

Taylor, F. W. et Thompson, S. E.—Pratique de la construction en béton et mortier de ciment armés ou non armés. (Translated and adapted by M. Darras) Un volume in-8° de XXIII-720 P., avec 141 figures. Dunod et Pinat, éditeurs, Paris. Prix: broché, 27 fr. 50; cartonné, 29 francs.

Thayer, H. R.—Structural design. Vol. II.—Design of simple structures. 503 P. 6×9. D. Van Nostrand Co., New York. Price: \$4.00 net.

Wallace, W. W.—Engineering problems. Part I. The Technical Publishing Co., London. Price: 3 s.

Weiss, H. F.—The preservation of structural timber. 312 P. 6×9. McGraw-Hill Book Co., New York. Price: \$3.00 net, postpaid.

Wig, R. J. and Pearson, J. C.—Standardization of No. 200 cement sieves. 51 P. 7×10.

Woodman, A. G. and Norton, J. F.—Air, water and food. 208 P. John Wiley & Sons, New York. 1914. Price: \$2.00 net.

Handbook containing general information for the use of engineers, architects and builders. 456 P. 4×6½, leather.

Lackawanna Steel Co., Buffalo. Price: \$2.00 net.

内外諸雜誌主要題目

かはさき畫報

第三卷 第二十三號 大正四年一月

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1. 鐵筋混凝土普通混凝土施工標準心得.

第三卷 第二十四號 大正四年二月.

1. 混凝土講話. (第一)

工 學

第一卷 第八號 大正三年十二月十五日.

1. 塞國ノ水道ヨリ.

2. 羽柄物寸法ノ變化ニ就テ.

3. 石材ニ就テ.

4. 鐵筋混凝土橋梁設計心得. (第二) 附錄鐵筋混凝土計算法.

5. 土堰堤ノ設計ニ關スル原理.

6. 請負ノ研究. (第八)

第二卷 第一號 大正四年一月十五日.

1. 鋼橋梁ノ製作上設計ニ關スル注意. (第一)

2. 鍛冶橋. (第一)

3. 鋼拱橋設計例吳服橋. (其一)

4. 水管内流水ニ關スル諸公式ノ比較研究.

5. 請負ノ研究. (第九)

第二卷 第二號 大正四年二月十五日.

1. 急速濾過機ノ種類.

2. 鋼橋梁ノ製作上設計ニ關スル注意 (第二)
3. 鍛冶橋 (第二)
4. 鋼拱橋設計例吳服橋 (其二)
5. 難波橋改築工事ニ試ミタル水噴射 (再ヒ)
6. 水管内流水ニ關スル諸公式ノ比較研究
7. 諸負ノ研究 (第十)

工業雜誌

- 第四十一卷 第五百四十三號 大正三年十一月十日.
1. 本邦石材重量吸水凍氷耐壓試驗成績表.
- 第四十一卷 第五百四十五號 大正三年十二月十日.
1. 土木建築材トシテノ石材ノ試驗.
- 第四十一卷 第五百四十六號 大正三年十二月二十五日.
1. 坑道留ト四ツ留ノ組ミ方ニ就テ.
- 第四十二卷 第五百四十七號 大正四年一月十日.
1. 廢頽石垣ノ被覆工ニ就テ.
 2. 日本都市ニ於ケル路面改良問題.
- 第四十二卷 第五百四十九號 大正四年二月十日.
1. 一號二號安全爆藥ノ實驗成績並其ノ特性.
- 第四十二卷 第五百五十號 大正四年二月二十五日.

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1. 鑿井問題

工學會誌

第三百八十一卷 大正四年二月二十七日

1. 電柱ノ根入ト控木ニ付テ

CONCRETE AND CONSTRUCTIONAL ENGINEERING

Vol. IX. No. 11. November, 1914.

1. The use of concrete in the substructure of the New County Hall.
 2. Deformation and deflection in concrete beams.
 3. Mixing and placing materials for concrete roads.
- Vol. IX. No. 12. December, 1914.

1. The Wallace-Scott Tailoring Institute, Glasgow.
2. The elasticity of compound bars; with special reference to reinforced concrete columns.
3. Collapsible steel centering.
4. Examination of concrete failures for their determining causes.
5. Concrete dam on Mississippi River, Coon Rapids Hydro-Electric Plant.

6. *Concrete lodge and Enquiry Office.*

2. Deep water concrete through a tube.
3. Shear and problem arising therefrom.
4. Tests of reinforced concrete structures on the Great Central Railway.
5. Concreting in freezing weather, and the effect of frost upon concrete.

EASTERN ENGINEERING

Vol. V. No. 53. November, 1914.

1. British aerial ropeways.

Vol. V. No. 55. January, 1915.

1. A pile-extracting machine.
2. Shorter's railograph.

ELECTRIC RAILWAY JOURNAL

Vol. 44. No. 21. Nov. 21, 1914.

1. Investment Bankers' Association Convention.
2. Labor conditions in Europe.
3. The Chicago, Milwaukee & St. Paul electrification.

Vol. 44. No. 22. Nov. 28, 1914.

1. Progress on the Newark Terminal.

Vol. 44. No. 23. Dec. 5, 1914.

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1. Costs of electric shovel work at Cleveland.
 2. Reinforced concrete poles for railways.
 3. Reconstructing both tracks at once in Kansas City.
- Vol. 44. No. 25. Dec. 19, 1914.
1. Electric freight service at Bangor.
 2. Economical use of wood and preservation of timber.
 3. New York State Commission on Ventilation.
 4. Operating plans for the electrified division of the C. M. & St. P.
- Vol. 44. No. 26. Dec. 26, 1914.
1. The New York municipal car—tracks, brake rigging and draft gear.
 2. Calculations of starting resistances for railway motors.
- Vol. 45. No. 1. Jan. 2, 1915.
1. The "safety first" movement.
 2. Location of trolley wire on curves.—I.
- Vol. 45. No. 2. Jan. 9, 1915.
1. Location of trolley wire on curves.—II.
- Vol. 45. No. 3. Jan. 16, 1915.
1. Location of trolley wire on curves.—III.
 2. Steel ferryboat in service on the Oakland, Antisch & Eastern.
 3. Discussion on paving.

Vol. 45. No. 4. Jan. 23, 1915.

1. Cleveland Railway's new repair shop.
2. Highway-crossing protection.
3. Steel tie construction in electrically-warmed concrete.
4. Location of trolley wire on curves.—IV.

Vol. 45. No. 5. Jan. 30, 1915.

1. Fireproof carhouse at Vancouver, B. C.
2. Rail-laying outfit on the Kankakee & Urbana Traction Line.
3. Location of trolley wire on curves.—V. (concluded)
4. Electric towing at Panama.

ENGINEERING

Vol. XCVIII. No. 2549. Nov. 6, 1914.

1. The Manhattan Bridge, New York.
2. 2-10-2 Type locomotives for heavy freight service.

Vol. XCVIII. No. 2550. Nov. 13, 1914.

1. Granary at Glasgow Harbour.
2. Drag-line bucket excavator with martinson tractor.
3. The law of power-house economy.

Vol. XCVIII. No. 2551. Nov. 20, 1914.

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1. Economics of electric railway distribution.

Vol. XCVIII. No. 2552. Nov. 27, 1914.

1. Granary at Glasgow Harbour.

Vol. XCVIII. No. 2554. Dec. 11, 1914.

1. Granary at Glasgow Harbour.

2. The "sentrot" chemical injector.

3. Reinforced concrete, concrete-cased steelwork, and the effect of frost on concrete.

Vol. XCVIII. No. 2556. Dec. 25, 1914.

1. Service reservoir construction.

2. The Rungles rotary driers.

3. The flexure of eccentrically-loaded columns.

4. Audible and other cab-signals on British railways.

Vol. XCIX. No. 2558. Jan. 8, 1915.

1. The assessment of damage to maritime works.—I.

2. Cab-signalling on railways.

Vol. XCIX. No. 2559. Jan. 15, 1915.

1. Clay foundations.

2. Riving.

3. Water softening: The Lassen-Ejford and the Permutit Processes.

1. The assessment of damage to maritime works.—II.
2. Some interesting and useful curves.

Vol. XCIX. No. 2561. Jan. 29, 1915.

1. 10-ton road-roller.

ENGINEERING MAGAZINE

Vol. XLVIII. No. 3. December, 1914.

1. Fans for ventilating work.
2. A new safety detonating fuse.
3. Flexible submarine piping.
4. Electrolytic sewage treatment.

Vol. XLVIII. No. 4. January, 1915.

1. The corrosion of iron.
2. Corrosion of metals in natural soils.

Vol. XLVIII. No. 5. February, 1915.

1. Via Panama to Pacific ports.
2. The corrosion of iron.

ENGINEERING NEWS

Vol. 72. No. 21. Nov. 19, 1914.

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1. Erecting the Snake River Viaduct; O.-W. R. R. & Nav. Co.
 2. Operation of sand and gravel plants.
 3. A century rainfall record at New Bedford, Mass.
 4. Slate Creek Bridge: Building a concrete arch bridge 56 mi. from rail.
 5. A large coaling station at Toledo; L. S. & M. S. Ry.
- Vol. 72. No. 22. Nov. 26, 1914.

1. Shifting the Milwaukee River draw-bridge; C. & N. W. Ry.
 2. A freight-handling equipment for fertilizer, Central of Georgia Ry., Savannah, Ga.
 3. Notes on Massachusetts highway work.
 4. New dry dock for San Francisco.
 5. New formulas for the flow of fluids in pipes.
 6. New York Rapid Transit Railway extensions.
 7. The protection of Watervliet, N. Y., against storm waters; "Dry River."
- Vol. 72. No. 23. Dec. 3, 1914.

1. The floating caisson for the Panama Canal Locks.
2. A new hydraulic stop valve.
3. New York Rapid Transit Railway extensions.
4. An English railway trashed.
5. The Hell Gate Bridge in the shop.
6. Flood-protection work on Fall Creek at Indianapolis, Ind.

7. Plant and working methods on approaches to North Side Point Bridge.
 8. New York exhibit of street cleaning apparatus.
- Vol. 72. No. 24. Dec. 10, 1914.
1. Some bridges on the Columbia Highway.
 2. New York Rapid Transit Railway extensions.
 3. Construction of the Metcalf Ave. sewer, Borough of the Bronx, New York City.
- Vol. 72. No. 25. Dec. 17, 1914.
1. Plant tests of a low-head hydro-electric development.
 2. Location and construction of highways in mountain country.
 3. Sewage-intercepting chamber and settling tank for a Public Institution at Geneva, Ill.
 4. Use and tests of unscreened gravel: Illinois State Highway Department.
 5. The New York Rapid Transit Railway extensions.
- Vol. 72. No. 26. Dec. 24, 1914.
1. The New York Rapid Transit Railway extensions.
 2. Beargrass Creek storm-water channel at Louisville, Ky.
- Vol. 72. No. 27. Dec. 31, 1914.
1. The influence of reservoir bottoms on stored water.
 2. New York Rapid Transit Railway extensions.
 3. The failure of the Hippodrome Arcade, Youngstown, Ohio.
- Vol. 73. No. 1. Jan. 7, 1915.

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1. Progress of work on the new Quebec Bridge during the first erection season.
 2. Cleveland West Side water-supply tunnel.
 3. The 12th St. double-deck viaduct at Kansas City.
- Vol. 73. No. 2. Jan. 14, 1915.

1. Excavation for the foundation of Elephant Butte Dam.
 2. The city tunnel of the Catskill Aqueduct.
 3. The Columbia highway in Oregon.
 4. Proposed method of constructing Pearl Harbor Dry Dock.
- Vol. 73. No. 3. Jan. 21, 1915.

1. The city tunnel of the Catskill Aqueduct.
 2. The Alaskan railroad survey.
 3. Bascule bridge acting as a simple truss span.
 4. Leakage from Cedar Lake Reservoir, Seattle Water-Supply.
- Vol. 73. No. 4. Jan. 28, 1915.

1. The city tunnel of the Catskill Aqueduct.
 2. The first large American Humphrey pump.
 3. Wind-pressure formulas and their experimental basis.
 4. Lining the St. Louis water tunnel with concrete by means of compressed air.
- Vol. 73. No. 5. Feb. 4, 1915.

1. The city tunnel of the Catskill Aqueduct.

2. Standard practice instructions for concrete testing laboratory.
3. Wind stresses in steel mill-buildings.

Vol. 73. No. 6. Feb. 11, 1915.

1. The Valier-Montana irrigation project.
2. Specifications for concrete aggregates and results of field tests.
3. Wind stresses in railroad bridges.

ENGINEERING RECORD

Vol. 70. No. 21. Nov. 21, 1914.

1. West Side tunnel extension at Cleveland.
2. The year's work on the Panama Canal.
3. Sewerage system for Panama-Pacific Exposition Grounds at San Francisco.—Part II.
4. Fourth American Road Congress.
5. Regulating a troublesome stream at Watervliet.
6. Double-track steel ore-stocking trestle.

Vol. 70. No. 22. Nov. 28, 1914.

1. Relation of road maintenance to traffic.
2. Main span of Detroit-Superior Bridge over Cuyahoga River at Cleveland.
3. Incasing steel on Rock Island Bridge at Chicago.

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Vol. 70. No. 23. Dec. 5, 1914.

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1. Piercing the Selkirk Mountains for a five-mile tunnel.
2. Results of task work in cleaning filter sand at Philadelphia.
3. Lock gates for Dalla-Celilo Canal.
4. Oneida Street crossing under Milwaukee River.
5. Reinforced-concrete bridge with cantilever abutments.

Vol. 70. No. 24. Dec. 12, 1914.

1. Thin asphalt block pavement for New York State highways.
2. Steel bridge standards of the Iowa Highway Commission.
3. Practical hints on proper method of maintenance for concrete pavements.
4. Details of main span of Detroit-Superior Bridge at Cleveland.
5. New type of traveling excavator for ditches.
6. Grouting foundations for gravity-section dam.

Vol. 70. No. 25. Dec. 19, 1914.

1. The narrows flexible joint submarine siphon.
2. Disastrous fire at Edison Factory.
3. American Road Builders' Association.
4. Emergency garbage disposal in Chicago.
5. Large floating gravel-washing plant in Indiana.
6. Erecting railroad viaduct superstructure.

Vol. 70. No. 26. Dec. 26, 1914.

1. Fabricating steelwork for the Hell Gate Arch.
 2. Chief features in building a long concrete viaduct at St. Louis.
 3. Toronto Breakwater to curb 10-foot waves.
 4. Erecting 40 ton girders at a height of 250 feet above the street.
- Vol. 71. No. 1. Jan. 2, 1915.
1. Review of the year: Summary by eminent specialists of the engineering developments during 1914 with forecasts of the progress in the immediate future.
 2. Chehalis River temporary bascule bridge.
 3. Electrically operated contractor's plant for building Kensico Dam.
 4. Coaling and sanding station on the Virginian Railway at Elmore.
 5. Hindia Dam on Euphrates River.
 6. Test of full-size reinforced-concrete slab.
- Vol. 71. No. 2. Jan. 9, 1915.
1. The underground survey at Cincinnati.
 2. Methods of creating and maintaining channels at mouths of fluvial and tidal river.
- Vol. 71. No. 3. Jan. 16, 1915.
1. Method of excavation for buildings.
 2. Chicago's new tunnel and pumping station, part of comprehensive waterworks plan.—Part I.
 3. Development of water power on public lands.
 4. Erection of new Quebec Bridge.

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5. New plan for building Pearl Harbor dry dock near Honolulu.

6. Rapid steel erection on third track work, Second Avenue Elevated, New York.

Vol. 71. No. 4. Jan. 23, 1915.

1. Microscope opens new field in study of concrete.

2. American Wood Preservers' Association.

3. Tower of jewels at Exposition a 435-foot skyscraper on two-hinged arches.

Vol. 71. No. 5. Jan. 30, 1915.

1. New methods of pneumatic tunneling aid safe and rapid completion of Passaic Valley sewer contract.

2. Electric towing locomotives chief feature in operation of Panama Canal.

3. Construction of Cumberland Waterworks.

4. Preliminary estimating of canal excavation.

5. West Fork Waterworks dam at Fort Worth.

Vol. 71. No. 6. Feb. 6, 1915.

1. Mechanical disintegration of defective concretes.

2. Half-mile concrete viaduct provides double-deck traffic way in Kansas City.

3. Reinforced-concrete roundhouse at Du Bois.

4. Economic design of concrete slab.

5. Five bridges erected two days.

INDIAN ENGINEERING

Vol. LVI. No. 13. Sept. 26, 1914.

1. Notes on modern road construction.
Vol. LVI. No. 15. Oct. 10, 1914.
1. St. Paul's Bridge, London.
2. Experiments on briquettes.
Vol. LVI. No. 16. Oct. 17, 1914.
1. The widening of the Jumna Bridge at Allahabad.
2. The cement gun.
Vol. LVI. No. 17. Oct. 24, 1914.
1. Waste disposal at Chicago.
Vol. LVI. No. 18. Oct. 31, 1914.
1. The Port of Rangoon.
2. Recent experiences in road-making.
Vol. LVI. No. 19. Nov. 7, 1914.
1. Dredgers on the Panama Canal.
Vol. LVI. No. 22. Nov. 28, 1914.
1. Rail corrugation.
Vol. LVI. No. 23. Dec. 5, 1914.
1. Ventilation.
Vol. LVI. No. 24. Dec. 12, 1914.
1. Town planning.

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2. Antiseptic treatment of chair pine sleepers in the Kumann Circle, U. P.
3. Notes on rail manufacture.

Vol. LVI. No. 25. Dec. 19, 1914.

1. Wide city roads.
2. Side lights on the Panama Canal.

Vol. LVII. No. 5, Jan. 30, 1915.

1. Drainage engineering in Egypt.
2. Madras Corporation waterworks.

JOURNAL OF THE AMERICAN WATER WORKS ASSOCIATION

Vol. I. No. 4. December, 1914.

1. Forty-eight inch cast iron force main for Atlantic City, New Jersey.
2. Notes on the contamination of a drinking and railroad water supply by sea water and the removal of the salt water from the reservoir.
3. Laboratory control of water supplies.
4. Some relations between the water supply and typhoid fever at Washington, D. C.

JOURNAL OF THE WESTERN SOCIETY OF ENGINEERS

Vol. XIX. No. 9. November, 1914.

1. Permeability tests on gravel concrete.
2. Reactions in a three-legged stiff frame with hinged column bases.

LE GÉNIE CIVIL

Tome LXXV. No. 24. Nov. 15, 1914.

1. L'emploi du béton armé dans les voies de tramways.

Tome LXXVI. No. 1. Jan. 2, 1915.

1. Le ferry-boat brise-glace "Leonard" du Transcontinental Railway (Canada).

Tome LXXVI. No. 2. Jan. 9, 1915.

1. Pelle à vapeur pour l'exécution rapide des terrassements.

Tome LXXVI. No. 3. Jan. 16, 1915.

1. Les ponts militaires pour l'établissement de passages improvisés.

Tome LXXVI. No. 4. Jan. 23, 1915.

1. Les ponts militaires pour l'établissement de passages improvisés. (suite)

MUNICIPAL JOURNAL

Vol. XXXVII. No. 21. Nov. 19, 1914.

1. Athleboro's sewerage and sewage disposal.
2. Operating sedimentation tanks.
3. Notes on Imhoff Tank operation.
4. Operation of sewage disposal plants.
5. Economics of sewage filters.

Vol. XXXVII. No. 22. Nov. 26, 1914.

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1. Improving Lowell's water supply.
 2. Cleaning reservoir and mains.
 3. Breaks in water mains.
 4. Lincoln water and light.
 5. California's greatest power development.
- Vol. XXXVII. No. 23. Dec. 3, 1914.
1. Brick highways in King County, Washington.
 2. Small granite block pavement.
 3. Paving with redressed granite.
- Vol. XXXVII. No. 24. Dec. 10, 1914.
1. New York's snow removal plans.
 2. Snow removal principles.
 3. Tables of street cleaning statistics.
 4. Street cleaning appliances.
- Vol. XXXVII. No. 25. Dec. 17, 1914.
1. Small sewage treatment plant.
 2. Operation of sewage disposal plants.
- Vol. XXXVII. No. 26. Dec. 24, 1914.
1. Chicago Water Works notes.
 2. Requiring consumers to install meters.

- 3. Brass in water works construction.
 - 4. Standard for drinking water.
- Vol. XXXVII. No. 27. Dec. 31, 1914.
- 1. Roadway up the Palisades.
 - 2. Road maintenance.
- Vol. XXXVIII. No. 1. Jan. 7, 1915.
- 1. Selection of paving material.
 - 2. Sewage treatment.
- Vol. XXXVIII. No. 2. Jan. 14, 1915.
- 1. Street cleaning by motor apparatus.
 - 2. Street cleaning in Chicago.
 - 3. Street cleaning data.
 - 4. Cincinnati street cleaning.
- Vol. XXXVIII. No. 3. Jan. 21, 1915.
- 1. Construction features on the Passaic Valley sewer.
 - 2. Sewer construction at Ludington.
 - 3. Removal of dead animals in cities.
 - 4. Operating sewage disposal plants.
- Vol. XXXVIII. No. 4. Jan. 28, 1915.
- 1. Hauling heavy water pipes.

3. Bewährung verschleißfester Schienen. (Mit Zeichnungen Abb. 1 und 2 auf Tafel 47 und einer Textabbildung)
 4. Höllenton-Brücke. (Mit einer Textabbildung)
 5. Unterführungen in Chicago. (Mit Zeichnungen Abb. 12 bis 19 auf Tafel 47)
- Band LI. Heft 22. Nov. 15, 1914.
1. Die natürliche Böschung von Erdarten starken Zusammenhaltes. (Mit fünf Textabbildungen)
 2. Formänderungen am schwebenden Schienenstosse. (Mit zehn Textabbildungen)
- Band LI. Heft 23. Dec. 1, 1914.
1. Der elektrische Kraft- und Licht-Betrieb in der Hauptwerkstätte Danzig. (Mit Zeichnungen Abb. 1 bis 6 auf Tafel 51, Abb. 11 und 12 auf Tafel 52 und 41 Textabbildungen)
 2. Zeiger für Abhaufberge. (Mit Zeichnungen Abb. 1 und 2 auf Tafel 52 und sieben Textabbildungen)
- Band LI. Heft 24. Dec. 15, 1914.
1. Rostschutz. (Mit Zeichnungen Abb. 1 bis 4 auf Tafel 32 und fünf Textabbildungen)
 2. Gleisunterhaltung mit elektrischen Werkzeugen. (Mit sechs Textabbildungen)
 3. Mittelwerte der Geschwindigkeit, des Fahrwiderstandes und der Leistung von Eisenbahnzügen. (Mit einer Textabbildung)
 4. Klappbrücke in Sault Ste. Marie. (Mit Zeichnungen Abb. 5 bis 9 auf Tafel 32)
 5. Schienenbefestigung auf der Überführung der Milwaukee-Avenue in Chicago. (Mit Zeichnung Abb. 6 auf Tafel 54)
 6. Locomotivbahnhof der Zentralbahn von Newjersey in Communnipaw. (Mit Zeichnung Abb. 18 auf Tafel 54)
 7. Bahnhof der Newyork-Zentral- und Hudsonfluss-Bahn in Utica, Newyork. (Mit Zeichnung Abb. 1 und 2 auf Tafel 33)
 8. Verschiebebahnhof der Boston- und Maine-Bahn in Mechanicville. (Mit Zeichnung Abb. 7 auf Tafel 54)

PROCEEDINGS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Vol. XL. No. 9. November, 1914.

1. Submerged pipe work at Portland, Oregon.
 2. History of Little Rock Junction Railway Bridge, of the St. Louis, Iron Mountain and Southern Railway Company, over the Arkansas River at Little Rock, Arkansas, 1883-1914.
 3. Proof of an assumption in the theory of concrete beams.
 4. Depreciation as an element for consideration in the appraisal of public service properties.
 5. Report on a series of tests on concrete columns reinforced with a spiral of steel.
 6. Some principles relating to the administration of streams.
 7. Subaqueous highway tunnels.
 8. A method of determining storm-water run-off.
 9. Water supply of the San Francisco-Oakland Metropolitan District.
 10. External corrosion of cast-iron pipe.
 11. The clarification of sewage by fine screens.
- Vol. XL. No. 10. December, 1914.

1. The water-proofing of solid steel-floor railroad bridges.
2. Nomographic solutions for formulas of various types.
3. Progress report of the special committee on materials for road construction and on standards for their test and use.

4. Progress report of the special committee on steel columns and struts.
 5. Progress report of the special committee to investigate the conditions of employment of, and compensation of, civil engineers.
 6. Stresses in wedge-shaped reinforced concrete beams.
 7. Reinforced concrete docks: foreign and American structures. Failures, costs, and general considerations.
 8. A method of determining storm-water run-off.
 9. The clarification of sewage by fine screens.
 10. Water supply of the San Francisco-Oakland Metropolitan District.
- Vol. XLII. No. 1. January, 1915.

1. Rivers and railroads in the United States.
2. Reconstruction of the Norfolk and Western Railway Company's bridge over Ohio River at Kenova, West Virginia.
3. The clarification of sewage by fine screens.
4. Water supply of the San Francisco-Oakland Metropolitan District.
5. Penstock and surge-tank problems.
6. The water-proofing of solid steel-floor railway bridges.

PROFESSIONAL MEMOIRS

CORPS OF ENGINEERS U. S. ARMY AND ENGINEER DEPARTMENT AT LARGE

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1. Action of water in locks of the Panama Canal.
2. Percolation and upward pressure of water.
3. The Hwai River conservancy project.

RAILWAY GAZETTE

- Vol. XXI. No. 19. Nov. 6, 1914.
 1. Putting girders in position by a new method: South Indian Railway.
- Vol. XXI. No. 20. Nov. 13, 1914.
 1. Ten years' railway accidents—1904-1913.
- Vol. XXI. No. 21. Nov. 20, 1914.
 1. Culverts for railway construction.
- Vol. XXI. No. 24. Dec. 11, 1914.
 1. Motor inspection cars for railways.
 2. Tests of reinforced-concrete structures on the Great Central Railway.
- Vol. XXI. No. 25. Dec. 18, 1914.
 1. Floods on the South Indian Railway.
 2. Ten years' railway accidents.
 3. Railway goods' station organization.
- Vol. XXI. No. 26. Dec. 25, 1914.
 1. Audible and other cab signals on British Railways.

2. Ten years' railway accidents.

Vol. XXII. No. 1. Jan. 1, 1915.

1. Audible and other cab signals on British Railways. (Concluded from page 662, Dec. 25, 1914.)

Vol. XXII. No. 2. Jan. 8, 1915.

1. Italian State Railways standard locomotives.
2. A new patent rail joint chair.

Vol. XXII. No. 3. Jan. 15, 1915.

1. New Pennsylvania elevator at Philadelphia.
2. The Queen's Park extension.

Vol. XXII. No. 4. Jan. 22, 1915.

1. Chicago, Milwaukee & St. Paul Railway.
2. The electrical train shaft.
3. The lateral pressure and resistance of clay, and the supporting power of clay foundations.

Vol. XXII. No. 5. Jan. 29, 1915.

1. The Pikes-Uppington Railway.

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1. New locomotive repair shops of the Chicago & Alton R. R. at Bloomington, Ill.
2. Developments with steel ties on the Bessemer & Lake Erie R. R.

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1. Tests of rails for curve wear.
2. Railroad tie plate patents.

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1. Pontoon railroad bridge across the Panama Canal.
2. Improvement of steel rail materials by milling the hot bar.
3. Electrification of Puget Sound lines of the Chicago Milwaukee & St. Paul Ry.

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1. Construction of the Hallstead Cut-off P. L. & W. R. R.
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1. Construction of the Hallstead Cut-off, D. L. & W. R. R. (Continued from No. 4.)
2. Electric towing locomotives of the Panama Canal.

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1. Car repair plant of the Northwest System, Pennsylvania Lines West, Indiana Harbor, Ind.

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1. Vom Bau der viereckigen Eisenbahnbrücke über den Neckar und des Rosensteintunnels bei Cannstatt.

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1. Vom Bau der vierecksigen Eisenbahnbrücke über den Neckar und des Rosensteintunnels bei Cannstatt.
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1. Zum Durchschlag des Grenchenbergtunnels.
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1. Vom Bau der vierecksigen Eisenbahnbrücke über den Neckar und des Rosensteintunnels bei Cannstatt.
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1. Vom Bau der vierecksigen Eisenbahnbrücke über den Neckar und des Rosensteintunnels bei Cannstatt.
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1. Lastverteilung bei Plattenbalkenbrücken.
2. Die Furkabahn.

3. Internationaler Verband für die Materialprüfungen der Technik.
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1. Die Furkabahn.
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Vol. CXXI. No. 21. Nov. 21, 1914.

1. The world longest bascule bridge. (How two folding leaves of huge dimensions are made to form a single rigid span)

Vol. CXXI. No. 24. Dec. 12, 1914.

1. New York State barge canal. (A waterway rivaling in some respects the Panama Canal)

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1. Looping the loop in the Alps.
2. Reinforced concrete pontoon.
3. The Western Australian goldfields. (How water supplies are provided in a waterless country)

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1. How small communities may have good roads. (The value of whole-hearted co-operation)
- Vol. CXII. No. 2. Jan. 9, 1915.

1. The Balboa Dock. (How the solid masonry columns for supporting the great wharves at the Pacific Ocean entrance to the Panama Canal were rapidly and economically constructed, carrying the foundations down to bed rock.)
2. The sewage purifying plant at Ostend.

Vol. CXII. No. 3. Jan. 16, 1915.

1. Disastrous burnout in a subway manhole. (Lessons that are taught by the accident)

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1. Steamship terminal in the Bronx. (Docking facilities for freighters reaching New York by way of Long Island Sound. Engineering difficulties involved in damming a vast sea of mud.)

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1. Parenty's outflow regulating devices.

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- 1. The Arrow Rock Dam.
 - 2. Red as danger indication. (The value of various colors for signalling purposes.)
- Vol. LXXVIII. No. 2031. Dec. 5, 1914.
- 1. Marine wood borers. (Little known crustaceans of destructive habits)
 - 2. Rail sections as an element in steam and electric traction.—I. (Early history of track construction and developments made possible)
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- Vol. LXXVIII. No. 2032. Dec. 12, 1914.
- 1. Rail sections as an element in steam and electric traction.—II. (Early history of track construction and developments made possible)
 - 2. The Gulf Stream. (Causes that governs its course, and its effect on climate)
- Vol. LXXVIII. No. 2033. Dec. 19, 1914.
- 1. Circumventing Niagara Falls. (A new Welland Canal necessitated by increasing traffic)
 - 2. Why rivers overflow. (How floods may be prevented)
- Vol. LXXIX. No. 2035. Jan. 2, 1915.
- 1. Purification of water by the ultra-violet rays. (Principles underlying the most recent system for destroying germ life)
- Vol. LXXXIX. No. 2036. Jan. 9, 1915.
- 1. Concrete viaducts on the Pennsylvania Railroad. (Replacing insecure wooden trestles with a substantial road

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1. To Cuba by rail. (The last link between Key West and Havana joined)

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1. A great railway electrification project. (440 miles of the Chicago, Milwaukee & St. Paul Mountain Lines to be operated by electric power)

Vol. LXXXIX. No. 2039. Jan. 30, 1915.

1. Electric towing in the Panama Canal locks. (Ingenious system and novel electric locomotives)

Vol. LXXXIX. No. 2040. Feb. 6, 1915.

1. An X-Ray inspection of a steel casting. (Experiments on a method for discovering hidden defects in metal)
2. Protection from earthquakes. (Principles of location and methods of construction found desirable)

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1. Railways in China. No. IX
2. Report on Chinese concrete.

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1. The piercing of the Münster-Grenchenberg tunnel.

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1. Sewage disposal works at Leeds.

2. Metropolitan Railway development—New viaduct at Kilburn.
 3. The new Allahabad Bridge.
- Vol. OXVIII. No. 3075. Dec. 4, 1914.
1. Design of the main shoes of the new Quebec Bridge.
- Vol. OXVIII. No. 3076. Dec. 11, 1914.
1. Steel arch bridge on curved gradient in the Bietsch Valley.
 2. Manganesee-steel rails.
- Vol. OXVIII. No. 3077. Dec. 18, 1914.
1. Typical ships: Dredgers.
- Vol. OXVIII. No. 3078. Dec. 25, 1914.
1. Hydro-electric power plant in Chile.
 2. A new type of grab.
 3. Audible and other cab signals on British railways.
- Vol. OXIX. No. 3079. Jan. 1, 1915.
1. Harbours and waterways, 1914.
 2. Water supply in 1914.
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- Vol. OXIX. No. 3080. Jan. 8, 1915.
1. Extension of the Bakerloo Tube. No. 1.
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1. Aerial ropeways. No. 1.
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5. The behaviour of metals under stress.

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2. Electrical system of cab-signalling.

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1. Corrosion of steel wharves at Kowloon.

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1. Automatic train stops; Chicago and Eastern Illinois R. R.
2. Tests of reinforced concrete structures on the Great Central Railway.
3. Corrosion of steel wharves at Kowloon.

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1. Freight marshalling yards.

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1. Colorado River siphon.
2. The philosophy of engineering.
3. A rational formula for asphalt street surfaces.
4. The storage of flood-waters for irrigation: A study of the supply available from Southern California streams.
5. The Prewitt Reservoir proposition.
6. Road construction and maintenance: An informal discussion.
7. Physical valuation of railroads.
8. Derivation of run-off from rainfall data.
9. Progress report of the special committee on concrete and reinforced concrete.
10. The effect of saturation on the strength of concrete.
11. Coal piers on the Atlantic Seaboard.
12. Modern pier construction in New York Harbor.
13. Flood flows.
14. Concrete bridges: Some important features in their design.
15. Stresses in wedge-shaped reinforced concrete beams.

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16. A study of economic conduit location.
17. A study of fluid resistance.
18. The diversion of irrigating water from Arizona streams.
19. Painting structural steel: The present situation.
20. Topographical surveys made by the American section of the International Boundary Commission United States and Mexico.
21. Reinforced concrete reservoir and coagulation plant at St. Louis, Mo.
22. Road construction and maintenance: An informal discussion.
23. Measurement of the flow of streams by approved forms of weirs with new formulas and diagrams.
24. Steel stresses in flat slabs.
25. An investigation of sand-clay mixtures for road surfacing.
26. Shearing strength of construction joints in stems of reinforced concrete T-beams, as shown by tests.
27. Storage to be provided in impounding reservoirs for municipal water supply.
28. Statical limitations upon the steel requirement in reinforced concrete flat slab floors.
29. California practice in highway construction.
30. Cinder concrete floors.

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1. Subsoil water in sewers.

2. Tank treatment of sewage.
 3. Durability of concrete in sea water.
 4. German water pipes in the world's markets.
 5. Frictional resistance of fluids in pipes.
- Vol. XVI. No. 192. Dec. 15, 1914.
1. The Assuan Dam.
 2. The channeller in water engineering.
 3. New waterworks extension at Baltimore.
- Vol. XVI. No. 193. Jan. 15, 1915.
1. Water Engineering in 1914.
 2. Metropolitan Water Board. (Richmond-Twickenham tunnel works).