid on this work.

THE PHILADELPHIA ENGINEERING WORKS, Philadelphia, is reported to have orders for a 300-HP. cross-compound condensing Corliss engine, with two 100-HP. vertical water-tube boilers for shipment to Yokohama, Japan; two 300-HP. horizontal cross-compound Corliss engines for shipment to China; and one 450-HP. vertical cross-compound Corliss engine for Honolulu, Hawaii.

THE DAIMLER MFG. CO., 54 Wall St., New York, and 937 to 945 Steinway Ave., Long Island City, N. Y., has acquired all the real estate, plants, machinery, patents, etc., of the Daimler Motor Co. and will continue the business with enlarged facilities. The officers of the new company are: Pres., Frederick Kuebler; Vice-Pres., Horace Bacon; Treas. and Secy., Otto G. Nestle; Asst. Treas. and Asst. Secy., Adolph O. Krieger. The capital stock of the company is \$500,000, of which \$400,000 is said to be paid in.

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