

Politechnika Krakowska
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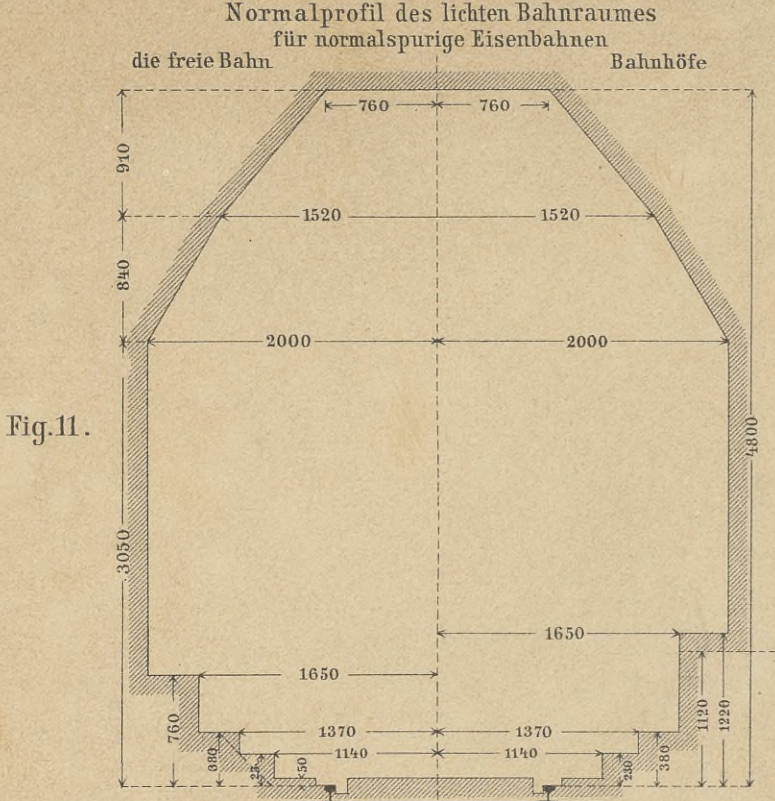


Fig. 11.

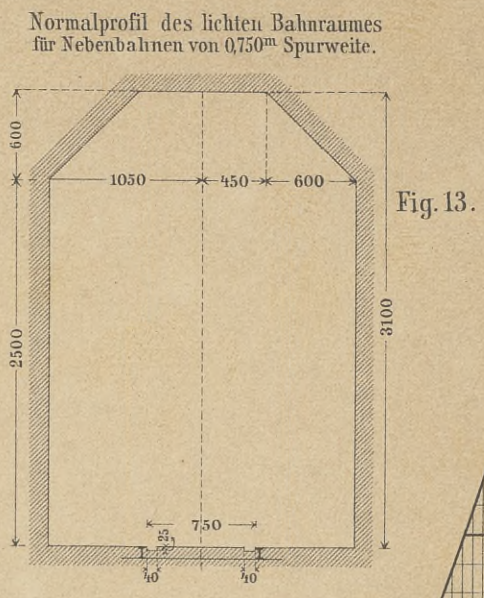


Fig. 13.

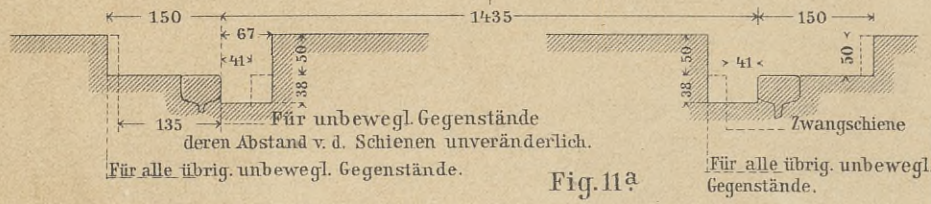


Fig. 11a

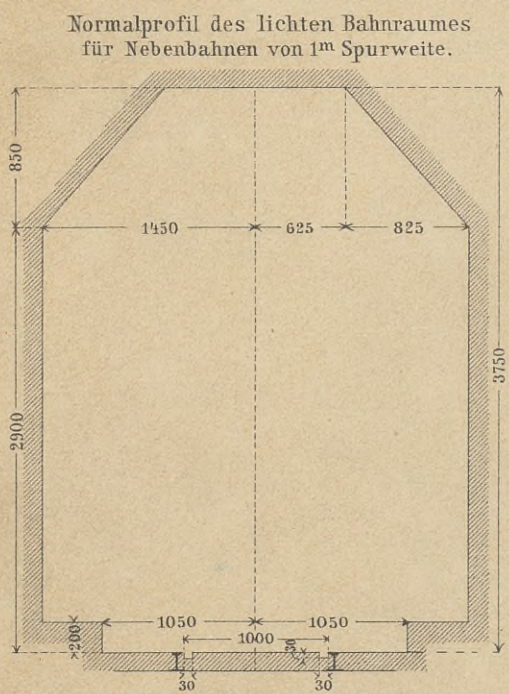


Fig. 12.

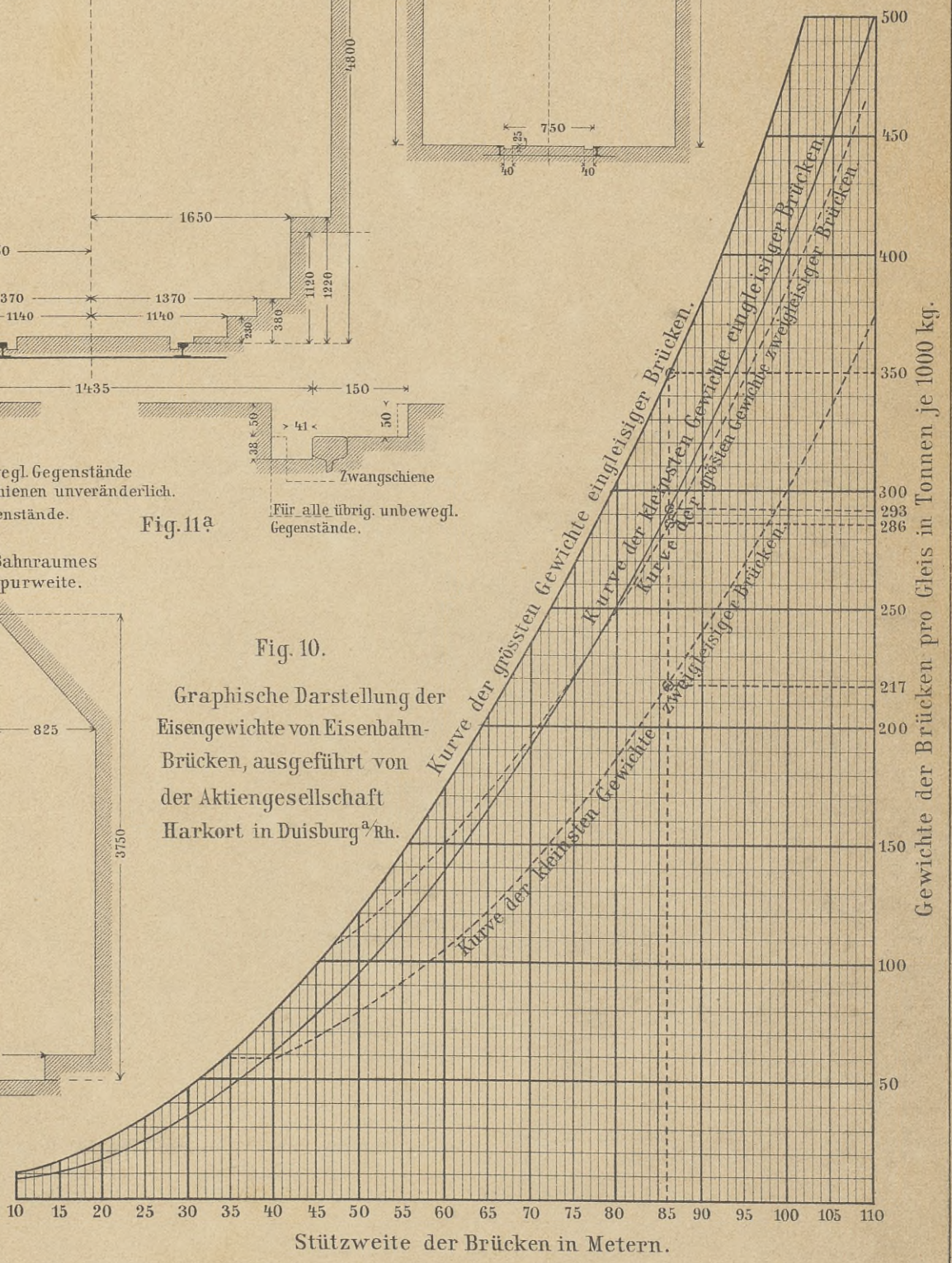


Fig. 10.

Graphische Darstellung der Eisengewichte von Eisenbahnbrücken, ausgeführt von der Aktiengesellschaft Harkort in Duisburg a/Rh.

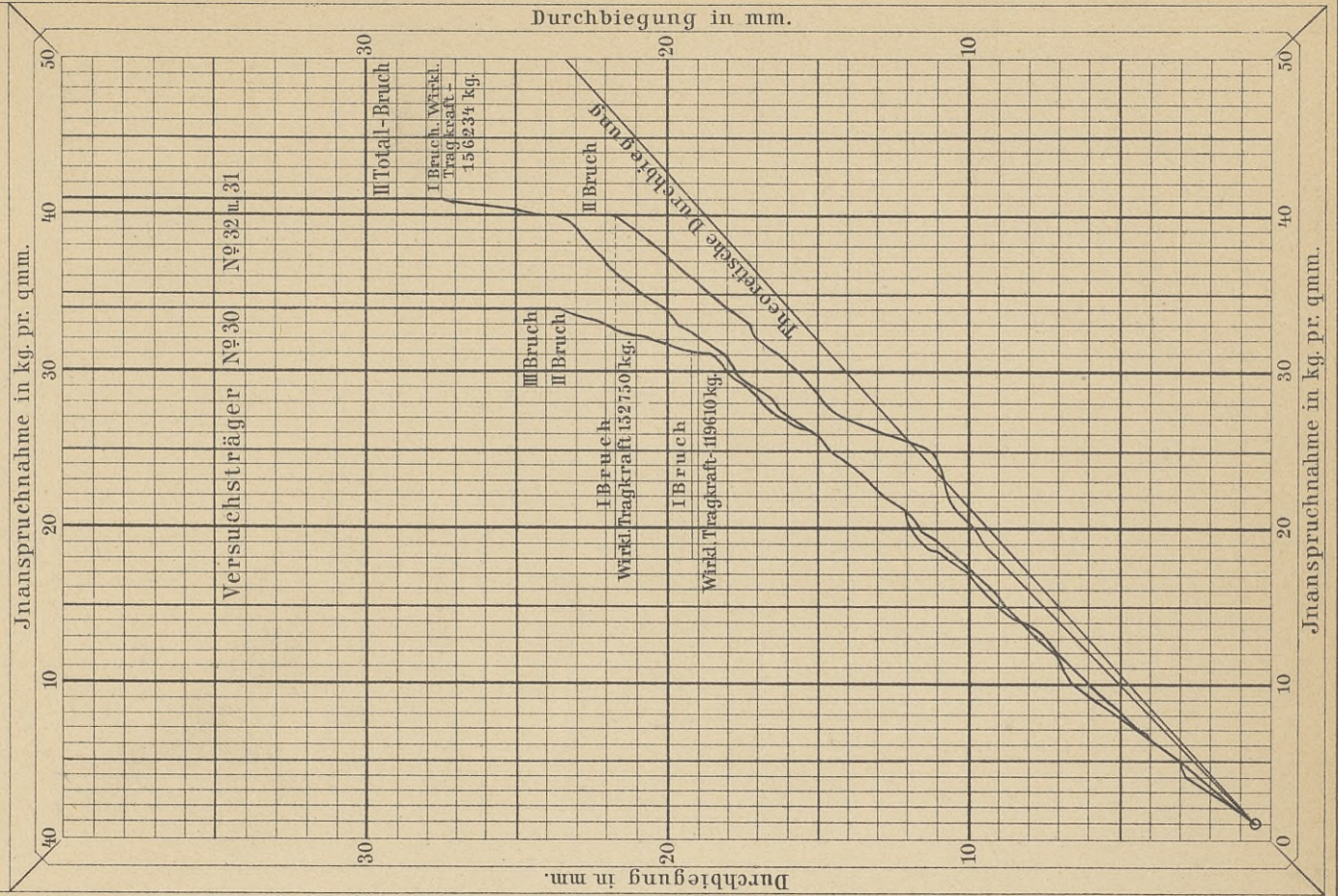
Akc. Nr.

2180/50

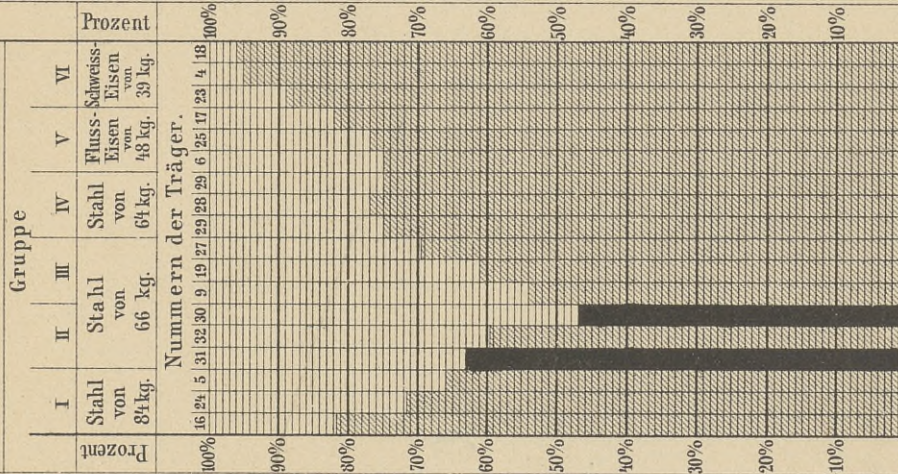
BPK-B-14/2020

Sz. 9.

Fig. 20. Stahl von 66 kg. mittlerer Festigkeit.
Genietete Blechträger von 7612 mm. Stützweite; 7267500 mm.⁴
Widerstandsmoment; 252052 kg. theoretischer Tragkraft.



Wirkliche Tragkraft der Träger,
dargestellt in Procenten
der theoretischen Tragkraft.



Unter der wirklichen Tragkraft ist diejenige Last gemeint, welche bei den gebrochenen Trägern den I. Bruch, bei den nicht gebrochenen dagegen derartige örtliche Deformation hervorbrachte, dass die Widerstandskraft gebrochen war.

Materialproben,
genommen von den probirten Trägern.

Zerreiß- und Biegeproben.

Benennung des Probe-Stückes.	Festigkeit pro qmm.	Verlängerung in %	Kontraktion in %	Biege-Winkel in Grad	Dicke der Biegeprobe.	Beschreibung des Bruchs.
Versuchsträger № 31						
Vert. Blech % mitte.	70	16	37	93°	9	seiteartig
Vert. Blech am Ende.	70	16	40	110°	9	desgl.
Deckplatte % mitte.	55	16	46	107°	10	desgl. nicht stell.
Versuchsträger № 32						
Vert. Blech % mitte.	63	17	35	96°	9	seiteartig.
Vert. Blech am Ende.	64	20	44	144°	9	desgl.
Deckplatte % mitte.	75	14	43	45°	10	desgl.
Versuchsträger № 30						
Vert. Blech % mitte.	67	13	29	45°	9	feinkörn. nicht stell.
Vert. Blech am Ende.	67	15	35	45°	9	desgl.
Deckplatte % mitte.	65	17½	42	88°	10	seiteartig.
Mittelwerthe.	66	16	39			

Stahl-Analysen.

Gruppe №	I	II	III	IV	V
Stahl von	84 kg.	66 kg.	66 kg.	Stahl von	Fluss-Eisen von
Nummern	№ 16	№ 30	№ 27	№ 28	№ 6
Versuchsträger	0,285	0,072	0,253	0,237	0,271
Mangan %	0,536	0,070	0,014	0,018	0,027
Silicium %	0,055	0,058	0,082	0,093	0,039
Schwefel %	0,059	0,119	0,126	0,160	0,095
Kupfer %	0,370	0,294	0,260	0,365	0,120
Kohlenstoff %	0,112	0,405	0,154	0,105	0,103
Absolute Festigkeit in kg. pro qmm.	84,67	66,33	59,33	64,33	48,33
Austragung beim Bruch des Trägers, das ist in Procenten der absoluten Festigkeit	69	31,32	24	49,33	36
	81,5 %	47,2 %	40,5 %	76,7 %	74,5 %

Pressung des Druckwassers:

Akkumulator ohne Belastungsringe 60 kg. pro qcm.
 1 Belastungsring 15 kg. " "

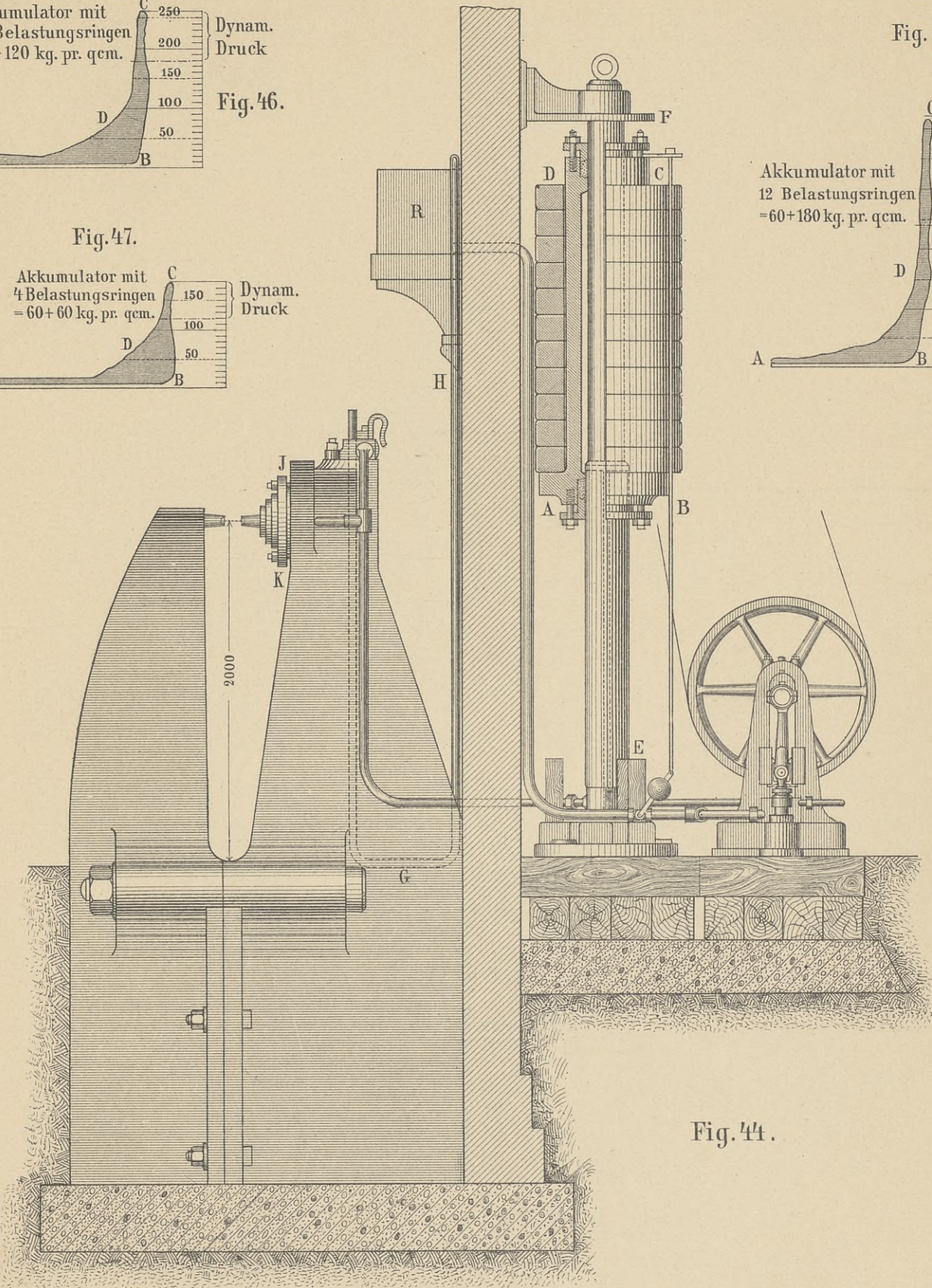
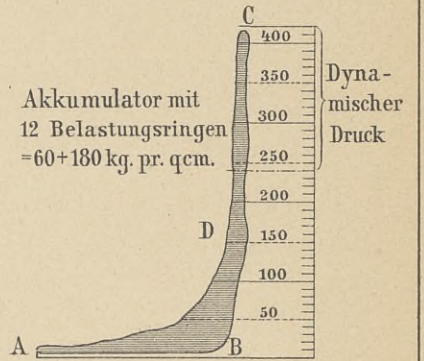
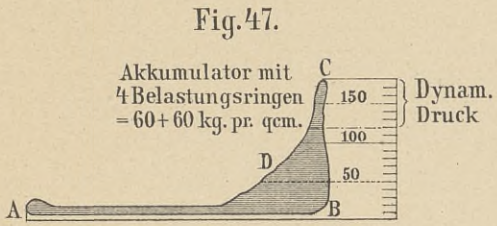
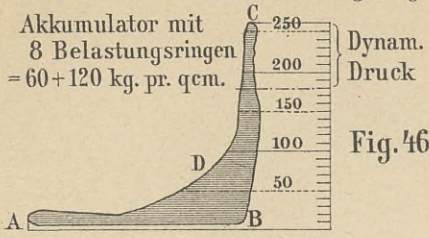
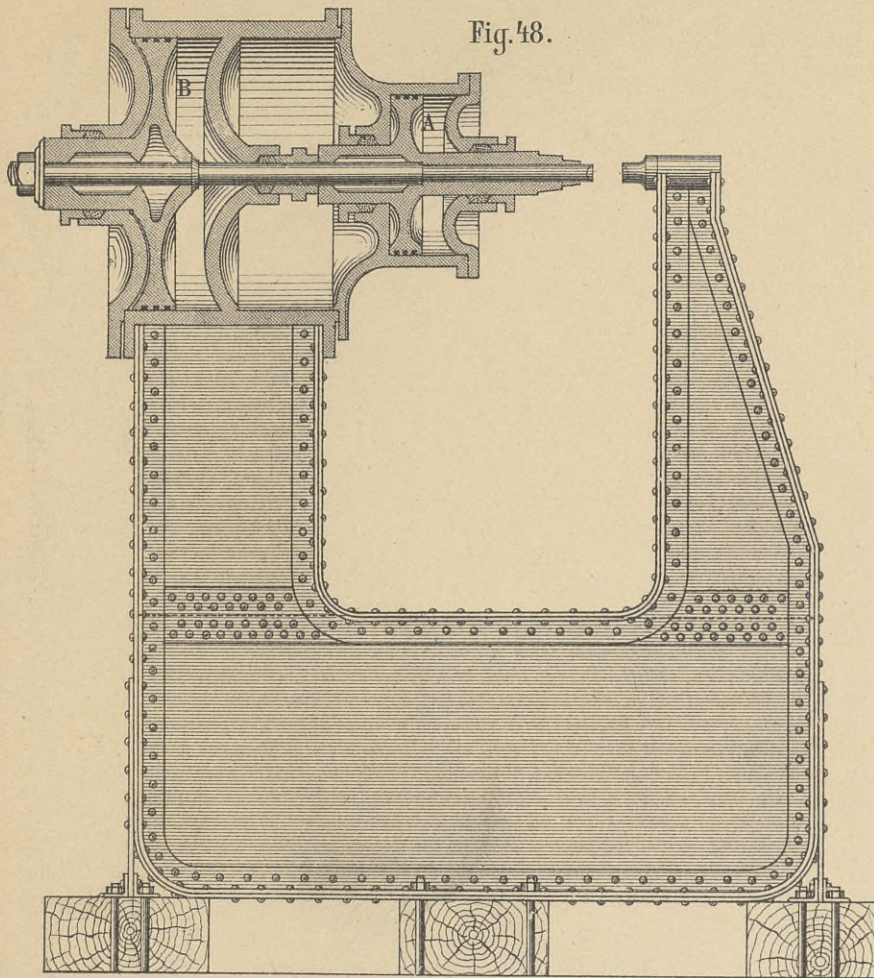


Fig. 44.

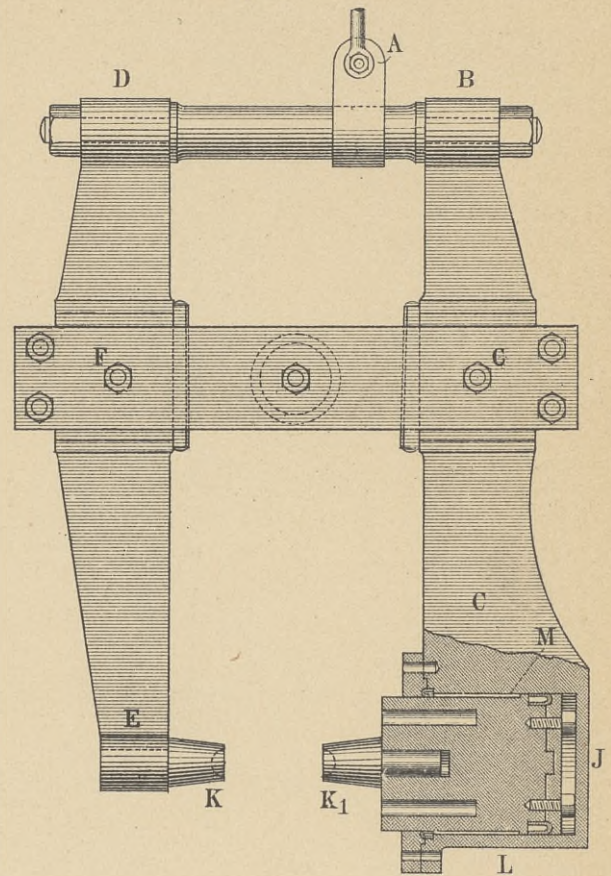
Hydraulische Nietmaschine mit Akkumulator.

Fig. 48.



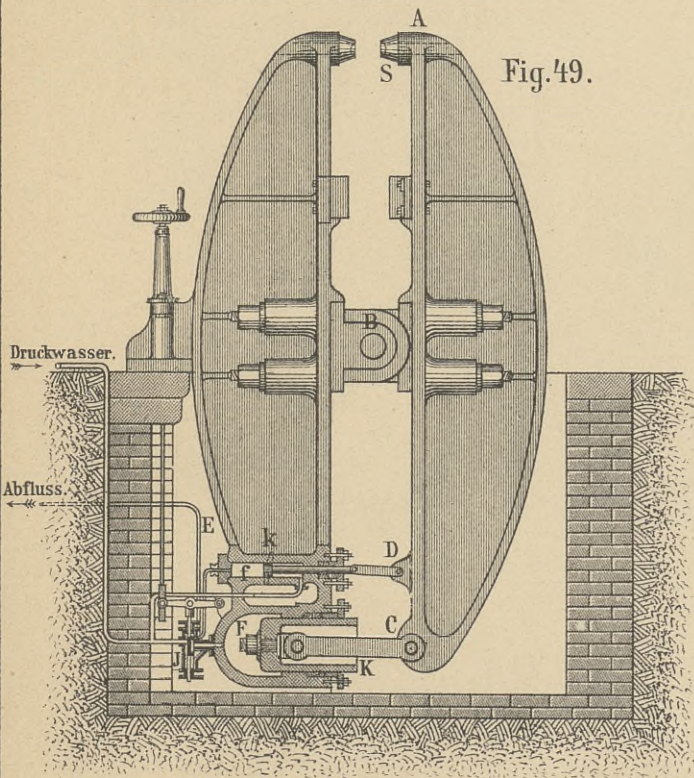
Hydraulische Nietmaschine der Conway-Brücke.

Fig. 50.



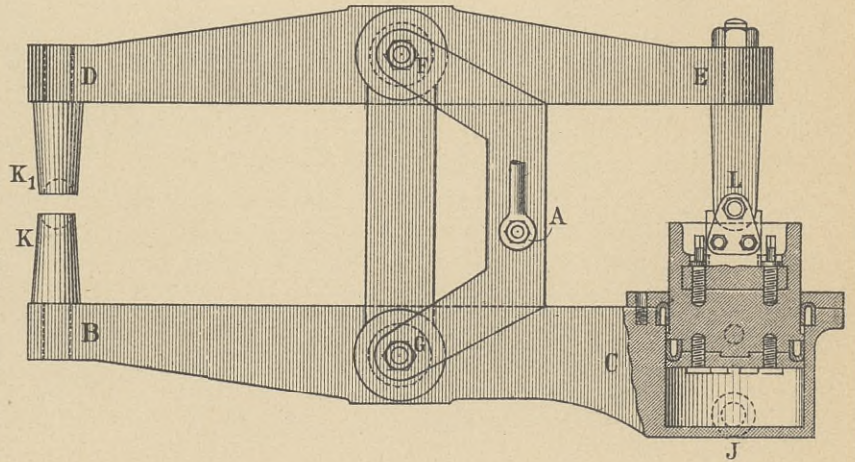
Transportable hydraulische Nietmaschine von der Firth of Forth-Brücke.

Fig. 49.



Hydraulische Nietmaschine von Mac Kay und Mac George.

Fig. 51.

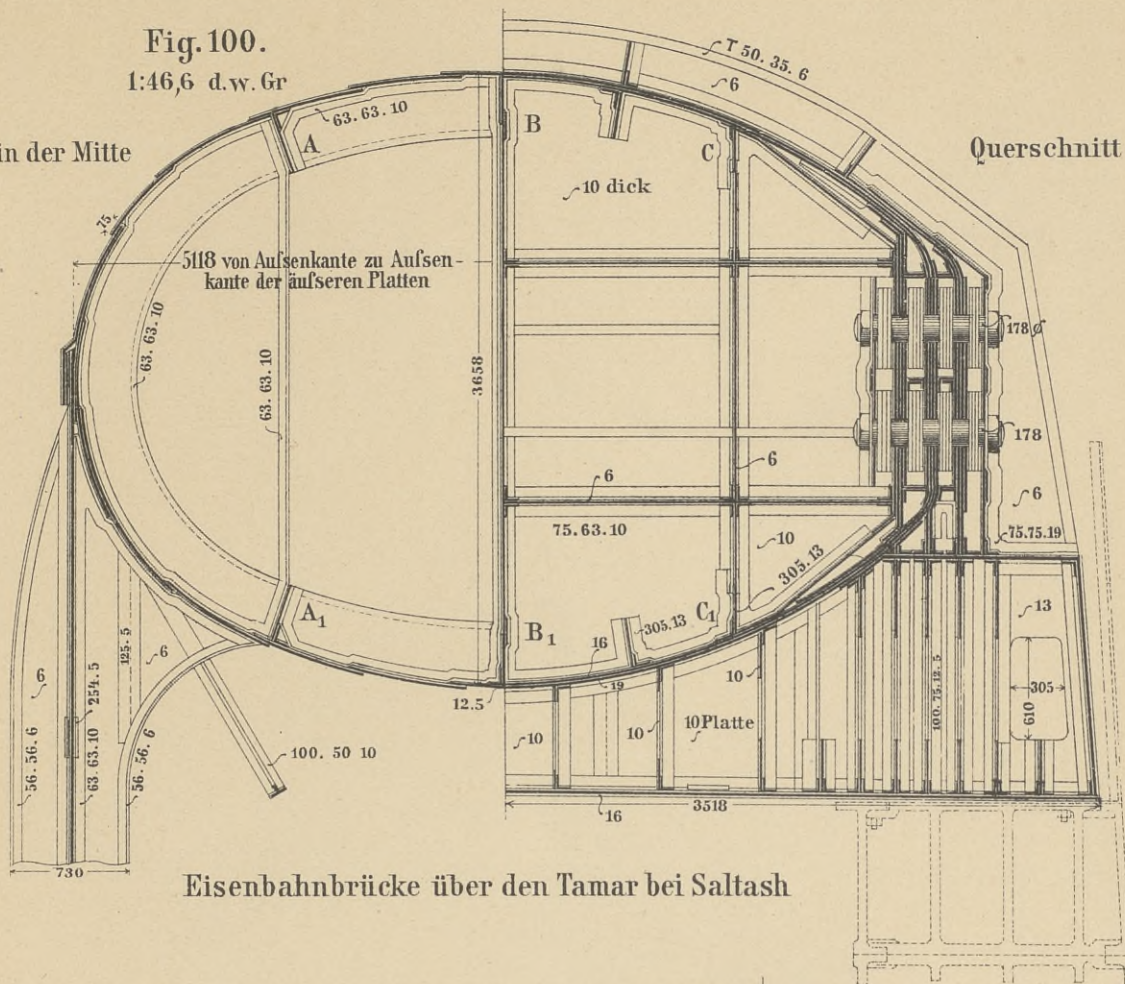


Transportable hydraulische Nietmaschine von der Firth of Forth-Brücke.

Fig. 100.
1:46,6 d.w. Gr

Querschnitt in der Mitte

Querschnitt am Auflager

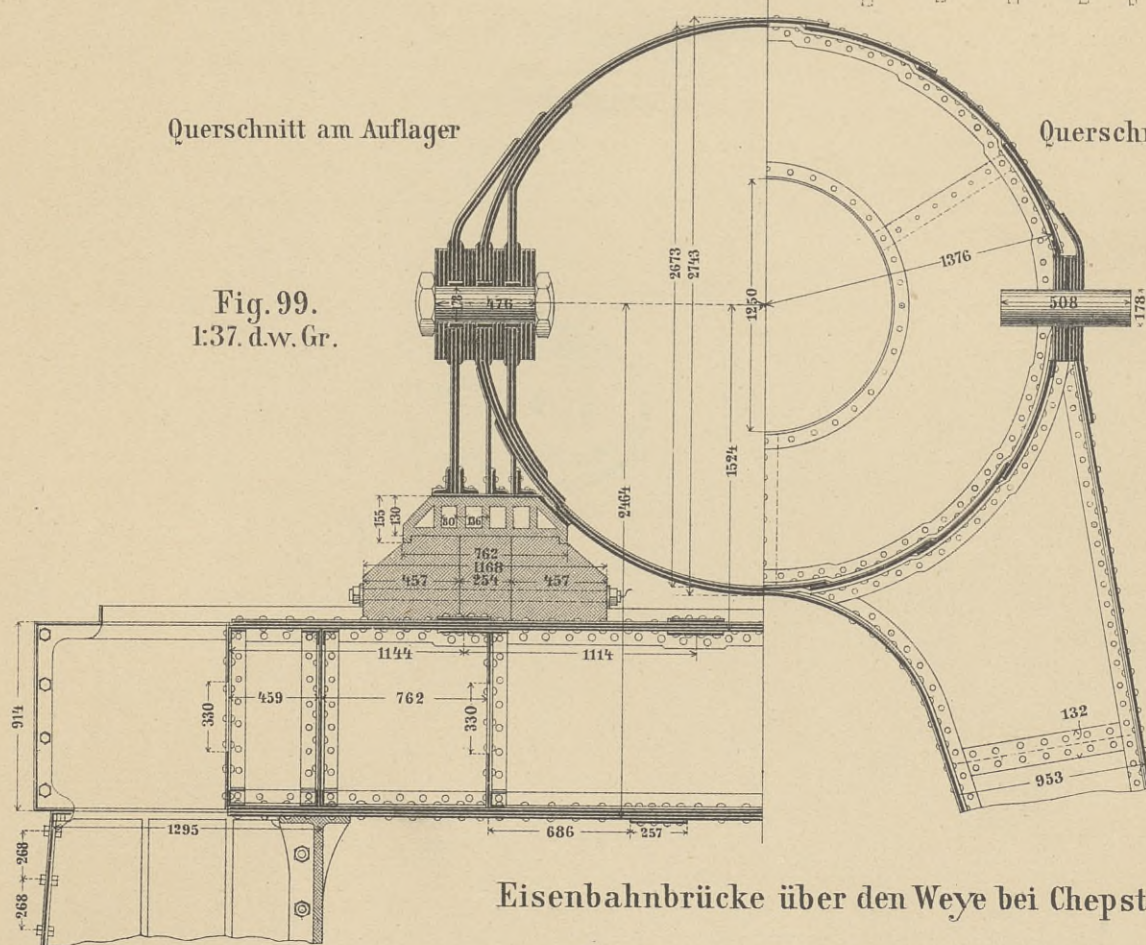


Eisenbahnbrücke über den Tamar bei Saltash

Querschnitt am Auflager

Querschnitt in der Mitte

Fig. 99.
1:37 d.w. Gr.



Eisenbahnbrücke über den Weye bei Chepstow.

Fig. 128.

1:29,6 d.w.Gr.

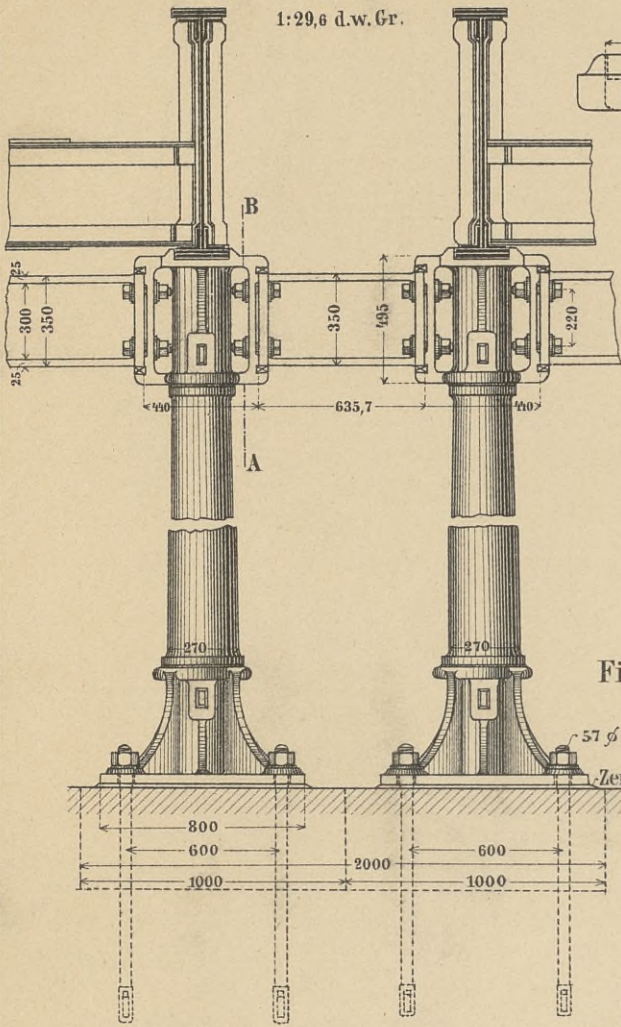
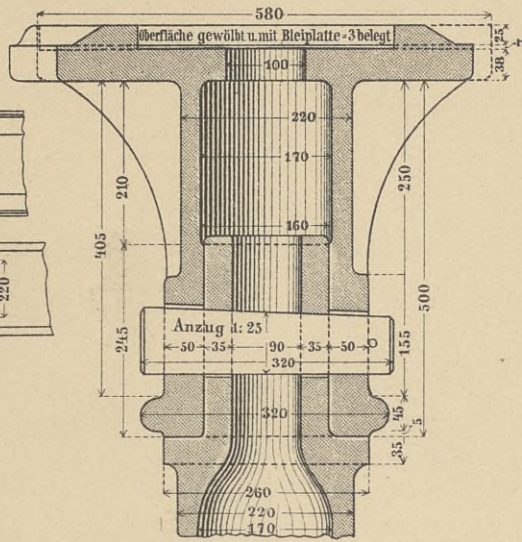


Fig. 128 b



1: 10 d.w.Gr.

Fig. 128 c

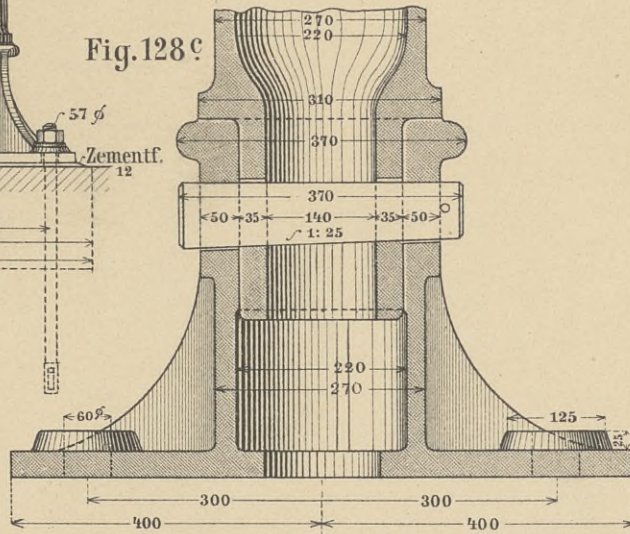
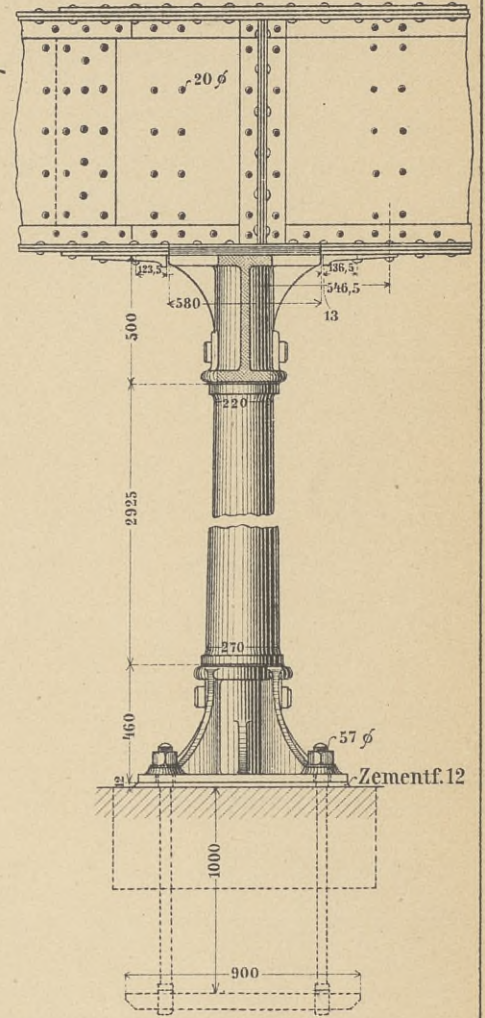


Fig. 128 a 1: 29,6 d.w.Gr.



Schiefe Chaussee-Unterführung
der Rheinischen Eisenbahn
(Duisburg-Quakenbrück)
2 Seitenöffnungen je 3,9^m
1 Mittelöffnung 12,5^m Stückweite.

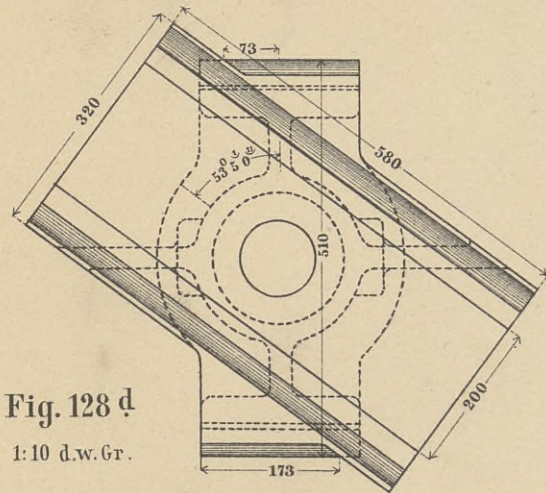


Fig. 128 d

1: 10 d.w.Gr.

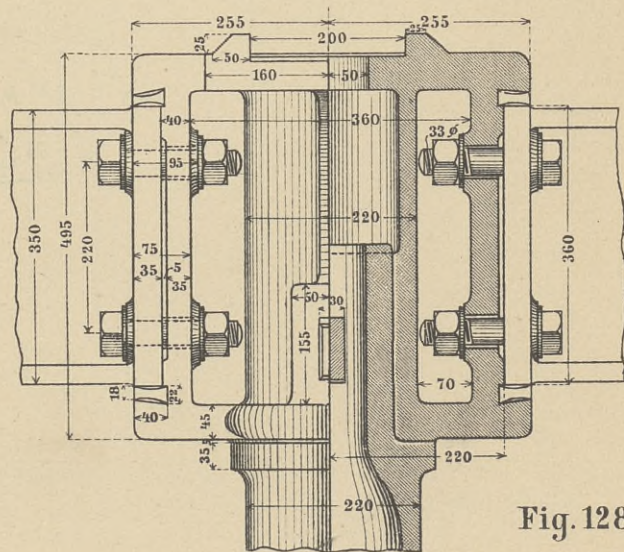


Fig. 128 e

1:10 d.w.Gr.

Fig. 138.
1: 12,7 d.w. Gr.

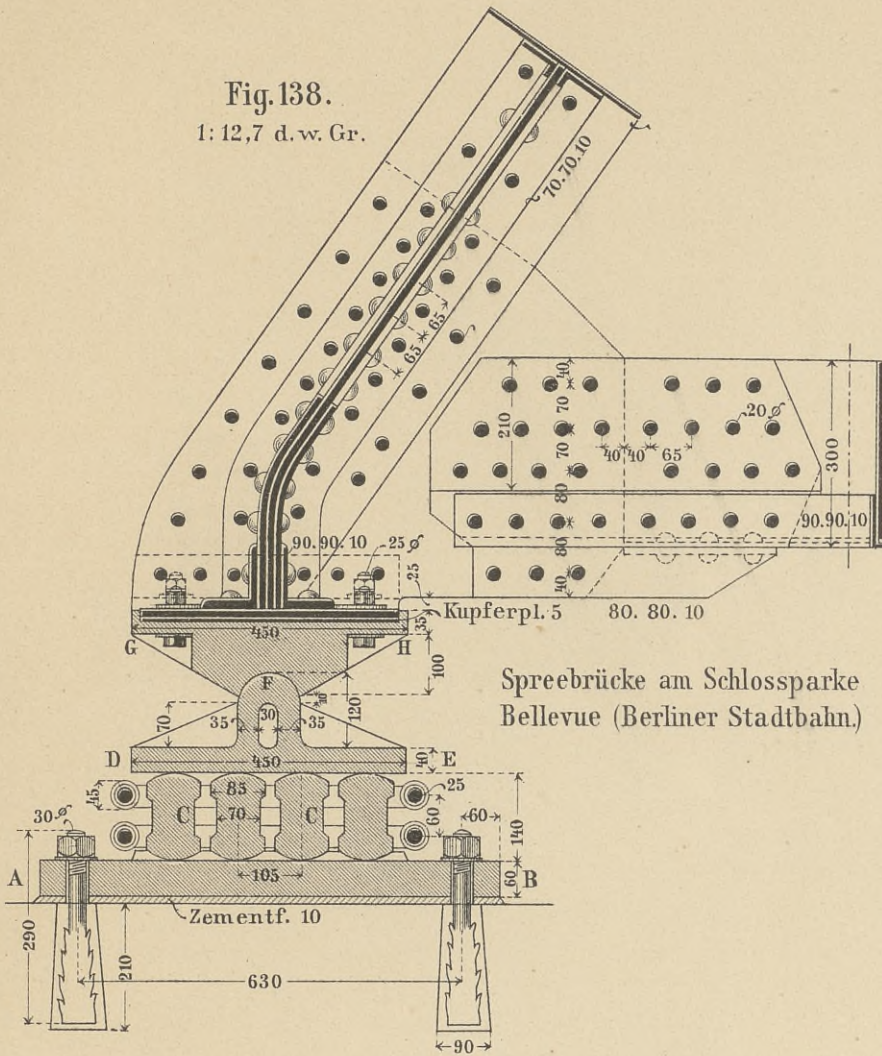
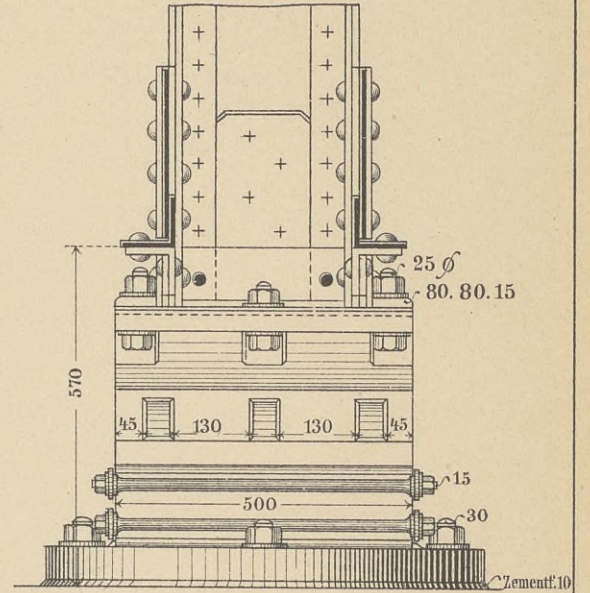


Fig. 138 b
1: 13,2 d.w. Gr.



Sprebrücke am Schlossparke
Bellevue (Berliner Stadtbahn.)

Fig. 139 b

1: 10 d.w. Gr.

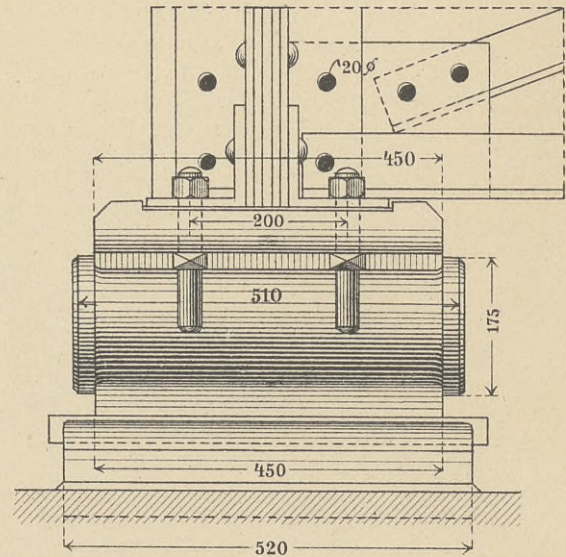
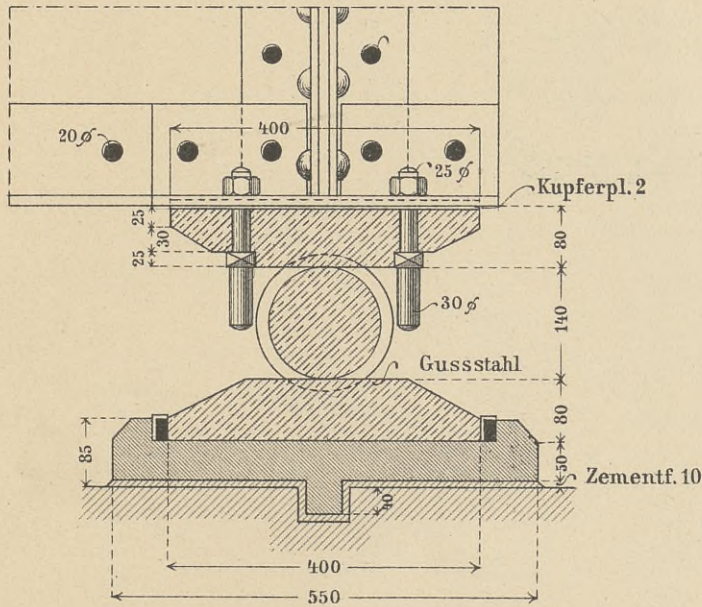
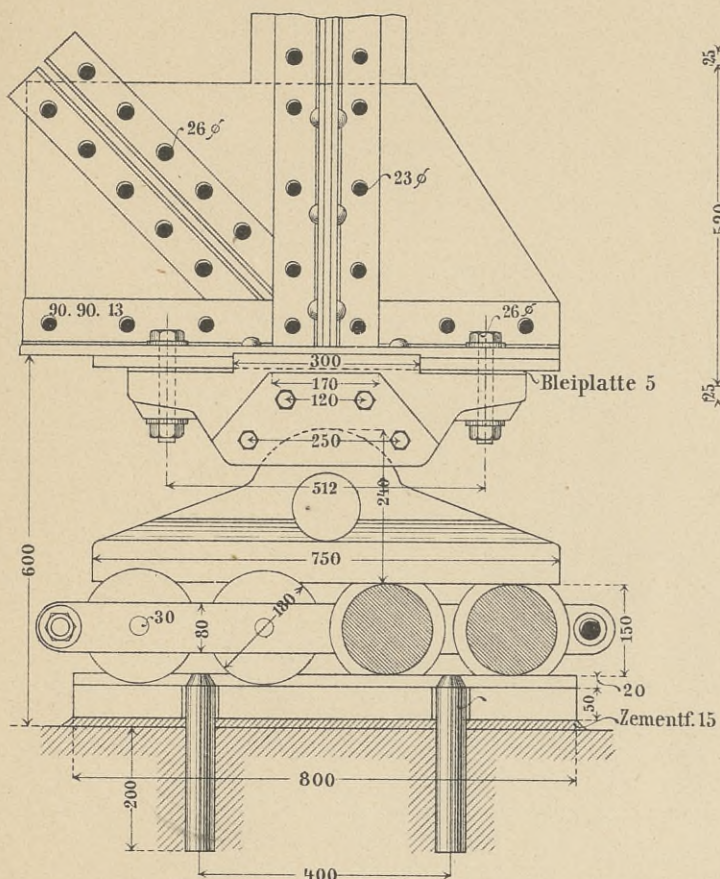


Fig. 139. 1: 10 d.w. Gr.



Unterführung des Uferweges am Schlossparke
Bellevue (Berliner Stadtbahn.)

Fig. 141. 1: 12,5 d.w. Gr.



Brücke über die Emscher (Duisburg-Quakenbrück.)

Fig. 141b 1: 12,5 d.w. Gr.

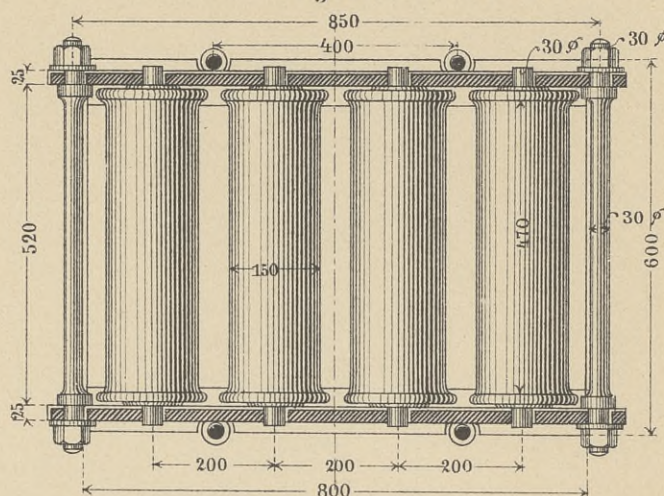
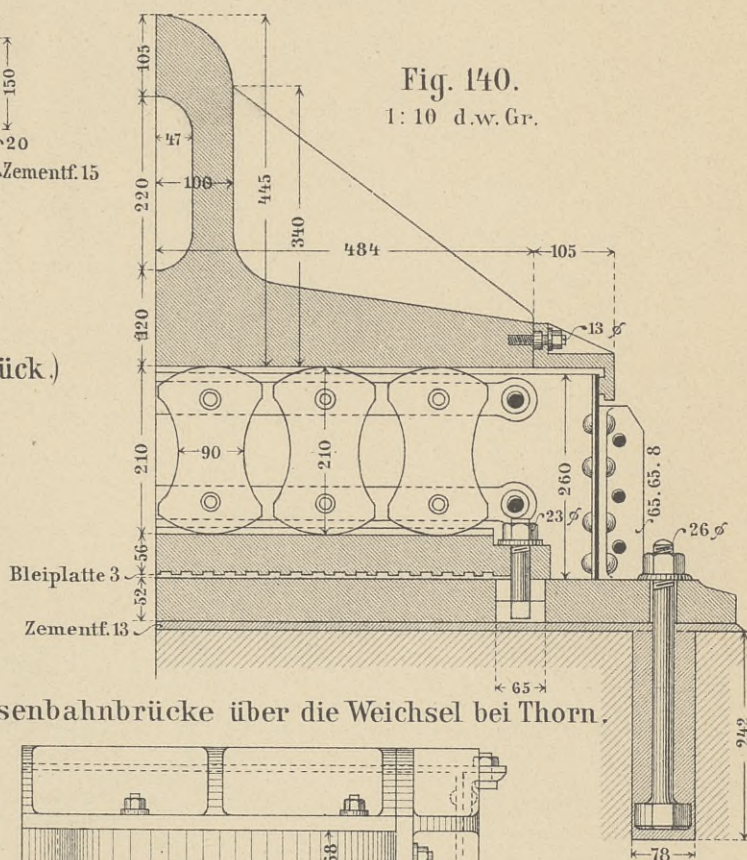


Fig. 140.

1: 10 d.w. Gr.



Eisenbahnbrücke über die Weichsel bei Thorn.

Fig. 141a
1: 12,5 d.w. Gr.

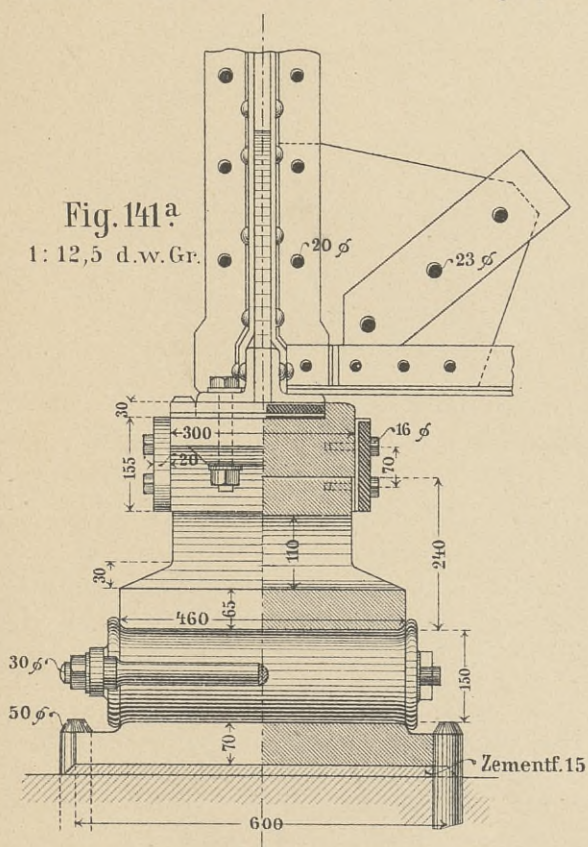


Fig. 140a

1: 10 d.w. Gr.

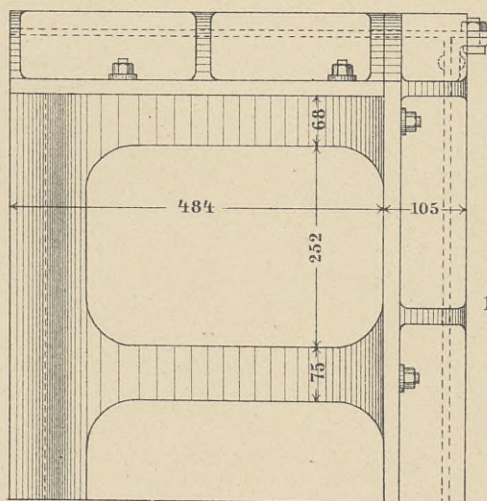


Fig. 142.

1: 10 d. w. Gr.

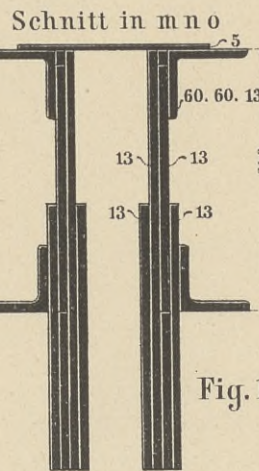
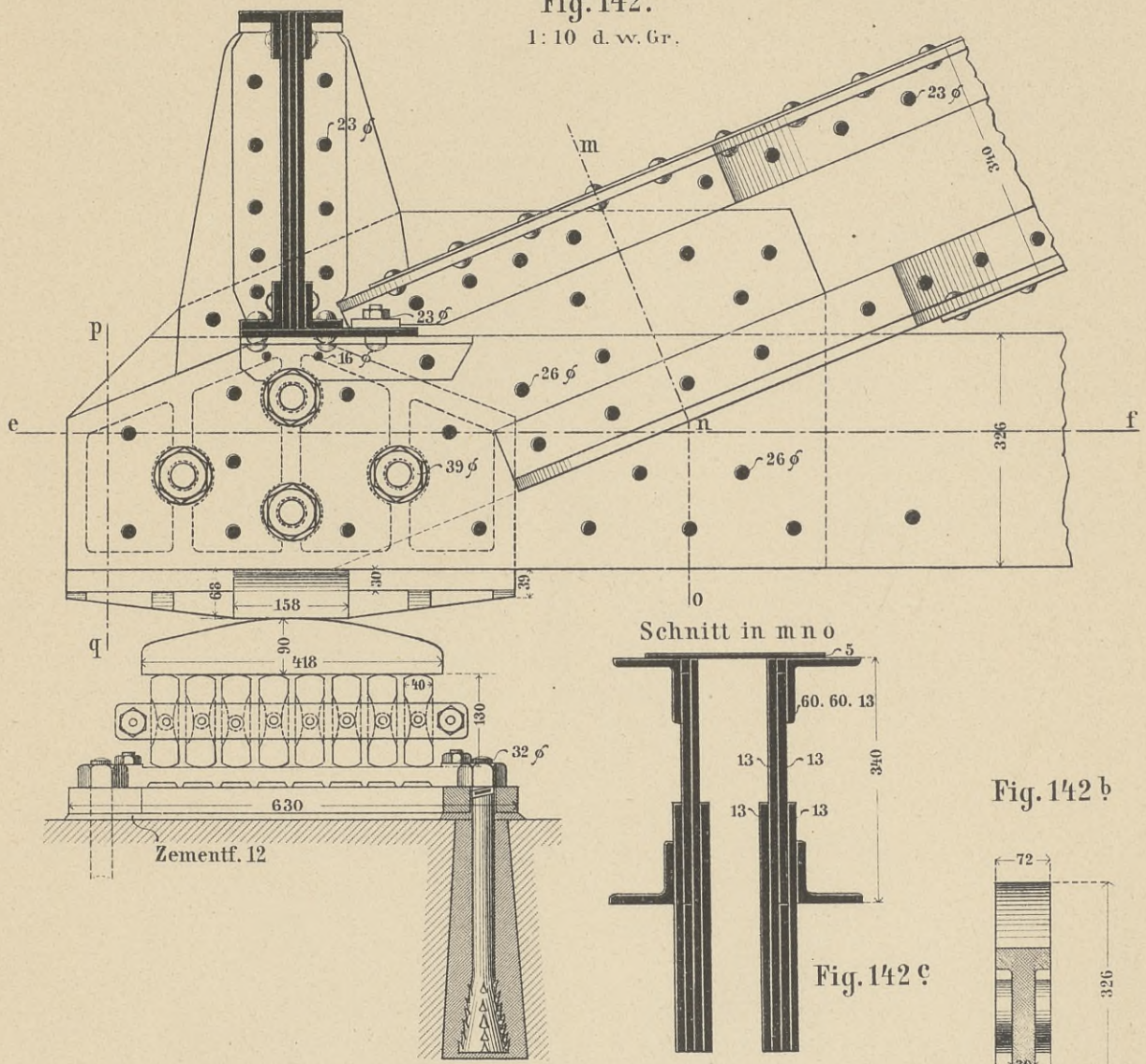
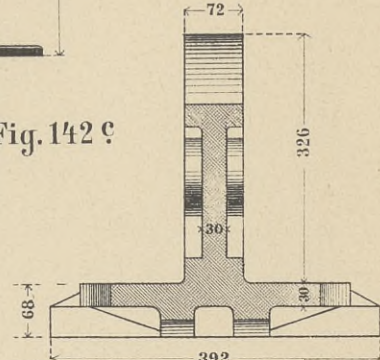


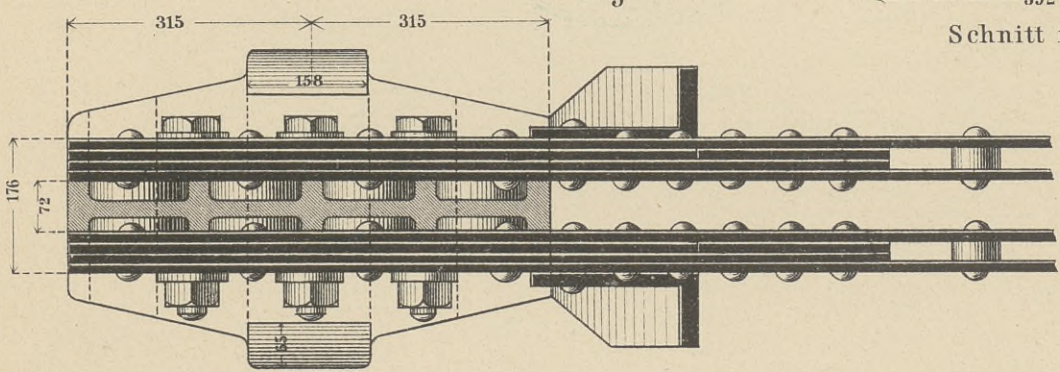
Fig. 142 b

Fig. 142 c



Brücke über die Schwarze Elster bei Prensendorf

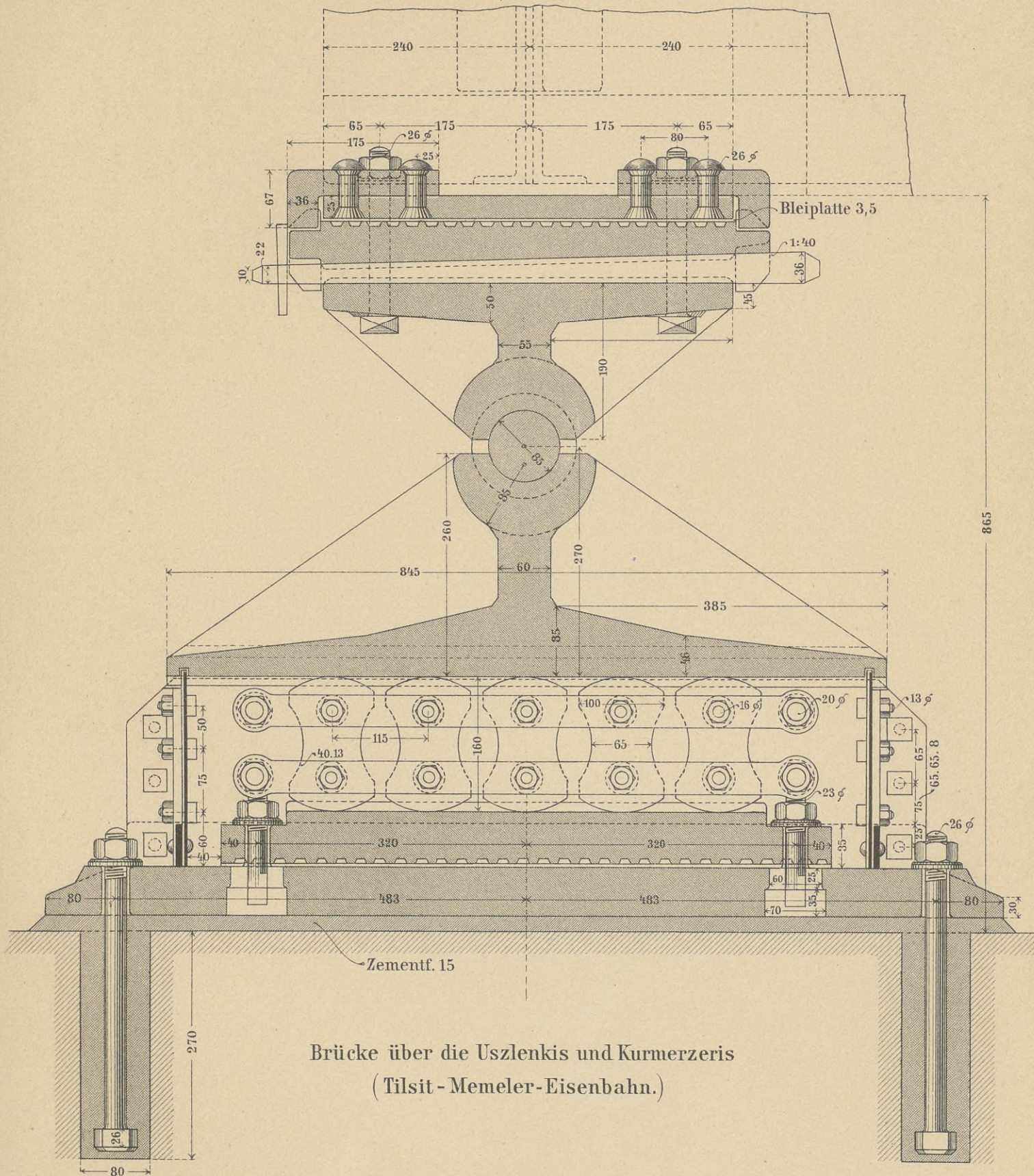
Fig. 142 a



Horizontalschnitt e f

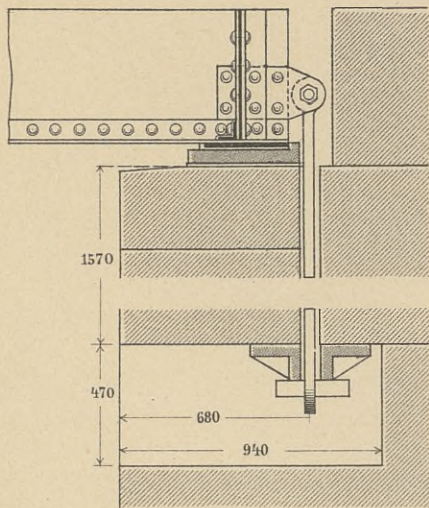
Fig. 152.

1 : 6,25 d. w. Gr.



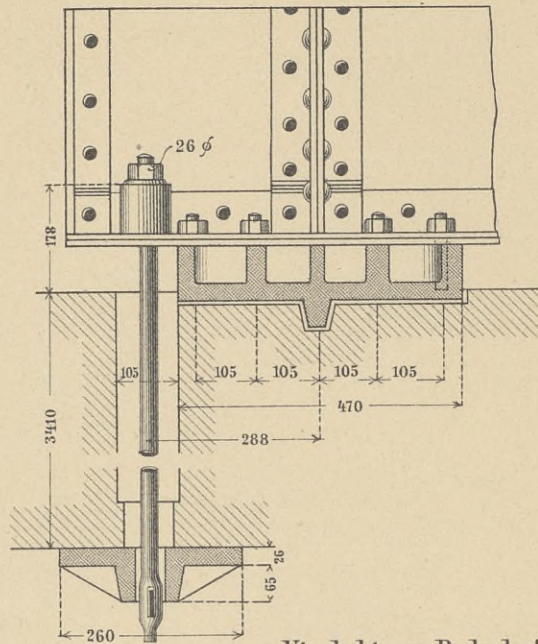
Brücke über die Uszlenkis und Kurmerzeris
(Tilsit - Memeler-Eisenbahn.)

Fig. 153.



Überführung der Halle-Sorau-Gubener Bahn über die Berlin-Anhalter Bahn.

Fig. 154.



Viadukt am Bahnhofe Berlin der Berlin-Potsdam-Magdeburger Eisenbahn.

Fig. 155.

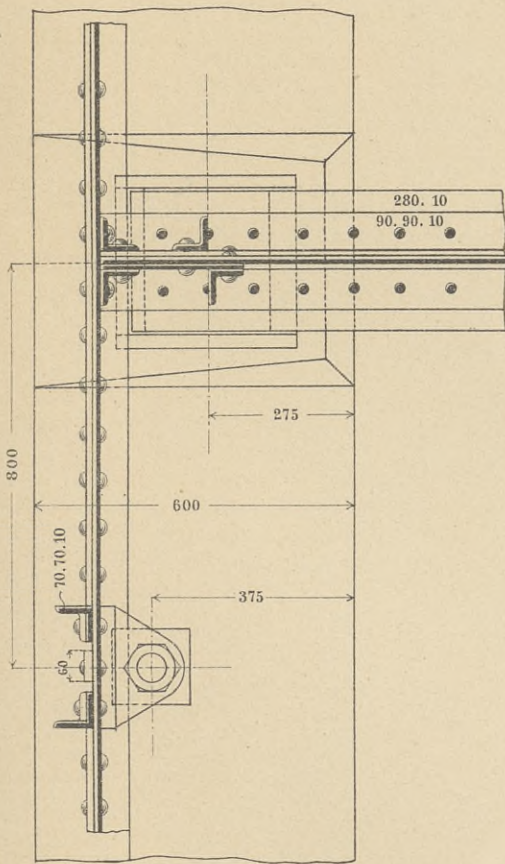
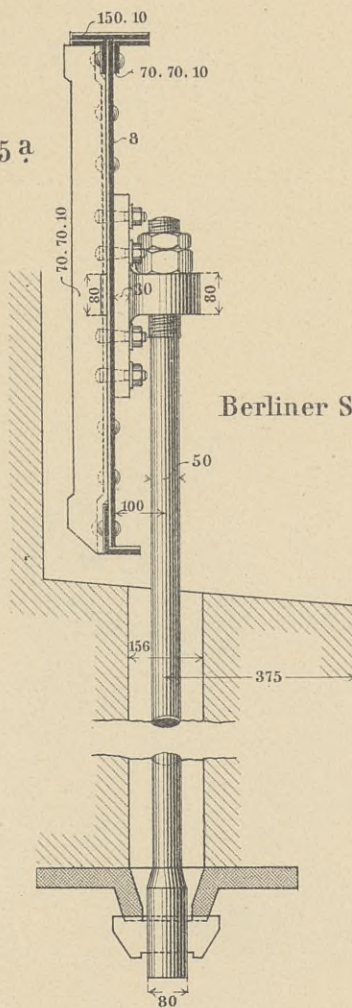


Fig. 155 a



Berliner Stadtbahn.

Fig. 154 a

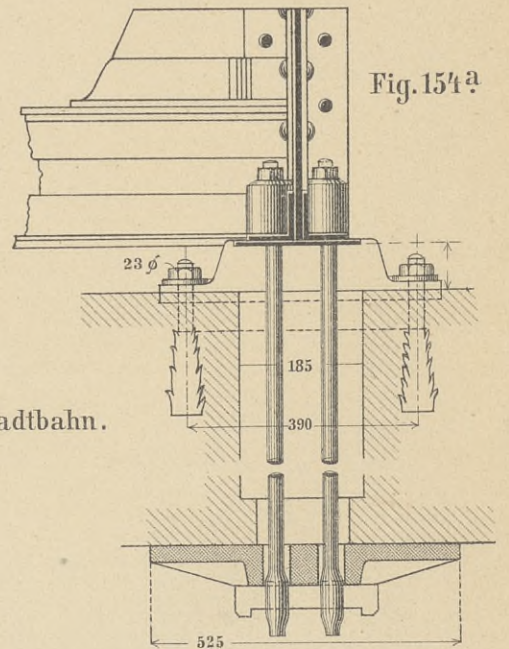


Fig. 155 b



Fig.157. 1: 25 d.w. Gr.

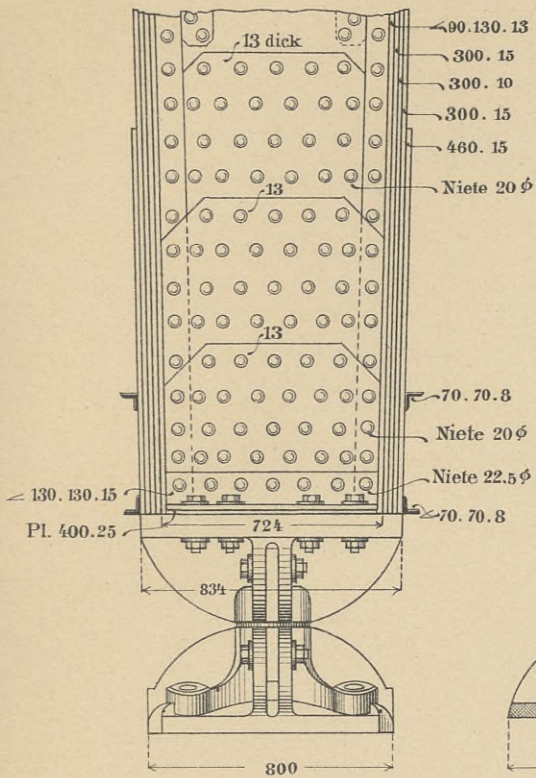


Fig.157 a

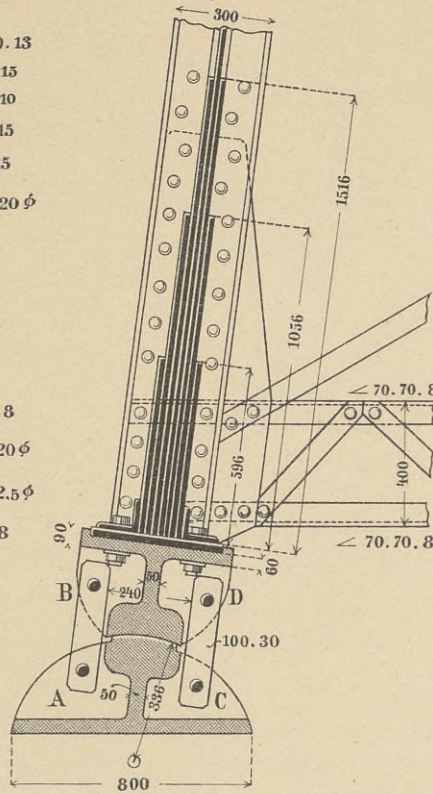


Fig.157 b 1: 25 d.w. Gr.

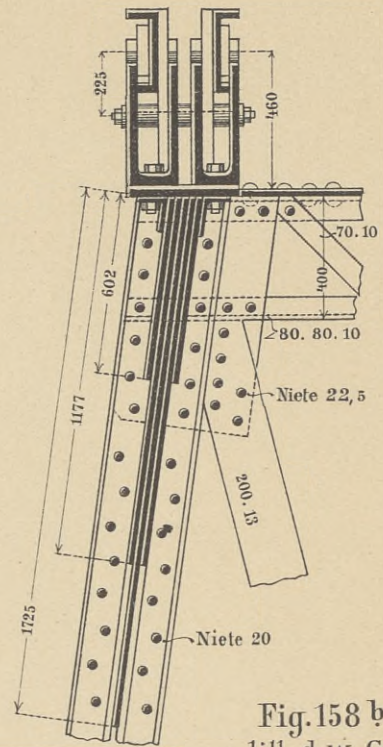


Fig.157 c

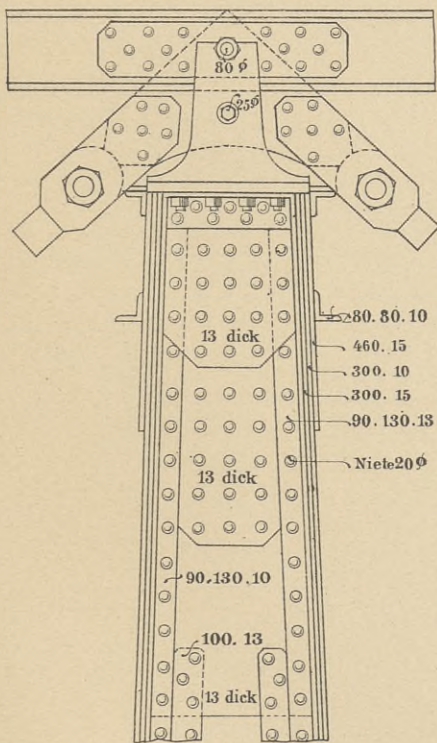


Fig.157 d
1: 25 d.w. Gr.

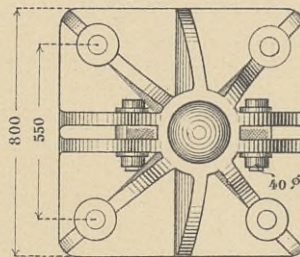
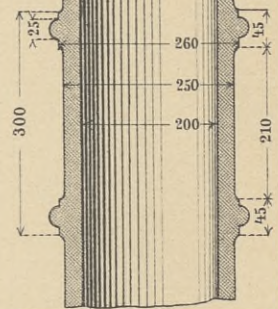


Fig.158 b
1: 11 d.w. Gr.



Solbergthal-Viadukt.

Fig.158.
1: 11 d.w. Gr.

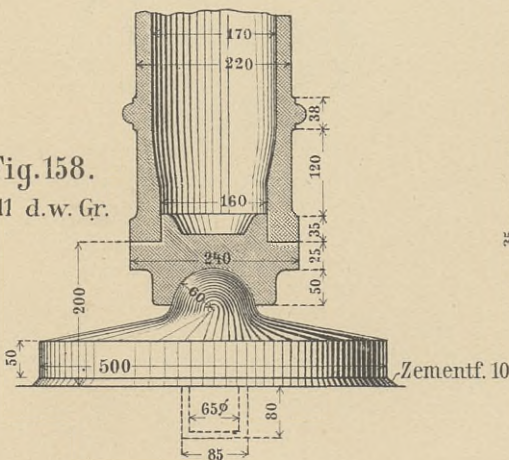
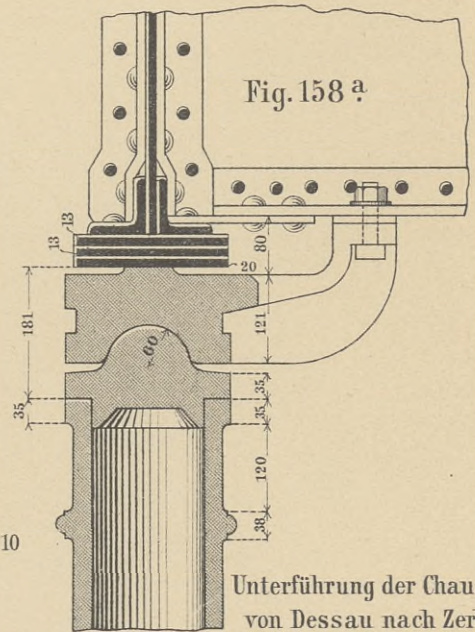


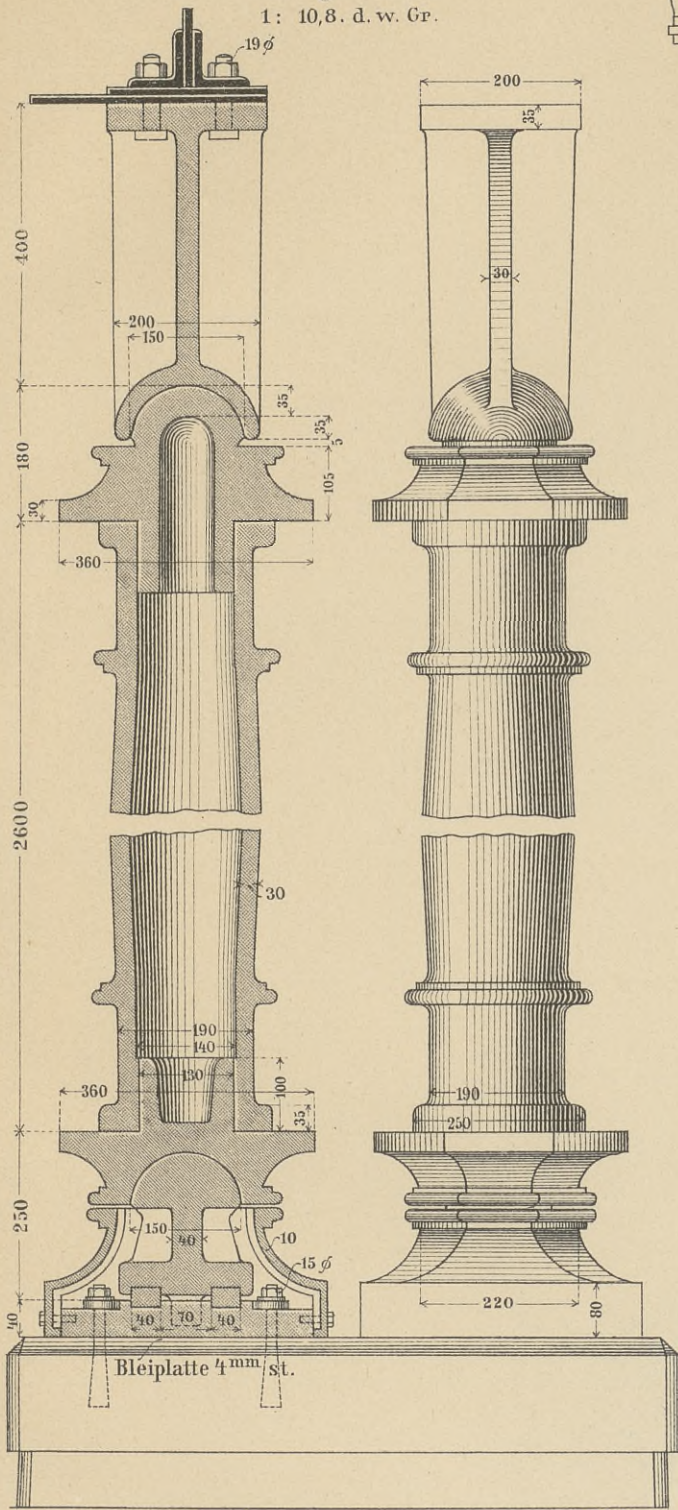
Fig. 158 a



Unterführung der Chaussee
von Dessau nach Zerbst
(Berlin-Anhalter Eisenbahn.)

Fig. 159.

1: 10,8. d. w. Gr.



Unterführung der Halleschen und Tempelhofer Uferstrasse in Berlin.

Fig. 159 a

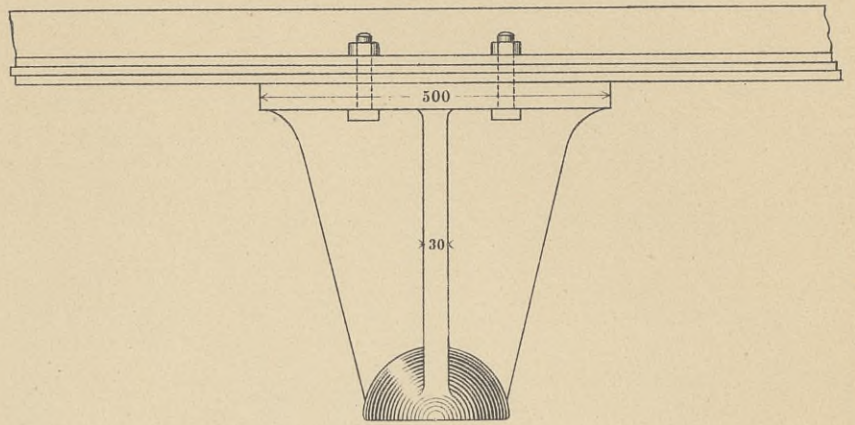


Fig. 159 b

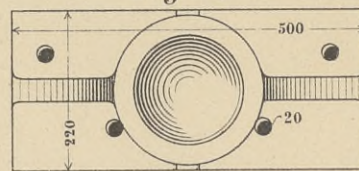


Fig. 159 c

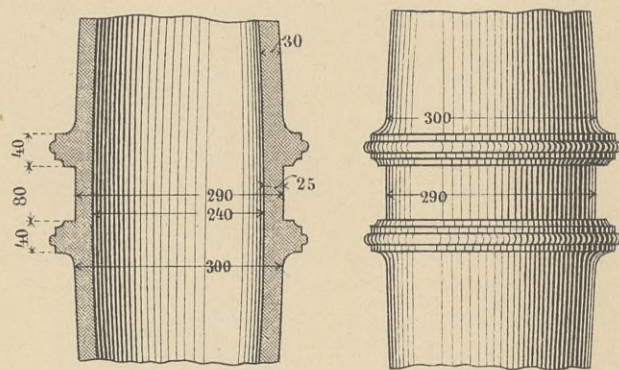
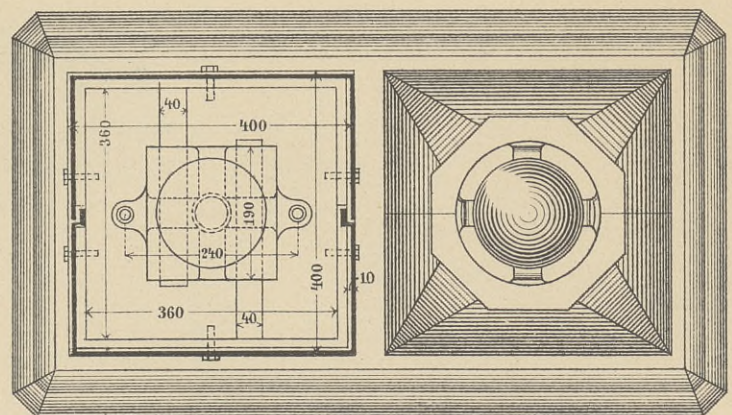
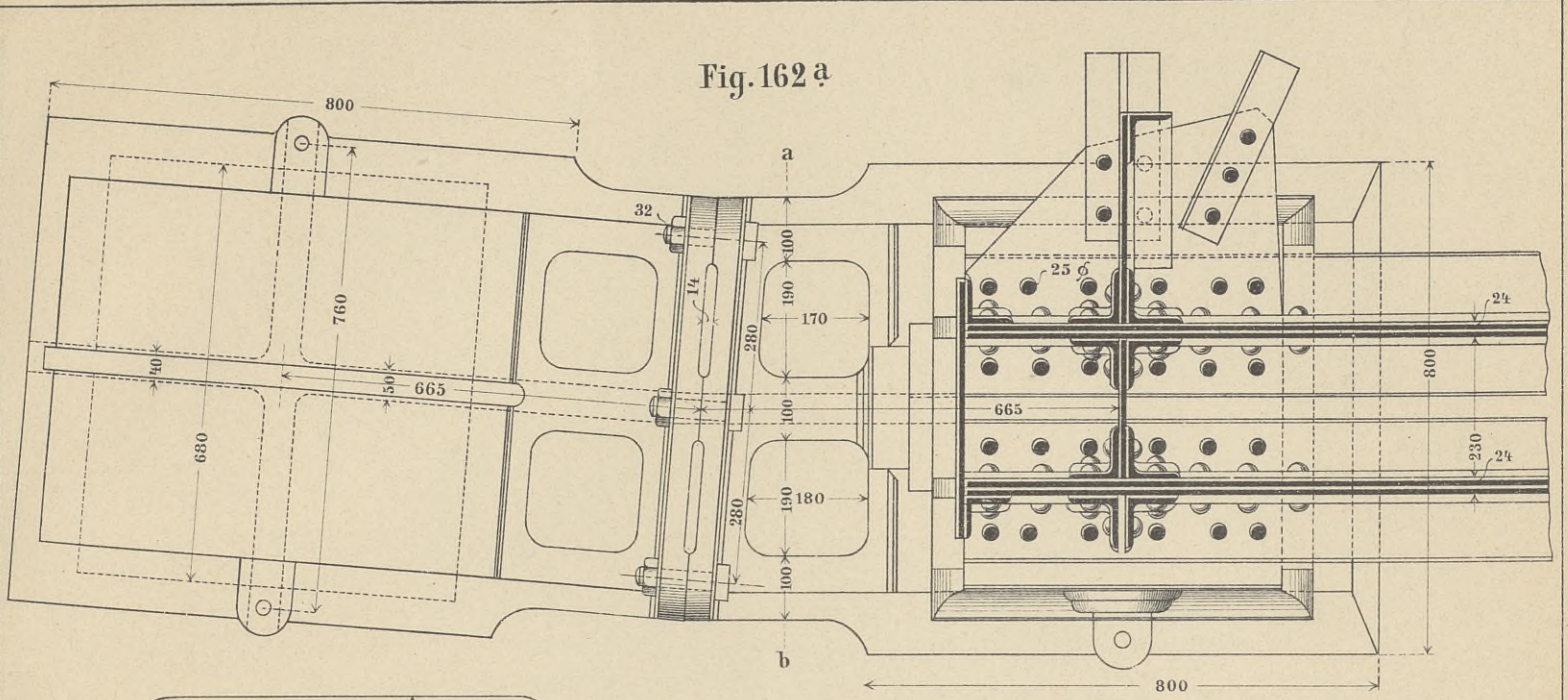


Fig. 159 d





Viadukt von Lengfeld (Nordhausen-Wetzlar.)

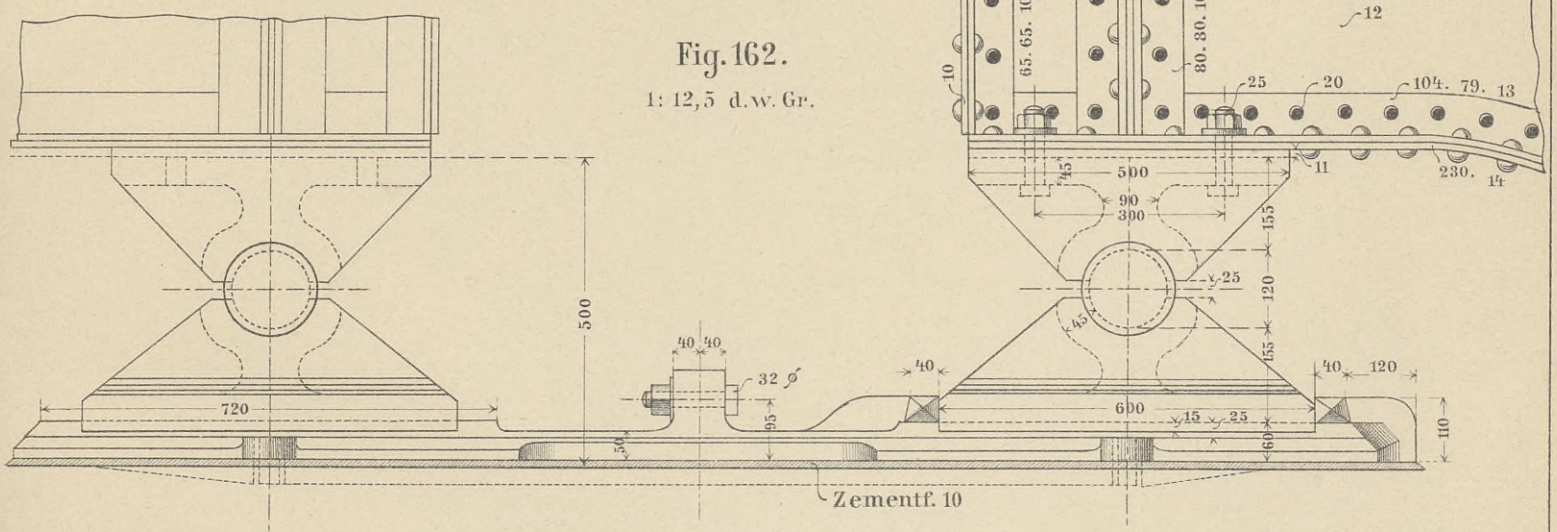
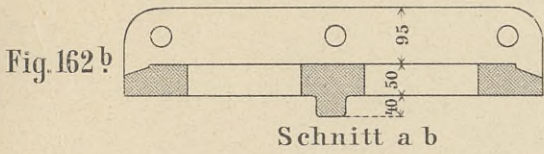


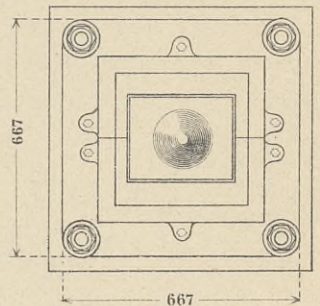
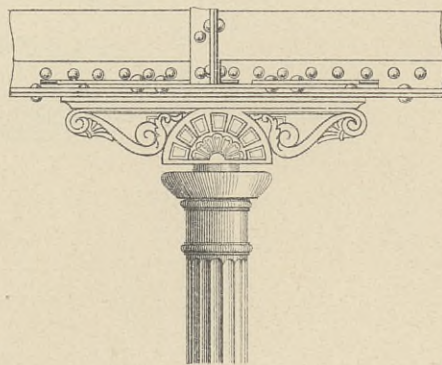
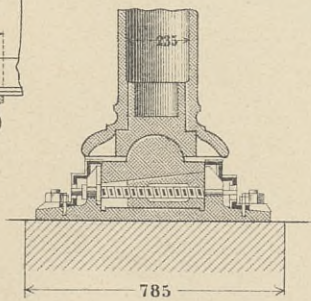
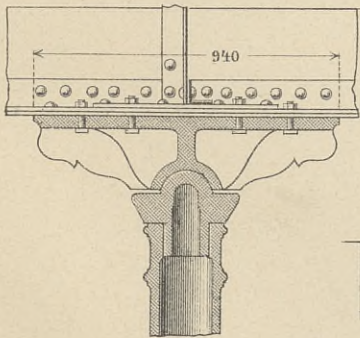
Fig. 160.

1: 23,5 d.w. Gr.

Fig. 160 b

Fig. 160 a

Fig. 160 c



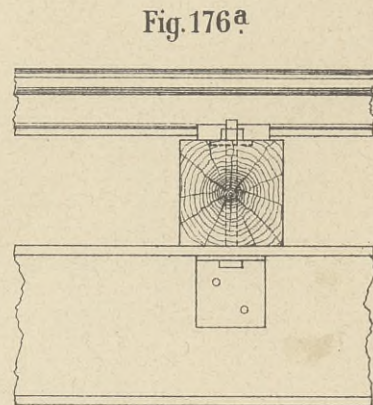
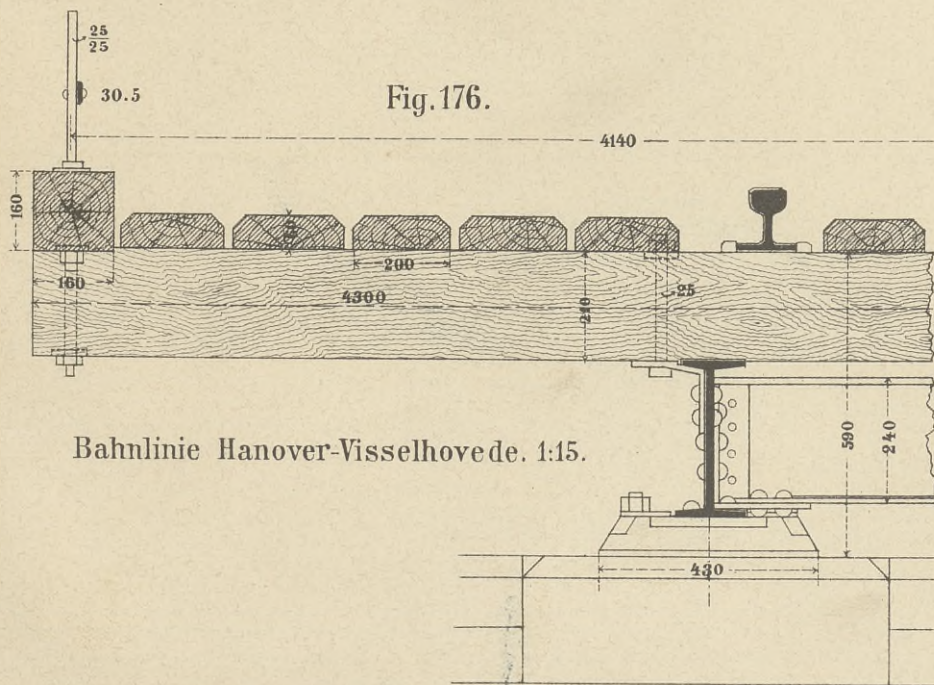
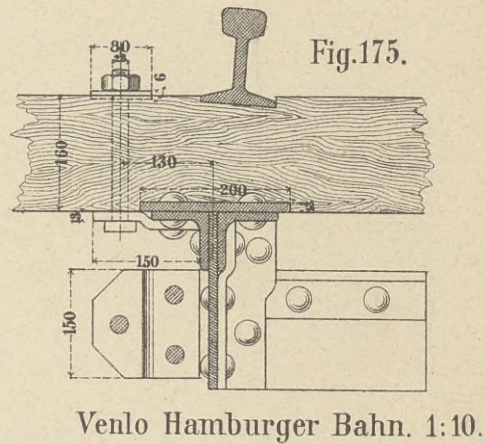
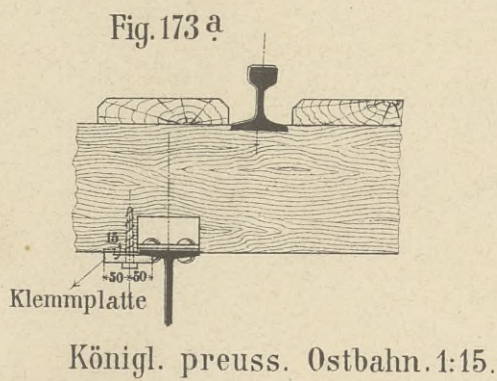
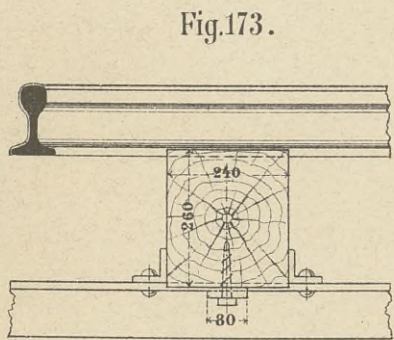
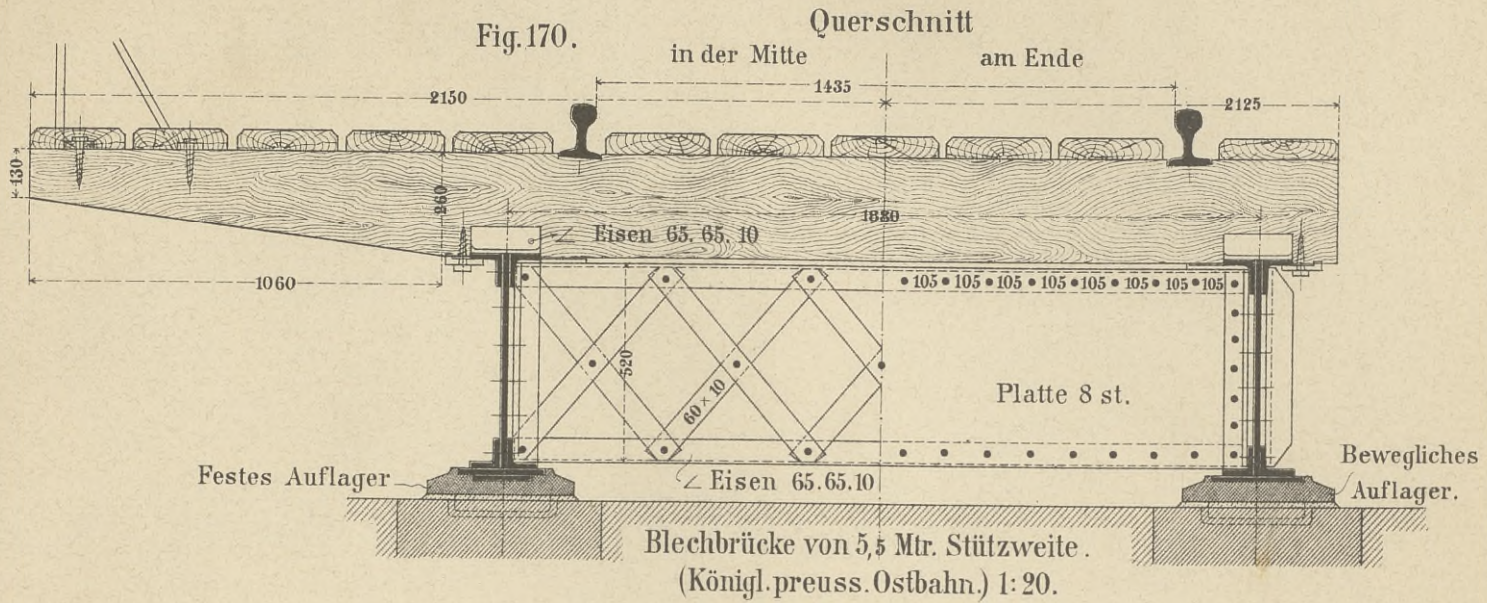
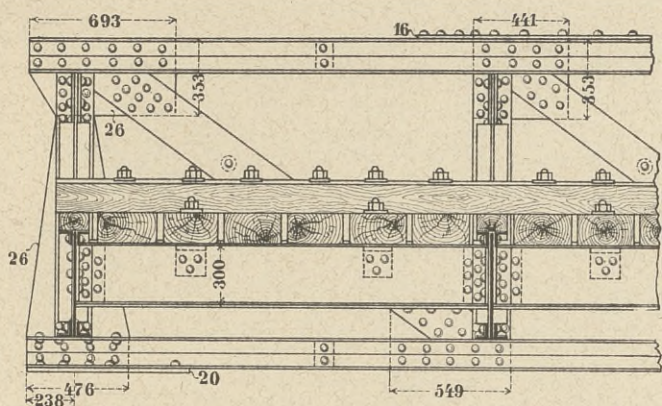


Fig.179.

Längenschnitt durch die Mitte.



Sieberbrücke (Südharzbahn Herzberg-Osterode.) 1:36.

Fig.179 a

Querschnitt.

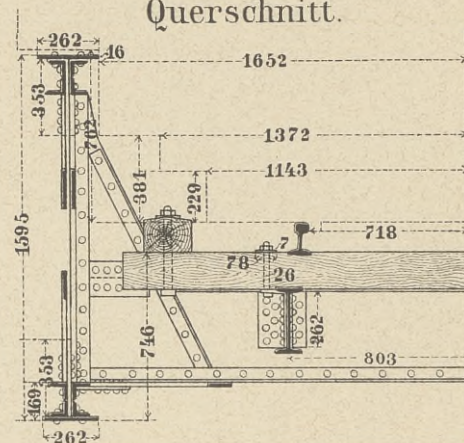
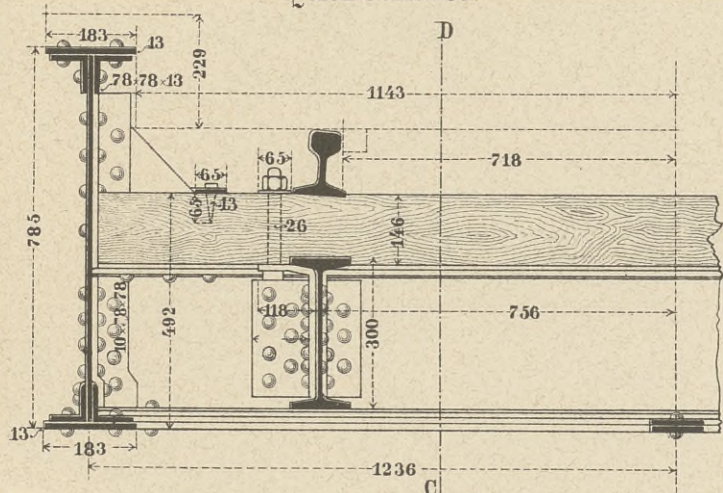


Fig.180.

Querschnitt.



Wegunterführung (Scharzfeld-Nüxey.) 1:16.

Fig.180 a

Längenschnitt nach C-D.

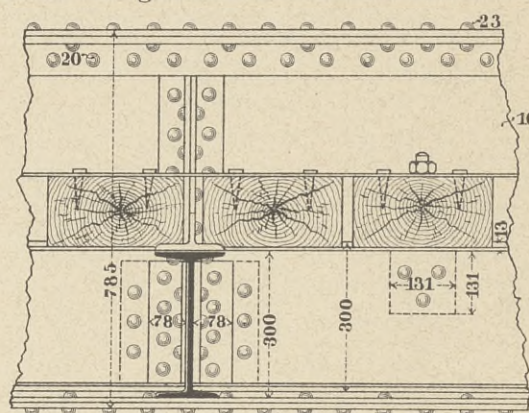
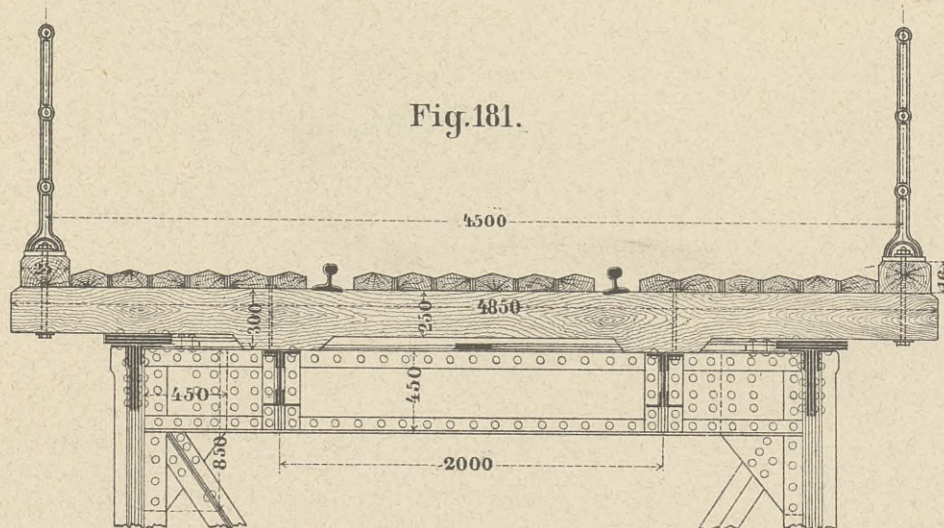


Fig.181.



Österreichische Südbahn. 1:40.

Fig.183.

Italienische Eisenbahnen

1:25.

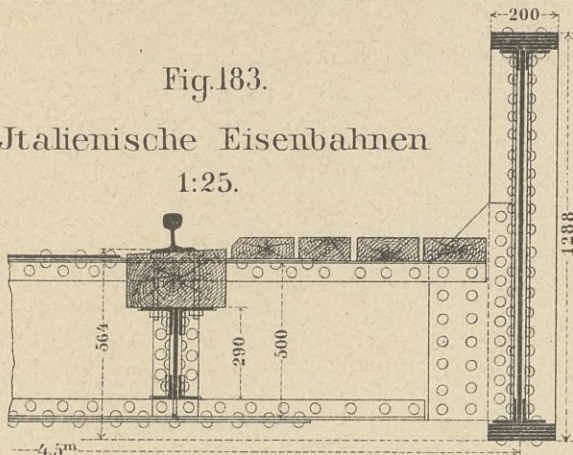


Fig.184.

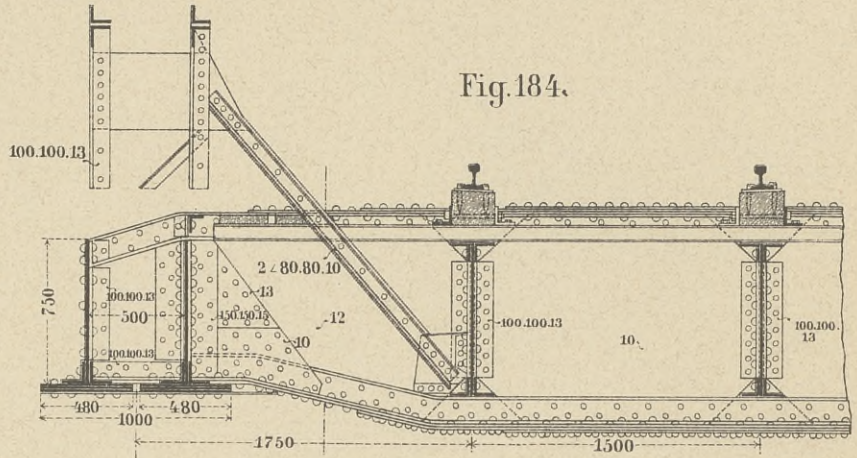


Fig.184^a

Neue Elbbrücke bei Riesa, 1:25.

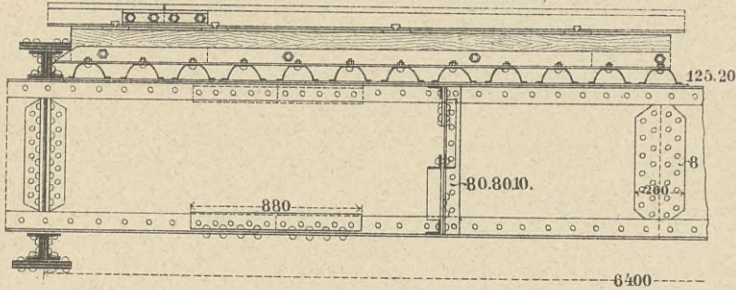


Fig.185.

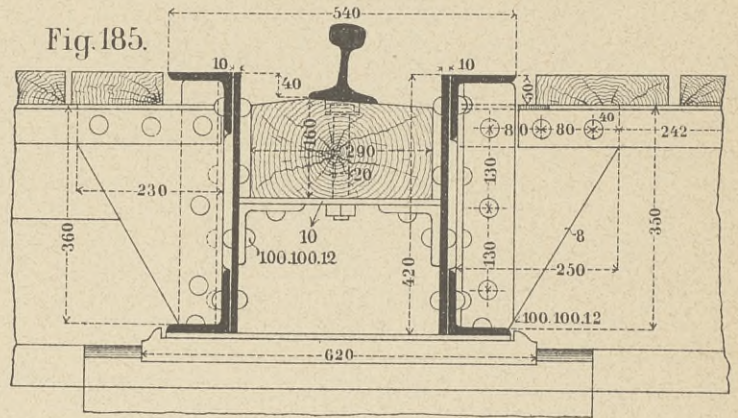
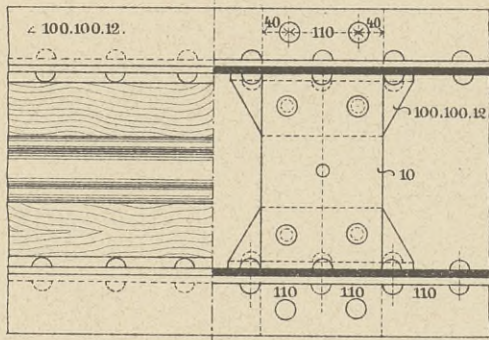


Fig.185^a



Brücke von 4 m lichter Weite der Bauunternehmung v. Schwarz. 1:12,5.

Fig.187^a

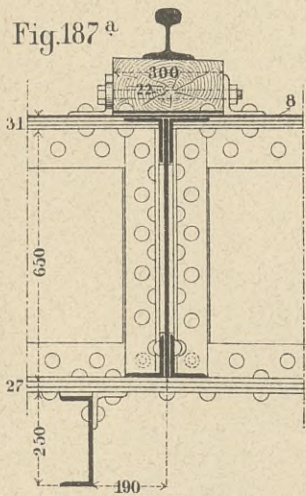


Fig.187^c

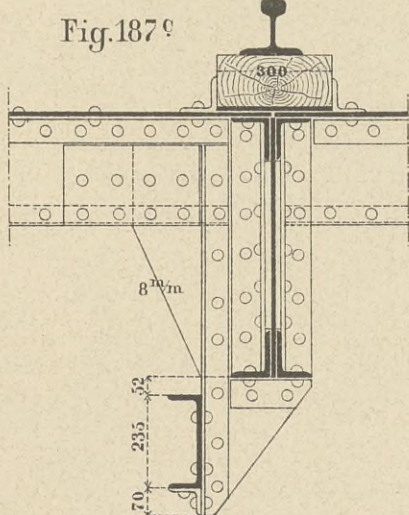


Fig.187.

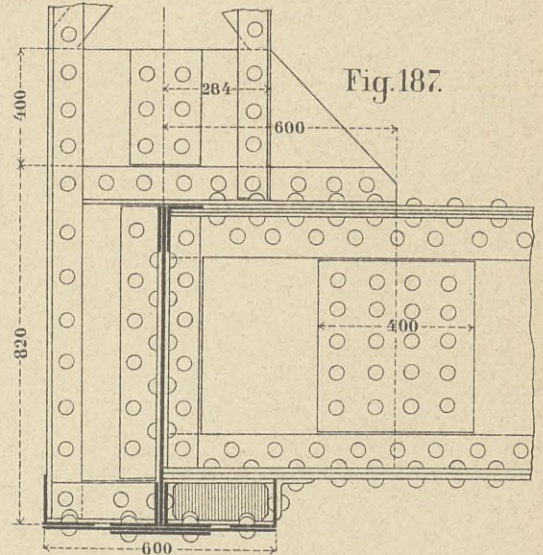
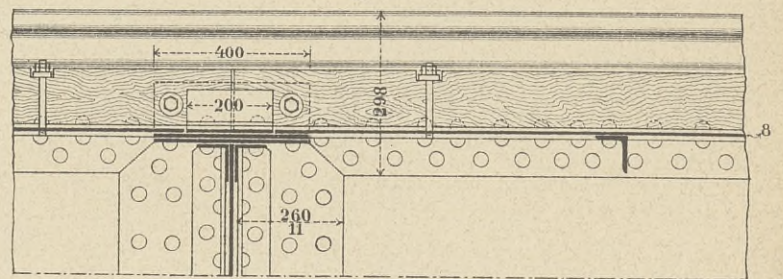
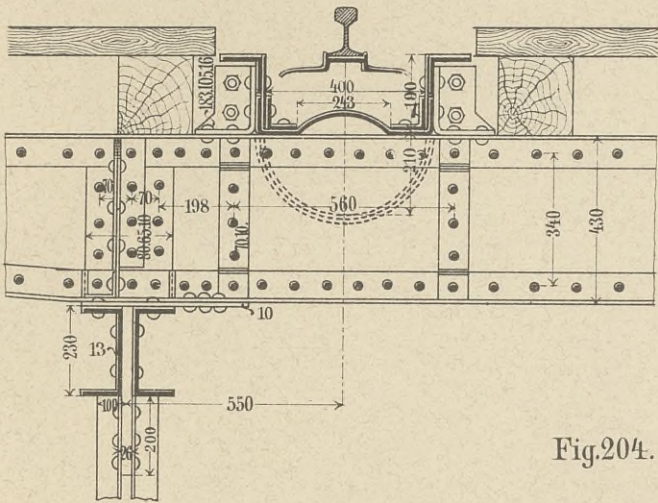


Fig.187^b



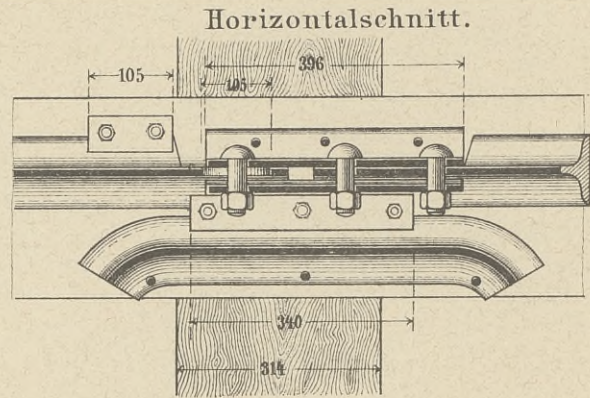
Thalübergang von Soulevre. 1:20.

Fig.200.



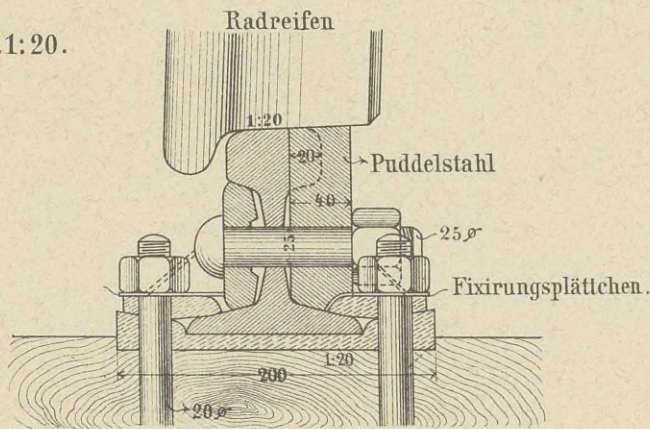
Berliner Stadtbahn. 1:20.

Fig.203.



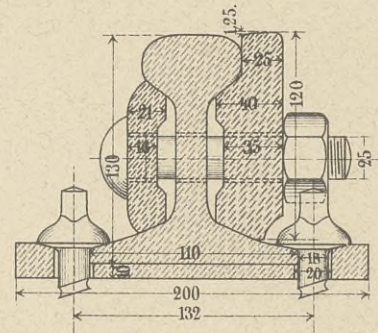
Elbbrücke bei Dömitz. 1:12.

Fig.204.



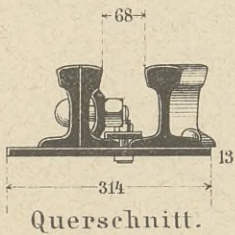
Fuldabrücke bei Malsfeld. 1:5.

Fig.205.



Thalübergang zu Lengsfeld. 1:5.

Fig.203^a



Querschnitt.

Fig.207.

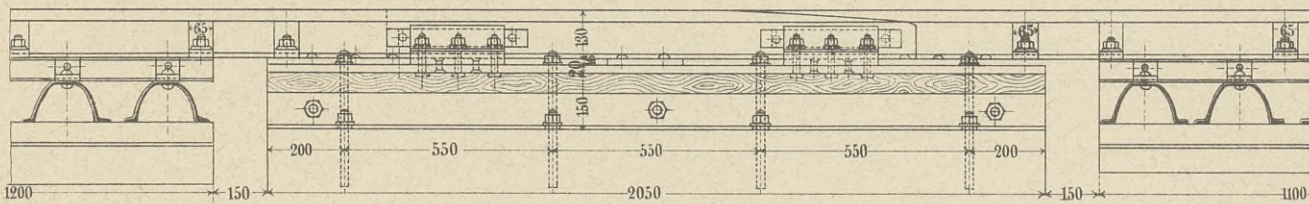
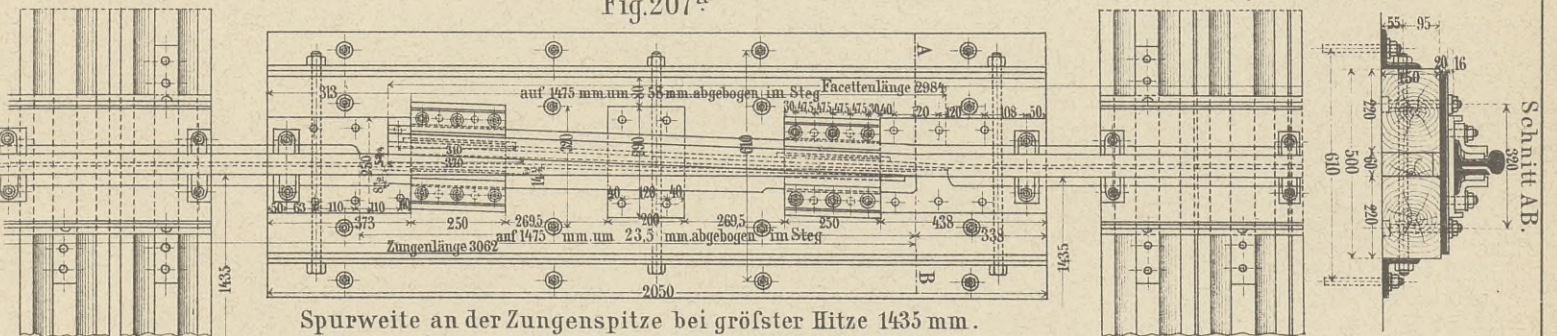


Fig.207^b.

Großer Träger.

Fig.207^a

Kleiner Träger.



Spurweite an der Zungenspitze bei größter Hitze 1435 mm.
" " " " " " Kälte 1447 mm.

Thalübergang in Weida. 1:20.

Schienenauszug auf Pfeiler V.

Fig. 208. 1: 60.

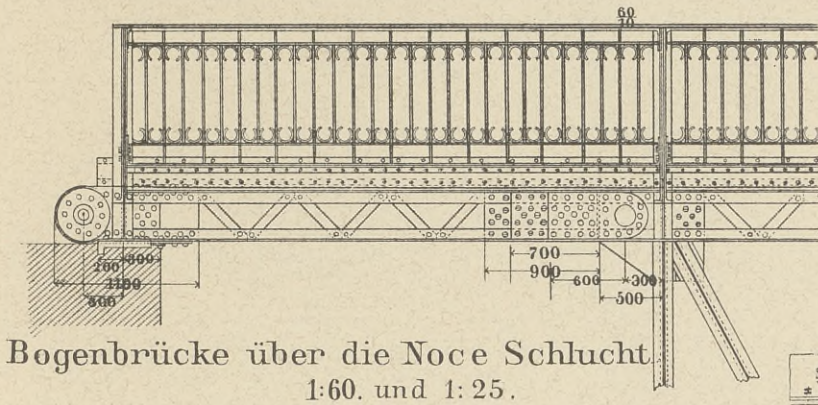


Fig. 208^a 1: 60

Querschnitt am Auflager.

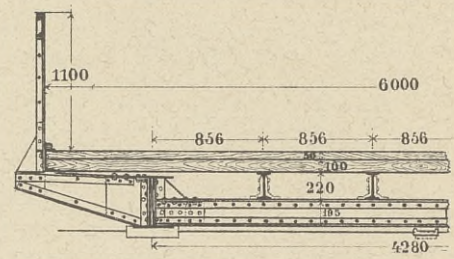
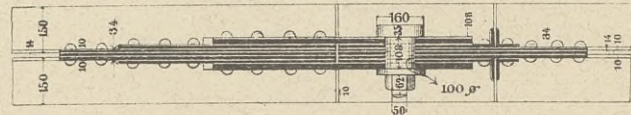


Fig. 208^b 1:25



Bogenbrücke über die Noce Schlucht
1:60. und 1: 25.

Fig. 211^a

Querschnitt E-F von Zwang-Schiene
und Stuhl. 1:7, 5.

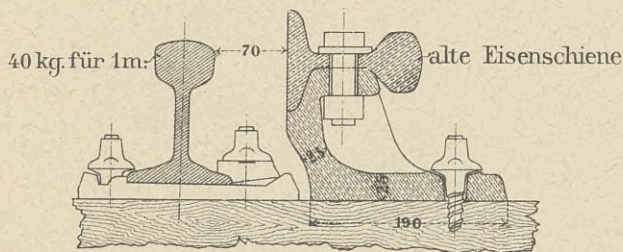
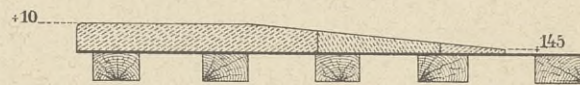


Fig. 211^b

Längenschnitt nach A-B. 1: 45.



Eingleisungsvorrichtung der Niederländischen Staatsbahn.

Fig. 211. Grundriss 1:45.

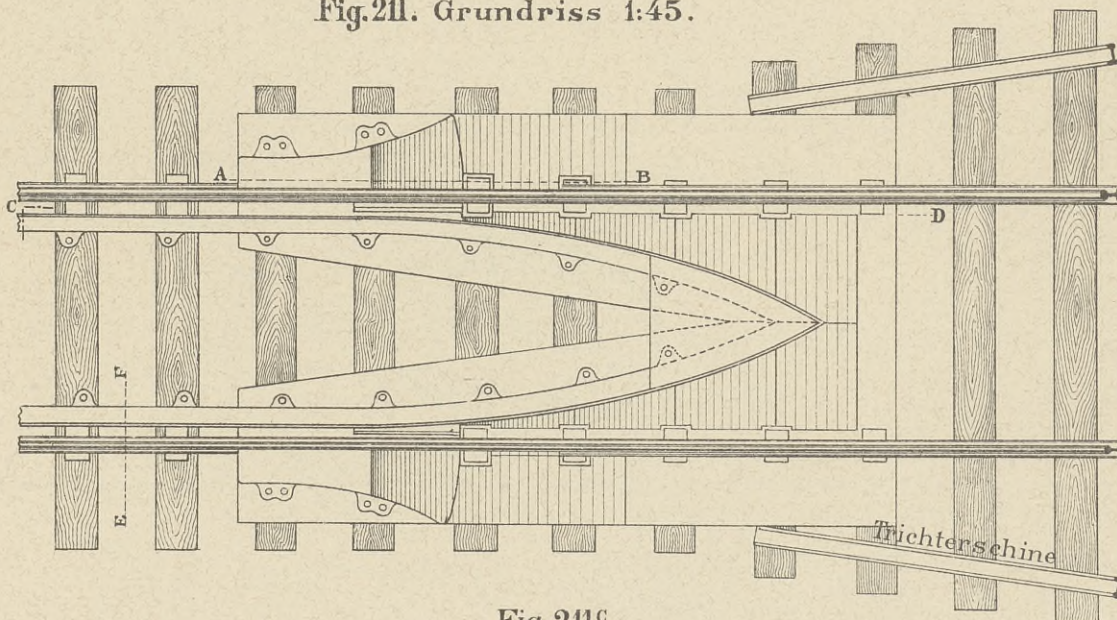


Fig. 211^c

Längenschnitt nach C D. 1:45.

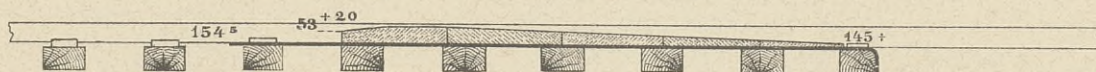
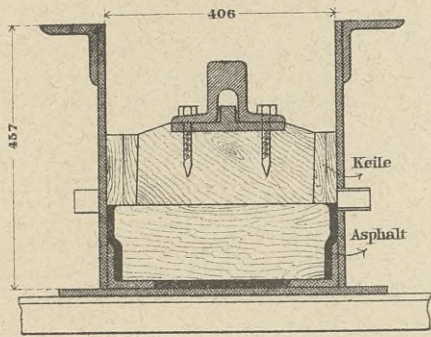
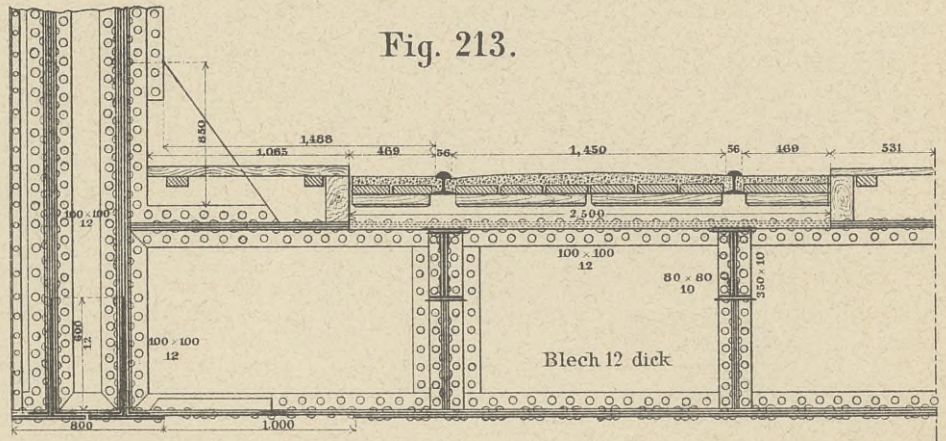


Fig. 212.



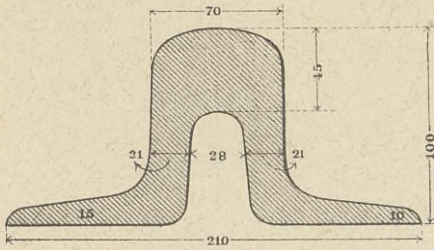
Forthbrücke. Lagerung der Fahrseihen 1: 14.

Fig. 213.



Thalübergang von Liane 1: 40.

Fig. 212 a



Fahrseiene 1: 4.

Fig. 213 a

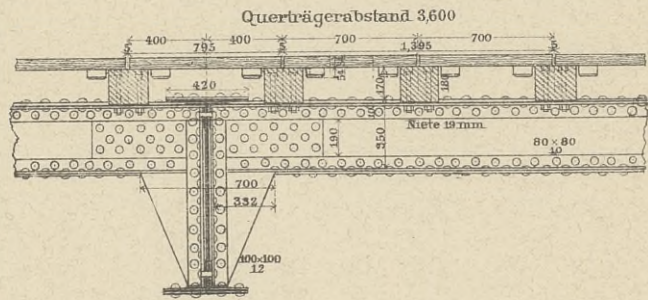
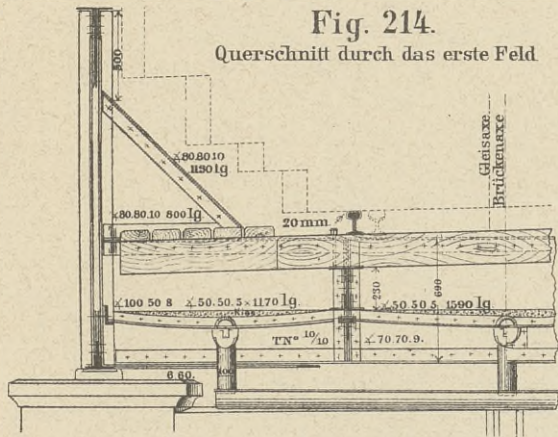


Fig. 214 a

Fig. 214.

Querschnitt durch das erste Feld



Unterführung der Düsternstrasse (Bahnhof Bremen) 1: 50.

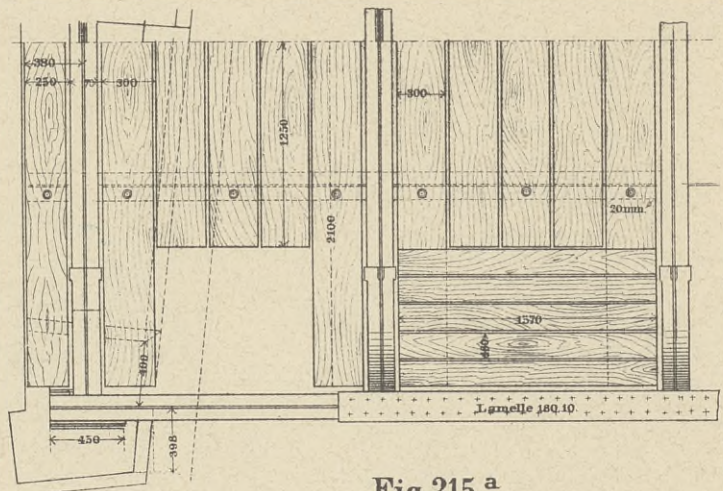
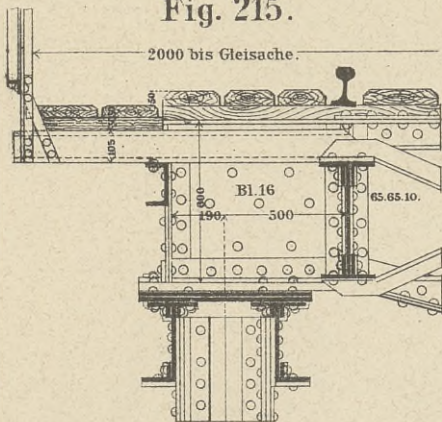


Fig. 215 a

Geländer

Fig. 215.



Frieda-Thalübergang 1: 30.

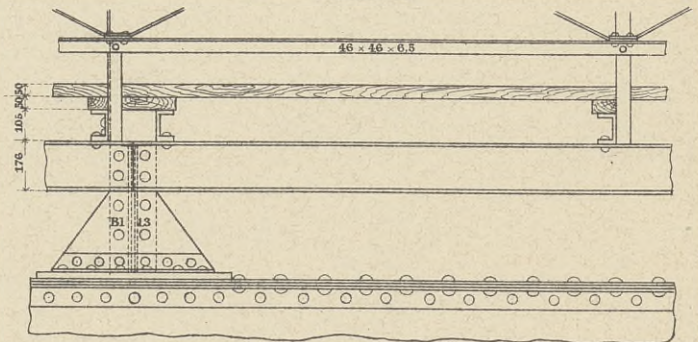
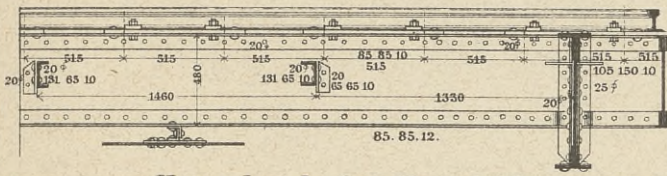


Fig. 216.



Neissebrücke bei Glatz 1:40.
(Niederschlesisch-Märkische Eisenbahn)

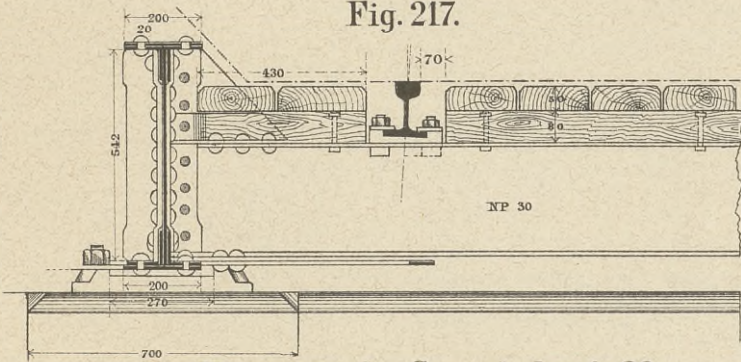
Fig. 216^a



Fig. 216^b

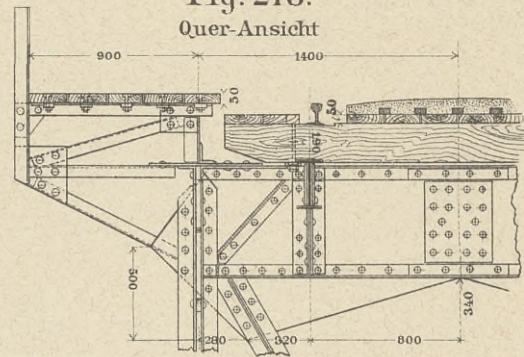


Fig. 217.



Hannoversche Staatsbahn 1:20.

Fig. 218.
Quer-Ansicht



Bayerische Staatsbahn 1:40.

Fig. 219. 1:60.

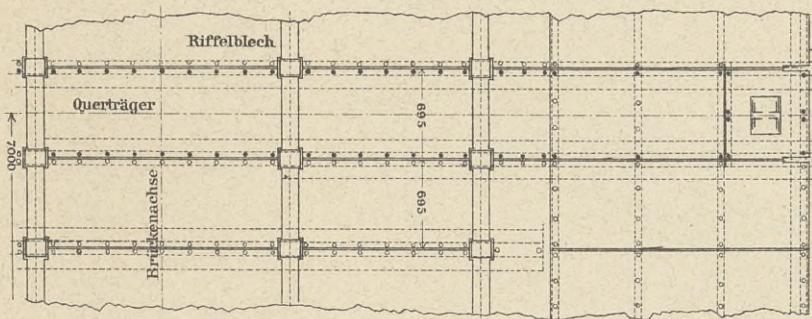
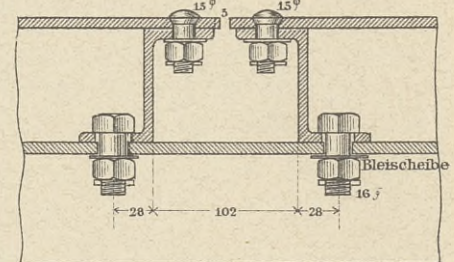
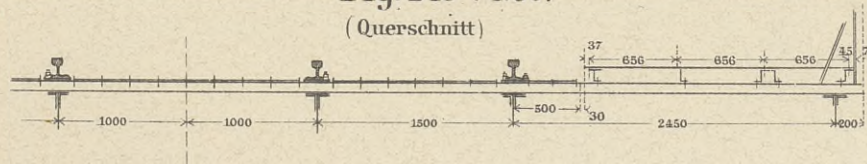


Fig. 219^b 1:5,6.



Querschelle

Fig. 219^a 1:60.
(Querschnitt)



Neue Weichselbrücke bei Dirschau 1:60 und 1:5,6.

Fig. 222 1:40.

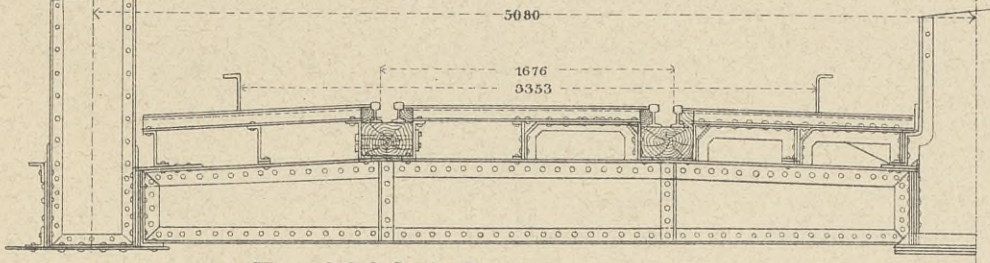
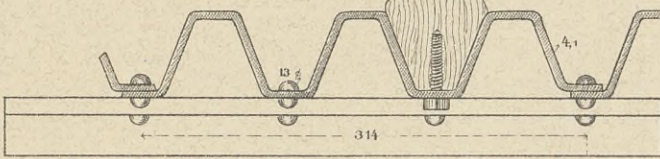
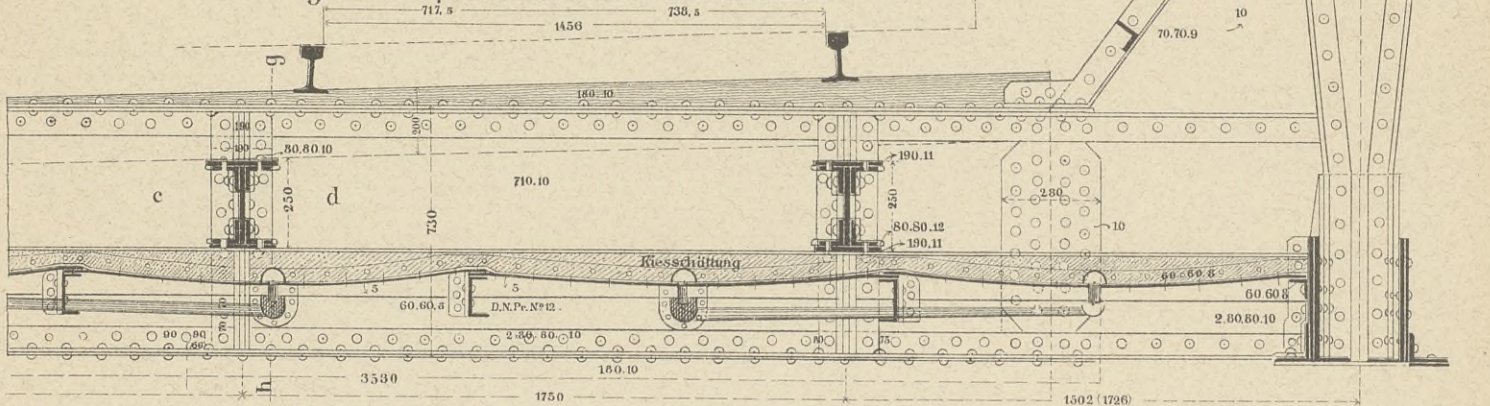


Fig. 222 a 1:6.



Chenab-Brücke. Indische Staats-Eisenbahn.

Fig. 224 Querschnitt durch Brückenmitte.



Unterführung des Hafengleises am Stephani-Thor in Bremen 1:25

Fig. 224 a Querschnitt nach g-h.

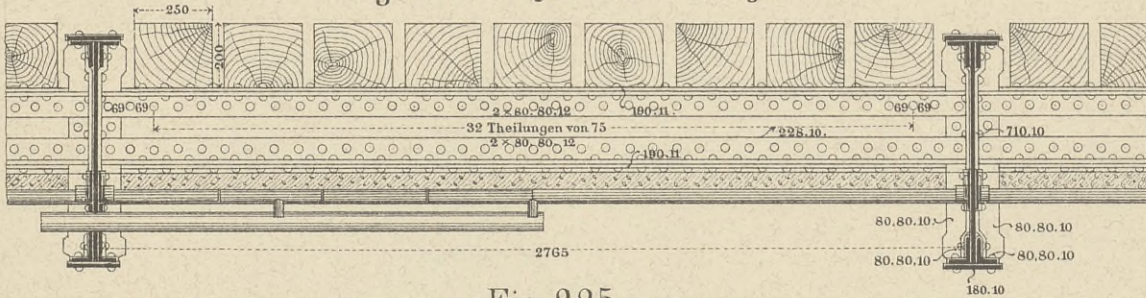


Fig. 225

Fig. 225 a

Querschnitt durch Geleisträger und Schaldeckenträger.

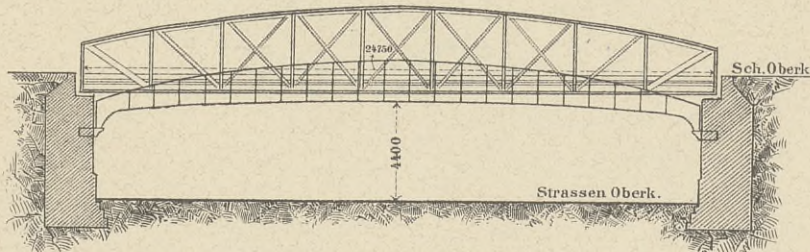
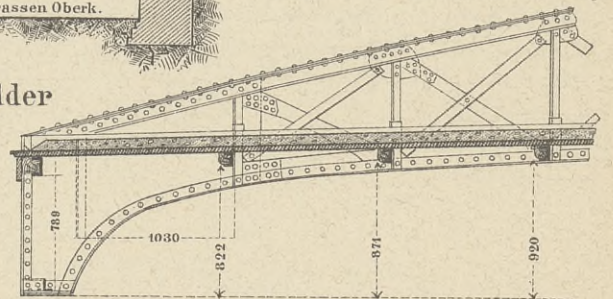
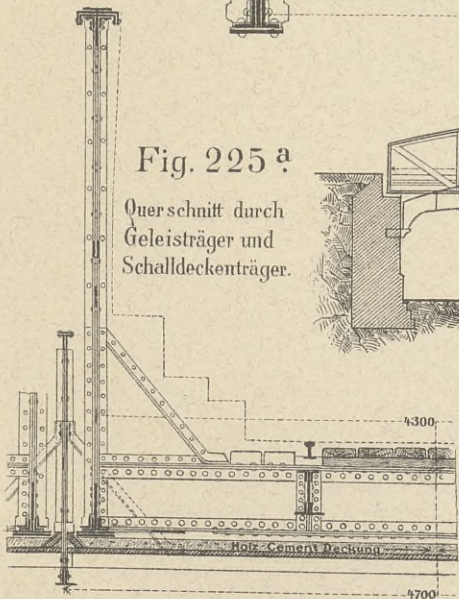
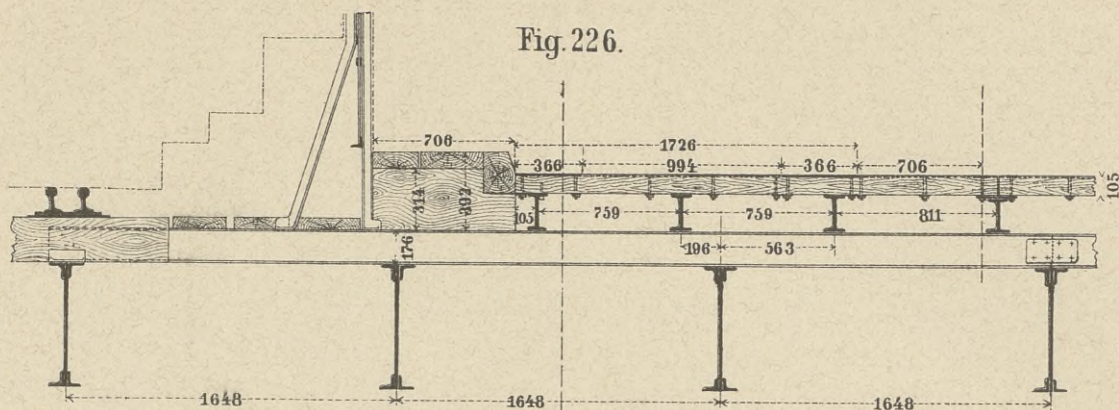


Fig. 225 b

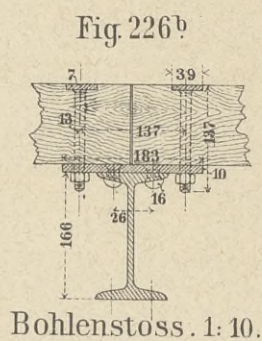
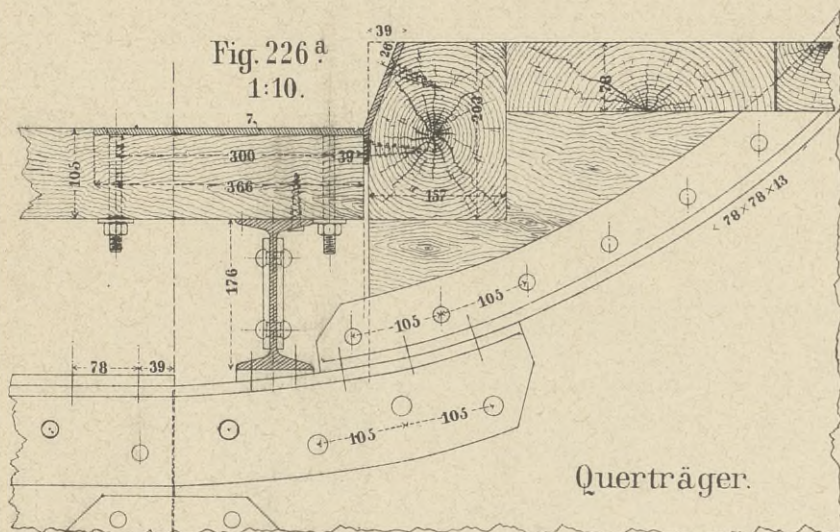
Längenschnitt des Schaldecken-Trägers.

Unterführung der Vahrenwalder Strafe in Hannover. 1:50.

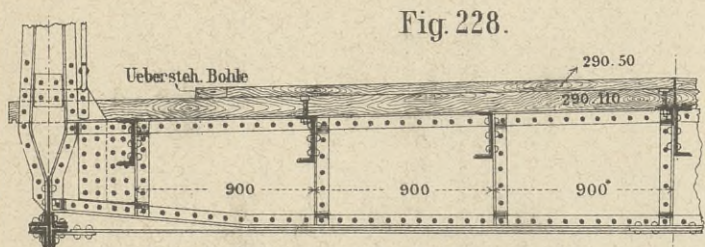




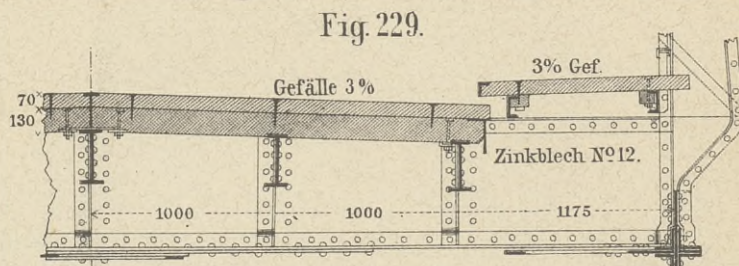
Weichselbrücke bei Thorn. 1:30.



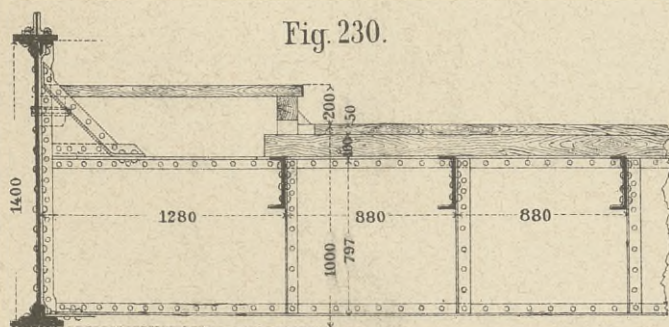
Bohlenstoss. 1:10.



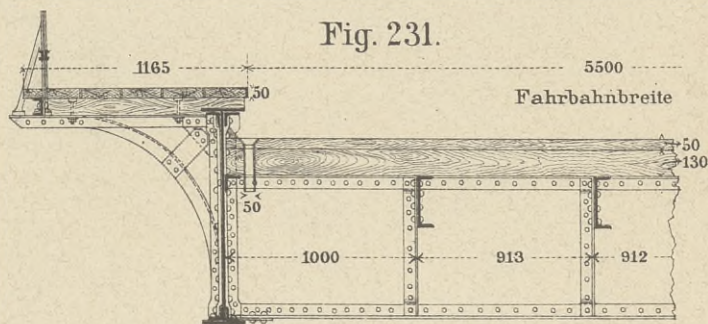
Ueberführung des Weges von Rosslau nach Streez. (Wittenberg-Köthen). 1:40.



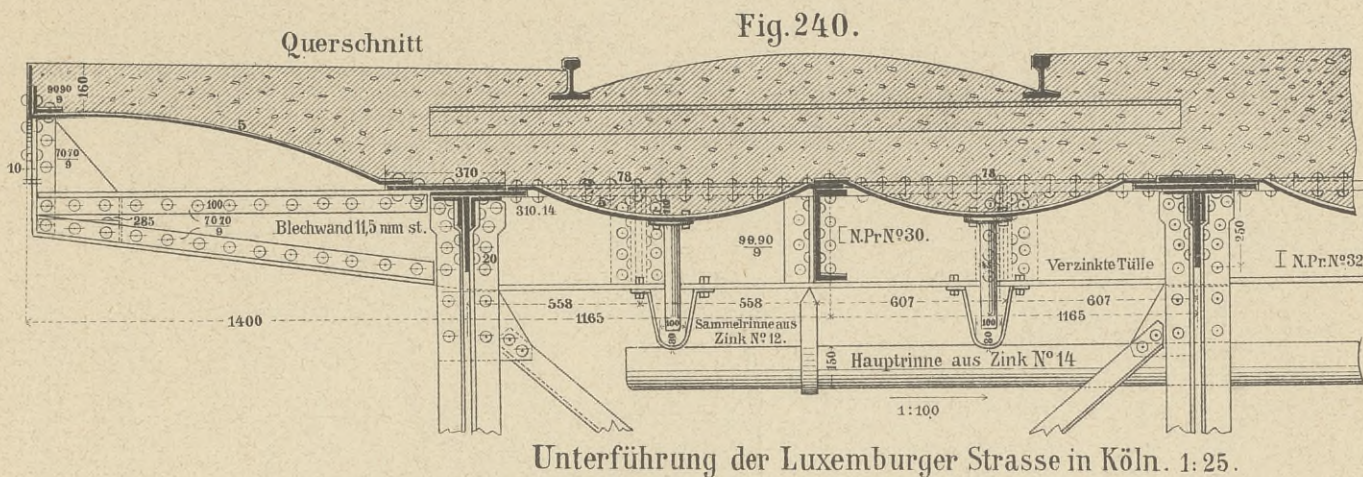
Weserbrücke bei Groß-Hutbergen. 1:40.



Ueberführung am Bahnhofe Rosslau. 1:40

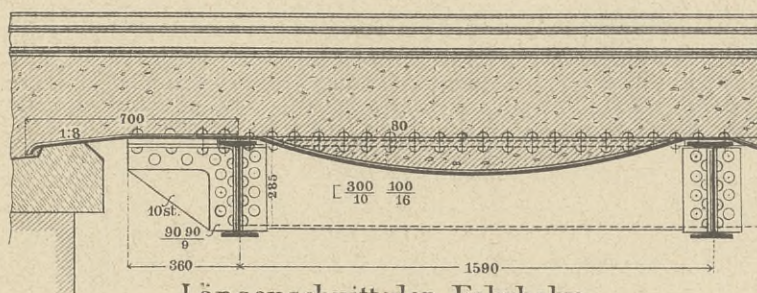


Ueberführung der Landstrasse von Dessau nach Zerbst (Wittenberg-Dessau) 1:40.



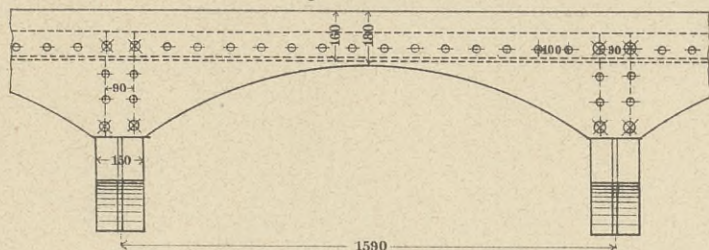
Unterführung der Luxemburger Strasse in Köln. 1: 25.

Fig. 240 a



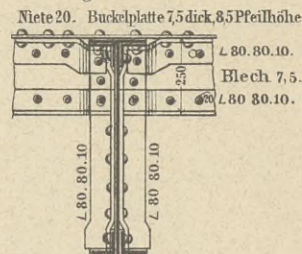
Längenschnitt der Fahrbahn.

Fig. 240 b

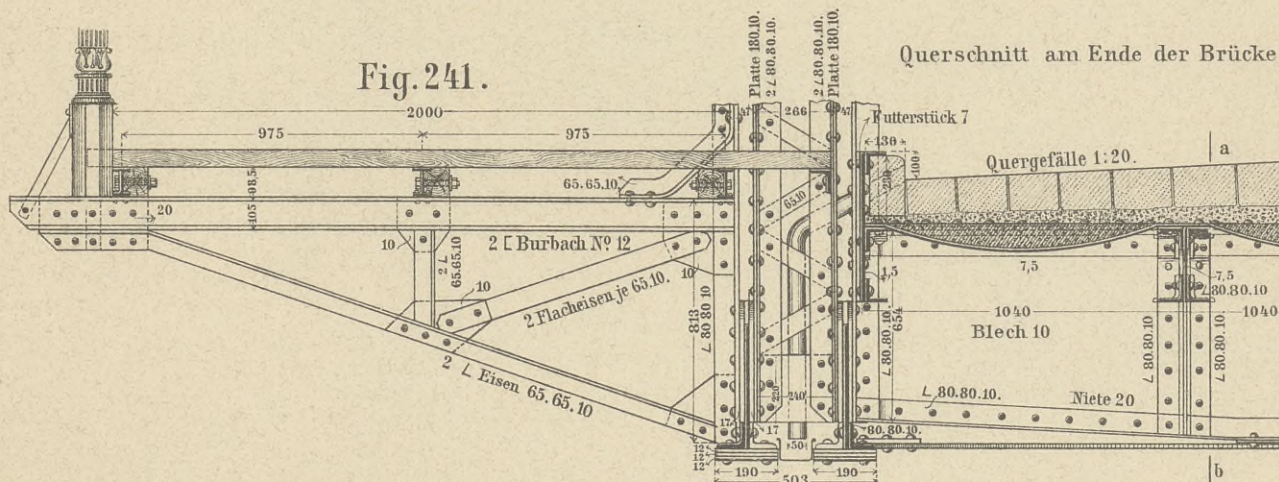


Ansicht.

Fig. 241 a



Schnitt a.b in Fig. 241.



Querschnitt am Ende der Brücke

Überführung der Bahnhofstrasse über Bahnhof Buckau. 1: 25.

Fig. 243^a Schnitt h h

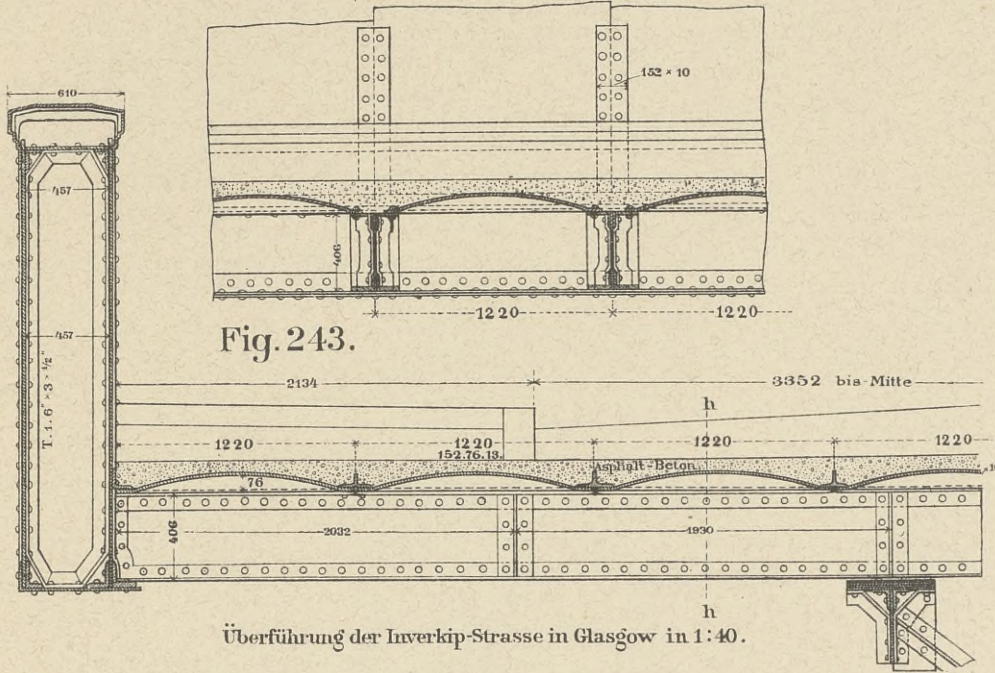


Fig. 243.

Überführung der Inverkip-Strasse in Glasgow in 1:40.

Fig. 244.

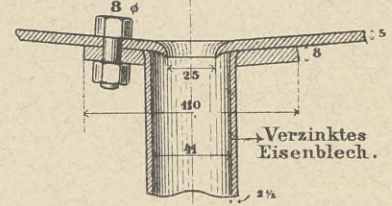


Fig. 244^a

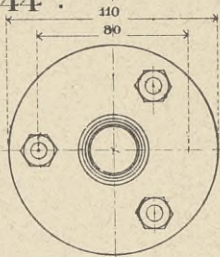
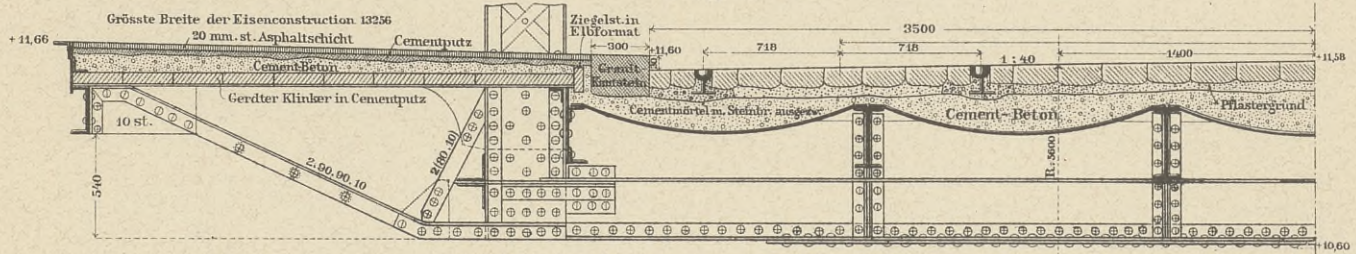
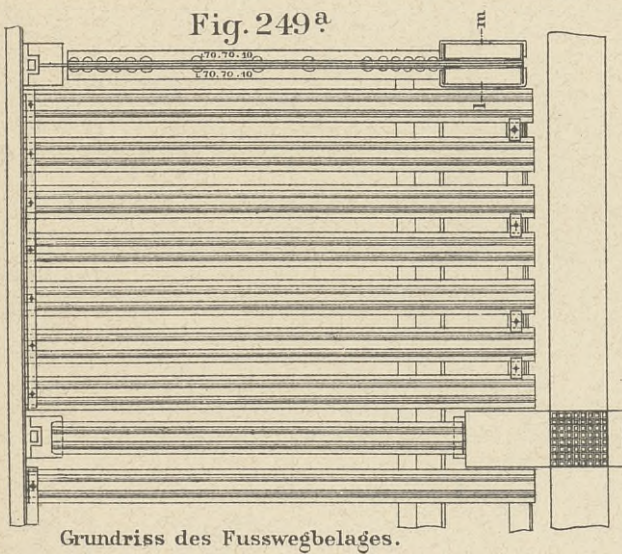


Fig. 249.



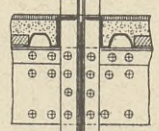
Schnitt durch ein normales Feld der Fahrbahn.

Fig. 249^a



Grundriss des Fusswegbelages.

Fig. 249^d



Schnitt nach lm in Fig. 249^a

Fig. 249^e

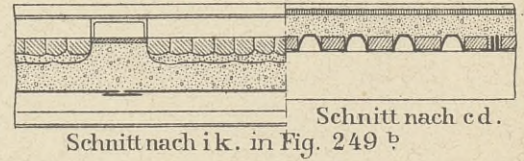
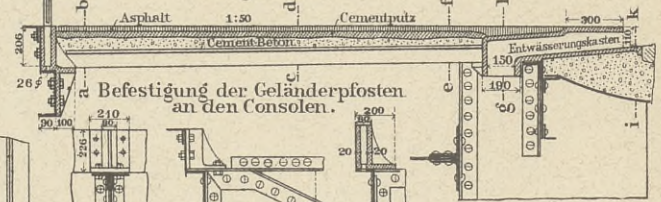


Fig. 249^f

Schnitt nach c d.

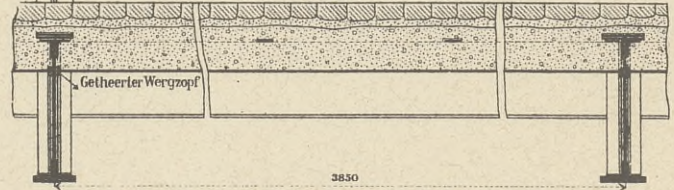
Schnitt nach i k. in Fig. 249^b

Fig. 249^b



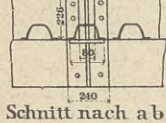
Entwässerung der Fahrbahn. Mitte eines Feldes.

Fig. 249^c



Längenschnitt durch die Mitte der Fahrbahn.

Fig. 249^g



Schnitt nach a b

Fig. 249^h



Schnitt nach e f in Fig. 249^b

Fig. 249ⁱ

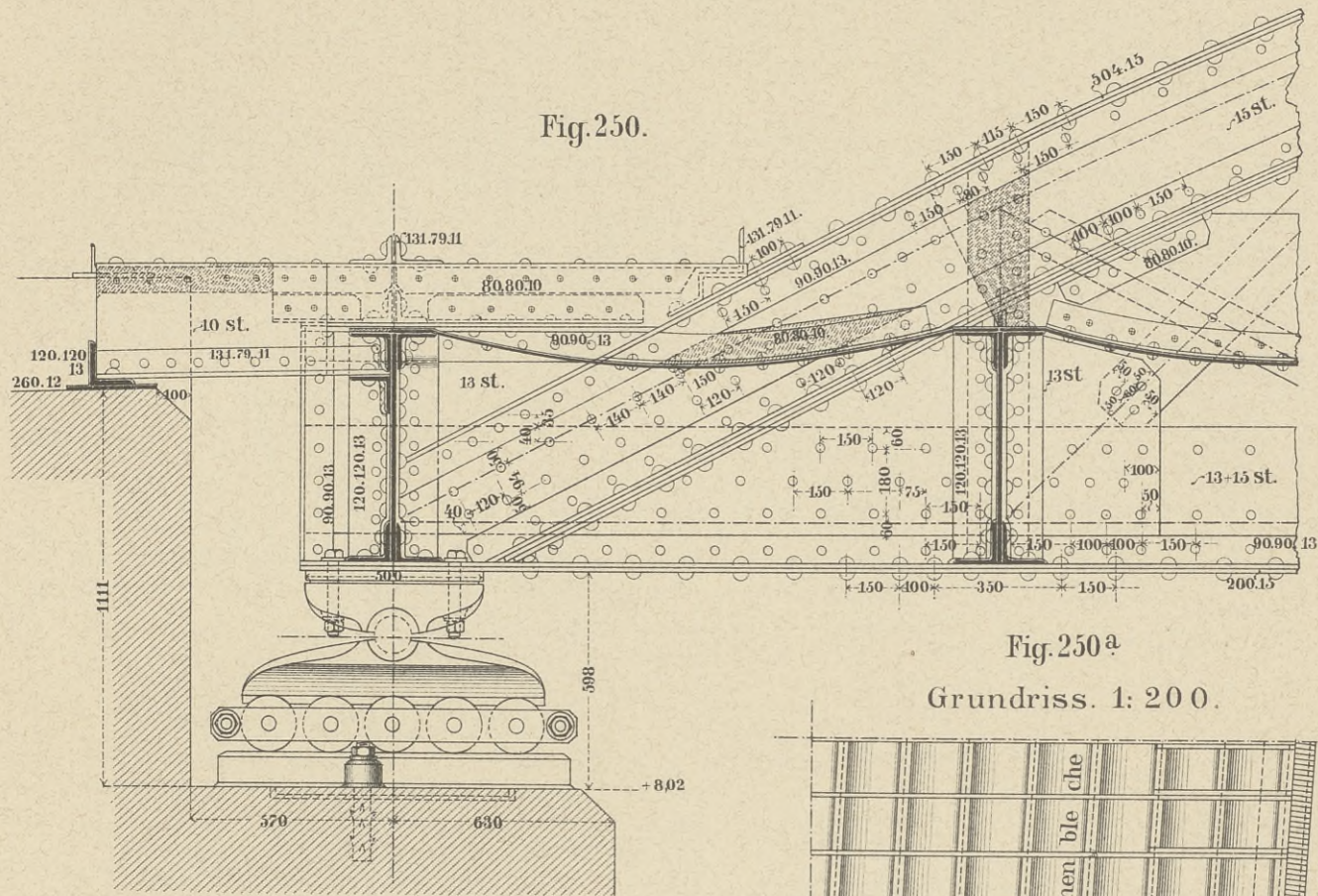


Schnitt nach g h

Strassenbrücke

über die
Norderelbe
bei Hamburg
in 1:40.

Fig. 250.



Sandbrücke in Hamburg. 1: 20.

Fig. 251a

Grundriss. 1: 30.

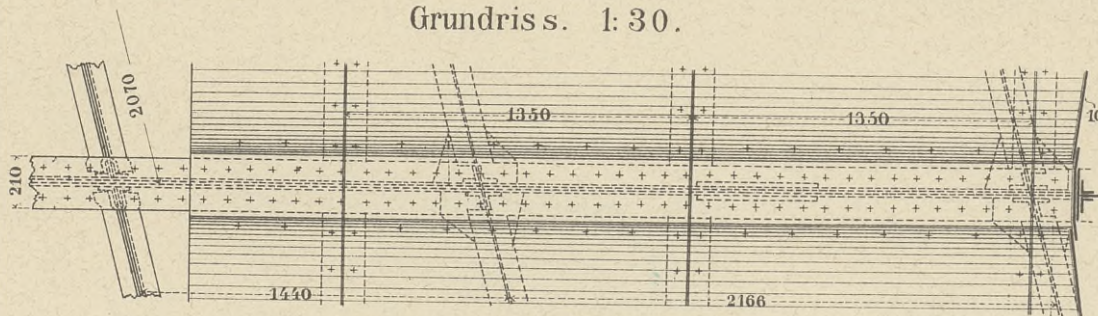
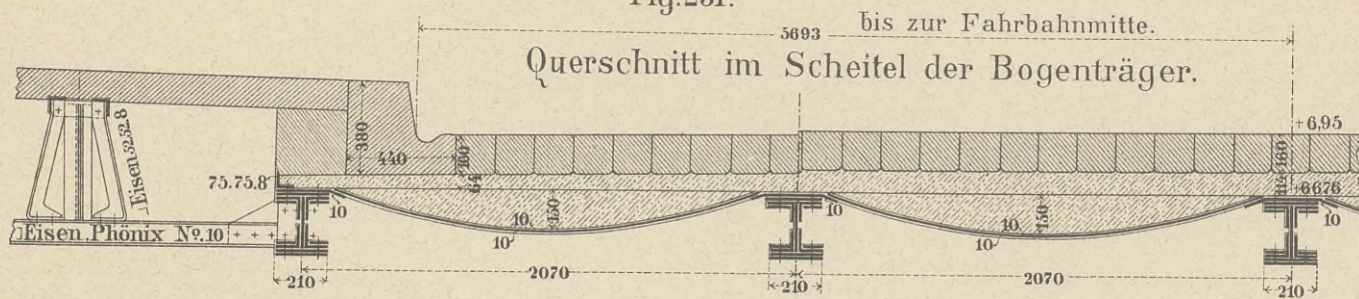


Fig. 251.

Querschnitt im Scheitel der Bogenträger.
bis zur Fahrbahnmitte.



Badbrücke in Berlin. 1: 30.

Fig. 257.
1:30.

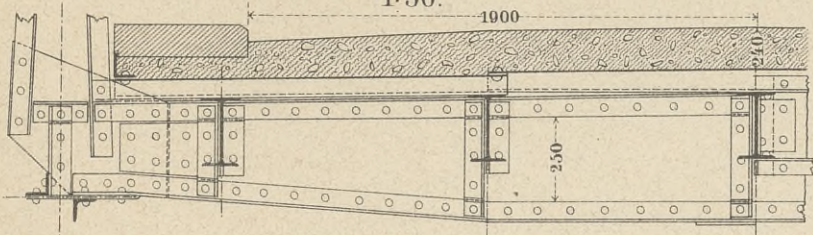


Fig. 257^a
1:50.

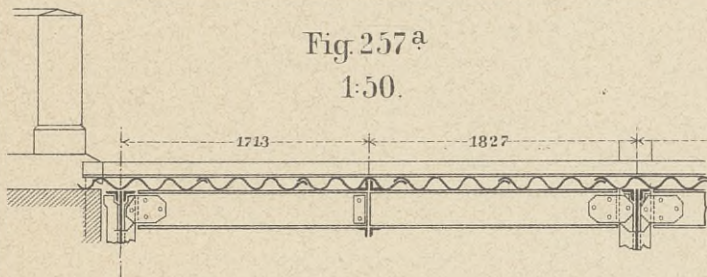
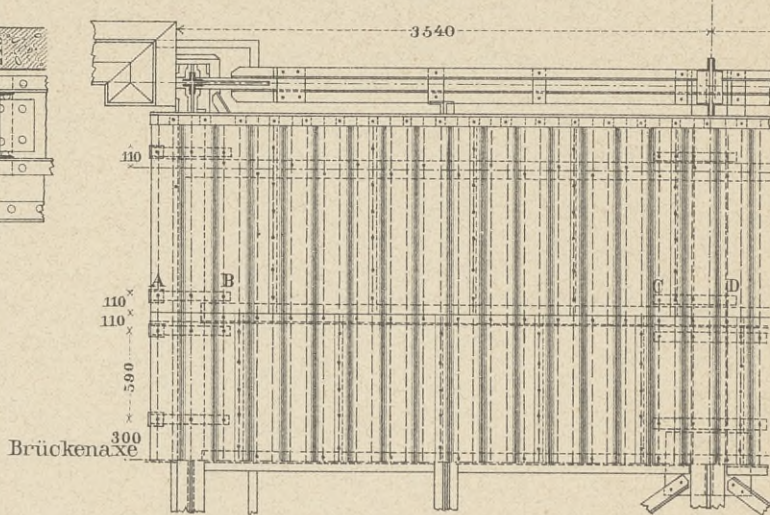
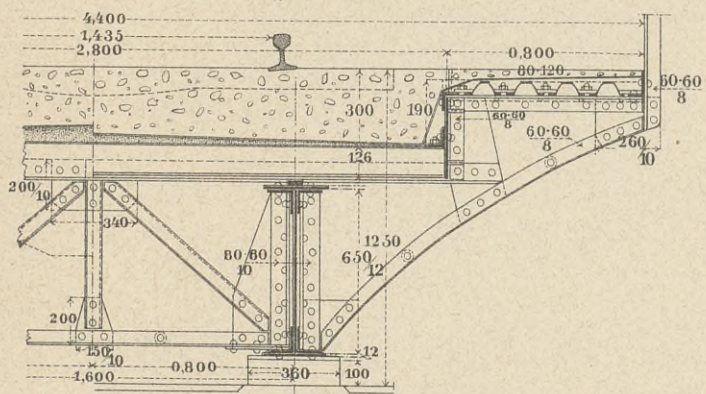


Fig. 257^b 1:50.



Brendbrücke bei Neustadt a/S.

Fig. 274.
1:30.
Querschnitt.



Schweizerische Nordostbahn.

Blechbrücke von 6 Meter lichter Weite.

Fig. 274^a
1:50.
Längenschnitt.

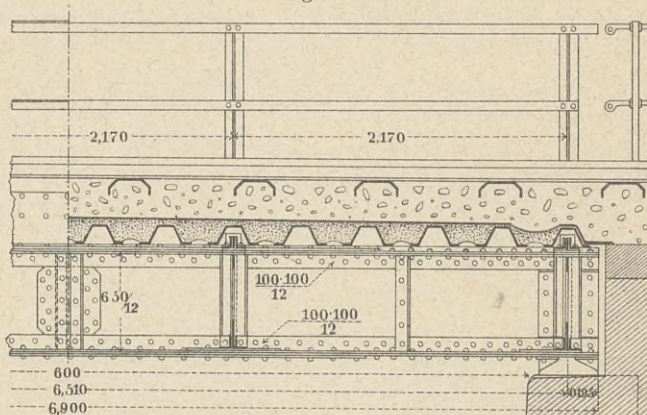


Fig. 275.
1:30.
Querschnitt.

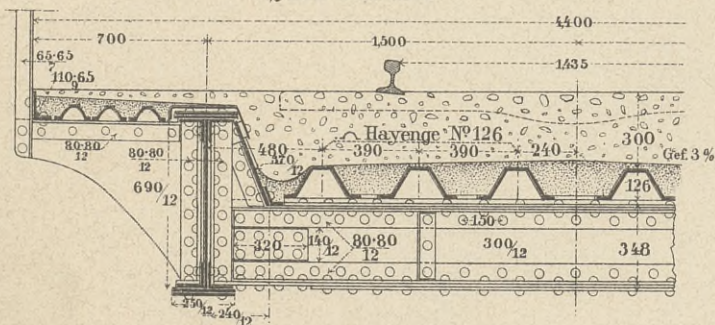
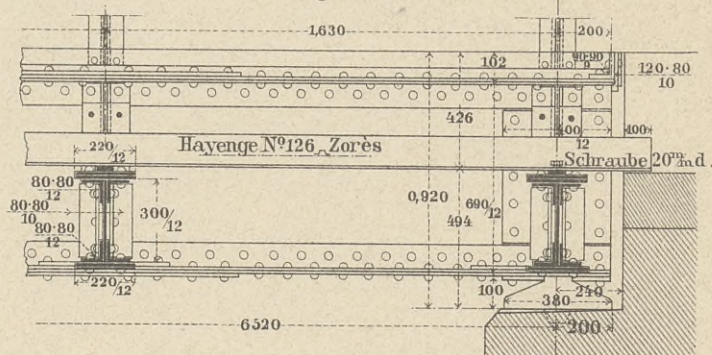
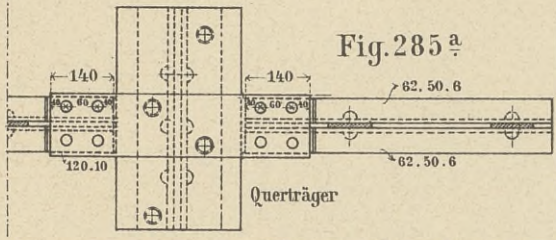
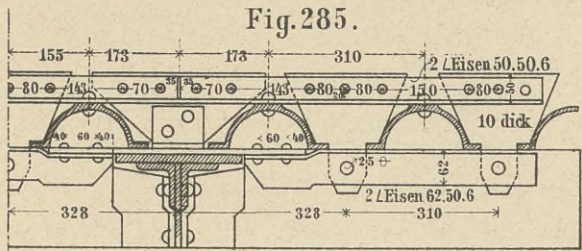
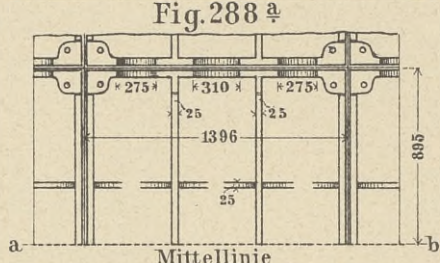
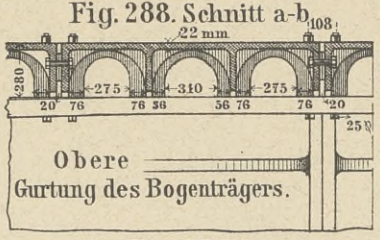


Fig. 275^a
1:30.
Längenschnitt.

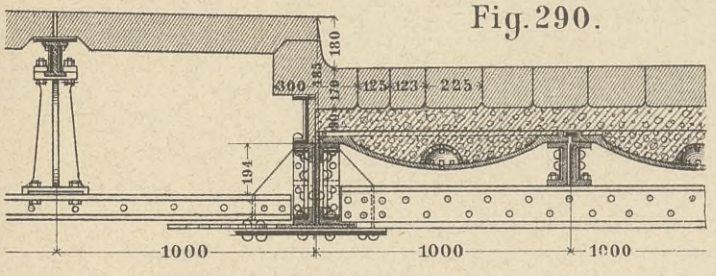




Strassenbrücke über den Lauterbach bei Lengelfelden (Bayern) 1:15.



Medwaybrücke zwischen Rochester u. Strood 1:40.



Michaelbrücke in Berlin. 1:30.

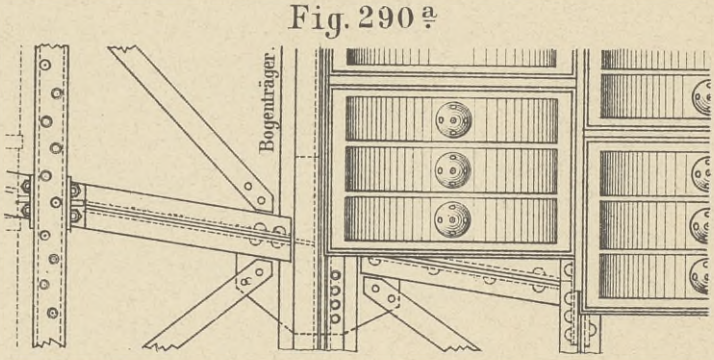
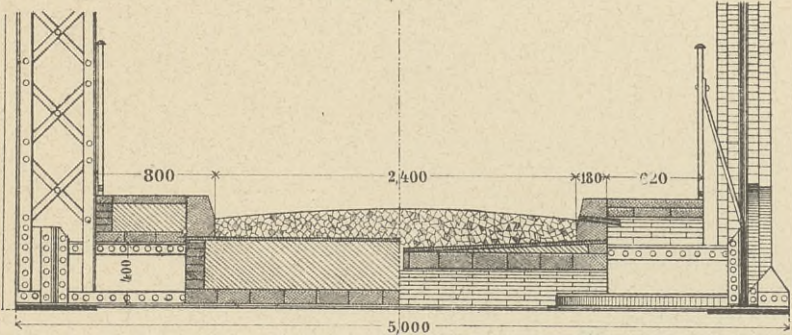


Fig. 294.



Brücke von Monistrol d'Allier 1:50.

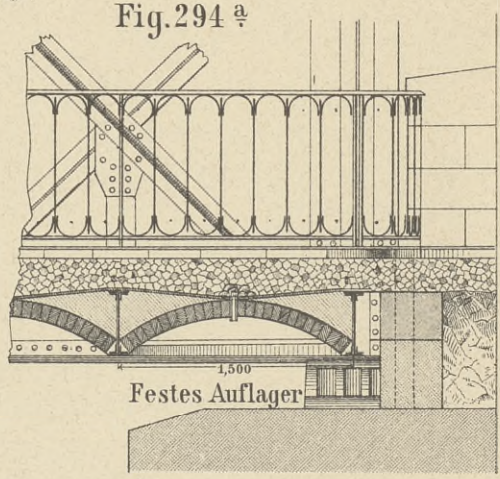
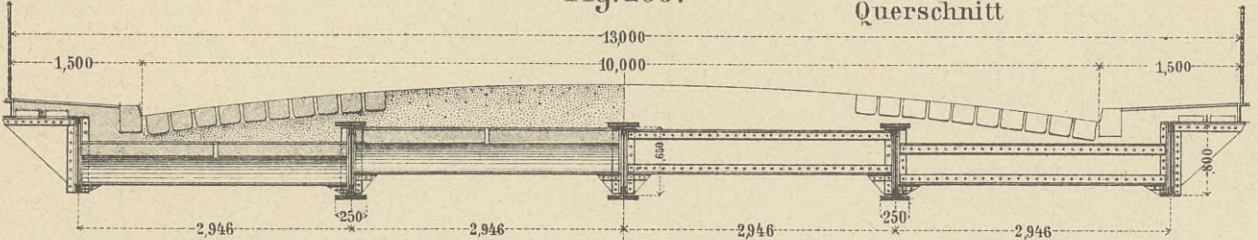
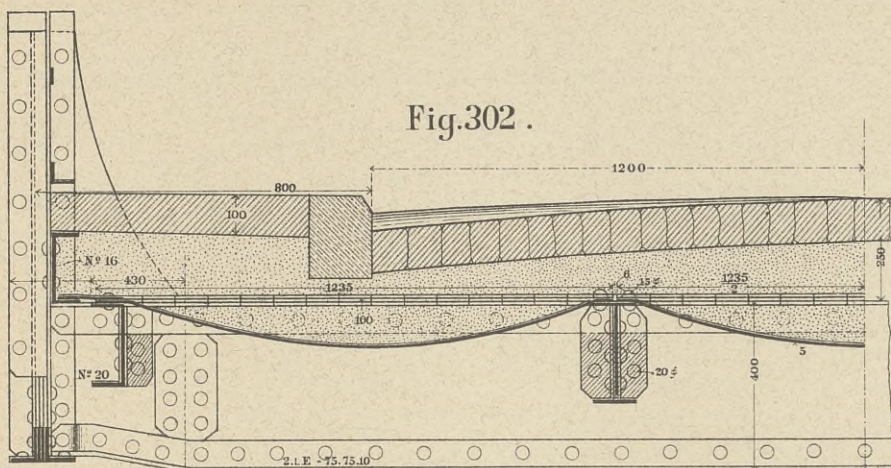


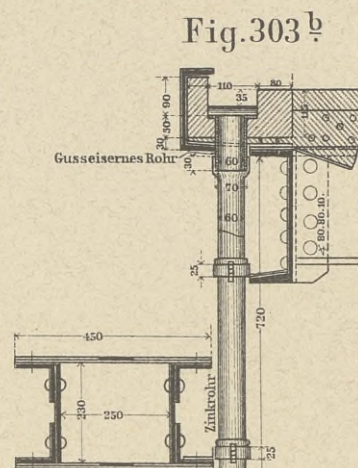
Fig. 295.



Ueberführung der Route Nat. N° 10 von Paris nach Bayonne über die Pariser Gürtelbahn 1:80.



Wege-Überführung auf Bahnhof Minden 1:20.



Entwässerung 1:20.

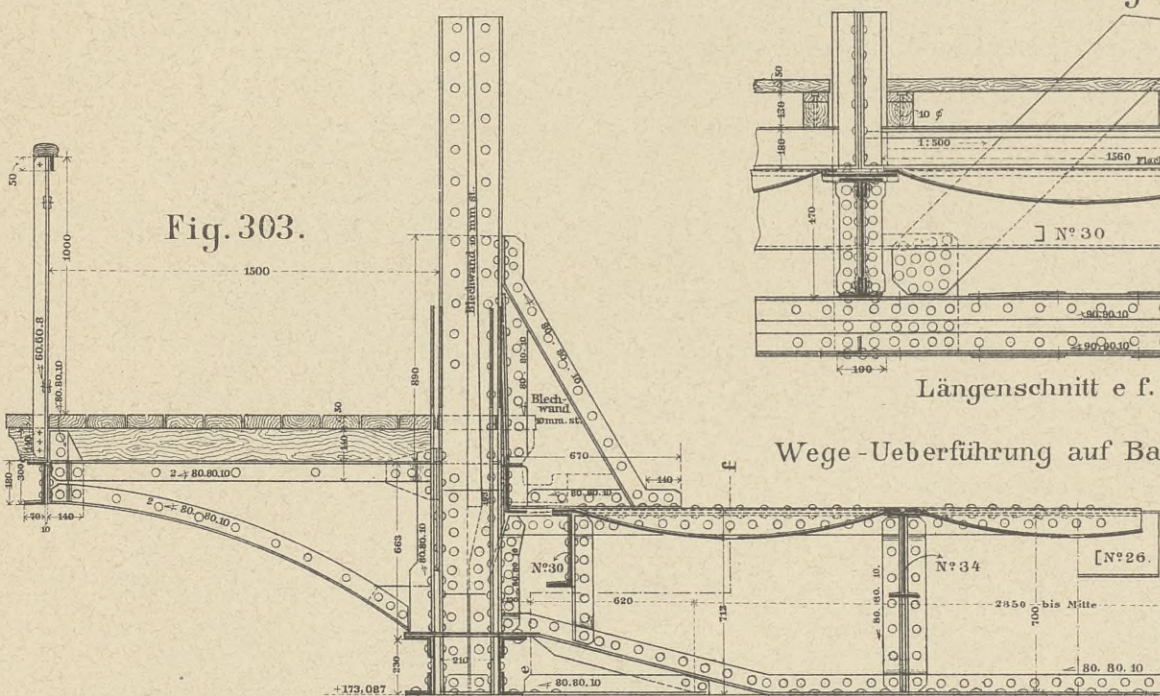
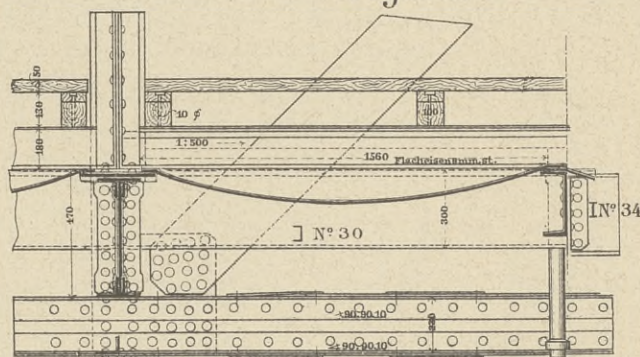


Fig. 303.



Längenschnitt e f. 1:30.

Wege-Ueberführung auf Bahnhof Giessen. 1:30.

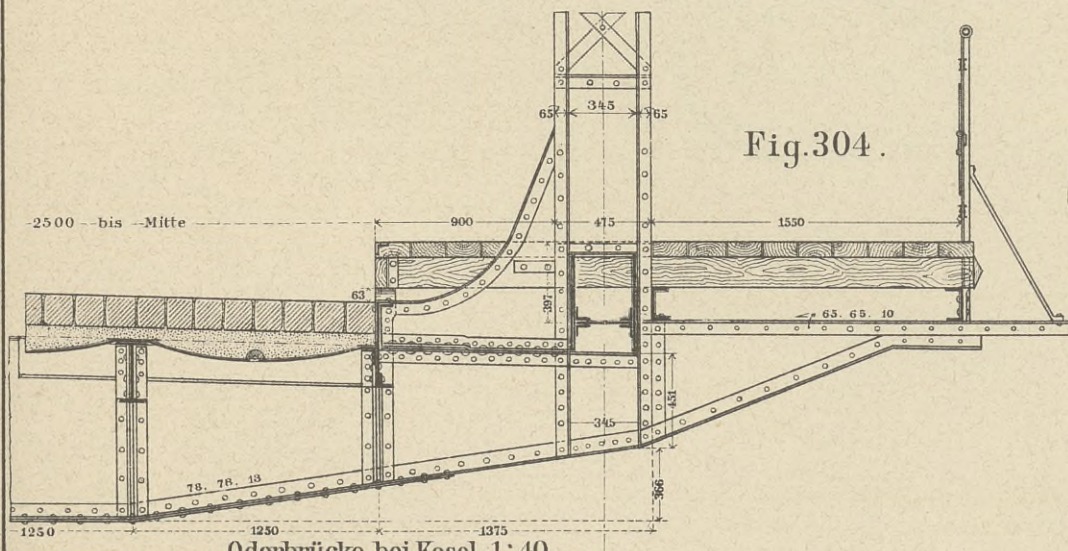


Fig. 304.

Oderbrücke bei Kosel 1:40.

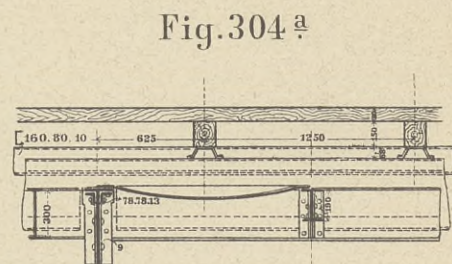


Fig. 304 a

Unter-Mainbrücke in Frankfurt am Main. 1:25.

Fig. 319.

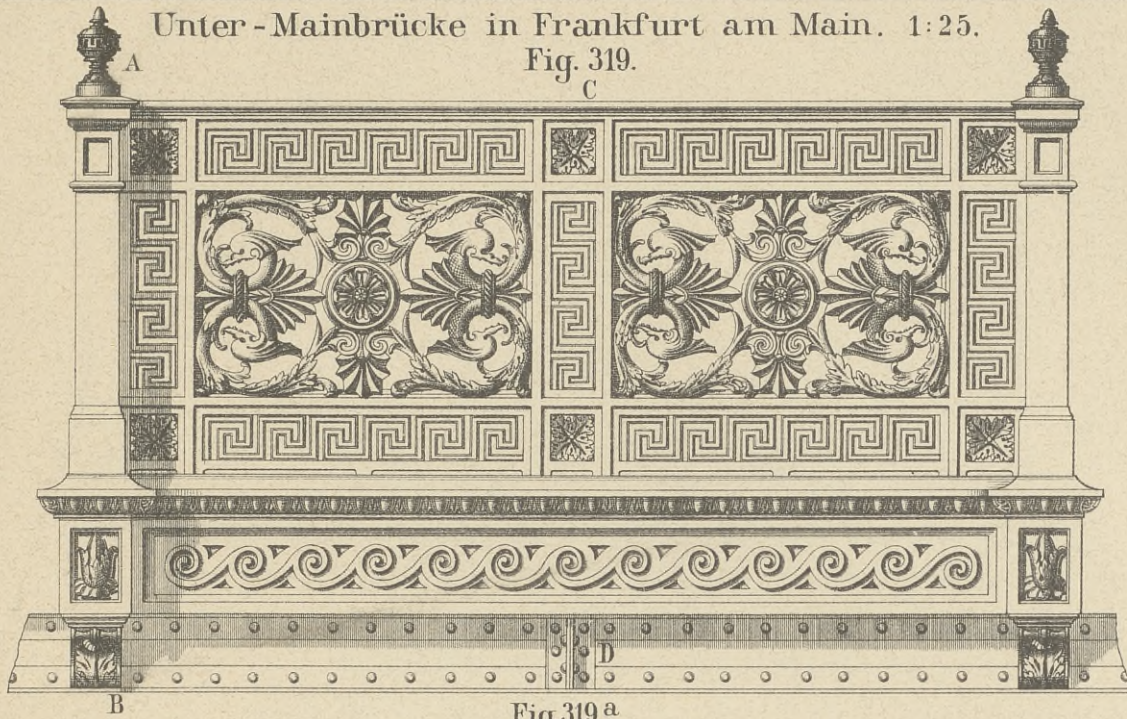


Fig. 319 b
Schnitt A B.

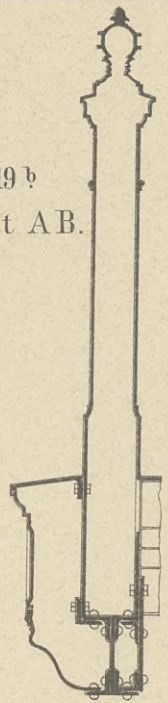


Fig. 319 a
Grundriss.



Unterführung der Charlottenburger Chaussee.
(Berliner Stadtbahn) 1:20.

Fig. 319 c
Schnitt C D.



Fig. 320 a

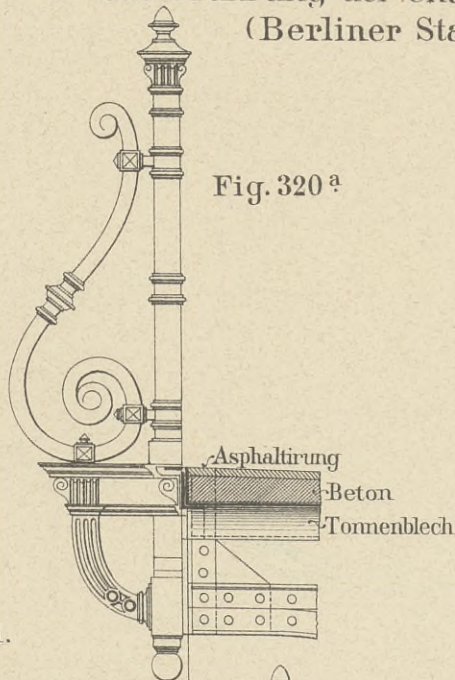


Fig. 320.

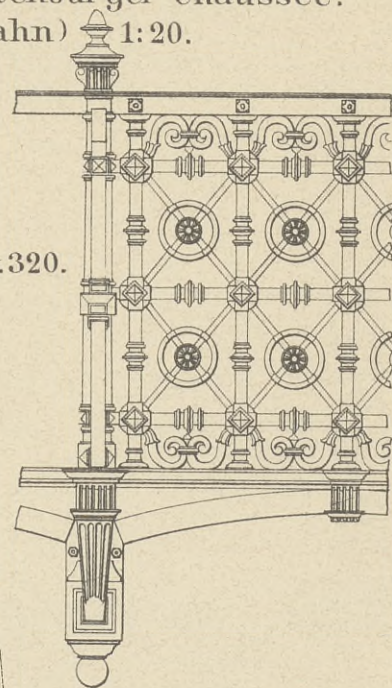
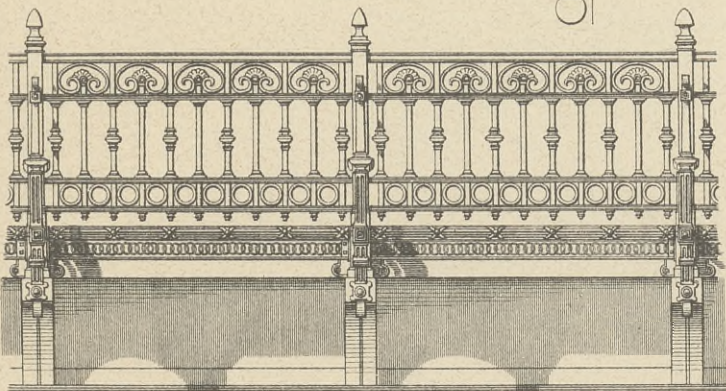
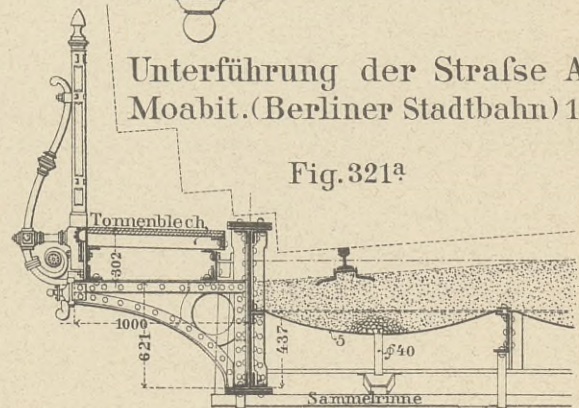


Fig. 321.



Unterführung der Straße Alt-Moabit.
(Berliner Stadtbahn) 1:45.

Fig. 321 a



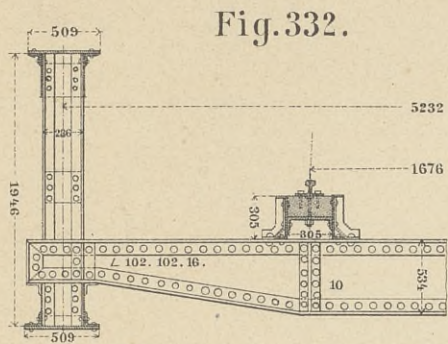


Fig. 332.

Saladobrücke bei Santa Fé.
1:55.

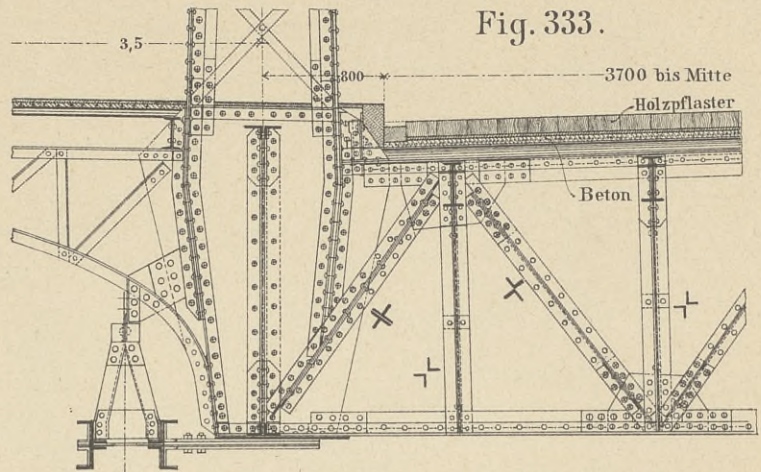


Fig. 333.

Konkurrenzentwurf d. Maschinenbau-Aktiengesellschaft Nürnberg
für eine feste Rheinbrücke bei Bonn. 1:50.

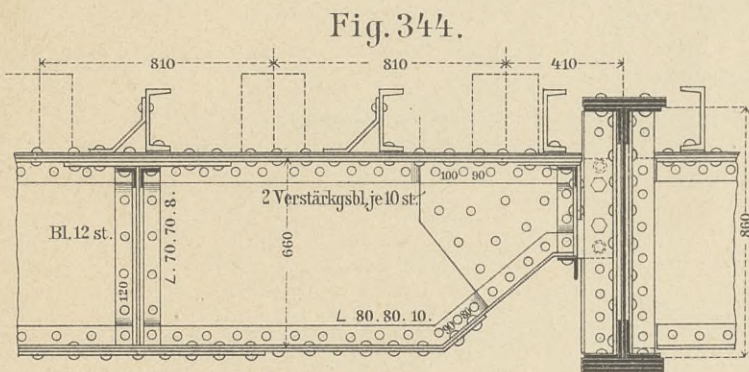
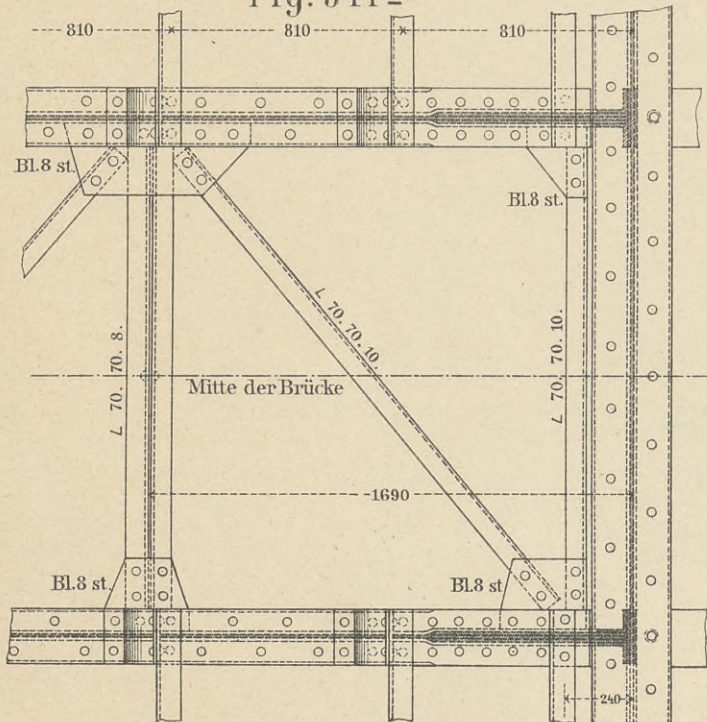


Fig. 344.

Fig. 344 a



Hochbrücke über den Nord-Ostsee-Kanal bei Grünthal.

1:30.

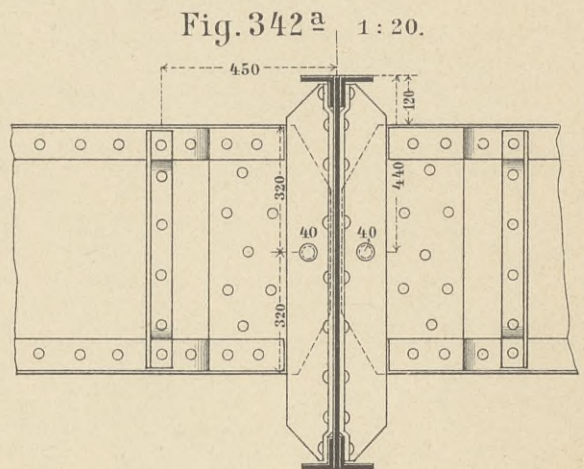
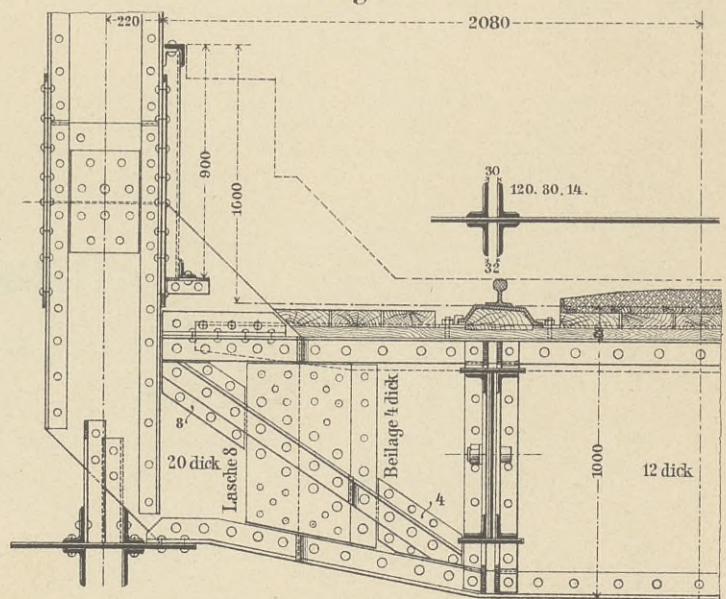


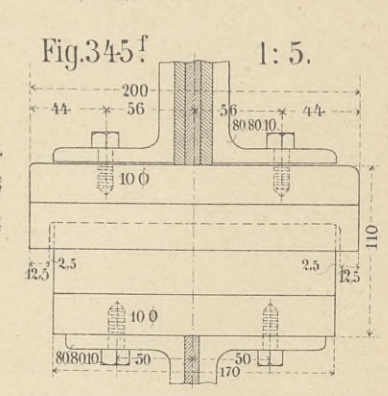
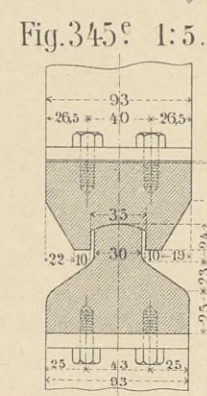
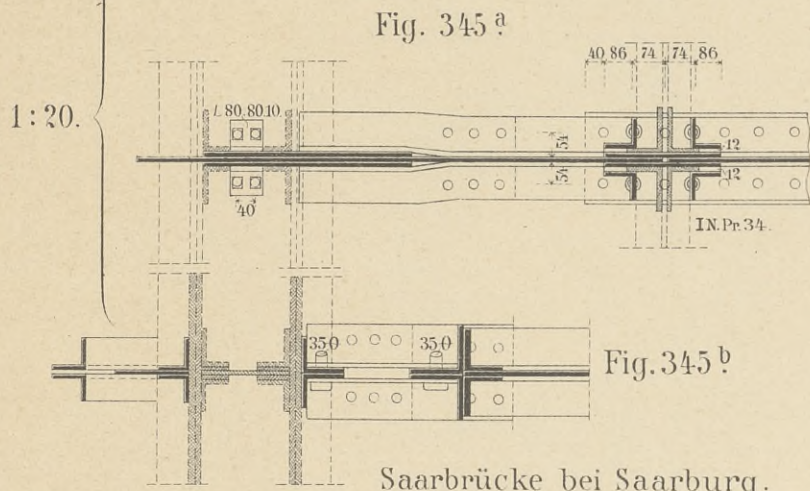
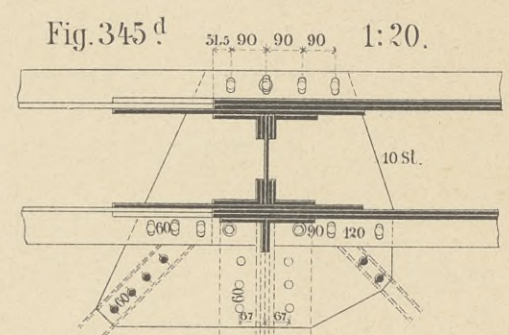
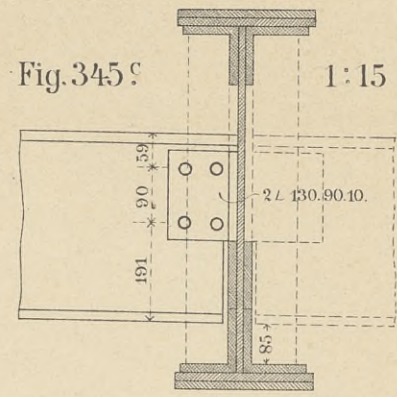
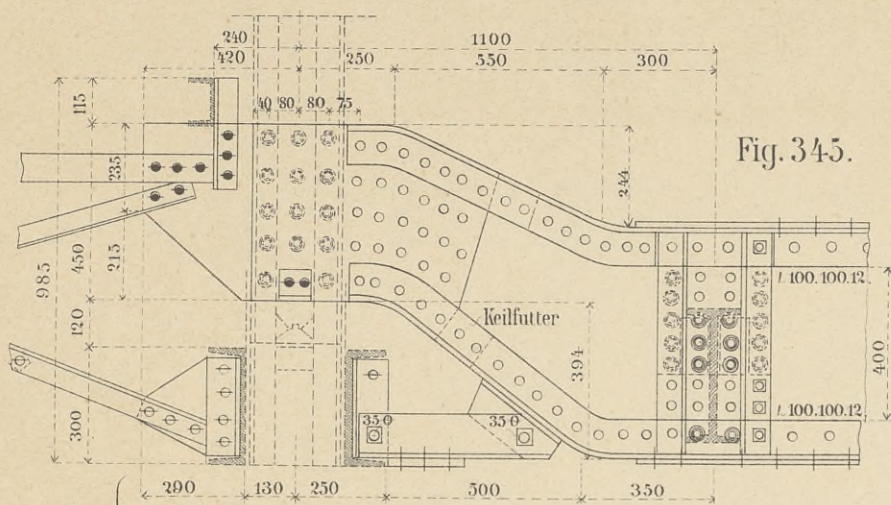
Fig. 342 a 1:20.

Fig. 342.

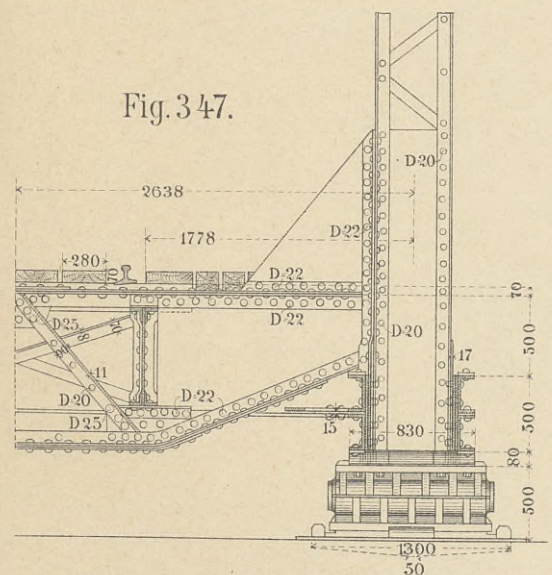


Mainbrücke bei Wertheim.

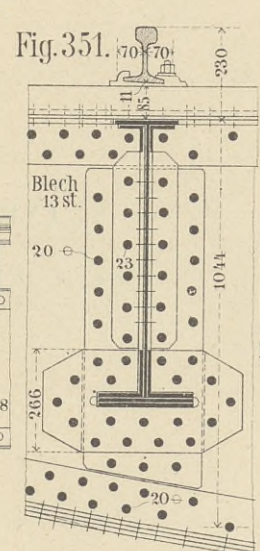
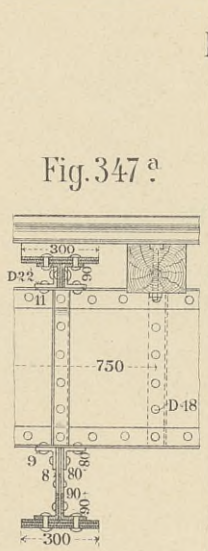
1:30.



Saarbrücke bei Saarburg.



Donaubrücke bei Sigmaringen. 1:50.



Wechselbrücke bei Dirschau. 1:20.

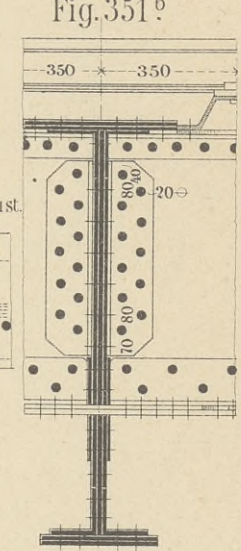
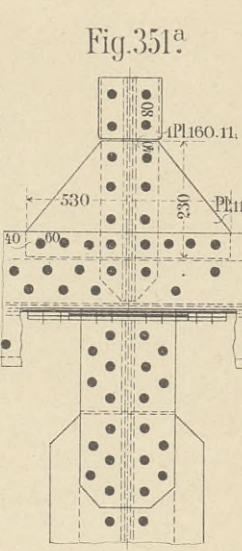




Fig. 353.

Wegunterführ.
bei Osterfeld. 1:20.

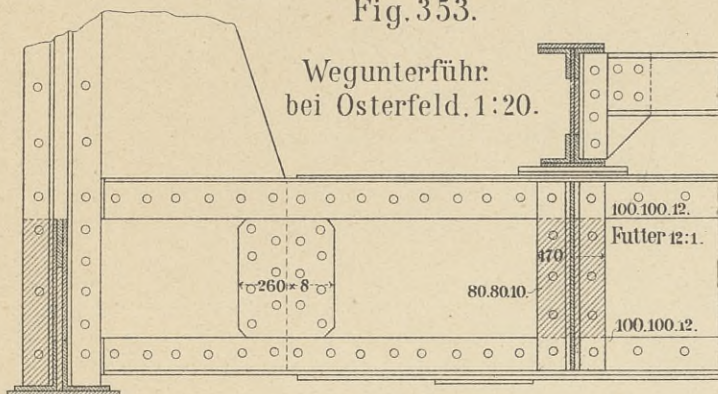


Fig. 353.a.b.

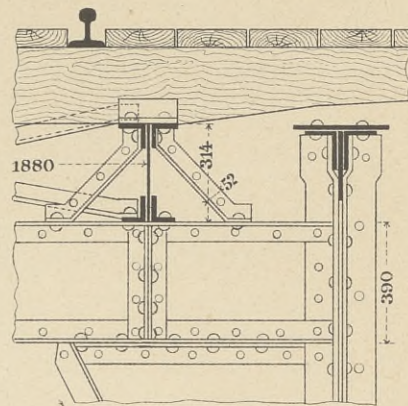
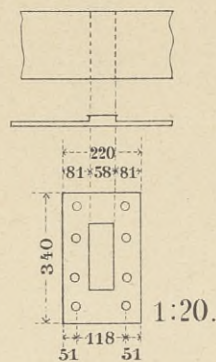


Fig. 354.

Saalebrücke b. Bernburg. 1:25.

Fig. 357.

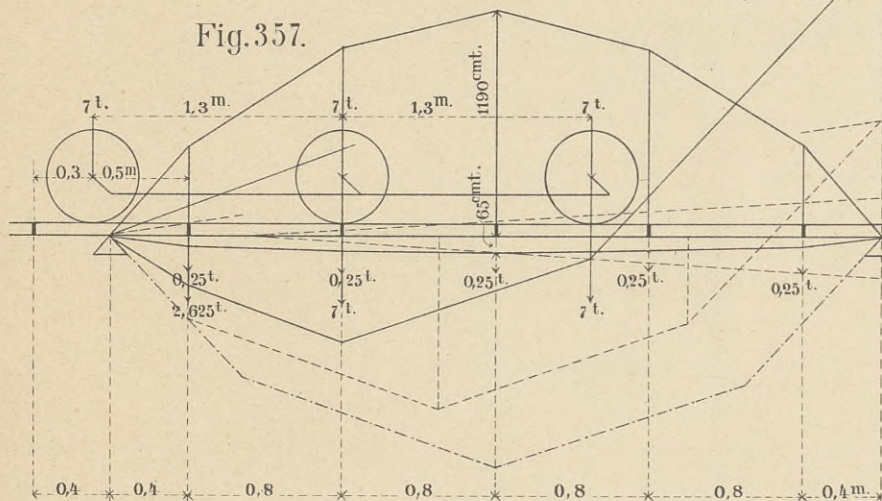
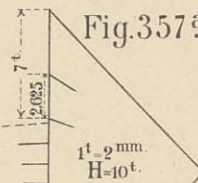


Fig. 357 a



Eigenlast f.d. Knotenp. 0.25 t

1:40.

Fig. 405.

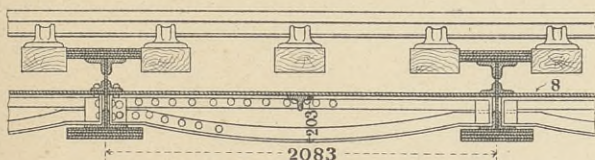
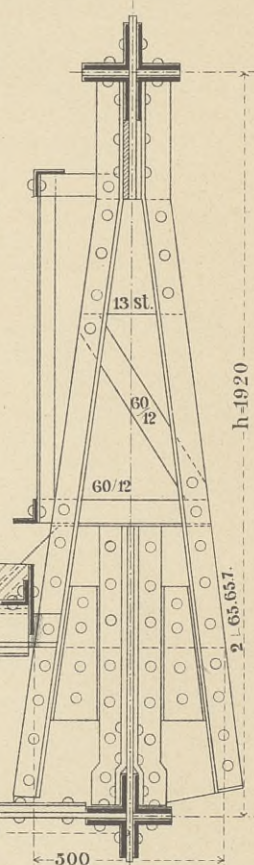
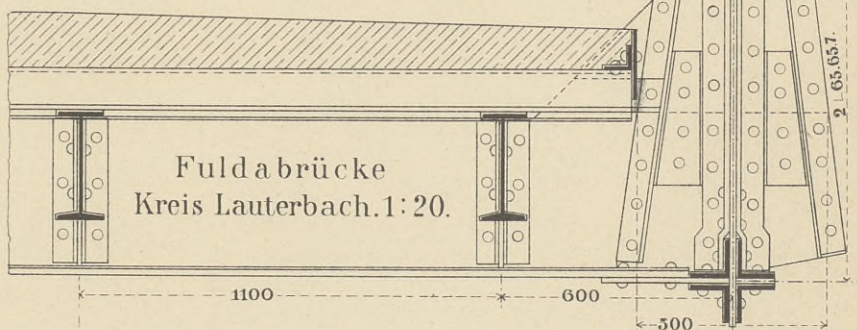


Fig. 406 a



Fulda brücke
Kreis Lauterbach. 1:20.

Fig. 406.

Brook-Strassenunterführ., Jikley. 1:45.

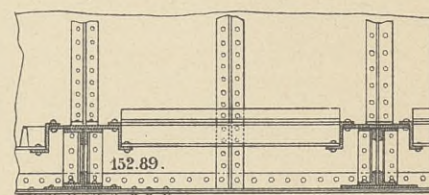
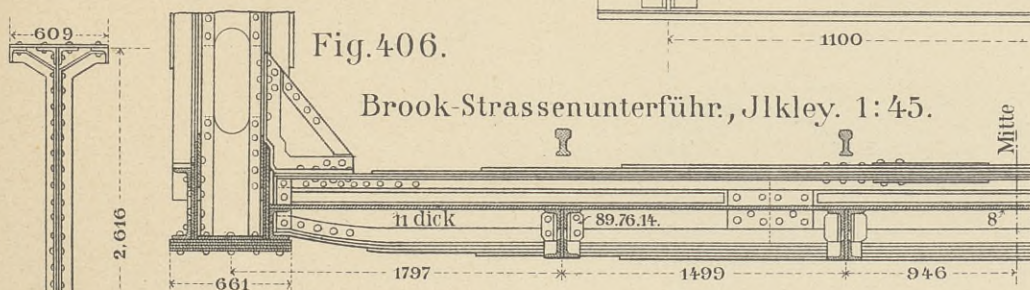
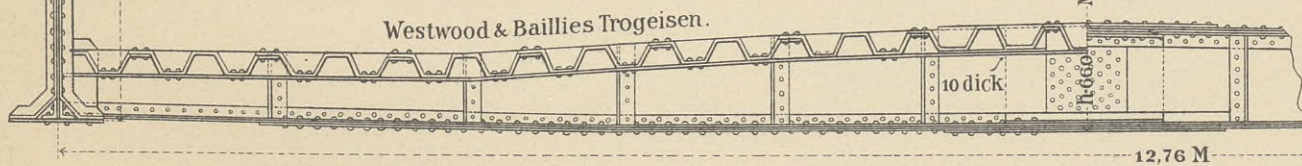


Fig. 407 a

Westwood & Baillies Trogeisen.

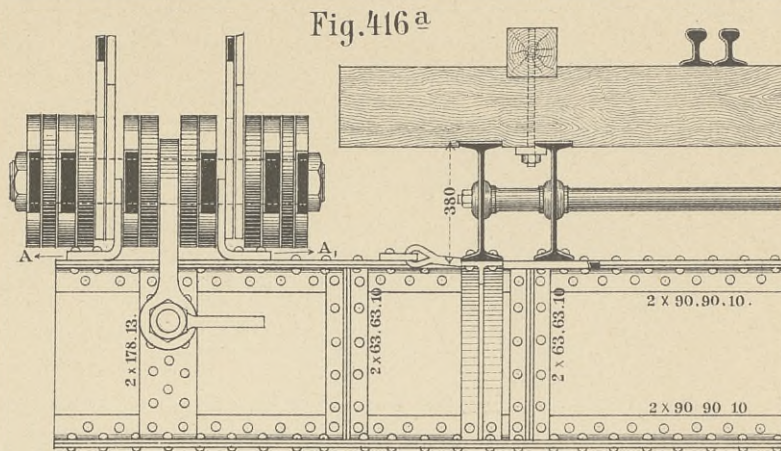
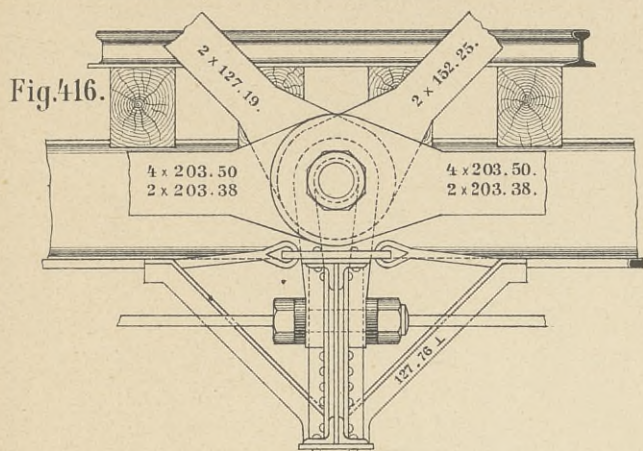


Battlebridge-Strassenüberführung, London 1:45.

Fig. 407.







Monongahelabrücke in Port Perry bei Pittsburg. 1:25.

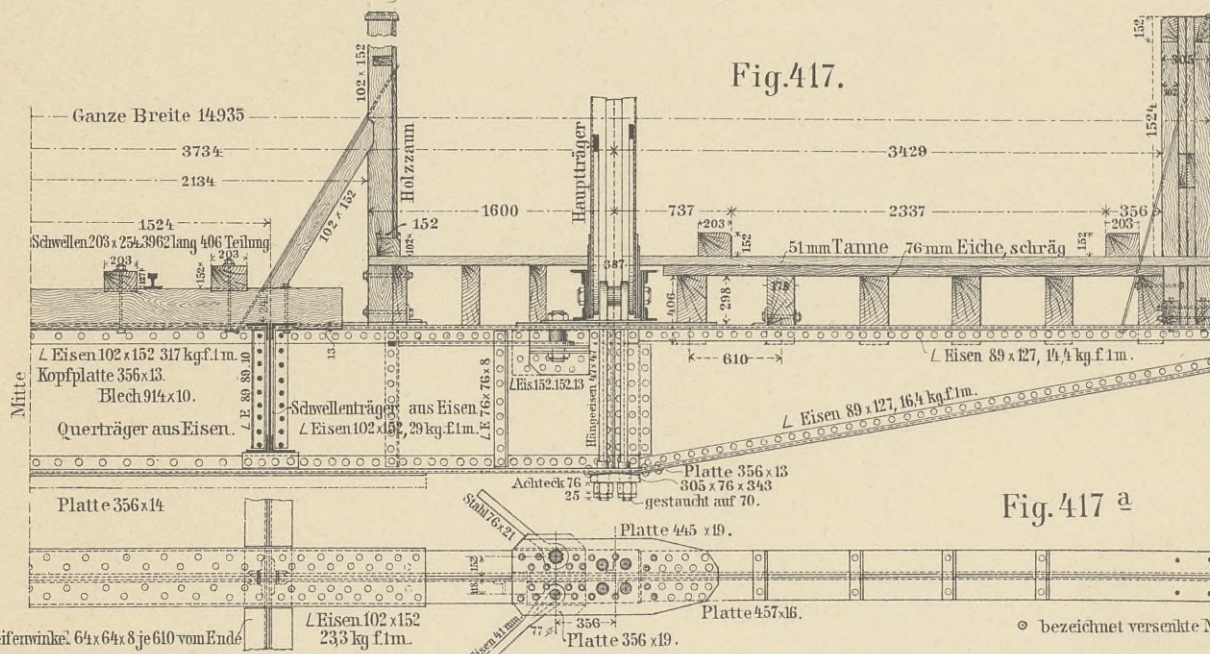


Fig. 417.

Fig. 417 a

Kentucky- und Indiana-Brücke. 1:50.

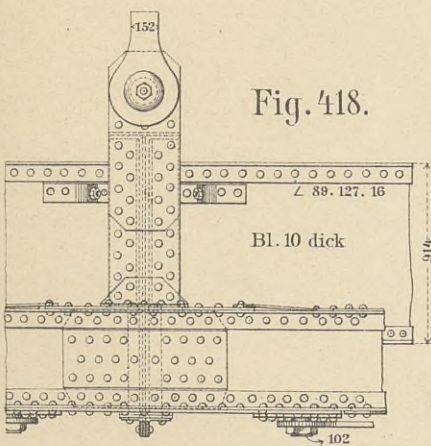


Fig. 418.

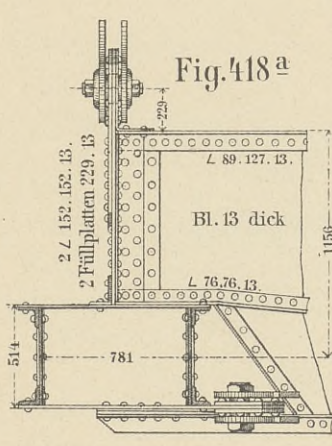


Fig. 418 a

Ohiobrücke bei Cairo (Nordamerika). 1:40.

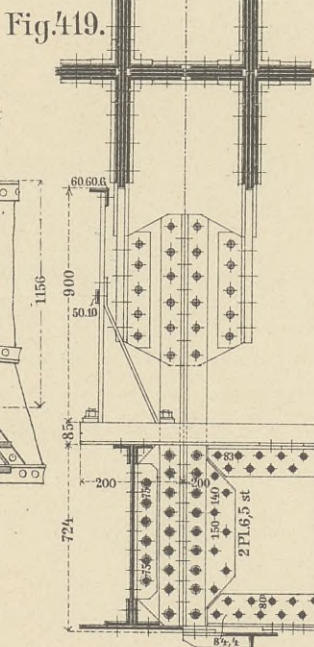


Fig. 419.

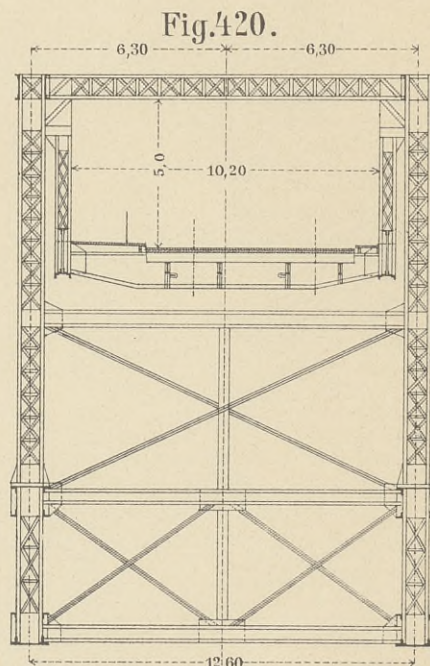


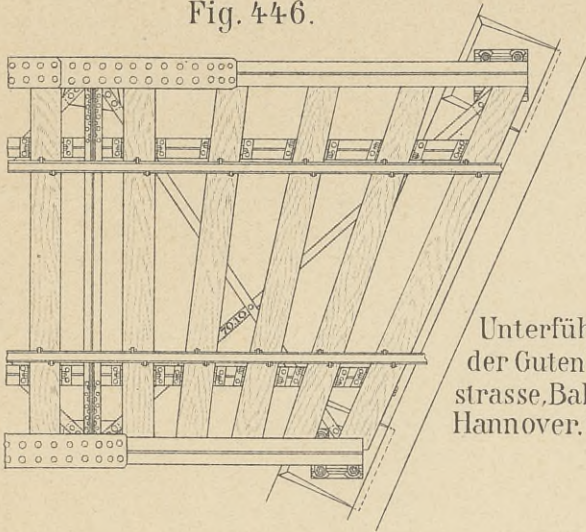
Fig. 420.

Hochbrücke bei Levensau. 1:250.

Wechselbrücke bei Dirschau. 1:30.



Fig. 446.



Unterführung der Gutenbergstrasse, Bahnhof Hannover. 1:60.

Fig. 447.

Siegbrücke bei Bahnhof Au. 1:50.

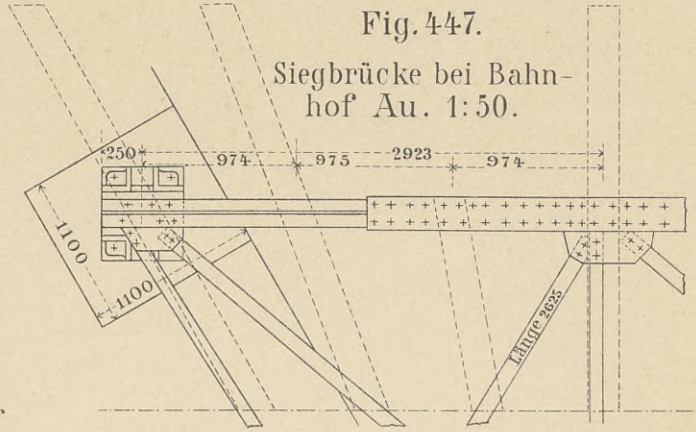


Fig. 450.

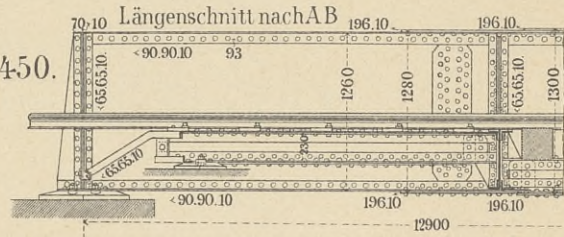
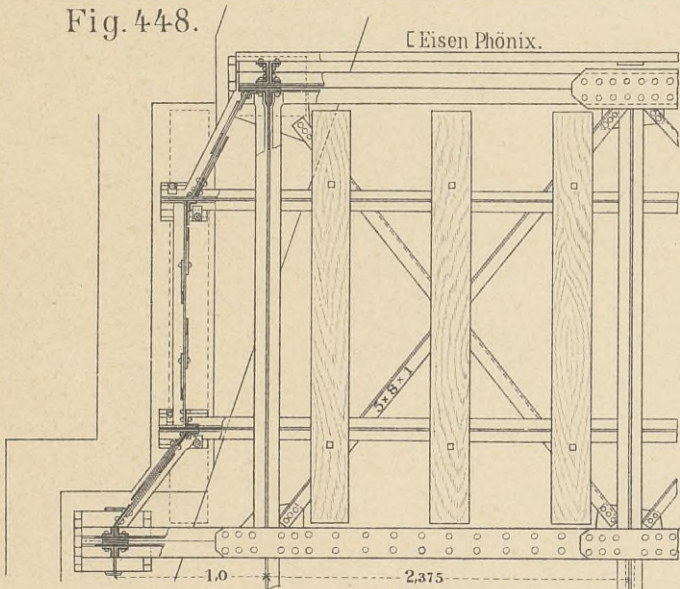
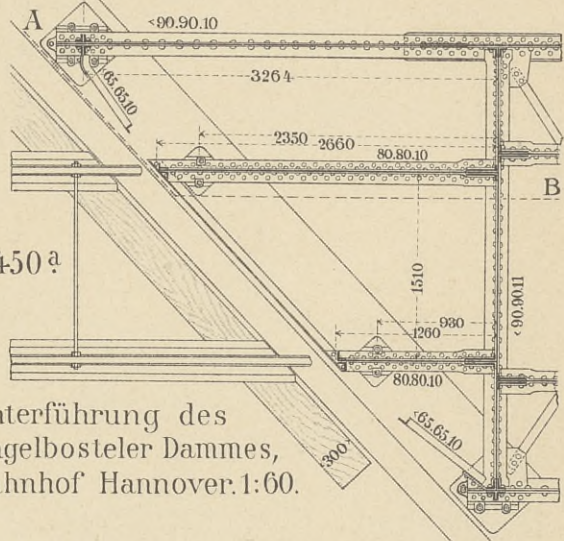


Fig. 448.



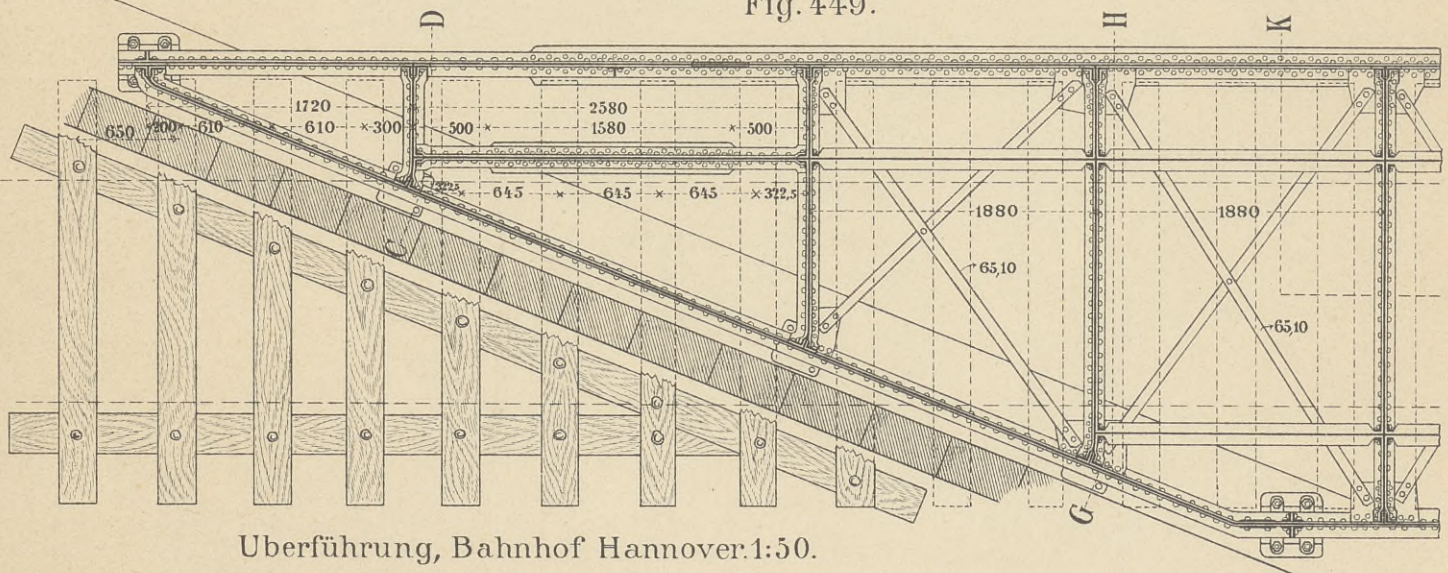
Unterführung b. Malsfeld. 1:50.

Fig. 450 a

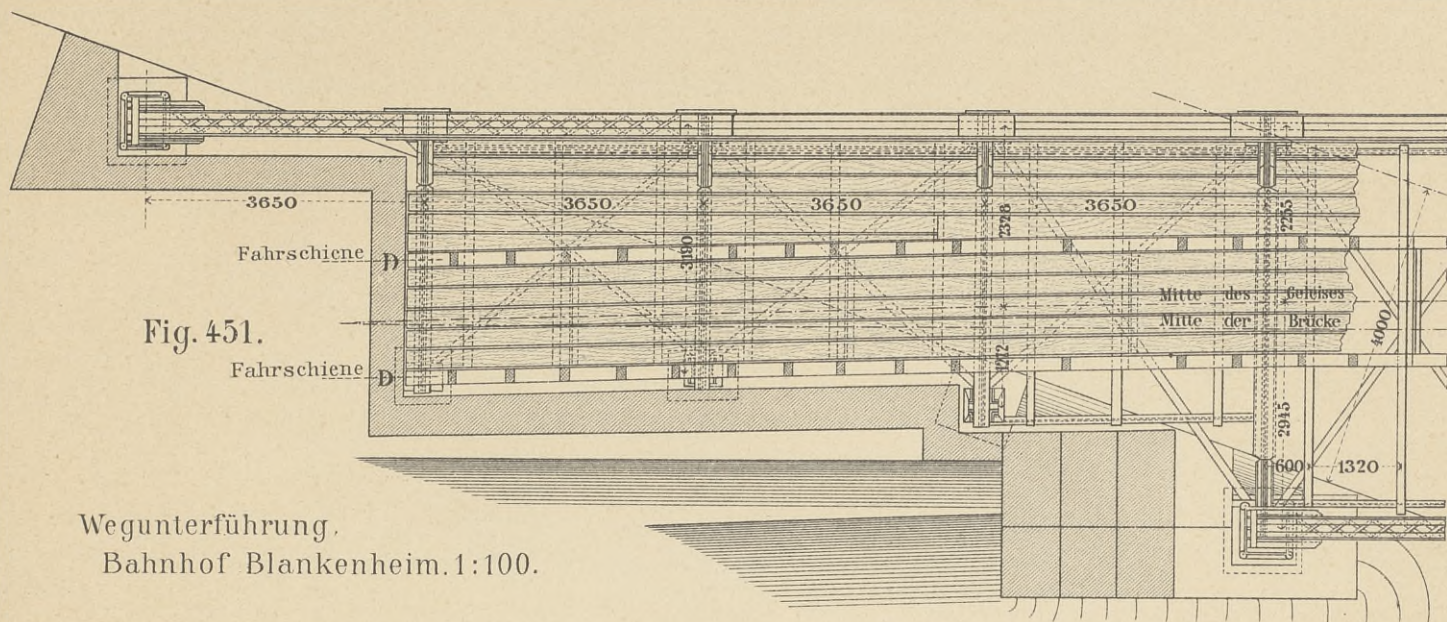


Unterführung des Engelbosteler Damms, Bahnhof Hannover. 1:60.

Fig. 449.

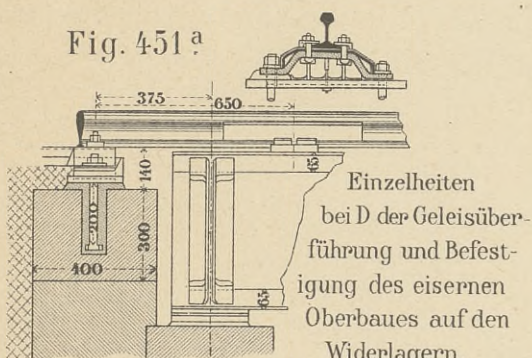


Überführung, Bahnhof Hannover. 1:50.



Wegunterführung.
Bahnhof Blankenheim. 1:100.

Fig. 451^a



Einzelheiten
bei D der Geleisüber-
führung und Befestig-
ung des eisernen
Oberbaues auf den
Widerlagern.

1:25.

Fig. 451^b

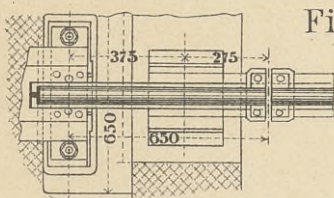
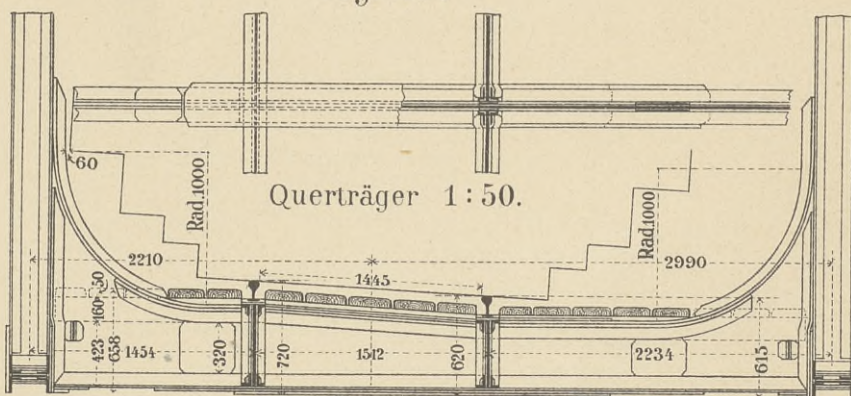
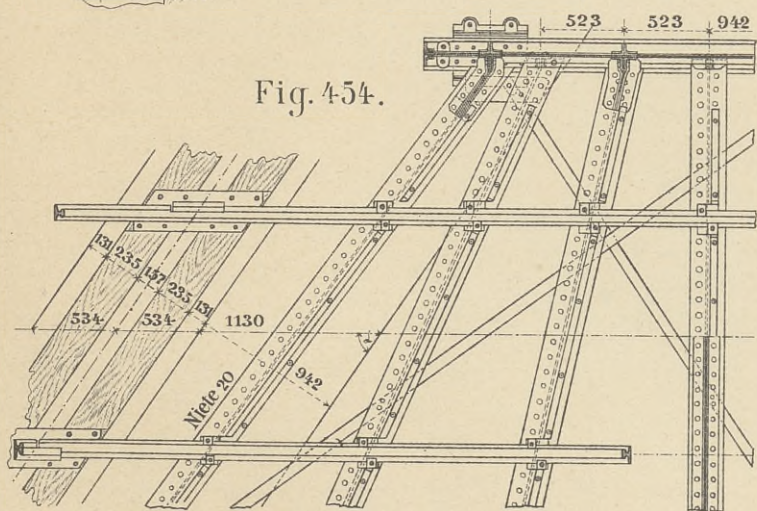


Fig. 451^c



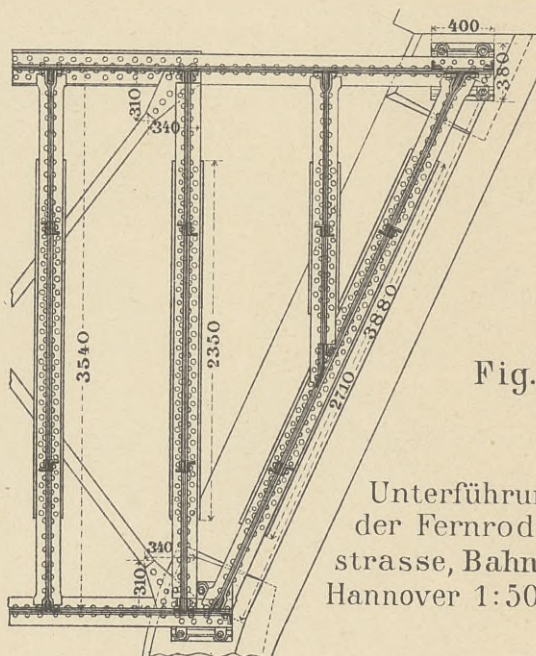
Querträger 1:50.

Fig. 454.



Unterführung der Schöneberger Uferstrasse,
Berlin Potsdamer Bahnhof 1:50.

Fig. 455.



Unterführung
der Fernroder-
strasse, Bahnhof
Hannover 1:50.

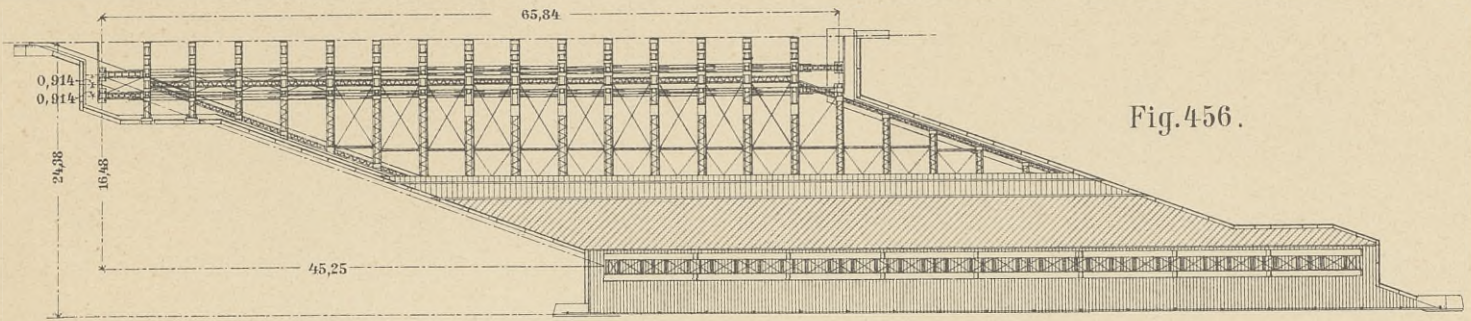


Fig. 456.

Überführung der Boylstonstrasse, Boston.

1: 70.

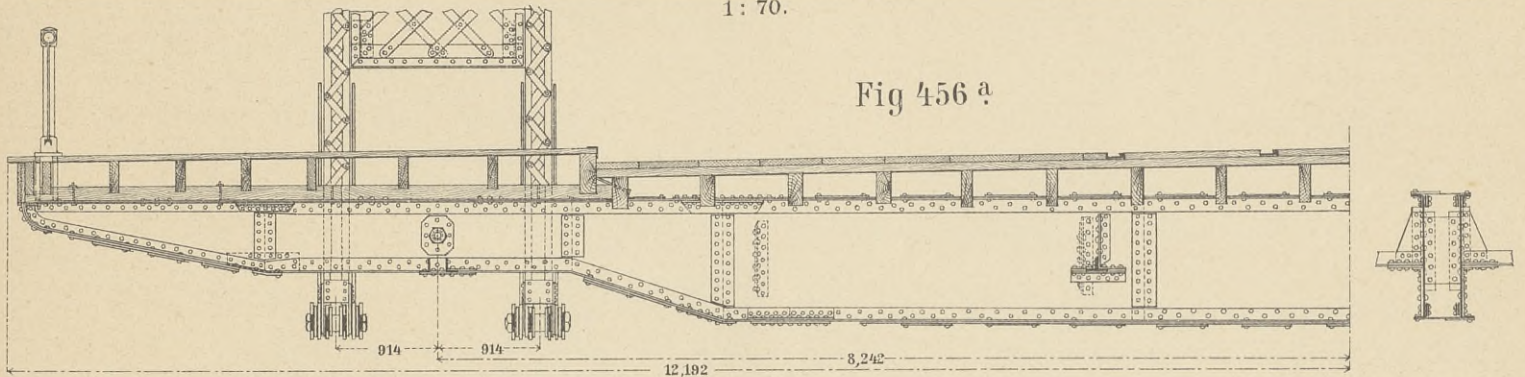


Fig 456 a

Fig. 458.

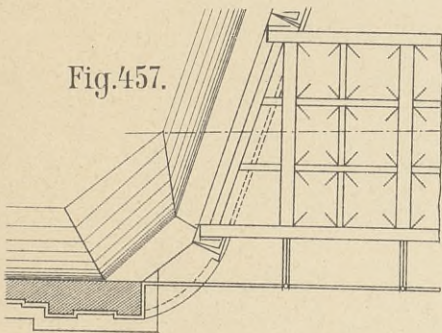
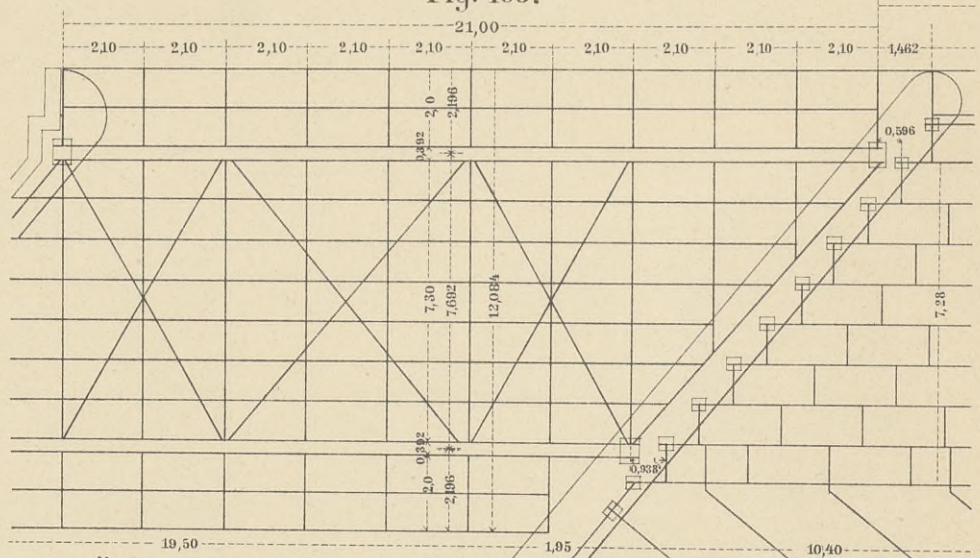


Fig. 457.

Unterführung des Dovenhorst-Steinweges,
Bahnhof Bremen.

1: 150



Überführung der Bahnhofstrasse über Bahnhof Buckau.

1: 200.

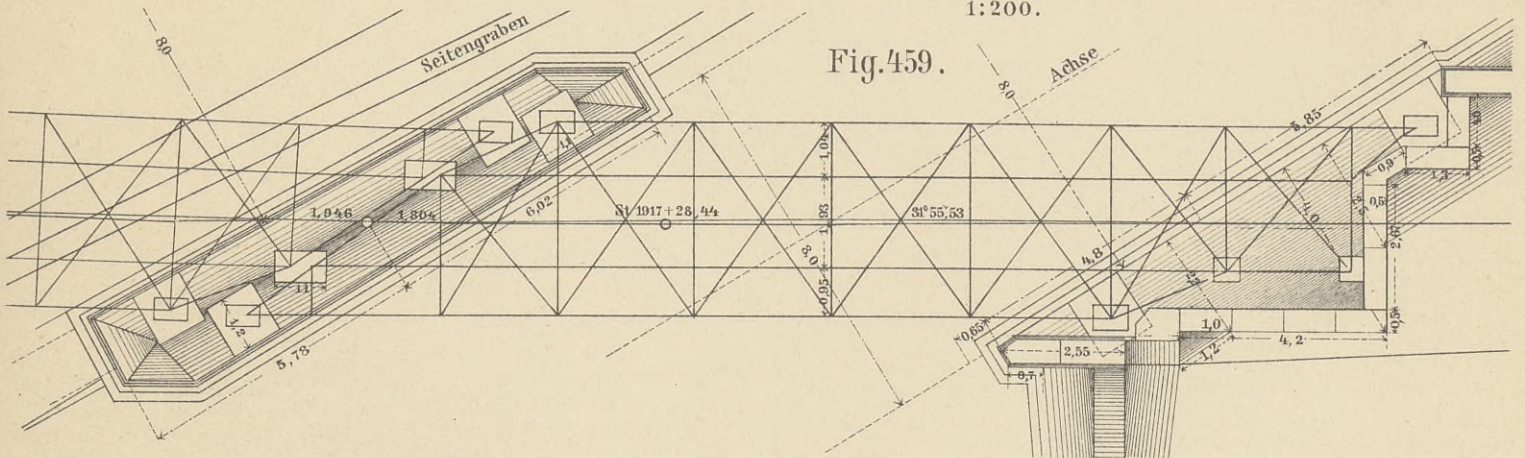


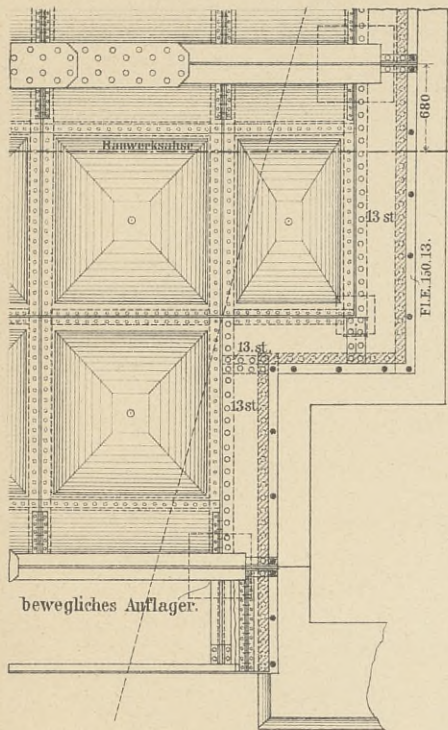
Fig. 459.

Unterführung der Gotha-Leinefelder Bahn. Berlin-Coblenz

1: 160



Fig. 460.



Strassenunterführung,
Bahnhof Erfurt. 1:60.

Fig. 474.

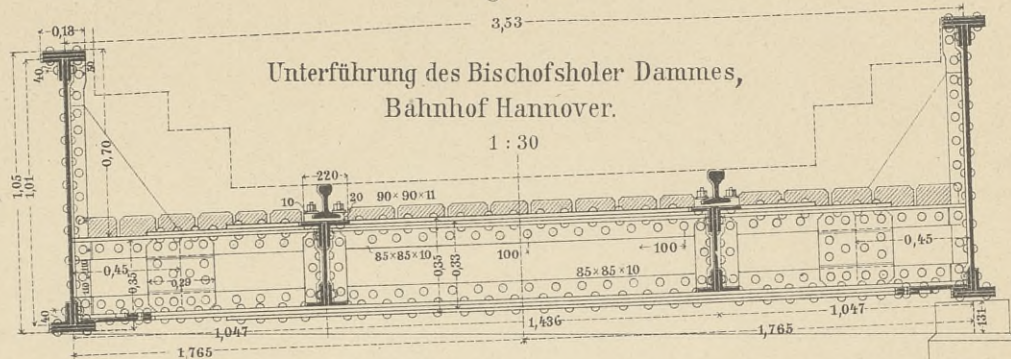


Fig. 475.

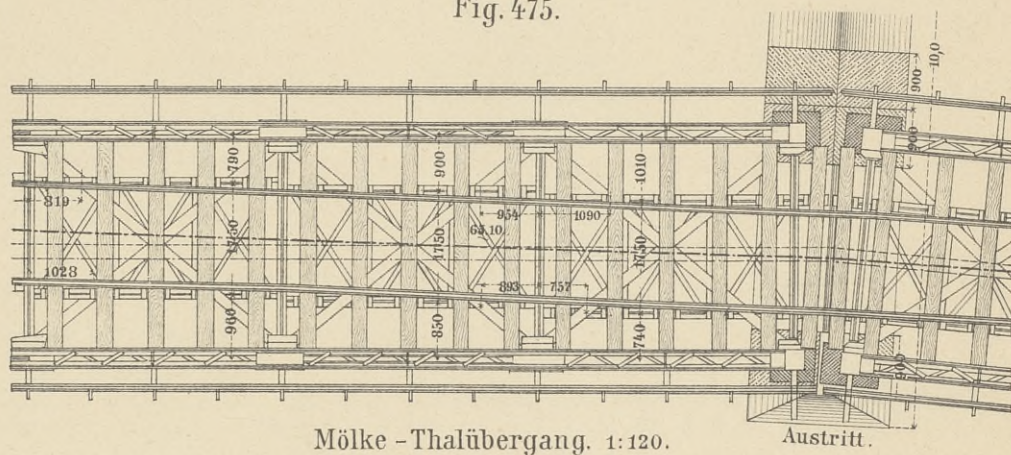
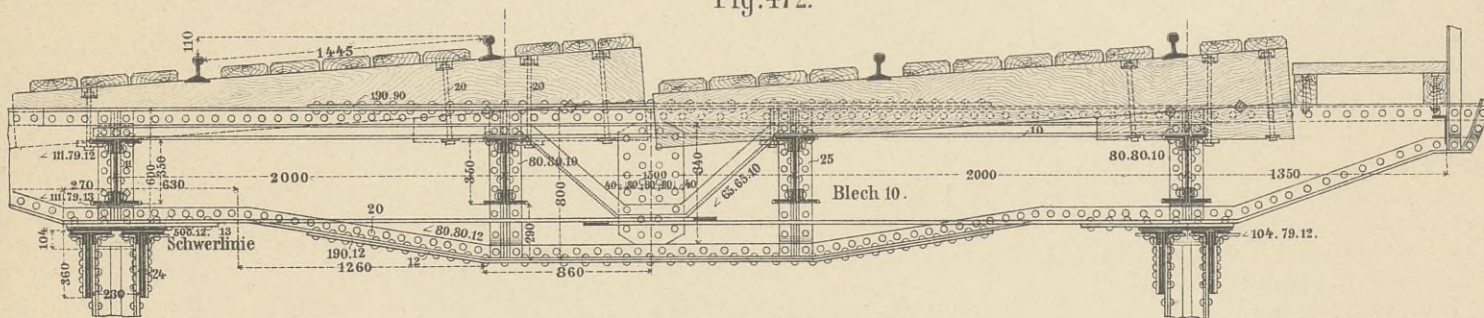


Fig. 472.



Thalübergang von Lengfeld. 1:40.

Fig. 473.

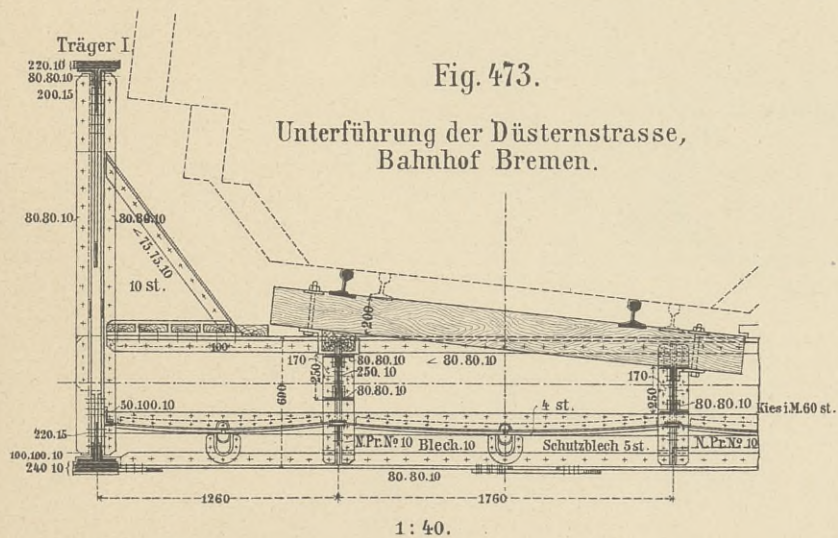


Fig. 472 a

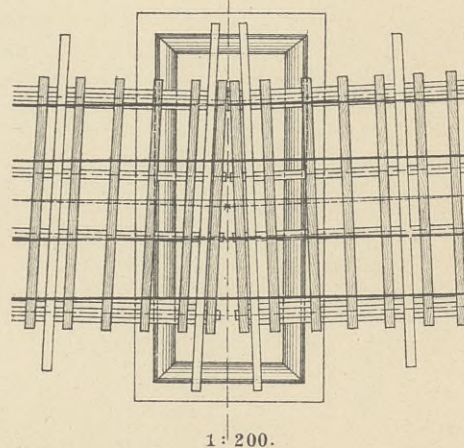
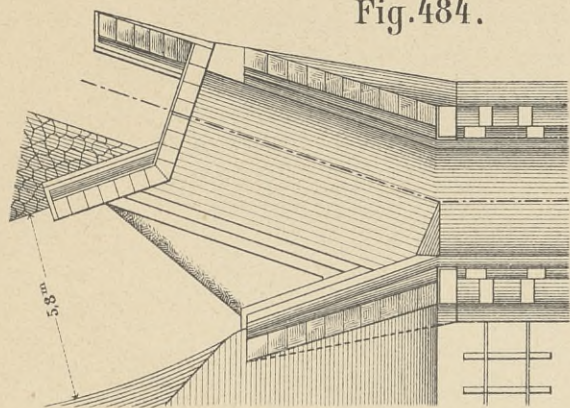
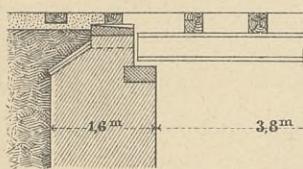


Fig.484.



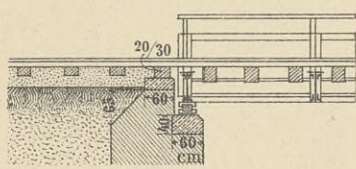
Wegeunterführung mit Durchlass, Wittenberge - Lüneburg. 1:230.

Fig.484^a



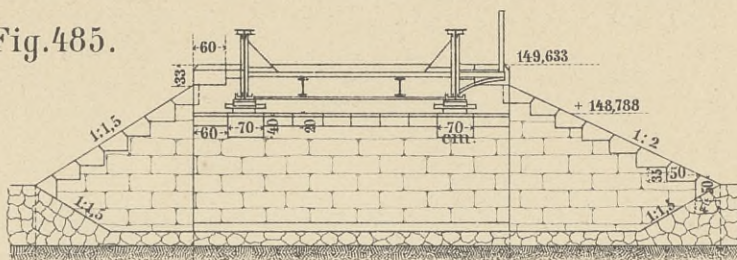
1:115.

Fig.485^a



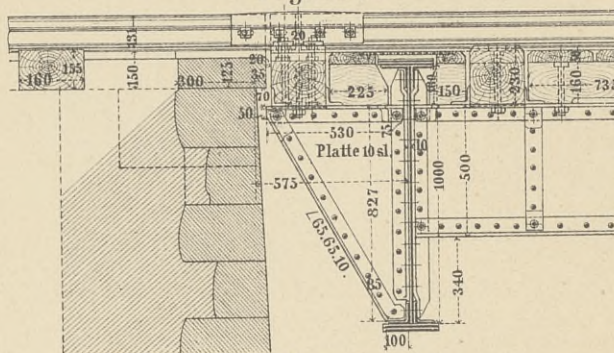
1:150.

Fig.485.



Rhume - Brücke, Wulften-Duderstadt 1:150.

Fig.486.



Elbbrücke bei Barby 1:30.

Fig.489.

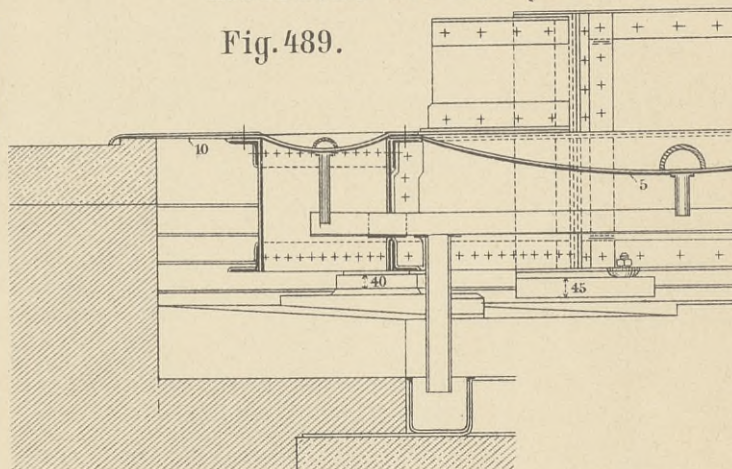
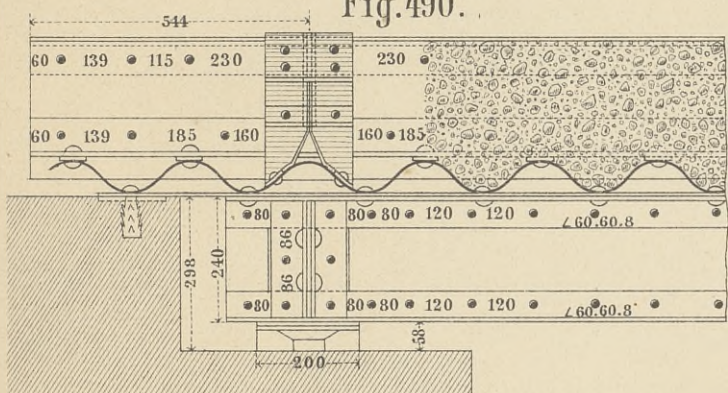


Fig.490.



Unterführung der Wormserstrasse in Mainz. 1:15.

Fig.490^a

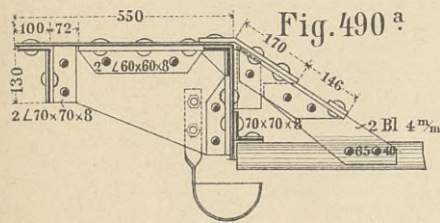
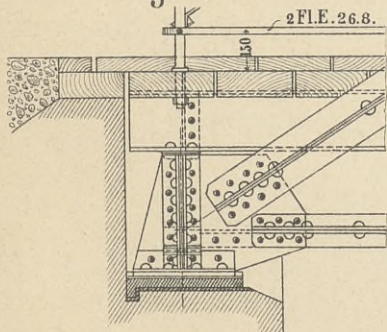
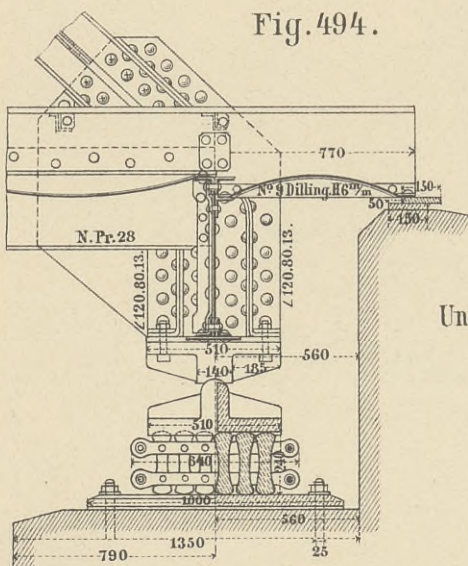


Fig.491.



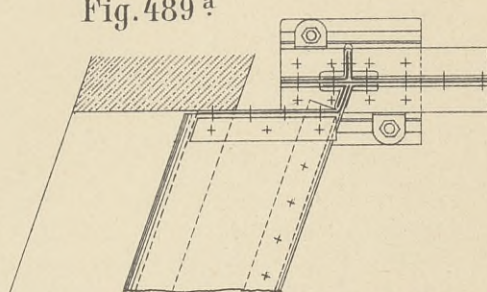
Unterführung des Weges von Rosslau nach Streetz (Wittenberg-Köthen) 1:30.

Fig.494.



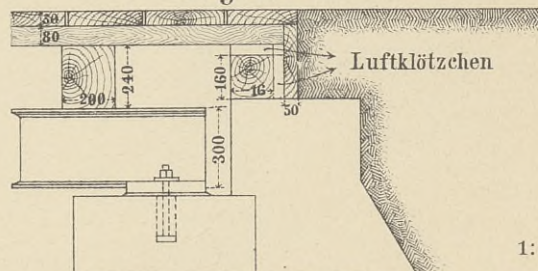
Elbbrücke bei Wittenberg 1:30.

Fig.489^a



Unterführung der Rembertistrasse, Bahnhof Bremen 1:20.

Fig.492.



Überführung der Siechenstrasse. Rheinische Eisenbahn.

1:30

Fig. 513. Wegunterführung von 6 m lichter Weite.
(Rechtsrh. Eisenb.)

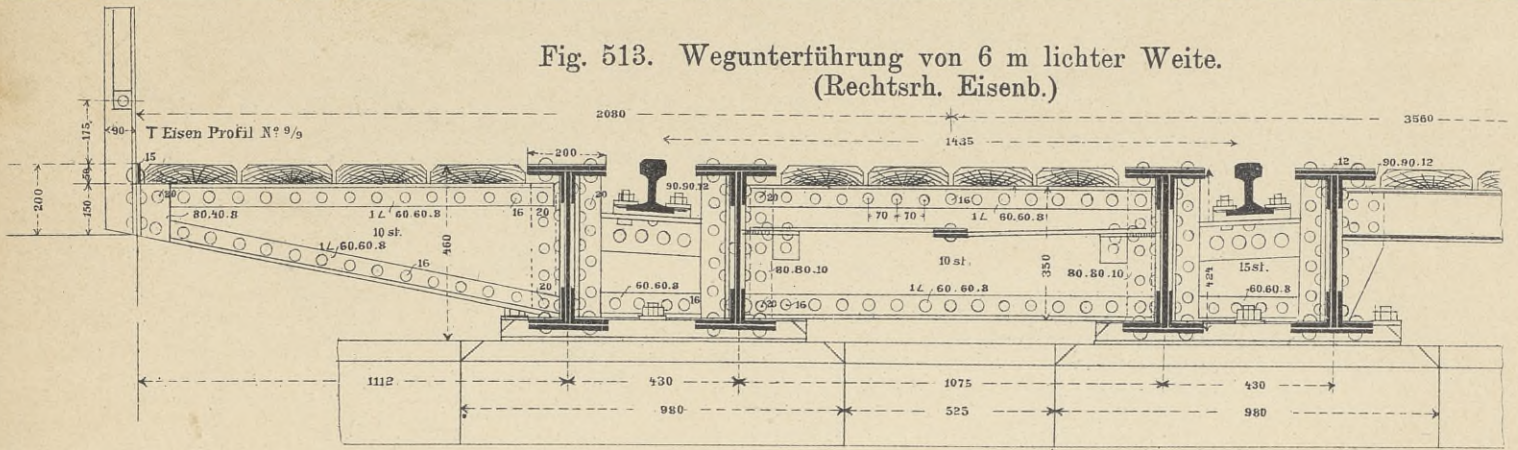


Fig. 518. Stoss des Hauptträgers.

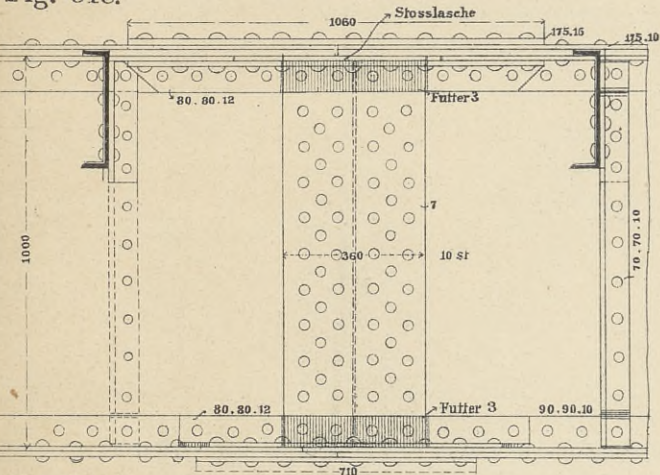


Fig. 518b.

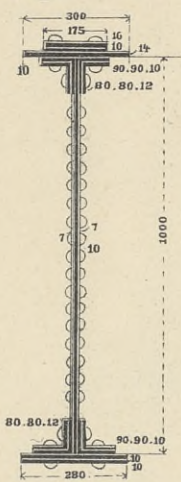


Fig. 636a.

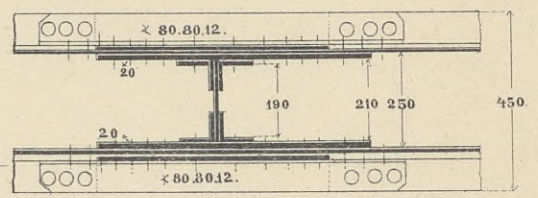


Fig. 636.

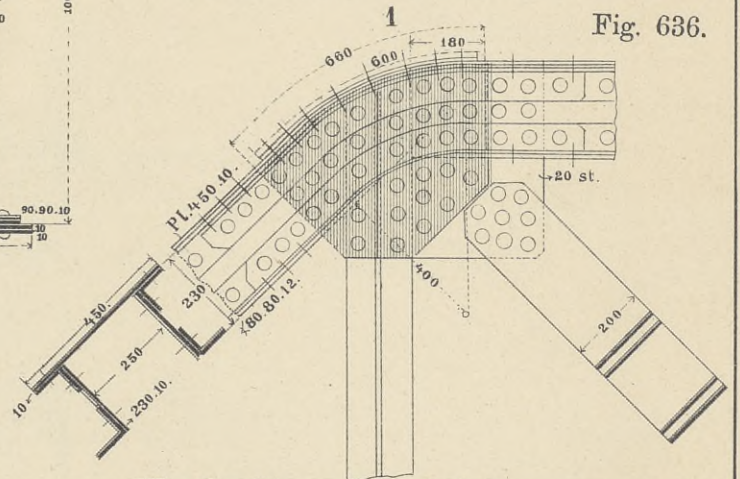
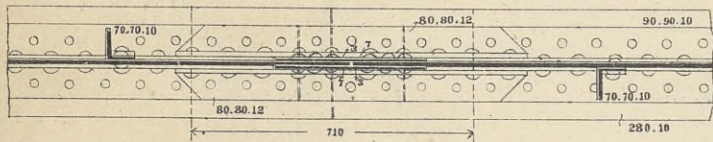


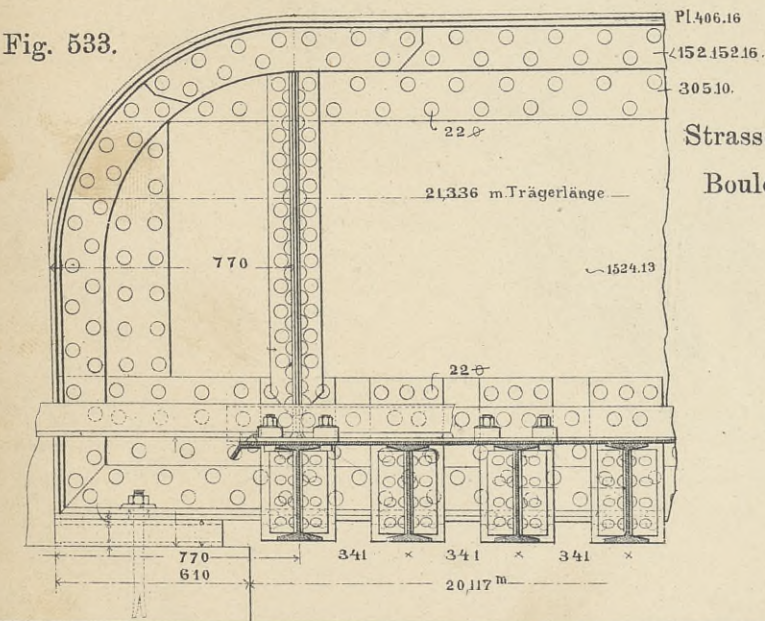
Fig. 518 a



Unterführung der Fruchtstrasse. Berliner Stadtbahn. 1:20.

Wegüberführung. Bahnhof Giessen. 1:20.

Fig. 533.



Strassenunterführung am Garfield
Boulevard. Chicago. 1:25.

Fig. 533. a

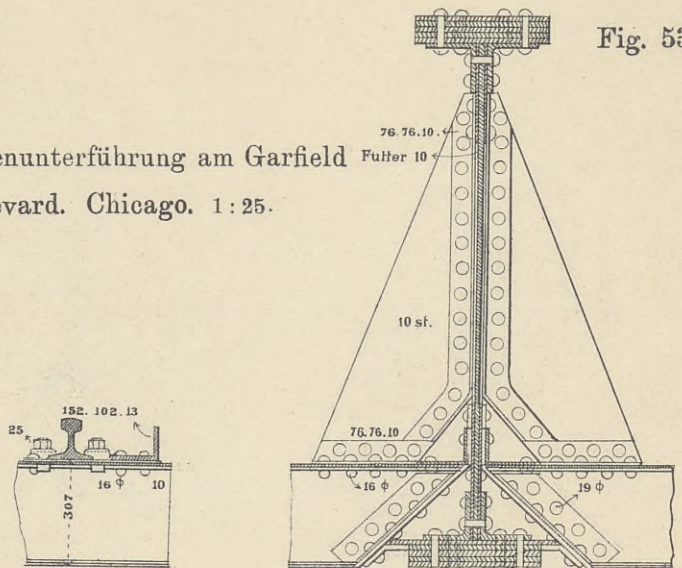
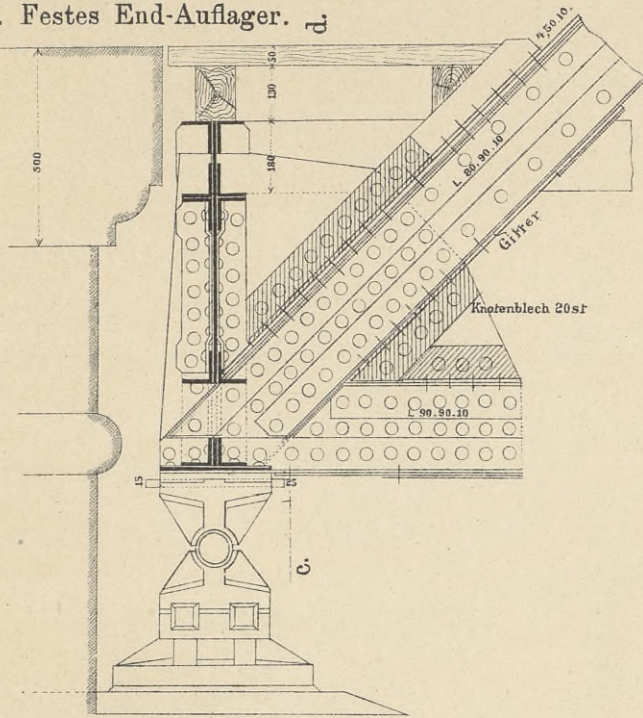


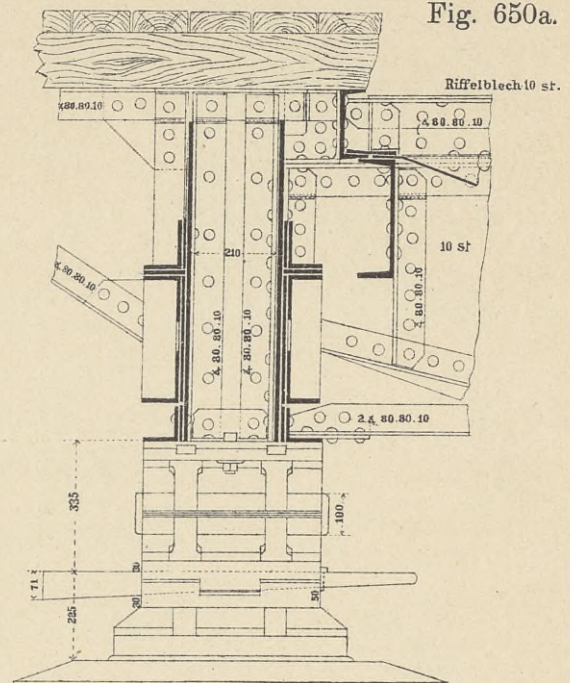


Fig. 650. Festes End-Auflager. d.



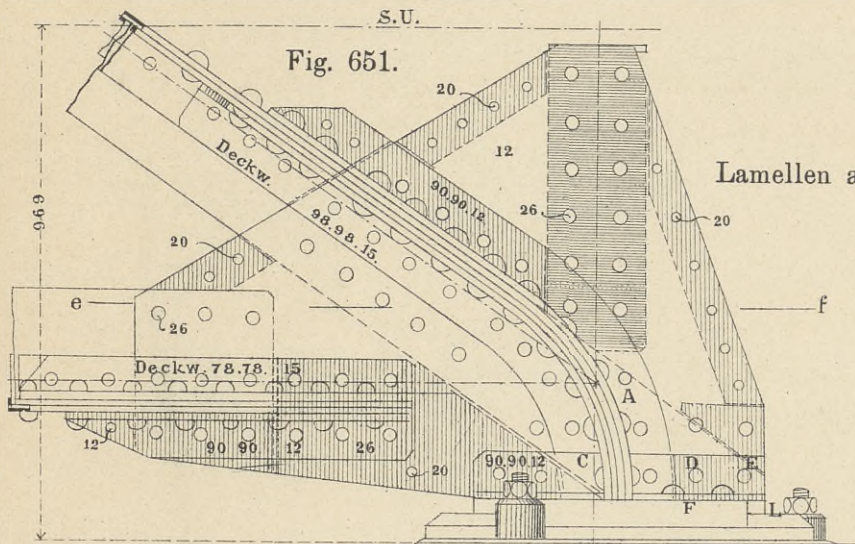
Schnitt c-d.

Fig. 650a.



Wegüberführung. Bahnhof Giessen. 1:20.

Fig. 651.



Lamellen am Ende geschlitzt.



Fig. 652.

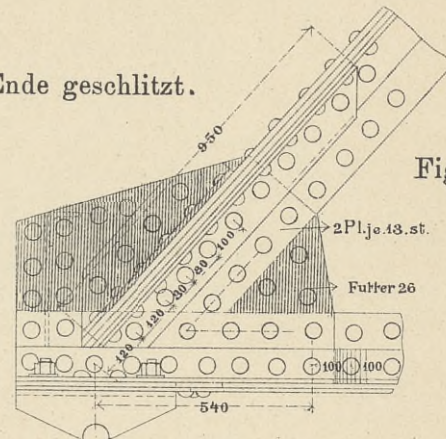


Fig. 651a.

Schnitt e-f.

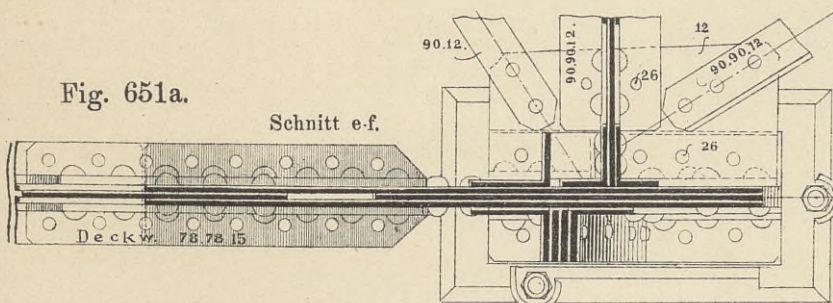
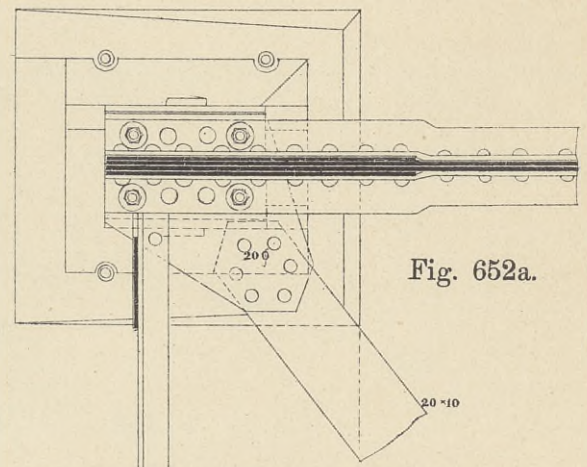


Fig. 652a.



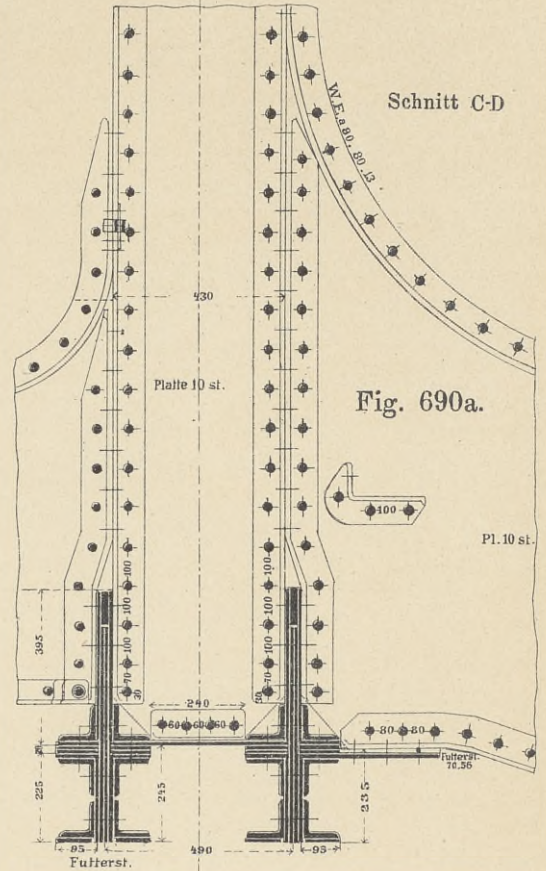
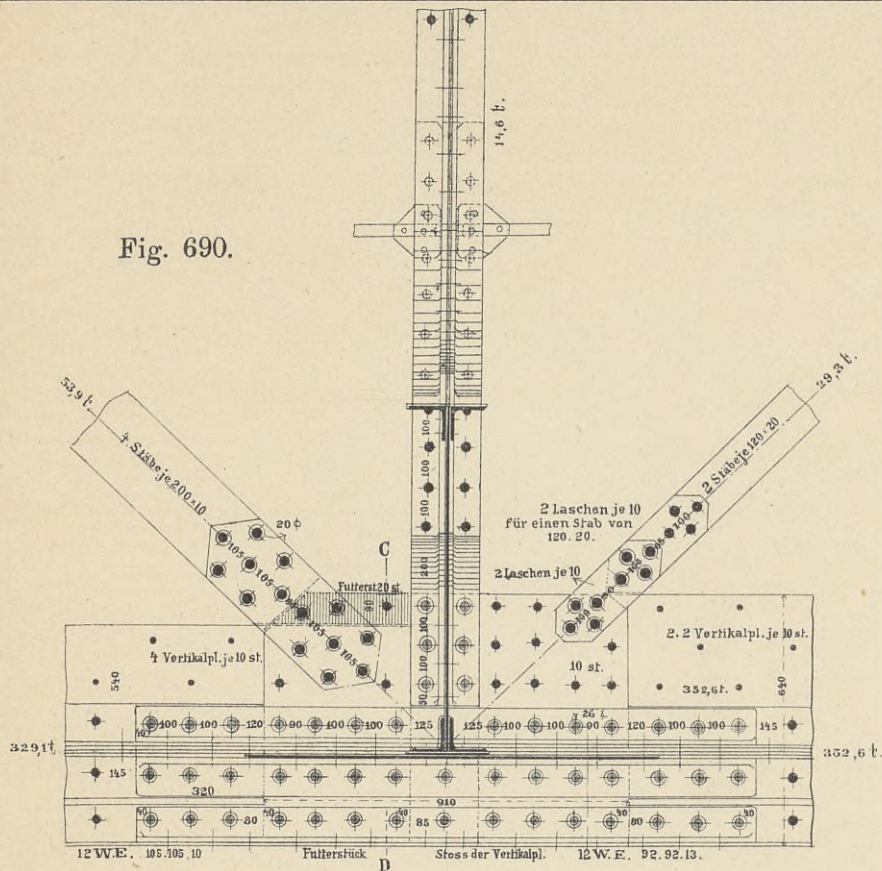
Unterführung der Leipzig-Dresdener Eisenbahn unter die Berlin-Dresdener Bahn. 1:15.

Wersebrücke. Neumünster-Rheda. 1:20.





Fig. 690.



Elbbrücke bei Barby. Stromöffnung v. 65,5 m Stützweite. 1:20.

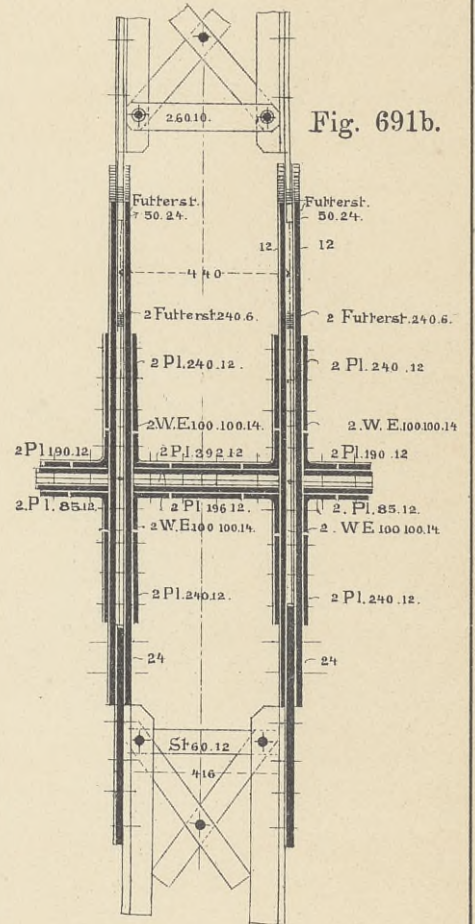
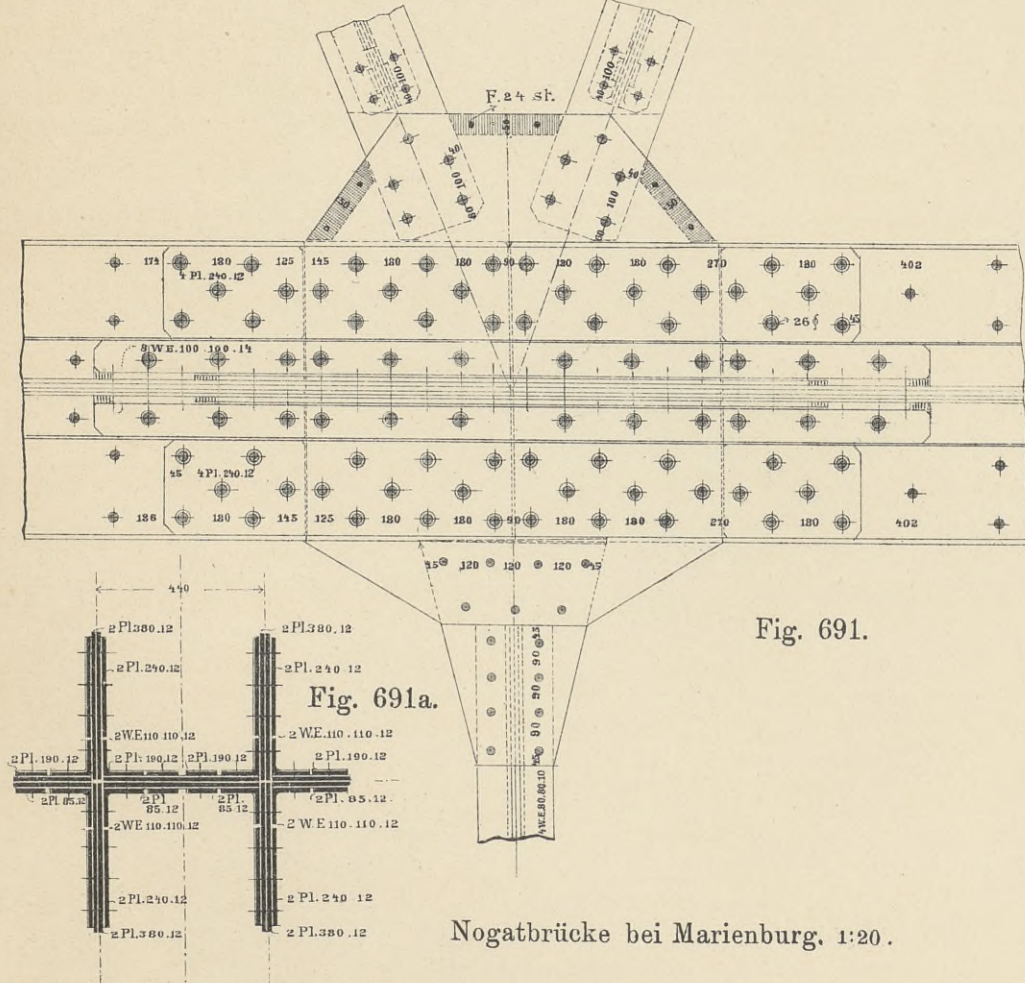


Fig. 691.

Nogatbrücke bei Marienburg. 1:20.



Fig. 693b.

Wagerechter Schnitt durch die obere Gurtung.

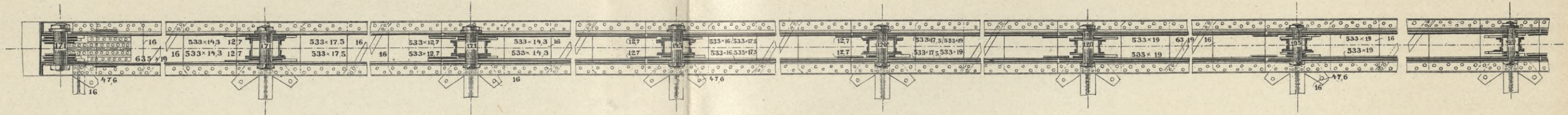


Fig. 693. Ansicht

Fig. 693d.

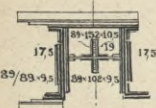


Fig. 693c.

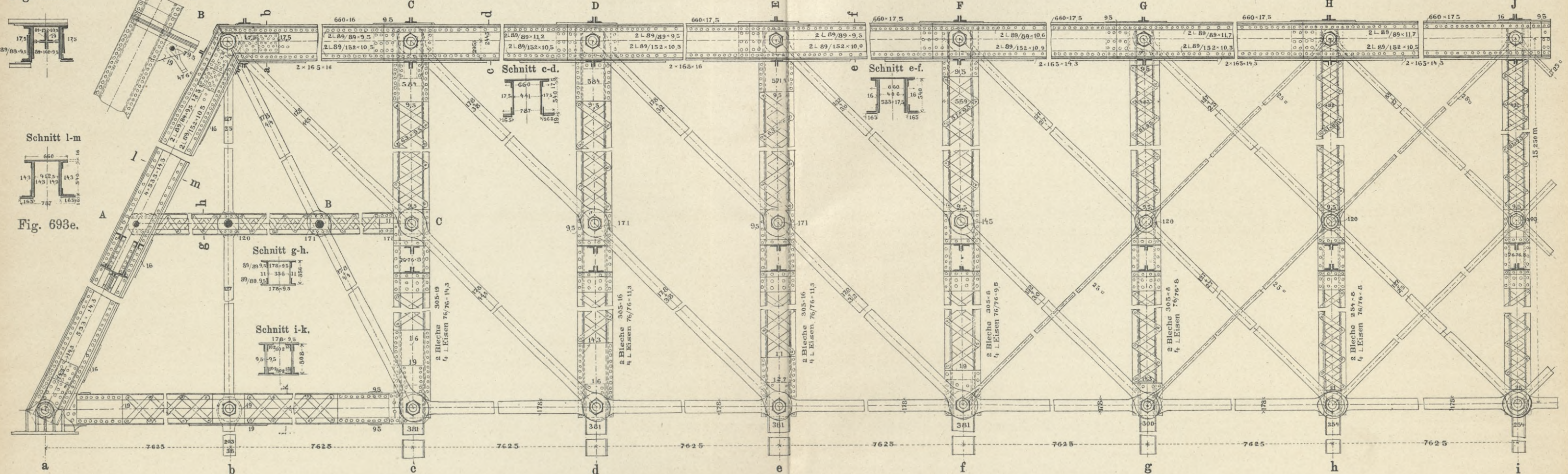
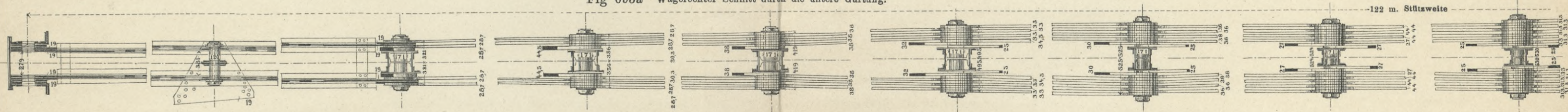


Fig 693a Wagerechter Schnitt durch die untere Gurtung.



Missouribrücke bei Kansas City. Öffnung von 122 m Stützweite. 1:60.



Fig. 694b.

Wagerechter Schnitt durch die obere Gurtung.

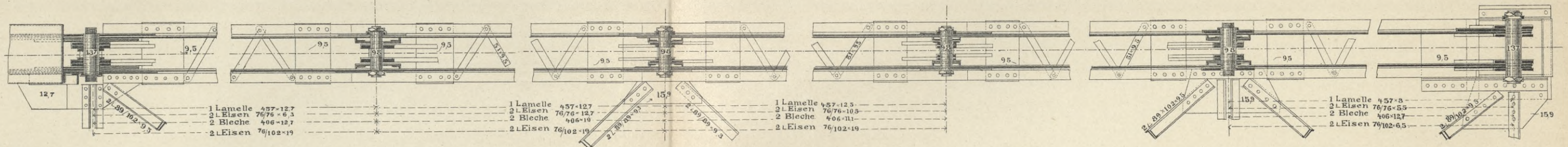


Fig. 694c

Fig. 694 Ansicht.

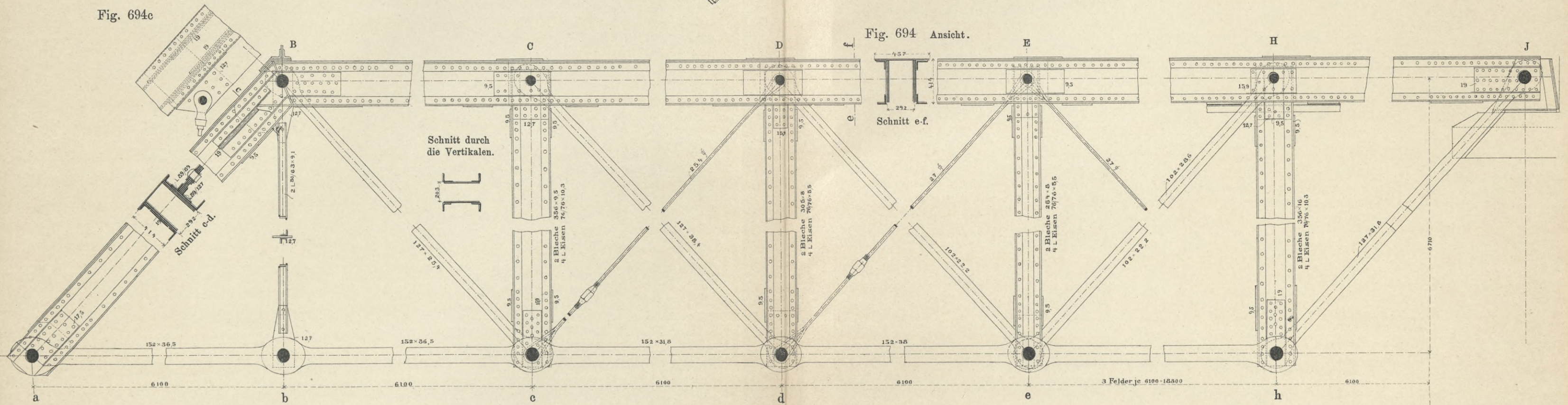
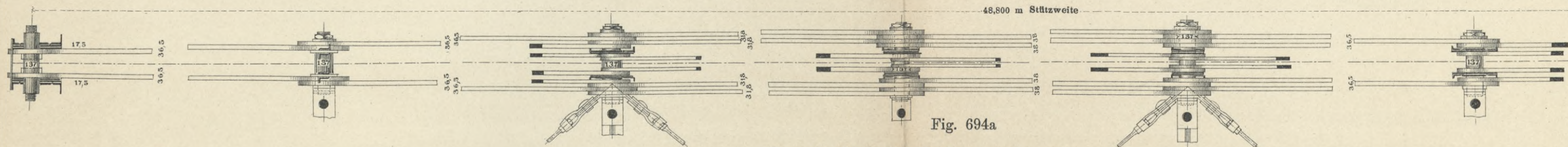


Fig. 694a

Wagerechter Schnitt dicht über der unteren Gurtung,



Missouribrücke bei Kansas City. Öffnung v. 48,8 m Stützweite. 1:35.



Fig. 716.

Die Forthbrücke.
Gesamtsicht des Bauwerkes. 1:4750.

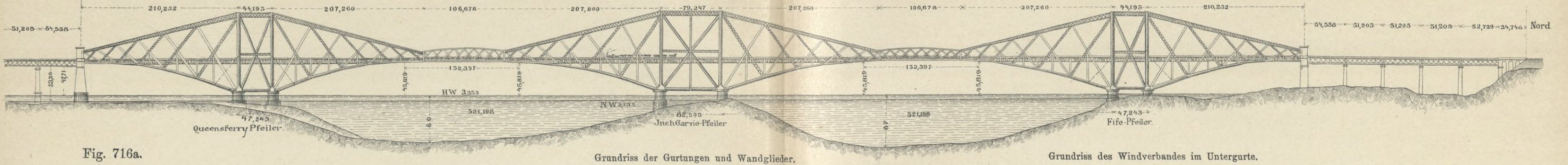
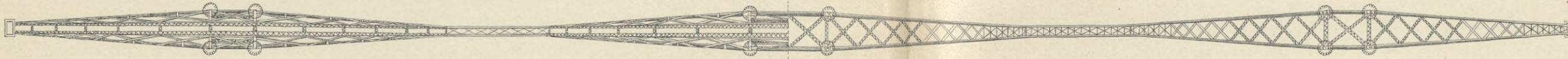


Fig. 716a.

Grundriss der Gurtungen und Wandglieder.

Grundriss des Windverbandes im Untergurte.



Wagerechter Schnitt A-B in Fig. 716l. 1:50.

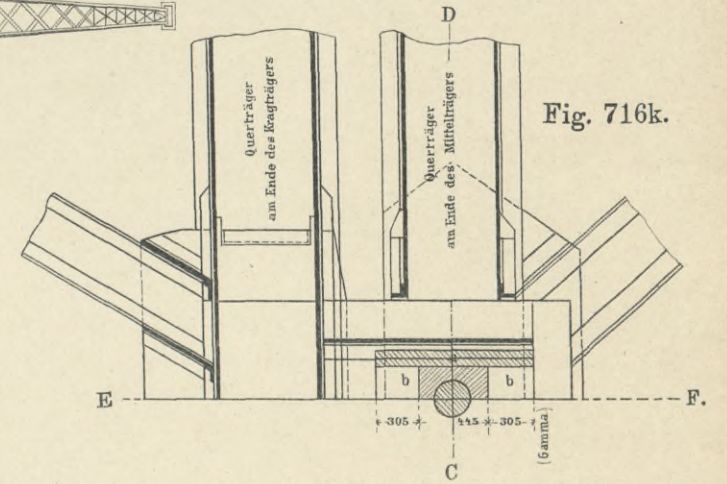


Fig. 716k.

Fig. 716b.

Queensferry-Pfeiler.

Querschnitt in der Mitte.

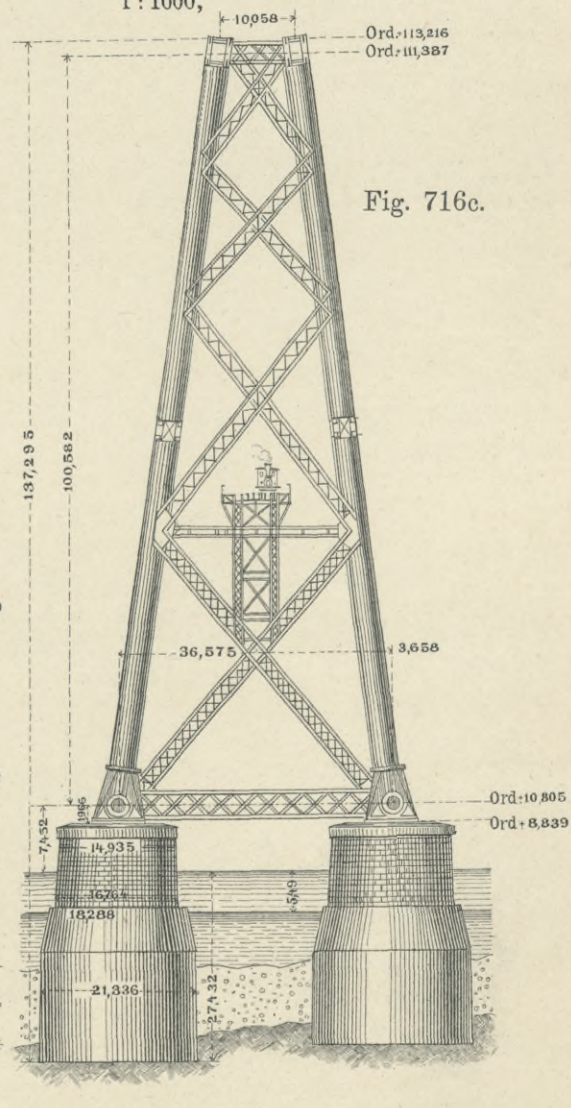
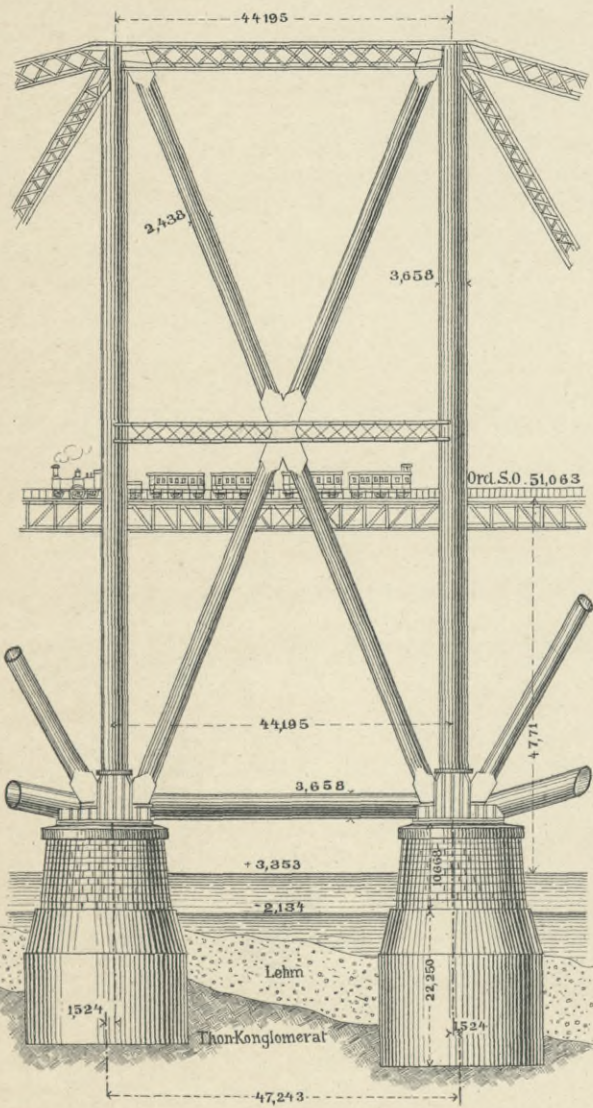


Fig. 716c.

Querschnitts-Anordnung des Zuggurtes.

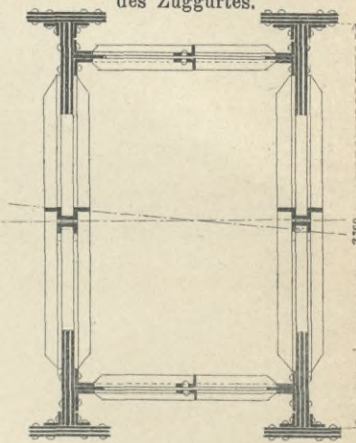


Fig. 716d.

Lotrechter Schnitt C-D in Fig. 716k.

Fig. 716m.

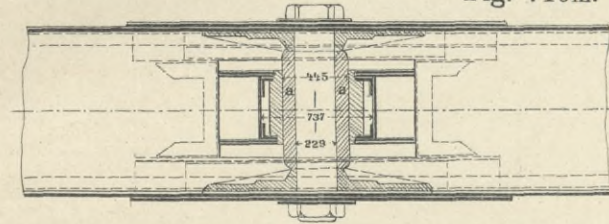
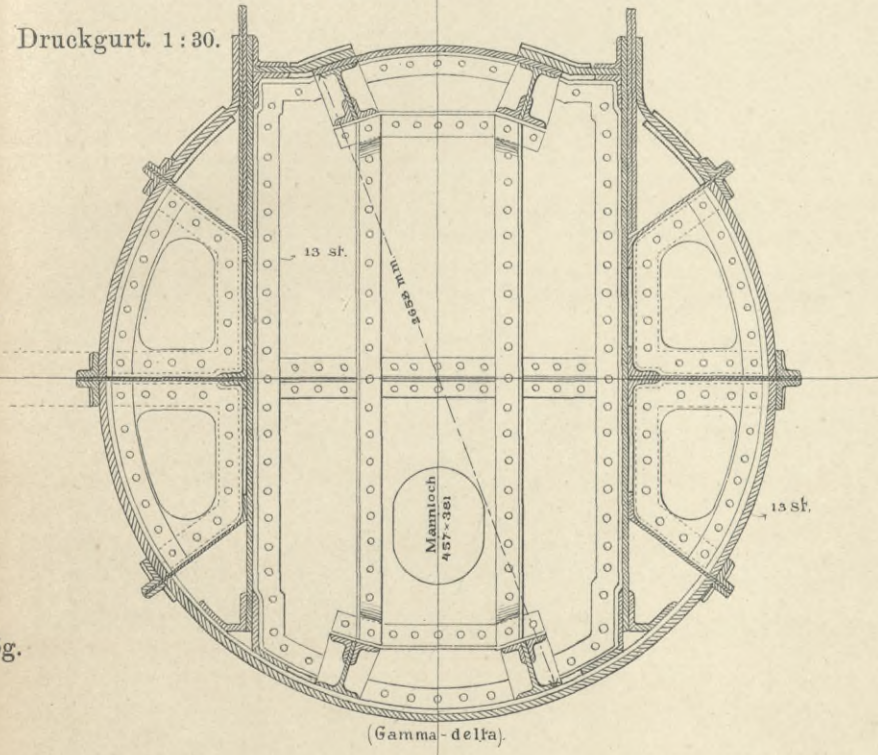


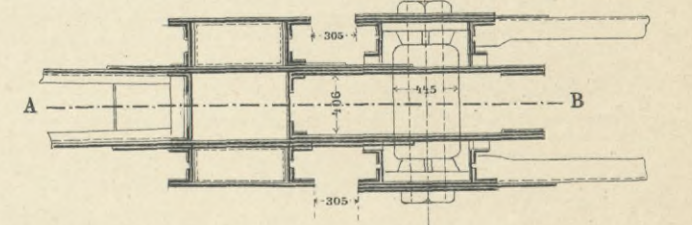
Fig. 716e.

Druckgurt. 1:30.



Lotrechter Längsschnitt E-F in Fig. 716k. 1:50.

Fig. 716l.



Querschnitts-Anordnung der gezogenen Wandglieder.

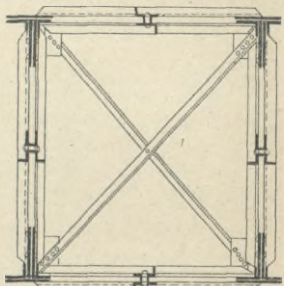


Fig. 716f.

Querschnitts-Anordnung der gedrückten Wandglieder.

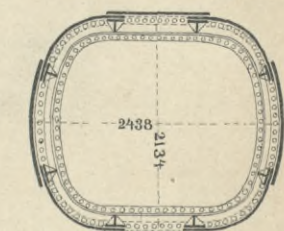


Fig. 716g.

Grundriss des Querträgers am Ende des Mittelträgers. 1:50.

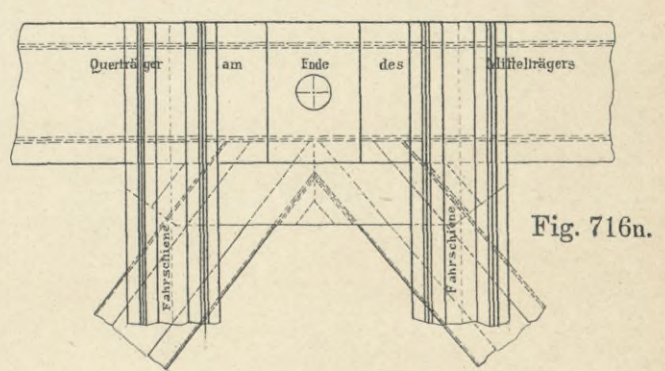
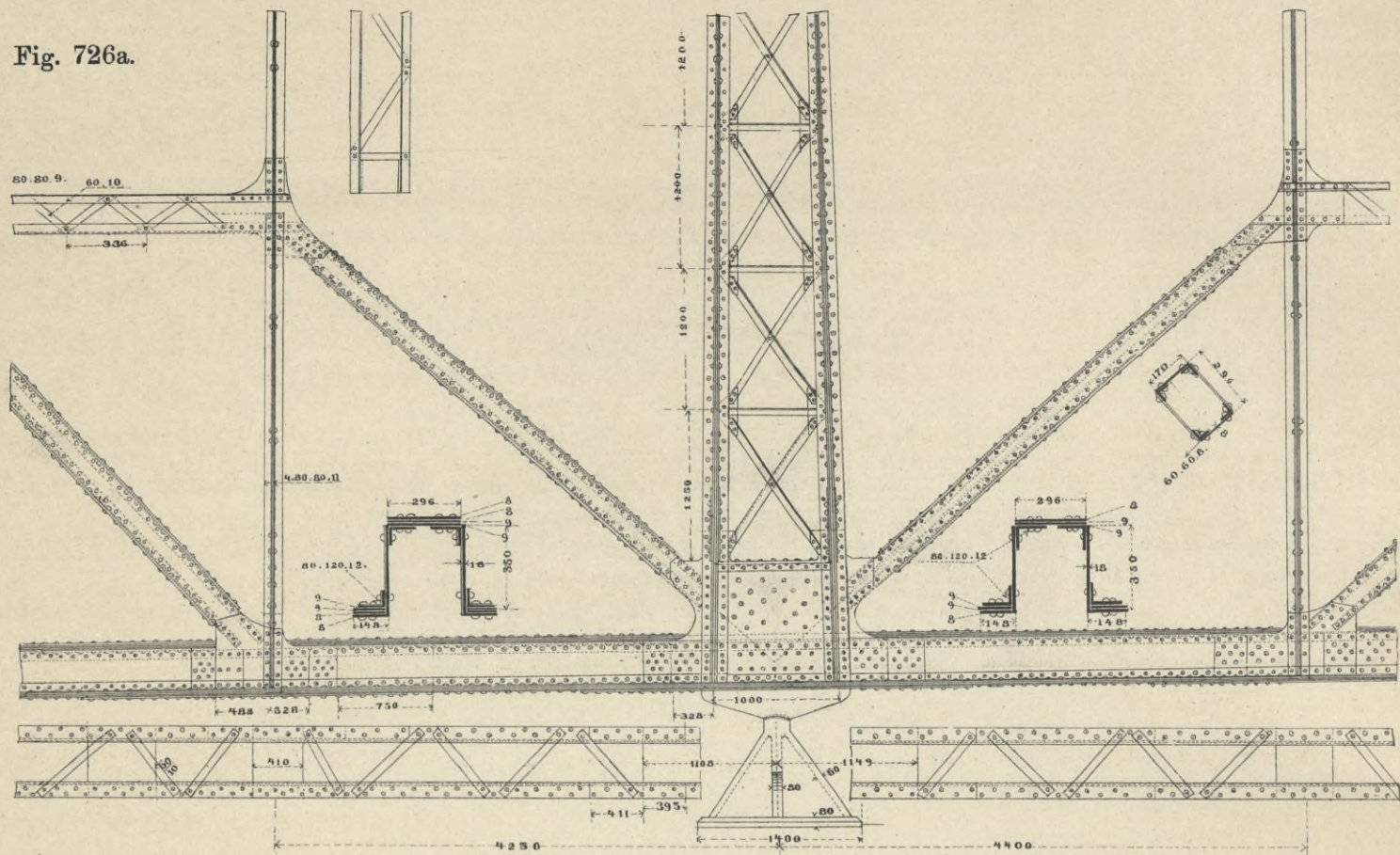


Fig. 716n.

Fig. 726a.



Die Theissbrücke bei Tokaj. 1:60.

Fig. 726b.

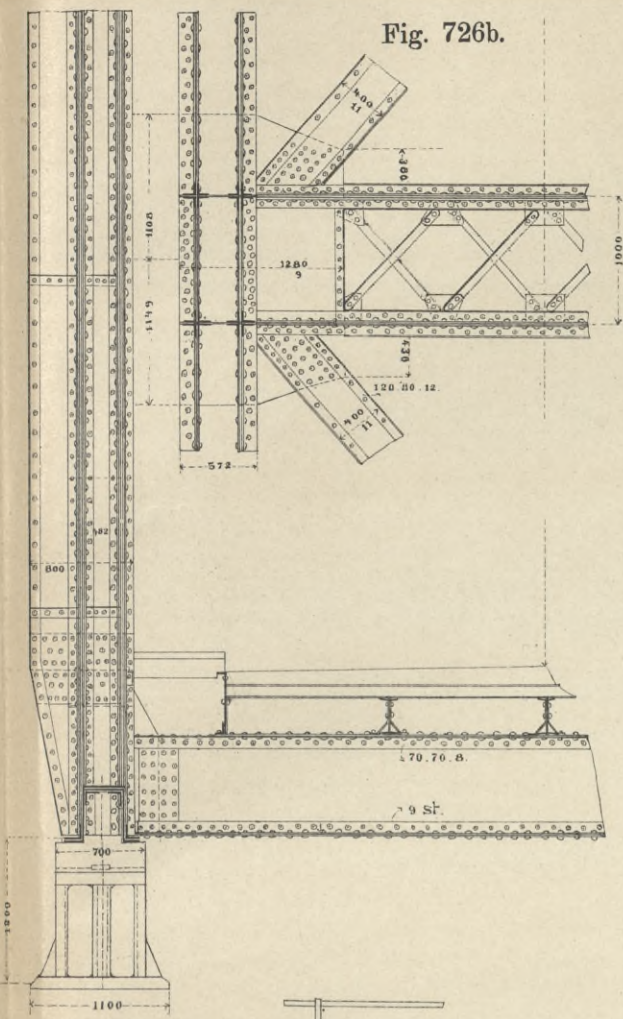


Fig. 731d.

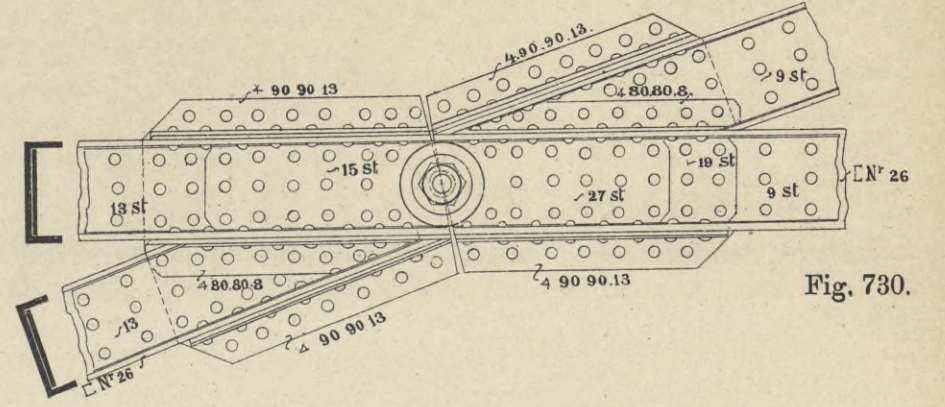


Fig. 730.

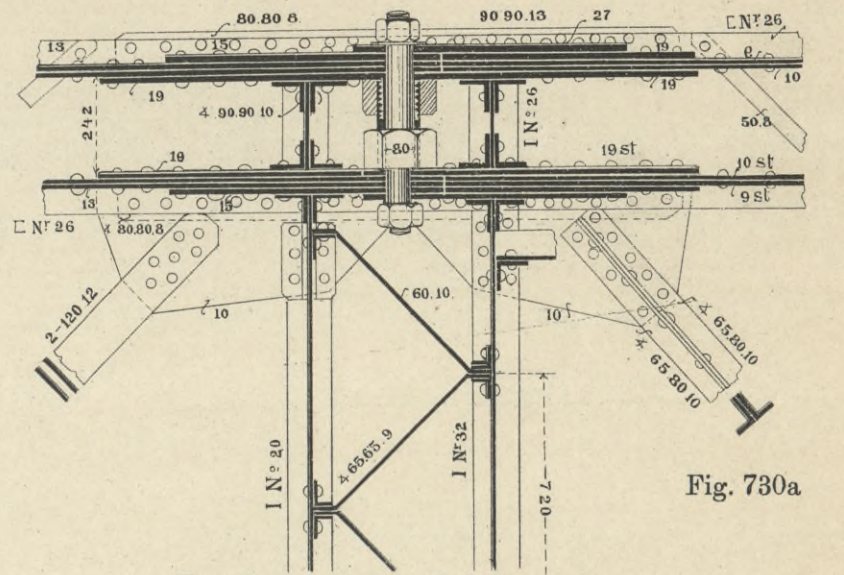
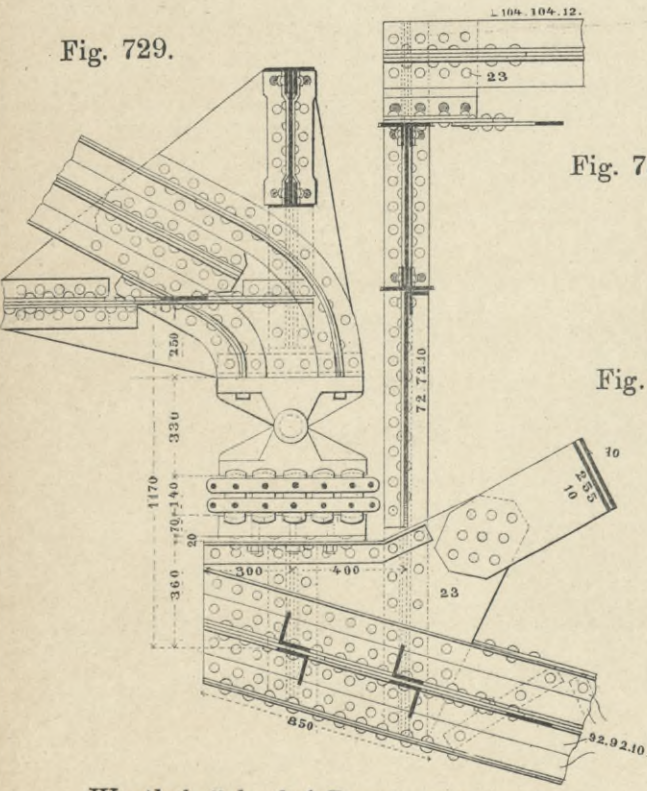


Fig. 730a.

Ems-Strassenbrücke bei Tunxdorf. Dortmund-Ems-Kanal. 1:20.

Fig. 729.



Warthebrücke bei Posen. 1:25.

Fig. 731a.

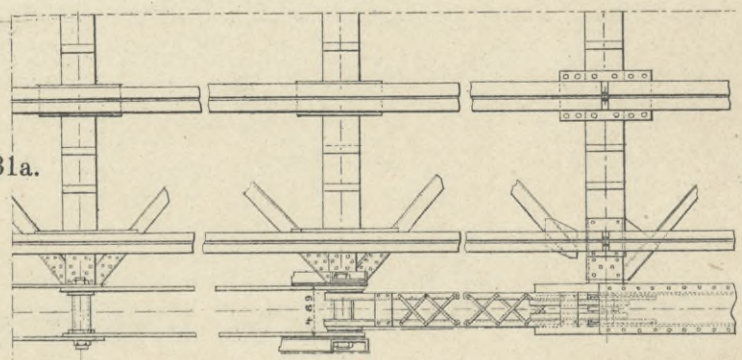
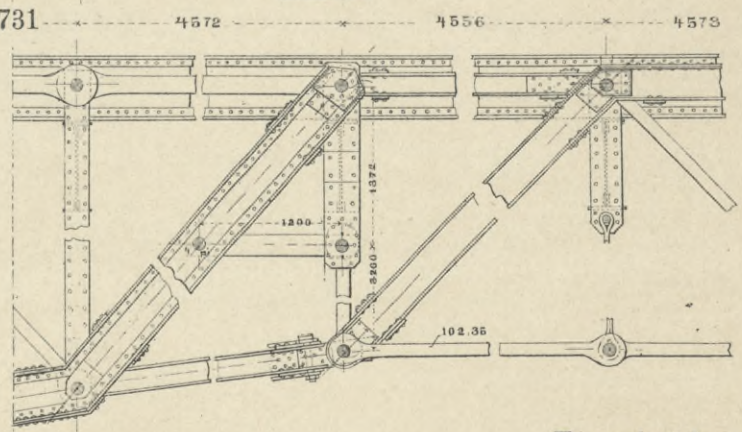


Fig. 731.



Frazerbrücke. 1:65.

Fig. 731b.

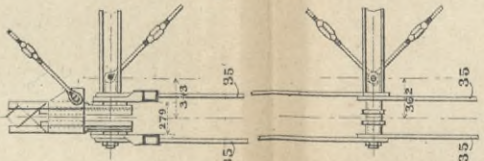


Fig. 731c.

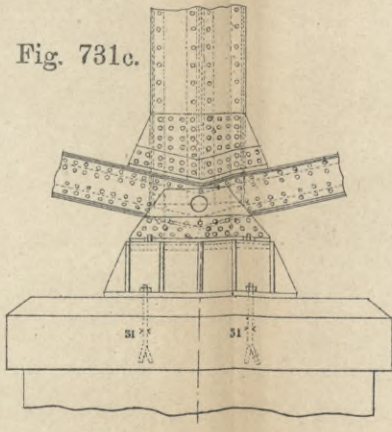


Fig. 736.

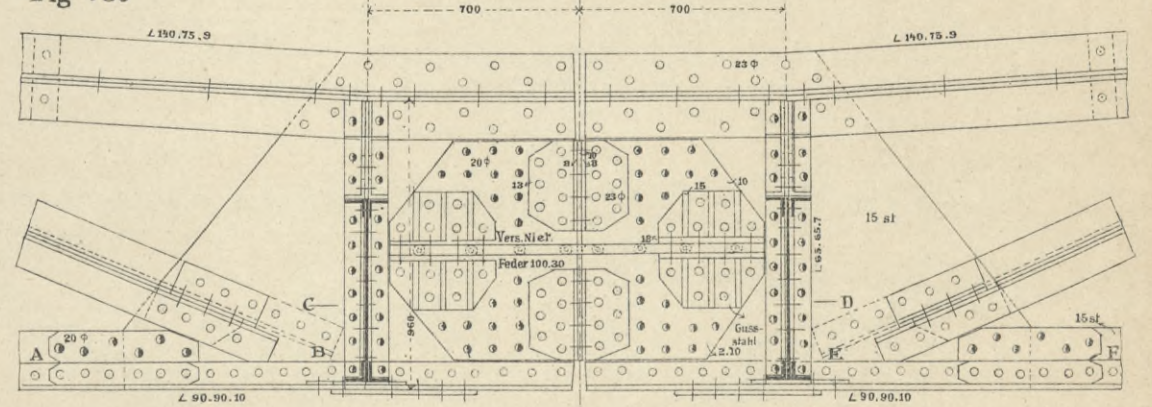
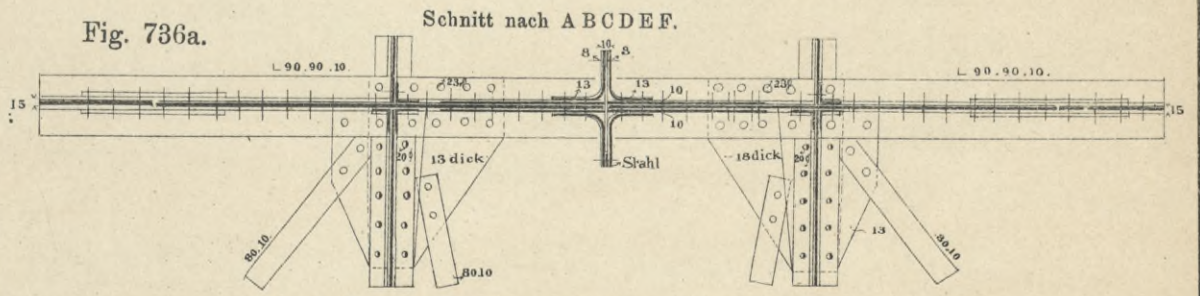


Fig. 736a.



Weser-Strassenbrücke bei Hameln. 1:25.

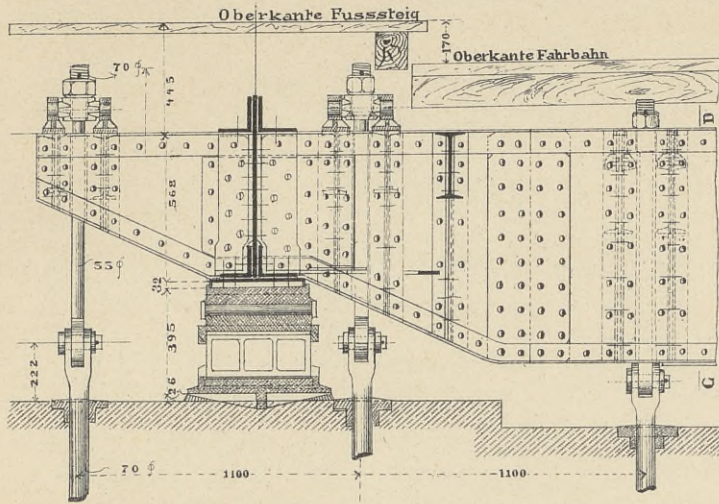


Fig. 736c.

Weserbrücke bei Hameln.

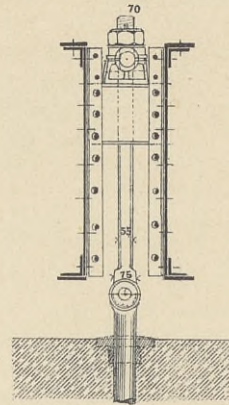
Verankerung der Endquerträger.

1:30.



Schnitt C-D

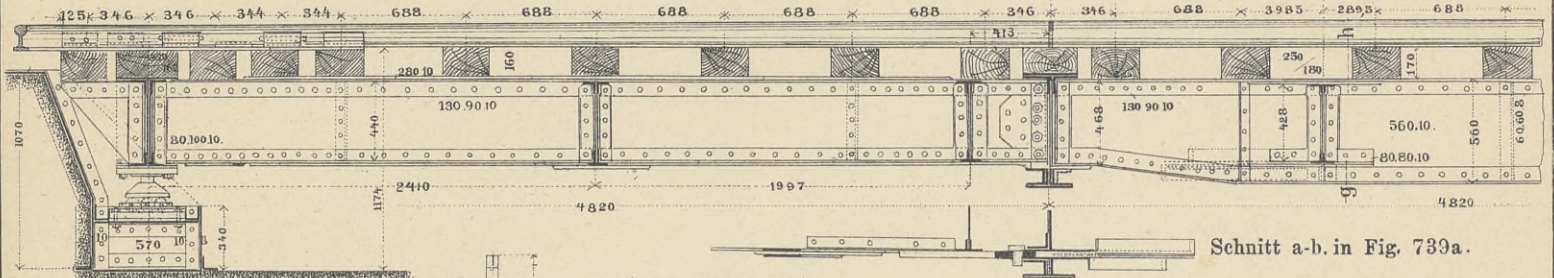
Fig. 736b.



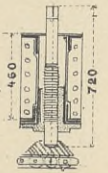
Längenschnitt durch die Schlepträger.

Fig. 739.

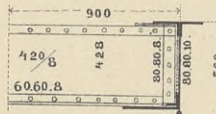
Endlängsträger.



Schnitt durch die Regulierungsschraube.



Schnitt g-h.



Warnowbrücke bei Rostock. 1:40.

Horizontalschnitt durch den Spindel- u. Schlepträger.

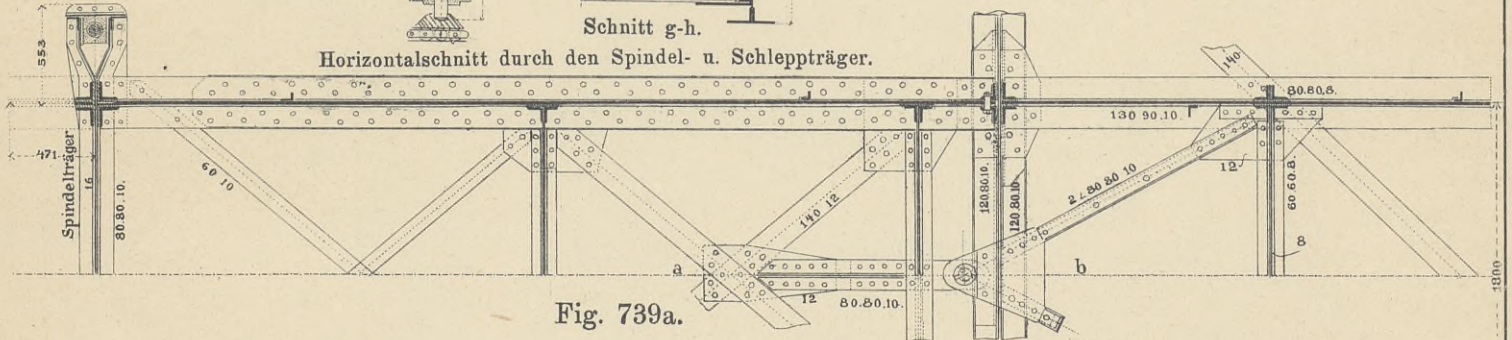


Fig. 739a.

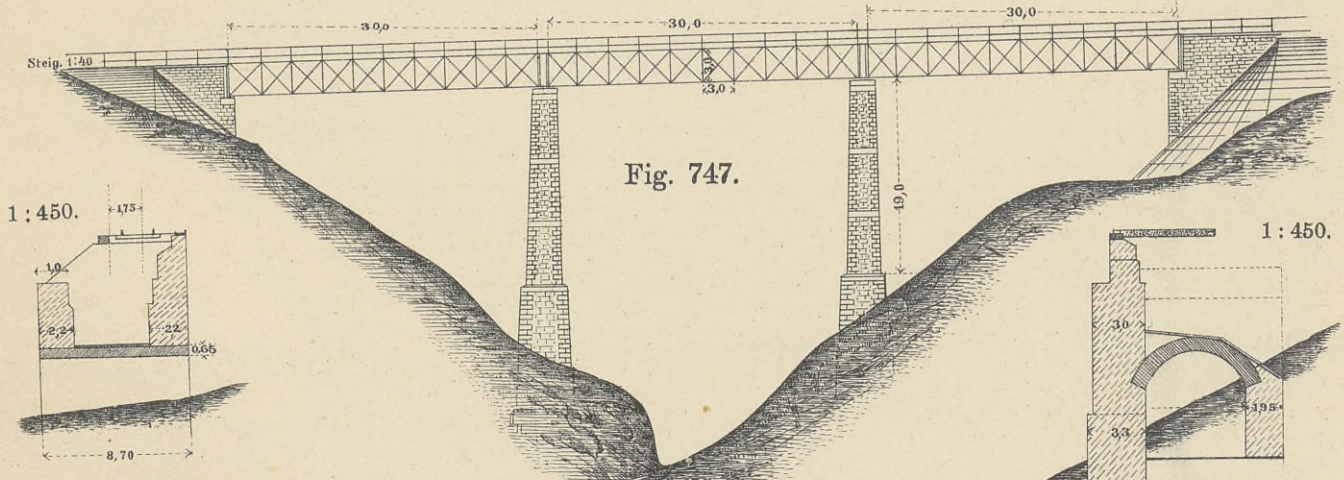
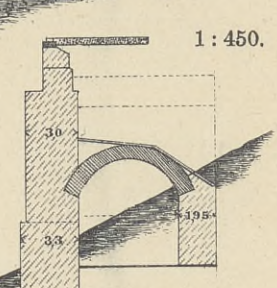
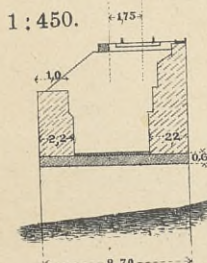


Fig. 747.



Zraggenthalbrücke. 1:750.

Fig. 747a.

Fig. 757.

Anatolische Eisenbahnbrücke. 1:40.

Fig. 753a.

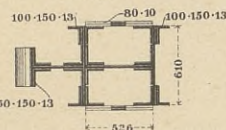
Fig. 753.



Eckanschluss der Windstreben.

Fig. 757a.

Schnitt m-n.



Zeglinbrücke. 1:60.
Stützweite. 92 m.

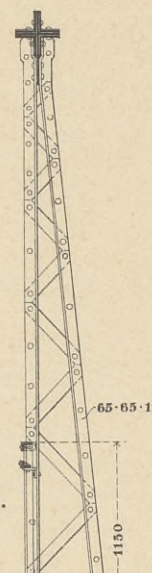
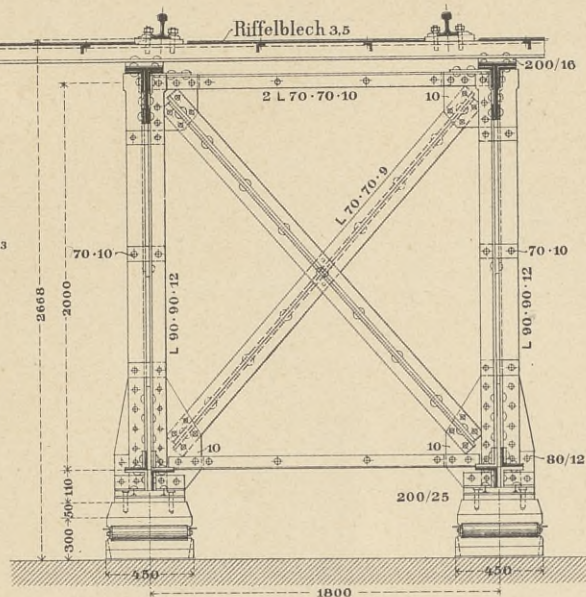
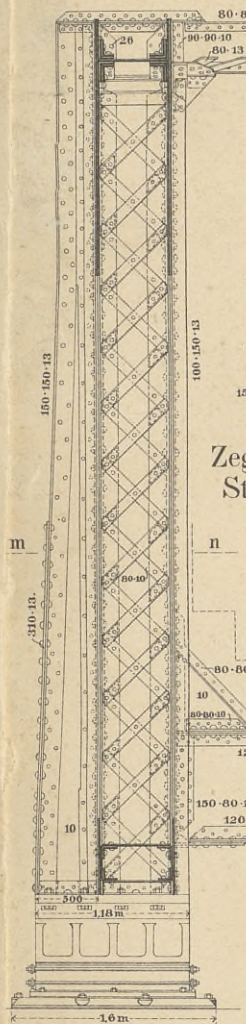


Fig. 756.

Weserbrücke bei Gr. Hutbergen. 1:40.

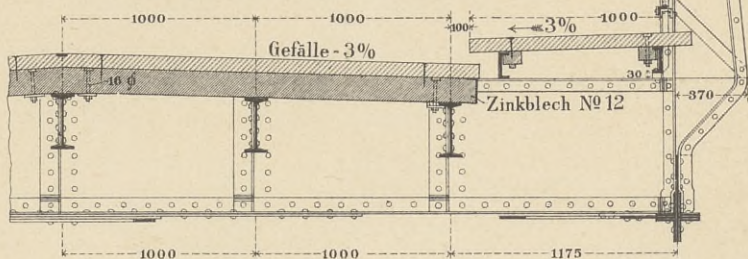


Fig. 755a.

Querschnitt 1:30.

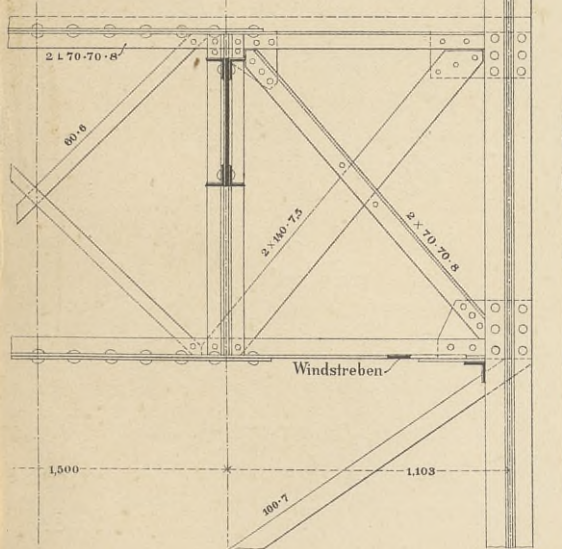
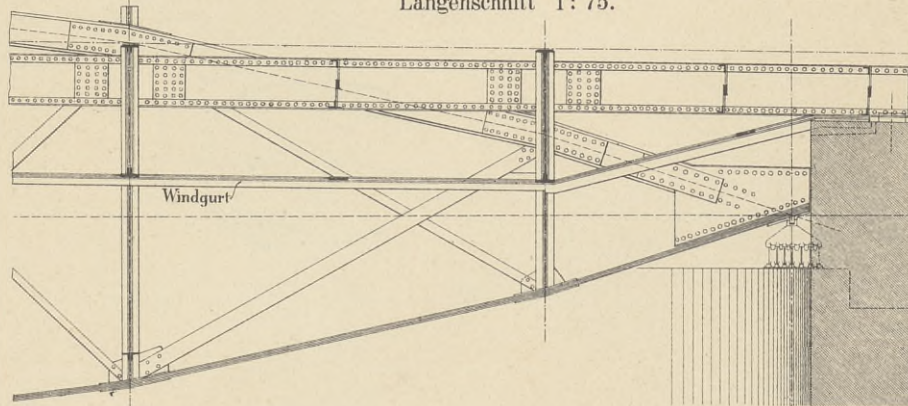


Fig. 755.

Längenschnitt 1:75.



Rheinbrücke bei Mainz. 1:75 u. 1:30. - Fluthöffnung. 35 m Stützweite.

Rheinbrücke bei Worms.
Mittellöffnung v. 116,8 m
Stützweite: 1 : 100.
Fig. 766 - 766a.

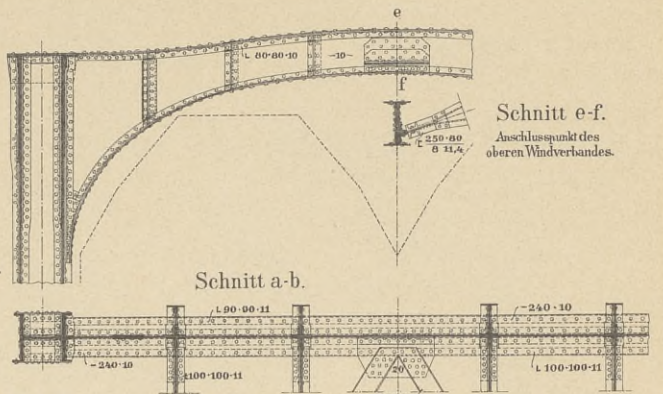


Fig. 766a.

Schnitt a-b.

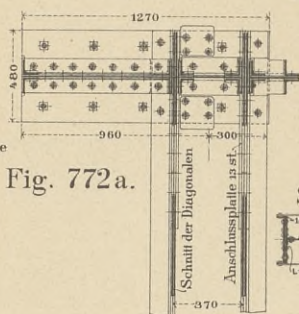
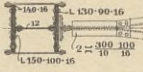


Fig. 772a.

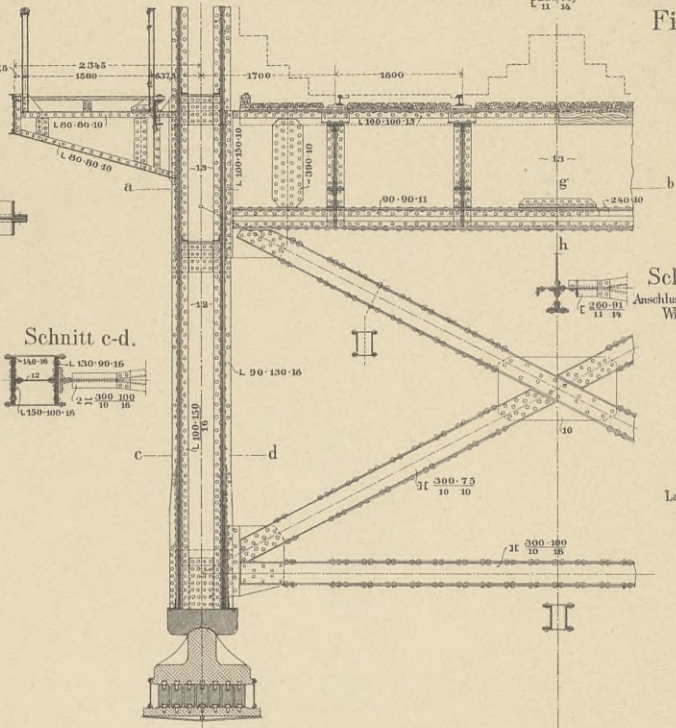
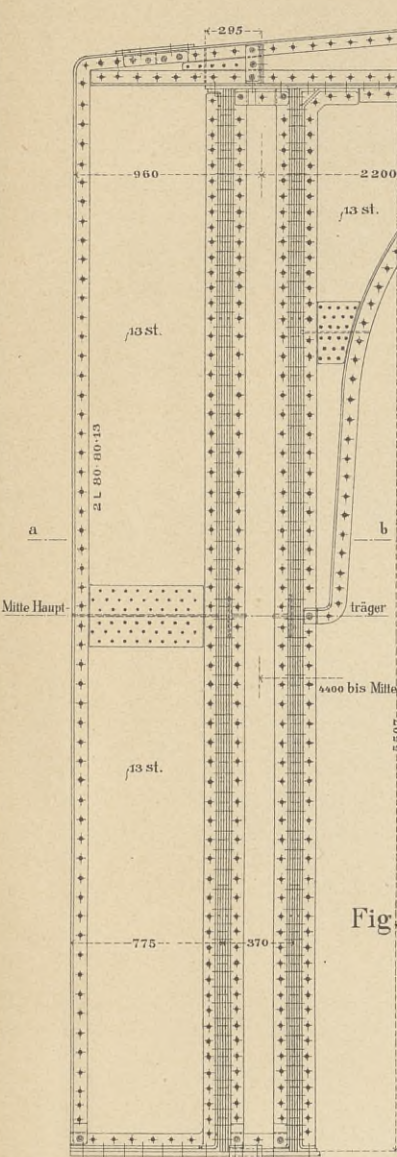
Schnitt c-d.



Schnitt g-h.
Anschlusspunkt des unteren Windverbandes.

Fig. 772.

Memelbrücke bei Tilsit.
1 : 40.



N. Pr. N° 25

Lasche

100-900-10

50-11

65-65-11

4,5-45-7

50-10

2,5 mm φ

65-65-11

50-10

2 L 250-90-11

75-75-10

F 10

130-10

65-65-11

Weichselbrücke bei Dirschau
1 : 120.

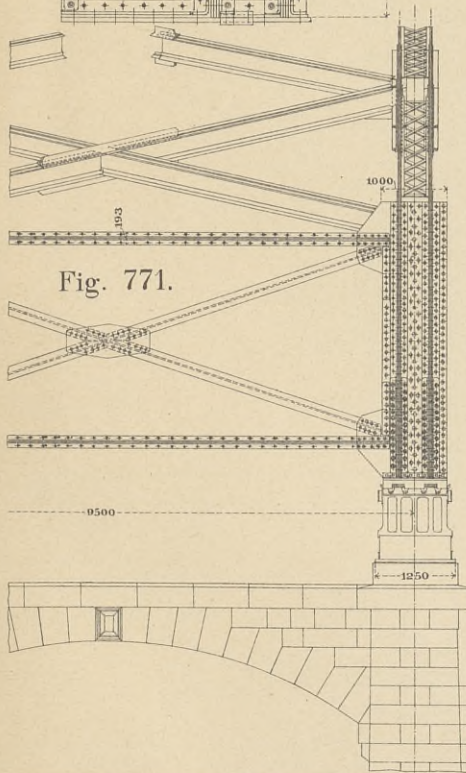


Fig. 771.

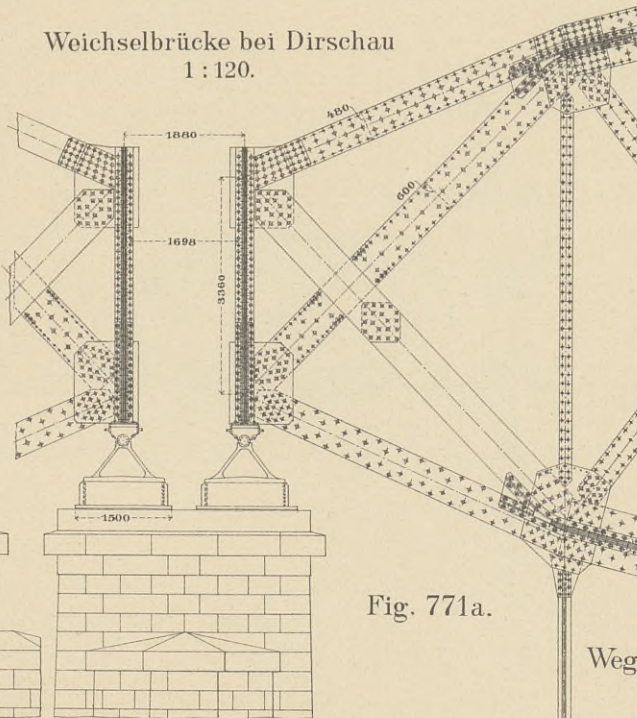
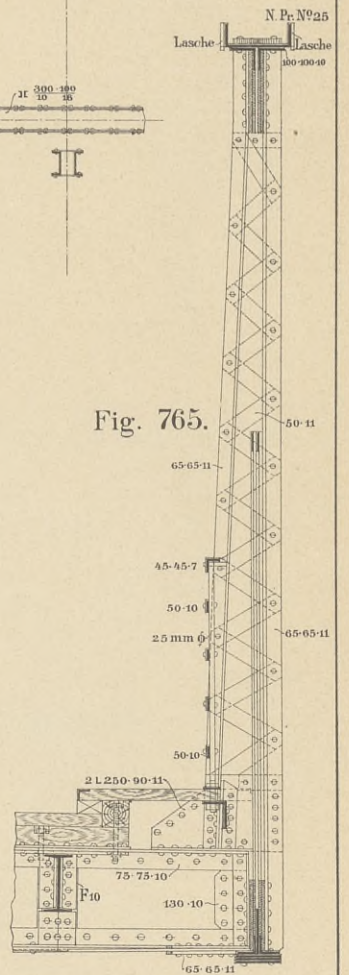


Fig. 771a.

Fig. 765.

Wegeüberführung v. 31,8 m Stützweite.
Dortmund-Ems-Kanal. 1 : 30.





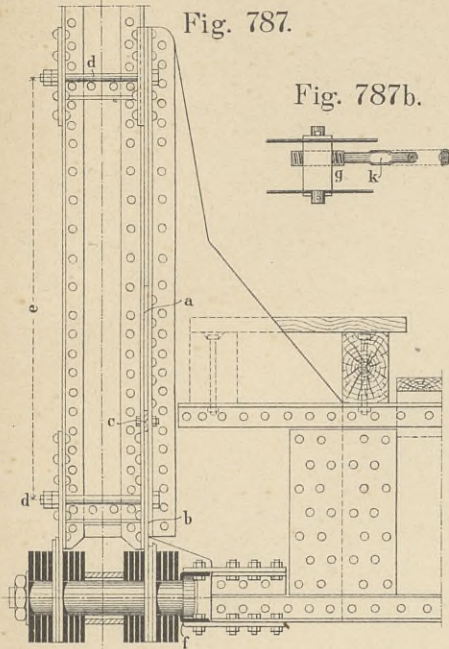


Fig. 787.

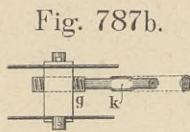


Fig. 787b.

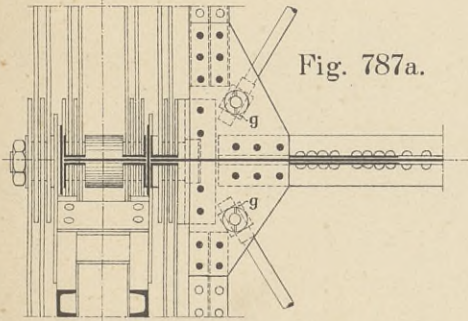


Fig. 787a.

Gelenkbolzenbrücke
der Gesellschaft Harkort. 1:25.

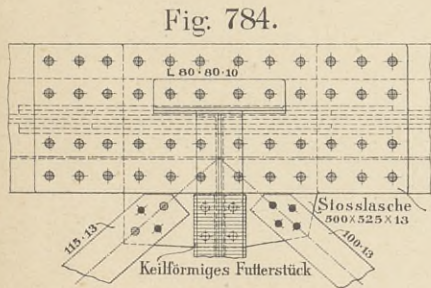


Fig. 784.

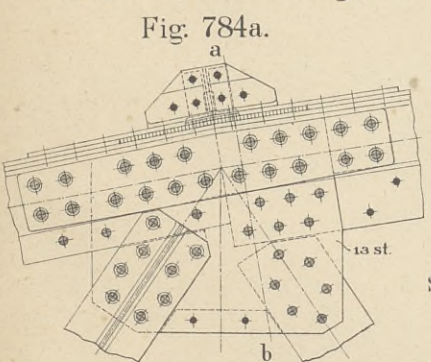


Fig. 784a.

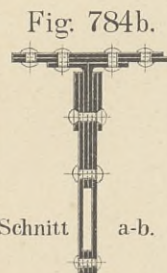


Fig. 784b.

Brücke über die Uszlenkis u. Kurmezeris
Tilsit - Memeler - Eisenbahn. 1:20.

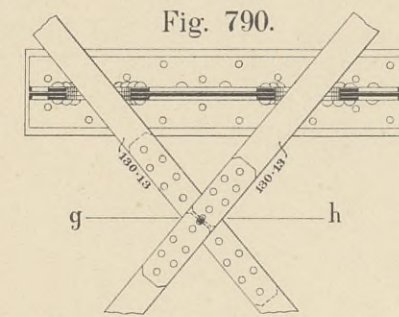


Fig. 790.

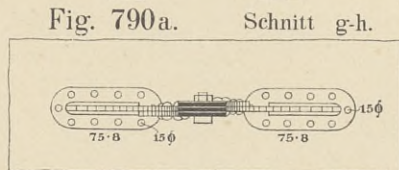


Fig. 790a. Schnitt g-h.

Zeglinbrücke. 1:30.

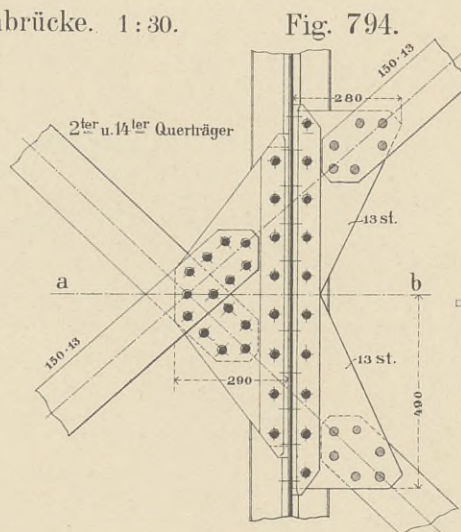


Fig. 794.

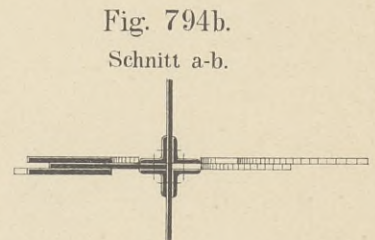


Fig. 794b.
Schnitt a-b.

Elbbrücke bei Barby.
1:20.

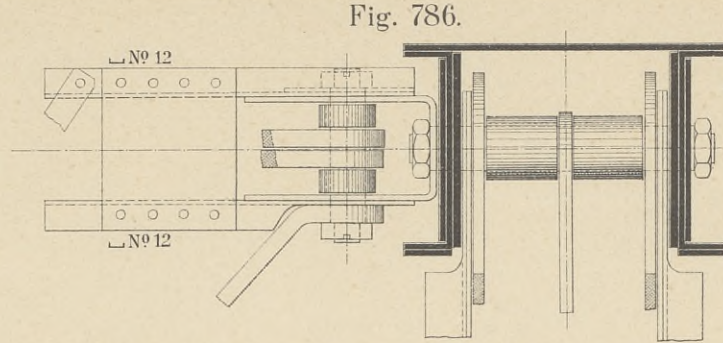


Fig. 786.

Ghitosche-Eisenbahnbrücke in Japan. 1:15.

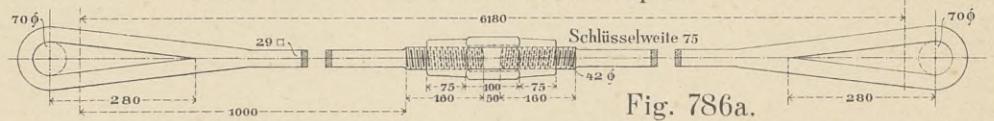


Fig. 786a.

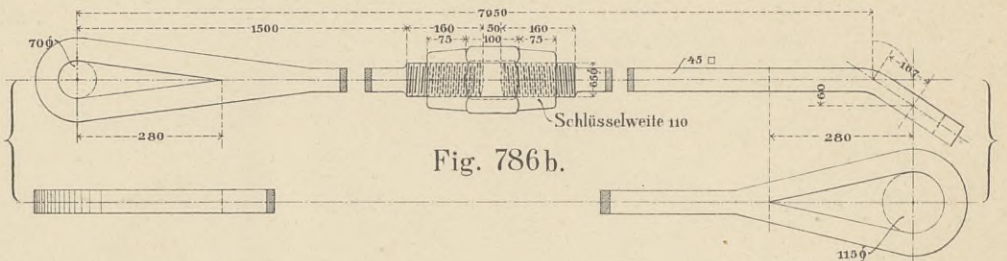


Fig. 786b.

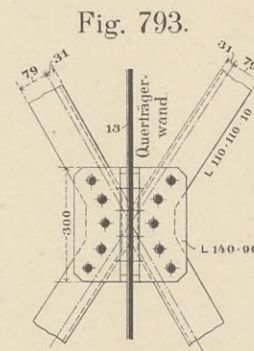


Fig. 793.

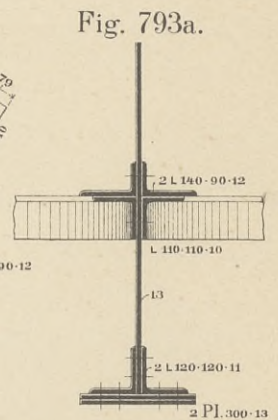


Fig. 793a.

Weichselbrücke bei Dirschau.
1:20.

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Biblioteka Politechniki Krakowskiej



IV-301383

Druk. U. J. Zam. 356. 10.000.

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