

# Ponts levants à presses hydrauliques.

Fig. 1. Sur le canal de Bourgogne  
près de Dijon.

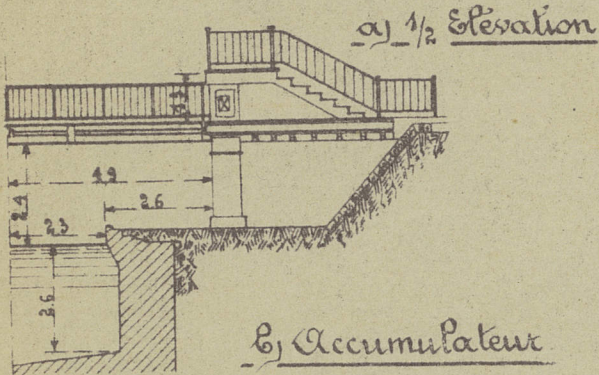
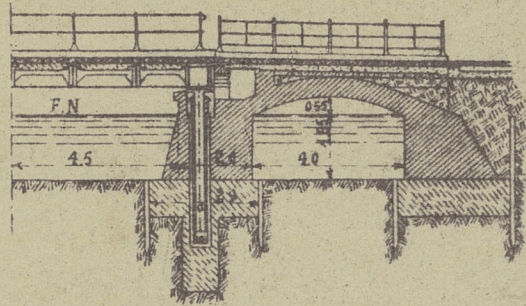


Fig. 2. à Berlin (port Urban)  
(1895)



- a) pignon
- b) axes
- c) crémaillères
- d)

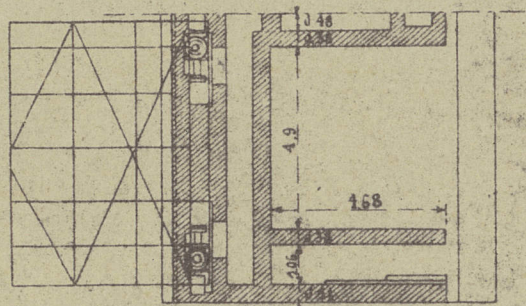
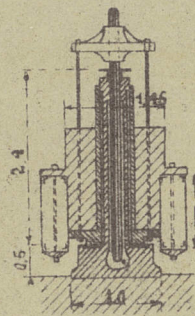
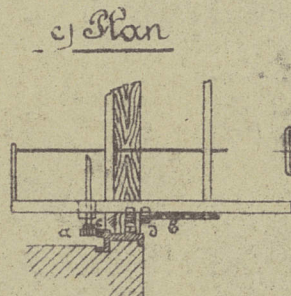
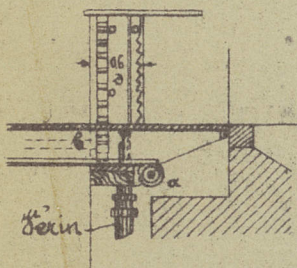
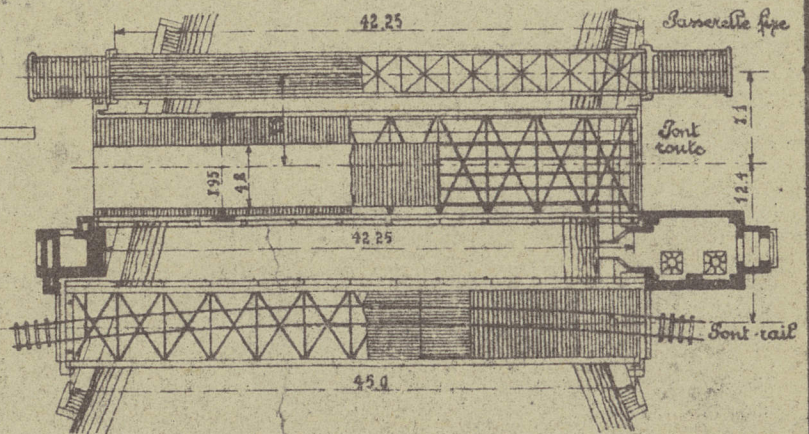
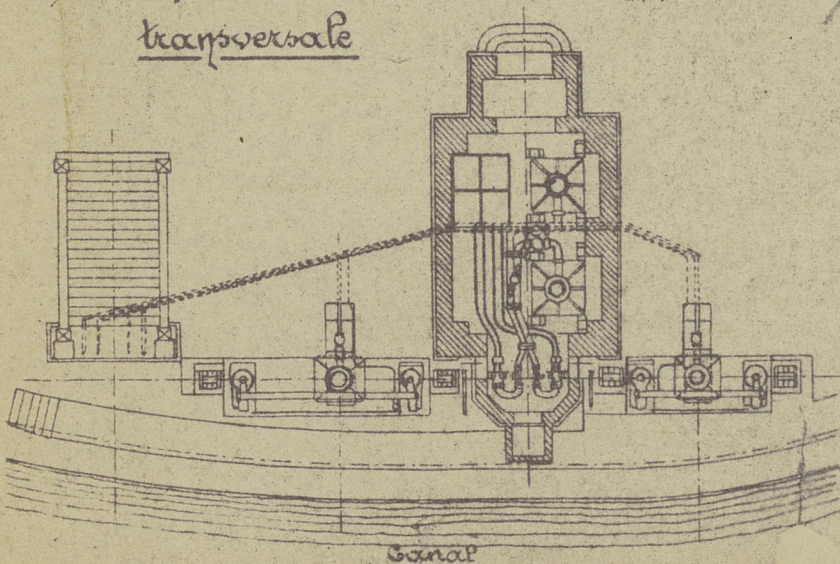


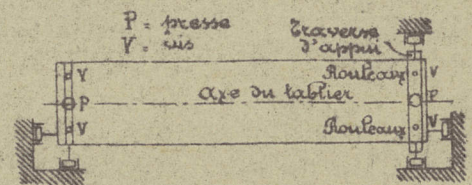
Fig. 3. à Suseck (1900)  
a) Plan.



b) Coupe  
transversale



c) Schéma des appuis  
et du guidage.





# Pont levant à presses hydrauliques de Subeck (1900) (suite)

## d) Accumulateurs et vains.

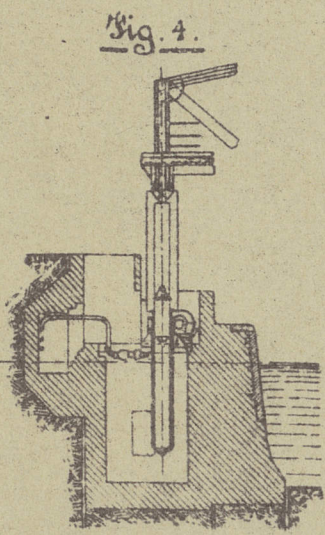
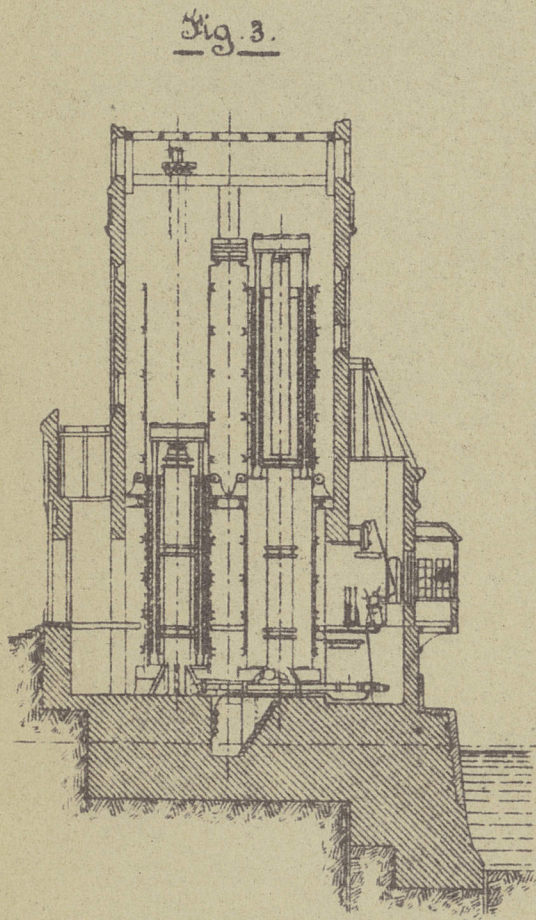
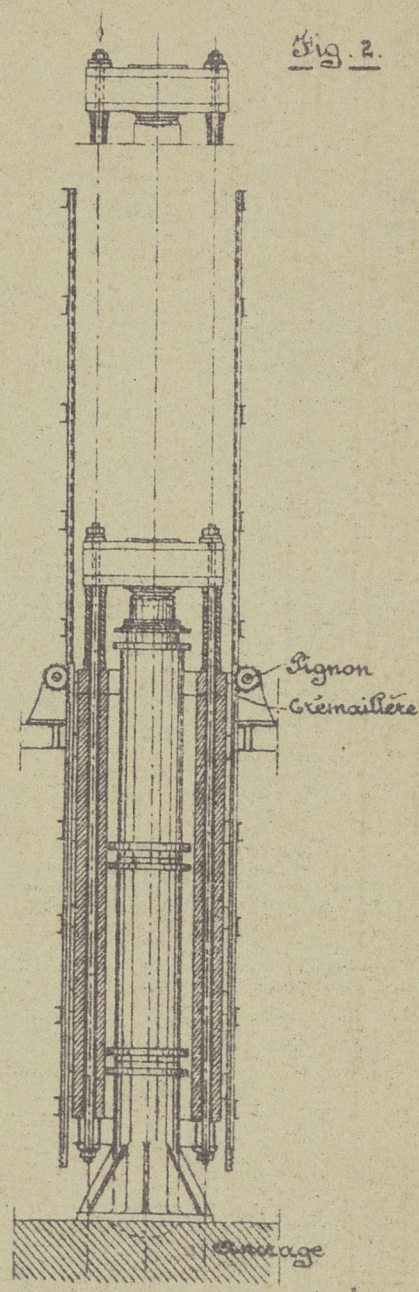
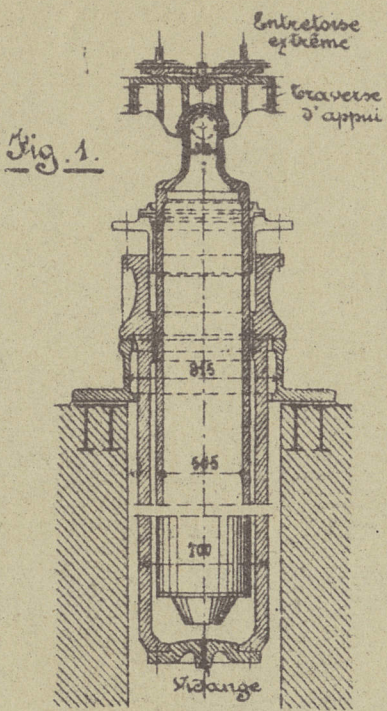


Fig. 1. Appui fixe

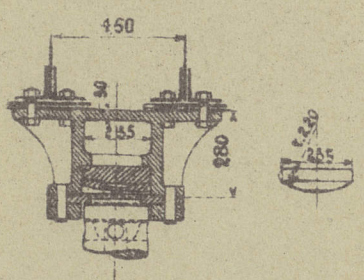
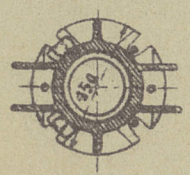
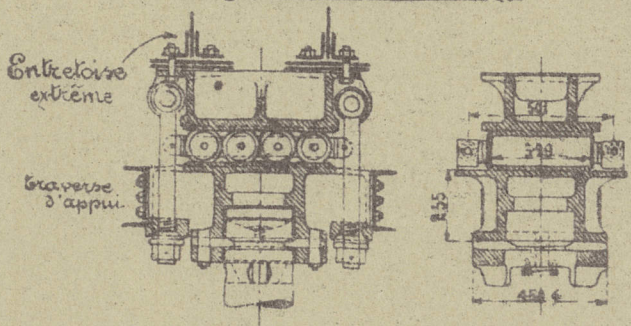
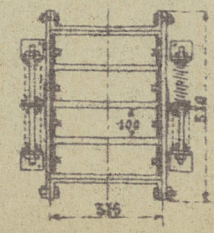


Fig. 2. à rouleaux



e) Appuis sur les vis.

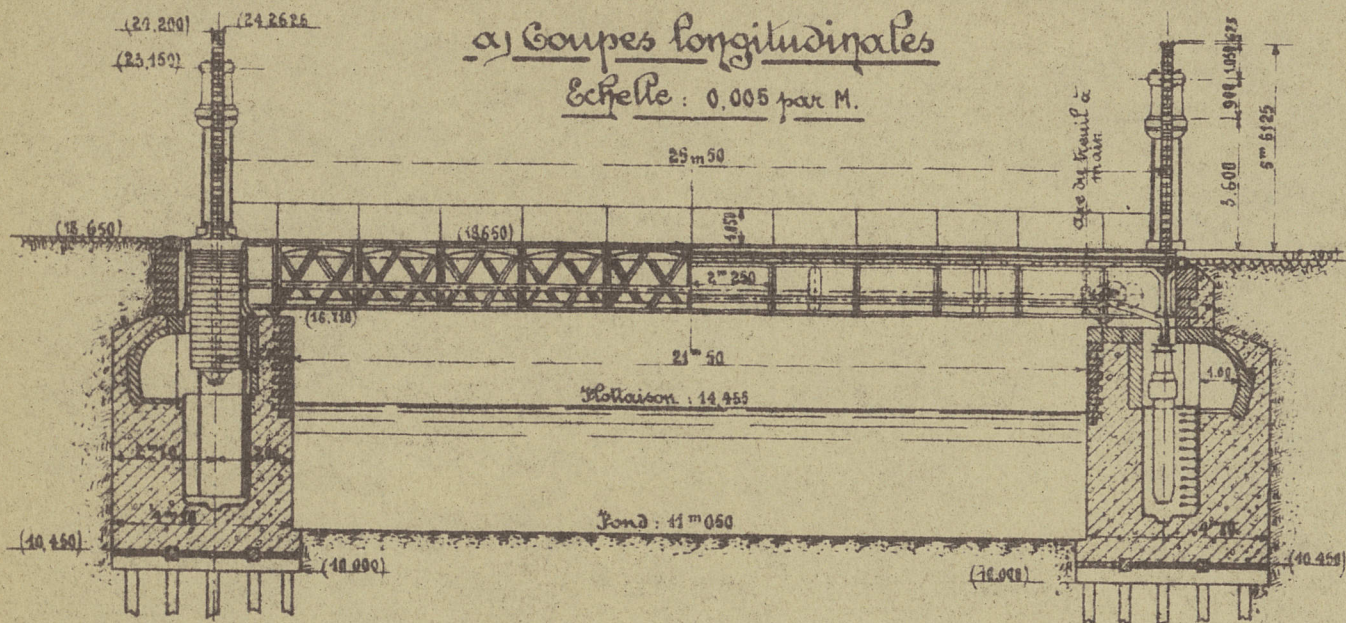




Pont de fer à Couvrai sur l'Escaut (1910-11)

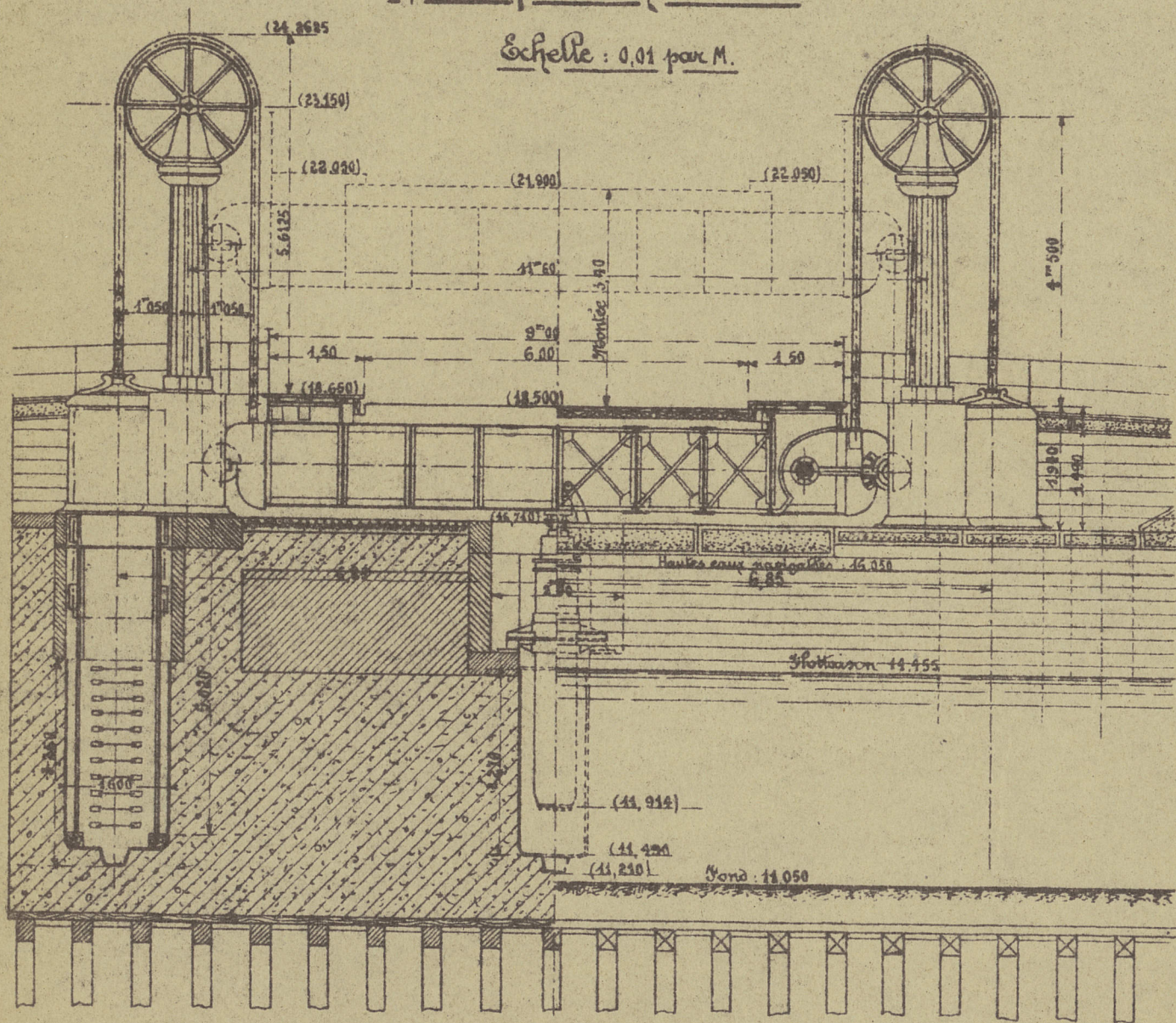
a) Coupes longitudinales

Echelle : 0,005 par M.



b) Coupes transversales

Echelle : 0,01 par M.





Ponts levants funiculaires.

Fig. 1. Sur le canal de l'Ourcq à la Villette (1885)

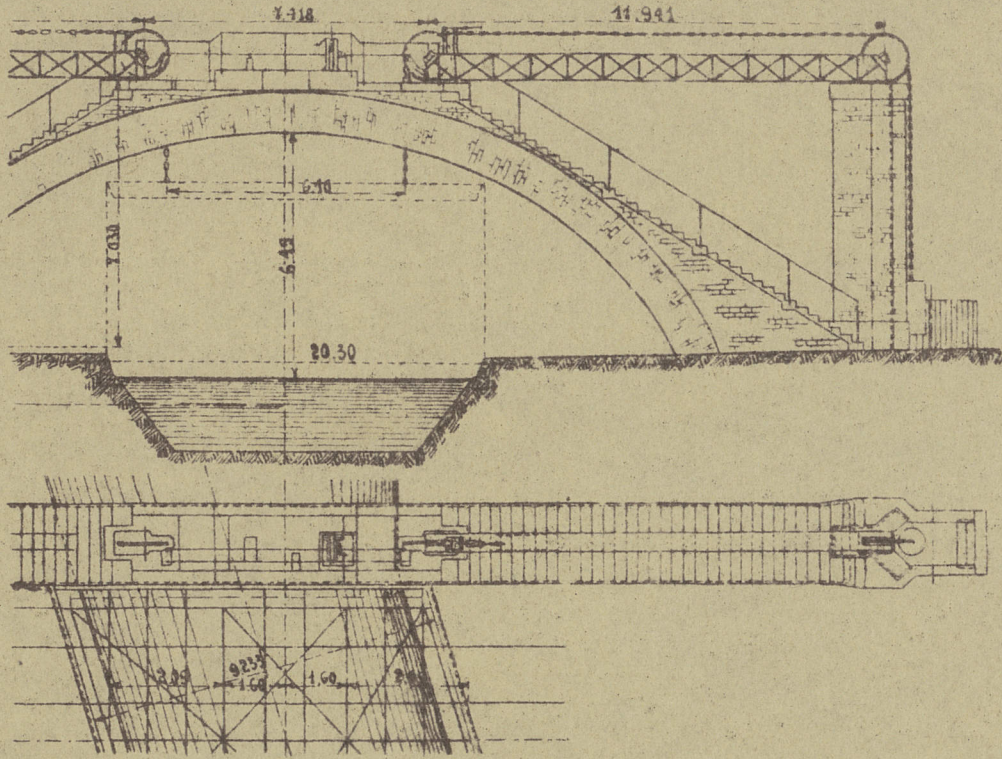


Fig. 2. Sur la rivière Halsted à Chicago.

(1892 - 1895)

Fig. a)

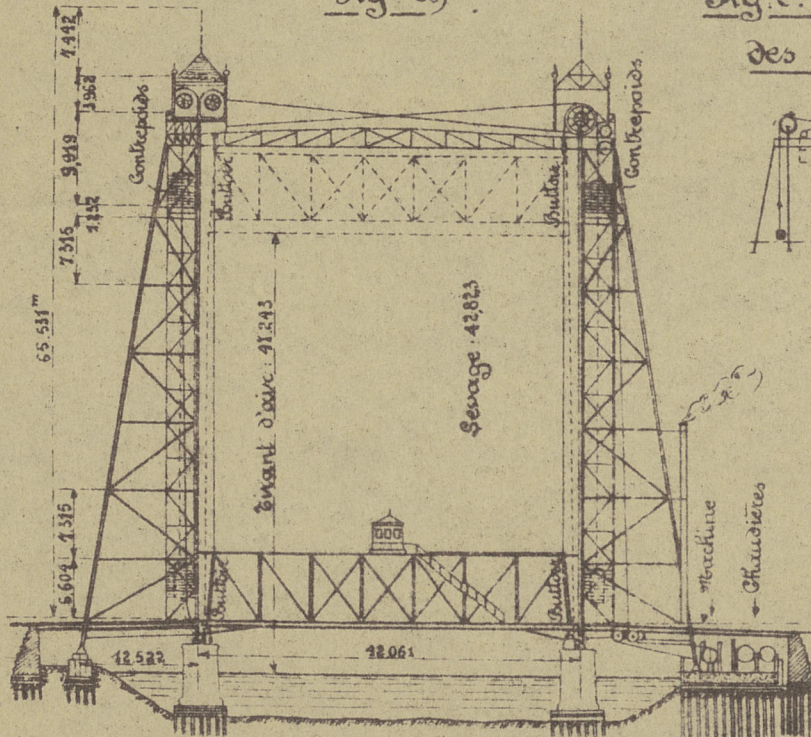


Fig. c. Schéma des câbles

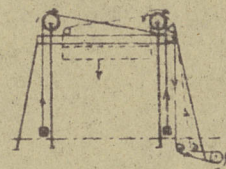
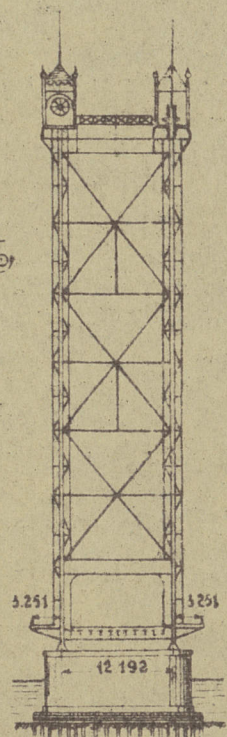


Fig. b





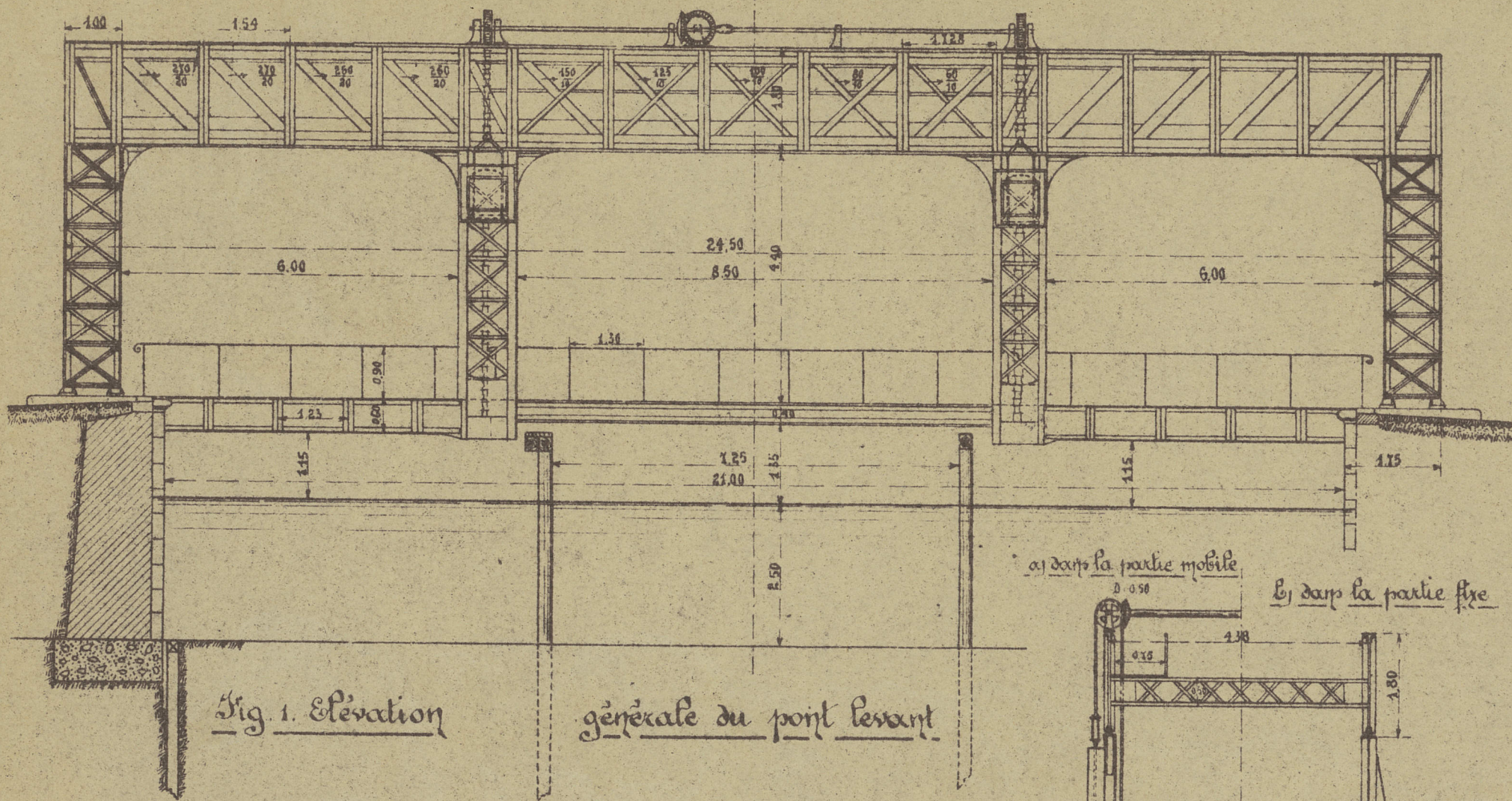
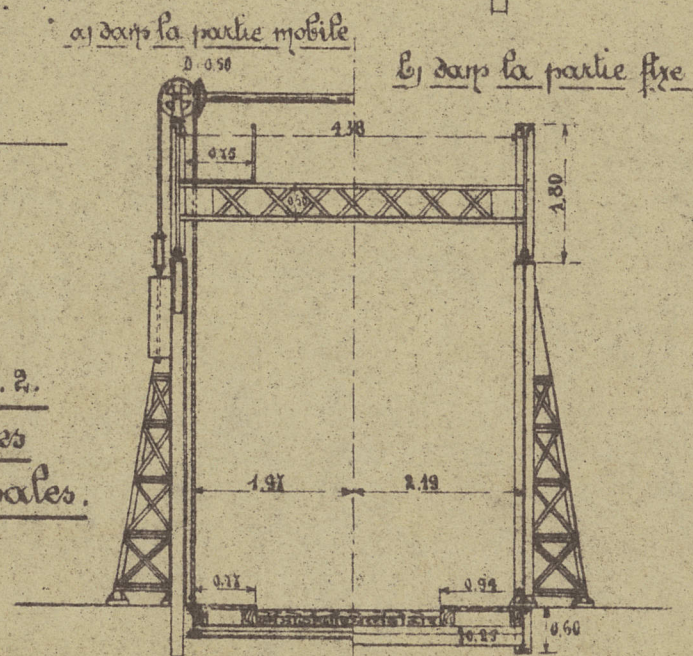


Fig. 1. Elevation

générale du pont levant

Sur la Sys à Houplines (1892)

Fig. 2.  
Coupes  
transversales.

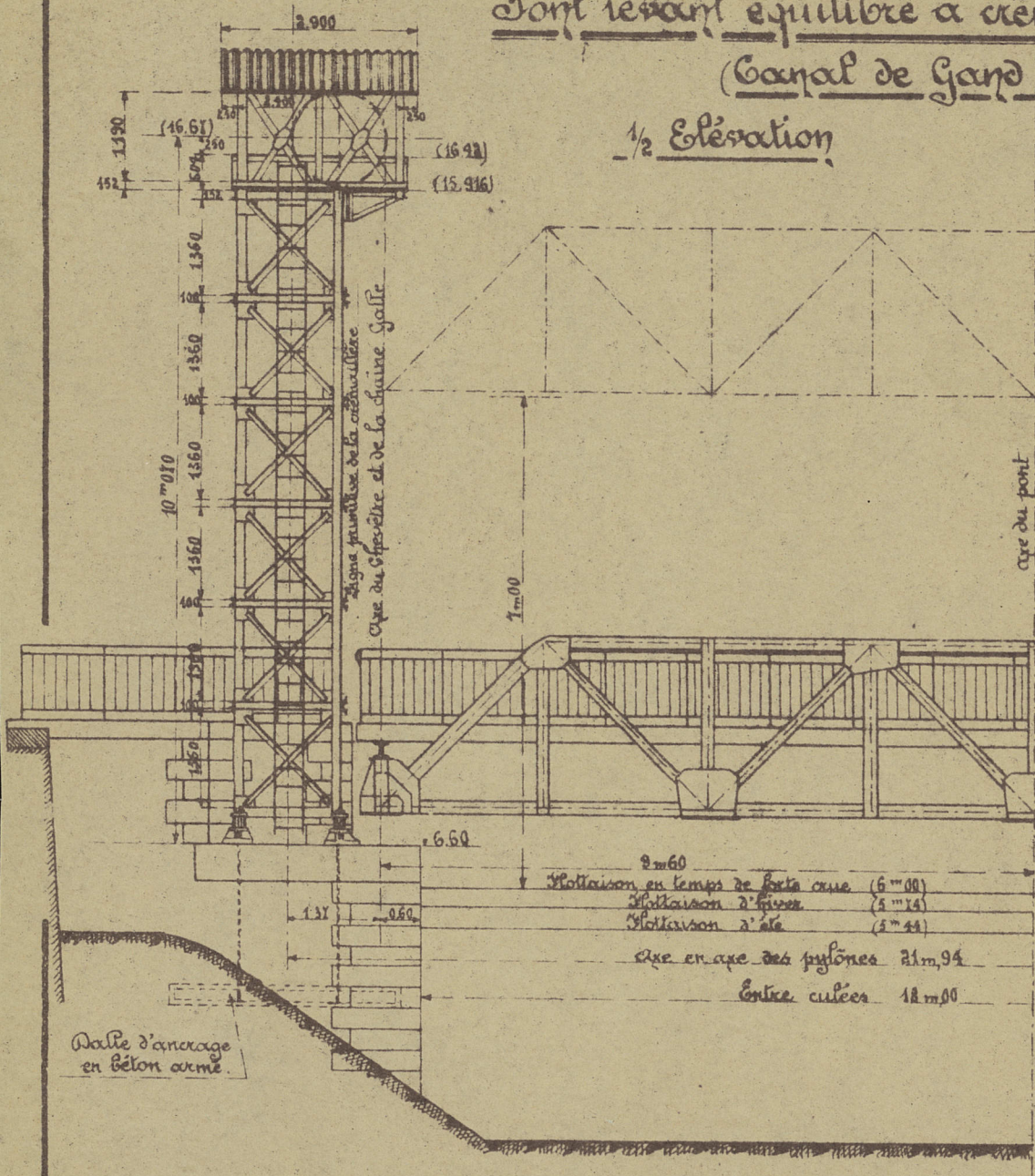


Stange

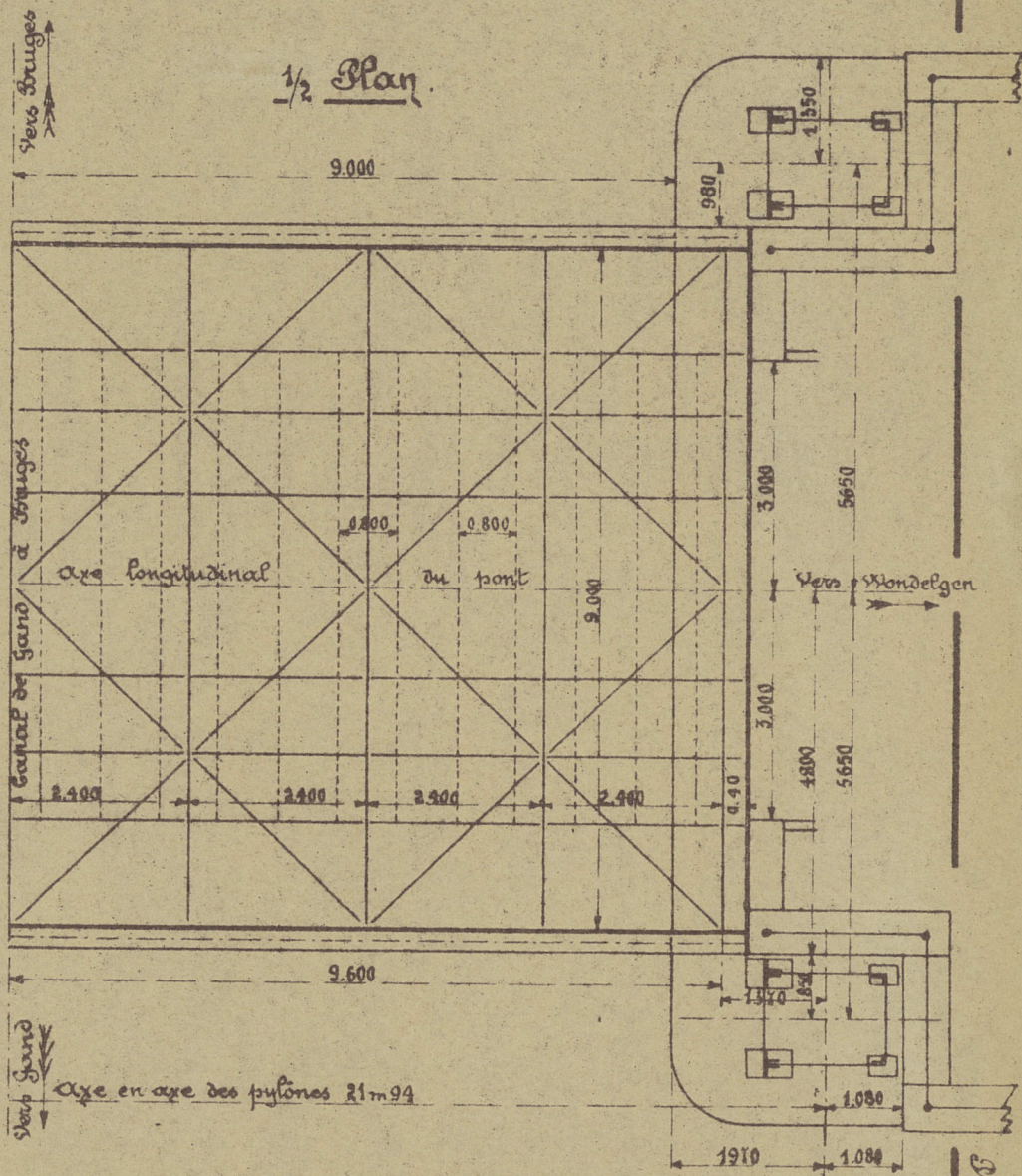


Pont levant équilibré à crémaillères à Moariakeke  
 (Canal de Gand à Bruges) 1927.

1/2 Élévation



1/2 Plan





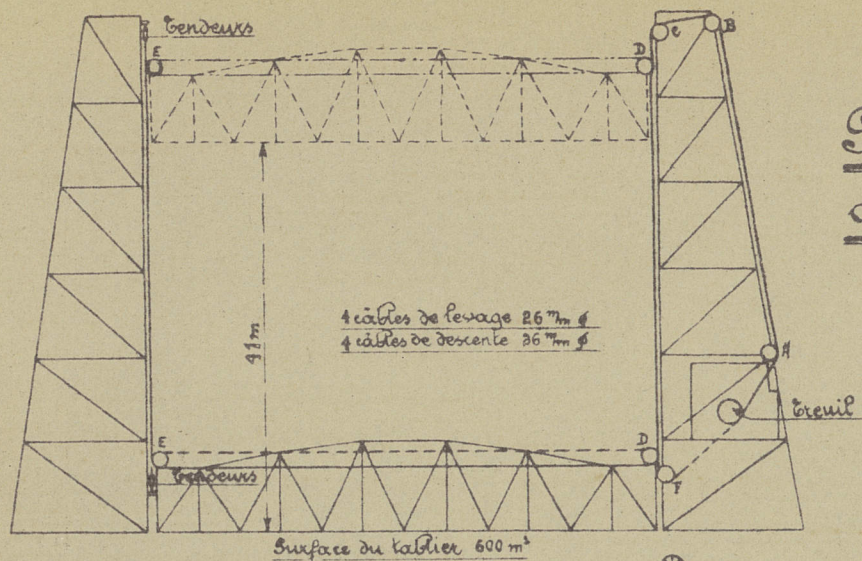


Fig. 3. Dispositif des câbles de levage et de descente.

Sur la Meuse  
à Rotterdam

(1925-1926)

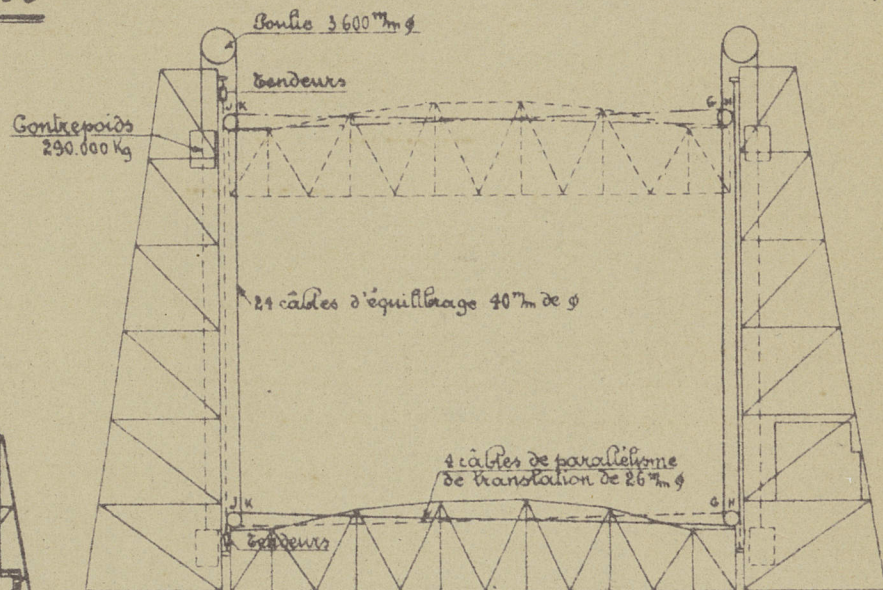


Fig. 4. Dispositif des câbles d'équilibrage et de parallélisme de translation.

Fig. 1. Elevation

longitudinale.

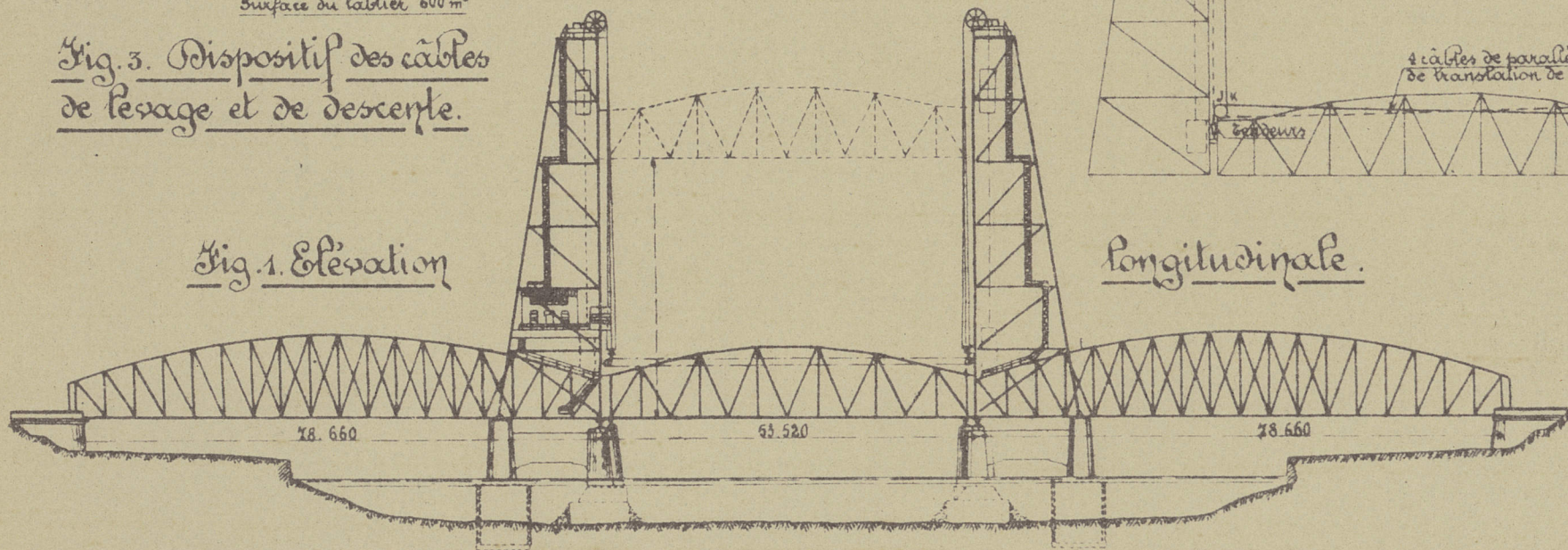
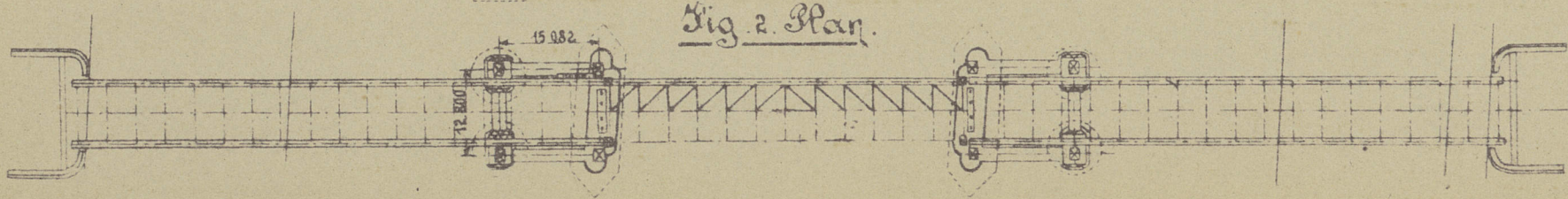


Fig. 2. Plan.





Sur la Meuse à Rotterdam (1925-26) (suite)

Fig. 5. Plan des piles

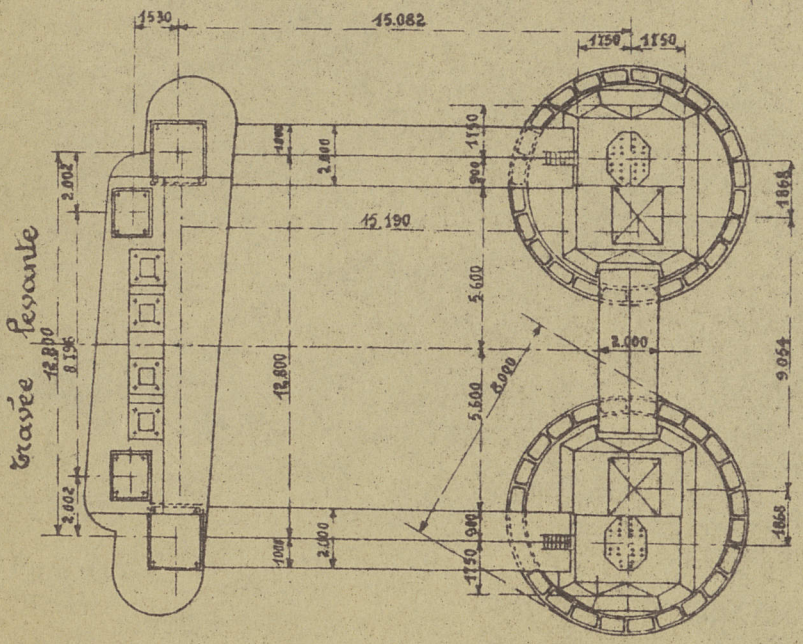


Fig. 6. Coupe E-F

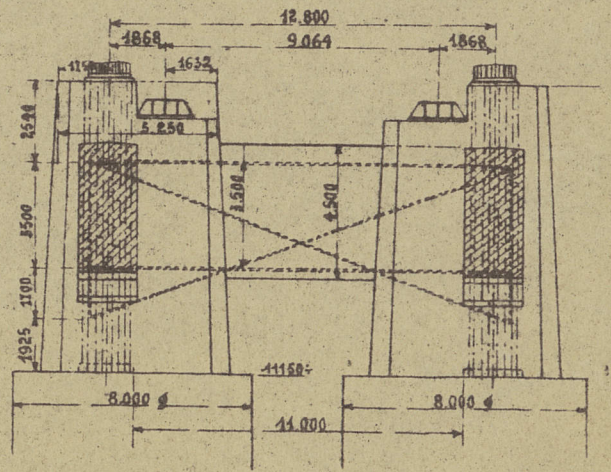
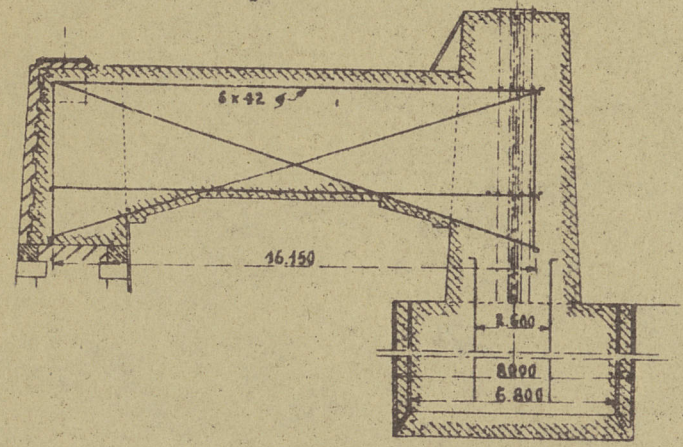
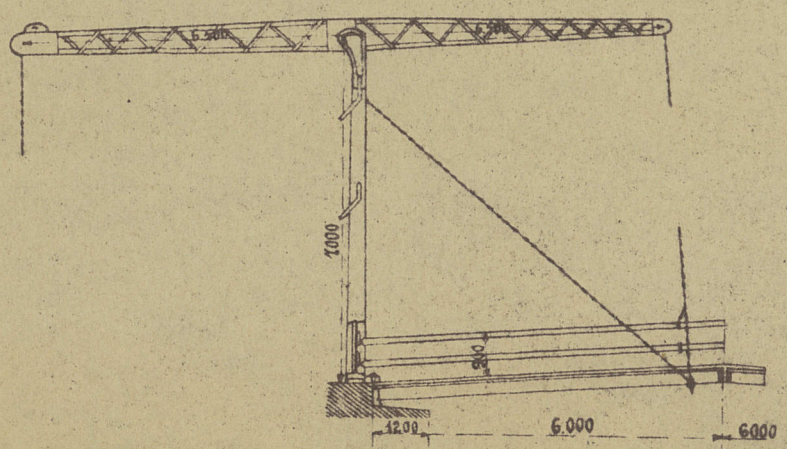


Fig. 7. Coupe G-H

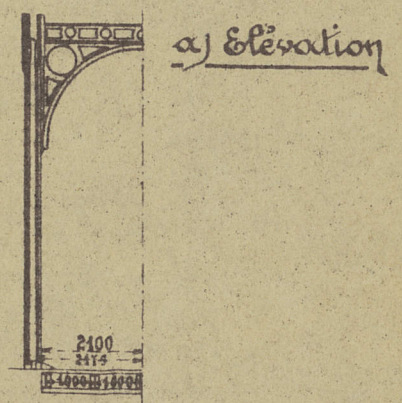


b) Coupe



Pont levis à flèche

Fig. 1. Type à 2 volées  
(Preesnyk Pays-Bas)



a) Elevation

c) Plan

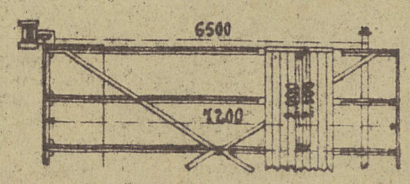




Fig. 1. Pont ferro à pèche ... Type à simple voie de faible portée.  
a) Elevation longitudinale b) Coupe transversale.

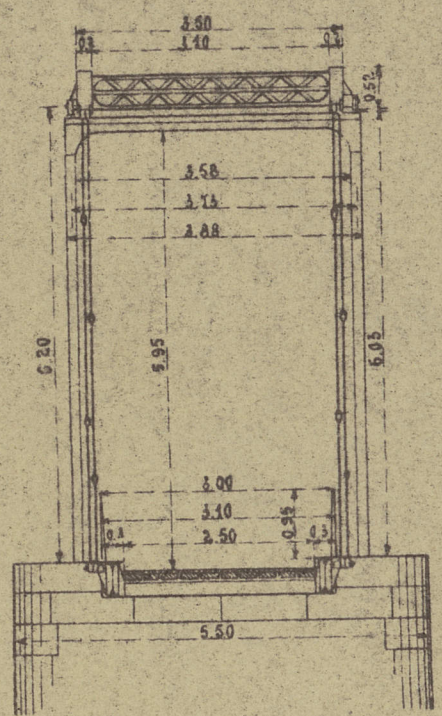
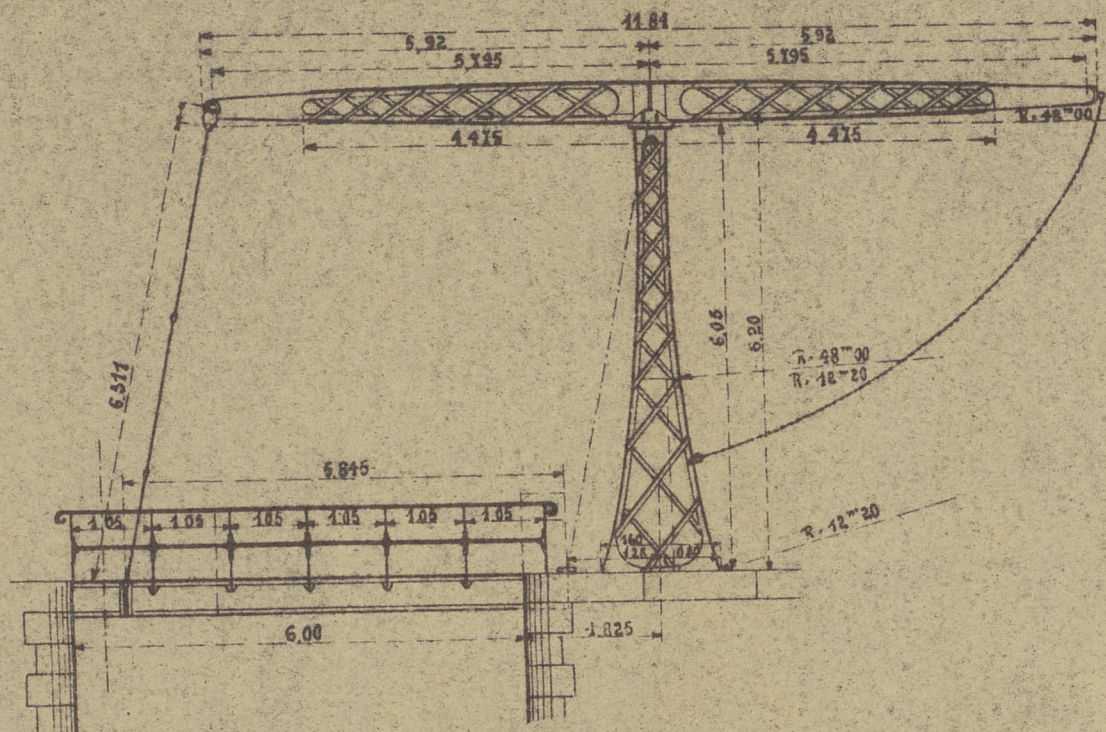
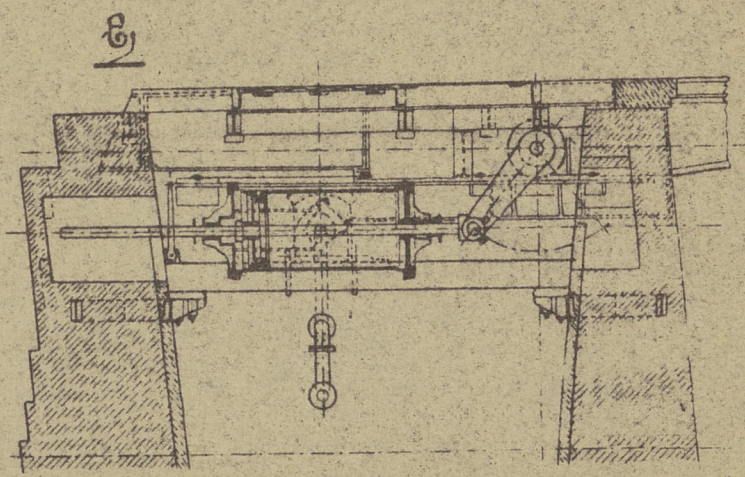
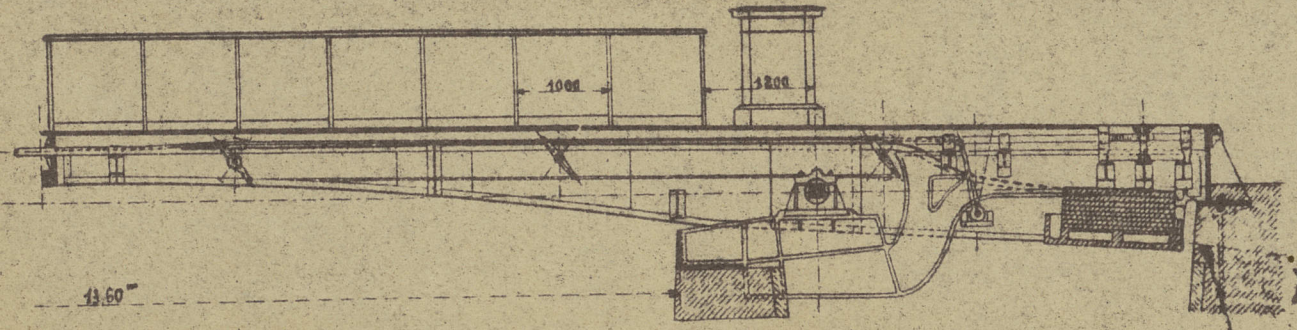


Fig. 2. "Schelwebrug" près de Rotterdam  
a) Coupe longitudinale. b) à verin hydraulique

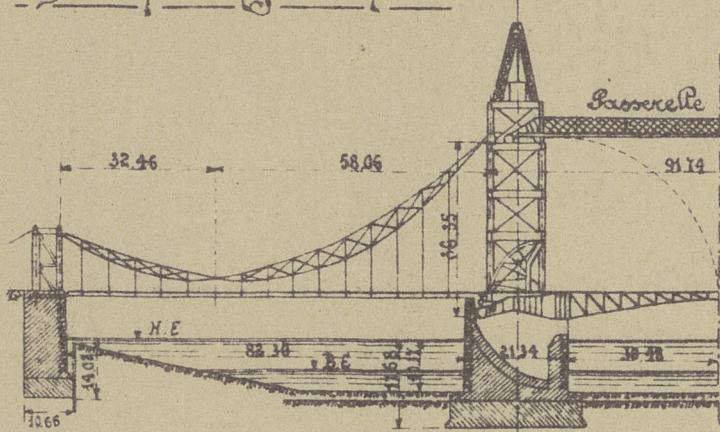




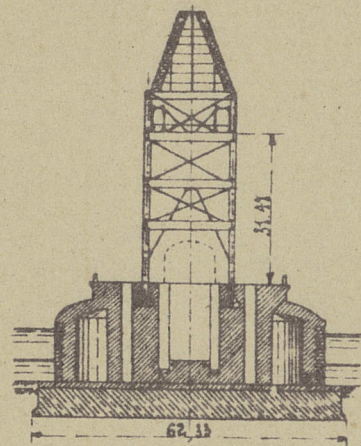
Pont de la Tour de Londres (1894)

Fig. 1. Schémas d'ensemble

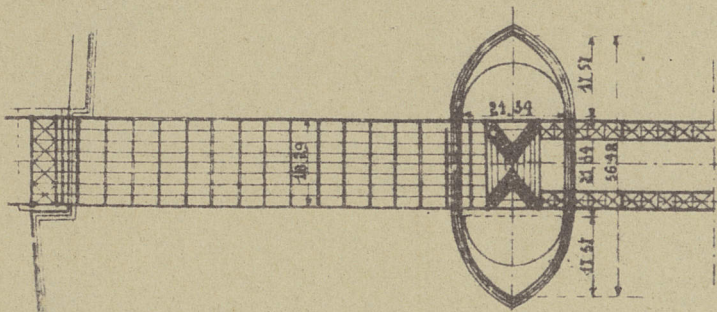
a) Coupe longitudinale



b) Coupe transversale



c) Plan



d) Coupe horizontale

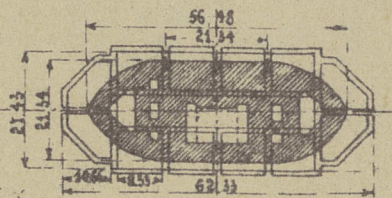


Fig. 2. Détail de la travée

basculante.

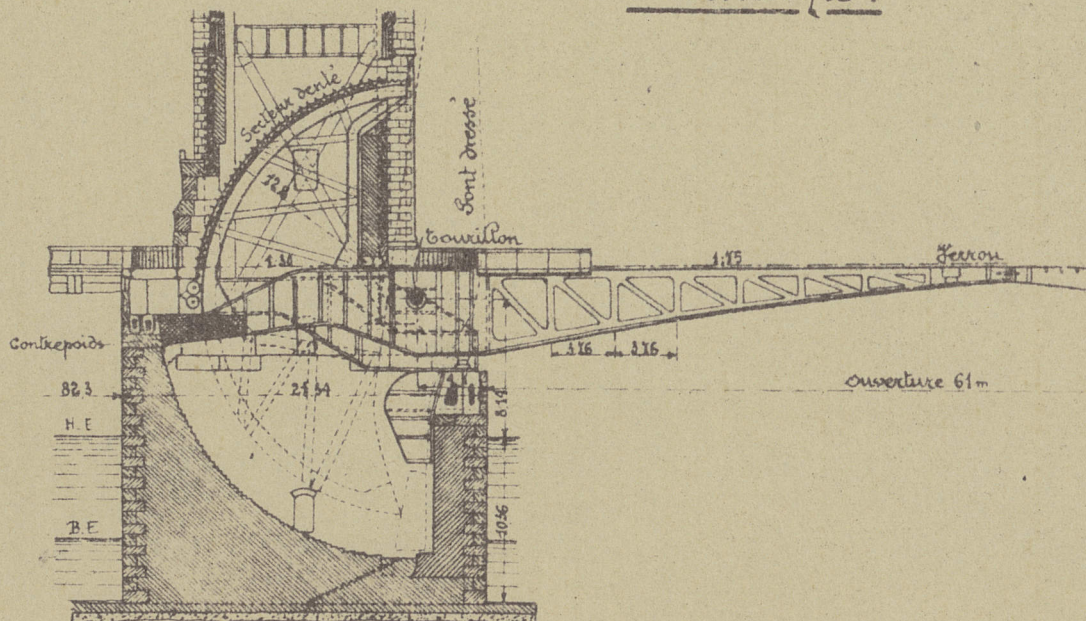




Fig. 1. Pont de Roendeburg (Canal de la Baltique)

1899

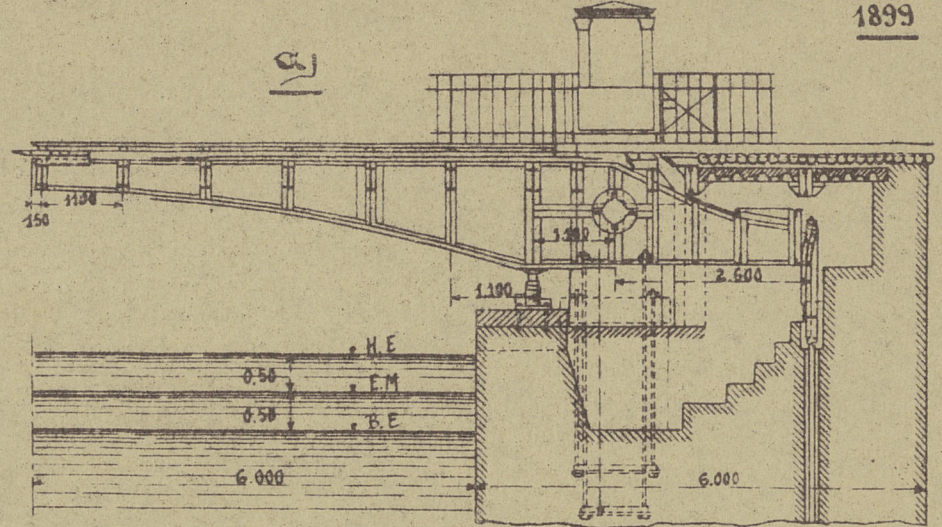


Fig. 2. Boötule de jonction des volées du pont de Nyenørd (Roetterdam)

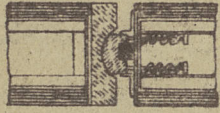


Fig. 3. Verrouillage à griffe des volées du Pont Haut de Königsberg.

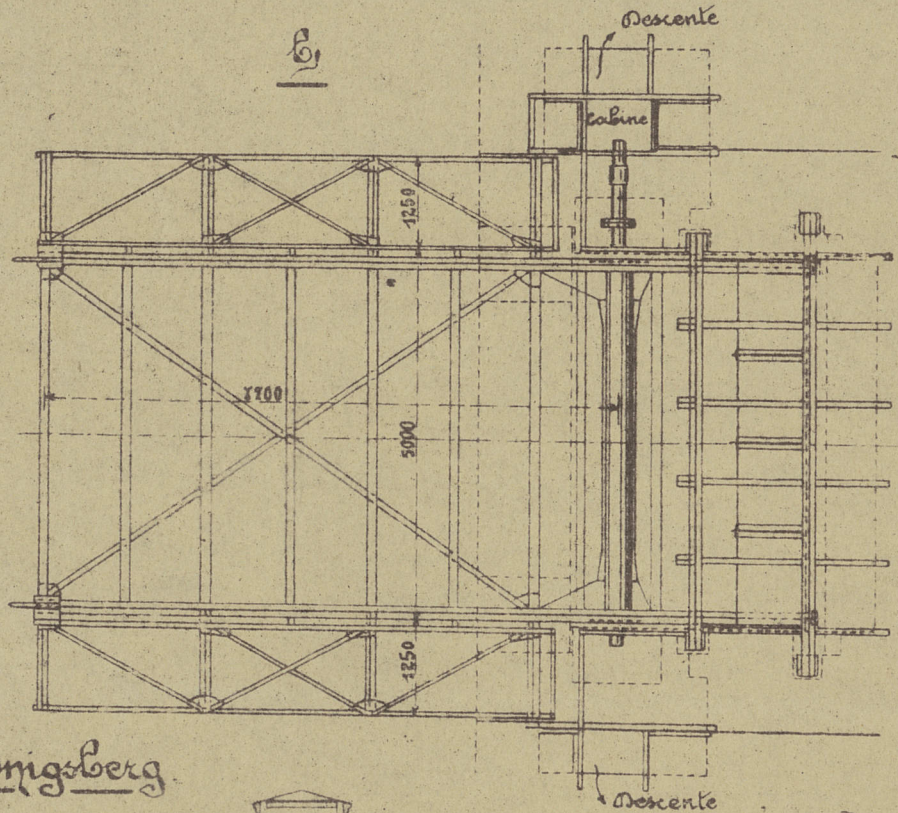
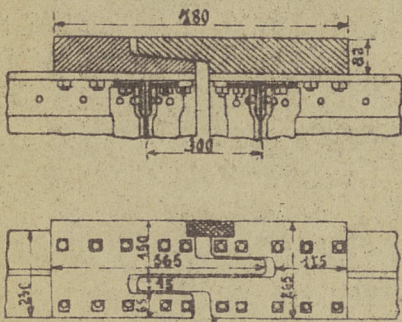
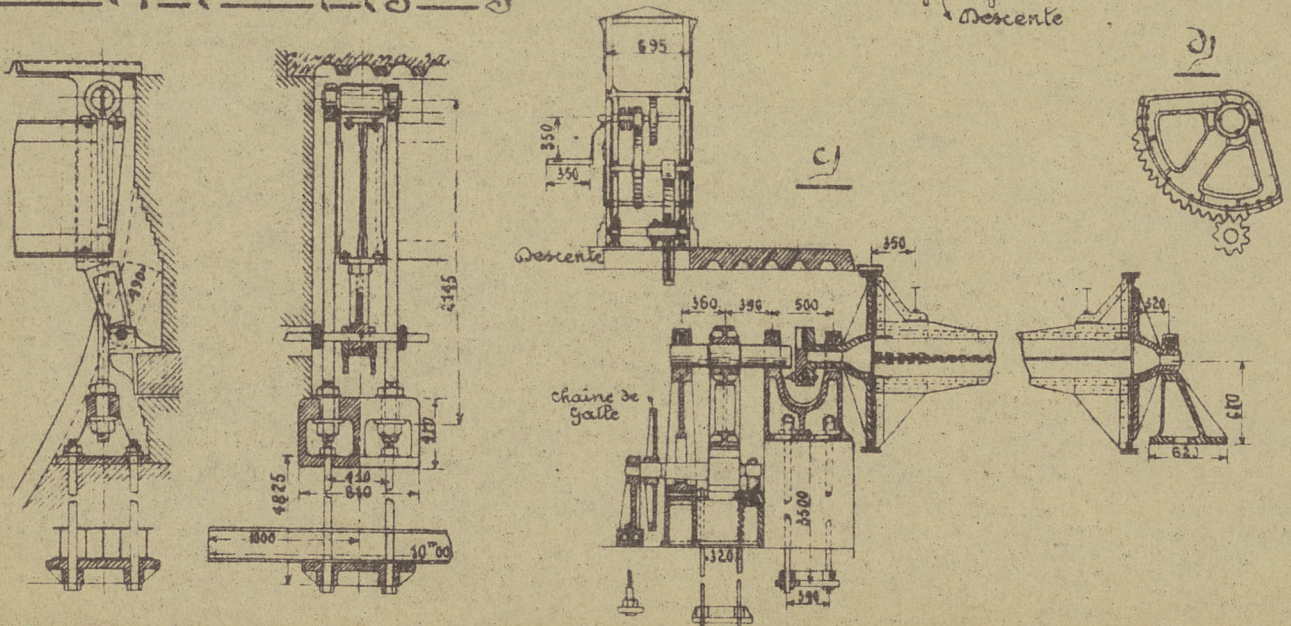


Fig. 4. Ancrage et butée de culasse de d'un pont à Königsberg





Sont basculant à tourillons de

Petit-Villebroeck (canal Maritime de Bruxelles)

(1924-25)

Fig. 1. Coupe longitudinale.

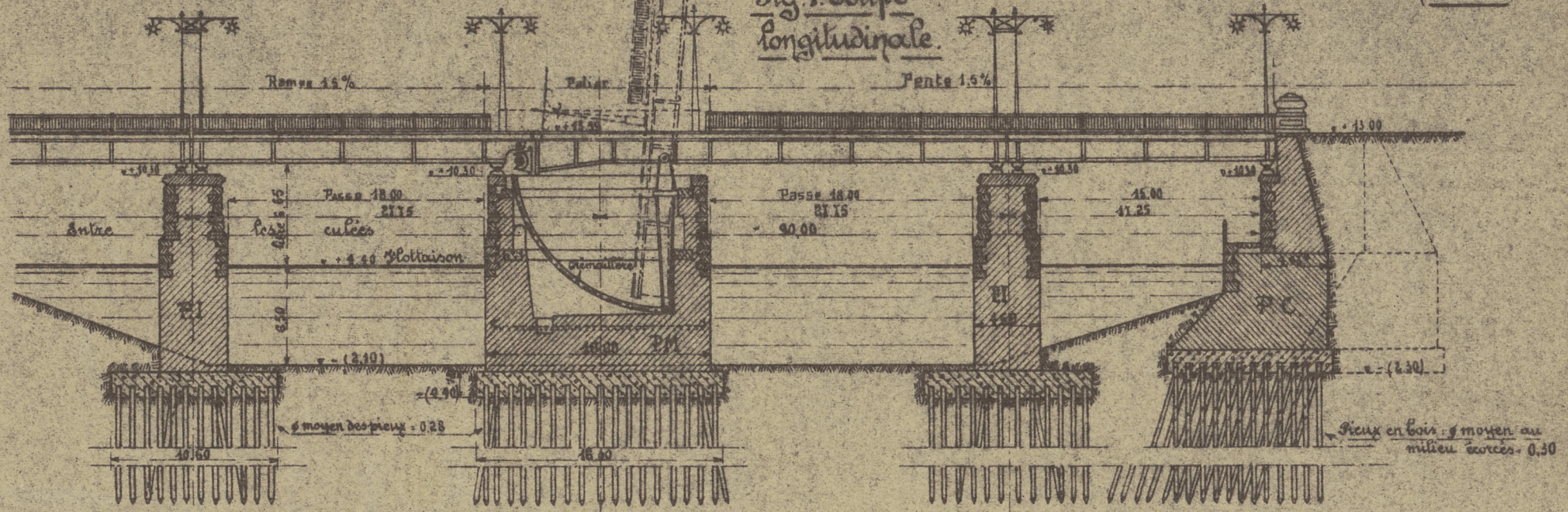


Fig. 2. Vue de face des culées P.C.

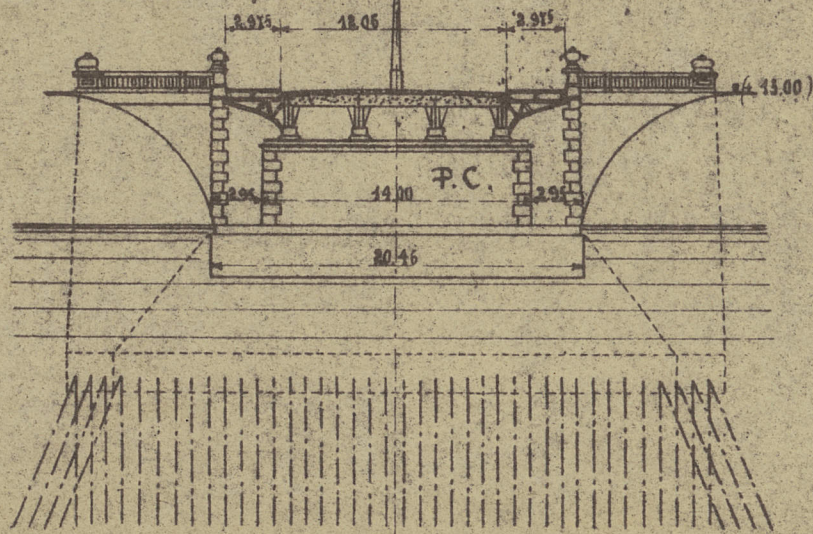
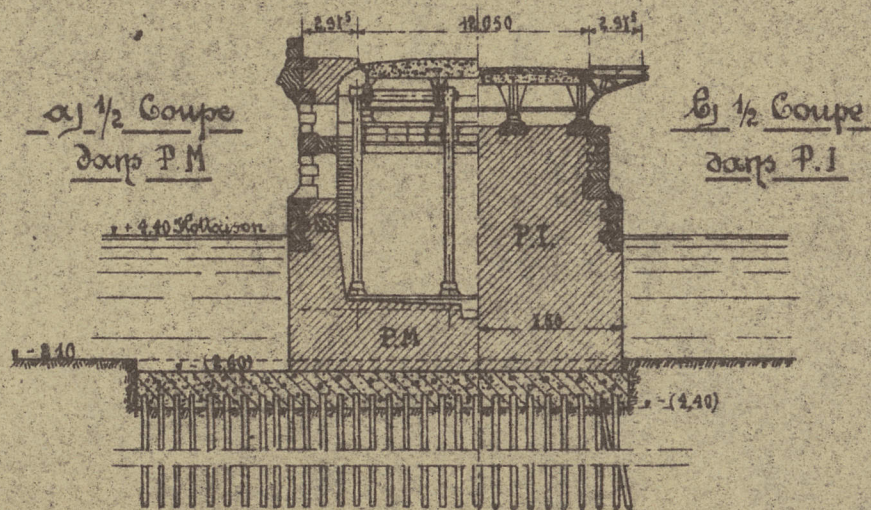


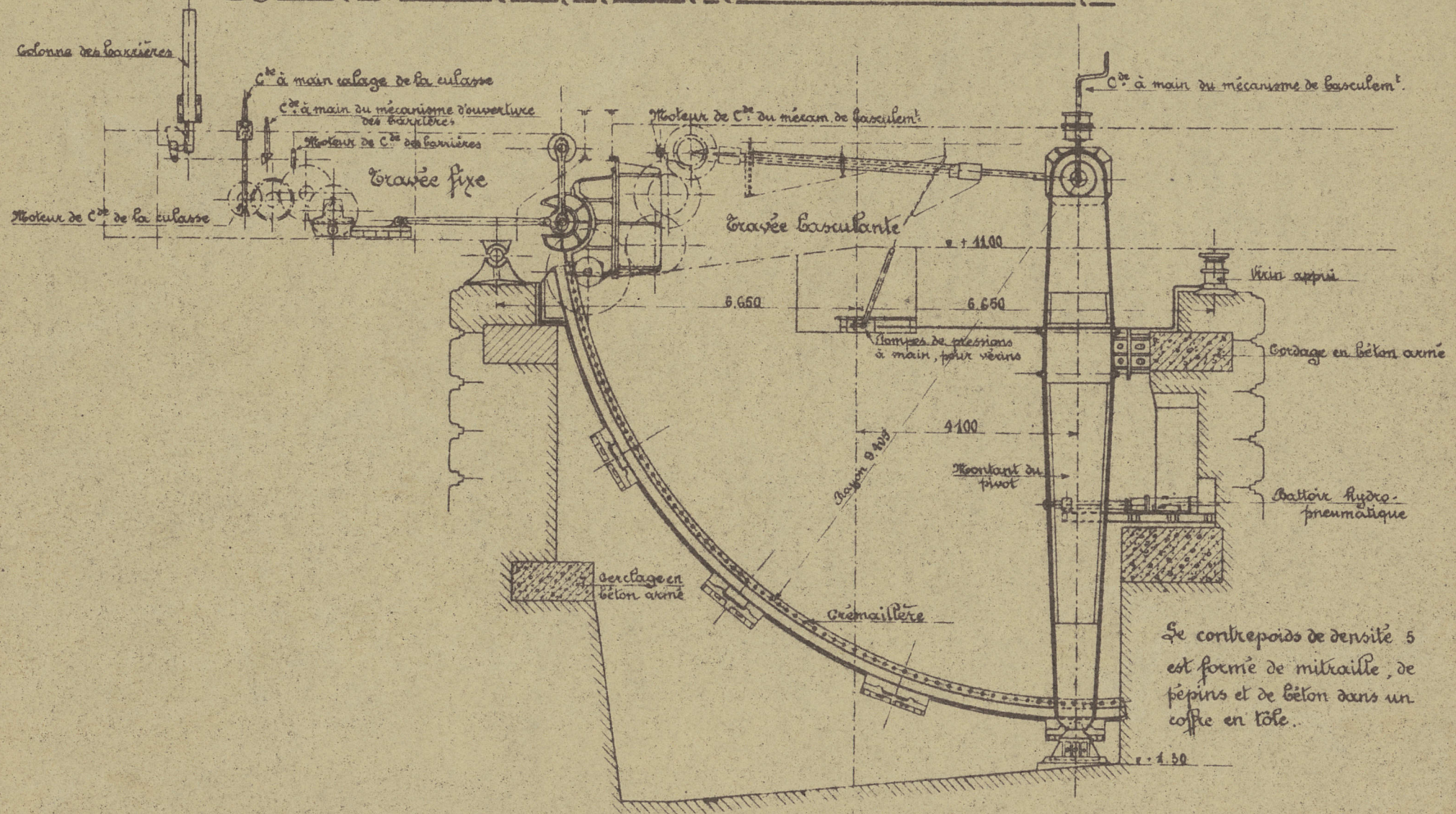
Fig. 3. Coupes transversales





# Pont basculant à tourillons de Petit-Millebroeck (Canal maritime de Bruxelles... 1924-25) (Suite)

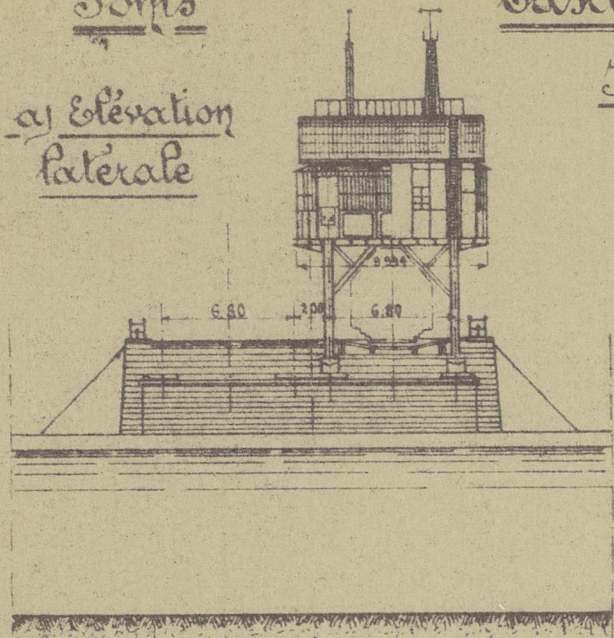
Fig. 4. Ensemble des mécanismes de manoeuvre de la travée basculante.





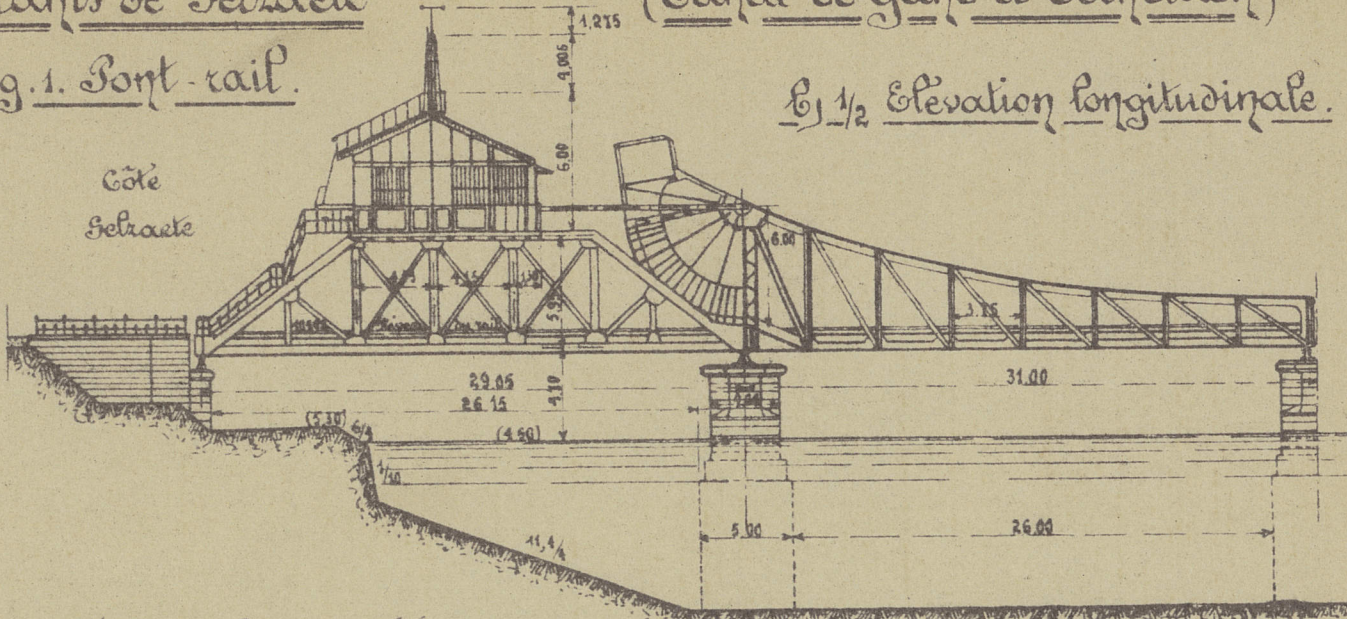
Ponts

a) Élévation latérale



Basculants de Getraete

Fig. 1. Pont-rail.

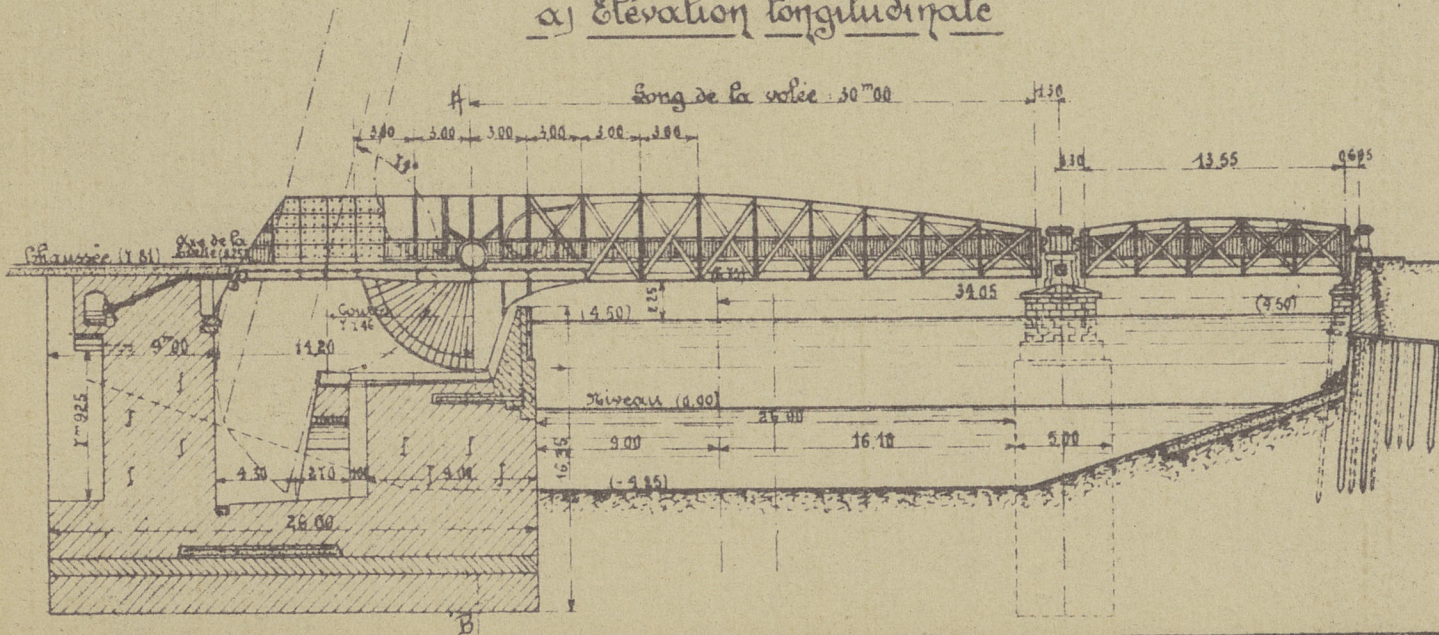


(Canal de Gand à Berneuxen)

b) 1/2 Élévation longitudinale.

Fig. 2. Pont route

a) Élévation longitudinale



b) Coupe transversale suivant #B

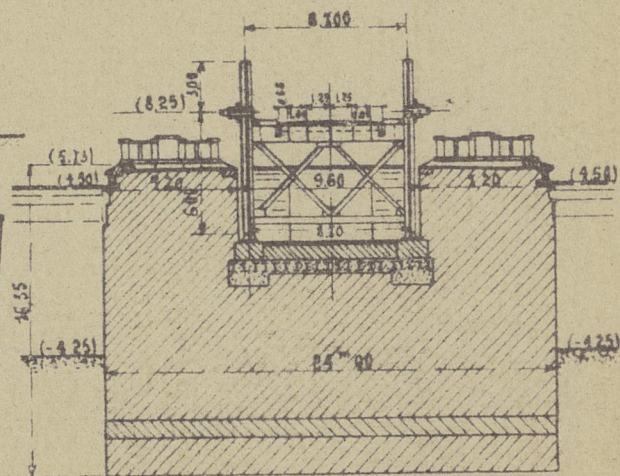
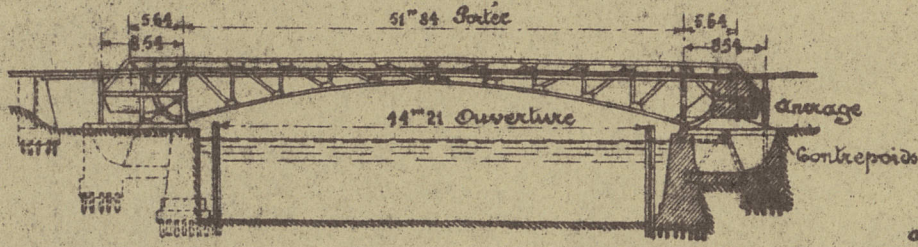




Fig. 1. Ponts basculants Scherer à double volée.  
a) à tablier supérieur.



b) Pont de  
Weston Creek à  
New York.

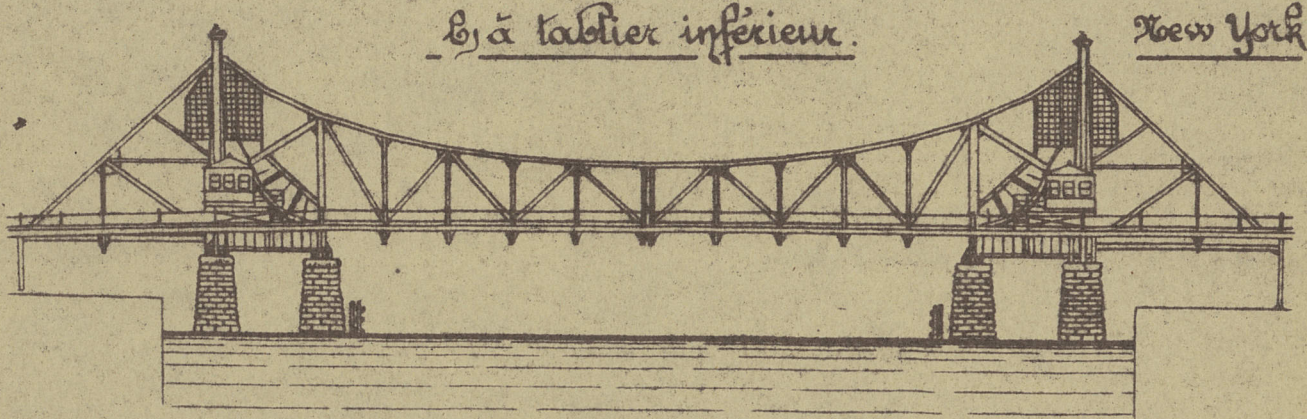


Fig. 2. Pont de bateaux du port de Rustrin (Oder).  
à travée tournante

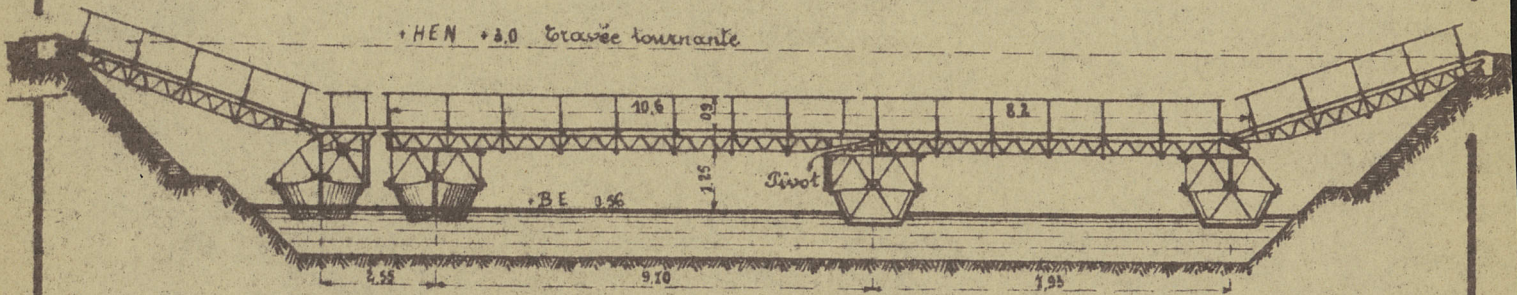


Fig. 3. Schéma du pont roulant de l'écluse du Hattendyk à Anvers.

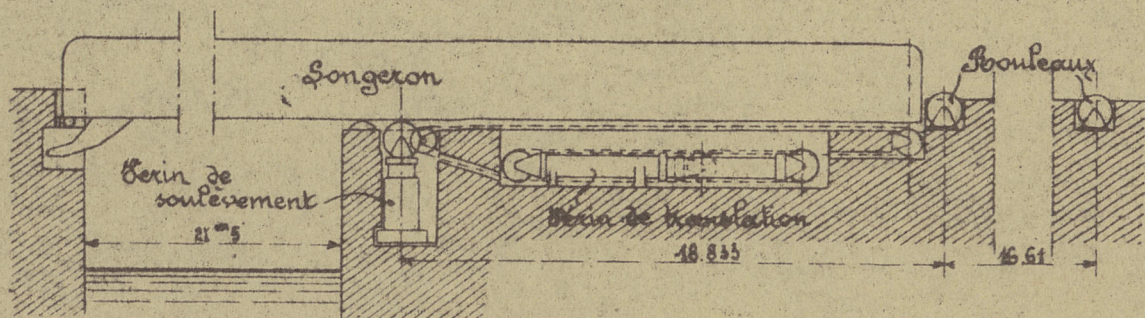




Fig. 2. Pont basculant  
Wansa, à Stettin (1900)

Disposition du secteur de  
roulement, de la culasse  
et du cylindre régu-  
lateur de course.

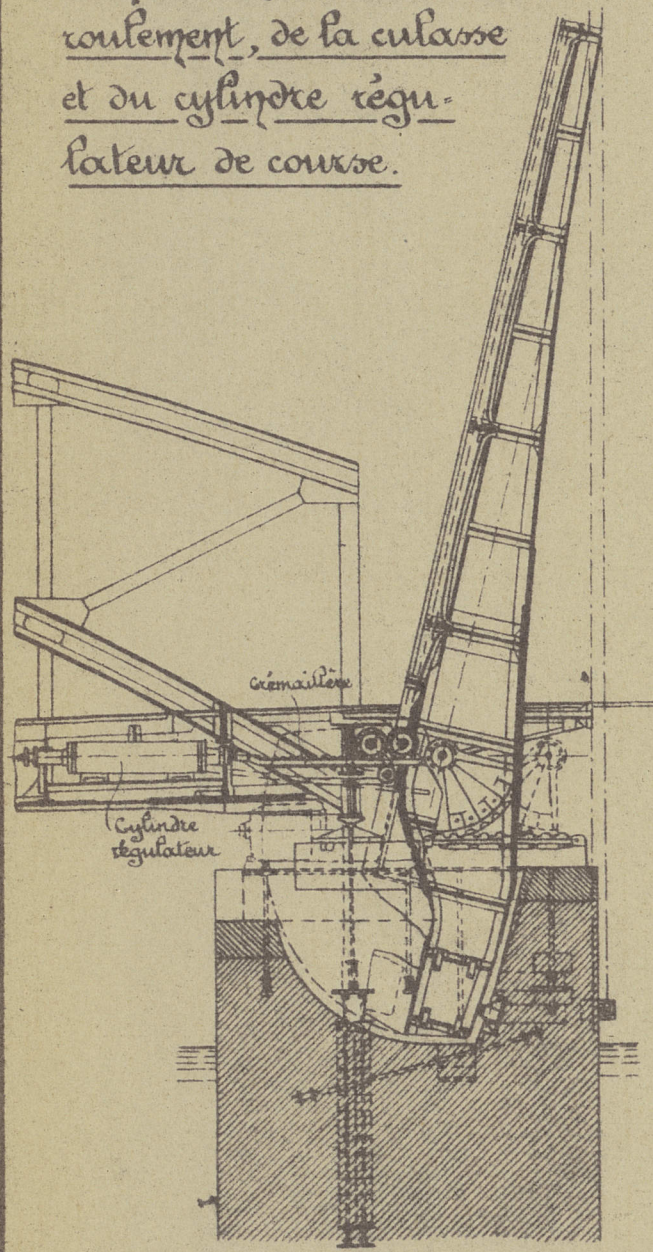


Fig. 1. Pont  
transbordeur de  
Beouen (1899)

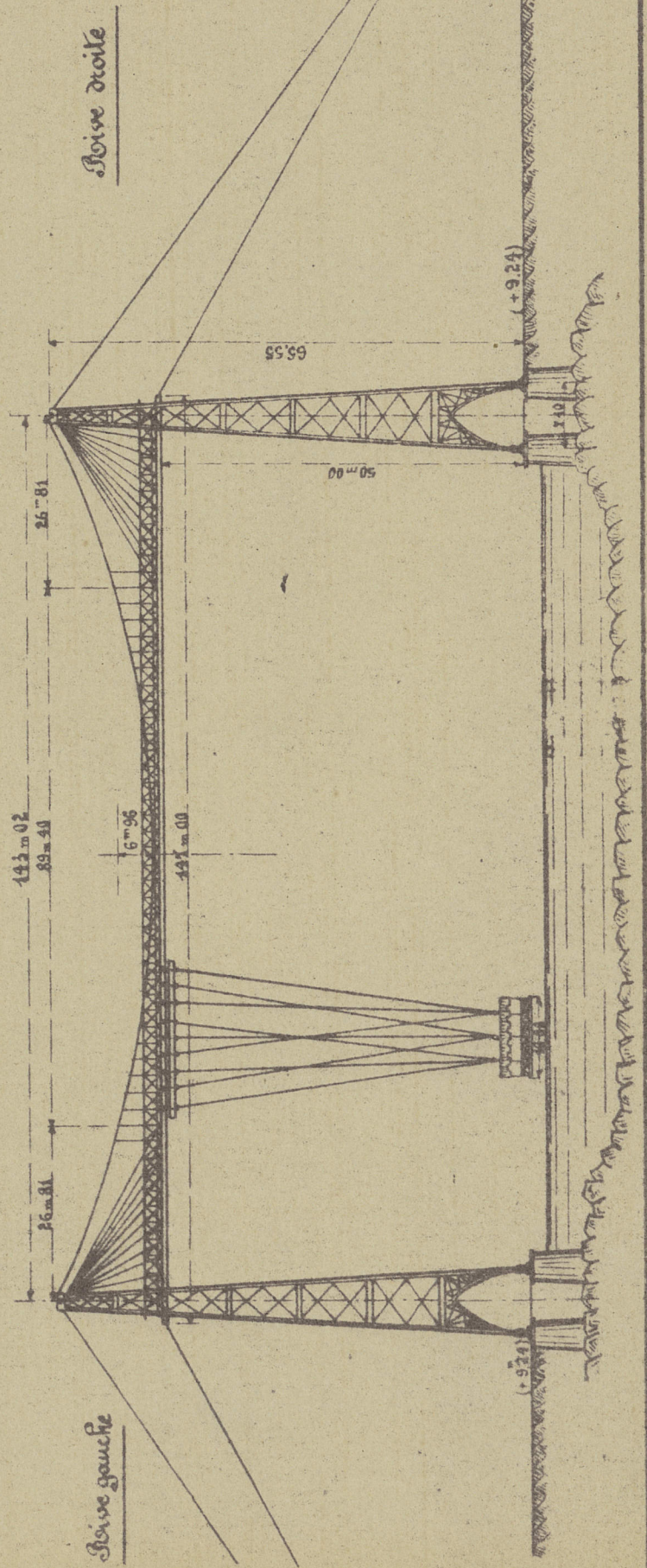




Fig. 1. Pont roulant Victoria sur la Dee près de Queensferry en Angleterre.

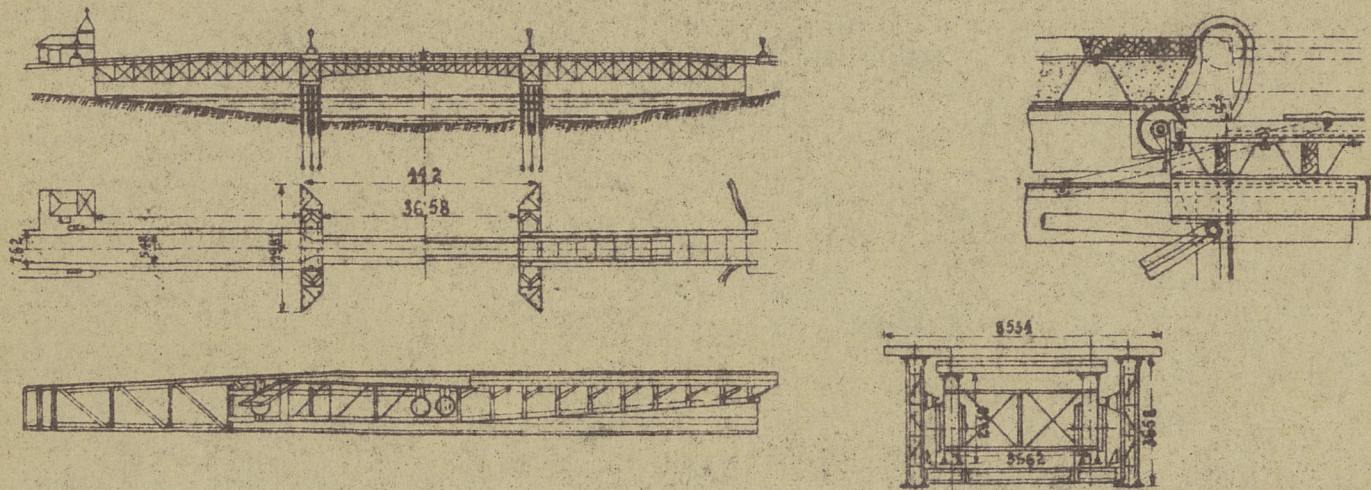
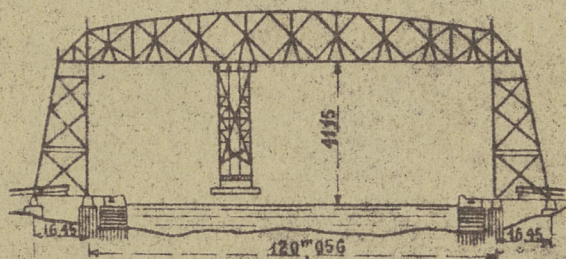
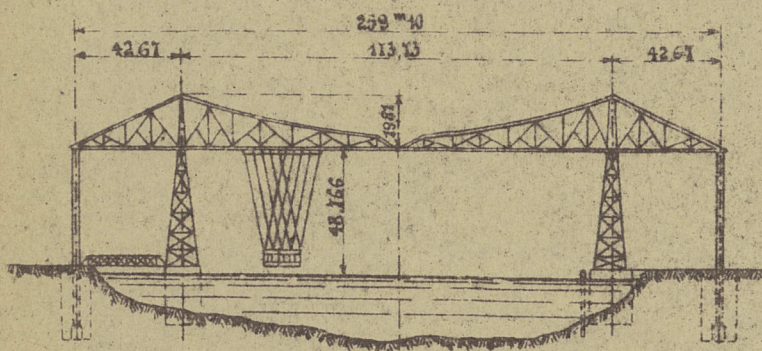


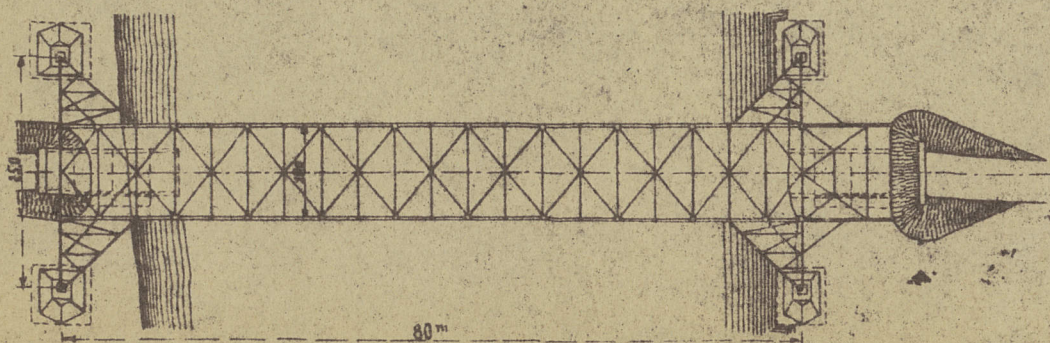
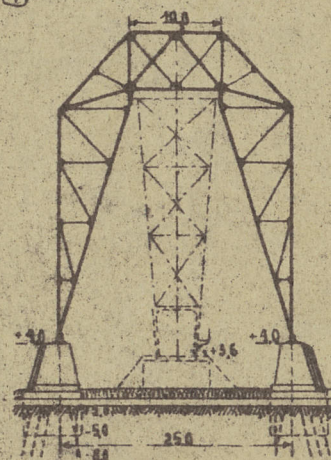
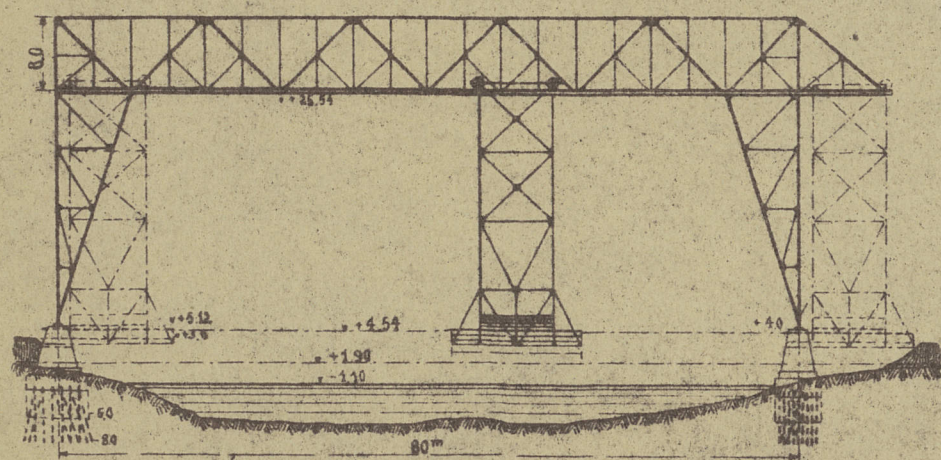
Fig. 2. Ponts transbordeurs.

a) de Middlesbrough (1911)

b) de Duluth (1906)



c) de Osten près d'Hambourg (1909)





# Pont transbordeur de Nantes (1903)

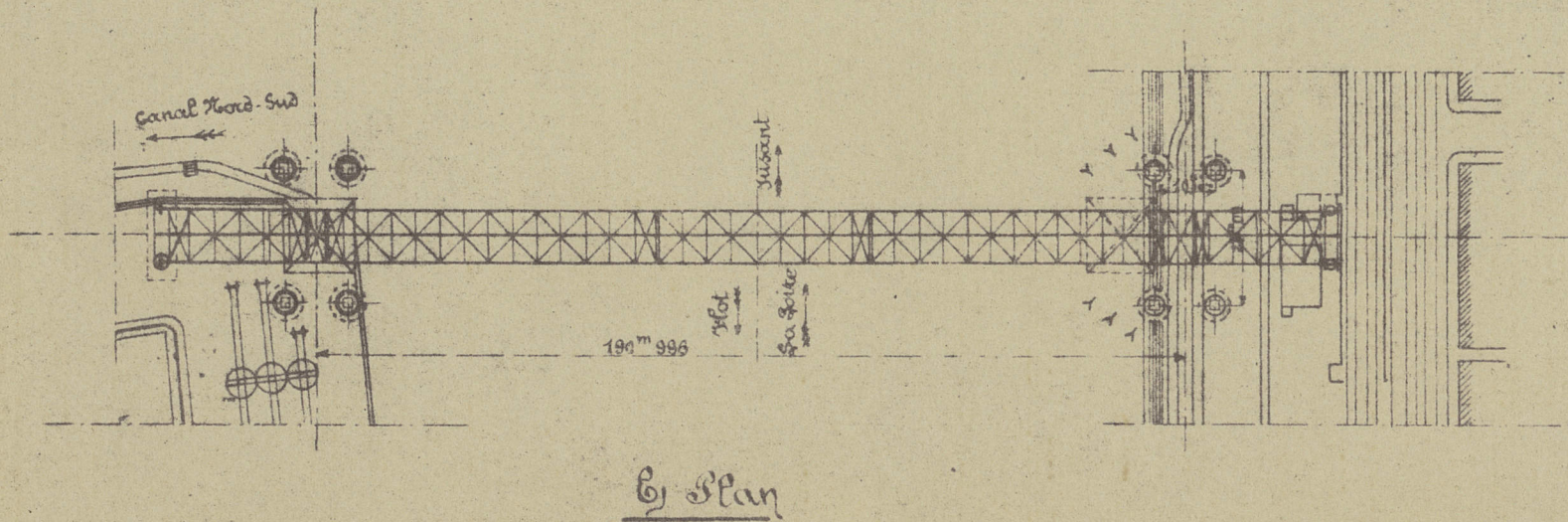
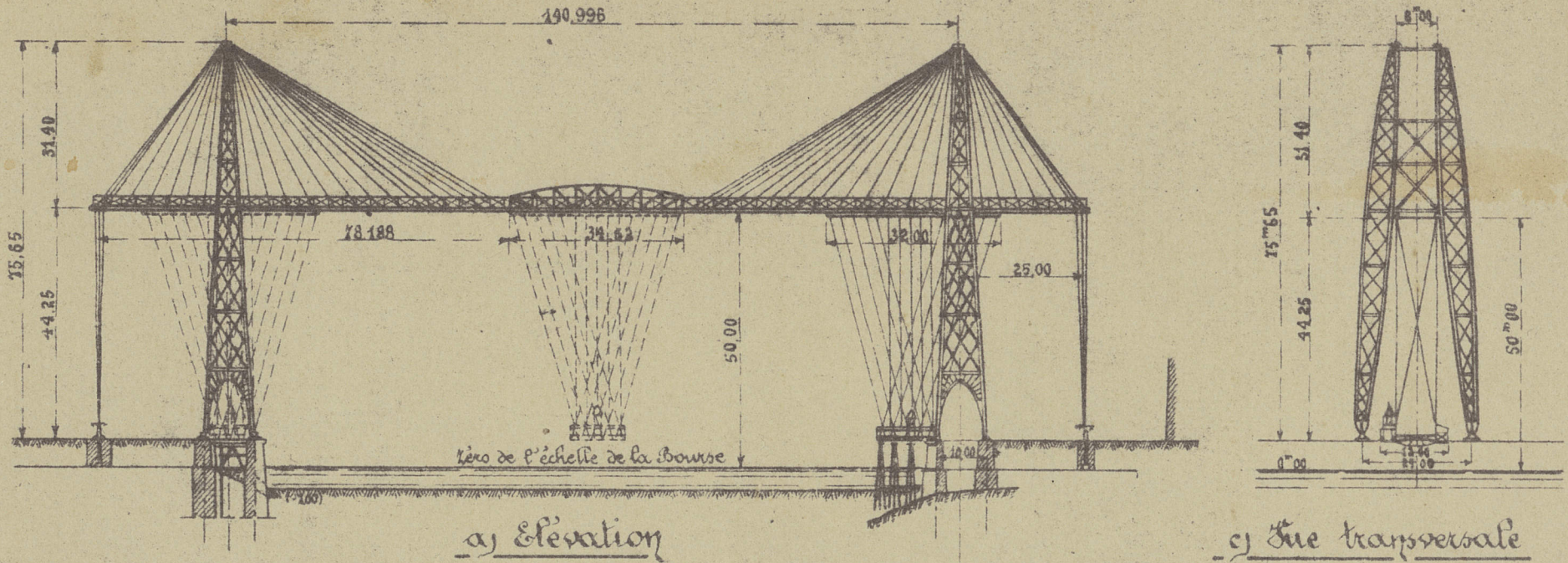
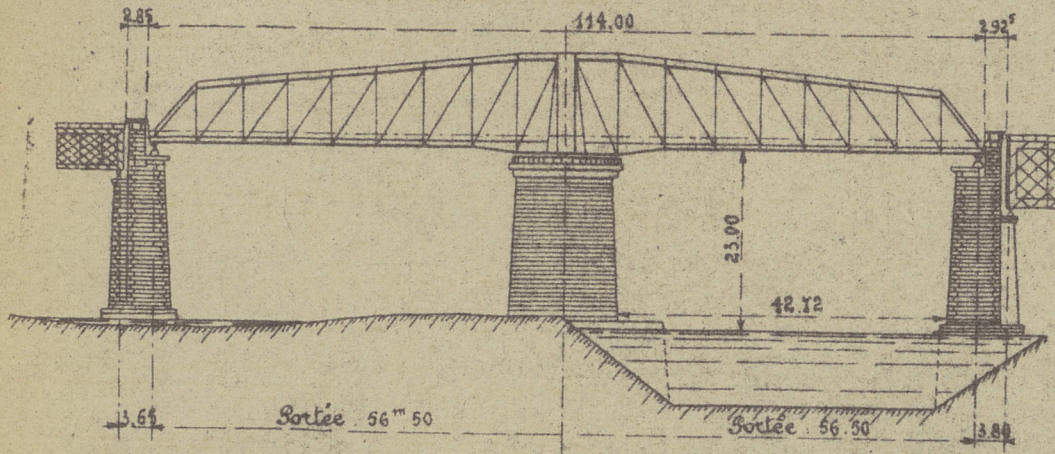




Fig. 1. Pont tournant de Caronte.

a) Elevation

b) Coupe sur l'axe



Coupe sur la culasse

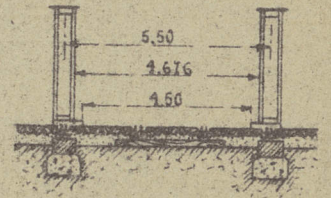
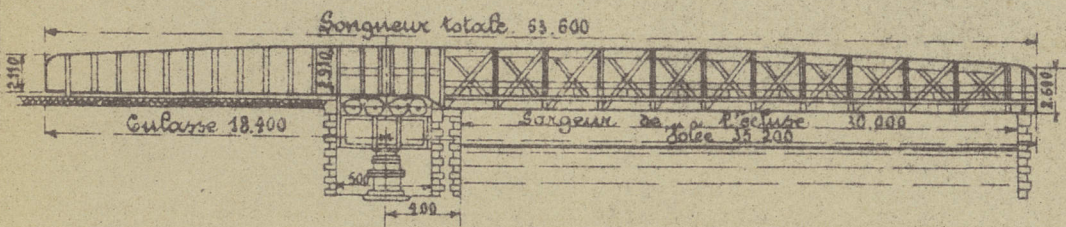


Fig. 2. Pont roulant de Saint Nazaire.

Elevation extérieure



Coupe sur la voie

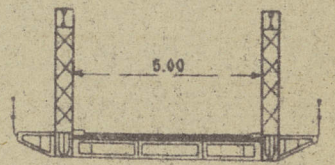
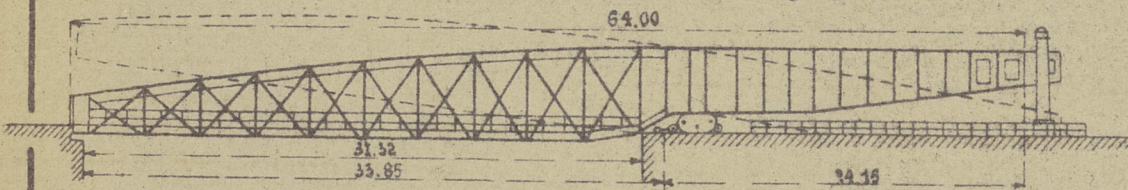


Fig. 3. Pont roulant de Cherbourg

a) Elevation générale.



b) Chariot de roulement.

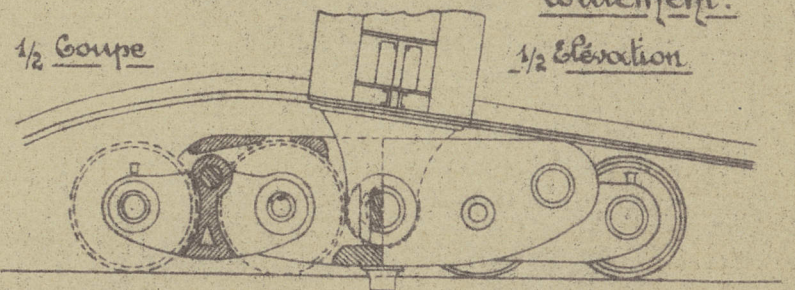
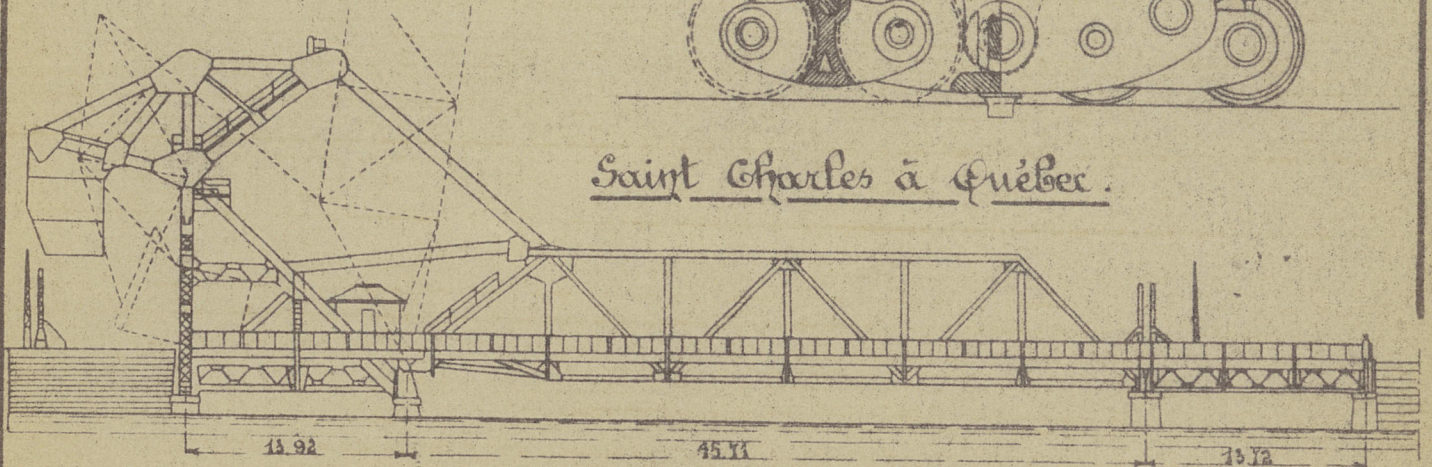


Fig. 4. Pont basculant

Strauss sur la rivière

Saint Charles à Québec.





Petit pont tournant  
pour route sur l'Clé  
à St Omer (France)

Fig. 1. Infrastructure

Fig. 2. Demi coupe suivant l'axe  
longitudinal du pont.

Fig. 3. Demi coupe suivant l'axe  
transversal du pont

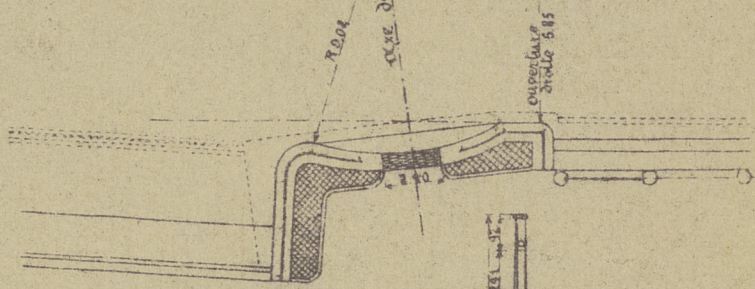
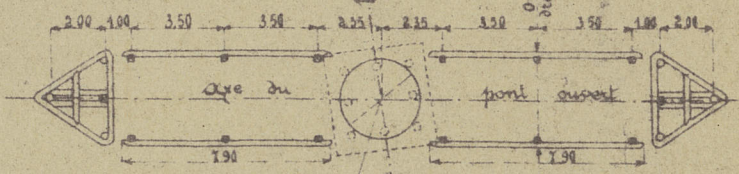
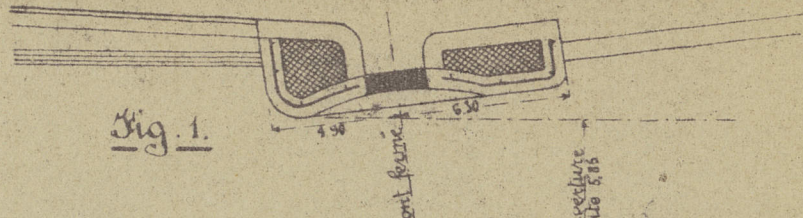


Fig. 2.

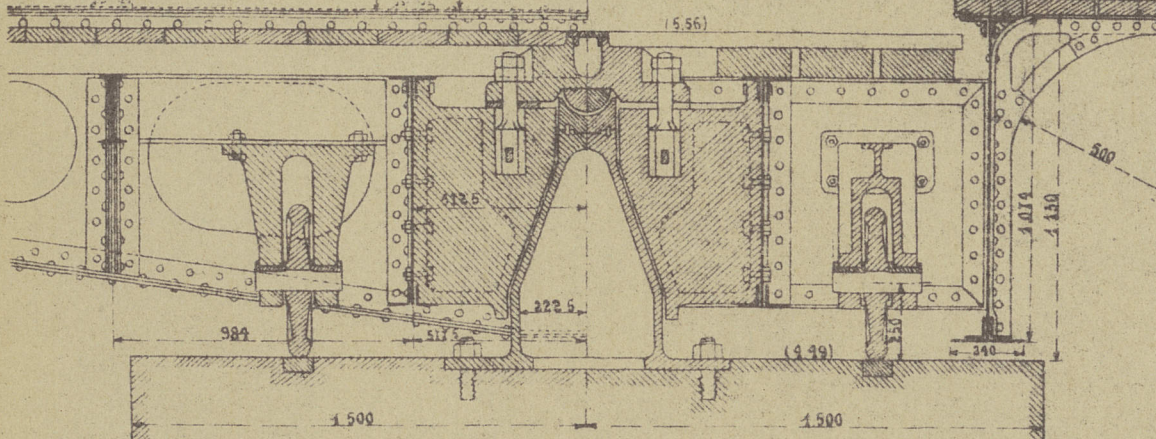
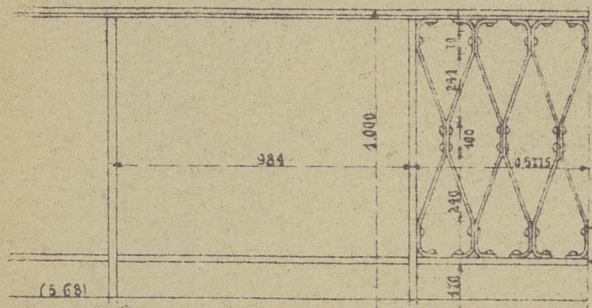


Fig. 3.

Fig. 4. Demi-Elevation

Fig. 5. Demi coupe longitudinale

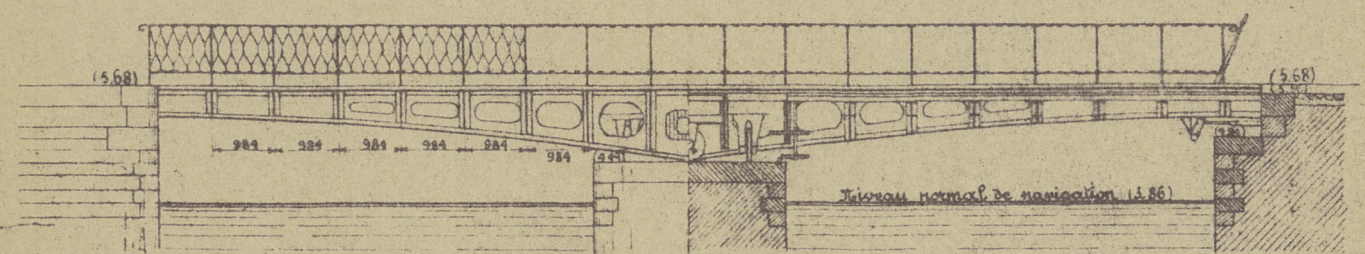
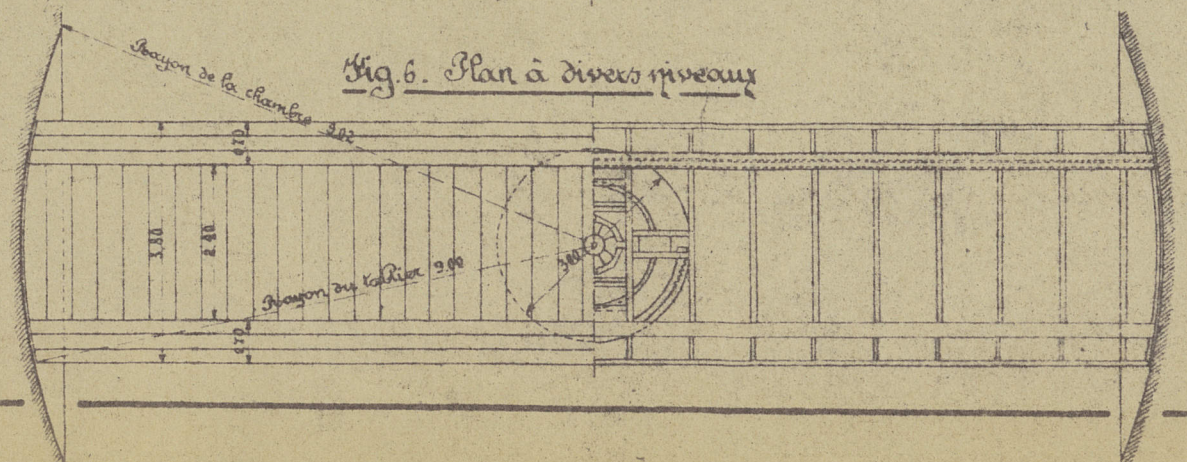


Fig. 6. Plan à divers niveaux





Pont rail tournant des écluses à Strasbourg (1926) Fig. 1. Elevation

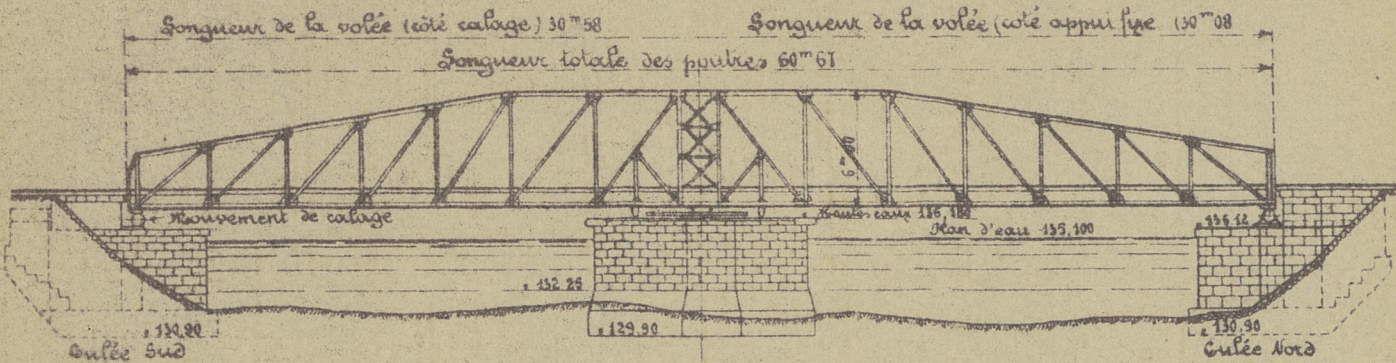


Fig. 2. Plan.

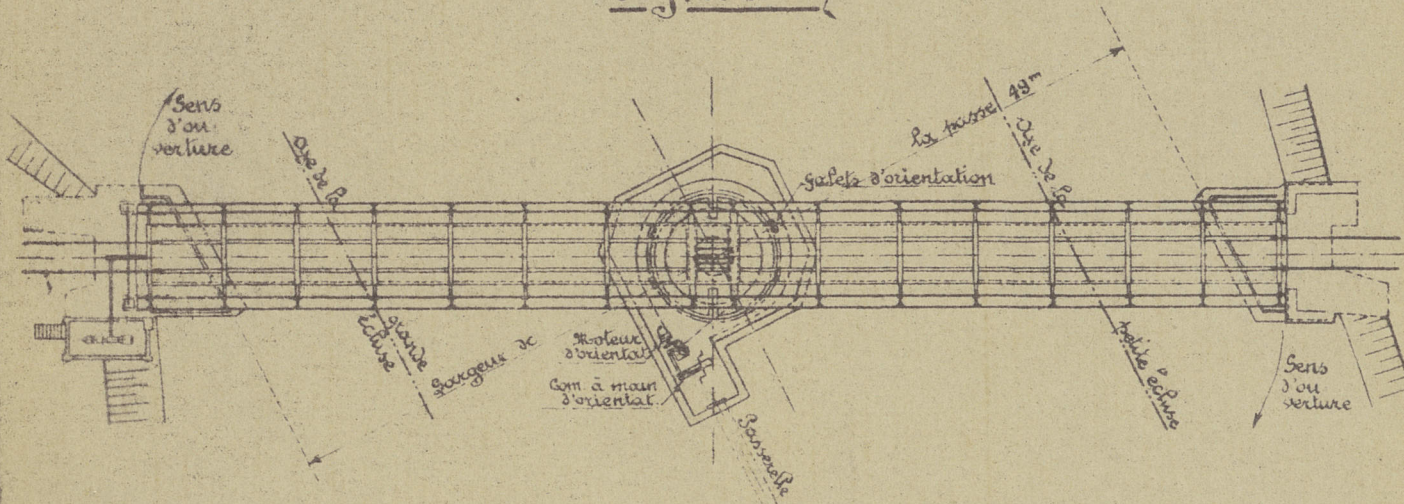


Fig. 5. Mécanisme d'orientation

Fig. 3. Coupe transversale

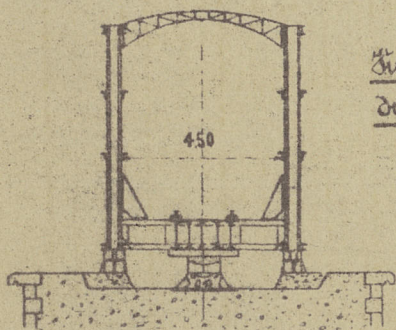


Fig. 4. Pivotal

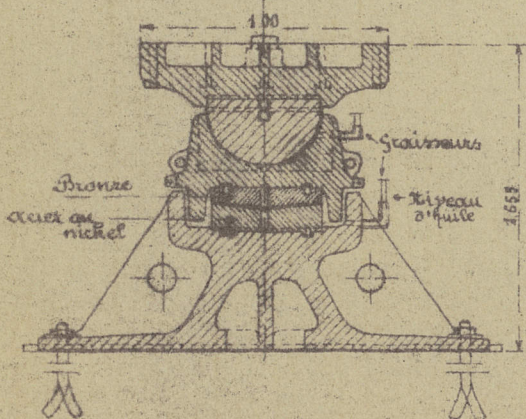


Fig. 7. Lignes latérales du mécanisme de calage

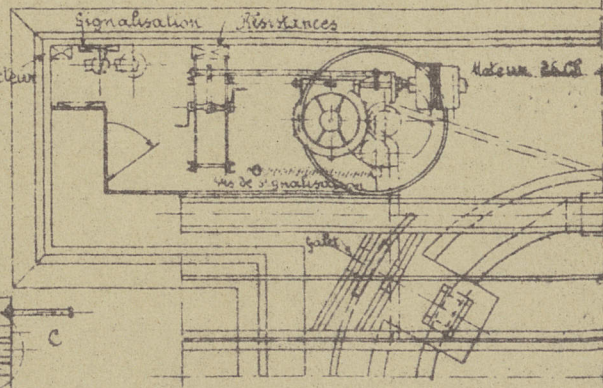
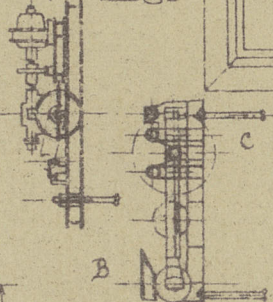
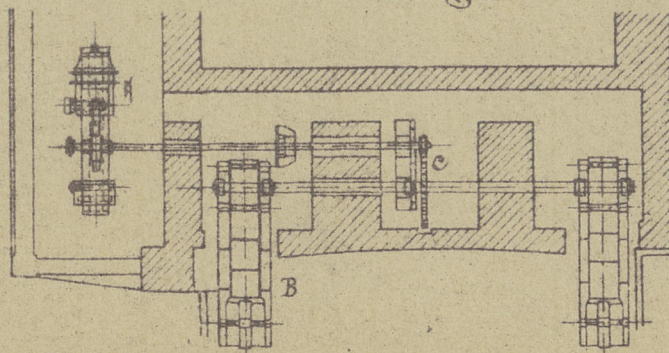


Fig. 6. Mécanisme de calage.





Pont rail tournant d'Hoofstade (1913)

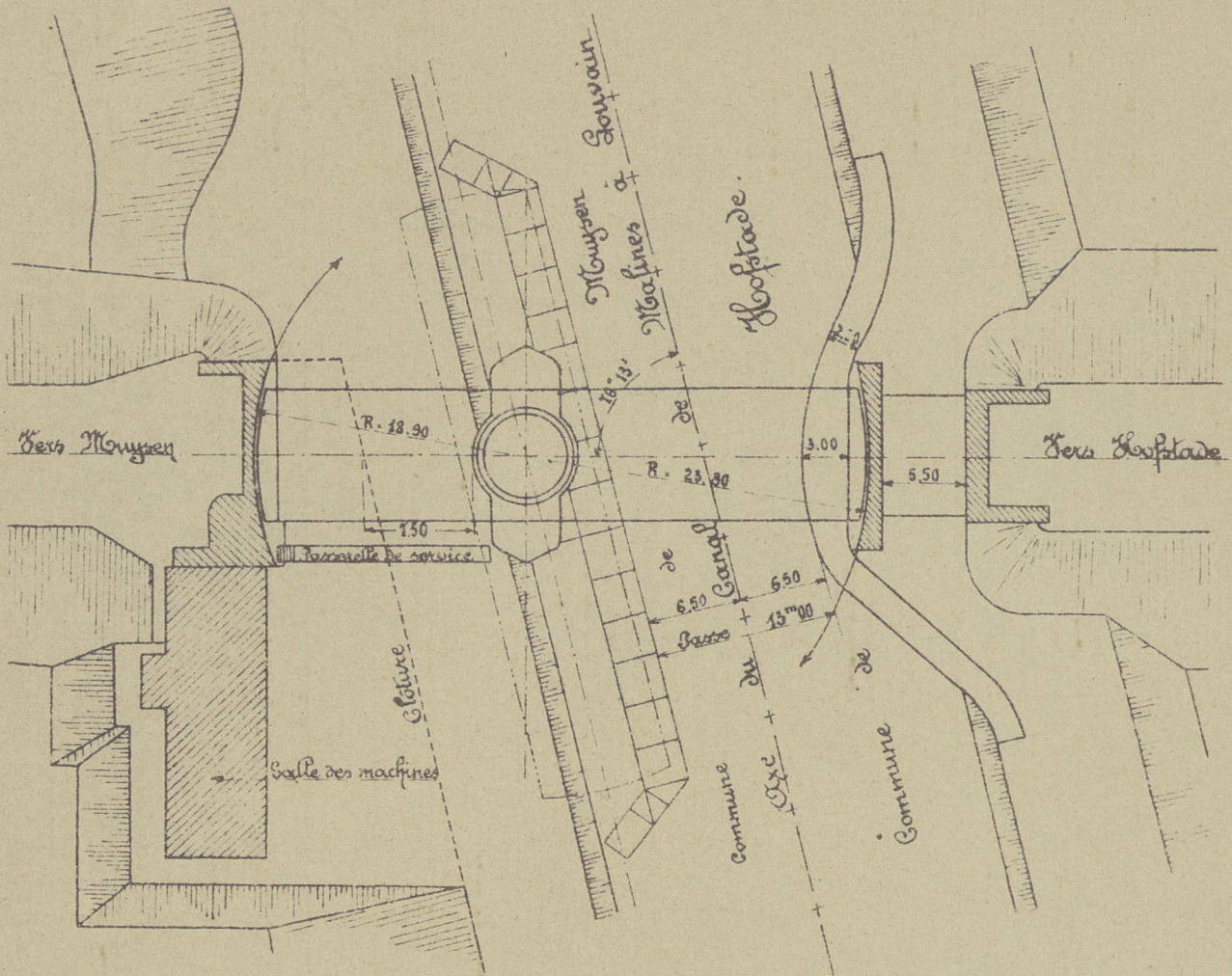


Fig. 1. Plan schématique.

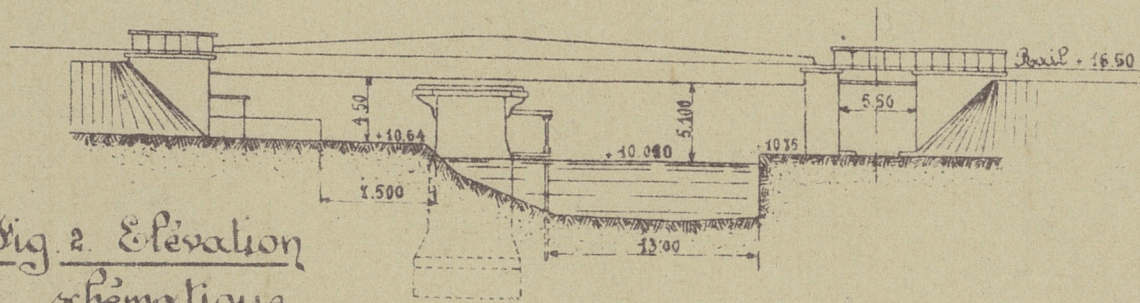


Fig. 2. Elevation schématique.

Fig. 3. Amortisseur hydropneumatique.

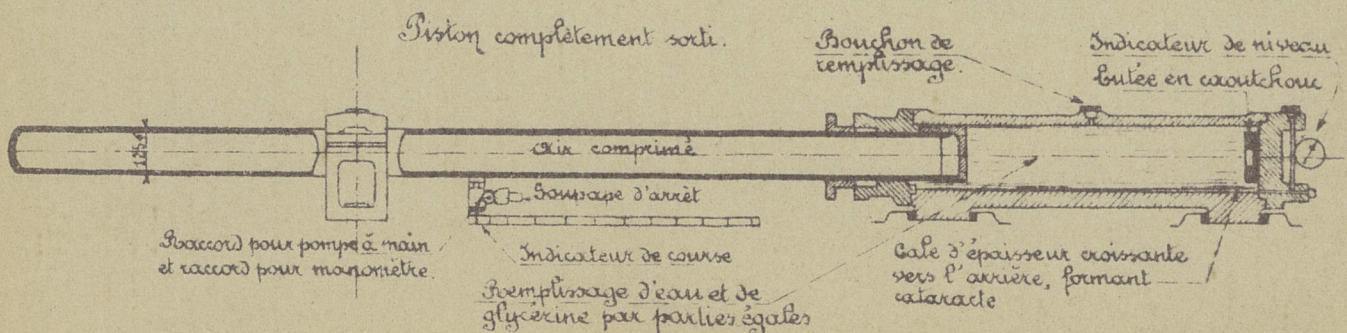




Fig. 4. Appui de voûte à rotule.

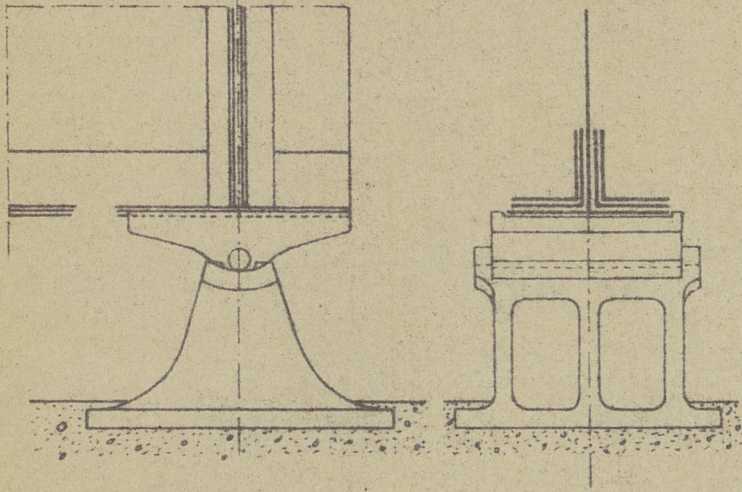


Fig. 7. Galets d'équilibre.

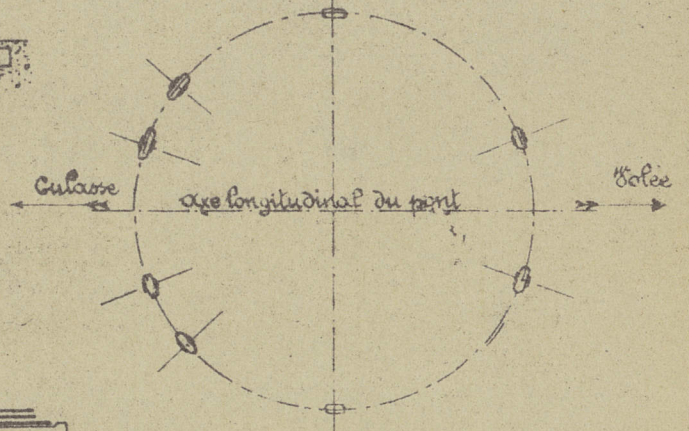
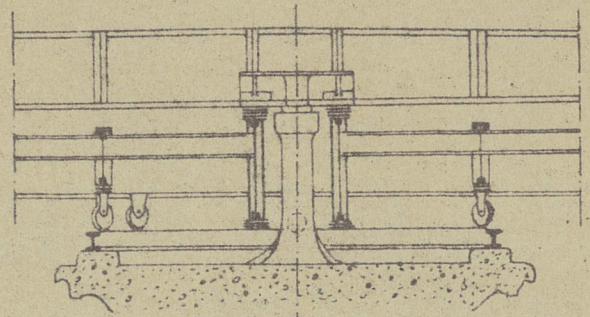


Fig. 5. Appui de culasse à effacement.

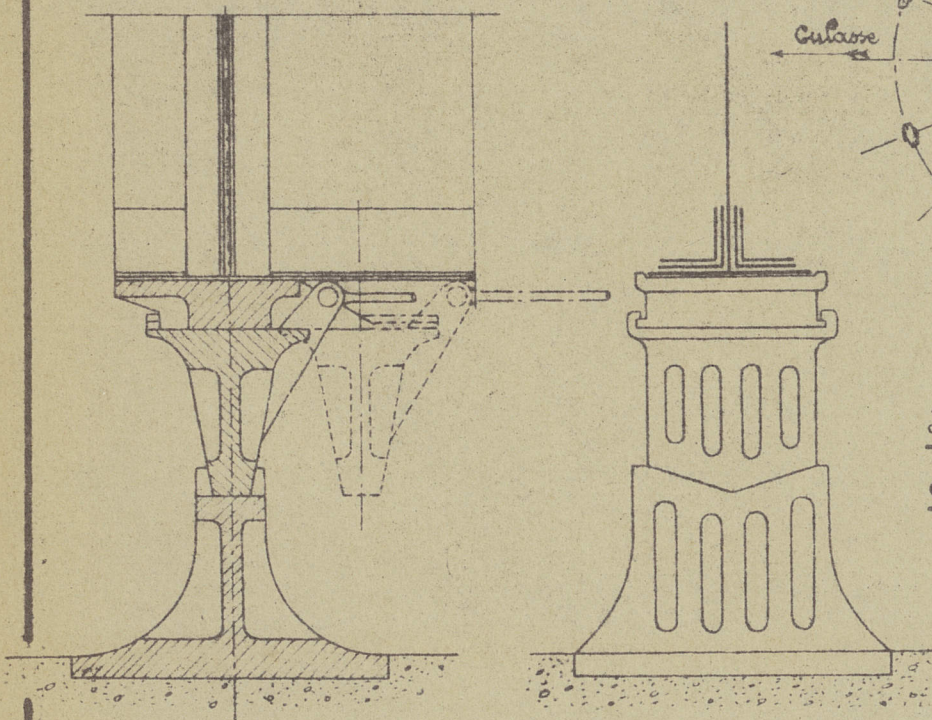
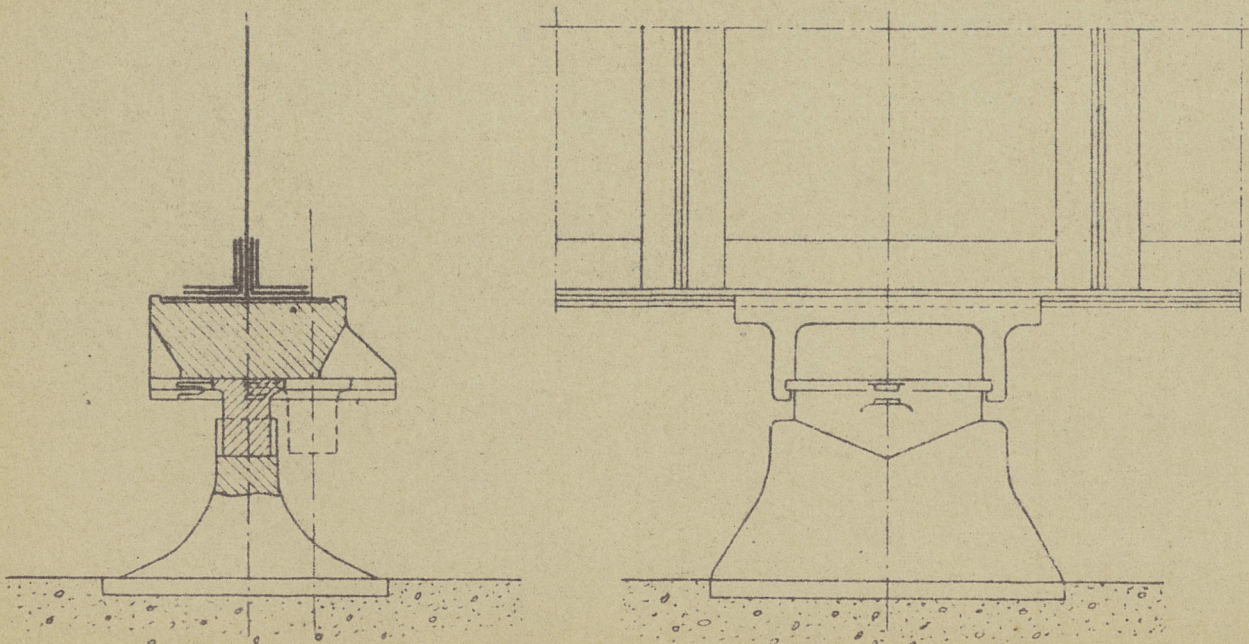


Fig. 6. Appui central à effacement.





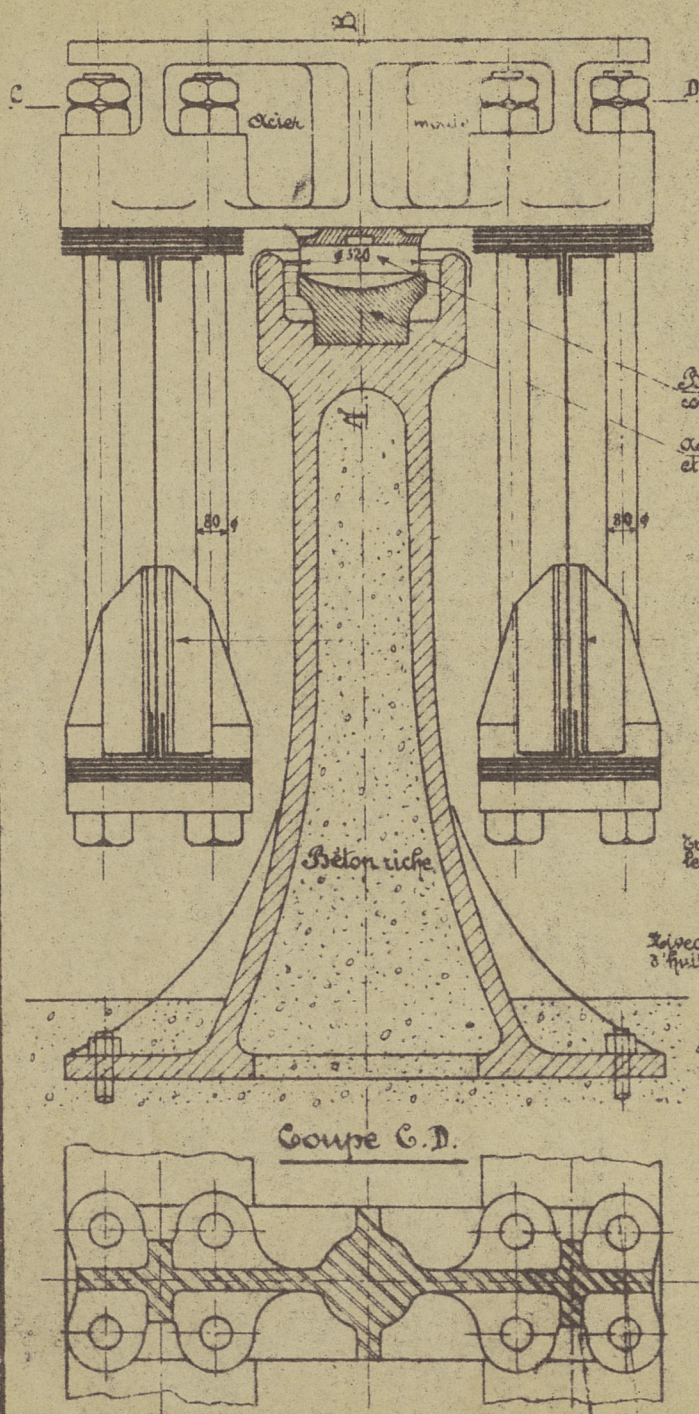
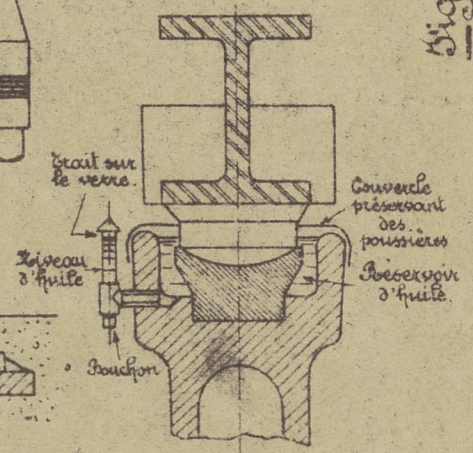


Fig. 8.  
Pivot  
et  
suspension

Bronze phosphoreux de composition spéciale  
Acier spécial comprimé et trempé

Coupe A.B.



Coupe C.D.

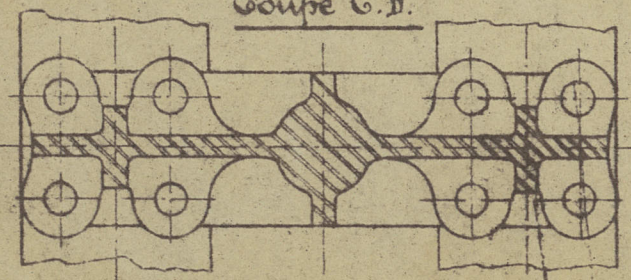
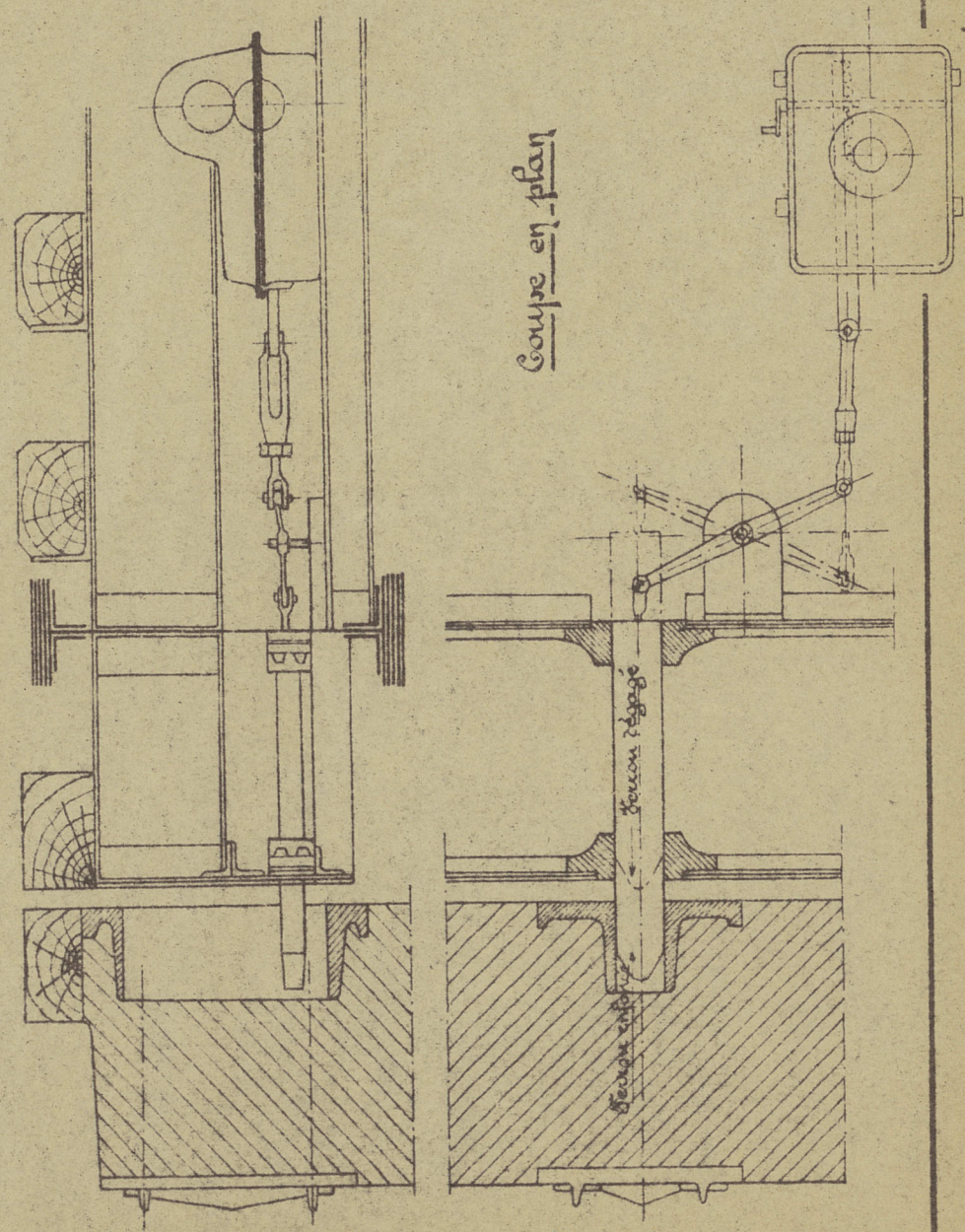


Fig. 9. Section.



Coupe en plan



Types de dispositifs de manoeuvre d'un pont  
à basculement à pivot.

tournant

Fig. 2.

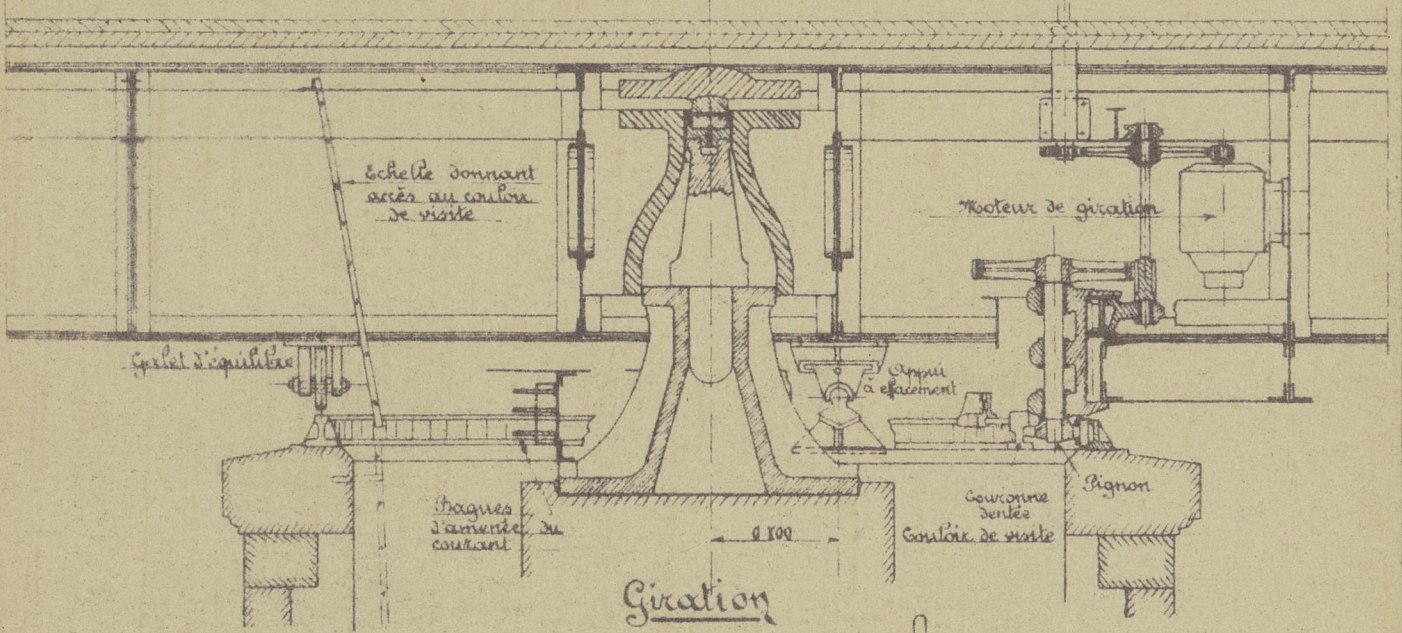


Fig. 4. Ferron à gâche oscillante.

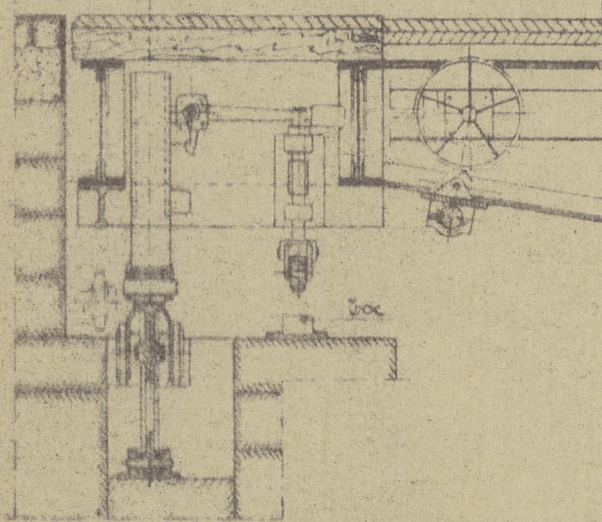


Fig. 1. Calage.

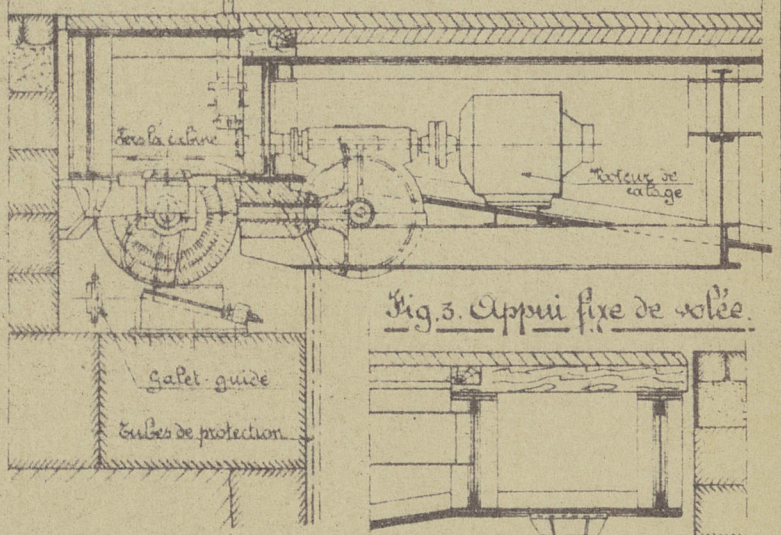


Fig. 3. Appui fixe de volée.

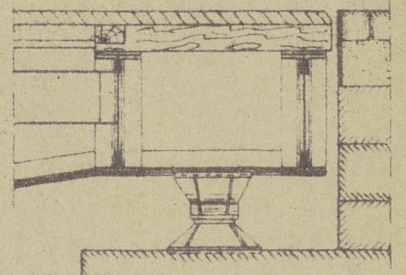
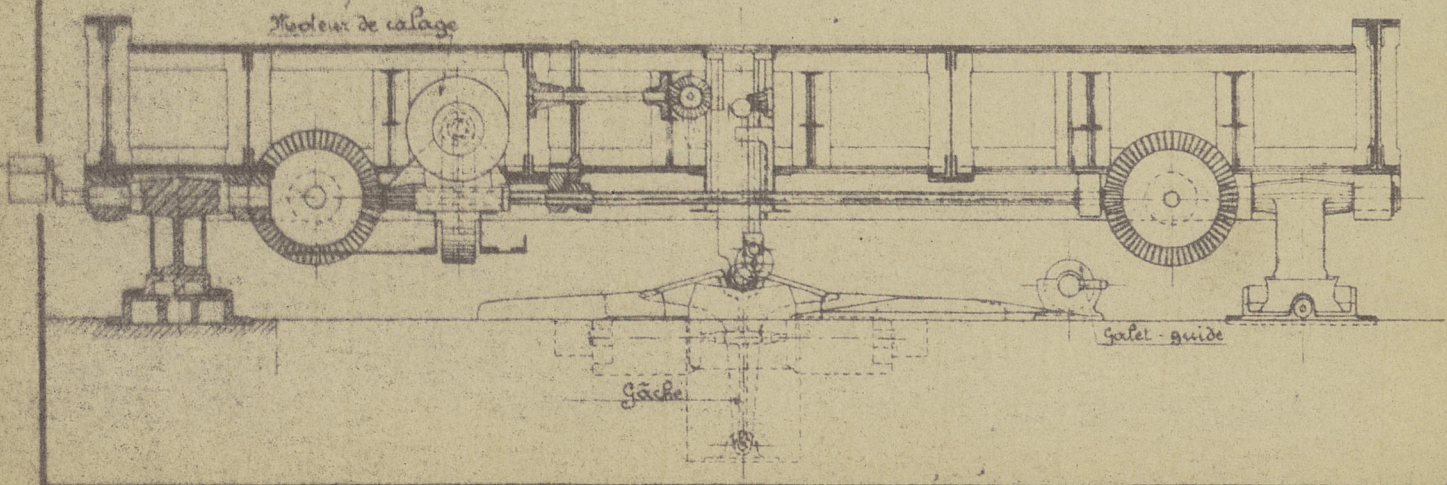


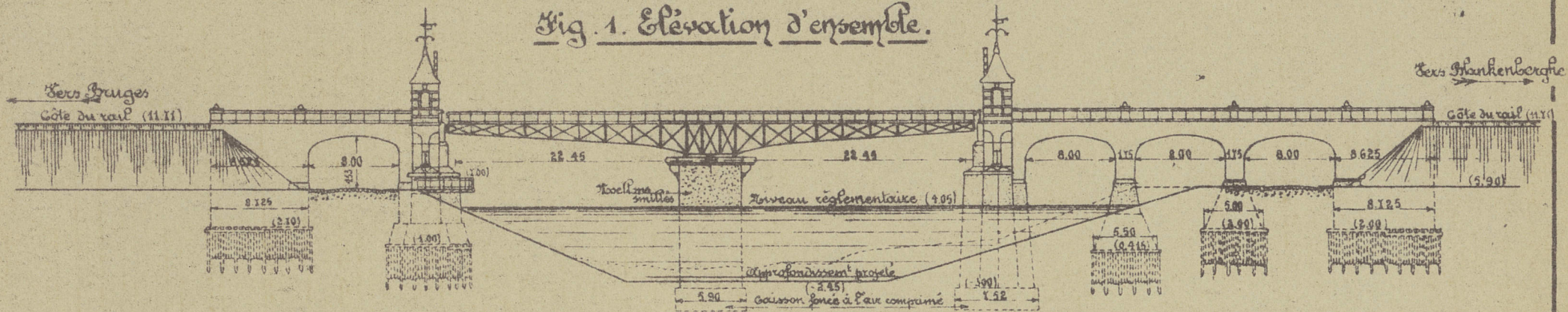
Fig. 5.



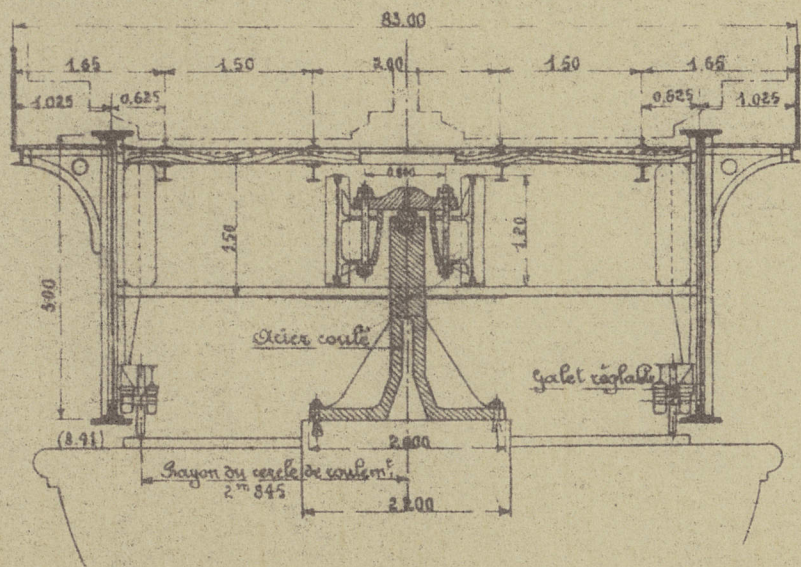


# Pont rail tournant de Bruges.

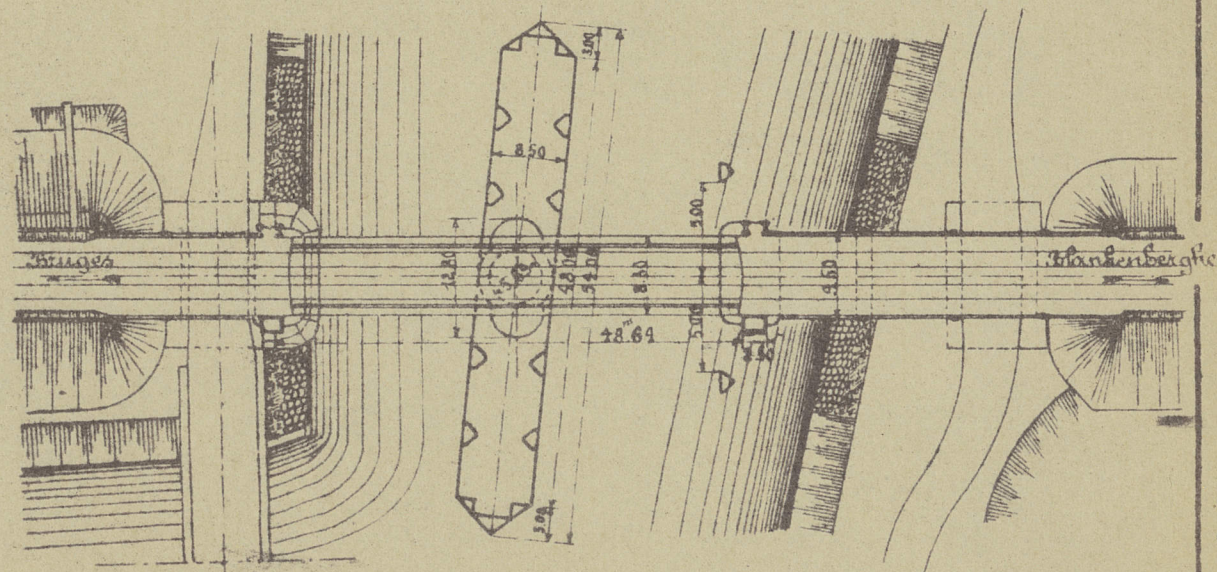
## Fig. 1. Elevation d'ensemble.



## Fig. 2. Coupe transversale du tablier et du pivot.



## Fig. 3. Plan d'ensemble.



Blanche ?



Fig. 1. Sentille à graissage  
sous pression du pont de  
Verdonck

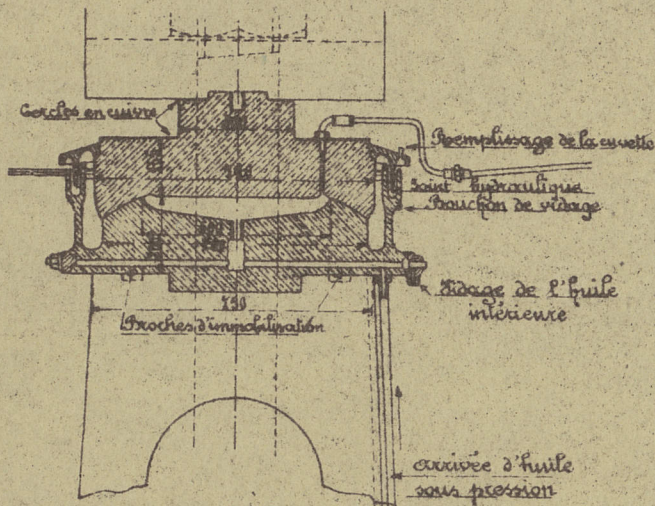


Fig. 2. Pivot à vis  
(pont sur le Canal  
grande à Trieste.)

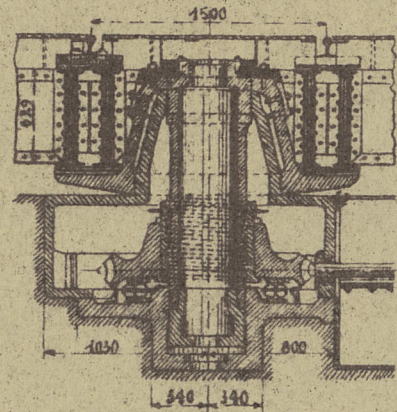


Fig. 4. Pont sur la Rurpe  
à Elsfleth en Allemagne.

Fig. a.

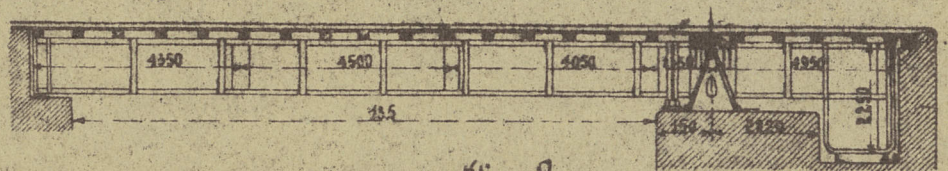


Fig. 3. Pivot  
à verin hydraulique  
(Pont de Hambourg)

Fig. a.

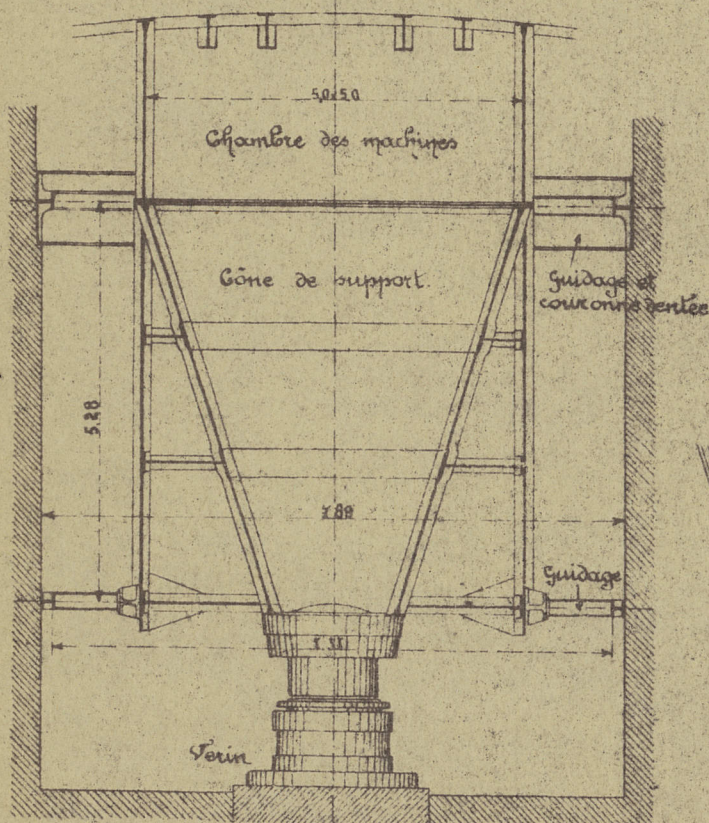


Fig. b.

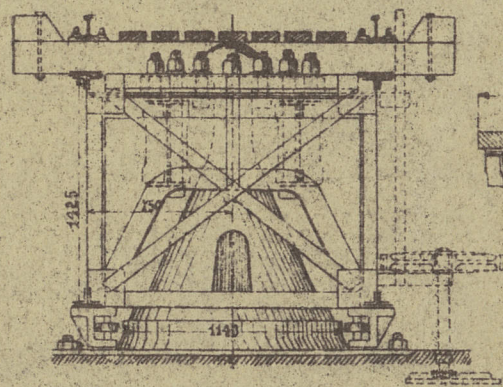
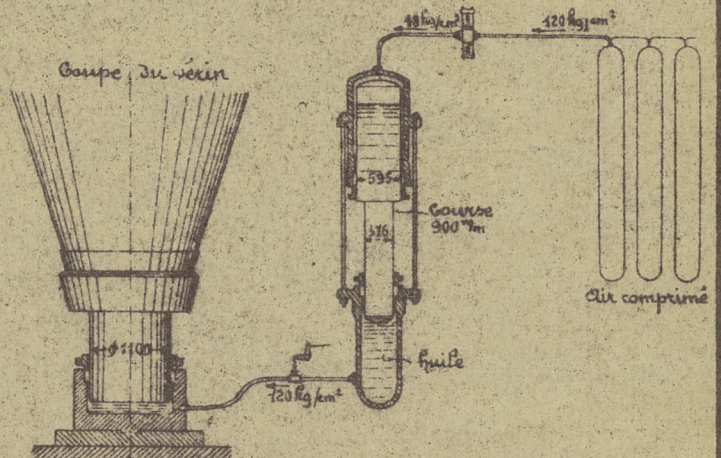


Fig. c.



Fig. b.





Pont rail tournant sur couronnes de galets.

Fig. 1. à Aigues-Mortes.

Fig. a.

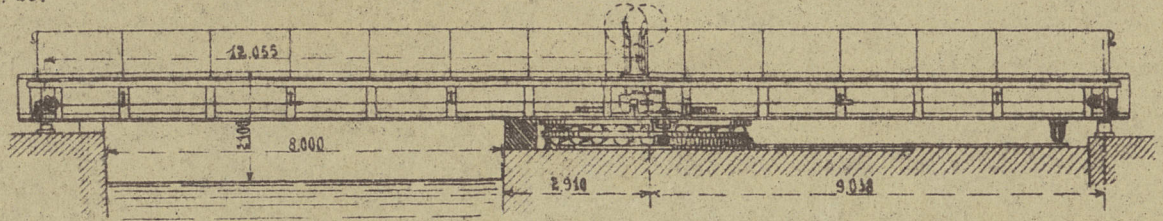


Fig. b.

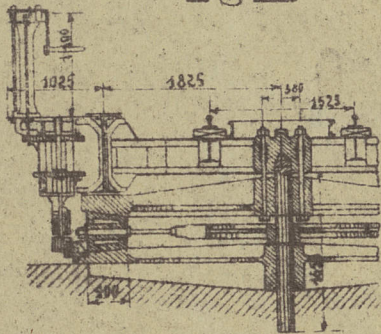


Fig. 2. Sur la Penfeld à Brest.

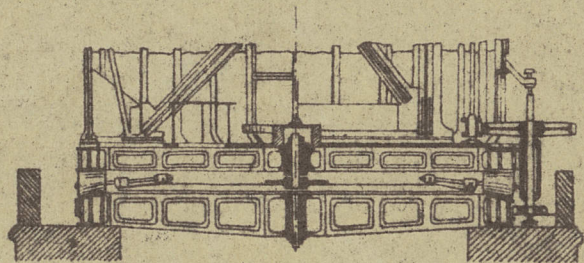
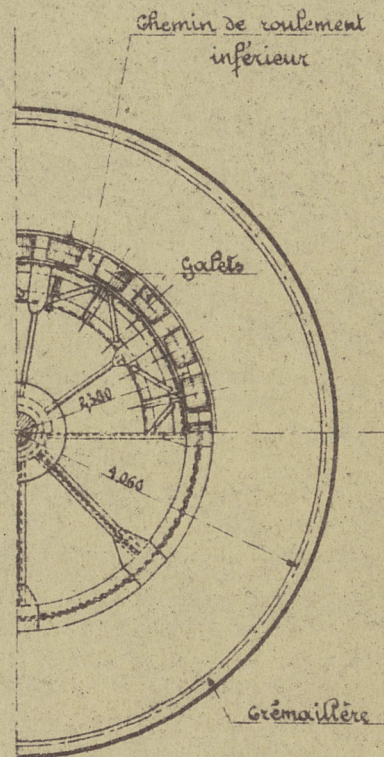
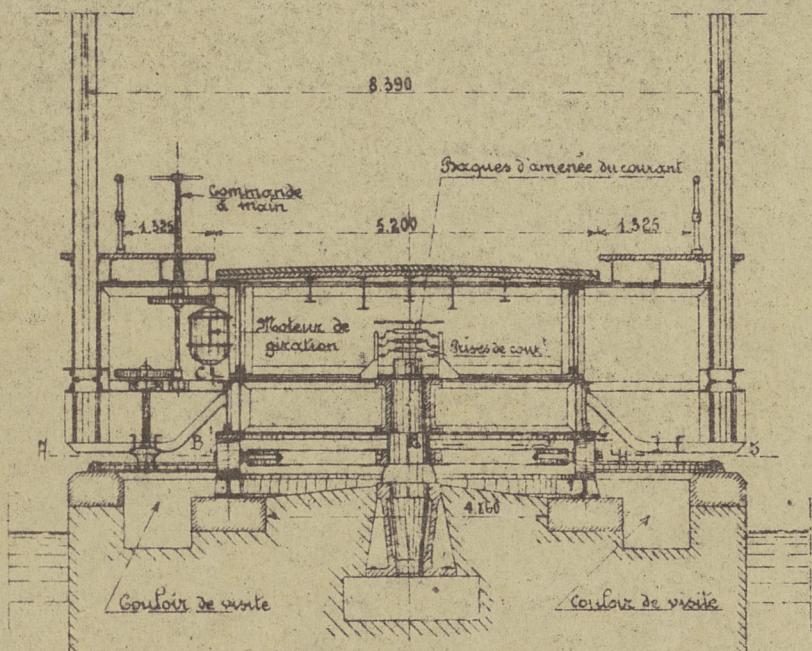


Fig. 3. Type.

Coupe transversale au droit du pivot.

Coupe A B C D E F G H J





Dispositifs de calage et de verrouillage.

Fig. 1. Came.

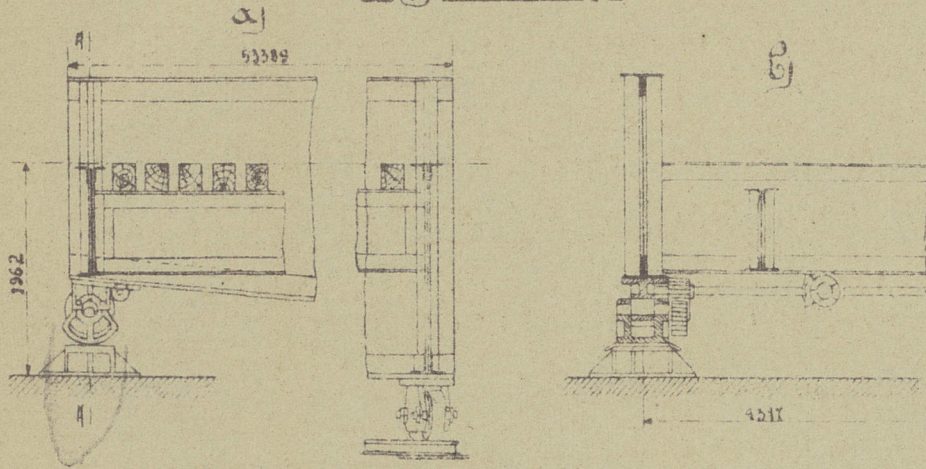


Fig. 2. Verrouil-  
lage d'amrissage.

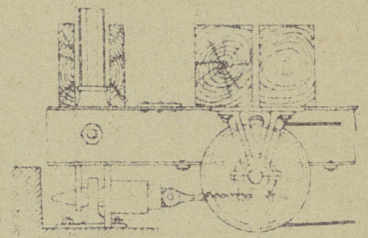


Fig. 3. Coin à rouleaux et verrou glissant

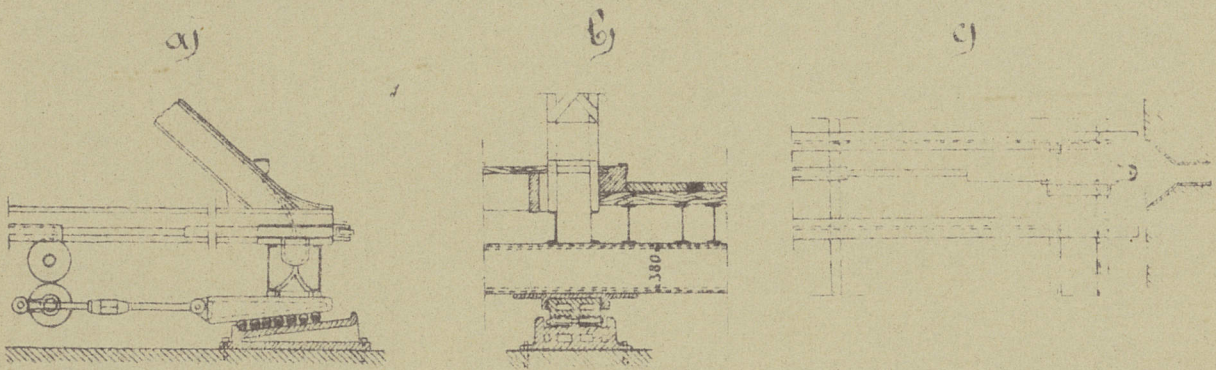


Fig. 4. Calage à vis

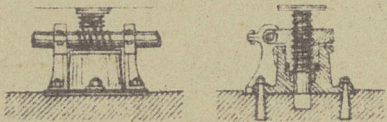


Fig. 5. Coin glissant

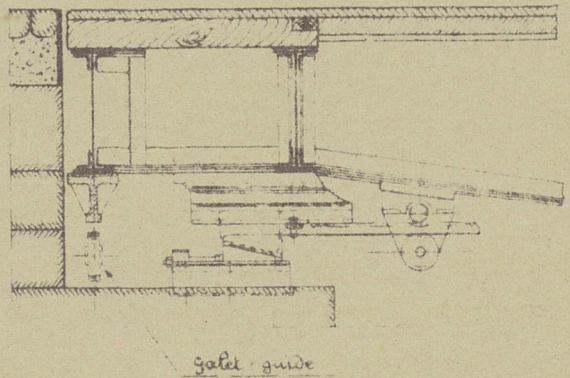
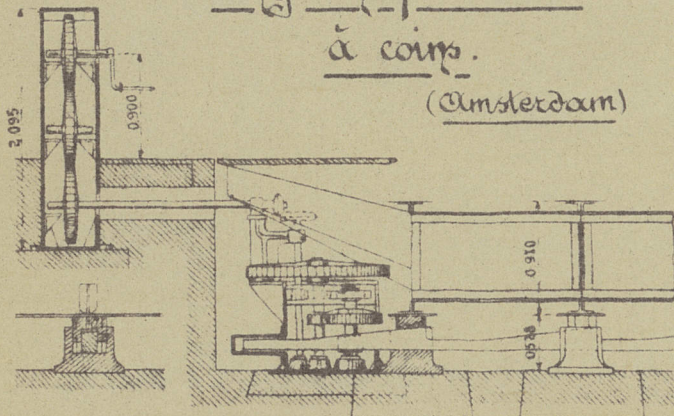


Fig. 6. Calage simultané des  
longerons par barre  
à coins.

(Amsterdam)





Double pont tournant de Wilhelmshafen.

Fig. 1. Elevation.

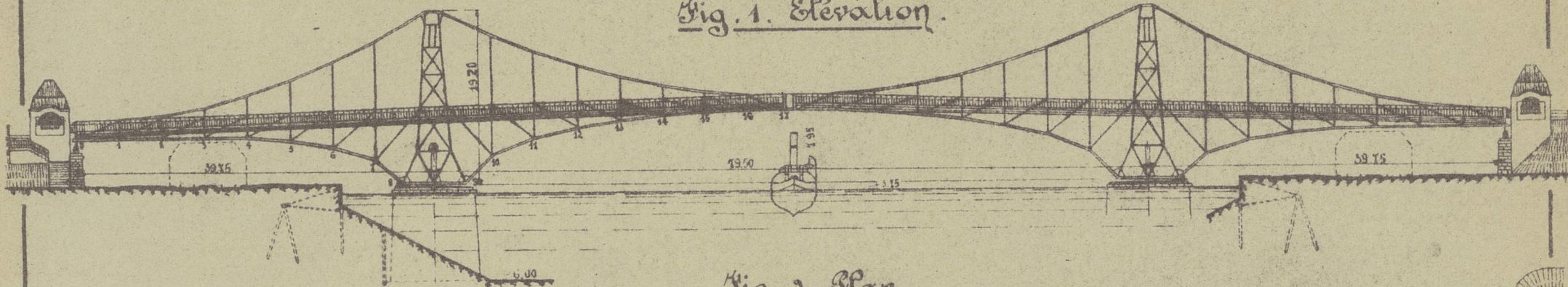


Fig. 2. Plan

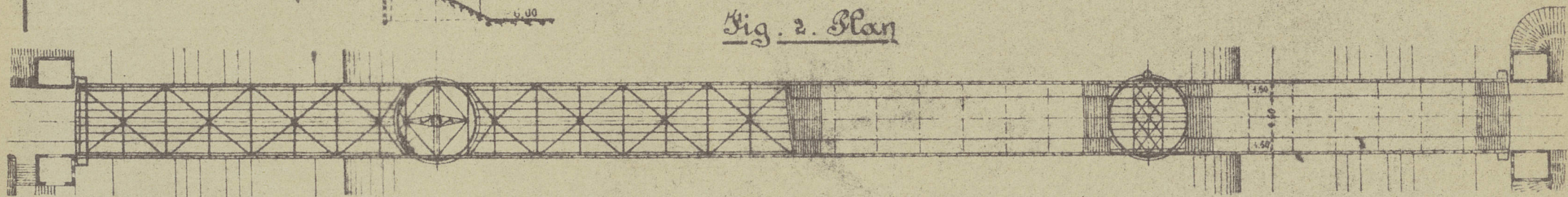


Fig. 4. Calage à vis et ancrage de culasse

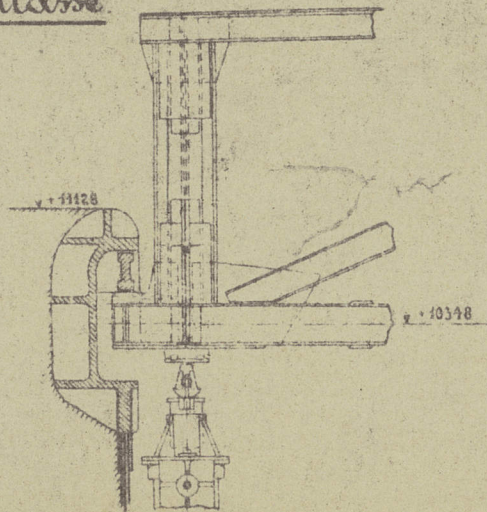


Fig. 5. Ferronnillage à la jonction des volées (fragment central)

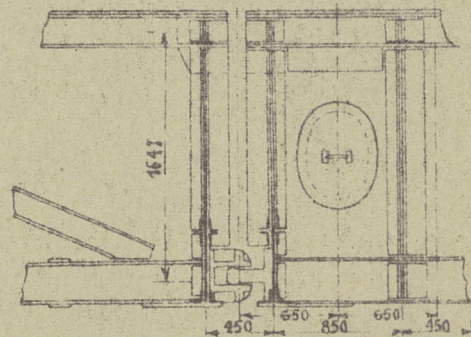


Fig. 3.  
Coupe  
transversale

