## INDEX.

1,1101	
Teaching, value of506, 790	Thrust from braked trains, descrip-
Teaching, value of to young engi-	tion of
neer	Thrust in elevated railroad col-
Technical course, components of 169	umns, proportioning for 691
Technical course, time for 94	Thrust in elevated railroads, descrip-
Technical literature, reading by stu-	tion of642, 647, 660, 661, 678, 697
dents	Thrust on elevated railroad col-
fessors	umns
Technical papers, breadth to be	Thrust on elevated railroads from
gained from834	brake trains723, 724, 725, 726, 772
T111 1 D W-11-11	Tile drains
Technical papers, by Dr. Waddell 3 Technical school, management of,	598, 711
92, 116, 122	Timber, seasoning 72
Technical schools, causes of lack of	Timber, teaching properties of 163
progress in or	Timber, treated for elevated rail-
progress in	road floors
Technical schools, director of 92	Timber, value of treatment677, 766
Technical schools, field work in 89	767, 769, 770, 778
Technical schools, higher grade 166	Time, employment of, in engineer-
Technical schools, income of 92	ing schools
Technical schools, in universities 168	Time for technical courses 94
Technical schools, lower grade 166	Time of completion, engineer's con-
Technical schools, progressive 91	trol of
Technical schools, studies of 931	Time-saving on surveys, methods of,
Technical studies, to gain time for. 169	37, 38
Technical subjects, new 169	Top chords as stringers 391
Temporary stresses in elevated rail-	Top drains
road columns 652	Top of cross girders in respect to
Tendering, alternate plans used in 595	stringers in elevated railroads 704
Tenders, form of 898	Topographer's duties 36
Teredo navalis, protection from 13	Tower bracing for elevated railroads,
Testing of materials 891	531, 600
Testing of metals, instruction in 947	Towers for Halsted Street Lift-
Testing of wire ropes 564	Bridge, adjustment of 578
Tests of paints for metal work 712	Towers for lift-bridge, adjustment
Tests of the bearing power of	of531, 532
Chicago soil713, 714, 715	Track bolts, with nuts above and
Tests, specifications for	below 610
Text-book, method of teaching 159 Text-books, choice of 127	Track centers, distance between 451
Text-books, need of good ones 94	Track laying 60
Text-books, number of 98	Track laying machines 60
Text-books, selection of	Track laying, relocation for 48
Theory combined with practice 94, 127	Traffic, maintenance of 890
Theory in engineering courses 97	Train loads preceding and following
Theory, instruction in	engine
Theory, its relations to practice939	Transferred load274, 451
Theses, preparation of 164	Transferred load on stringers 435
Thickness of metal, minimum 393	Transit, adjustment of
Thoroughness essential in students 176	Transit book
Thoroughness, essential in the engi-	Transit, checking position of 33
neer	Transitman, his duties 32
Thoroughness, importance of 836	Translation of foreign engineering
Thoroughness in instruction 130	
Thoroughness, need of in students. 862	works
Thoroughness of courses 124	Transportation facilities, importance
Thrust from brake trains, amount of 730	of 67
Thrust from brake trains, observa-	Transportation, specifications cover-
tion of, by floors 772	ing 889
Thrust from brake trains, proofs	Transverse girders projecting above
of, on New York elevated rail-	stringers, objections to 658
roads	Traverse, the recording of 52