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NOTICE BIBLIOGRAPHIQUE

NOTICE DE LA REVUE	
Auteur(s) ou collectivité(s)	Revue technique de l'exposition universelle de Chicago 1893
Auteur(s)	Revue technique de l'exposition universelle de Chicago 1893
Titre	Revue technique de l'exposition universelle de Chicago de 1893
Édition	Revue technique de l'exposition universelle de Chicago de 1897
Adresse	Paris : E. Bernard et Cie, 1894-1896
Collation	10 vol. (176, 183, 250, 294, 278, 180, 130, 148, 188-[34], 240 p.) ; 26 cm
Nombre de volumes	20
Cote	CNAM-BIB 8 Xae 399
Sujet(s)	Exposition universelle (1893 ; Chicago) Industrie -- États-Unis -- 19e siècle
Permalien	https://cnum.cnam.fr/redir?8XAE399
LISTE DES VOLUMES	
	1. L'architecture et les constructions métalliques à l'exposition de Chicago. Première partie
	Première partie. Architecture. Atlas
	2. Les nouvelles chaudières à vapeur. Chaudières fixes et chaudières marines à l'Exposition de Chicago
	Deuxième partie. Chaudières fixes et chaudières marines. Atlas
	3. L'électricité industrielle à l'Exposition de Chicago en 1893. Troisième partie
	Troisième partie. Electricité industrielle. Atlas
	4. La mécanique générale à l'exposition de Chicago. Moteur à vapeur, à gaz, à air hydraulique. Pompes grandes installations mécaniques
	[Quatrième partie.] Moteurs à vapeur, à gaz, à air, hydraulique, pompes, grandes installations mécaniques. Atlas
	5. Les arts militaires aux Etats-Unis et à l'Exposition de Chicago
	[Cinquième partie.] Les arts militaires aux Etats-Unis et à l'exposition de Chicago. Atlas
	6. L'agriculture et les machines agricoles aux Etats-Unis
	[Sixième partie.] L'agriculture et les machines agricoles aux Etats-Unis. Atlas
	7. La marine des Etats-Unis
	[Septième partie.] La marine des Etats-Unis. Atlas
	8. Les chemins de fer à l'Exposition de Chicago. Les locomotives
	[Huitième partie.] Les chemins de fer à l'exposition de Chicago. Les locomotives. Atlas
	9. Les chemins de fer à l'Exposition de Chicago. Deuxième volume : voies, signaux, matériel roulant et tramways
	[Neuvième partie.] Les chemins de fer à l'exposition de Chicago. Deuxième volume : voies, signaux, matériel roulant et tramways. Atlas
	10. Les travaux publics aux Etats-Unis
VOLUME TÉLÉCHARGÉ	[Dixième partie.] Les travaux publics aux Etats-Unis. Atlas

NOTICE DU VOLUME TÉLÉCHARGÉ

Auteur(s) volume	Revue technique de l'exposition universelle de Chicago 1893
Titre	Revue technique de l'exposition universelle de Chicago de 1893
Volume	[Dixième partie.] Les travaux publics aux Etats-Unis. Atlas
Adresse	Paris : E. Bernard et Cie, 1896
Collation	1 vol. ([4] p.-74 f. de pl.) ; 37 cm
Nombre de vues	187
Cote	CNAM-BIB 4 Xae 47 (10)
Sujet(s)	Exposition universelle. 1893. Chicago Travaux publics -- États-Unis Architecture -- 19e siècle -- États-Unis
Thématique(s)	Expositions universelles
Typologie	Revue
Langue	Français
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Recherche plein texte	Disponible
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REVUE TECHNIQUE
DE
L'EXPOSITION UNIVERSELLE
DE CHICAGO
1893

ATLAS

10^{ÈME} PARTIE

PARIS

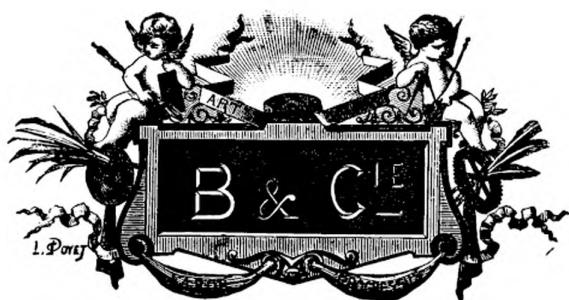
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1898



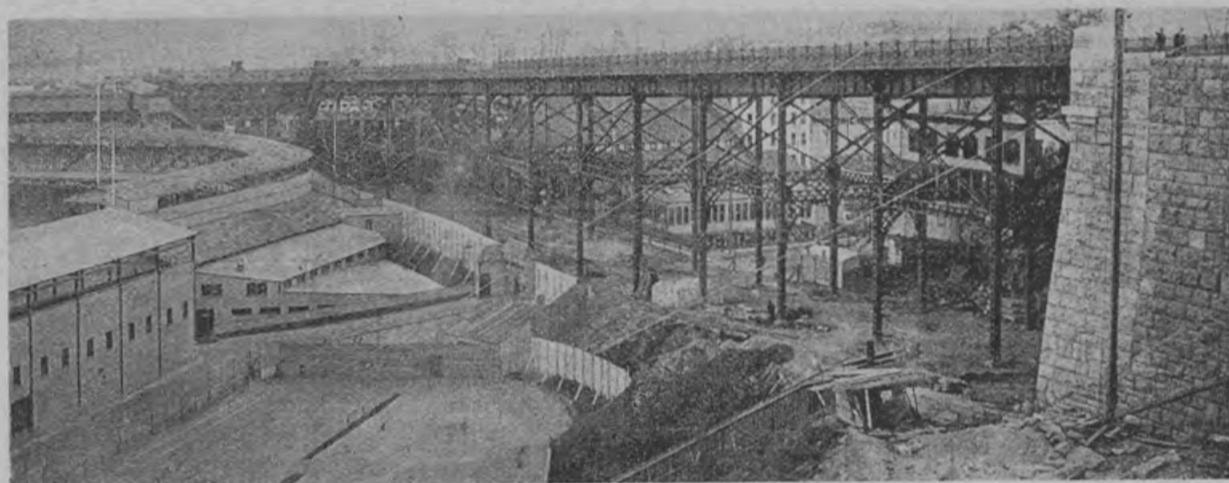
TABLE DES PLANCHES

Nos des Planches

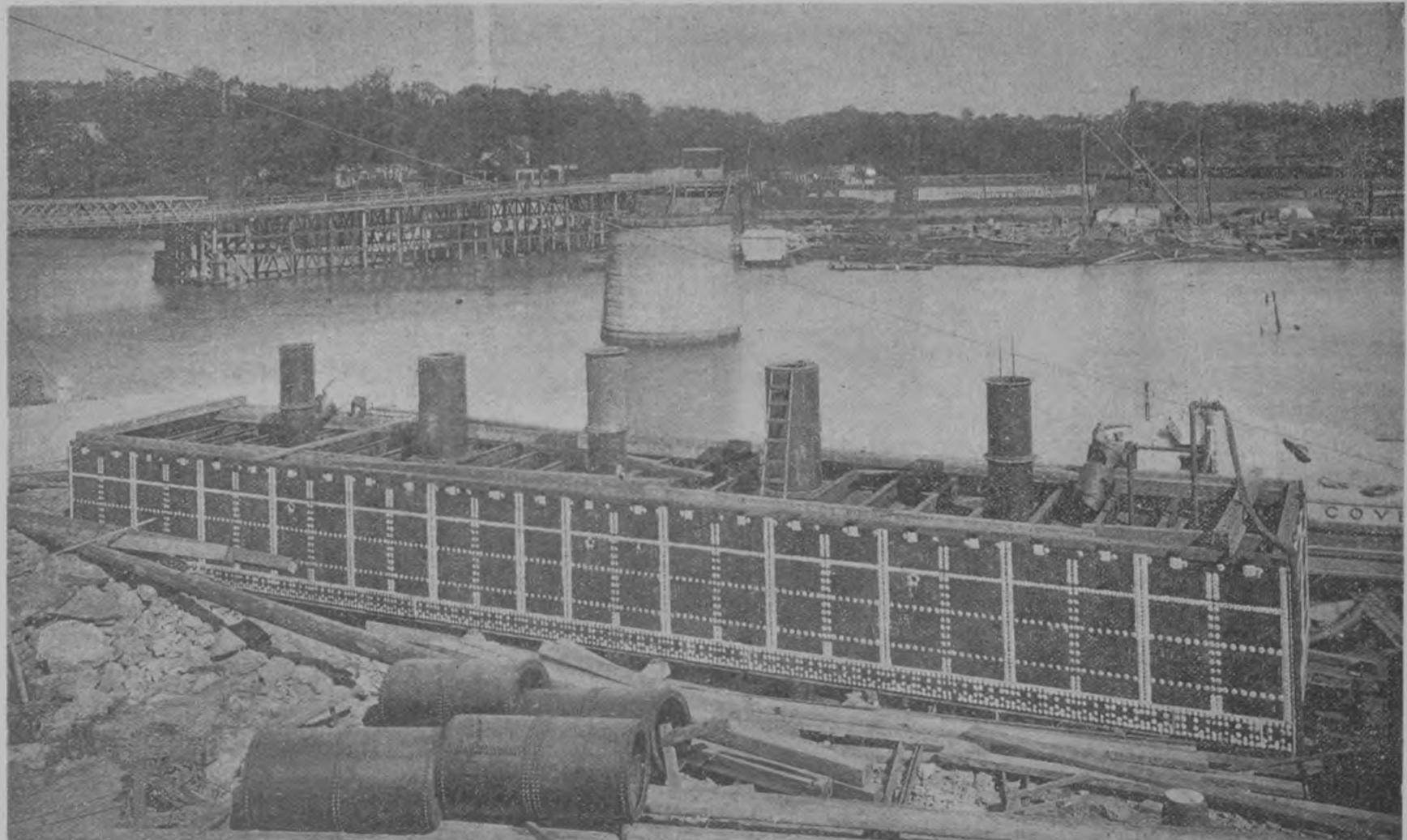
- 1 à 3. — Pont route sur la rivière Alleghany. — Viaduc de la 155^e rue et pont tournant de la 7^e avenue, New-York.
- 4 à 6. — Pont tournant de la 3^e avenue, New-York.
7. — Viaduc de la 153^e rue et pont tournant de la 7^e avenue, New-York.
- 8 à 13. — Viaduc sur le Mississippi à Memphis (Tennessee).
- 14 à 17. — Chute d'une travée du pont de Louisville. — Viaduc de Louisville. — Pont de Louisville (Kentucky).
18. — Pont droit à âmes pleines à la 93^e rue, Chicago.
- 19 à 22. — Viaduc sur la Tamise, New-London (Connecticut).
23. — Pont tournant sur la rivière Passaic.
- 24 à 26. — Pont tournant d'Omaha (Nebraska).
- 27 à 29. — Pont tournant sur la rivière Harlem, New-York.
- 30-31. — Viaduc d'approche du pont sur la rivière Harlem, New-York.
32. — Viaduc d'approche du pont de Bellefontaine.
33. — Elevated de la Madison Street, Chicago.
- 34-35. — Viaduc de Trenton Falls.
- 36 à 38. — Viaduc de Pécos. — Elevated de la Madison Street, Chicago.
- 39 à 42. — Pont à soulèvement sur la rivière Chicago, à Chicago.
43. — Pont transbordeur à l'embouchure du Nervion (Espagne).
- 44 à 46. — Ferry Boats de la C^e Tolédo, Ann Arbor and North Michigan.
- 47 à 51. — Ponts en bois (Systèmes Howe et Grondahl).
- 52 à 55. — Pont mixte sur la North Umpqua River (Oregon).
- 56-57. — Emploi du bois sur les lignes de chemins de fer aux États-Unis.
- 58-59. — Chute du pont de Chester (Massachusetts).
- 60 et 61. — Reconstruction de ponts tournants.
- 62-63. — Reconstruction de la pile centrale du pont de Gadsden.
- 64 à 78. — Nouvelle gare du Pennsylvania Railroad, Philadelphie.
79. — Chariot pour locomotives. — Les Grandes maisons à Chicago.
- 80-81. — Maison à 17 étages. Ossature métallique.
82. — Les grandes maisons à Chicago.
83. — Fondations du Manhattan Life Building, New-York.
84. — Temple Beth-Zion à Buffalo (New-York).
85. — Wharf de chargement, Chicago.
86. — Plaque tournante de locomotives.
87. — Utilisation des eaux d'égout.
- 88-89. — Usine de purification des eaux d'égout à l'exposition de Chicago.
- 90-91. — Installation d'alimentation artésienne de Savanah.
92. — Filtre à sable (alimentation de la ville de Lawrence).
- 93 à 96. — Barrage construit par la ville d'Austin (Texas) sur le Colorado.
- 97-98. — Construction de l'Howard Street Tunnel.
- 99 à 100. — Excavateurs.
- 101 à 104. — Drague de 2000 mètres cubes de production journalière.
105. — Transporteur à déblai. — Barrage d'Austin sur le Colorado.
- 106-107. — Port de protection contre les glaces de la baie de Delaware.
108. — Passes de la baie de Yaquina.
- 109-110. — Phare de Waackaak, exposé par le gouvernement.
111. — Phare construit par le gouvernement au cap Charles (Virginie).



PONT ROUTE SUR LA RIVIÈRE ALLEGHANY, A PITTSBURG



VIADUC DE LA 155^e RUE, NEW-YORK CITY



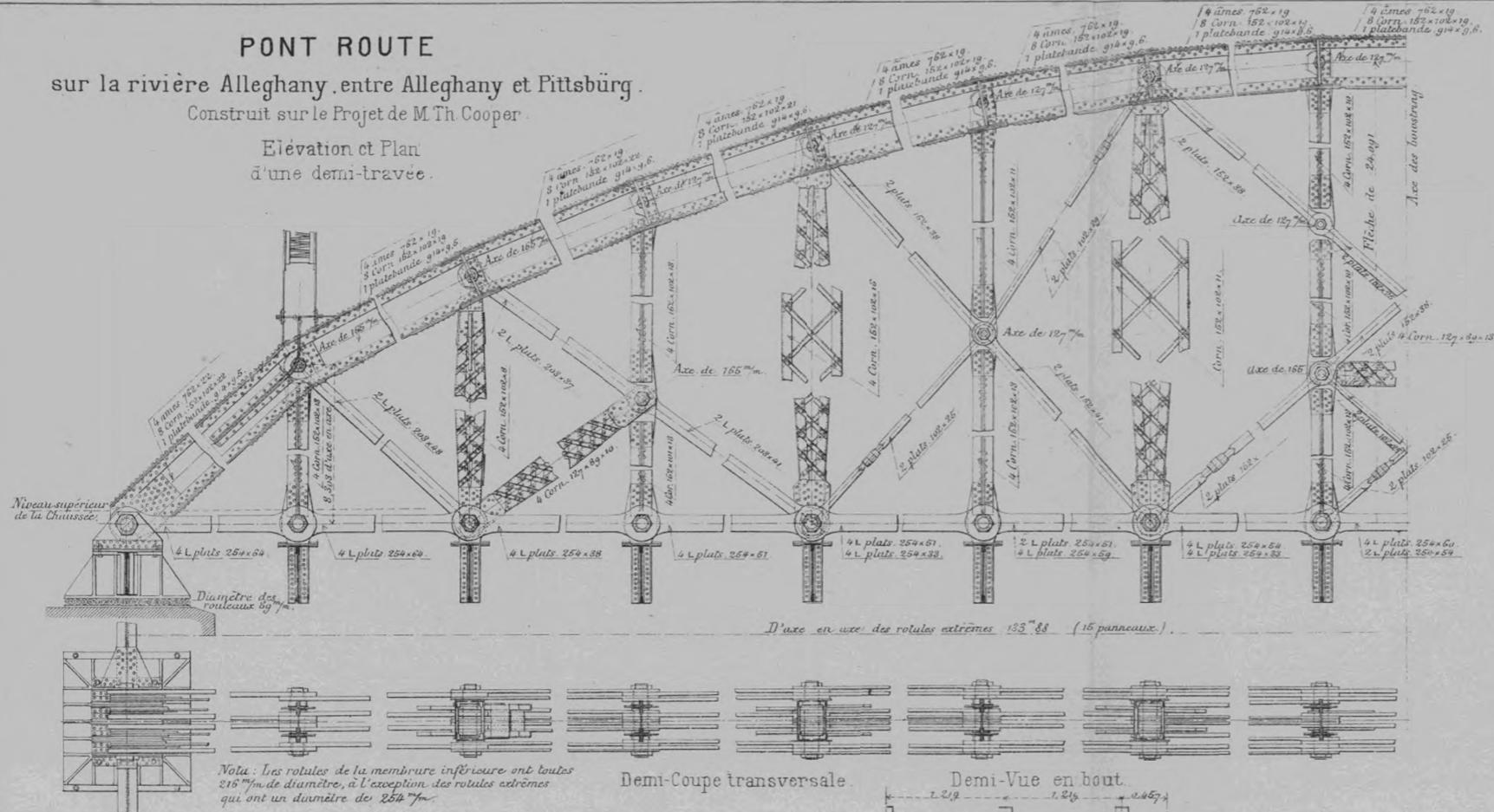
CAISSON DU PONT TOURNANT DE LA 7^e AVENUE, SUR LA RIVIÈRE HARLEM, NEW-YORK, PILE N° 1

PONT ROUTE

sur la rivière Alleghany, entre Alleghany et Pittsburg

Construit sur le Projet de M Th. Cooper

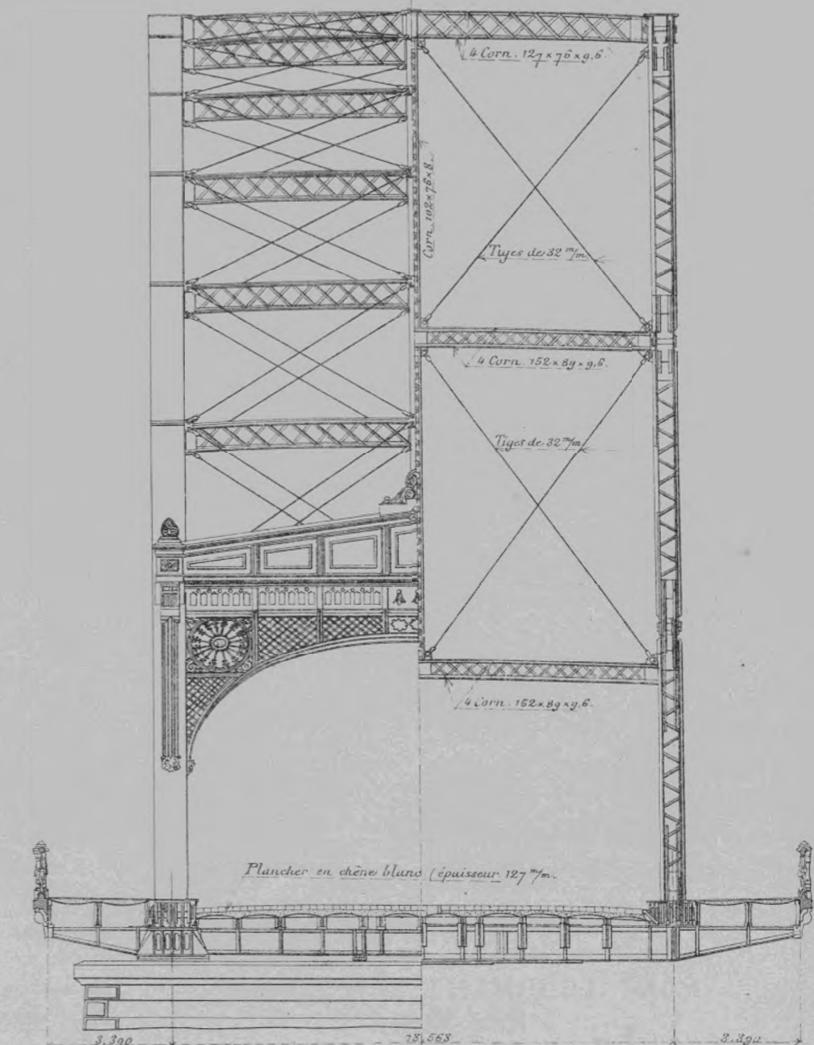
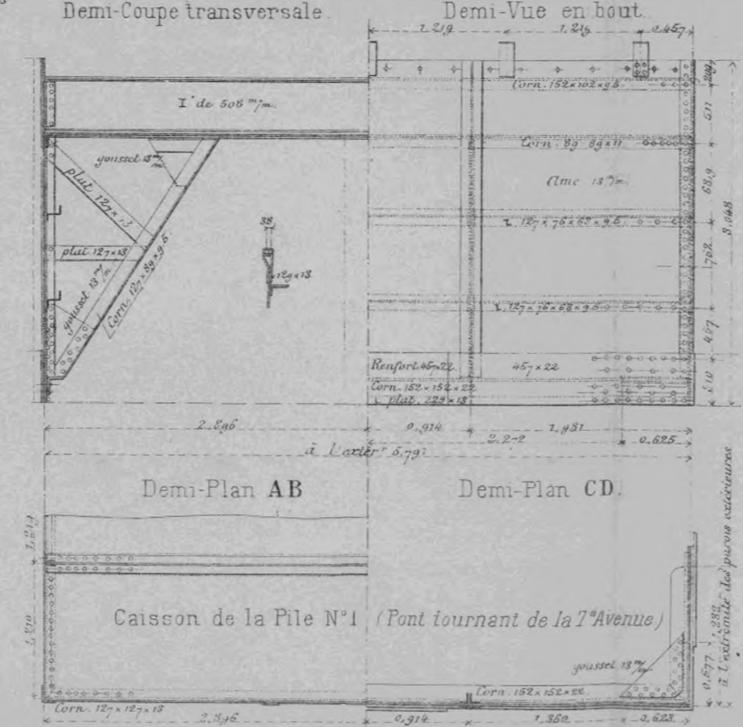
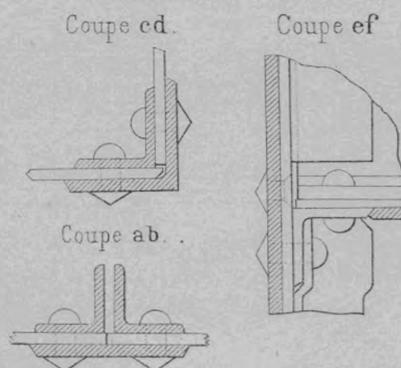
**Elevation et Plan
d'une demi-travée.**



VIADUC de la 155^e Rue et

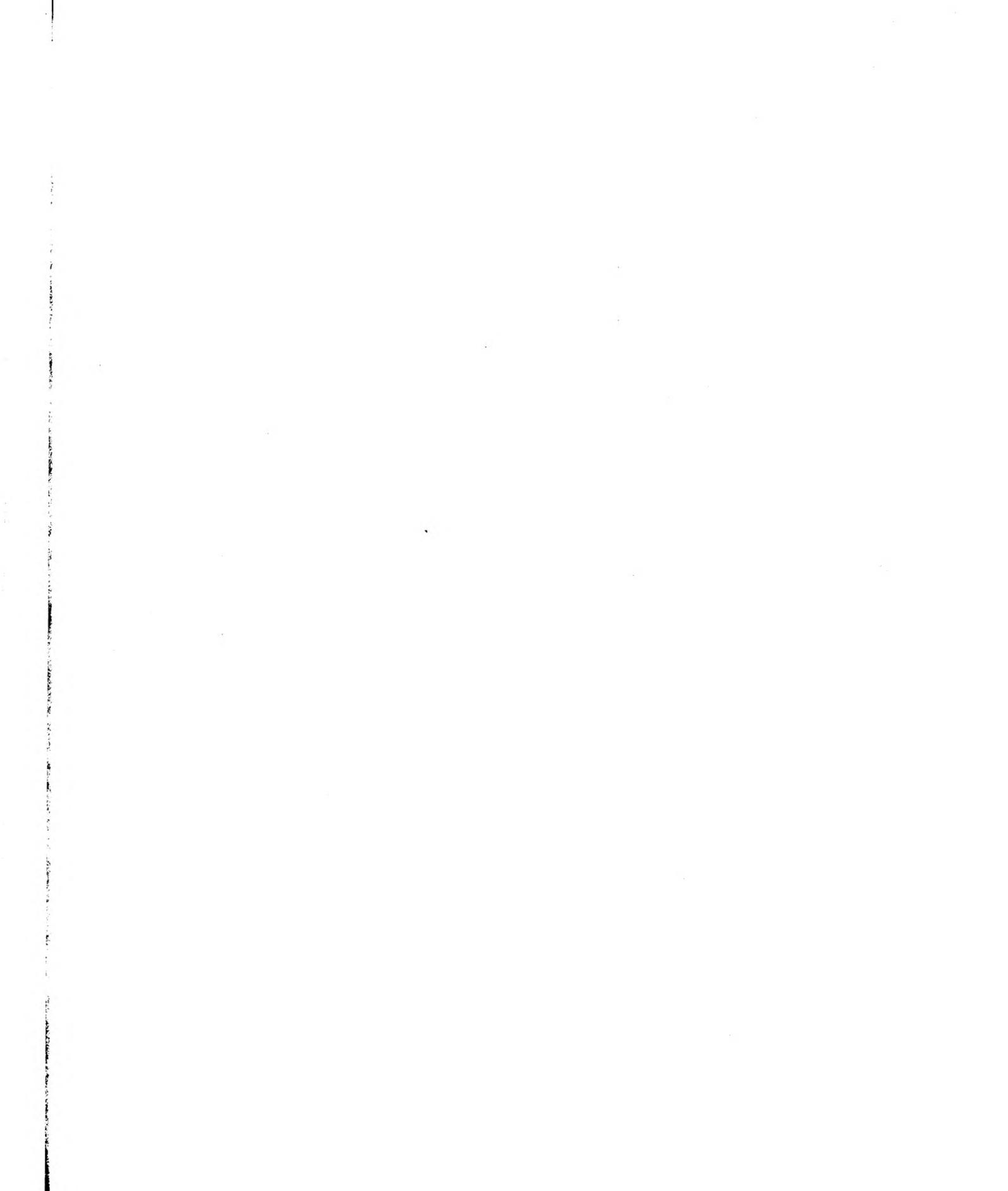
PONT TOURNANT de la 7^e Avenue
à New-York.

Détails du poisson

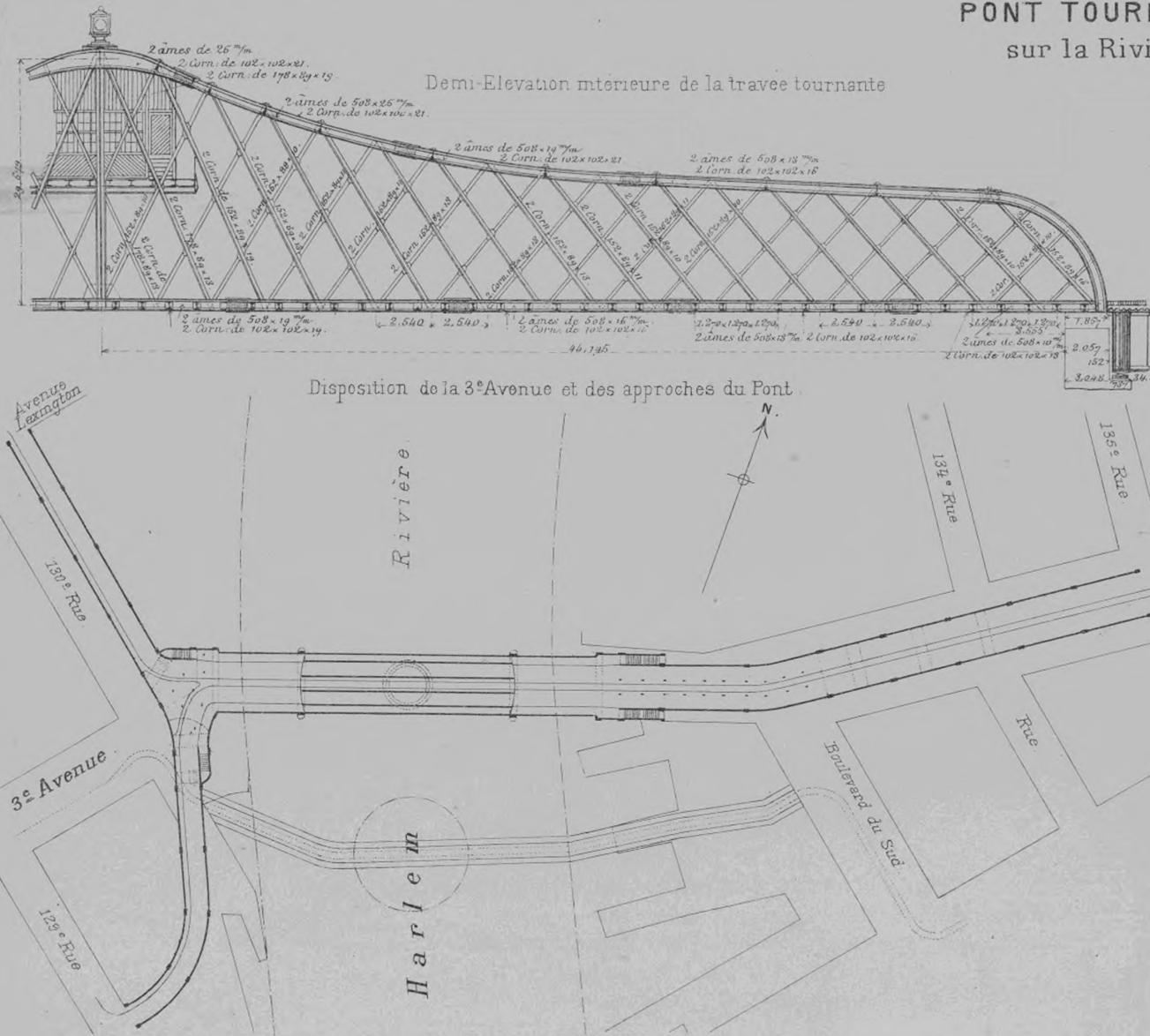


Disposition de la 155^e Rue et de la 7^e Avenue.





PONT TOURNANT DE LA 3^e AVENUE
sur la Rivière Harlem à New-York

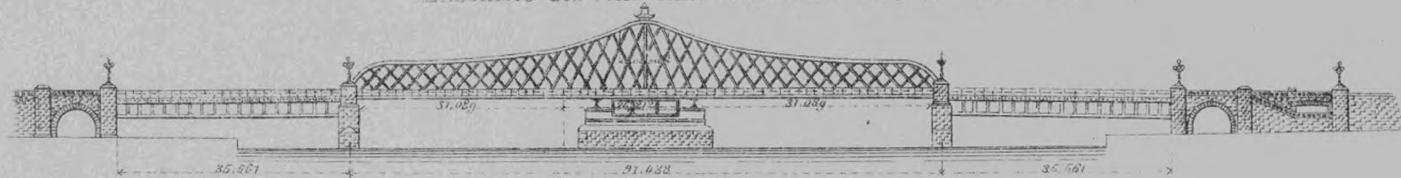


PONT TOURNANT DE LA 3^e AVENUE

travées fixes et maçonneries d'approche sur la rivière Harlem à New-York.
Approches Côté Sud. Vue prise du Côté Nord de la 3^e Avenue



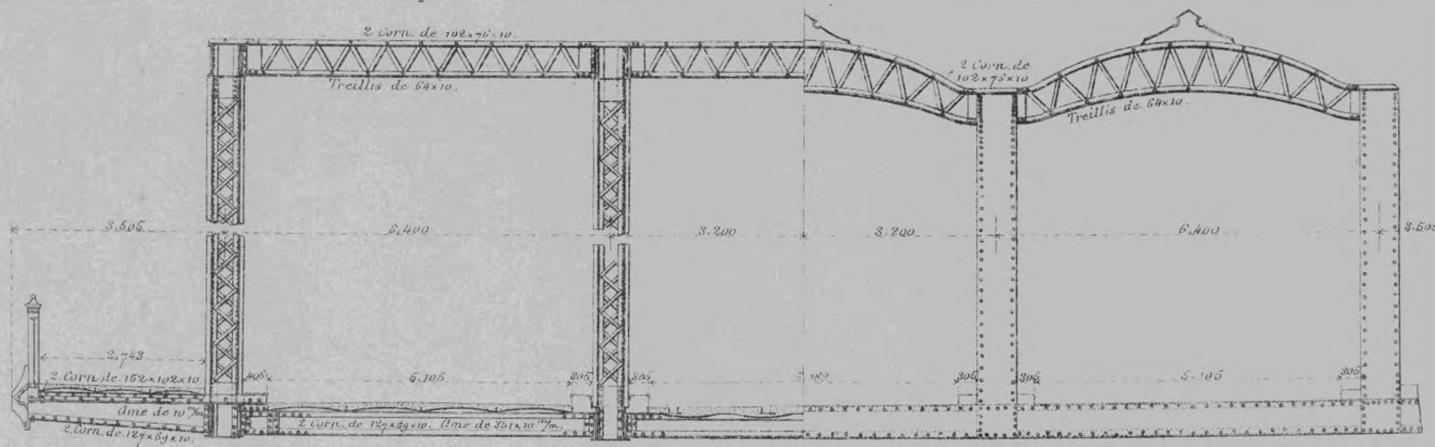
Ensemble des Ponts fixes et tournant. Vue prise du côté Est.



Approches. Côté 3^e Avenue Nord



Demi-Coupe transversale. Travée tournante.

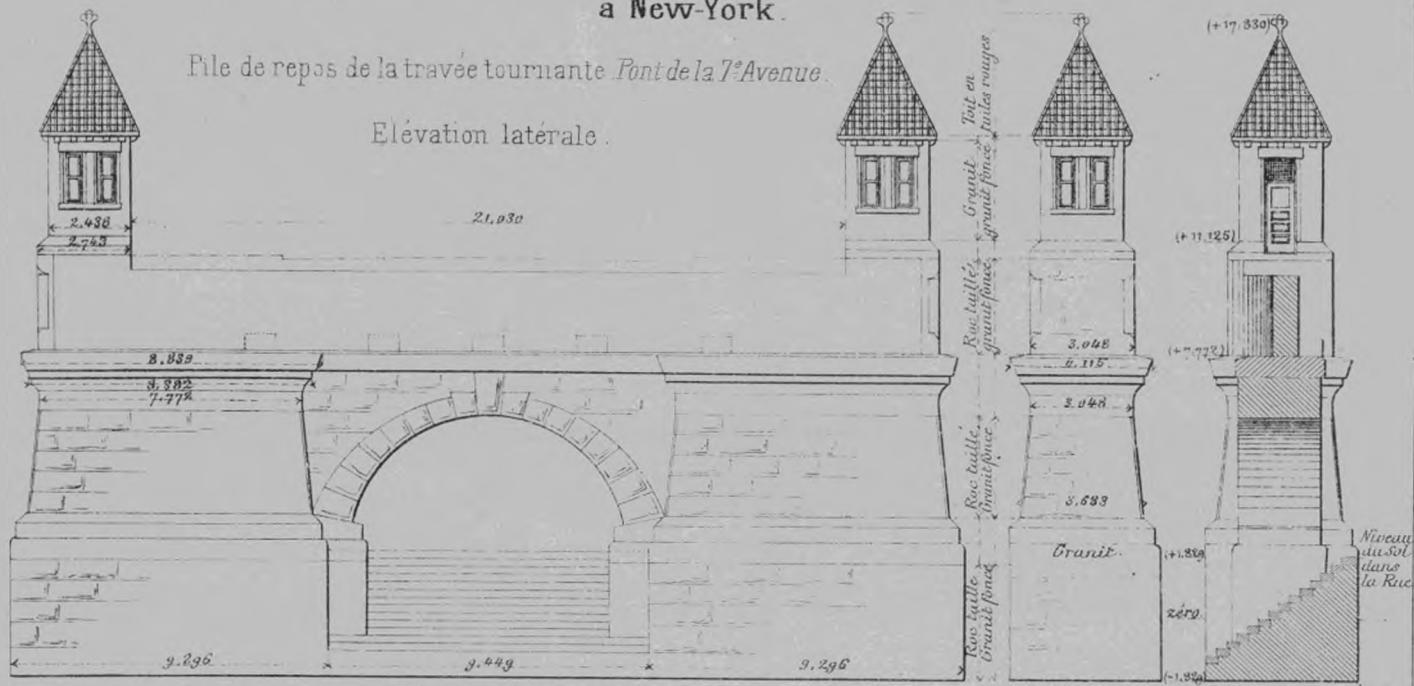


Demi-Vue en boul. Travée tournante

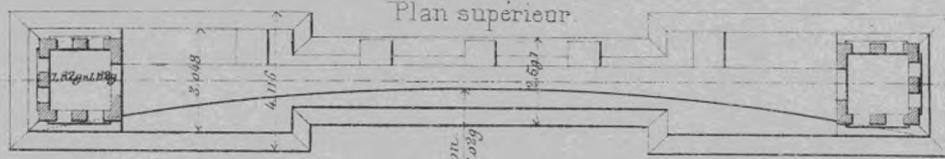
VIADUC de la 155^e Rue et PONT TOURNANT de la 7^e Avenue
à New-York.

Pile de repos de la travée tournante Pont de la 7^e Avenue.

Élevation latérale.



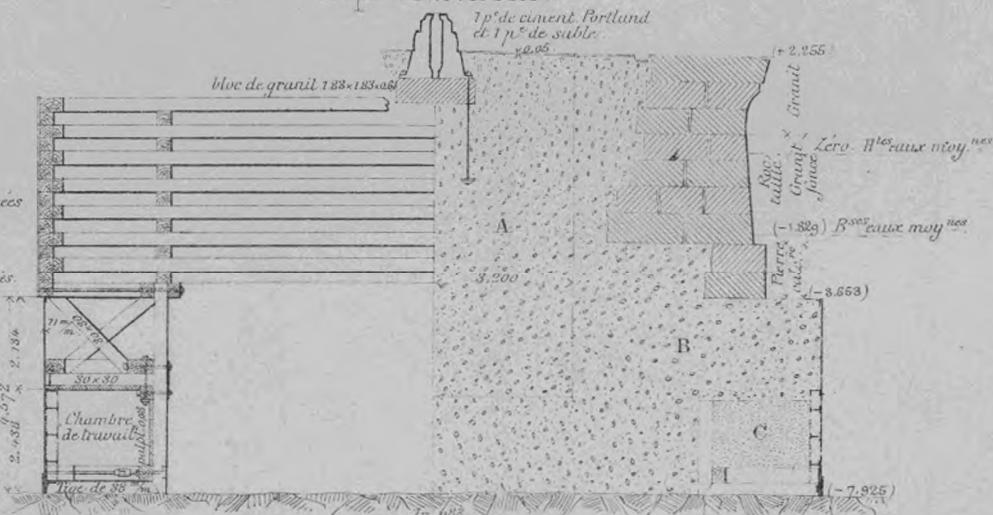
Plan supérieur.



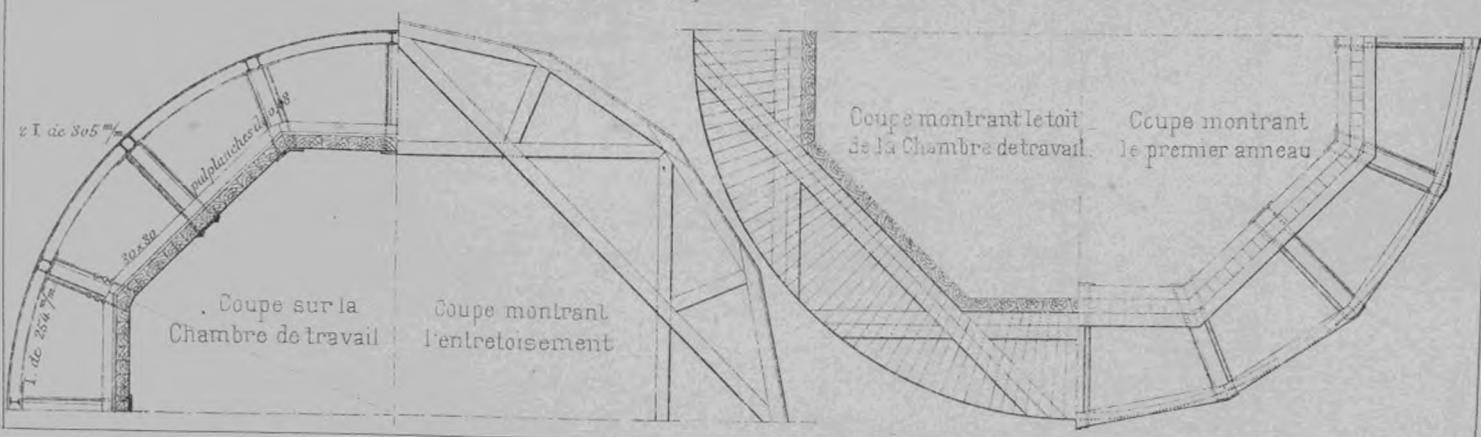
Vue en bout. Coupe transversale sur l'axe

Echelle
0 1 2 3 4 m.

Coupe transversale.



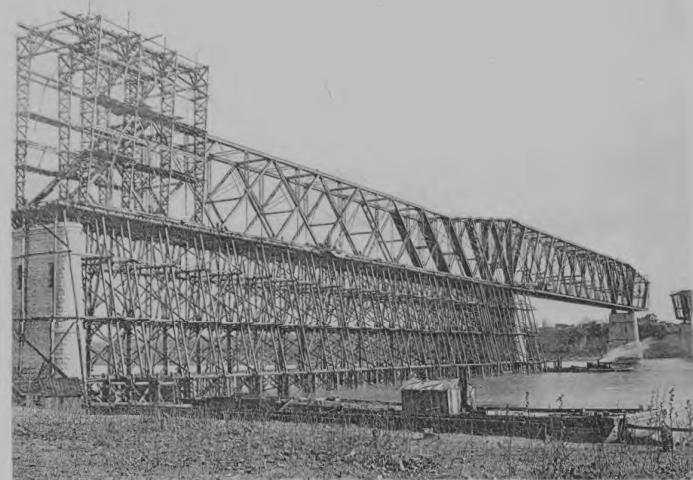
Détails de la pile centrale et de son caisson



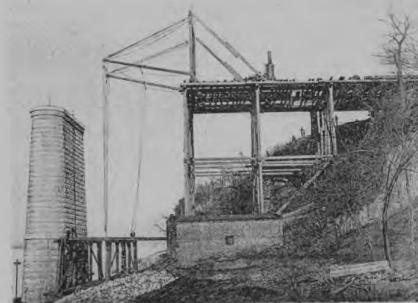
VIADUC SUR LE MISSISSIPI A MEMPHIS (TENNESSÉE)



VUE N° 1



VUE N° 2



VUE N° 3



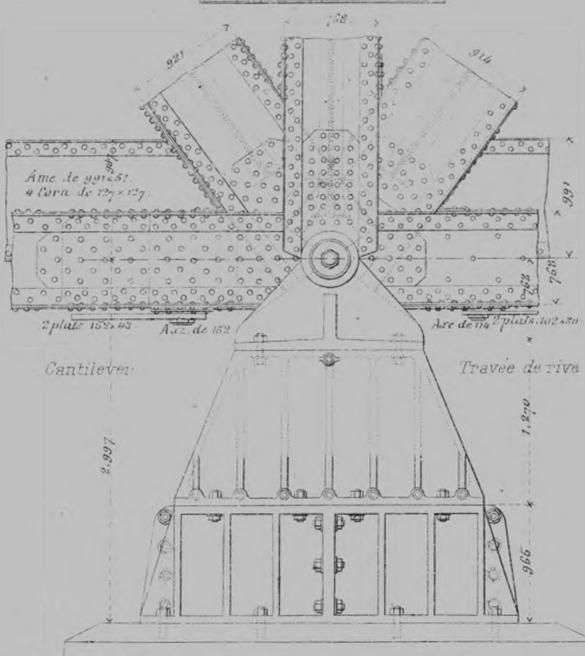
VUE N° 4

VIADUC SUR LE MISSISSIPI A MEMPHIS.(TENNESSEE.).

Détails des retombées et des appareils d'appui

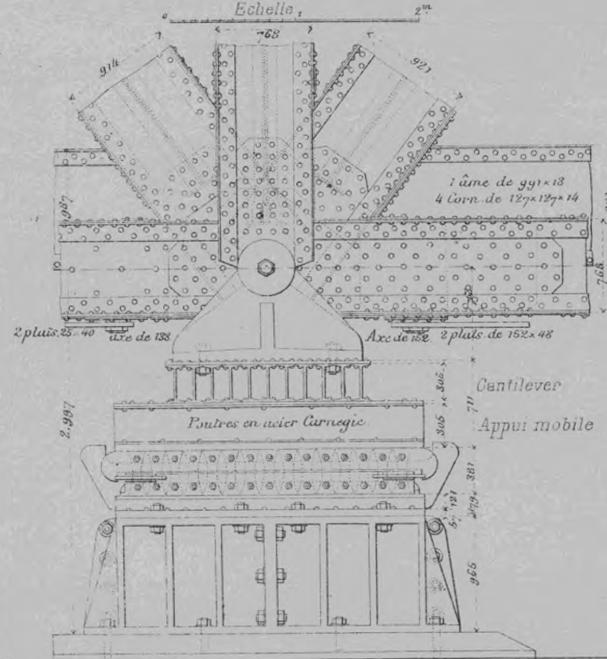
Elévation du Côté Pile N°1

Echelle



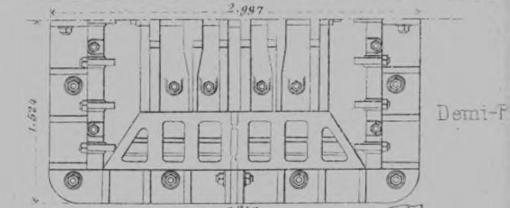
Elevation de Côte

Echelle₁ 2^m

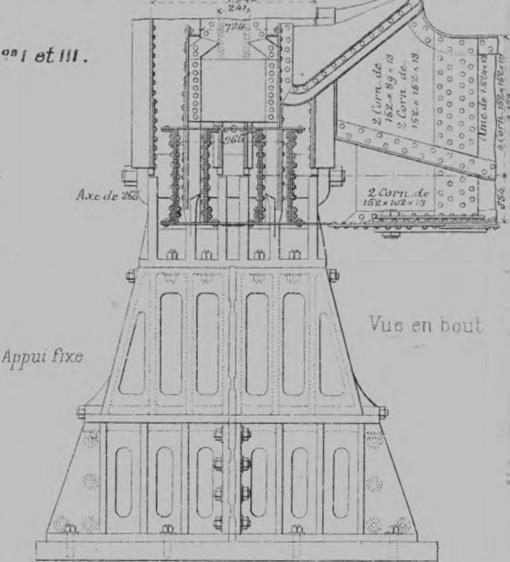


PILE. N° I

ES. N°s I et III

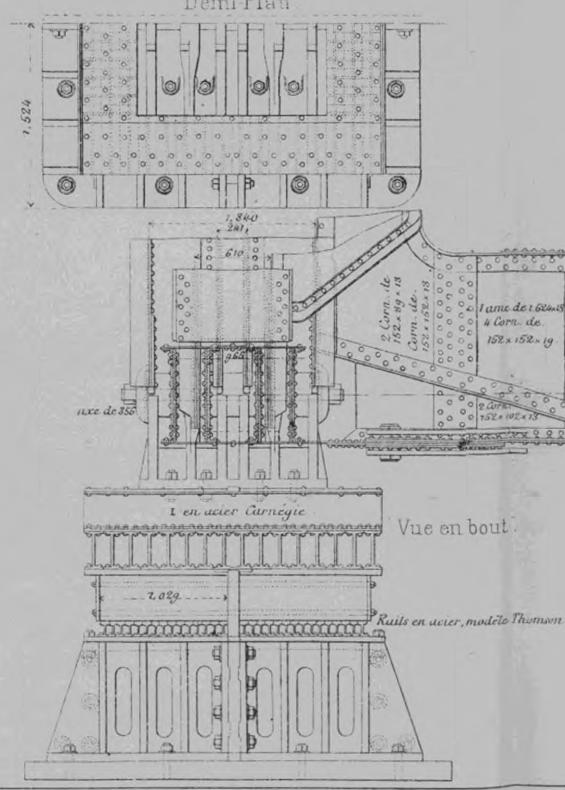


Demi-Plan



Vue en b-

Appui fixe

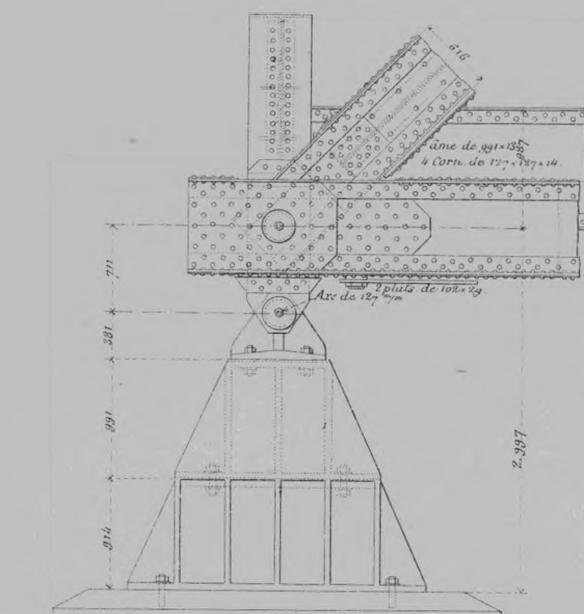


Détails des retombées appareils d'appui Coupes sur les travées intermédiaires

Coupes sur les travées intermédiaires

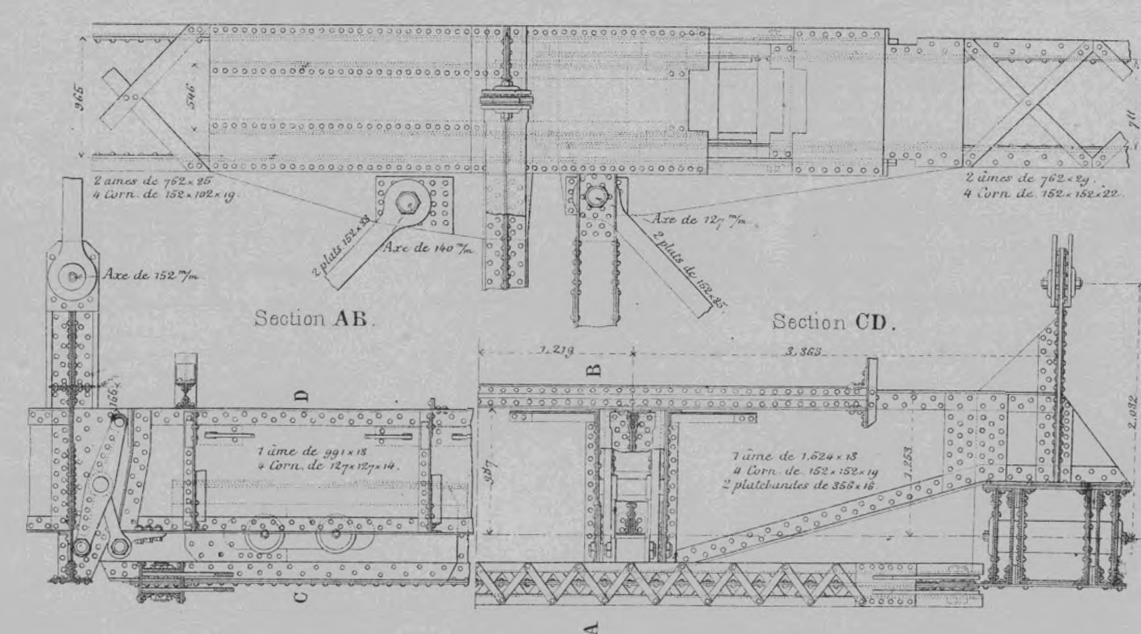
Elevation de Côte

Eche



Travée intermédiaire, membrure inférieure et longerons

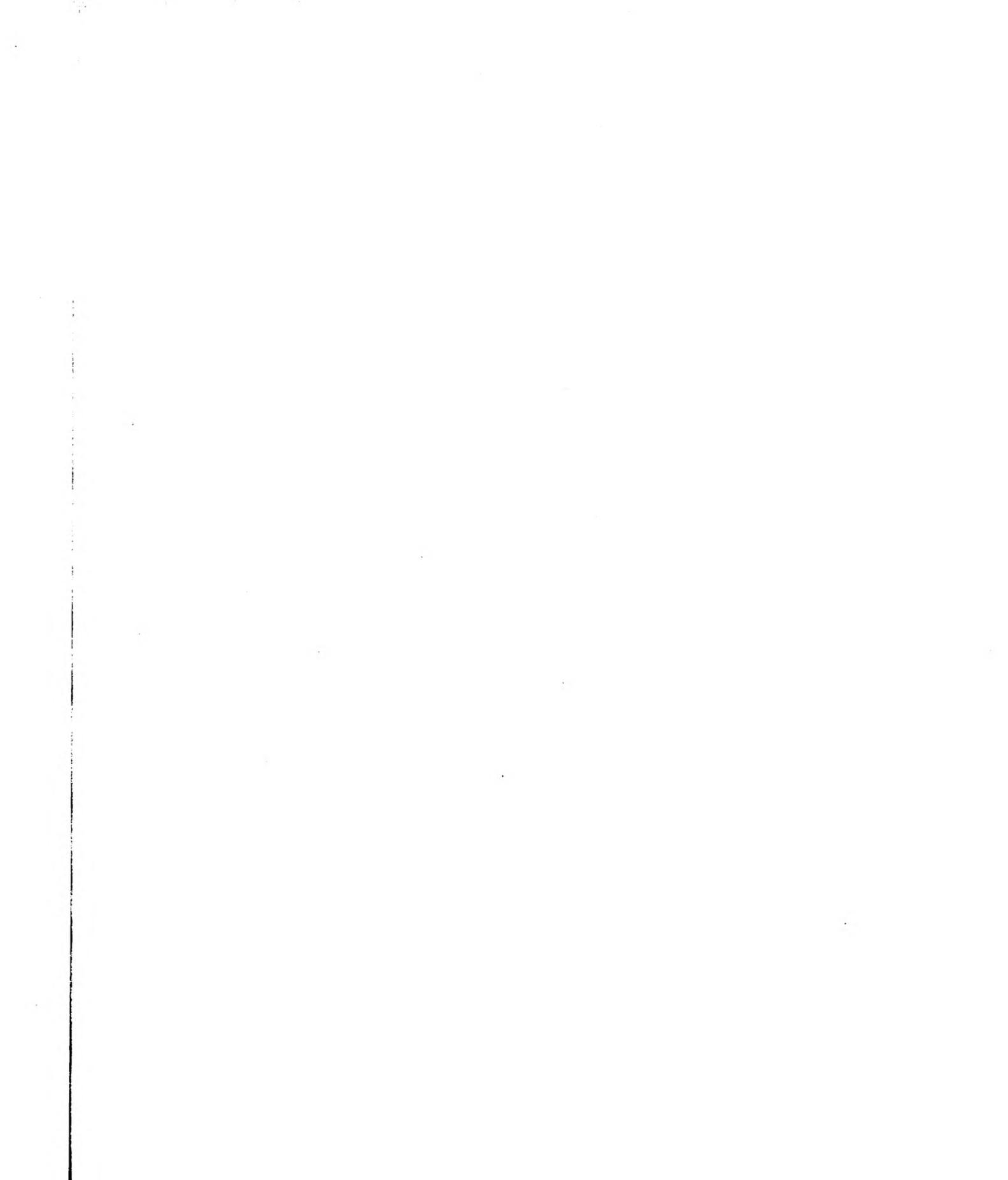
Echelle



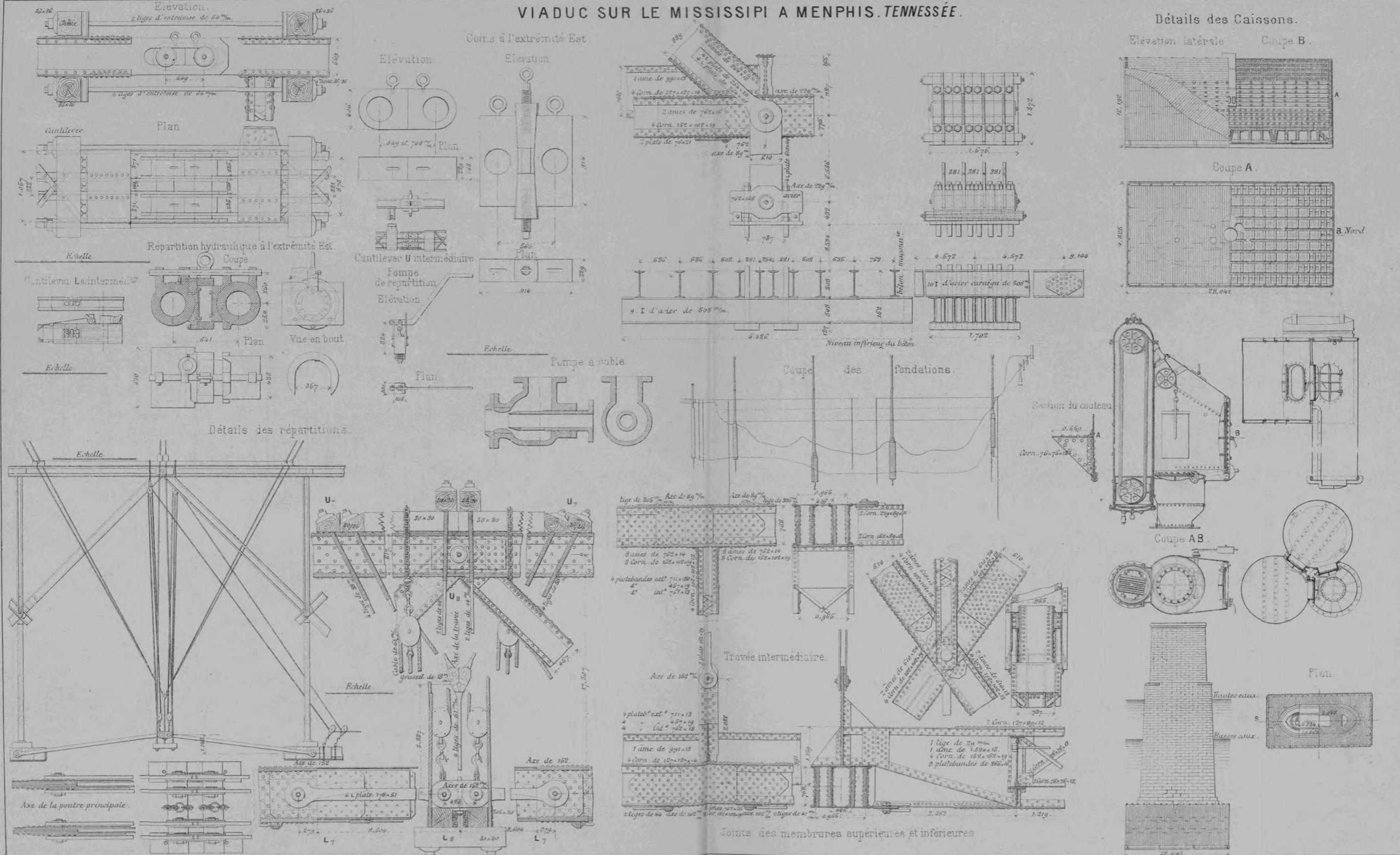
Section AE

Section CD

279-



VIADUC SUR LE MISSISSIPI A MENPHIS. TENNESSEE.



CHUTE D'UNE TRAVÉE DU PONT DE LOUISVILLE

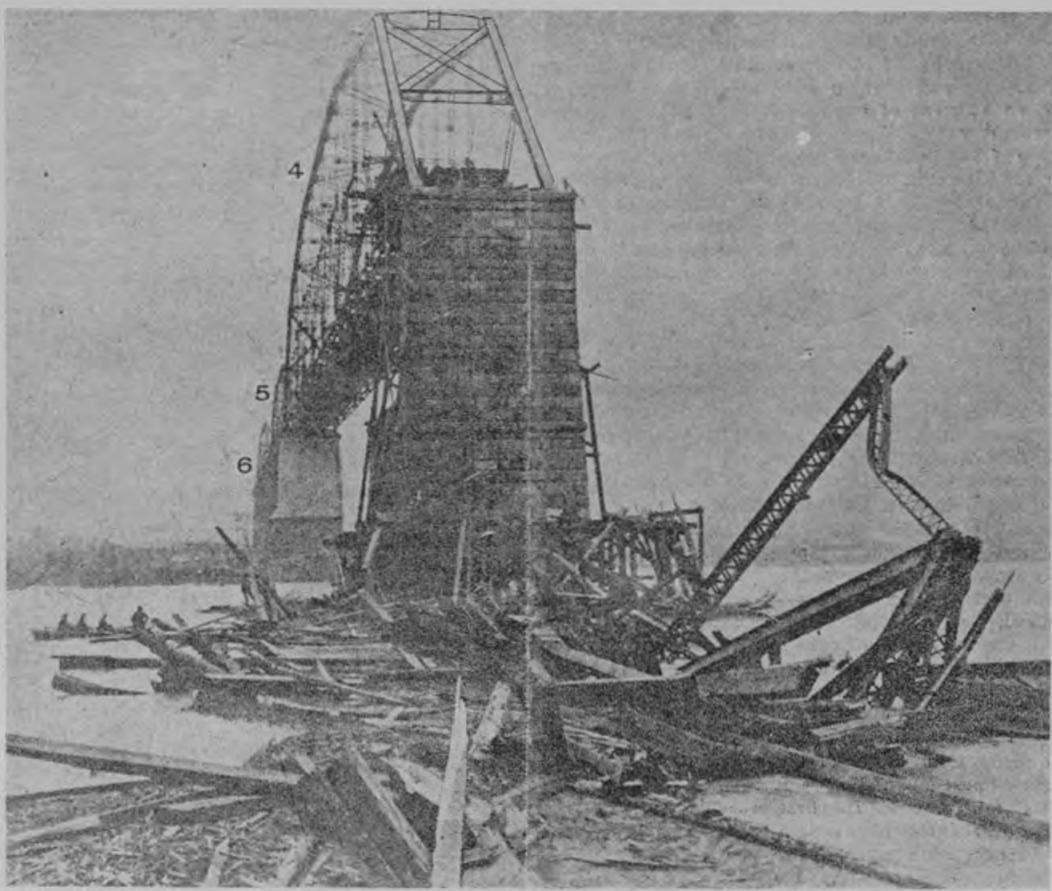


FIG. 1

DIVERS

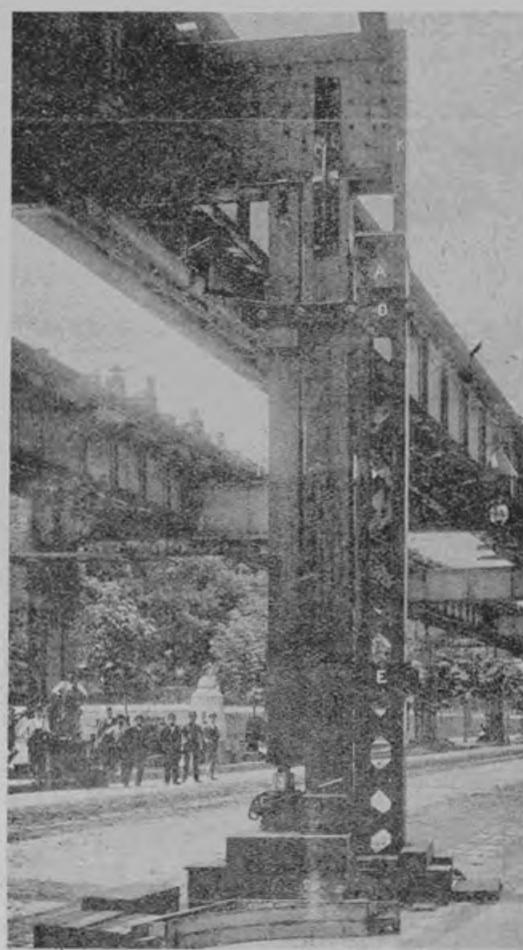


FIG. 4



FIG. 2

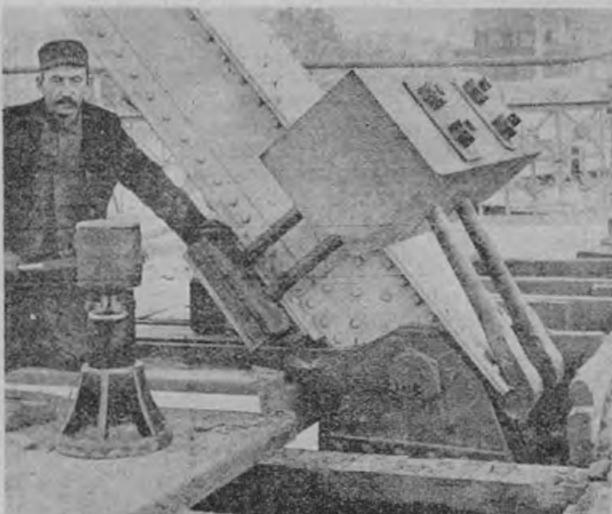


FIG. 5



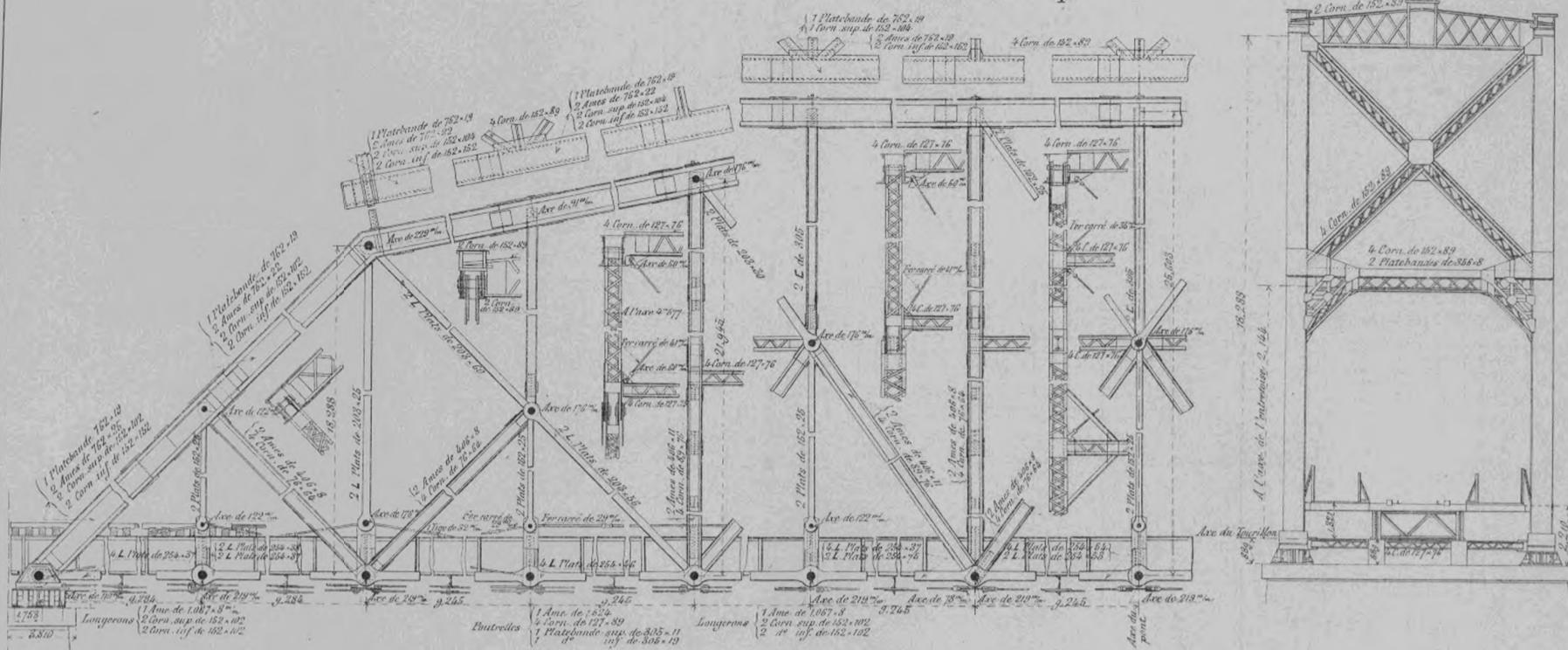
FIG. 3



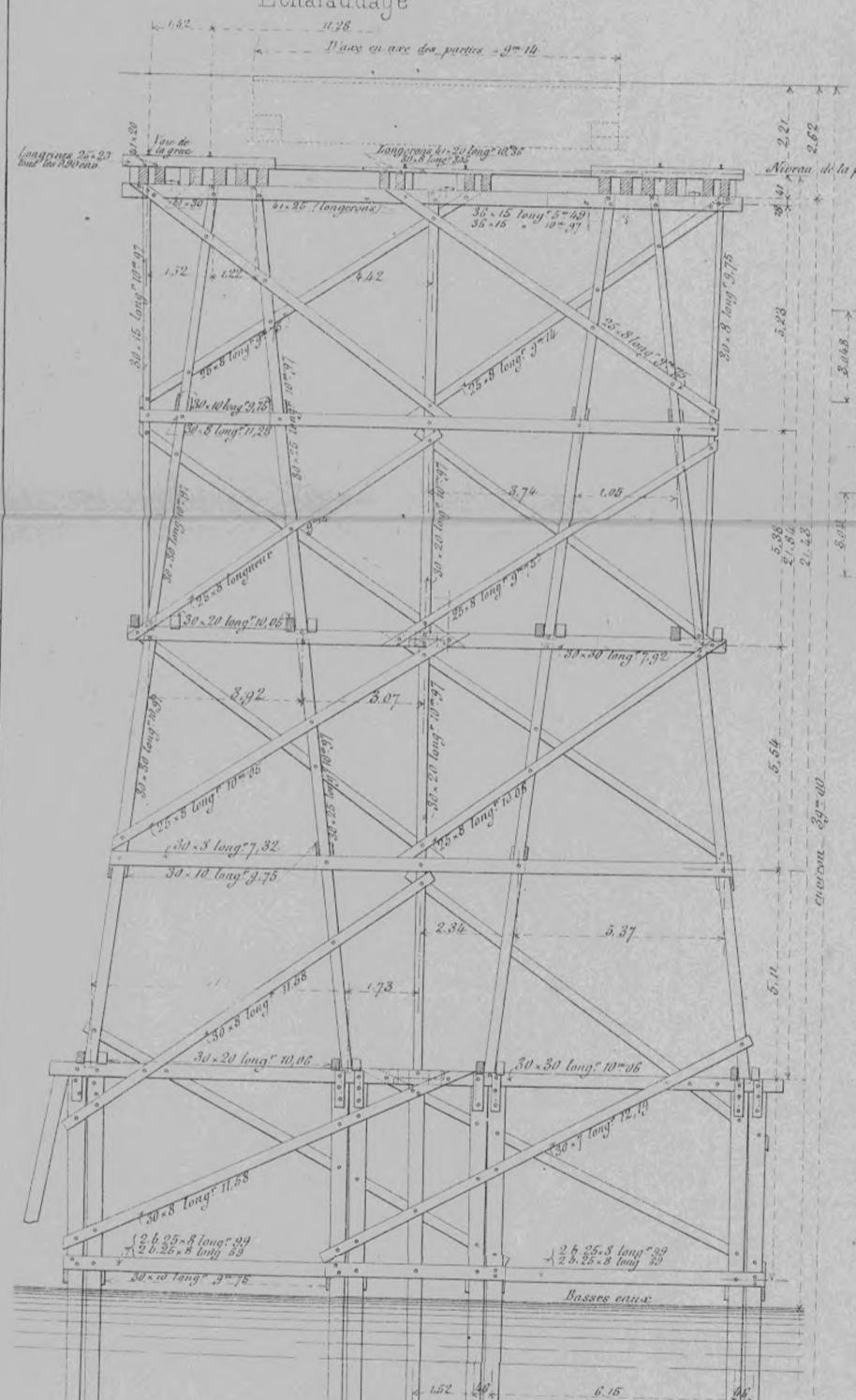
FIG. 6

VIADUC DE LOUISVILLE (Kentucky)
Ensemble et détails de l'ossature métallique.

Vue en bout



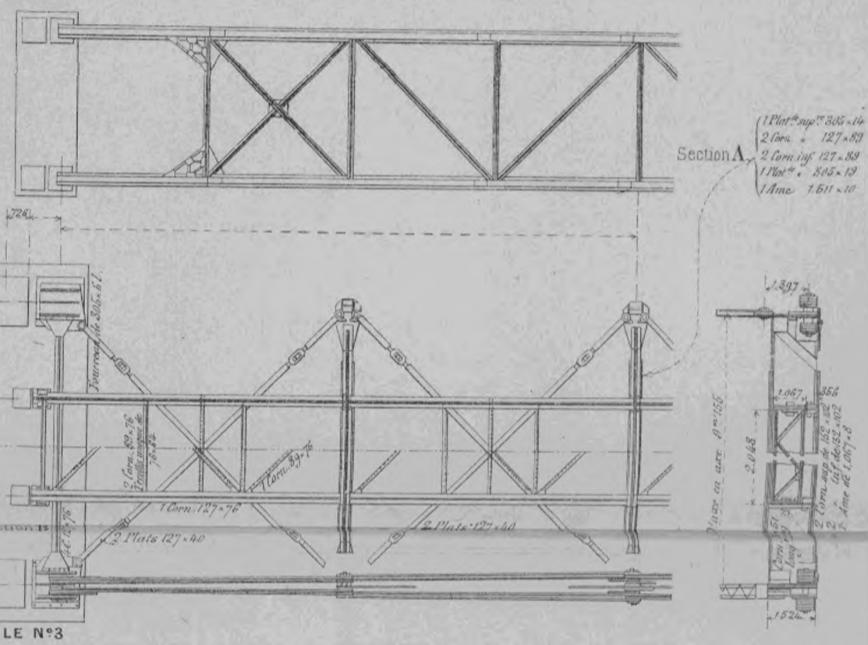
Echafaudage



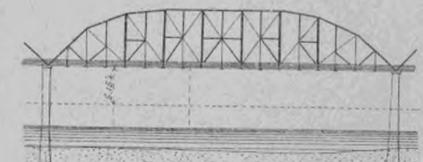
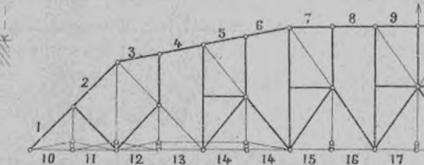
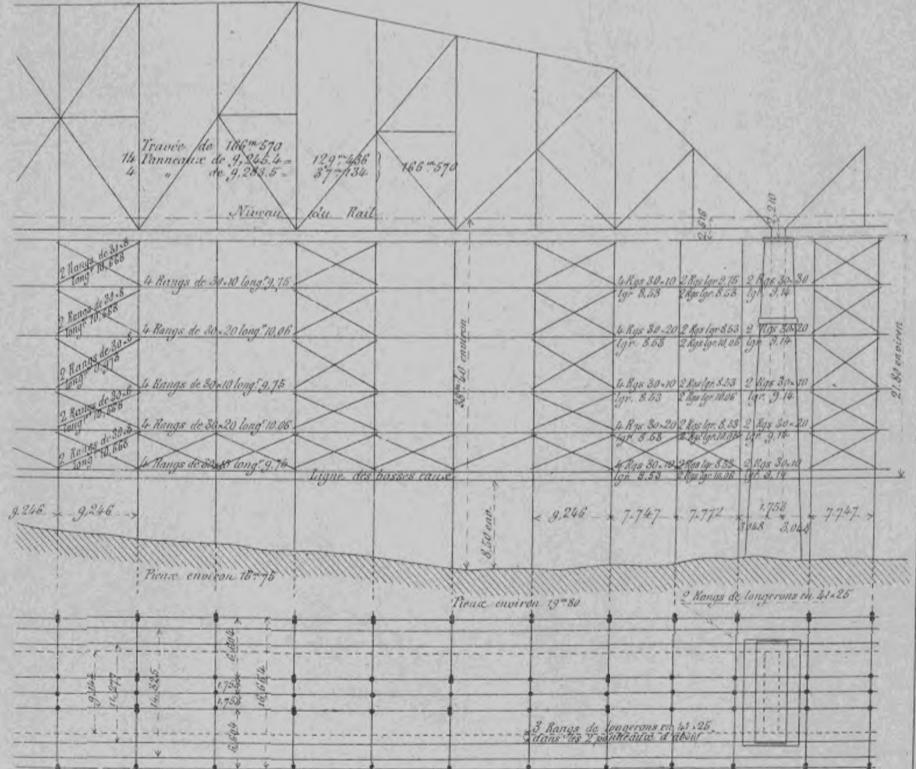
19 Pylônes

Diamètre min des pieux 23 cent.
Long" des pieux min 19.80

Contreventement



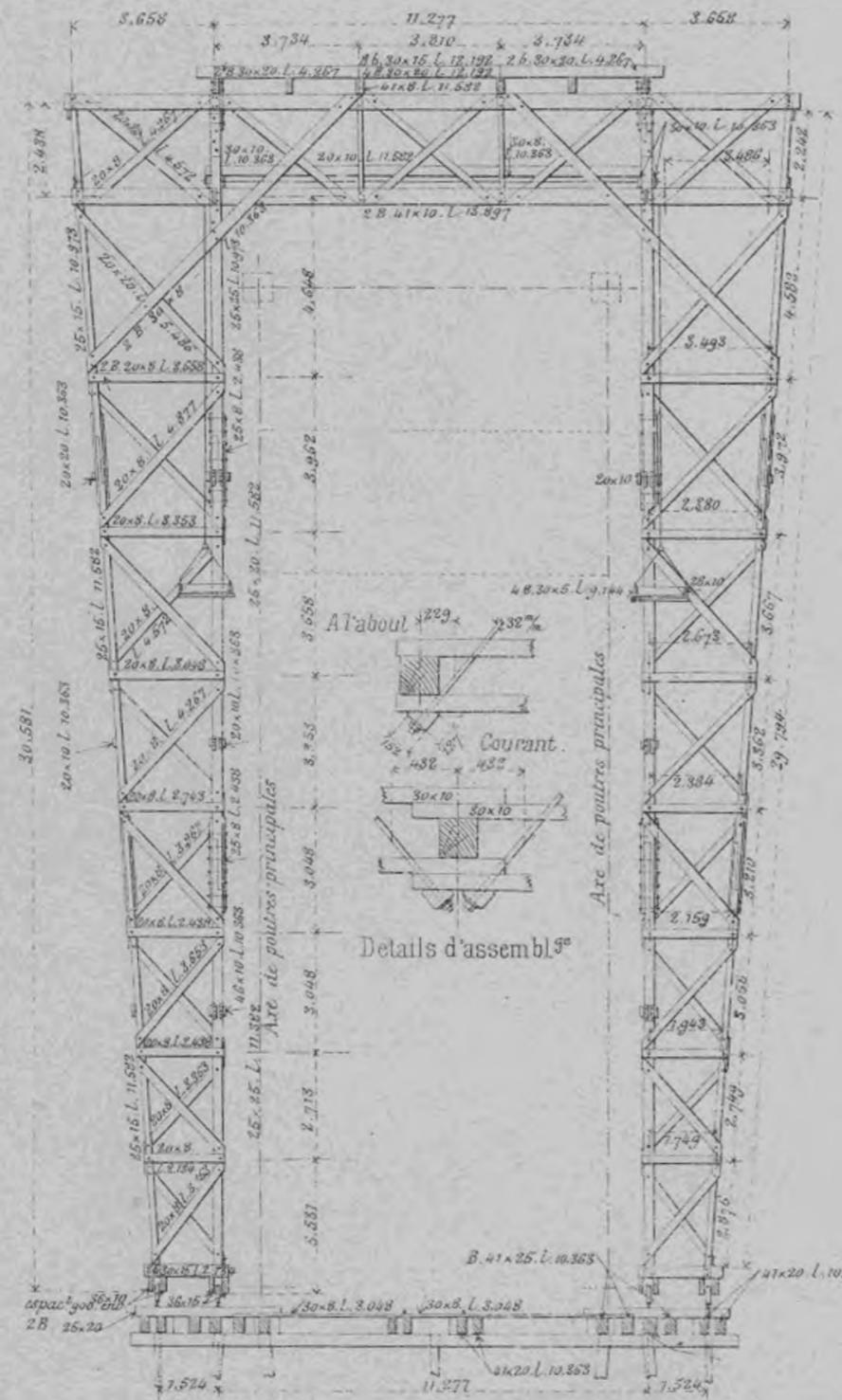
Echafaudage de montage



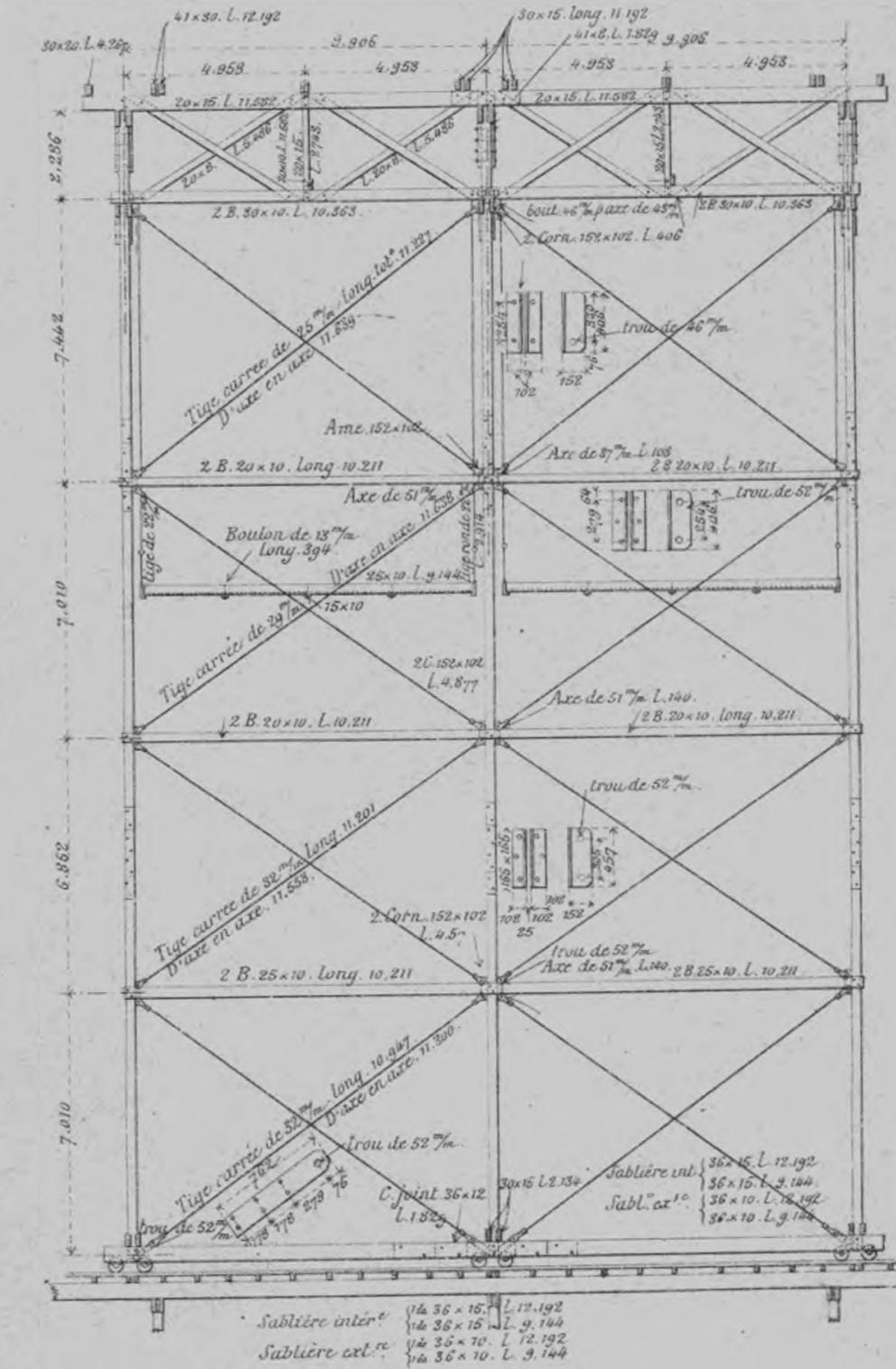
PONT DE LOUISVILLE (KENTUCKY.)

Détails de la grue de montage

Vue en bout



Vue de face



PONT DROIT A AMES PLEINES.
à la 93^e Rue de Chicago.

Fig. 1 Section transversale sur rue

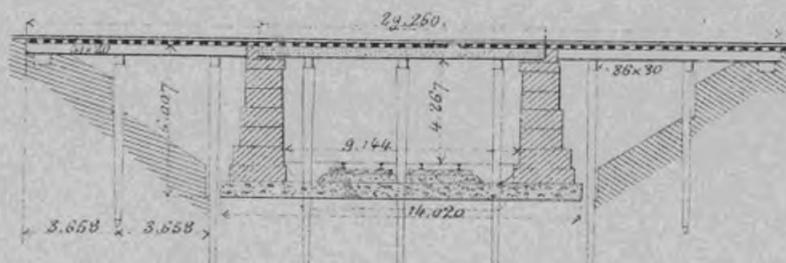


Fig. 10.

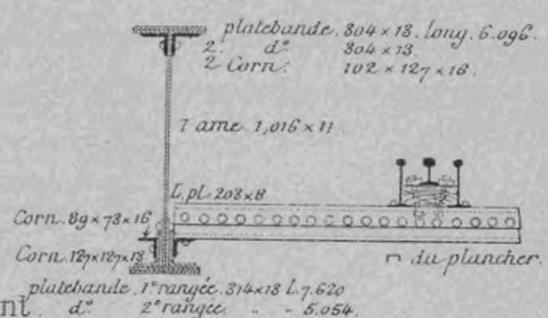


Fig. 2. Section transv. le du pont.

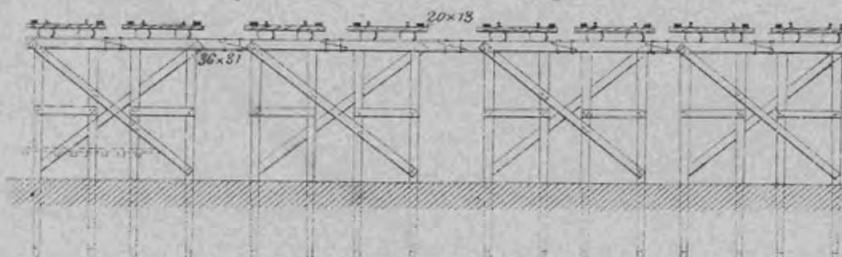


Fig. 3. Culée.

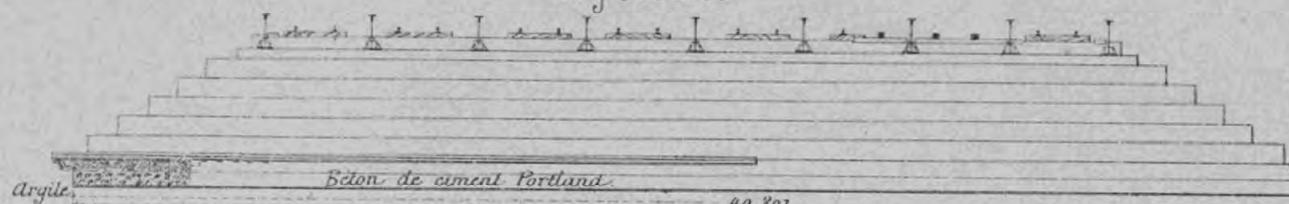


Fig. 5.

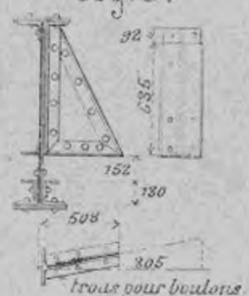


Fig. 6

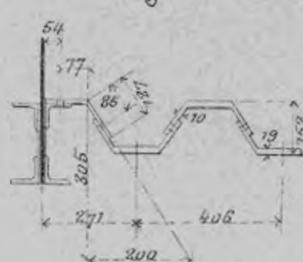


Fig. 8.

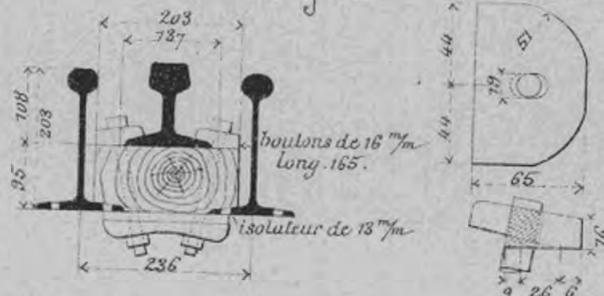


Fig. 7. Détails d'une poutre.

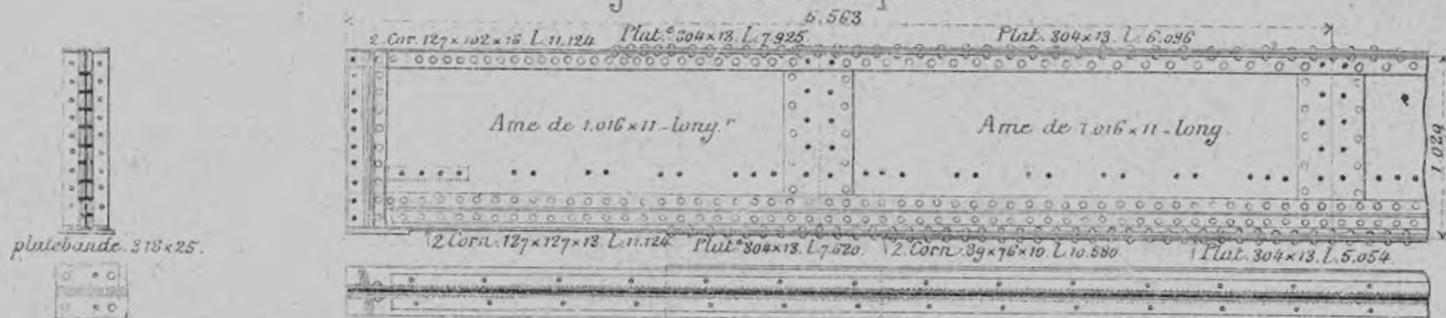


Fig. 4.

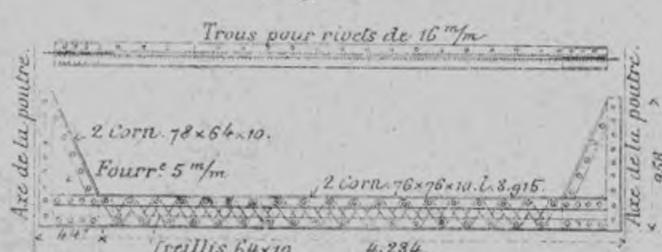


Fig. 9

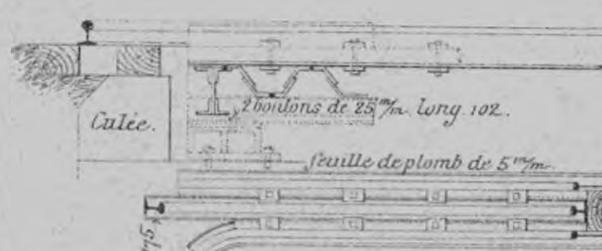
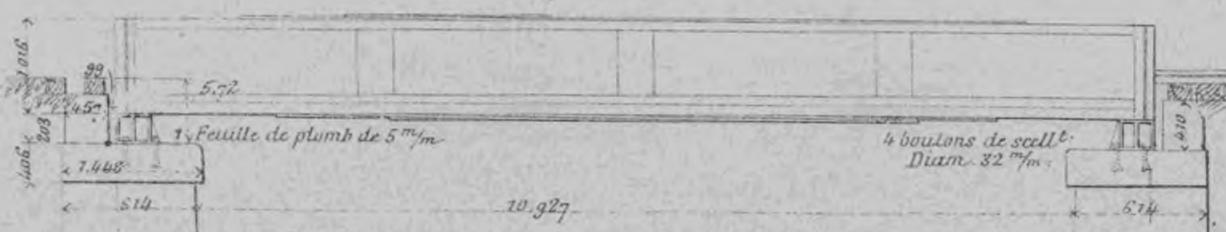


Fig. 11. Ensemble.



VIADUC SUR LA TAMISE . à New-London

Fig. 1.

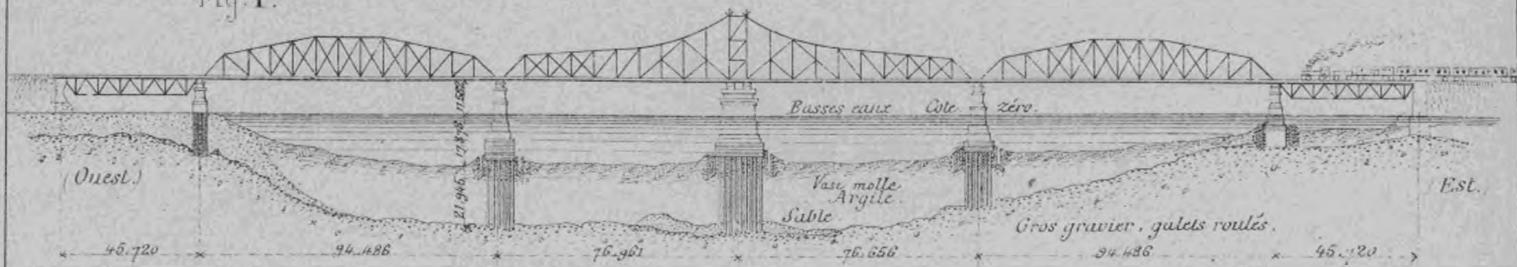


Fig. 2.

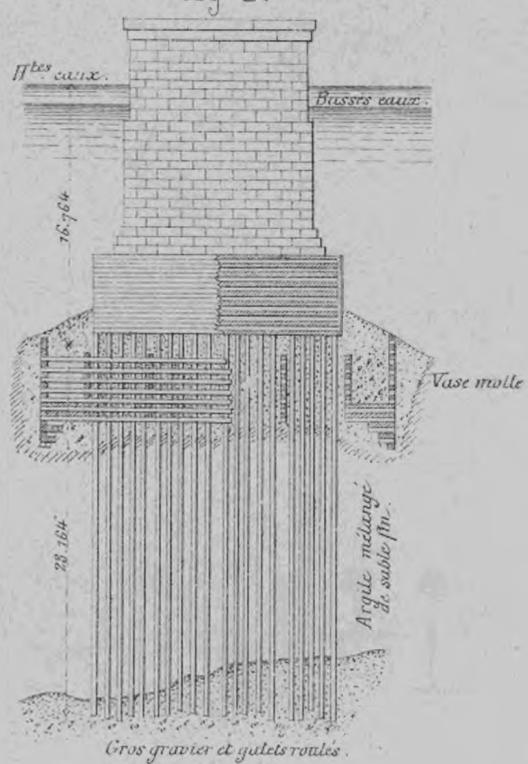


Fig. 3.

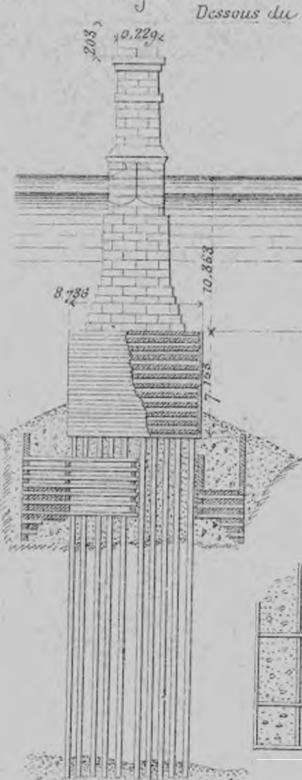


Fig. 4.

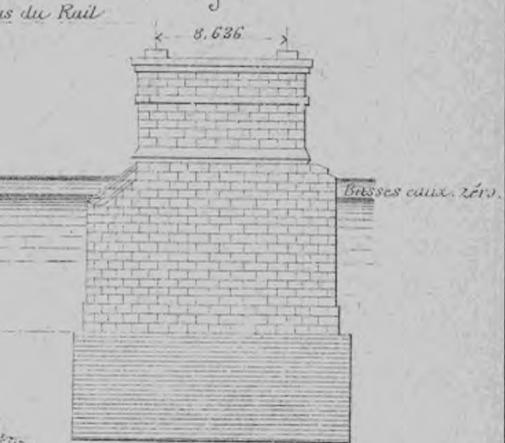


Fig. 5

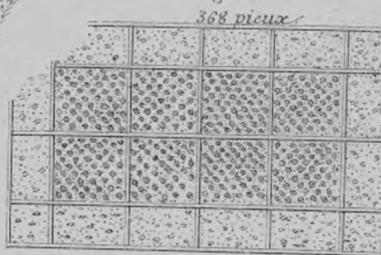
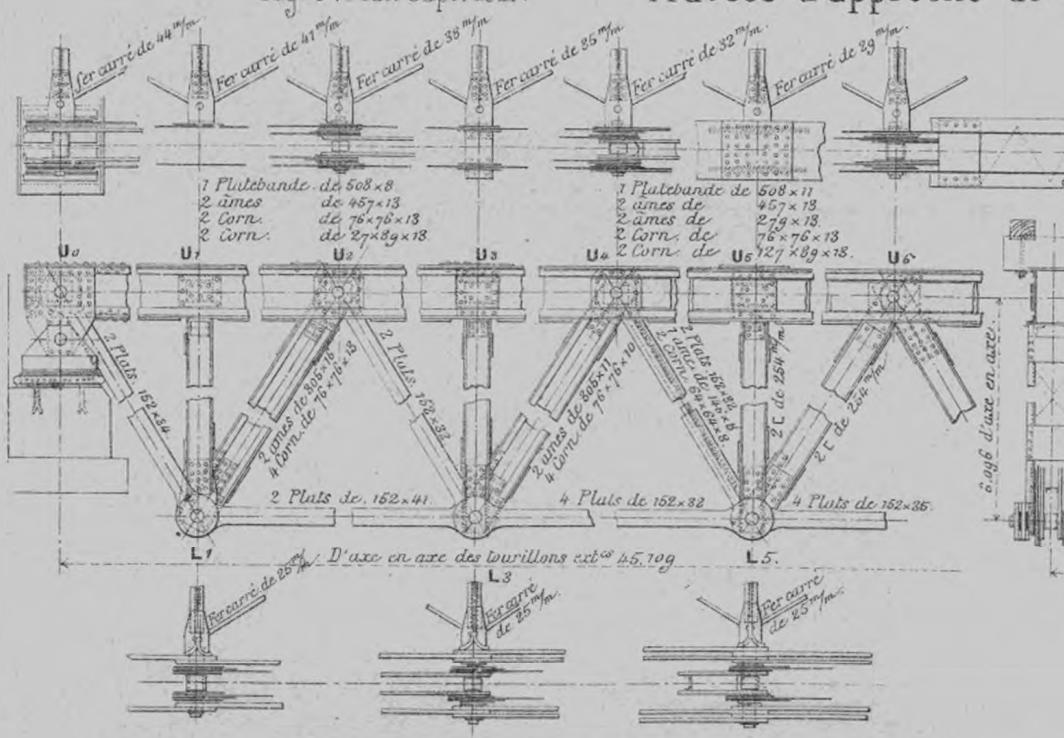
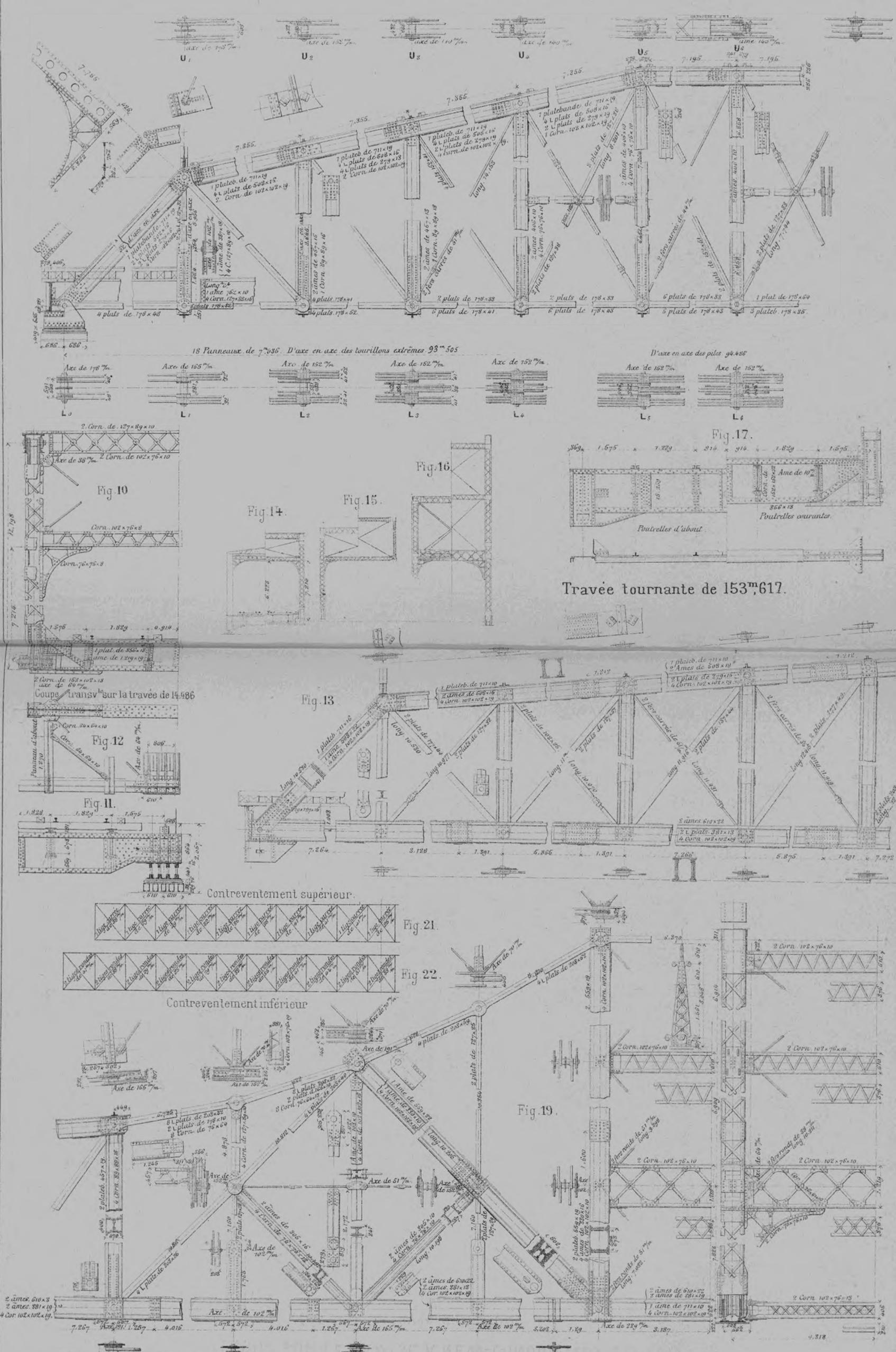


Fig. 6. Plan supérieur.

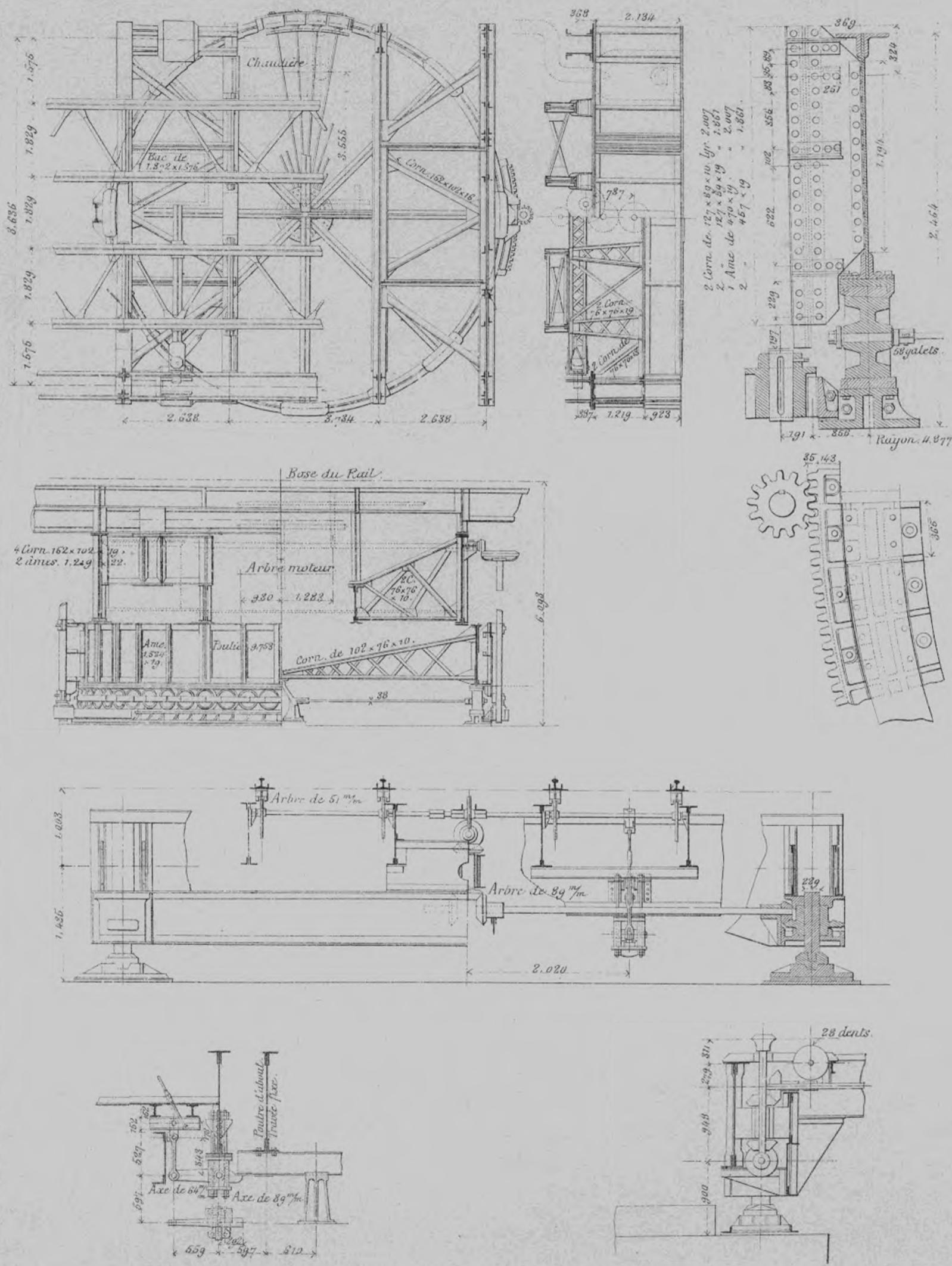


VIADUC SUR LA TAMISE A NEW-LONDON (CONNECTICUT).

Travée de 94^m.486.



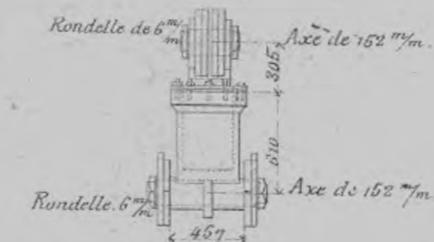
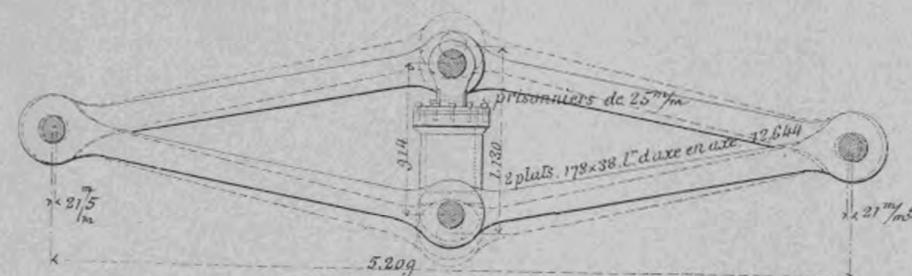
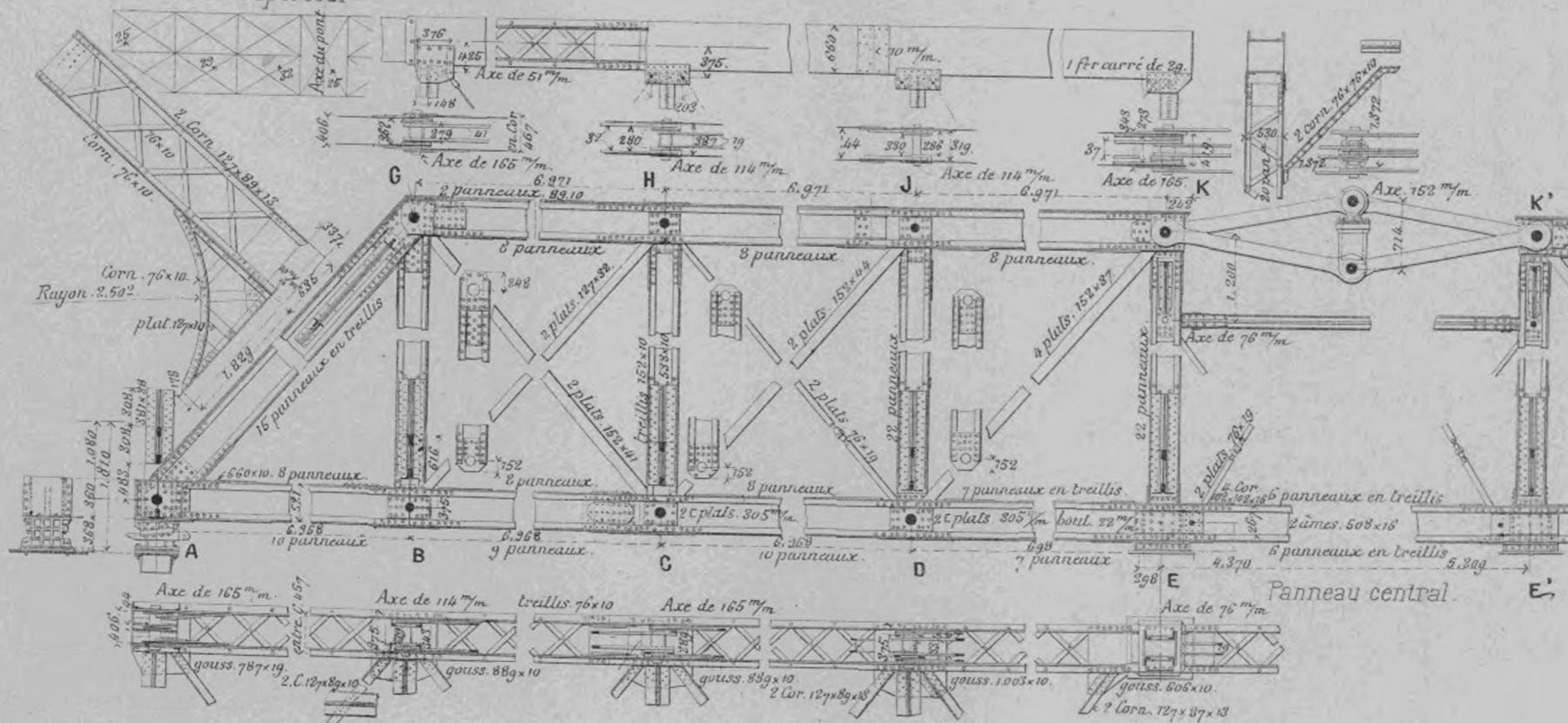
VIADUC SUR LA TAMISE A NEW-LONDON (CONNECTICUT).



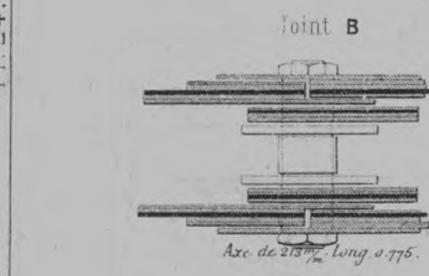
PONT TOURNA NT SUR LA RIVIÈRE PASSAIC

New-York Lake Erie & Western Railroad Constr'g

Plan supérieur

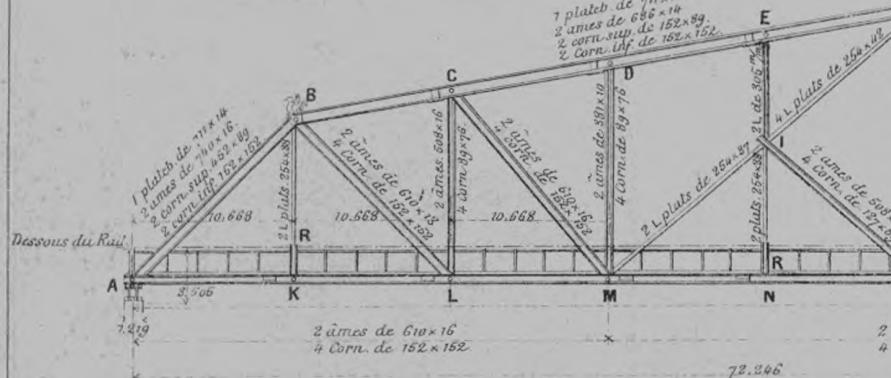


PONT TOURNANT D'OMAHA
(NEBRASKA)



Joint C

Fig. 1. Elevation



Joint D

Fig. 2. Coupe transv sur l'axe

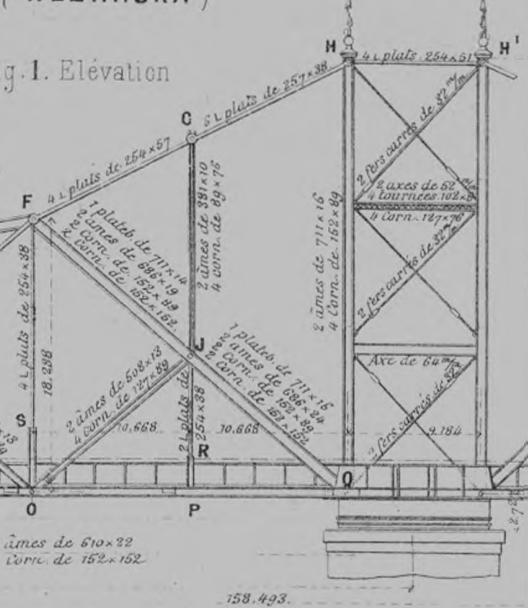
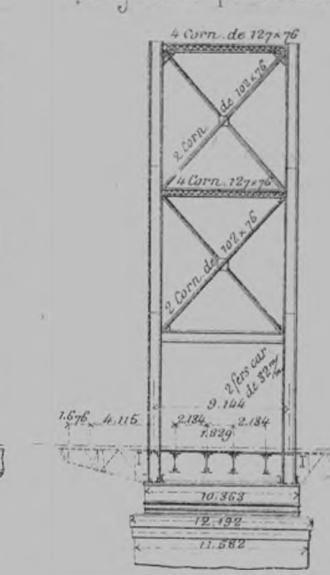
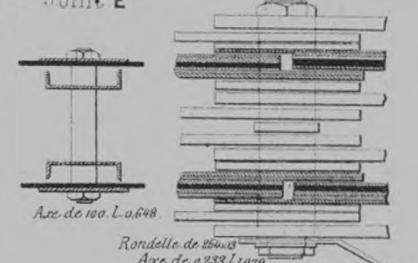


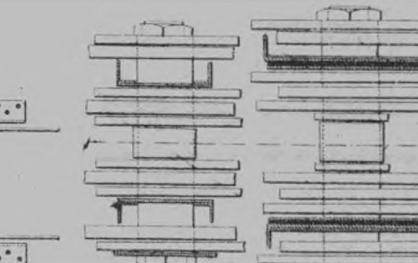
Fig. 3. Plan inférieur



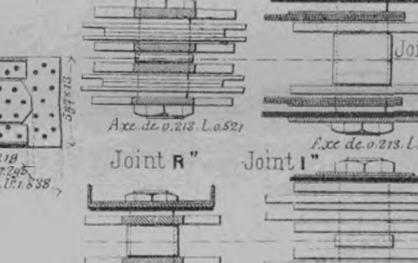
Joint F



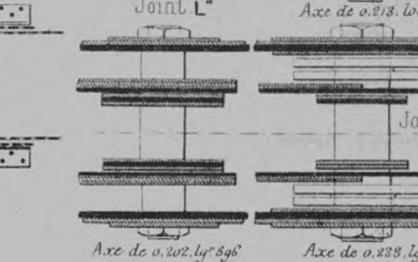
Joint G



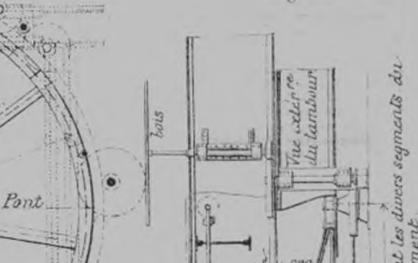
Joint H



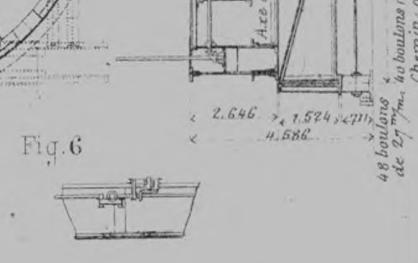
Joint I



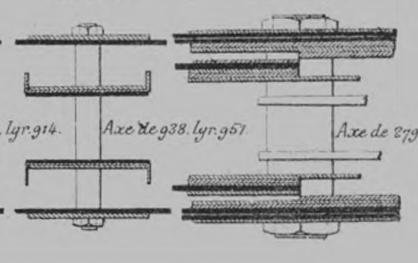
Joint J



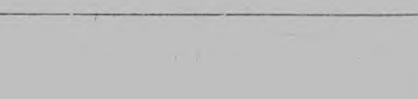
Joint K



Joint L



Joint M



Joint N

Joint O

Joint P

Joint Q

Joint R

Joint S

Joint T

Joint U

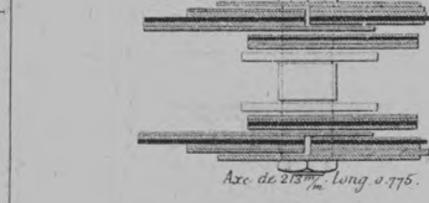
Joint V

Joint W

Joint X

Joint Y

Joint Z



Joint C

PONT TOURNANT D'OMAHA
(NEBRASKA)

Fig. 1. Elevation

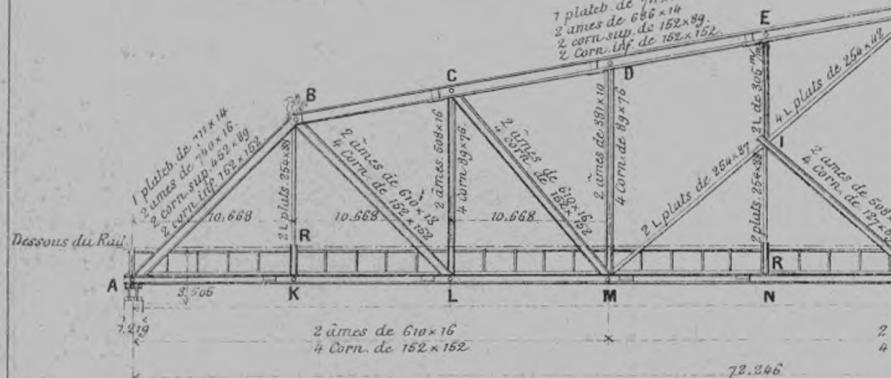


Fig. 2. Coupe transv sur l'axe

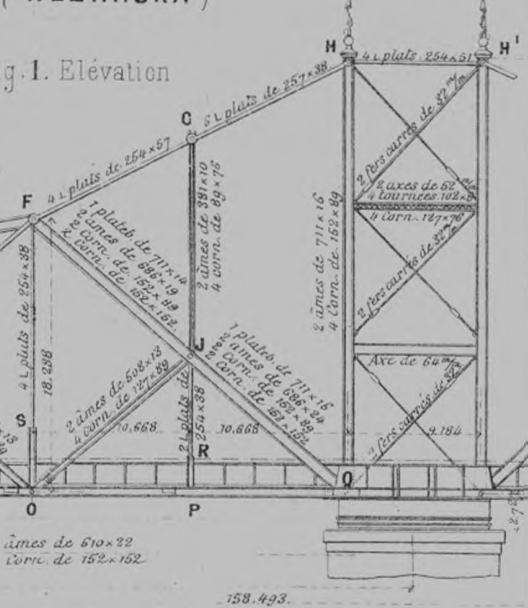
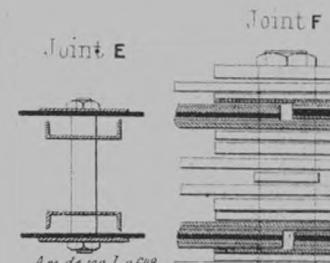
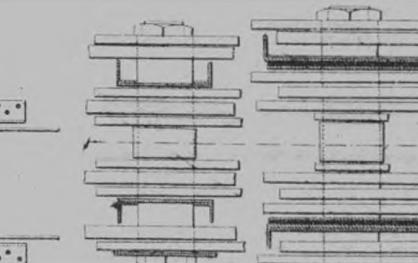


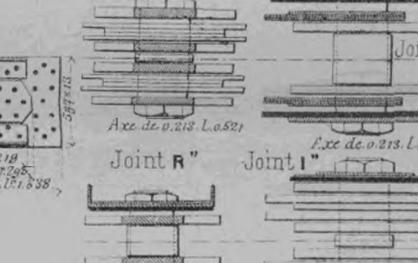
Fig. 3. Elevation



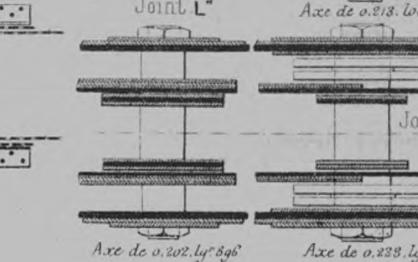
Joint F



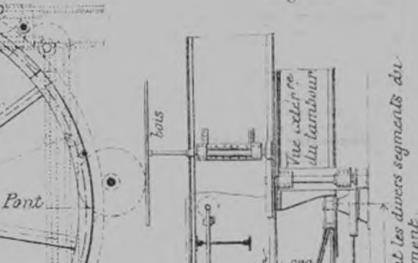
Joint G



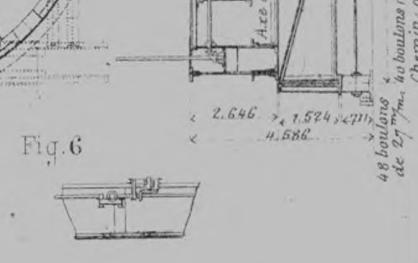
Joint H



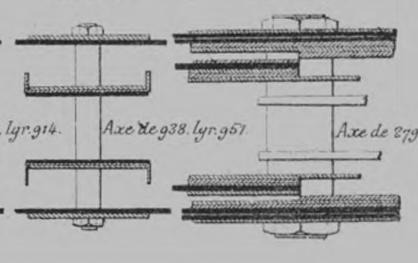
Joint I



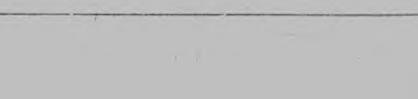
Joint J



Joint K



Joint L



Joint M

Joint N

Joint O

Joint P

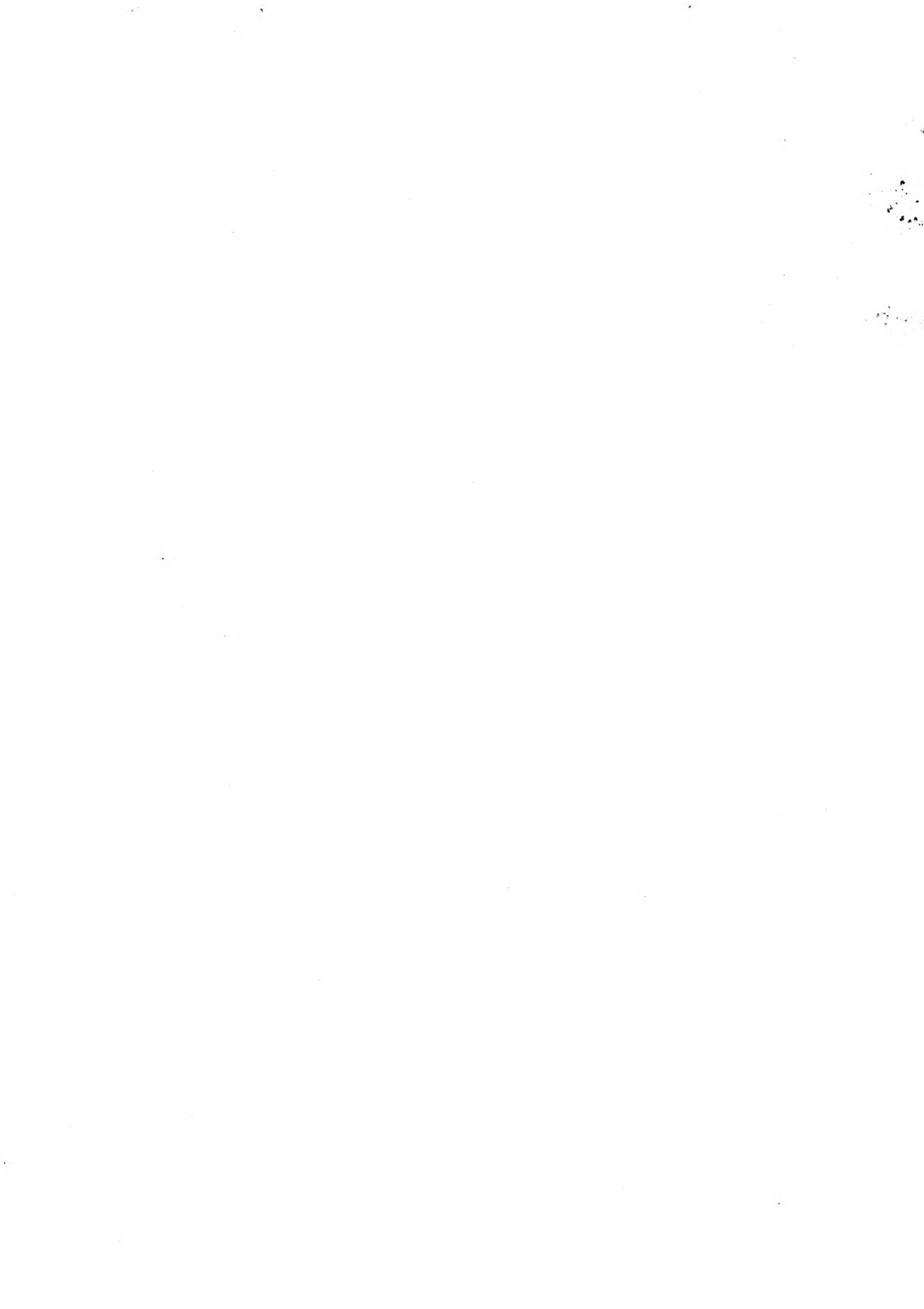
Joint Q

Joint R

Joint S

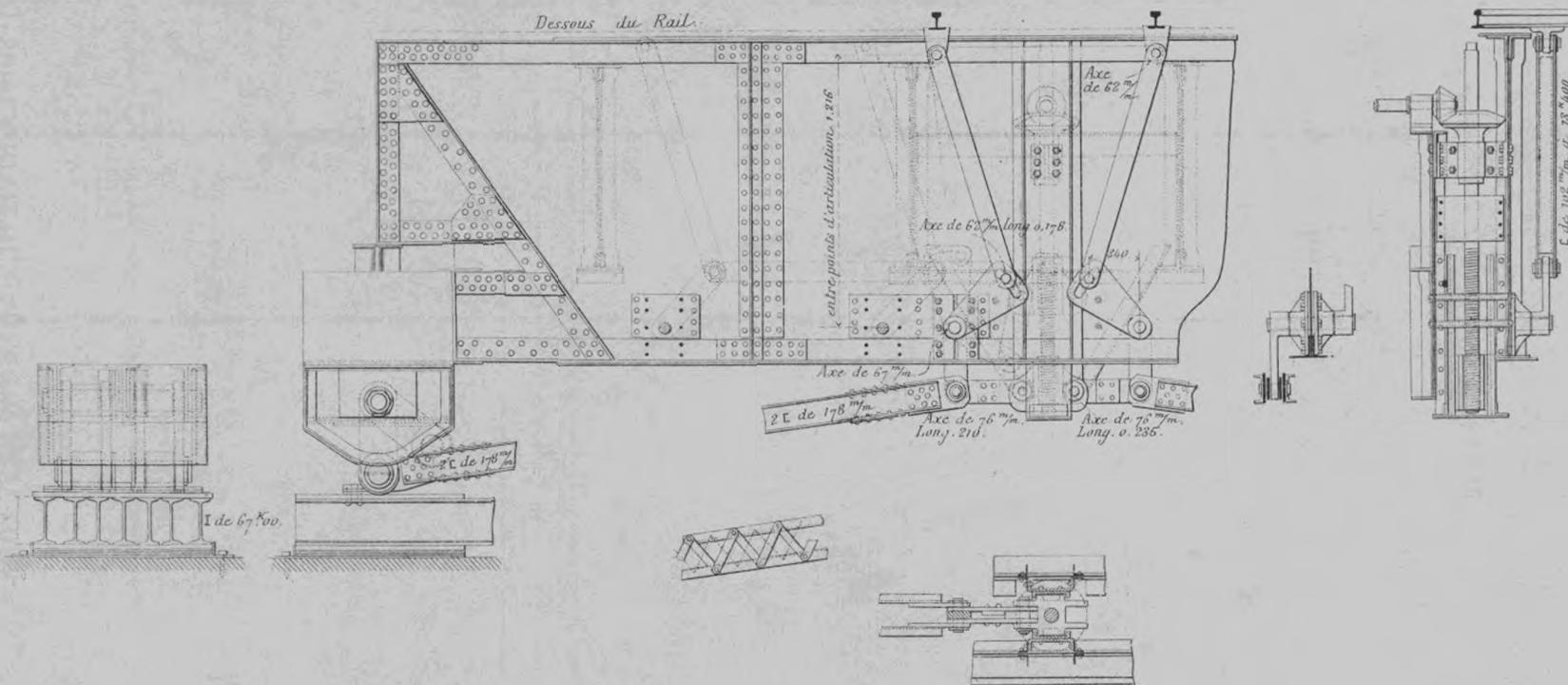
Joint T

Joint U



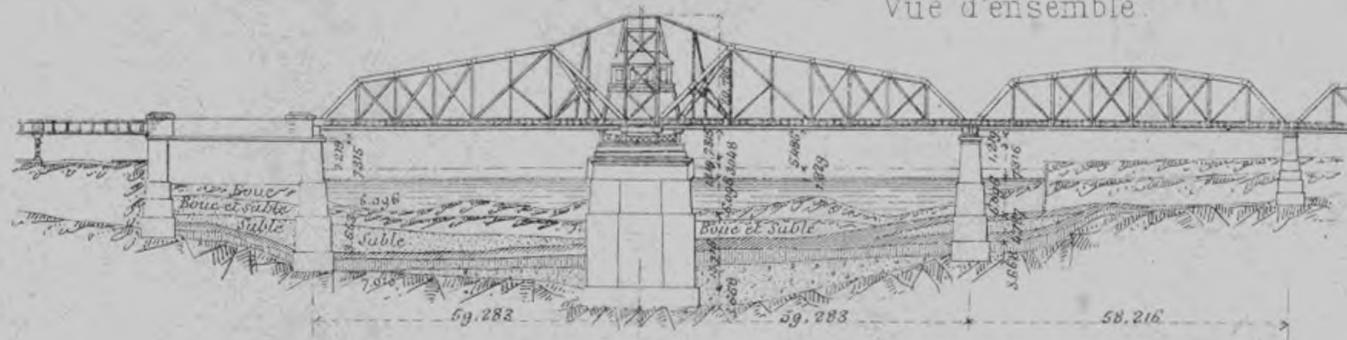
PONT TOURNANT D'OMAHA - (NEBRASKA).

Appareil de relèvement des extrémités des voûtes.

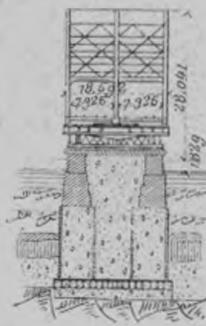


PONT TOURNANT SUR LA RIVIÈRE HARLEM A NEW-YORK

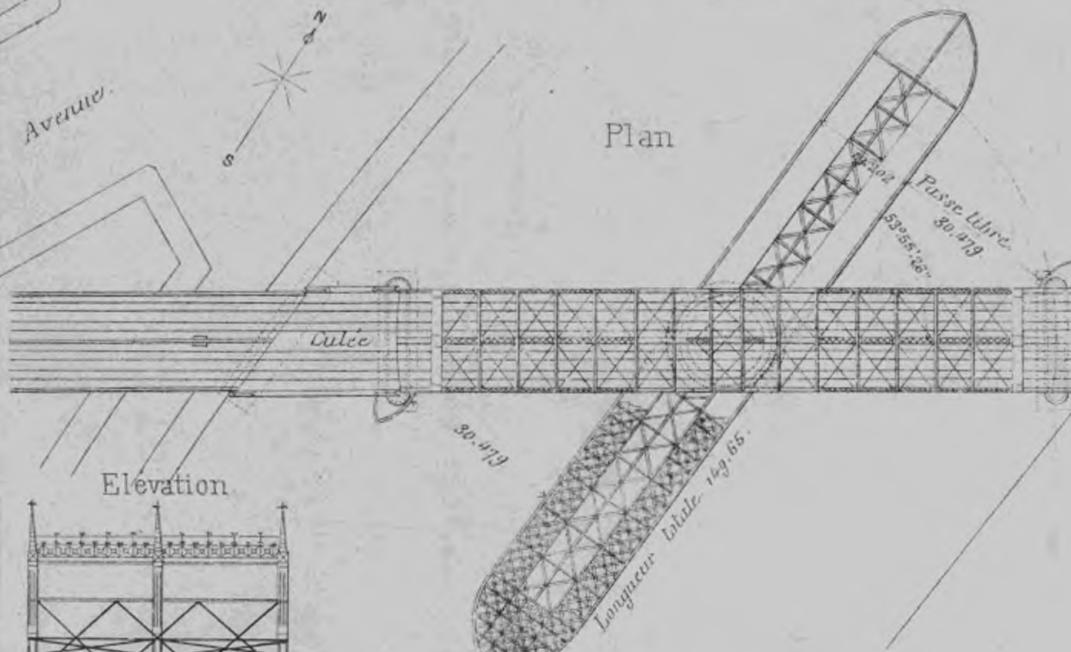
Vue d'ensemble



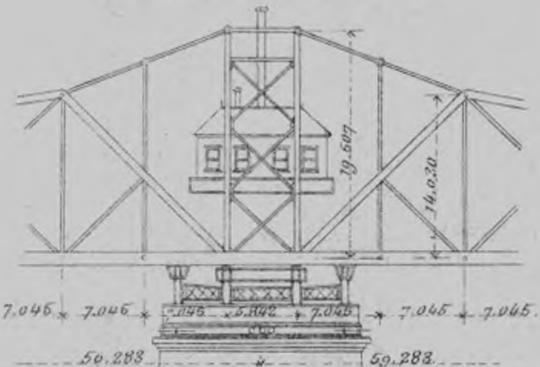
Coupe sur l'axe de la pile



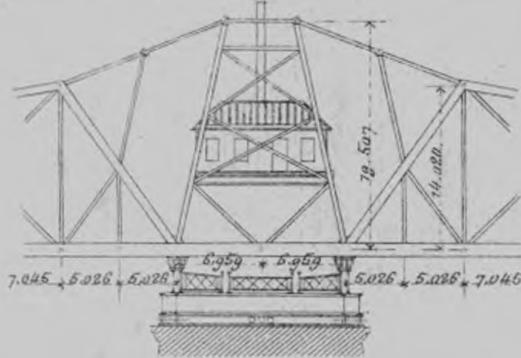
135^e Rue
Avenue.



Plan



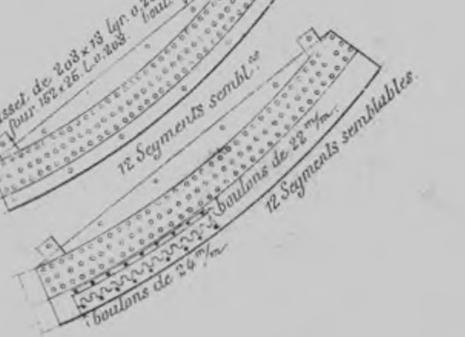
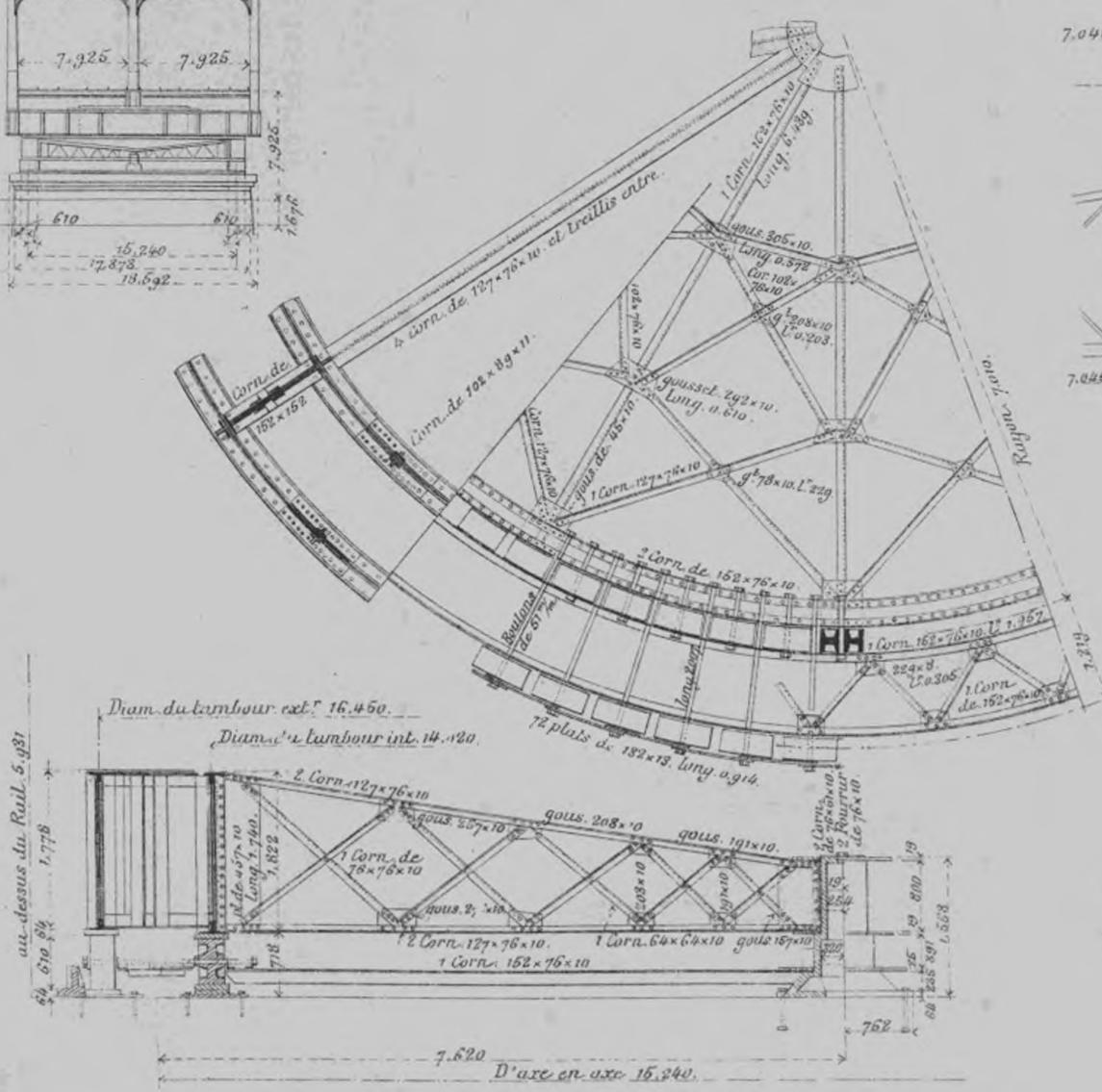
Poutre médiane



Panneaux près la pile centrale.



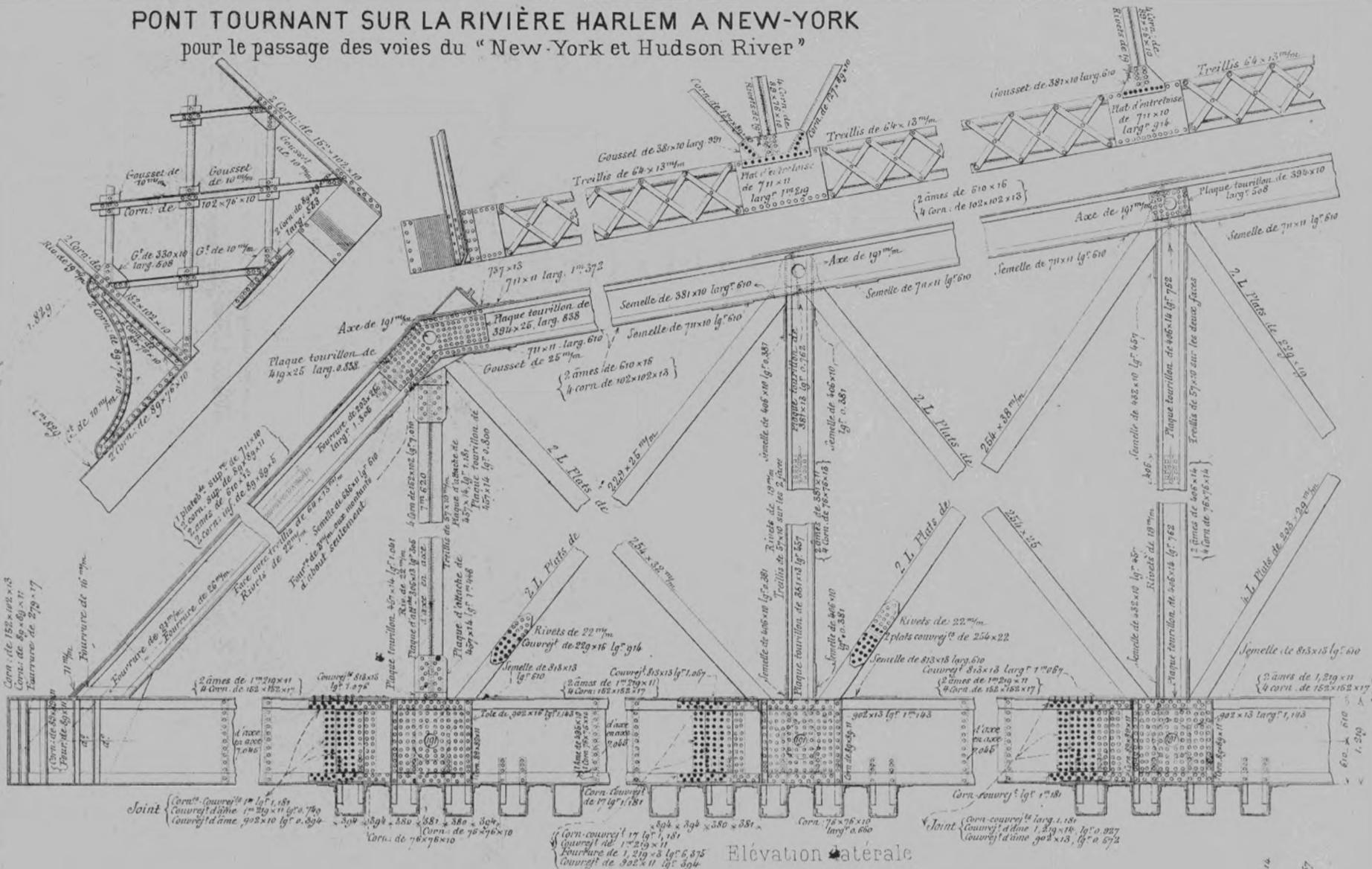
Pivot



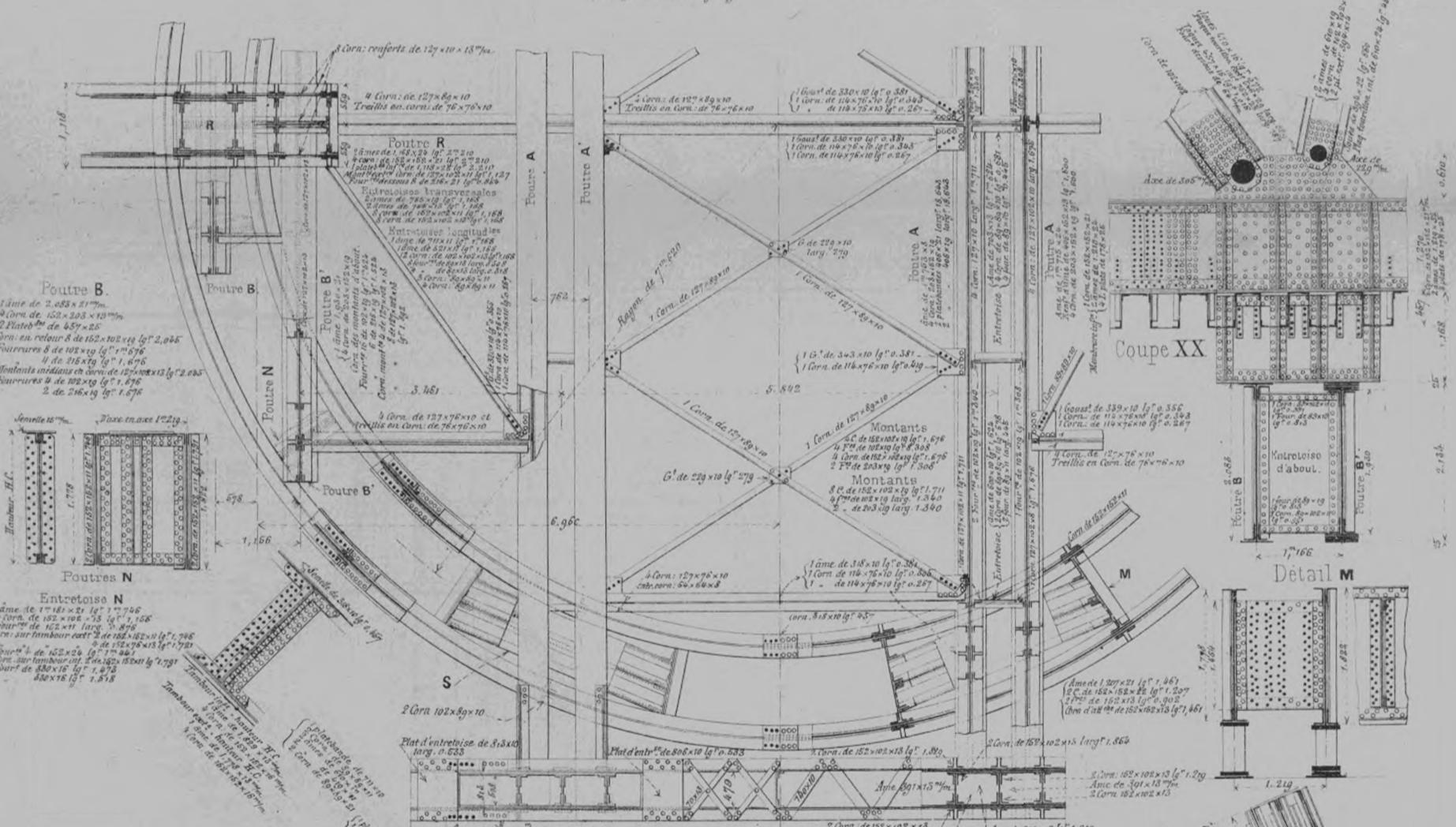
12 Segments semblables.
Boulans de 22 %
de 26 mm.



PONT TOURNANT SUR LA RIVIÈRE HARLEM A NEW-YORK
pour le passage des voies du "New-York et Hudson River"



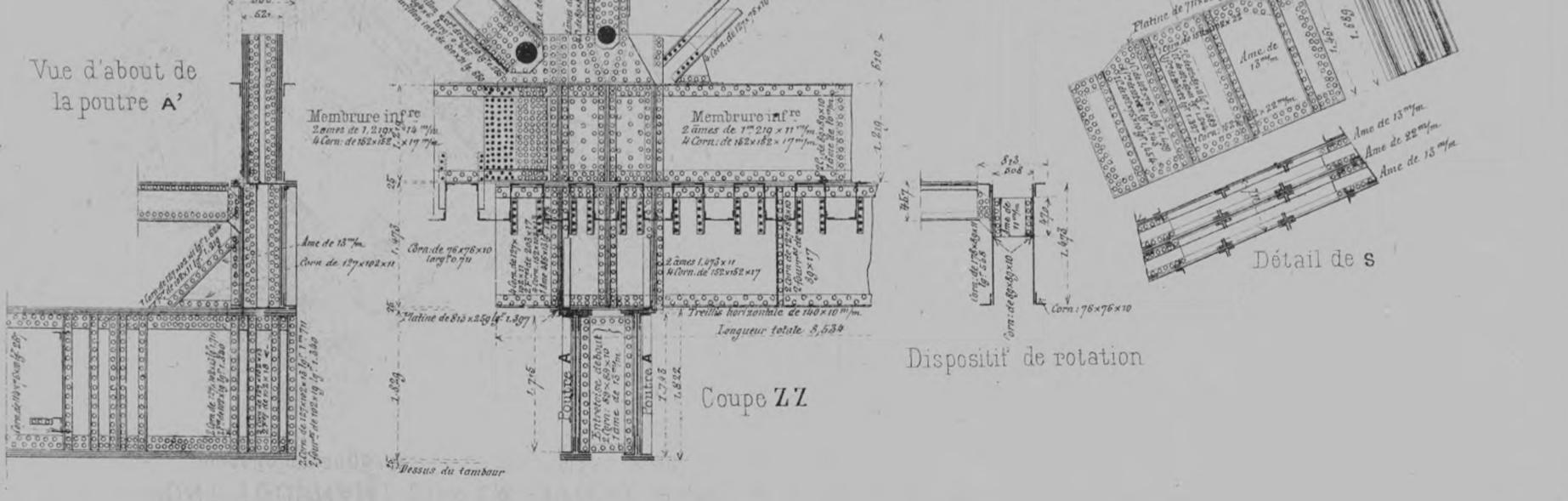
Élevation latérale



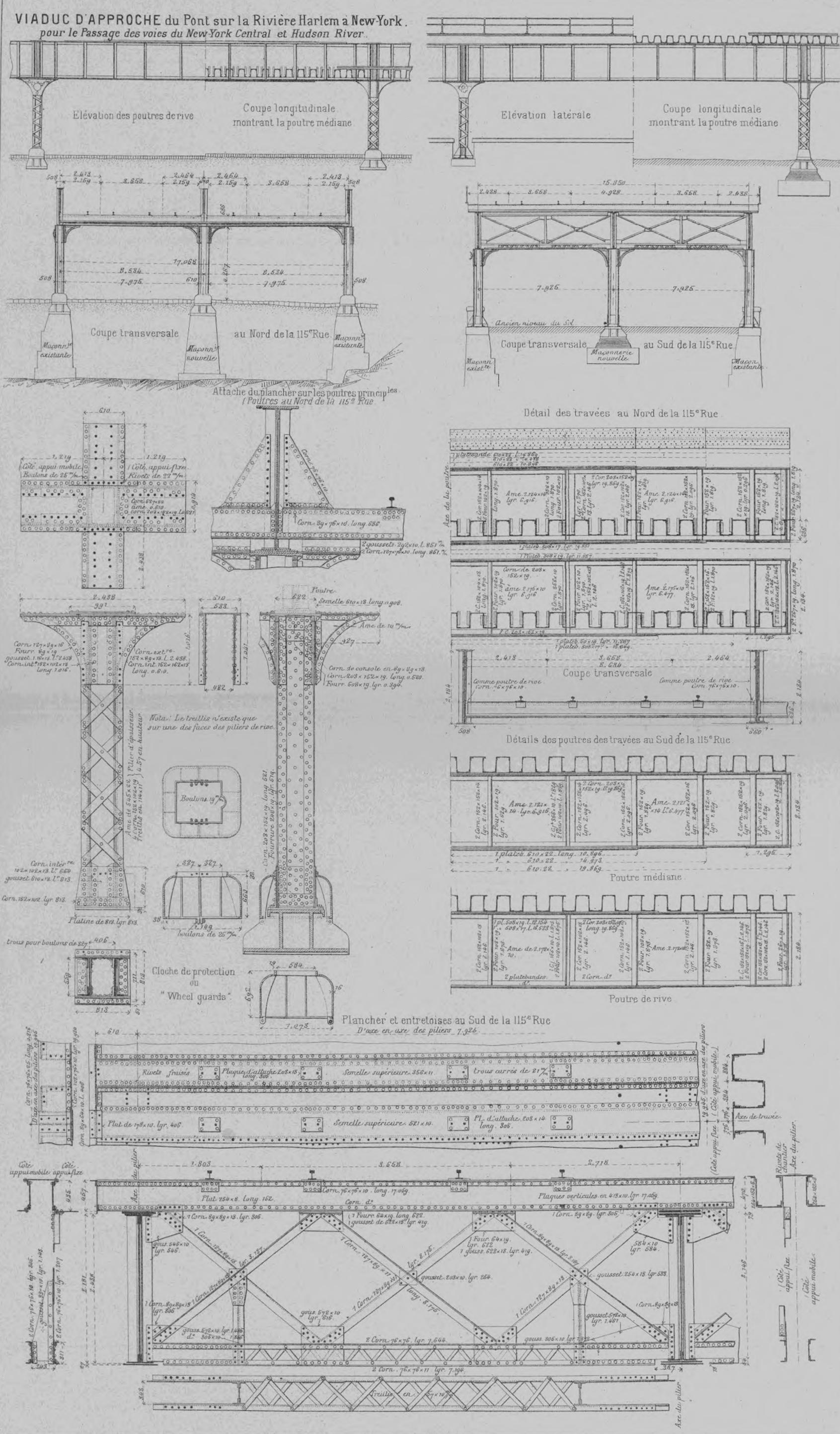
Coupes XX

Detail M

Vue d'about de la poutre A'



Dispositif de rotation



VIADUC D'APPROCHE DU PONT DE BELLEFONTAINE
Compagnie du St Louis. Koehuk & Northwestern.

Fig. 1. Coupe transversale.

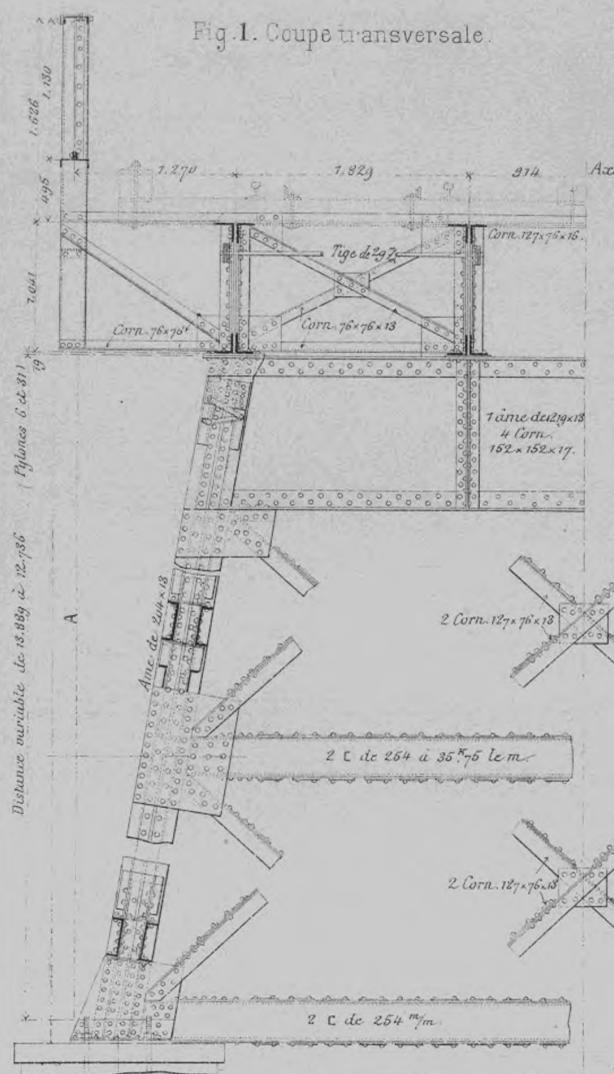


Fig. 2. Elévation longitudinale.

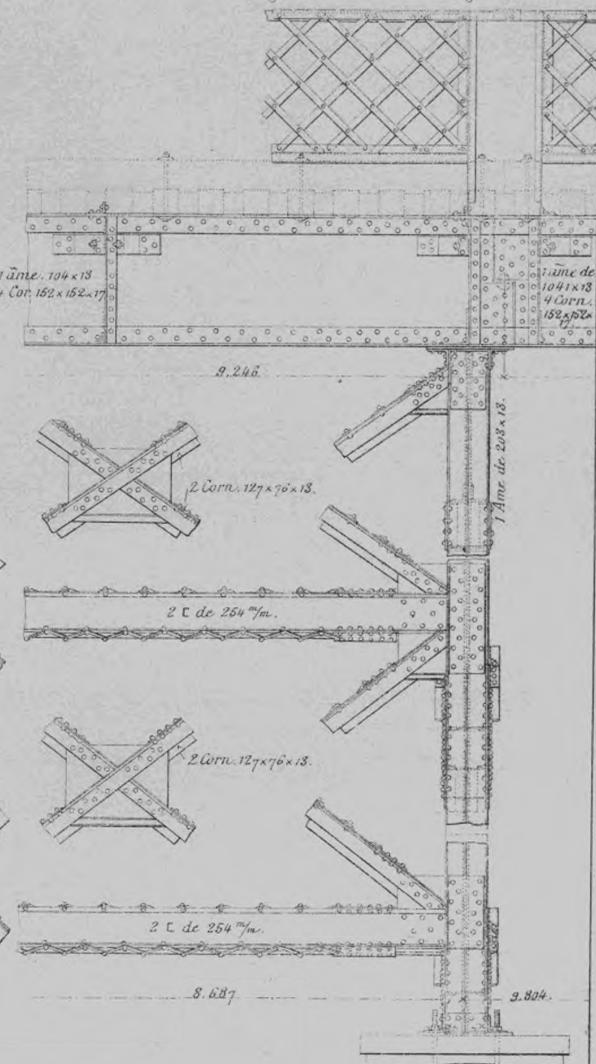
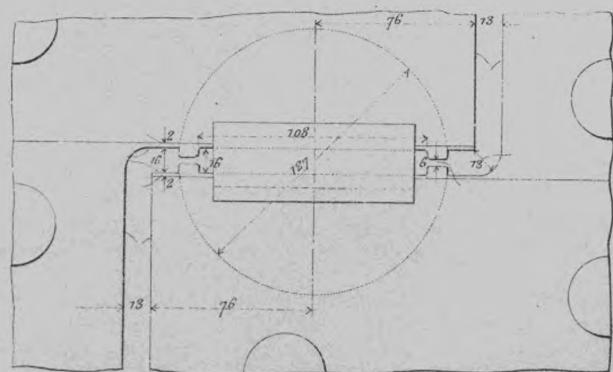
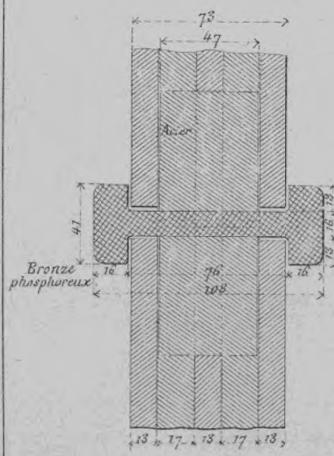
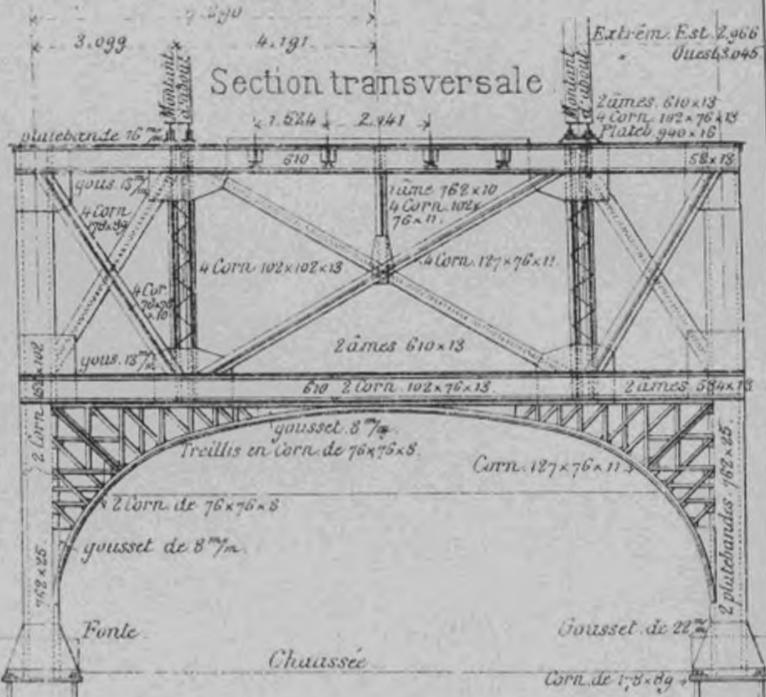
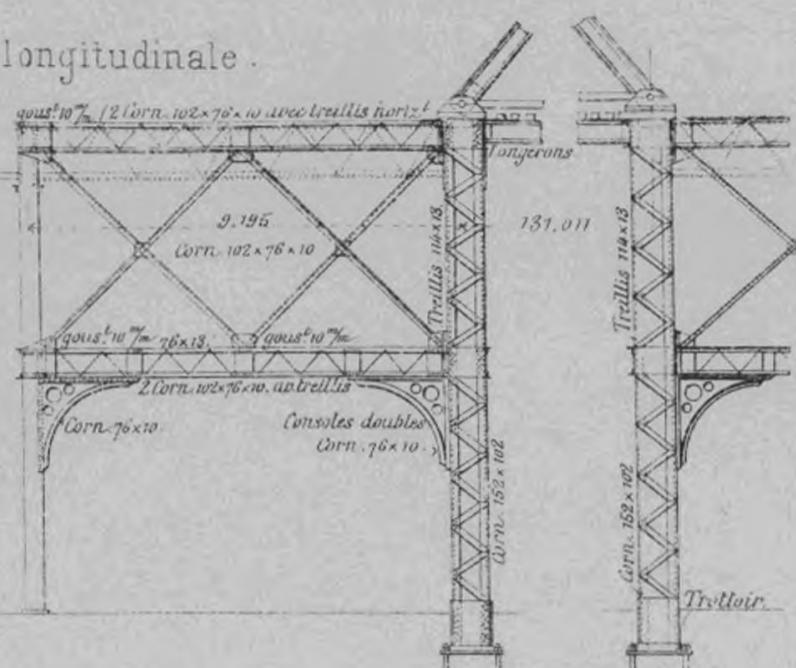
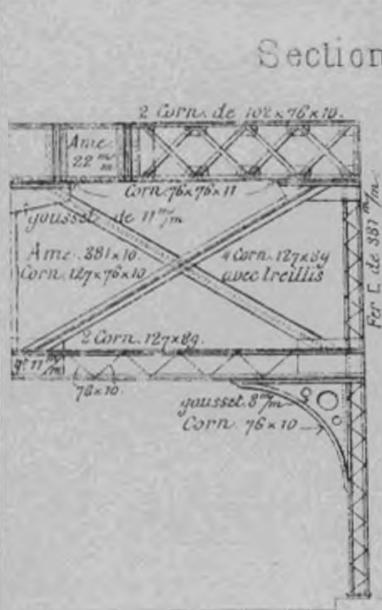


Fig. 3. Dispositif de dilatation.

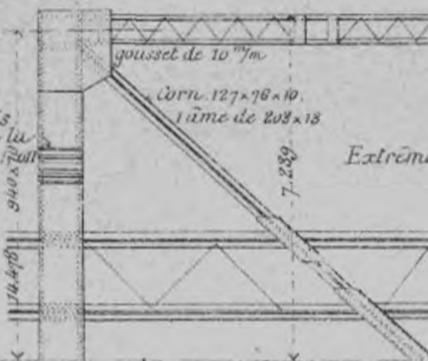
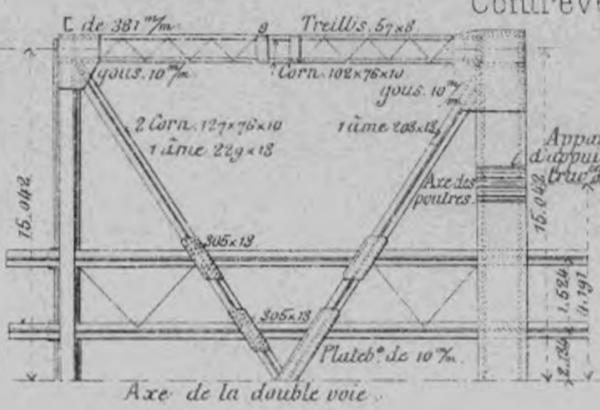


ELEVATED DE LA MADISON STREET A CHICAGO

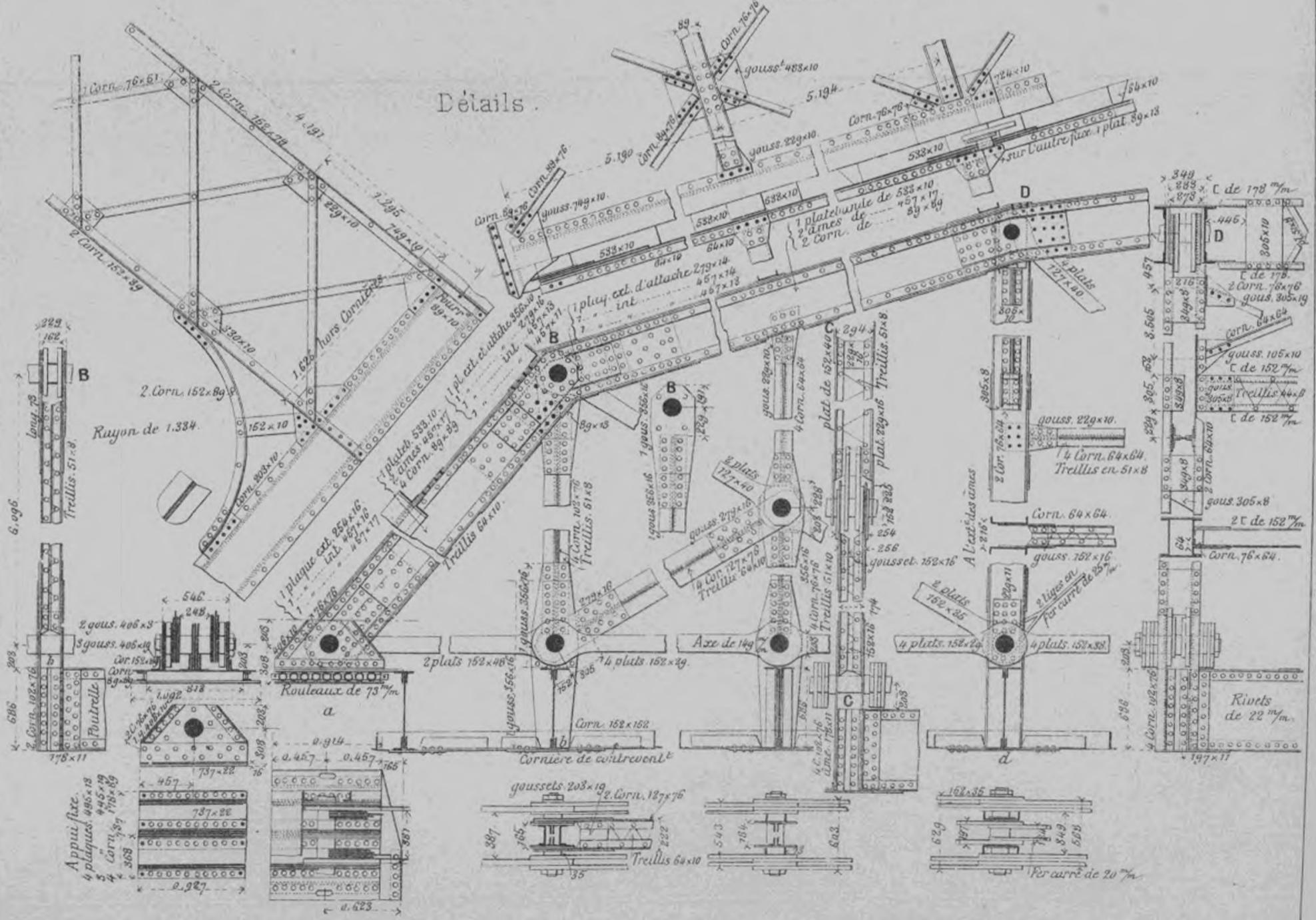
Section longitudinale.

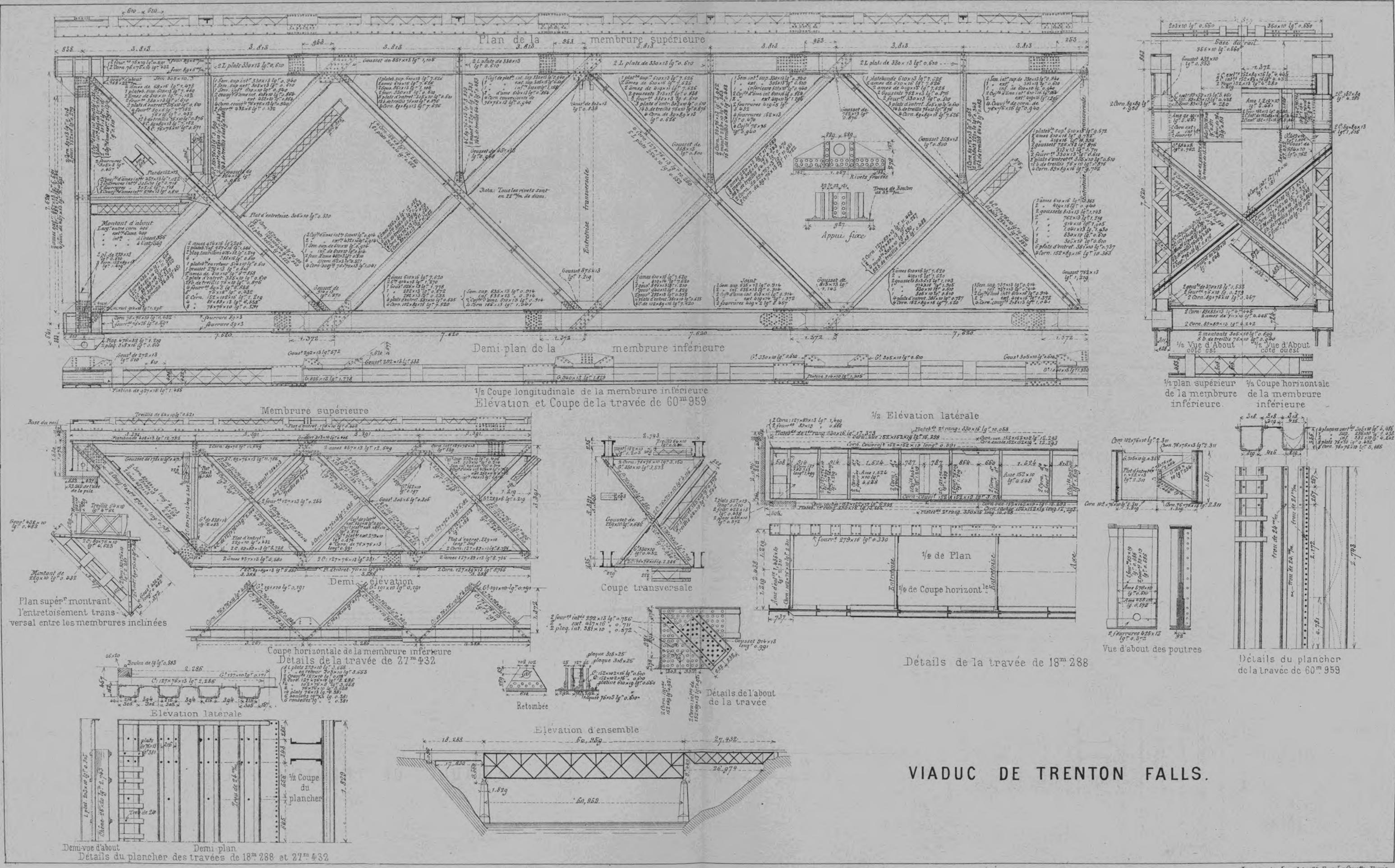


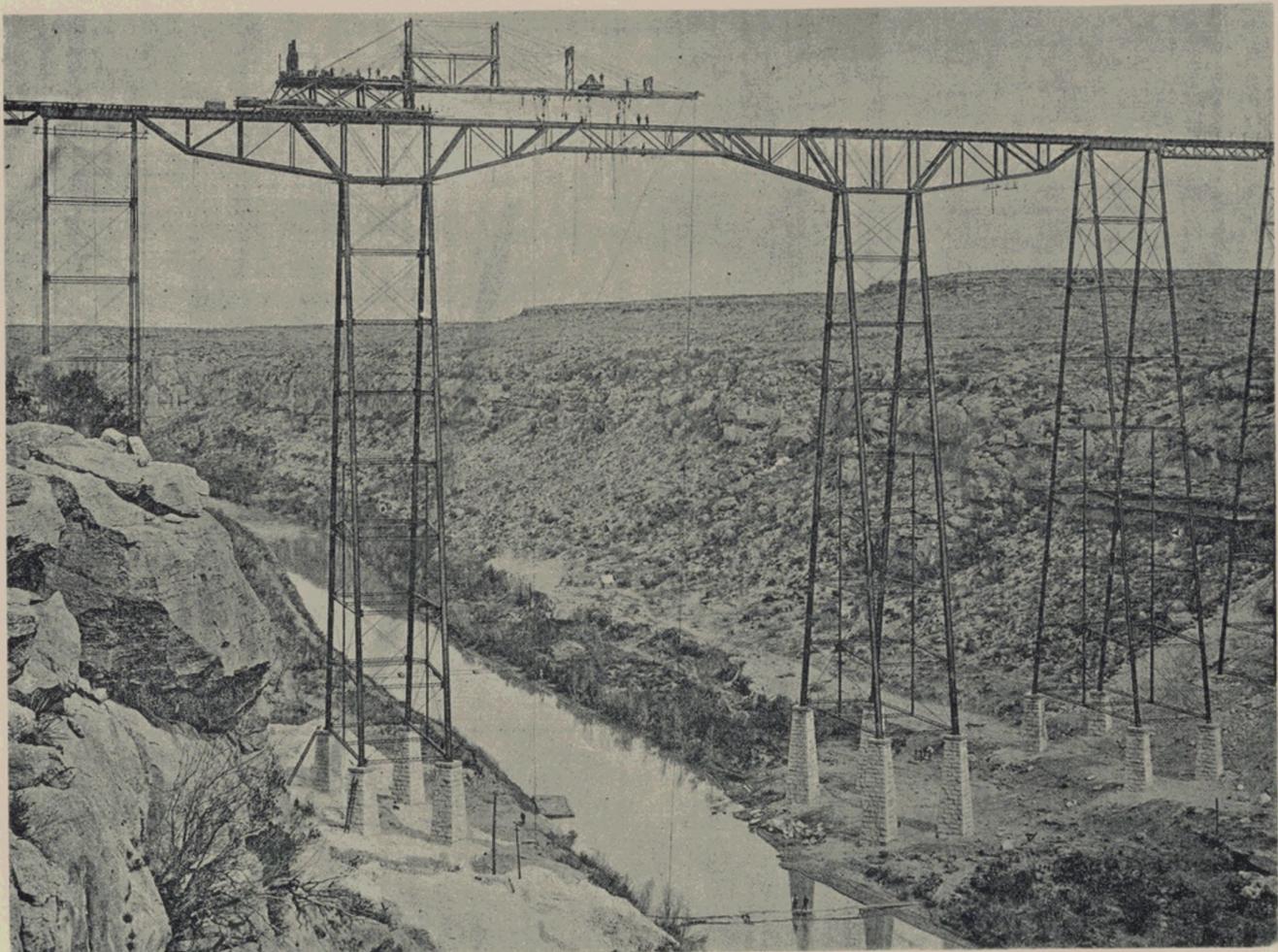
Contreventement.



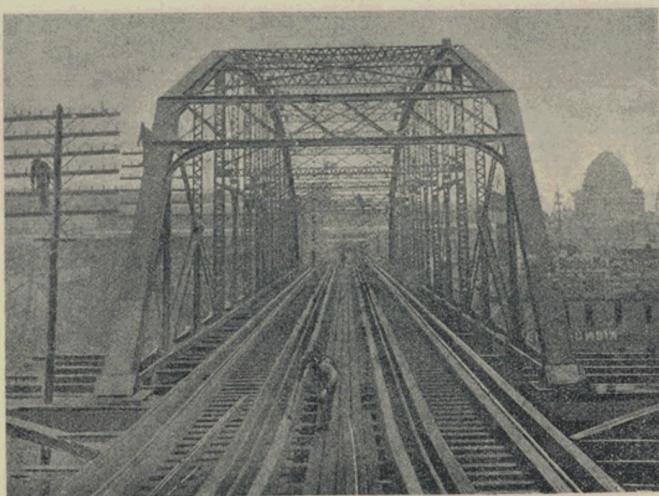
Détails .





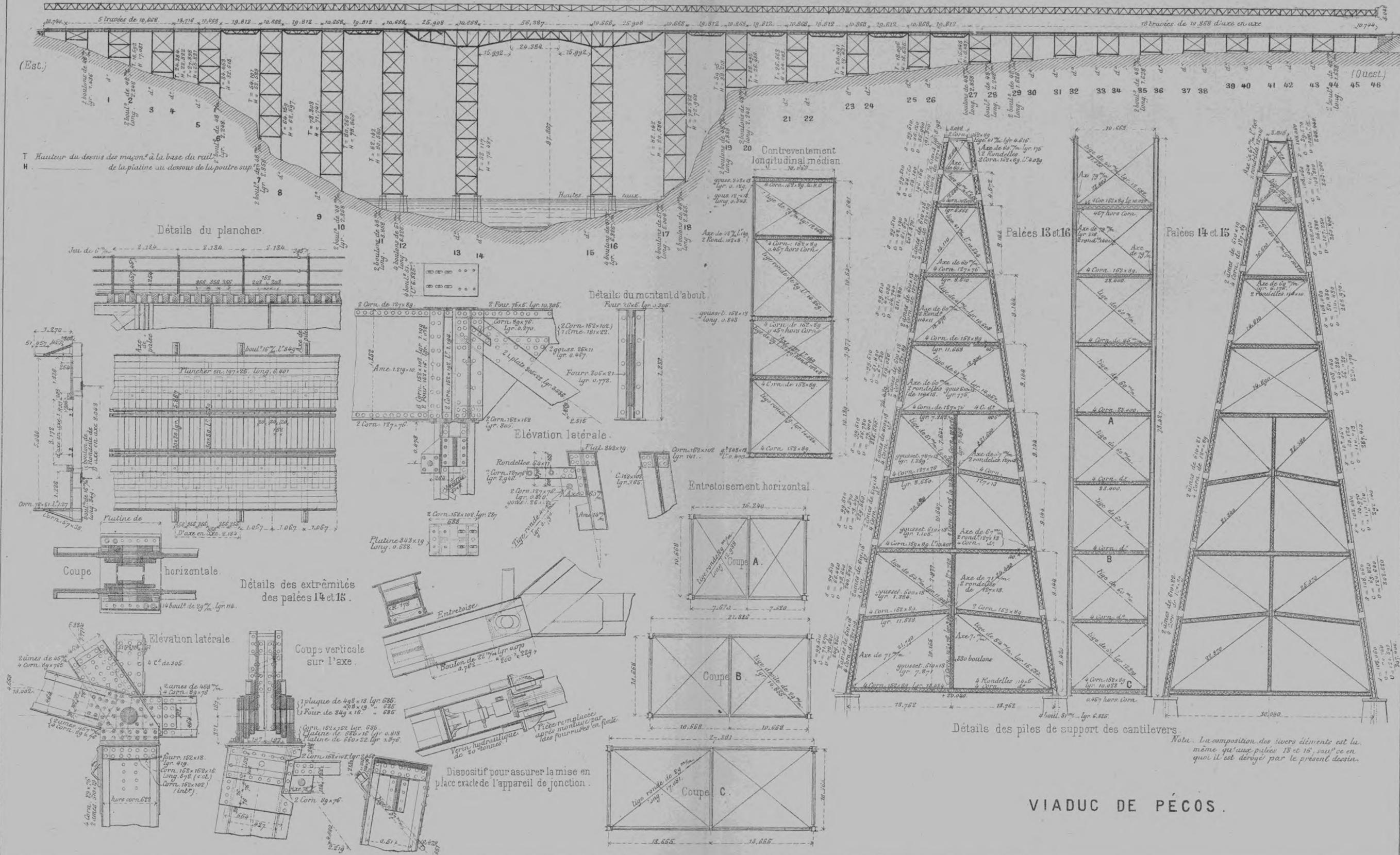


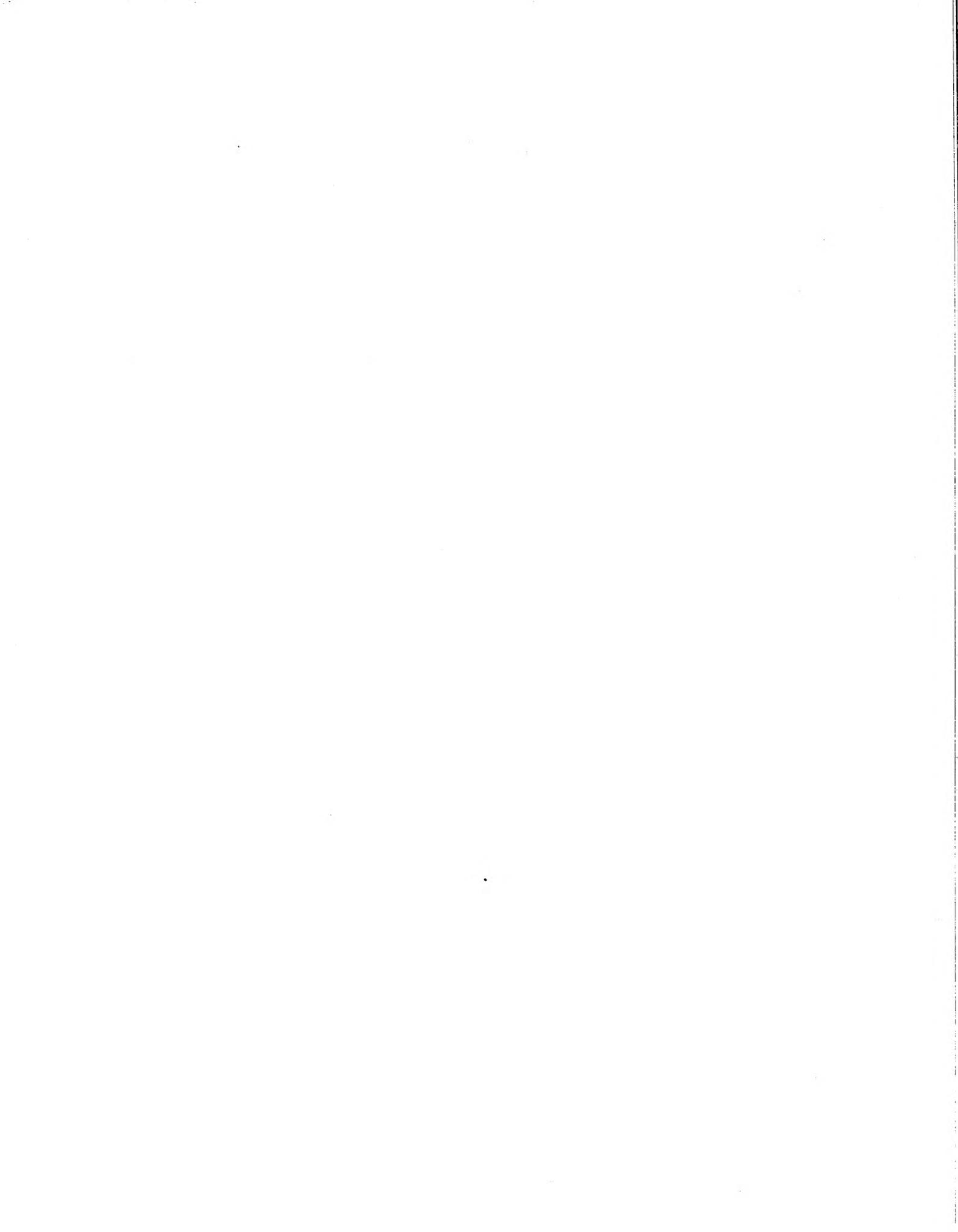
VUE PERSPECTIVE DU VIADUC DE PECOS



ELEVATED DE LA MADISON STREET A CHICAGO

Elévation d'ensembl

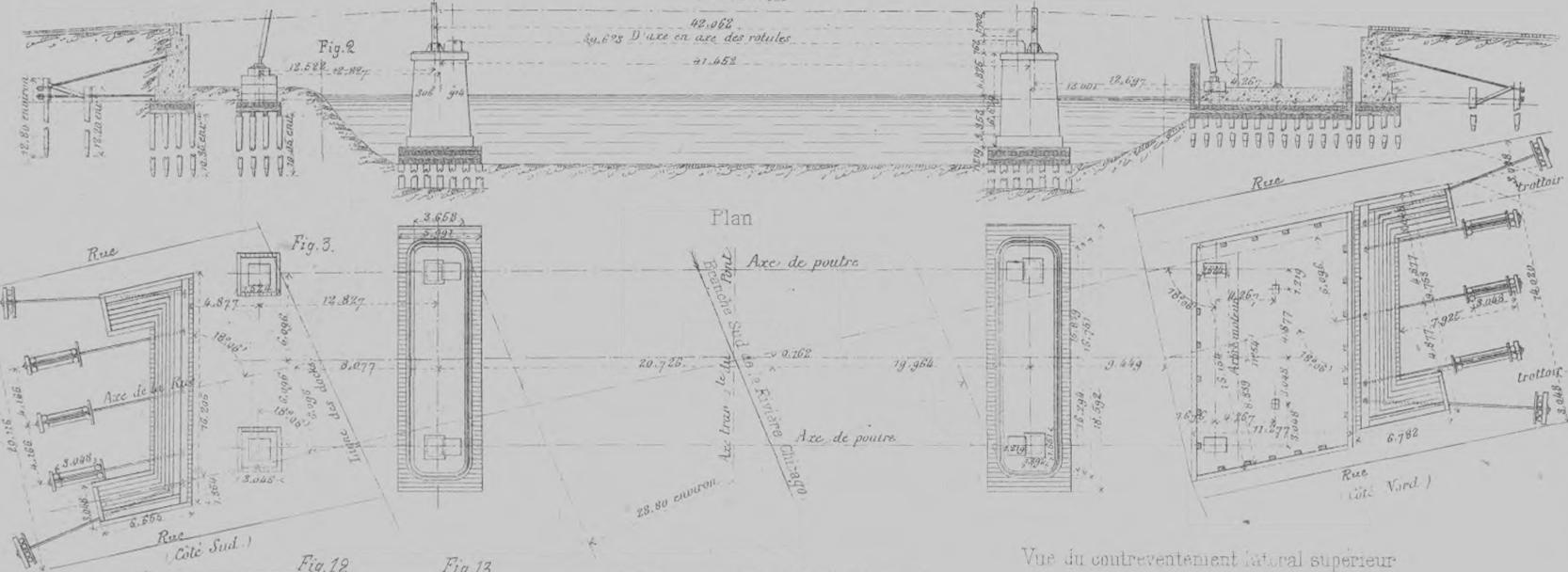




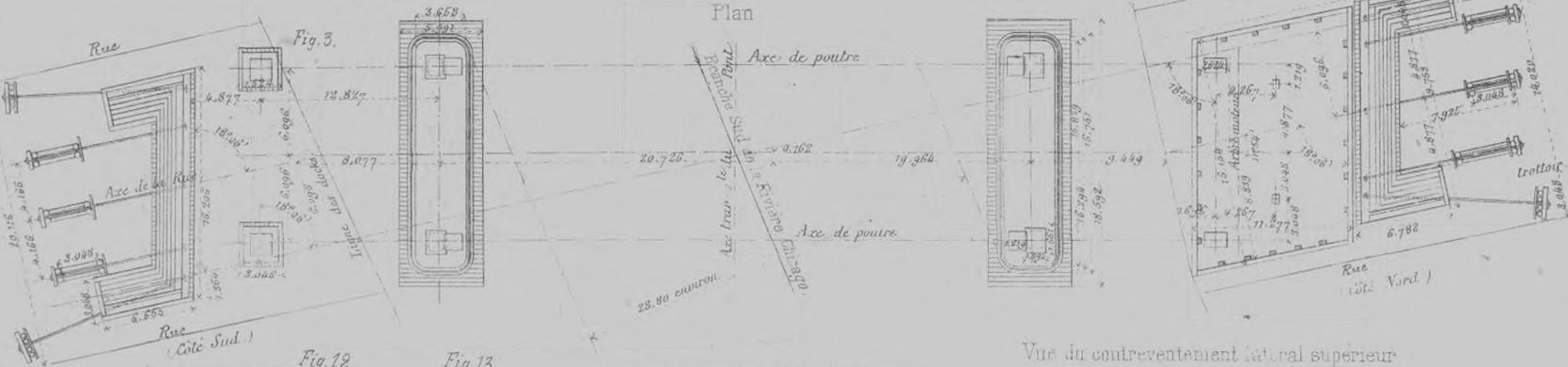
PONT A SOULEVEMENT SUR LA RIVIÈRE CHICAGO A LA HALSTED STREET (CHICAGO.)

Pittsburgh Bridge Company, Constructeur.).

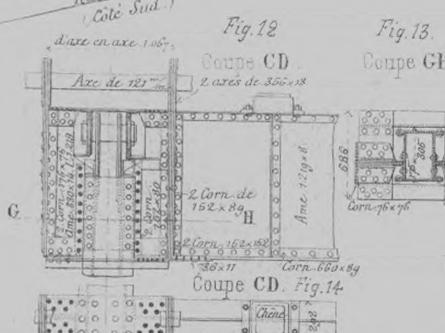
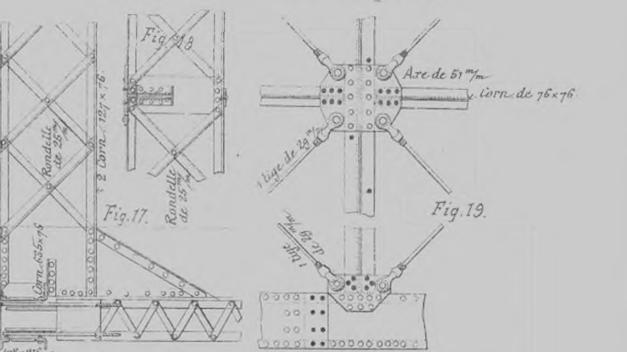
Elevation



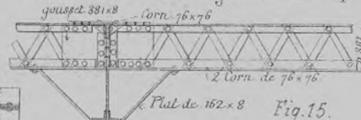
Plan



Vue du contreventement latéral supérieur



Entretoisement longitudinal sup^r



Vue par dessous de la membrure sup^r

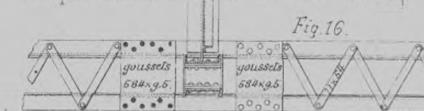


Fig. 16.

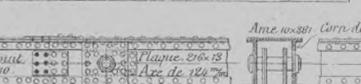
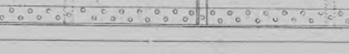
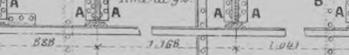
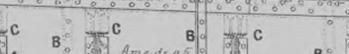
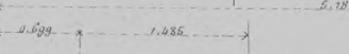
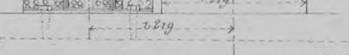
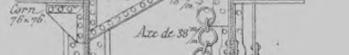
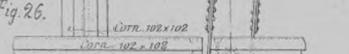
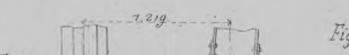
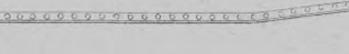
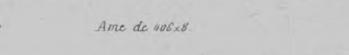
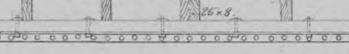
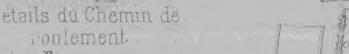
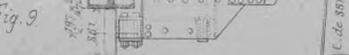
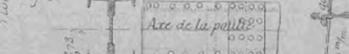
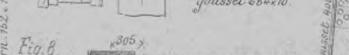


Fig. 15.



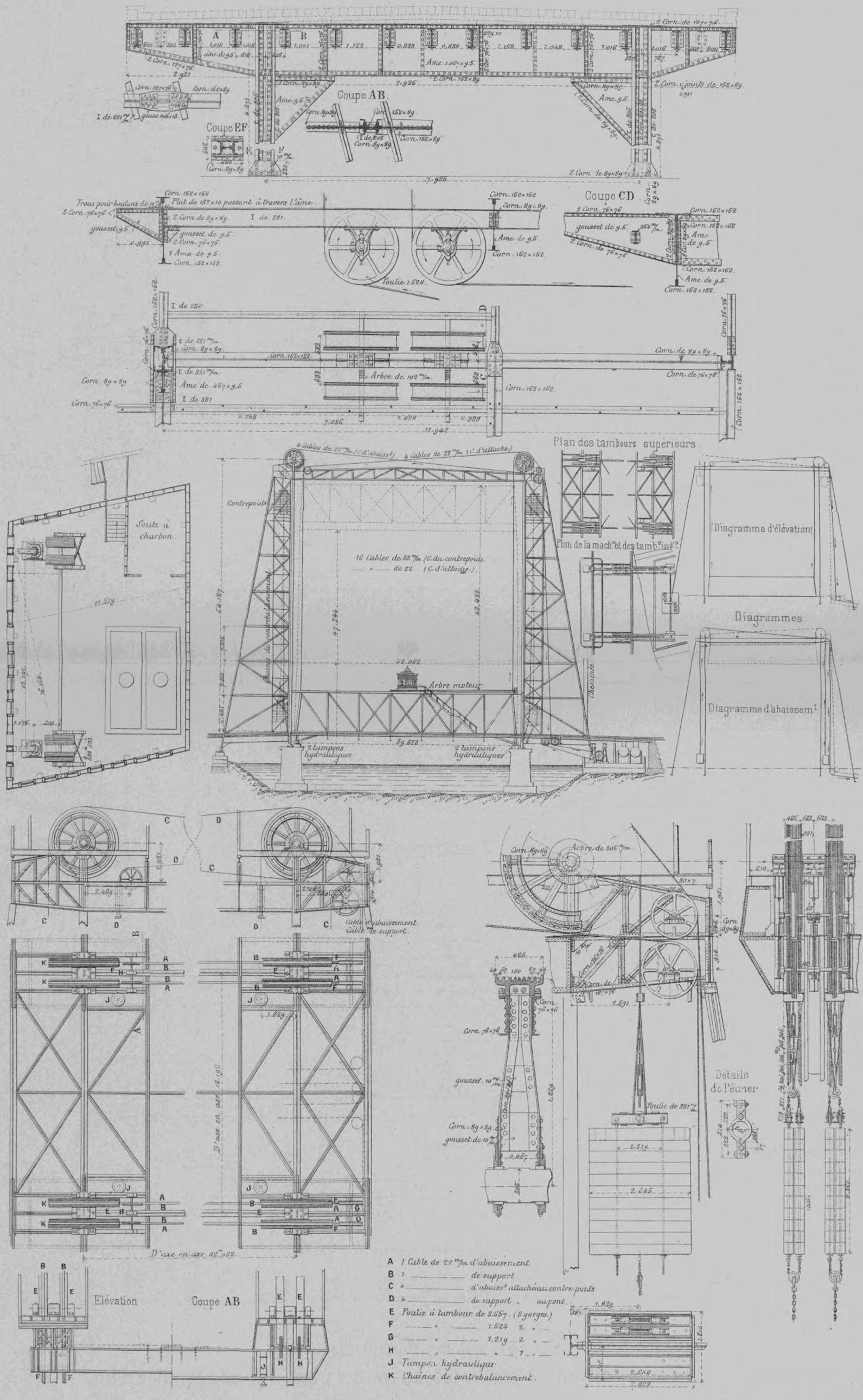
Coupe IJ.





REVUE TECHNIQUE DE L'EXPOSITION DE CHICAGO 1893

PONT A SOULEVEMENT SUR LA RIVIÈRE CHICAGO A LA HALSTED STREET. (CHICAGO.)
Pittsburgh Bridge Company. Constructeur.



PONT TRANSBORDEUR A L'EMBOUCHURE DU NERVION (ESPAGNE)
M. ARNODIN, CONSTRUCTEUR



Fig. 1. Chassis mobile. — Vue longitudinale.

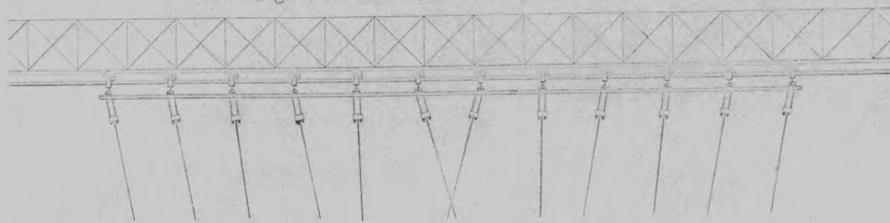


Fig. 2. Corps transversale.

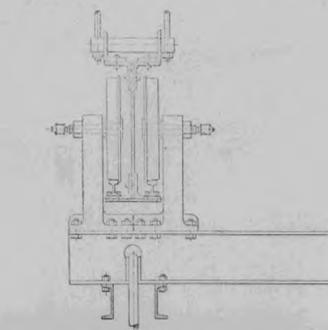
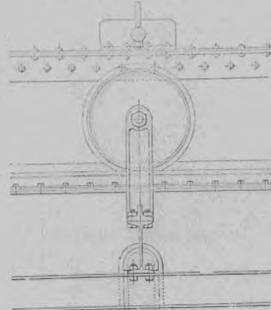
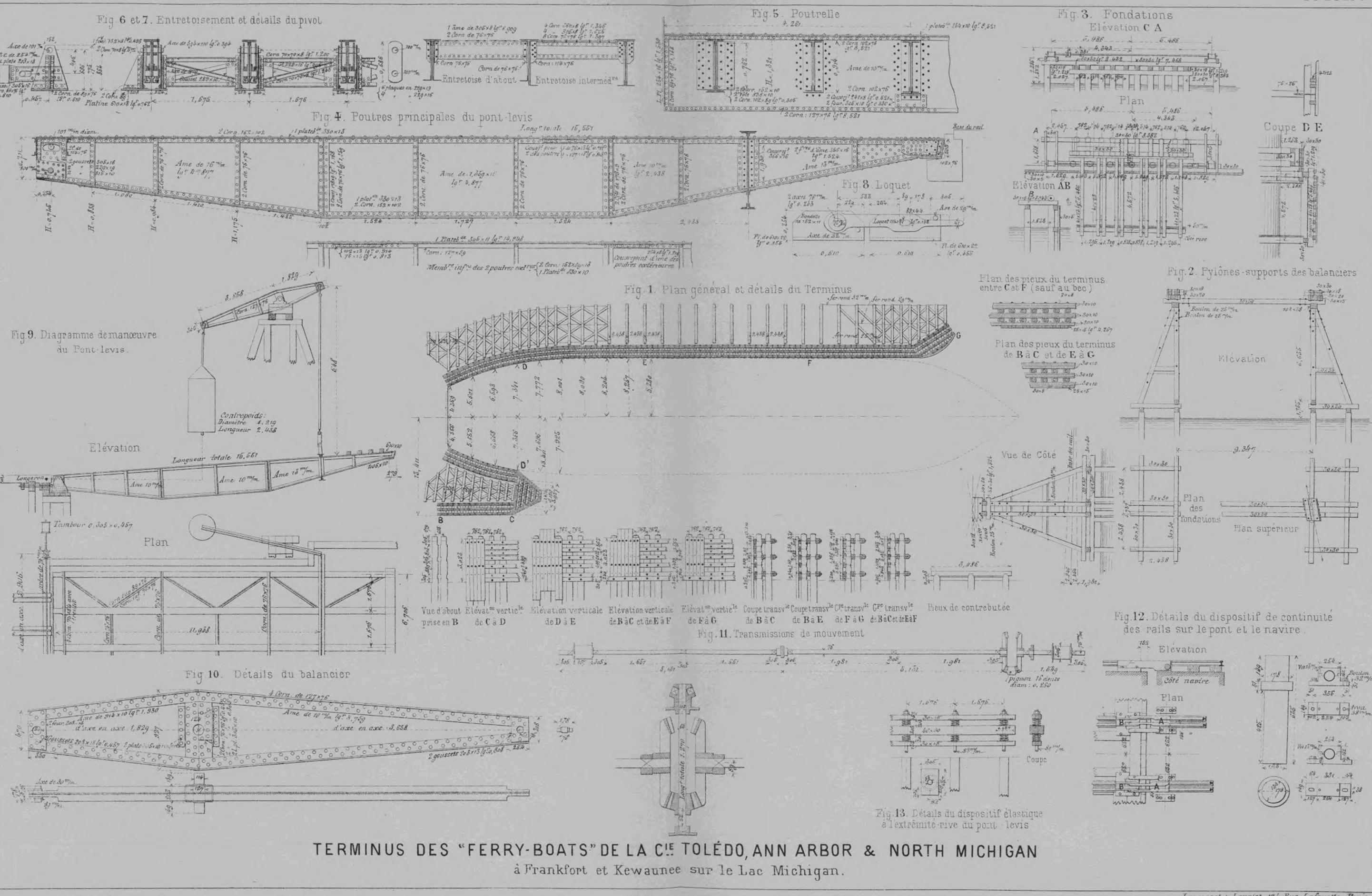


Fig. 3. Vue longitudinale.







FERRY-BOATS DE LA C^{ie} ANN ARBOR SUR LE LAC MICHIGAN



FIG. 1

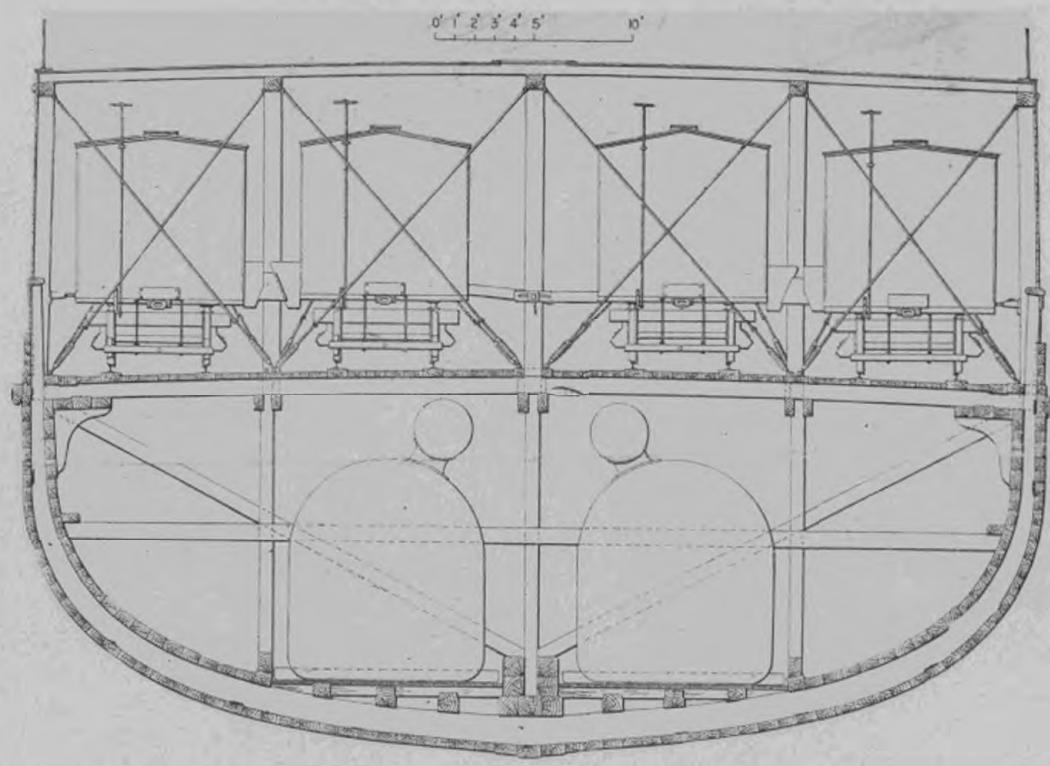


FIG. 2

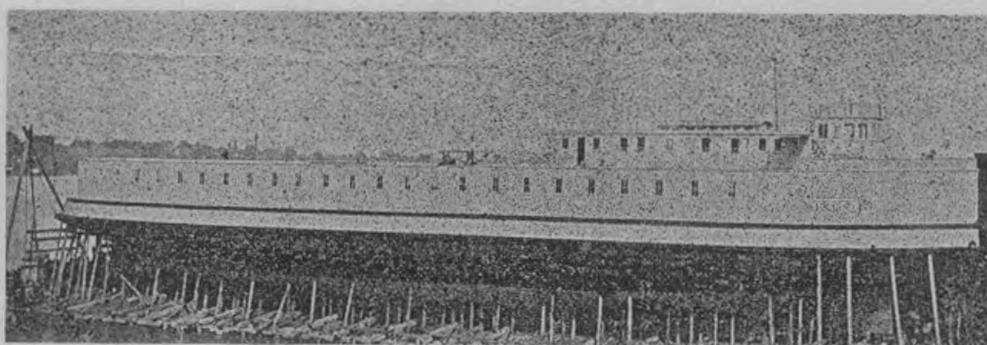
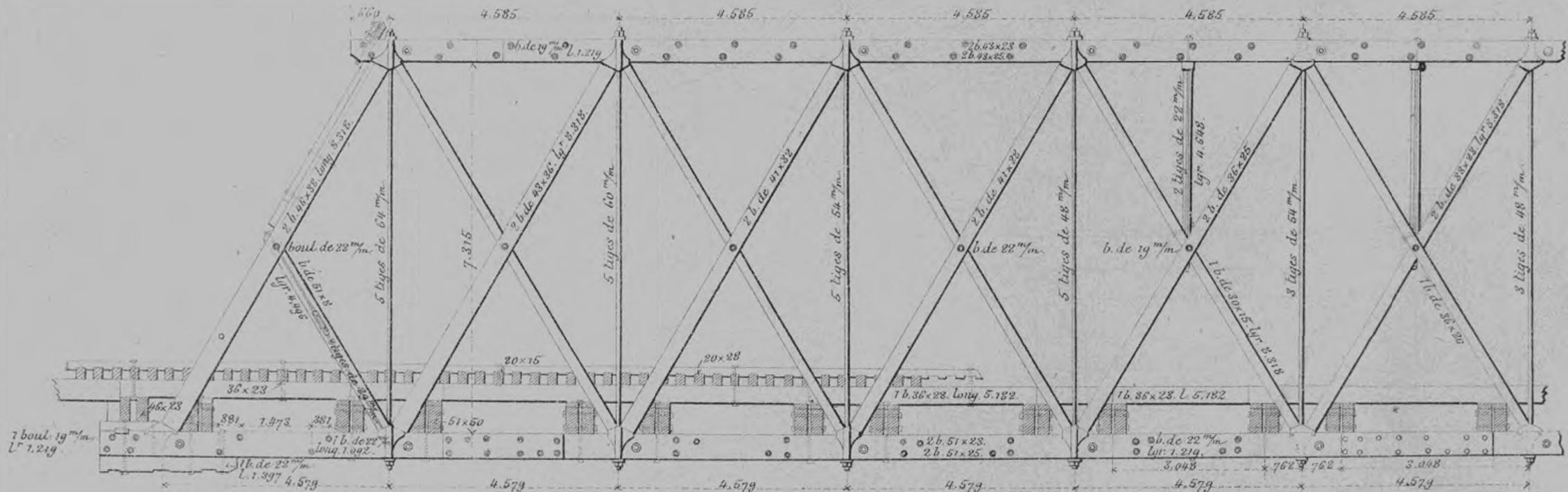


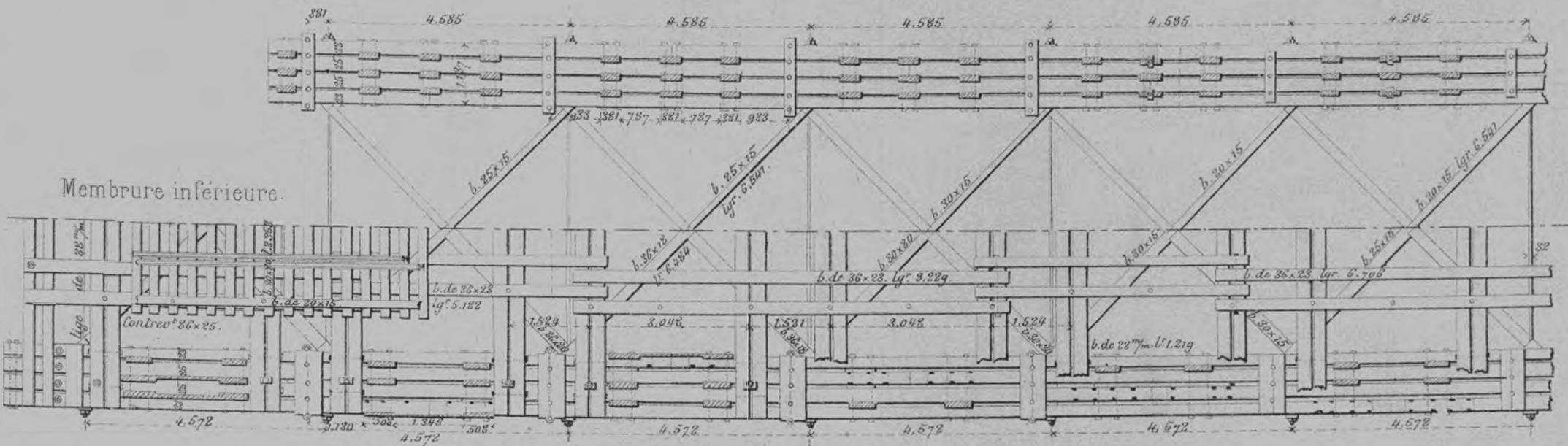
FIG. 3



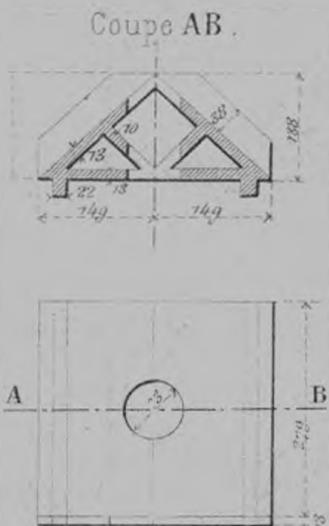
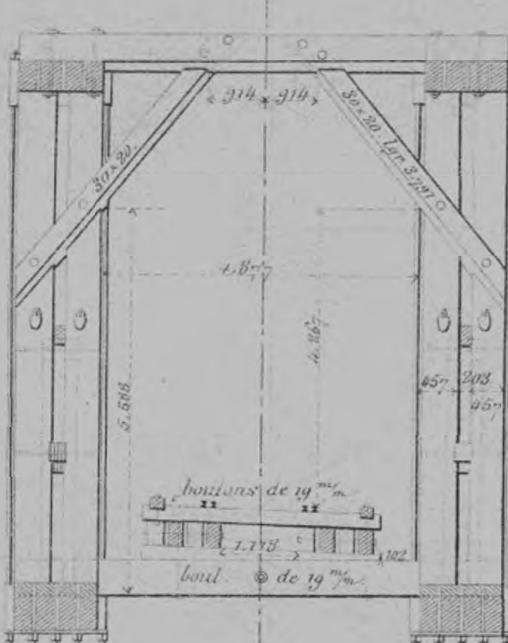
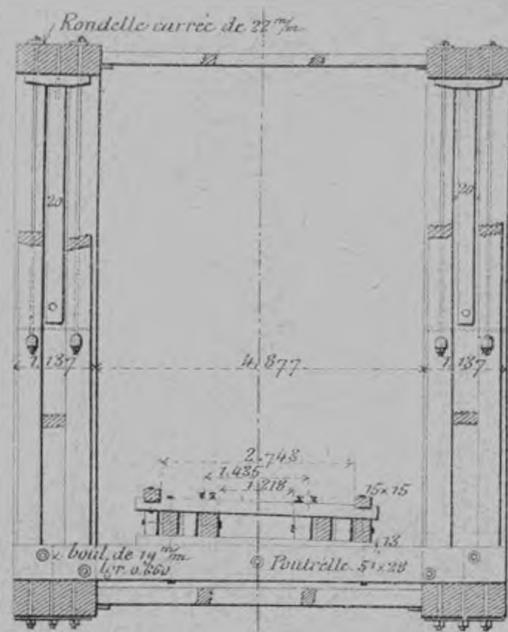
PONT EN BOIS (Système Howe)



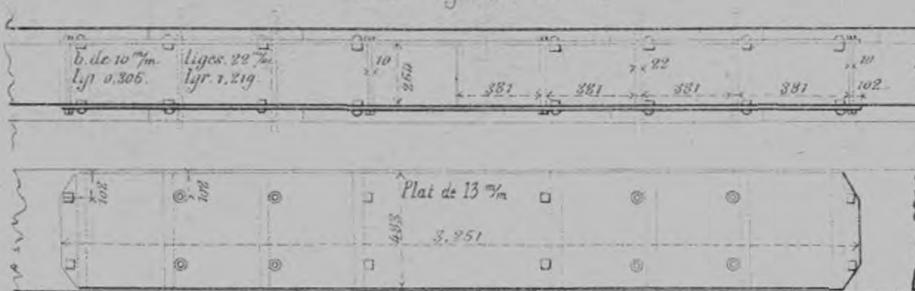
Membrane supérieure



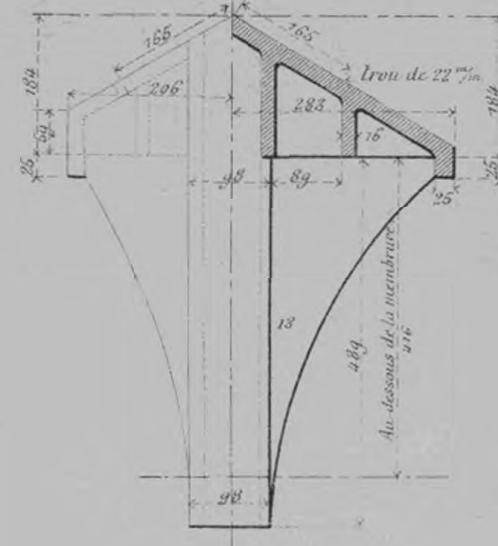
PONT EN BOIS. SYSTÈME HOWE



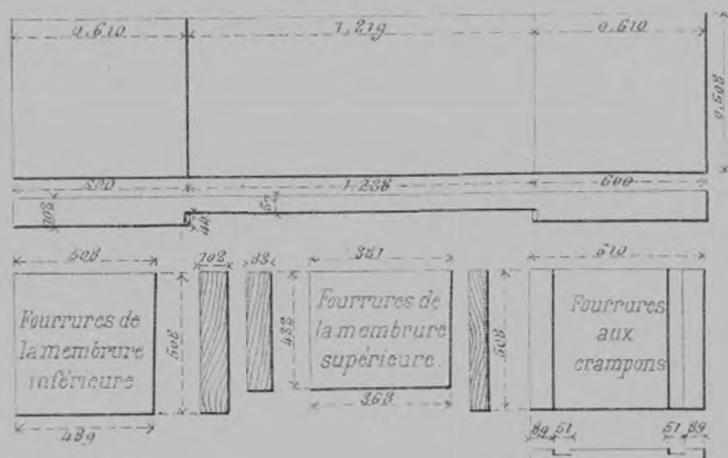
Couvre-joints en fer



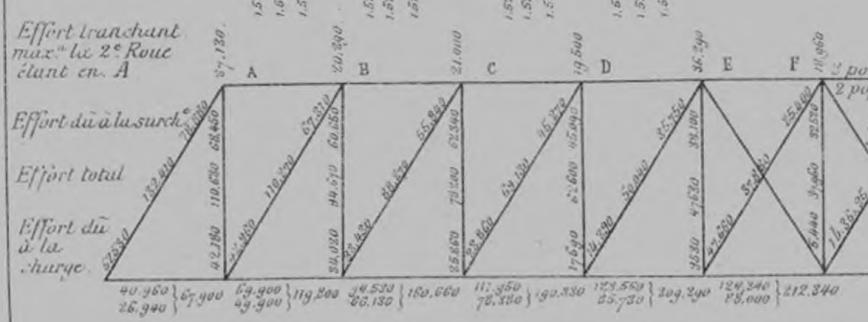
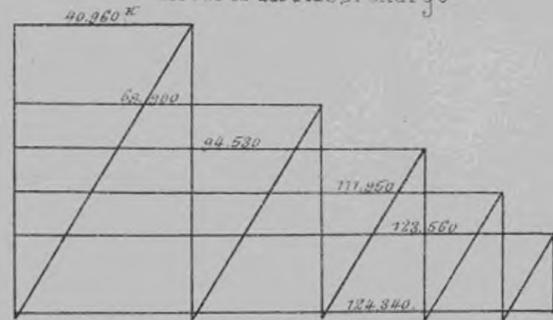
$\frac{1}{2}$ Coupe AB



Crampons en bois



Efforts dus à la surcharge



PONT EN BOIS SYSTÈME HOWE GRONDAHL.

Longueur 26^m. 20.

Fig. 46.

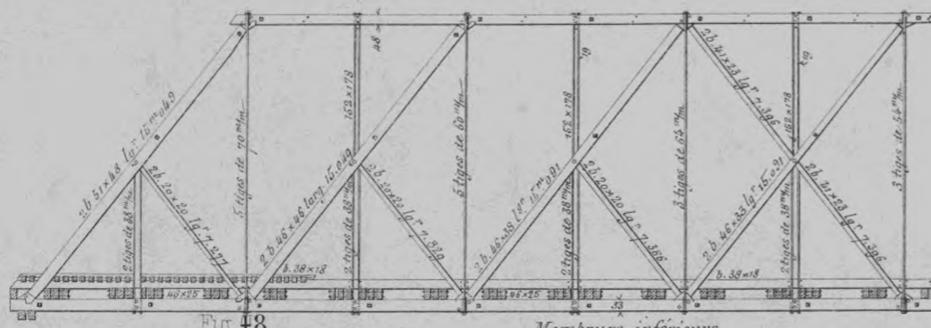
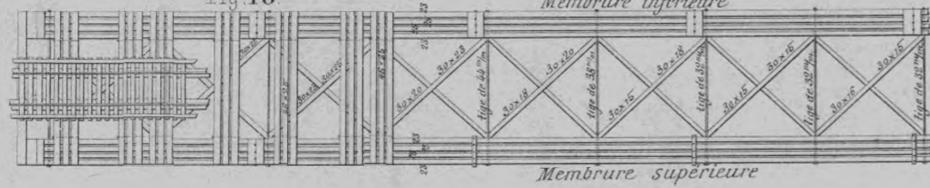


Fig. 48



Membrane inférieure

Fig. 47.

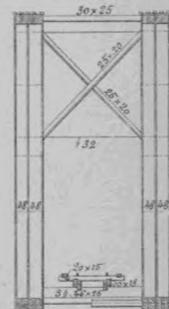


Fig. 65.

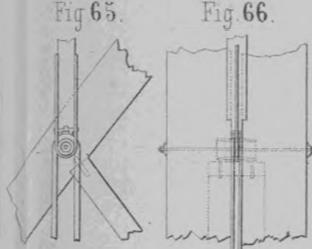


Fig. 66.

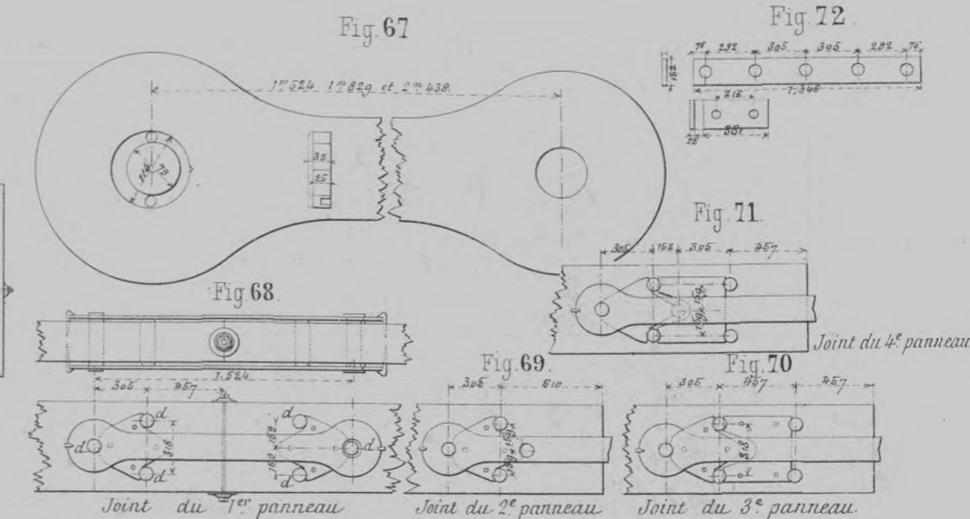


Fig. 67

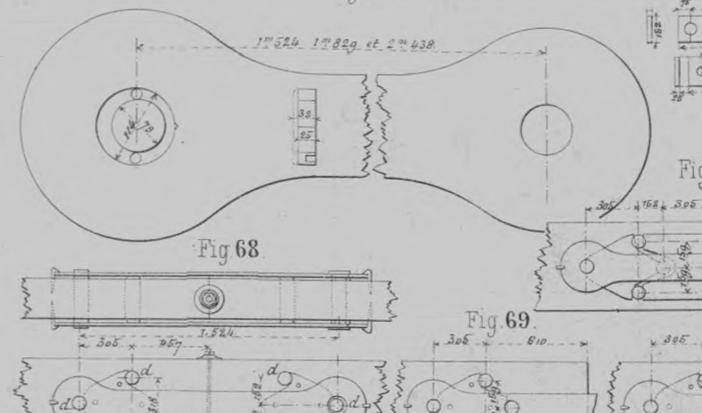


Fig. 72

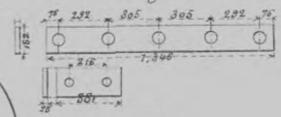


Fig. 71.

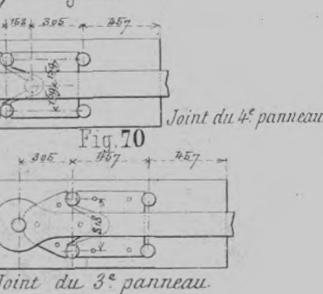


Fig. 70

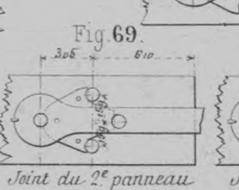


Fig. 69.

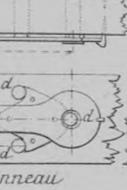


Fig. 68.

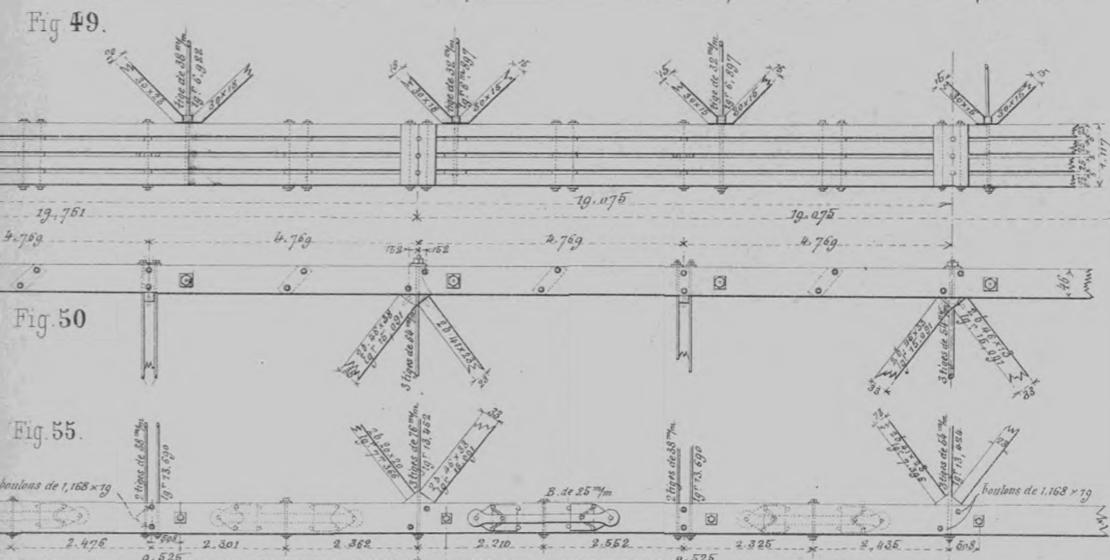


Fig. 49.

Fig. 50.

Fig. 56.

Fig. 62.

Fig. 63.

Fig. 64.

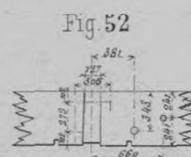
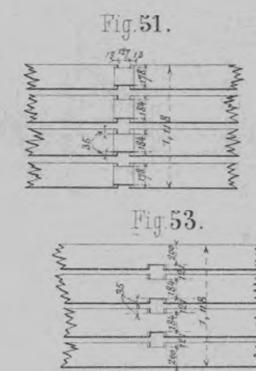


Fig. 53.

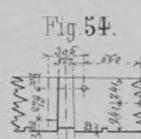


Fig. 52

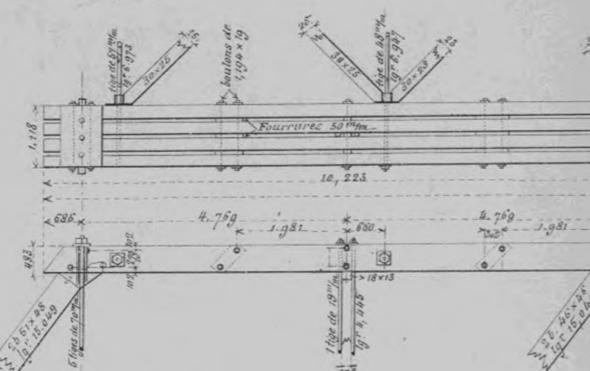
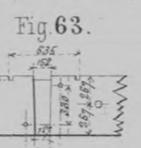
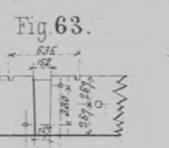
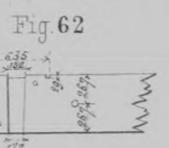
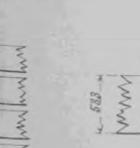
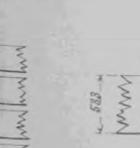
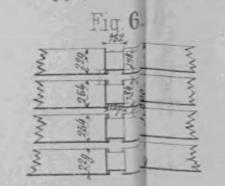
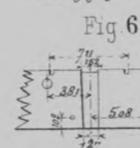
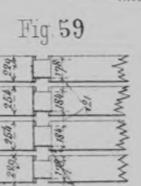
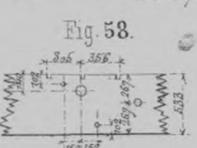
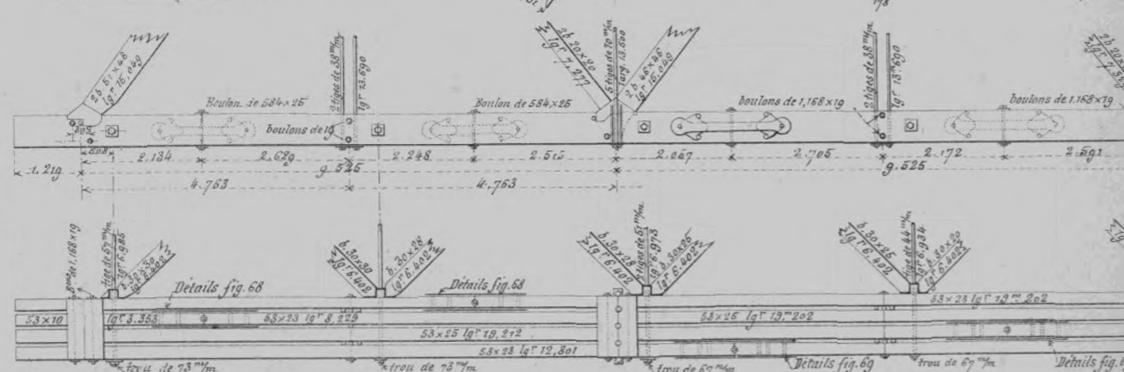


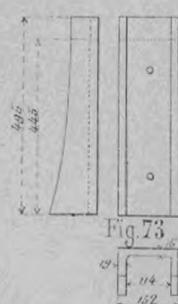
Fig. 51.



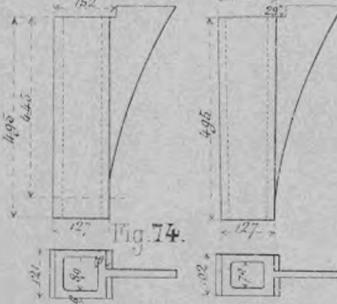
PONT EN BOIS

Système Howe-Grondahl, longueur 76^m.80

Détails des appareils en fonte



Tubes extérieurs



Tubes intérieurs

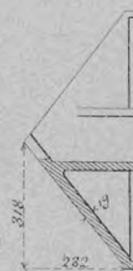


Fig. 75.

Pièces du contreventement



Fig. 79.

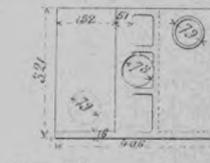


Fig. 80.



Fig. 81.

Rondelle

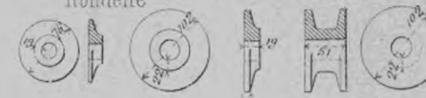


Fig. 82.

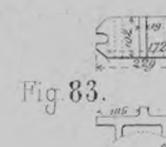


Fig. 83.

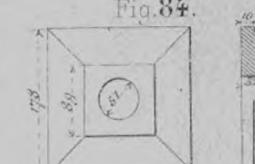


Fig. 84.

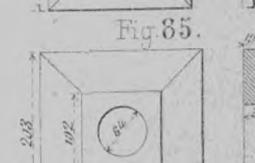
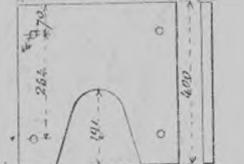


Fig. 85.



Rondelle

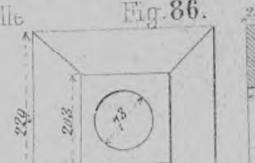


Fig. 86.

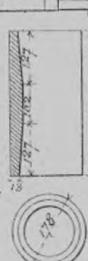


Fig. 88.

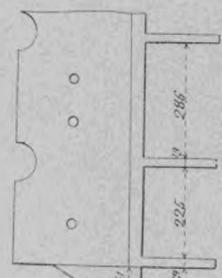


Fig. 76.

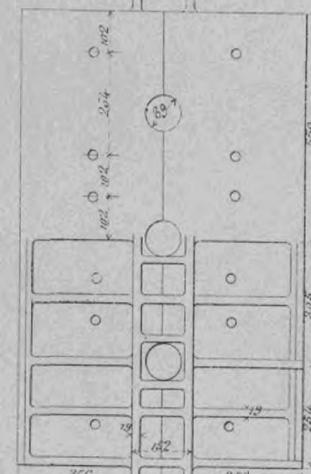


Fig. 77.

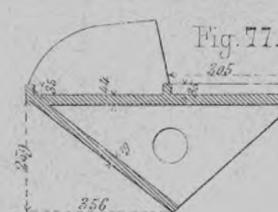


Fig. 78.

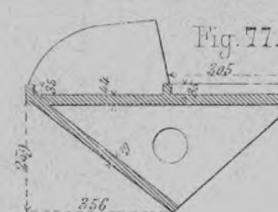
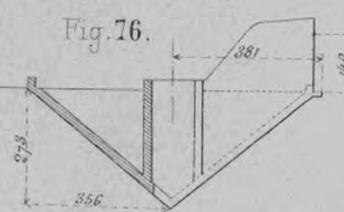


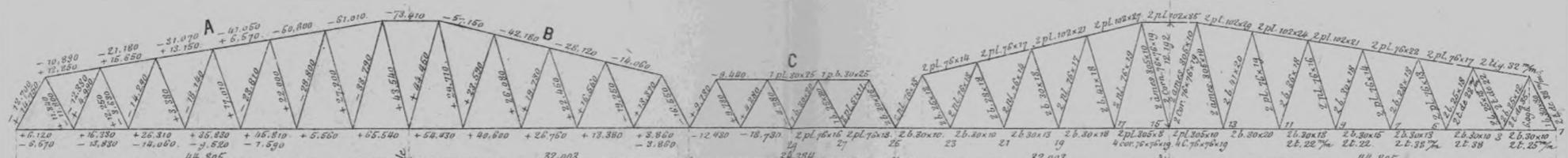
Fig. 79.



PONT MIXTE SUR LA NORTH UMPQUA RIVER (OREGON)

The California Bridge Company. Constructeur.

Efforts et sections des divers éléments du Pont



Demi-plan du contreventement supérieur

Demi-plan du contreventement inférieur

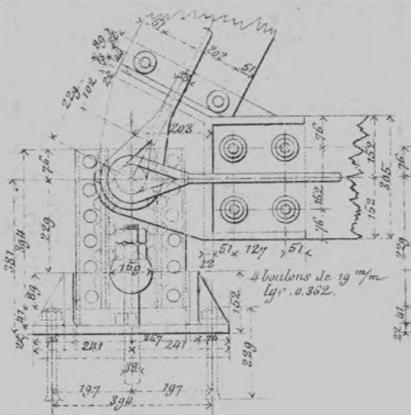


Dispositif en vue de la dilatation

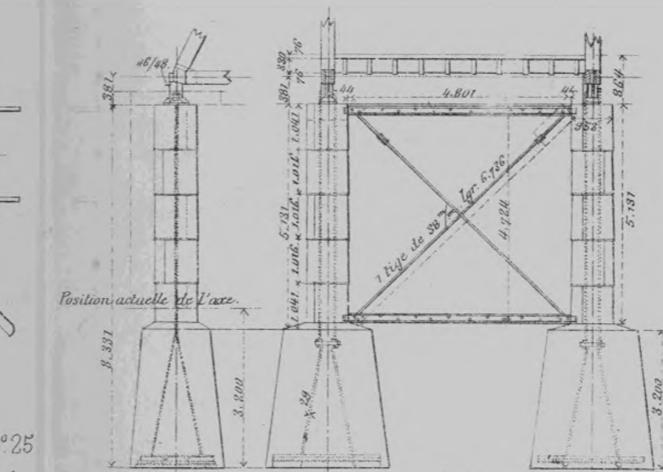
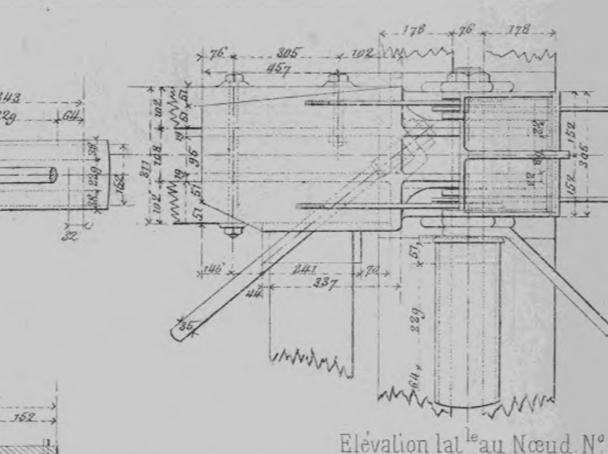
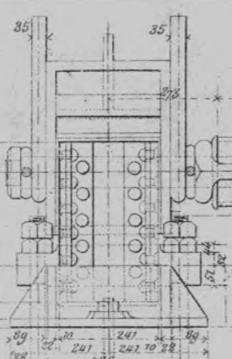
Élevation latérale au Nœud N°1

Vue en bout Nœud N°1

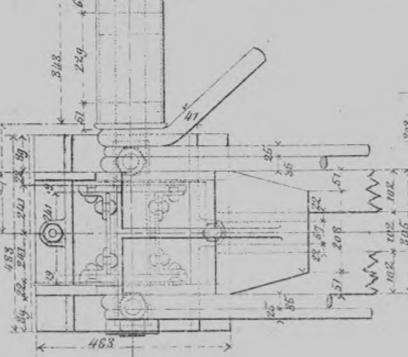
Plan du Nœud N°25



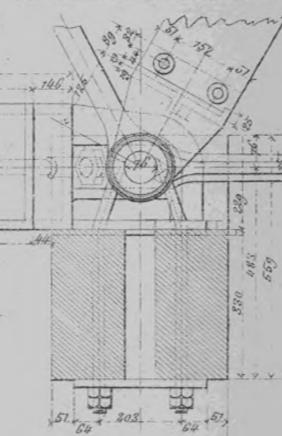
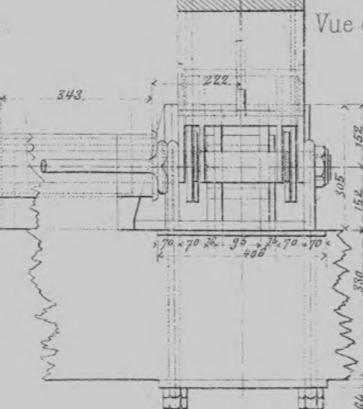
Plan au Nœud N°1



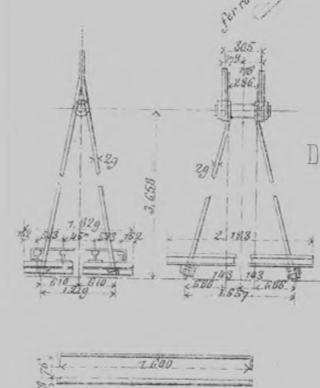
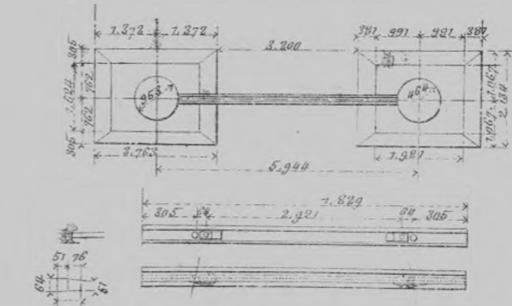
Détails de l'entretoisement des piles



Vue en bout Nœud N°25

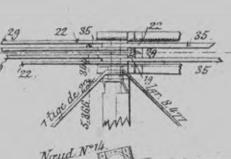
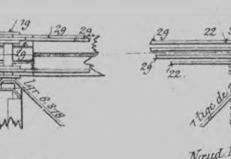
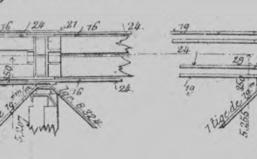
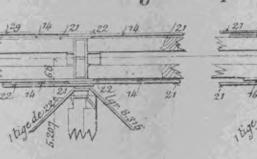
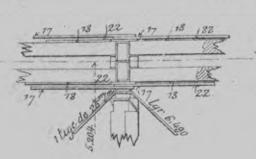
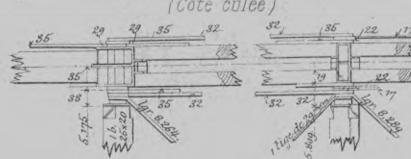


Détails des rails



Détails des piles culées

PONT MIXTE SUR LA NORTH UMPQUA RIVER (OREGON).

The California Bridge Company, Construct^rDétails des bras du cantilever
(Côté culée)

Nœud N°1

2 plate 70x35
Axe de 89 mm.

Plan supérieur

Nœud N°10

2 plate 70x35
Axe de 76 mm.

Nœud N°12

1 plate 102x35
Axe de 89 mm.

Nœud N°14

2 plate 70x35
Axe de 89 mm.

Nœud N°8

2 plate 70x35
Axe de 76 mm.

Nœud N°6

2 plate 70x35
Axe de 76 mm.

Nœud N°4

2 plate 70x35
Axe de 76 mm.

Nœud N°2

2 plate 70x35
Axe de 76 mm.

Nœud N°3

2 plate 70x35
Axe de 76 mm.

Nœud N°5

2 plate 70x35
Axe de 76 mm.

Nœud N°7

2 plate 70x35
Axe de 76 mm.

Nœud N°9

2 plate 70x35
Axe de 76 mm.

Nœud N°11

2 plate 70x35
Axe de 76 mm.

Nœud N°13

2 plate 70x35
Axe de 76 mm.

Nœud N°15

2 plate 70x35
Axe de 76 mm.

Nœud N°17

2 plate 70x35
Axe de 76 mm.

Nœud N°19

2 plate 70x35
Axe de 76 mm.

Nœud N°21

2 plate 70x35
Axe de 76 mm.

Nœud N°23

2 plate 70x35
Axe de 76 mm.

Nœud N°25

2 plate 70x35
Axe de 76 mm.

Nœud N°27

2 plate 70x35
Axe de 76 mm.

Nœud N°29

2 plate 70x35
Axe de 76 mm.

Nœud N°31

2 plate 70x35
Axe de 76 mm.

Nœud N°33

2 plate 70x35
Axe de 76 mm.

Nœud N°35

2 plate 70x35
Axe de 76 mm.

Nœud N°37

2 plate 70x35
Axe de 76 mm.

Nœud N°39

2 plate 70x35
Axe de 76 mm.

Nœud N°41

2 plate 70x35
Axe de 76 mm.

Nœud N°43

2 plate 70x35
Axe de 76 mm.

Nœud N°45

2 plate 70x35
Axe de 76 mm.

Nœud N°47

2 plate 70x35
Axe de 76 mm.

Nœud N°49

2 plate 70x35
Axe de 76 mm.

Nœud N°51

2 plate 70x35
Axe de 76 mm.

Nœud N°53

2 plate 70x35
Axe de 76 mm.

Nœud N°55

2 plate 70x35
Axe de 76 mm.

Nœud N°57

2 plate 70x35
Axe de 76 mm.

Nœud N°59

2 plate 70x35
Axe de 76 mm.

Nœud N°61

2 plate 70x35
Axe de 76 mm.

Nœud N°63

2 plate 70x35
Axe de 76 mm.

Nœud N°65

2 plate 70x35
Axe de 76 mm.

Nœud N°67

2 plate 70x35
Axe de 76 mm.

Nœud N°69

2 plate 70x35
Axe de 76 mm.

Nœud N°71

2 plate 70x35
Axe de 76 mm.

Nœud N°73

2 plate 70x35
Axe de 76 mm.

Nœud N°75

2 plate 70x35
Axe de 76 mm.

Nœud N°77

2 plate 70x35
Axe de 76 mm.

Nœud N°79

2 plate 70x35
Axe de 76 mm.

Nœud N°81

2 plate 70x35
Axe de 76 mm.

Nœud N°83

2 plate 70x35
Axe de 76 mm.

Nœud N°85

2 plate 70x35
Axe de 76 mm.

Nœud N°87

2 plate 70x35
Axe de 76 mm.

Nœud N°89

2 plate 70x35
Axe de 76 mm.

Nœud N°91

2 plate 70x35
Axe de 76 mm.

Nœud N°93

2 plate 70x35
Axe de 76 mm.

Nœud N°95

2 plate 70x35
Axe de 76 mm.

Nœud N°97

2 plate 70x35
Axe de 76 mm.

Nœud N°99

2 plate 70x35
Axe de 76 mm.

Nœud N°101

2 plate 70x35
Axe de 76 mm.

Nœud N°103

2 plate 70x35
Axe de 76 mm.

Nœud N°105

2 plate 70x35
Axe de 76 mm.

Nœud N°107

2 plate 70x35
Axe de 76 mm.

Nœud N°109

2 plate 70x35
Axe de 76 mm.

Nœud N°111

2 plate 70x35
Axe de 76 mm.

Nœud N°113

2 plate 70x35
Axe de 76 mm.

Nœud N°115

2 plate 70x35
Axe de 76 mm.

Nœud N°117

2 plate 70x35
Axe de 76 mm.

Nœud N°119

2 plate 70x35
Axe de 76 mm.

Nœud N°121

2 plate 70x35
Axe de 76 mm.

Nœud N°123

2 plate 70x35
Axe de 76 mm.

Nœud N°125

2 plate 70x35
Axe de 76 mm.

Nœud N°127

2 plate 70x35
Axe de 76 mm.

Nœud N°129

2 plate 70x35
Axe de 76 mm.

Nœud N°131

2 plate 70x35
Axe de 76 mm.

Nœud N°133

2 plate 70x35
Axe de 76 mm.

Nœud N°135

2 plate 70x35
Axe de 76 mm.

Nœud N°137

2 plate 70x35
Axe de 76 mm.

Nœud N°139

2 plate 70x35
Axe de 76 mm.

Nœud N°141

2 plate 70x35
Axe de 76 mm.

Nœud N°143

2 plate 70x35
Axe de 76 mm.

Nœud N°145

2 plate 70x35
Axe de 76 mm.

Nœud N°147

2 plate 70x35
Axe de 76 mm.

Nœud N°149

2 plate 70x35
Axe de 76 mm.

Nœud N°151

2 plate 70x35
Axe de 76 mm.

Nœud N°153

2 plate 70x35
Axe de 76 mm.

Nœud N°155

2 plate 70x35
Axe de 76 mm.

Nœud N°157

2 plate 70x35
Axe de 76 mm.

Nœud N°159

2 plate 70x35
Axe de 76 mm.

Nœud N°161

2 plate 70x35
Axe de 76 mm.

Nœud N°163

2 plate 70x35
Axe de 76 mm.

Nœud N°165

2 plate 70x35
Axe de 76 mm.

Nœud N°167

2 plate 70x35
Axe de 76 mm.

Nœud N°169

2 plate 70x35
Axe de 76 mm.

Nœud N°171

2 plate 70x35
Axe de 76 mm.

Nœud N°173

2 plate 70x35
Axe de 76 mm.

Nœud N°175

2 plate 70x35
Axe de 76 mm.

Nœud N°177

2 plate 70x35
Axe de 76 mm.

Nœud N°179

2 plate 70x35
Axe de 76 mm.

Nœud N°181

2 plate 70x35
Axe de 76 mm.

Nœud N°183

2 plate 70x35
Axe de 76 mm.

Nœud N°185

2 plate 70x35
Axe de 76 mm.

Nœud N°187

2 plate 70x35
Axe de 76 mm.

Nœud N°189

2 plate 70x35
Axe de 76 mm.

Nœud N°191

2 plate 70x35
Axe de 76 mm.

Nœud N°193

2 plate 70x35
Axe de 76 mm.

Nœud N°195

2 plate 70x35
Axe de 76 mm.

Nœud N°197

2 plate 70x35
Axe de 76 mm.

Nœud N°199

2 plate 70x35
Axe de 76 mm.

Nœud N°201

2 plate 70x35
Axe de 76 mm.

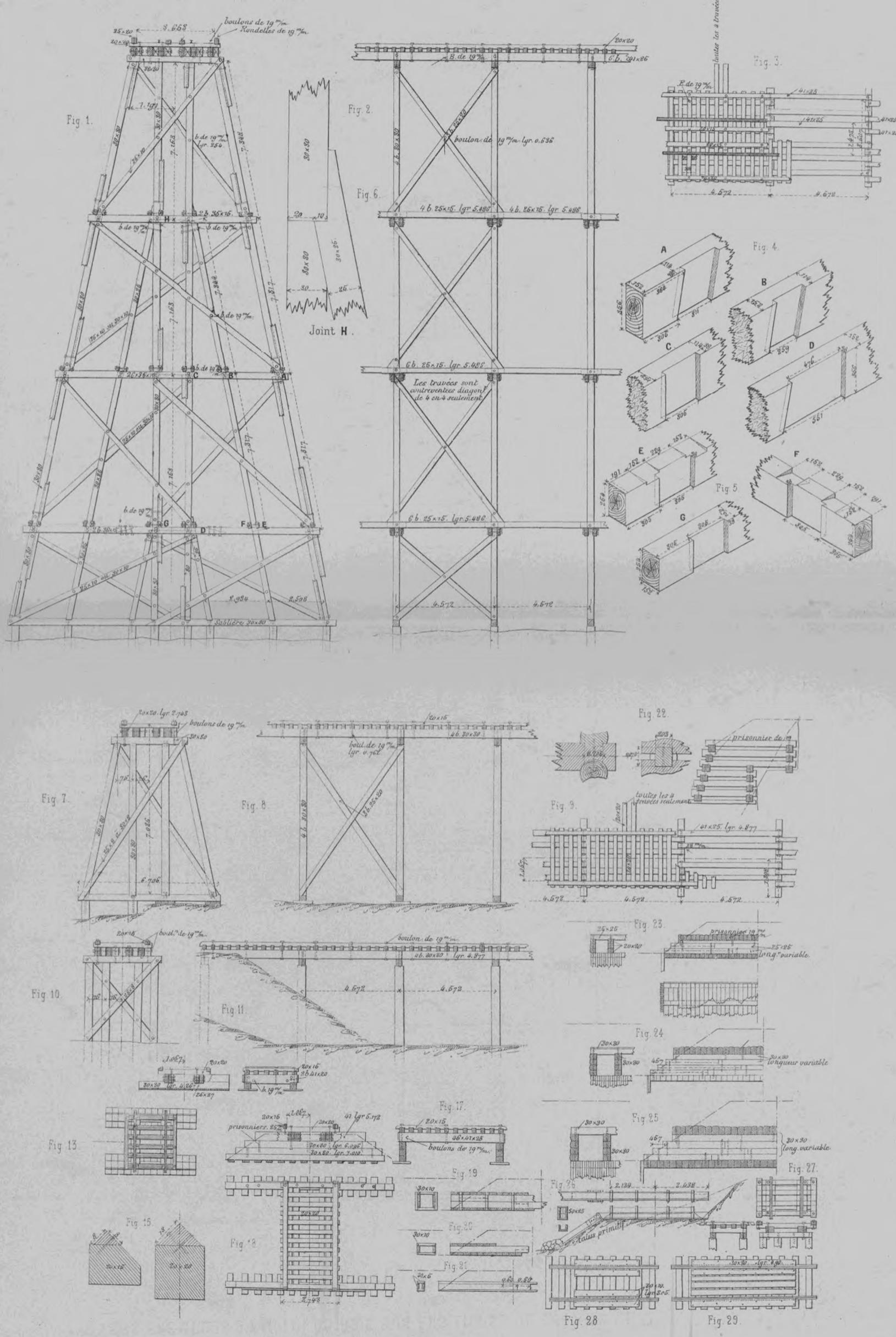
Nœud N°203

2 plate 70x35
Axe de 76 mm.

Nœud N°205

2 plate 70x35
Axe de 7

DIVERS EXEMPLES D'EMPLOI DU BOIS SUR LES LIGNES DE CHEMINS DE FER A L'OUEST DES ETATS-UNIS.



CHUTE DU PONT DE CHESTER (MASSACHUSETTS)



VUE N° 1



VUE N° 4

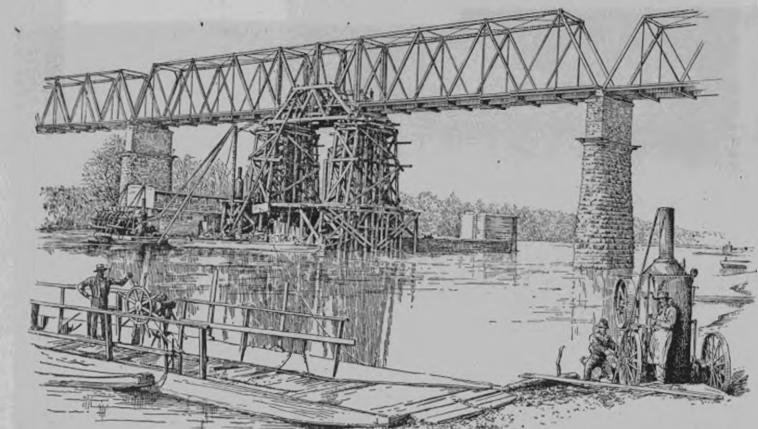
RECONSTRUCTION DE LA PILE CENTRALE DU PONT DE GADSDEN



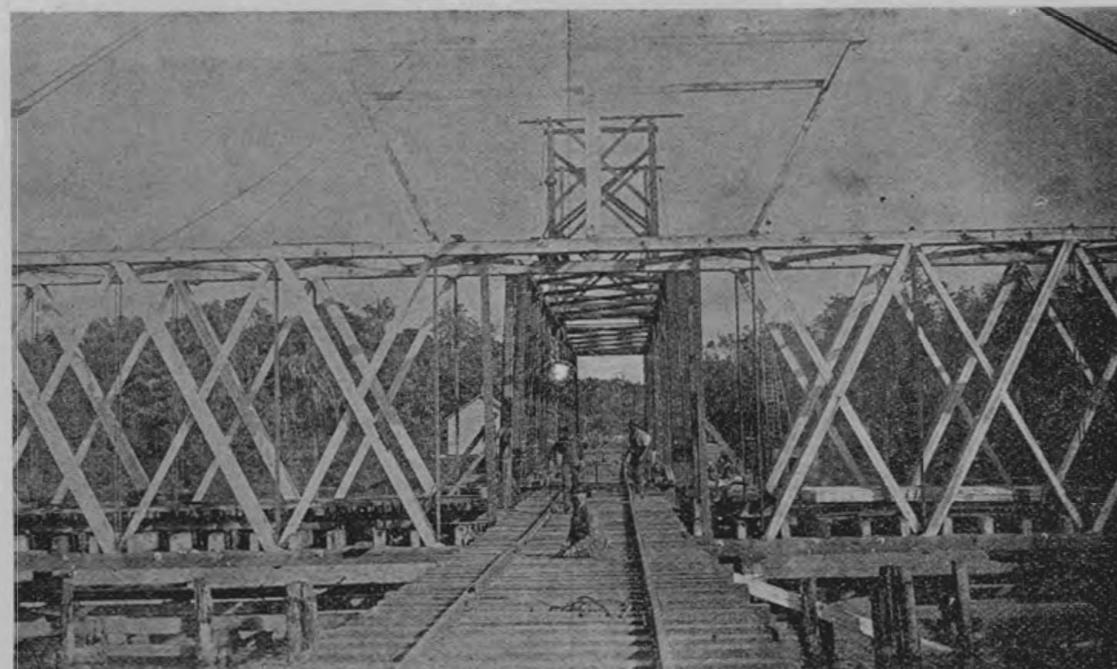
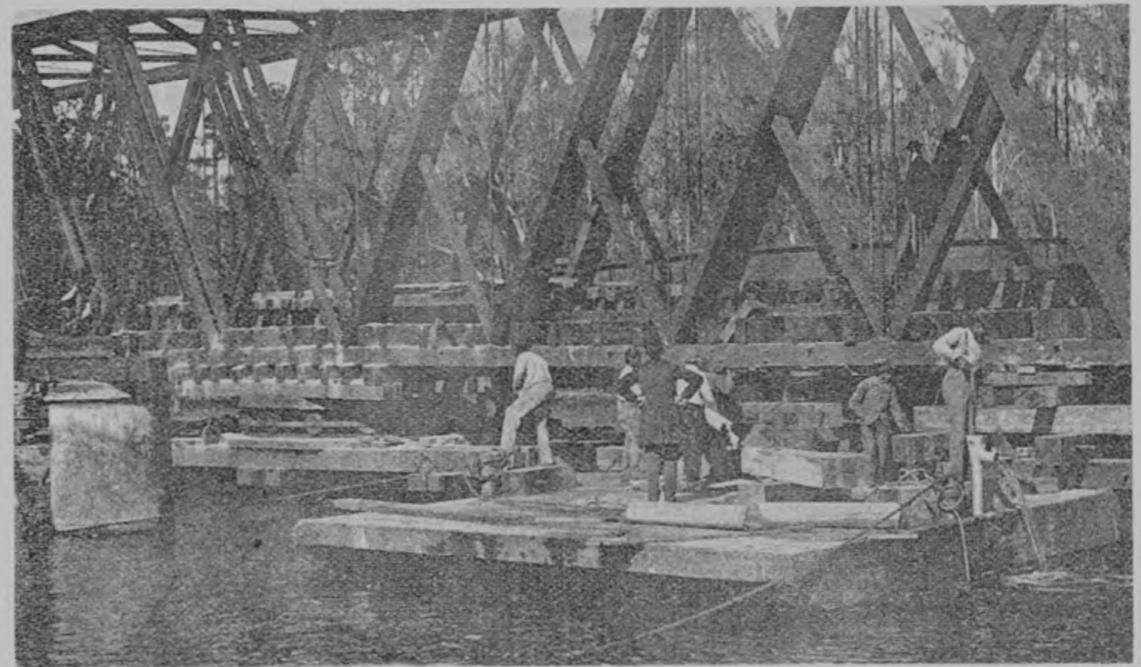
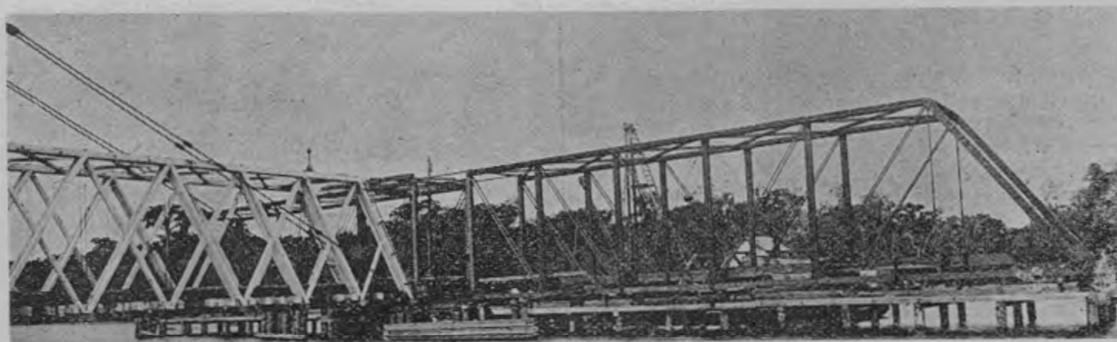
VUE N° 3



VUE N° 2



VUE D'ENSEMBLE DE L'ÉCHAFAUDAGE ET DE LA TRAVÉE TOURNANTE



CHANGEMENT D'UN PONT TOURNANT SUR LA RIVIÈRE SAINT-JEAN, AU LAC MUNROE



CHANGEMENT D'UN PONT TOURNANT A BLACK-CREEK

Changement d'un Pont tournant sur la Rivière St-Jean au Lac Monroe.

Scie de récépage.

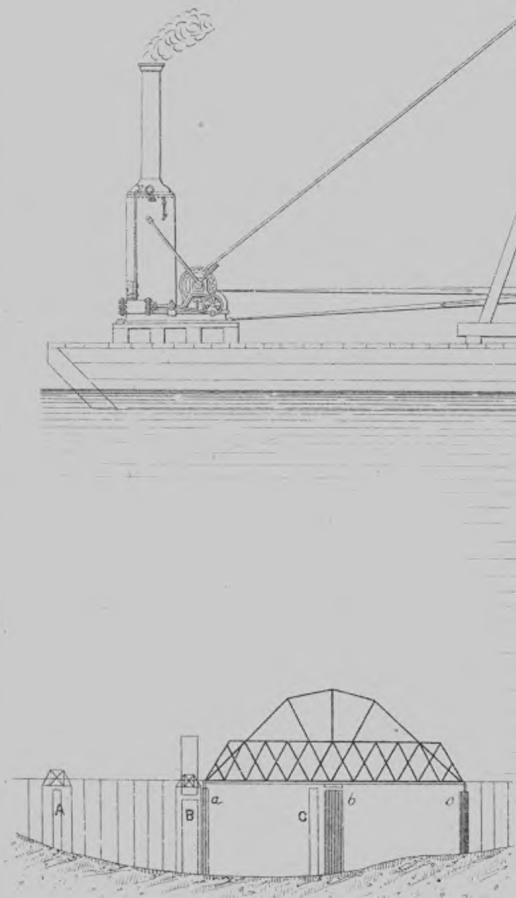


Fig. 1.

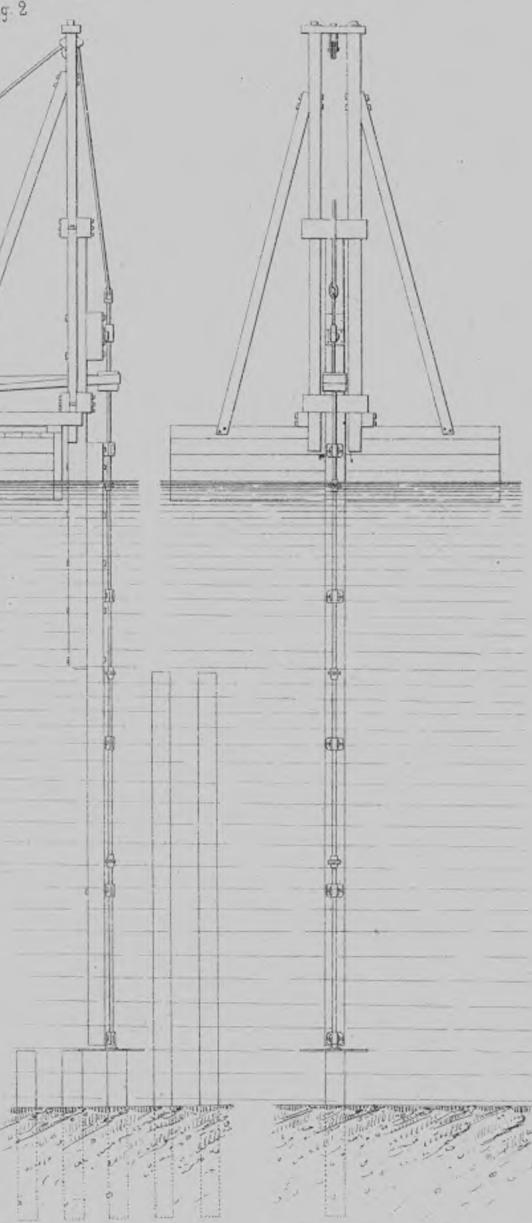
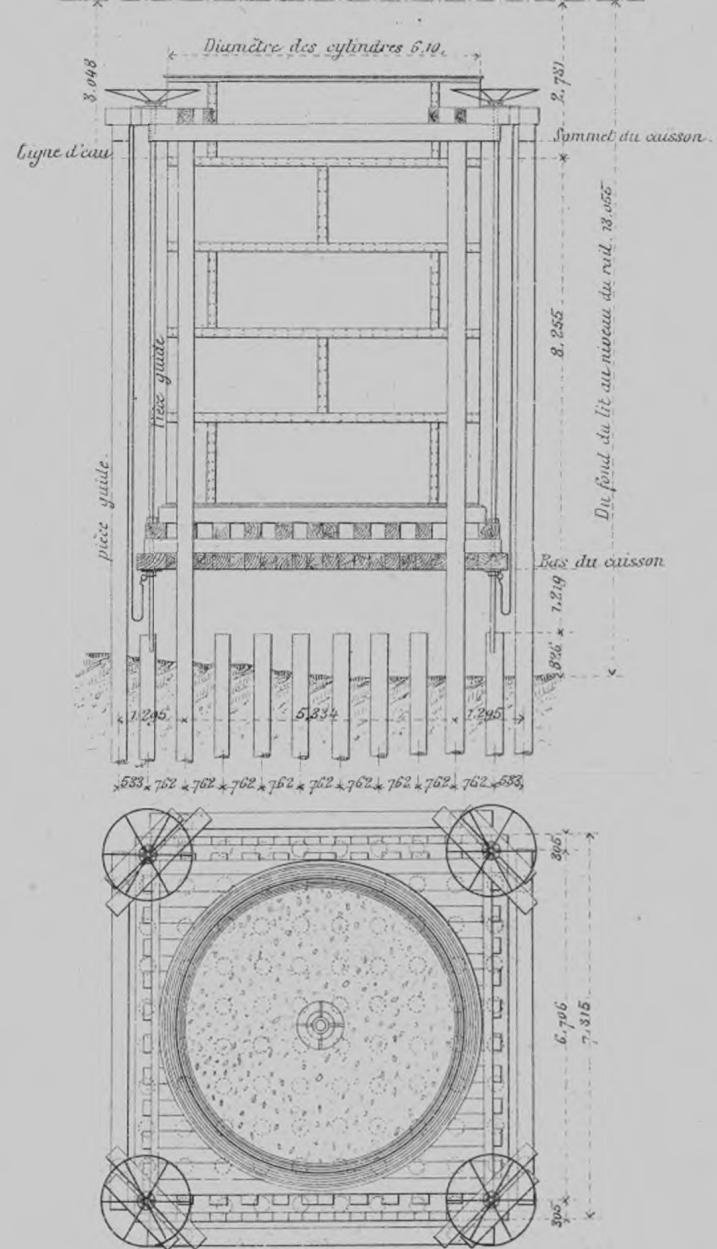


Fig. 2

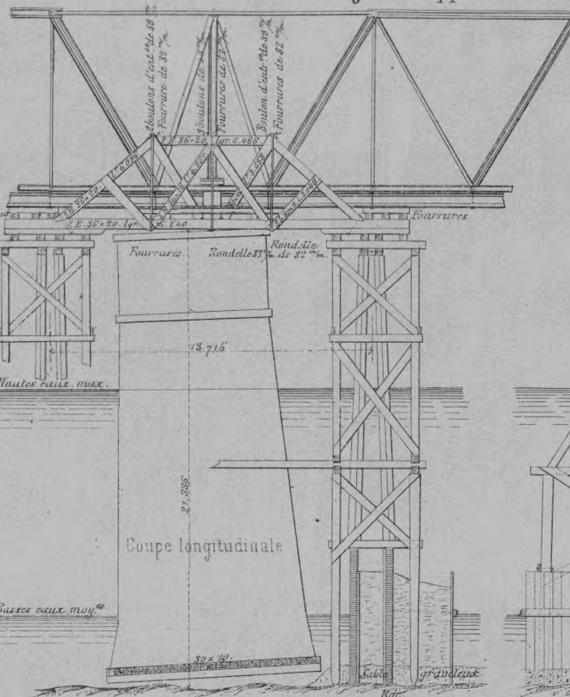
Caisson
Fig. 3

Niveau du Rail

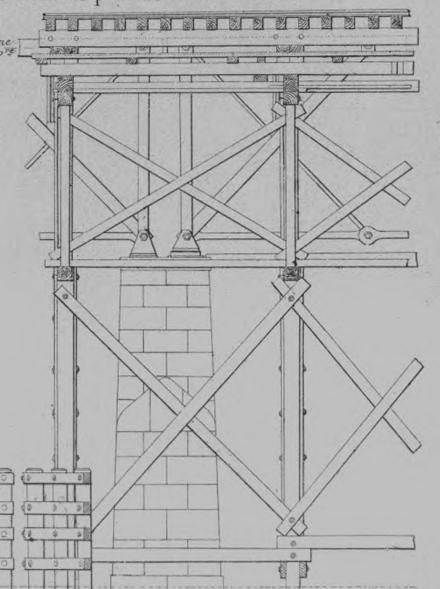




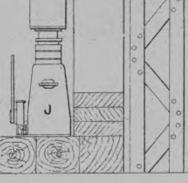
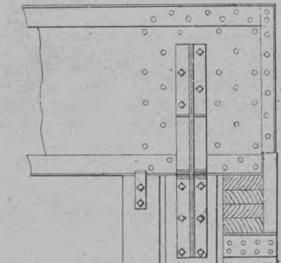
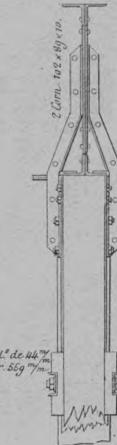
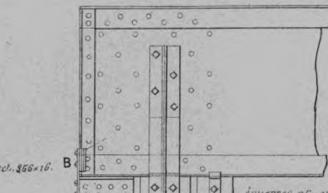
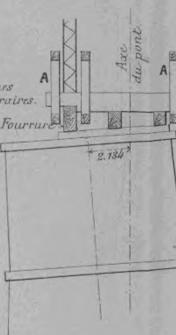
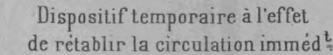
Echafaudage de support de la travée tournante.



Echafaudage de changement du pont de Filbert Street

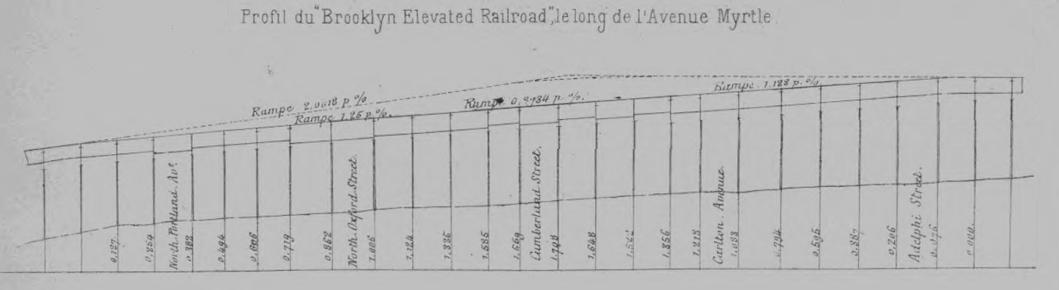


RECONSTRUCTION DE LA PILE CENTRALE DU PONT DE GADSDEN.



Abaissement de la pente du "Brooklyn Elevated Railroad"
le long de l'Avenue Myrtle.

ansvers^{le} montrant le dispositif d'abaissement.



LA NOUVELLE GARE DU PENNSYLVANIA RAILROAD A PHILADELPHIE
(VOIR LE PLAN DES VOIES INDiquANT L'ENDROIT EXACT, ET LA DIRECTION DANS LAQUELLE LES VUES ONT ÉTÉ PRISES)

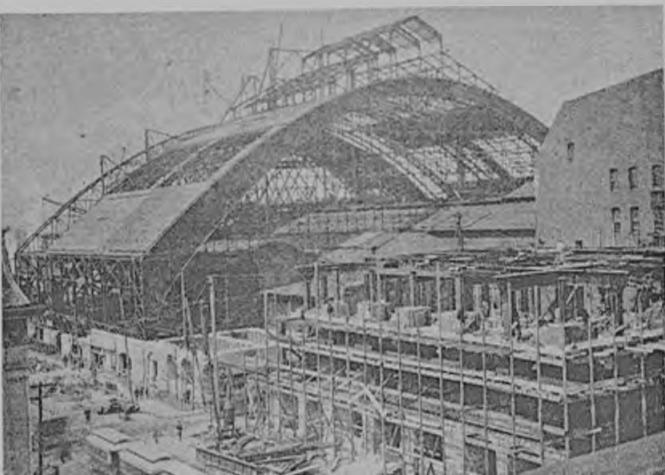


FIG. 8. — VUE COTÉ NORD-OUEST,
PRISE DU 4^e ÉTAGE DU "NEW CITY HALL", LE 26 AVRIL

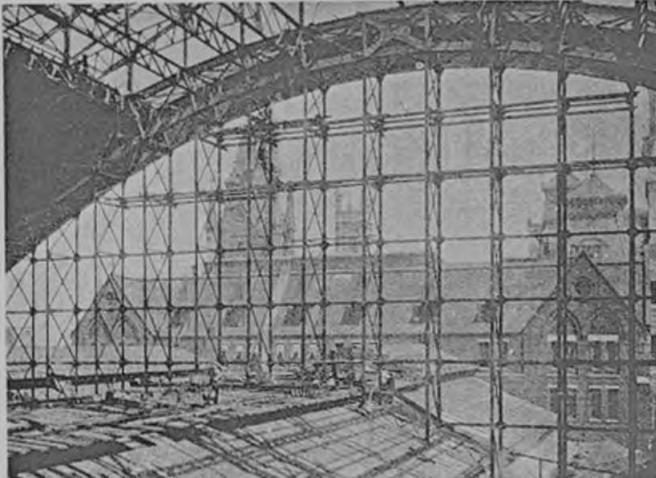


FIG. 14. — FERMES 1 ET 2 ET RIDEAU VITRÉ,
VUE PRISE DE LA PLATE-FORME DE LA GRUE DE MONTAGE, LE 26 AVRIL

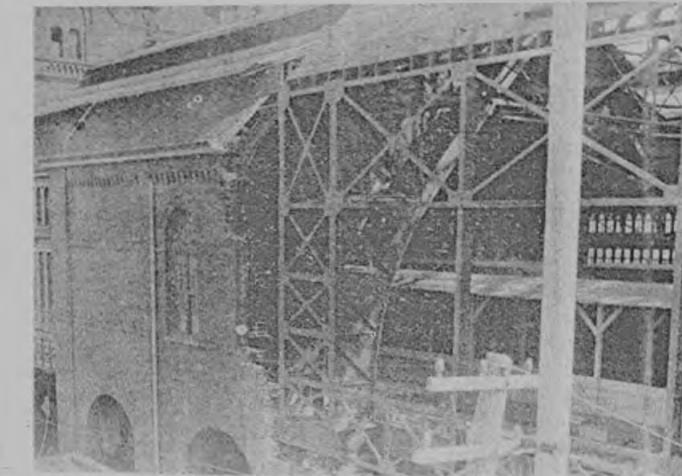


FIG. 15. — RETOMBÉES DES FERMES 1 ET 2, VUE SUD-EST, DU 21 AVRIL



FIG. 25. — MARKET-STREET. VUE PRISE LE 24 AVRIL (EST)

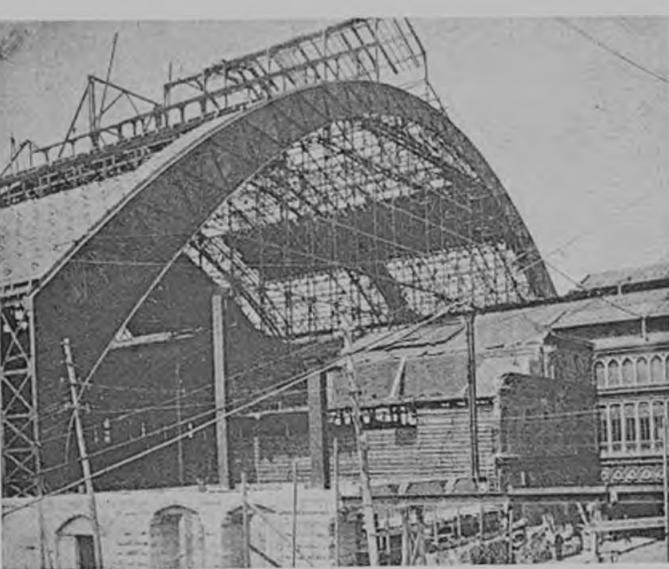


FIG. 9. — FERMES 1 ET 2 A L'INTERSECTION DE MARKET STREET
ET DE LA 15^e RUE, LE 26 AVRIL

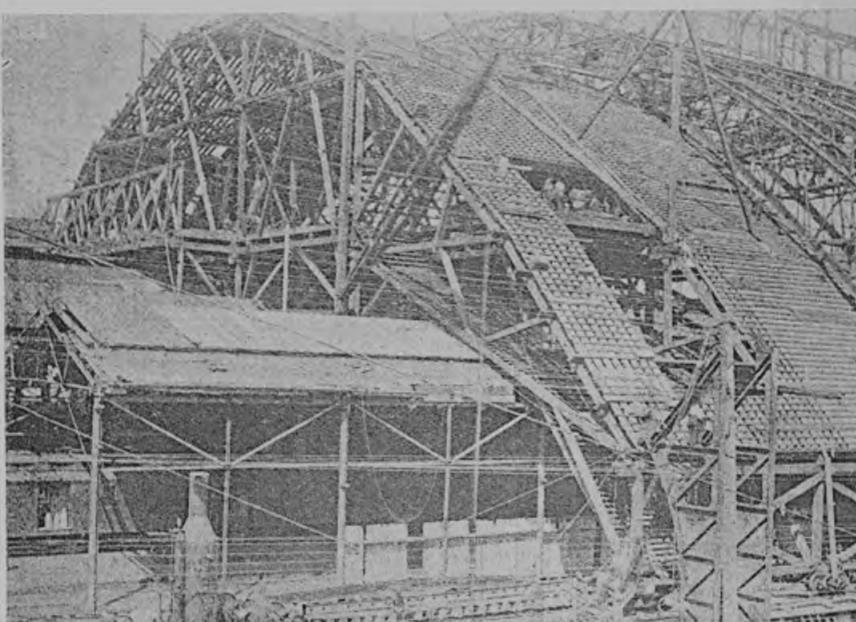


FIG. 10. — ÉCHAFAUDAGE, VUE DU 21 AVRIL

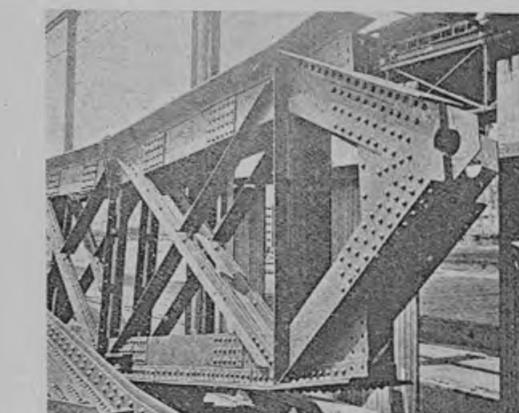


FIG. 21. — VUE DU SOMMET DE L'ARC (RENVERSÉ)

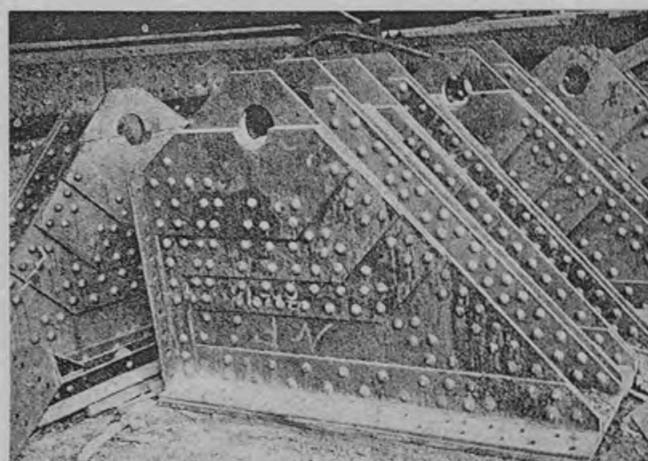


FIG. 20. — RETOMBÉE (RENVERSÉE)

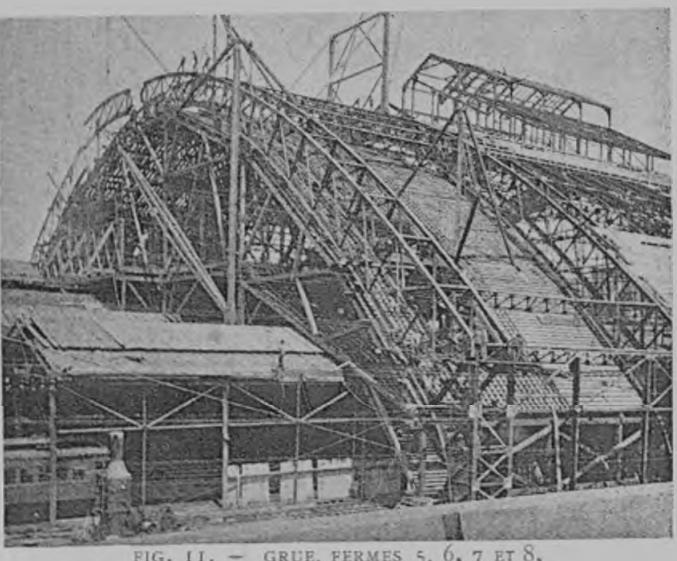


FIG. 11. — GRUE, FERMES 5, 6, 7 ET 8,
VUE COTÉ NORD PRISE LE 26 AVRIL

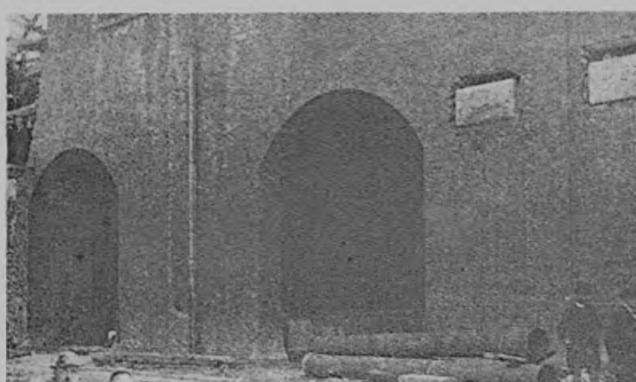


FIG. 16. — ANCIEN MUR, COTÉ NORD,
VUE PRISE SOUS LA 16^e RUE, LE 18 AVRIL



FIG. 24. — MARKET-STREET. VUE PRISE LE 26 AVRIL (OUEST)

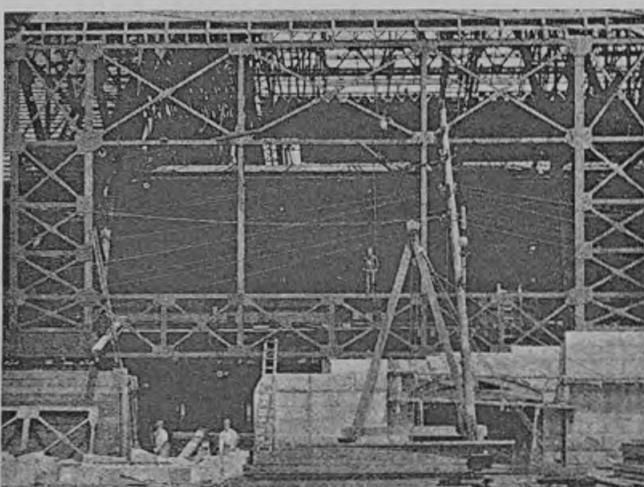


FIG. 23. — VUE LONGITUDINALE (FERMES 5, 6, 7 ET 8)
PRISE LE 10 MAI

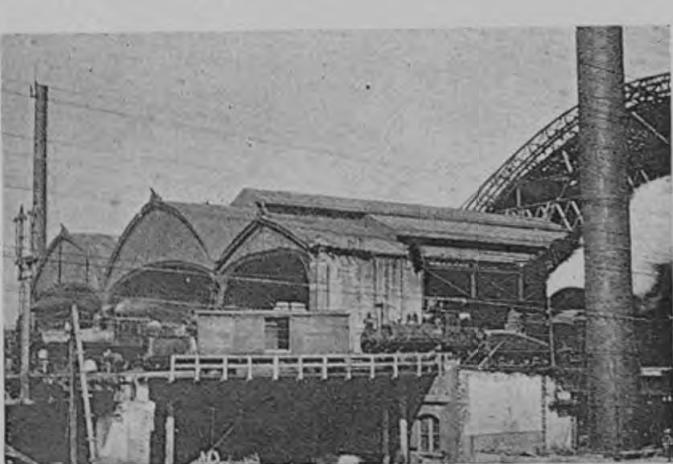


FIG. 12. — VUE PRISE A L'INTERSECTION DE MARKET STREET
ET DE LA 16^e RUE, LE 18 AVRIL

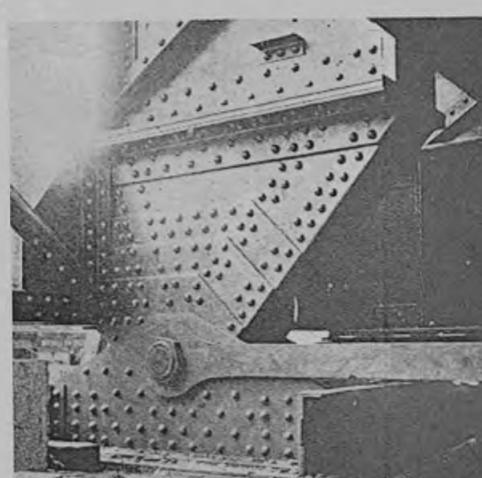


FIG. 17. — RETOMBÉE



FIG. 13. — VUE PRISE A L'EST PRÈS LA 17^e RUE, LE 18 AVRIL

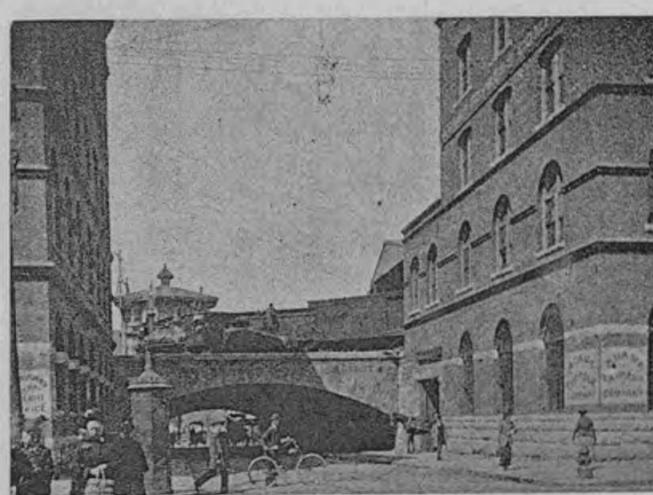
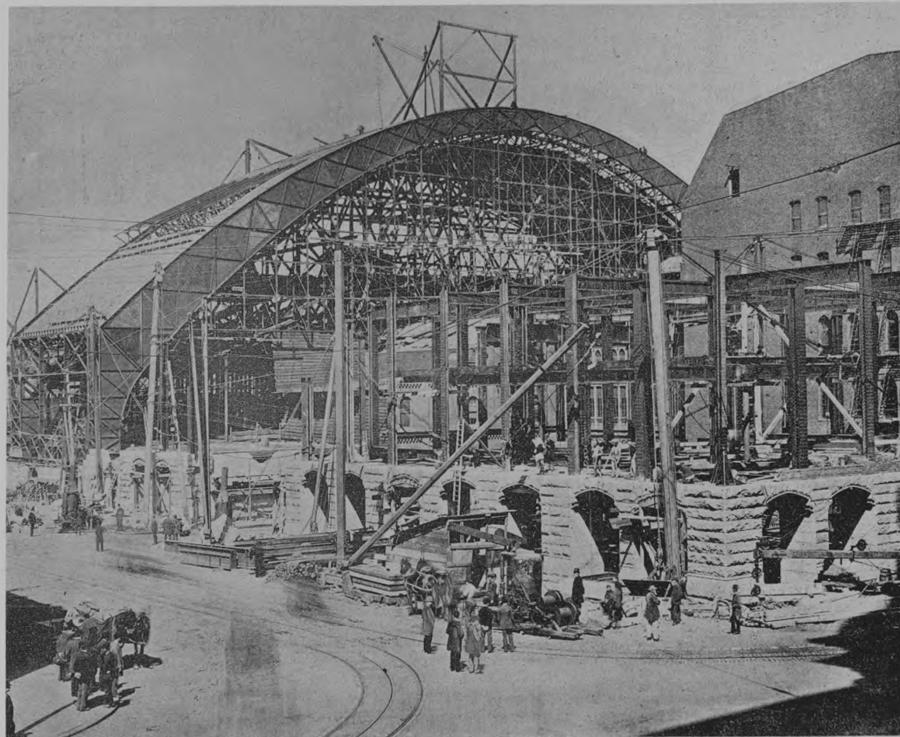


FIG. 26. — LA 17^e RUE, VUE PRISE LE 24 AVRIL

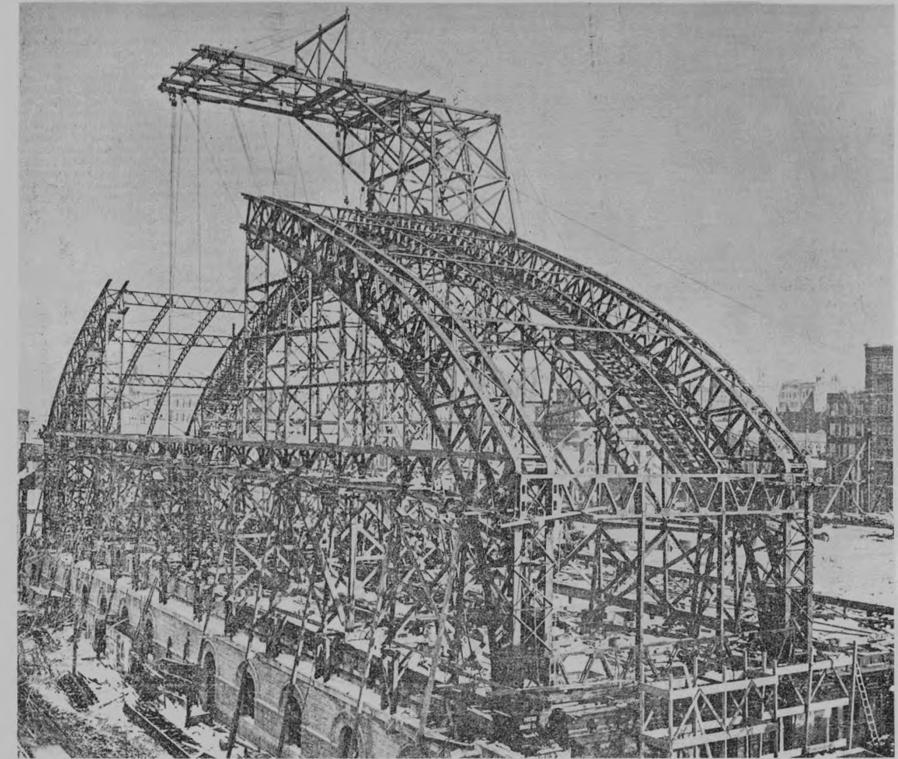




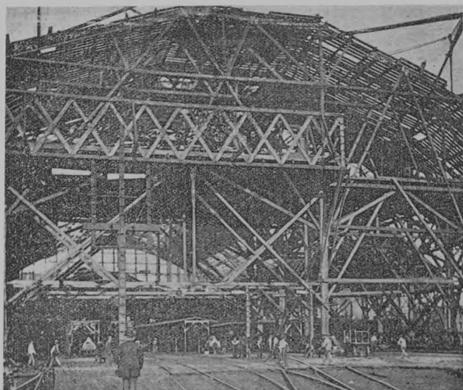
CHARPENTE DE LA GARE DU "PENNSYLVANIA & READING TERMINAL RAILROAD" A PHILADELPHIE



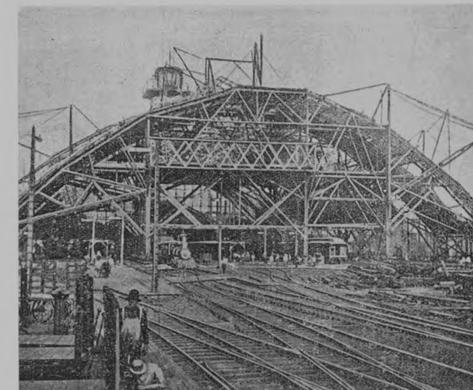
VUE EN COURS DE MONTAGE



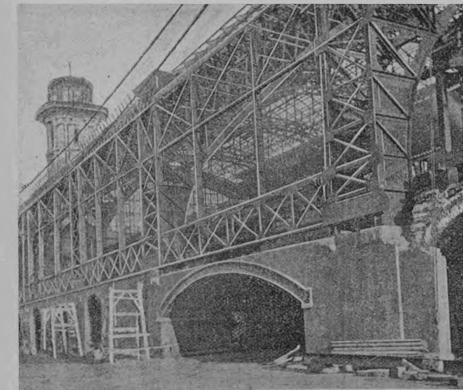
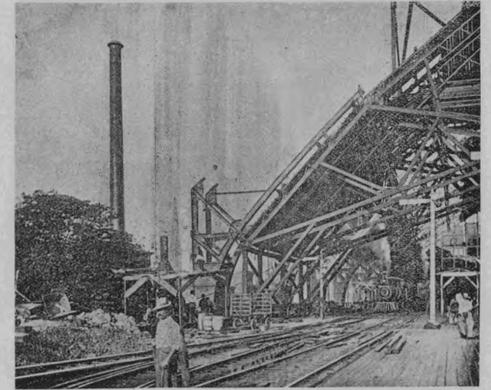
VUE PENDANT LE MONTAGE



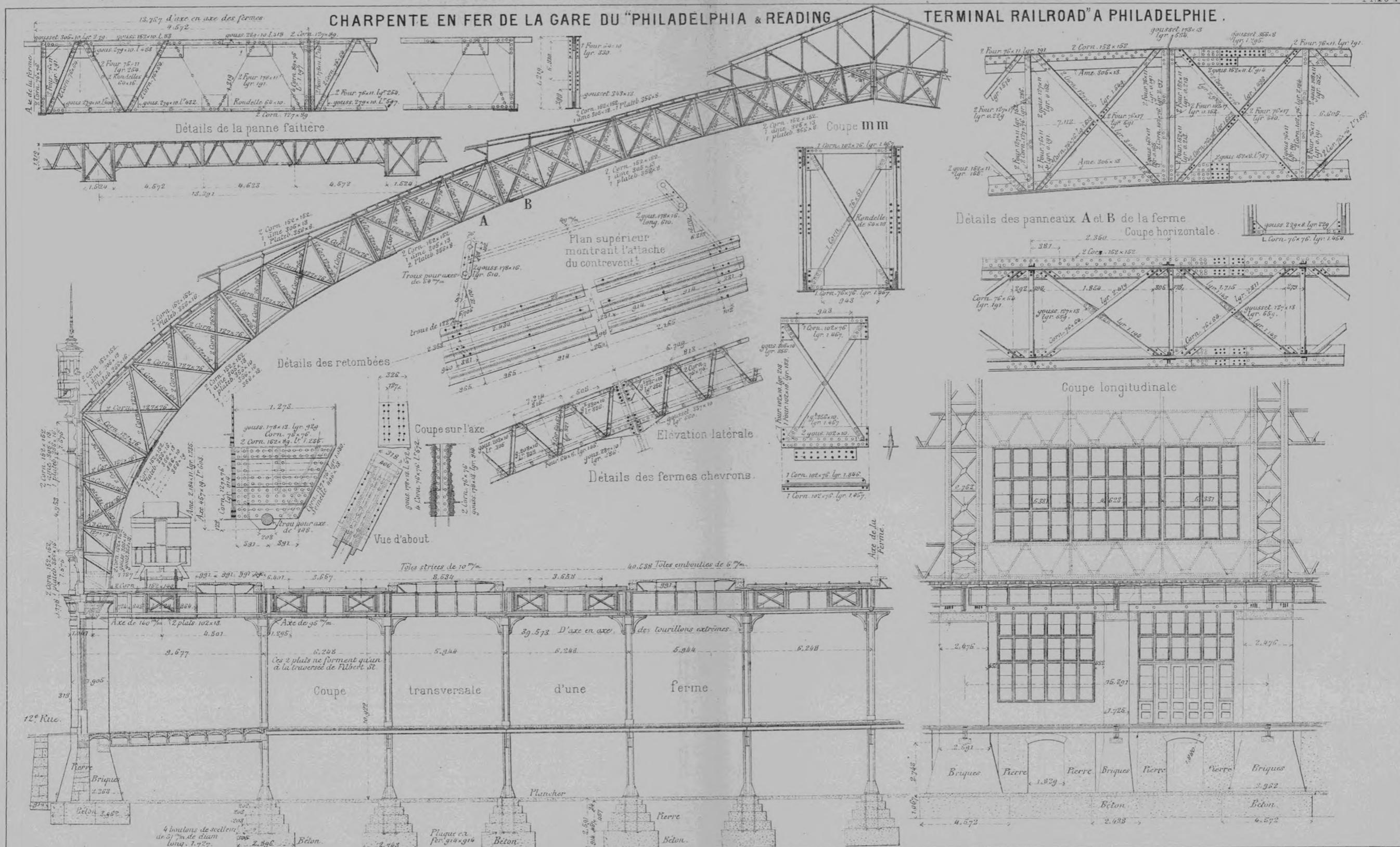
ÉCHAFAUDAGE ET GRUE



ÉCHAFAUDAGE ET GRUE

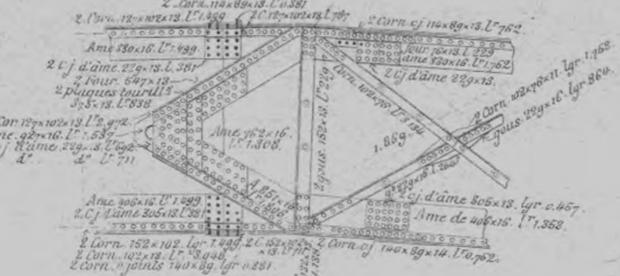
VUE DU CÔTE NORD ET PONT AU-DESSUS DE LA 16^E RUE

RETOMBÉE DE L'ÉCHAFAUDAGE ET DE LA GRUE (FERME N° 26)



CHARPENTE EN FER DE LA GARE DU "PHILADELPHIA & READING TERMINAL RAILROAD" A PHILADELPHIE

Détails du sommet de la ferme



Coulis 306x16. Lgr. 2.695.

Ame 35x16.

Lgr. 2.530.

plus c. joints 229x18. lgr. 0.657.

Corde 114x89x12. 0.762.

Ame 35x16. Lgr. 1.569.

Lgr. 2.530.

2 plaq. tourr. 13.

3.5x13. L. 338.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

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2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

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Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

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2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

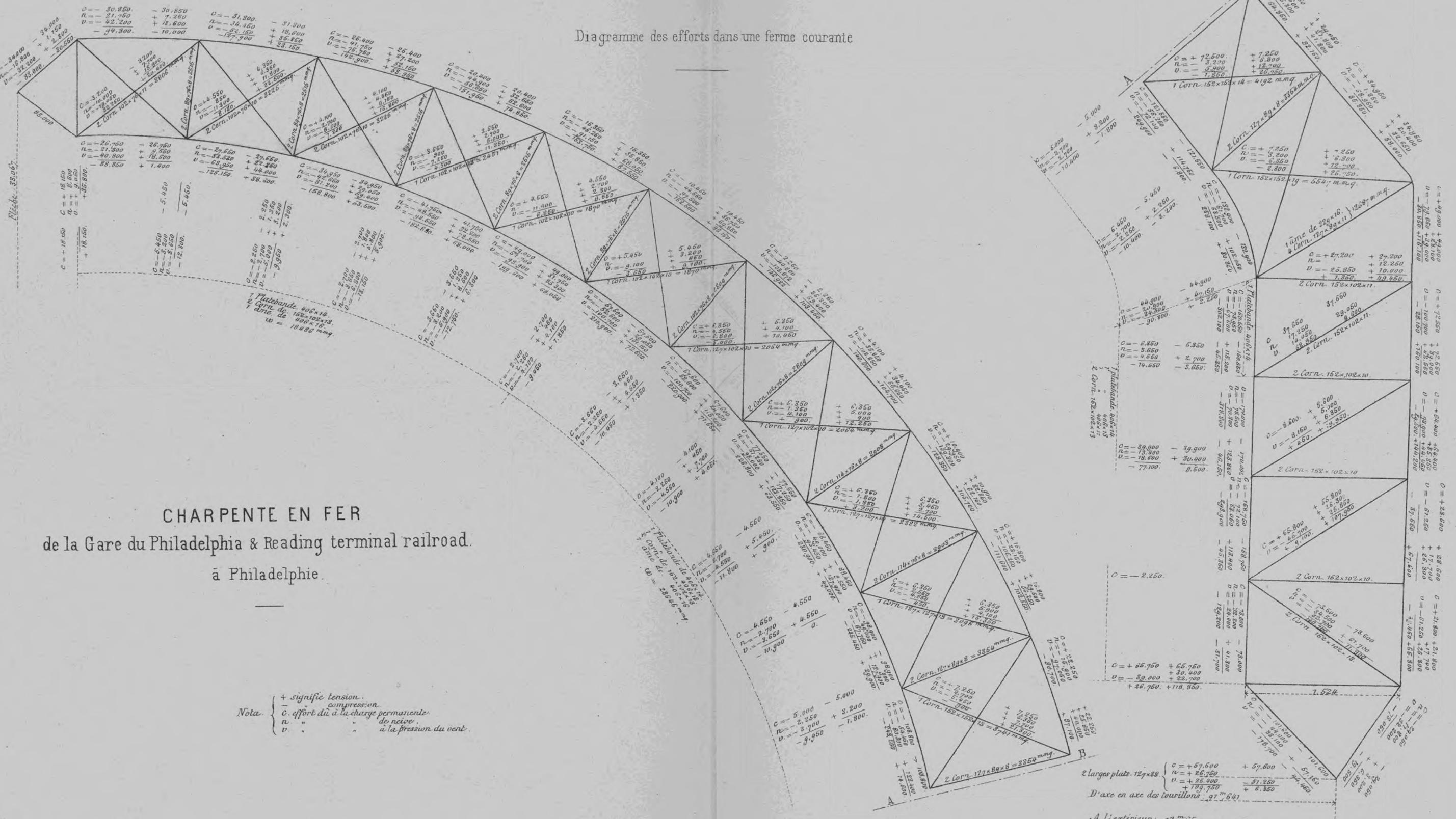
2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

2 Cor. 127x102x10. lgr. 1.569.

Ame 35x16. L. 537.

Diagramme des efforts dans une ferme courante



CHARPENTE EN FER

de la Gare du Philadelphia & Reading terminal railroad.

à Philadelphie.

Nota. { + signifie tension.
 C. effort dû à la charge permanente.
 n. " " de neige.
 v. " " à la pression du vent.

A l'extérieur: 92 m 657

2 larges plats 127x88 { C = + 57,600
 V = + 26,750+ 57,600 - 57,160
 + 26,400 - 26,750

D'axe en axe des tourbillons 97 m 641

$$\begin{aligned} C &= 56,500 \\ n &= 56,500 \\ v &= 56,500 \end{aligned}$$

$$\begin{aligned} C &= 56,500 \\ n &= 56,500 \\ v &= 56,500 \end{aligned}$$

$$\begin{aligned} C &= 56,500 \\ n &= 56,500 \\ v &= 56,500 \end{aligned}$$

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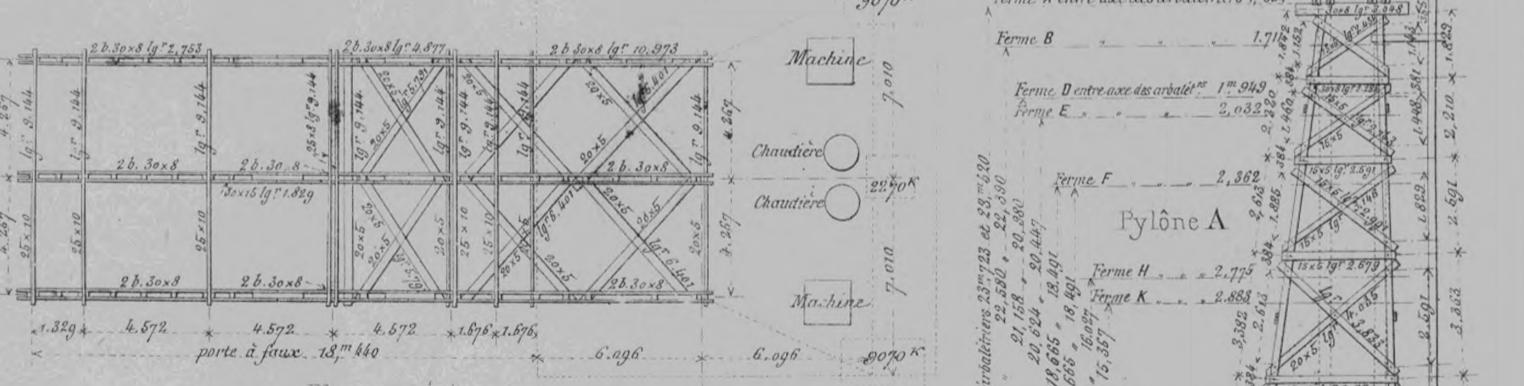
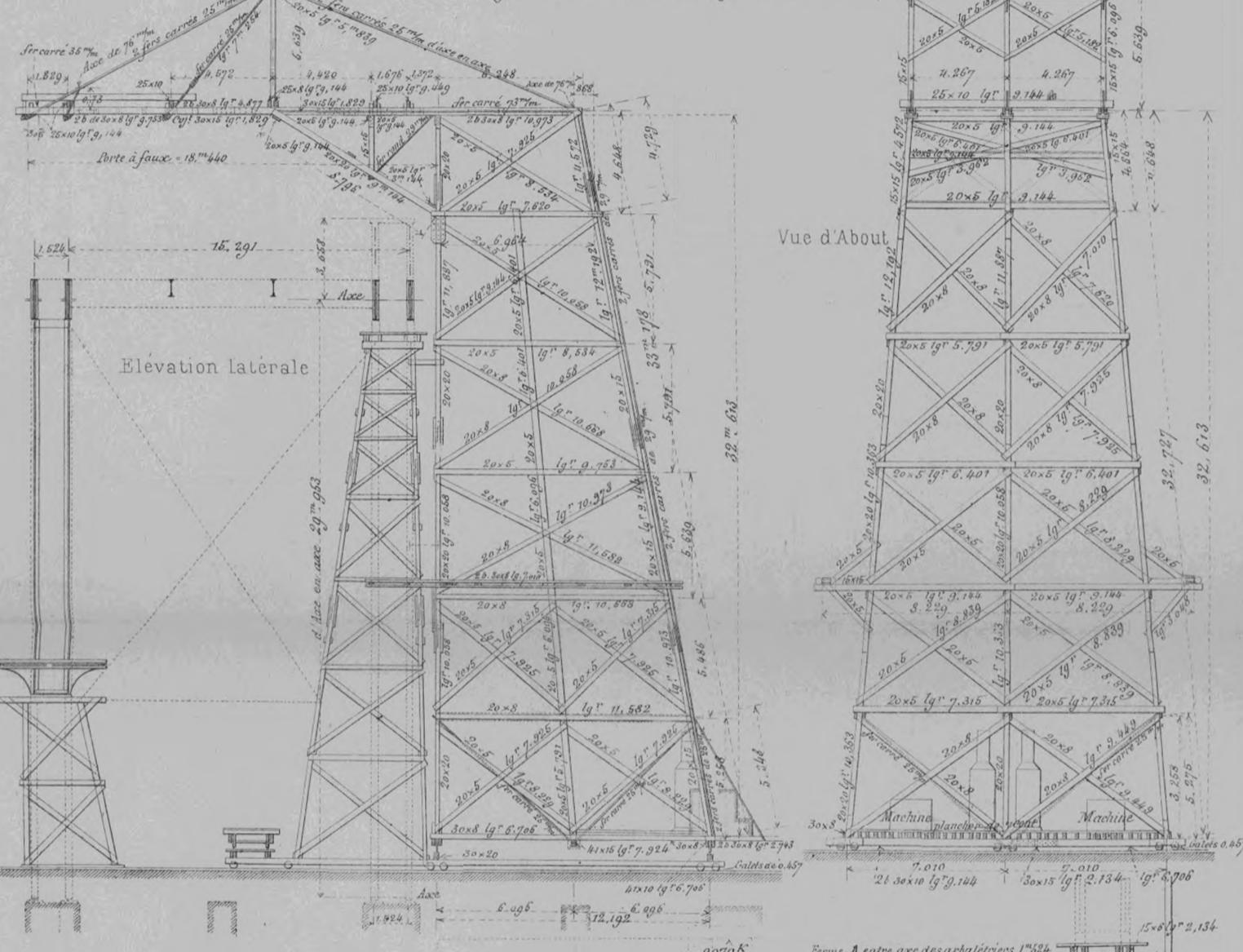
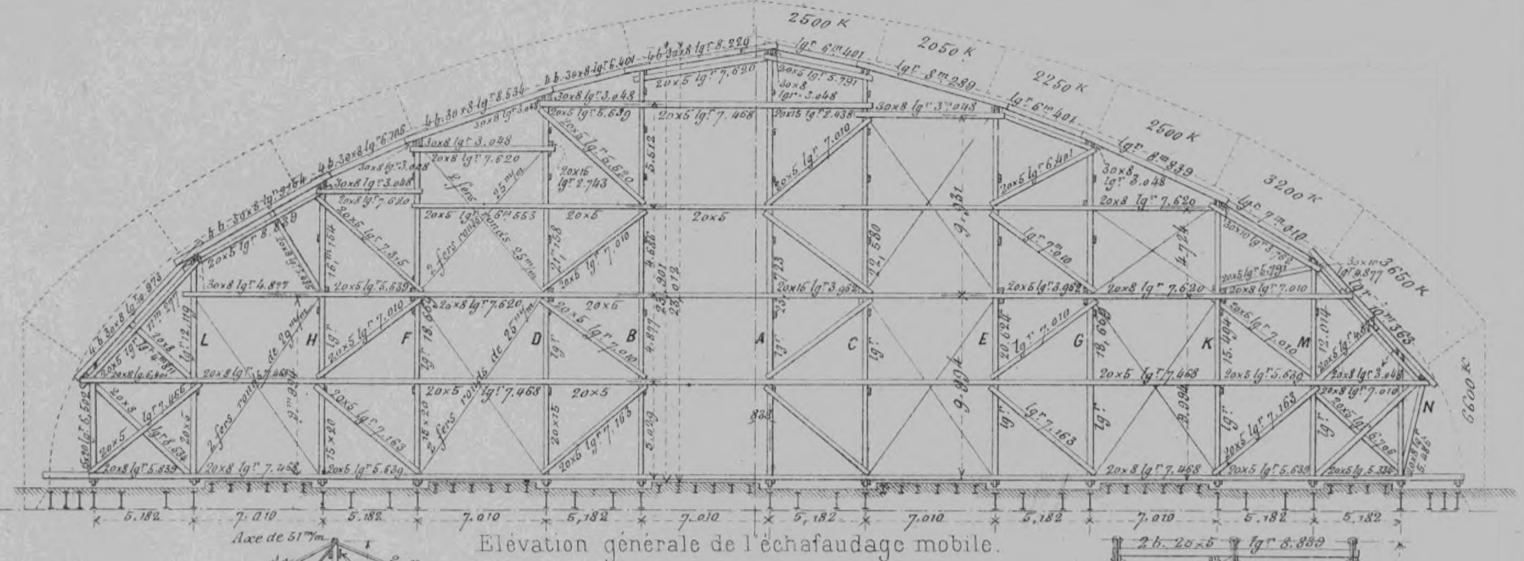
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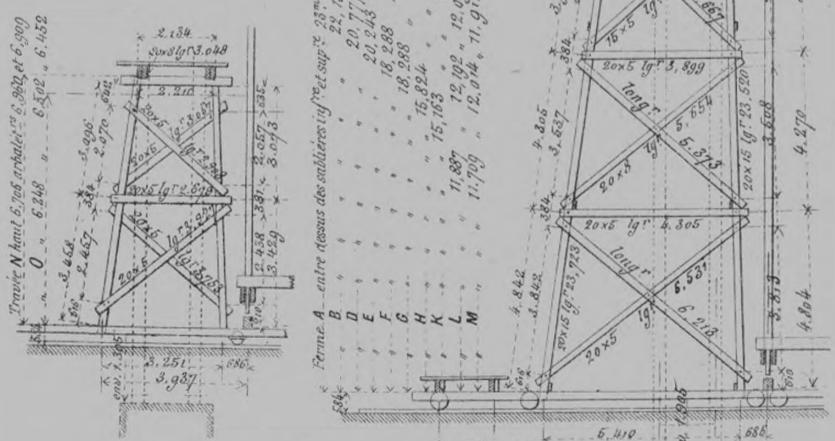
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**ÉCHAFAUDAGE MOBILE ET GRUE DE MONTAGE
DE LA CHARPENTE EN FER DE LA GARE
DU "PHILADELPHIA & READING
TERMINAL RAILROAD"
A PHILADELPHIE**



Détails des fermes de l'échafaudage mobile

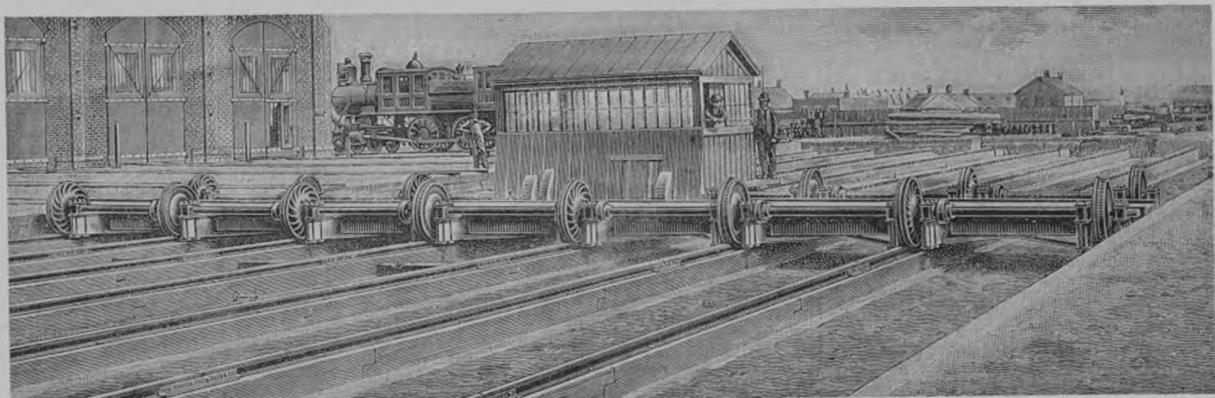


FIG. 1

CHARIOT TRANSBORDEUR POUR LOCOMOTIVES
(ANALOGUE A CELUI DE L'EXPOSITION DE CHICAGO)

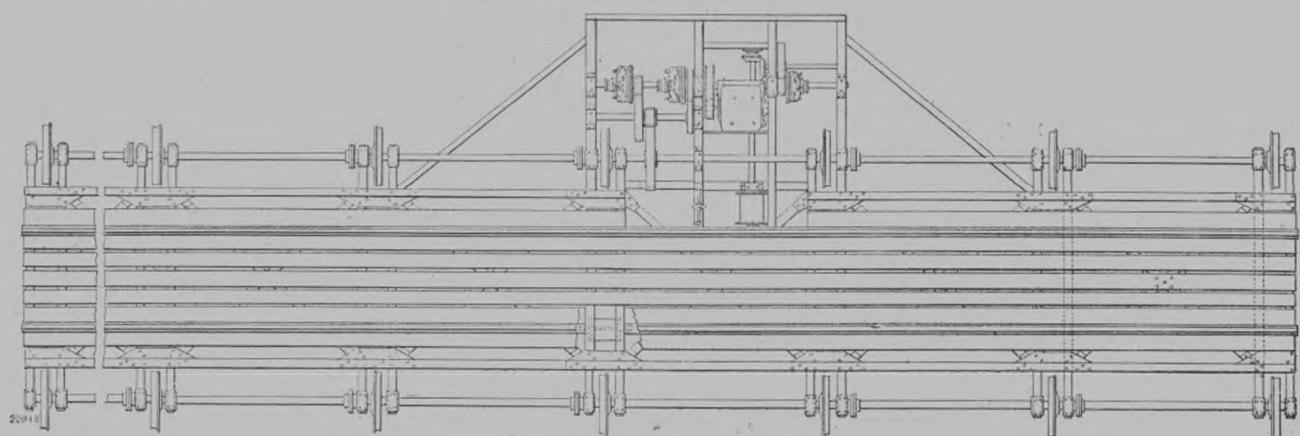
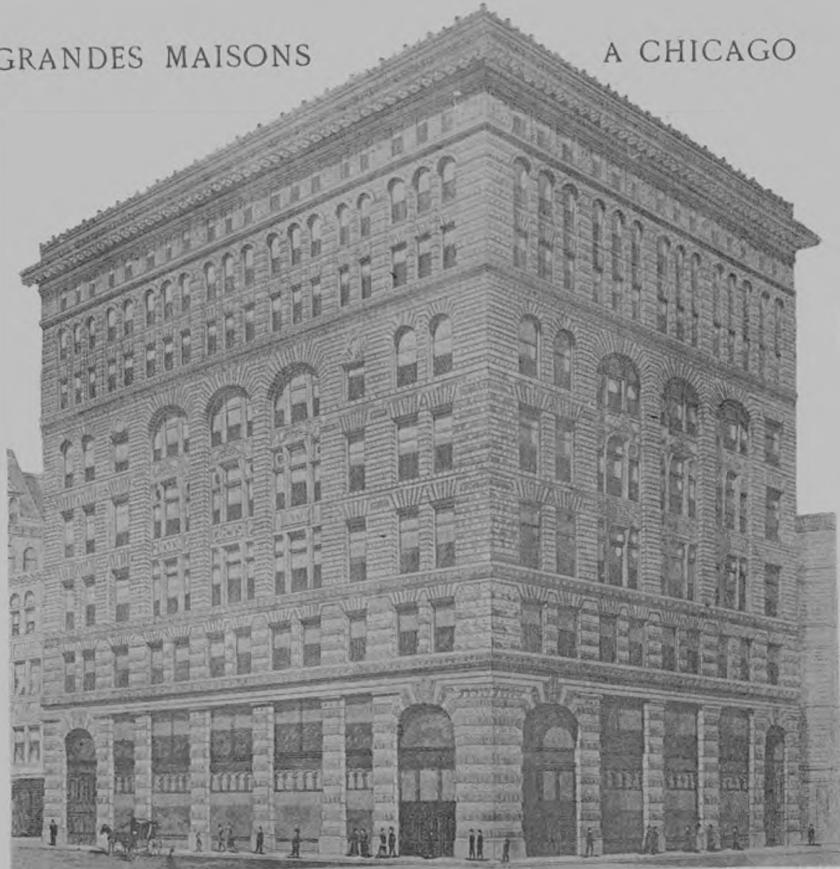


FIG. 2

LES GRANDES MAISONS

A CHICAGO



MARSHALL FIELD BUILDING, CHICAGO

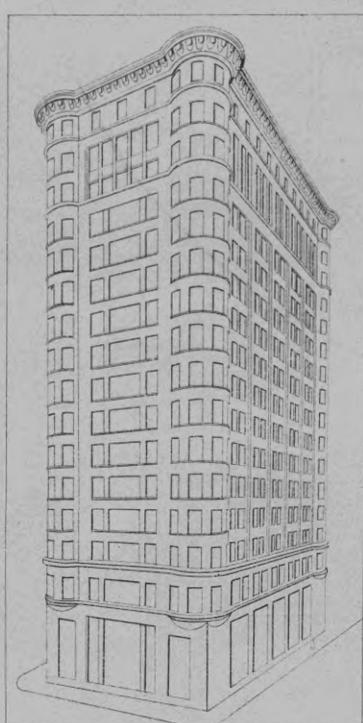


Fig. 11. Vue de l'Old Colony Building

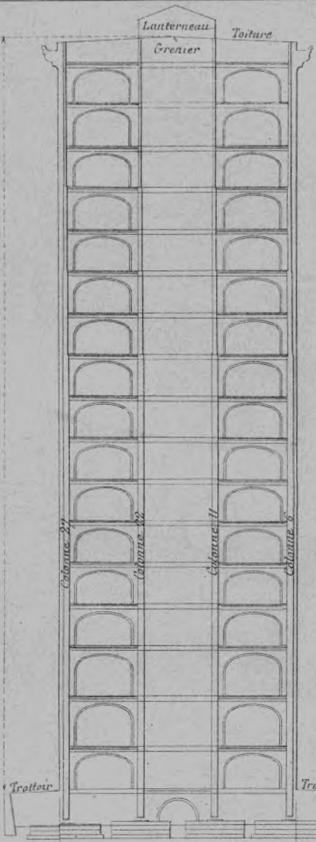


Fig. 5. Coupe donnant le contreventement

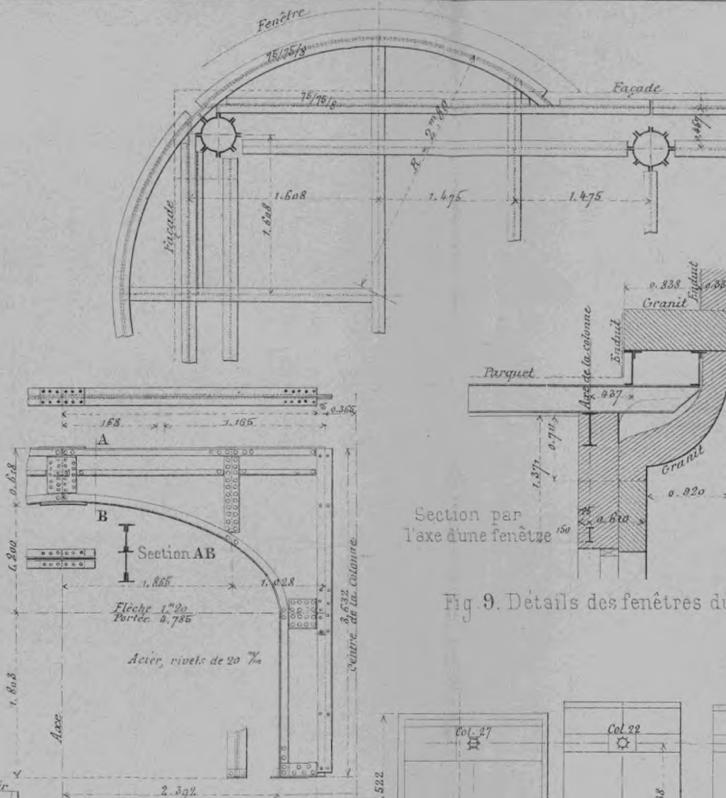
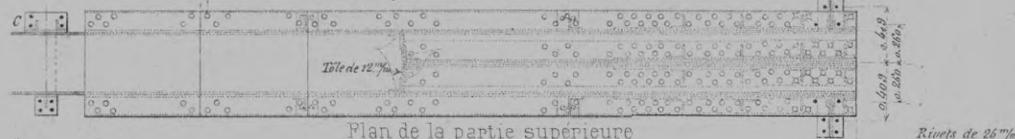
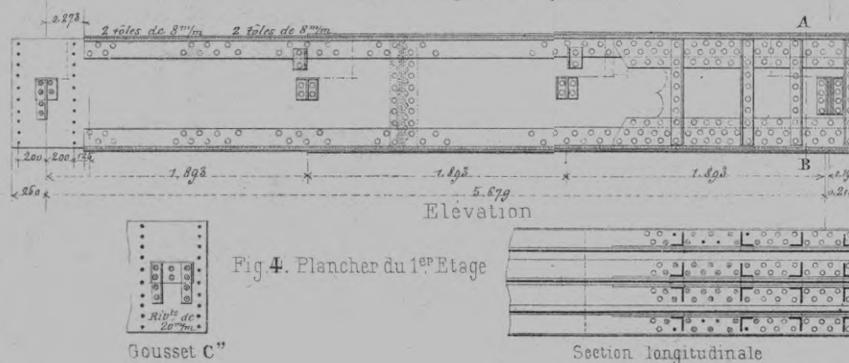


Fig. 7. Détails de construction du contreventement



Plan de la partie supérieure

Fig. 4. Plancher du 1^{er} Etage

Gousset C'

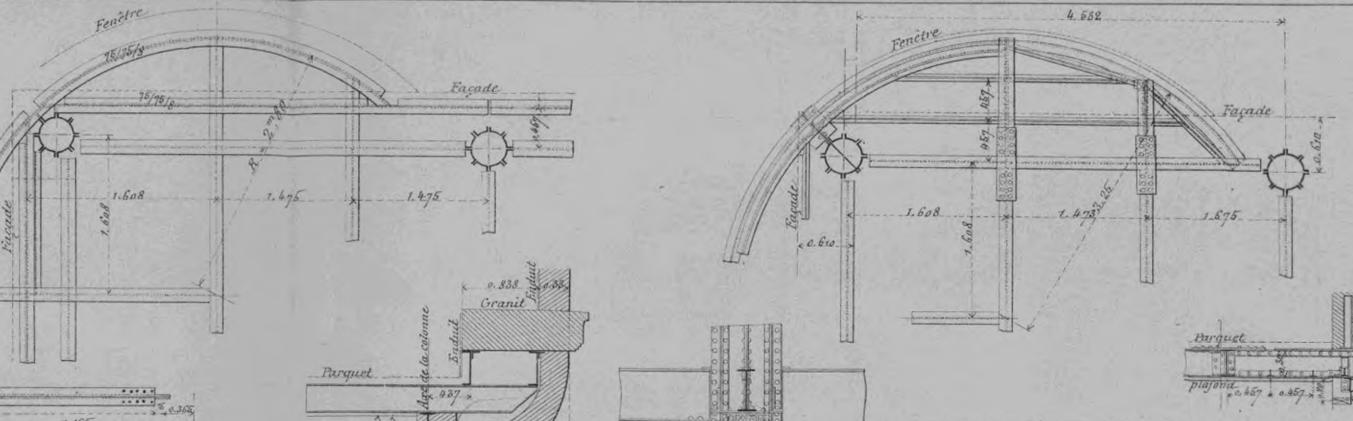


Fig. 10. Détails de l'ossature des pans arrondis

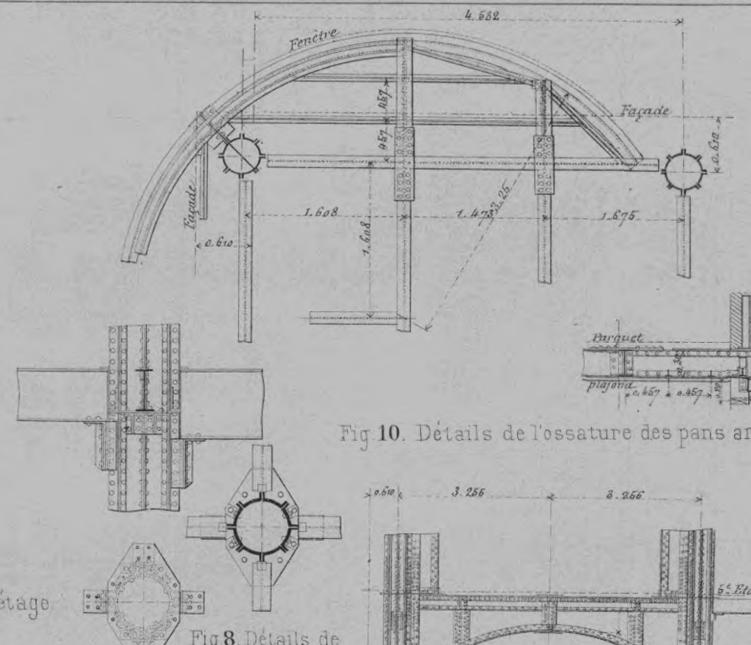


Fig. 8. Détails de l'assemblage des colonnes

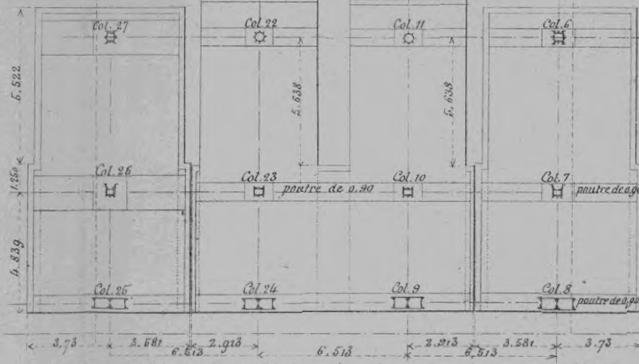


Fig. 6. Elevation du contreventement des colonnes

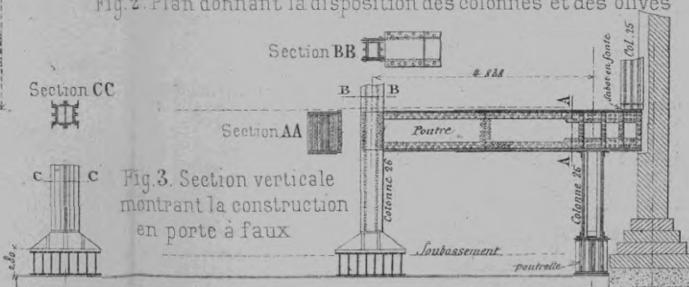


Fig. 3. Section verticale montrant la construction en porte à faux

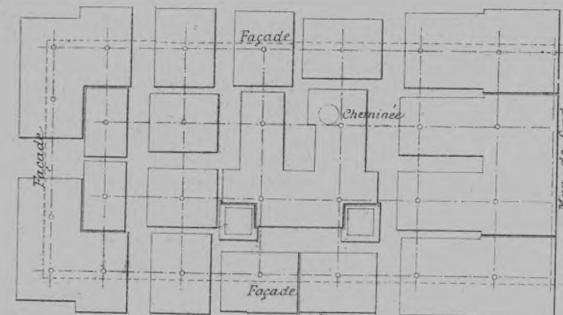


Fig. 1. Plan du bétonnage de fondation

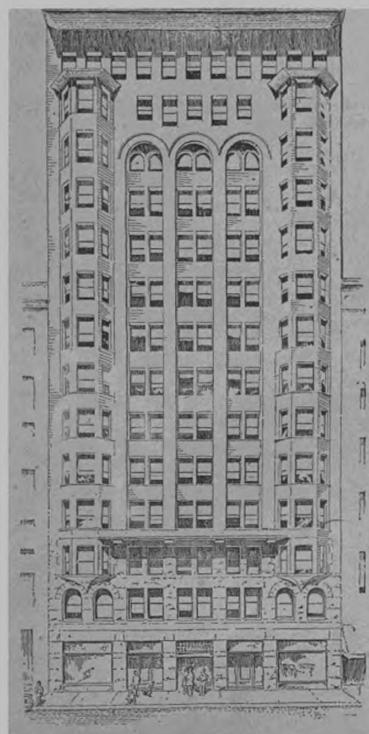
MAISON A 17 ÉTAGES. (OLD COLONY BUILDING)

Armature métallique construite à Chicago en 1893. MM. Holabird et Roche, Architectes.

LES GRANDES MAISONS A CHICAGO



Y. M. C. A. BUILDING, A CHICAGO



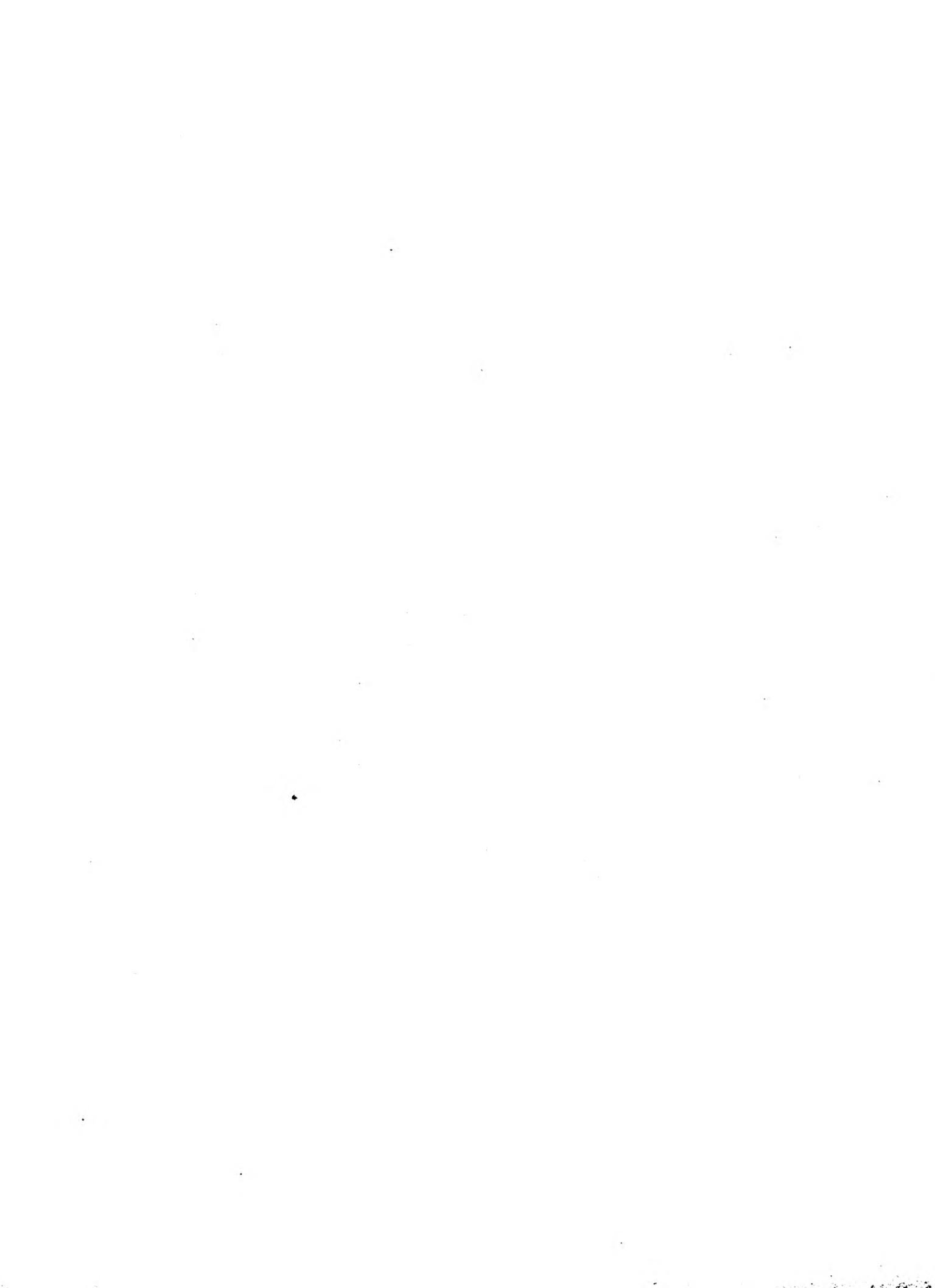
ELLSWORTH BUILDING



TEUTONIC BUILDING



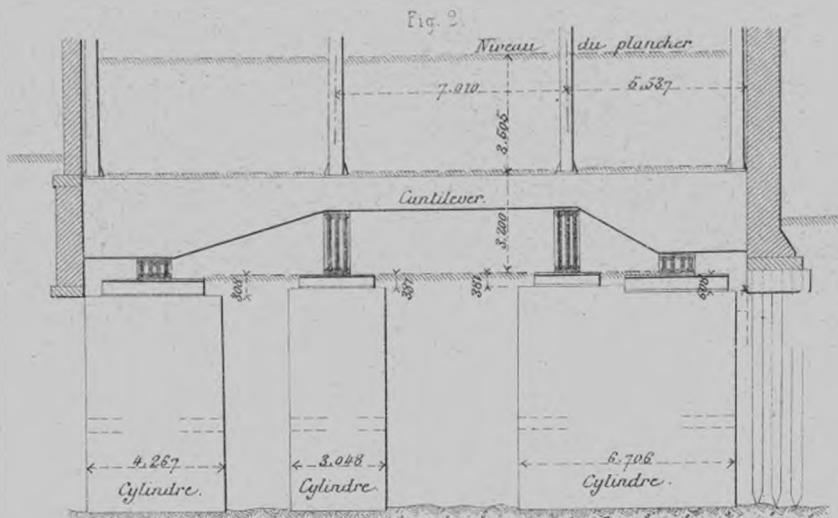
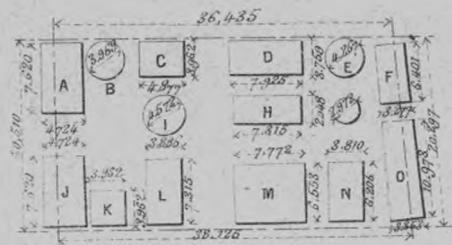
COLOMBUS BUILDING



FONDATIONS DU MANHATTAN LIFE BUILDING à New-York.

Coupe transversale.

Fig. 1.
Plan des fondations.



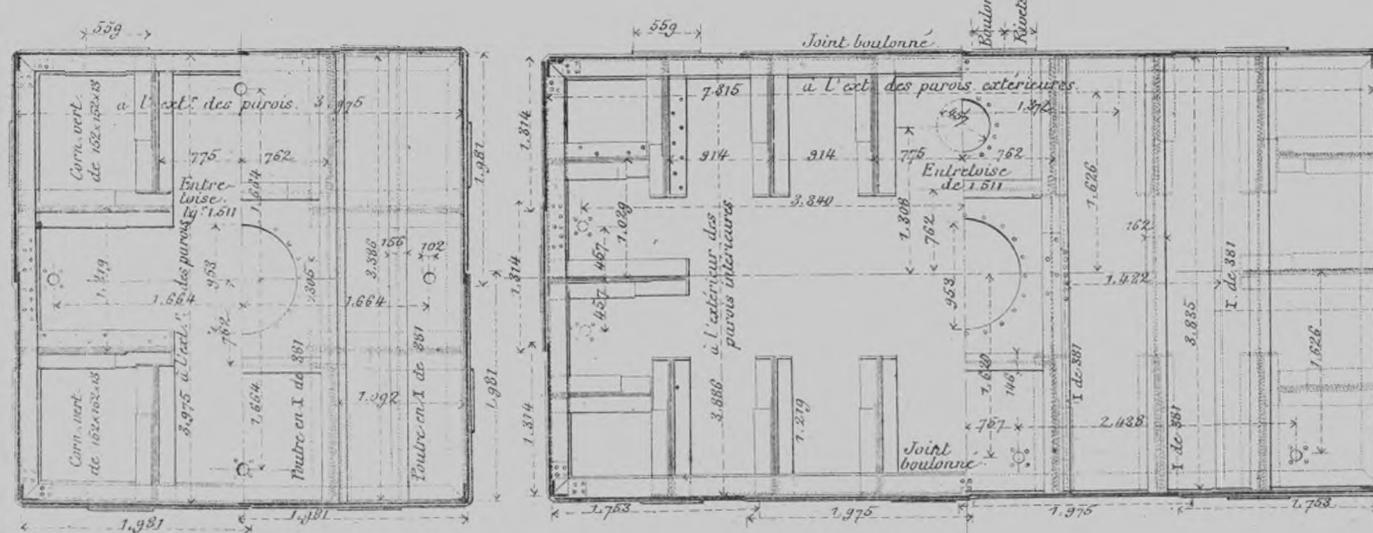
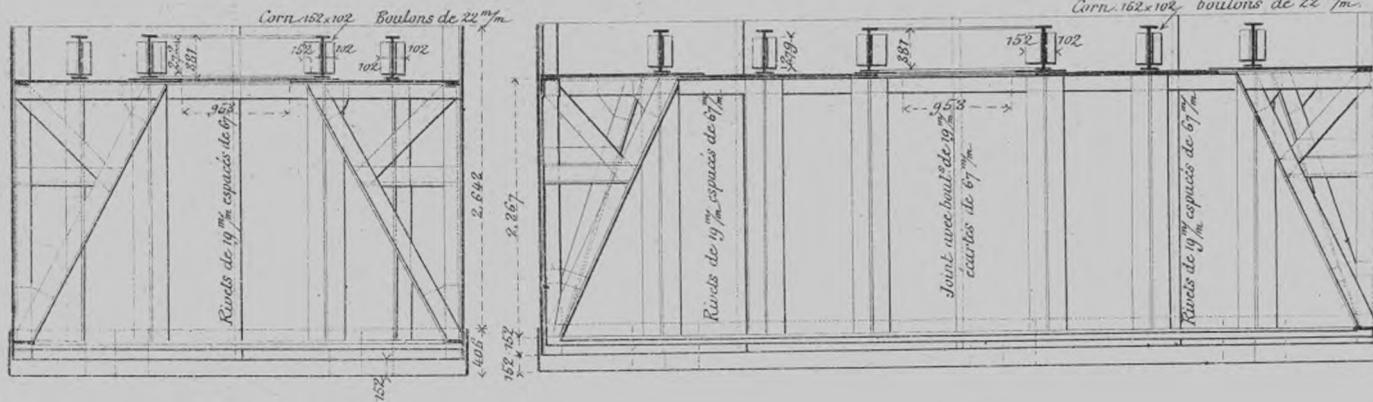
Détails des caissons K et L

Caisson K

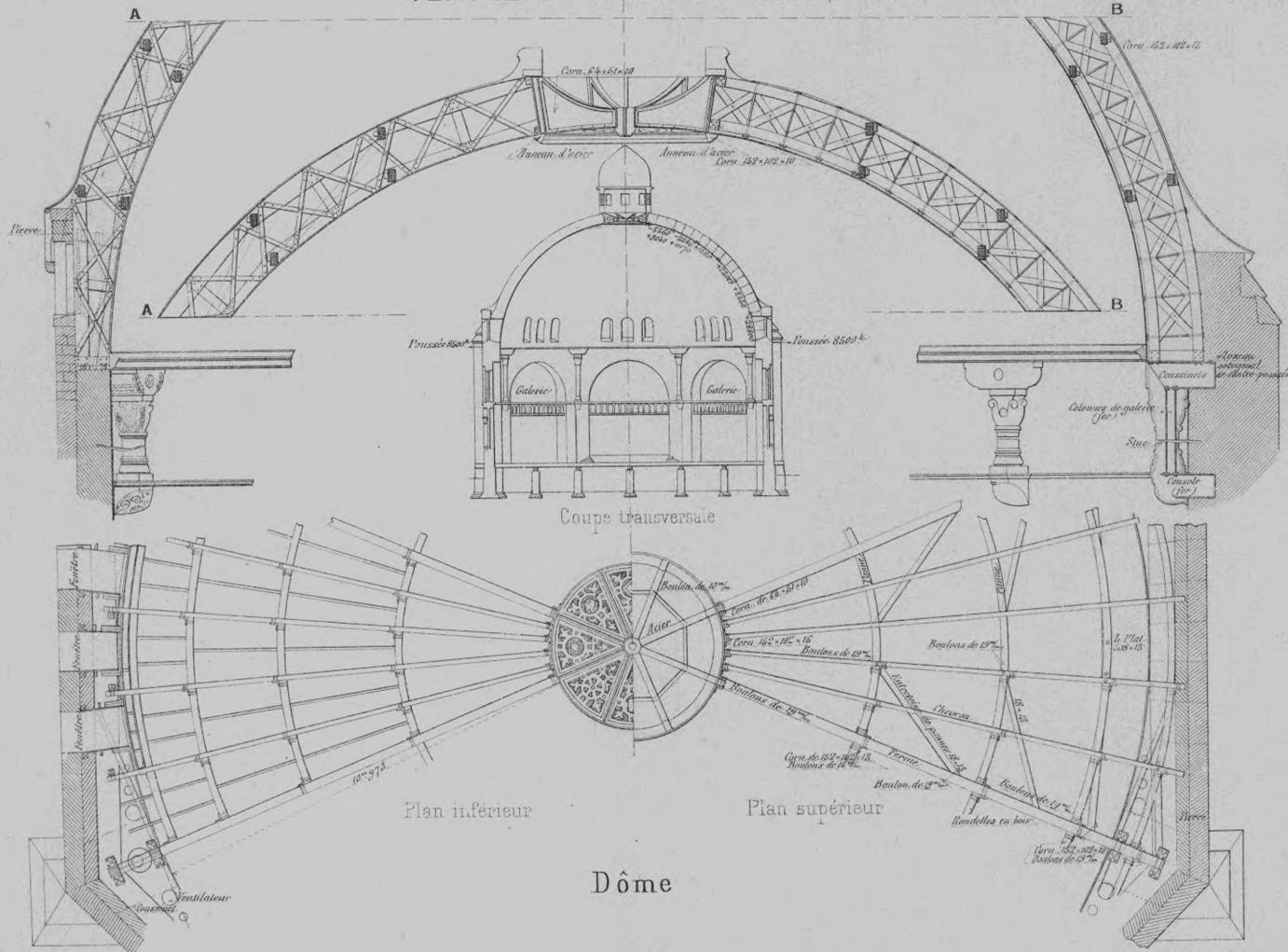
Fig. 3.4.

Caisson L

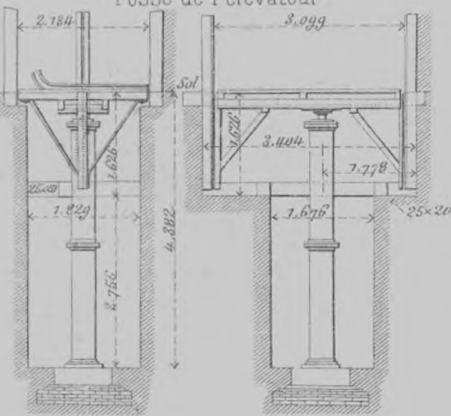
Corn. 162x102 boulons de 22 mm.



TEMPLE BETH-ZION à Buffalo (*New-York*)



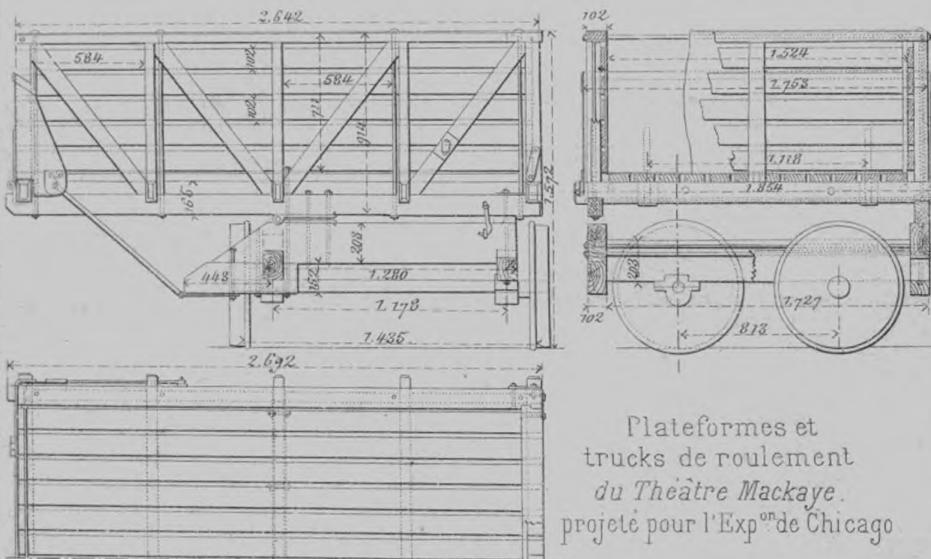
Fosse de l'élevateur



WHARF DE CHARGEMENT pour locomotives à Chicago.

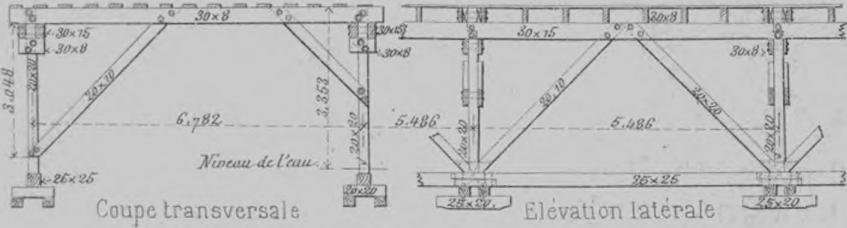
Pittsburg, Cincinnati,
et Saint Louis Railway.

Wagonnet de roulement



Plateformes et
trucks de roulement
du Théâtre Mackaye.
projeté pour l'Expo de Chicago

Plateforme mobile avec jambes de force.



Coupe transversale

Élevation latérale

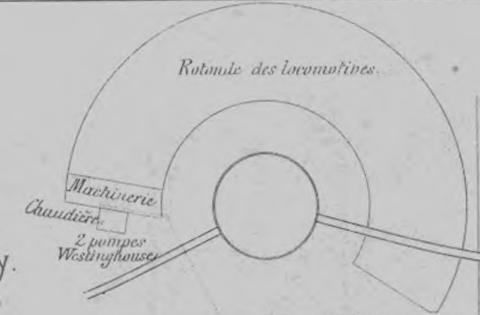


Fig. 1

Plan général

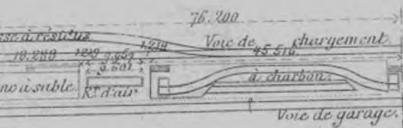
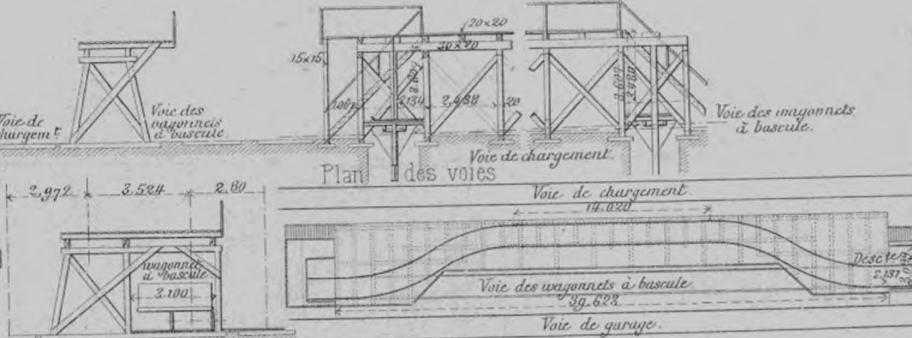
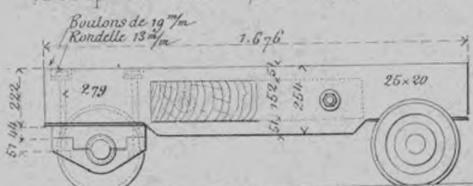


Fig. 2

Plan des voies et Coupes sur le Wharf

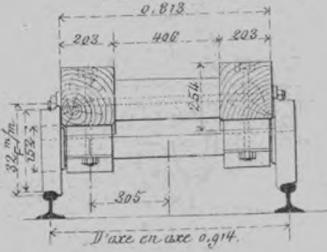


1/2 Coupe sur l'axe

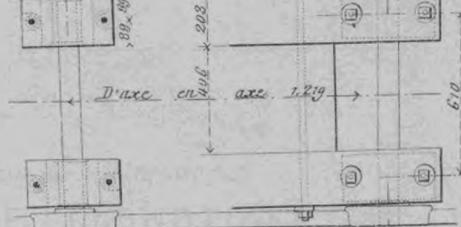


Plan Variable

Vue en bout



Trucks de roulement



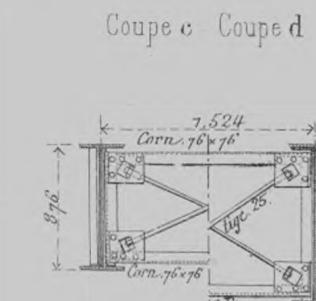
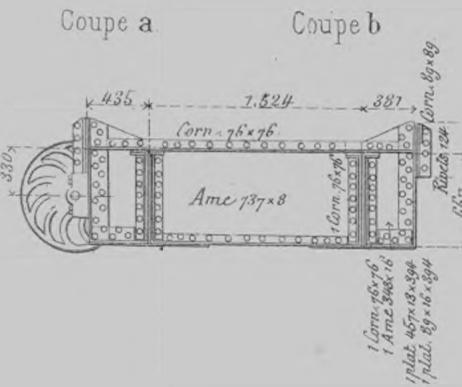
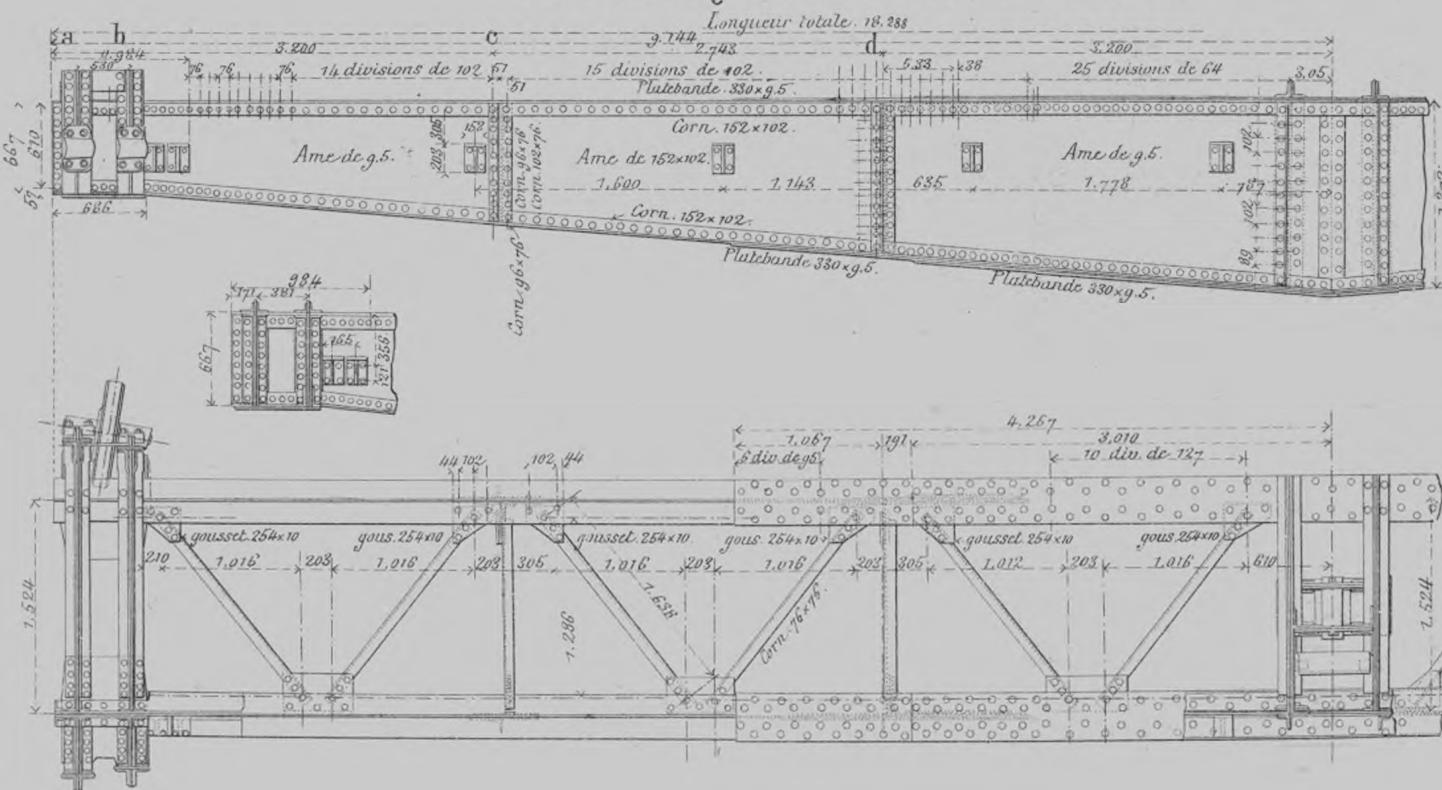
Plateforme mobile simple



Niveau de l'eau

PLAQUE TOURNANTE DE LOCOMOTIVES.

Detroit Bridge and Iron Works, Constructeur.



Coupé c Coupé d

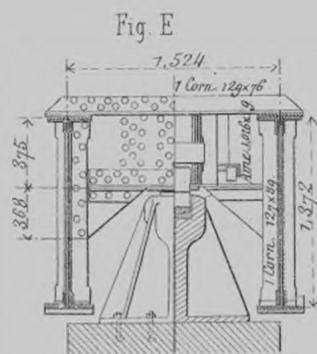


Fig. E

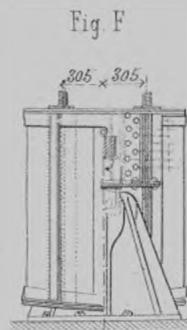


Fig. F

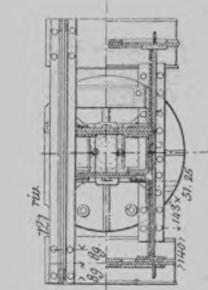
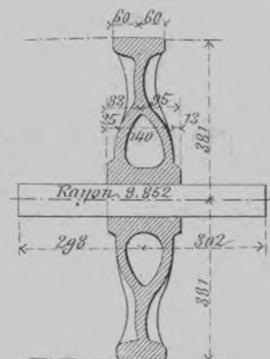


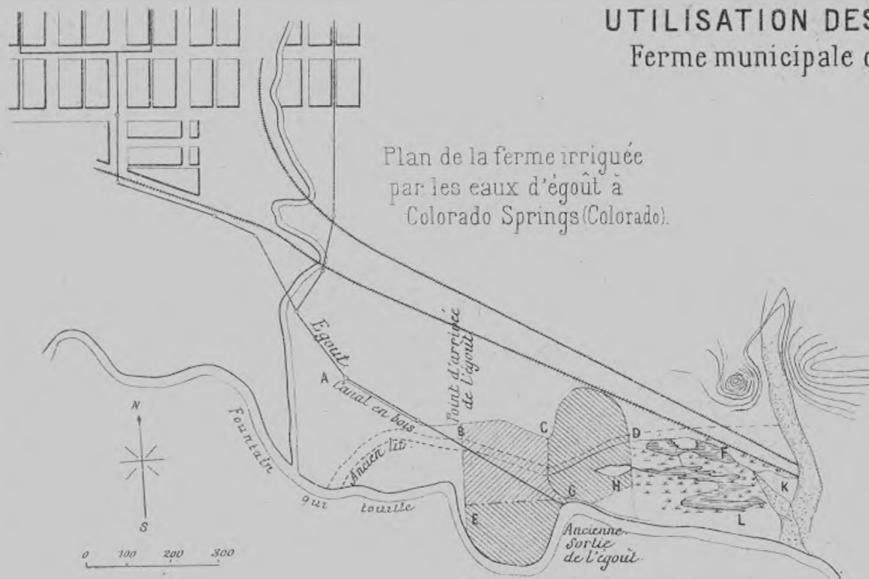
Fig. G



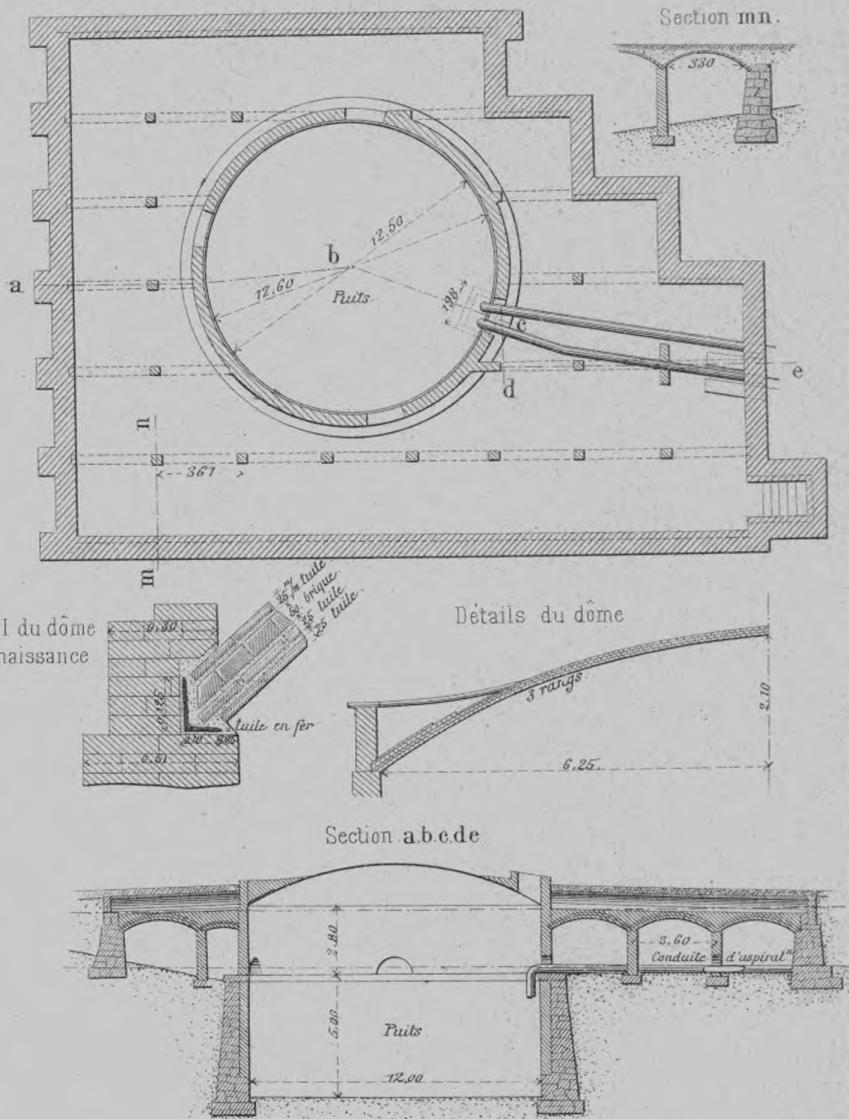
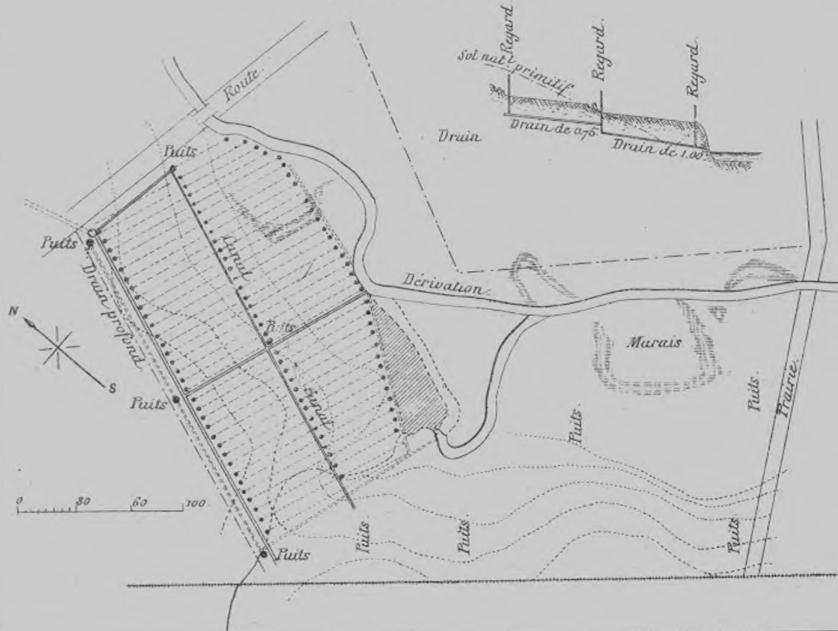
UTILISATION DES EAUX D'EGOUT

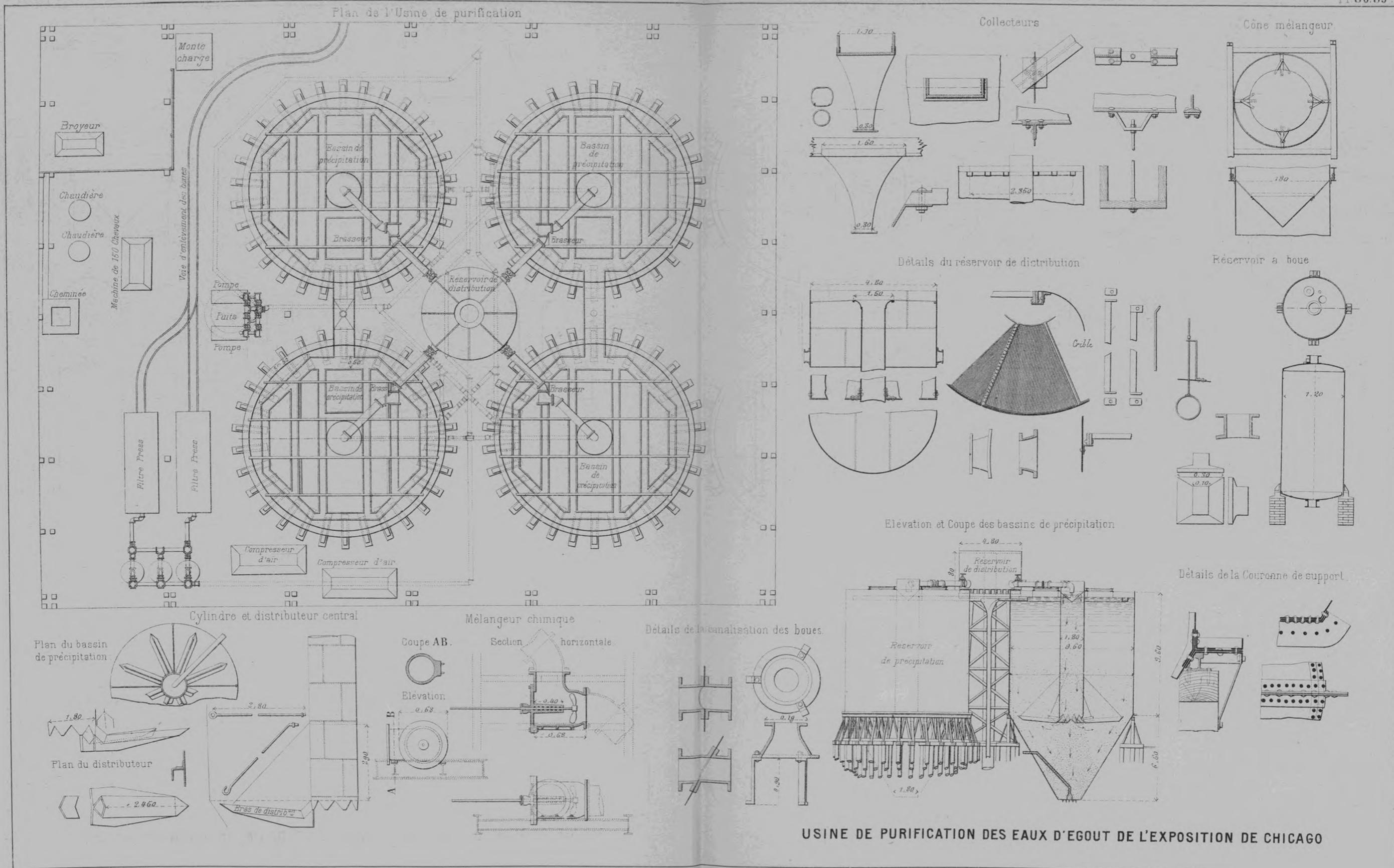
Ferme municipale de Berlin-Ontaris.

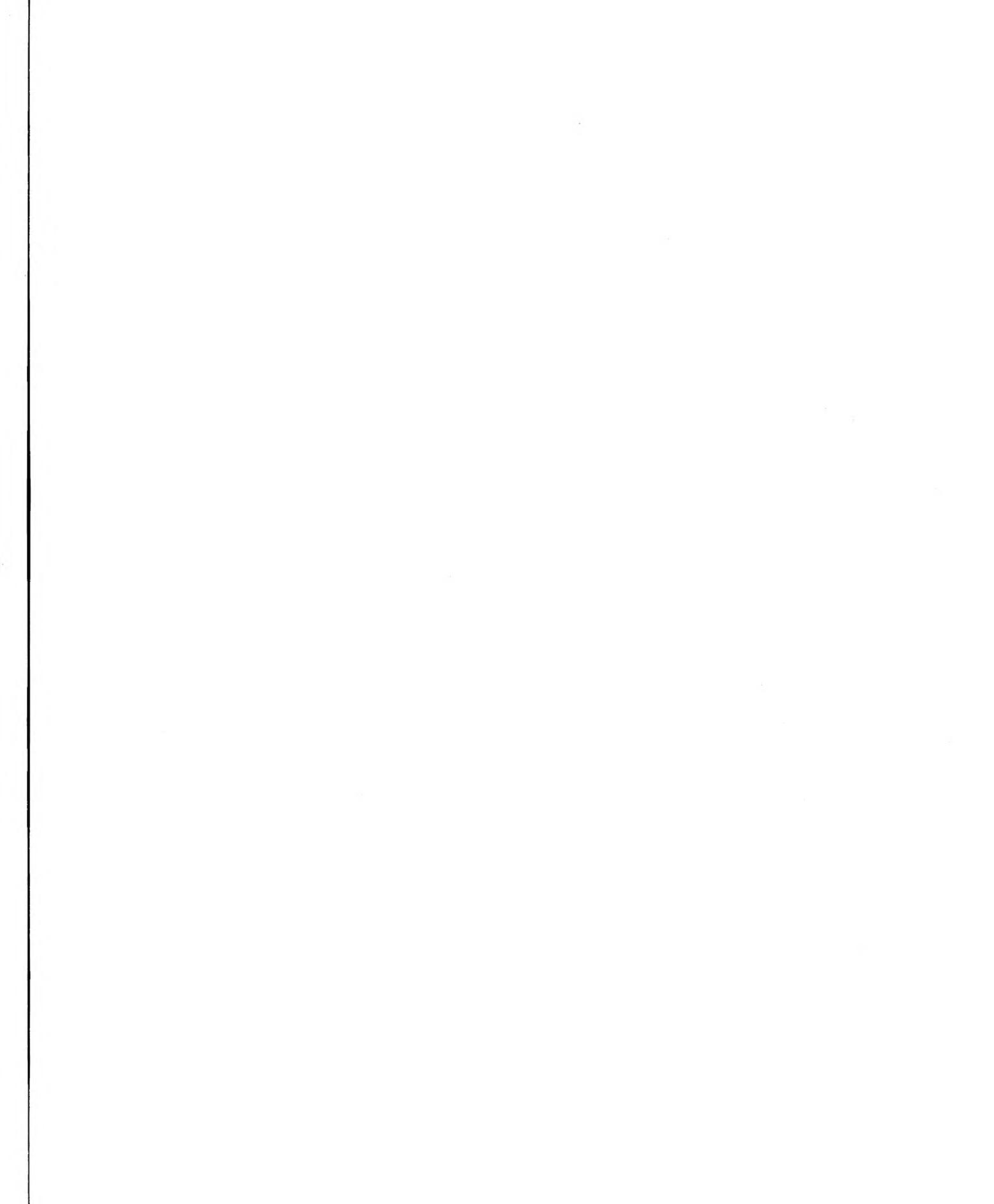
Réervoir et puits couvert à Waltham



Plan et Coupe des irrigations au moyen des eaux d'égout de Berlin-Ontaris.

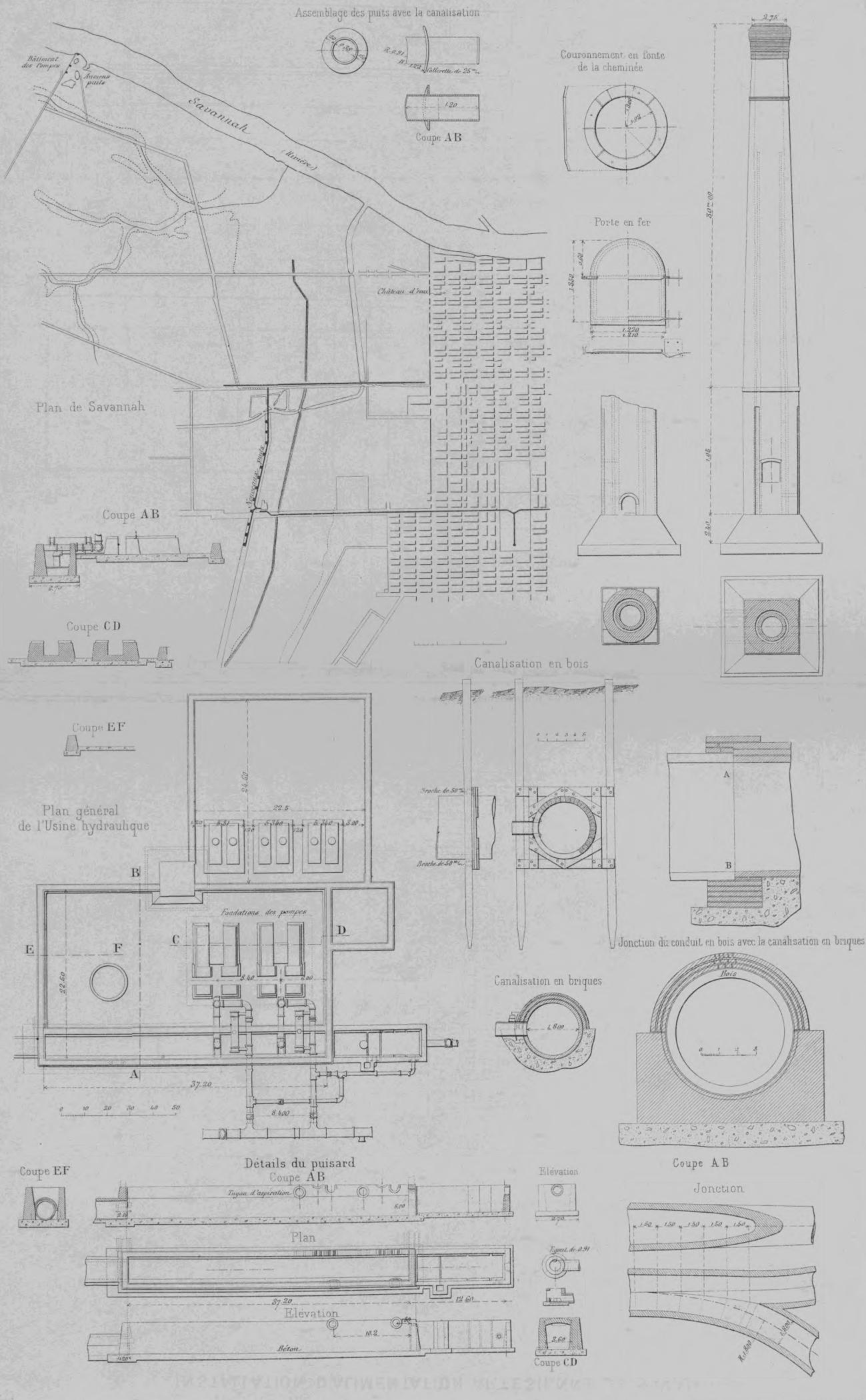






INSTALLATION D'ALIMENTATION ARTÉSIENNE DE SAVANNAH

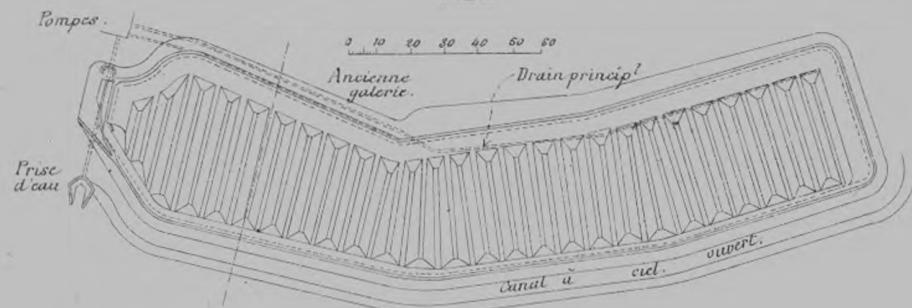
Cheminée



FILTRE A SABLE.

(Alimentation de la Ville de Lawrence, Mass.)

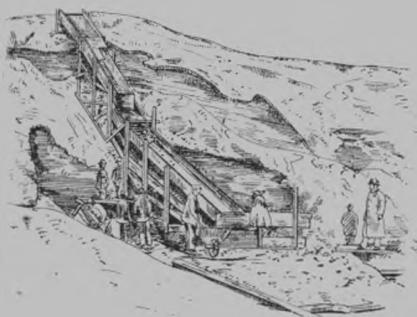
Plan



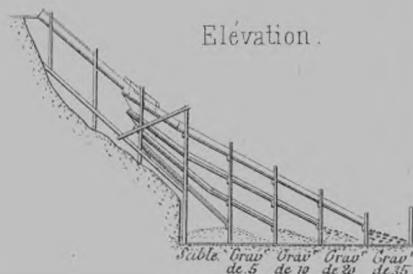
Coupe



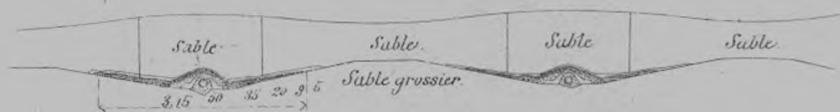
Appareil à cribler et à classer le sable.



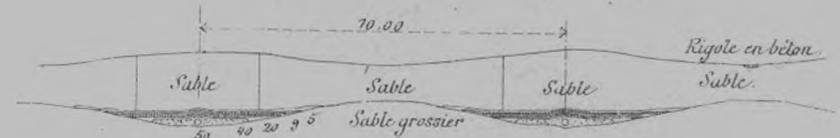
Élévation.



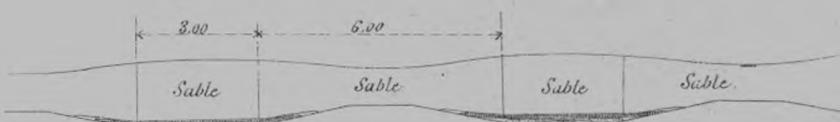
Section à 40^m de l'axe du Canal principal.



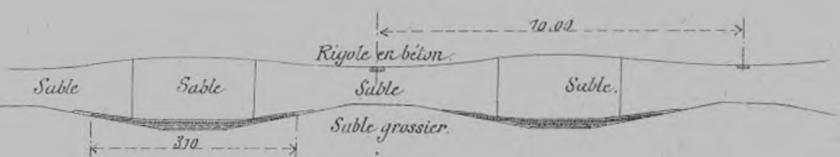
Section à 30^m de l'axe du Canal principal.



Section à 15^m de l'axe du Canal principal.



Section à 7^m de l'axe du Canal principal.



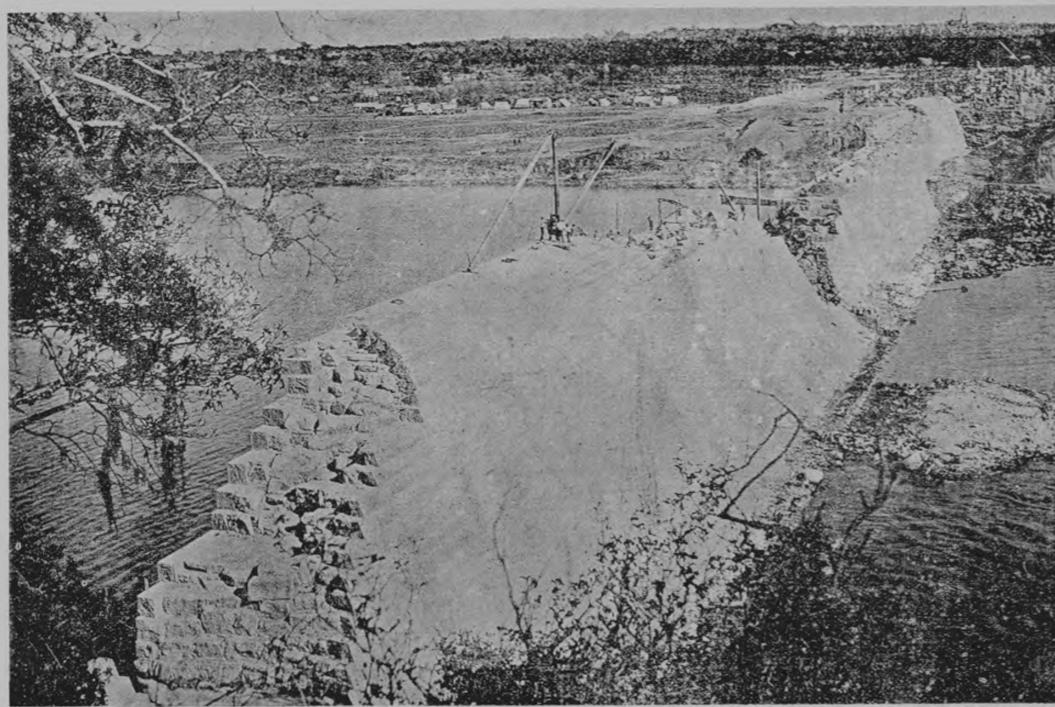




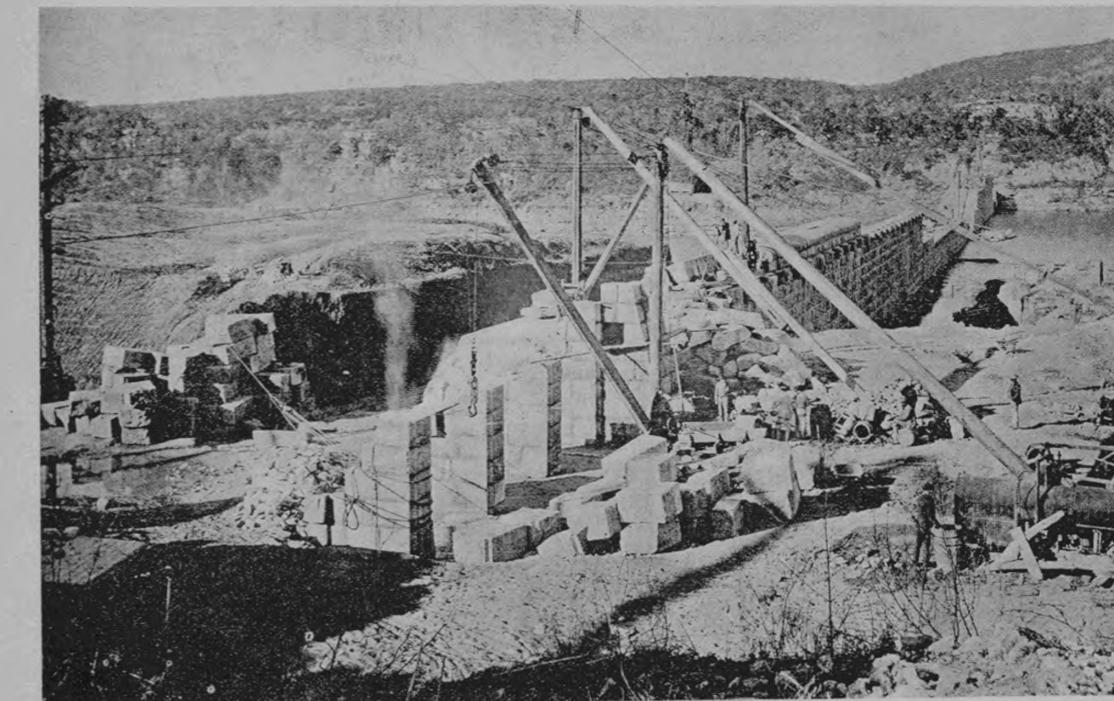
BARRAGE CONSTRUIT PAR LA VILLE D'AUSTIN (TEXAS) SUR LE COLORADO



VUE DU CHANTIER DU BARRAGE DE BASIN CREEK



VUE OUEST DU BARRAGE EN ACHÈVEMENT

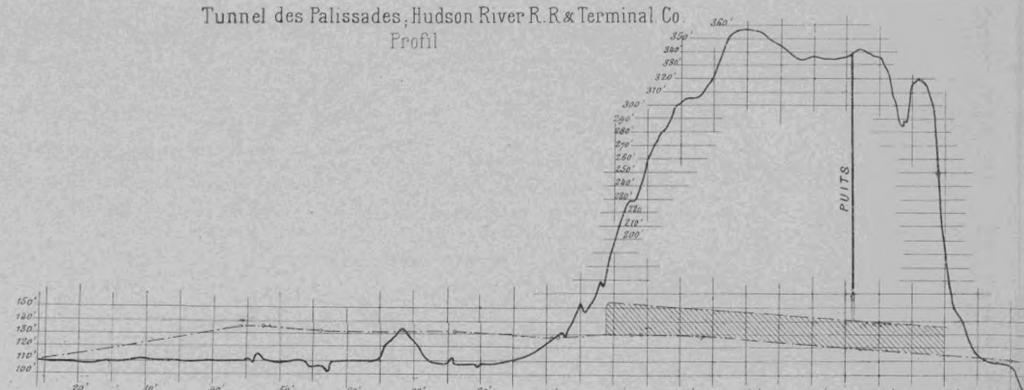


VANNES EN CONSTRUCTION (TRAVAUX DE MAÇONNERIE)

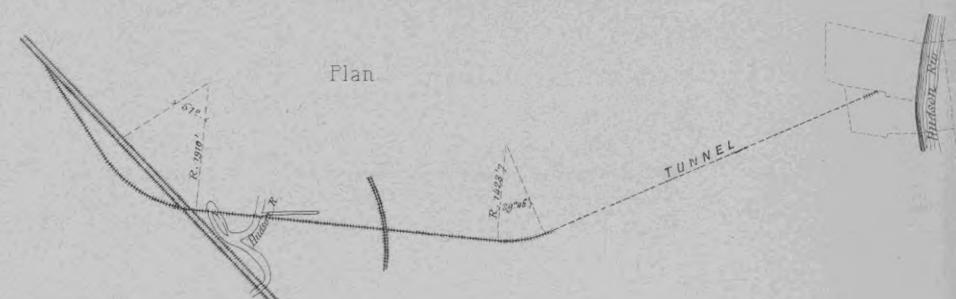
BARRAGE

Construit par la Ville d'Austin Texas sur le Colorado.

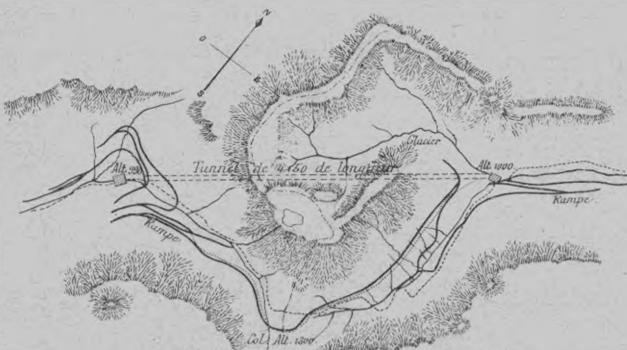
Tunnel des Palisades, Hudson River R.R. & Terminal Co.
Profil



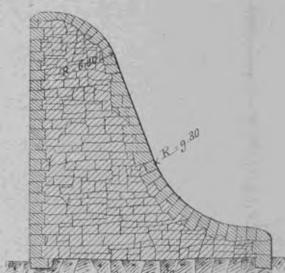
Pla



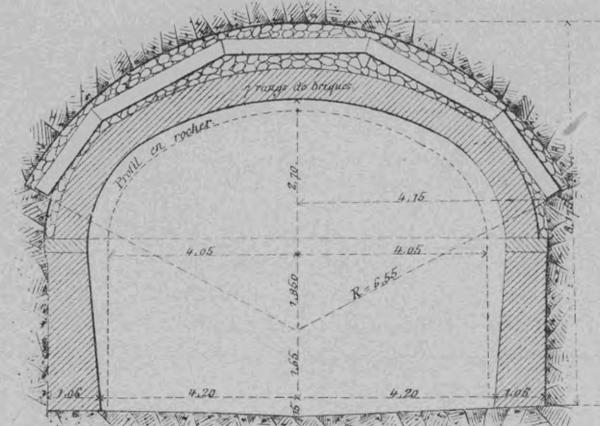
Plan des rebroussements employés par le Great Northern P^r pour le passage des cascades Mountain



Coupe du barrage



Profils en travers types



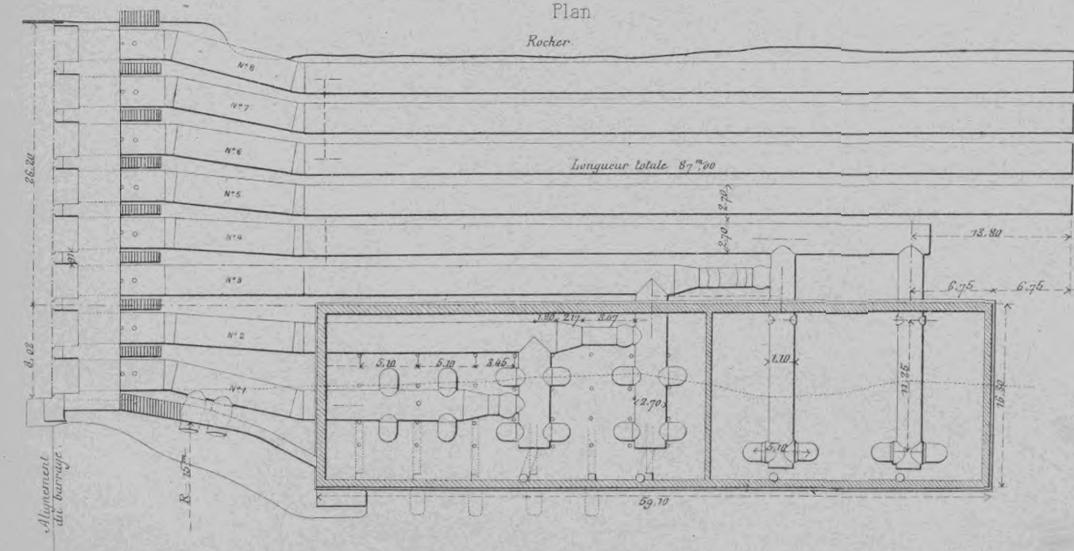
Profil du barrage de Basin Creek et Élévation du Funiculaire



Posé de blocs en dehors de la ligne du câble



Plan



CONSTRUCTION DE L'HOWARD STREET TUNNEL.

Chemin de fer de Ceinture de Baltimore.

Profils d'avancement et Plan

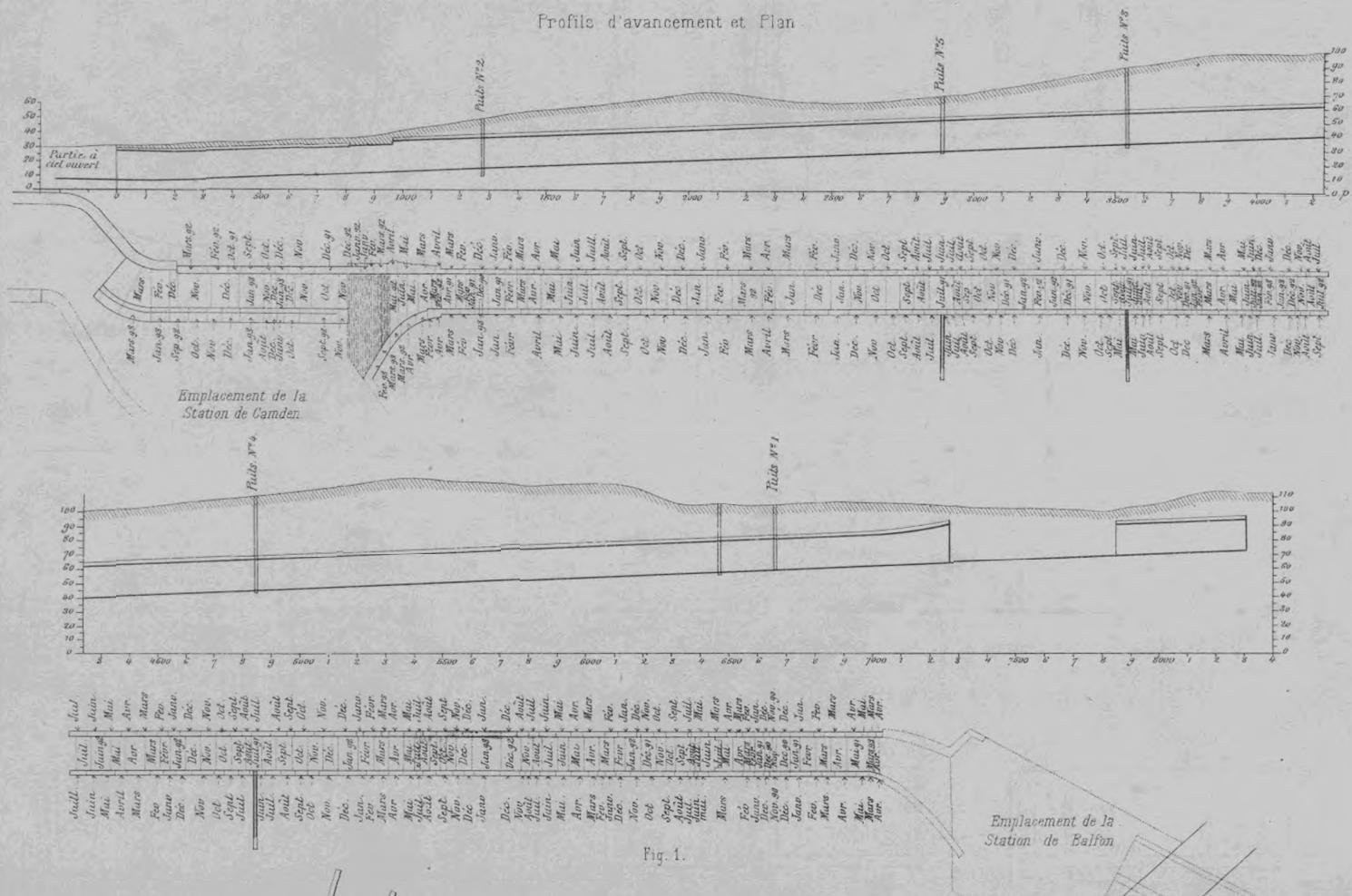


Fig. 1.

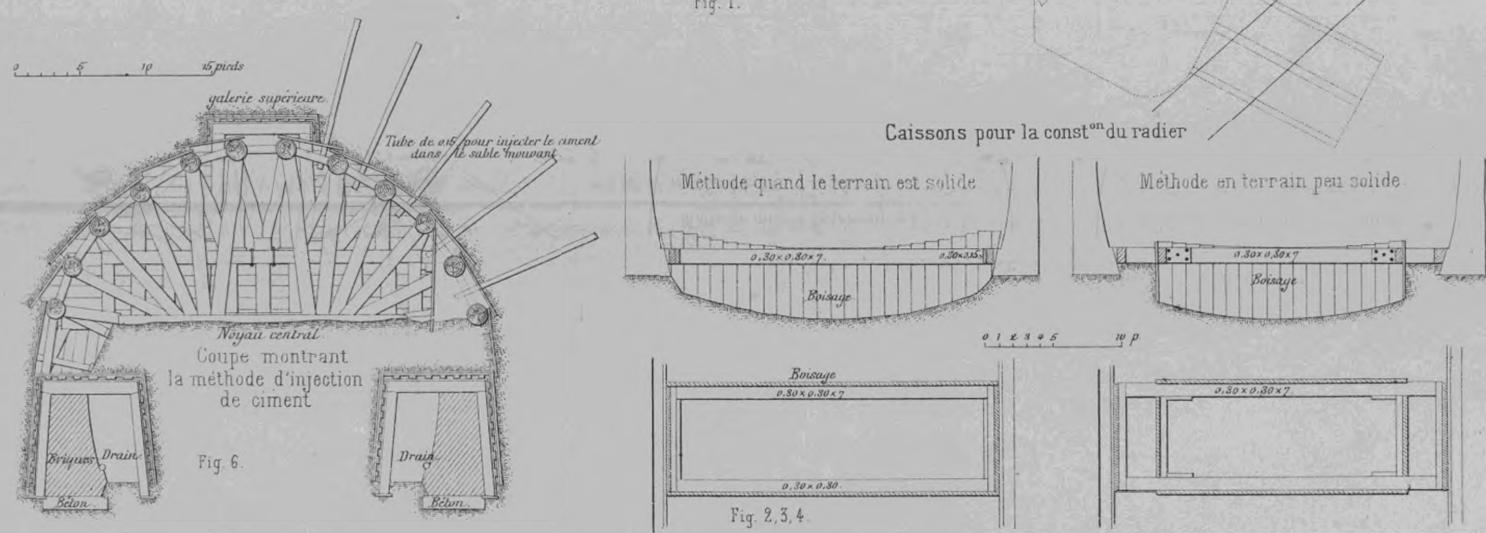
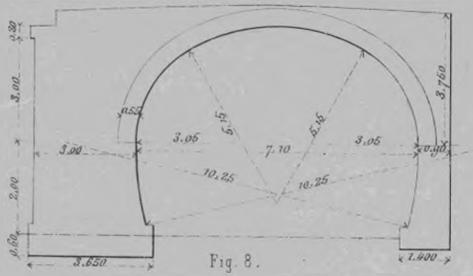


Fig. 2, 3, 4.

Section type du tunnel construit à ciel ouvert.



Section type du tunnel avec radier.

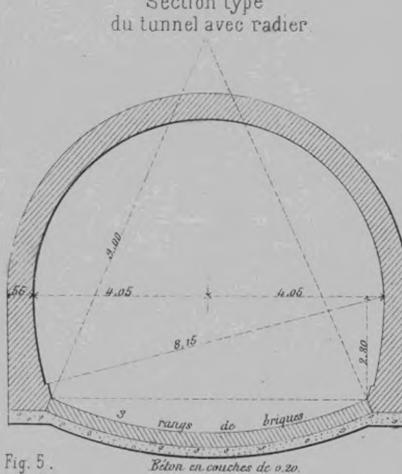


Fig. 5. Béton en couches de 0.20.

Méthode dans le sol très mauvais.

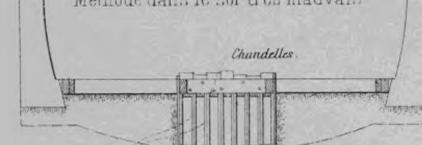


Fig. 6.

Construction à ciel ouvert.

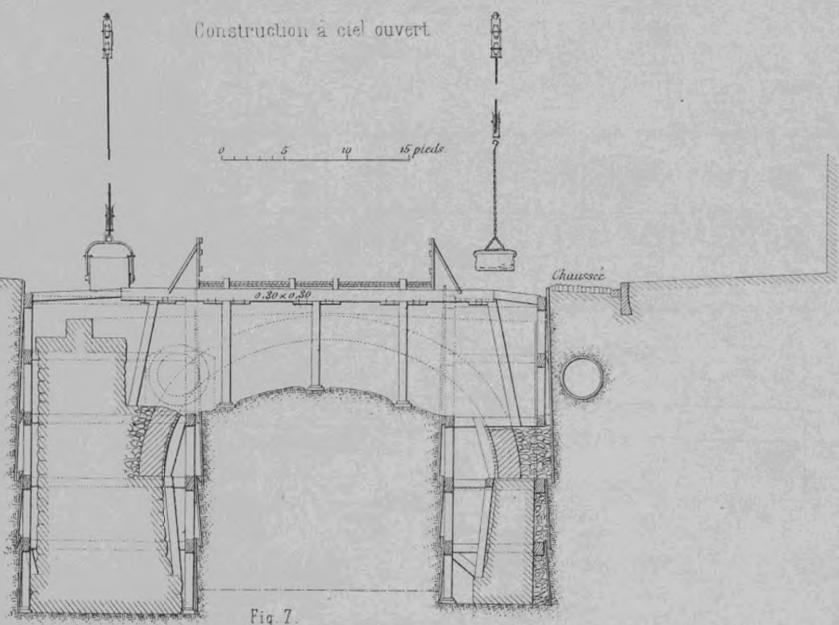
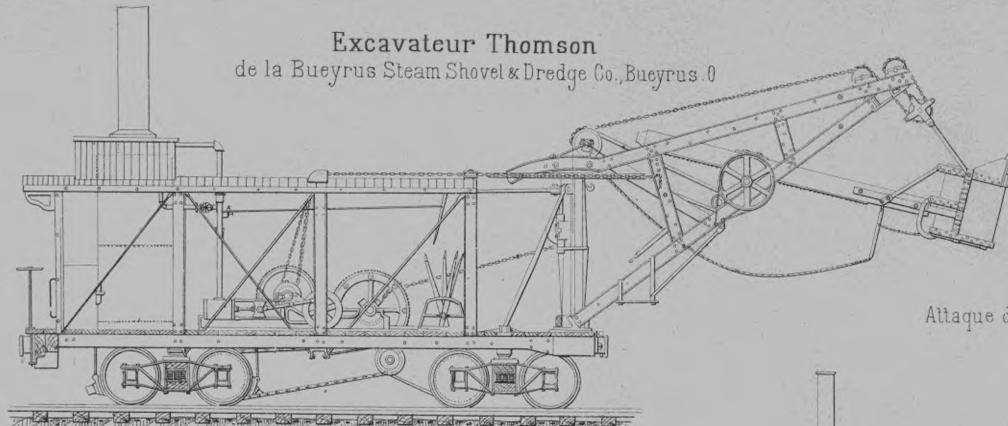


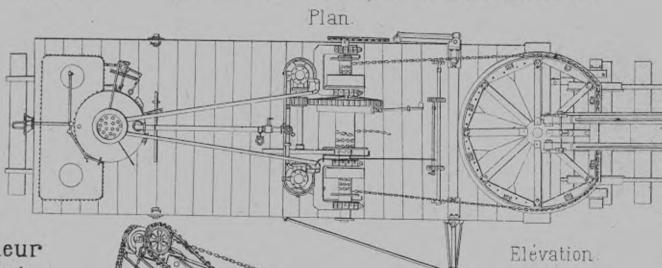
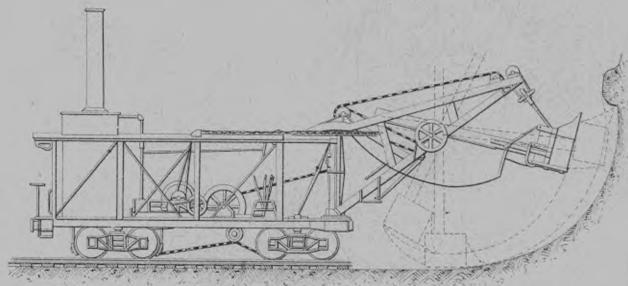
Fig. 7.

Excavateur Thomson
de la Bueyrus Steam Shovel & Dredge Co., Bueyrus, N.Y.



EXCAVATEURS.

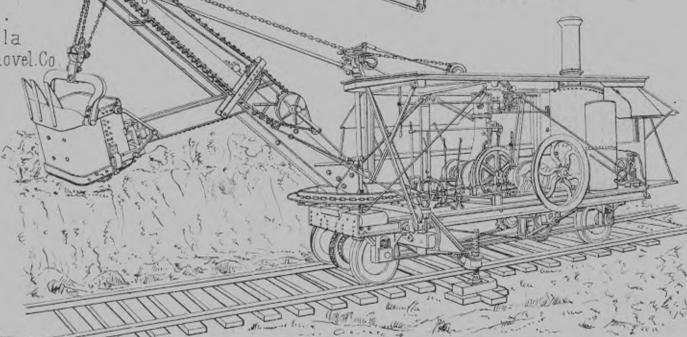
Attaque d'une tranchée à l'excavateur



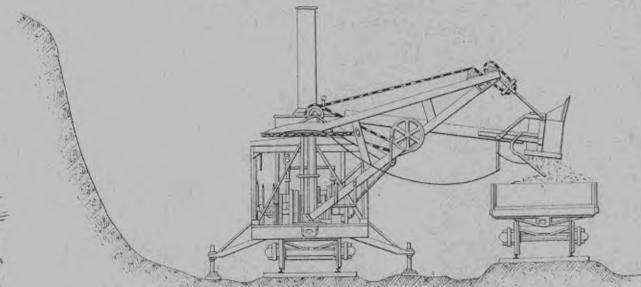
Elévation.

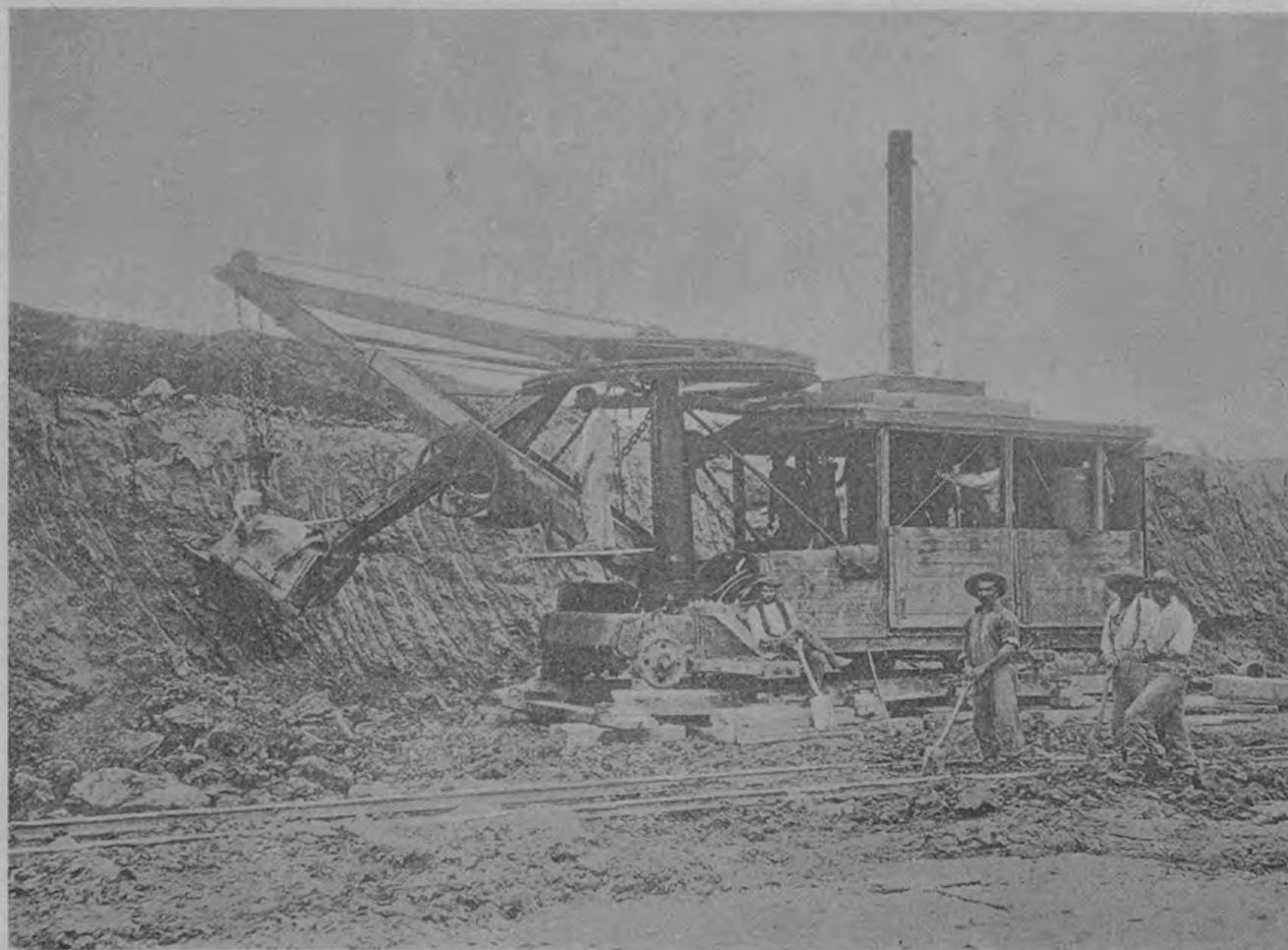
Excavateur
Barnhart.

Construit sur la
Marion Steam Shovel Co.
Marion, Ohio.

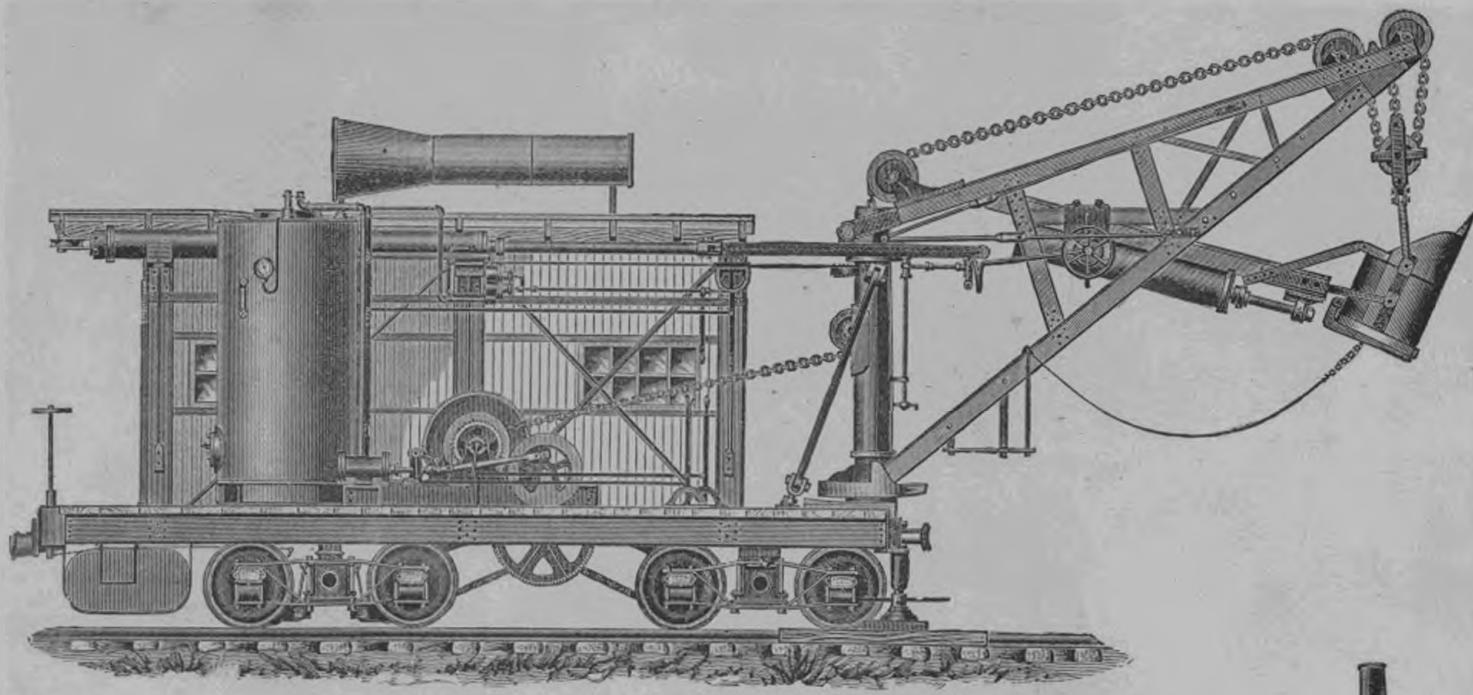


Chargement des déblais dans les wagons.

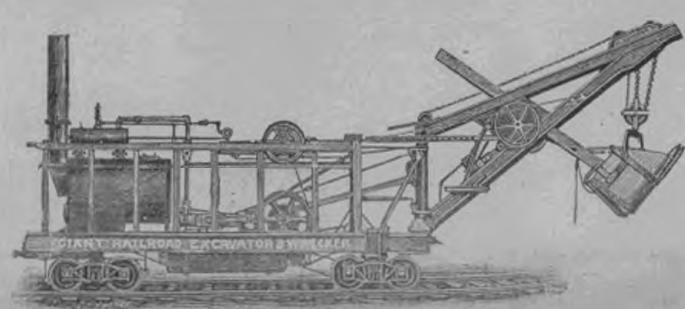




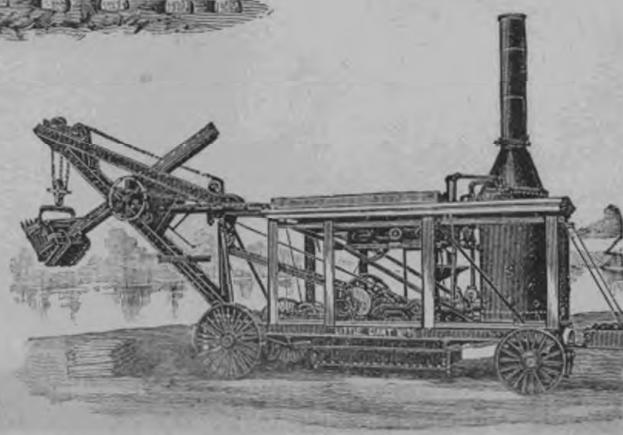
EXCAVATEUR SYSTÈME OTIS-CHAPMAN



EXCAVATEUR CLÉMENT

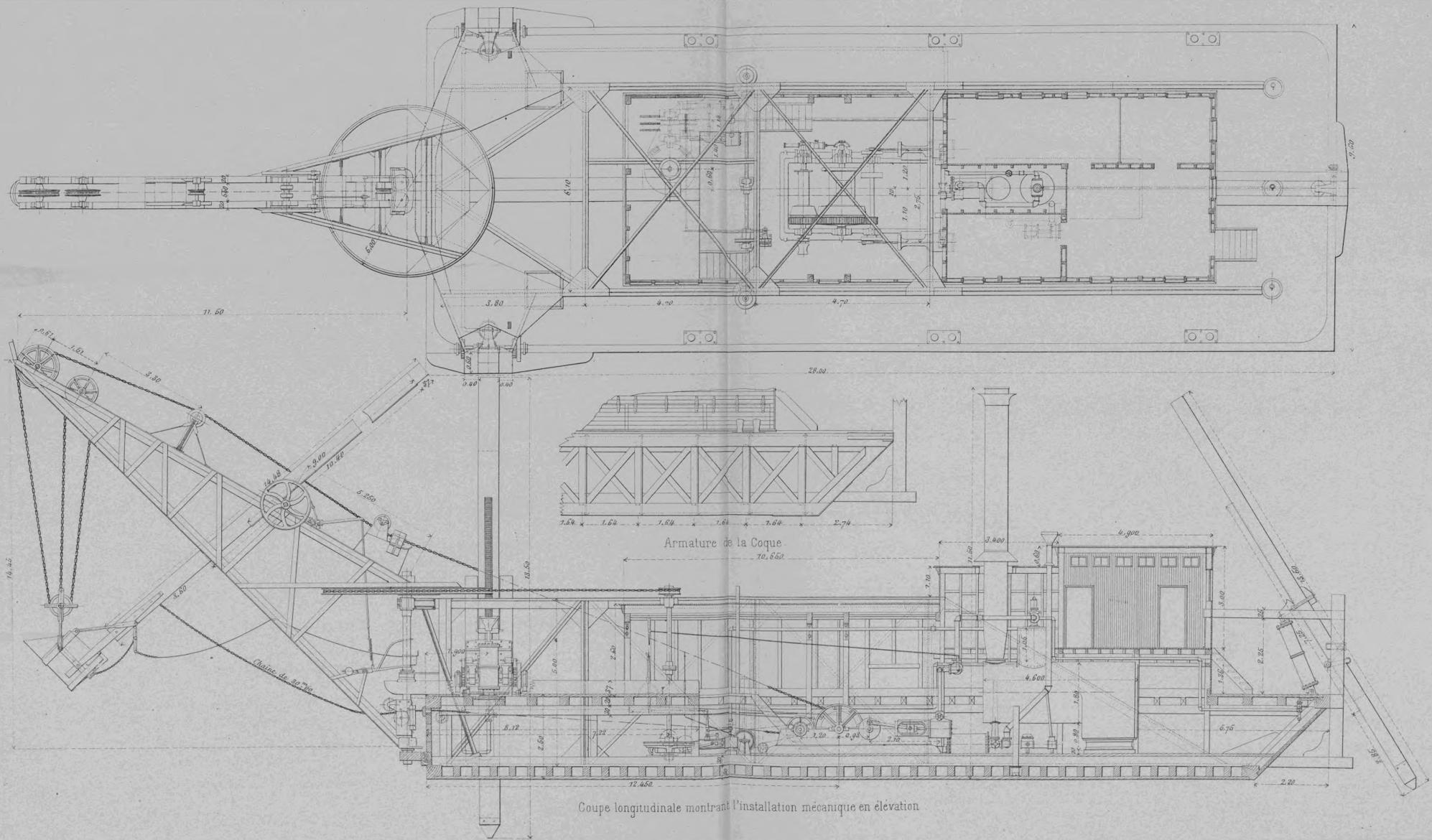


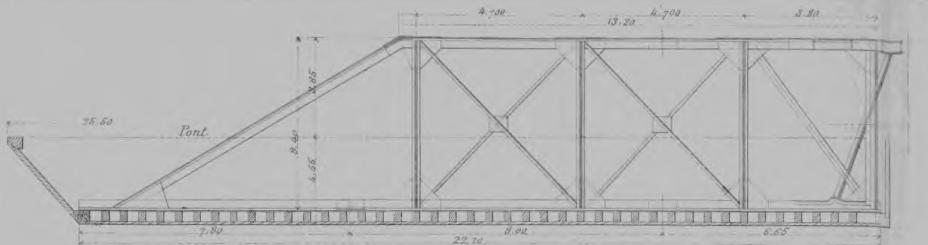
EXCAVATEUR " GIANT "

EXCAVATEUR " LITTLE GIANT "
POUR OPÉRER EN DEHORS DES VOIES FERREES

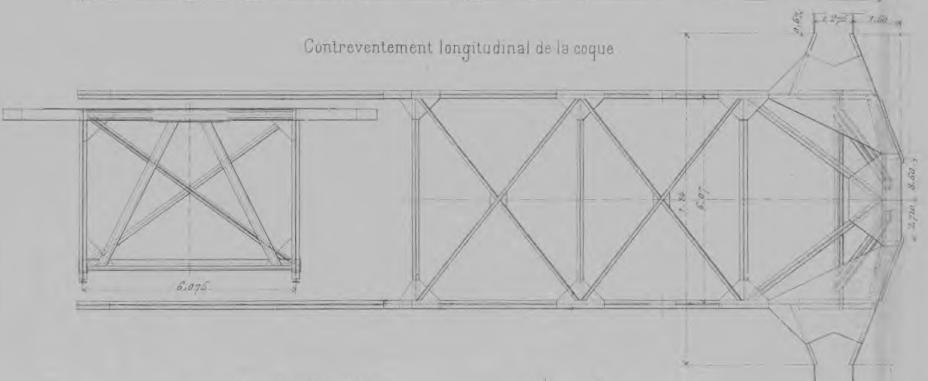
DRAIGUE DE 2000^{m³} DE PRODUCTION JOURNALIÈRE
Construite par les "Excelsior Iron Works" de Chicago

Plan. (*Le toit de la cabine enlevé.*)

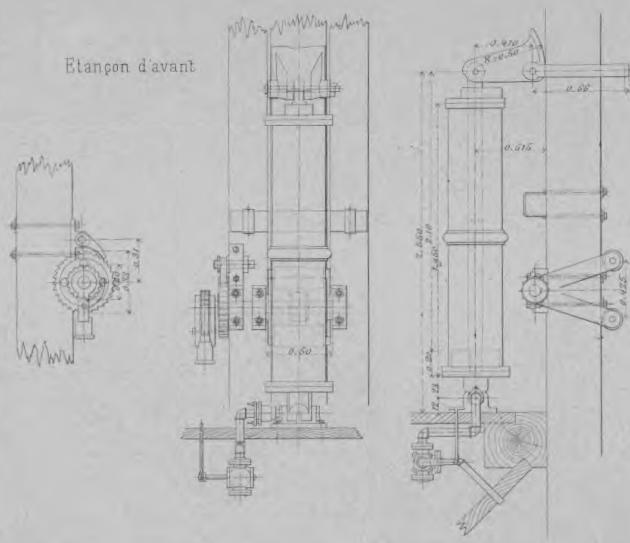




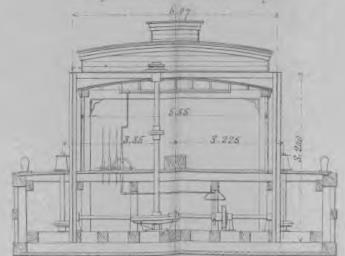
Contreventement longitudinal de la coque



Etançon d'avant

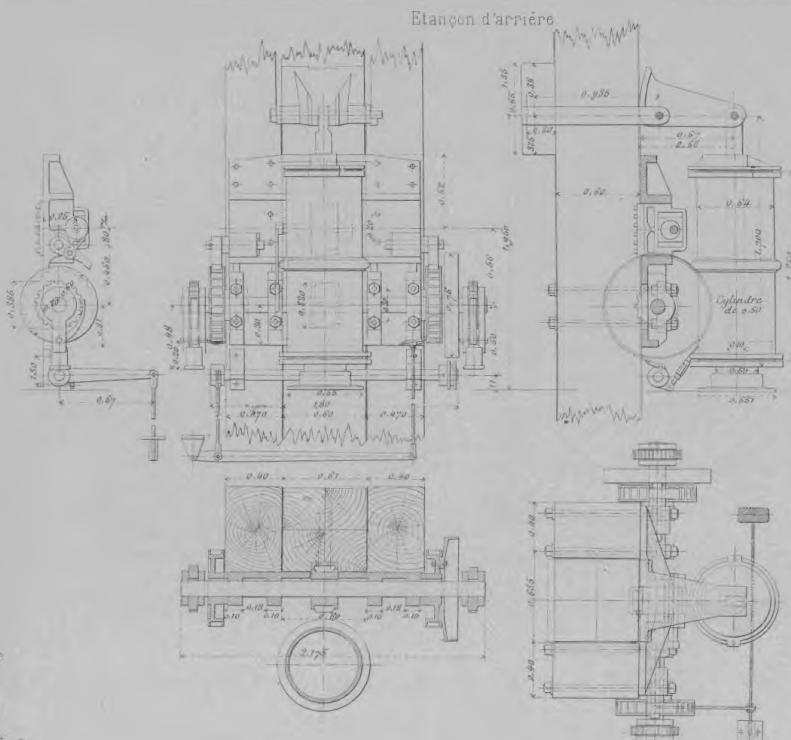


Coupe en travers de la coque



DÉTAILS DE LA DRAGUE DE 2000 M³

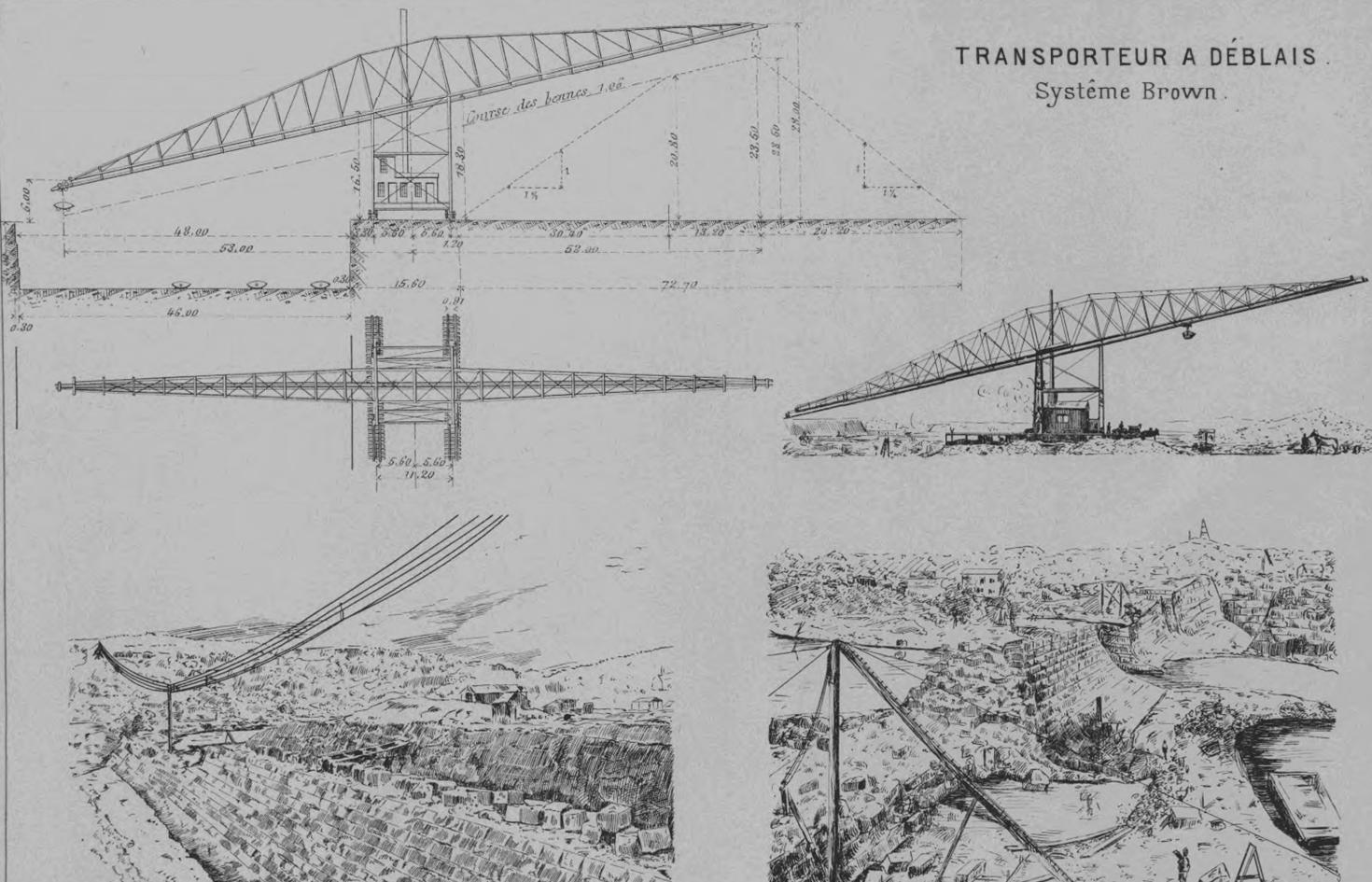
Construite par les "Excelsior Iron Works".
de Chicago.



Machine de commande du qodet

TRANSPORTEUR A DÉBLAIS.

Système Brown.

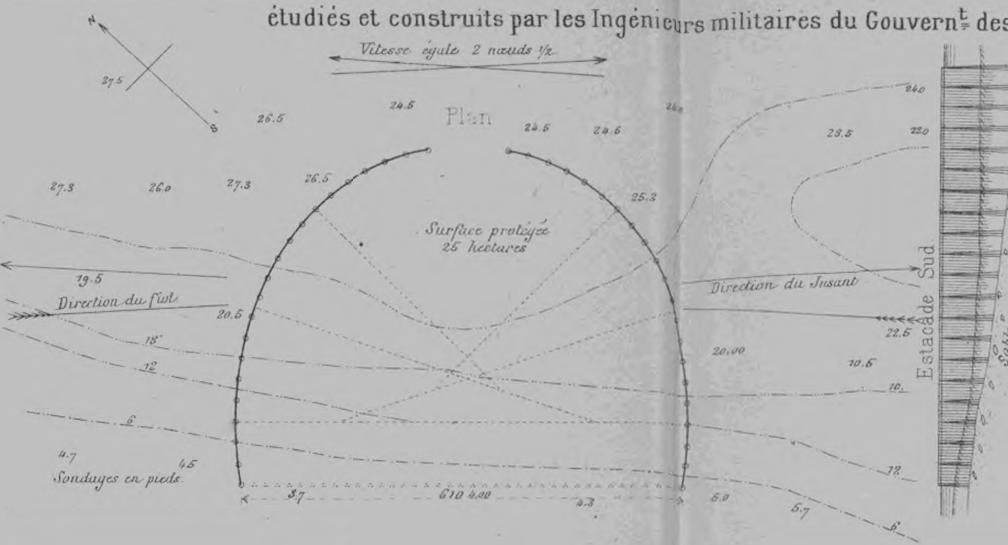
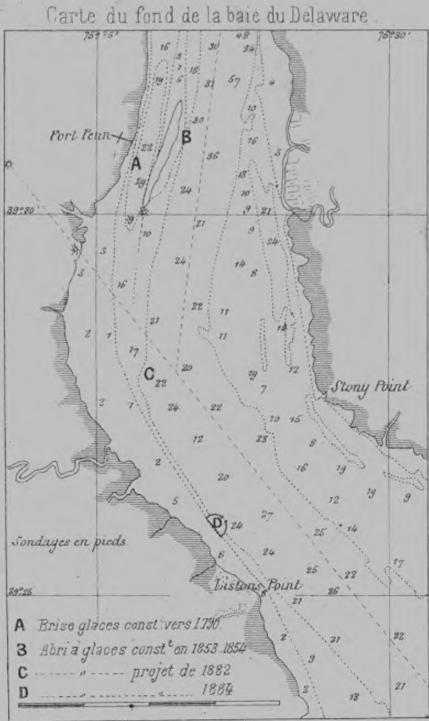


BARRAGE D'AUSTIN SUR LE COLORADO.

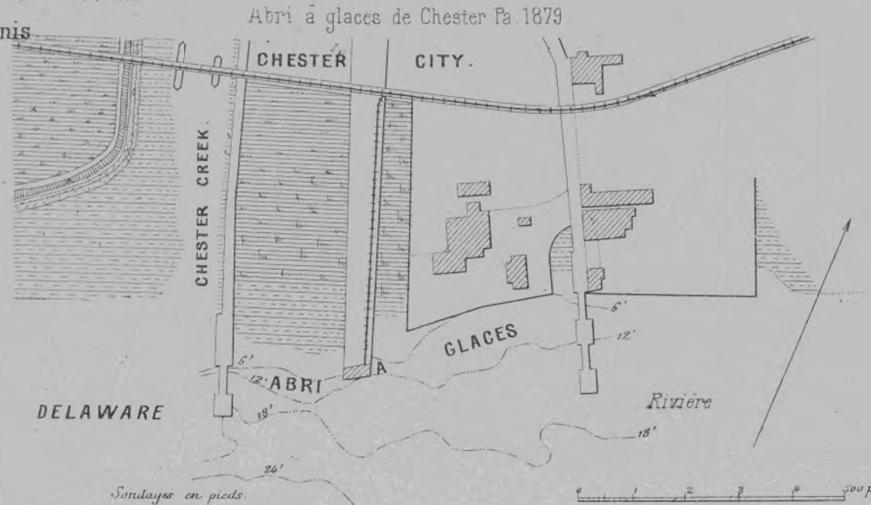
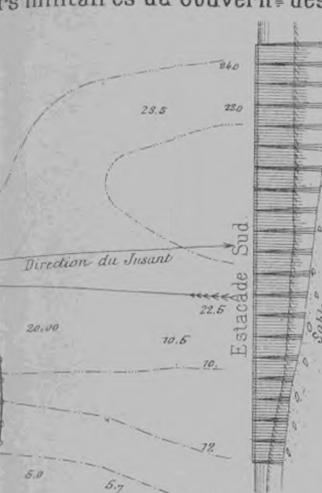


PORTS DE PROTECTION CONTRE LES GLACES DE LA BAIE DU DELAWARE

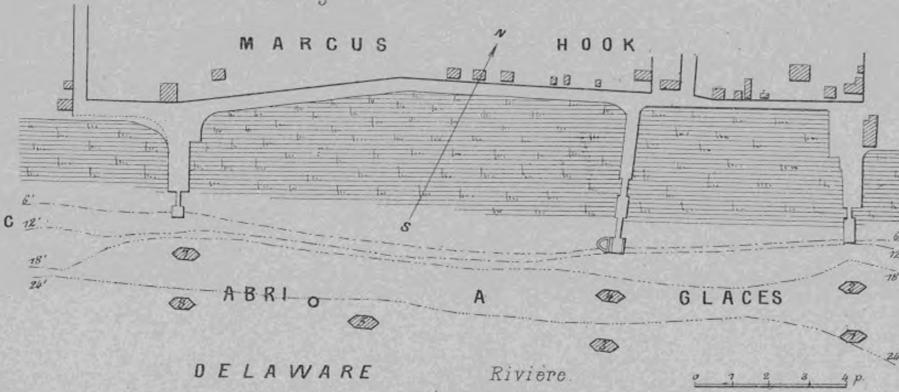
étudiés et construits par les Ingénieurs militaires du Gouvernement des Etats-Unis.



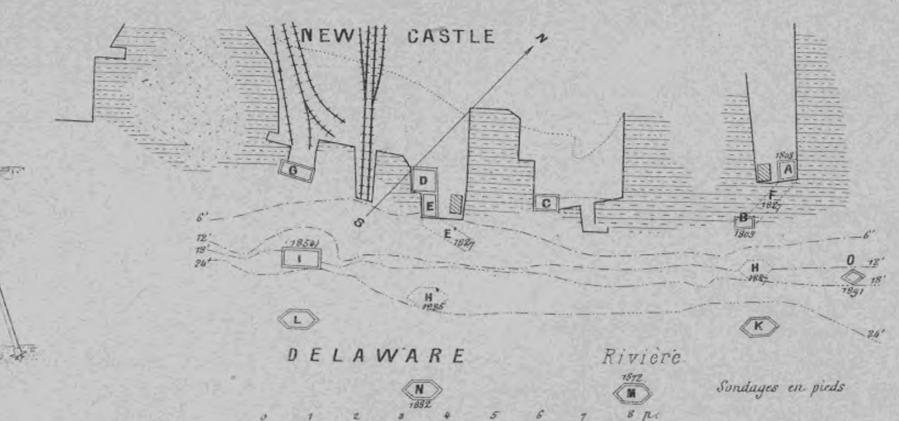
Détails de construction



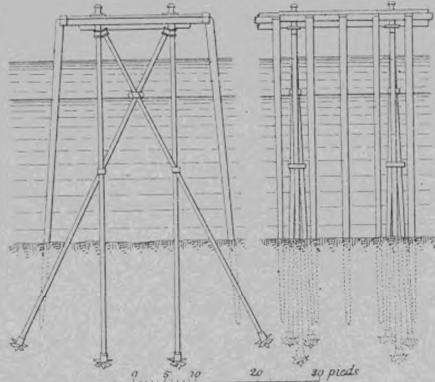
Port à glaces de Marcus Hook 1893.



Port à glaces de New Castle, Del. 1893.



Brise glaces du Col Ludlow



Arrête glaces du Col Kurtz.

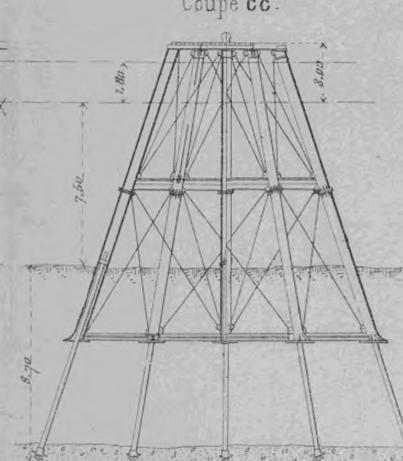
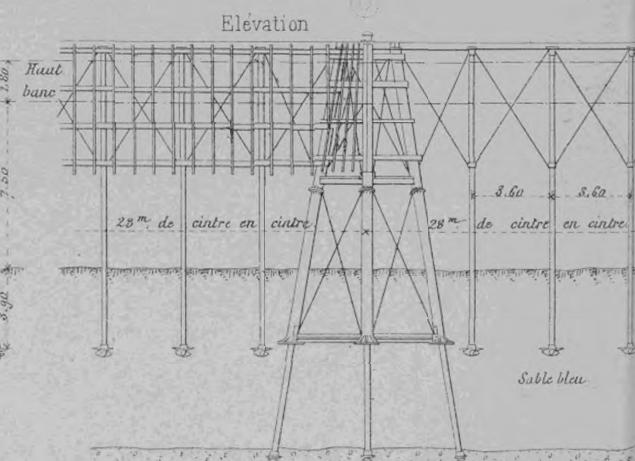
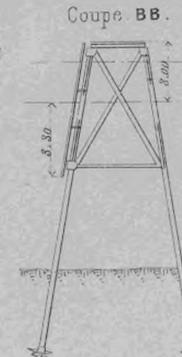
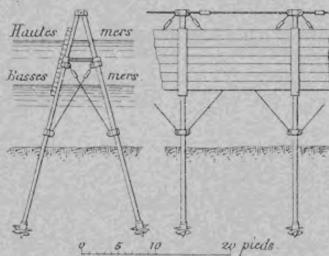


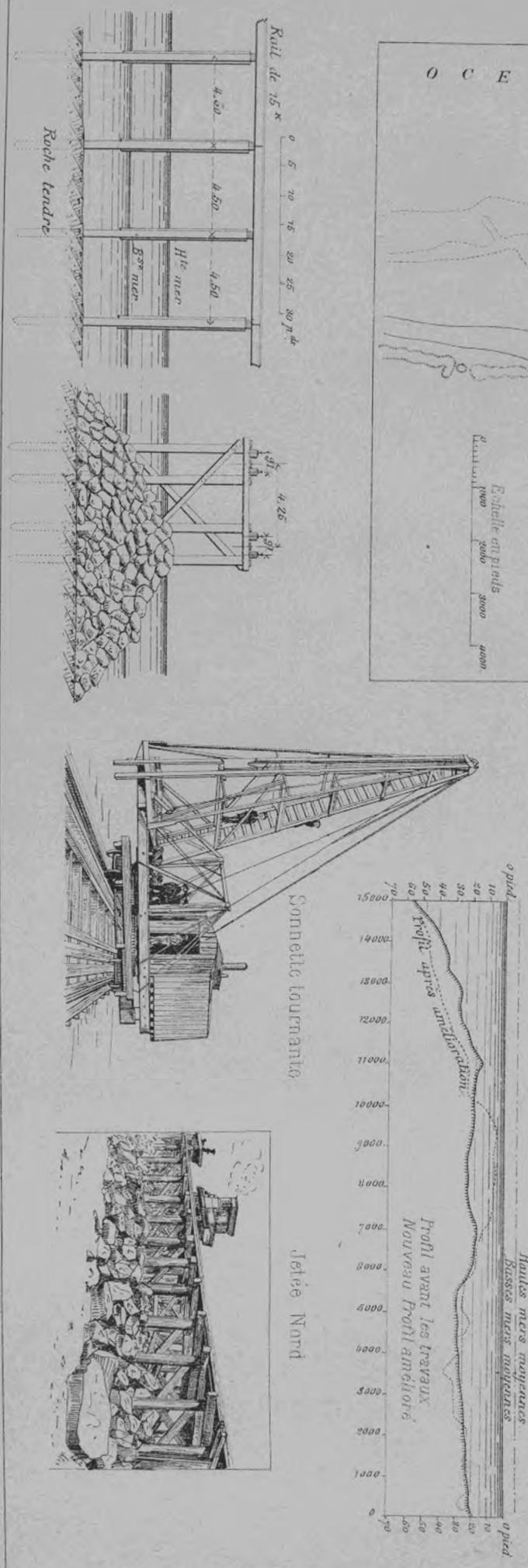
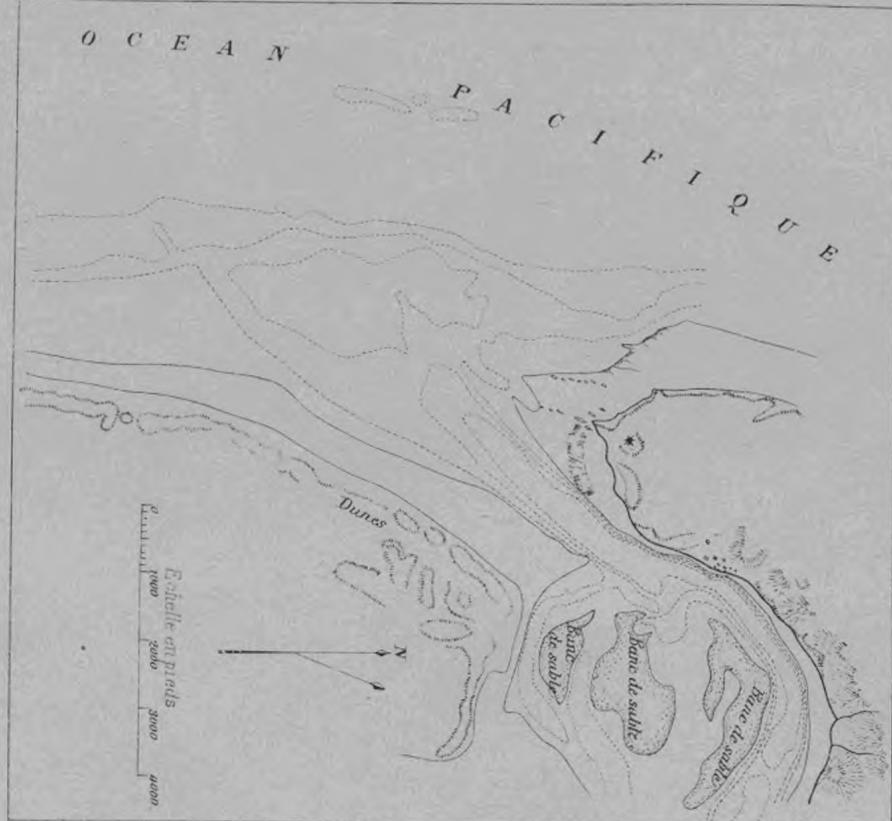
Fig. 1.

en 1880.

PASSES DE LA BAIE DE YAQUINA.

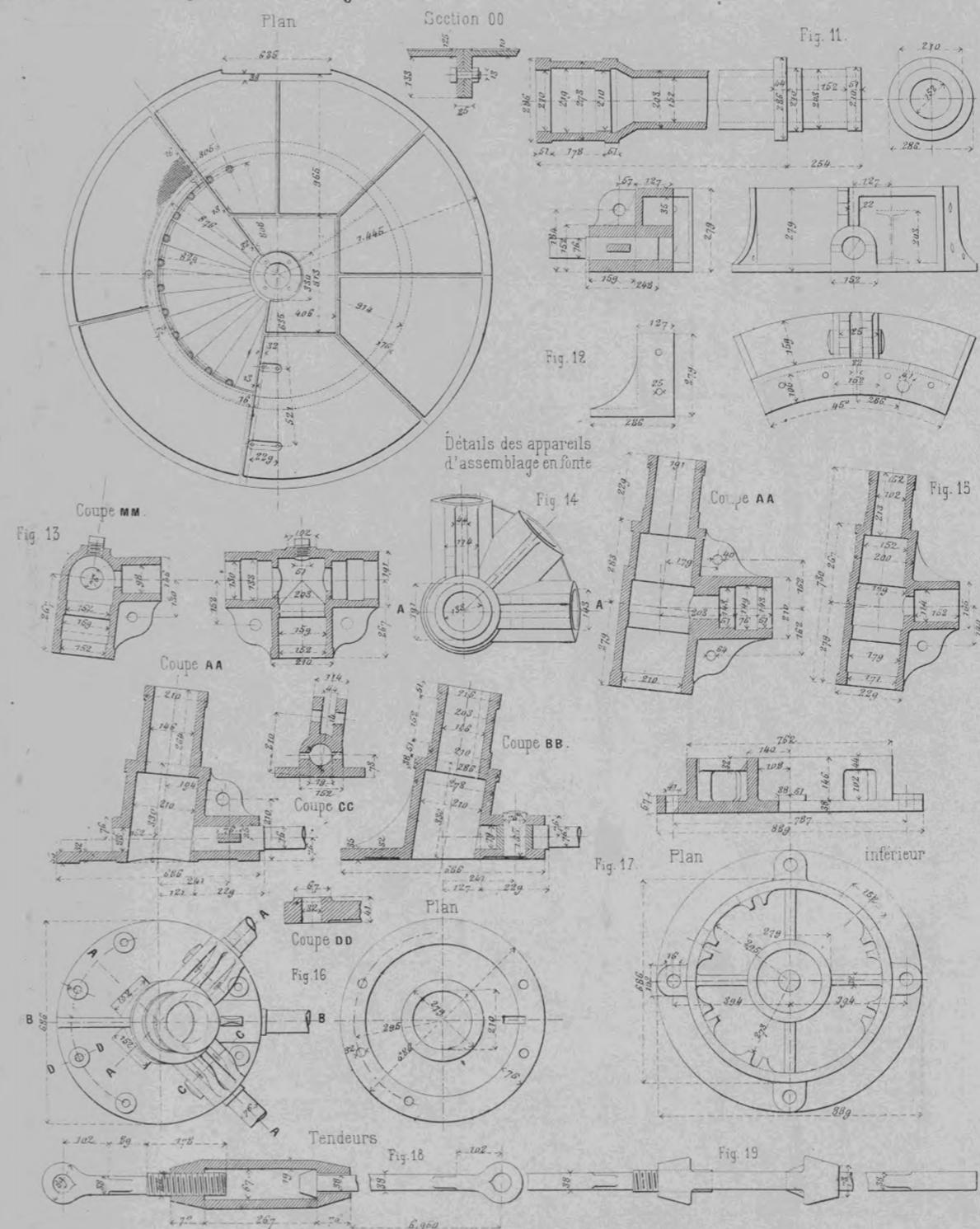
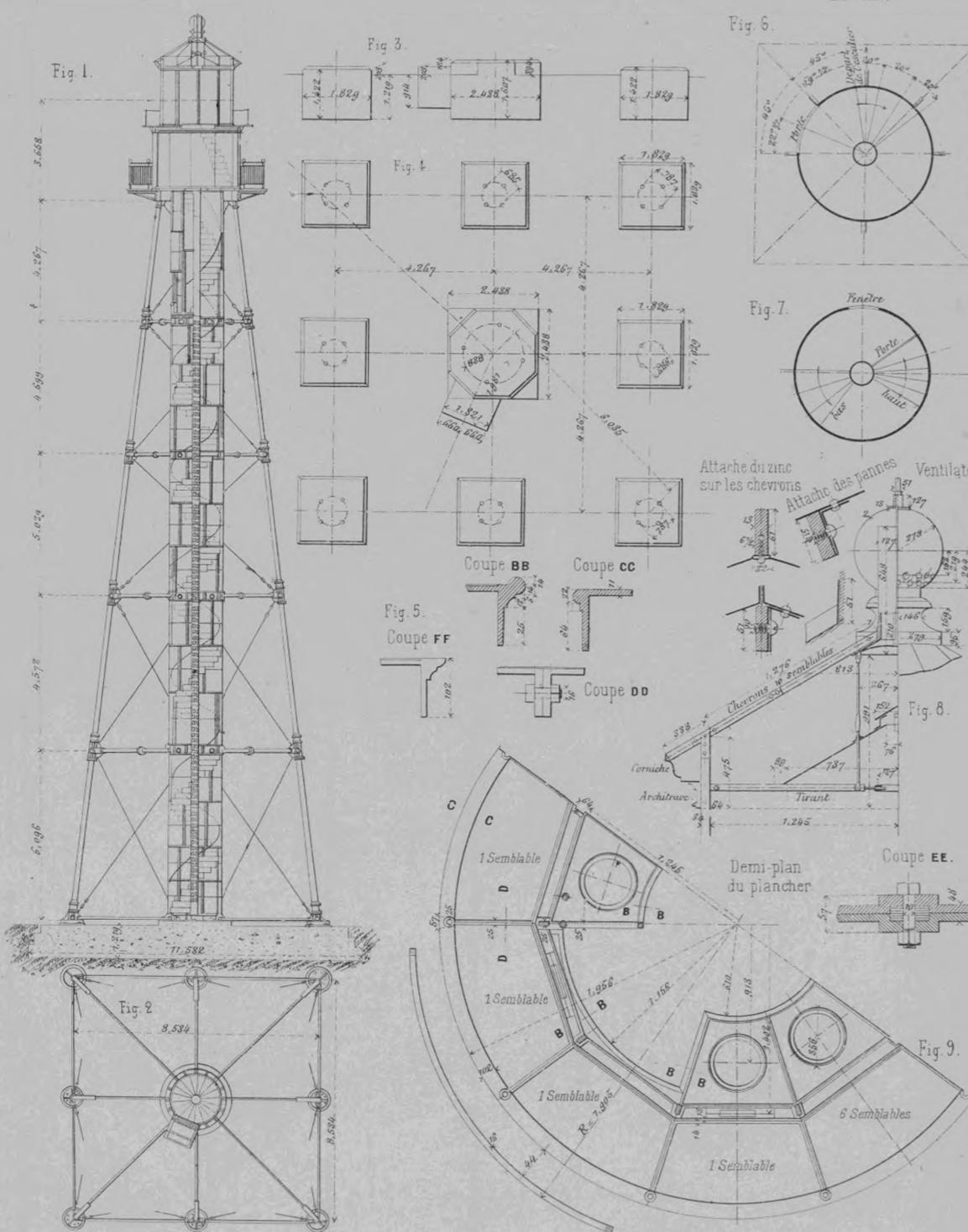
en 1893.

Fig. 2.



PHARE DE WAACKAAK.

Expose par le Gouvernement des Etats-Unis à l'Exposition de Chicago.



PHARE

Construit par le Gouvernement des Etats - Unis.
au Cap Charles (Virginie).

