

Rodding Concrete—Effect of***; F. E. Giesecke. 118.
 Rogers, James. 218.
 Route—New York State Opposes St. Lawrence Deep Water. 603.
 Ruhl, Harry Thornton. 332.
 Runnymede and Swansea Sewerage Scheme*. 165.
 Rural Water Supplies†. 493.
 Rural Water Supply an Integral Part of the Municipal Supply The; Dr. E. G. Birge. 489.
 Ryckman, John H.; Unionization of Engineers**. 329.

S

St. Jerome, Que.—Hydro-Electric Development at*; L. A. Wright. 299.
 St. John and Kenogami—May Build Storage Dams at Outlets of Lakes. 261.
 St. Lawrence Deep Waterway Project. 488.
 St. Lawrence Deep Water Route—New York State Opposes. 603.
 St. Lawrence Must be Developed. 331.
 St. Lawrence Navigation and Power Investigation. 488.
 St. Lawrence Schemes—Joint Commission to Study. 211.
 St. Mary's and Milk Rivers Case†. 454.
 St. Raphael, Que.—Power Development at. 121.
 Sacks at Work—Keep the Cement†. 331.
 Salaries and Unionization—Engineering Institute Council Discusses†. 411.
 Salaries—Toronto Engineers Demand Action on. 285.
 Salary!—Some. 516.
 Salonica Front—Pile Driving With Motor Lorry on the; Capt. L. S. Daynes. 139.
 Samson Alfred. 430.
 Sand and Gravel*; A. Ledoux. 532.
 Sand Filters at Toronto—Drifting**; Ransome-Ver Mehr Machinery Co. Ltd. 233.
 Sand Filters—Sandwashers of Drifting*; William Gore. 563.
 Sand—Horizontal Pressure of; Ponsonby Moore Crosthwaite. 364.
 Sand Roads—How to Improve and Maintain Earth, Clay and; A. R. Hirst. 553.
 Sands—Alberta's Bituminous. 320.
 Sandwashers of Drifting Sand Filters*; William Gore. 563.
 Sanitary Engineers—Activites of Provincial; Fred. A. Dallyn. 109.
 Sanitary Structures?—Should Provincial Boards of Health Design†. 113.
 Sarnia—New Intake and Sedimentation Basin at*; F. W. Thorold. 413.
 Saskatchewan Engineers Will Incorporate. 441.
 Saskatchewan Land Surveyors. 330.
 Saskatchewan Town Planning By-Law. 47, Apr. 22.
 Saskatchewan Water Supply Council. 320.
 Saskatchewan's Bridge Program. 438.
 Saskatchewan's Highway System—Development of; Charles W. Dill. 222.
 Saskatoon Looks Inquiringly Upon Regina and Moose Jaw Water Scheme. 106.
 Scale!—Adopt the Institute's†. 349.
 Schedules of Engineering Fees. 425.
 Science and Engineering†. 185.
 Section for Water Works Association—Canadian*. 583.
 Sedimentation Basin at Sarnia—New Intake and*; F. W. Thorold. 413.
 Self-Constituted Waterways Association—A†. 454.
 Septic Tank—Designs New. 330.
 Service to the Public†. 217.
 Settles Civic Dispute—Engineering Society†. 269.
 Sewage Purification—Development of*; S. H. Adams. 314.
 Sewer for Essex Border Utilities Commission—Cnit Cost of Labor on Construction of Intercepting*; Charles W. Tarr. 156.
 Sewer Pipe—Incrustation in Vancouver**; A. G. Dalzell. 260.
 Sewer and Water Works on Typhoid Death Rate—Effect of—George G. Earl. 126.
 Sewerage Scheme—Runnymede and Swansea*. 165.
 Sewerage System—Design of York Township*; J. M. Greig. 255.
 Seymour, H. L.; Housing and Town Planning: A Survey. 499, 530.
 Shapes—Anglo-American Standardization of Structural. 592.
 Shean, J. R.; Protection of Metal Structures by Painting. 180.
 Ship—"Cement-Gun" Repairs Concrete. 450.
 Shoal Lake Aqueduct—Drainage for. 298.
 Shop—English Firms Use Canadian†. 167.
 Shovels at Queenston Development—Operating Data on Large*; L. C. McLure. 470.
 Shrinkage of Mortars—Hydration and†. 390.
 Single National Association—U.S. Engineers to Discuss Formation of. 491.
 Slab Values of "Gunite". 192.
 Slater, W. A.; Recommendation for Practice in Testing Floors of Concrete Buildings. 484.
 Slocum, H. S.; Duties of a Young Engineer on the Construction of a Hydro-Electric Plant*. 375.
 Sludge Process at Manchester, Eng.—Development of Activated. 245.
 Sludge Process for Factory Wastes—Operating Experiences With Activated; George W. Fuller. 367.

Sludge—Proposed New Name for Activated. 522.
 Smith, E. B.; Pressure of Concrete Against Forms. 321.
 Smith, K. H.; Power Possibilities of Nova Scotia. 230.
 Snow Removal—New Method of*. 437.
 Snow Removal—Street Cleaning, Refuse Disposal and; Geo. H. Norton. 177.
 Soils—Concrete Mixtures in Alkali Soils; C. J. Mackenzie. 344.
 Soils of the Great Plains—The; D. B. Dowling. 306.
 Specifications and Competent Inspection on Bidding Prices—Influence of; H. S. Mattimore. 309.
 Specifications—New Joint Committee to Prepare Standard Concrete. 259.
 Spillways in Nova Scotia Proven Inadequate*; K. G. Chisholm. 371.
 Stack, Michael J. 271.
 Standard Concrete Specifications—New Joint Committee to Prepare. 259.
 Standardization of Research Tests†. 493.
 Standardization of Structural Shapes—Anglo-American. 592.
 Standards Association—Canadian Engineering. 419.
 Standards Criticizes Hydro's Method—Bureau of. 159.
 Station Industry in Canada—Central Electric*. 593.
 Statistics for Quebec—Water Supply; T. J. Lafreniere. 589.
 Status of Reinforced Concrete Design—Present*; F. G. Engholm. 151.
 Status of Reinforced Concrete Design—Present**; I. F. Morrison. 252.
 Steam Reserve for Ontario Hydro. 469.
 Steam Reserve Plant—Hydro-Electric. 598.
 Steel Bridge Replaces Batiscan Ferry*; F. Benoit Painchaud. 348.
 Steel Columns—Provisional Working Stresses for*; C. R. Young. 169.
 Steel Corporation—British Empire. 420, 438.
 Steel Firm—Changes in Toronto. 168.
 Steel—Uncertain Outlook in Iron; J. Frater Taylor. 130.
 Stone—Mechanical Handling of Gravel or Broken*; Alan Mair Jackson. 273.
 Stone Roads—Broken; Geo. Hogarth. 529.
 Storage Dams at Outlets of Lakes St. John and Kenogami—May Build. 261.
 Street Cleaning, Refuse Disposal and Snow Removal; Geo. H. Norton. 177.
 Street Paving in Towns and Villages*; E. A. James. 277.
 Street Railway Permanent Track Construction*; C. C. Sutherland. 393.
 Strength of Concrete Mixtures?—Do Consistency and Richness Determine†. 515.
 Stresses for Steel Columns—Provisional Working*; C. R. Young. 169.
 Stresses in Railroad Track. 479.
 Strikes in Civic Utilities†. 369.
 Structural Materials—Production of. 387.
 Structural Shapes—Anglo-American Standardization of. 592.
 Structures?—Should Provincial Boards of Health Design Sanitary†. 113.
 Stucco—New Development in Surface-Treated Concrete and; J. C. Pearson and J. J. Earley. 468.
 Students—Practical Training for Engineering. 403.
 Sullivan, J. G.; Oppressors of the Poor**. 161.
 Sullivan, J. G.; The Duration of Twilight*. 373.
 Sumas Lake Reclamation Project*. 460.
 Super-Cement Now on the Market. 356.
 Supervising Tie Renewals—Methods of. 384.
 Surface Area—Bulking and†. 492.
 Surface Area—Bulking Measurement of*; Roderick B. Young and William D. Walcott. 475.
 Surface Area Method—Practical Application of*; Roderick B. Young. 101.
 Surface-Area Method—The Water-Ratio†. 113.
 Surface-Treated Concrete and Stucco—New Development in; J. C. Pearson and J. J. Earley. 468.
 Surfaces—Bituminous Penetration Surfaces; A. B. Manson. 294.
 Survey—Housing and Town Planning: A; H. L. Seymour. 499, 530.
 Survey Troops: Their Work at the Front—Field*; E. W. Berry. 317.
 Surveyors and Town Planning. 225.
 Surveyors' Association—Alberta Land. 184.
 Surveyors May Form National Association*. 226.
 Surveyors—National Association off. 269.
 Surveyors Oppose Bill—B.C. 271.
 Surveyors—Problems Confronting; C. Fraser Aylsworth. 268.
 Surveyors—Remuneration off. 314.
 Surveyors—Saskatchewan Land. 330.
 Surveyors—The Outlook for; J. R. Akins. 262.
 Surveys in the Canadian Northwest—Early Explorations and; Roger Fyfe Clarke. 327, 340.
 Surveys Required—Comprehensive Topographical*; P. J. Barry. 433.
 Surveys—The Value of Highway Transport; F. Van Z. Lane. 426.
 Sutherland, C. C.; Street Railway Permanent Track Construction*. 393.
 Swansea Sewerage Scheme—Runnymede*. 165.

T

Tank—Designs New Septic. 330.
 Tannery Building, London, Ont.—Hyman*; R. E. W. Hagarty. 495.
 Tansley, Ont.—Construction of High Level Bridge at*; A. W. Connor. 115.
 Tarr, Charles W.; Unit Cost of Labor on Construction of Intercepting Sewer for Essex Border Utilities Commission*. 156.
 Taylor, J. Frater; Uncertain Outlook in Iron and Steel. 130.
 Teachers—Dean Mitchell's Address to. 374.
 Technical Association—British Columbia. 47, Apr. 22.
 Technical Men in Government Employ†. 390.
 Technical Organizations—Future of the Joint Committee off. 252.
 Temporary Contamination of a Deep Well; G. H. Hazelhurst. 424.
 "Tender—No Time to"†. 201.
 Test-Dam That Withstood Unusual Service*; A. W. Thwing. 517.
 Test Data—Acknowledgment of. 174.
 Testing Floors of Concrete Buildings—Recommendation for Practice in; W. A. Slater. 484.
 Tests of Concrete Beams—Extensometer. 483.
 Tests of Concrete Materials Be Made of Greater Value to the Field Engineer and Contractor?—How Can Laboratory; G. M. Williams. 172.
 Tests—Standardization of Research†. 493.
 Theories Both Wrong?—Are Abrams' and Edwards*; G. M. Williams. 183.
 Thomson, T. Kennard; Big Demand for Engineers**. 429.
 Thorold, F. W.; New Intake and Sedimentation Basin at Sarnia*. 413.
 Thwing, A. W.; Dam That Withstood Unusual Service Test*. 517.
 Tie Renewals—Methods of Supervising. 384.
 Tillson, George W.; Effect of Car Tracks Upon Traffic Capacity of Roadways. 406.
 Time and Cost-Keeping on County Roads; K. W. McKay.
 Tonawanda—Typhoid Fever Outbreak at; Theodore Horton. 439.
 Topographical Surveys Required—Comprehensive*; P. J. Barry. 433.
 Toronto Branch of Engineering Institute of Canada—Program For. 179.
 Toronto—Drainage of Exhibition Park*; Reginald B. Evans. 401.
 Toronto Draughtsmen Form Labor Union. 336.
 Toronto—Drifting Sand Filters at**; Ransome Ver Mehr Machinery Co., Ltd. 233.
 Toronto Electrical Engineers—Calvert Townley Addresses. 419.
 Toronto Engineers Demand Action on Salaries. 285.
 Toronto—New King Edward Hotel*; Victor J. Blackwell. 259.
 Toronto Power Co. Obtain \$800,000 for Power Supplied Dominion Government. 186.
 Toronto—Proposed Water Works Extensions at. 261.
 Toronto Steel Firm—Changes in. 168.
 Town Management and Town Planning—Citizen Co-operation in; Horace L. Brittain. 129.
 Town Planning: A Survey—Housing and; H. L. Seymour. 499, 530.
 Town Planning By-Law—Saskatchewan. 47, Apr. 22.
 Town Planning—Growth of Interest in†. 185.
 Town Planning—Housing and; James White. 347.
 Town Planning—Surveyors and. 225.
 Town—Water Supply Made Safe for a Tropical*. 571.
 Townley Addresses Toronto Electrical Engineers—Calvert. 419.
 Towns and Villages—Street Paving in*; E. A. James. 277.
 Track Construction—Street Railway Permanent*; C. C. Sutherland. 393.
 Track—Stresses in Railroad. 479.
 Tracks Upon Traffic Capacity of Roadways—Effect of Car; George W. Tillson. 406.
 Tractors and Trailer Traffic to Highway Design—Relation of; H. Eltinge Breed. 510.
 Trade Unionism and Engineers**; Charles A. Mullen. 119.
 Traffic Capacity of Roadways—Effect of Car Tracks Upon; George W. Tillson. 406.
 Traffic Census—The Value and Application of a; W. A. McLean. 519.
 Traffic to Highway Design—Relation of Tractors and Trailer; H. Eltinge Breed. 510.
 Trailer Traffic to Highway Design—Relation of Tractors and; H. Eltinge Breed. 510.
 Training for Engineering Students—Practical. 403.
 Transport—Interrelationship of Highway, Railway and Waterway; Prof. Henry E. Riggs. 441.
 Transport Requirements—Roads for Modern; H. T. Chapman. 508.
 Transport Surveys—The Value of Highway; F. Van Z. Lane. 426.
 Troops: Their Work at the Front—Field Survey*; E. W. Berry. 317.
 Trophy—Canada May Get This. 298.
 Tropical Town—Water Supply Made Safe for a*. 571.
 Trotter, H. L.; New 18,000 k.v.a. Hydro-Electric Development. 305.
 Trouble at Queenston—Labor†. 492.