

	Page.		Page.		Page.
*Pumps, Air and Circulating.....	670	Service Our Aim .....	478	Rail Grooves and .....	490
*Pumps, Vertical Air .....	350	*Sewer Construction in Clinton, Iowa .....	71	*Traction of Freight Trains at Dif- ferent Speeds .....	458
<b>Q</b>				Train Loads, Freight .....	1
Quebec & Lake St. John Railway	690	Sewerage Works, Substitution of Concrete for Brick Work .....	67	*Trains, Traction of Freight, at Different Speeds .....	458
"    Bridge .....	307	Shafts, Sinking of .....	143	Training of an Engineer .....	556
"    Railway Light & Power Co. (Annual Meeting) .....	344	Shawinigan Power Co's. Earnings	160	Transcontinental Classification ..	152
"    Street Railway .....	60	*Shovels, Electrically-driven .....	152	*Transcontinental Railway, Na- tional .....	292
Queen's University Engineering Department .....	691	*Signalling and Interlocking .....	121	Trees, Fences and Hedgerows....	381
<b>R</b>				Trees on the Highway .....	449
*Rail Failures, due to Burns and Crystallization .....	86	Signalling, Railway .....	195	Trench, Cubic Yards of Excavation in, Varying Widths .....	506a
*Rail Grooves and Track Gauge for Curved Tracks .....	490	Sinking Shafts .....	143	*Trestle Collapsed at Mullin's Brook .....	227
Rails on the B. & O. Railroad, Titanium .....	238	Smelting Titaniferous Ores at Welland, in the Electric Furnace	168	*Turntable Construction, With Data on Costs .....	697
Railway Accidents, 1908-9....	631	Smoke, Relation of Coals to Pre- vention of .....	8	*Trestle, Reinforced Concrete .....	341
Railway Accidents, June, 2; July, 179; Aug., 282; Sept., 393; Oct., 520; Nov., 679.	651	Societies, Technical .....	337	Turbines, Steam .....	55
Railway and The State .....	83	Specifications for Asphalt .....	537	<b>U</b>	
"    Building in Western Can- ada .....	583	"    for Bridge Masonry. ....	494	United States October Iron Output	527
"    Created Wealth .....	114	"    for Concrete Bridges .....	57	Units and Standards, Electrical, for 1908 .....	357
"    Earnings appear weekly.		"    for Piles and Piling .....	34	<b>V</b>	
*Railway Motor Control .....	463	*Stability of Dams .....	571	Vancouver's Water Rates .....	231
"    National Transcontinen- tal .....	292	Standpipes and Tanks, Design of	3	*Vertical Air Pumps .....	350
Railway Signalling .....	195	*Standpipes, Water Storage in Tanks and .....	25	*Viaduct at Lethbridge .....	321
Railways, Fencing of .....	80	Star Map: August, 135; Sept., 247; Oct., 359; Nov., 497; Dec., 603.	603	Virginia State Highway Commis- sion .....	494
"    in British Columbia....	508	State and The Railway .....	83	Volume XVIII. ....	659
"    of Canada, Compared..	120	*Statics, Problems in Applied, every week, commenced on 449.		<b>W</b>	
*Railway Track in Muskoka Divi- sional Yard, Laying-out of.....	5	Status of the Engineering Profes- sion .....	527	Wages Paid by Municipalities and Private Parties .....	115
Raw Materials, Selective Econ- omy in .....	487	Steam Turbines .....	55	Walbank, W. McLea .....	632
Resignation of Mr. Lumsden ....	23	Steel and Wood Ties Compared....	151	Walk in Feet, Width of and Curve for Estimating .....	506a
Reid, Robert .....	225	Steel, Preservation of Iron and ...	84	Walks, Bags of Cement in 100 Sq. Feet of .....	506a
*Reinforced Concrete .....	243	*Storage of Water in Tanks and Standpipes .....	25	*Walls, Retaining and Revetment	354
Reinforced Concrete Construction.	59	Stream Flow .....	583	Walls, Retaining, Curves for Es- timating Quantity of Concrete in	506a
*Reinforced Concrete, Electrolysis in .....	214	Strength of British Columbia Tim- ber .....	689	Water and Water Power Diversion	718
Reinforced Concrete in Fireproof Construction .....	59	Strength of Concrete .....	214	Water Consumption .....	143, 338
*Reinforced Concrete Trestle .....	341	*Stress Indicator .....	515	*Water, Flow of in Pipes, Culverts and Channels .....	288
*Relation of Pavement Area to Pop- ulation .....	369	*Stresses in Masonry Dams...310,	338	*Water Mains at Winnipeg, Elec- trolysis of .....	197
*Resonance in Electric Lines, Phenomena of .....	379	Structural Material, Protective Coatings for .....	94	*Water Pipes, Efficiency of Day Labor in Laying .....	93
Resources, Natural, Conservation of .....	256	Structures, Dangerous .....	83	Water Power, Development of....	348
Responsibility, Divided .....	389	Study for the Winter .....	408	Water Power of Canada .....	23
*Retaining and Revetment Walls..	355	Suction Gas Producer, for Power Plants .....	42	Water Power, Value of .....	127
Retaining Walls, Curve for Estima- ting Quantity of Concrete in..	506a	<b>T</b>			
*Revetment and Retaining Walls..	355	Tanks and Standpipes, Design of	3	Water Pumped at Erie, Pa. ....	27
River Improvement, Grand .....	477	*Tanks and Standpipes, Water Storage in .....	25	Water Rates—At St. John, N.B., Moncton, N.B., Winnipeg, Man., and Vancouver, B.C. ....	231
Road Construction and the Use of Tar .....	353	Tar as Applied to the Surface Treatment of Roads .....	465	*Water Storage in Elevated Tanks and Standpipes .....	25
Road Construction, Bituminous Materials for .....	130	Tar in Road Construction .....	353	*Water Supply at Guelph ....420,	434
Road Covering .....	1	Technical Press and Advertising	420	*Water Tank Causes Collapse of Building .....	178
Roadmaking, Modern .....	559	Technical Societies .....	337	Waterworks Extensions .....	167
Road Surface .....	517	Terms of Service in Municipal La- bor Force .....	144	Wide Tires and the Highways....	507
Roads, Earth .....	351	Telephone and its Service .....	255	Windsor, Essex and Lake Shore Rapid Railway Company .....	577
"    Graft .....	631	"    Association, Canadian	256	*Winnipeg Water Mains, Electrol- ysis of .....	197
"    Tar as Applied to Surface Treatment of .....	465	*Testing Plant for Gasoline En- gines .....	29	Winnipeg's Water Rates .....	231
Roadways, Asphalt—Macadam ....	181	Ties, Wood and Steel, Compared	151	Winter Study .....	408
Rock Drilling Contest .....	227	Timber Crops .....	338	Wood and Steel Ties Compared..	151
<b>S</b>				Wood Waste Decreasing .....	178
St. John's Water Rates .....	231	"    Loss .....	277	Workmanship on Asphalt Pave- ments, Control of .....	661
Sand—Clay, Experiments With...	103	"    Strength of British Col- umbia .....	689		
Sarnia Street Railway .....	730	Titaniferous Ores, Smelting Them in an Electric Furnace at Wel- land .....	168		
Sault Ste. Marie Street Railway..	471	Titanium Rail on, the B. & O. Railway .....	238		
Seawater and the Disintegration of Cement .....	360	Toronto & York Radial Railway..	577		
Seawater on Concrete, Actions of	457	Torsional Strain and Ductile Ma- terial .....	255		
*Seleroscope Tests .....	150	Town Engineer's Salary .....	602		
		Track Elevation .....	367, 376		
		*Track Gauge for Curved Tracks,			