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Matériel de transport. Atlas de 39 planches

Adresse : Paris : Liège : J. Baudry, 1878

Collation : 39 pl. ; 25 cm

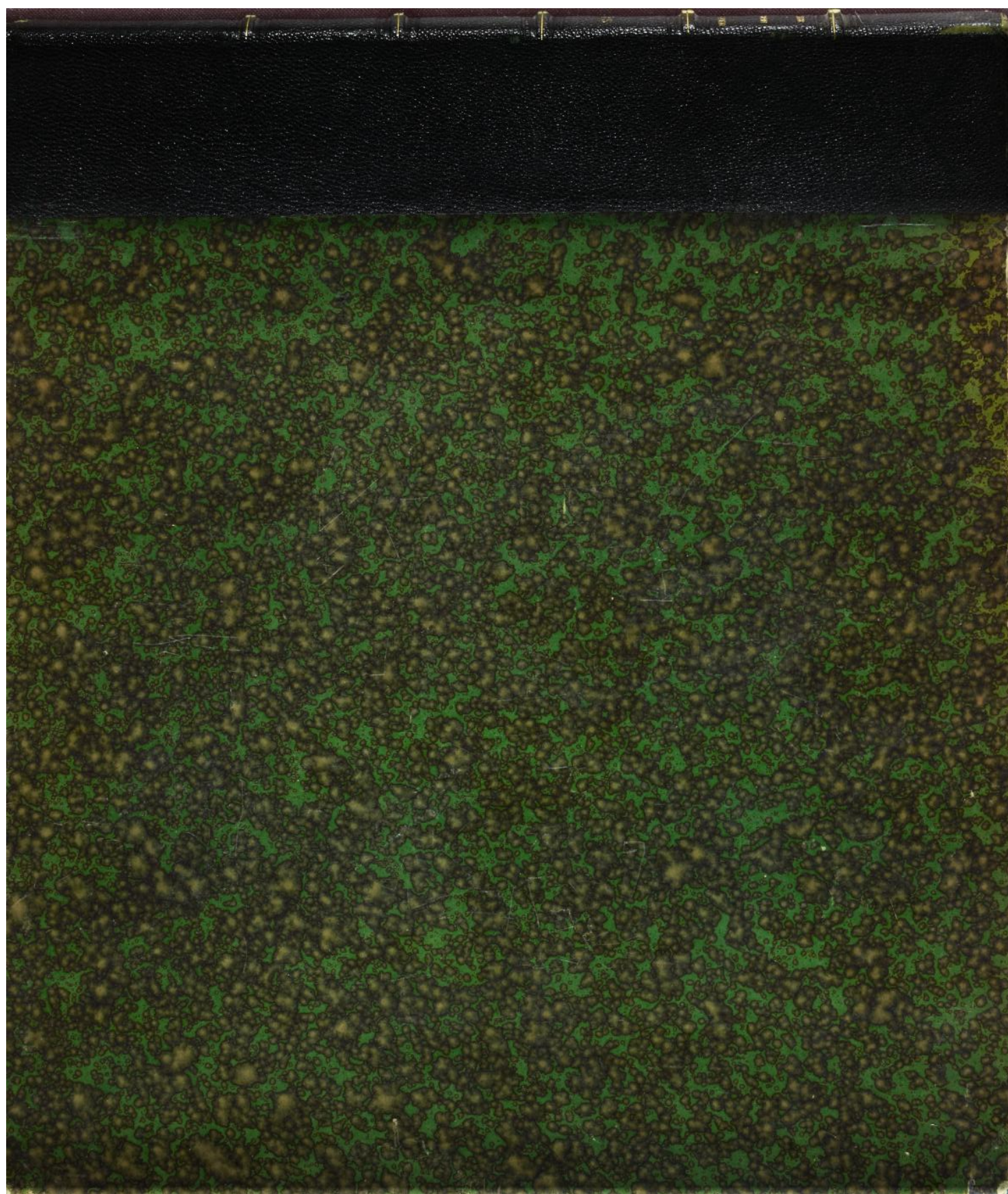
Cote : CNAM-BIB 8 Le 568 (7)

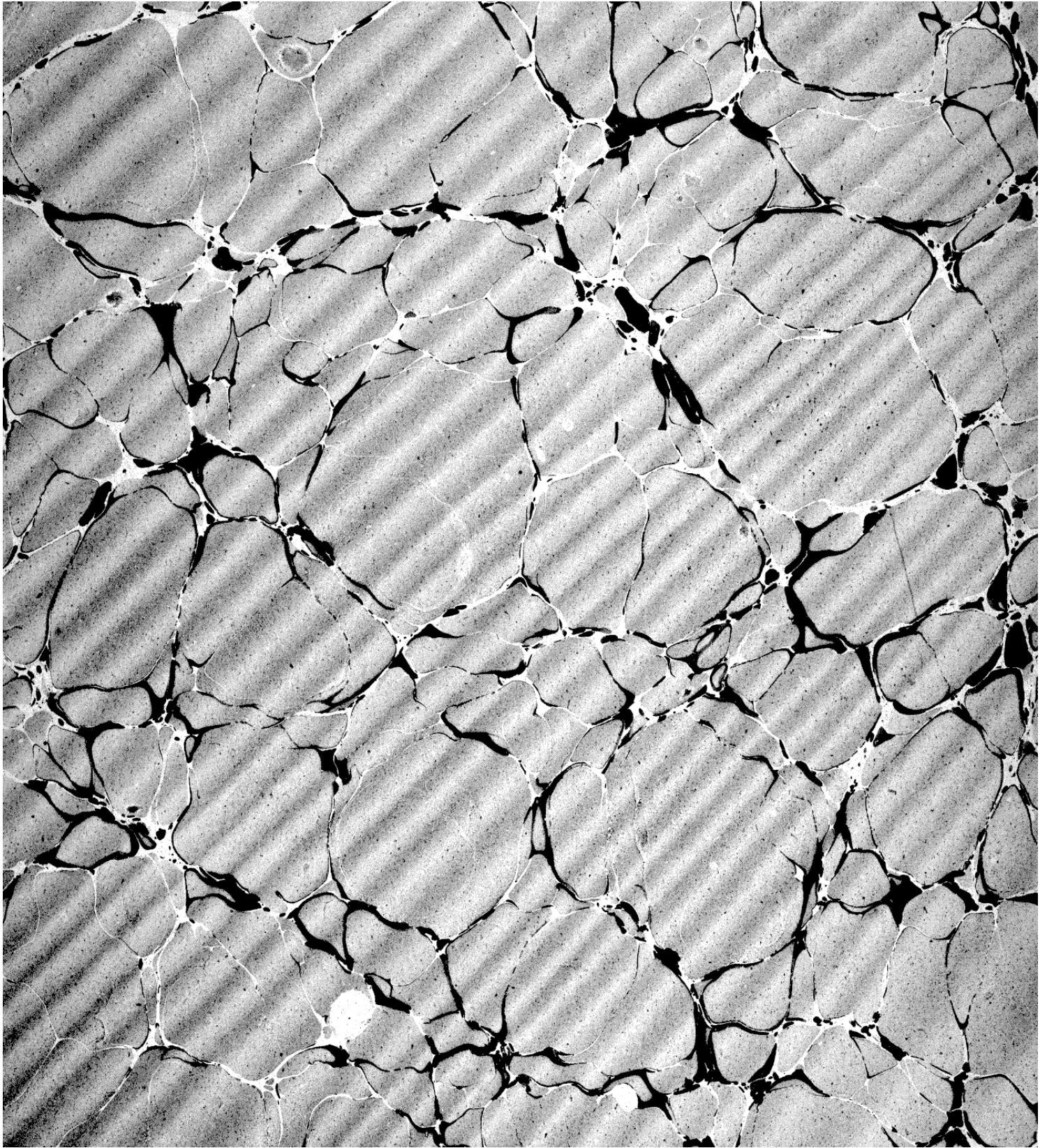
Sujet(s) : Chemins de fer

Date de mise en ligne : 08/11/2016

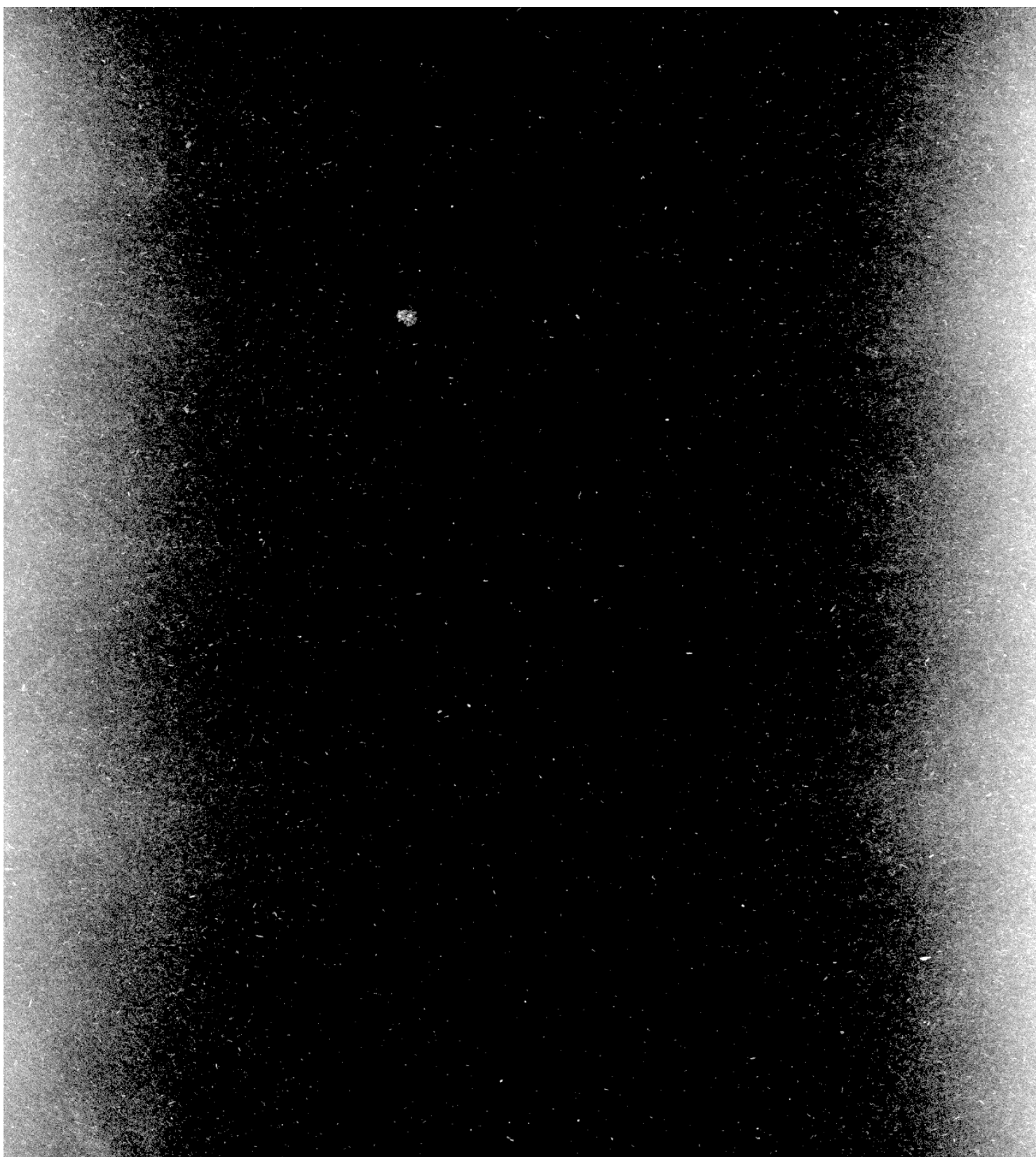
Langue : Français

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TRAITÉ PRATIQUE

80 de 568

DE L'ENTRETIEN ET DE L'EXPLOITATION DES CHEMINS DE FER

PAR

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et successivement

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DIRECTEUR GÉNÉRAL DES CHEMINS DE FER HAINAUT ET FLANDRES

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DIRECTEUR GÉNÉRAL DES CHEMINS DE FER EN TURQUIE ET CONSEILLER TECHNIQUE DU GOUVERNEMENT OTTOMAN

TOME TROISIÈME

DEUXIÈME PARTIE : SERVICE DE LA LOCOMOTION

PREMIÈRE SECTION

MATÉRIEL DE TRANSPORT

DEUXIÈME ÉDITION

CONSIDÉRABLEMENT AUGMENTÉE

ATLAS DE 39 PLANCHES



PARIS

LIBRAIRIE POLYTECHNIQUE

J. BAUDRY, LIBRAIRE-ÉDITEUR

RUE DES SAINTS-PÈRES, 15

LIGÈRE, MÊME MAISON

1878

Tous droits réservés.

EDITION

RECEVEUR
DE LA
VILLE DE
PARIS



SECONDE PARTIE. — SERVICE DE LA LOCOMOTION

PREMIÈRE SECTION. — MATÉRIEL DE TRANSPORT

LÉGENDES DE L'ATLAS

Nombres
des planches.

- I. Relations de la voie et du matériel de transport.
- II. Voitures à compartiments isolés. — Châssis.
- III. Voitures et fourgons. — Water-closets.
- IV. Voitures à salon, calorifère, water-closel, lavabo.
- V. Voitures à deux étages, à compartiments isolés.
- VI. Voitures à un et deux étages, à circulation intérieure.
- VII. Voitures à circulation intérieure. — Omnibus de tramway.
- VIII. Voitures, fourgon et poste. — Voie réduite.
- IX. Voitures à lits.
- X. Voitures de famille. — Coupés à lit. — Voitures de malades.
- XI. Voitures et appareils pour la poste.
- XII. Fourgon. — Châssis. — Frein.
- XIII. Chauffage par poêles et chaufferettes.
- XIV. Chauffage par l'air chaud.
- XV. Chauffage par la vapeur.
- XVI. Chauffage par la vapeur.
- XVII. Chauffage par l'eau chaude. — Bouillottes fixes. — Water-closets.
- XVIII. Chauffage par l'eau chaude. — Bouillottes mobiles. — Appareils de réchauffage. — Water-closets.
- XIX. Eclairage des voitures par le gaz.
- XX. Eclairage des voitures de l'Etat belge.
- XXI. Eclairage des voitures. — Usine à gaz.
- XXII. Vagons à marchandises, chevaux, bestiaux, bois, rails.

Nombres
des planches.

- XXIII. Vagons écuries, wagon couvert, wagon à lait.
- XXIV. Vagons à marchandises, à bestiaux. — Freins.
- XXV. Transport des houilles, des liquides.
- XXVI. Vagons plats.
- XXVII. Vagons à marchandises, à chevaux, à minerais. — Voie réduite.
- XXVIII. Matériel pour ateliers agricoles et industriels.
- XXIX. Wagon de secours, chasse-neige. — Omnibus de tramway.
- XXX. Détails : portière, porte roulante, signal de train, Dynamomètre.
- XXXI. Freins continus à air (Westinghouse, Smith).
- XXXII. Freins Exter, Newal, Bricogne, Stilmant, etc.
- XXXIII. Transports militaires.
- XXXIV. Transports des blessés.
- XXXV. Détails : freins des plans inclinés.
- XXXVI. Détails : freins, suspension, etc.
- XXXVII. Détails : traction et choc.
- XXXVIII. Détails : roues, essieux, boîtes à graissage.

SUPPLÉMENT AU SERVICE DE LA VOIE.

- XXXVI. Profils en travers et matériel pour voie de 0^m, 75; 0^m, 80; 1 mètre; 1^m, 10 et 1^m, 50, chemins de fer secondaires.



C. GOSCHLER. Chemins de fer.

Position des roues sur la voie.

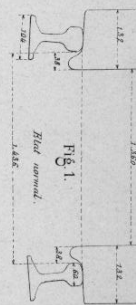


Fig. 1.

Rail normal.

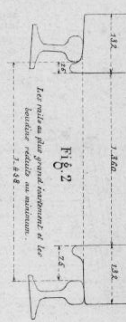


Fig. 2.

Les rails au plus grand écartement et les roues réduits au minimum.

Vue des boîtes à graissage.

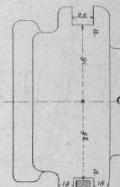


Fig. 3.

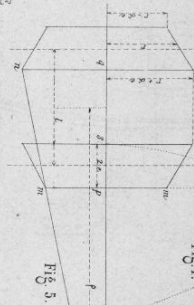


Fig. 4.

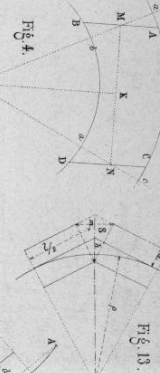


Fig. 13.

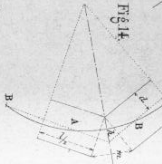


Fig. 14.

Profil de libre passage.

en pleine voie en atollon.

Fig. 8.

ALLEMAGNE.

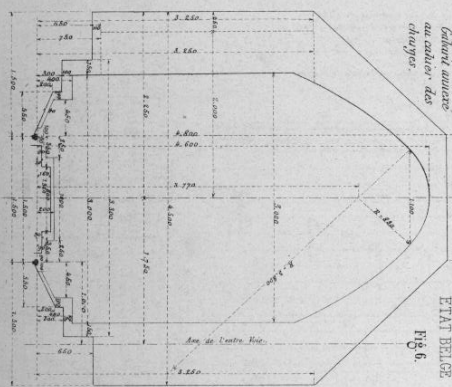


Fig. 6.

ETAT BELGE.

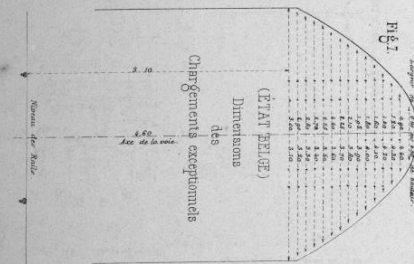


Fig. 7.

Changements exceptionnels des dimensions.

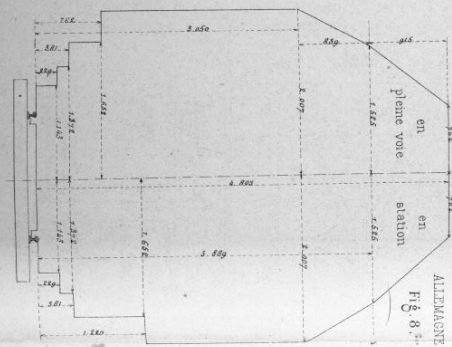


Fig. 8.

ALLEMAGNE.

Appareils d'accouplement.

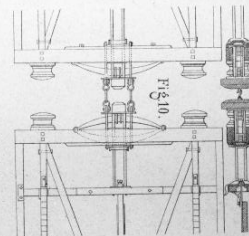


Fig. 10.

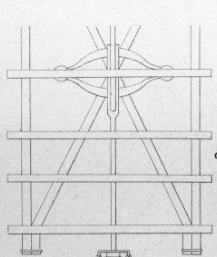


Fig. 11.

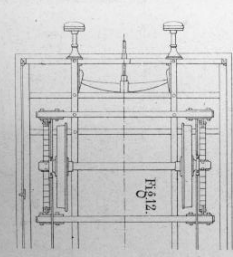


Fig. 12.

Matériel de transport. — Pl. 1.

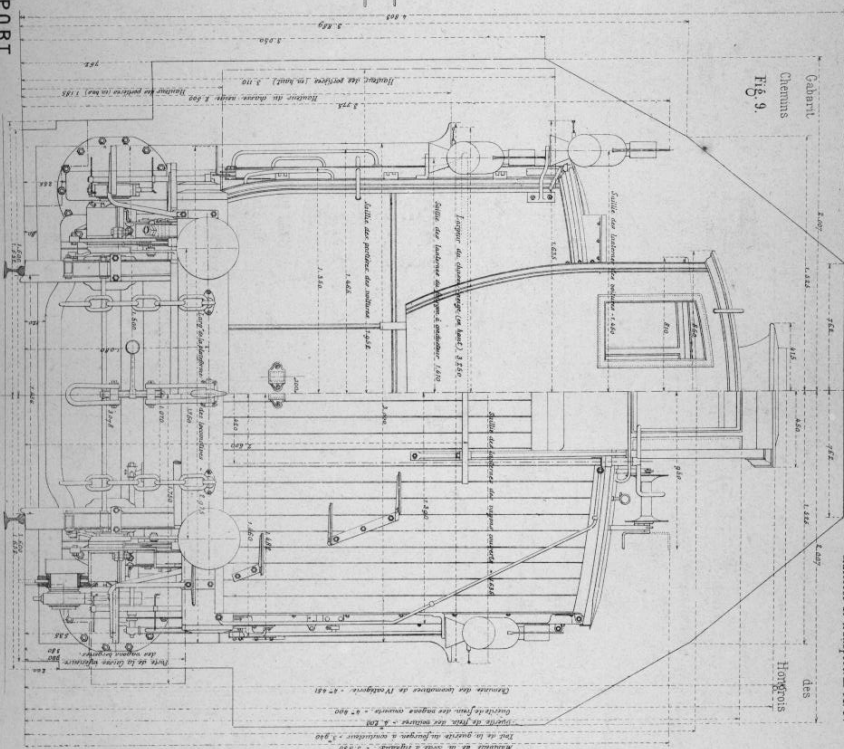


Fig. 9.

Chemins de fer.

Fig. 8. Coupe longitudinale
l'ouverture de 2^{me} classe à 40 Places. (Fig. 8, 11^{bis})

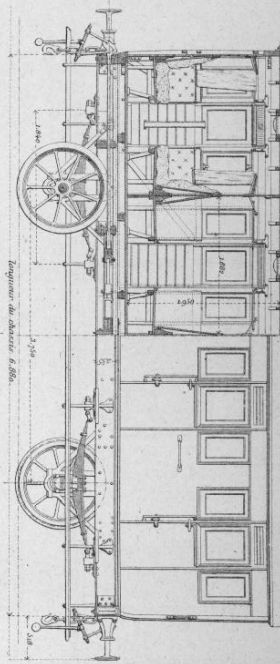


Fig. 11. Coupe transversale.

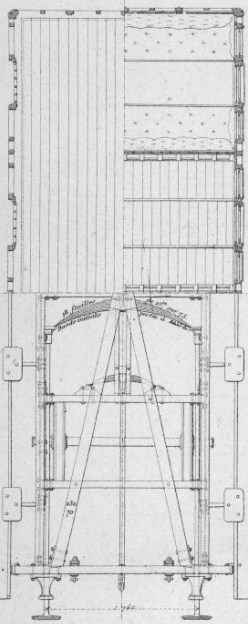
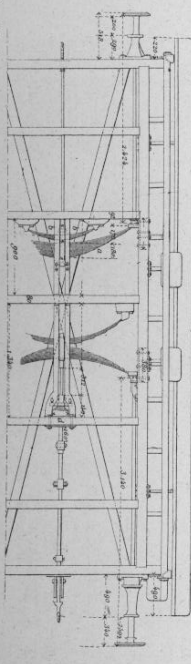


Fig. 7. Chassis de fusoir à bagages. (Options.)



(Options)
Fig. 9. Coupe transversale.

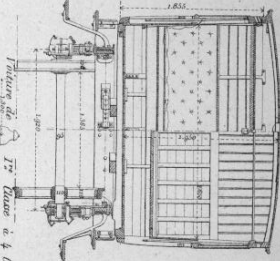


Fig. 10. Vue par haut.

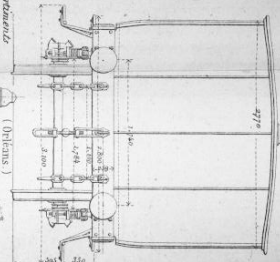
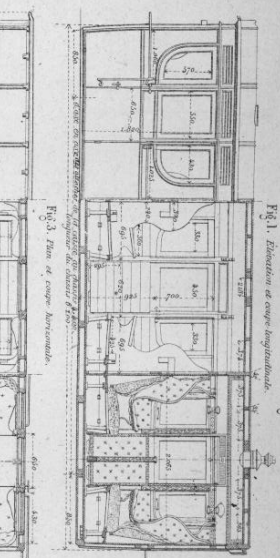


Fig. 11. Vue par haut.



l'ouverture de 1^{re} classe (Fig. 1 à 4 bis)

Fig. 1. Elevation de coupe longitudinale.

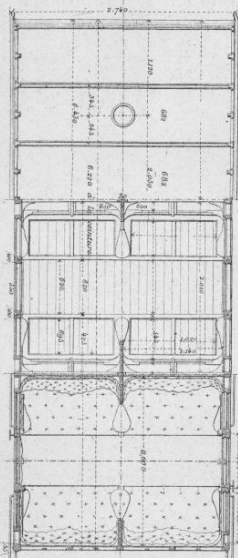


Fig. 2. Coupe transversale.

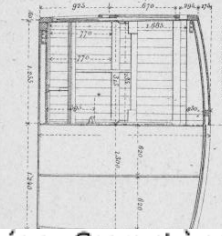


Fig. 3. Coupe transversale.

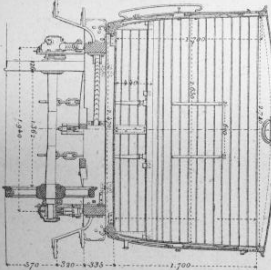


Fig. 4. Coupe transversale.

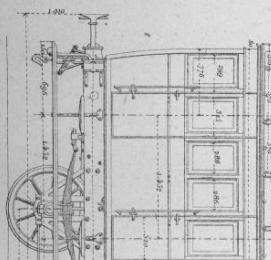


Fig. 5. Coupe transversale.

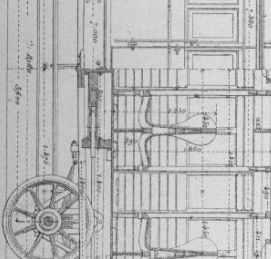


Fig. 6. Coupe transversale.

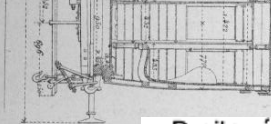
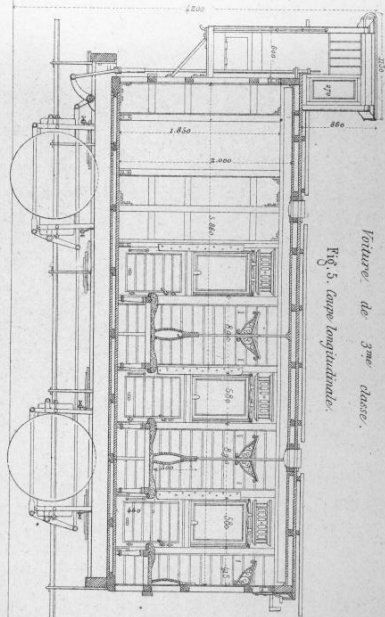


Fig. 7. Coupe transversale.



Matériel de l'Etat-Honnois.



Voiture de 4^{me} classe.

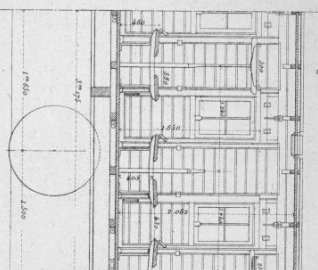


Fig. 4. *Plan du chassis.*

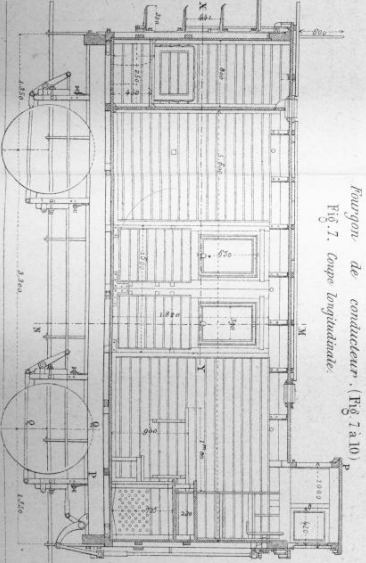
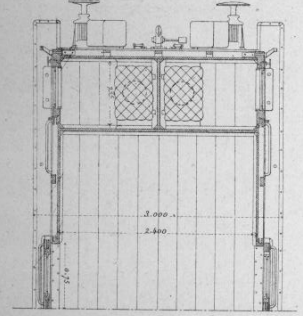
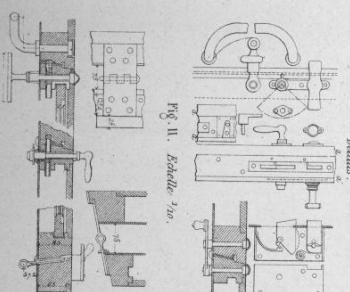


FIG. 10. Coupe horizontale. XY.



Fermures des portières.
N° 470



Voiture à Salons avec compartiments de 2^e classe (Ouest) (Fig. 1 à 4)

Fig. 1 Coupe longitudinale

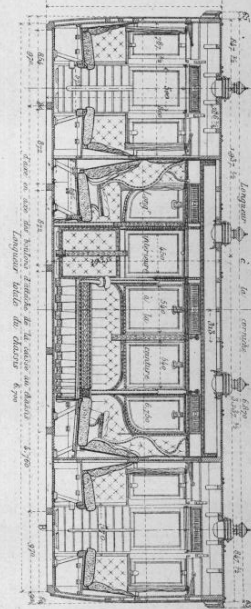


Fig. 2 Coupe transversale suivant AB

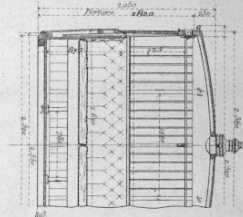
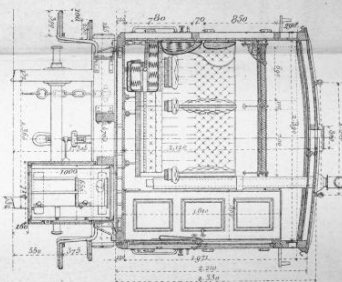


Fig. 7 Coupes suivant CD EF AB.



Voiture à Salons (Etat Hongrois) (Fig. 5 à 9)

Fig. 5 Coupe longitudinale

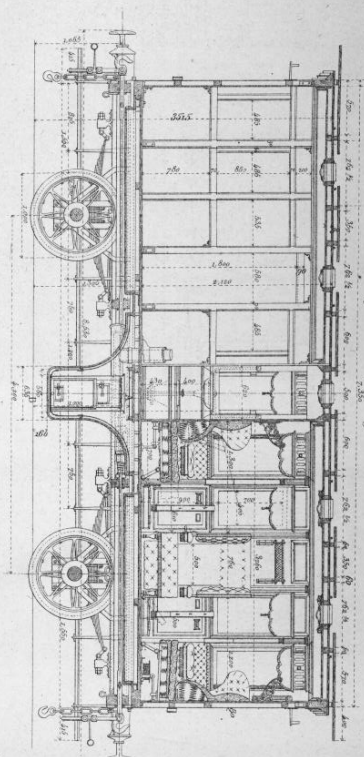


Fig. 4 Coupe horizontale

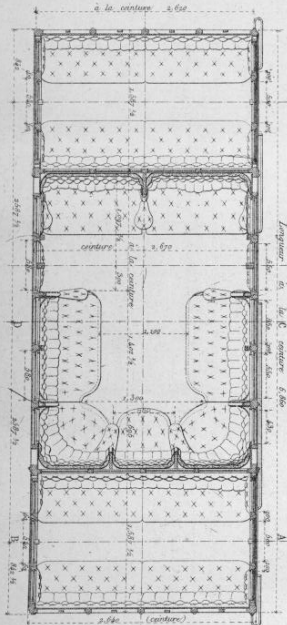


Fig. 3 Coupe suivant CD

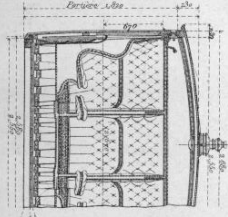


Fig. 8 Coupe HK Fig. 9 Vue par bout

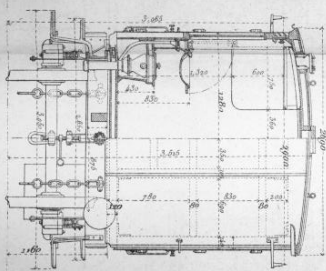


Fig. 6 Plan et coupe horizontale

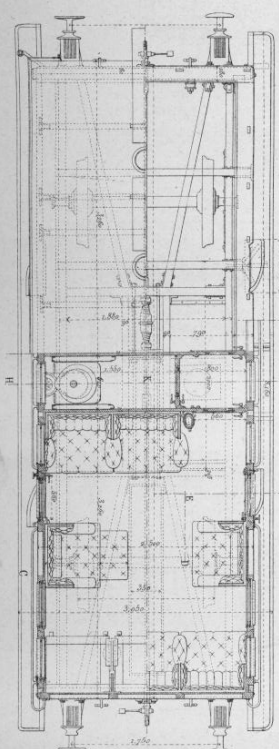


Fig. 1 *Intérieur à 3 classes (Fig. 1 à 4)*

Impériale, 1^{re} classe *Vue longitudinale* *Impériale ouverte*

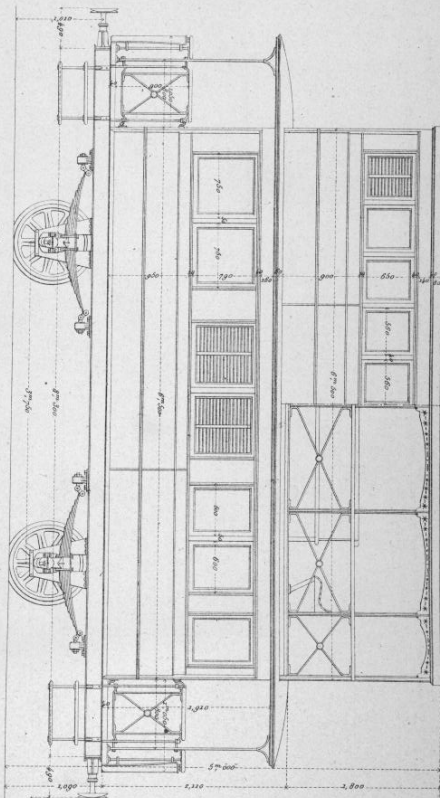
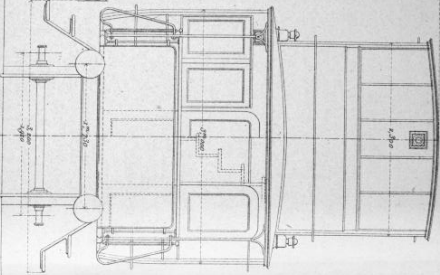


Fig. 2 *Vue par bout*

tête de la 1^{re} classe *tête de l'escalier*



Bayonne à Biarritz

Fig. 5 *Intérieur à 3 classes* *Impériale et 1^{re} classe (Fig. 5 à 8)*

Vue longitudinale

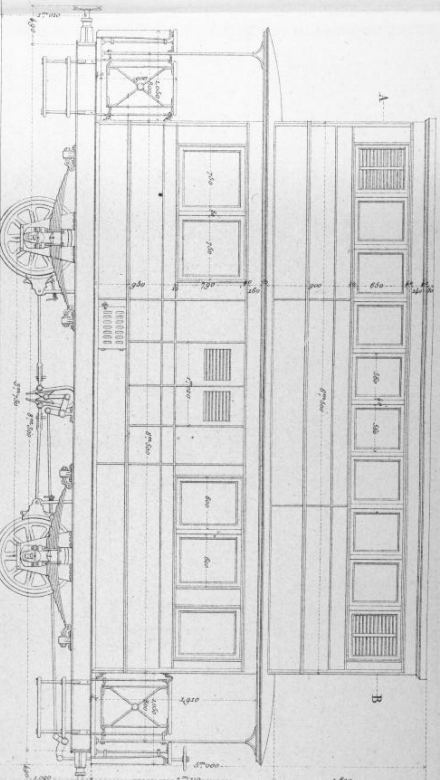


Fig. 6 *Vue par bout*

tête de l'escalier *tête de la 1^{re} classe*

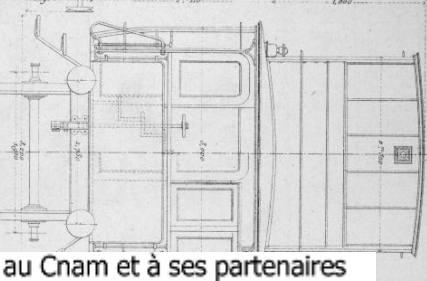


Fig. 3 *Coupe horizontale de l'étage inférieur*

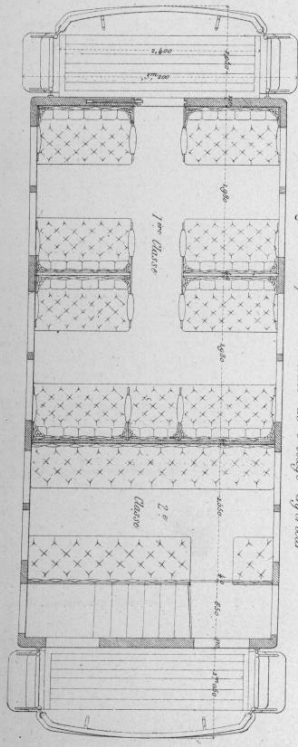
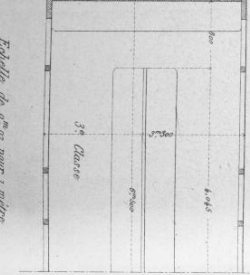


Fig. 4 et 8 *Coupe horizontale AB*

de l'étage supérieur (au pied)



Echelle de 0,75 m pour 1 mètre

Fig. 7 *Coupe horizontale de l'étage inférieur*

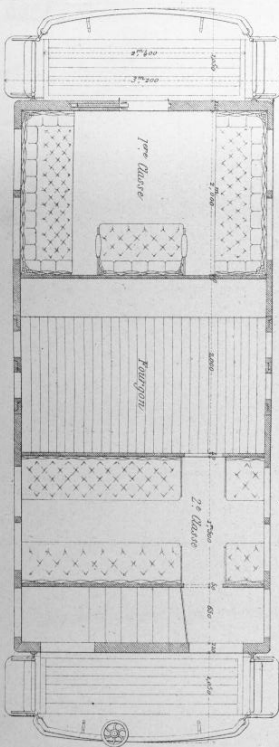
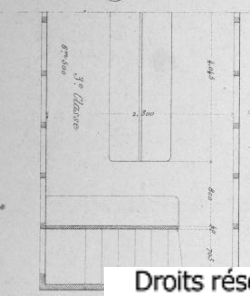


Fig. 4 et 8 *Coupe horizontale*

de l'étage supérieur (au pied)



Imprimé par E. H. H. H.

VOITURES À DEUX ÉTAGES

Fig. 1 Voiture de 3^e classe

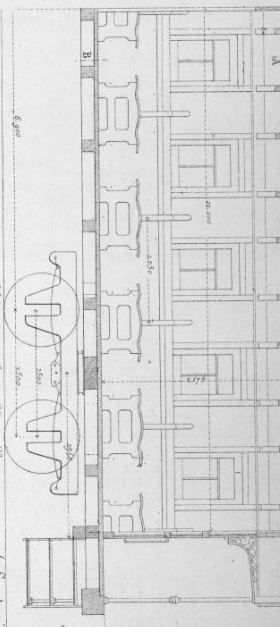


Fig. 3 Elevation de la charpente

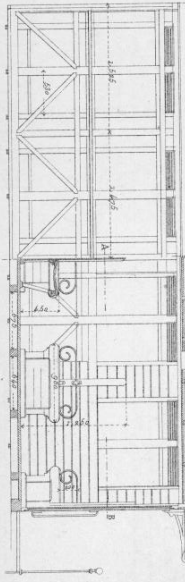


Fig. 4 3^e classe (Soutien-Isnidl) (Fig. 3 à 8)

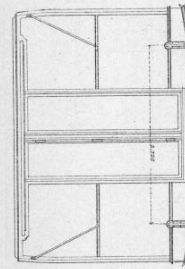


Fig. 5 Vue par bout

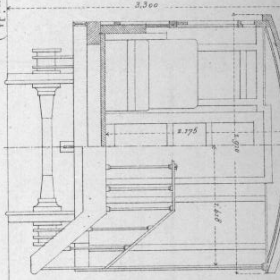


Fig. 2a Vue par bout

Fig. 9 Voiture mixte à deux étages et chassis abaisse

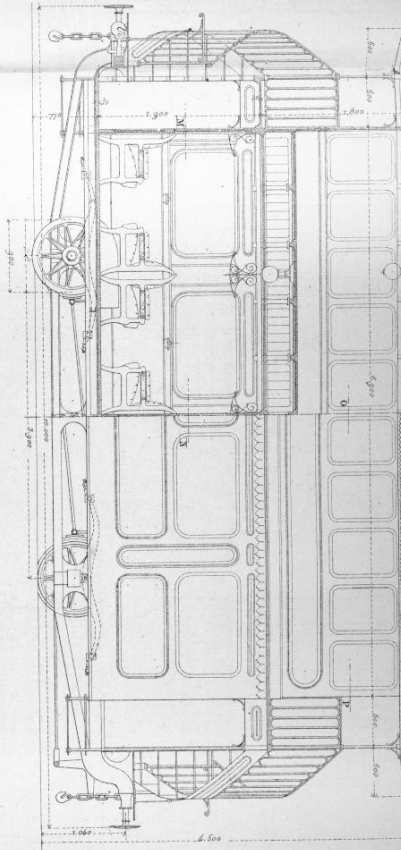


Fig. 10 Elevation

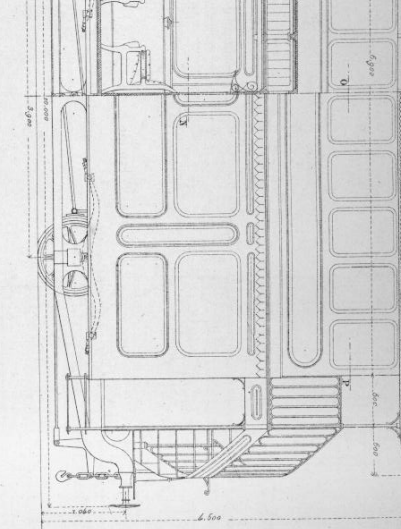


Fig. 12 Plan du chassis

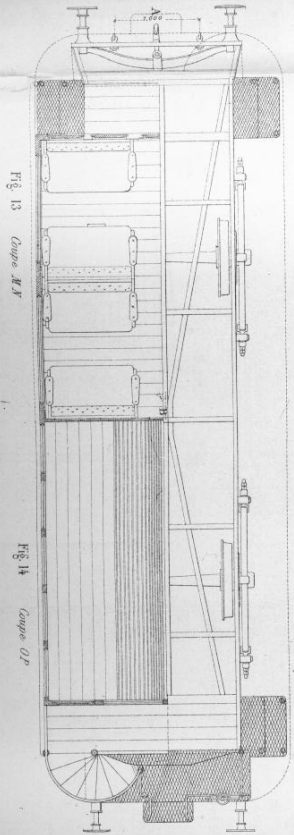


Fig. 13 Coupe M N

Fig. 14 Coupe O P

Craté par Richard

VOITURES A CIRCULATION INTERIEURE

Fig. 11 Coupe transversale

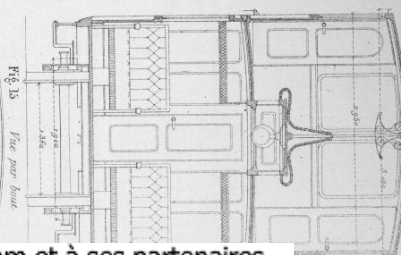
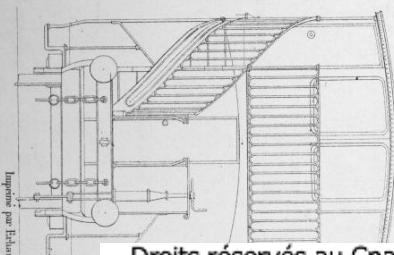


Fig. 13 Vue par bout



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Véture de 1^{re} classe (Nord Est Suisse) (Fig 1 à 4)

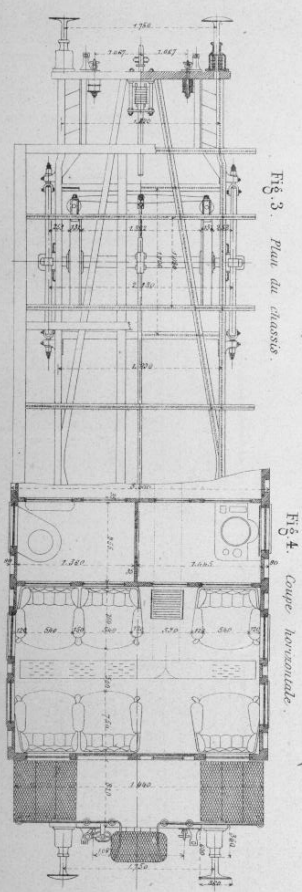
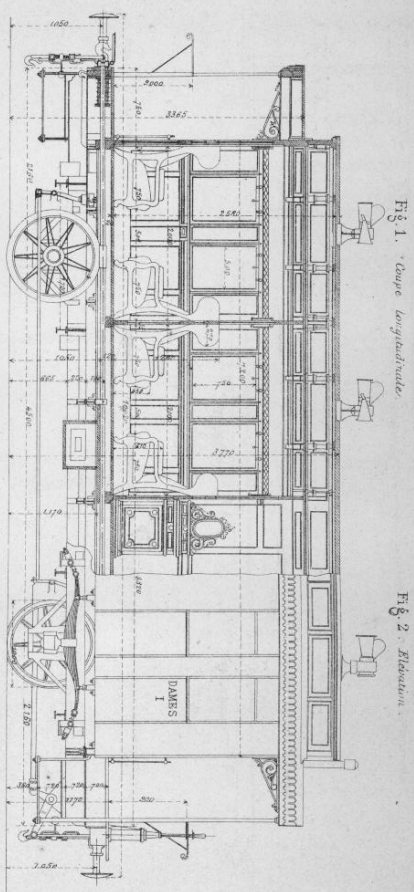


Fig 5. Vue par bout.

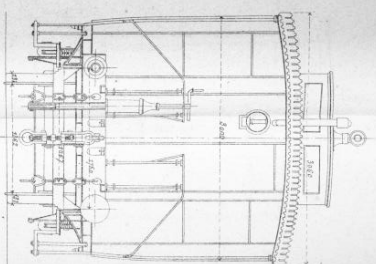


Fig 6. Coupe transversale.

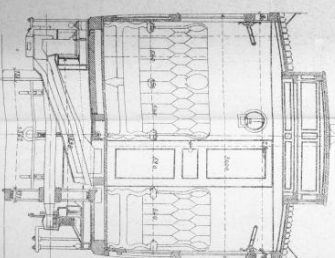


Fig 7. Elevation.

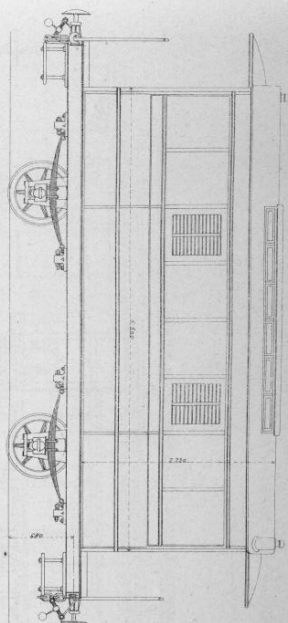


Fig 8. Coupe horizontale.

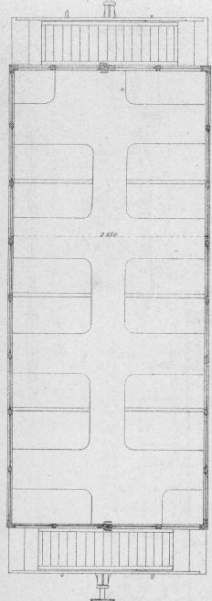


Fig 9. Vue par bout.

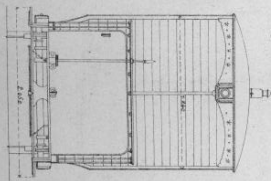


Fig 10. Elevation.

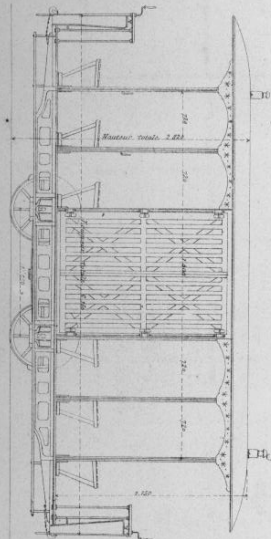
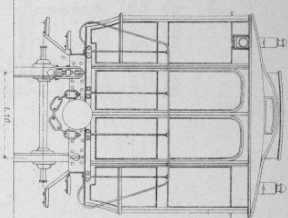


Fig 9 Vue par bout.



Véture de 3^{me} classe pour voie étroite Fig 7 à 9

Echelle de 1/50

Charrons Rougon pour Trun Fig 10 et 11.

Bresil 1^{re} et 2^{me} Classe.

Fig. 1. Elevation et Coupe longitudinale.

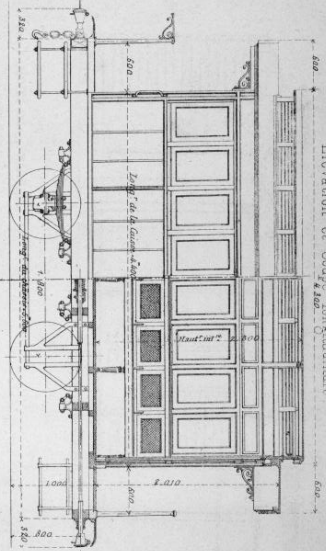
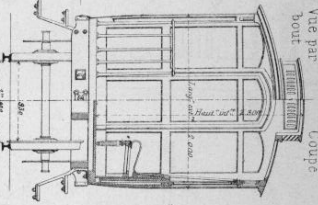


Fig. 2. Vue par bout Coupe.



Bresil. Voiture de 3^{me} classe.

Fig. 3. Elevation et Coupe longitudinale.

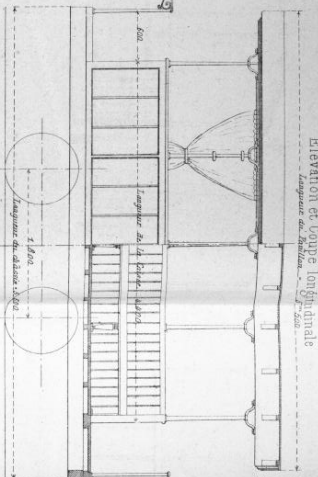
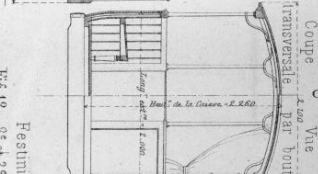


Fig. 6. Coupe transversale par bout.



Fourgon à bagages avec compartiment de poste.

Fig. 9. Elevation et Coupe longitudinale.

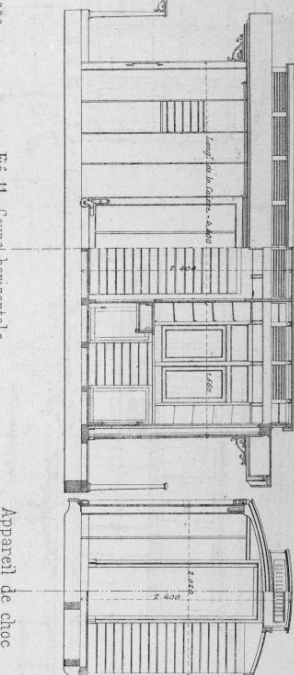
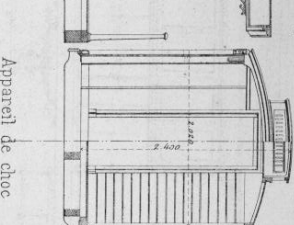
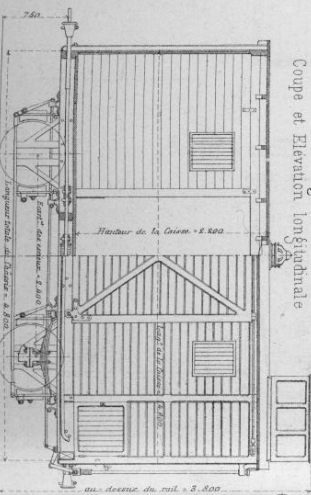


Fig. 10. Coupe et Vue par bout.



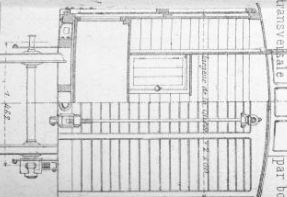
Echelles de 1/50^e pour les ensembles de 1/10^e pour les détails.

Fig. 7. Coupe et Elevation longitudinale.



Fourgon à bagages avec frein.

Fig. 8. Coupe transversale par bout.



Festinoç.

Fig. 12. 2^e et 3^e classe.

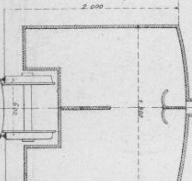
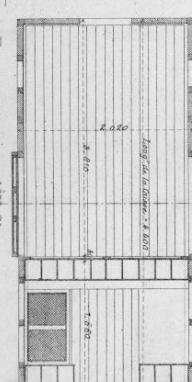


Fig. 11. Coupe horizontale.



Appareil de choc et traction.

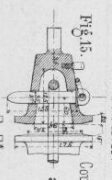
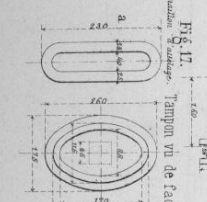


Fig. 16. Plan.



Fig. 17. Tendeur vu de face.



Voiture à lits — 13 Places (Mann's Railway-Sleeping carriage) (Fig. 1 à 3)

Fig. 1 Elevation

Fig. 2 Coupe longitudinale

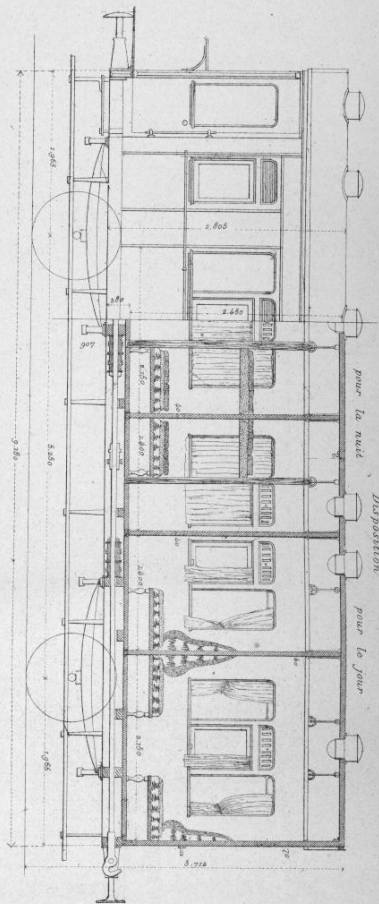
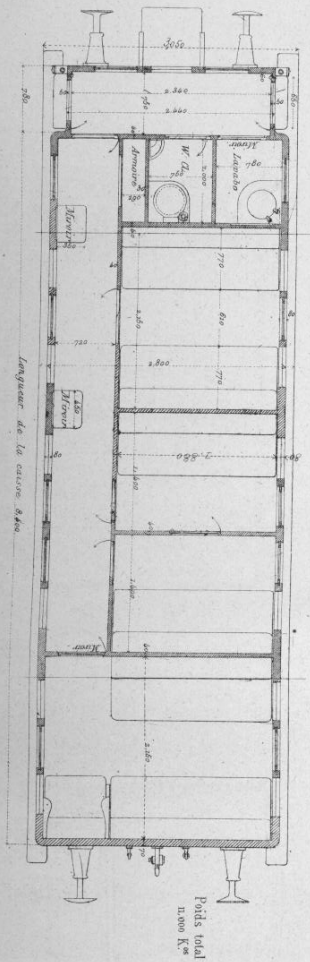


Fig. 3 Coupe horizontale



Dessiné par Richard

Fig. 5 Coupe transversale

Disposition pour la nuit

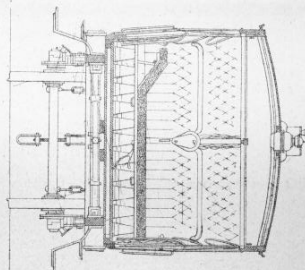
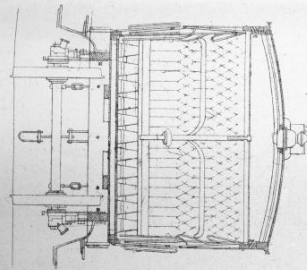


Fig. 6 Coupe transversale

Disposition pour la jour



Voiture de 1^{re} classe avec compartiment pour 2 lits (Ouest) (Fig. 4 à 7)

Fig. 4 Coupe longitudinale

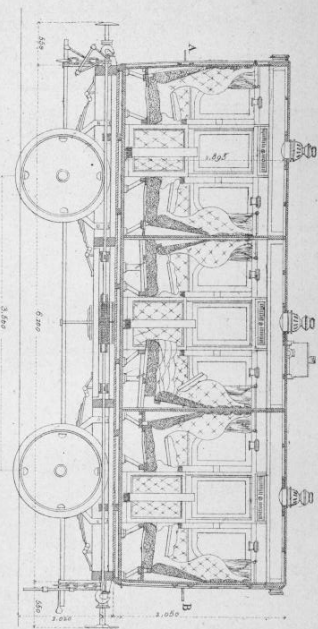
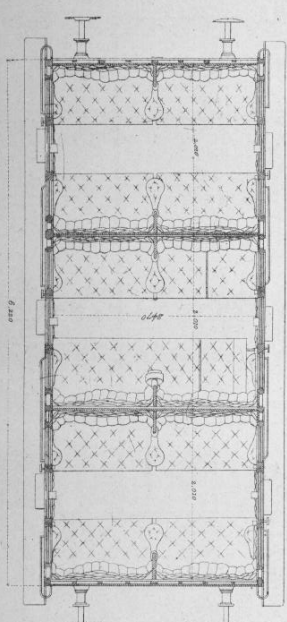


Fig. 7 Coupe horizontale AB

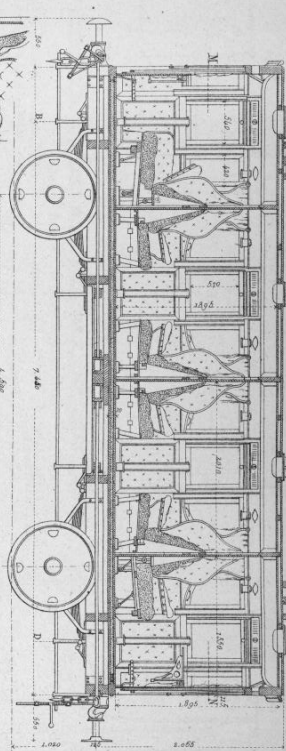


VOITURES A LITS

Imprimé par Richard

Voiture de 1^{re} Classe a 2 Coups-lits (Ouest) (Fig 1 a 4)

Fig 1 Coupe longitudinale



(Fig 1^{mo})
Detail au 1/50
du mécanisme servant à
développer le coussin-lit.

Fig 2 Coupe horizontale MO.

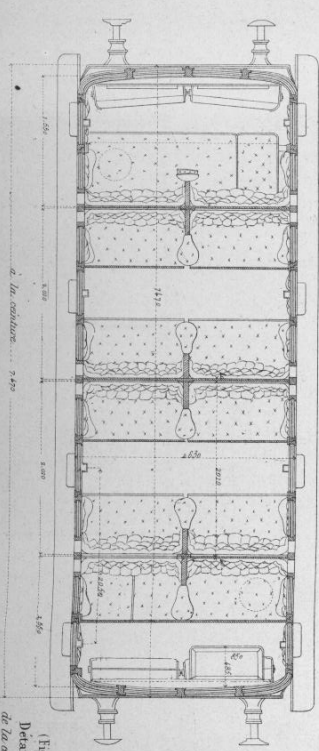
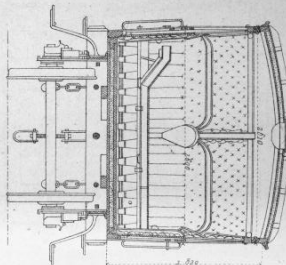


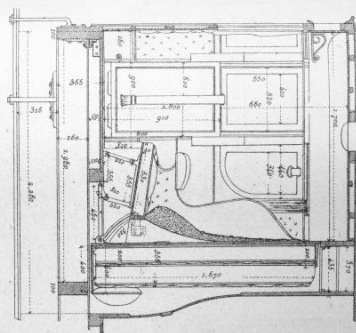
Fig 1, 3, 4, 5
Echelle 1/50.

Fig 3 Coupe AB



Coups-lits (Est) (Fig 5 et 6)

Fig 5 Coupe longitudinale (la même)



(Fig 5 et 6. Echelle de 0.03.)

Coups-lits (Est) (Fig 5 et 6)

Fig 6 Coupe longitudinale
(lit abais)

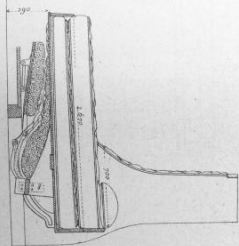
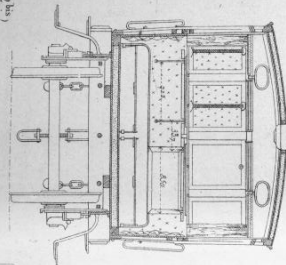


Fig 4 Coupe CD



(Fig 2^{ème})
Detail au 1/50
de la coupe MO

VOITURES DE FAMILLE. COUPES A LIT. VOITURES DE MALADES.

Voiture a Salon et a lit (Orléans) A (Fig 7 et 8)

Fig 7
Coupe horizontale

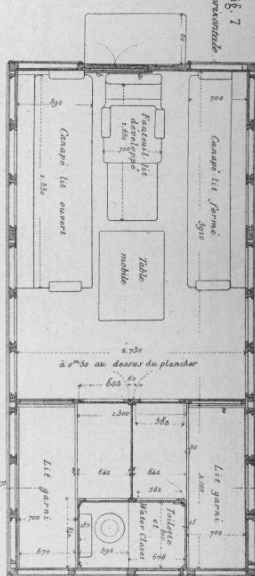


Fig. 1

Elevation

Vagon - Poste

pour

(France) (Fig. 1a 3)

Fig. 3 Coupe transversale

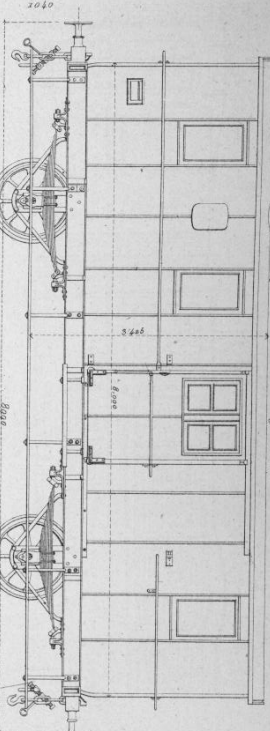
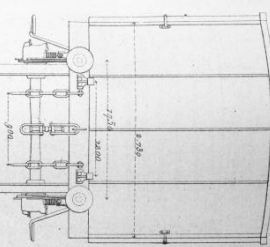
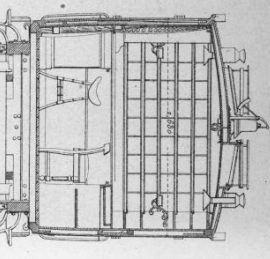
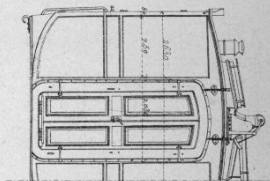
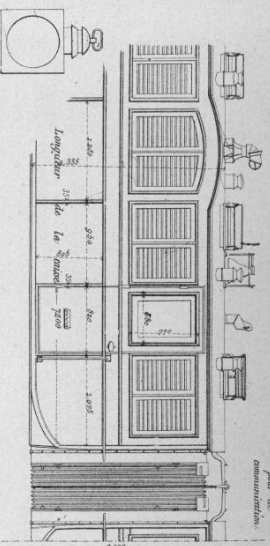
Fig. 6 Vue par bout

Vagon - Poste

Confédération Suisse

Fig. 4 Elevation longitudinale

Matériel de Transport Pl. XI



Appareil pour l'échange des plaques
en marche
(Allemagne) (Fig. 10 a 12)
Echelle: 1/2

Fig. 10

Mécanisme
de dépôt.

Fig. 12. Coupe transversale
du Vagon-poste.

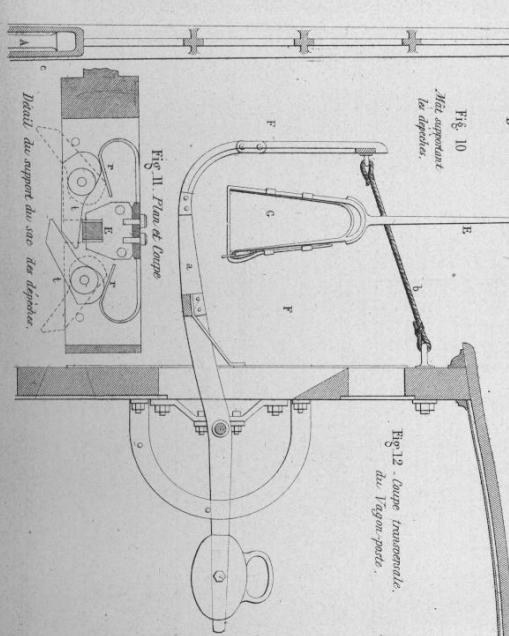
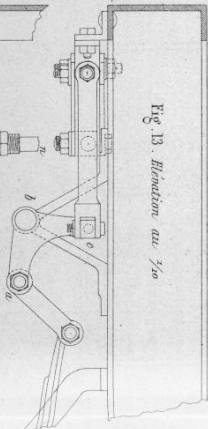


Fig. 13. Elevation au 1/20



Suspension par trois points
du Vagon-poste
de la Confédération Suisse (Fig. 13 a 15)

Fig. 14. Plan au 1/20

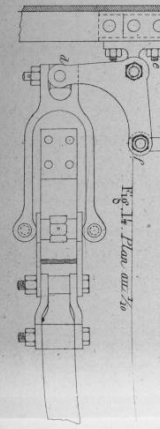


Fig. 8. Coupe transversale C)

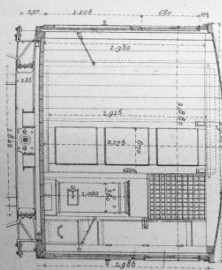


Fig. 5

Coupe longitudinale

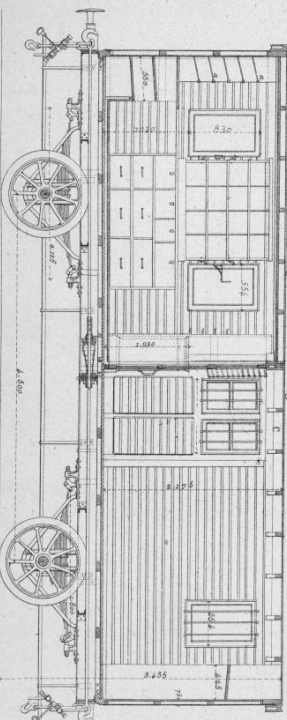


Fig. 3. Coupe horizontale et Plan

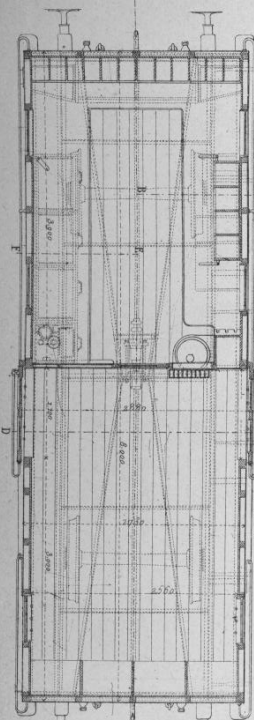
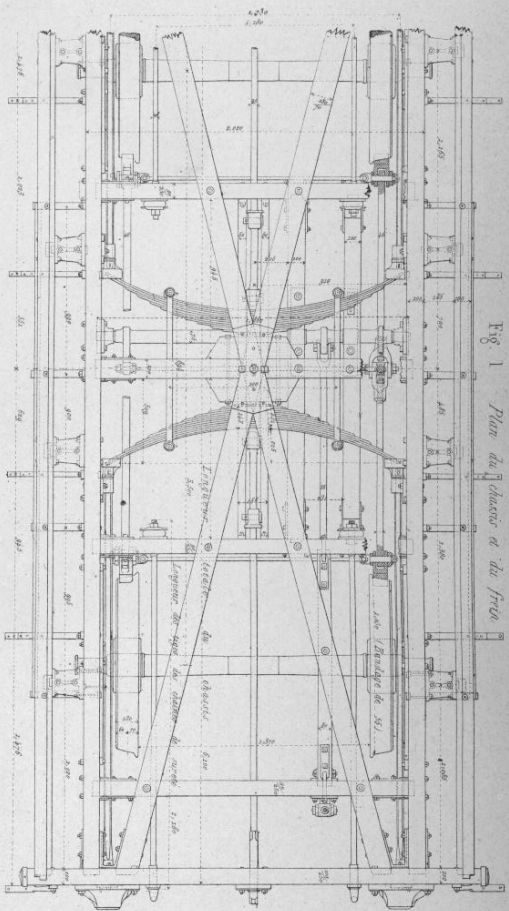


Fig. 1 Plan du chassis et du frein



Ouest Français

Fourgon à bogies.

Chassis et frein
(Fig. 1 et 2)

Etat longirois

Chassis de roulers à voyageurs
(Fig. 3 à 6)

Fig. 4 bogies

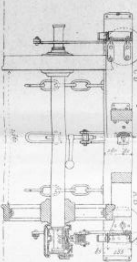


Fig. 5 bogies

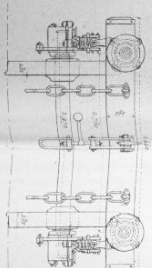


Fig. 2 Coupe longitudinale

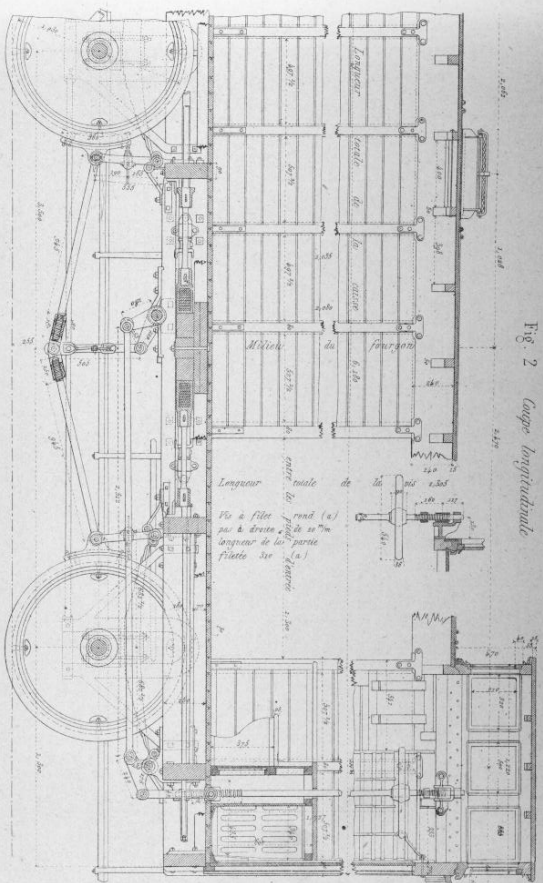


Fig. 6 Elevation et coupe longitudinale

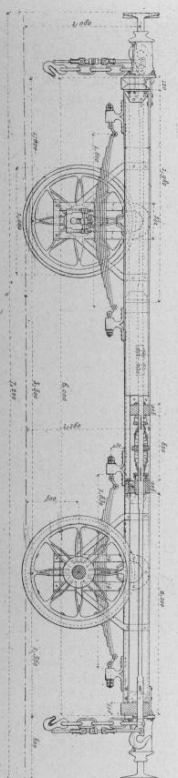
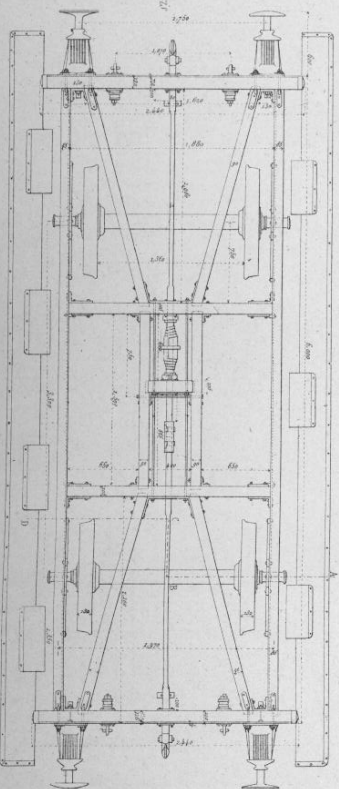


Fig. 3 Plan du chassis



Constr. par Schenck

FOURGON CHASSIS FREIN

Imprimé par Schenck

C. GOSCHER

Matériel de transport Pl. XIII.

Thermis le fer
Pote l'assise Schötenhof (Fig. 2 à 5) (Fig. 6. Plan de l'installation
du pote dans les rails de 3^e classe
(Mon. Méc.)
(Honneur)

Fig. 7. Coupe verticale du pote
Fig. 8. Coupe transversale
Fig. 9. Coupe longitudinale
de la velle

Chaque par pote d'une voiture de 3^e classe (Honneur) (Fig. 12 à 13)
Fig. 12. Coupe longitudinale
Fig. 13. Coupe transversale

Fig. 14. Coupe transversale AB
Fig. 15. Coupe transversale CD

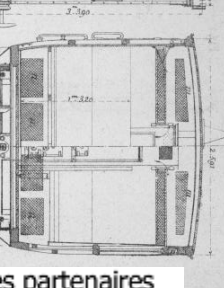
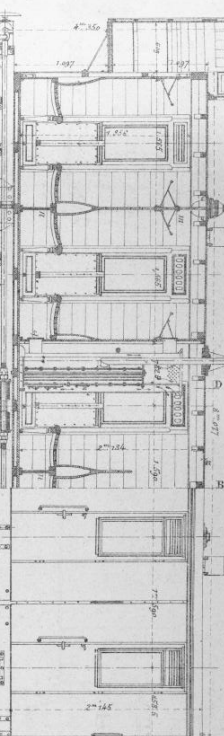
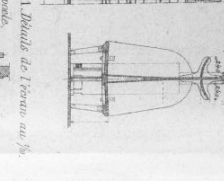
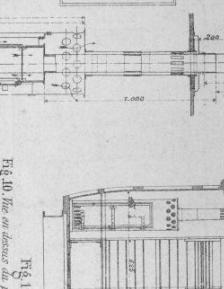
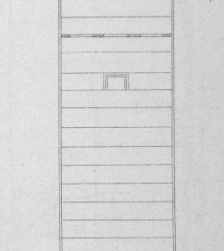
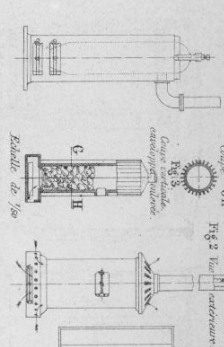
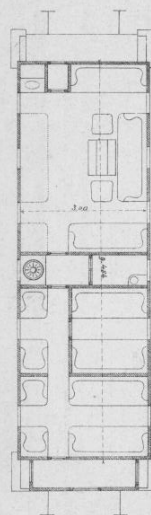


Fig. 5. Plan de la voiture de 1^{re} classe avec pote et Mater. Classé.



Chaudière à briques (Honneur) (Fig. 16 à 20) Bn. 7-8-9

Fig. 16. Coupe suivant la longueur de la chaudière.

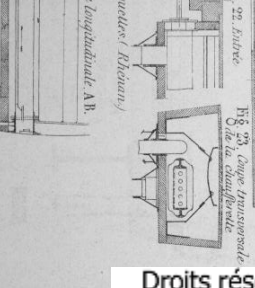
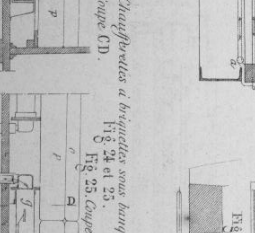
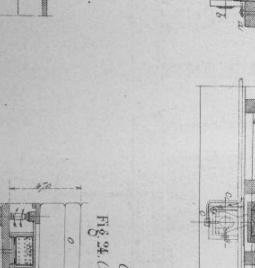
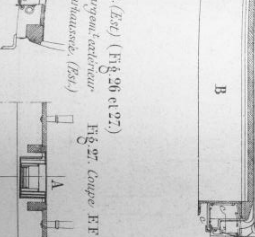
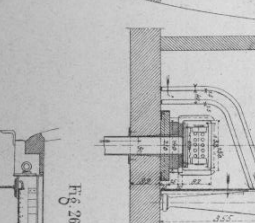
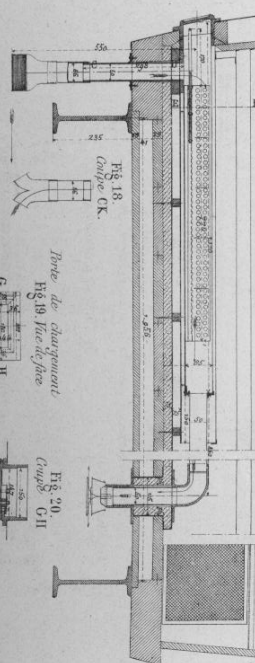
Fig. 17. Coupe CDEF.

Fig. 18. Coupe par le pote Système Chaudron (Bn. belge) (Fig. 18, 19)

Fig. 19. Coupe longitudinale AB d'un compartiment

Chaudières à briques entre banquettes (Région)

Fig. 20. Coupe ABCD.



CHAUFFAGE PAR POÊLES ET CHAUFFERETTES.

Fig. 1. Intérieur de 3^{me} classe, chauffée par calorifère à air chaud. (C^{ste} des Bontés.)

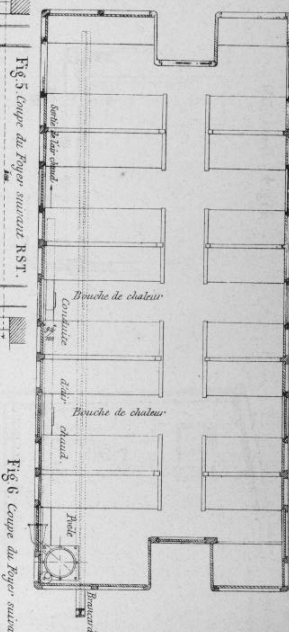


Fig. 5. Coupe du foyer suivant RST.

Fig. 6. Coupe du foyer suivant PQ.

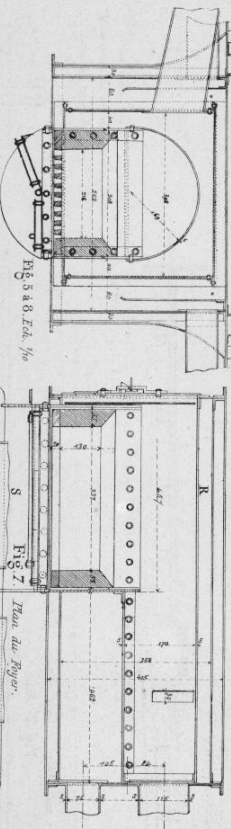


Fig. 5 & 6. Ecl. 1/50.

Fig. 8. Vue de chargement.

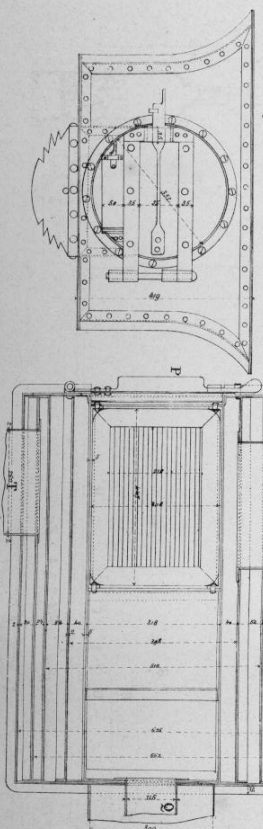


Fig. 7. Plan du foyer.

Chauffage et ventilation des voitures en Ambique. (Fig. 9 à 11.)

Fig. 9. Coupe longitudinale. Ecl. 1/50.

Fig. 10. Coupe longitudinale.

Fig. 11. Coupe transversale.

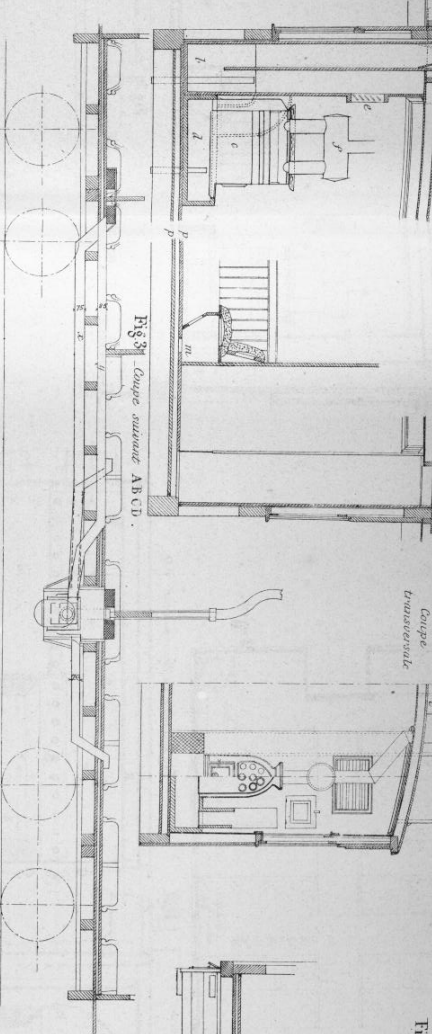


Fig. 3. Coupe suivant ABCD.

Chauffage des voitures à 8 roues par calorifère à air chaud. (Central - Suisse.) (Fig. 2 à 8.)

Fig. 2. Plan. M.

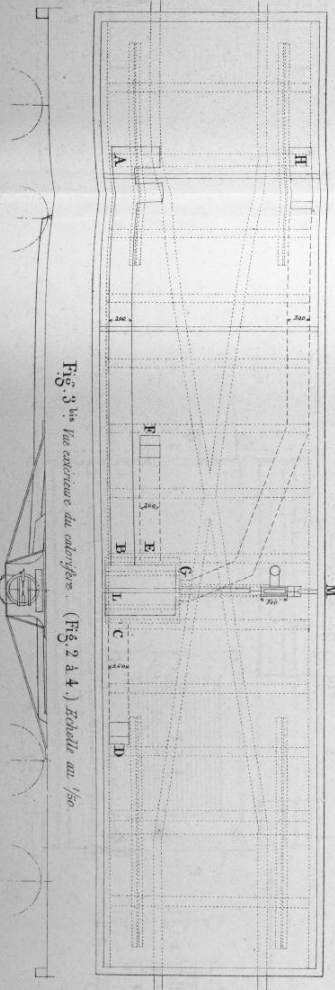
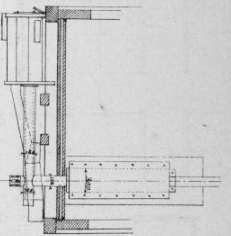


Fig. 3. Vue extérieure du calorifère. (Fig. 2 à 4.) Ecl. au 1/50.

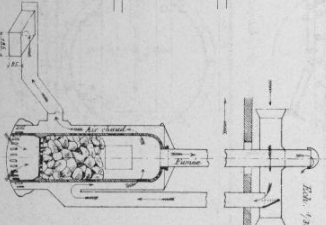
CHAUFFAGE PAR L'AIR CHAUD.

Fig. 4. Coupe LM.



Train Impérial de Russie.

Poutre antirouille système lance vapeur et Fig. 12 coupe normale.



(Ecl. 1/50) Coupe 1. Bouche de lance à vapeur (1/50).

Chauffage des voitures de 2^{ème} classe système Breckau (Russie) Figs 1 à 5.

Fig. 1 Elevation.

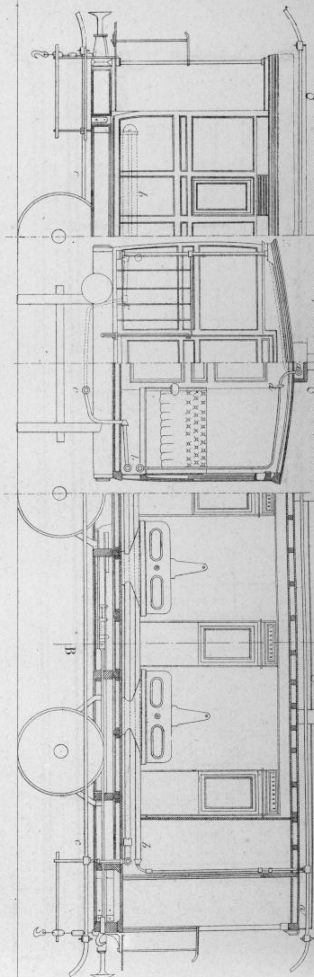


Fig. 3 Vue par haut

Fig. 4 Coupe A-B

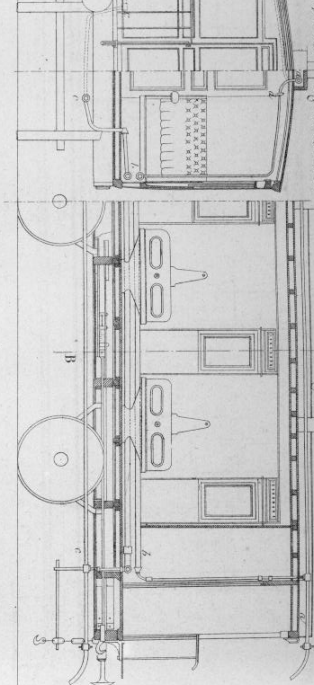


Fig. 5 Plan de coupe horizontale Foh. 160°

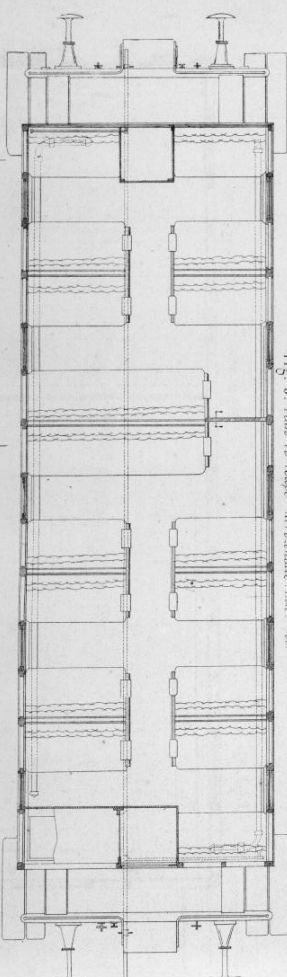


Fig. 10 Rassemblement de la conduite de vapeur entre deux voitures.

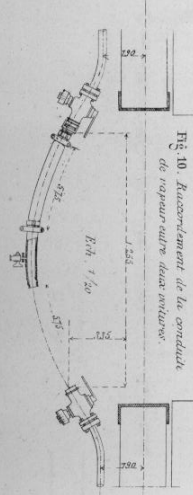
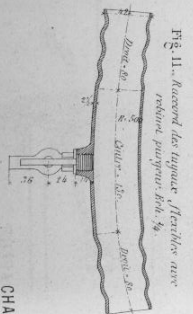


Fig. 11 Rassemblement des tuyaux flexibles avec robinet, poignée Foh. 90°



Chauffage des voitures (Est Prussien) Figs 6 à 12

Fig. 6 Coupe longitudinale

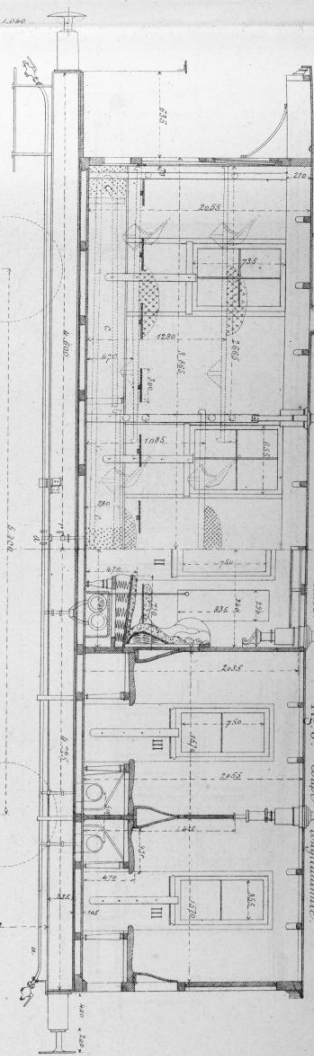


Fig. 8 Coupe longitudinale

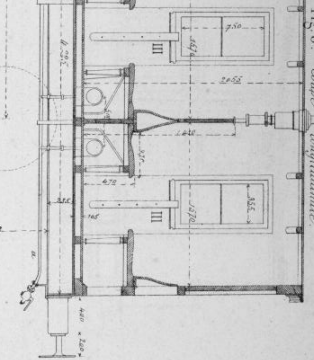


Fig. 7 Plan de coupe

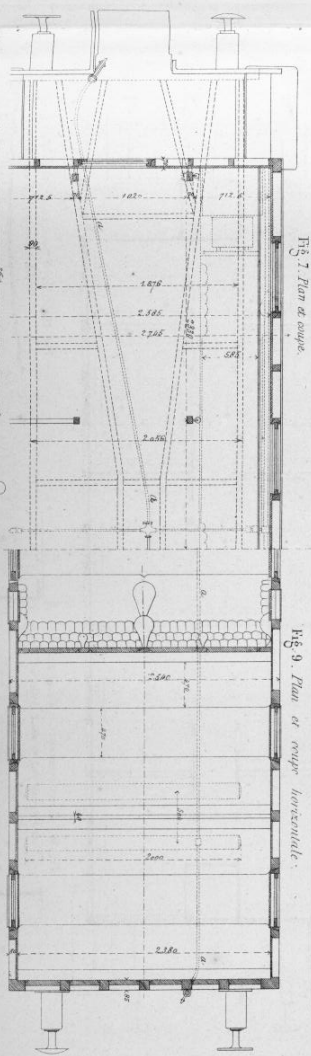
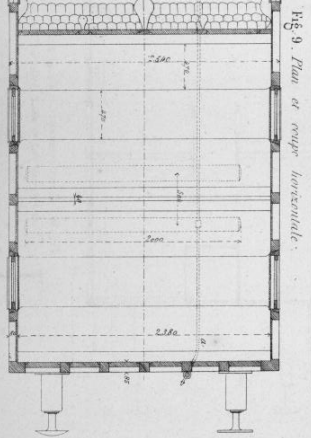


Fig. 9 Plan de coupe horizontale



CHAUFFAGE A VAPEUR.

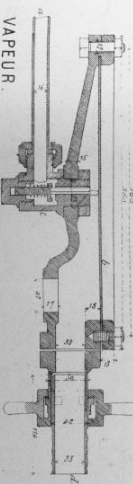


Fig. 12 Régulateur de pression, grand. Coupe transversale. Echelle 1:1.

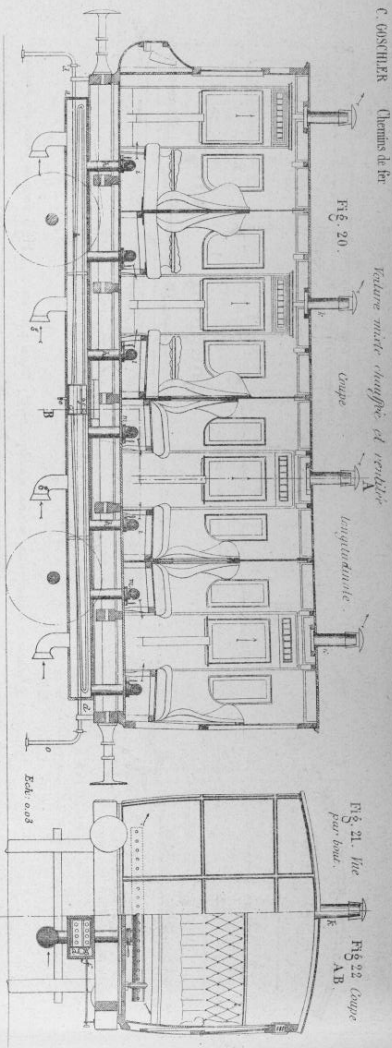


Fig. 23. Train composé de 10 voitures, chauffé par une chaudière spéciale (Châssis laminé de cailloux) (Fig. 20 à 23.)

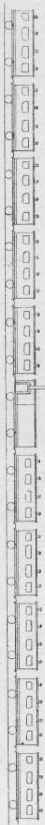


Fig. 10. Prise de vapeur sur la locomotive. 1/50

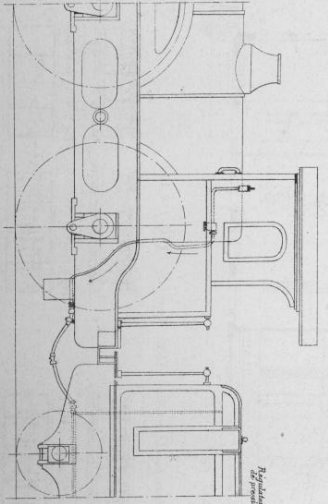


Fig. 10^{bis}. Vue d'ensemble de la prise de vapeur.

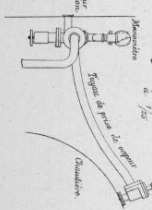


Fig. 11. Régulateur de pression.

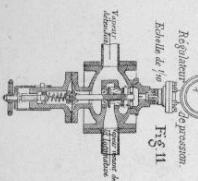


Fig. 12. Régulateur de pression.

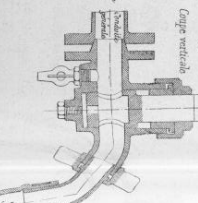


Fig. 13. Régulateur de pression.

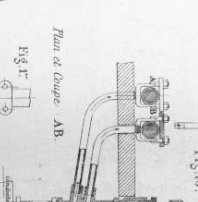


Fig. 14. Régulateur de pression.

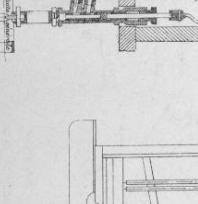


Fig. 15. Régulateur de pression.

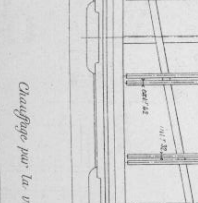


Fig. 16. Régulateur de pression.

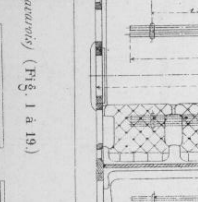


Fig. 17. Régulateur de pression.



CHAUFFAGE A VAPEUR

Fig. 1. Coupe transversale par l'axe d'un compartiment.

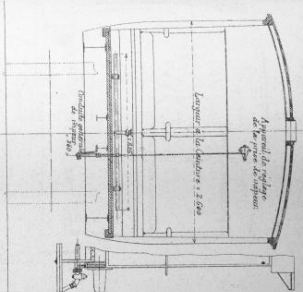


Fig. 2. Vue extérieure.

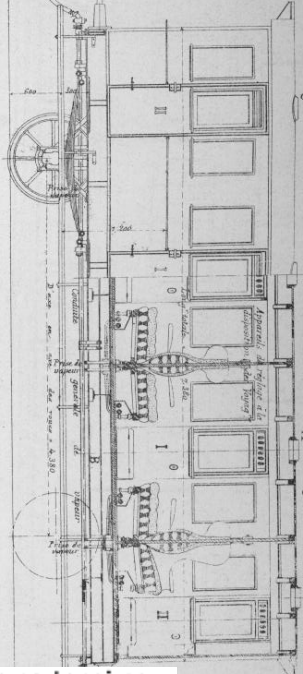


Fig. 3. Coupe longitudinale.

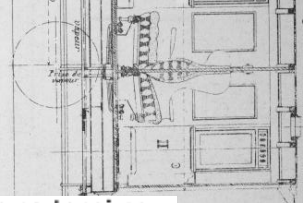
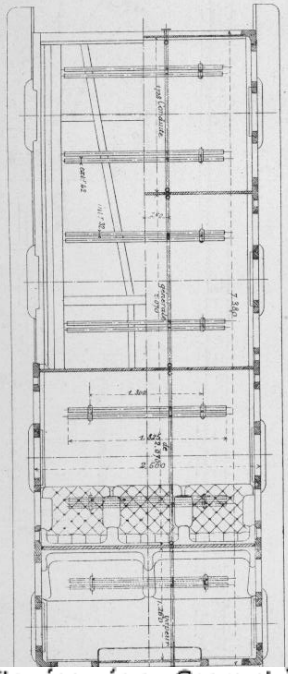
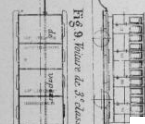
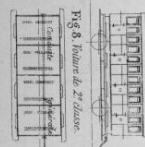
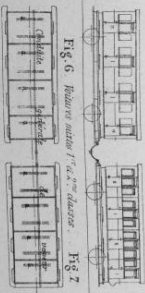


Fig. 4. Coupe les banquettes et une partie du plancher chauffé. Coupes horizontales. Fig. 5. Coupe au-dessus des banquettes.



Chauffage par la vapeur. (Lst. Baumeville) (Fig. 1 à 19)



Chauffage par l'eau chaude. (Chemin de fer Rhéan) (Fig. 1 à 4)
Fig. 1. Coupe horizontale et plan à une voiture-salon.

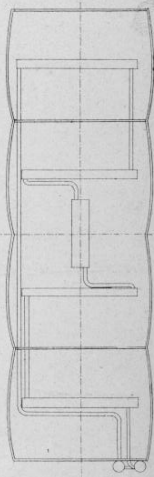


Fig. 17.
Water-closet dans un wagon à bagages. (Borde.)

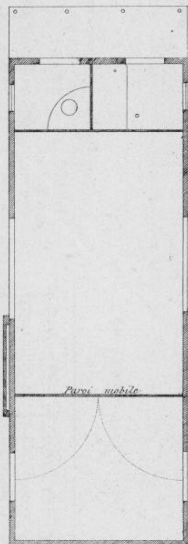


Fig. 18.

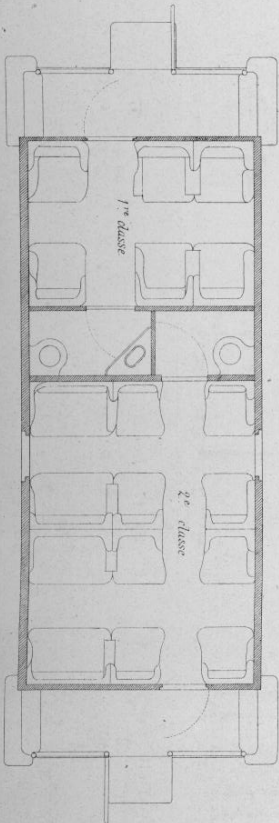


Fig. 2. Ensemble de l'appareil de chauffage.

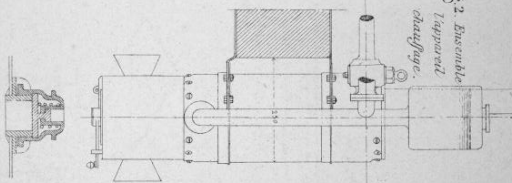
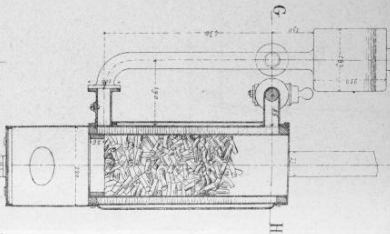


Fig. 3. Coupe verticale EF.



Chaudière Fig. 8, 9, 10.
Fig. 8. Détail.

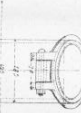


Fig. 9. Coupe verticale AB.



Fig. 7. Coupe horizontale MN, et Plan.

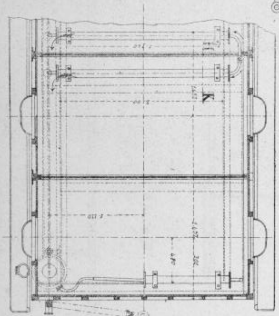


Fig. 13.

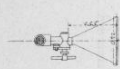


Fig. 11. Vue d'ensemble coupe verticale O P Q R.

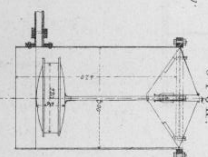


Fig. 12. Plan du vase d'expansion.

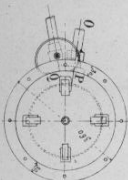


Fig. 16. Raccord des retours à l'eau.

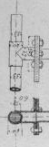


Fig. 10. Coupe horizontale CD.

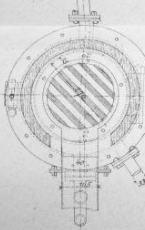


Fig. 14. Coupe verticale HK.

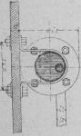
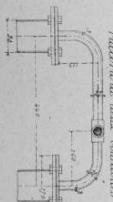


Fig. 15. Plan du raccord des deux bouillottes.



Chauffage par l'eau chaude. (Système Trézel et Bréguet) (Fig. 5 à 16)

Fig. 5. Coupe longitudinale

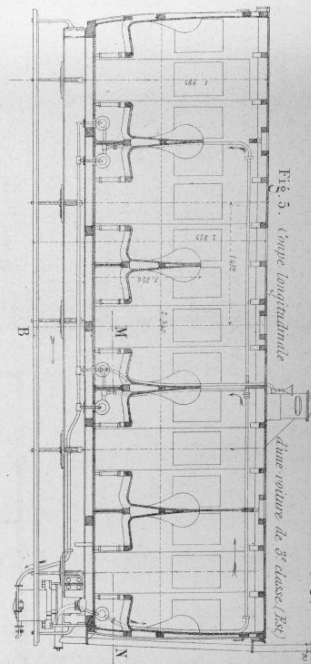
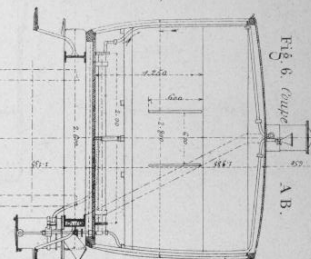


Fig. 6. Coupe AB.



Chauffage par Thermosiphon (Fig. 1 à 17)

Fig. 1. Coupe longitudinale du côté de la chaudière.

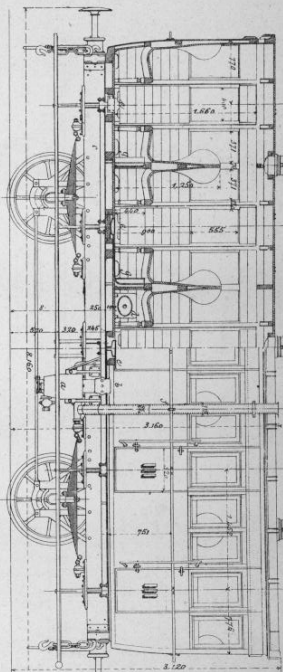


Fig. 3. Coupe verticale

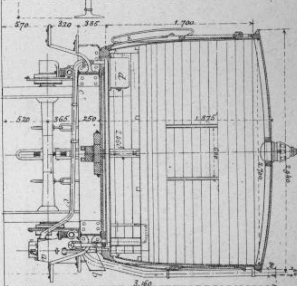


Fig. 9. Appareil d'hygiène supplémentaire de secours. Coupe A-B. Appareil pendant l'opération du réchauffage. (Voyez Fig. 9 à 12) Ech. 1/500

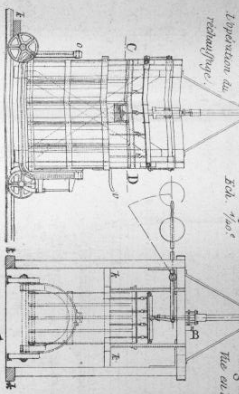
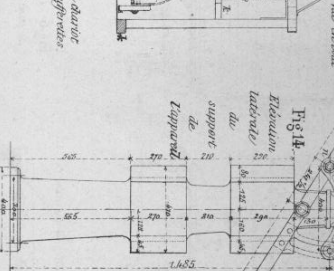


Fig. 10. Vue en bout



Appareil de réchauffage. Vue des bouillottes (Voyez Fig. 13 à 15) au 1/500

Fig. 13. Elevation longitudinale de l'appareil et du système de chauffage de bouillottes.

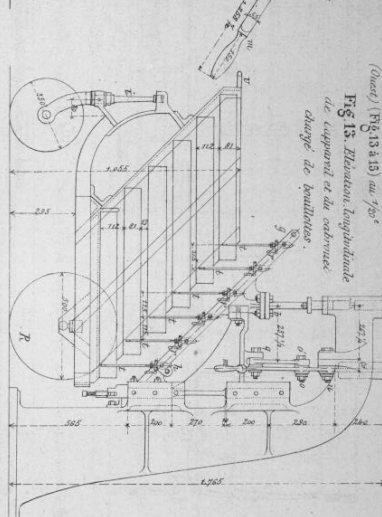


Fig. 2. Vue extérieure du côté de la chaudière.

Fig. 4. Plan et coupe au niveau des bruleurs de la caisse.

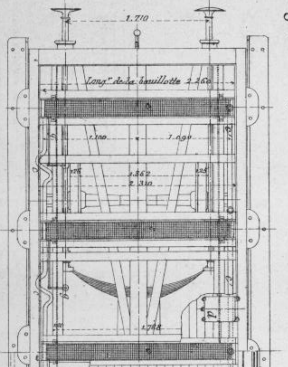
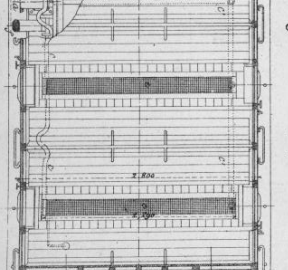


Fig. 6. Coupe verticale du vase d'expansion.

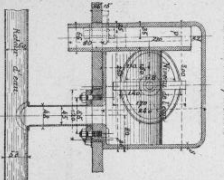


Fig. 11. Vue en plan du chariot et coupe C-D.

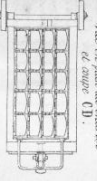


Fig. 12. Vue en plan du chariot chargé des 20 chauffe-vies.

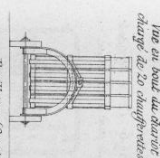


Fig. 16. Coupe longitudinale de la bouteille. Bouteilles (Voyez Fig. 16 à 22) Ech. 1/500

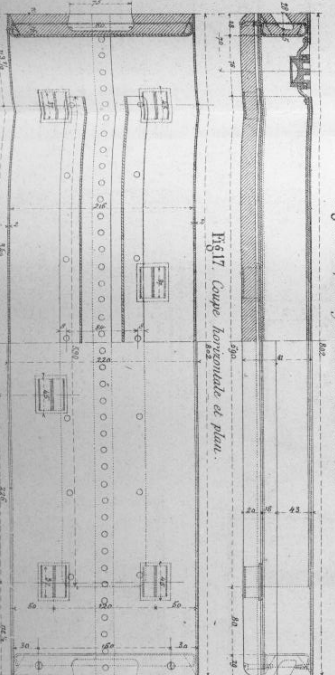


Fig. 17. Coupe horizontale et plan.

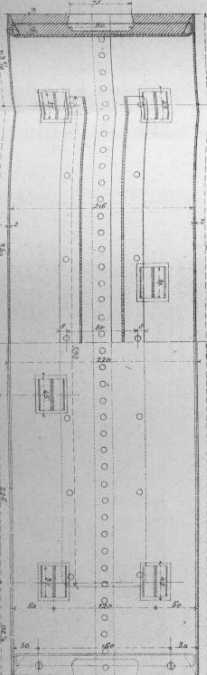


Fig. 20. Vue d'ensemble de la garniture ou des autres le montage.

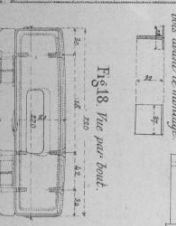


Fig. 18. Vue par bout.

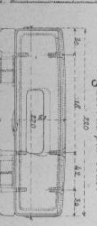


Fig. 19. Coupe transversale.



Fig. 21. Vue de face.



Fig. 22. Vue de face.

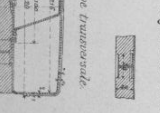


Fig. 23. Vue de face.



Fig. 24. Vue de face.



Fig. 25. Vue de face.



Fig. 26. Vue de face.



Fig. 27. Vue de face.



Fig. 28. Vue de face.



Fig. 29. Vue de face.

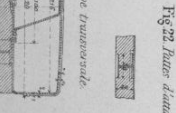


Fig. 30. Vue de face.



Fig. 31. Vue de face.



Fig. 32. Vue de face.



Fig. 33. Vue de face.



Fig. 34. Vue de face.



Fig. 35. Vue de face.



Fig. 36. Vue de face.



Fig. 37. Vue de face.



Fig. 38. Vue de face.



Fig. 39. Vue de face.



Fig. 40. Vue de face.



Fig. 41. Vue de face.



Fig. 42. Vue de face.

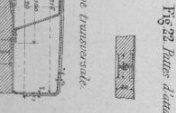


Fig. 43. Vue de face.



Fig. 44. Vue de face.



Fig. 45. Vue de face.



Fig. 46. Vue de face.



Fig. 47. Vue de face.



Fig. 48. Vue de face.



Fig. 49. Vue de face.



Fig. 50. Vue de face.



Fig. 51. Vue de face.



Fig. 52. Vue de face.

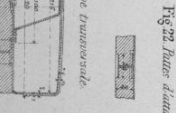


Fig. 53. Vue de face.



Fig. 54. Vue de face.



Fig. 55. Vue de face.



Fig. 56. Vue de face.



Fig. 57. Vue de face.



Fig. 58. Vue de face.



Fig. 59. Vue de face.



Fig. 60. Vue de face.



Fig. 61. Vue de face.



Fig. 62. Vue de face.



Fig. 63. Vue de face.



Fig. 64. Vue de face.



Fig. 65. Vue de face.



Fig. 66. Vue de face.



Fig. 67. Vue de face.



Fig. 68. Vue de face.



Fig. 69. Vue de face.



Fig. 70. Vue de face.



Fig. 71. Vue de face.



Fig. 72. Vue de face.



Fig. 73. Vue de face.

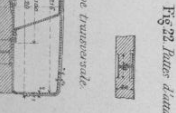


Fig. 74. Vue de face.



Fig. 75. Vue de face.



Fig. 76. Vue de face.



Fig. 77. Vue de face.



Fig. 78. Vue de face.



Fig. 79. Vue de face.



Fig. 80. Vue de face.



Fig. 81. Vue de face.



Fig. 82. Vue de face.



Fig. 83. Vue de face.



Fig. 84. Vue de face.



Fig. 85. Vue de face.



Fig. 86. Vue de face.



Fig. 87. Vue de face.



Fig. 88. Vue de face.



Fig. 89. Vue de face.



Fig. 90. Vue de face.



Fig. 91. Vue de face.



Fig. 92. Vue de face.



Fig. 93. Vue de face.



Fig. 94. Vue de face.



Fig. 95. Vue de face.



Fig. 96. Vue de face.



Fig. 97. Vue de face.



Fig. 98. Vue de face.



Fig. 99. Vue de face.



Fig. 100. Vue de face.

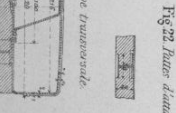


Fig. 101. Vue de face.



Fig. 102. Vue de face.



Fig. 103. Vue de face.



Fig. 104. Vue de face.



Fig. 105. Vue de face.



Fig. 106. Vue de face.



Fig. 107. Vue de face.



Fig. 108. Vue de face.



Fig. 109. Vue de face.



Fig. 110. Vue de face.



Fig. 111. Vue de face.



Fig. 112. Vue de face.

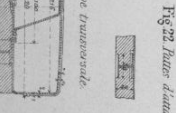


Fig. 113. Vue de face.



Fig. 114. Vue de face.



Fig. 115. Vue de face.



Fig. 116. Vue de face.



Fig. 117. Vue de face.



Fig. 118. Vue de face.



Fig. 119. Vue de face.



Fig. 120. Vue de face.

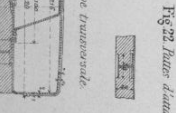


Fig. 121. Vue de face.



Fig. 122. Vue de face.



Fig. 123. Vue de face.



Fig. 124. Vue de face.

Voiture portant son gaz à éclairage. (Fig. 14 à 17.)

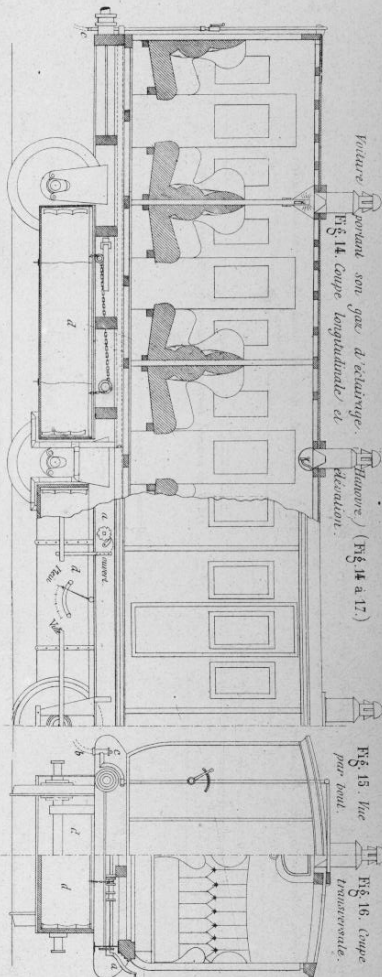
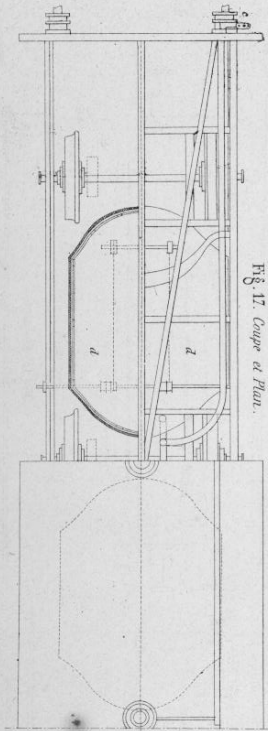
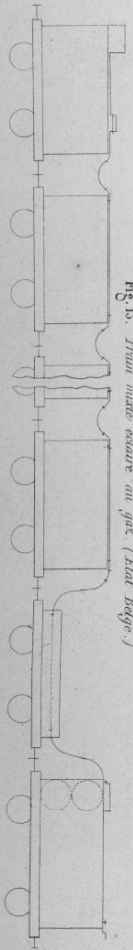


Fig. 17. Coupe et Plan.

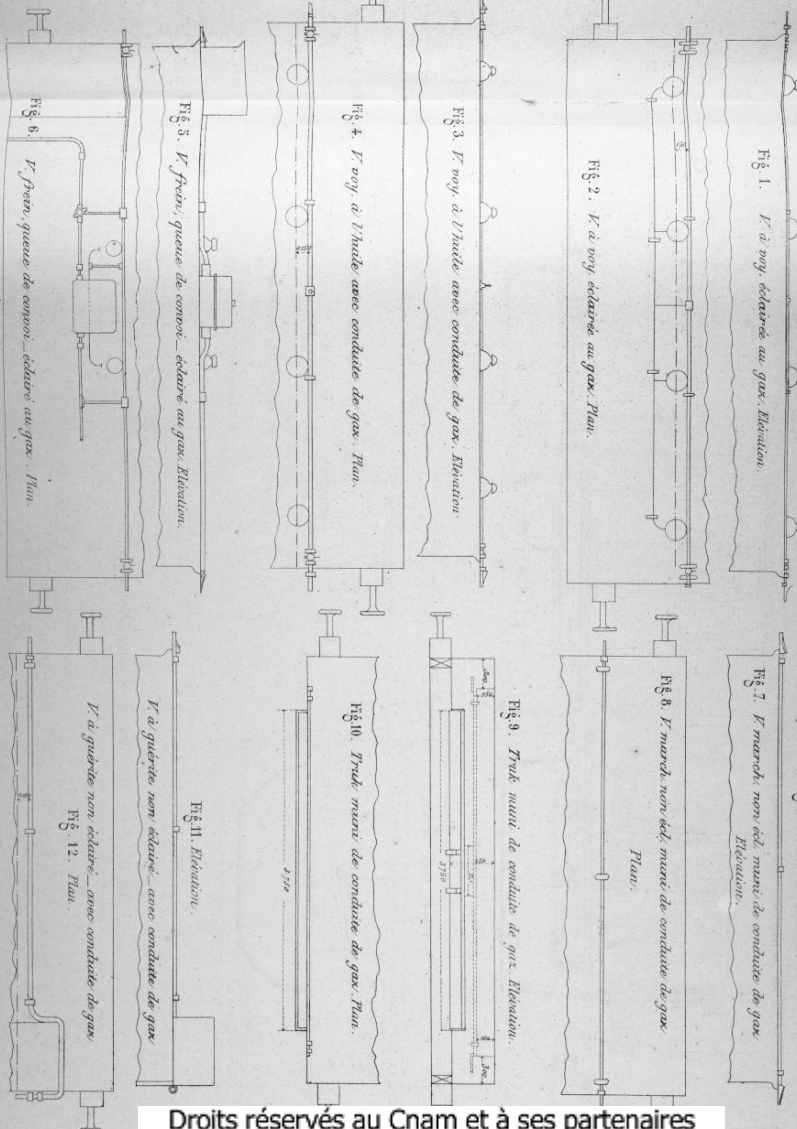


a. Tranchée pour recevoir le gazomètre.
b. Boîtier.
c. Boîtier de remplissage.
d. Gazomètre.

Fig. 13. Train muni d'éclairage au gaz. (Etat Bâgé.)

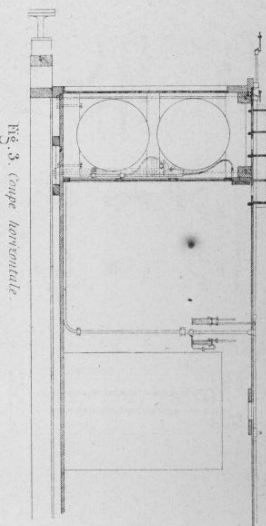


Montage des conduites de gaz sur le matériel de transport. (Etat Bâgé.) (Fig. 1 à 13.)



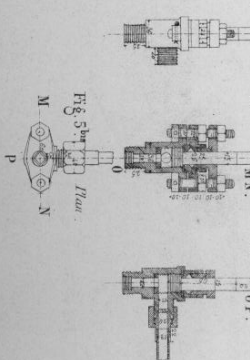
ÉCLAIRAGE

Réserve dans le fourgon à bagages (Fig. 1 à 4) à 1/30°

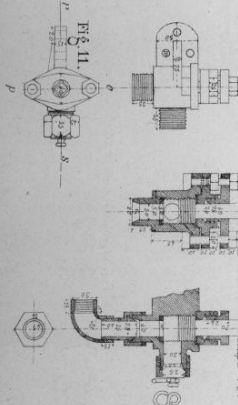


Échelles
au 1/30 pour les figures 1 à 4
au 1/5 pour les figures 5 à 39
au 1/60 pour les figures 40 à 43

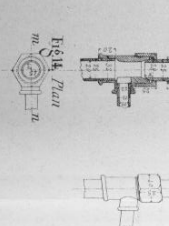
Réserve d'interruption pour réservoirs (Fig. 5 à 7)



Réserve d'interruption dans les réservoirs (Fig. 8 à 11). Éléments latéraux.



Coude à T pour réservoirs (Fig. 12 à 14). Coude m.



Éclairage des voitures par le gaz (Etat belge). Régulateur de pression (Fig. 14 à 17) ou 1/3°

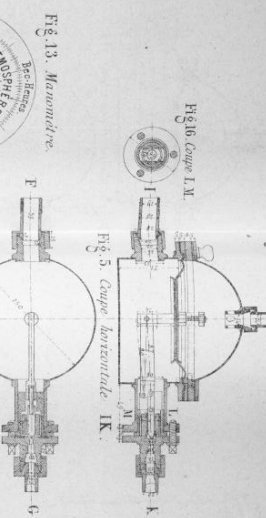


Fig. 13. Manomètre.



Fig. 21. Coupe EF.



Réserve commutateur (Fig. 18 à 21).

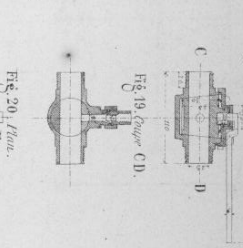
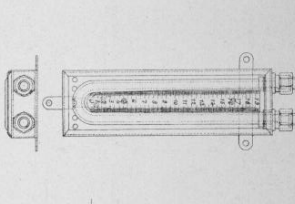
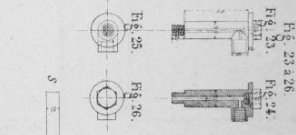


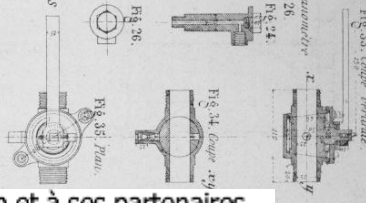
Fig. 22. Indicateur de pression



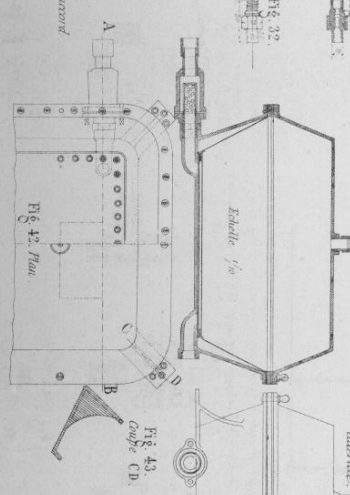
Coude de manomètre



Manivelle de l'empoi P. XX. Régulateur à vent (Fig. 33 à 35). Fig. 33. Coupe verticale



Réserve de quai du train (Fig. 40 à 43)



ECLAIRAGE

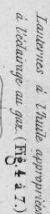


Fig. 3. Manoeuvres lors d'un changement de composition du train.

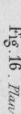
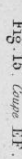
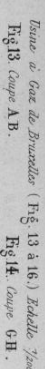
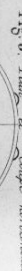
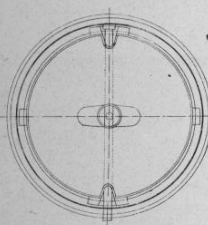
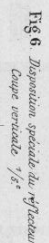
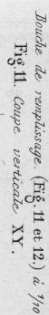


Fig. 6 Coupe de direction transversale
Vagon écurie (Fig. 1 à 7)

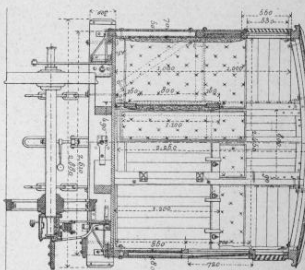


Fig. 7 Vue par bout

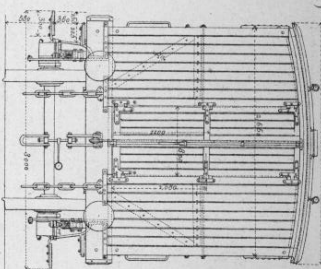
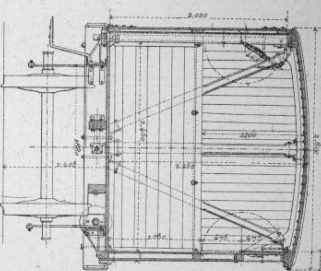


Fig. 2 Coupe transversale



Vagon écurie à bords hauts (Fig. 1 à 3)
Fig. 1 Coupe longitudinale

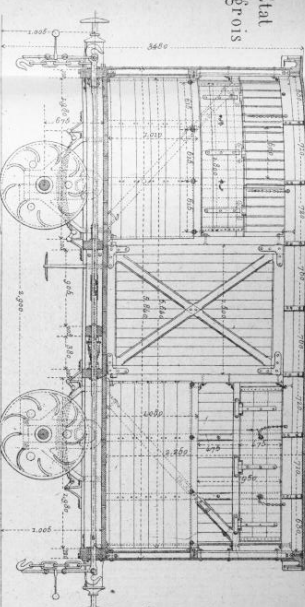


Fig. 4 Coupe longitudinale
Vagon écurie (Fig. 1 à 7)

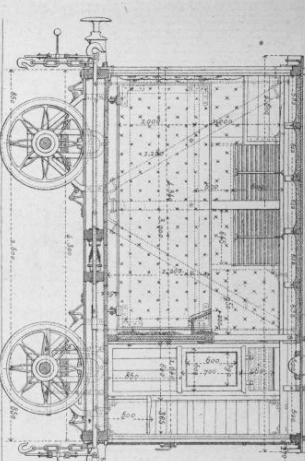


Fig. 8 Plan pour le transport des linge

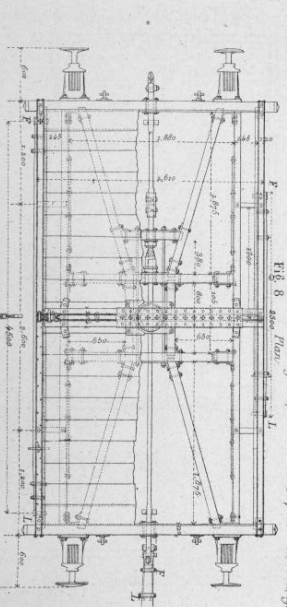


Fig. 10 Détail de coupe transversale

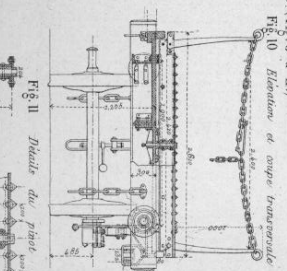


Fig. 3 Plan de coupe horizontale

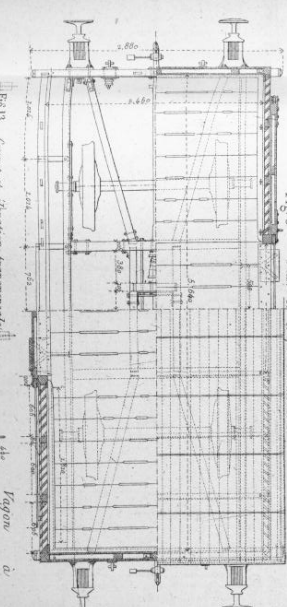


Fig. 5 Coupe horizontale

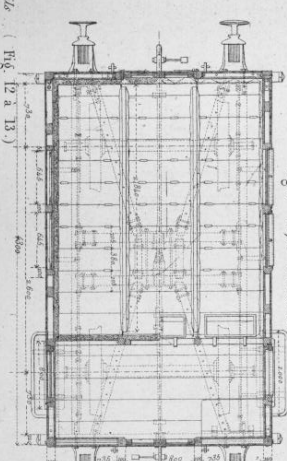


Fig. 9 Elevation et coupe longitudinale

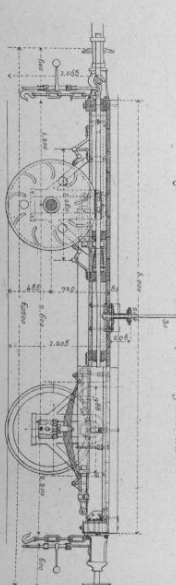


Fig. 11 Detail de coupe transversale

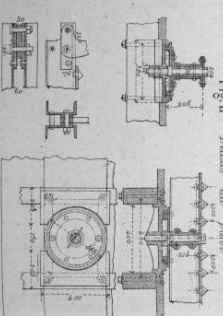


Fig. 13 Coupe de direction transversale

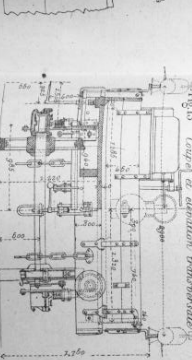
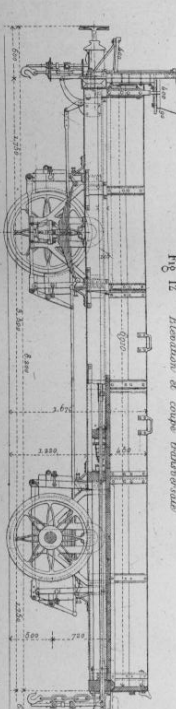


Fig. 12 Elevation et coupe transversale



VAGONS POUR MARCHANDISES, CHEVAUX, BESTIAUX, BOIS, RAILS

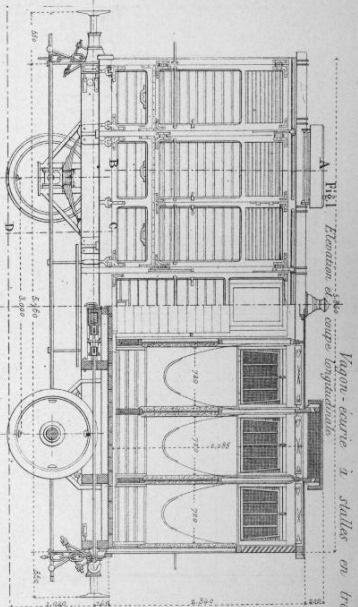
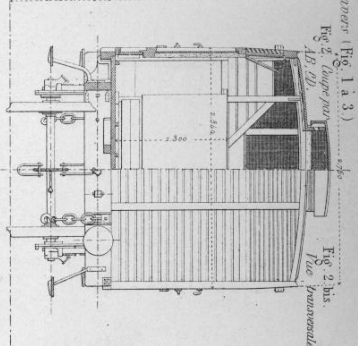


Fig. 1 à 3. Elevation et coupe longitudinale d'un wagon-écurie à stalles en travers.



(Ouest Français)

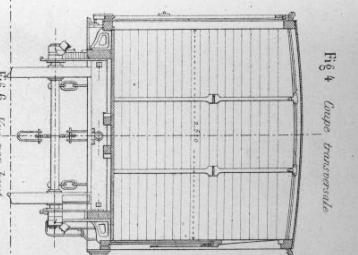


Fig. 4. Coupe transversale.

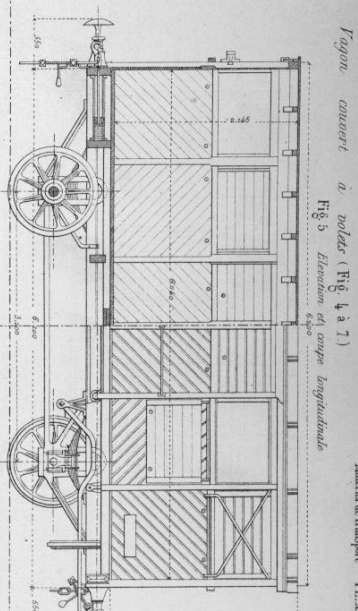


Fig. 5. Elevation et coupe longitudinale d'un wagon couvert à volets (Fig. 4 à 1).

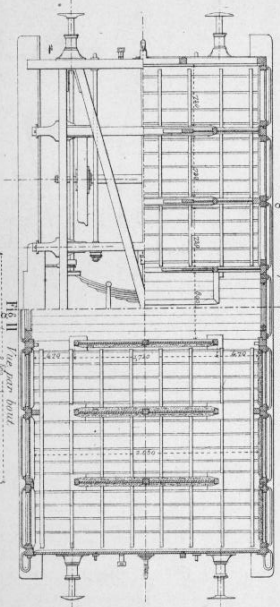


Fig. 6. Vue par bout.

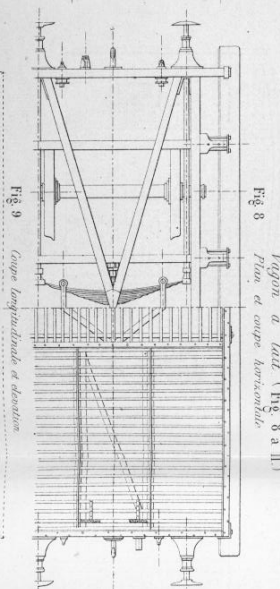


Fig. 7. Coupe horizontale et plan.

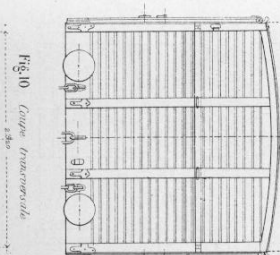


Fig. 8. Plan et coupe horizontale.

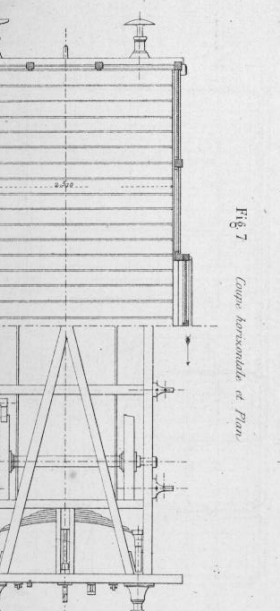


Fig. 9. Coupe longitudinale et elevation.

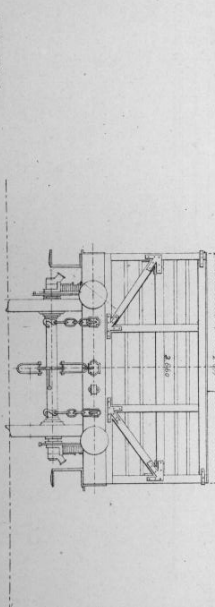


Fig. 10. Coupe transversale.

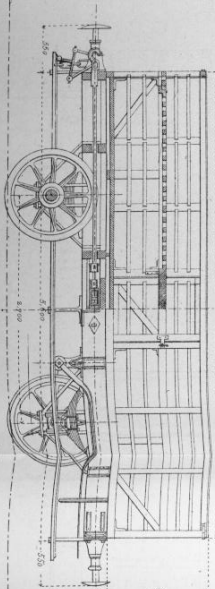


Fig. 11. Vue par bout.

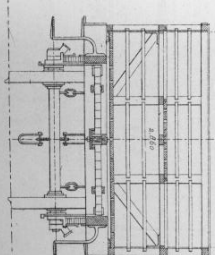


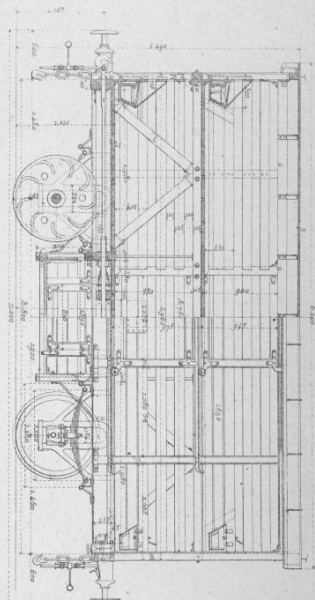
Fig. 12. Coupe horizontale et plan.

VAGON-ÉCURIE VAGON COUVERT À VOILETS VAGON À LAIT

Échelle de 0^m02 pour 1^m000.

Vagon à porcs (Etat Hongrois) (Fig. 1 à 3)

Fig. 1 Coupe longitudinale et direction



Vagon decouvert à bestiaux, à frein (Etat Hongrois) (Fig. 4 à 8)

Fig. 4 Coupe longitudinale et direction

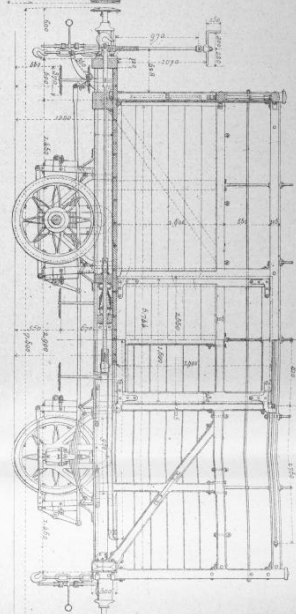
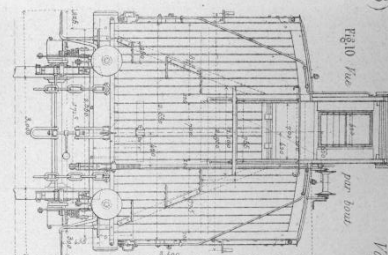


Fig. 10 Vue par bout



Vagon couvert à marchandises (Etat Hongrois) (Fig. 9 à 13)

Fig. 9 Coupe longitudinale

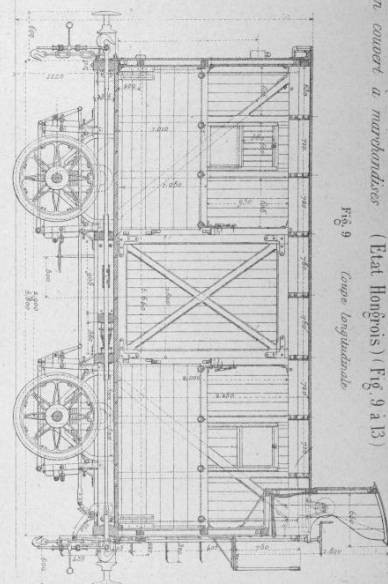


Fig. 2 Vue par bout

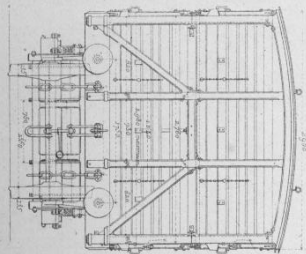


Fig. 3 Coupe transversale

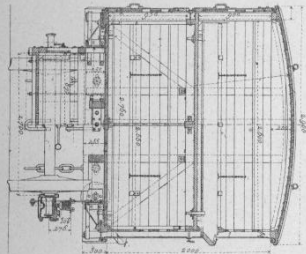


Fig. 5 Vue par bout côté du frein

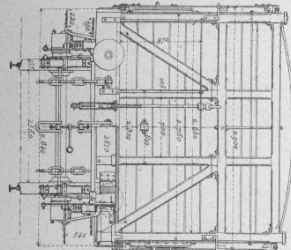


Fig. 6 Coupe par la plateforme du frein

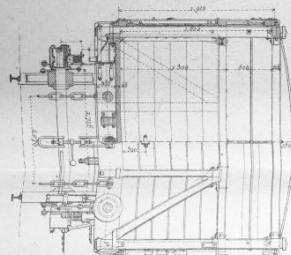


Fig. 7 Coupe transversale

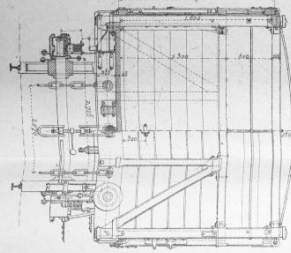


Fig. 8 Vue par bout

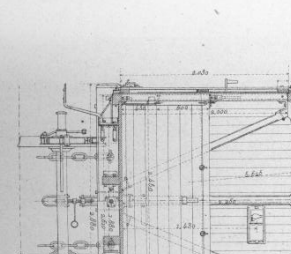


Fig. 11 Coupe transversale

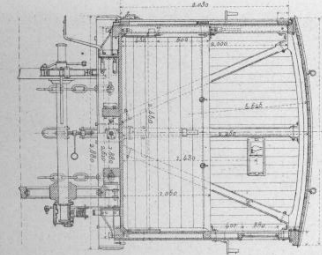


Fig. 12 Coupe horizontale

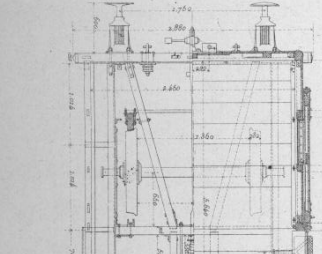
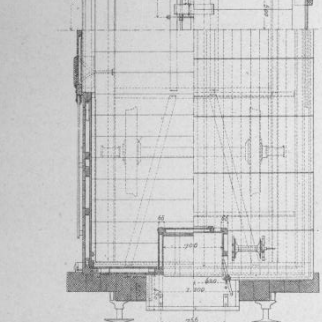


Fig. 13 Vue



Voie à double (voir l'explication) (Fig. 1 à 4)

Fig. 1 Coupe et élévation longitudinale.

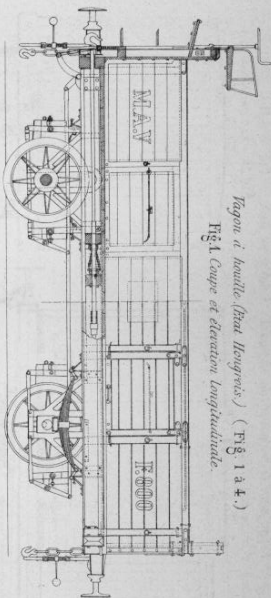


Fig. 2 Coupes transversales

Fig. 3 Vue par bout.

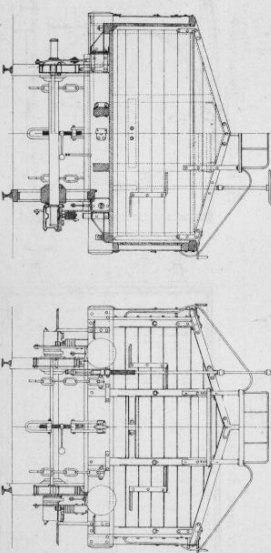
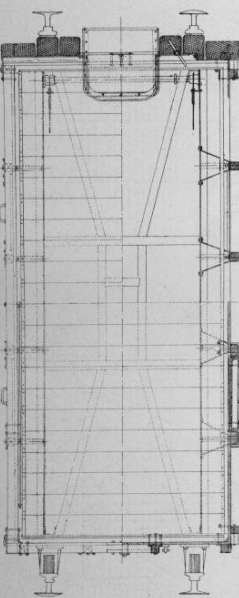


Fig. 4 Plan.



Voie pour le transport des liquides. Roules en fer. (Fig. 5 à 7)

Fig. 5 — Coupe et élévation longitudinale.

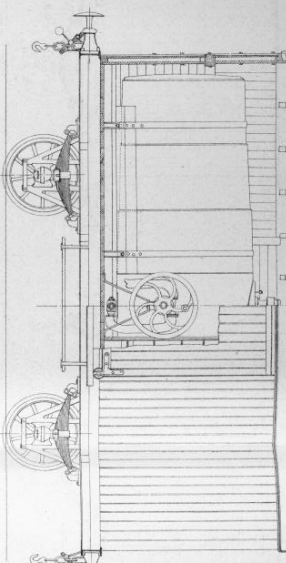


Fig. 6 Plan.

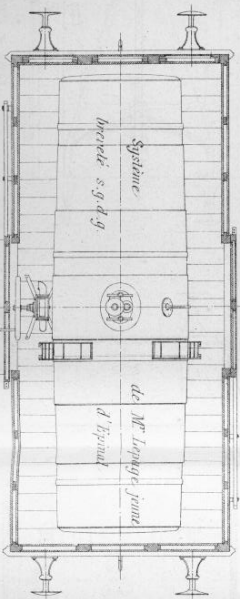
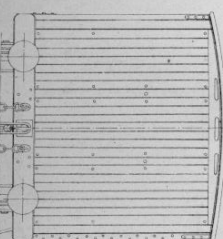


Fig. 7 Vue par bout.



Voie pour le transport des liquides. Roules en bois. (Fig. 8 à 11)

Fig. 8 Élévation et coupe longitudinale.

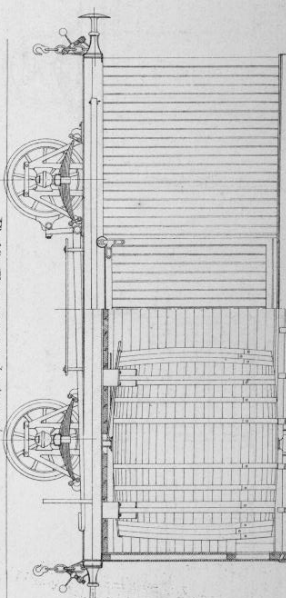
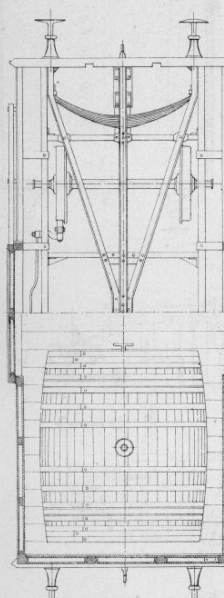


Fig. 10 Plan et coupe horizontale.



Voie à marchandises. Voie étroite.

Fig. 12 Élévation.

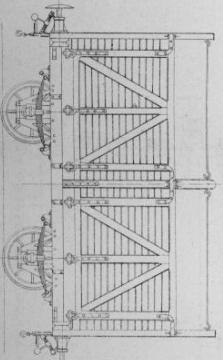


Fig. 14 Vue par bout.

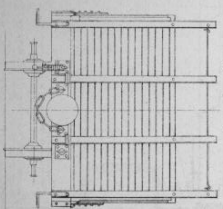


Fig. 1 Tranchée à coupe

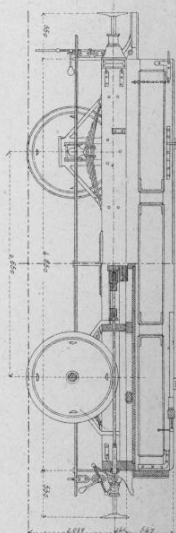
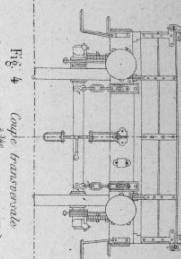


Fig. 2 Vue par bout



(Orléans)

Profil du fondage de la Fig. 6, PL. XXVI

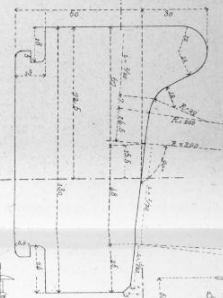


Fig. 5 Fronton à coupe longitudinale

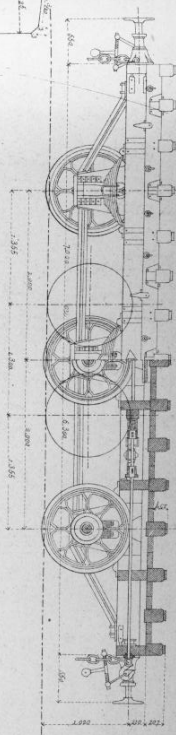


Fig. 6 Coupe transversale

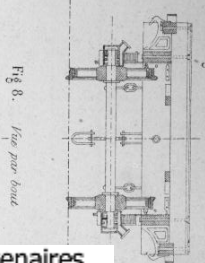


Fig. 7 Plan

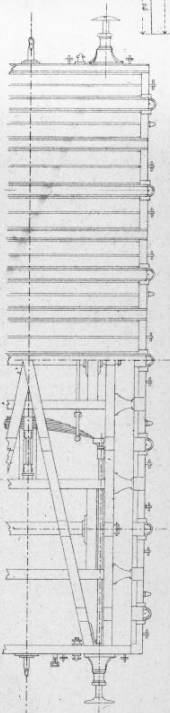
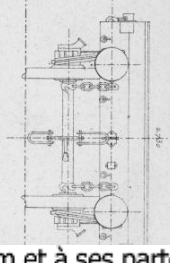


Fig. 8 Vue par bout



Chemins de fer de l'Ouest (France)

Fig. 9 Coupe de l'écluse

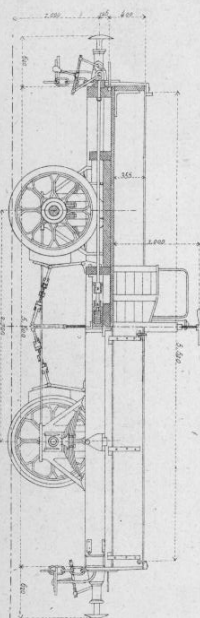


Fig. 10 Coupe transversale

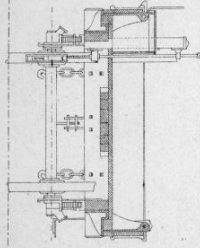


Fig. 13 Élévation à coupe longitudinale

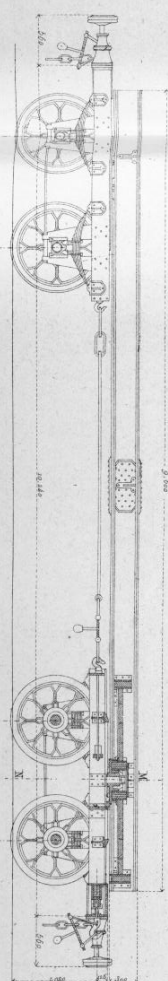


Fig. 14 Coupe M N

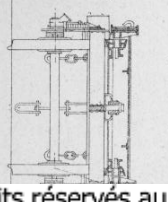


Fig. 11 Plan

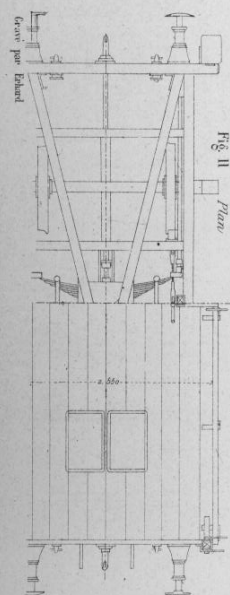


Fig. 12 Vue par bout

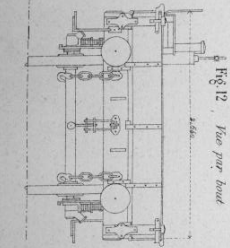


Fig. 15 Plan

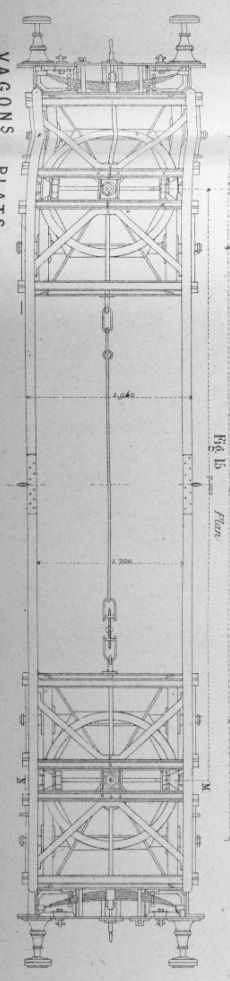
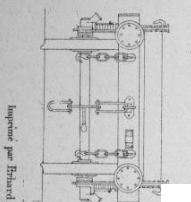


Fig. 16 Vue par bout



VAGONS PLATS

Figures de marchandises (Brevet) (Fig. 1 et 2.)

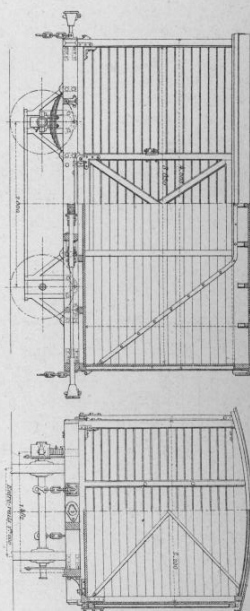
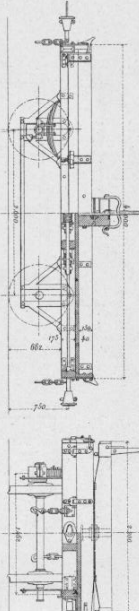


Fig. 3. Elevation of a freight wagon with a gabled roof.



Figures de marchandises (Brevet) (Fig. 3 et 4.)

Fig. 5. Elevation of a freight wagon with a gabled roof.

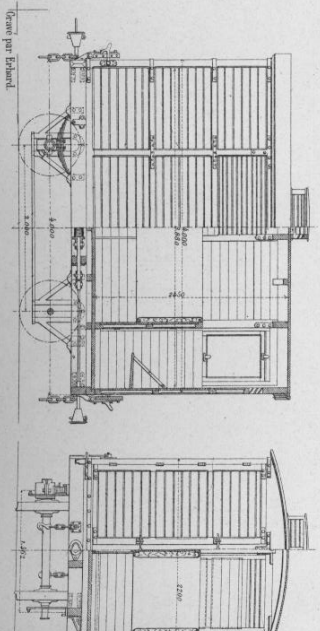
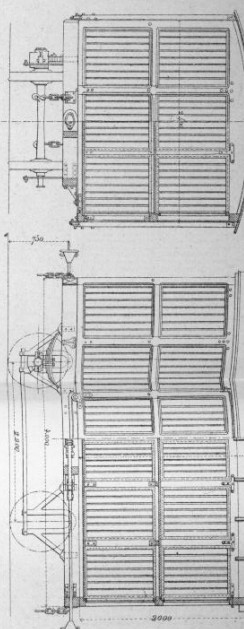


Fig. 6. Elevation of a freight wagon with a gabled roof.



Figures de marchandises (Brevet) (Fig. 7 et 8.)

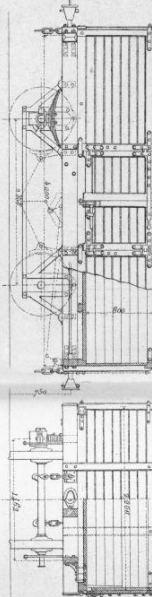


Fig. 9. Elevation of a freight wagon with a gabled roof.

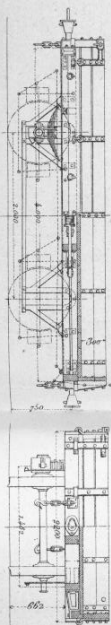
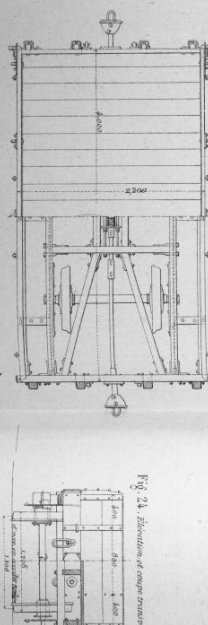


Fig. 11. Plan of a freight wagon with a gabled roof.



Figures de marchandises (Brevet) (Fig. 9 et 10.)

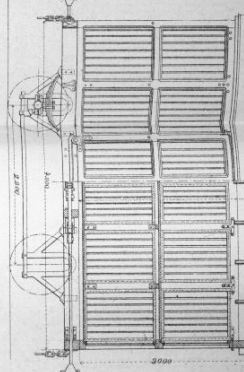


Fig. 12. Elevation of a freight wagon with a gabled roof.

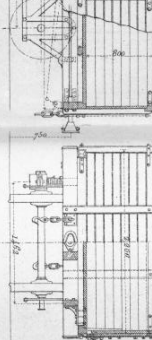


Fig. 13. Elevation of a freight wagon with a gabled roof.

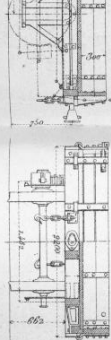
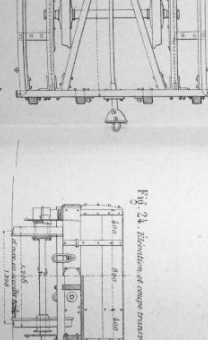


Fig. 14. Elevation of a freight wagon with a gabled roof.



Figures de marchandises (Brevet) (Fig. 15 et 16.)

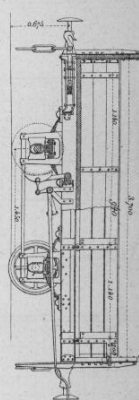


Fig. 17. Elevation of a freight wagon with a gabled roof.

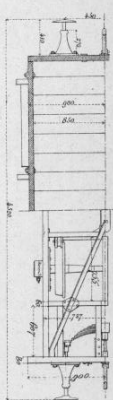


Fig. 18. Elevation of a freight wagon with a gabled roof.

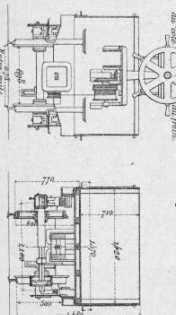


Fig. 19. Elevation of a freight wagon with a gabled roof.

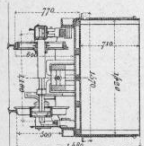
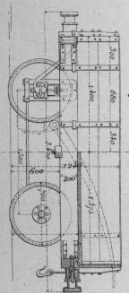
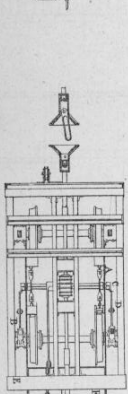
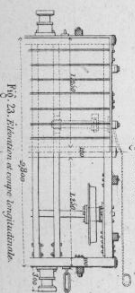


Fig. 20. Elevation of a freight wagon with a gabled roof.



VAGONS À MARCHANDISES, À CHEVAUX, À MINÉRAIS, VOIE RÉDUITE.

Détails de la boîte à graissage.

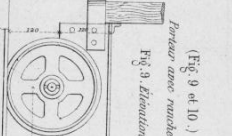
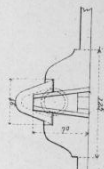
Fig. 1^{bis} Elevation

Fig. 9. Elevation

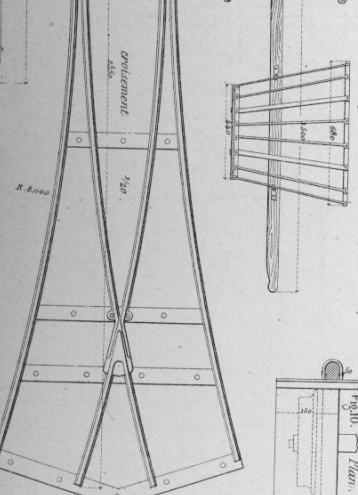


Fig. 10. *Plan.*

Imprime par Echard

Fig. 5. *Coupe AH.* Fig. 6. *Coupe BK.* *Masses-niges.* (Etat horizontal.) (Fig. 5 à 10.)

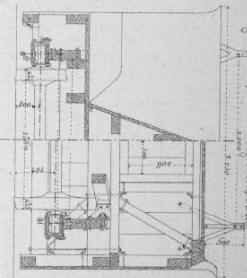


Fig. 7. *Vue d'avant.* Fig. 8. *Vue d'arrière.*

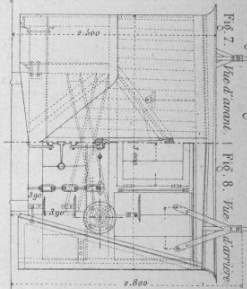


Fig. 9. *Coupe longitudinale.*

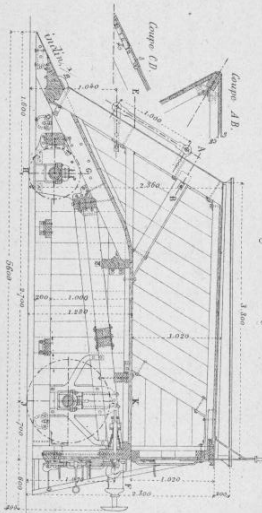
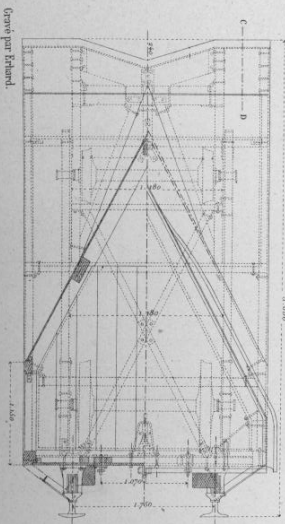


Fig. 10. *Coupe horizontale de la Traction.*



Tram de secours. (Ouest.) (Fig. 1 à 4.)

Fig. 1. *Vue longitudinale.*

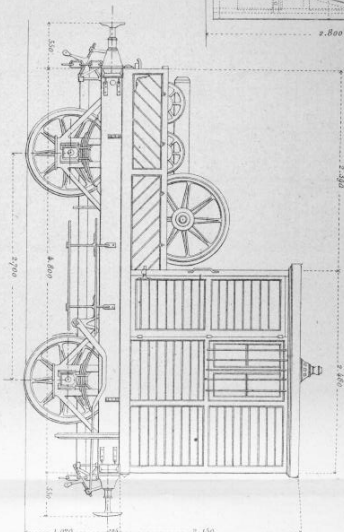


Fig. 2. *Coupe horizontale et plan.*

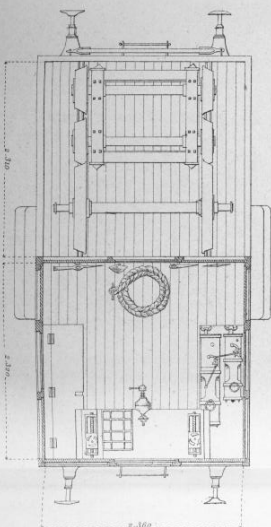
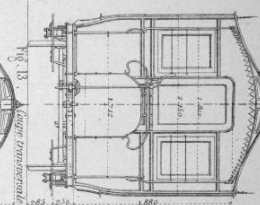


Fig. 11. *Vue de bout.*



Tramway (Fig. 11 à 13.)

Fig. 12. *Coupe longitudinale.*

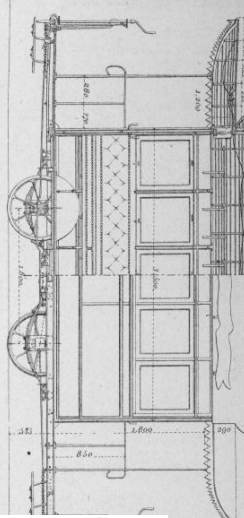


Fig. 13. *Élévation latérale.*

Fig. 14. *Plan du chassis.*

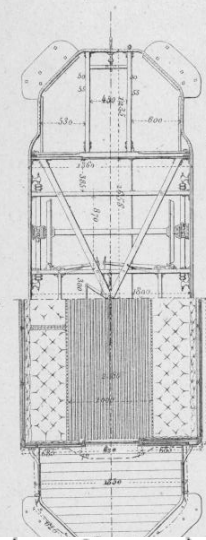


Fig. 15. *Coupe horizontale.*

Fig. 3. *Coupe transversale.*

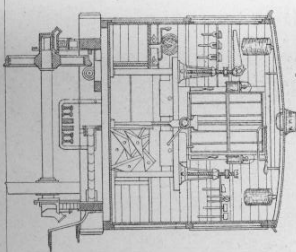
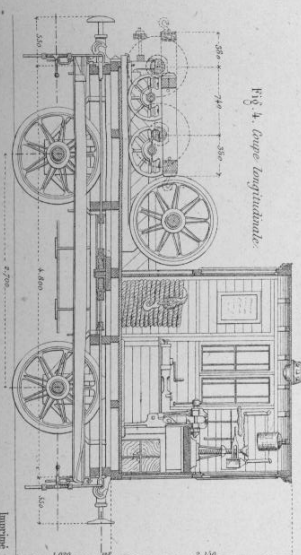


Fig. 4. *Coupe longitudinale.*



VAGON DE SECOURS. OMNIBUS DE TRAMWAY. CHASSE NEIGE.

Montage du chassis de glace de la portière. (Ouest.)

Fig 12. Coupe verticale P Q.

Porte mutante des vagnons à bestiaux. (Hougrue) (Fig. 7 à 12.)
M₂ MN.

Fig. 7. Elevation de la partie supérieure

Matériel de Transport Pl. XXX

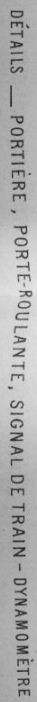
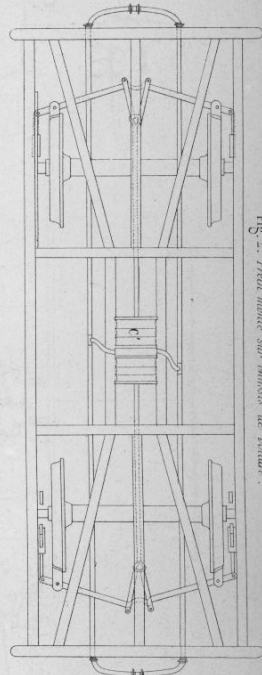


Fig. 2. Frein monté sur chassis de voiture.



Frein à air comprimé, système Westinghouse. (Fig. 6 à 10.)
Fig. 9. Frein monté sur chassis à double bogie. (Mikant) Ed. 1^{re}.

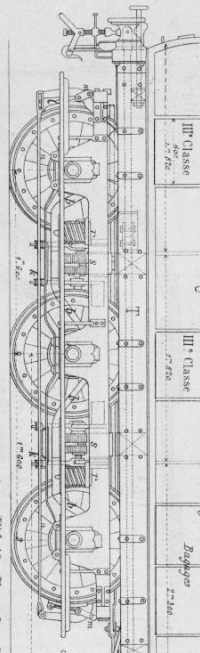
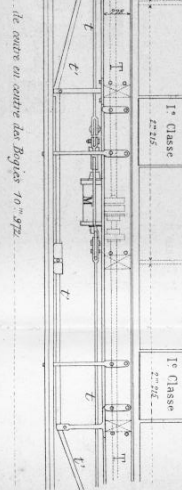
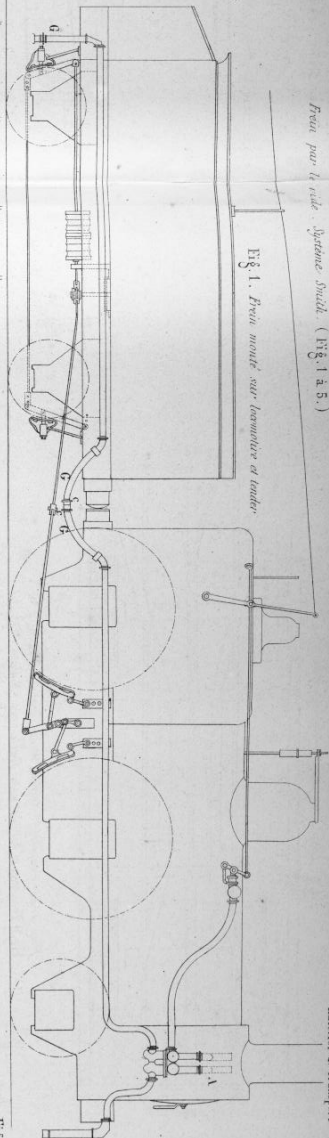


Fig. 10. Plan du chassis et du frein.



Frein pour le vide. Système Smith. (Fig. 1 à 5.)



FREINS CONTINUS A AIR.

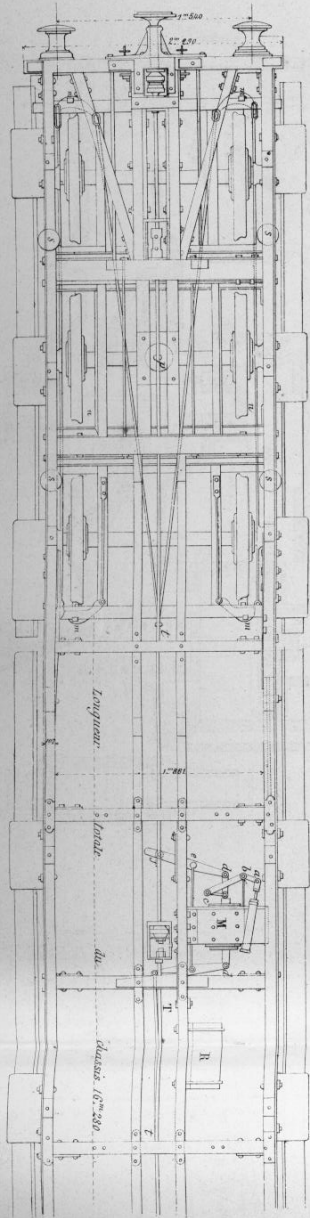


Fig. 6. Appareil de distribution.

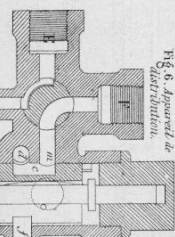


Fig. 7. Soupape de sûreté.

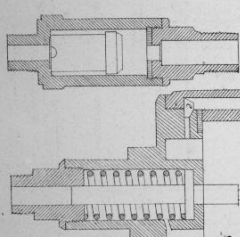


Fig. 4. Tube de connexion et quinzaine ouvert.

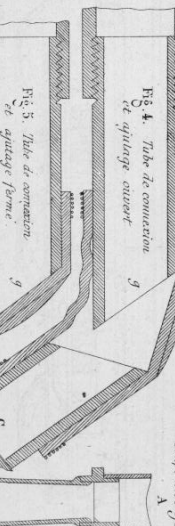


Fig. 5. Tube de connexion et quinzaine fermé.

Fig. 8. Soupape pour l'assemblage des tuyaux.

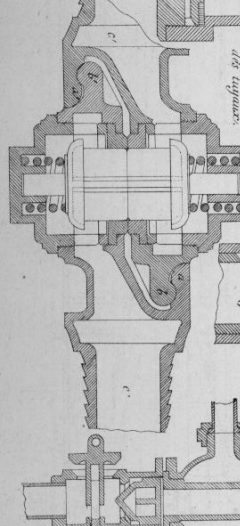


Fig. 3. Coup d'oeil général.

Pl. XXXII

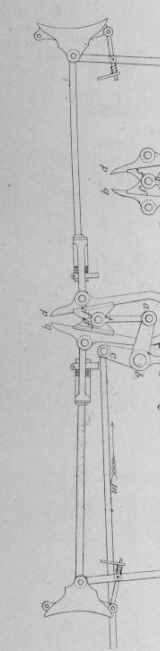
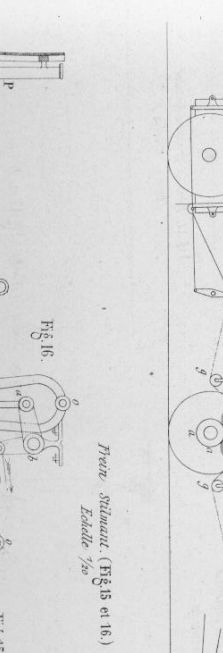
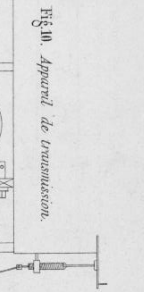
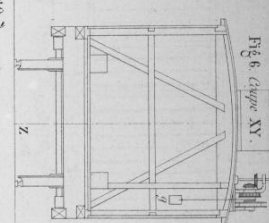


Fig. 1. Bouquettes et dièsses rangés contre les parois. Fig. 2. Bouquettes et dièsses en place.

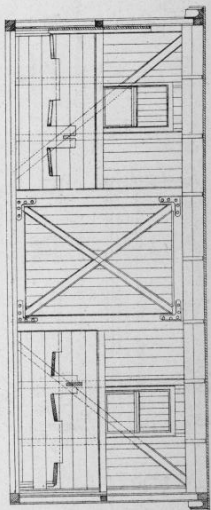


Fig. 3. Chevaux placés en long. Fig. 4. Chevaux placés en larg.

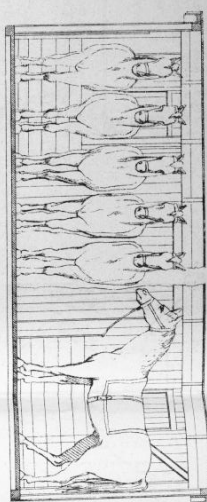


Fig. 12. Chargement des voitures d'équipages de pont.

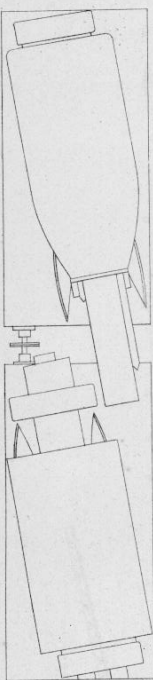
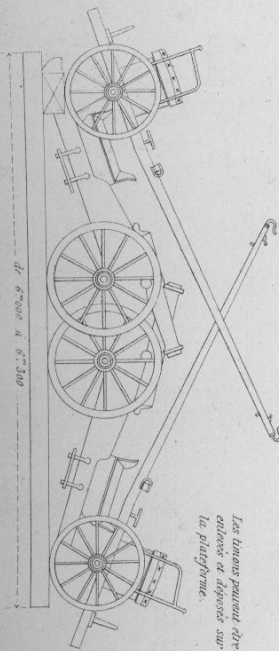


Fig. 13. Chargement de deux caissons avec leurs efflu.



Les timons peuvent être enlevés et déposés sur la plateforme.

de 6"200 à 6"300

Fig. 13. Rampes mobiles (Fig. 13 et 14). Fig. 14. Rampe disposée pour le chargement des voitures.

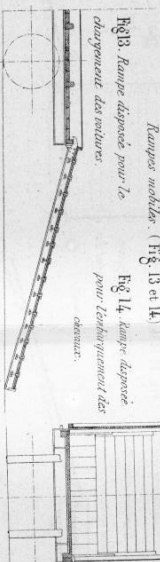


Fig. 15. Chargement de deux caissons à munitions.

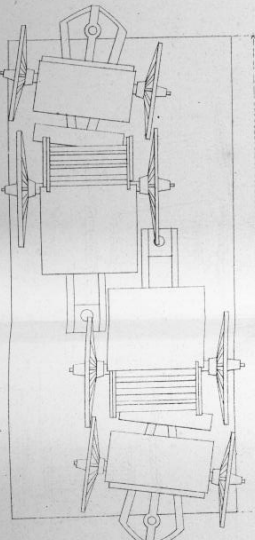


Fig. 16. Supports d'angle des bouquettes. Fig. 17. Supports d'angle des bouquettes.

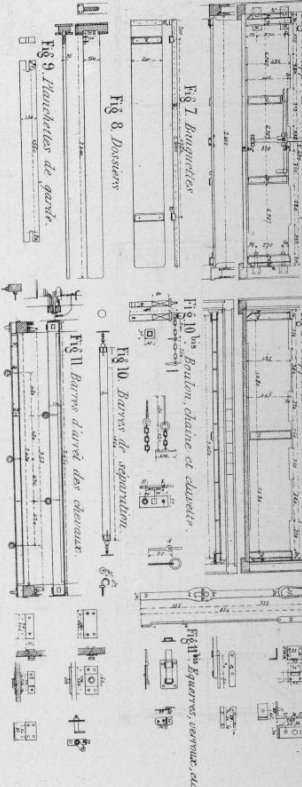


Fig. 18. Supports des dièsses.

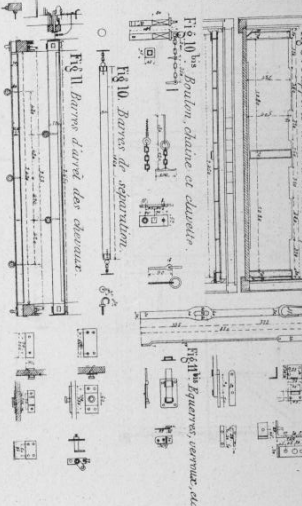


Fig. 19. Supports d'angle des bouquettes.

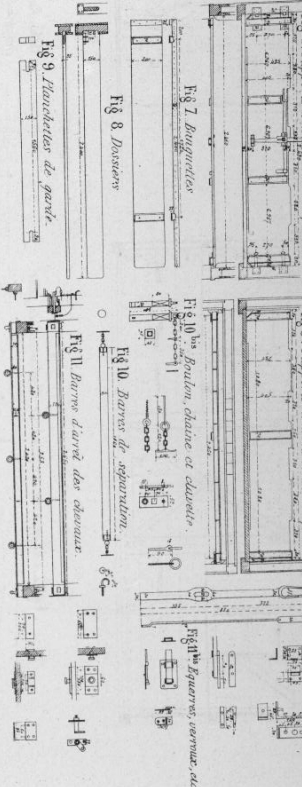


Fig. 20. Supports des dièsses.

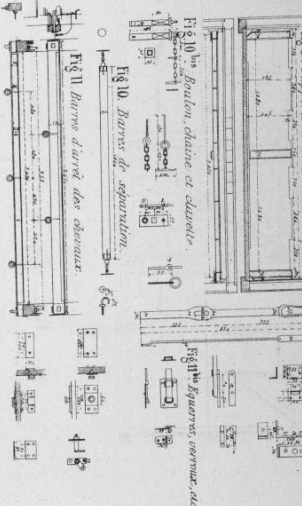


Fig. 21. Supports d'angle des bouquettes.

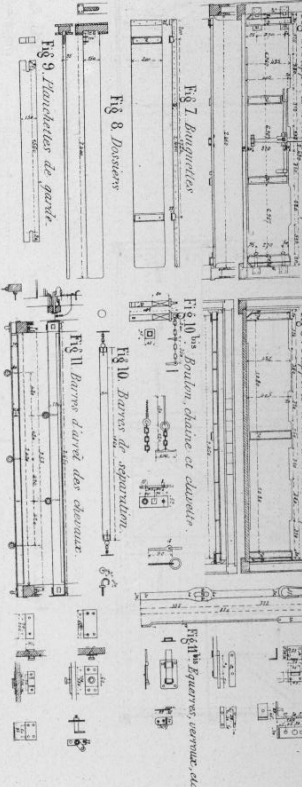


Fig. 22. Supports des dièsses.

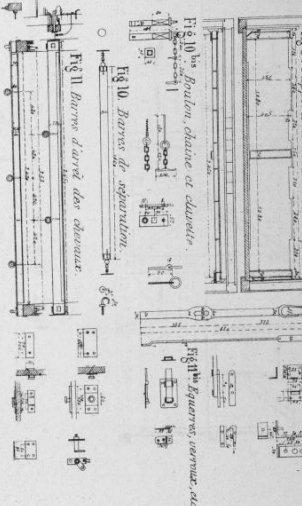


Fig. 23. Supports d'angle des bouquettes.

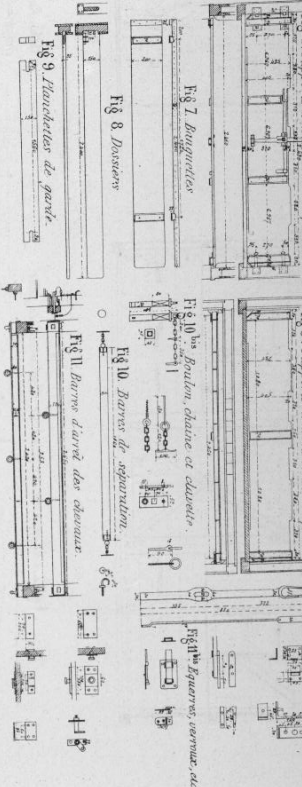


Fig. 24. Supports des dièsses.

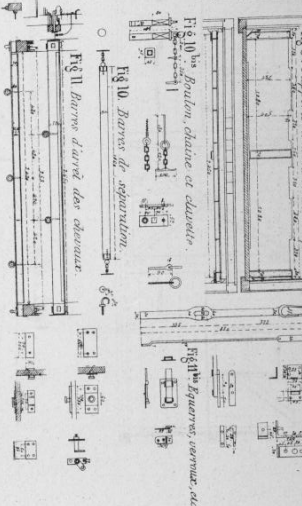


Fig. 25. Supports d'angle des bouquettes.

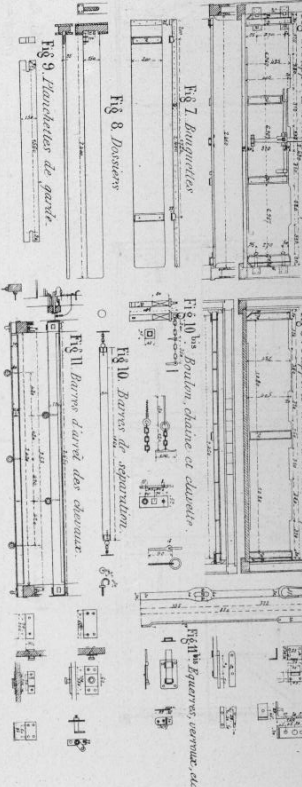


Fig. 26. Supports des dièsses.

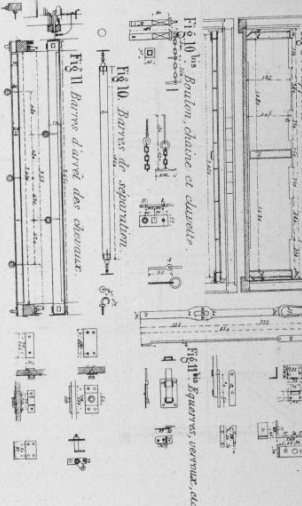


Fig. 27. Supports d'angle des bouquettes.

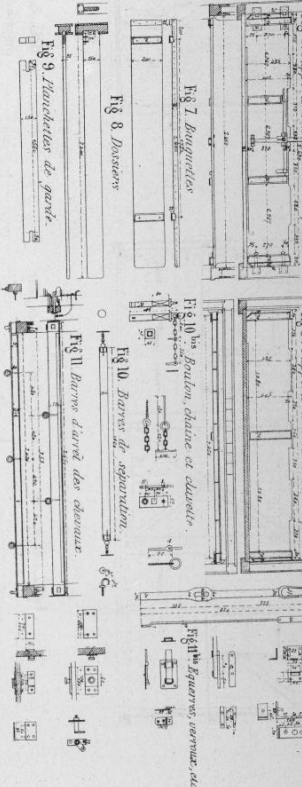


Fig. 28. Supports des dièsses.

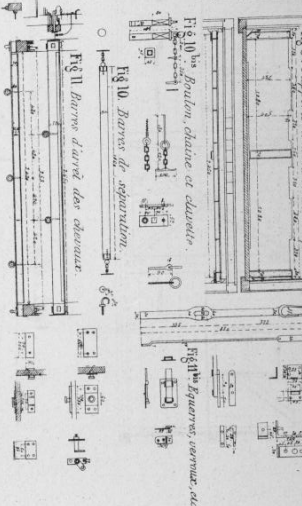


Fig. 29. Supports d'angle des bouquettes.

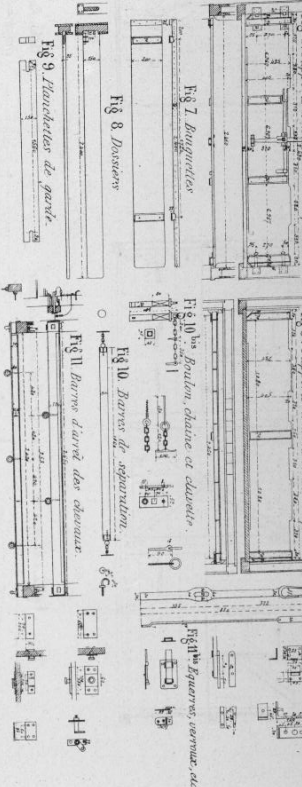


Fig. 30. Supports des dièsses.

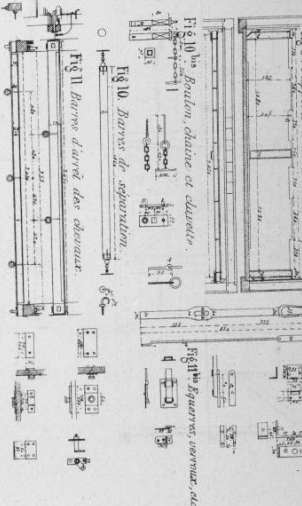


Fig. 31. Supports d'angle des bouquettes.

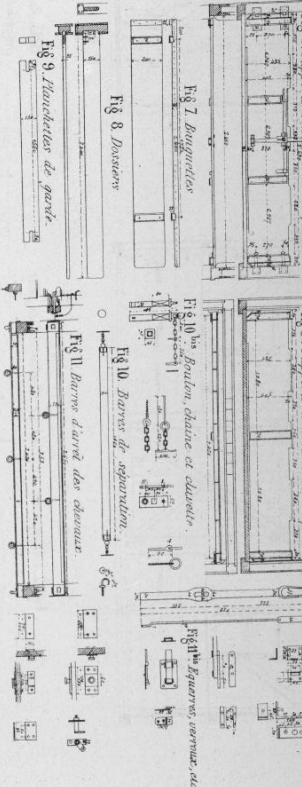


Fig. 32. Supports des dièsses.

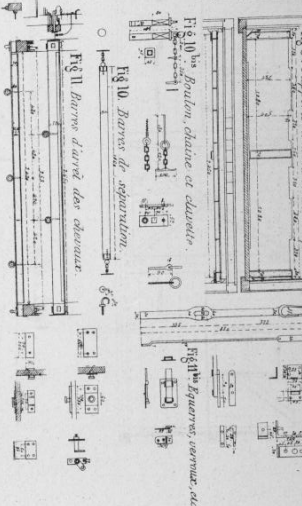


Fig. 33. Supports d'angle des bouquettes.

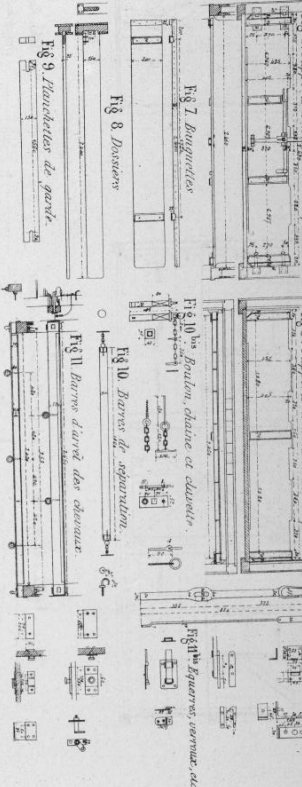


Fig. 34. Supports des dièsses.

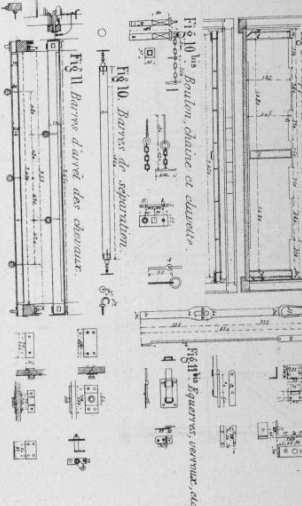


Fig. 35. Supports d'angle des bouquettes.

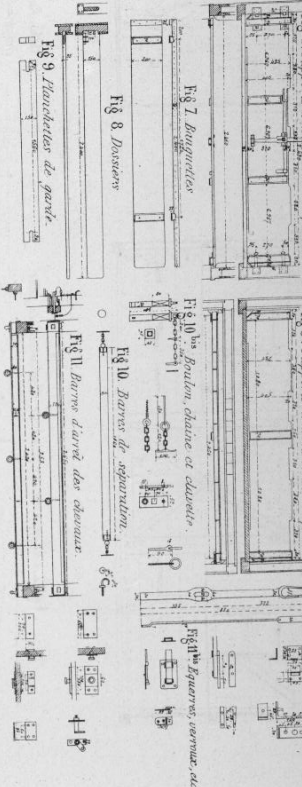


Fig. 36. Supports des dièsses.

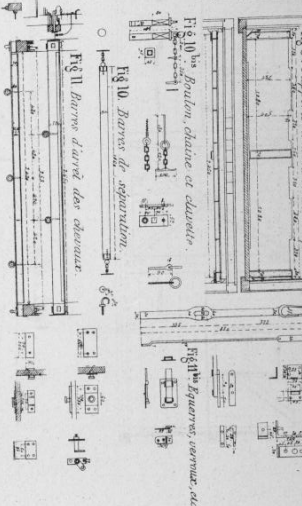


Fig. 37. Supports d'angle des bouquettes.

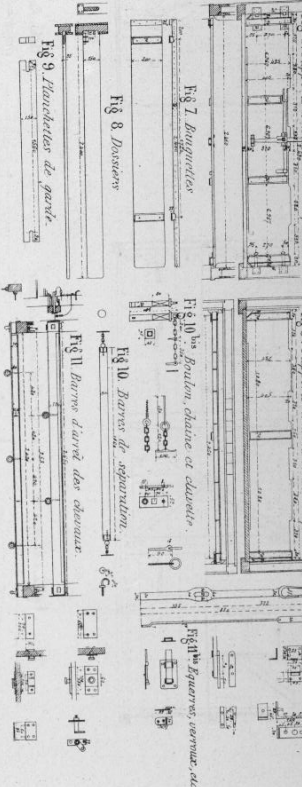


Fig. 38. Supports des dièsses.

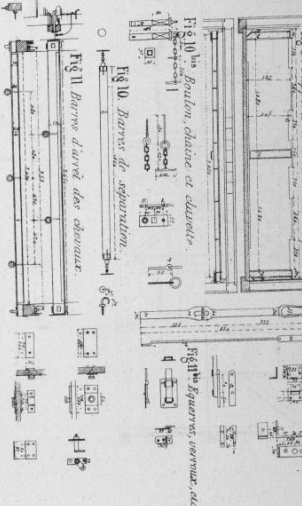


Fig. 39. Supports d'angle des bouquettes.

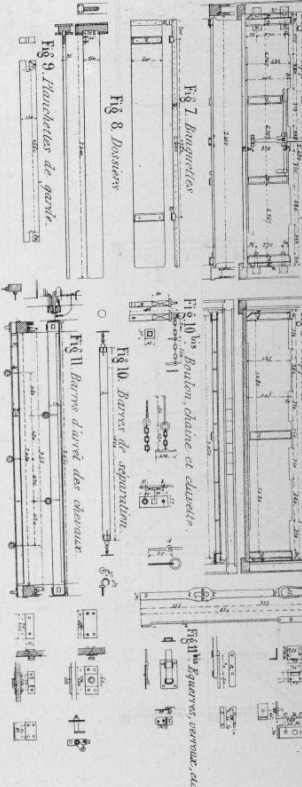


Fig. 40. Supports des dièsses.

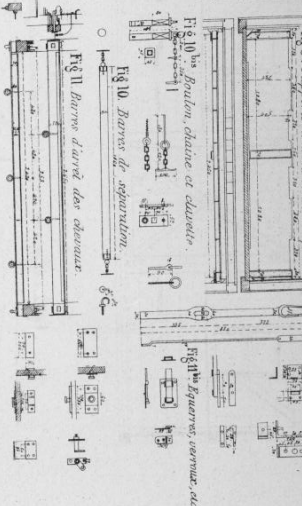


Fig. 41. Supports d'angle des bouquettes.

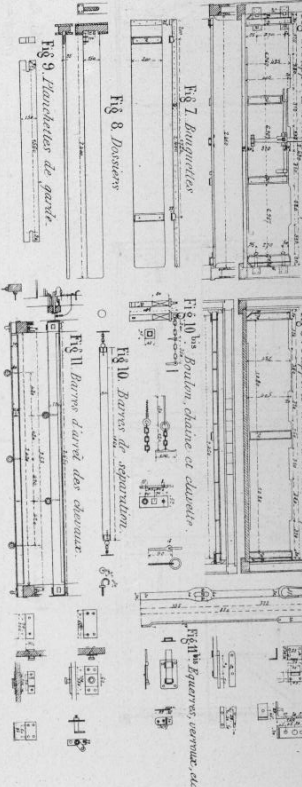


Fig. 42. Supports des dièsses.

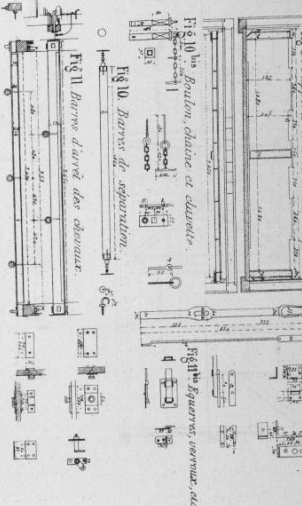


Fig. 43. Supports d'angle des bouquettes.

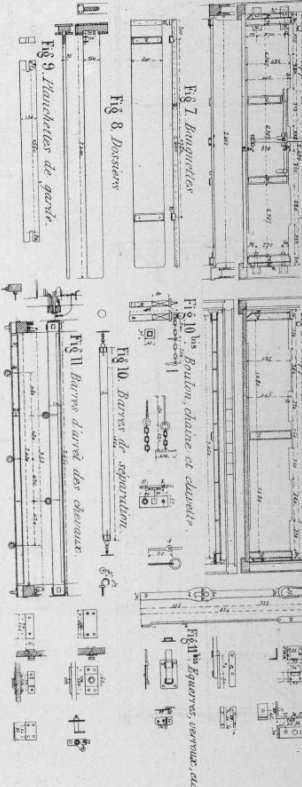


Fig. 44. Supports des dièsses.

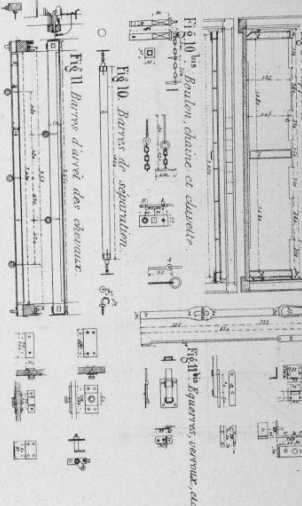


Fig. 45. Supports d'angle des bouquettes.

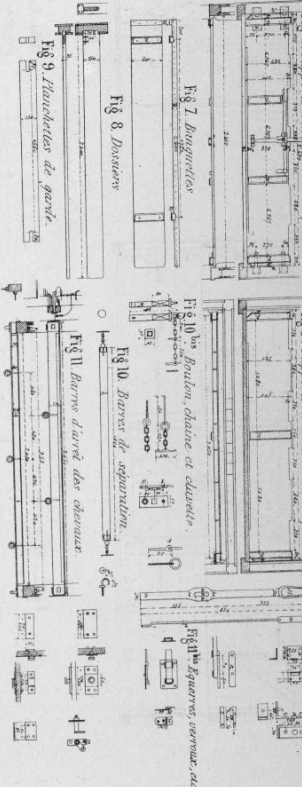


Fig. 46. Supports des dièsses.

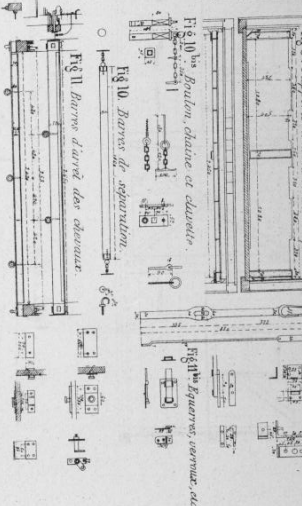


Fig. 47. Supports d'angle des bouquettes.

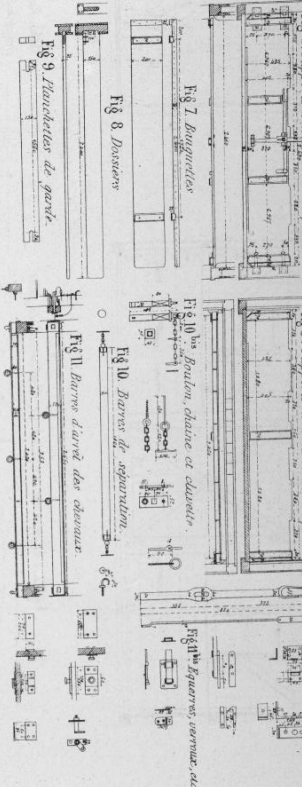


Fig. 48. Supports des dièsses.

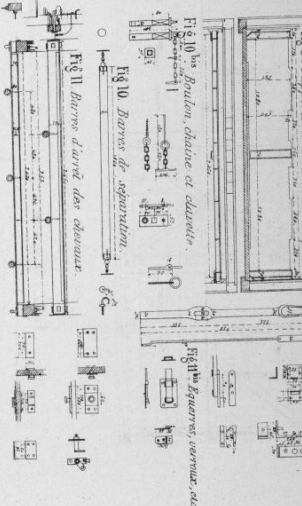


Fig. 49. Supports d'angle des bouquettes.

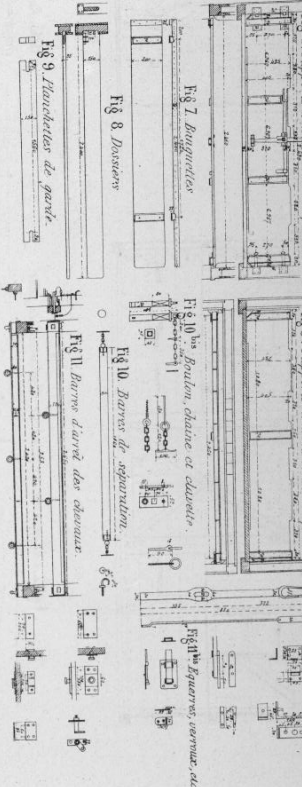


Fig. 50. Supports des dièsses.

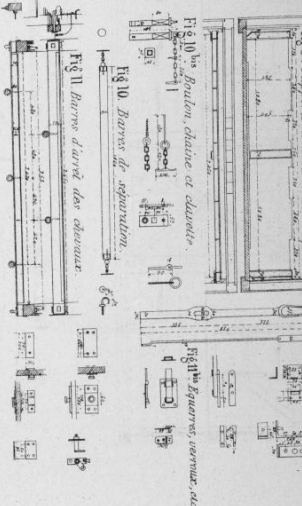


Fig. 51. Supports d'angle des bouquettes.

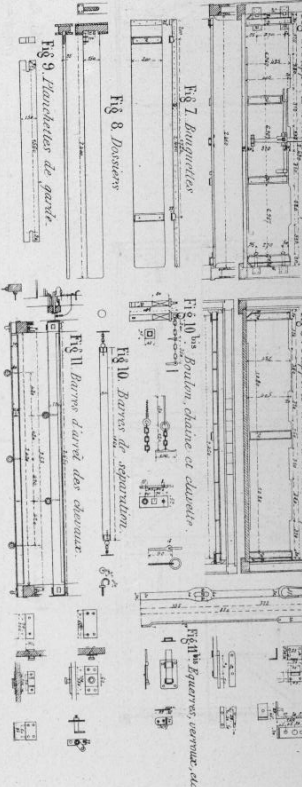


Fig. 52. Supports des dièsses.

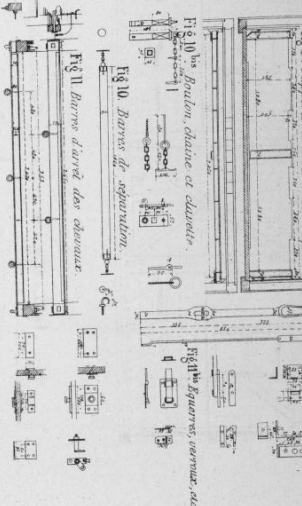


Fig. 53. Supports d'angle des bouquettes.

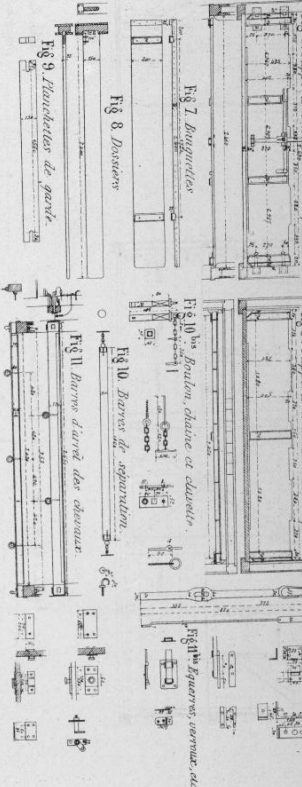


Fig. 54. Supports des dièsses.

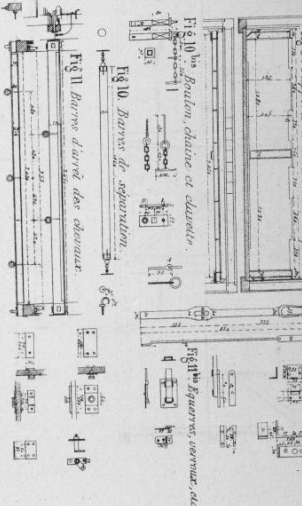


Fig. 55. Supports d'angle des bouquettes.

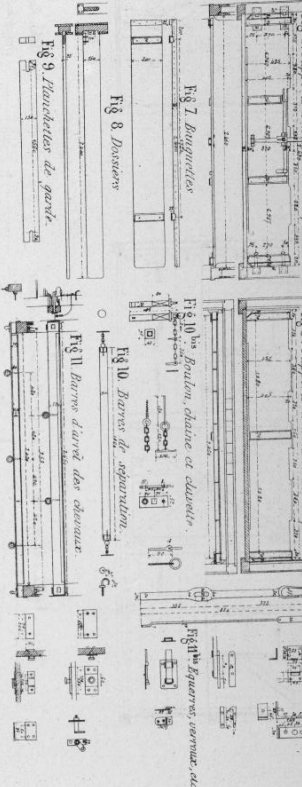


Fig. 56. Supports des dièsses.

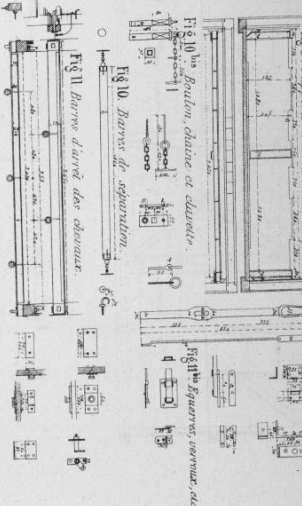


Fig. 57. Supports d'angle des bouquettes.

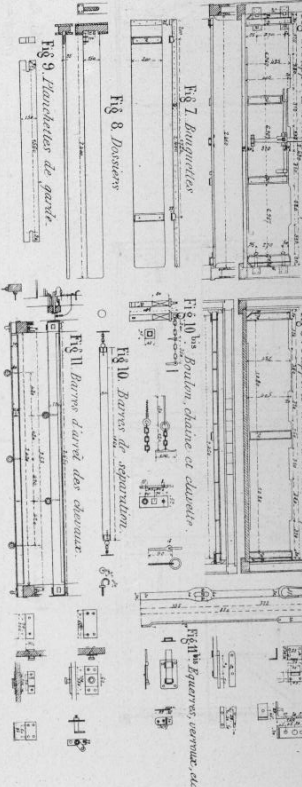


Fig. 58. Supports des dièsses.

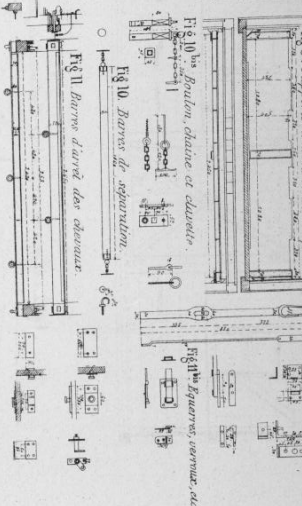


Fig. 59. Supports d'angle des bouquettes.

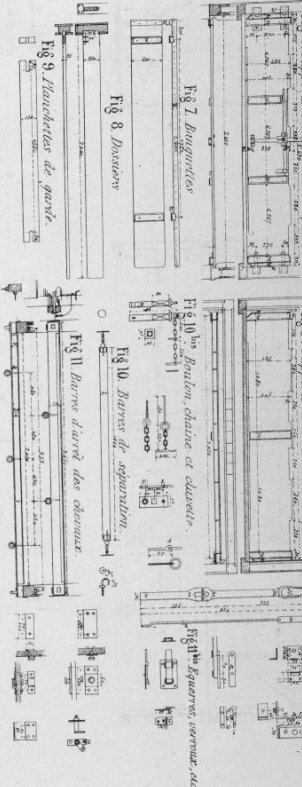


Fig. 60. Supports des dièsses.

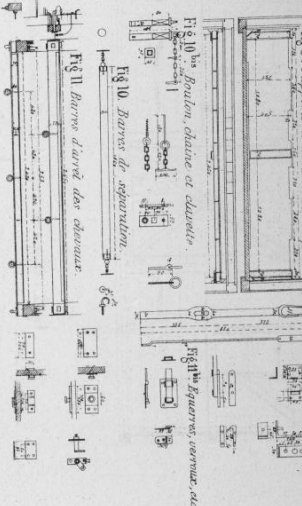


Fig. 61. Supports d'angle des bouquettes.

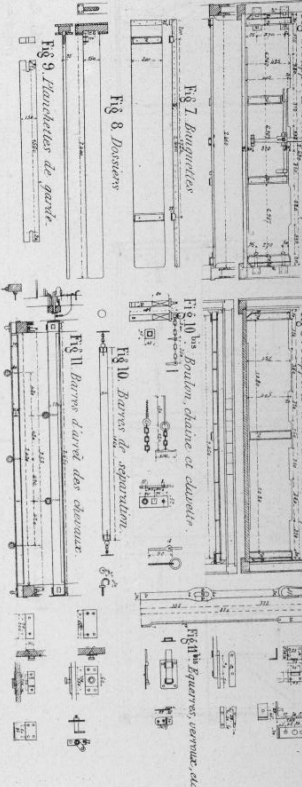


Fig. 62. Supports des dièsses.

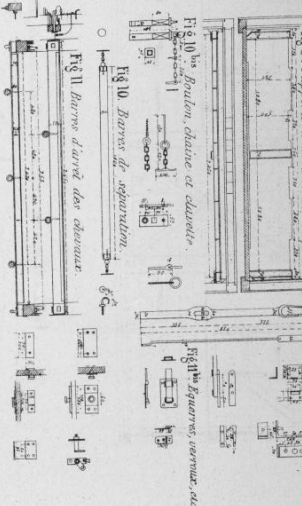


Fig. 63. Supports d'angle des bouquettes.

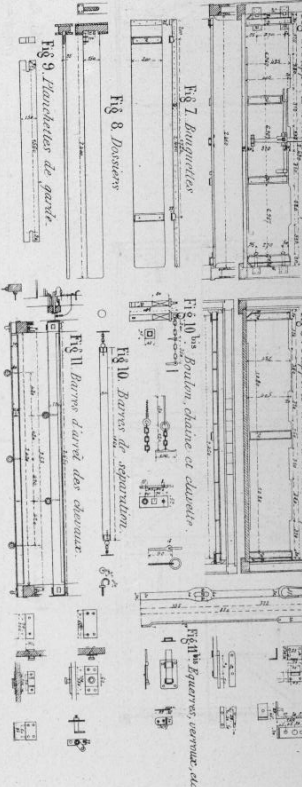


Fig. 64. Supports des dièsses.

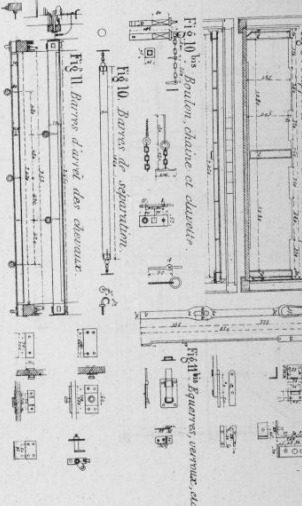


Fig. 65. Supports d'angle des bouquettes.

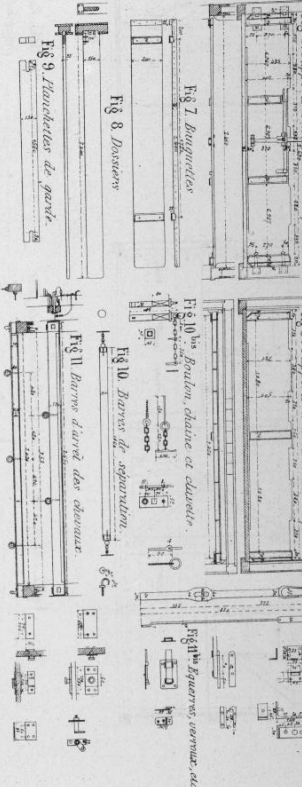


Fig. 66. Supports des dièsses.

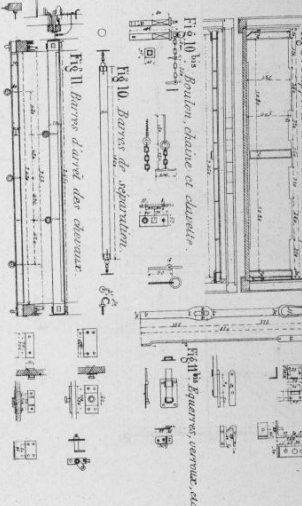


Fig. 67. Supports d'angle des bouquettes.

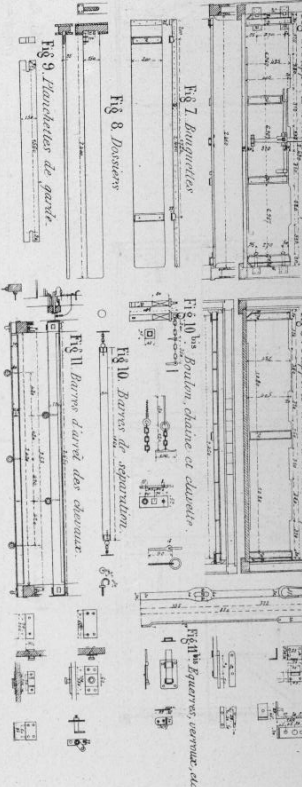


Fig. 68. Supports des dièsses.

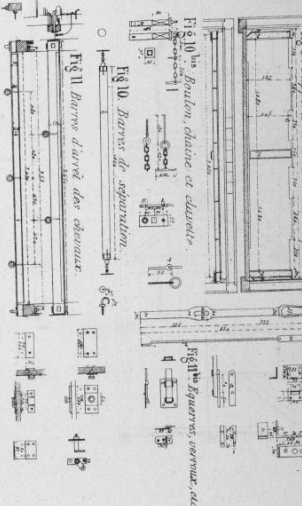


Fig. 69. Supports d'angle des bouquettes.

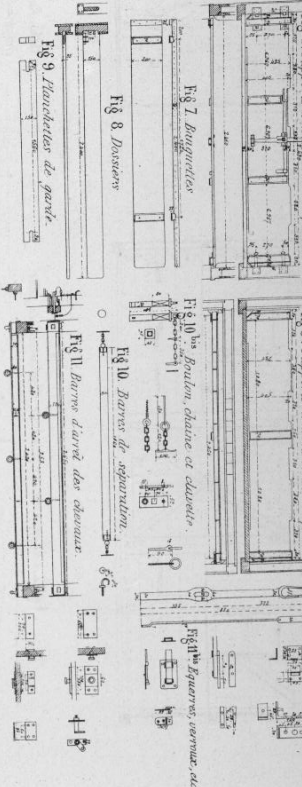


Fig. 70. Supports des dièsses.

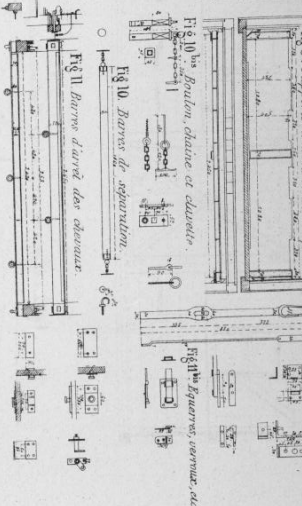


Fig. 71. Supports d'angle des bouquettes.

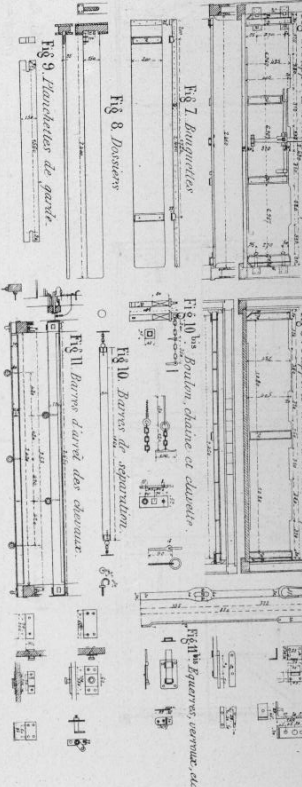


Fig. 72. Supports des dièsses.

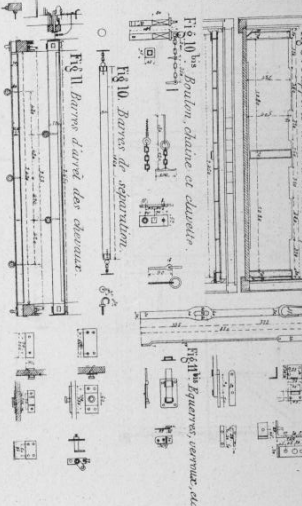


Fig. 73. Supports d'angle des bouquettes.

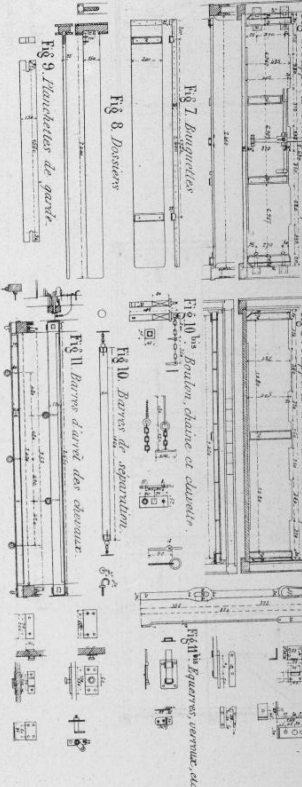


Fig. 74. Supports des dièsses.

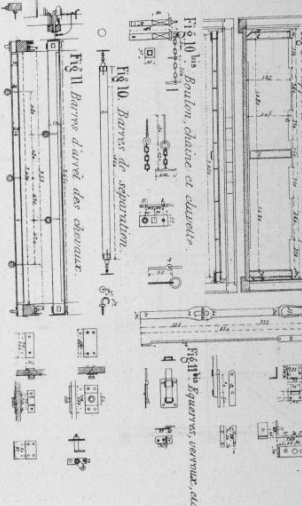


Fig. 75. Supports d'angle des bouquettes.

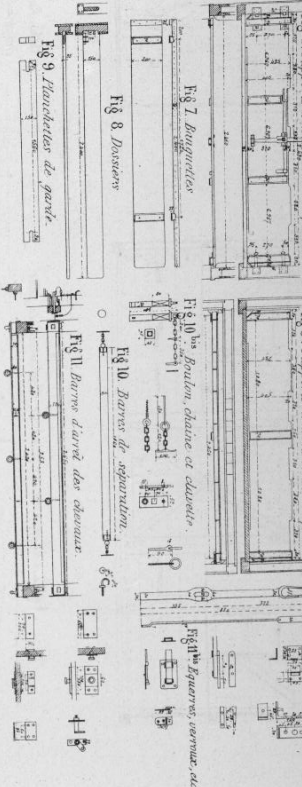


Fig. 76. Supports des dièsses.

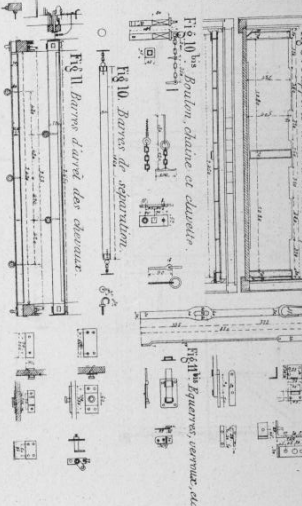


Fig. 77. Supports d'angle des bouquettes.

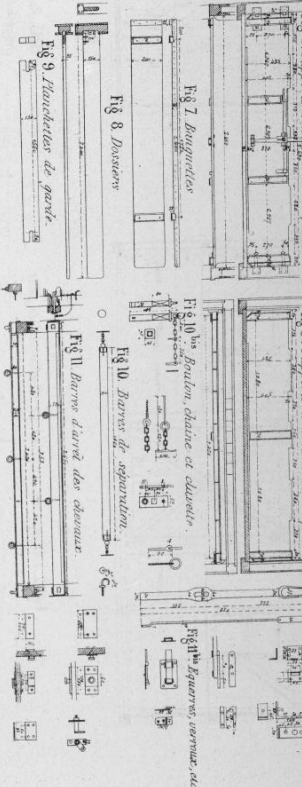


Fig. 78. Supports des dièsses.

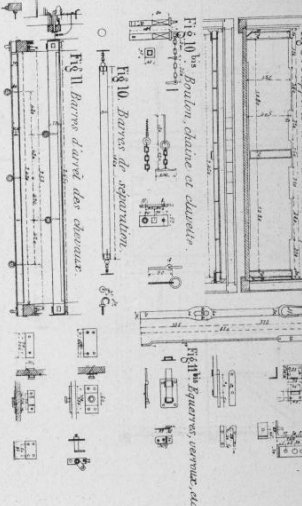


Fig. 79. Supports d'angle des bouquettes.

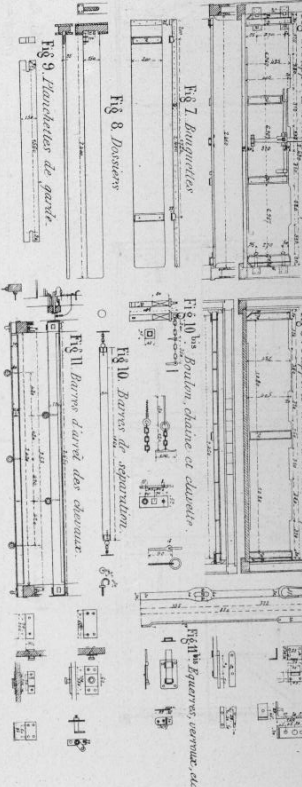


Fig. 80. Supports des dièsses.

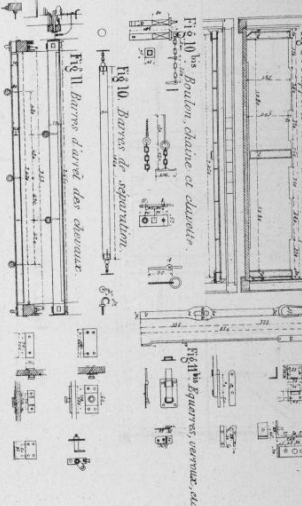


Fig. 81. Supports d'angle des bouquettes.

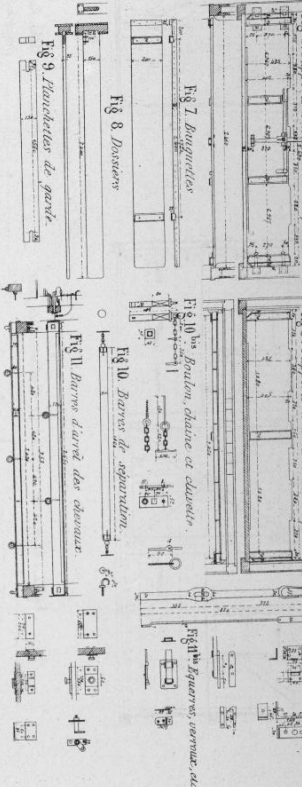


Fig. 82. Supports des dièsses.

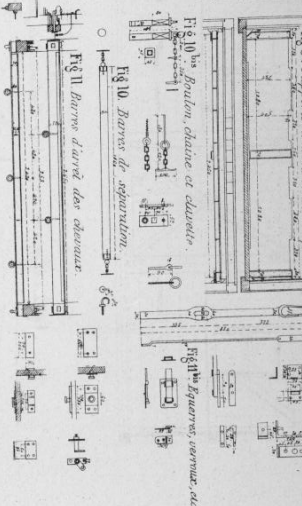


Fig. 83. Supports d'angle des bouquettes.

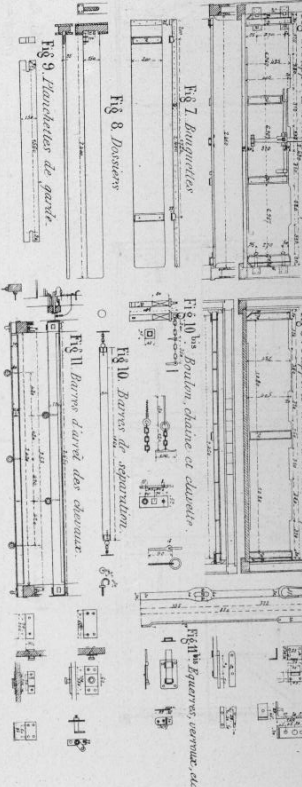


Fig. 84. Supports des dièsses.

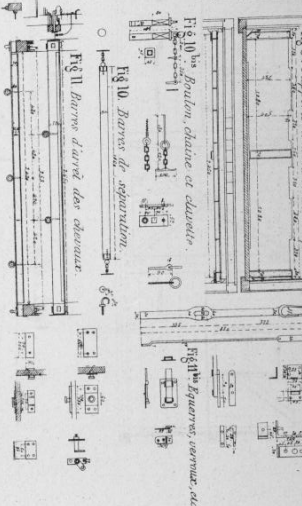


Fig. 85. Supports d'angle des bouquettes.

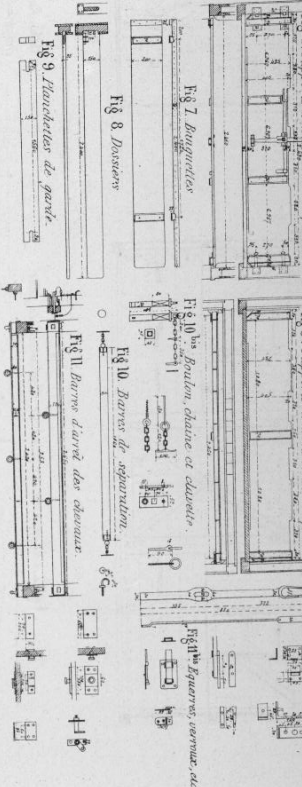


Fig. 86. Supports des dièsses.

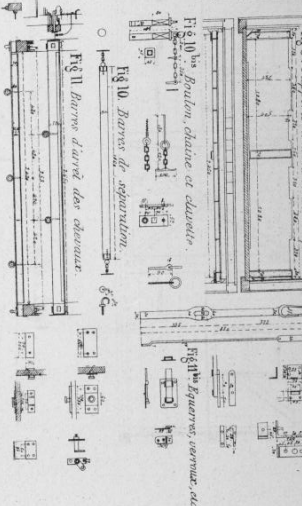


Fig. 87. Supports d'angle des bouquettes.

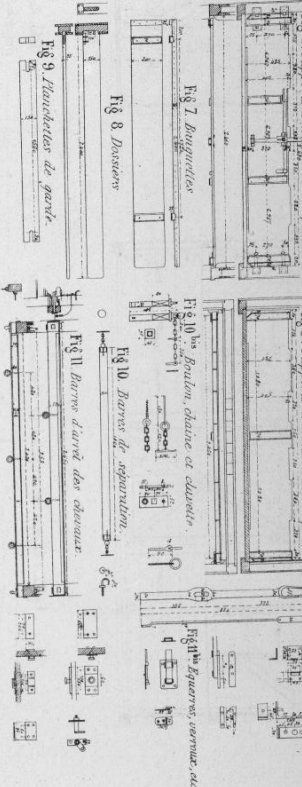


Fig. 88. Supports des dièsses.

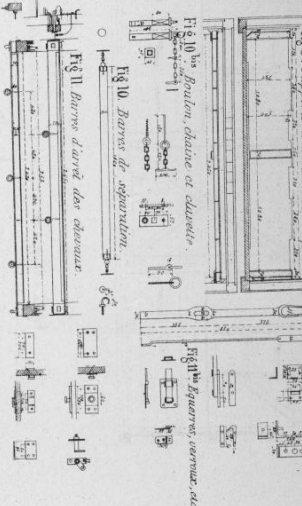


Fig. 89. Supports d'angle des bouquettes.

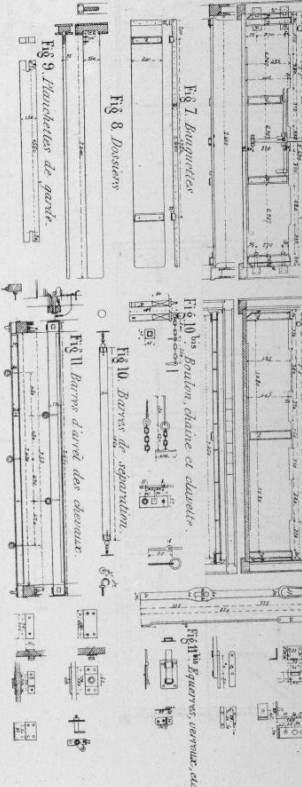


Fig. 90. Supports des dièsses.

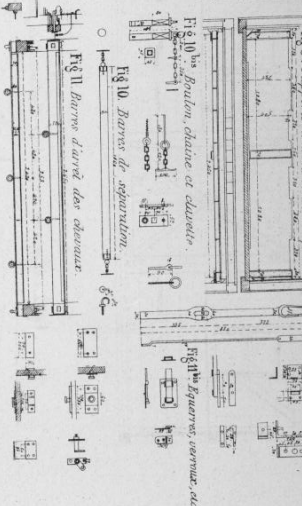


Fig. 91. Supports d'angle des bouquettes.

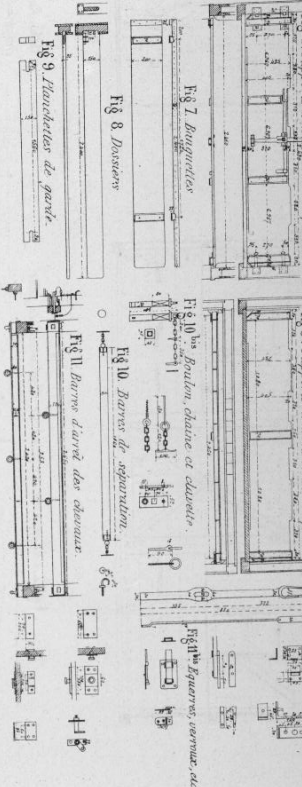


Fig. 92. Supports des dièsses.

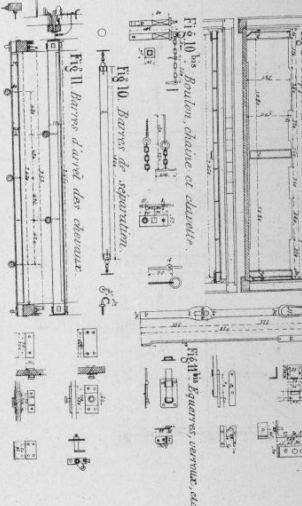


Fig. 93. Supports d'angle des bouquettes.

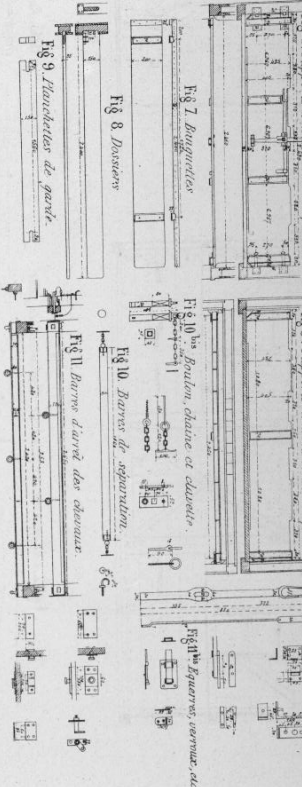


Fig. 94. Supports des dièsses.

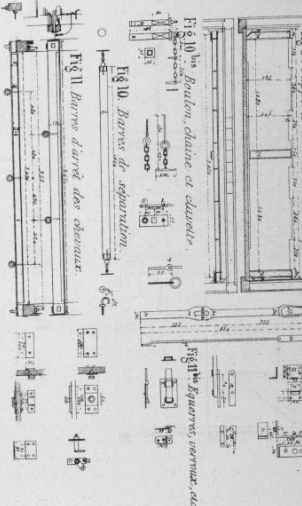


Fig. 95. Supports d'angle des bouquettes.

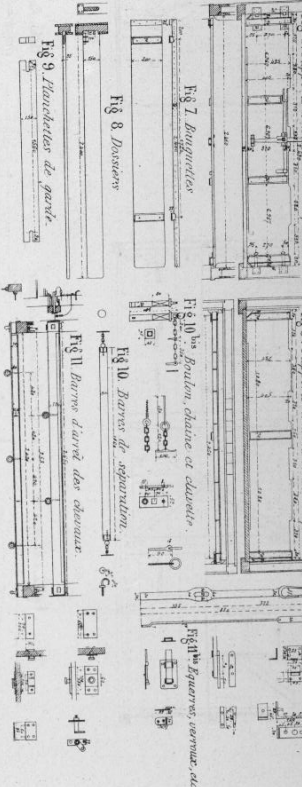


Fig. 96. Supports des dièsses.

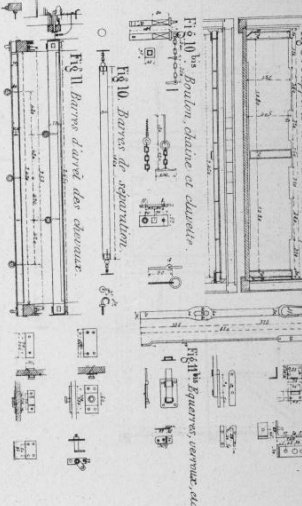


Fig. 97. Supports d'angle des bouquettes.

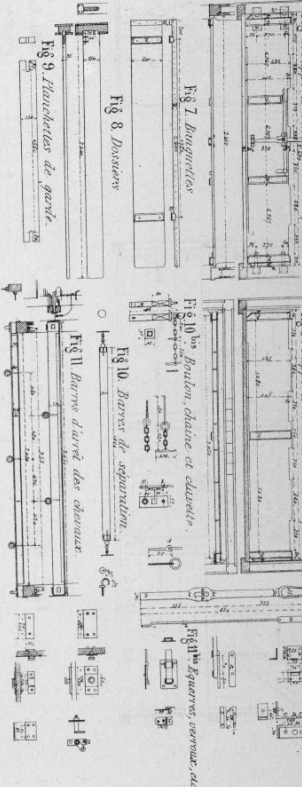


Fig. 98. Supports des dièsses.

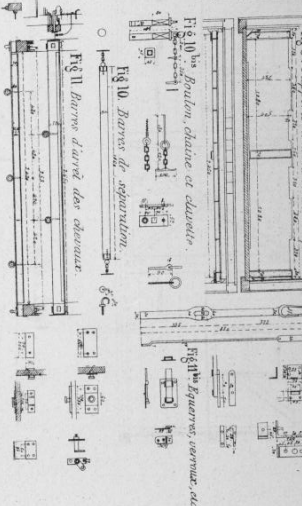


Fig. 99. Supports d'angle des bouquettes.

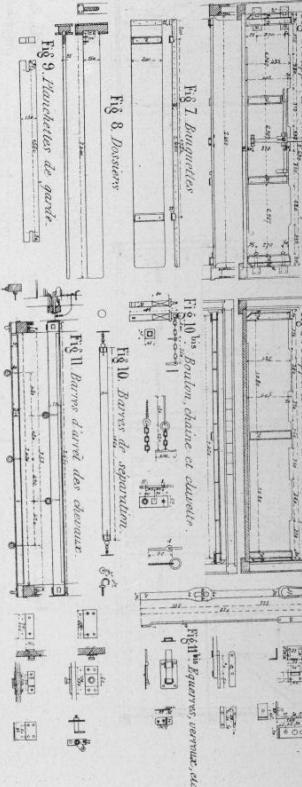


Fig. 100. Supports des dièsses.

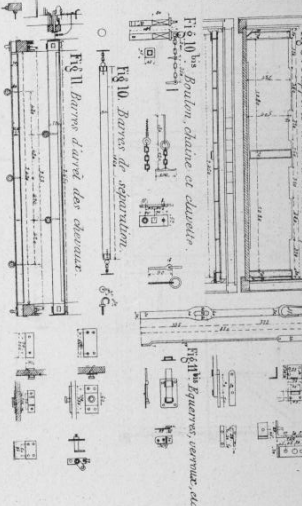


Fig. 101. Supports d'angle des bouquettes.

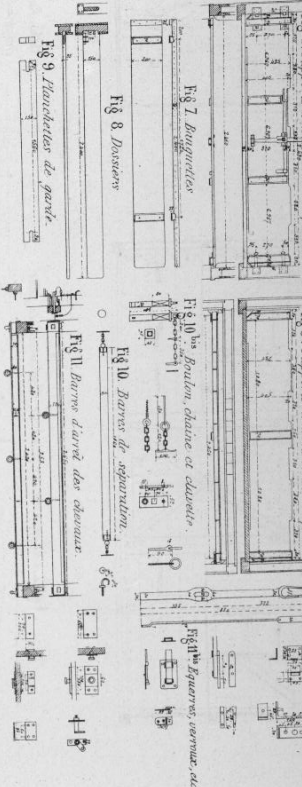


Fig. 102. Supports des dièsses.

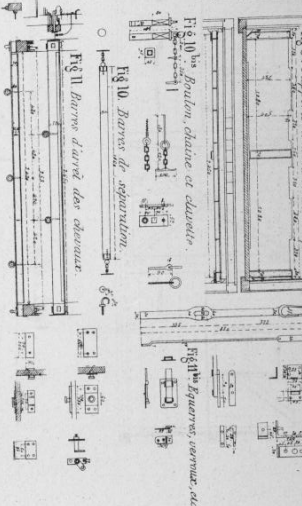


Fig. 103. Supports d'angle des bouquettes.

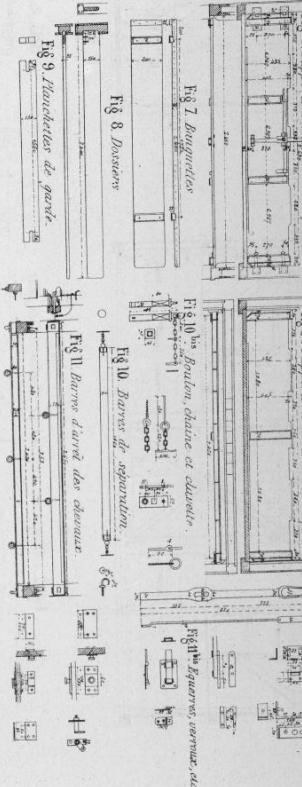


Fig. 104. Supports des dièsses.

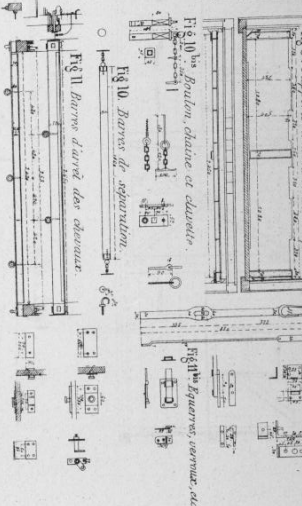


Fig. 105. Supports d'angle des bouquettes.

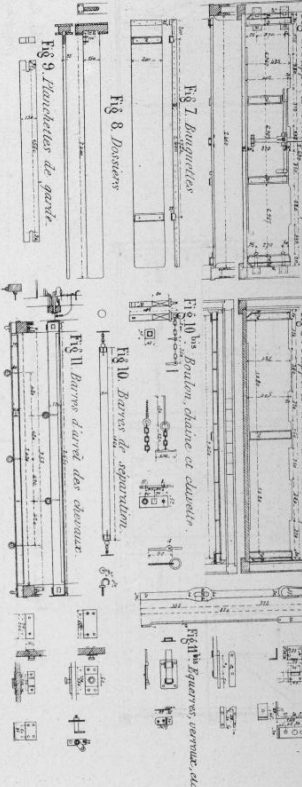


Fig. 106. Supports des dièsses.

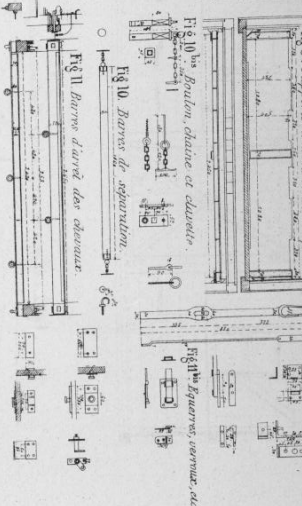


Fig. 107. Supports d'angle des bouquettes.

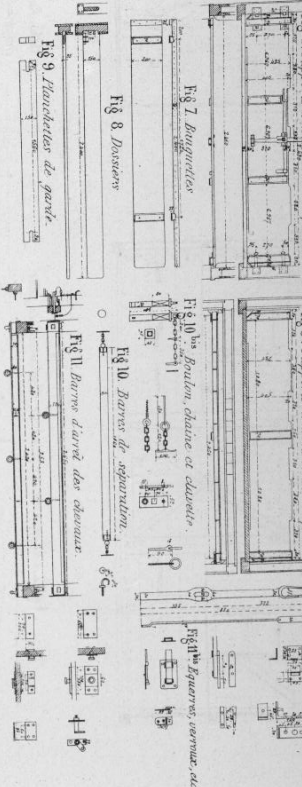


Fig. 108. Supports des dièsses.

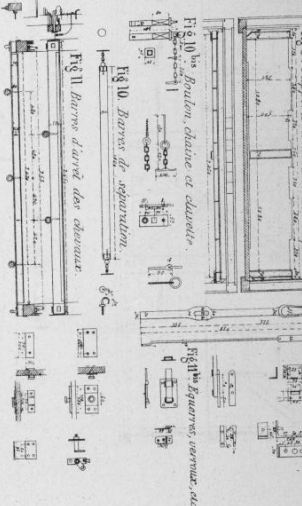


Fig. 109. Supports d'angle des bouquettes.

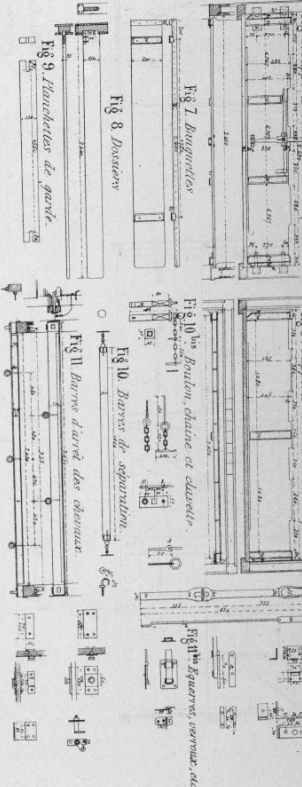


Fig. 110. Supports des dièsses.

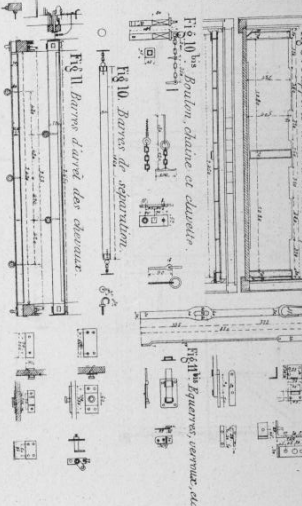


Fig. 111. Supports d'angle des bouquettes.

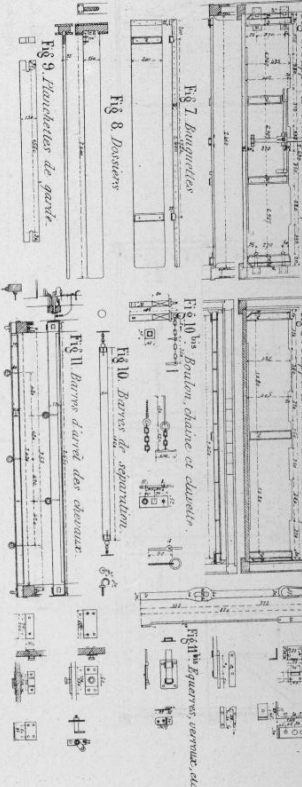


Fig. 112. Supports des dièsses.

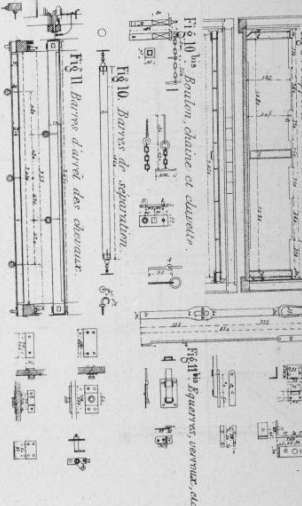


Fig. 113. Supports d'angle des bouquettes.

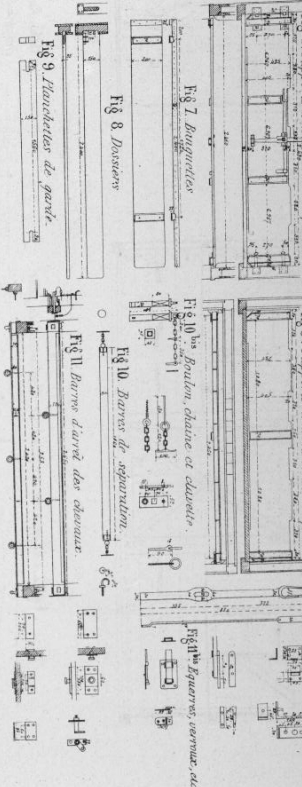


Fig. 114. Supports des dièsses.

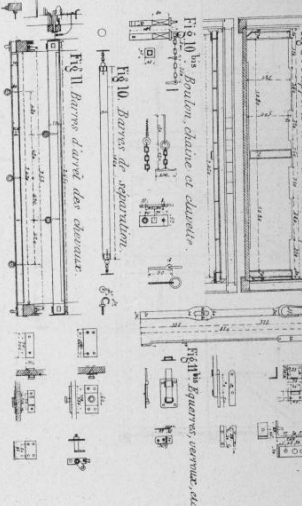


Fig. 115. Supports d'angle des bouquettes.

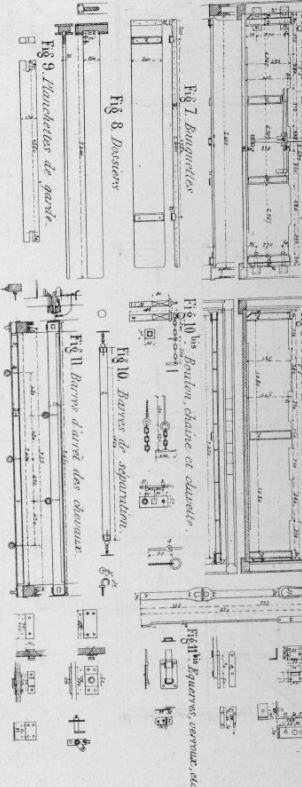


Fig. 116. Supports des dièsses.

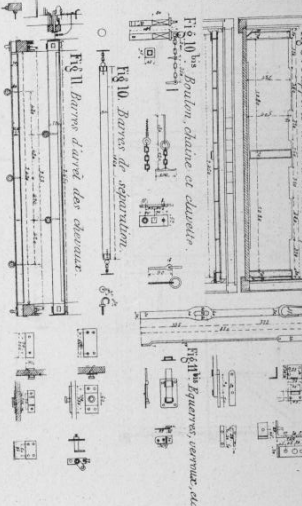


Fig. 117. Supports d'angle des bouquettes.

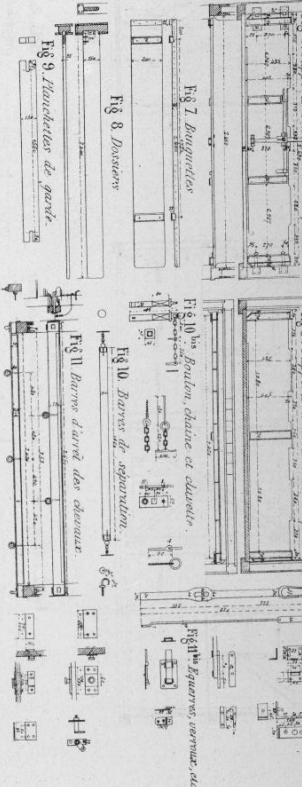


Fig. 118. Supports des dièsses.

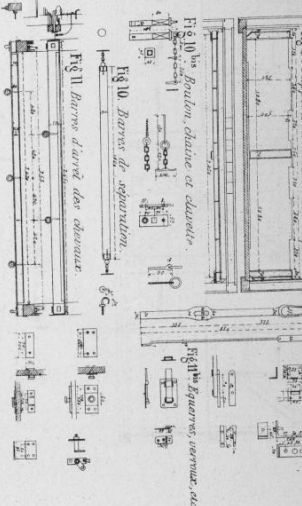


Fig. 119. Supports d'angle des bouquettes.

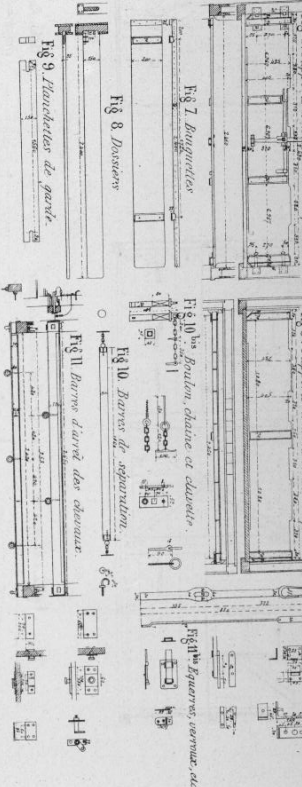


Fig. 120. Supports des dièsses.

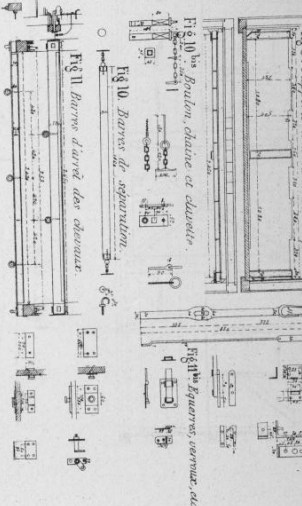


Fig. 121. Supports d'angle des bouquettes.

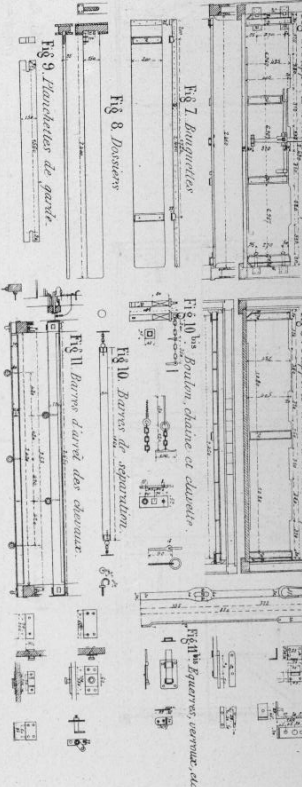


Fig. 122. Supports des dièsses.

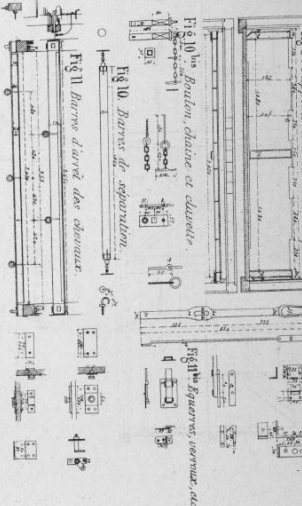


Fig. 123. Supports d'angle des bouquettes.

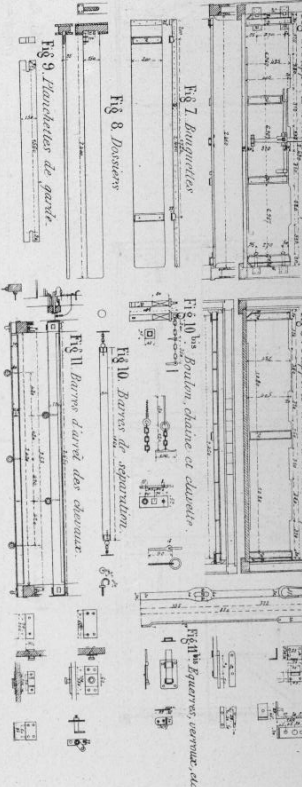


Fig. 124. Supports des dièsses.

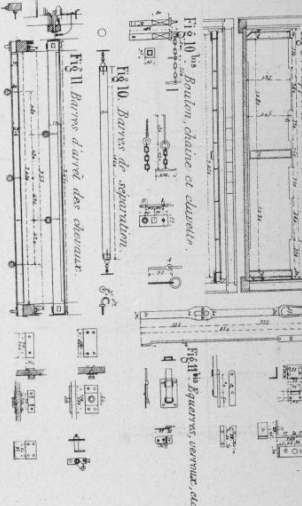


Fig. 125. Supports d'angle des bouquettes.

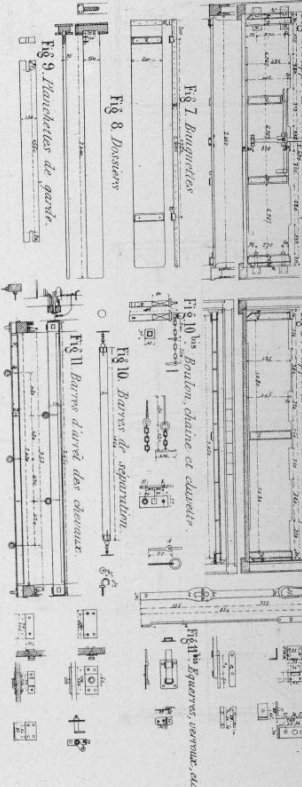


Fig. 126. Supports des dièsses.

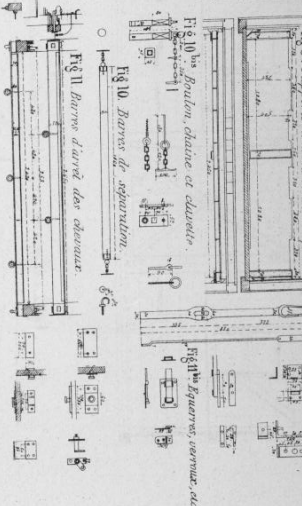


Fig. 127. Supports d'angle des bouquettes.

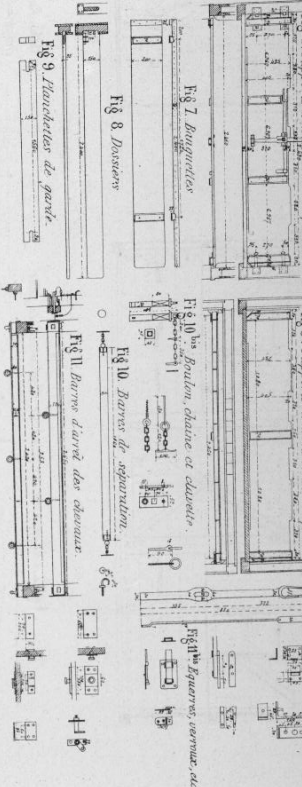


Fig. 128. Supports des dièsses.

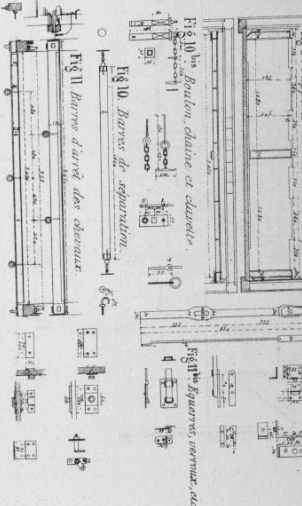


Fig. 129. Supports d'angle des bouquettes.

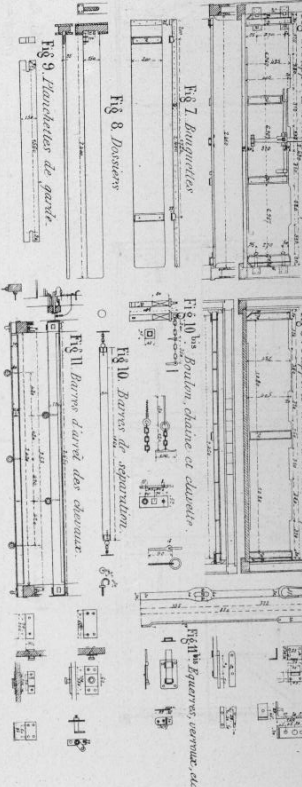


Fig. 130. Supports des dièsses.

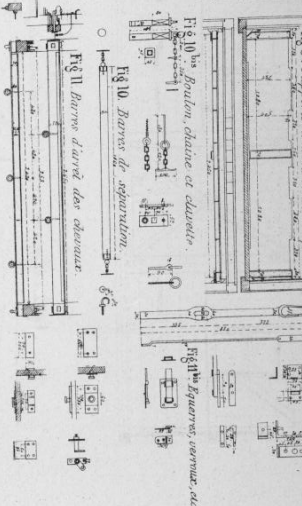


Fig. 131. Supports d'angle des bouquettes.

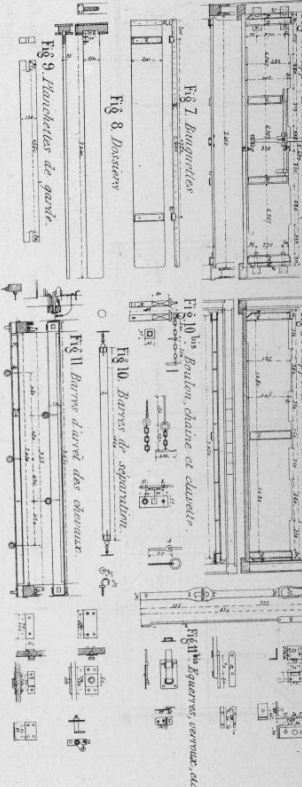


Fig. 132. Supports des dièsses.

Fig. 1. Coupe longitudinale. A. B.

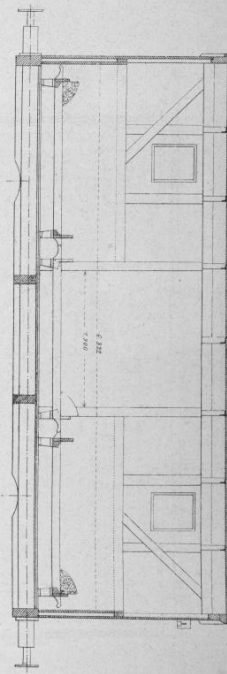


Fig. 2. Coupe horizontale et plan.

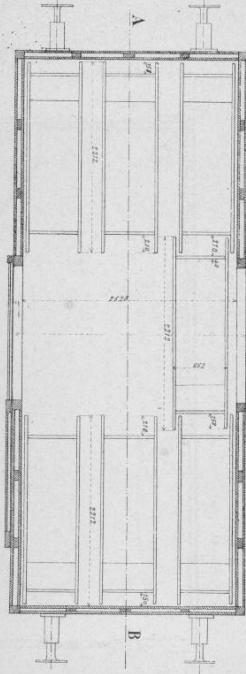


Fig. 3. Elevation du brucard.

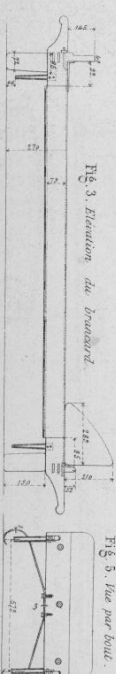


Fig. 5. Vis par bout.

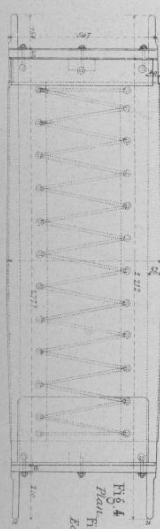


Fig. 4. Plan.
Fig. 5 a 5. (voir Pl. XV) Fig. 6 a 9.)
Breveté (Hongrie)
Fig. 12 a 14.
Brev. 7/14

Fig. 6 et 7. Coupe longitudinale du wagon à blessés.

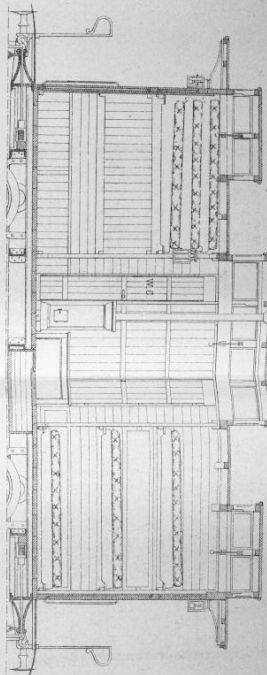


Fig. 8. Blessés assés.

Fig. 8 et 9. Coupe horizontale du wagon à blessés.

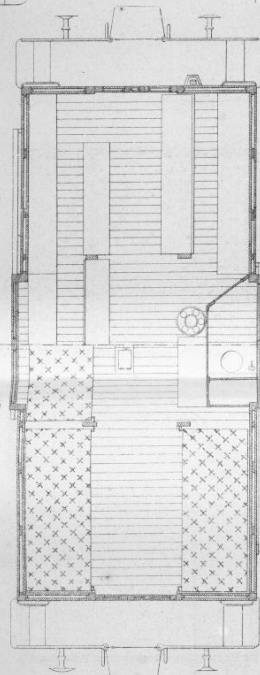


Fig. 12. Coupe longitudinale du brucard supérieur.

Fig. 13. Plan.

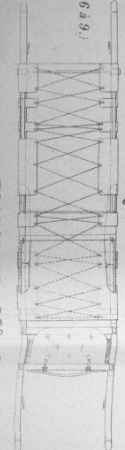


Fig. 14. Coupe transversale.

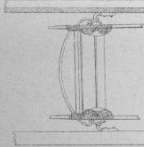


Fig. 10. Coupe longitudinale du wagon cuisine.

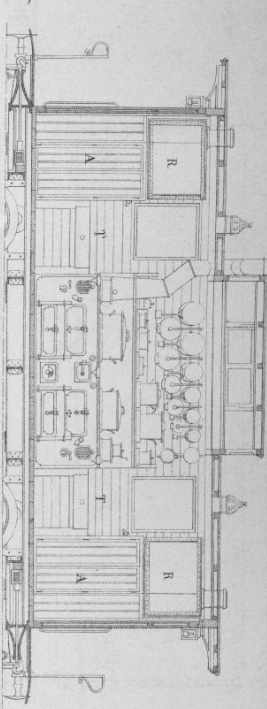


Fig. 11. Coupe horizontale du wagon cuisine.

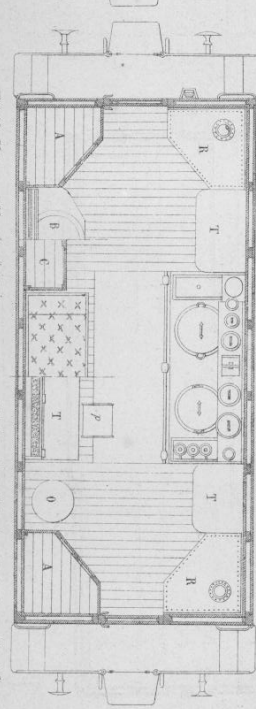


Fig. 16. Voiture à blessés chargée sur plateau. (Attributa Hongry)

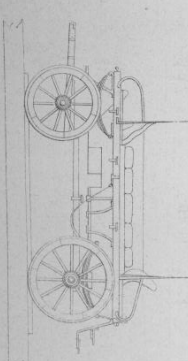
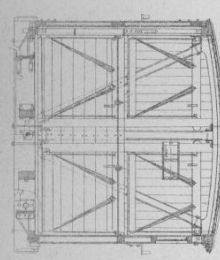


Fig. 15. Lits à blessés (Nord-Empire) (Attributa Hongry)



TRANSPORT DES BLESSÉS

Fig. 11 et 12. — Frein à machoires (Lyon à la Croix-Rouge).

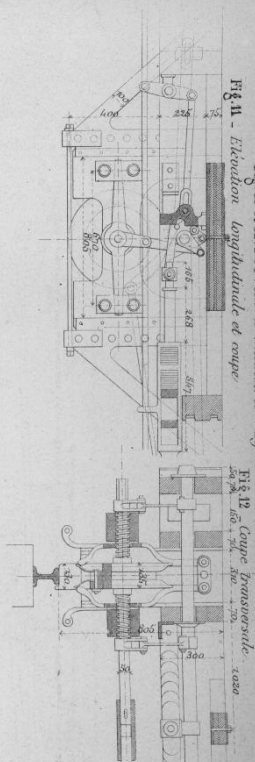
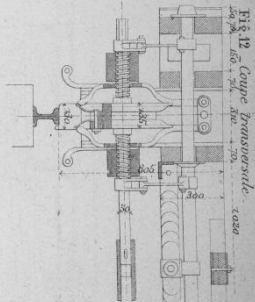


Fig. 13. — Coupe transversale.



Chemins de fer de Lausanne-Neuchâtel (Suisse).
Châssis du Végon-frein. (Fig. 1 et 2.) — Etablie - 1/25.

Fig. 1. — coupe longitudinale.

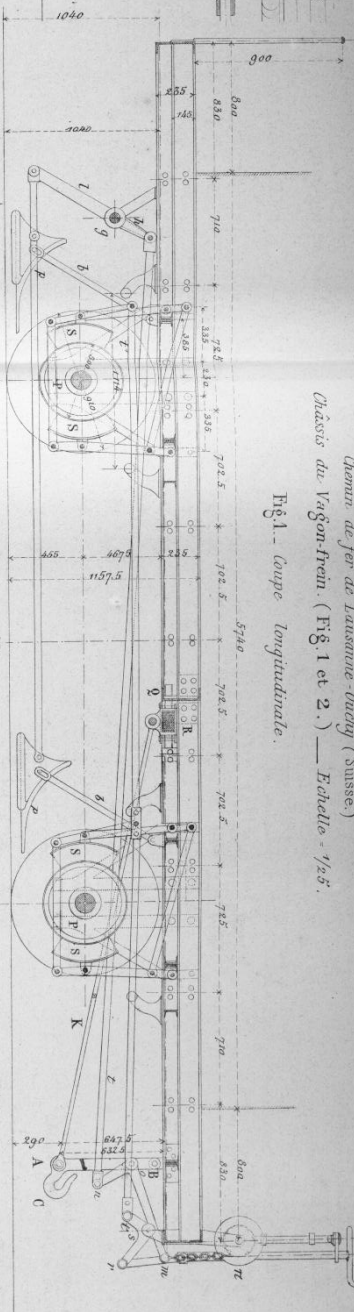


Fig. 4.



Fig. 2. coupe horizontale et plan.

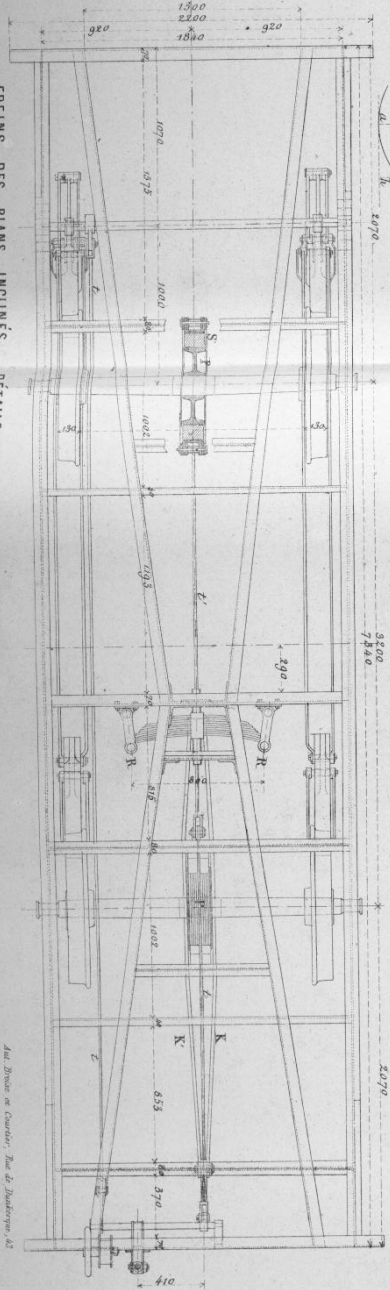
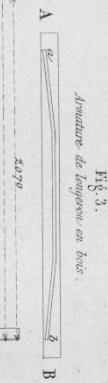


Fig. 3.



Structure de trolley en bois.

Fig. 3.

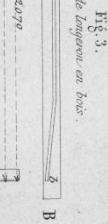


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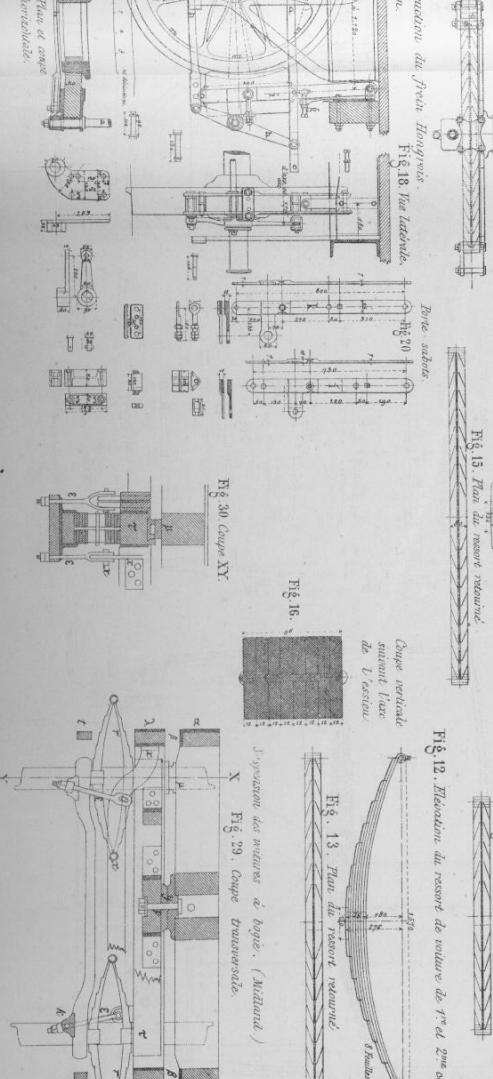
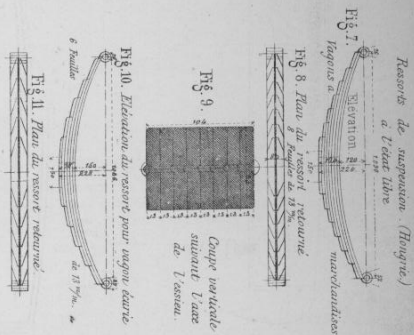
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(Fig. 1 à 2) *Matrices de sûreté (Hongrie)*

Fig. 1 Elevation

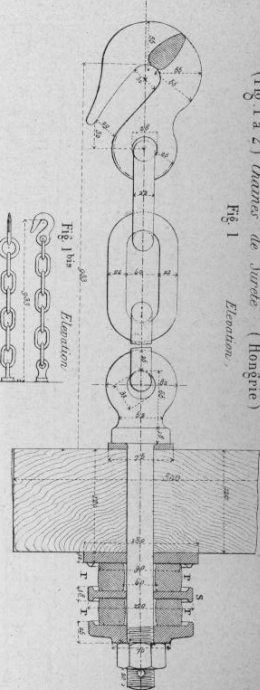
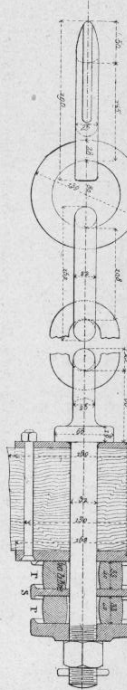


Fig. 1 bis Elevation

Fig. 2 Plan



Prochets d'attelage (Allemagne) (Fig. 3 à 6)

Fig. 3 Elevation

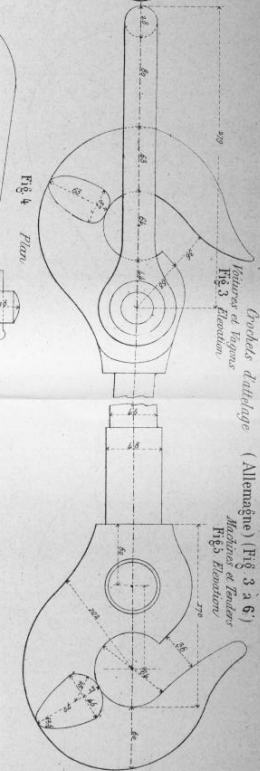
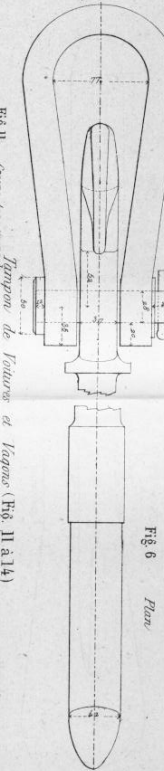


Fig. 4 Plan

Fig. 6 Plan



Tendeur à attelage pour voitures à lagons (Hongrie) (Fig. 7 à 8)

Fig. 7 Elevation

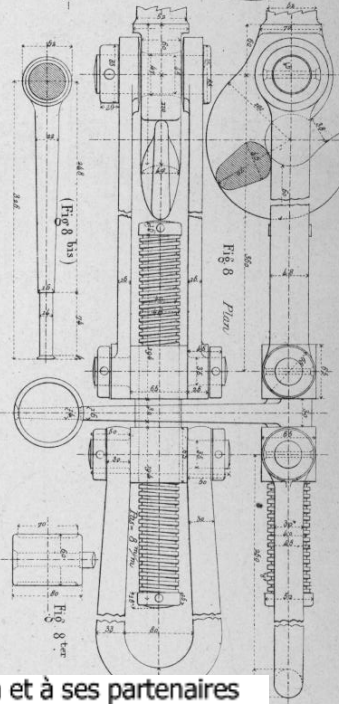
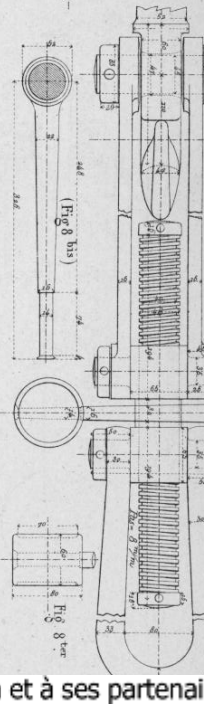


Fig. 8 Plan



Tendeur à défile pour voitures en marche (South-Eastern) (Fig. 9 à 10)

Fig. 9 Plan

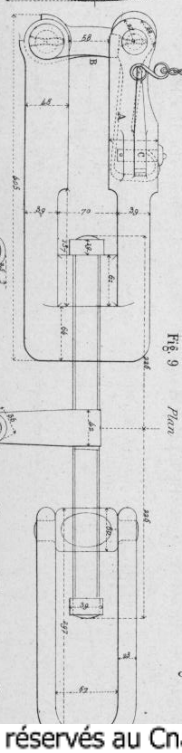
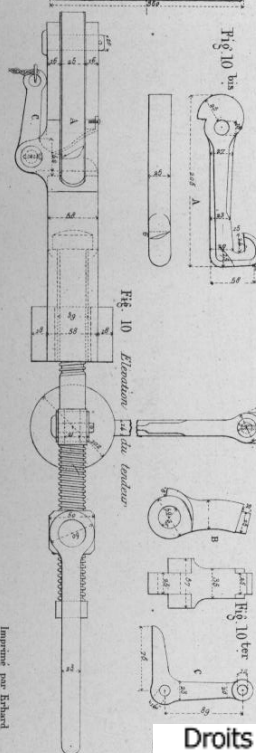


Fig. 10 bis

Fig. 10 Elevation



Montage du Tendeur de lagons (Fig. 15 à 16), Montage du Tendeur de voitures (Fig. 17 à 18)

Fig. 15 Elevation



Fig. 16 Plan

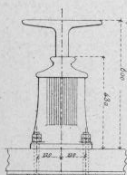


Fig. 17 Elevation

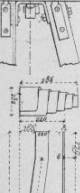


Fig. 18 Plan

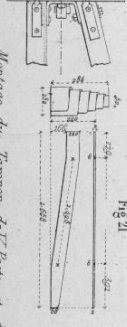


Fig. 11 coupe transversale

Fig. 12 coupe longitudinale

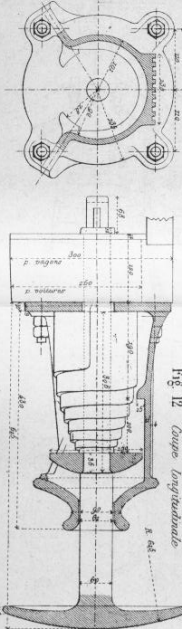


Fig. 13 Plan

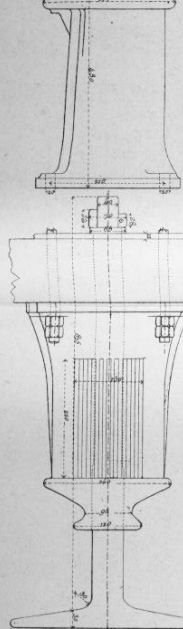


Fig. 14 coupe transversale

Fig. 15 coupe longitudinale

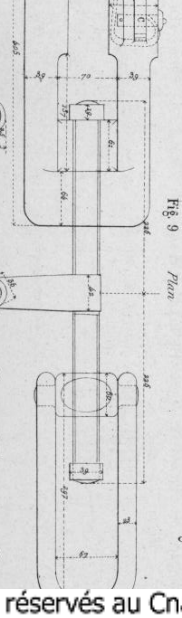


Fig. 16 Plan

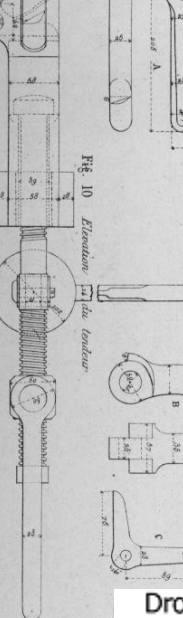


Fig. 17 coupe transversale

Fig. 18 coupe longitudinale

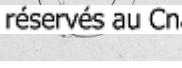


Fig. 19 Plan



DÉTAILS TRACTION ET CHOC

Gravé par Edvard

Imprimé par Edvard

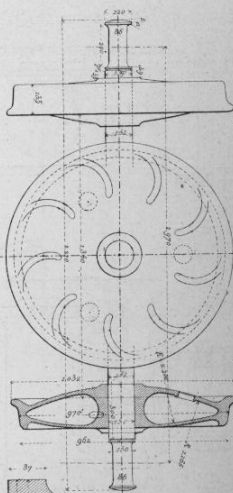
Fig. 1. Roue en fonte (Etat Hongrois) (Fig. 1 et 1^{bis})

Fig. 2. Roue en fonte (Etat Hongrois) (Fig. 2 bis)

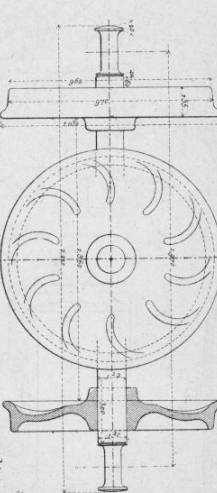


Fig. 3. Roue à contre on (Plat) (Fig. 3 bis)

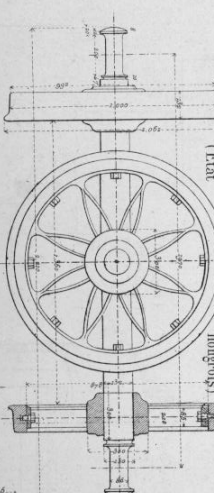
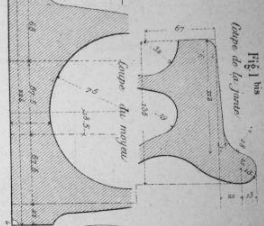
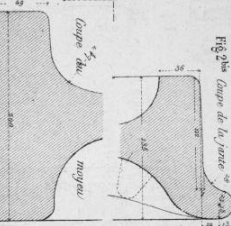
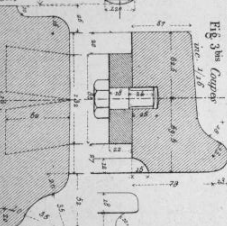
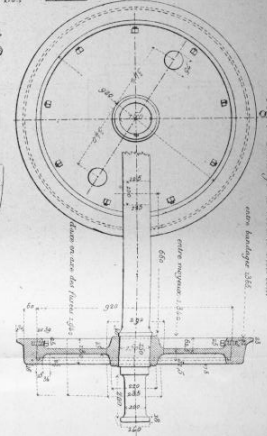
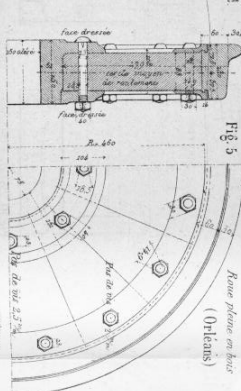
Fig. 1^{bis} Coupe de la janteFig. 2^{bis} Coupe de la janteFig. 3^{bis} Coupe de la janteRoue pleine en fer (Orléans) (Fig. 4, 4^{bis} et 4^{ter})

Fig. 4. Bandage à rebord intérieur



Roue pleine en bois (Orléans)



Roue pleine en bois (Orléans)

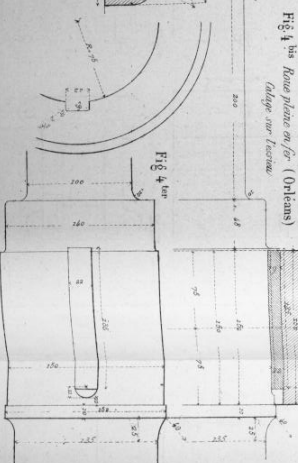
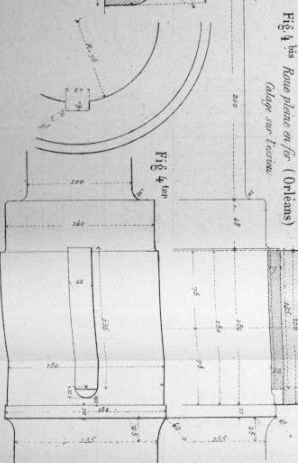
Fig. 4^{bis} Roue pleine en fer (Orléans)Fig. 4^{ter} Roue pleine en fer (Orléans)

Fig. 6. Nazareth Bahia (Bresil)

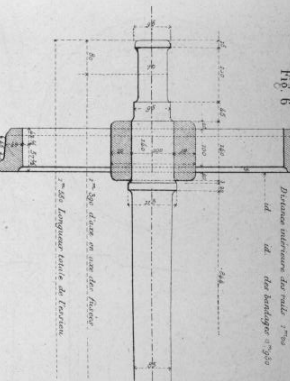


Fig. 8

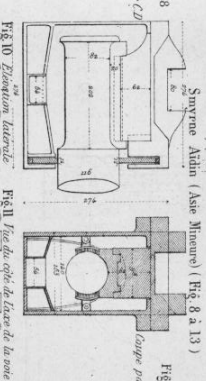


Fig. 9

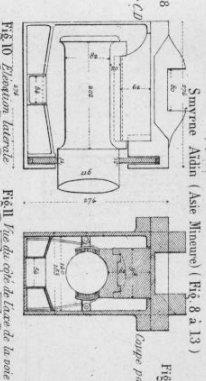


Fig. 10

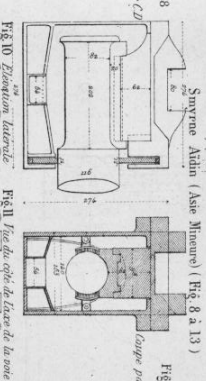


Fig. 11

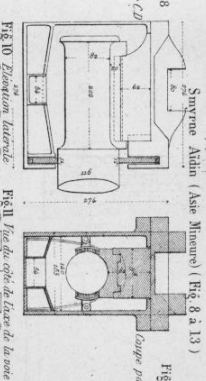


Fig. 12

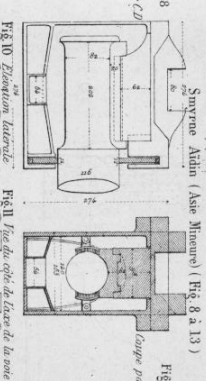


Fig. 13

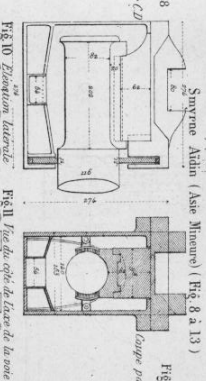


Fig. 14

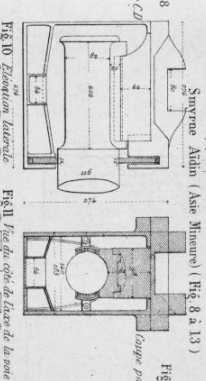


Fig. 15

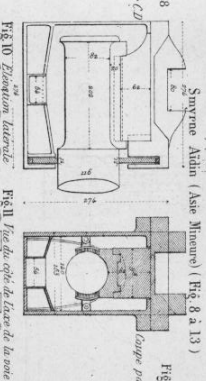


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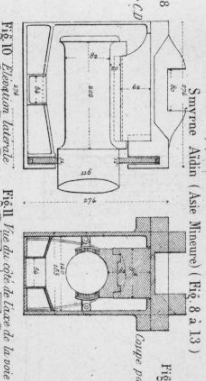


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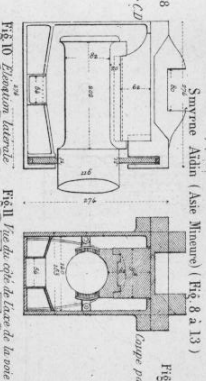


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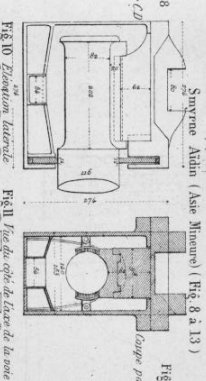


Fig. 19

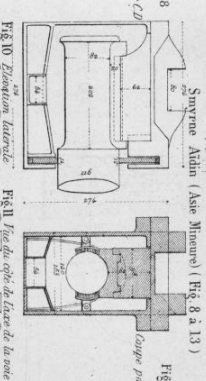


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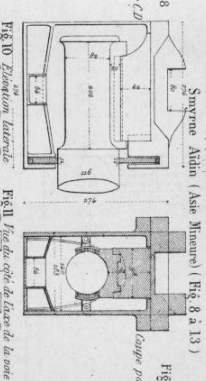


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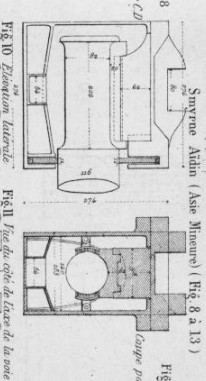


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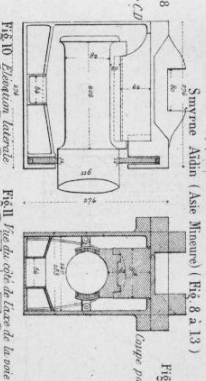


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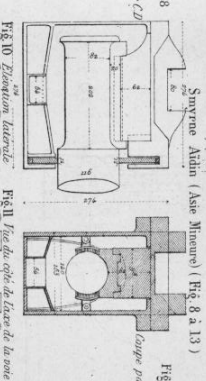


Fig. 24

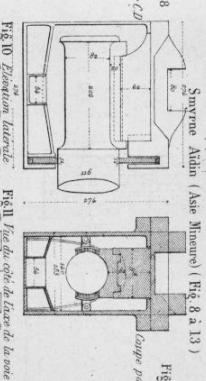


Fig. 25

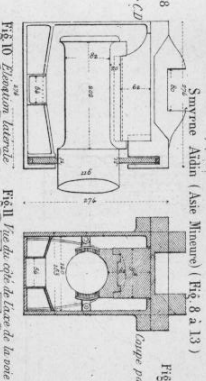


Fig. 26

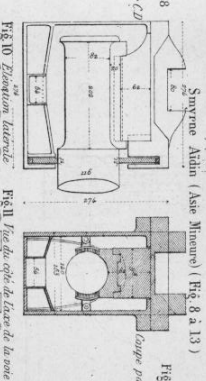


Fig. 27

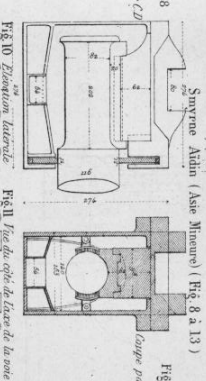


Fig. 28

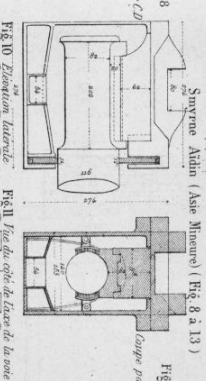


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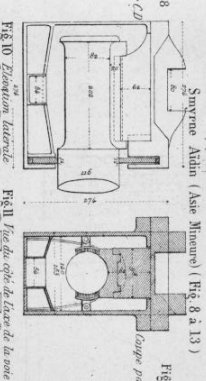


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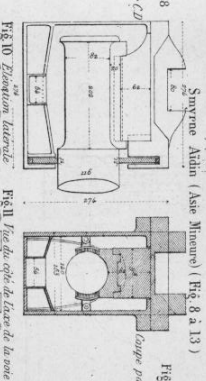


Fig. 31

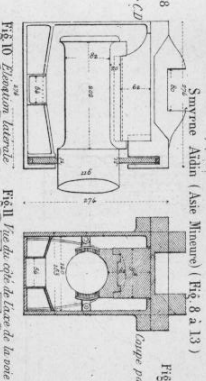


Fig. 32

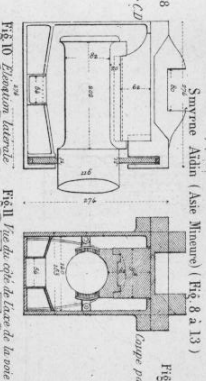


Fig. 33

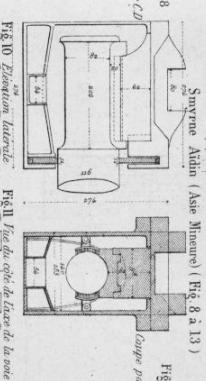


Fig. 34

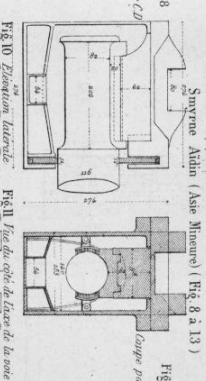


Fig. 35

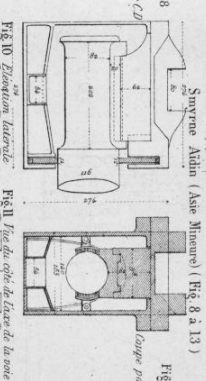


Fig. 36

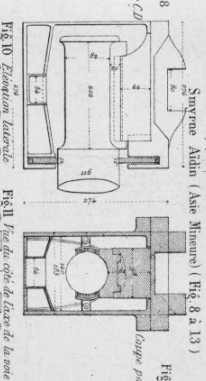


Fig. 37

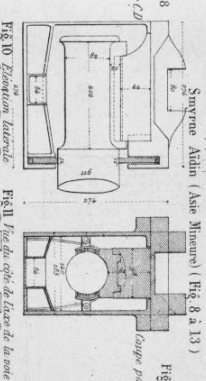


Fig. 38

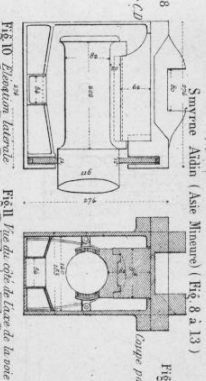


Fig. 39

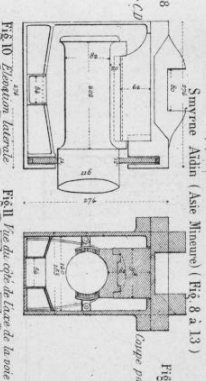


Fig. 40

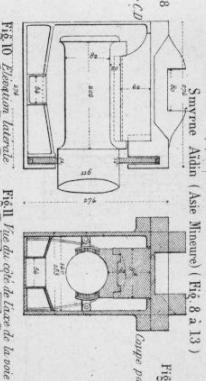


Fig. 41

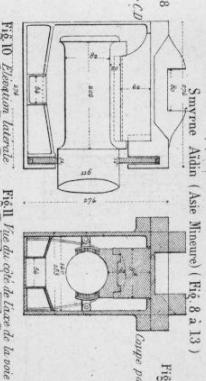


Fig. 42

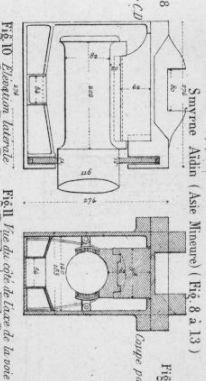


Fig. 43

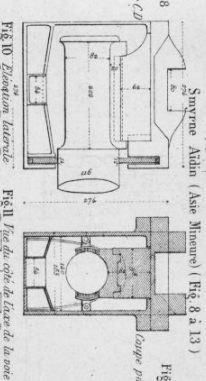


Fig. 44

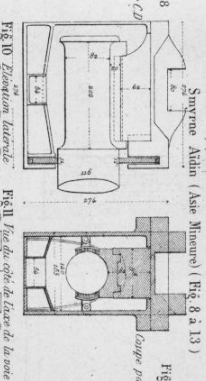


Fig. 45

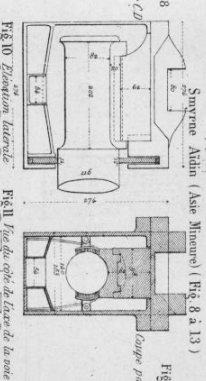


Fig. 46

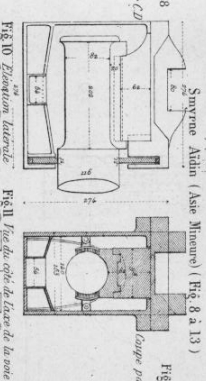


Fig. 47

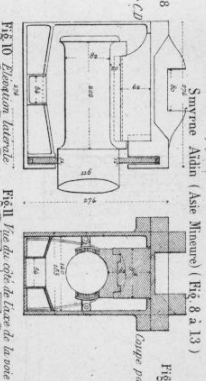


Fig. 48

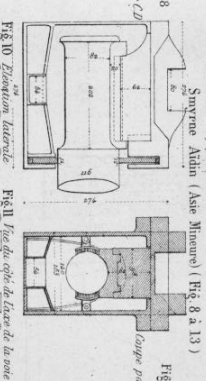


Fig. 49

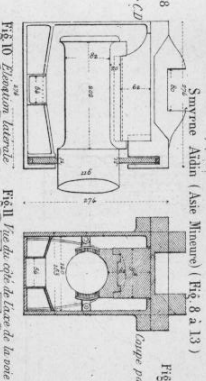


Fig. 50

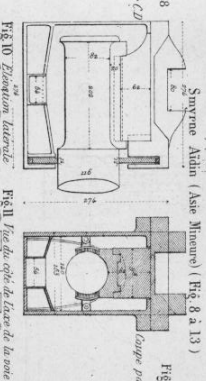


Fig. 51

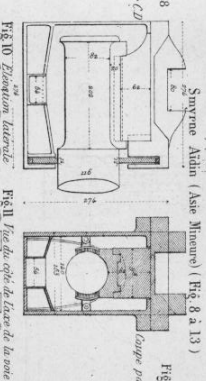


Fig. 52

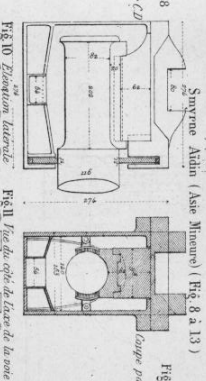


Fig. 53

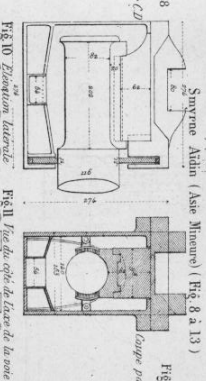


Fig. 54

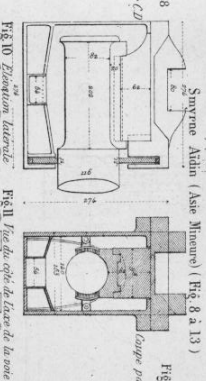


Fig. 55

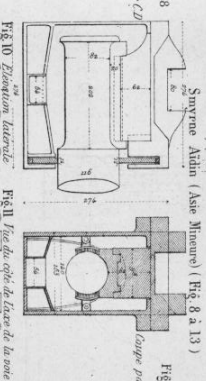


Fig. 56

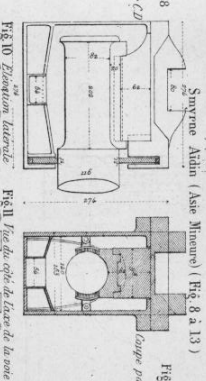


Fig. 57

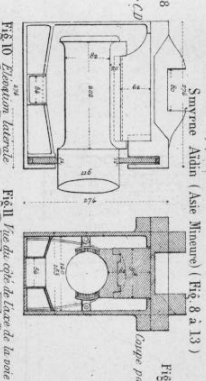


Fig. 58

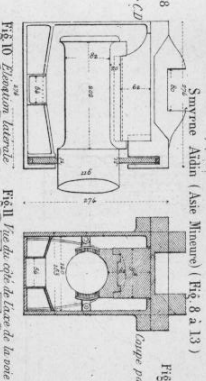


Fig. 59

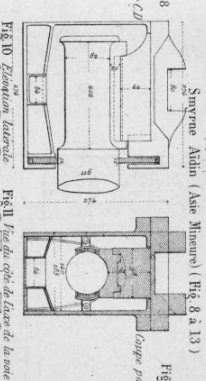


Fig. 60

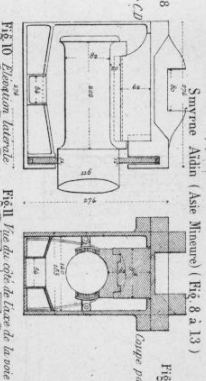


Fig. 61

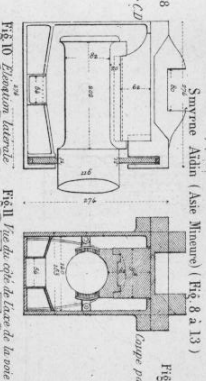


Fig. 62

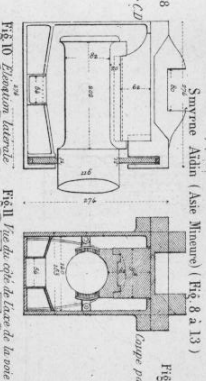


Fig. 63

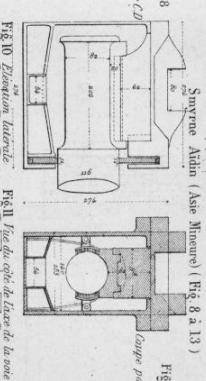


Fig. 64

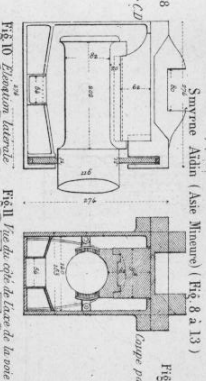


Fig. 65

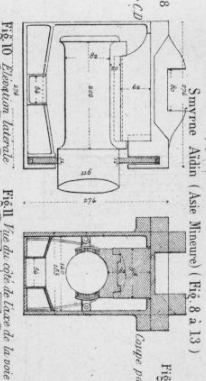


Fig. 66

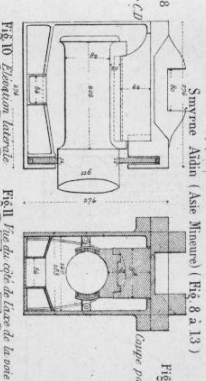


Fig. 67

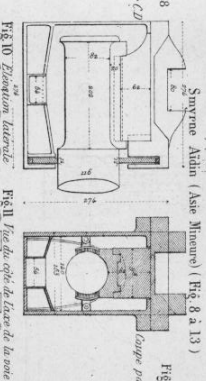


Fig. 68

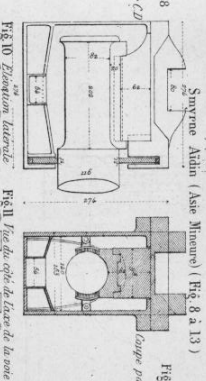


Fig. 69

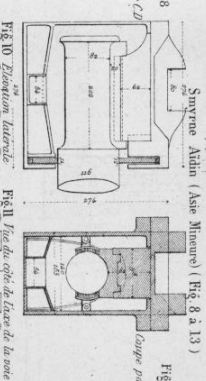


Fig. 70

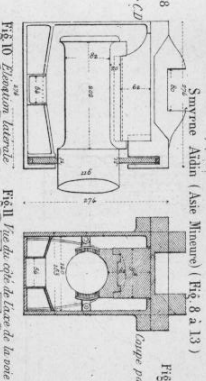


Fig. 71

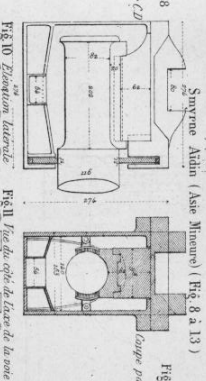


Fig. 72

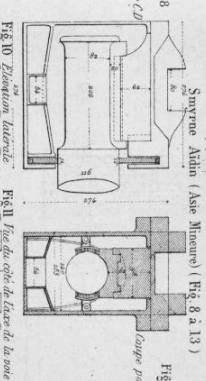


Fig. 73

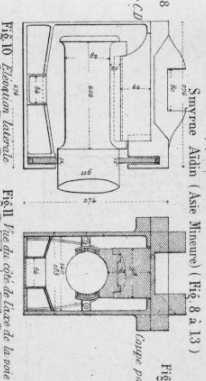


Fig. 74

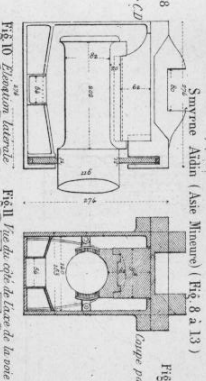


Fig. 75

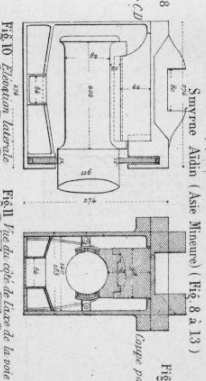


Fig. 76

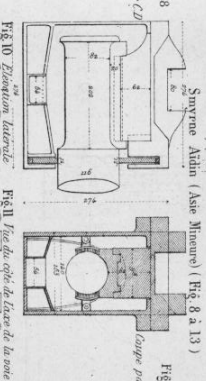


Fig. 77

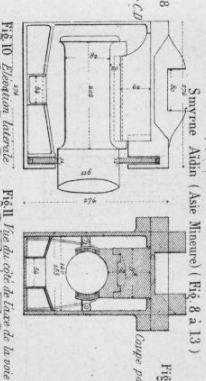


Fig. 78

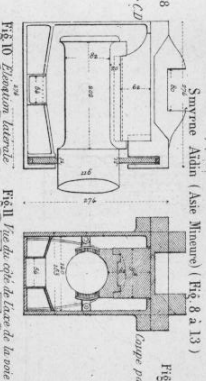


Fig. 79

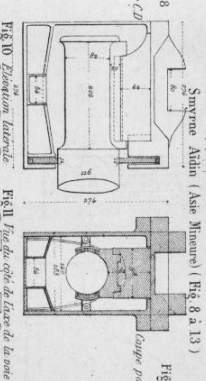


Fig. 80

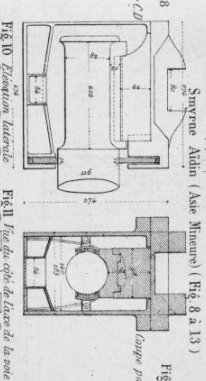


Fig. 81

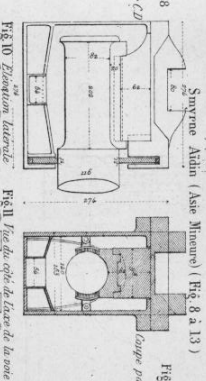


Fig. 82

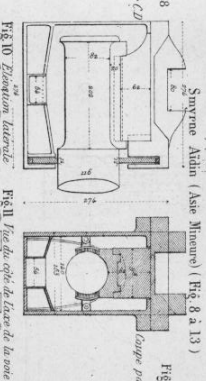


Fig. 83

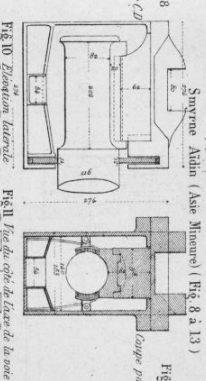


Fig. 84

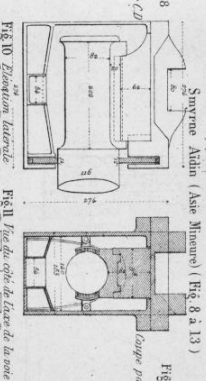


Fig. 85

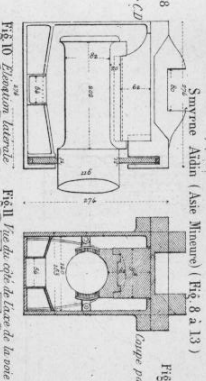


Fig. 86

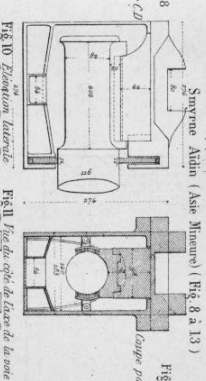


Fig. 87

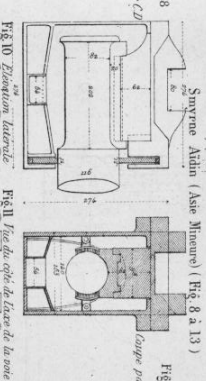


Fig. 88

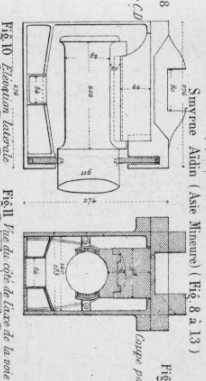


Fig. 89

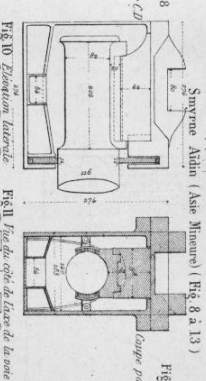


Fig. 90

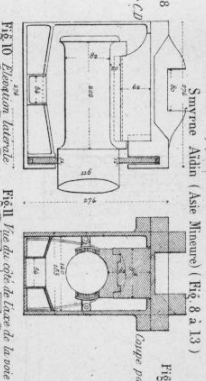


Fig. 91

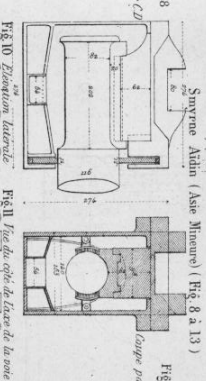


Fig. 92

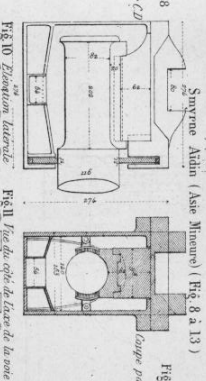


Fig. 93

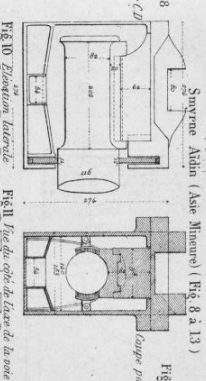


Fig. 94

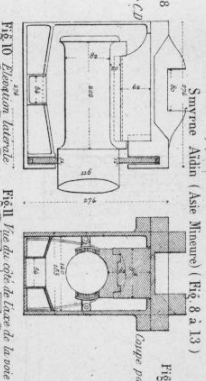


Fig. 95

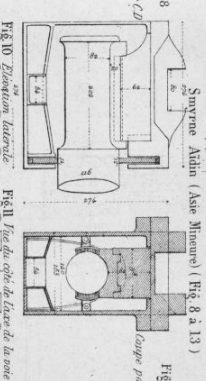


Fig. 96

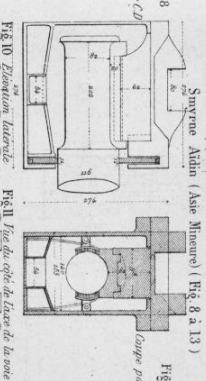


Fig. 97

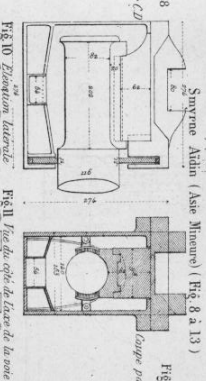


Fig. 98

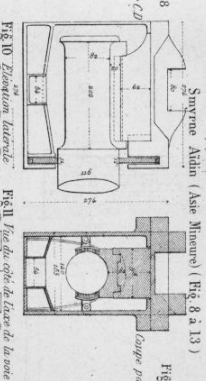


Fig. 99

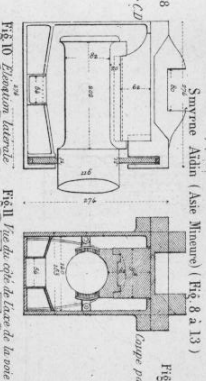


Fig. 100

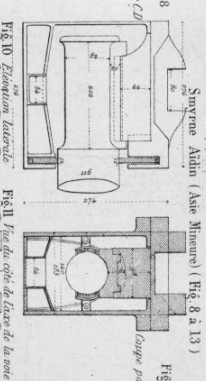
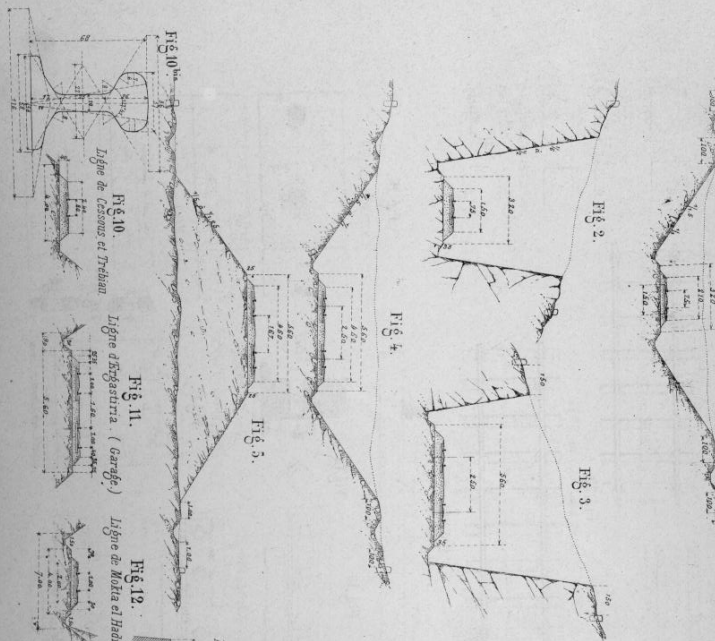


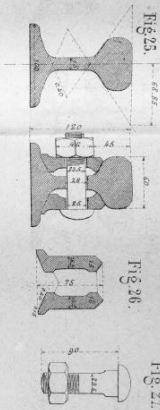
Fig. 1. Profils en travers types.

HONGRIE. — Longueur de voie 0,75 entre rails.

Longueur de voie 1,00 entre rails.



TURQUE DEUROPÉE

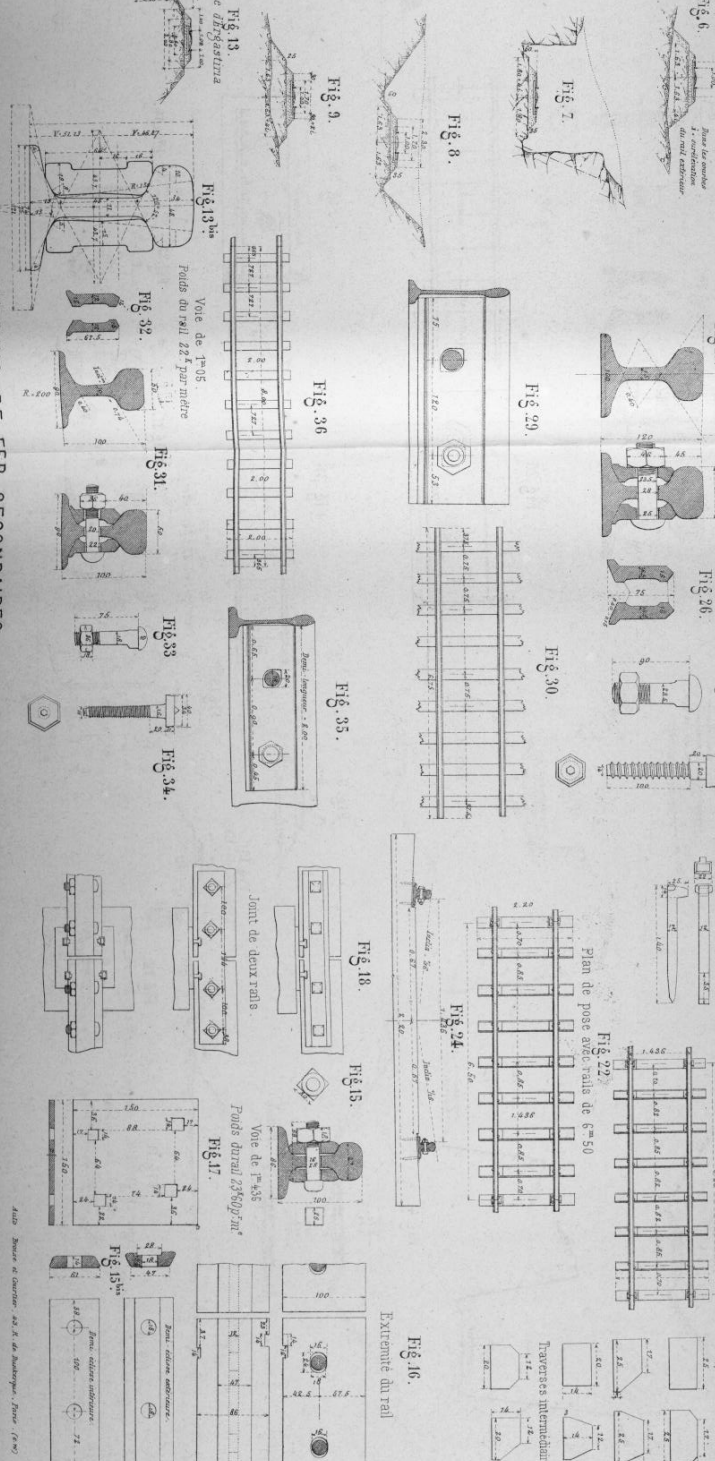


MATÉRIEL DE LA VOIE.

Fig. 19. Crapin.

Fig. 20. Plan de pose avec rails de 57,50.

HONGRIE. Fig. 21. Traverses de joints.



CHEMINS DE FER SECONDAIRES.

