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ad VANDBYGNINGSVÆSNETS BOGSAMLING ~~K236~~ 136 3

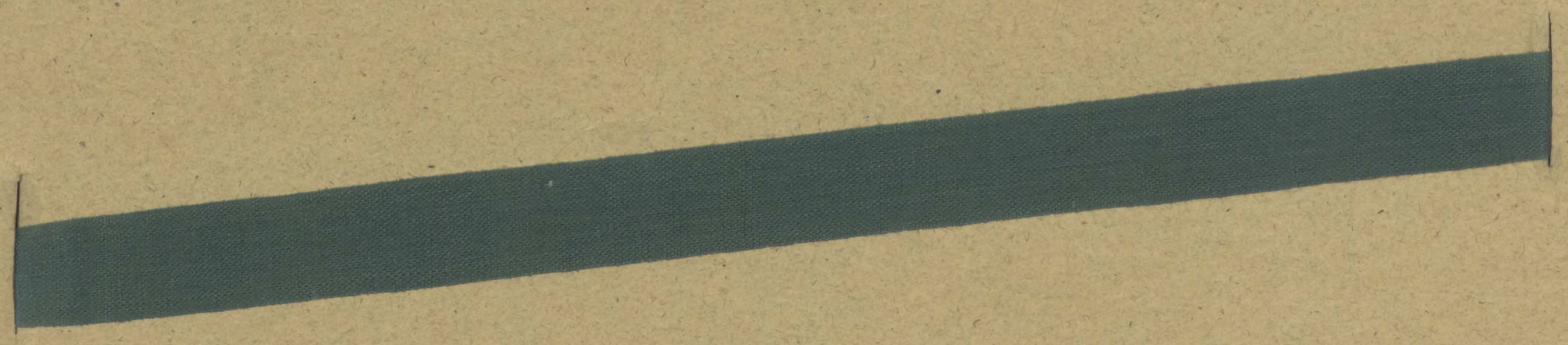
PLATEN

BEHOORENDE BIJ DE

WATERBOUWKUNDE

UITGAVE VAN

DE GEBROEDERS VAN CLEEF TE 'S GRAVENHAGE



PLATEN

BEHOORENDE BIJ DE

WATERBOUWKUNDE

BEWERKT DOOR

N. H. HENKET EN E. STEUERWALD

Hoogleeraren in de Waterbouwkunde aan de Polytechnische School te Delft

J. VAN DER TOORN

Hoofd-Ingenieur van den Waterstaat

T. J. STIELTJES Sr

Ingenieur

EN C. M. SCHOLS

Civiel Ingenieur, Leeraar aan de Koninklijke Militaire Akademie te Breda

VANDBYGNINGSVÆSNETS
A. BOGSAMLING 46

UITGAVE VAN DE GEBROEDERS VAN CLEEF TE 'S GRAVENHAGE

1878

PLATEN

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A. BOGSAMLING
46

UITGAVE VAN DE GEBROEDERS VAN CLEEF TE 'S GRAVENHAGE

1878

UITWATERINGSSLUIZEN IN ZEELAND.

Fig. 1.a Lengte doorsnede. 1/200.

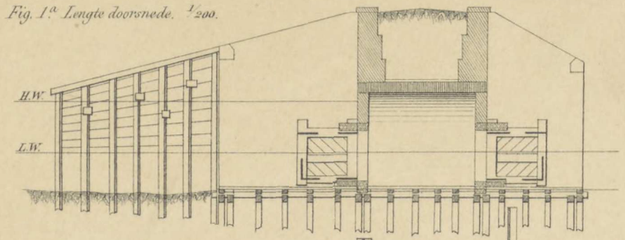


Fig. 1.b Binnen aanzicht. 1/200.

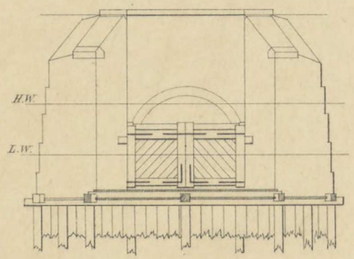


Fig. 1.c Platte grond. 1/200.

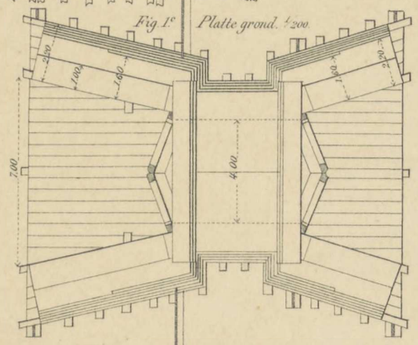


Fig. 2.a Lengte doorsnede der suatiesluis bewesten Herseke nabij Hansweert. 1/200.

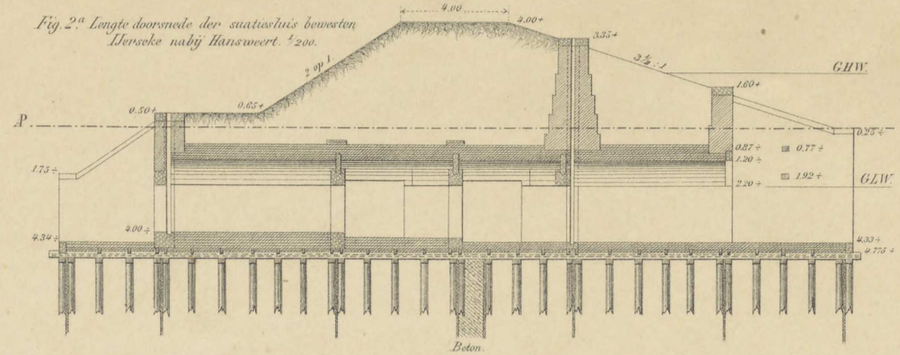


Fig. 2.b Halve horizontale doorsnede. 1/200.

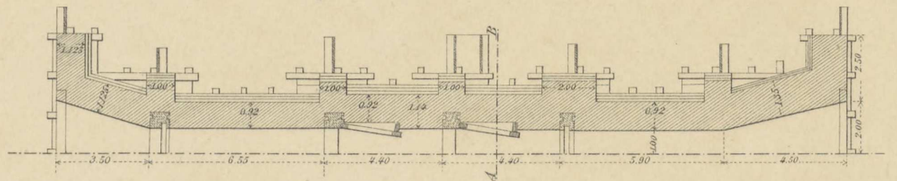


Fig. 2.c Buiten aanzicht. 1/200.

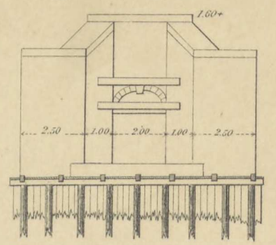


Fig. 2.d Doorsnede A.B. 1/200.

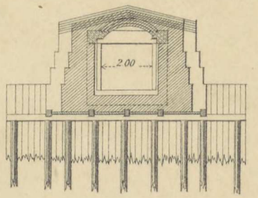


Fig. 3.a Doorsnede over A.B. 1/200.

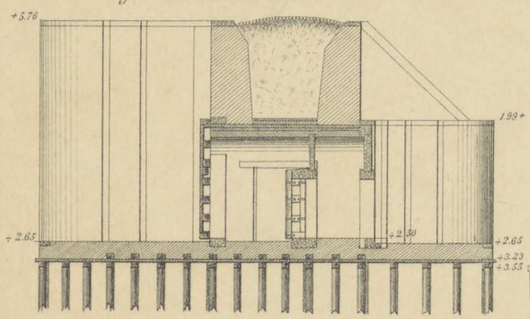


Fig. 3.b Half Buitenfront. 1/200.

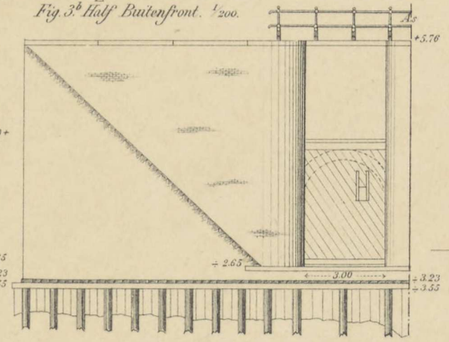


Fig. 3. Sluis in Staatsvlaanderen. (voormalig 4.e district).

Fig. 3.c Half Bovenaanzicht. 1/200.

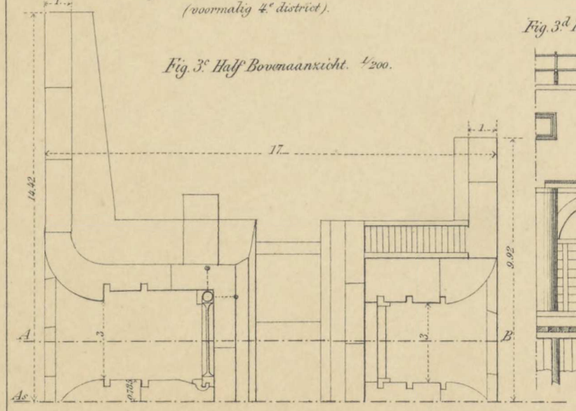


Fig. 3.d Half Binnenfront. 1/200.

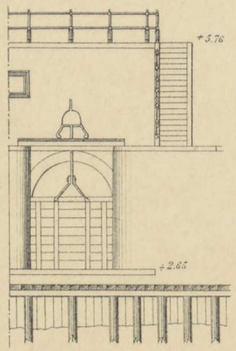


Fig. 4.f Situatie. 1/5000.

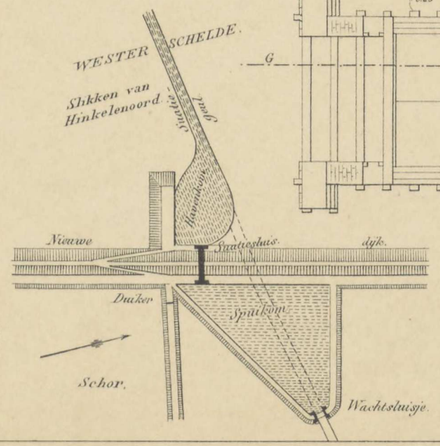


Fig. 4.a Lengtedoorsnede volgens GH. der suatiesluis voor de bedijking der schorren onder Woensdrecht en Rilland-Bath. 1/200.

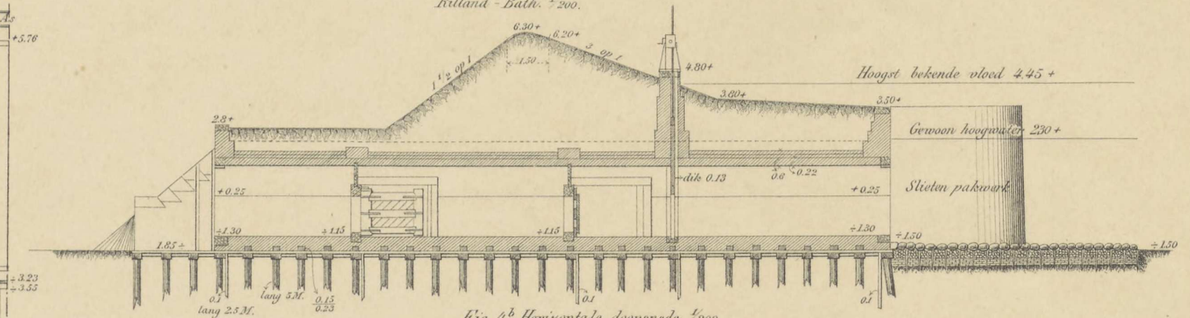


Fig. 4.b Horizontale doorsnede. 1/200.

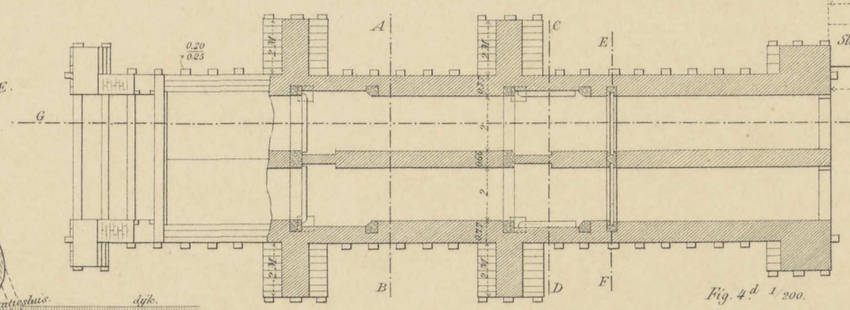


Fig. 4.c Aanzicht van het binnenfront. 1/200.

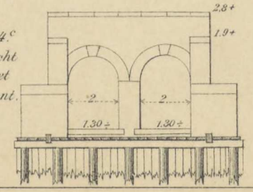
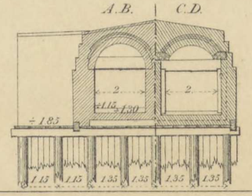


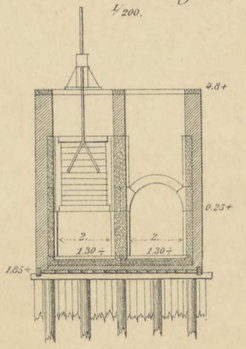
Fig. 4.d 1/200. A.B. C.D.



Slieten pakwerk.

Stortebed.

Fig. 4.e Doorsnede over den schuifkoker. 1/200.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

Fig. 1. Suatiesluis van den Hoofdplaat polder. 1/200.

Fig. 1a Lengte doorsnede 1/200.

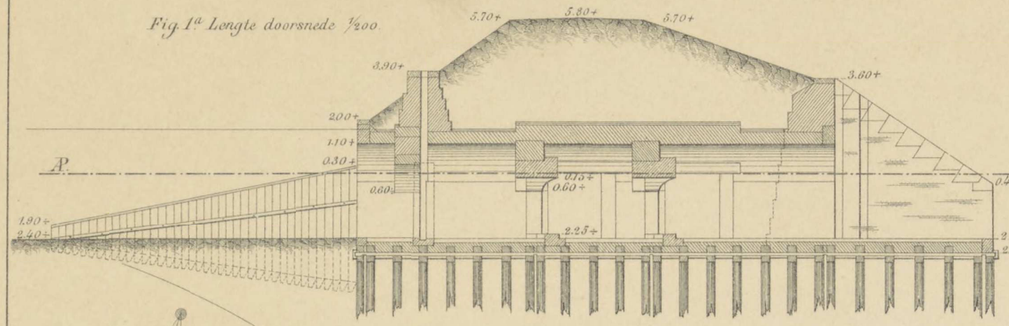


Fig. 1b Half binnen- en buiten-aanzicht. 1/200.

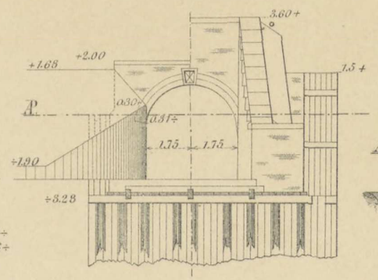


Fig. 1c Halve horizontale doorsnede en platte grond. 1/200.

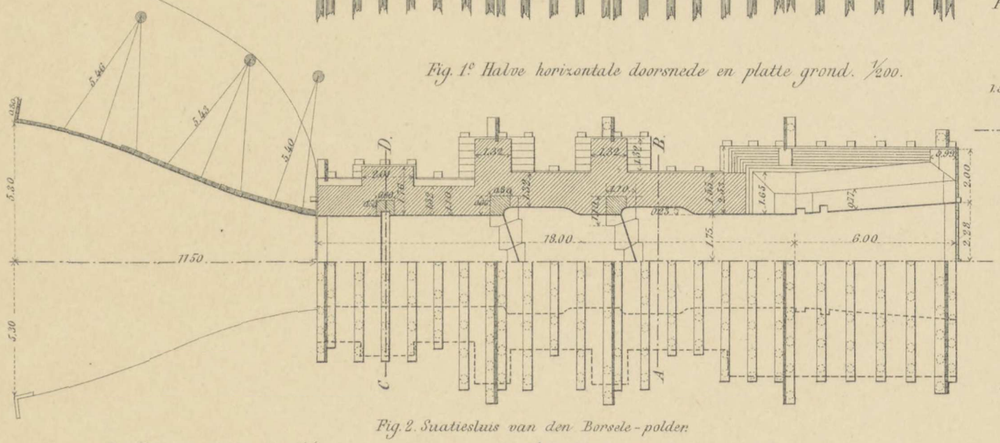


Fig. 1d Halve doorsnede over AB en C.D.

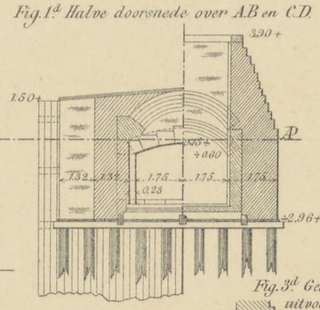


Fig. 2. Suatiesluis van den Borsele-polder.

Fig. 2a Lengte-doorsnede. 1/200.

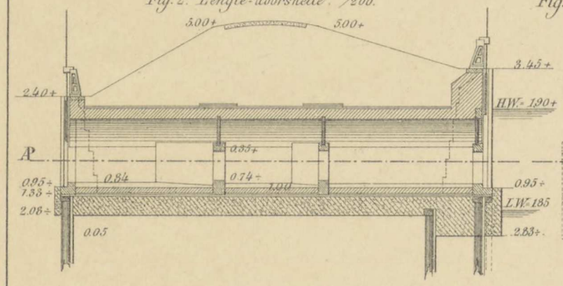


Fig. 2b Half binnen- en buiten-aanzicht. 1/200.

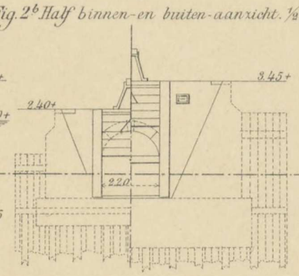


Fig. 2c Doorsnede volgens A.B.

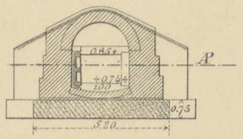


Fig. 2d Horizontale doorsnede 1/200.

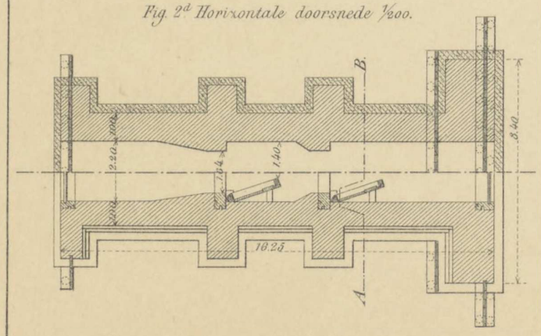


Fig. 2e Situatie. 1/1500.

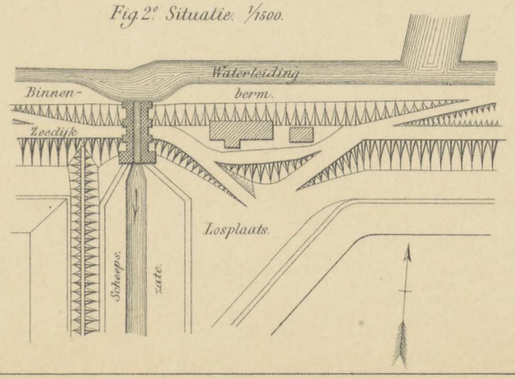


Fig. 3a Lengte-doorsnede der sluis aan den Oosterlandpolder. 1/200.

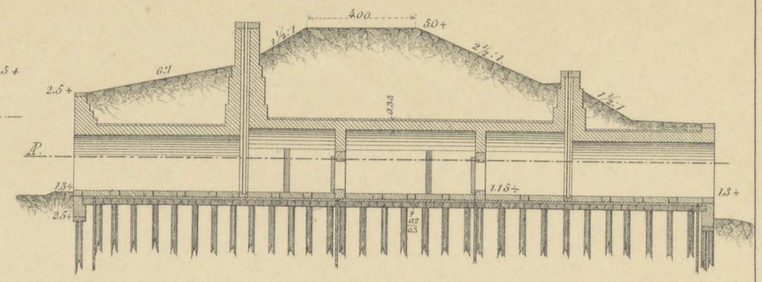


Fig. 3b Platte grond. 1/200.

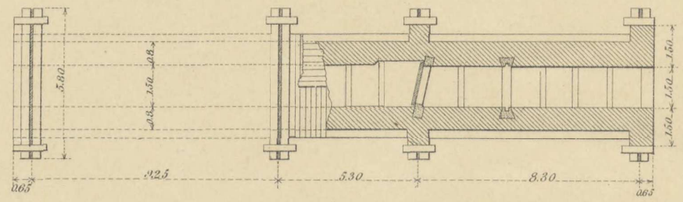


Fig. 3d Ged. lengte-doorsnede, tijdens de uitvoering der verlaging. 1/100.

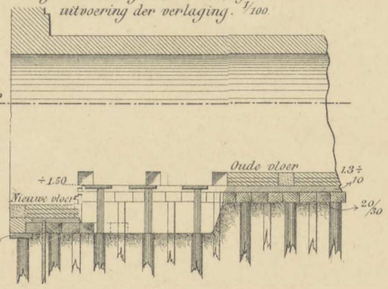


Fig. 3c Dwarsdoorsnede.

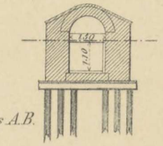


Fig. 3c Doorsnede voor en na de verlaging 1/100.

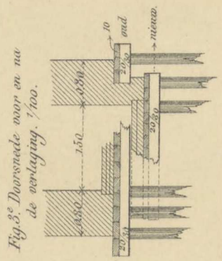


Fig. 3e Platte grond gedurende de uitvoering 1/100.

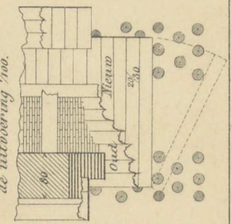


Fig. 4c Doorsnede A.B. 1/200.

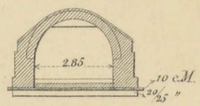


Fig. 4. Suatiesluis van den polder Schouwen.
Fig. 4a Lengte-doorsnede. 1/200.

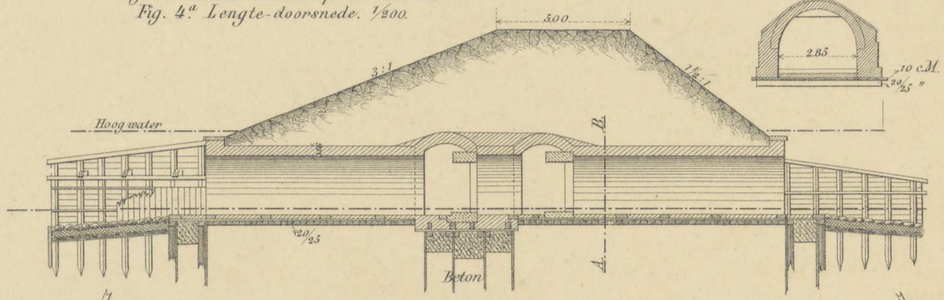
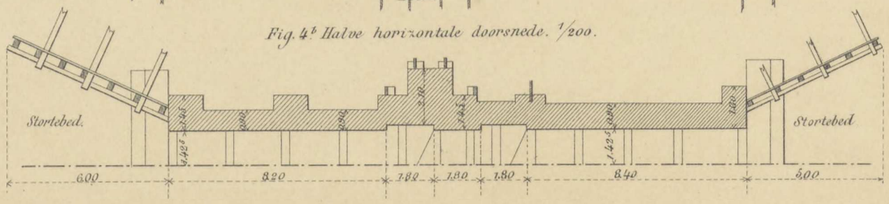


Fig. 4b Halve horizontale doorsnede. 1/200.



Uitg. de Gebr. v. Cleef, 's Hage. Steendr. v. Gebr. J. & Hv. Langenhuysen, 's Hage.

UITWATERINGSSLUIS AAN HET BENEDENEINDE VAN DEN ROSENDAALSCHEN EN STEENBERGSCHEN VLIET NABIJ HET VOLKERAK.

Fig 1.a Halve verticale dwarsdoorsnede volgens A.B. 1/200.

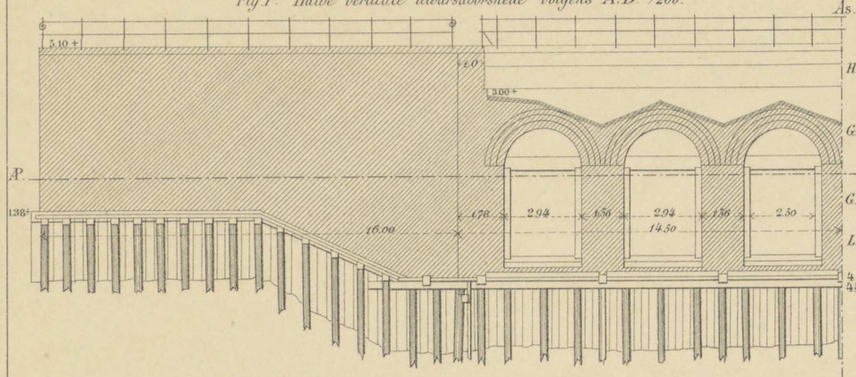


Fig 1.b Halve platte grond. 1/200.

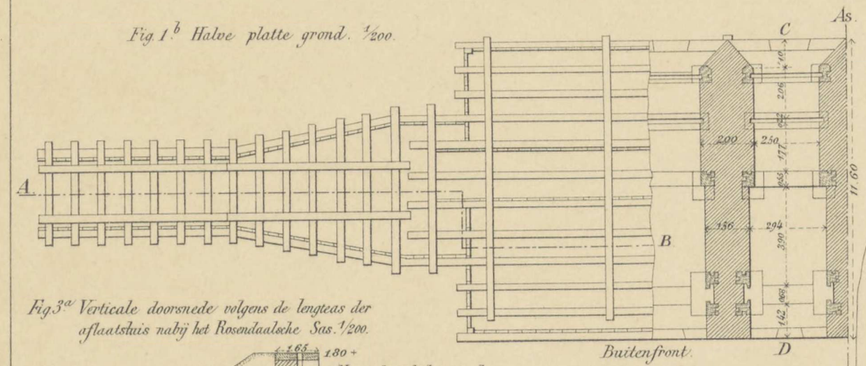


Fig 1.c Dwarsdoorsnede volgens D.C. 1/200.

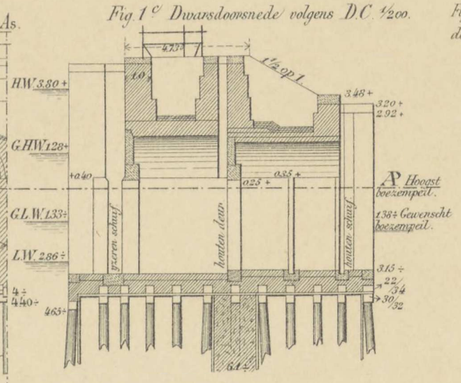


Fig 2. Situatie. 1à 2500.

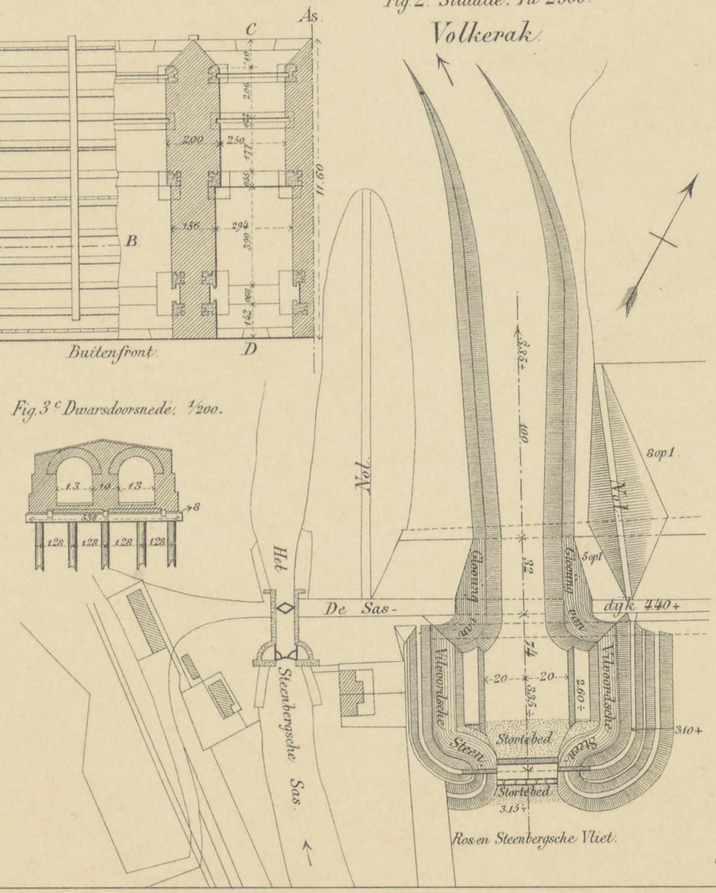


Fig 3.a Verticale doorsnede volgens de lengteas der aflaatsluis nabij het Rosendaalsche Sas. 1/200.

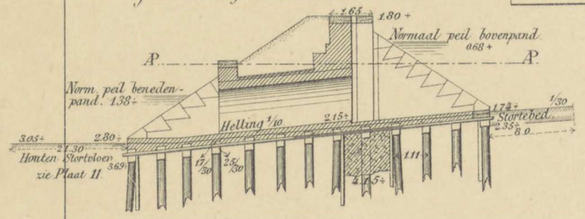


Fig 3.b Halfbovenaanzicht en halve platte grond. 1/200.

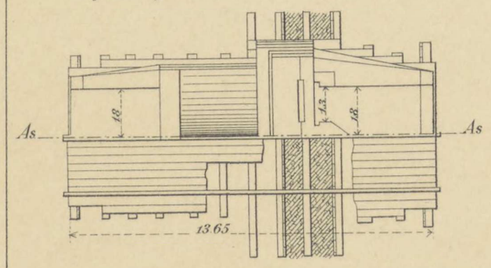


Fig 3.c Dwarsdoorsnede. 1/200.

Fig 1.d Half-Aanzicht en halve doorsnede der Plaatyzeren schuif. 1/50

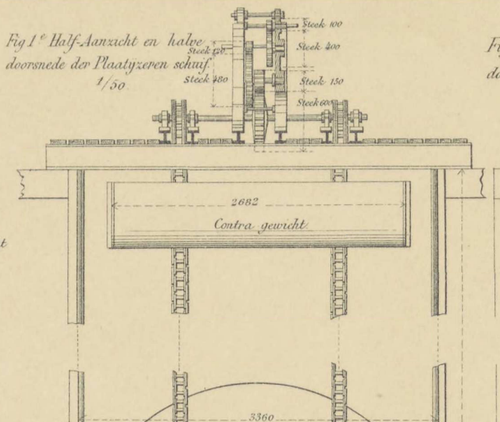


Fig 1.e Dwarsdoorsnede. 1/50

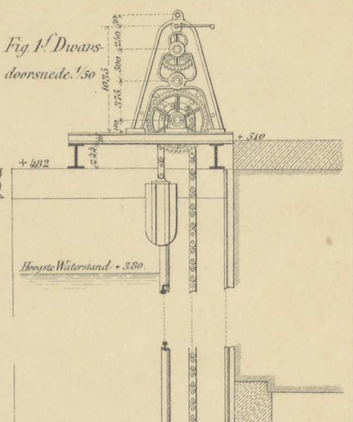


Fig 1.g Bovenaanzicht. 1/50.

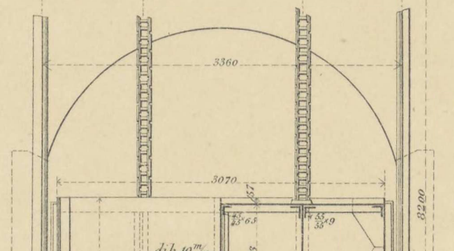


Fig 1.h Horizontale doorsnede volgens AA. 1/20.

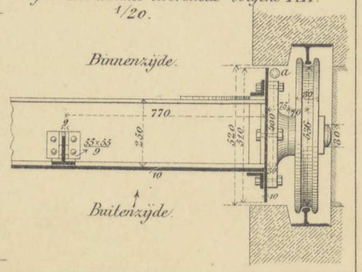
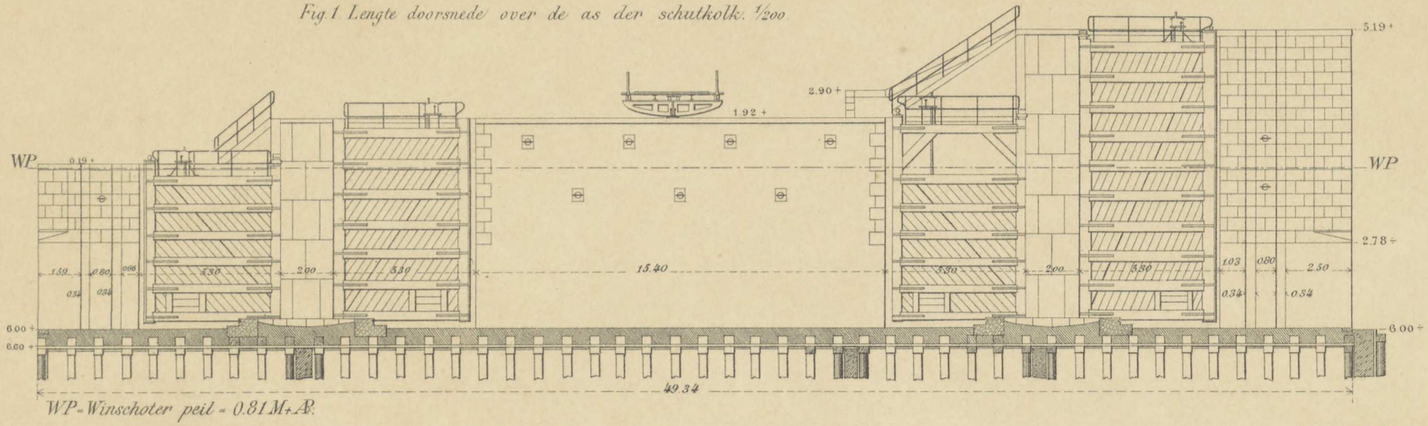


Fig. 1. Lengte doorsnede over de as der schutkolk. 1/200.



WP = Winschoter peil = 0.81 M + A.P.

Fig. 3[a] Dubbele bovenslagbalk. Boven aanzicht. 1/40.

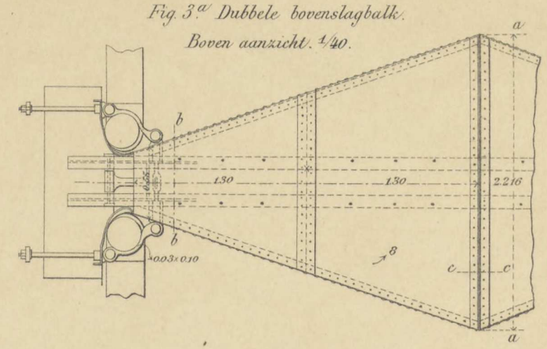


Fig. 3[b] Ged. vooraanzicht. 1/40

Fig. 3[c] Vert. doorsnede volgens a a. 1/40.

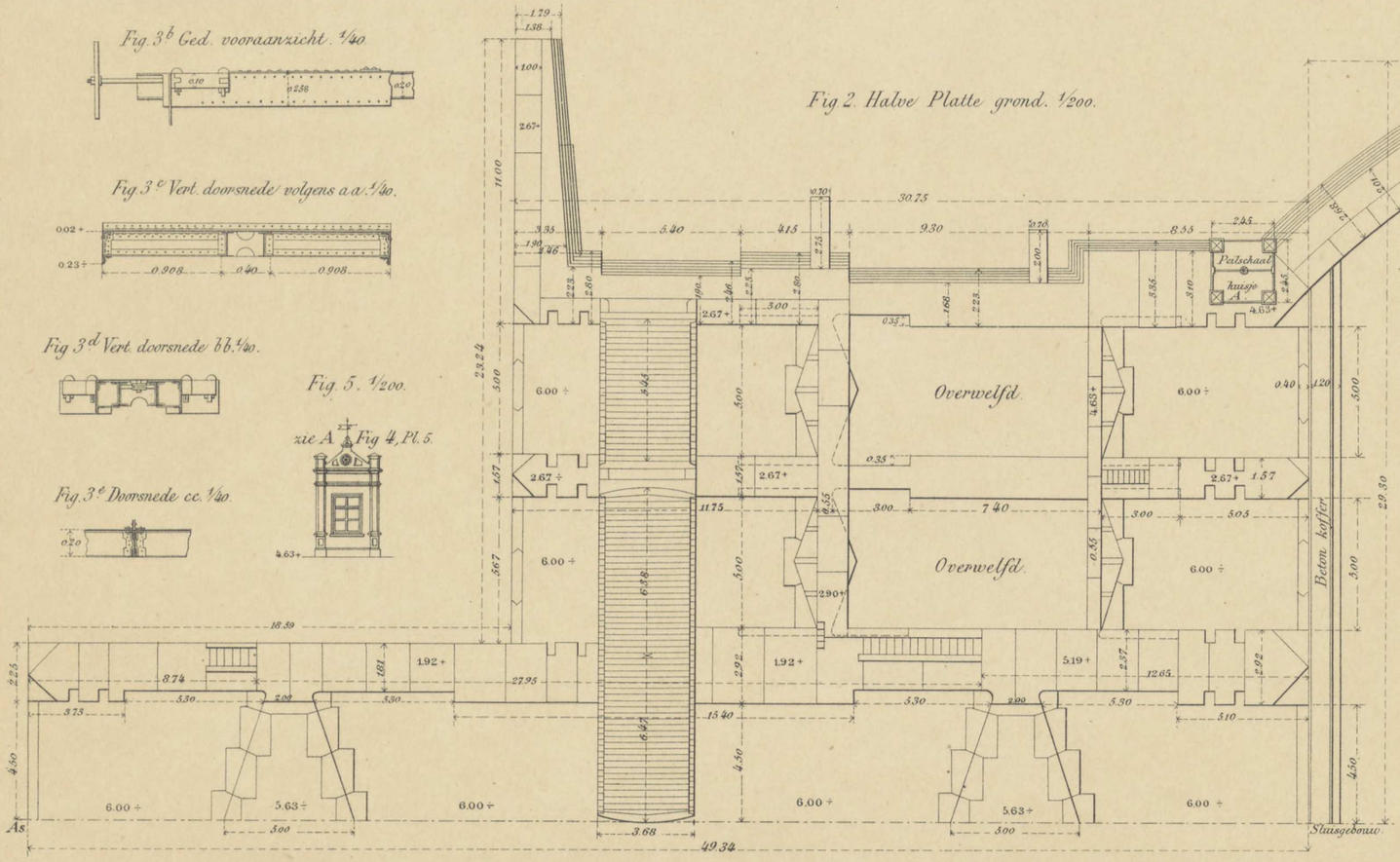
Fig. 3[d] Vert. doorsnede bb. 1/40.

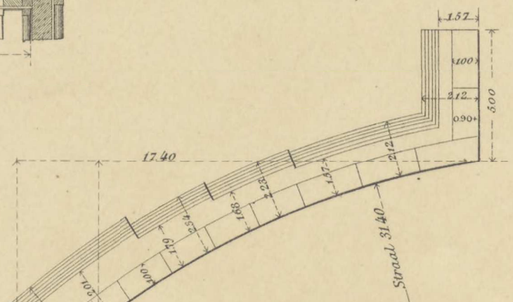
Fig. 3[e] Doorsnede cc. 1/40.

Fig. 5. 1/200.

zie A Fig 4, Pl. 5.

Fig 2. Halve Platte grond. 1/200.





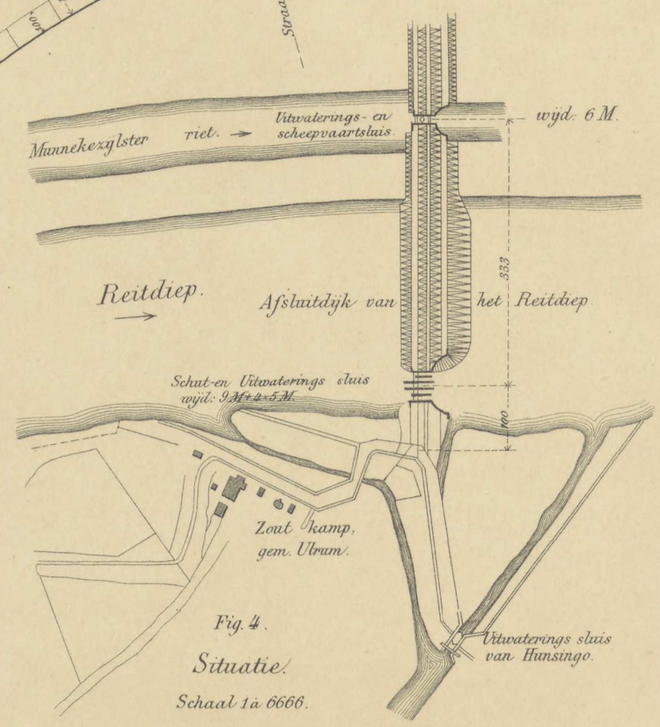


Fig. 4.

Situatie.

Schaal 1 a 6666.

Uitg. de Gebr[s] v. Cleef. Steendr. Gebr. v. Langenhuysen, s Hage.

GROOTE SLUIS BIJ ZOUTKAMP.

Fig. 1. Gedeeltelijk Binnenaanzicht. 1/200.

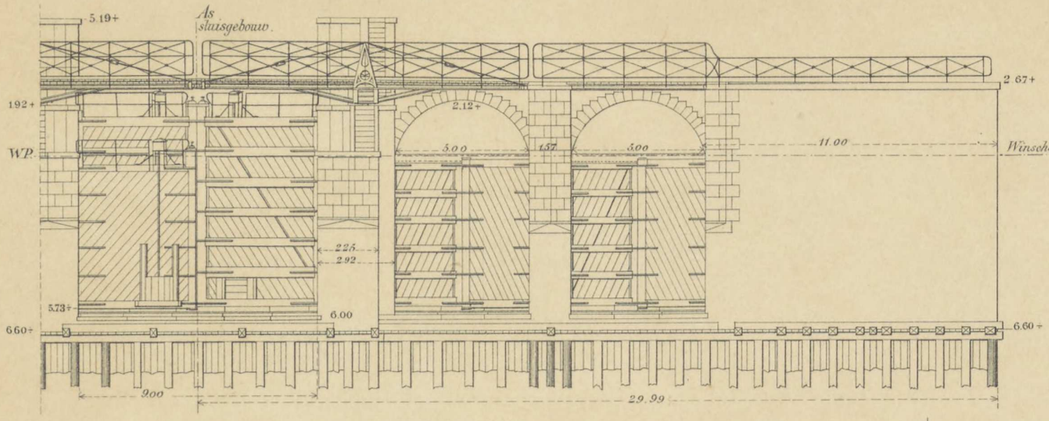


Fig. 2. Lengtedoorsnede over de As van een buitenkoker. 1/200.

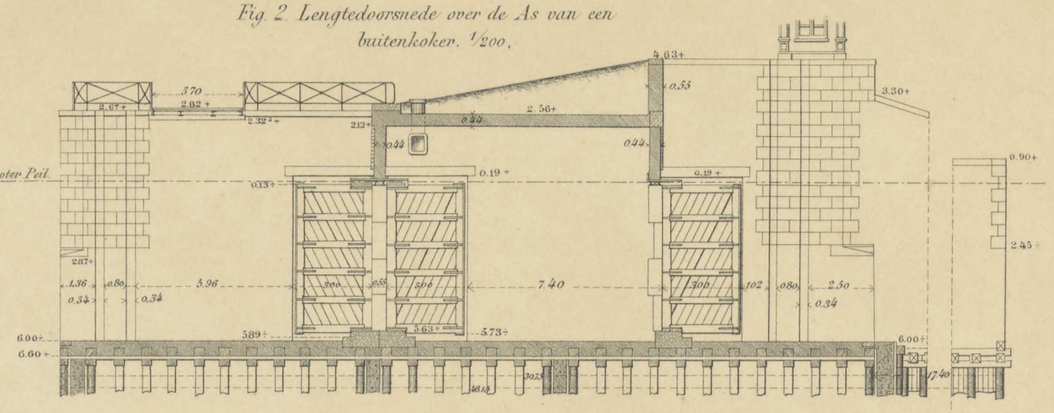


Fig. 3 Lengtedoorsnede over de As van een binnenkoker. 1/200.

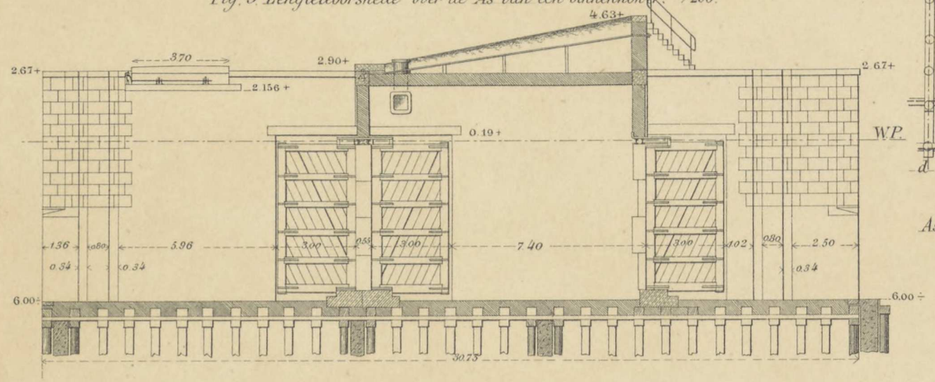


Fig. 4 Ged buitenaanzicht. 1/200.

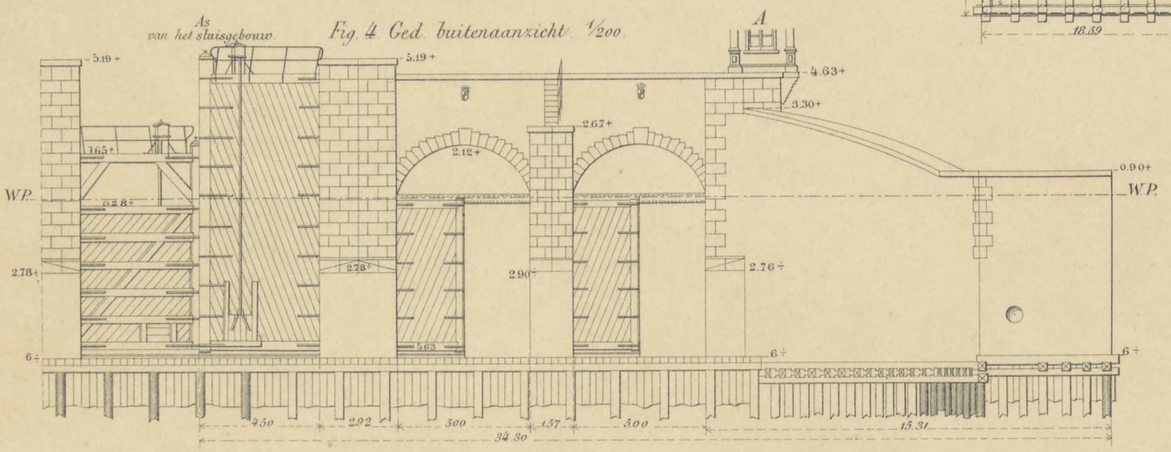


Fig. 5a Fundeering. 1/200.

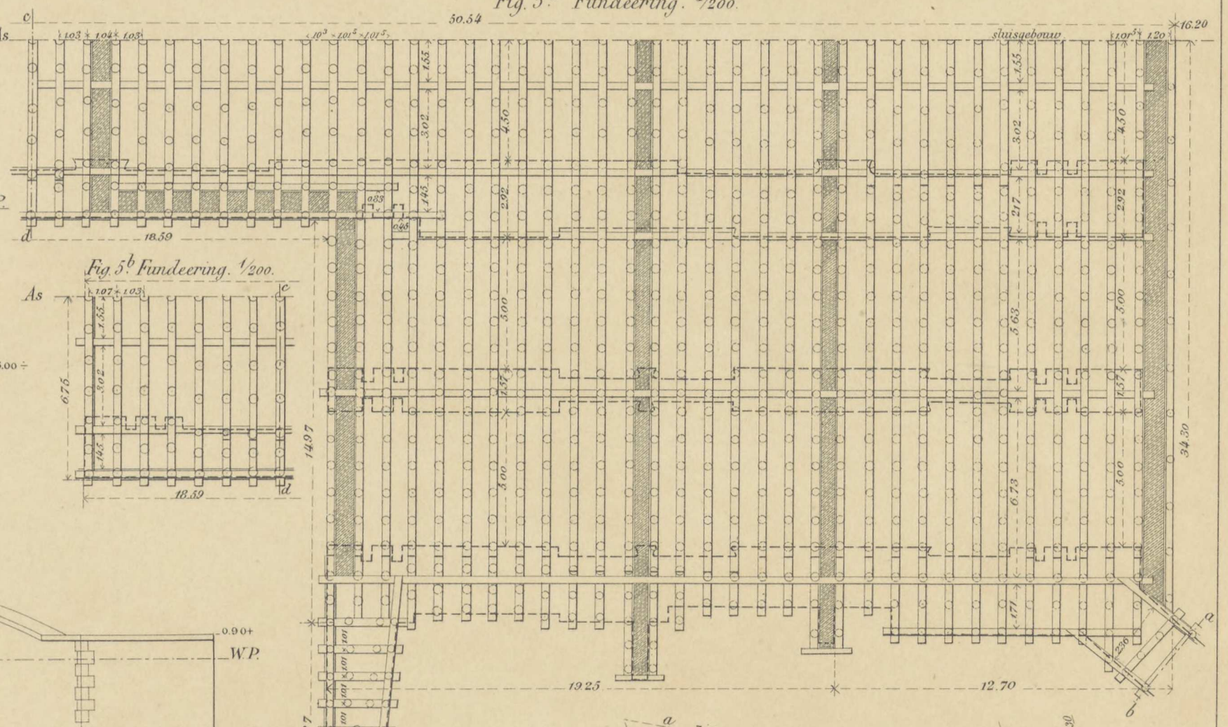
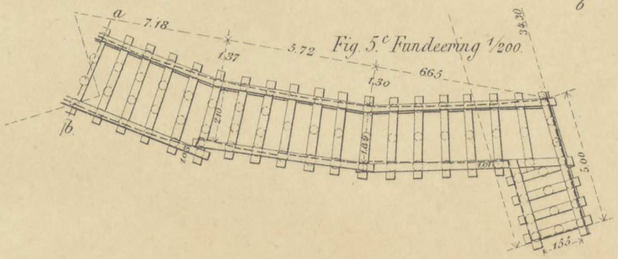


Fig. 5b Fundeering. 1/200.

Fig. 5c Fundeering 1/200.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

DE VERNIEUWDE ROPTAZIJL IN DEN FRIESCHEN ZEEDIJK.

Fig 1a Verticale doorsnede volgens AB 1/100.

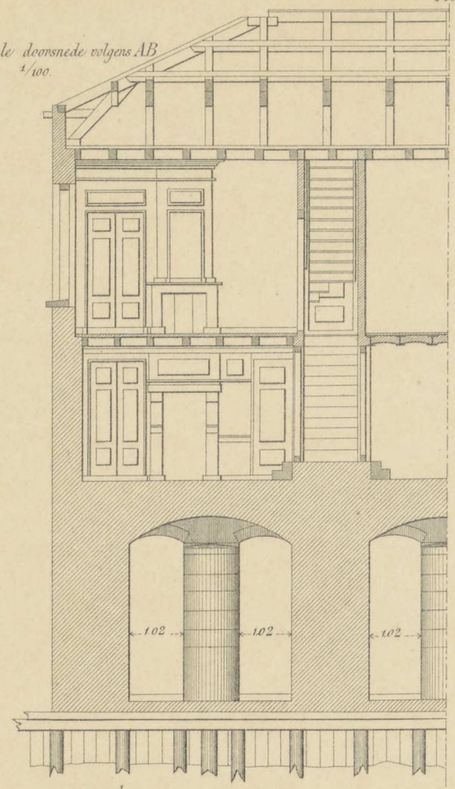


Fig 1b Half-aanzicht van de landzijde. 1/100. Half-aanzicht van de zeezijde. 1/100.

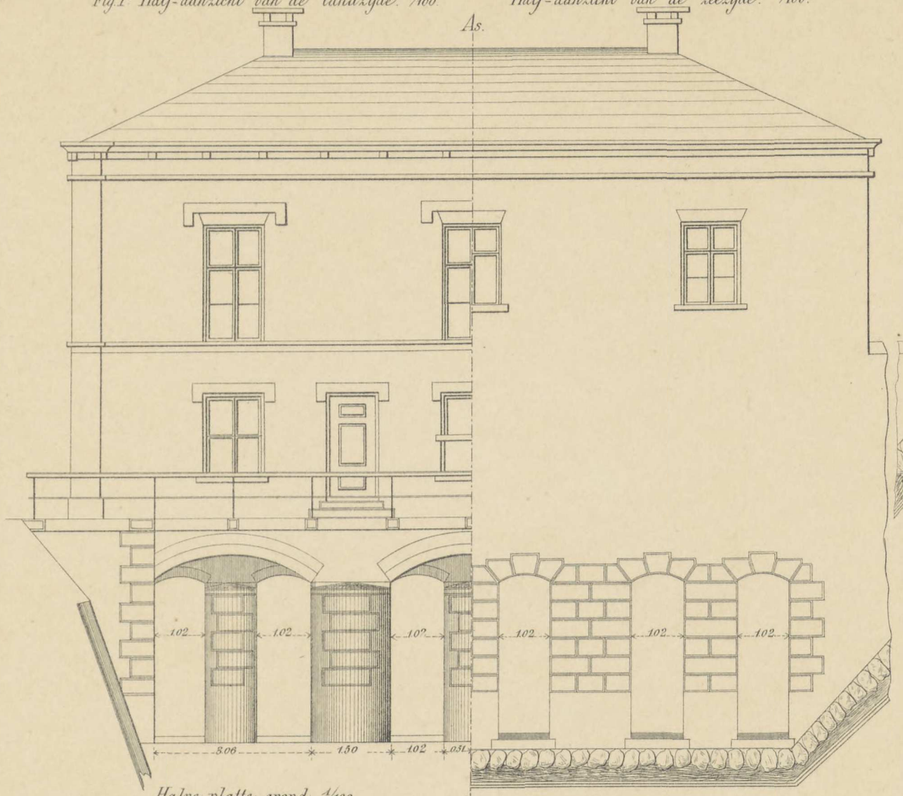


Fig 1c Verticale doorsnede volgens CD. 1/100.

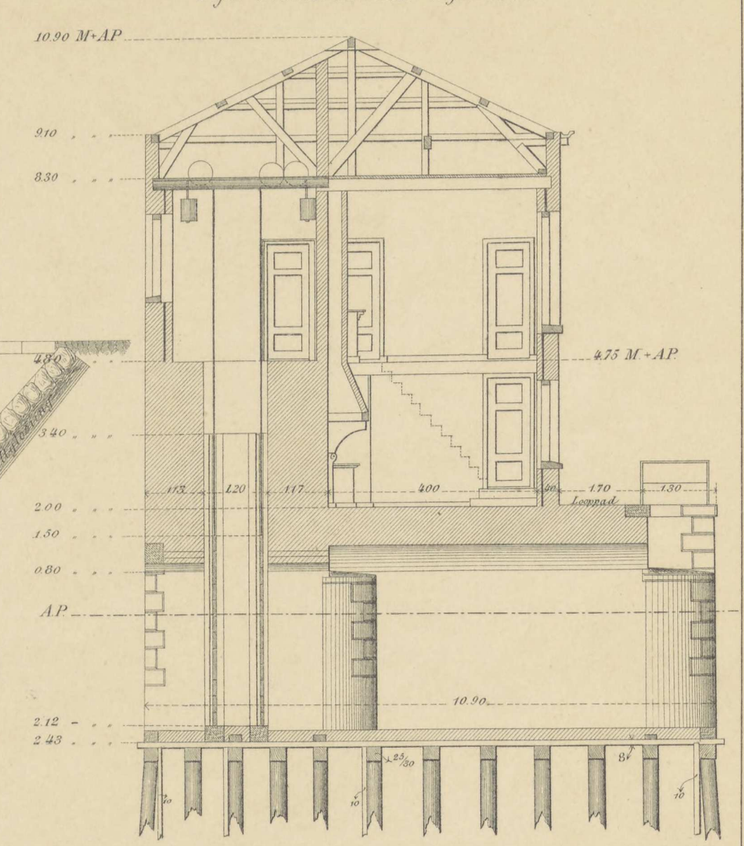
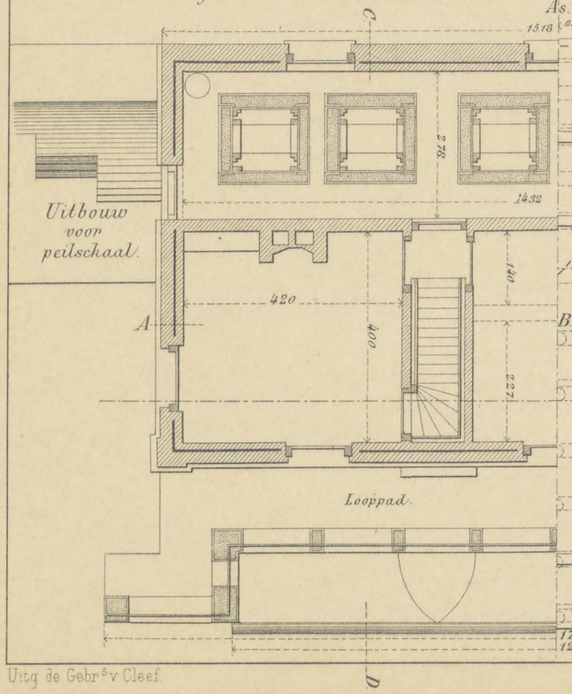


Fig 1d Halve horizontale doorsnede. 1/100.



Halve platte grond. 1/100.

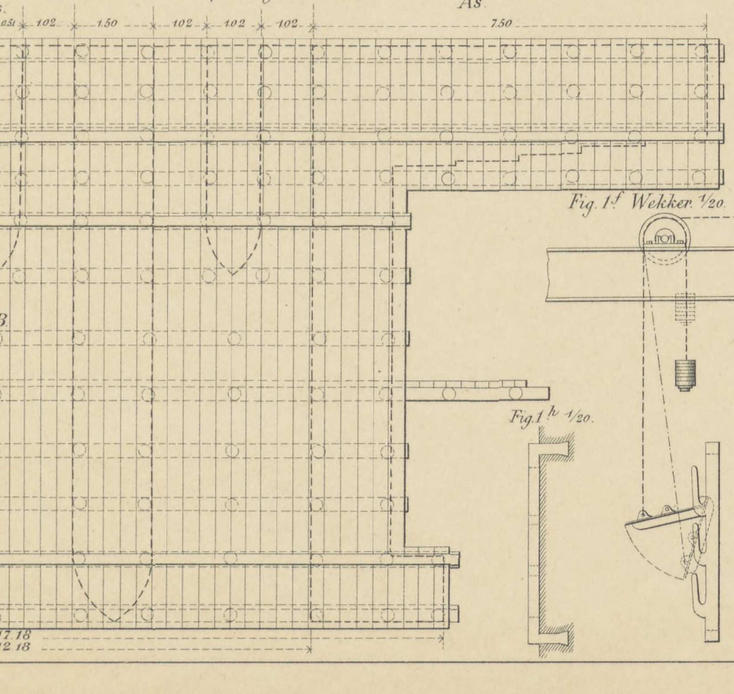


Fig 1e Situatie. 1/500.

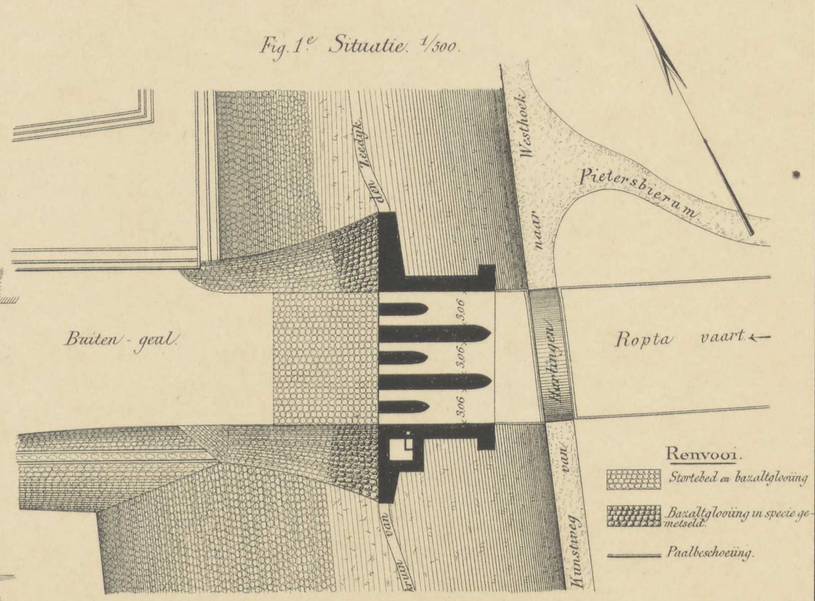


Fig 1f Wekker 1/20.

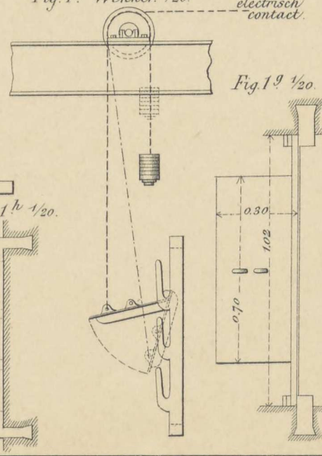


Fig 1g 1/20.

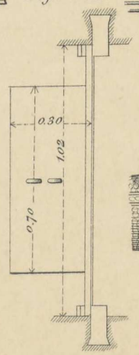


Fig 1h 1/20.

Uitg de Gebr^s v Cleef.

Steendr Gebr^s v Langenhuysen 's Hage

UITWATERINGSSLUIZEN VAN RIJNLAND TE SPAARNDAM EN TE KATWIJK. IJZEREN DUIKER VAN BESOIJEN.

Fig. 1. Uitwaterings- en schutsluis te Spaarndam, genaamd de Groote Sluis.

Fig. 1a Lengte-doorsnede. 1/200.

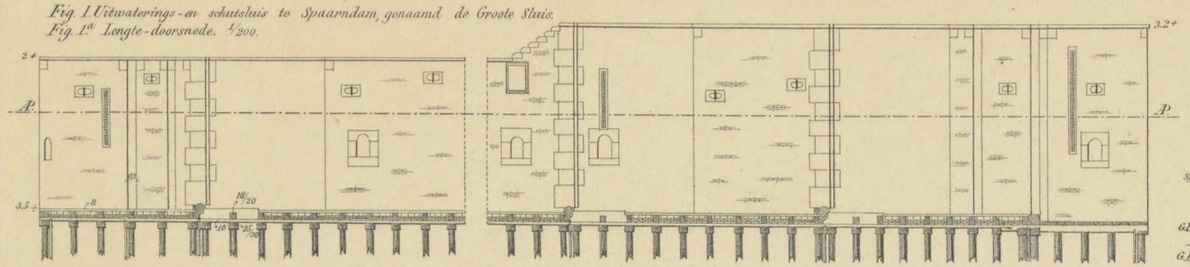


Fig. 1b Boven-aanzicht en platte grond. 1/200.

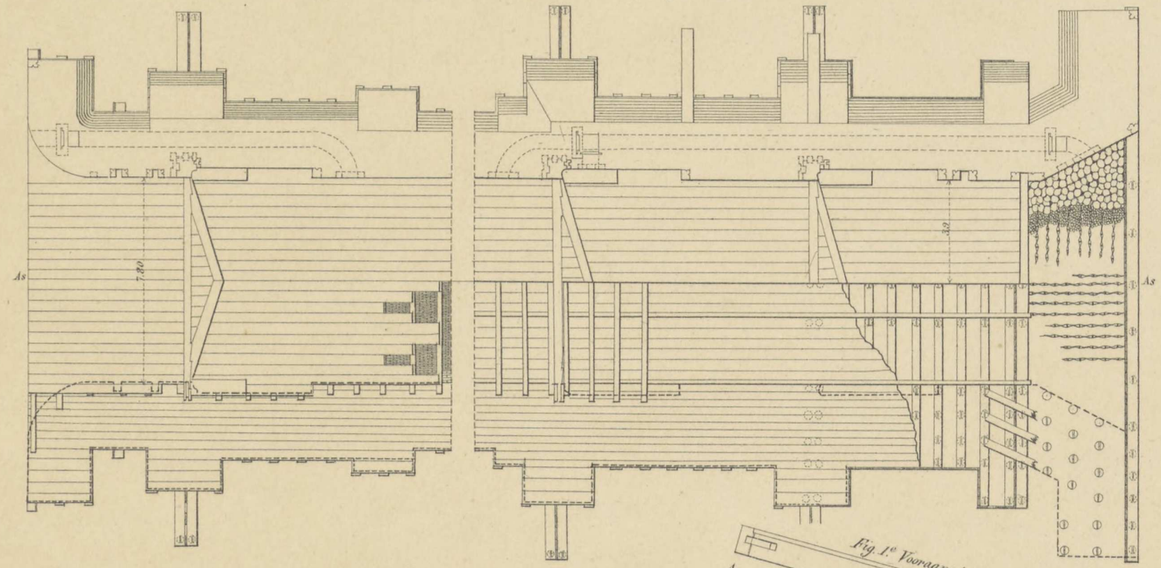


Fig. 1c Bovenaanzicht van den houten slagdrempel. 1/50.

Fig. 1c Vooraanzicht v.h. puntstuk. 1/50.

Fig. 1e Doorsnede volgens CD. fig 1c 1/50.

Fig. 1d. Vooraanzicht v. d. omgekanten slagbalk. 1/50.

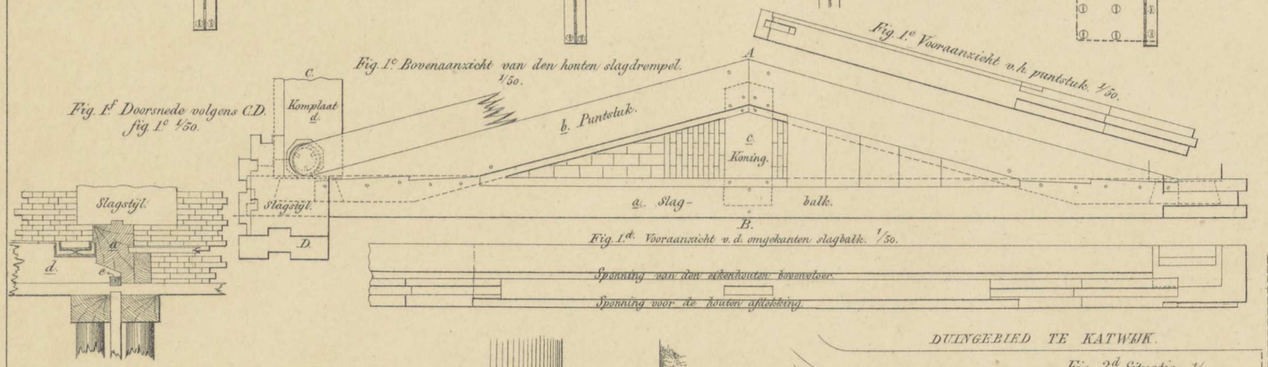
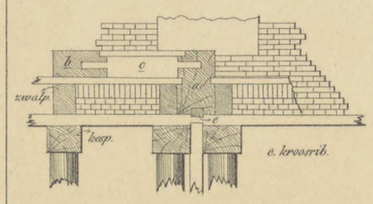


Fig. 1f Doorsnede volgens AB. fig 1c 1/50.



DUINGEBIED TE KATWIJK.

Fig. 2d Situatie. 1/2000.

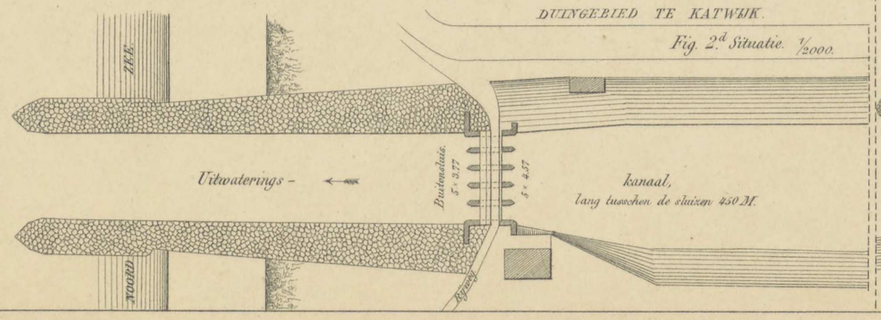


Fig. 2. Buitensluis te Katwijk.

Fig. 2a Gedeeltelijk aanzicht van de zeezijde. 1/300.

Fig. 2b Lengte-doorsnede. 1/300.

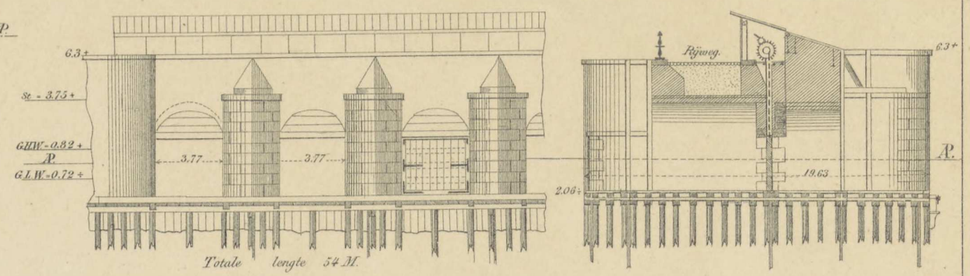


Fig. 2c Gedeeltelijk boven-aanzicht en hor. doorsnede. 1/300.

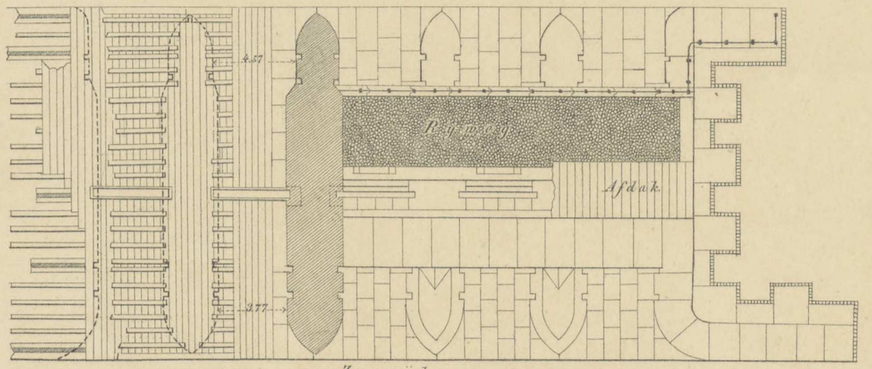


Fig. 3. IJzeren duiker voor den buitenpolder van Besoijen.

Fig. 3a Dwarsdoorsnede. 1/100.

Fig. 3b Ged. lengte- aanzicht en doorsnede. 1/100.

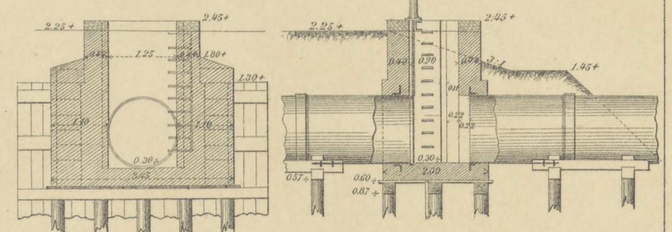


Fig. 3c Doorsnede volgens CD. 1/100.

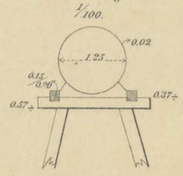
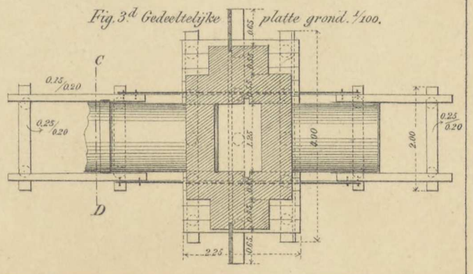


Fig. 3d Gedeeltelijke platte grond. 1/100.



Uitg. de Gebr. v. Cleef.

Lith. Gebr. J. & H. v. Langenhuysen, s'Hage.

SLUIS TE MAASSLUIS, STROOMDUIKERS. HARDSTEENEN SLAGDREMPEL. WAKER TE MUIDEN.

Fig. 1. Monstersche Sluis te Maassluis.

Fig. 1a Doorsnede over A.B. 1/200.

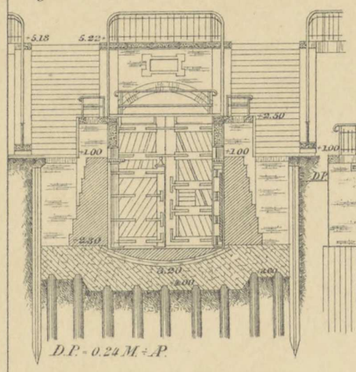
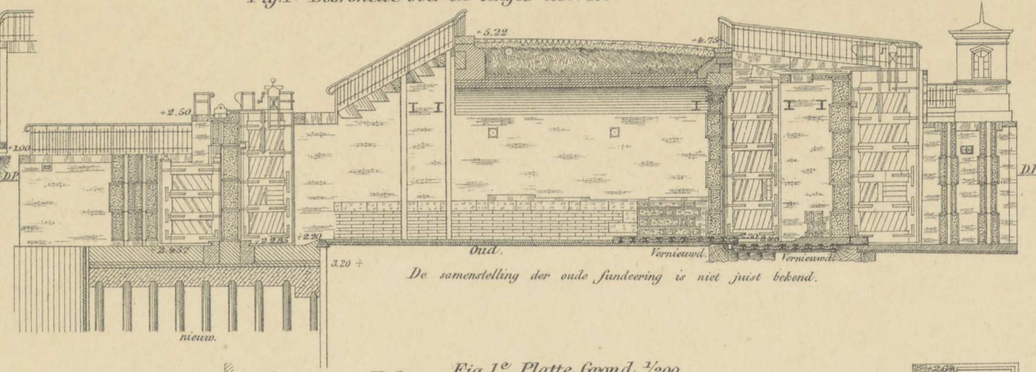


Fig. 1b Doorsnede over de lengte-as. 1/200.



De samenstelling der oude fundeering is niet juist bekend.

Fig. 1c Doorsnede over E.F. 1/200.

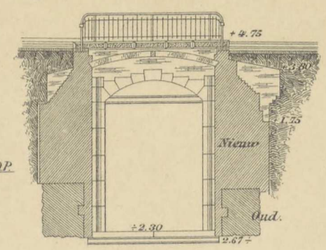


Fig. 2. Stroomduiker op de Dedemsvaart.

Fig. 2a Lengtedoorsnede van den duiker nabij Sluis V.

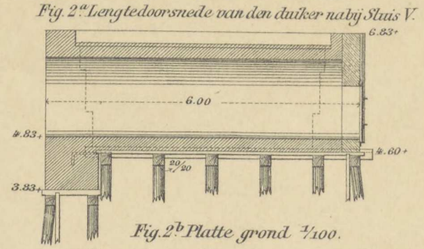


Fig. 2b Platte grond 1/100.

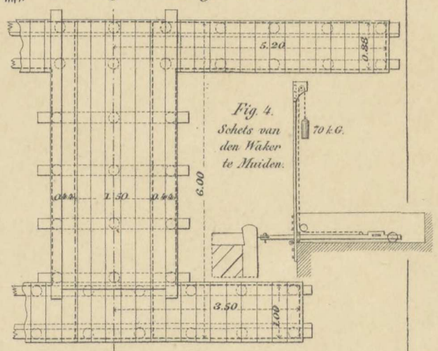


Fig. 4. Schets van den Waker te Muiden.

Fig. 1d Doorsnede over C.D. 1/200.

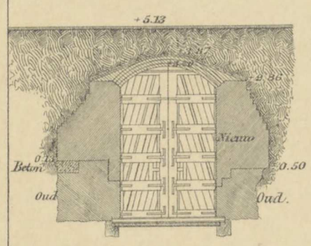


Fig. 1e Platte Grond. 1/200.

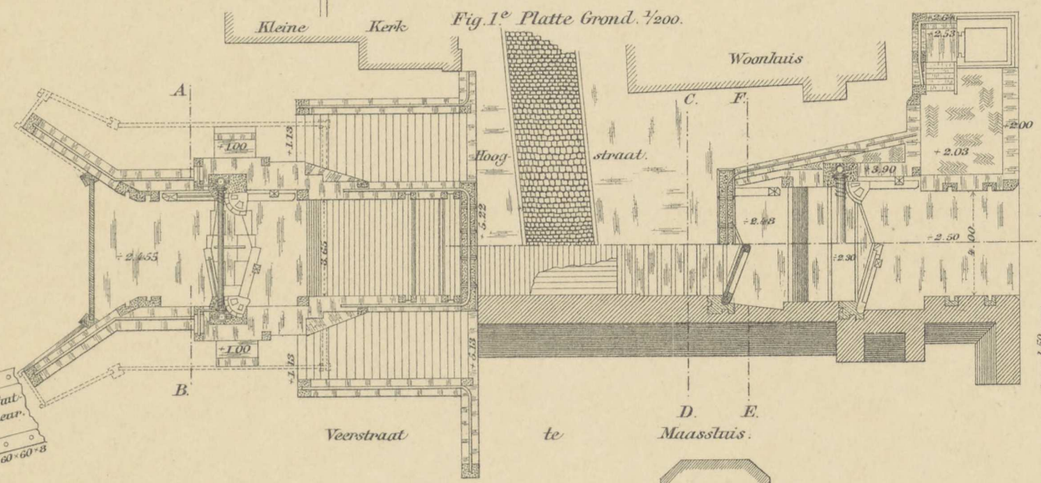


Fig. 2c Halfzijdsicht van de bovenzijde 1/100.

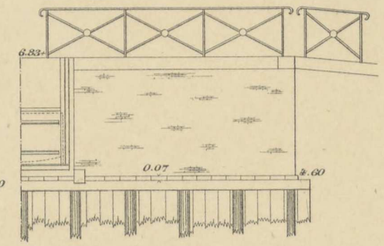


Fig. 2d Halfzijdsicht van de benedenzijde 1/100.

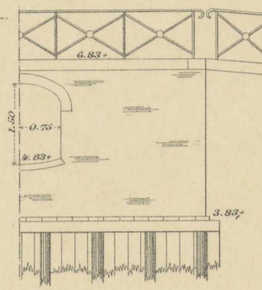


Fig. 2e Situatie van den stroomduiker bij sluis V. 1/2500.

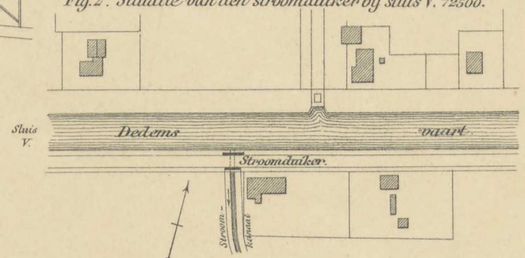


Fig. 1f Bewegingstoestel der Schuifdeuren. 1/20.

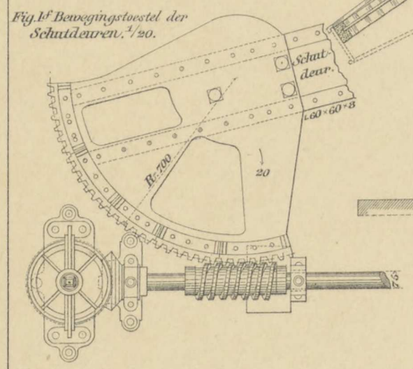


Fig. 2g Lengte doorsnede van den duiker bij sluis IV. 1/100.

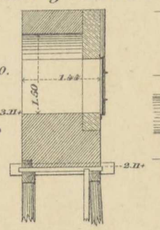


Fig. 2f Situatie van den stroomduiker bij sluis IV 1/2500

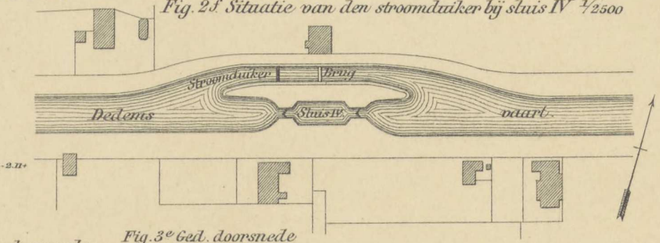


Fig. 3a Half vooraanzicht van een hardsteenen slagdrempel. 1/20.

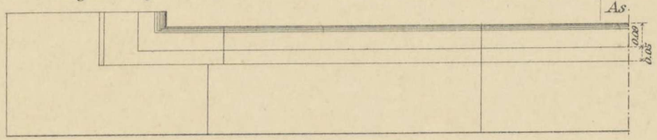


Fig. 3c Doorsnede volgens AA. 1/20.

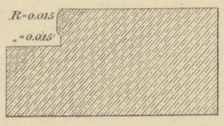


Fig. 3b Half bovenaanzicht. 1/20.

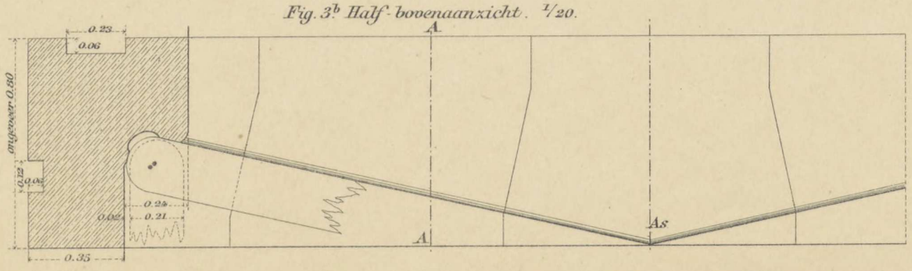


Fig. 3d Halve doorsnede volgens B.B. fig. 3c 1/100.

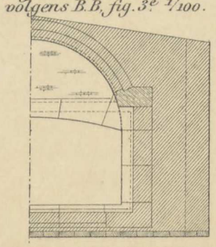


Fig. 3e Ged. doorsnede volgens C.C. fig. 3f 1/100.

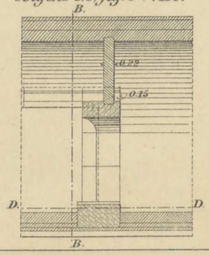


Fig. 3f Ged. horizontale doorsnede volgens D.D fig. 3e 1/100.

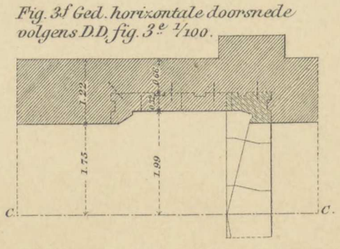
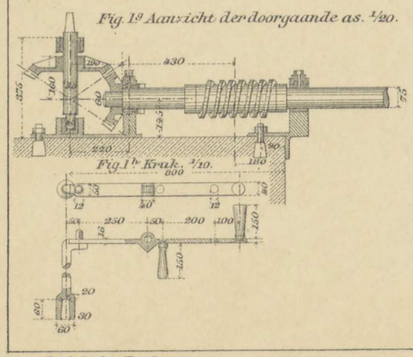


Fig. 1g Aanzicht der doorgaande as. 1/20.



Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen, 's Hage

SLUIS TE SCHEVENINGEN, TE KOPPERSHORN EN DIEMERDAMMERSLUIS.

Fig. 1. Zeesluis te Scheveningen, ten behoeve der waterverversching van 's Gravenhage.

Fig. 1a Doorsnede over HK. 1/200.

Fig. 1b Doorsnede over E F G. 1/200.

Fig. 1c Doorsnede over A B. 1/200.

Fig. 1d C D. 1/200.

Fig. 1e Aanzicht Zeezijde. 1/200.

Fig. 1f Platte grond. 1/200.

Fig. 1g. Schoen der waaierdeur 1/50.

Onder-aanzicht. Bowen-aanzicht.

Fig. 1h 1/50.

Fig. 1i Doorsnede volg. a.b. 1/50.

Fig. 1k Doorsn. volgens c.d.

Fig. 1l Beweegings-toestel. 1/50.

Fig. 1m Doorsn. volg. e f. 1/50.

Fig. 1n Ged. houten schuif. 1/50.

Fig. 1o Houten schuif. 1/50.

Fig. 2. Sluis in den zeedijk bij Koppershorn.

Fig. 2a Lengte doorsnede 1/200.

Fig. 2b Binnenfront. 1/200.

Fig. 3. Diemerdammersluis. 1/200.

Fig. 3a Ged. lengte doorsnede. Fig. 3b Dwarsdoorsnede 1/200.

Fig. 3c Ged. hor. doorsnede. 1/200.

Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuyzen, 's Hage

UITWATERINGSSLUIS TE AARTSWOUD EN KEERSLUIS TE BROEKERHAVEN.

Fig. 1. Nieuwe uitwateringssluis van Raaxmaatsbovem van Geestmerambacht benoorden Aartswoud.

Fig. 1.a Lengte doorsnede. 1/200.

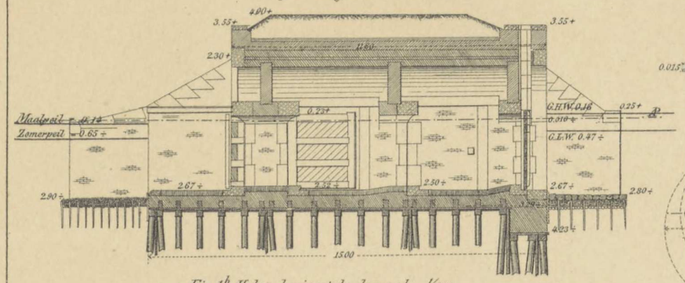


Fig. 1.b Halve horizontale doorsnede. 1/200.

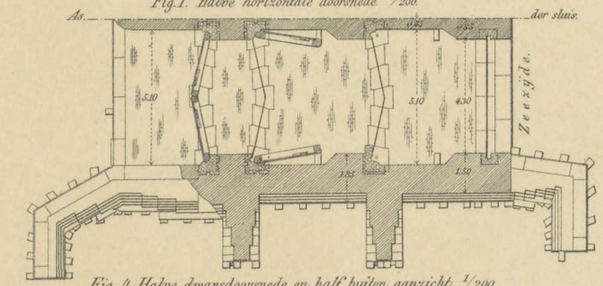


Fig. 4. Halve dwarsdoorsnede en half buiten aanzicht. 1/200.

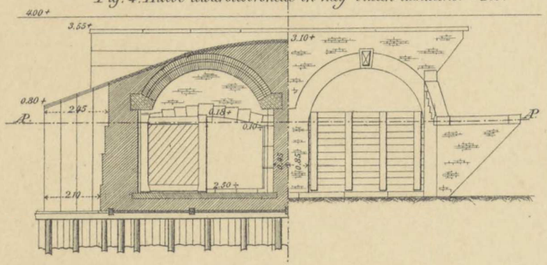


Fig. 1.k Situatie. 1/2000.

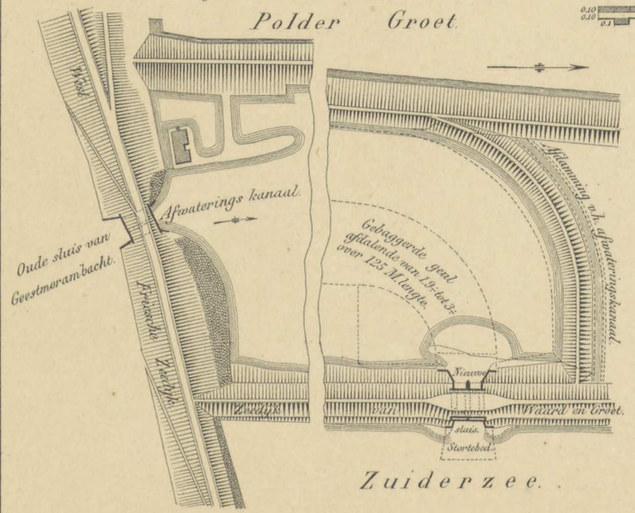


Fig. 1.d Kom en taats 1/10.

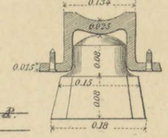
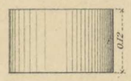
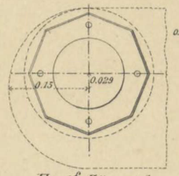


Fig. 1.e Halsring 1/10.





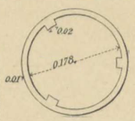


Fig. 1.f Zijaanzicht vd. halsbeugel. 1/10.

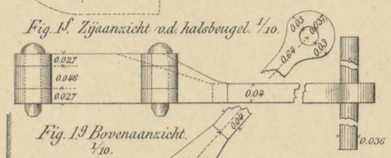


Fig. 1.g Bovenaanzicht. 1/10.

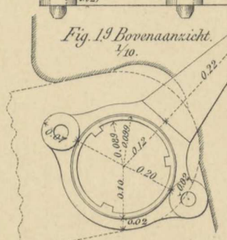


Fig. 1.i Details van het ijzeren beslag der schuif 1/20.

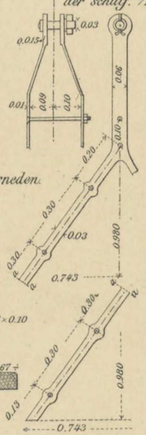


Fig. 1.h Schuif in aanzicht en dwarsdoorsneden. 1/100.

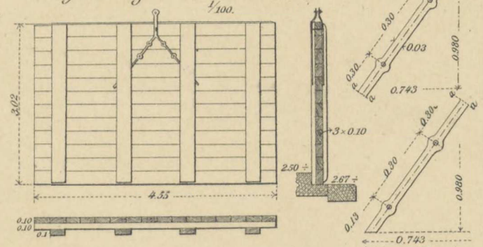


Fig. 1.l Gedeelte der fundeering. 1/100.

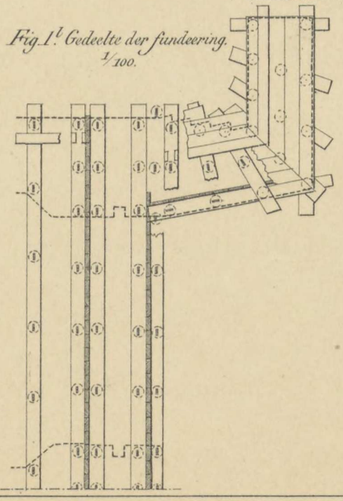


Fig. 2. Keersluis in den Westfrieschen Zeedijk te Broekerhaven.

Fig. 2.a Lengtedoorsnede. 1/200.

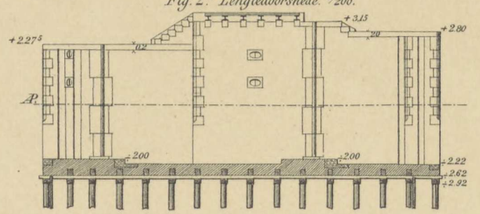


Fig. 2.b Half buitenaanzicht en halve dwarsdoorsnede 1/200.

Fig. 2.c 1/200.

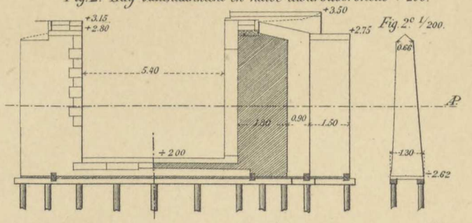


Fig. 2.d Platte grond. 1/200.

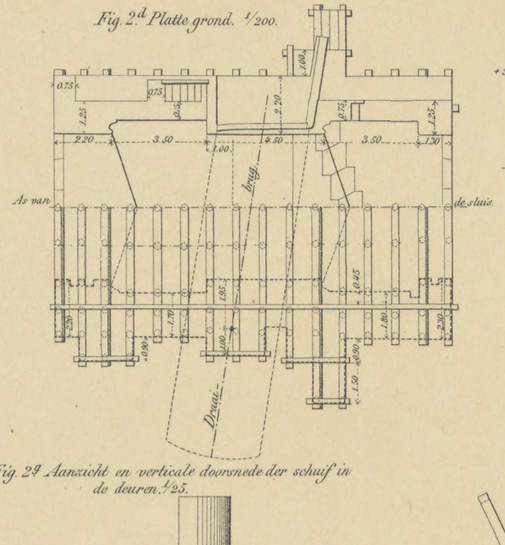


Fig. 2.e Half binnenaanzicht en halve dwarsdoorsnede. 1/200.

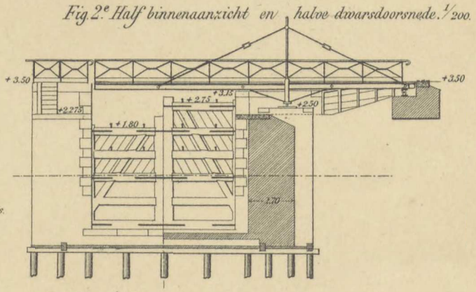
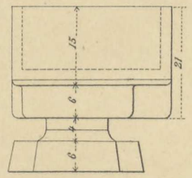


Fig. 2.f Details van de kom en de taats. 1/10.

Aanzicht. 1/10.



Verticale doorsnede. 1/10.

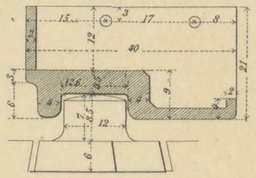


Fig. 2.g Aanzicht en verticale doorsnede der schuif in de deuren. 1/25.

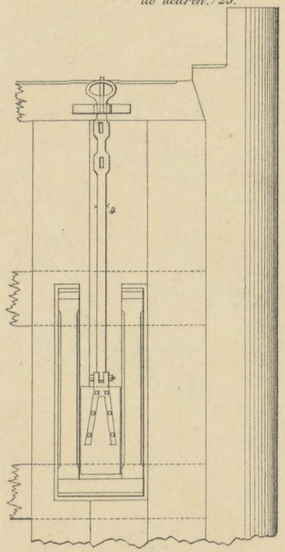


Fig. 2.h Horizont. doorsn. der schuif. 1/25.

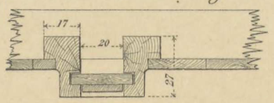


Fig. 2.i Bovenaanzicht van den halsbeugel met de ankers. 1/25.

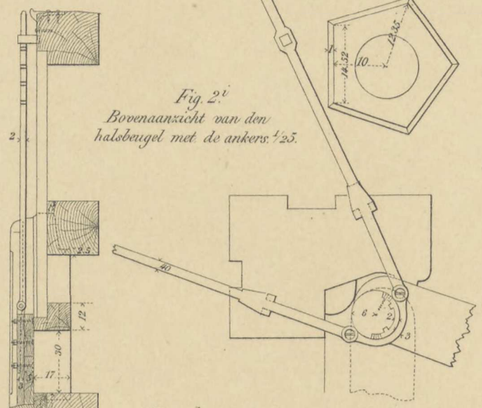
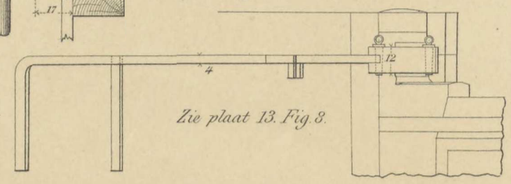


Fig. 2.k Zijaanzicht. 1/25.



Zie plaat 13. Fig. 8.

Fig. 2.f Bovenaanzicht der taats. 1/10.

Bovenaanzicht der kom. 1/10.

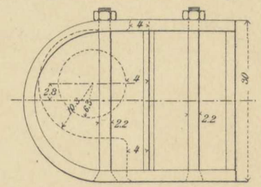


Fig. 2.l Hardsteenen slagstijl. 1/25. Aanzicht.

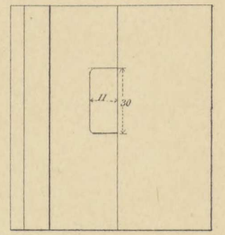
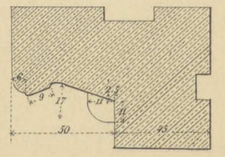


Fig. 2.l Platte grond. 1/25.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

SLUIZEN NABIJ NIJMEGEN EN CRÈVECOEUR EN HASSELT. STORTVLOER.

Fig. 1.a-k Meersluis in den Ooijdijk nabij Nijmegen.

Fig. 1.a Lengte doorsnede. 1/200. 13.21 + H.W. 13.25 + 8.92 + M.R. 7.28 + 118 9.2 120

Fig. 1.b Platte grond. 1/200. A B Buitenstortbed. Binnenstortebed. 3.75 1.44 3.75

Fig. 1.c Aanzicht van de rivierzijde. 1/200. 3.75 1.44 3.75

Fig. 1.d Doorsn. over c.d. 1/50. 2052 230 102 8.4 300

Fig. 1.e Binnenaanzicht. 1/50. a b c d 19.58 23.30

Fig. 1.f Doorsn. over a.b. 1/50. 230 102 648 102 648 102 308 102 538 102 538 102 538 102 230

Fig. 1.b Halsbeugel. 1/20. 80 153

Fig. 1.c Prop v.d. halsbeugel. 1/20. Berm-regel. 100 80 245

Fig. 19 Doorsn. over A.B. 0.99 1.77

Fig. 1.k Taats. 1/20. 102 80 (staal) 320 340

Fig. 4. Sluisje te Hasselt.

Fig. 4.a Buiten- aanzicht. 1/50. 1.00 + 4.00 A.P. 0.30 1.00 0.80 ÷ 1.02 ÷ 1.10 +

Fig. 4.b Gedeeltelijke lengte doorsnede. 1/50. A.P. 0.05 1.02 ÷

Fig. 2.a Half-Aanzicht. 1/200. A B As. + 6.50 + 3.00 + 0.55 1.92 1 500 155 500 100

Fig. 2.b Doorsnede over A.B. 1/200. 350 150 25 212.5 25 212.5 25 150 + 0.90 + 0.55 20 80 80 75 75 80 80

Fig. 2.c Halve platte grond. 1/200. As. Brug 202 150 105 25 sluis.

Fig. 3.c Doorsnede over C.D. 1/50. 2.05 + 0.55 0.13 0.40

Fig. 3.a-c Stortvloer der afslaatsluis nabij het Rosendaalsche Sas. zie Plaat 3.

Fig. 3.a Doorsnede over A.B. 1/200. + 1.00 + 0.50 2 op 1 + 2.05 + 3.05 2.30 ÷ Afslaatsluis

Fig. 3.b Platte grond. 1/200. Doornikssche Beton. 1.30 ÷ 1.30 + steenbezetting op en in beton. 1.00 ÷ Houten beschoeiing met dubbele rij palen. A B 1.30 + 8.20 7.00 5.30 Afslaat sluis. C D Doornikssche steenbezetting op en in beton.

Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen, 's Hage.

UITWATERINGS-SLUIZEN BUITEN NEDERLAND.

Fig. 1a Lengtedoorsnede van den stijlkoker. 1/200.

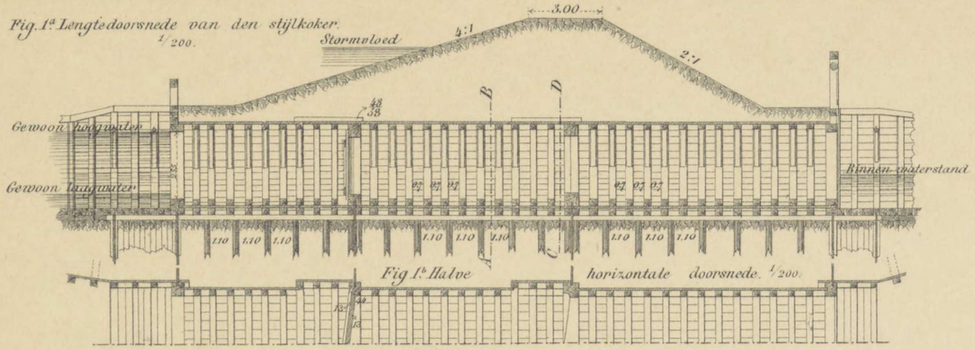


Fig. 1c 1/100.
Doorsnede over AB. Doorsnede over CD.

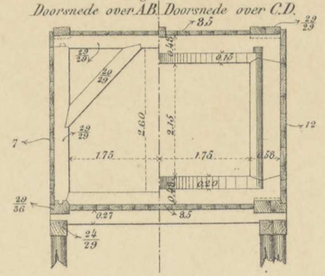


Fig. 3. Halve dwarsdoorsnede. 1/100.

Fig. 7a Sluis in den Oderdijk bij Bellinchen. 1/250.

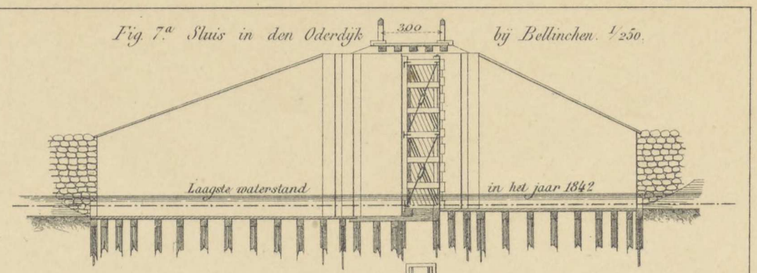


Fig. 7b Halve horizontale doorsnede. 1/250.

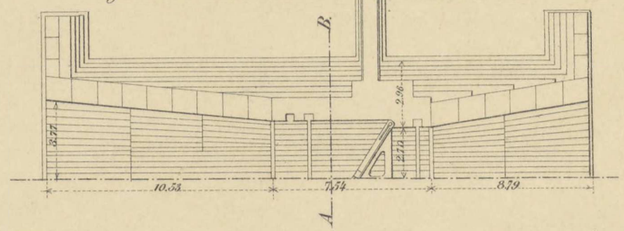
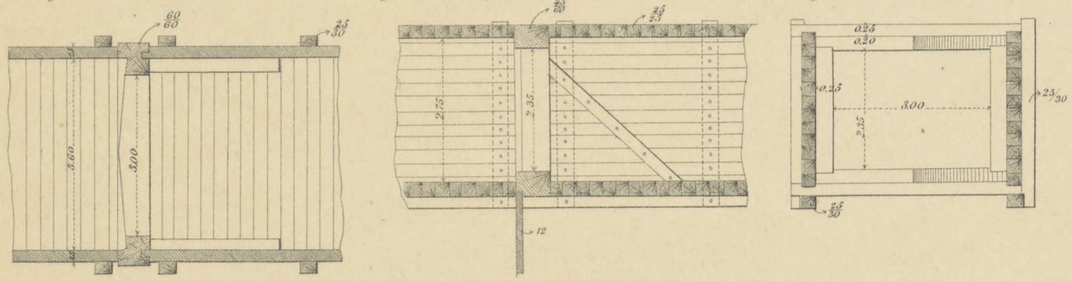


Fig. 2b Ged. horizontale doorsnede. 1/100. Fig. 2a Ged Lengtedoorsnede van den balkkoker. 1/100. Fig. 2c Dwarsdoorsnede. 1/100.



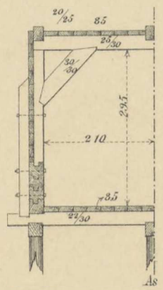


Fig 5a Houten klepkoker. 1/50. Fig 5b 1/50.

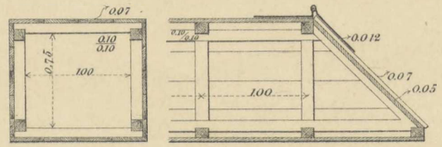


Fig. 7c Doorsnede A.B. 1/100.

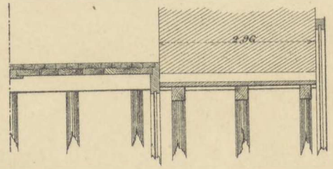


Fig. 6a Lengtedoorsnede van eene sluis aan de Jümme. 1/200.

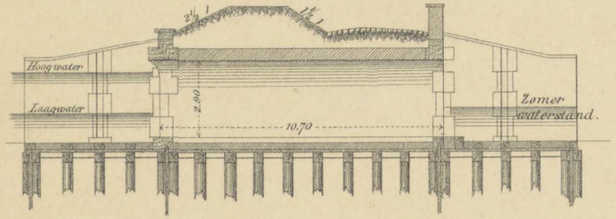


Fig. 6c Half zijaanzicht en halve dwarsdoorsnede. 1/200.

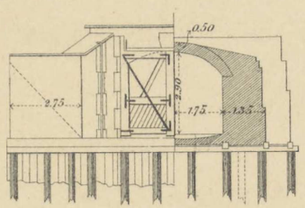


Fig. 6b Halve hor. doorsnede en half bovenaanzicht. 1/200.

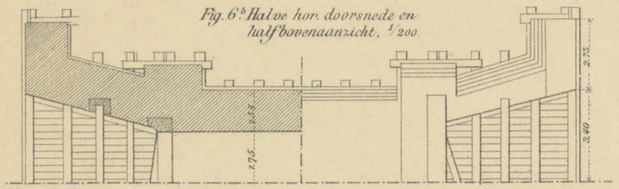


Fig. 8c Dwarsdoorsnede volgens AB. CD.

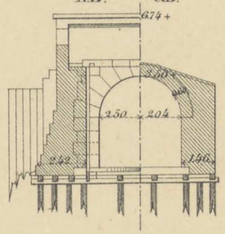


Fig. 8a Lengtedoorsnede van eene sluis aan de Eider. 1/250.

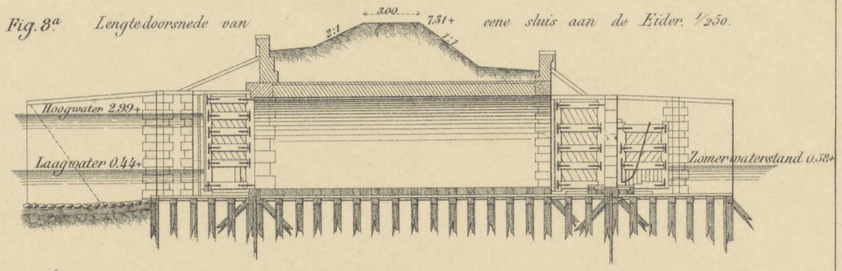


Fig. 8b Halve horizontale doorsnede. 1/250.

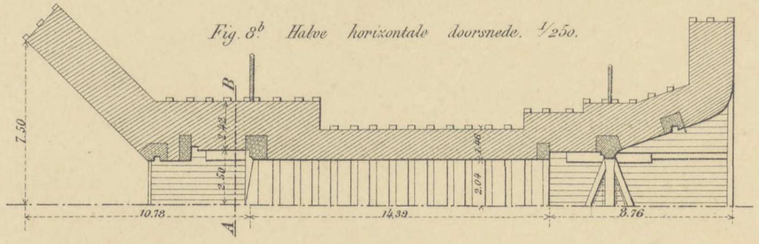


Fig. 4a Halfzicht der Sluisdeur. 1/50.

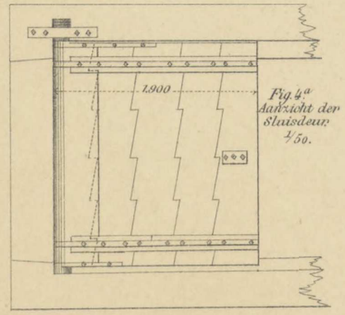


Fig. 4b Gesmeed ijzeren beslag.

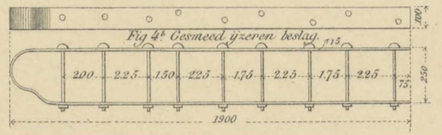


Fig. 4c Beslag voor den onderkant der deur. 1/25.

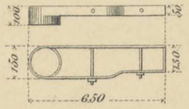


Fig. 4d Halsbeugelplaat. 1/25.

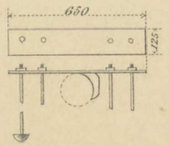


Fig. 4e Beslag aan den bovenkant der deur. 1/25.

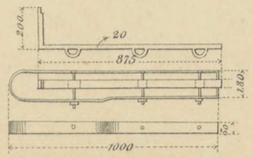


Fig. 4f Stalen draagprop. 1/25.

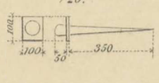


Fig. 4g Metalen komplaat. 1/25.

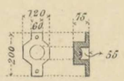


Fig. 4h Ring met scheenen aan de bovenprop. 1/25.

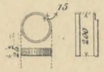


Fig. 9. Waker.

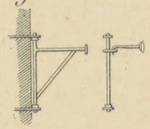


Fig. 10a Kom en taats. 1/25.

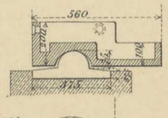


Fig. 10b 1/25.

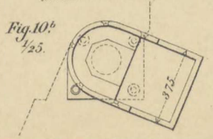
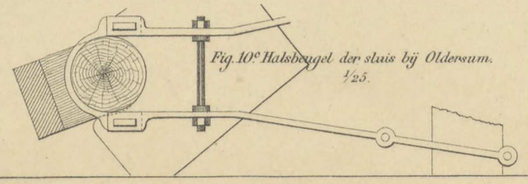


Fig. 10c Halsbeugel der sluis bij Oldersum. 1/25.



Schaal van 1 à 25 voor de fig 4b-h en 10a-c
" " 1 à 50 " " " 4a en 5a-b
" " 1 à 100 " " " 1c, 2ac, 3, 7c
" " 1 à 200 " " " 1a-b, 6a-c
" " 1 à 250 " " " 7a-b, 8a-b

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr.s v. Langenhuysen, 's Hage.

Fig. 1. Schuif der nieuwe uitwateringssluis te Lemmer. 1 à 20.

Fig. 1ª Aanzicht. 1/20.

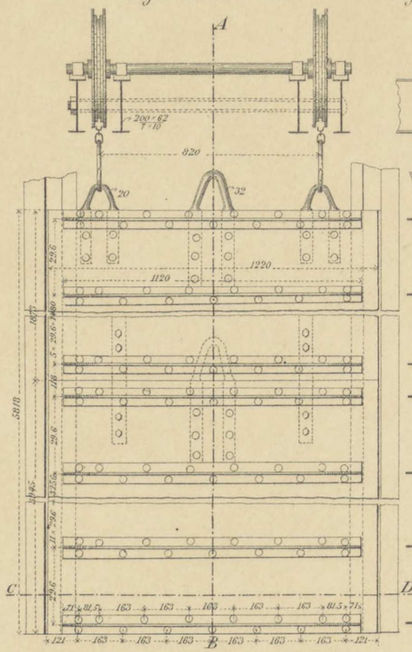


Fig. 1ᵇ Doorsnede AB. 1/20.

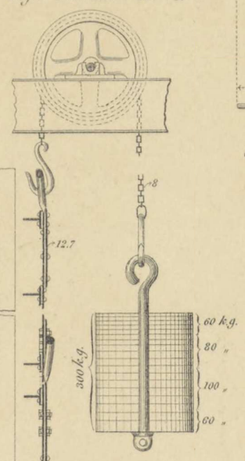


Fig. 1ᶜ Doorsnede CD. 1/20.

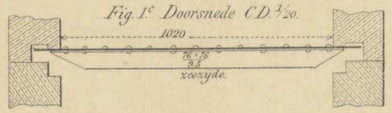


Fig. 2. a en b. Zijaanzicht en aanzicht van een windas voor de beweging eener houten schuif 1/50.

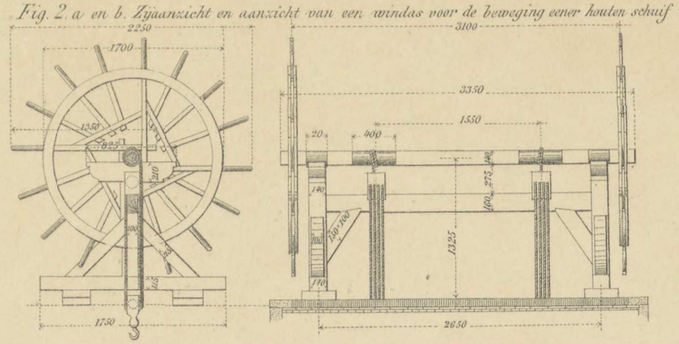


Fig. 4. Schuif der uitwateringssluis bewesten Vlissingen. 1 à 50.

Fig. 4ª Aanzicht. 1/50.

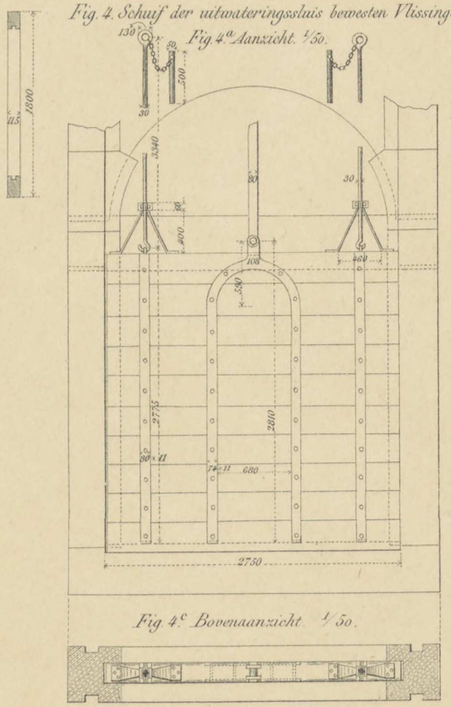


Fig. 4ᵇ Dwarsdoorsnede. 1/50.

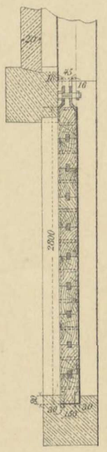


Fig. 4ᶜ Bovenaanzicht 1/50.

Fig. 3. Schuif in den stroomduiker naby sluis 7 op de Dedemsvaart. 1 à 20.

Fig. 3ª Aanzicht. 1/20.

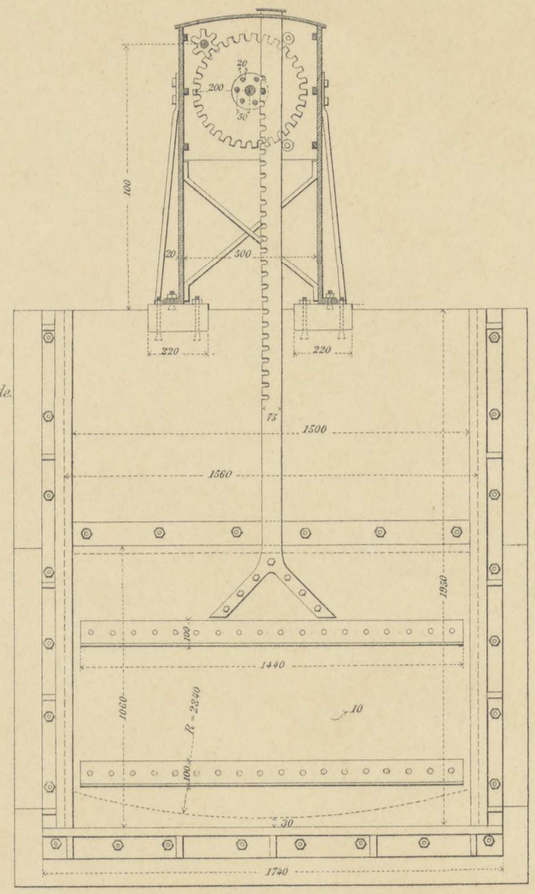


Fig. 3ᵇ Zijaanzicht. 1/20.

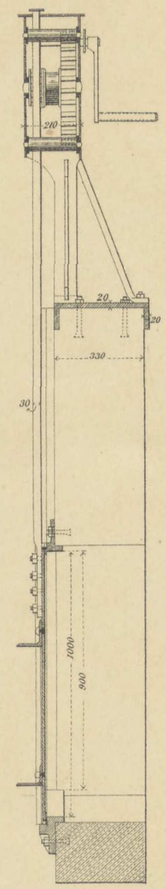


Fig. 3ᶜ Horizontale doorsnede. 1/20.

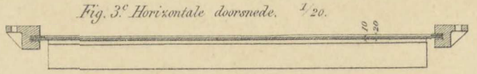


Fig. 5. Schuif in eene duikersluis te Arnemuiden. 1/50.

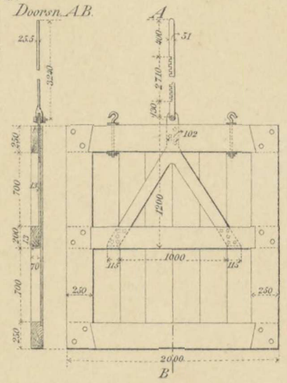


Fig. 6. Houten sluisdeur volgens oude constructie 1 à 50.

Fig. 6ª Aanzicht. 1/50.

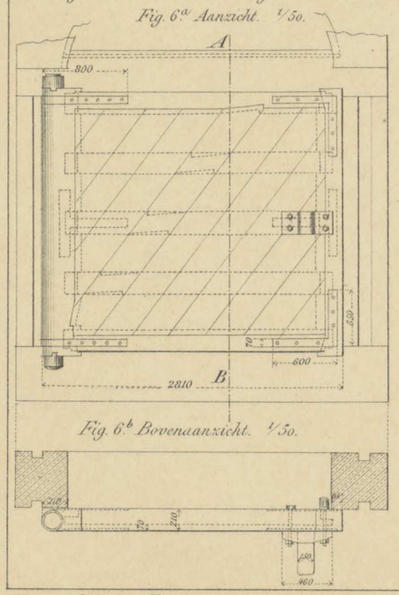


Fig. 6ᵇ Bovenaanzicht. 1/50.

Fig. 6ᶜ Doorsnede over AB. 1/50.

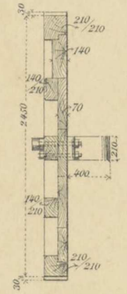


Fig. 7. Gegoten ijzeren schuif. 1/40.

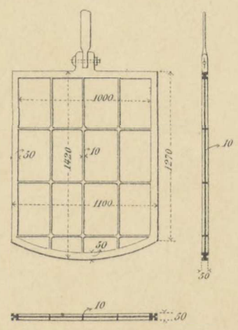


Fig. 8. Deur der keersluis te Broekerhaven. zie plaat 10.

Fig. 8ª Aanzicht. 1/50.

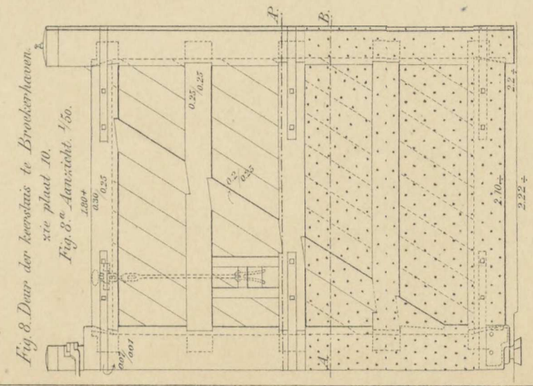


Fig. 9ª Doorsnede volgens AB. 1/50.

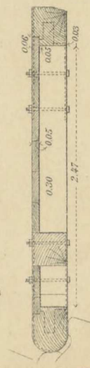


Fig. 10.

Halsbeugel eener sluis in Zeeland. 1/20.

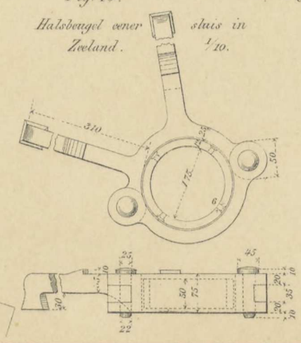
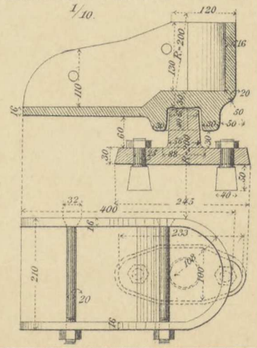


Fig. 9. Kom en taats eener sluis in Zeeland. 1/10.



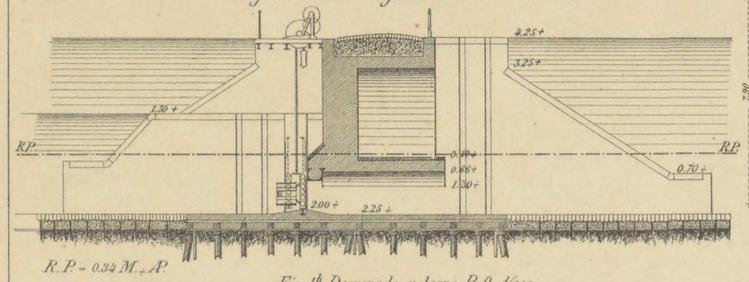
Uitg. de Gebrs v Cleef

Steendr. Gebr v Langenhuysen, s Hage

SCHUIVEN VAN SLUIZEN TE ROTTERDAM EN PELOTAS.

Fig. I. Inlaatsluizen te Rotterdam ten behoeve der Drinkwaterleiding.

Fig. 1a Doorsnede volgens JK. 1/200.



R.P. = 0.34 M. A.P.

Fig. 1b Doorsnede volgens P.Q. 1/200.

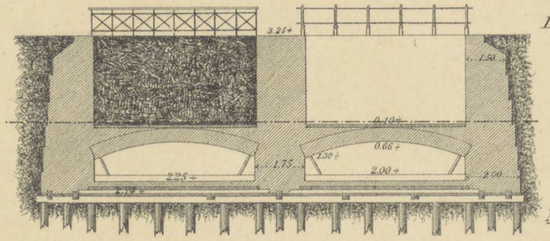


Fig. 1c Platte grond der twee inlaatsluizen, 1/200.

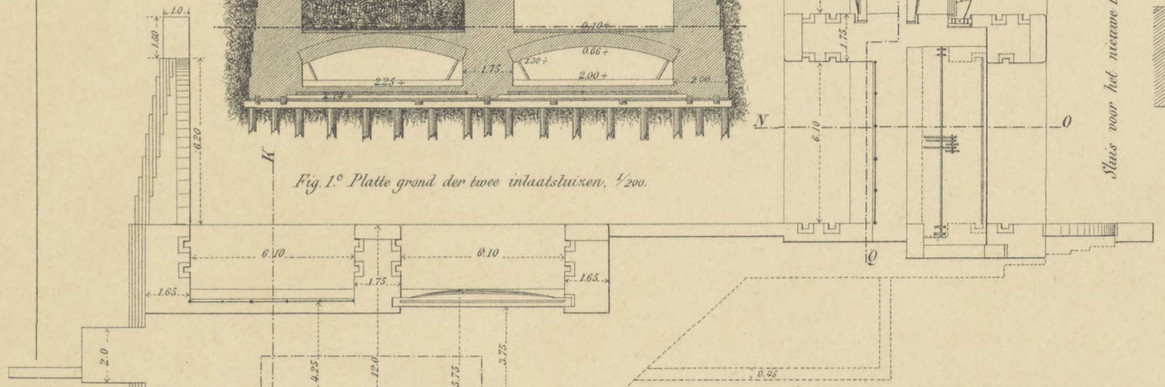


Fig. 1d Doorsnede volgens GH. 1/200.

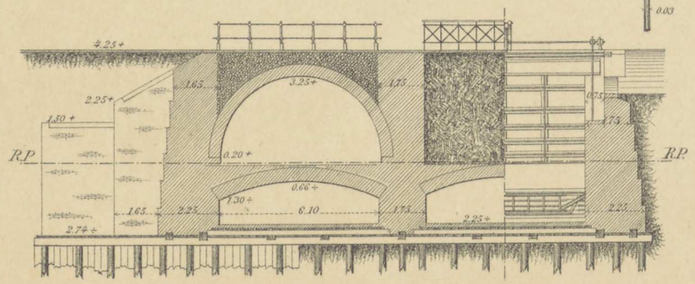


Fig. 1e Half voor-aanzicht van schuif en drempel. 1/40.

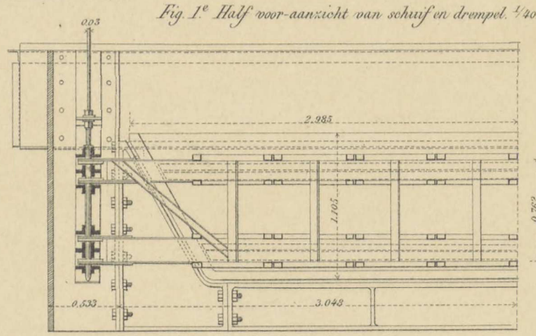


Fig. 1f Dwarsdoorsnede. 1/40.

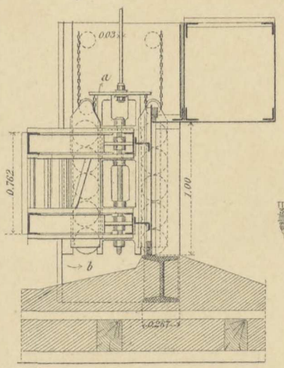


Fig. 1g Half bovenaanzicht. 1/40.

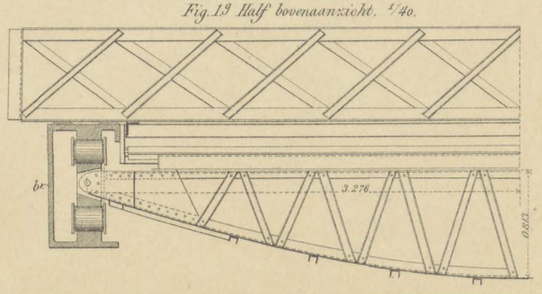


Fig. 1h Doorsnede volgens LM. 1/200.

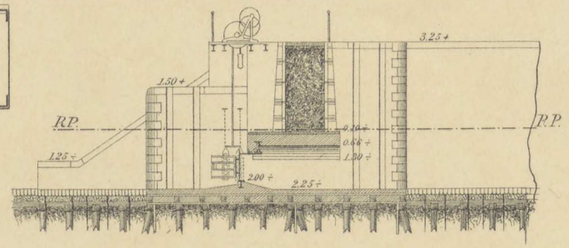


Fig. 1i 1/40.

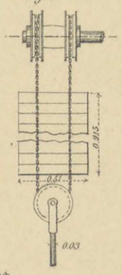


Fig. 1k Doorsnede volgens ON. 1/200.

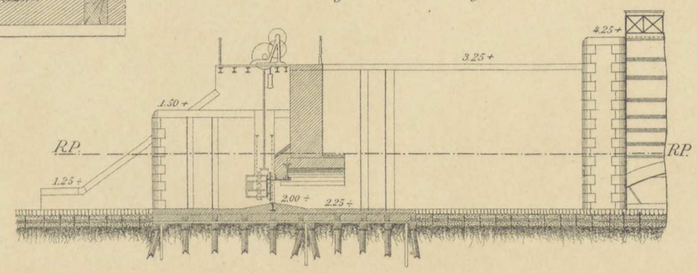


Fig. 2a Ged. vooraanzicht. 1/48.

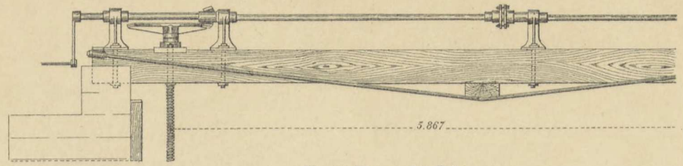


Fig. 2. Sluis nabij Pelotas.

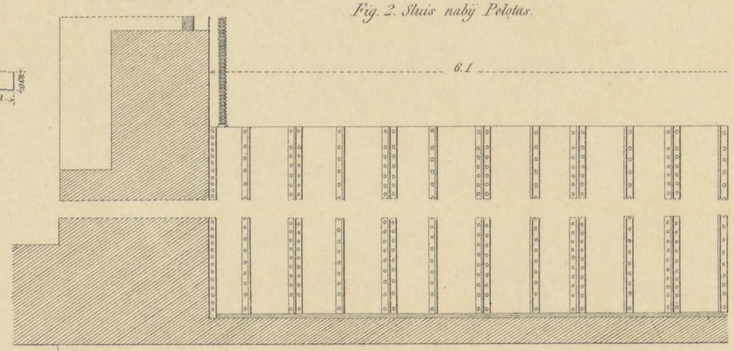


Fig. 2b Ged. horizontale doorsnede. 1/48.

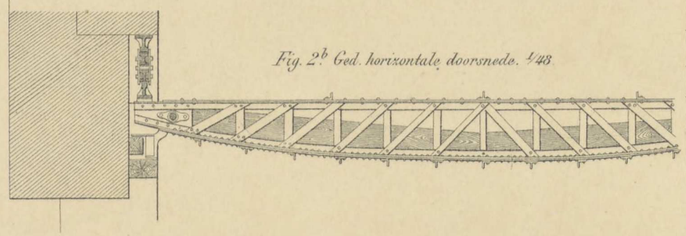
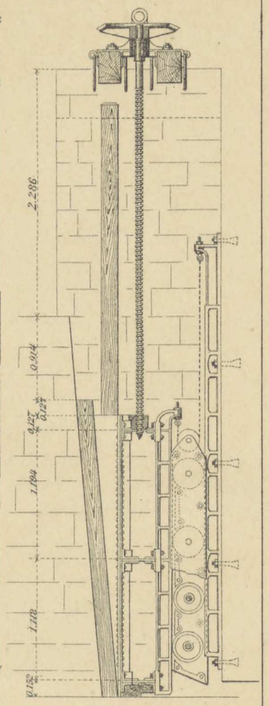


Fig. 2c Dwarsdoorsnede. 1/48.



Uitg. de Gebr.s v. Cleef.

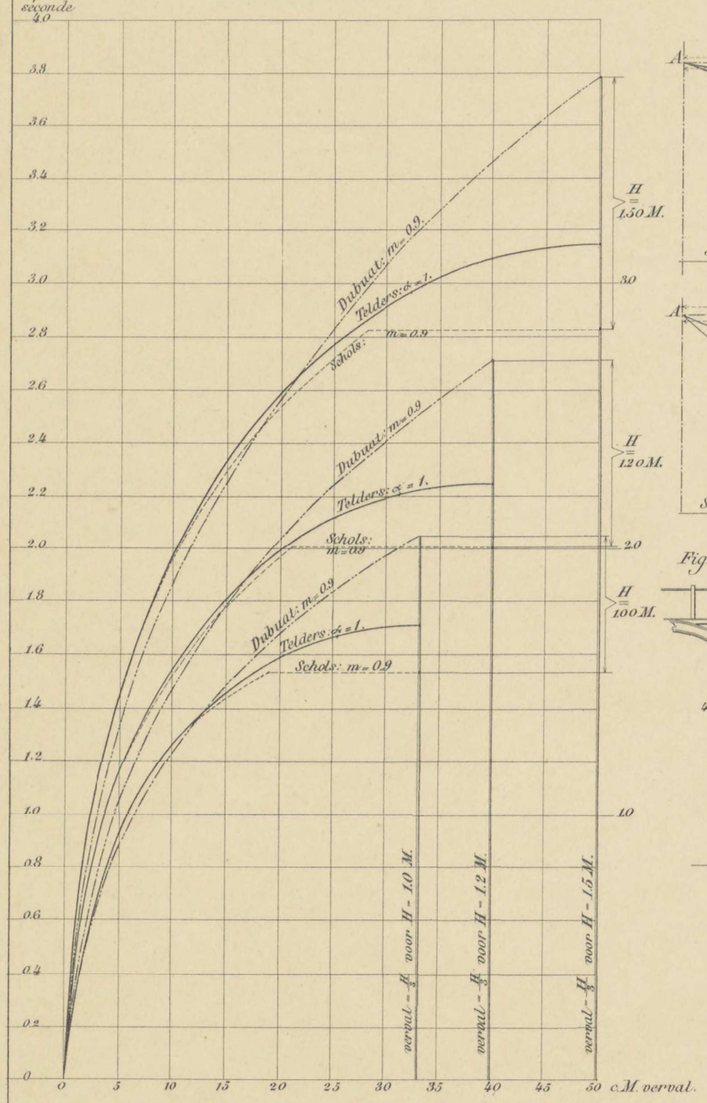
Steendr. Gebr. v. Langenhuysen, 's Hage.

GRAFISCHE VOORSTELLING VAN WATERAFVOEREN. AANSLUITING VAN DE KEER-EN VLEUGELMUREN MET DE FRONTMUREN. SLUIZEN BIJ BELLEEK EN DUTTON.

Fig. 1 Afvoer door eene lange Sluis,

volgens de formulen van Dubuat, Schols en Telders.

(de hoogte van het binnenwater constant ondersteld.)



Abscisfen : 1 c.M. = 5 c.M. verval. H = hoogte v.h. binnenwater boven den drempel.

Ordinaten : 1 c.M. = 0.2 M³ afvoer per seconde.

Fig. 2.

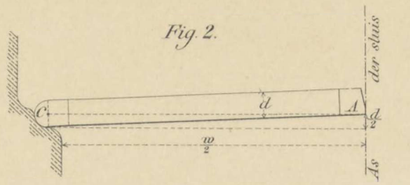


Fig. 3.

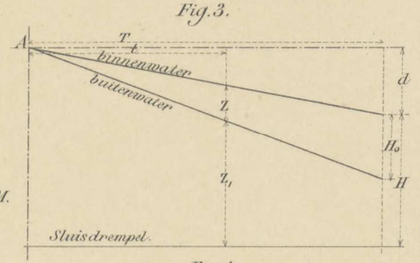


Fig. 4.

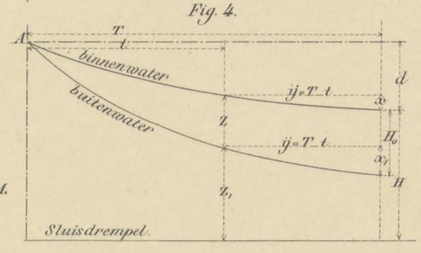


Fig. 5.a

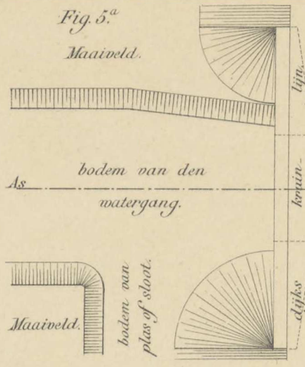


Fig. 5.b

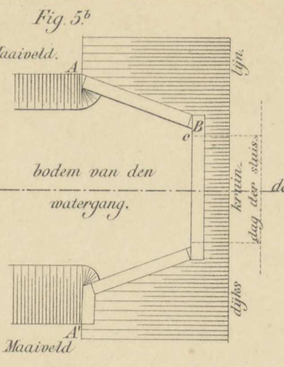


Fig. 5.c

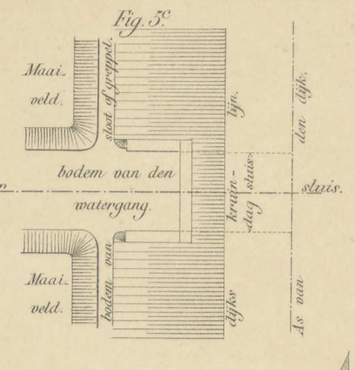


Fig. 7. Erne-sluis bij Belleek.

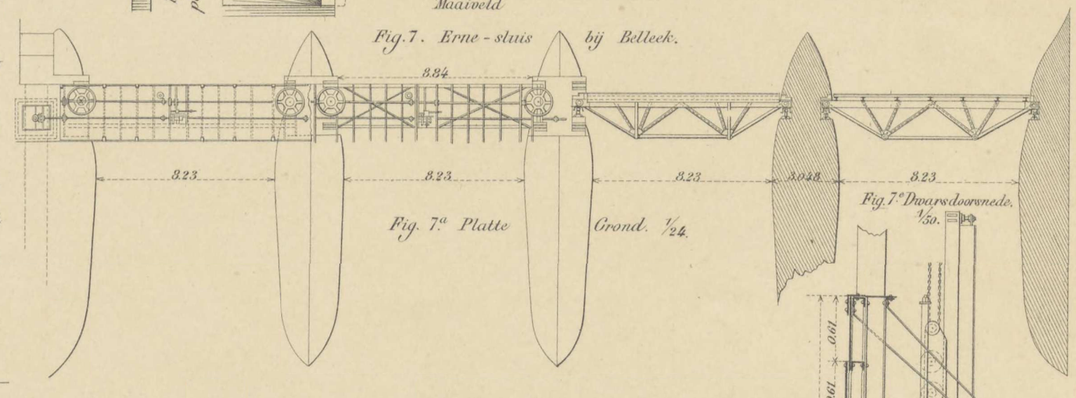


Fig. 7.a Platte Grond. 1/24

Fig. 7.c Dwarsdoorsnede. 1/50.

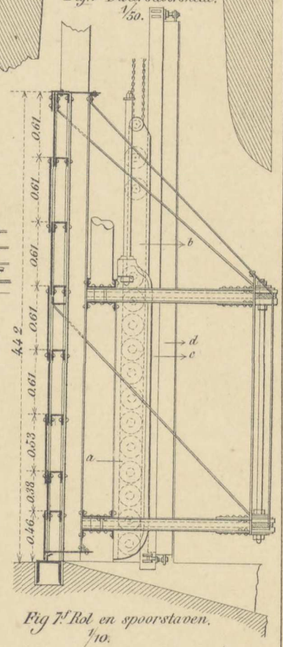


Fig. 6. Sluis te Dutton.

Fig. 6.a Ged. lengte doorsnede en aanzicht 1/200.

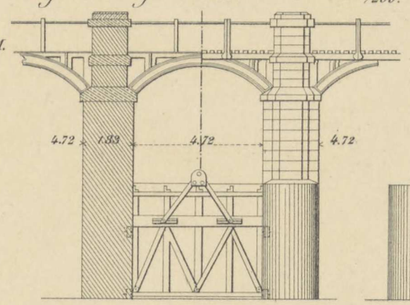


Fig. 6.b Doorsnede. 1/200.

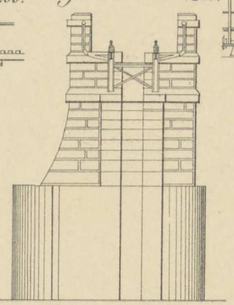


Fig. 6.c Ged. horizont. doorsneden. 1/200.

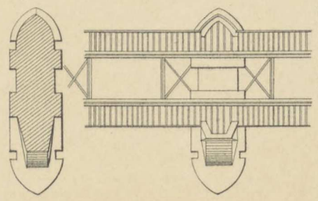


Fig. 6.d Details. 1/20.

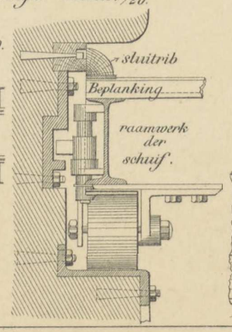


Fig. 7.b Aanzicht van de brug met de bewegingstoestellen. 1/100.

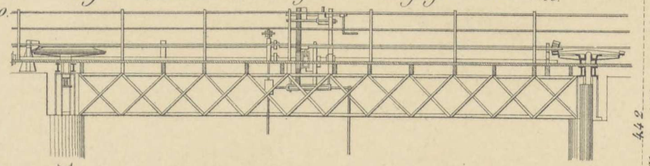


Fig. 7.c Achteraanzicht van eene schuif. 1/100.

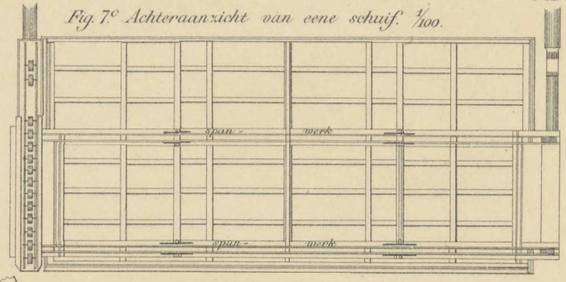


Fig. 7.d Bovenaanzicht. 1/100.

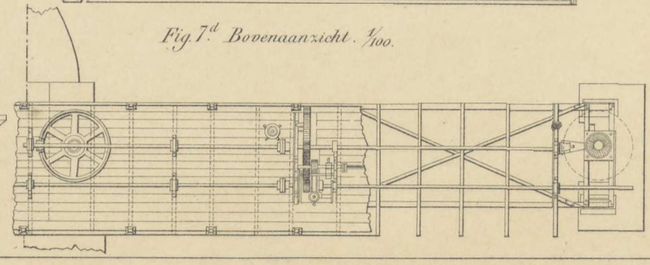
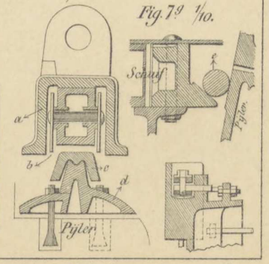


Fig. 7.f Rol en spoorstaven. 1/10.

Fig. 7.g 1/10.



Uitg. de Gebr.s v. Cleef.

Lith. v. Gebr.s J. & H. v. Langenhuysen, 's Hage.

SLUIZEN TE KATWIJK: WATERSTANDEN BIJ DE WAARNEMINGEN VAN 30 MAART 1853.

Fig. 1.

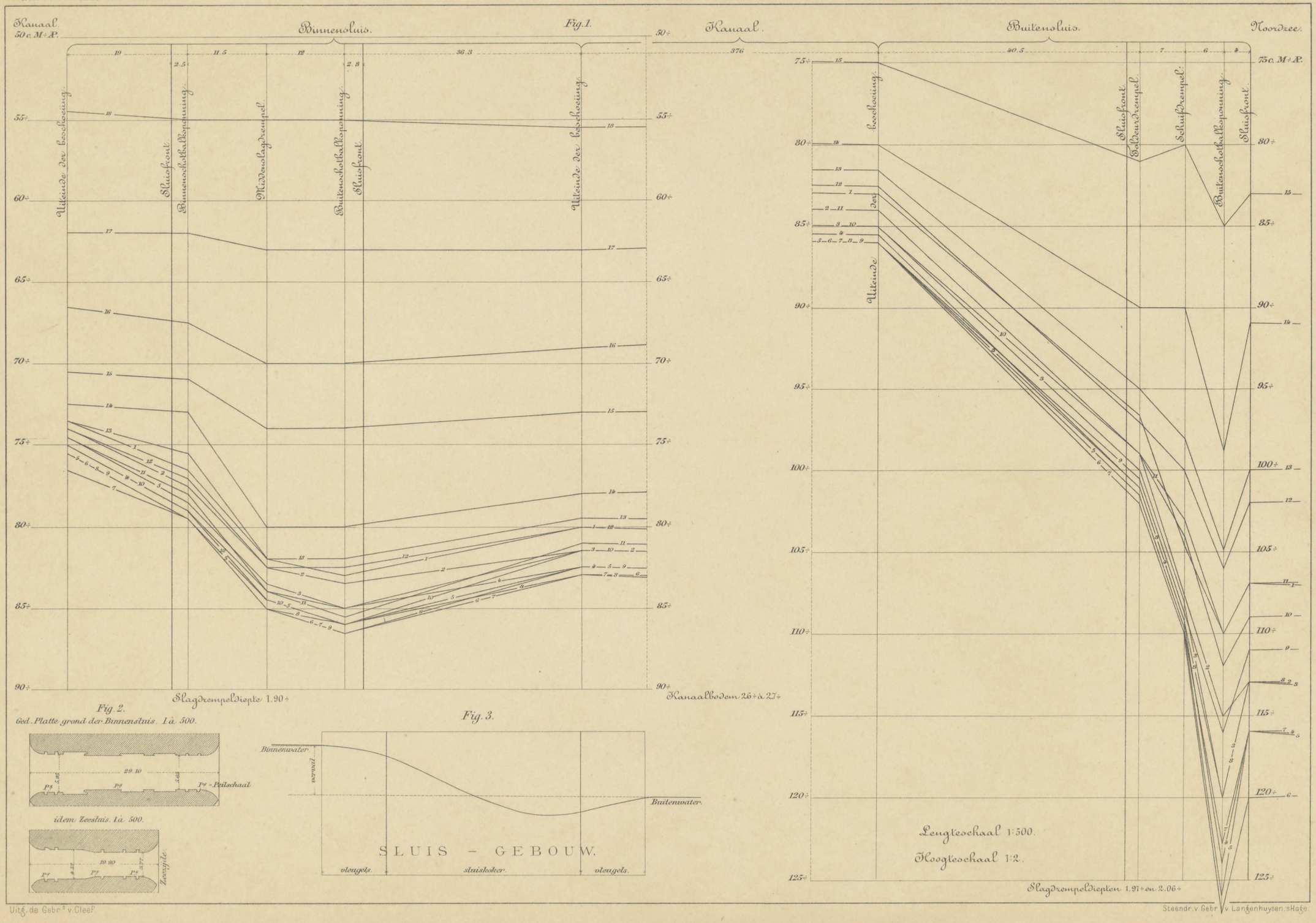


Fig. 2.

Ged. Platte grond der Binnensluis. 1 à 500.

idem Zeesluis. 1 à 500.

Fig. 3.

Uitg. de Gebr.s v. Cleef

Steendr. v. Gebr.s v. Langenhuysen, s Hage

DAM-EN INLAAT-SLUIZEN

Fig. 1. Damsluis in den Singelweg om het fort de Gagel.

Fig. 1ª Dwarsdoorsnede volgens A.B. 1/100.

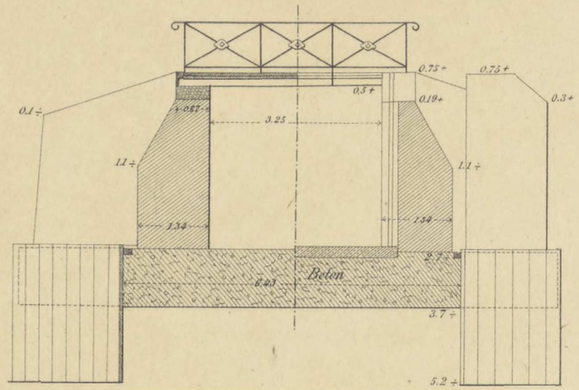


Fig. 1ᵇ Platte grond. 1/100.

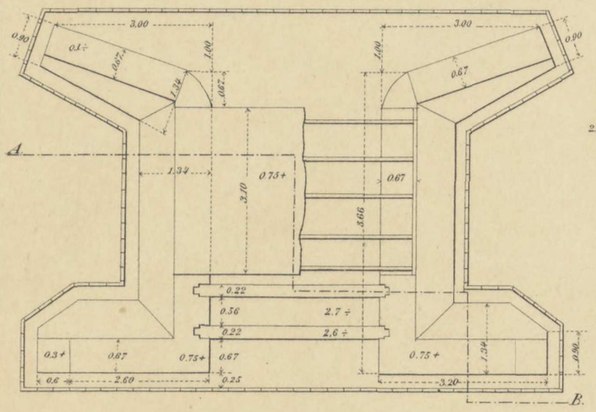


Fig. 2. Dam- of doorlaatsluis in den Biltschen straatweg.

Half aanzicht en halve dwarsdoorsnede. 1/100.

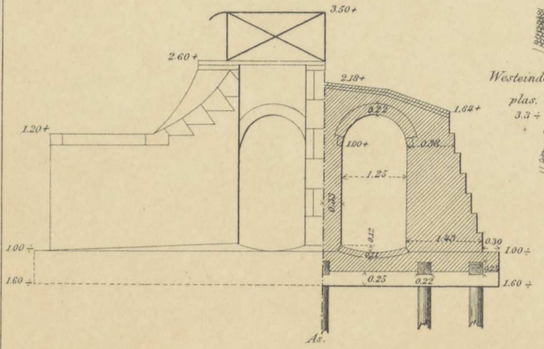


Fig. 3ª Lengte doorsnede der damsluis in het kanaal naar de kleine sluis bij Spaarndam. 1/100.

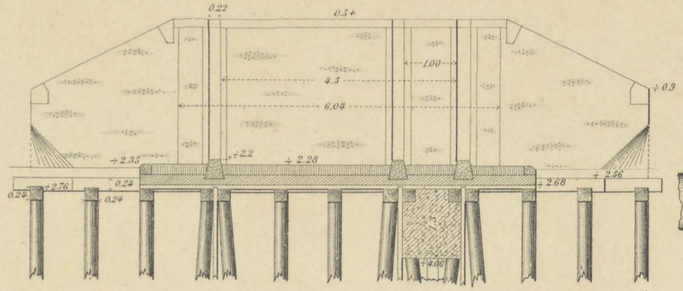


Fig. 3ᵇ Platte grond. 1/100.

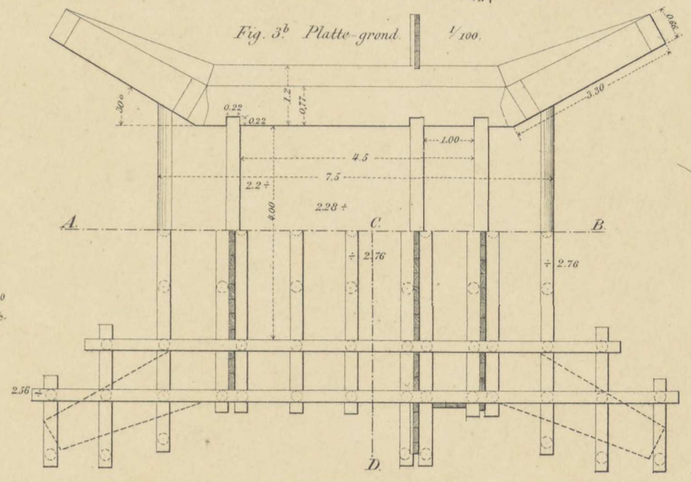


Fig. 3ᶜ Half zij aanzicht en halve dwarsdoorsnede volgens C.D. 1/100.

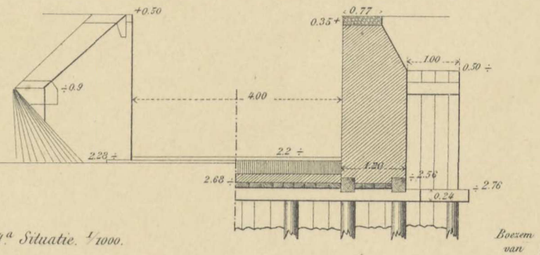


Fig. 4ª Situatie. 1/1000.

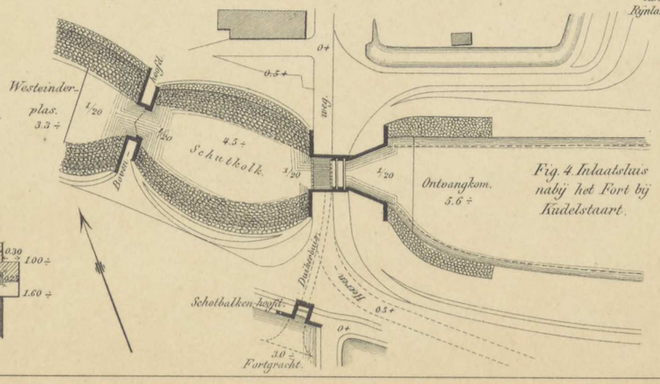


Fig. 4. Inlaatsluis nabij het Fort bij Kudelstaart.

Fig. 4ᵇ Dwarsdoorsnede over het boeden sluishoofd volgens A.B. 1/100.

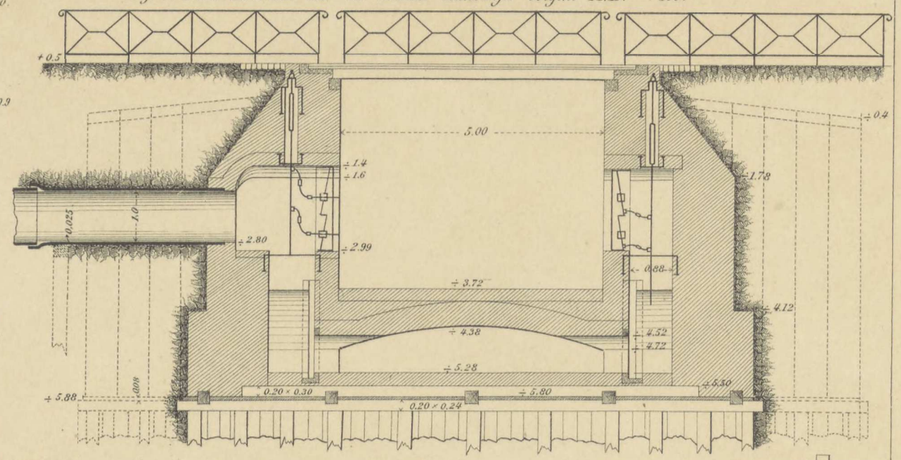


Fig. 4ᶜ Halve platte grond. 1/100.

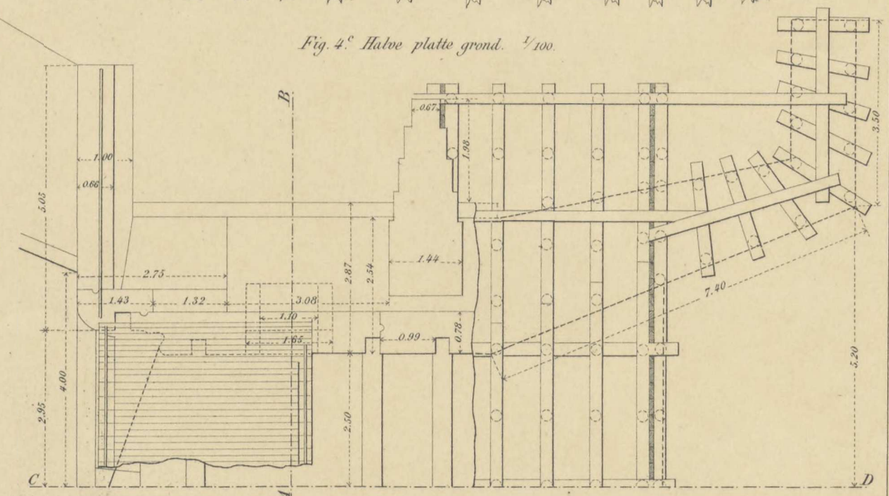
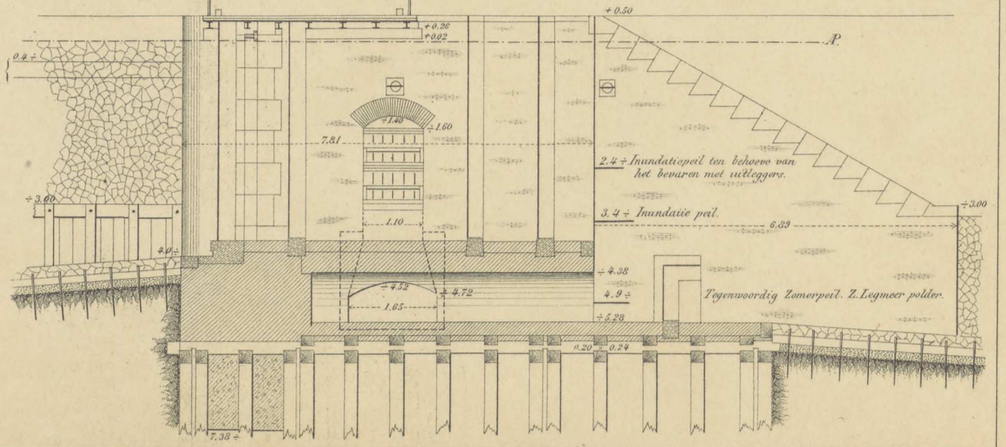


Fig. 4ᵈ Lengte doorsnede volgens C.D. 1/100.



Uitg. de Gebrs v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

Fig. 1. Sluis in den Noorder Lekdijk nabij Wijk by duurstede.

Fig. 1a Lengte-doorsnede. 1/200.

Fig. 1b Dwarsdoorsnede volgens A.B. fig 1a 1/200.

Fig. 1c Schuifkozijn met gegoten ijzeren bovendorpel. 1/100.

Doorsnede C.D. 1/100.

Fig. 1c Doorsnede E.F. 1/100.

Fig. 2. Lengte doorsnede der Sluis in den Hoogen Maasdijk bij Heidikhuizen. 1/200.

Fig. 3. Sluisbeer in den Zuider Lekdijk bij het Fort Everdingen.

Fig. 3a Gedeeltelijke platte grond. 1/200.

Fig. 3b Doorsnede volgens C.D. 1/200.

Fig. 7a 1/20.

Fig. 7b 1/20.

Fig. 6a Boven aanzicht. 1/20.

Fig. 6b Zij aanzicht. 1/20.

Fig. 9a Vooraanzicht 1/40.

Fig. 9b Dwarsdoorsnede. 1/40.

Fig. 3c Doorsnede volgens A.B in fig. 3a 1/200.

Fig. 4c Situatie. 1/2000.

Fig. 4a Lengte doorsnede volgens A.B. 1/200.

Fig. 4. Sluis bij het Fort de Ruijter nabij Willemstad.

Fig. 4b Halve platte grond. 1/200.

Fig. 4d Doorsnede volgens C.D. en E.F. fig. 4b 1/200.

Fig. 5. Dwarsdoorsnede van den Sluisbeer nabij Muiden. 1/200.

Uitg. de Gebrs v. Cleef. Steendr. Gebr. v. Langenhuysen, s Hage.

SCHUTSLUIZEN TE WIJK BIJ DUURSTEDE EN AALSMEER. INLAATSLUIS IN DEN RINGDIJK VAN DE BEEMSTER. SLUIS BIJ WILLEMSTAD.

Fig. 1.a Doorsnede volgens A.B. over de lengte-as der schutsluis nabij Wijk bij duurstede. 1/200.

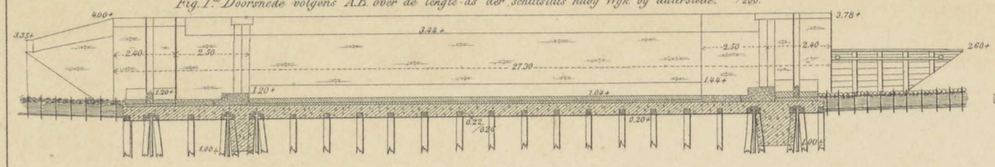


Fig. 1.b Platte grond. 1/200.

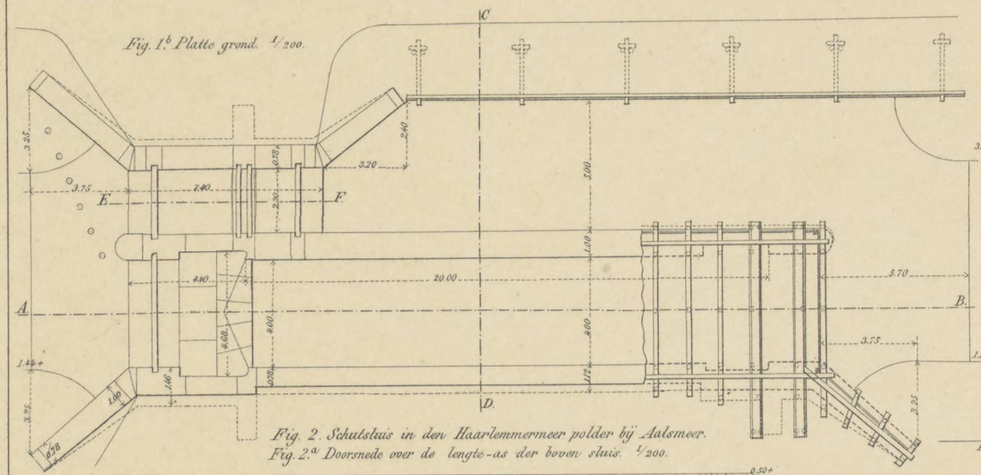


Fig. 2. Schutsluis in den Haarlemmermeer polder bij Aalsmeer.
Fig. 2.a Doorsnede over de lengte-as der boven sluis. 1/200.

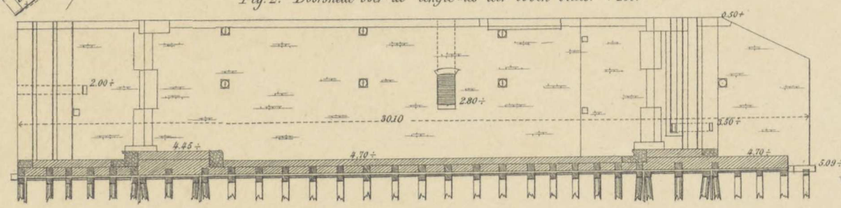


Fig. 2.b Halve Platte-grond. 1/200.

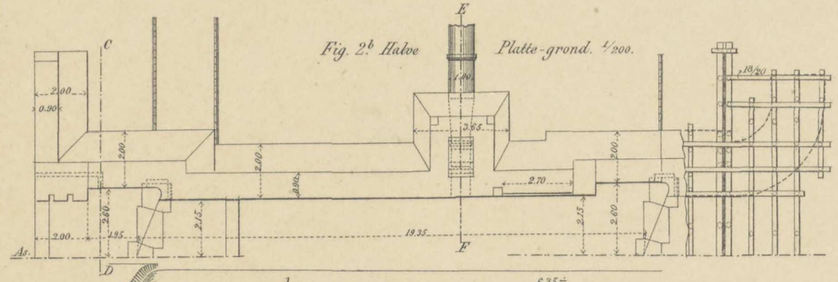


Fig. 2.c Situatie. 1/2000.

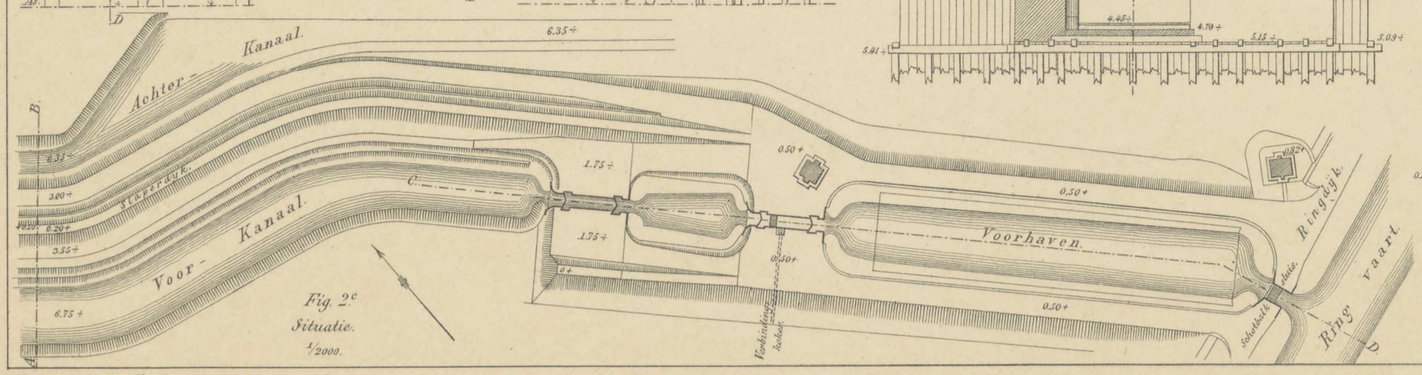


Fig. 1.c Dwarsdoorsnede volgens C.D. 1/100.

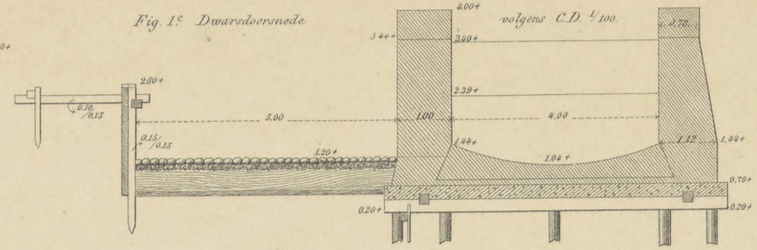


Fig. 1.d Doorsnede volgens E.F. 1/100.

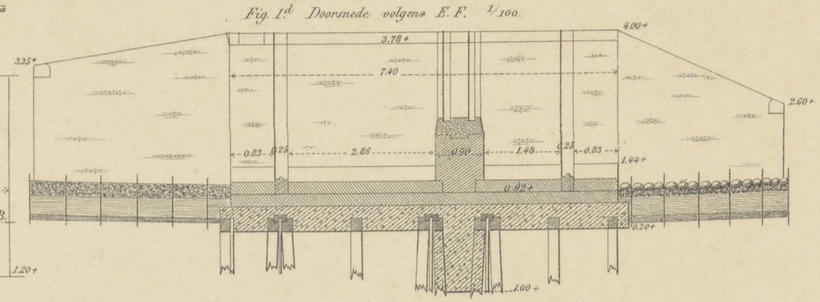


Fig. 2.d Lengteprofiel volgens C.D. in fig. 2.c

Lengte-schaal 1/2000.
Hoogte-schaal 1/200.

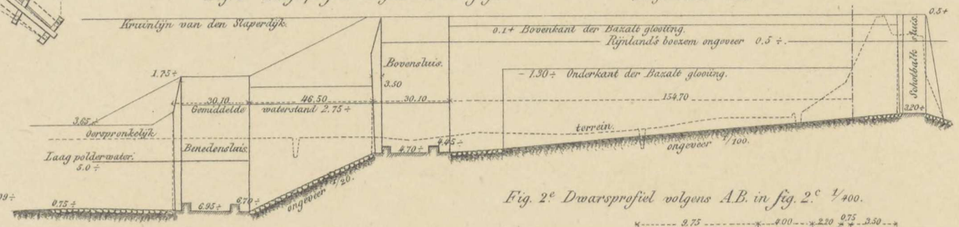


Fig. 2.e Dwarsprofiel volgens A.B. in fig. 2.c 1/400.

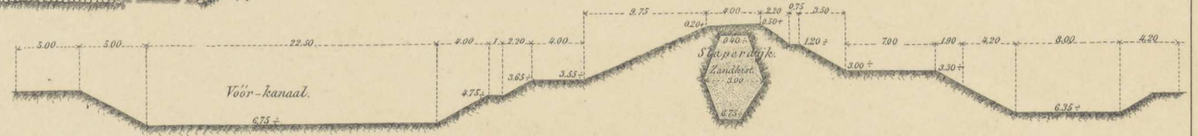


Fig. 2.f Dwarsdoorsnede volgens C.D. in fig. 2.b 1/200.

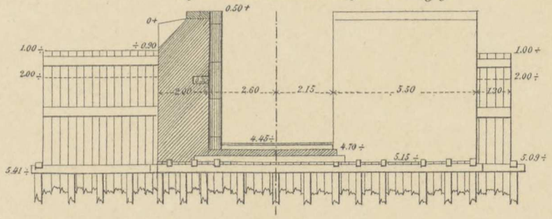


Fig. 2.g Half beneden aanzicht en halve dwarsdoorsnede volgens E.F. in fig. 2.b 1/200.

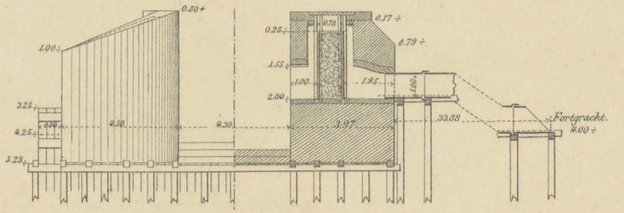


Fig. 3. Inlaatsluis in den Z. Ringdijk van de Beemster. 1/200.

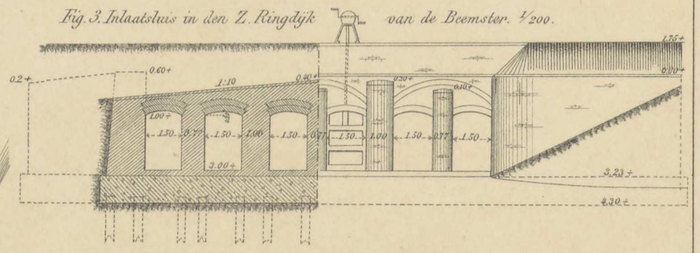


Fig. 4. Sluis nabij Willemstad.

Fig. 4.a Gedeeltelijke lengtedoorsnede. 1/50.

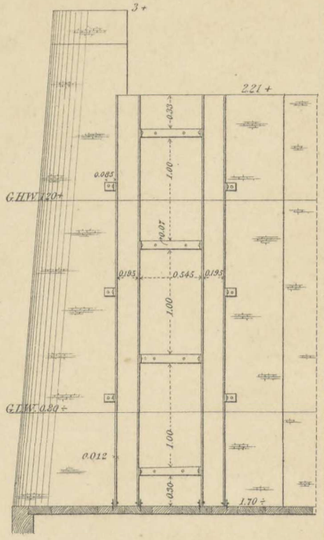
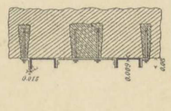


Fig. 4.b Ged. hor. doorsnede. 1/50.



Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen, 's Hage

DE HOUTEN SLUISVLOER.

Fig. 1a 1/10.

Fig. 1b 1/10.

Fig. 1c 1/10. Fig. 1c 1/10. Helpalen.

Fig. 1d 1/10.

Fig. 1e 1/10.

Fig. 1f 1/10.

Fig. 1g 1/10.

Fig. 2a 1/10.

Dik 0.5 à 1 c.M.

Breed 5 c.M.

Fig. 2b 1/20.

Fig. 2a–f. Damplanken en Dampalen.

Fig. 2c 1/20.

Fig. 2d 1/20.

Fig. 2e 1/20.

Fig. 2f 1/20.

Fig. 2g 1/20.

Boorgat 22 m.M.

Fig. 4a Verbinding van Kesp en Palen onder de opgaande muren.

Fig. 15b 1/10.

Vloer.

Kesp.

Fig. 2h 1/20.

Fig. 2i 1/20.

Fig. 3a Verticale dwarsdoorsnede van den vloer volgens A B, fig. 3b 1/25.

Dagrijde muur.

Zwalp.

Donnen Vloer.

Kesp.

Fig. 3b Bovenaanzicht van den houten vloer. 1/25.

Biken trekna gel.

Gegalv ij houtschroef.

Fig. 3c 1/25.

Fig. 4b 1/10.

Fig. 4c 1/10.

Fig. 4d 1/10.

Fig. 5a Schoorpaal. 1/20.

Helling 1 op 20.

Vloer.

Kesp.

Sloof.

Fig. 5b 1/3.

Fig. 5c 1/3.

Helling 2 op 3.

Schoorpaal.

Helpaal.

Helling 1 op 20

Damwand.

Fig. 5d Schoorpaal. 1/20.

Fig. 6. 1/20.

Schuifhout.

Kesp.

Helling 1 op 20.

Damwand.

Fig. 7. 1/25.

Fig. 9a 1/10.

Fig. 9b 1/10.

Fig. 8a-b. Koppeling van twee vleugelmuren.

Fig. 8a Platte Grond. 1/25.

Zwalp.

Dammagel.

Trekkagel.

Kesp.

Vloerplaat.

Fig. 8b Verticale doorsnede. 1/25.

Fig. 13. Hakkelbouten. 1/4.

Fig. 12 Oogbout 1/10.

Fig. 10. 1/25.

Hokdorpel.

Rollaag.

Zwalp.

Vloer.

Klooster hout.

Kesp.

Damwand.

Fig. 11a Houtschroef. 1/3.

Fig. 11b 1/3.

Fig. 11c Houtschroef. 1/3.

Fig. 11d 1/3.

Fig. 15a Treknagel. 1/10.

Kesp. Vloer Zwalp.

Fig. 16b 1/20

Fig. 16a 1/20

Fig. 14. Roosbout. 1/10.

boorgat 44 m.M.

Fig. 17a 1/30.

Zwalp.

Kesp.

Fig. 17b 1/30.

Zwalp.

Kesp.

Fig. 18. 1/30.

Kesp.

Fig. 17a-b Oude verbindingmiddelen van Kesp en Zwalp.

Uitgave de Gebrs v Cleef

Lith. D. Osseman Amst.

DE HOUTEN VLOER. KISTDAMMEN. BETONTSTORTINGEN. HARDSTEENEN SLAGDREMPEL.

Fig. 1[a] Verticale doorsnede 1/100.

Fig. 1[a b] Houten roosterwerk zonder heipalen. 1/100.

Fig. 1[b] Boven-aanzicht. 1/100.

Fig. 2. Vert. doorsnede over het bovensluishoofd der Mallegatsluis. 1/200.

Fig. 4. Kistdam. 1/150.

Fig. 5. Kistdam. 1/150.

Fig. 6. Kistdam. 1/100.

Fig. 7. Kistdam. 1/100.

Fig. 8. Kistdam. 1/100.

Fig. 13[a] 1/20. Koker bij herstellingen.

Fig. 3[a b] Vloer der groote schutsluis te Antwerpen 1/200.

Fig. 3[a] Vert. doorsn.

Fig. 13[b] 1/100

Fig. 3[b] Boven-aanzicht. 1/200.

Fig. 11. Kistdam, te Kopenhagen toegepast. 1/250.

Fig. 15.[a-d] Toestellen bij het storten van beton.

Fig. 15.[d] Betonkoker b.

Fig. 15.[f] Betonkoker. 1/100.

Fig. 9. 1/75.

Fig. 9. Kistdam bij den bouw eener brug op het Zederik-kanaal. 1/75.

Fig. 10. Kistdam te Portsmouth. 1/400.

Fig. 13[b] 1/200.

Fig. 15.[e] 1/50.

Fig. 15. [a]

Verticale doorsnede 1/200

Fig. 15 a, b en d.
a. Betonstede.
b. Betonkoker.
c. Damwand.

Zeildoek.

Fig. 15.[g] Kip bak. 1/40.

Fig. 15.[c] Betonmière.

Fig. 12. Kistdam met klep. (Zeeland.) 1/100.

Fig. 14. Koker. 1/40.

Omgekeerd gewelf.

Valling stagstijl 1:24

Valling dearkasmuur 1:100

Fig. 15.[h] Kipbak. 1/30.

Fig. 16. Doorsn. v. d. schutkolkmuur. 1/100.

Fig. 15.[i] Inrichting tot wasschen van brikken. 1/100

Fig. 15.[j] Toestel tot stampen van beton. 1/100.

Fig. 17. Toestel tot mengen van beton. 1/75.

Fig. 18. Toestel tot mengen van mortel en beton. 1/100.

Kalkbrij. Trap. Zand. Mortel trommel. Betonmengtrommel.

Fig. 19. Halve hardsteenen slagdrempel. 1/100.

Uitg. Gebr. v. Cleef.

Steendr. Gebr. v. Langenhysen à Hage.

FUNDEERINGEN MET SAMENGEPERSTE LUCHT TE ANTWERPEN, CARNET, ELBEUF, TOULON, e.a.

Fig 1 a-k Sluis van St Aubin nabij Elbeuf.

Fig 1 a Lengtedoorsnede volgens AB. 1/1000.

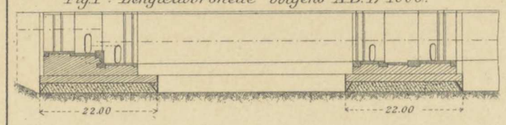


Fig 1 b Doorsnede volgens CD 1/1000.

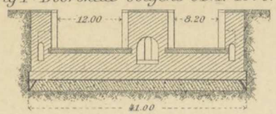


Fig 2 a Doorsnede volgens LMNO. 1/1000.

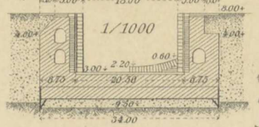


Fig 2 a-f Sluis te Carnet.

Fig 2 b Lengtedoorsnede volgens ABCDEF. 1/1000.

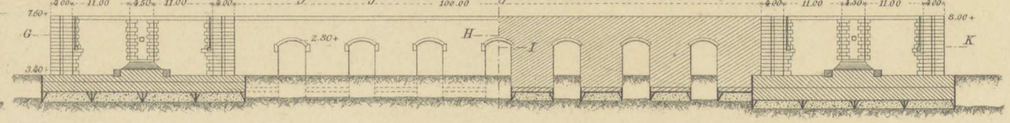


Fig 1 c Platte grond. Schaal 1/1000.

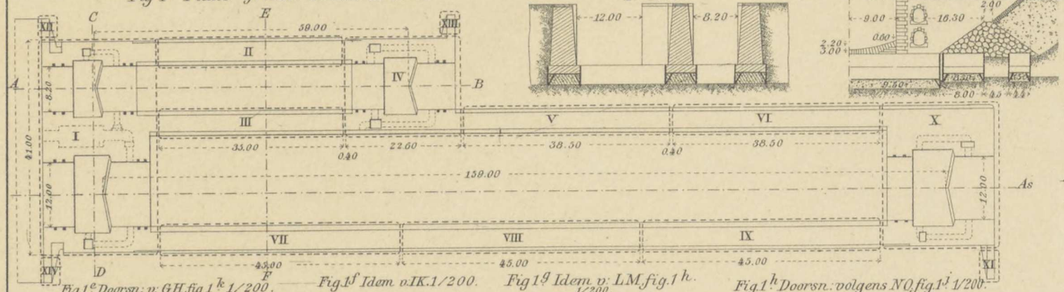


Fig 1 d Doorsnede volgens EF. 1/1000.

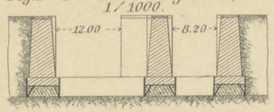


Fig 2 c Half benedensluishoofd.

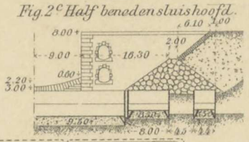


Fig. 2 d Horizontale doorsnede volgens GHIK. 1/1000.

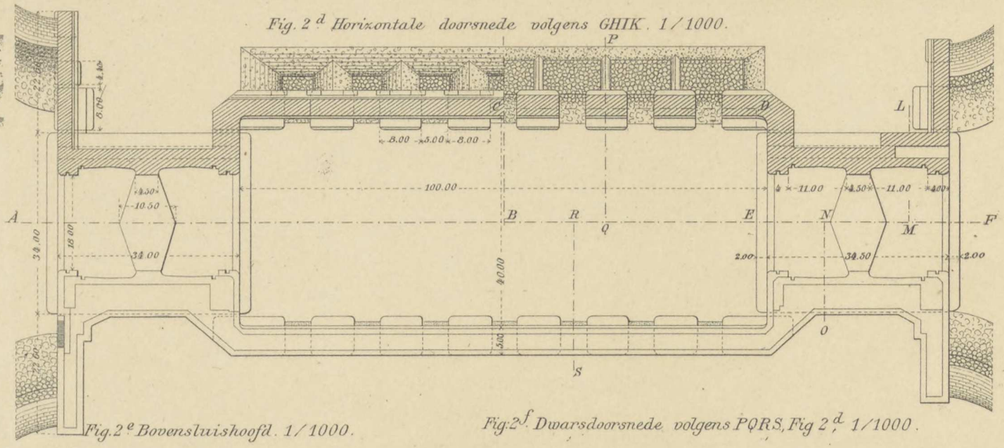


Fig 1 e Doorsn: v. GH fig 1 k 1/200.

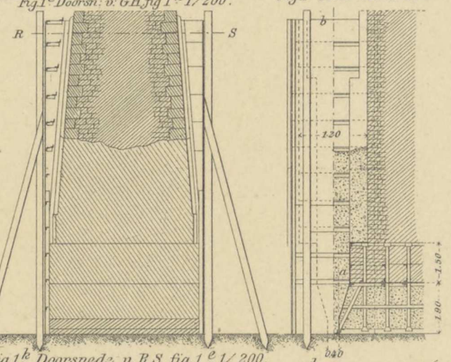


Fig 1 f Idem v. IK. 1/200.

Fig 1 g Idem v. LM. fig 1 h. 1/200

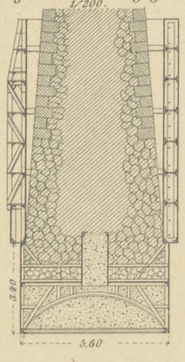


Fig 1 h Doorsn: volgens NO fig 1 j 1/200

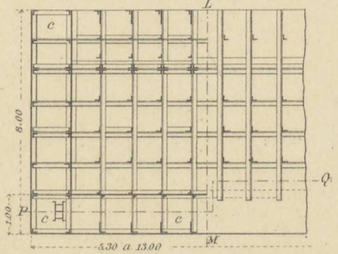


Fig 2 e Bovensluishoofd. 1/1000.

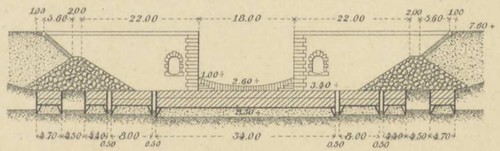


Fig 2 f Dwarsdoorsnede volgens PQRS, Fig 2 d 1/1000.

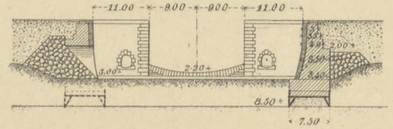


Fig 1 j Doorsnede volgens PQ, fig 1 h 1/100.

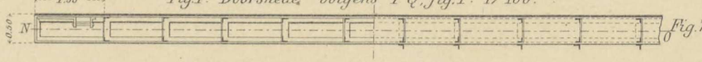


Fig 7 g Grossprüfening 1/40.

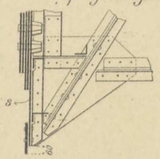


Fig 7 a Rotterdam 1/40.

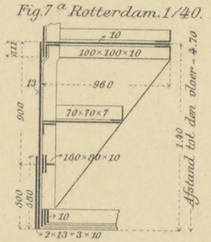


Fig 5 d Toulon 1/40.

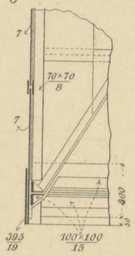


Fig 1 k Doorsnede v. RS fig 1 e 1/200

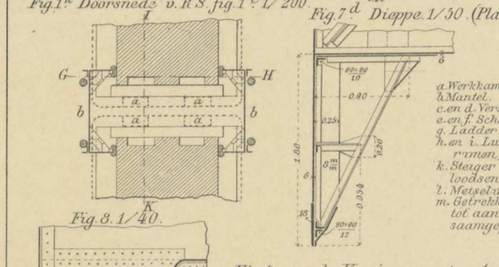


Fig 7 d Dieppe 1/50. (Plaat 38 Fig 2)

Fig 1 b Loogsteen

Fig 3. 1/40.

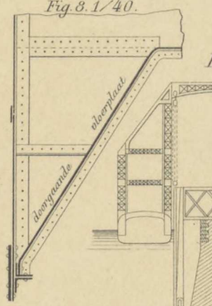


Fig. 3. Schets.

a. Werkkamer.
b. Mantel.
c. en d. Verstijvingsbalken van den vloer.
e. en f. Schachten of Schoorsteenen.
g. Ladder.
h. en i. Luchtsluizen met deuren en ringen, soms met voorportaal.
k. Steiger met spoorbanen, laadsen, enz.
l. Metselwerk.
m. Getrokken ijzeren luchtbuizen, tot aan- en afvoer van saamgeperste lucht.

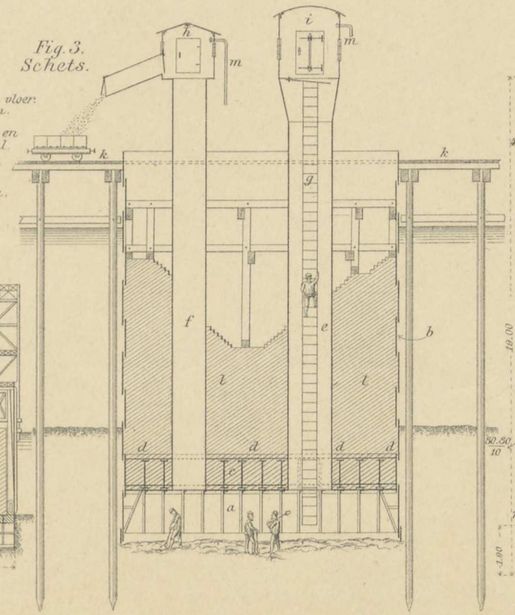


Fig 4 a en b. Kaaimuur te Antwerpen. 1/500.

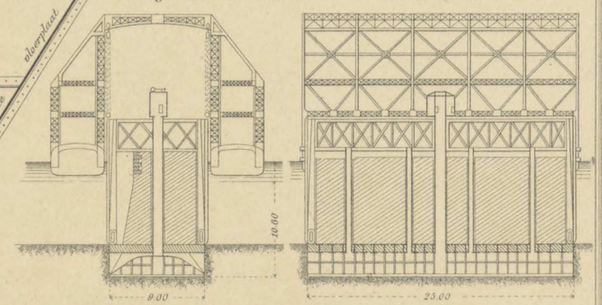


Fig 7 b Scoff 1/20.

Fig 5 a-d Fundeering van droge dokken te Toulon. 1/200.

Fig 5 a Dwarsdoorsnede. Ged. lengtedoorsnede Fig 5 b

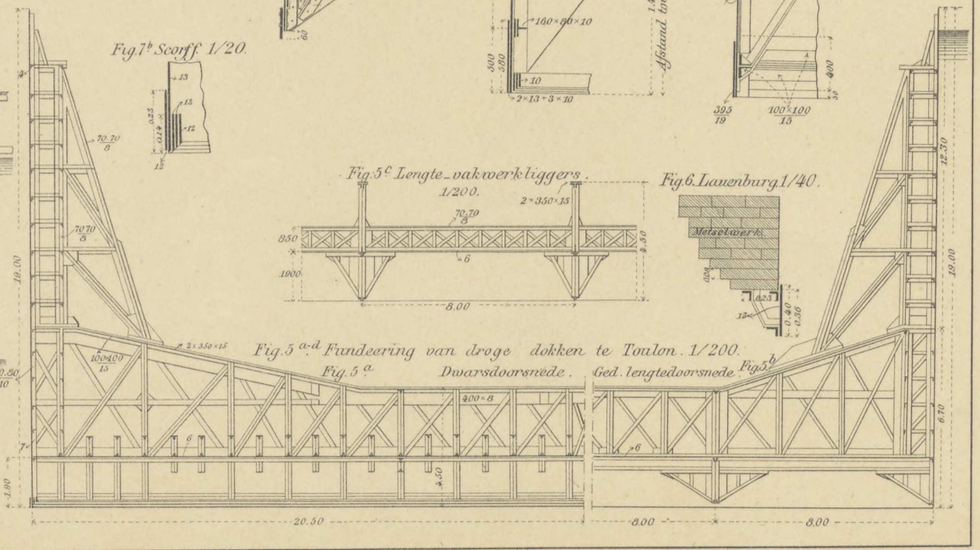


Fig 5 c Lengte-vakwerkliggers. 1/200.

Fig 6. Lauenburg 1/40.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen's Hage.

FUNDEERINGEN MET SAMENGEPERSTE LUCHT TE COUDRAY, GENUA, PERROTINE, RIVIÈRE, ROTTERDAM, SAÏGON, SAINT-SERVAN, TALCAHUANO.

Fig. 1 a-c Duikerklok, gebezigd te Rotterdam.
Fig. 1a Verticale doorsnede. 1/40.

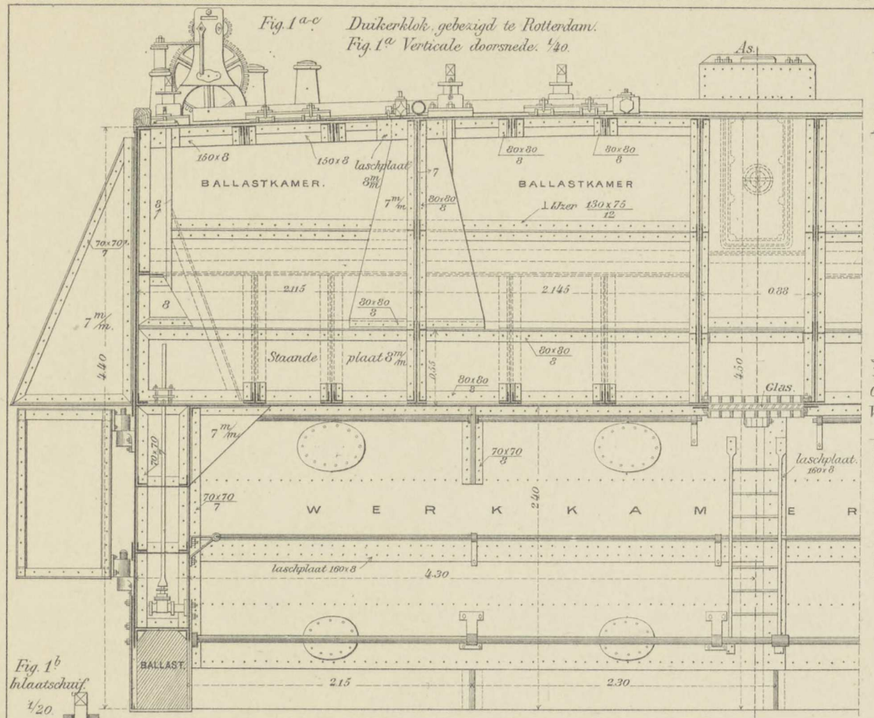


Fig. 1b hlaatschuif 1/20

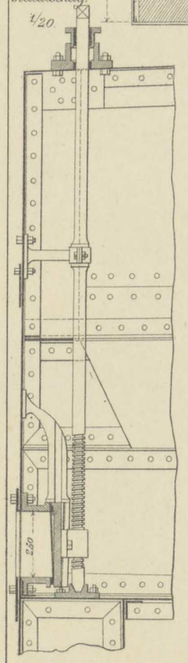


Fig. 1c Bovenaanzicht en doorsnede der schuif. 1/20

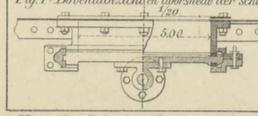


Fig. 2 a-c Stuw van Coudray op de Seine.
Fig. 2a Halve lengte-doorsnede (Aanvang arbeid) 1/170 Fig. 2b Halve lengte-doorsnede (Einde arbeid) 1/170.

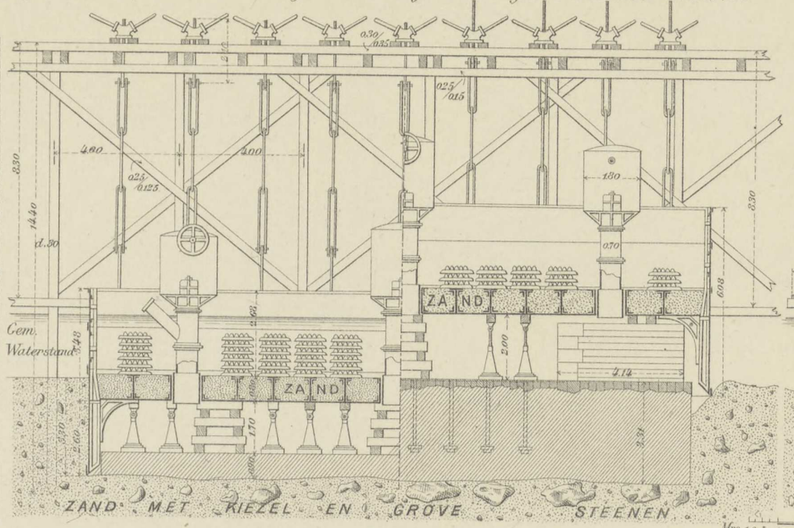


Fig. 2c. Dwarsdoorsnede. 1/170.

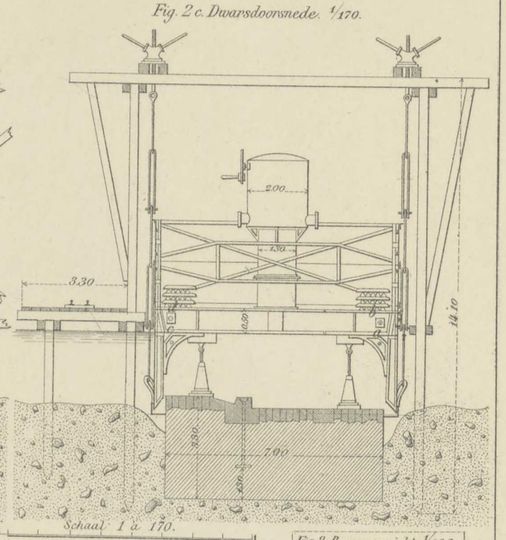


Fig. 3a Spuisluis de Perrotine. 1/100.

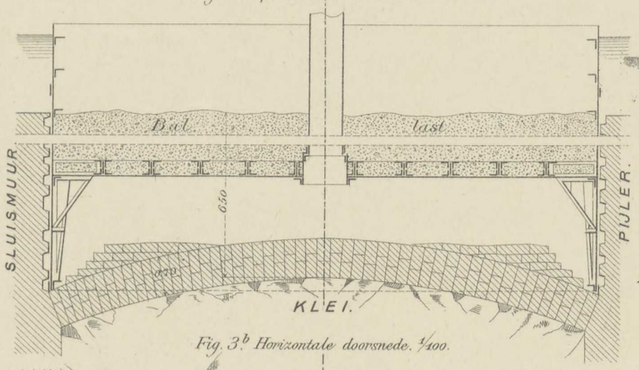
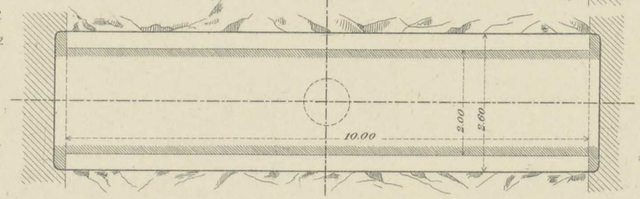


Fig. 3b Horizontale doorsnede. 1/400.



Droog dok te Saïgon.
Fig. 5. Dwarsdoorsnede. 1/300.

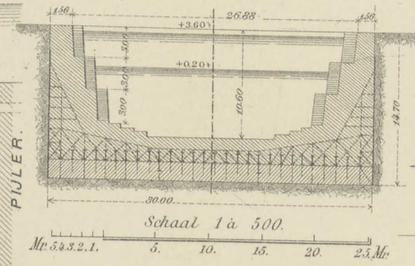


Fig. 8. Bovenaanzicht 1/200.
caisson.

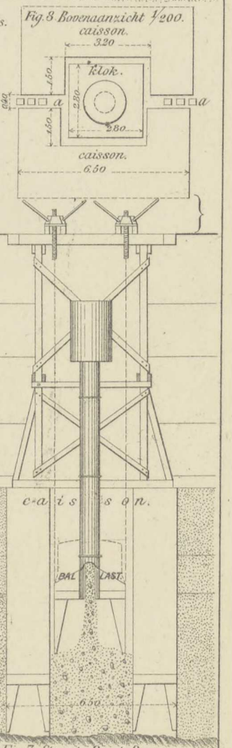


Fig. 7 Stuw te Saint-Servan. 1/200.

Fig. 4 Stuw van de Rivière op de Maas.

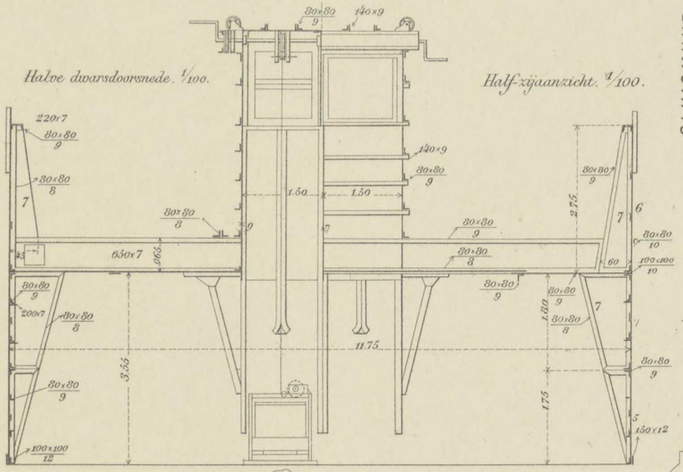


Fig. 10.

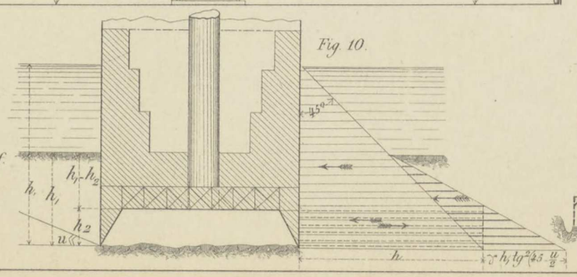


Fig. 9b Ged. dwarsdoorsnede. 1/300.

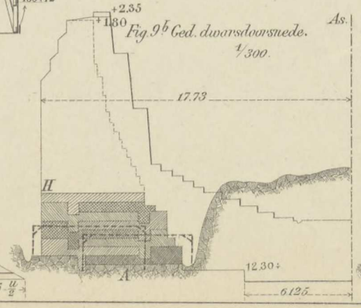


Fig. 9a-b Droog dok te Talcahuano.
Fig. 9a Ged. lengte doorsnede. 1/300.

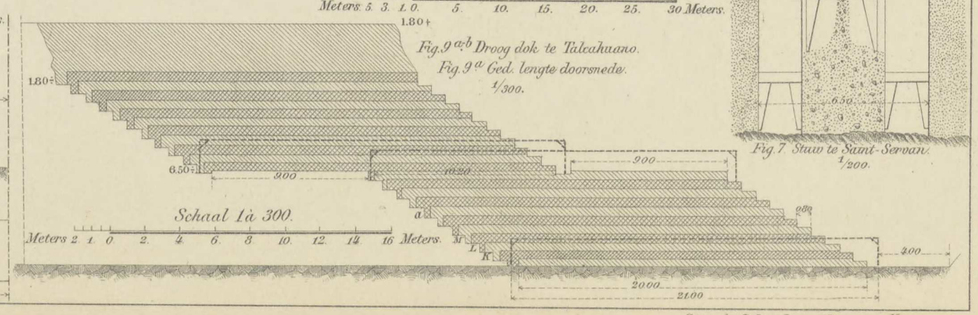
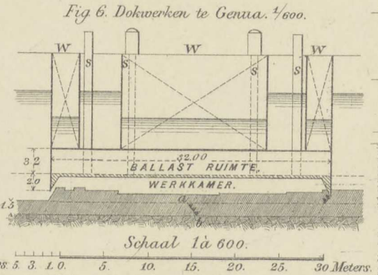


Fig. 6. Dokwerken te Genua. 1/600.



Uitg. de Gebrs v. Cleef.

Steendr. Gebr. v. Langenhuysen, s Hage.

SLUIZEN van 4 M. verval in het CANAL DU NORD en van 3.75 M. verval in het kanaal ST. DIZIER-WASSIJ.

Fig. 1a. Dubbele sluis van 4 M. verval in het Canal du Nord.
Fig. 1a. Lengtedoorsnede over het midden der schutkolk. 1/250.

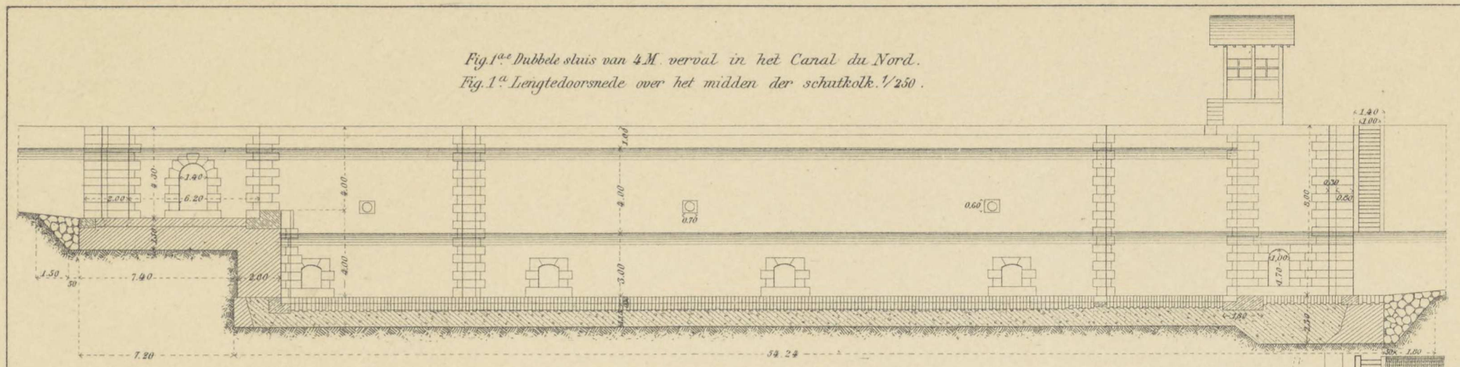


Fig. 1b Platte grond. 1/250.

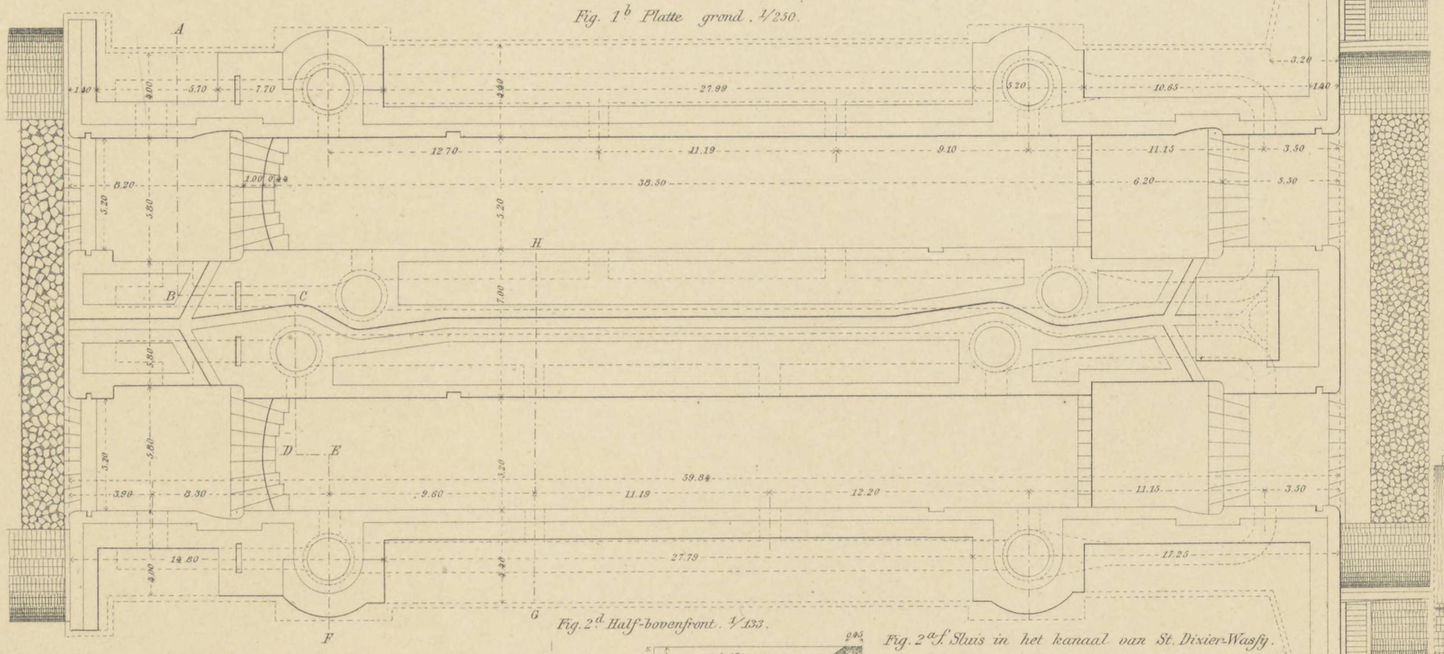


Fig. 1c Doorsnede over ABCDEF fig. 1b 1/250.

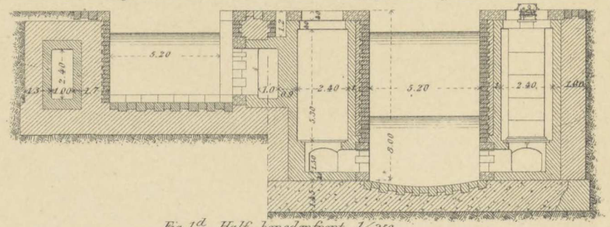


Fig. 1d Half-benedenfront. 1/250.

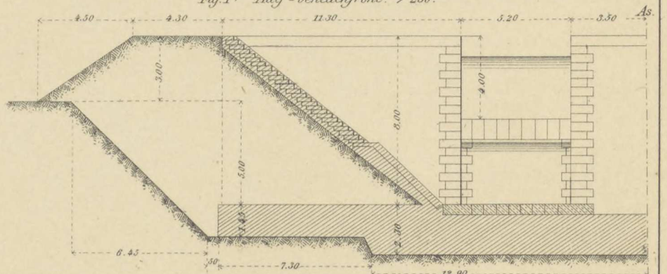


Fig. 1e Doorsnede over GH. 1/250.

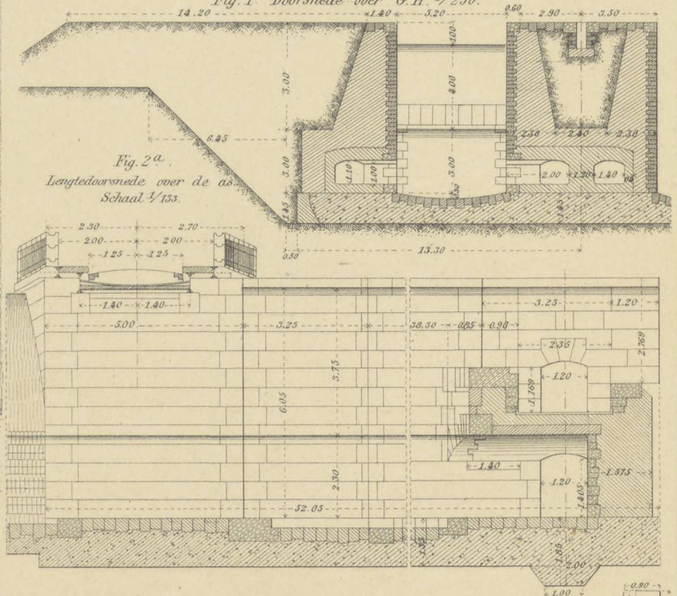


Fig. 2a. Lengtedoorsnede over de as. Schaal 1/133.

Fig. 2d Half-bovenfront. 1/133.

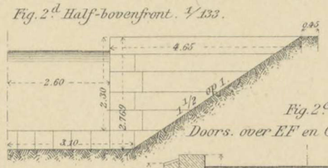


Fig. 2a-f. Sluis in het kanaal van St. Dixier-Wasfy.

Fig. 2f. Halve doors. over AB. 1/133.

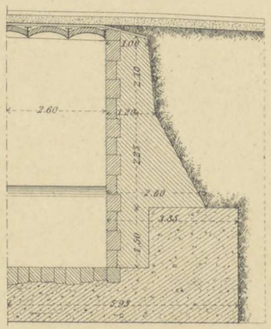


Fig. 2e Halve doors. over CD. 1/133.

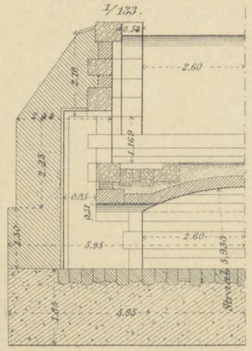
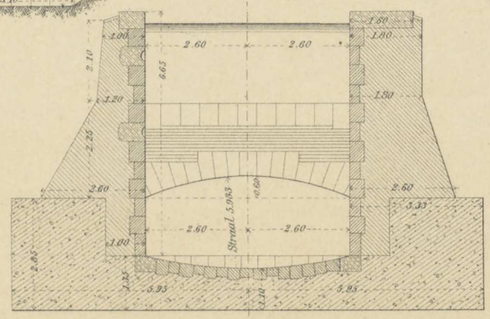


Fig. 2c Doors. over EF en GH fig. 2b 1/133.



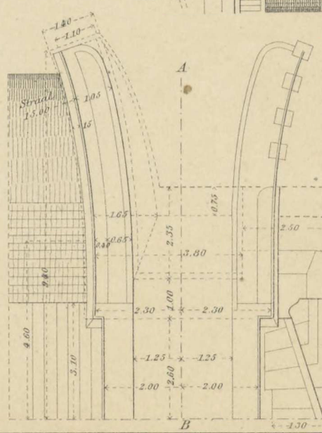
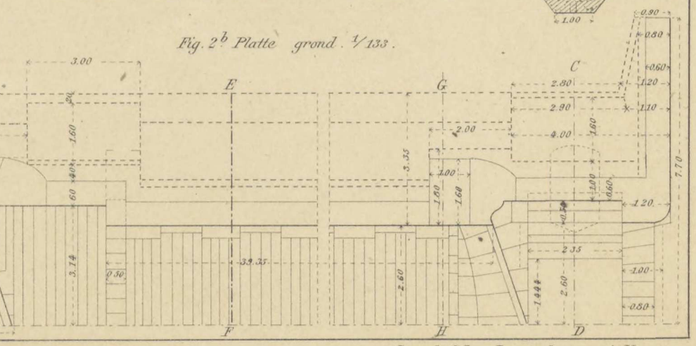


Fig. 2b Platte grond. 1/133.



Schaal van 1/133.

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Steendr. Gebr. v. Langenhuysen, 's Hage.

SLUIZEN TE AUBOIS, BORDEAUX, EVRIJ, OBOURG, SCHOTKAMPSLUISJE, SLUIS IN HET EMSKANAAL.

Fig. 1 a-c Sluis bij Obourg. 1/200.
Fig 1 a Dwarsdoorsnede volgens ABCDE fig 1 b 1/200.

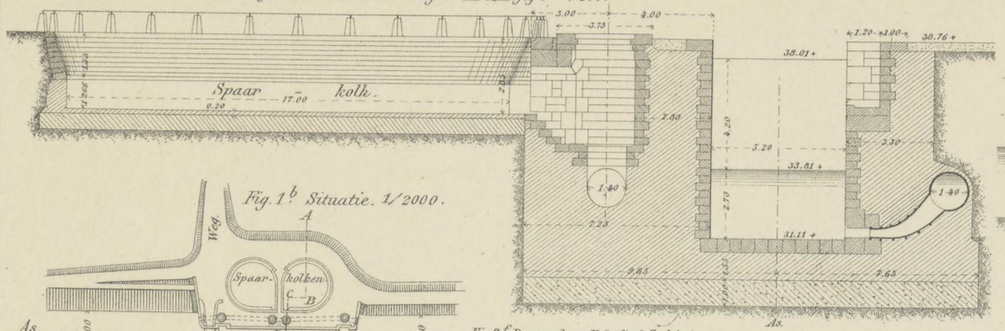

Fig. 1 b Situatie. 1/2000.

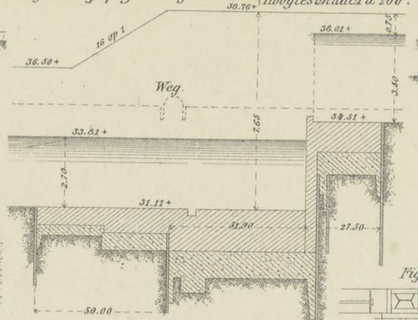

Fig. 1 c Lengteprofil nabij de sluis. Lengteschaal: 1 à 2000. Hoogteschaal 1 à 200.

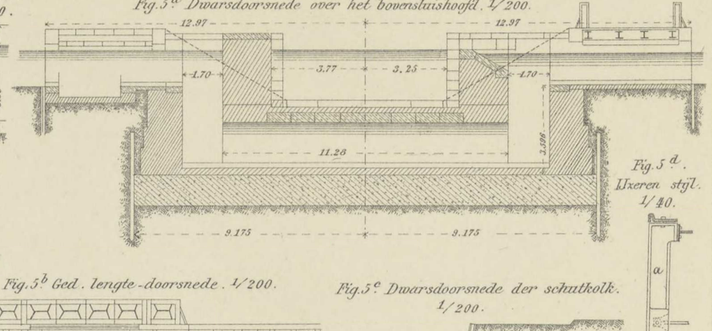

Fig. 5 a-d Sluis in het Emskanaal.
Fig. 5 a Dwarsdoorsnede over het bovensluishoofd. 1/200.

Fig. 5 d. IJzeren stijl. 1/40.

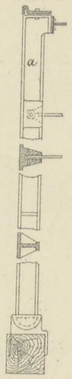

Fig. 5 b Ged. lengte-doorsnede. 1/200.

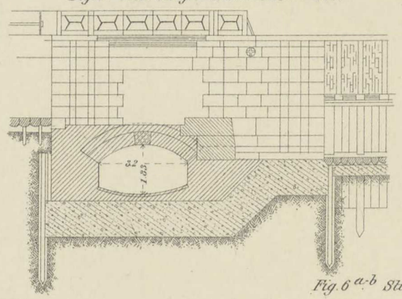

Fig. 5 c Dwarsdoorsnede der schutkolk. 1/200.

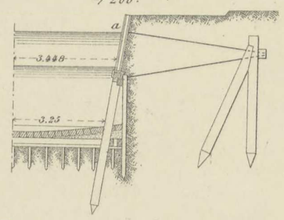

Fig. 6 a-b Sluis te Evrij.
Fig. 6 a Verticale doorsnede volgens AB. fig. 6 b 1/200.

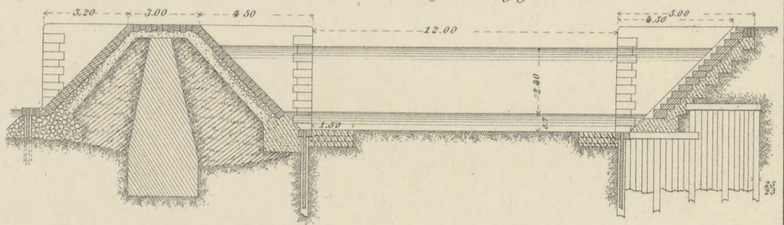

Fig. 6 b Plattegrond van het bovensluishoofd. 1/200.

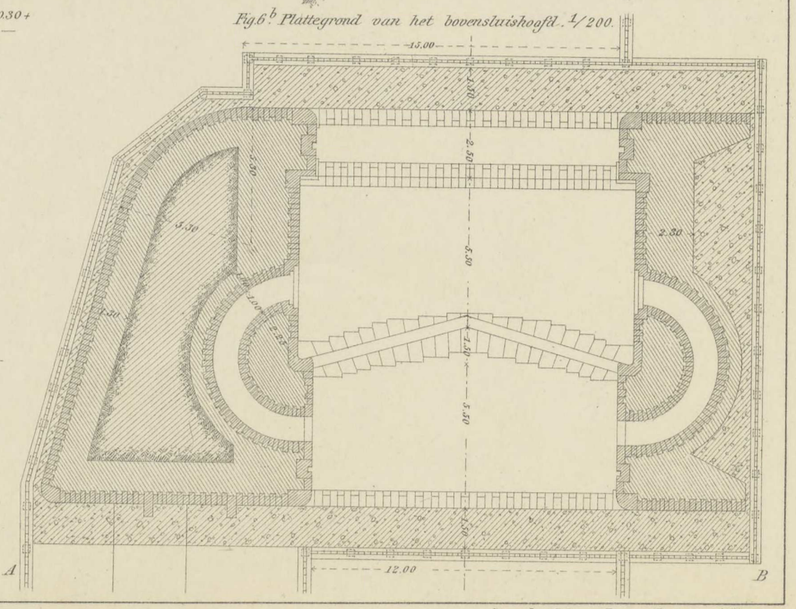

Fig. 2 a-m Sluis van Aubois.
Fig. 2 a Platte Grond 1/400.

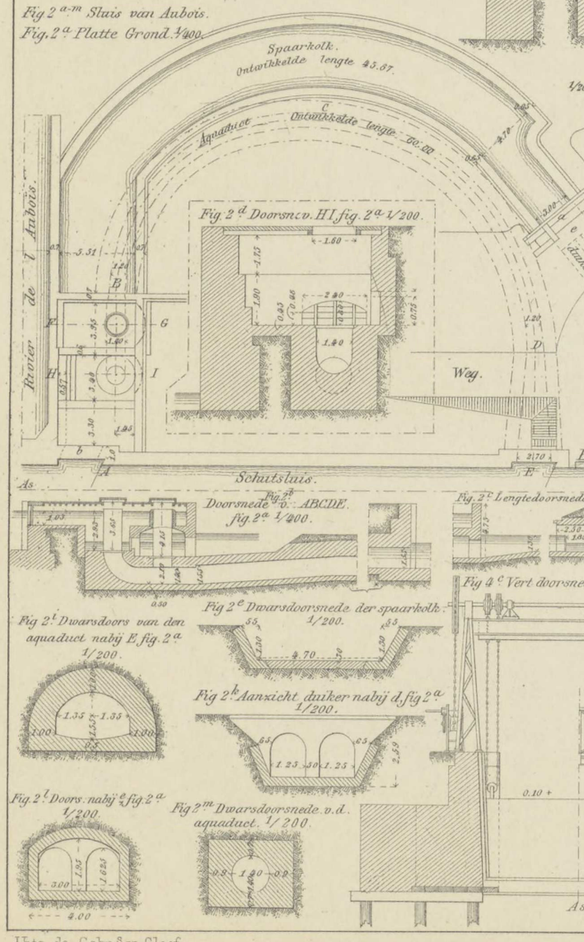

Fig. 2 b Dwarsdoorsnede. nabij a fig 2 a 1/200.

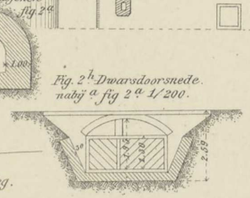

Fig. 2 c Doorsnede v. F G. fig 2 a 1/250.

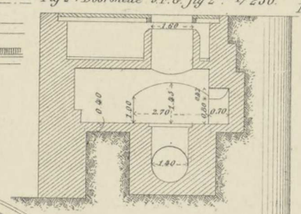

Fig. 2 d Doorsn. v. HI. fig 2 a 1/200.

Fig. 2 e Doorsnede v. ABCDE. fig 2 a 1/200.

Fig. 2 f Lengtedoorsnede der spaarkolk. 1/400.

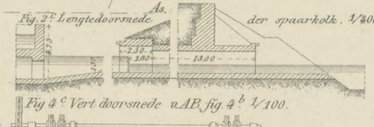

Fig. 2 g Dwarsdoorsnede aquaduct tusschen B en D fig 2 a 1/200.

Fig. 2 h Dwarsdoorsnede van den aquaduct nabij E fig 2 a 1/200.

Fig. 2 i Doors. nabij d fig 2 a 1/200.

Fig. 2 k Aanzicht duiker nabij d fig 2 a 1/200.

Fig. 2 l Dwarsdoorsnede der spaarkolk. 1/200.

Fig. 2 m Dwarsdoorsnede v. d. aquaduct. 1/200.

Fig. 3. Schets der fundeering op gemetselde putten bij de sluizen te Bordeaux.

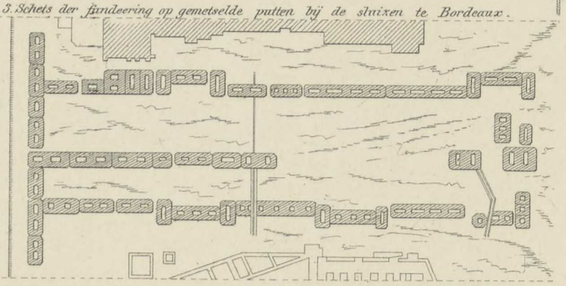

Fig. 4 a-c Schotkampsluisje.
Fig. 4 a Lengte-doorsnede. 1/100.

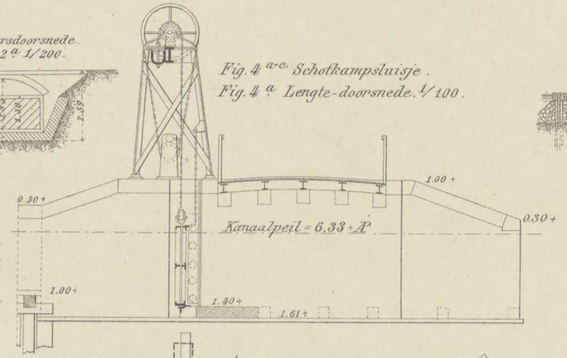

Fig. 4 b

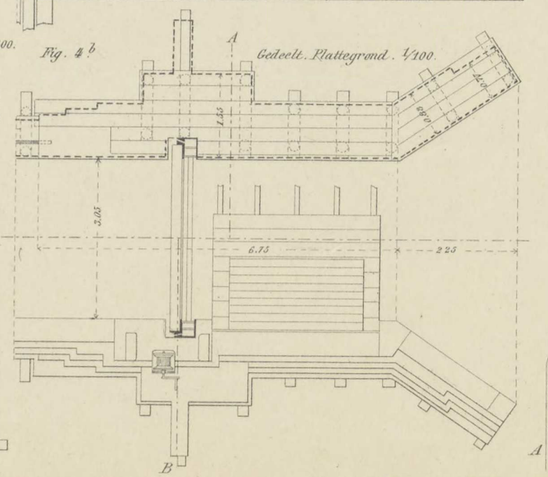

Fig. 4 c Vert doorsnede v AB. fig 4 b 1/100.

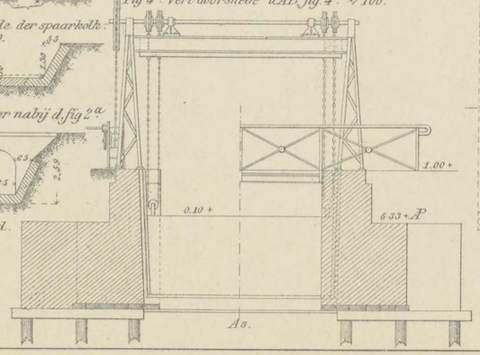

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Fig. 1_{a-e}. Sluis N°. 6, in de Dedemsvaart.
Fig. 1_a. Lengte doorsnede volgens AB, fig. 1_b. 1/200

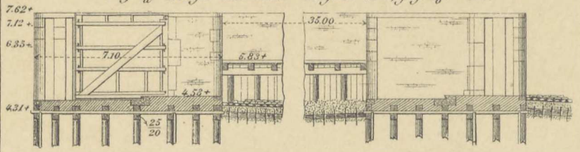


Fig. 1_b. Ged. Platte Grond. 1/200.

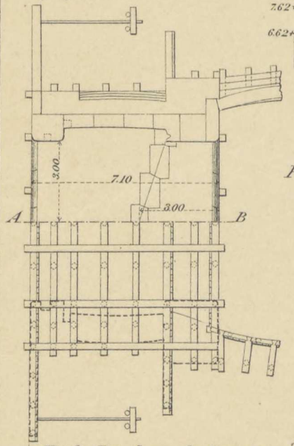


Fig. 1_c. Half boven sluishoofd. 1/200.

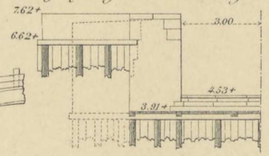


Fig. 1_d. Half beneden sluishoofd. 1/200.

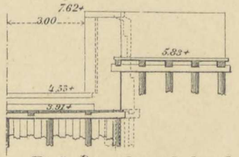


Fig. 1_e. Dwarsdoorsnede der schutkolk. in het midden. nabij het einde. 1/200.

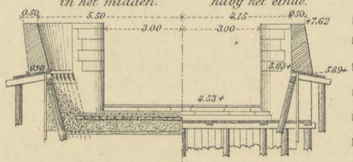


Fig. 3_{h}. Detail van den bewegingstoestel voor de schuif. 1/10.

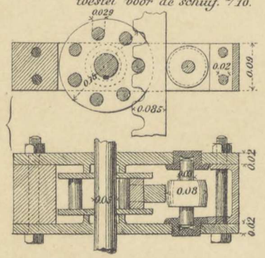


Fig. $3_{a,k}$. IJzeren deur der sluis N°. 7. in de Dedemsvaart.
Fig. 3_a. Aanzicht der bovendeur. 1/40.

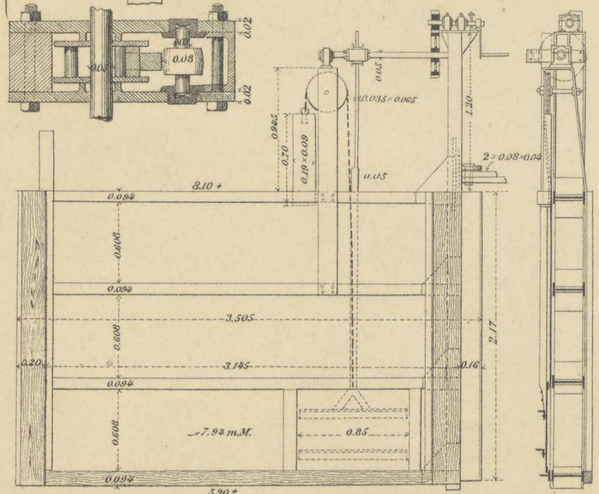


Fig. 3_b. Horizontale doorsnede der bovendeur. 1/40.

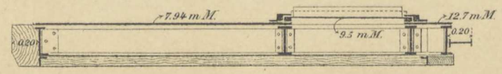


Fig. 3_c. Verticale doorsnede der bovendeur. 1/40.

Fig. 2_{a-g}. Nieuwe sluis N°. 1. in de Lutter Hoofdwijk.
Fig. 2_a. Lengte doorsnede. 1/200.

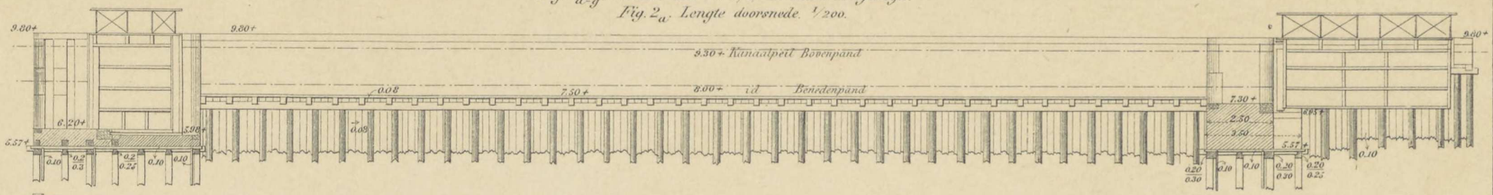


Fig. 2_b. Platte grond. 1/200.

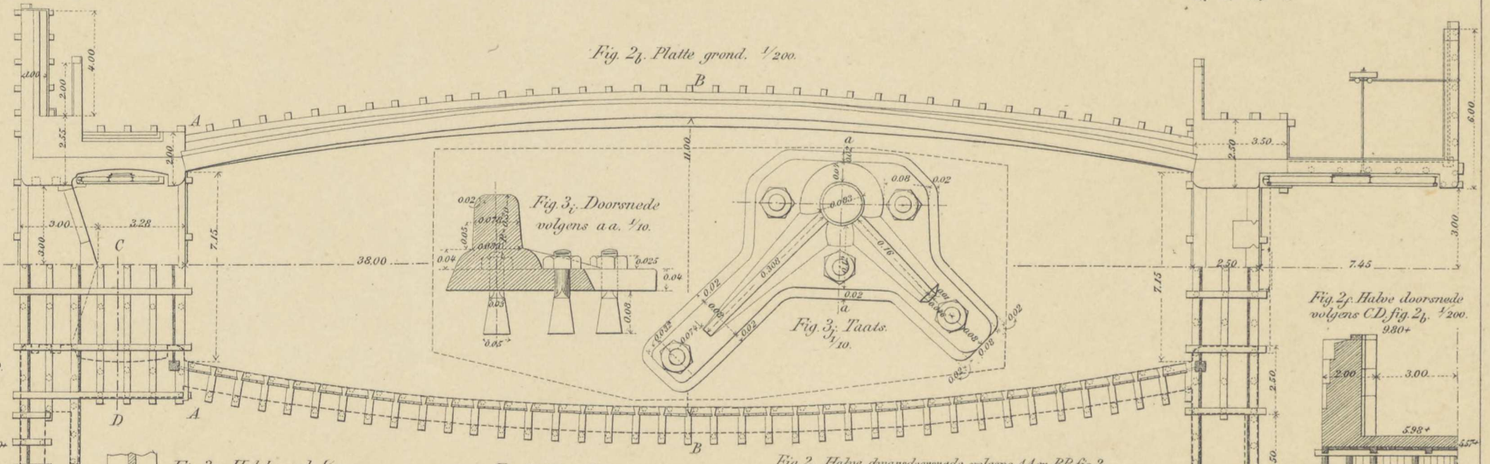


Fig. 3_i. Doorsnede volgens a a. 1/10.

Fig. 3_k. Taats. 1/10.

Fig. 3_d. Halsbougel. 1/10. Verticale doorsnede volgens AA, fig. 3_e.

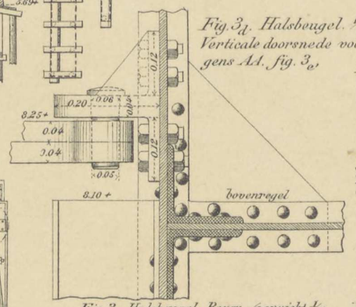


Fig. 3_f. Halsbougel. Boven-aanzicht. 1/10.

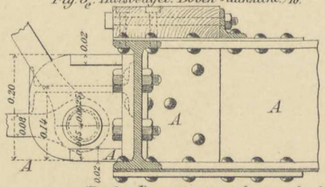


Fig. 3_p. Kom. 1/10. Verticale doorsnede.

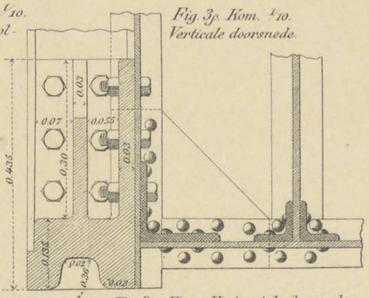


Fig. 3_g. Kom. Horizontale doorsnede.

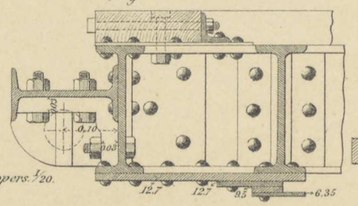
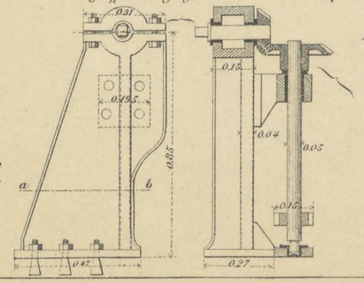


Fig. 3_h. Bewegingstoestel voor de dwarspers. 1/20.



Horizontale doorsnede volgens a.b.

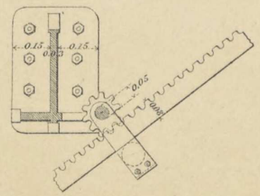


Fig. 2_c. Halve dwarsdoorsnede volgens AA en BB, fig. 2_b. 1/200

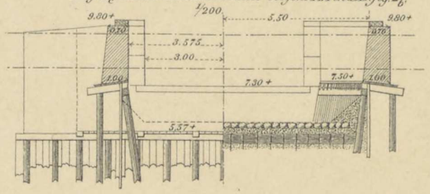


Fig. 2_d. Aanzicht van het boven sluishoofd. 1/200.

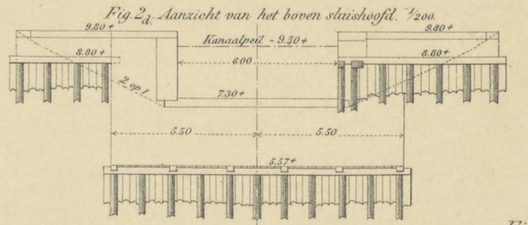


Fig. 2_f. Halve doorsnede volgens CD, fig. 2_b. 1/200.

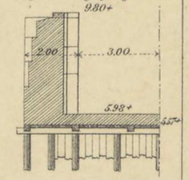


Fig. 2_g. Half beneden sluishoofd. 1/200.

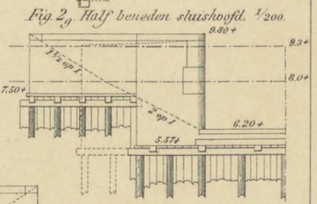
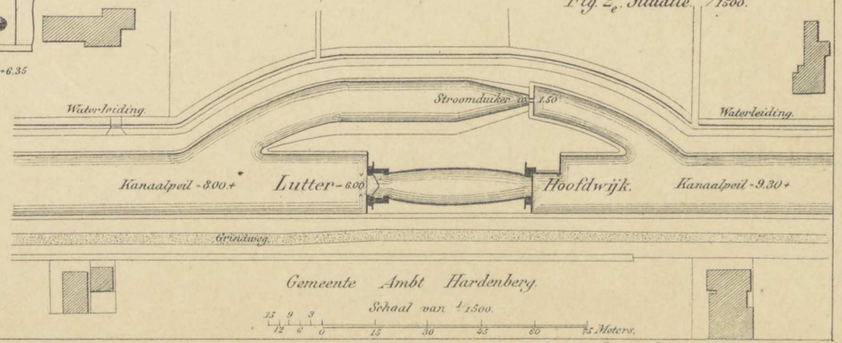


Fig. 2_e. Situatie. 1/1500.



Uitg. de Gebr.s v. Cleef. Steendr. Gebr. v. Langenhuysen, den Haag.

HEZENBERGER-SLUIS EN TJONGER-SLUIS

Fig. 1a-h. Hezenberger-sluis in het Apeldoornsche Kanaal.

Fig. 1a. Lengte doorsnede over de as. 1/200.

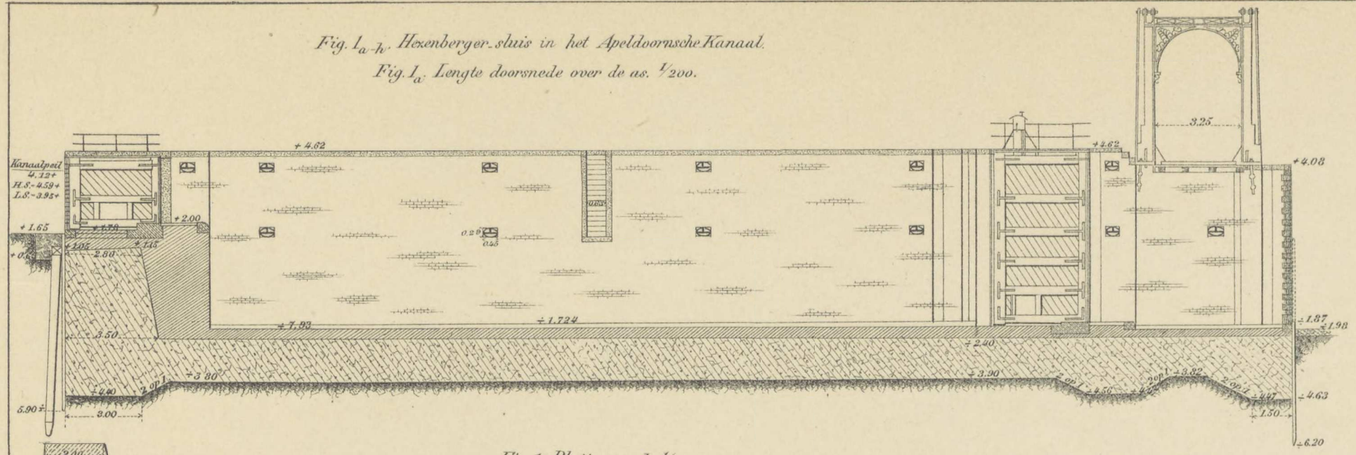


Fig. 1b. Platte grond. 1/200.

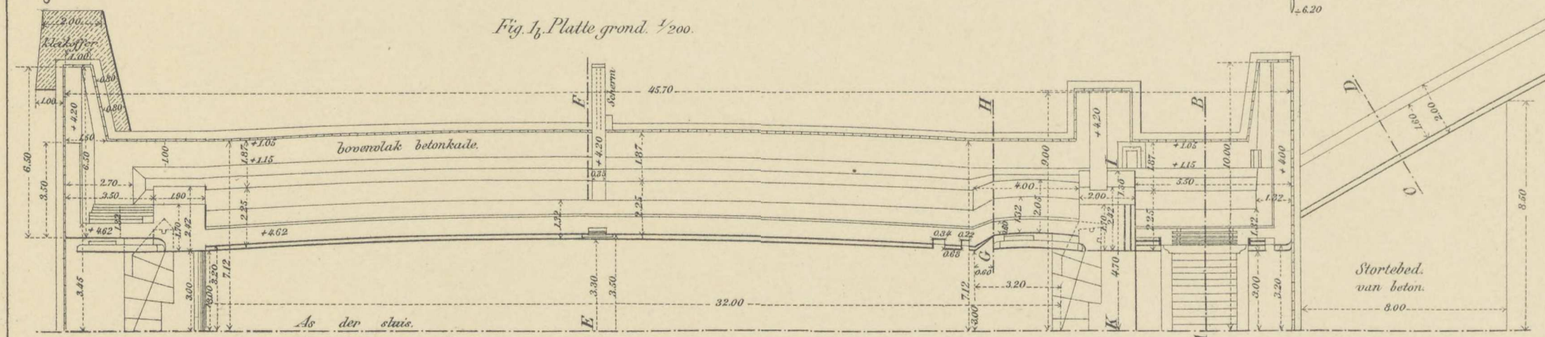


Fig. 1c. Boven-front. 1/200.

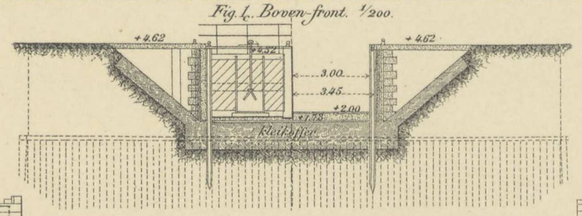


Fig. 1d. Dwarsdoorsnede volgens EF fig. 1b. 1/200.

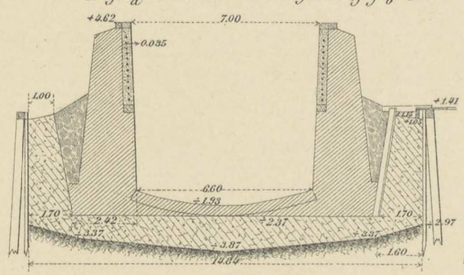


Fig. 1e. Halve doorsnede over GH en IK fig. 1b. 1/200.

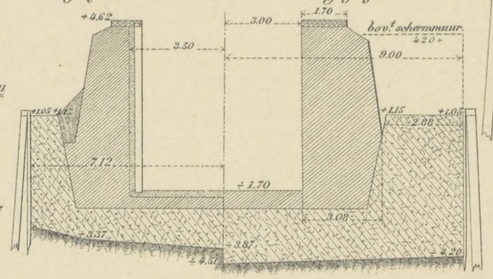
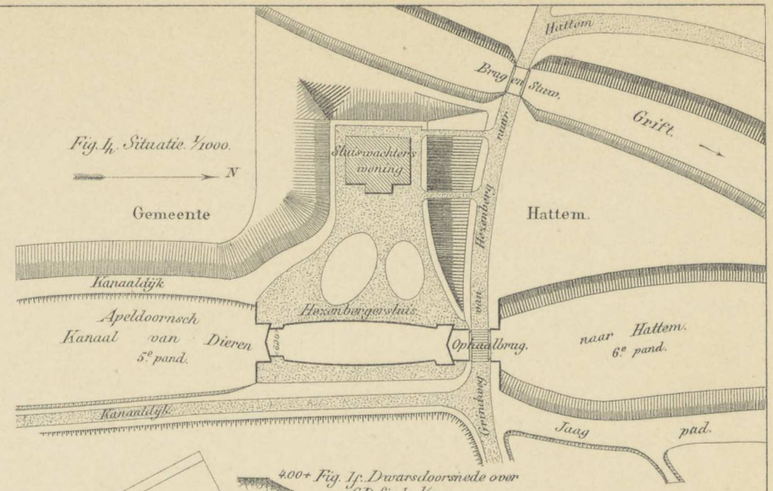


Fig. 1f. Situatie. 1/1000.



400+ Fig. 1g. Dwarsdoorsnede over CD fig. 1b. 1/200.

Fig. 1g. Dwarsdoorsnede volgens AB, fig. 1b. 1/200.

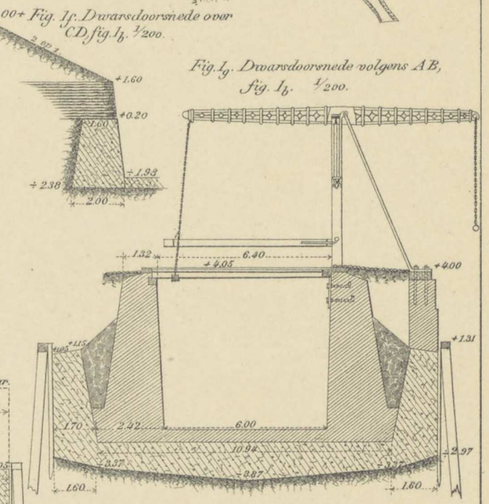


Fig. 2b. Platte grond. 1/200.

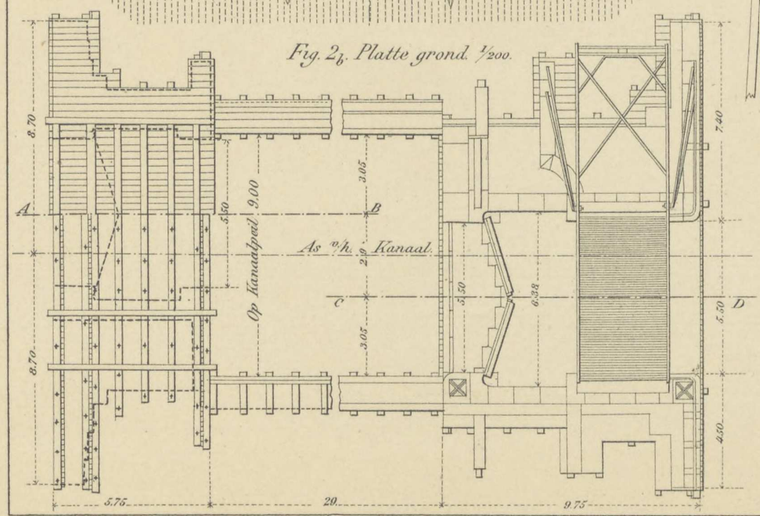


Fig. 2c. Boven-front. 1/200.

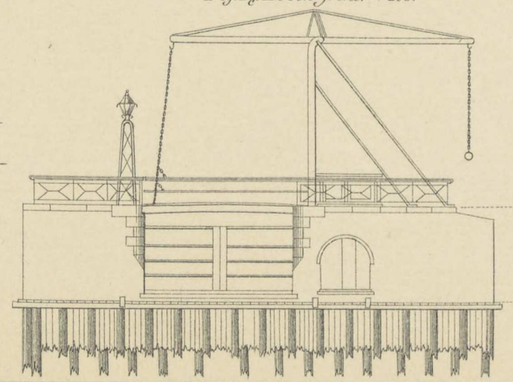


Fig. 2a. Doorsnede volgens AB.CD, fig. 2b. 1/200.

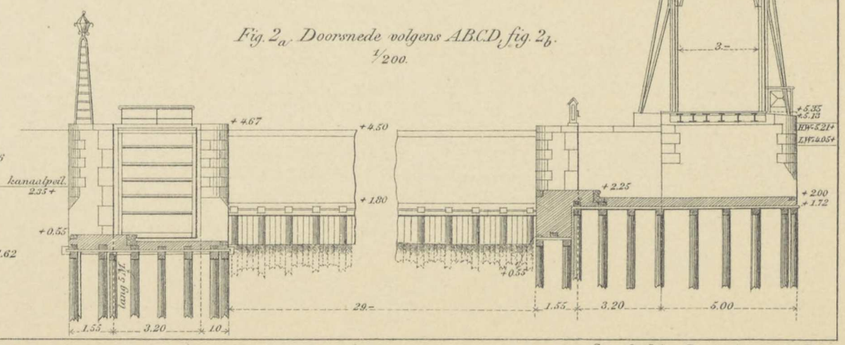


Fig. 2a-c. Sluis III in het Tjonger-kanaal.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, den Haag.

GEKOPPELDE SLUIS TE DIEREN. SCHUTSLUIS IN DE ZUID-WILLEMSVAART. DETAILS VAN SLUISVLOEREN.

Fig. 1[a-d] Schutsluis nabij den IJssel te Dieren. 1/400.

Fig. 1[a] Lengte doorsnede. 1/200.

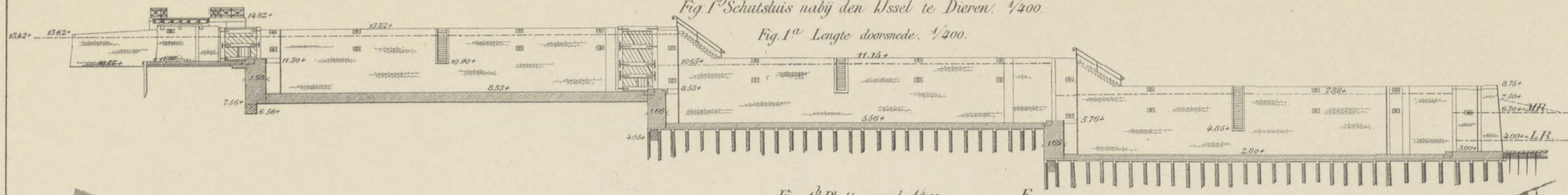


Fig. 1[b] Platte grond. 1/400.

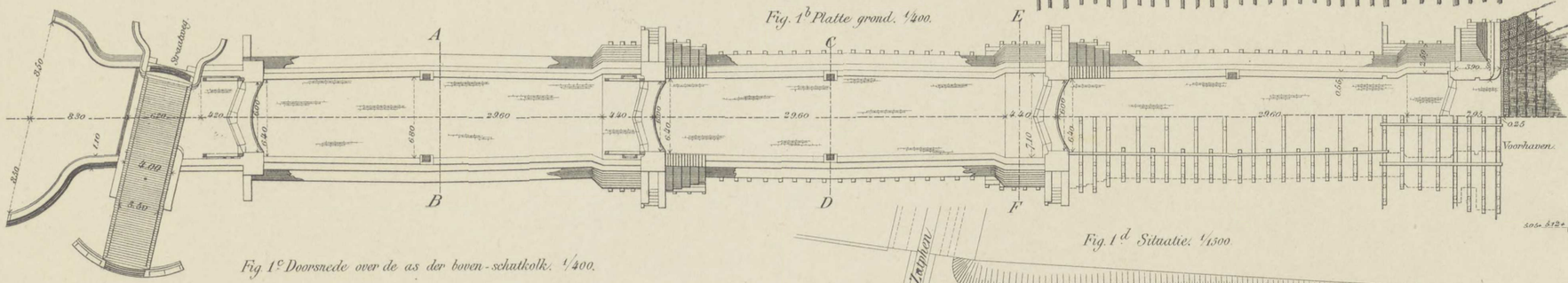


Fig. 1[c] Doorsnede over de as der boven-schutkolk. 1/400.

Fig. 1[c] Doorsnede volgens AB, fig. 1[b]. 1/200.

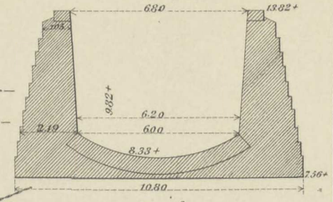


Fig. 1f Halve doorsnede CD en halve doorsnede EF. 1/200.

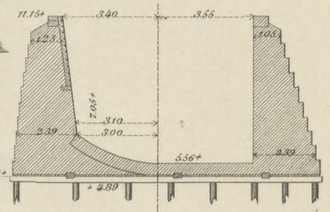


Fig. 1[d] Situatie. 1/1500.

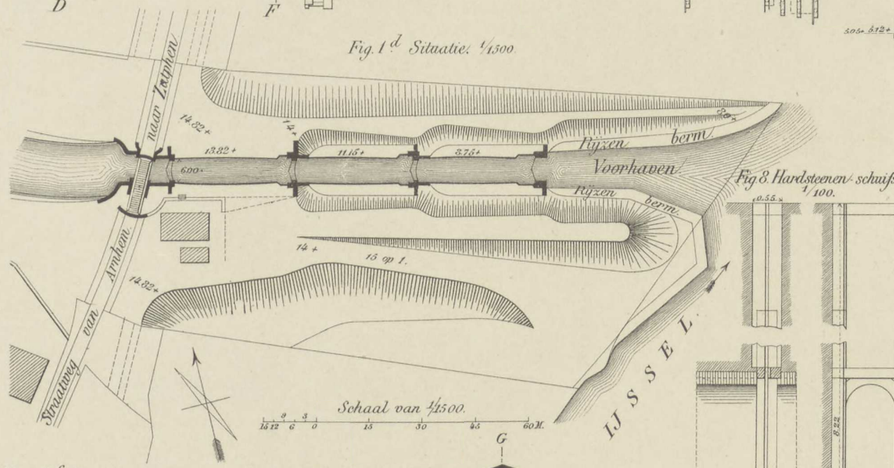


Fig. 2[a-d] Schutsluizen in de Zuid-Willemsvaart.

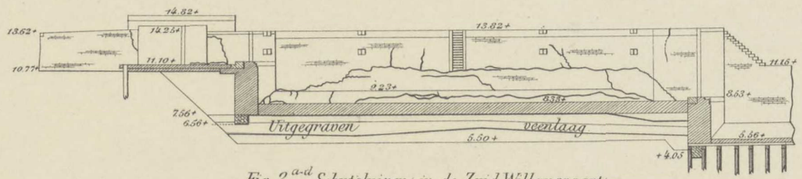


Fig. 2[a] Beneden-sluishoofd. 1/200.

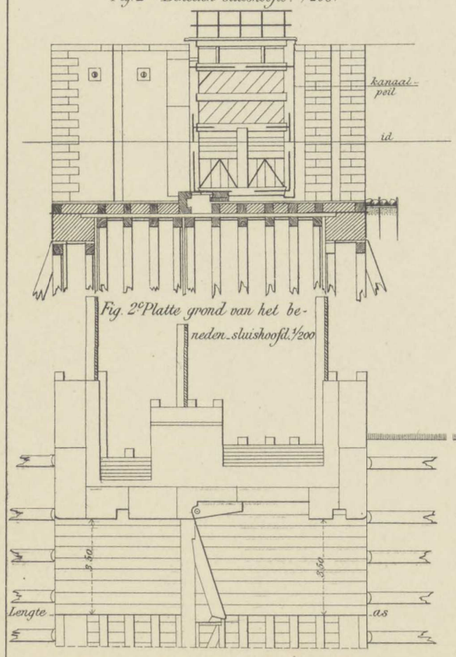


Fig. 2[b] Boven-sluishoofd. 1/200.

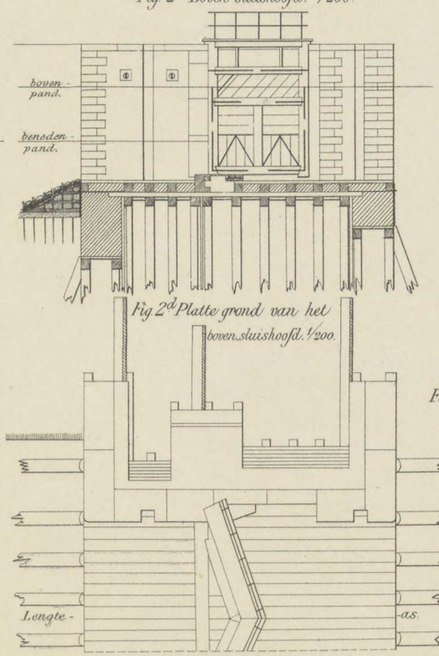


Fig. 2[c] Platte grond van het beneden-sluishoofd. 1/200.

Fig. 2[d] Platte grond van het boven-sluishoofd. 1/200.

Fig. 3[a-f] Slagdrempel eener sluis in de Zuid-Willemsvaart. 1/50.

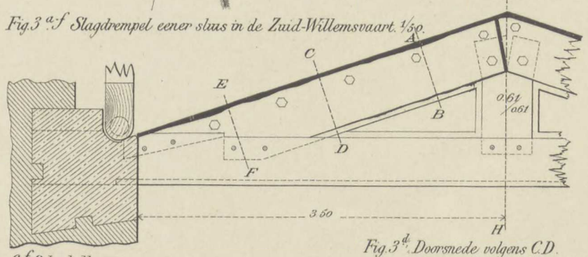


Fig. 3[f] Schutholknuur.

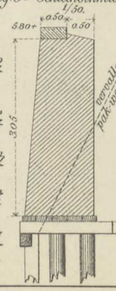


Fig. 3[e] Doorsnede volgens AB.

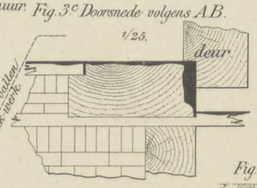


Fig. 3[d] Doorsnede volgens CD.

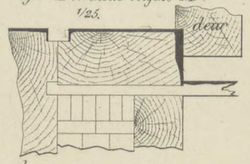


Fig. 3[b] Doorsnede volgens GH. 1/50.

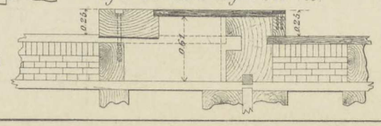


Fig. 8. Hardsteenen schuifsijlen. 1/100.

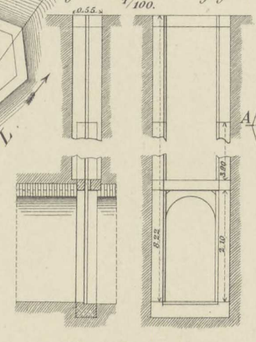


Fig. 5 Dubbele hardsteenen slagdrempel. 1/200.

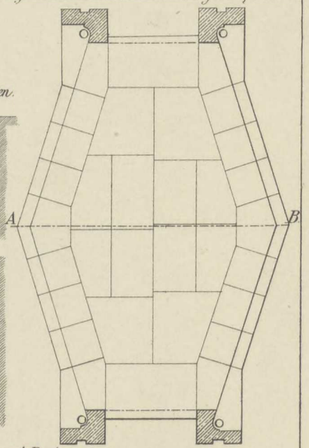


Fig. 6. Doorsnede volgens AB. 1/100.

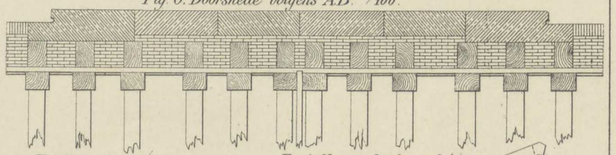


Fig. 7. Koffer. 1/100.

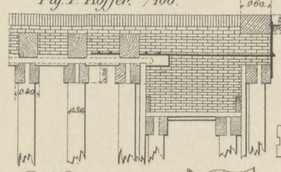


Fig. 3[e] Doorsnede volgens EF. 1/25.

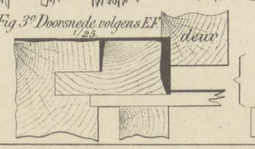
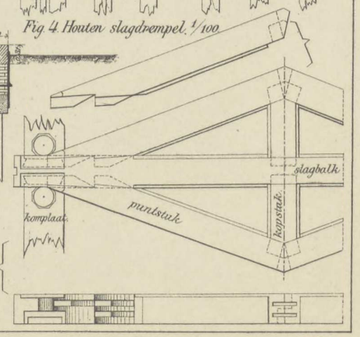


Fig. 4 Houten slagdrempel. 1/100.



Uitg. de Gebr[s] v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

SCHUTSLUIZEN IN HET KANAAL TE St. DÉNIS EN KEERSLUIS TE LEIDEN.

Fig. 1a-d Keersluis te Leiden.
Fig. 1a Verticale doorsnede volgens C D, fig. 1b 1/200.

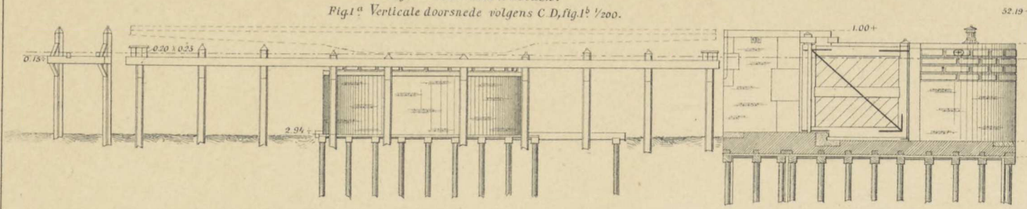


Fig. 1b Platte grond, 1/200.

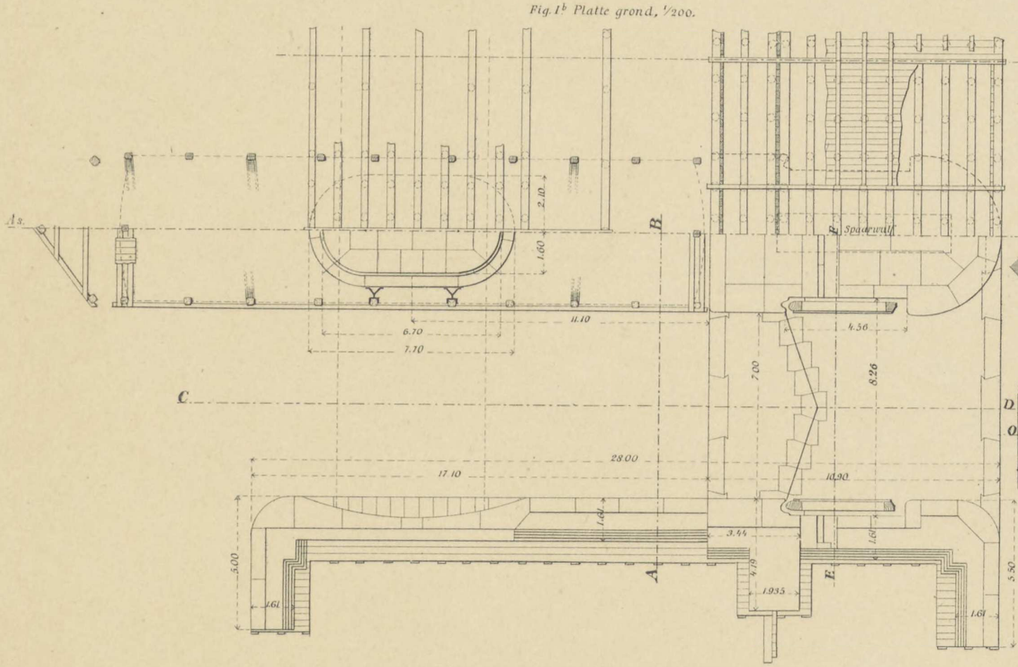


Fig. 1c Situatie. 1 à 2000.

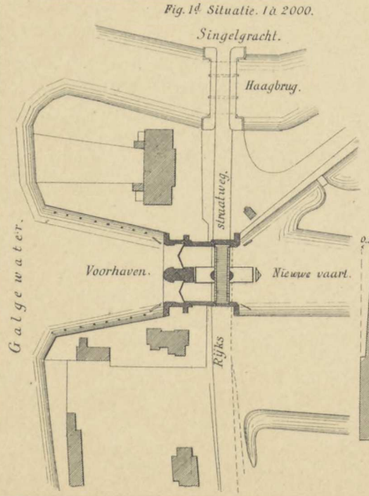


Fig. 1d Doorsnede volgens EF en A B, fig. 1b 1/200.

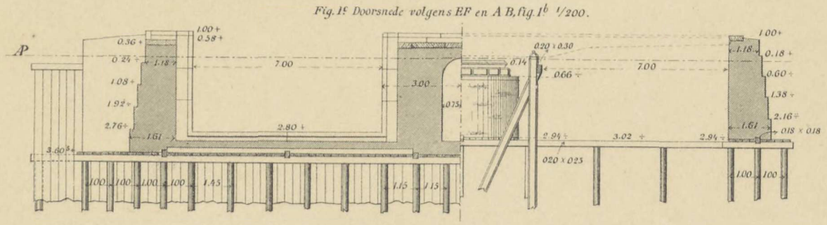


Fig. 2a-n Sluis van 9.92 M. schuthoogte in het kanaal van St. Dénis.
Fig. 2a Verticale doorsnede over de lengte-as der groote sluis, 1/500.

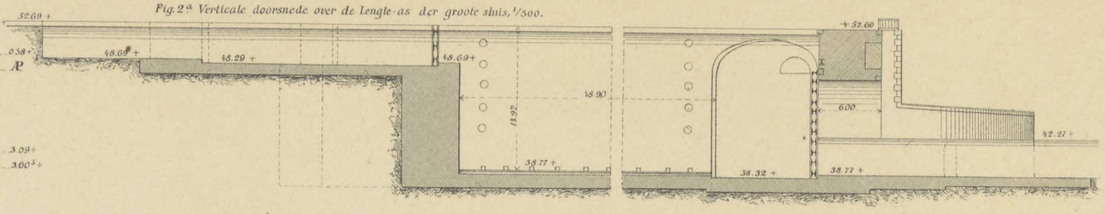


Fig. 2b Situatie. 1/2000.

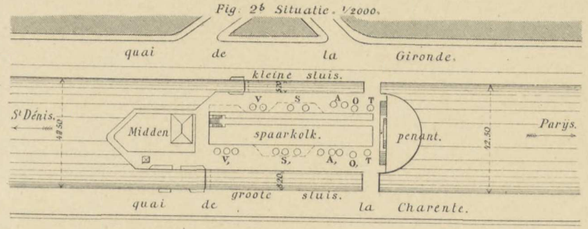
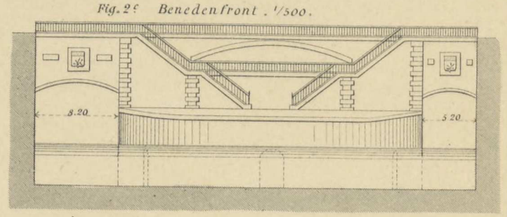


Fig. 2c Benedenfront. 1/500.



V en V, Cyl. schuiven voor het vullen.
A - A, - - - - aftappen.
S - S, - - - - de spaarkolk.
T - - - - turbine.
O - O, - - - - tot ontlasting.

Fig. 2e. Gedeeltelijke horizontale doorsnede over het middenpenant ter hoogte van 50.00 +. schaal 1 à 500.

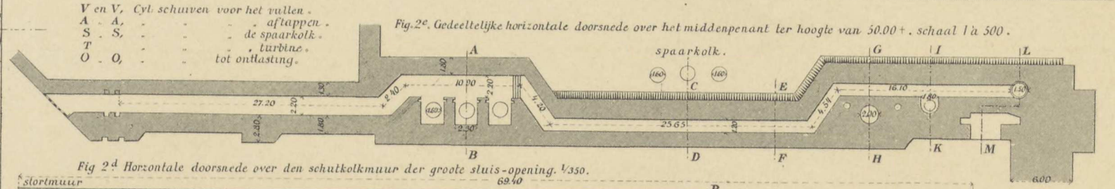


Fig. 2d Horizontale doorsnede over den schutkolkmuur der groote sluis-opening. 1/350.

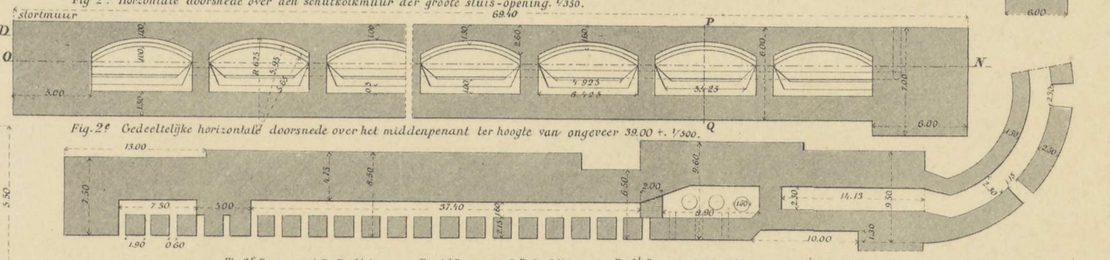


Fig. 2e Gedeeltelijke horizontale doorsnede over het middenpenant ter hoogte van ongeveer 39.00 +. 1/500.

Fig. 2f Doors over A B, fig 2e 1/350.

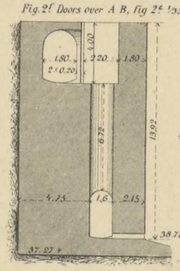


Fig. 2g Doors. over C D, fig 2e 1/350.

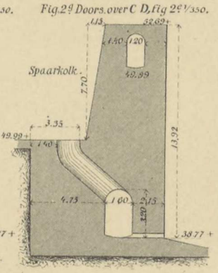


Fig. 2h Doors. over E F, fig 2e 1/350.

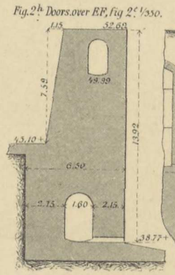


Fig. 2i Langsdoorsnede over O N, fig 2d 1/350.

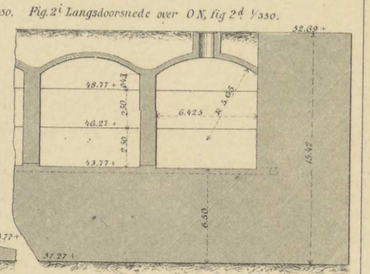


Fig. 2k Doors. over G H, fig 2e 1/350.

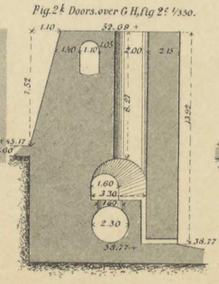


Fig. 2l Doors. over I K, fig 2e 1/350.

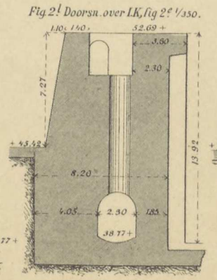


Fig. 2m Doors. over L M, fig 2e 1/350.

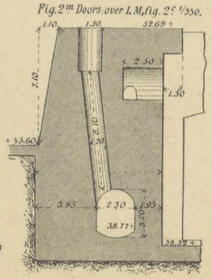


Fig. 2n Dwarsd. over P Q, fig 2d 1/350.

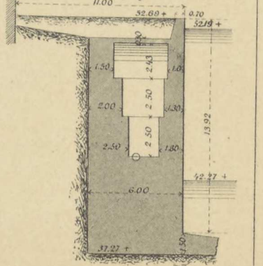


Fig. 3a Dwarsdoorsnede der nieuwe sluizen in het kanaal van St. Dénis van 2.30 M. en 4.50 M. schuthoogte.

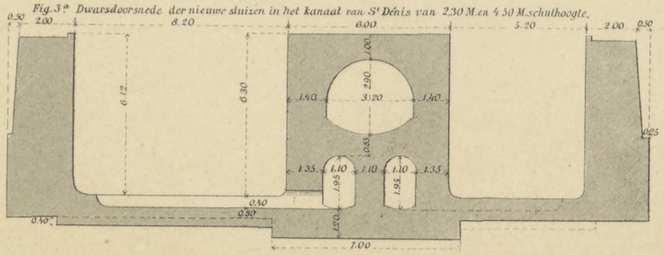


Fig. 3b Detail. 1/100.

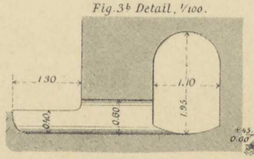
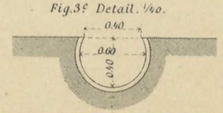


Fig. 3c Detail. 1/40.

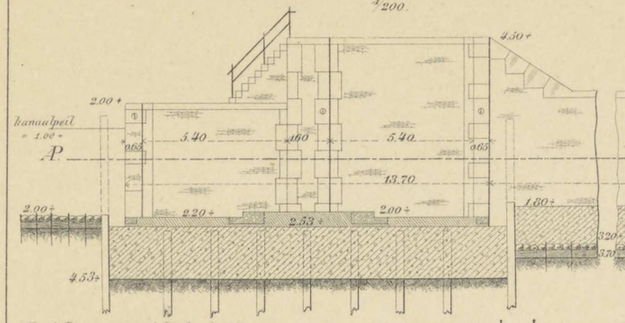


Uitg. de Gebr.s van Cleef, 's Hage.

LITH. D. OSSEMAN, AMST.

NIEUWE SLUIS IN DEN MOND DER HAVEN VAN GOES.

Fig. 1 Lengte-doorsnede over de as van het binnen-sluishoofd. 1/200.



Lengte-doorsnede over de as van het buiten-sluishoofd. 1/200.

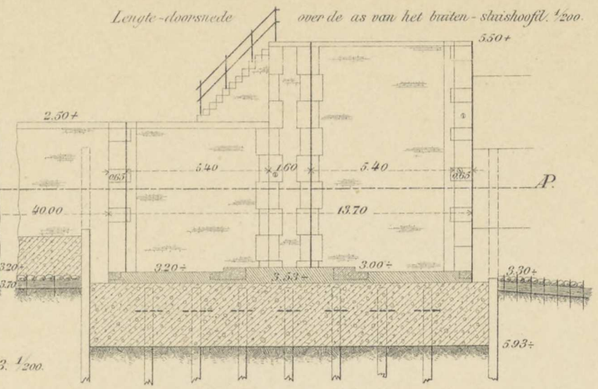


Fig. 4 Buiten-aanzicht der vloeddeur. 1/100.

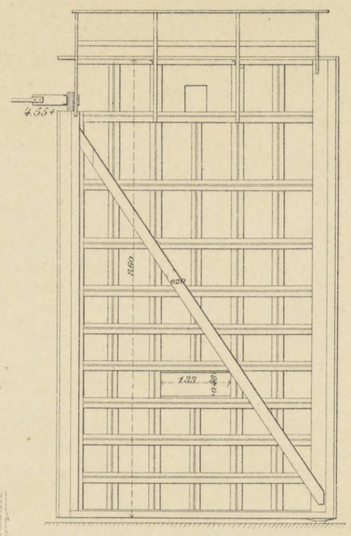


Fig. 5 Binnen-aanzicht der vloeddeur. 1/100.

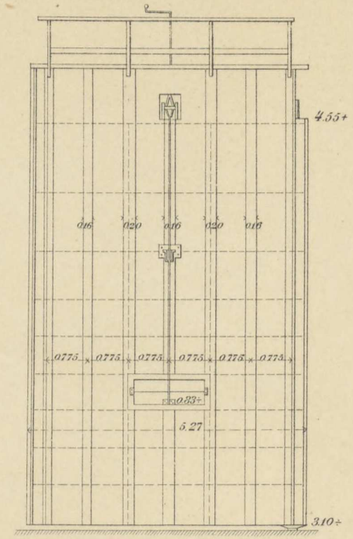


Fig. 6. Verticale doorsnede der vloeddeur. 1/100.

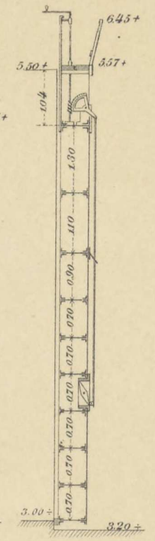


Fig. 9 Doorsnede v. AB. fig. 3. 1/200. (volgens ontwerp.)

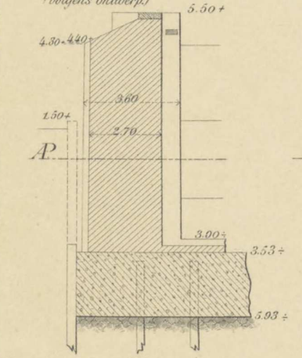


Fig. 10 Doorsnede v. CD. fig. 3. 1/200.

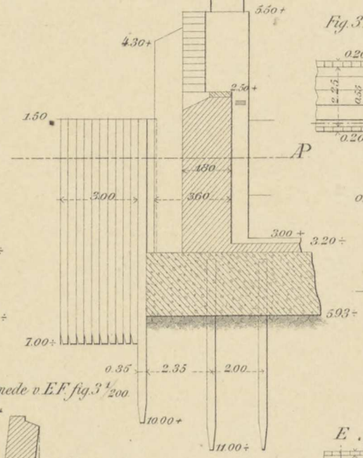


Fig. 3 Platte grond van het buiten sluishoofd. 1/200

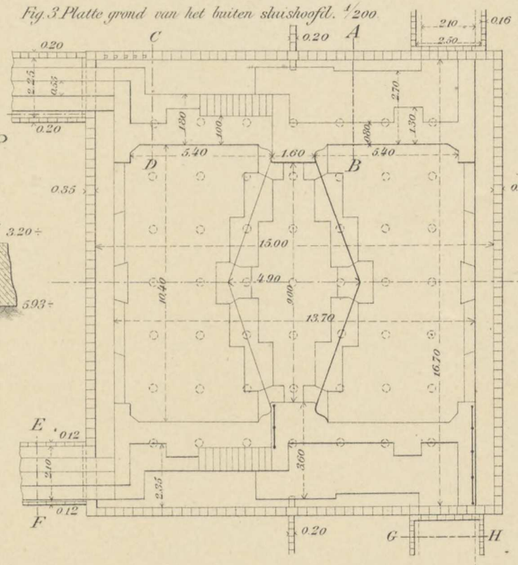


Fig. 7 Horizontale doorsnede der vloeddeur. 1/50.

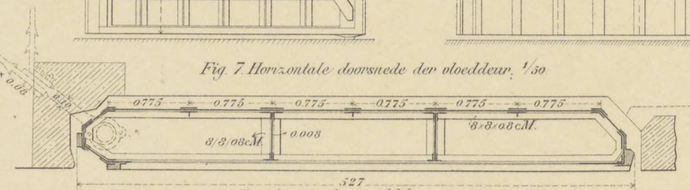


Fig. 8 Voorhar. 1/20.

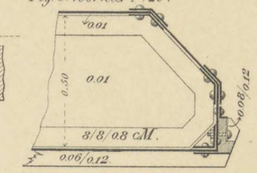


Fig. 12 Doorsnede v. GH. fig. 3. 1/200.

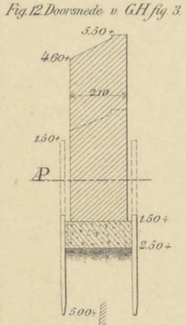


Fig. 11 Doorsnede v. EF. fig. 3. 1/200

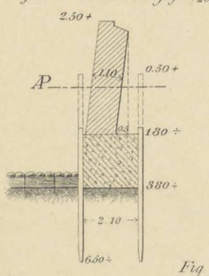


Fig. 13 Situatie. 1/2000.

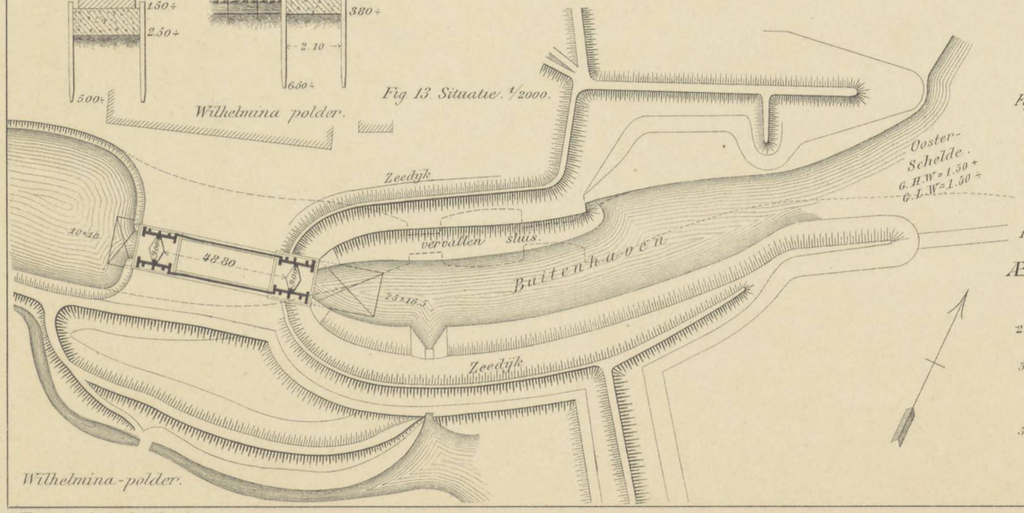


Fig. 14. Ontwerp tot droogligging door middel van tachtdruk (niet uitgevoerd.)

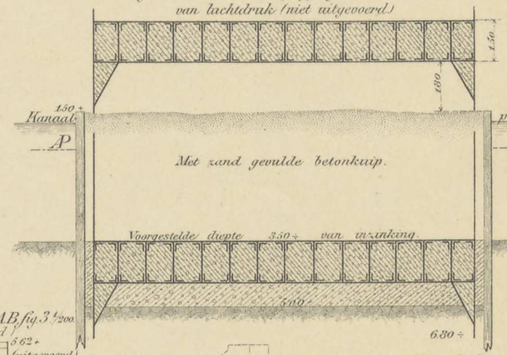


Fig. 15 Ged. doorsnede van de droggelegde betonkuip.

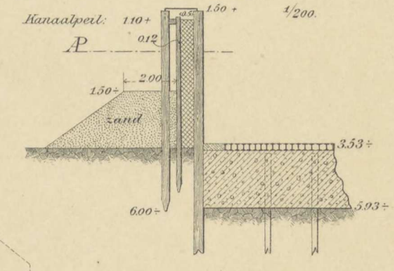


Fig. 16 Doorsnede v. AB. fig. 3. 1/200 (alzoo uitgevoerd) 5.62 + (uitgevoerd).

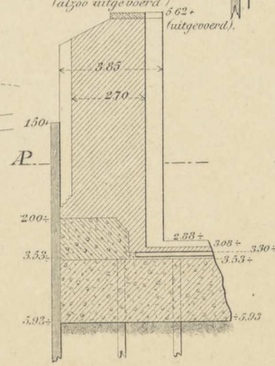


Fig. 17 Betonkuip met betonkaden.

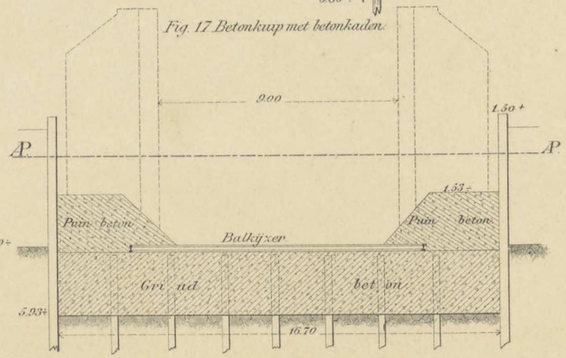
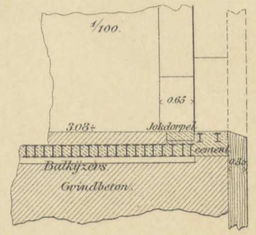


Fig. 18 Versterking van den vloer.



SLUIS IN HET ODER-SPREE KANAAL TE WERNSDORF. SLUIS TE DELFZIJL, SITUATIËN VAN SLUIZEN TE APREMONT, AIGUES MORTES, BÉZIERS, BROMBERG, DUINKERKEN, VERSCHILLENDE DETAILS.

Fig 1a-f. Sluis te Wernsdorf in het Oder-Spree kanaal.

Fig. 1a. Lengte doorsnede volgens AB, fig. 1b 1/400.

Fig 1b Platte grond en horizontale doorsnede volgens C.D. fig 1a 1/400.

Fig 1c Doorsnede volgens CD fig 1b 1/100. Fig 1d Doorsnede volgens EF fig 1b 1/100. Fig 1e Doorsnede volgens GH fig 1b 1/100.

Fig 1m Voor-aanslagen 1/15

Fig 1n Aanzicht der benedendeur 1/100

Fig 1n-o Doorsnede volgens AB fig 19 1/100.

Fig 1f Doorsnede volgens IK fig 1b 1/400.

Fig 1g Aanzicht der klepdeur 1/200.

Fig 1h Doorsnede over de klepdeur 1/200.

Fig 1k Achter-aanslagen 1/40.

Fig 1l Prop voor den halsbeugel 1/30.

Fig 1p Doorsnede volgens C.D. fig 19. 1/100.

Fig 1r Traats en kom. 1/30.

Fig 2a-g Schut-en uitwateringssluis nabij Delfzijl.

Fig. 2a. Lengte-doorsnede. 1/400.

Fig 2b Halve Platte grond. 1/400.

Fig 2c Bovensluisfront 1/200.

Fig 2d Beneden-sluisfront 1/200.

Fig 2e Doorsn. v CD fig 2b 1/200

Fig 2f Doorsn. v AB fig 2b 1/400.

Fig 2g Doorsn. v EF fig 2b 1/400.

Fig. 3 Ged. lengte doorsnede eener sluis, behoorende tot de Moezel kanalisering. 1/200.

Fig. 4 Apremont

Fig. 5. Duinkerken

Fig. 6 Agde.

Fig. 7. Aigues-Mortes.

Fig. 8 Bromberg.

Fig. 9

Fig 10. Schaine regelstijlen.

Fig 11. Ged. hor doorsnede van de sluis der Victoria docks te Londen. 1/666

Schaal 1a 666

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's-Hage.

GEKOPPELDE SLUIS IN HET MERWEDE-KANAAL TE VIANEN. Eerste Blad.

Fig: 1. Situatie. 1/2000.

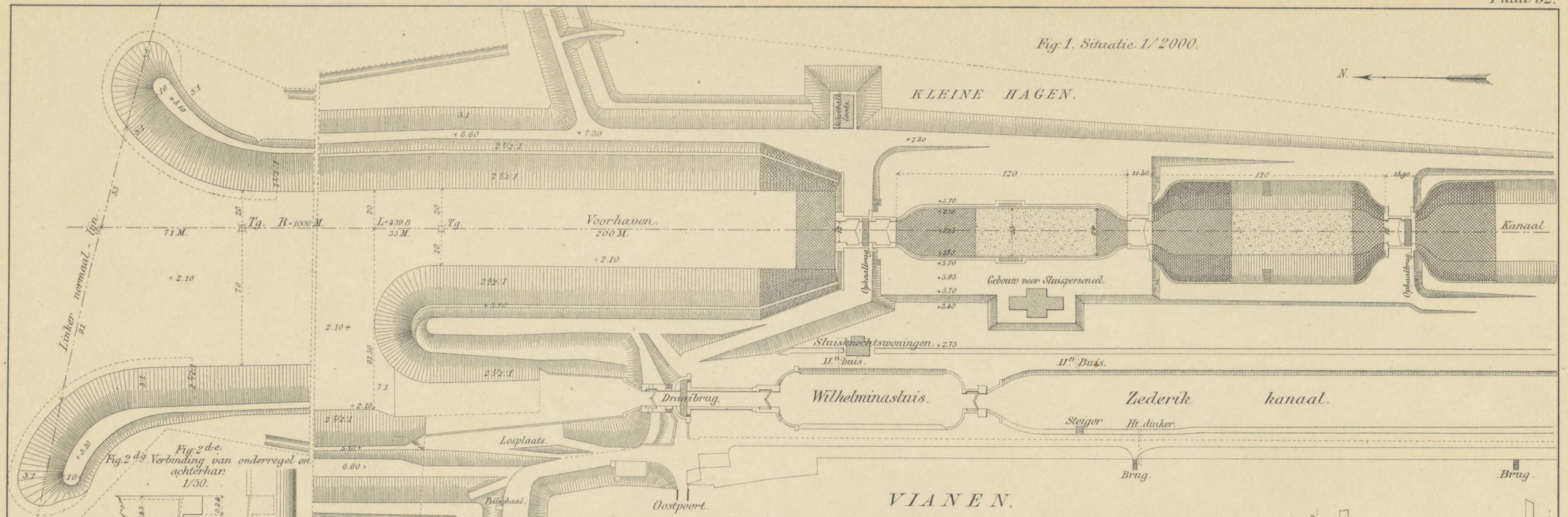


Fig: 2 d-e. Verbinding van onderregel en achterhar. 1/50.

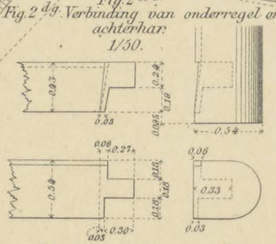


Fig: 2 f-g.

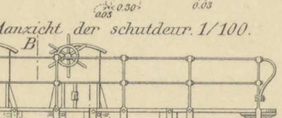


Fig: 2 a. Aanzicht der schutdeur. 1/100.

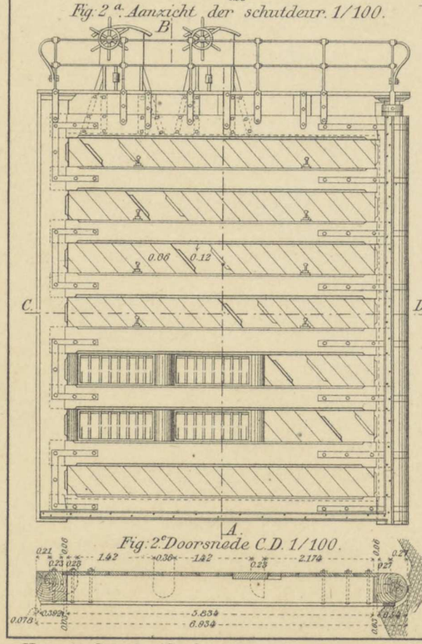


Fig: 2 c. Doorsnede C.D. 1/100.

Fig: 2 b. Dwarsdoorsnede. 1/100. volgens AB, Fig: 2 a.

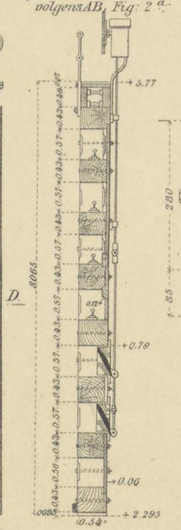


Fig: 3 a-b. Tolklep. 1/10.

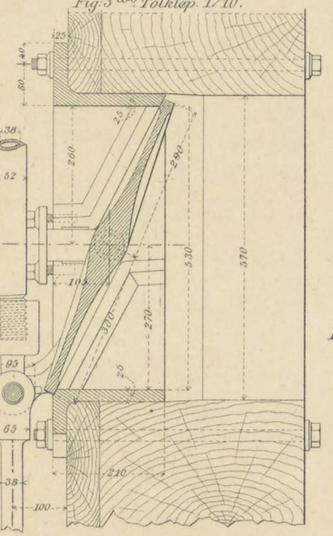


Fig: 2 h-k. Verbinding van bovenregel en achterhar. 1/50.

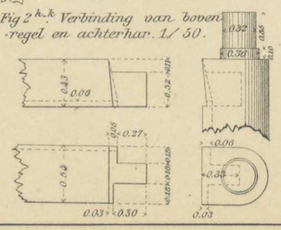


Fig: 3 b. Aanzicht der tolklep. 1/10.

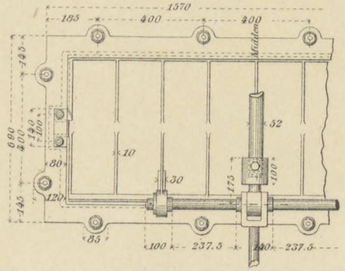


Fig: 4 b. Bovenaanzicht der kom. 1/10.

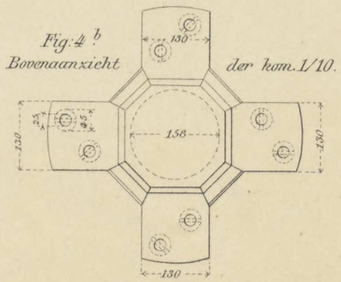


Fig: 4 a. Kom. 1/10.

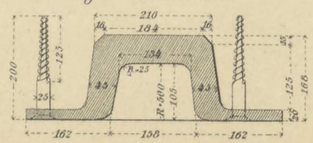


Fig: 6 c. Schieter a. Fig: 6 a. 1/25.

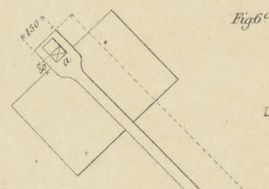


Fig: 5 a. Bovenaanzicht der taats. 1/10.

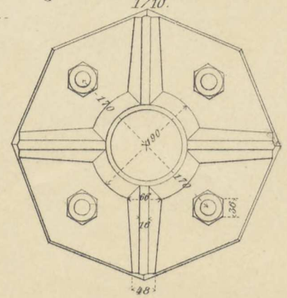


Fig: 5 b. Aanzicht der taats. 1/10.

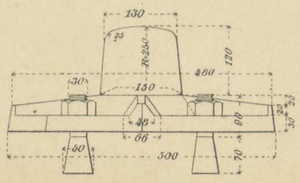
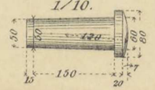


Fig: 6 d. Sluitbout. 1/10.



Halsbeugel. Fig: 6 a. Bovenaanzicht. 1/25.

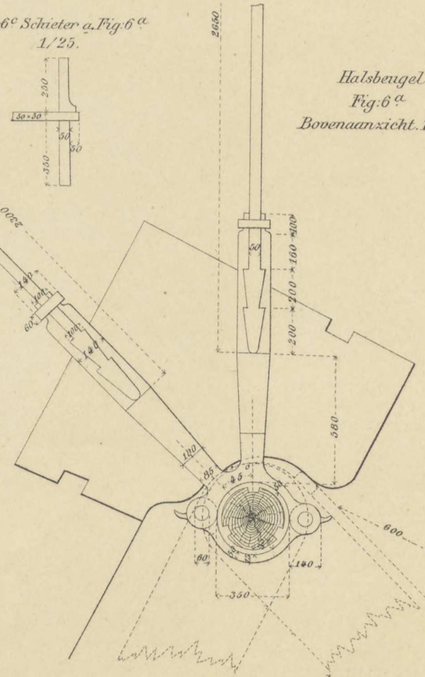


Fig: 6 b. Zijaanzicht. 1/25.

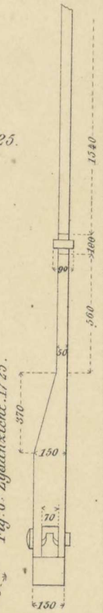
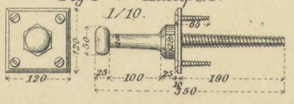


Fig: 2 l-m. Haalpen. 1/10.



Uitg. de Gebr^s v Cleef.

Steendr. Gebr. v Langenhuysen 's Hage.

GEKOPPELDE SLUIS IN HET MERWEDE-KANAAL TE VIANEN. Tweede blad.

Fig. 1a Buitensluishoofd., Doorsnede van AB, fig. 1b 1/200.

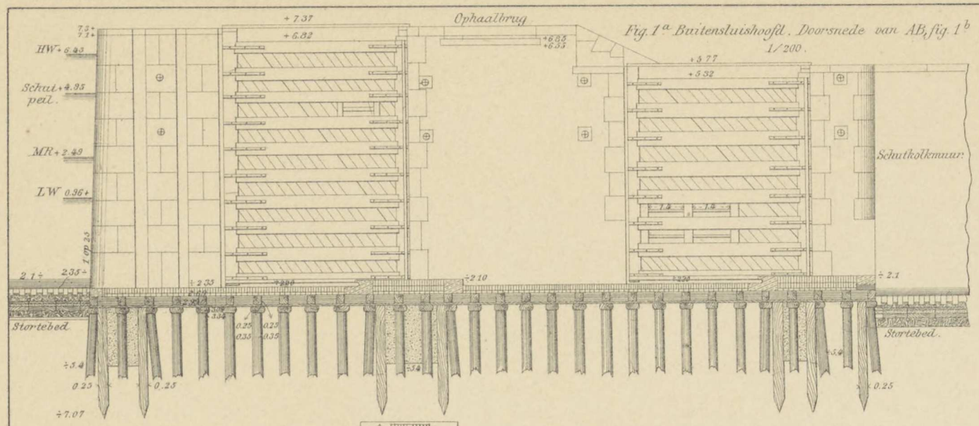


Fig. 6 Dwarsdoorsnede der schothalkenloods 1/200.

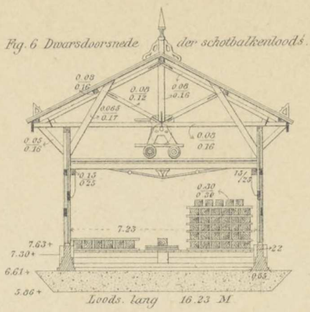


Fig. 1c Half buiten- en binnen-sluisfront. 1/200.

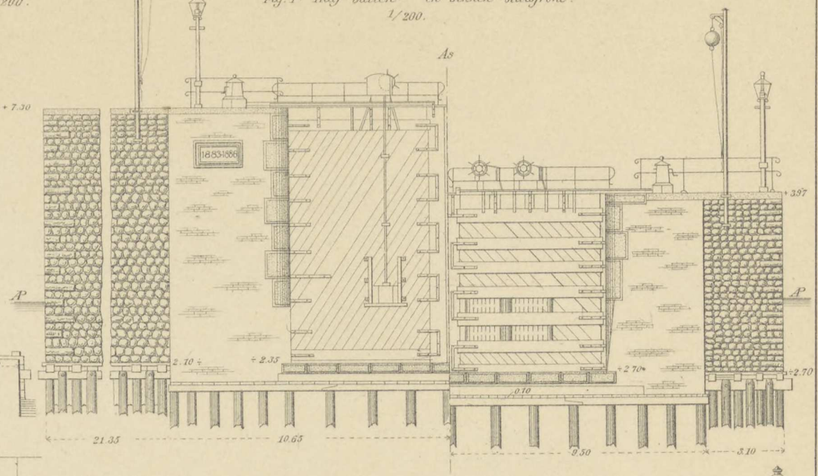


Fig. 1b Bovenaanzicht en Platte Grond. 1/200.

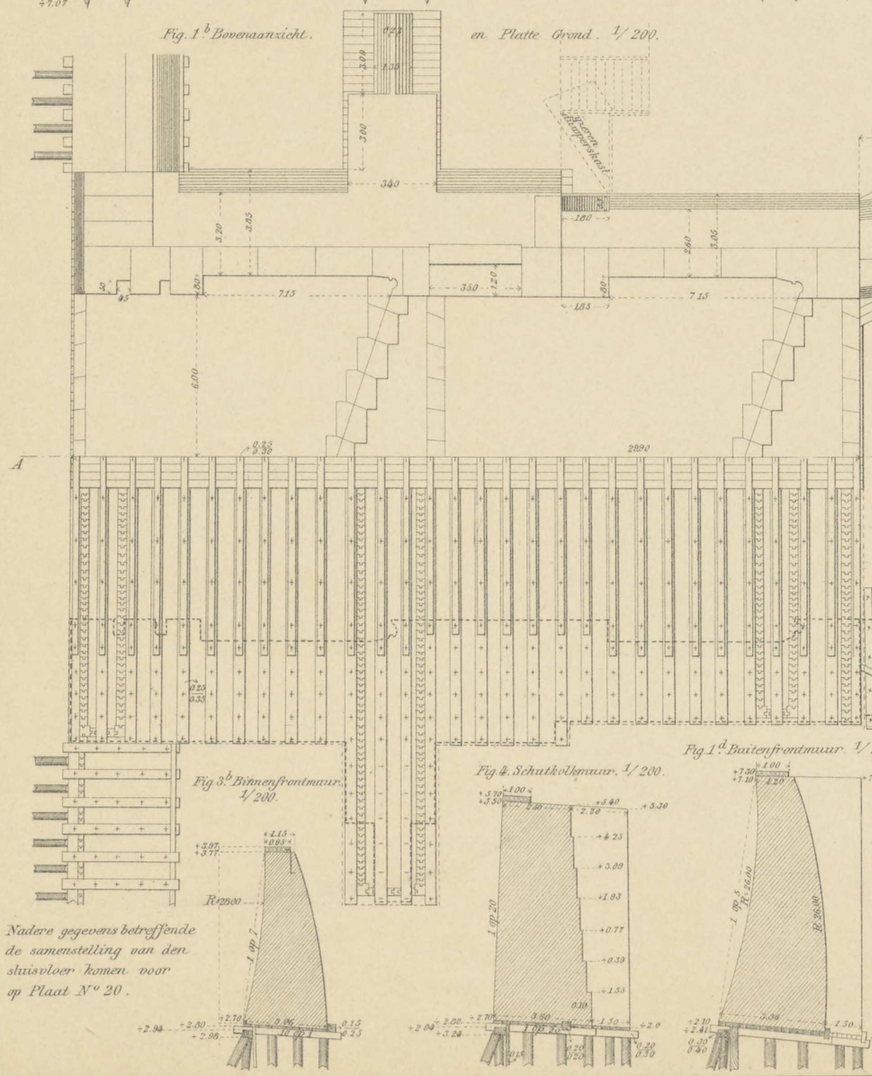


Fig. 3a Lengtedoorsnede over het Binnensluishoofd. 1/200.

Fig. 2 Half aanzicht en halve doorsnede van het Midden-sluishoofd. 1/200.

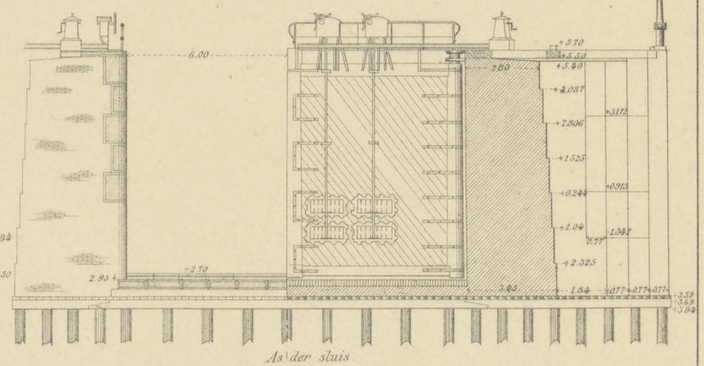


Fig. 1d Buitenfrontmuur 1/200.

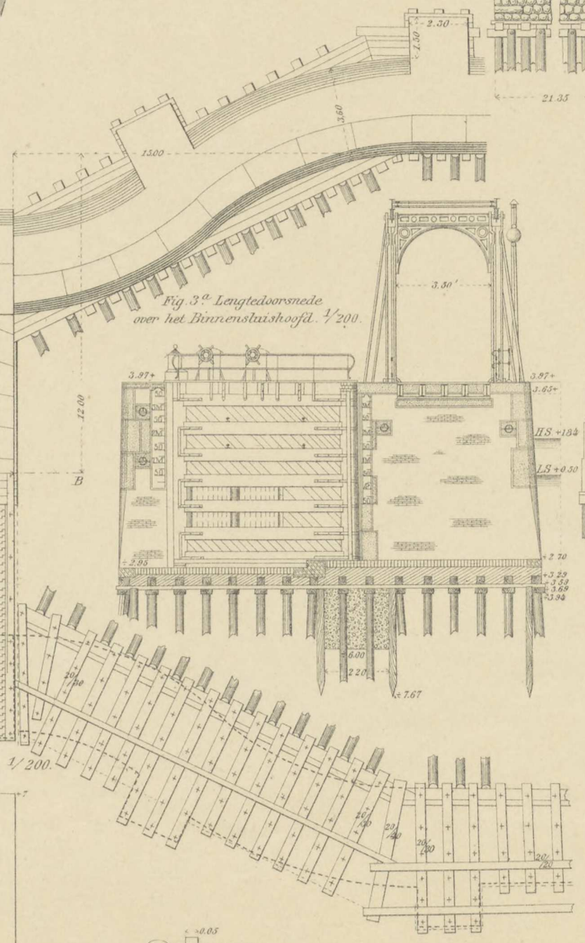


Fig. 3b Binnenfrontmuur. 1/200.

Nadere gegevens betreffende de samenstelling van den sluisvloer komen voor op Plaat N° 20.

Fig. 4 Schutkolkmuur. 1/200.

Fig. 9 a-c Gesmeed ijzeren uithouder. 1/20.

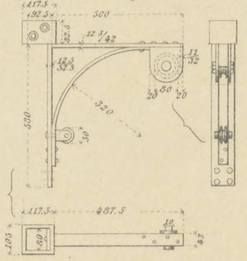


Fig. 7a

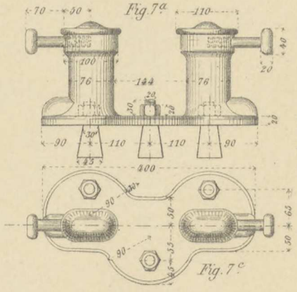


Fig. 7b

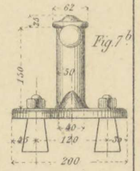


Fig. 7a-c 1/10. Dubbele bolder.

Fig. 5a 1/20.

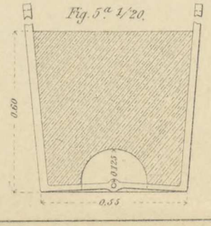


Fig. 5a-c Haalsteen. 1/20.

Fig. 5b 1/20.

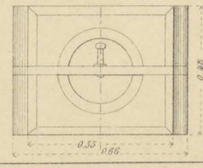


Fig. 5c 1/20

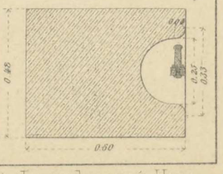
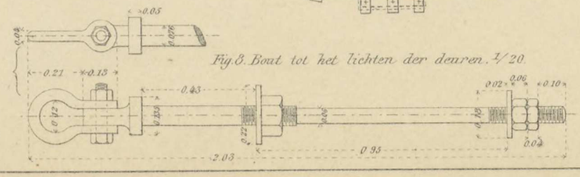


Fig. 8 Boat tot het lichten der deuren. 1/20



Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen s. Hage

Fig. 1.a-i Nieuwe schutsluis te Sas van Gent.

Fig. 1.a Lengte doorsnede volgens AB. Fig. 1.b 1/400.

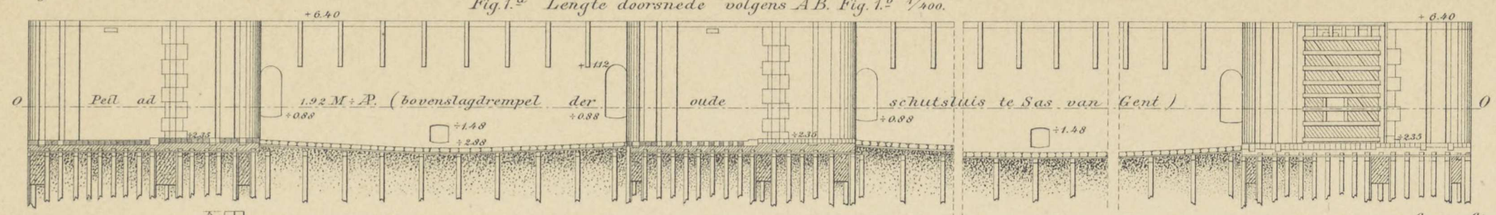


Fig. 1.b Halve Platte grond. 1/400.

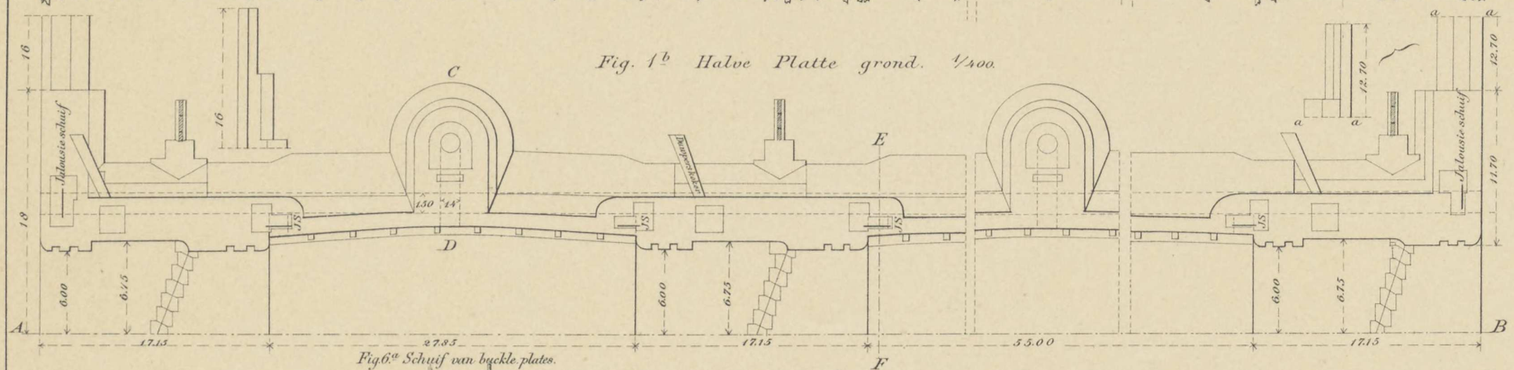


Fig. 1.c Doorsnede volgens C.D. 1/100.

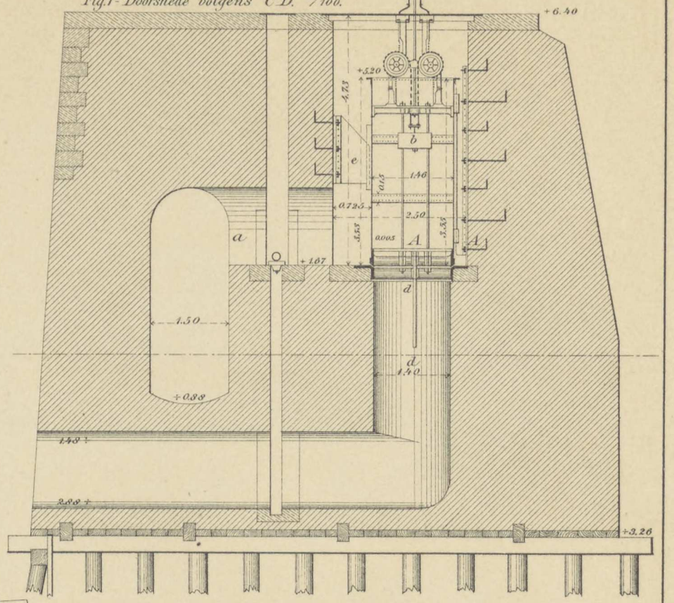


Fig. 1.d-f Jalousie schuif. 1/100.

Fig. 1.g Schuif. 1/50.

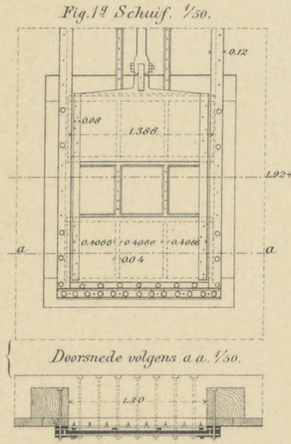


Fig. 6.a Schuif van buckle plates. 1/100.

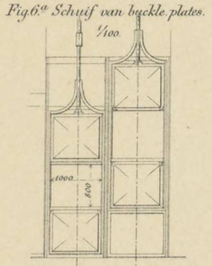


Fig. 6.b Horizontale doorsnede. 1/40.

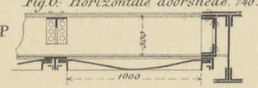


Fig. 5. Jalousieschuif in de deuren der sluizen op het kanaal van Lens naar de Deule.

Fig. 5.a 1/40. Fig. 5.b

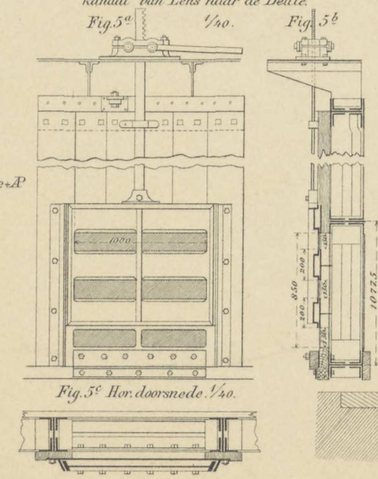


Fig. 5.c Hor. doorsnede 1/40.

Fig. 1.b Doorsnede volgens EF. Fig. 1.b 1/200.

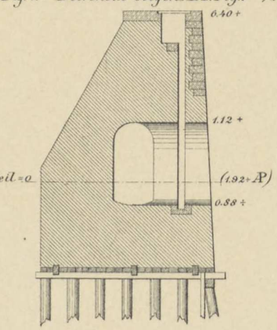


Fig. 1.c Half bovenaanzicht der schuif en halve horizontale doorsnede volgens AA Fig. 1.c 1/20.

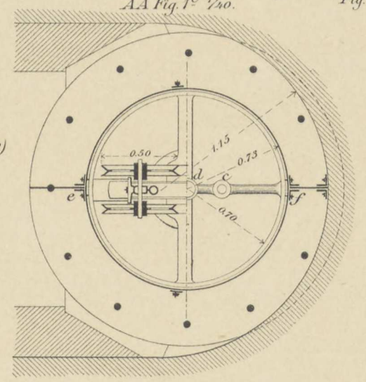


Fig. 3. Schuif met dubbele sluiting van Renaud. 1/10.

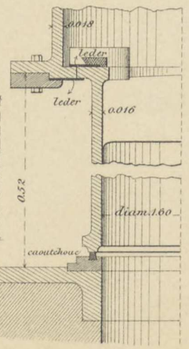


Fig. 4. Verticale doorsnede der cylindrische schuif van Clavenad. 1/20.

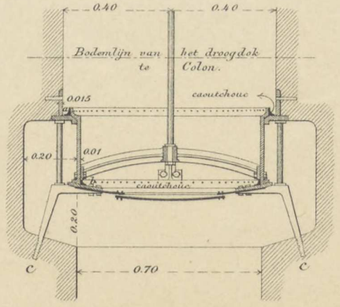


Fig. 7. Schuif der Nieuwe sluis te Wilhelmshaven. 1/40.

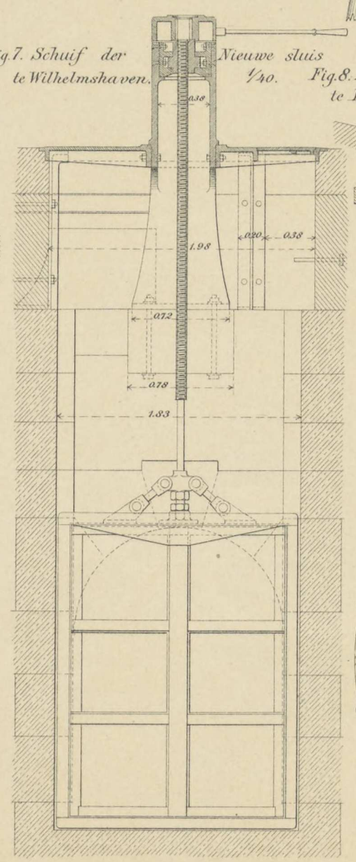


Fig. 8. Dichte sluiting te Bromberg.

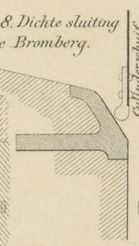


Fig. 2.a Verticale doorsnede van 0.01 der cylindrische schuif Moraillon. 1/20.

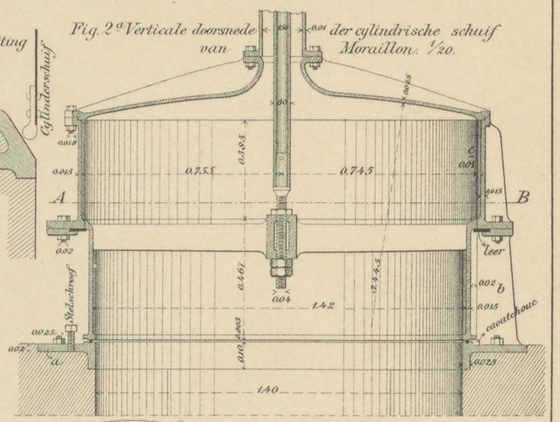


Fig. 2.b Bovenaanzicht 1/20.

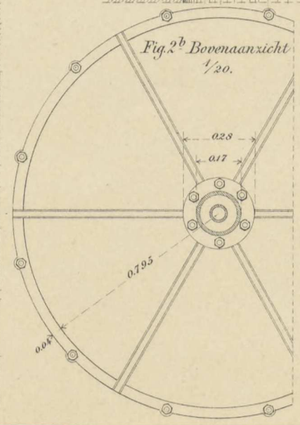
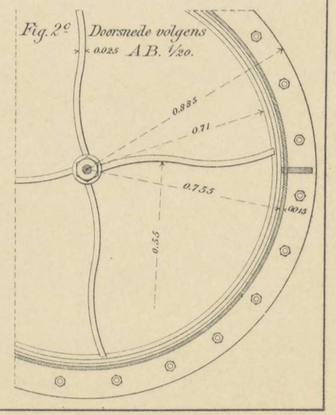


Fig. 2.c Doorsnede volgens AB. 1/20.



Uitg. de Gebr.s van Cleef, 's Hage.

LITH. D. OSSEMAN, AMST.

Fig. 1 a-e Waaiersluis.

Fig. 1 a Ged. lengte doorsnede 1/200.

Fig. 1 b Platte grond 1/200.

a. Puntdeur.
b. Waaier.
c. Koppelgording.
d. Schortstijl.
e. Steunregel.
f. Schuiven.

Fig. 1 c Aanzicht der waaierdeur. 1/100.

Fig. 1 d Boven-aanzicht der waaierdeur. 1/100.

Fig. 1 e Bevestiging der planken. 1/100.

Fig. 2 a-c Steeksluisje.

Fig. 2 a Dwarsdoorsnede. 1/100.

Fig. 2 c Lengte doorsnede. 1/100.

Fig. 2 b Hor: doorsnede. 1/100.

Fig. 3 a-e Toldeur. 1/150.

Fig. 3 a Vooraanzicht. 1/150.

Fig. 3 b Dwarsdoorsnede. 1/150.

Fig. 3 c Horizontale doorsnede. 1/150.

Fig. 3 d Kom der aanslagstijlen. 1/20.

Fig. 4 a Ged. lengtedoorsn: 1/150.

Fig. 4 en 5. Houten sluizen.

Fig. 4 b Ged. dwarsdoorsn: 1/150.

Fig. 3 Ged. dwarsdoorsn: 1/150.

Fig. 3 b Details der kom. 1/20.

Fig. 3 e Taats der toldeur 1/20.

Fig. 7 b Hor: doorsnede in het bovendeel der deur. 1/100.

Fig. 7 d Achterhar: 1/50.

Fig. 7 a-d Sluis te Rendsburg.

Fig. 7 a Hor: doorsnede 1/100.

Fig. 7 c Kom en taats. 1/50.

Fig. 6 i Situatie 1/10.000.

RIVIER DE MAAS

Fig. 6 a-i Sluis te Andel.

Fig. 6 a Hor: doorsnede over de waaierdeur. 1/80.

Fig. 6 b Doorsnede volgens H G fig. 6 a 1/80.

Fig. 6 c Schets der waaierdeur.

Luchtkoker met ladder.

Luchtkoker.

LUCHTKIST.

Fig. 6 f Rolschuif C, zie fig. 6 d 1/40.

Fig. 6 g Roerklep. 1/40.

Fig. 6 e Verticale doorsnede volgens IK fig. 6 d 1/300.

Fig. 6 d Horizontale doorsnede der platte grond. 1/300.

Fig. 6 h Doorsnede volgens E F. fig. 6 d 1/300.

Fig. 9 a Houten praamhar. 1/100.

Fig. 9 b Hor: doorsnede 1/100.

Fig. 8 a Toldeur in puntdeur 1/100.

Fig. 10. Sluis van Alewijn. 1/400.

Fig. 11. Donkersluis te Gouda. 1/400.

Fig. 12.
Toestel tot gelijktijdige opening der twee puntdeuren. 1/200.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen's Hage.

SLUIS te TANCARVILLE in het kanaal van HAVRE naar TANCARVILLE.

Fig. 1a. Sluis te Tancarville.
Fig. 1a. Bovenaanzicht 1/500.

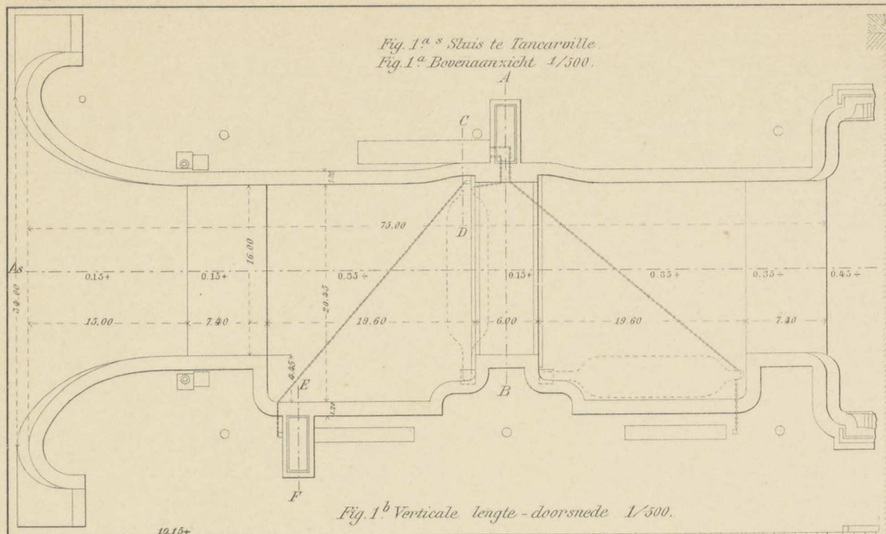


Fig. 1b Verticale lengte-doorsnede 1/500.

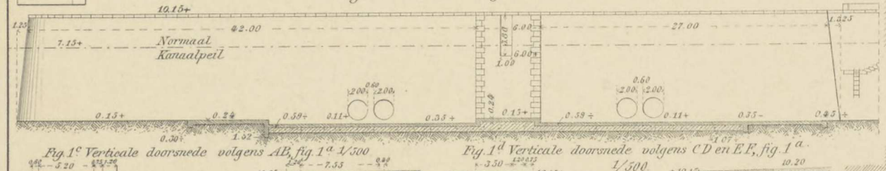


Fig. 1c Verticale doorsnede volgens AB, fig. 1a 1/500

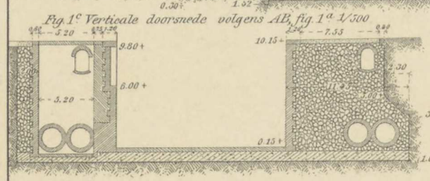


Fig. 1d Verticale doorsnede volgens CD en EF, fig. 1a 1/500.

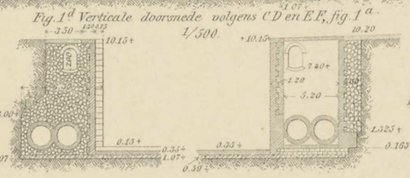


Fig. 1e Aanzicht der ebdeur 1/100.

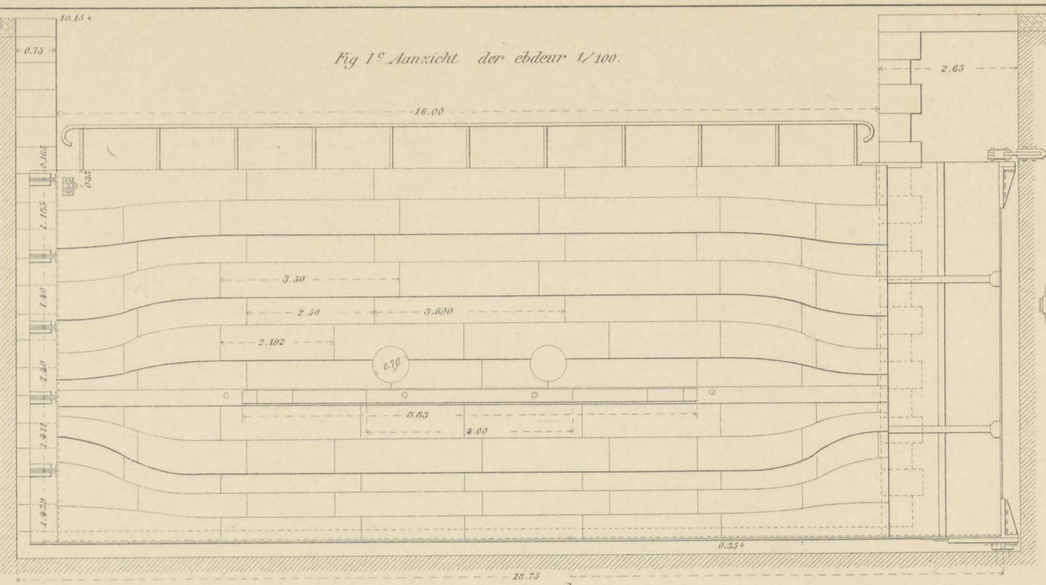


Fig. 1f Horizontale doorsnede volgens BB, fig. 1h 1/100.

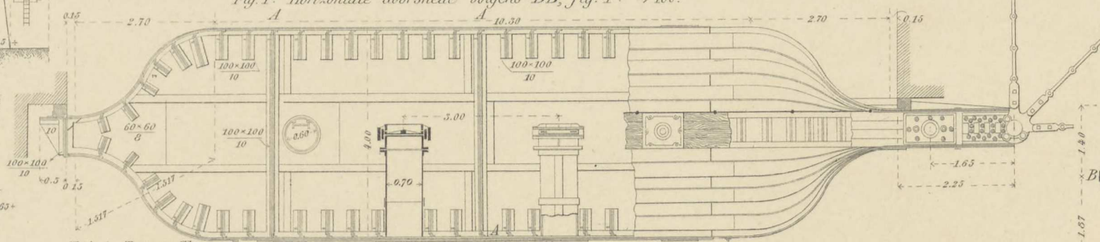


Fig. 1g Achter aanzicht. 1/100.

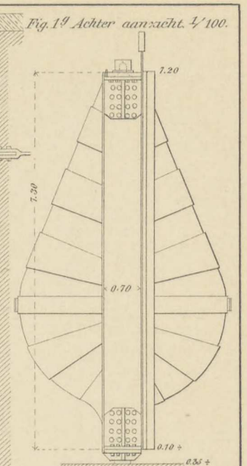


Fig. 1h Doorsnede volgens AA fig. 1f 1/100.

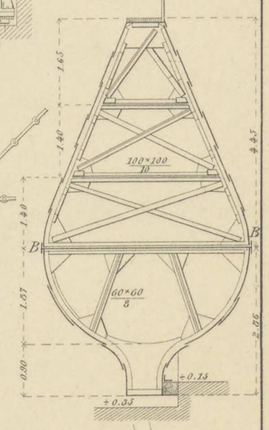
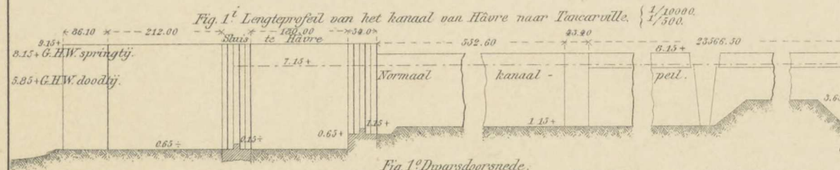


Fig. 1i Lengteprofiel van het kanaal van Havre naar Tancarville. 1/10000. 1/500.



Sluis te Tancarville.

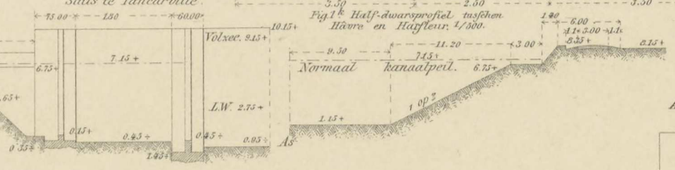


Fig. 1k Half-dwarsprofiel tusschen Havre en Harfleur. 1/500.

Fig. 1l Half-dwarsprofiel tusschen Harfleur en Tancarville. 1/500.

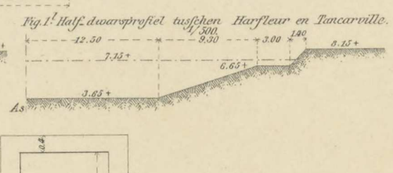


Fig. 1m IJzeren schuif-raam in aanzicht. 1/40.

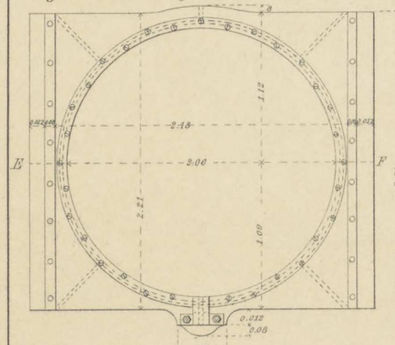


Fig. 1o Doorsnede volgens EF, fig. 1m 1/40.

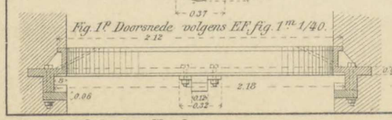


Fig. 1p Doorsdoorsnede over AB fig. 1n 1/40.

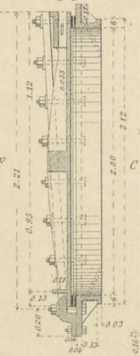


Fig. 1n IJzeren schuif 1/40.

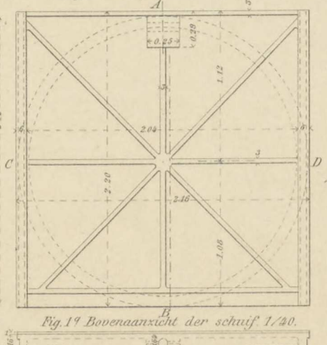


Fig. 1q Bovenaanzicht der schuif 1/40.

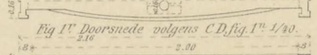


Fig. 1r Doorsnede volgens CD, fig. 1n 1/40.

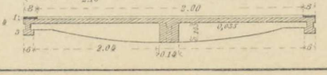
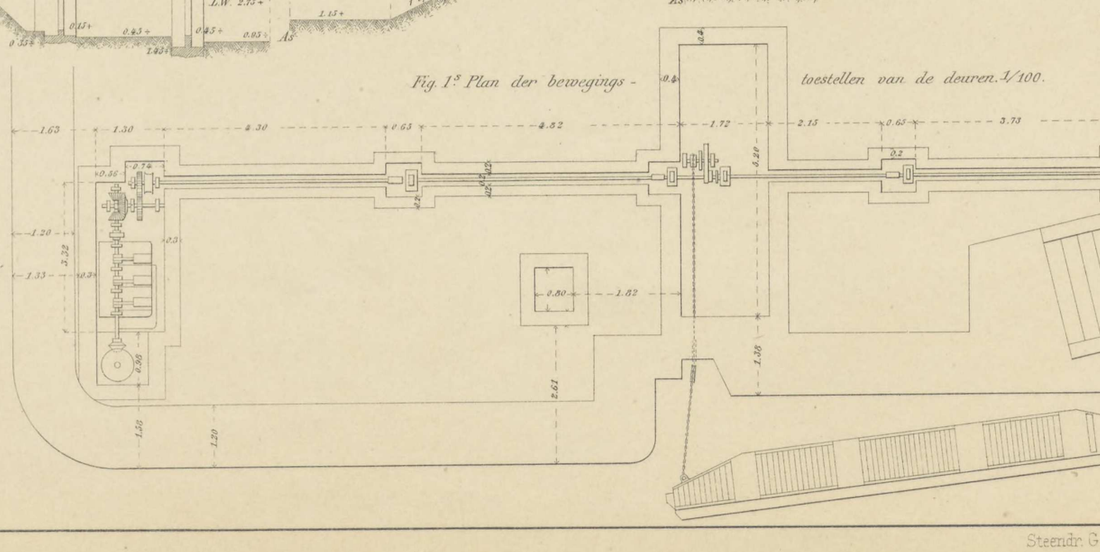


Fig. 1s Plan der bewegings - toestellen van de deuren. 1/100.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

SCHUTSLUIS WILLEM III AAN DEN INGANG VAN HET NOORD HOLLANDSCH KANAAL TEGENOVER AMSTERDAM.

Fig. 1. Gedeeltelijke doorsnede over de as der sluis.
1/200.

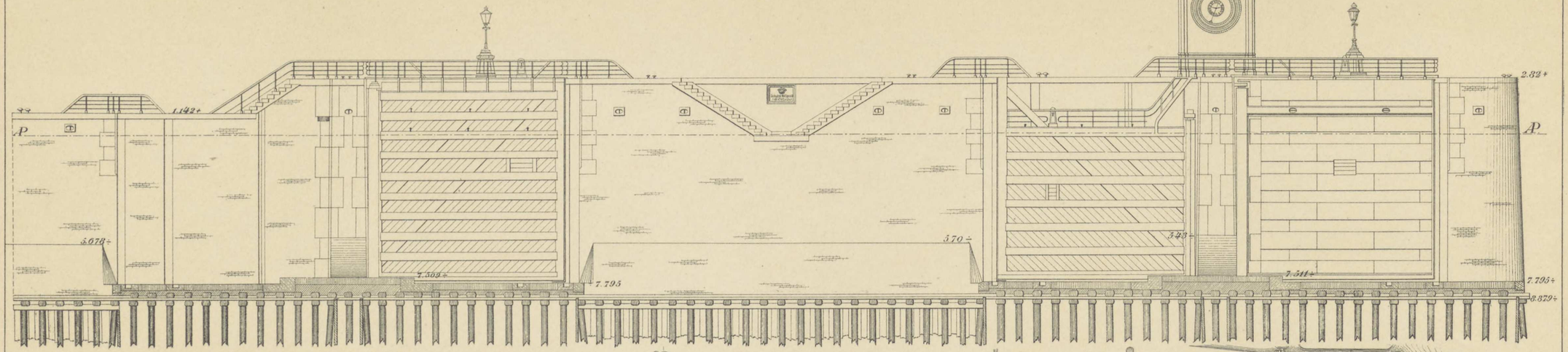


Fig. 5 Dwarsdoorsnede v.d. buiten frontmuren.
1/200.

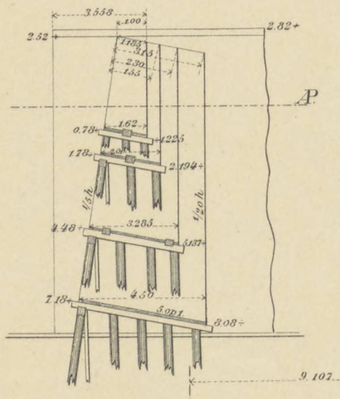


Fig. 4 Doorsnede volgens AB.
Fig. 3. 1/200.

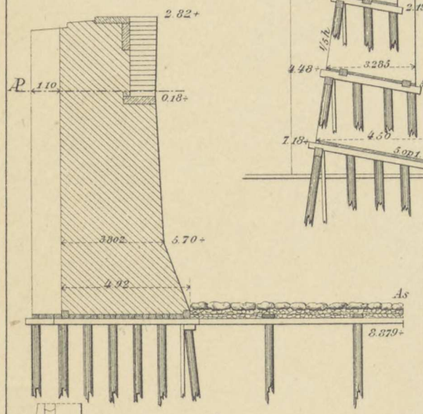


Fig. 2 Half buitenfront.
1/200.

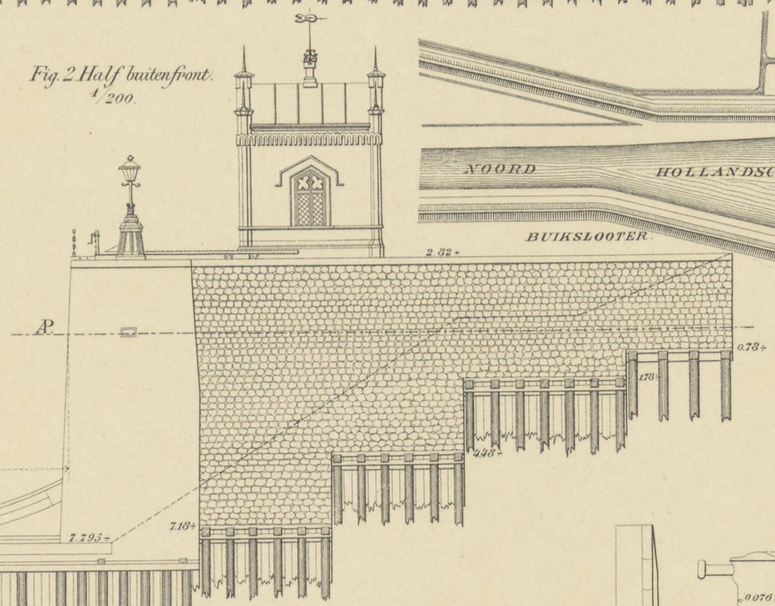
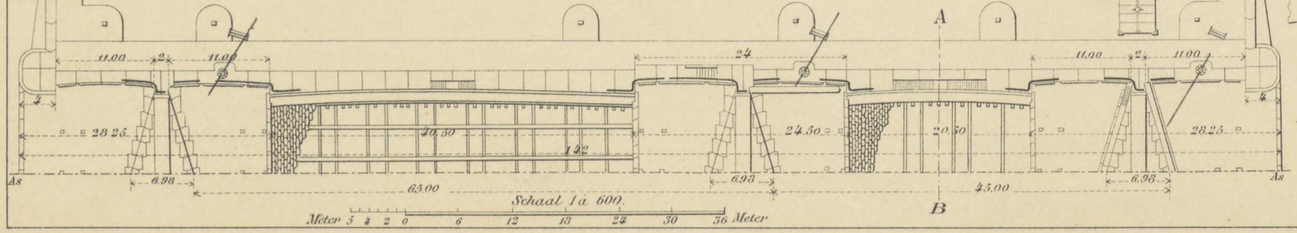


Fig. 3. Halve plattegrond.
1/600.



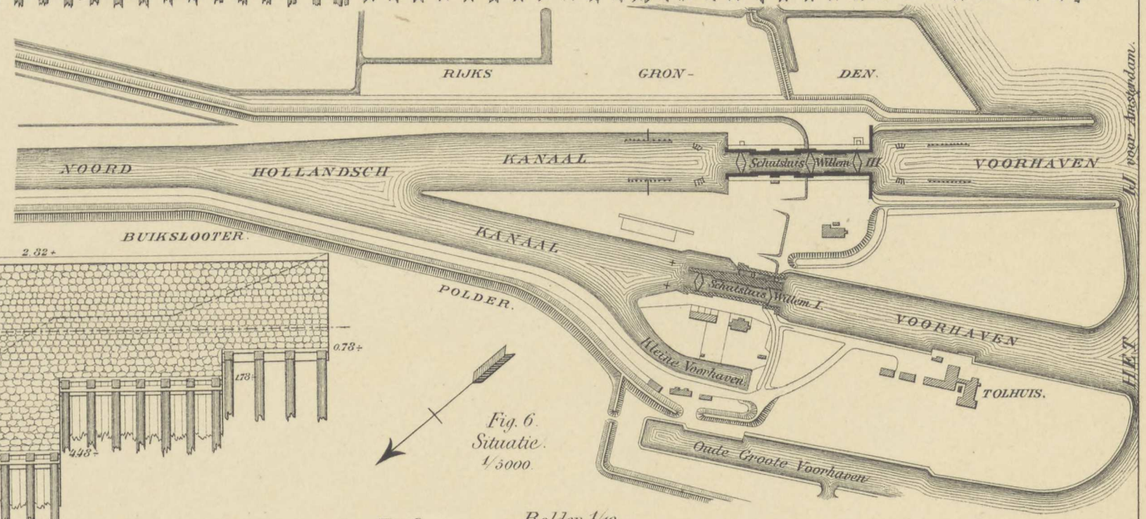


Fig. 6
Situatie.
1/5000.

Bolder. 1/10.

Fig. 9 a-c.

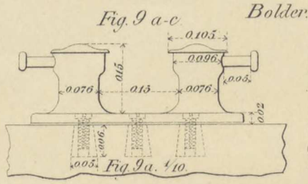


Fig. 9 b. 1/10.

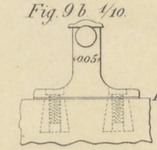


Fig. 7.
Details der fundeering.
1/40.

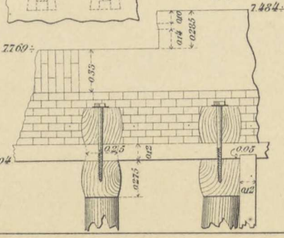
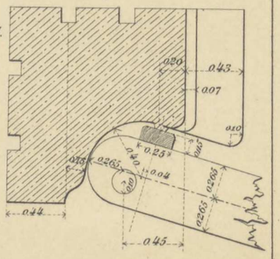


Fig. 8.
Aanslag der deuren tegen de slagstijlen. 1/40.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr.s v. Langenhuysen 's Hage.

SCHUTSLUIS WILLEM III (Tweede Blad) en NIEUWEDOKSLUIS TE DIEPPE.

Fig. 1 a-o Schutsluis Willem III te Buiksloot.

Fig 1a Aanzicht van den gebogen buitenwand. 1/100.

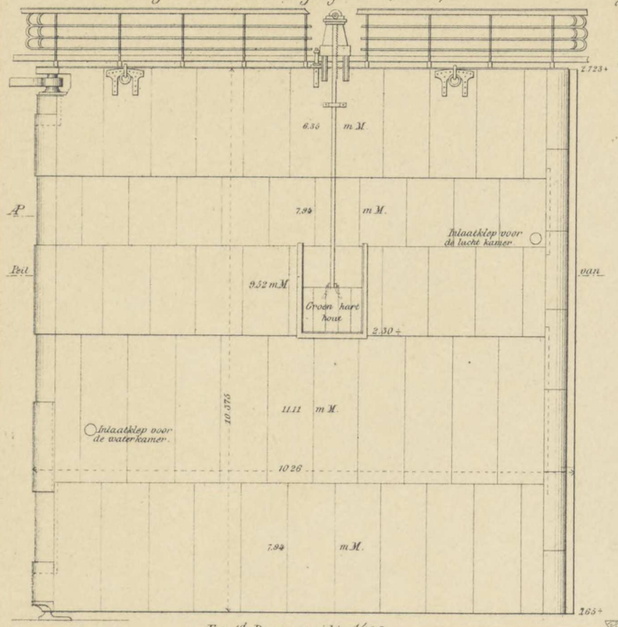


Fig. 1d Bovenaanzicht. 1/100.

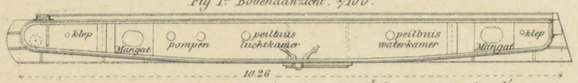


Fig. 1c Dwarsdoorsneden nabij de voorhar. en het midden. 1/100.

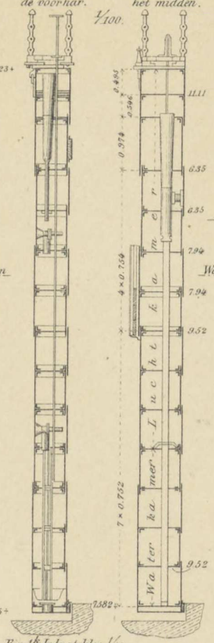


Fig. 1k Inlaat-klep. 1/10. Horizontale doorsnede.

Fig. 1b Aanzicht van den vlakken binnenwand. 1/100.

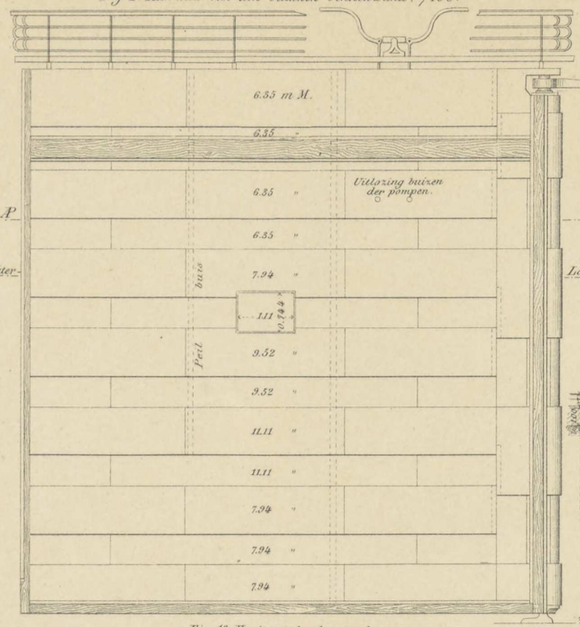


Fig. 1e Horizontale doorsnede.

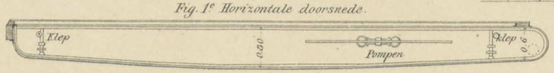


Fig. 2 a-e Nieuwe Dokssluis te Dieppe.

Fig. 2a Lengte-doorsnede volgens IK. 1/286.

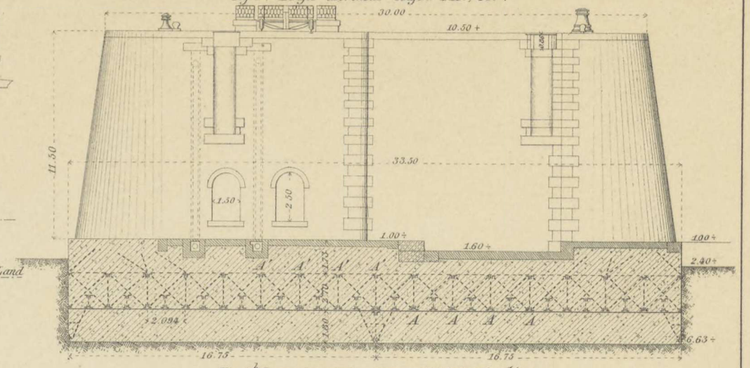


Fig. 2b Dwarsdoorsnede volgens ABCD. fig. 2c 1/286.

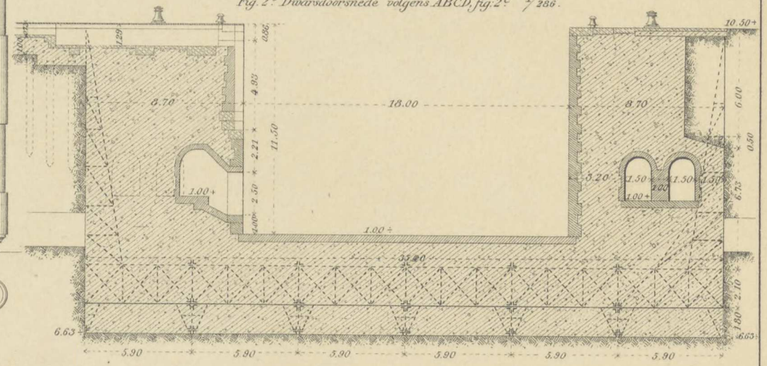


Fig. 1f Halsbeugel en hals. Boven-aanzicht. 1/20.

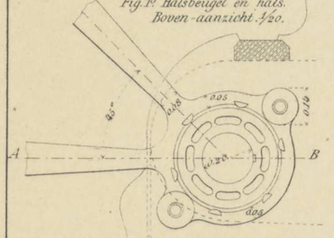


Fig. 1g Doorsnede volgens AB. van fig. 1f. 1/20.

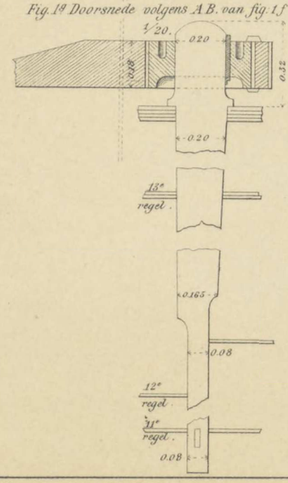


Fig. 1h Gegoten stalen kom 1/20.

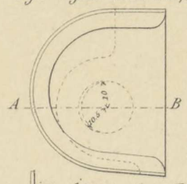


Fig. 1i Doorsn. volgens AB. 1/20.

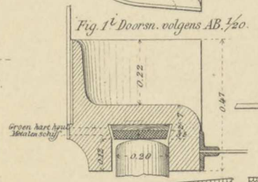


Fig. 1l. m. n. o. Wijze van bevestiging der eikenhouten aanslagstukken 1/20.

Fig. 1l

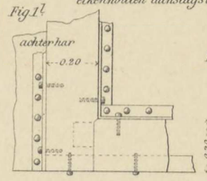


Fig. 1m 1/20.

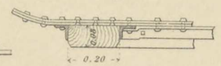


Fig. 1o 1/10.

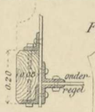
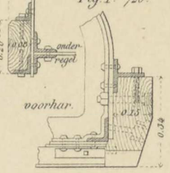


Fig. 1n 1/20.



Schaal 1:286.

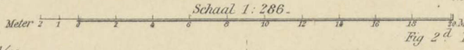


Fig 2d Boven-aanzicht 1/286 of 3,5 m M p M.

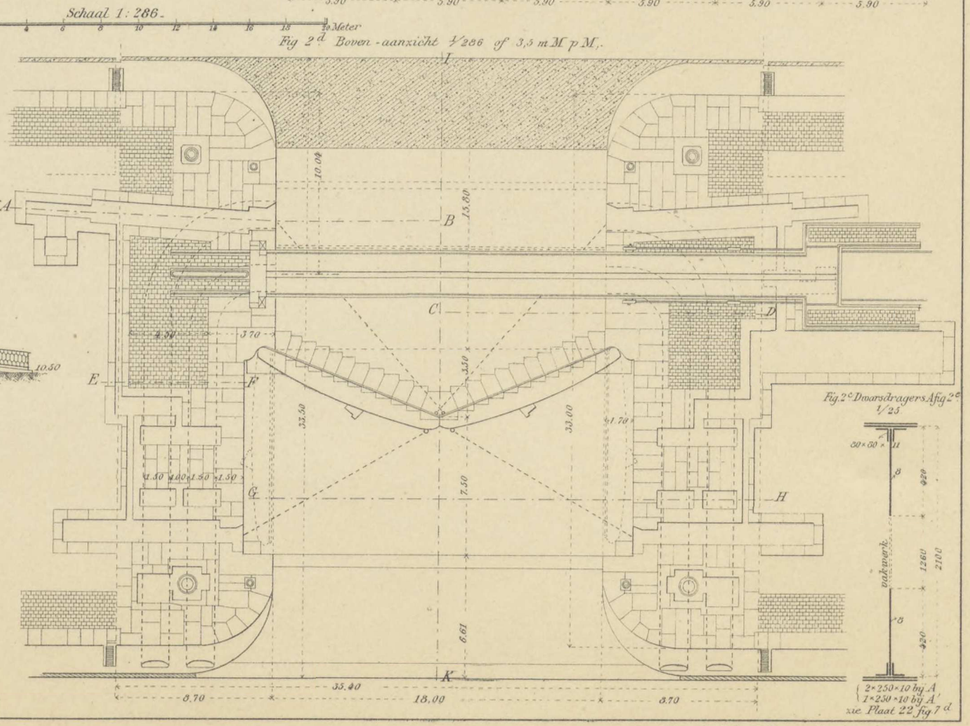


Fig. 2c Dwarsdoorsnede volgens EFGH. fig. 2d 1/286.

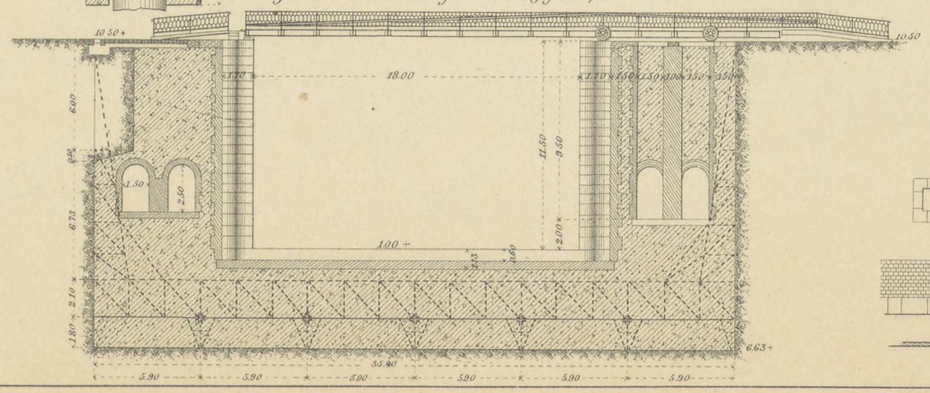


Fig. 2c Dwarsdragers. A fig. 2c 1/25.

Uitg. de Gebr.s v Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage

GROOTE SCHUTSLUIS TE VLISSINGEN en detail der sluizen in het kanaal van ZUID BEVELAND.

Groote schutsluis te Vlissingen.

Fig. 1a Verticale doorsnede over de as AA der sluis van 20 M. fig. 1b 1/500.

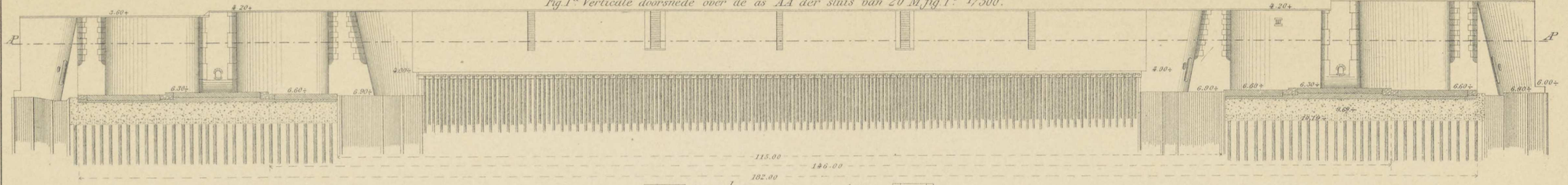


Fig. 1b Platte grond. 1/500.

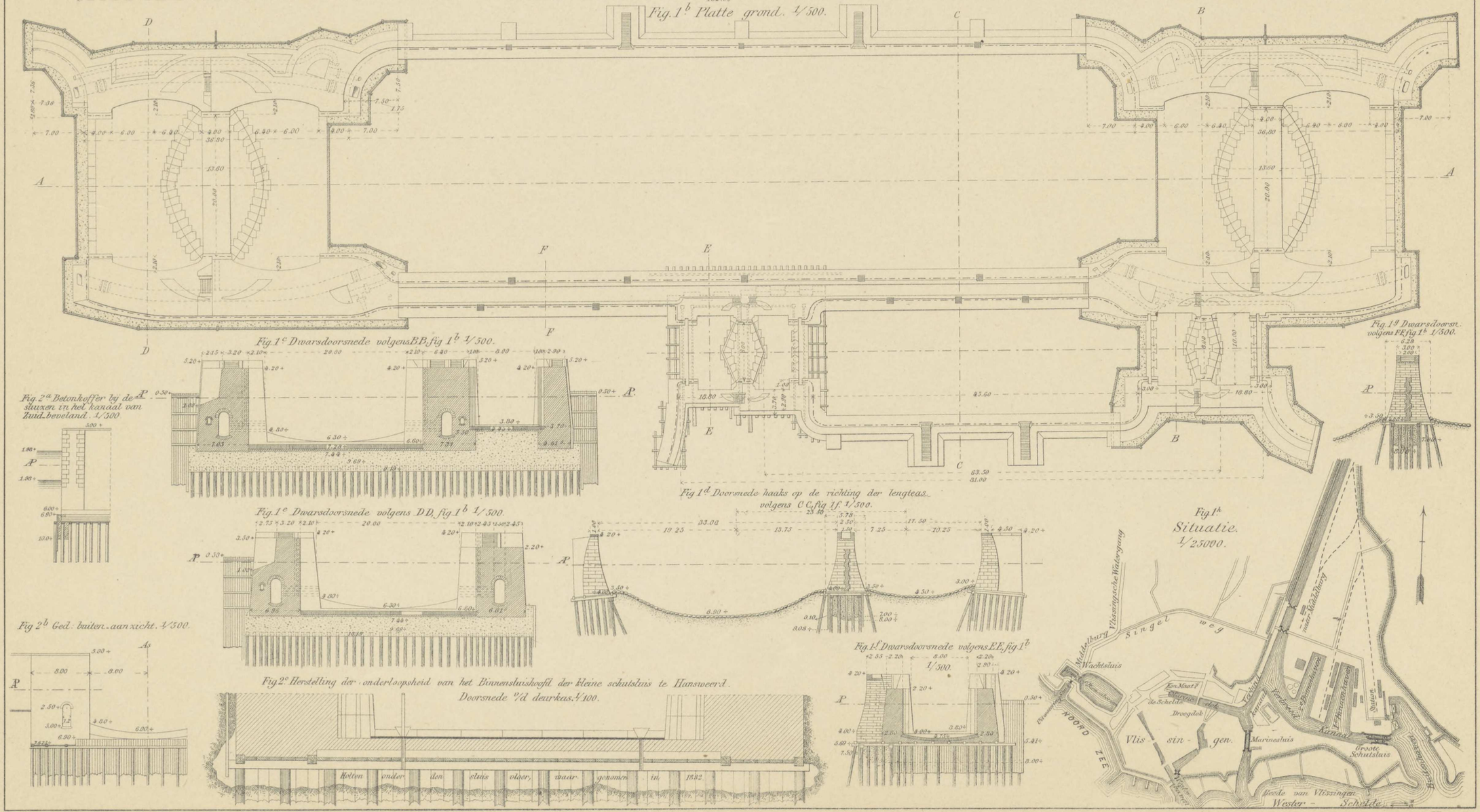


Fig. 1c Dwarsdoorsnede volgens BB fig 1b 1/500.

Fig. 1d Doorsnede haaks op de richting der lengteas volgens CC fig 1f. 1/500.

Fig. 1e Dwarsdoorsnede volgens DD fig 1b 1/500.

Fig. 1f Dwarsdoorsnede volgens EE fig 1b 1/500.

Fig. 1g Dwarsdoorsn. volgens FF fig 1b 1/500.

Fig. 1h Situatie. 1/25000.

Fig. 2a Betonkoffer bij de sluizen in het kanaal van Zuid-beveland. 1/500

Fig. 2b Ged: buiten-aanzicht. 1/500.

Fig. 2c Herstelling der onderloopsheid van het Binnenshuishoofd der kleine schutsluis te Hansweerd. Doorsnede v/d deurkas. 1/100.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhysen's Hage.

SLUIS TE KAMPSVILLE. (ILLINOIS RIVER IMPROVEMENT). Eerste blad.

Fig 1[a] Lengtedoorsnede volgens AB, fig 1[b] 1/300.

Fig 1[b] Platte grond. 1/300.

Fig 1[c] Doorsnede volgens GH, Fig 1[b] 1/300.

Fig 1[d] Doorsnede volgens IK, Fig 1[b] 1/300.

Fig 1[e] Doorsnede volgens PQ, Fig 1[f] 1/100.

Fig 1[f] Ged. Platte Grond 1/300.

Fig 1[g] 1/40.

Fig 1[h] 1/40.

Fig 1[i] Doors. o. EF 1/300.

Fig 1[k] Doors. o. CD, fig 1[b] 1/300.

Fig 1[l] Doors. v. LM, fig 1[b] 1/300.

Fig 1[m] Doorns. v. NO. 1/300.

Fig 2[a] Bovenaanzicht van den toestel tot beweging der deuren. 1/100.

Fig 2[b] Dwarsdoorsnede over den houten vloer achter den sluismuur 1/100.

Fig 2[c] Aanzicht der Schijf A fig 2[d] 1/25.

Fig 2[d] Schijf A 1/25.

Fig 2[e] Wagen B 1/25.

Fig 2[f] Wagen B 1/25.

Fig 2[g] Drawpers D 1/40.

Fig 2[h] Kettingblok C, fig 2[a] 1/20.

Sluismuur.

Uitg. de Gebr[s] v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

Fig:1[a] Deur van het beneden-sluishoofd. 1/60.

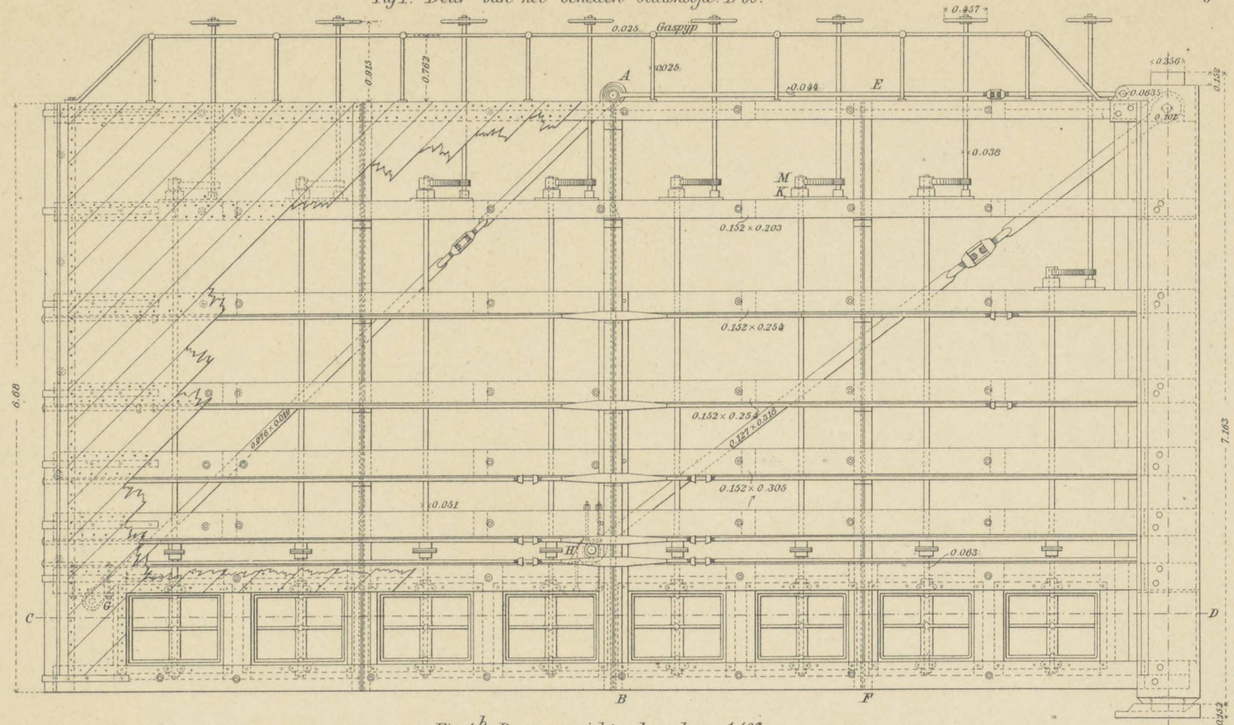


Fig:1[b] Bovenaanzicht der deur. 1/60.

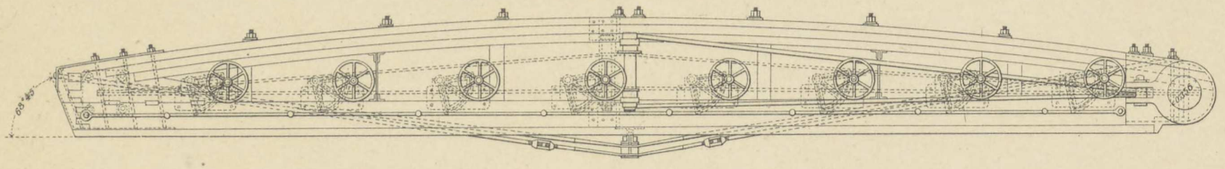


Fig:1[c] Horizontale doorsnede volgens C D, fig: 1[a] 1/60.

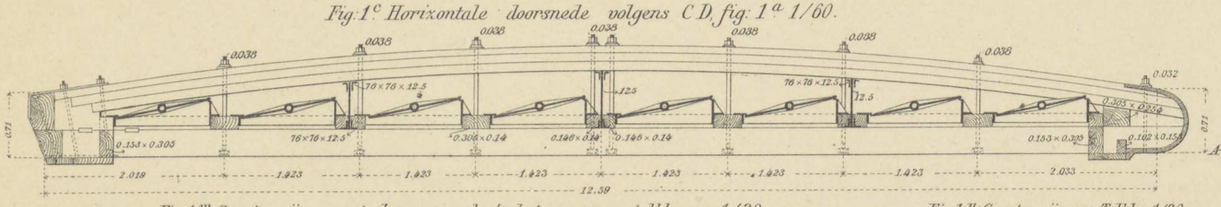


Fig:1[w] Gegoten ijzeren stoelen voor de trekstangen en tolkleppen. 1/20.

Fig:1[w-y] Stoel bij G, fig:1[a] 1/20.

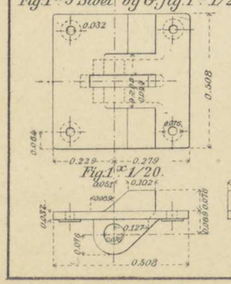


Fig:1[x-bb] Stoel bij H, fig 1[a] 1/20.

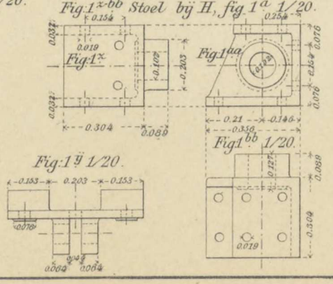


Fig:1[cc-ff] Stoel bij K, fig:1[a] 1/20.

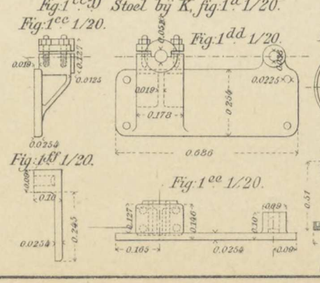


Fig:3[a-b] Bolder. Fig:3[b] 1/40.

Fig:3[a] 1/40.

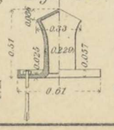


Fig:1[d] Doorsnede volgens AB, fig 1[a] 1/60.

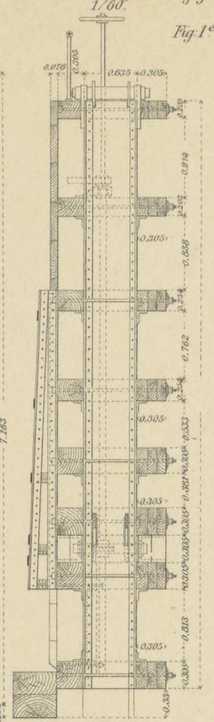


Fig:1[e] Doorsnede volgens E F, fig 1[a] 1/60.

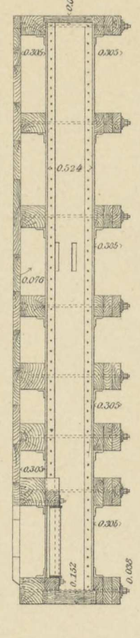


Fig:1[f] Voorhar. 1/60.

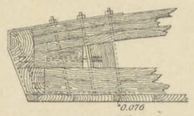


Fig:1[m] Ondergaanzicht vdr. Fig:1[l] 1/60.

Fig:1[s-v] Tolklep der deur. 1/20.
Fig:1[s] Gegoten ijzeren raam. 1/20.

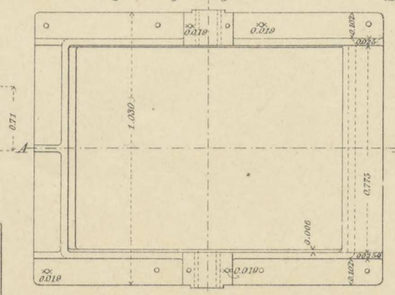


Fig:1[u] Gegoten ijzeren Tolklep 1/20.

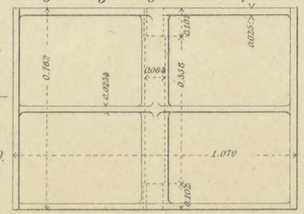


Fig:1[t] Hor: doorsnede v. AB, fig: 1[s] 1/20.

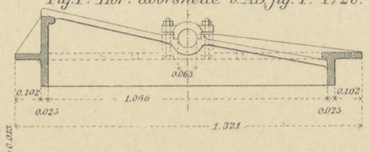


Fig:1[v] Doorsnede der tolklep. 1/20.

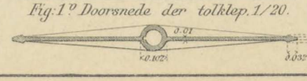


Fig:1[g] Gegoten stalen Halsbeugel met verankering. 1/60.

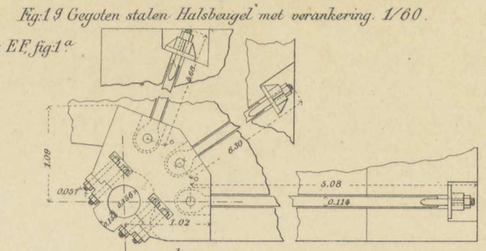


Fig:1[h] Aanzicht van den halsbeugel. 1/60.

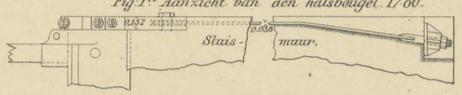


Fig:1[n-p] Tapleger bij A fig:1[a]

Fig:1[i-m] Gegoten ijzeren achterhar. 1/60. Fig:1[n] 1/10.

Fig:1[i] 1/60.

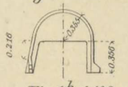


Fig:1[j] 1/60.

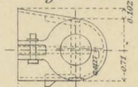


Fig:1[n] 1/10.

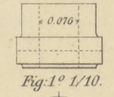


Fig:1[o] 1/10.

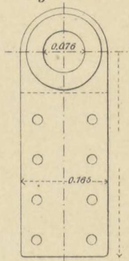


Fig:1[p] 1/10.

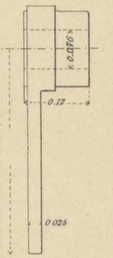


Fig:1[k] 1/60.

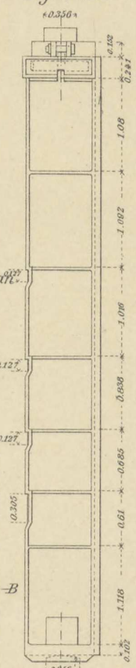


Fig:1[l] 1/60.

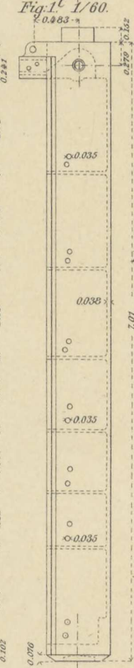


Fig:1[q-gg] Raderwerk bij M, fig:1[a] 1/15.

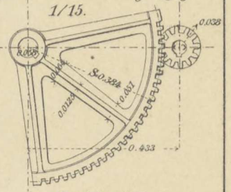


Fig:1[q] 1/15.

Fig 2[a-b] Bodemklep. 1/40.
Fig 2[a] Klep bij A, fig:1[a] Plaat 1/30

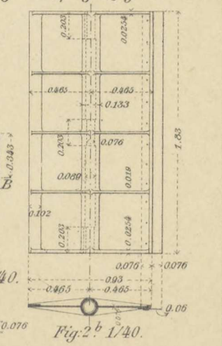


Fig:2[b] 1/40.

Fig:1[r] Taats, 1/40.

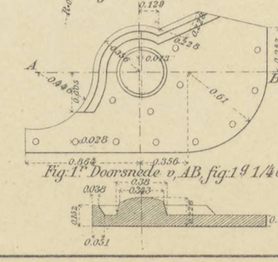


Fig:1[s] Doorsnede v. AB, fig:1[q] 1/40.

Uitg. de Gebr[s] v. Cleef.

Steendr. Gebr. v. Langenhuysen, s Hage.

SLUIZEN IN HET MANCHESTER SCHEEPVAARTKANAAL.

Sluizen te Barton Fig. 1a-d

Boven aanzicht Fig. 1a 1/1000.

Fig. 1b Dwarsdoorsnede volgens AA, fig. 1a, over de schut- en doorlaatsluizen. 1/1000.

(afgesleten door Stoney-schuiven.)

Fig. 1c Gedeeltelijke lengtedoorsnede volgens BB, fig. 1a 1/1000.

a. Kaapstanders.
b. Hydraulische toestel tot beweging der deuren.
c. Schuiven met Stoney-rollen.

Kanaalbodem, breed 111.63

Kanaalbodem, breed 105.29

Fig. 1d Lengtedoorsnede volgens CC, fig. 1a 1/1000.

In Fig. 1d is de bovenkant van de beneden slagdrempels als hoogtepeil aangenomen.

Fig. 2d Looprol 1/24.

Fig. 2b Deur der sluis van 15.25 M. wijdte te Eastham. 1/72.

Bovenkant van den slagdrempel.

Fig. 2c Horizontale doorsnede over een der tusschenregels. 1/72.

Fig. 2b en 2c Schaal 1 à 72.

Fig. 3 Detail der schuiven met Stoney-rollen der doorlaatsluizen 1/10.

Stoney-rol. Stoney-rol. Schuif.

Fig. 5 Dwarsdoorsnede van het kanaal 1/1000.

Fig. 2a Boven aanzicht der sluizen te Eastham. 1/1600.

de Mersey

(Doorlaatsluis, gesloten door Stoney-schuiven.)

Manchester Scheepvaart kanaal.

Hydraulische machine.

Meters 10 0 2 10 20 30 40 50 60 70 80 90 100 Meters.

Fig. 2a Schaal à 1500.

Fig. 4 Lengte-profiel van het Manchester scheepvaartkanaal.

de Mersey

Peil

Uitg. de Gebr.s v Cleef

Steendr Gebr. v Langenhuysen, 's Hage

NIEUWE SLUIS TE DUINKERKEN.

Fig. 1. Lengte-doorsnede. 1/500.

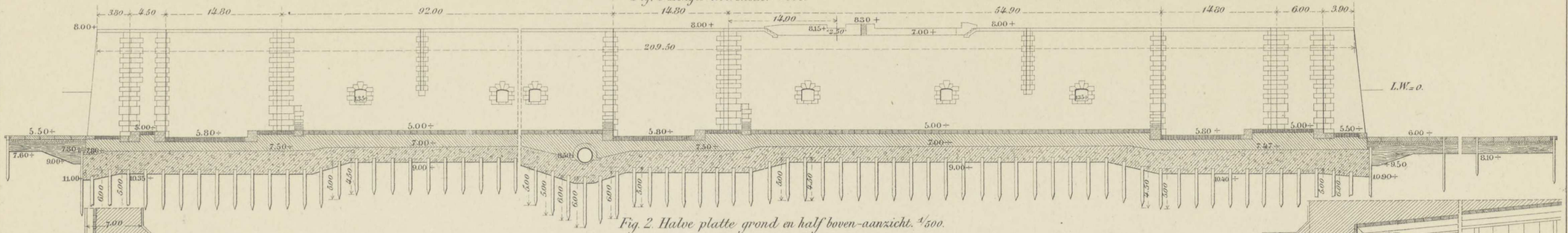


Fig. 2. Halve platte grond en half boven-aanzicht. 1/500.

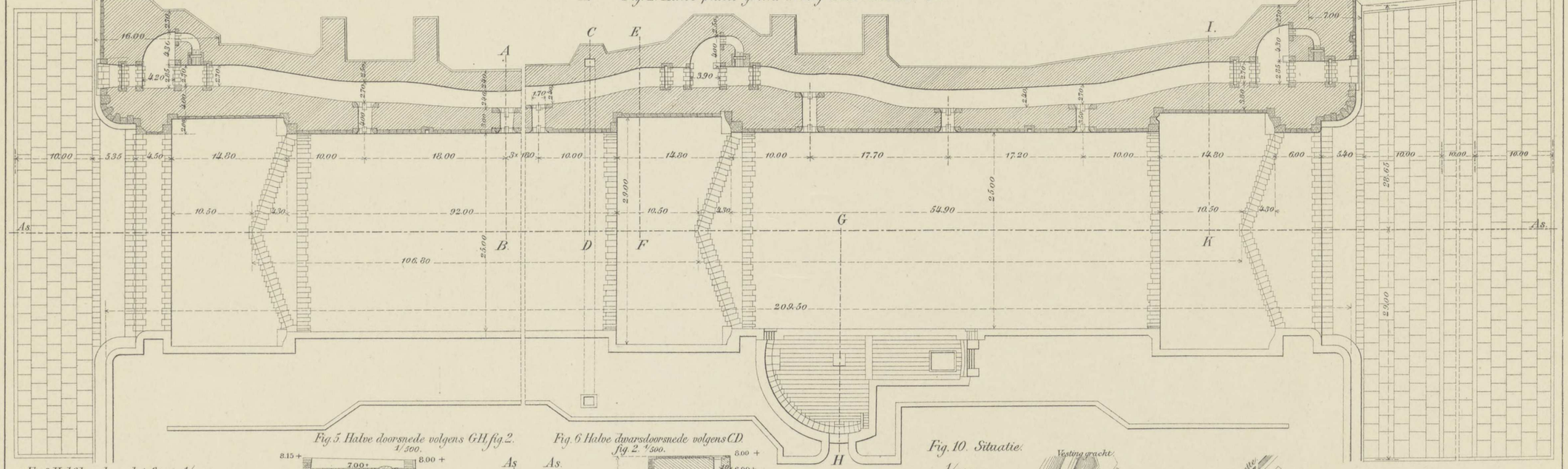


Fig. 3. Half beneden-sluisfront. 1/500.

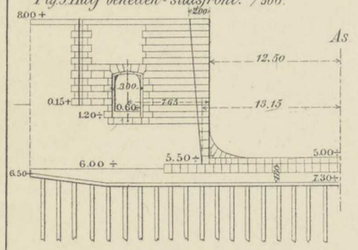


Fig. 4. Half boven-sluisfront. 1/500.

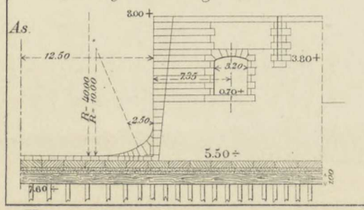


Fig. 5. Halve doorsnede volgens GH fig. 2. 1/500.

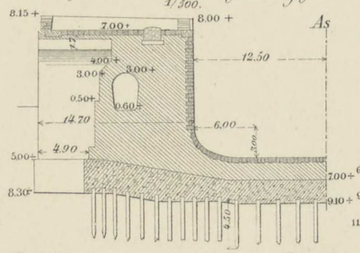


Fig. 6. Halve dwarsdoorsnede volgens CD fig. 2. 1/500.

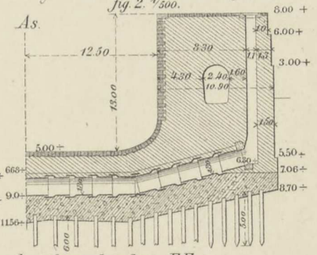


Fig. 7. Halve dwarsdoorsnede volgens AB. fig. 2. 1/500.

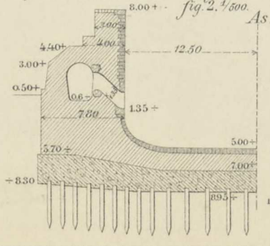


Fig. 8. Halve dwarsdoorsnede volgens EF. fig. 2. 1/500.

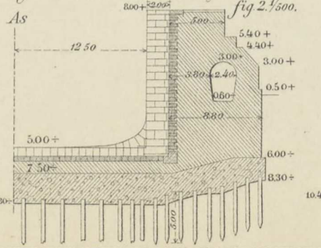


Fig. 9. Halve doorsnede volgens HK. fig. 2. 1/500.

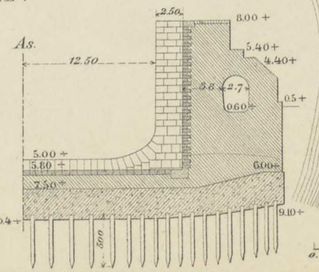
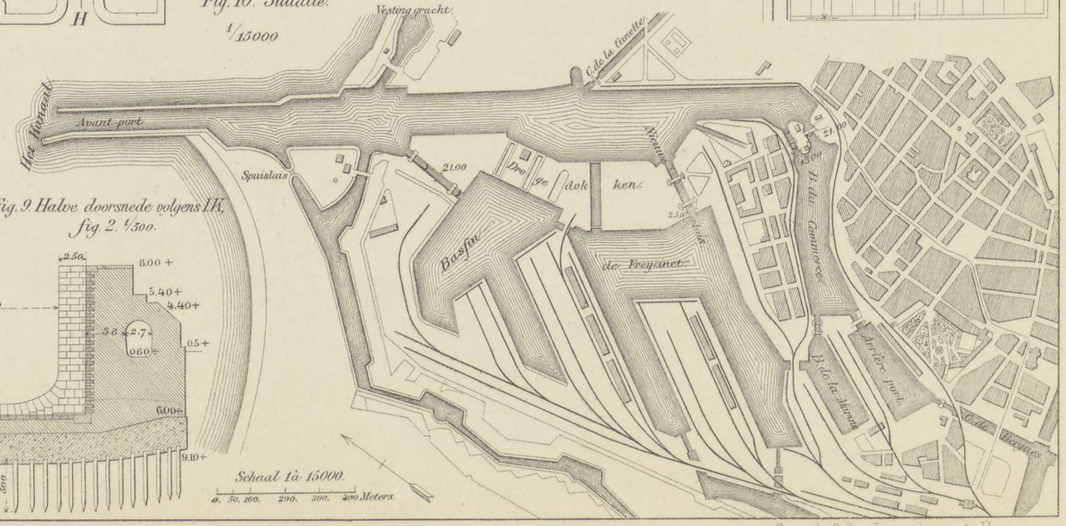


Fig. 10. Situatie. 1/15000



Uitg. de Gebrs v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

DUBBELE SLUIS IN HET NOORD-OOSTZEE-KANAAL BIJ BRUNSBÜTTEL EN DETAIL DER SLUIS BIJ HOLTENAU.

Fig. 1. Lengtedoorsnede over CD, fig. 2. 1/500.

Buitensluishoofd.

Fig. 3. Halve doorsnede volgens EE fig 1. 1/500.

Fig. 4. Halve doorsnede volgens GH, fig. 2. 1/500.

Fig. 5. Buitenaanzicht.

Schaal = 1/500.

Fig. 7. Half-binnenaanzicht. 1/500.

Fig. 6. Halve doorsnede volgens J K, fig. 2. 1/500

Fig. 8. Situatie. 1/20000.

Fig. 9. Sluis bij Holtenau. 1/500.

Boven-aanzicht en Fig. 2. Horizontale doorsnede, 1/500 volgens AB, fig 1.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, s Hage.

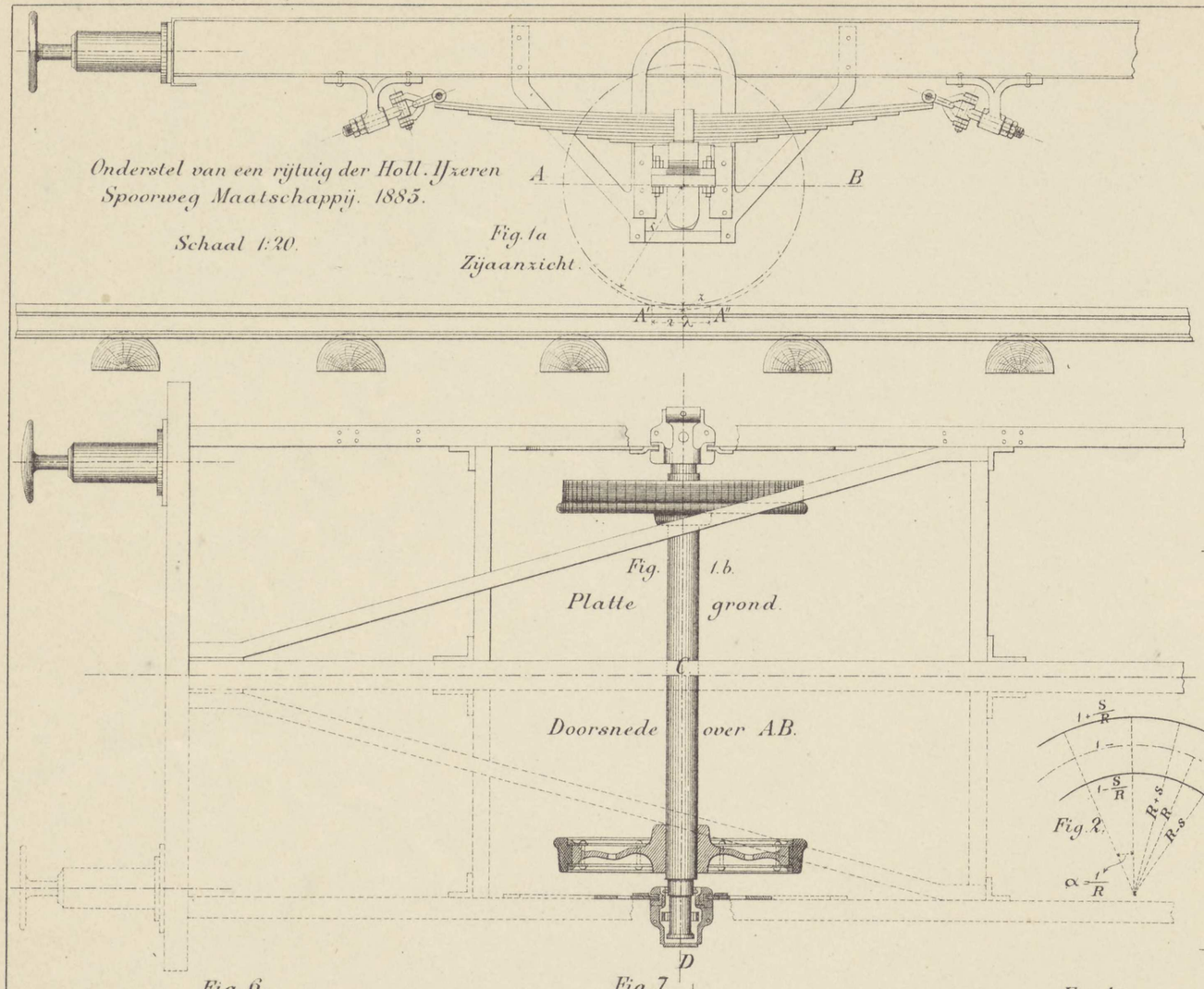
Nr XV B.

Sprawy

Pl 1–2 / – 77

4–5. 6–9

1 3 cank 10–18



Onderstel van een rijtuig der Holl. IJzeren Spoorweg Maatschappij. 1885.

Schaal 1:20.

Fig. 1a
Zijaanzicht.

Fig. 1.b.
Platte grond.

Doorsnede over AB.

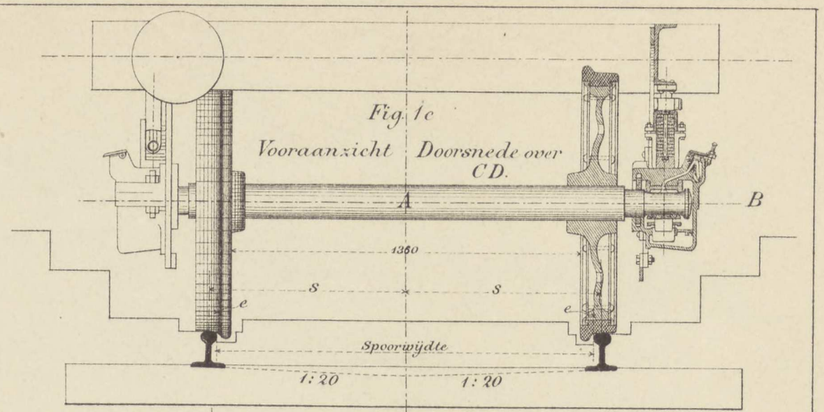


Fig. 1c
Vooraanzicht Doorsnede over CD.

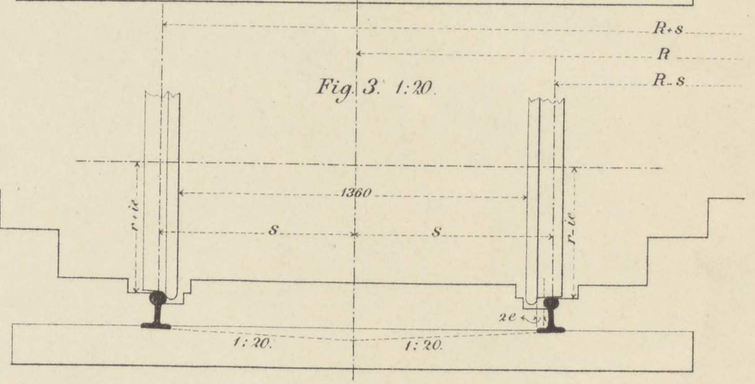


Fig. 3. 1:20.

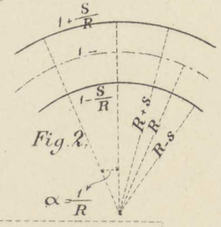


Fig. 2.

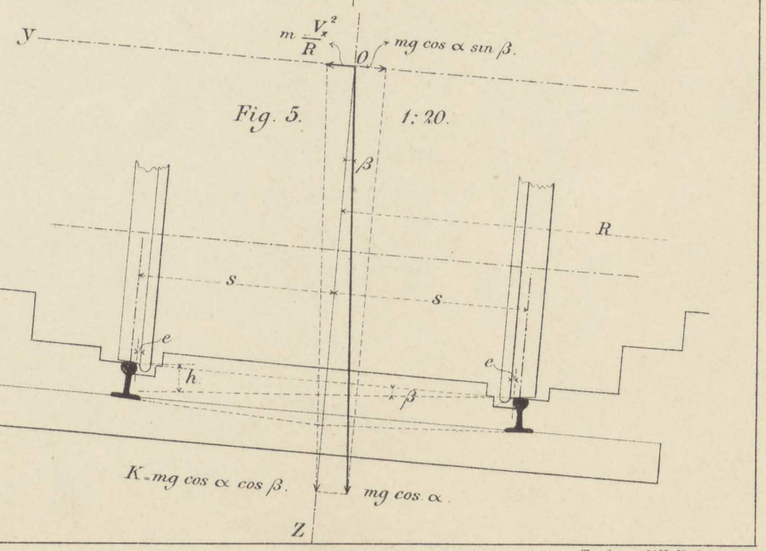


Fig. 5. 1:20.

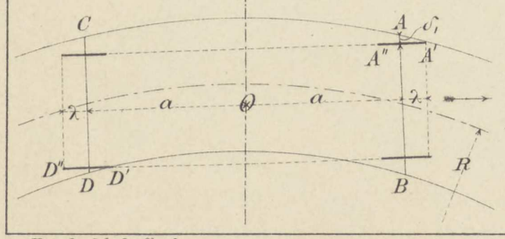


Fig. 6.

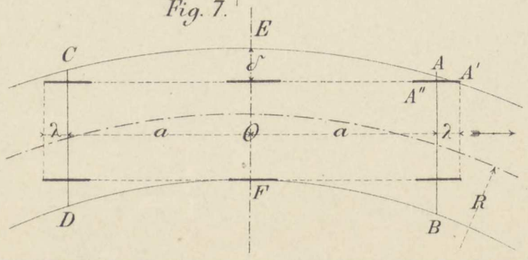


Fig. 7.

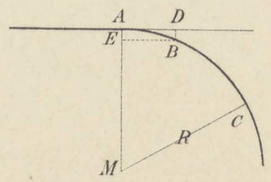
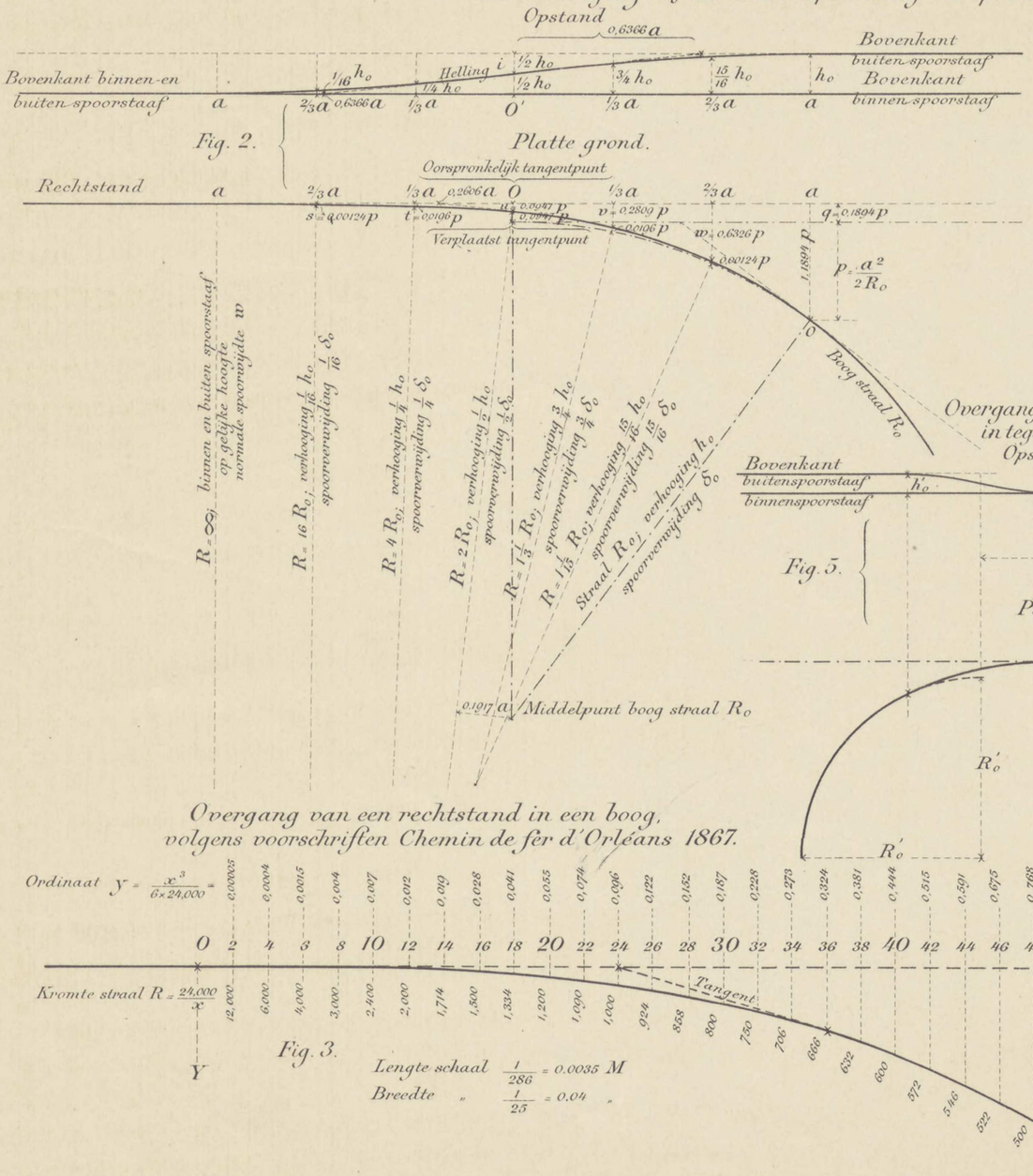
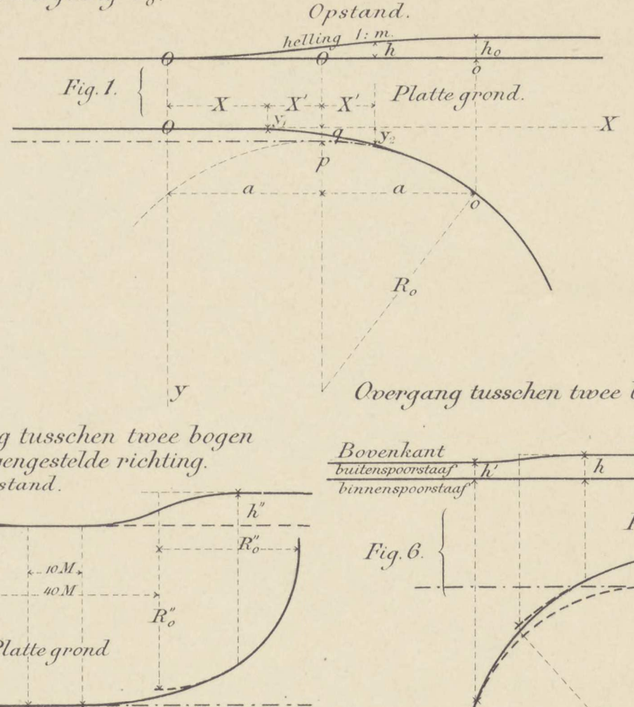


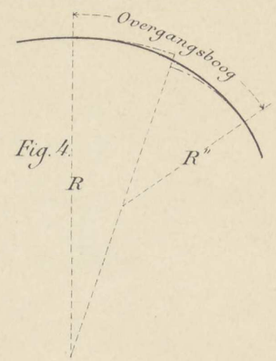
Fig. 4.

Uitg. de Gebr^s v. Cleef. Tresling & C^o Hof Luth Amst

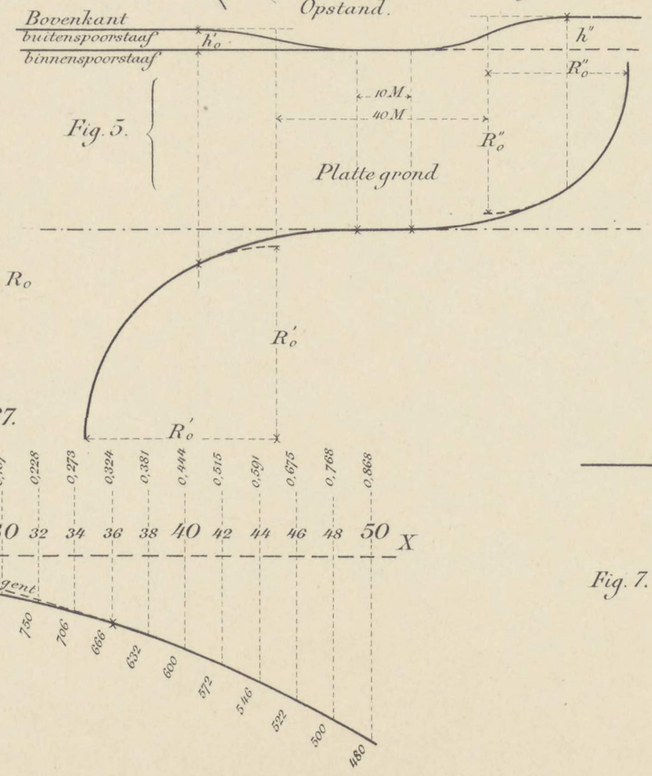
Overgang van een rechtstand in een boog van een straal R_o, met verhooging h_o der buitenspoorstaaf en spoorverwijding δ_o.



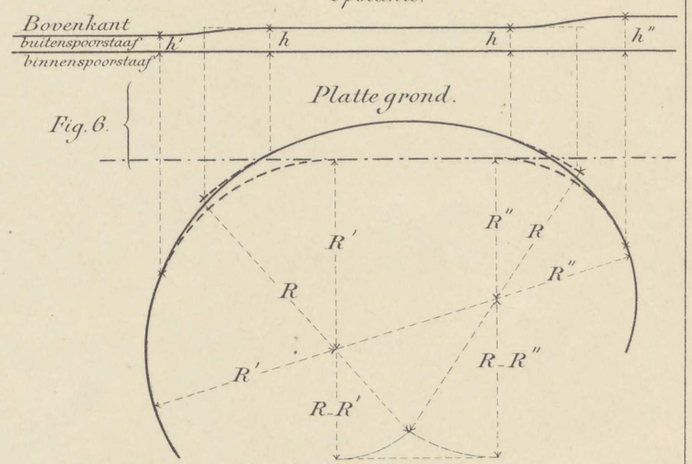




Overgang tusschen twee bogen in tegengestelde richting.



Overgang tusschen twee bogen in dezelfde richting.



Overgang van een rechtstand in een boog, volgens voorschriften Chemin de fer d'Orléans 1867.

Fig. 3.

Lengte schaal 1/286 = 0.0035 M
Breedte „ 1/25 = 0,04 „

Bepaling van den hoek en den straal van een boog.

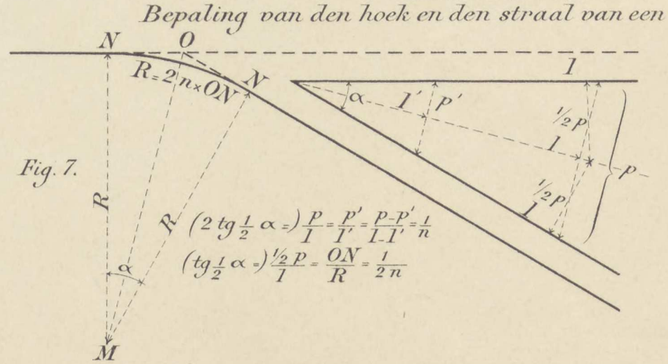


Fig. 7.

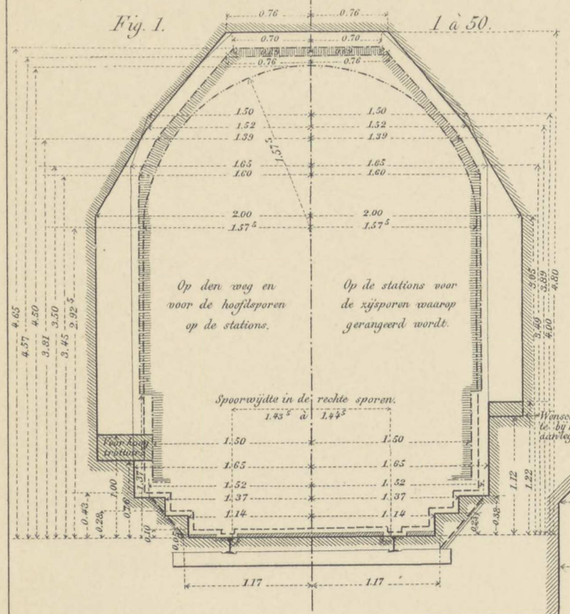
Uitg de Gebr^s v. Cleef

Tresling & C° Hof Lith Amst.

VRIJE RUIMTE-BAAN-EN BALLAST-PROFILLEN.

Normaal profil der vrije ruimte op de spoorwegen en op de stations.

Fig. 1. 1 à 50.



2.– 4.80 Normaal profil voor gewone spoorwegen behoorende bij Koninklijk besluit van 27 October 1875 (Staatsblad N° 183)

1.50 50 Normaal profil voor gewone spoorwegen volgens de Technische Vereinbarungen van het V.D.E.V. d.d. 1882

1.52 0.38 Voorgeschreven vergrooting bij nieuwen aanleg volgens id. id. 1888.

1.57^{c} 4.57 Maximum constructie profil voor rollend materieel volgens id. id. 1885.

1.60 4.65 „ laad profil D volgens de Technische Vereinbarungen van het V.D.E.V. dd. 1885.

1.57^{c} 4.50 „ „ „ „ „ „ „

1.65 4.60 Normaal profil voor locaal-spoorwegen behoorende bij Koninklijk besluit van 31 Januari 1879 N°13 (Staatsblad N°27)

Contrarail in bestrating.

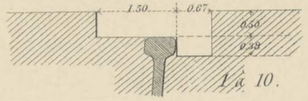
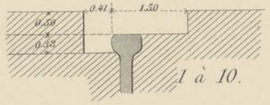


Fig. 10.

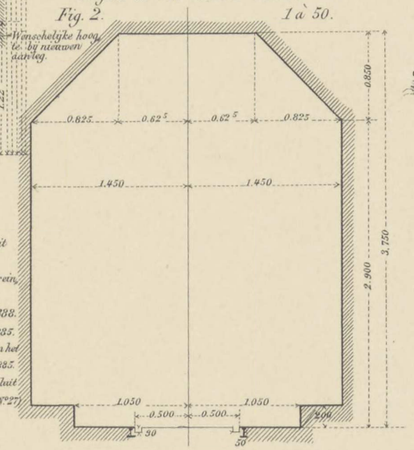
Contrarail in wissels en kruisingen.



1 à 10.

Normaal profil der vrije ruimte voor locaal-spoorwegen van 1.00 M. spoorwijdte volgens de T.V. van het V.D.E.V.

Fig. 2. 1 à 50.



Normaal profil der vrije ruimte voor locaal-spoorwegen van 0.75 M. spoorwijdte volgens de T.V. van het V.D.E.V.

Fig. 3. 1:50.

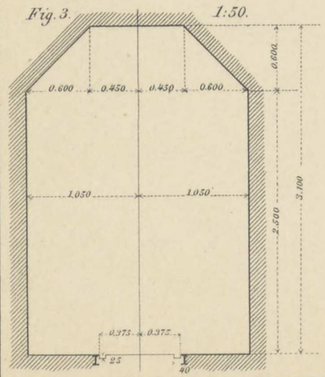
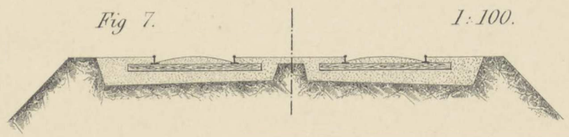


Fig 7. 1:100.



K.E.D. Elberfeld.

Fig. 6. 1:100.

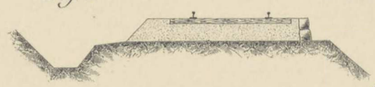
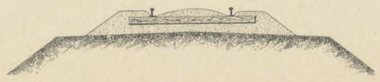


Fig. 8. G.O.L.S. 1:100.



Stelsel Hartwich.

Fig. 14.

Fig. 13.a Elsass-Lothringen.

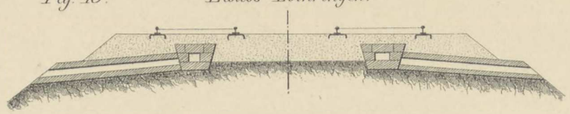


Fig. 13.b 1:100.

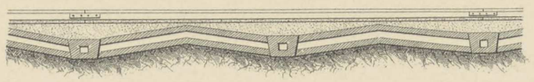


Fig. 10.a K.E.D. Berlin.

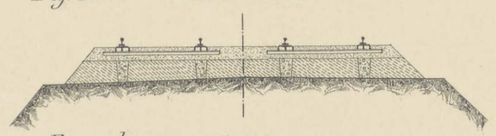


Fig. 10.b 1:100.

Fig. 5. 1:100

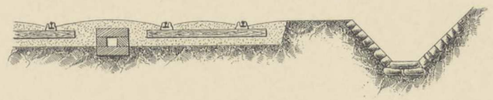


Fig. 9.a

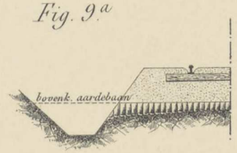


Fig. 9.b 1:100.

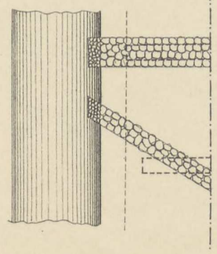


Fig. 12.a Elsass-Lothringen.

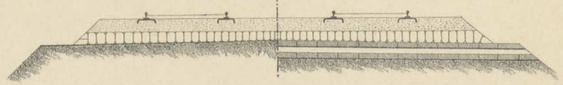


Fig. 12.b 1:100.

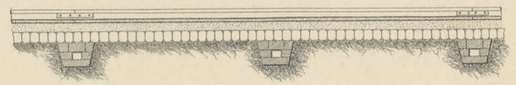


Fig. 11.a K.E.D. Berlin.

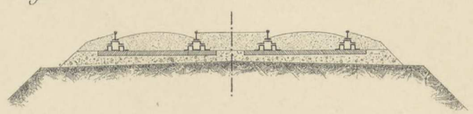


Fig. 11.b 1:100.

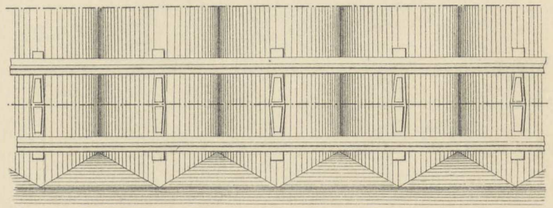


Fig. 4. 1:100.

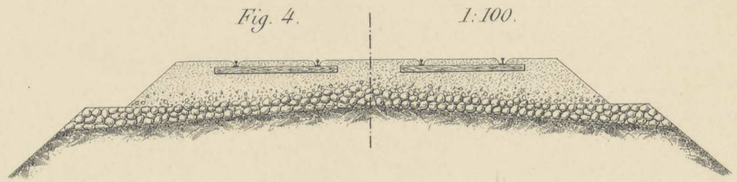
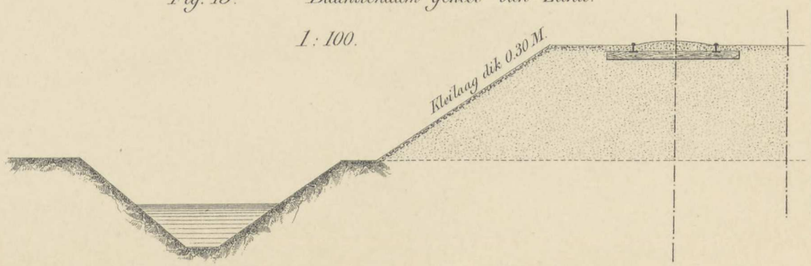


Fig. 15. Baanlichaam geheel van Zand.

1:100.



Uitg. de Gebr^{s} v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

SPOREN MET HOUTEN LANGSLIGGERS.

Fig. 1a.

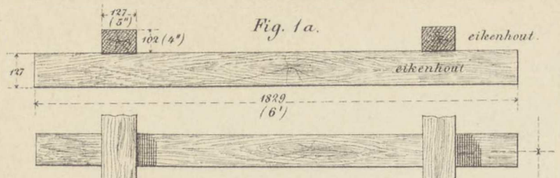


Fig. 1b. 1:20.

Houten sporen in Engeland

Fig. 2.

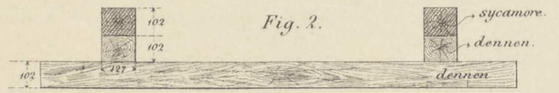


Fig. 3.

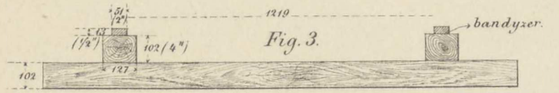


Fig. 4a.

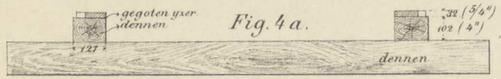
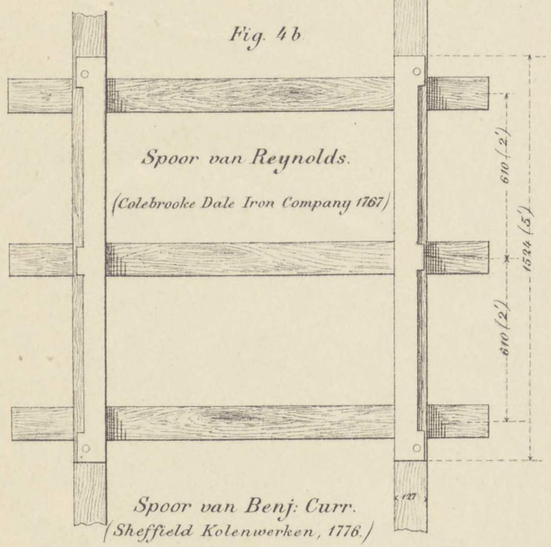


Fig. 4b

Spoor van Reynolds.

(Colebrooke Dale Iron Company 1767)



Spoor van Benj: Curr.

(Sheffield Kolenwerken, 1776.)

Fig. 5.

Fig. 9a.

Hollandsche IJzeren Spoorweg.

Amsterdam — Rotterdam (1840-64)

Fig. 9b. 1:50.

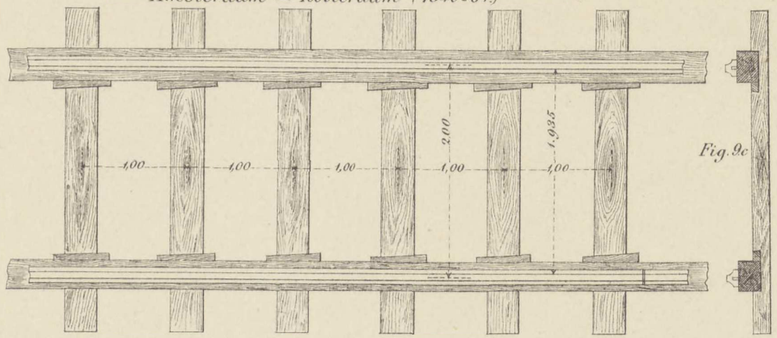


Fig. 9d.

1:5

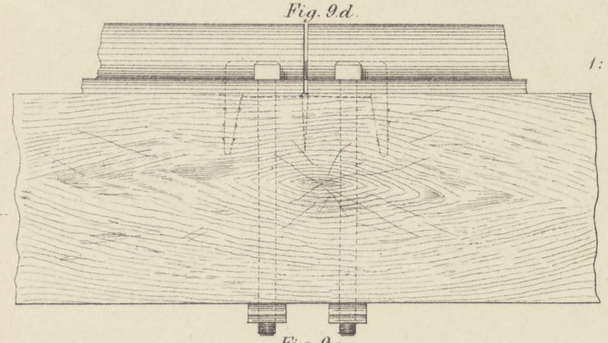


Fig. 9e

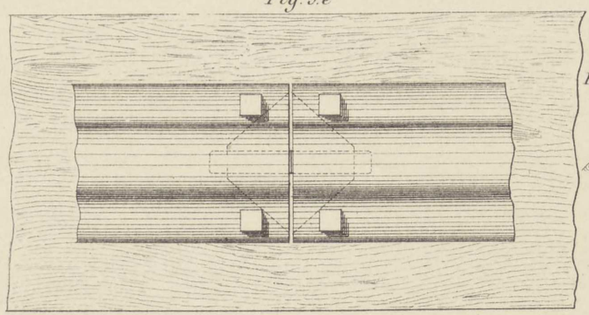
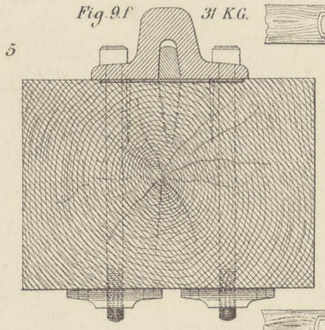


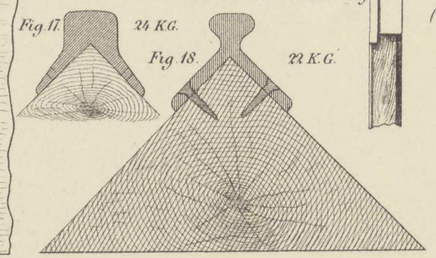
Fig. 9f. 31 KG.



Zadelrail van Seaton.

(Great Western 1860) 1:5

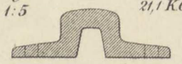
Birmingham Bristol en Thames Junction Railway



Brugrail van Brunel

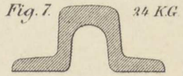
(Great Western Railway, 1835)

Fig. 6. 1:5



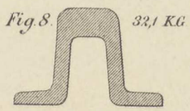
Badensche S.S. 1:5

Fig. 7.



Zwitsersche Zuid-Oost-baan

Fig. 8.



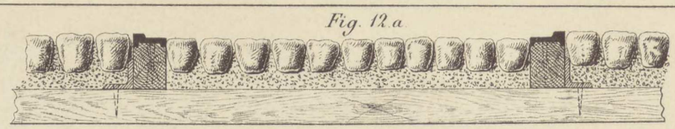
Weenen-Gloggnitz (in Lijsporen) 1:5

Fig. 10.

Leipzig-Dresden (1837)

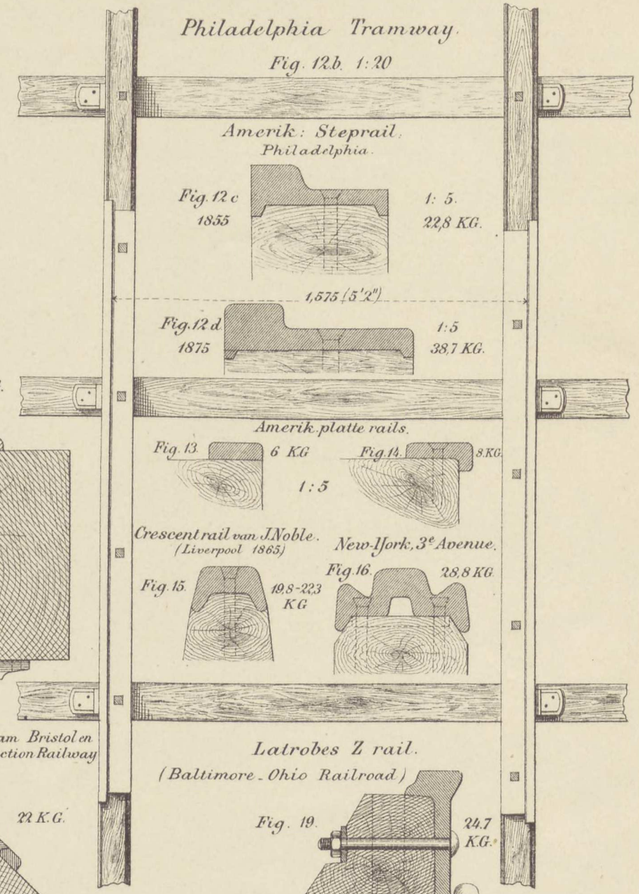
Fig. 11.

Fig. 12a.



Philadelphia Tramway.

Fig. 12b. 1:20



Amerik: Steprail.

Philadelphia

Fig. 12c 1855

1: 5. 22,8 KG.

Fig. 12d 1875

1:5 38,7 KG.

Amerik. platte rails.

Fig. 13. 6 KG

1:5

Fig. 14. 8 KG.

Crescent rail van J. Noble.

(Liverpool 1865)

Fig. 15.

19,8-22,3 KG.

New-York, 3e Avenue.

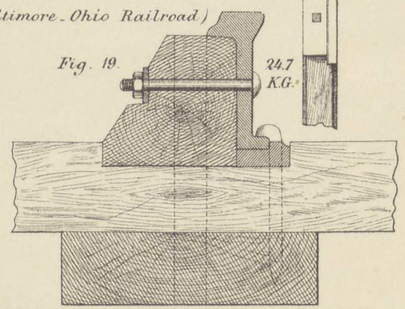
Fig. 16.

28,8 KG.

Latrobes Z rail.

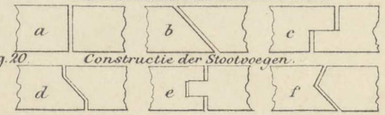
(Baltimore - Ohio Railroad)

Fig. 19.



24,7 K.G.

Fig. 20. Constructie der Stootvoegen.



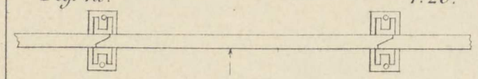
Uitg. de Gebrs v. Cleef.

Tresling & Cº Hof-Lith Amst.

STOELRAILS OP STEENBLOKKEN EN HOUTEN DWARSLIGGERS.

Spoor van Ch. Outram.
(1800, rails van gegoten ijzer.)

Fig. 1a. 1:20.



Spoor van Losh, Wilson en Bell.
(1829, rails van getrokken ijzer.)

Fig. 2a. 0,916 (3')

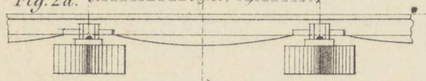
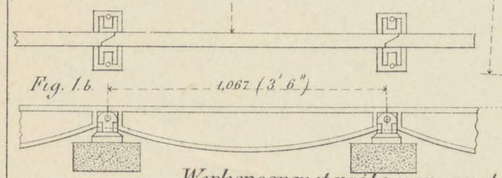


Fig. 2b.



Spoorstaaf à double champignon.
Cie du Chemin de fer d'Orléans.

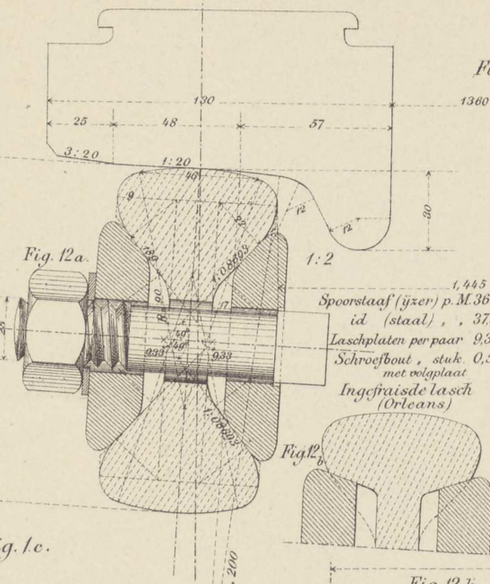


Fig. 12a.

Spoorstaaf (ijzer) p. M. 36. KG. 1,445
id (staal) , , 37,5 ,
Laschplaten per paar 9,3 ,
Schroefbout , stuk 0,5 ,
met volaplaat
Ingefraisde lasch (Orleans)

Fig. 12b.

Ijzeren pen.
(Chevillette)
tot bevestiging der stoelen.

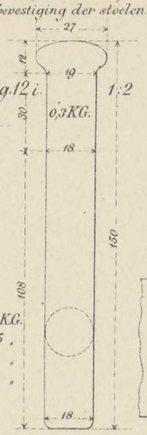


Fig. 12i. 1:2

Eindverbinding met stoelen.

Fig. 12c. 1:5.

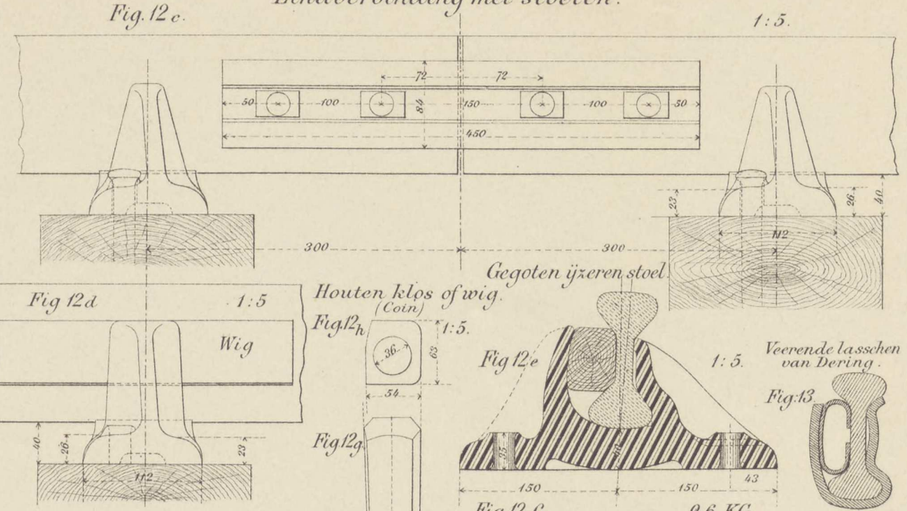


Fig 12d 1:5

Houten klos of wig.
(Coin)
Fig. 12h 1:5.

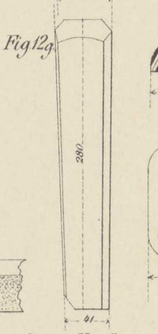


Fig 12g

Gegoten ijzeren stoel

Fig 12e 1:5.

Fig 12f. 9.6 KG.

Veerende lasschen van Dering.
Fig. 13

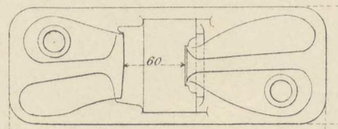
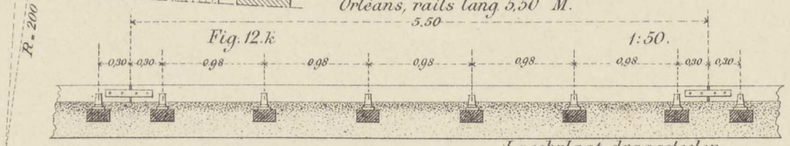


Fig. 14

Verdeeling der dwarsliggers.
Orléans, rails lang 5,50 M.

Fig. 12k. 1:50.

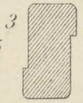


Werkspoor met rails van gegoten of getrokken ijzer.

Fig. 4.

Spoorstaaf van Coste.
(Lyon-St Etienne, 1835)

Fig 3 1:5



30,9 KG.

Spoorstaaf der Belgische S.S. (1835.)

Fig. 5.a. 1:20.

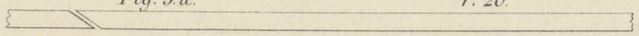
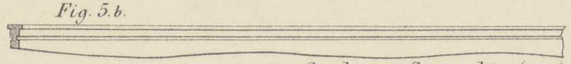
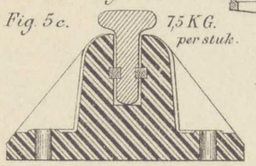


Fig. 5.b.



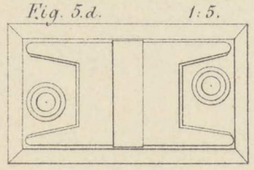
Stoel Belgische S.S.

Fig. 5c.



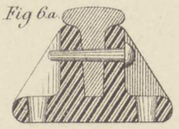
7,5 KG. per stuk.

Fig. 5.d. 1:5.



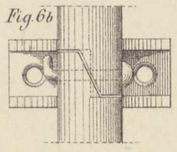
Eindstoel met nagel.

Fig 6a.



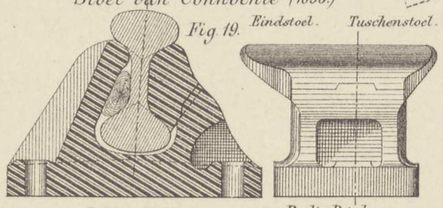
1:5

Fig 6b

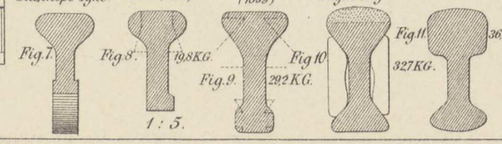


Stoel van Connochie (1853.)

Fig 19. Eindstoel. Tuschenstoel.

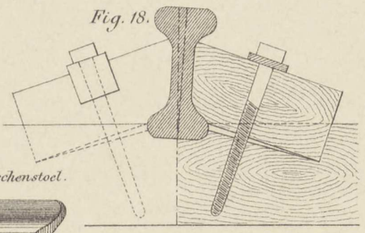


Stanhope-Tyne. Ferdinand Nordbahn (1836) Paris Versailles. (1839) Berlin-Potsdam-Magdeburg Bairische Westbahn.



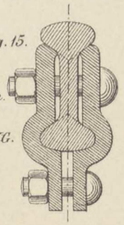
Stoel van Barberot (1853)

Fig. 18.



Lasch van Desbrières.

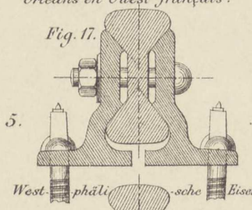
Fig. 15.



Laschplaat draagstoelen

Orleans en Ouest français.

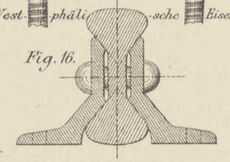
Fig. 17.



1:5.

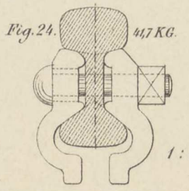
West-phälische Eisenbahn.

Fig. 16.



London-Chatham-Dover

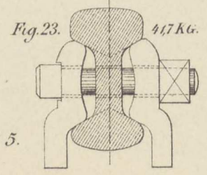
Fig. 24. 41,7 KG.



1:5.

North-London.

Fig. 23. 41,7 KG.



Great Northern.

Fig. 20. 41,7 KG.

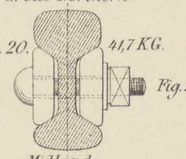
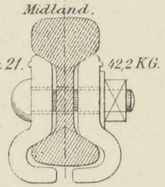


Fig. 22d.

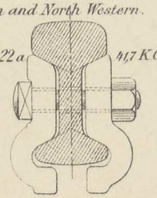
Midland.

Fig. 21. 42,2 KG.



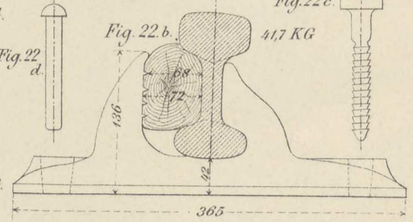
London and North Western.

Fig. 22a. 41,7 KG.



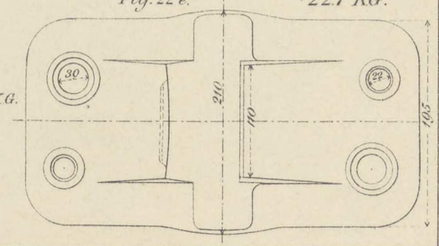
Stoel London and N. Western.

Fig. 22b. 41,7 KG.



1:5.

Fig. 22e. 227 KG.

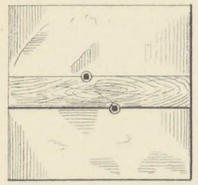


Uitg. de Gebr.s v. Cleef.

Tresling & Cie Hof-Lith. Amst.

Vignolesrails op steenblokken, bij de lasschen.

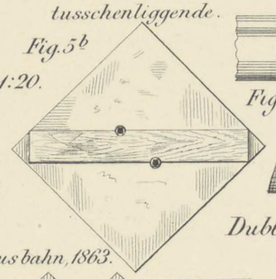
Fig. 5a



tusschenliggende.

Fig. 5b

1:20.



Taunusbahn, 1863.

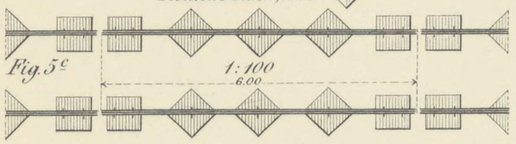


Fig. 5c

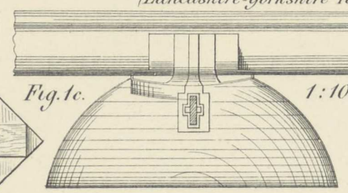
1:100

6.00

Klokvormige draagstoel (calotte) van Greave.

(Lancashire-Yorkshire Railway, 1847.)

Fig. 1c.

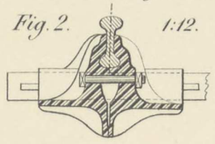


1:10.

Dubbele stoel van Barlow

(South-Eastern Railway, 1849.)

Fig. 2.

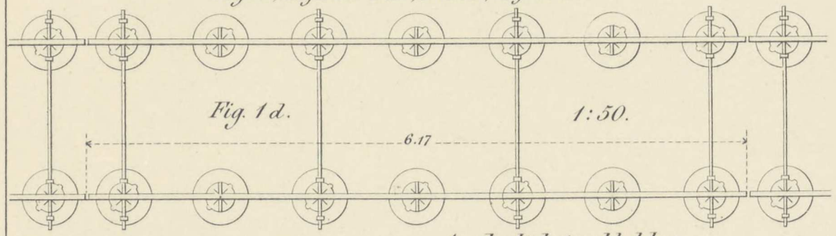


1:12.

Spoorbaan Alexandrië-Suez, 1851.

Algerië, Engelsch-Indië, Braxilië, Argentine.

Fig. 1d.



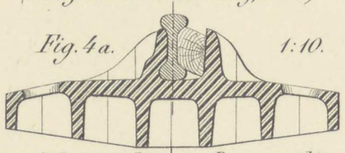
6.17

1:50.

Cellenschijf van Richardson.

(Parijsche tentoonstelling, 1867.)

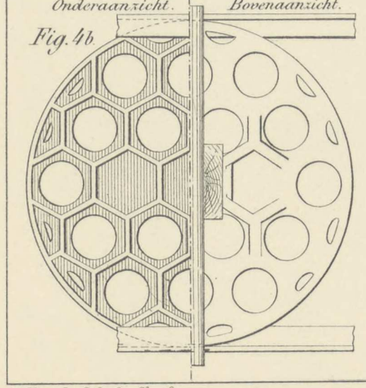
Fig. 4a.



1:10.

Onderaanzicht. Bovenaanzicht.

Fig. 4b



Asphalt-betonblokken.

(Paris-Lyon-Méditerranée, 1873.)

Fig. 6a.

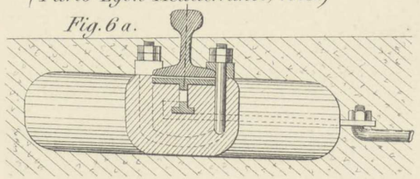
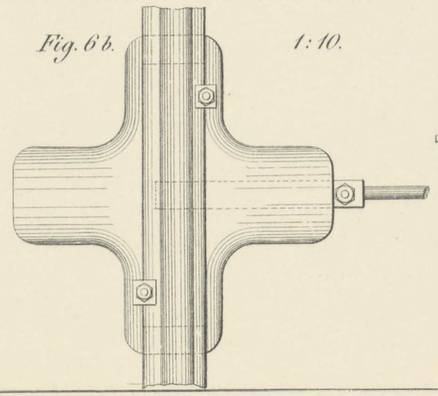


Fig. 6b.



1:10.

Klok van Griffin.

(Argentine, 1865.)

Fig. 3a.

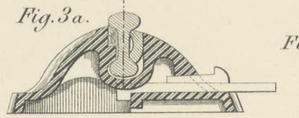
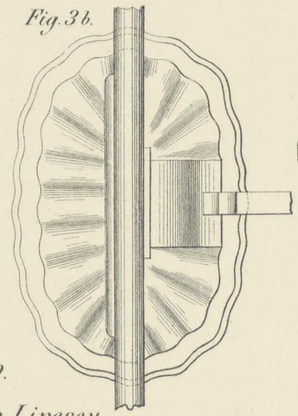


Fig. 3b.



Klokken van Livesey.

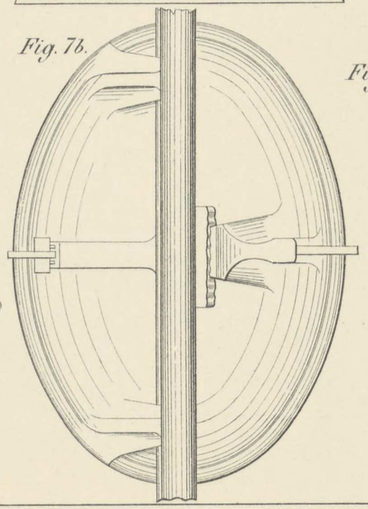
(Argentijnsche Great-Southern.)

Gegoten ijzerenklok.

Fig. 7a.

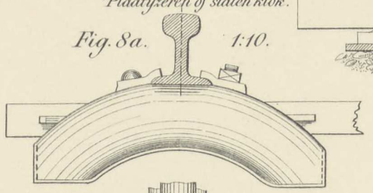
1:10

Fig. 7b.



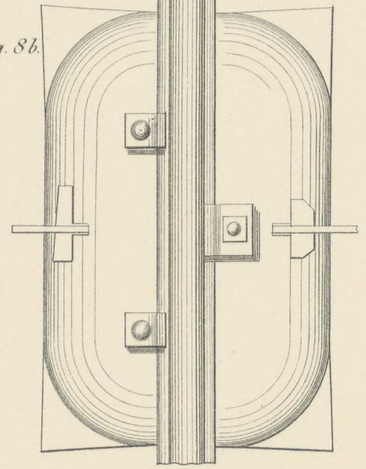
Plaatijzeren of stalen klok.

Fig. 8a.



1:10.

Fig. 8b.

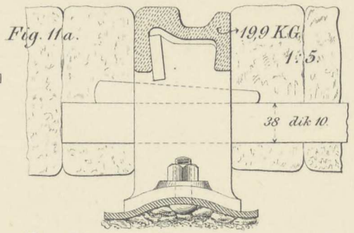


1:10.

Tramsporen

van Livesey, 1869. Buenos-Ayres, stad.

Fig. 11a.

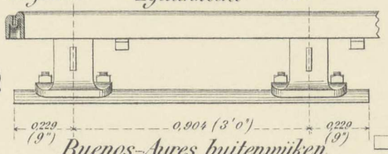


19,9 KG.

1:5.

38 dik 10

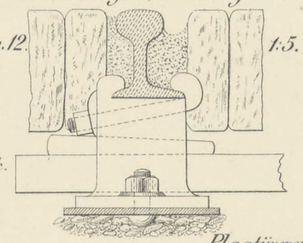
Fig. 11b. Zijaanzicht 1:10



0.229 (9") 0.904 (3'0") 0.229 (9")

Buenos-Ayres, buitenwijken.

Fig. 12.

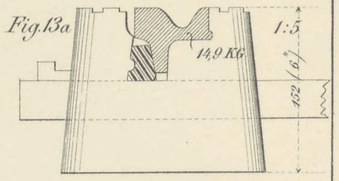


1:5.

van Cockburn-Muir, 1870.

(Monte-Video, Buenos-Ayres, Palermo enz.)

Fig. 13a.

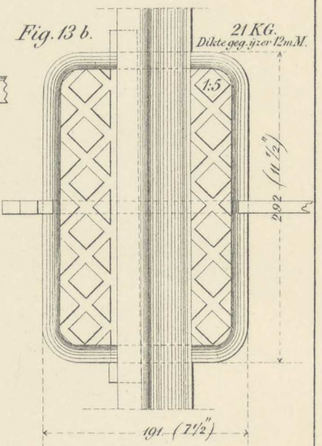


1:5

14,9 KG.

162 (6½")

Fig. 13b.



21 KG.

Dikte geg. ijzer 12m.M.

1:5

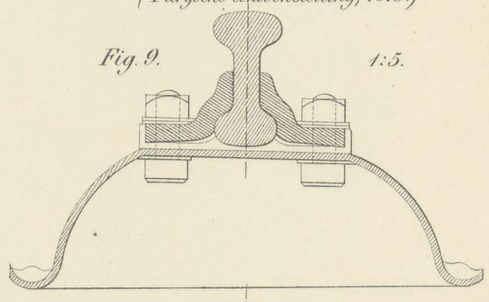
292 (11½")

191 (7½")

Plaatijzeren of stalen klokken van Mac-Lellan.

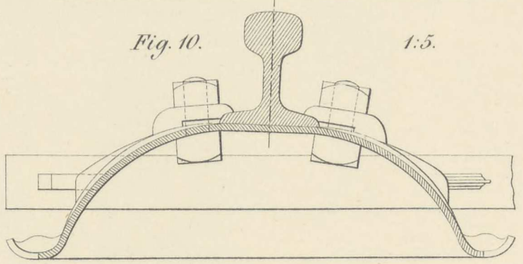
(Parijsche tentoonstelling, 1878.)

Fig. 9.



1:5.

Fig. 10.



1:5.

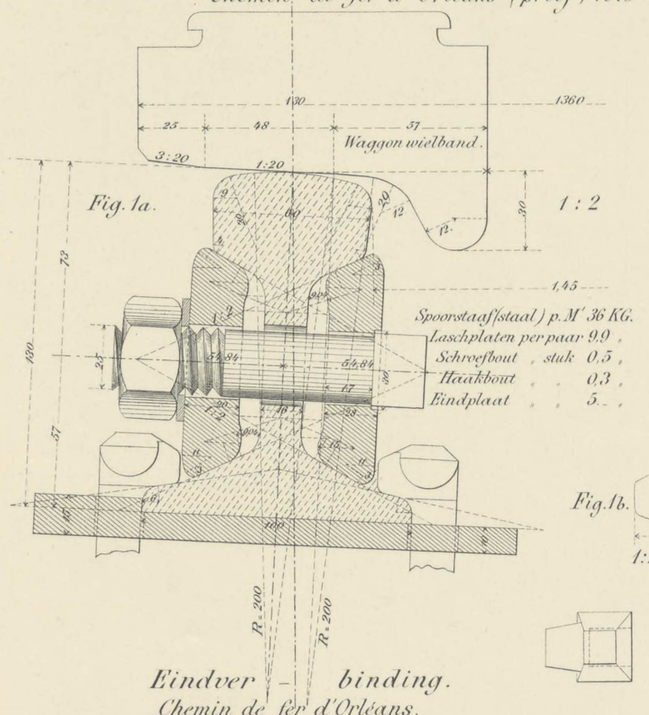
Uitg. de Gebrs v Cleef.

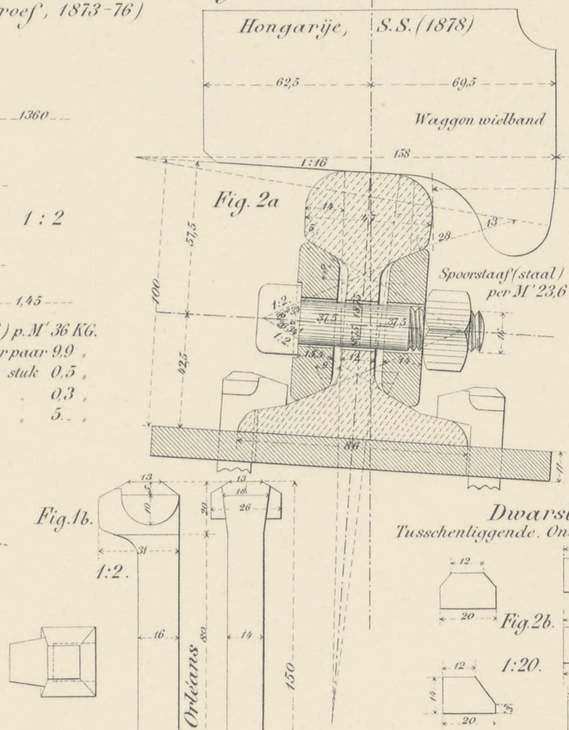
Tresling & Co Hof-Lith Amst.

VIGNOLESRAILS OP HOUTEN DWARSLIGGERS.

Spoorstaven met eindverbindingen.

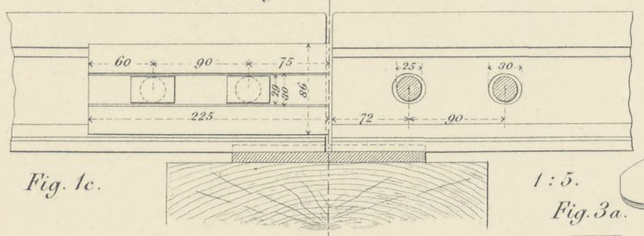
Chemin de fer d'Orléans (proef, 1873-76)

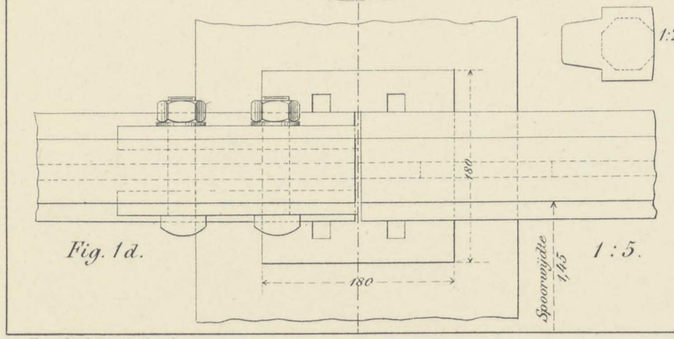


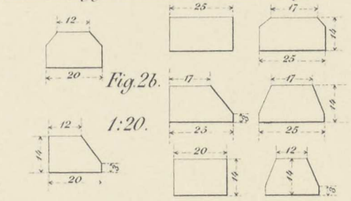


Eindver - binding.

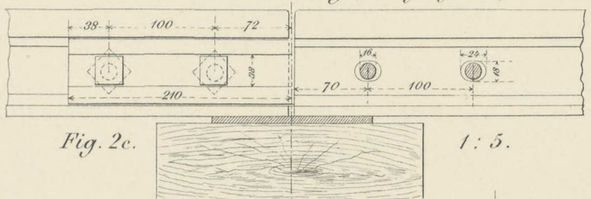
Chemin de fer d'Orléans.

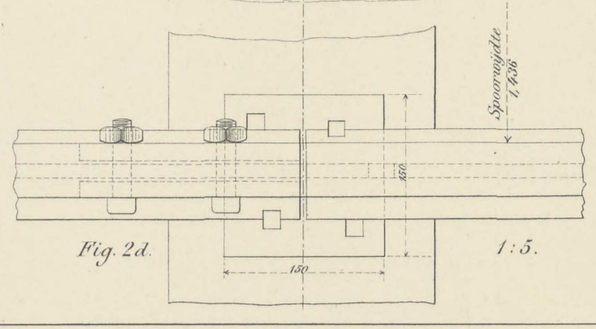






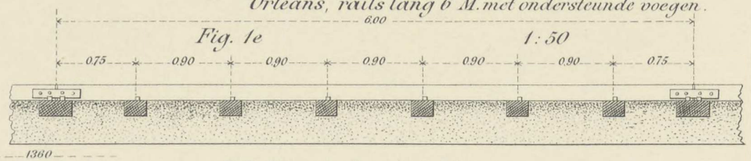
Eindverbinding. (Hongarije S.S.)



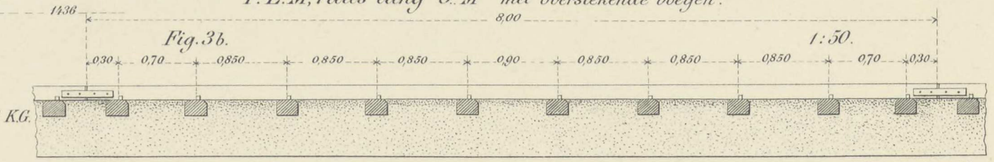


Verdeeling der dwarsliggers.

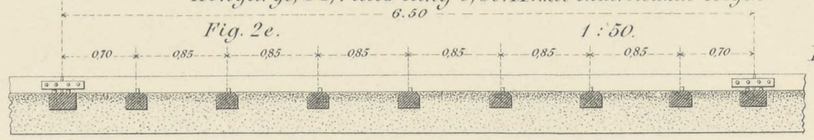
Orléans, rails lang 6 M. met ondersteunde voegen.



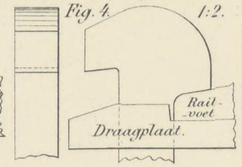
P.L.M, rails lang 8 M' met overstekende voegen.



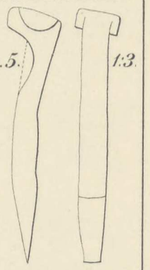
Hongarije, S.S, rails lang 6,50 M. met ondersteunde voegen.



Haakboutkop.
Alta-Italia Turijn, 1875



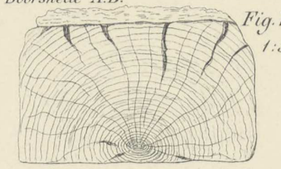
Gebruikte haakbout



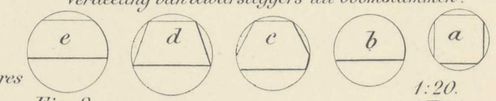
Dwarsliggers. (Hongarije S.S.)

Tusschenliggende. Onder de stootvoegen.

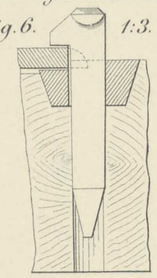
Eikendwarsligger na ± 7 jaar gebruik.

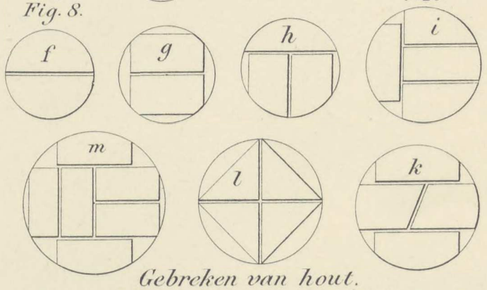


Verdeeling van dwarsliggers uit boomstammen.



Haakbout-ringen van Desbrières





Gebreken van hout.

Vries wind- en hart-scheuren.

Losse ringen.

Uitg. de Gebrs v. Cleef.

Tresling & Co Hof-Lith Amst.

VIGNOLESRAILS OP HOUTEN DWARSLIGGERS.

Spoorstaven met eindverbindingen.

Pensylvania Railroad (1878)

Drijfwielband.

Fig. 1a. 1:2.

Spoorstaaf (staal) p.M'. 33.2 KG.

Fig. 1b. 1:5.

Eindverbinding Pensylvania Railroad.

Fig. 1c. 1:5

Nederland. S.S. (1876)

Waggon wielband.

Fig. 2a. 1:2.

As bout

As laschplaten

Nederland S.S. oud ijzeren type (peervorm, 1861-75)

Fig. 4. 1:5. 37,6 KG.

Java S.S.

Fig. 3. 1:5. 25,7 KG.

Spoorstaaf (staal) p. M' 33,7 K.G.
Hoek laschplaten
ijzeren (aanleg S.S.) p. paar 20,6 K.G.
stalen (Expl. Mij) " " 21,2 "
Schroefbouten
met een moer p. stuk 0,74 K.G.
twee " " 0,96 "
Haakbouten, korte 145 m.M. 0,25 "
lange 162 " " 0,28 "
Eindplaten
ijzeren (aanleg S.S.) p. stuk 2,4
stalen (Expl. Mij) " " 2,5

Drijfwielband (midden as) bij Exploitatie Mij S.S.

Fig. 2h. 1:2.

Onsymmetrisch spoorstaafprofil.

Fig. 6. 1:5.

Horizontaal

Fig. 7. 1:5

Oploopende laschplaat van Währer.

1:20.

Houten dwarsliggers, Ned. S.S. tusschenliggende.

Fig. 2b. 1:20. bij de lasschen.

Verdeeling der dwarsliggers.

Exploitatie Mij S.S. rails lang 9 M.

Fig. 2i. 1:50.

Aanleg S.S, rails lang 7. M.

Fig. 2k. 1:50.

Kepen in halfronde houten dwarsliggers.

Fig. 2l. 1:20.

Laschplaten volgens Dixons patent, toegepast op den N.H.S.S.

Fig. 2e. Per paar 14 KG. 1:5

Fig. 2f.

Fig. 2c.

Eindverbinding Ned. S.S.

Fig. 2d.

Brunswijksche S.S. (1865)

Fig. 5. 1:5.

Fig. 2g. Doorsneden 1:2

1:5

1:5

Uitg. de Gebrs v Cleef.

Tresling & Cie Hof-Lith. Amst.

STOEL-EN VIGNOLESRAILS OP HOUTEN DWARSLIGGERS.

Eindstoel voor Vignolesrails. Saarbrücker Bahn, 1865.

Fig. 1a.

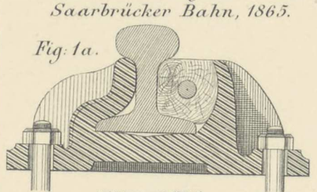
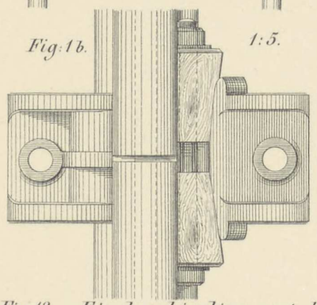


Fig. 1b. 1:5.



Tusschenstoel voor Vignolesrails. Ouest-français.

Fig. 2a.

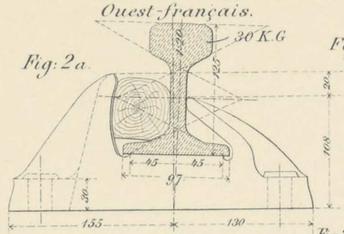


Fig. 2b.

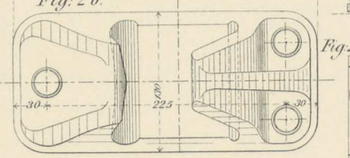
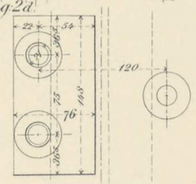


Fig. 2c.

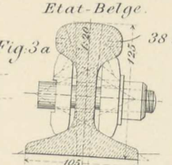
Fig. 2d.



Rails met eindverbindingen; bevestiging en ondersteuning op de dwarsliggers.

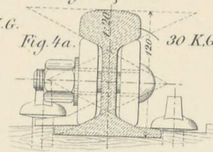
Etat-Belge.

Fig. 3a.



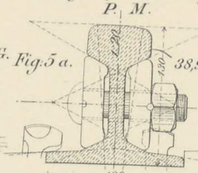
Est-français.

Fig. 4a.



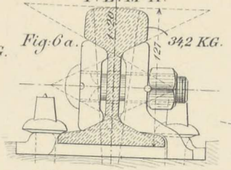
P. L. M.

Fig. 5a.



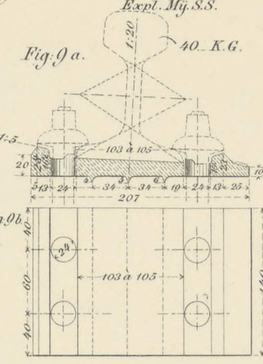
P. L. M-A.

Fig. 6a.



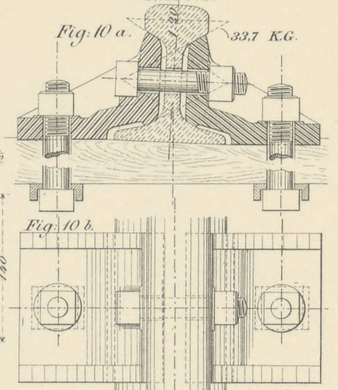
Tandplaat. Expl. Mij. S.S.

Fig. 9a.



Geg: ijz: steunklossen. N.H.S.S.

Fig. 10a.



Stootplaatje op einddwarsliggers Ouest-français

Fig. 4b.

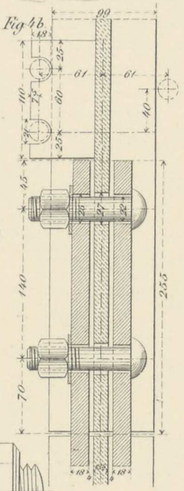


Fig. 5b.

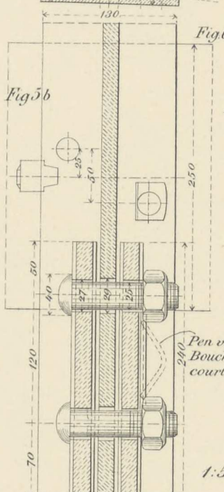


Fig. 6b.

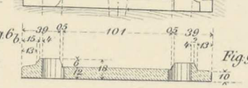


Fig. 6c.

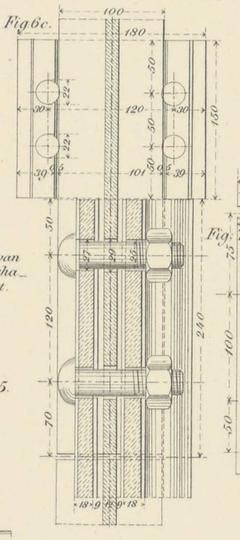


Fig. 9b.

1:5

Fig. 10b.

Nord-français (1879)

Stootvoeg *Stootpen*

Fig. 7a.

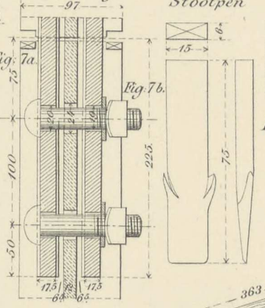
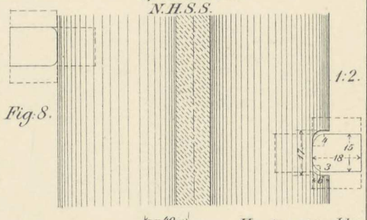


Fig. 7b.

Inkepingen in den voet der spoorstaven. N.H.S.S.

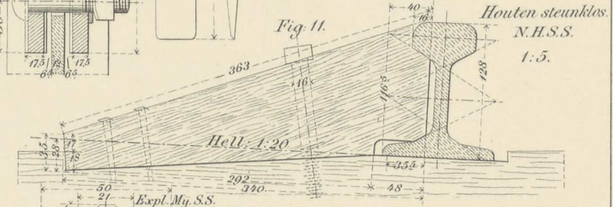
Fig. 8.



1:2.

Houten steunkloss. N.H.S.S.

Fig. 11.



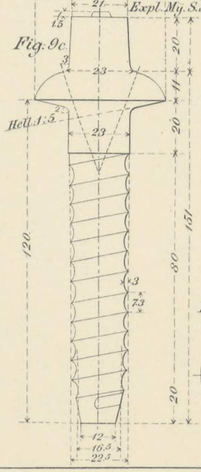
1:5.

Hell. 1:20

Rail-houtschroeven.

Expl. Mij. S.S.

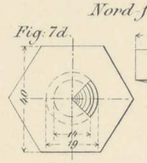
Fig. 9c.



Hell. 1:5

Nord français.

Fig. 7d.



1:2.

Fig. 7c.

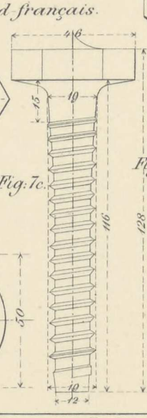
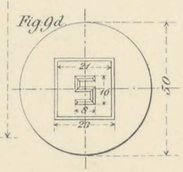
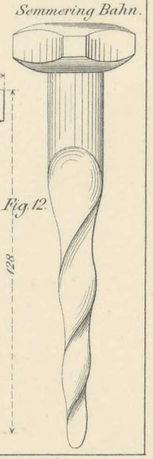


Fig. 9d.



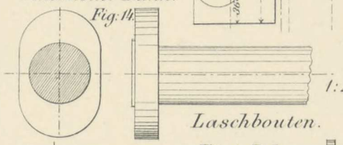
Sommering Bahn.

Fig. 12.



Schlesische Bahn.

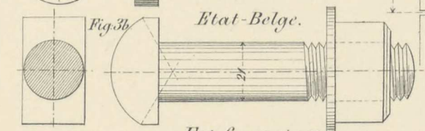
Fig. 14.



1:2.

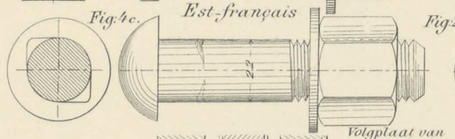
Laschbouten. Etat-Belge.

Fig. 3b.



Veerring van Grover

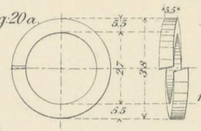
Fig. 4c.



Est-français

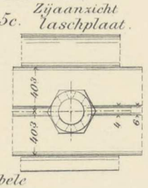
Zijaanzicht laschplaat.

Fig. 20a.



1:2

Fig. 5c.



P. L. M.

Fig. 6d.

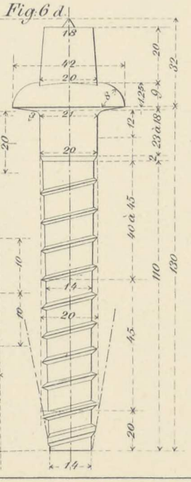


Fig. 6e.

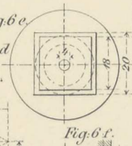
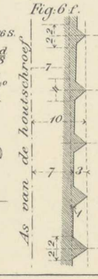
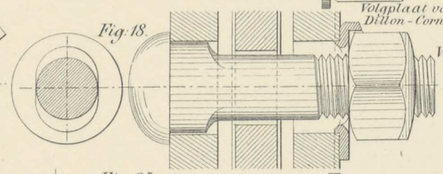


Fig. 6f.



Volgplaat van Dillon-Corneck

Fig. 18.

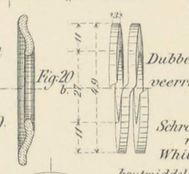


Volgplaat van Paget.

Fig. 19.

Dubbele veerring

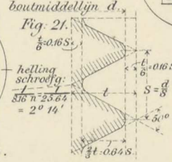
Fig. 20b.



Schroefdraad naar Whitworth.

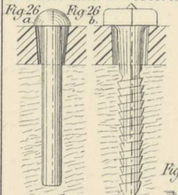
boutmiddellijn d.

Fig. 21.



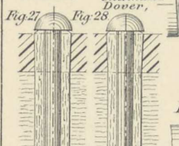
Bevestiging van geg: ijz: stoelen London-and N Western

Fig. 26a. Fig. 26b.



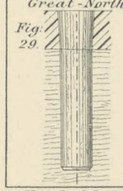
South-Eastern *London-Chatham-Dover.*

Fig. 27. Fig. 28.



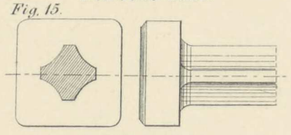
Great-Northern.

Fig. 29.



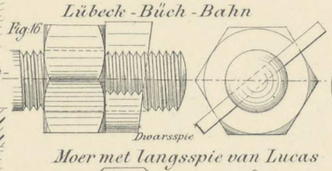
Parsons bout.

Fig. 15.



Lübeck-Büch-Bahn

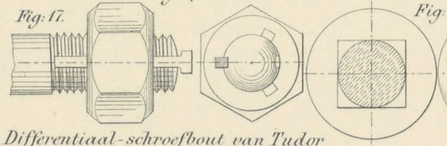
Fig. 16.



Dwarsspie

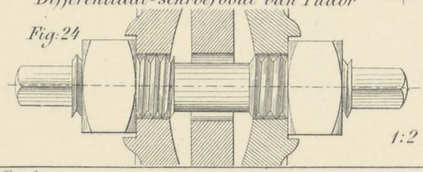
Moer met langsspie van Lucas

Fig. 17.



Differentiaal-schroefbout van Tudor

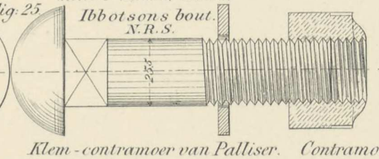
Fig. 24



1:2

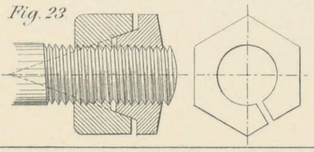
Ibbotsons bout. N.R.S.

Fig. 25



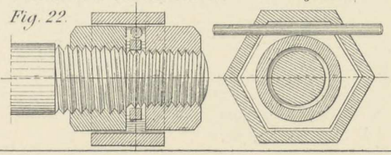
Klem-contramoer van Palliser.

Fig. 23



Contramoer van Strauch.

Fig. 22



Pen van Boucha-court.

1:5.

Veerring van Grover

As van de koutschroef

Laschbouten. Etat-Belge.

Parsons bout.

Lübeck-Büch-Bahn

Moer met langsspie van Lucas

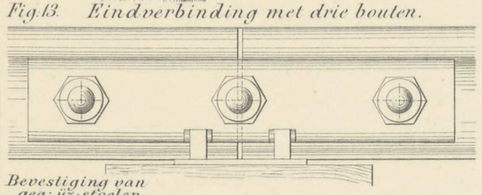
Differentiaal-schroefbout van Tudor

Ibbotsons bout. N.R.S.

Klem-contramoer van Palliser.

Contramoer van Strauch.

Fig. 13. *Eindverbinding met drie bouten.*



Tresling & C^o Hof Lith Amst.

VIGNOLESRAILS OP IJZEREN DWARSLIGGERS.

Stelsel Cosijns.
Mij tot Expl. v. S.S., 1865.
Fig. 1a. 37,6 KG. 1:5
Gewicht met houten klossen 65 KG.
Fig. 1b.
Lengte ligger 270 M.

Stelsel Vautherin.
Cie P.L.M. Algerië.
Fig. 2a.
Fig. 2b. 1:5
Gewijzigde bevestiging. Vautherin
Fig. 2c.
Bevestiging Degreef
Fig. 2d.

Stelsel Langlois.
Slachtplaats La Villette.
Fig. 9a. 1:10 Fig. 9b.

Fig. 3a.
Fig. 3b.
Lengte ligger 2,30 M.
Gewicht 44.5 KG.

Stelsel Vautherin.
K.E.D. Elberfeld.
Fig. 3c
Fig. 3d.
Profil 1879
Profil 1860

Stelsel Le Crenier. Portugal.
Fig. 4a.
Fig. 4b.

Stelsel Tardieu. Est — français.
Fig. 7.

Stelsel Legrand en Sal-kin
Etat — Belge
Fig. 6.

Stelsel Humbert. Est — français
Fig. 5.

Klemplaten Ruppell.
Nº 5. Nº 0. Nº 3.
Fig. 10d. 1868
Fig. 10e. 1:2. 1880

Stelsel Schaltenbrand
Fig. 8.

Figuren schaal 1:5

Stelsel Guillaume. Est-francais.
Fig. 13a.
Fig. 13b.
Fig. 13c.

Stelsel Küpfer. Gotthard bahn.
Fig. 12.

Reichs bahnen. Elsass — Lothringen.
Fig. 11.

Lengte ligger 2.50 M.
Gewicht 78. KG.

Fig. 10a. Stelsel Rheinische — Bahn, 1868.
Gewicht 35. KG.
Lengte ligger 2,25 M.
Fig. 10b.
Fig. 10c.

Uitg de Gebrs v. Cleef.

Tresling & Cº Hof-Lith Amst.

VIGNOLESRAILS OP IJZEREN DWARSLIGGERS

Oud Stelsel Haarmann.

Fig. 1a. 1 à 5.

Lengte ligger 2.40 M.
Gewicht met gegoten ijzeren klossen 60 K.G.

Fig. 1b. 1 à 5.

Tramspoor met onsymmetrisch railprofil.

Fig. 1c. 1 à 5.

Stelsel Haarmann
Pruissische Staatsbahnen.

Fig. 2a. 1 à 5.

Lengte ligger 2.40 M.
Gewicht met draagplaten 80 K.G.

Fig. 2b. 1 à 5.

Klembout.

Fig. 5f. 1 à 2.

Stelsel Heindl.

Fig. 4a. 1 à 5.

Arlbergtunnel
(Oesterreichische Staatsbahnen.)

Lengte ligger 2.40 M.
Gewicht 72 K.G.

Fig. 4b. 1 à 5.

Fig. 4c. 1 à 5.

Fig. 3a. 1 à 5.

Fig. 3b. 1 à 5.

Klembout (moer met ribben en veerring.)

Fig. 7e. 1 à 2.

Klemplaat.
met ribben te smeden.

Fig. 7d. 1 à 2.

Fig. 5a. 1 à 5.

Lengte ligger 2.30 M.
Gewicht met draagplaten 44 K.G.

Stelsel Holl. kl. Sp. M.y

Fig. 5b. 1 à 5.

Fig. 5c. 1 à 5.

Klemplaten.

Fig. 5d. 1 à 2.

Draagplaten.

Fig. 5e. 1 à 2.

Stelsel Roth en Schüler
Badische Staatsbahnen.

Fig. 8a. 1 à 5.

Lengte ligger 2.25 K.G.
Gewicht 42 K.G.

Fig. 7a. 1 à 5.

Stelsel Hörde-Post.

Fig. 7c. 1 à 5.

Fig. 7c'. 1 à 5.

Klemplaat.

Fig. 8b. 1 à 2.

Stelsel Brunon.

Fig. 6a. 1 à 5.

Regelingsplaat.

Fig. 8c. 1 à 2.

Fig. 7b. 1 à 5.

Lengte ligger 2.60 M.
Gewicht 55 K.G.

Fig. 6c. 1 à 5.

Lengte ligger 2.25 M.
Gewicht 32 K.G.

Fig. 6b. 1 à 5.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen 's Hage.

STOEL-EN VIGNOLESRAILS OP IJZEREN DWARSLIGGERS.

Stelsel Webb.

Fig. 1a. London and N. Western. 41,7 KG. 1435

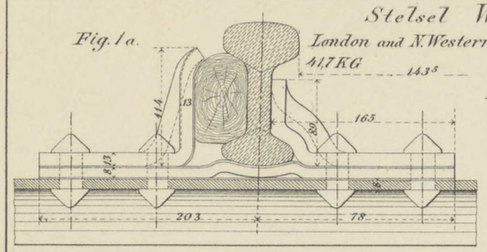


Fig. 1c.

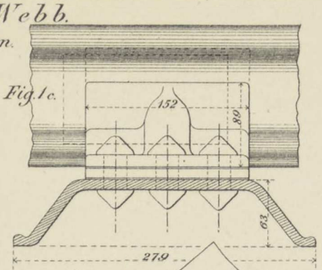
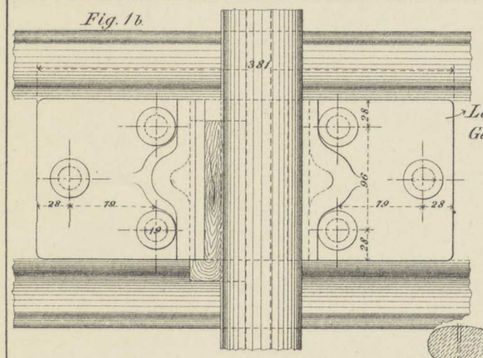


Fig. 1b.



Stelsel Etat-Paulet. francais. 38 KG.

Fig. 2a. 145

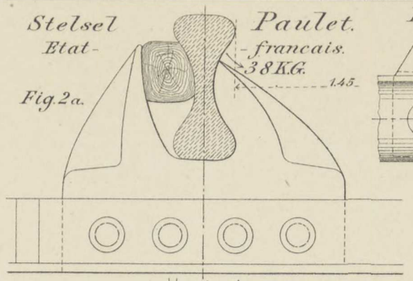
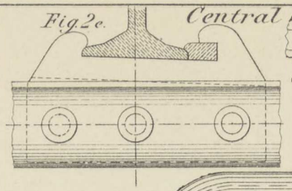
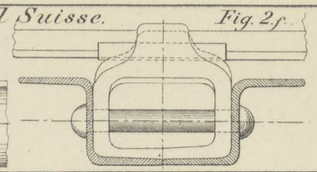


Fig. 2c.



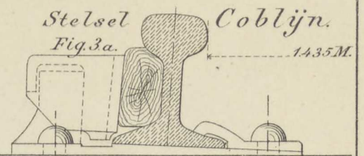
Central Suisse.

Fig. 2f.



Stelsel Coblijn.

Fig. 3a. 1435 M.



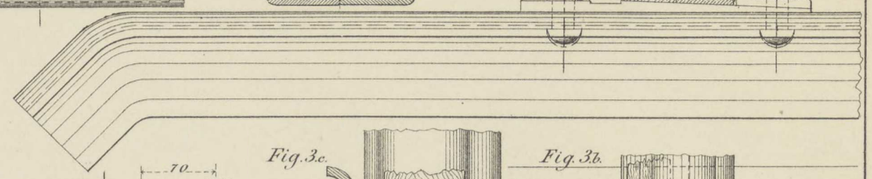


Fig. 2b.

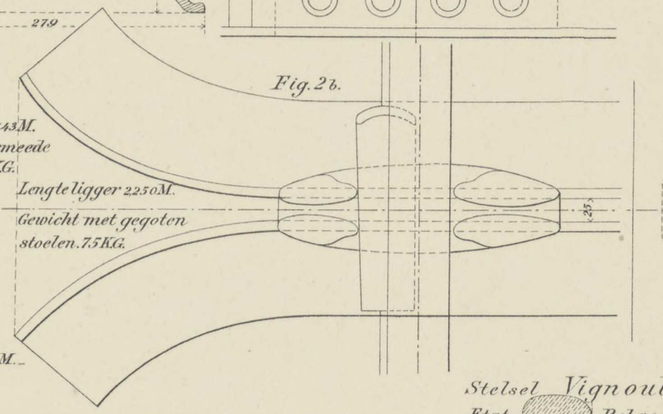


Fig. 2c.

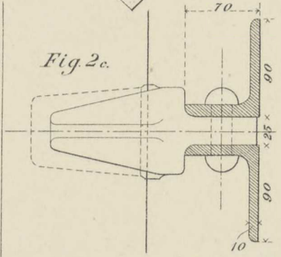


Fig. 3c.

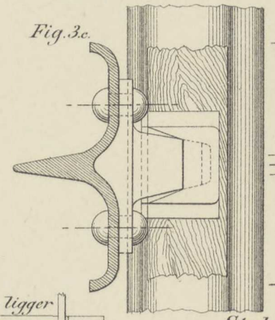


Fig. 3b.

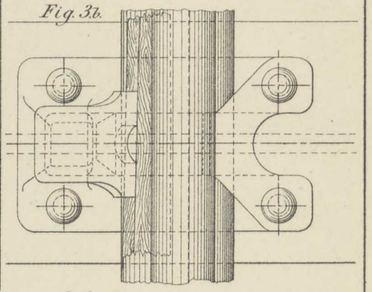
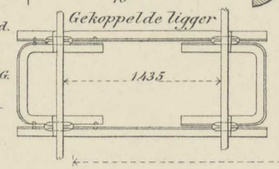


Fig. 2d. 1:50



Stelsel Sévérac

Nord-francais. 30 KG. Lengteligger 2300 M. Gewicht met draagplaten 57 KG. 1445 M.

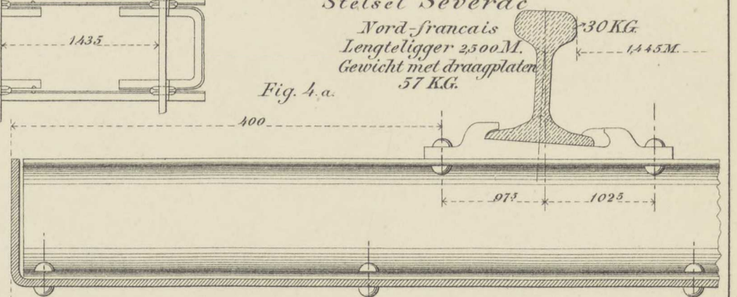


Fig. 4a.

Fig. 4b.

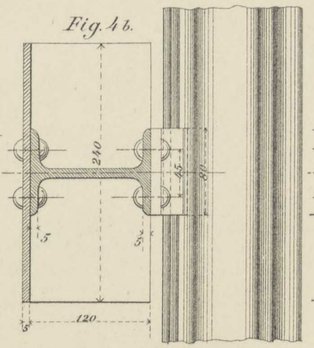
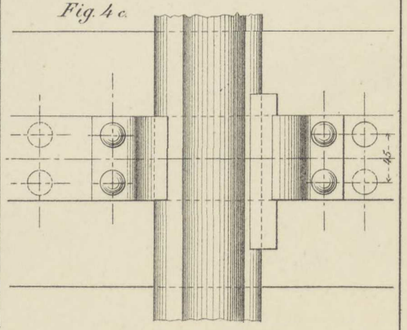


Fig. 4c.



Stelsel Bernard.

Nord-en Etat-Belge.

Fig. 6a. 1,445 M. 38 KG.

Lengte ligger 2320 M. Gewicht met draagplaten 105 KG.

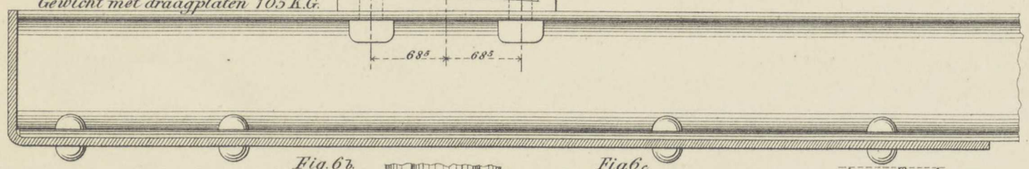


Fig. 6b.

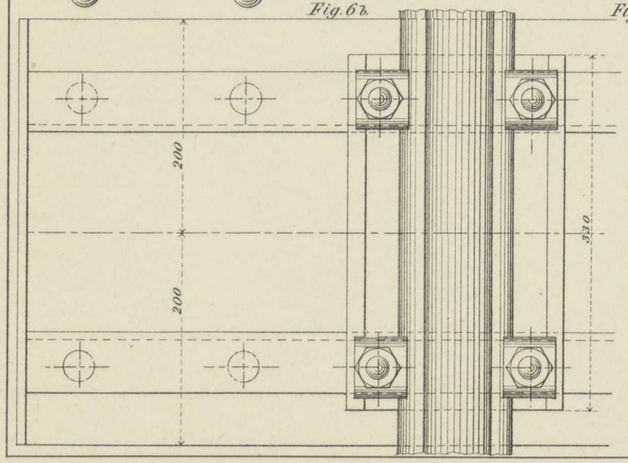
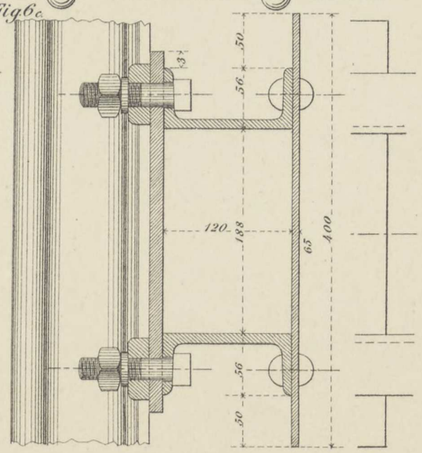


Fig. 6c.



Stelsel Vignoul Etat-Belge

Fig. 5a. 1435 M. 38 KG.

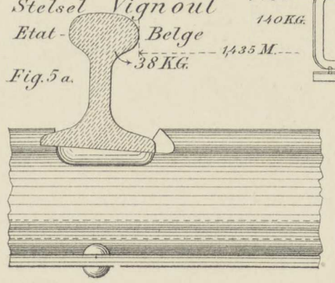


Fig. 5b.

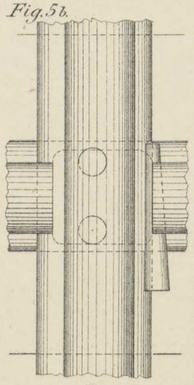
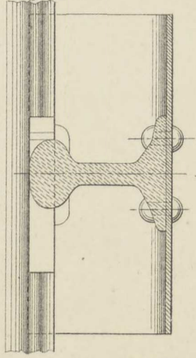


Fig. 5c.



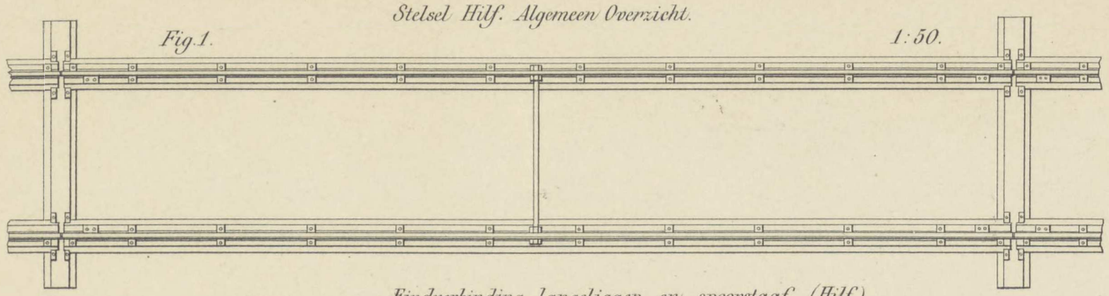
De maten zijn m.M; de figuren Schaal 1:5.

Uitg. de Gebrs v. Cleef.

Tresling & Co Hof-Lith. Amst.

Stelsel Hilf. Algemeen Overzicht.

Fig. 1. *1:50.*



Eindverbinding langsligger en spoorstaaf (Hilf)

Fig 3.a *1:5.*

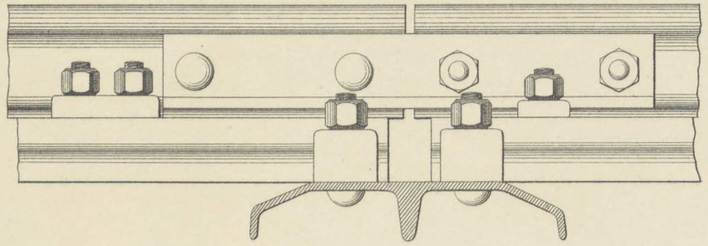


Fig. 3.b *1:5.*

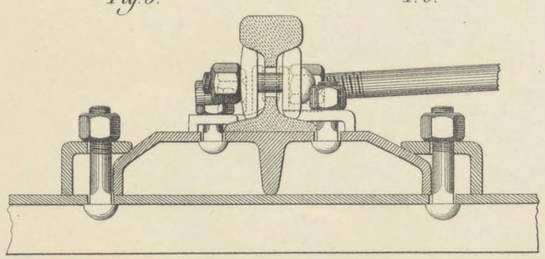
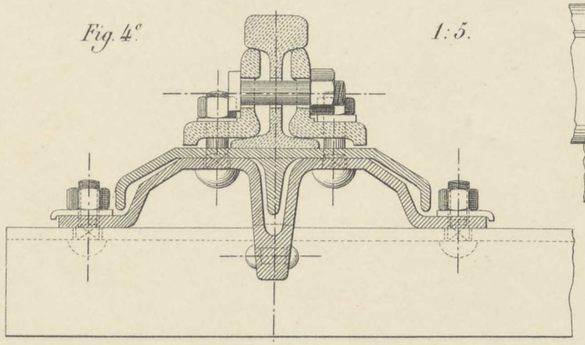


Fig. 4.c *1:5.*



Nieuwe eindverbinding langsligger en spoorstaaf (Hilf.)

Fig. 4.a *1:5.*

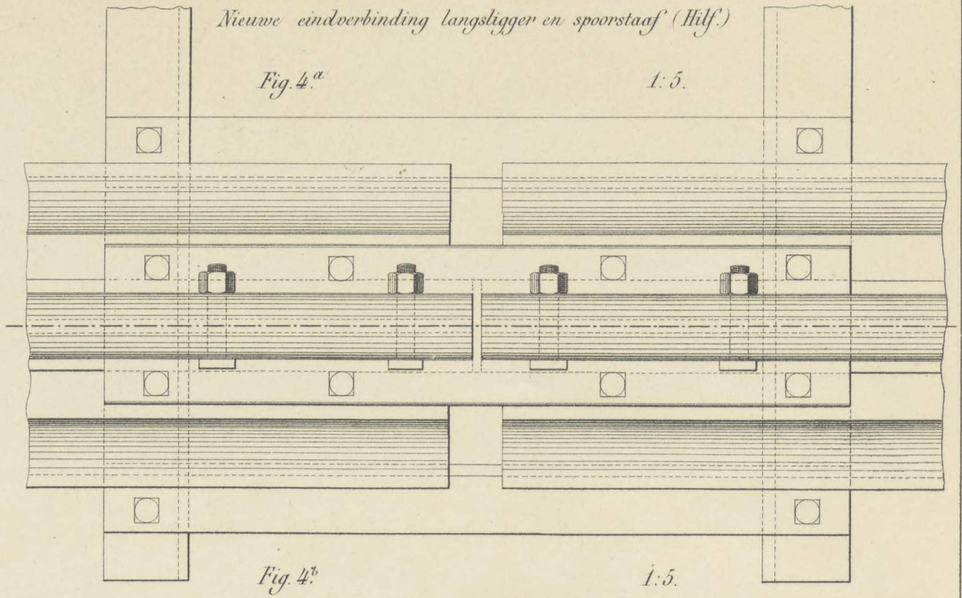
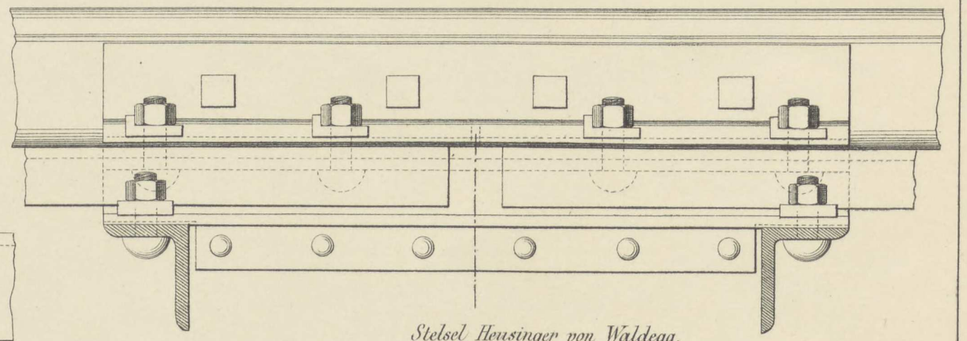


Fig. 4.b *1:5.*



Stelsel Heusinger von Waldegg.

Fig. 2. *Stelsel Heusinger von Waldegg Algemeen Overzicht.* *1:50.*

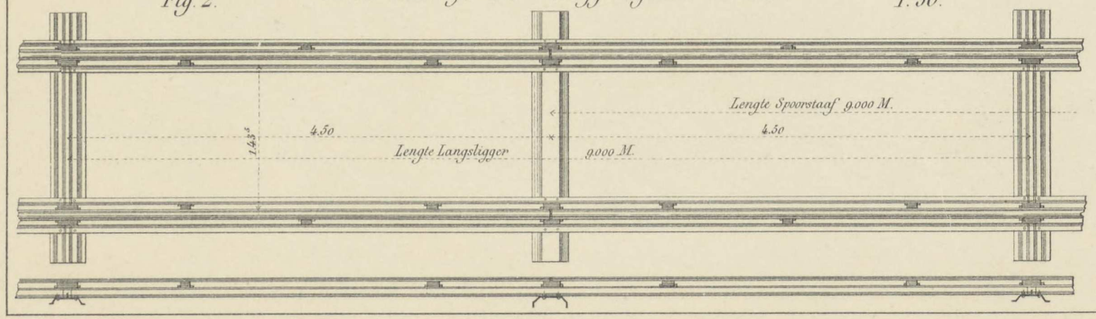


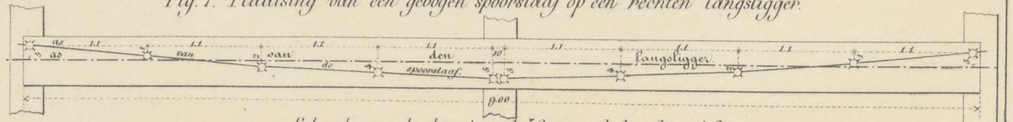
Fig. 5. *op den rechten weg.*

Dwarsprofillen.

1:5.

Fig 6. *in bogen.*

Fig. 7. Plaatsing van een gebogen spoorstaaf op een rechten langsligger.

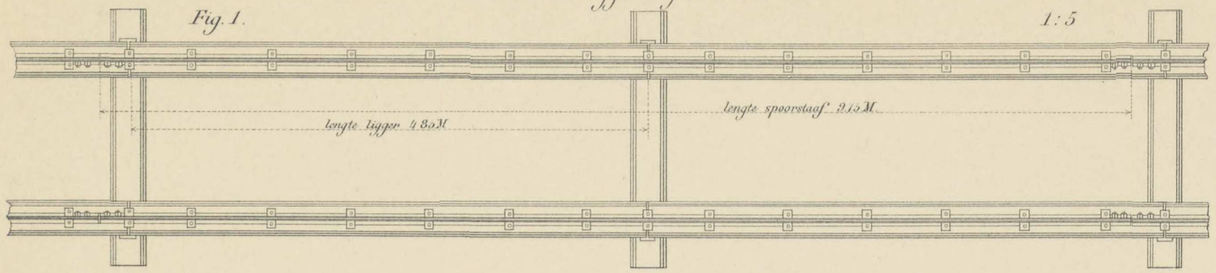


Schaal voor de lengten 1:50, voor de breedten 1:2.

Uitg. de Gebr.s v. Cleef. Steendr. v. Gebr. v. Langenhuysen.

Stelsel Hohenegger Algemeen overzicht.

Fig. 1. 1:5



Eindverbinding langsligger (Hohenegger)

Fig. 2.a 1:5.

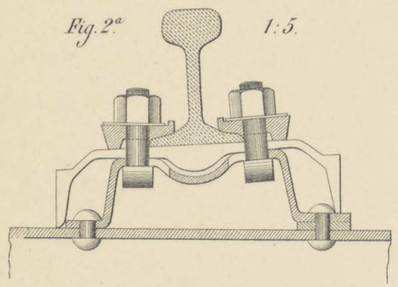
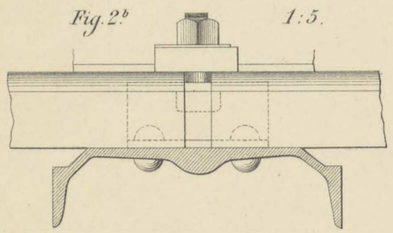
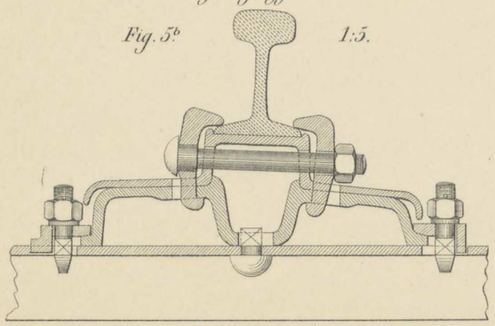


Fig. 2.b 1:5.



Eindverbinding langsligger (Haarmann)

Fig. 5.b 1:5.



Eindverbinding der spoorstaven (Haarmann)

Fig. 5.c 1:5.

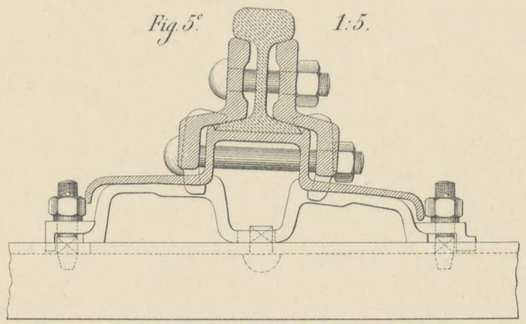


Fig. 3.a *Nieuwe eindverbinding langsligger en spoorstaaf (Hohenegger)* 1:5.

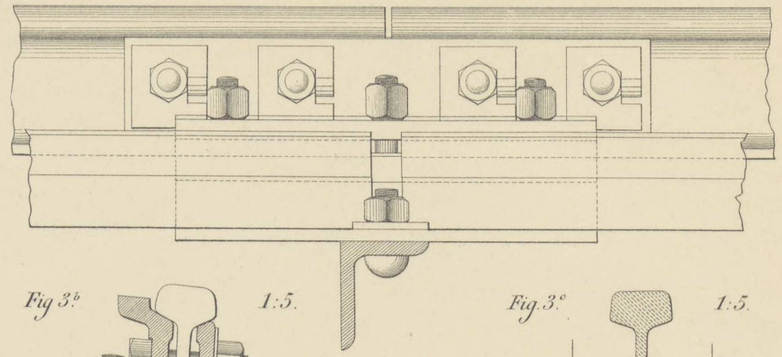


Fig. 3.b 1:5.

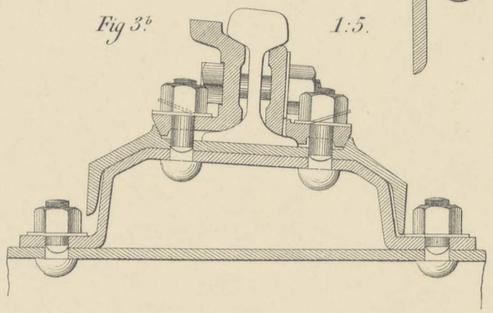
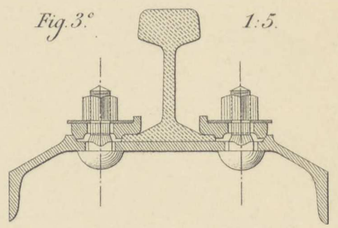
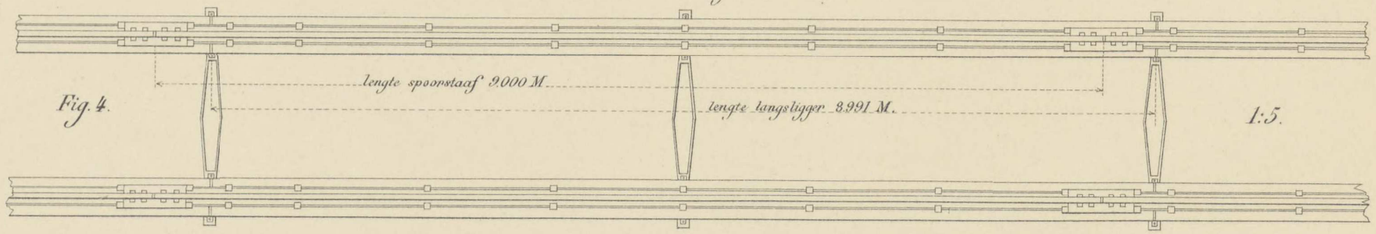


Fig. 3.c 1:5.



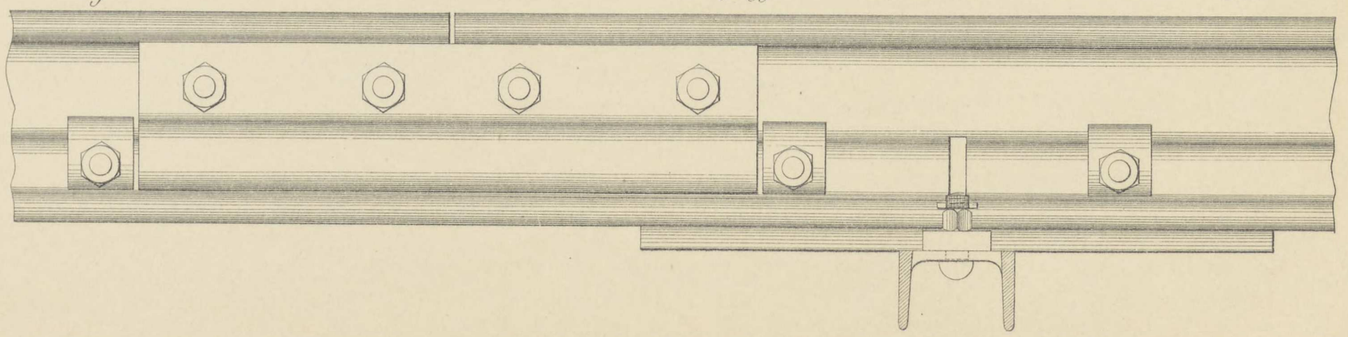
Stelsel Haarmann Algemeen overzicht.

Fig. 4.



1:5.

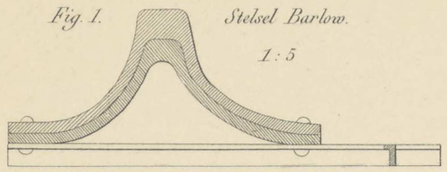
Fig. 5.a *Eindverbinding der spoorstaven en der langsliggers (Haarmann) Aanzicht.* 1:5.



Uitg. de Gebr.s v. Sleen. Steendr. Gebr. v. Langenhuysen, 's Hage.

IJZEREN LANGSLIGGERS. EEN-EN MEERLEDIGE STELSELS.

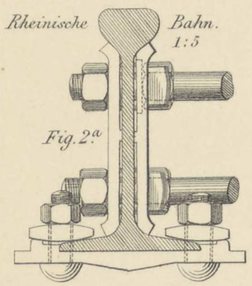
Fig. 1. Stelsel Barlow. 1:5



Stelsel Hartwich.

Rheinische Bahn. 1:5

Fig. 2.a



Köln Mindener Bahn. 1:5

Fig. 3.

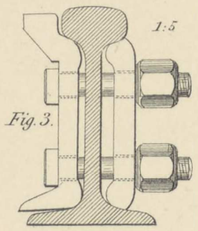
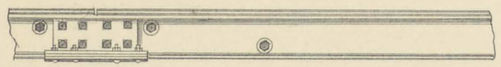


Fig. 2.b 1:25.



Stelsel Winby en Levick.

Fig. 5. 1:5.

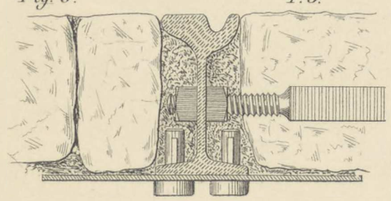


Fig. 7.a Stelsel Gowans. 1:5.

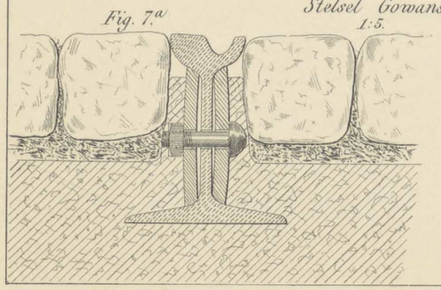


Fig. 4. Haarmann's Straatsysteem voor tramwegen. 1:5

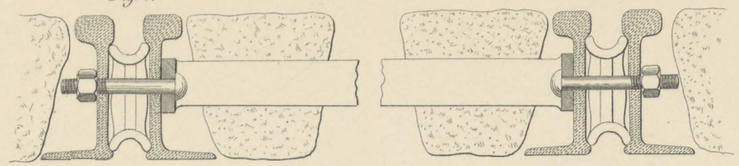
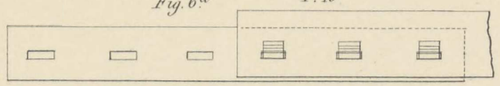
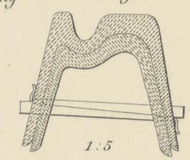


Fig. 6.d 1:10



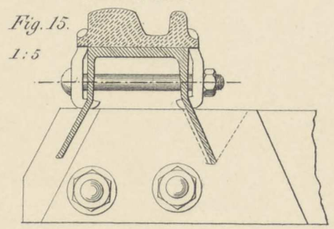
Laschverbinding Fig. 6.c



1:5

Stelsel Geveke.

Fig. 15. 1:5



Stelsel de Serres en Battig.

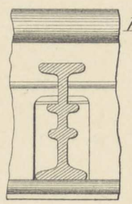
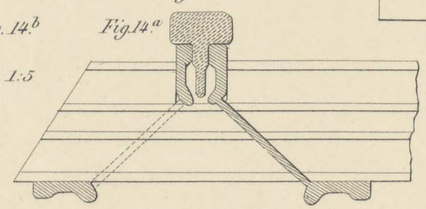


Fig. 14.b 1:5

Fig. 14.a



Stelsel Heusinger von Waldegg.

Fig. 17.a 1:5

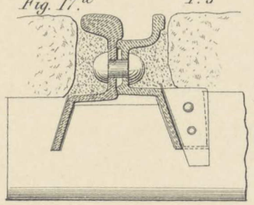
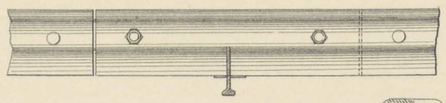


Fig. 17.b 1:10.



Haarmann's „Schwellenschiene".

Fig. 10.b 1:10.

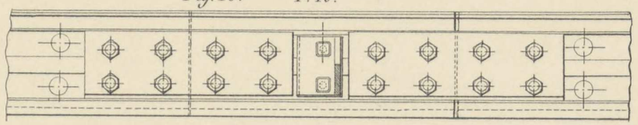
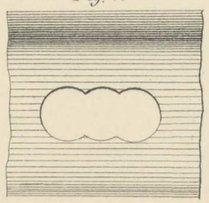
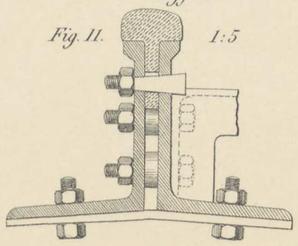


Fig. 7.b



Stelsel Scheffler

Fig. 11. 1:5



Stelsel Daelen.

Fig. 12. 1:5.

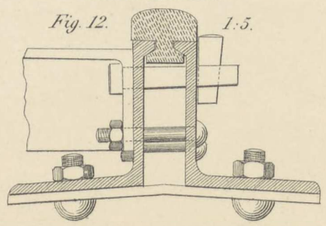
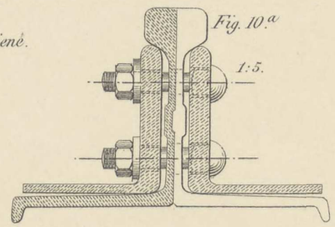


Fig. 10.a 1:5.



Stelsel Demerbe.

Profillen in bogen.

Fig. 6.f. buitenrail. 1:5

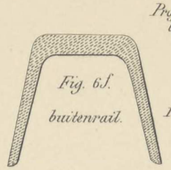


Fig. 6.e. binnenrail.

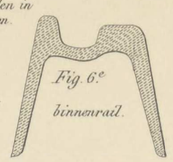


Fig. 6.b Profil buiten bestrating. 1:5

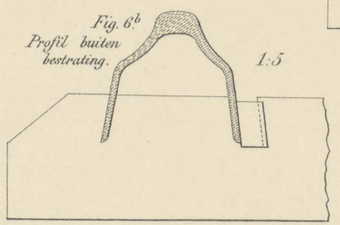
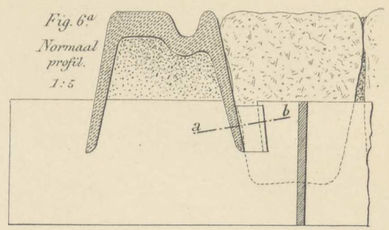
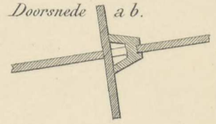


Fig. 6.a Normaal profil. 1:5



Doorsnede a b.



Stelsel Edge. 1:5

Fig. 16.b

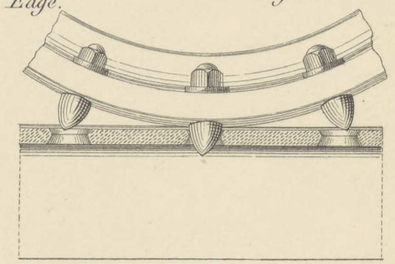
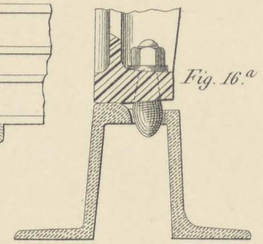


Fig. 16.a



Stelsel Mac Donnell.

Fig. 8.a 1:5

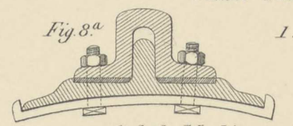


Fig. 8.b

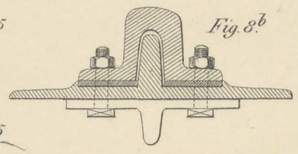
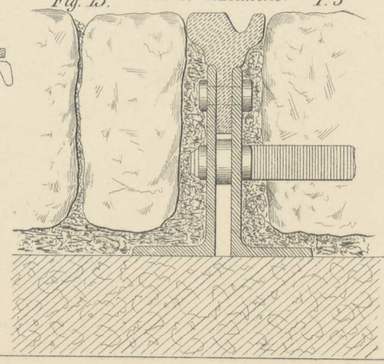
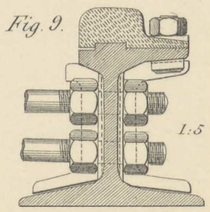


Fig. 13. Stelsel Meakins. 1:5



Stelsel Winkler.

Fig. 9.



1:5

Uitg. de Gebr.s v Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

Eerste tramrails te New-York.

Fig 1. 4e Avenue.

Fig. 2. 6e Avenue.

Fig. 3. 3e Avenue.

1:5

Fig. 4. 8e Avenue.

Fig. 5. 2e Avenue.

Fig. 7. Ch. Light. Boston.

Fig. 6.a Loubat. Parijs. 1:5

Fig. 15.a Cassel. *Stelsel Busing* *Fig. 15.b* 1:5

Fig. 14. Hannover. 1:5

Stelsel Geveke.

Fig. 8. 1:5

Fig. 9.a Normaal profil.

Fig. 9.b Profillen in bogen. Binnenrail.

Fig. 9.c Buitenrail. 1:5

Fig. 12.a *Stelsel Deacon.* 1:5

Fig. 10. Bremen. 1:5

Fig. 12.b 1:20.

Stelsel Keiffler. Posen.

Fig. 11. 1:5

Cie des Omnibus. Parijs. *Fig. 6.b* 1:5

Stelsel Deacon.

Fig. 13.b 1:20.

Fig. 13.a 1:5.

Stelsel Larsen. *Fig. 16.* 1:5

Dublin. *Fig. 17.*

Fig. 25. Wirral. 1:5.

Hannover. *Fig. 20.* 1:5.

Fig. 23. Budapest. 1:5

Stelsel Souttar. *Fig. 19.* 1:5

Fig. 24.a

Rouaan.

Fig. 24.b

Fig. 22.a Stelsel 1:5.

Fig. 22.b Fischer-Dick. 1:5.

Fig. 22.c Grosse Berliner Pferdebahn. 1:10.

Stelsel St. Yoes. *Fig. 18.* 1:5.

Lubeck. *Fig. 21* 1:5

Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen, 's Hage.

STELSELS VAN BOVENBOUW VOOR TRAMWEGEN.

Fig. 1.a *Stelsel Mackison.* *1:5.*

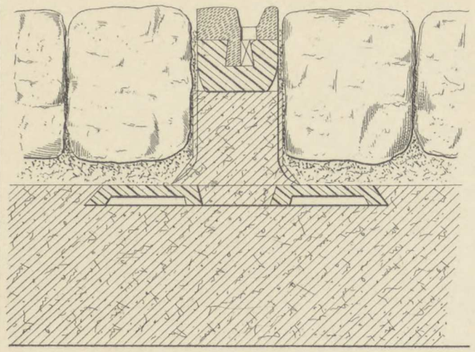


Fig. 1.b

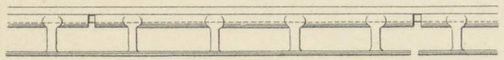


Fig. 1.c *1:20.*

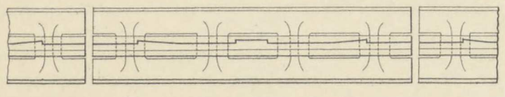


Fig. 2. *Stelsel Kerr.* *1:5.*

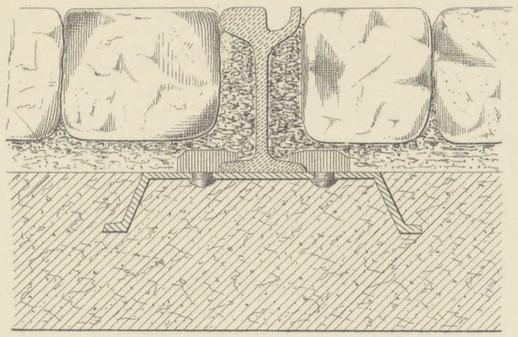


Fig. 3. *Stelsel Aldred en Spielmann.* *1:5*

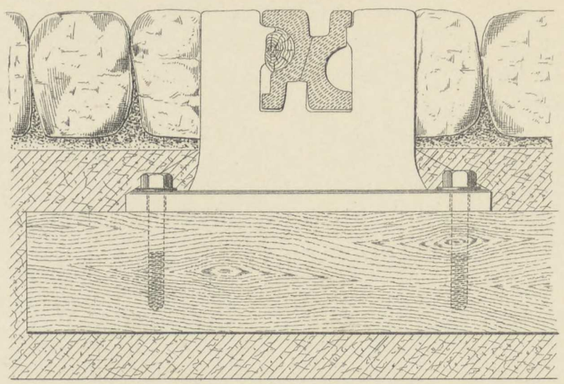


Fig. 4. *Stelsel Truswell.* *1:5.*

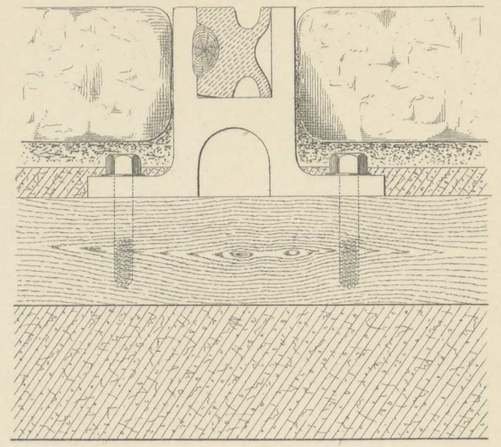


Fig. 6.a *Stelsel Shaw.* *1:5.*

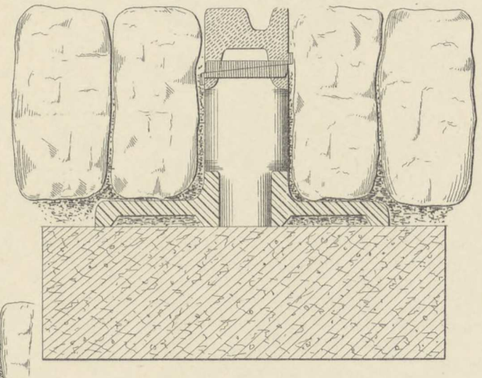
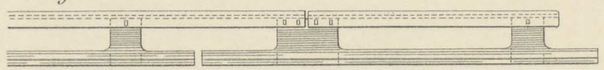


Fig. 6.b



1:20.

Fig. 6.c

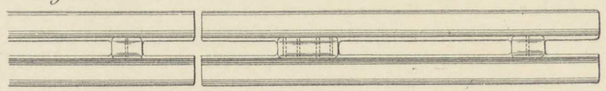


Fig. 7.a *Stelsel Vignoles.* *1:5.*

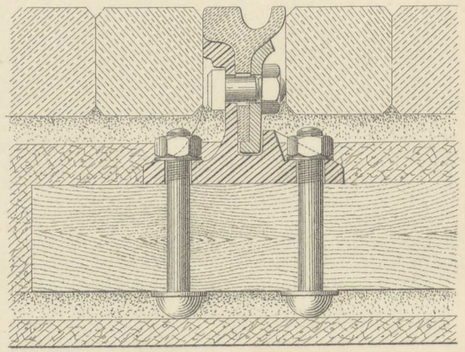


Fig. 7.b *1:20.*

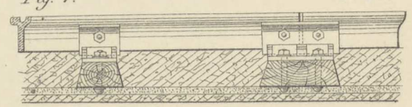


Fig. 5.a *Stelsel Dugdale.* *1:5.*

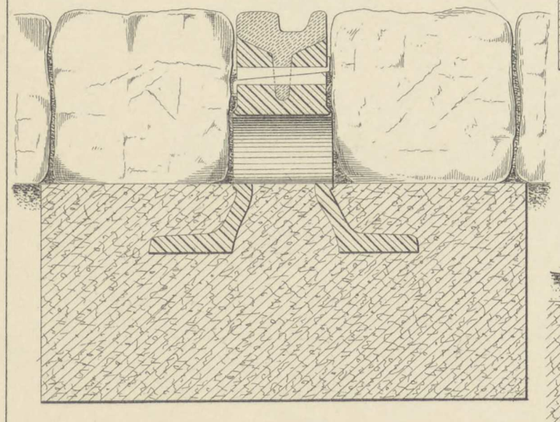


Fig. 5.b *1:20.*

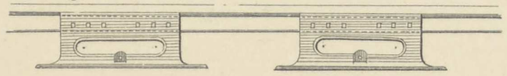


Fig. 8.a *Stelsel Hincaid.* *1:5.*

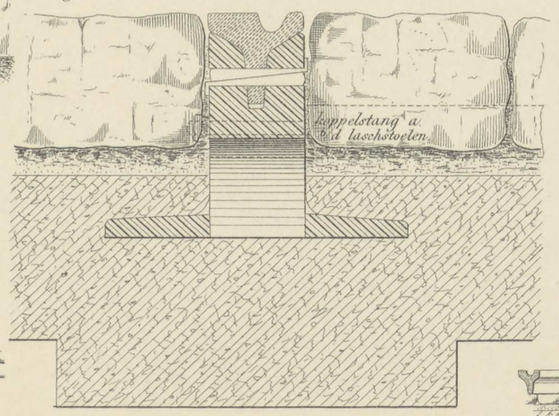


Fig. 8.b *1:20.*

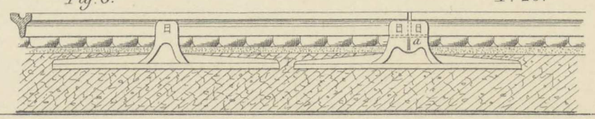


Fig. 9.a *Stelsel Wilson.* *1:5.*

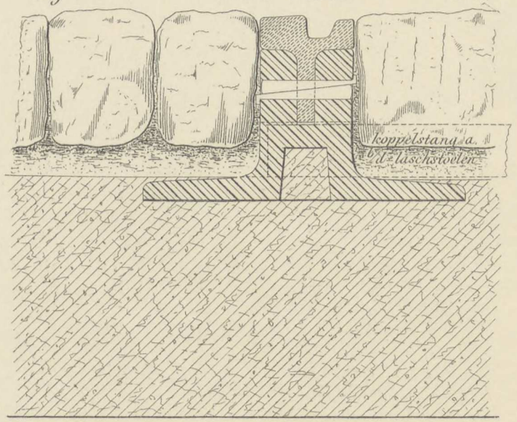
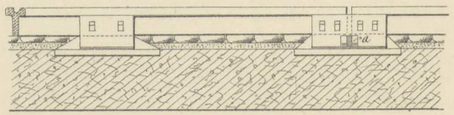


Fig. 9.b *1:20.*



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr v. Langenhuysen, 's Hage

Gesleten Spoormaterialen.

Tusschen twee dwarsliggers. Op den dwarsligger. Ingesleten klembout.

Fig. 1b. Fig. 1a. Fig. 1c. Fig. 2. 1:3.

1:5. 1:20. 1:5.

Rail en laschverbinding der Penssylvania Railroad.

Fig. 4. 1:5.

Fig. 5a Bruglasch van Fisher.

Fig. 5b 1:5.

Laschplaat.

Fig. 3a 1:5.

Rail bij de laschverbinding.

Fig. 3b 1:5.

Versleten rail en laschplaat type P.M. der Cie P.L.M.

7.5 m.M.

Schroefpers of beer.

Fig. 8.

Machine met drie walsen.

Fig. 9. 1:25.

Werktuig tot het uittrekken van haakponten.

Fig. 18. Stophamer voor fijnen ballast.

Stophamer voor groven ballast.

1:10.

Fig. 17. Stamper 1:10.

Fig. 19 1:10.

Fig. 20.

1:10.

Fig. 12. Lichtboom.

Railhaak. Fig. 21. 1:10.

Fig. 14. Lichtplank. met libel. 1:10.

Fig. 6a Keepmal. Fig. 7a

1:16. 1:16.

Voor dwarsliggers 4/4 voeg. Fig. 6b

Voor tusschendwarsliggers. Fig. 7b

1:10.

Fig. 13. Dompblok.

1:10.

Buigmachine van Schrabetz.

Fig. 11b

Fig. 11a

Fig. 11c

Verhoogingsplankje Fig. 15.

Spoorlichter van de Bergue. Fig. 16a

1:10.

Fig. 16b

Buigmachine van Vojacek.

Fig. 10.

Uitg. de Gebr. v. Cleef. Steendr. Gebr. v. Langenhuysen, s-Hage.

Mal tot het bevestigen der stoelen op de dwarsliggers.

Fig. 1a

1:10

Fig. 1b

Mal tot het controleeren der aangebrachte stoelen.

Fig. 2a

1:10.

Fig. 2b

Voeg over één dwarsliggerafstand verspringend.

Fig. 7.

600 600 600

Est-Français.

Fig. 8. Verdeeling der dwarsliggers.

Hollandsche IJzeren Spoorweg. Raillengte 9.80 M. Gewicht per M.t 38.6 K.G.

320 880 925 925 925 925 925 925 925 925 880 320

Great Eastern. Raillengte 9.14 M. Gewicht per M.t 39.7 K.G.

321 942 942 942 942 942 942 942 942 942 942 321

Great Western. Raillengte 7.92 M. Gewicht per M.t 39.7 K.G.

304 914 914 914 914 914 914 914 914 914 304

London and North-Western. Raillengte 9.14 M. Gewicht per M.t 41.7 K.G.

335 847 847 847 847 847 847 847 847 847 335

Caledonian. Raillengte 7.30 M. Gewicht per M.t 39.7 K.G.

410 810 810 810 810 810 810 810 810 410

Est. Raillengte 12 M. Voeg verspringt één dwarsliggerafstand. Gewicht per M.t 30 K.G.

300 770 770 770 770 770 770 780 780 770 770 770 770 770 770 600 300

Midi. Raillengte 11 M. Gewicht per M.t 37.6 K.G.

296 817 817 818 818 817 817 600 817 817 818 818 817 817 296

Paris-Lyon-Méditerranée. Raillengte 10. M. Gewicht per M.t 38.9 K.G.

300 700 850 900 900 900 900 900 900 900 900 850 700 300

Ouest. Raillengte 8 M. Gewicht per M.t 38.7 K.G.

296 727 850 850 850 850 850 850 850 727 296

Nord. Raillengte 8 M. Voegen verspringen. Gewicht per M.t 30 K.G.

300 850 850 850 850 600 850 850 850 850 300

Fig. 5. Railtang.

1:10

Fig. 3.

Spoormal. 1:10

1436

Fig. 6. Viseerbordjes.

1:10.

Goliathrail.

Dopsleutel.

Fig. 4. 1:10.

Fig. 10. 1:5.

145

135

240

Schrijfinrichting.

1:2.

Fig. 9c

Fig. 9d

Excentriek aan het einde der vaste as Fig. 9e

1:2.

Verbinding van wijzer met verplaatsbare as. Fig. 9f

1:2

Fig. 9b

1:10.

Fig. 9a

1:10.

Spoorcontroleur van Hochgrassl, verbonden aan eene draisine.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, s Hage

SLEEPWISSELS, TOESTELLEN MET VASTE SPOORSTAVEN, TONGEN-WISSELS.

Fig. 1.a
Sleepwissel van Stephenson. 1:50.

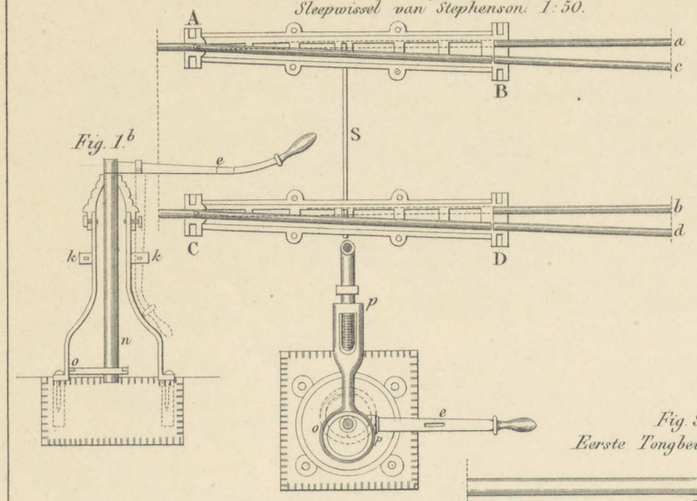


Fig. 1.b

Fig. 2.
Dubbele Sleepwissel. 1:60.

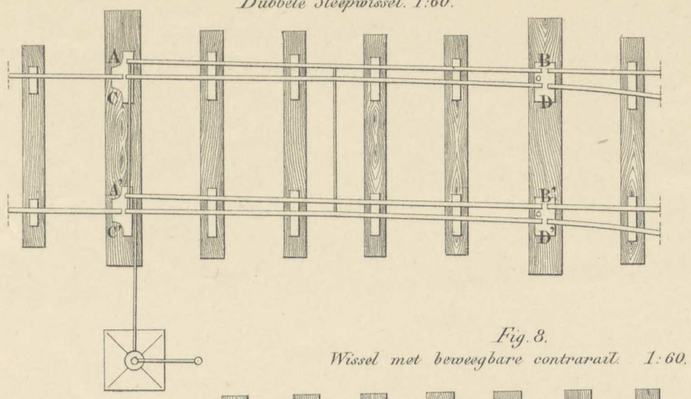


Fig. 3.
Sleepwissel van Poiret. 1:60.

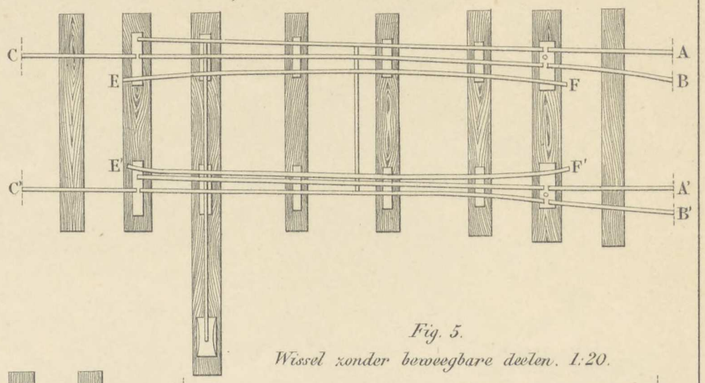


Fig. 8.
Wissel met beweegbare contrarail. 1:60.

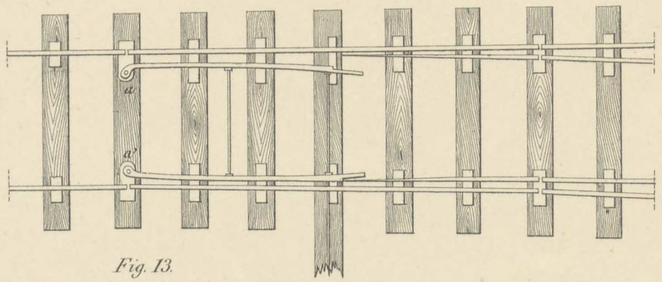


Fig. 9.
Eerste Tongbeweging. 1:20.

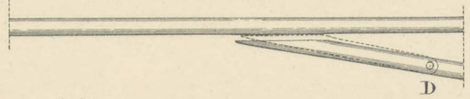


Fig. 5.
Wissel zonder beweegbare deelen. 1:20.

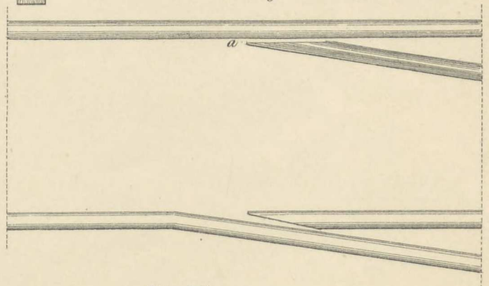


Fig. 10
Wissel met één tong van Stephenson. 1:60.

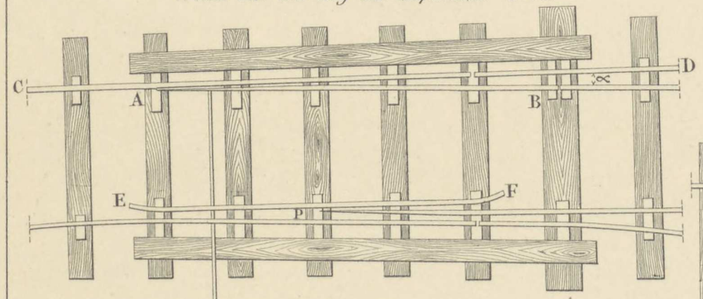


Fig. 11.
Wissel met ongelijk lange tongen. 1:60.

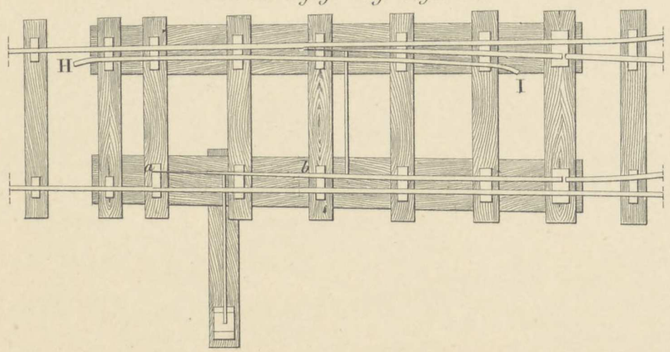


Fig. 13.
Wissel met even lange tongen. 1:60.

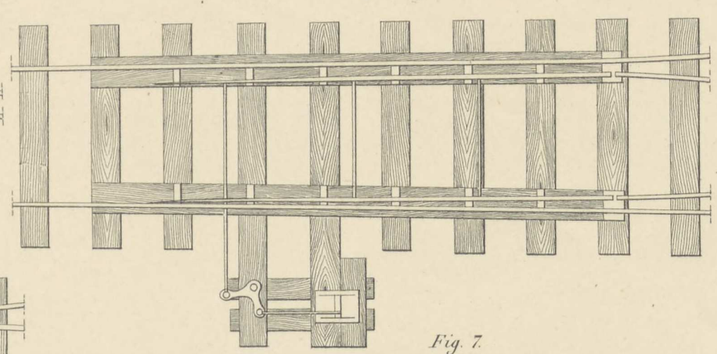


Fig. 6.a
Wissel voor tramwegen. 1:27,5

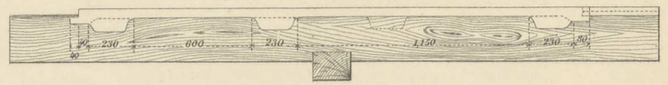


Fig. 6.b Rechterdeel.

Fig. 6.c Linkerdeel.

Fig. 6.d Doorsnede.

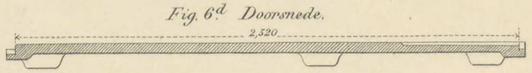


Fig. 6.e
Aanzicht a.

Fig. 6.f.
Aanzicht b.

Fig. 7.
Wissel voor Tramwegen. 1:20.

Fig. 12.
Aanslaande tong voor tramwegwissels. 1:25.

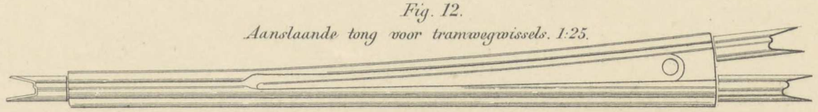
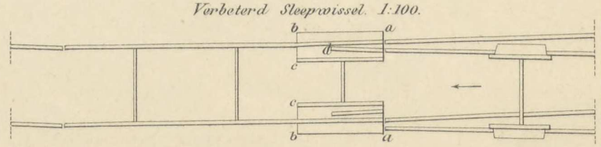


Fig. 4
Verbeterd Sleepwissel. 1:100.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, s Gravenhage.

WISSELS MET DOORGAAND HOOFDSPOOR, WISSELTONGEN.

Fig. 1a. Platte-grond. 1:36.

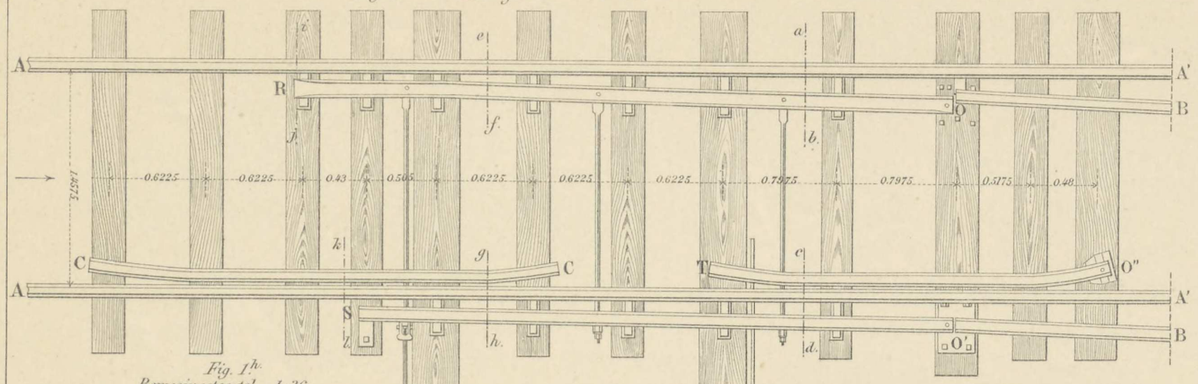


Fig. 1b. Doorsnede over a b. 1:6.

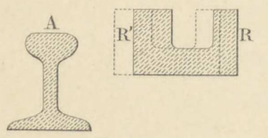


Fig. 1c. Doorsn. over c.d. 1:6.

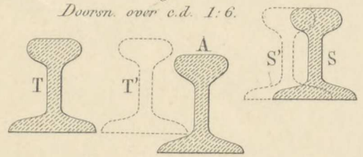


Fig. 1c. Doorsn. over e.f. 1:6.

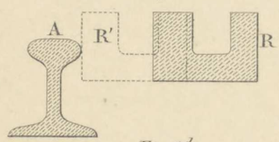


Fig. 1d. Doorsn. over i.j. 1:6.

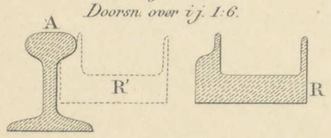


Fig. 1g. Doorsn. over g.h. 1:6.

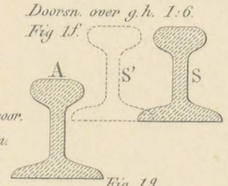
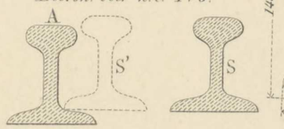


Fig. 1f. Doorsn. over k.l. 1:6.



Wissel met doorgaand hoofdspoor. Systeem Wharton. (fig. 1a - 1h).

Fig. 1h. Bewegingstoestel. 1:36.

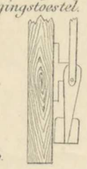
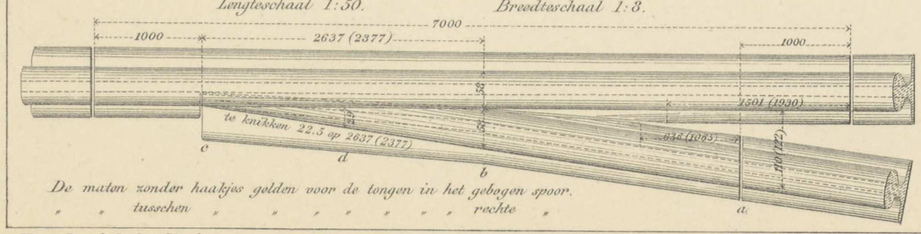


Fig. 2.
Constructie eener rechte onderslaande tong.
Lengteschaal 1:50. Breedteschaal 1:3.



De maten zonder haakjes gelden voor de tongen in het gebogen spoor.
" " tusschen " " " " " " " " rechte "

Fig. 4. Aanzicht eener onderslaande tong in de spoorrichting. 1:2.

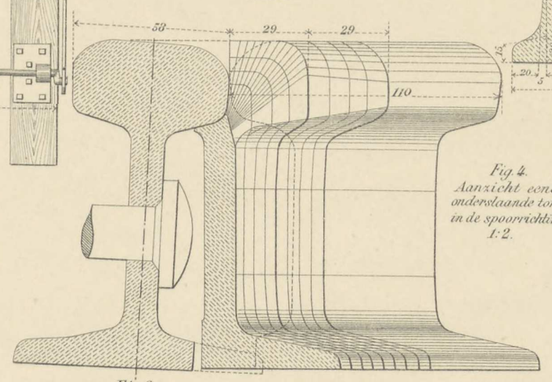


Fig. 6. Tong van Stoelrails. 1:4 (Chemin de fer de l'Etat).

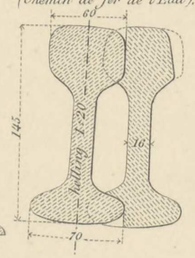


Fig. 12. Symmetrisch hoedprofiel der H.I.S.M. 1:4.

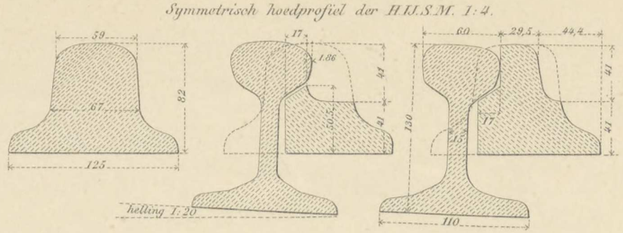


Fig. 14. Onsymmetrisch hoedprofiel der M.t.E. v.S.S. 1:4.

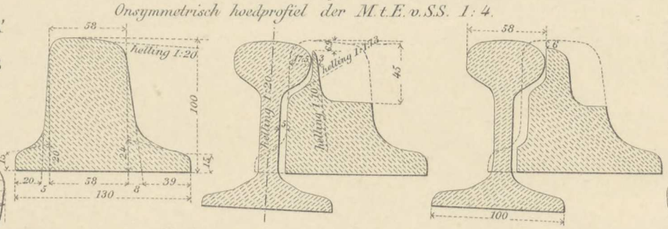


Fig. 5. Aanslaande Vignolestong der Comp. P.L.M. 1:4.

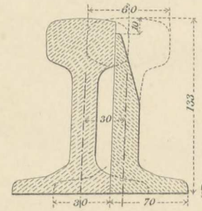


Fig. 10. Verlaagd Vignoles profiel. 1:4.

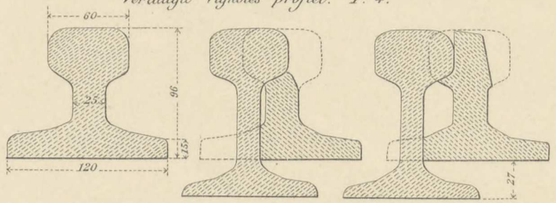


Fig. 8. Systeem Richartson. 1:4.

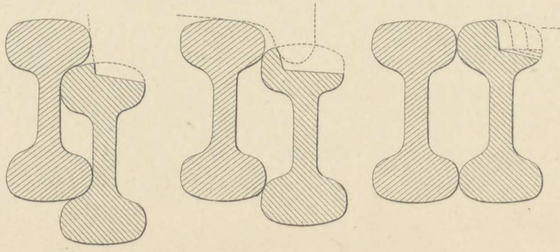


Fig. 11. Rechthoekig tongprofiel 1:4.

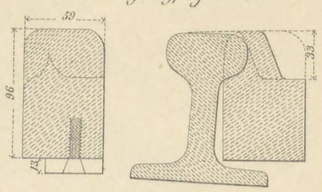


Fig. 7. Rail en tongprofiel der Comp. du Midi. 1:4.

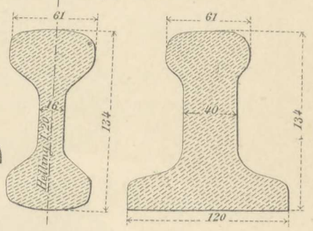


Fig. 3. Tong van Vignoles-rails der H.I.S.M. 1:4.

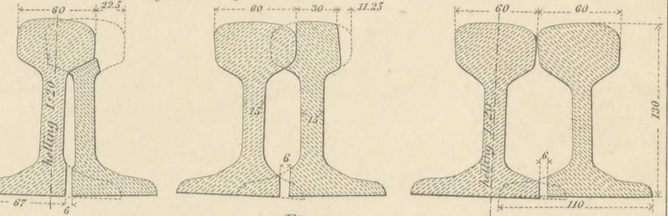


Fig. 13. L-vormig tongprofiel der Oostenrijksche Südbahn. 1:4.

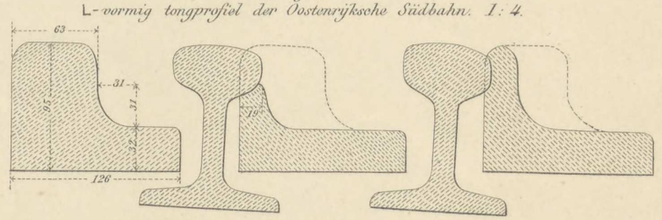


Fig. 15. Tongprofiel van Barleigh. 1:4.

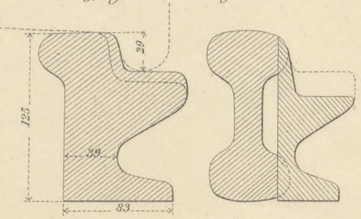
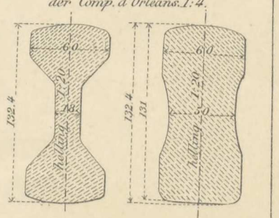


Fig. 9. Rail en tongprofiel der Comp. d'Orleans. 1:4.



Uitg. de Gebr^s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

EINDVERBINDINGEN VAN WISSELTONGEN.

Fig. 1 Dwarsdoorsnede 1:10.

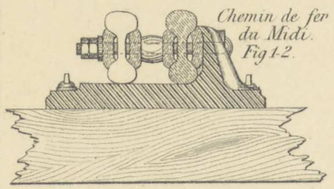


Fig. 2 Plattegrond 1:10.

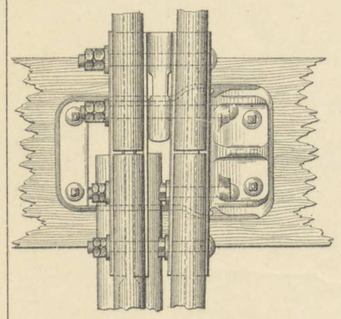


Fig. 3 Dwarsdoorsnede 1:10.

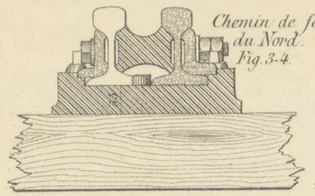


Fig. 4 Plattegrond 1:10.

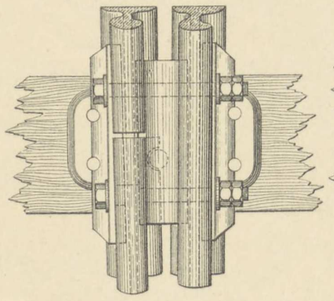


Fig. 5 Dwarsdoorsnede 1:10.

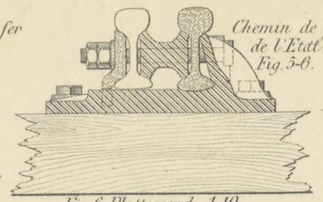


Fig. 6 Plattegrond 1:10.

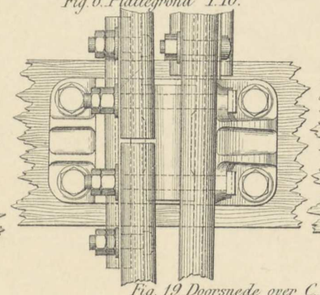


Fig. 13 Dwarsdoorsnede 1:10.

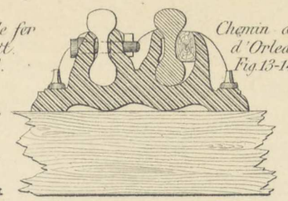
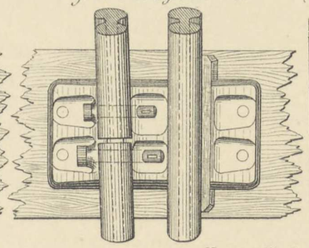


Fig. 14 Plattegrond 1:10.



Saksische Staatsspoorweg. Fig. 11 en 12.

Fig. 11 Dwarsdoorsnede 1:5.

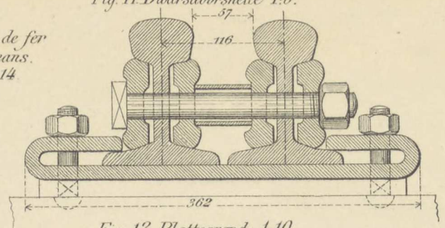
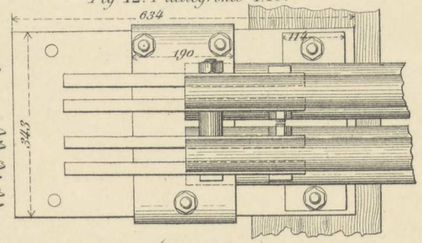


Fig 12 Plattegrond 1:10.



Oberschlesische Bahn. Fig 15 en 16.

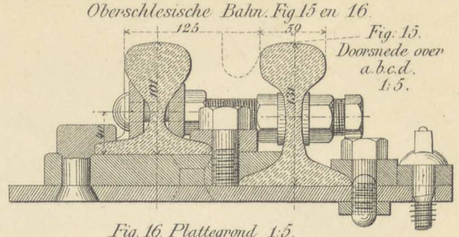
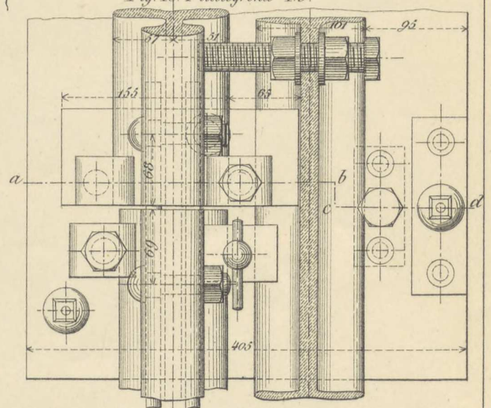


Fig. 16 Plattegrond 1:5.



Kaiser Ferdinands Nordbahn. (Fig. 17-19.)

Fig. 17 Doorsnede over A.B. 1:5

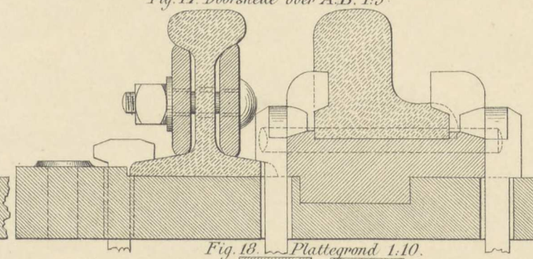


Fig. 19 Doorsnede over C.D. 1:5.

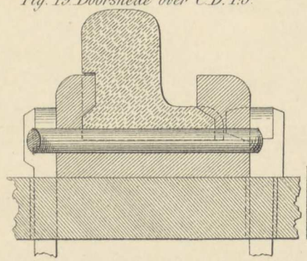


Fig. 18. Plattegrond 1:10.

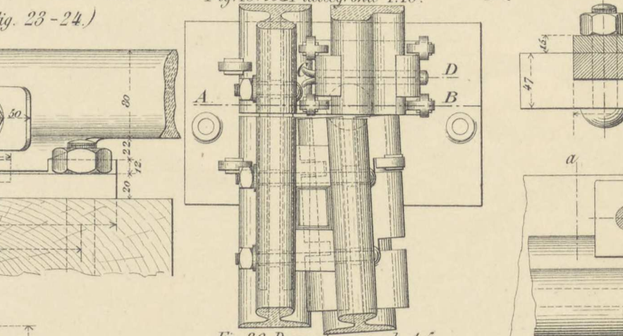


Fig. 9 Dwarsdoorsnede 1:8.

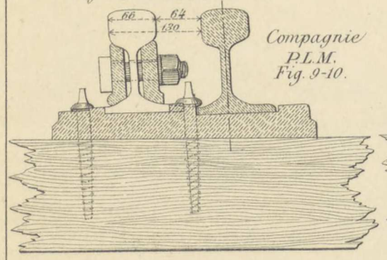
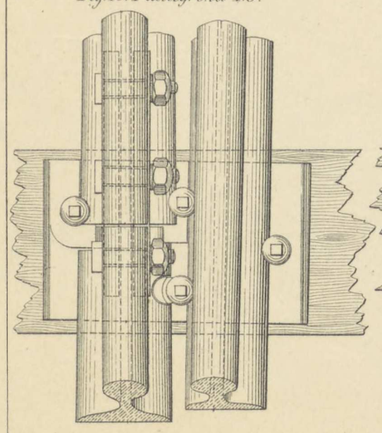


Fig. 10 Plattegrond 1:8.



Chemin de fer de l'Est.
Fig. 7-8.

Fig. 7 Dwarsdoorsnede 1:10.

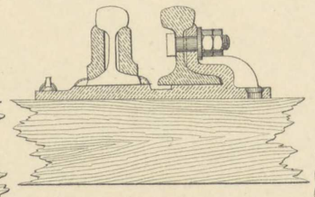
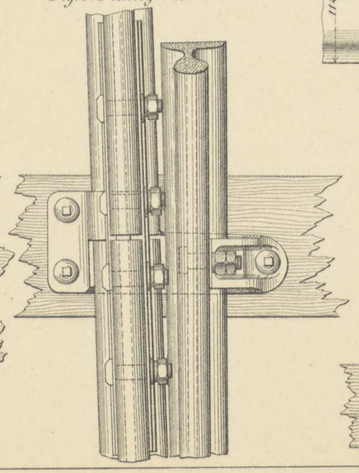


Fig. 8 Plattegrond 1:10.



Wurtembergsche Staatsbahn. (Fig. 23-24.)

Fig. 24 Zijaanzicht 1:5.

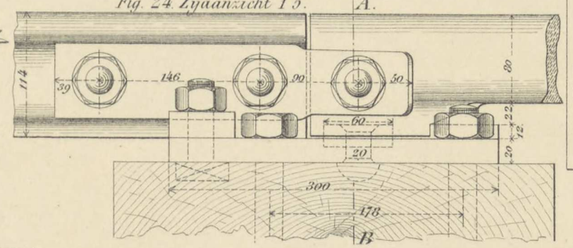


Fig 23. Doorsnede over AB. 1:5.

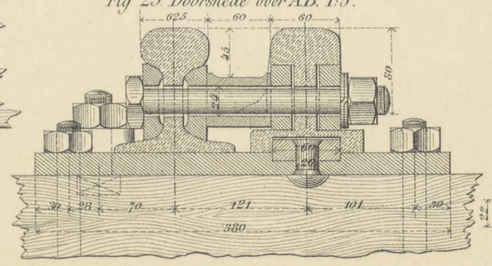
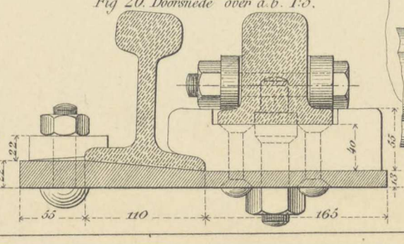


Fig 20. Doorsnede over a.b. 1:5.



Braunschweigische Bahn. Fig. 20-22.

Fig. 21 Doorsnede over c.d. 1:5.

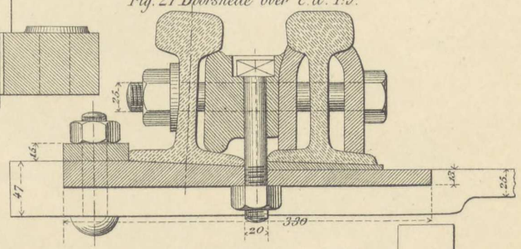
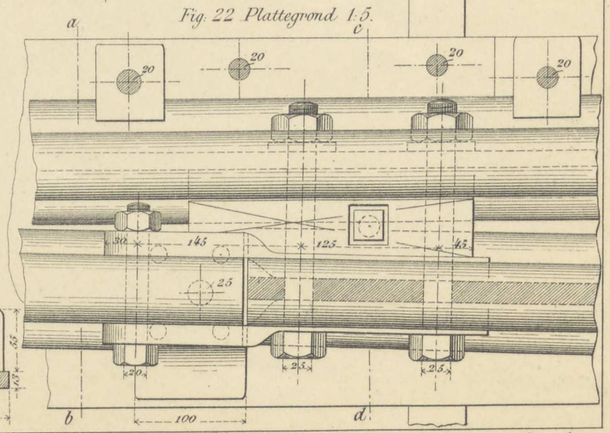


Fig. 22 Plattegrond 1:5.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

TONGBEWEGINGEN.

Tongbeweging met Vignoles-tongen der H.Y.S.M. Fig. 1-3.

Fig. 1. Plattegrond 1:20.

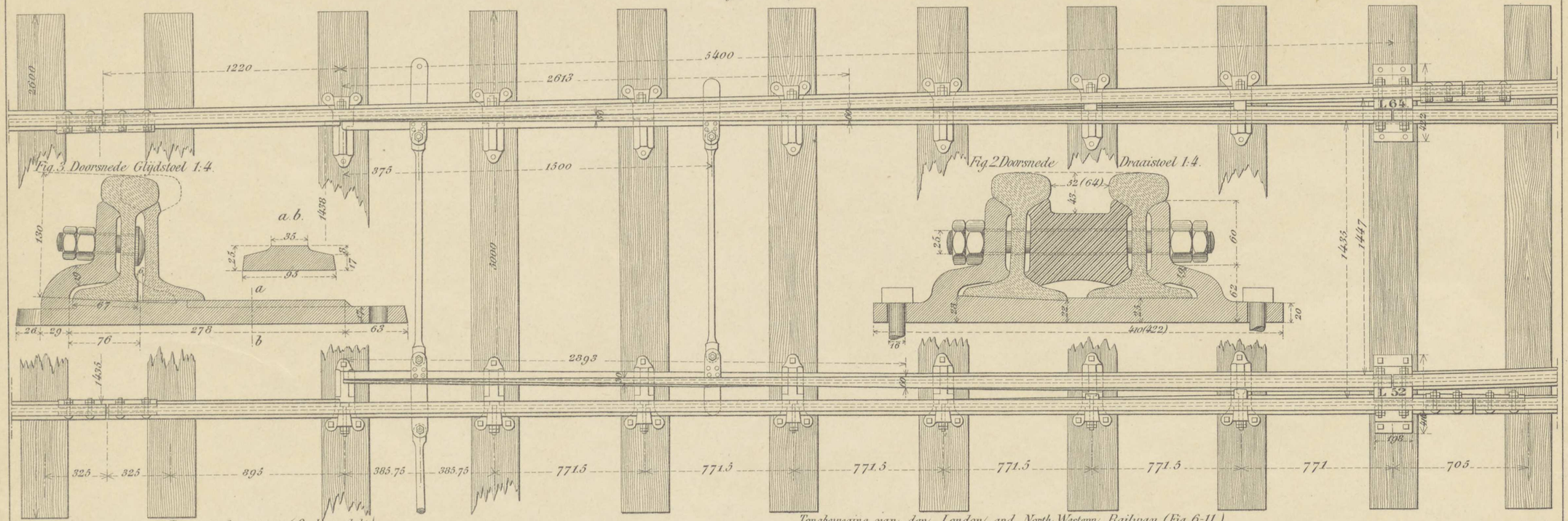
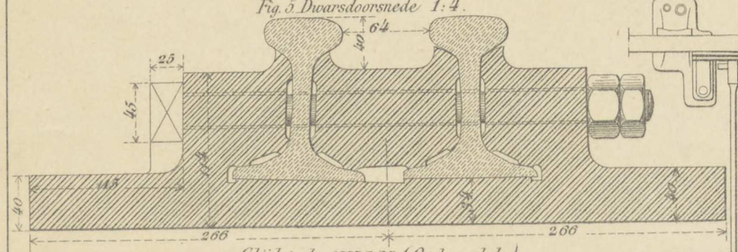


Fig. 3 Doorsnede Glijdstoel 1:4.

Fig. 2 Doorsnede Draaistoel 1:4.

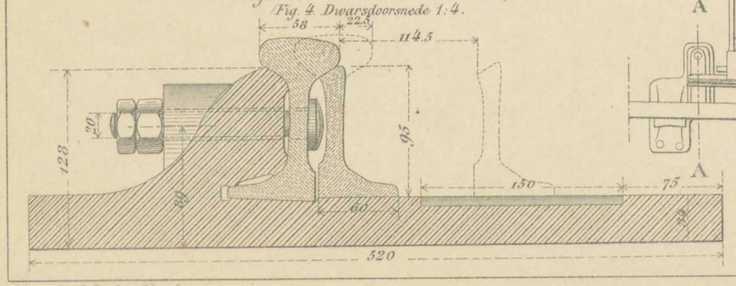
Draaistoel H.Y.S.M. (Oud model).

Fig. 5 Dwarsdoorsnede 1:4.



Glijdstoel H.Y.S.M. (Oud model).

Fig. 4 Dwarsdoorsnede 1:4.



Tongbeweging van den London and North Western Railway (Fig. 6-11.).

Fig. 6. Plattegrond 1:24.

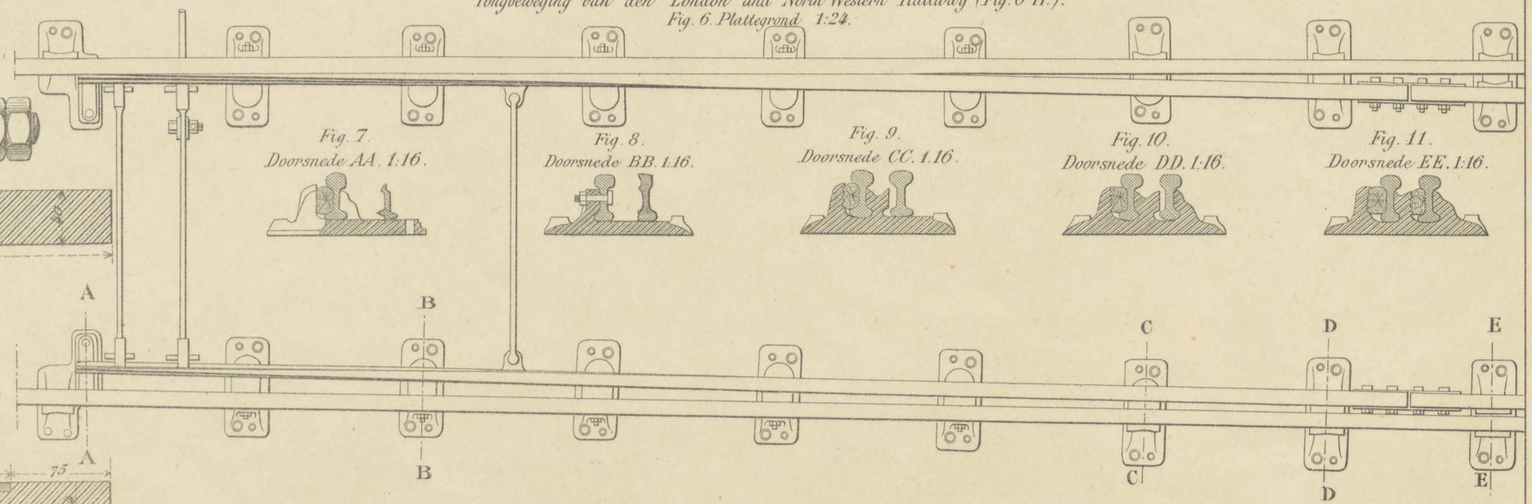


Fig. 7. Doorsnede AA. 1:16.

Fig. 8. Doorsnede BB. 1:16.

Fig. 9. Doorsnede CC. 1:16.

Fig. 10. Doorsnede DD. 1:16.

Fig. 11. Doorsnede EE. 1:16.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

Maatschappij tot Exploitatie van Staatsspoorwegen.

Wissel op langsliggers. Fig. 1-8.

Fig. 2. Doorsnede over A.B. 1:20.

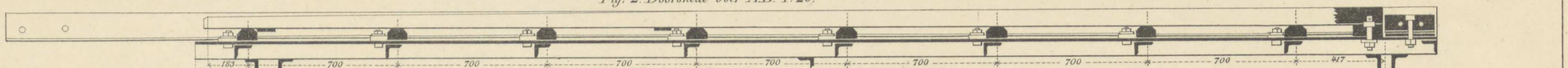


Fig. 1. Platte grond. 1: 20.

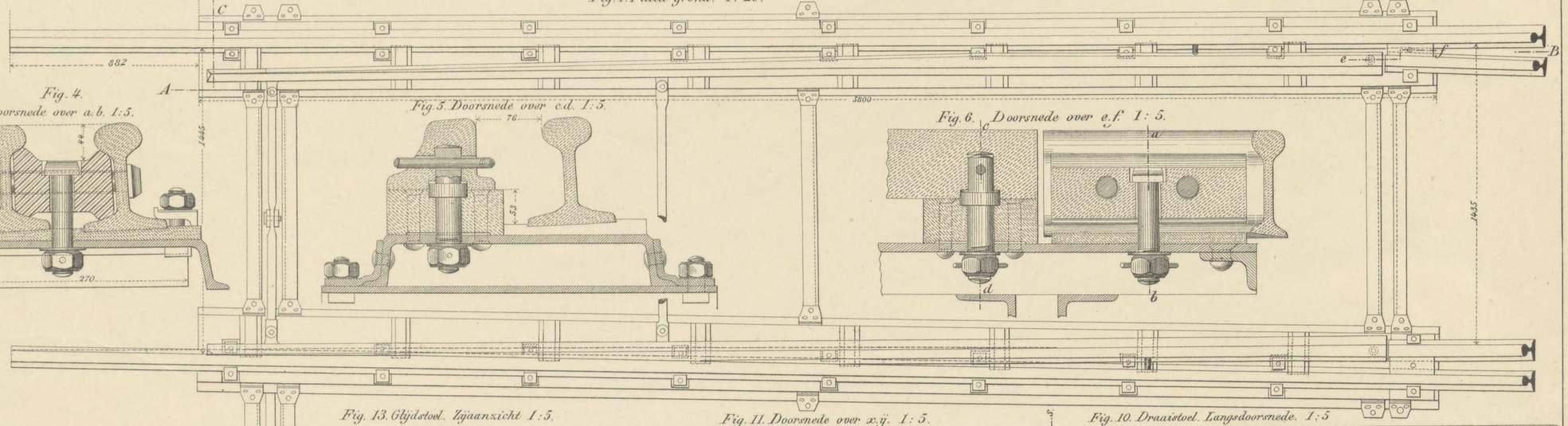


Fig. 4. Doorsnede over a.b. 1:5.

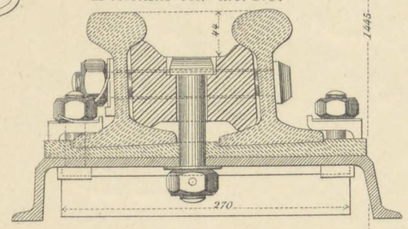
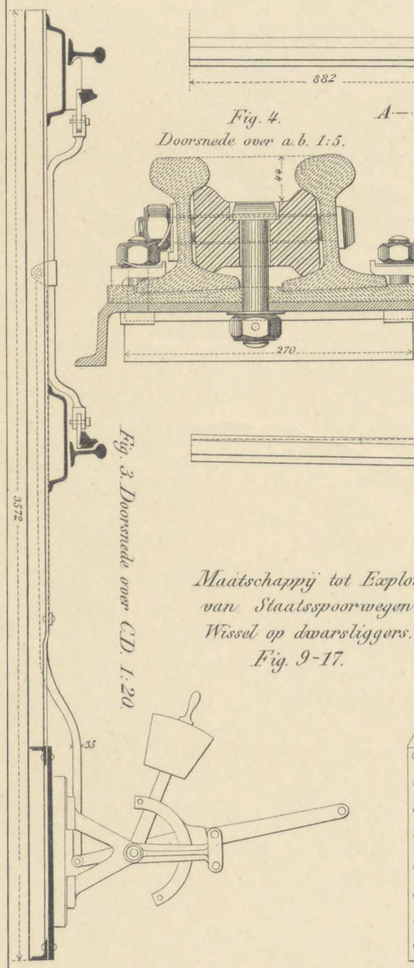


Fig. 5. Doorsnede over c.d. 1:5.

Fig. 6. Doorsnede over e.f. 1:5.

Fig. 3. Doorsnede over CD 1:20



Maatschappij tot Exploitatie van Staatsspoorwegen. Wissel op dwarsliggers. Fig. 9-17.

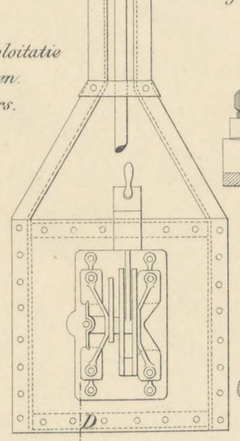


Fig. 13. Glijdstoel. Zijaanzicht 1:5.

Fig. 11. Doorsnede over x.y. 1:5.

Fig. 10. Draaistoel. Langsdoorsnede. 1:5

Fig. 15. Doorsnede nabij de verbindingsstang. 1:5.

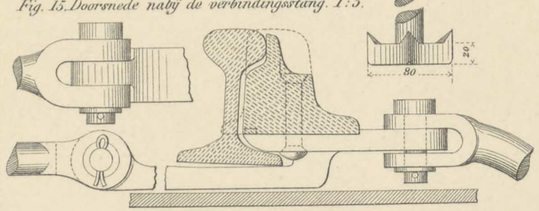


Fig. 16. Doorsnede bij een steunbout. 1:5.

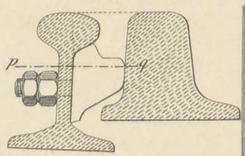


Fig. 17. Doorsn: over p.q. 1:5

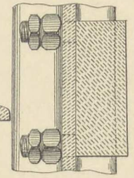


Fig. 9. Draaistoel, Bovenaanzicht. 1:5.

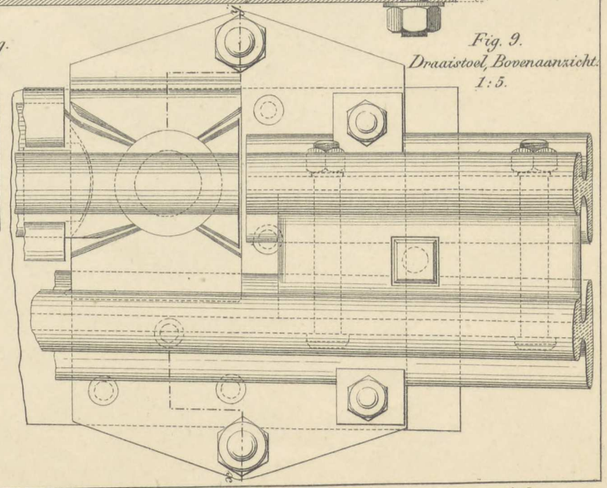


Fig. 7. Glijdstoel, Zijaanzicht 1:5.

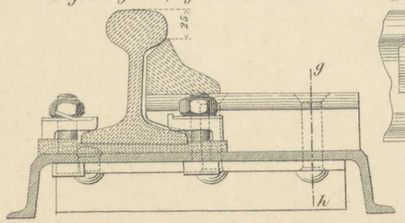


Fig. 8. Glijdstoel, Doorsnede over g.h. 1:5.

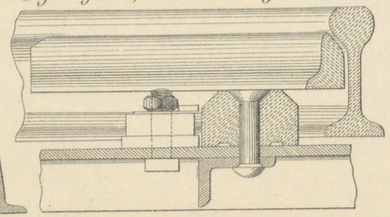


Fig. 14. Doorsnede over glijdstoel en verbindingsstang. 1:5.

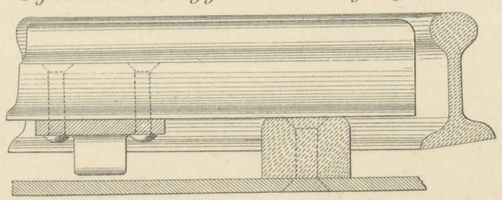
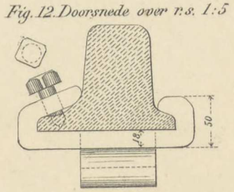


Fig. 12. Doorsnede over r.s. 1:5



Uitg de Gebr[s] v Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

TONGBEWEGINGEN.

Pruisische Staatsspoorwegen (Fig. 1-11.)

Fig. 6. Glijdstoel 1:7½.

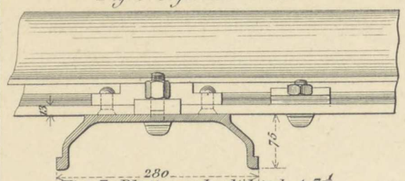


Fig. 1. Draaistoel 1:7½.

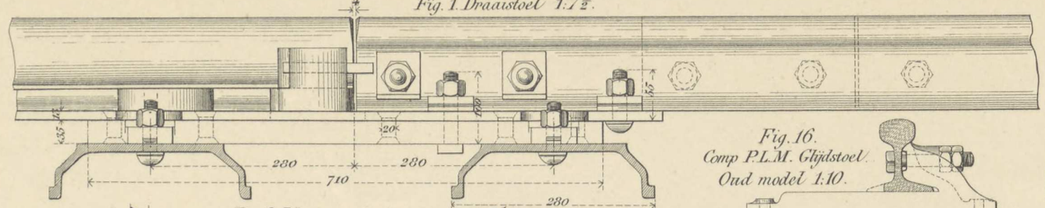


Fig. 16. Comp. P.L.M. Glijdstoel. Oud model 1:10.

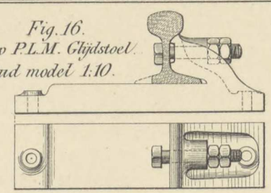


Fig. 7. Plattegrond glijdstoel 1:7½.

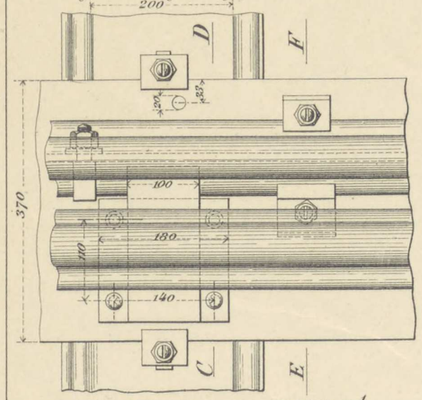


Fig. 2. Plattegrond draaistoel 1:7½.

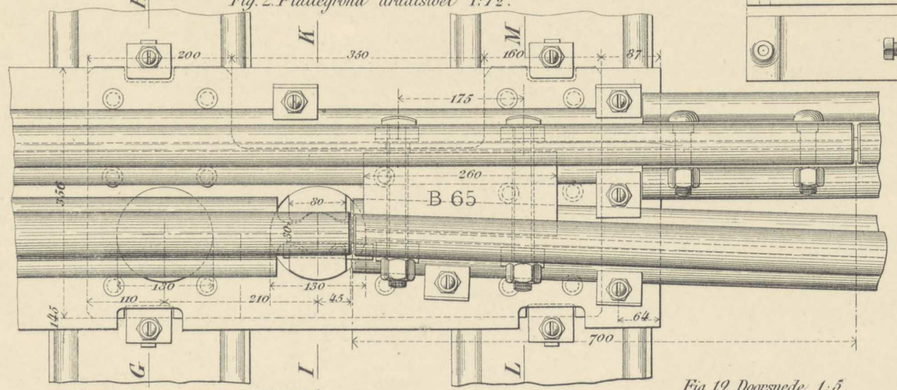


Fig. 8. Doorsnede over E.F. 1:7½.

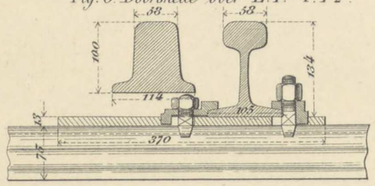


Fig. 3. Doorsnede over G.H. 1:7½.

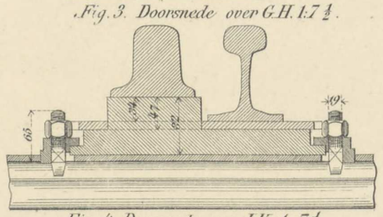


Fig. 9. Doorsnede over C.D. 1:7½.

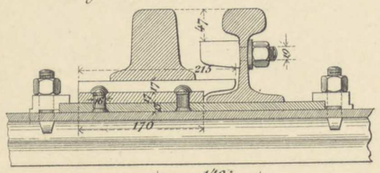


Fig. 4. Doorsnede over I.K. 1:7½.

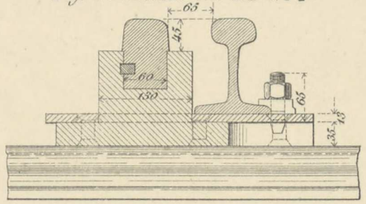


Fig. 5. Doorsnede over L.M. 1:7½.

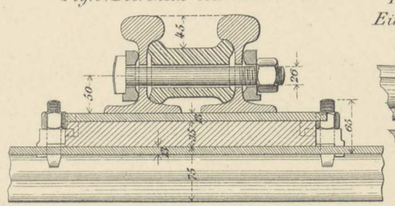


Fig. 10. Verbindingsstang 1:7½.

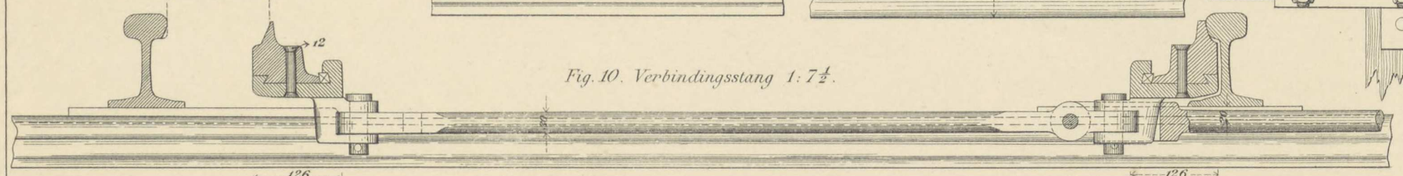


Fig. 11. Verbindingsstang. Plattegrond 1:7½.

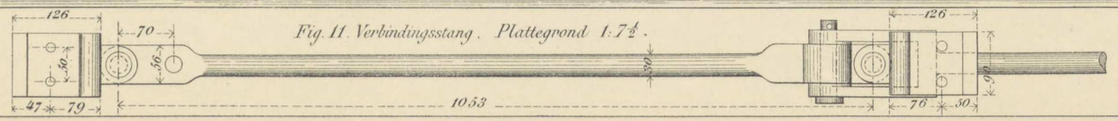
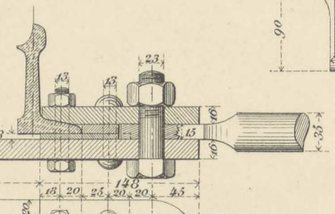


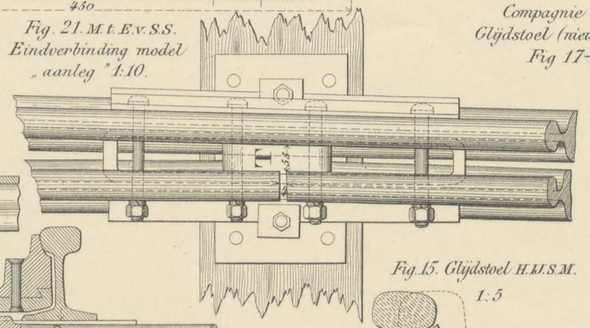
Fig. 19. Doorsnede 1:5.



Sloef der beweging sstang voor Vignoles-tongen der H.IJ.S.M. Fig. 19-20.

Fig. 20 Plattegrond 1:5.

Fig. 21. M.t.E.v.S.S. Eindverbinding model „aanleg" 1:10.



Draaistoel H.IJ.S.M. (Fig. 12-14.)

Fig. 12. Doorsnede over W.X. 1:5.

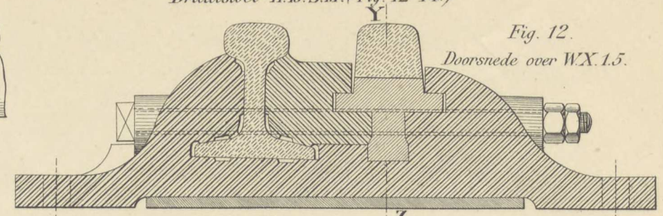


Fig. 13. Plattegrond 1:5.

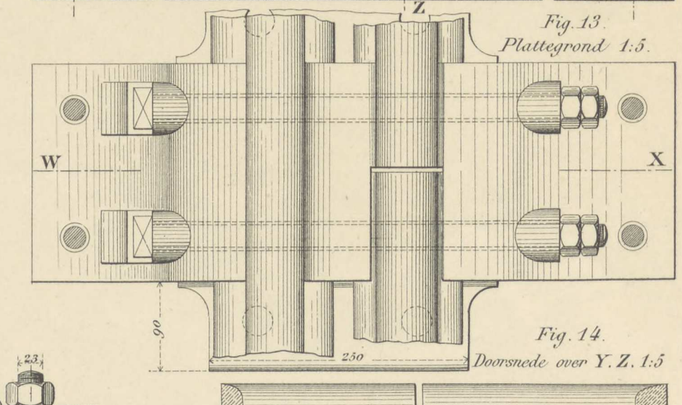


Fig. 14. Doorsnede over Y.Z. 1:5

Compagnie P.L.M. Glijdstoel (nieuw model.) Fig 17-18.

Fig. 17. Doorsnede 1:10.

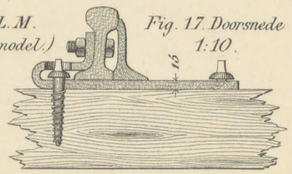


Fig. 18. Plattegrond 1:10

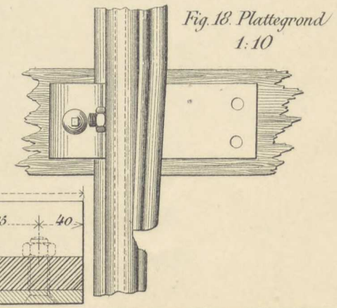
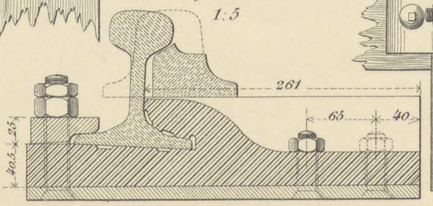


Fig. 15. Glijdstoel H.IJ.S.M. 1:5



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

Systeem Demerbe (Fig. 1-3.)

Fig. 1 Doorsnede bij de tongspits 1:10.

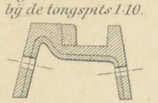


Fig. 2 Doorsnede over het draaipunt 1:10.

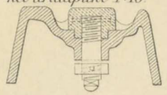
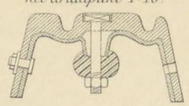


Fig. 3 Doorsnede voorbij het draaipunt 1:10.



Systeem Winkler (Fig. 4.5)

Fig. 5. Doorsnede a.b. 1:8.

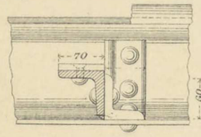
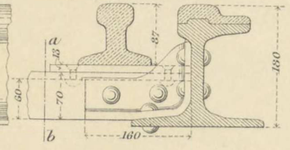


Fig. 4 Glijdstoel 1:8.



Systeem Hartwich (Fig. 9-10.)

Fig. 10 Langsdoorsnede over den draaitap. 1:4

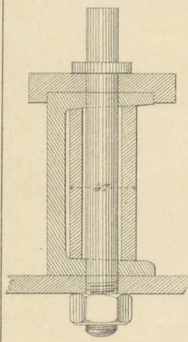


Fig. 9 Draaistoel 1:4.

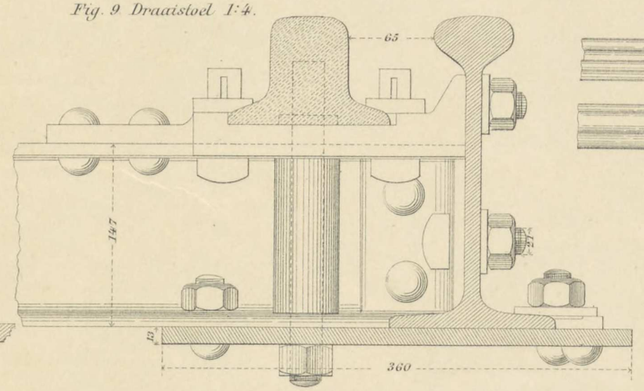
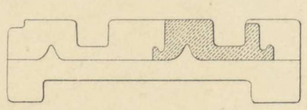


Fig. 22. Doorsnede g.h. 1:5.



Systeem Büsing (Fig. 19-22)

Fig. 19. Bovenaanzicht 1:15.

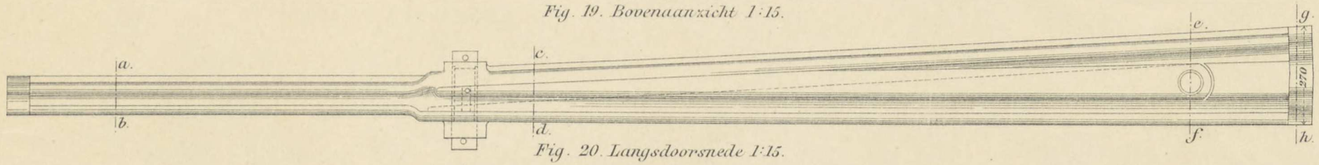


Fig. 20. Langsdoorsnede 1:15.

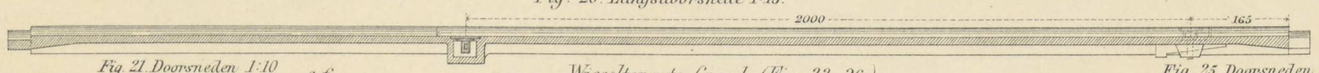
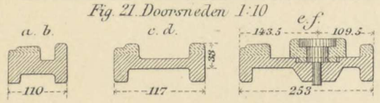


Fig. 21. Doorsneden 1:10



Wisseltong te Cassel (Fig. 23-26.)

Fig. 23. Zijaanzicht 1:5.

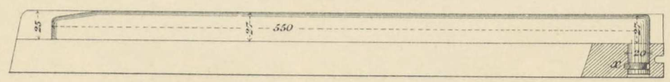
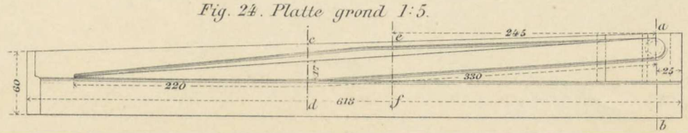


Fig. 24. Platte grond 1:5.



Systeem de Serres en Battig (Fig. 6-8.)

Fig. 6 Doorsnede voorbij het draaipunt 1:4.

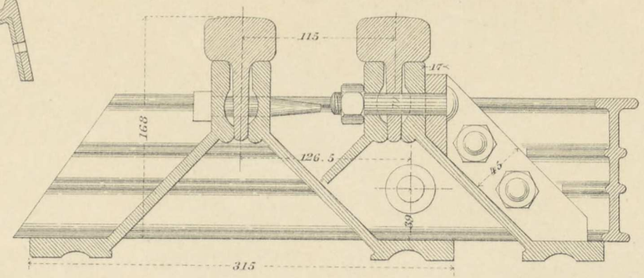


Fig. 7. Draaistoel, Dwarsdoorsnede 1:4.

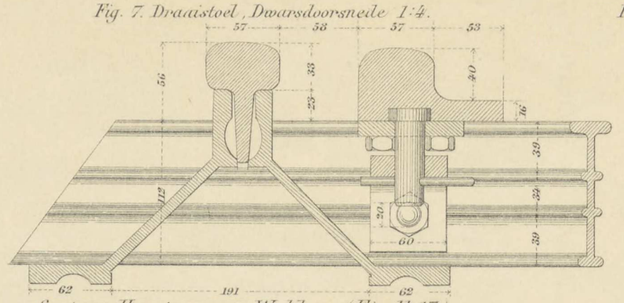
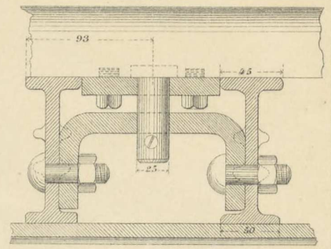


Fig. 8. Draaistoel, Langsdoorsnede. 1:4.



Systeem Heusinger von Waldegg. (Fig. 11-17.)

Fig. 11. Bovenaanzicht 1:15.

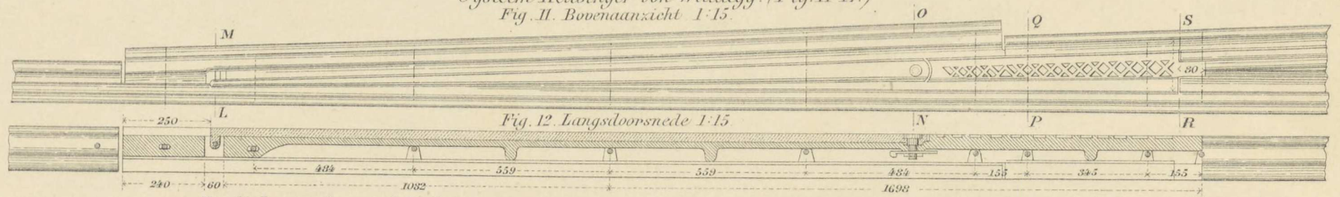


Fig. 12. Langsdoorsnede 1:15

Fig. 13. Doorsnede over L.M. 1:3.

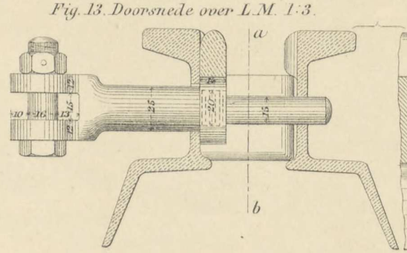


Fig. 14. Doorsnede over a.b. 1:3.

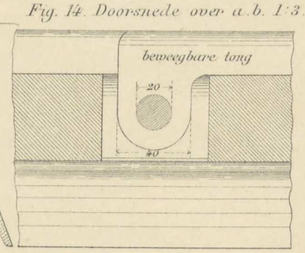


Fig. 15. Doorsnede over N.O. 1:3.

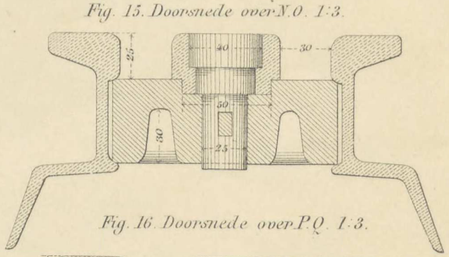


Fig. 16. Doorsnede over P.Q. 1:3.

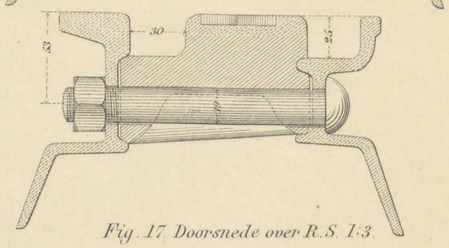


Fig. 17. Doorsnede over R.S. 1:3.

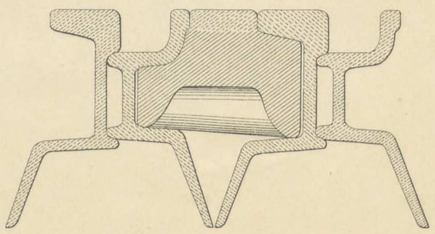


Fig. 18.
Draaipunt voor wissel tongen (Metz.) 1:10.

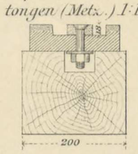


Fig. 25. Doorsneden 1:5.

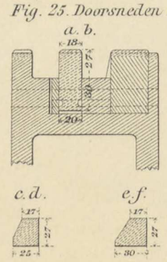
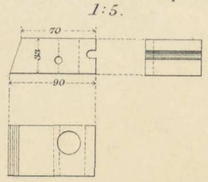


Fig. 26.
Details van het draaipunt 1:5.



Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen, 's-Gravenhage

INRICHTINGEN TOT HET BEWEGEN EN VASTZETTEN DER TONGEN.

Fig 2 Gewoon handel.

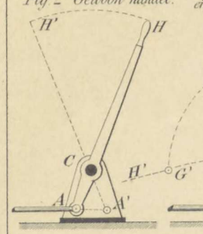


Fig. 3 Handel met elkelwerkend tegenwicht.

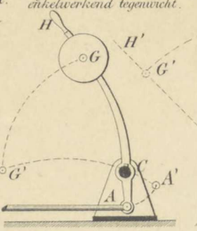


Fig. 4 Handel met vast tegenwicht

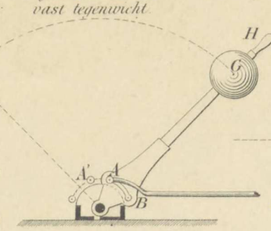


Fig. 5 Handel met beweegbaar tegenwicht

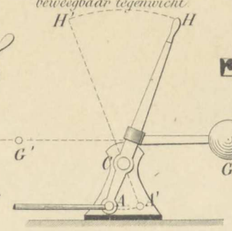


Fig. 1.
Tramway-tong met veer.

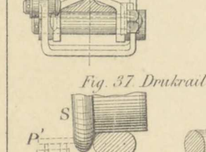


Fig. 13.
Eenarmige tuimelaar.

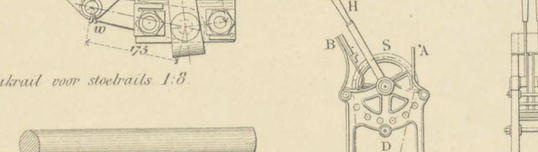


Fig 11-12 Horizontale compensatietoestel en tusschensteunpunt.

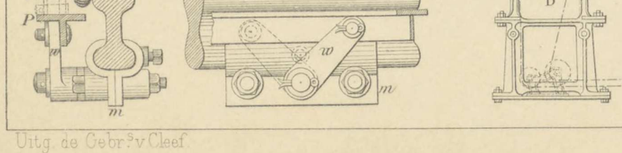


Fig 11.
Zij aanzicht

Fig 12. Plattegrond.

Overbrenging der beweging door stangen
Fig. 11-16.

Fig 14-15 Tweearmige tuimelaar

Fig 14 Plattegrond.

Fig 16 Verticale compensatie toestel.

Fig 15. Zijaanzicht.

Fig. 36. Drukrail voor Vignolesrails 1:10

Fig. 37 Drukrail voor stoelrails 1:3

Fig. 31-32 Excentriek Tuurel.

Fig. 31.
Aanzicht 1:10

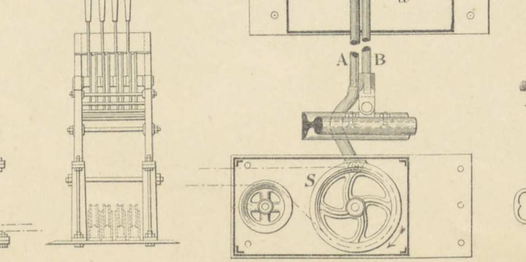


Fig. 32 Plattegrond 1:10

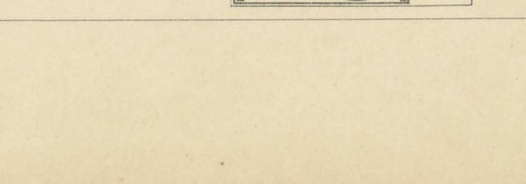


Fig. 33 Wisselsteller met enkele schaar 1:20.

Fig. 28. Handelinrichting 1:40.

Fig. 34 Wisselsteller met dubbele schaar 1:20.

Fig. 9. Wisselslot Oldenburgsche SS. 1:8.

Systeem Dujour. Fig. 19-22.
1:25.

Fig. 19.

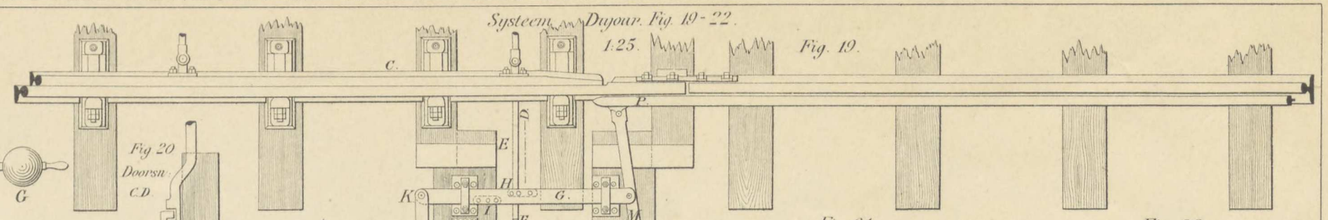


Fig 20
Doorsn
C.D.

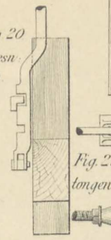


Fig. 29. Beweging der tongen zonder sluiting 1:20

Fig. 7
Zekerheidsslot. 1:10

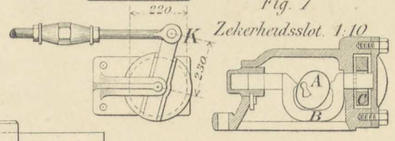


Fig. 26. Draadoog.

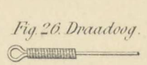


Fig. 27 Draadspanner 1:25.

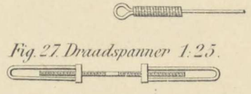


Fig. 25. Draadrol 1:5.

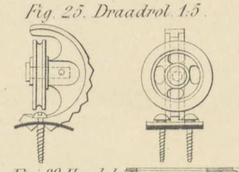


Fig. 39 Handel met uitneembaar bovenstuk 1:15.

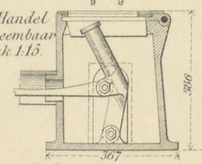


Fig. 21.

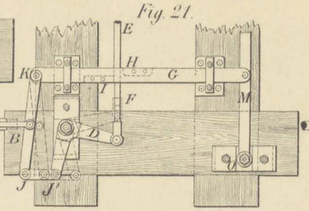


Fig. 22.

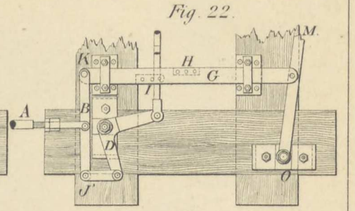


Fig. 17-18. Beweging en sluiting der tongen Systeem Saxby en Farmer.
1:30.

Fig. 17 Plattegrond.

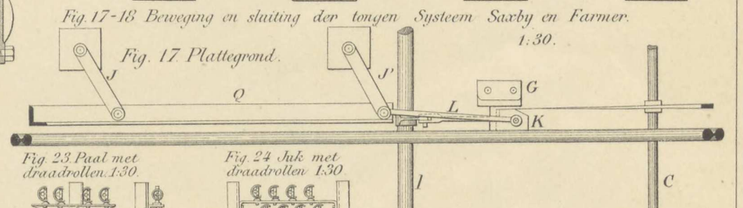


Fig. 23 Paal met draadrollen 1:30.

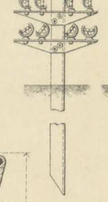


Fig. 24 Juk met draadrollen 1:30.

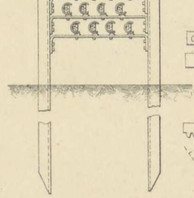


Fig. 18. Aanzicht.

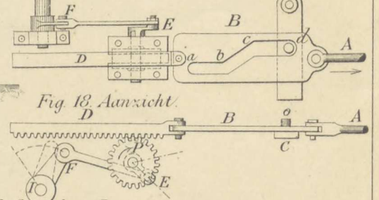


Fig. 35. Controleur Lartigue.

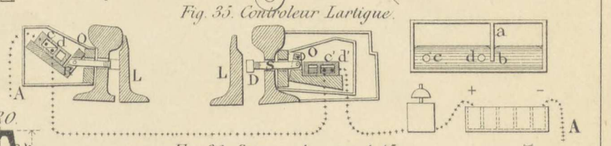


Fig. 38. Beweegbaar bord tusschen de rails (AO.M.) 1:20.

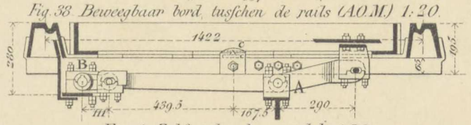


Fig. 30. Siemensche pot. 1:15.

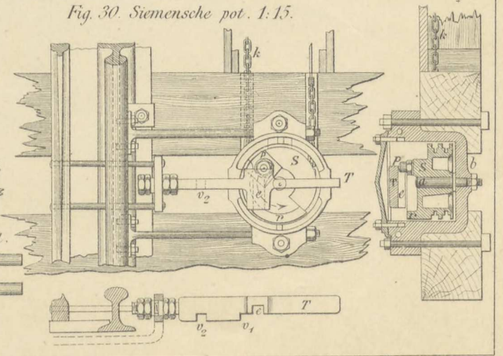


Fig. 6. Zelfwerkende grendel 1:20.

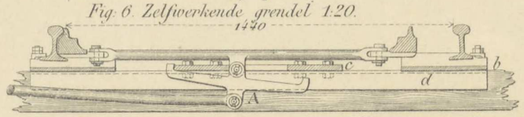


Fig. 10. Wisselsper. Oostenrijksche S.S. 1:8.

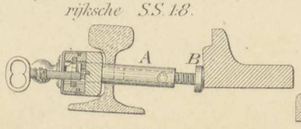
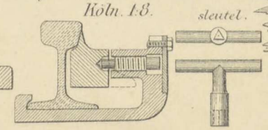


Fig. 8. Wisselslot K.E.D. Köln. 1:8.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

VERSCHILLENDE INRICHTINGEN VAN PUNT-EN HARTSTUKKEN.

Fig. 1. Kruising met beweegbare spoorstaaf 1:20.

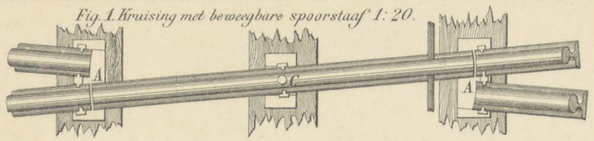


Fig. 24. Puntstuk met één beweegbare contrarail 1:20.

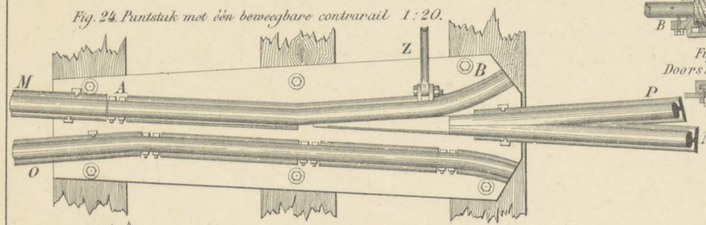


Fig. 25. Puntstuk met gekoppelde contrarails 1:20.

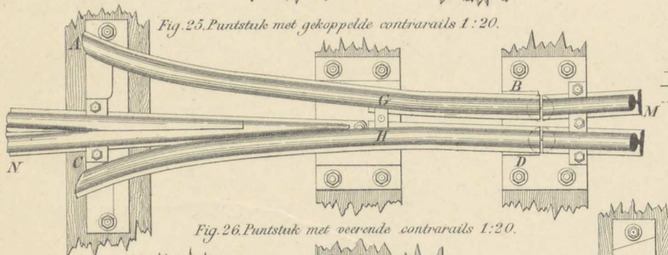


Fig. 26. Puntstuk met veerende contrarails 1:20.

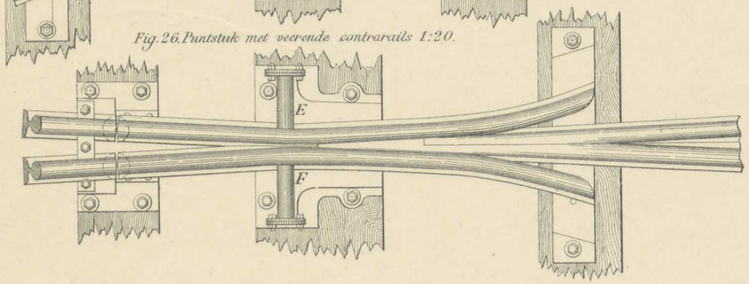


Fig. 3. Doorsn. SS. 1:15.

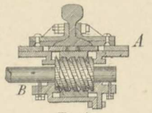
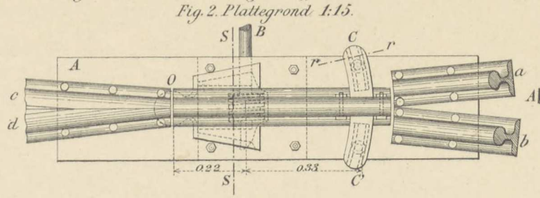


Fig. 4. Doorsn. rr 1:15

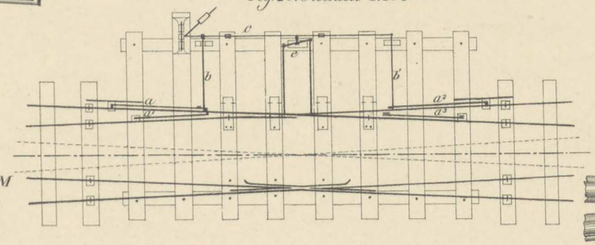
Puntstuk Systeem Parson (Fig. 2-4.)

Fig. 2. Plattegrond 1:15.



Oostenrijksche Noord-Westbaan.
Hartstuk Systeem Hohenegger Fig. 20.23.

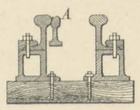
Fig. 20. Situatie 1:100.



Beweegbaar puntstuk. Systeem Pouled.

Fig. 16-19.

Fig. 19. Doorsnede over W.Z. 1:20.



Kruising Systeem Williams (Fig. 5-7).

Fig. 5. Plattegrond 1:40.

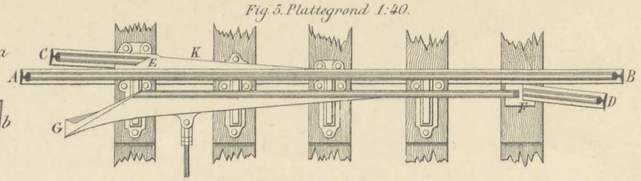


Fig. 6. Doorsnede 1:30.

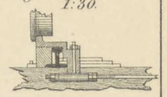


Fig. 7. Doorsnede 1:30.

Fig. 23. Doorsnede over N.O. 1:10.

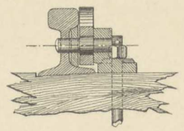


Fig. 22. Pedalen. Zijaanzicht 1:20

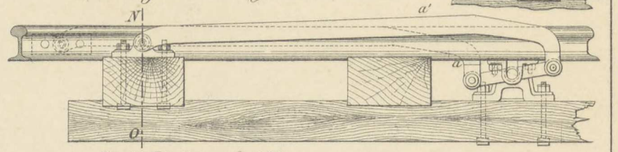


Fig. 21. Plattegrond 1:20

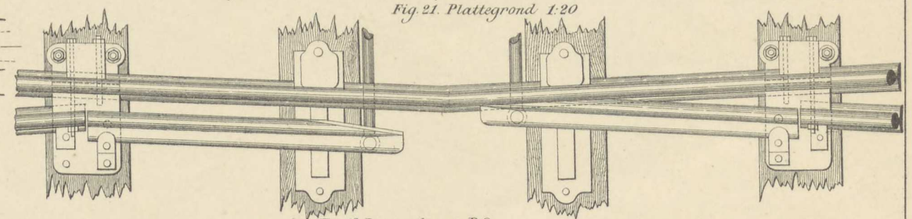


Fig. 18. Doorsnede over P.Q.

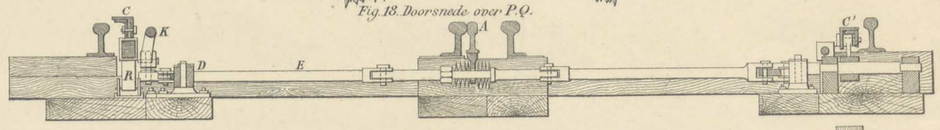


Fig. 16. Plattegrond 1:40.

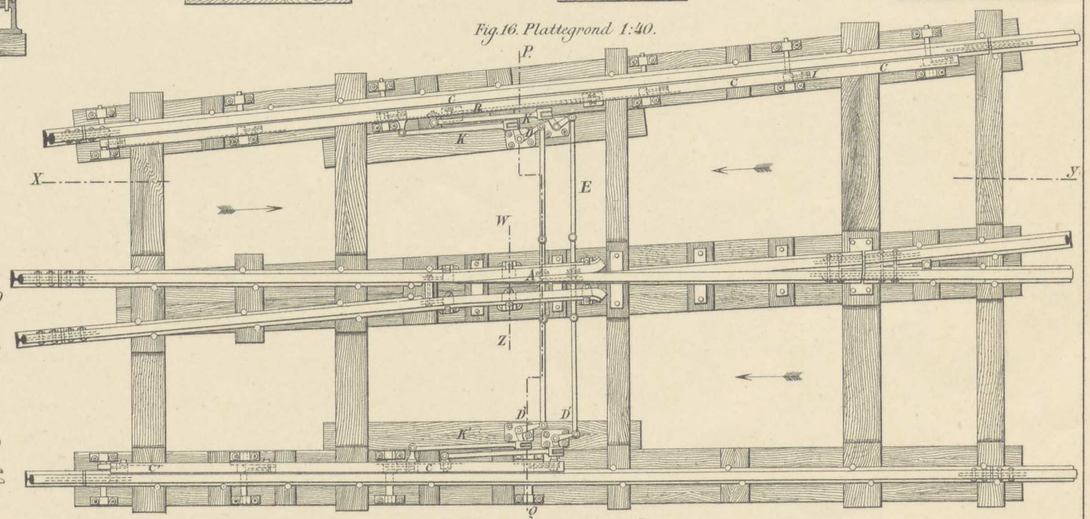
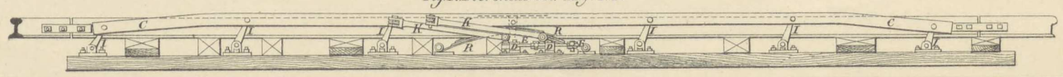


Fig. 17. Doorsnede over X.Y. 1:40



Systeem Bland Fig. 3.15.

Fig. 8. Plattegrond 1:20.

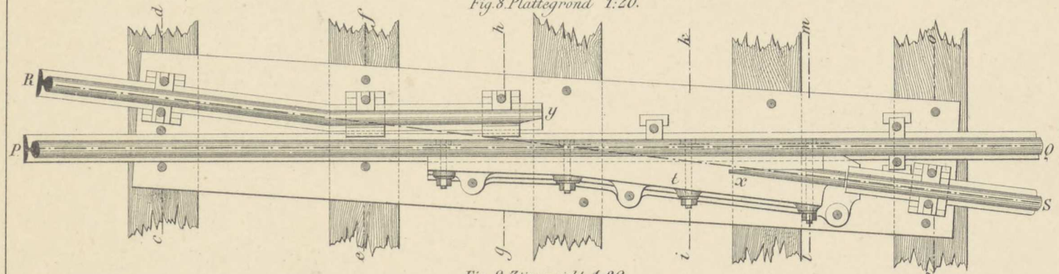


Fig. 9. Zijaanzicht 1:20.

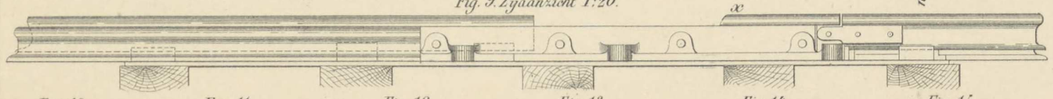


Fig. 10. Doorsn. over c.d. 1:20

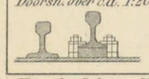


Fig. 11. Doorsn. e. f. 1:20.

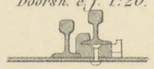


Fig. 12. Doorsn. g. h. 1:20.

Fig. 13. Doorsn. i. k. 1:20

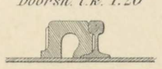
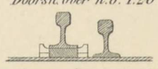


Fig. 14. Doorsn. l. m. 1:20

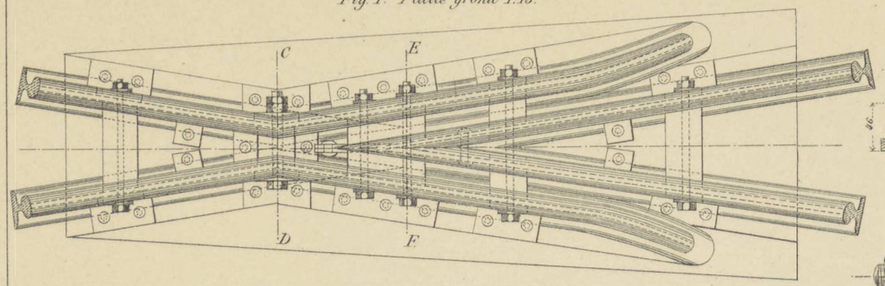
Fig. 15. Doorsn. over n. o. 1:20



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

Puntstuk uit rails (Fig. 1a–1c).
Fig. 1a Platte grond 1:15.



Doorsnede over CD 1:5.
Fig. 1b

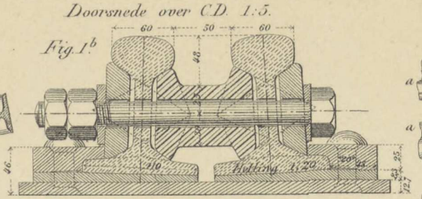
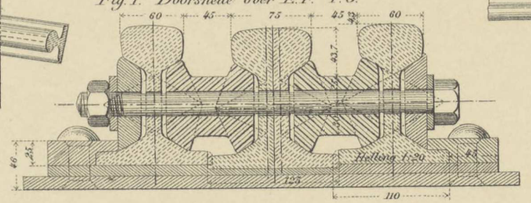
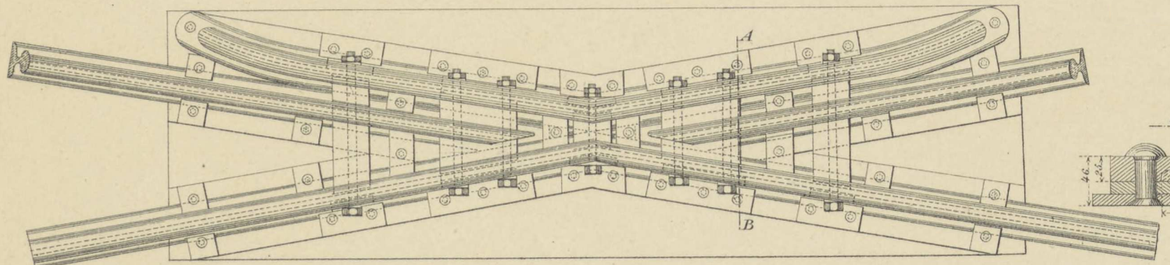


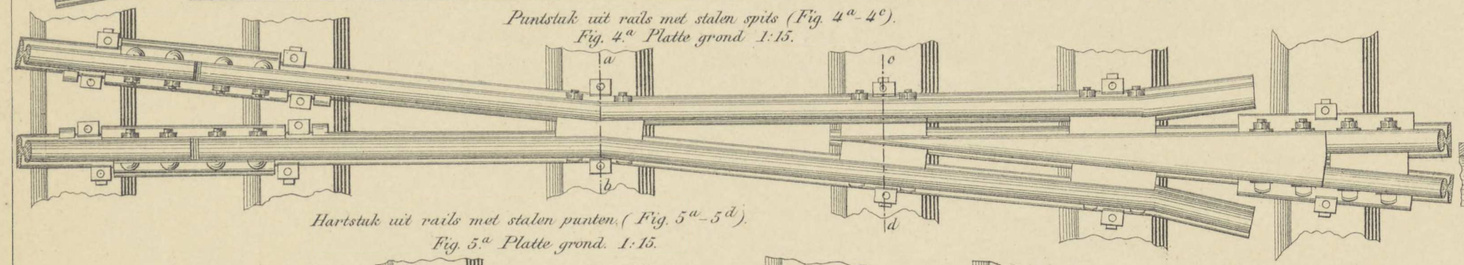
Fig. 1c Doorsnede over EF 1:5.



Hartstuk uit rails (Fig. 2a–2b).
Fig. 2a Platte grond 1:15.



Puntstuk uit rails met stalen spits (Fig. 4a–4c).
Fig. 4a Platte grond 1:15.



Hartstuk uit rails met stalen punten. (Fig. 5a–5d).
Fig. 5a Platte grond. 1:15.

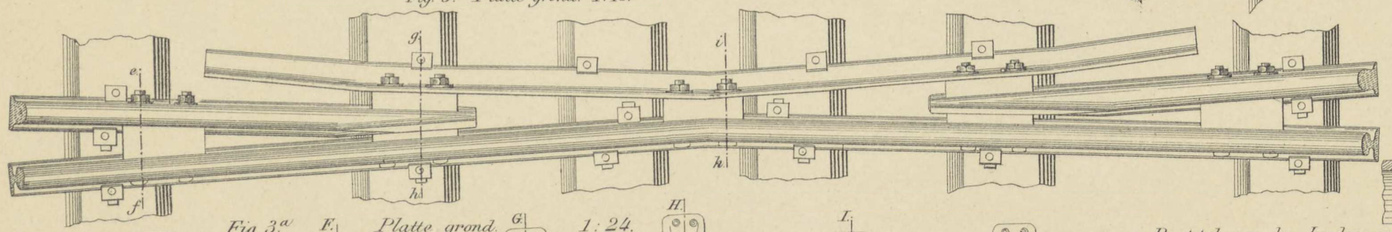
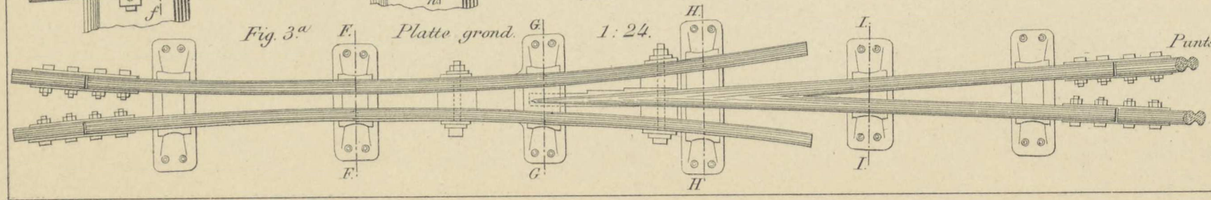


Fig. 3a F. Platte grond. G. 1:24. H. I.



Puntstuk voor tramwegen. Systeem Heusinger von Waldégg. Fig. 6a–6e.
Fig. 6a Platte grond 1:15.

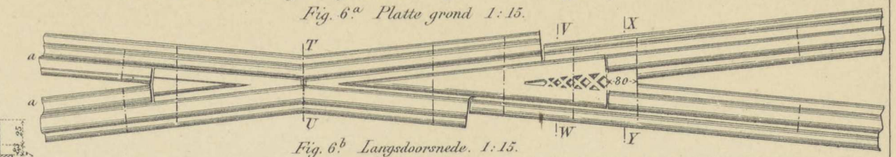


Fig. 6b Langsdoorsnede. 1:15.

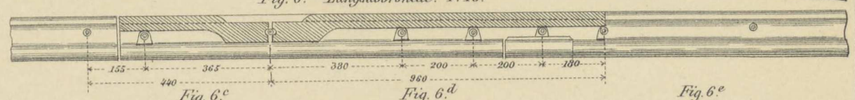


Fig. 6c Doorsnede over TU. 1:5.

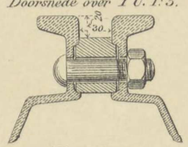


Fig. 6d Doorsnede VW. 1:5.

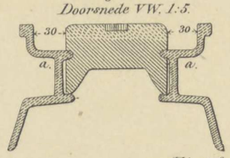


Fig. 6e Doorsnede XY. 1:5.

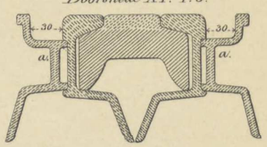


Fig. 2b Doorsnede over AB. 1:5.

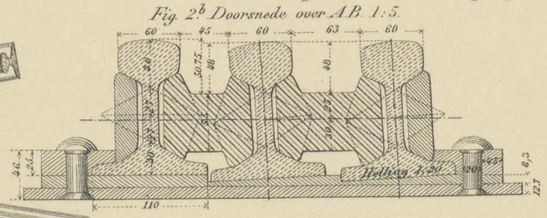


Fig. 4c Doorsnede over cd. 1:5.

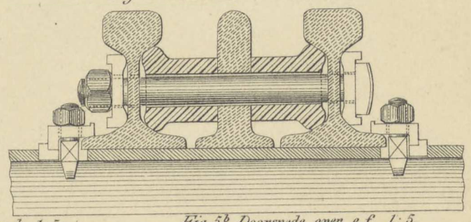


Fig. 4b Doorsnede over ab. 1:5.

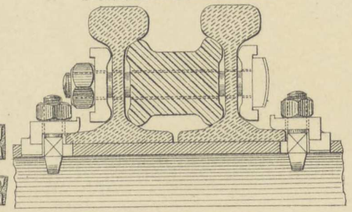


Fig. 5b Doorsnede over ef. 1:5.

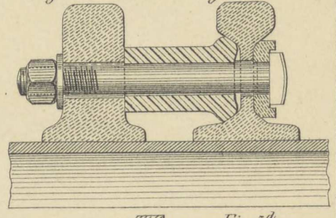


Fig. 5c Doorsnede over gh. 1:5.

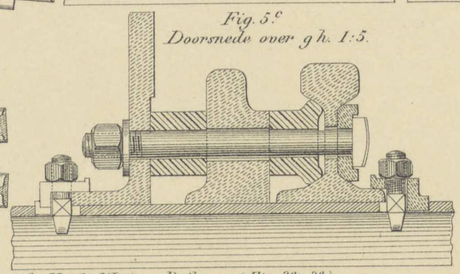
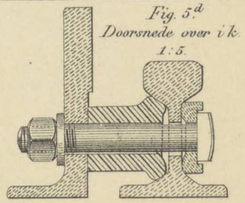


Fig. 5d Doorsnede over ik. 1:5.



Puntstuk van den London and North Western Railway. (Fig. 3a–3e).

Fig. 3b Doorsn: over FF.

Fig. 3c Doorsn: over GG.

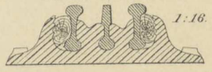


Fig. 3d Doorsn: over HH.

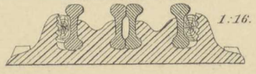
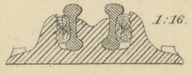


Fig. 3e Doorsn: over II.



Uitg. de Gebrs. v. Cleef.
Steendr. Gebrs. v. Langenhuysen, 's Hage.

OMLEGBARE PUNT- EN HARTSTUKKEN.

Fig. 1 a-i Omwendbaar puntstuk 1 à 9 der Maatsch.ij tot Expl. van S.S

Fig. 1a Zijaanzicht 1:15

Fig. 1d Doorsnede over AB. 1:5

Fig. 1h Doorsnede over EF 1:5.

Fig. 1b Plattegrond 1:15.

VÓÓR 1:9

1:9 ACHTER

Fig. 1c Langsdoorsnede 1:15.

Fig. 1e Doorsnede over CD. 1:5

Fig. 1i Doorsnede over GH. 1:5.

Fig. 1f Doorsnede over IK 1:5

Fig. 1g Doorsnede over L M 1:5

Fig. 3 a-f Omlegbaar puntstuk 1 à 3,5 der H.I.S.M.

Fig. 3a Langsdoorsnede 1:15

Fig. 3c Doorsneden over AB. (1:5) BA.

Fig. 3b Plattegrond. 1:15

1:3,5 VOOR

1:3,5 ACHTER

Fig. 3d Doorsnede over CD. (1:5)

Fig. 3e Doorsnede over E F.

Fig. 3f Doorsneden over GH (1:5) HG (1:5)

Fig. 2 a-f Omlegbaar puntstuk 1 à 10 der H.Y.S.M.

Fig. 2a Langsdoorsnede 1:15

Fig. 2b Plattegrond. 1:15

Fig. 2c Doorsneden over AB (1:5) BA.

Fig. 2d Doorsnede over GH 1:5

Fig. 2e Doorsneden over CD (1:5) EF.

Fig. 2f Doorsn. over HG. 1:5.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

PUNT EN HARTSTUKKEN

Gegoten stalen hartstuk der H.Y.S.M. (uitwijking 1 à 5) Fig. 2.a–2.d
Fig. 2.a Aanzicht en langsdoorsnede 1 à 10.

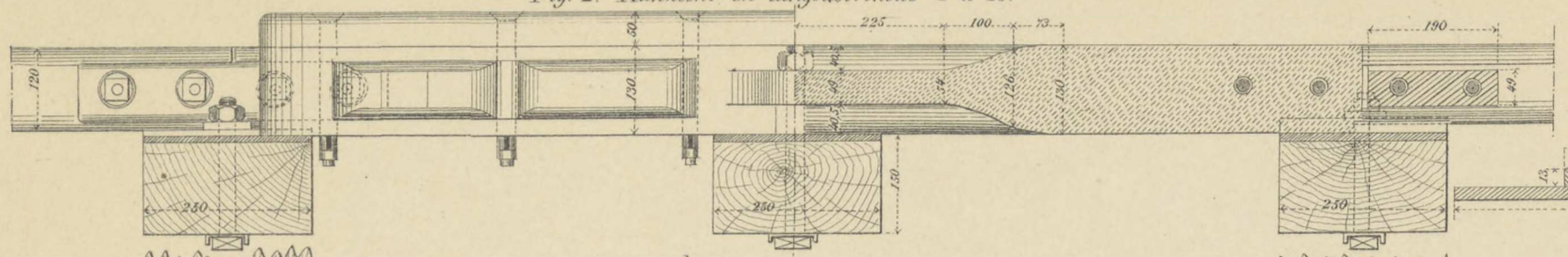
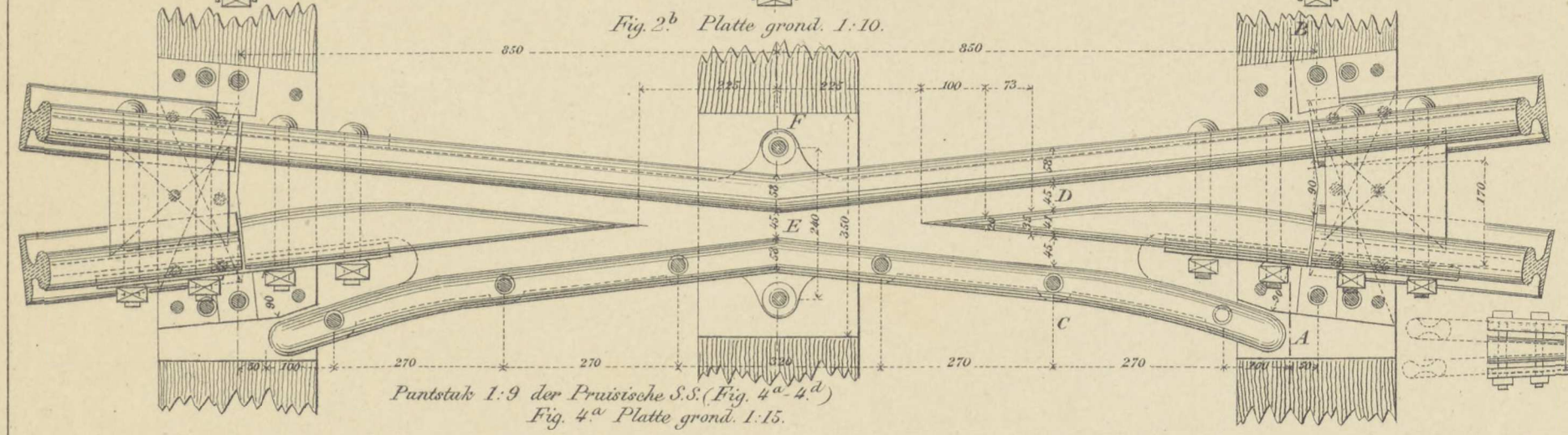


Fig. 2.b Platte grond. 1:10.



Puntstuk 1:9 der Pruisische S.S. (Fig. 4.a–4.d)
Fig. 4.a Platte grond. 1:15.

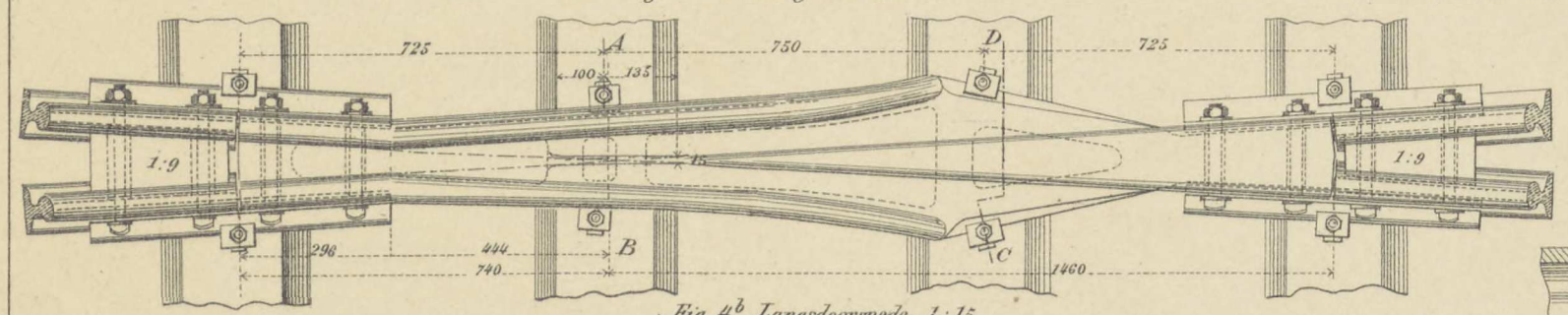
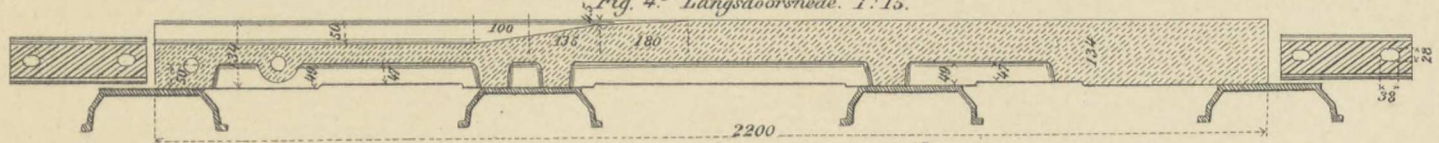


Fig. 4.b Langsdoorsnede. 1:15.



Hartstuk 1:9 der Pruisische SS. (Fig. 5.a–5.d).
Fig. 5.a Platte grond. 1:15.

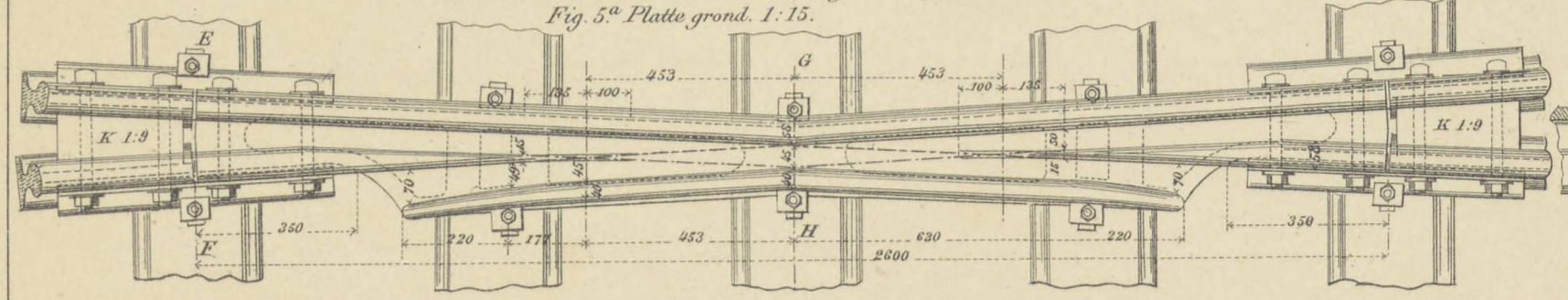


Fig. 5.b Aanzicht en Langsdoorsnede. 1:15.

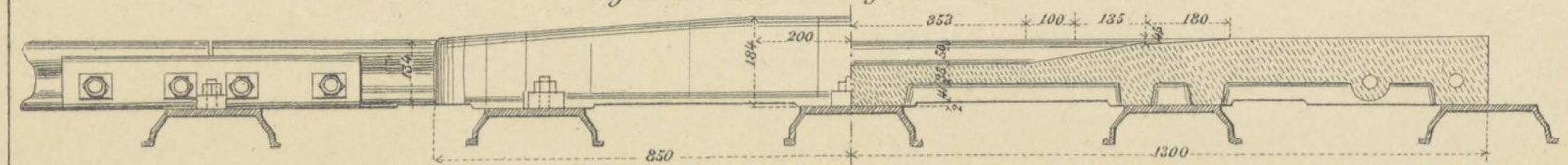


Fig. 2.c Doorsnede over AB. 1:5.

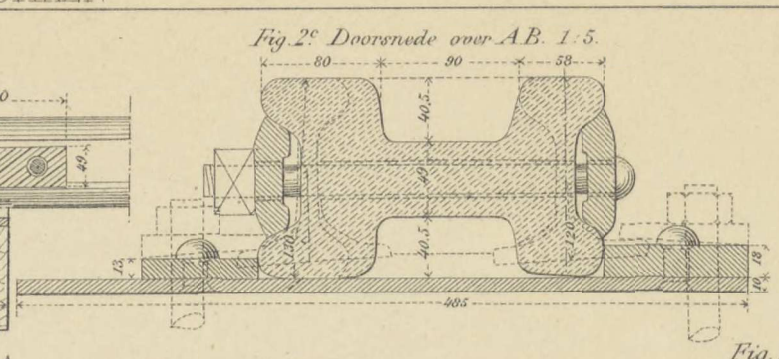


Fig. 2.d Doorsneden 1:5.

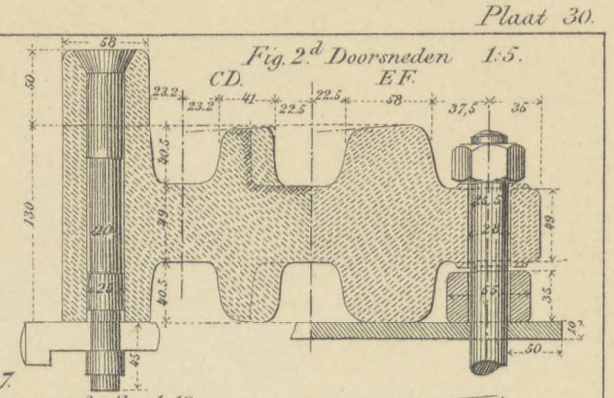


Fig. 7.
Kruisstuk voor groefrails. 1:12.

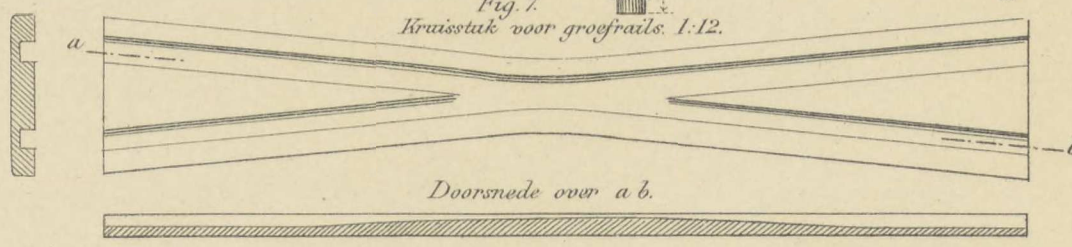


Fig. 1. Puntstuk voor den Eastern Bengal Railway. 1:15.

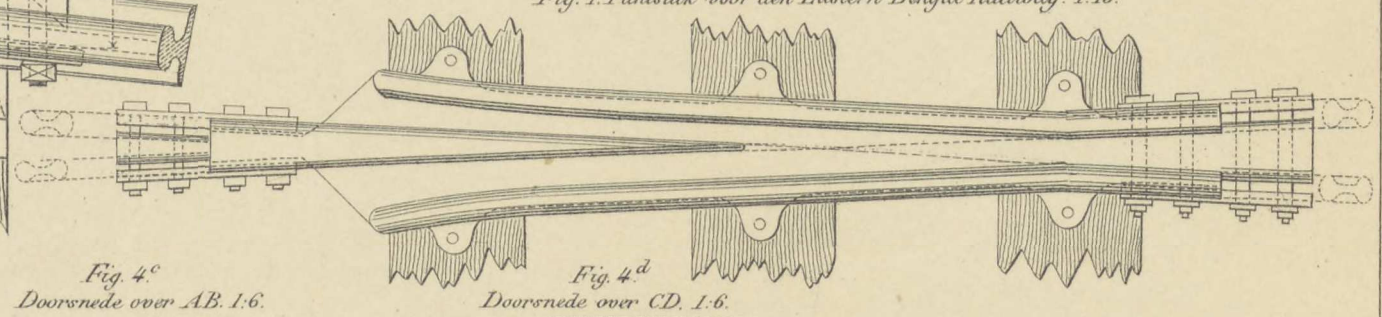


Fig. 4.c
Doorsnede over AB. 1:6.

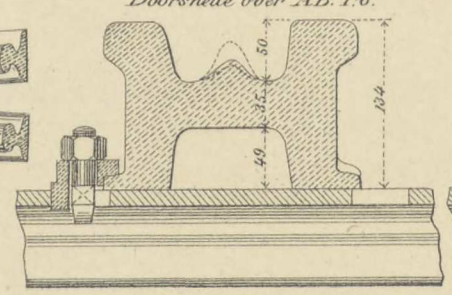
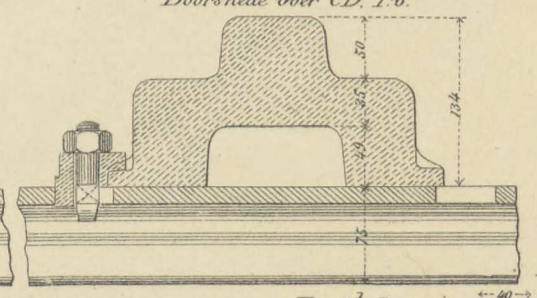


Fig. 4.d
Doorsnede over CD. 1:6.



Omlegbaar hartstuk der Kaiser Ferdinands Nordbahn Fig. 3.a, 3.b
Fig. 3.a Doorsnede over de spits. 1:6.

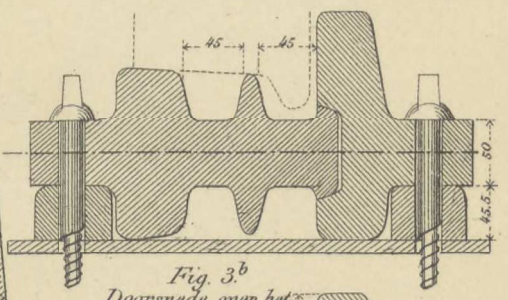


Fig. 5.c Doorsnede over FE. 1:6.

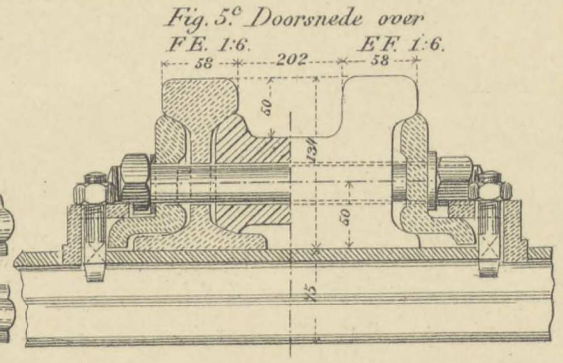


Fig. 5.d Doorsnede over GH. 1:6.

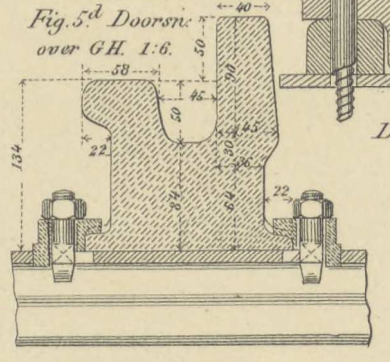
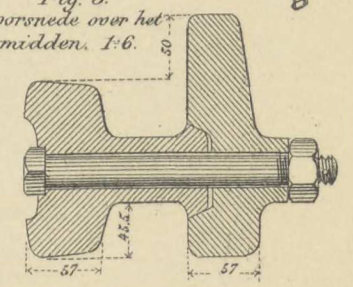


Fig. 3.b
Doorsnede over het midden. 1:6.



Puntstuk voor Demorberails (Fig. 6.a–6.b).
Fig. 6.a Platte grond. 1:20.

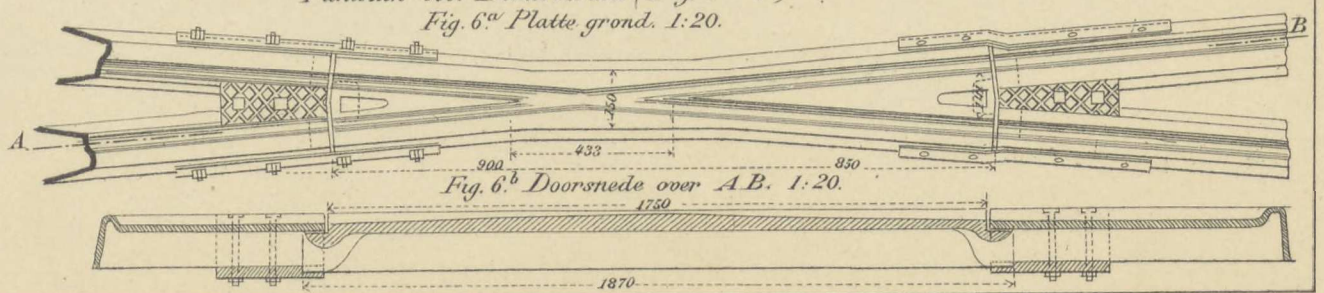
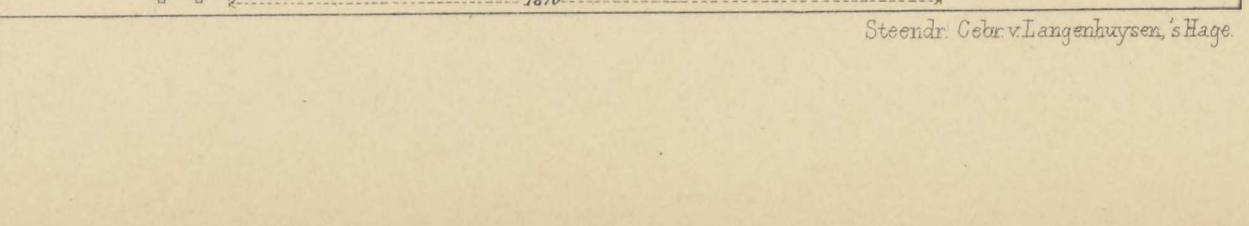


Fig. 6.b Doorsnede over AB. 1:20.



Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen, 's Hage.

Kruising uit rails Amsterdam-Rietlanden Fig. 6a-6e

Fig. 6a Platte grond. 1:30.

Fig. 6b Doorsnede over AB. 1:5.

Fig. 6c Doorsnede over CD. 1:5.

Fig. 7a Platte grond 1:30.

Kruising van H.Y.S.M. en S.S. nabij den Haag. Fig. 7a-7e

Fig. 7b Doorsnede 1:5. AA CC.

Fig. 7c Doorsnede over BB. 1:5.

Fig. 7d Doorsnede over DD. 1:5.

Fig. 7e Doorsnede over EE. 1:5.

Kruisstuk Oostenrijksche SS. Fig. 9a-9b

Fig. 9a Platte grond 1:15.

Fig. 9b Doorsnede over AB. 1:5.

Fig. 1. Contrarail Mij. t.E.v.SS. Doorsnede 1:5.

Fig. 5. Contrarail voor hartstukken. Braunschweigische Bahn. 1:10.

Fig. 4. Contrarail Hessische Ludwigsbahn. 1:5.

Fig. 3. Contrarail Braunschweigische Bahn. 1:5

Fig. 2. Contrarail Eastern Bengal Railway. 1:15.

Tramkruising met de Bergisch-Märkische Bahn. Fig. 8a-8b

Fig. 8a Doorsnede hoofdspoor 1:10.

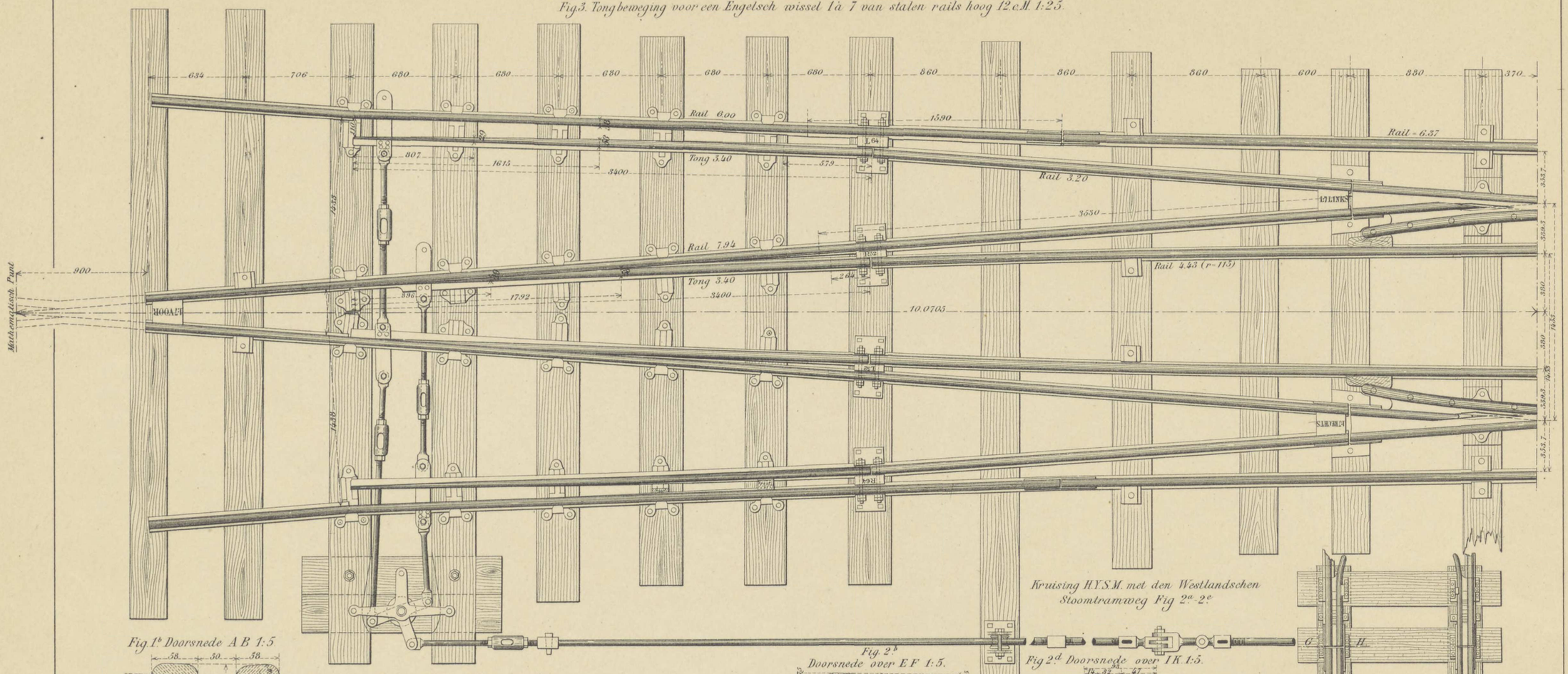
Fig. 8b Doorsn. Tramspoor 1:5.

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

KRUISINGEN EN ENGELSCHE WISSELS.

Fig. 3. Tongbeweging voor een Engelsch wissel 1 à 7 van stalen rails hoog 12 c.M. 1:25.



Haaksche kruising H.Y.S.M. (Fig. 1a - 1c)

Fig. 1b Doorsnede A B 1:5

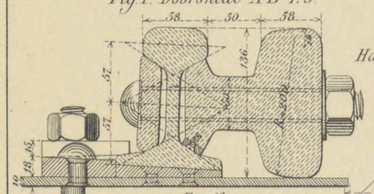


Fig. 1c
Doorsnede over C D 1:5.

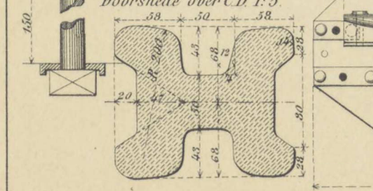


Fig. 1a Plattegrond 1:20.

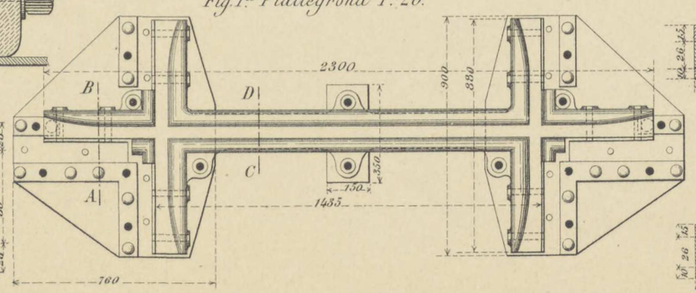


Fig. 2b
Doorsnede over E F 1:5.

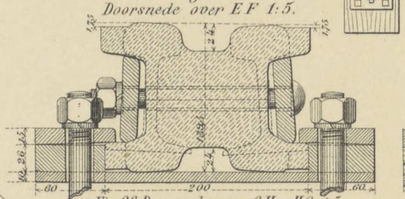
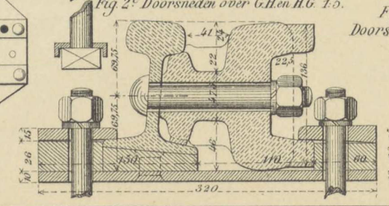


Fig. 2c Doorsneden over G H en H G 1:5.



Kruising H.Y.S.M. met den Westlandschen Stoomtramweg Fig 2a - 2c

Fig. 2d Doorsnede over I K 1:5.

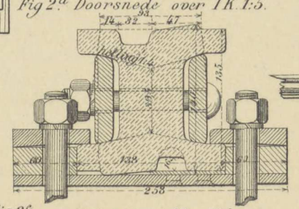
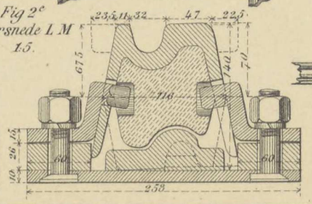


Fig. 2c
Doorsnede L M
1:5.



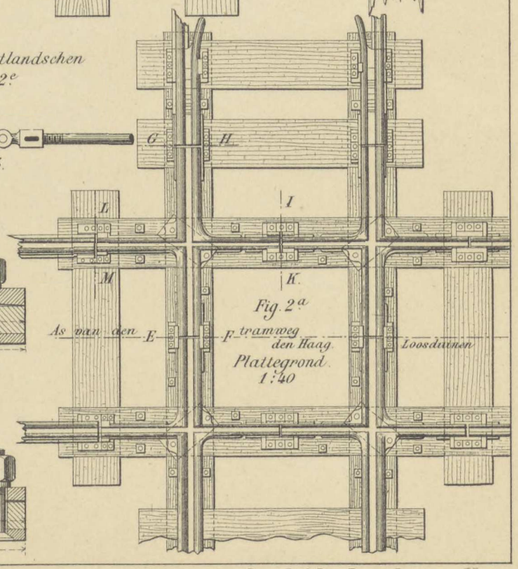


Fig. 2a
Plattegrond
1:40

Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen. s Hage.

SITUATIES VAN WISSELS EN KRUISINGEN.

Fig 1. Gewoon rechtsch wissel. Uitwijking 1 à 10

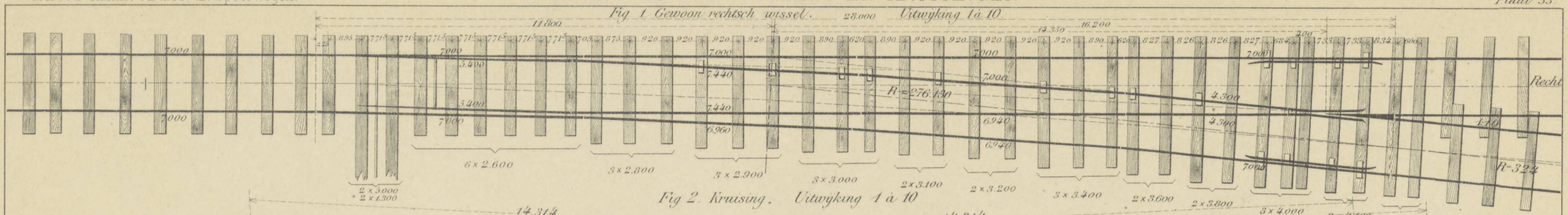


Fig 2. Kruising. Uitwijking 1 à 10

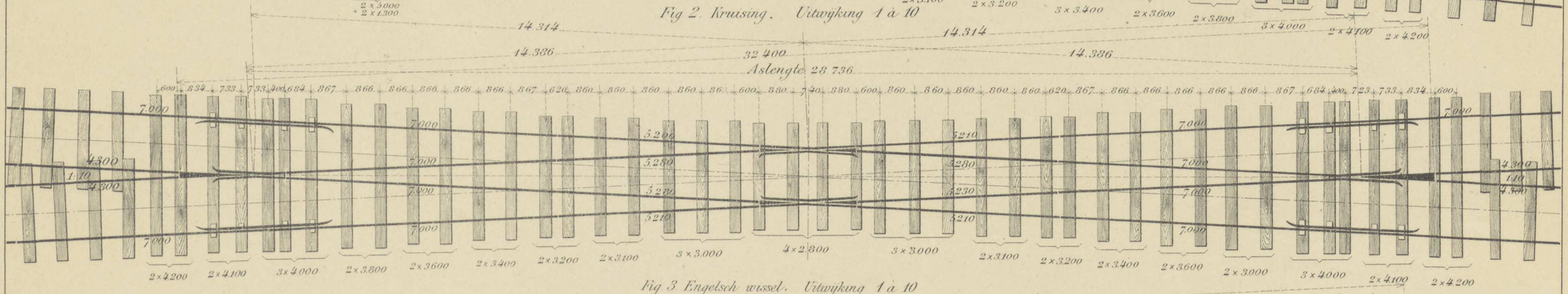


Fig 3 Engelsch wissel. Uitwijking 1 à 10

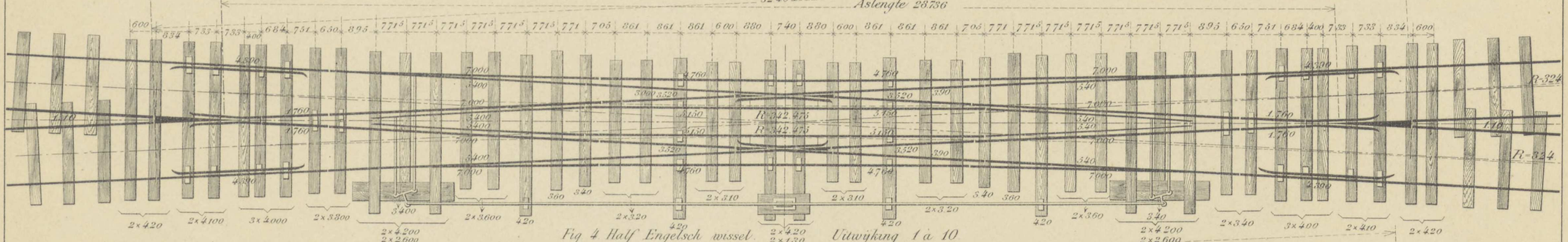
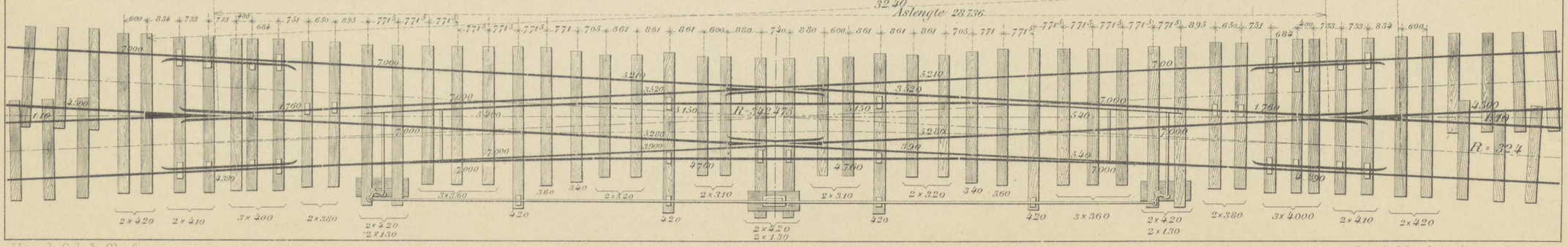


Fig 4 Half Engelsch wissel. Uitwijking 1 à 10



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen 's Gravenhage.

SITUATIES VAN WISSELS EN KRUISINGEN.

Fig. 1. Kruiswissel H.Y.S.M. 1:100

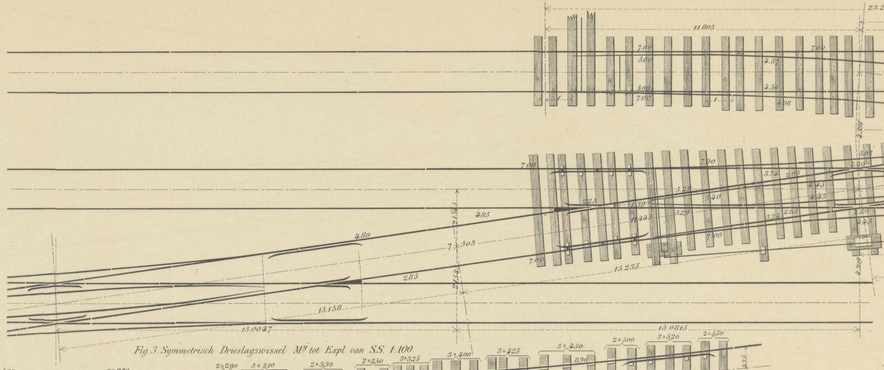


Fig. 2. Driewegswissel H.Y.S.M. 1:100

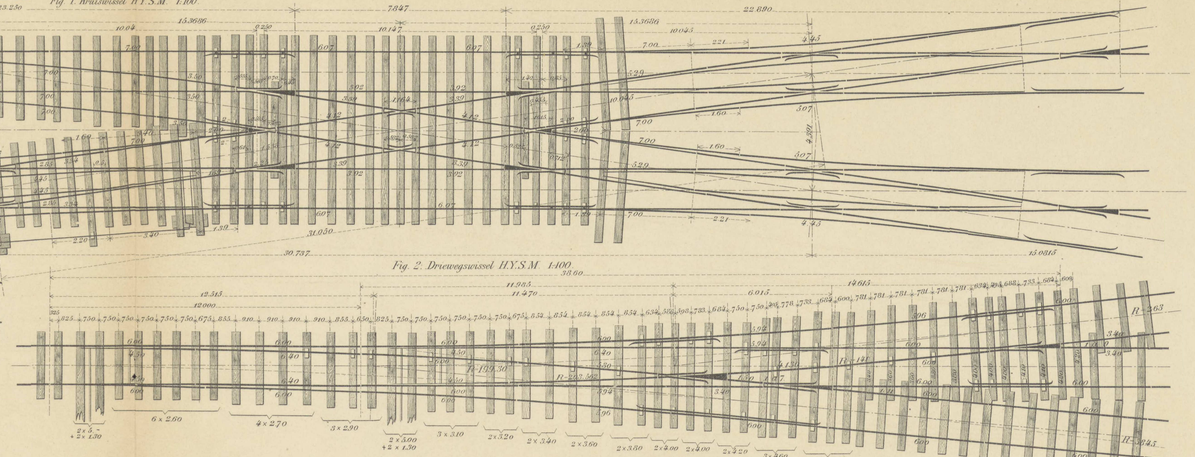


Fig. 3. Symmetrisch Driedaagswissel M^{o} tot Espl. van S.S. 1:100

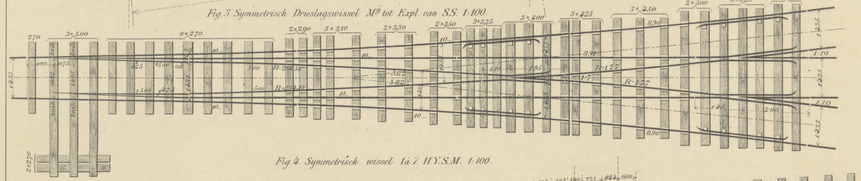


Fig. 4. Symmetrisch wissel 1:7 H.Y.S.M. 1:100

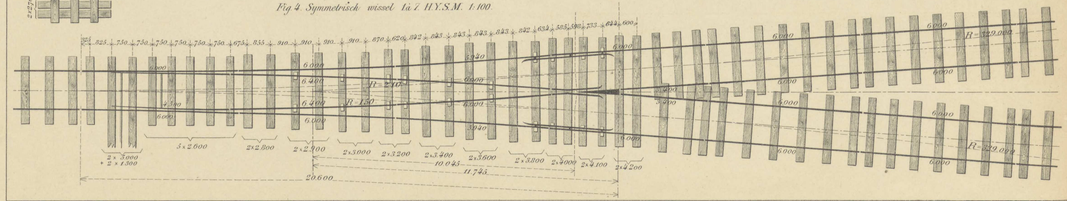
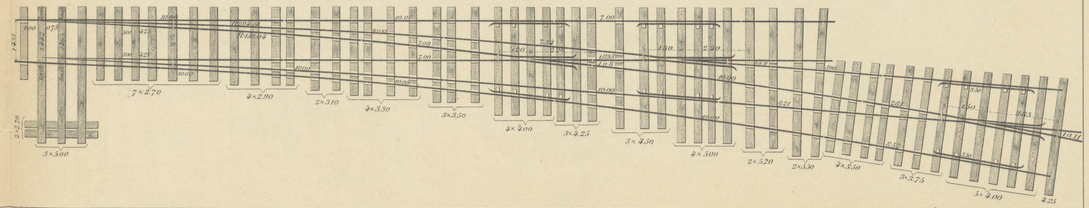


Fig. 5. Meebuigend Driedaagswissel M^{o} tot Espl. van S.S. 1:100



Uitg. de Gebr. v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Gravenhage.

DRAAISCHIJVEN.

Fig: 2 a Langsdoorsnede 1 :20.

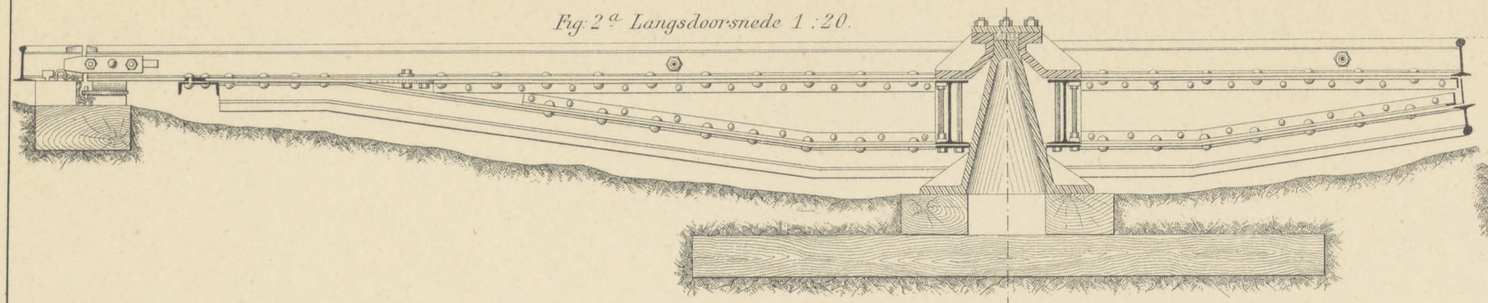


Fig: 2 b Dwars- doorsnede 1 :20.

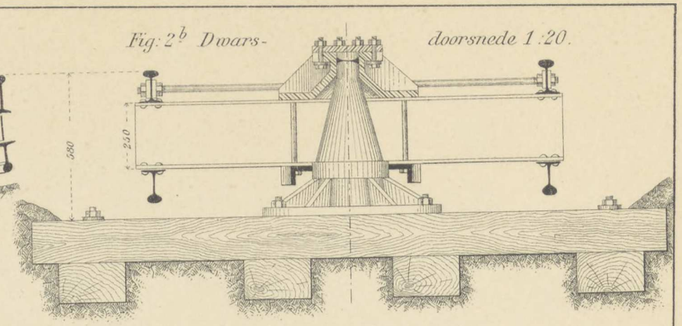
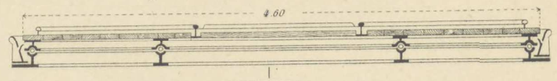


Fig: 1 a Dwarsdoorsnede 1 :46.



Draaischijf voor wagens der Oldenburgsche S.S. Fig: 2 a-c

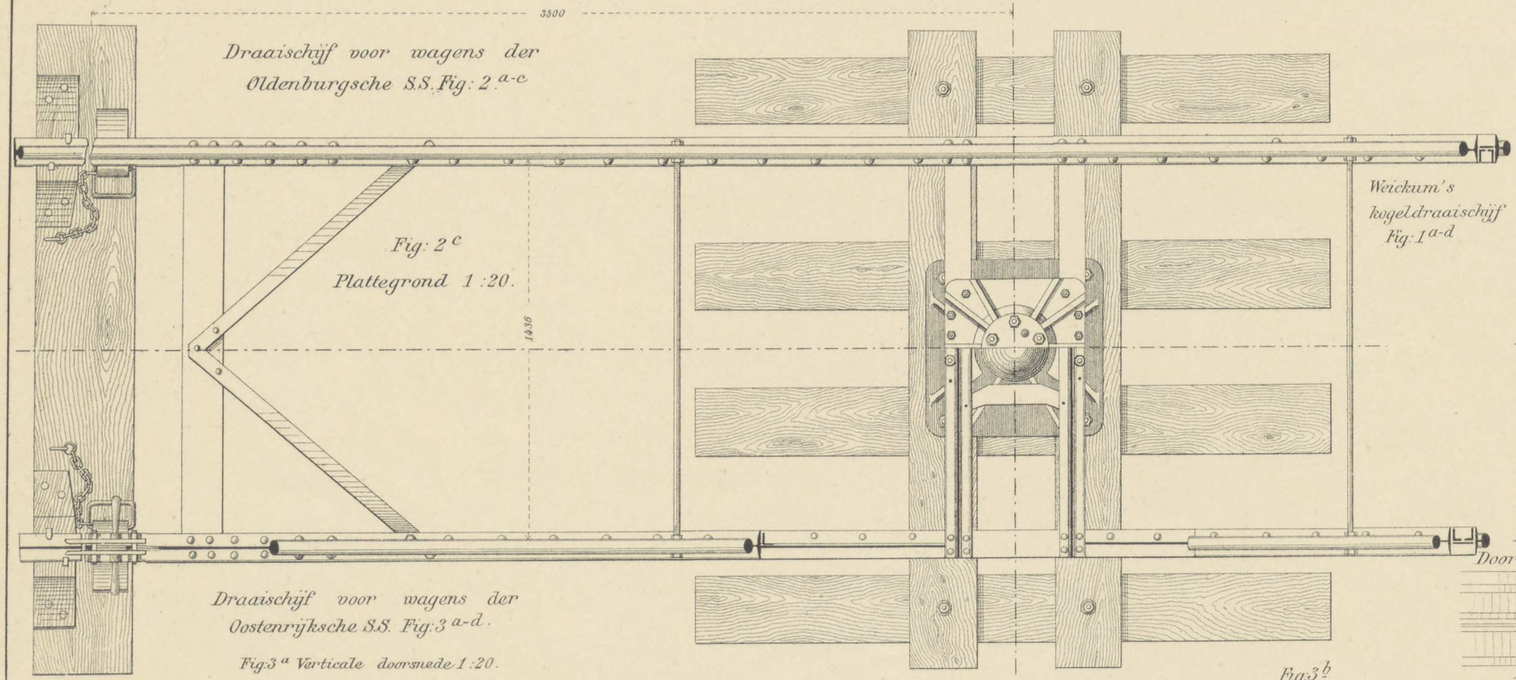


Fig: 2 c Plattegrond 1 :20.

Weickum's kogeldraaischijf Fig: 1 a-d

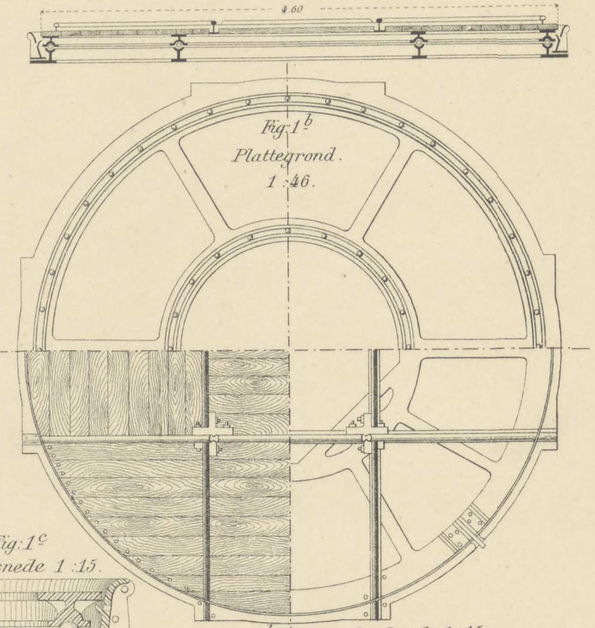


Fig: 1 b Plattegrond. 1 :46.

Fig: 1 c Doorsnede 1 :15.

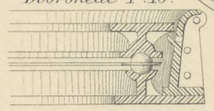
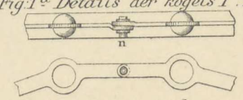


Fig: 1 d Details der kogels 1 :15.



Draaischijf voor wagens der Oostenrijksche S.S. Fig: 3 a-d.

Fig: 3 a Verticale doorsnede 1 :20.

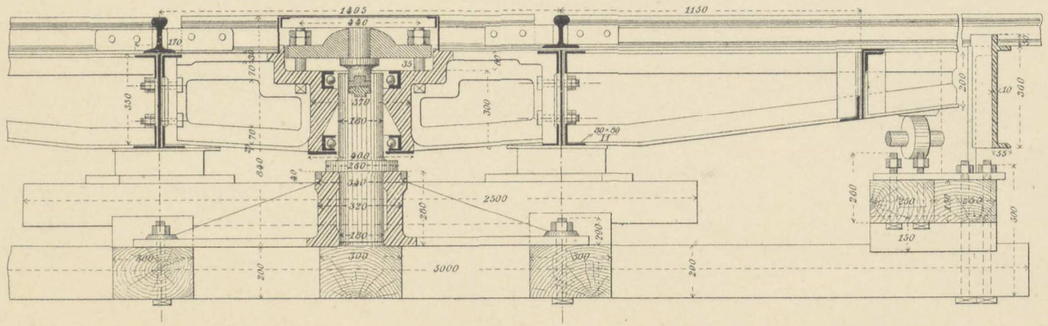


Fig: 3 b Steunrol Doorsnede 1 :10.

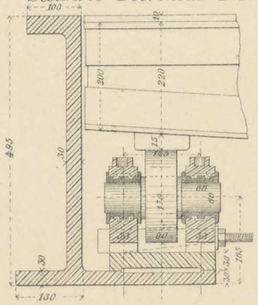


Fig 3 c Steunrol Zijaanzicht 1 :10.

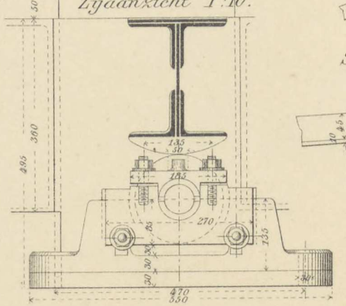
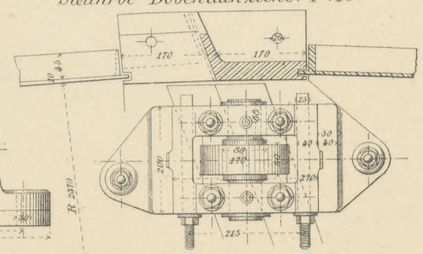


Fig 3 d Steunrol Bovenaanzicht. 1 :10.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen 's Hage.

DRAAISCHIJVEN.

Fig. 1[a] Langsdoorsnede volgens c.d.e.f.g.h.i. 1:70

Locomotief draaischijf van den Chemin de fer d'Orléans Fig. 1 a.b.c.

Fig. 1[c] Doorsnede over het midden aan de einden 1:30

Fig. 1[b] Plattegrond 1:70

Fig. 2 g Details der tandreep 1:15

Locomotief draaischijf der Pruisische S.S. Fig. 2 a-g

Fig. 2[e] Doorsnede AB 1:30

Fig. 2[b] Langsdoorsnede over de spil 1:30.

Fig. 2[a] Dwarsdoorsnede over de spil 1:30.

Fig. 2 c Doorsnede v/d spilkoker 1:30.

Fig. 2 f Doorsnede C.D 1:30.

Fig. 2[d] Enddwarsdrager met bewegings inrichting Plattegrond 1:30

Uitg. de Gebr[s] v. Cleef.

Steendr. Gebr. v. Langenhuysen 's Hage.

Fig: 1 a Doorsnede over het midden.
Bovenbouw volgens AB. 1:16 Onderbouw volgens BD.

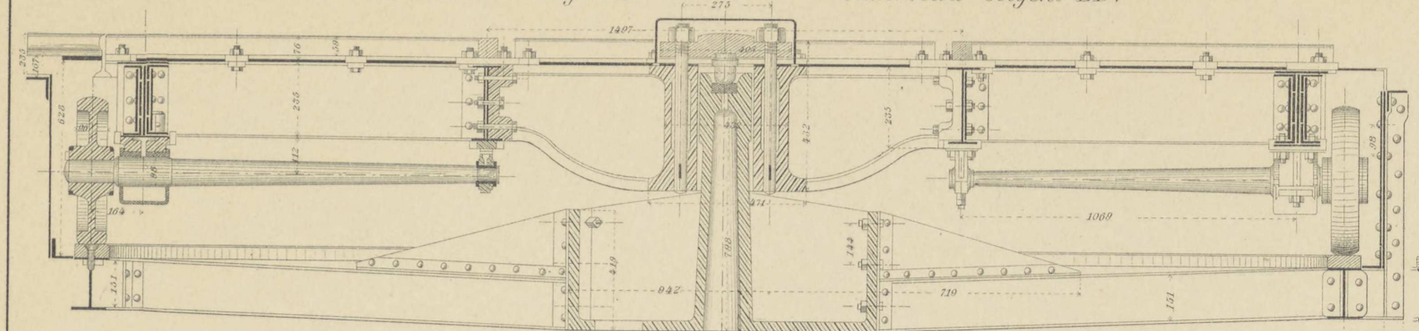
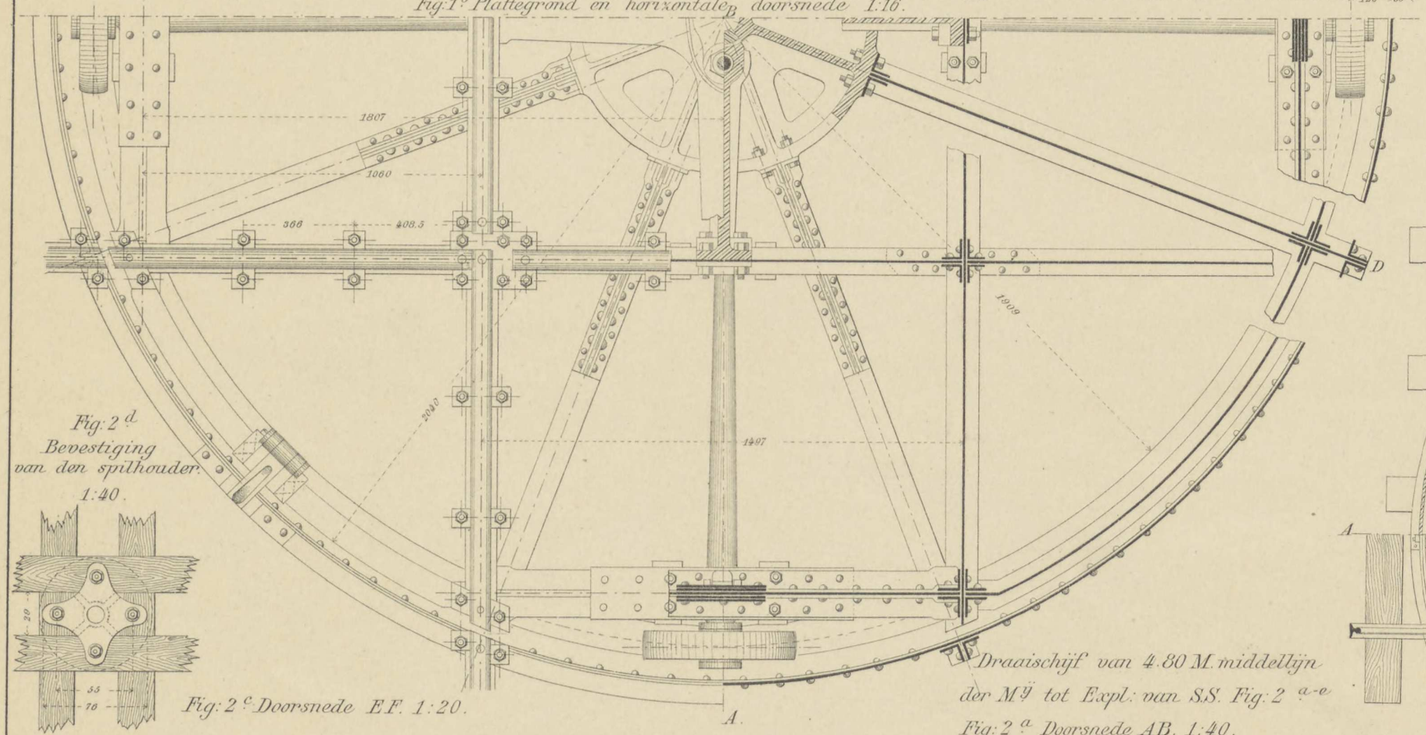


Fig: 1 b Plattegrond en horizontale doorsnede 1:16.



Draaischijf van 4.08 M. middellijn der Rheinische Eisenbahn. Fig 1 a-e

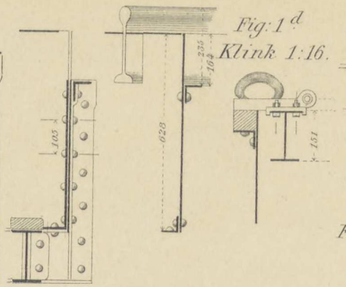


Fig: 1 d Klink 1:16.

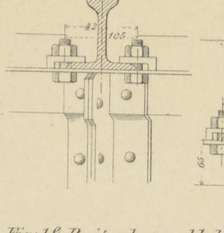


Fig 1 c Ondersteuning der aansluitende rails. 1:8.

Fig: 1 e Buitenkussenblok. 1:16.

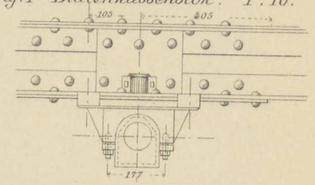


Fig: 2 b Doorsnede CD. en bovenaanzicht 1:40.

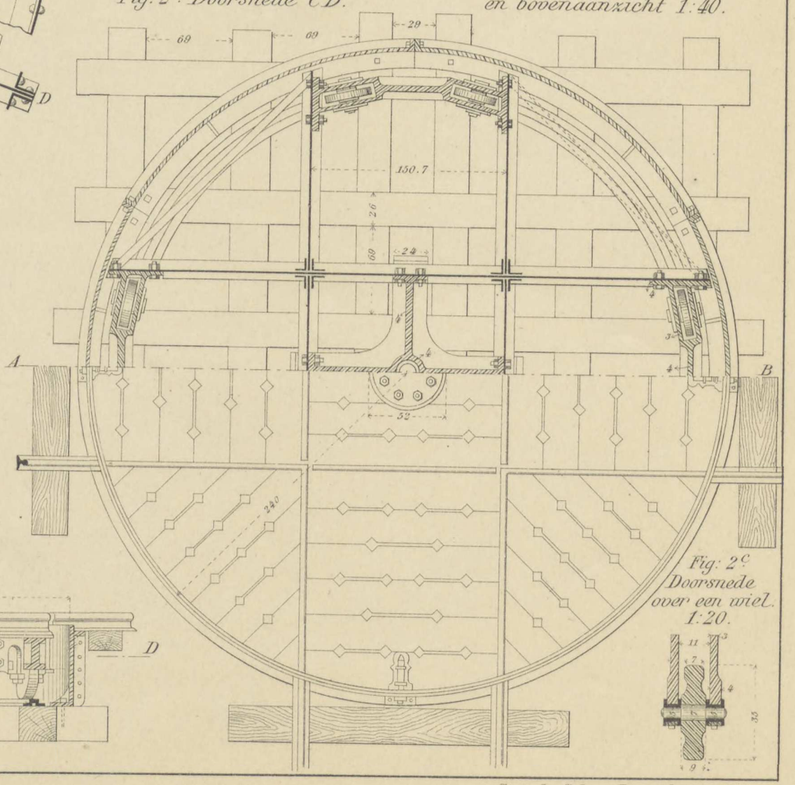
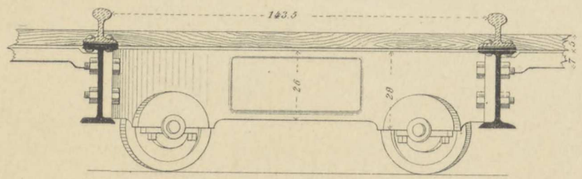


Fig: 2 d Bevestiging van den spilhouder 1:40.

Fig: 2 c Doorsnede EF. 1:20.



Draaischijf van 4.80 M. middellijn der M^lij tot Expl: van S.S. Fig: 2 a-e

Fig: 2 a Doorsnede AB. 1:40.

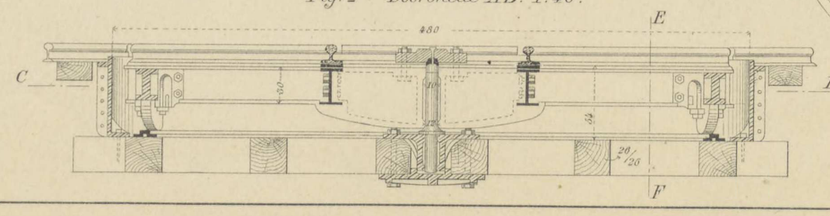


Fig: 2 c Doorsnede over een wiel. 1:20.

Uitg. de Gebr^s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

DRAAISCHIJVEN.

Draaischijf van 15.50 M middellijn der HIJSM.
Fig. 1 a-e

Fig. 1a
Verticale doorsnede en zijaanzicht 1:30.

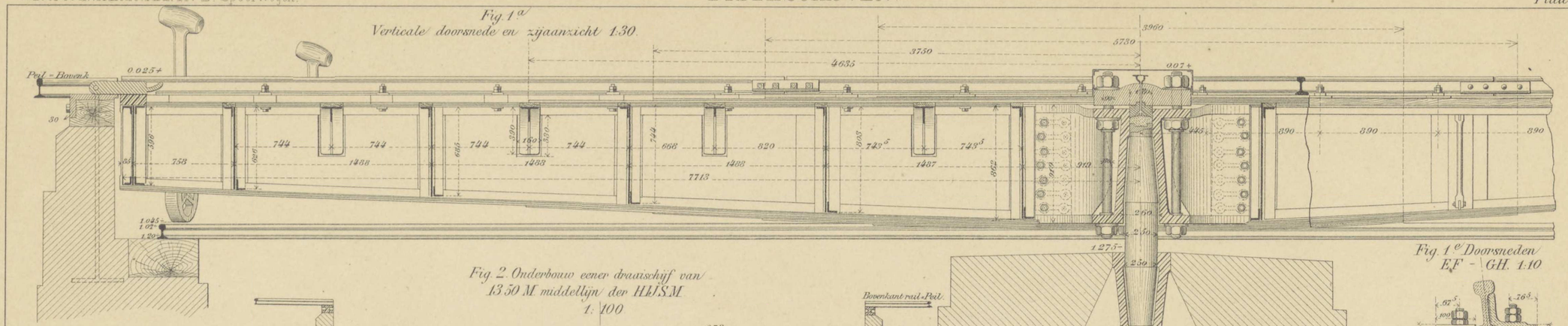


Fig. 2. Onderbouw eener draaischijf van 13.50 M middellijn der HIJSM.
1:100

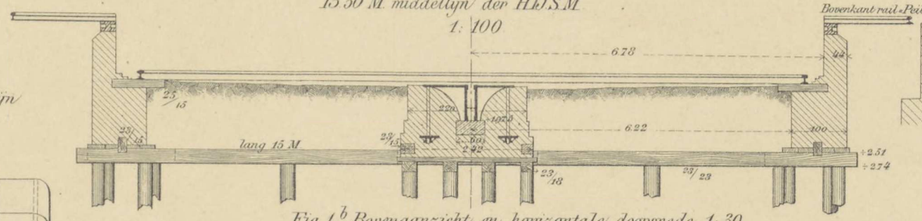


Fig. 1b Bovenaanzicht en horizontale doorsnede 1:30.

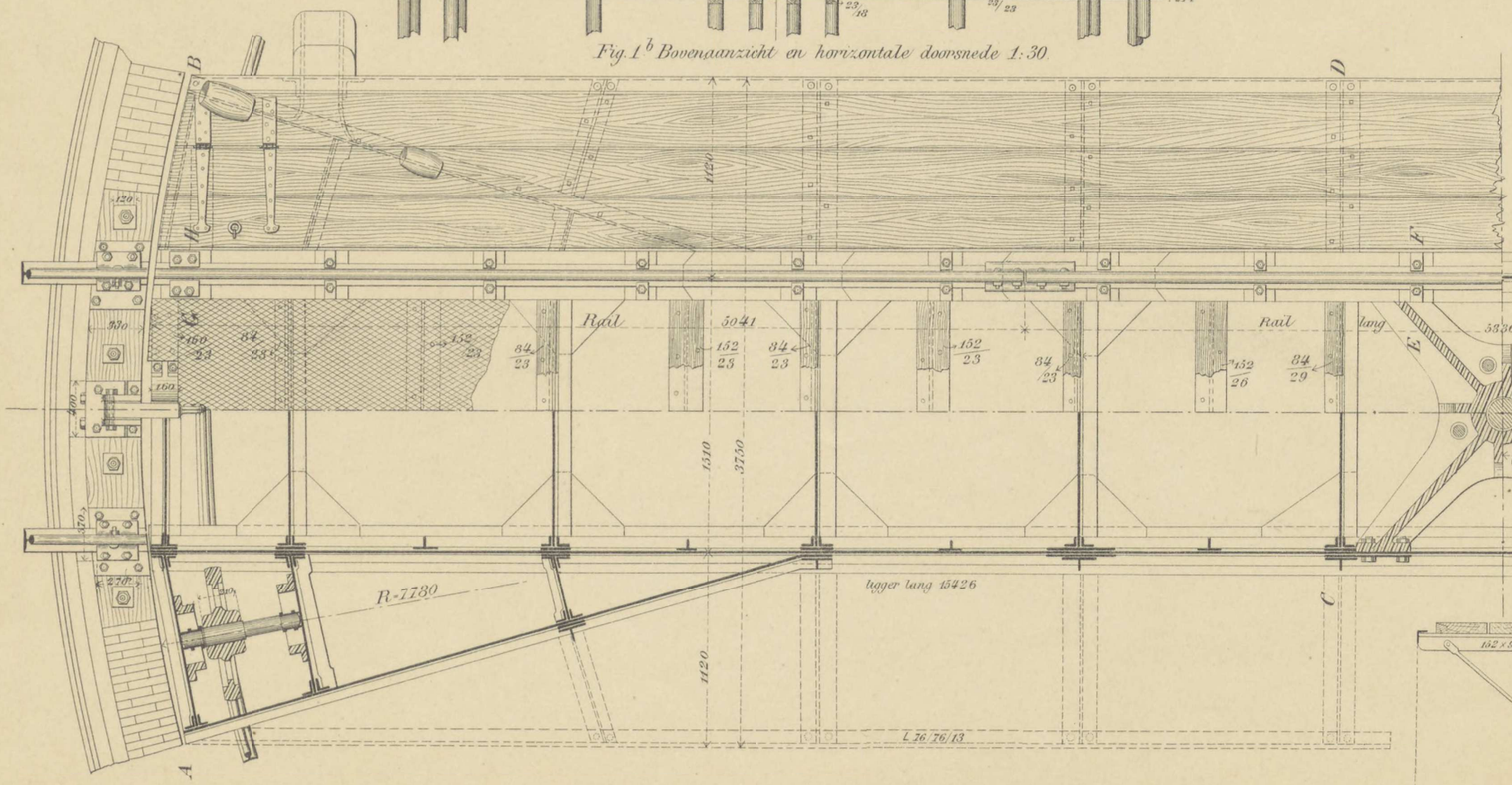


Fig. 1c Doorsneden E.F - G.H. 1:10

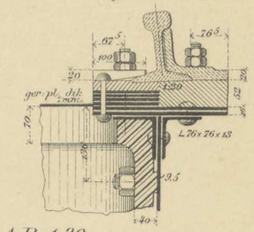


Fig. 1d Aanzicht A.B. 1:30.

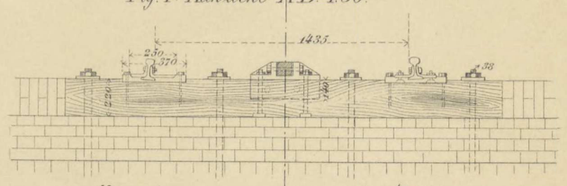
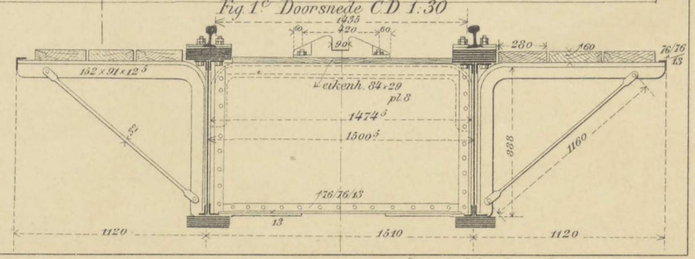


Fig. 1e Doorsnede C D 1:30.



Uitg. de Gebr^s v. Cleef.

Steendr. Gebr v. Langerhuysen's Gravenhage.

DRAAISCHIJVEN.

Fig. 1d
Doorsnede E.F.
1:30.

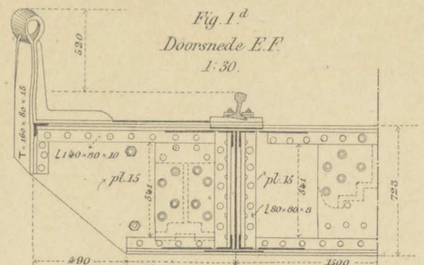


Fig. 1e Doorsnede C.D. 1:30.

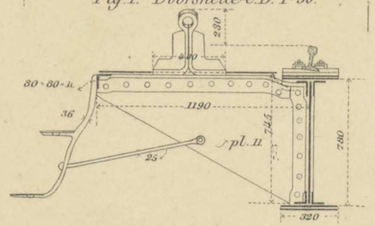
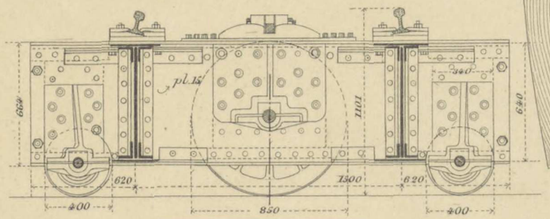


Fig. 1f Doorsnede G.H. 1:30.



Locomotief-draaischijf van 14.50 M. middellijn
der Mij. t. Expl. v. SS.
Fig. 1a-h.

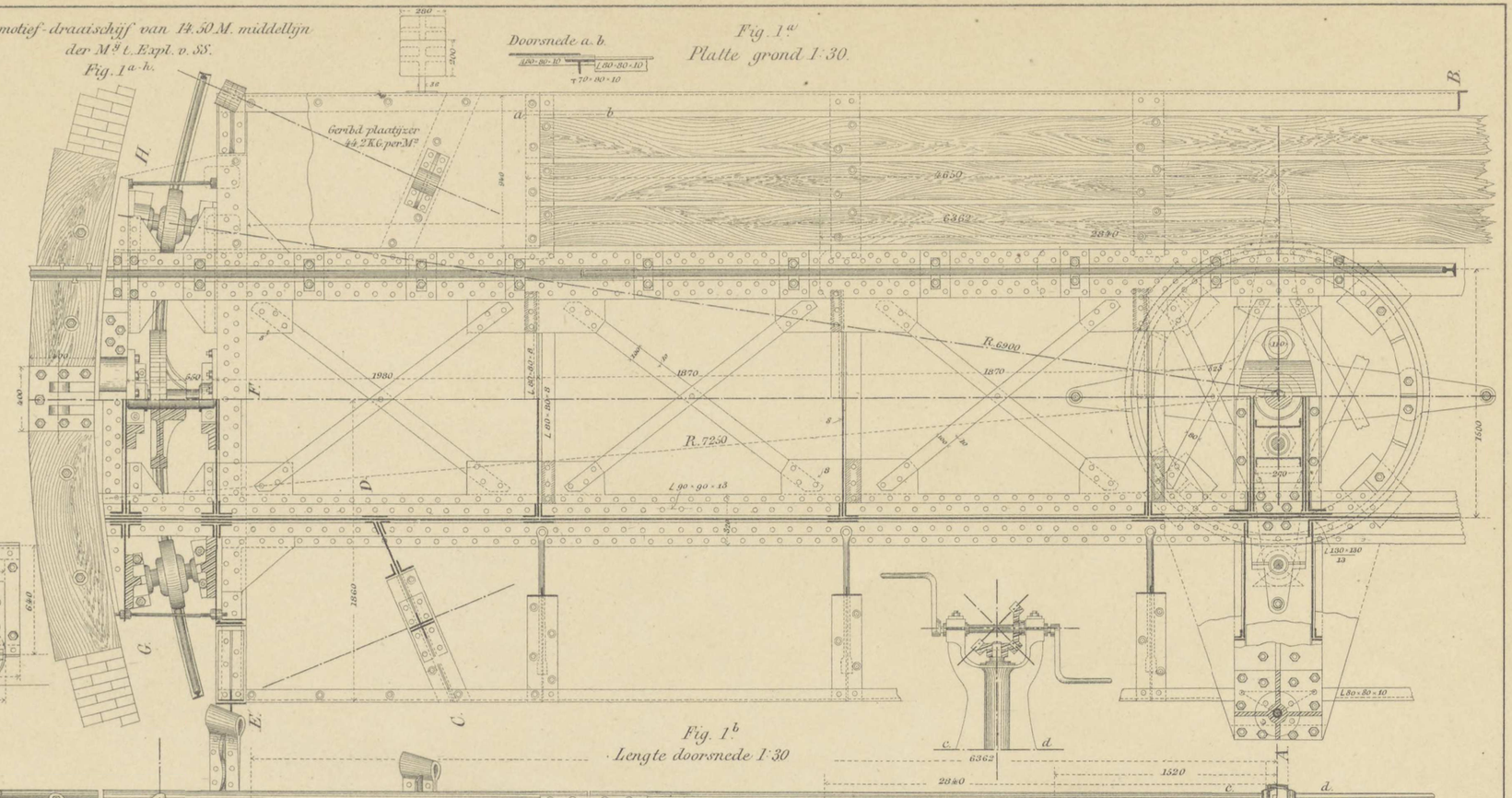


Fig. 1b
Lengte doorsnede 1:30

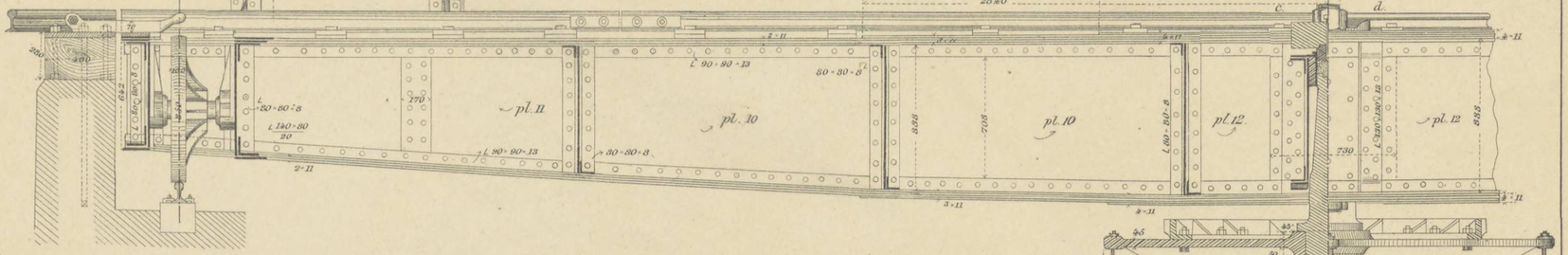


Fig. 1g Gegoten ijzeren stoel 1:10

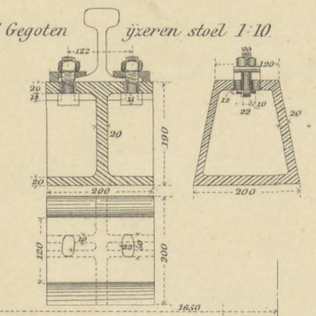


Fig. 1c Doorsnede AB. 1:30

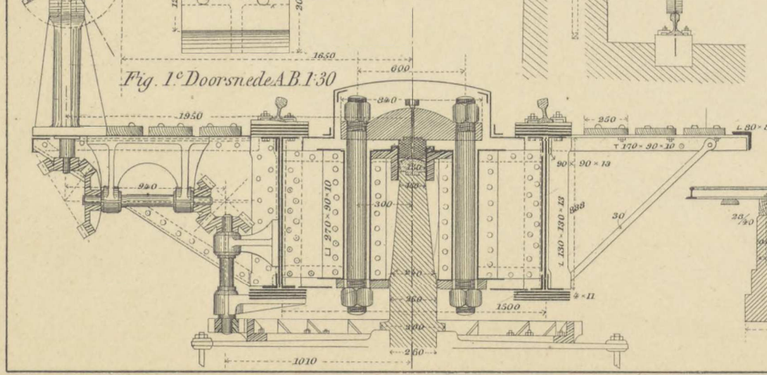
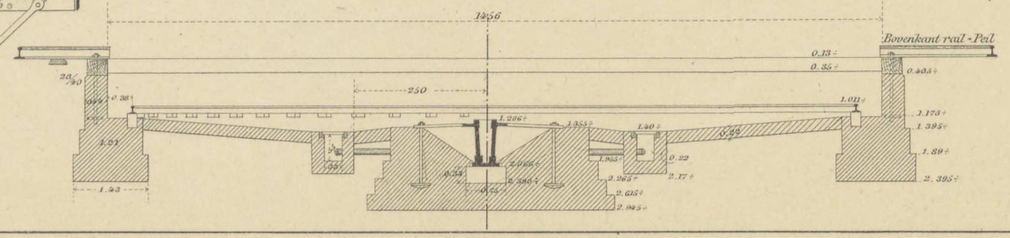


Fig. 1h Onderbouw 1:100
(Station Roosendaal)



DRAAISCHIJVEN.

Fig. 2 a Plattegrond. 1:30.

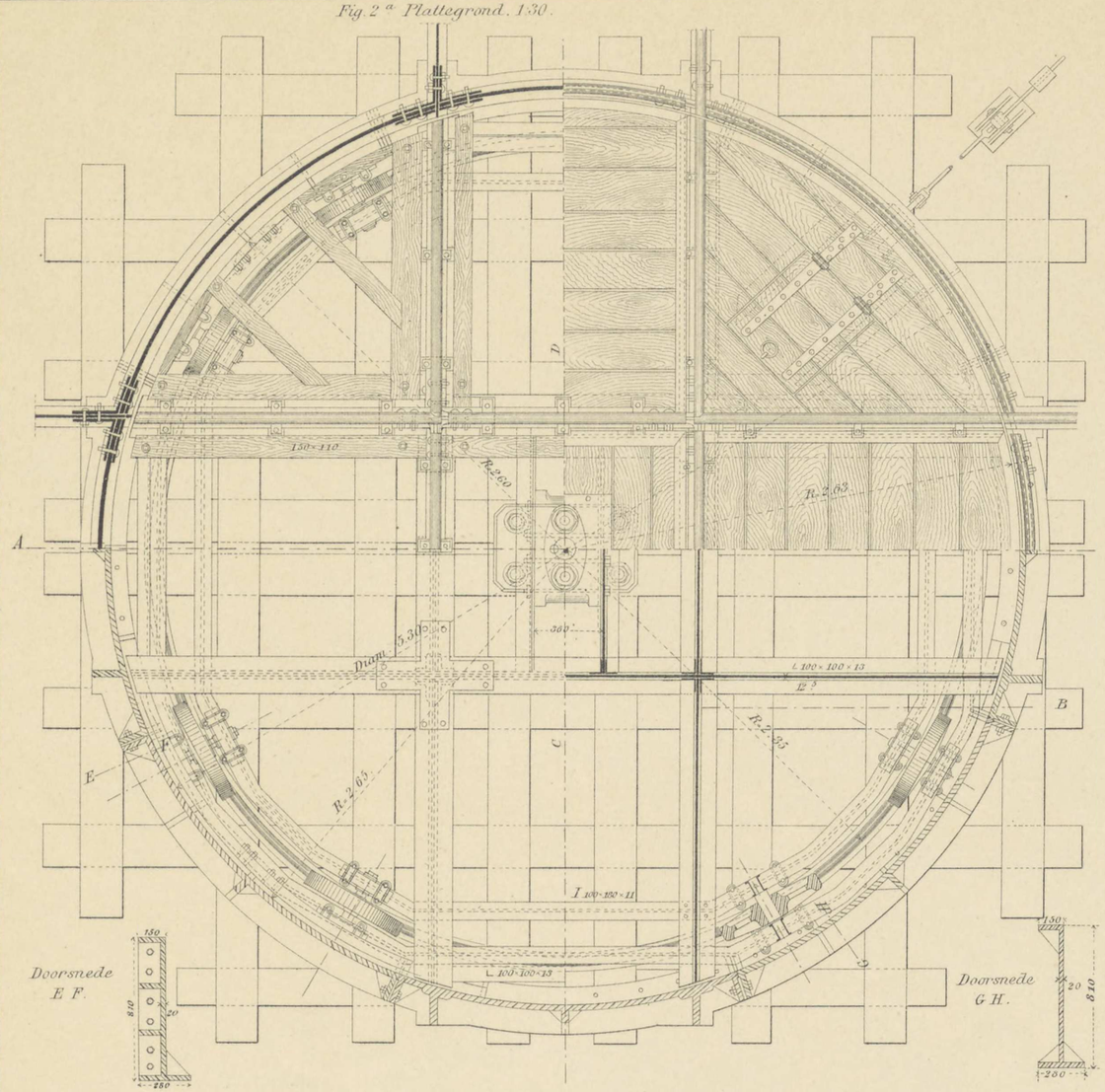
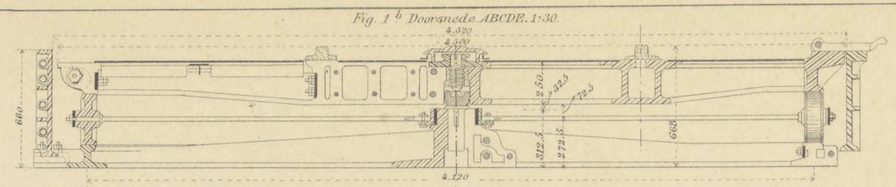
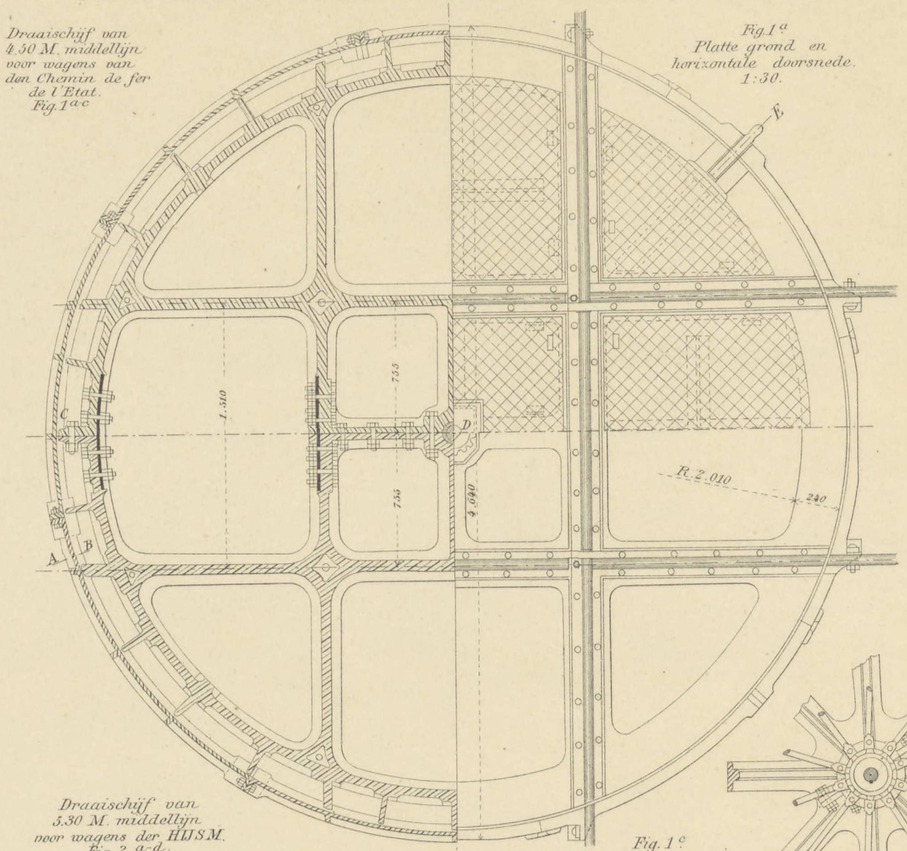


Fig. 1 b Doorsnede ABCDE. 1:30.



Draaischijf van 4.50 M. middellijn voor wagens van den Chemin de fer de l'Etat. Fig. 1 a c

Fig. 1 a Platte grond en horizontale doorsnede. 1:30.



Draaischijf van 5.30 M. middellijn voor wagens der HIJSM. Fig. 2 a-d.

Doorsnede E F.

Doorsnede G H.

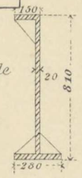


Fig. 2 b Doorsnede AB. 1:30.

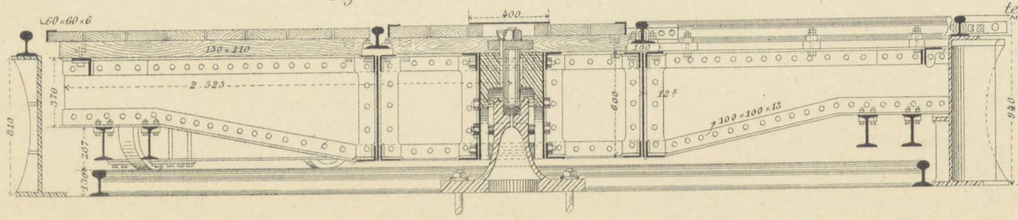


Fig. 1 c Binnenaanzicht tegen het steunvlak der kuip 1:30.

Fig. 2 d Doorsnede CD. 1:30.

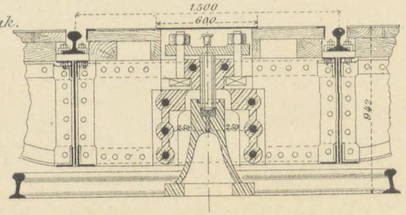
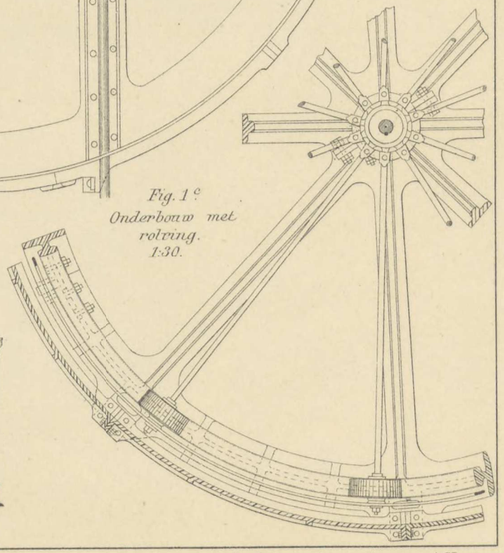


Fig. 1 c Onderbouw met rolving. 1:30.



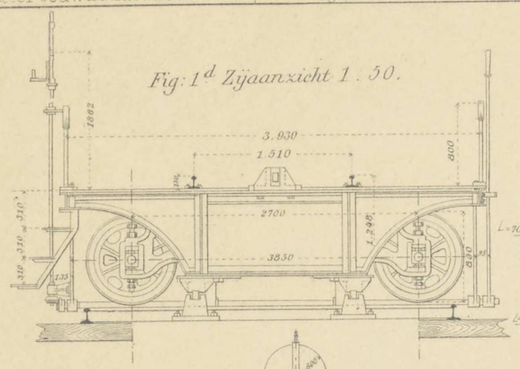
Uitg. de Gebr.s v Cleef.

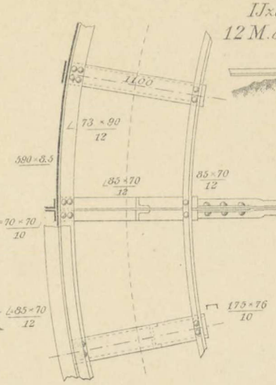
Steendr Gebr. v. Langenhuysen, s Hage.

DRAAISCHIJVEN.

IJzeren onderbouw eener draaischijf van 12 M. diameter der Wurtembergsche S.S. Fig 2 a-b

Fig: 1d Zijaanzicht 1 : 50.





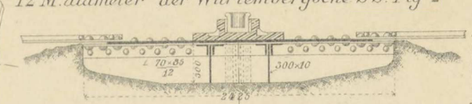
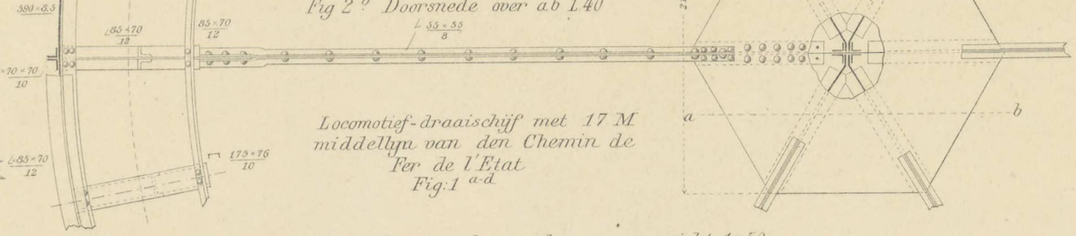
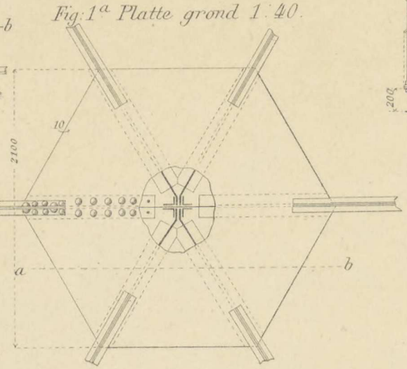


Fig 2 b Doorsnede over a b 1:40



Locomotief-draaischijf met 17 M middellijn van den Chemin de Fer de l'Etat Fig: 1 a-d

Fig: 1a Platte grond 1:40.



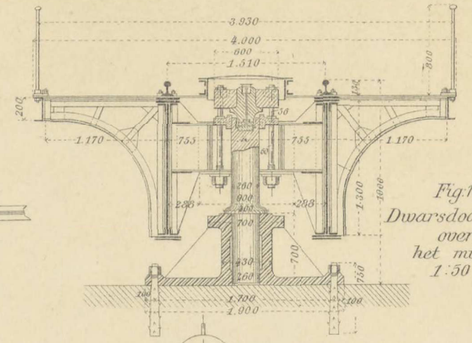


Fig: 1c Dwarsdoorsnede over het midden 1:50

Fig: 1a Langsdoorsnede en aanzicht 1:50

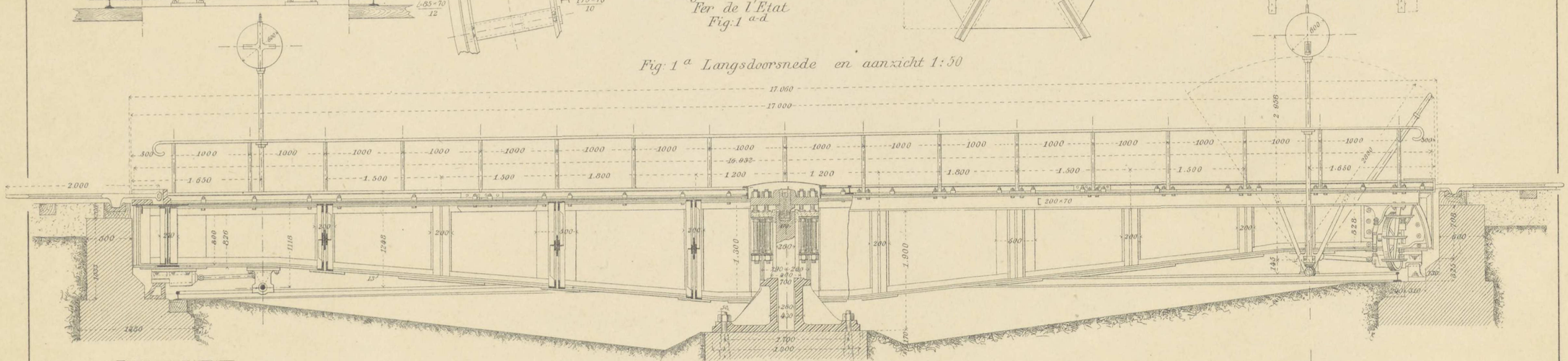
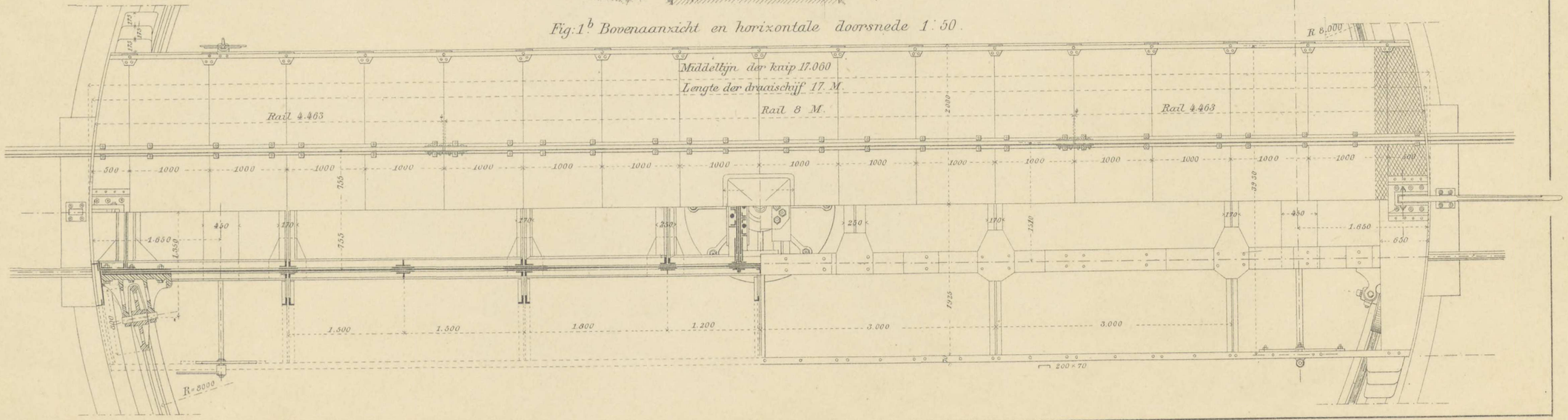


Fig: 1b Bovenaanzicht en horizontale doorsnede 1:50



Uitg de Gebr.s v Cleef

Steendr. Gebr. v Langenhuysen s Hage

DRAAISCHIJVEN

Fig: 1ª Plattegrond en horizontale doorsnede 1:30

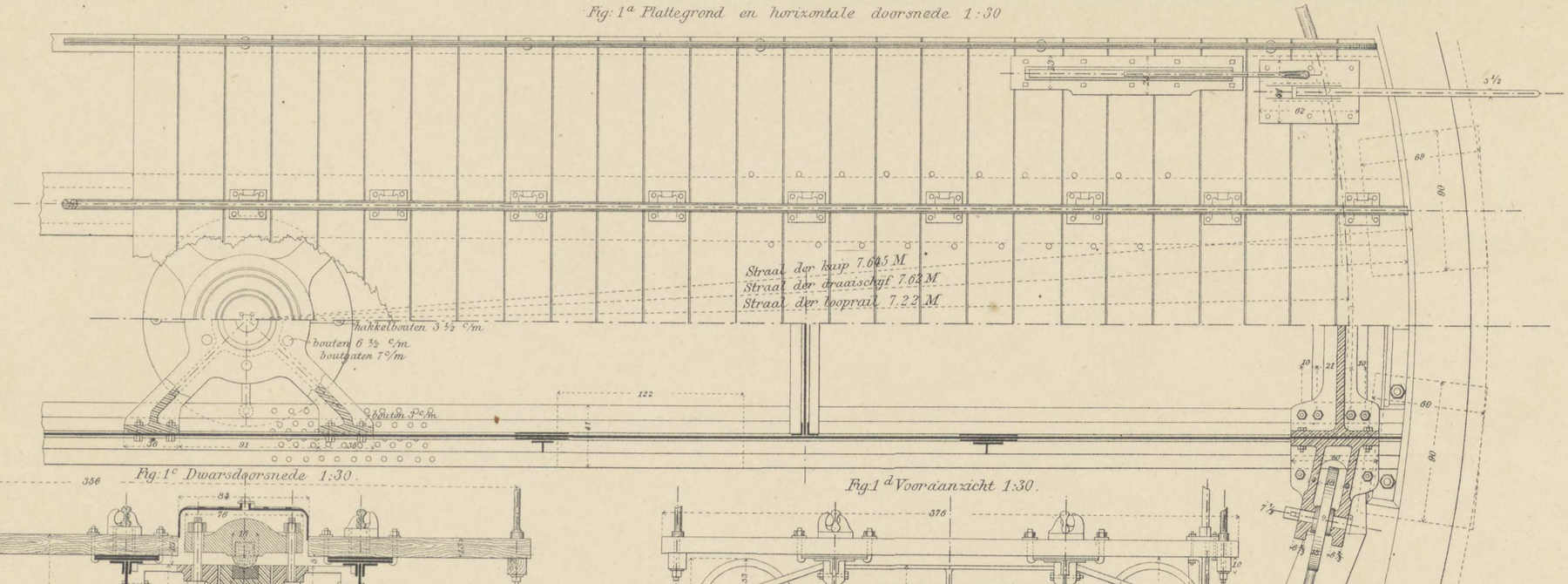
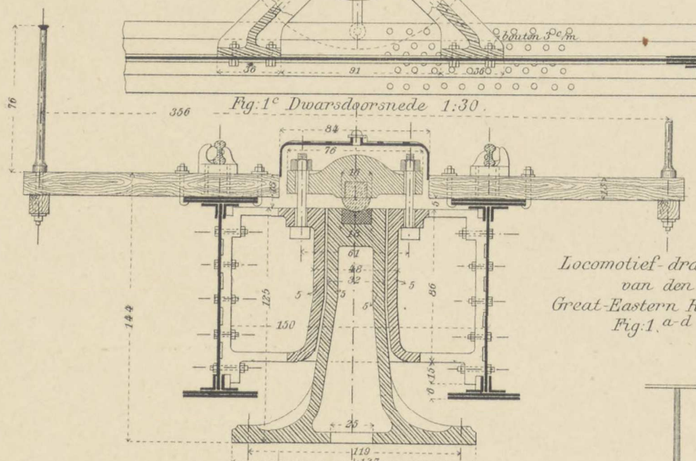


Fig: 1ᶜ Dwarsdoorsnede 1:30.



Locomotief-draaischijf van den Great-Eastern Railway. Fig: 1. a-d

Fig: 1ᵈ Vooraanzicht 1:30.

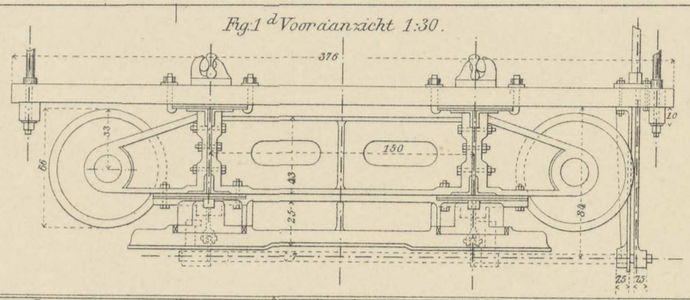
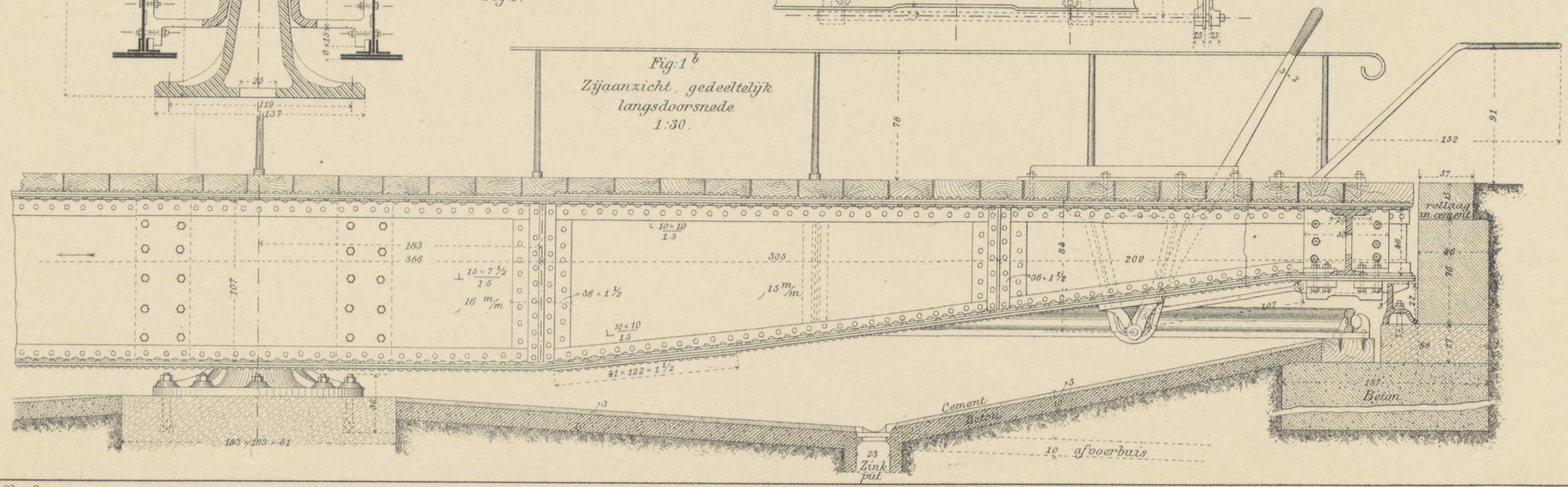


Fig: 1ᵇ Zijaanzicht, gedeeltelijk langsdoorsnede 1:30.



Uitg. de Gebr^s v. Cleef.

Steendr. Gebr. v. Langenhuysen's Hage.

ROLWAGENS.

Fig. 2ª Voor-aanzicht en doorsnede ABC. 1:30.

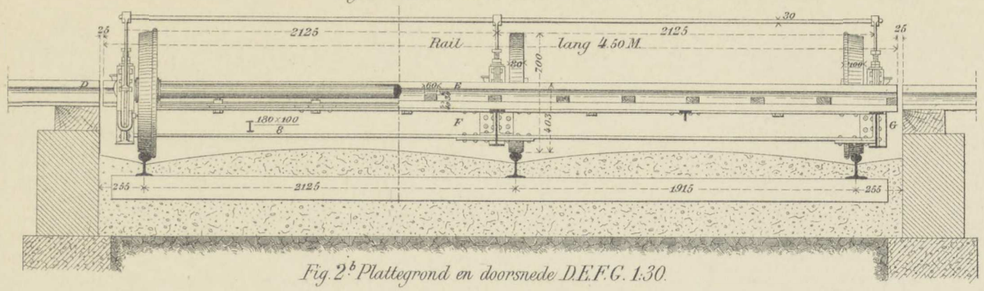


Fig. 2ᵇ Plattegrond en doorsnede DEFG. 1:30.

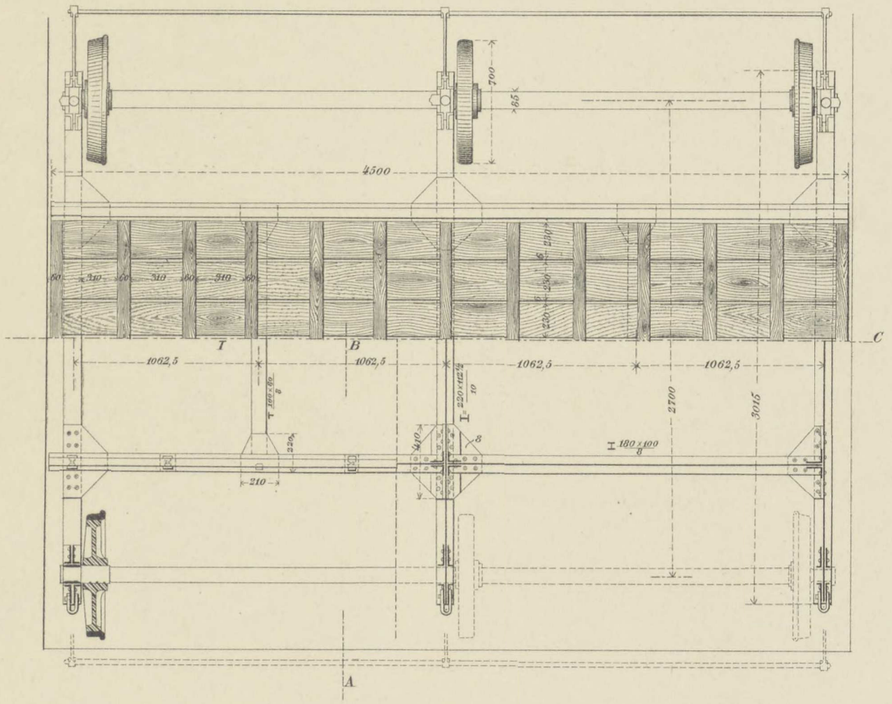
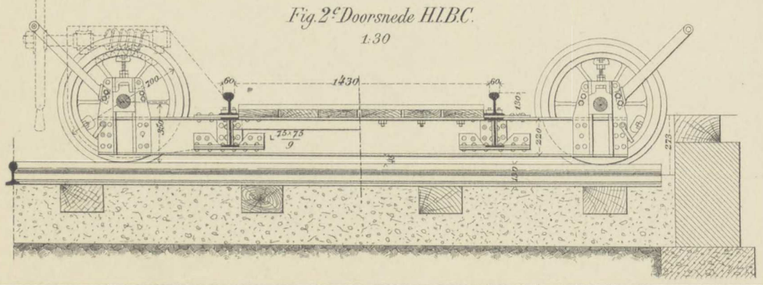


Fig. 2ᶜ Doorsnede HIBC. 1:30



Rolwagens voor wagens van den Chemin de Fer de l'Etat. Fig 2ª-c

Rolwagen voor locomotieven der Mij tot Expl. v. S.S. (Station Zwolle.) Fig 1ª-f

Fig. 1ª Plattegrond en horizontale doorsnede 1:30.

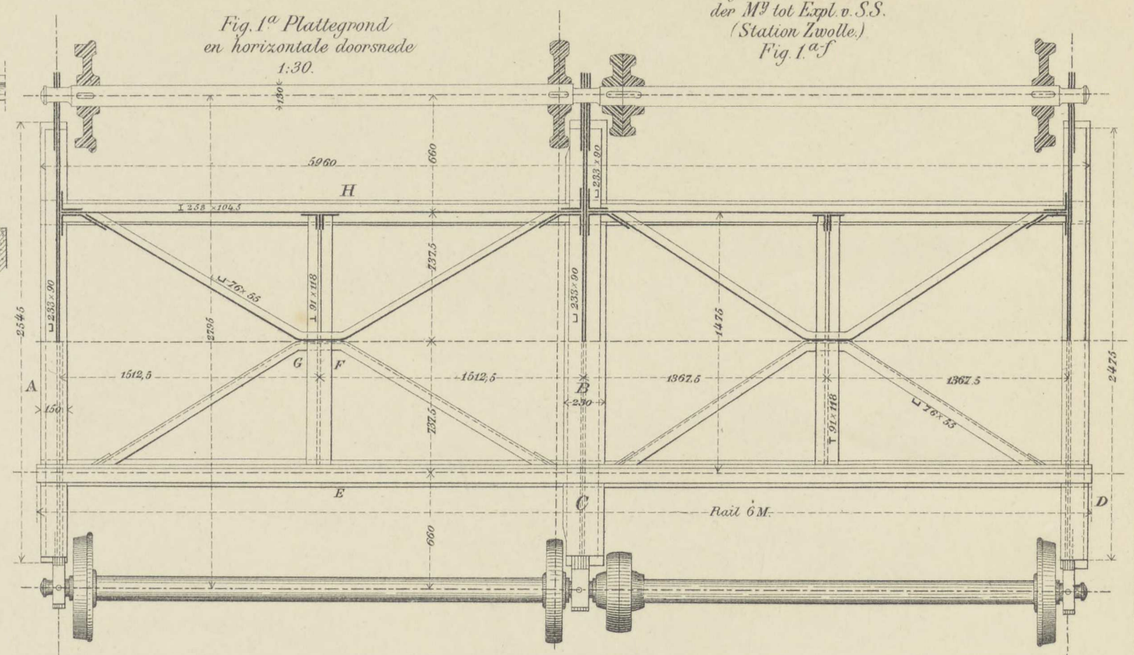


Fig. 1ᵇ Doorsnede ABCD. 1:30.

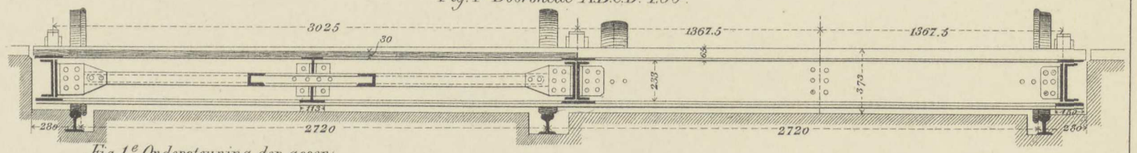


Fig. 1ᵉ Ondersteuning der assen aan de einden. in het midden.

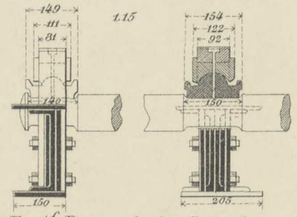


Fig. 1ᵍ Doorsnede by C. 1:15.

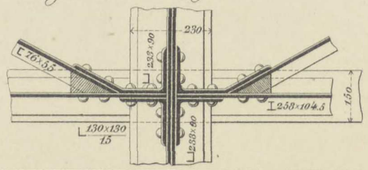


Fig. 1ᶜ Doorsnede EFGH. 1:30.

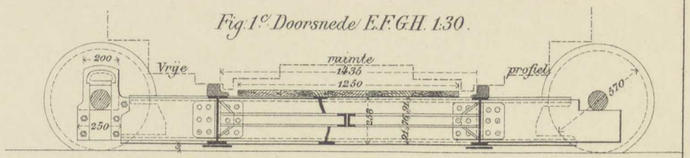
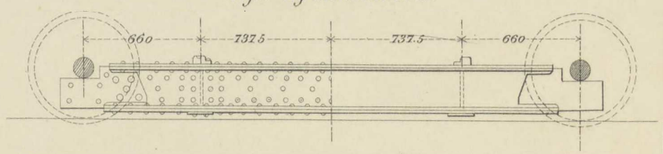


Fig. 1ᵈ Zij-aanzicht. 1:30.

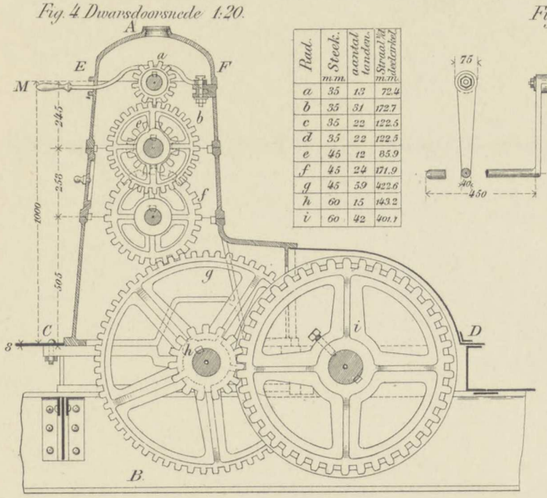


Uitg. de Gebrs v. Cleef.

Steendr. Gebr. v. Langenhuysen's Gravenhage.

ROLWAGENS.

Fig. 4 Dwarsdoorsnede 1:20.



Rad.	Steek. m.m.	aantal tanden.	Spraakte. m.m.
a	35	13	72.4
b	35	31	172.7
c	35	22	122.5
d	35	22	122.5
e	45	12	85.9
f	45	24	171.9
g	45	59	422.6
h	60	15	143.2
i	60	42	401.1

Fig. 5 Doorsnede A.B. 1:20.

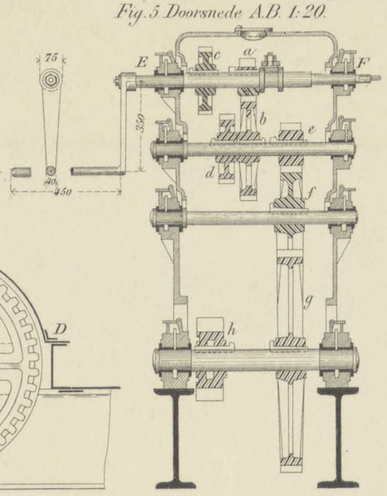
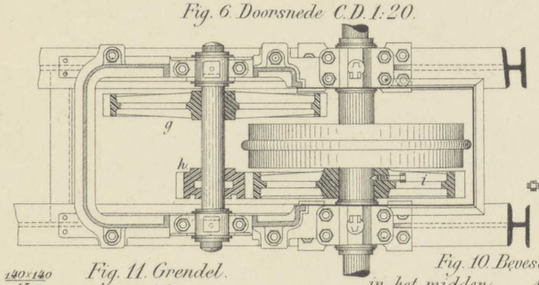


Fig. 6 Doorsnede C.D. 1:20.



Details van het windwerk. Fig. 4-7.

Fig. 7 Doorsnede E.F. 1:20.

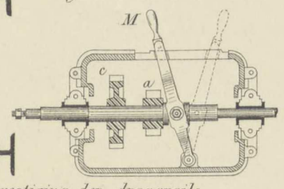


Fig. 11. Grendel. 1:15.

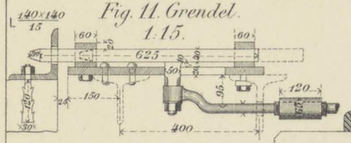


Fig. 10 Bevestiging der draagrails in het midden. 1:10. ter weerszijden

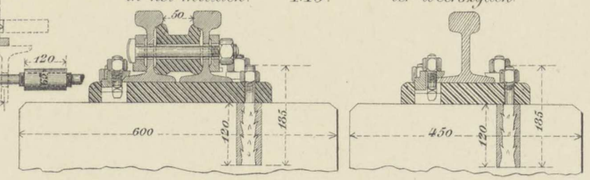


Fig. 3 Dwarsdoorsnede 1:40

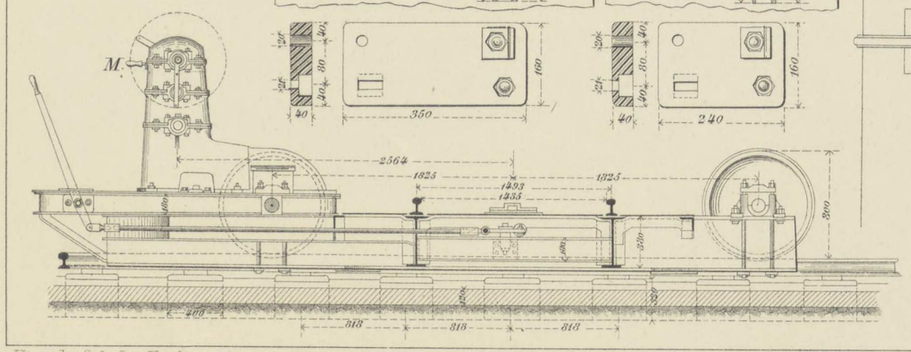


Fig. 1 Langsdoorsnede 1:40.

Rolwagen voor locomotieven zonder tender der Pruisische Staatsspoorwegen. Fig 1-11

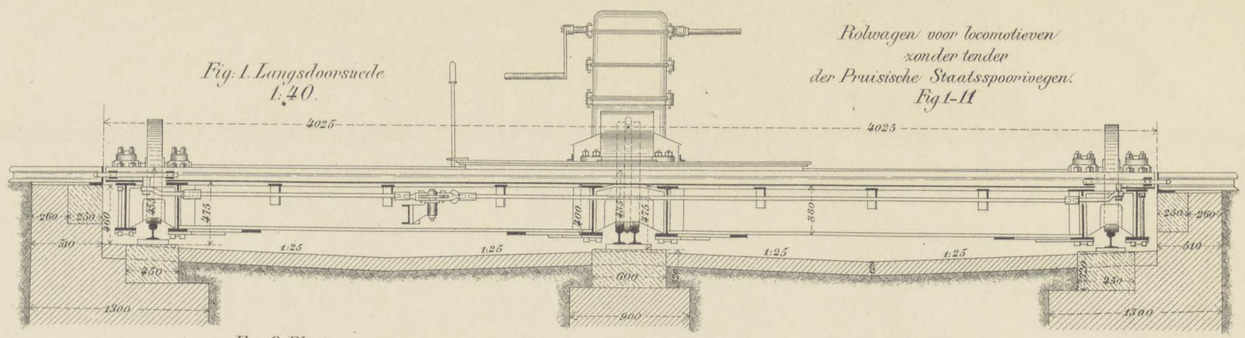


Fig. 2 Platte grond en horizontale doorsnede 1:40.

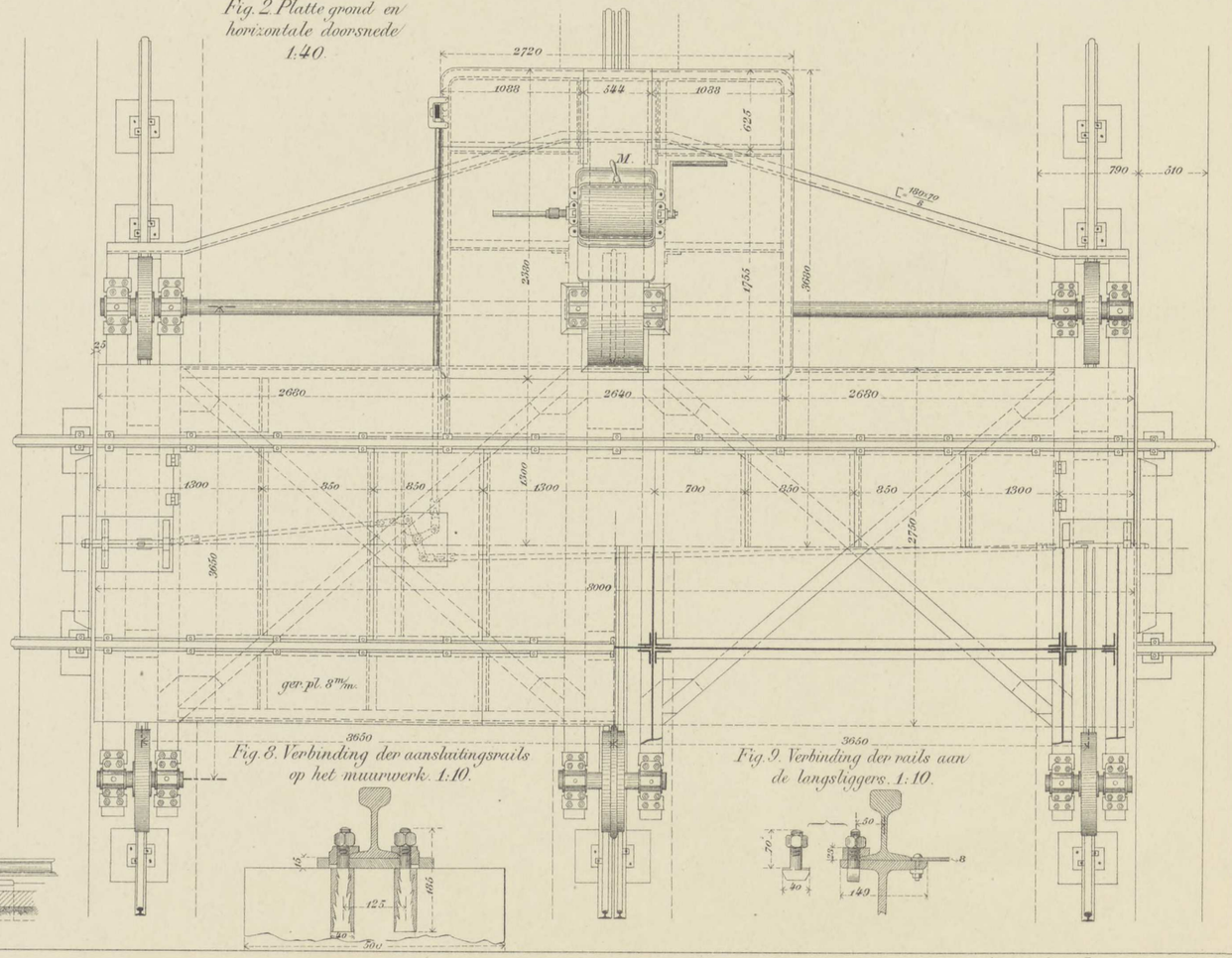


Fig. 8. Verbinding der aanslaitingsrails op het muurwerk. 1:10.

Fig. 9. Verbinding der rails aan de langsliggers. 1:10.

Uitg. de Gebr^s v. Cleef.

Steendr. Gebr. v. Langenhuysen's Gravenhage.

Traverse van Clauss.
(Fig. 1 a b)

Fig. 1a Zijaanzicht 1:50.

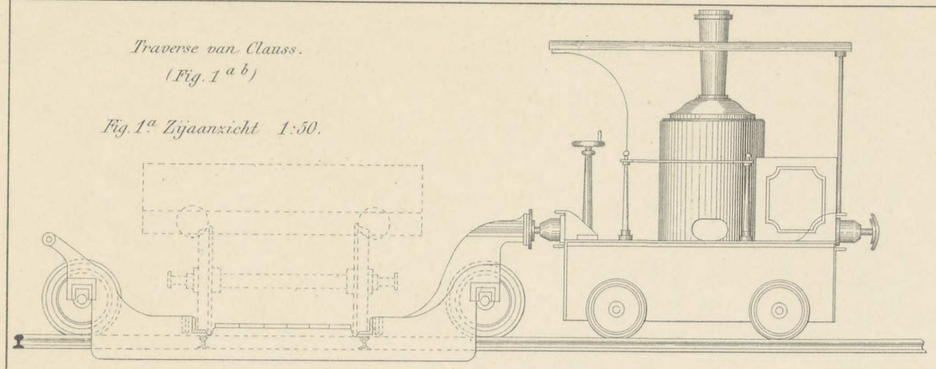


Fig. 4 a
Langsdoorsnede 1:40.

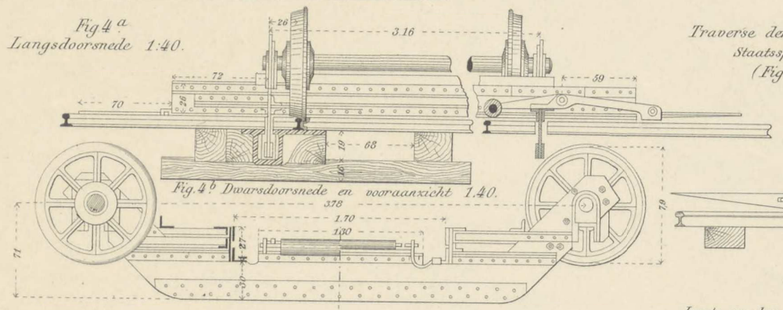
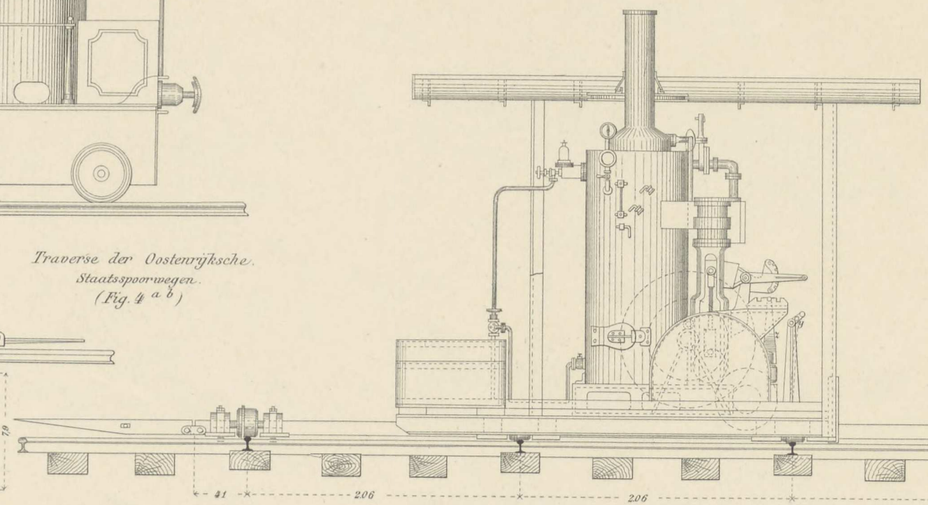


Fig. 4 b Dwarsdoorsnede en vooraanzicht 1:40.

Traverse der Oostenrijksche Staatsspoorwegen.
(Fig. 4 a b)

Traverse van Ehrhardt & Schmer.
(Fig. 2 a-c)

Fig. 2 a Aanzicht 1:40.



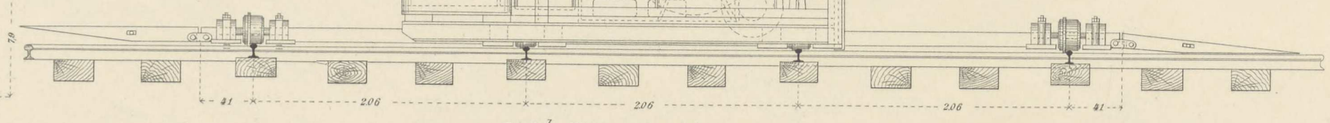
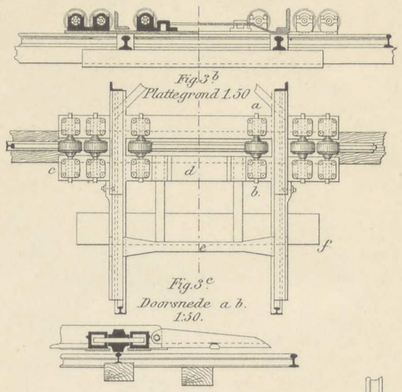
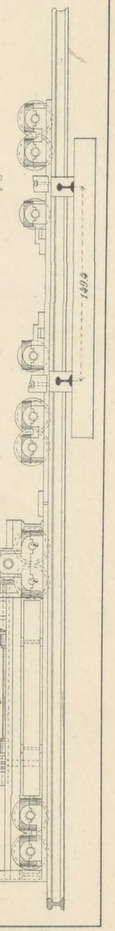


Fig. 2 b Plattegrond 1:40.

Fig. 3 a Doorsnede c.d.e.f 1:50.



Traverse van Klett.
(Fig. 3 a-c)



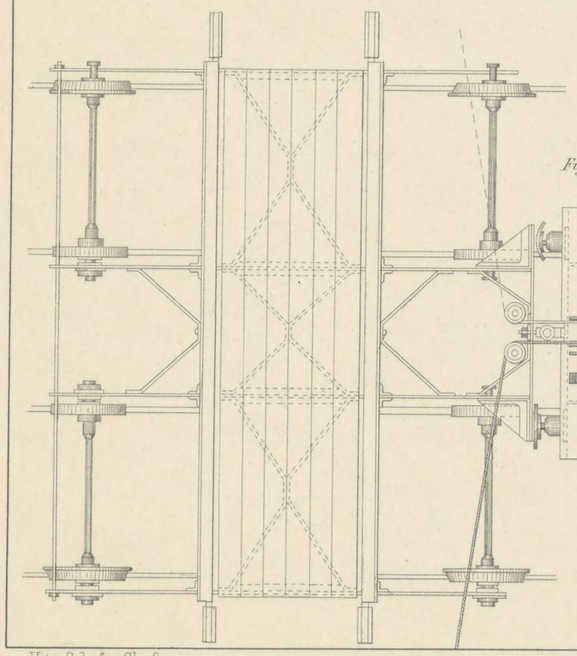
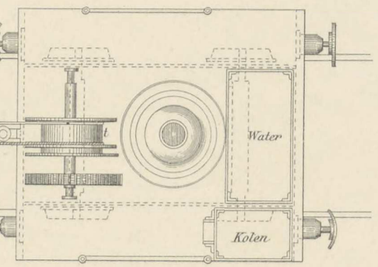
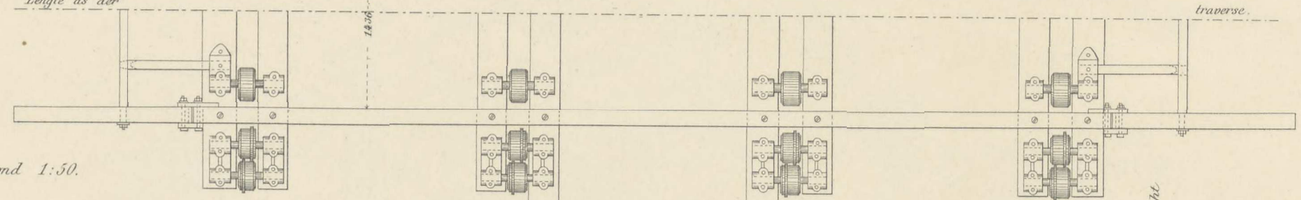


Fig. 1 b Plattegrond 1:50.



Lengte as der traverse.



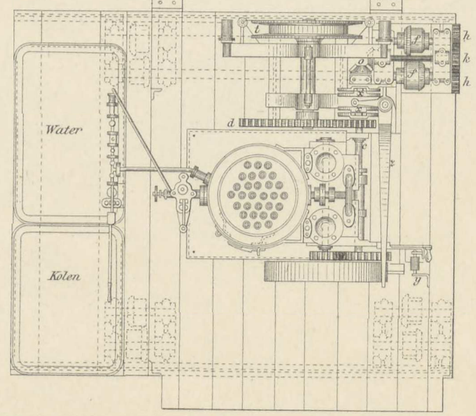
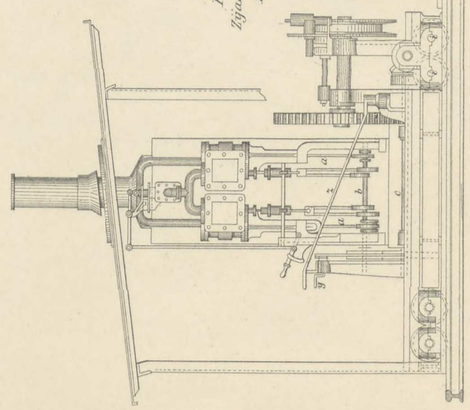


Fig. 2 c
Zijaanzicht
1:40.



Uitg. Gebr.s v. Cleef.

Steendr: Gebr.s v. Langenhuysen. s Hage.

TRAVERSEN.

Fig 5. Zijaanzicht en langsdoorsnede 1:30.

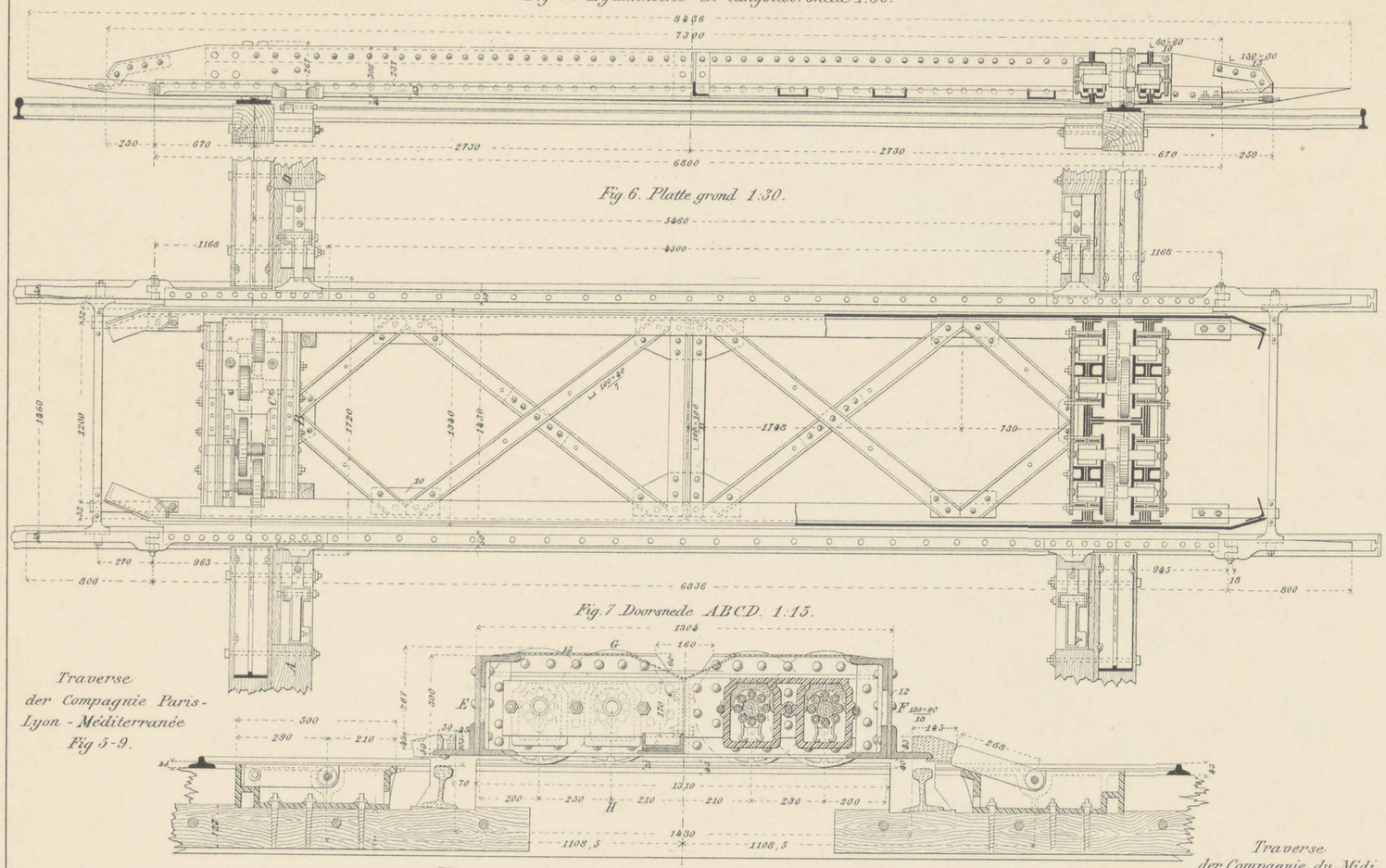


Fig. 6. Platte grond 1:30.

Fig. 7 Doorsnede ABCD. 1:15.

Traverse der Compagnie Paris-Lyon-Méditerranée Fig 5-9.

Fig. 8 Doorsnede EF 1:15.

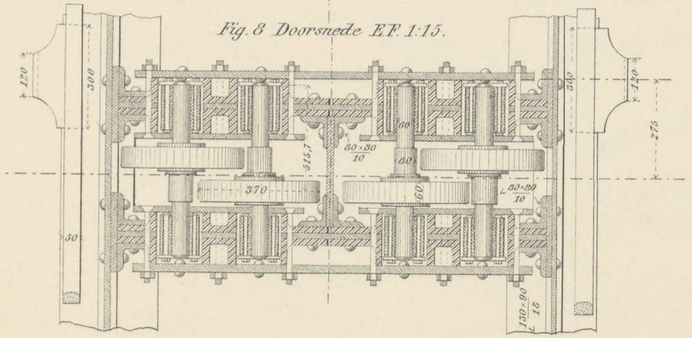
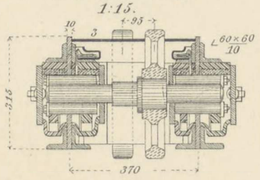


Fig. 9. Doorsnede G.H. 1:15.



Traverse der Compagnie du Midi. Fig 1-4.

Fig: 1. Doorsnede AB. 1:40.

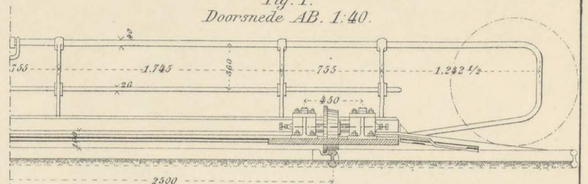


Fig. 2 Platte grond 1:40.

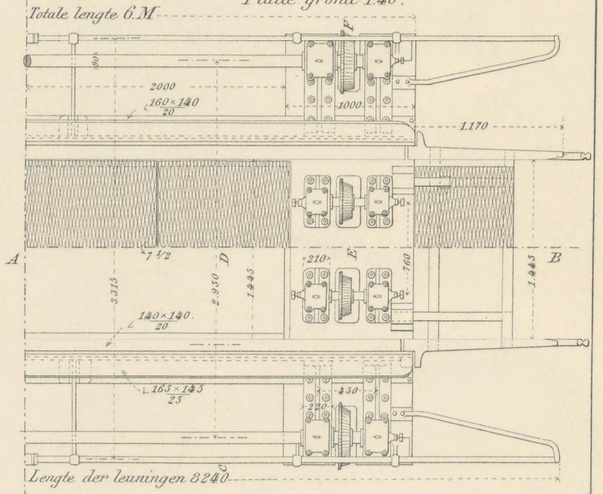


Fig. 3. Zijaanzicht 1.40.

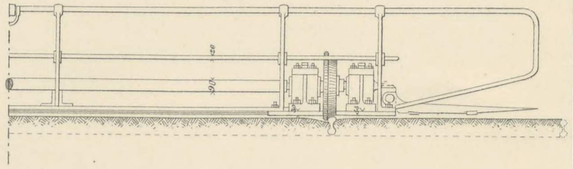
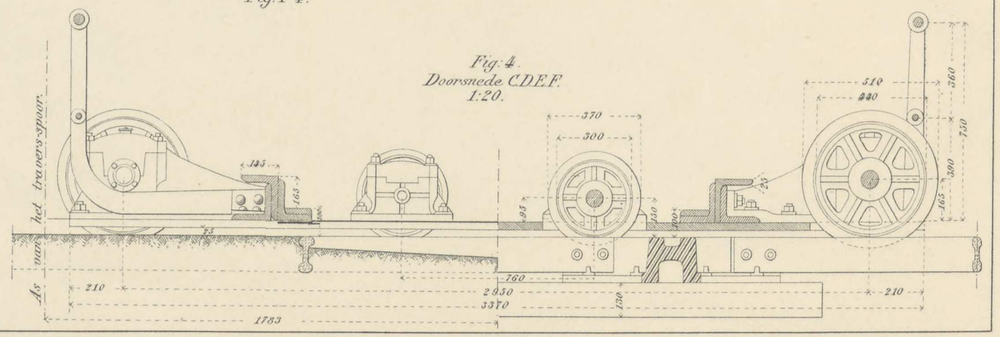


Fig. 4. Doorsnede CDEF. 1:20.



Uitg: de Gebr^s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage

TRAVERSEN.

Fig. 1. Aanzicht en langsdoorsnede 1:40.

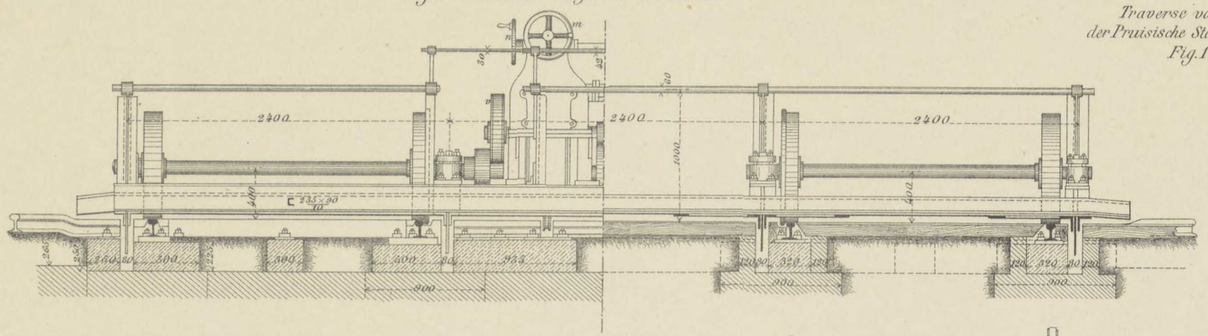
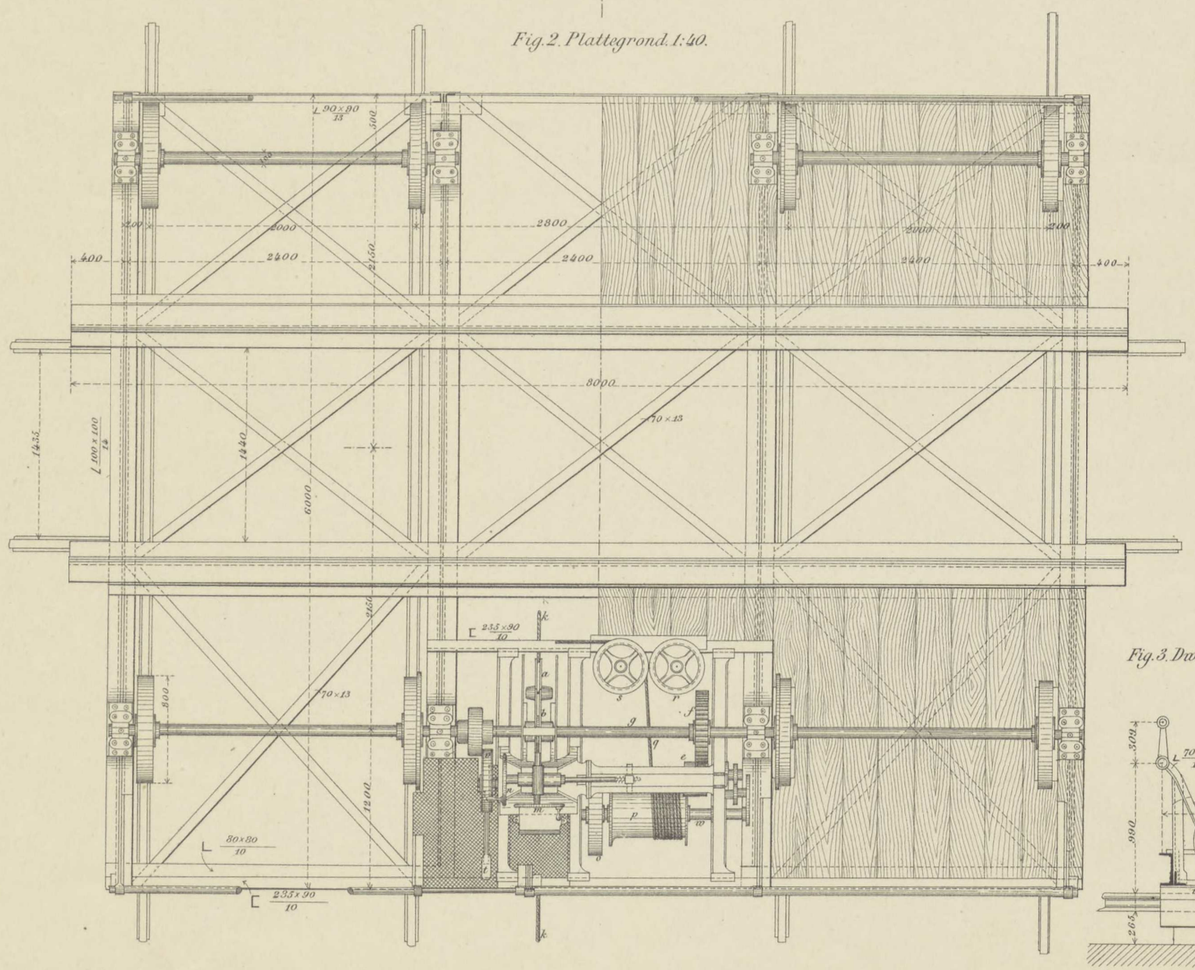


Fig. 2. Plattegrond. 1:40.



Traverse voor wagens der Pruisische Staatsspoorwegen. Fig. 1–8.

Fig. 4. Details van het inrijstuk. 1:10.

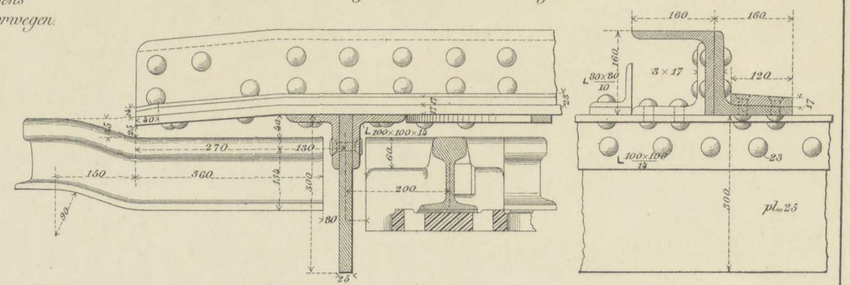


Fig. 5. Onderbouw 1:60.

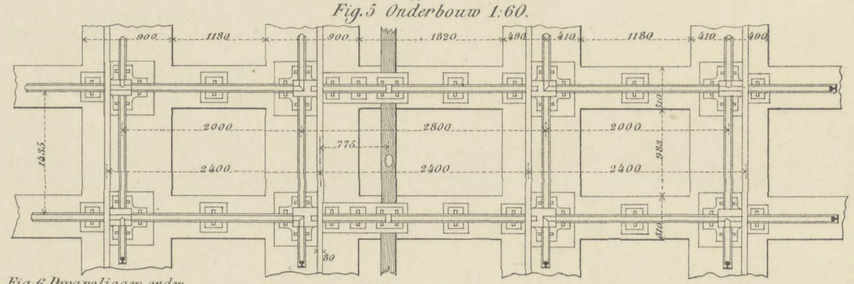


Fig. 6. Dwarsligger onder de kussenblokken. 1:10.

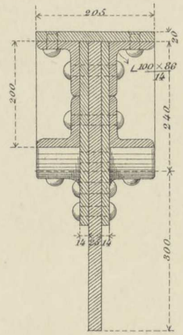


Fig. 7. Kruisstuk. 1:10.

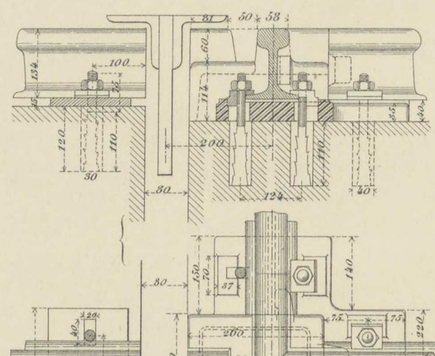


Fig. 8. Geleidingsklauw voor den kabel 1:6.

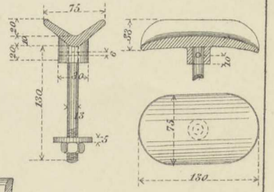
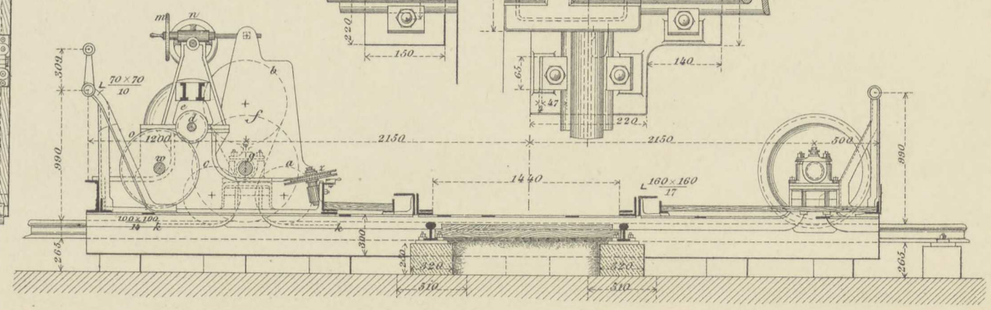


Fig. 3. Dwarsdoorsnede. 1:40.

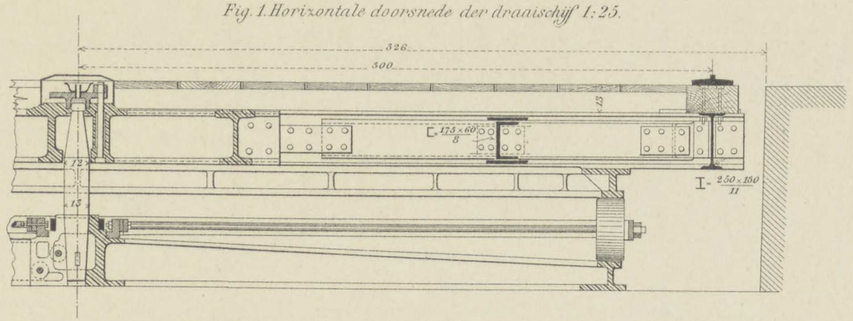


Uitg. de Gebr.s v. Cleef.

Lith. v. Gebr.s J. & H. v. Langenhuysen, 's Hage.

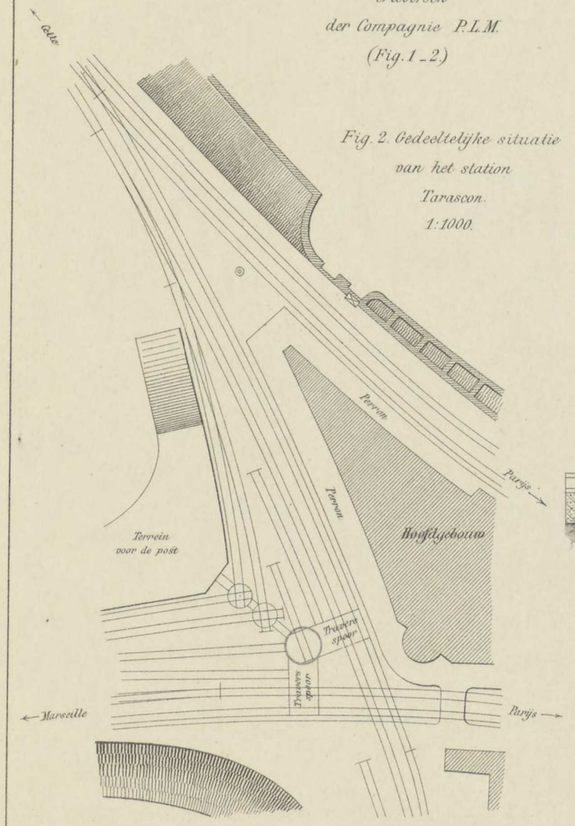
ROLWAGENS EN TRAVERSEN MET DRAAISCHIJF.

Fig. 1. Horizontale doorsnede der draaischijf 1:25.



Draaischijf voor traversen der Compagnie P.L.M. (Fig. 1–2)

Fig. 2. Gedeeltelijke situatie van het station Tarascon. 1:1000.



Rolwagen met draaischijf der Compagnie de l'Ouest, op het station St Lazare te Parijs (Fig. 3–5)

Fig. 3. Doorsnede A.B. 1:80.

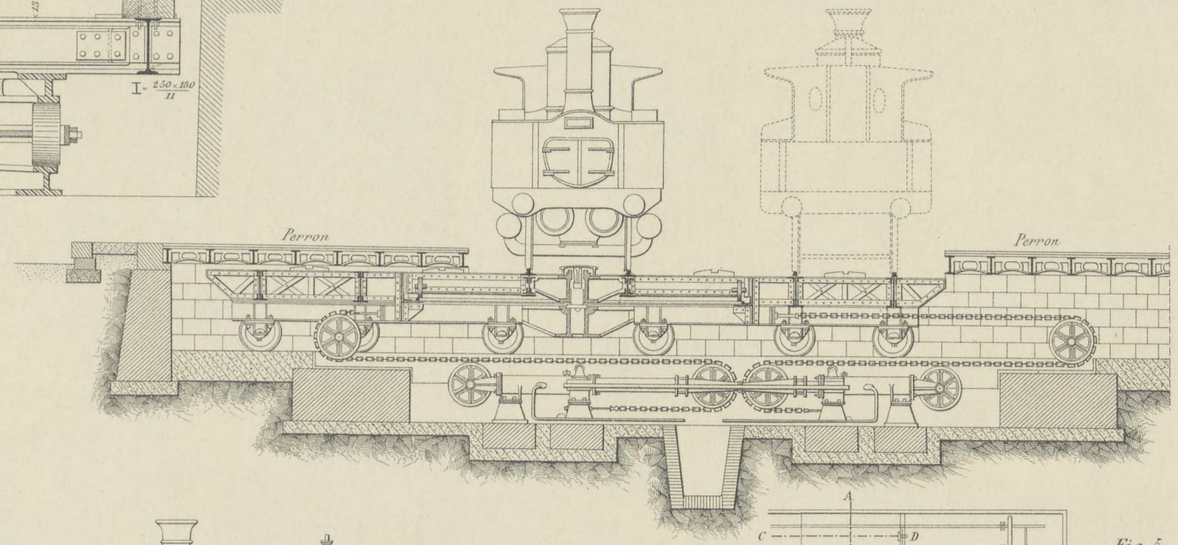
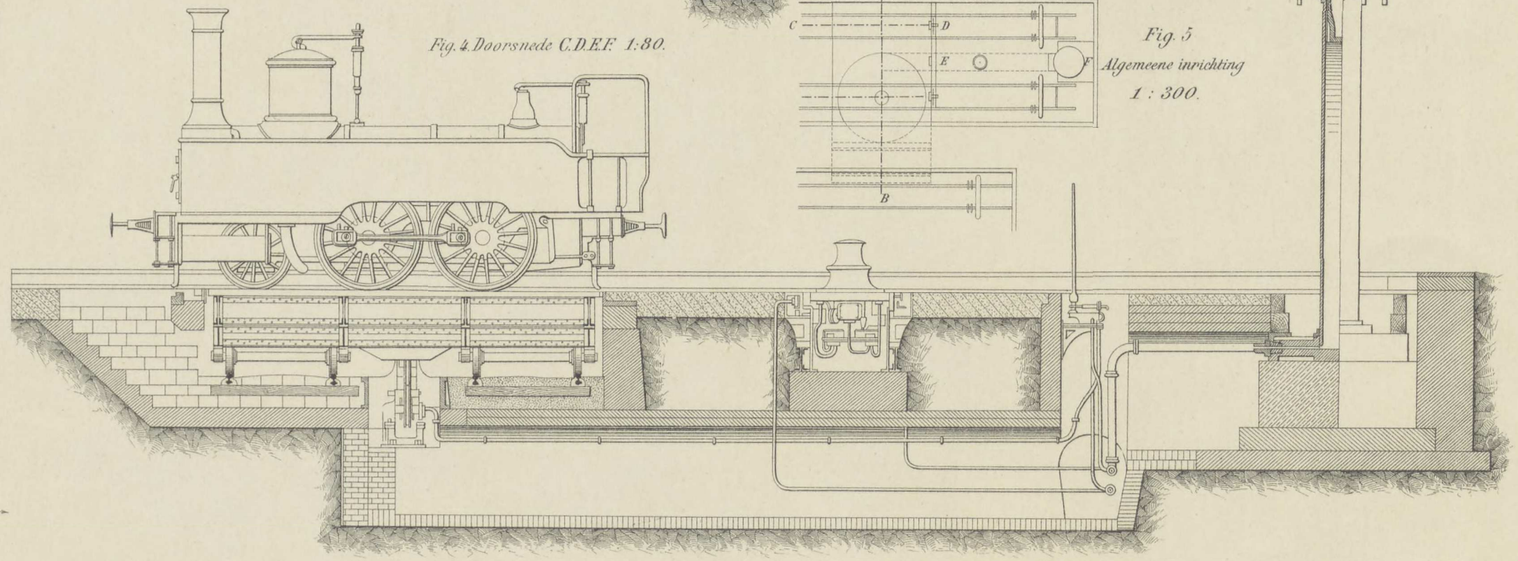


Fig. 4. Doorsnede C.D.E.F. 1:80.



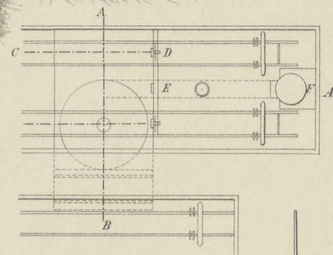
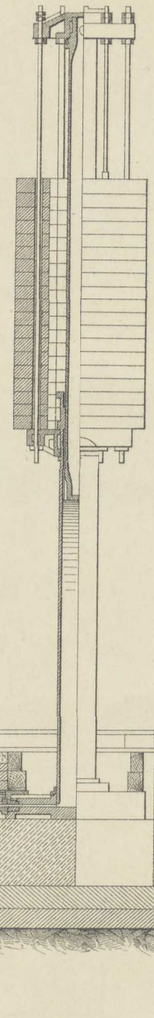


Fig. 5
Algemeene inrichting
1 : 300.



Uitg. de Gebrs. v. Cleef.

Lith. Gebrs. J. & H. v. Langenhuysen, 's Hage.

BENOODIGDHEDEN OP EN LANGS DEN WEG.

Fig. 1a Voorraanzicht. 1:50.

Wipsluitboom. (Fig. 1a-g)

Fig. 1b Zijaanzicht. 1:50.

Fig. 1c Doorsnede a b. 1:50.

Fig. 1d Schuif met beugel. 1:10.

Fig. 1e Palrad en pal. 1:10.

Fig. 1f Doorsnede a b. 1:10.

Fig. 1g Klink- en aanslagijzer. 1:10.

Fig. 6a Zijaanzicht. 1:25.

Fig. 6c Doorsnede A B. 1:25.

Fig. 6d Doorsnede C D. 1:10.

Fig 6e Doorsnede E F. 1:15.

Fig. 6b Bovenaanzicht. 1:25.

Wipsluitboom met ijzeren vakwerk der Mij. tot Expl. v. SS. (Fig. 6a-e.)

Fig. 8. Klapbek. 1:50.

Fig. 2. Trekwip - sluitboom. 1:50.

Fig. 4. Wipsluitboom met hangbalk en draaikruis 1:70.

Fig. 9. Hellingwijzer. 1:50

Fig. 10. Tangentbord. 1:50.

Fig. 5a Zijaanzicht. 1:50.

Wipsluitboom met ijzeren hangwerk. (Fig. 5a-b)

Fig. 5b Details. 1:10.

Fig. 7a Zijaanzicht. 1:50.

Afsluiting met ketting. (Fig. 7a-b.)

Fig. 7b Doorsnede a b. 1:20.

Fig. 3. Treksluitbooms, patent C. Stahmer. 1:50.

Uitg. de Gebrs v. Cleef.

Steendr. Gebrs J. & H. v. Langenhuysen Den Haag.

SIGNALEN.

Fig. 2.
Seinpaal, 1/60.

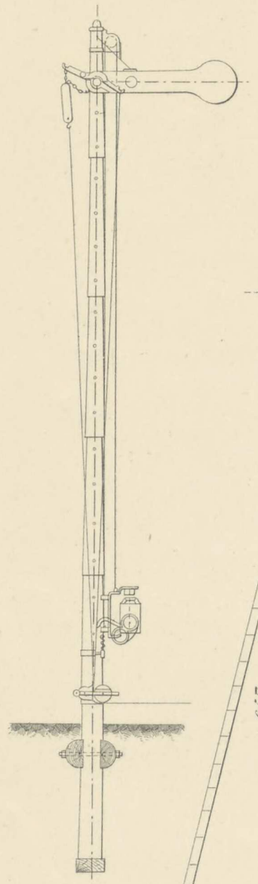


Fig. 3 Dubbele seinpaal, 1/50.

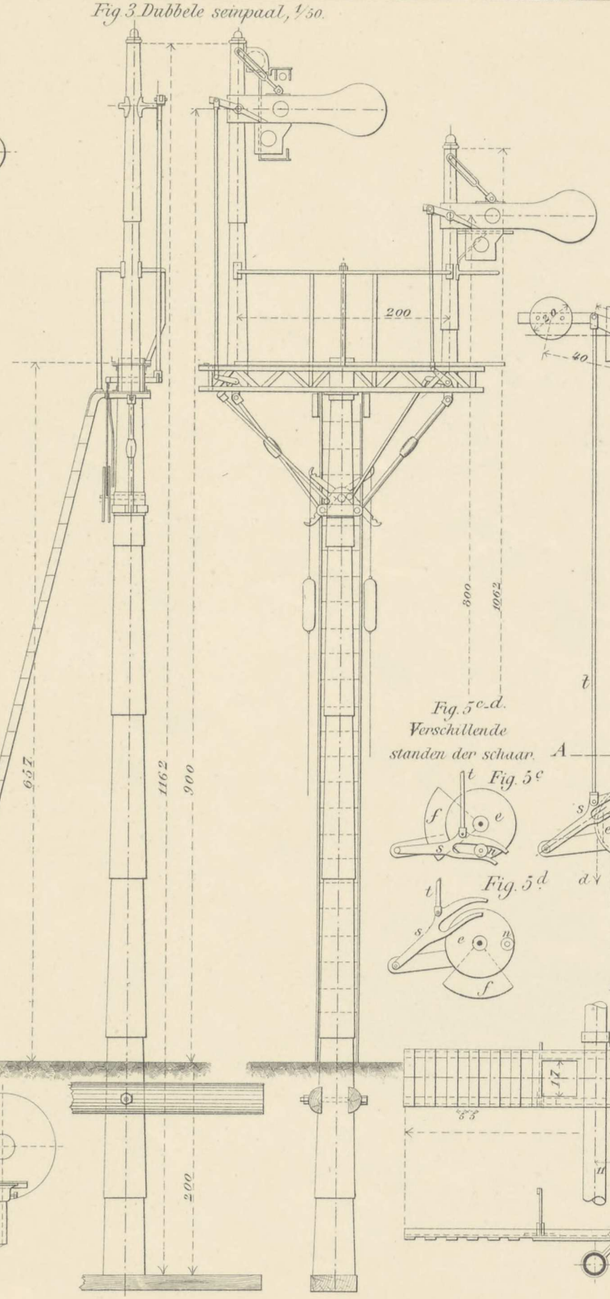


Fig. 1.
Wissel- seinblad,
1/20

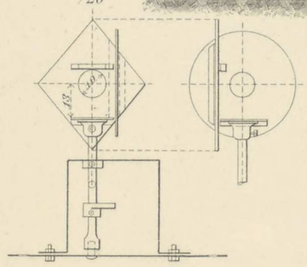


Fig. 5 a.d.
Afstandsignaal
met schaarbeweging,
1/25.

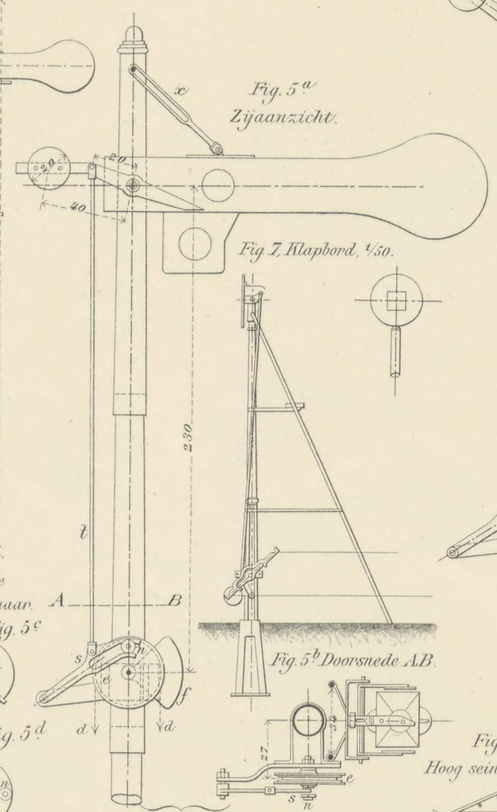


Fig. 5 a
Zijaanzicht.

Fig. 5 e.d.
Verschillende
standen der schaar.

Fig. 5 e

Fig. 5 d

Fig. 5 b Doorsnede AB.

Fig. 7. Klapbord, 1/50.

Fig. 3. Rangeersignaal, 1/25.

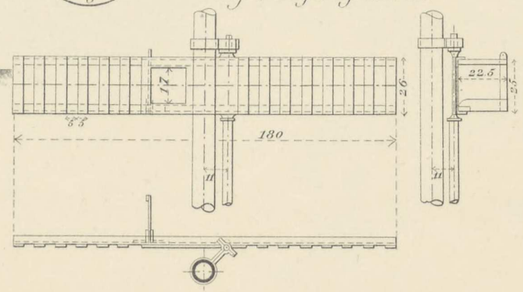


Fig. 6. Voorsignaal met schaarbeweging, 1/25.

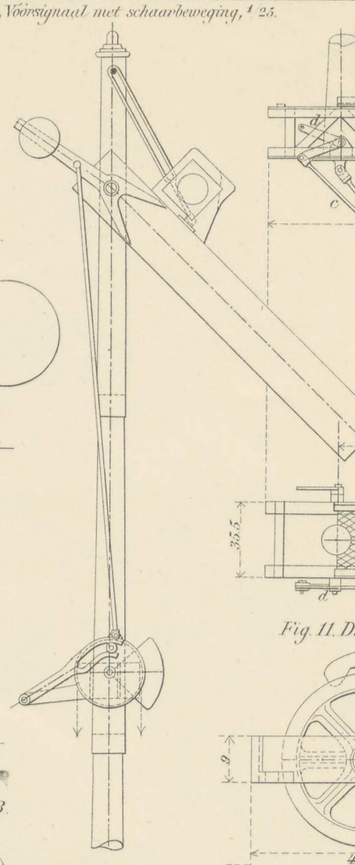


Fig. 9.
Hoog seinhuis, 1/200.

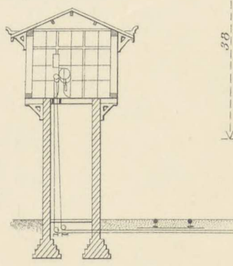


Fig. 4. Bordespaal met twee
armen en veiligheidsbalansen, 1/25.

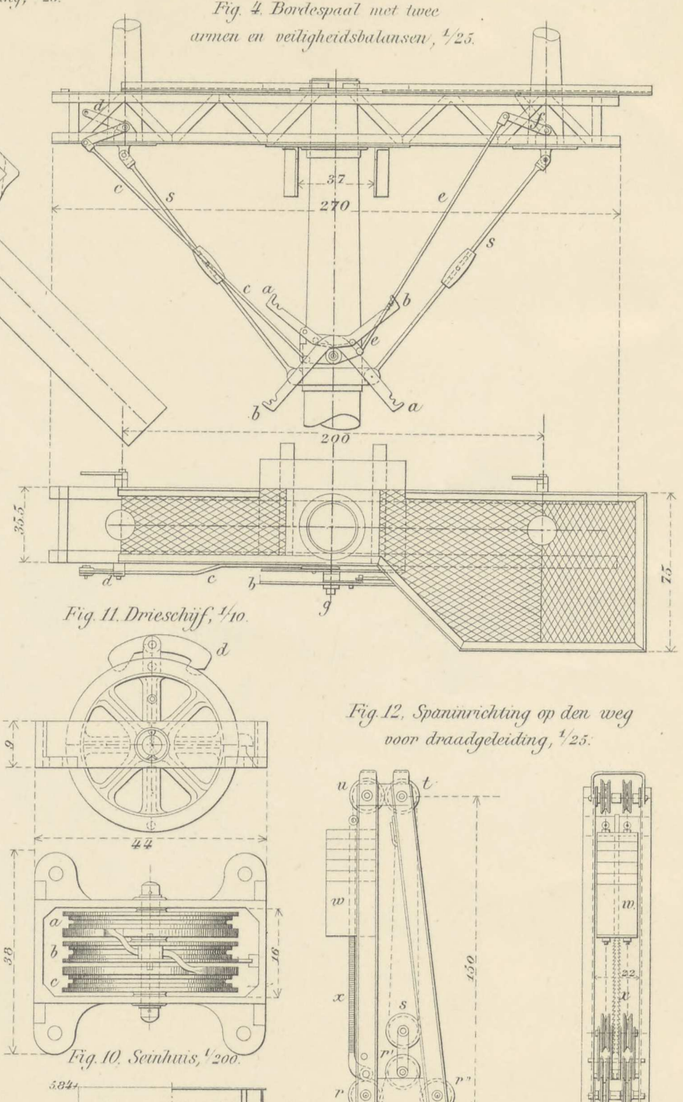


Fig. 11. Drieschijf, 1/10.

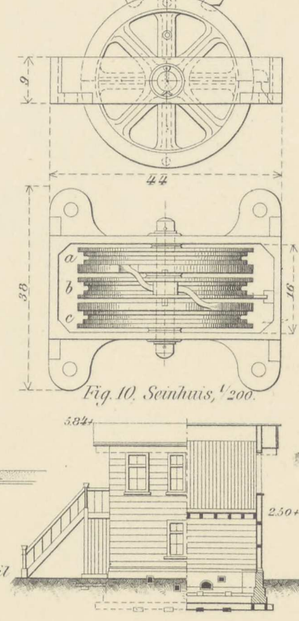


Fig. 10. Seinhuis, 1/200.

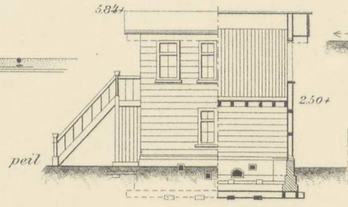
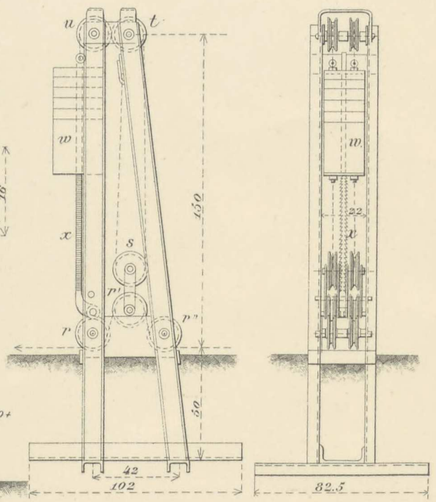


Fig. 12. Spanninrichting op den weg
voor draadgeleiding, 1/25.



Uitg. de Gebr.s v. Cleef.

St.e en dr. v. Gebr. v. Langenhuysen, s Hage.

Fig. 1 Electrisch klokwerk van Kramer 1/3.

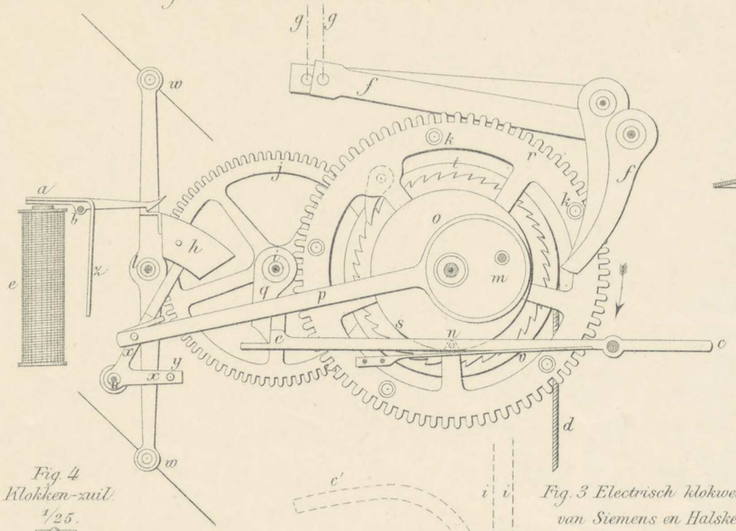


Fig. 2 Doorsnede over het dak van een klokkenhuis 1/3.

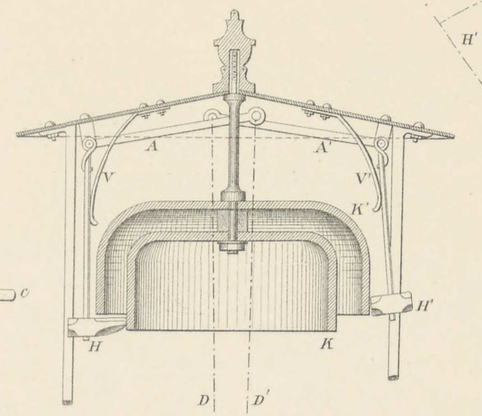


Fig. 4 Klokken-zuil 1/25.

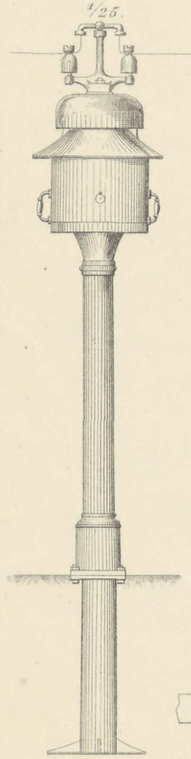
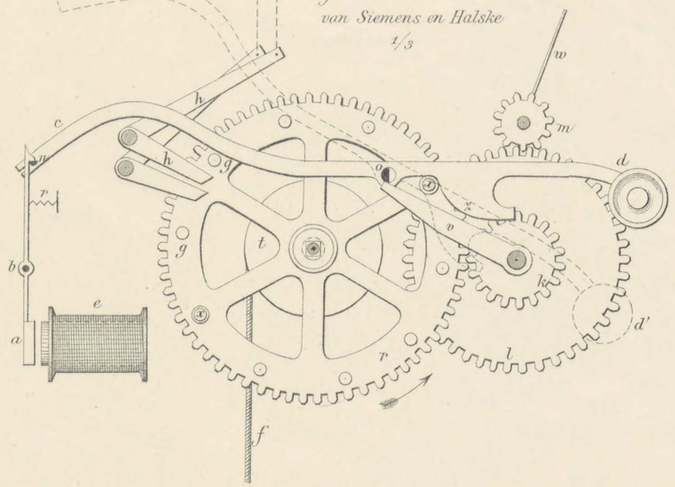


Fig. 3 Electrisch klokwerk van Siemens en Halske 1/3



Centraal bewegingstoestel systeem Saxby & Farmer. Fig. 5 a-e

Fig. 5 a/ Dwarsdoorsnede der geheele inrichting 1/10.

Fig. 5 b/ Vooruanzicht van het rooster 1/10.

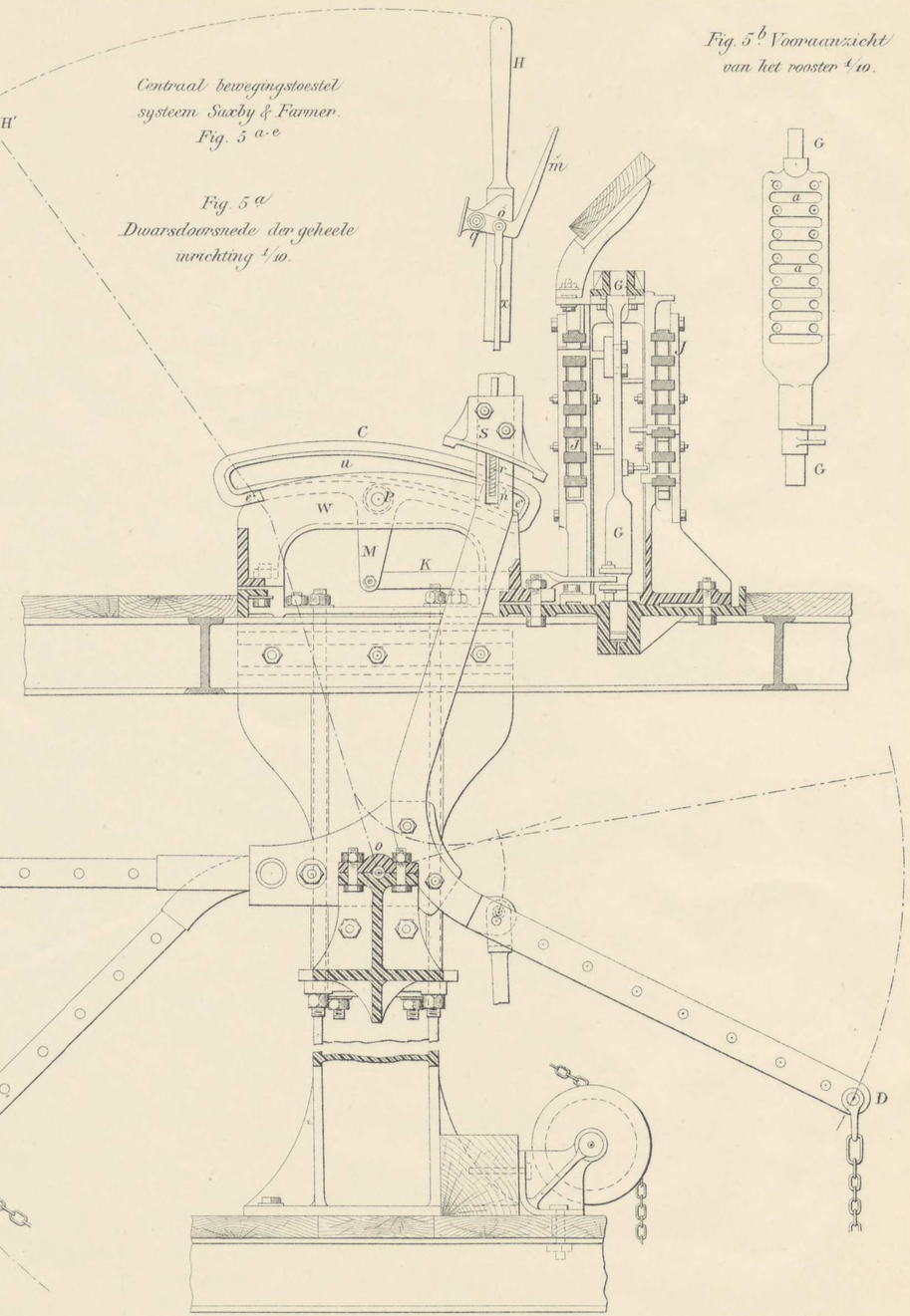
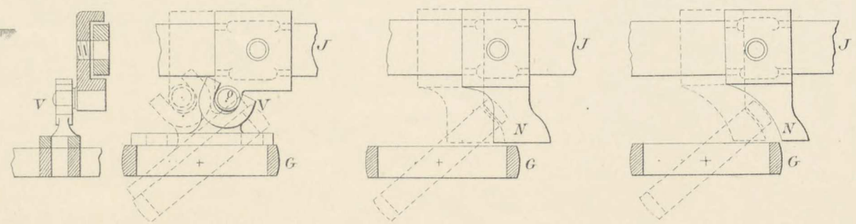


Fig. 5 c/ Fig. 5 d/ Fig. 5 e/

Verschillende voorbeelden van koppelingen met vorken en nokken 1/4.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen, 's Hage.

CENTRAAL BEWEGINGSTOESTEL MET BLOK.

Fig 2 a
Blokkast en trekkerkast met weggenomen voorwanden 1/5.

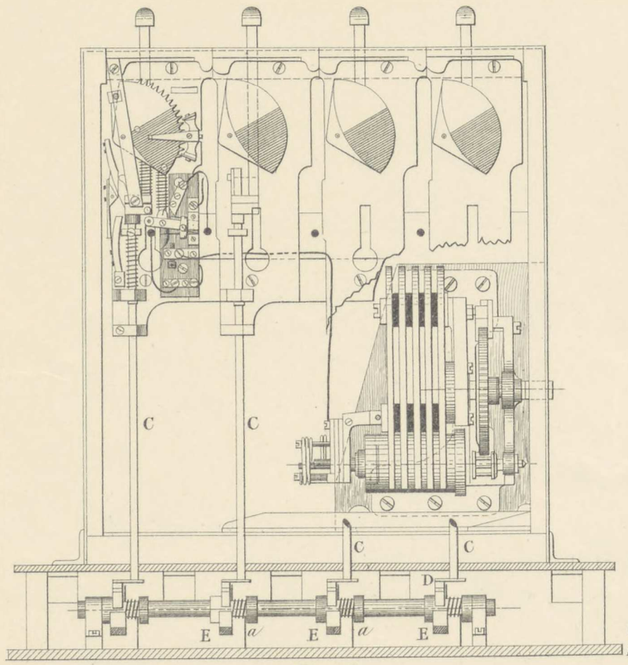


Fig 2 b
Blokkast en trekkerkast met met weggenomen zijwanden. 1/5.

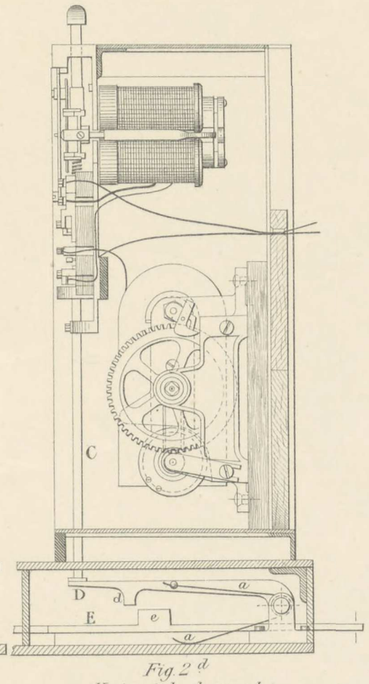


Fig 2 c
Horizontale doorsnede over de trekkerkast 1/5.

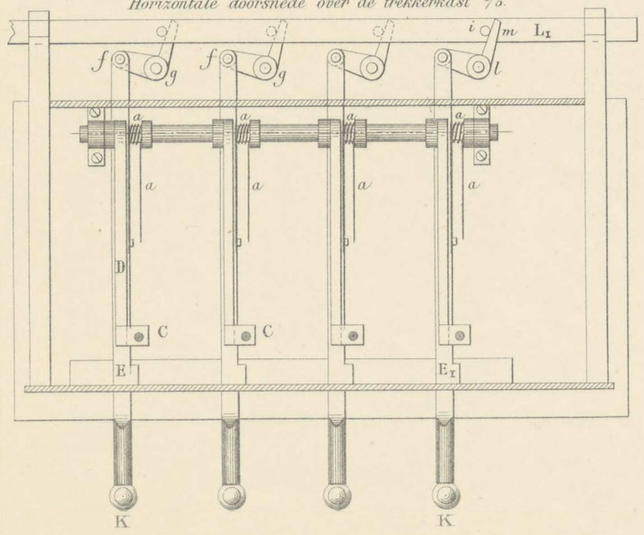
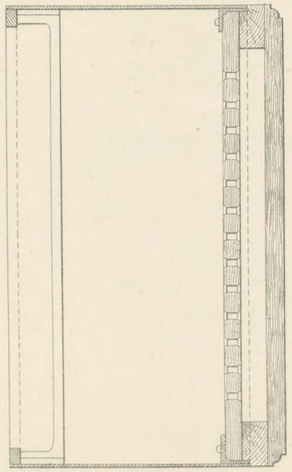


Fig 2 d
Horizontale doorsnede over de blokkast 1/5.



Centraal bewegingstoestel met blok, constructie der H.I.S.M. (fig 1 a-b en 2 a-d)

Fig. 1 a
Voorzijaanzicht der geheele inrichting 1/10.

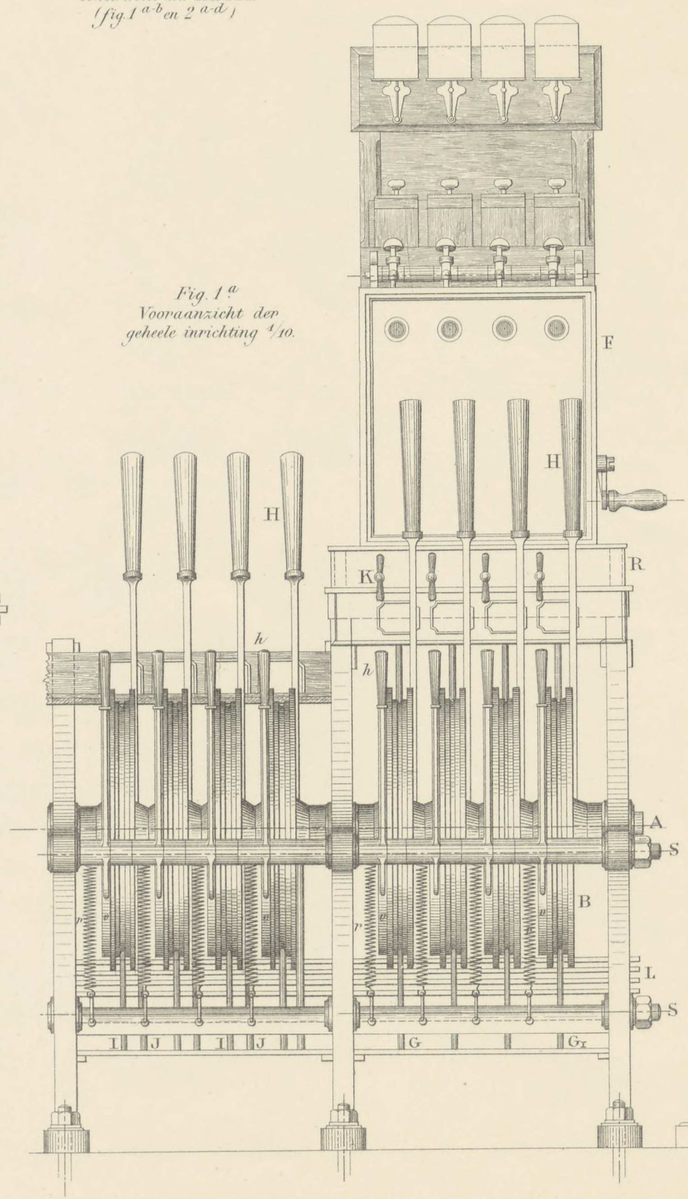
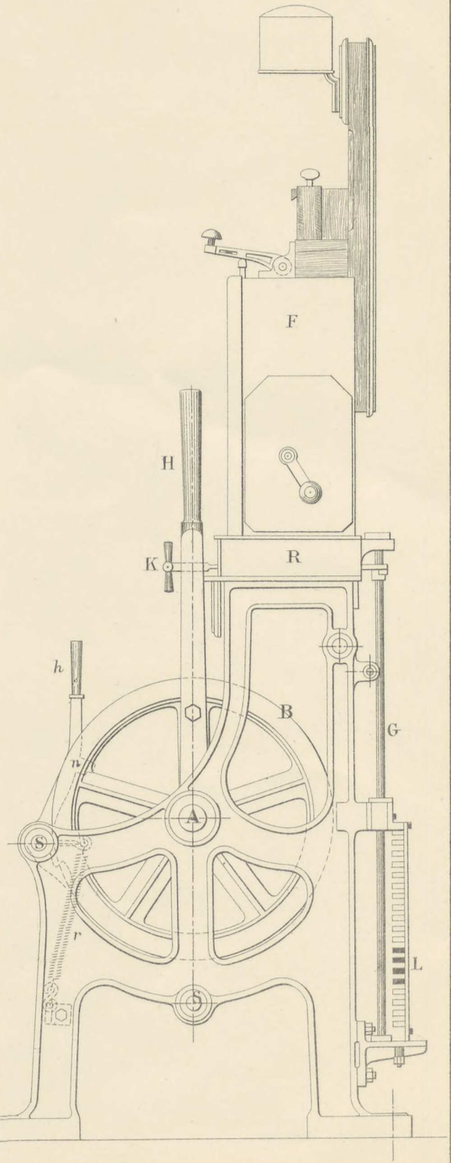


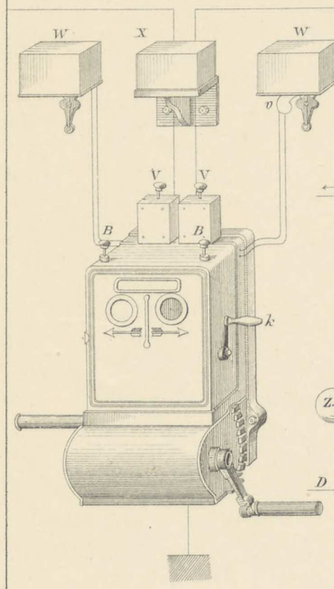
Fig 1 b
Zijaanzicht der geheele inrichting 1/10.



Uitg. de Gebr.s v. Cleef.

Steendr. Gebr. v. Langenhuysen 's Hage.

Fig 1. Bloktoestel, systeem Siemens & Halske.



Inwendige inrichting van het bloktoestel (electrisch slot.) systeem Siemens & Halske. Fig. 2 a-c.

Fig. 2a Toestand voor het blokkeeren.

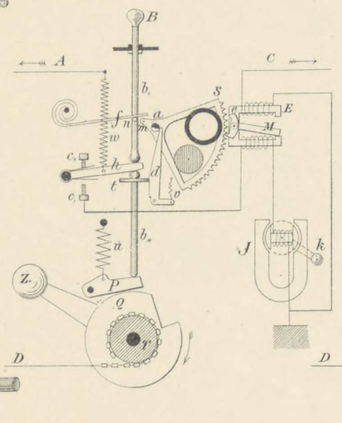


Fig. 2b Toestand tijdens het blokkeeren.

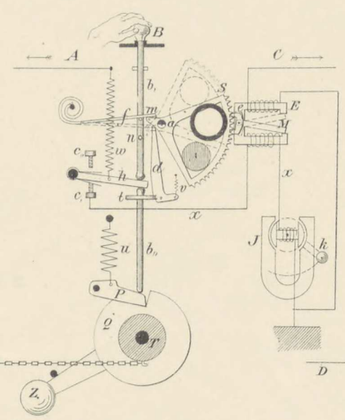


Fig. 2c Toestand na het blokkeeren.

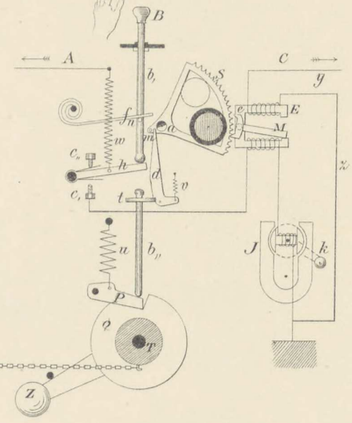
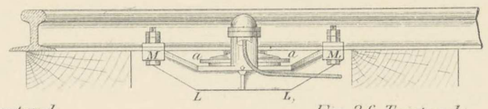


Fig. 6a Zijaanzicht.



Kwik-contact Siemens & Halske. (Fig. 6a-b)

Fig. 6b Dwarsdoorsnede.

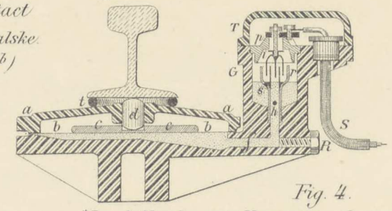


Fig. 5 Gewoon treincontact.

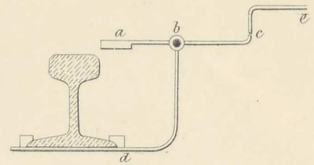


Fig. 3.
Schematische voorstelling van den stroomloop in de bloktoestellen met tweedeelig systeem.

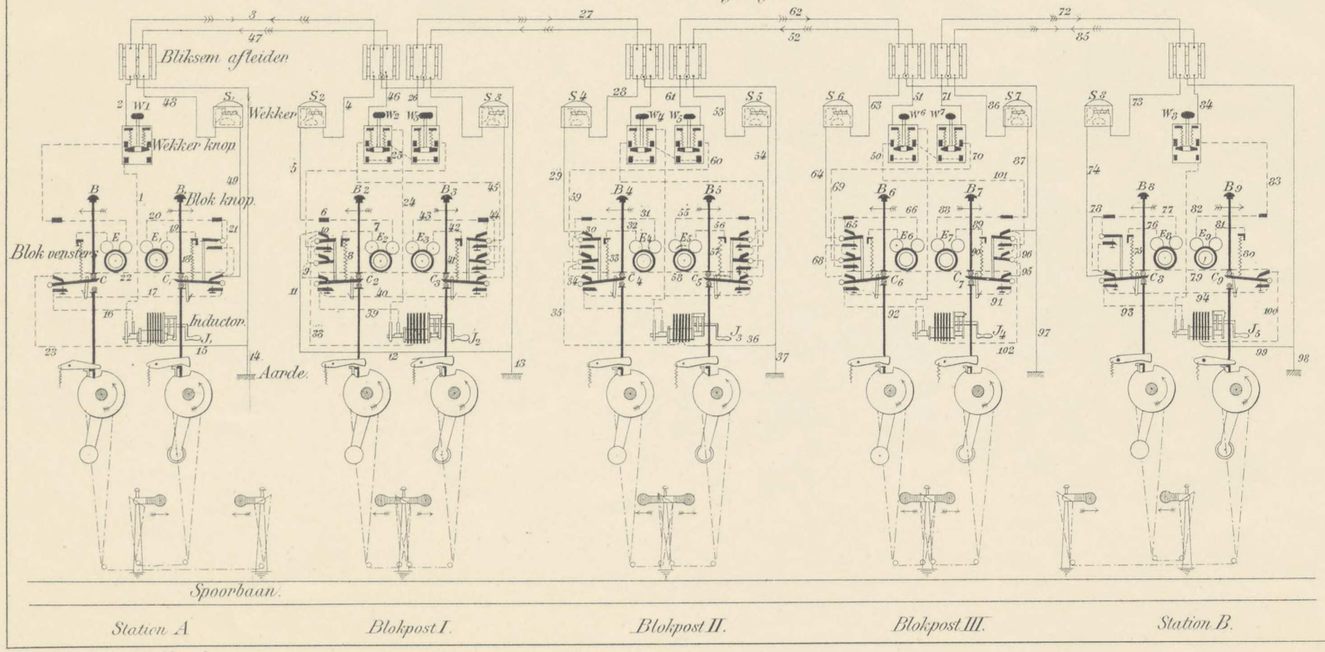
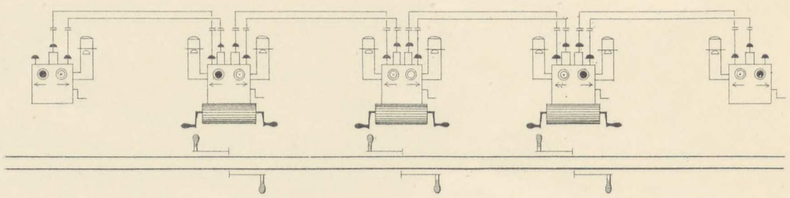
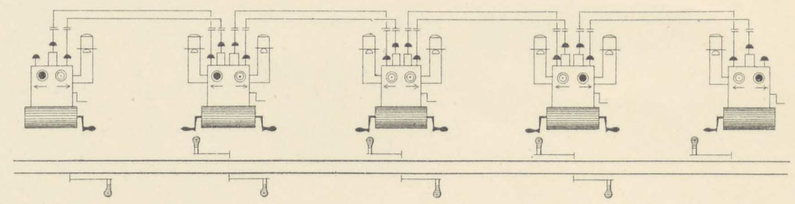


Fig. 4.
Verschillende gevallen van plaatsing der signalen in verband met de blokinrichtingen.

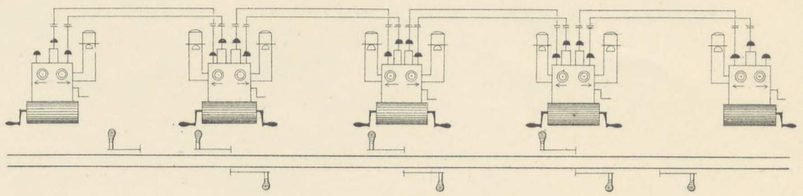
I.



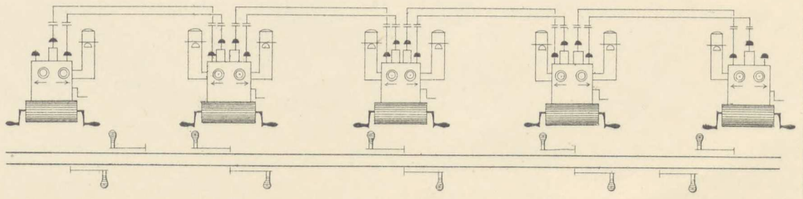
II.



III.



IV.



Station A. Blokpost I. Blokpost II. Blokpost III. Station B.

Uitg. de Gebr.s v. Cleef

Steendr. Gebr. v. Langenhuysen's Hage.

Fig. 1. Schematische voorstelling
van de plaatsing van bloktoestellen tot beveiliging van het treinenverkeer op eene in vier secties verdeelde spoorweglijn, volgens het tweedeelig systeem van Siemens & Halske, met aanduiding van de bediening der toestellen tijdens den loop van een trein.

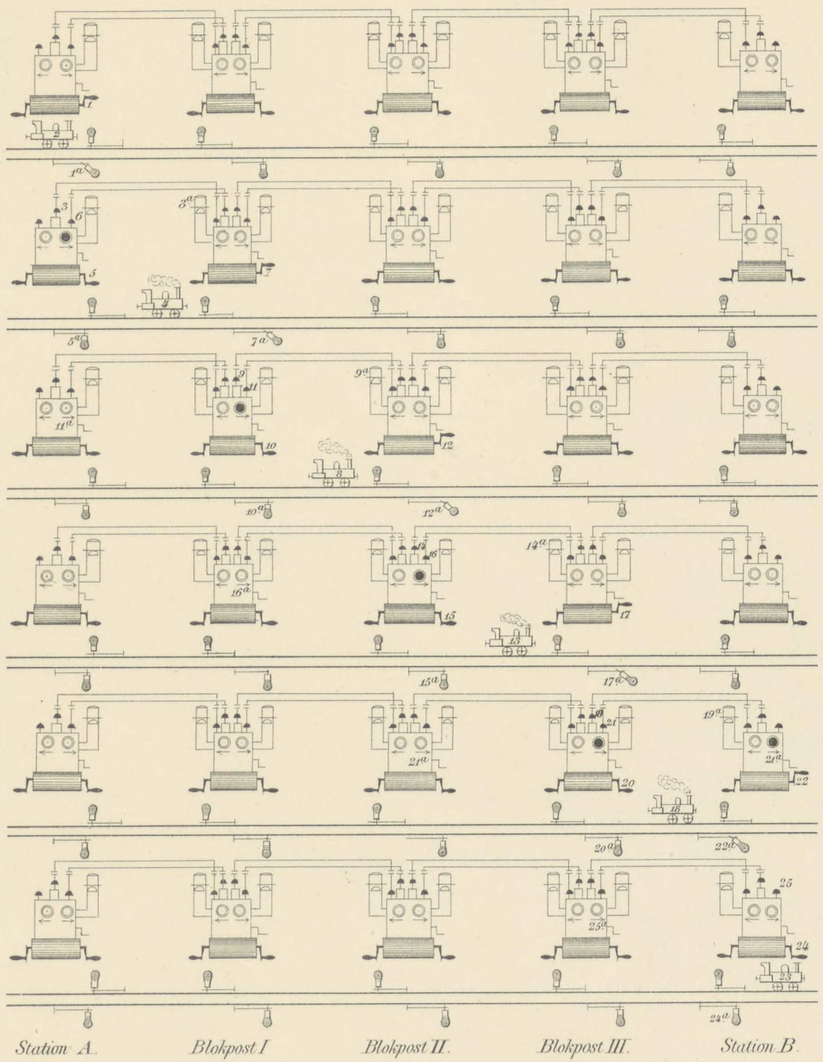
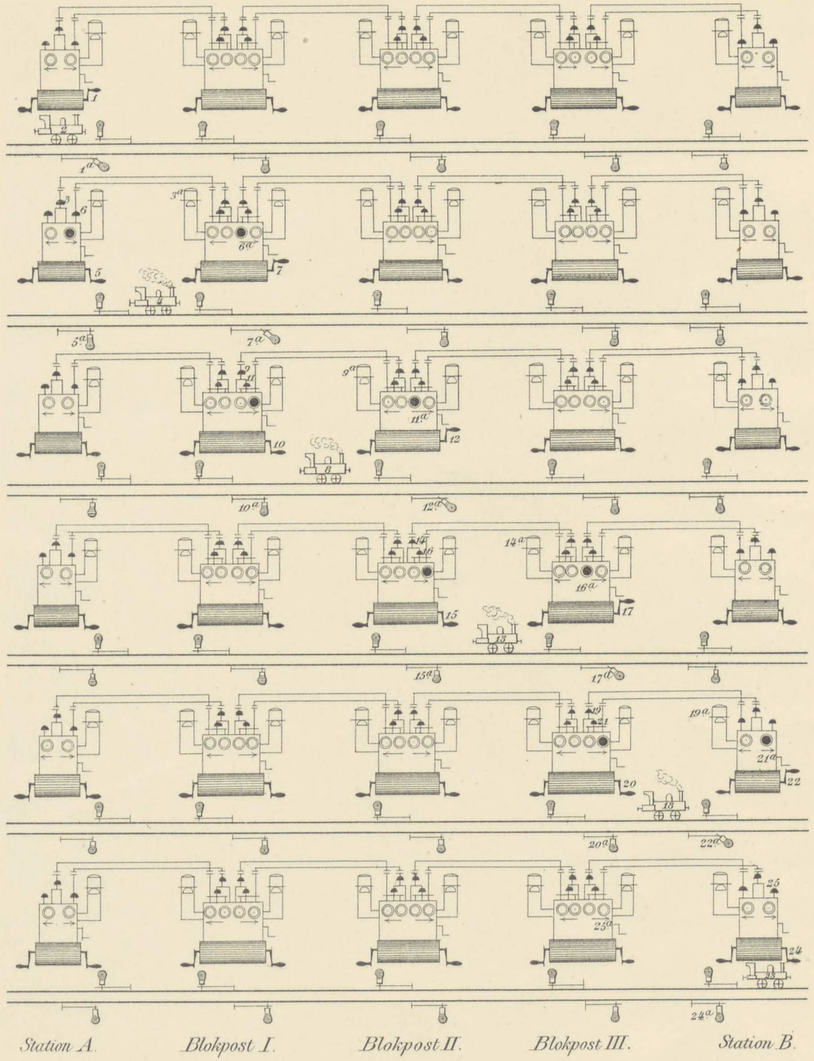


Fig. 2. Schematische voorstelling
van de plaatsing van bloktoestellen tot beveiliging van het treinenverkeer op eene in vier secties verdeelde spoorweglijn, volgens het vierdeelig systeem van Siemens & Halske, met aanduiding van de bediening der toestellen tijdens den loop van een trein.



Uitg. de Gebr.s v. Cleef
Steendr. Gebr. v. Lagenhuysen, s Hage.

Renvooi.

- Handwissel,
- id. met Clausslot en sper. v. recht spoor.
- id. met centraal bediend grendel v. krom. spoor,
- id. id. id. v. recht spoor,
- id. id. id. v. recht en krom. spoor,
- Centraal bediend wissel, norm. stand recht spoor,
- id. id. id. krom spoor,
- id. id. met druklat, id. recht spoor,
- Onteigeningsgrens,
- Afrastering.

Fig 2. Stationsemplacement Apeldoorn.

Lengteschaal 1:2000. Breedteschaal 1:1000.

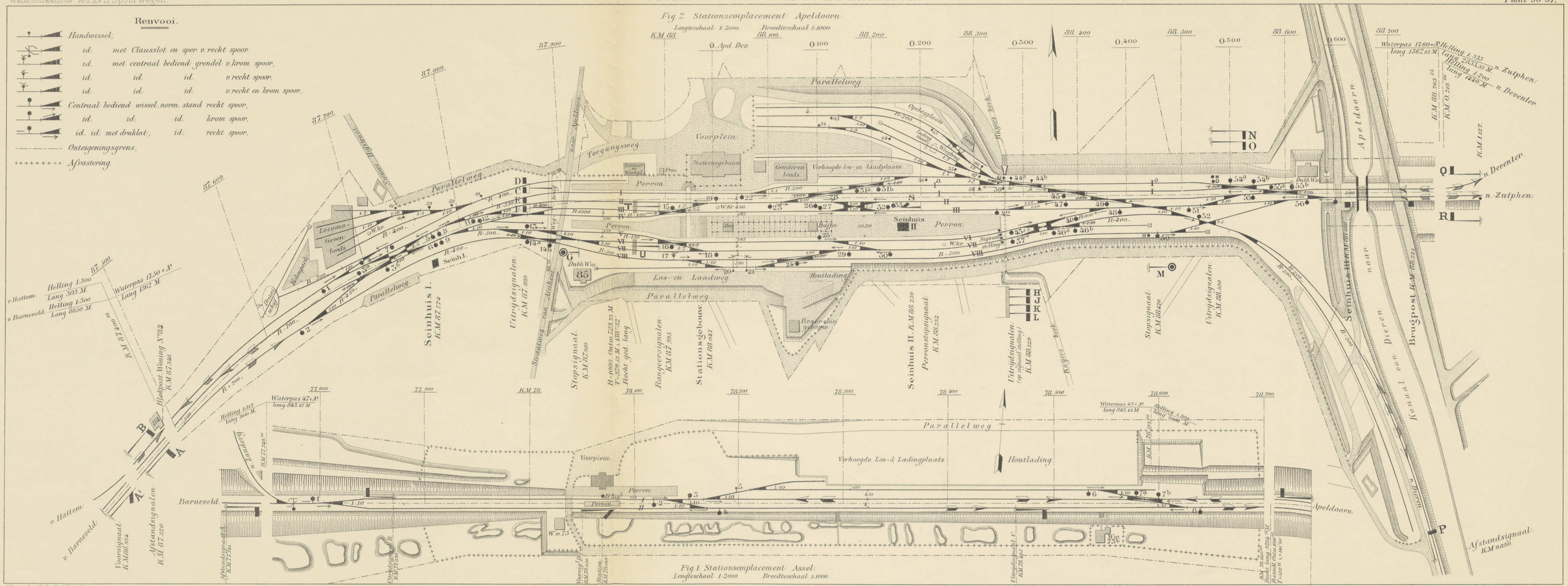
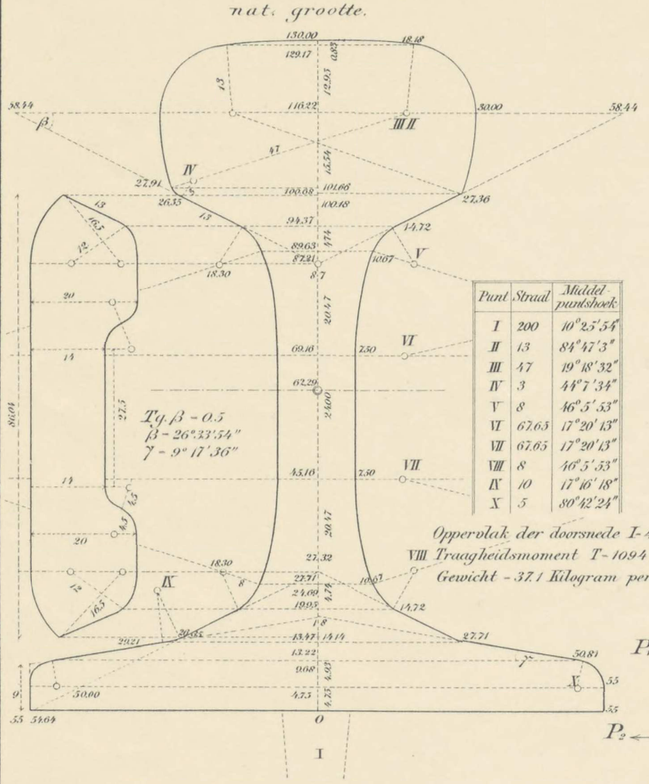


Fig 1. Stationsemplacement Assel.

Lengteschaal 1:2000. Breedteschaal 1:1000.

Uitg. de Gebr. v. Cleef. Steendr. Gebr. v. Langenhuysen, 's Hage.

Fig. 1. Normaal profiel voor ijzeren rails nat. grootte.



Punt	Straal	Middel-puntshoek
I	200	10° 25' 54"
II	13	84° 47' 3"
III	47	19° 18' 32"
IV	3	44° 7' 34"
V	8	46° 5' 53"
VI	62.63	17° 20' 13"
VII	67.65	17° 20' 13"
VIII	8	46° 5' 53"
IX	10	17° 16' 18"
X	5	80° 42' 24"

Oppervlak der doorsnede I = 48.18 cM.²
Traagheidsmoment T = 10.94 cM.
Gewicht = 37.1 Kilogram per M.

Fig. 6.

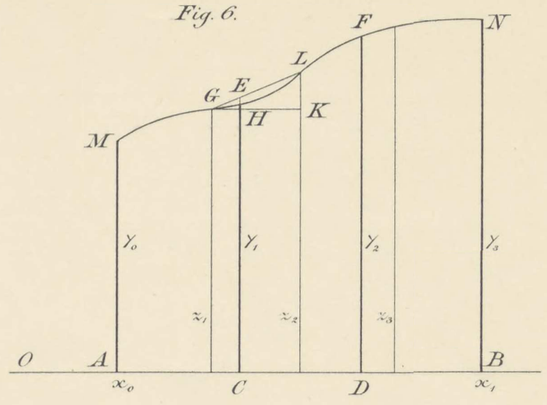


Fig. 7.

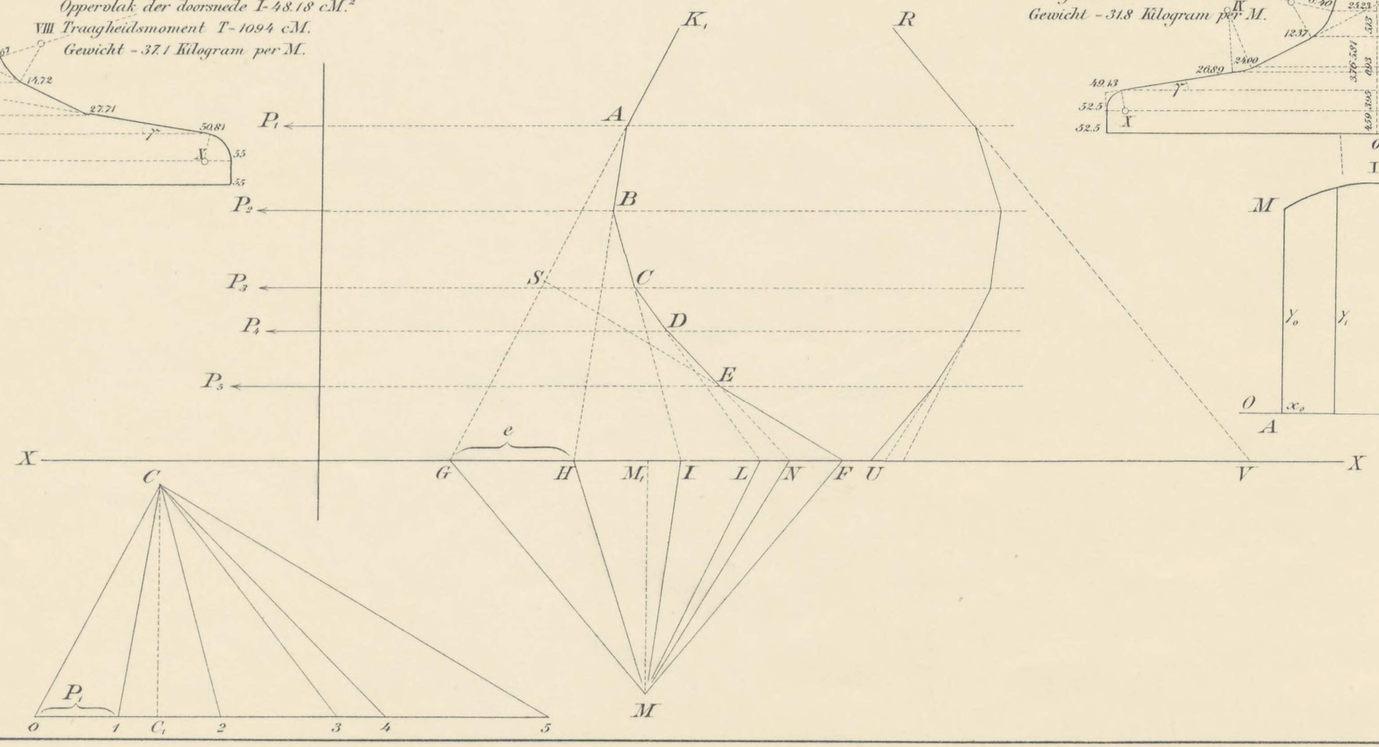
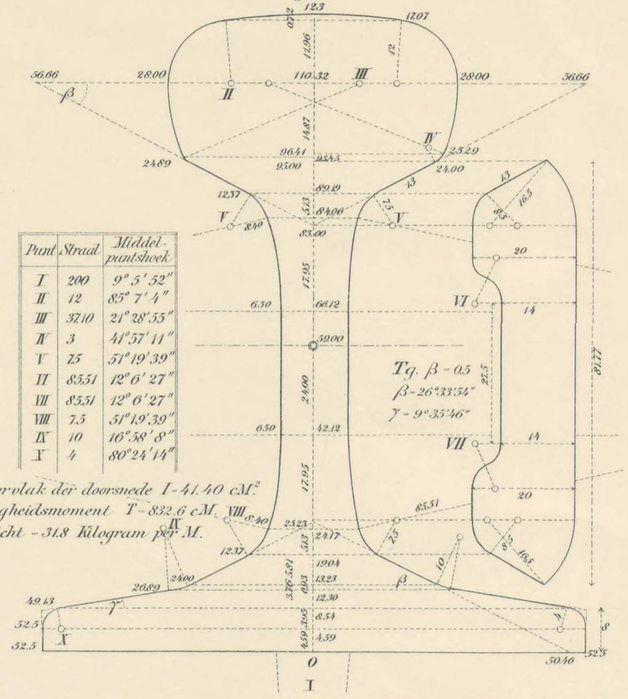


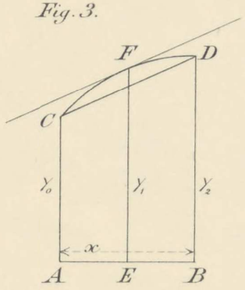
Fig. 2. Normaal profiel voor stalen rails. nat. grootte.



Punt	Straal	Middel-puntshoek
I	200	9° 5' 52"
II	12	85° 7' 4"
III	37.10	21° 28' 55"
IV	3	41° 57' 11"
V	25	51° 19' 39"
VI	85.51	12° 6' 27"
VII	85.51	12° 6' 27"
VIII	7.5	51° 19' 39"
IX	10	16° 58' 8"
X	4	80° 24' 14"

Oppervlak der doorsnede I = 41.40 cM.²
Traagheidsmoment T = 832.6 cM.
Gewicht = 31.8 Kilogram per M.

Fig. 3.



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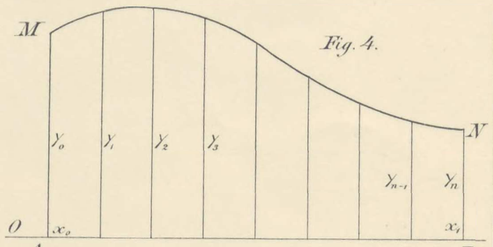

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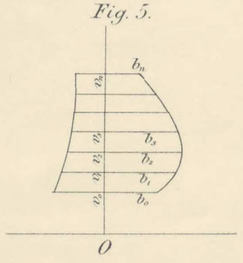

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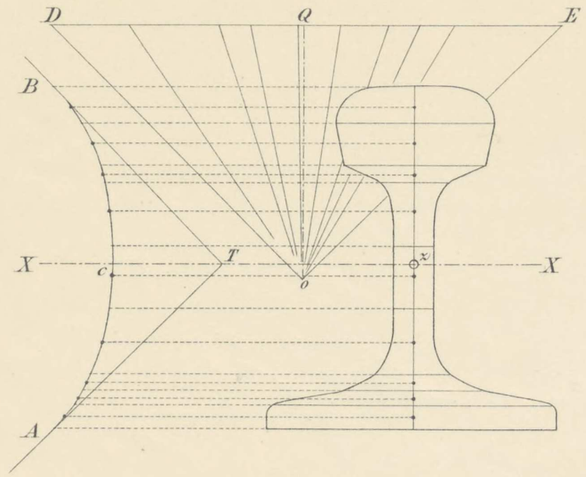
Fig. 8.



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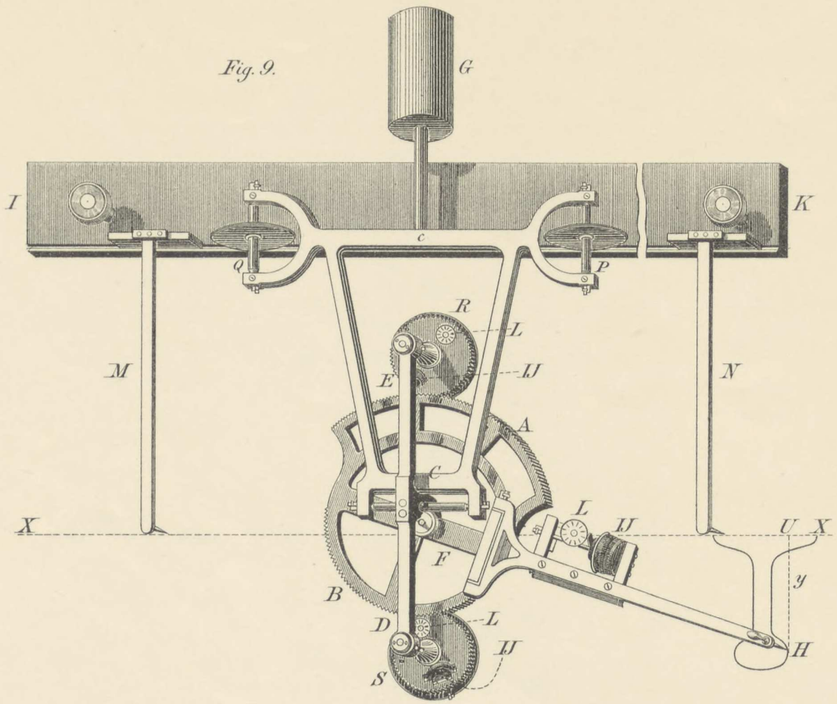

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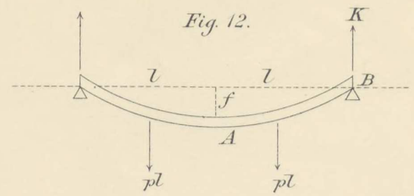

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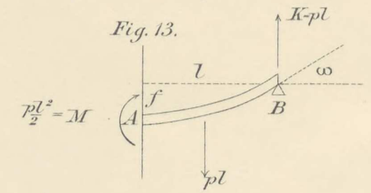

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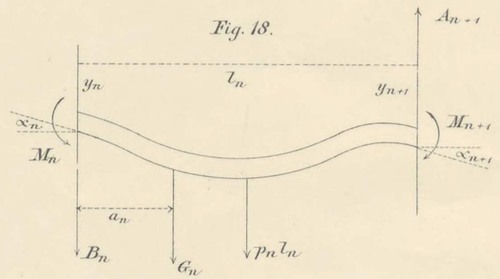

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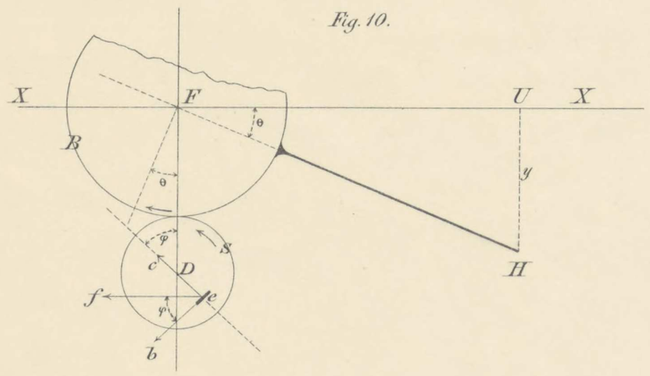

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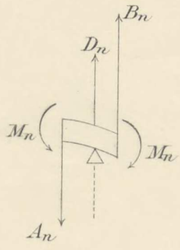

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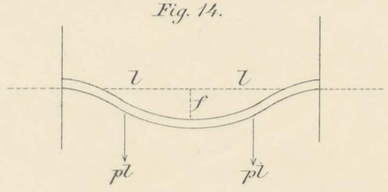

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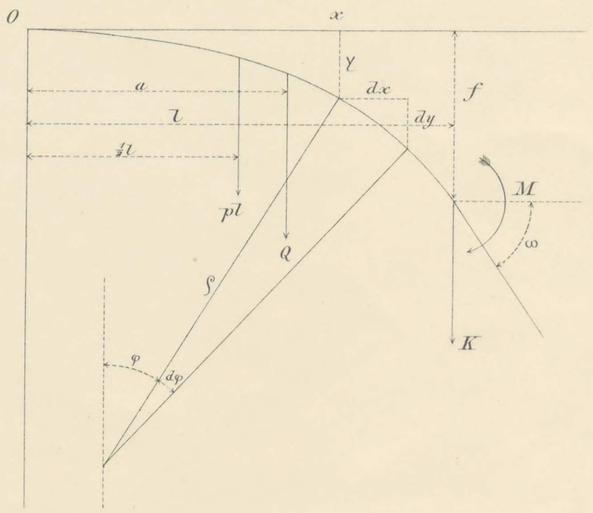

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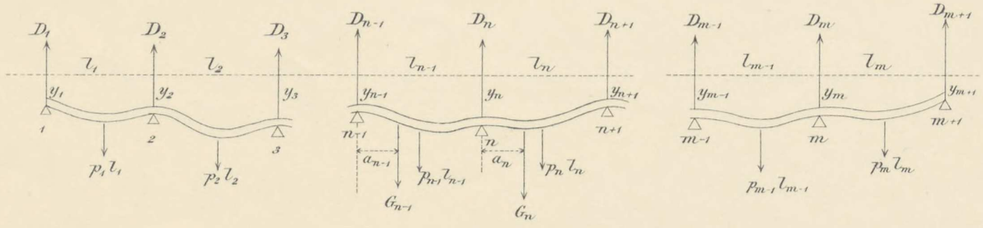

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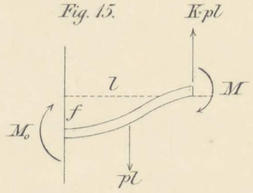

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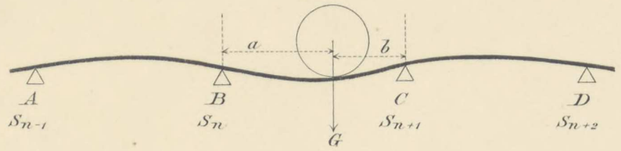
Fig. 19.



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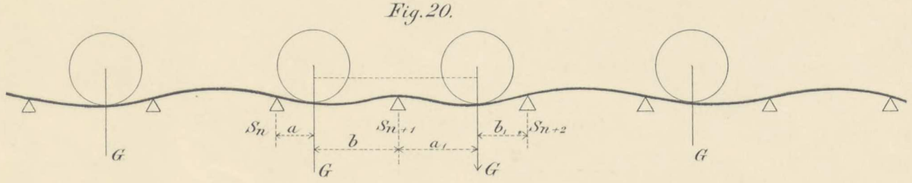

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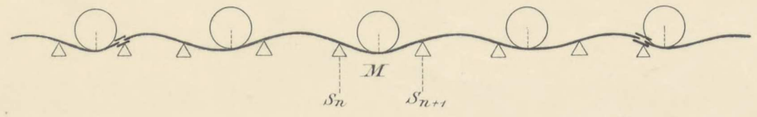


Fig. 21a

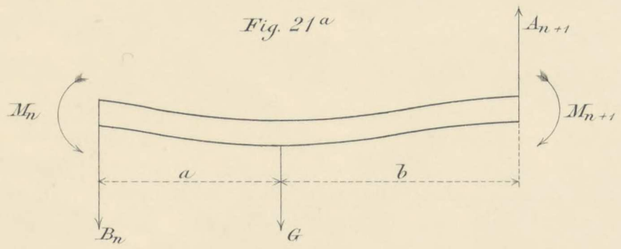
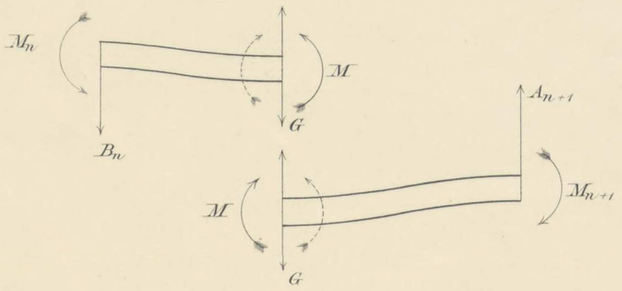


Fig. 21b



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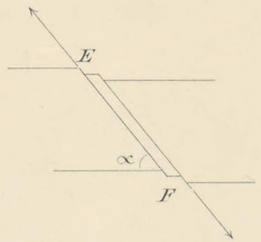


Fig. 25b

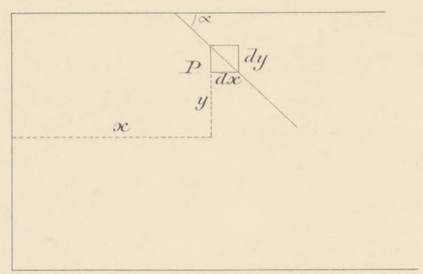
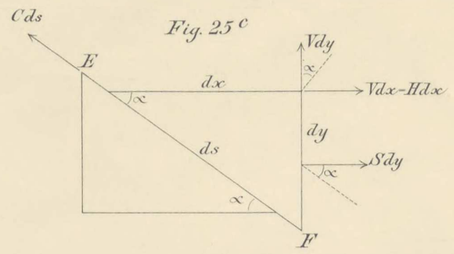


Fig. 25c



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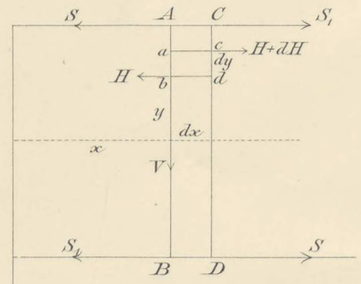


Fig. 26

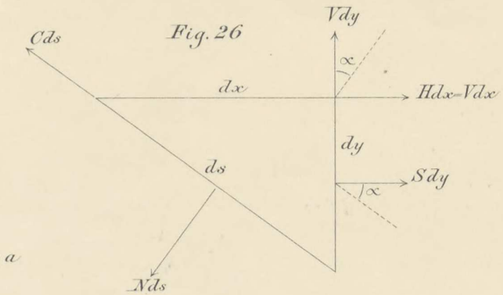


Fig. 23a

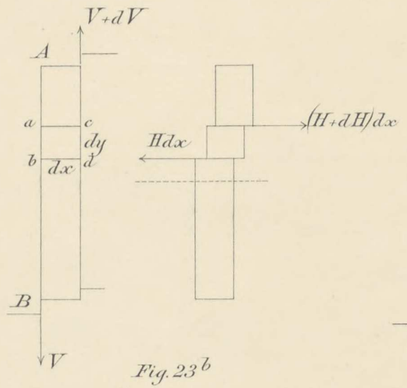
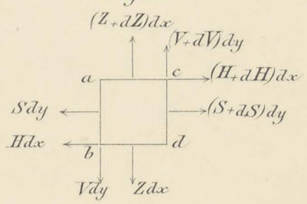


Fig. 23b



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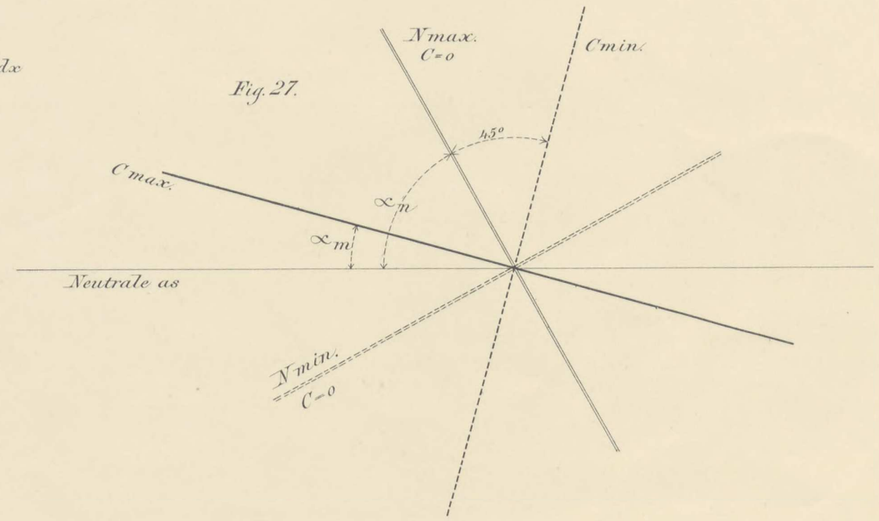

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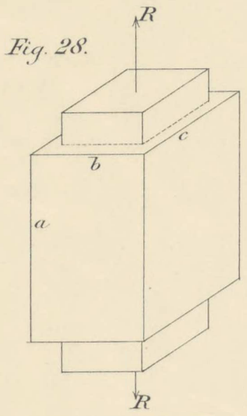

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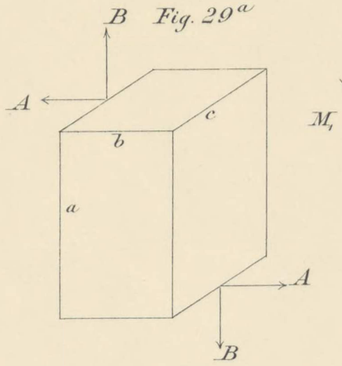


Fig. 29b

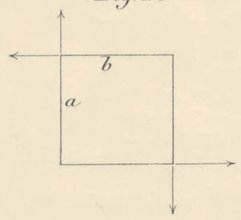
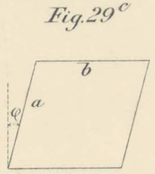


Fig. 29c



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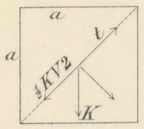

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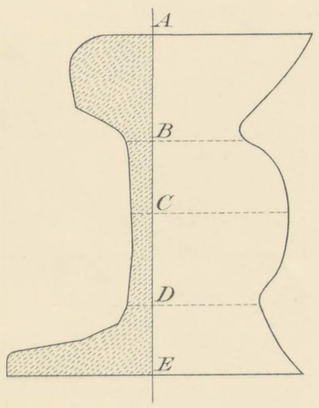

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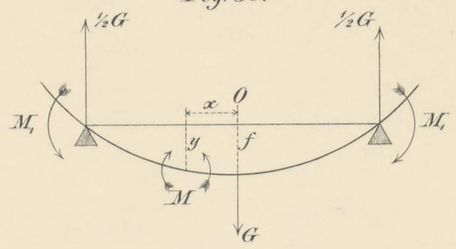

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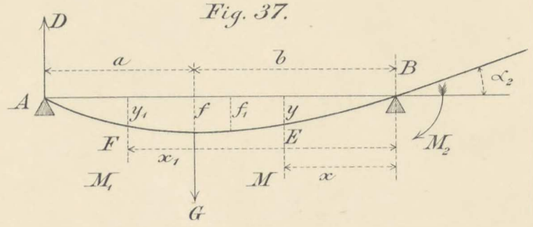

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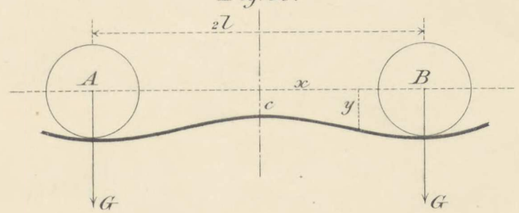

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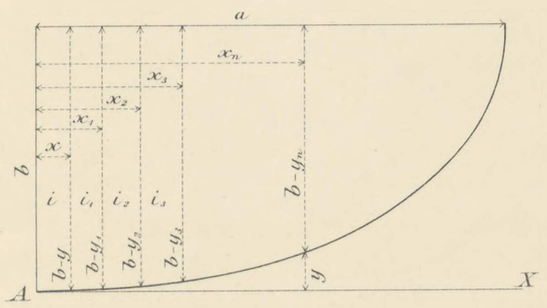

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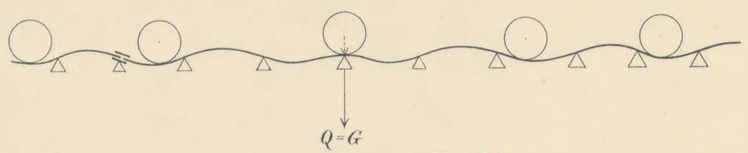

Fig. 34.

IJzeren rails (Oud profiel Nordbahn)

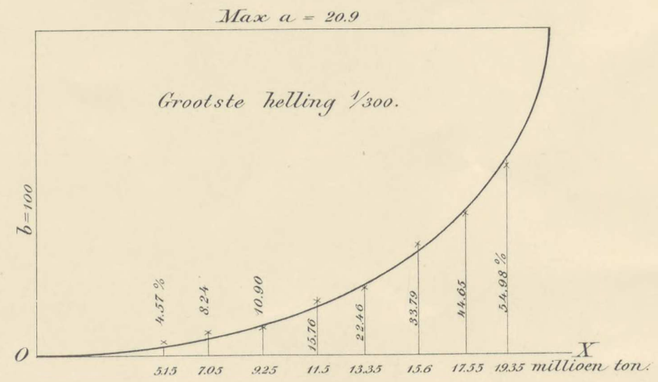

Fig. 35.

Stalen rails (Nieuw profiel Nordbahn)

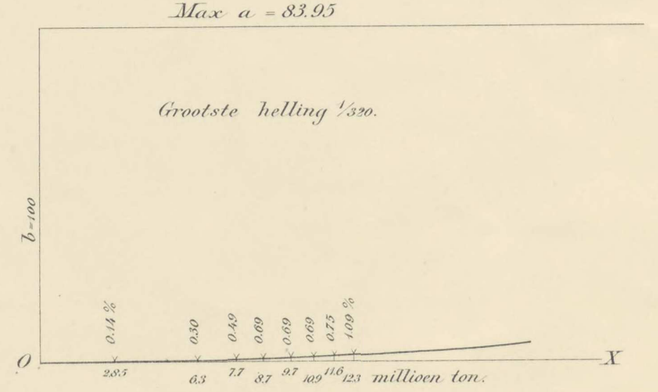

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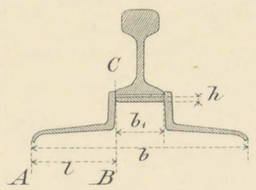
Fig. 39.



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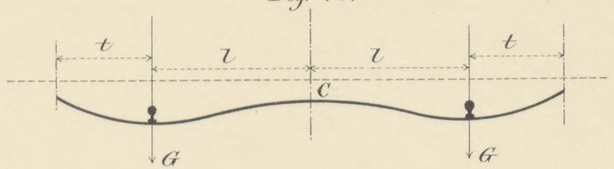

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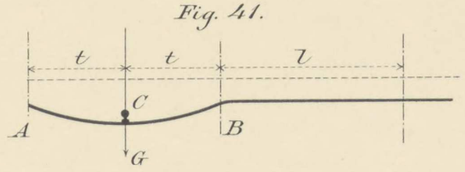

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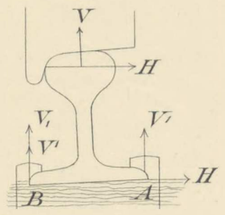

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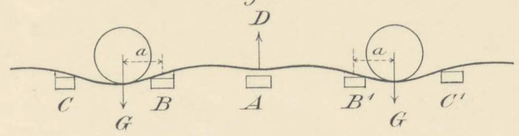

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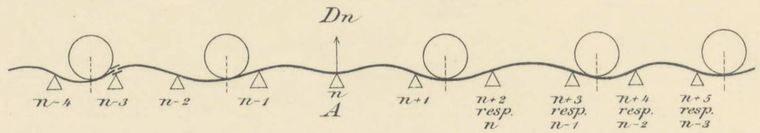
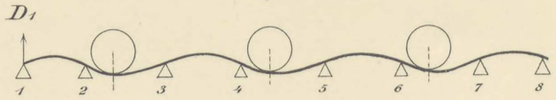


Fig. 46.



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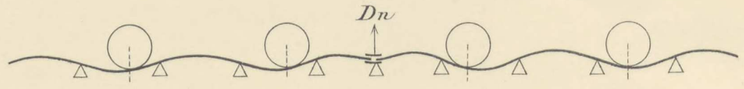

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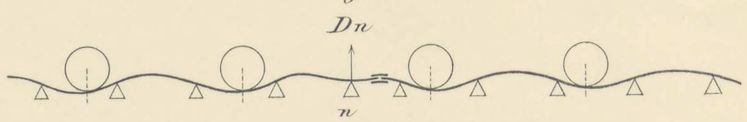

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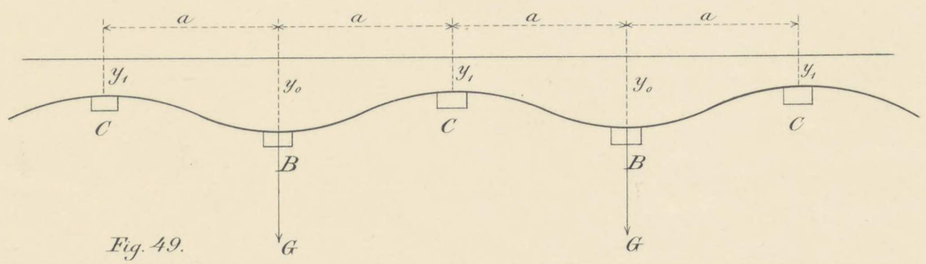

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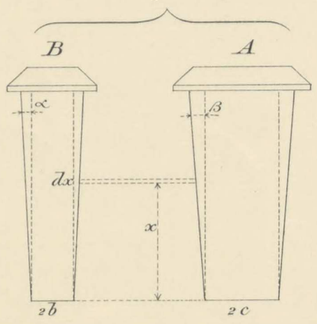

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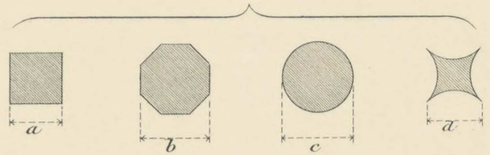

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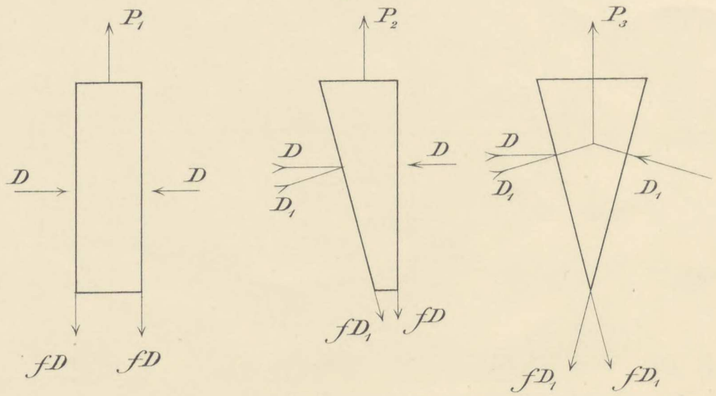

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WISSELS EN KRUISINGEN.

Fig. 1.

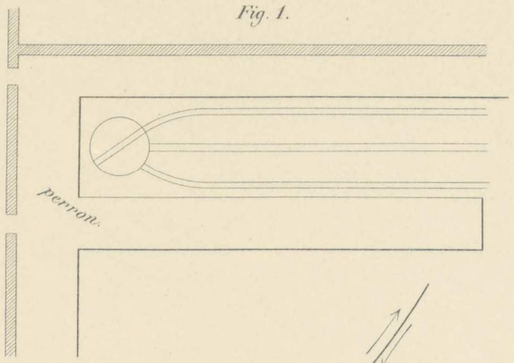
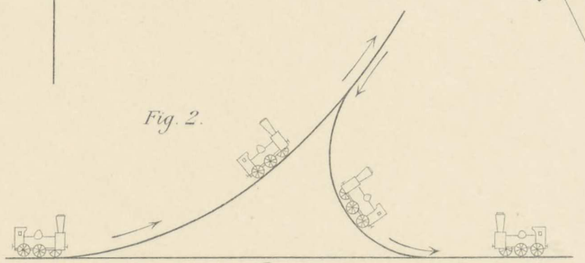


Fig. 2.



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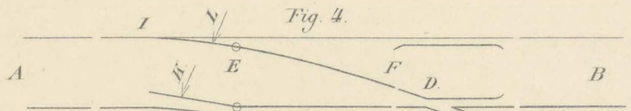

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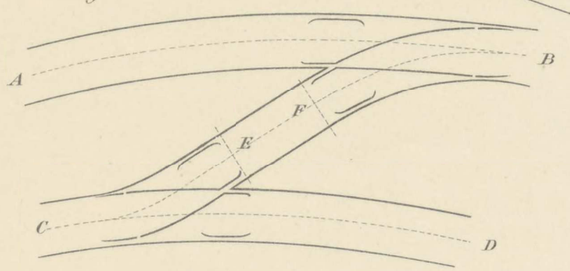

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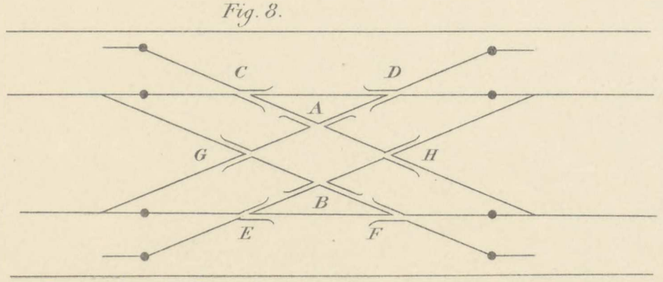

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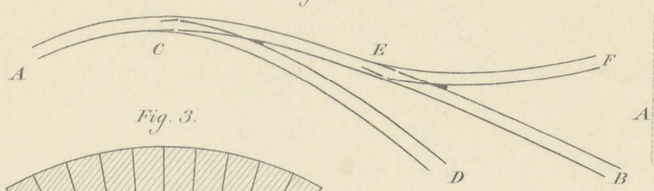

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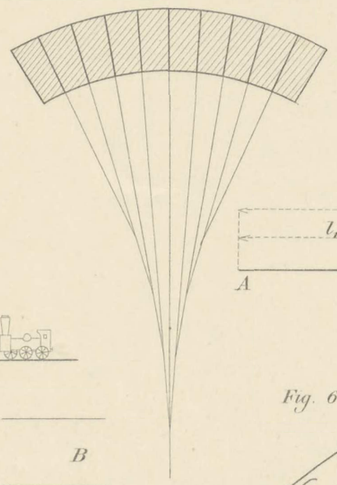

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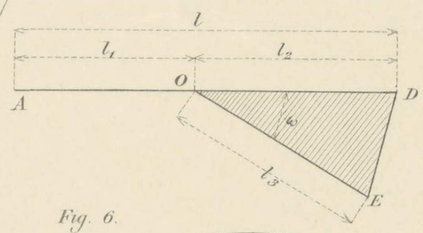

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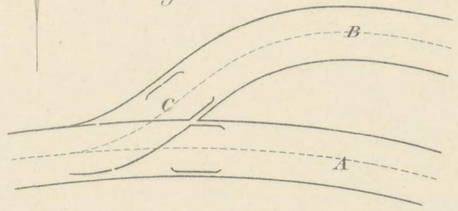
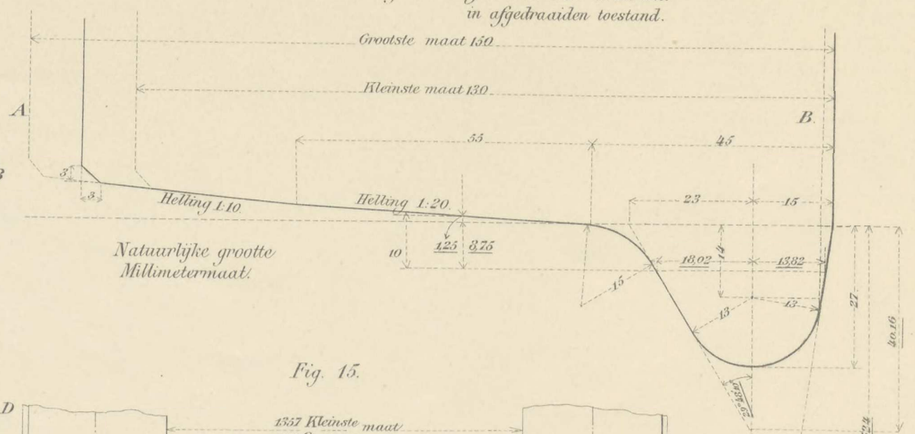
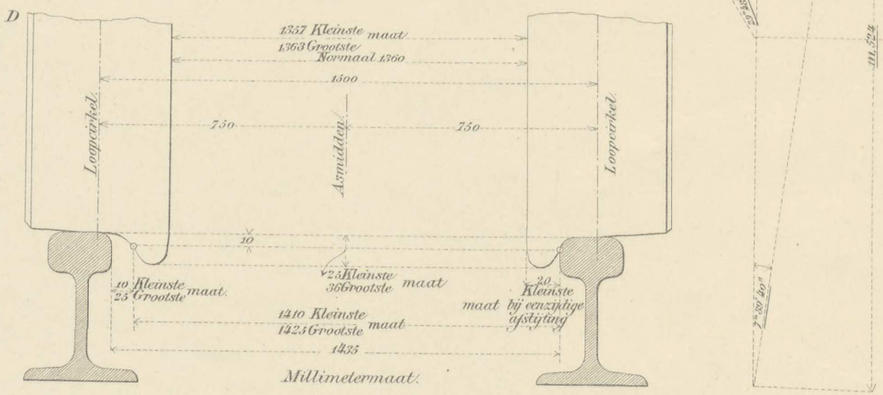


Fig. 14. Profiel van den wielband in afgedraaiden toestand.



Natuurlijke grootte
Millimetermaat.

Fig. 15.



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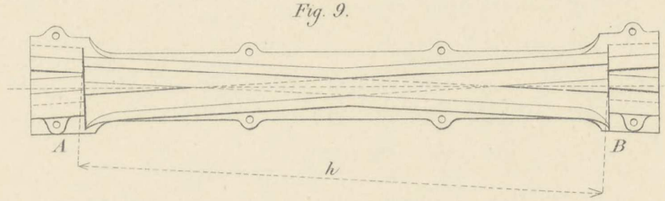

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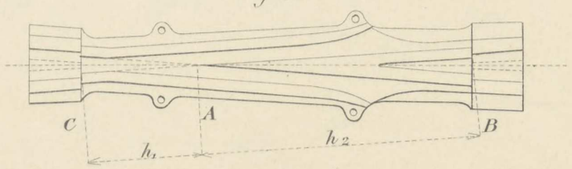

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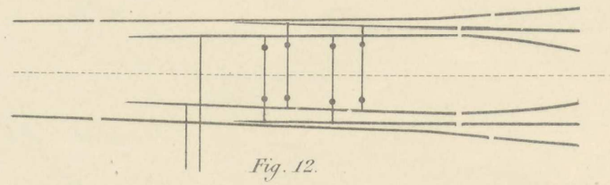

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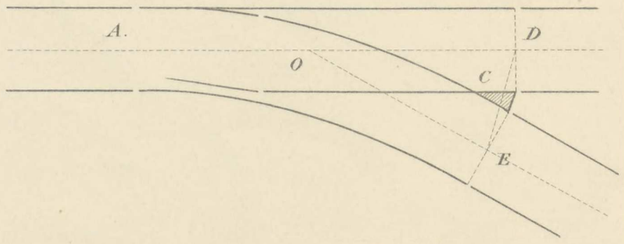

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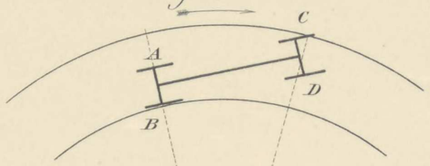
Fig. 16



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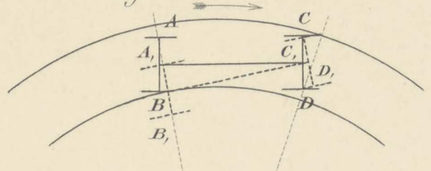

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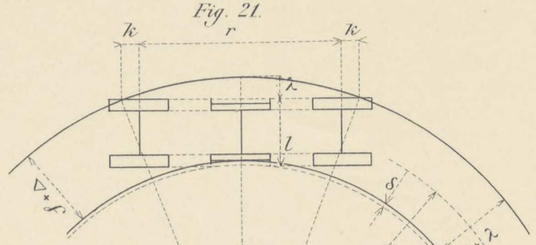

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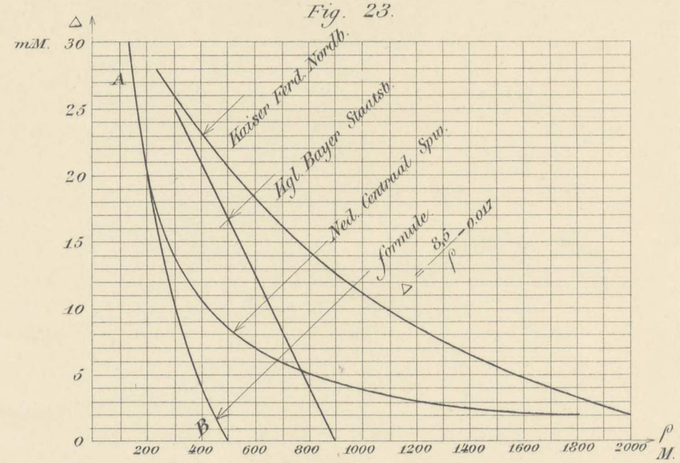

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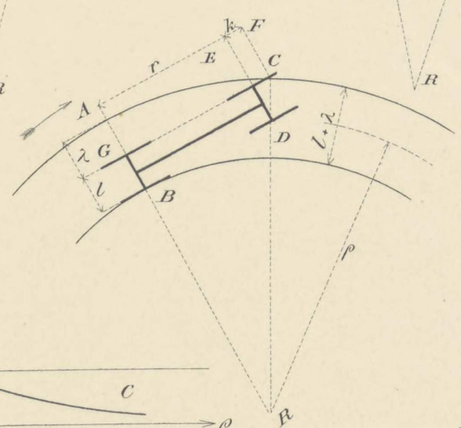

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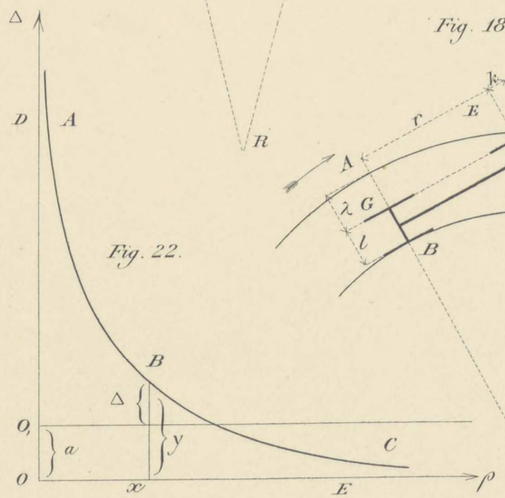

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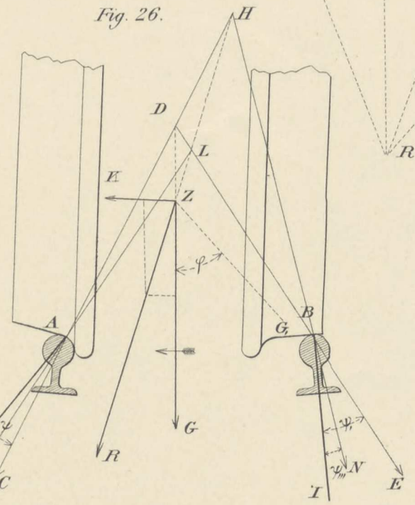

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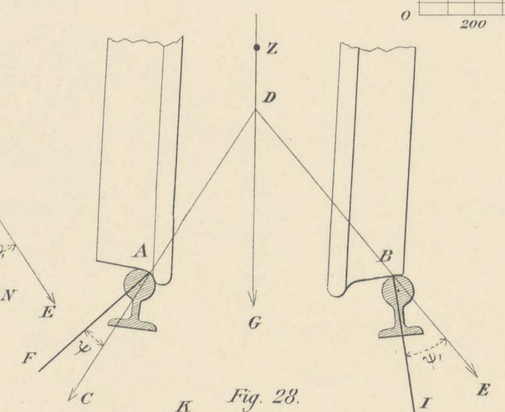

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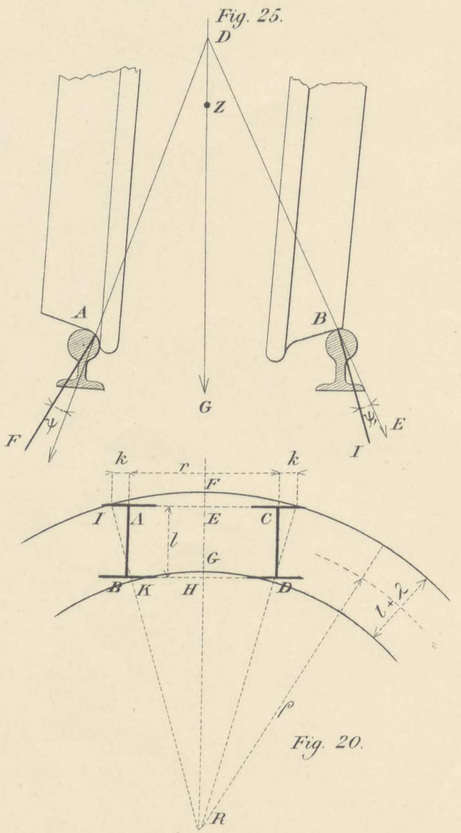

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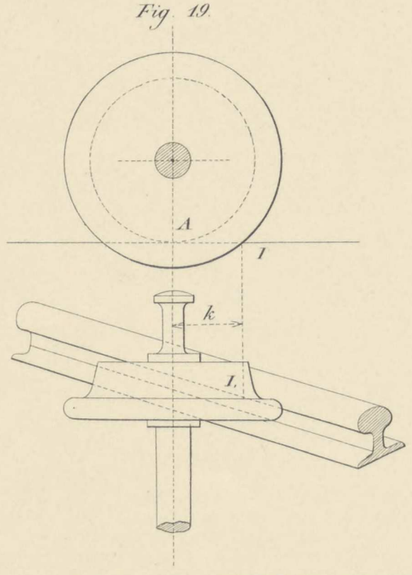

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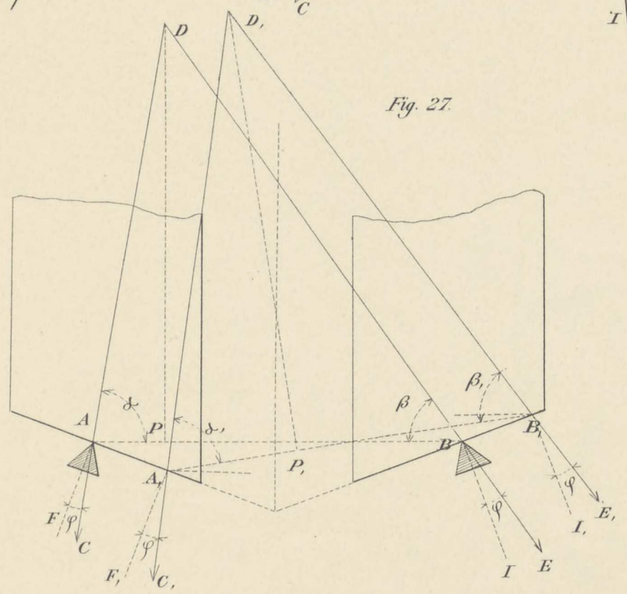

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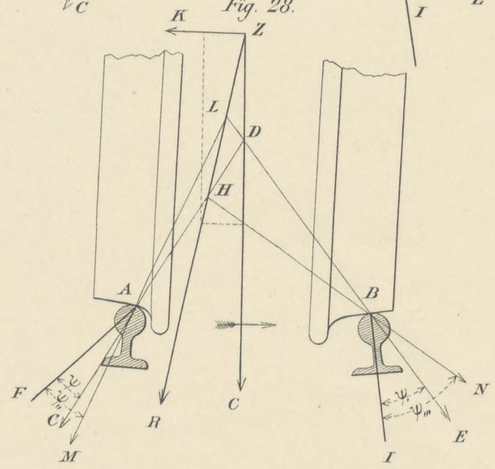

Fig. 20.

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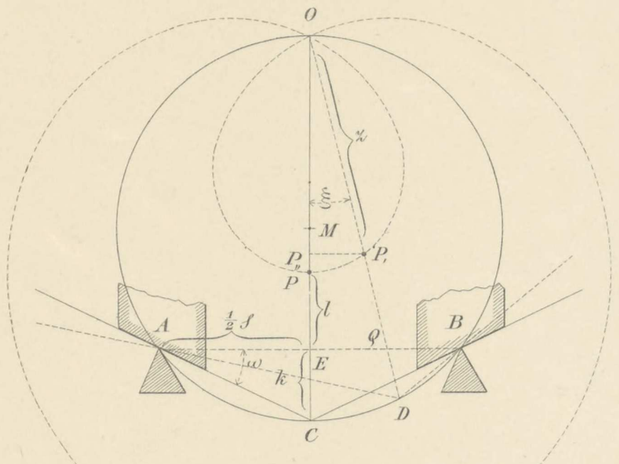
Fig. 29.



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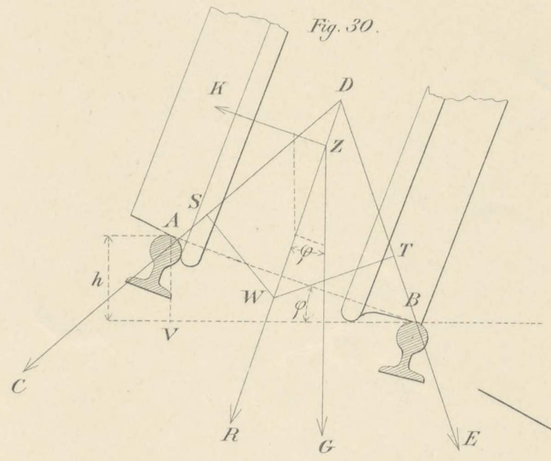

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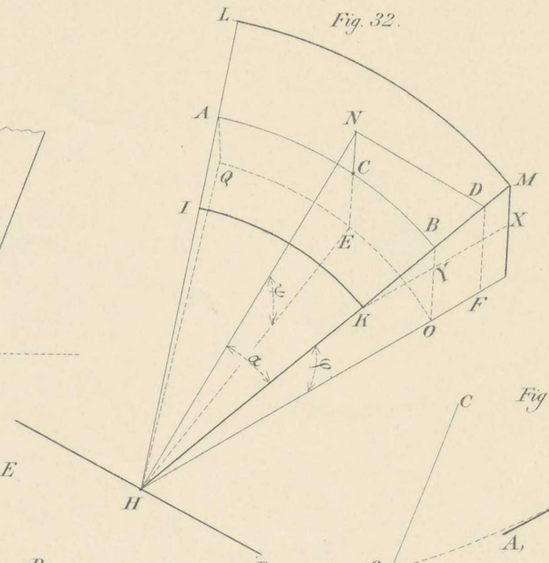

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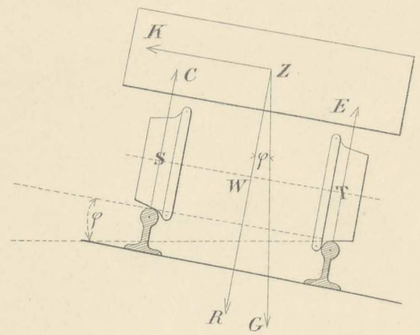

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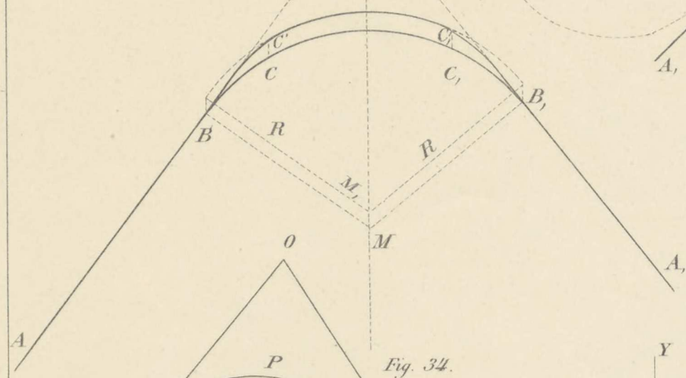

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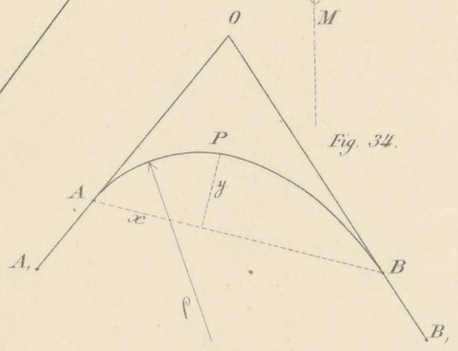

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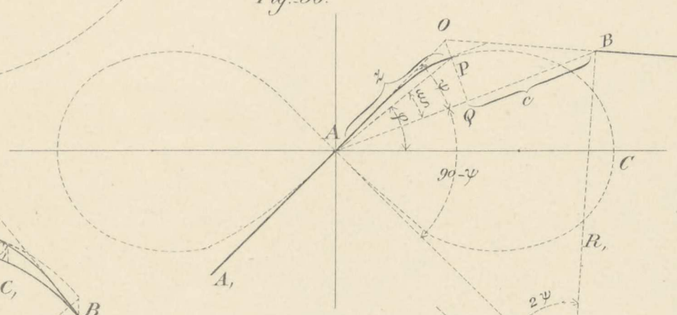

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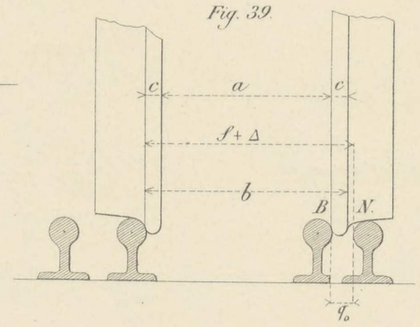

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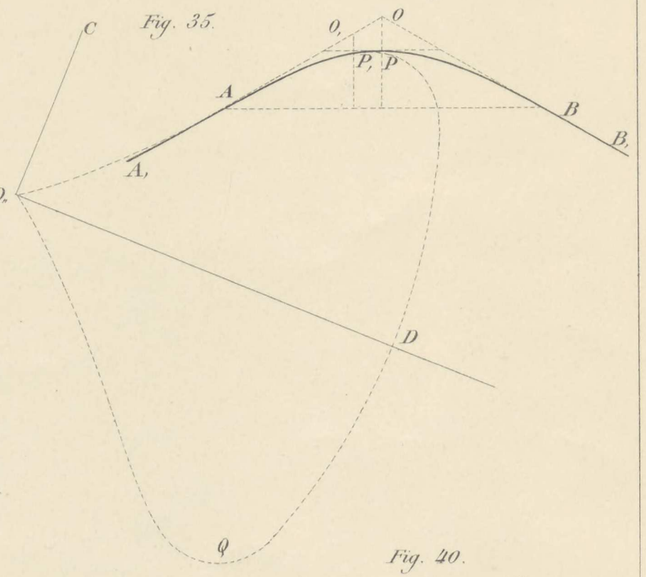

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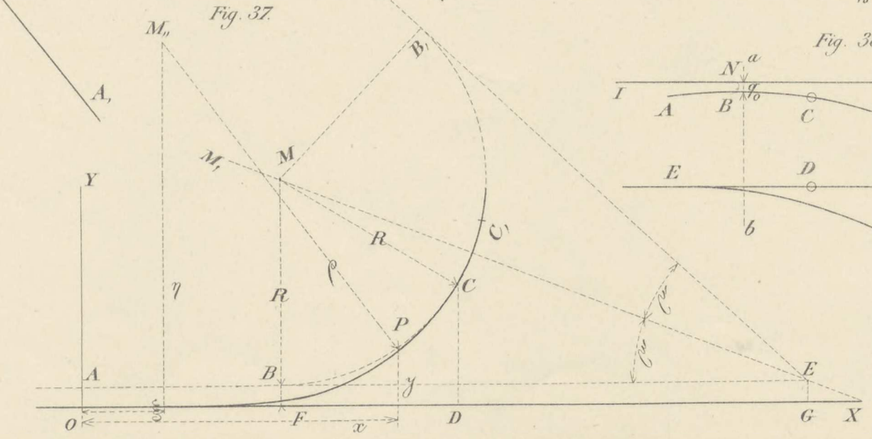

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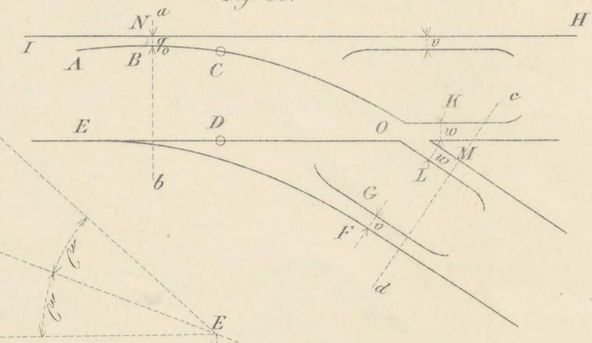

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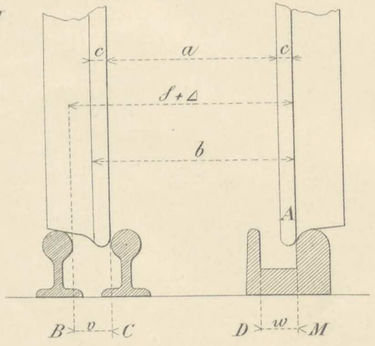

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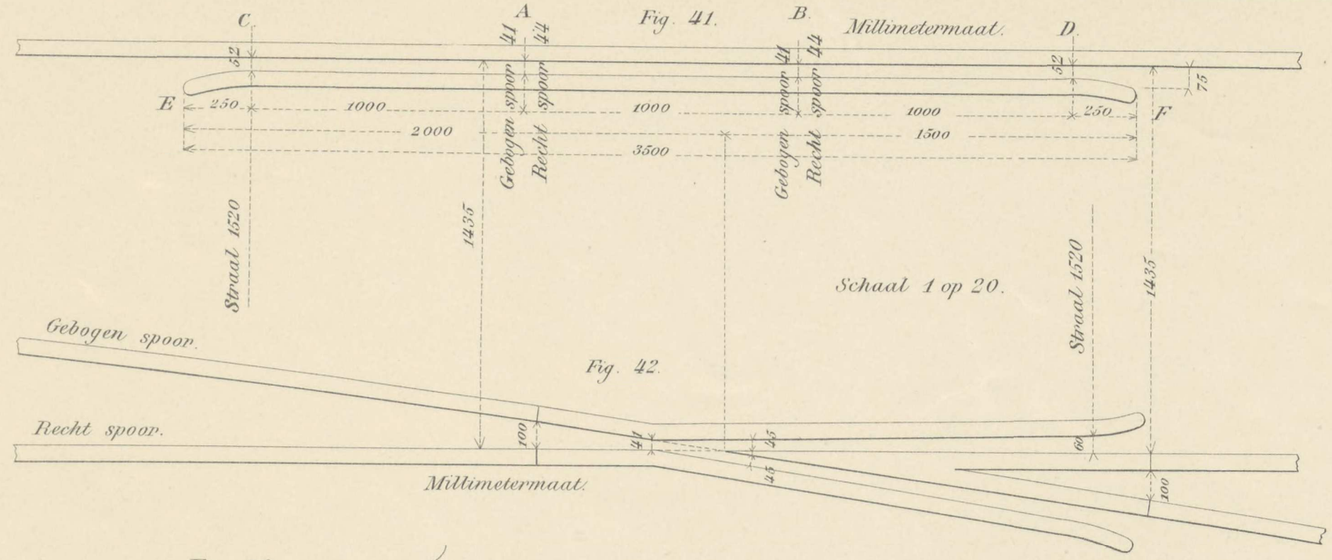
Fig. 41.



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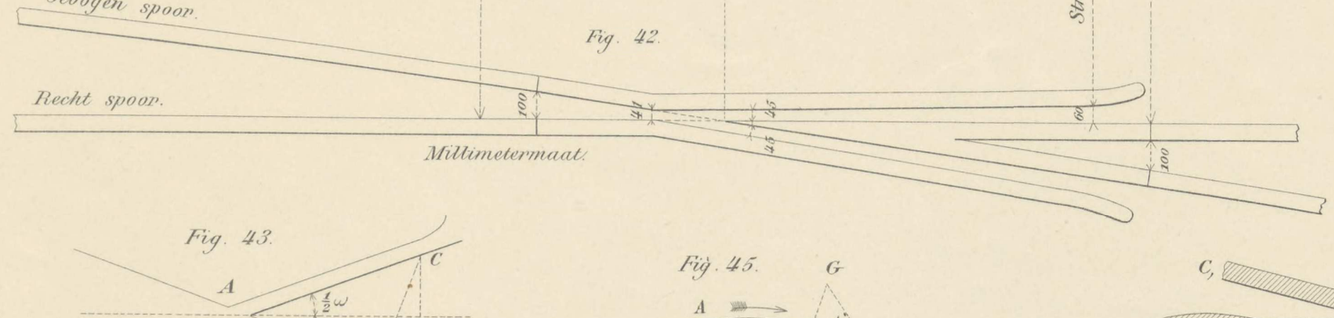
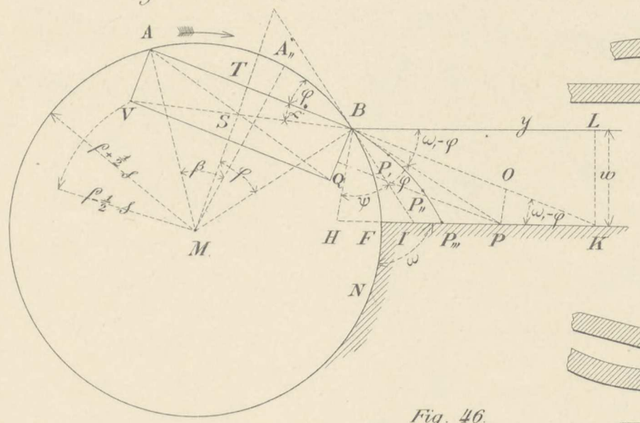


Fig. 43.

Fig. 44.

Fig. 45.



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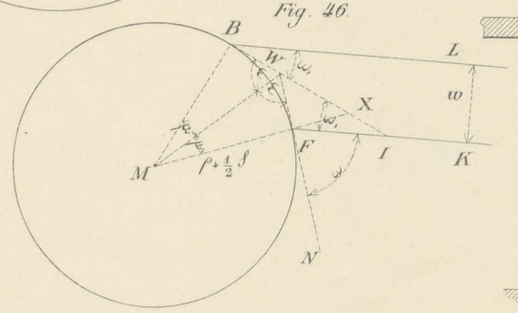

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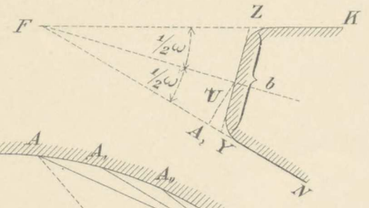
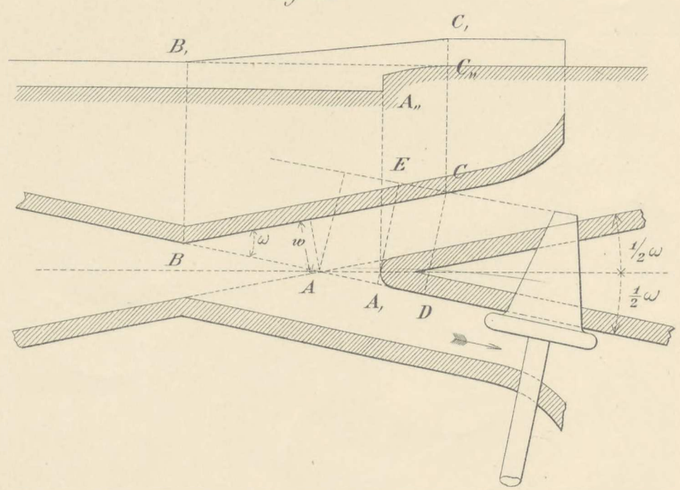


Fig. 48



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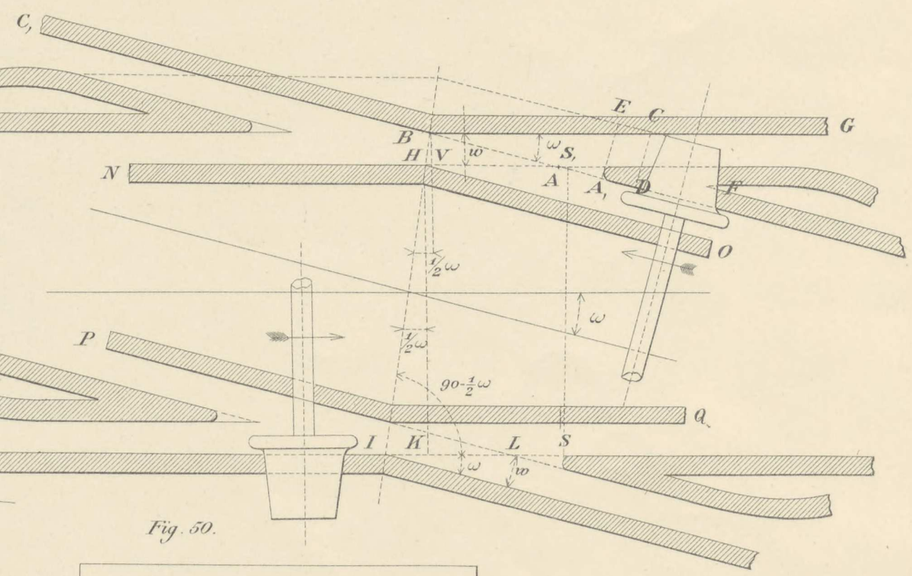

Fig. 50.

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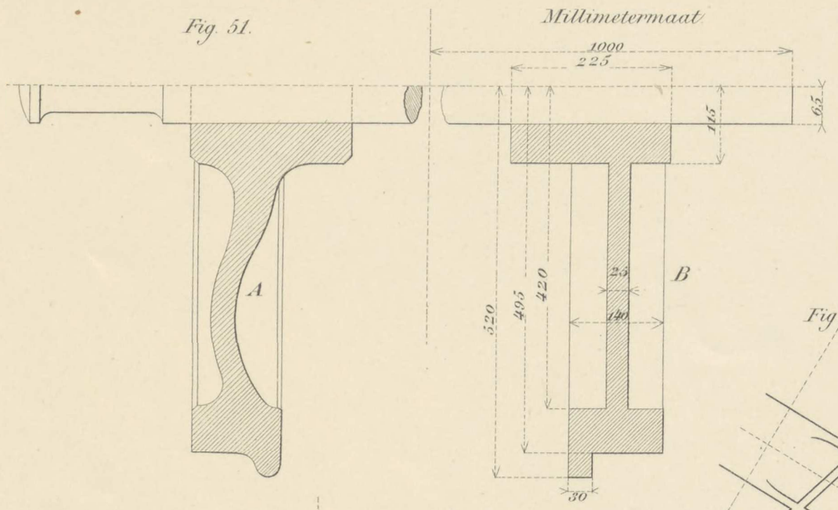
Fig. 51.



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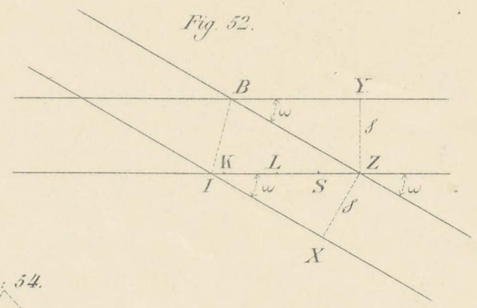

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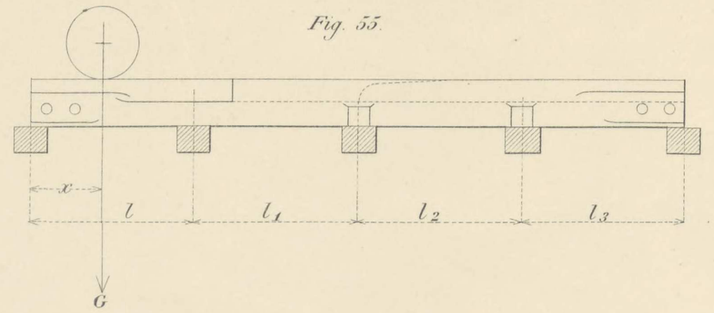

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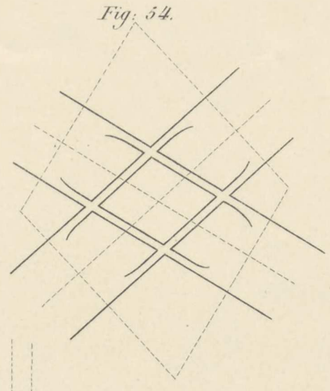

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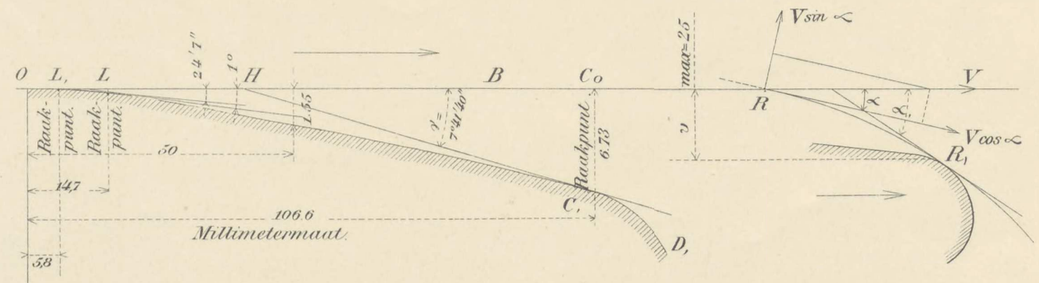

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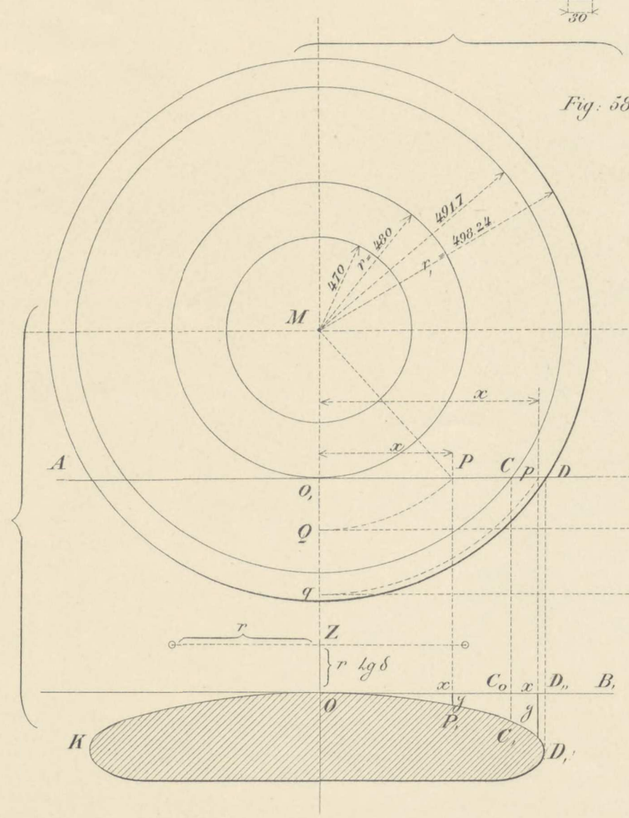


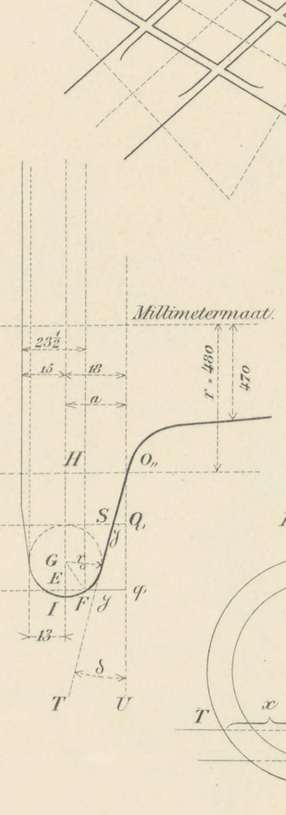
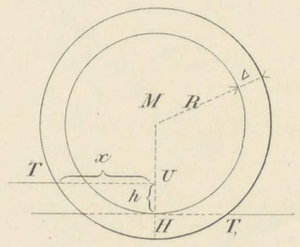


Fig. 53.



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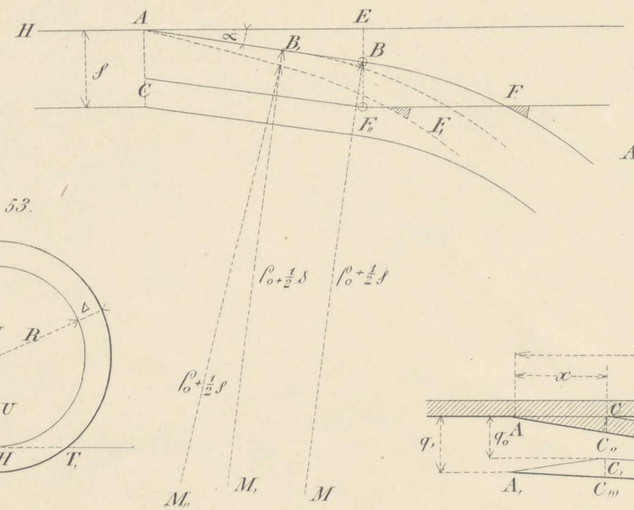

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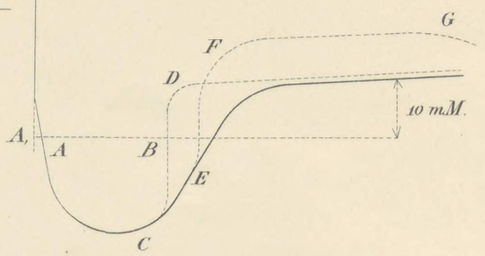

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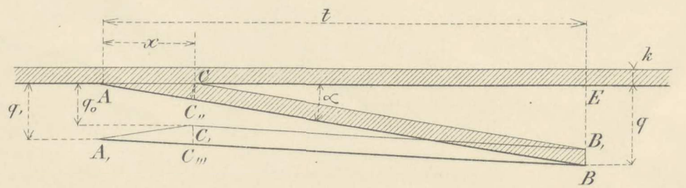

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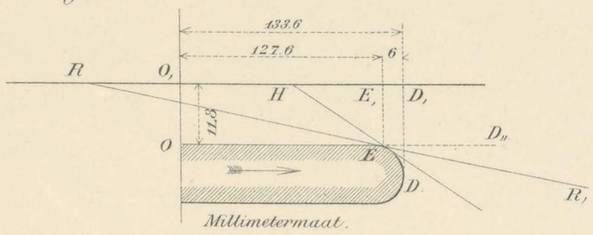
Fig. 61.



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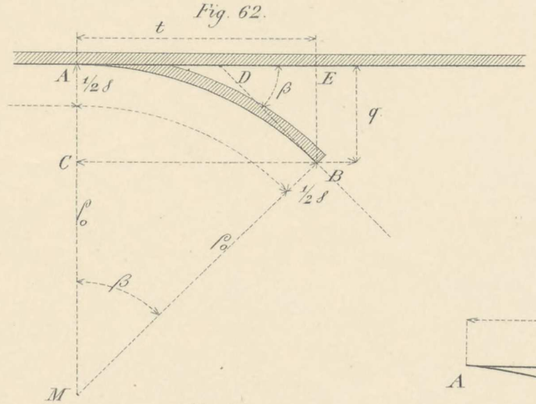

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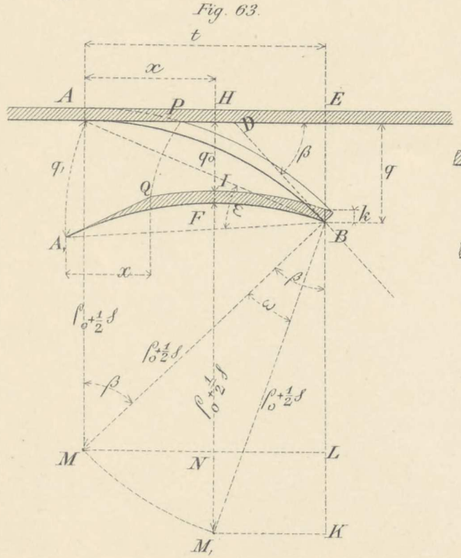

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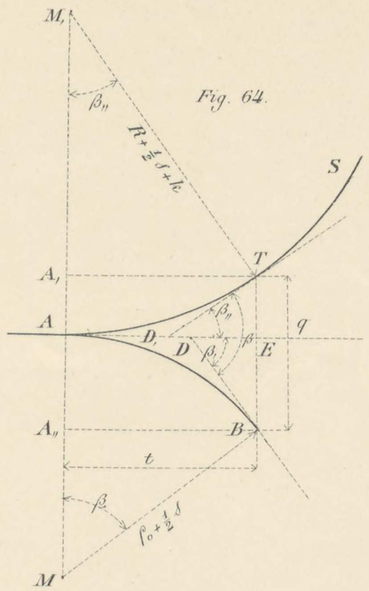

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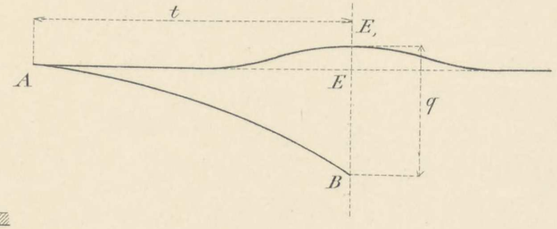

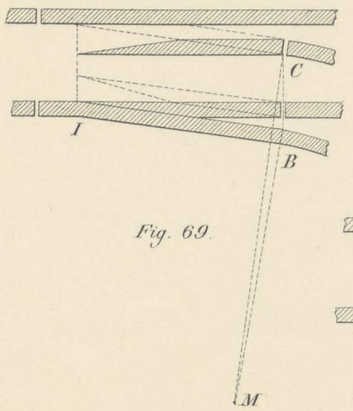

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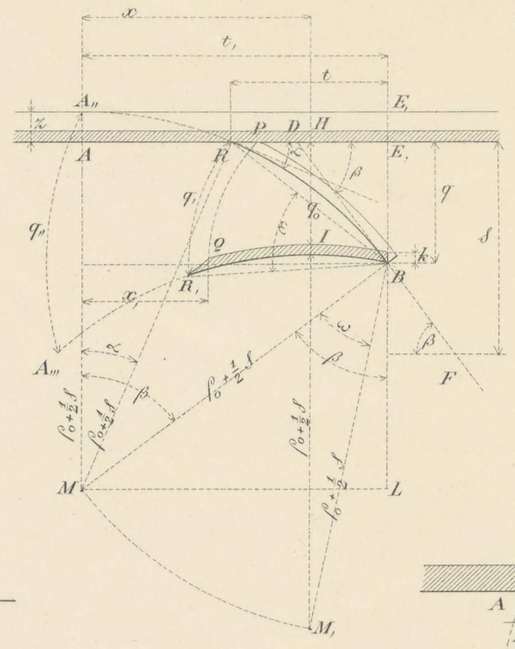

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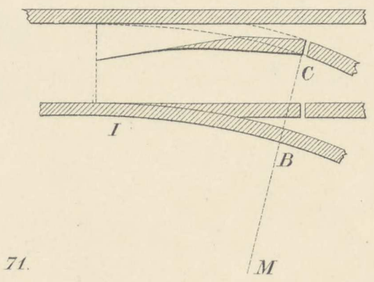

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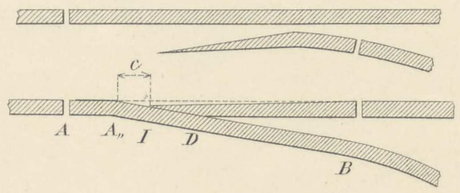

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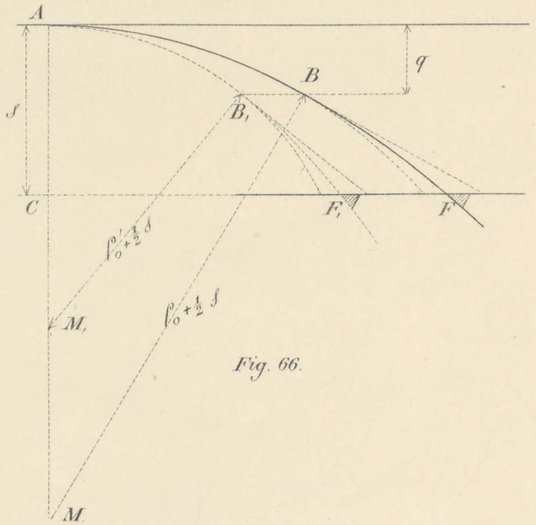

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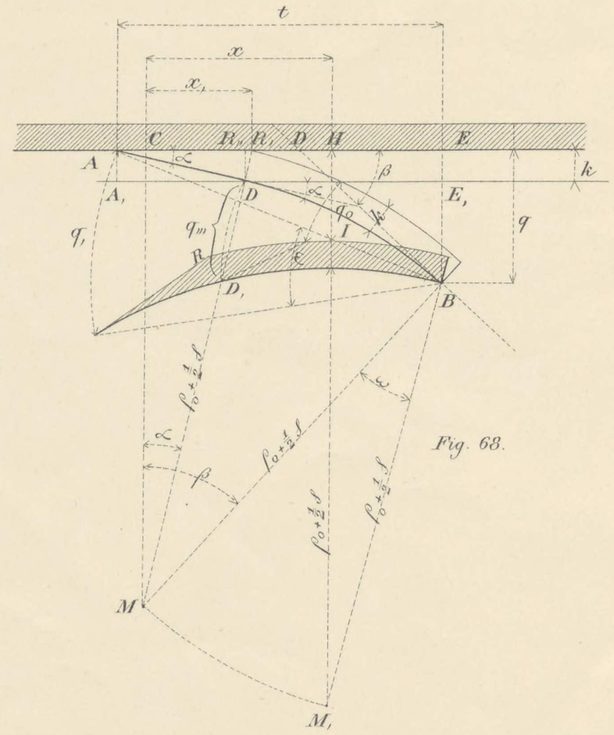

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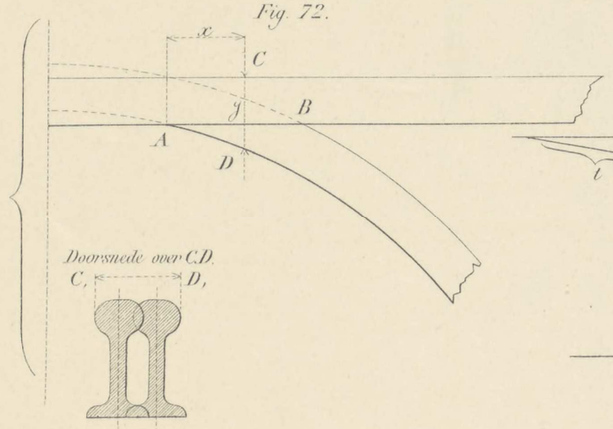

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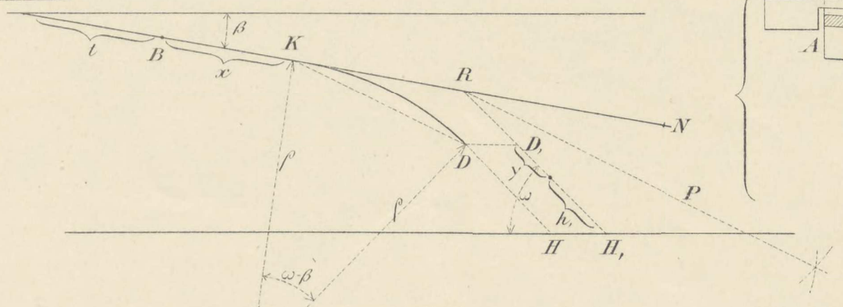

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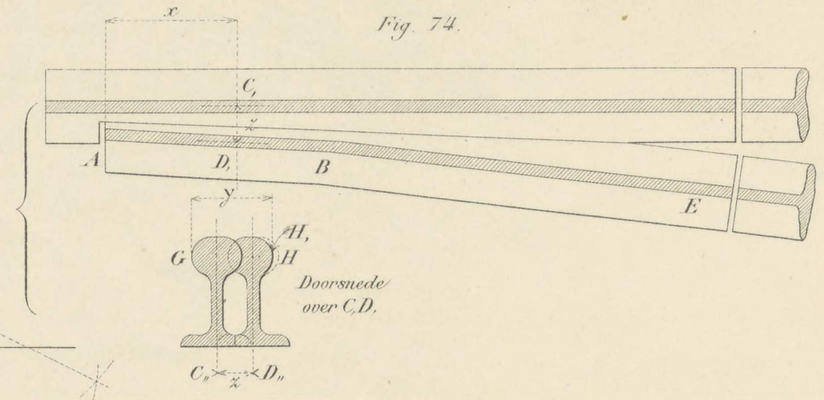

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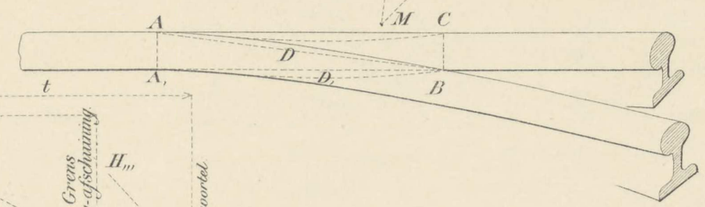

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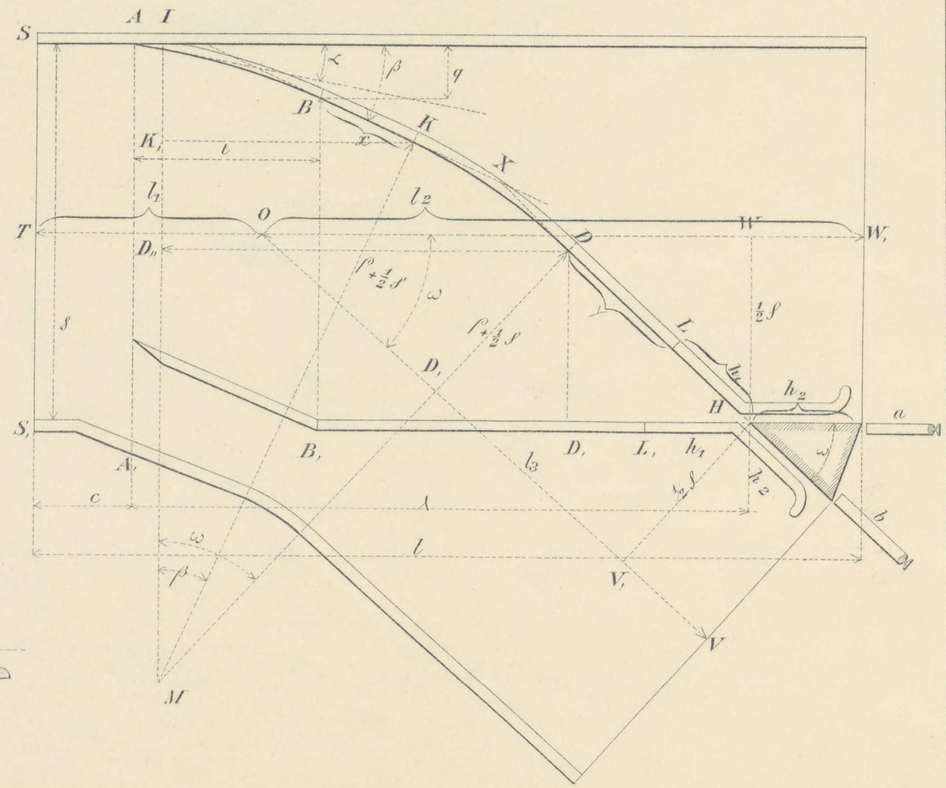

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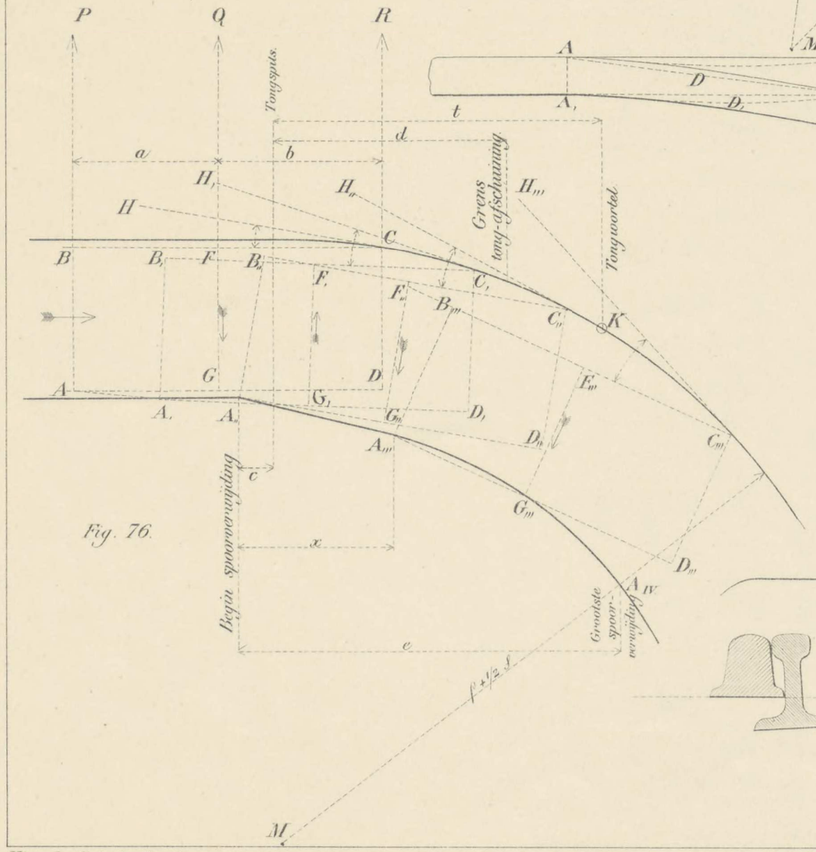

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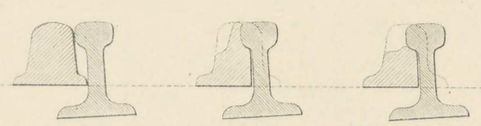

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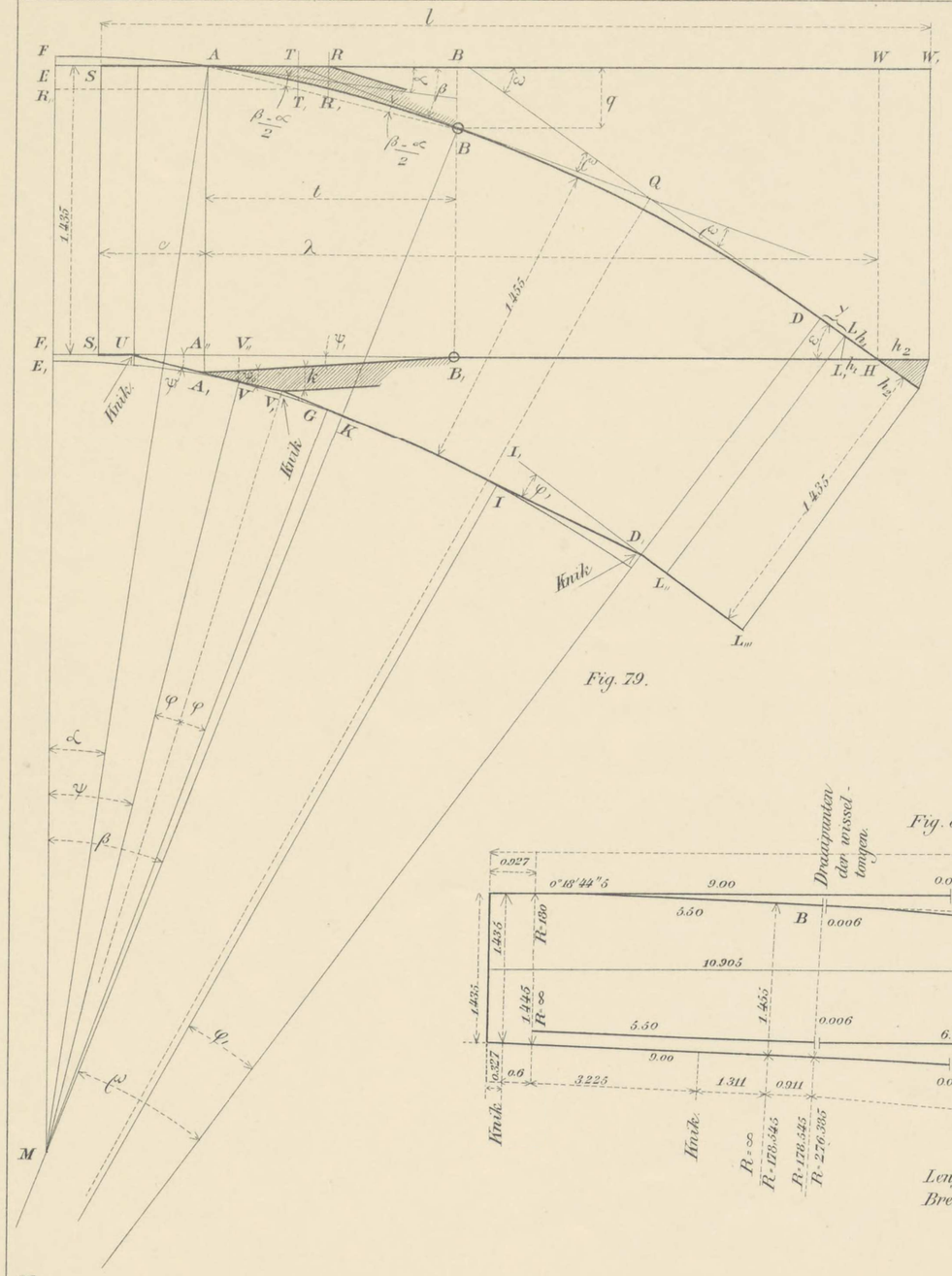

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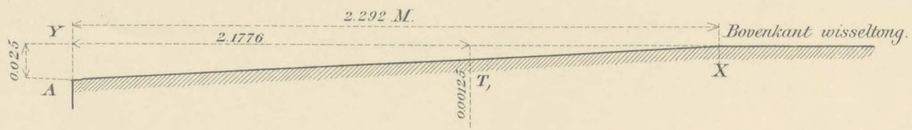

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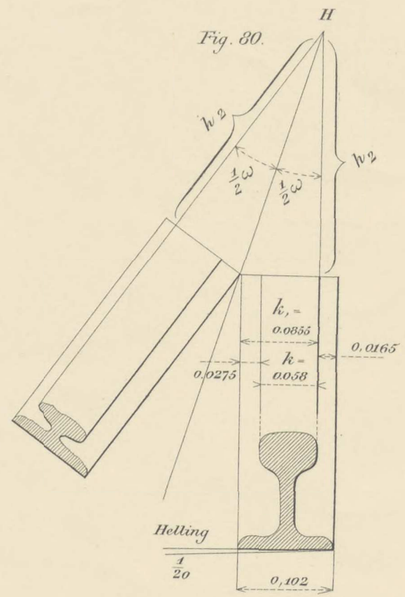

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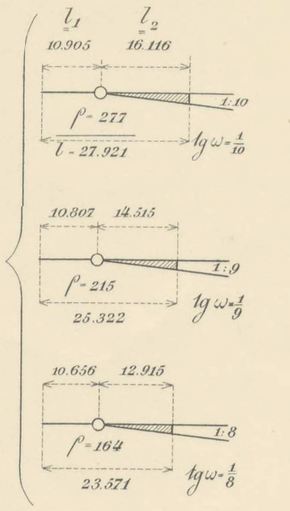

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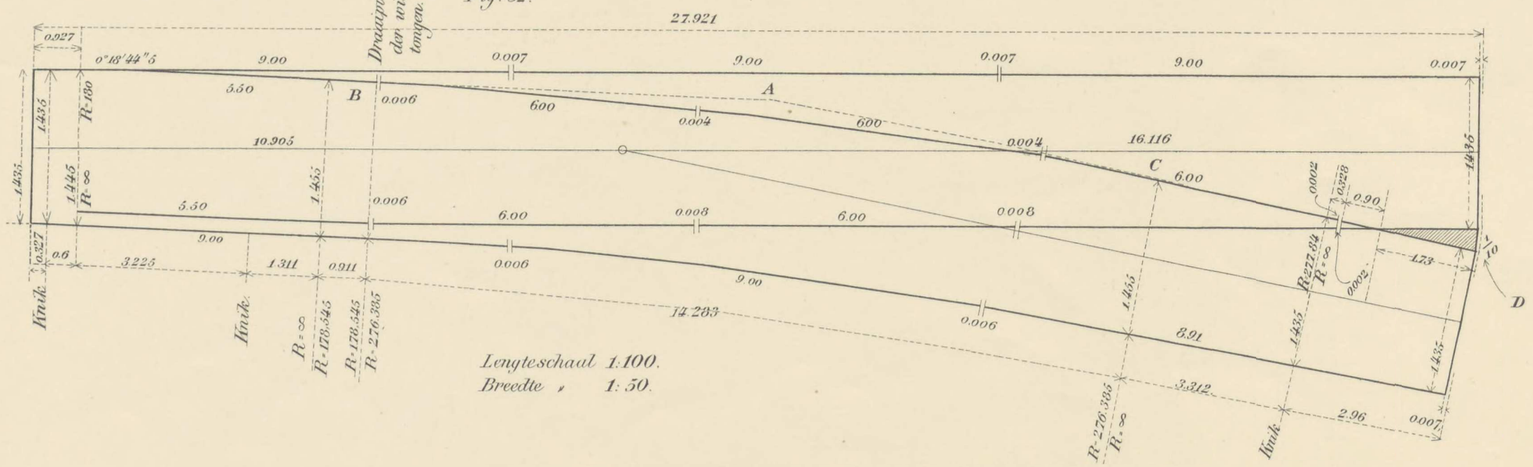

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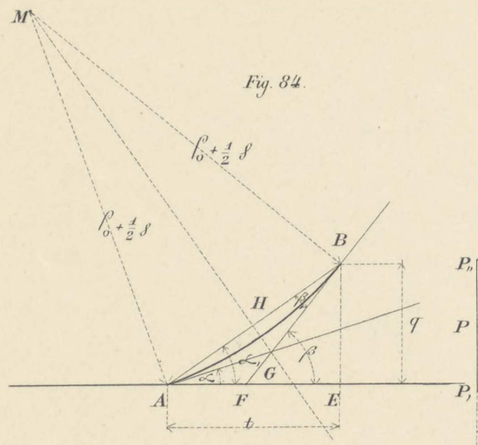

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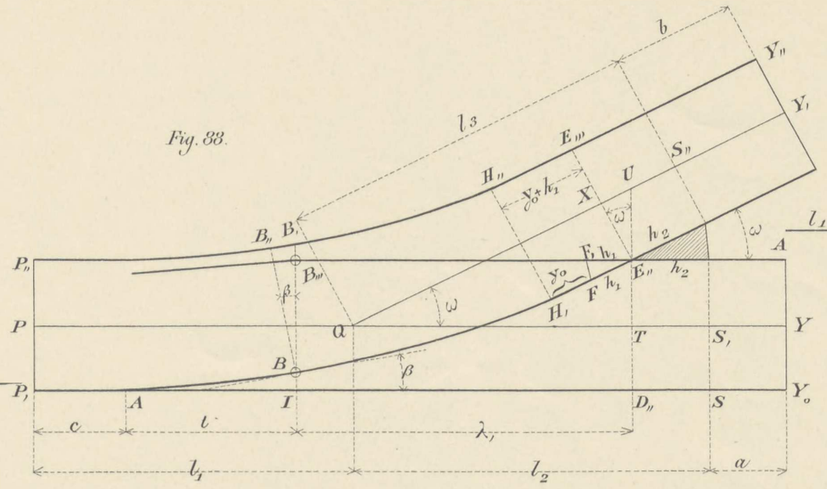

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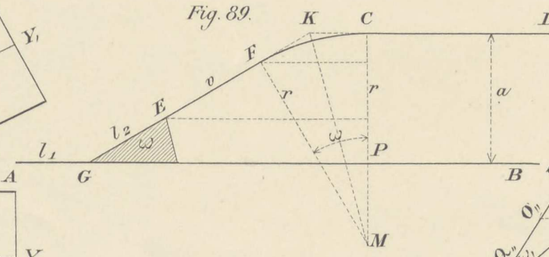

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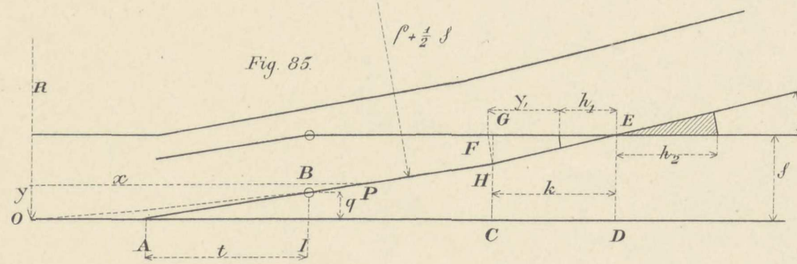

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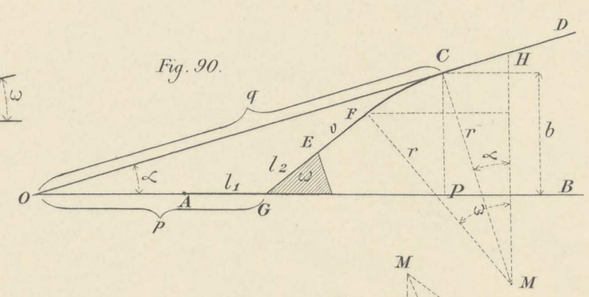

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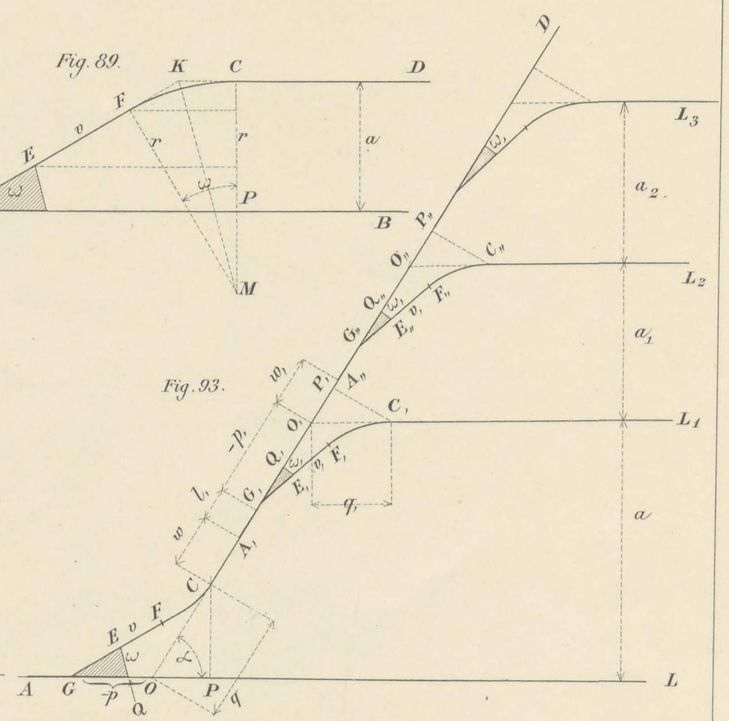

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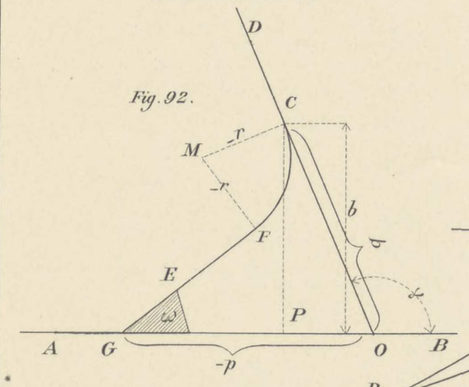

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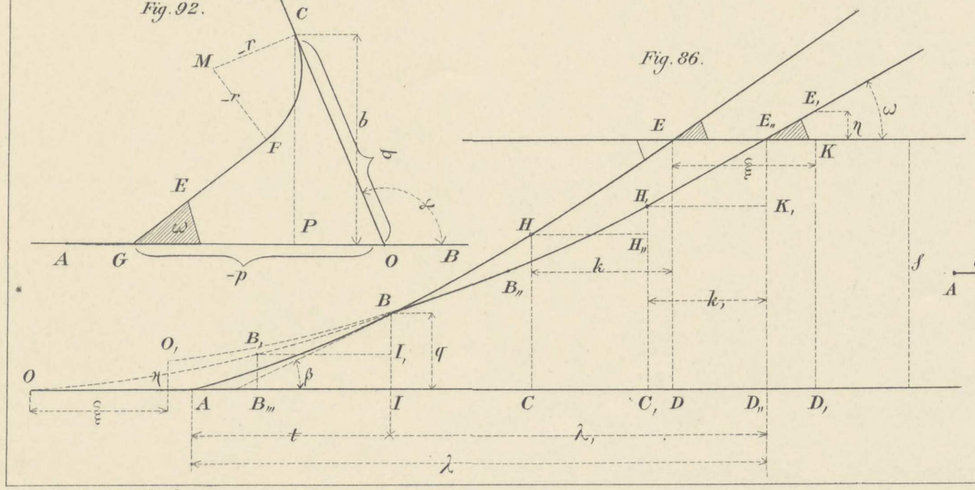

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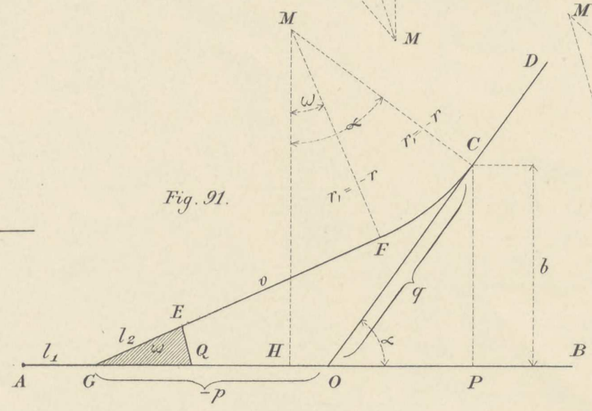

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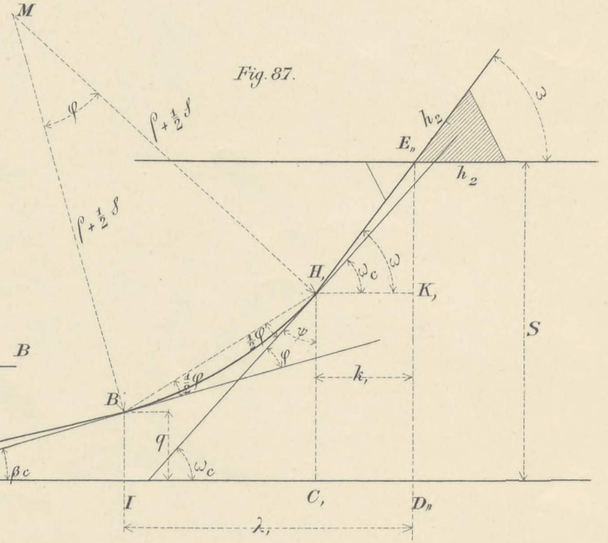

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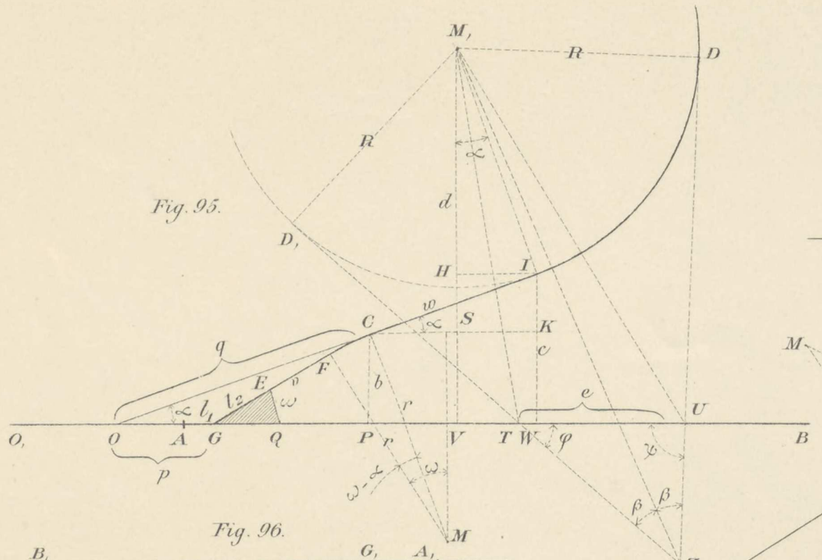

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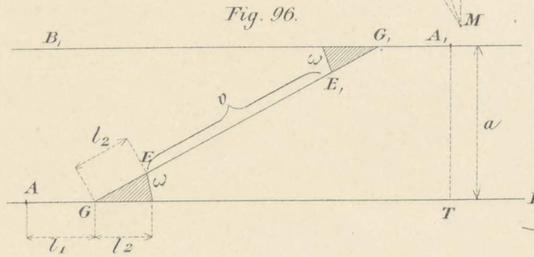

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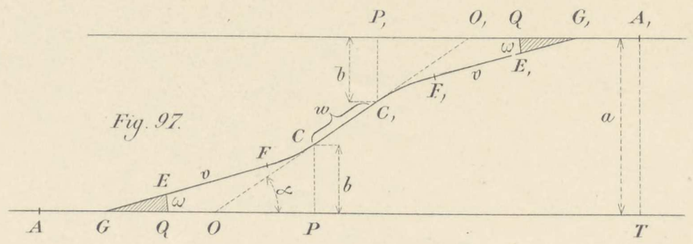

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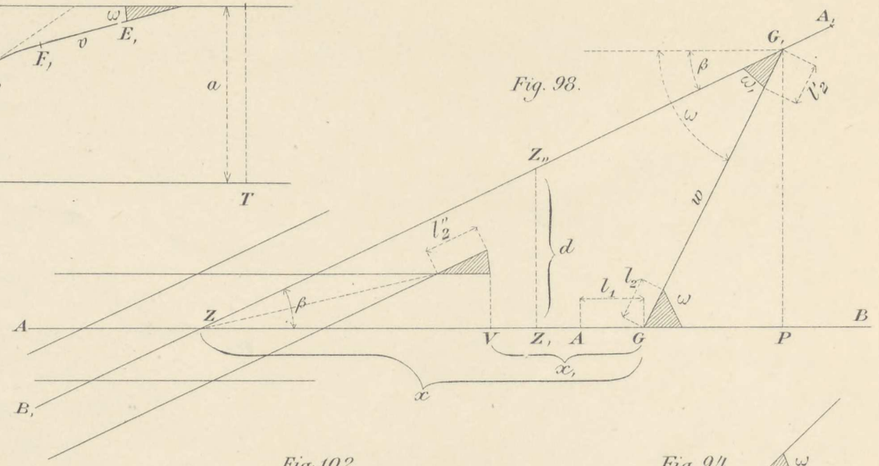

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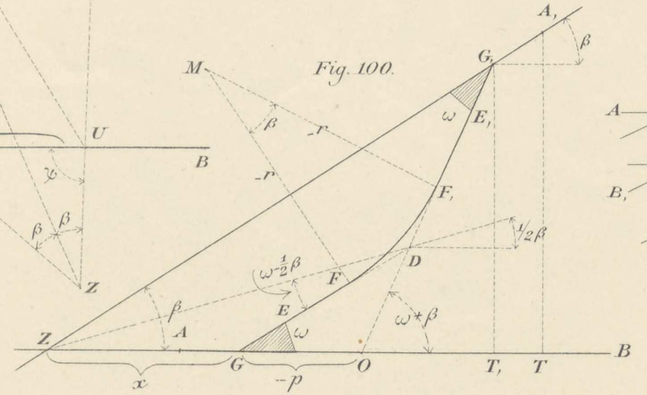

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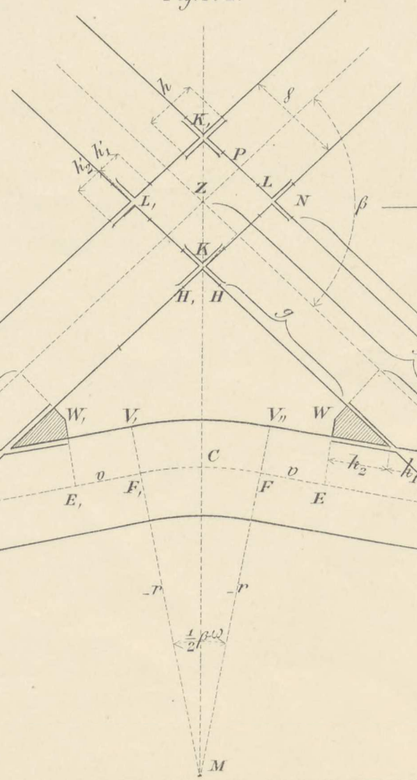

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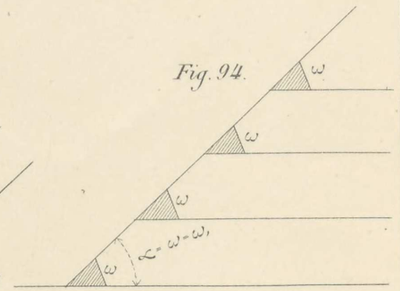

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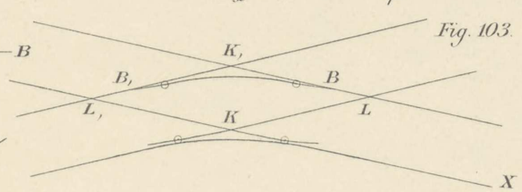

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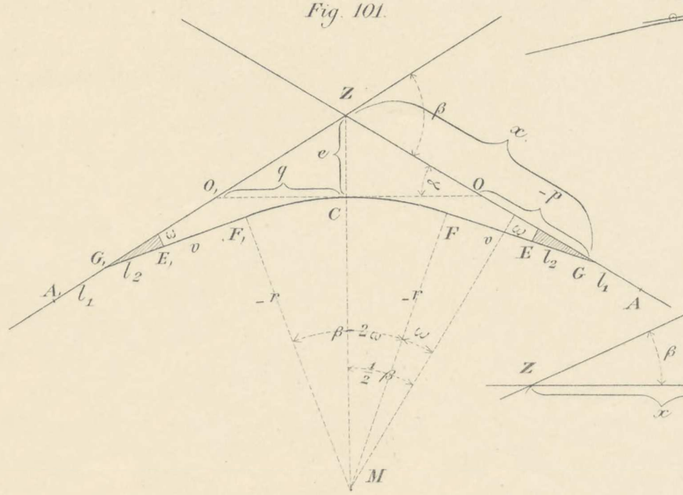

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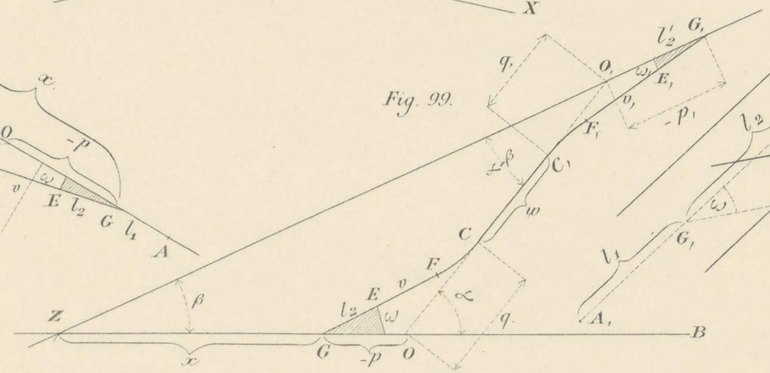

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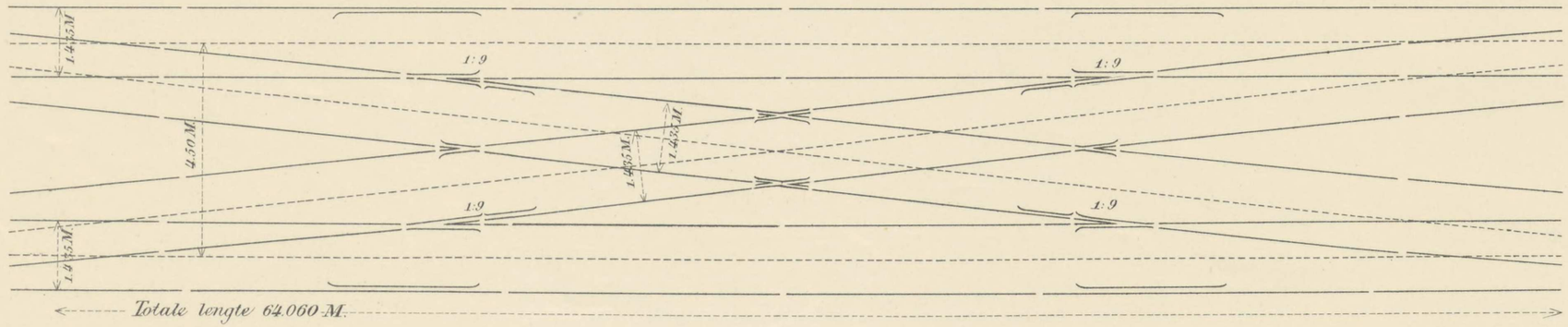

Fig. 106.

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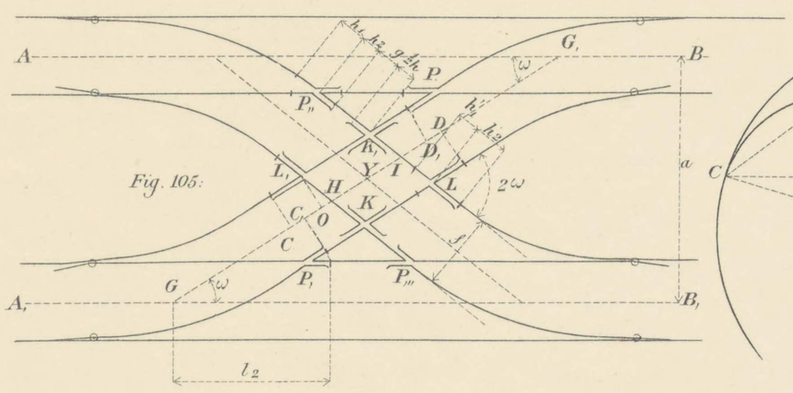

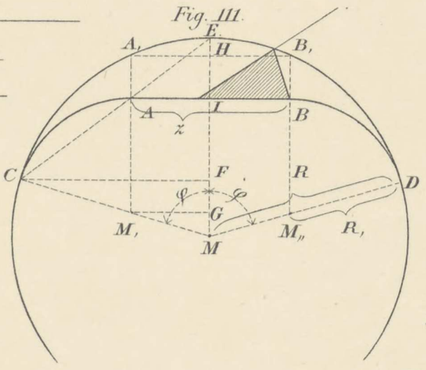

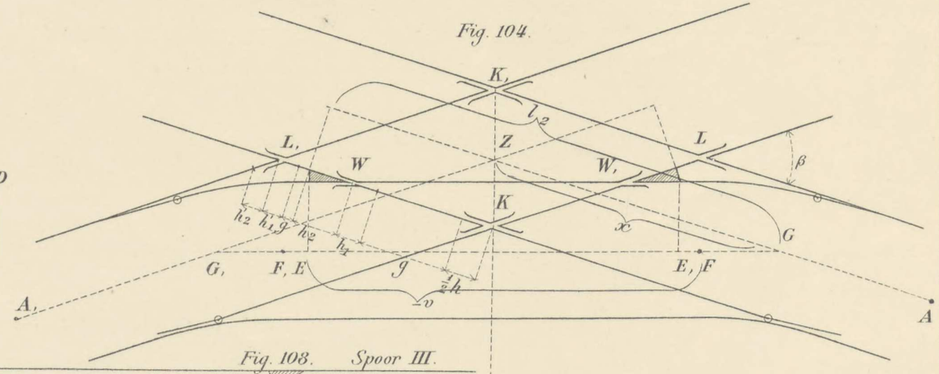

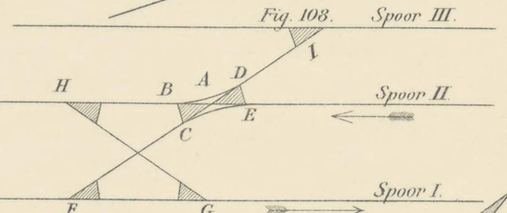

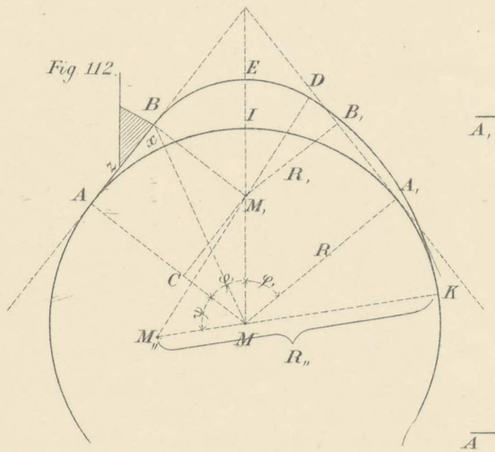

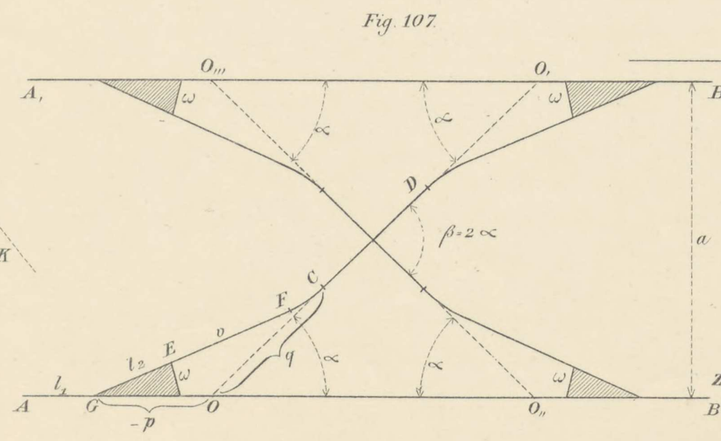

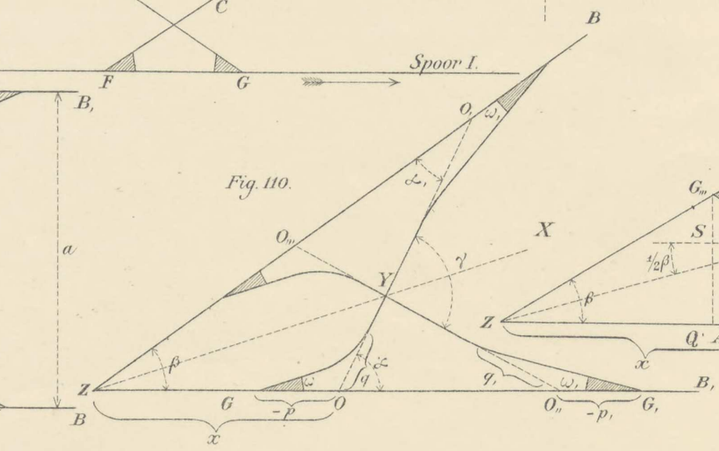

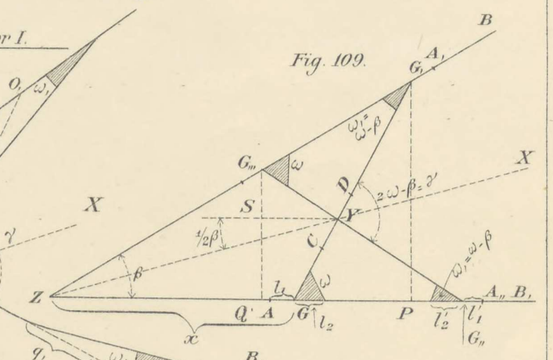

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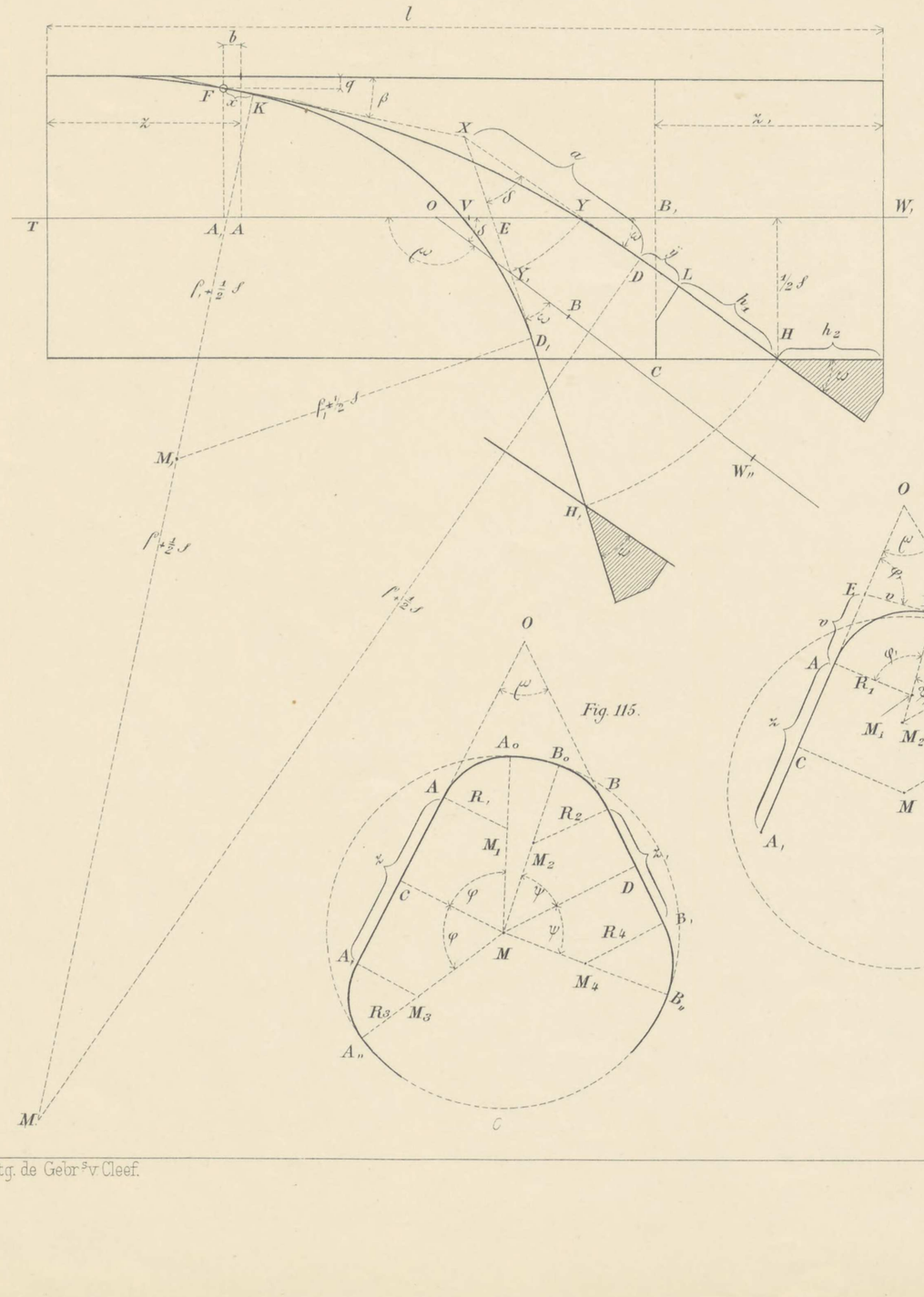
Fig. 118.



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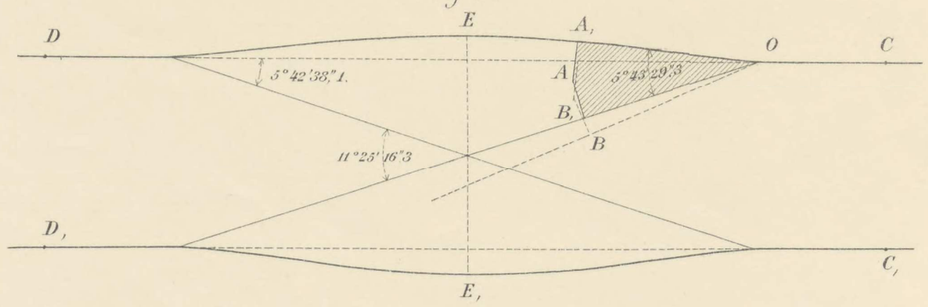

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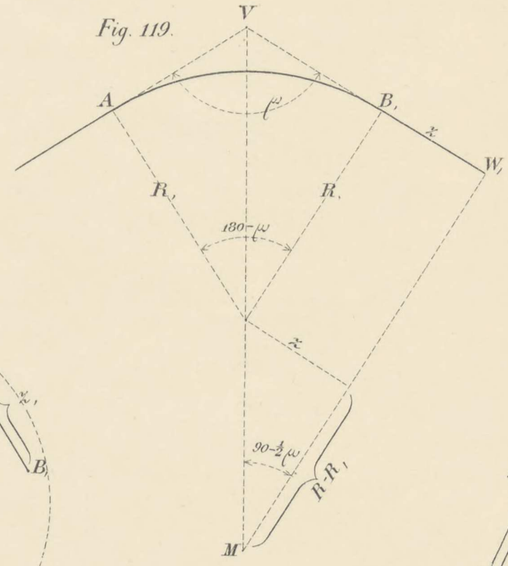

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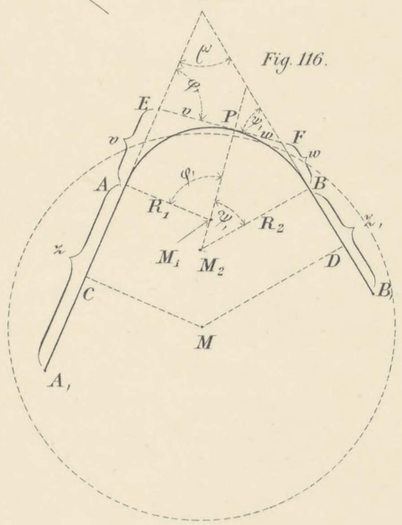
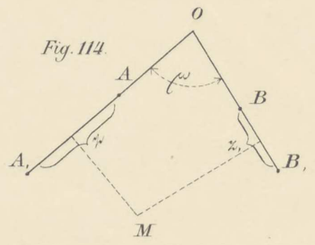


Fig. 115.

Fig. 114.



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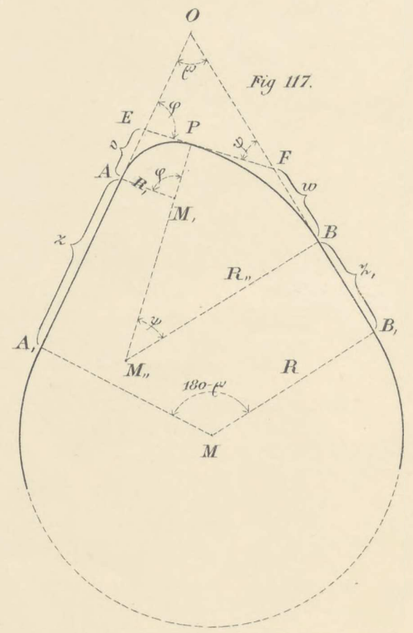

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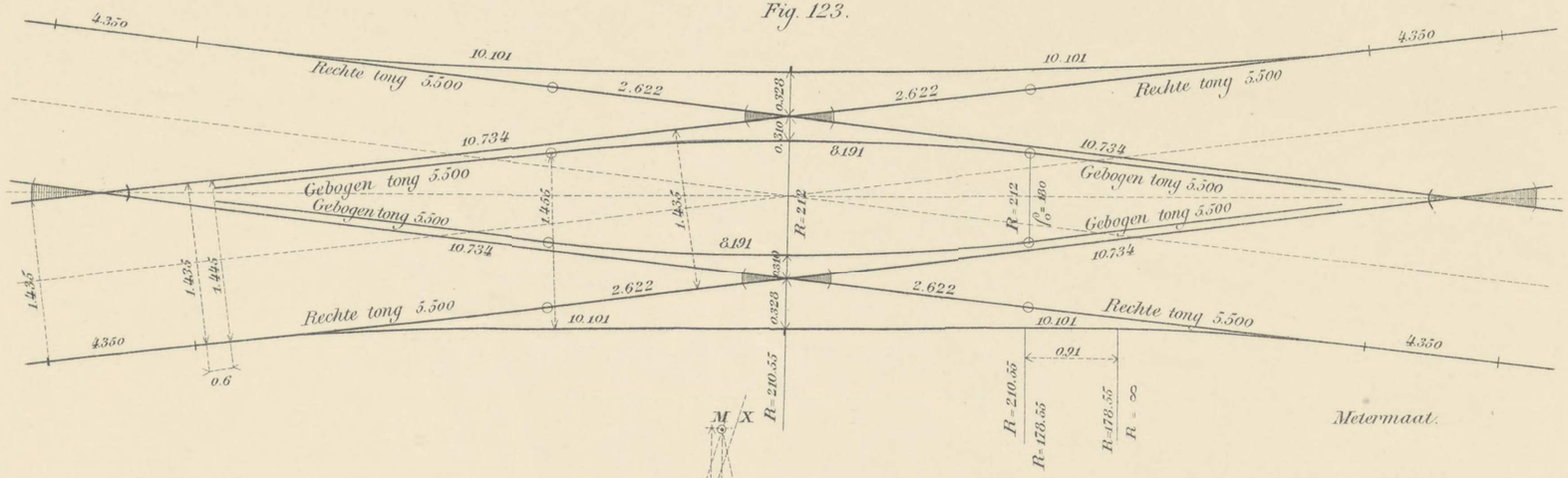
Fig. 123.



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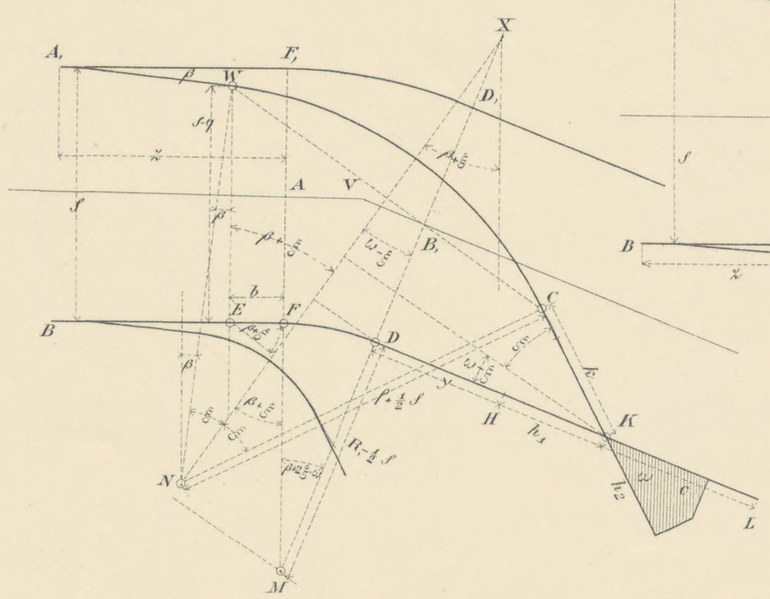

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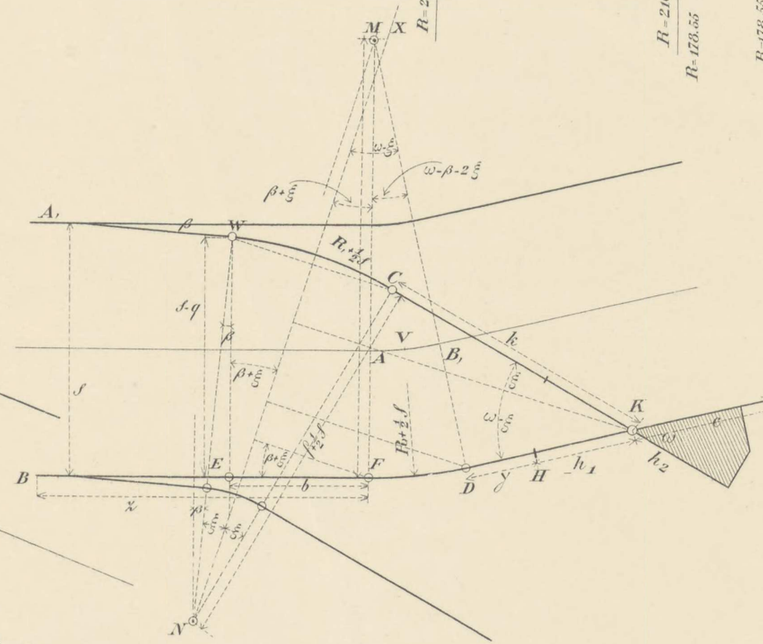

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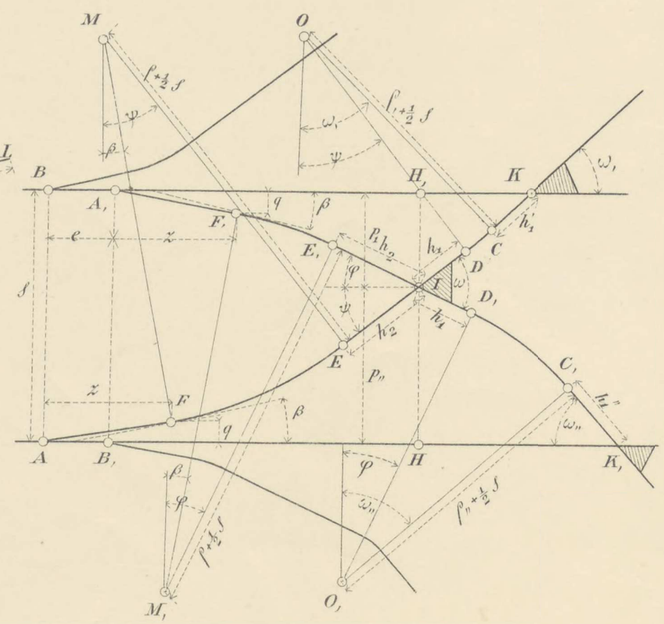

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Fig. 130.

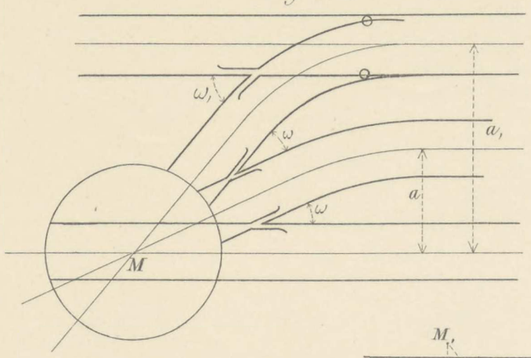
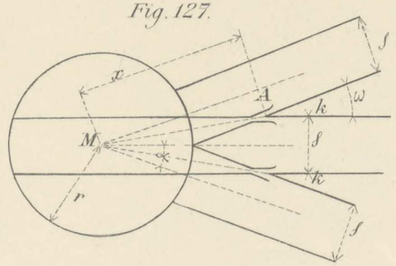


Fig. 127.



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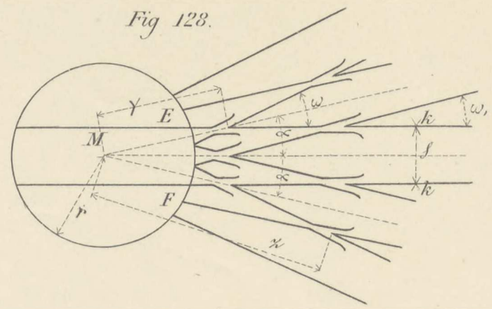

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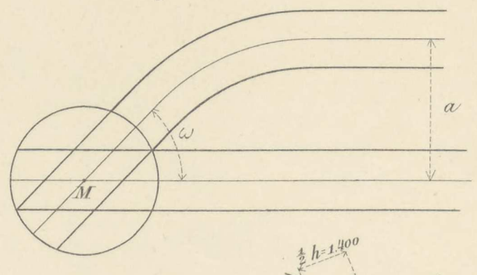
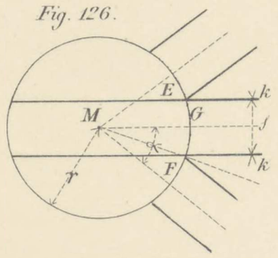


Fig. 126.



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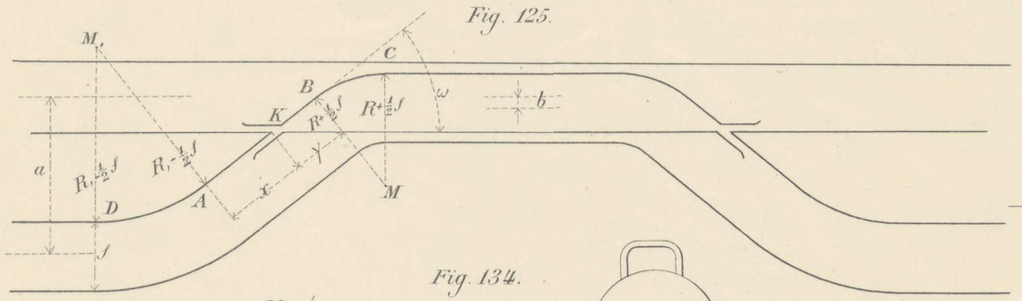

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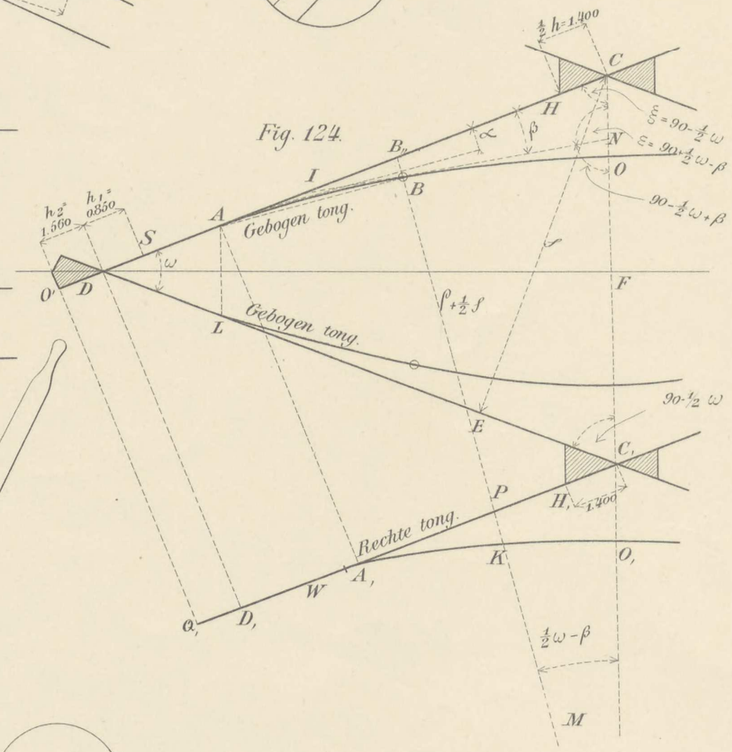

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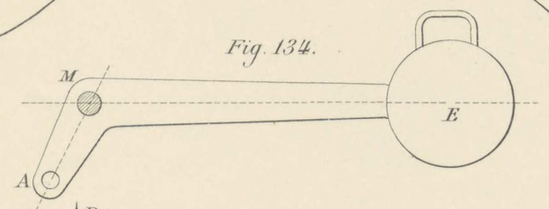
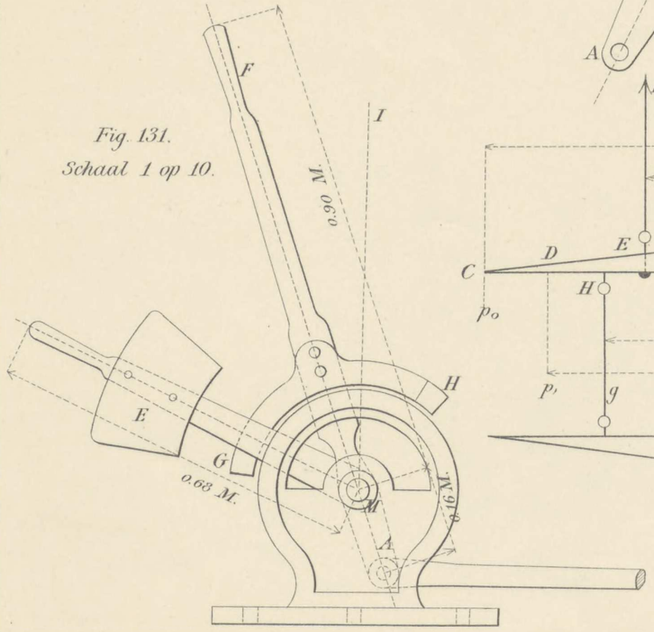


Fig. 131.
Schaal 1 op 10.



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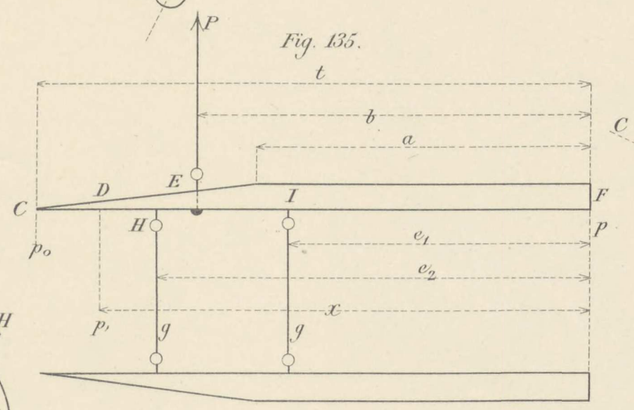


Fig. 132.

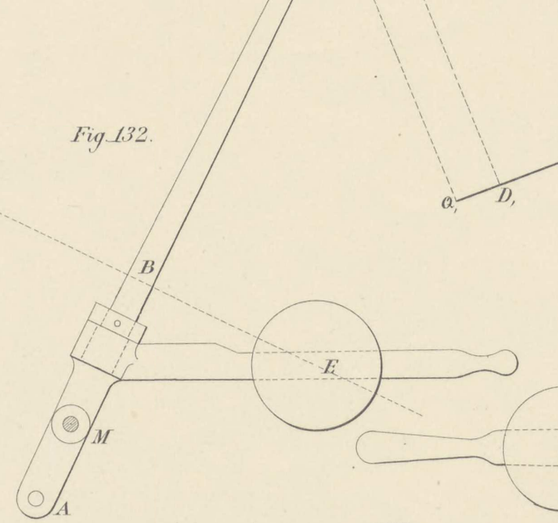
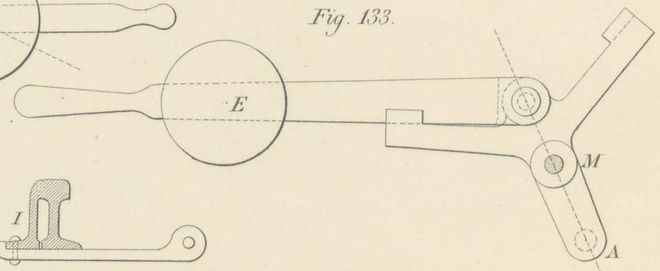


Fig. 133.



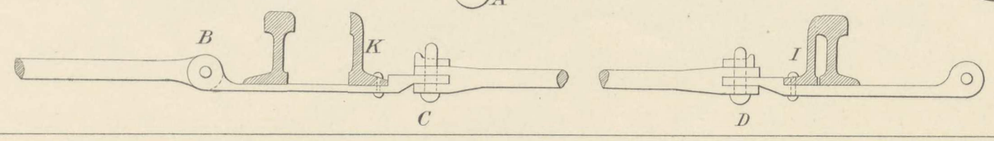


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Fig. 137. Schaal 1:100.

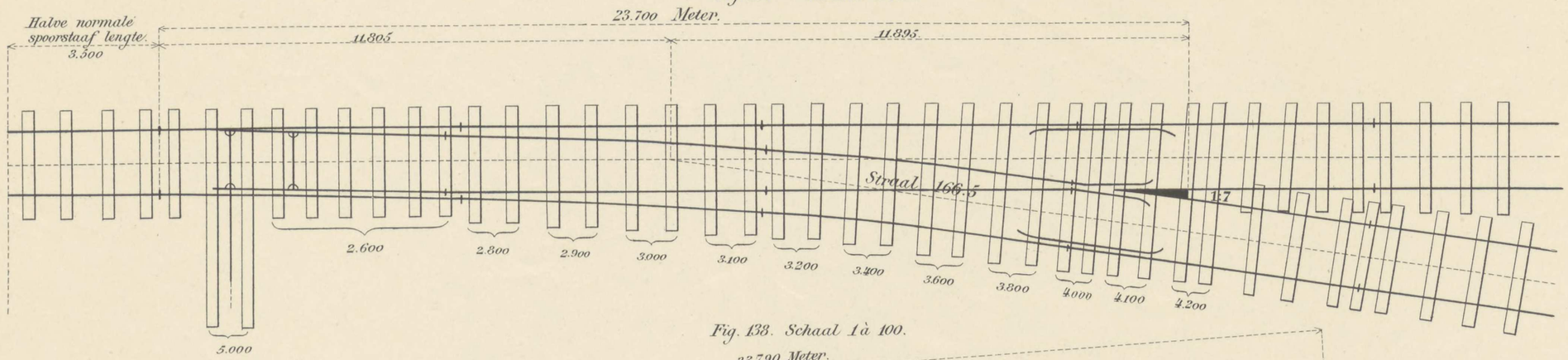


Fig. 138. Schaal 1 à 100.

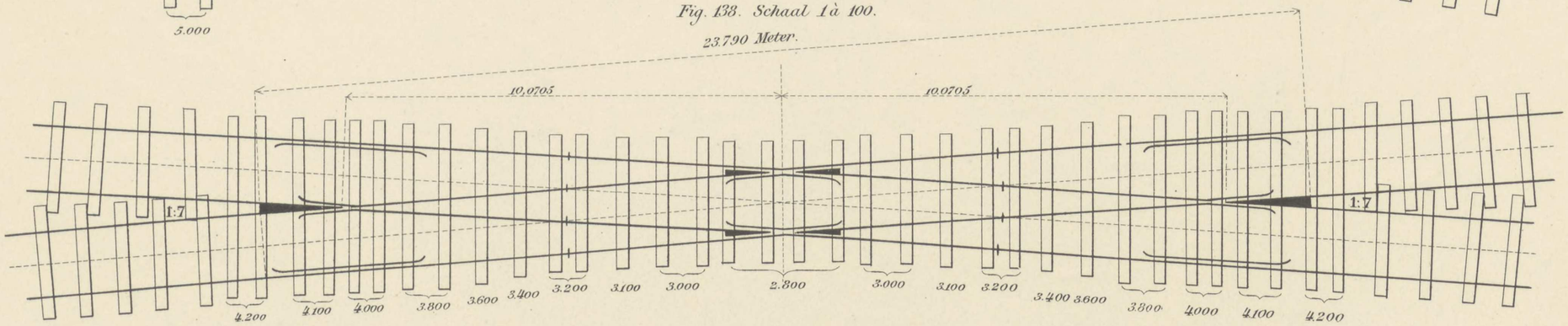


Fig. 141.

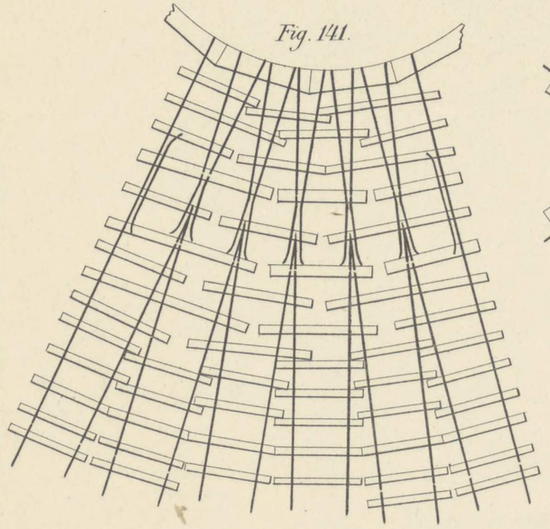
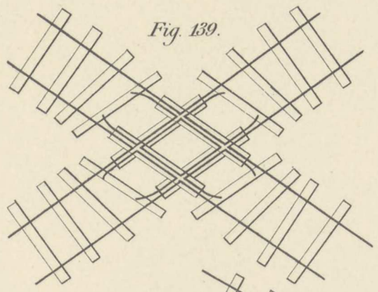


Fig. 139.



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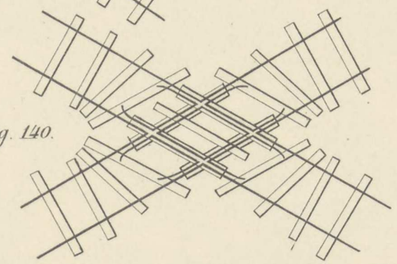
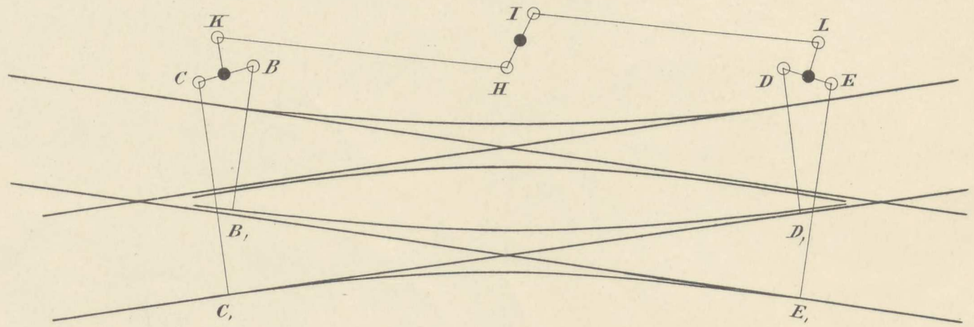


Fig. 136.



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