

Day River basin, Oregon. 7 P. No. 378. Profile surveys in 1914 on Middle Fork of Willamette River and White River, Oregon. 8 P. No. 379, Profile surveys in 1914 in Umpqua River basin, Oregon. 7 P. No. 388, Surface water supply of the United States, 1914; Part VIII, Western Gulf of Mexico basins, 124 P. No. 332—B.: Surface water-supply of the United States, 1912; Part XII: North Pacific drainage basins, B. Snake River basin. by N. C. Grover, and G. C. Baldwin and F. F. Henshaw. 227 P. No. 362—C.: Surface water-supply of the U. S., 1913; Part XII: North Pacific drainage basins, C. Lower Columbia River and Rogue, Umpqua, Wilson and Nehalem Rivers, by N. C. Grover and F. F. Henshaw. 246 P. No. 371: Equipment for current-meter gaging stations. by G. J. Lyon. 64 P. No. 375—F.: Conditions requiring the use of automatic gages in obtaining records of stream flow. by C. H. Pierce. P. 131—139.

Versuche zur Ermittlung des Rostschutzes der Eiseneinlagen im Beton, unter besonderer Berücksichtigung des Schtackenbetons. Heft 31 des Deutschen Ausschusses für Eisenbeton. Wilhelm Ernst u. Sohn, Berlin. Preis: geh. 8 M.

Water Supply Commission of Pennsylvania. (Harrisburg, Penn.): Annual report for 1914. 399 P., illustrated, 6×9, cloth.

内外諸雜誌主要題目

發電水力

第九號. 大正四年十一月十五日.

1. 下野電力會社取入口ニ於ケルろーりんぐだむ.

第十號. 大正四年十二月十五日.

1. 米國加州ノ水力電氣事業.
2. 混凝土水壓管採用ノ記錄.

かはさき畫報

新刊
紹介
内外諸雜誌主要題目

第三卷. 第三十三號. 大正四年十一月.

1. 橋杭ト鐵網混凝土被覆.

第三卷. 第三十四號. 大正四年十二月.

1. 鐵網混凝土ニ就テ.

第四卷. 第三十五號. 大正五年一月.

1. 鐵筋混凝土ノ衛生的價値.

工 學

第貳卷. 第十一號. 大正四年十一月十日.

1. 東京市臨時下水改良課月島製管工場鐵筋混凝土下水管及
暗渠蓋製造工事報告. (一)

2. 杭ノ支持力ニ就テ.

3. 橋杭ト鐵網コンクリート被覆.

4. 函形暗渠ニ於ケル應力計算法. (三)

5. 東京市内河川大浚渫事業ノ概況. (三)

6. 請負ノ研究. (十八)

第貳卷. 第十二號. 大正四年十二月十日.

1. 寒地水道用不凍結水栓ニ就テ.

2. 東京市臨時下水改良課月島製管工場鐵筋混凝土下水管及
暗渠蓋製造工事報告. (二)

3. 東京市内河川大浚渫事業ノ概況. (四)

4. 請負ノ研究. (十九)

一〇 第參卷. 第一號. 大正五年一月十日.

1. 糸鉛ト空氣壓搾機ニヨル鐵管ノ接合トニ就テ.

2. だいやぐらむノ研究.

3. 軌條ノ用途選擇及検査ニ就テ.

4. 埋立工事ト唧筒式浚渫機.

5. 請負ノ研究 (二十)

工學會誌

第三百八十九卷 大正四年十一月十九日

1. 歐羅巴ニ於ケル無軌條電車調査報告

第三百九十卷 大正四年十二月十日

1. 木材ノ收縮ニ關スル研究報告
2. 歐羅巴ニ於ケル無軌條電車調査報告 (承前)

工業雜誌

第四十三卷 第五百六十七號 大正四年十一月十日

1. 高壓電線路ノ機械的研究 (一)
2. 水路取入口ニ應用セル輾動堰

第四十三卷 第五百六十八號 大正四年十一月二十五日

1. 高壓電線路ノ機械的研究 (二)

2. 北豆及駿豆西浦石材丁場ノ現況 (上)

第四十三卷 第五百六十九號 大正四年十二月十日

1. 歐洲戰後ニ於ケル我工業發展策

2. 北豆及駿豆西浦石材丁場ノ現況 (下)

第四十三卷 第五百七十號 大正四年十二月二十五日

1. 戰後ノ軍事工業ニ就テ

2. 市街塵芥燒却問題ニ就テ

第四十四卷 第五百七十一號 大正五年一月十日

1. 英國及獨逸ニ於ケル工場設備ノ取締

帝國鐵道協會會報

第十六卷 第五號 大正四年十月二十五日

1. 佐伯線津久見川橋梁工事ニ就テ

2. 停車場ノ配線軌道及軌條ニ關スル報告

第十六卷 第六號 大正四年十一月二十五日

1. 佐伯線淺海井附近ニ於ケル海岸壁工事ニ就テ.
2. 朝鮮鐵道史.

ANNALES DES PONTS ET CHAUSSÉES

PARTIE TECHNIQUE

Tome XXVI. Vol. II. Mars-Avril, 1915.

1. Notice sur Maurice Lévy, Membre de l'Académie des Sciences, Inspecteur général des Ponts et Chaussées.
2. Viaduc sur l'étang de Caronte (Ligne de Miramas à l'Estaque).
3. Etude sur le calcul des voûtes en maçonnerie.
4. Sur le régime des sources.

BULLETIN OF THE SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION

Vol. VI. No. 4. December, 1915.

1. The theory of columns.

BETON u. EISEN

XIV. Jahrgang Heft XIV/XV. 3, Sept., 1915.

1. Bogenbrücken zur Zeit des Weltkrieges. I. Steintorbrücke auf Bahnhof Halle a. S.
2. Erbauung eines Aussichtsturmes in Eisenbeton.
3. Die Rammwirkung im Erdreich. Versuche auf neuer Grundlage. (Schluss aus Heft XII/XIII.)
4. Berechnung kontinuierlicher Träger für Dreieck- und Trapezbelastungen sowie für parabolische Belastung.
5. Weitere Versuche mit Säulen. (Schluss aus Heft XII/XIII.)

XIV. Jahrgang Heft XVI. 4, Okt., 1915.

1. Sammelkanal in Eisenbeton von 200/250 cm. Lichtweite.
2. Bogenbrücken zur Zeit des Weltkrieges. Steintorbrücke auf Bahnhof

Halle a. S. (Fortsetzung aus Heft XIV/XV.)

3. Der Bau der Medina-Talsperre in Texas.
4. Beitrag zur Bestimmung der Bogenform bei Wölbbrücken.
5. Weitere Versuche mit Säulen. (Fortsetzung aus Heft XIV/XV.)

XIV. Jahrgang Heft XVII/XVIII. 3. Nov., 1915.

1. Die Berechnung der nachträglichen Grundmauerwerkverbreiterung, Bauweise Heimbach.
2. Zwei neue Eisenbetonbrücken über die Pegnitz.
3. Welchen Einfluss übt der Grad der statischen Unbestimmtheit eines Systems auf dessen Querschnittbemessung aus?
4. Maschinelle Baustelleneinrichtungen. (Schluss aus Heft XIV/XV.)
5. Weitere Versuche mit Säulen. (Schluss aus Heft XVI.)
6. Bestimmungen für Ausführung von Bauwerken aus Eisenbeton. Aufgestellt vom Deutschen Ausschuss für Eisenbeton, Oktober, 1915.

CASSIER'S ENGINEERING MONTHLY

Vol. 48. No. 4. October, 1915.

1. Allowance for impact in bridge design.

Vol. 48. No. 5. November, 1915.

1. Electric locomotives.

Vol. 48. No. 6. December, 1915.

1. Electric power in New Zealand.

CEMENT WORLD

Vol. IX. No. 7. Oct. 15, 1915.

1. Design and construction of the Gwynn's Falls arch bridge.
2. Estimates on standpipes and tanks.
3. Calculating slab, beam and girder floors. Part I.
4. General principles of estimating.
5. Road foundations and drainage.

6. Arrowrock Dam.

Vol. IX. No. 8. Nov. 15, 1915.

1. Cement grout to the rescue. (Notable engineering project, the Astoria-Bronx Tunnel.)
2. Efficient layout for concreting equipment.
3. Concrete slab, beam and girder floors. Part II.
4. Cement-sand cushion under block pavements.

Vol. IX. No. 9. Dec. 15, 1915.

1. Model highway construction on Penn. State road.
2. Railroad experience with concrete piles.
3. Concrete slab, beams, and girder floors. Part III.
4. Tunkahannock Creek Viaduct described in detail.
5. The error of the stirrup.

CONCRETE AND CONSTRUCTIONAL ENGINEERING

Vol. X. No. 10. October, 1915.

1. Oil-mixed portland cement concrete.
2. London's reinforced concrete regulations (As revised). II.
3. The microscope in the study of concrete. V.

Vol. X. No. 11. November, 1915.

1. Wind stresses in building frames.
2. Concrete roads.
3. London's reinforced concrete regulations (As revised). III.
4. Concrete buoys and sinkers.
5. Reinforced concrete in the electrification of the London & South-Western Railway (Suburban lines).

Vol. X. No. 12. December, 1915.

1. New reinforced concrete wharf and jetty for the Port Talbot Railway.
2. The Concrete Institute—Presidential address.
3. High strength concrete produced through lowering of surface tension

of mixing water.

4. The durability of cement drain tiles in alkali soils.
5. Portland cement concrete pavements for country roads.
6. The substructure of the Lethbridge Viaduct.
7. Some concrete cottages at Norwich.

ENGINEERING

Vol. C. No. 2597. Oct. 8, 1915.

1. The Panama Canal.—No. XVII.
2. Artesian water in Australia.
3. Stress distribution in engineering materials.

Vol. C. No. 2598. Oct. 15, 1915.

1. The Swedish State hydro-electric power-station at Porjus.
2. Torsion stresses in framed structures.

Vol. C. No. 2599. Oct. 22, 1915.

1. The Swedish State hydro-electric power-station at Porjus. (Continued from page 388.)
2. New sewage disposal works at Wanstead.
3. The Brownhoist Shnoble drag-line bucket.
4. Direct reading tachometer.

Vol. C. No. 2600. Oct. 29, 1915.

1. The Swedish State hydro-electric power-station at Porjus. (Concluded from page 414.)
2. Canadian railway ferry-steamer "Scotia II."
3. Development of main-line signalling on railways.

Vol. C. No. 2601. Nov. 5, 1915.

1. Multiple filtration plant at Accra, Gold Coast Colony.
2. Torsion stresses in framed structures.
3. Development of main-line signalling on railways. (Continued from page 443.)

4. The Institution of Civil Engineers—Presidential address.

Vol. C. No. 2602. Nov. 12, 1915.

1. Development of main-line signalling on railways. (Continued from page 481.)

Vol. C. No. 2603. Nov. 19, 1915.

- 1. Canadian railway ferry-steamer "Scotia II."
- 2. The Punjab Triple Canal system.
- 3. Development of main-line signalling on railway. (Concluded from page 508.)

Vol. C. No. 2604. Nov. 26, 1915.

1. The water power of Canada.

Vol. C. No. 2606. Dec. 10, 1915.

- 1. The Eskdale Railway: A narrow gauge experiment.
- 2. The corrosion of metals.
- 3. Harbour works at Alexandria and Galvan Port.

ELECTRIC RAILWAY JOURNAL

Vol. 46. No. 15. Oct. 9, 1915.

1. Sessions of Engineering Association.

Vol. 46. No. 16. Oct. 16, 1915.

1. Progress on C., M. & St. P. electrification.

Vol. 46. No. 17. Oct. 23, 1915.

- 1. Notes on mountain railway electrification.
- 2. Girder and high T-rail renewals.

Vol. 46. No. 19. Nov. 6, 1915.

- 1. Seven years of operating experience of a singlephase interurban railway.
- 2. Graphics in maintenance work.

Vol. 46. No. 20. Nov. 13, 1915.

- 1. Philadelphia-Paoli electrification.
- 2. Concrete pavement in the track allowance.

Vol. 46. No. 22. Nov. 27, 1915.

1. Steel vs. wood tie in city track construction.

Vol. 46. No. 23. Dec. 4, 1915.

1. Report of Chicago Committee on smoke abatement and terminal electrification.

Vol. 46. No. 24. Dec. 11, 1915.

1. Estimated costs of Chicago Terminal electrification.
2. Rail bond testing—determining and interpreting bond resistance.

ENGINEERING NEWS

Vol. 74. No. 16. Oct. 14, 1915.

1. Storm King Highway, New York.
2. Reinforced-concrete viaduct at St. Louis, Mo.
3. Rebuilding the Burlington's Platte River Bridge.
4. Flooding and recovery of the Astoria Tunnel. II.
5. Construction and operation of Gloversville Sewage Works.—I.

Vol. 74. No. 17. Oct. 21, 1915.

1. Ornamental bridge at Akron built of slag concrete.
2. Novel bulkhead for wharves at Jacksonville.
3. Small mechanical-filter plant, Franklin Furnace, N. J.
4. Construction and operation of Gloversville Sewage Works.—II.

Vol. 74. No. 18. Oct. 28, 1915.

1. Building low-grade line for Norfolk & Western R. R.
2. Portland Harbor Bridge.
3. Newark Railway terminal and utilities building.

Vol. 74. No. 19. Nov. 4, 1915.

1. Construction details of bridge across Portland Harbor.
2. Construction progress on the Twin Peaks Tunnel.
3. Double-deck bascule bridge over the Chicago River.
4. Track elevation on the Nickel Plate Railroad at Chicago.

Vol. 74. No. 20. Nov. 11, 1915.

1. Ornamental concrete elevated railway, New York City.
2. Methods used in building the Rogers Pass Tunnel.
3. Concrete pile and cylinder foundations at Charleston.
4. Pennsylvania R. R. electrifies Philadelphia District.
5. Substructure of the Lake St. bascule bridge at Chicago.
6. East River tunnel shields.

Vol. 74. No. 21. Nov. 18, 1915.

1. Indianapolis flood protection.
2. Subaqueous rock excavation.—I.
3. Making a road up the Palisades.

Vol. 74. No. 22. Nov. 25, 1915.

1. Goethals on Panama slides.
2. The Mexican Railway; 1873 and 1915.
3. Subaqueous rock excavation.—II.
4. Connecticut shipping terminal at New London.

Vol. 74. No. 23. Dec. 2, 1915.

1. Piecemeal erection of a bridge on the Boston & Maine R. R.
2. Subaqueous rock excavation—III.
3. Making concrete, tight, Tacoma and Seattle Water-Works.

Vol. 74. No. 24. Dec. 9, 1915.

1. Record-breaking plate girder for Nickel Plate R. R.
2. By pass around Leaky Tunnel in Catskill Aqueduct.
3. Gravel roads of New Hampshire; Patrol maintenance.
4. Pile-and-mat foundation for power house in Marsh.
5. Halifax Ocean Terminals.
6. Freight yard at Birmingham.

Vol. 74. No. 25. Dec. 16, 1915.

1. Replacing water-main bridge with concrete arch.
2. Experimental concrete roadway, Sacramento Calif.

ENGINEERING RECORD

Vol. 72. No. 15. Oct. 9, 1915.

1. World's longest arch, across Hell Gate, New York City, is closed and swung as planned.
2. New type of submersible lockgate at Keokuk operated by compressed air.
3. Large saving in steel effected by new system of flat-slab reinforcement.
4. Cushionless brick pavements, built as monoliths by new method, win widespread favor.

Vol. 72. No. 17. Oct. 23, 1915.

1. Build scenic highway up Pike's Peak.
2. Virgin county renders pipe line construction difficult.

Vol. 72. No. 18. Oct. 30, 1915.

1. Pennsylvania builds concrete road as object lesson.
2. Pressure test shows little leakage from Huge molded concrete pipe.
3. Test results will form basis for selecting pavements in St. Louis.

Vol. 72. No. 19. Nov. 6, 1915.

1. High levees will protect Indianapolis from floods.
2. Wire cables of various types and materials tested by U. S. Bureau of Standards.
3. Development of New York's rapid-transit system resulting in dual contracts.
4. Test show how loads are distributed on reinforced-concrete slab floors.

Vol. 72. No. 20. Nov. 13, 1915.

1. Pennsylvania inaugurates electric service in Philadelphia.
2. Street bridges in Philadelphia designed for permanent artistic effects.
3. Well-designed concrete plant aids construction of waterworks dam.

Vol. 72. No. 21. Nov. 20, 1915.

1. Softening plant converts hard, impure river water into boiler feed

supply.

2. Mass concrete retains setting heat several years.
3. Soil tests reported and safe underpinning methods in sand described.
4. St. Louis municipal bridge east approach a steel viaduct nearly 3 miles long.

Vol. 72. No. 22. Nov. 27, 1915.

1. Ten million yards of material must be removed to stop Panama Canal slides.
2. Lift spans over Arkansas River designed for possible shifting of channel.

Vol. 72. No. 23. Dec. 4, 1915.

1. Materials vs. methods—testimony of moving pictures in the study of concrete.
2. How Australia builds its railroads.
3. Long pontoon bridges carry heavy railway loading-floor lifting devices.

Vol. 72. No. 24. Dec. 11, 1915.

1. Planning board for highway contract work, Philadelphia.
2. Suggestions for better practice in concrete placing in study with moving pictures.

Vol. 72. No. 25. Dec. 18, 1915.

1. Mechanical filtration plant, Panama-Pacific International Exposition.
2. Avoidance of segregation and entrained air a factor in better concrete.
3. Beam analysis by elastic curves and influence lines.

JOURNAL OF THE AMERICAN WATER WORKS ASSOCIATION

Vol. 2. No. 4. December, 1915.

1. Methods of washing slow sand filters.
2. Artesian wells and methods of pumping them.
3. Impounded waters of Alabama in relation to public health.
4. Present status of disinfection of water supplies.

5. Some considerations in estimating the sanitary quality of water supplies.

JOURNAL OF THE WESTERN SOCIETY OF ENGINEERS.

Vol. XX. No. 8. October, 1915.

1. A study of grade crossing elimination in cities.

LE GÉNIE CIVIL

Tome LXVII. No. 15. 9 Oct., 1915.

1. Le pont-levant de Louisville, sur le canal de Louisville à Portland (Kentucky, É.-U.).

Tome LXVII. No. 16. 16 Oct., 1915.

1. L'irrigation de la vallée de la Murrumbidgee, Nouvelle-Galles du Sud (Australie).
2. L'action du vent sur les constructions.

Tome LXVII. No. 17. 23 Oct., 1915.

1. Calcul et épreuves des ponts métalliques. Le nouveau règlement du Ministère des Travaux publics du 8 janvier 1915.
2. L'action du vent sur les constructions.

Tome LXVII. No. 18. 30 Oct., 1915.

1. Les chemins de fer en Angleterre. Historique, matériel, fonctionnement.

Tome LXVII. No. 19. 6 Nov., 1915.

1. Le viaduc de Fontpédrouse, sur la Têt (Pyrénées-Orientales).

Tome LXVII. No. 20. 13 Nov., 1915.

1. Note sur l'équation différentielle de la ligne neutre et de la fibre moyenne d'une pièce chargée de bout.

Tome LXVII. No. 21. 20 Nov., 1915.

1. Le pont en arc de Hell Gate, sur l'East River, à New York.
2. Wagon-bétonnière automobile pour la construction du muraillement du tunnel de Sandy-Ridge (États-Unis).

Tome LXVII. No. 22. 27 Nov., 1915.

1. Ligne de Miramas à l'Estaque-Marseille (Chemins de fer de Paris à Lyon et à la Méditerranée).

MUNICIPAL JOURNAL

Vol. XXXIX. No. 15. Oct. 7, 1915.

1. Asphalt paving in Columbia.
2. Granite block repaving in Worcester.
3. Garbage disposal at Reading.
4. Surfacing the Boston Post Road.
5. Dye for measuring sewage flow.
6. Electrolytic sewage treatment.

Vol. XXXIX. No. 16. Oct. 14, 1915.

1. Recent granite paving.

Vol. XXXIX. No. 17. Oct. 21, 1915.

1. Lowell filtration plant.

Vol. XXXIX. No. 18. Oct. 28, 1915.

1. The Astoria-Bronx gas tunnel.
2. Lynn Waterworks improvement.
3. Types of bituminous pavements.
4. Cushions for brick pavements.

Vol. XXXIX. No. 19. Nov., 4, 1915.

1. Asphalt repaving in Manhattan.
2. Highway work in New York.
3. Disposal of greater New York's sewage.

Vol. XXXIX. No. 20. Nov. 11, 1915.

1. Garbage collection and incineration in Sewickley.
2. Refuse collection and disposal. (Tables)
3. Refuse disposal notes.
4. Refuse collection notes.
5. Refuse disposal in San Francisco.

6. Refuse disposal data.

7. Garbage and ash collection in Montclair.

Vol. XXXIX. No. 21. Nov. 18, 1915.

1. Operating Manhattan asphalt plant.

2. Boston's new sewage pumping station.

3. Activated sludge at Milwaukee.

4. Joint fillers for granite block pavement.

Vol. XXXIX. No. 22. Nov. 25, 1915.

1. Wakefield water sterilization.

Vol. XXXIX. No. 24. Dec. 9, 1915.

1. Pavement maintenance in Montclair.

2. Mortar and concrete.

Vol. XXXIX. No. 25. Dec. 16, 1915.

1. Sewer cleaning in the Atlantic City.

2. Garbage disposal in Dayton.

3. Rochester sewage disposal plant.

4. Planning for garbage collection.

ÖSTERREICHISCHE WOCHENSCHRIFT FÜR DEN
ÖFFENTLICHEN BAUDIENST

Jahrgang XXI. Heft 1. 7, Jän., 1915.

1. Berechnung von Rollenauflegern.

Jahrgang XXI. Heft 2. 14, Jän., 1915.

1. Berechnung von Rollenauflegern. (II. Teil und Schluss.)

Jahrgang XXI. Heft 5. 4, Feb., 1915.

1. Zur Spannungsverteilung in Talsperren.

Jahrgang XXI. Heft 6. 11, Feb., 1915.

1. Der Fischereihafen in Ymuiden (Niederlande).

Jahrgang XXI. Heft 7. 18, Feb., 1915.

1. Die Bestimmung der jährlichen Abflussmengen offener Gerinne aus

dem Niederschlage und der Temperatur. (Für das Dniestrprofil bei Zaleszczyki.)

Jahrgang XXI. Heft 8. 25, Feb., 1915.

1. Kriegs- und Notbrücken.

Jahrgang XXI. Heft 9. 4, März, 1915.

1. Teilschächte für städtische Kanalnetze bei Schwemmkanalisationen. (Hiezu die Tafeln 13, 14 und 15.)
2. Wasserdruck auf kreisförmige zylindrische Wände der Staumauern und Wehro.

Jahrgang XXI. Heft 10. 11, März, 1915.

1. Über die Tragfähigkeit gebogener Lamellen.

Jahrgang XXI. Heft 11. 18, März, 1915.

1. Über Wertschätzung der Wildbachverbauungen. (Hiezu Tafel 16 und 17.)
2. Neuere Versuche mit Säulen aus umschürtem Gusseisenbeton. (Hiezu Tafel 18.)

Jahrgang XXI. Heft 12. 25, März, 1915.

1. Tragkraft und Kosten von Stützen und Balken aus Eisenbeton im Vergleich zur solchen aus Holz, Eisen und Stein. (Hiezu Tafel 19 und 20.)

Jahrgang XXI. Heft 13. 1. April, 1915.

1. Die Inangriffnahme der Marchregulierung in der Grenzstrecke gegen Ungarn. (Hiezu Tafel 21, 22, 23, 24 und 25.) (Erster Teil.)
2. Wasserkraftprojekte an der Mur in Steiermark.

Jahrgang XXI. Heft 14. 8, April, 1915.

1. Die Inangriffnahme der Marchregulierung in der Grenzstrecke gegen Ungarn. (Hiezu Tafel 21, 22, 23, 24 und 25.) (Zweiter Teil und Schluss.)

Jahrgang XXI. Heft 15. 15, April, 1915.

1. Das Kraftnetz und die Kraftanlagen der Southern Power Company

in Nord- und Süd- Carolina. (Hiezu Tafel 26 und 27.) (Erster Teil).

Jahrgang XXI. Heft 16. 22, April, 1915.

1. Das Kraftnetz und die Kraftanlagen der Southern Power Company in Nord- und Süd- Carolina. (Hiezu Tafel 26 und 27.) (Zweiter Teil und Schluss).
2. Die neue Fischhalle in Ymuiden (Holland).

Jahrgang XXI. Heft 17. 29, April, 1915.

1. Ermittlung des Normalprofils für die Rekonstruktion des linksufrigen Hochwasserschutzdammes in der Wiener Donaustrecke. (Hiezu Tafel 30 und 31).
2. Über die Spannungsverteilung in Röhren, die eine gleichmässig über die Horizontalprojektion verteilte lotrechte Belastung tragen.

Jahrgang XXI. Heft 19. 13. Mai, 1915.

1. Der Neubau der Beraunbrücke bei Königsaal. (Hiezu die Tafeln 33, 34 und 35.)

Jahrgang XXI. Heft 20. 20. Mai, 1915.

1. Studie über die Koeffizientenlose Berechnung des Ausflusses unter Wasser bei Schützenanlagen.

Jahrgang XXI. Heft 21. 27. Mai, 1915.

1. Überfall über ein Streichwehr.

Jahrgang XXI. Heft 22. 3 Juni, 1915.

1. Geodätische Streifzüge.
2. Rekonstruktion des Sázawa-Viaduktes bei Budigsdorf, km 24 7/9 der Linie Böhmisches-Trübau-Olmütz.

Jahrgang XXI. Heft 23. 10. Juni, 1915.

1. Über das Auftreten von Normalspannungen bei Torsion prismatischer Stäbe.

Jahrgang XXI. Heft 24. 17. Juni, 1915.

1. Die Catskill Wasserversorgungsanlage für die Stadt New York.

(Hiezu Tafel 43, 44 und 45.) (Erster Teil.)

Jahrgang XXI. Heft 25. 24. Juni, 1915.

1. Die Catskill Wasserversorgungsanlage für die Stadt New York. (Hiezu Tafel 43, 44 und 45.) (Zweiter Teil und Schluss.)

Jahrgang XXI. Heft 26. 1. Juli, 1915.

1. Wagedrehkrane als Hilfsmittel bei Brückenauswechslungen.
2. Trägheits- und Widerstandsmomente von Querschnitten teilweise behauener Rundhölzer.

Jahrgang XXI. Heft 27. 8. Juli, 1915.

1. Vereinfachte Zeichnerische Ermittlung für den Wasserkraft-Stauweiherr und für die Seezurückhaltung. (Hiezu Tafel 46.)

Jahrgang XXI. Heft 28. 15. Juli, 1915.

1. Regulierung des Gilauflasses im Mittellaufe. (Hiezu Tafel 47, 48, 49, und 50.)
2. Die Berücksichtigung der Querschnittsveränderlichkeit bei der statischen Untersuchung gelenkloser Bögen.

Jahrgang XXI. Heft 29. 22. Juli, 1915.

1. Versuche über die Zugfestigkeit bei allseitigem Wasserdruck.

Jahrgang XXI. Heft 30. 29. Juli, 1915.

1. Eine Anwendung der Airyschen Spannungsfunktion zur Berechnung von Spannungsstörungen in scheibenartigen Körpern.

Jahrgang XXI. Heft 31. 5. August, 1915.

1. Zur Theorie des Kugelgewölbes.

Jahrgang XXI. Heft 32. 12. Aug., 1915.

1. Der Eisenbeton bei den Bauten der Eisenbahnen.

PROFESSIONAL MEMOIRS

CORPS OF ENGINEERS, UNITED STATES ARMY, AND

ENGINEER DEPARTMENT AT LARGE

Vol. VII. No. 36. Nov.-Dec., 1915.

1. Quartermaster and submarine mine wharf at Key West, Fla.
2. Two useful shop boats.
3. Duty, organization, training, and equipment of engineer troops for field service.
4. A compilation of experiences and conclusions of eminent authorities as to the utility of outlets in reducing the height of floods, citing all opinions found, whether for or against.
5. Depositing material by derrick beyond beach of boom.

RAILWAY GAZETTE

- Vol. XXII. No. 23. June 4, 1915.
1. Viaduct construction on the Kansas City Terminal Railway.
- Vol. XXII. No. 24. June 11, 1915.
1. Promoting safety in the maintenance department.
- Vol. XXII. No. 25. June 18, 1915.
1. New station and track elevation at Memphis.
- Vol. XXII. No. 26. June 25, 1915.
1. Retaining walls on soft foundations.
- Vol. XXIII. No. 1. July 2, 1915.
1. An interesting pier protection problem.
- Vol. XXIII. No. 2. July 9, 1915.
1. Development of Pennsylvania Railroad track inspection system.
- Vol. XXIII. No. 3. July 16, 1915.
1. A pneumatic sleeper-packing tool.
- Vol. XXIII. No. 4. July 23, 1915.
1. The design and construction of small stations.
- Vol. XXIII. No. 5. July 30, 1915.
1. The North-Eastern Railway, its rise and development.
- Vol. XXIII. No. 6. Aug. 6, 1915.
1. The electric railways of London.

Vol. XXIII. No. 7. Aug. 13, 1915.

1. Ferro-concrete footbridge, Neasden Station.

Vol. XXIII. No. 8. Aug. 20, 1915.

1. The signalling of the Wembley widening, Metropolitan Railway.

Vol. XXIII. No. 10. Sept. 3, 1915.

1. Results of five years' extensive use of screw spikes.

Vol. XXIII. No. 11. Sept. 10, 1915.

1. Effect of canting the low rail on curves.

Vol. XXIII. No. 12. Sept. 17, 1915.

1. Train resistance in gravitational shunting.
2. New terminal station, Central Argentine Railway.

Vol. XXIII. No. 13. Sept. 24, 1915.

1. New bridge across the Allegheny River.
2. Strengthening the Hasdeo Bridge, Bengal-Nagpur Railway.

Vol. XXIII. No. 14. Oct. 1, 1915.

1. Continuous brakes for goods trains.
2. London & South-Western Railway electrification.

Vol. XXIII. No. 15. Oct. 8, 1915.

1. The Aberdeen joint station.

Vol. XXIII. No. 16. Oct. 15, 1915.

1. Single-track automatic signals on Toronto, Hamilton & Buffalo Railroad.

Vol. XXIII. No. 17. Oct. 22, 1915.

1. New engine shed at Newport, Mon.

Vol. XXIII. No. 18. Oct. 29, 1915.

1. The signalling of the Queen's Park extension.

Vol. XXIII. No. 20. Nov. 12, 1915.

1. Hampton Court junction Fly-over line and bridge, London & South-Western Railway.
2. Julian train control and automatic stop.

Vol. XXIII. No. 21. Nov. 19, 1915.

1. The essential qualities of good steel rail.
2. Special bridge and tunnel protection on the Panama Railway.

Vol. XXIII. No. 22. Nov. 26, 1915.

1. Cab signalling and the Pollokshaws collision.

Vol. XXIII. No. 23. Dec. 3, 1915.

1. Solid deck trestles and bridges on the Illinois Central.
2. The railway of Japan.

RAILWAY REVIEW

Vol. 57. No. 15. Oct. 9, 1915.

1. Hell-Gate Arch Bridge and the New York Connecting R. R.

Vol. 57. No. 16. Oct. 16, 1915.

1. Concrete poles in electric railway work.

Vol. 57. No. 17. Oct. 23, 1915.

1. Convention of the Bridge and Building Association.
2. Locomotive cranes.
3. Track maintenance.
4. Protection of grade crossings.

Vol. 57. No. 18. Oct. 30, 1915.

1. Modern methods in railway tunnel construction.

Vol. 57. No. 19. Nov. 6, 1915.

1. New engine terminal for the O. W. R. R. & N. Co., Spokane, Wash.
2. Scientific train loading; tonnage rating.

Vol. 57. No. 20. Nov. 13, 1915.

1. Electrification of the Pennsylvania Railroad's suburban line at Philadelphia.
2. Expansion joints in concrete structures.

Vol. 57. No. 21. Nov. 20, 1915.

1. Lining a double-track tunnel under traffic.
2. Track elevation work of the Chicago & Western Indiana R. R., in

Chicago.

3. Track maintenance.

Vol. 57. No. 22. Nov. 27, 1915.

1. Combined railway and marine terminal at Beaumont, Tex.

Vol. 57. No. 23. Dec. 4, 1915.

1. The Chicago report on electrification.

Vol. 57. No. 24. Dec. 11, 1915.

1. Four-tracking of the Hudson Division of the New York Central R. R.

Vol. 57. No. 25. Dec. 18, 1915.

1. The Cleveland & Youngstown R. R. freight terminal project in Cleveland.

2. The imperial pneumatic tie tamper.

3. Track maintenance. Developing track foremen.

Vol. 57. No. 26. Dec. 25, 1915.

1. Manilla rope.

SCIENTIFIC AMERICAN

Vol. OXIII. No. 16. Oct. 16, 1915.

1. The largest arch bridge in the world. (Direct rail connection between New England and the South and West.)

2. Completion of Arrowrock Dam. (The highest dam in the world.)

Vol. OXIII. No. 17. Oct. 23, 1915.

1. Paving river-beds with concrete. (New system of laying concrete floors and walls to confine river waters to their course.)

Vol. OXIII. No. 18. Oct. 30, 1915.

1. The great gas tunnel under the East River. (A battle with floods two hundred feet below sea level.)

Vol. OXIII. No. 21. Nov. 20, 1915.

1. The world's largest rapid sand filter.

2. Electrifying the Philadelphia-Paoli Division of the Pennsylvania R. R.

Vol. OXIII. No. 22. Nov. 27, 1915.

1. Flooring the sea with concrete.

Vol. OXIII. No. 23. Dec. 4, 1915.

1. The passing of the steam locomotive. (Railroad electrification of marked importance.)
2. The intermittent waterfall. (Using the power of Niagara Falls without impairing its scenic beauty.)

Vol. OXIII. No. 24. Dec. 11, 1915.

1. Recent completion of the Kensico Reservoir.

SCIENTIFIC AMERICAN SUPPLEMENT

Vol. LXXX. No. 2075. Oct. 9, 1915.

1. Signalling on railway trains in motion.—II. (Various systems of engine cab systems used in France.)

Vol. LXXX. No. 2079. Nov. 6, 1915.

1. A district sanitary disposal plant. (A model collection and disposal system for city waste material.)

Vol. LXXX. No. 2080. Nov. 13, 1915.

1. An important terminal improvement. (The economic value of a great engineering work demonstrated.)

Vol. LXXX. No. 2082. Nov. 27, 1915.

1. The electric locomotive. (Its operation and rating as compared with steam.)

Vol. LXXX. No. 2084. Dec. 11, 1915.

1. Economics in operating small cars. (Solving new problems of local transportation.)
2. Electric welding. (The various methods in use and latest improvements.)

THE ENGINEER

Vol. CXX. No. 3115. Sept. 10, 1915.

1. Cost of railway footbridges. No. III.
2. British portland cement-making machinery. No. XXVI.
3. A double-leaf bascule railway bridge.
- Vol. CXX. No. 3116. Sept. 17, 1915.
1. The water supply of London.
2. Cost of railway footbridges. No. IV.
3. A new bridge over the Nile at Cairo.
- Vol. CXX. No. 3117. Sept. 24, 1915.
1. Electrification on the London and South-Western Railway. No. 1.
2. Explosives and accidents.
- Vol. CXX. No. 3118. Oct. 1, 1915.
1. Electrification on the London and South-Western Railway. No. II.
2. Iron and Steel Institute. No. I.
3. The Murrumbidgee irrigation project.
- Vol. CXX. No. 3119. Oct. 8, 1915.
1. Flood relief in the Huai River district of China.
2. Iron and Steel Institute. No. II.
3. Two large lift bridge at Chicago.
4. Electrification on the London and South-Western Railway. No. III.
- Vol. CXX. No. 3120. Oct. 15, 1915.
1. Ozone treatment for drinking water.
2. The railway returns for 1913. No. I.
- Vol. CXX. No. 3121. Oct. 22, 1915.
1. The railway returns for 1913. No. II.
2. Cost of oxy-acetylene welding.
- Vol. CXX. No. 3122. Oct. 29, 1915.
1. Progress of erection of the New Quebec Bridge.
2. The repairs to the gates at the 70-foot entrance to the Tyne Docks.
- Vol. CXX. No. 3123. Nov. 5, 1915.
1. The Institution of Civil Engineers.

2. 5000-volt continuous-current railways.

Vol. CXX. No. 3124. Nov. 12, 1915.

1. Electrification on the Chicago, Milwaukee and St. Paul Railway.

THE ENGINEERING MAGAZINE

Vol. L. No. 2. November, 1915.

1. How to handle materials in manufacture.
2. Wrought-iron or steel pipe?

Vol. L. No. 3. December, 1915.

1. The biggest steam shovel.
2. New design for shore protection.

THE INDIAN AND EASTERN ENGINEER

Vol. XXXVII. No. 4. Oct., 1915.

1. Corrosion of iron and steel.

Vol. XXXVII. No. 5. Nov., 1915.

1. The hill section of the Assam-Bengal Railway.
2. The completion of the Triple Canal scheme.
3. Corrosion of iron and steel.

Vol. XXXVII. No. 6. December, 1915.

1. Concrete mixers.
2. A great electrification.

THE RAILWAY ENGINEER

Vol. XXXVI. No. 429. October, 1915.

1. A timber fungus.
2. Copper-slag for concrete.
3. Electric railway for transport of iron ore in Sweden.

Vol. XXXVI. No. 430. November, 1915.

1. Defective porosity of concrete.

2. Cab signals and train control.
3. Reinforced concrete in railway work. XXII.

Vol. XXXVI. No. 431. December, 1915.

1. Rusting of iron and steel.
2. Power interlockings.—IV.

THE RAILWAY MAGAZINE

Vol. XXXVII. No. 220. October, 1915.

1. Light railways. No. I.
2. Reconstruction of the joint station at Aberdeen.

Vol. XXXVII. No. 221. November, 1915.

1. Notable railway stations and their traffic.
2. A great electrification undertaking.
3. Light railway. No. II.

TRANSACTIONS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Vol. LXXVIII. 1915.

1. The possibilities in bridge construction by the use of high-alloy steels
2. Report on a series of tests on concrete columns reinforced with a spiral of steel.
3. The determination of safe yield of underground reservoirs of the closed-basin type.
4. Subaqueous highway tunnels.
5. The gauge of railways, with particular reference to those of Southern South America.
6. Grouted cut-off for the Estacada Dam.
7. The construction of the Klondike pipe line.
8. Huacal Dam, Sonora, Mexico.
9. Some principles relating to the administration of streams.

10. The constant-angle arch dam.
11. Stresses in wedge-shaped reinforced concrete beams.
12. The differential surge tank.
13. External corrosion of cast iron pipe.
14. The clarification of sewage by fine screens.
15. Reinforced concrete docks: Foreign and American structures. Failures, costs, and general considerations.
16. A method of determining storm-water run-off.
17. The design and construction of four reinforced concrete viaducts at Fort Worth, Texas.
18. Proof of an assumption in the theory of concrete beams.
19. Submerged pipe work at Portland, Oregon.
20. Nomographic solutions for formulas of various types.
21. The lock 12 development of the Alabama Power Company, Coosa River, Alabama.

WATER AND WATER ENGINEERING

Vol. XVII. No. 202. Oct. 15, 1915.

1. Pumping plant economy.
2. The selection of deep well pumping machinery.
3. Cement drain tile in alkali soils.
4. Some methods of boring and drilling.

Vol. XVII. No. 203. Nov. 15, 1915.

1. The slate bed biological sewage disposal process.
2. The relation of stream gauging to the science of hydraulic.
3. Electrolytic sewage treatment.
4. Leakage from lead joints.