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INDUSTRIAL NOTES	-

PERSONAL.

Mr. R. H. Gamble has heen appointed City Engineer of

Mr. D. I. Bachman, General Manager of the Crozer Iron Reanoke, Va., has resigned.

Mr. Henry Wingeland, civil engineer, of Sioux City, la has been ohliged to enter a hospital on account of ner-yous prostration, brought on hy anxiety.

Mr. Hugh E. Brady has been appointed Chief of the Sewer and Assessment Division of the Street Laying Out Department of Boston, Mass., at a salary of \$2,500 a year.

Mr. James W. Miller, of Pittshurg, Pa., who went abroad ome time ago to introduce the Wehling method of casting pig iron, returned to this country April 14 and is now in Chicago.

Mr. C. P. Coleman, formerly General Storekeeper of the Lehigh Valley R. R., has resigned to accept a position of Purchasing Agent of the Bethlehem Iron Co., South Bethlehem, Pa.

Dr. Bernard E. Fernow, Chief of the Division of Forestry of the United States, has been appointed a Director of the New York State College of Forestry, at Cornell University,

M. Tropenas, of France, the inventor of a modification of the Bessemer process which hears his name, is expected to arrive in the United States soon, to start a plant in the use of his process.

Mr. Theodore Steinacker, County Surveyor, has been onfirmed as City Engineer of St. Joseph, Mo., thus ending a deadlock which has existed for the past year hetween the mayor and the common council.

Mr. Arthur Lagron, Engineer of the Peoria & Pekin Traction Co., Peoria, Ill., has reaigned to accept the poon of Assistant Engineer of the Lake Shore & Michigan Southern Ry., with headquarters at Toledo, O.

Mr. Julian Kennedy, mechanical engineer, of Pittshurg, Pa., has returned from England, where he went recently as Consulting Engineer to Beil Brothers, the well-known akers of which Sir Lowthian Bell is the head.

Mr. O. E. Hovey, Assoc. M. Am. Soc. C. E., Engineer in charge of the Union Bridge Co. office at Athens, Pa., sailed for England on the "Etruria," April 16, and will spend some time in London in the interests of the com-

Mr. William H. Turrell, President of the Standard Paving Co., 22 Clinton St., Newark, N. J., has resigned and is no longer interested in the company. He will continue the artificial stone and asphalt husiness at the same

Mr. Lawrence Dameron, Assistant City Engineer of Newport, Ky., has resigned to accept a position with the Sanborn Perin Map Co., with headquarters at Indian-Ind. Mr. Bailey Morlidge has been appointed to succeed him.

Mr. Chapman L. Johnson, formerly Deputy State Engineer, of Alhany, N. Y., has been appointed Consulting Engineer to T. Henry Dumary and the Wilson-Baillie Co., who have the contract for the installation of the filter plant in that city.

Mr. C. Shleids, General Superintendent of the Chicago Great Western Ry., with headquarters at St. Paul, Minn., has resigned. Mr. Raymond Du Puy, at one time General Manager of the Chicago Great Western Ry., has been appointed to succeed him.

Mr. Andrew Ernest Foye, Asaoc. M. Am. Soc. C. E., of Foye & Wilkes, Civil Engineers, No. 11 Broadway, New York, will hereafter represent, in this vicinity, Mr. J. A. L. Waddeli, M. Am. Soc. C. E., consulting engineer for bridges and high office huildings.

Mr. Edward R. Knowles, civil, electrical and mechanical engineer, has become identified with the Sprague Electric Co., New York, and will have entire charge of its Power Motor Department. He was formerly Consulting Engineer for several corporations in New York city and vi-

Mr. Franklin Bache, mining engineer, has retired from the firm of Lathhury, Spackman & Bache, consulting engineers, 1619 Filhert St., Philadelphia, Pa., with whom he became associated in October of last year, and the husi-ness will be conducted as heretofore under the old firm name of Lathbury & Spackman.

Messrs. W. H. Barker, G. B. Healy and John P. Allison, have heen appointed as the Board of Trustees of the Water-Works Department of Sioux City, Ia. Mr. Healy has heen elected President and Mr. Alliaon, Secretary, of the hoard. Mr. E. B. Spalding has been appointed Super-Intendent, to succeed Mr. Phil Carlin.

Mr. Cooper Ayers, Superintendent of the Greenville Light & Power Co., Greenville, O., has resigned to accept the position of Superintendent of the Piqua Electric Co., Piqua, O., to succeed Mr. H. B. Brooks, who has resigned to enter the Ohio State University in the electrical engineering course.

Mr. W. H. Newman, Second Vice-President of the Great Northern Ry., has accepted the office of President of the Lake Shore & Michigan Southern Raiiway Co., succeeding Mr. S. R. Callaway, now President of the New York Con-tral & Hudson River R. R. He was horn in Virginia, in 1847, and entered the railway service in 1869. He was Traffic Manager of the Gould roads for a number of years, and for two years was Third Vice-President of the Missourl Pacific Ry.; he inter held a similar office with the Chicago & Northwestern Ry.

Mr. Nicholas S. Hill, Jr., Assoc. M. Inst. Elec. E., resigned on March 14 his position as Chief Engineer of the Water Department of Baltimore Md., and has associated himself with Mr. B. C. Howard, electrical engineer, under the firm name of Hill & Howard, with offices at 35 Manufacturers' Record Bldg., Baltimore. The firm will carry on a general engineering husiness, making speciaitles of on a general engineering nusiness, making specialties of water-works, electrical suhways, electric light and power plants and power transmission work. Mr. Hill is a graduate of the Stevens Institute of Technology, and has heen Mechanical Engineer of the South Side Elevated R. R., Chicago, Engineer Secretary of the Sewerage Commission of Baltimore, and Engineer of the Electrical Suhway Commission of Baltimore. Mr. Howard is a graduate of the Electrical Department of Johns Hopkins Univer-sity and was formerly Secretary and Treasurer of the McCay-Howard Engineering Co., general electrical contractor of Baltimore

OBITUARY.

Mr. A. J. Bigony, ex-City Engineer of Lock Haven, Pa., committed suicide April 13.

Mr. Edward D. Conolly, contractor and hullder, of New York city, died April 13, aged 68.

Mr. John S. Potter, electrical manufacturer and contractor, of Newton, Mass., died April 17, aged 61.

Capt. Isaac Albertson, for many years President of the American Dredging Co., of Philadelphia, Pa., died in that city April 15, aged 65.

Capt. John W. Smith, Secretary and Treasurer of the Vulcan Iron Works Co., Toledo, O., died at his home in that city, April 9, aged 66. He was horn in Buffalo, N. Y., and moved to Ohio at an early age.

Mr. Charlea H. Foster, Secretary and Treasurer of the Chicago & Alton R. R., died at his home in Chicago, Ill., April 13. He was horn April 14, 1835, at Rochester, N. , and entered the railway aervice in 1855 with the Ga-na & Chicngo Union R. R. In 1865 he was made General Accountant of the Chicago & Alton R. R. and held this office until May 14, 1879, when he was appointed Secretary and Treasurer and held the office until his death.

Mr. James S. Pierson, of Burlington, Vt, said to have been instrumental in the invention and development of the water-gas process, died in Chicago, Ill., April 11. At the time of his death he was interested in the construction of some electric railway lines in Vermont.

Mr. John H. Nair, civil engineer, died in Chicago, April 14. aged 38 years. He originally came from Longwood. 14, aged 35 years. He originally came from Longwood, Va., and during 1884 and 1885 engaged in railway surveys in West Virginia. From 1886 to 1888 he was employed on the surveys and the construction of the Chicago, Madison & Northern Ry., and later with the Chicago & Calumet Terminal R. R. Since 1891 he has heen engaged in a general surveying husiness, with office in the Ashiand Block, Chicago.

Mr. Montgomery A. Kellogg, Chief Engineer of Construction of the Park Department of New York city, died at his home in that city, April 19. He was horn in Galway, N. Y., Feb. 21, 1830, and graduated from the Renssalaer Polytechnic Institute, Troy, N. Y., as a civil engineer. He was engaged in railway work in Ohio and was negative on the construction of the New York Constant. an engineer on the construction of the New York Central an engineer on the construction of the New York Central & Hudson River R. R. He huilt the water-works at Georgetown, D. C., and ahout 40 years ago was appointed to a position in the Park Department of New York, with which he has been connected ever since.

Prof. Jules Marcou, geologist, died at his home, Camhridge, Mass., April 17. He was horn in Salins, France, April 20, 1824, and was educated in St. Louis College, As traveling geologist for the Jardin des Plantes he visited this country and Canada in 1848 and accom-panied Prof. Louis Agassiz to the Lake Superior region. Later he directed his attention to the geology of New Jersey, Pennsylvania and Virginia. He published a geo-logical map of North America in 1850 and shortly afterwards entered the geological service of the United States. In 1855 he returned to Europe and from that year until 1859 held a profeasorship in the Polytechnic School, Zu-rich. In 1861 he returned to the United States, and, with Prof. Agassiz, founded the Museum of Comparative Zoo-logy, in which he had charge of the paleontological di-

vision. From 1864 to 1875 he devoted himself to scientific research and in the latter year again entered the service of the United States as a geologist, remaining in that capacity until a few years ago. He was made a memher of the Legion of Honor in 1867 and was also a member of scientific societies here and ahroad.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

INDIANAPOLIS ENGINEERING CLUB.

INDIANAPOLIS ENGINEERING CLUB.

Apr. 23. Secy., Edson F. Foisom, Indianapolis, Ind.
TECHNICAL SOCIETY OF NEW YORK.

Apr. 23. "Humoristisches Polytechnikum," Cari Hauser.
Secy., William Mueser, 35 Nassau St., New York city.
FRANKLIN INSTITUTE.

Apr. 26. "The Multiple Unit System of Electric Railways," Frank J. Sprague. Secy., Wm. H. Wahl, 15
S. 7th St., Philadelphia, Pa.
CIVIL ENGINEERS' CLUB OF CLEVELAND.

Apr. 26. Secy., Wm. H. Searles, Case Library Bidg.,
Cleveland, O.
AMERICAN INSTITUTE ELECTRICAL ENGINEERS.

Apr. 27. Secy., R. W. Pope, 26 Cortlandt St., New York
city.

AMERICAN.
Apr. 27. Seey., R. W. Pope, and Apr. 27. Seey., R. W. Pope, and CANADIAN SOCIETY OF CIVIL ENGINEERS.
Apr. 28. Seey., C. A. McNah, 112 Mansfield St., Monical Can.

CANADIAN SOCIETY OF CIVIL ENGINEERS.

Apr. 28. Secy., C. A. McNah, 112 Mansfield St., Montreal, Can.

ENGINEERING ASSOCIATION OF THE SOUTH.

Apr. 28. Nashville, Tenn. Secy., C. B. Wilson, Nashville, Tenn.

BROOKLYN ENGINEERS' CLUB.

Apr. 28. "Glasgow Harbor Tunnel Elevators." Chas. L.

Duenkel. Secy., A. J. Provost, Jr., 191 Montague St.,

Brooklyn, N. Y.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.

May 2. Secy., H. J. March, Library Bidg., Buffalo, N.Y.

CIVIL ENGINEERS' SOCIETY OF T. PAUL.

May 2. Secy., C. L. Annan, City Engineers' Office, St.

Paul, Minn.

ENGINEERS' CLUB OF ST. LOUIS.

May 4. Secy., Richard McCulloch, St. Louis, Mo.

AMERICAN SOCIETY OF CIVIL ENGINEERS.

May 4. "Flushing in Pipe Sewers." II. N. Ogden. Secy.,

C. W. Hunt, 220 West 57th St., New York city.

WESTERN SOCIETY OF ENGINEERS.

May 4. "Locomotive Water Supply." Theodore W.

Snow: "The Cycloidal Pump." Chas. E. Biiin. Secy.,

N. L. Litten, Monadnock Block Chicago, III.

TECHNICAL SOCIETY OF THE PACIFIC COAST.

May 6. Secy., O. Von Geldern, S19 Market St., San

Francisco, Cai.

May 6. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
CHICAGO ELECTRICAL ASSOCIATION,
May 6. Secy., J. R. Cravath, 825 Monadnock Block,
Chicago, III.
THE ENGINEERS' CLUB OF PHILADELPHIA.
May 7. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.
BNGINEERS' CLUB OF MANAGEMENT ST.

ENGINEERS' CLUB OF KANSAS CITY.
May 9. Secy., F. W. Tuttle, Baird Bldg., Kansas

May 9. Secy., F. W. Tuttle, Balla Sci., City, Mo.
LOUISIANA ENGINEERING SOCIETY.
May 9. Secy., J. F. Coleman, 712 Union St., New Orleans, La.
RAILWAY SIGNALING CLUB.
May 10. Secy., Earl M. Seitz, Signal Engr., C. & N. W.

May 10. Secy., Earl M. Seitz, Signal Engr., C. & N. W. Ry., Chicago, Ill.
DENVER SOCIETY OF CIVIL ENGINEERS.
May 10. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

ver, Colo.
NORTHWEST RAILWAY CLUB.
May 10. Secy., T. A. Foque, Soo Line, Minneapolis,

NORTHWEST RAILWAY CLUB.

May 10. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

NEW ENGLAND RAILROAD CLUB.

May 11. Secy., Edward L. Janes, P. O. Box 1158, Boston, Wass

CENTRAL RAILWAY CLUB.

May 13. Buffalo, N. Y. Secy., H. D. Vought, 114 Fifth Ave., New York city.

ST. LOUIS RAILWAY CLUB.

May 13. Secy., H. H. Roherts, 511 Commercial Bidg., St. Louis, Mo.

MONTANA SOCIETY OF ENGINEERS.

May 14. Secy., Albert S. Hovey, Helena, Mont, TECHNICAL CLUB OF OMAHA.

May 16. Secy., I. Harry Lawrie, Omaha, Neh, ENGINEERS' CLUB OF MINNEAPOLIS.

May 16. Secy., I. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUIS-VILLE.

VILLE.
May 16. Secv., Jas. K. Zollinger, 16 Norton Bidg.,
Louisville, Ky.
ENGINEERS' SOCIETY OF WESTERN PENNSYL-

Secy., R. A. Fessenden, 410 Penn Ave., Pitts-

May 17. Secy., R. A. Fessenaus, hurg. Pa.
ILLINOIS STREET RAILWAY ASSOCIATION.
May 18. Annual meeting. Secy., C. K. Minary, Spring-field City R. R. Springfield, Ill.
WESTERN RAILWAY CLUB.
May 18. Secy., F. M. Whyte, 225 Dearhorn St. Chicago. Ill.

May 18. Secy., F. M. Whyte, 225 Dearborn St, Chicago, Ill.
BOSTON SOCIETY OF CIVIL ENGINEERS.
May 18. Secy., S. E. Tinkham, City Hall. Boston, Mass.
WESTERN FOUNDRYMEN'S ASSOCIATION.
May 18. Annual meeting. Secy., A. Sorge, Jr., 1020
Monadnock Block, Chicago. Ill.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF
SOUTHERN CALIFORNIA.
May 18. Secy., Frank H. Olmstead, Los Angeles, Cal.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
May 19. Secy. F. A. Charolot, Macon, Ga.
ENGINEERS' CLUB OF CINCINNATI.
May 19. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O

BNGINEERS' CLUB OF CINCINNATI.
May 19. Secy., J. F. Wilson, P. O. Box 333, Cincinnatl, O
NEW YORK RAILWAY CLUB.
May 19. Secy., W. W. Wheatley, 168 Montague St.,
Brooklyn, N. Y.
ENGINEERS' CLUB OF COLUMBUS.
May 21. Secy., M. S. Hopkins, 14½ N. High St., Columbus. O.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 30, June 4. Sprin meeting. Niagara Falis, N. Y.
Secy., Prof. F. R. Hutton, 12 W. 31st St., New York city.

LOUISIANA ENGINEERING SOCIETY.-meeting of this society was held April 11. 7

meeting of this society was held April 11. The question of offering aid to the government in case of war was augested and all present volunteered their services to Mayor James B. Quinn, U. S. Engineer in charge of the government work in and about New Orleans. The paper of the evening on "Leveea, with Special Reference to the Red River System," was read by Mr. Frank M. Kerr, state

Ma

NEW ENGLAND ASSOCIATION OF RAILROAD SU-NEW ENGLAND ASSOCIATION OF RAILROAD SU-PERINTENDENTS.—At the last meeting held April 4, the following officers were elected for the ensuing year: Pres., C. C. Elwell, Norwich; Vice-President, W. G. Bean, Boston; Secy., C. E. Lee, Nashua.

NEW YORK ACADEMY OF SCIENCE.—This society gave an exhibition at the American Museum of Natural History, New York city, on April 13-14. Prof. George E. Hale, of the Yerkes Observatory, read a paper on "The Functions of Large Telescopes."

BROOKLYN ENGINEERS' CLUB.—At the regular meeting of this club, held April 14, Mr. George W. Tillson read a paper on the "Selection of Paving Materials." The paper contained an interesting table, in which numer-lcal values were assigned to the various qualities desired in an acceptable paying material, a proper adjustment of which showed the comparative values of the different materials cited for any particular case.

A. J. Provost, Jr., Secy.

A. J. Provost, Jr., Seey.

AMERICAN CHEMICAL SOCIETY.—The regular meeting of the New York section was held at the College of the City of New York, on April 15. The following was the program of the evening: "Preliminary Notes on the Use of Taka-Diastase as a Laboratory Reagent," H. C. Sherman; "A Convenient Stirring Apparatus for the Laboratory," James H. Stehbins, Jr.; "The Amex Sluice, a New Apparatus and Process for Electrolytic Extraction of Gold from Ores," Thomas M. Chatard.

THE FRANKLIN INSTITUTE .- At the last meeting of the mining and metallurgical section, held on April 13, Mr. Raimundo Cahrera, of New York city, read an Interesting paper on the "Minersi Resources of Cuha"; an ac-count of the physical conditions under which mining is there carried on, and the administration of the mining

laws was given.

Mr. Militades W. Armas read a paper giving a detailed account of the "Metallurgical Treatment of the Complex Silver Ores of Auduna, Sonora, Mexico."

J. S. de Beuneville, Secy., M. and M. Section.

ENGINEERS' CLUB OF CINCINNATI.—At the March meeting, held on the 13th, the death of Mr. Oswald Dietz was announced. The question of joining the Association of Engineering Societies was discussed at some length and

Engineering Societies was discussed at some length and a committee was appointed to bring the matter before the entire membership by a letter ballot.

Mr. W. H. D. Totten resd a paper on "Testing and Inspection of Steel Materials." He contrasted the present spection of Steel Materials. The contracted the present methods with those of former years, and outlined the practice at the works of the Carnegie Steel Co., Ltd., and the workings of its Buresu of Inspection, together with the workings of its percent and testing an carried out at those works. The sdvantages of such a hureau, both to the manufacturer and the customer, were pointed out. Various specifications for inspection and testing were quoted from.

J. F. Wilson, Secy.

MONTANA SOCIETY OF ENGINEERS.—A meeting of the society was held in Helena on April 12. A commit-tee was appointed to consider the question of taking action and co-operating with other states interested in securing a grant of arid lands to be used for the purpose of Irrigrant of arid industry grants are large tracts in the Rocky Mountains which it is understood the general government will give. The movement originated in Wyomling, ernment will give. The movement originated in Wyoming, where the desirability of state control of arid grazing lands is even more apparent than in Montana. The state engineers of Utah, Colorado, Nebraska, Kansas and Wyoming held a meeting recently at which it was concluded to ask a grant of 5,000,000 acres of grazing land to each of the arid states, this land to be rented and the proceeds to be applied to irrigation investigations and development. To accomplish this it was recommended that a memorial he sent to the representatives in Constress of the respective accomplish this it was recommended in Congress of the respective states.

Albert S. Hovey, Secy.

CIVIL ENGINEERS' CLUB OF CLEVELAND.—The last regular meeting of this cluh was held on April 12 at the Case School of Applied Science. Prior to the meeting the members visited the mechanical and electrical laboratories of the school. There were present 57 members and visitors. A letter from the Engineers' Society of Western New York, inquiring as to legal status of the profession in Ohio, and another letter from H. M. Wilson, Washington, suggesting that a memorial he sent to the Ohio legislature in favor of the proposed topographical survey of the state heing made in conjunction with the U. S. Geological Survey, were read. Prof. C. H. Benjamin then delivered an illustrated lecture upon the "Evolution of Machine Design." Attention was called to faulty designing in the earlier machines, from authentic as well as a structural point of view, such as the use of carved cast-iron legs of Louis XIV, style under heavy planers, the imitation of wood framing and penelling in cast-iron work and the introduction of architectural features, all of which were entirely unnecessary to the machine. CIVIL ENGINEERS' CLUB OF CLEVELAND .- The last tirely unnecessary to the machine.

AMERICAN RAILWAY ASSOCIATION.—The spring meeting of this association was held at Louisville, Ky., on April 6, with about 100 present. The Executive Committee reported 247 members representing 161,629 miles of SERIES:

The joint committee on Interlocking and Block Signals, The joint committee on interfocking and Block Signals, which is revising the rules for hoth systems, reported progress. The report of the committee having in hand car service with reference to mileage of freight cars on car ferry lines was referred back to the committee for further confidentials. ther consideration.

The Committee on Train Rules handed in a report answering several communications received, which adonted.

of the Committee on the Metric System a letter from Mr. L. Weissenbruch. Secretary-General of the International Railway Congress and Chief Engineer of the Belgian State Railways, was presented.

In Belgium and all countries officially using the metric system the freight tariffs are based upon the metric quintal of 100 kilograms (220.5 lbs.) for fast service and the metric ton (2,205 lbs.) for allow service, with fixed minimum of the countries of the co

mums.
The standard gage of track of the Belgium railways is 1,435 millimeters (4 ft. 8.496 ins.) measured between inner sides of the heads of the rsis. On curves the gage of the track may not exceed 1,465 millimeters (4 ft. 9.677 ins), including the widening (about I 3-16 ins.). These atandards are uniform in Germany, Austria, Hungary, Italy, Switzerland, France and Belgium.

As an appendix to the report an abstract was given from a paper read by Captain Sankey at the meeting of the English Institution of Civil Engineers, held in London May 27, 1897.

May 27, 1897.

Brosdly speaking the decimal system is used in engineering in England whenever calculation other than mere checking have to he made, or when very accurate dimensions have to he expressed.

* * In either case the decimals are those of the inch, its square or its cube.

* * If decimals of an inch are adopted the aystem is still incomplete, owing to there being 12 ins. to the foot, 3 ft. to the yard, and so on. It is here that the metric system has a great advantage—it is a decimal system throughout.

The proceedings of the matter.

The proceedings of the meeting will be issued about May May 15 was selected as the date for the change of time tables and it was decided to hold the next meeting in New York on Oct. 16.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING Bids to he WITH DATE OF OPENING BIDS.

Bids to he WITH DATE OF OPENING BIDS.

Bids to he WOrk.

Apr. 21. Asphalt paving, Oswego, N. Y.

Apr. 21. Asphalt paving, Oswego, N. Y.

Apr. 21. Water pipe, hydrants, etc., New York.

Apr. 14. Apr. 21. Paving stones, etc., Maiden, Mass.

Apr. 22. Paving stones, etc., Maiden, Mass.

Apr. 21. Paving (15.00) eg. yes.), Wauketho, Wis.

Apr. 21. Paving (15.00) eg. yes.), Wauketho, Wis.

Apr. 22. Repairing asphalt, Erie, Pa.

Apr. 21. Repairing asphalt, Erie, Pa.

Apr. 22. Bridge, Monticello, Ind.

Apr. 22. Eriet supplies, etc., Harrisburg, Pa.

Apr. 22. Brick sidewalks, New Orleans, La.

Apr. 22. Brick sidewalks, New Orleans, La.

Apr. 22. Heating and ventilating, Baltimore, Md.

Apr. 22. Heating and ventilating, Baltimore, Md.

Apr. 22. Heating and ventilating, Baltimore, Md.

Apr. 22. Water-works, Prattsburg, New, Apr. 14.

Apr. 22. Sewer and street castings, Canton, O.

Apr. 23. Sewer and street castings, Canton, O.

Apr. 24. Sewer and street castings, Canton, O.

Apr. 25. Sewer and street castings, Canton, O.

Apr. 26. Service, Prattsburg, New, Apr. 14.

Apr. 27. Sewer and street castings, Canton, O.

Apr. 28. Evoluming station, etc., Billerica, Mass.

Apr. 29. Stroken stone, Clinton, Mass.

Apr. 29. Stroken stone, Clinton, Mass.

Apr. 21. Apr. 23. Lymping station, etc., Billerica, Mass.

Apr. 21. Apr. 23. Evoluming, etc., Helena, Mont.

Apr. 23. Paumping, etc., Helena, Mont.

Apr. 23. Street work, Jersey, City, N.

Apr. 24. Stone sidewalks, Elmira, N.

Apr. 25. School hulldings, Wilmington, Del.

Apr. 26. School hulldings, Wilmington, Del.

Apr. 27. Stone sidewalks, Elmira, N.

Apr. 28. Helper experience, Collevalnd CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Apr. 28. Dock, West Point, N. Y. Advertised, Eng. News, Apr. 14 and 11. Apr. 28. Oli or vapor lighting, Cleveland, O. Apr. 28. Grading, etc., Cleveland, O. Apr. 28. Main sewer, etc., Cleveland, O. Apr. 28. Water tunnel, intake, etc., Clincinati, Apr. 7. Advertised, Eng. News, Mar. 31 to Apr. 21. Apr. 28. School building, Indianapolis, Ind. Apr. 28. Water meters (1,040), Chicago, Ill. Apr. 28. Water meters (1,040), Chicago, Ill. Apr. 28. Exchool building, Indianapolis, Ind. Apr. 28. Brick sewers, Providence, R. 1. Apr. 29. Brick sewers, Providence, R. 1. Apr. 21. Apr. 28. Electric plant, Grand Rapids, Mich. Apr. 21. Apr. 28. Electric plant, Grand Rapids, Mich. Apr. 21. Apr. 29. Electric plant, Grand Rapids, Mich. Advertised, Engineering News, Apr. 21. Apr. 29. School building, Defiance, O. Apr. 29. Sewer, Buffslo, N. Y. Apr. 29. Plumbing, Miliard, N. Y. Apr. 29. Paving, Buffslo, N. Y. Apr. 29. Paving, Buffslo, N. Y. Apr. 29. Bricks and plue sewers, St. Louis, Mo. Apr. 20. Brick and plue sewers, St. Louis, Mo. Apr. 20. Brick and plue sewers, St. Louis, Mo. Apr. 20. Scewers, Omaha, Neb. Apr. 20. Scowers, Omaha, Neb. Apr. 20. Scowers, Omaha, Neb. Apr. 20. Cement sidewalks, Irvington, Ind. Apr. 20. Cement sidewalks, Irvington, Ind. Apr. 20. Canal work, Cornwall, Ont. Apr. 20. Canal work, Cornwall, Ont. Apr. 20. Apr. 11. Apr. 20. Canal work, Cornwall, Ont. Apr. 20. Scewers, Washington, D. C. Apr. 21. Asphalt paving, Minneanolis, Minn. Apr. 30. Paving, Mahanoy City, Pa. Advertised, Eng. News, Apr. 14. Apr. 30. Paving, Mahanoy City, Pa. Advertised, Eng. News, Apr. 14. Apr. 30. Paving, Mahanoy City, Pa. Apr. 30. Sewers, Washington, D. C. Apr. 31. Advertised, Eng. News, Apr. 14. Apr. 30. Paving, Mahanoy City, Pa. Advertised, Eng. News, Apr. 14. Apr. 30. Repairing pavement, Washington, D. C. Apr. 31. Advertised, Eng. News, Apr. 14. Apr. 30. Repairing pavement, Washingto
Apr. 28.011 or vapor lighting Cleveland
Apr. 28 Grading, etc., Cleveland, OApr. 7
Apr. 28. Water tunnel, intake, etc., Cincinnati Apr. 7
Apr. 28, School hullding, Indianapolis, Ind
Apr. 28 Water meters (1,040), Chicago, Ili. Apr. 21
Apr. 28. Brick sewers, Providence, R. 1
Apr. 28. Water franchise Cloverner Vy
Apr. 28. Electric plant, Grand Rapids, Mich. Apr. 21
Apr. 28 Pine and brick sewers Davison Opr. 21
Apr. 28. School huilding, Defiance, O. Apr. 21
Apr. 29. Sewer, Buffslo, N. Y
Apr. 29 Plumbing, Millard, N. Y
Apr. 29. Asphalt paving, Minneapolis, Minn
Apr. 29. Paving, Buffalo, N. Y
Apr. 29. Bridge superstructure, Zanesville, O. Apr. 21
Apr. 29. Brick and pipe sewers, St. Louis, MoApr. 21
Apr. 29. Mooring stones. Portland, Me. Apr. 21
Apr. 29. Stone, Cleveland, O
Apr. 29. Electric wiring. Albany. N. Y
Apr. 29. Asphalt paving, Minneapolls, Minn.
Apr. 30. Canal work, Cornwall, Ont Apr. 14
Apr. 30. Sewers, Washington, D. C.
Anr. 30, Paving, Mahanov City, Pa
Advertised, Eng. News, Apr. 14 and 21.
Apr. 30. Electric light plant, Superior, Wis
Apr. 30 Cast-iron floor, Boston, Mass
Apr. 30. Repairing pavement, Washington, D. C. Apr. 7
Apr. 30. Repairing dredge Charleston S. C.
Advertised, Eng. News, Apr. 7 to 21.
Apr. 30. Surfacing road (6 miles). Milton, Mass. Mar. 21
Advertised, Eng. News, Msr. 31 to Apr. 14.
Apr. 30. Court house, Elk Point, S. Dak
Apr. 30. Grading Ashury Park N. J.
Apr. 30. Library hullding plans, Jersey City, N. J., Apr. 21
Apr. 30. Garhage disposal, etc., Detroit, MichApr. 21
Advertised, Engineering News, Mar. 10.
Advertised, Engineering News, Mar. 10.
May 1 College huilding, Georgetown, Tex
May 1. Cathedral, Memphis. Tenn
May 1. Electric lighting, Sheboygan Falls, Wis Mar. 24
May 2. Arc lighting (240 lights), Elmirs, N. Y. Apr. 14
May 2. Water pipe, hydrants, etc., Lehanon, PaApr 14
Advertised, Engineering News, Apr. 14.
Advertised, Eng. New, Apr. 7 to 28.
May 2. Paving, Rockford, Ill
May 2. Telephone service, New York, N. Y Apr. 21
May 2. Water pipe, Mitchell, S. Dak
May 2. Water pipe, Mitchell, S. Dak. Apr. 21 Advertised, Engineering News, Apr. 21. Apr. 21 Advertised, Engineering News, Apr. 21. May 2. Stoen arch, Elyrla, O. Apr. 22 May 2. Stoen arch, Elyrla, O. Apr. 21 May 3. Street railway franchise, Canton, O. Apr. 21 May 3. Street railway franchise, Canton, O. Apr. 21 May 3. Bridge (200-fit, Span), New Whatcom, Wash, Apr. 21 May 3. Jail, Callon, Ga. May 3. Jail, Callon, Ga. May 3. Jail, Dailon, Ga. May 3. Steel cells (4), Visalia, Cal. May 3. Jail, Dailon, Ga. May 3. Steel cells (4), Visalia, Cal. May 4. Bridge, Meadow Grove, Neh. Apr. 21 May 4. Bridge, Meadow Grove, Neh. Apr. 21 May 4. Bridge, Meadow Grove, Neh. Apr. 21 May 4. Bridge, Leavenworth, Kan. Apr. 21 May 4. Bridge, Cavenworth, Kan. Apr. 21 May 4. Constructing road, Clinton, Mass. Apr. 21 May 5. Steel bridge, Jersey City, N. J. Apr. 21 May 5. Steel bridge, Jersey City, N. J. Apr. 21 May 5. Steel bridge, Jersey City, N. J. Apr. 21 May 5. Grading, paving, etc., Cameron, W. Va. Apr. 21 May 5. Steem heating, etc., Buffalo, N. Y. Apr. 14 May 5. Sewer honds, East Cleveland, O. Apr. 14 May 5. Serve honds, East Cleveland, O. Apr. 21 May 6. Brick paving (47,000 sq. yds.), Tampa, Fla. Apr. 7 Advertised, Eng. New, Apr. 7 to 28. May 6. Newer-works, Cahoun, Ga. Apr. 21 May 6. Plaster models, etc., Cumban, Neh. Apr. 21 May 7. Building substructure, Cheyenne, Wyo. Apr. 21 May 6. Plaster models, etc., Cumha, Neh. Apr. 21 May 7. Building substructure, Cheyenne, Wyo. Apr. 21 May 7. Building substructure, Cheyenne, Wyo. Apr. 21 May 9. Water honds (300,000), Cleveland, O. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hornellsville, N. Y. Apr. 21 May 19. Brick paving, Hor

May 14 Improving road, Cincinnati, O
Msy 10. Laying Advertised, Engineering News, Apr. 14.
Msy 16. Library Dullding, Newark, 17. Prescott, Ariz.Mar. 31 Msy 18. Extending water-works, etc., Prescott, Ariz.Mar. 31
May 18. Extending water-works, etc., Frescott, Ariz, Mar. 31 May 18. Eridges (3), Chicago, Ill
Msy 10 Advertised, Eng. News, Mar. 31 to Apr. 21.
Dridge Chicago, Ill.
May 18. Advertised, Eng. News, Apr. 7 and 14.
Msy 18. Sewers, Prescott, Ariz. Msy 20. Court house, Parsons, W. Va
May 20. Court house, Parsons, W. Va. May 21. Wooden hull, Montgomery, Aia,
May 21 Wooden nuit, Montgamery, Ala.
May 21 Advertised, Eng. News, Apr. 21 to May 12.
May 25. Water franchise, Ridgewood, N. JMar. 24
Advertised, Eng. News, Mar. 24 to Apr. 28.
hands (\$19 O(k)) St Johnsville N V Apr 14
May 30. Pactory Heliant Malwann Ask
May 30. Factory Bunding, etc., Malvern, Ark
Comprism, masonry, etc., Chicago, III.
Floring Pallway, Zurich, Switzerland Mar. 10
tune 1 Ry-nass, etc., Unicago, Ill
Advertised, Eng. News, Apr. 21 and 28.
Ann 91
Apr 21
June 6. Electric Iranchise, Gridley, Cal
June S. County road, Bozeman, Mont
June 24. Electric plant, Hawthorne, AustraliaApr. 14
Aug. of theopital plans San Francisco Cal Mar. 24
Aug. 31. Hospital plans, San Francisco, Cal
No date. County hridges (5), Cumber land, ald.
". Composite huils, Wahigoon, Ont
" Power plant, Sault Ste. Marie, Mich Apr. 14
Advertised, Eng. News, Apr. 14 and 28.

RAILWAYS.

RAILWAYS.

ALBERENE.—R. E. Shaw, Engr. and Secy., Alberene, Va., informs us that this company is laying the last few miles of its railway between the Arrowhead state quarries and Warren, via Alberene, Va., a distance of 12 miles. The line is chiefly intended to provide an outlet for these state quarries and the Alberene soapstone quarries, and it will be operated as a feeder of the Chesapeake & Ohio R. R. Pres., C. D. Langhorn, Greenwood, Va.

BANGOR & PORTLAND.—C. Miller, Pres., Bangor, Pa., writes us that it is expected to huild a 1½-mile branch of this line from Pen Argyle, Pa., to the American Bangor siste quarry, at a cost of about \$10,000, and a ¼-mile siding at East Bangor to Columbia quarry, to cost, \$1,000. Contracts have also been made for the erection of a 50-tt. plate girder hridge at Nazareth Junction, with about 500 ft. of trestling, to cost \$6,000, and a 35-ft. plate girder and masonry bridge in Bangor, to cost \$1,000; work to be done by the Edge Moor Bridge Co., Wilmington, Del. A new erecting shop at Bangor will be built at a cost of \$1,000. A new freight locomotive & Machine Co., at Paterson, N. J., at \$9,080.

BUFFALO, ROCHESTER & PITTSBURG.—We are informed that the following improvements.

chased from the Cooke Locomotive & Machine Co., at Paterson, N. J., at \$9,980.

BUFFALO, ROCHESTER & PITTSBURG.—We are informed that the following improvements have heen authorized to be made on this railway system: The construction of a new branch to New Castle, Pa., which is more fully described in nur issue of April 7, and for which contracts will probably he let early in May; the double-tracking of the main line hetween Falls Creek and Du Bois and double-tracking extended at other points; extensive changes in alinement and reduction of grades on the Rochester division; the straightening of the line and reduction of grades to be continued on the Pittsburg division; the completion of the large Carrollion treatis hetween Salamanca and Bradford, Pa.; and the erection of new shops near Du Bois and an engine house on the new terminus at Elk Run Junction, near Punxsutawney, for which pisns have heen prepared. Wm. E. Hoyt, Ch.

which plans have been prepared. Wm. E. Hoyt, Ch. Engr.
BURLINGTON & HINESBURG.—F. O. Sinclair, Ch. Engr., 174 Main St., Burlington, Vt., is quoted as saying that this proposed railway would be ready for operation by next August. The line will be 12 miles long, and it was partially graded and contracts for ties awarded to local parties some three years ago.

CAIRO & KANAWHA VALLEY.—H. S. Wilson, Pres., Parkersburg, W. Va., informs us that the proposed extension of this road from Smithville to Macfarlan, W. Va., 9½ miles, has heen located, and the right of way is now being obtained. No contracts will be let, as the work will be done by the company direct.

ERIE.—Gratton & Jennings, of Buffalo, N. Y., were awarded the contract, April 12, for the elevation of the Erie R. R. tracks in Jersey City, N. J., as advertised in Engineering News. About two miles of track will be raised at a cost of hetween \$200,000 and \$300,000. Work is expected to begin at once, and to be completed in about two years. C. W. Buchholz, Ch. Engr., Havemeyer Bidg., 26 Cortisandt St., New York.

FLORIDA & INDIAN SPRINGS—This company was incorporated in Georgia, April 12, with a capital stock of \$10,000. The company was formerly known as the Indian Springs & Florida Ry. Co., until its property was sold to the present company.

GRAY'S POINT TERMINAL—P. L. Wise, Ch. Engr., Cane Girardeau

sincer. The company was formerly known as the Indian Springs & Florida Ry. Co., until its property was sold to the present company.

GRAY'S POINT TERMINAL—P. L. Wise, Ch. Engr., Cape Girardeau, Mo., Informs us that the grading and track-isying is completed on this new railway from Gray's Point to Delta, Mo., and that the yards and huildings are nearly finished, but the completion of the incline is held-back by the high water in the Mississippl River. Johnston Bros. & Faught, General Contractors, St. Elmo, Ill., have also graded and iald track on the extension of the illinois Central, on the illinois side of the Mississippl River, and are only walting for high water to subside in order to huild the incline.

ILLINOIS CENTRAL—The McArthur Bros. Co., of Chicago, Ill., has been awarded a contract for the grading of a two-mile extension of this line in Murphysboro, Ill., to connect the tracks of the Cairo Shert Line with those of the Chicago & Texas branch. J. R. Fulton & Co., of Chicago, are reported as having received the misonry contract.—Information regarding the extension of the Illinois Central to meet the proposed Gray's Point Terminal Ry., at Gray's Point, Mo., may be found in an official communication from that company, given above.

JONESBORO, LAKE CITY & EASTERN.—A. J. Kerfoot, Gen. Mgr., Jonesboro, Ak., Informs us that all the right of way has been obtained for this line from Lake City, Ark, northeast for 15 miles, and that surveys are now being made; grading has also begun. Twelve miles of the road are already in operation. C. Van Smith, Ch. Engr., Mass

MASSACHUSETTS.—H. D. Woods, Cy. Engr., Newton, Massa, in his report to the board of aldermen regarding the abolition of grade crossings on the south side of the city states that there are eight grade crossings through Newton Centre and Newton Highlands, and that the estimated cost of doing away with the same is \$732,000, of which amount \$151,037 would be required for the de-

pression of tracks, \$165,006 for masonry and paving work, \$52,556 for solid floor bridges to be paid for hy the Boston & Albany R. R. Co., and \$47,342 to be paid by the city, among other items, for the grading of streets.

NORFOLK & WESTERN.—We are informed that H. M. Alken, Gen, Mgr. Morristown & Cumberland Gap Ry. Co., is negotiating with this company for an extension of its line from Bristol to a connection with the Morristown & Cumberland Gap Ry. and further from Corryton to Knoxville. This would require about 90 miles of new line and would give the Norfolk & Western a southern and western outlet. C. S. Churchill, Engr., Roanoke, Va.

NORTHERN PACIFIC.—E. H. McHeffry, Ch. Engr., Northern Pacific Ry., St. Paul, Minn., Informs us that the work now in progress between Cheney and North Yakima, Wash., does not involve any considerable amount of new construction work, heing confined to grade reduction and minor line revisions in connection with the replacement of the present 56-ih. steel hy new 72-ih. steel.

OMAHA & SIOUX CITY.—J. P. Latta, Pres., Tekamah, Neh., informs us that all the surveys have heen made for this proposed line between Omaha and Sioux City, via Blair, Tekamah, Decatur and Pakota, Neh., 100 miles. Capital has not yet been secured. W. E. Pratt, Cb. Engr., Tekamah.

Capital has not yet heen secured. W. E. Pratt, Cb. Engr., Tekamah.

PECOS VALLEY & NORTHEASTERN.—Mailory & Co., Chicago, Ill., are reported as having been awarded the contract for the extension of this railway from Amarilio, Tex., to Roswell, N. Mex., 206 miles. Work is to commence May 1, and to be pushed rapidly to completion. A. C. Camphell, of Eddy, N. Mex., is interested.

RIO GRANDE WESTERN.—E. J. Ysrd, Ch. Engr., Salt Lake City, Utah, informs us that the proposed work on this railway, near Springfield, consists merely in a change of the main line in order to reduce grades, which would only require the alteration of ahout two miles of track. Although the right of way has been obtained, yet it has not heen definitely decided to undertake the work. Pres., Wm. J. Paimer, 11 Broadway, New York.

SPRING GARDEN CONNECTING.—Frank Felkel, Ch. Engr., 703 Publication Bldg., Pittshurg, Pa., informs us that this company has petitioned the conneil of Allegheny, Pa., for the right of way over the city streets. After having secured this franchise, it is expected that construction will soon he hegun.

STAUNTON & AUGUSTA.—E. C. Vincent, Pres., Staun-

naving secured this franchise, it is expected that construction will soon he hegun.

STAUNTON & AUGUSTA.—E. C. Vincent, Pres., Staunton, Va., informs us that this company intends to construct a railway from Staunton south, probably connecting with the Norfolk & Western Ry., thus giving Stauuton a direct southern outlet, and the advantage of the Baltimore & Obio, the Norfolk & Western and the Chesapeske & Obio Rys. After the completion of this southern line it is hoped to build north into the undeveloped region of West Virginia, connecting the West Virginia Central R. R. at Elkins with Buckhannon and Parkersburg, W. Va., and from Elkins to Pittshurg and the north. Active work is expected to begin on the southern extension within 60 days. B. A. Blakemon, Secy. and Treas, Staunton.

TACOMA & COLUMBIA RIVER.—The council of Tacoma, Wash., April 8, granted a franchise to this company for the right of way within the city limits for its proposed line, including terminal facilities. Pres., William Bailey, 66 Broadway, New York.

STREET AND ELECTRIC RAILWAYS.

STREET AND ELECTRIC RAILWAYS.

LEWISTON, ME—It is reported that Manager Gerald, of the Lewiston, Brunswick & Bath Electric R. R. Co., bas made a contract with Pittshurg parties for shout \$50,000 of equipment for the new power station to he constructed at Brunswick. The contracts for grading and track-laying are expected to be awarded soon in four divisions, each about nine miles in length. John A, Jones, Ch. Engr., Lewiston.

BOSTON, MASS.—C. F. Baker, Supt. of Motive Power and Machinery, Boston Elevated R. R. Co., 439 Alhany St. Informs us that tbis company will install a new 4,200-HP. engine in its central power station, as stated in our last issue, and that the engine, which will be vertical cross-compound, will be directly connected with a 3,000-K-W. direct-current generator. Pres., Wm. A. Gaston.

MIDDLEBORO, MASS.—The selectmen of this town have granted a franchise to the New Bedford, Middleboro & Brockton St. Ry. Co. to build within the town limits.

PEEKSKILL, N. Y.—The Peckskill Traction Co. has been incorporated, with a capital of \$150,000, by Dr. Charles N. Wells, Jay R. Decatur, Matthew Clune, James F. Martin, Hanford Smith, of Peckskill; Jacob Larsch, New York.

BORDENTOWN, N. J.—The Monmouth Traction Co. was granted a franchise by the council, April 12, for the right of way through this town. The line must be in operation within a year, and a \$10,000 bond given. Pres., Edward Morrell, of Torresdale, Pa.

NEW BRUNSWICK, N. J.—The Syndicate Construct and Morrell, of Torresdale, Pa.

NEW BRUNSWICK, N. J.—The Syndicate Construct and maintain street railways in Middlesex, Somerset, Union, Mercer, Burlington and Camden counties. The incorporators are, Gottfried Kruger, Newark, N. J.: Edward H. Radel, New Brunswick; and Andrew Radel, Bridgeport, Conn.; all officers of the Brunswick Traction Co., of New Brunswick.

CARNEGIE, PA.—The Carnegle & Washington St. Ry. Co. was incorporated April 13, with a capital stock of \$18,000, to build a line 2½ miles long through the principal streets of the Brunswick Trac

cided when contracts will be awarded, but it will probably he within 60 days. Pres., John R. Byrne; Ch. Engr., W. N. Riter, botb of Scottdale.

MYERSVILLE, MD.—It is reported that work on the Myersville & Catoctin Electric Ry. Co. will be commenced in a few weeks. The line will be 5½ miles long, and will run from Myersville, through several villages, connecting with the Frederick & Middletown Electric Ry. about half a mile east of Middletown. Pres., C. F. Flook, Frederick, Md.

Md.

ATLANTA, GA.—The Atlanta & Douglasville Electric Ry.
Co., which has recently been jucorporated in this state, has
asked the council for a franchise to construct its proposed
line in Atlanta; work to hegin as soon as practicable.
Secy., Joe James.

asked the council for a tranchise to construct its proposed line in Atlanta; work to hegin as soon as practicable. Seey., Joe James.

CANTON, O.—Bids will be received at the office of the city clerk, May 3, for the sale of a street railway franchise, known as route No. 3.

CINCINNATI, O.—It is reported that the Mount Auhurn St. Ry. has been sold to the Cincinnati Consolidated St. Ry. Co., at \$278,000. Work will soon begin on the requipment of the line, as well as on the laying of new ralls; and stringing of double troiley wires. Pres., John Kilgour, DAYTON, O.—Reports state that the Checinnati & Miami Valley Traction Co. has leased the Dayton Traction Co 's line in this city for 399 years. It is expected that improvements will be made to the terminal facilities at the south end of the line, having in view a connection with Cincinnati, O. Pres., Dennis Dwyer, Hamilton, O.

HAMILTON, O.—The city council has granted a franchise to the Gincinnati & Hamilton Electric St. R. R. Co. for the construction of an extension along Central Ave.

ASHTABULA, O.—The commissioners of Ashtsbula county granted a 50-year franchise, April 15. to the Pennsylvania & Ohio Ry. Co. to build and operate an electric railway through Conneant, Kingsville, Ashtabula, Sayhrook and Geneva, and thence westward to a connection with the Cieveland, Painesville & Eastern.

CLAYTON, MO.—The St. Louis & Kirkwood Electric Ry. Co., said to be controlled by the St. Louis & Subnrban Ry. Co., has petitioned the county court for a franchise to construct and operate a line to connect the two above lines.

ST. LOUIS, MO.—It is reported that the South Broadway Improvement Co. will soon ask for a franchise to build an

ST. LOUIS, MO.—It is reported that the South Broadway Improvement Co. will soon ask for a franchise to huild an electric line, starting at 9th St. and Russeil Ave., to Broadway, north to Chouteau St., etc. Among those interested are, Ben Westhus, Henry Gehner, H. Stoffregen, John Becker, Jr., and H. Gideonsen.

John Becker, Jr., and H. Gideonsen.

LITTLE ROCK, ARK.—M. D. L. Cook is said to have heen awarded the contract for the construction of the proposed line of the Army Post Electric St. Ry. Co., incorporated on April 4, with a capital stock of \$55,000, as stated in our issue of last week. Work is to be completed within 60 days. Pres., Dod G. Gibson; Secy., R. J. Solourner.

ELECTRIC LIGHT AND POWER.

ROCKPORT, ME.—Press reports state that Rockport has voted to make a 5-year contract for electric lights and a 3-year contract with the Camden & Rockland Water Co. At the recent annual town meeting it was voted not to have the electric lights. The taxpayers on April 11 revoted on the question, which resulted with the above contract

being made.

LOWELL, MASS.—Bids are asked until April 26 for furnishing the court house with electric light fixtures. Arch., O. W. Cutter, 85 State St., Boston; L. S. Gould, Chn. County Comrs., East Cambridge, Mass.

AMESBURY, MASS.—It is stated that the Amesbury Electric Light, Heat & Power Co. will purchase at once a new 80-liP, generator. Mgr., H. A. Sawyer.

ABINGTON, MASS.—This place is said to have voted at a town meeting against contracting for electric lighting. Geo. A. Beal may he addressed.

ALBANY, N. Y.—The water commissioners have decided to have steam as the power for the new pumps at the fliter plant instead of electricity as they had intended. Bids for this work are asked until May 17. Geo. I. Bailey, Supt.

Supt. COLD SPRING HARBOR (L. I.), N. Y.—We are informed that it is very likely that a small electric light plant will he put ln. Popuation, 1,500. Des. Engr., Chas. H. Davis.

McGRAW, N. Y .- Pudney & Ensign are interested in a projected plant for this place.

projected plant for this place.

NEWARK, N. Y.—Schuman & Van Buren, of Newark, N.
Y., have heen awarded the contract, at about \$14,000, for erecting the power bouse at the asylum for feehle-minded females in this place.

GIBBSTOWN, N. J.—The question of building a plant is being considered by the Gibbstown Powder Works, according to reports.

being considered by the Gibbstown Louisian County Electric Co. MORRISTOWN, N. J.—The Morris County Electric Co. has asked for a franchise to lay electric wires in underground conduits. City Clerk Aylis may be addressed. Halnes V.—I. E. Derrick and David S. Halnes in this

SANDY HILL, N. Y.-J. E. Derrick and David S. Halnes are applied for permission to erect electric lines in this

HIGHTSTOWN, N. J.—It is stated that plans are being prepared for a plant to be erected at Hightstown for the Electric Light & Power Co. It will be of brick and Iron, one story and hasement, 40×75 ft., and will be fitted up with dynamos and other power machinery. Holt, Schroeber & Co., Hale Bldg., Philadelphia, Pa., may be addressed.

with dynamos and other power machinery. Holi, Schroeber & Co., Hale Bldg., Philadelphia, Pa., may be addressed.

ALLEGHENY, PA.—We are informed that the following hids were received April 11 for furnishing a 250-HP, water tube boiler and stoker and a multi-circuit direct current are dynamo of 125 light capacity: Boiler, with Playford stoker, Heine Safety Boiler Co., Pittsburg. \$5.375; Eric City Iron Works, Eric, Pa., \$5.600; Caldwell Water tube boiler, Edge Moor Iron Co., Wilmington, Del., \$6.070; Sterling Boiler Co., Pittsburg. \$6,070; Oil City Boiler Works, Oil City, Pa., \$4,150; Geary water tube boiler, with B. & W. stoker, Helne Company, \$4,975; Bahcock-Wilcox Co., New York, \$5,128; Edge Moor Company, \$5,740; with Murphy stoker, Helne Company, 4,065; Sterling Co., \$4,267; Dynamo, General Electric Co., Schenectady, N. Y., \$2,038; Fort Wayne Electric Co., Chicago, Ili., \$1,960. A local paper states that the Edge Moor Iron Co. has been swarded the contract for furnishing stoker and boiler complete at \$6,152.

PERKASIE, PA.—Carey B. Nace, Philadelphia, is said to have been swarded the contract for huilding a plant in this place, to he 50 × 75 ft., for Edinger & Co.

READING, PA.—Local papers state that the Philadelphia & Reading R. R. Co. is preparing plans for extending its electric plazt, in this city.

BALTIMORE, MD.—The contract for furnishing the engine for the payer contract for the passenger and patenting for the pew courthouse and nost-office for the passenger and pas

BALTIMORE MD.—The contract for furnishing the en-gine for the plant for the new courthouse and post-office has been swarded to Morton, Reed & Co., Baltimore, at \$6,996. The Siemens-Hajske Electric Co., Chicago, has the contracts for the dynamos and switchboards at \$3,091 and \$1,467, respectively.

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PIEDMONT, W. VA.—We are informed that the contract for constructing a plant for J. C. Fredlock, Piedmont, was let April 1 to the D'Olier Electric Co., 123 South 11th St., rhiadelphia. The plant will have a capacity for 20 2,000-c. p. and 250 16-o. p. lights; estimated cost, \$8,000.

cost, \$8,000.

FITZGERALD, GA.—We are informed that this city has soid \$33,000 in bonds at a premium of \$1,700 for a plant and water-works. The city is prepared to receive bids, with plans and specifications, for constructing the improvements. Address the Mayor, or Martin Scott, Councilmansital area.

ments. Address the Mayor, or Martin Scott, Councimana-t-Large.

Miami, Fla.—Fred C, Thomas, C, S. Van Houton and H. E. Robinson have been granted a franchise for a piant in this city, according to reports.

Pratt City, Ala.—The question of building a piant and water-works is being considered.

Jackson, Miss.—G, S. T. Carnes, Memphis, Tenn., and H. H. Corsou, Scheuectady, N. Y., are reported to have been awarded the contract for building a piant here.

NATCHEZ, Miss.—Bids are asked until June 2 for lighting the streets, parks and public buildings with electricity for a term of 10 years, from March 1, 1899. Mayor, W. G. Benbrook; Cy. Cik., Thos. R. Quarterman.

Clarksville, Tenn.—It is stated that the Queen City Electric Light & Power Co. Is about to extend its plant and install new machinery. Mgr., W. M. Case,

HARRIMAN. TENN.—D. W. Thomas, Cy. Cik., informs

HARRIMAN, TENN.—D. W. Thomas, Cy. Cik., informs us that the following bids were received April 14 for furnishing and installing the machinery for the plant:

Dyuamo (75 K-W.) and switchboard:

*Niuety K-W. machine, without switchboard, with board \$209 acquitional.

LEXINGTON, TENN.-H. E. Graper is reported as wishing to purcuase machinery for a plant for this place; popu-

LOUISVILLE, KY.—Bids are asked until April 26 for installing a plant in the post office bulding in this city. O. L. Spaulding, Asst. Secy. Treasury Dept., Washington, D. C.

D. C. WILLIAMSBURG, KY.—J. M. Blakely, Mayor, writes us that the couocil receutiy grauted a fracculae for a plant to Bell & Gagin. The time for work to begin is about expired, but no work nas been doue. Population, 2,000.

HARTWELL, O.—The question of granting a franchise to T. C. Haruish is being discussed by the couocil, according to reports; estimated cost, \$12,000.

corning to reports; estimated cost, \$12,000.

HURON, O.—Burtou J. Ashiey, Coosuit. Engr., Oid Colouy Engs., Chicago, is preparing plans for an electric light plant at sturou, O., to consist of one 60-arc light, 2,000-c. p. dynamo and a 1,000-light 10-c. p. alternator, eogines, boilers, building and pole line equipment; forty-seven arc lights will be justafied.

RICHWOOD, O.—This place voted April 18 on the ques-on of issuing \$10,000 in houds for a plant, according to

reports.

ELKHART, IND.—It is stated that the Home Electric Light & Power Co. will reconstruct its plant. The present plant cost about \$40,000. Pres., O. M. Lumhert; Mgr. aud Purchasing Agent, A. M. Barron.

RICHMOND, IND.—The committee is in correspondence with manufacturers in regard to estimates for the proposed municipal plant.

municipal plant.

GRAND RAPIDS, MICH.—Bids are asked until April 28 for furoishing and installing the machinery for the proposed municipal plant; estimated cost, \$100,000. Consult. Eugrs., Nagle & Bail, Mouadnock Block, Chicago; Ili.; Pres. Bd. Puh. Wks., D. E. Waters; Cik., F. A. Twamiey. HARBOR SPRINGS, MICH.—This place is reported to have evoted to issue \$6,000 in bonds for building a plant. PINCKNEY, MICH.—Bids are asked until May 2 for lighting the streets for a term of one year. R. H. Tuple, Cik. CHICAGO ILL.—The Altman & Taylor Co., Mansfield, O.,

CHICAGO, ILL.—The Altman & Taylor Co., Mansfield, O., has been awarded the contract for furnishing boilers for the municipal plant at \$16,800.

DECATUR, ILL.—Geo. F. De Witt, Alderman, writes us that blds were asked until April 18 for furnishing two 125 light dynamos. C. G. Dickson, Cy. Engr.

CEDARBURG, Wis.-This place is reported to have voted to build a plant.

ELKHORN, WIS.—H. C. Morris, Mayor, writes us that this city recently voted to issue bonds for a pisnt. No further action will be taken until the new council is in-stalled, which will be in a few days.

WEST SUPERIOR, WIS.—Gustav Willus, Jr., 511 Phoenly Bidg., St. Paul, Minn., has been engaged to prepare plans

HENNING, Minn.—We are informed that a committee as been appointed to investigate the question of putting in a plant.

ROCHESTER, MINN.—Bids are asked until April 21 for extending the plant. There will be required four bollers; compound engine, 110-volt generator, 60 meters, marble switchhoard, two 400-light transformers, etc.; check, \$1,-000. Supt., W. G. Rowan; Cy. Cik., G. McDermott.

WOOD LAKE, MINN.—A. B. Smith is reported as interested in the proposed plant for this place.

OSCEOLA, NEB.—This place is said to bave voted to bave electric lights.

WAYNE, NEB.—This place voted April 4 to issue \$5.00 in honds for constructing the proposed plant. Bids wiprohably be asked for st once.

CISCO, TEX.—Frank Vernon, Editor "Round-Up," is re-orted as interested in the proposed plant for this place.

COLORADO SPRINGS, COLO.—Geo. W. Jackson, Colrado Springs, bas applied for a 25-year franchise to supply this city with electric power. The power will be transmitted from Lake Morine.

GOLDFIELD, COLO.—L. L. Summers, Consult. Engr., La Belle Mill, Water & Power Co., is reported to have let contracts for furnishing the machinery and for con-structing the power plant at this place.

LAMAR, COLO.—The council, on April 12, granted a franchise for a plant to Bent & Strain. A telephone system will also be established. The plants are to be in operation by Oct. 1.

BAKERSFIELD, CAL.—The village trustees are re-orted to have decided to secure 25 arc lights for the vil-

iage.

GRIDLEY, CAL.—Bids are asked until June 6 for the purchase of a 50-year franchise; it having been applied for by the Gridley Electric Light Co. II, D. Lansen, Cik. Bd. SACRAMENTO, CAL.—Bids are asked until April 25 for lighting this city for oue year, from May 1. M. J. Desmand, Cy. Cik.

WENTURA, CAL.—Lincoln Nissiey, Elect. Engr., bas filed estimates for the proposed municipal plant; estimated cost, \$19,400. The Ventura Land & Power Co. is said to have offered cheaper lights to the town on a long contract.

onered cheaper lights to the town on a long contract.

LEWISTON, IDAHO.—Press reports state that the
Lewiston Light & Power Co. has commenced the construction of a ditch on Asotin Creek. The ditch will supply
power for its new plact, which will be in operation July 1.
The site of the power plant is 10 miles from Lewiston,
in the state of Washington.

in the state of Washington.

OTTAWA, ONT.—it is stated that Jas, Perry, E. L. Perkins and R. Lester, of Ottawa, are interested in a proposed plant and water-works for Rideauville, Que., for which they have asked for a franchise.

BRANTFORD, ONT.—Bids are asked until April 28 for furuishing the machinery and for constructing a plant of 120 2,000-c. p. and 80 32-c. p. lights, or for lighting this city with that number of lights. D. B. Wood, Chn. Com.

MENICO. MEX.—The "Journal of Commerce" New

120 2.000-c. p. and 80 32-c. p. lights, or for lighting this city with that number of lights. D. B. Wood, Chn. Com.

MEXICO, MEX.—The "Journal of Commerce," New York, states that the Siemens & Haiske Electric Co., Monadnock Bidg., Chicago, Ili., is negotiating with the city authorities of Tacuhaya, Mexico, for the installation of a new electric light plant. J. K. Ebert and Joseph Ketchum, of Mexico City, are looking forward to their heing allowed to establish a new plant in the city of Oaxaca, State of Oaxaca. A. E. Worswick has been engaged by Wernher, Beit & Co., 29 Holborn Viaduct, London, E. C., the owners of the Federal District Ry., of Mexico City, to superintend the work of equipping the lines with electric motive power. The contract for the electrical transmission of power from the fails of the Monte Alto and Tlatnepantia Rivers to Mexico has been awarded to G. & O. Braniff & Co., the representatives of the Westinghouse Electric & Mig. Co., of Pittsburg, Pa. This will be derived from three ialis on the Monte Alto and three fails on the Tlatnepautia River, amounting in all to about 6,000 HP, and will he transmitted to Mexico from 20 300-HP. Westinghouse polyphase generators directly coupled to 20 water-wheels. The contract will smount to nearly \$1,000,000.

NEW COMPANIES.—Sayreville Electric Light & Power Co., Sayreville, N. J.; \$4,000, with full amount paid in; Jas. R. Sayre, Jr., Newark, N. J.; Peter Fisher, Sayreville. Williams Electric Co., Cleveland O.; \$25,000; to manu-

NEW COMPANIES.—Sayreville Electric Light & Poweer Co., Sayreville, N. J.; \$4,000, with full amount paid in; Jas. R. Sayre, Jr., Newark, N. J.; Peter Fisher, Sayreville.
Willams Electric Co., Cleveland O.; \$25,000; to manufacture telephooe and electric supplies; J. A. Williams, Will G. heade, F. A. J. Keller, B. J. Chamberlain, Geo. Gehard Monday.
Brownwood Ice & Light Co., of Brown county, Brownwood, Tex.; \$30,000; to supply light and electric motor power to the public and the manufacture and sale of ice; Brocke, Smith, Jobu G. Lee, J. W. Shepard.
La Salle Electric Power Co., Buffalo, N. Y.; \$50,000; to purchase, improve and sell resl estate in Erle and Niagara counties; Charles A. Pooley, Maurice C. Spratt, R. C. Paimer, Buffalo.
Sunset Power Co., Los Angeles, Cal.; \$2,000,000; H. Bert Ellis, F. D. Builard, Charles Udell, E. B. Udell.
Union Electric Power & Light Co., Copperpolis, Calveras county, Cal.; Oliver Ames, Samuel Carr, of Boston, Mass.; G. McM. Ross, Benjamin Johnston, Copperpolis; F. B. Nicol, Stockton, Cal.
Decatur Gas & Electric Co., Checatur, Ill.; \$400,000; W. C. Johns, G. C. Danforth, Joseph Housam.
Farnham Electric Co., Chicago, Ill.; \$15,000; E. W. Farnham, H. Burkhoider, C. E. M. Pratt.
Sonoma Electric Light, Co., Sonoma, Cal.; \$10,000; Pres., F. T. Duhring; Vice-Pres., C. F. Leiding; Secy., F. Clewe; Tress., C. Aguilloa.
Williams Electric Light, Heat & Power Co., Getyshurg, Pa.; \$2,000, with \$200 paid io; Jsred Darlington, Treas, Glens Mills, Pa.; Horsce A. Doan, Chas. A. Bragg, Pbiladelphis; Frank Reeder, Easton, Pa.
Standard Electric Magnetic Power Co., Martinsburg, W. Va.; \$5,000,000; R. Miles Rohinson, W. L. Teter, Philadelphis, Pa.; F. S. Seamsn, M. L. Ritter, Reading, Pa.; F. C. Stalnaker, Hanover, Pa.

BRIDGES.

CHAZY, N. Y.—The question of bridging the Little bazy River is being considered.

Chary River is being considered.
GLOVERSVILLE, N. Y.—Chas. Fiske, Jr., Cy. Engr., writes that bids were received April 19 for the masonry substructure of a wooden hridge at Grove St., estimated cost, \$775. Bida will be ssked later for the construction of a steel bridge 20 ft. long and 50 ft. wide.

JERSEY CITY, N. J.—Bids are asked by the board of freeholders until May 5 for constructing a steel bridge, to cost ahout \$18,000, over the Morris & Essex Csnal at Pacific Ave.

Pacific Ave.

NAZARETH, PA.—We are informed that the Bangor & Portiand Ry. Co., C. Miller, Pres. and Gen. Mgr., Bangor, Pa., bas awarded a contract to the Edge Moor Bridge Co., Wilmington, Del., to construct a 50-ft. plate girder bridge with a 500-ft. bridge in Bangor, Pa., to cost \$1,00.

33-IL bridge in Bangor, Fa., to cost \$1,00, McKEESPORT, PA.—A petition has been presented to the council for the construction of a foot hridge over the tracks on Fourtb and Walnut Sts., according to reports. SHARTLESVILLE, PA.—The county court, Reading, bas appointed Solomon Dreibelbis, Dr. Wim. Harris and Charles Seidel as viewers for the proposed new bridge over Pium Creek.

over Plum Creek.

WILLIAMSPORT, PA. — The county commissioners awarded the contract April 12 to the Horsebeads Bridge Co., Horsebeads, N. Y., at \$1,633 for constructing a bridge of five spans, 45 ft. each, over Lycoming Creek, McNett townsbip.

wnsbip.

BALTIMORE, MD.—Reports state that the county com-insciners bave been petitioned to construct a bridge over unpowder River at Massamore's Mill.

Gunpowder River at Massamore's Mill.

CUMBERLAND, MD.—Bids are asked by the cocommissioners for the construction of three iron bridg
Woodland, Short Gap and Miller's Run, respectively.

ATHENS, ALA.—Reports state that the Jasper Construction Co. of Jasper, Ala., has been awarded the contract for building a new iron or steel bridge at Reder's Shoals, ten miles north of Athens. Estimated cost, \$9,000.

BLOUNTVILLE, TENN.—Reports state that Rogers, County Engr., has received bids for the tion of a bridge 112 ft. long and 16 ft. wide extanooga Creek, to cost about \$1,000.

CINCINNATI, O.—Frank \$1,000.

CINCINNATI, O.—Frank \$1,000.

CINCINNATI, O.—Frank \$1,000.

Terek townstructed to prepare plans for a culvert is structed on Northside Ave., in Mili Creek townstructed on eventual to the van Blaircum of the saked by the count for the construction of two bridges and appropriate the saked by the count for the construction of two bridges and appropriate the saked by the count for the construction of two bridges and appropriate the saked by the County of the County of the construction of two bridges and appropriate the saked by the County One of the County One of the Saked by the County One of the Saked by the County One of the Saked by the County One of the Saked

cost about \$4,415, over Muddy Creek, in Green cost COLLINWOOD, O.—It is reported that the Lie R. R. and the Cleveland, Paineaville & Eastern et be asked to share the cost of constructing a better the Lake Shore R. R.; estimated cost, \$60,000. COLUMBUS, O.—Plans are being prepared of Maetzel, County Engr., for a plate girder that Alum Creek, on East Main St., to be 150 ft. Ind. (t. wide, of two spans, to cost about \$50,000. LORAIN, O.—It has been voted to construct bridge across the Black River, to cost about bridge across the Black River, to cost about Structing a stone arch scross the west branch Black River, at Third St., according to reports. Lewis, County Audr.

MILLWOOD, O.—Bids are asked until May 15

MILLWOOD, O.—Bids are asked until May 12 for the iron superstructure of a bridge 186 ft. iong, to be constructed over the Kokosing River; surety, \$5.69. W. A. Wander, County Audr., Mount Vernon.

HAMILTON, O.—It is reported that \$75,000 in bonds will be issued for the construction of a bridge 500 ft. long and 40 ft. wide, of one span across the Miami River at Wood

Ave.

TROY, O.—Bids are ask ed until April 29 for building an iron truss bridge 116 × 20 ft. over the Miami River and cautal on East Main St., Piqua, and a 125-ft. span bridge, 16 ft. wide, over Lost Creek, in Staunton township, according to reports. J. T. Bartmess, County Audr.

cording to reports. J. T. Bartmess, County Audr. URBANA, O.—Press reports attate that the Bellefontaine Bridge Co., Bellefontaine, O., has been awarded a contract to construct a new bridge over Glady Creek, in Concord township, and one in Salem township.

ZANESVLLE, O.—Bids are asked until April 29 for constructing the steel superstructure of a bridge across the Licking River, at Dilion's Fails, according to reports. James L. Starkey, County Audr.

MONTICELLO, UND.—Bide are asked until April 24 for the County Audr.

MONTICELLO, IND.—Bids are asked until April 21 for constructing a bridge, estimated to cost about \$25,000.

M. J. Holtzman, County Audr.

ORLEANS, IND.—The county commissioners are considering a proposition to construct a bridge at Fisher Ford.

GREENSBURG, IND.—A wagon bridge is to be con-tructed across Panther Creek, esst of this place, acstructed across Pa cording to reports.

ording to reports.

RICHMOND, IND.—Plans have been submitted by H.

V. Weber, Cy. Eugr., for the construction of a bridge at forth 10th St., about 155 ft. long and 20 ft. wide, estimated cost, \$6,000. Mayor Ostrauder; Jesse H. Brooks, hn. Com.

ATHENS, MICH.—A. N. Ciark, C. E., writes us that this town has voted to erect four steel highway bridges. LANSING, MICH.—J. C. Davis, Mayor, informs us that the iron bridge which was removed from Michigan Ave. will he put in position across the river at Kaiamazoo St., at a cost of \$8,000.

t a cost of \$8,000.

MILWAUKEE, WIS.—The financial committee has deded to appropriate \$80,000 for the construction of a new ridge at Grand Ave. and the removal of the old structure of greenfield Ave., according to reports. Geo. H. Benzenerg, Cy. Engr.

berg, Cy. Engr.

MINNEAPOLIS, MINN.—Reports state that the St. Paul & Duluth R. R. has asked the council for permission to construct a bridge over Fillmore St., N. E. L. S. Miller, Cb. Engr. and Asst. Gen. Mgr., St. Paul.

NEW ULM, MINN.—Bids are asked by the county supervisors until April 26 for constructing an iron bridge across the Little Cottonwood River, according to reports.

across the Little Cottonwood River, according to reports.

ST. PAUL, MINN.—L. W. Rundlett, Cy. Engr., has submitted the following estimates, for repairing bridges; high bridge, \$30,500; Third St. and University Ave. bridges, \$24,000; Wabssha St. bridge, \$168,000.

LOUP CITY. NEB.—A petition bas heen presented to the county supervisors for the construction of a bridge across the Middle Loup River, west of this place.

WEBBERS FALLS, IND. TER.—The Campbell-Lynch Bridge Co., Fort Smith, Ark., has been incorporated by William W. Campbell, Susan F. Lynch, Ben. T. Duvali, Rose Duvali, F. N. Davis; capital stock, \$100,000, to construct a bridge across the Arkansas River, at this place.

DENVER, COLO.—The board of public works awarded the following contracts April 8 for constructing the 14th St. viaduct: Missouri Valley Bridge & Iron Co., Leavenworth, Kan., steel work, \$107,654; McGilfray Stone Co., saphait paving, \$33,530.

LEAVENWORTH, KAN.—Bids are asked until May 4 for the construction of stone abutments and superstructure of a bridge over Three Mile Creek. M. A. Przybylowicz, Cy. Cik.

ture of a bruge over three mile creek. M. A. Frayoylowicz, Cy. Cik.

COLFAX, WASH.—Bids are asked until May 4 for constructing a combination 60-ft. bridge over Hangman Creek
at Tekoa.—The county commissioners will also give a
hearing May 3 in regard to the construction of a combination bridge over Pine Creek on the Belshaw and Bancroft Road. Each bridge will be 18 ft. wide. John Tabln,
County Audr., Colfax.

NEW WHATCOM, WASH.—Bids are asked until May 3
for constructing a 200-ft. span bridge over the Nocksack
River. Alex Van Wyck, Cik. Bd. County Comrs.

SPOKANE, WASH.—Bids are asked by the board of public works, until May 12, for building a bridge across the
river for carrying a 24-in. force main. Secy., B. H. Fowle.

PORTLAND, ORE—The following bids were received by the county commissioners, April 8, for making the superstructure new and putting in four new chords to swing spans: R. Wakefield, \$17,310; Columbia Bridge Co., \$15,-460; Pacific Bridge Co., \$14,279; for repairing the bridge and putting in four new chords to swing spans: R. Wakefield, \$15,214; Columbia Bridge Co., \$15,153; Pacific Bridge Co., \$15,535.

WOODLAND, CAL.—A bridge will be constructed by the county commissioners across Putah Creek, according to

BRANTFORD, ONT.—Bids are asked until May 2 for the construction of two steel bridges 83 ft. long and 12 ft. wide, including about 200 cu. yds. of masonry and 200 piles. Pbilip Kelly, Clk. Township, New Durbam.

GALT, ONT.—The Canadian Pacific Ry. Co, wili construct a new hridge at this place, according to reports. P. A. Peterson, Ch. Engr., Montreal, Que. HONOLULU, H. I.—The following items have passed the senate: Roads and bridges, Oabu, Honoluiu, \$100,000; roads and bridges, Kaual, Waimea, \$2,000; Hanalel, \$8,000; hridge across Waipa Stream, \$4,000; roads and bridges, general, \$6,000.

BUILDINGS.

BARRE, VT.—The city council has been authorized to commence the construction of the proposed city ball building, to cost shout \$30,000.

shout \$30,000.

ON, MASS.—At a town meeting held here was decided to issue \$52,000 in bonds for the a site for a new town ball.

MASS.—Bids are asked by the election comold Court House, Court Square, until April ding 100 steel buildings to be used for voting—A fire in this city, April 17, destroyed the for at Hoosic Tunnel docks, Charlestown, causted ioss of \$150,000 on the structure, \$50,000 and \$300,000 on contents. BOSTO 25, for h

VER, MASS.—Beattle & Cornell, of this city, have heen the lowest bidders for the construc-l and bouse of correction, at \$99,950. Edward of Bristol County. FALL

Mott, Comp. of Bristol County,
Lowell, MASS.—Bids are asked by the commissioners of Middlesco took the labor of Cambridge, Mass., until April of Middlesco took the labor of Cambridge, Mass., until April of Middlesco took the labor of Cambridge, Mass., until April of for furnal electric light fixtures and for the furnishment of the man of the court bouse at Lowell.

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BALTIMORE, MD.—Bids are asked until April 22 for a heating and ventilating plant for Grammar School No. 7, at Eastern Ave, and Patuxent St. Everett J. Dowell, Inspector of Bidgs.—Crook, Horner & Co., of Baltimore, are said to bave been awarded the contract for the installation of a heating and ventilating plant, etc., in the new court house, at \$70,502.

PARSONS, W. VA.—Bids are asked by the county court of Tucker county, until May 20, for the erection of a new court house, Wm. M. Clayton, County Clk.

JONESBORO, GA.—W. W. McAfee, of Atlanta, Ga., is reported as having received the contract for the new court house, at \$12,870.

GENEVA, ALA.—J. J. Johnson has heen awarded the

GENEVA, ALA.—J. J. Johnson has heen awarded the ontract for the crection of the new court bouse for leneva county, at \$13,500.

Geneva county, at \$13,500.

MONTICELLO, KY.—We are informed that bids will be asked until June 1 for the erection of a court house for Wayne county, to cost \$15,000. Arch., Frank P. Milhurn, Charlotte, N. C.

CANTON, O.—Bids are asked by the Dicks Agricultural Works, until April 22, for the construction of a school building for the St. John's Catbolic Parisb.

CINCINNATI, O.—Plans have been prepared, according to reports, for a new 5-story hotel building, at 414 and 416 Vine St., to cost about \$75,000. Archs., Hannaford Sons, Hulbert Block.

CLEVELAND, O.—A hill has passed the state legislature providing for the erection of a new city ball in this city to cost more than \$1,000,000.

to cost more than \$1,000,000.

DEFIANCE, O.—Bids are asked, until April 28, according to reports, for the construction of a new school building. Archs., Chestney & Kelley.

MASSILLON, O.—Bids are asked until May 11 for erecting an auditorium and other buildings for the Massilion State Hospital. Archs., Yost & Packard, Y. M. C. A. Bidg., Columbus, O.

Bidg., Columhus, O.

INDIANAPOLIS, IND.—Bids are asked by the school commissioners, Library Bidg., until Auril 28, for the erection of an 8-room school building and additions to five other school buildings in this city.

CHEBOYGAN, MICH.—The people of Cheboygan county bave voted to issue \$30,000 in bonds for erecting a new court house. Wm. N. Cross, County Cik.

DETROIT, MICH.—Bids are asked, until May 11, for the reconstruction of a hospital building at Fort Wayne, Mich., including plumbing, gas-piping, etc. Capt. F. Von Schrader, Asst. Q. M., 688 River St., Detroit.

CHICAGO, ILL.—Plans have been accepted by the trus-

Schrader, Asst. Q. M., 688 River St., Detroit.

CHICAGO, ILL.—Plans have heen accepted by the trustees of the Chicago Home for Jewish Orphans for a new building to be erected at Drexel Boulevard and 62d St., to cost \$60,000. Arch., Simeon B. Elsendrath, Marquette B.dg.—Reports state that plans bave been prepared for an addition to the Lewis Institute, at Madison and Robey Sts., to cost about \$100,000. Arch., Henry Ives Cobh, Title and Trust Bidg.

Title and Trust Bldg.

GREEN BAY, WIS.—Blds are asked, until April 21, for constructing the new addition to the Wisconsin State Reformatory at this place, to cost \$50,000. Arcb., John Cbarles, Menominee, Wis.

IOWA CITY, IA.—Plans bave been accepted, according to reports, for a new college building to he erected in this city; estimated cost, \$125,000. Arcbs., Proudfoot & Bird, Des Moines, Ia.

WINDOM MINN.—Plans.—Bld

Des Moines, Ia.

WINDOM, MINN.—Bids are asked by the commissionres of Cottonwood county, until May 3, for the construction of a jail and sheriff's residence. Herman Telchroew,
County Audr.; Pass & Schippel, Archs., Mankato, Minn.
OMAHA, NEB.—Bids are asked by the supervising architect, Washington, D. C., until May 6, for furnishing
plaster models and carving granite for the U. S. Building
in this city.

In this city.

ELK POINT, S. DAK.—Bids are asked by the commissioners of Union county, until April 30, for the erection of a court bouse at Elk Point. Chn., W. W. Main; Archs., Burkbead & Reese, Sloux City, Ia.

HELENA, MONT.—Bids are asked, until April 23, for constructing and plumbing an addition to the quartermaster stables at Fort Harrison. F. B. Jones, Q. M., Helena.

Heiena. GEORGETOWN, TEX.—John R. Ailen, Cbn. of Faculty, Southwestern University, informs us that pians have been prepared for a new 3-story stone college hullding, 170×130 ft., to be used as the main hullding of the university; estimated cost, \$40,000. Bids will be received for constructing until May 1.

timated cost, \$40,000. Bids will be received for constructing until May I.

PORTLAND, ORE.—The following hids were received by the supervising architect, Washington, D. C., April 15, for constructing the foundation, superstructure, roof covering and approaches of the U. S. Building at Portland: Wakefield & Bridges, Portland, Rockland granite... \$389,895 Nels. J. Blagen, Portland, Rockland granite... \$49,000 C. E. H. Campbell, Council Bluffs, Ia., Ore, granite 358,999 J. C. Robinson, Chicago, Ill., Raymond granite... \$42,355 J. L. Record & Earnest Johnson, Chicago, Ill. \$40,900 Davidson Bro. Marble Co., Chicago, Ill. \$10,000 Davidson Bro. Marble Co., Chicago, Ill. \$26,850 Bently Const. Co., Milwaukee, Wis., Cal., granite... \$26,885 W. H. Ellis, New York City, Raymond granite... \$30,000

*Snake River granite: †Add \$4,000 for Raymond granite. SONORA, CAL.—Bids are asked by the hoard of super-visors until May 12 for constructing a new court house in this city. Chn., J. B. Doyle; Archs., Wm. Mooser &

on.
PHOENIX, ARIZ.—Pugh & Gray, of Portland, Ore., have eccived the contract for erecting the new hulldings at he National Indian School, north of Phoenix, at \$32,0.0. MILLVILLE, UTAH.—Bids are asked, until May 5, for recting a school huliding at this place. Arch., J. W. Bar-ett, Logan, Utah.

rett, Logan, Utah.

SUTTON, QUE.—A fire at Sutton, eight miles from Richford, Vt., destroyed about 25 buildings, including the Canadian Pacific Ry. Co.'s round-bouse and two hotels; reported loss, \$100,000.

GUAYQUIL, ECUADOR.—Bids are asked by the government of Ecuador, at the consulates of New York, Paris, Liverpool, Brussels and Hamburg, until August 31, for the construction of a new custom house hullding in this

WATER-WORKS.

DANFORTH, ME.—It is stated that a local company is arranging to put in works at this place.

PEAK ISLAND, ME.—Plans are about completed by the Peak Island Water & Light Co. for the proposed works. Artesian wells and a 350,000-galion stand-pipe will be required. Capital stock, \$50,000. Pres., Richard K. Gatley, Portland, Me.

HAMPTON, N. H.—The Hampton Water-Works Co. has been organized to furnish this place with water. It is prob-thle that the supply will be taken from the Marston

Spring. Edwin G. Eastman, Exeter, N. H.; Chas. M. Lamprey, Hampton, and Chas. J. Gilman, Brunswick, Me., are

prey, Hampion, and Chas. J. Gilman, Brunswick, Me., are interested.

BILLERICA. MASS.—Bids are asked until April 23 for laying about nine miles of cast-iron water pipe, as stated in our advertising columns; for huilding the pumping station and for constructing a stand-pipe foundation. Engr., Percy M. Blake; F. S. Clarke, Chn, Water Comrs.

HOLDEN, MASS.—We are informed that the water board has reported to the town on the proposed high service works, to include a reservoir and pumping machinery. Consult. Engr., Louis E. Hawes, Tremont Bidg., Boston. ALBANY, N. Y.—Bids are asked until May 3 for furnishing cast-iron water pipe and for painting the water department huilding. Geo. I. Bailey, Supt.

CORNING, N. Y.—Bids are asked until May 2 for furnishing the materials and for isying 1,940 ft. of water mains across the river, as stated in our advertising columns. S. T. Hayt, Jr., Cy. Engr.

COLD SPRING HARBOR (L. I.), N. Y.—We are informed that the proposed works, to be erected by a private company, will have an engine, reservoir, about four miles of 6 and 8-in. cast-iron water pipe, hydrants, etc.; estimated cost, \$20,000. No contracts have yet been let. Hydraulic Engr., Chas. H. Davis; Chas. H. Newman is interested.

JERSEY CITY, N. J.—it is stated that the Consolidated

JERSEY CITY, N. J.—It is stated that the Consolidated Traction Co. has decided to hore a well in the new power house on the Meadows. The well will be about 2,000 ft. deep, and it is hoped to secure a sufficient supply of water for the power house and car stables. The company has already put up timhers preparatory to boring an artesian well at the Jersey City power house, and this will be 1,500

ft. deep.

ViNELAND, N. J.—C. P. Lord, Mayor, writes us that nothing more will be done in regard to the proposed works, etc., until the citizens petition the council for further action. Dr. Waldo L. Sawyer, Chn. Com.

BRADFORD, PA.—S. D. Heffner, Supt., writes us that it is proposed to build a 100,000,000-gallon reservoir this summer. Bids will be asked for the work in June. Population, 18,500.

GROVE CITY, PA.—Bids are asked until May 4 for fur-ishing the materials and for constructing works, as de-cribed in our advertising columns. Engr., J. F. Witner, Suffalo, N. Y.; Burgess, J. R. Cunningham; Secy., J. A.

Buffalo, N. Y.; Burgess, J. R. Cunningham; Secy., J. A. McCutchen.

OLYPHANT, PA.—Bids are asked until April 23 for building a dam and reservoir on Grassy Island Creek, near Peckville, Pa., for the Winton Water Co.; check, \$500. Engr., F. G. Wolfe, 412 Board of Trade Building, Scranton, Pa.; Pres., T. F. Jordan.

PITTSBURG, PA.—Bids are asked until April 23 for furnishing and erecting a water fitration plant at the Pittsburg City Home and Hospitals, Marshalsea, Geo. Booth, Dir. Dept. of Charities, 511 Fourth Ave.—Bids are asked until April 23 for laying about 83,000 ft. of 6-in, water pipe and for furnishing coal spouts for the Brilliant pumping station. E. M. Bigelow, Dir. Dept. Pub. Wks.

TAMAQUA, PA.—Sam'l Beard, Town Cik., writes us that nothing has yet been done in regard to improving the works. F. B. Krebs is on the committee.

CALHIOUN, GA.—Bids are asked until May 6 for con-

CALIHOUN, GA.—Bids are asked until May 6 for constructing works to cost about \$12,500. The works will require two 500,000-gallon pumps, as described in our issue of April 7. (Postponement from April 20.) Mayor W. L.

LUMPKIN, GA.—This place bas voted in favor of issuing onds for huilding works to cost about \$12,000. E. J. bonds for huild Hickey, Msyor,

FITZGERALD, GA.—E. B. Warman writes us that this place is ready to receive hids for constructing works and a light plant. The city bas soid \$33,000 in bonds at a premium of \$1,700 for the improvements. Alderman Martin Scott may he addressed.

Scott may he addressed. PERRY, GA.—G. B. Wells, Peyton, Ga., writes us that the new water company bopes to secure a charter in a few days. The works will cost about \$2,500. Population, 1,000. PRATT CITY, ALA.—The question of huilding works and a light plant is being considered.

CARROLLTON, MISS.—It is stated that about \$700 baseen subscribed for sinking a well for a water supply.

heen subscribed for sinking a well for a water supply. CLOVERPORT, KY.—Bids are asked until April 28 for the purchase of a 20-year water-works franchise. The plant must he completed by Jan. 1. F. N. D'Ituy, Cy. Clk. WILLIAMSBURG, KY.—J. M. Blakely, Mayor, writes us that this city is considering the question of constructing works. The city would like to correspond with parties huilding works. Population, 2,560.

BLOOMVILLE, O.—Tbis place voted April 4 to issue \$8,000 in bonds for works. Engrs., W. D. Boyce & Co., Chemical Bldg., St. Louis, Mo.; Mayor, J. F. Walker; Cik., A. S. Prouse.

cal Bldg., St. Louis, Mo.; Mayor, J. F. Walker; Cik., A. S. Prouse.

CLEVELAND, O.—Bids are asked until April 25 for furnishing and delivering at the Division St, pumping station one 60 x 60 x 48 x 36-in. cross; estimated weight; 24,329 lbs.

Tbis cross to be subjected to a hydrostatic test of 200 lbs. a sq. in. Bond, \$500. Geo. R. Warden, Dir. Puh. Wks.

YOUNGSTOWN, O.—D. K. Simpkin, Secy., 7 Central Square, writes us that the contract for furnishing 500 tons of pipe and 10 tons of special castings has been let to the Lake Sbore Foundry, Cleveland, O., at \$7,050 and \$350, respectively. The other bidders were the Addyston Pipe & Steel Co., Clincinnati; Jas. B. Clow & Son, Chleago, and the Ohio Pipe Co., Columbus.

NORTH LIBERTY, IND.—W. E. Gusheva, Treas., writes us that the board has taken no definite action in regard to the proposed works, which has been under discussion for some time. At present the town is not financially able to do the work. Population, 700.

CHICAGO, ILL.—Bids are asked until April 28 for furnishing and delivering at the repair shops, 22d St. and Ashland Ave., water meters of sizes and quantities (approximately) as follows: 200 %-in., 200 %-in., 200 1-in., 20 1-in., 100 2-in., 100 3-in., 20 4-in., and 20 6-in. meters; check, \$500. L. E. McGann, Comr. Puh. Wks.

RIVERFALLS, WIS.—A. P. Weid, Cy. Cik., writes us that the 4-in, mains will be required.

BUFFALO CENTER, IA.—Oliver Gorden, Mayor, writes us that this place will yote April 30 on the question of is.

BUFFALO CENTER, IA.—Oliver Gorden, Mayor, writes us that this place will vote April 30 on the question of issuing bonds for works.

MINDEN, IA.—Jno. W. Crow, Mayor, writes us that this place voted April 11 hy a decided majority in favor of issuing \$5,000 in bonds for works.

DULUTH, MINN.—Bids are asked until April 25 for furnishing about 365 ft. of 10 and 20-in. cast-from water pipe and three special castings. R. Murchison, Cik. Bd. Pub. Wks.

ELY, MINN.—This place recently voted to issue \$2,000 ands for completing the works and erecting a stand-pip

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NORTH ST. PAUL, MINN.—The village has purchase ne works of the North St. Paul Water Co. for \$15,000 ounclimen J. W. Herick, Jos. Muller and Jno, Owens ma

PINE ISLAND, MINN.—Irish & Stone, of the "Record," write us that a special election will soon be held to vote on the question of issuing bonds for works. It is proposed before the election to employ an engineer to prepare plans, estimates, etc. The town wishes to correspond at once with engineers. Estimated cost, \$6,000.

SALINA, KAN.—This city has voted to have municipal orks; it heing undecided whether to purchase the works f the Salina Water-Works Co. or to build.

MITCHELL, S. DAK.—Bids are asked until May 2 for furnishing and laying 432 ft. of water pipe. J. K. Smith, Cy. Audr.

FORT BENTON, MONT-This city is reported as co sidering the question of huilding extensions to the works.

MONTICELLO, ARK.—R. S. Hyatt, Mayor, writes us that the city is contemplating the purchase of an air compressor and holler for the proposed water-works. Address E. B. Windes.

PALESTINE, TEX.—G. R. Cooke and W. B. Johnson, Palestiue, and Frank E. Holloday, of North Hampton (probably N. H.), have been granted a franchise for works to cost about \$90,000. Mayor, A. L. Bowers.

cost about \$20,000. Mayor, A. L. Bowers.

PLEASANTON, TEX.—Geo. H. Allen writes us that the contract for sinking a 2½-in. artesian well 300 ft. bas heen awarded to Allen & Peterson for ahout \$400.

RODGERS, TEX.—F. Leahy writes us that the works will require about 5,000 ft. of 4-in. and 10,000 ft. of 2-in. pipe; besides smaller pipe. The supply will be received from an artesian well. Population, 1,000. Jos. S. Thompson will own the works.

TYLER, TEX .- The citizens of this place propose to sink

BRECKENRIDGE, COLO.—This place voted April 5 to extend the works at a cost of ahout \$8,000. Mayor, W. F. Forman; Trustee, F. C. Cramer.

DENVER, COLO.—Local papers state that the city engineer will prepare plans and specifications for the proposed municipal works.

ELDORA, COLO.—The construction of the proposed orks for this place has been hegun by A. L. Tomblin and L. Teagarden, the owners of the franchise. Ahout 4,000 ft. f pipe will be required.

L. reagarden, the owners of the franchise. Ahout 4,000 ft. of pipe will be required.

PRESCOTT, ARIZ.—Jas. D. Schuyler, Consuit. Engr., Los Angeles, Cai., submitted a report April 11 on the proposed works and water supply: estimated cost, \$16.5 865. Bids for the construction will probably be received about May 18, as noted in our issue of March 31. Cy. Engr., J. J. Fisher; Mayor, Wm. O. O'Neill.

HOQUIAM, WASH.—H. C. Heermans, Corning, N. Y., writes us that the franchise for works for this place has been granted to him. The works will be constructed this year. A reservoir and pumping station will be built and 5½ miles of cast-iron pipe laid. Population, 2,000.

NORTHPORT, WASH.—A. H. Dawson, Justice of the Peace, writes us that the works for Northport Townsite Co. will require a wooden flume two miles long, a reservoir, etc. E. J. Roberts, Ch. Engr. Spokane Fails & Northern Ry. Co., Northport, will have charge of the work. Population, 2,000.

SPOKANE, WASH.—B. H. Fowle, Secv. Rd. Pub. When

tion, 2.000.

SPOKANE, WASH.—B. H. Fowle, Secy. Bd. Pub. Wks., writes us that hids for enlarging the pumping station, furmities us that water-wheel of 375 HF., building a bridge across the river for carrying a 24-in. force main and for supplying and laying about 21,000 ft. of 24-in. steel riveted pipe will be asked until May 12. Estimated cost, \$88,000.

pipe will be asked until May 12. Estimated cost, \$88,000. FLAVEL, ORE.—J. M. Turney, Secy. and Asst. Treas. Flavel Land & Development Co., writes us that this place will probably have works in the near future. The question is now being agitated. The proposed supply is from the Lewis and Ciarke River, about 12 miles distant. The water will be brought by gravity, the fail being about 500 ft. No surveys have been made yet. It is expected some definite action will be taken during the summer.

action will be taken during the summer.

PORTLAND, ORE.—The contract for the new 24-in. submerged pipe across the Williamette River at Portland has been awarded by the water committee to Smyth & Howard, Portland, at \$44,317, they being the lowest hidders for the work, as given in our issue of March 24. Asst. Eugr., D. D. Clarke; Chn. Com., Henry Failing.

SALEM, ORE.—The Salem Water Co, is preparing for the erection of a crih 40 × 60 ft, in the sand har on Minto Island. Work on this crib will begin as soon as consent is secured from the war department, and some necessary concessions, preliminary to the issuance of bonds, granted by the council.

LOS ANGELES, CAL,—Bide are asked watel Actions.

LOS ANGELES, CAL.—Bids are asked until April 25 for urnishing 30 fire bydrants, etc. C. H. Valance, Cik.

MONROVIA, CAL.—An-election will be held May 14 to vote on the question of issuing \$25,000 in bonds for completing the works. W. A. Walker, Cy. Cik.
FREDERICTON, N. B.—Alex. Burchill, Supt., is preparing plans for certain improvements to the works.

NEW GLASGOW, N. S.—Bids are asked until April 25 for ne purchase of \$5,000 of water-works bonds. F. D. Laurie,

RICHMOND, QUE.—The Richmond Aqueduct Co. has applied for incorporation. It will extend the works, according to reports. Capital stock \$100,000. Pierre Alex. Lariviere, of Melbourne, Que, and Henry Fitz-William Beliew, of Montreal, Que., are interested.

IRRIGATION.

BILLINGS, MONT.—Walter & Reece have been awarded a contract by the arid land commission for constructing a canal to recialm about 11,000 acres of land.

canal to recialm about 11,000 acres of land.

YUMA, ARIZ.—Reports state that the California Development Co., Los Angeles, Cai., will construct a canal to irrigate about 1,000,000 acres of land in San Diego and Riverside counties with water taken from the Colorado River at Gaulous, to cost about \$250,000.

CLAREMONT, CAL.—It is reported that the Del Monte Water Co., Pomona, will irrigate a tract of land west of this place, owned by C. Seaver; estimated cost, \$25,000.

MONROVIA, CAL.—This place is about to spend \$25,000 for au irrigation water supply, according to reports.

SAN BERNARDINO, CAL.—Bids are asked for the construction of a pumping plant, according to reports. F. W. Bilss, County Cik.

Biliss, County Cik.

SAN JOSE, CAL.—Reports state that the council is considering a proposition from W. S. Richards to supply water from springs on his land adjoining the town or to sell the rights for a reservoir to be erected at a cost of about \$100,000.

VISALIA, CAL.—The Kaweah Irrigation & Power Co-will put in a pumping plant to work 23 wells at Lemon Cove. O. C. Ainsworth, Pasadena, may be addressed, ac-cording to reports.

cording to reports.

BOISE CITY, IDAHO.—Press reports state that the Interstate Canal & Irrigation Co., Oxford, proposes to construct a ditch 100 miles iong and 40 ft, wide to irrigate about 500,000 acres in Bannock and Oneida counties. Geo. C. Parkinson, Preston, may be addressed.

NEW COMPANIES.—Pine Island Irrigation Co., Beaumont, Tex.; \$25,000; to construct canals, etc., for irrigation; S. H. Van Warmer, Catherine Stengie, Frank Cooley. Coal Creek Reservoir Co., Fort Collins, Col.; \$10,000; to construct reservoirs, irrigating, etc.; Joel Clark, Wm. E. Parker, Samuel Pyne, Issac, Pyne.

North Fork Irrigation Ditch Co., Winthrop, Wash.; \$4,000.

\$4,000. Landike Irrigation Co., Seattie, Wash.; \$50,000; general irrigation husiness; J. D. McIntyre, C. L. Erwin, E. B. Paimer, trustees.

SEWERAGE.

WINOOSKI, VT.—F. L. Linsenmeir, Pres., writes us that at the meeting to be held May 3 the question of constructing a system and issuing bonds will be considered. Des. Engr., V. K. Nash, Providence, R. I.

LONG MEADOW, MASS.—We are informed that this town voted April 4 to spend \$4,000 for heginning the construction of the system. The matter is in charge of Selectmen F. B. Allen, Thos. D. Walters and Chas. S. Gates.

PROVIDENCE, R. I.—Bids are asked until April 28 for constructing brick sewers, as described in our advertising columns. Robt. E. Smith, Comr. Puh. Wks.

NEW HAVEN, CONN.—The following contracts have heen let for constructing sewers: Wilson St. and Sylvan Ave., Thos. A. Linahan, \$1,518 and \$1,140; Fourth St. and three others, T. F. Maher, ahout \$1,040; Liherty St., John A. Doolittle & Co., \$4,298. H. J. Kellogs, Asst. Cy. Engr., BINGHAMTON, N. Y.—Henry Ward, Asst. Cy. Engr., is preparing plans and specifications for 18 and 8-in. pipe sewers in a number of streets. The work will be done by day labor.

day labor.

BUFFALO, N. Y.—Bids are asked until April 29 for constructing a sewer in Courtlandt Ave. R. G. Parsons, Secy. Dept. Puh. Wks.

HUDSON, N. Y.—Wm. F. Hallenbeck, Cy. Clk., informs us that the following hids were received April 6 for constructing a brick aewer in State St., to he 2,890 ft. long: John F. Shaughnessy, 28 Bond St., New York, \$8,996; Eugene Elkinburgh, Hudson, \$9,650; Thomas Cruise, Hudson, \$12,258, and Shute & Rightmyer, Hudson, \$12,433.

MOUNT VERNON, N. Y.—Bids are asked until April 26 or constructing a 12-in, hrick sewer in a number of strects and alieys. Wm. N. Hoyt, Cy. Cik.

and aneys. Wm. N. Hoyt, Cy. Cik.

OSWEGO, N. Y.—Bids are asked by the council for constructing sewers in six streets, at a cost of about \$1,800. Bids are asked until April 21 for asphalt paving, as advertised in our issue of last week. E. A. Cooke, Cy. Cik.

TUXEDO PARK, N. Y.—It is stated that the Tuxedo Park Association contemplates putting in a sewage disposal plant.

posal plant.

CARLISLE, PA.—The county board is reported as arranging to put in a new system at the county jail grounds.

—Alex. Potter, 137 Broadway, New York, has been giving data to the council in regard to a system for the entire town. Dr. S. L. Diven may be addressed.

EASTON, PA.—Bids are asked until April 27 for constructing hrick and pipe sewers in three streets. H. R. Fehr, Cy. Engr.

NORRISTOWN, PA.—Bids are asked until May 6 for onstructing sewers in two streets, according to reports. ohn. C. Shanks, Chn. Com.

John. C. Shanks, Chn. Com.

WILMINGTON, DEL.—J. B. Oherly, Chn. Finance Com., has applied to the council for an appropriation of \$50,000 for the Silver Brook sewer, paving, etc.

HAGERSTOWN, MD.—The council is again considering the question of building a system to cost about \$200,000. Cy. Surv., J. E. S. Pryor; Mayor, E. M. Schindel.

MOUNDSVILLE, W. VA.—The council is considering the question of issuing bonds for sewers and paving. J. D. Binley, Cy. Cik.

LEXINGTON, KY.—The asylum commissioners have set apart \$10,000 for a sewer at the hospital in this city.

CLEVELAND, O.—Bids are asked until May 12 for constructing sewers in two streets. Geo. R. Warden, Dir. Pub. Wks.

CLEVELAND, O.—Bids are asked until April 27 for con structing a sewer in Gordon Park Ave.; check, \$5,000. C W. Prati, Jr., Ch. Engr. Bd. Park Comrs., 719 Hickox Bids SPRINGFIELD, O.—The question of huilding sewers in the south side is heing considered. Plans will he prepared at once by D. L. Snyder, Cy. Engr., according to reports.

pared at once by D. L. Shyder, Cy. Engl., according to reports.

DAYTON, O.—Bids are asked until April 28 for constructing 3,140 ft. of 24 to 12-in. pipe and 1,480 ft. of 48, to 30-in. brick sewers, 35 catch-hasins, 12 manholes, etc. O. E. Davidson, Pres. Bd. Cy. Affairs; J. E. Gimperling, Cy. Comptroller.

MARION, O.—Bids are asked until May 23 for constructing the proposed system to cost about \$57,000. Consuit. Engrs., Sturdevant & Todd; City Engineer Overman may be addressed.

e addressed.
TOLEDO, O.—W. F. Brown, Cy. Engr., has received noce that the state board of nealth will consider the plans or main sewers in districts 28 and 33. The main sewer in district 33 is located in Dearbern Ave. and drains into he river. The other sewer is to be located in Adams St., ith its outlet in the river.

with its outlet in the river.

INDIANAPOLIS, IND.—The question of building sewers in West Indianapolis is being considered. Councilman McGrew may be addressed.

CHICAGO, ILL.—Local papers state that the lowest hid received April 13 for constructing the 20-ft. Intercepting sewer at 39th St., was submitted by the Chicago S:ar Construction Co., at \$786.591. Farley & Green submitted the lowest hid for the 16-ft. sewer in Lawrence Ave., at \$479,663.

DECATUR, ILL.—Alderman Geo. F. De Witt writes us that the contracts for constructing 4,500 ft. of 36-in. brick sewer will be let in May; average cut, 17 ft. Des. Engr., C. G. Dickson.

TOLUCA, ILL.—The construction of a system is being onsidered, according to reports.

ST. PAUL, MINN.—The board of public works in con-idering the question of building sewers in four streets, t a cost of about \$60,000.

at a cost of about \$69,000.

OMAHA, NEB.—Bids are asked until April 29 for constructing sewers in three streets. Andrew Rosewater, Chn. Bd. Pub. Wks.; Wm. Coburn, Secy.

ANACONDA, MONT.—F. O. Leary, Cythat James Ryan, Butte, Mont., has be contract for constructing sewers in special 4, at 83,723. District No. 3 will have 196 ft. of 10-in. and 1,640 ft. of 8-in. pipe. 6 m Miller flusb tank; No. 4 will have 850 ft. 430 of 8-in. pipe, 6 manholes and one other hidders were: James Duggan, Butt J. H. Hasley, Pat Walsh, Bernard Fitzpat: Keely, all of Anaconda.

GREAT FALLS, MONT.—The question of main sewer in 6th St. is being considered geraid and City Engineer Swearinger may ST. JOSEPH, MO.—Heisley Bros. have the contract for huilding sewer, macadam 3,280 ft. of the asylum road at \$13,050. C Steinacker may be addressed.

Steinacker may be addressed.

ST. LOUIS, MO.—Bids are asked until April
structing 2,760 ft. of 18 to 12-in. pipe sewer
St. district, 2,670 ft. of 41 × 53 to 36 × 48-d
about 15,600 ft. of 30 to 12-in. pipe sewers in
don Ave. district. B. H. Colhy, Sewer Comr
ter, Secy. Bd. Pub. Improvements.

ter, Secy. Bd. Pub. Improvements.

PRESCOTT, ARIZ.—Jas. D. Schuyler, Los Ashas suhmitted a report on the proposed sewers.

\$25,906. Cy. Engr., J. J. Fisher.

PALO ALTO, CAL.—H. W. Simkins, Town ous that this city will vote April 28 on the question of the proposed system. Des. Engr., Cal.

YREKA, CAL.—Bids are asked until May structing sewers in a portion of the city north structing sewers in a portion of the city north the proposed system.

U. F. Brown, Clk.

KASLO, B. C.—G. O. Buchanan writes us tha a system to cost ahout \$12,000 have been filed Cummings, C. E. The city was prohibited by vincial board of health from discharging as Kootenay Lake. The neighboring cities of Nossiand have systems, and are similarly Legislation is now proposed to exempt these cite board of health regulations.

GARBAGE DISPOSAL-STREET CLEANING

TROY, N. Y.—Bids are asked until April 26 for the disposal hy means of cremation or other efficient process, for a term of five years, of all garhage, dead animals, storehouse and market offal, and all waste material of like character, and to receive and dispose of all street sweepings and material removed from cesspools and sewers, gathered by the city seavengers or contractors having contracts for removal of garbage, material from cesspools, sewers, etc. Bond, \$10,000. E. Ogden Ross, Secy. Contracting Bd.

BRADDOCK, PA.—Wesley Richardson, of North Braddock, Pa., is reported to have submitted a proposition to dispose of the garbage of the city. Wm. Yost, Borough Soliettor.

SCRANTON, PA.—The Dunn Sprinkling & Street Clean-ing Co. has been incorporated with a capital stock of \$50, 000, of which \$3,000 is pald in, by T. A. Dunn, G. M. Hail-stead, B. D. O'Riley and J. A. Dunn, Scranton.

WEIGELTOWN, PA.—Louis Kaufman will construct a garbage disposal plant on his farm this spring, according to reports; estimated cost, \$4,000.

NEWPORT NEWS, VA.—Bids are asked until May 14 for collecting and removing the night soil of the city for a period of one year. J. A. Massie, Cy. Clk.; S. W. Hobson, Health Officer.

Heaith Officer.

TOLEDO, O.—The Dixon Sanitary Co., of Toledo, has heen organized with a capital stock of \$10,000 by Geo. H. Breyman, D. C. Shaw, Mayor S. M. Jones, of Toledo, and David Joy, of Findiay, O. The parties have purchased the Dixon works at Findiay for about \$100,000. according to reports.

DETROIT, MICH.—Blds are asked until April 30 for collecting and disposing of garbage, dead animals, etc., for a term of three years from July 1; check, \$2,000. F. A. Blades, Controller.

SACRAMENTO, CAL.—Bids are asked until April 25 for sprinkling the streets for the season. M. J. Desmond, Cy. Cik.

STREETS AND ROADS.

NEW HAMPTON, N. H.—Edward E. Dow, Town Clk., in-press us that this place voted April 12 against purchasing road machine.

a road machine.

CLINTON, MASS.—Bids are asked until May 4 for constructing a road at the Wachusett reservoir in Clinton and Boyiston, as stated in our advertising columns. Henry II.

Sprague, Chn. Metropolitan Water Bd., 3 Mount Vernon St., Boston, Mass.

Boston, Mass.

LEE, MASS.—This place has voted to appropriate \$10,000 for 'macadamizing in Main St. Chas. H. Pease, Cik.; Edward J. Dowd, First Selectman.

SPRINGFIELD, MASS.—Charles M. Slocum, Cy. Engr., informs us that the council is considering an appropriation of \$60,000 for paving.

NEWPORT, R. I.—The street committee has recommended the macadamizing of the Bliss Road, at a cost of \$1,000.

\$1,000.

CLINTON, MASS.—It has been voted to spend \$3,000 additional in macadamizing Main St.

GROTON, CONN.—Bids are asked until April 30 for macadamizing. William II. Alien, First Selectman.

NEW LONDON, CONN.—Bids are asked until April 30 for paving portions of State and Hamilton Sts., with granite blocks. Peleg Williams, Chn. St. Com.; Geo, K. Crandail, Cy. Surv.

STAFFORD SPRINGS, CONN.—Bids are asked until April 27 for macadamizing a section of road. John A. Foster, First Selectman.

WATERFORD, CONN.—Bids are asked until April 27 for macadamizing. Daboil & Crandail, Des. Engrs., 94 State St., New London; John L. Payne, Joseph Peahody, Select-

men.

WILLIMANTIC, CONN.—The council has voted to extend
the South Windham Road, at a cost of \$3,000.

BUFFALO, N. Y.—The Barber Asphalt Paving Co., New
York, submitted the lowest bids April 14 for paving and
resurfacing portions of four streets with asphalt. R. G.
Parsons, Secy. Bd. Pub. Wks.—The following bids were
received April 5 for paving in Niagara St. R. G. Parsons,
Secy. Bd. Pub. Wks.:

Utica Paving Co., Utica, N. Y	\$41,250
German Rock Asphalt Co., Morgan Bldg., Bullate.	46,925
Henry P. Burgard, 560 Waiden Ave., Buffalo	46.887
Barber Asphalt Paving Co., Ellicott Sq., Buffalo.	40,004

WINDSOR, CONN.—Bids are asked until April 26 for accadamining and grading the Hartford Road. T. S. 200mis, First Selectman.

BUFFALO, N. Y.—Bids are asked until April 29 for pavage Kenefick Ave, with aspbalt or other material, from south Park Ave. to South Park Boulevard, and for macadinizing Oskwood Pl., between Main St. and Parkside Ave. C. G. Farsons, Secy. Bd. Pub. Wks.

D, N. Y.—The board of trade beld a meeting consider the question of paving in Main St. and St. Chairman Wallace, of Paving Committee, ressed.

Mrssed.
N. Y.—Bids are asked until April 25 for conhout 4,500 lin. ft. of stone sidewalks; surety, H. Murpby, Clk. Bd. Pub. Wks.
(VILLE, N. Y.—Bids are asked until April 26 for yellow the description of the paving and 3,000 lin. ft. of curbing, ated in our advertising columns. Chas. Fiske, ngr., M. V. B. Netson, Cy. Clk.
LLSVILLE, N. Y.—Bids are asked until May 9 for og 1,245. of brick paving, as stated in our adversings. F. W. Dalrymple, Cy. Engr.
FALLS, N. Y.—The council has decided to pave the brick.

HOR

with Drick.

ORK, N. Y.—Bids are asked by the department of until April 26 for furnishing about 10,000 cu. sharp sand. James P. Keating, Comr., 150 Nas-

HESTER, N. Y.—The following bids were received 2 for certain paving: Glenwood Ave., with briek, H. ker, \$31,519; Chambers & Casey, Syracuse, \$34,318; ore. Rauber & Vicinus, Deckman's blue granite \$10,476; with asphalt, Warren-Scharf Asphalt Pavs. \$36,256; Rocbester Vulcanite Pavement Co., \$37, Rock Asphalt Pavement Co., \$36,970. Grading St. William H. Jones & Sons, \$2.587; Chambers & \$2,620; William M. Roach, \$2,957; H. B. Hooker, ROCH April 12 B. Hool Whitmo blocks,

Casey, \$2,620; Whitam M. Rosco, \$2,504; H. B. Hooker, \$2,504; M. Y.—The council has rejected the bids received for paving Court St., which amounted to about \$50,000. A petition has been presented, asking for asphalt paving in Lesh St., for a distance of 975 ft. The question of what material to use in paving portions of Post Ave. and Broad St. will be decided May 6.

ASBURY PARK, N. J.—Bids are asked by the council until April 30 for grading Bangs and Grand Aves.

HOBOKEN, N. J.—Bids are asked until April 27 for the purchase of \$150,000 in repaving bonds; also until May 11 for improving 4th St., from Monroe St. to Jackson St. M. V. McDermott, Cy. Cik.

JERSEY CITY, N. J.—Edlow W. Harrison, Ch. Engr., County Freebolders, has estimated the cost of the proposed new county boulevard at about \$333,000.

JERSEY CITY, N. J.—Bids are asked until April 25 for

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Engr.,

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April

posed new county boulevard at about \$339,000.

IERSEY CITY, N. J.—Bids are asked until April 25 for improving Palisade Ave, from Newark Ave. to Hoboken Ave., and Montgomery St., from the Hudson Boulevard to West Side Ave. William A. Tolson, Cik. pro tem.

PATERSON, N. J.—Resolutions have been passed by the board of aldermen to improve portions of 12 streets by grading, curbing, etc.

TEENTON, N. J.—A contract was awarded to Robert A. Montgomery, Lambertville, N. J., April 12, for macadaming the White Horse Road, a distance of 2½ miles.

PHILLIPSBURG, N. J.—This town bas voted to expend 0,000 for street improvements. B. C. Frost, Mayor. ERIE, PA.—Bids are asked until April 21 for repairing neet asphalt pavements for one year. Benj. E. Briggs,

ty. Engr.

HARRISBURG, PA.—Bids are asked until April 22 for furnishing cement, broken stone, sand, brick, etc.; also for laying new street crossings. William II. Lyncb, Highway

Comr.

PITTSBURG, PA.—Bids are asked until April 25 for repairing asphalt pavements and laying sidewalks. Edward M. Bigelow, Dir. Dept. Pub. Wks.

WASHINGTON, D. C.—The District commissioners have ordered the construction of cement sidewalks and the laying of granite curbing at an estimated cost of \$18,556.

ROCKVILLE, MD.—The legislature has authorized the county commissioners to issue \$25,000 in bonds for the macadamizing of the Rockville Pike Road.

LYNCHBURG, VA.—Rids are asked until April 20 for

LYNCHBURG, VA.—Bids are asked until April 29 for turnishing 6,000 lln, ft. of stone curbing. L. P. Rodes, Cy. Engr.—The question of macadamizing a road is being considered, the cost to be raised by private subscription, according to reports.

CAMERON, W. VA.—Bids are asked until May 5 for grad-ng, curbing and paving. D. C. Haskins, Recorder, Cam-

HUNTINGTON, W. VA.—Blds are asked until May 9 for onstructing a road. F. L. Doolittle, Clk. County Court.

constructing a road. F. L. Doolittle, Clk. County Court.
WHELLING, W. VA.—Bids are asked until April 22 for
macadamizing in the following districts: Triadelphia, Richland, Liberty and Ritchie. Robt. Hazlett, County Engr.;
T. C. Moffat, Clk. County Comrs.
AUGUSTA, GA.—The street committee awarded a contract
April 10 to Hankinson & O'Keefe for furnishing 200,000
paving brick and to W. F. Bowe, for paving, at \$13,000.
ARCADIA, FLA.—An election will be held April 30 to
vote on the question of issuing \$3,000 in bonds for street
improvements.

mprovements.

NEW ORLEANS, LA.—Bids are asked until April 22 for constructing brick sidewalks in portions of 12 streets. P. Alph Rabouin, Comptroller.—The council has passed an ordinance to pave Rampart St., from Kerlerec St. to Esplanade St, with aspbalt.

ALLIANCE, O.—Bids are asked until May 7 for asphalt block paving in Main St. O. W. Pfouts, Cy. Engr.; J. H. McConnell, Cy. Cik.

McConnell, Cy. Clk.

CANTON, O.—Bids are asked by the council until May 14 for the purchase of \$10,550 in street improvement bonds.

L. E. Chapin, Cy. Engr.

CINCINNATI, O.—Bids are asked until May 14 for improving the Werk Road, between the Lower River Road and Lowland Ave., in Miami townsbip; surety, \$500; also until May 11 for broken stone, grading, filling, etc., on the Gulick Road, in Colerain township; surety, \$500. Eugene L. Lewis, County Audr.—Bids are asked until April 27 for brick paving in Swift Alley. A. P. Butterfield, Clk, Bd. City Affairs.

City Affairs.

CLEVELAND, O.—Bids are asked until May 14 for asphalt paying, curbing, grading, etc., in portions of 10 streets. Geo. R. Warden, Dir. Bd. Pub. Wks.—The countil has resolved to pave Liberty St., from Franklin Ave. to Lorain St., with brick.—The following submitted the lowest bids April 6 for brick paying: Condon & Blasherg, Oliver St., \$10,853, Republic St., \$8,174, Lincoln Ave., \$9,.483; C. H. Burgess, Cemetery St., \$9,942; Cieveland Construction Co., Bolton Ave., \$10,698; Brennan & Buettner,

Plymouth St., \$5,647, Hobnden Ave., \$10,450. Bell Ave., \$7,231, Kenilworth St., \$7,268; North Obio Paving & Construction Co., Wade Park Ave., \$41,996.

MANSFIELD, O.—Resolutions to pave, macadamize, etc., portions of the following streets bave been passed by the council: East Bloom St., Newman St., Flint St. and Orange St. D. S. Koontz, Pres. Council.

MIDDLETOWN, O.—An ordinance has been passed to curb and gutter portions of First St. C. B. Johnson, Pres. Council.

ATTICA, IND.—The construction of a road to cost about \$1,500 is being considered; the money to be raised by sub-

BRAZIL, IND.—Bids are asked until April 28 for macadamizing in Washington township. Thos Phillips, County Audr.

SCOTTSBURG, IND.—Bids are asked until May 6 for about 5,140 ft. of gravel slate and macadam roads in Finlay and Vienna townsbips. James L. Fisher, County Audr.

Audr.

INDIANAPOLIS, IND.—Bids are asked until April 25 for constructing cement sidewalks in St. Clair St. M. A. Downing, Chn. Bd. Pub. Wks.

WASHINGTON, IND.—Bids are asked by the city clerk for improving 19 squares of brick streets, according to reports.

BAY CITY, MICH.—The council has voted to pave Center Ave, with brick on concrete foundation; estimated cost, \$17,500. Geo. Turner, Cy. Engr.; G. F. Ambrose, Comptroller.

BLOOMINGTON, ILL.—C. L. Hills, Secy. Bd, Local Improvements, informs us that certain brick paving will be laid this season by contract.

CHAMPAIGN, ILL.—A hearing will be given April 22 to consider the estimates submitted by R. P. Brower, Cy. Engr., amounting to about \$63,637, for paving, etc. J. R. Scott, Mayor; L. M. Van Wegen, Supt. Sts.

CHICAGO, ILL.—Bids are asked until April 26 for constructing granite-concrete sidewalks in 12th St. and in California Ave. Jos. W. Suddard, Pres.; Ernest G. Scbubert, Secy. Bd. Park Comrs.

DECATUR, ILL.—Geo. F. De Witt, Alderman, informs us that 50,142 sq. vds. of brick paving will be laid; estimated cost, about \$70,100.

cost, about \$70,100.

ROCKFORD, ILL.—Bids are asked until May 2 for paving with brick and asphalt in East State St., as stated in our advertising columns. E. W. Brown, Pres. Bd. Local Improvements; Edwin Main, Cy. Engr.

MARSHALLTOWN, IA.—Reports state that the council has decided to construct three miles of paving this summer.

has decided to construct three miles of paving this summer.

MINNEAPOLIS, MINN.—Bids are asked until April 29
for asphalt paving on 6-in. concrete foundation, in portions
of four streets; surety, \$2,000. L. A. Lydiard, Cy. Cik.
ST. PAUL, MINN.—Bids are asked until April 25 for paving Summit Ave., from Wabasha St. to St. Peter St. with
sandstone. C. H. Bronson, Cik. Bd. Pub. Wks.

BOZEMAN, MONT.—Bids are asked until June 8 for constructing a road on the Middle Fork of Sixteen-Mile Creek,
according to reports. H. P. McNaughton, County Cik.

JOPLIN, MO.—An ordinance bas been passed by the
council to grade and macadamize the alleys between Pearl
St. and Byers Ave., and between Wall and Pearl Sts. T.
W. Cunningham, Mayor.

MONTREAL, QUE.—It is reported that the finance com-

MONTREAL, QUE.—It is reported that the finance committee has authorized an appropriation of \$76,600 for street and sidewalk improvements.

OTTAWA, ONT.—Bids are asked by the board of nublic works until April 27 for stone paving during the year.

VICTORIA, B. C.—The board of aldermen is considering a proposition to pave portions of Fort and Broad Sts. with wooden blocks and constructing new sidewalks. Alderman Humpbrey may be addressed.

MANUFACTURING PLANTS

MORRISVILLE, VT.—1t is reported that plans have been prepared for an enlargement of the tannery plant at this place, which provides for an addition of 369 vats and six leaches 18 ft. in diameter and 8 ft. deep.

SANDY HILL, N. Y.—The Holland Paper Co. contemplates the erection of a 1-story brick mill building at this place, to cost about \$75,000. Archs., Tower & Waliace, 1123 Broadway, New York.

Broadway, New York.

CLAYVILLE, N. Y.—A fire at this place, April 13, destroyed the S. A. Millard Works, operated by J. M. Butler, of Utica, N. Y., manufacturer of agricultural implements. Estimated loss, \$90,600; insurance, \$41,500.

Estimated loss, \$90,000; insurance, \$41,500.

IIARRISBURG, PA.—It is reported that La Lance & Grosjean, agate from manufacturers, of this city, bave decided to erect an additional building, \$0 × \$0 ft., and also another annealing furnace. Work on new buildings is expected to begin at once.

SCRANTON, PA.—The Oxford breaker, in this city, owned and operated by the Delaware, Lackawanna & Western Coal Co., with all the adjacent buildings necessary to its operation, was destroyed by fire April 15, causing a reported loss of \$90,000.

WINTON, PA.—The New Waddell breaker, at this place

WINTON, PA.—The New Waddell breaker, at this place, was destroyed by fire April 17, causing a loss of about \$50,000.

CROWLEY, LA.—Reports state that the Eagle Rice Mill Co. will erect a 4-story mill, 86×88 ft., and also two large warehouses. A power plant will be installed. Proprietor, J. E. Platt.

J. E. Piatt. SHELBY, O.—The Shelby Electric Co. will shortly erect a new building, according to reports, in which a 25-HP. gas engine and a 40-K-W. generator will be installed.

LARAMIE, WYO.—The American Gold & Copper Mining Co., which owns gold and copper mines on Jelm Mountain, will construct a 40-ton smelter at Laramle this summer, according to reports.

BELT, MONT.—The Anaconda coal washers, at Belt, w. burned April 15, causing a reported loss of \$200,000;

COLORADO SPRINGS, COLO.—Press reports state that Geo. W. Jackson expects to establish two new factories in this city for the manufacture of Portland cement and terra cotta sewer pipe, to cost about \$100,000. Water power will be used.

SEATTLE, WASH.—It is reported that a company, headed by Edward Blewett, of this city, will build a smelter on Texada Island, off the coast of British Columbia. The ca-pacity at first will be 50 tons a day.

SACRAMENTO, CAL.—The Southern Pacific Co.'s pattern warehouse, on I St., between Front and 2d Sts., was destroyed by fire on April S, causing a reported loss of \$50,000. Supt., H. J. Small.

MISCELLANEOUS CONTRACTS.

BONDS.—Bridgeport, O.—This place voted April 4 to issue \$60,000 in general improvement bonds.

STONE.—Clinton, Mass.—Bids are asked until April 23 for furnishing about 2,500 tons of broken stone. H. Bail, Chn. Com.

BROKEN STONE.—Clinton, Mass.—Bids are asked until April 23 for furnishing 2,500 tons of broken stone, H. Ball, Cbn, Com.

April 23 for furnishing 2,500 tons of broken stone, H. Ball, Cbn, Com.

TELEPHONE EXCHANGE.—Athens, Tenn.—Reports state that the American Telephone Co. will install a telephone exchange at this place.

BRICK.—New Orleans, La.—Bids are asked until May 10 for furnishing about 3,000 tons of brick. Capt. Geo. McC. Derby, U. S. Engr., 3232 Prytania St.

SAND.—New York, N. Y.—Bids are asked by the department of bighways, 150 Nassau St., until April 26 for furnishing 10,000 cu. yds. of clean, sharp sand.

DREDGING.—Baltimore, Md.—Bids are asked by the harbor board until April 22 for dredging and removing about 250,000 cu. yds. W. H. Hutton, Ch. Engr.

TELEPHONE EXCHANGE.—Traverse City, Mich.—F. O. Gullifer, of the New State Telephone Co., Detroit, Mich., is arranging to establish an exchange in this city.

CITY SUPPLIES.—Reading, Pa.—Bids are asked by the board of public works until April 21 for furnishing oif, gravel, brick, iron, cement, blue stone, etc. Samuel S. Hoff, Cy. Engr.

gravel, brick, iron, cement, blue stone, etc. Samuel S. Hoff, Cy. Engr.

TELEPHONE LINE.—Yarmouth Port, Mass.—Reports state that the Southern Massachusetts Telephone Association will construct a telephone line from Hyannis via Yarmouth Port to Dennis.

WOODEN HULL.—Montgomery, Aia.—Bids are asked until May 21 for building a wooden hull for a sea-going dredge, as stated in our advertising columns. Maj. F. A. Mahan, U. S. Engr., Montgomery,

PARK WORK.—Albany, N. Y.—A contract was awarded to the Vulcanite Paving Co., Philadelphia, Pa., April 13, for improving the capitol park and grounds at \$47,460. Geo. W. Aldridge, Supt. Bd. Pub. Wks.

TELEPHONE SYSTEM.—Dunkirk, N. Y.—The committee appointed by the council to consider the question of granting a franchise to the Dunkirk & Fredonia Telephone Co. has reported favorably on the proposition.

COMPOSITE HULLS.—Wabigoon, Ont.—Bids are asked

tee appointed by the council to consider the question of granting a franchise to the Dunkirk & Fredonia Telephone Co. has reported favorably on the proposition.

COMPOSITE HULLS.—Wabigoon, Ont.—Bids are asked by the Pioneer Steam Navigation Co, for the construction of two composite built hulls, 60 and 65 ft, long and 12 and 12½ ft. beam, respectively, according to reports.

RECREATION PIER.—Hoboken, N. J.—The committee on public grounds and buildings has authorized Inspector Steigleiter to prepare plans for the construction of a new batb bridge and pier to be 250 ft. long and 13 ft. wide.

PARK WORK.—Cleveland, O.—The board of park commissioners will ask the general assembly for an issue of \$1,000,000 in bonds for the proposed improvement along the Cuyahoga River and lake front. J. H. McGride and L. E. Holden, Park Comrs.

MORTAR BATTERY.—Boston, Mass.—Bids are asked until May 14 for constructing a mortar battery at Peddocks Island, Boston Harbor, as stated in our advertising columns. (Postponed from May 12.) Lieut Jobn Stephen Sewell, U. S. Engr., Boston.

TELEPHONE SYSTEM.—Des Moines, Ia.—The Central Telephone Co., recently organized, has let contracts for 50 miles of wire and two carloads of poles for its proposed lines. Capital stock, \$10,000. Pres. H. E. Teachout; Vice-Pres., J. W. Hill; Secy., M. McFarlin.

BY-PAS, ETC.—Cblcago, III.—Bids are asked until June 1 for constructing the substructure, auxiliary work, etc., for the by-pass along the Chicaso River, as stated in our advertising columns. Jas. Reddick, Secy. Bd. Trustees, Chicago Sanitary District of Chicago, Security Bidg.

TELEPHONE SYSTEM.—Seranton, Pa.—An ordinance will be introduced in the council asking for a franchise to be granted to the Lackawanna Telephone Co., Pres., Conrad Schroeder, Mgr., Samuel E. Wayland, to operate a telephone system in this place, with about 700 subscribers.

WEIR.—Sacramento, Cal.—It is stated that at a meeting of the auditing board of commissioners of public works last week, plans and specifications of Engineers N

\$25,000.

TUNNELING.—Los Angeles, Cal.—A special election will be held to vote on the question of issuing bonds for the construction of two tunnels, according to the following estimates submitted by J. H. Dockweller, Cy. Engr.: Third St. tunnel, 1,059 ft. long, 32 ft. wide and 20 ft. higb, excavation, 48,500 cu. yds., 82,116 cu. ft. of brick work, 182,597 cu. ft. of concrete, cost, about \$105,000; Broadway tunnel, length 696 ft., width 38 ft. and height 21½ ft., cost, about \$35,000.

REMOVING WRECK.—Davis Strait, Me.—The following bids were received by Maj. R. L. Hoxle, U. S. A., Portland, April 12, for removing the wreck of the schooner "Nevada," as advertised in Engineering News:

C. W. Johnston, Philadelphia, Pa\$375
W. S. White, Rockland, Me 475
D. A. Johnston, New York, N. Y 800
John L. Mills, Camden, N. J 947
W. H. Simmons, Rockland, Me 473
James S. Rogers, Plattsburgh, N. Y
Solon S. Andrews, Gorham, Me 465
John F. Hamilton, Portland, Me
Philip H. Doyen, Knightsville, Me

CONTRACT PRICES.

LEDGE EXCAVATION AND DREDGING.—Rockland Harbor, Me.—We are informed that the following bids were received April 9 by Maj. R. L. Hoxle, U. S. Engr., Portland, Me., for ledge excavation and dredging in Rockland Harbor, as advertised in Engineering News:

Bidder. Charles H. Souther, Boston, Mass.	471,286 cu. yds.	Boulder, a ton.
Virginia Dredging Co., Richmond, Moore & Wright, Portland, Me	Va149	\$5.00 3.00 5.00
	-Ledge exc	avation,-
Bidder.	A, B and C, 11,150	D and E, 19.030

Bidder.	11,150	19.030
Chas. W. Johnston, Philadelphia, J. J. Fitzpatrick, Piattsburg, N. Y	cu. yds. Pa\$9.15	cu. yds \$9.75
1. T. Brown, New York, N. Y Wm. S. White, Rockland, Me.	20.00	10.00 18.00 12.50
Glover & Spear, Rockland, Me Dunbar & Sullivan, Buffalo, N. Y	7.52 6.75	7.58 6.25
P. Sanford Ross, Jersey City, N.	J 8.50	9.29

PAVING.—Macon, Ga.—Bridges Smith, Cy. Clk., writes us that the following blds were received April 12 for 20,000 sq. yds, of asphalt or hrick paving:

lowing bids are for wire-cut hrick on cars: Toronto Fire Clay Co., Steubenville, O., \$7.35; Globe Fire Brick Works, Moscow, W. Va., \$7.40; Camden Clay Co., Spilman, W. Va., \$9.05.

VALVES.—Boston, Mass.—W. E. Swan, Ch. Clk. and Secy. to Water Comrs., Informs us that the following bids were received April 8 for furnishing valves; contract awarded the Coffin Valve Co.:

	Qua	an	it	11	ti	81	8.					1	Va	Coffin live Co., Boston.	Works, E. Boston
36-in.	valves									4	eacl	١		\$438.50	\$655.00
30-in.	44									4	66			312.50	514.00
24-In.	44								-	5	44			178.00	343.00
20-in.	44									10	0.6			142.00	282.00
To	tal									 				.\$5,314	\$9,211

Blds Received a	t Rocheste	r, N. Y.,	March 2	29, for 1	Medina I	Block Par	ing.		
			Whit-						
		Rock	more, Rauber	Lauer	Cham-	W. H. Jones	Gilbert Brady	Н. В.	
Quantities.	1	Pavement	&	Haga-	bers &	&	&	Hook-	H. N.
		Co.	Vicinus.	man.	Casey.	Sons.	Co.	er.	Cowles.
New Medina block stone pavement 7	.100 sq. yds	. \$2.45	\$2.53	\$2.53	\$2,53	\$2.65	\$2.67	\$2.70	\$2,80
Flag'g in crosswalks, incldg grad'g 2			.35	.48	.40	.50	.42	.45	.60
6-in, curbatones	3,050 In. ft.	60	.50	.80	.60	.80	.75	.70	.65
Cleaning main stone sewer	356 " "	.15	.01	.10	.10	.15	.15	.10	.10
New surface sewers	8 each		22.00	25.00	25.00	25.00	25.00	26.00	25.00
Reprg, conect'g and extnd'g surf. swrs	7 "		15.00	12.00		12.00	18.00	20.00	15.00
New lot laterals, 21 ft. long	50 "		7.00	9.00		11.00	15.00	16.00	
Manholes	5 "	. 42.00	35.00	45.00	35.00	35.00	50.00	34.00	40.00
Water-service pipes, East Side:									
%-in., with fixtures, 32 ft. long	10 "		12.00	9.45		18.30	18.00	17.00	20.00
34-in., with fixtures, 32 ft. long	10 "	. 19.75	14.40	10.60	16.77	21.25	22.00	19.00	23.00
Water-service pipes, West Side;									
%-in., with fixtures, 9 ft. long	10 "		8.25	17.00	9.38	9.10	9.00	9.00	10.00
%-in., with fixtures, 9 ft. long	10		9.10	19.65	8.05	10.60	12.00	10.00	12.00
Connecting water service at the curb	20 "		1.25	1.50		2.00	1.00	1.50	1.00
Extra concrete	40 cu. vds	2.50	4.50	4.50	4.50	4.00	3.60	5.00	3.00

Total \$22,511 \$21,825 \$23,475 \$22,835 \$24,510 \$24,508 \$24,664 \$25,393

CONCRETE BLOCKS.—Duluth.Minn.—The following bids were received April 11 for building concrete footing blocks for the superstructure for the south pier of ship canal entrance to harbor at Duluth, as advertised in Engineering News; amount proposed to be expended on the work, about \$12,000; Maj. Clinton B. Sears, U. S. Engr.:

	Footing blocks,
Bidder.	concrete, com-
Diam't	plete, a cu. yd.
Michael Rabbitt, Toledo, O	
Norris & Fitzgerald, Duluth, Mlnn	
Stamsen & Blome, Chicago, Ill	5.93
Davis & Davis, Duluth, Minn	6.74
Nlison & Carlson, Duluth, Minn,	
Frank Campbell, Duluth. Minn	6.90
G. H. Sager, Chicago, Ill	6.20
King & Steele, Duluth, Minn. (accepted)	4.95
Emil Engie and Aqulia G. Osman, Duluth	8.49
Lipsett & Gregg, Sauit Ste, Marle, Mich	8.69
John F. Schleunes, Duluth, Mlnn	5.63

BRICK PAVING.—Evansville, Ind.—We are informed that the following bids were received April 2 for brick paving in certain streets; the contracts were awarded to Bedford. Welkel & Nugent, with the exception of the lower half of Frankiin St., that being awarded to Stinchfield & Saunders:

CURB AND GUTTER.—Newport, Ky.—We are informed that the following bids were received April 12 for furnishing 2,000 lin. 2t. of combined curb and gutter, curb to be 5 ins. thick; gutter 6 ins., and 16 ins. wide; W. L. Glazier, Cy. Engr.:

S. J. Osborn & Co., Cincinnati, O	.64
Peter Ader Stone Co., Newport, Ky	.63
Chas, Kuhl Art, Stone Co., Cincinnati, O. (accepted)	.63
Cincinnati Granitold Co., Cincinnati, O	.65
MACADAM ROAD Orange, ConnWalter A. Main, I	First
Selectman, West Haven, Conn., writes us that the follow	
bids were received April 2 for 3,000 lin, ft. of maca	dam
road, 16 ft. wide, 5 ins. deep, grading 36 ft. wide:	
B. D. Pierce & Co., Bridgeport, Conn \$0.	.99

Bids Received at Evansville, In-	d., April 2 for B	rick Paving.		
,	Franklin	Fulton	Water -	Summer
Bldder.	St1	Ave	St.	St.
Bedford, Weikel & Nugent, Evansville, Ind	\$1.58 \$1.59	\$1.54 \$1.48	\$1.26	\$1.361/2
Stinchfield & Saunders, Evansville, Ind	1.51		1.38	
Eigerman, Eichel, Arnold & Co., Evansville, Ind	1.63 1.63	1.59 1.59	1.44	1.49
A. D. Thompson, Peoria, Iil.	1.511/2	1.51 1.46	1.37	

PAVING AND CURBING.—Mason City, Ia.—We are informed that the following bids were received April 2 for brick paving and curbing; Frank McCann received the contract for paving and M. V. Kenedy that for curbing:

Cement

Bldder.	Paving,	curbing
	a sq. yd.	a lin. ft.
J. W. Campbell, Des Molnes, Ia	\$1.51	
E. T. Webster, Dubuque, Ia	1.495	\$0.39
Magden & Sheeley, Des Moines, fa	1.71	.465
J. W. Gardiner, Mason City	1.63	
J. H. Keilmas, Des Molnes, Ia	1.56	.41
Filnt Brick Works, Des Moines, Ia	1.60	
N. M. Stark, Des Molnes, Ia	1.49	***
Frank McCann, Fort Dodge, Ia	1.48	90

improving water		A	sa vå		Culver
Bidder.	Exca	vation.	Rock.	Wall rock.	lin. ft.
Allen Bros	8	0.37	\$3.00	\$1.50	\$0.15
Noll & Thompson		.22	1.25	.50	.10
Newling & Co		.30	1.15	.75	.25

formed that the following brick and stone paving; T 430 4th Ave., Pittsburg:	bids	were rec	eiv	ed April	5 to	r
200 Atti Ave., Fittabulg.	Blds	Received	at	Rankin	Pa.	A

000 lbs. beams and channels, 2 cts.; I, wo lbs rods, bolt and nuts, 5 cts.; 5,500 lbs. splice plates, spli0 cts.; 300 lbs. wail plates, 2½ cts.; total \$2,069. Time of the rods bolt bs. wail plates, 2½ cts.; total \$2,069.
splice plates, 44 cts.; 900 lbs. wail plate 2.000 lbs
\$2,063. Time, 52 days.
BRICK PAVINGBinghamton, N. Y 11

BRICK PAVING.—Binghamton, N. Y.—11. Engr., writes us that A. S. Webb, Syracuse awarded the contract for brick paving in from the bridge to Vestal Ave., at \$1.95 New York Paving Co.'s brick will be used bids were given in our issue of April 7.

MISCELLANEOUS CONTRACTS.

DREDGING.—Chleago, Iil.—Bids are asked and April 27
for dredging. L. E. McGann, Comr. Pub. Was April 27
RIVER WORK.—Buffalo, N. Y.—Bids will soon be asked for straightening Buffalo Creek, to cost about \$150,000, V.
TELEPHONE SERVICENew York No. 1

asked by the department of correction, 148 until May 2 for telephone service. Francis J. RIVER WORK.—Nelson, B. C.—A grant of \$10,000 has been authorized for improving the Columbia and Duncan Rivers, according to reports.

Rivers, according to reports.

TELEPHONE SYSTEM.—Indianapolis, Ind.—The New Telephone Co., A. H. Nordyke, Pres.; Harry B faces Sey. has applied to the council for a franchise to operate a telephone system in this city.

REMOVING WRECK.—Baltimore, Md.—Bids are asked by the harbor board until April 27 for removing the wreck of the schooner "W. H. Rutan" from Harris Creek. W. T. Malster, Mayor; N. H. Hutton, Engr., BRICK SMOKESTACK.—Philadolpho, De. R. BRICK SMOKESTACK.—Philadolpho, De. R. B.

BRICK SMOKESTACK.—Philadeiphia, Pa.—Reports state that R. C. Bellinger & Co., 218 North 13th St., submitted the lowest bid April 12 at \$9,810 for constructing a brick smokestack at the Belmont Pumping Station. Thos. M. Thompson, Dir. Dept. Pub. Wks.

Thompson, Dir. Dept. Pub. Wks.

TELEPHONE SYSTEM.—Lebanon N. H.—A telephone
line from Etna to Lebanon will be installed soon; also an
exchange for Hanover, N. H., for which surveys are being
made. F. E. Austin, Hanover, is interested. Engr., J.
H. Lettenry, Tremont Bldg., Boston, Mass.

STEAMBOAT.—Portland, Me.—We are informed that the following bids were received April 15 by Maj. R. L. Hoxie, U. S. Engr., Portland, for constructing a steam vessel, as advertised in Engineering News:

Bldder.	Vessel,	Electric
H. J. Rodermond Ship-Building Co ¹ . R. M. Spedden Co ² . Portiand Company ³ Bath Iron Works ⁴ . Craig Ship-Building Co. ⁵ .	. 24,700 . 19,600 . 28,900	plant, 8898 2,000 1,530 1,750 1,000

¹Tompkin's Cove, N. Y. ²Baltimore, Md. ³Portland, Me. ⁴Bath, Me. ⁶Toledo, O.

INDUSTRIAL NOTES.

QUEEN & CO., INC., Philadelphia, has removed its New York office from 116 Fulton St. to 59 Fifth Ave.

York office from 116 Fulton St. to 59 Fifth Ave.

ARTHUR KOPPEL, 78-80 Broad St., New York, manufacturer of narrow gage railway materials, will remove its offices to Rooms 84-86, No. 68 Broad St.

THE MISSOURI CAR & FOUNDRY CO., St. Louls, Mo., is reported to have an order for 2,000 cars for the Union Pacific Ry, and 500 cars for the Texas & Pacific Ry.

THE SIOUX CITY SEWER PIPE CO., Sloux City, Ia, sold its plant at Receiver's sale, April 15, to Mr. Sumer R. Clarke, Peoria, Iii., for \$8,500, according to report.

THE ATLAS ENGINE WORKS, Indianapoils, Ind., is reported to have an order for twenty-eight 100-HP, steam engines from the Pittsburg Plate Giass Co., Pittsburg, Pa., through Mr. J. A. McCormick, machinery dealer, of the latter city.

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	Blds	Received	at	Rankin,	Pa.,	April	5,	for	Brick	and	Stone	Paving.
					F	counds	tle	n-				

Dida iteceived	of Managin	, ran, mp	III o, tot D	ick and	Stone Lavi	ng.		
		-Four	ndatlon					
		Stone.	Brick,	Cu	ırbı	-Sld	ewalks.	
	Roadway	8-in.	6-ln. grvi,		Un-	Grad-	6-in. clndr.	
Bldder.	grading.	gravel,	2-in. sand,	Dressed.	dressed.	lng.	foundat'n,	
	3,500	2,970	1,170	2,000	245	1,500	1,780	
	cu. yds.	sq. yds.	sq. yds.	lin.ft.	lin.ft.	cu.yds.	sq.yds.	Total.
Cono, Assetta & Co., Plttsburg		\$1.44	\$1.14	\$0.52		\$0.31	\$0.73	\$9,500
Ott Bros., 89 Federal St., Allegheny, P	a33	.88	.93	.46	\$0.30	.40	.55	7.392
H. C. Howard, 326 4th Ave., Pittsburg		\$1.44 .88 .89 .87	.97	.44	.37	.33	.48	7,214
Charles Rosser, Bellaire, O. (accepted).		.87	.921/2	.45	.30	.311/2		7,121
Keeling, Ridge & Co., Pittsburg, Pa	47	.85	.90	.50	.40	.40	.65	8,042

WATER PIPE.—Cohoes, N. Y.—It is stated that Chas. Millar & Son, Utica, N. Y., have been awarded the contract for furnishing 3,500 ft. of 24-in. cast-iron water pipe, at \$18.40

a gross ton.

CEMENT.—Saginaw, Mich.—H. E. Terry, Cy. Engr., informs us that the following bids were received April 15 for furnishing cement: Portland cement, Remer Bros., Saginaw (Dyckerhoff), \$3.15 a bbl.; (Atlas), \$2.58; (Sandusky), \$2.58; Cameron & Co., Port Huron, \$2.59; Morley, Ewen & Co., Saginaw (Alpha), \$2.63; (Alsen), \$3.18. Hydraulic ce-

THE EDGE MOOR IRON CO., Edge Moor, Del., has a contract, according to report, for a 250-HP, boiler, with Playford stoker, for the water department of Allegheny, Pa.

Playford stoker, for the water department of Allegheny, Pa.
THE PENNSYLVANIA STEEL CO., Steelton, Pa., is reported to have a contract from the Russian Government for 35,000 tons of steel ralls, to be used in the construction of the Trans-Siberian Ry.

THE GILLETTE-HERZOG MFG. CO., Minneapolis, Minn., is reported to have shipped, April 9, 31 carloads of structural iron for the Hennessey Mercantile Co. Bidg., Butte, Mont. The cost is said to be over \$40,000.

THE CONNERSVILLE BLOWER CO., Connersville, Ind., has an order for four of its largest cycloidal pumps for irrigation work, which it is claimed will be the largest of this type ever built, each having a capacity of 34,000 gallons a minute.

MR. J. H. HOUGHTON. Boston. Mass. has the con-

gallons a minute.

MR. J. H. HOUGHTON, Boston, Mass. has the contract to furnish three 70-HP. boilers and five engines, one of 50 HP., one of 20 HP., two of 15 HP. and one of 8 HP., for the American Wood Co., Weeksboro, Me., according to reports.

THE SCHENECTADY LOCOMOTIVE WORKS, Schenectady, N. Y., is reported to have orders for 20 locomotives for the Chicago & Northwestern Ry. and two 14-wheel passenger and two consolidated freight locomotives for the Mexican Inter-Oceanic Ry.

THE SCHOEN PRESSED STEEL CO., Allegheny, Pa.,

Mexican Inter-Oceanic Ry.

THE SCHOEN PRESSED STEEL CO., Allegheny, Pa, is reported to have the contract to build 1,000 steel ore and coal hopper ears for the Pennsylvania R. R., for \$1,000,000, which is said to be the largest single contract ever given for steel cars.

THE VULCAN IRON WORKS CO., Toledo, O., reports that it has received more orders so far this year than at any previous time in its history, dating over a priled of 25 years. It further stytes that it has many inquiries from Europe for machinery, and is figuring on dredge-machinery for the Yukon River, Alaska.

Bids Received at Cincinnati, Ohio, April 11, for Macadam Paving.

				T.		G. S.			
			P.	Howard		Glea-	J.		W.
		Delaney	Gleason,	Lud-	J. M.	son,	Good-	A. J.	Fogarty
Quantities.		& Broe-	84 Bulld-	· low &	Quili.	1825	man.2028	Heubel.	2550
		man, 1139	ers' Ex-	Cilfton	1052 Pine	Jose-	Symmes	621 Mair	Burnett
	1	W. 6th St.	change.	Ave.	St.	phine,	St.	St.	Ave.
Broken stone	260 cu. yds	. \$1.00	\$0.95	\$1.05	\$1.20	\$1.09	\$1.00	\$1.20	\$0.95
Concrete	1 " "	.01	3.00	2.00	3.00	3.00	2.50	.01	5.00
Curbs	670 lin. ft.	50	.55	55	.49	.63	.53	.50	.45
Flags and lateral gutters	630 " "	70	.75	.60	.65	.80	.80	1.00	.75
Grading	700 cu. yds	06	.01	.095	.01	.14	.20	.01	.10
Resetting curbs	40 lin. ft.		.01	.10	.01	.10	.10	.05	.10
Rolling	1,120 sq. yds		.03	.03	.03	.021		.03	.05
Gravel	32 cu. yd		.75	1.00	1.40	.95	1.25	1.20	1.00
Asphalt repairs	5 sq. yds		3.00	2.50	2.00	3.00	3.00	.01	2.00
Headers	24 lin. ft.	01	.25	.10	.15	.20	.30	.20	.01
Total		. \$1,156	\$1,177	\$1,173	\$1,152	\$1,393	\$1,361	\$1,363	\$1,198

PAVING BRICK.—Wheeling, W. Va.—Wm. H. Hornish, Clk. Bd. Pub. Wks., informs us that the following bids were received April 9 for furnishing paving brick: Wirecut, Mack Mig. Co., Pittsburg, Pa., cars \$7.30, barge \$7.70, New Cumberland, W. Va., \$7.50, \$7.25, \$9.50 and \$9.10, respectively; awarded contract for wire-cut brick. The fol-

ment, Remer Bros., Saginaw (Obelisk), 65 cts. a bbl.; Cameron & Co., Port Huron (kind not named), 88 cts.; Moriey, Ewen & Co., Saginaw (Milwaukee), 54 cts.

IRON AND STEEL.—Portland, Me.—The following bids were received by Maj. R. L. Hoxle, U. S. Engr., Portland, for furnishing iron and steel: Thomas Laughlin Co., 33,

Contract Work Should Always be Advertised in a Paper Read by Contractors.

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies in North America Reads Engineering News.

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Garbage
Streets a
Manufact
Gas Plan
Miscellar
Contract
INDUSTR

6.