

# ATLAS

DE LA

## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE.

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**1<sup>re</sup> ANNÉE.**

**4<sup>me</sup> LIVRAISON.**

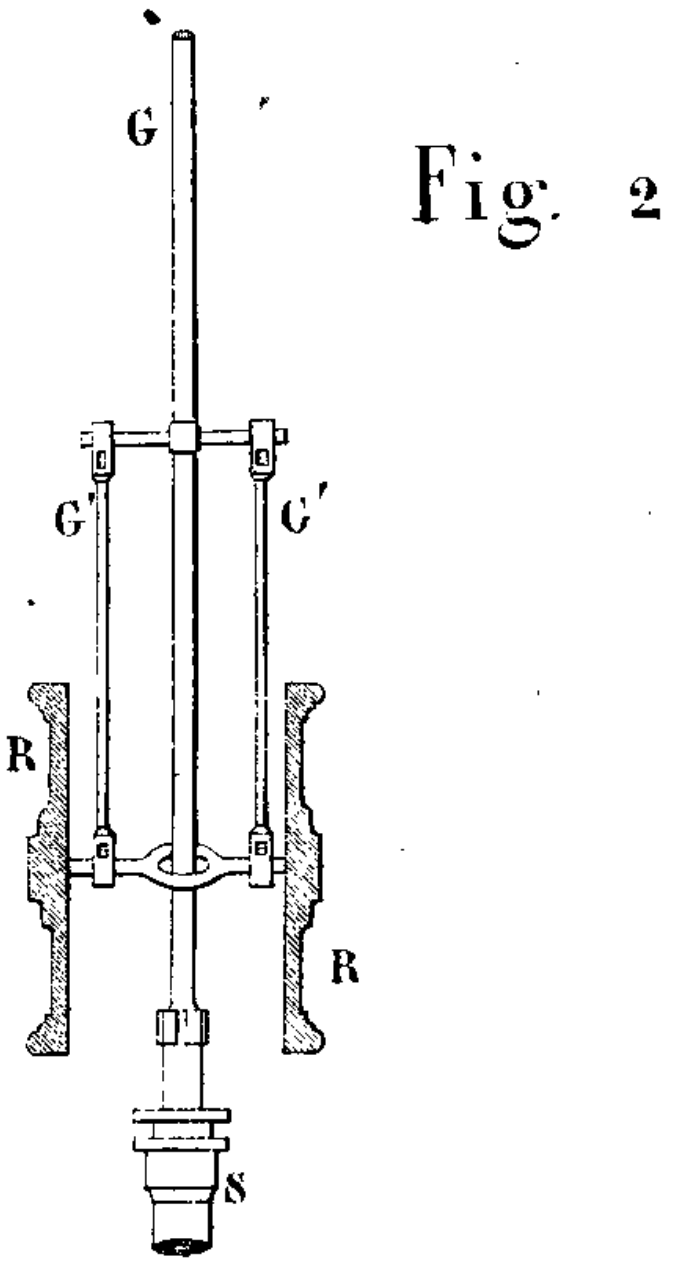
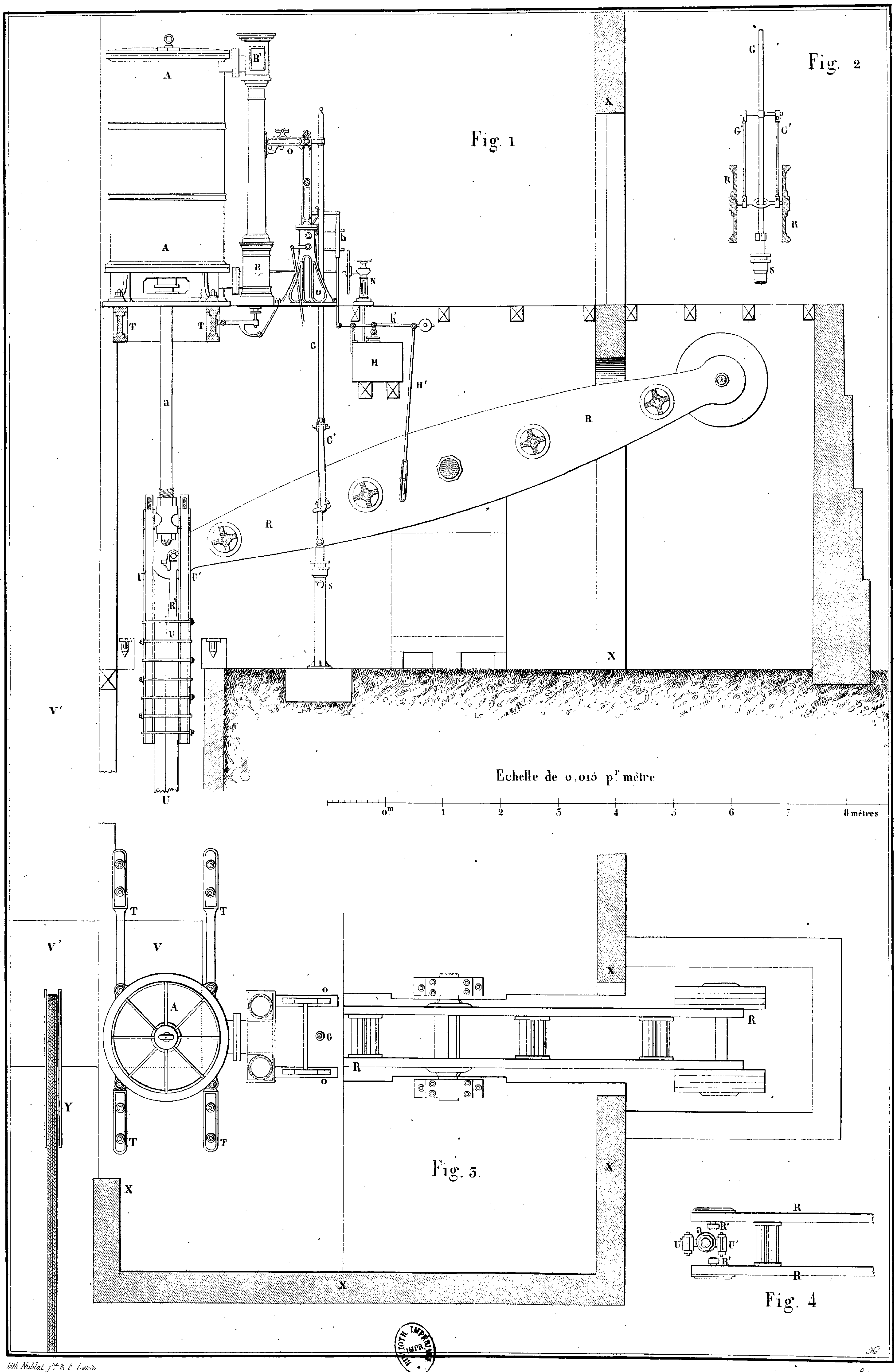
**Avril, Mai, Juin.**

**1856.**



SAINT-ÉTIENNE, IMPRIMERIE DE THÉOLIER AÎNÉ,  
Places de l'Hôtel-de-Ville, 13,  
et du Marché, 1.





Echelle de 0,015 p<sup>r</sup> mètre

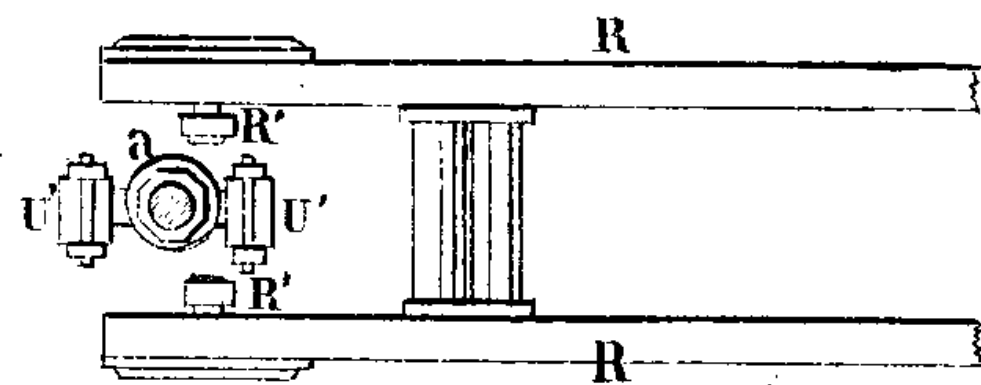
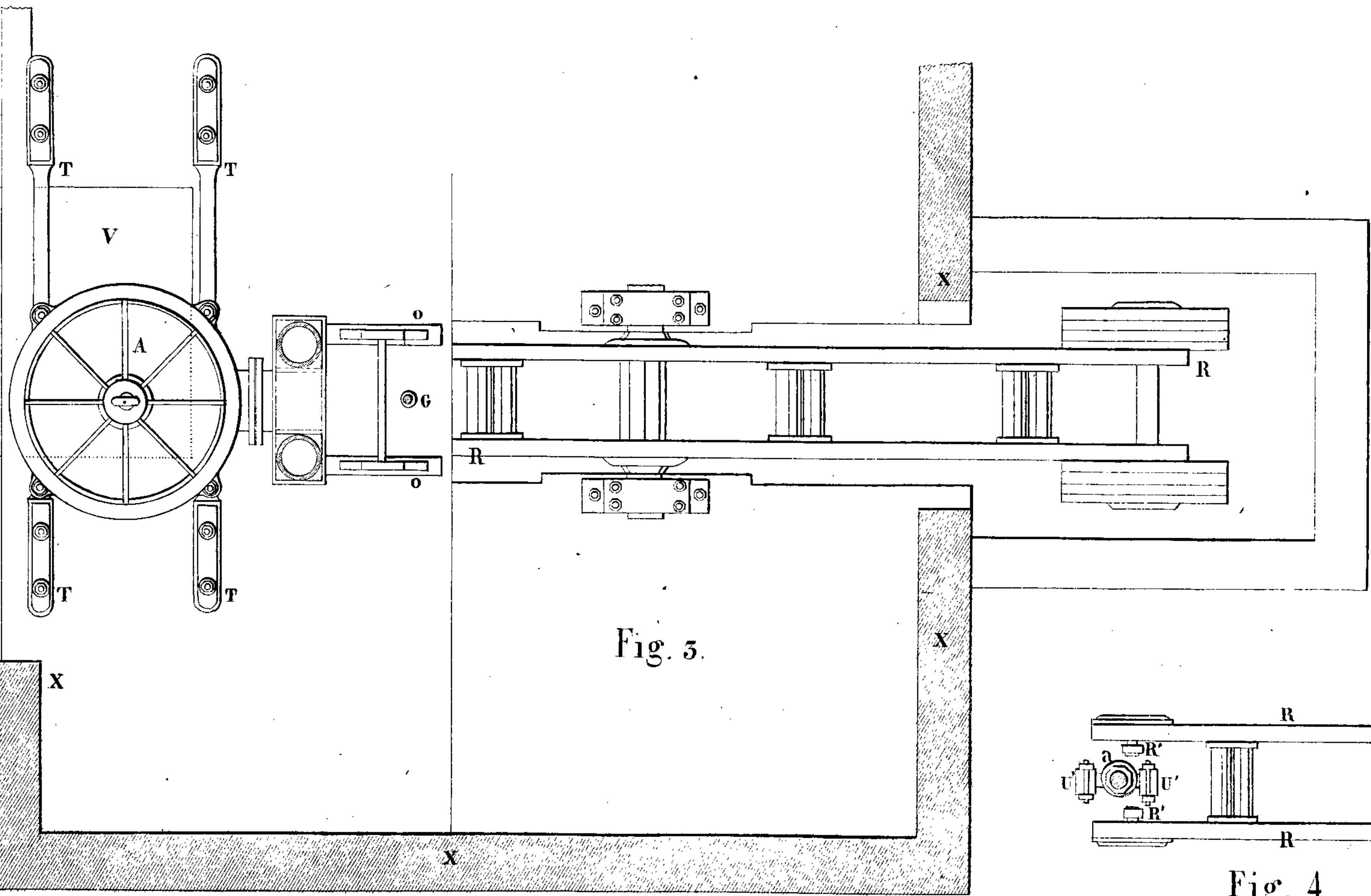


Fig. 5.

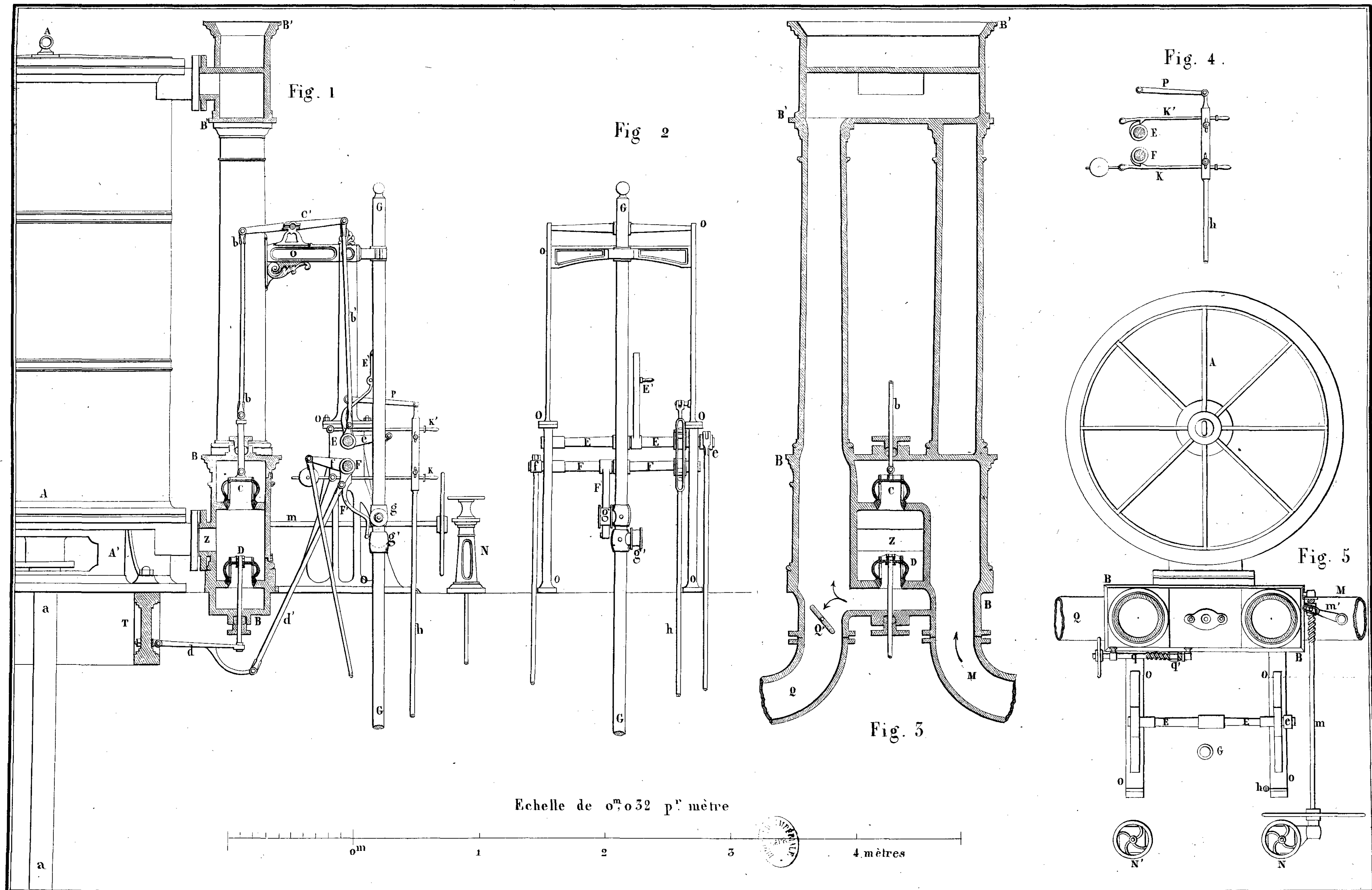
*Rich Nublat j<sup>re</sup> & F. Lantz*

Baire.

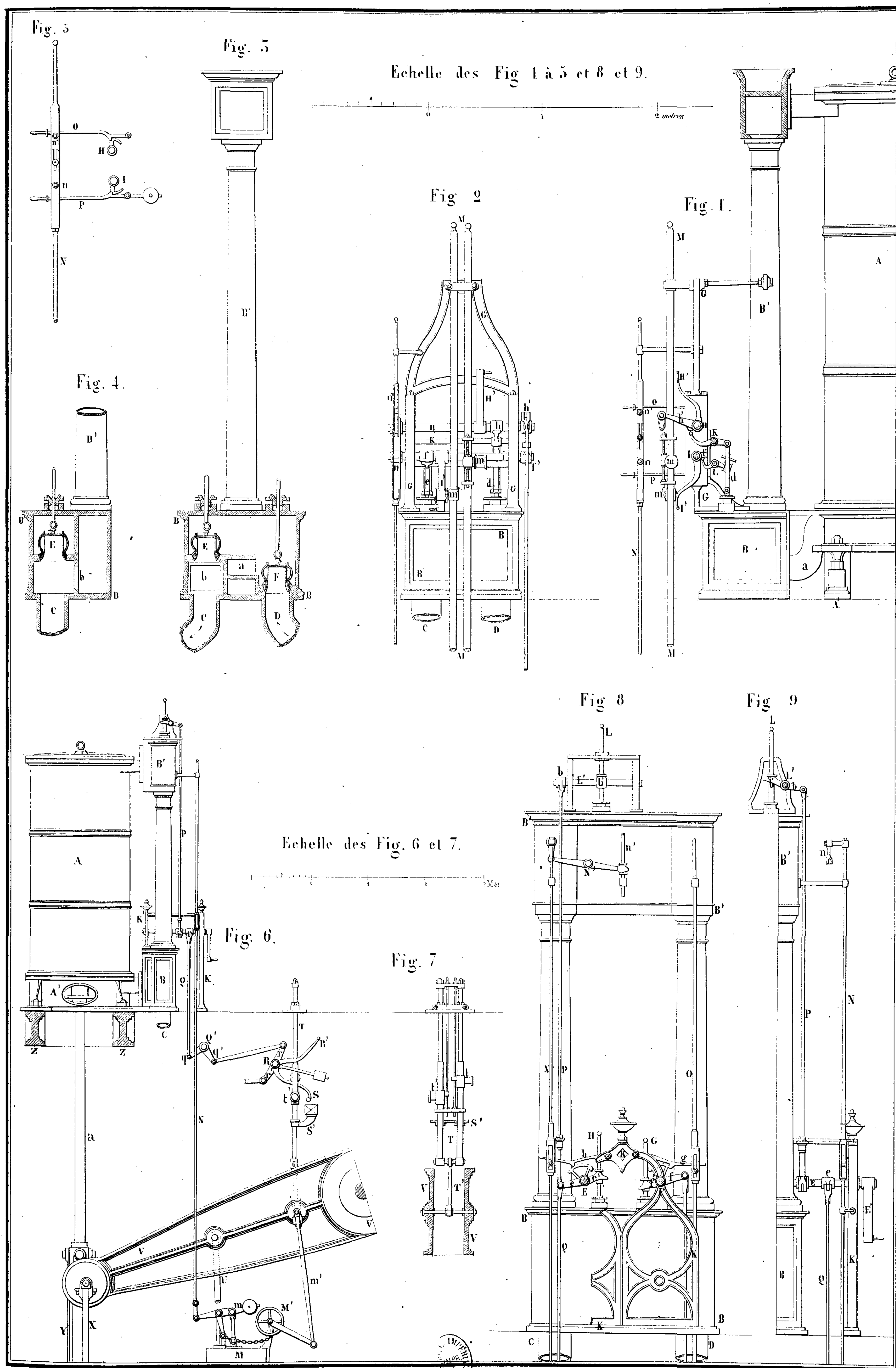
V. 2935  
Fol.

⑥

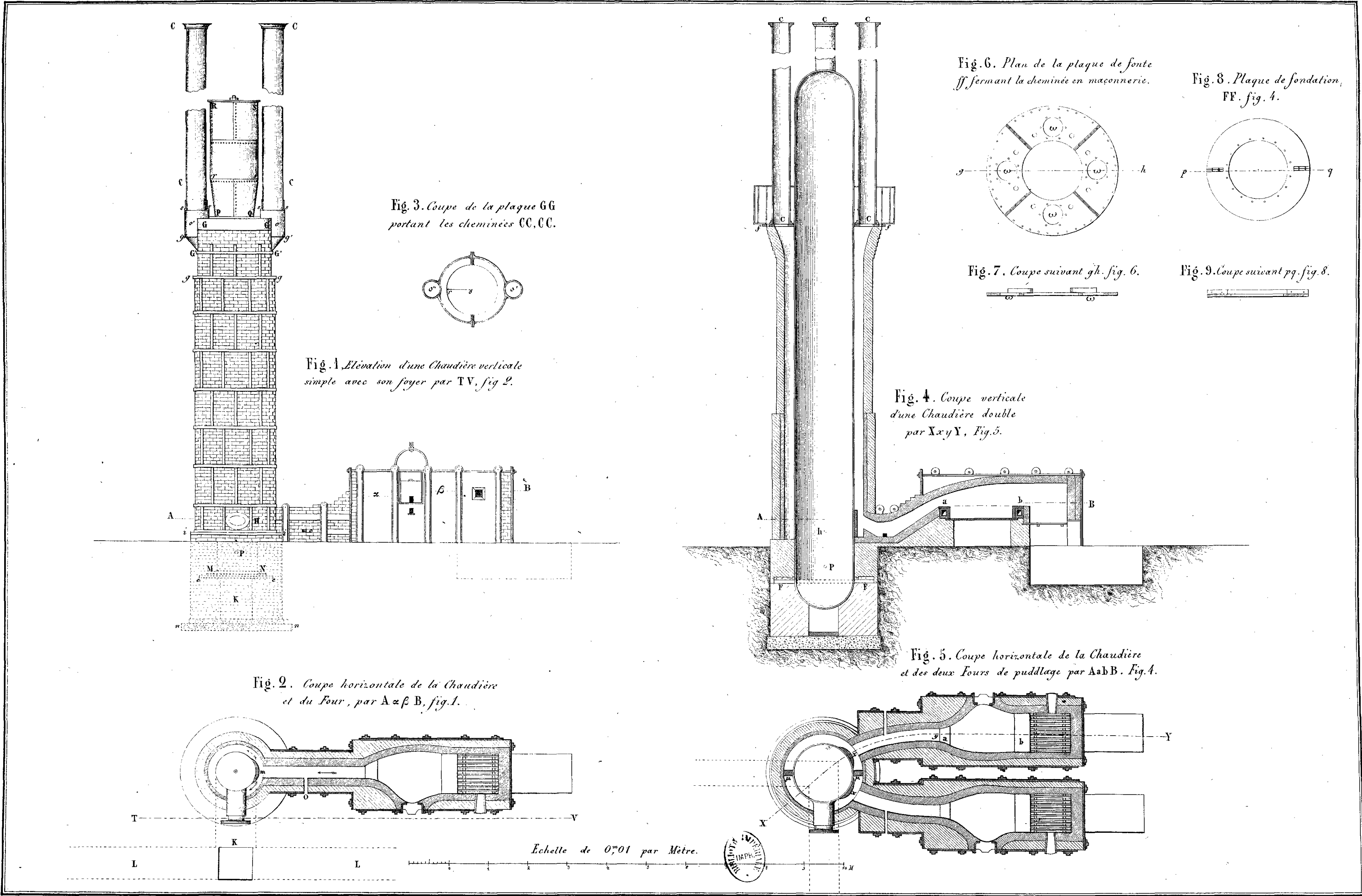












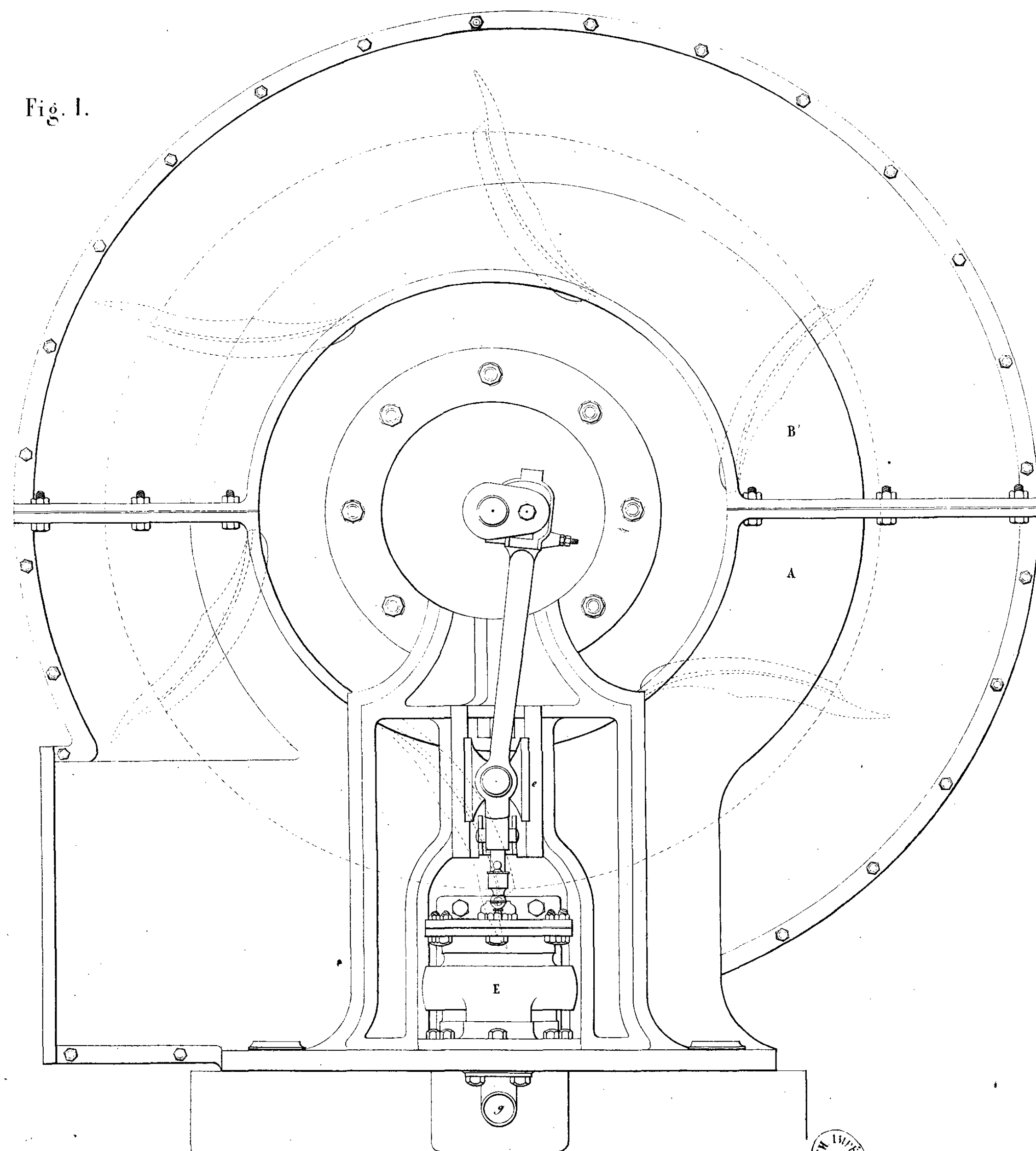


# VENTILATEUR.

M.M. Mazeline frères breveté au Havre.

Pl. V.

Fig. 1.

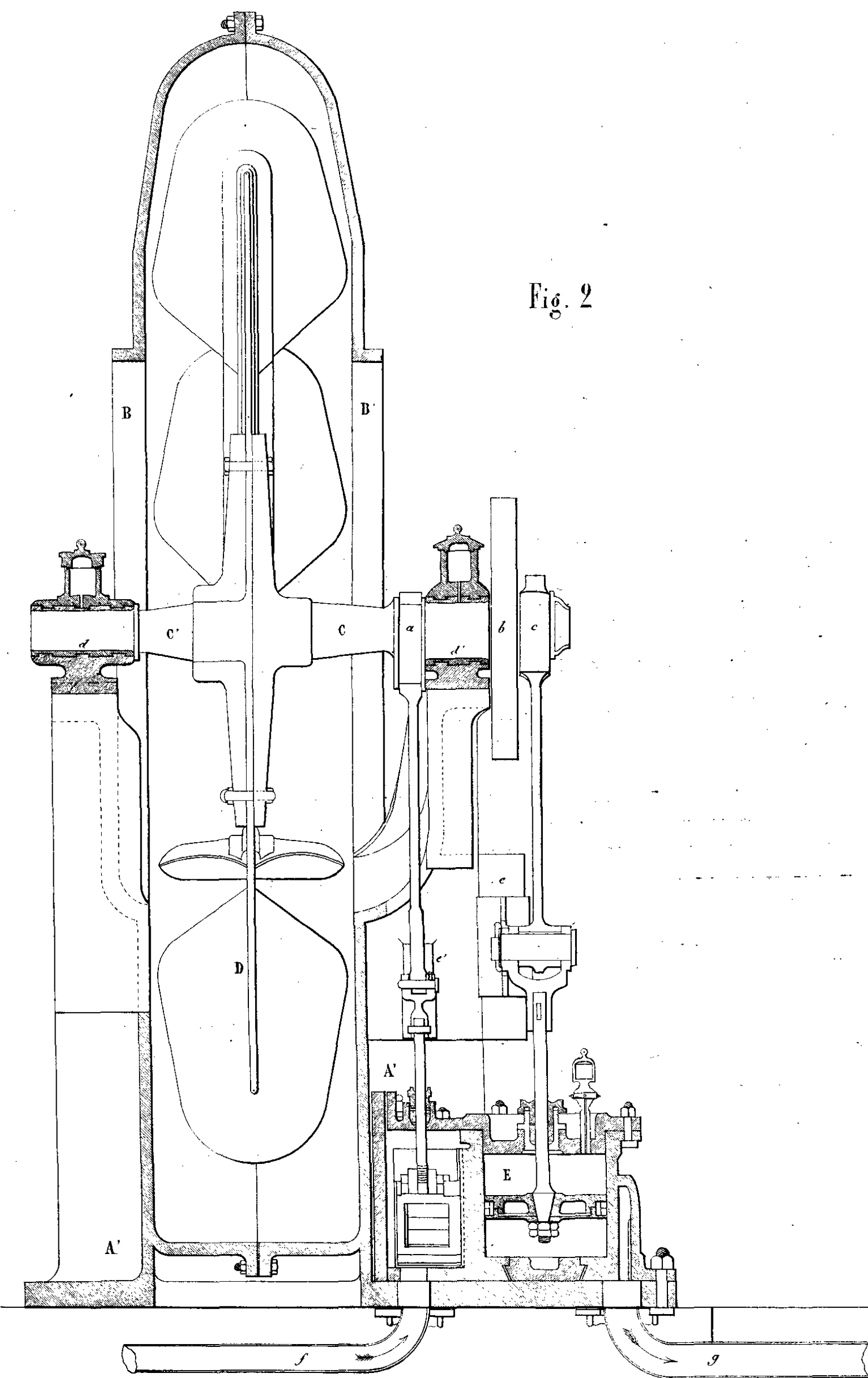


Echelle



5 mètres

Fig. 2



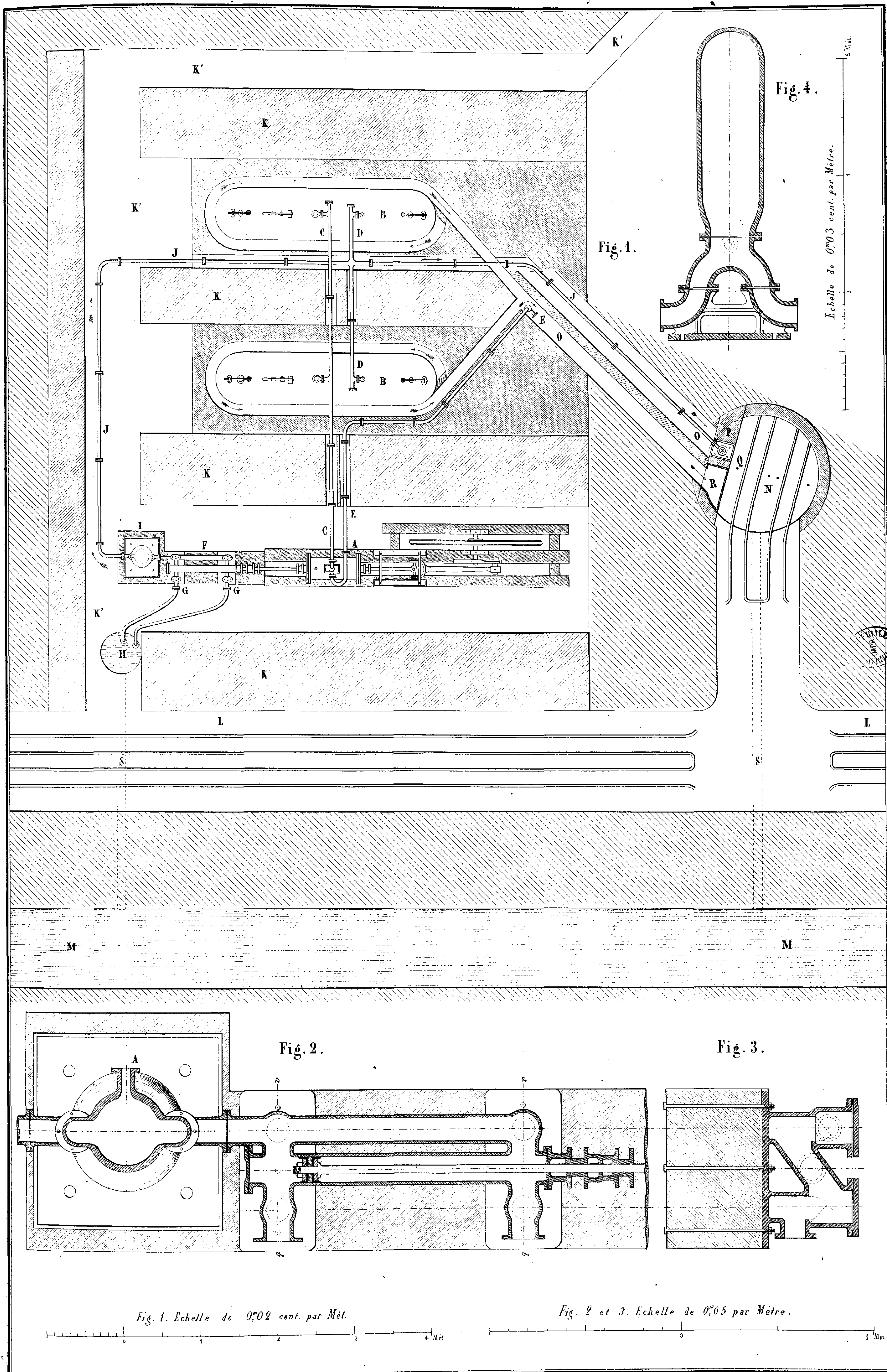
Lith. Nublet J<sup>re</sup> et F<sup>re</sup> Lantz.



# MACHINE D'ÉPUISEMENT A L'INTÉRIEUR DU Puits MONTEERRAD.

Concession de Roche-la-Molière et Firminy.

PL. VI.





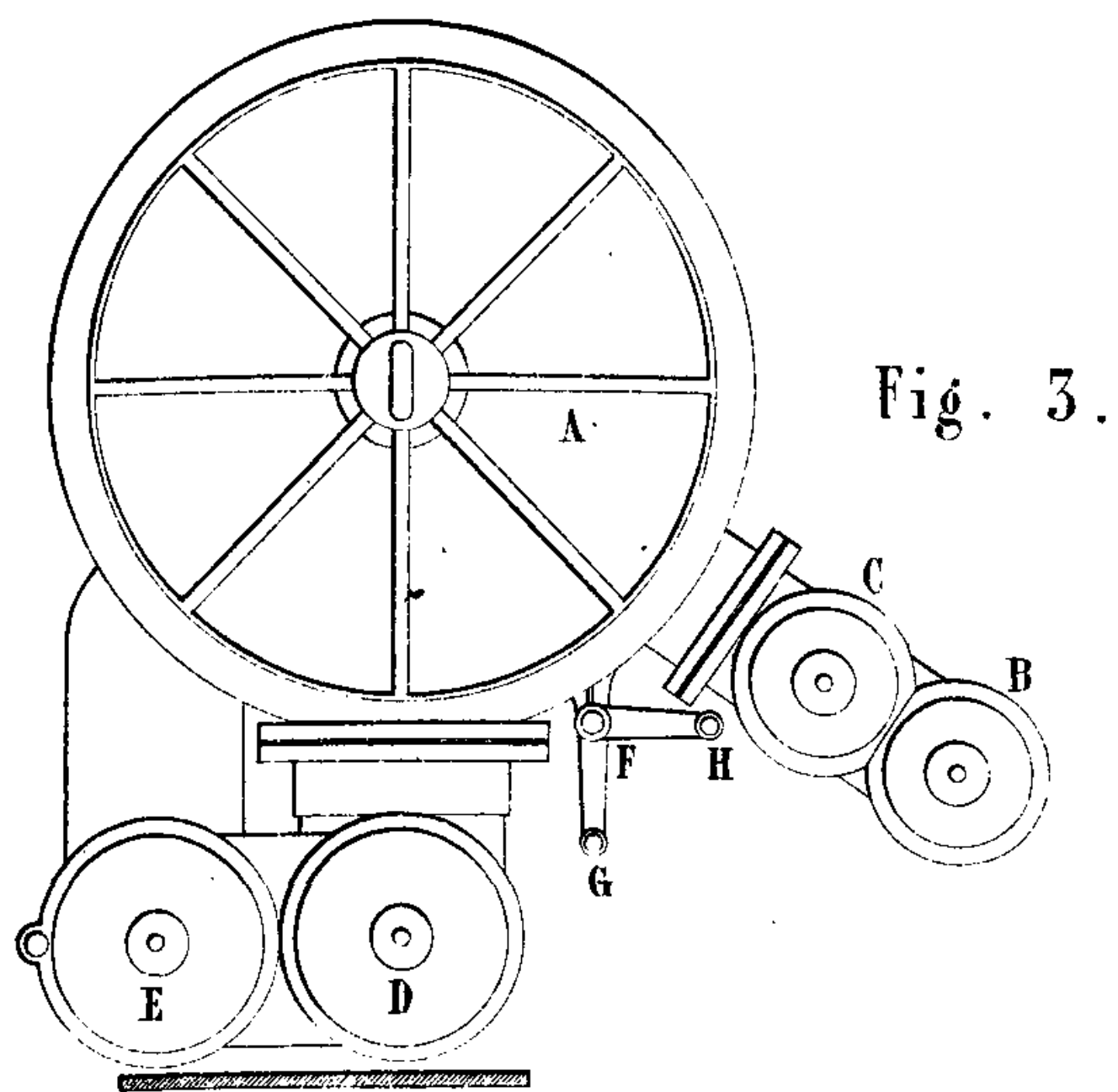


Fig. 3.

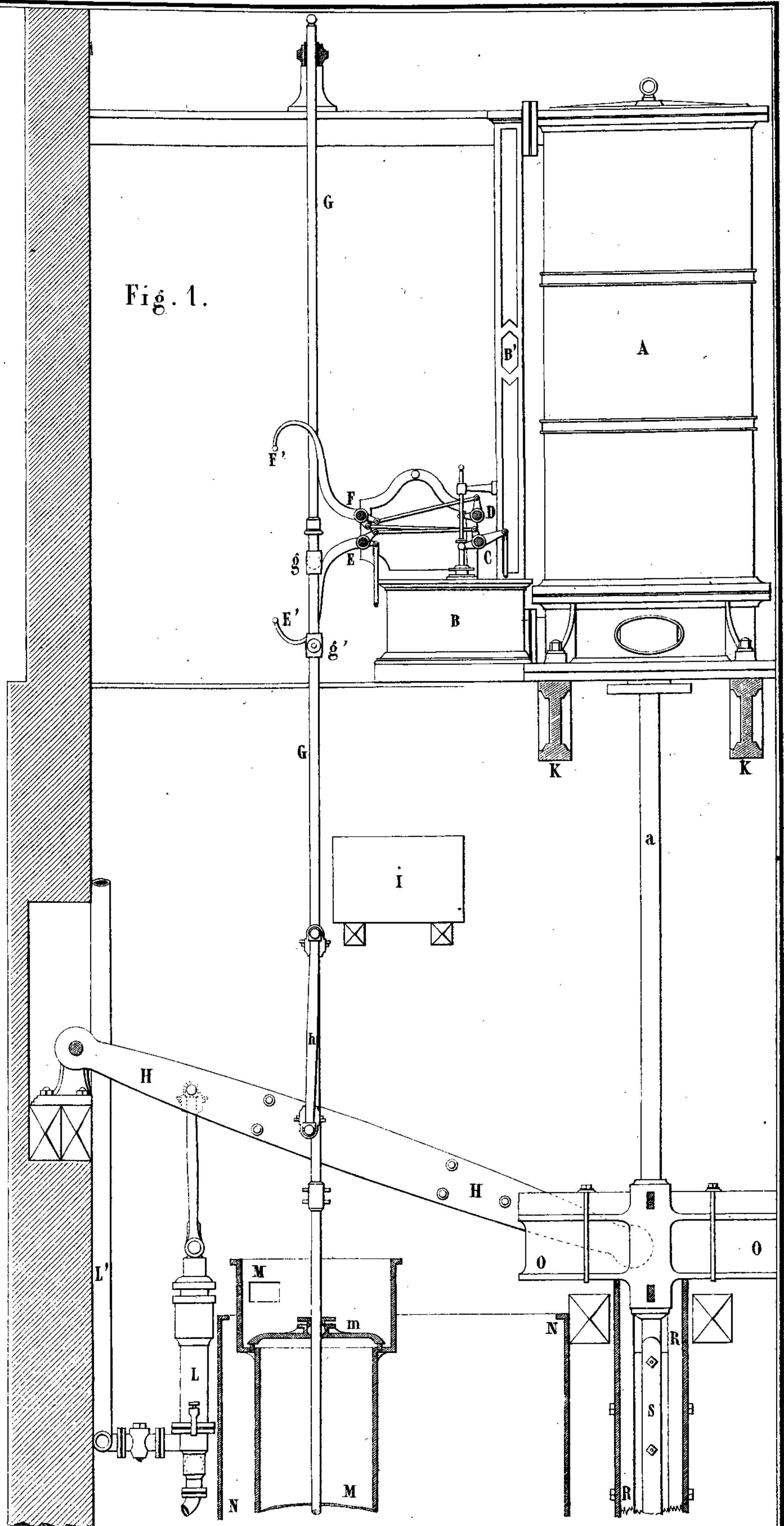


Fig. 1.

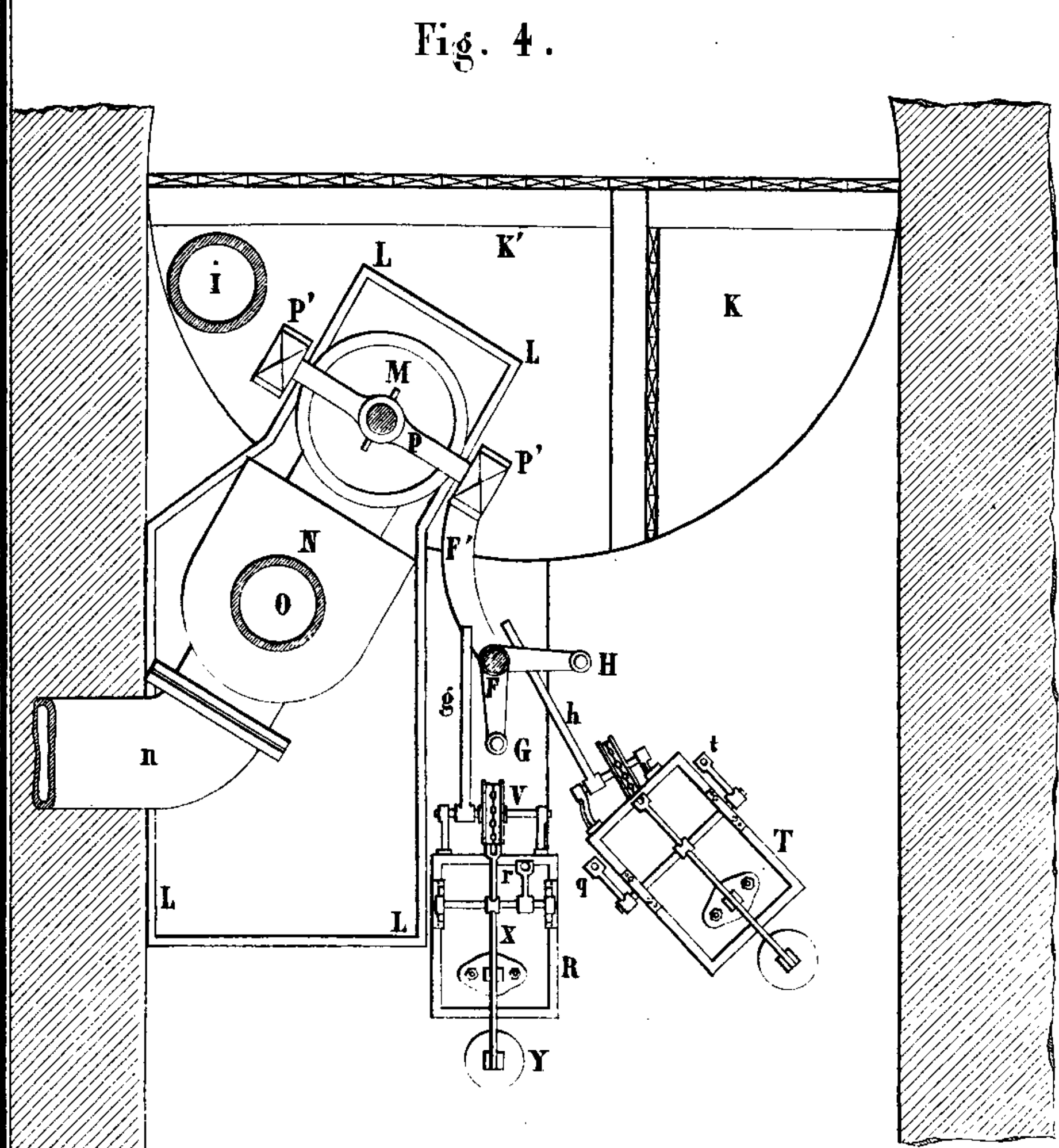


Fig. 4.

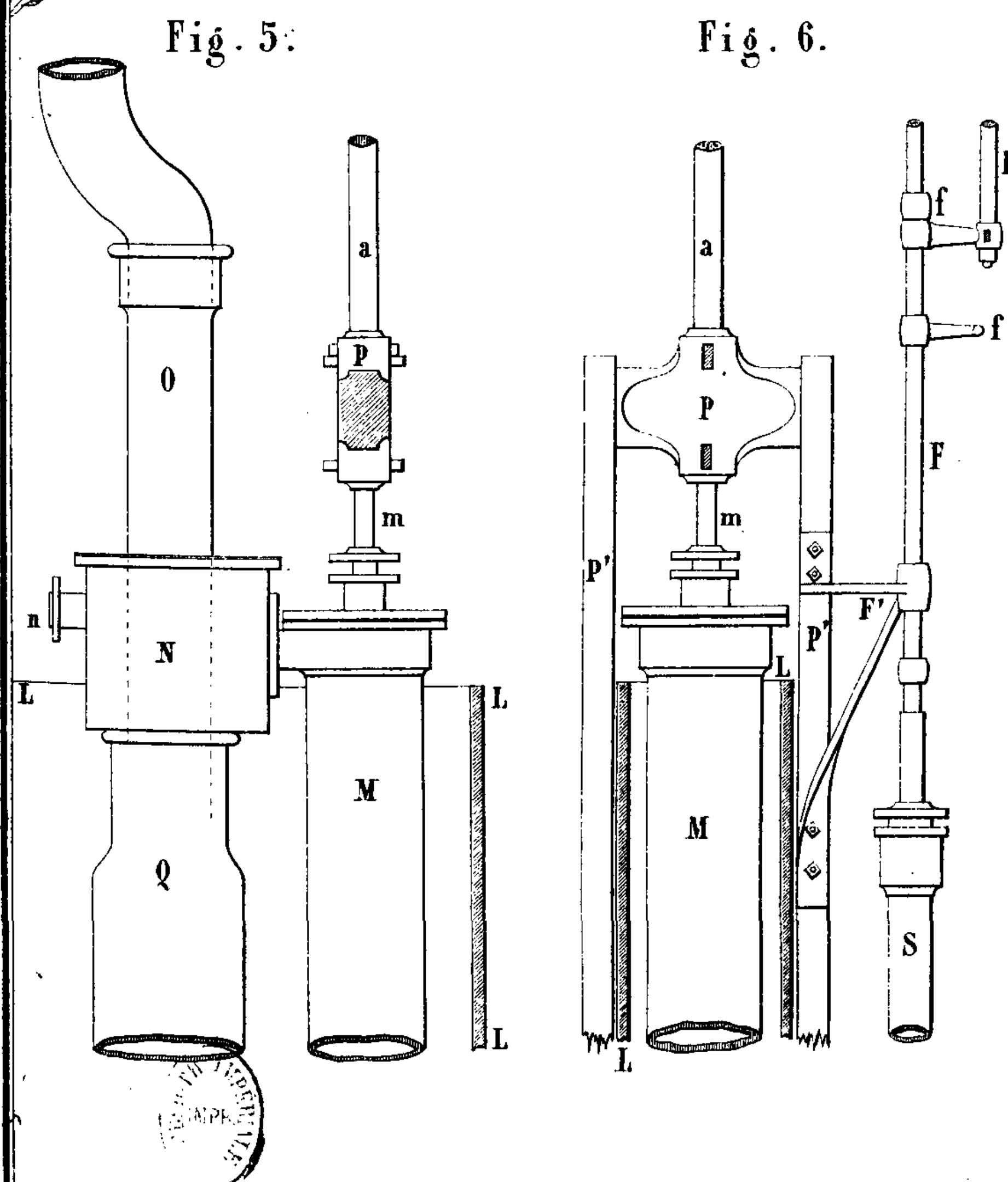


Fig. 5.

Fig. 6.

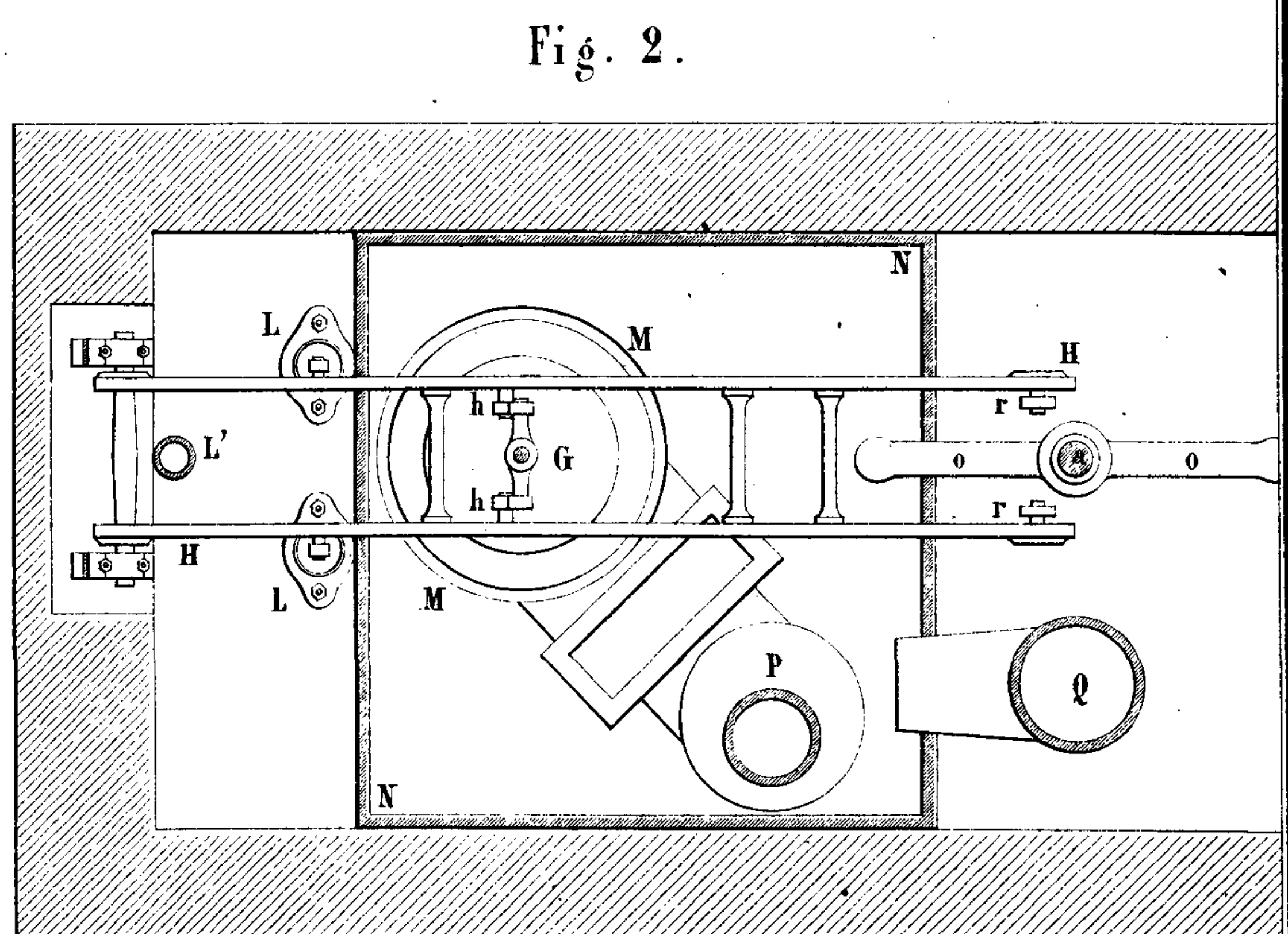


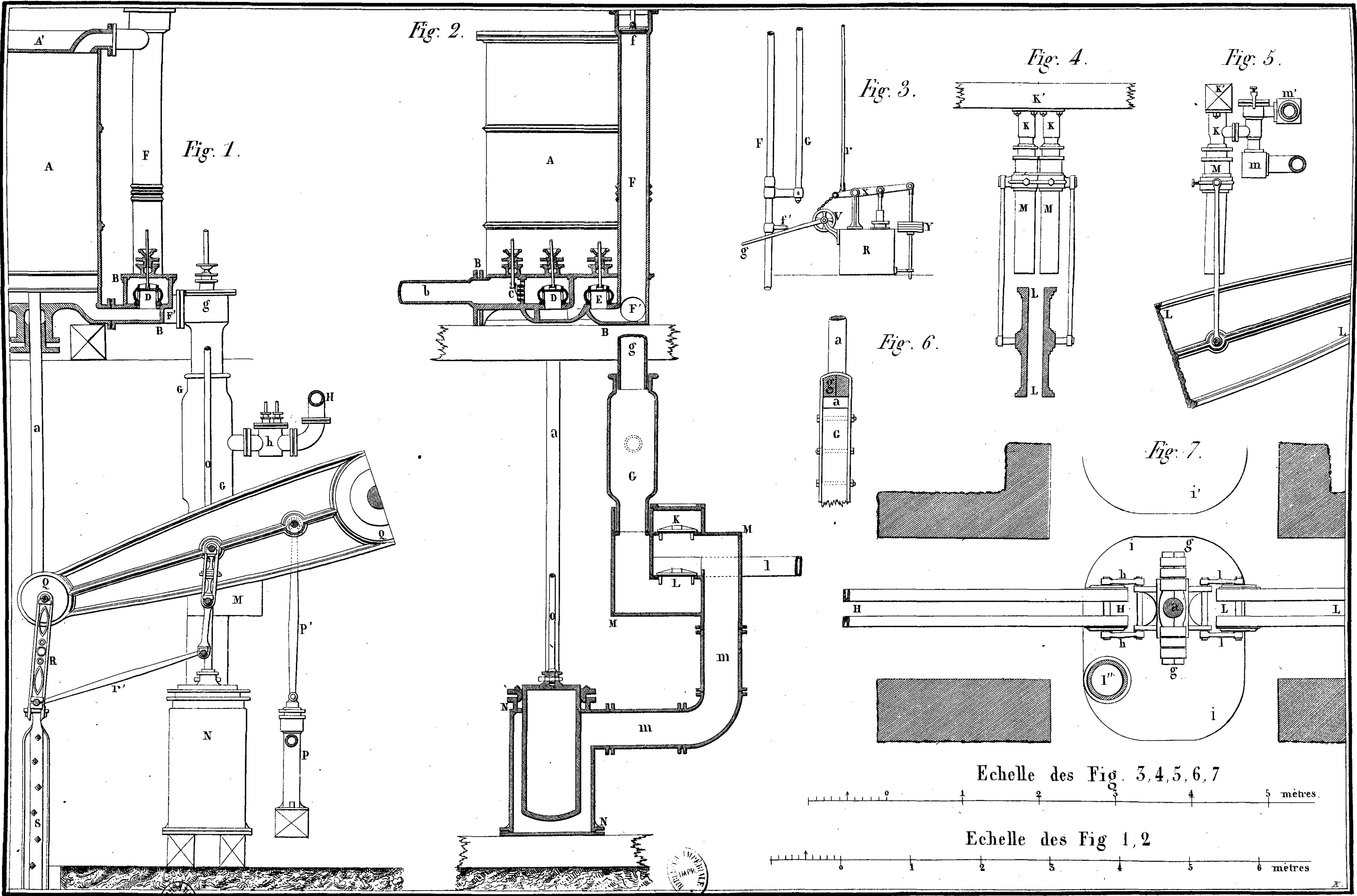
Fig. 2.

Echelle de 0,02 cent par Mètre.











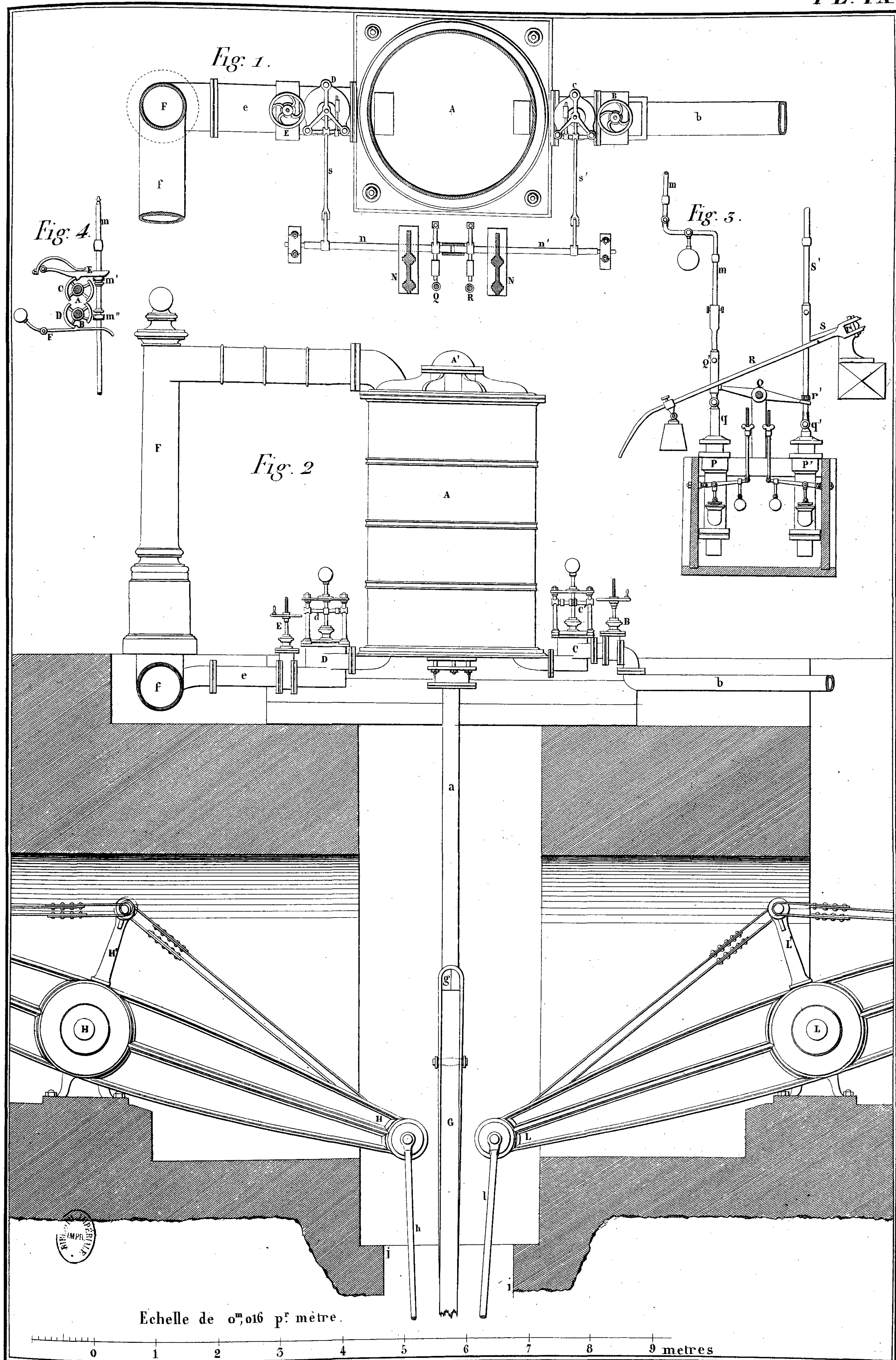




Fig. 1.

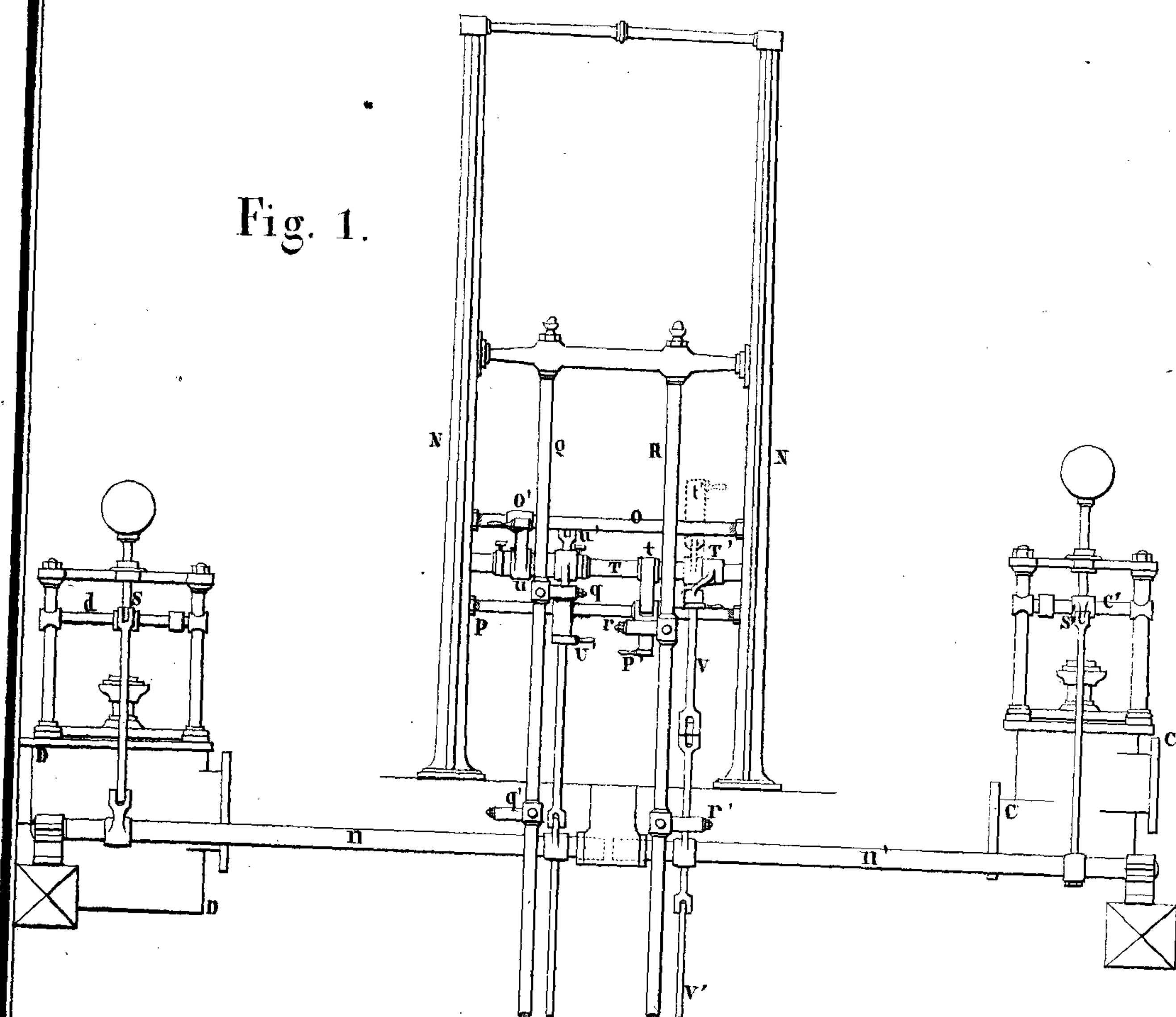


Fig. 2.

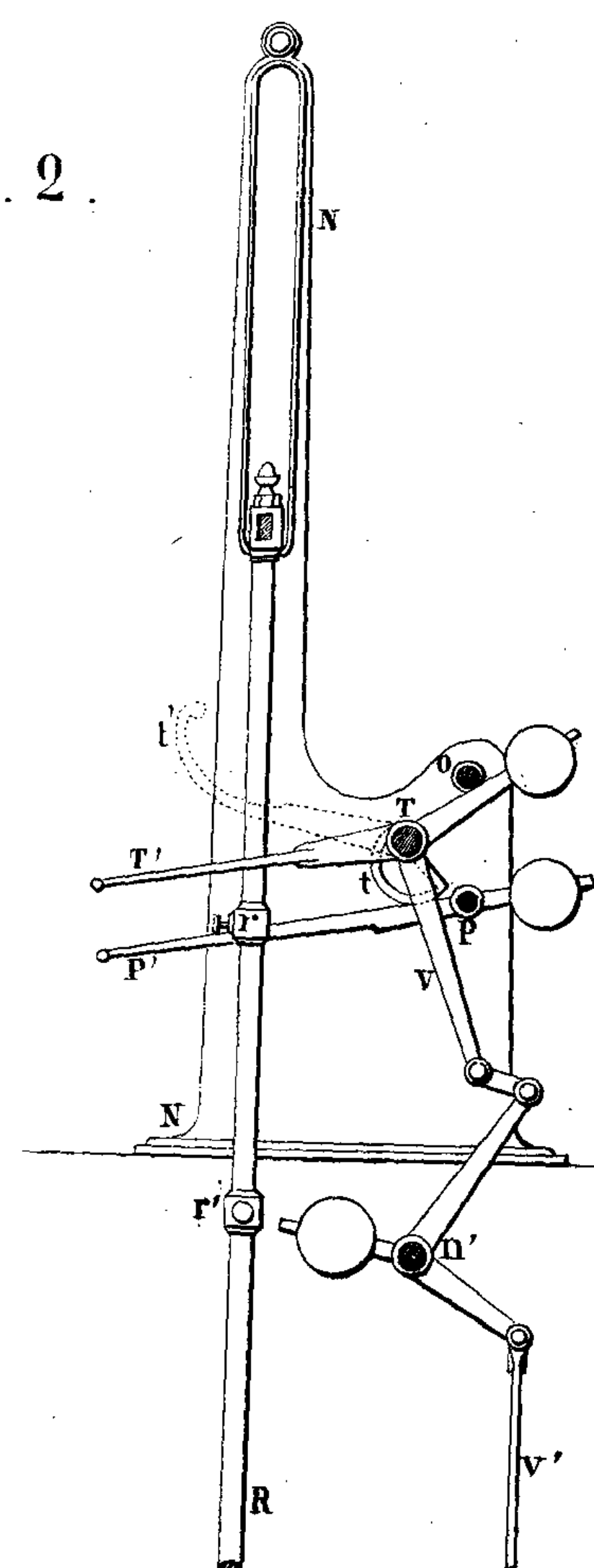


Fig. 4.

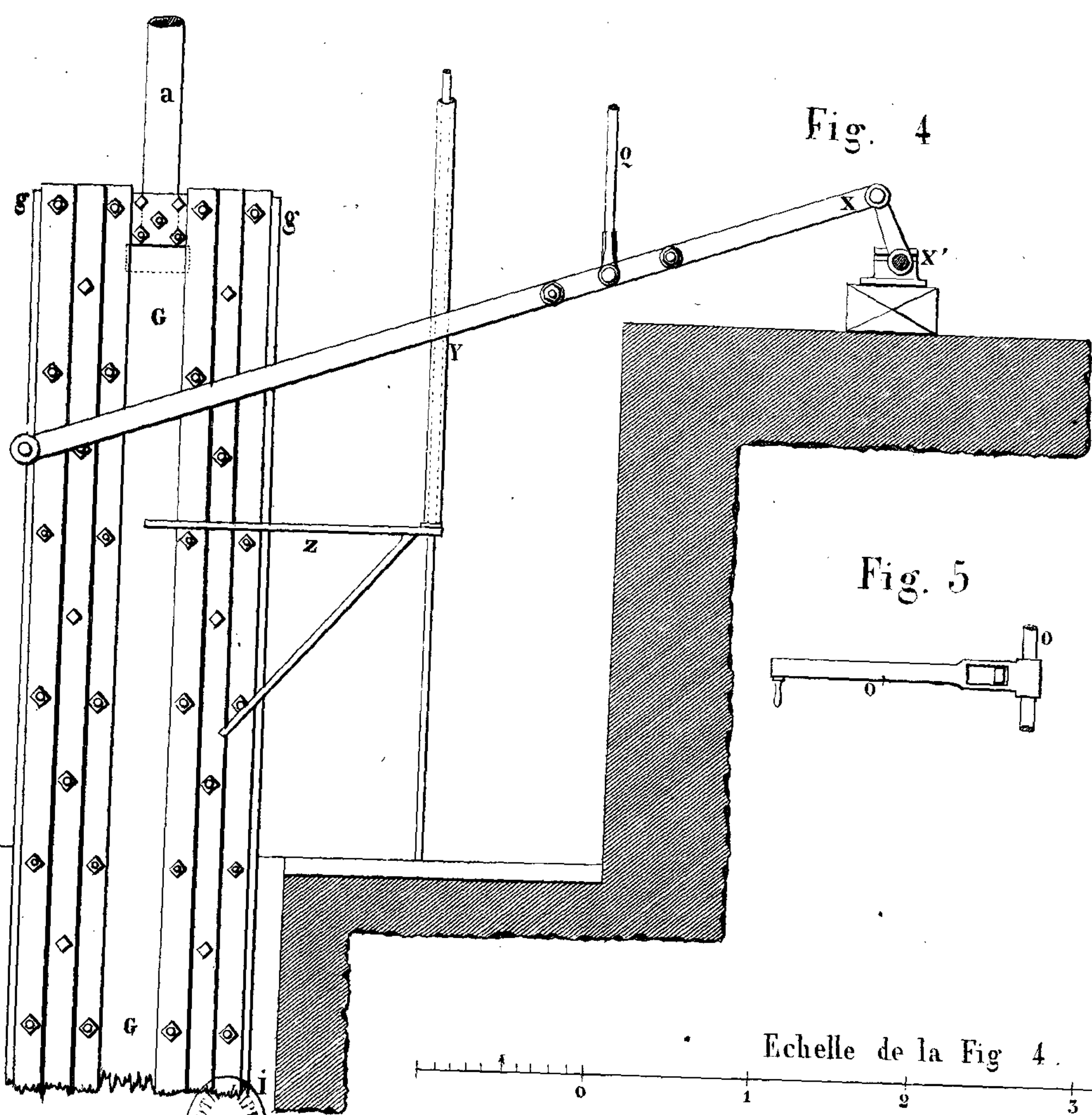
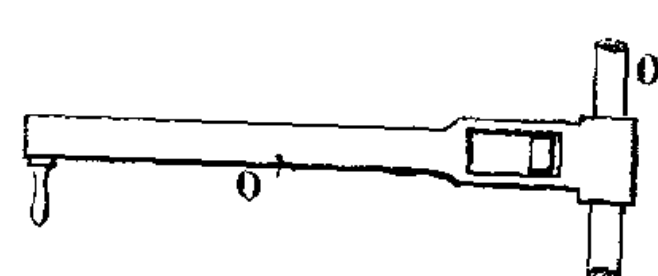


Fig. 5.



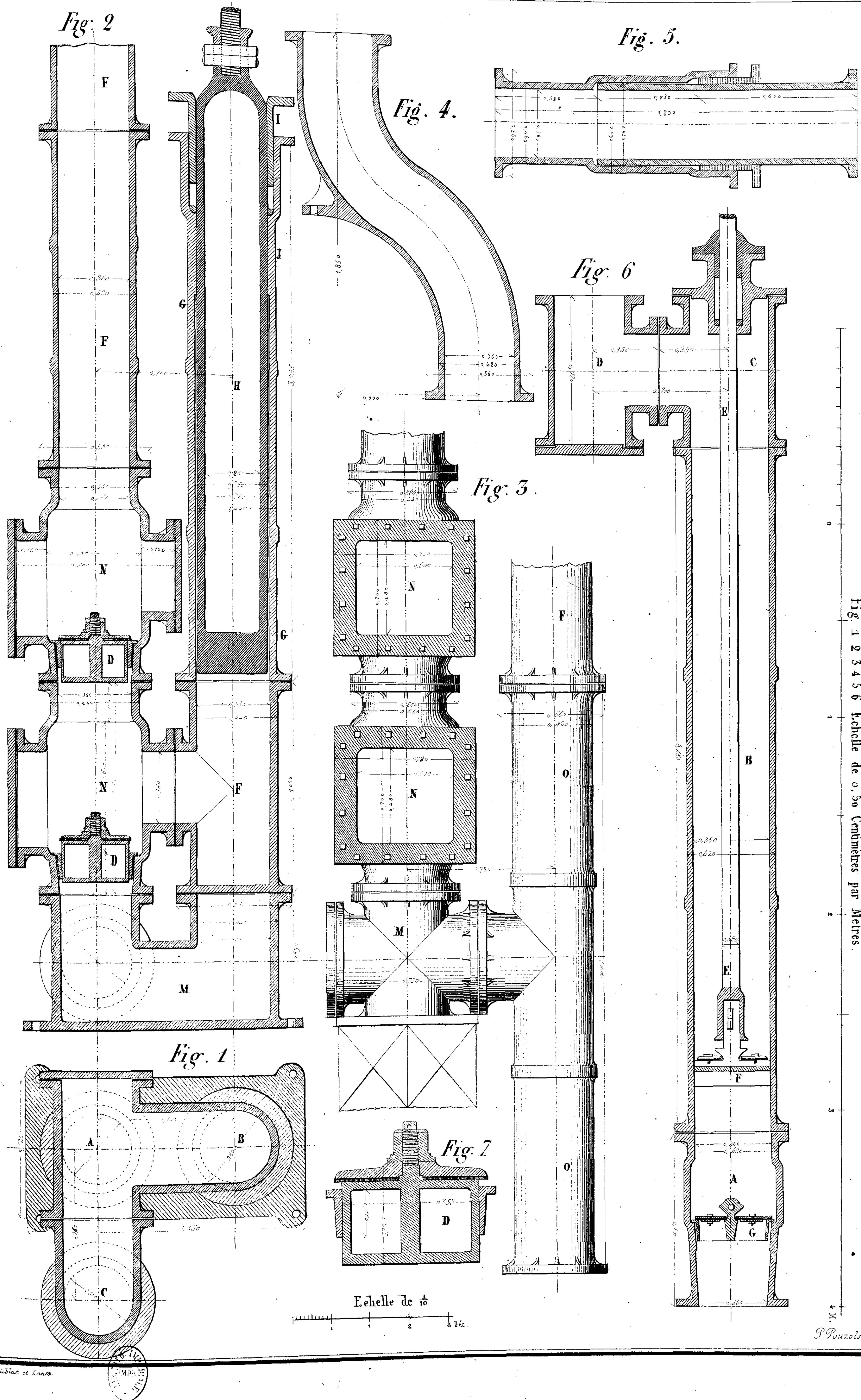
Echelle de la Fig. 4.

0 1 2 3 4 mètres

Echelle des Fig. 1, 2, 3, 5.

0 1 2 3 4 mètres







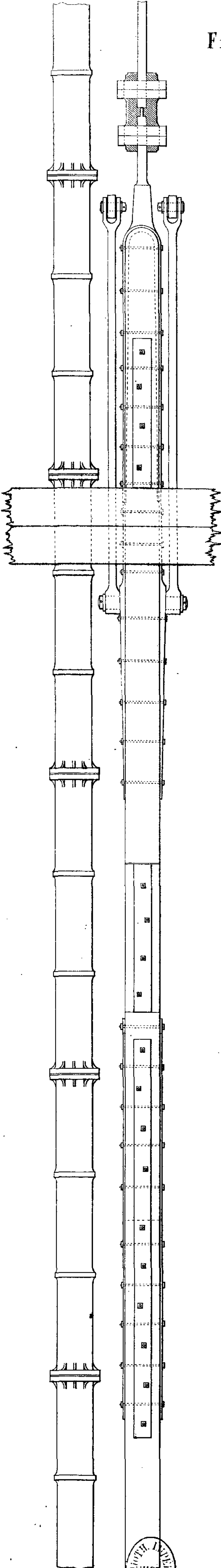


Fig. 1.

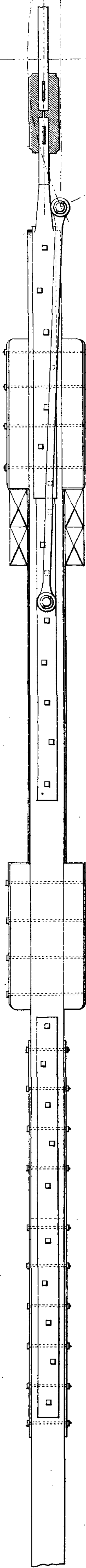


Fig. 2.

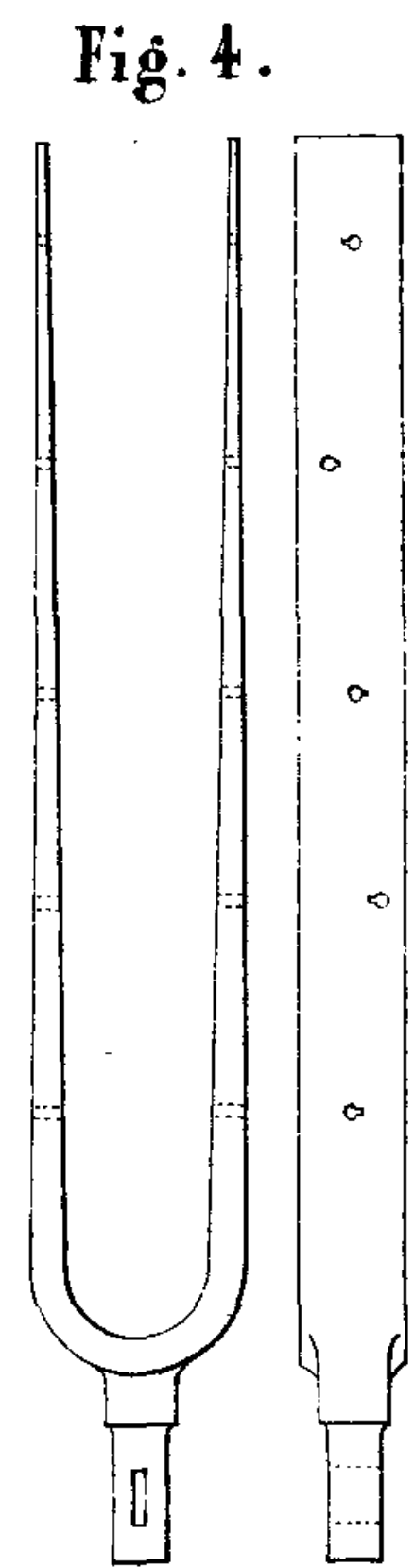


Fig. 4.



Fig. 3.

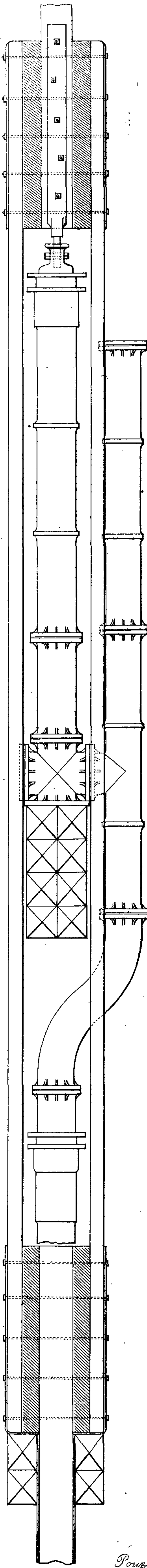
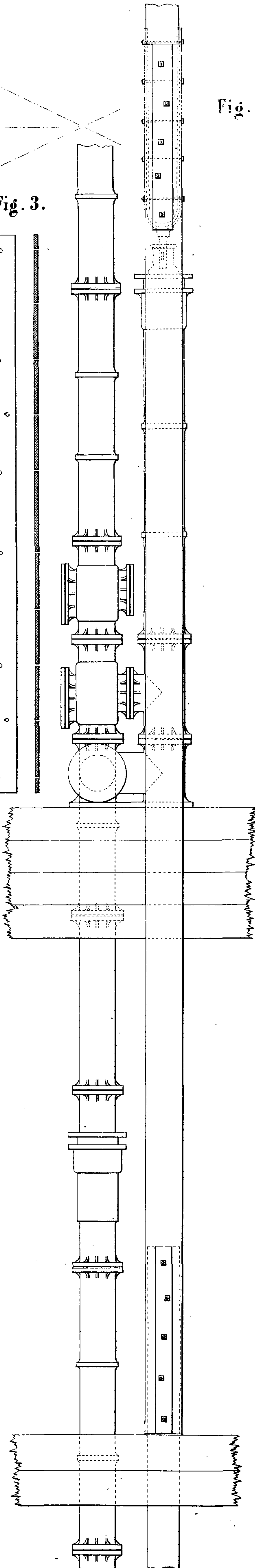
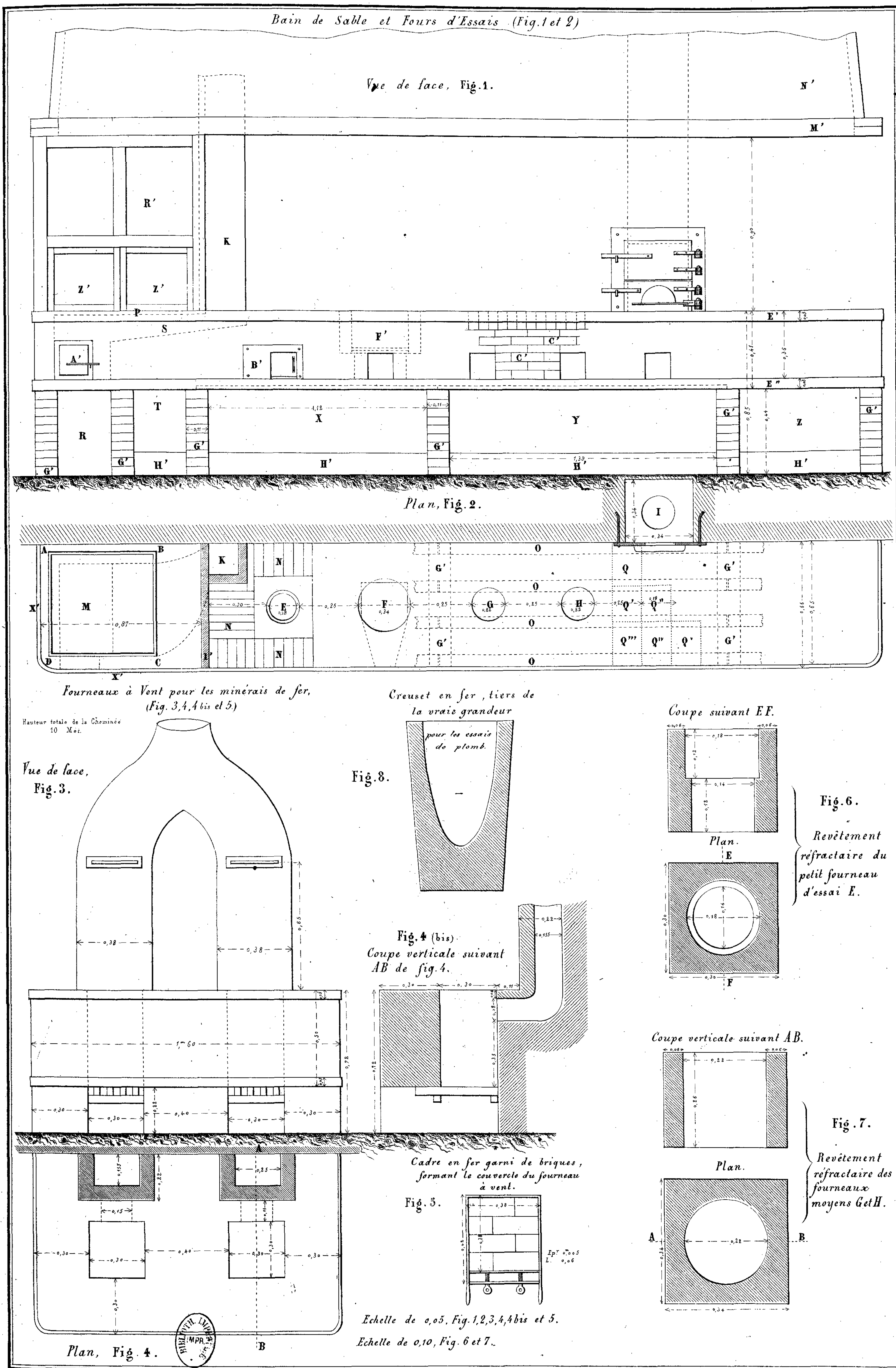


Fig. 1 et 2 Echelle de 0<sup>m</sup>02 centimètres par mètre.

Fig. 3 et 4 Echelle de 0<sup>m</sup>03 centimètres par mètre.



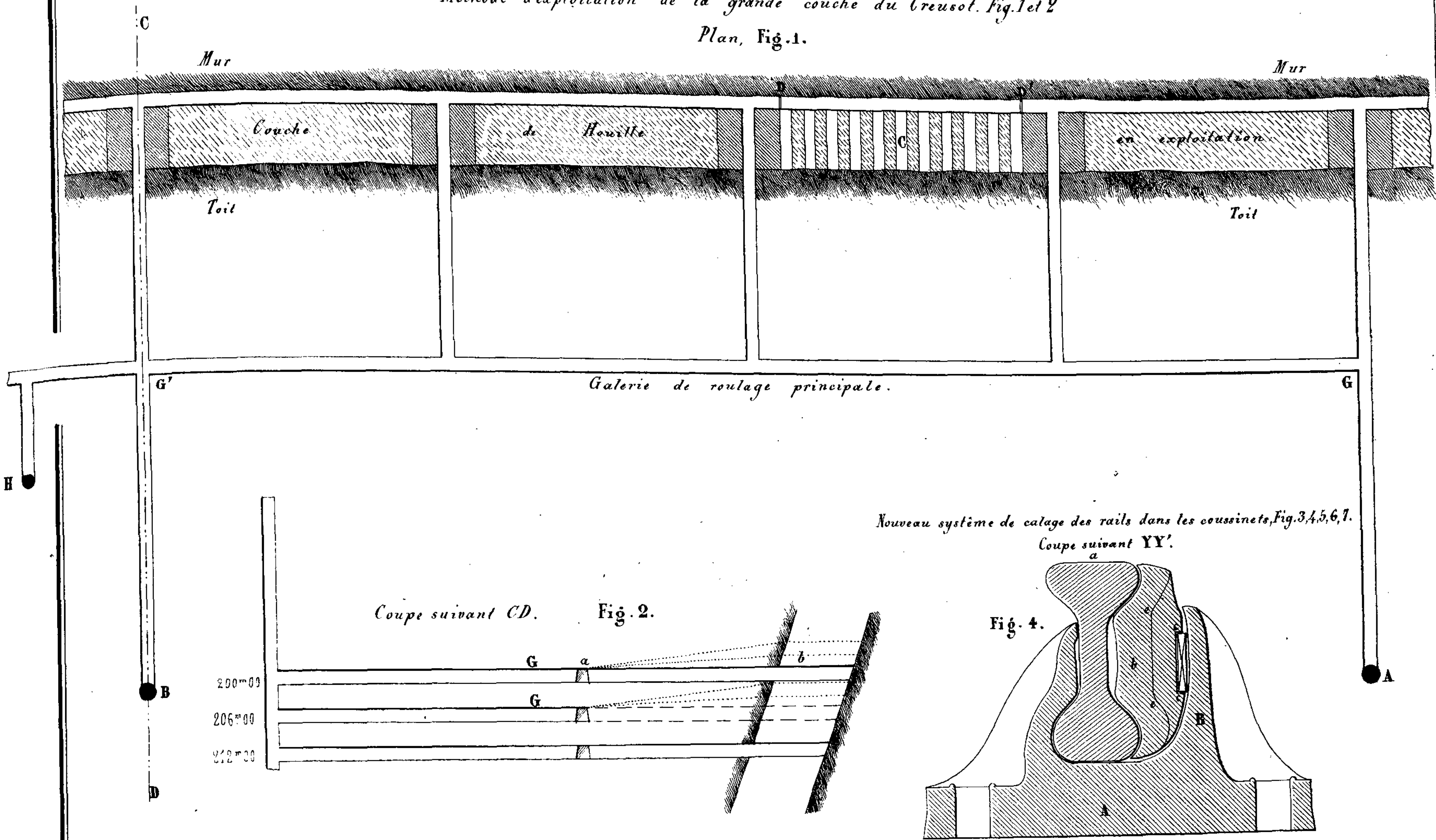




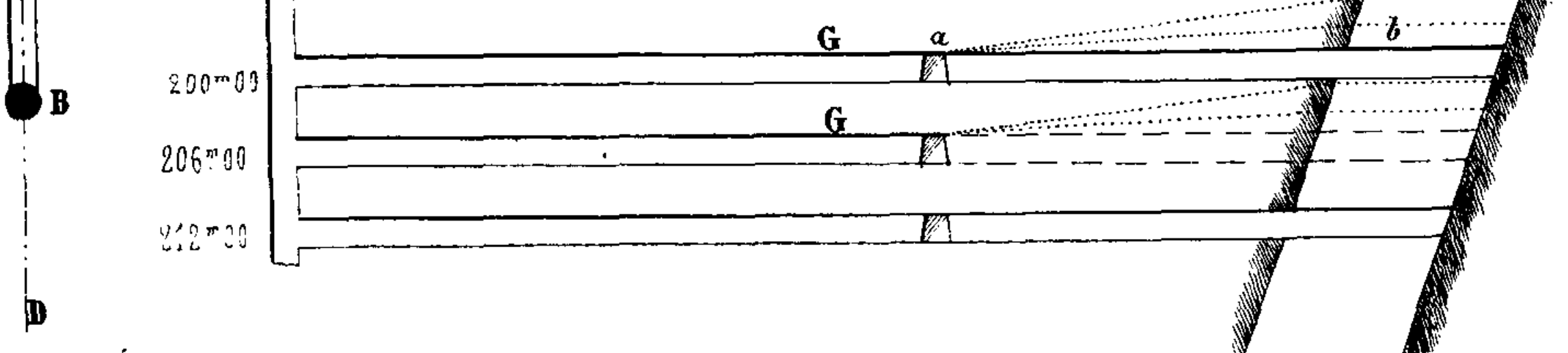




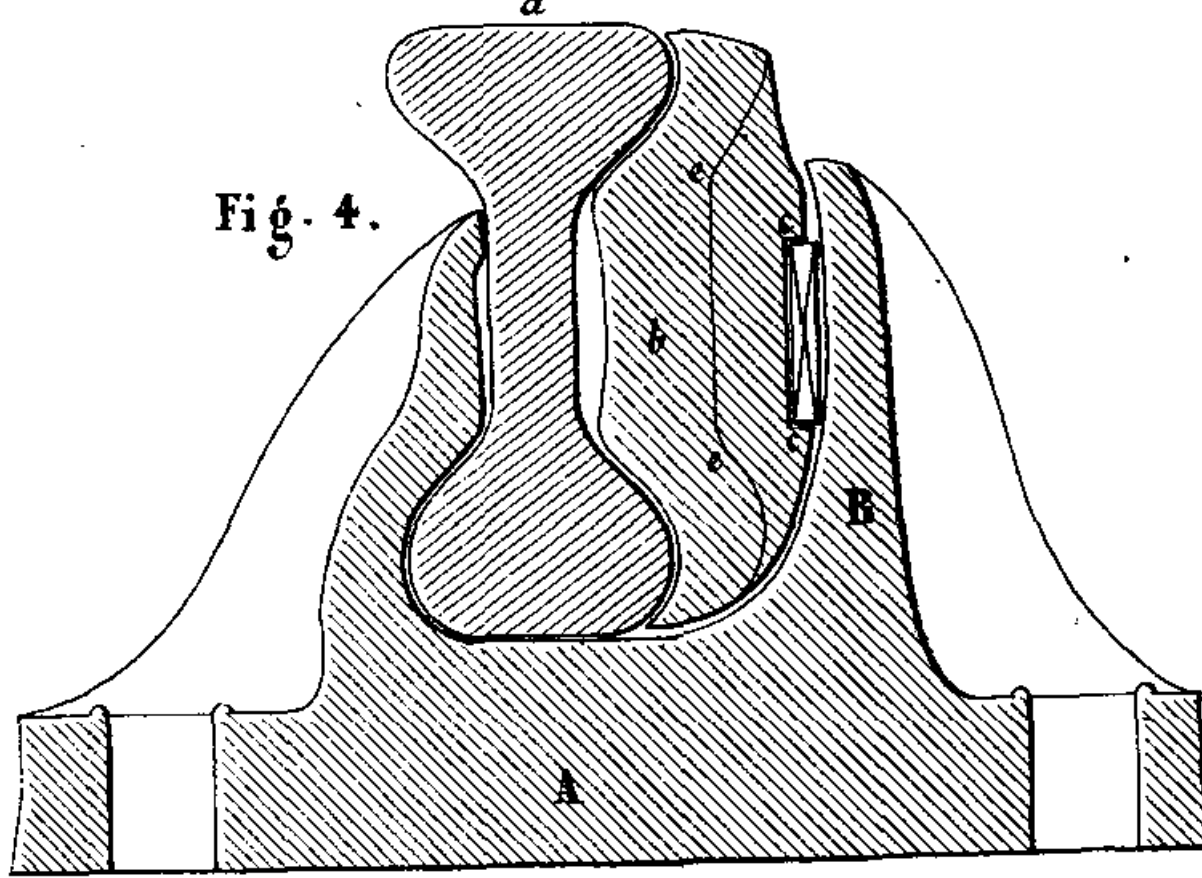
Méthode d'exploitation de la grande couche du Creusot. Fig. 1 et 2  
Plan, Fig. 1.



Coupe suivant CD. Fig. 2.

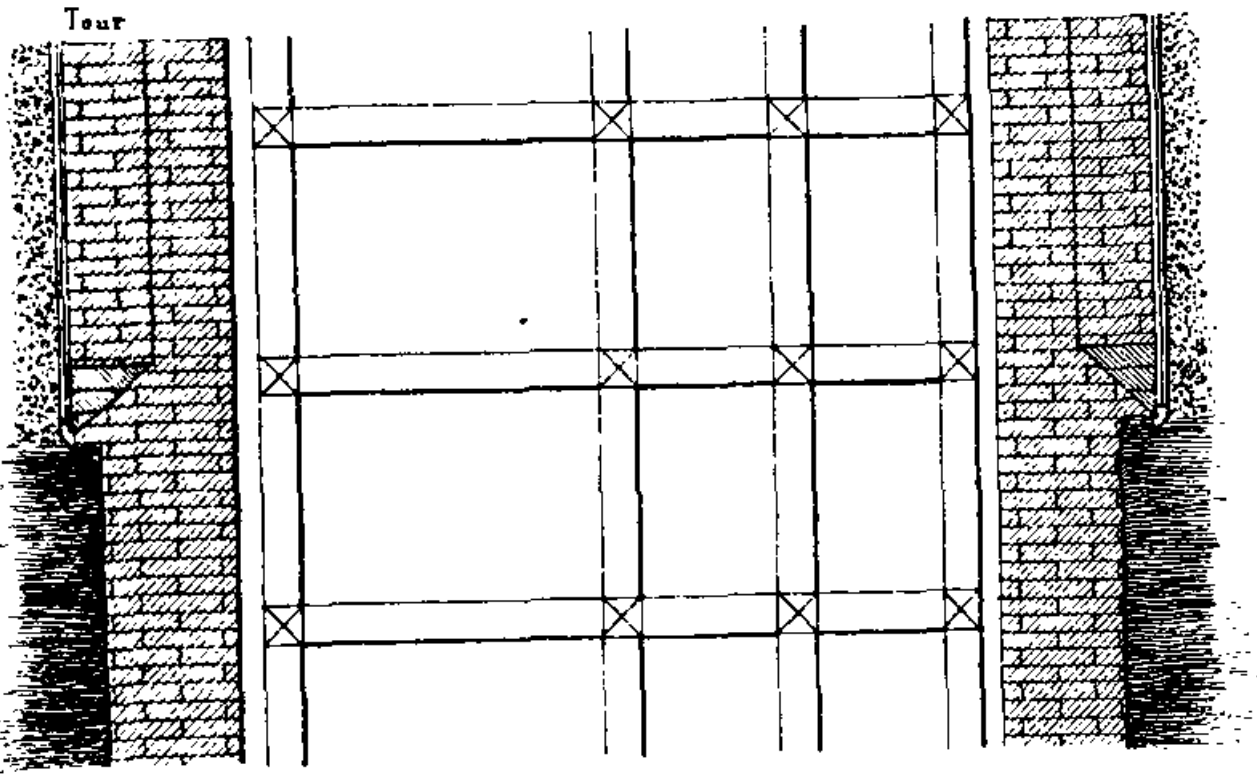


Nouveau système de calage des rails dans les coussinets, fig. 3, 4, 5, 6, 7.  
Coupe suivant YY'.



Coupe verticale montrant la liaison de la tour avec le coulage.

Fig. 9.



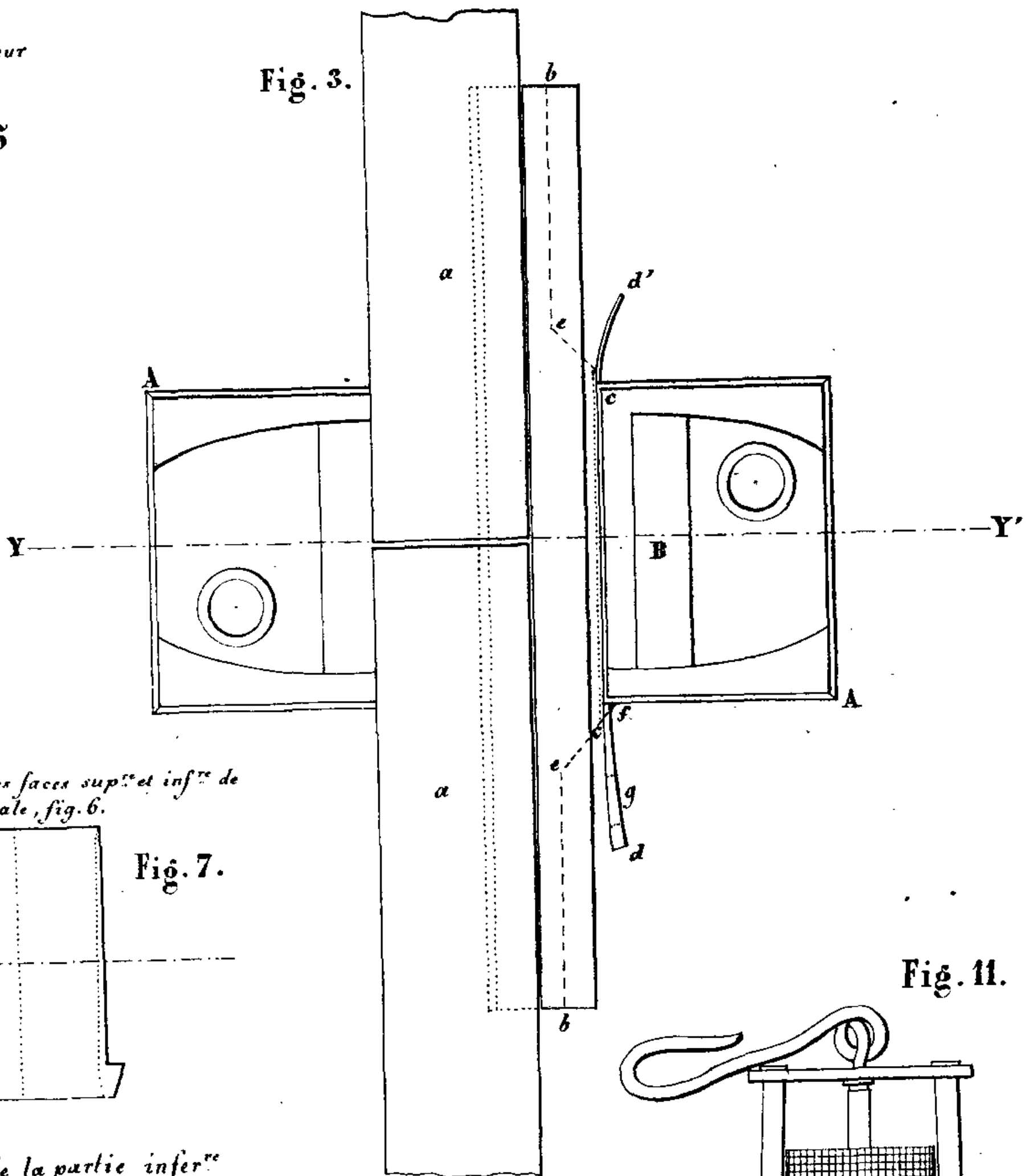
Coulette en longueur et largeur

Fig. 5.



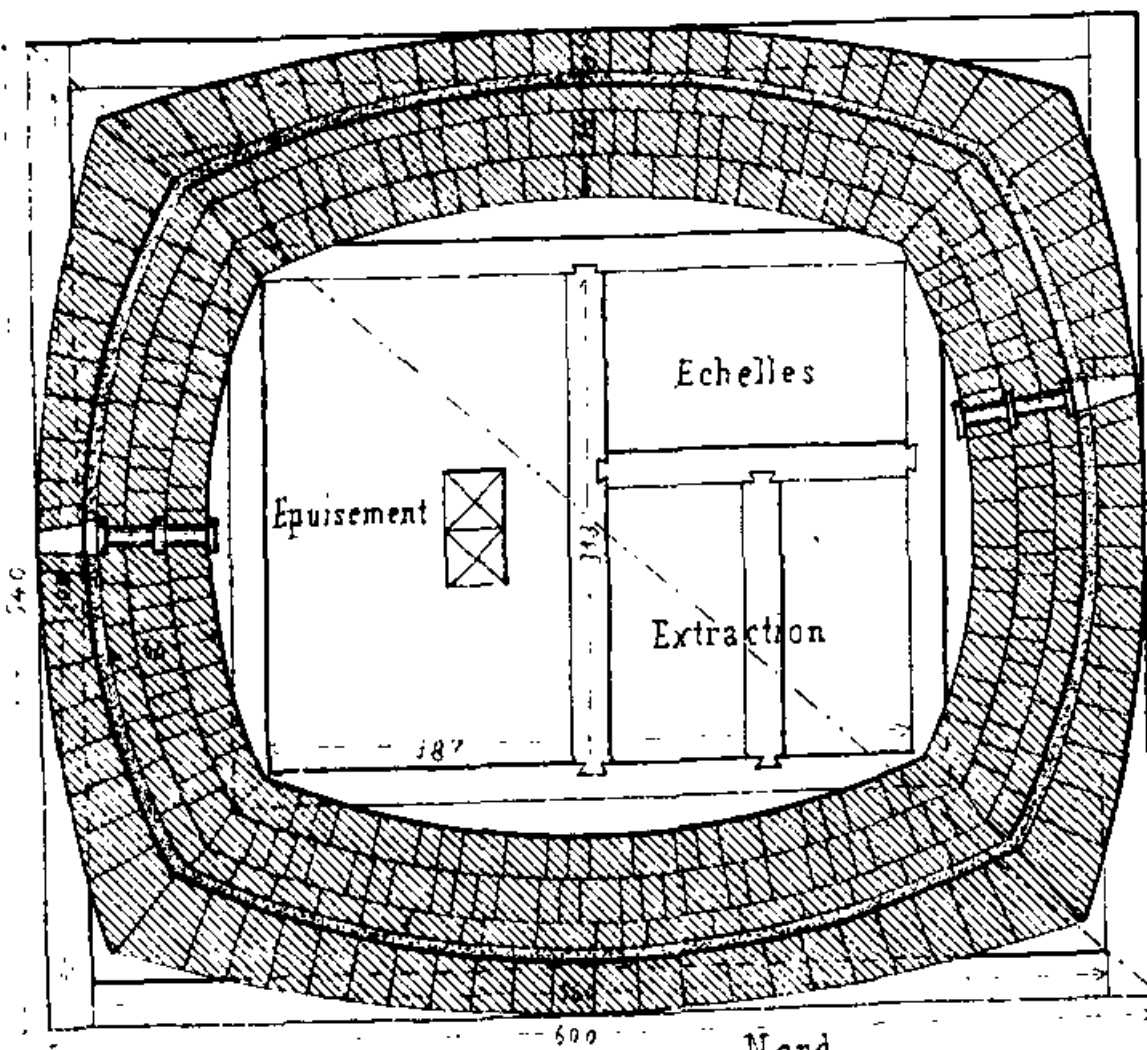
Projection horiz<sup>te</sup> du dessus des rails fixés dans le coussinet de joint.

Fig. 3.



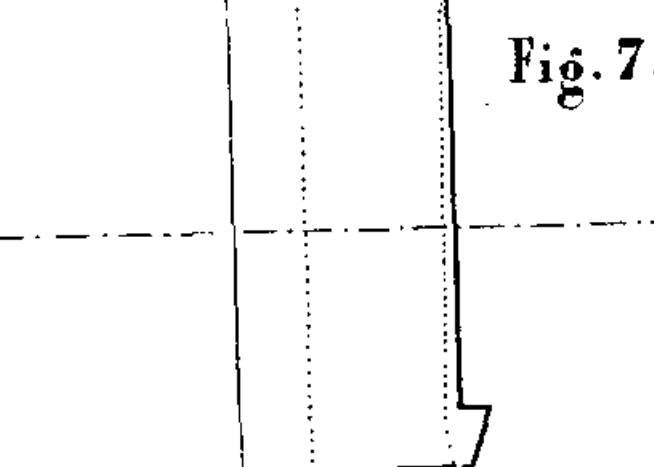
Coupe horizontale dans l'intérieur du Puits.

Fig. 10.



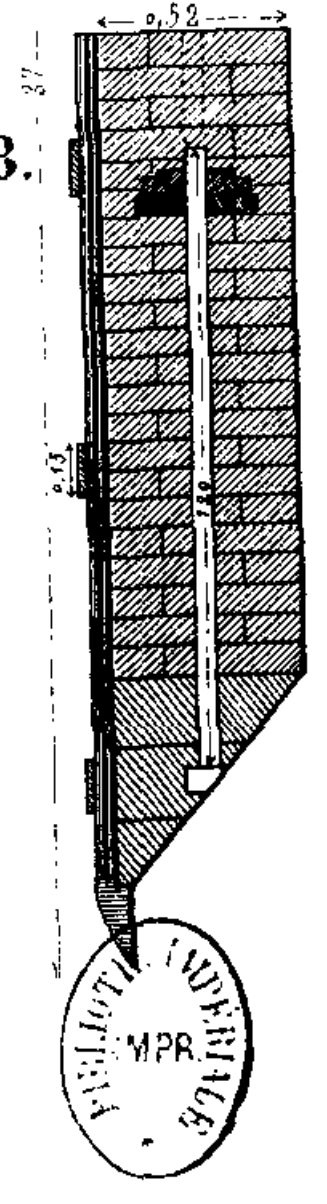
Projection des faces sup<sup>re</sup> et inf<sup>re</sup> de la cale, fig. 6.

Fig. 7.



Coupe verticale de la partie inf<sup>re</sup> de la Tour.

Fig. 8.



Coupe d'un rail fixé dans un coussinet intermédiaire.

Fig. 6.

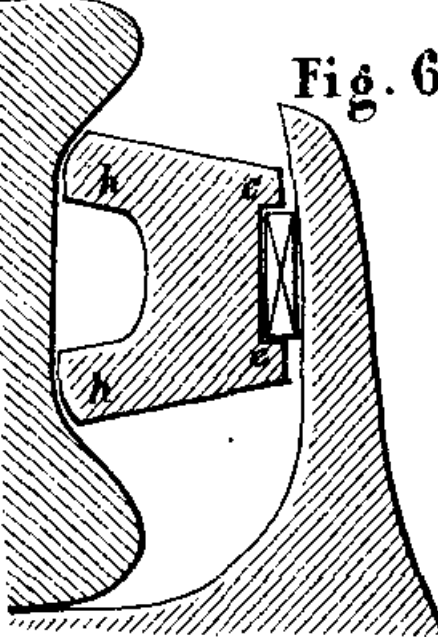


Fig. 11.

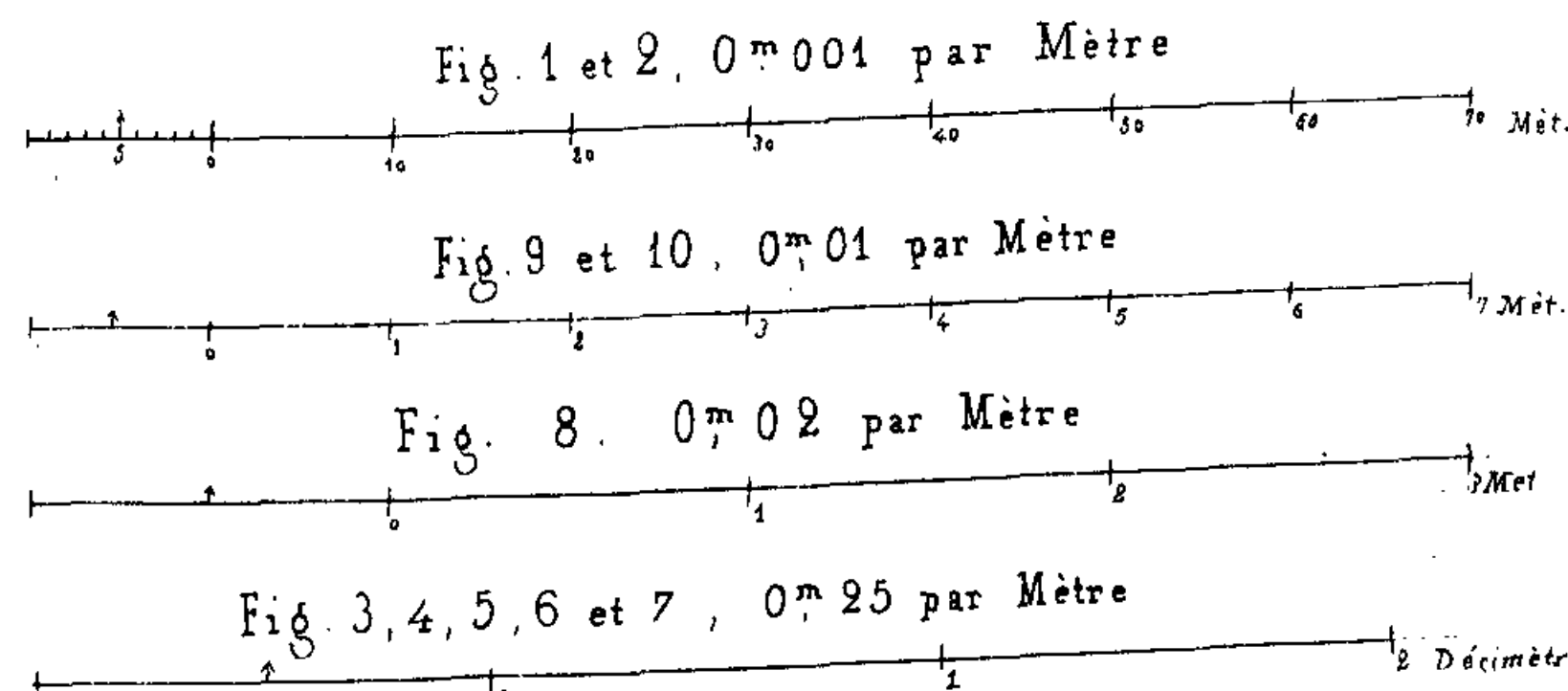
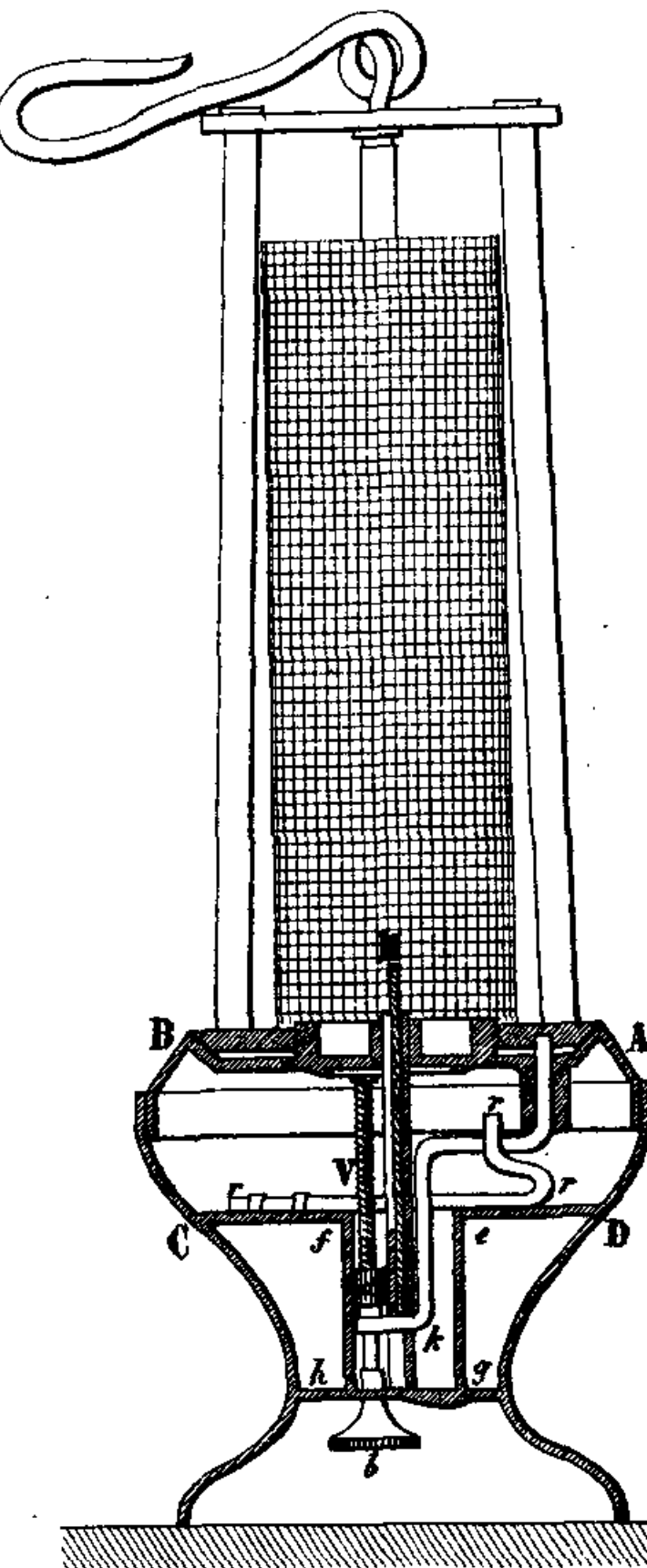
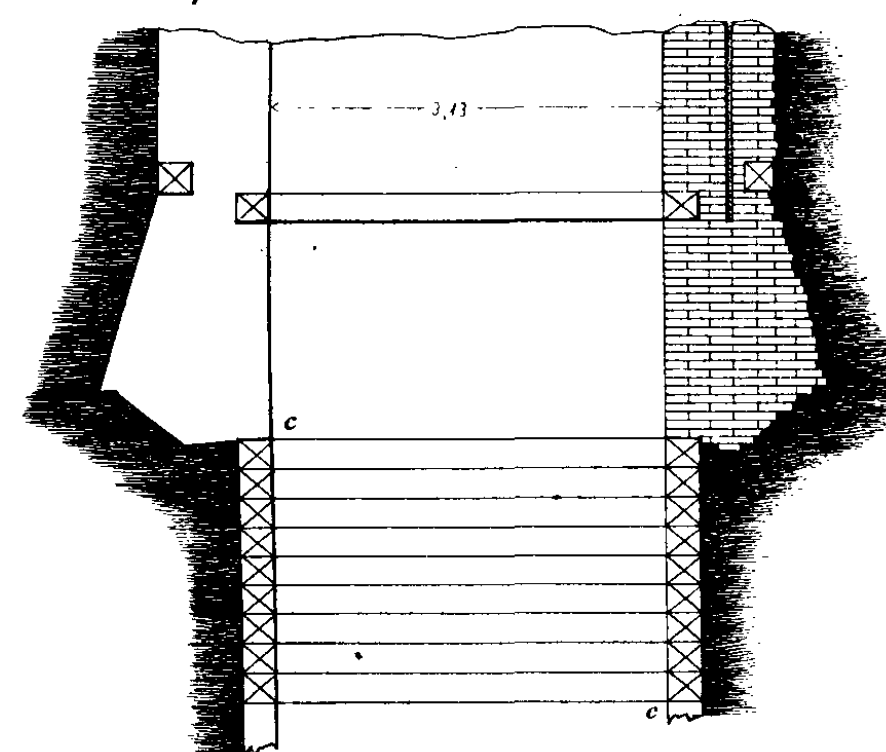








Fig. 1.  
Epaulement de la base.



Epaulement intermédiaire

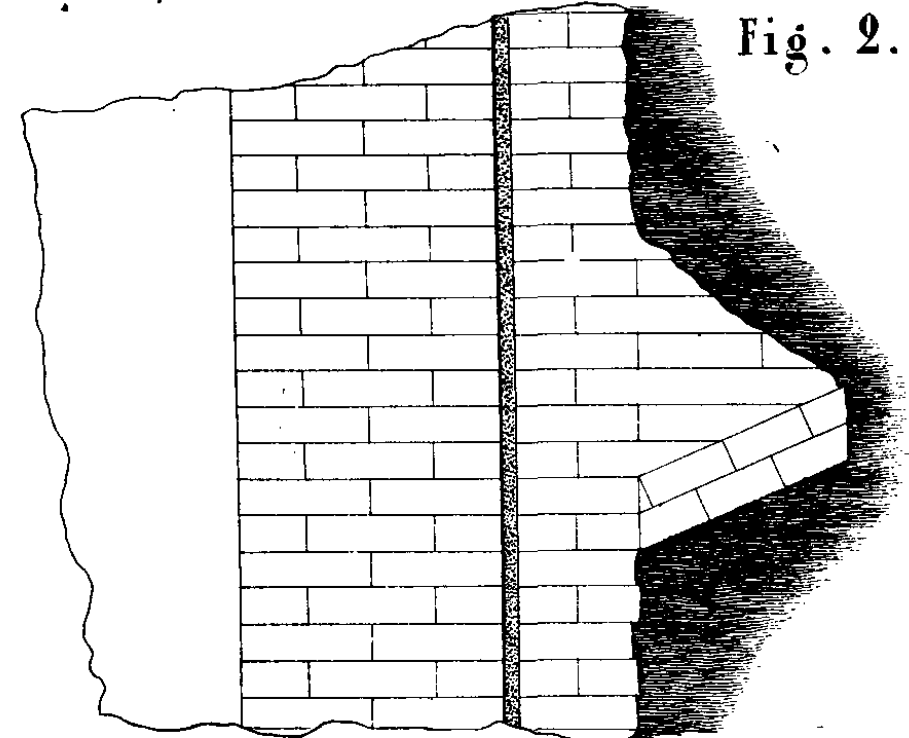


Fig. 6.  
Travail pour relier la  
maçonnerie du puits à  
celle de la tour.

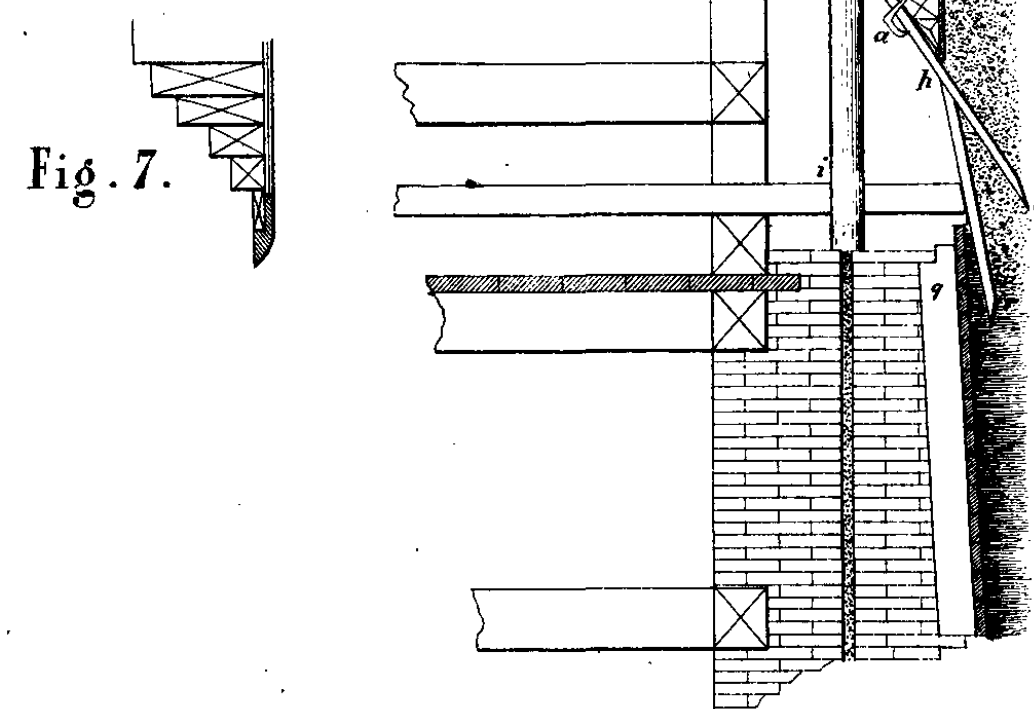


Fig. 7.

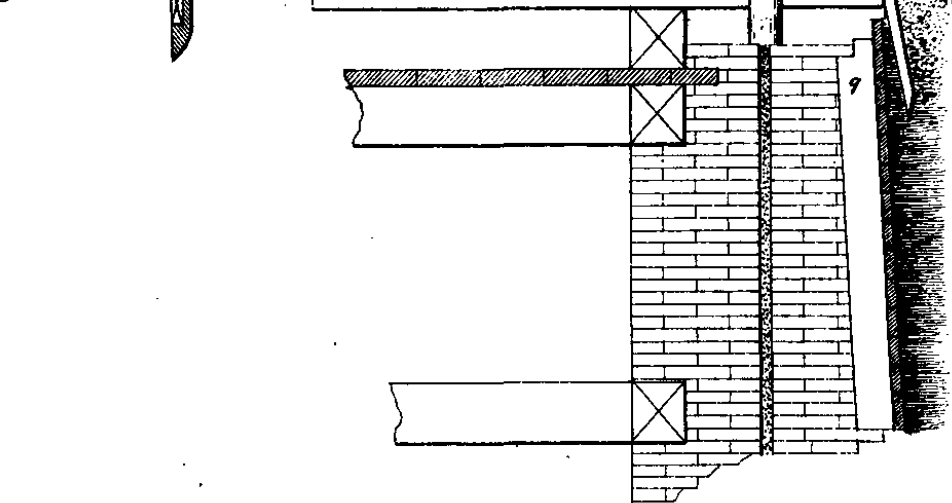


Fig. 1. 0<sup>m</sup>01 pour 1 met.

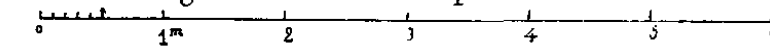


Fig. 3.

Suspension des cadres par des tirants en fer.

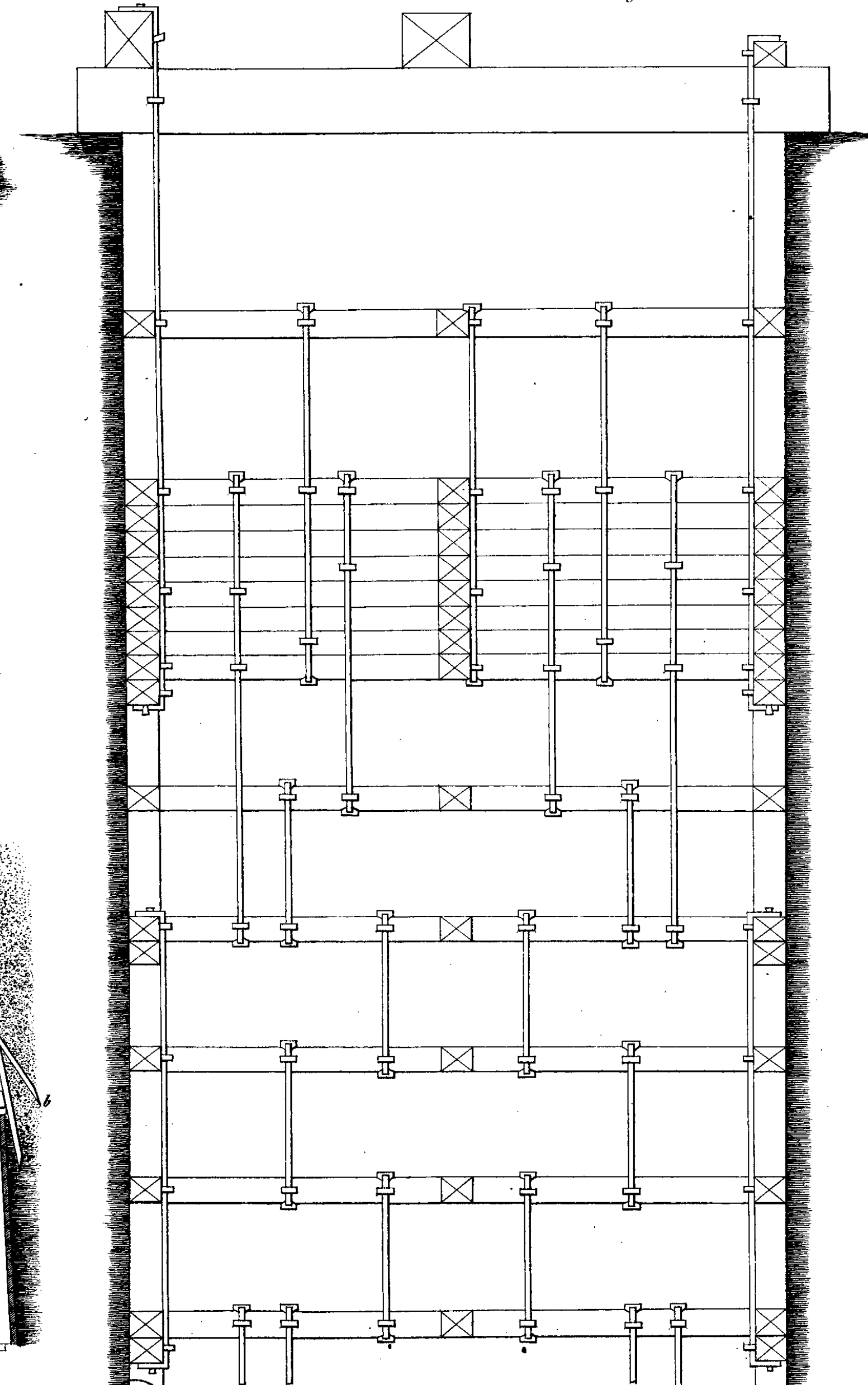
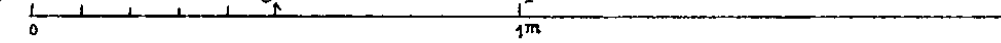
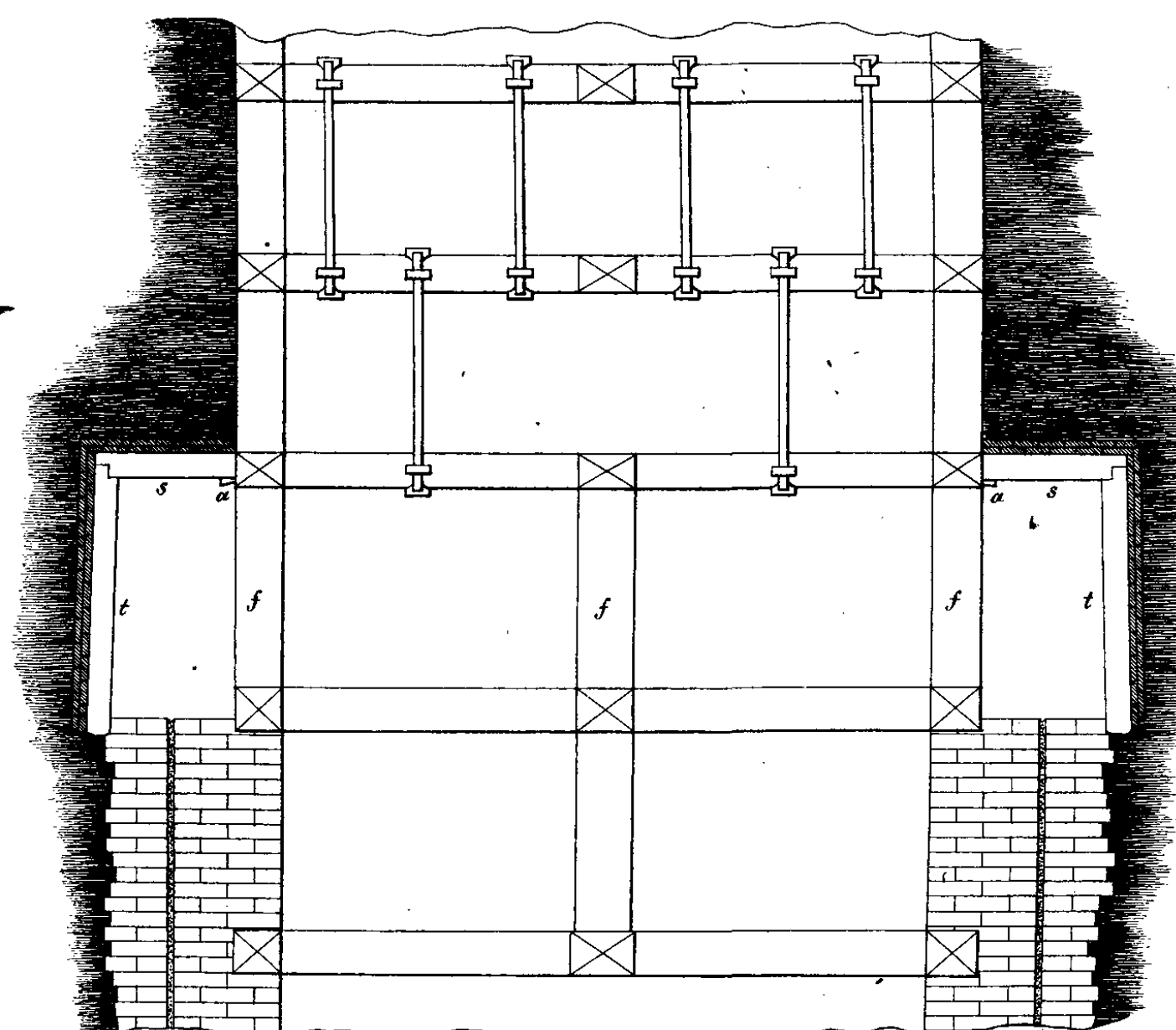


Fig. 2. 0<sup>m</sup>04 pour 1 met.



Elargissement des parois du puits.  
(Travail en remonte)

Fig. 4.



Elargissement des parois du puits dans les terrains coulans  
(Travail en remonte)

Fig. 5.

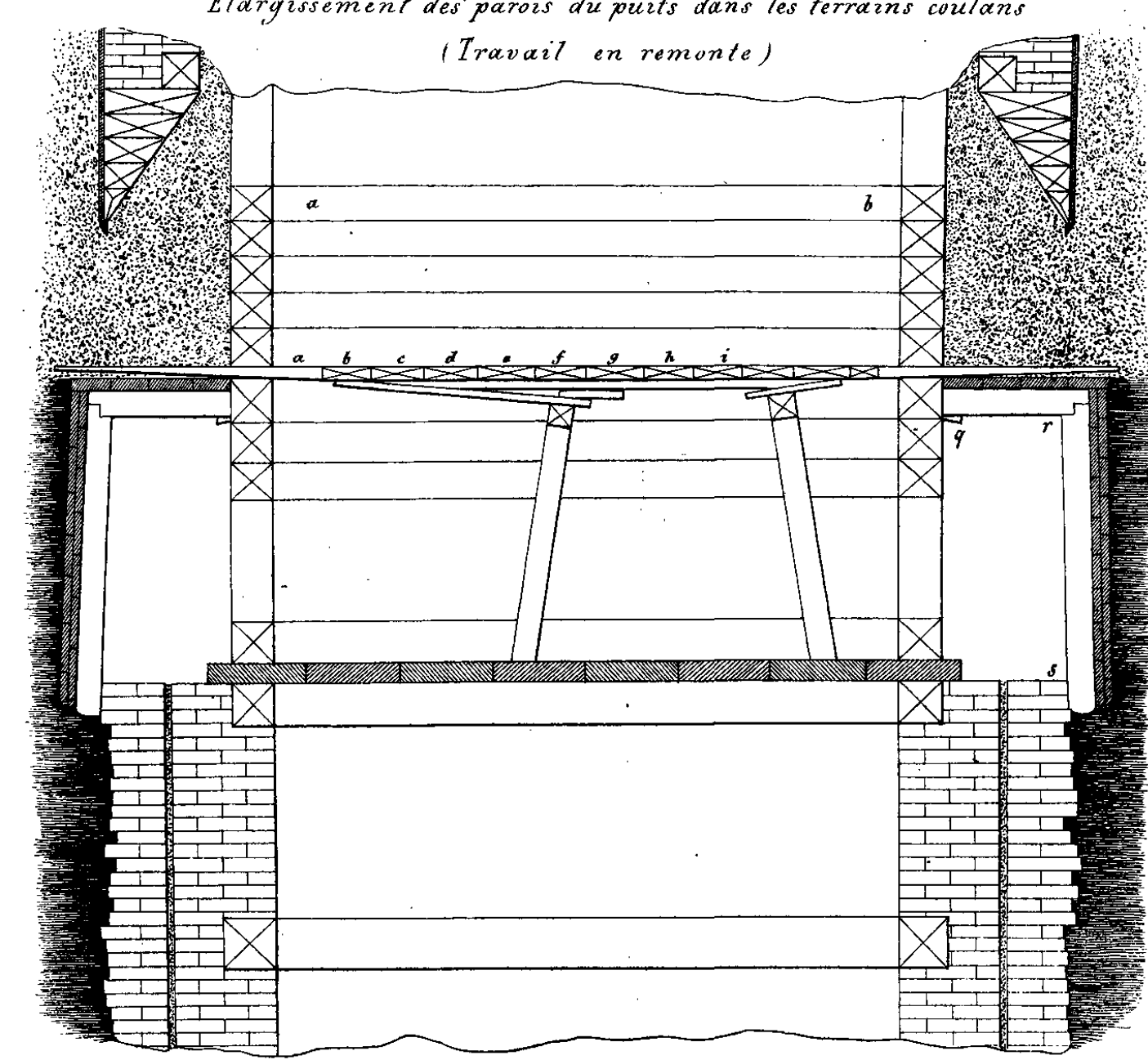
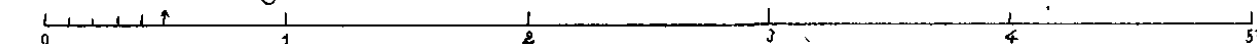


Fig. 3, 4, 5, 6 et 7. 0<sup>m</sup>02 pour 1 met.









# TUNNEL DE S'IRÉNÉE A LYON.

PL. XVI.

Fig. 1. Tête de Vaise.

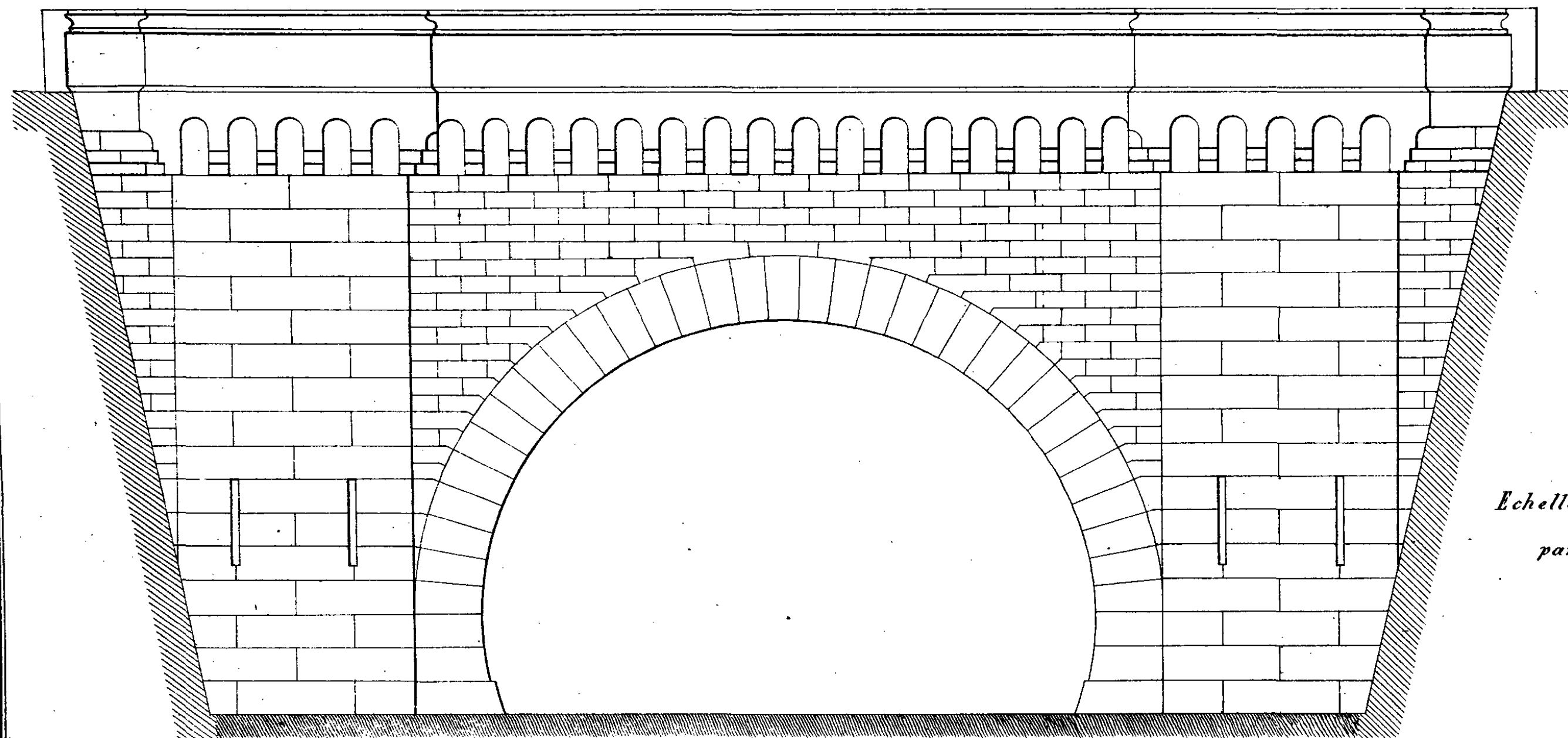
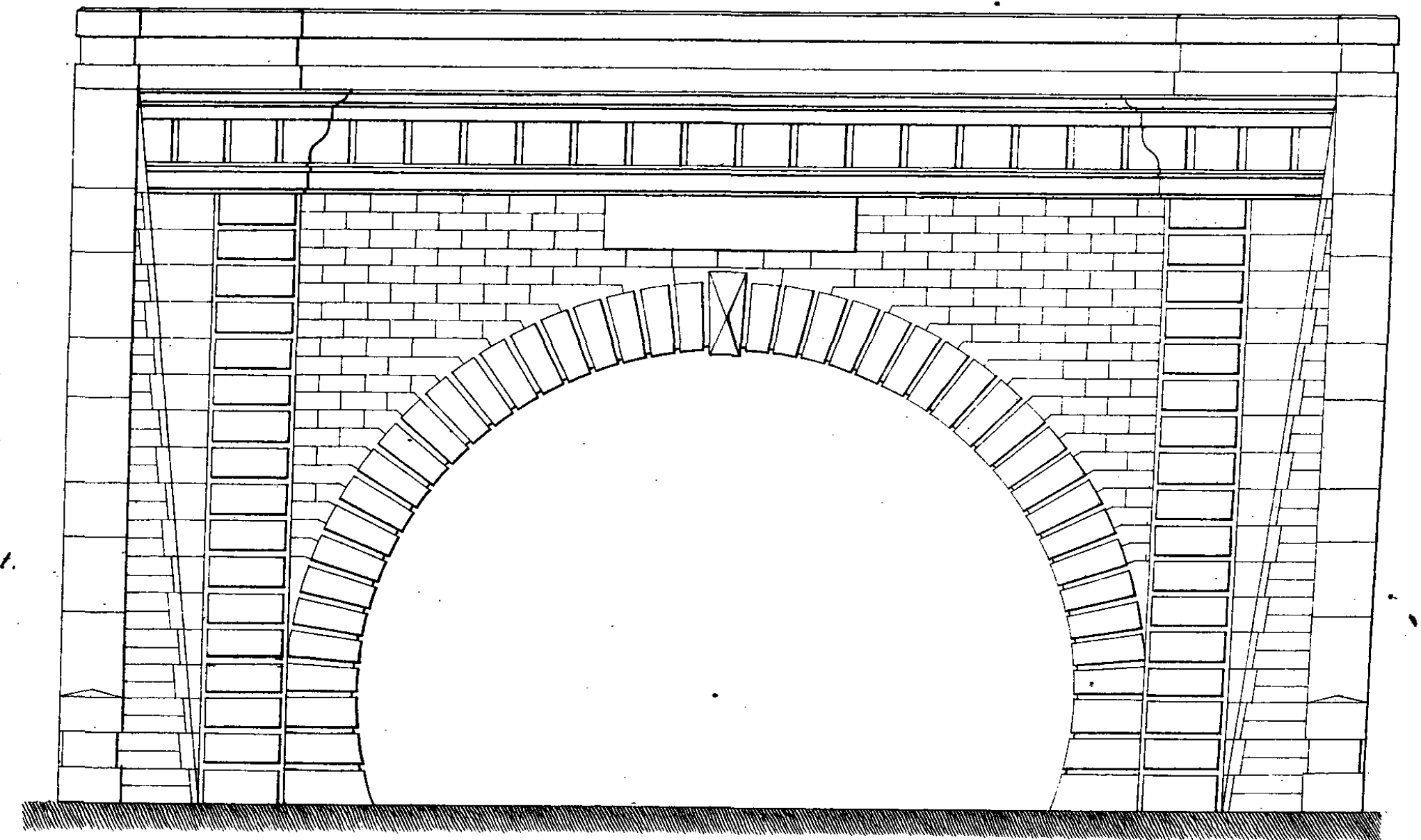
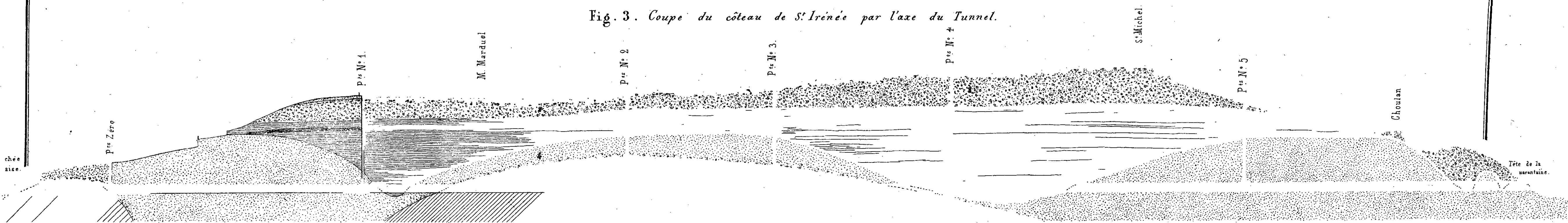


Fig. 2. Tête de la Quarantaine.



Echelle de 0<sup>m</sup>01 cent.  
par mètre.

Fig. 3. Coupe du coteau de S'Irénée par l'axe du Tunnel.



Echelle de 1 à 5000.









Boisage provisoire des puits.  
Fig. 1.

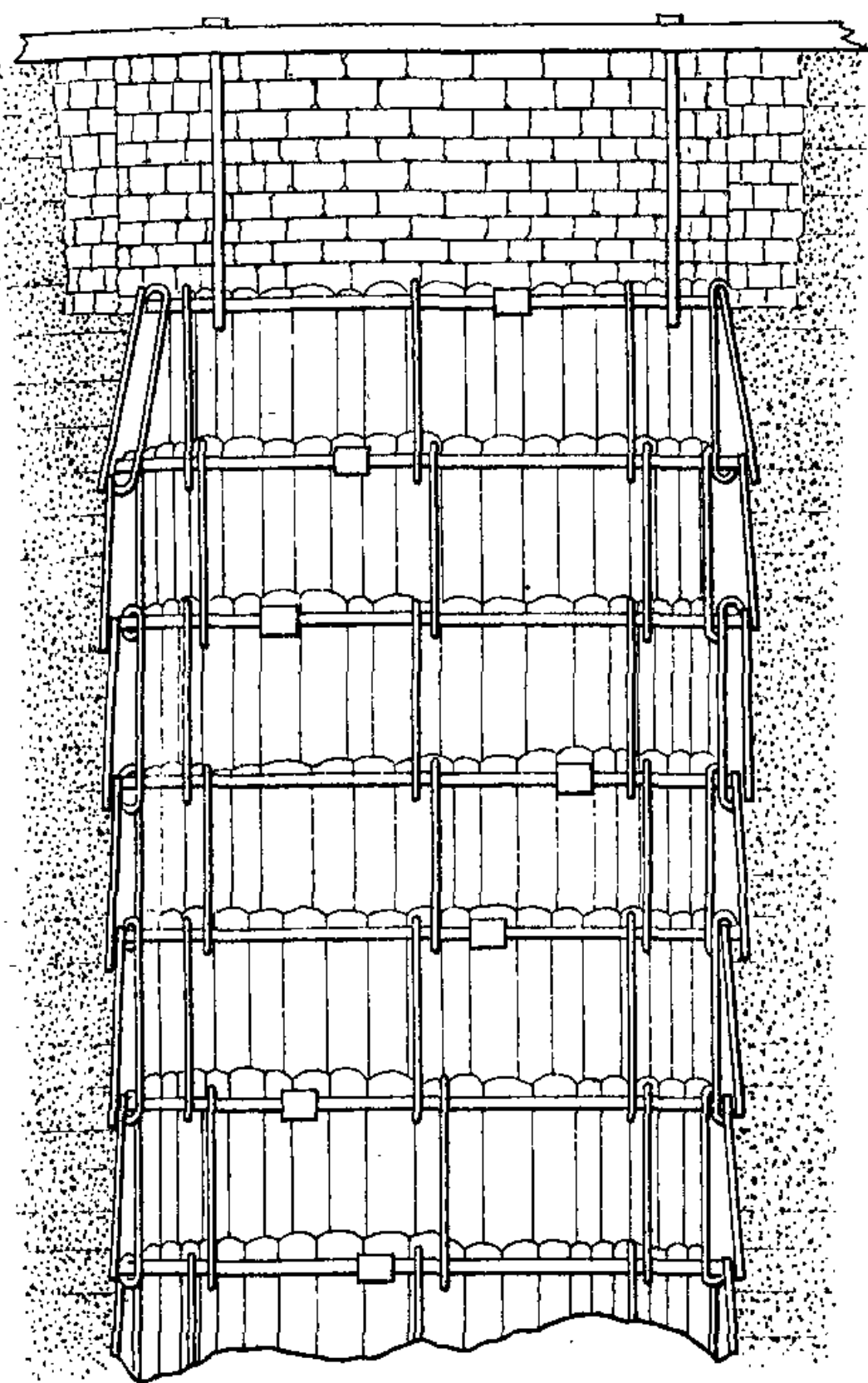


Fig. 3.

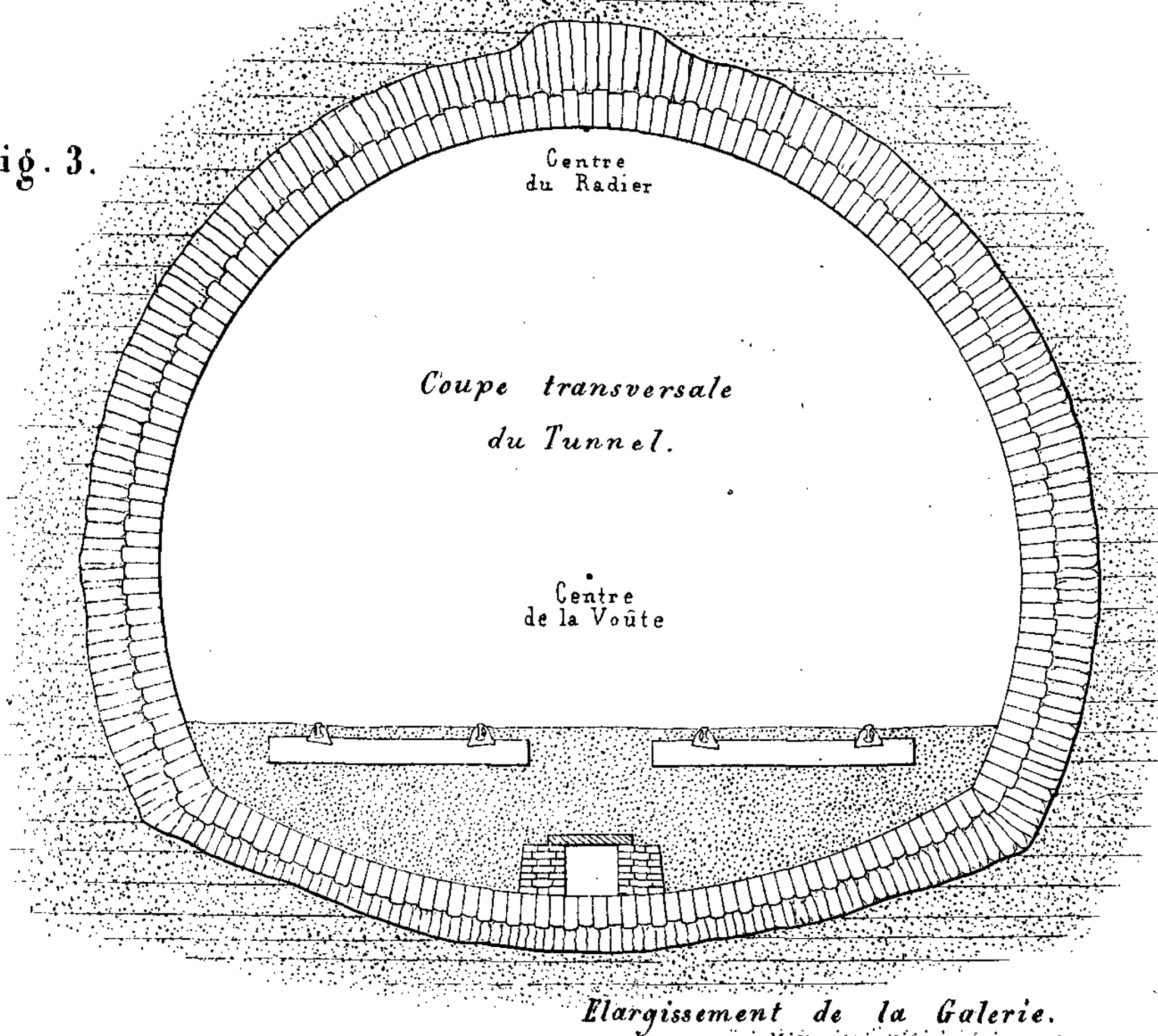


Fig. 2.  
Etablissement du revêtement imperméable.

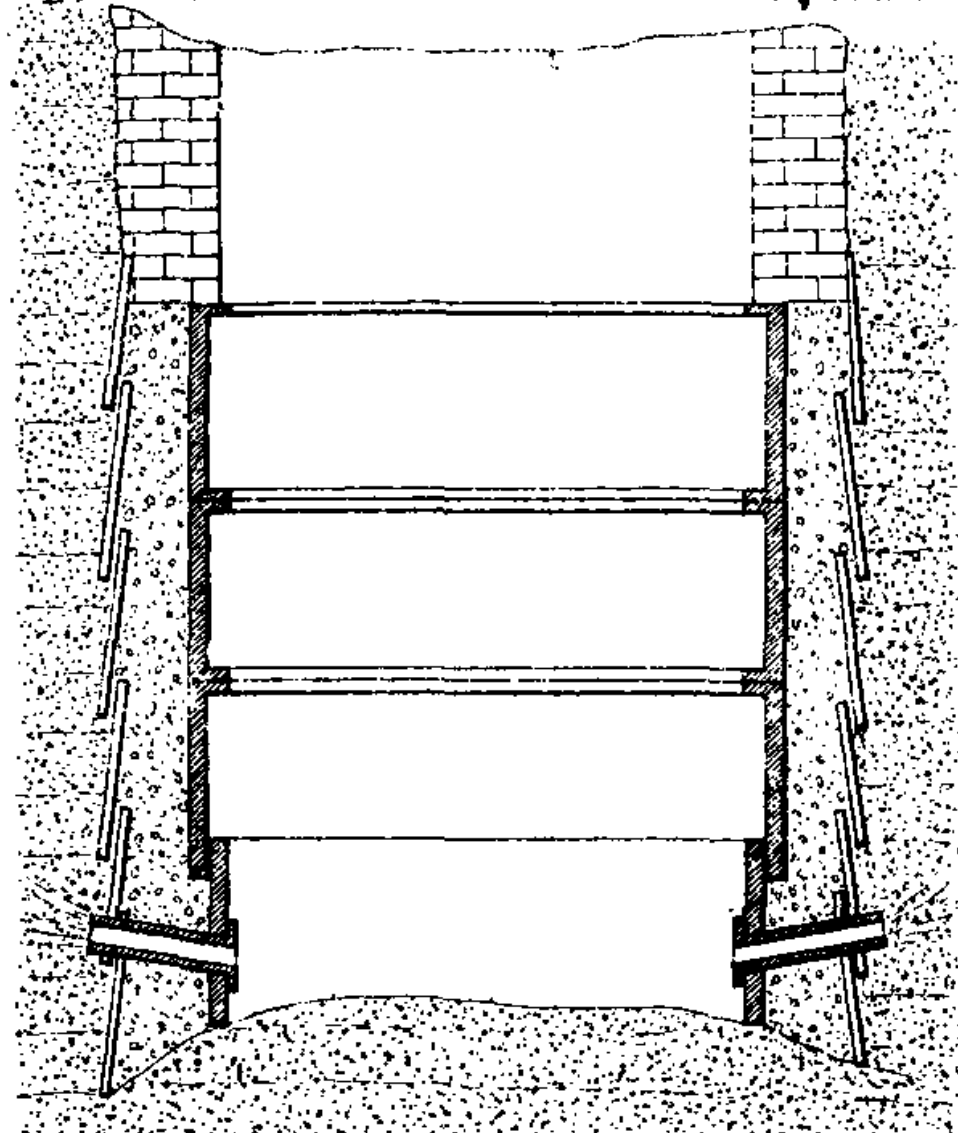


Fig. 4.  
Percement de la 1<sup>re</sup> Galerie.

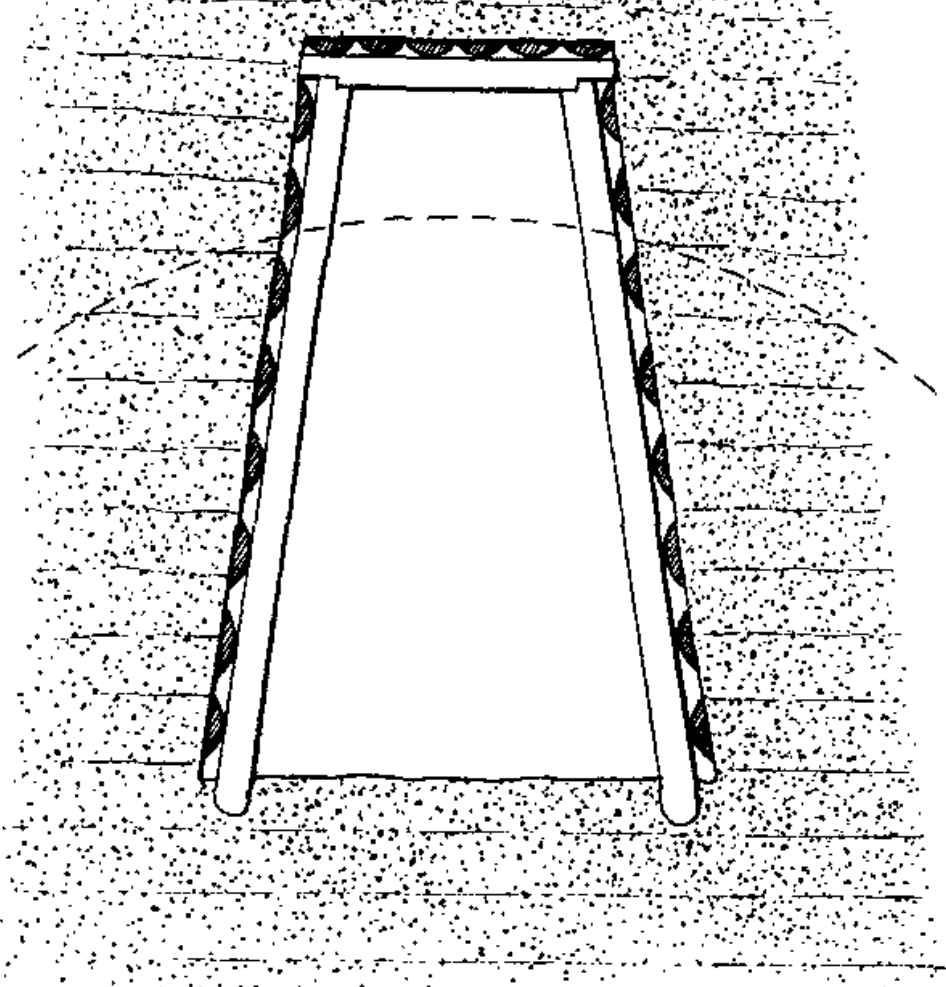
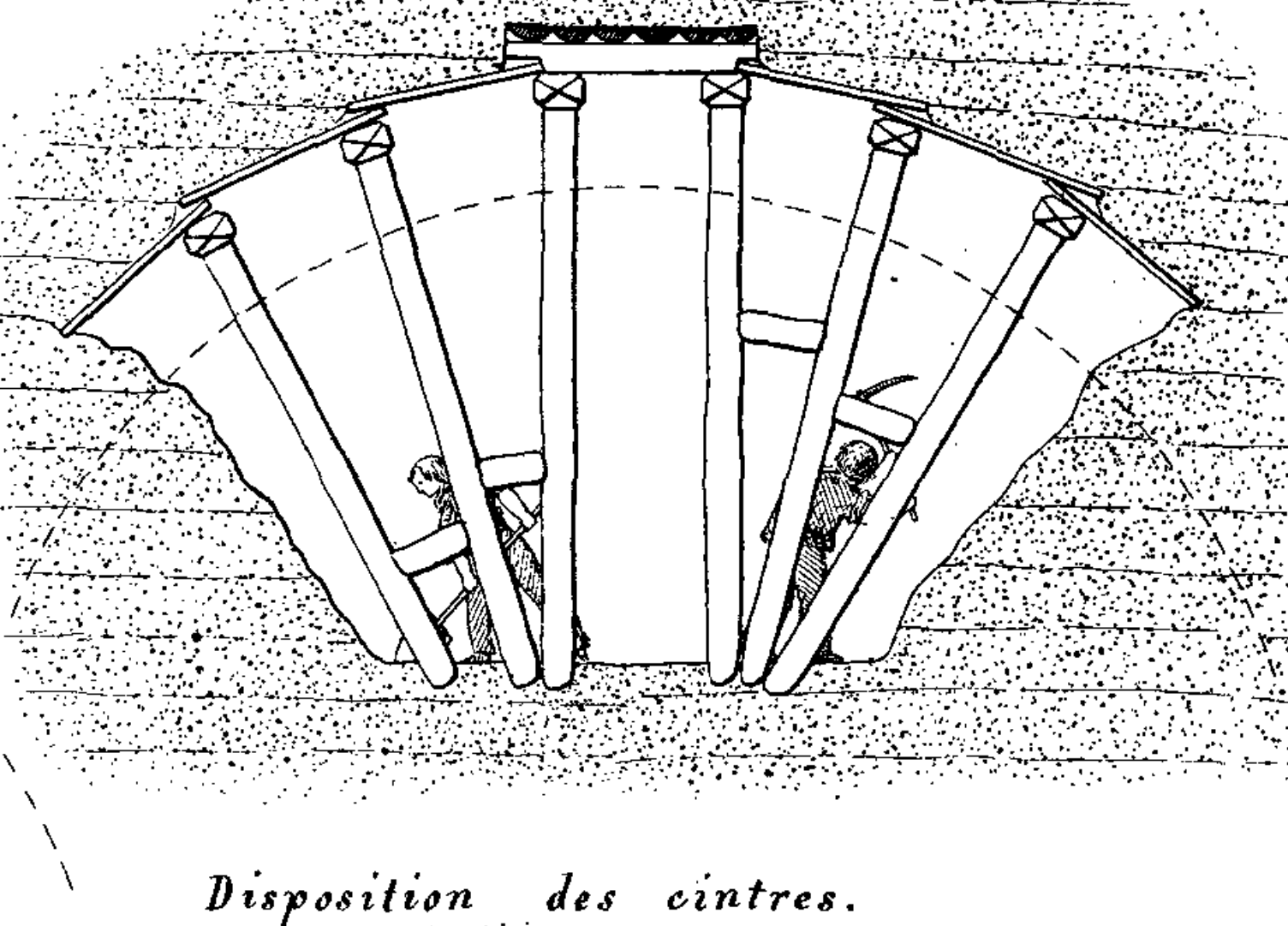


Fig. 5.



Disposition du boisage en éventail.

Fig. 6.

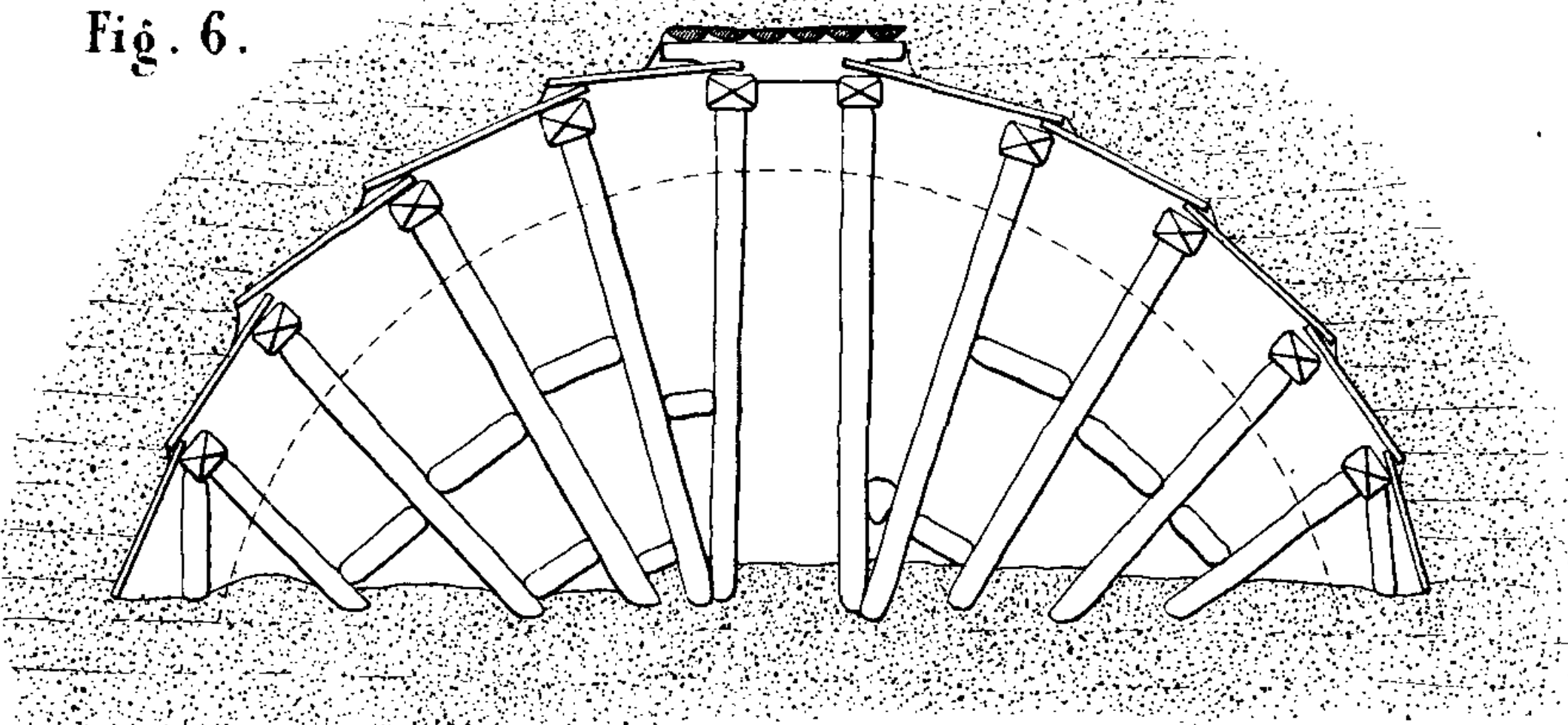
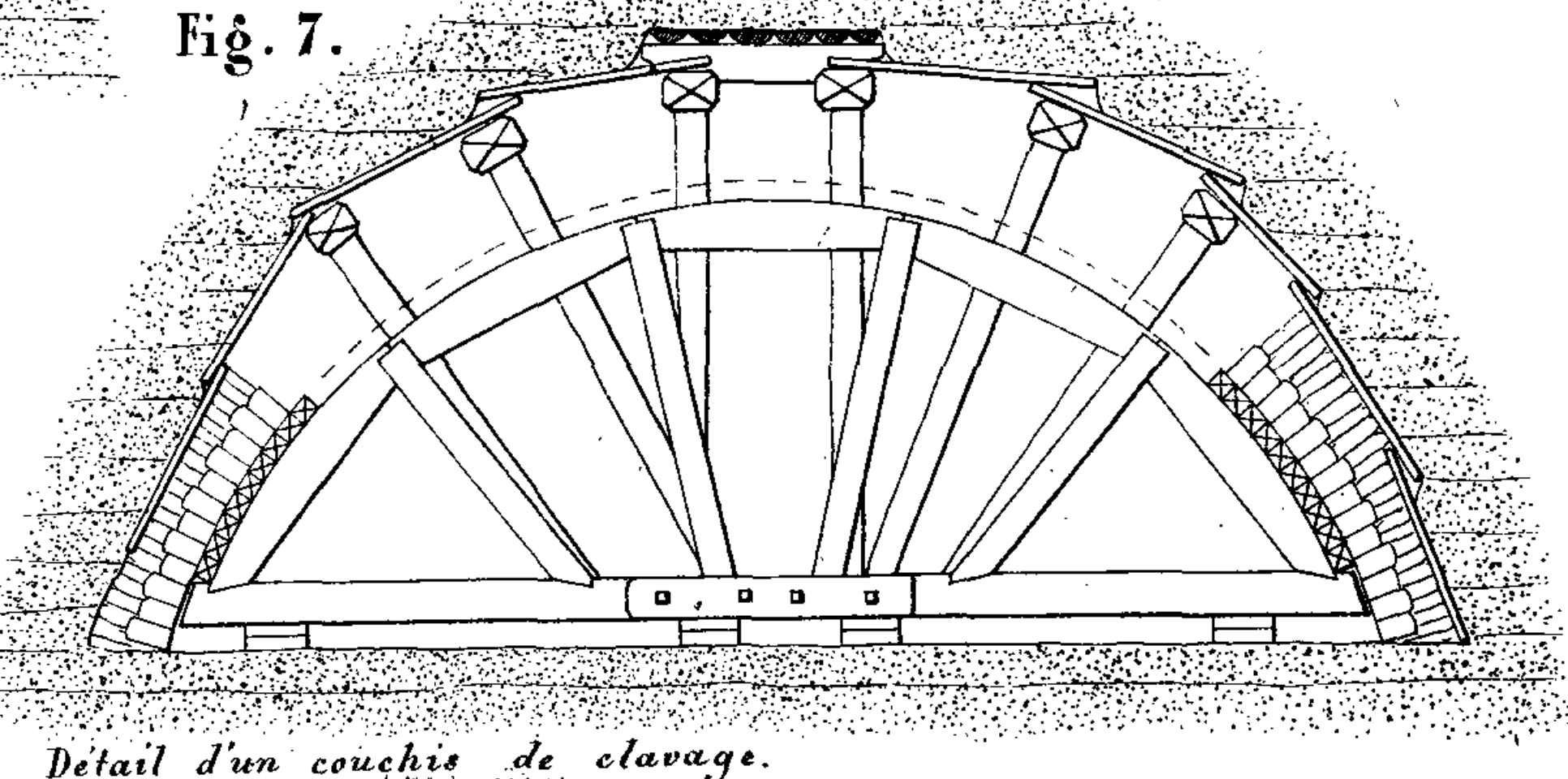
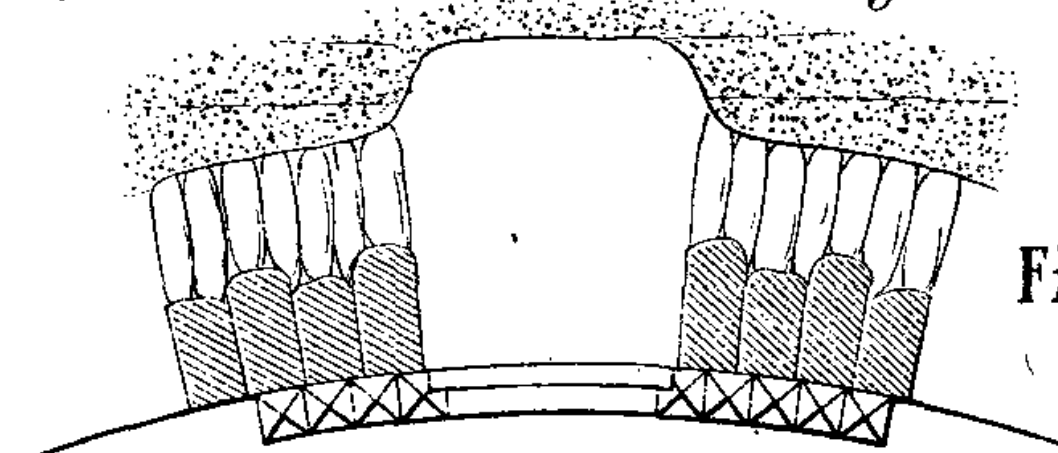


Fig. 7.



Détail d'un couchis de clavage.

Fig. 10.



Préparation de l'emplacement des pieds-droits.

Fig. 9.

Pose du Radier.

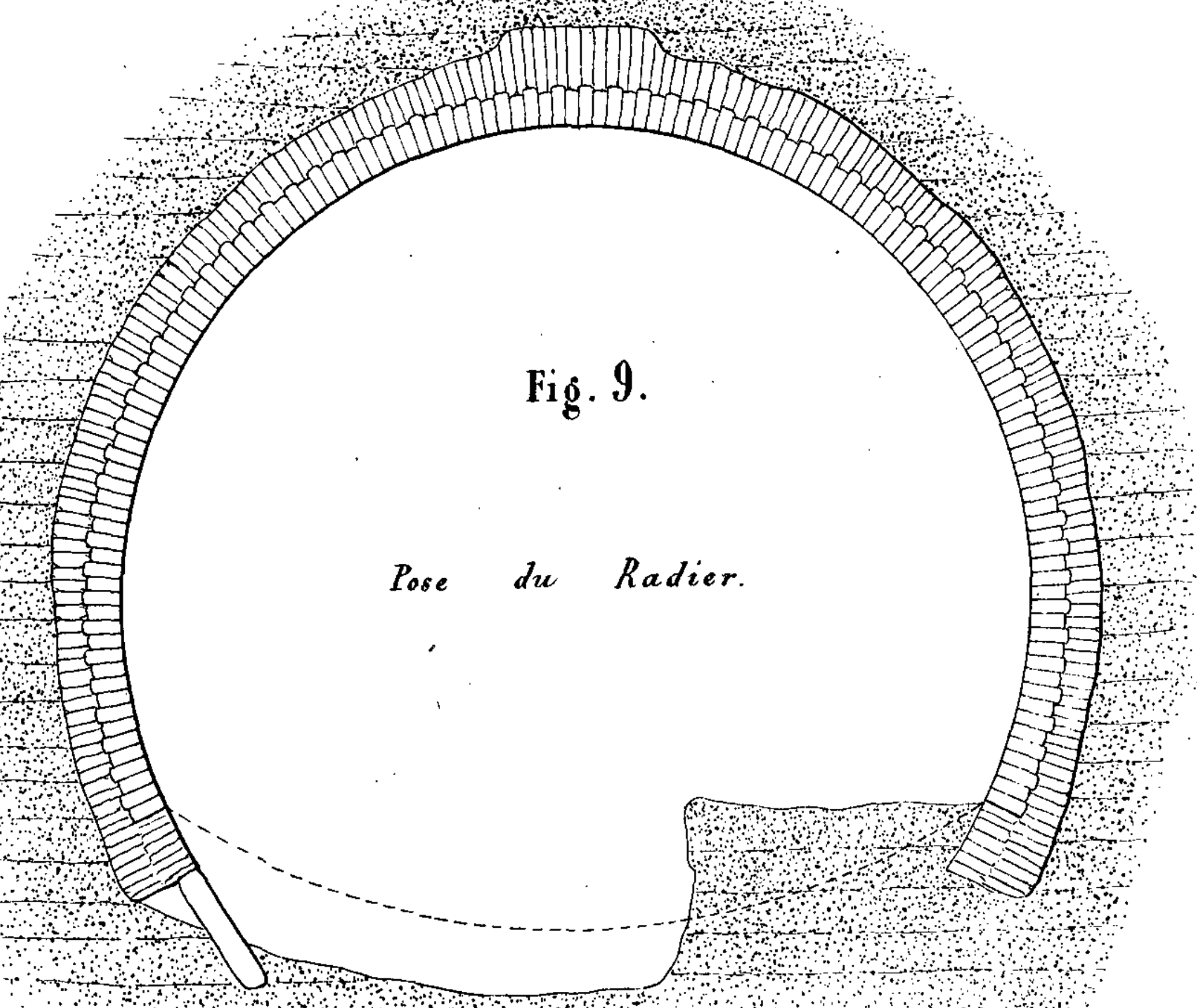


Fig. 8.

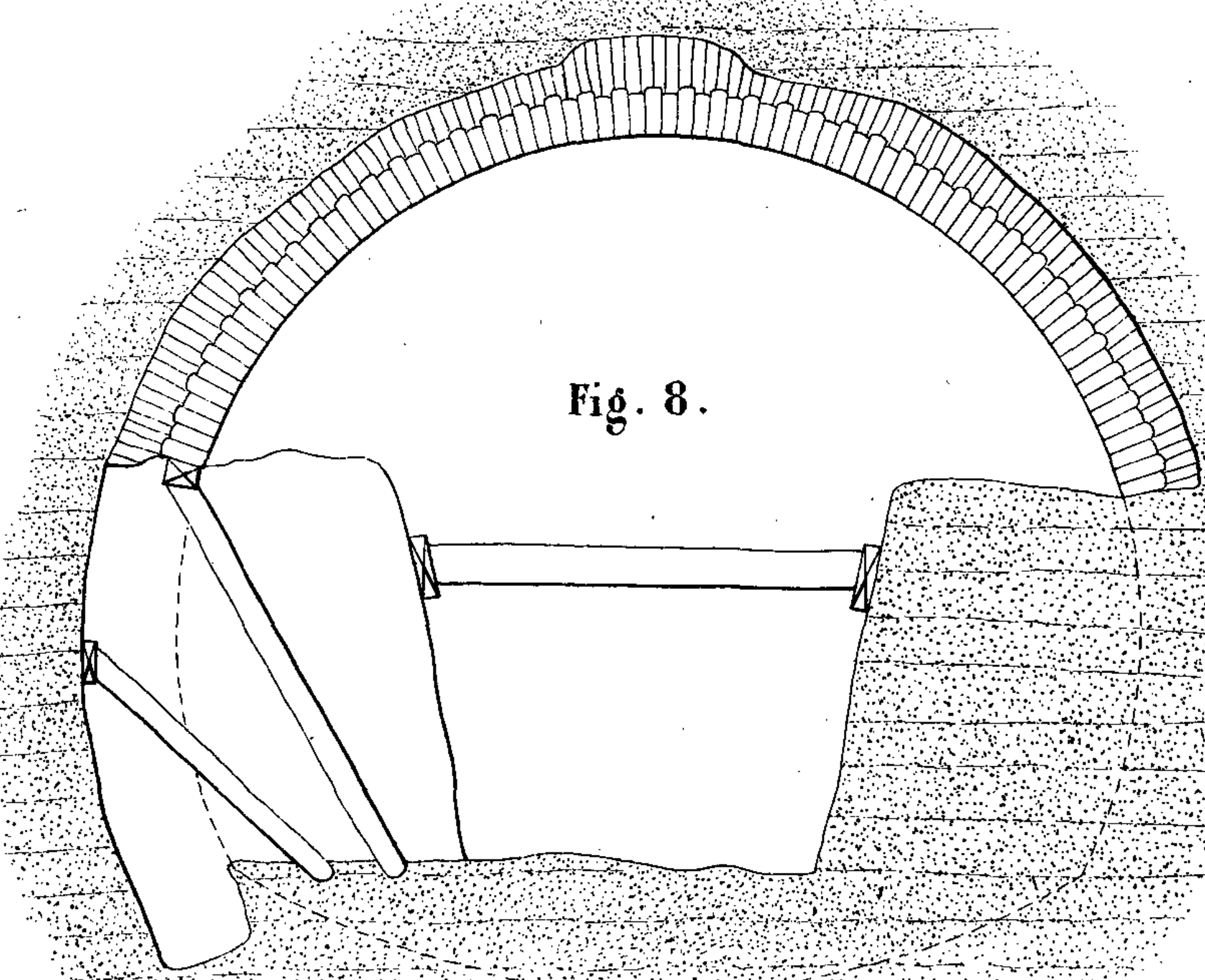


Fig. de 1 à 9. Echelle de 0<sup>m</sup>01 cent. par mètre.  
Fig. 10. Echelle de 0<sup>m</sup>02 cent. par mètre.









Fig. 1.

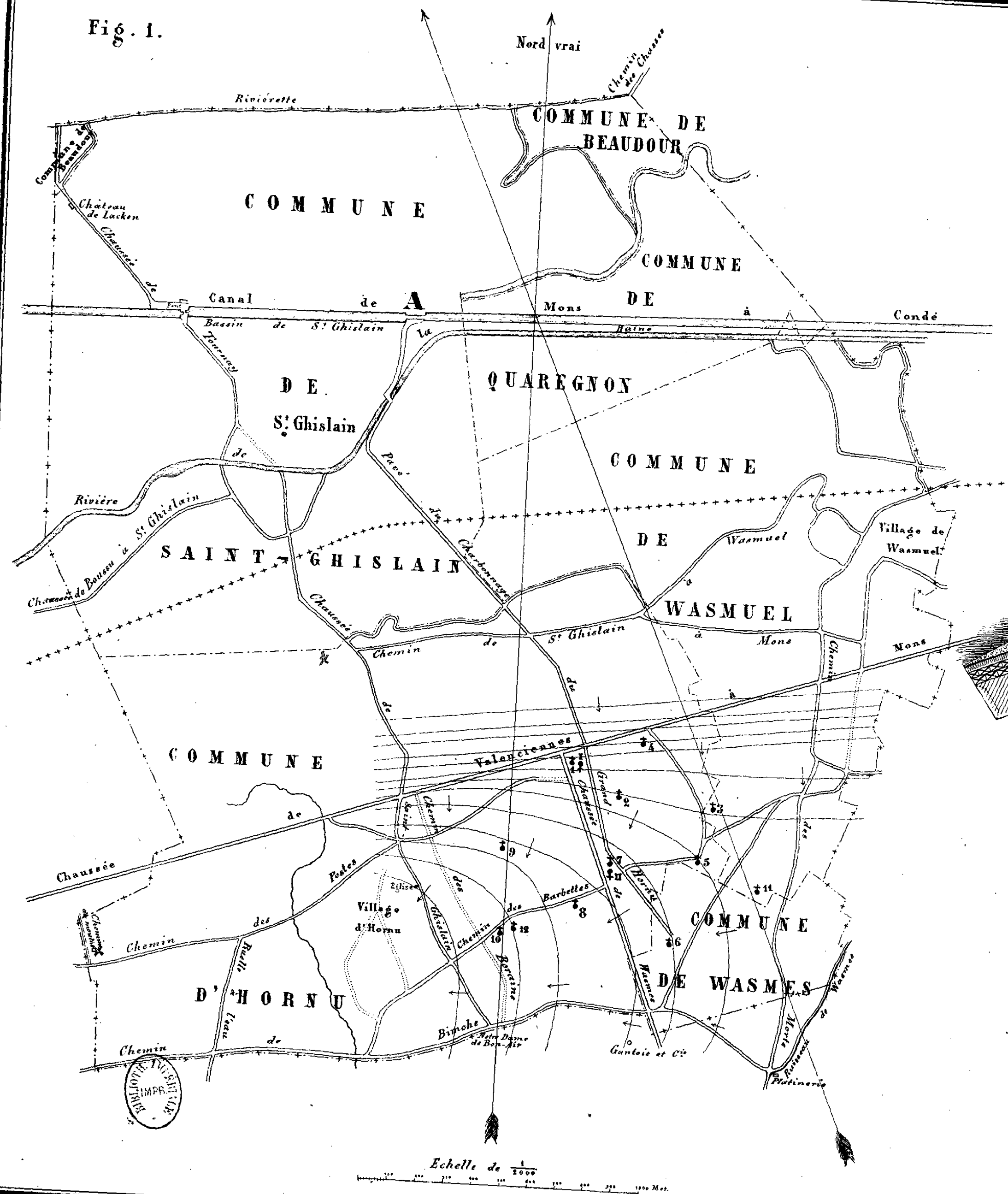


Fig. 2.

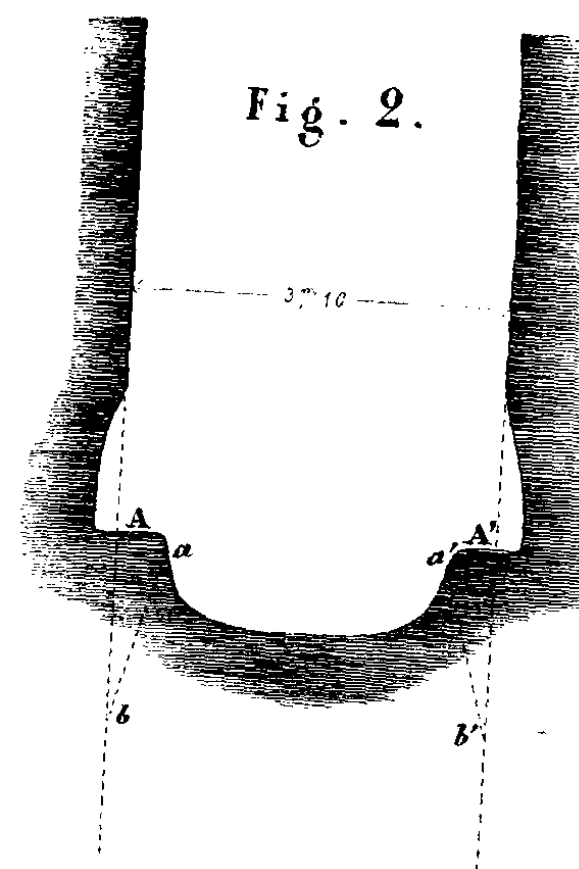


Fig. 3.

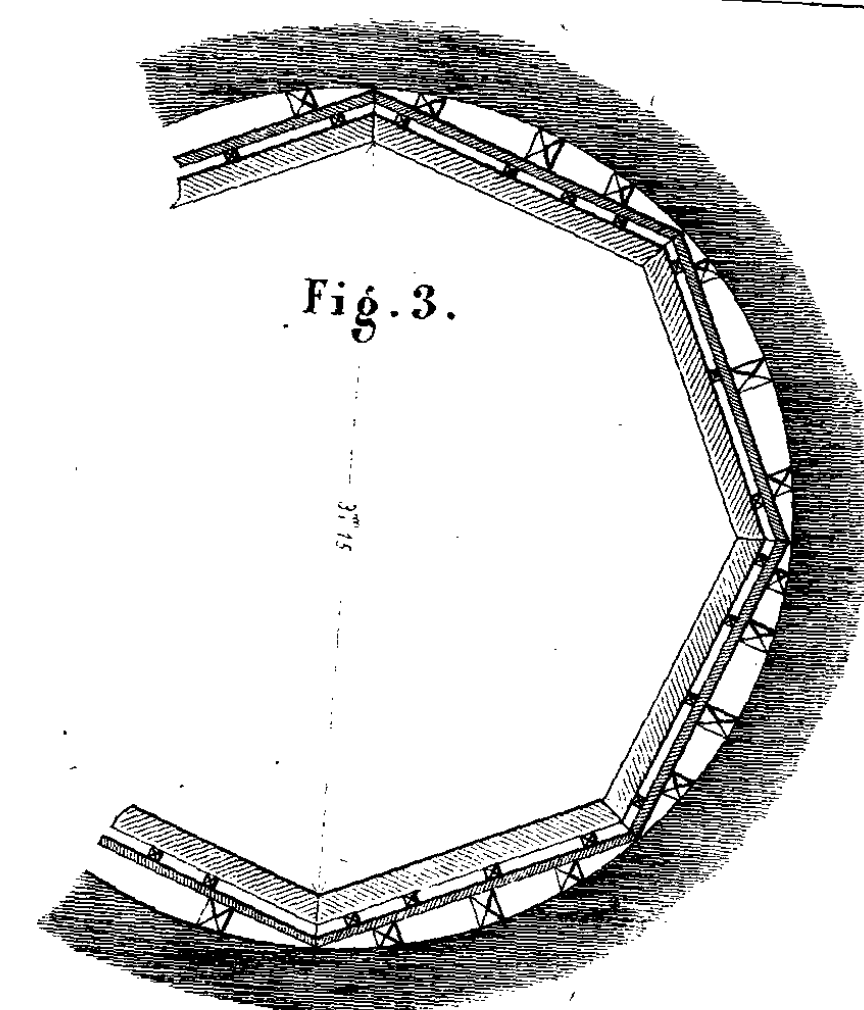
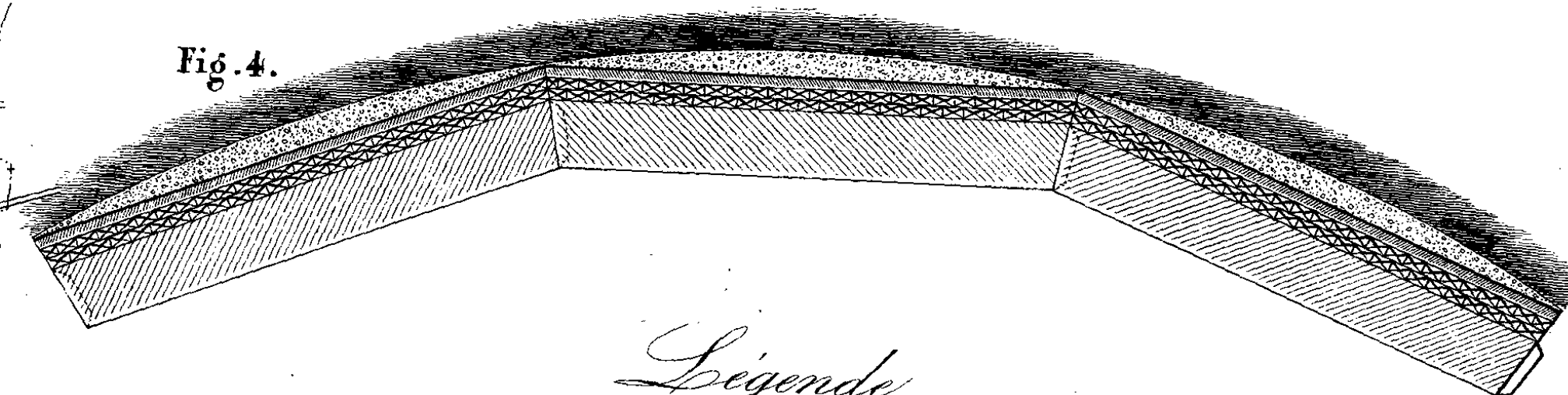


Fig. 4.



### Légende.

- Puits d'extraction. Près de chaque puits est un chiffre qui
- Puits d'épuisement. Indique le numéro sous lequel il est désigné.
- Limites de la Concession.
- Limites des communes.
- Trace de la direction des couches.
- +++++ Trace approximatif du chemin de fer de Bruxelles à Valenciennes.
- A** Point marquant la position, sur le Canal de Mons à Condé, des magasins de dépôt pour expéditions par bateaux. Les charbons y sont conduits par un chemin de fer à double voie établi le long du pavo du charbonnage, avec embranchements sur les puits 96° 1, 5, 6, 7, 8, 9, 10, 11 et 12.

Echelles

- Fig. 2. 0<sup>m</sup>01 par mètre
- Fig. 3. 0<sup>m</sup>02 par mètre
- Fig. 4. 0<sup>m</sup>04 par mètre



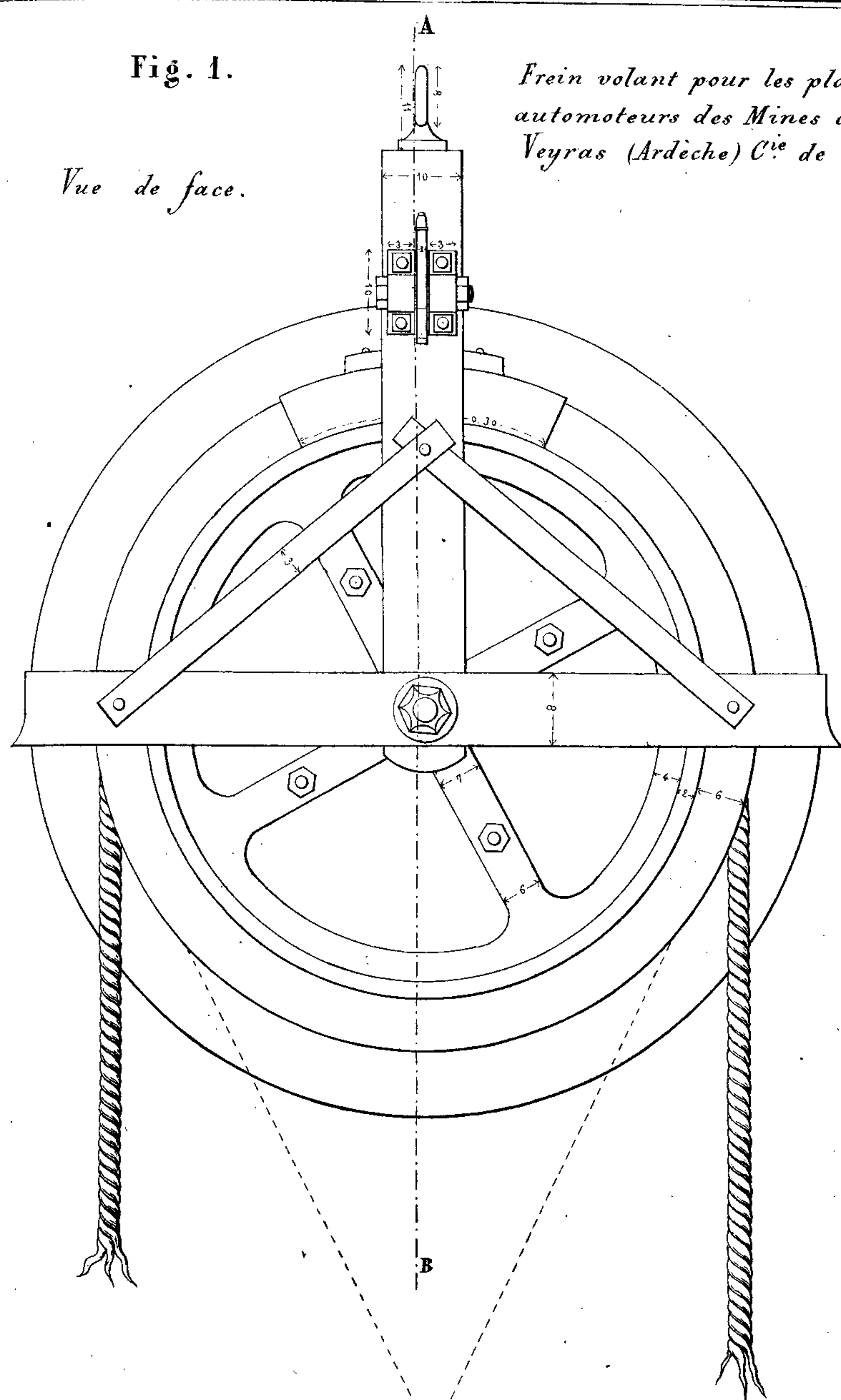




**Fig. 1.**

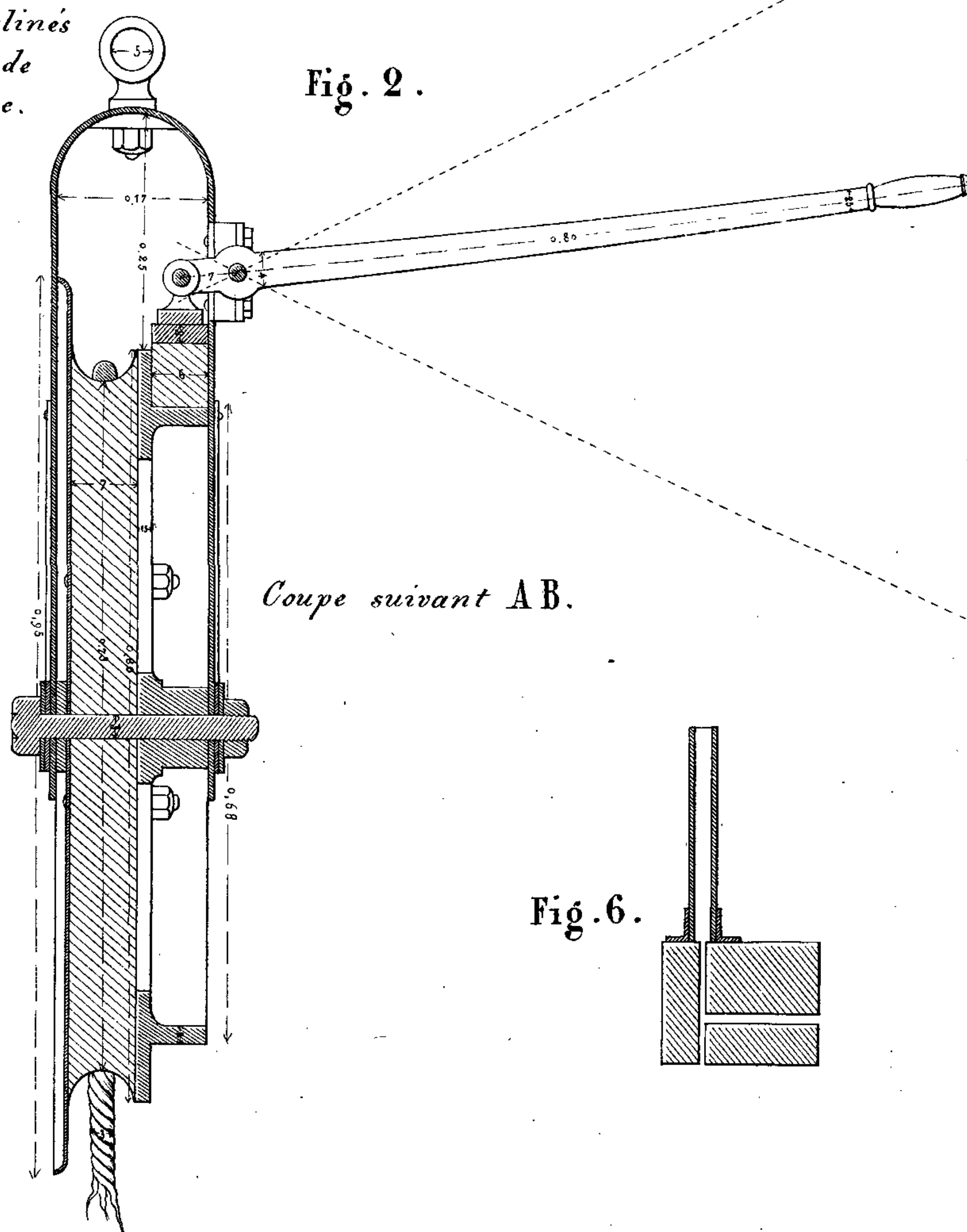
*Vue de face.*

*Frein volant pour les plans inclinés  
automoteurs des Mines de fer de  
Veyras (Ardeche) C<sup>ie</sup> de l'Horme.*



**Fig. 2 .**

*Coupe suivant A B.*



**Fig. 6.**

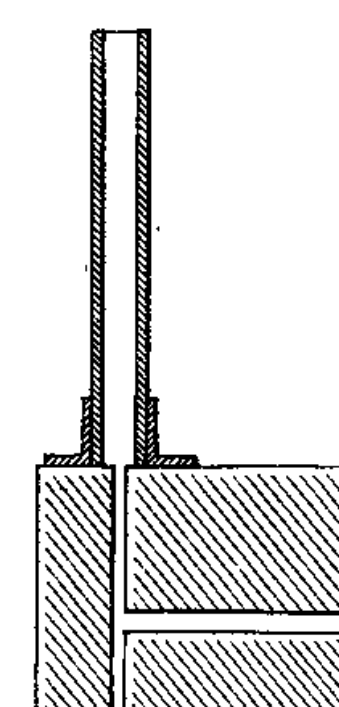
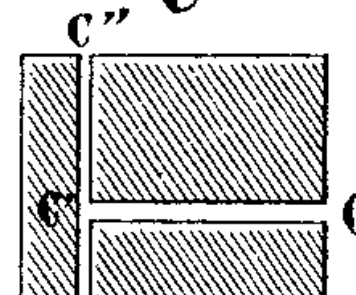


Fig. 7.



**Fig. 8.**

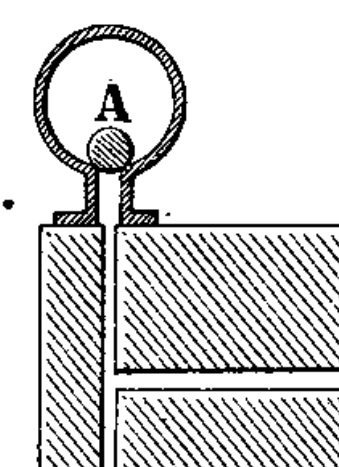


Fig. 3.

**A.** Régulateur à vent, à volume constant, en maçonnerie  
des Usines de la C<sup>ie</sup> des Fonderies et Forges de l'Horme  
au Pouzin (Ardèche).

*Coupe suivant CD fig.4.*

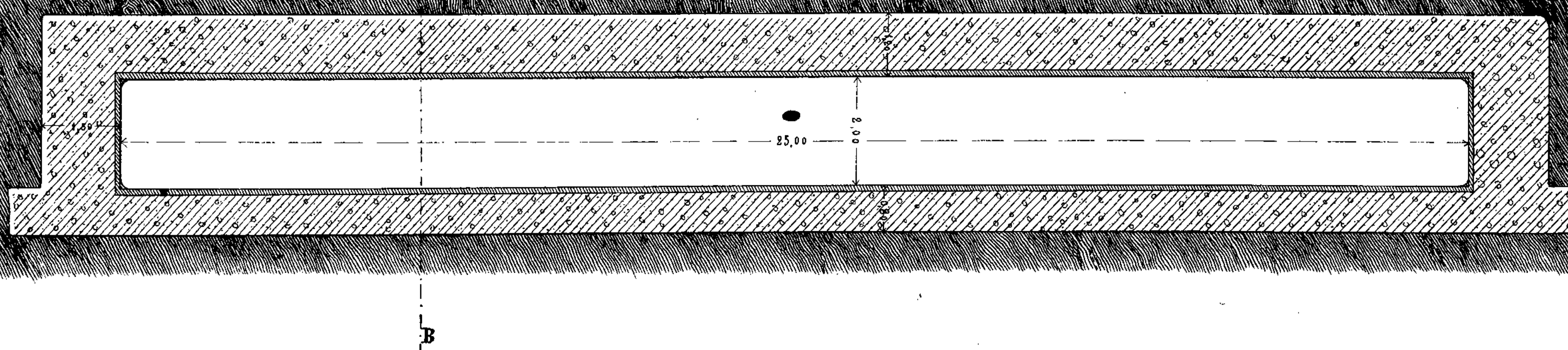


Fig. 4.

Coupe suivant **AB** fig.3.

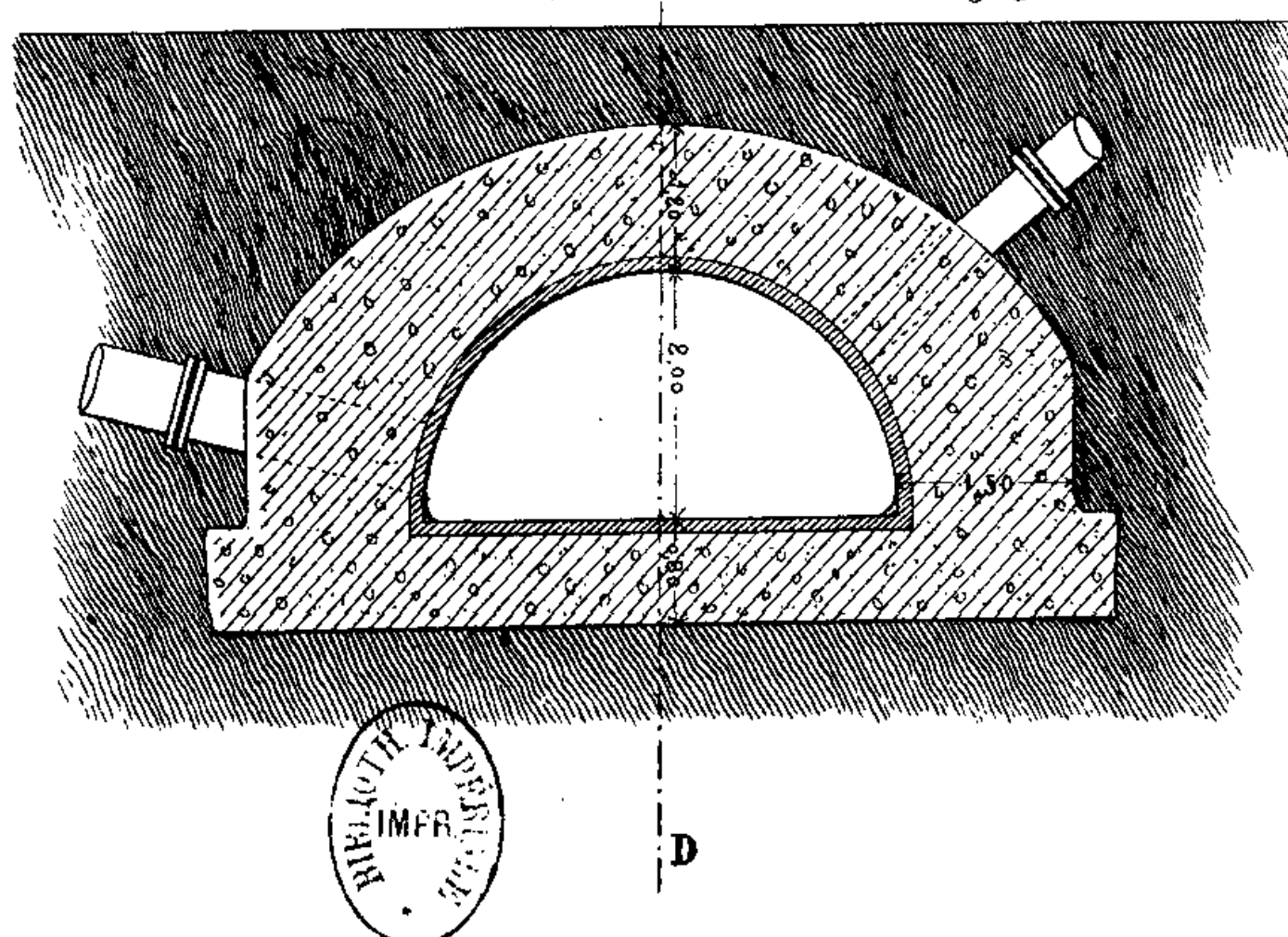


Fig. 5.

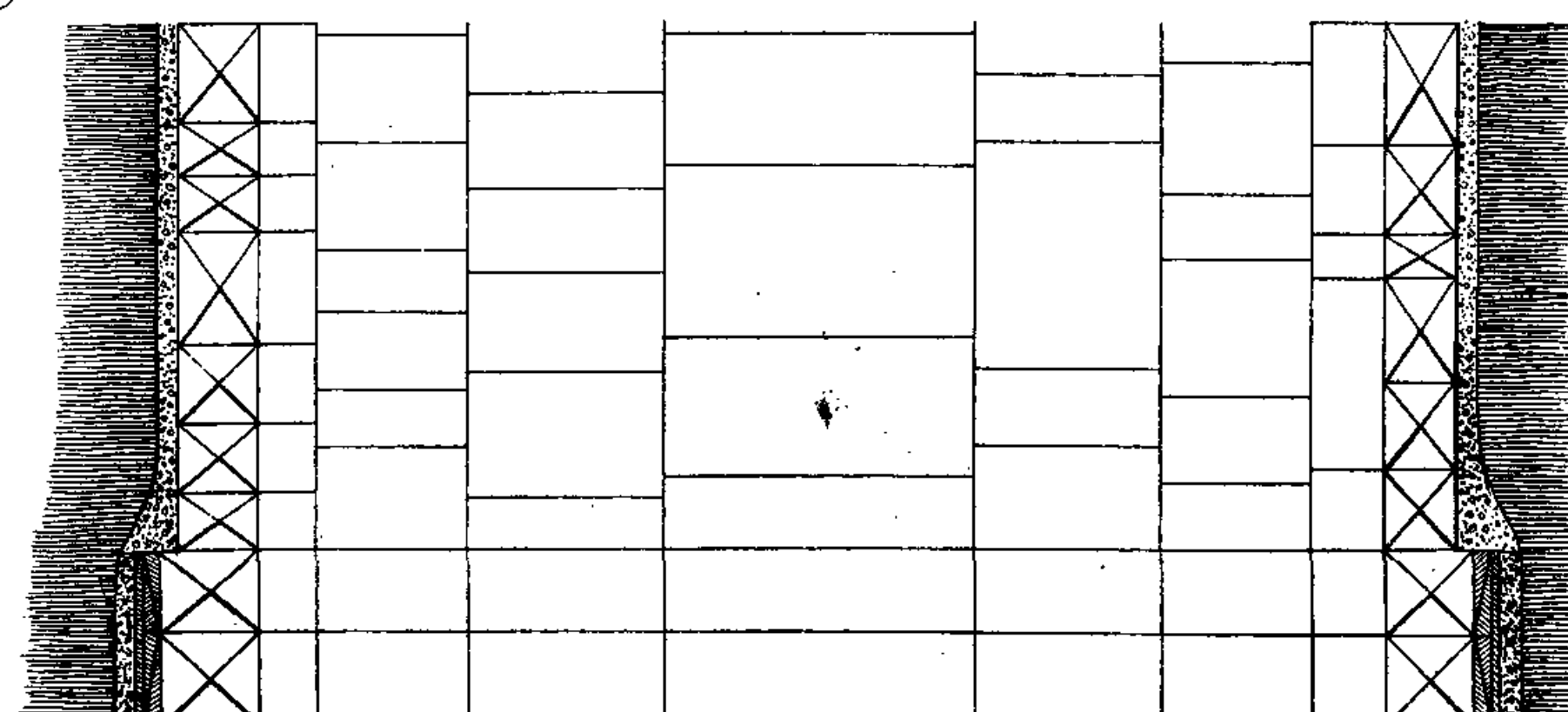


Fig. 1 et 2, échelle de 0<sup>m</sup>1 par mètre.  
Fig. 3 et 4, échelle de 0<sup>m</sup>001 par mètre.  
Fig. 5, échelle de 0<sup>m</sup>02 par mètre.

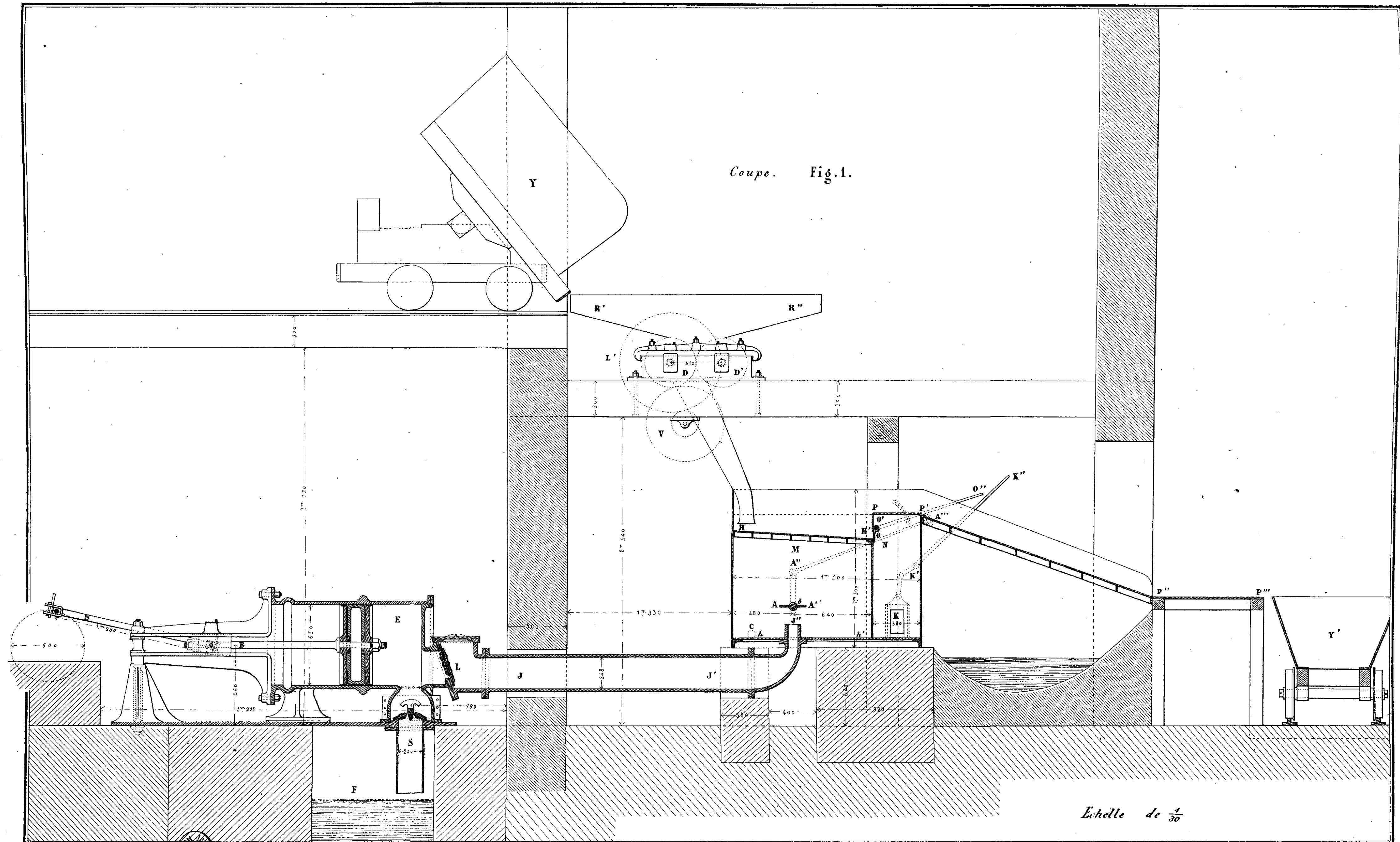






APPAREIL D'ÉPURATION DES HOUILLES.  
(Système Meynier.)

PL. XX.



Lith. Aublat J<sup>re</sup> et F<sup>re</sup> Lantz à St Etienne.







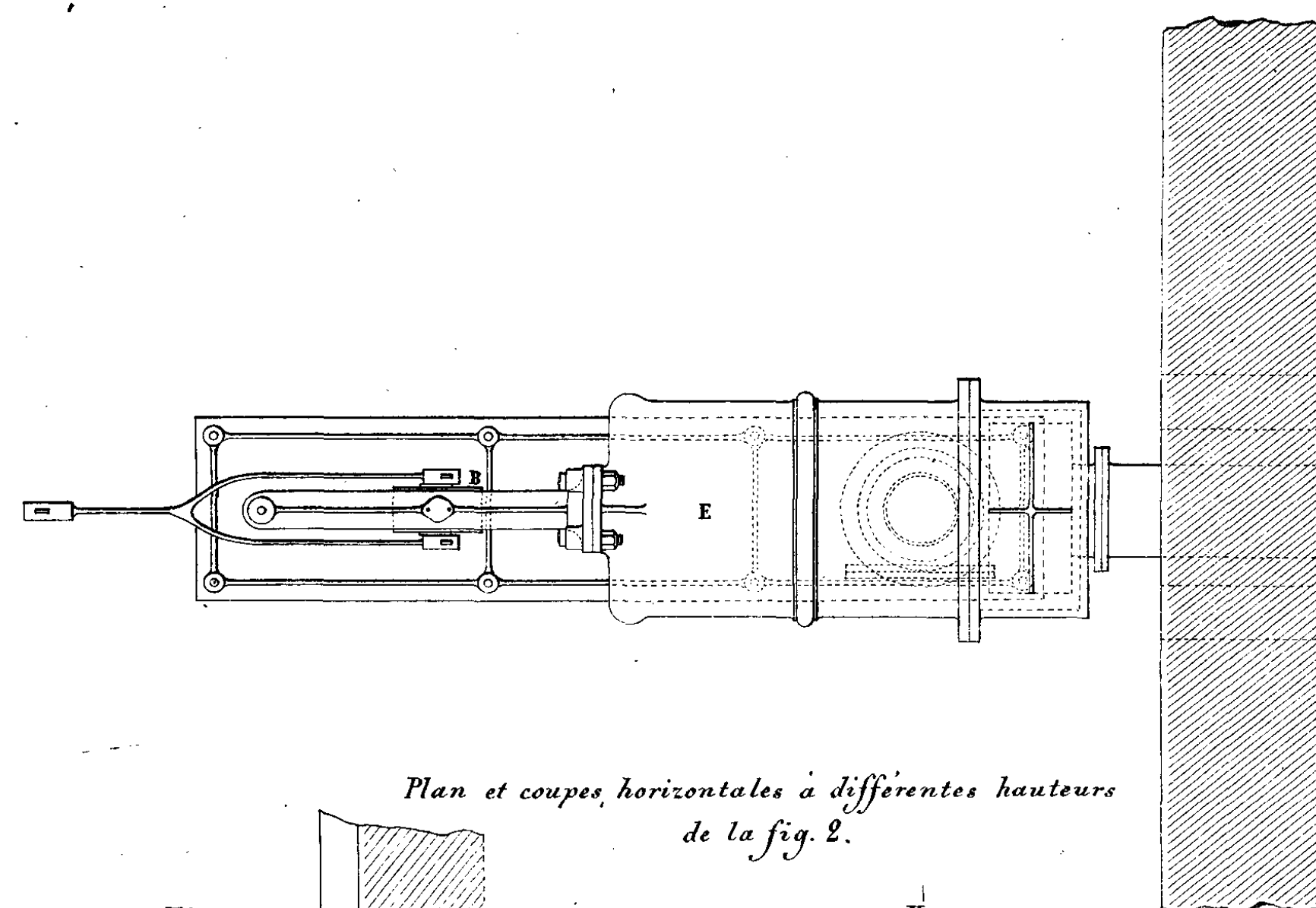
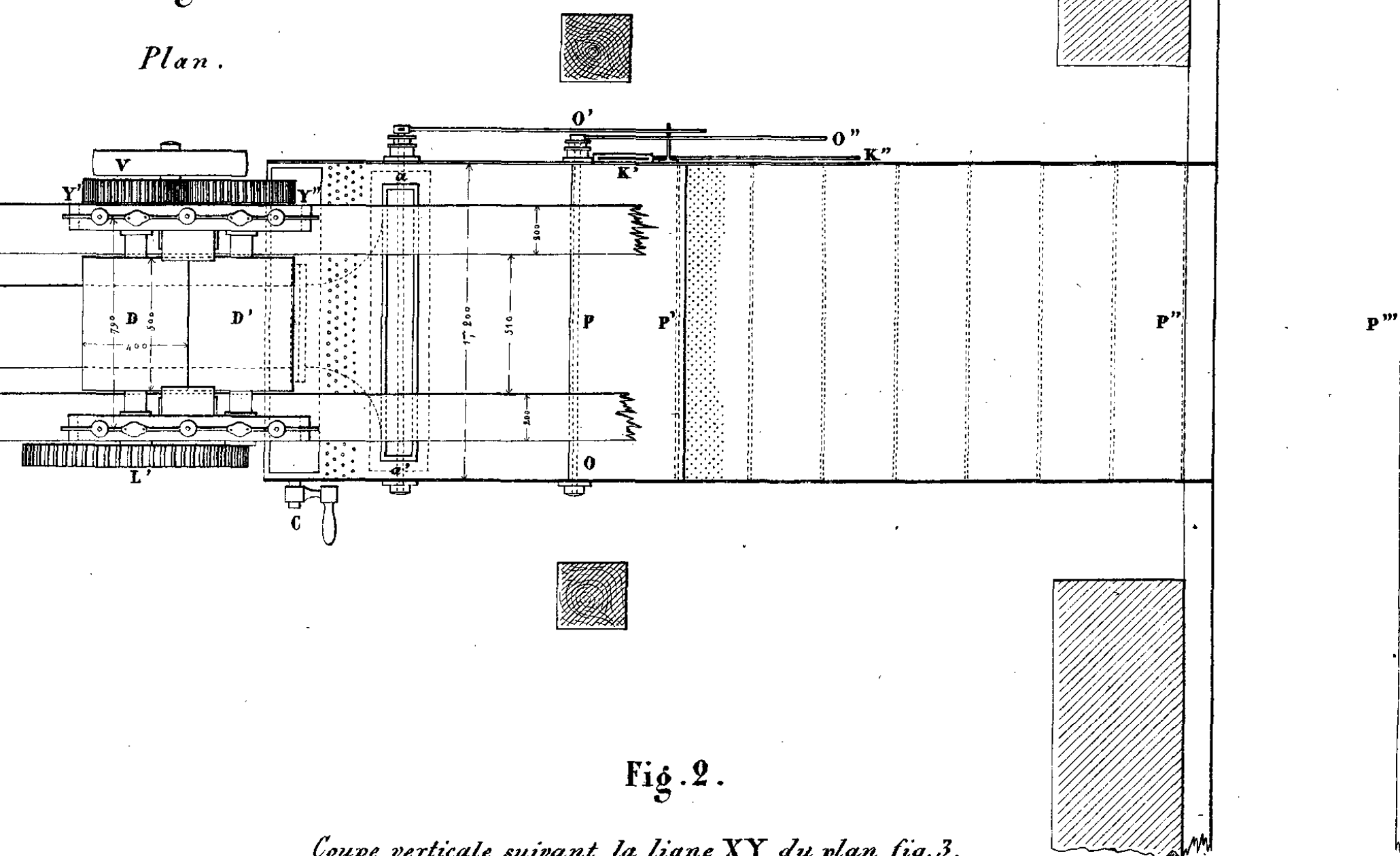


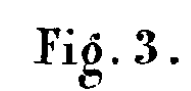
Fig. 1.

*Plan .*



**Fig. 2.**

*Coupe verticale suivant la ligne XY du plan fig.3.*



*Plan et coupes horizontales à différentes hauteurs  
de la fig. 2.*

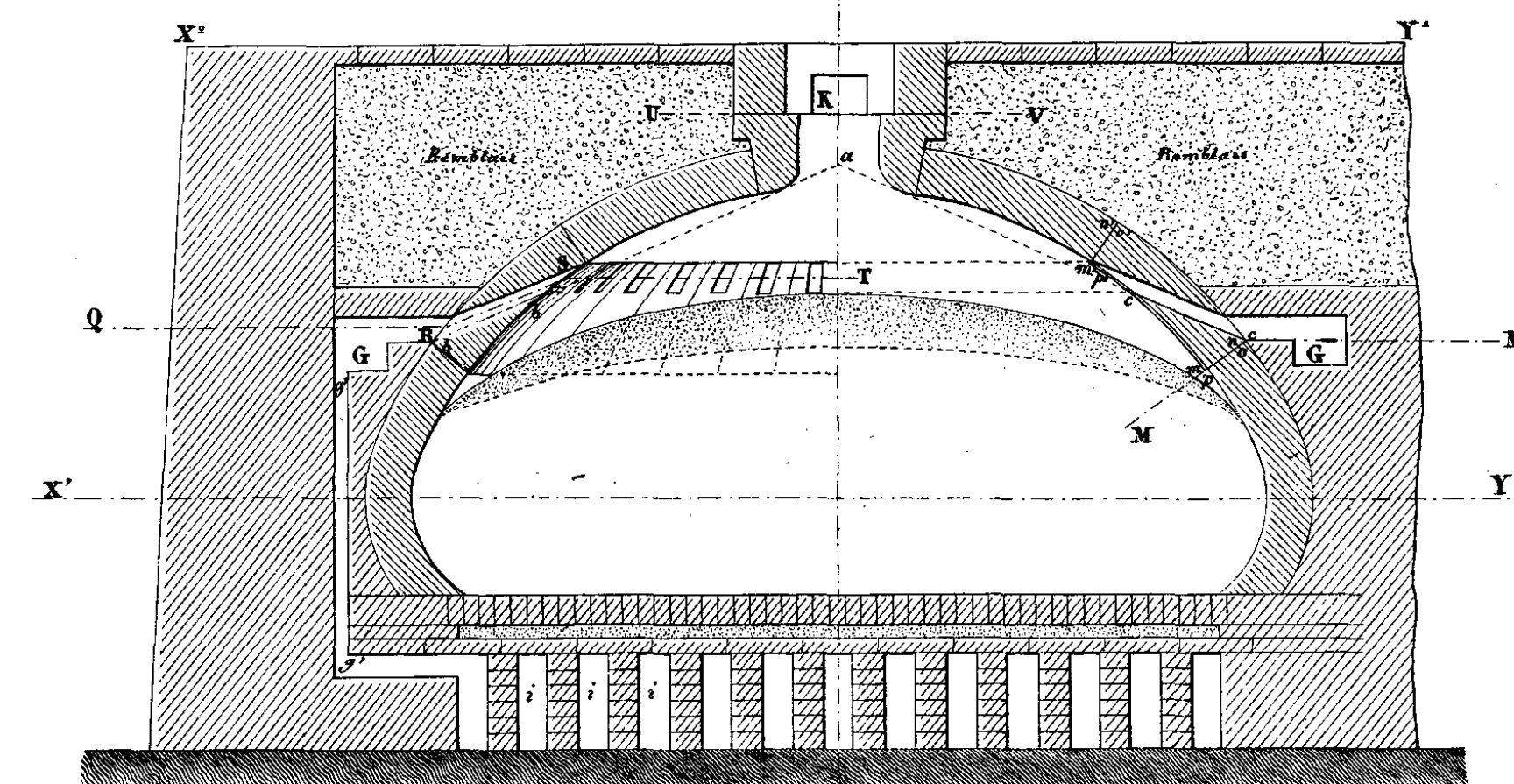
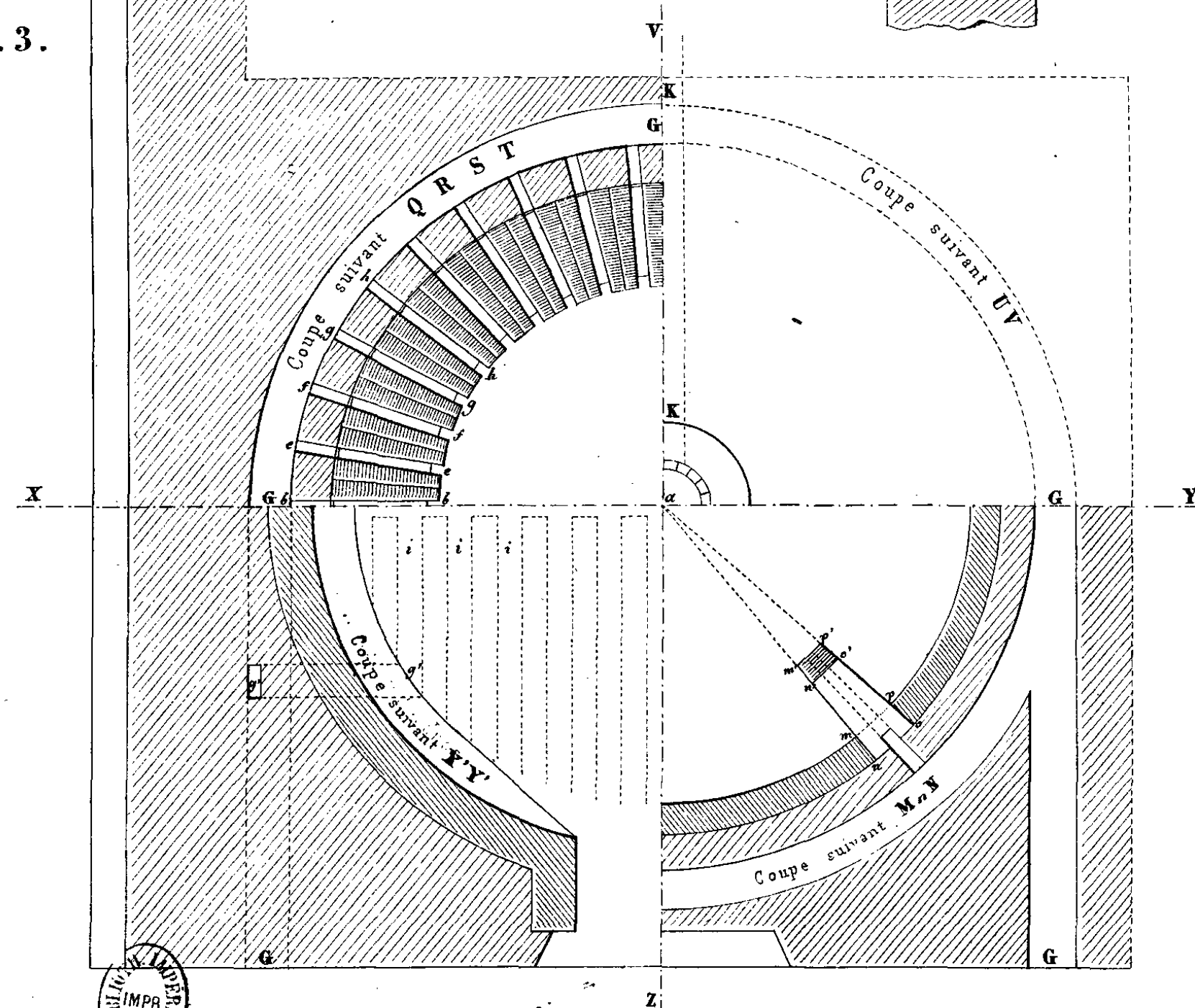


Fig. 1. Echelle de  $\frac{1}{\infty}$ .

*Fig. 2 et 3. Echelle de 0<sup>m</sup>05 pour un Mètre.*

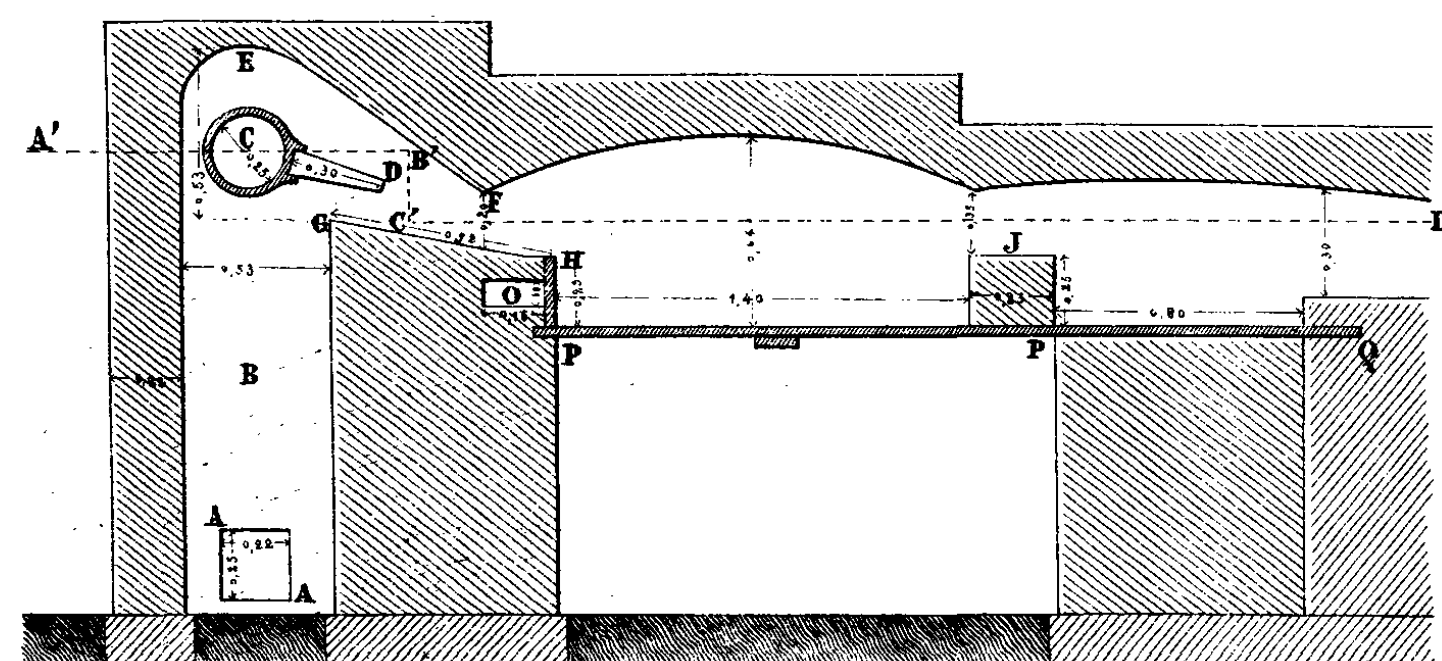






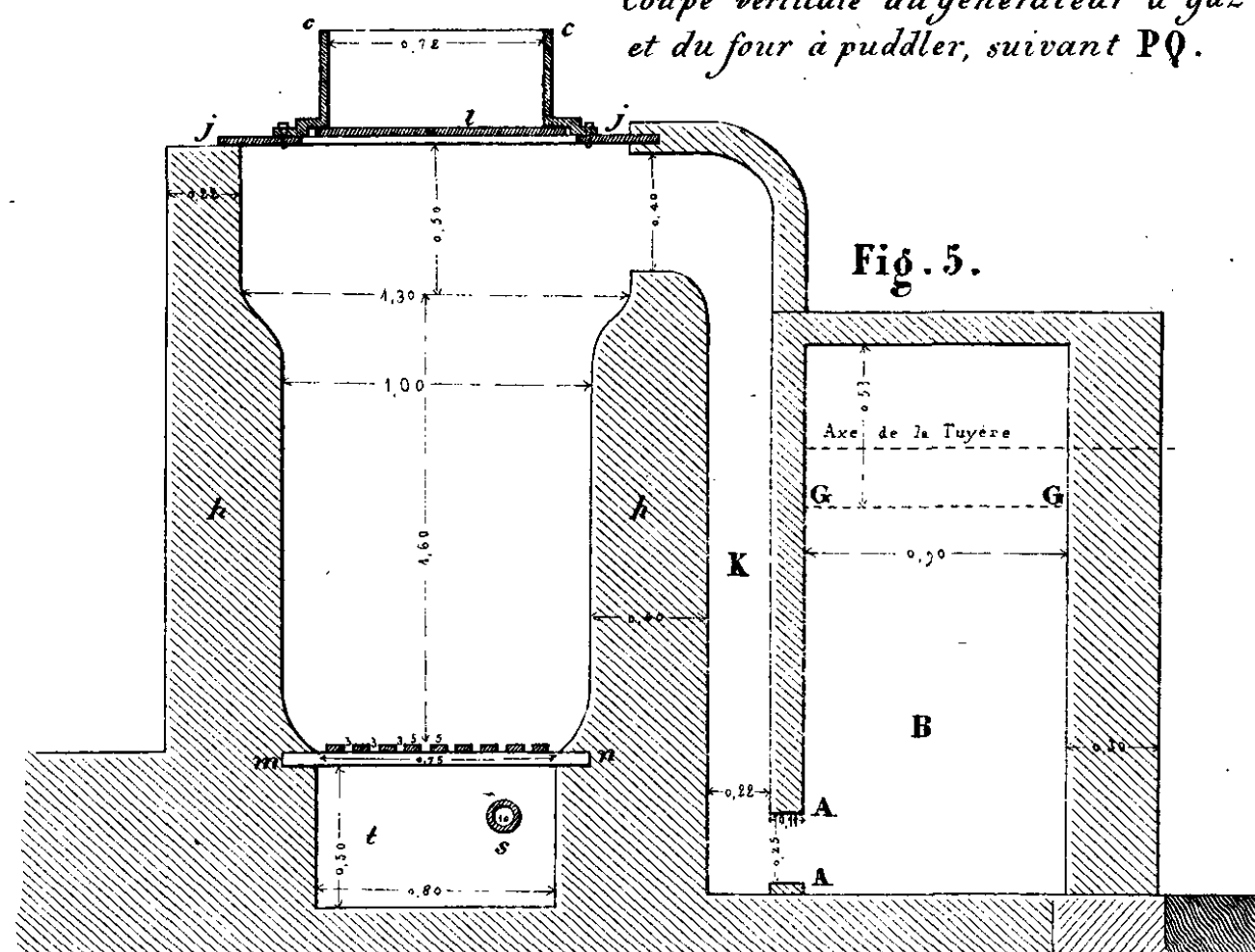
Fig. 7.

Coupe verticale du four à puddler suivant MN.



Coupe verticale du générateur à gaz  
et du four à puddler, suivant PQ.

Fig. 5.



Coupe verticale des chambres à ligneux, suivant PQ.  
Elevation et profil d'un wagon pour charger le bois vert.

Fig. 2.

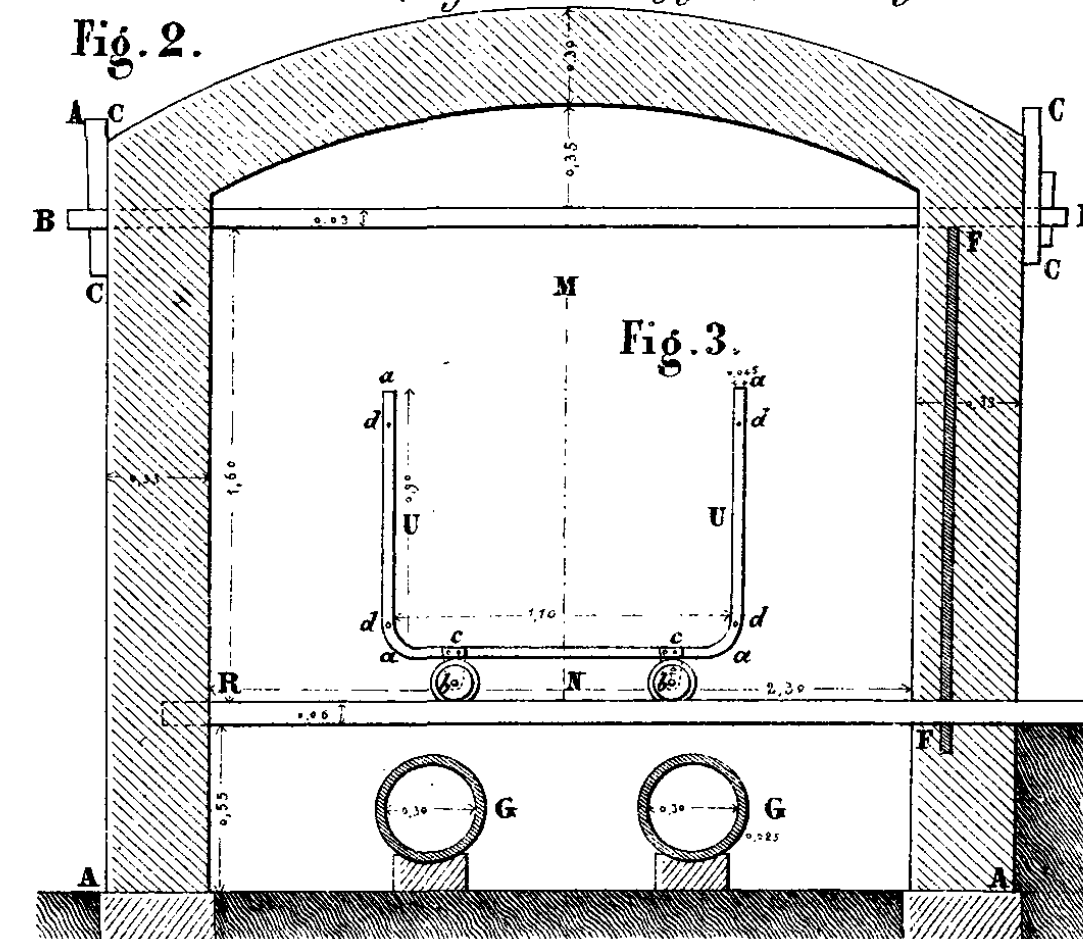


Fig. 3.

Fig. 4.

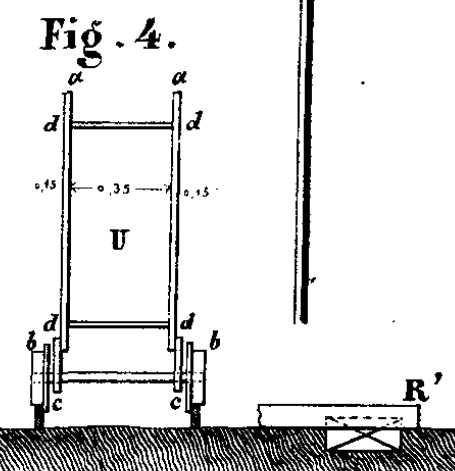
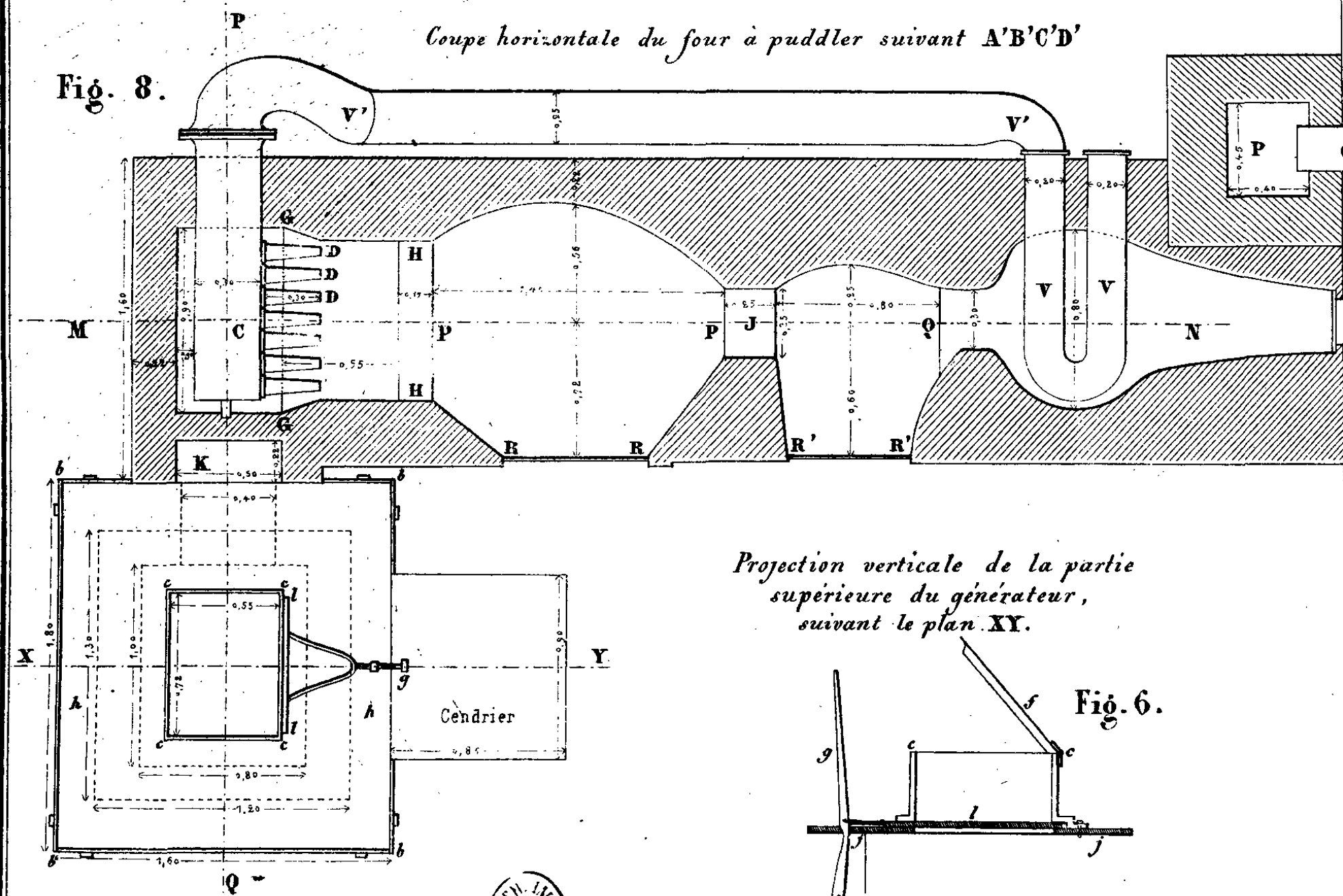


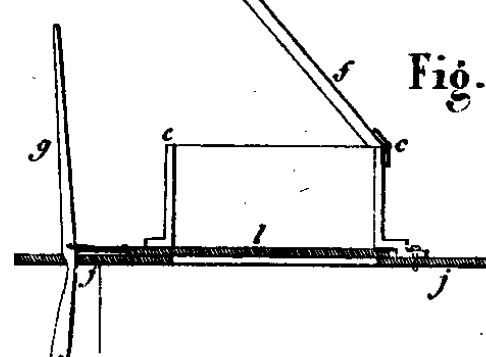
Fig. 8.

Coupe horizontale du four à puddler suivant A'B'C'D'.



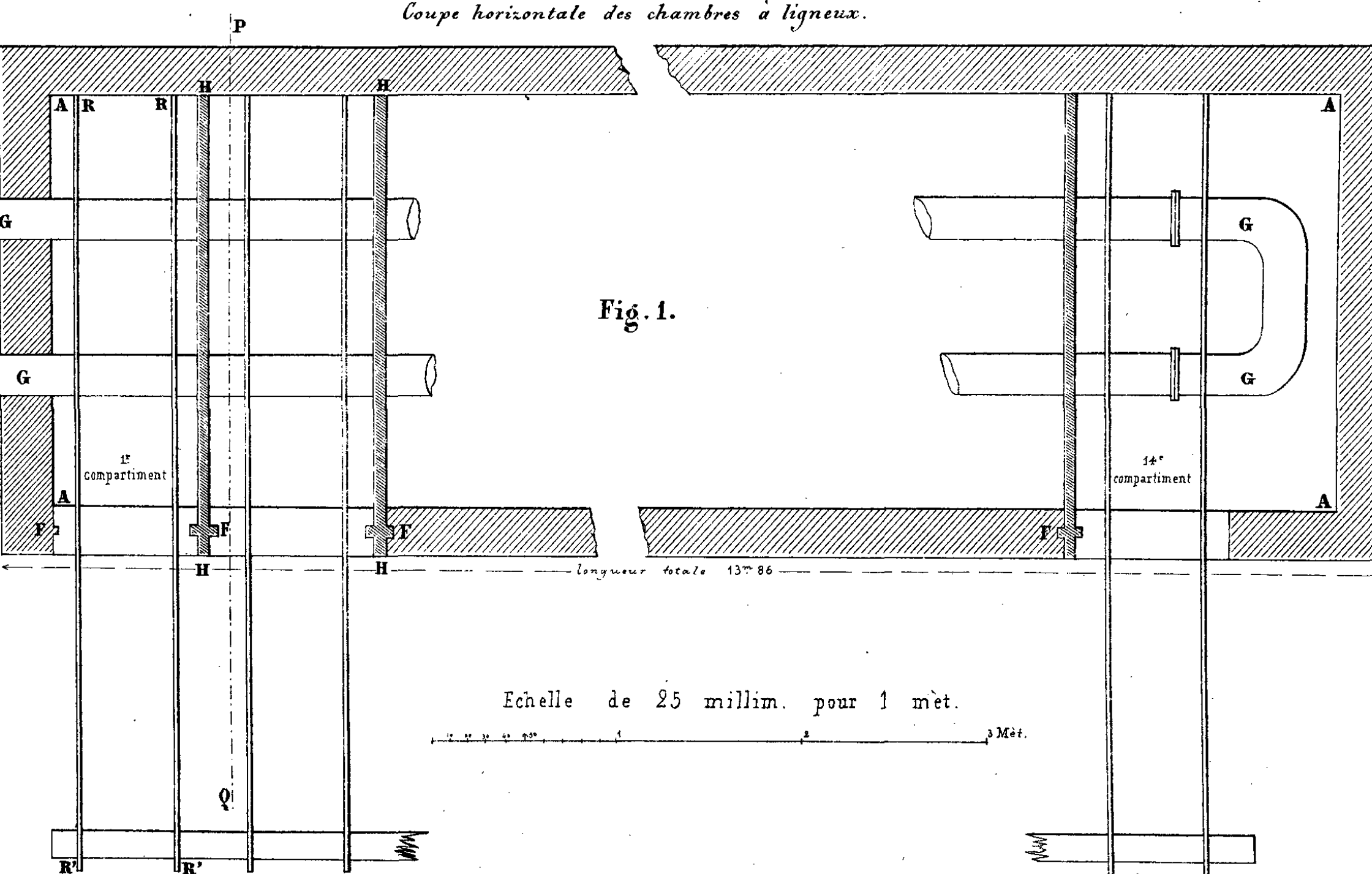
Projection verticale de la partie  
supérieure du générateur,  
suivant le plan XY.

Fig. 6.



Coupe horizontale des chambres à ligneux.

Fig. 1.



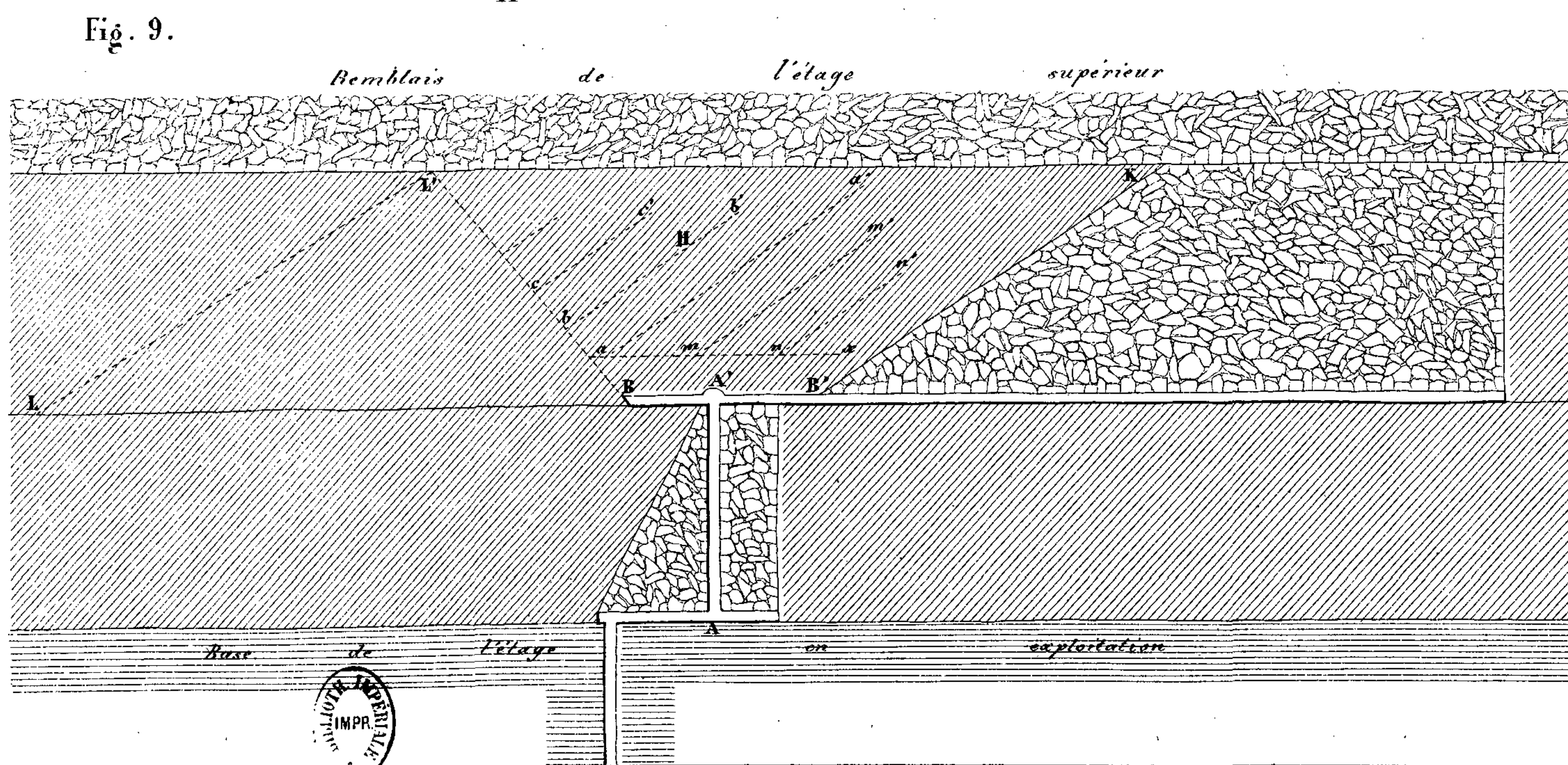
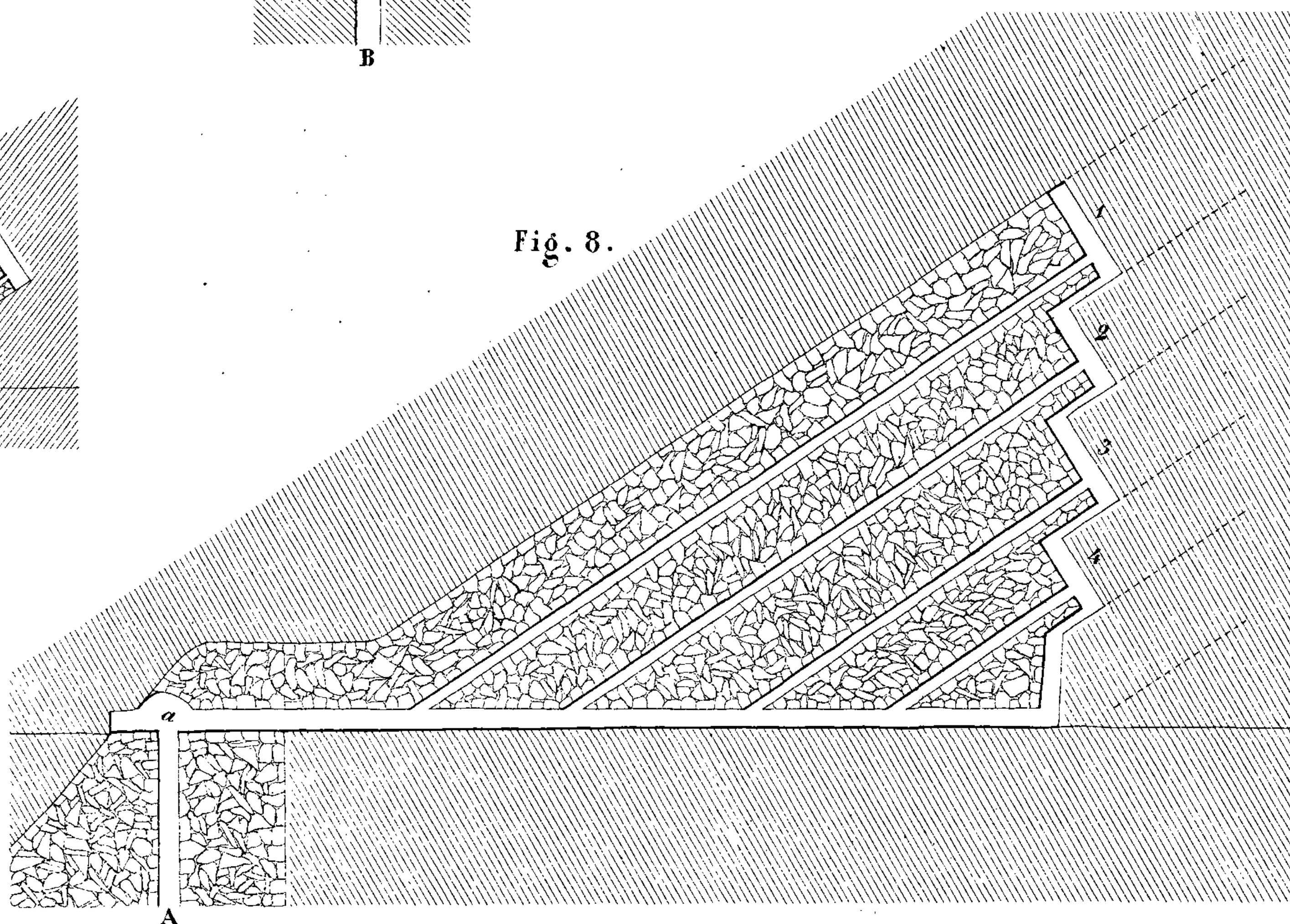
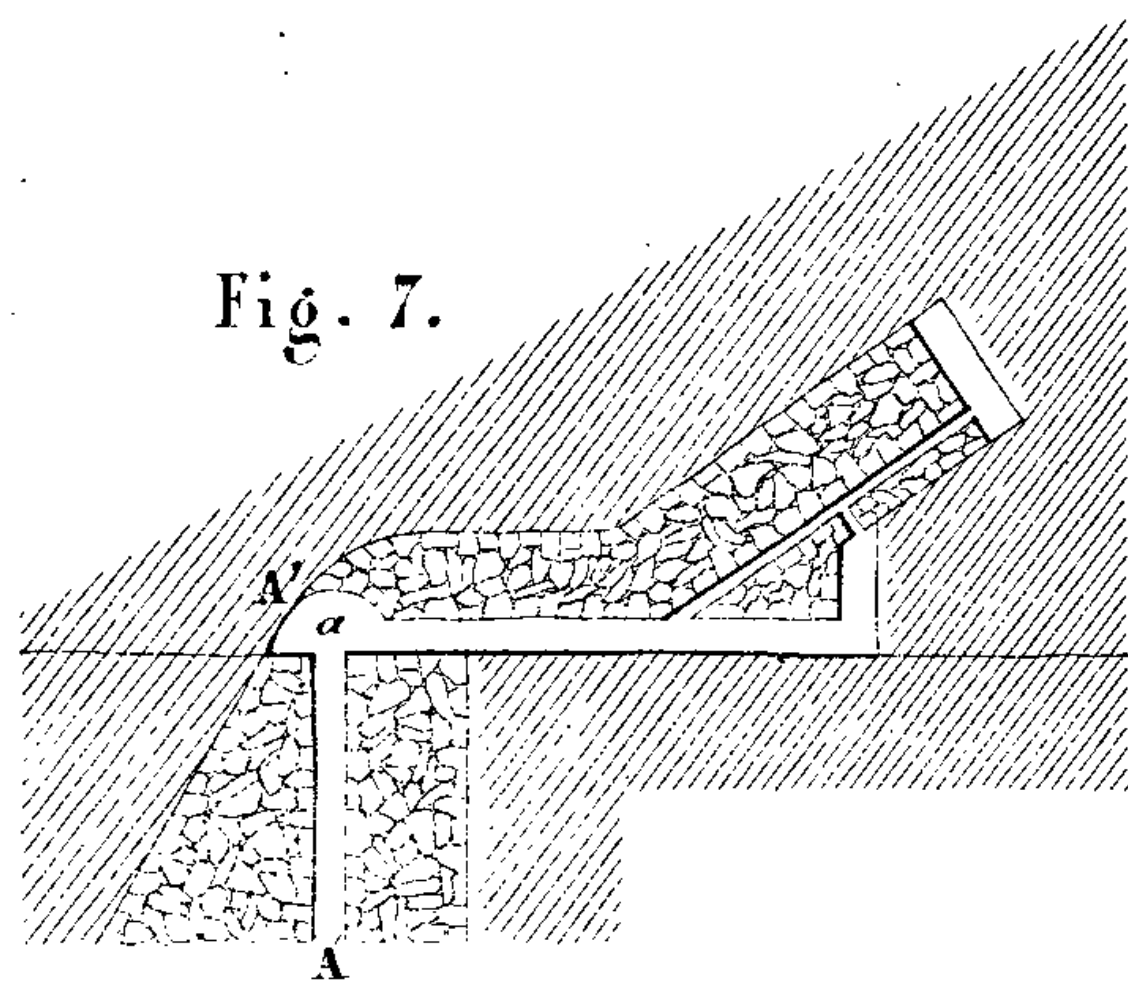
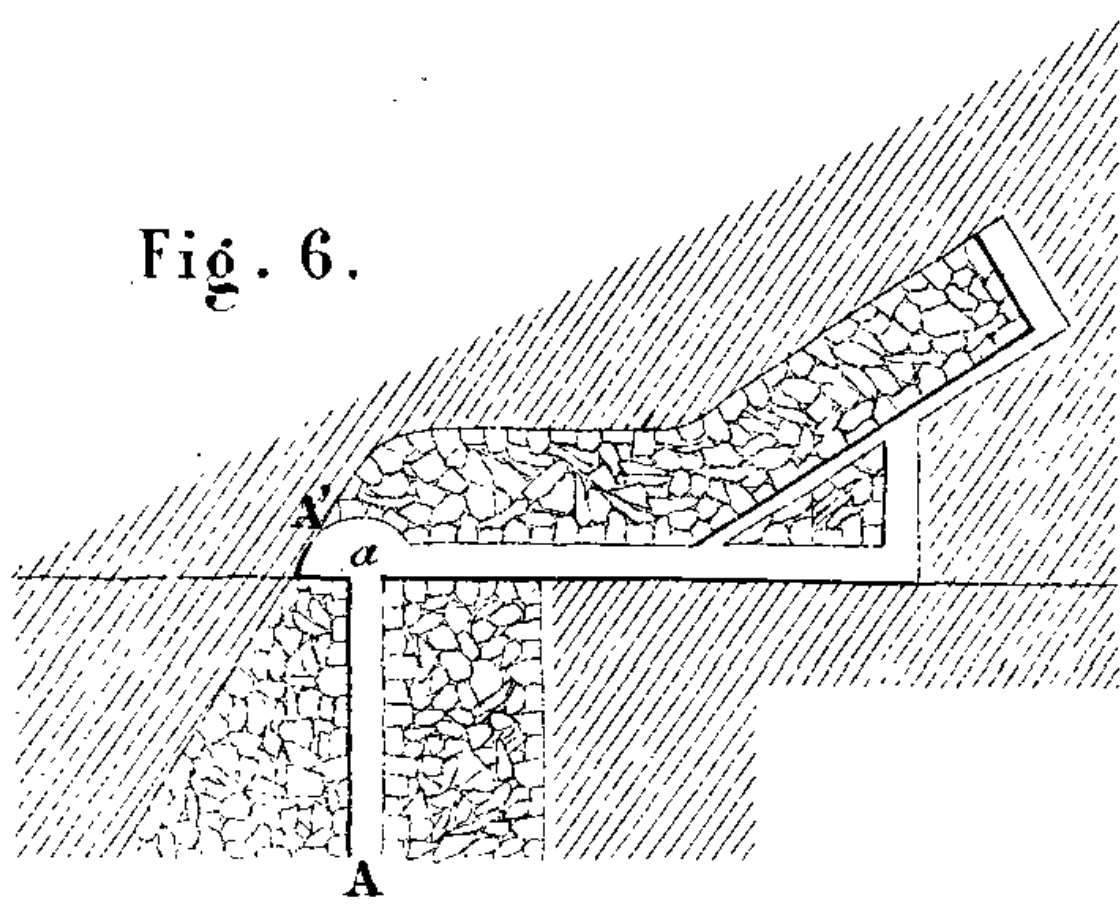
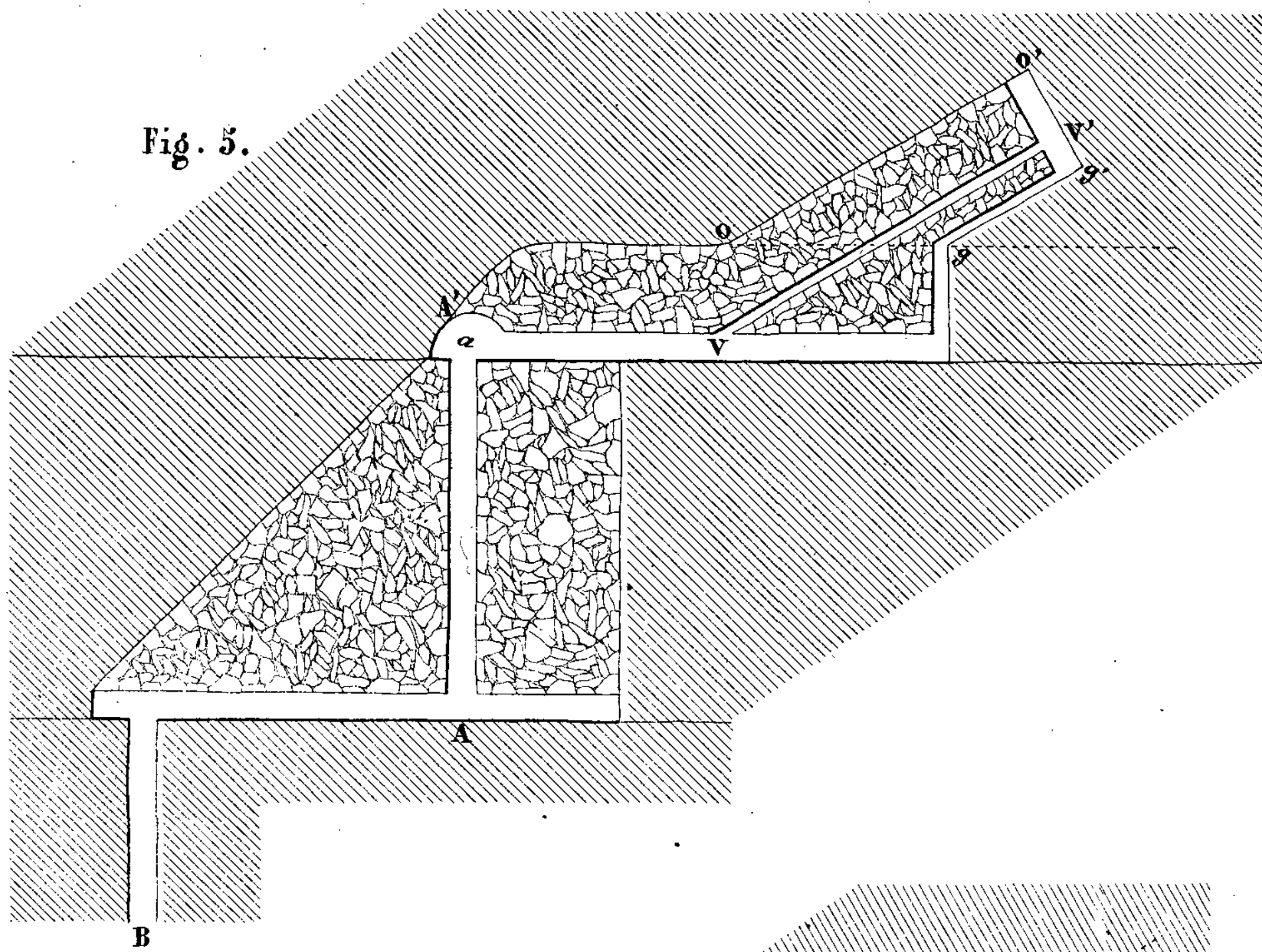
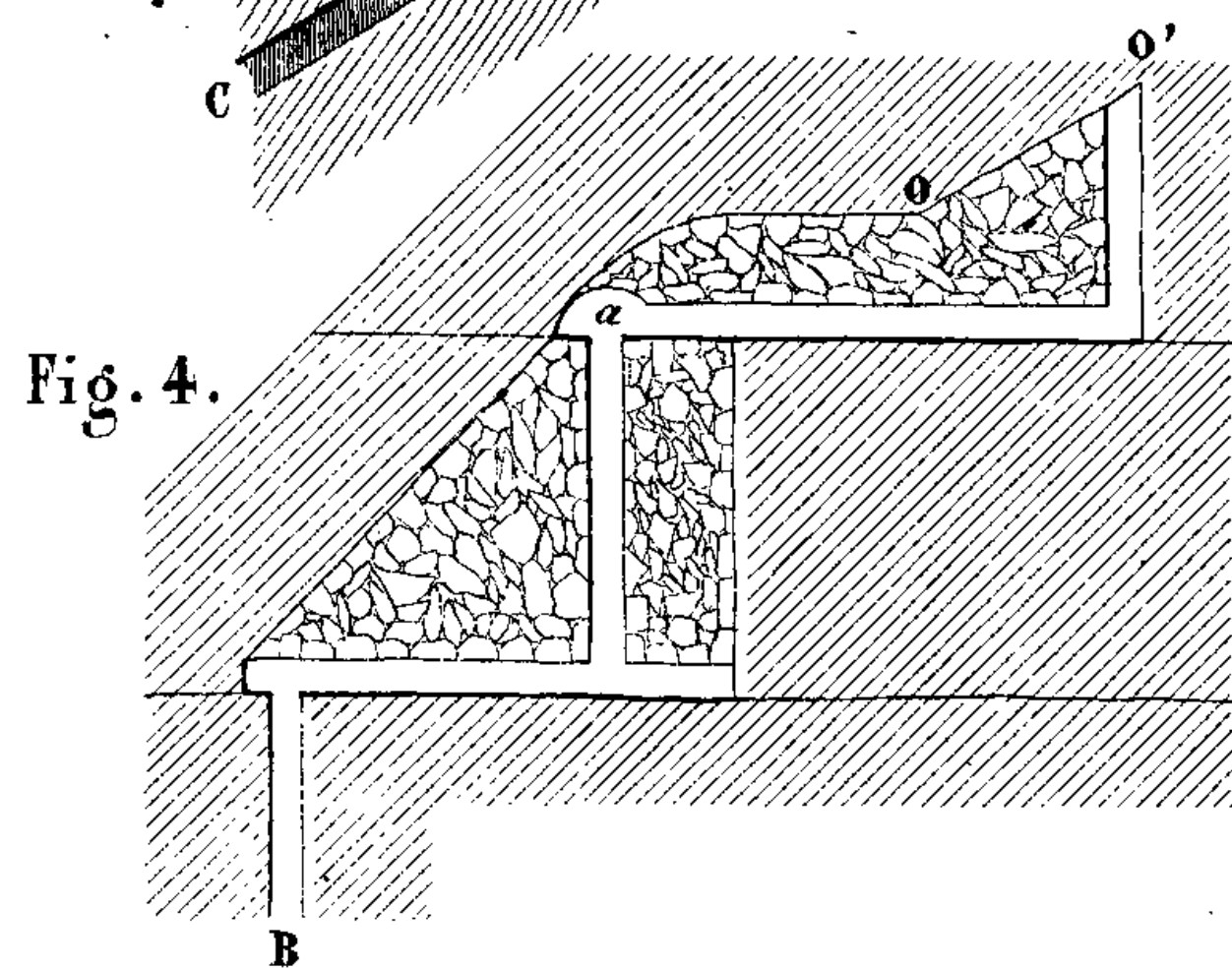
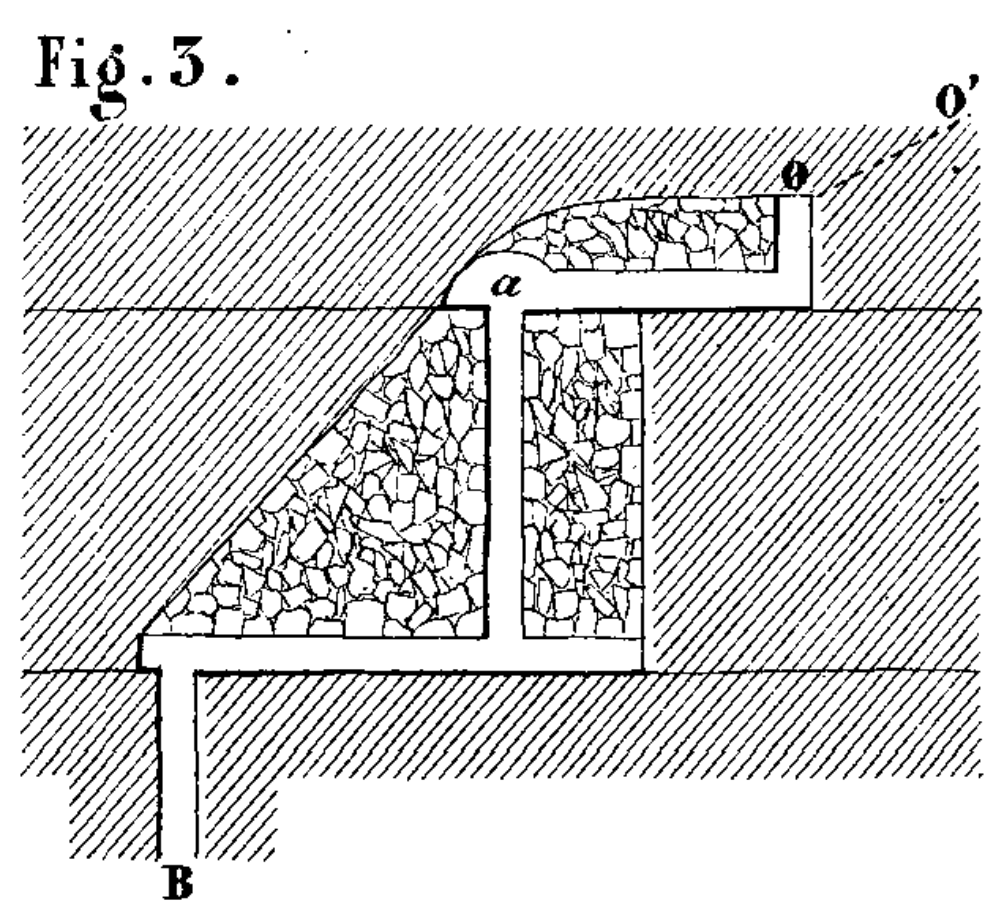
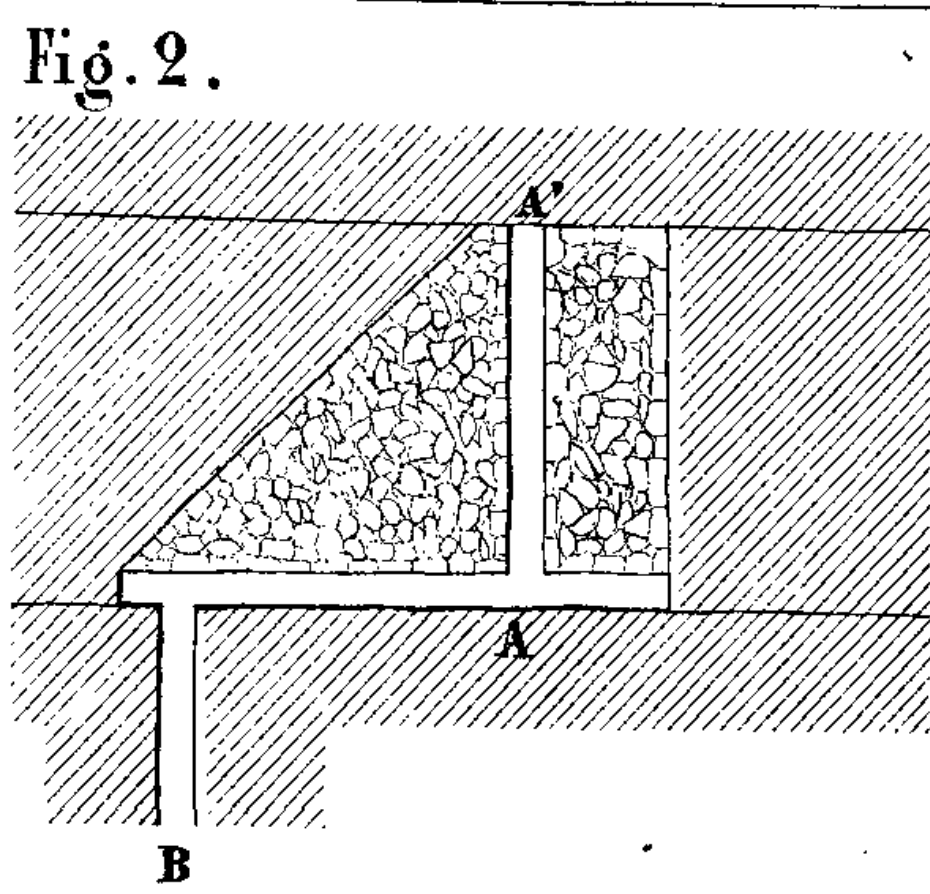
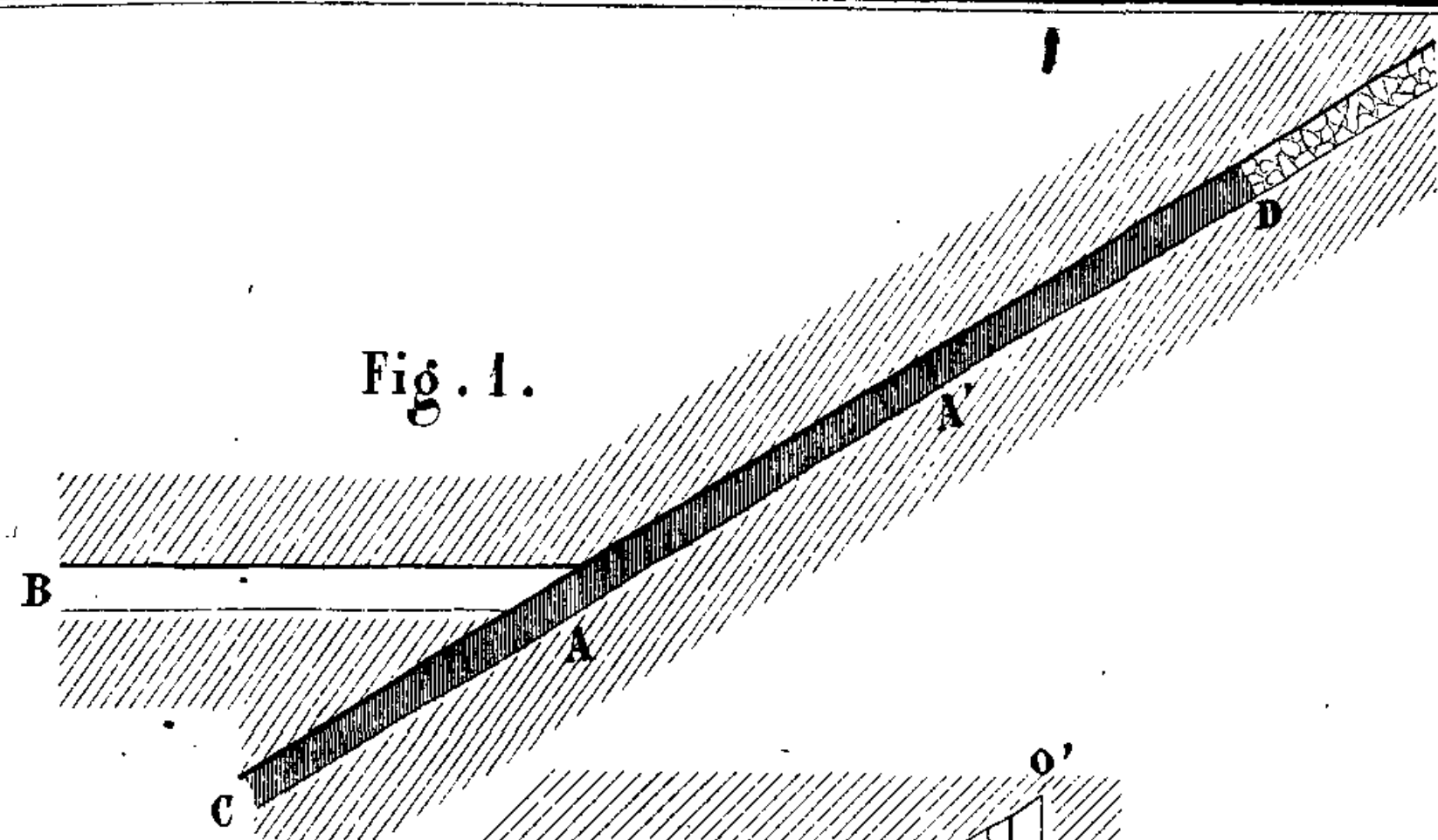
Echelle de 25 millim. pour 1 mèt.

longueur totale 13<sup>m</sup> 86















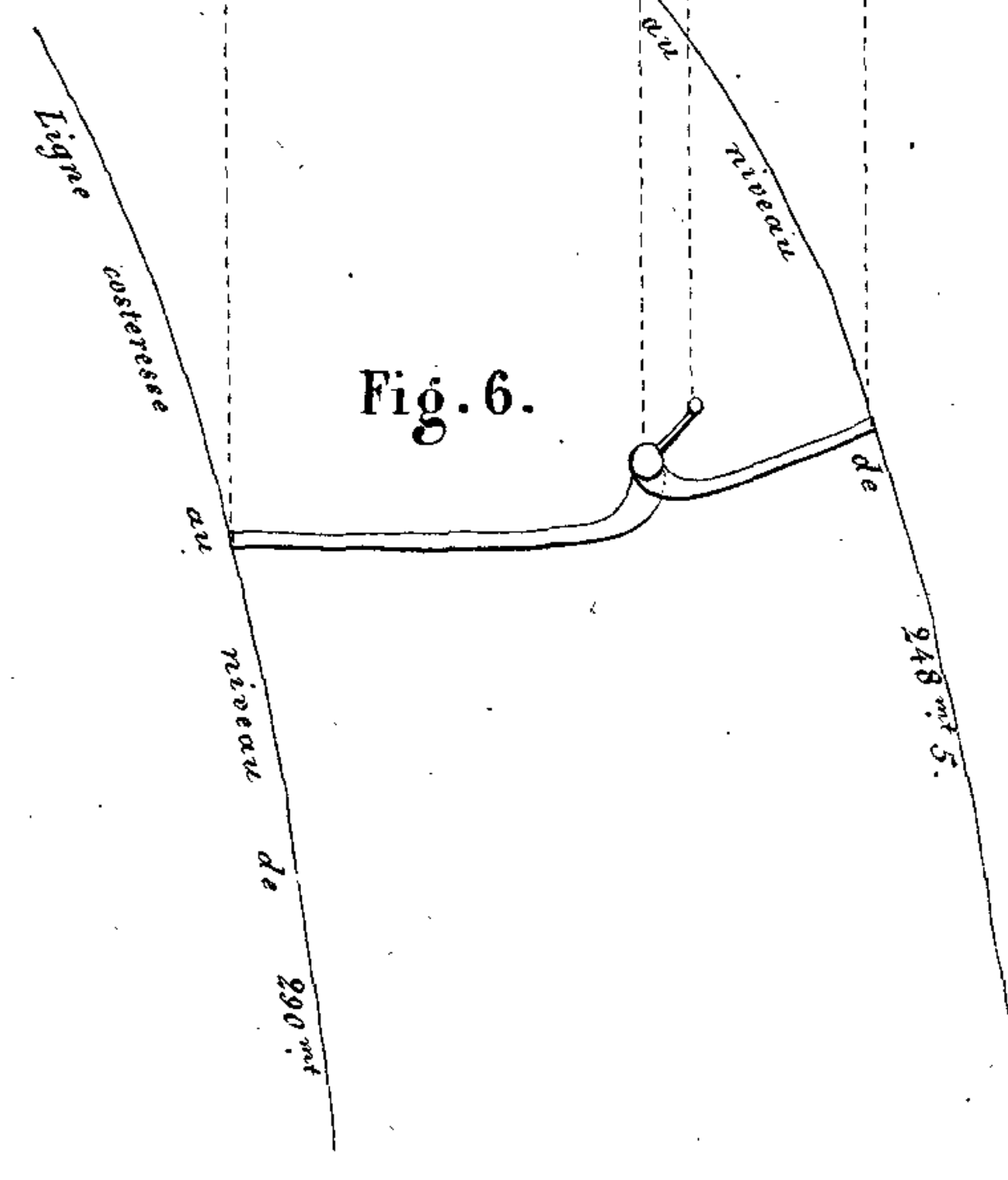
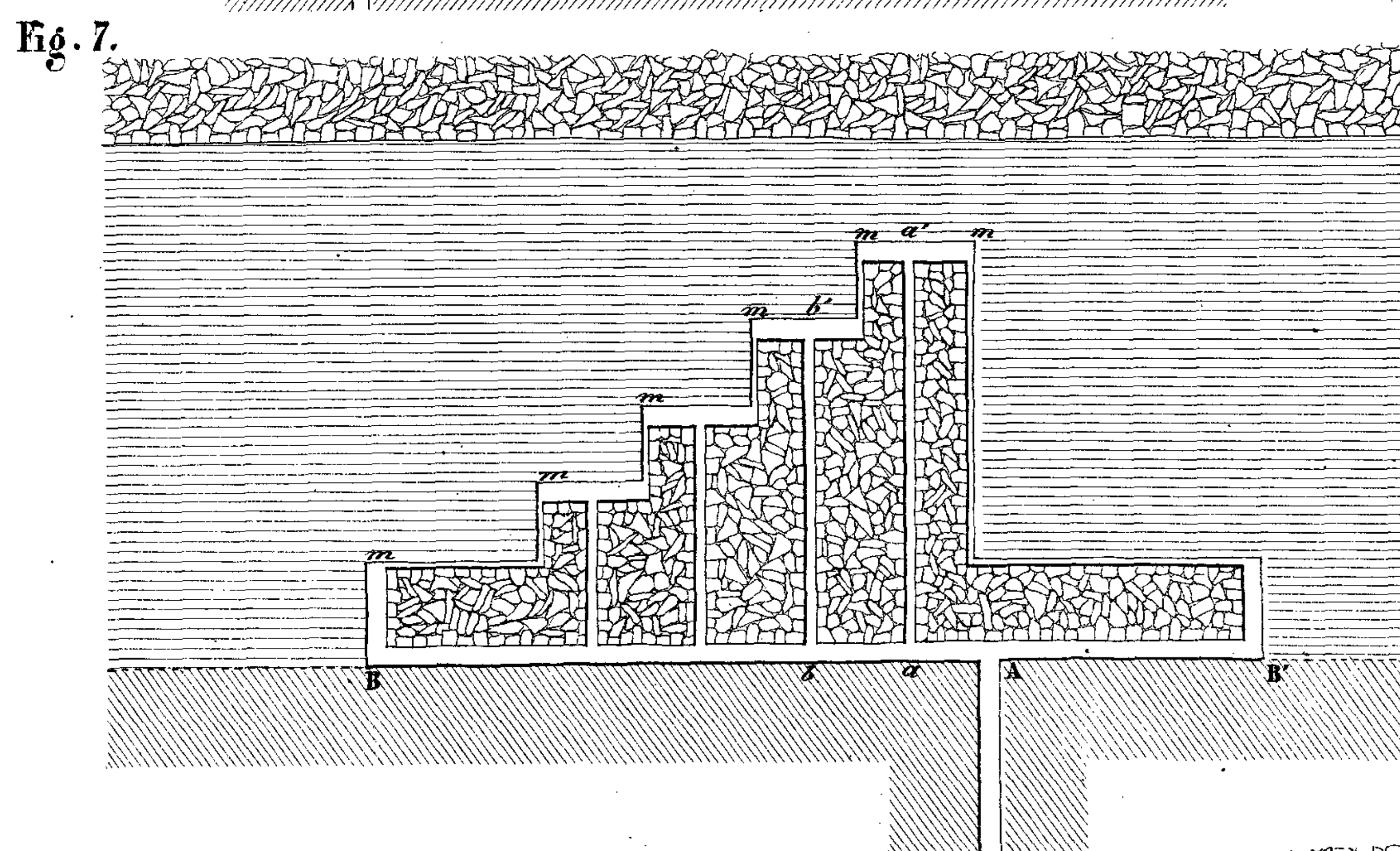
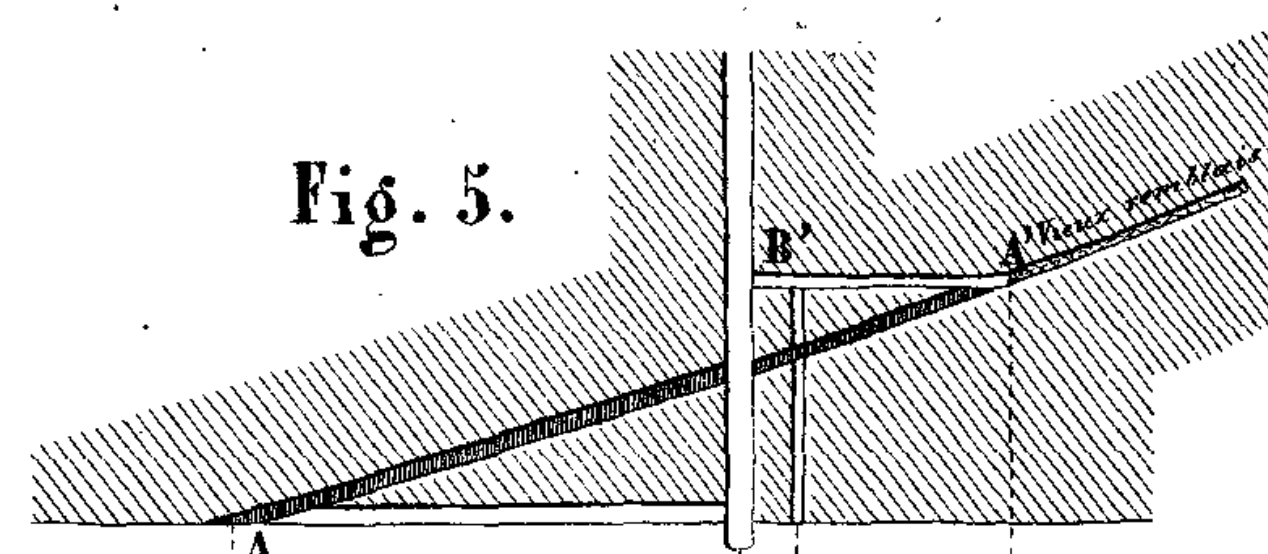
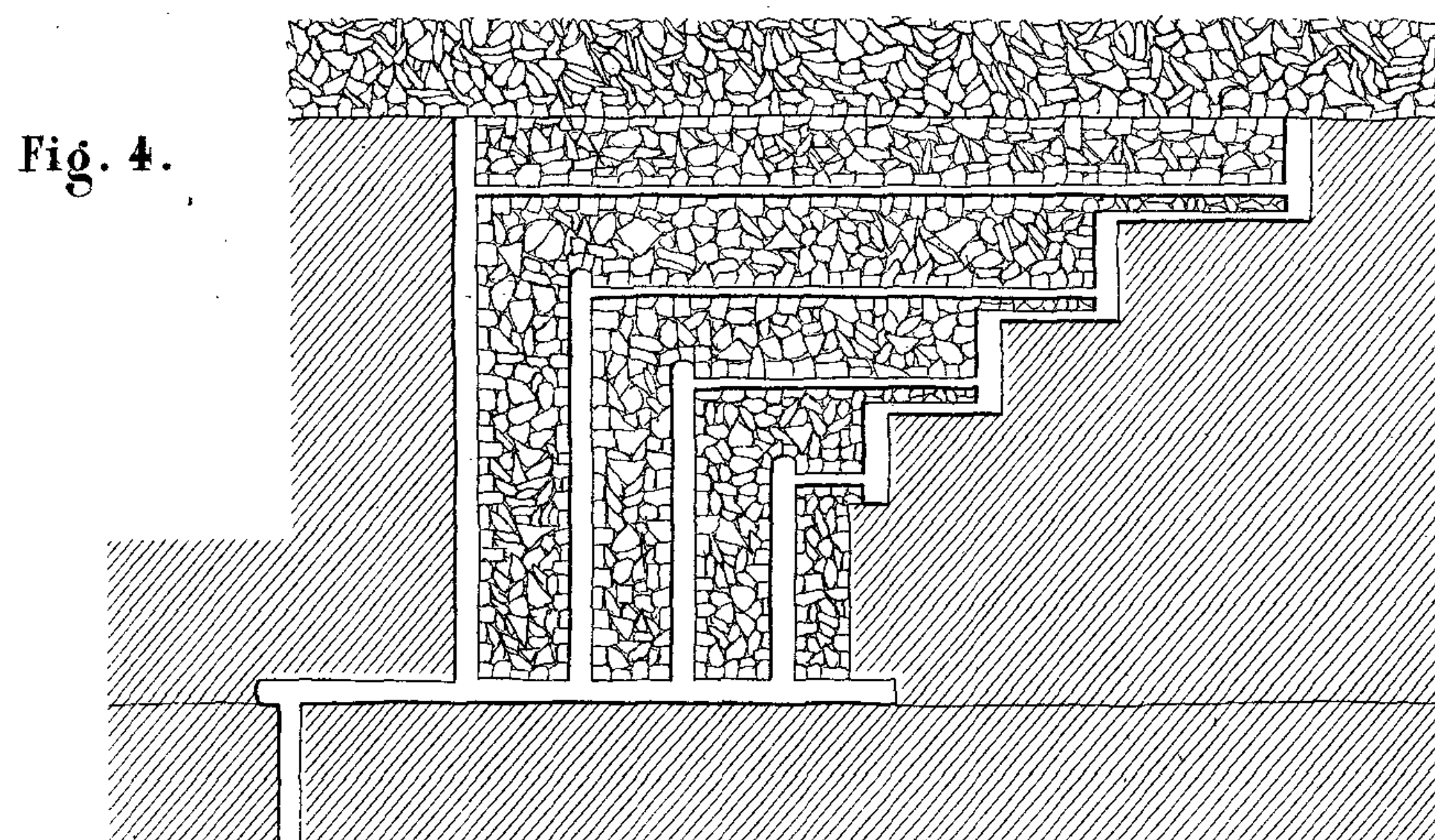
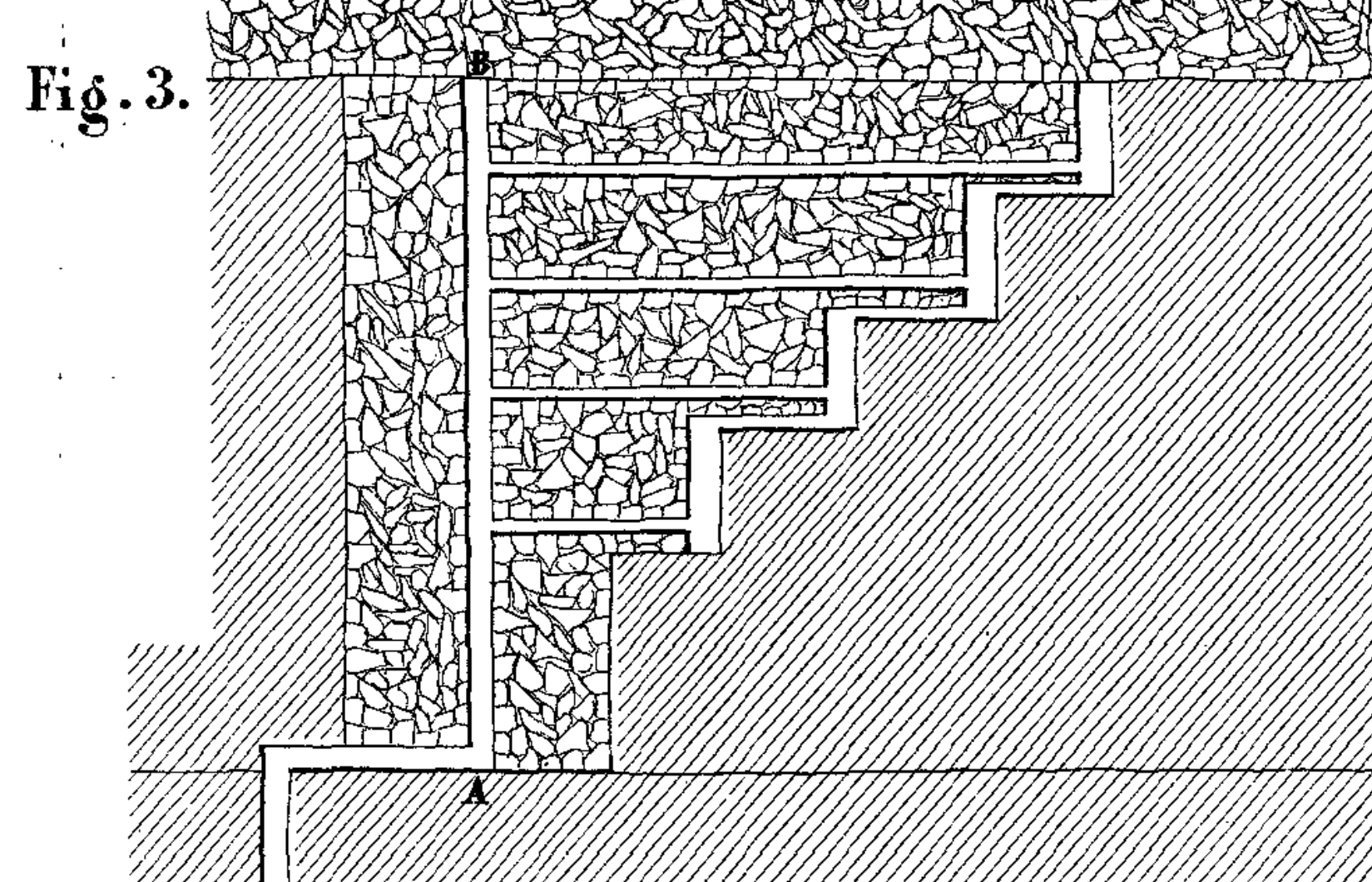
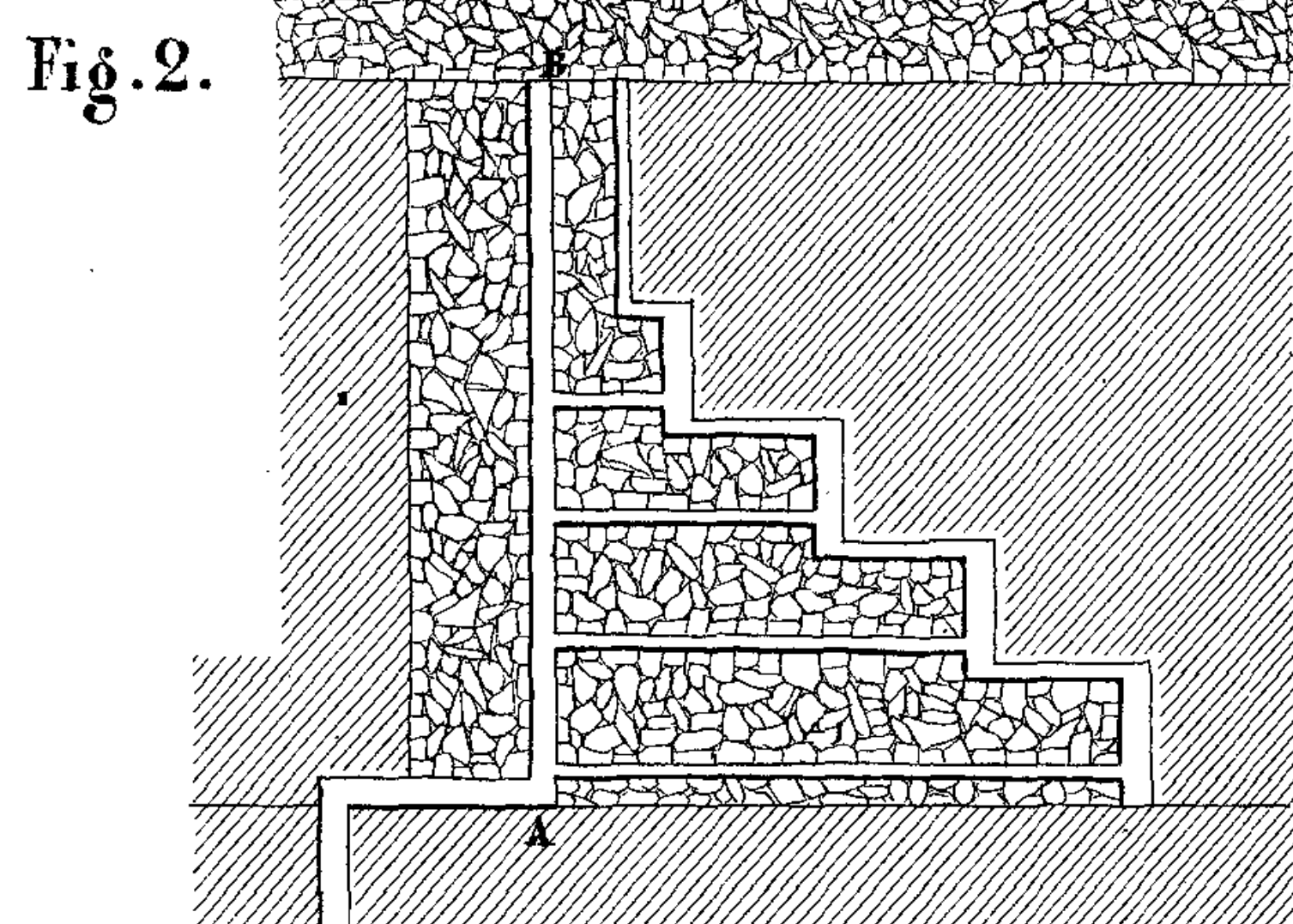
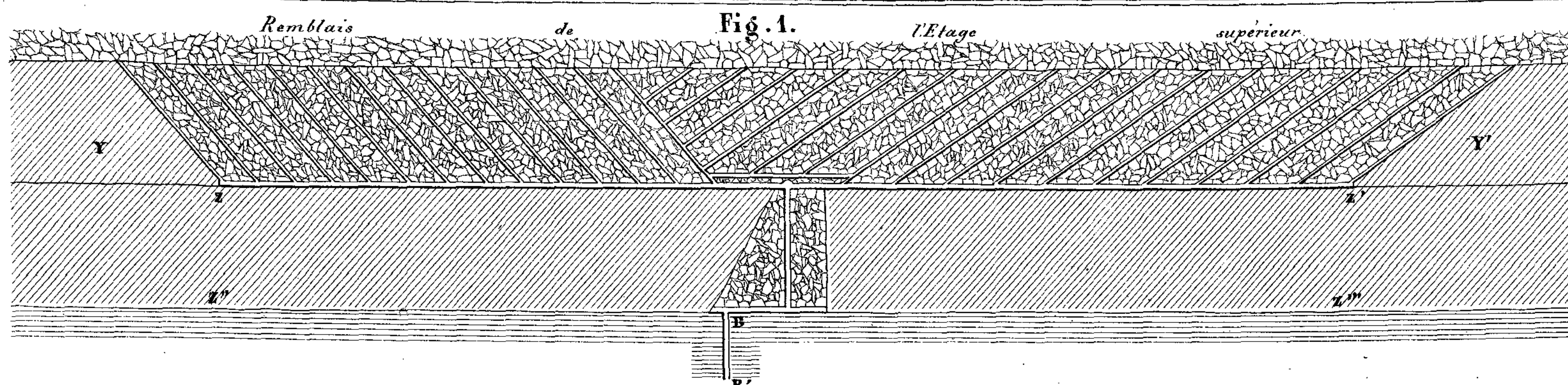
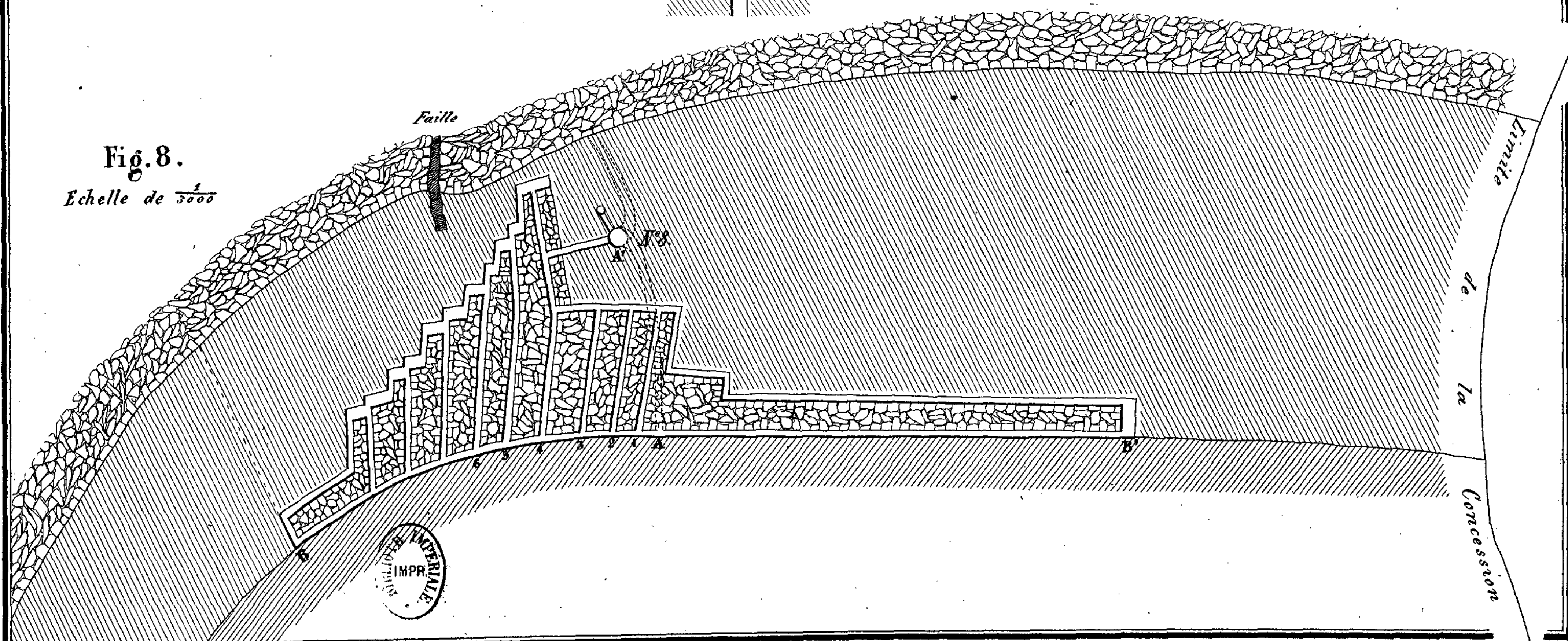


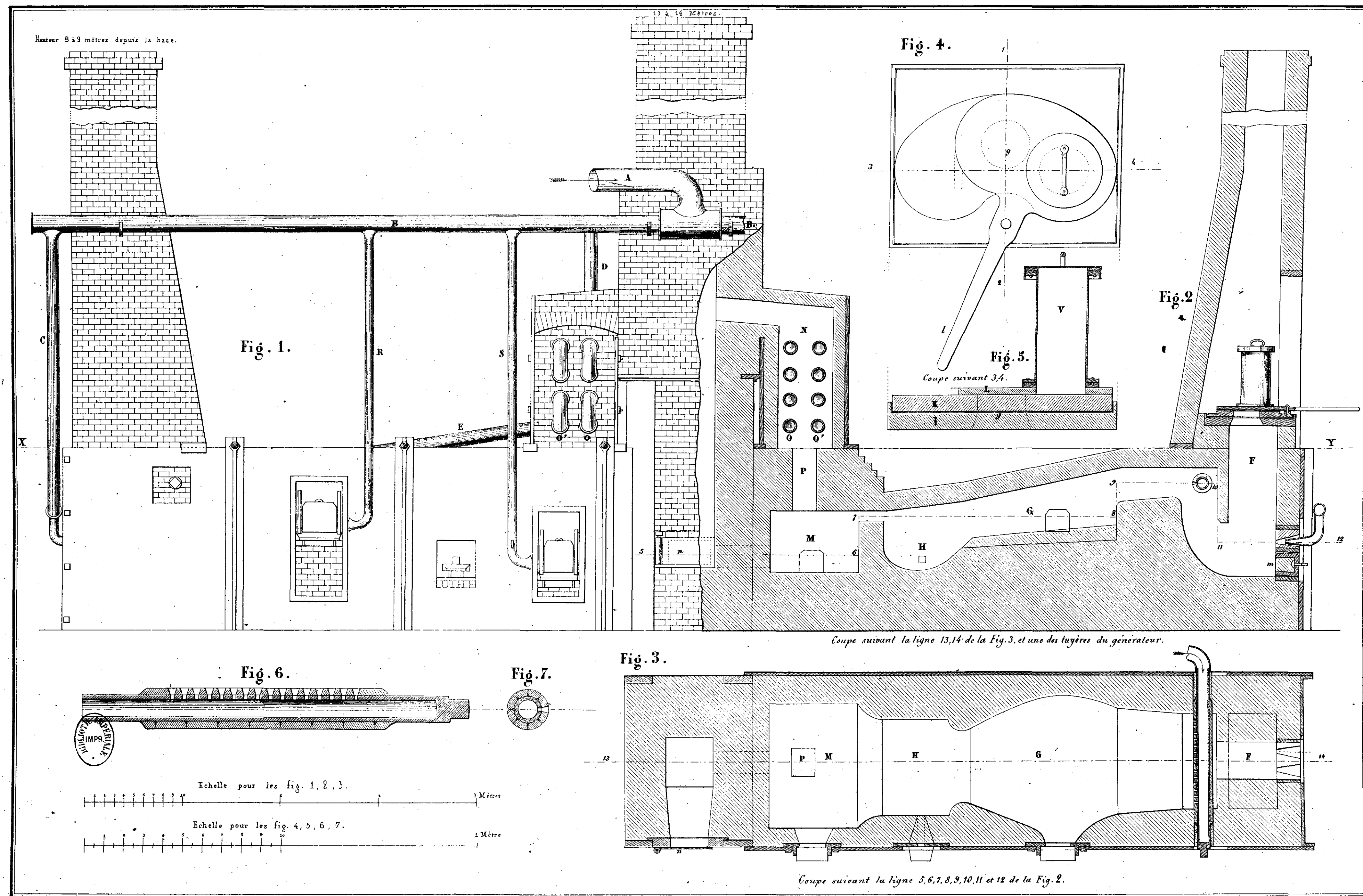
Fig. 8.  
Echelle de 5000

















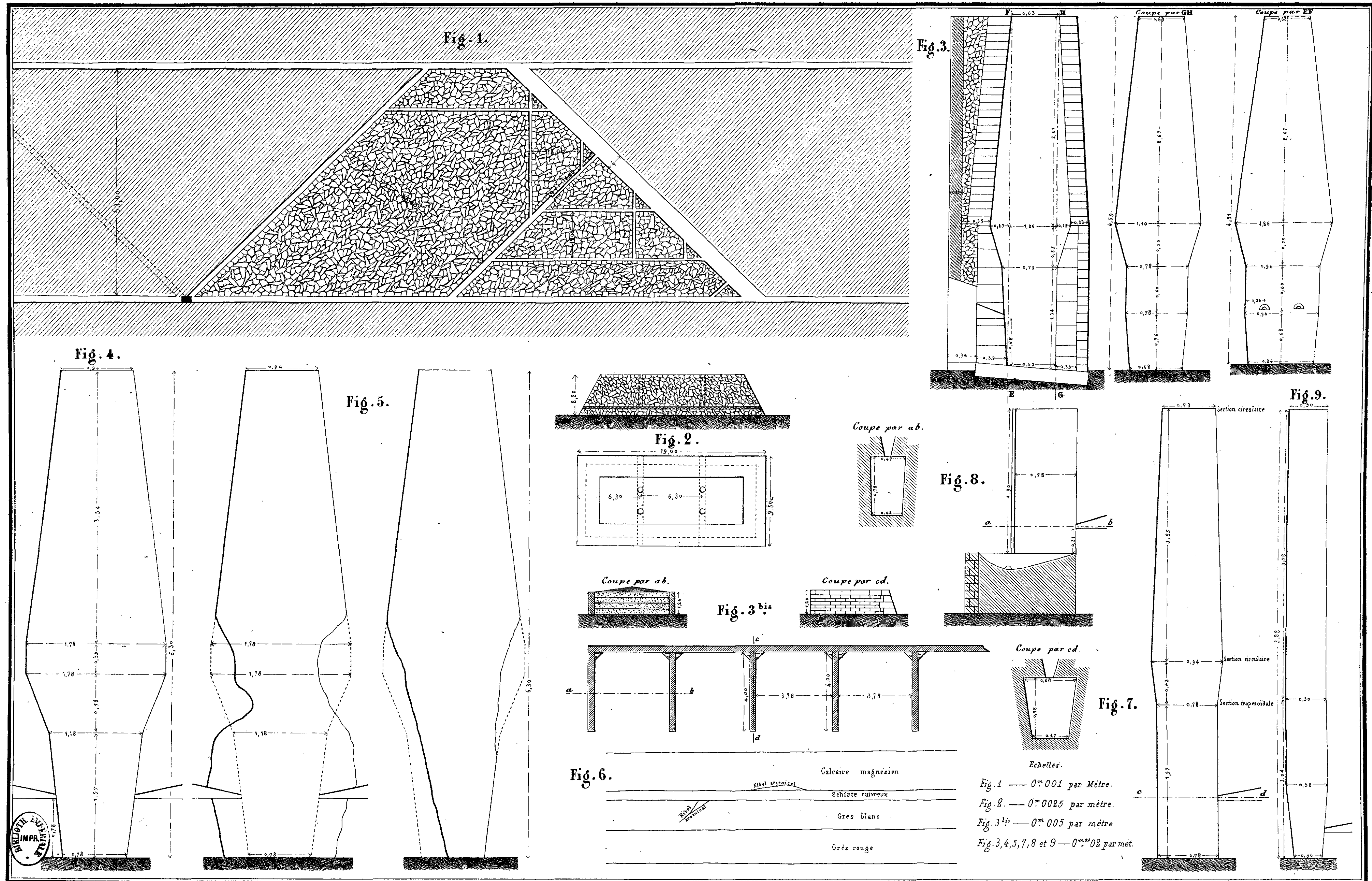








Fig. 1.

Elevation antérieure.

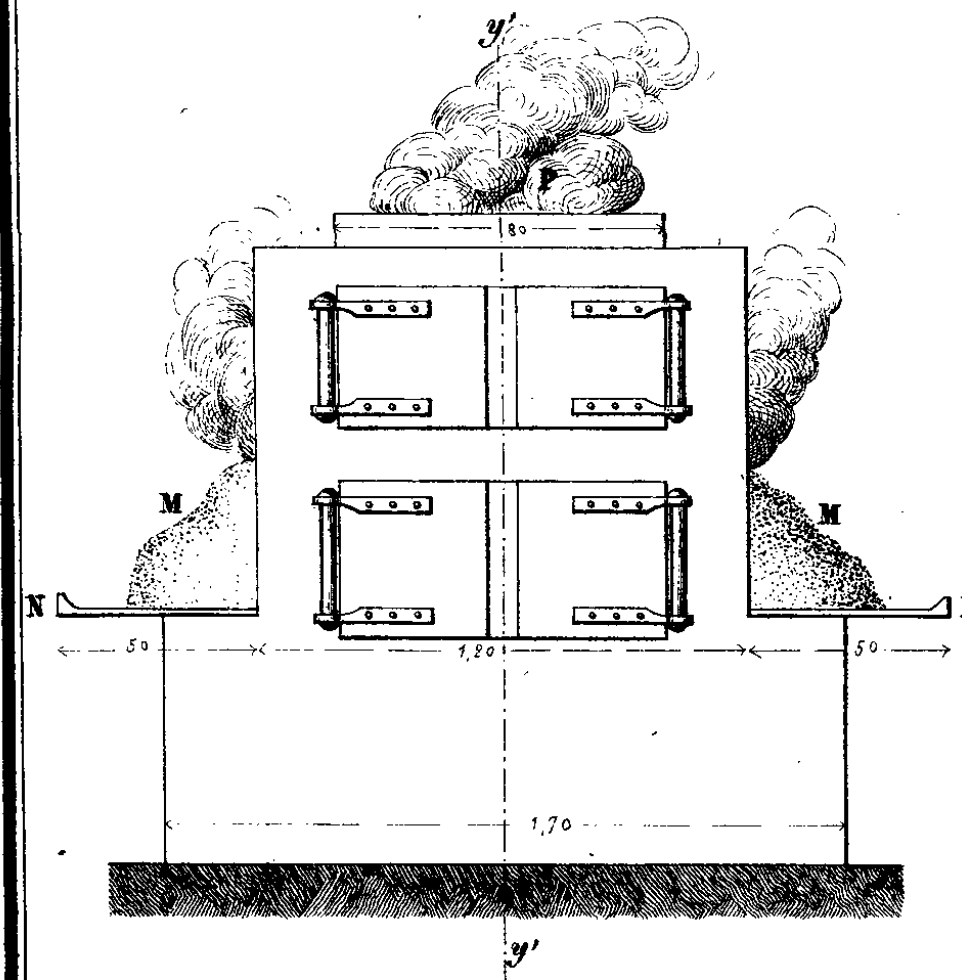


Fig. 2.

Elevation latérale.

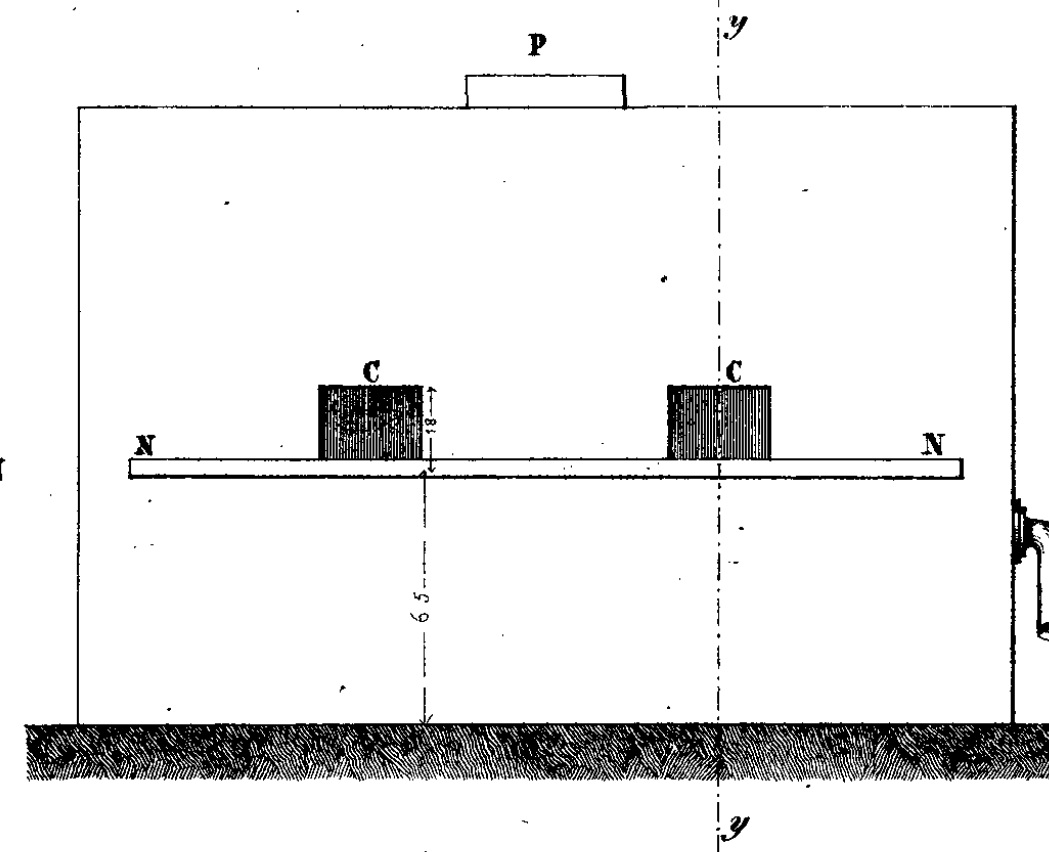


Fig. 3.

Coupe verticale transversale par yy.de fig. 2.

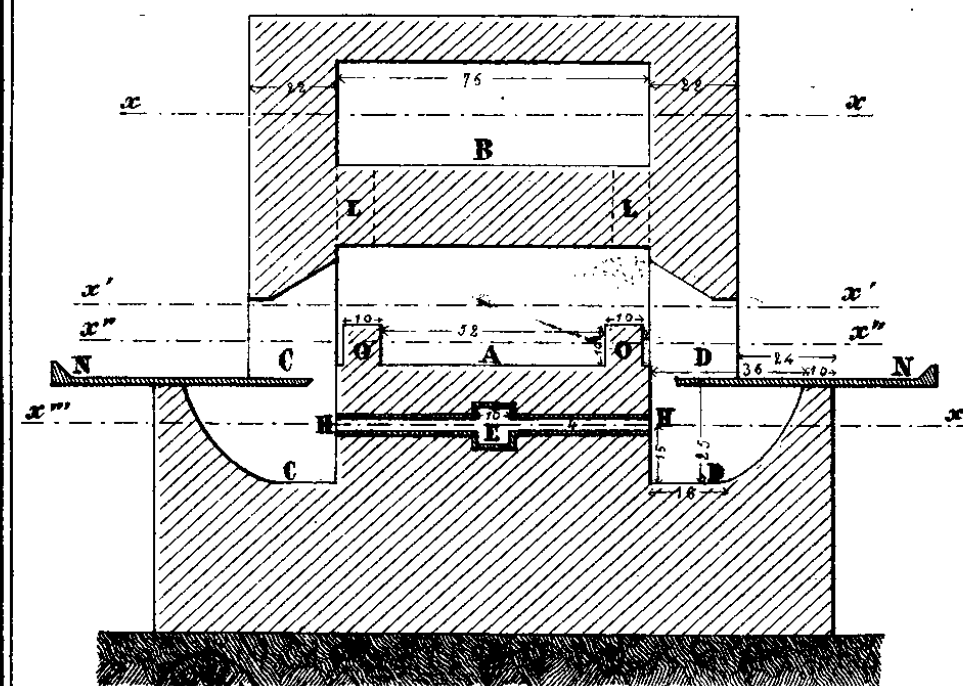
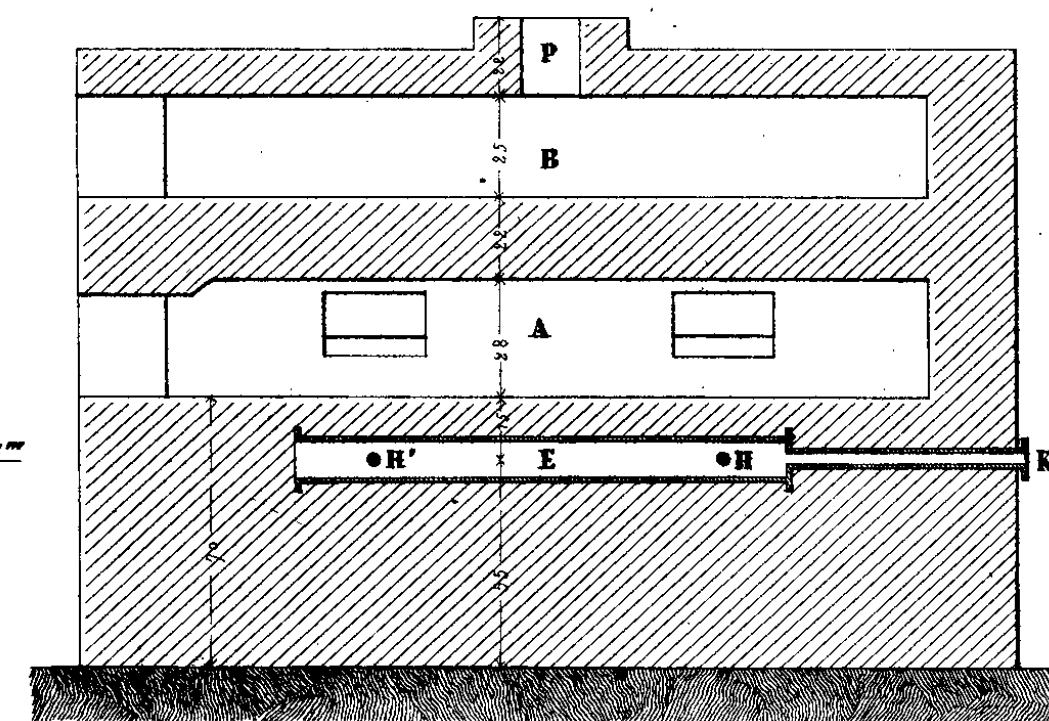


Fig. 4.

Coupe verticale longitudinale par y'y'.de fig. 1.



Echelle de  $\frac{1}{30}$  ou de 0<sup>m</sup>033 par Mètre.

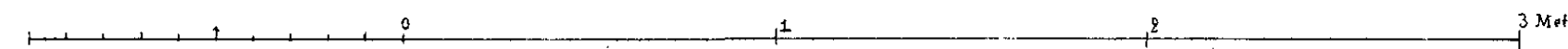


Fig. 5.

Vue en dessus.

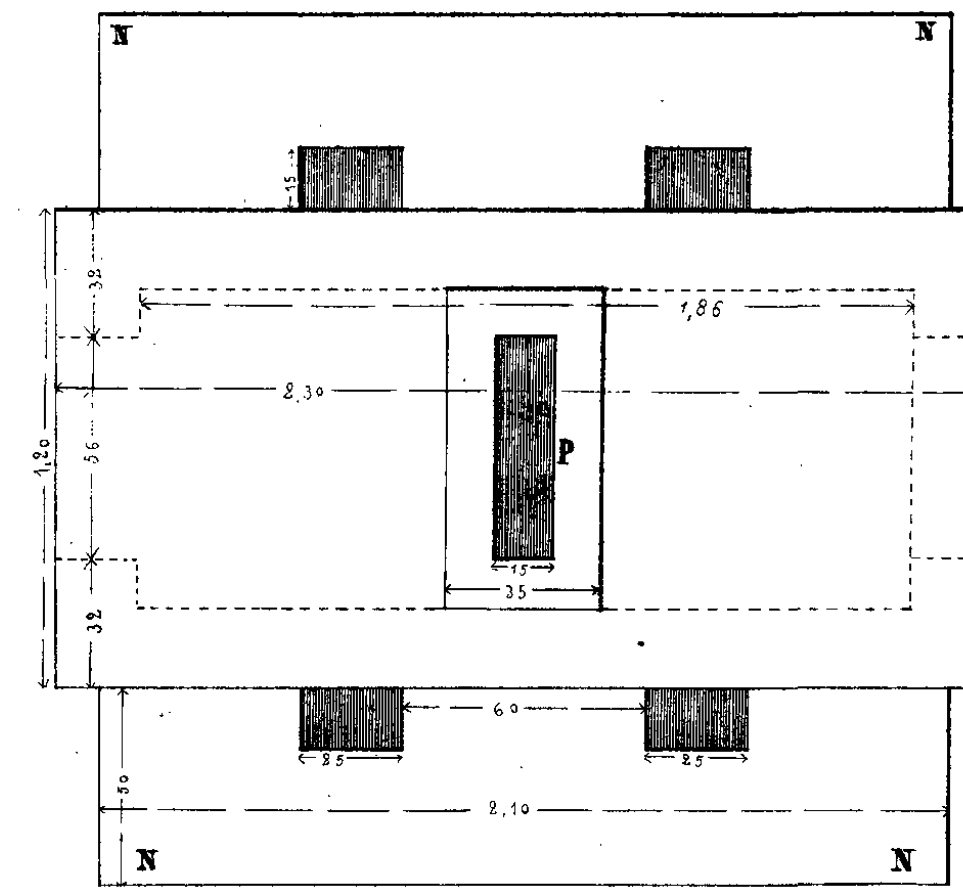


Fig. 6. Coupe horizontale par xx.de fig. 3.

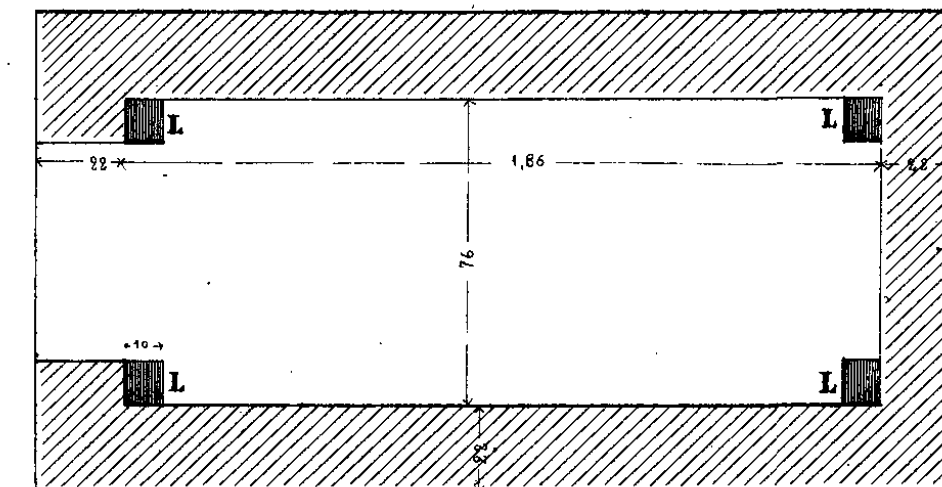


Fig. 7. Coupe horizontale par x'x'.de fig. 3.

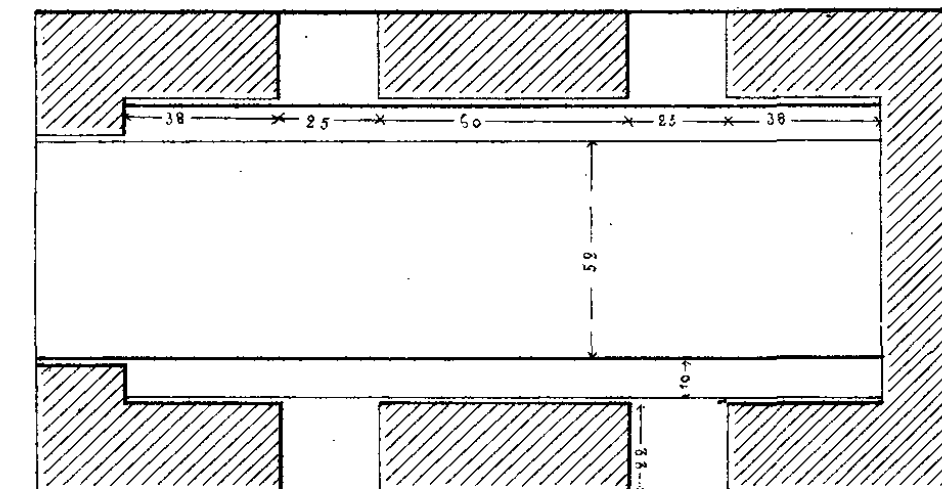


Fig. 8. Coupe horizontale par x''x''.de fig. 3.

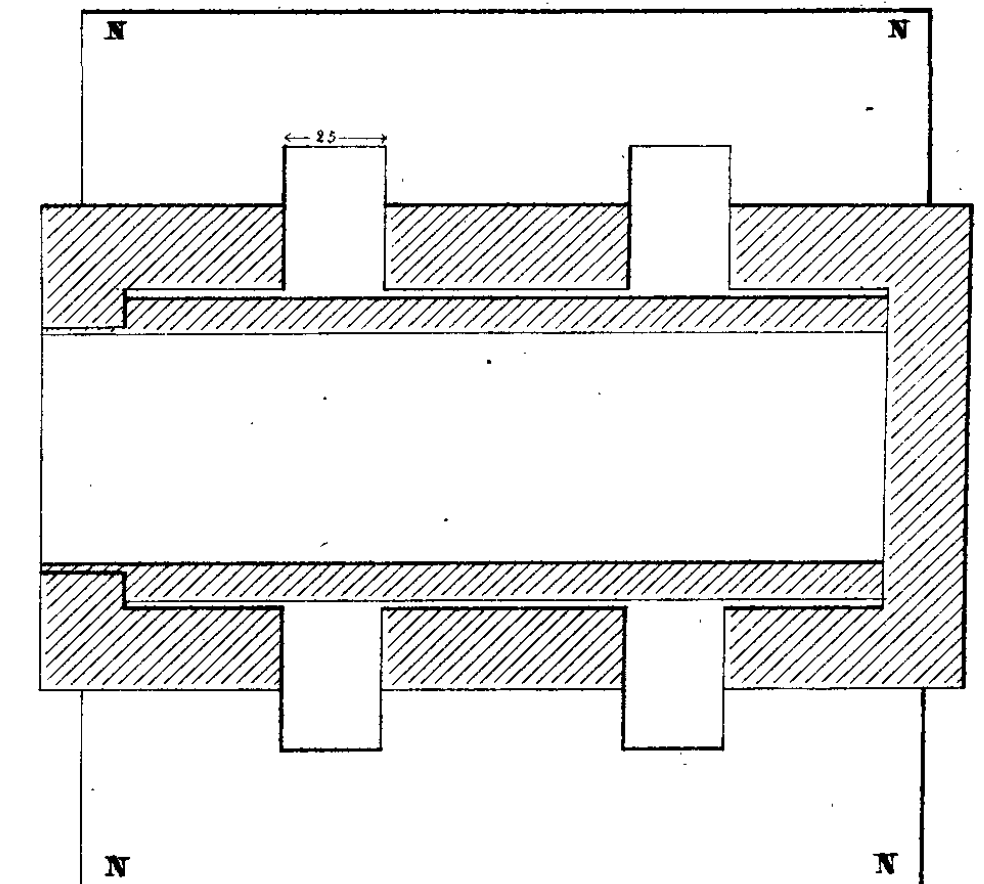
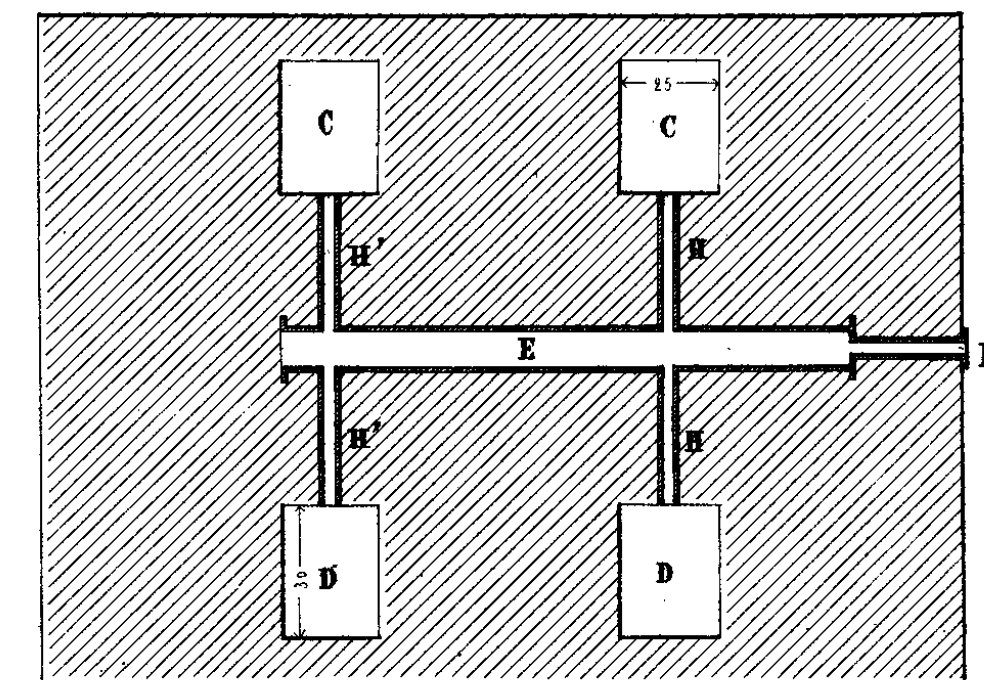


Fig. 9. Coupe horizontale par x'''x'''de fig. 3.













# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1857-04.

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# ATLAS

DE LA

## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE

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II<sup>e</sup> ANNÉE

4<sup>e</sup> LIVRAISON

Avril, Mai, Juin.

1857

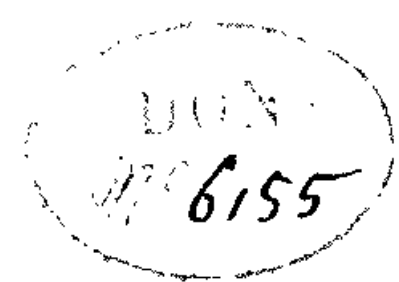


Les Planches XXXVII et XXXVIII paraîtront avec la prochaine livraison.

SAINT-ETIENNE IMPRIMERIE LITHOGRAPHIQUE

NUBLAT J<sup>re</sup> & F<sup>re</sup> LANTZ  
Place Marengo, 2

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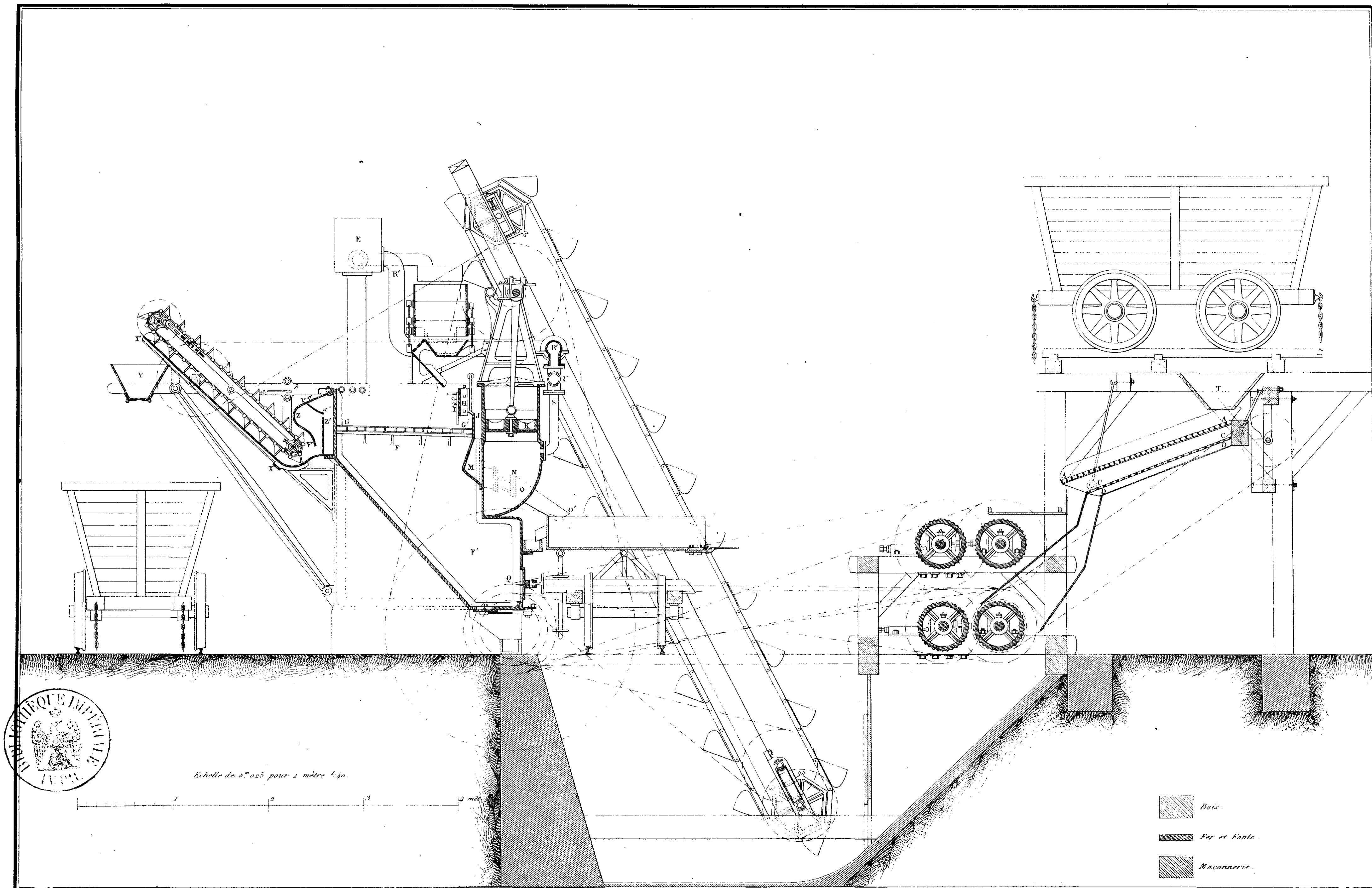




N 2155  
F 102

# APPAREIL POUR L'ÉPURATION DES HOUILLES (SYSTÈME BÉRARD).

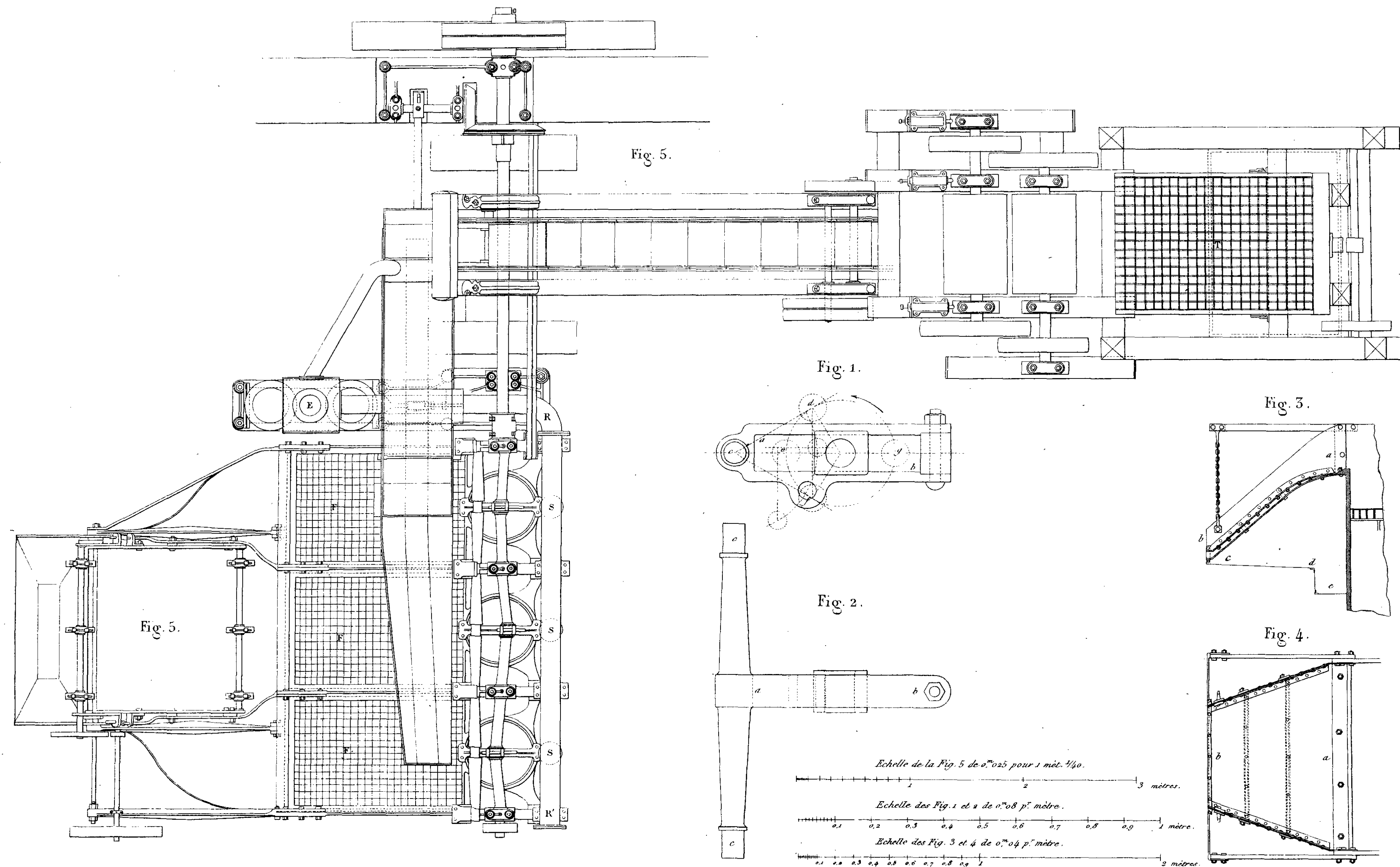
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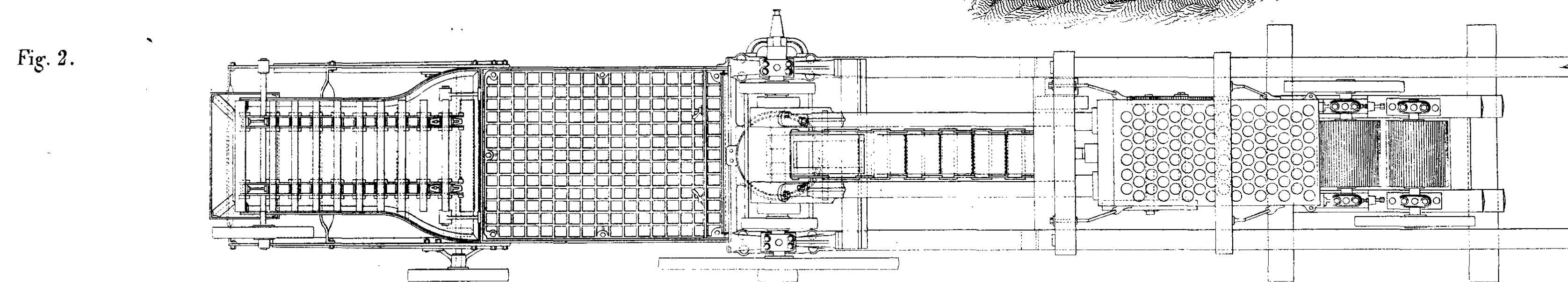
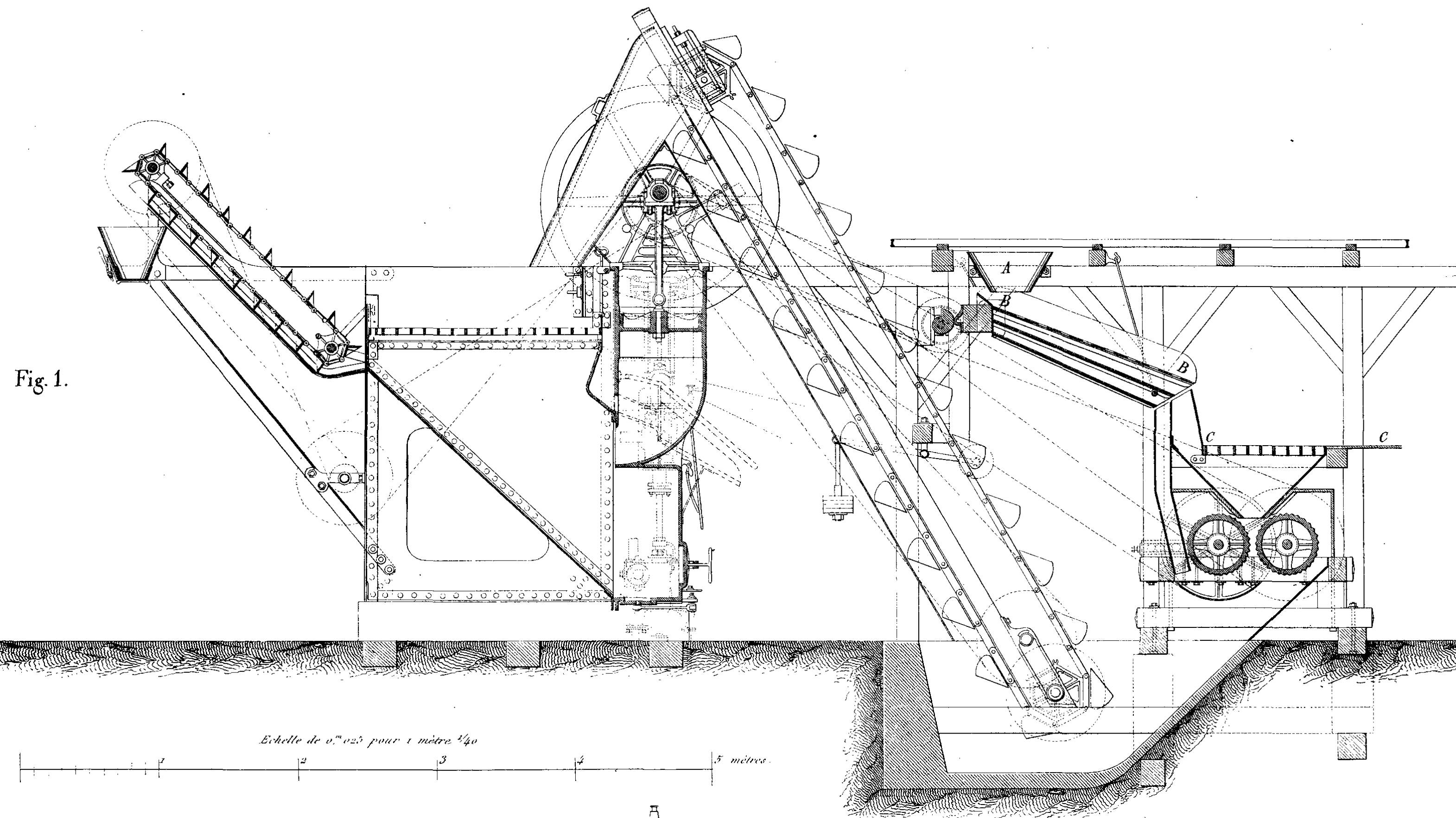


















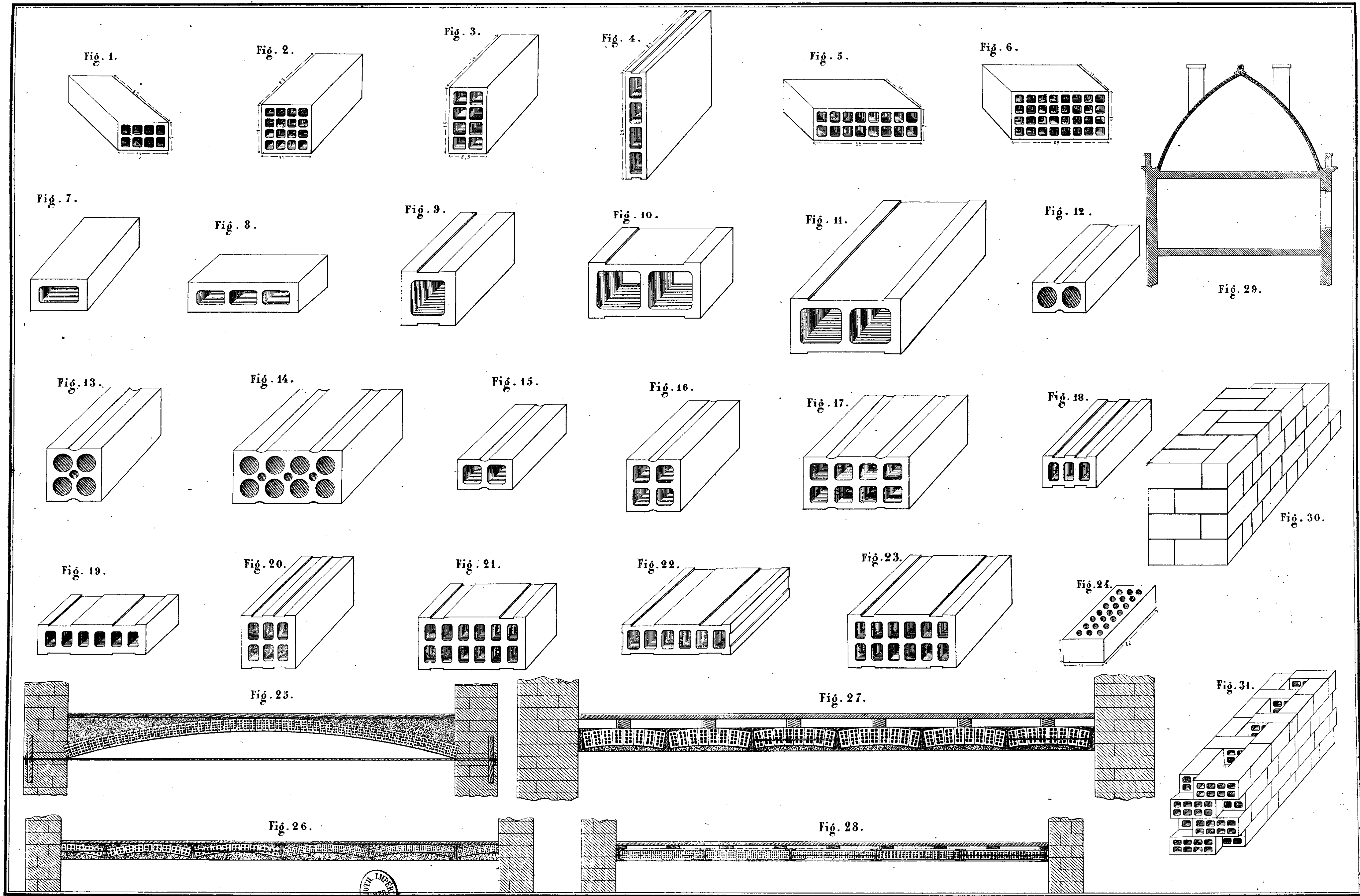








Fig. 3.

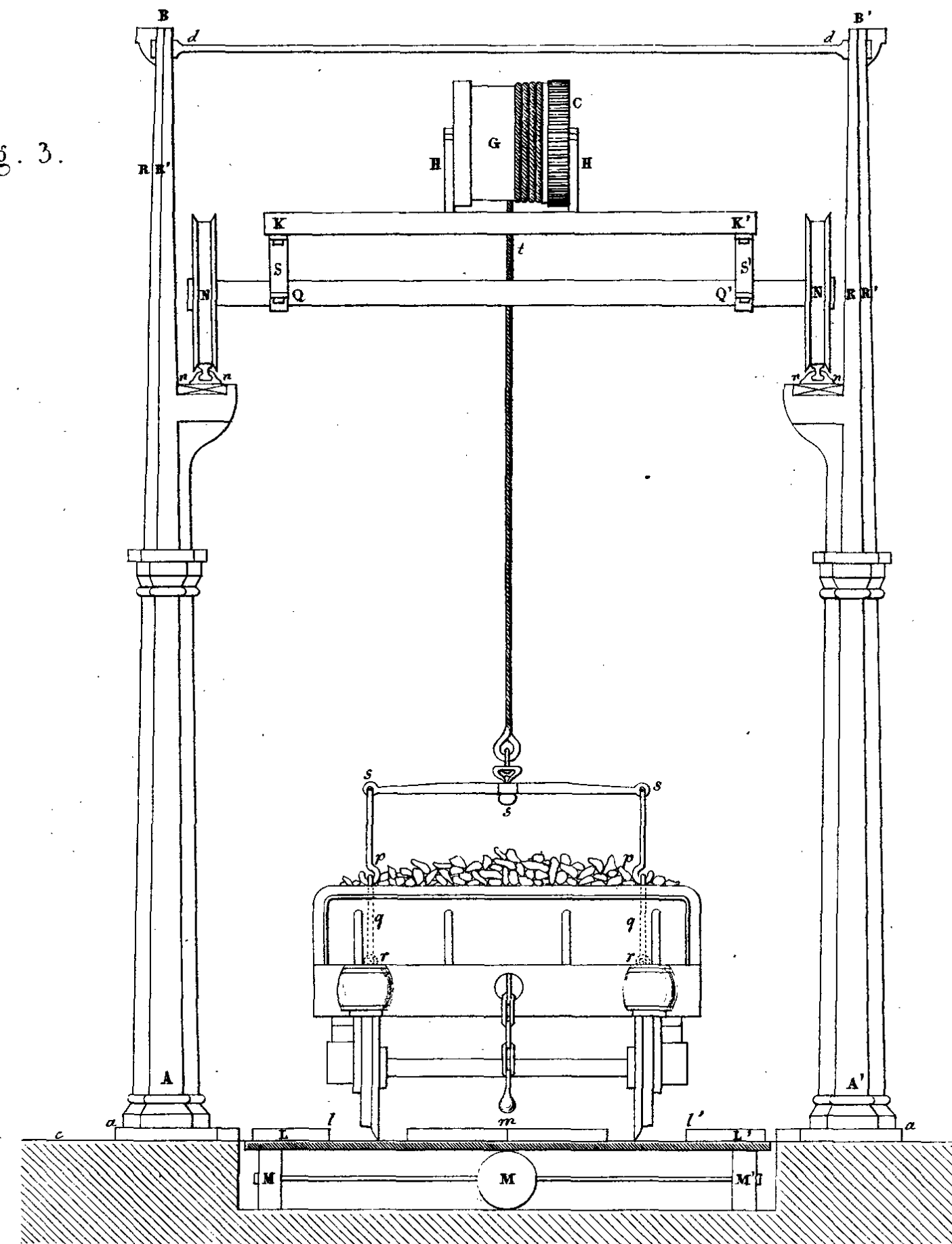


Fig. 4.

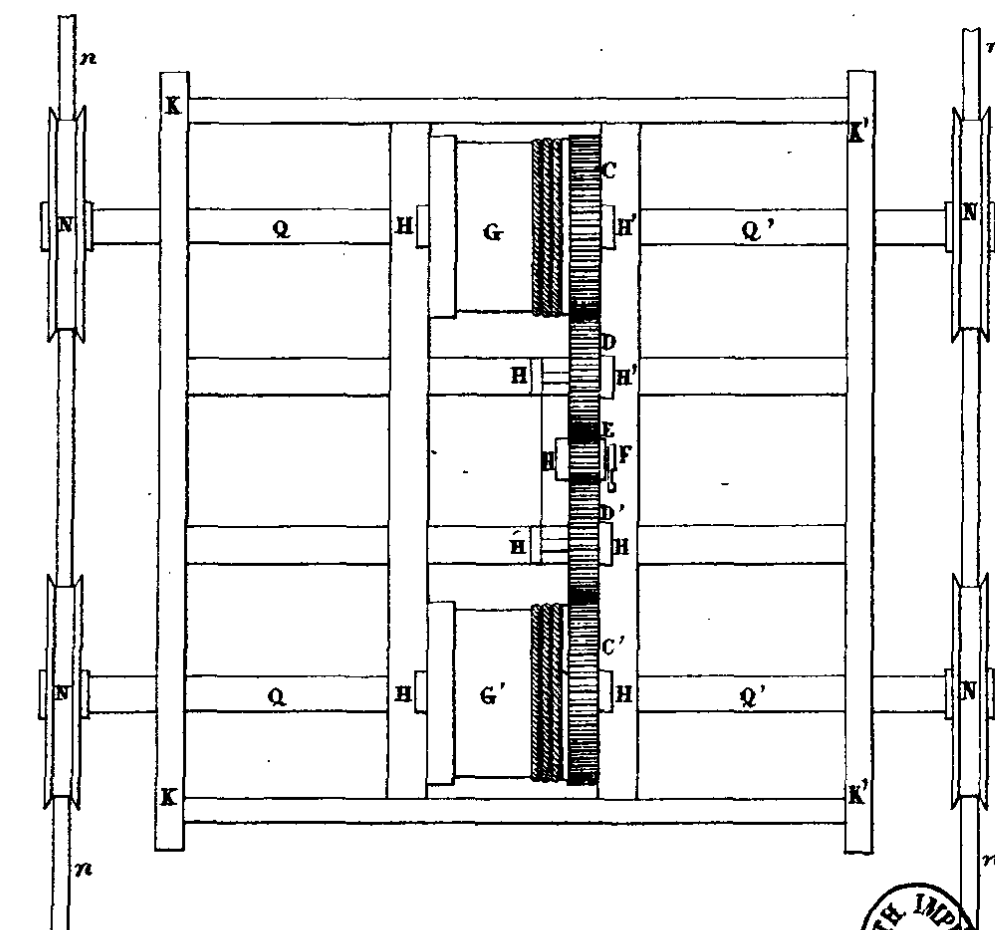


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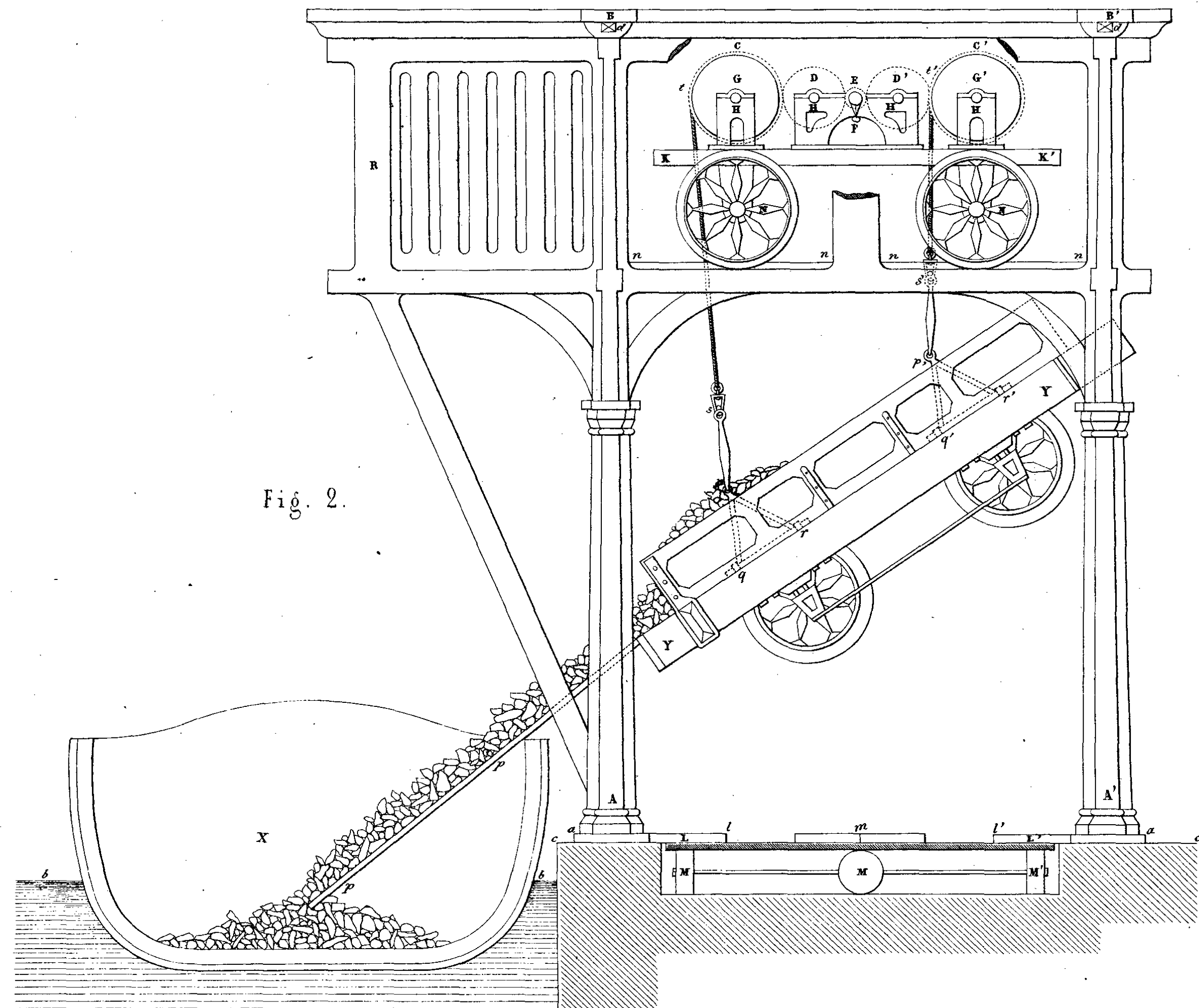
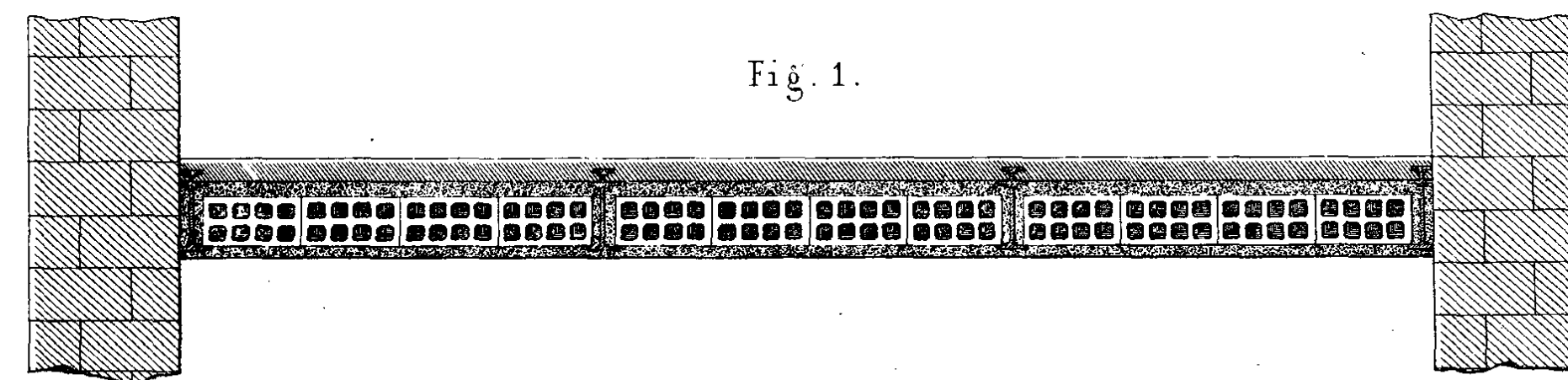


Fig. 1.



Echelle des Fig. 2, 3 et 4.

100 80 60 40 20 0 1 2 3 4 5 6 Met.







Fig. 2.

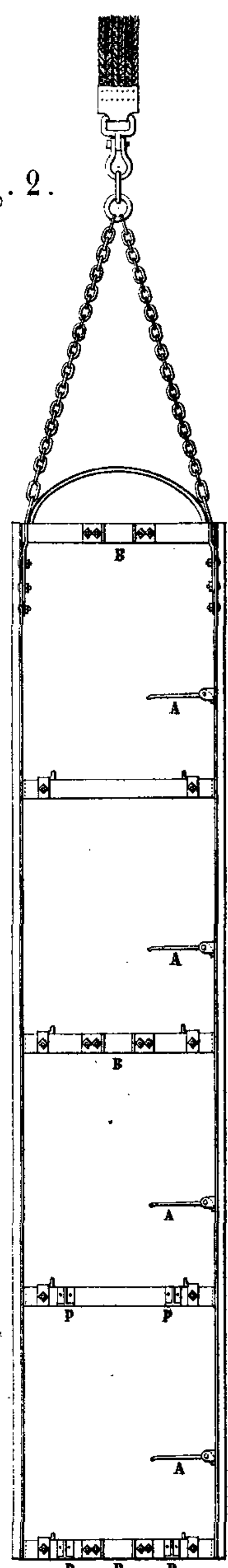


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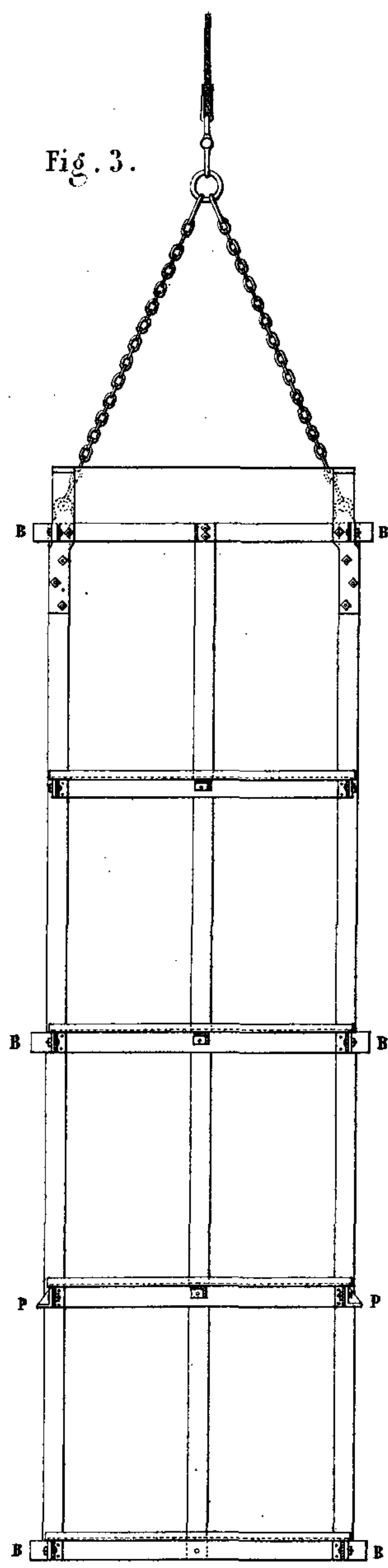


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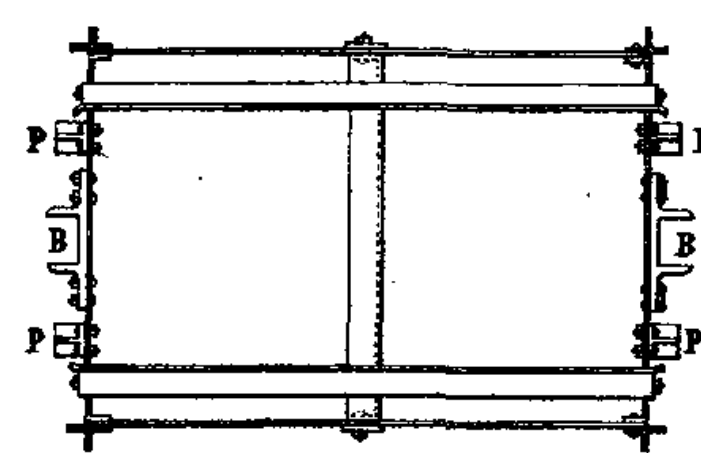


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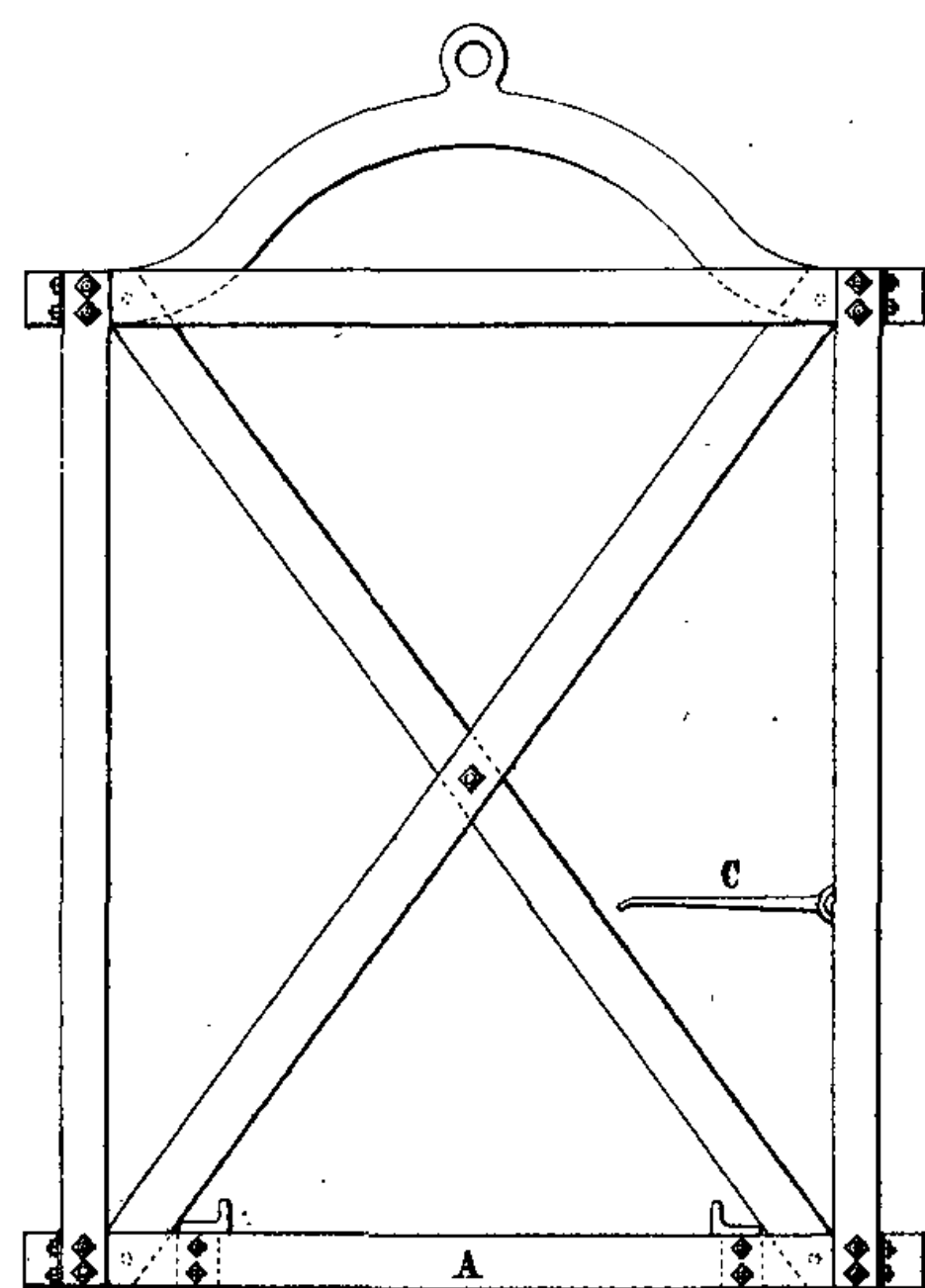


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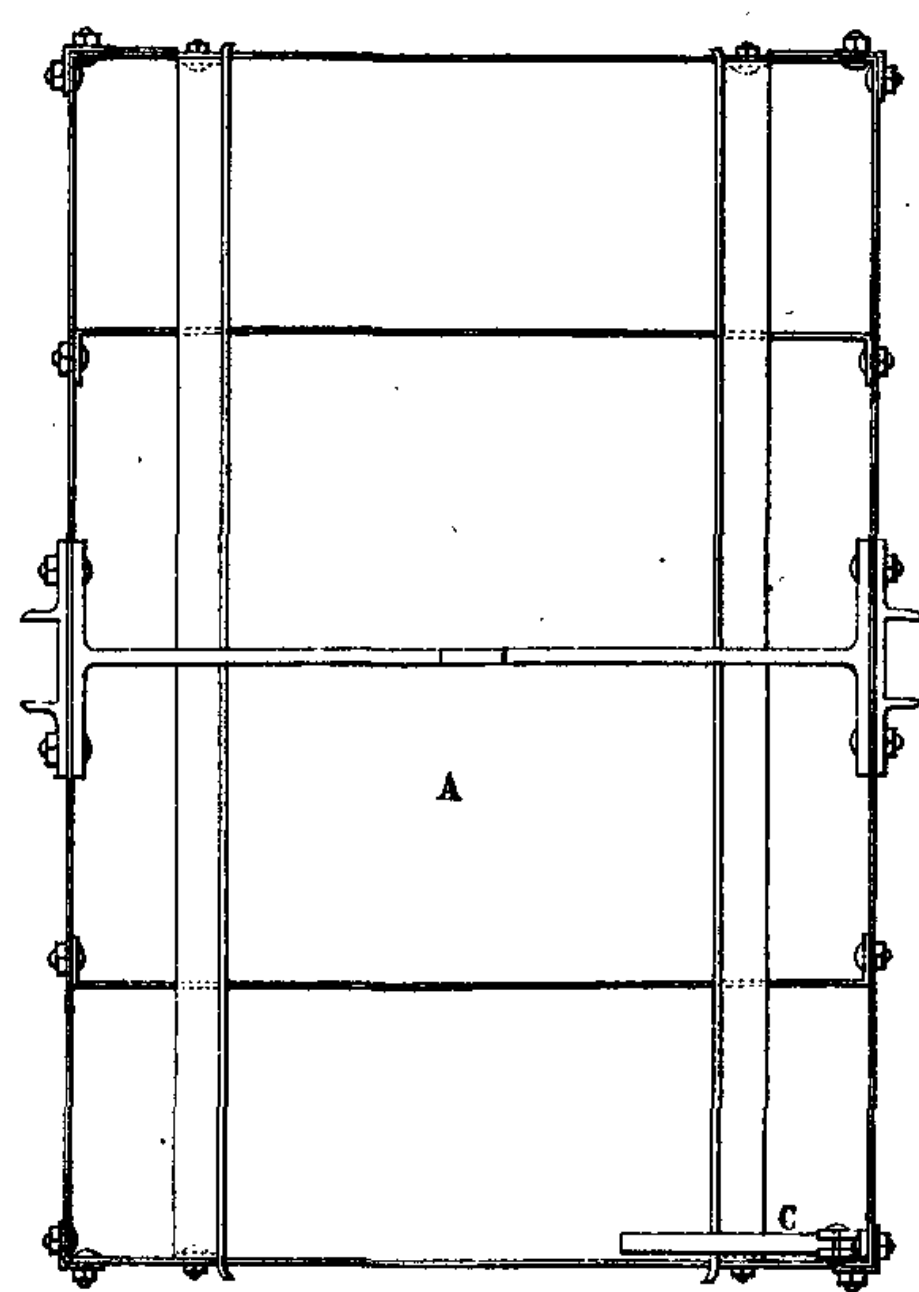


Fig. 10.

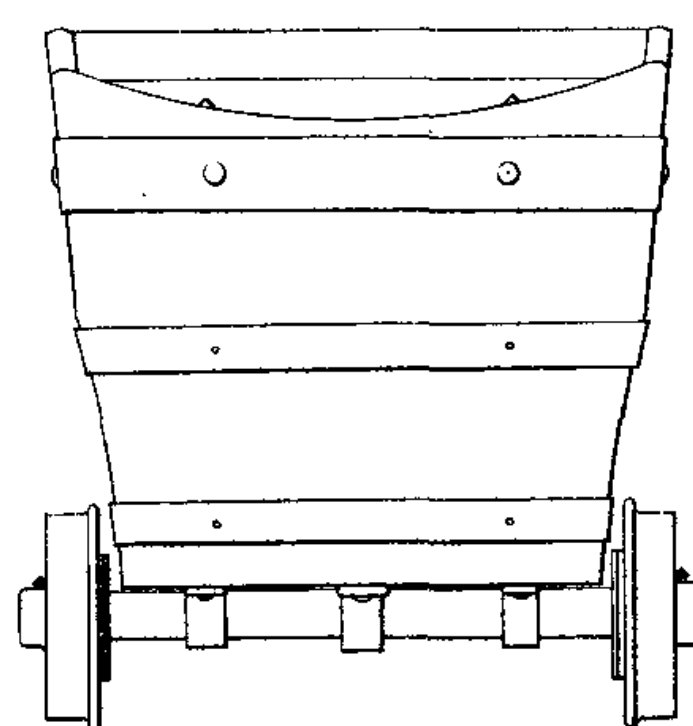


Fig. 11.

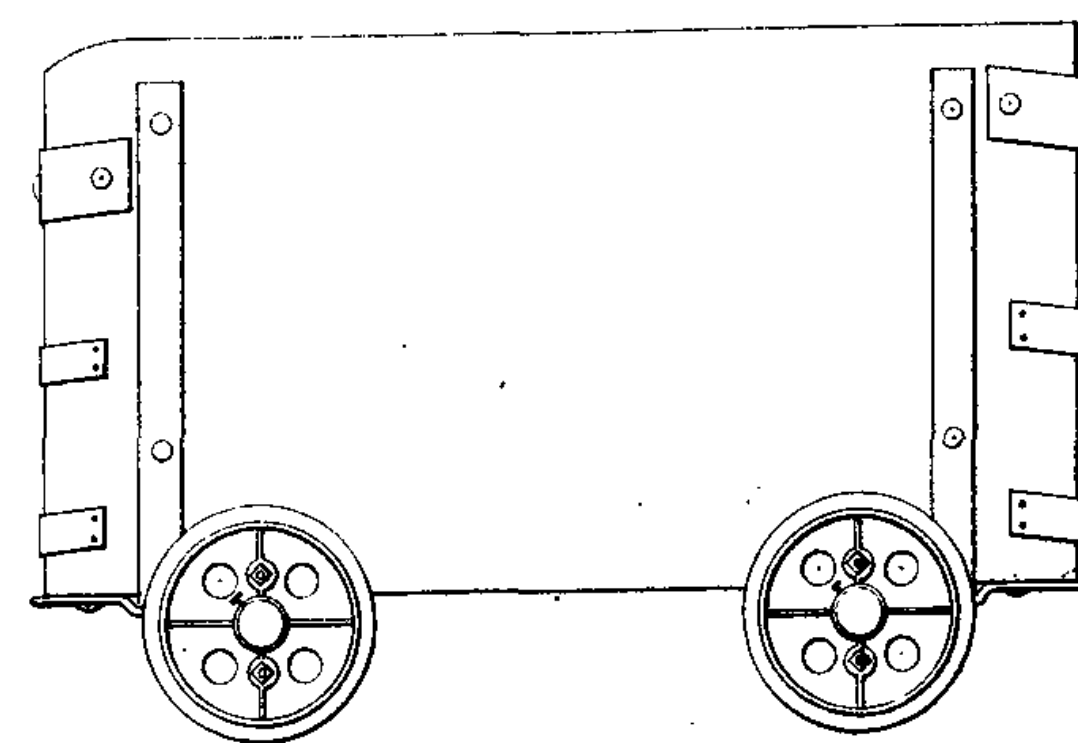


Fig. 6.

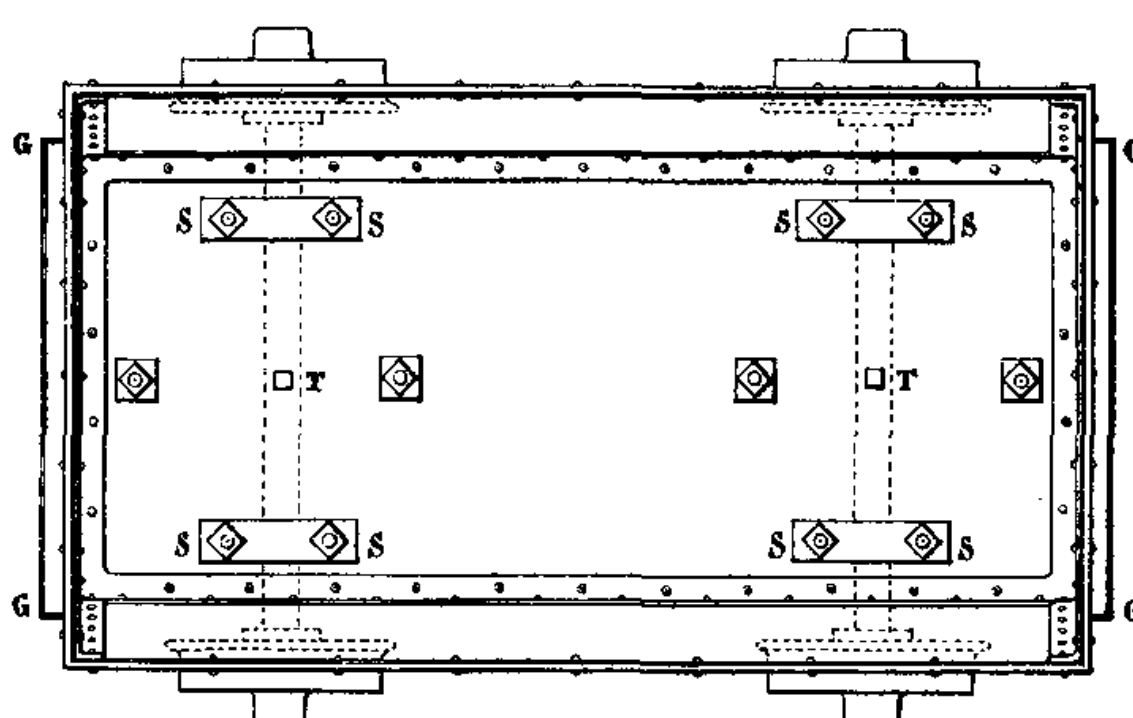


Fig. 9.

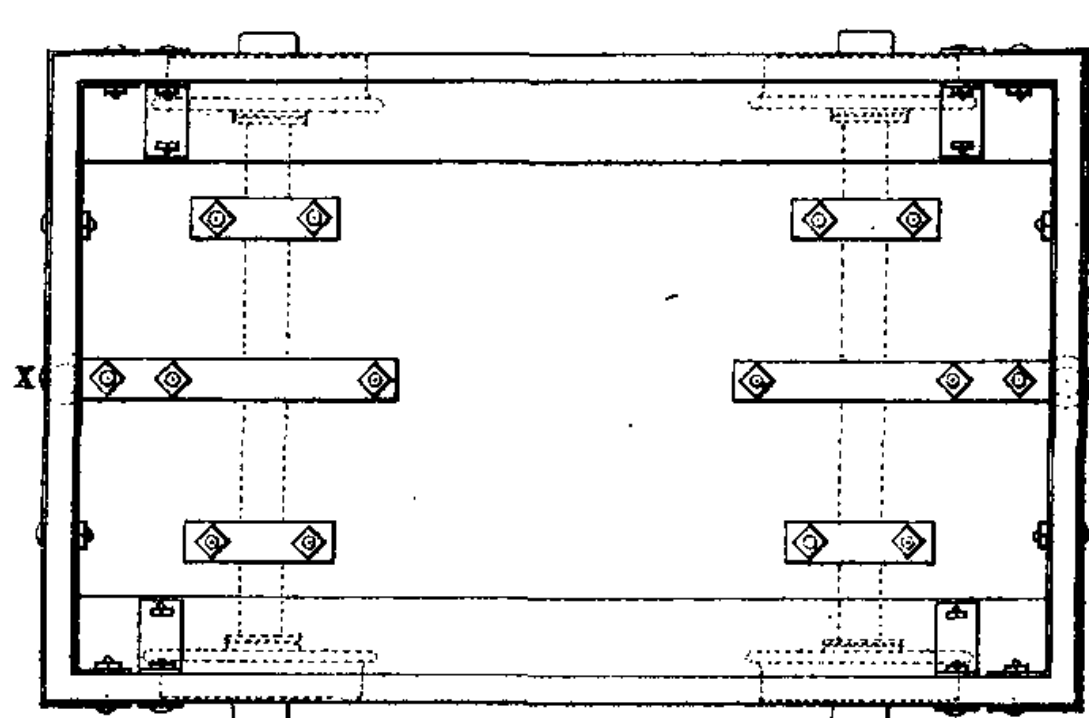


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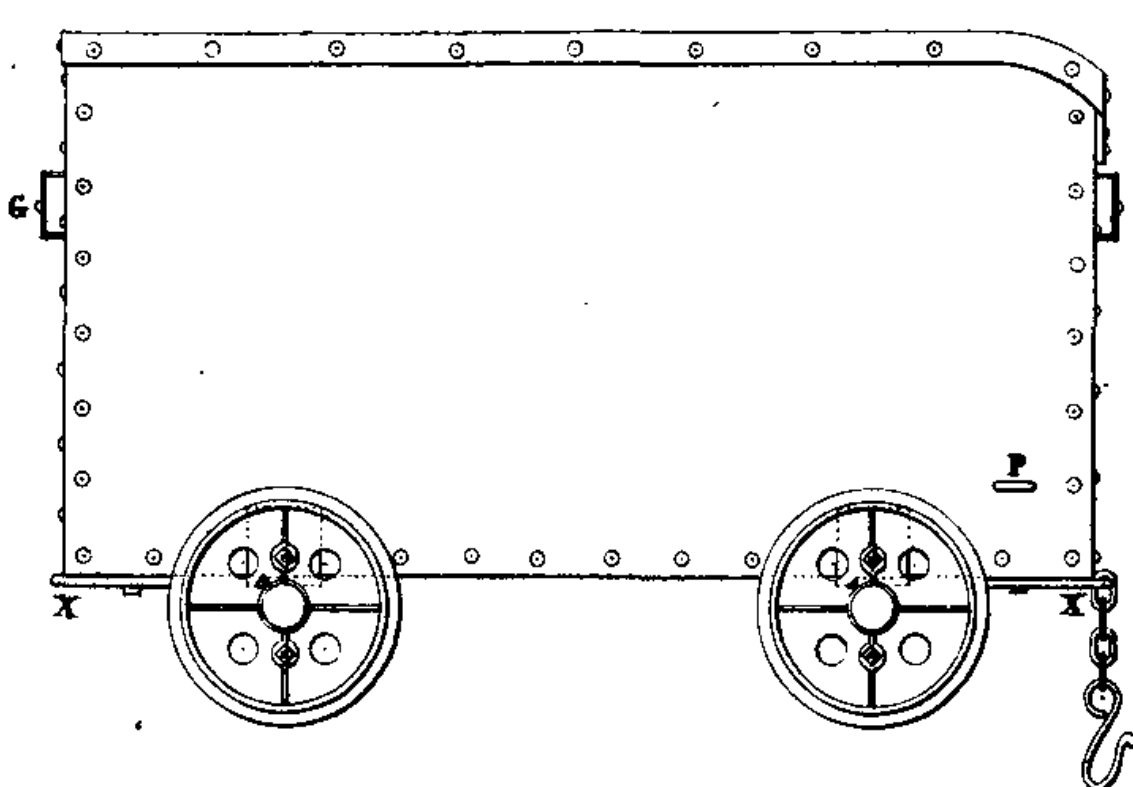


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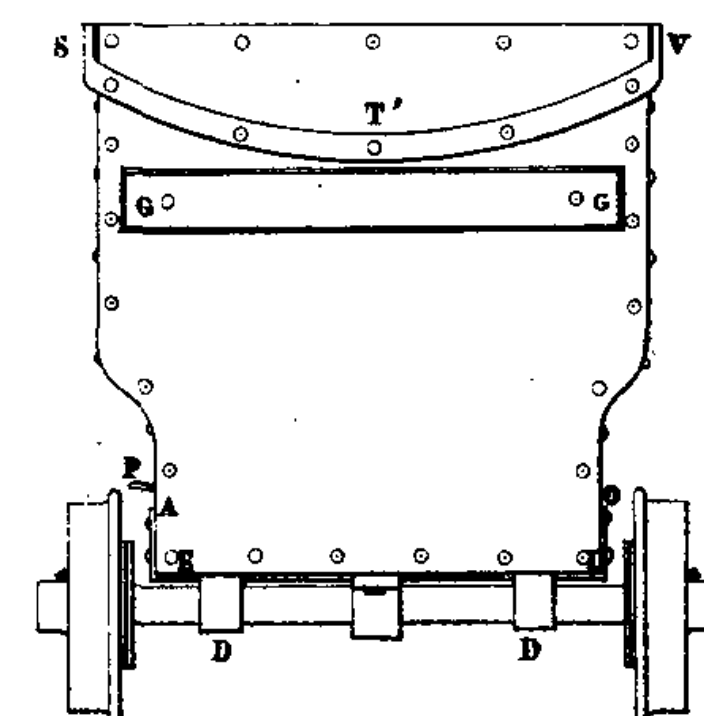


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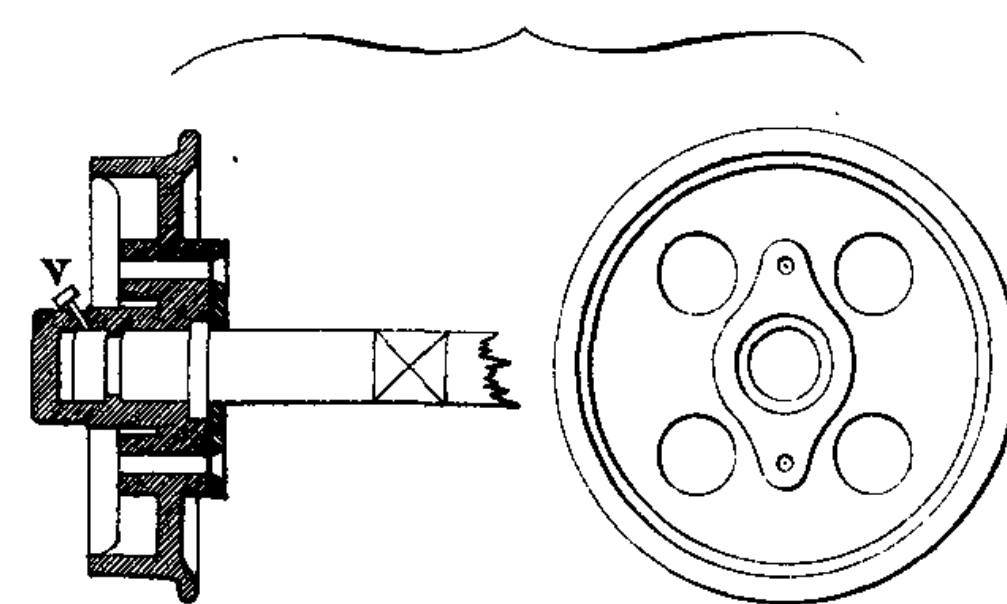


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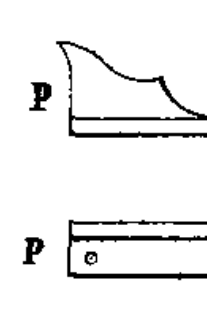


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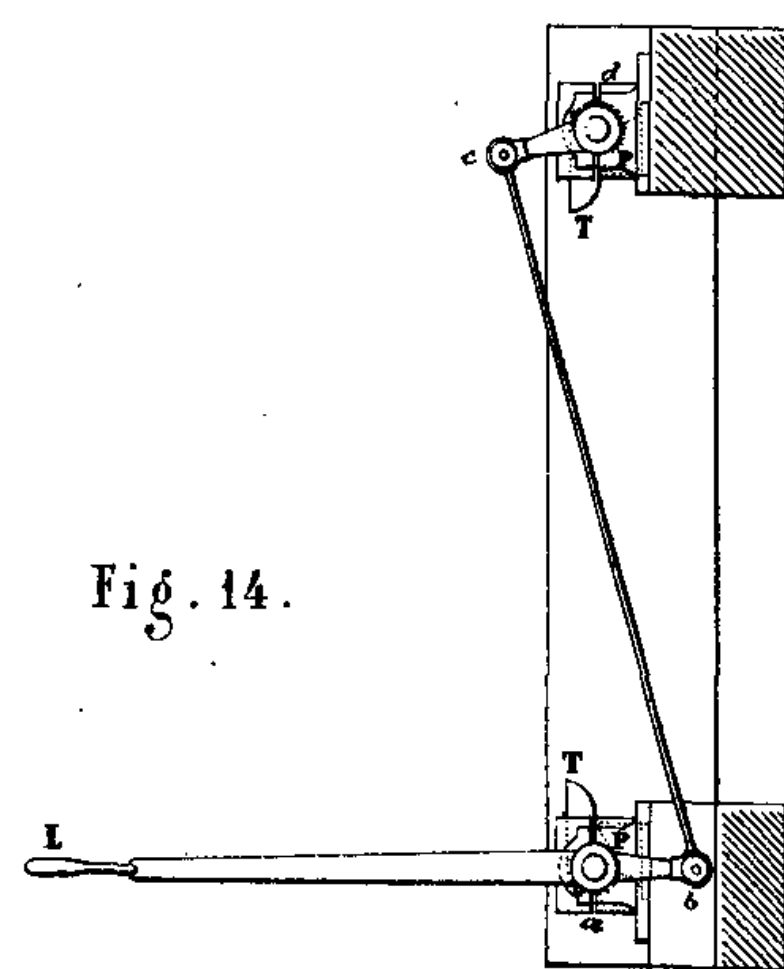
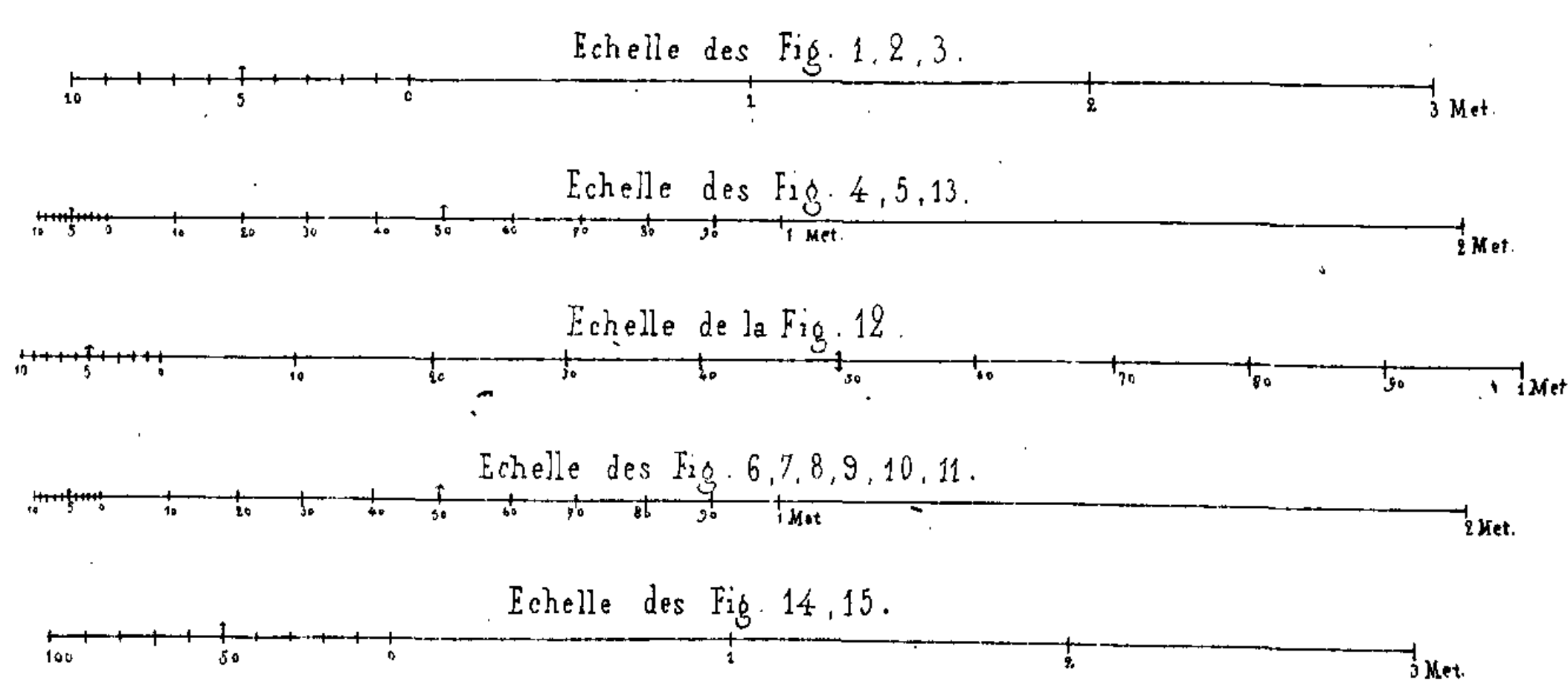
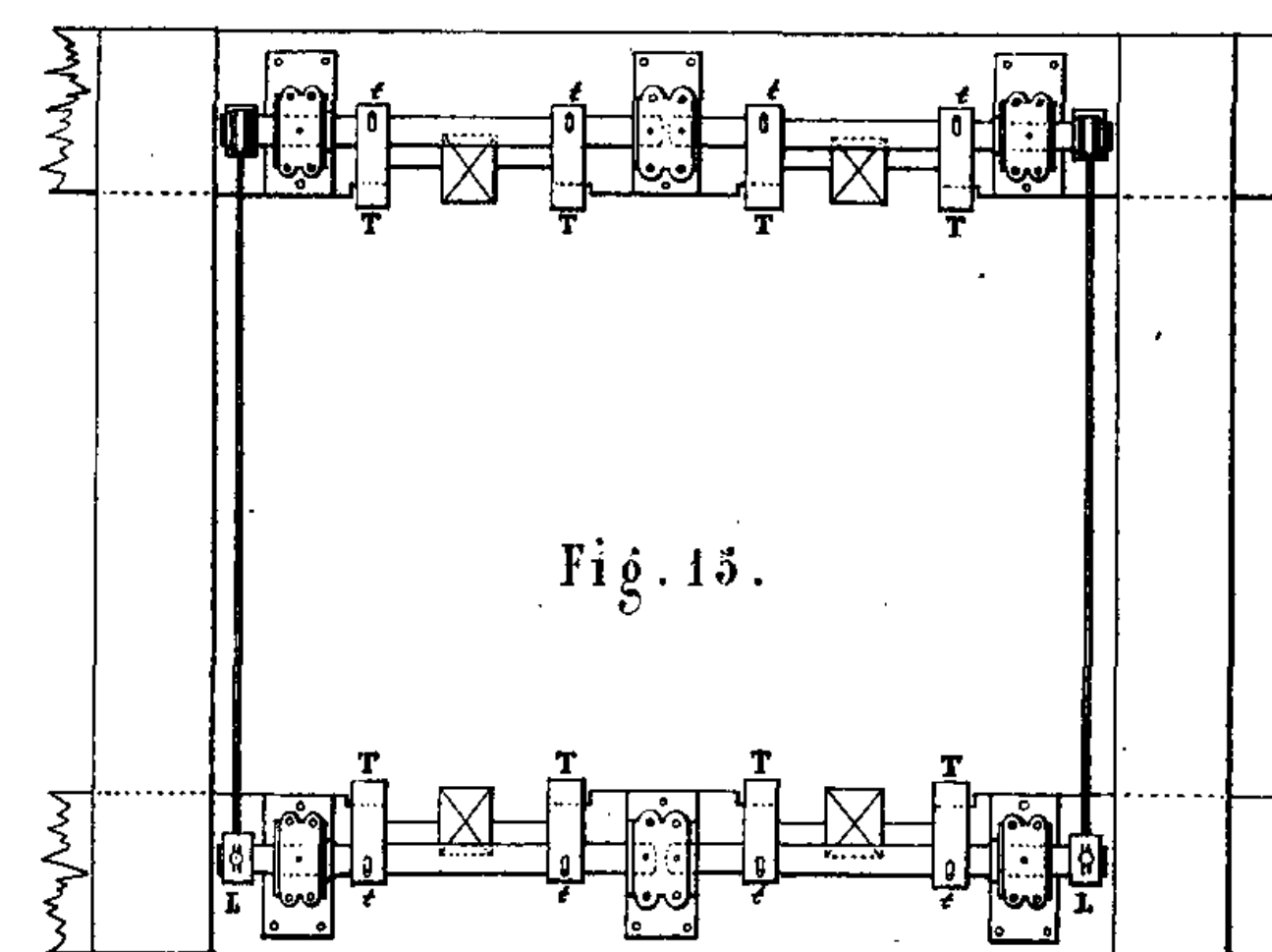


Fig. 15.









EXTRACTION ET TRIAGE DE LA HOUILLE  
aux Mines du GRAND-HORNU (Belgique)

PL. VII.

Fig. 4.

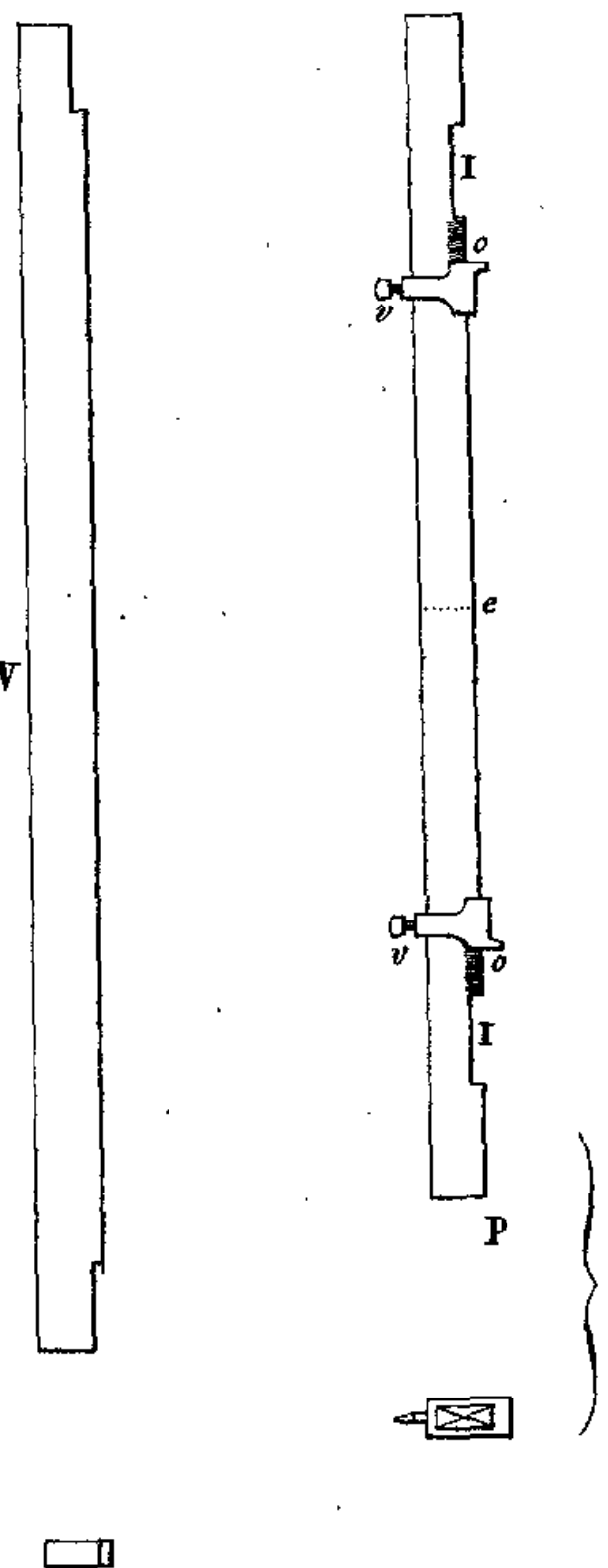


Fig. 3.

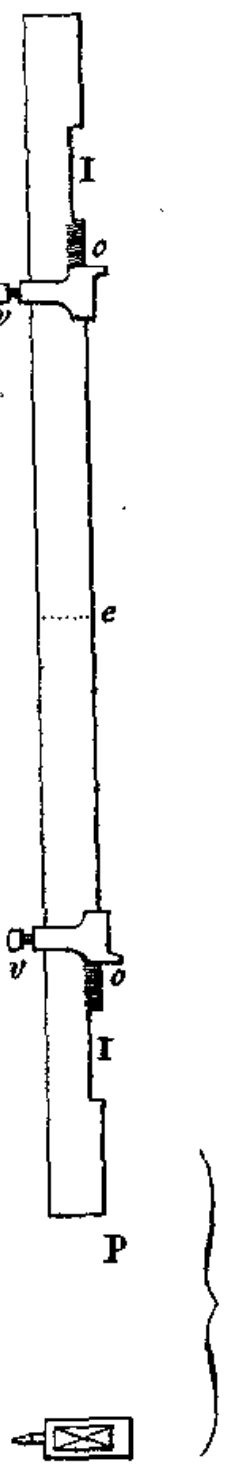


Fig. 2.

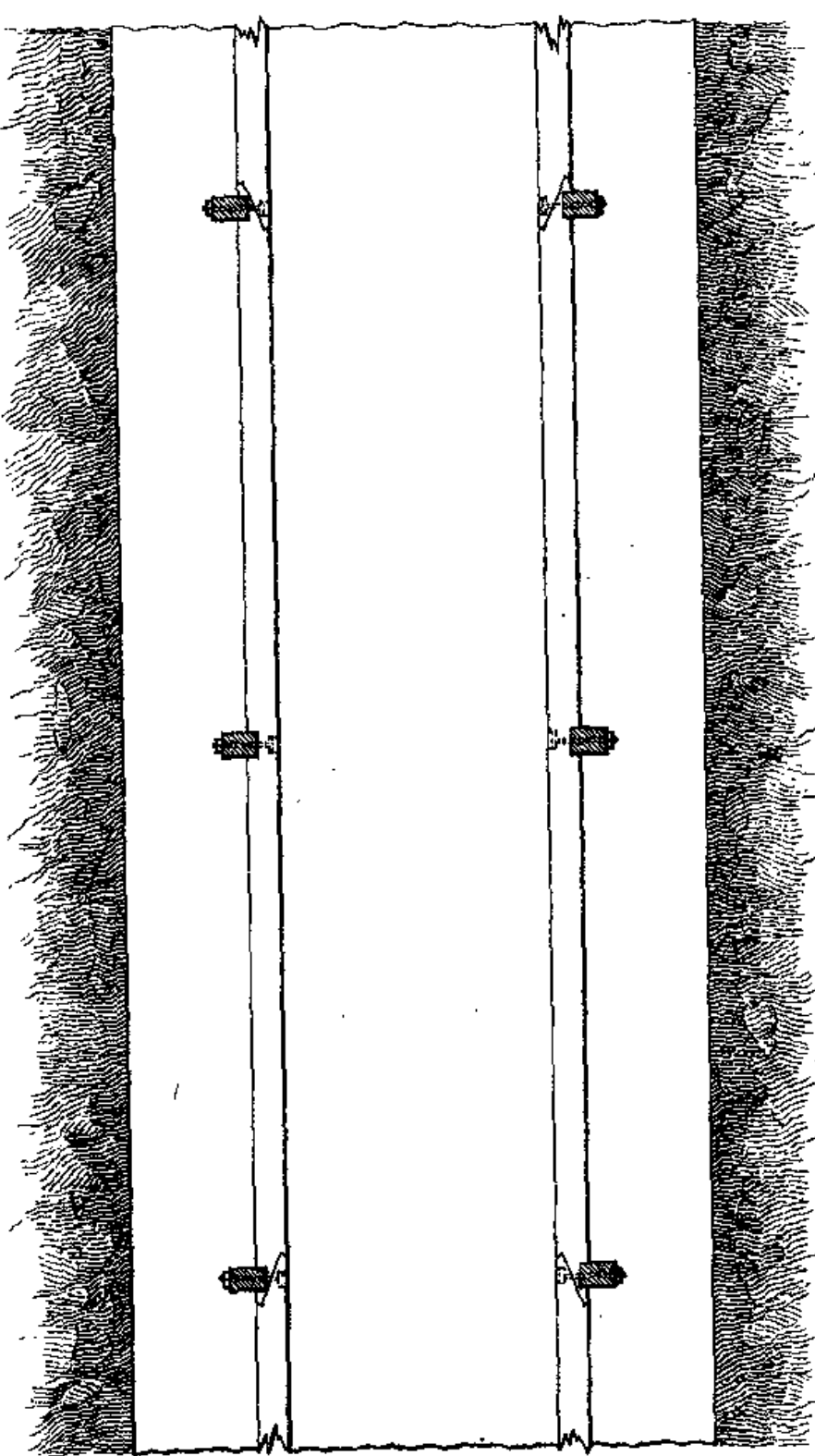


Fig. 1.

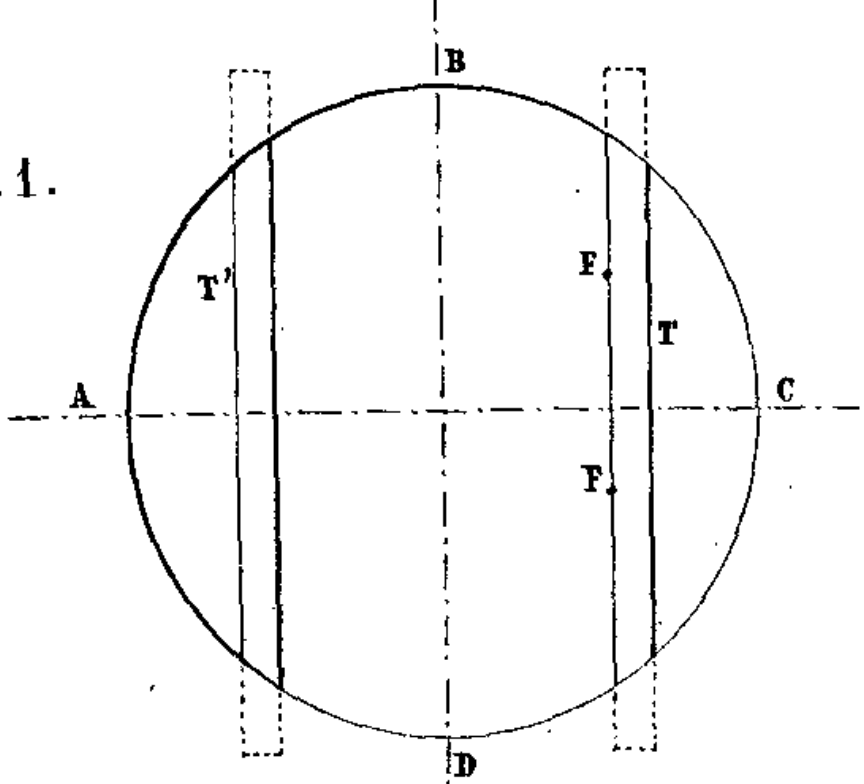


Fig. 5.

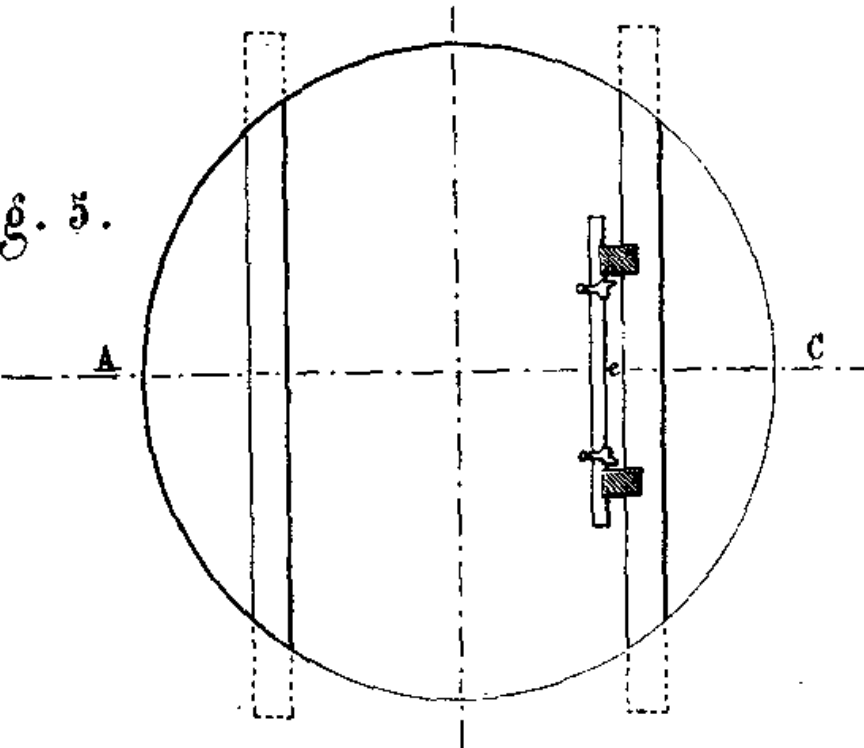


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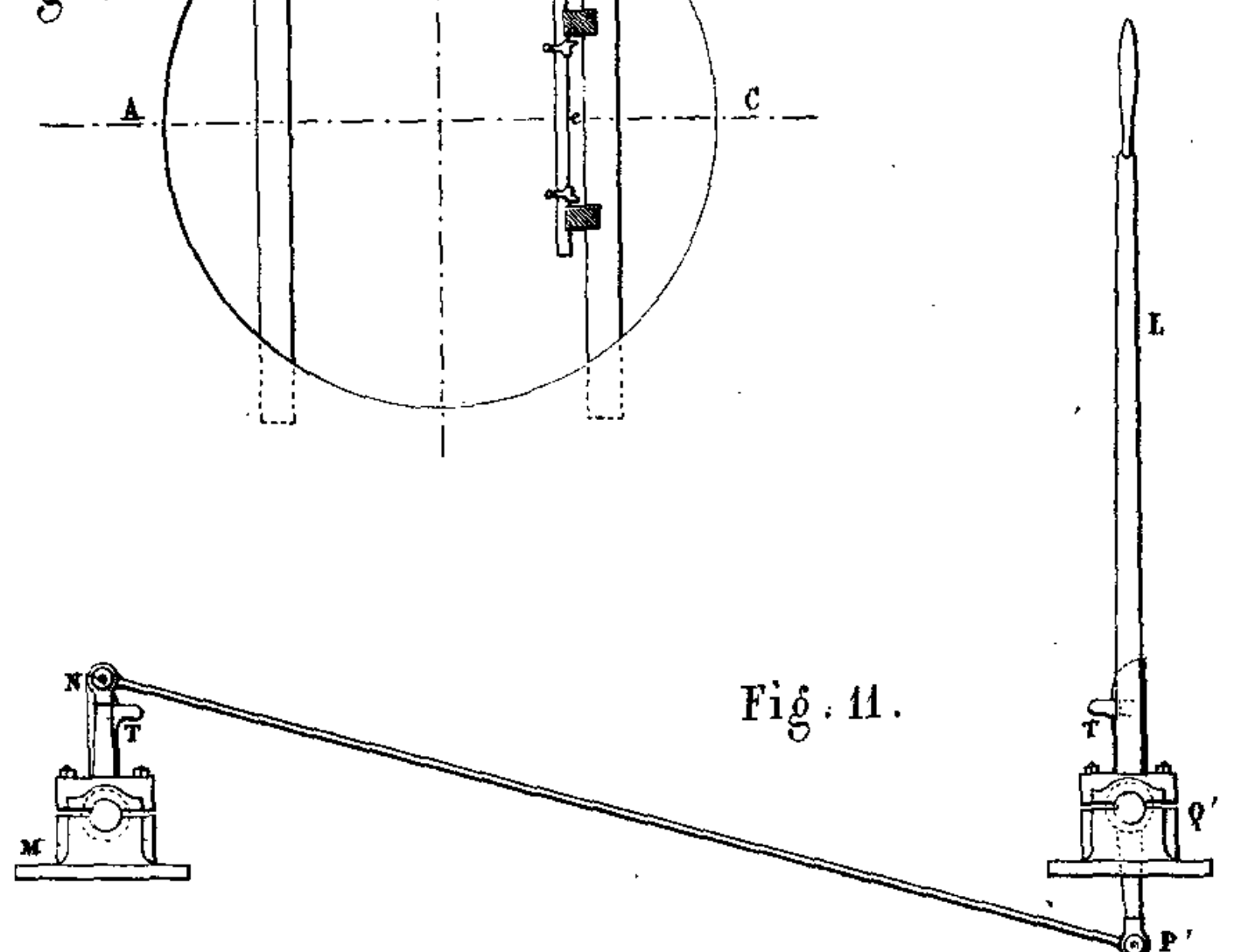


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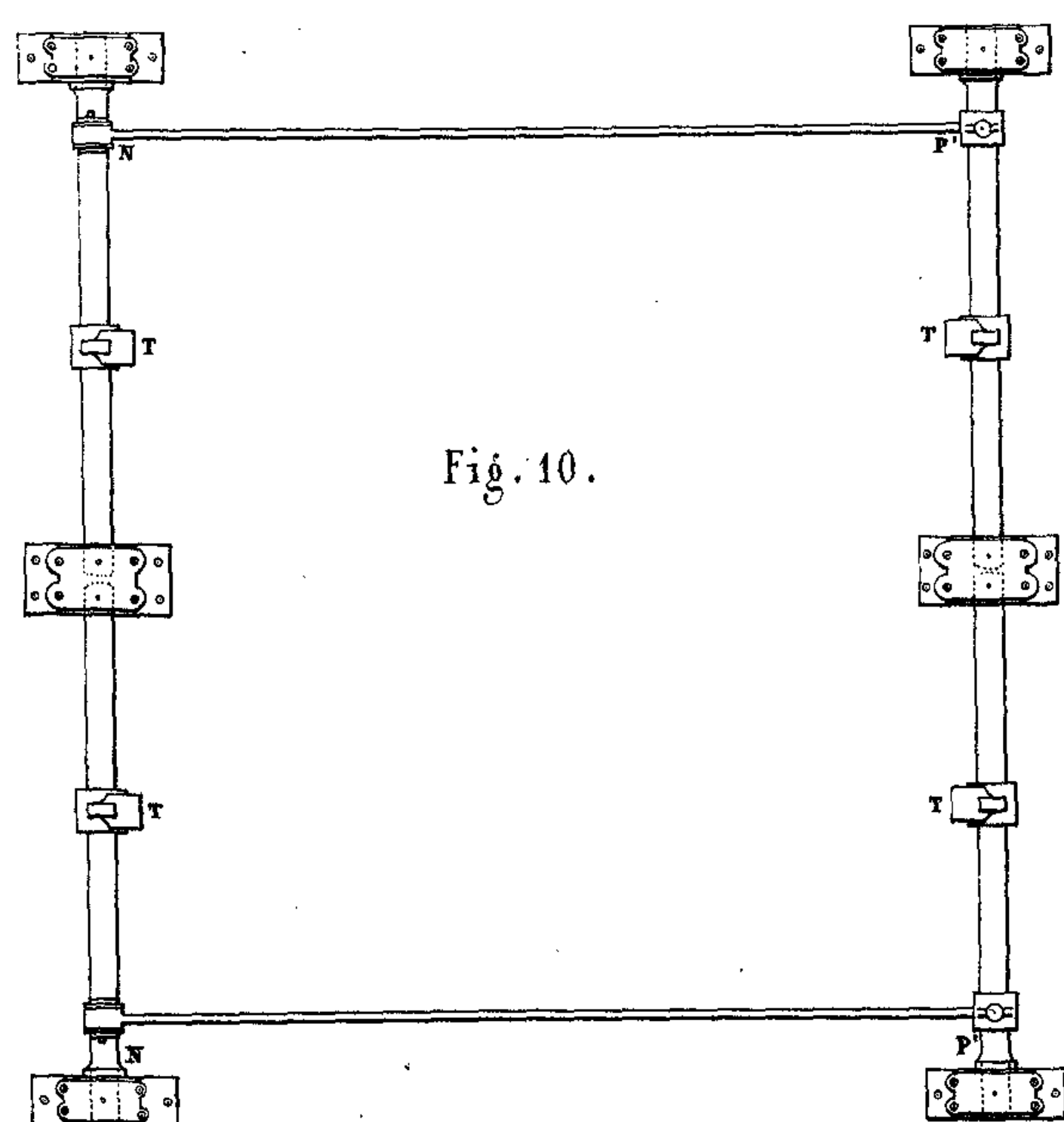


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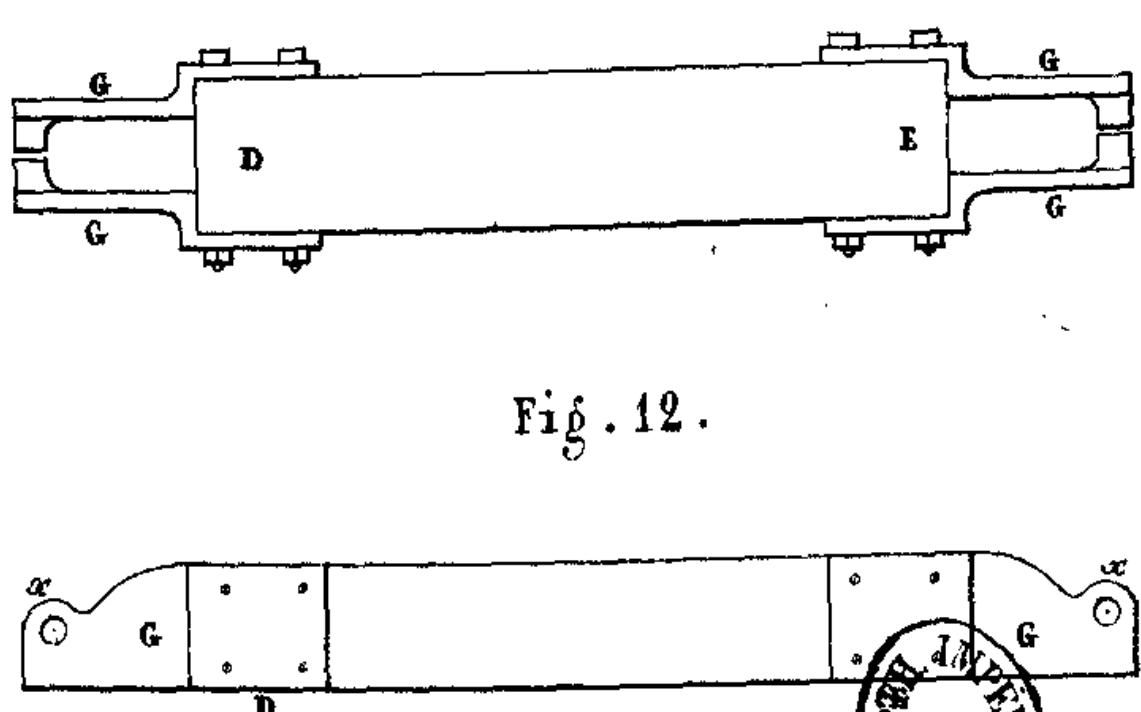


Fig. 6.

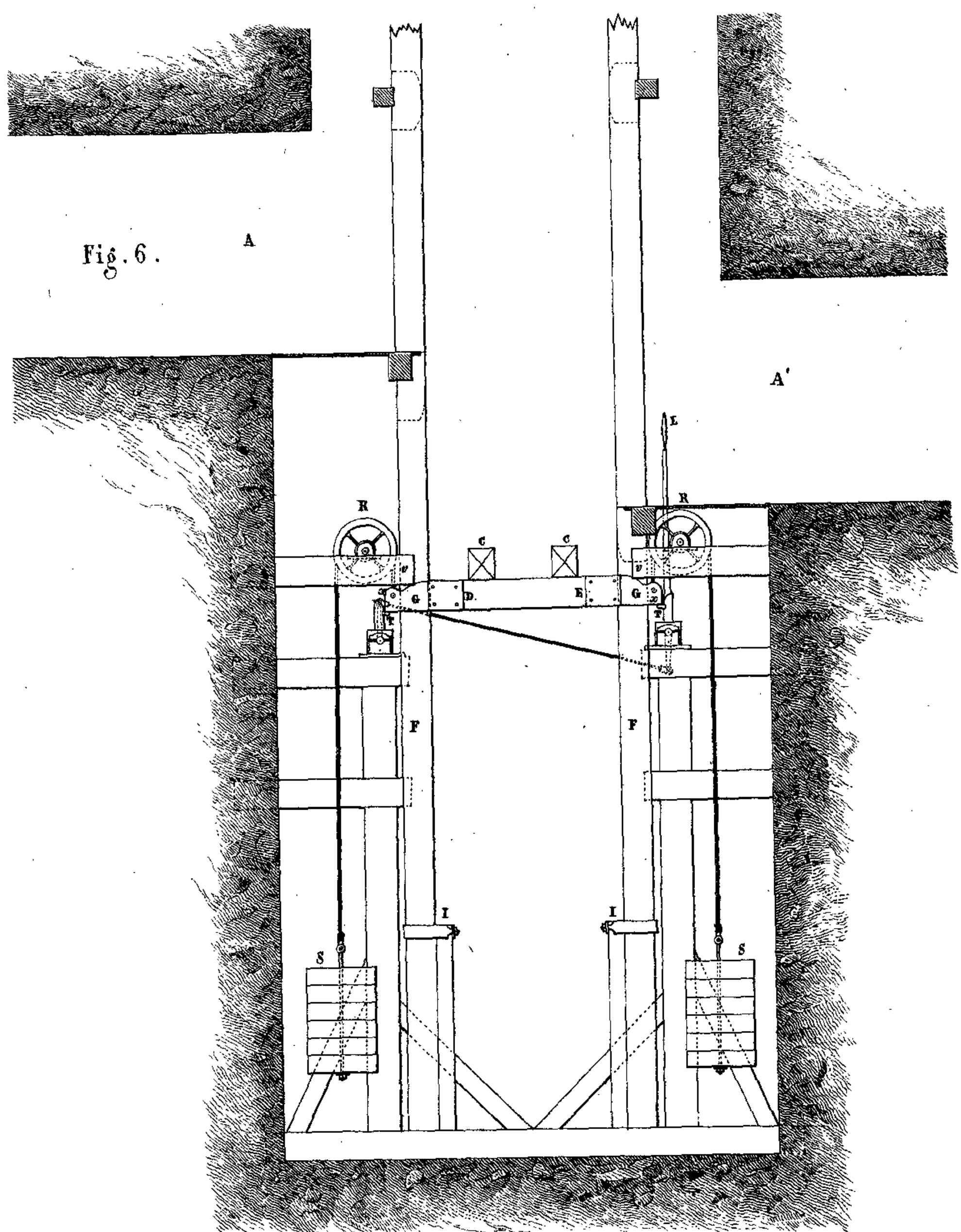


Fig. 9.

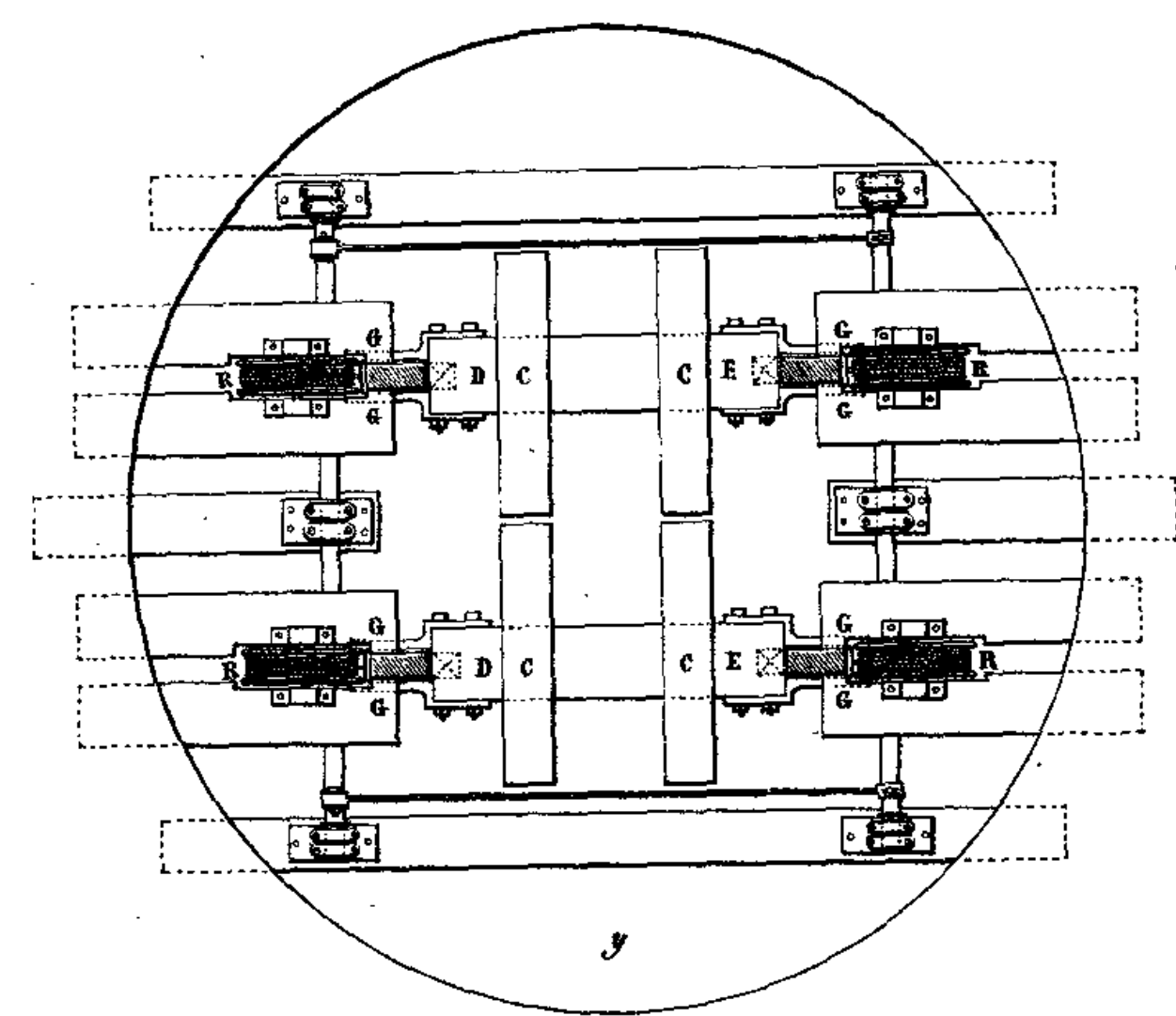
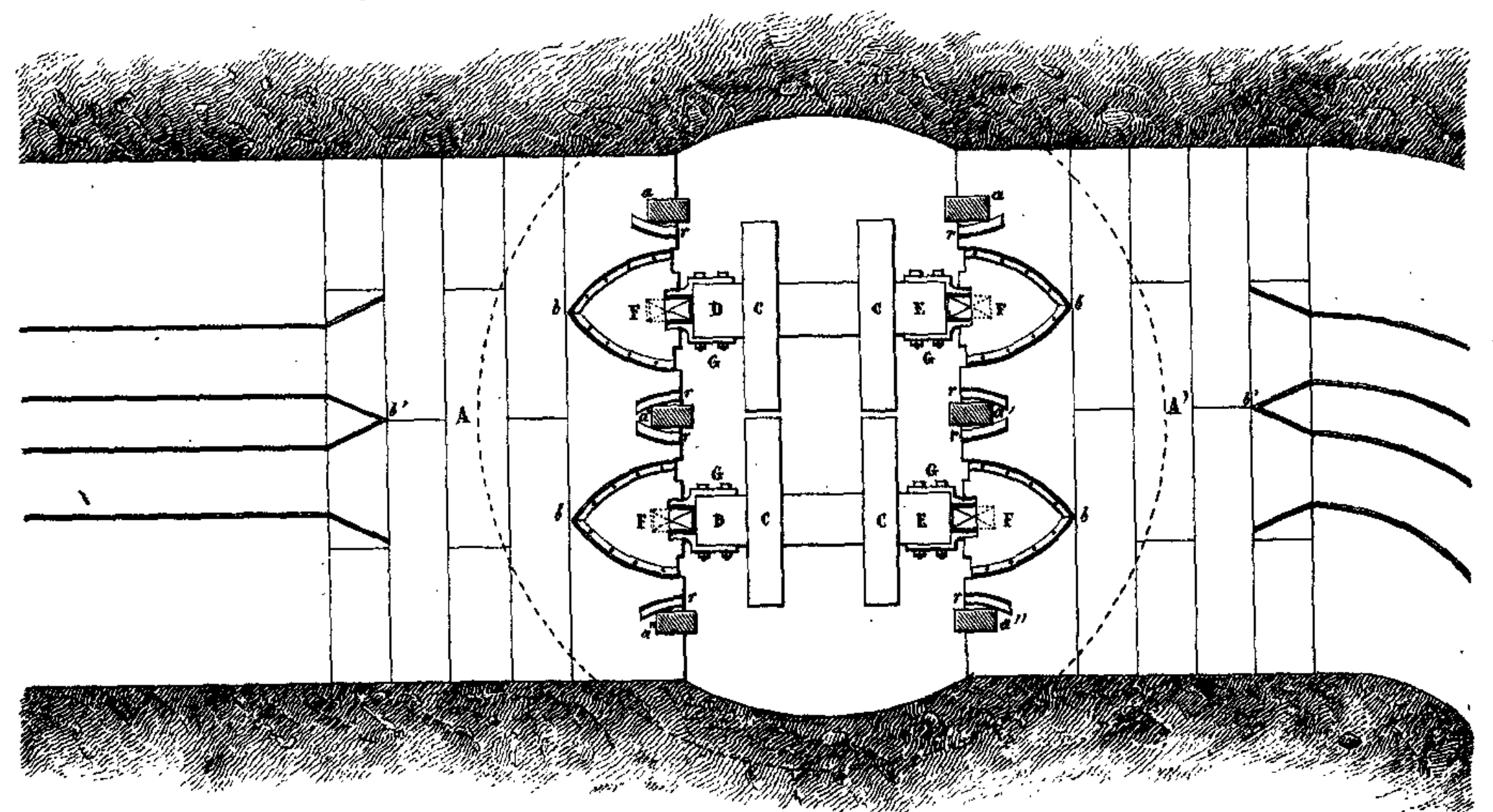
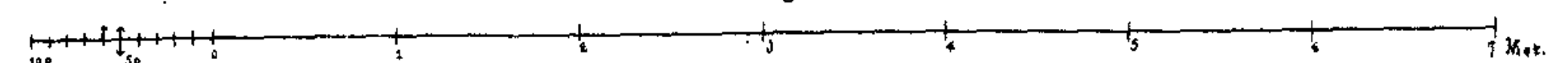


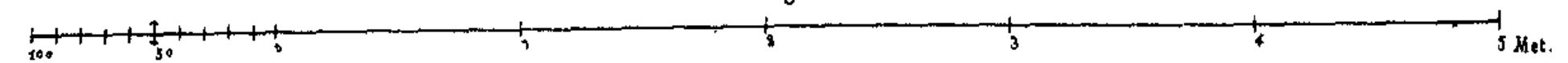
Fig. 7.



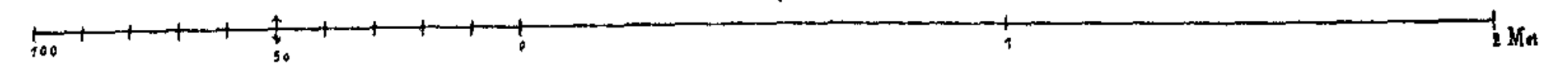
Echelle des Fig. 1, 2, 3.



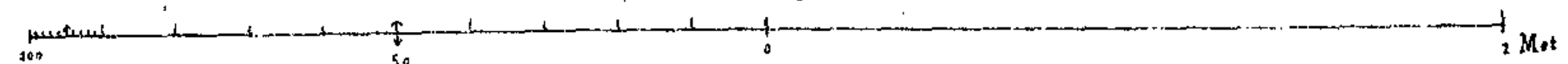
Echelle des Fig. 6, 7, 9.



Echelle des Fig. 10, 11, 12.



Echelle des Fig. 3, 4.













EXTRACTION ET TRIAGE DE LA HOUILLE  
aux Mines du GRAND-HORNU (Belgique)

PL. VIII.

Fig. 2.

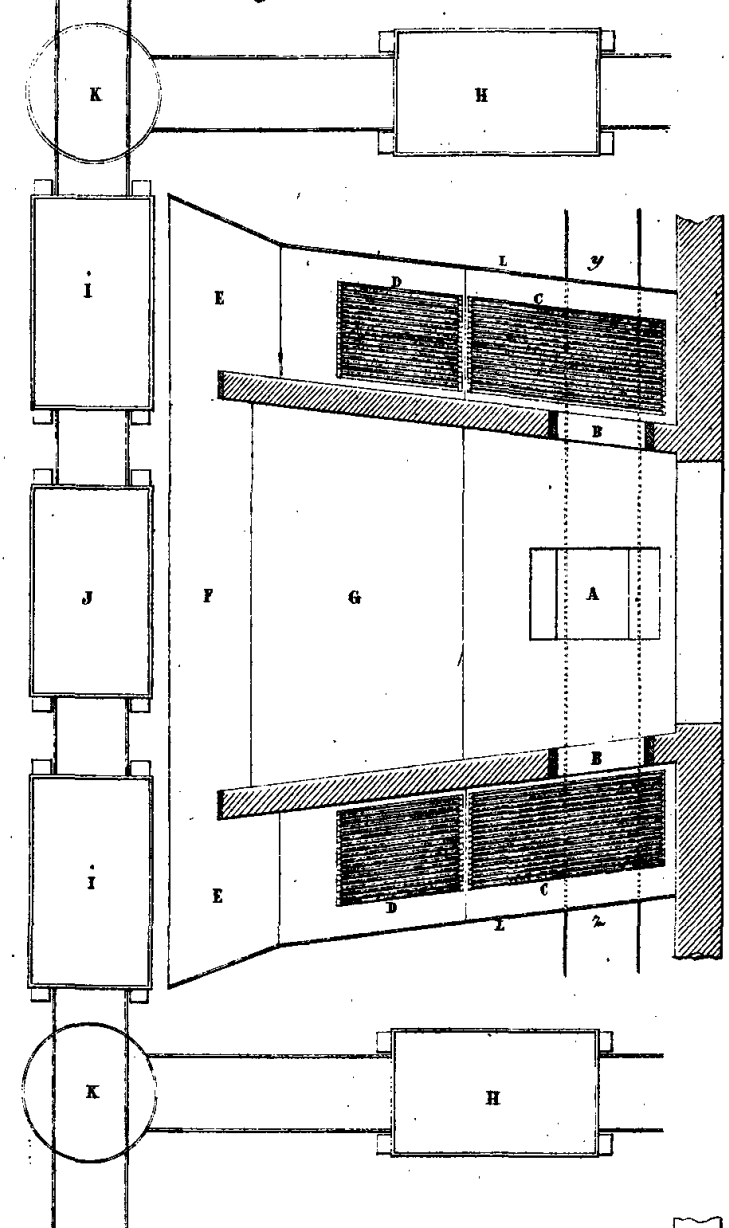


Fig. 4.

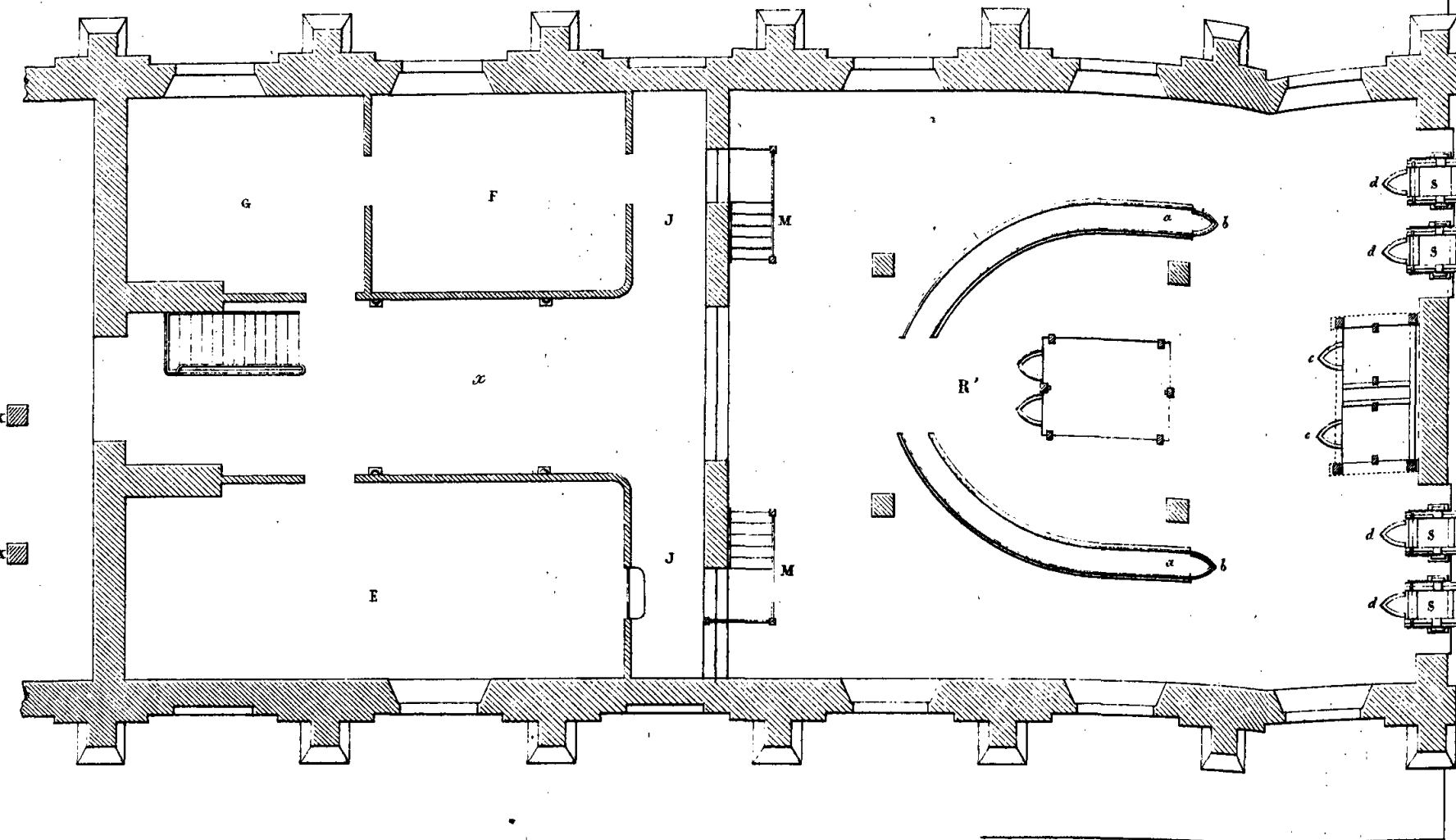


Fig. 1.

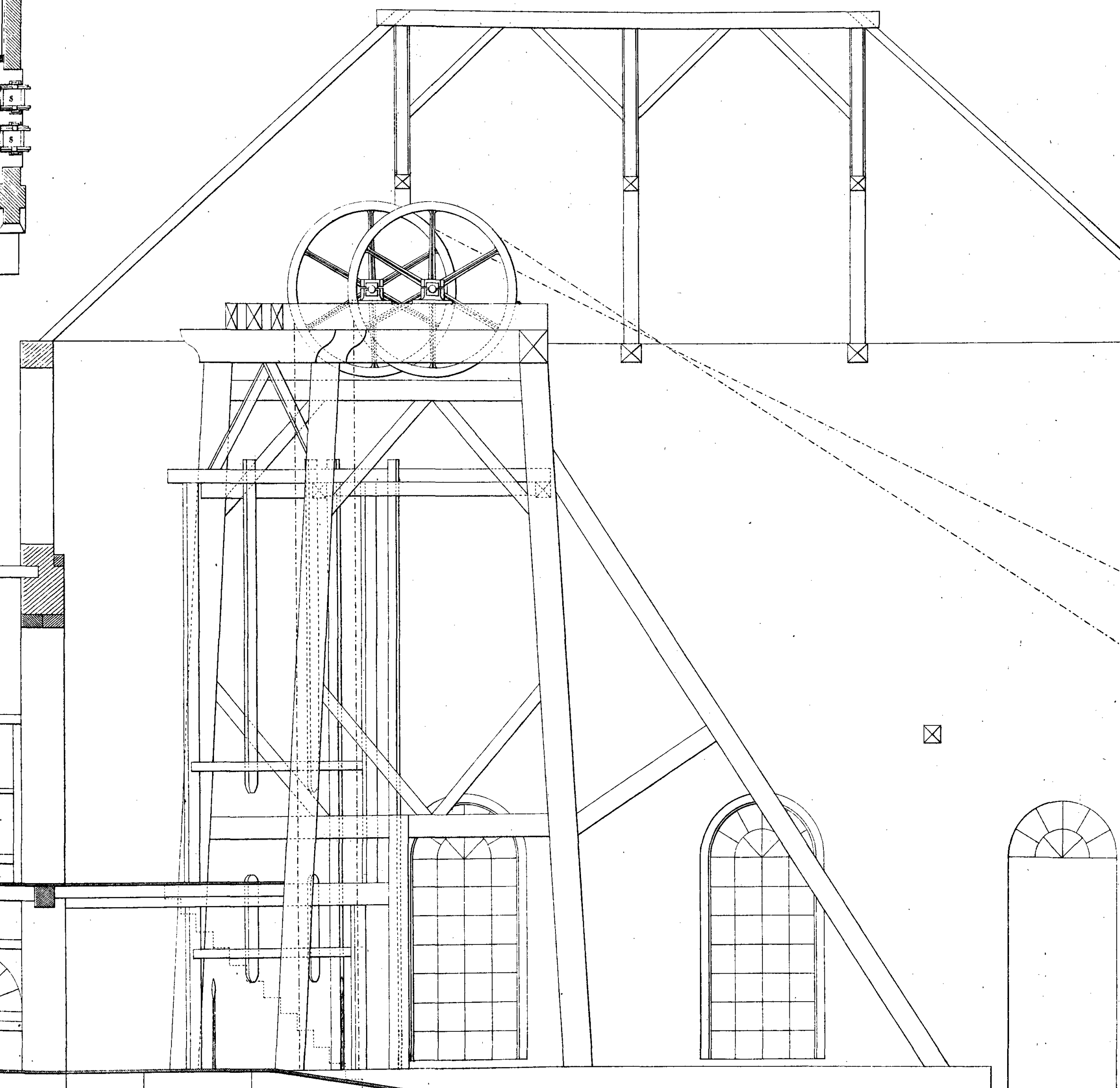
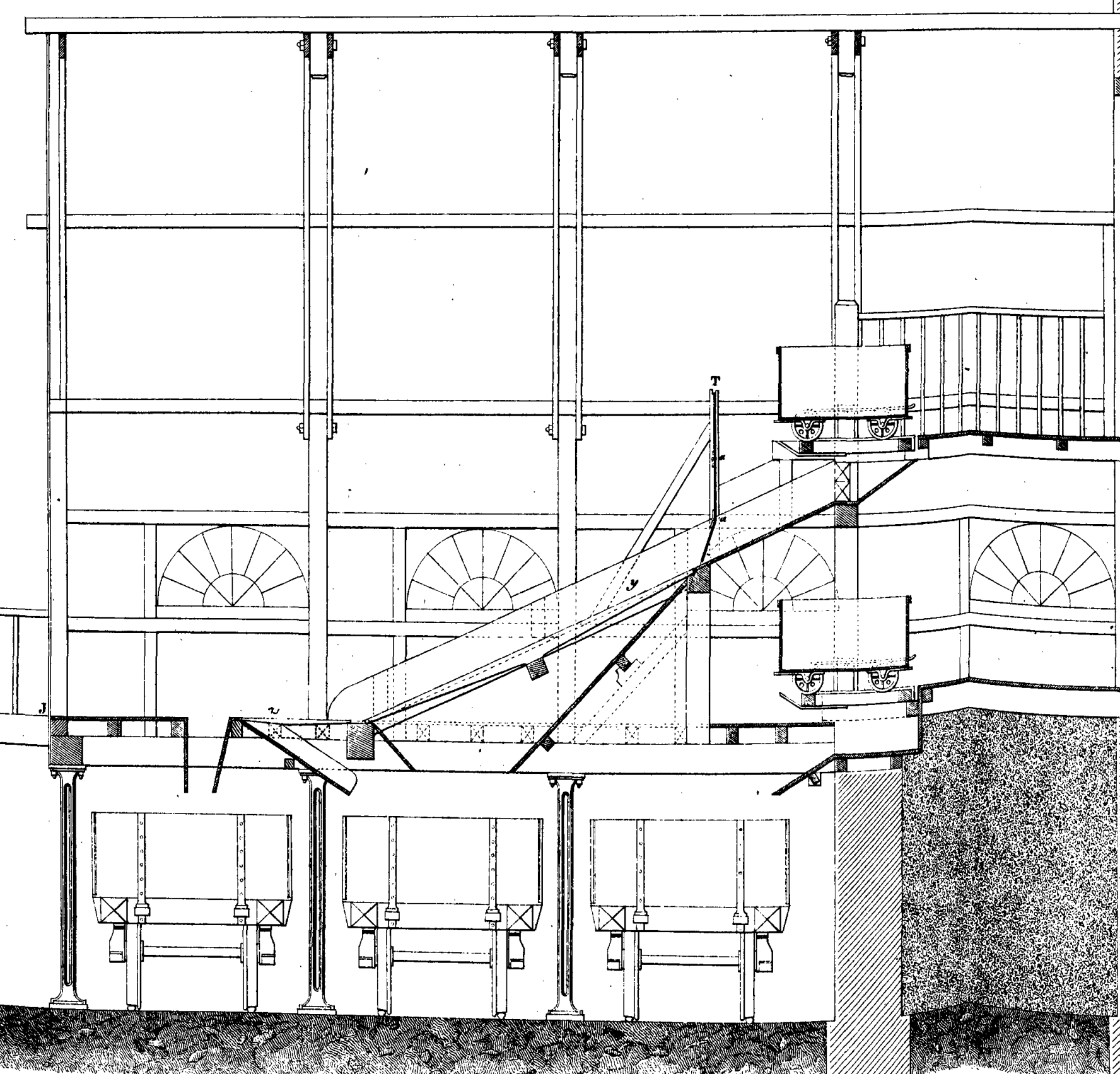
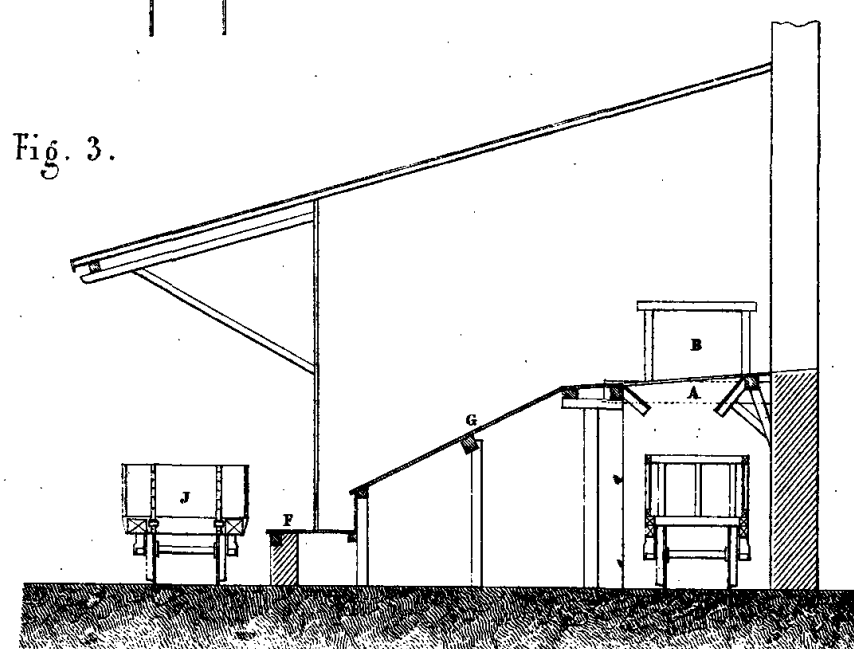
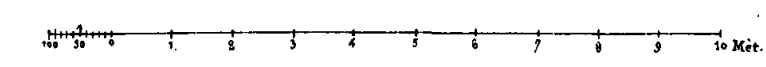


Fig. 3.



Echelle de la Fig. 4.



Echelle des Fig. 2 et 3.



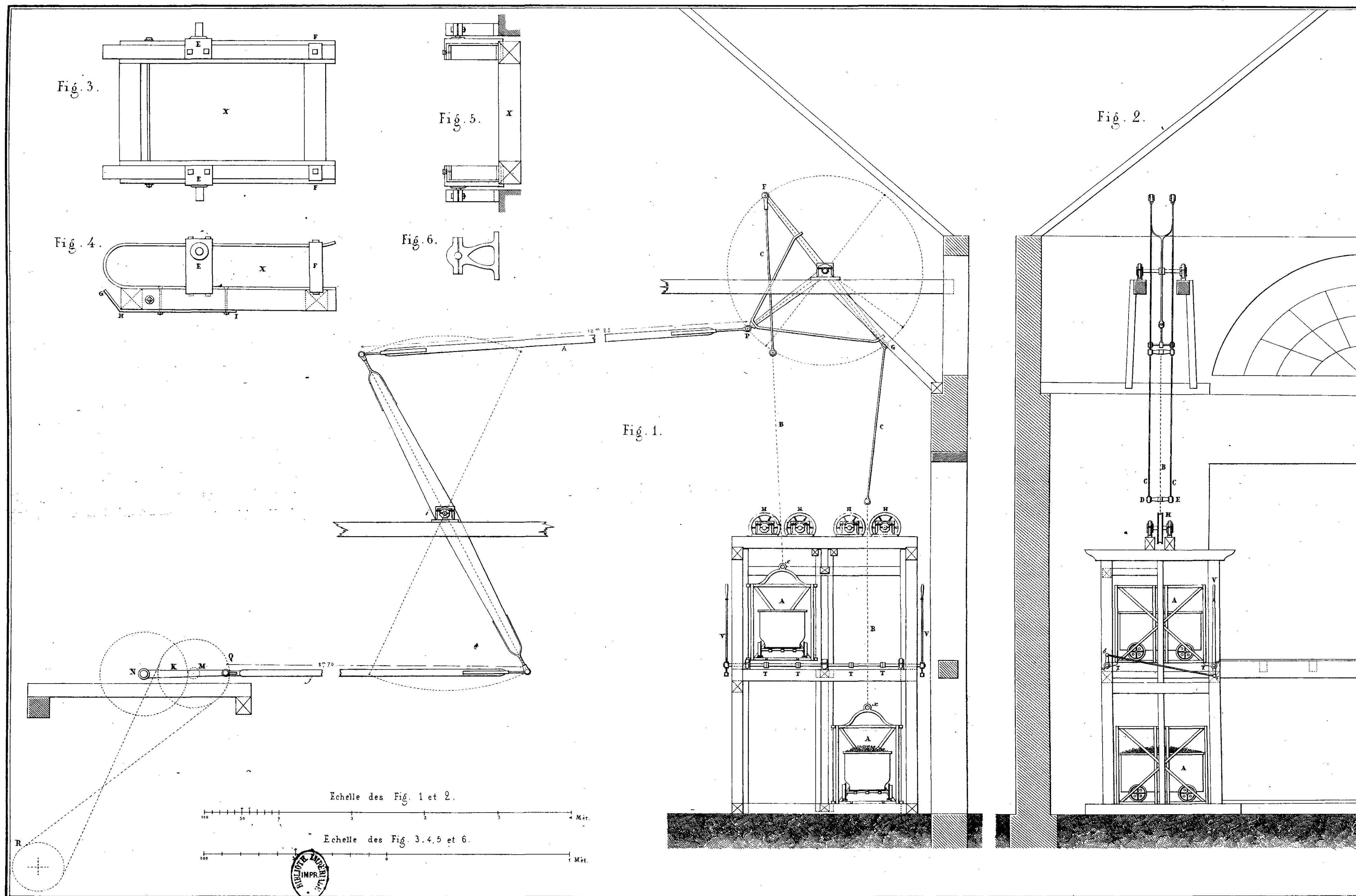
Echelle de la Fig. 1.















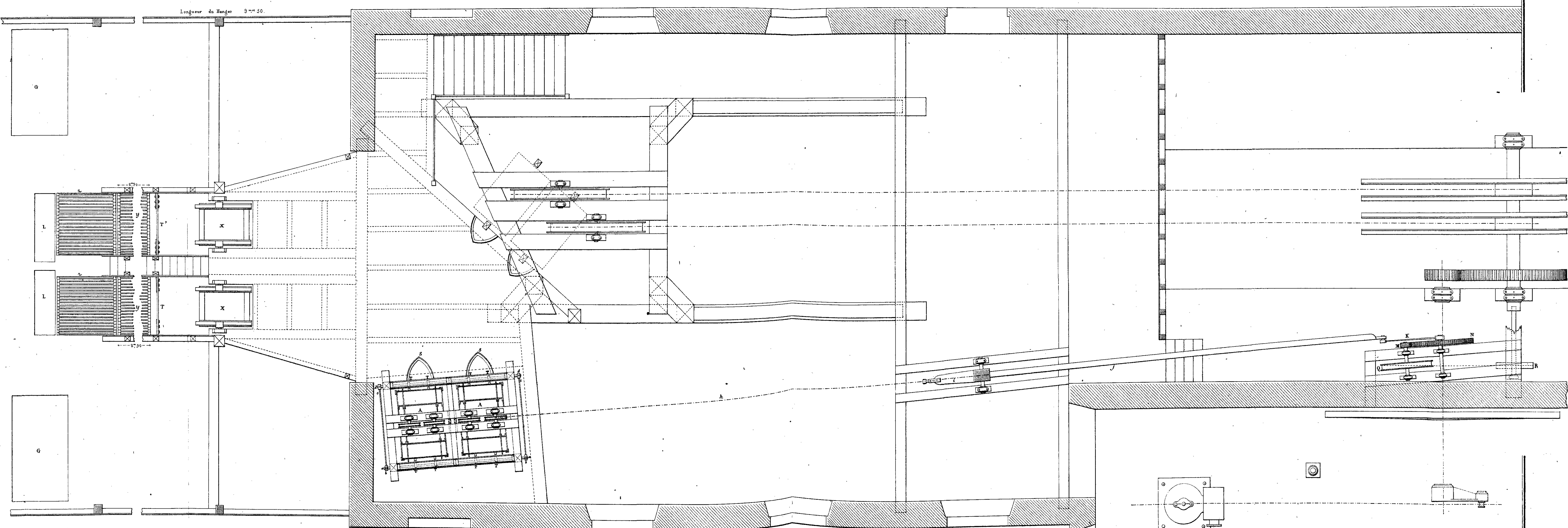
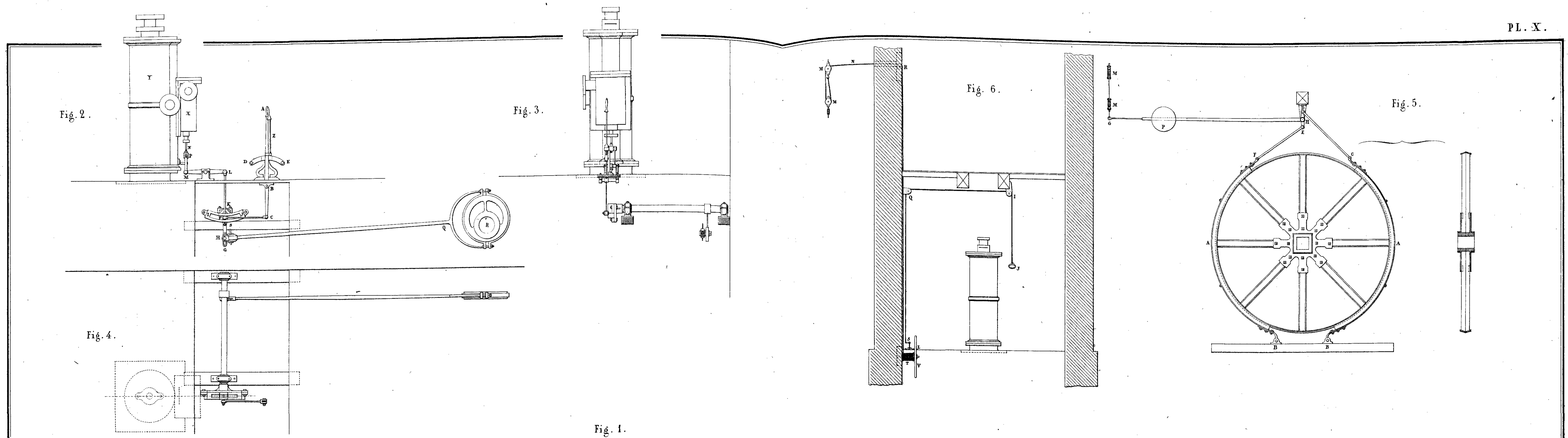






EXTRACTION ET TRIAGE DE LA HOUILLE  
aux Mines du GRAND-HORNU (Belgique)

PL. X.



Echelle de la Fig. 1.

Echelle des Fig. 2, 3 et 4.

Echelle des Fig. 5 et 6.

Distance jusqu'à la façade extérieure du bâtiment 22<sup>m</sup> 30.







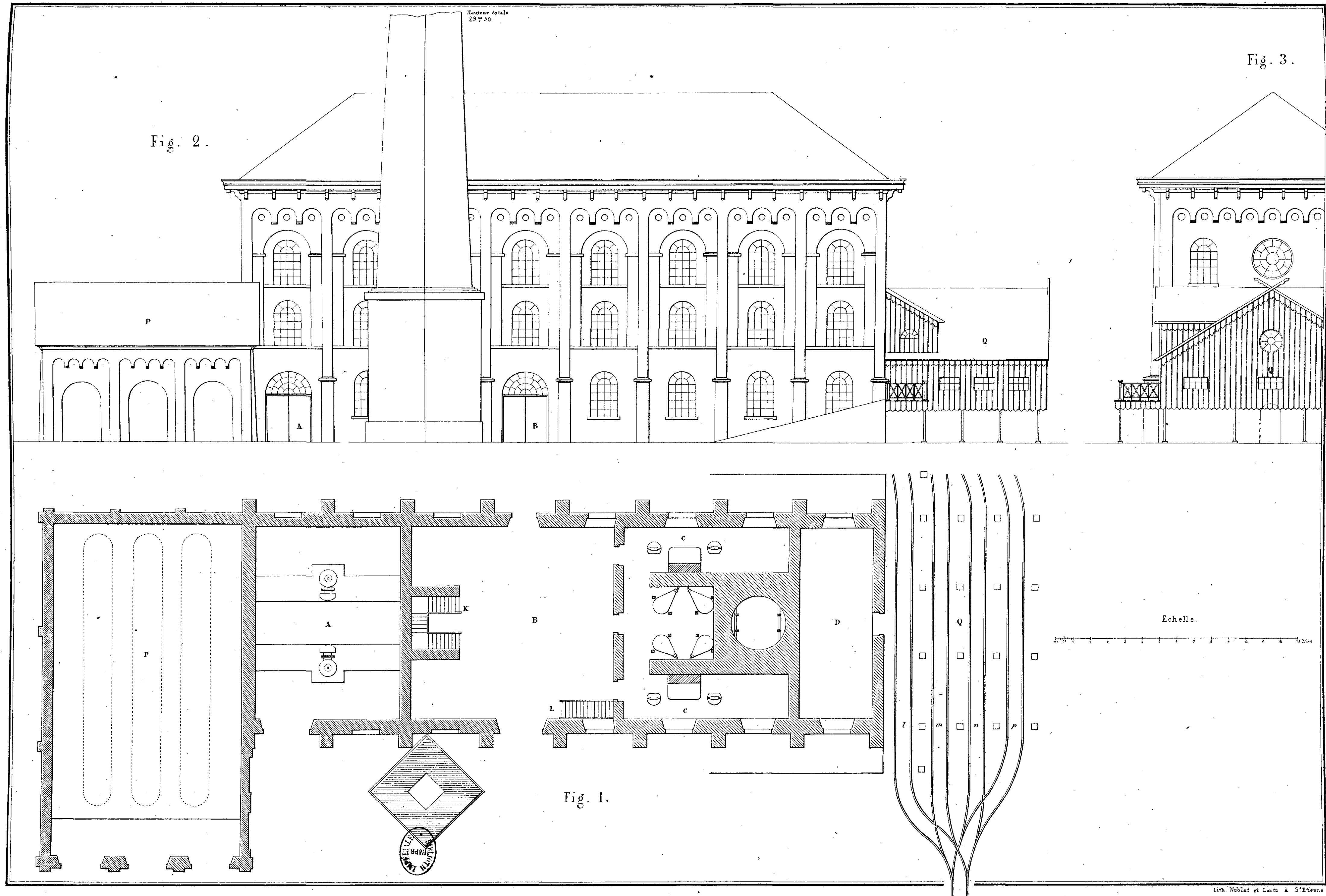












Fig. 9.

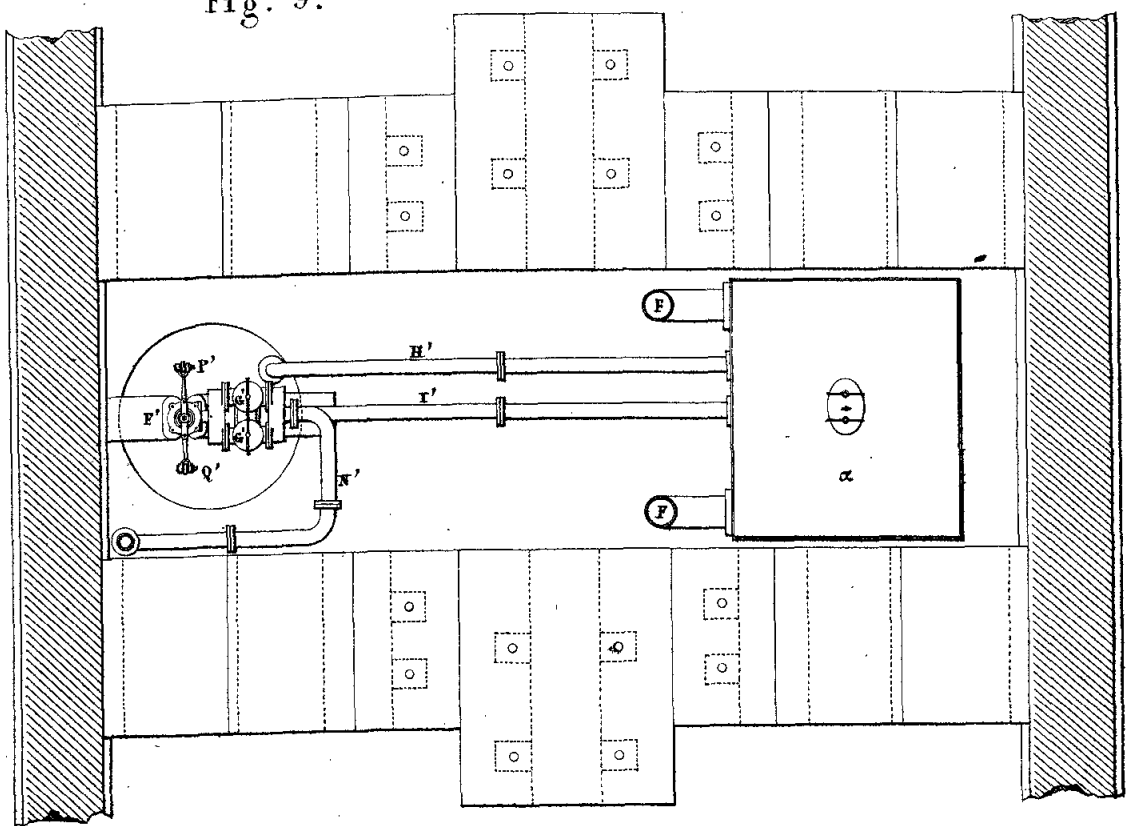


Fig. 8.

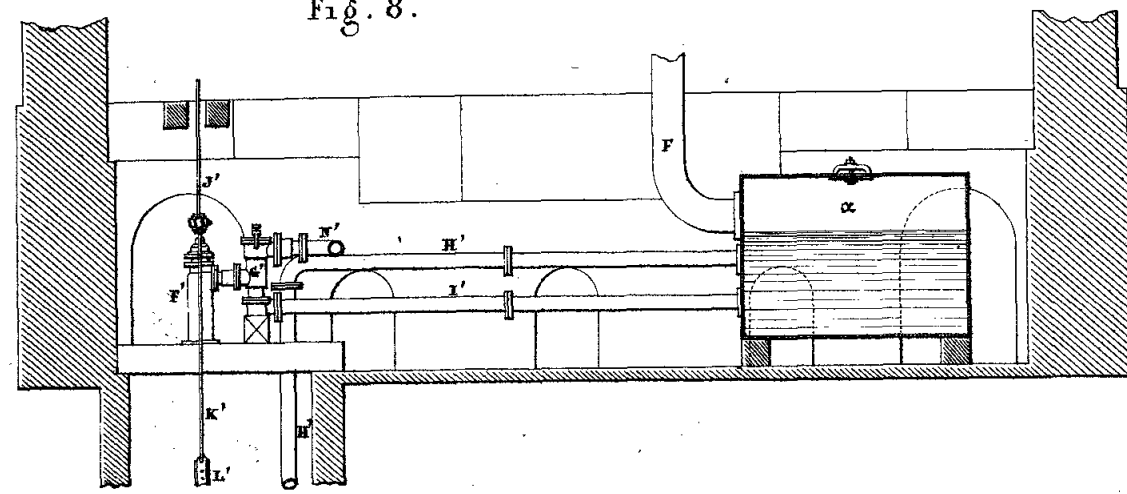


Fig. 4.

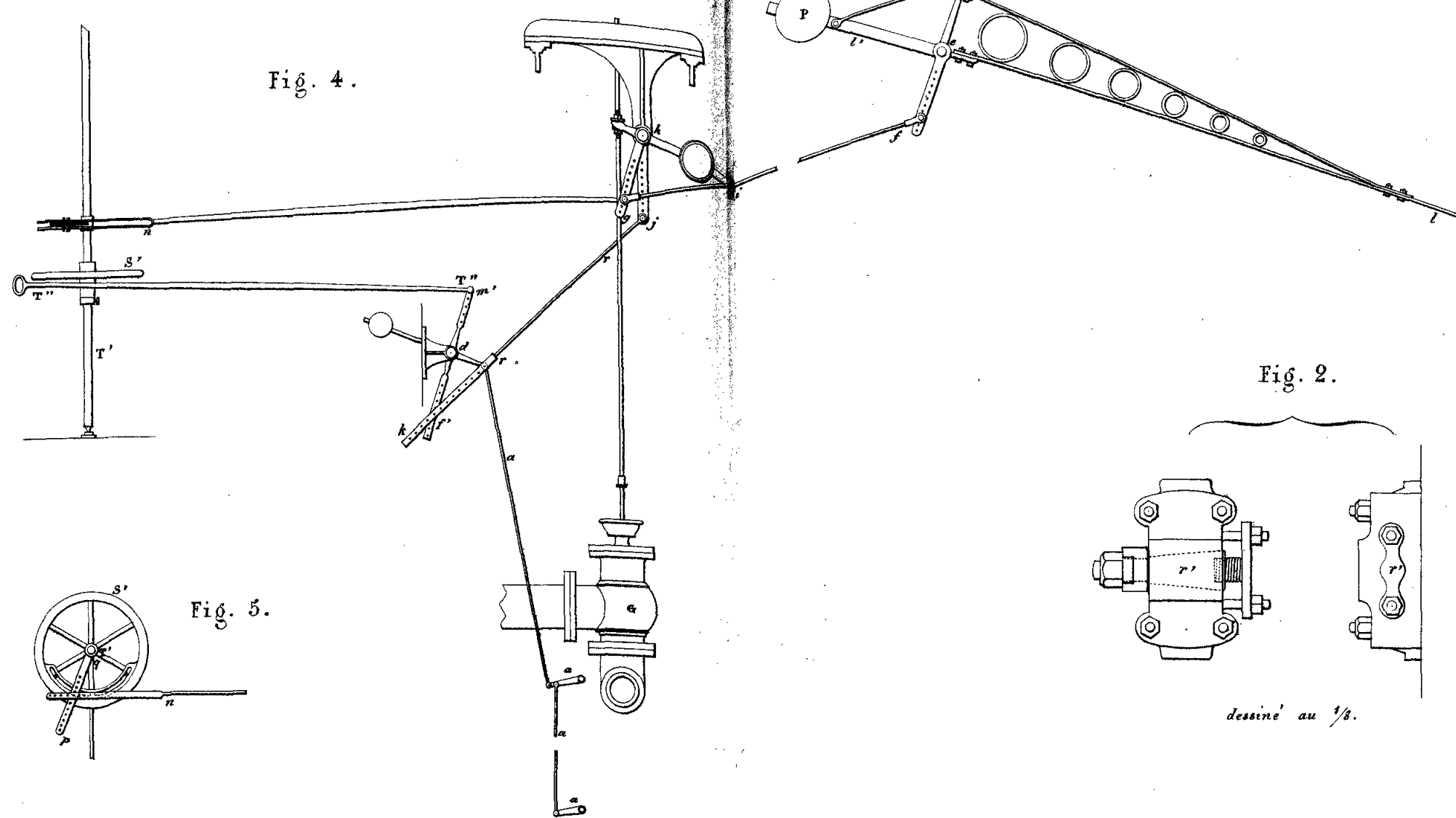


Fig. 5.

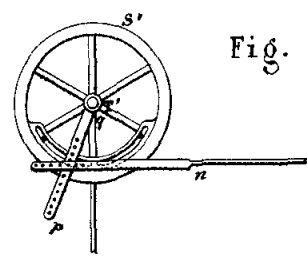


Fig. 2.

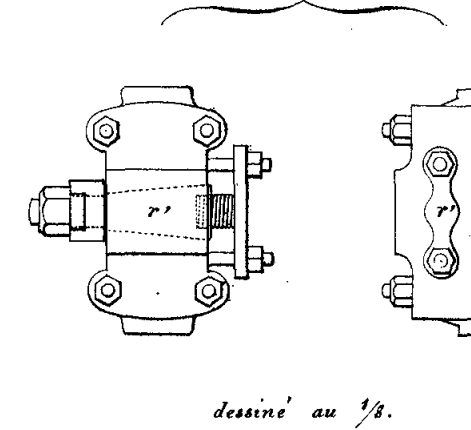


Fig. 7.

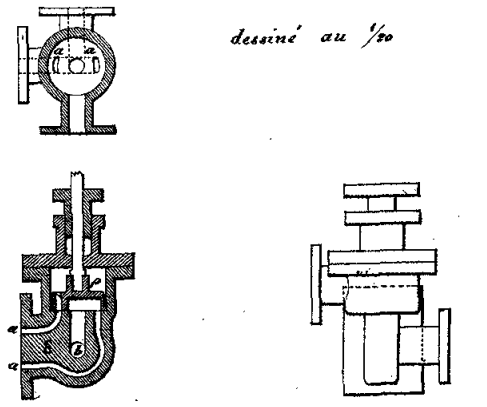


Fig. 6.



Fig. 3.

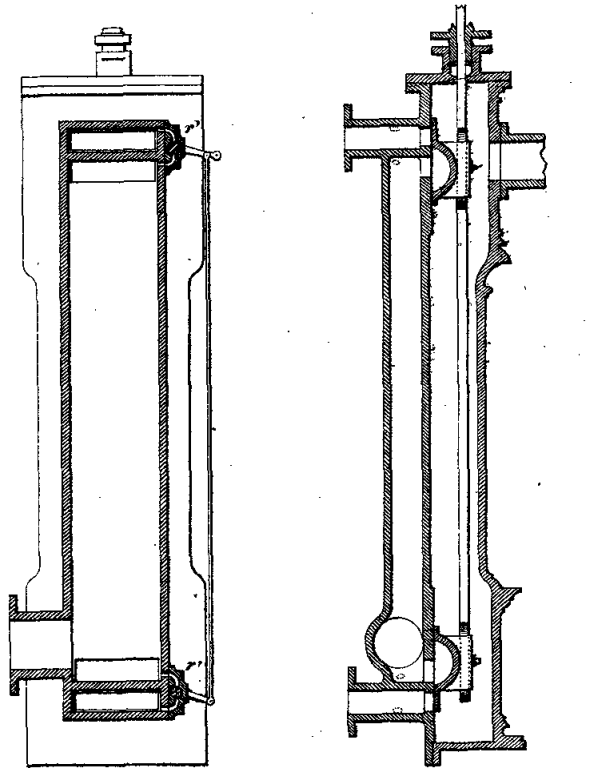
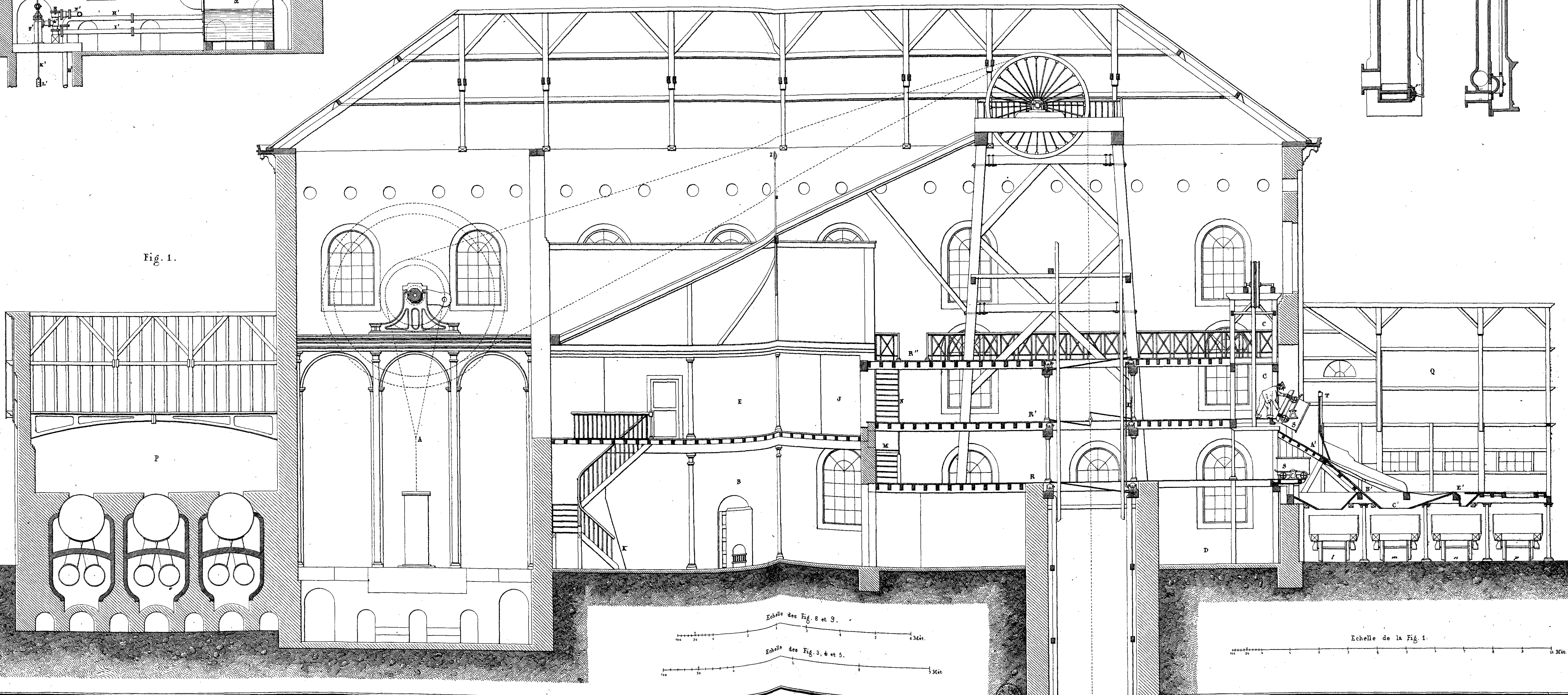


Fig. 1.



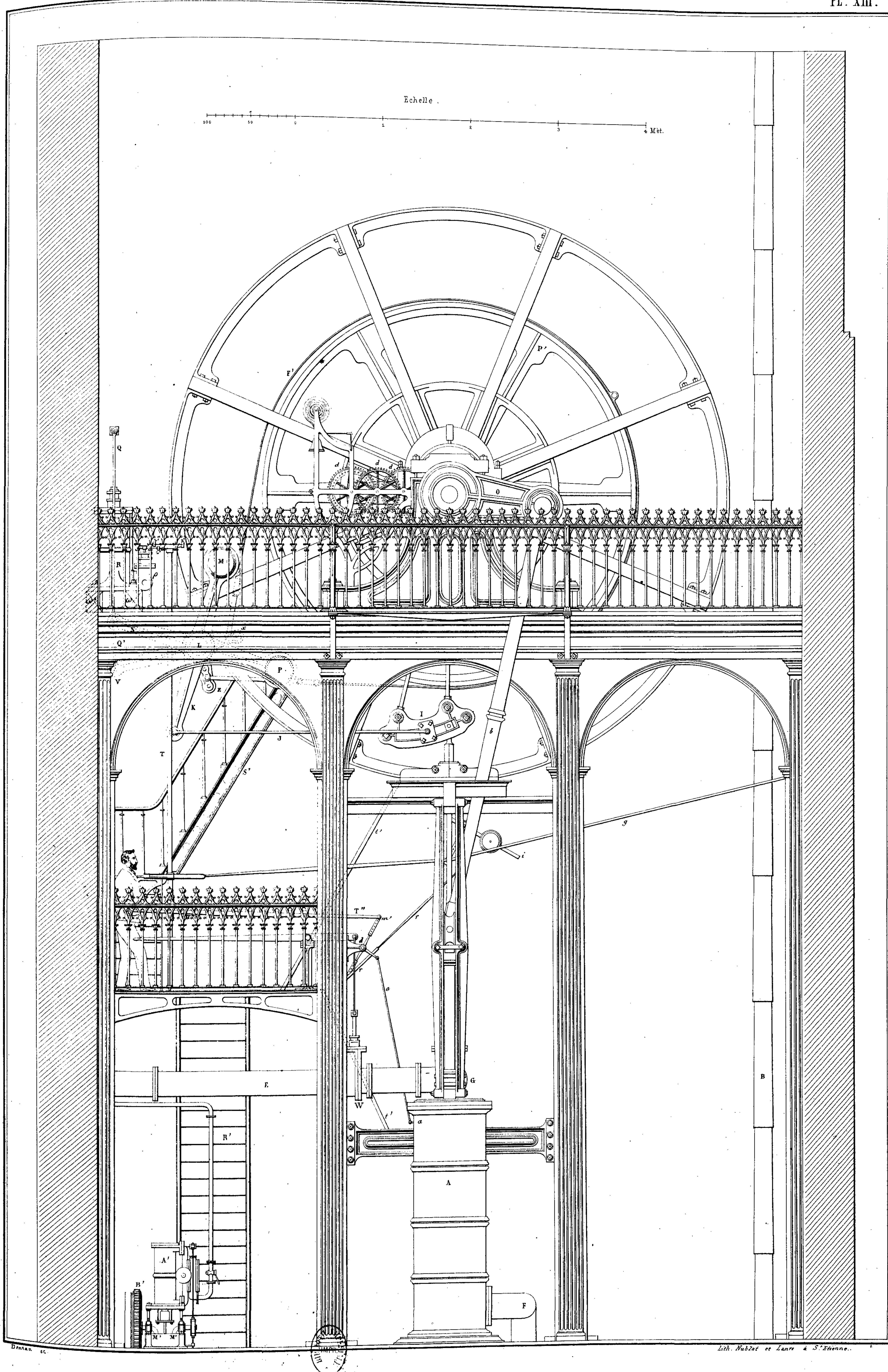






EXTRACTION ET TRIAGE DE LA HOUILLE  
aux Mines du GRAND-HORNU (Belgique)

PL. XIII.





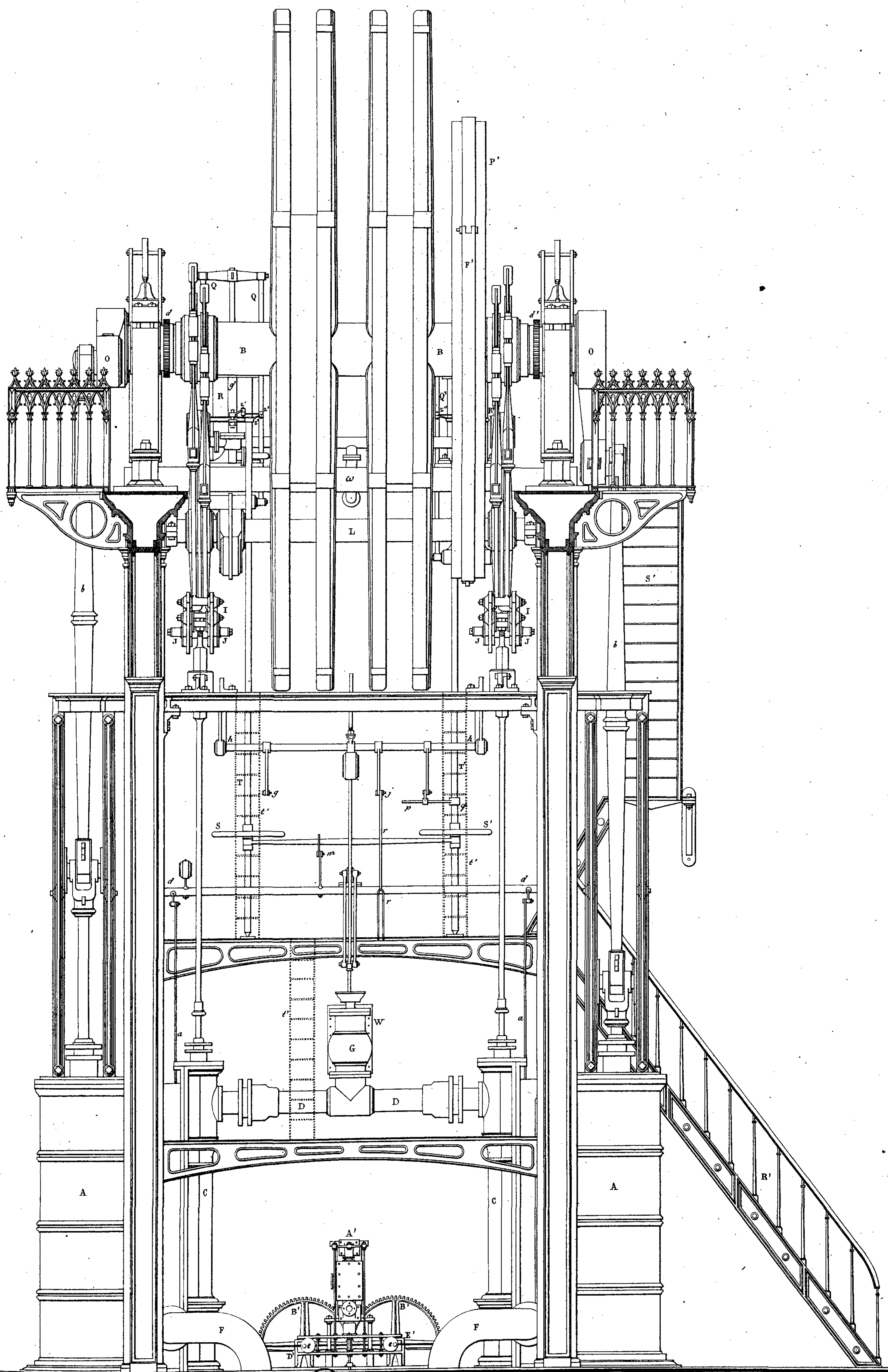
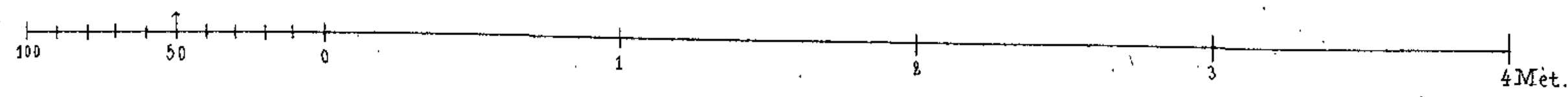




EXTRACTION ET TRIAGE DE LA HOUILLE  
aux Mines du GRAND-HORNU (Belgique)

PL. XIV.

Echelle



*Dentax* sc.

*Lith. Nublat et Lantz à S.<sup>t</sup> Etienne.*

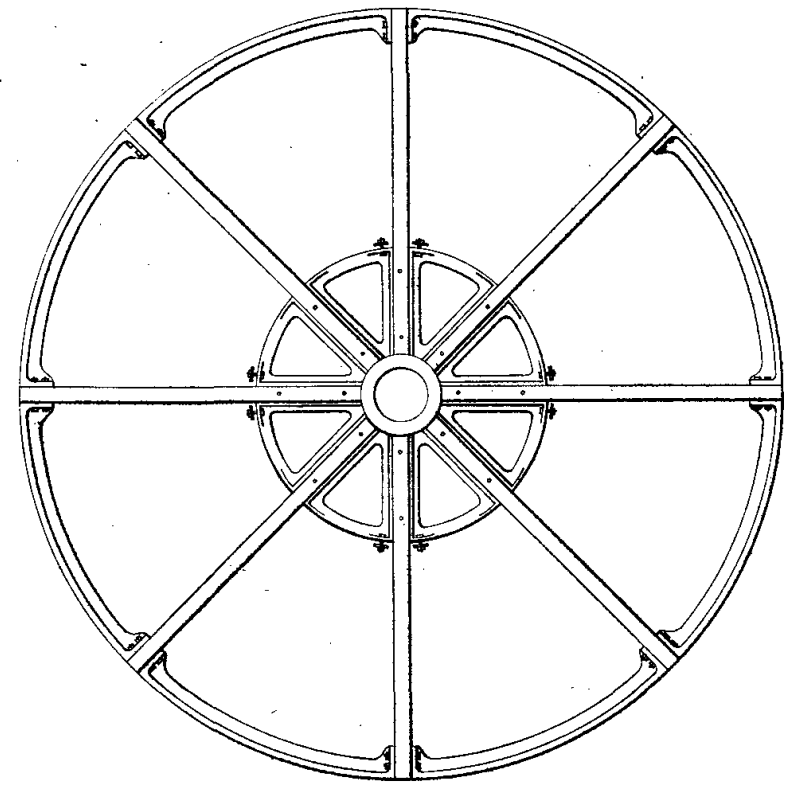












Technical drawing of a long, narrow mechanical component, likely a beam or support structure. It features two main vertical sections connected by a central horizontal section. The top and bottom sections have internal structural details, including what appear to be mounting points or fasteners. The central section is narrower and has a different internal profile. The drawing is a black and white line drawing with hatching for shading.

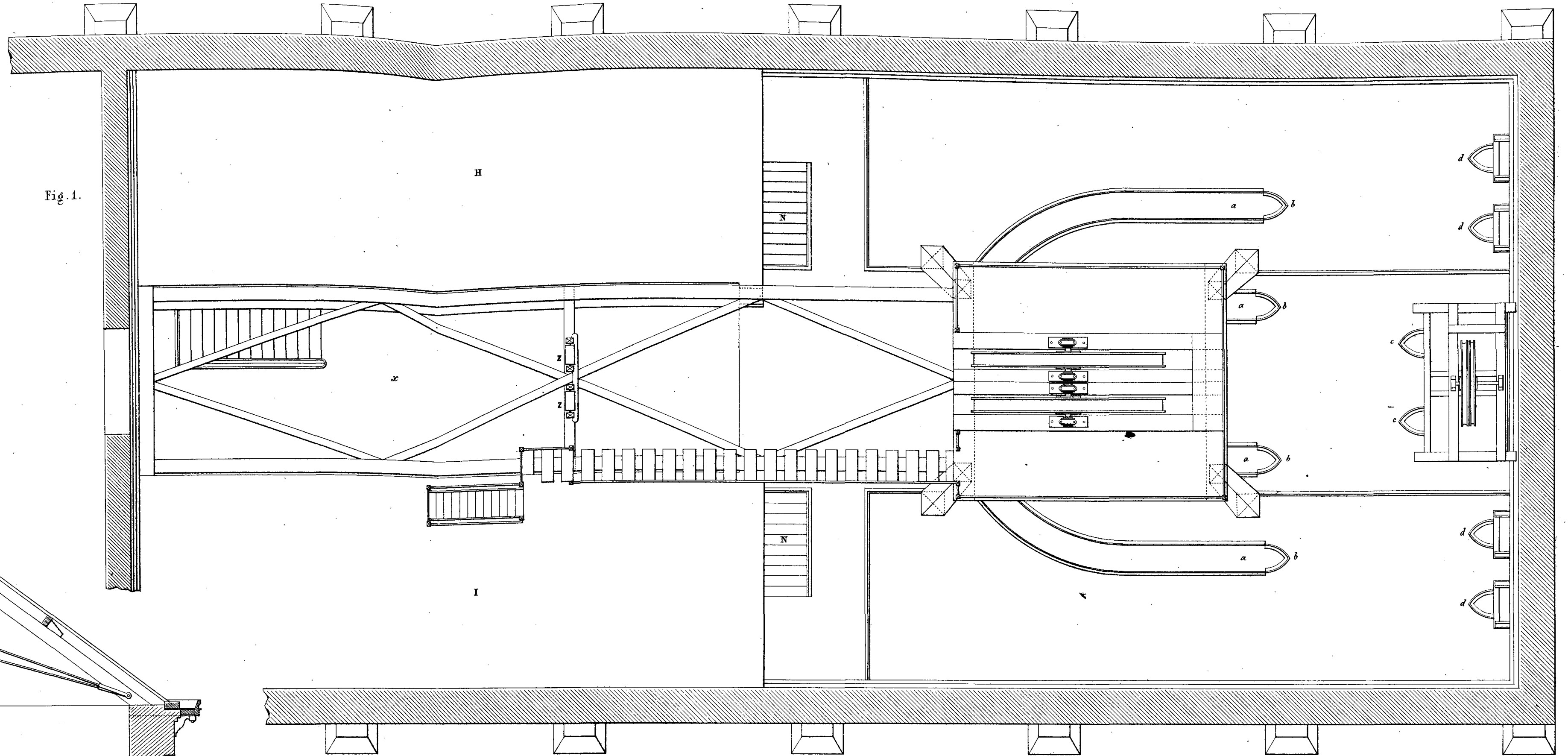


Fig. 8. A perspective view of the lifting device from Fig. 7, showing the chain and the frame with rollers. The chain is attached to a hook at the top, and the frame is shown with rollers at the bottom. The frame is labeled with 'R' at the top and 'C' at the bottom. The rollers are labeled 'A' and 'B'.

Fig. 4.

Coupe longitudinale.

This diagram shows a longitudinal section of a steam engine. A horizontal cylinder (cylindre) is shown in cross-section, with a piston rod extending from its center. The piston rod is connected to a crosshead (traverse) which moves vertically within a guide. The crosshead is connected to a connecting rod (manivelle) which is attached to a crank on a vertical shaft. The shaft is supported by a base. Various parts are labeled with letters: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. The diagram is a technical drawing with hatching to indicate different materials and a dashed line to show the path of the piston rod.

Fig. 6.

Coupe transversale suivant CD

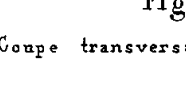


Fig. 3.  
Coupe horizontale suivant g H.

Echelle des Fig. 3, 4, 5 et 6.

Echelle des Fig. 7, 8 et 9.

110 30 0 1 2 Mèt.







EXTRACTION ET TRIAGE DE LA HOUILLE  
aux Mines du GRAND-HORNU (Belgique)

PL. XVI.

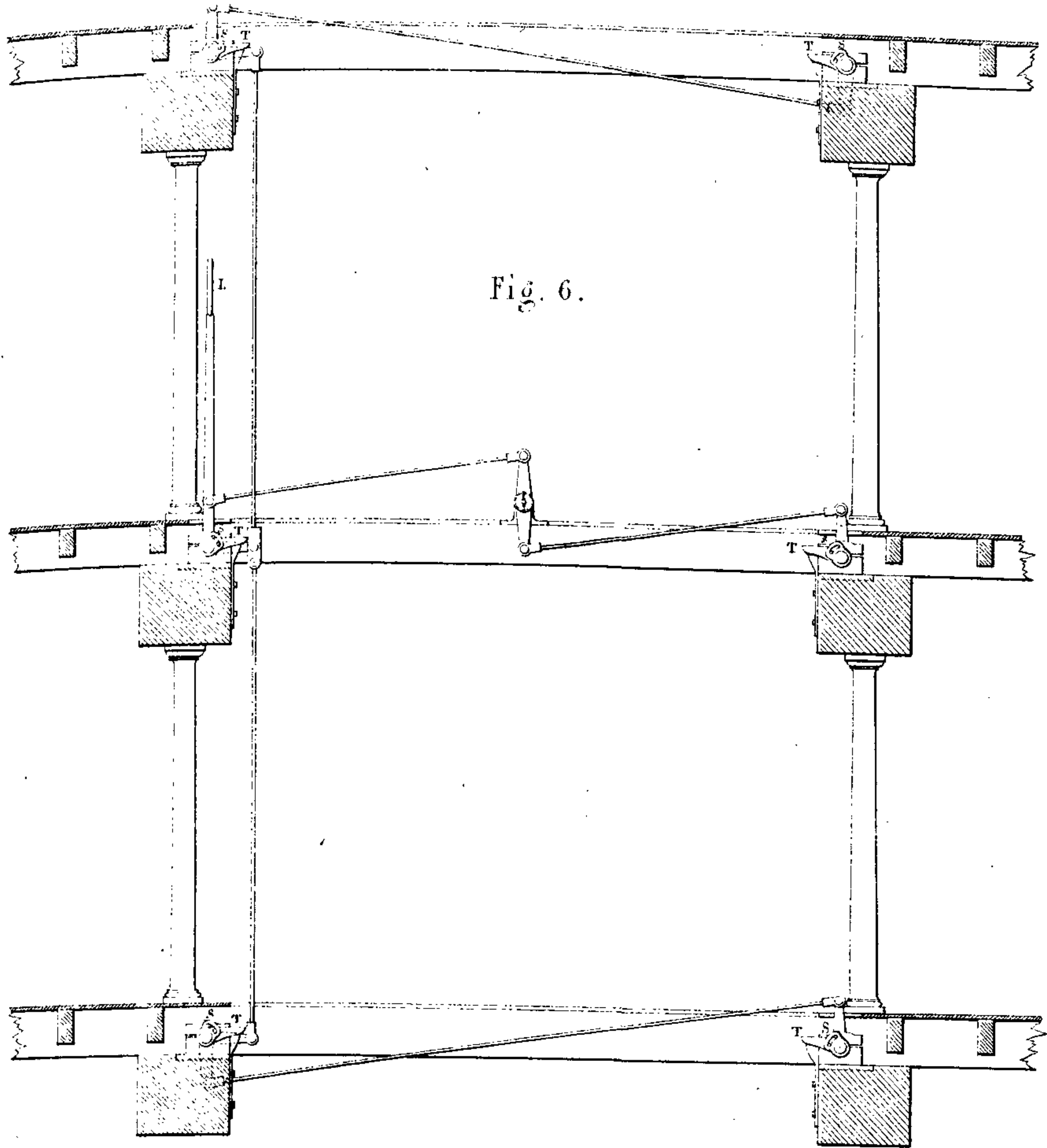


Fig. 6.

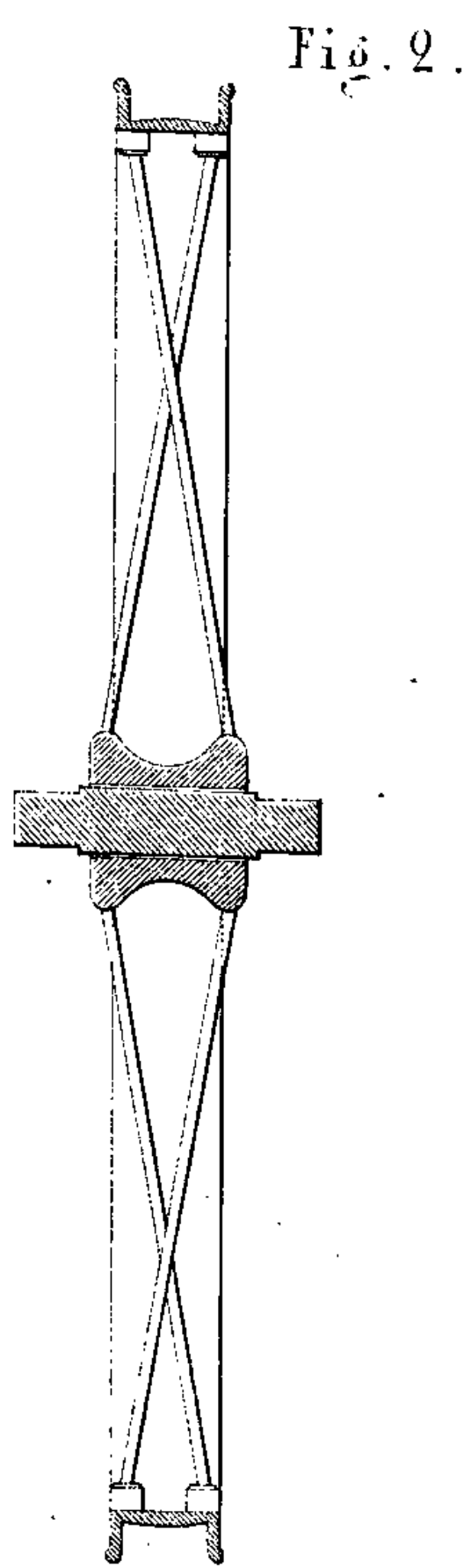


Fig. 2.

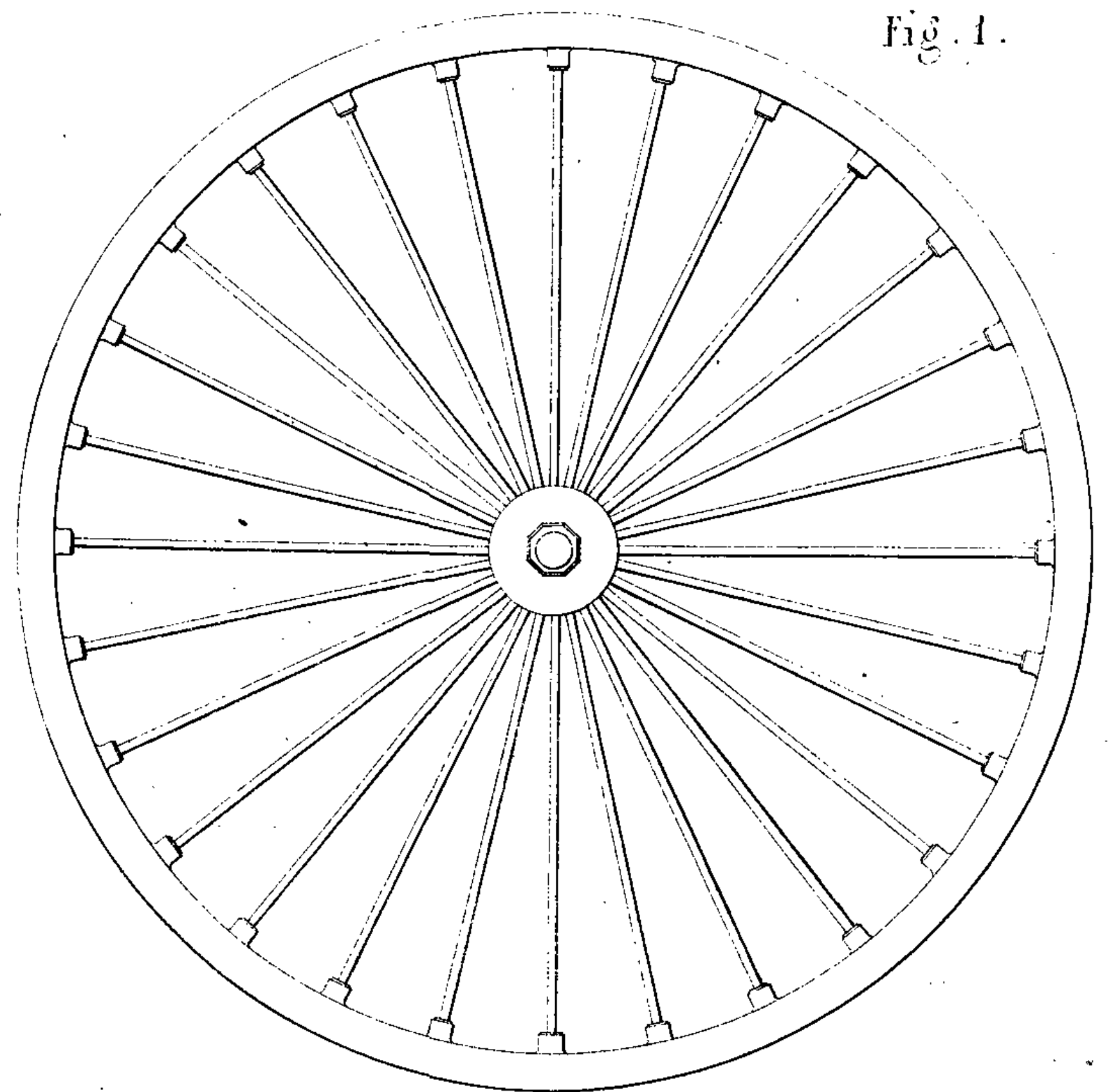


Fig. 1.

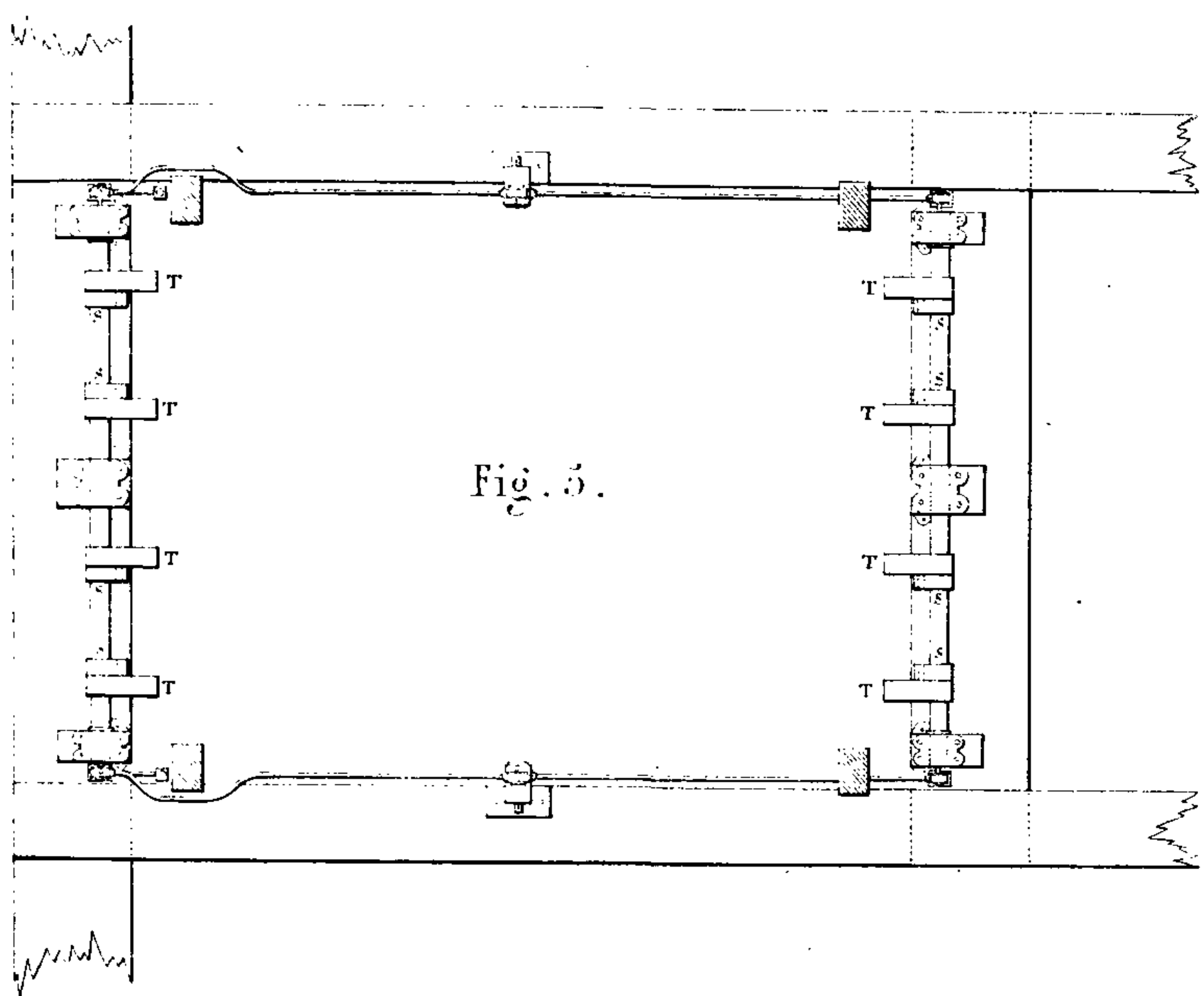


Fig. 5.

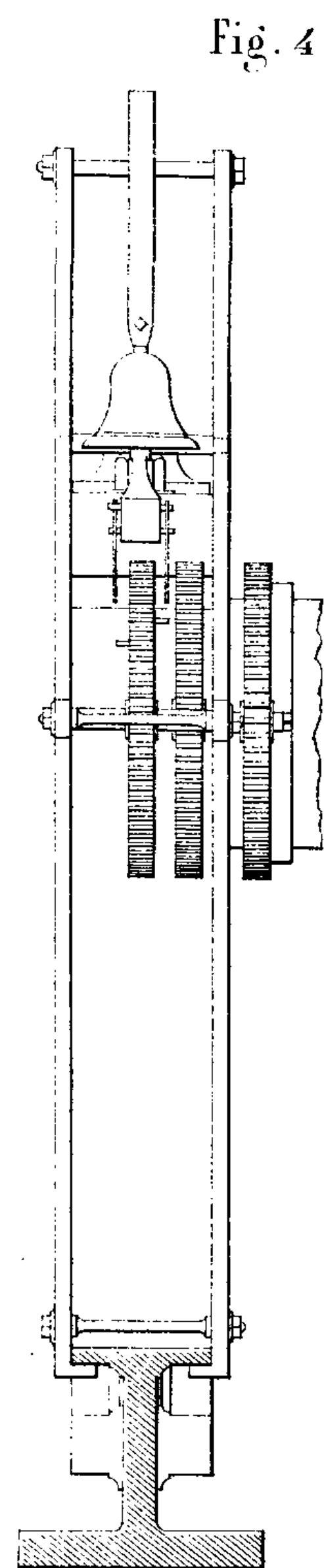


Fig. 4.

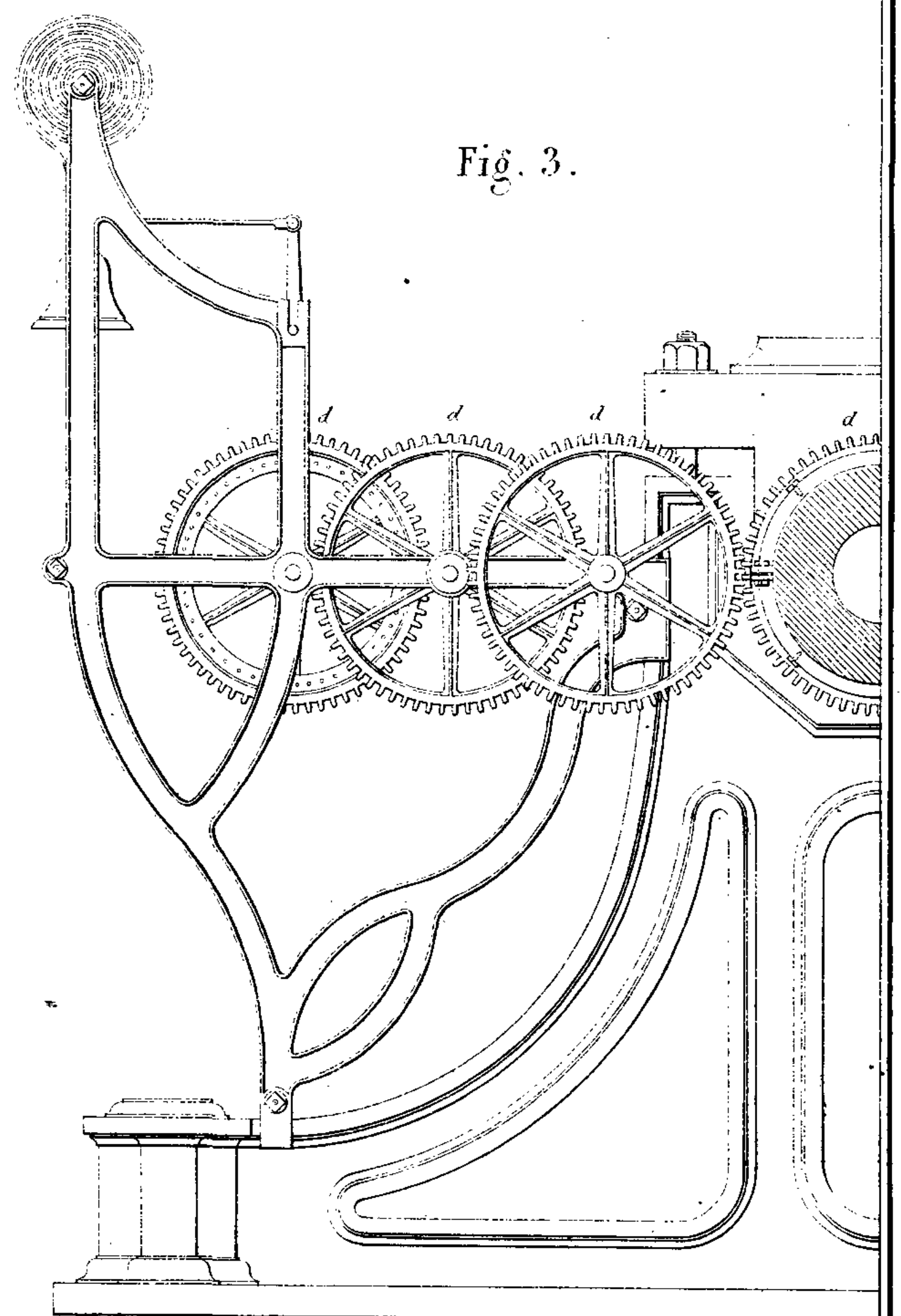


Fig. 3.

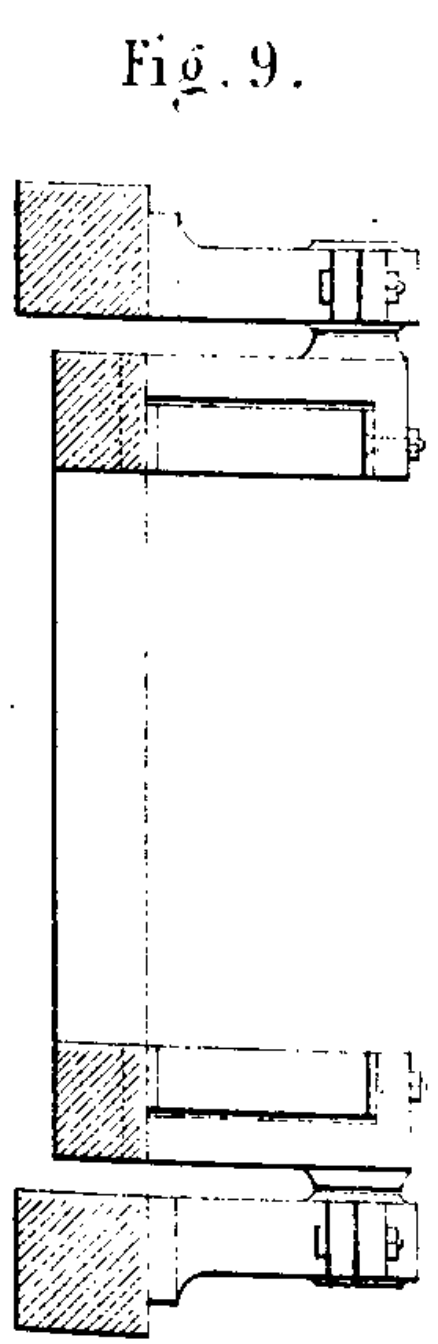


Fig. 9.

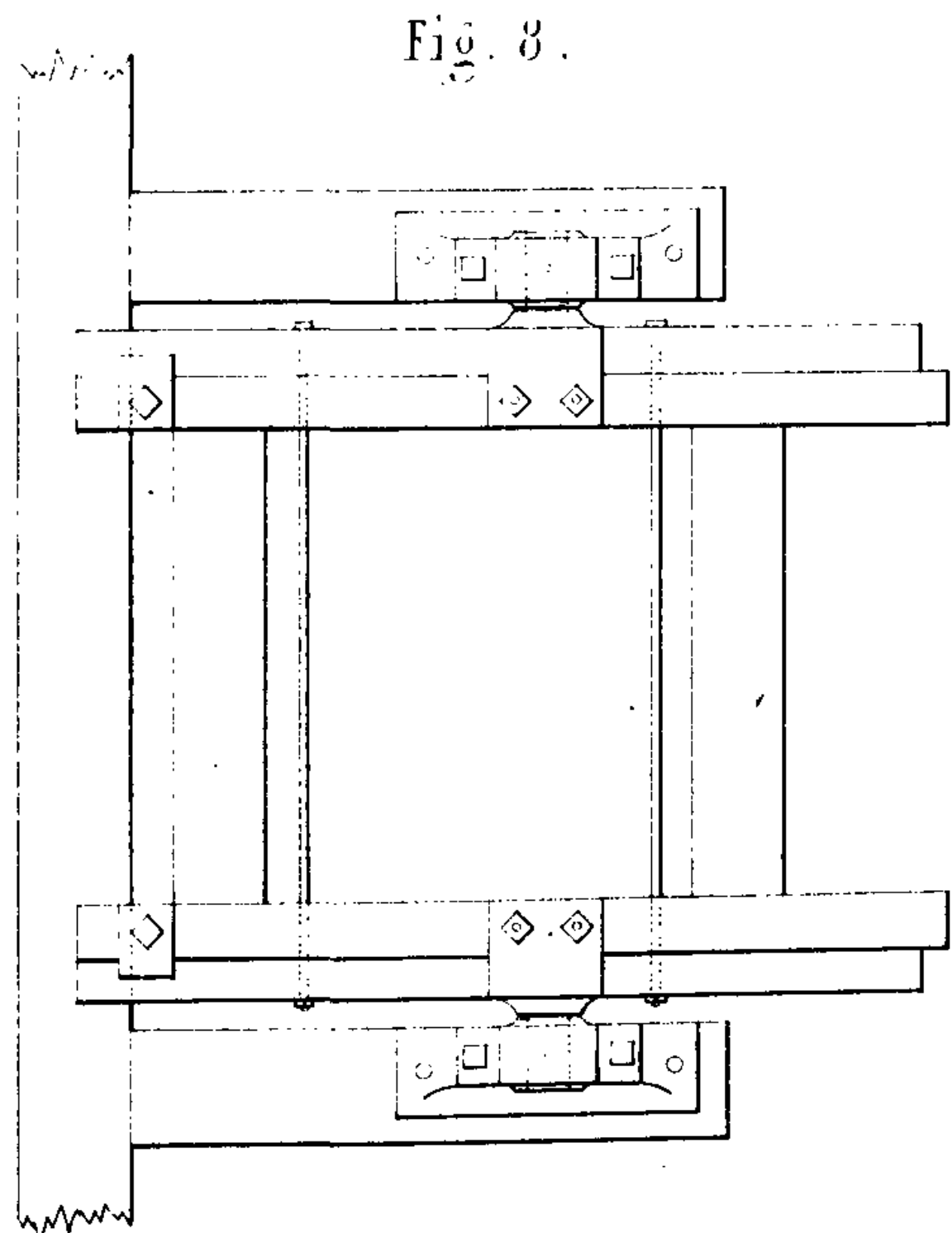


Fig. 8.

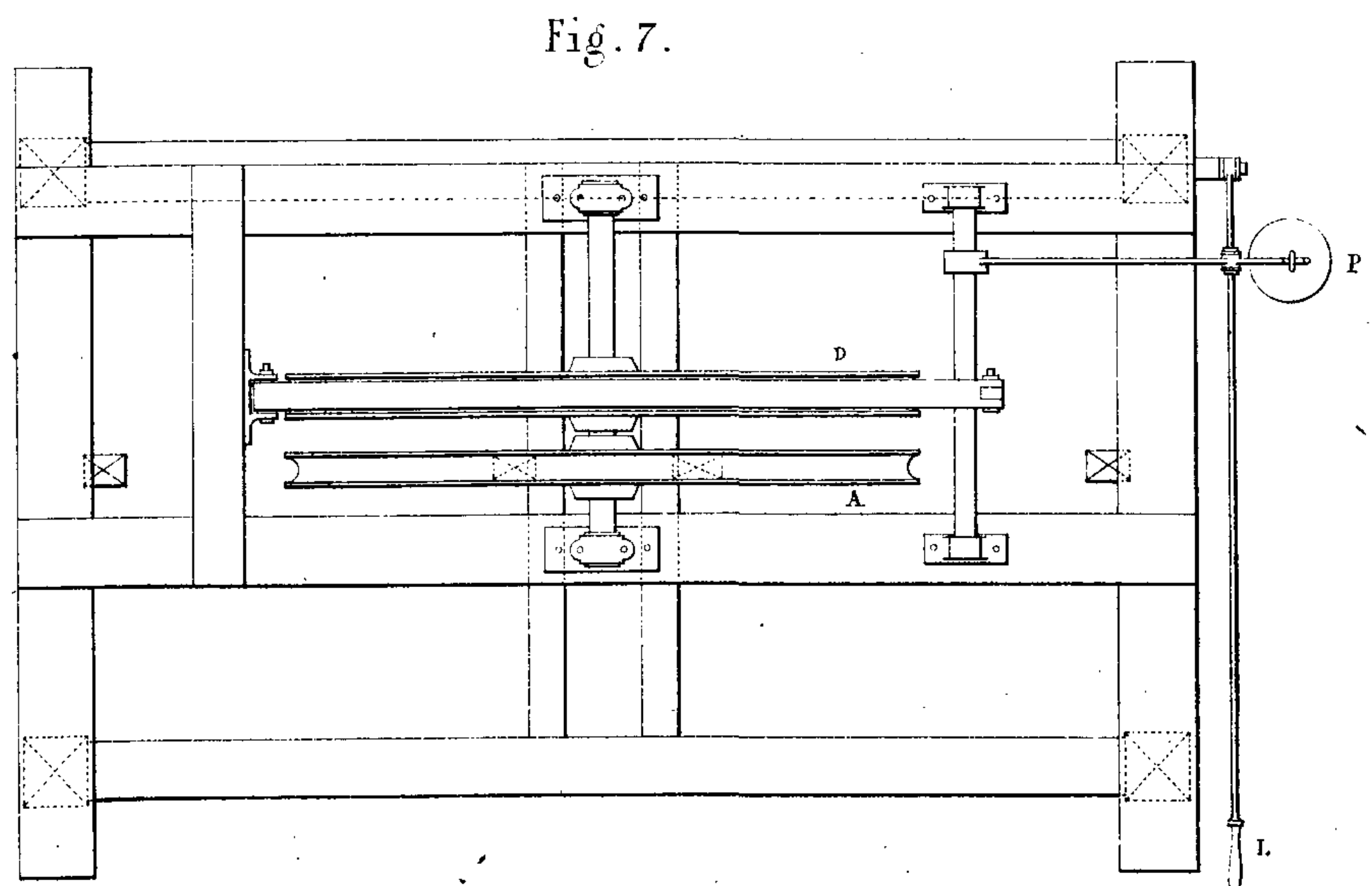


Fig. 7.

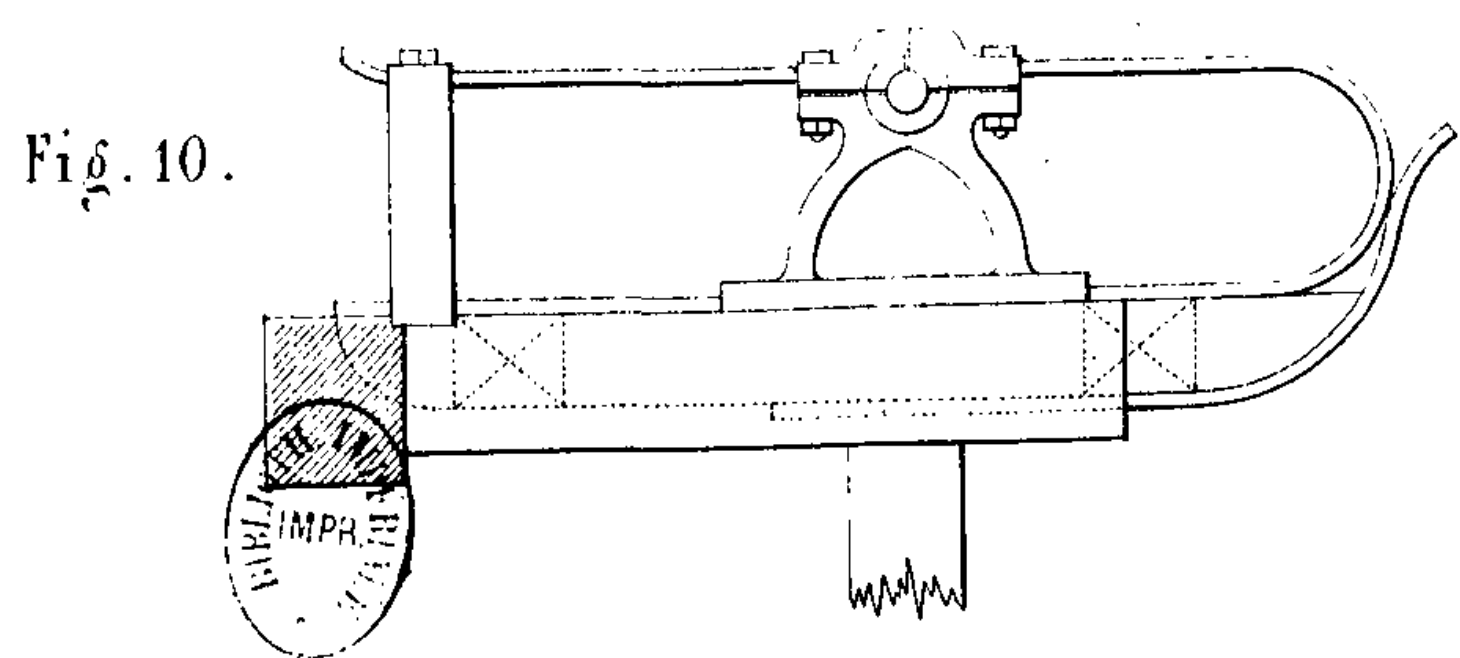


Fig. 10.

Echelle des fig. 1, 2, 5 et 6.

100 50 0 1 2 Mèt.

Echelle des fig. 3, 4, 8, 9 et 10.

100 50 0 1 2 Mèt.

Echelle de la Fig. 7.

100 50 0 1 2 Mèt.







Fig. 4.

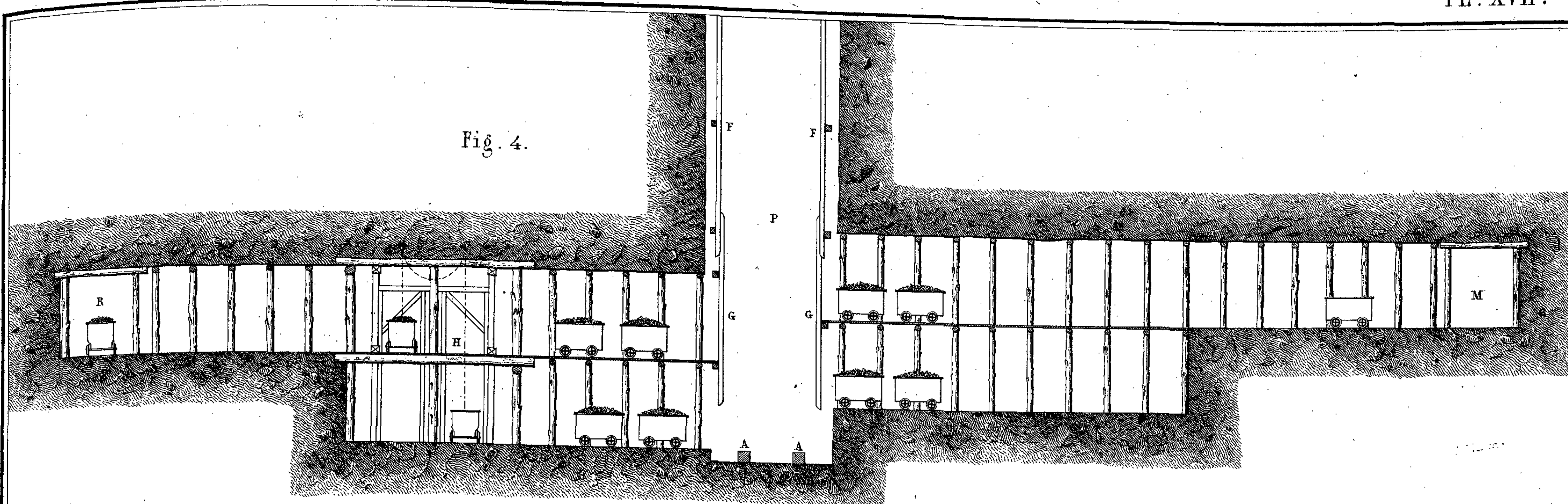


Fig. 3.

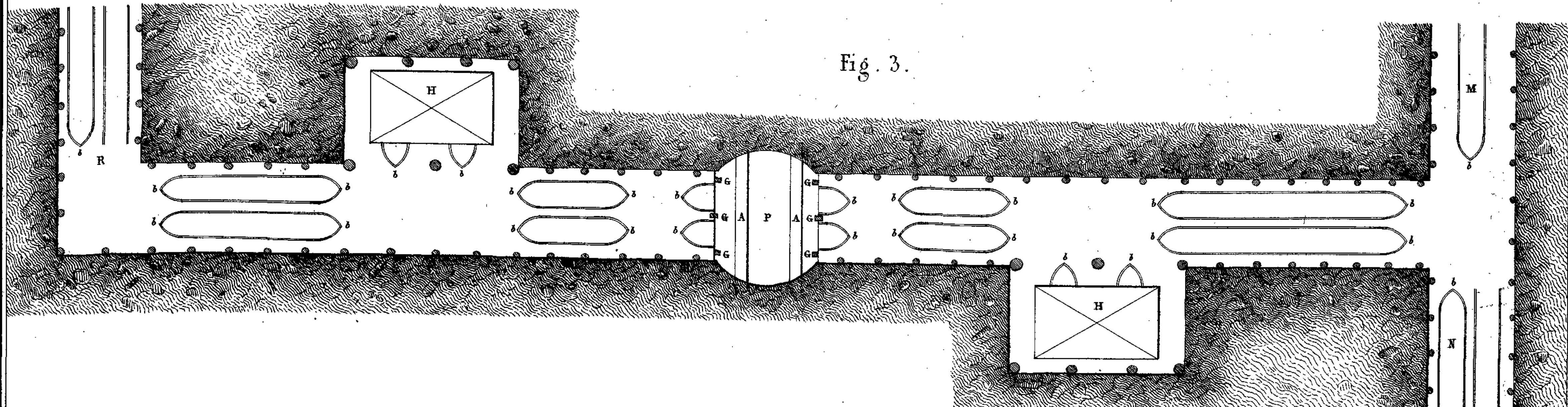


Fig. 1.

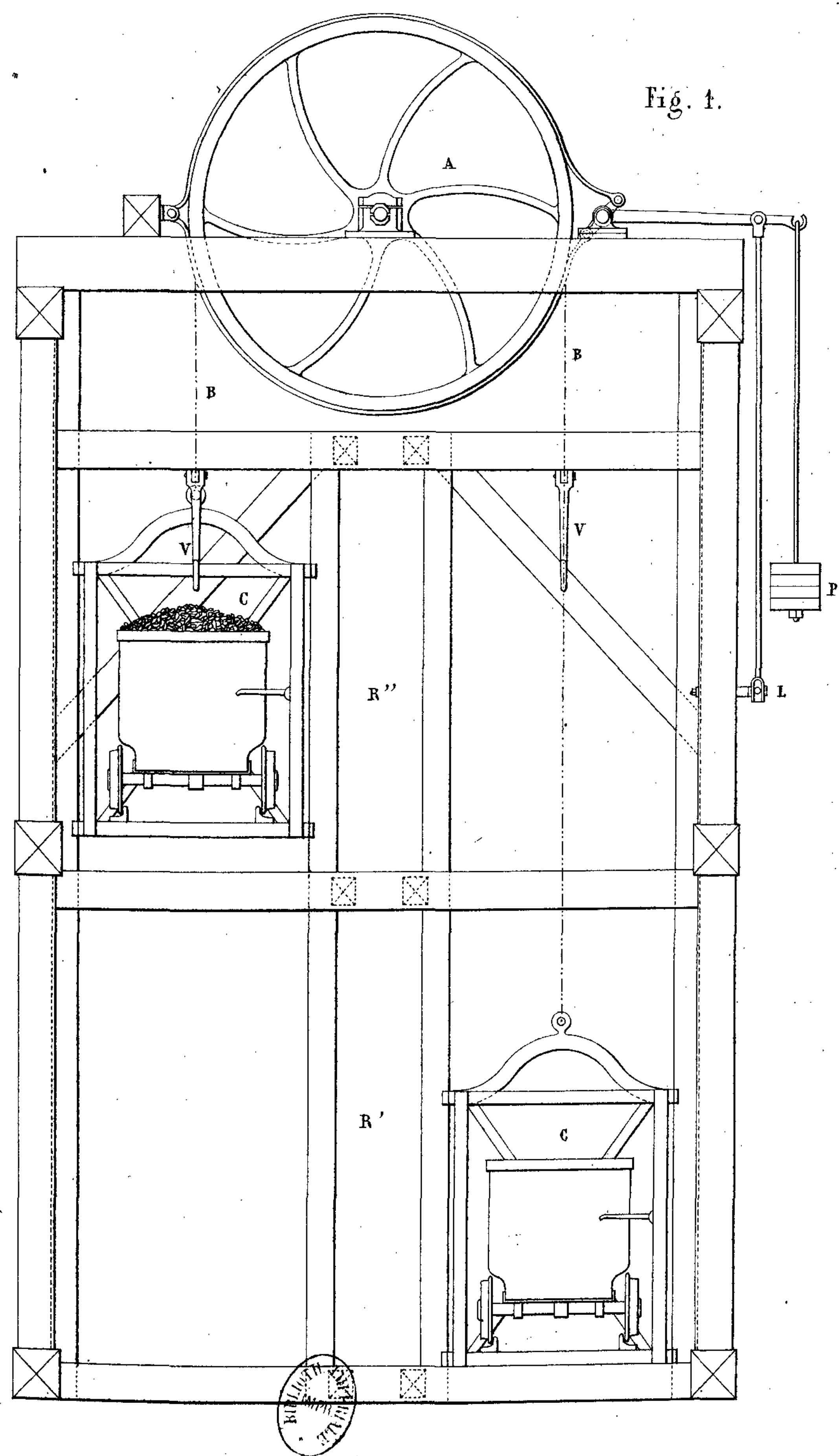
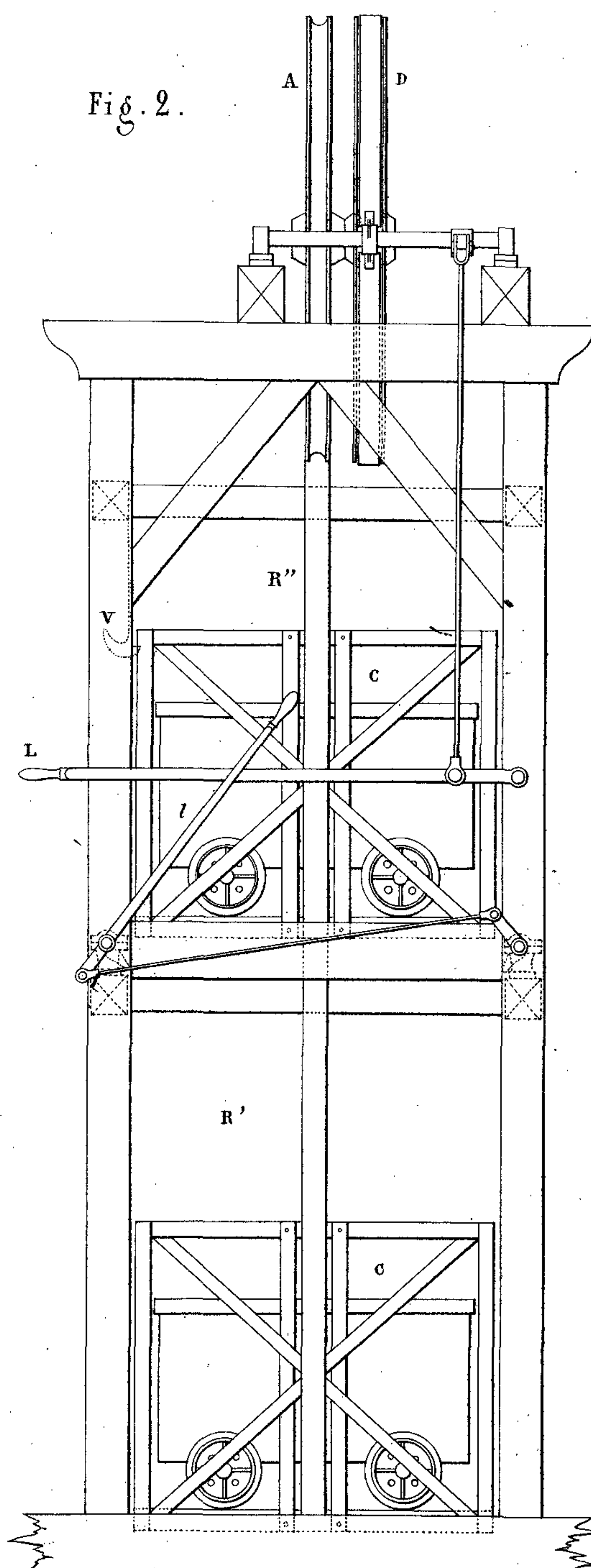


Fig. 2.



Echelle des Fig. 1 et 2.

100 50 0 1 Mèt.

Echelle des Fig. 3 et 4.

100 50 0 1 Mèt.







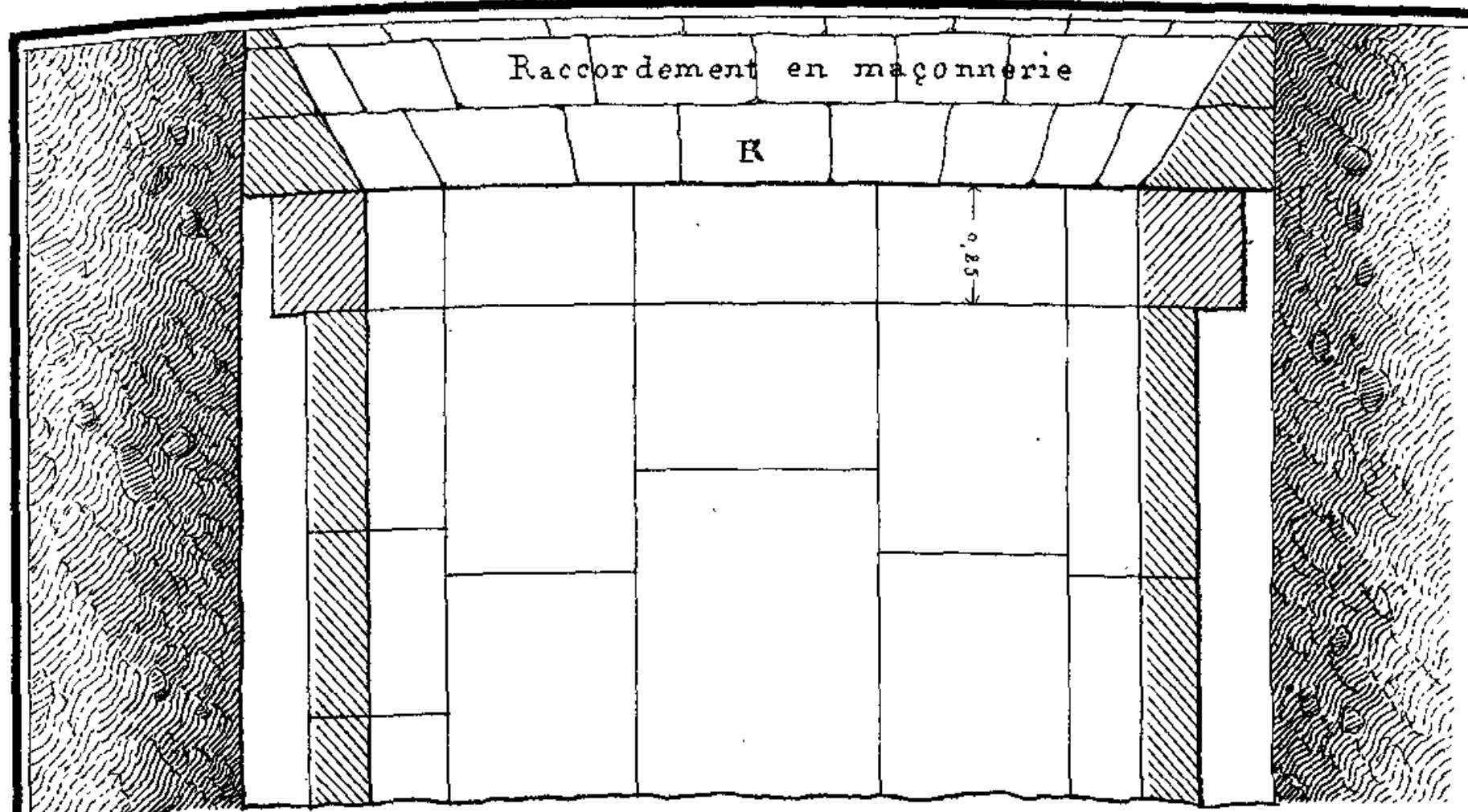


Fig. 10.  
Coupe verticale.

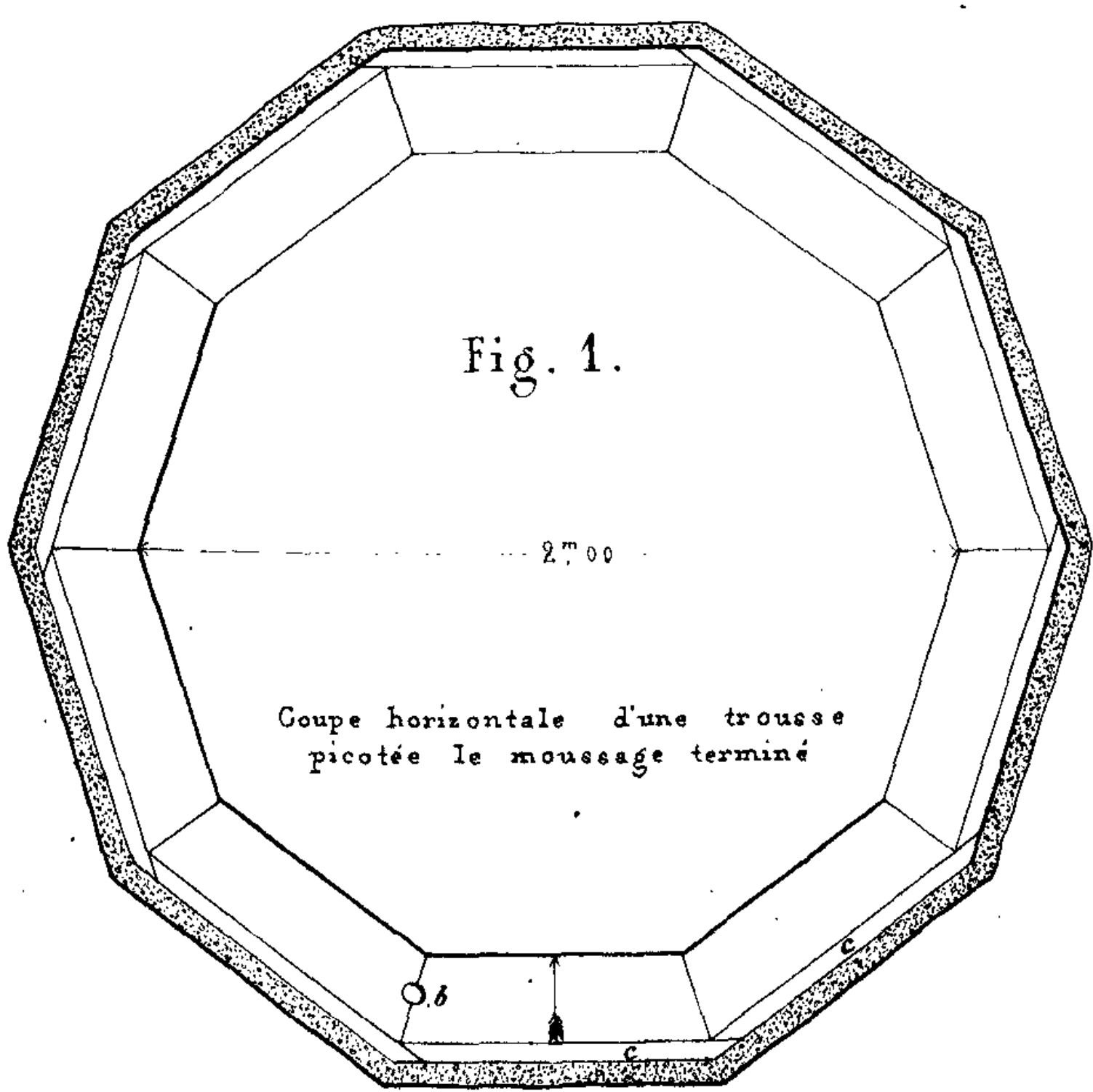
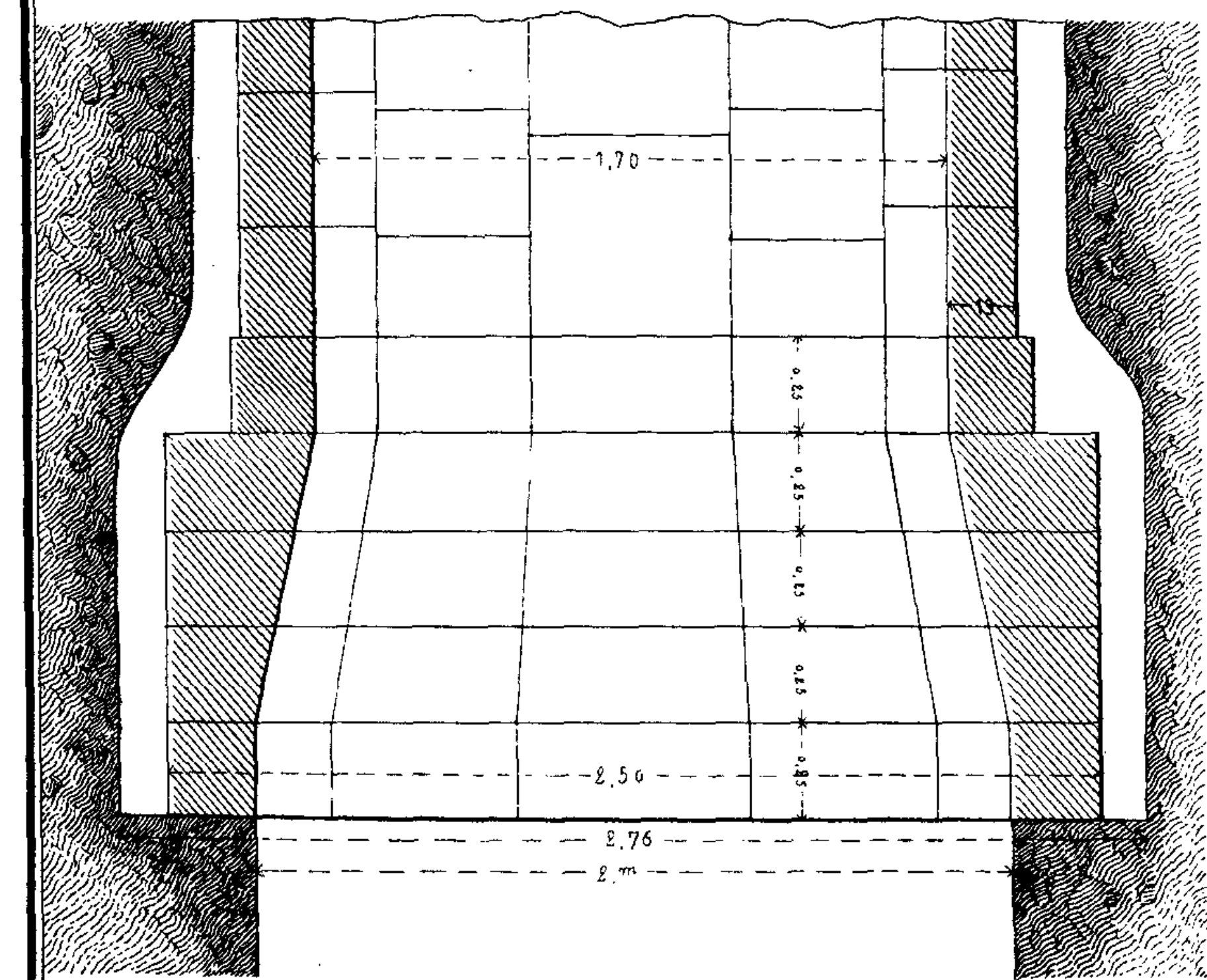
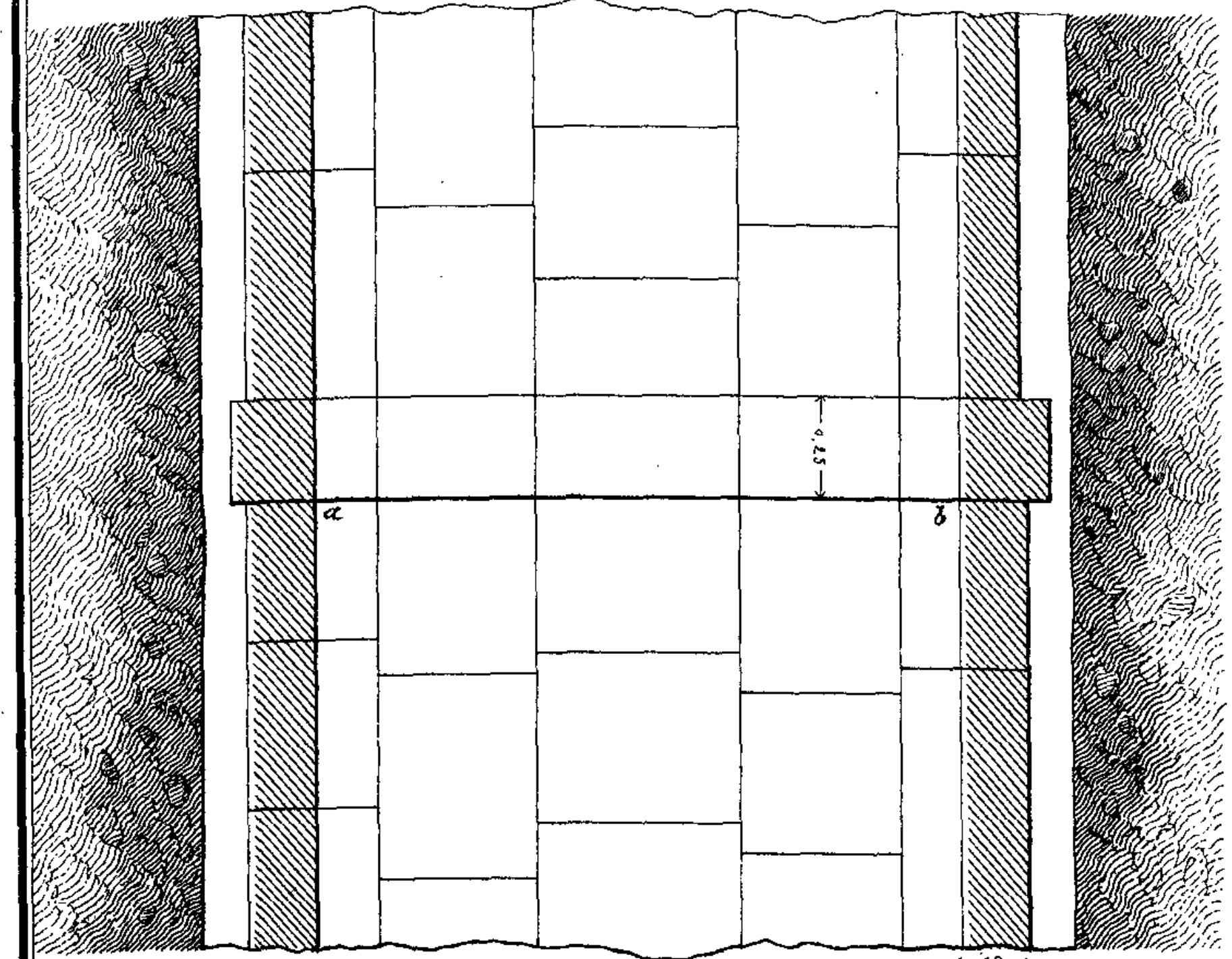


Fig. 1.

Coupe horizontale d'une trousse picotée le moutage terminé

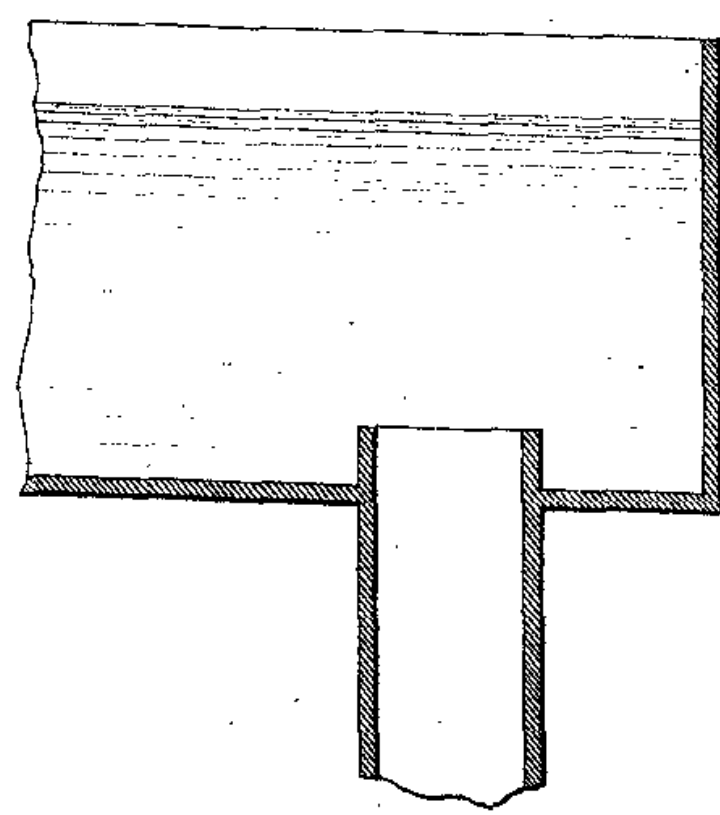
2.00

Echelle des fig. 1, 2, 3 et 10.

0 1 2 3 4 5 6 7 8 9 10 Mèt.

Echelle des fig. 4, 5, 6, 7 et 8.

0 1 2 3 4 5 6 7 8 9 10 Mèt.



Bélier hydraulique  
à clapet double et  
matelas d'eau.  
Coupe verticale.

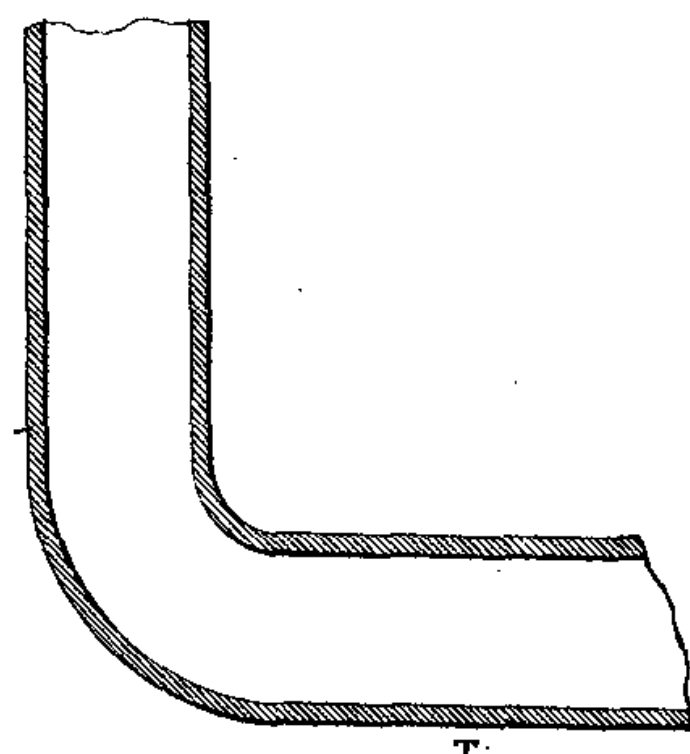


Fig. 14.

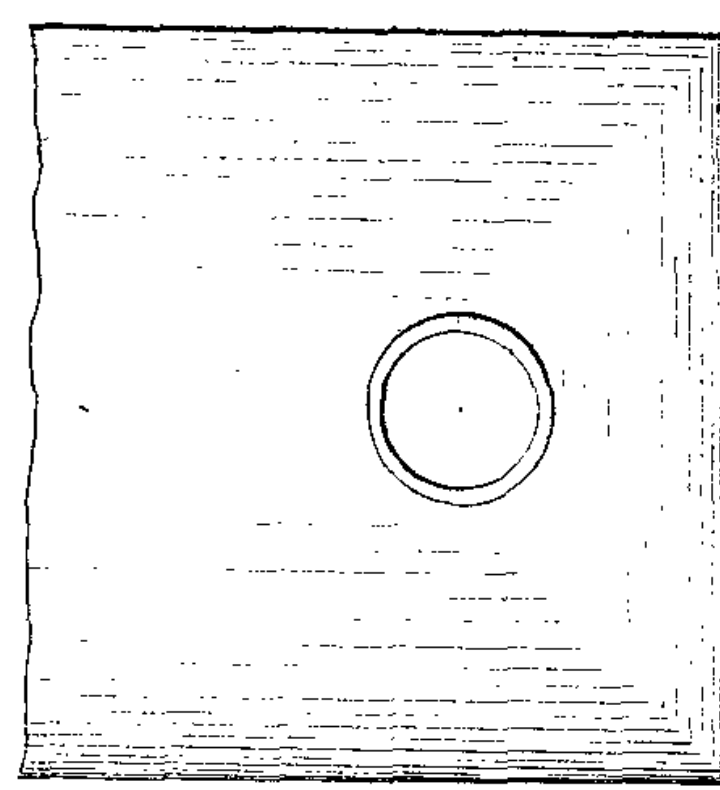


Fig. 5.  
Coupe verticale avant le recépage  
des plats-corns.

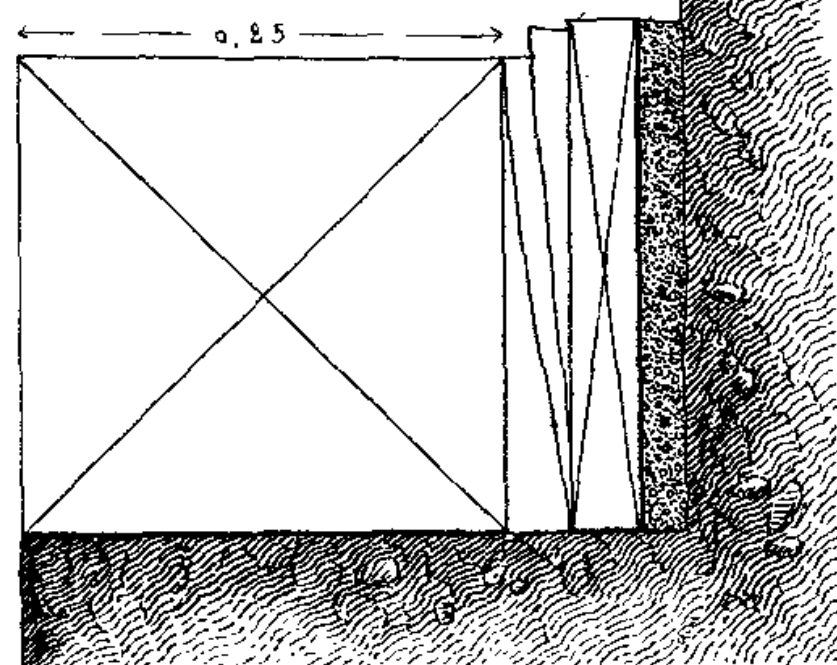


Fig. 6.  
Coupe d'une trousse picotée  
au moment du recépage de  
la lambourde.

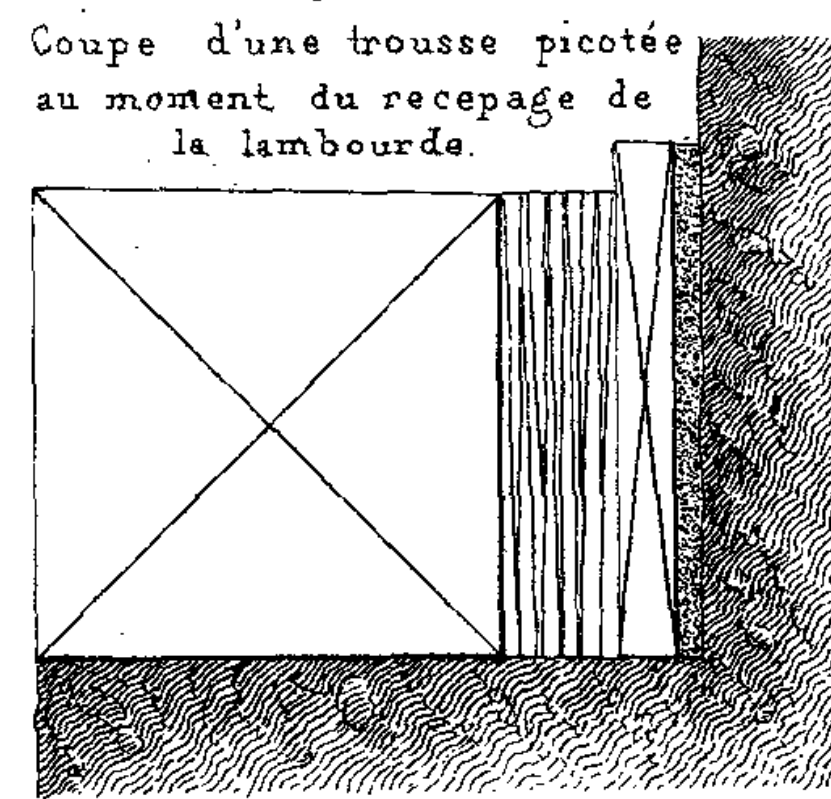


Fig. 9.

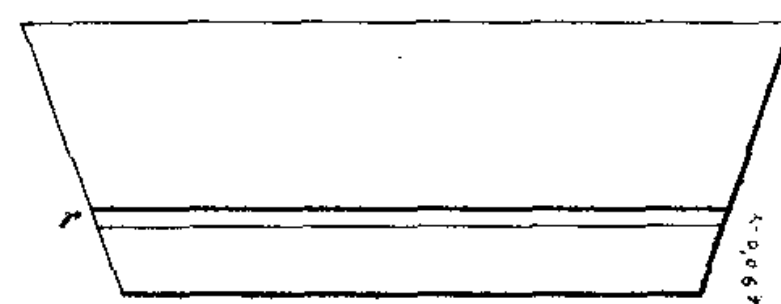
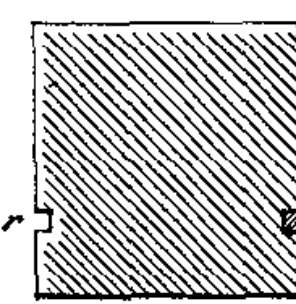


Fig. 8.

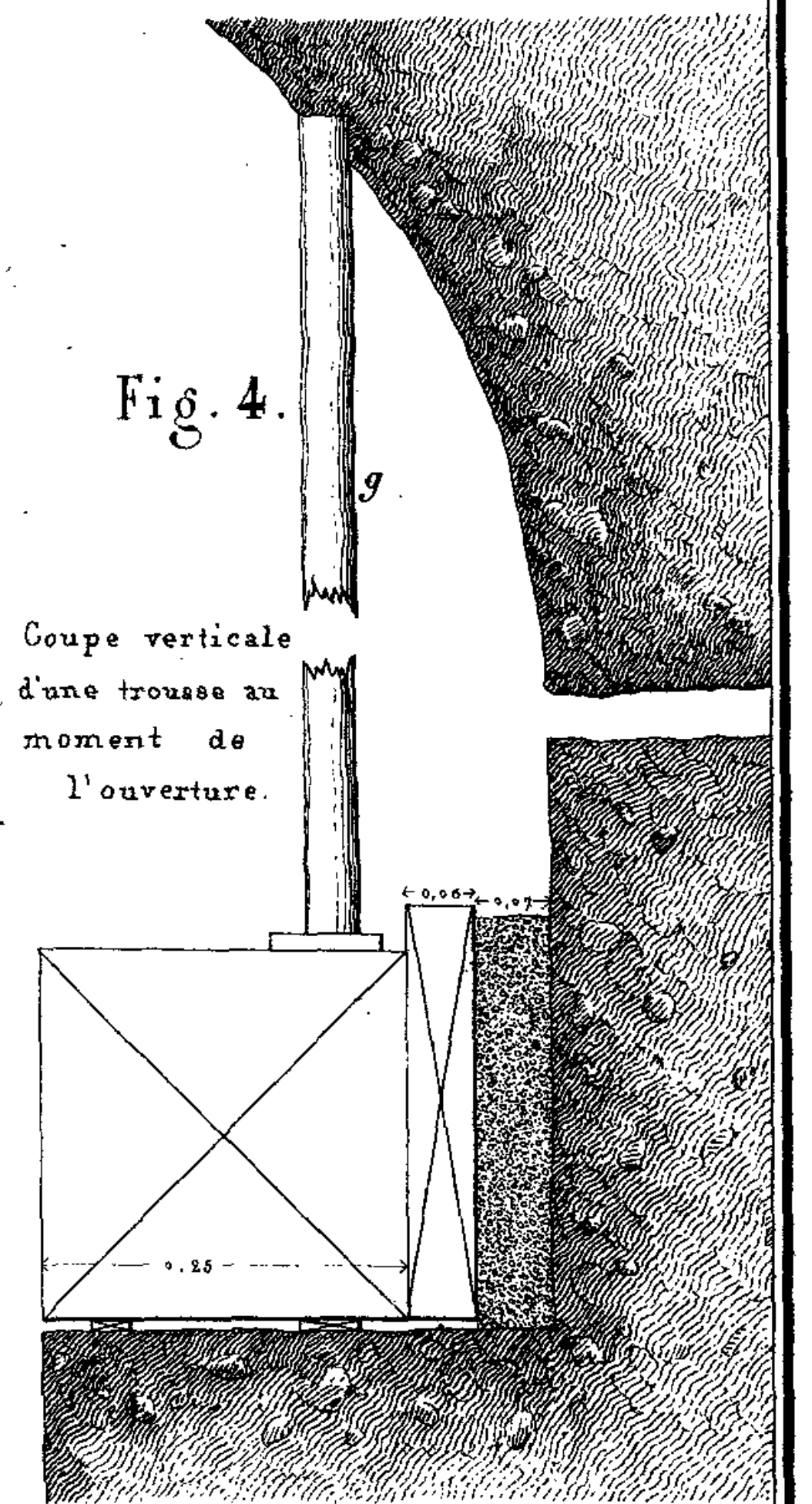
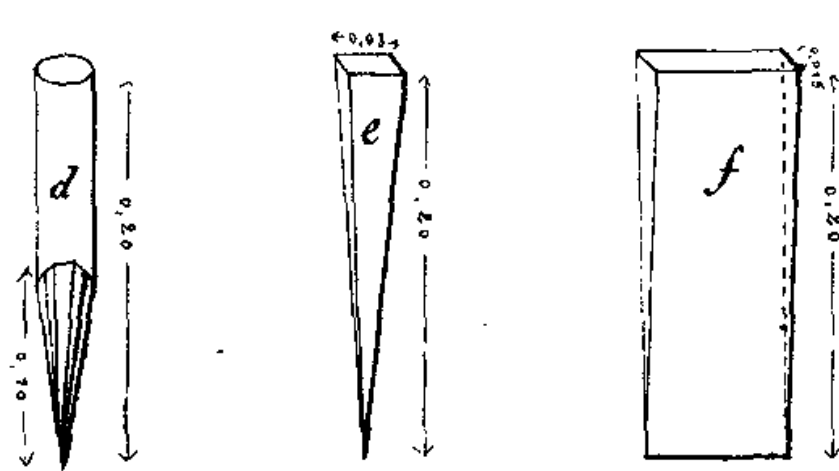


Fig. 4.

Coupe verticale  
d'une trousse au  
moment de  
l'ouverture.

Coupe de deux trusses superposées

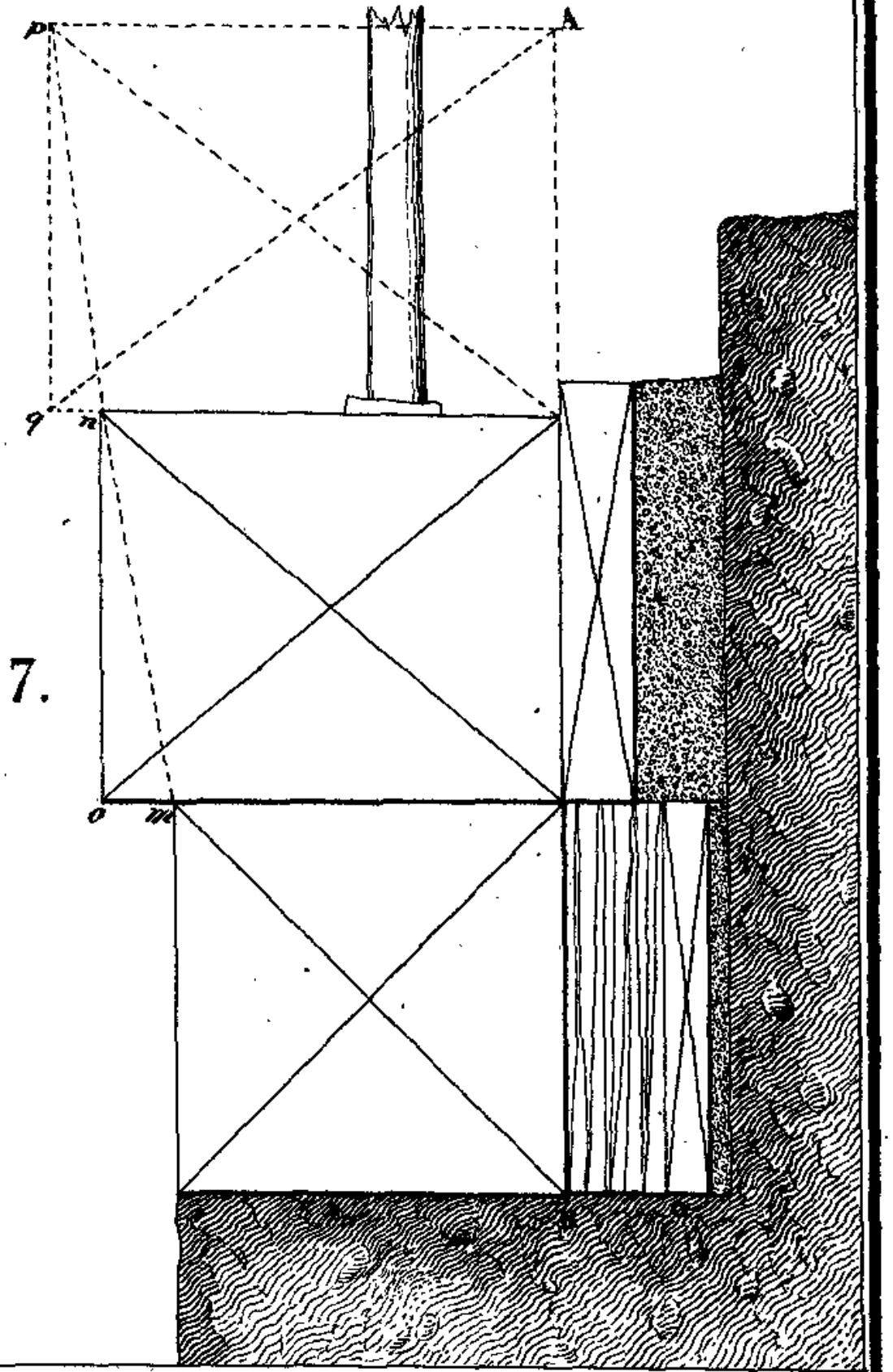


Fig. 7.

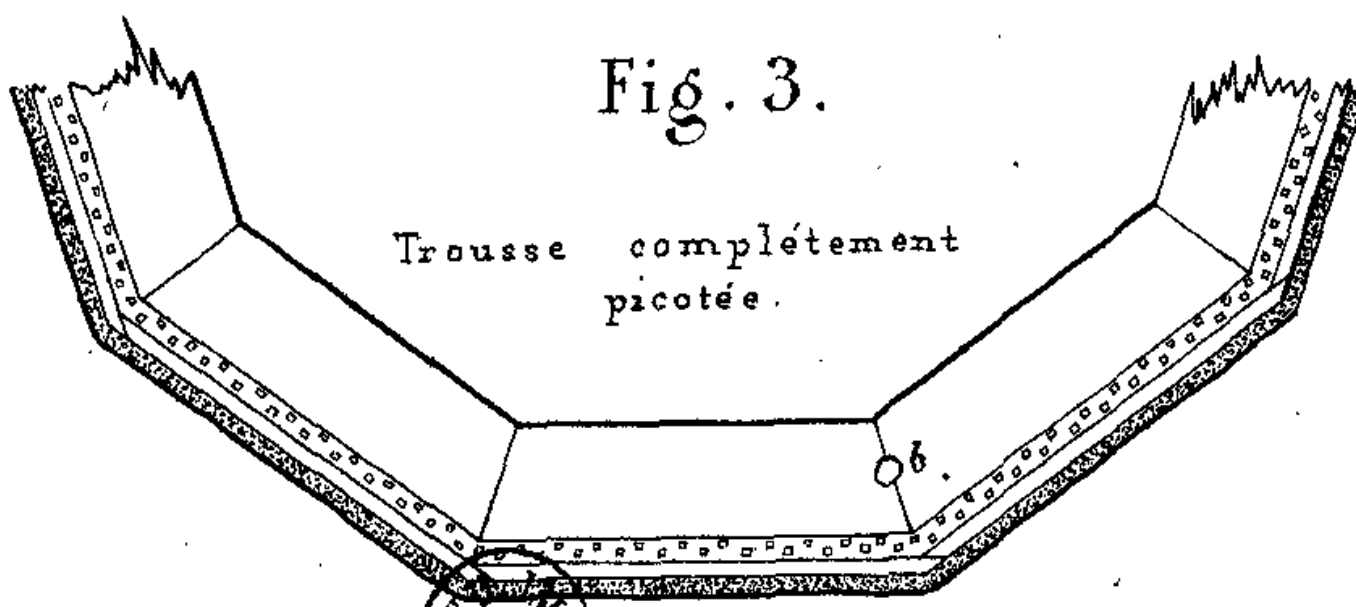


Fig. 3.

Trouse complètement  
picotée.







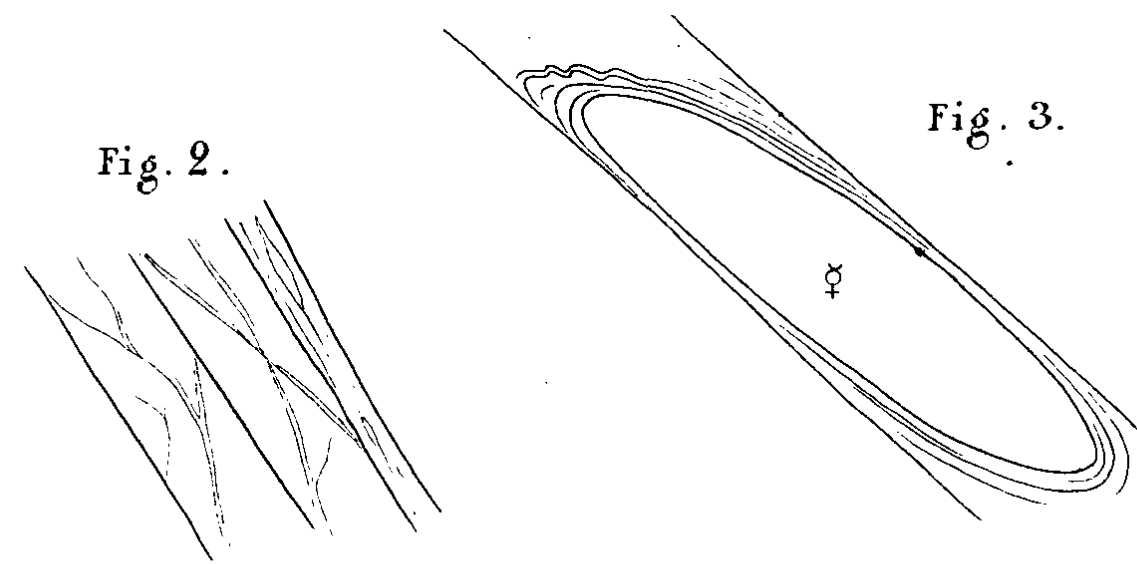
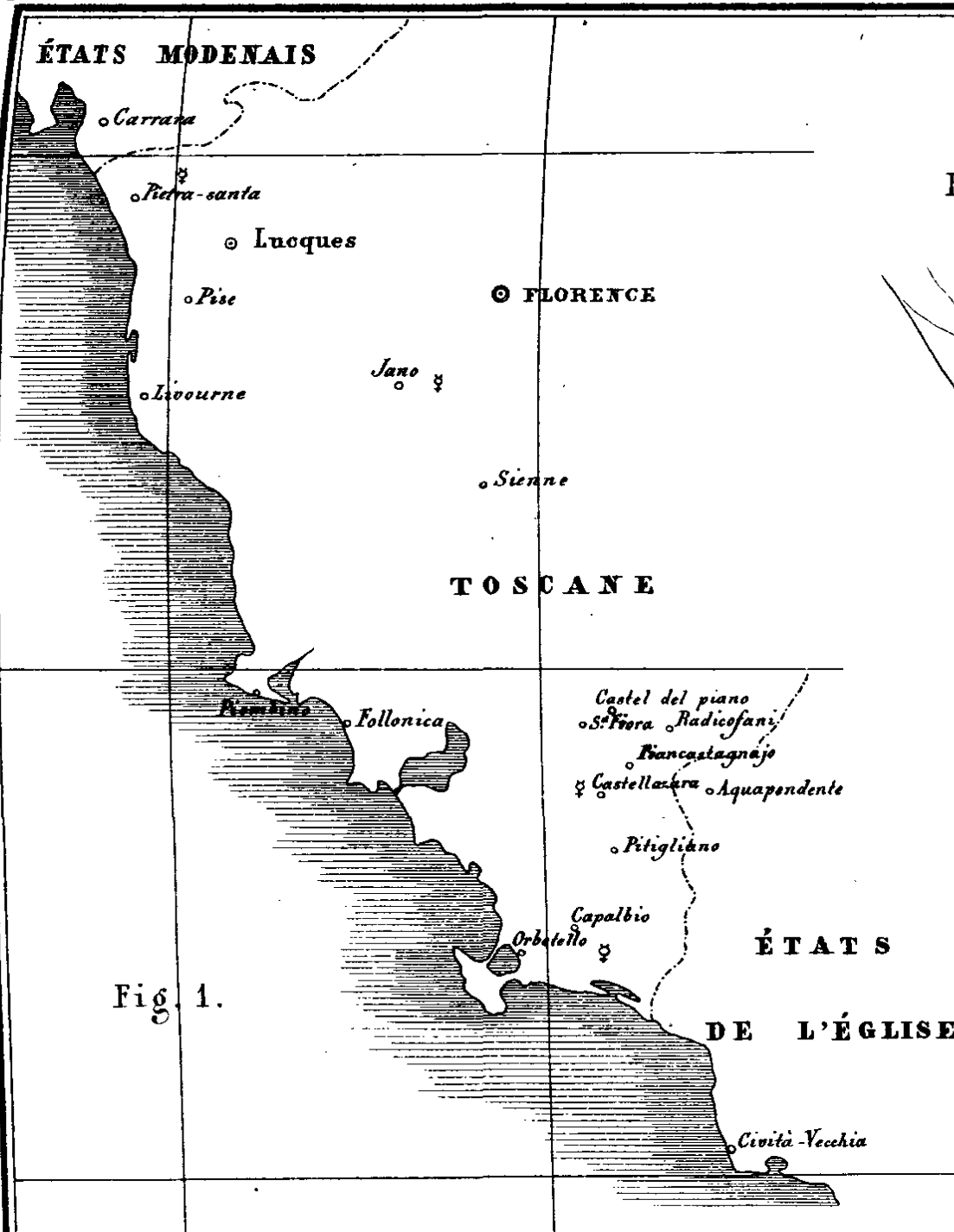


Fig. 5.

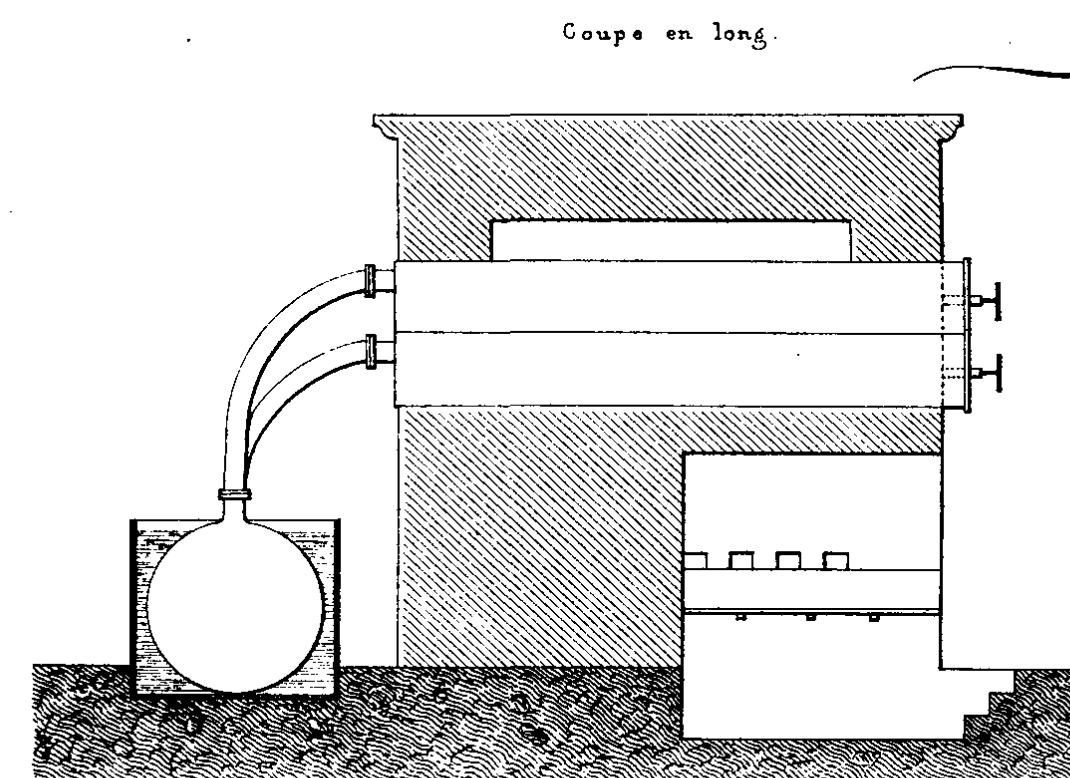
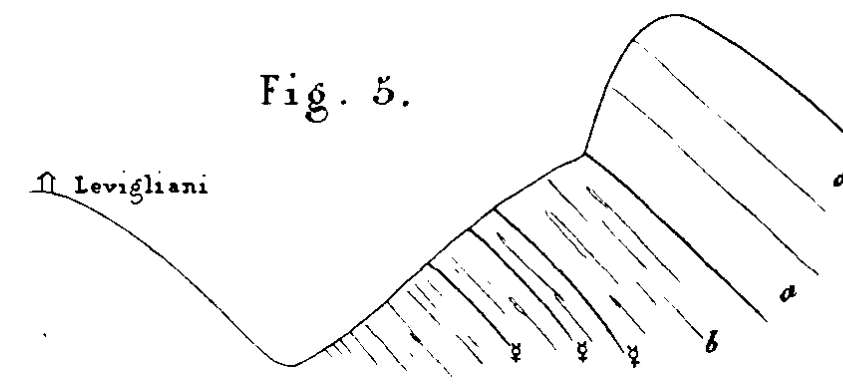
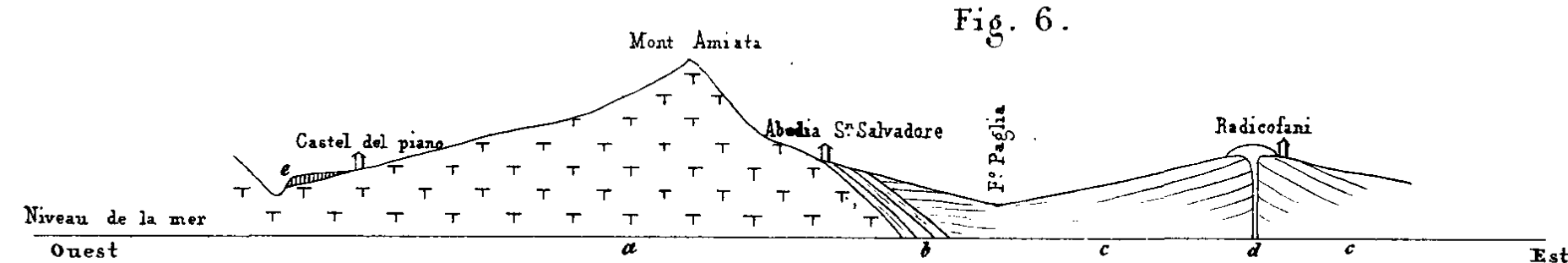
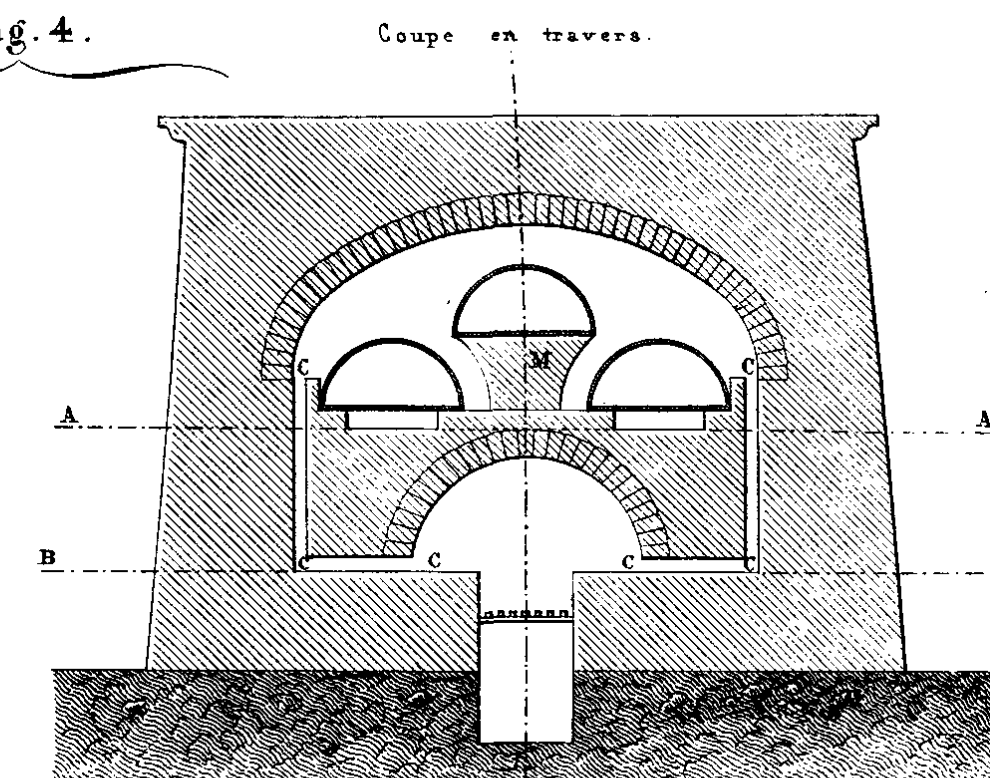
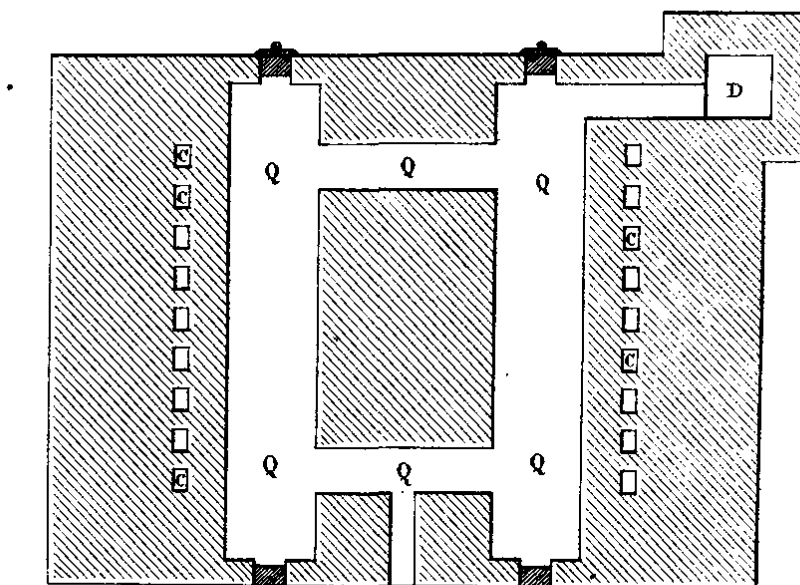


Fig. 4.



Coupe horizontale suivant AA.



Coupe horizontale suivant BB.

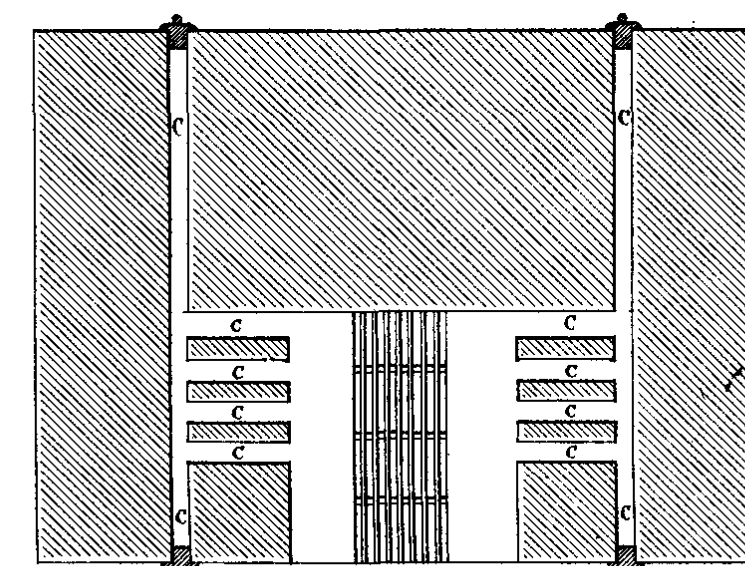


Fig. 5.

- a Calcaires marbres.
- b Stéarochistes.
- c Cinabre.

Fig. 6 et 7.

- a Trachyte.
- b Eocène (Calcaires, Alberès et Macigno).
- c Pliocène (Argiles et Sables).
- d Basalte.
- e Dépôt de Terre de Sienne (Bol).
- f Couches nummulitiques (Eocène).
- g Couches Jura-liaïques.
- m Calcaires dolomitiques (Jura-liaïque?).
- o Ophiolites.

Echelle  $\frac{1}{100000}$  double pour les hauteurs.

Fig. 8 et 9.

- A Galerie d'Extraction principale.
- Q Puits au niveau de cette galerie.
- P Puits d'Exploration sur un bloc.
- B Galerie d'écoulement.
- nm Galerie inclinée, ou fendue.
- ngk Galerie d'allongement suivant les contours du bloc.
- gg. Galeries traversant le bloc.

Echelle de  $\frac{1}{2000}$ 

MM et M'M' Grands blocs calcaires à cinabre.

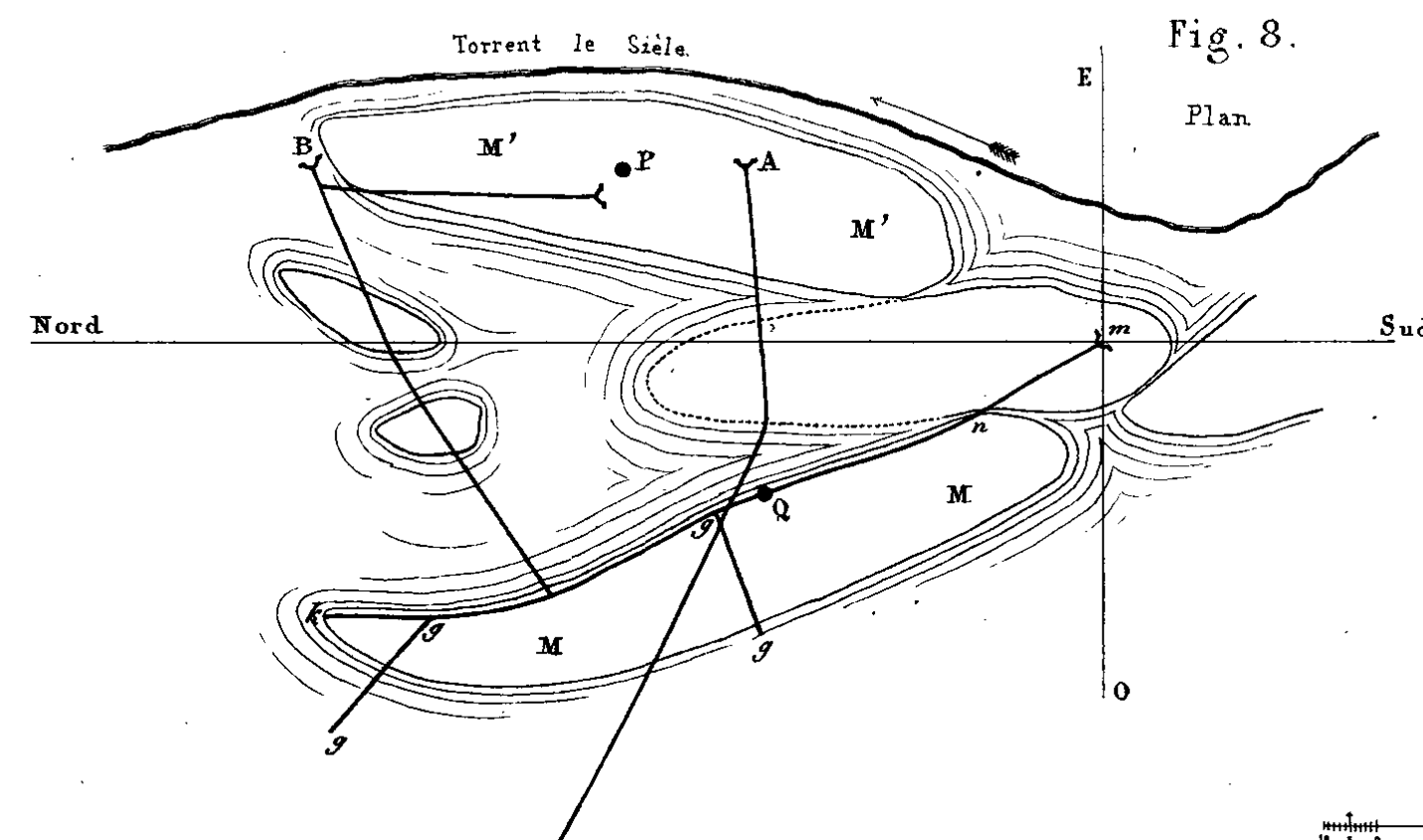
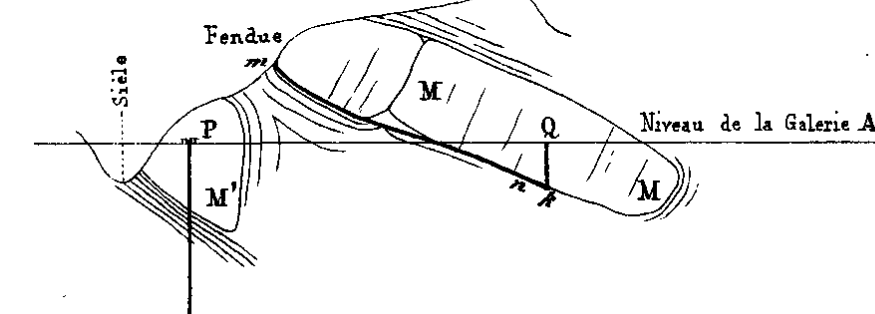


Fig. 8.

Plan.

Fig. 9.

Projection sur le plan vertical EO



Echelle de la Fig. 1.

0 1 2 3 4 5 6 7 8 9 10 Myriam.

Echelle de la Fig. 4.

0 10 20 30 40 50 60 70 80 90 100 Mèt.







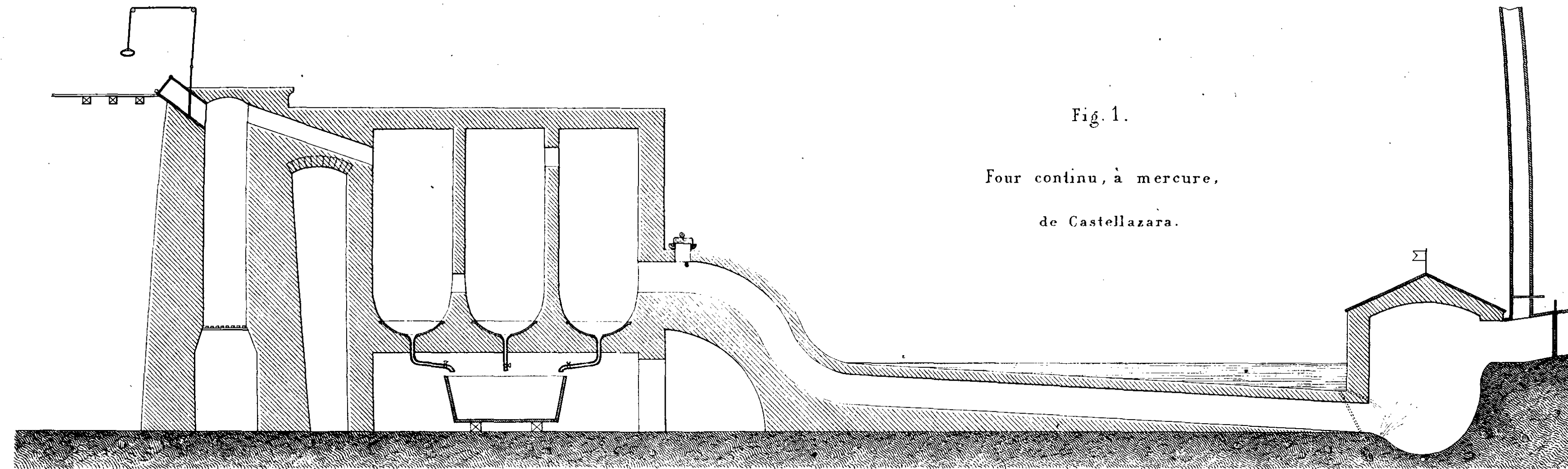
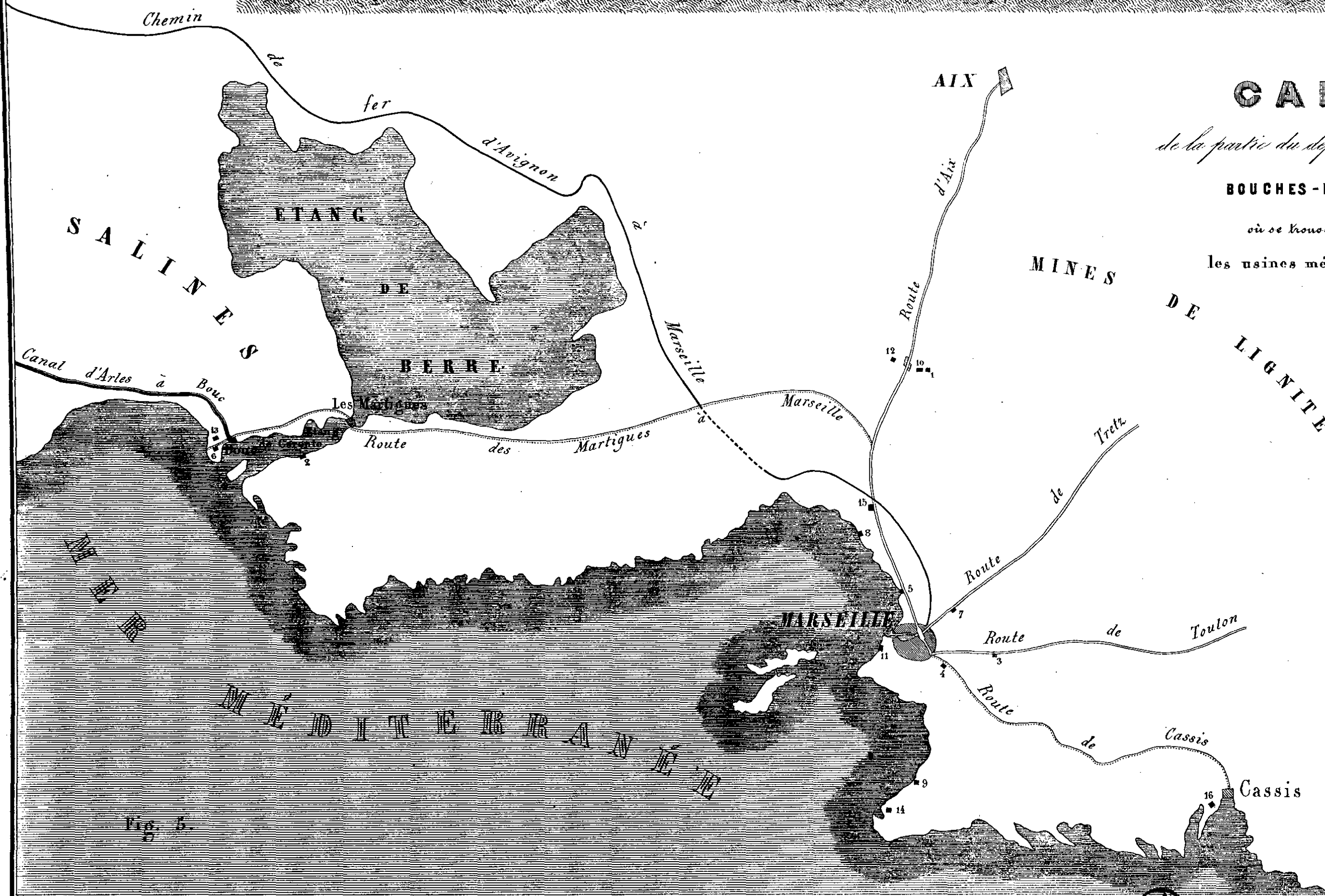


Fig. 1.

Four continu, à mercure,  
de Castellazara.



# CARTE

de la partie du département de

BOUCHES-DU-RHÔNE

où se trouvent situées  
les usines métallurgiques.

MINES DE LIGNITE

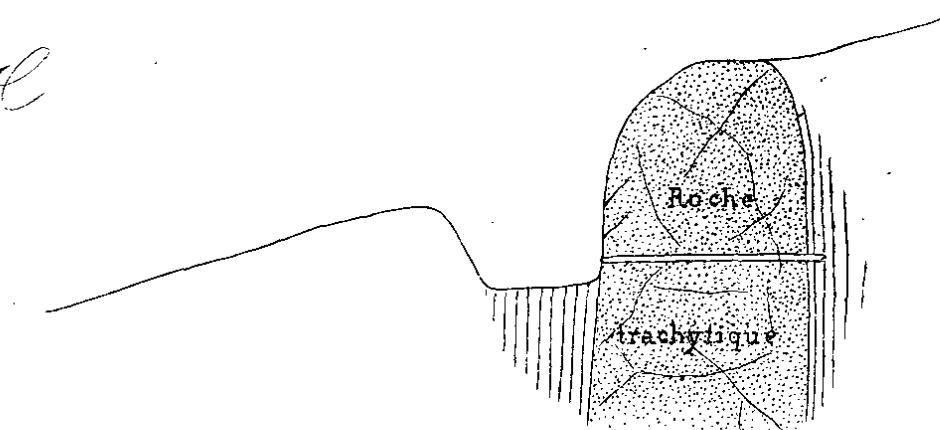


Fig. 2.

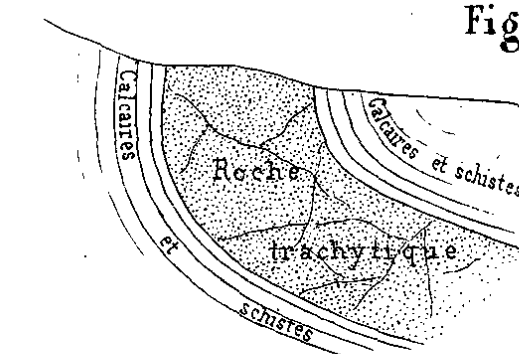


Fig. 3.

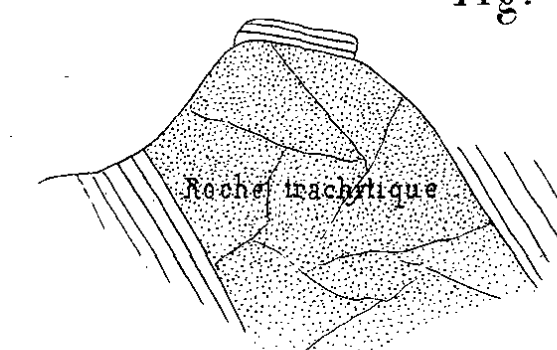
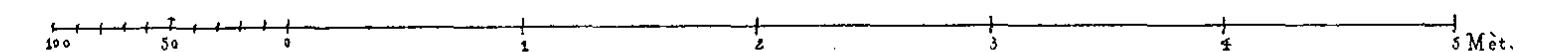
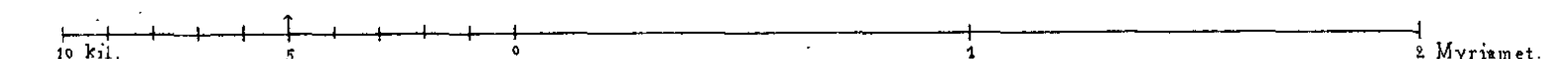


Fig. 4.

Echelle de la Fig. 1.



Echelle de la Fig. 5.









Four de grillage de l'usine de l'Escalette.

Fig. 1.

Plan au niveau de la sole.

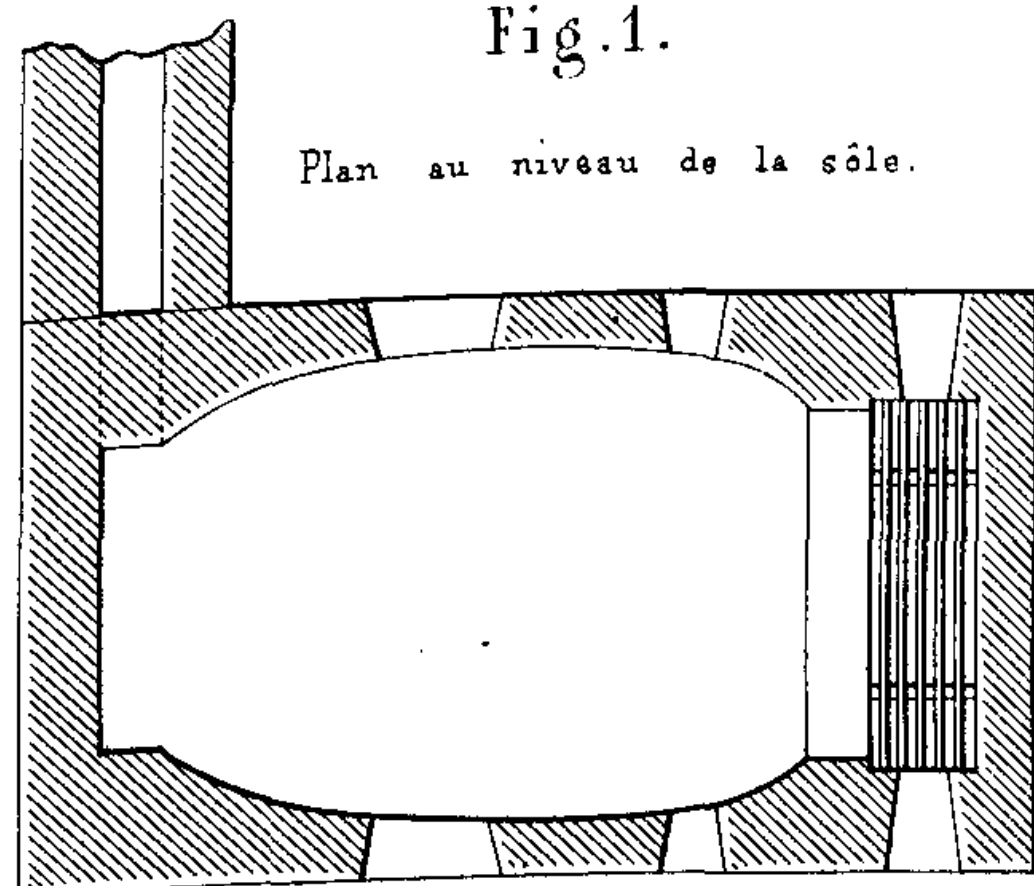
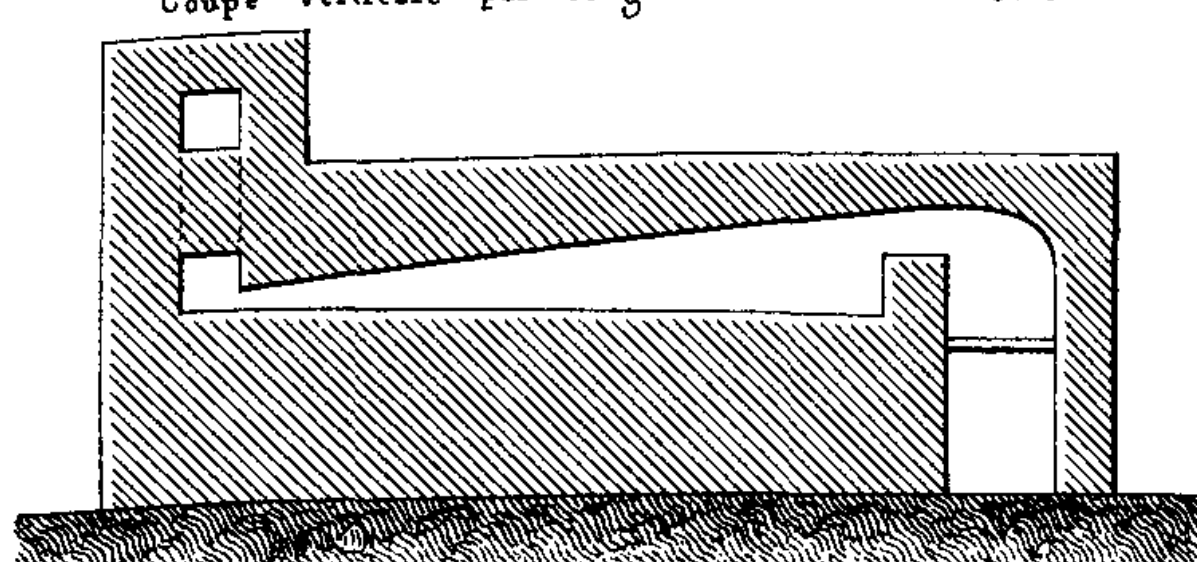


Fig. 2.

Coupe verticale par le grand axe de la sole.



Four de grillage de l'usine des Goudes.

Fig. 3.

Plan.

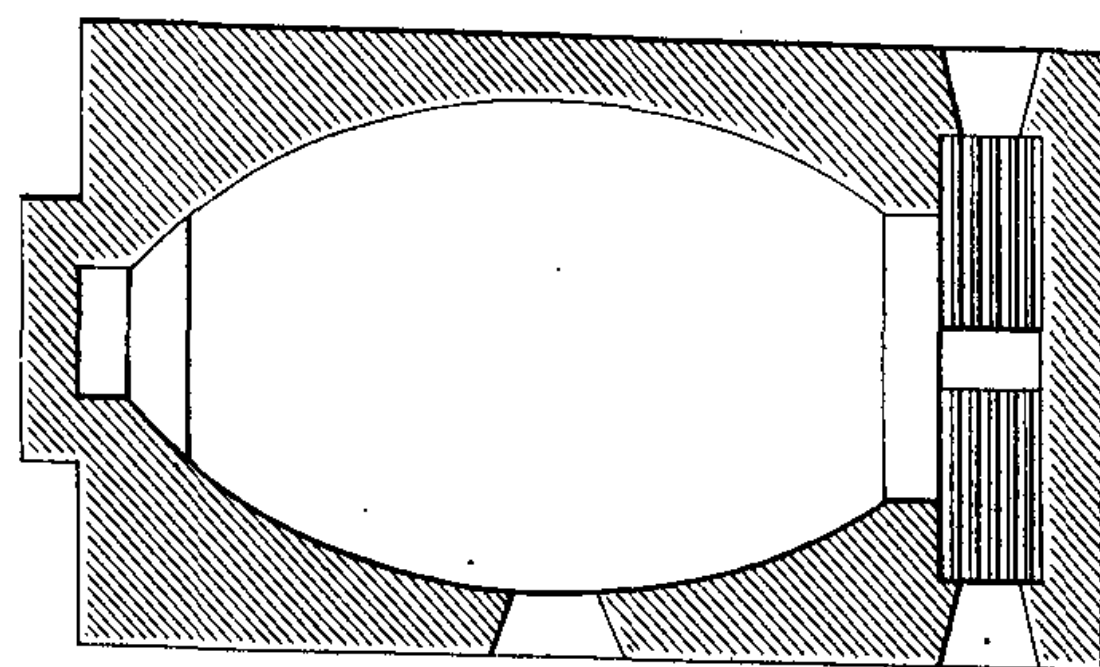
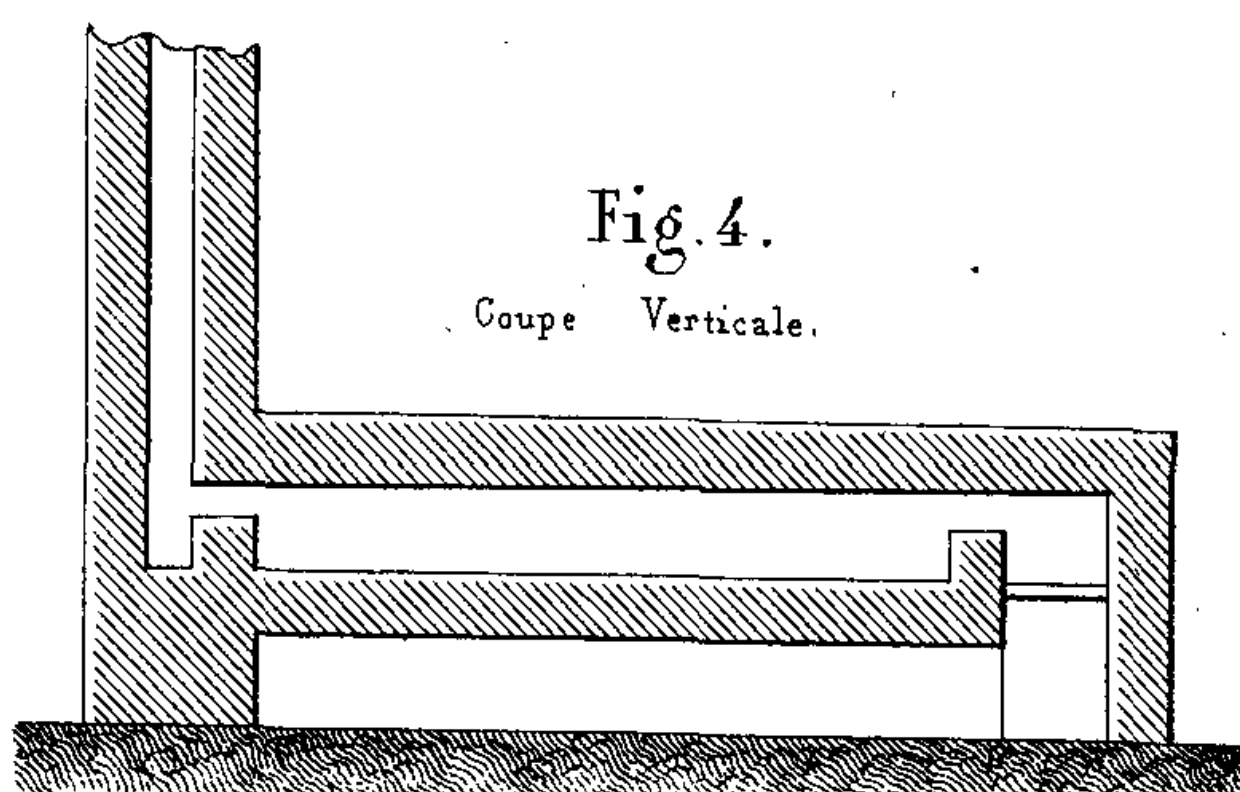


Fig. 4.

Coupe Verticale.



Four d'Albertville de l'usine de l'Escalette.

Fig. 5.

Plan.

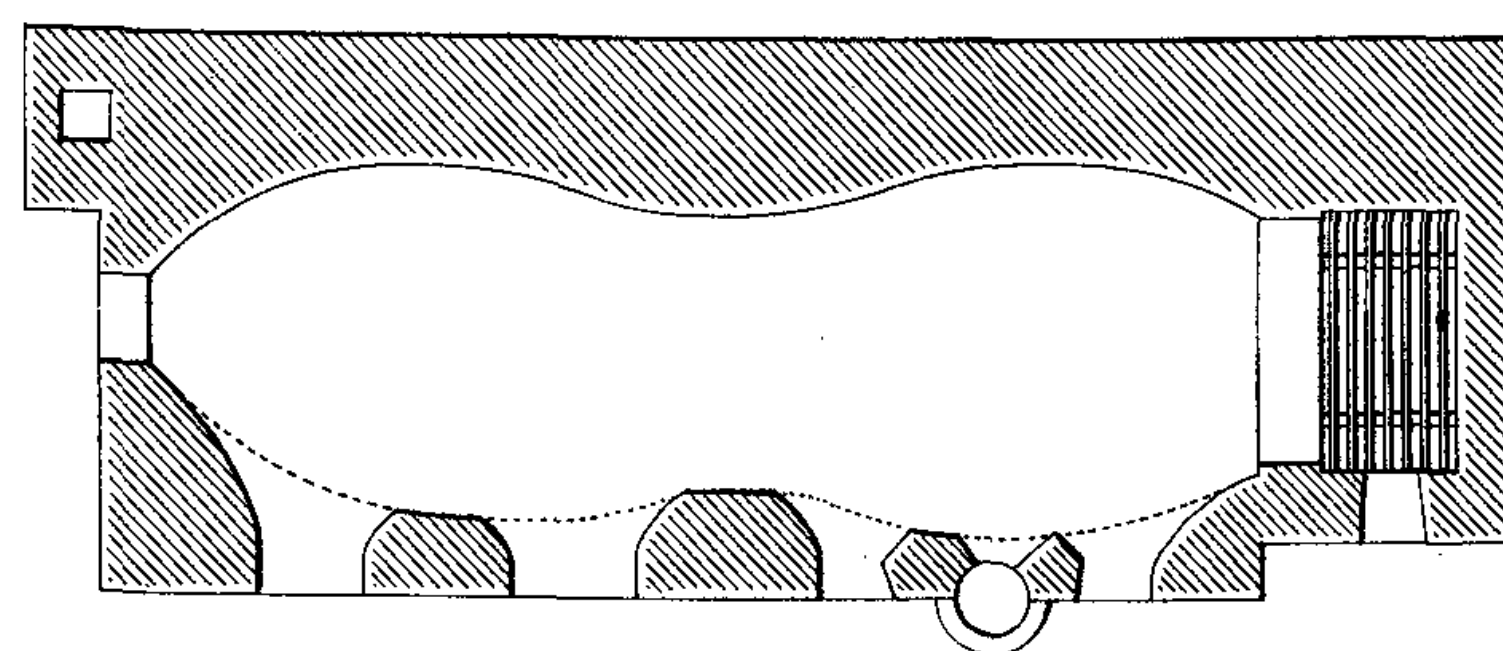
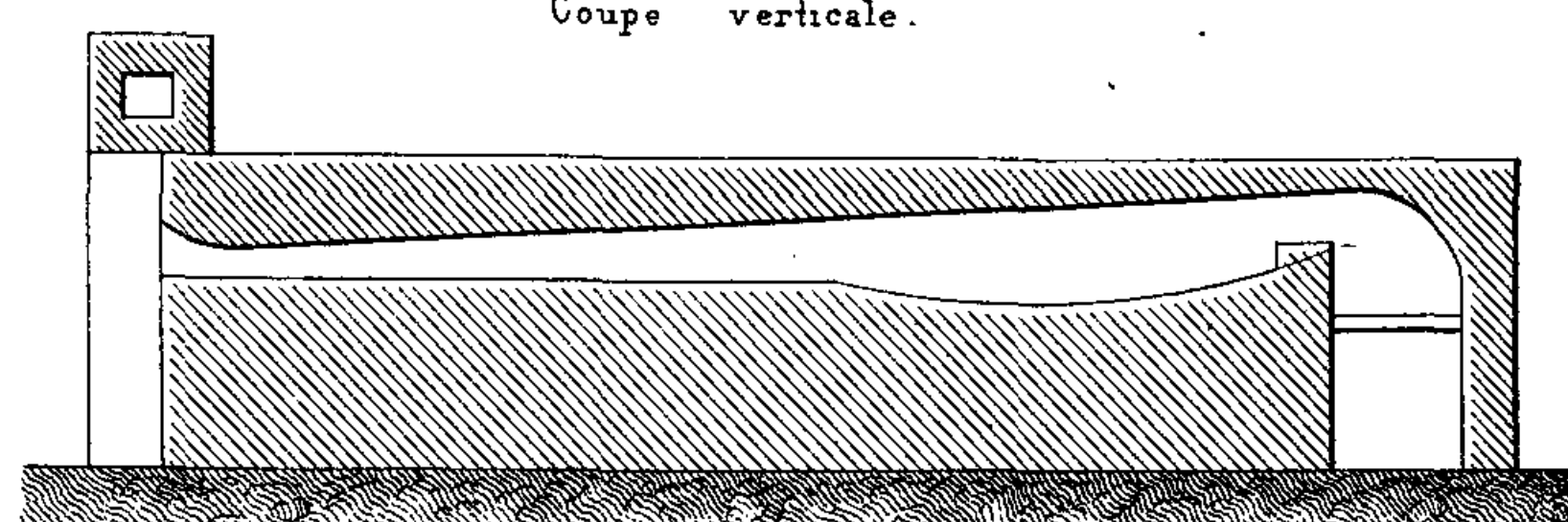


Fig. 6.

Coupe verticale.



Four de réduction de l'usine de Bouc.

Fig. 7.

Plan.

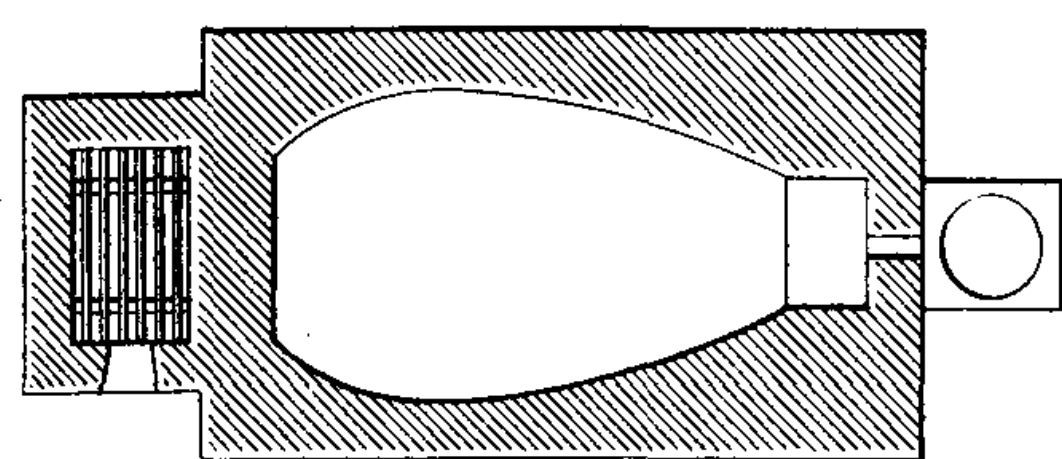
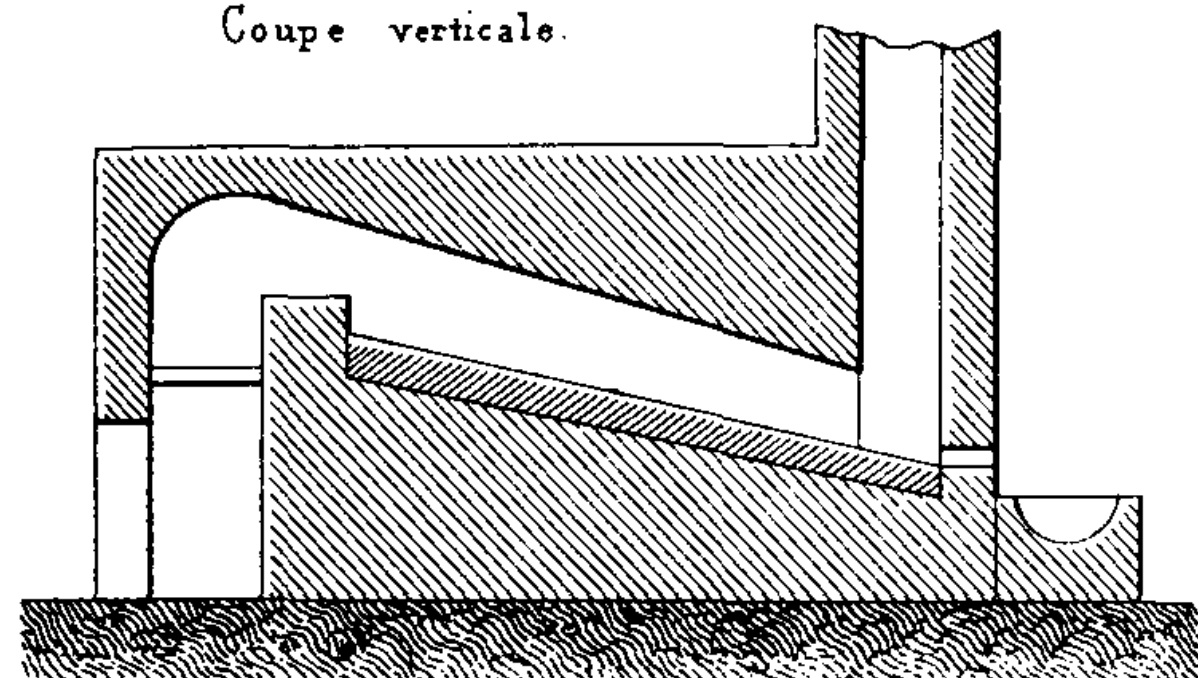


Fig. 8.

Coupe verticale.



Four de réduction de l'usine des Goudes.

Fig. 9.

Plan.

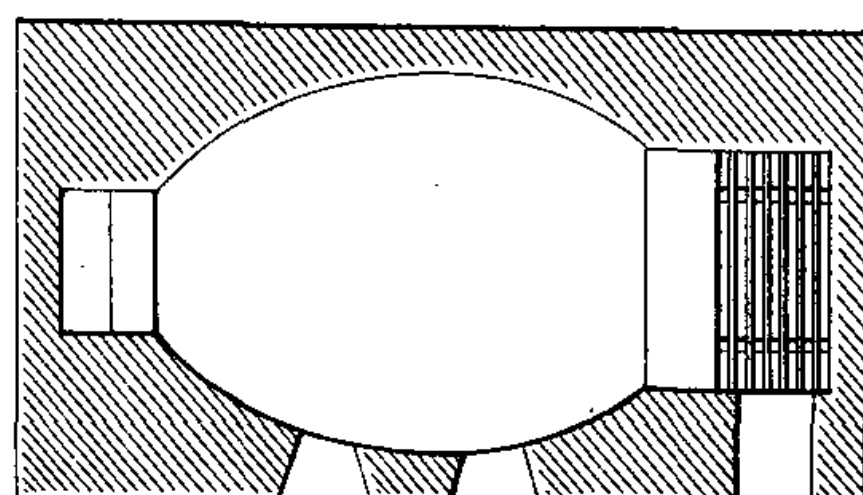
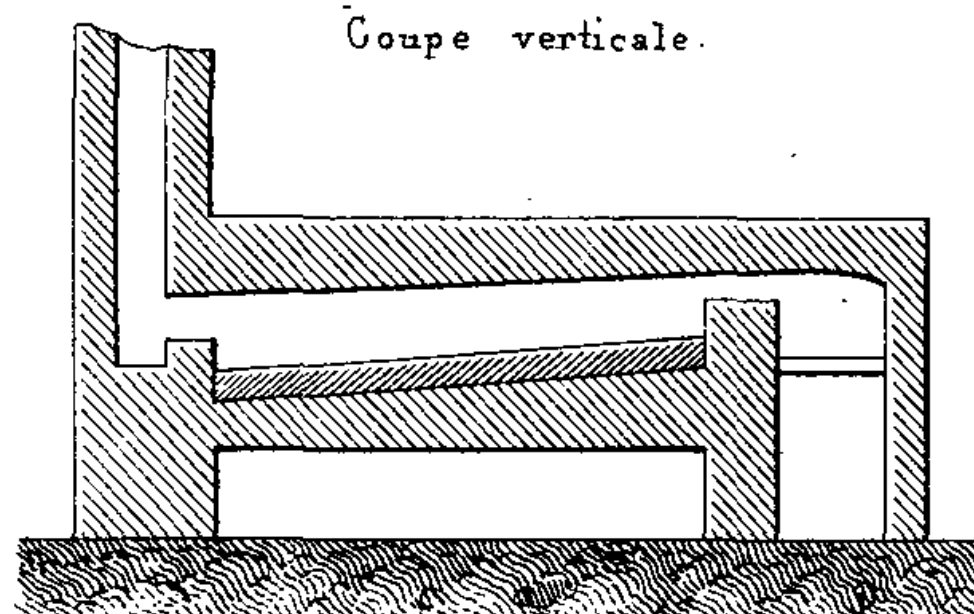


Fig. 10.

Coupe verticale.



Four Viennois de l'usine de l'Escalette.

Fig. 11.

Plan.

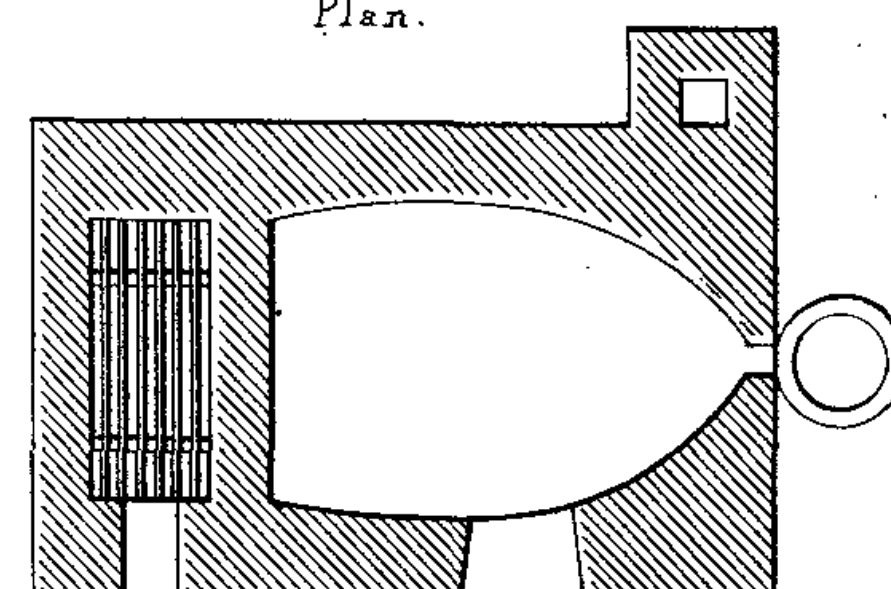
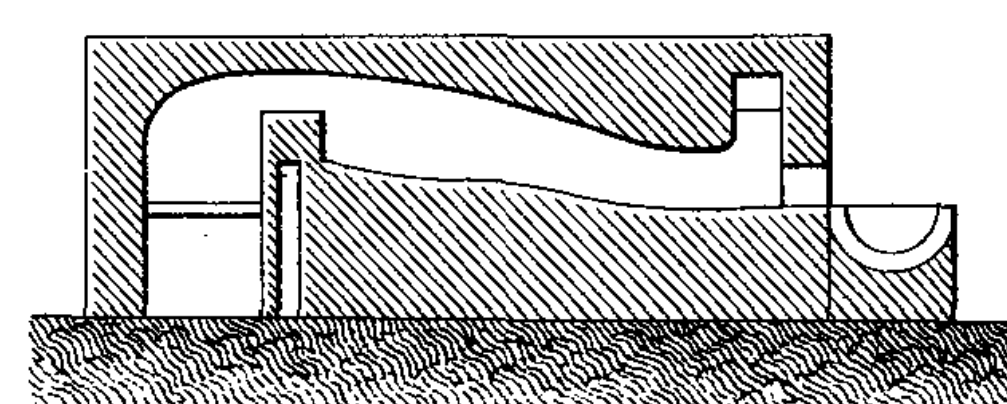


Fig. 12.

Coupe verticale.



Four à manche de l'usine des Catalans.

Four de calcination de l'usine du Rouet.

Fig. 13.

Plan.

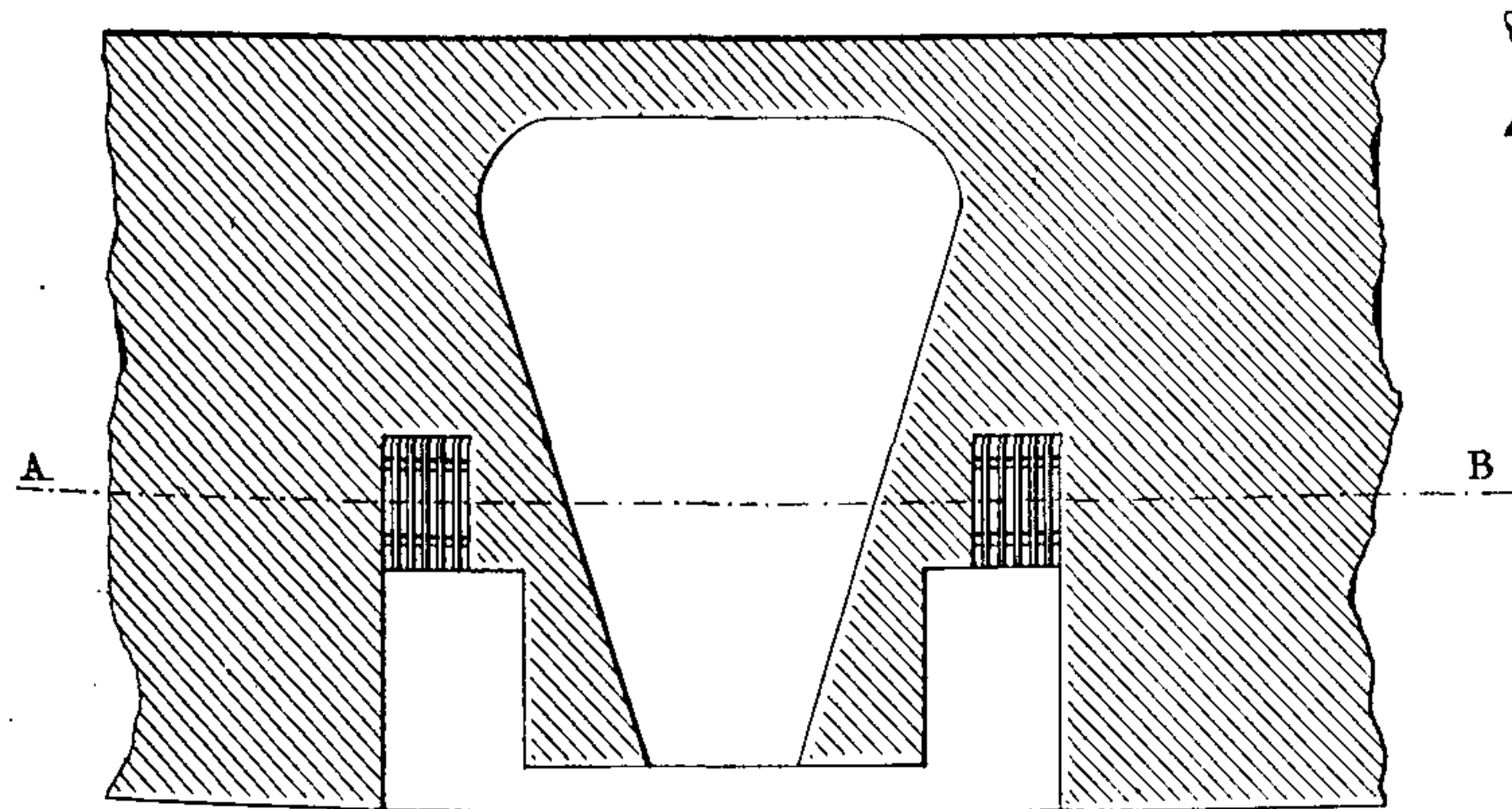
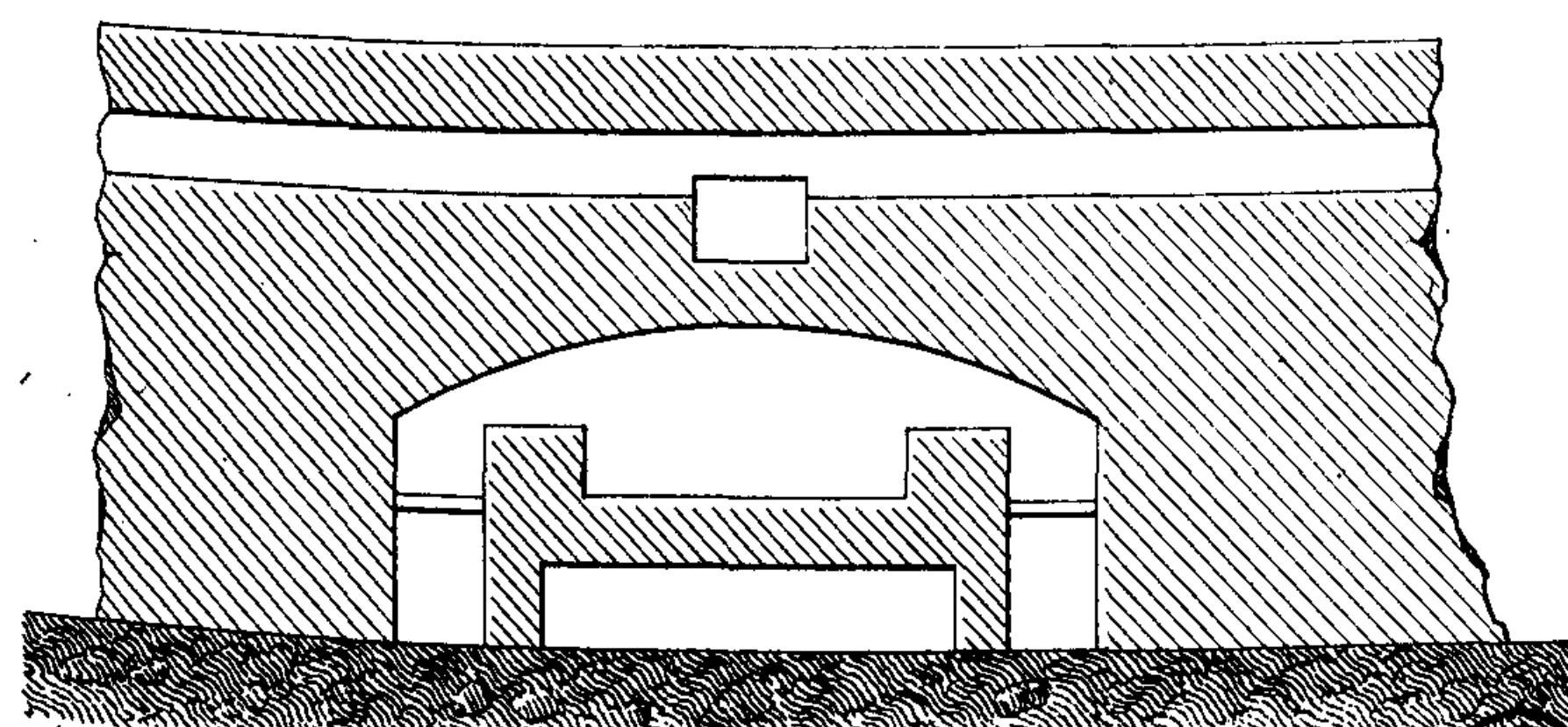


Fig. 14.

Coupe transversale par A.B.



Coupe verticale par l'axe de la tuyère.

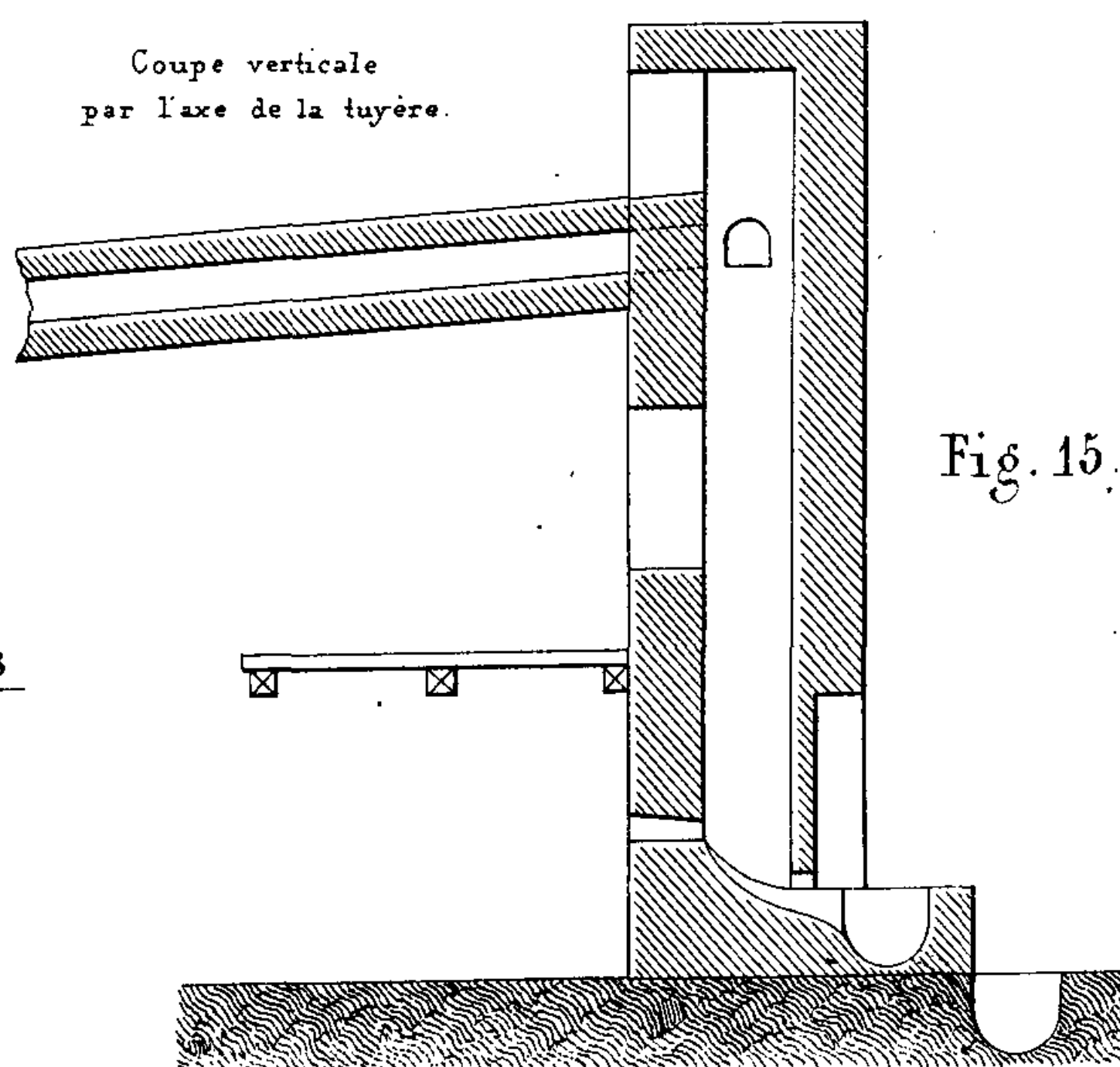


Fig. 15.

Plan au niveau de la tuyère.

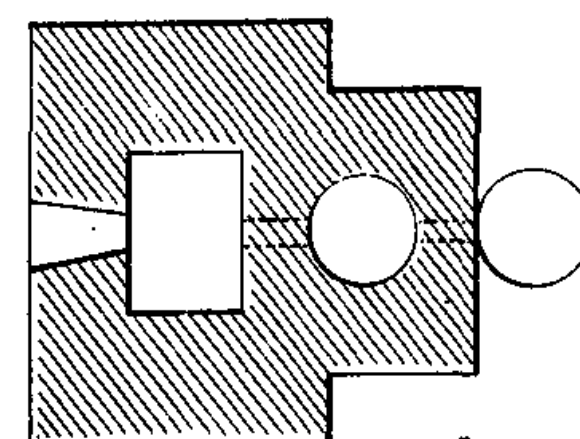
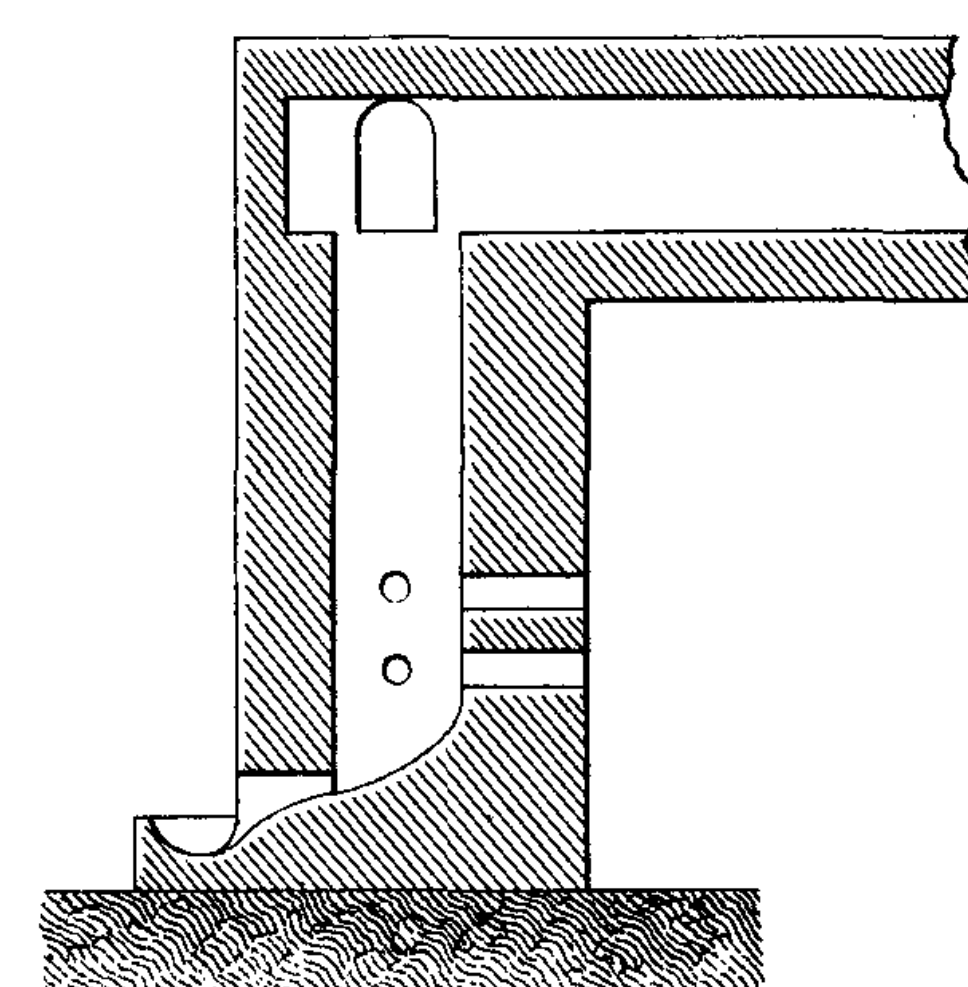


Fig. 16.

Four à manche de l'usine de l'Escalette.

Fig. 17.

Coupe.



Plan.

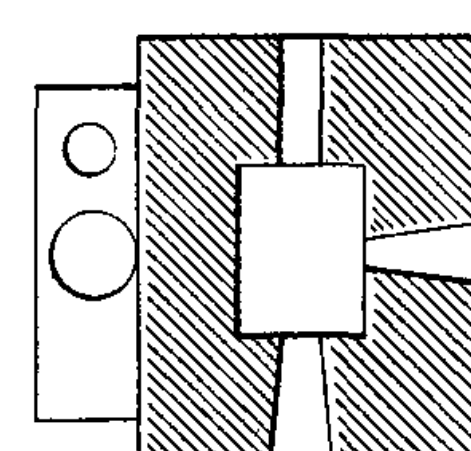
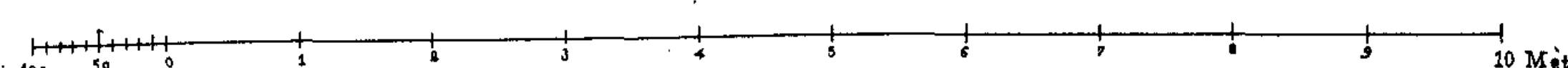


Fig. 18.

Echelle.



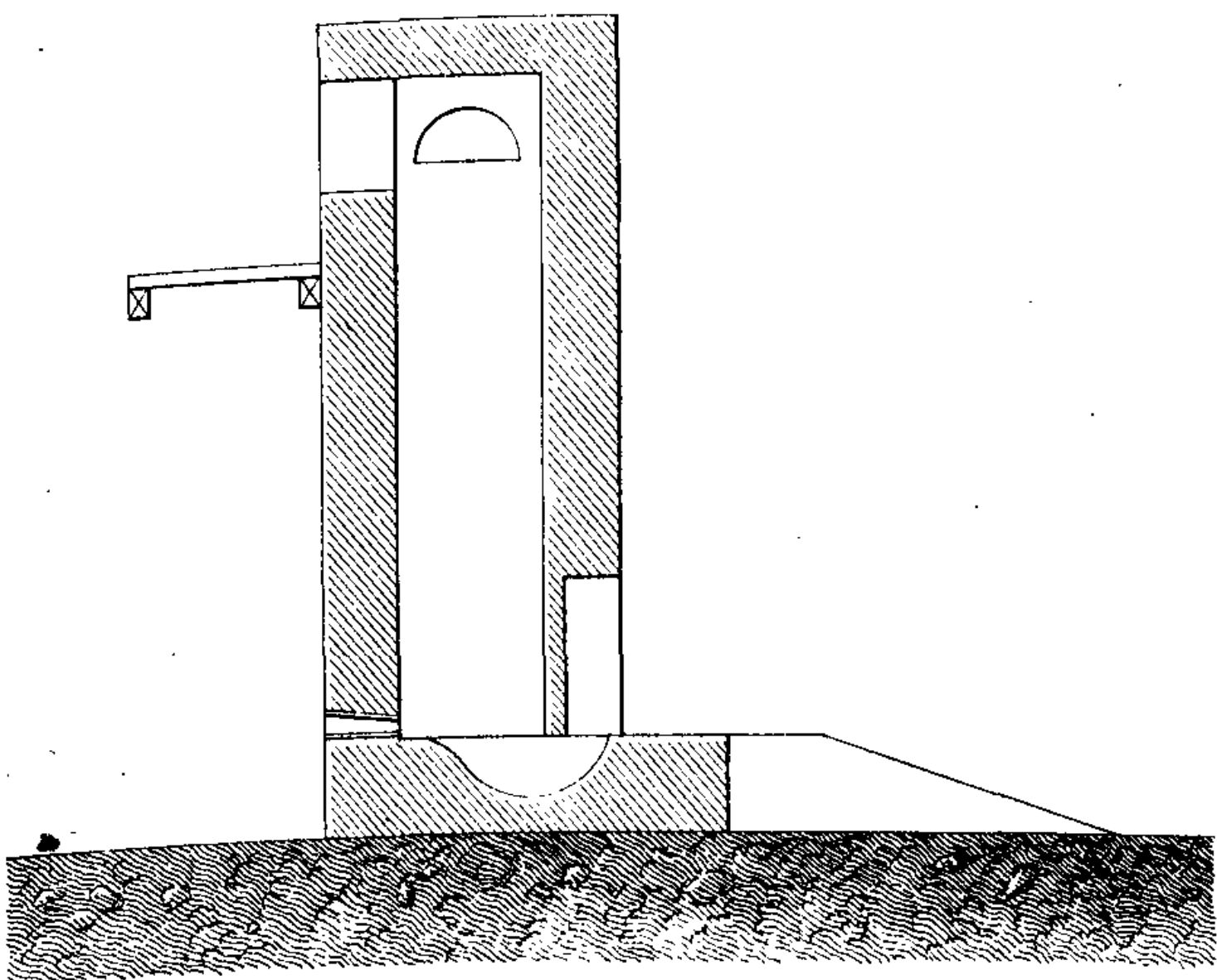






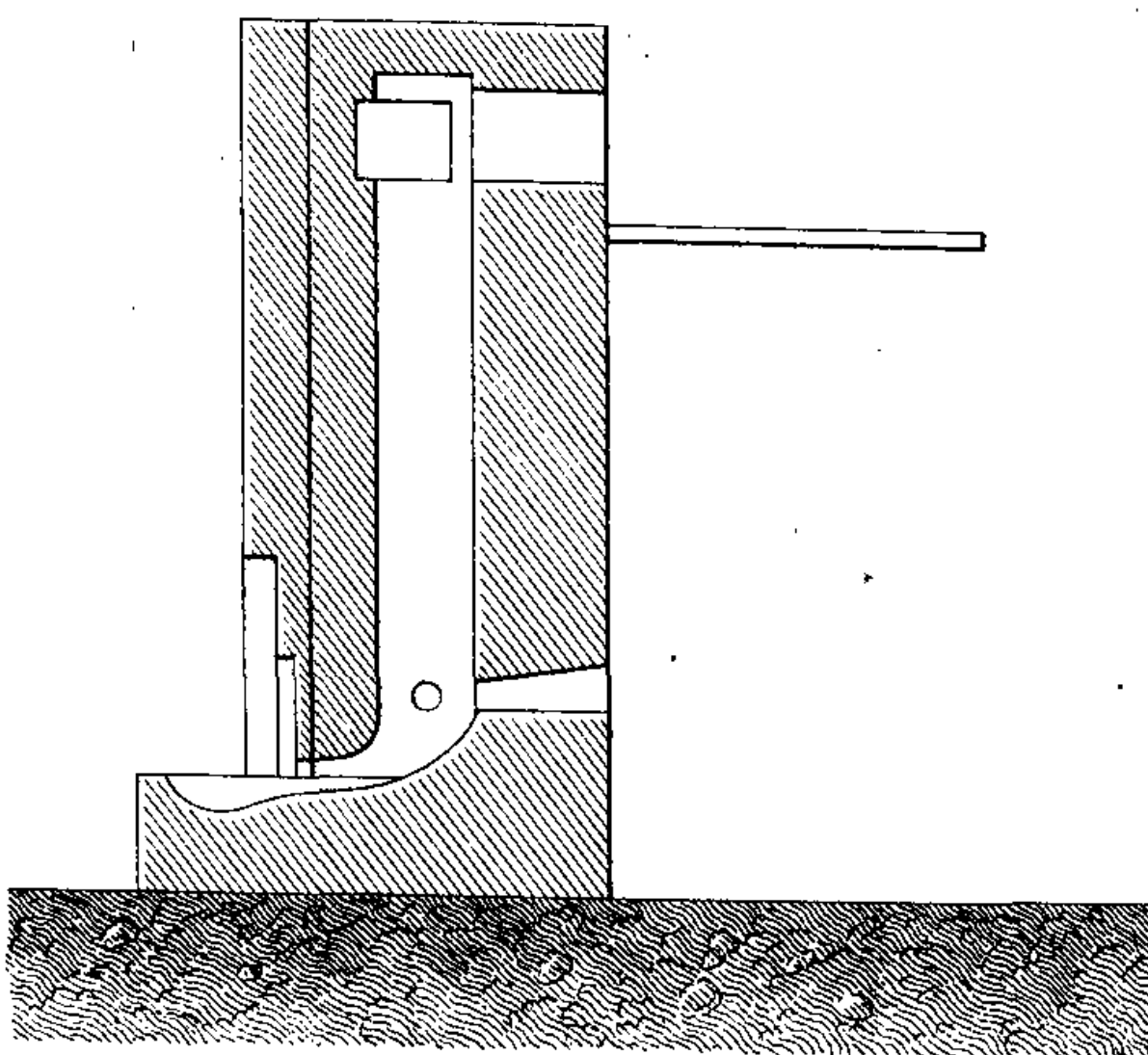
Four à manche de l'usine de Bouc.

Fig. 1.  
Coupe.



Four à manche de l'usine de Septèmes.

Fig. 3.  
Coupe.



Four de Coupellation de l'usine des Goudes

Fig. 9.

Coupe en travers.

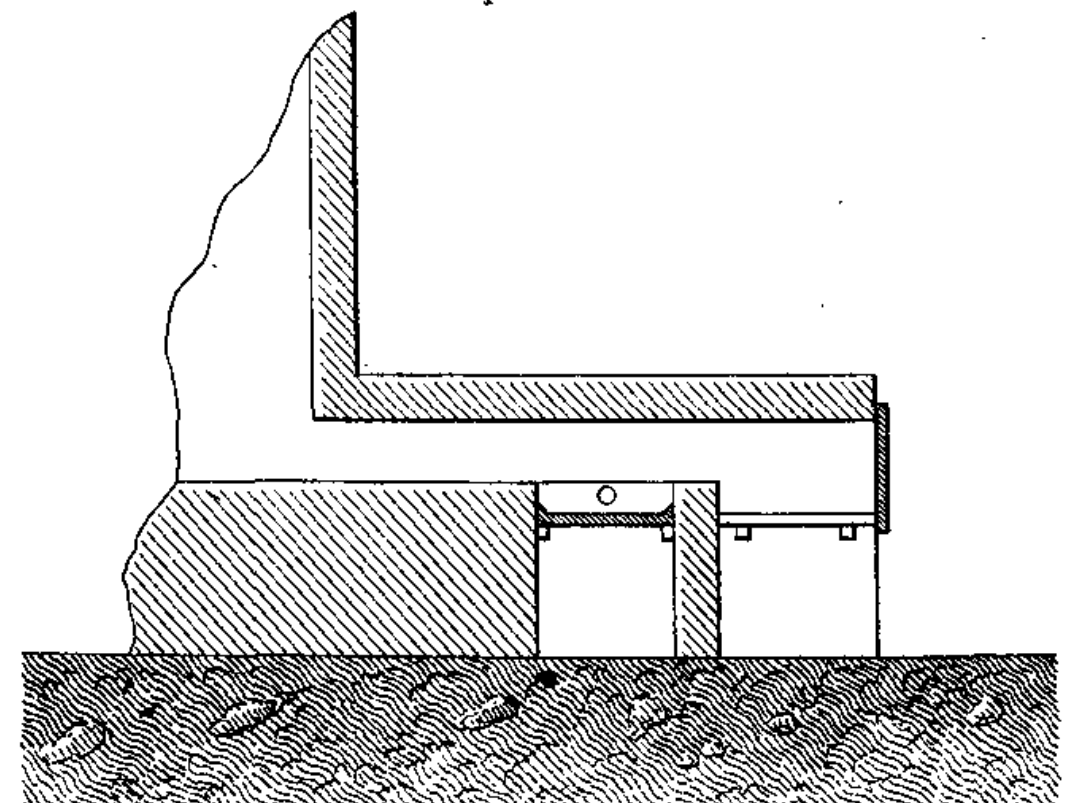


Fig. 2.  
Plan.

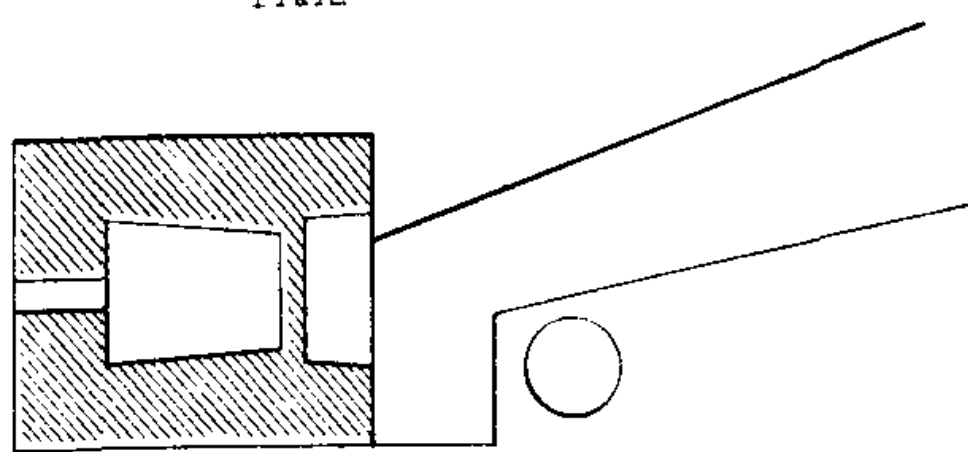


Fig. 4.  
Plan.

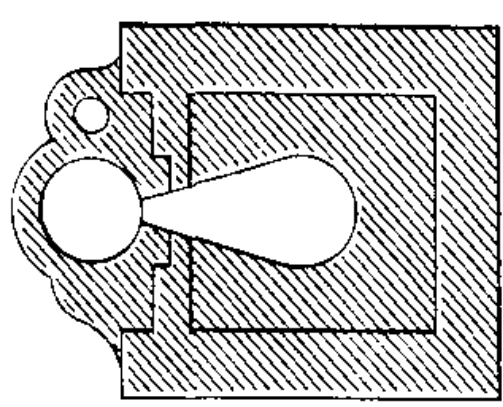
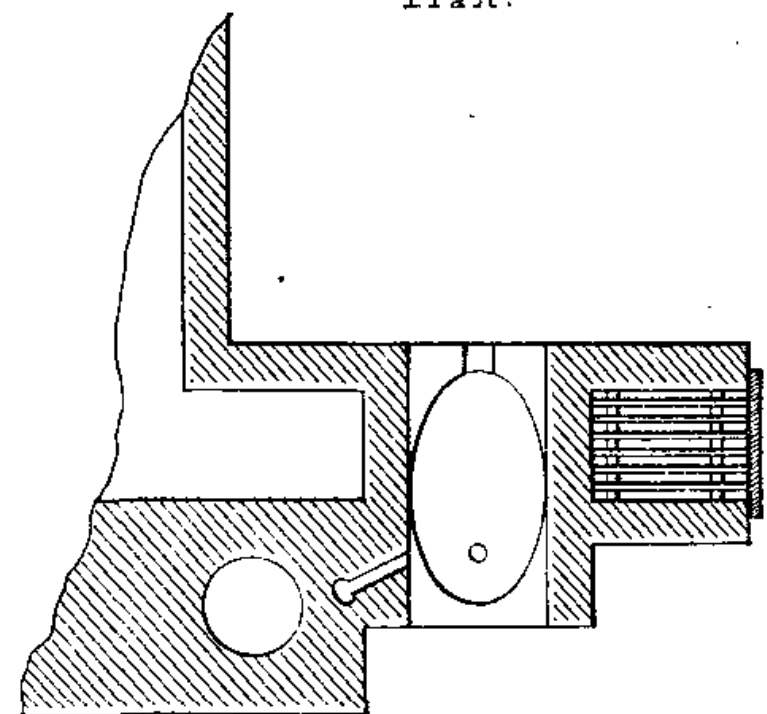


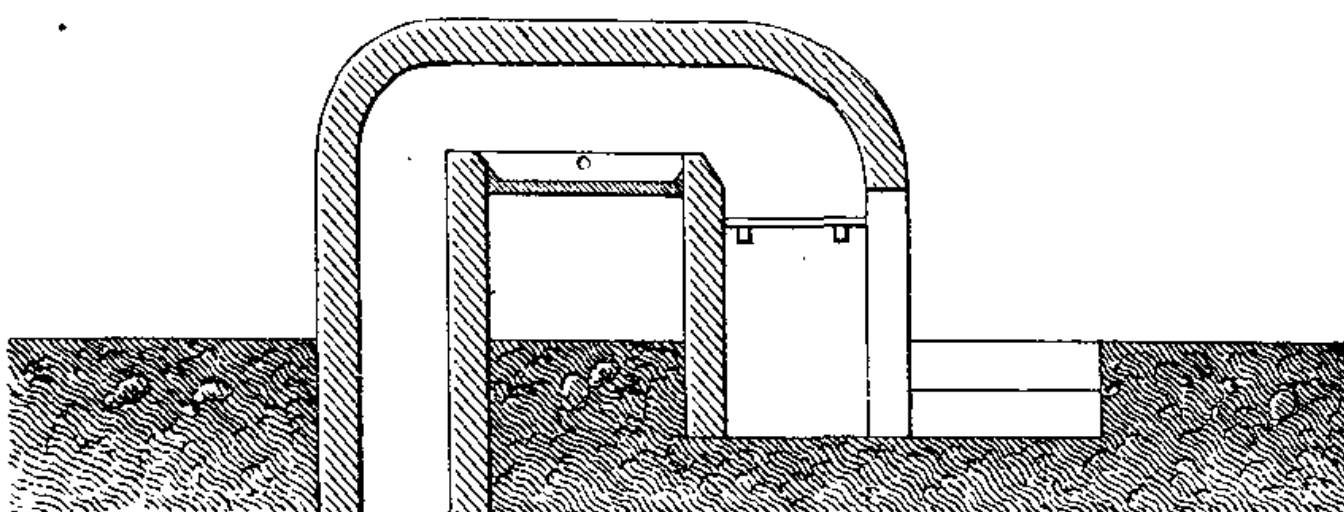
Fig. 10.  
Plan.



Four de Coupellation de l'usine de Septèmes

Fig. 7.

Coupe en travers par le petit axe de la Coupelle.



Chaudière de pattinsonnage de l'usine de Septèmes

Fig. 5.

Coupe en long.

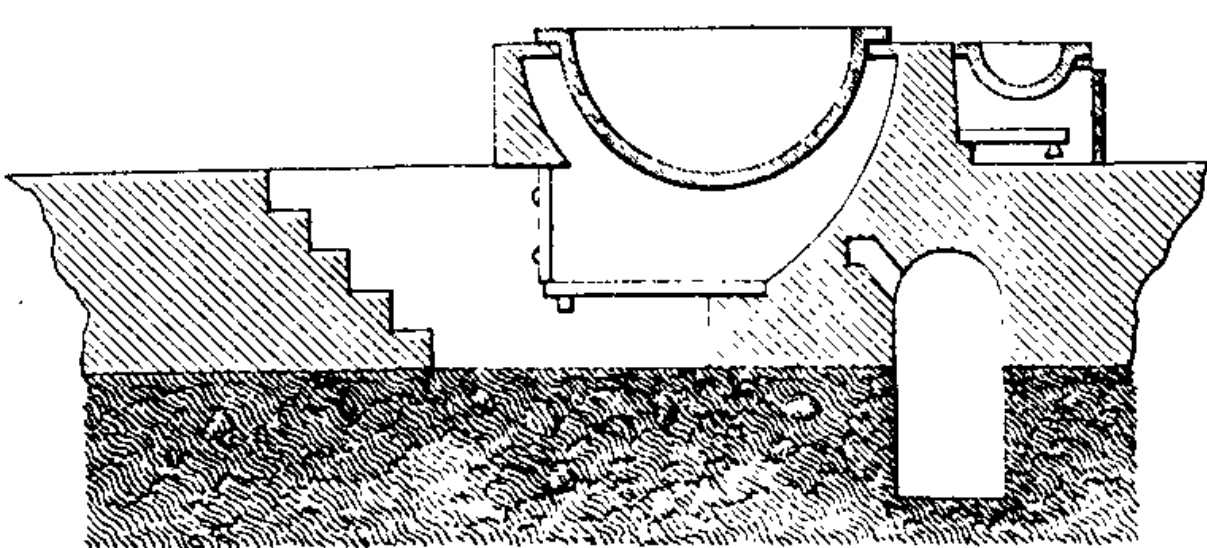
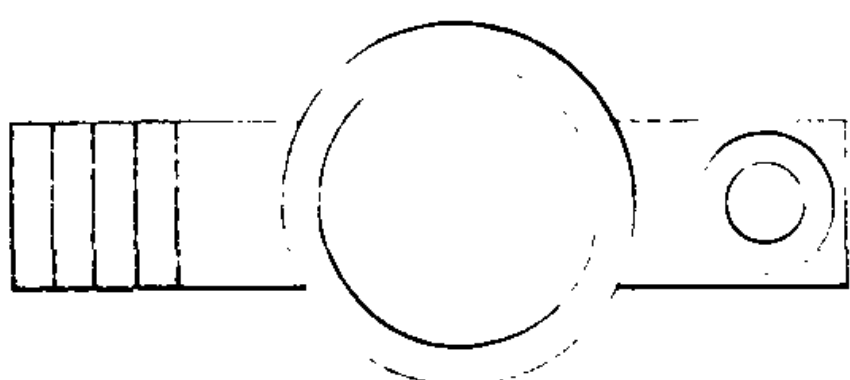


Fig. 6.  
Plan.



Four pour la Carbonisation du bois.  
(Procédé Américain)

Fig. 11.

Coupe verticale

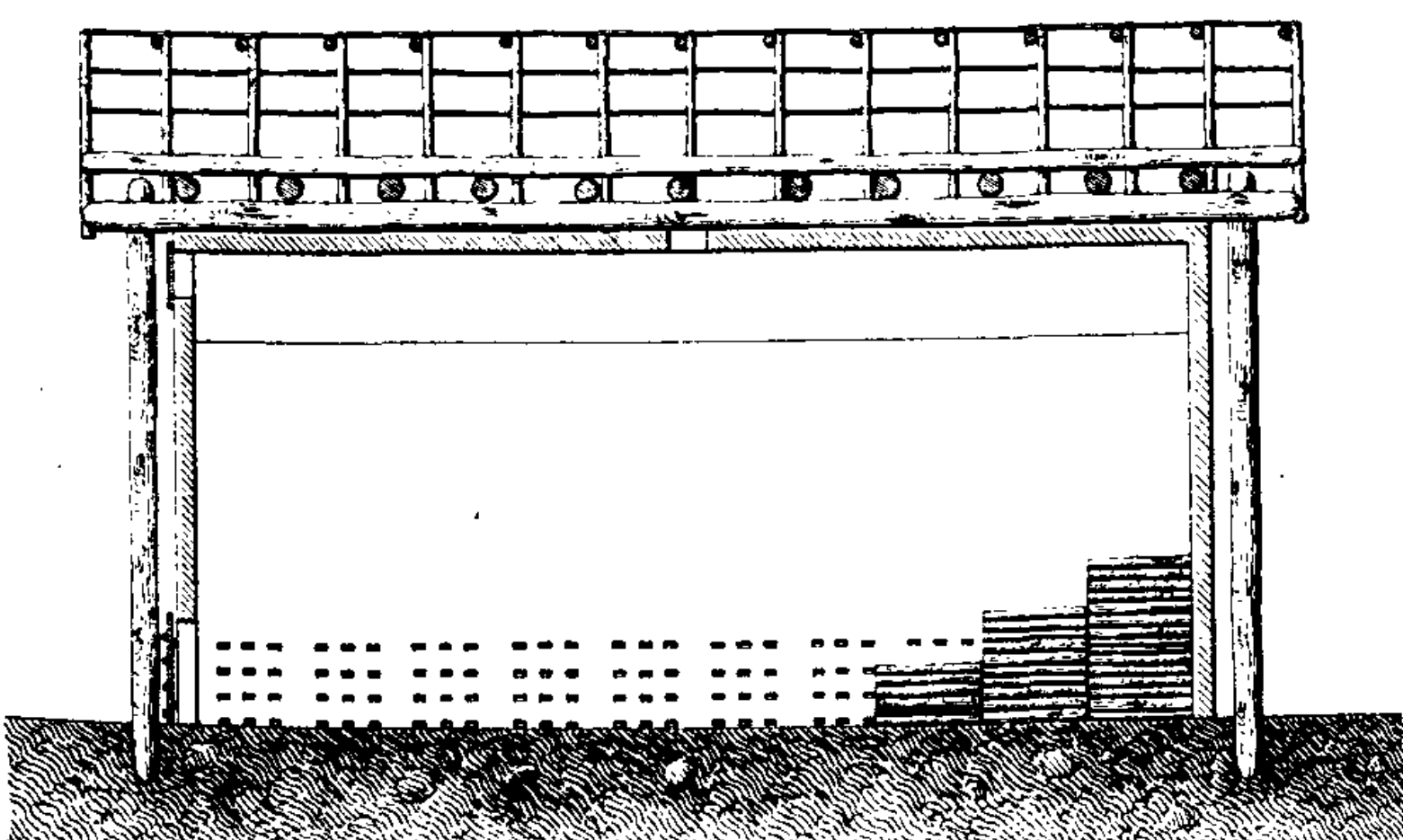
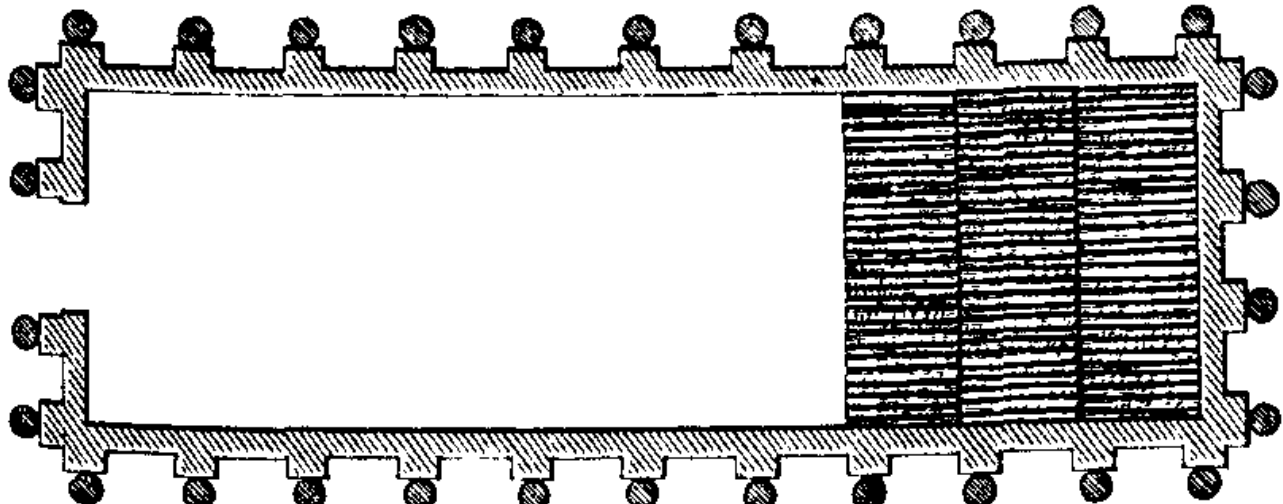


Fig. 12.  
Plan.



Générateur à houille et lignite

des forges de Cran  
près Annecy (Savoie)

Fig. 13.

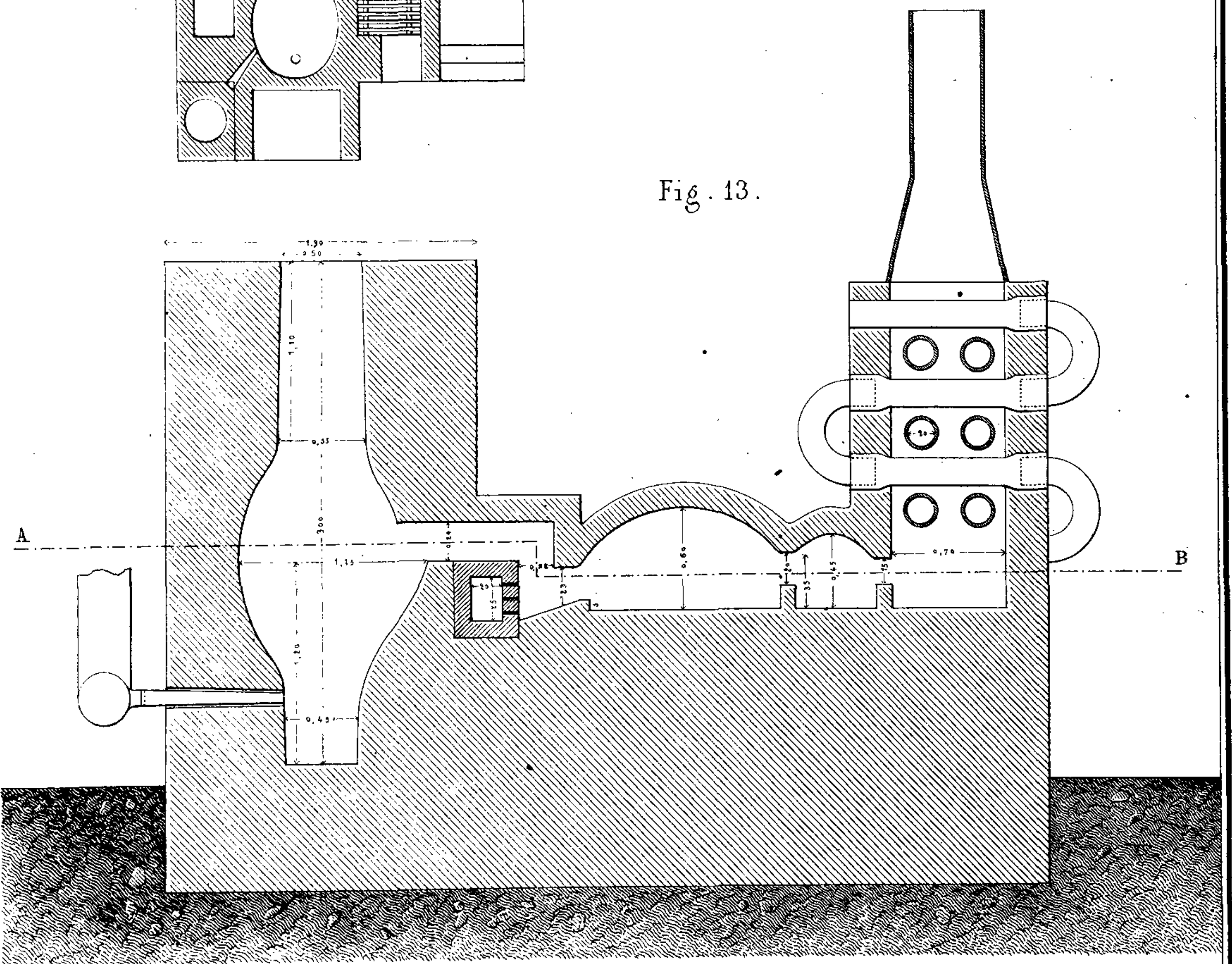
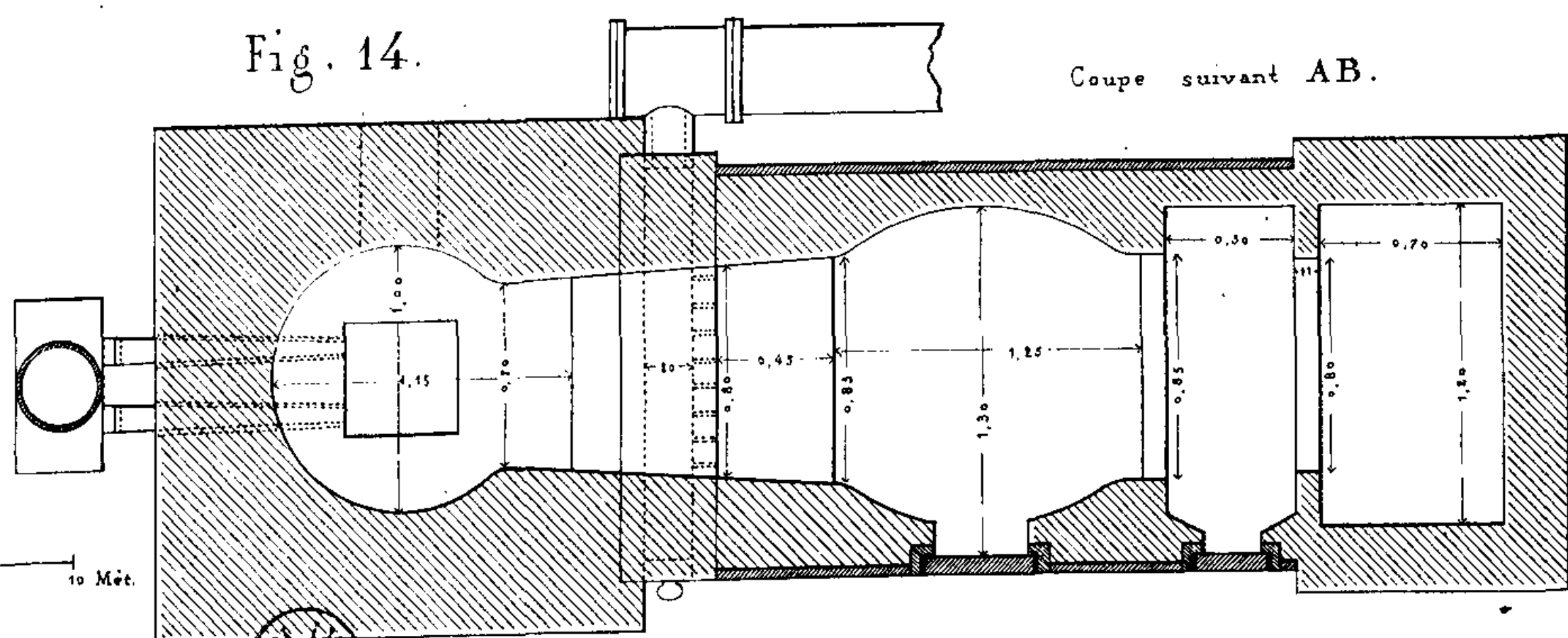
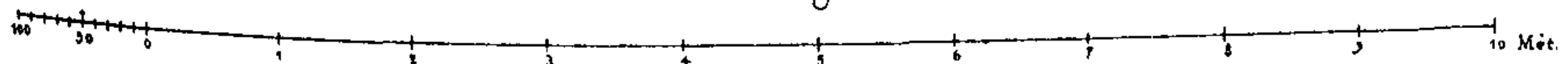


Fig. 14.

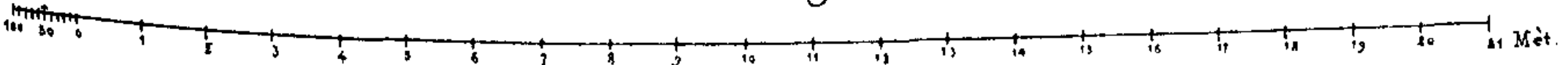
Coupe suivant AB.



Echelle des Fig. 1 à 10.



Echelle des Fig. 11 et 12.



Echelle des Fig. 13 et 14.

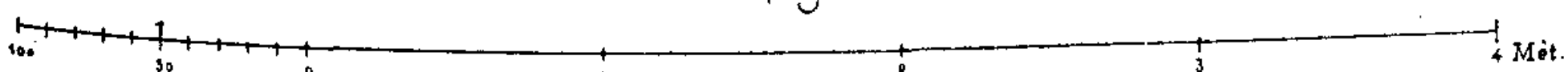
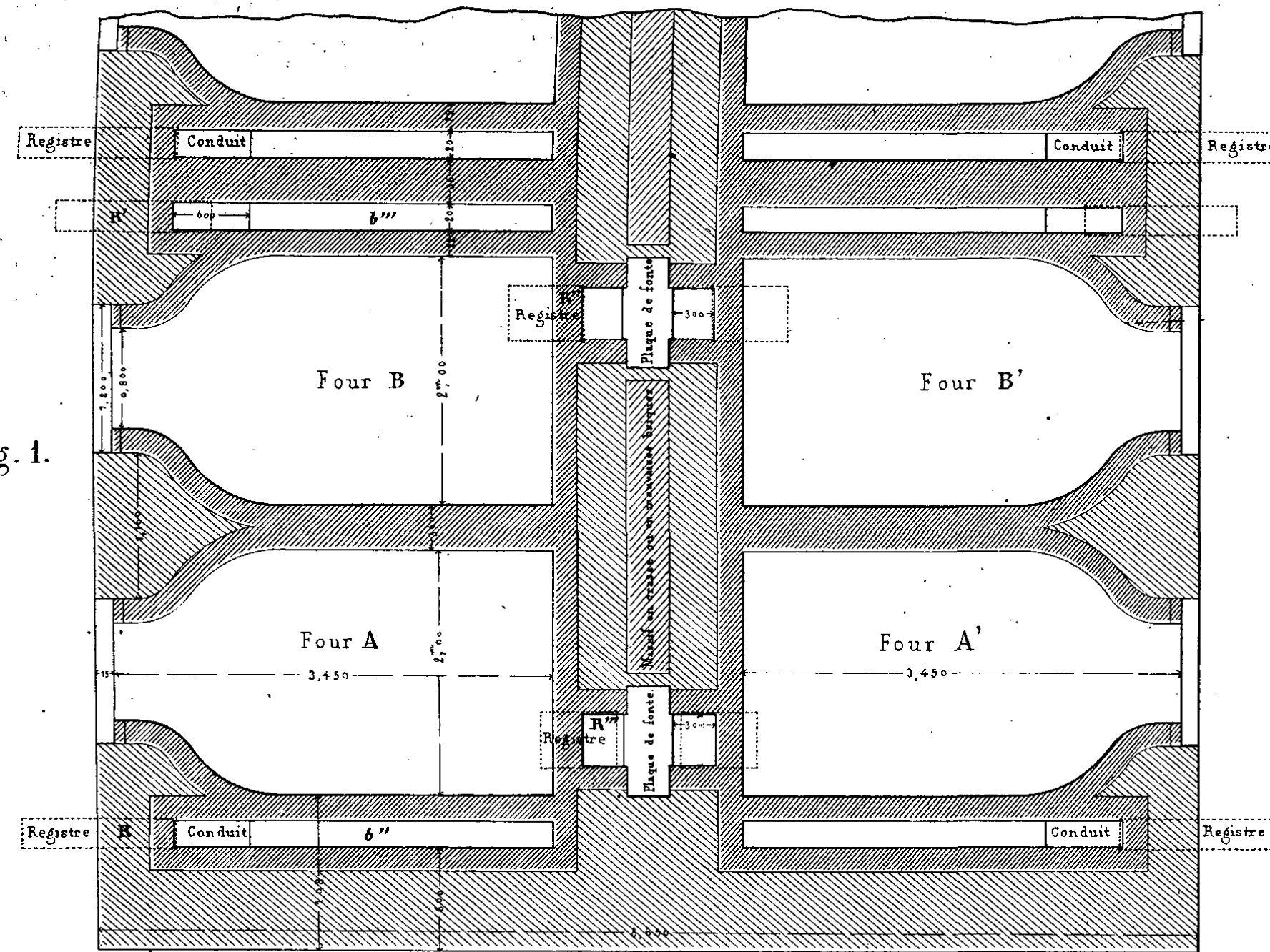








Fig. 1.



Grands fours accouplés à sole chauffée  
(1<sup>er</sup> Système de Carbonisation)

Fig. 2.

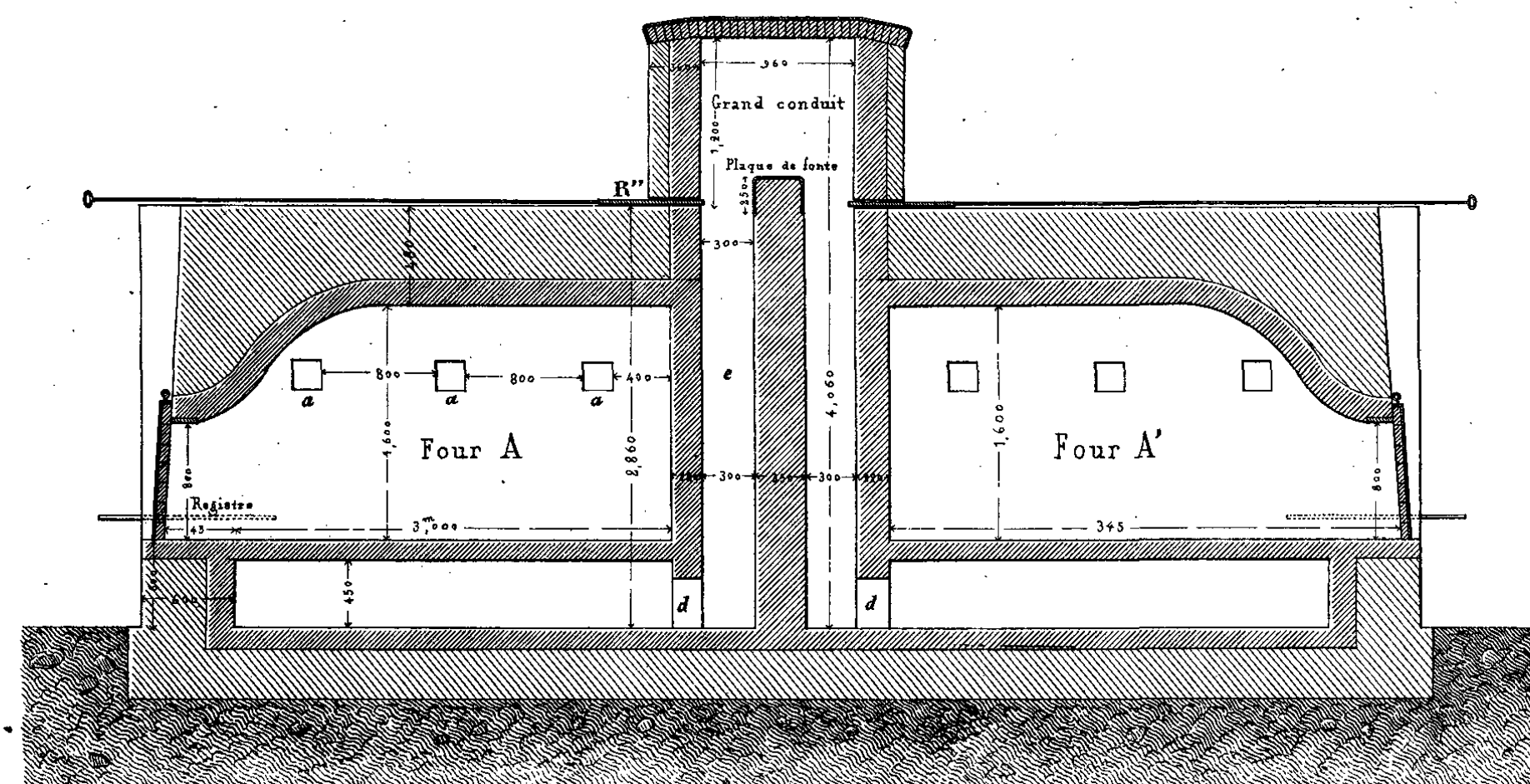
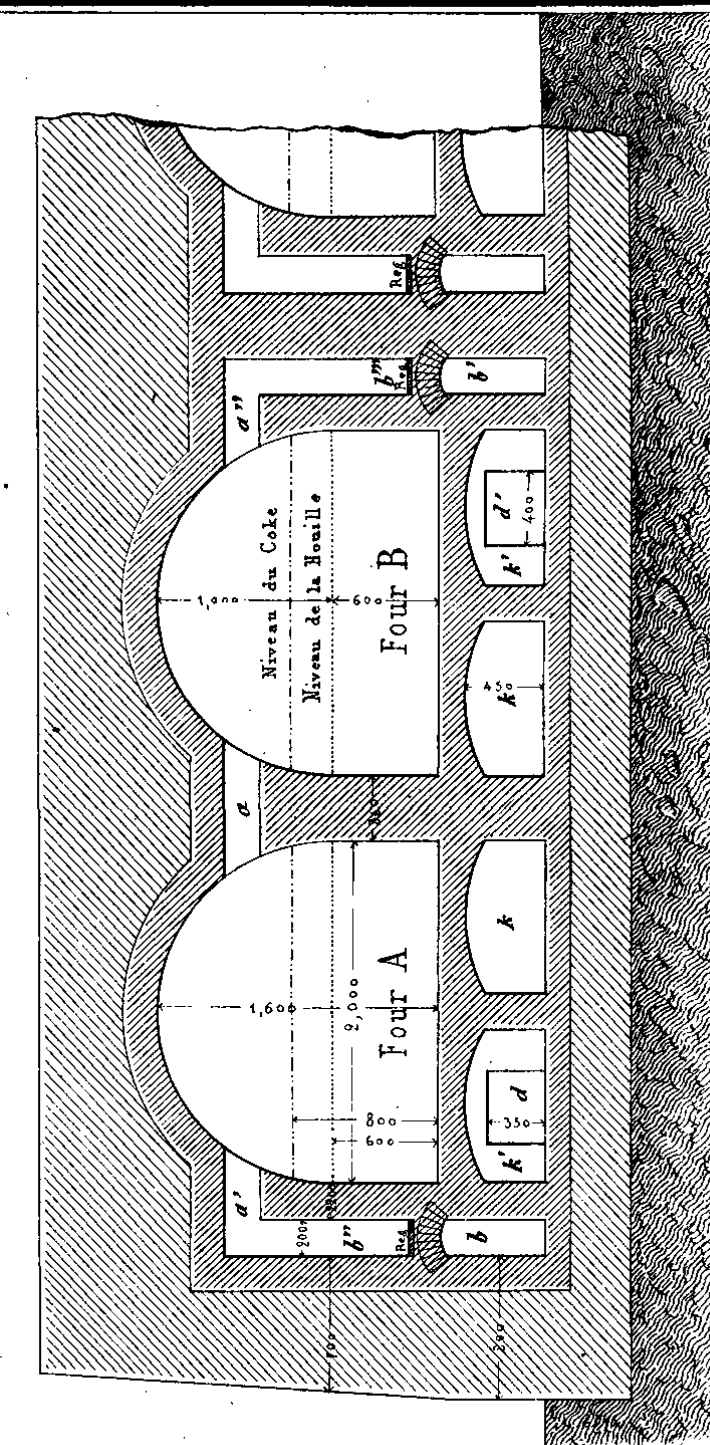


Fig. 3.



Petits fours accouplés à sole chauffée  
(Nouveau modèle.)

2<sup>ème</sup> Genre du 2<sup>ème</sup> Système.

Fig. 6.

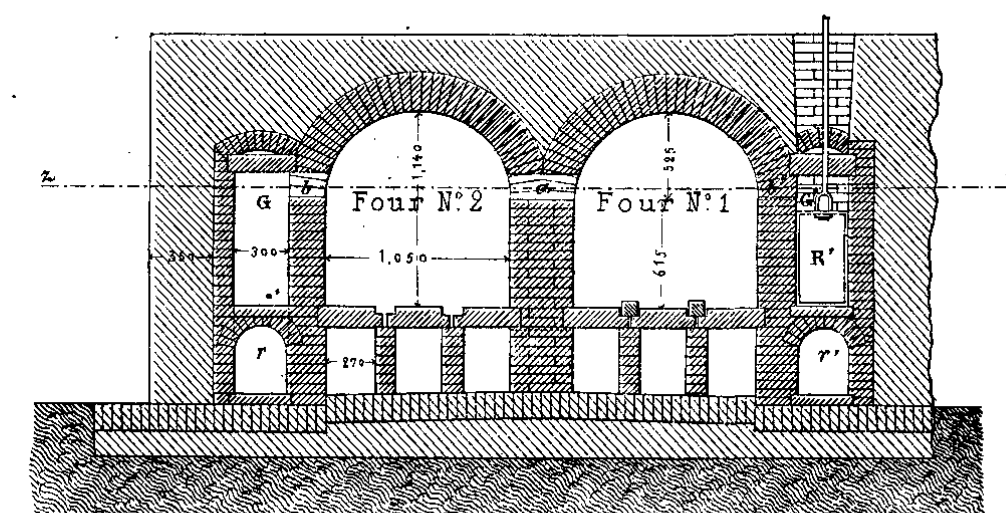


Fig. 5.

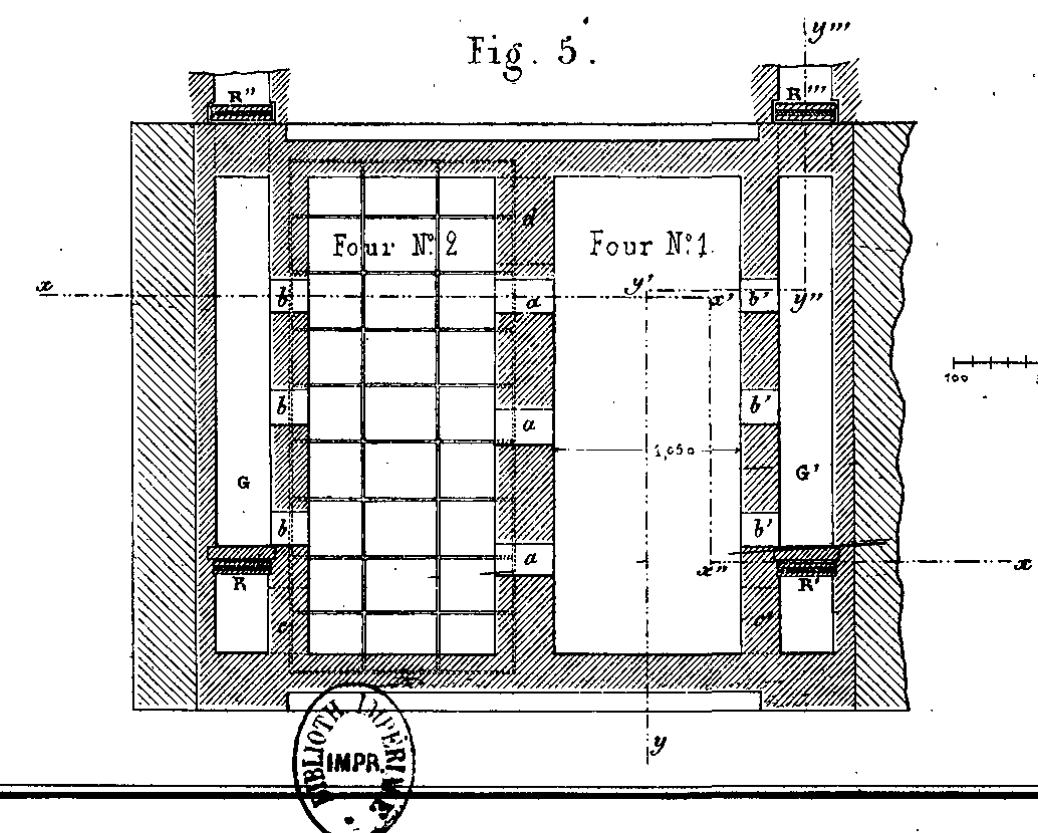


Fig. 4.

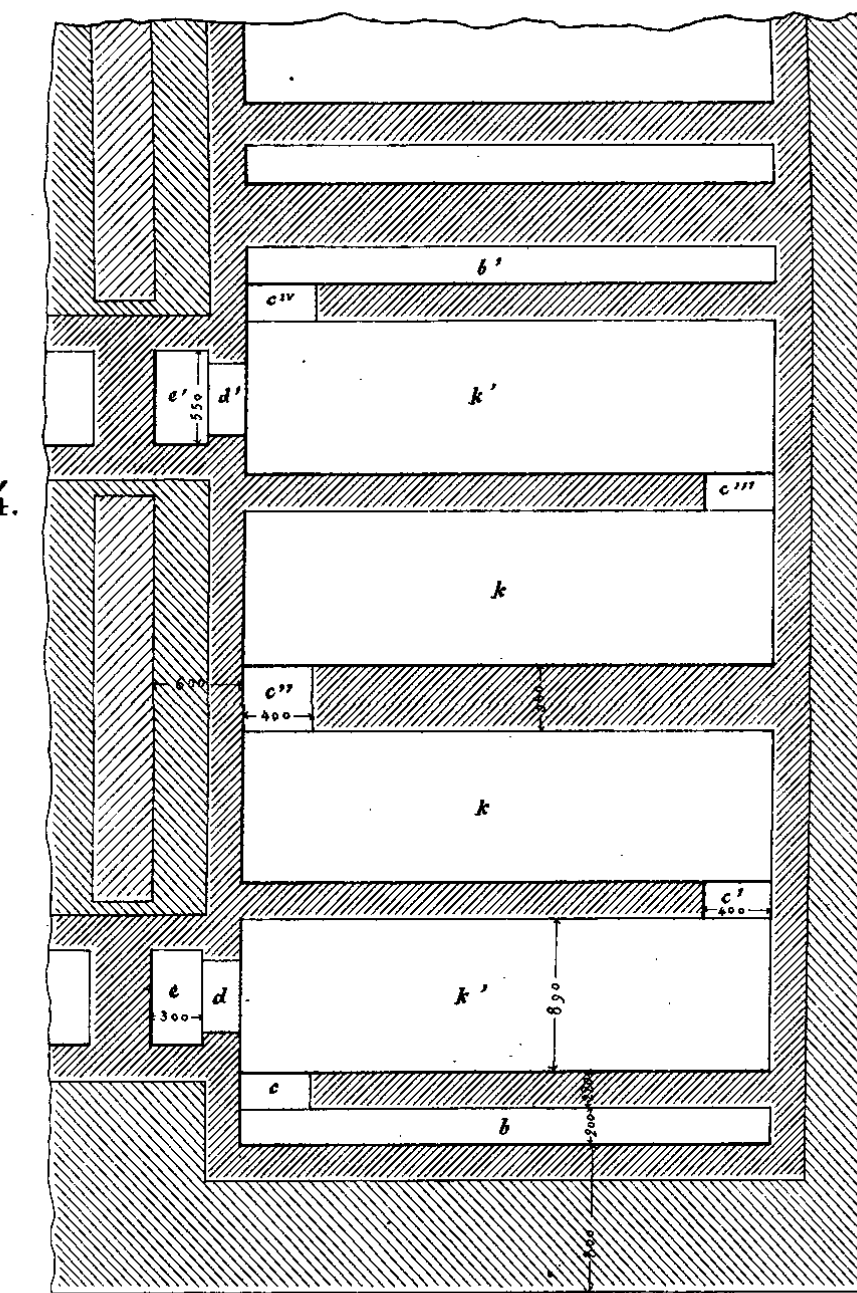
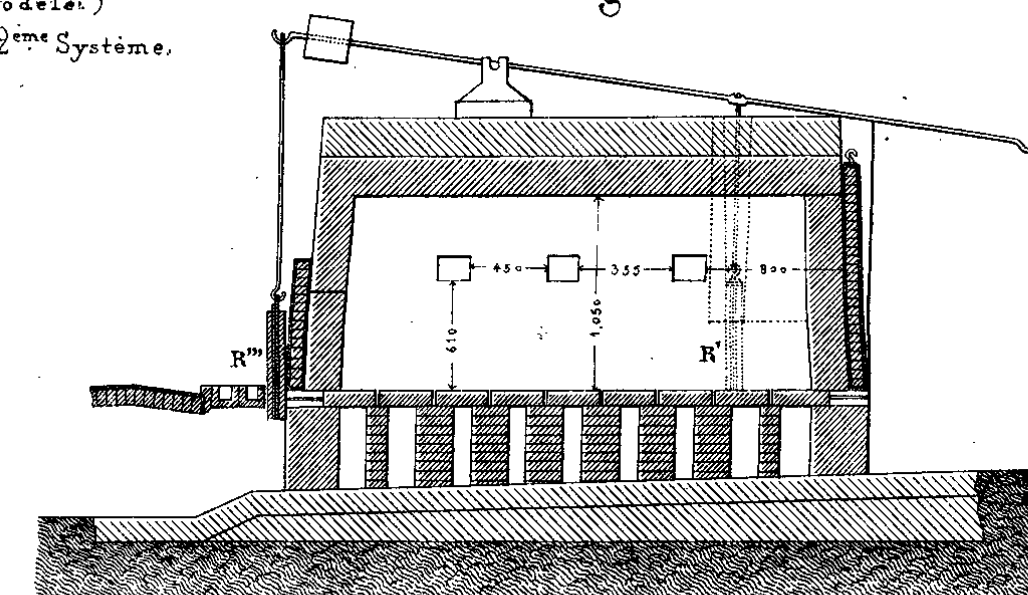


Fig. 7.



Les figures 5, 6, 7 ont été, par erreur, indiquées sur le texte,  
page 471, sous les N<sup>os</sup> 1, 2 et 3.

Echelle

100 50 0 1 2 3 4 5 6 Mètres







Fig. 1.

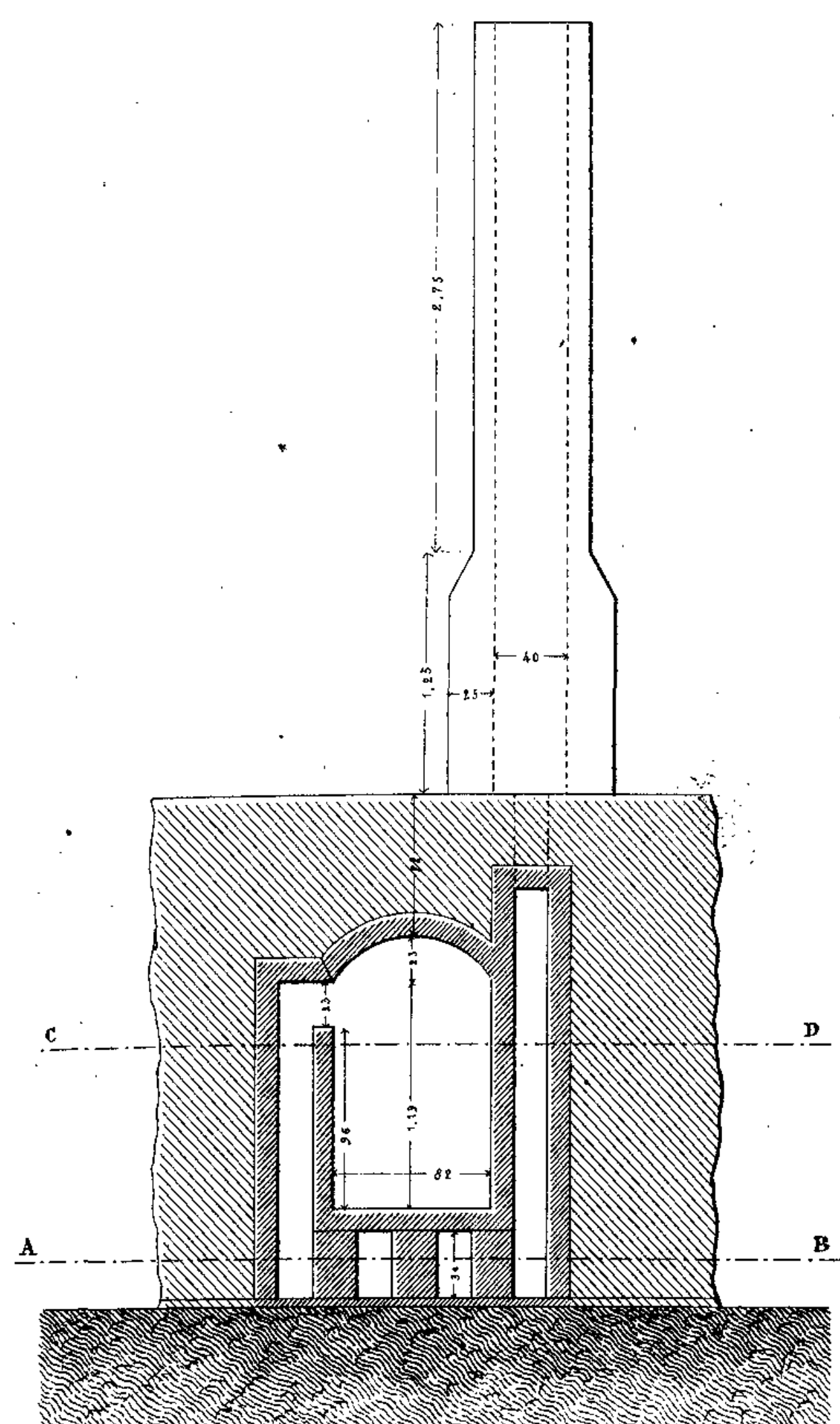


Fig. 5.

Petits fours  
de M. Forey.

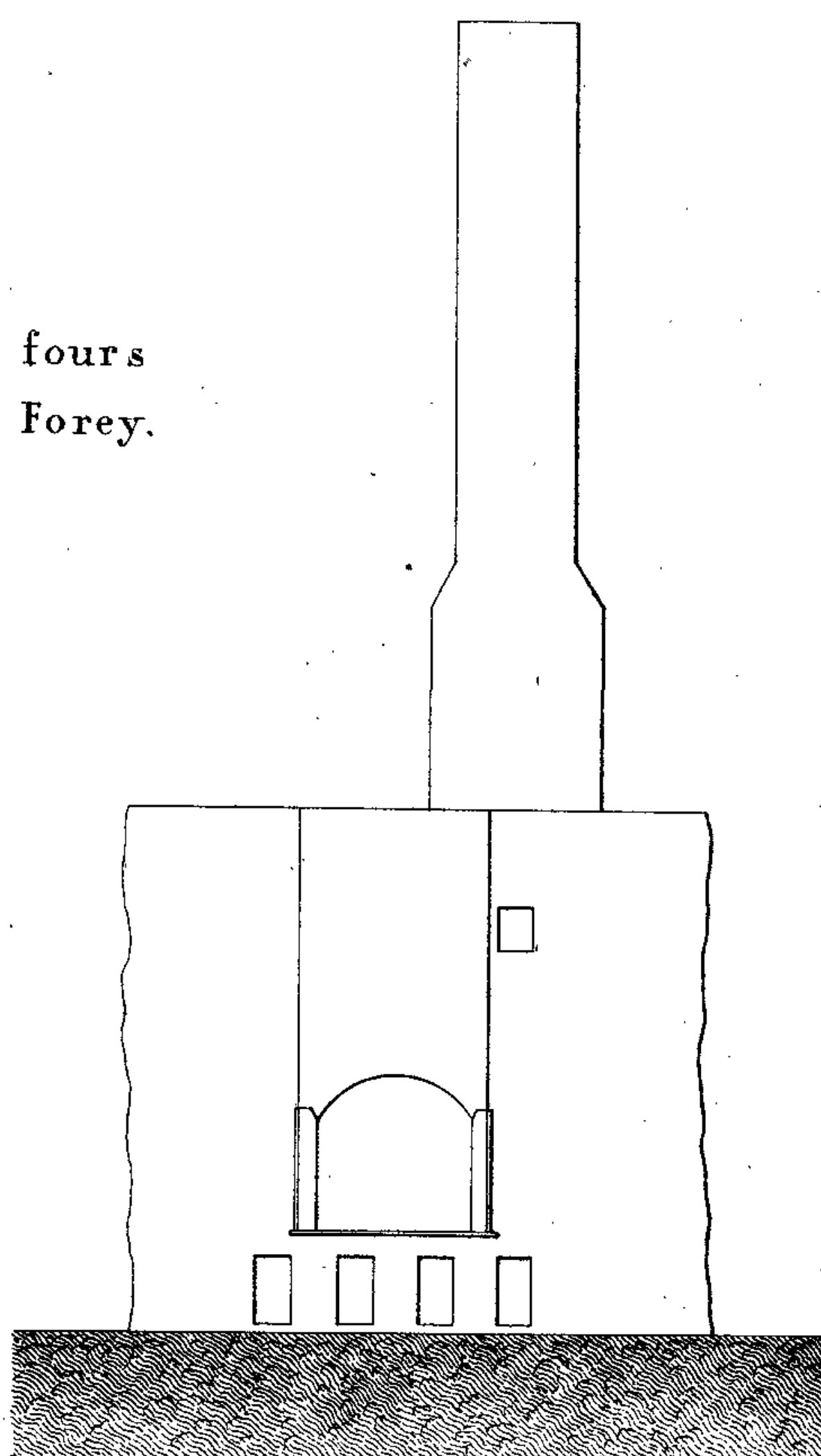


Fig. 2.

2<sup>me</sup> Système  
3<sup>me</sup> Genre.

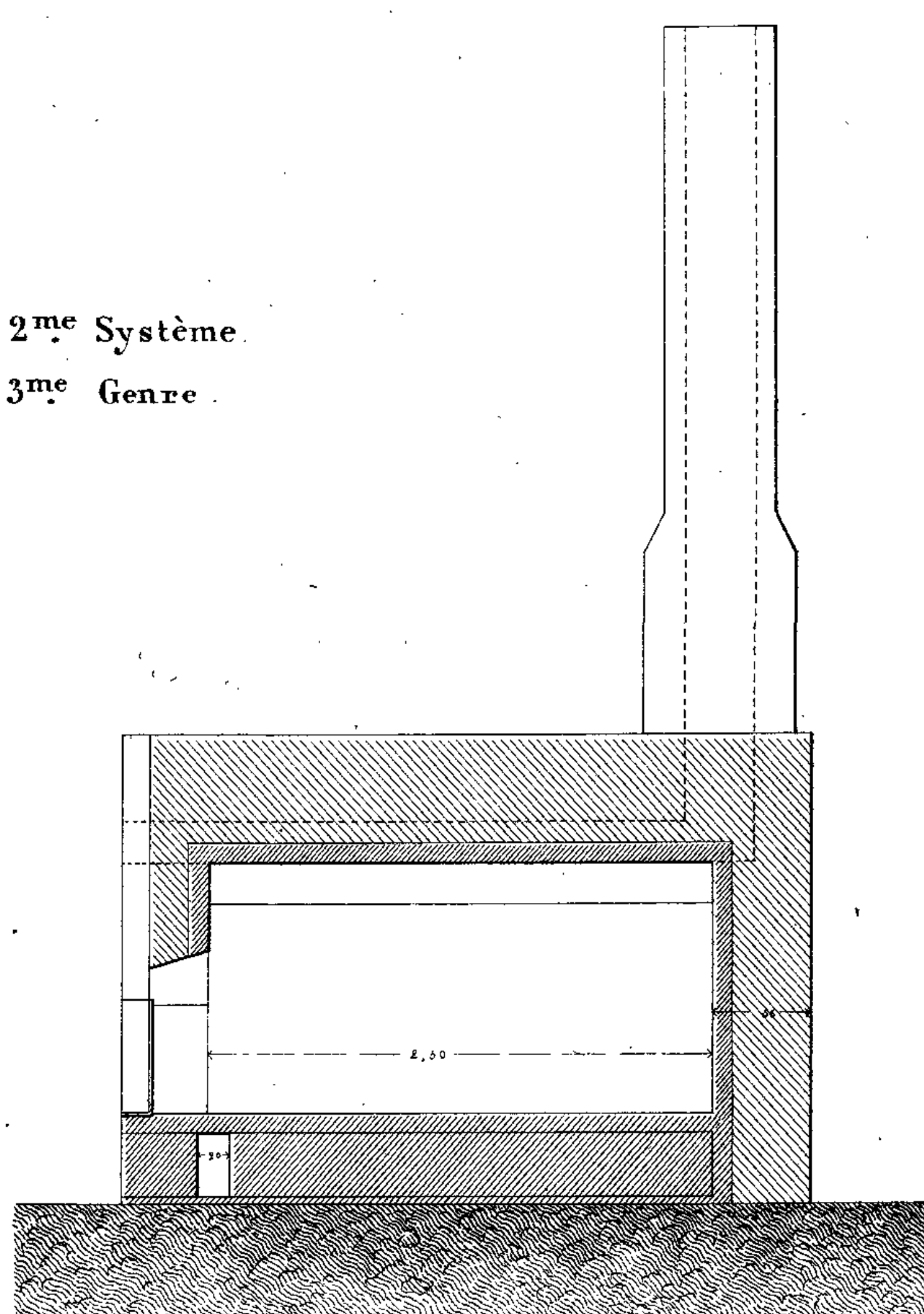


Fig. 3.

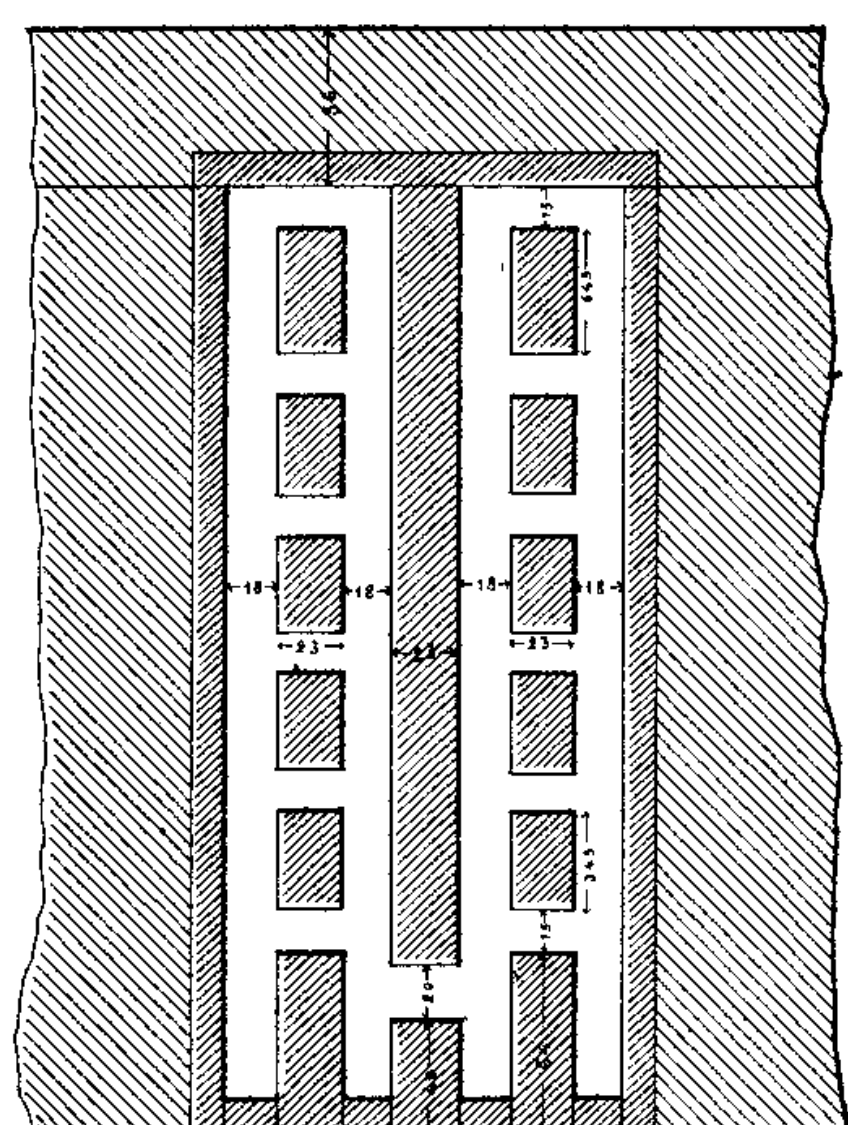


Fig. 4.

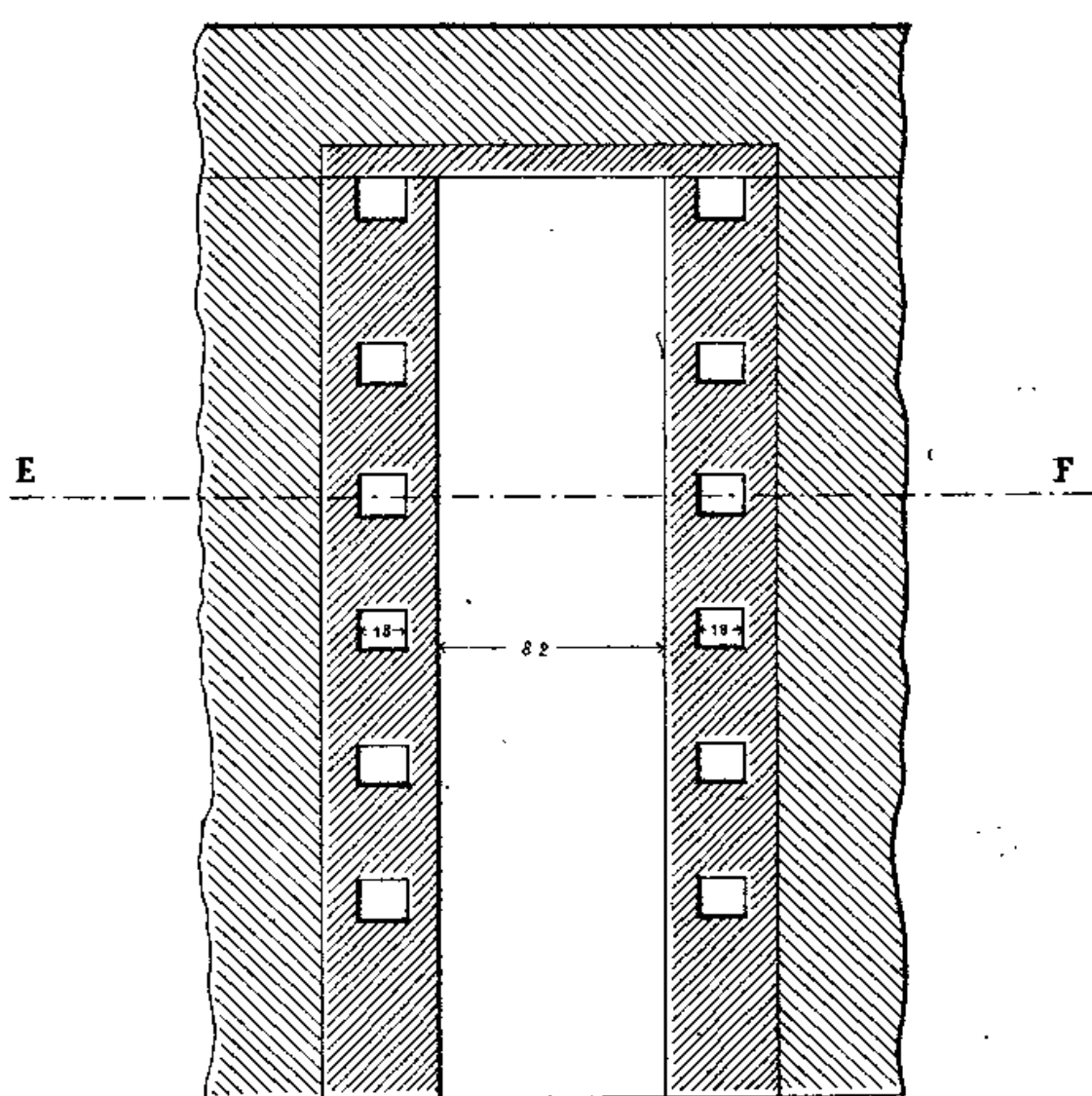
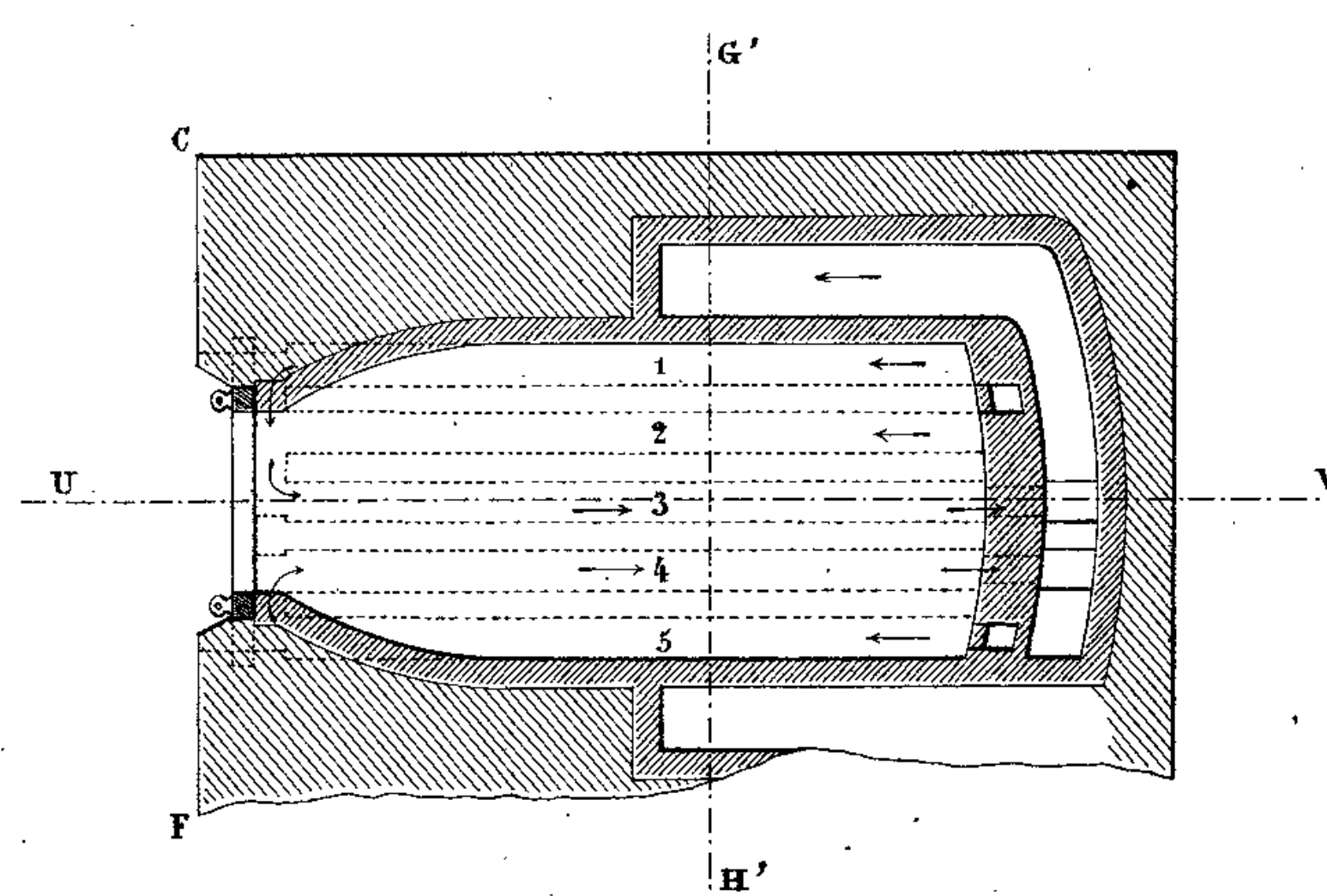


Fig. 8.



Fours Belges. 2<sup>me</sup> Système, 4<sup>me</sup> Genre.

Fig. 7.

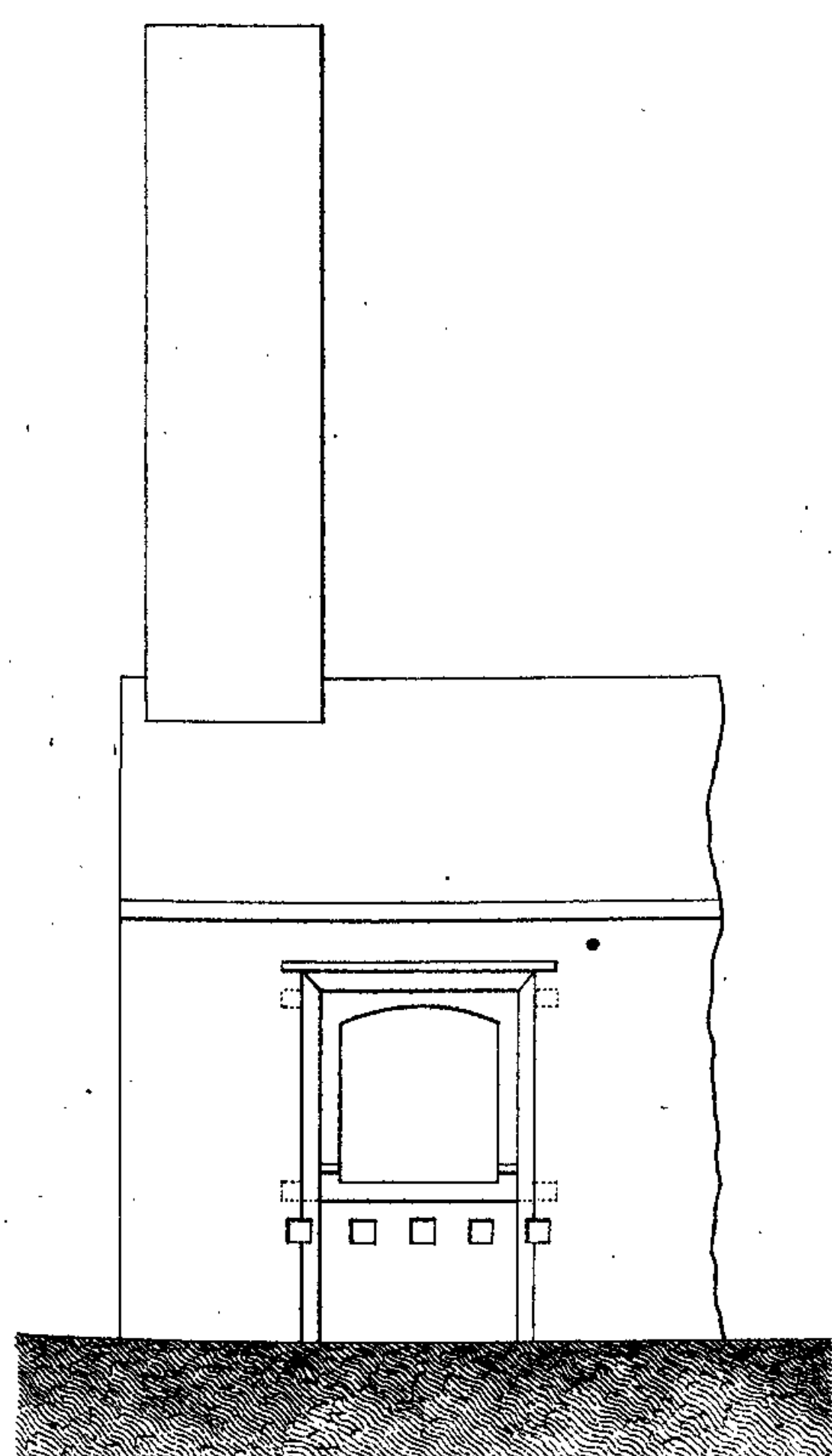


Fig. 9.

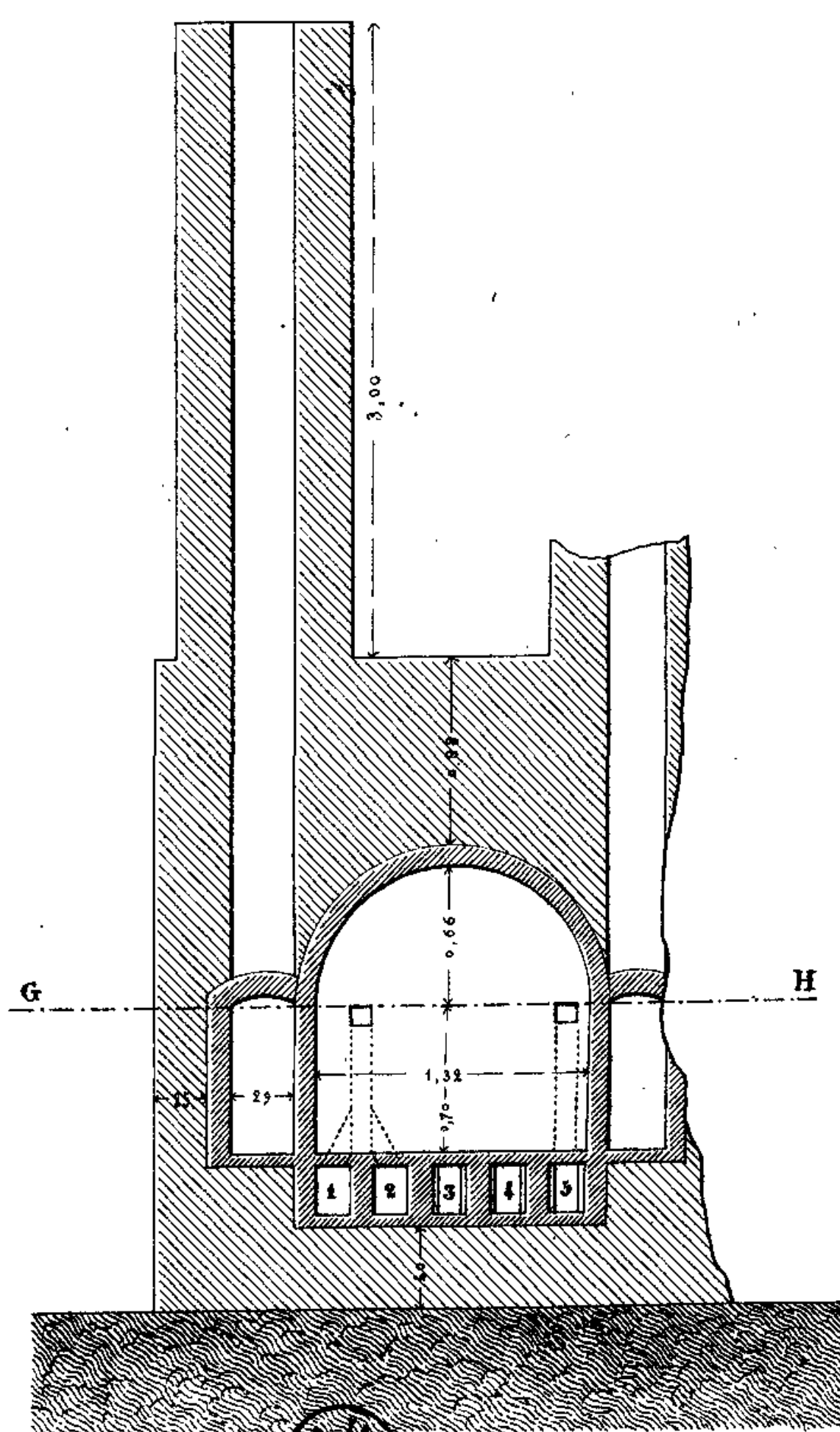
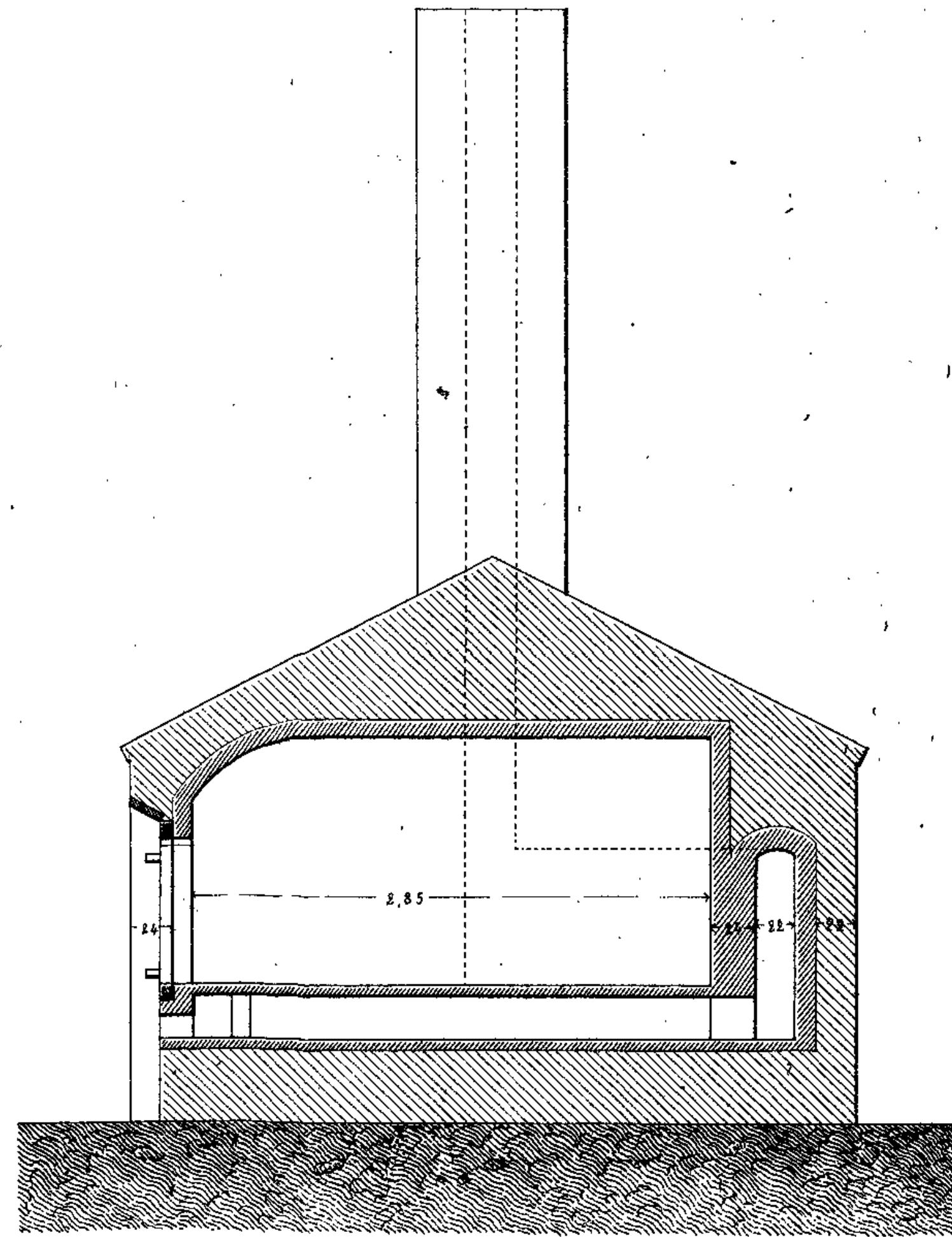
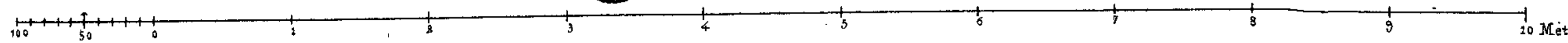


Fig. 6.



Echelle.

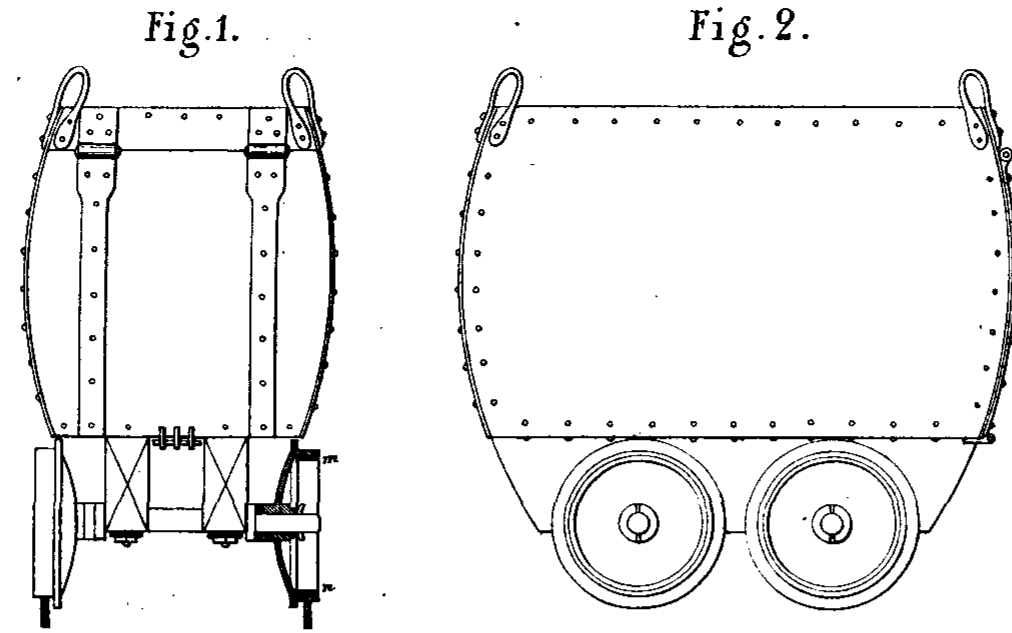




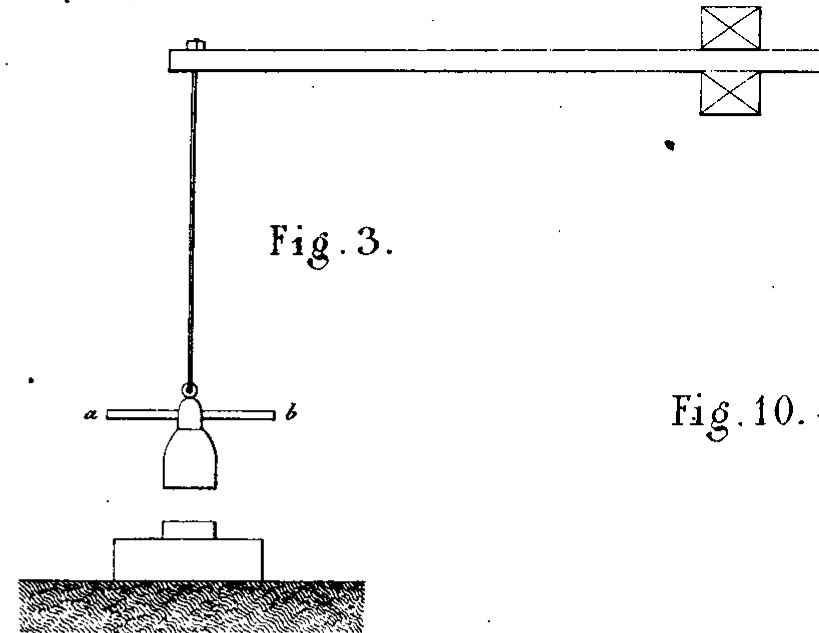




Wagons en tôle.

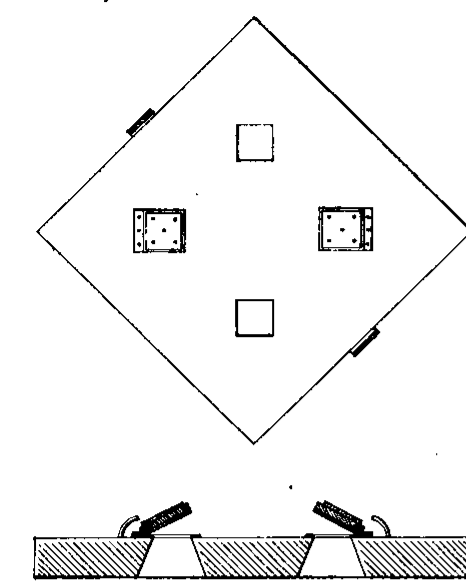


Marteau à ressort pour le cassage du minéral.



Piston du Crible mécanique.

Fig. 10.



Trommels classeurs et débourbeurs

Fig. 4.

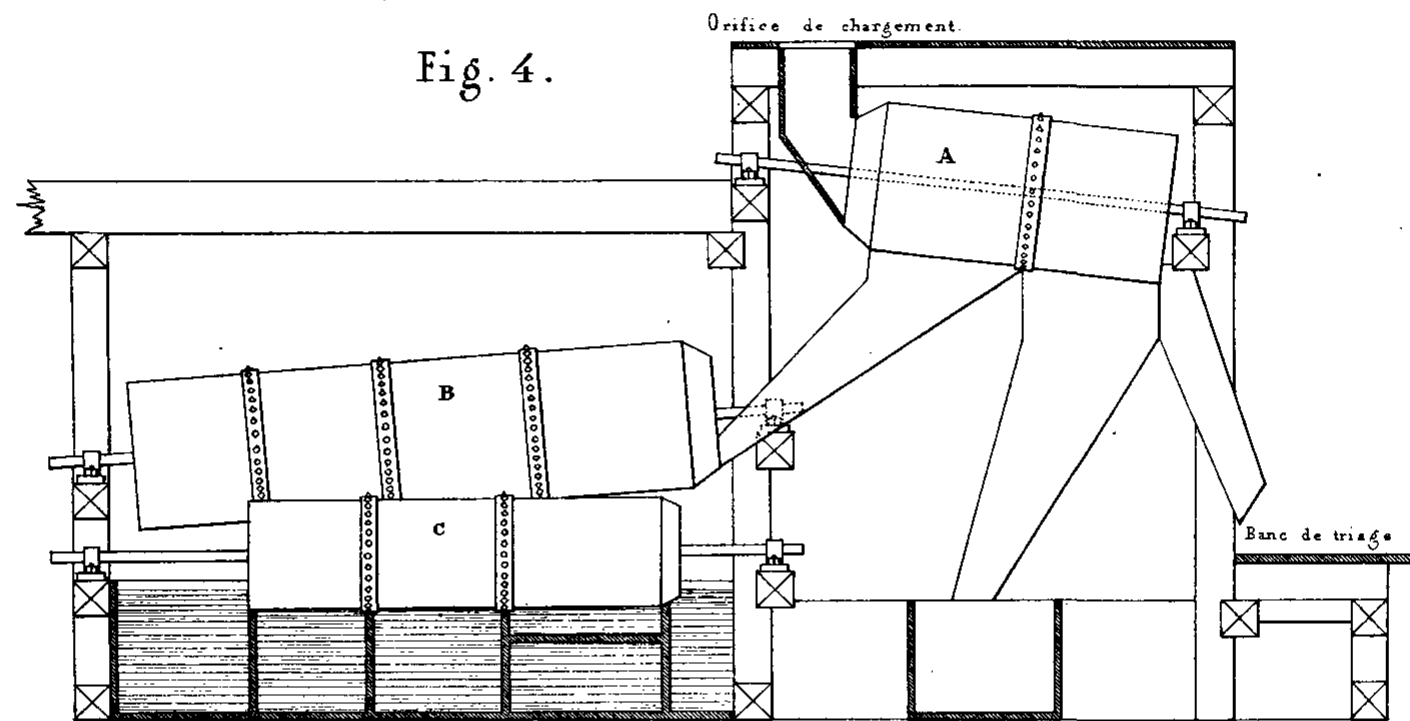


Fig. 5.

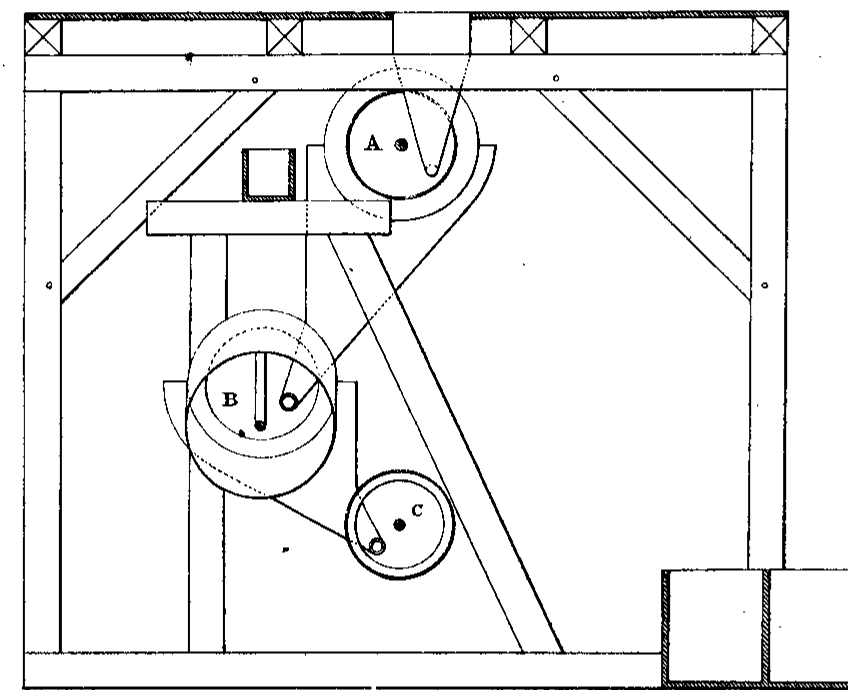


Fig. 6.

Crible à bras.

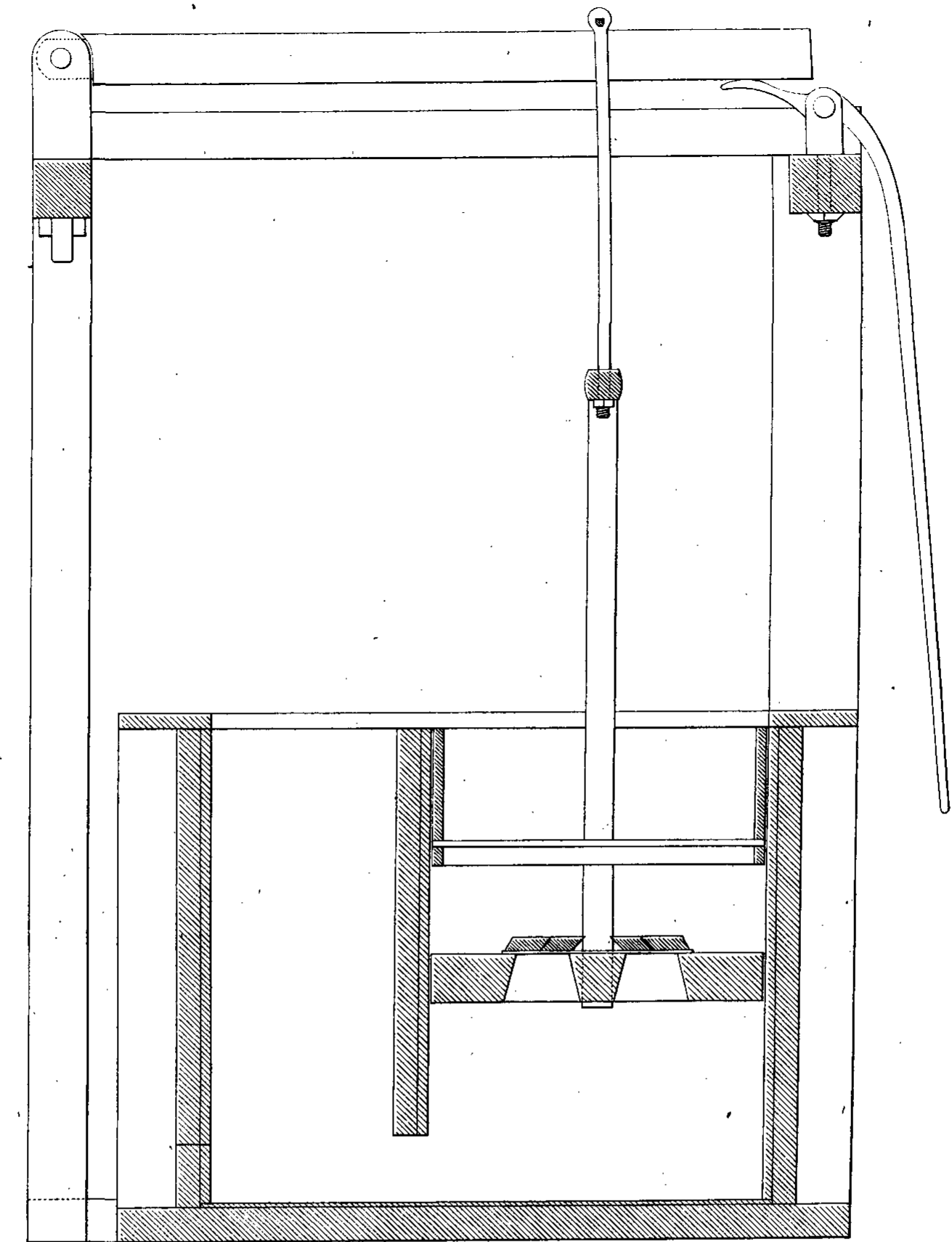


Fig. 8.

Crible mécanique.

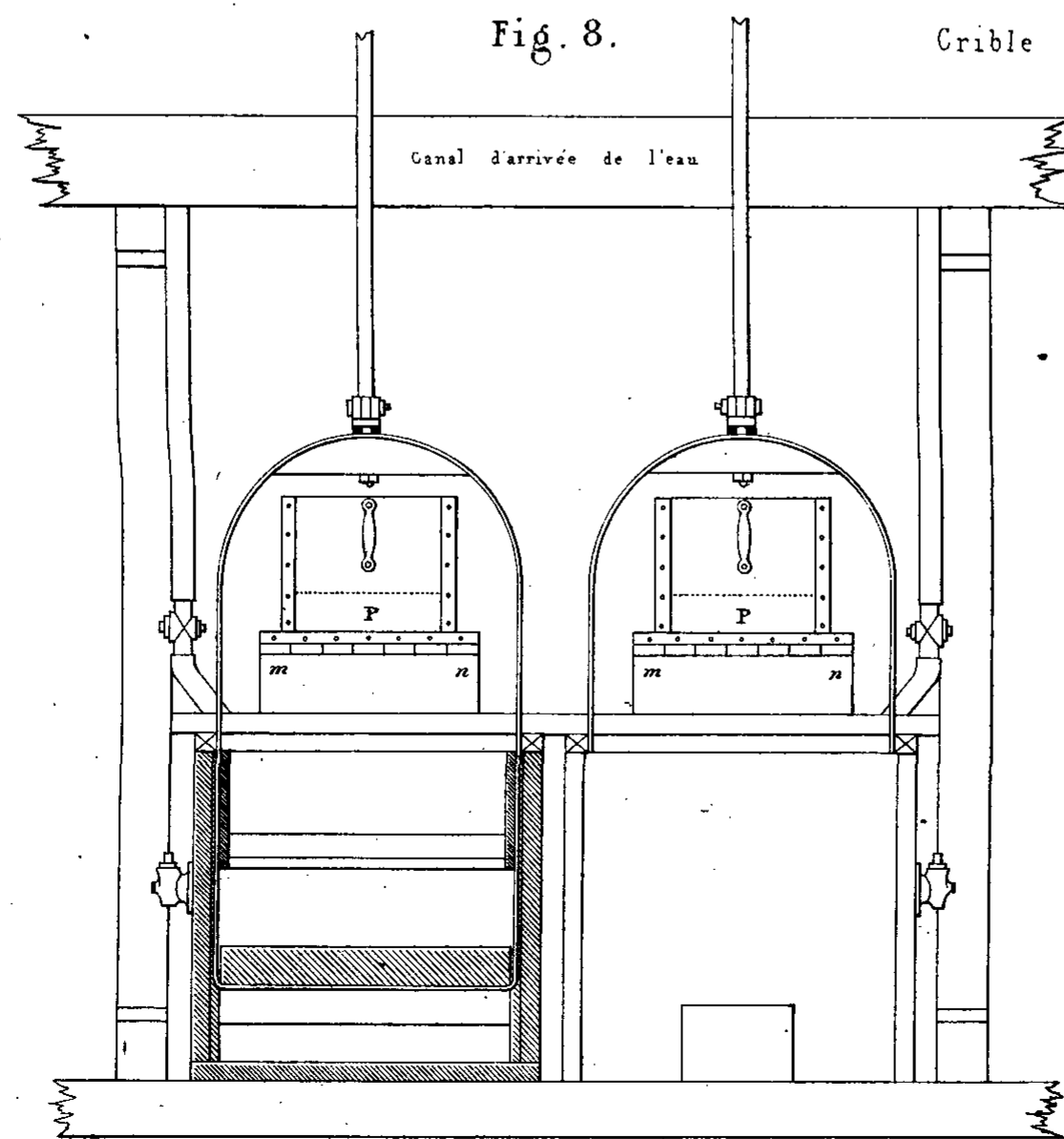
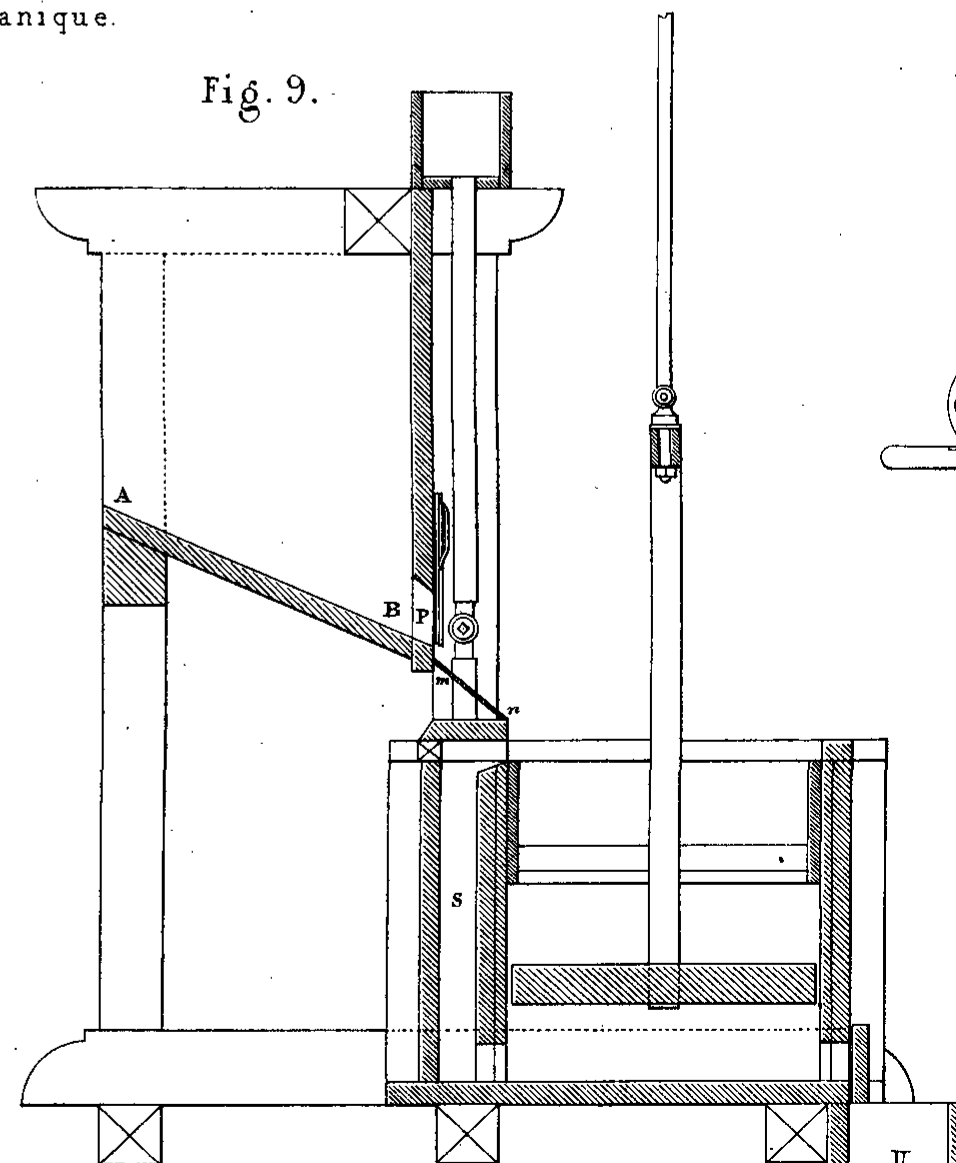


Fig. 9.



Cames des Cribles mécaniques.

Fig. 11.

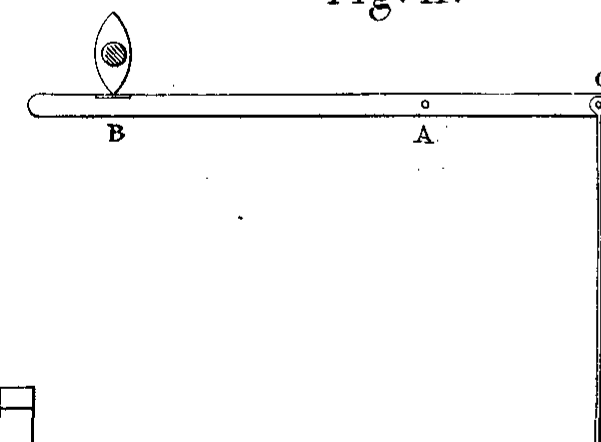
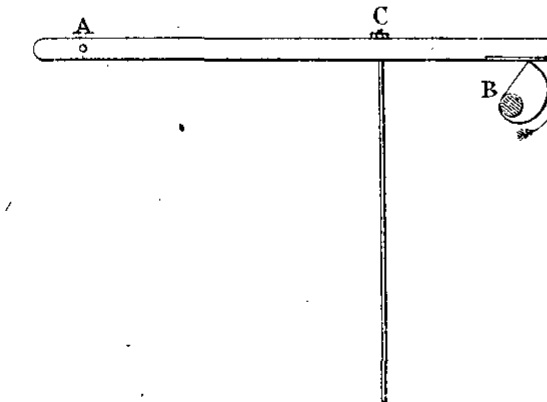
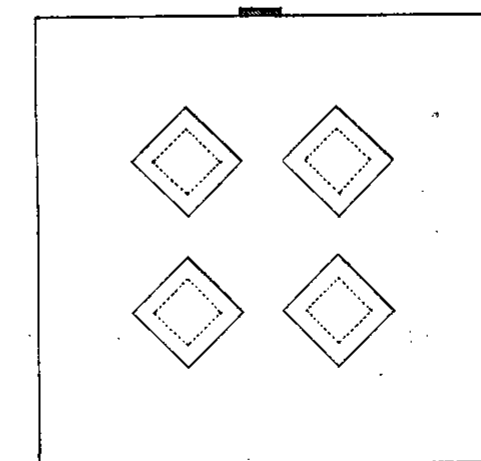


Fig. 12.

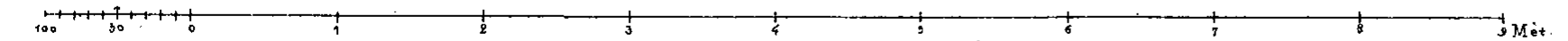


Piston du Crible à bras.

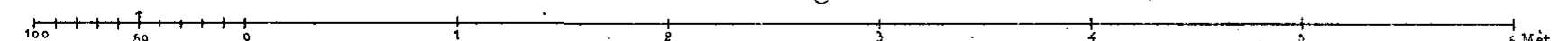
Fig. 7.



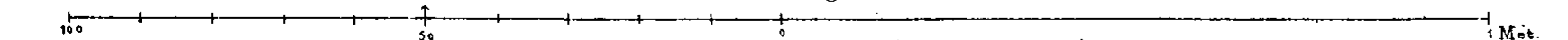
Echelle des Fig. 1 et 2



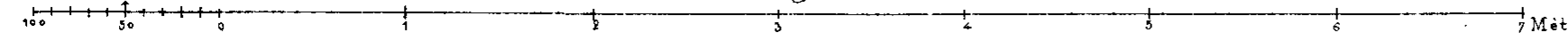
Echelle des Fig. 4 et 5.



Echelle des Fig. 6 et 7.



Echelle des Fig. 8, 9 et 10.









Round - Boddle

Fig. 1.

Coupe transversale.

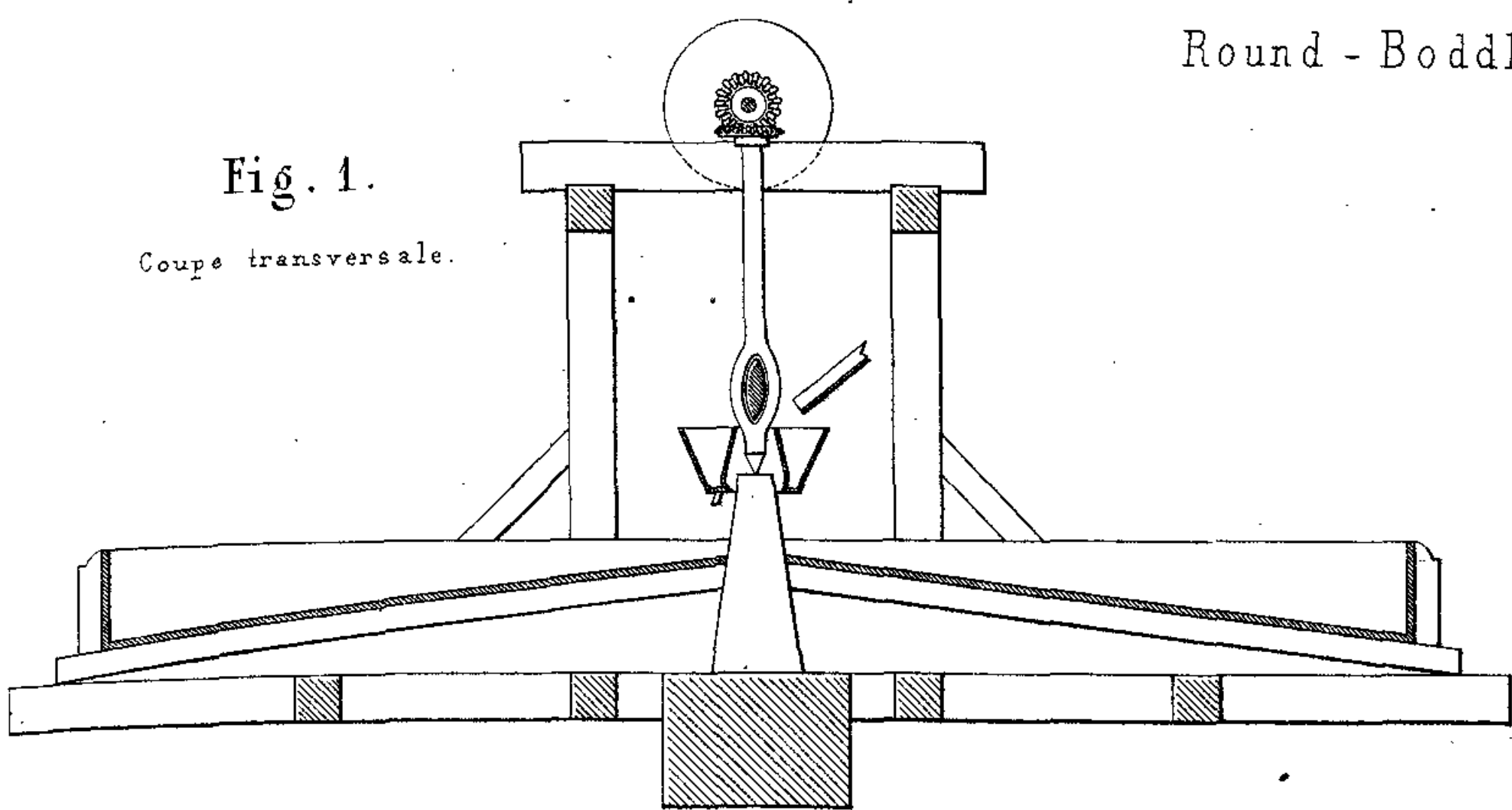
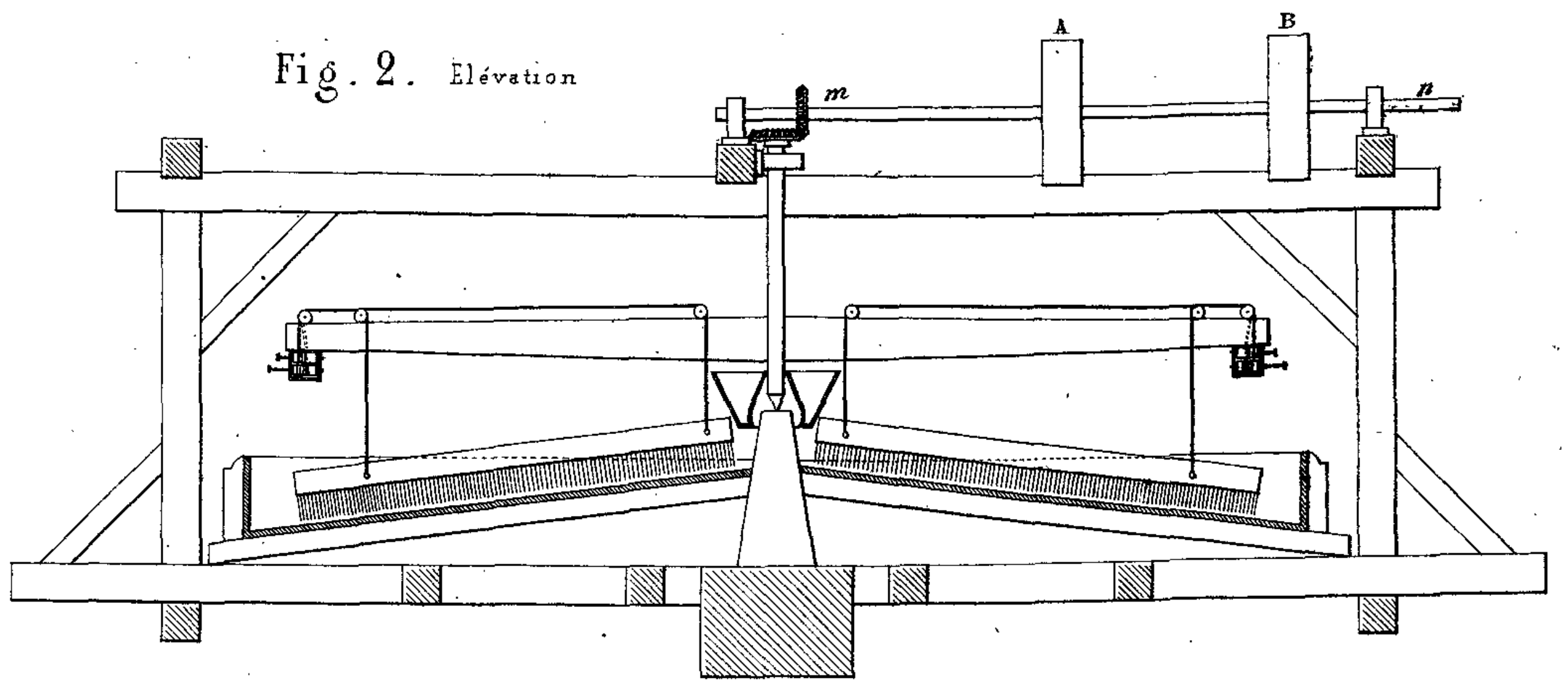


Fig. 2. Elevation



B Poulie transmettant le mouvement à l'arbre *m n*.

A Poulie de transmission pour l'agitateur placé dans la caisse où sont jetés les sables qui doivent passer sur la table.

Fig. 4.

Plan de la charpente de la table.

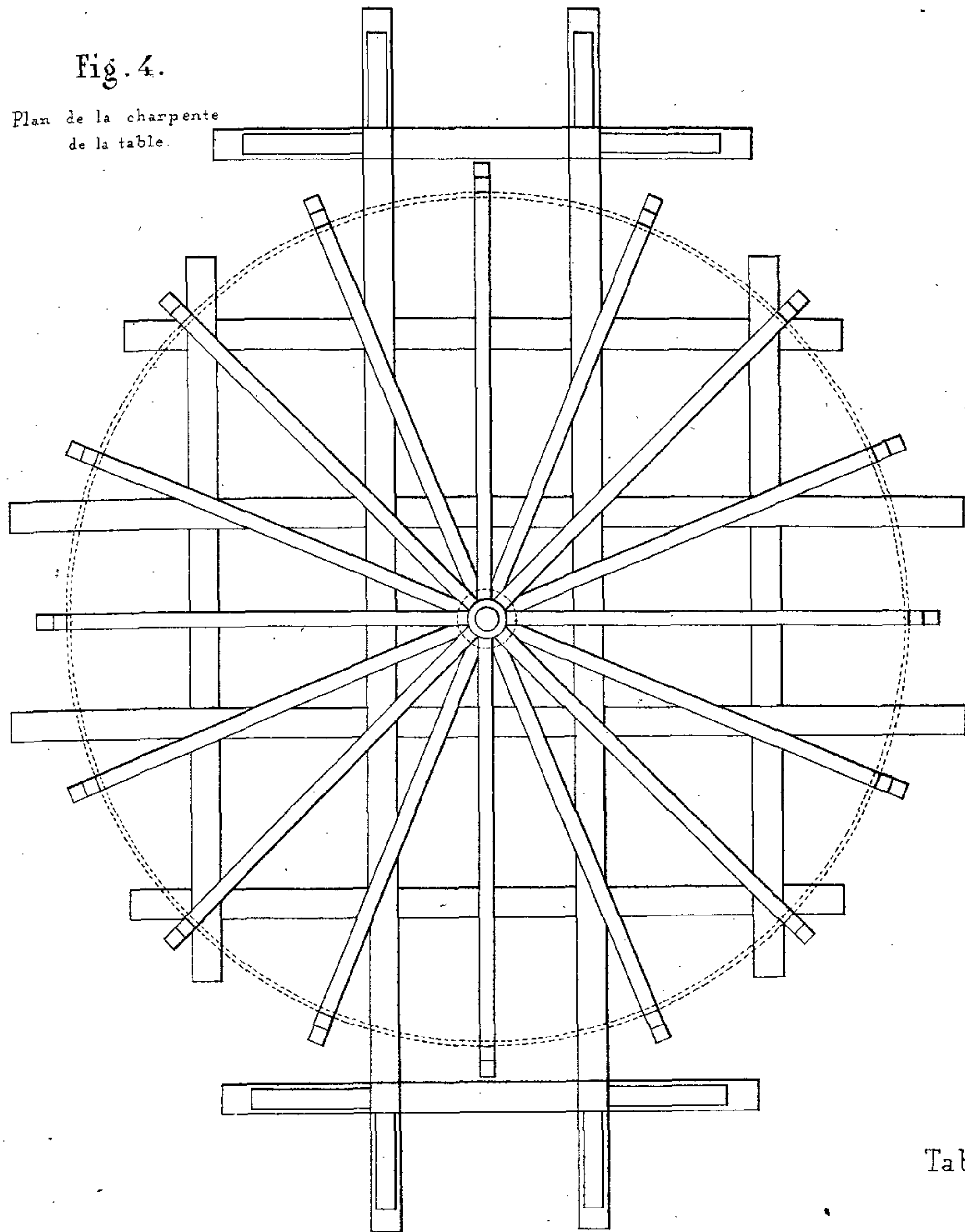


Fig. 3.

Plan.

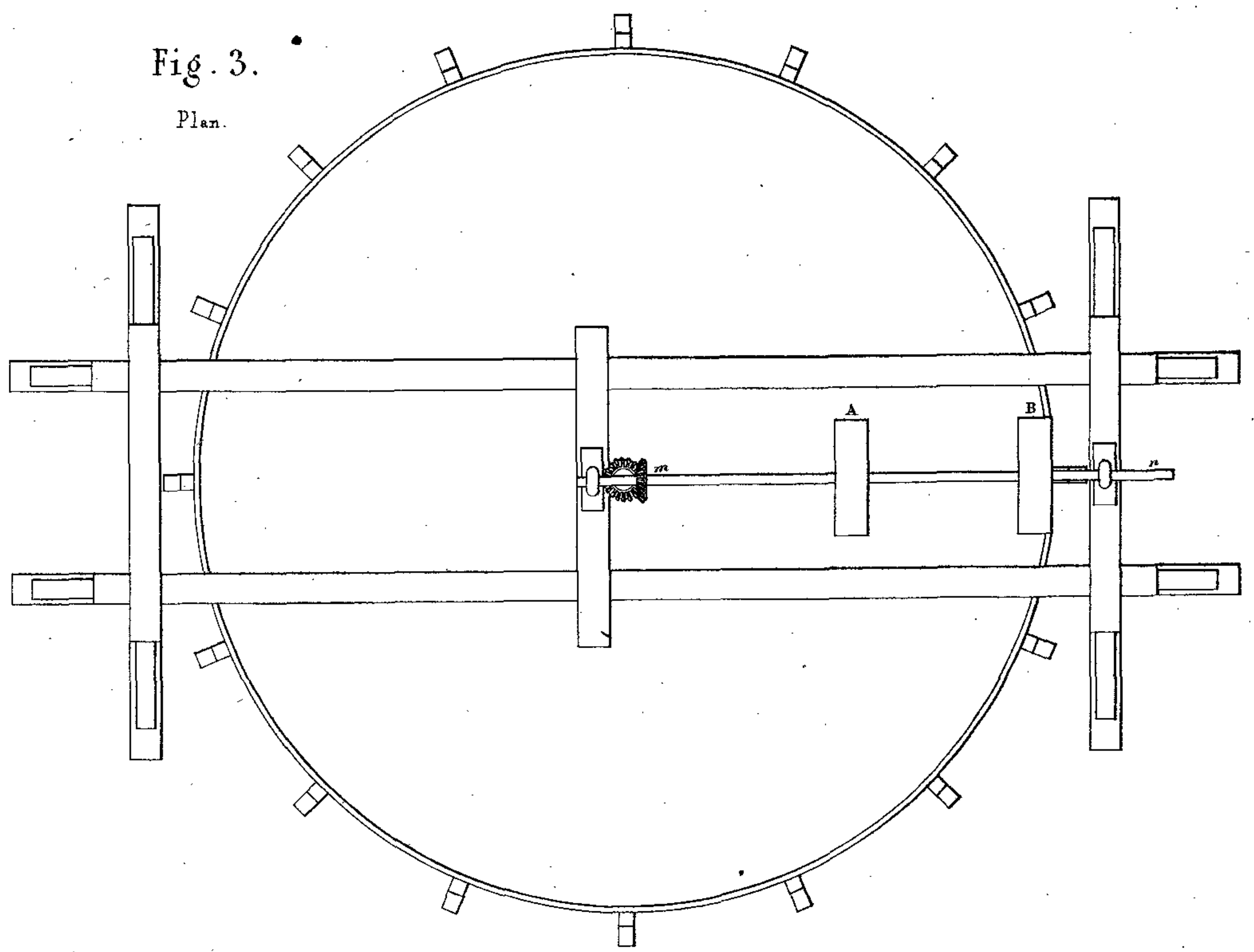


Table à secousses.

Fig. 5.

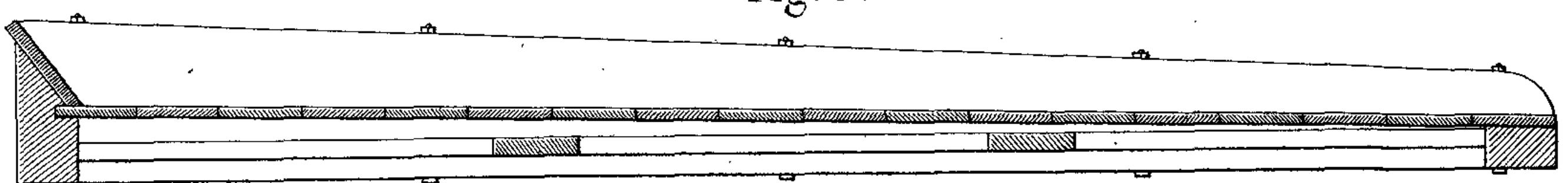


Fig. 6.

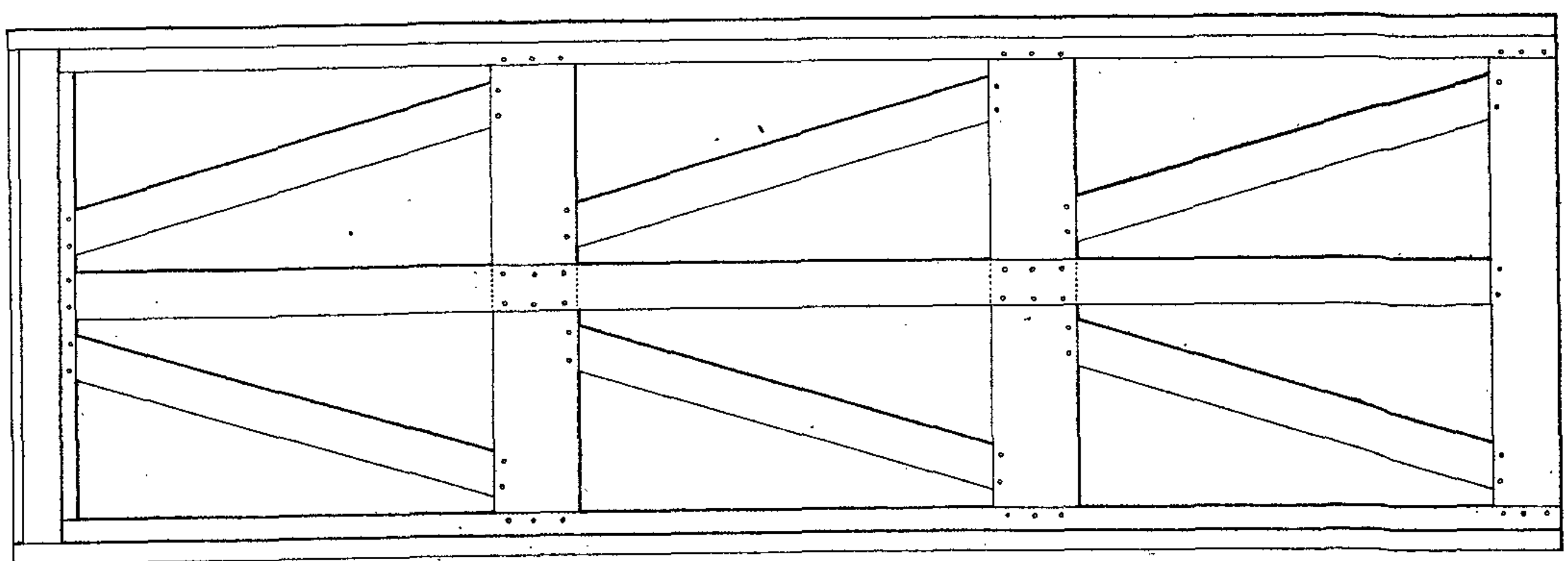


Fig. 7.

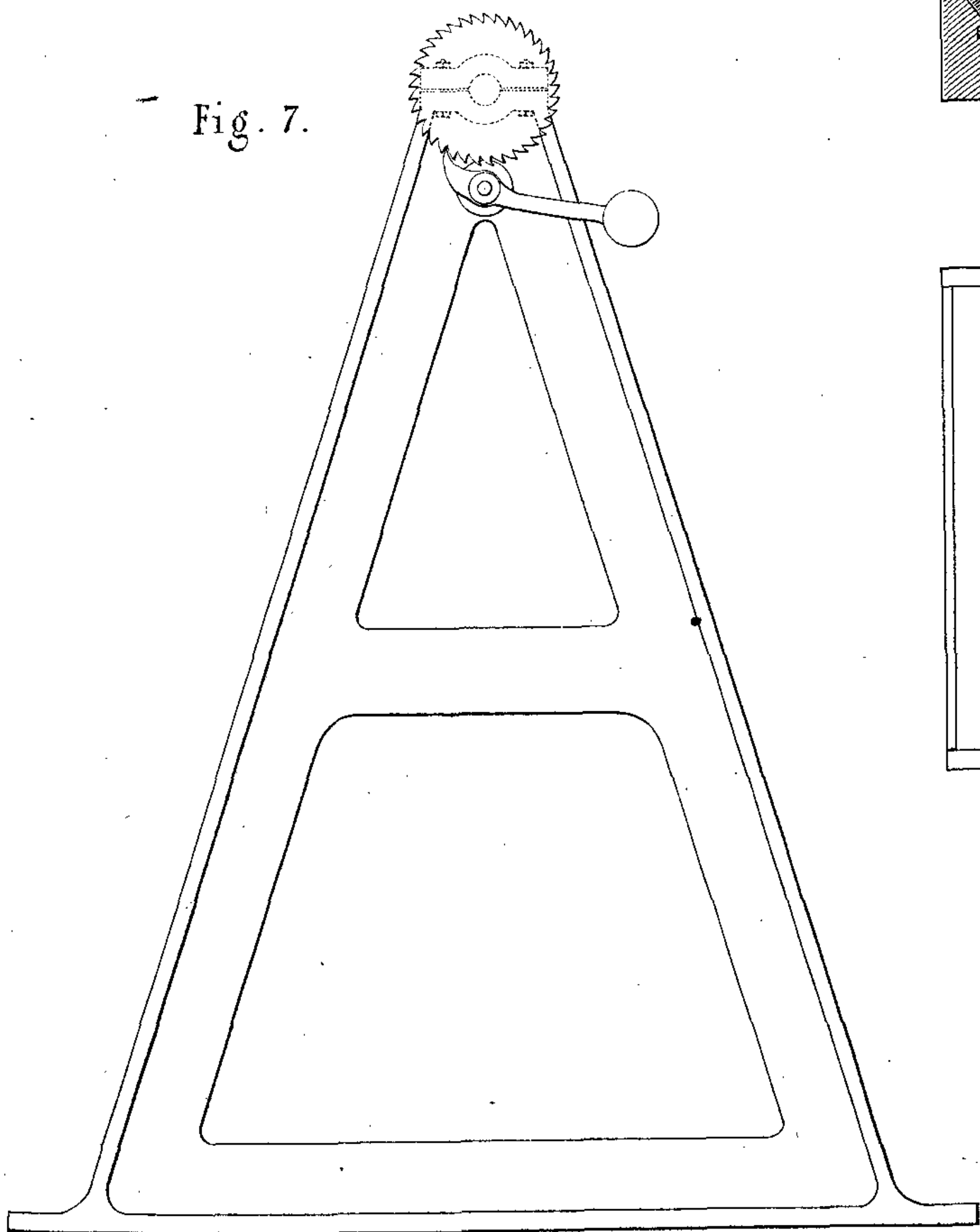


Fig. 8.

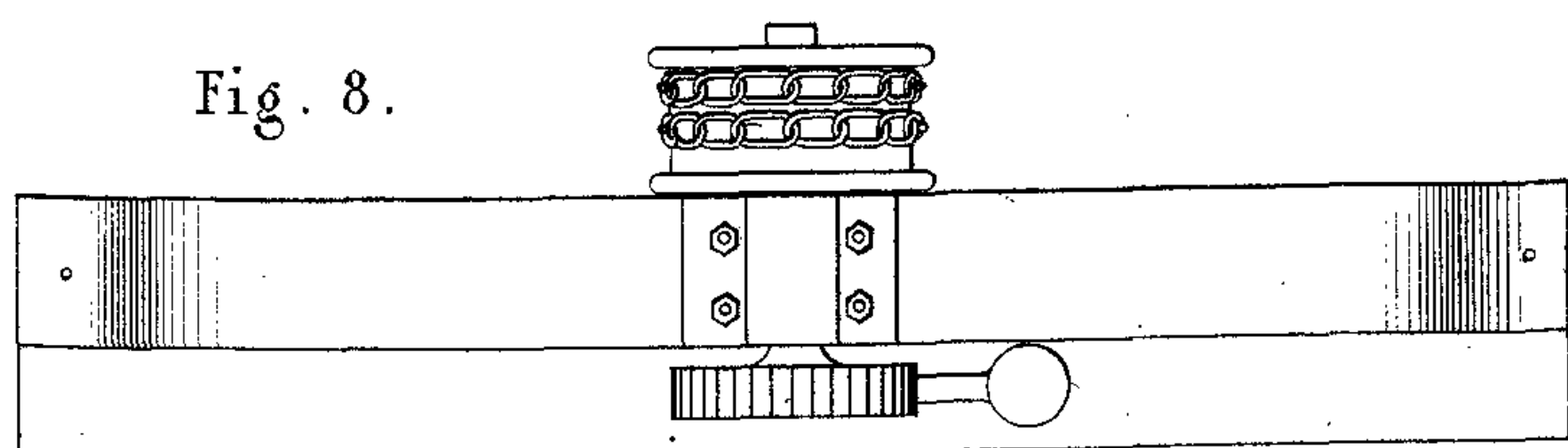


Fig. 9.

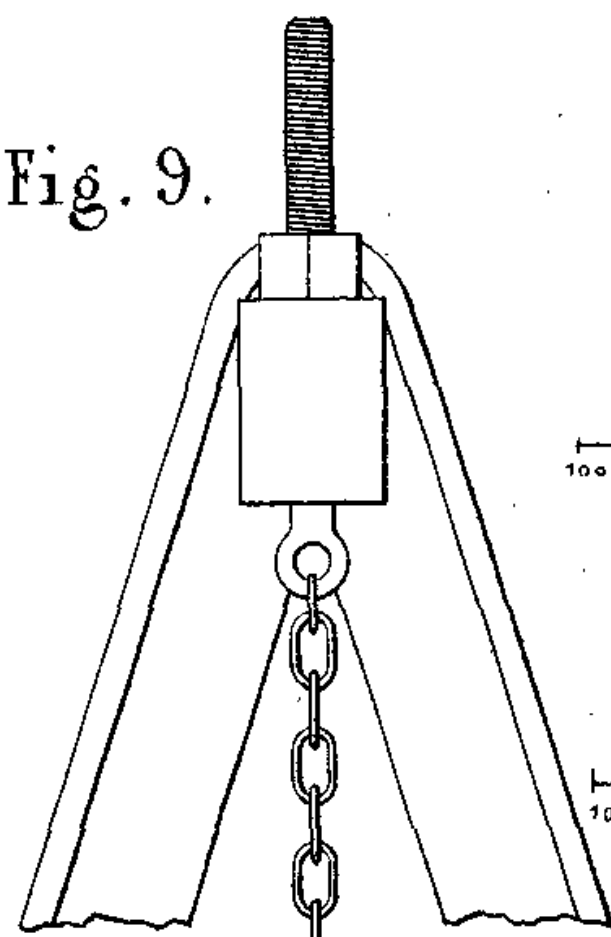
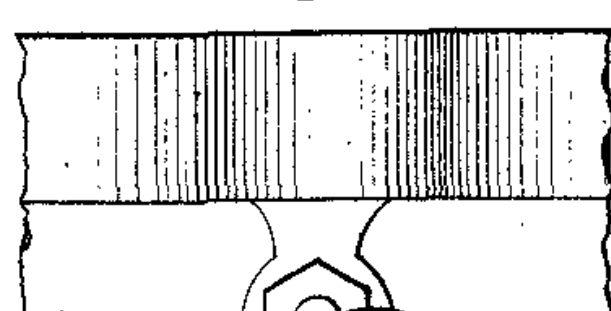


Fig. 10.



Echelle des fig. 1, 2, 3 et 4.

100 50 0 1 2 3 4 Mètres

Echelle des fig. 5 et 6.

100 50 0 1 2 Mètres

Echelle des fig. 7, 8, 9 et 10.

100 50 0 1 2 Mètres







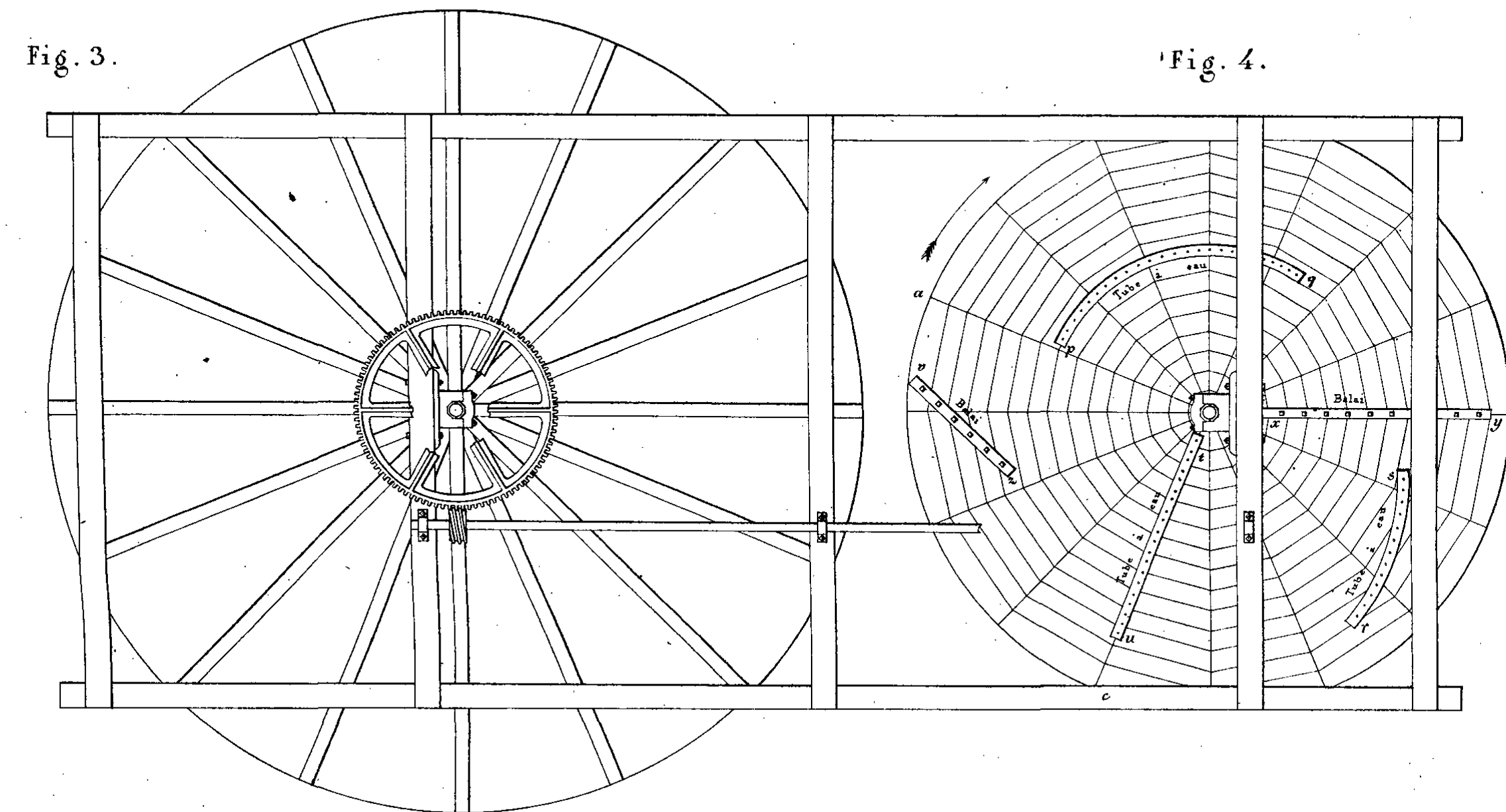
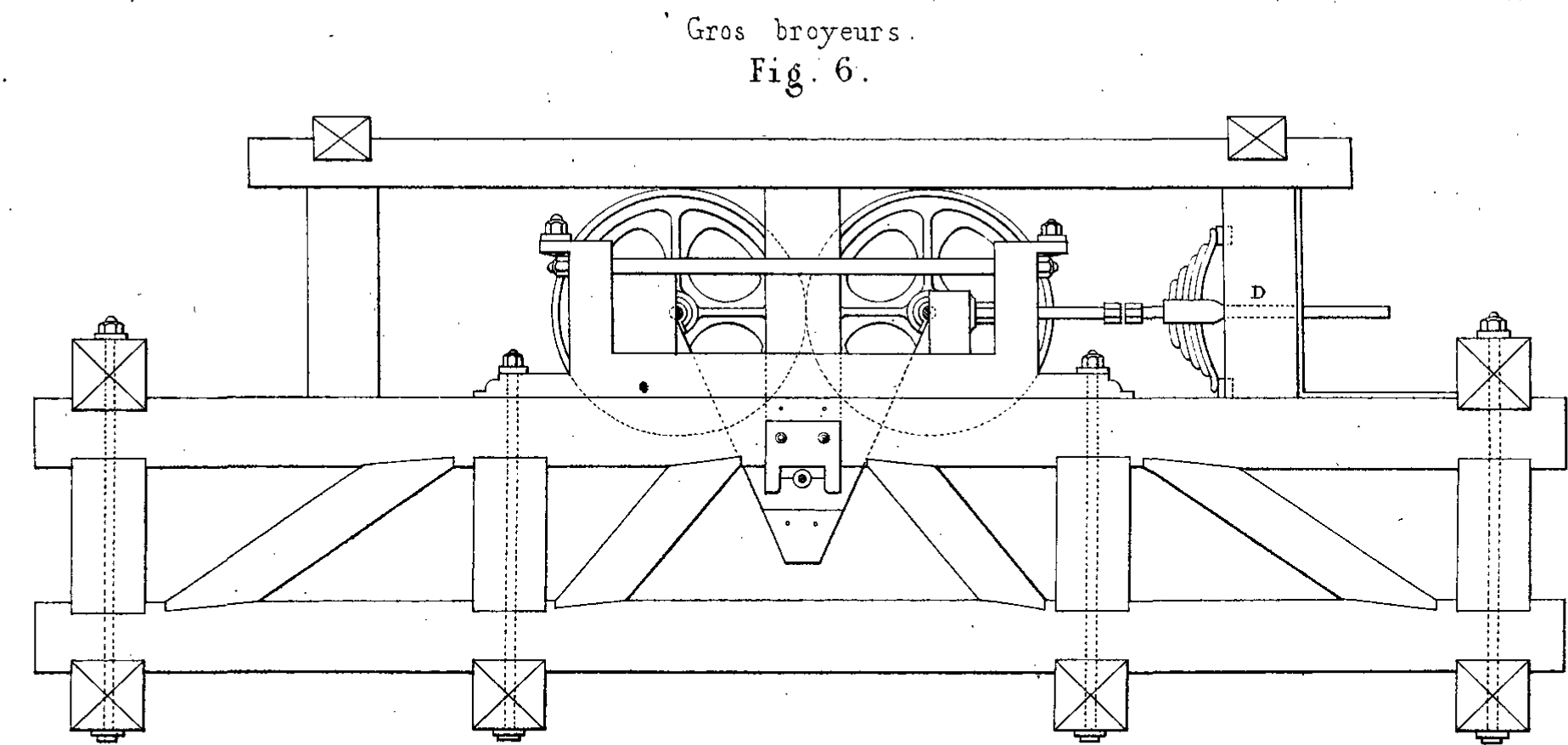
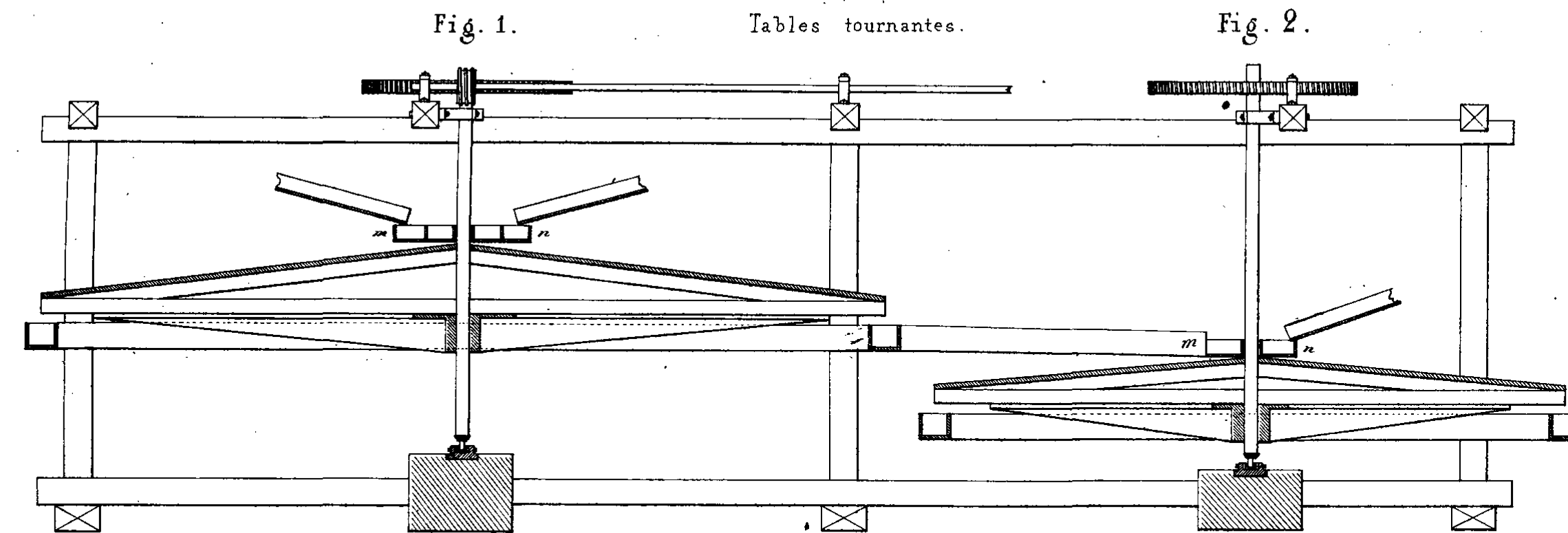
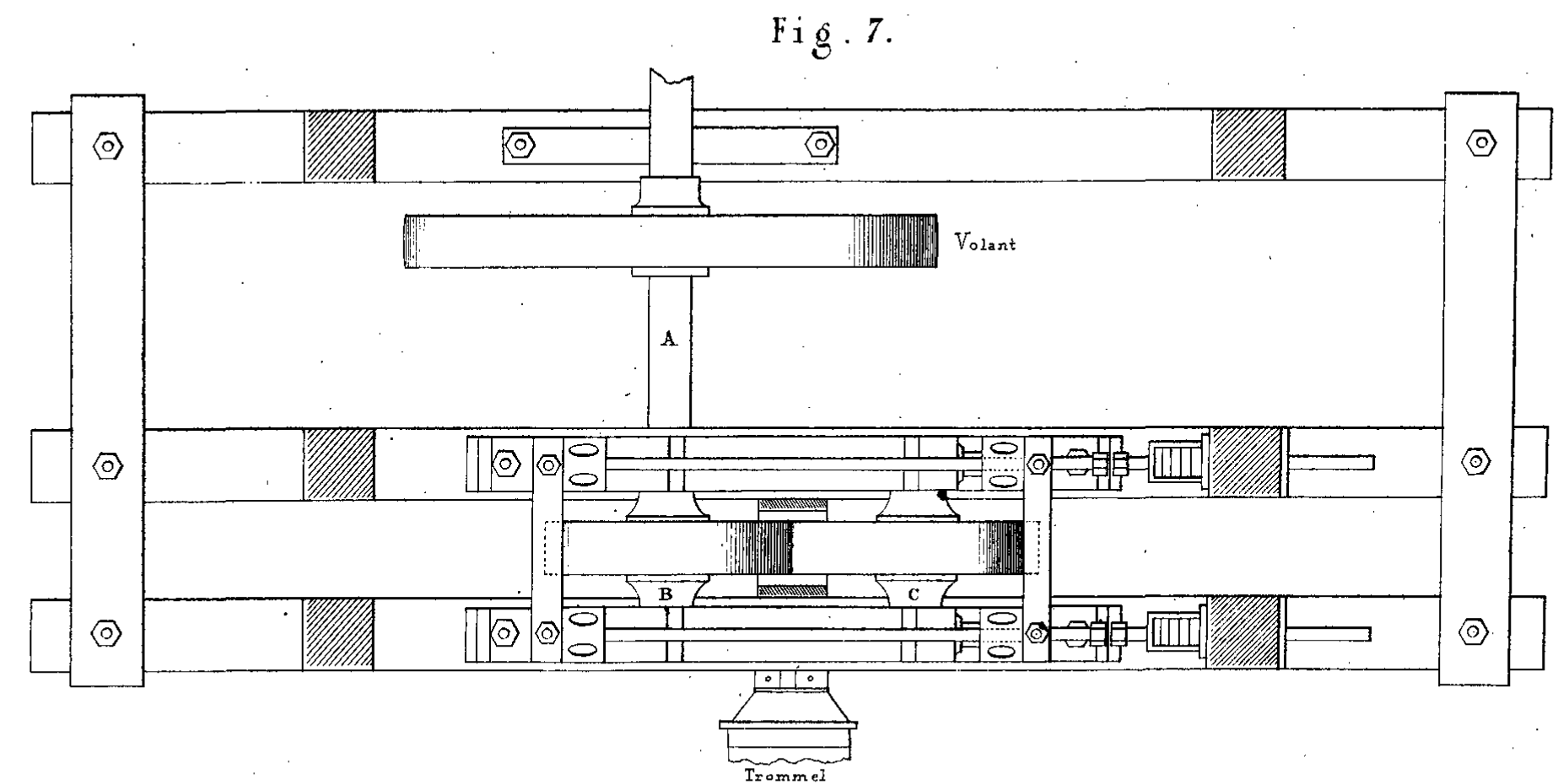
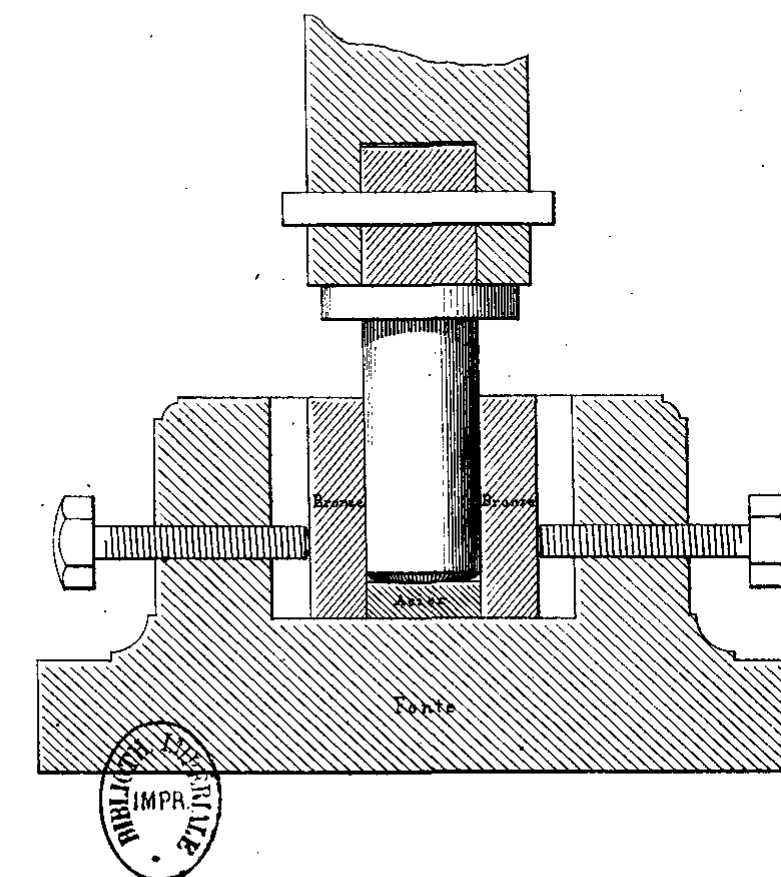


Fig. 4.



Support du pivot.  
Fig. 5.



Système pour faciliter la descente  
du minéral.

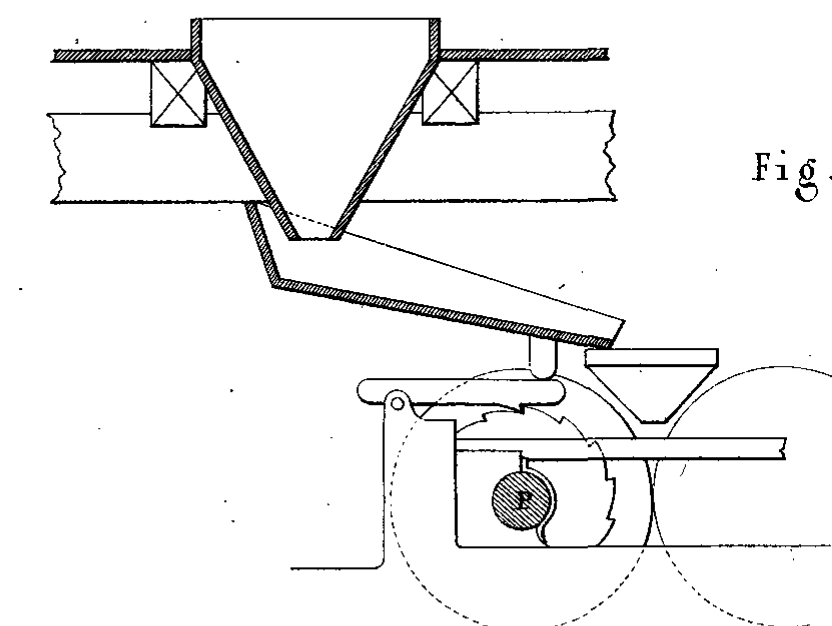
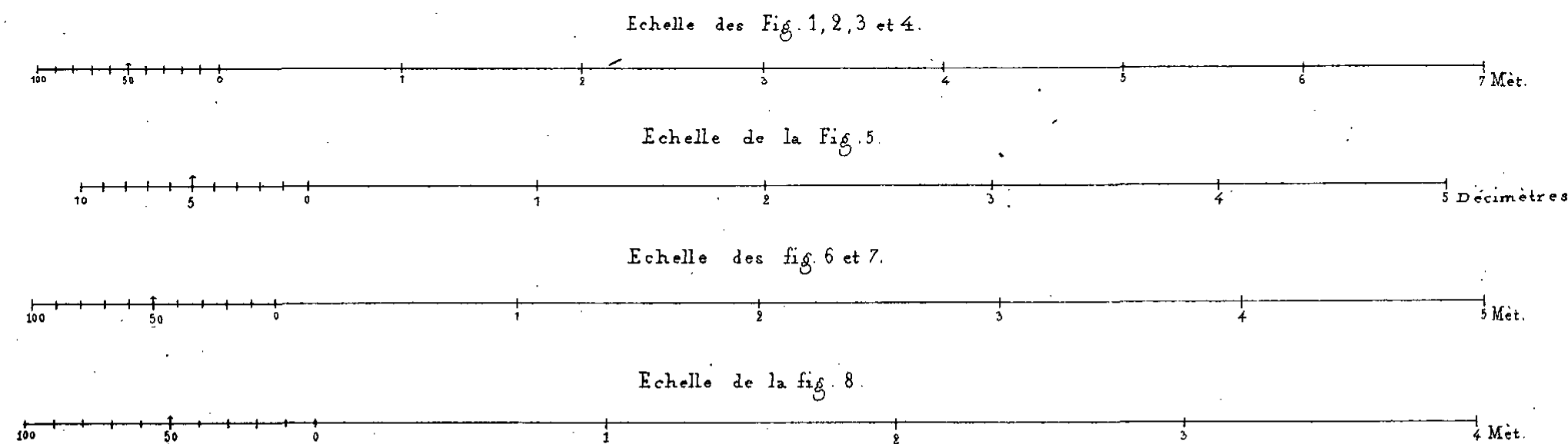


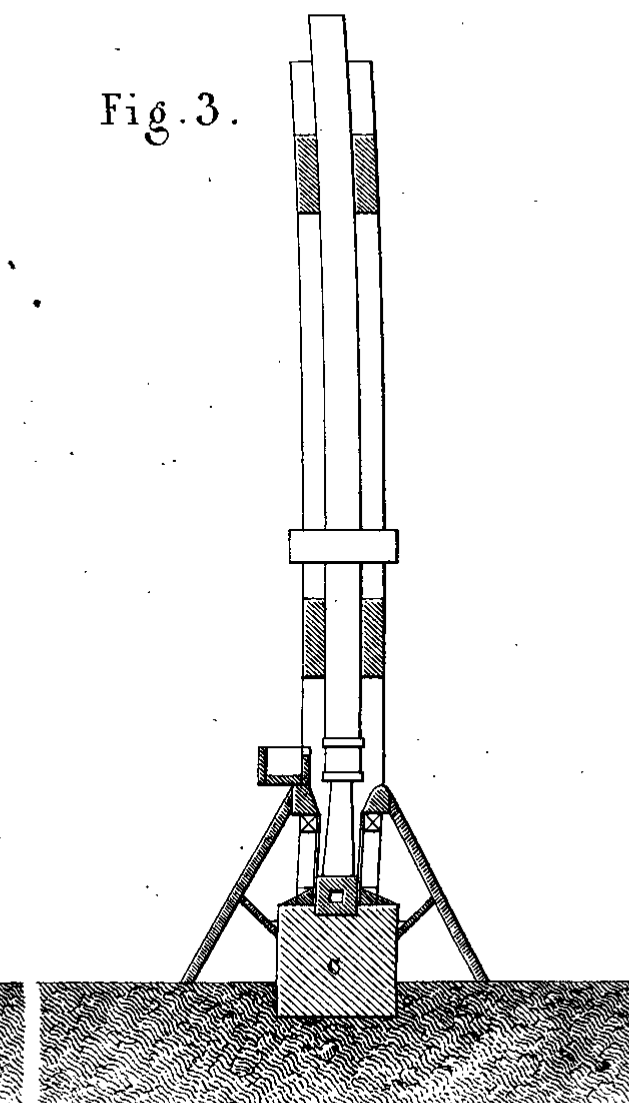
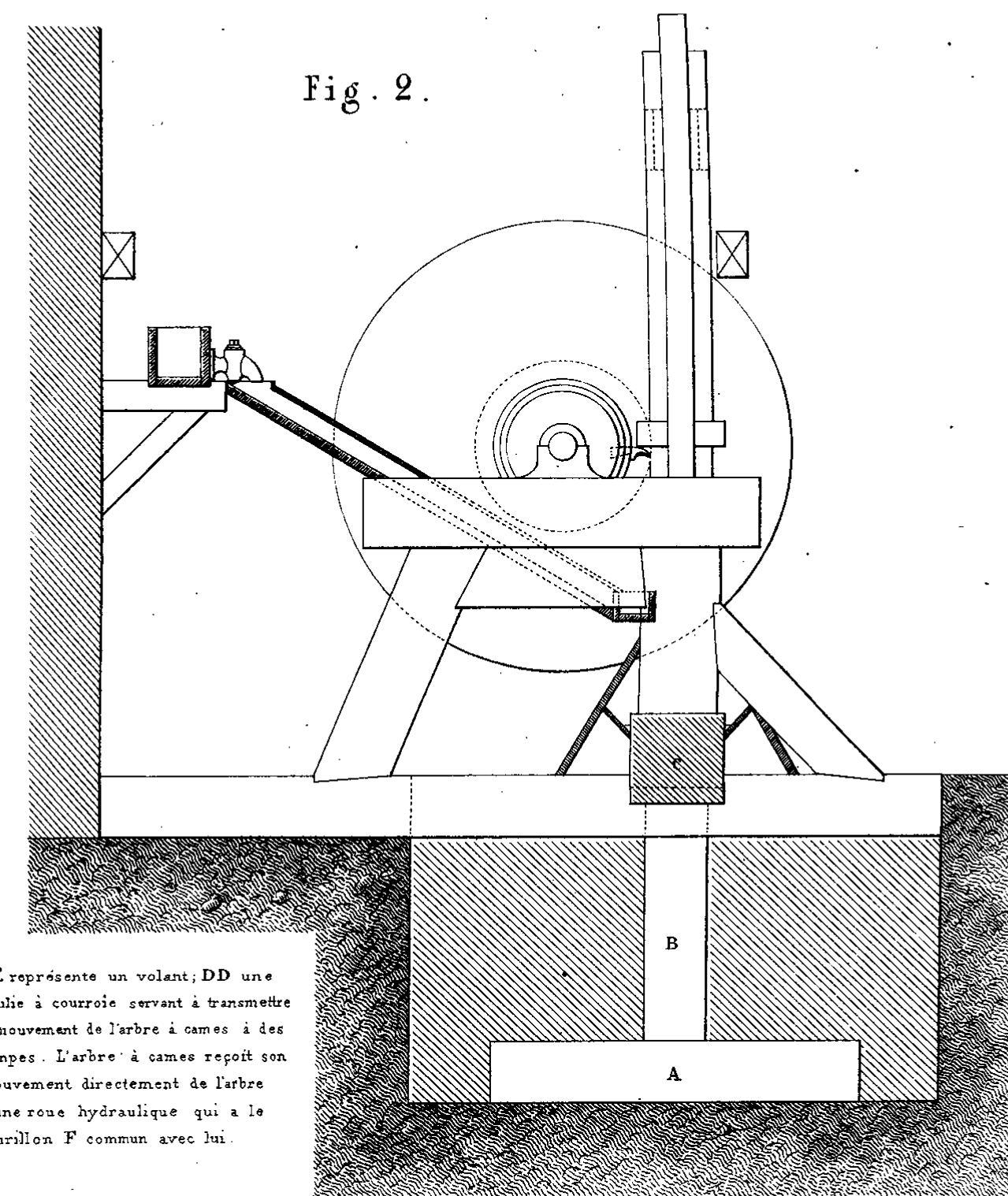
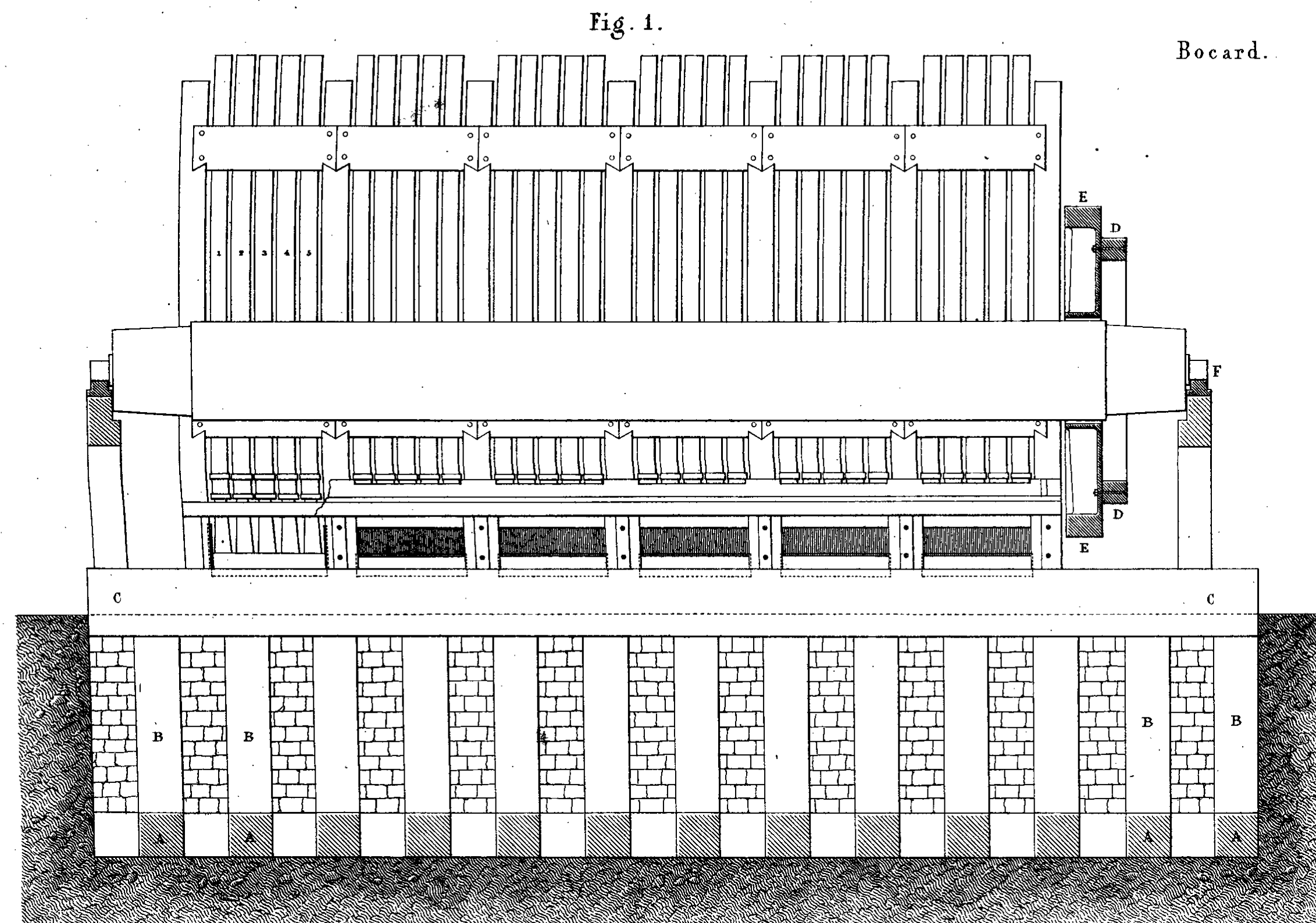
Fig. 8.



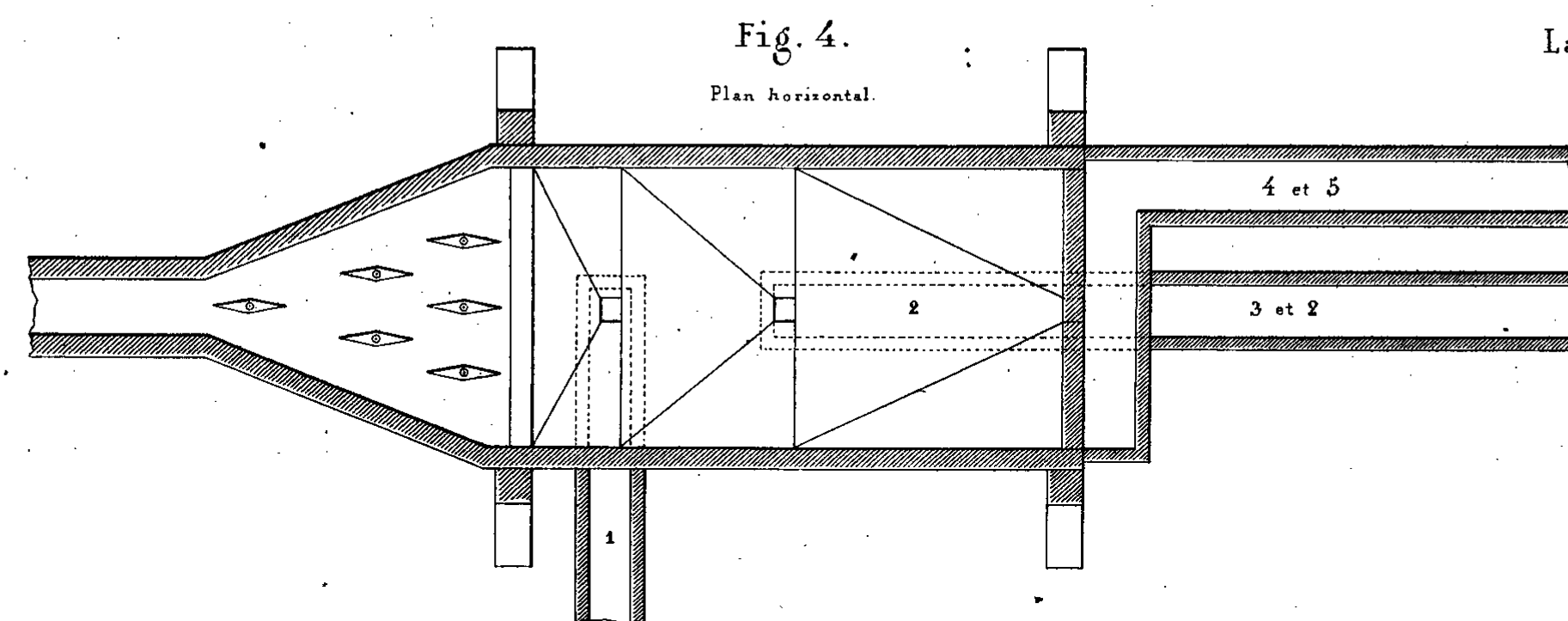




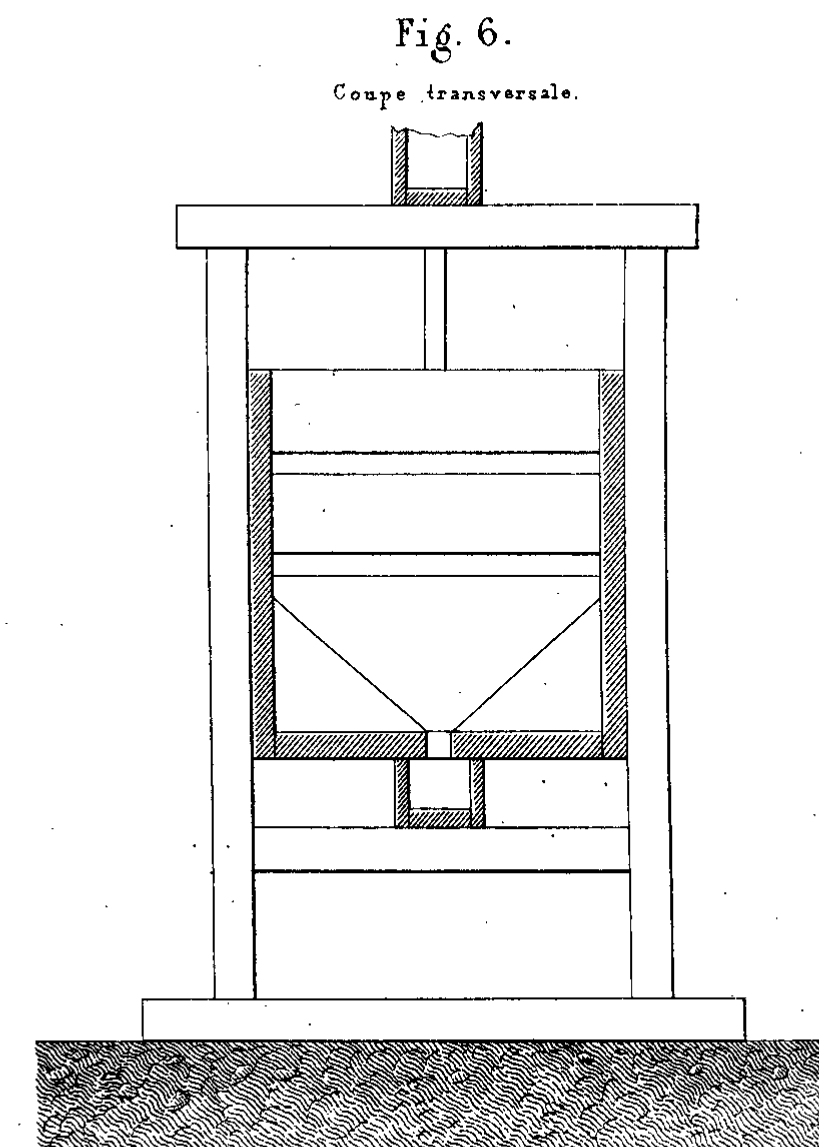
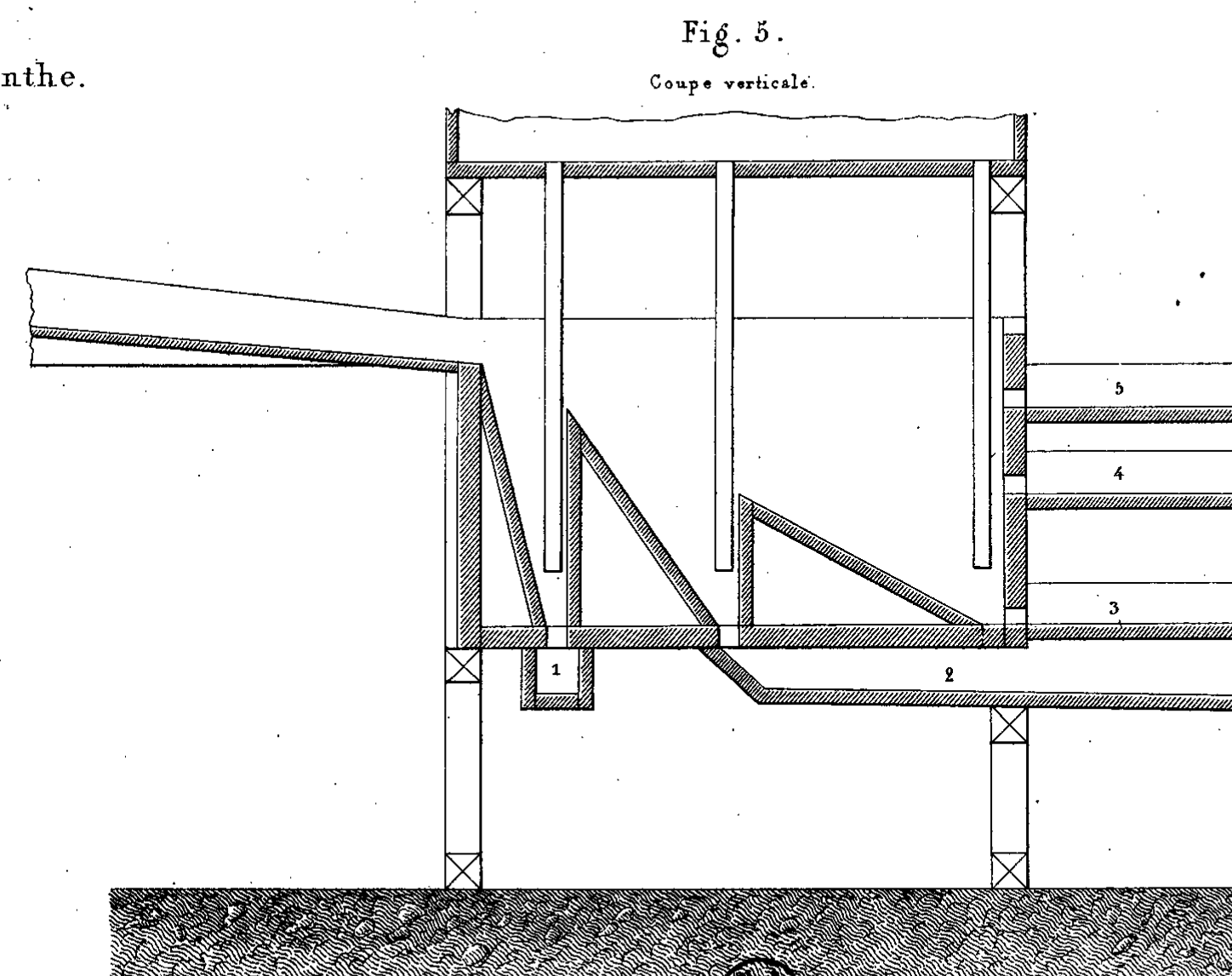




AA... Forts madriers formant grillage et supportant les poteaux BB... sur lesquels reposent les sablières CC, et sur celles-ci les pièces de fonte formant le fond des auges

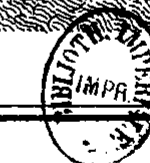


Labyrinthe.



Echelle des fig. 1, 2 et 3.

Echelle des fig. 4, 5 et 6.









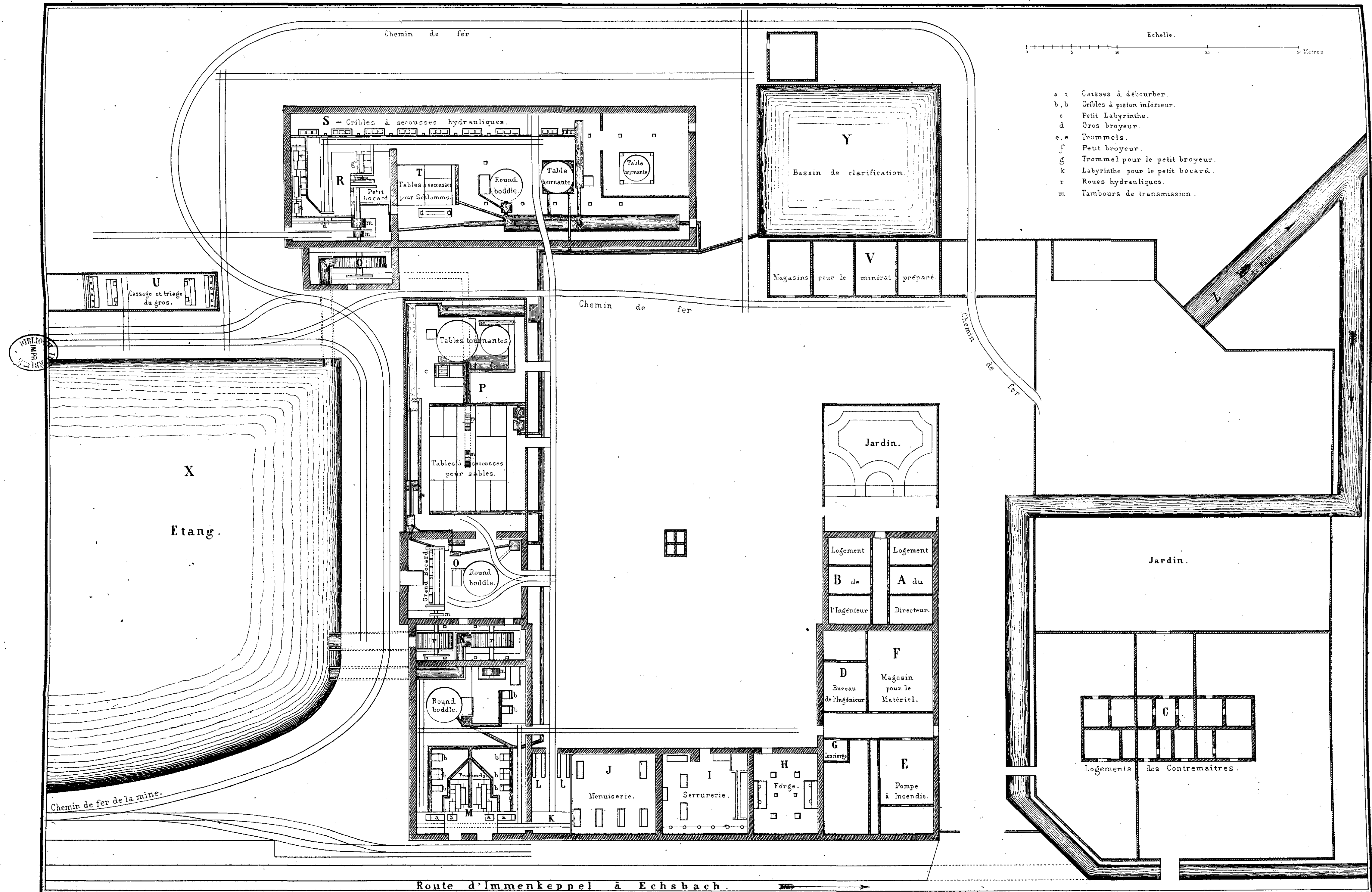








Fig. 5.

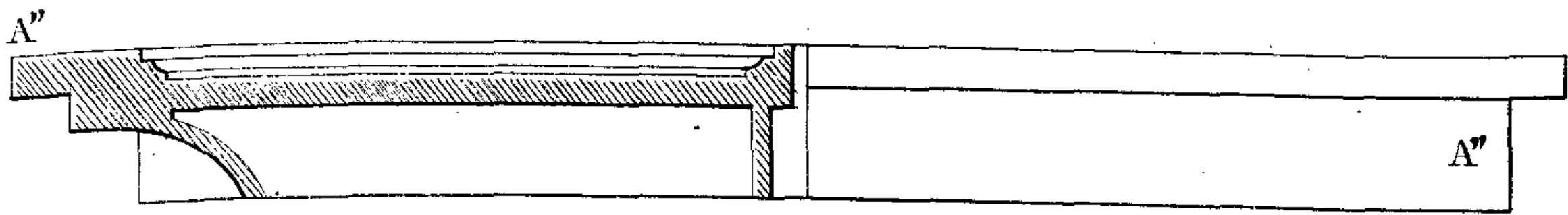


Fig. 6.

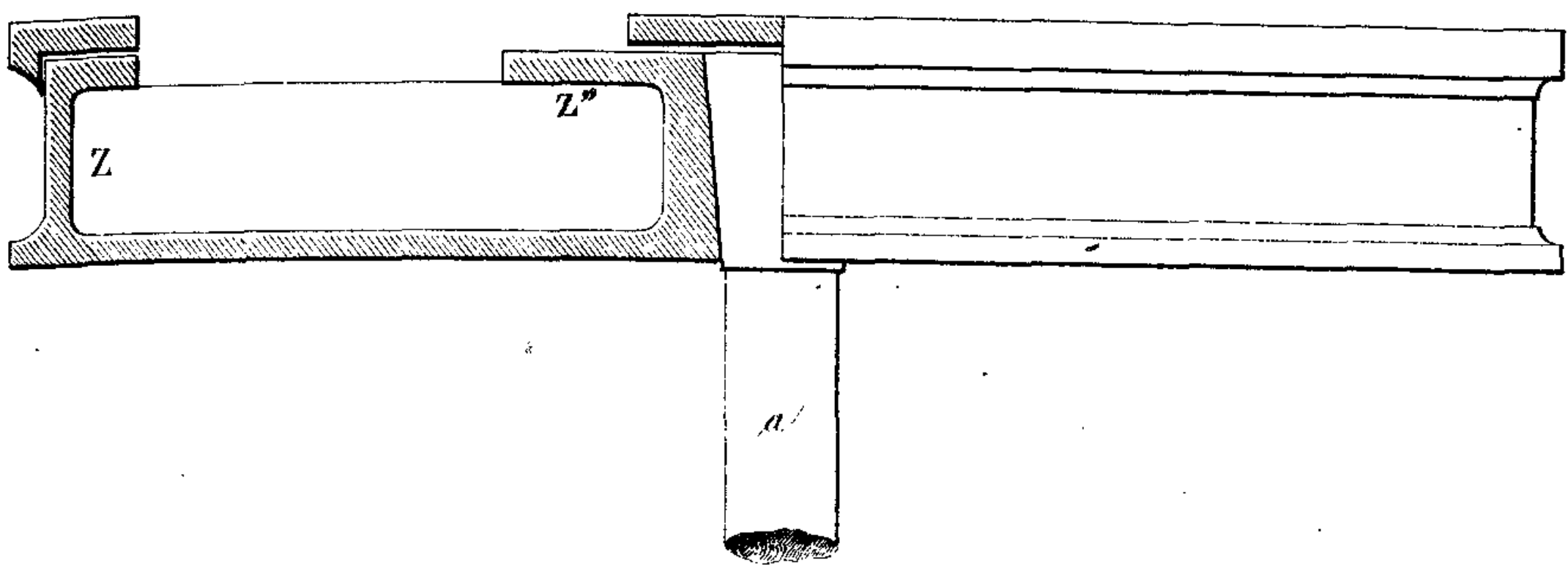


Fig. 7.

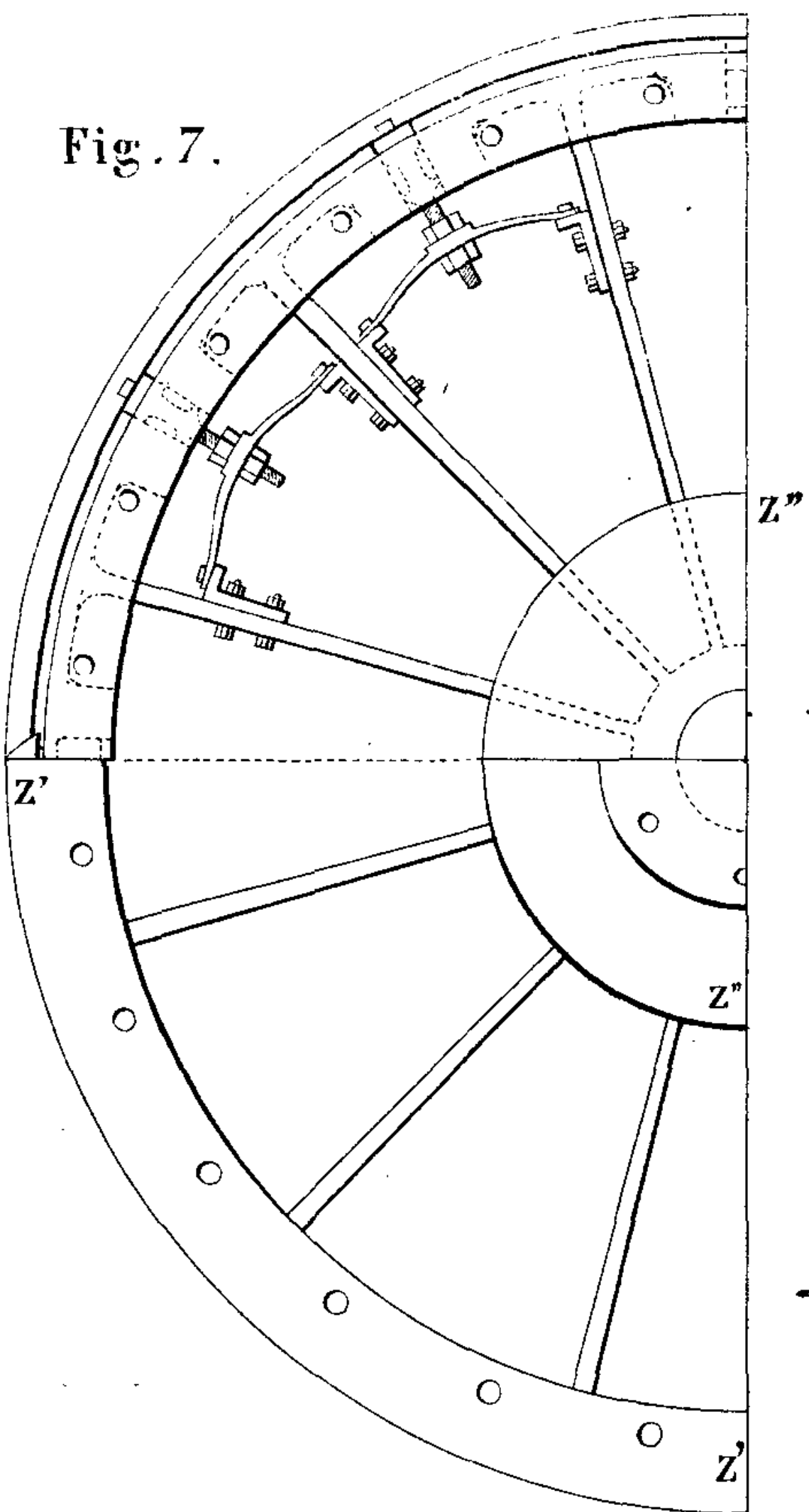


Fig. 8.

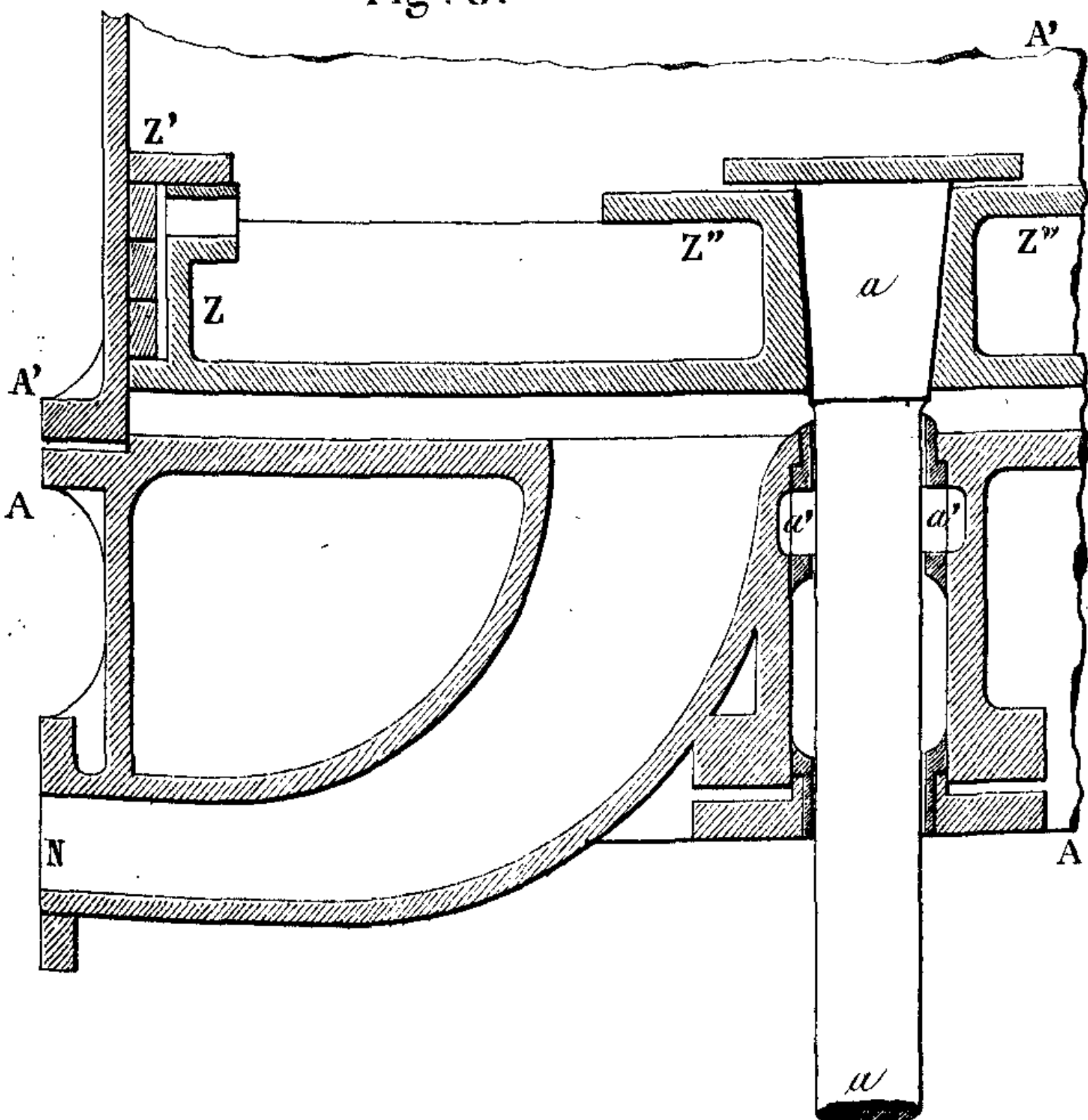


Fig. 2.

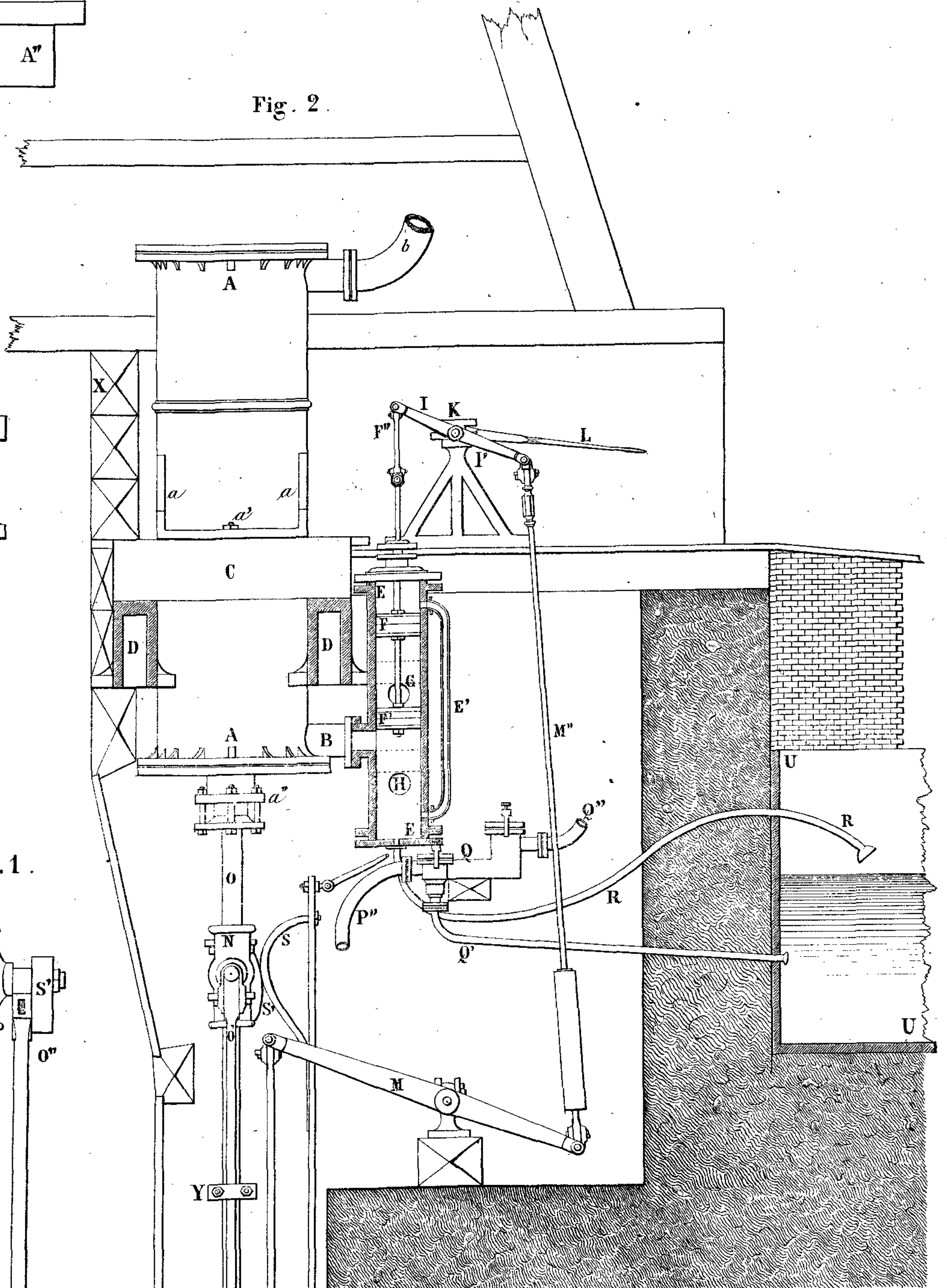


Fig. 1.

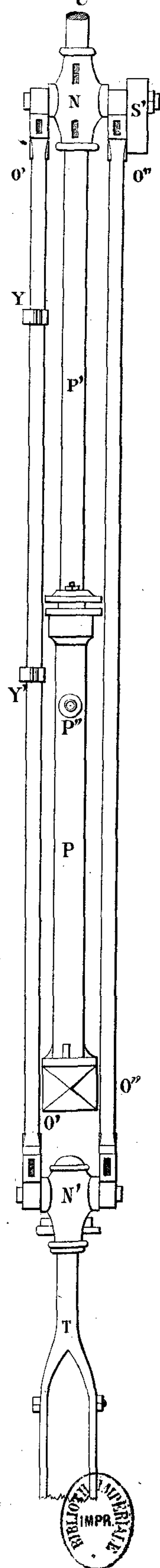


Fig. 3.

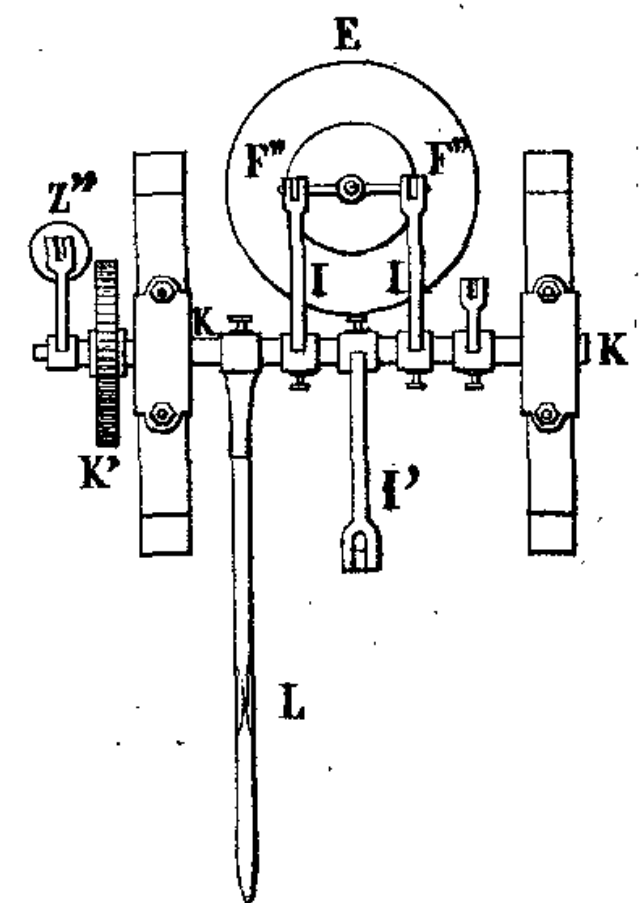
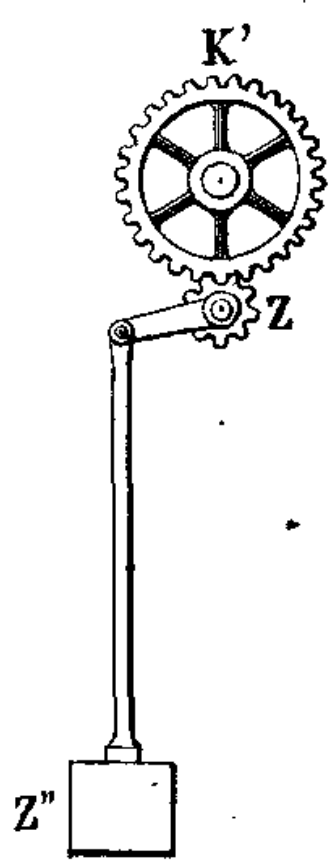
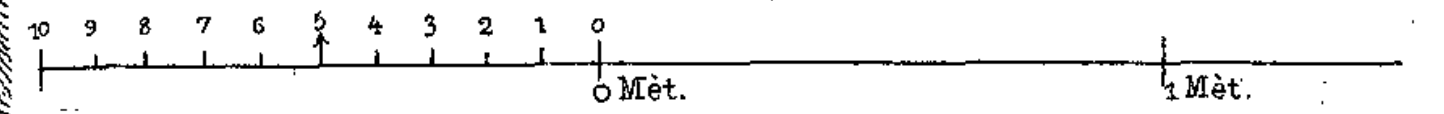


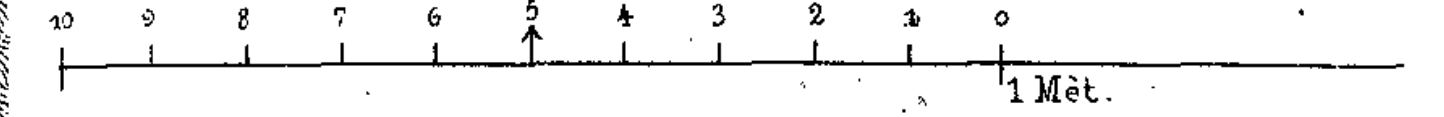
Fig. 4.



Echelle des fig. 1, 2, 3, 4,



Echelle des fig. 5, 6, 7, 8









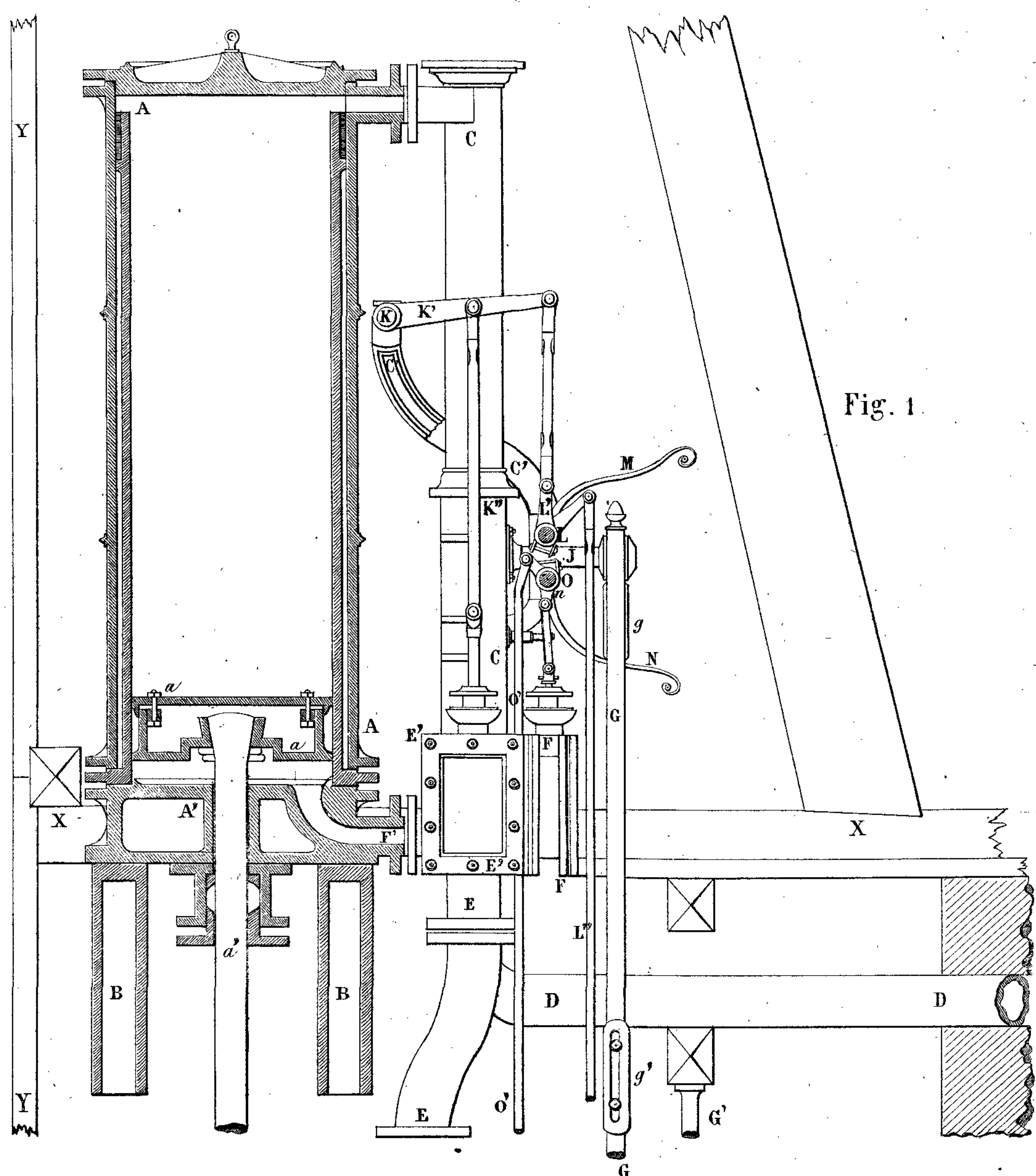


Fig. 1.

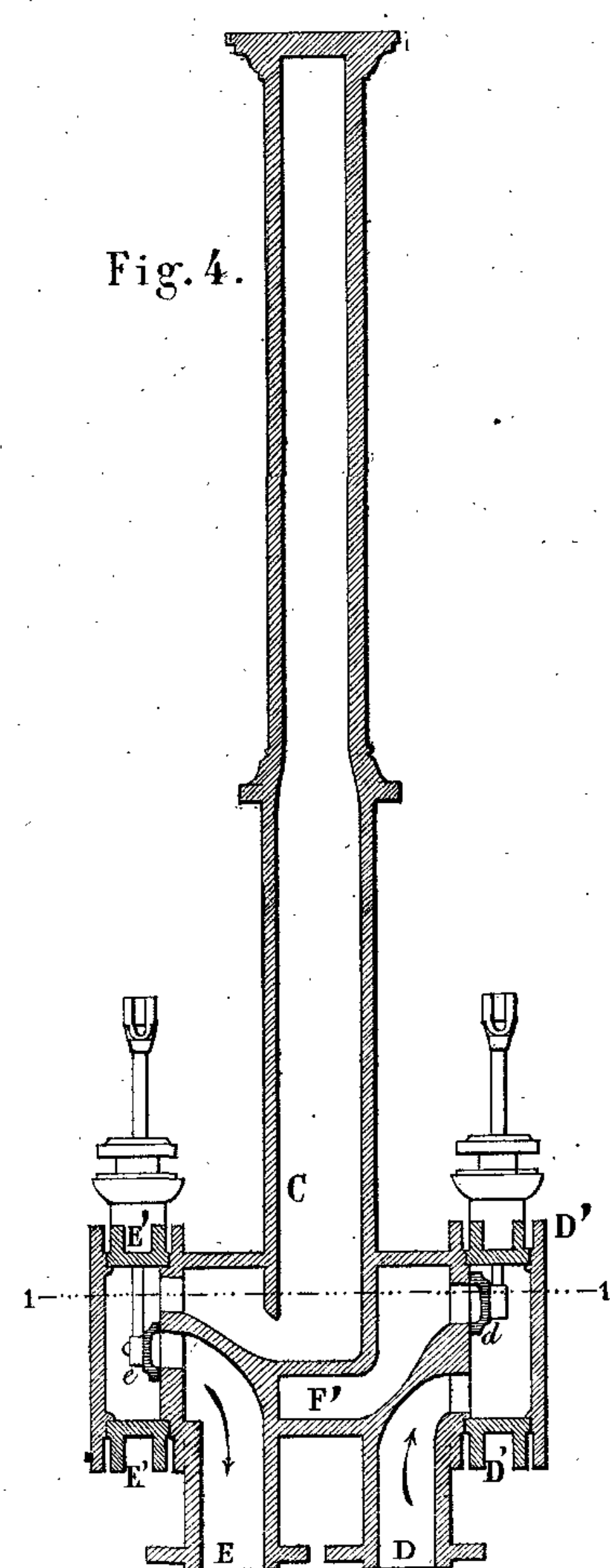


Fig. 4.

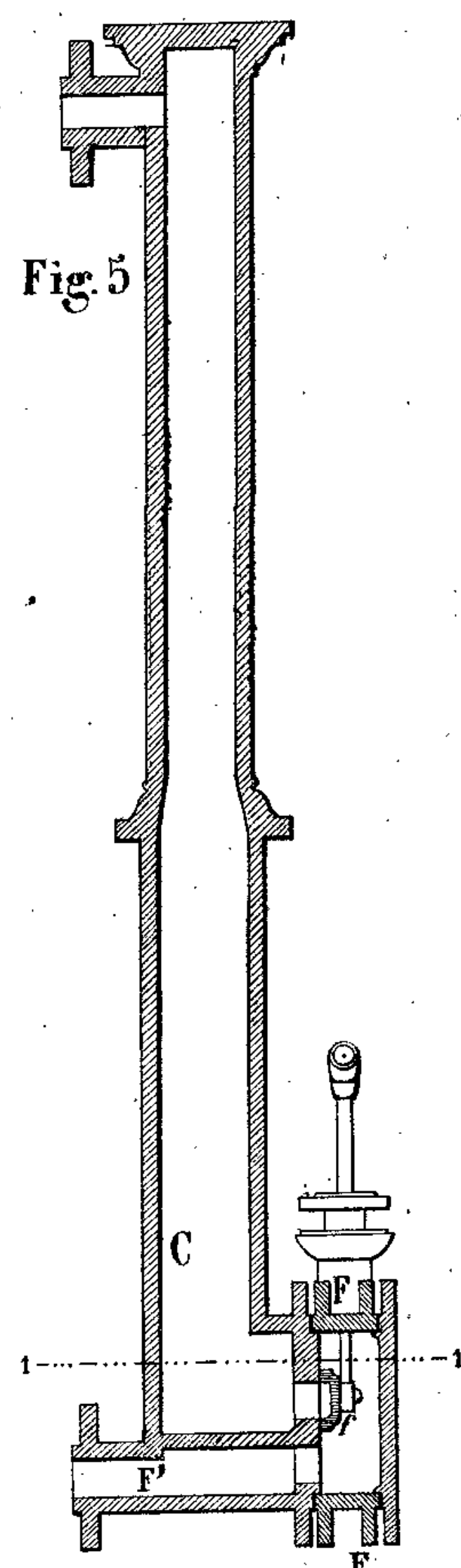


Fig. 5.

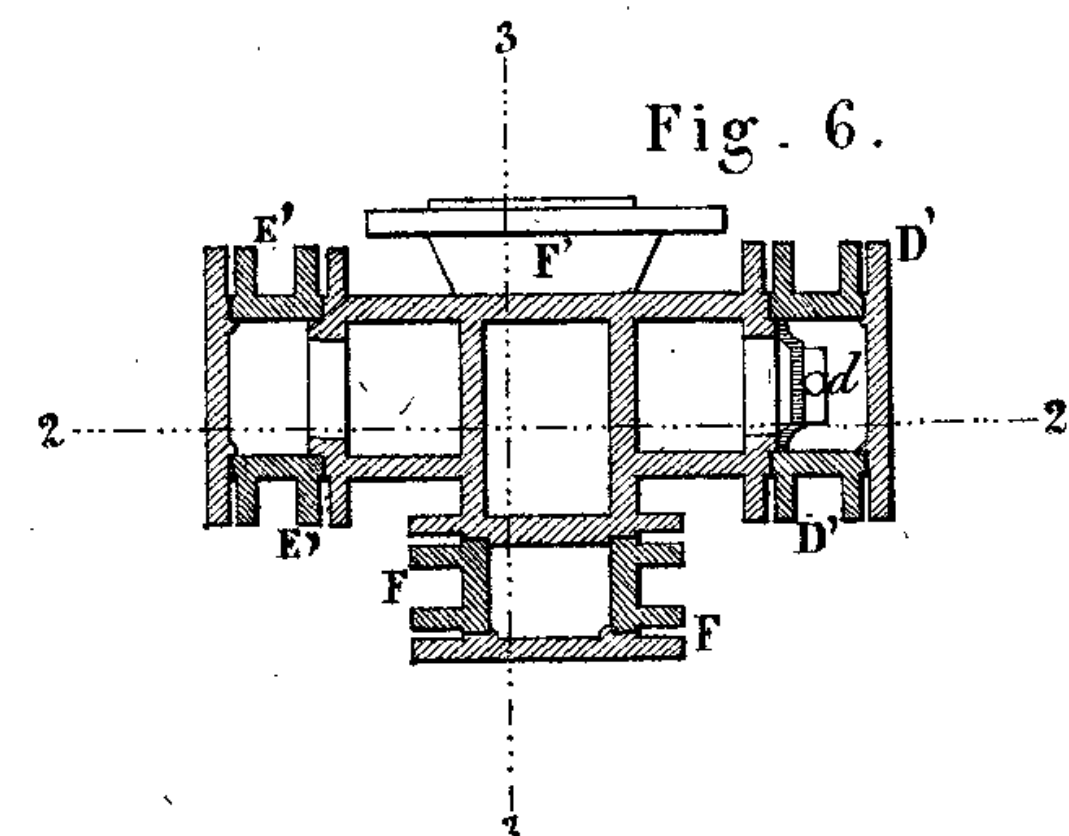


Fig. 6.

Echelle des fig. 7, 8.  
10 Décimètres 1 Mètre.

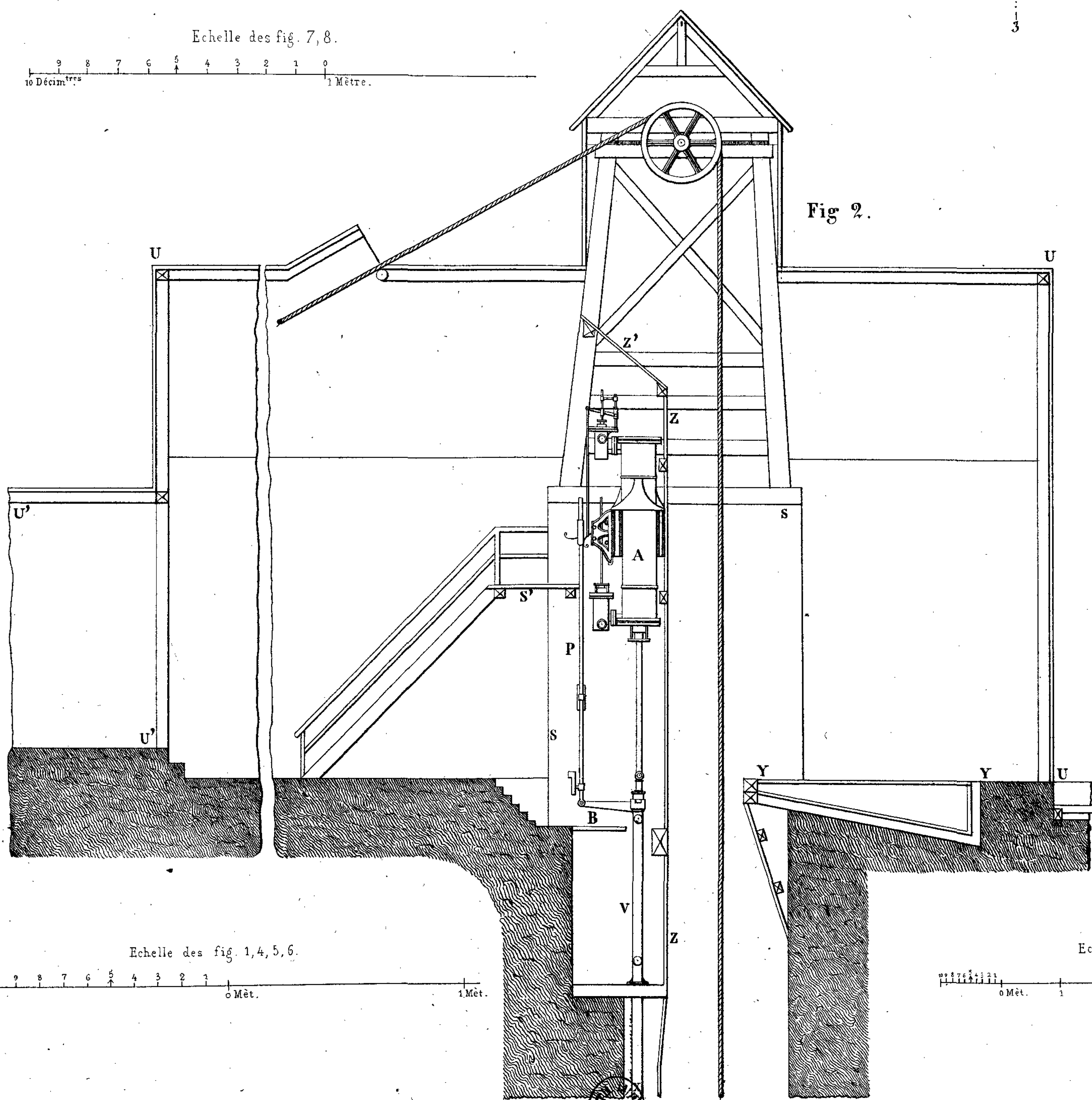


Fig. 2.

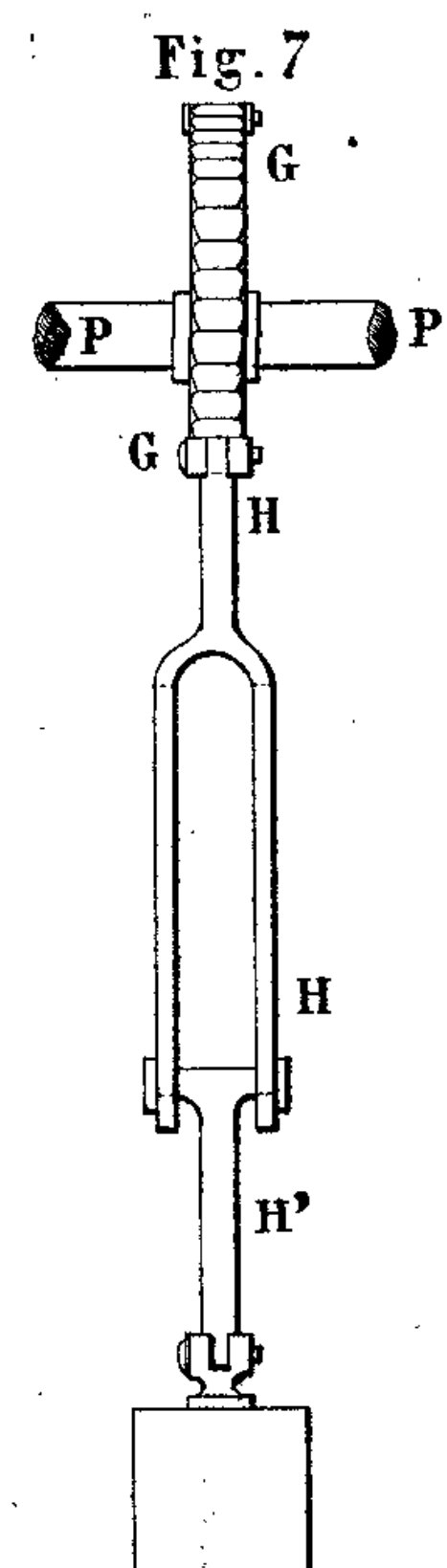


Fig. 7.

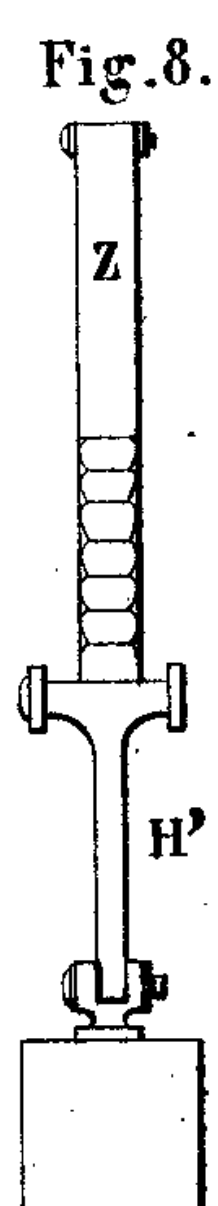


Fig. 8.

Echelle des fig. 1, 4, 5, 6.  
0 Mèt. 1 Mèt.

Echelle de la fig. 2.  
0 Mèt. 1 2 3 4 5 6 Mèt.



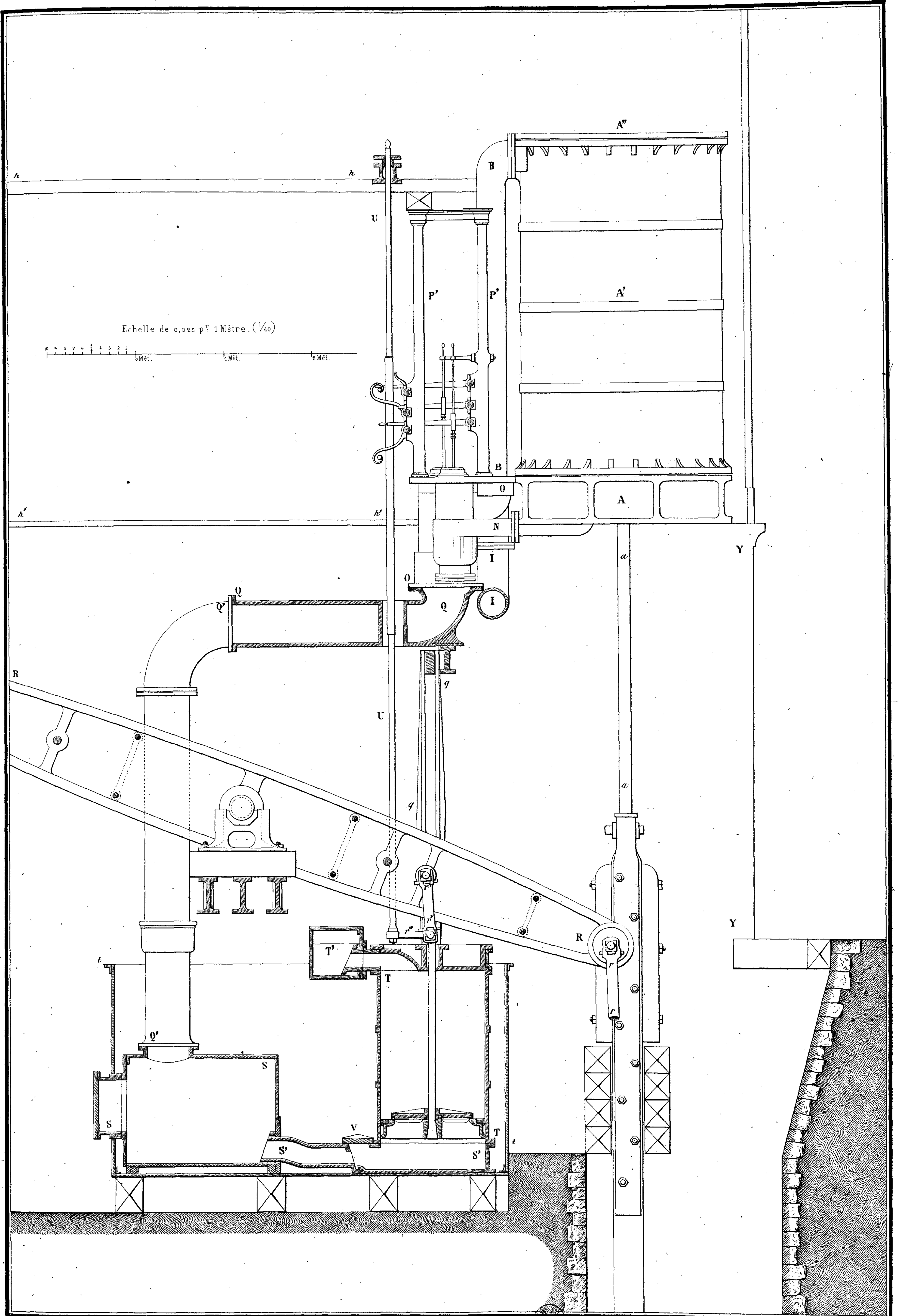




MACHINE D'ÉPUISEMENT DU PUIT S<sup>t</sup> COLETTE.

(Rive-de-Gier).

PL. XXXII.









Echelle de 0<sup>m</sup>025 p<sup>r</sup> Mètre ( $\frac{1}{40}$ )

10 9 8 7 6 5 4 3 2 1 0 1 2 Mètres

Fig. 1

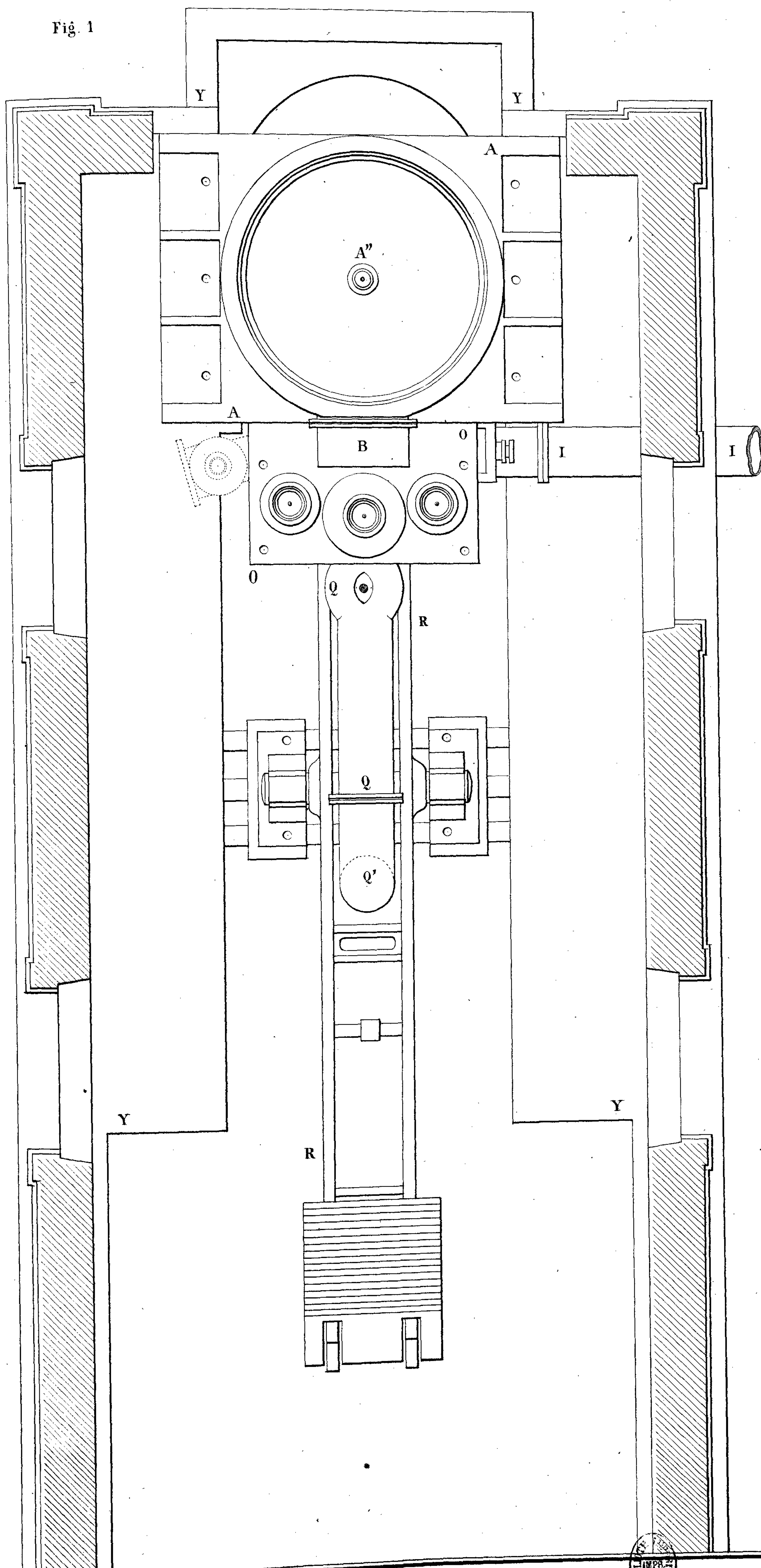


Fig. 2.

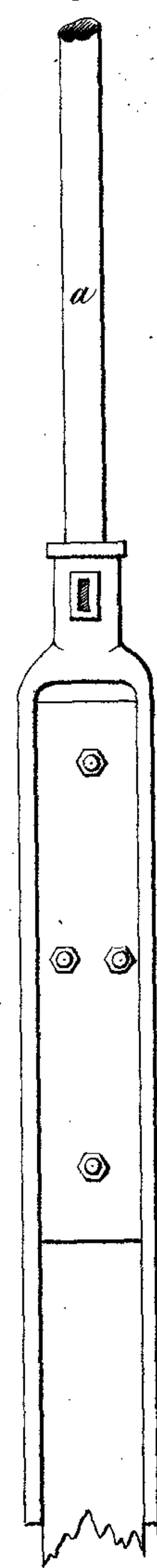


Fig. 3.

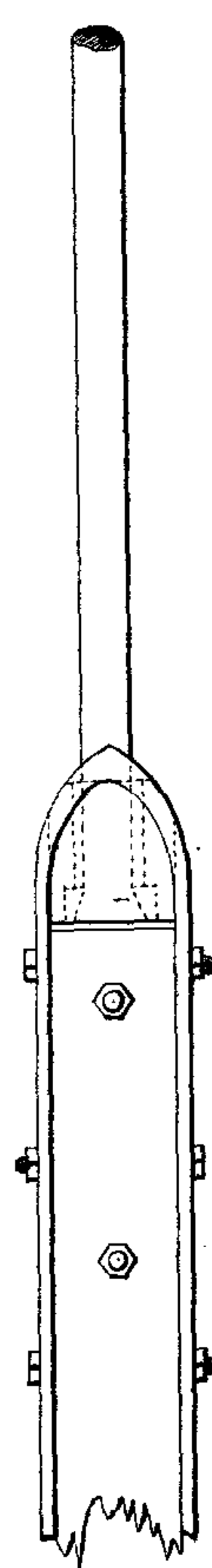


Fig. 4.

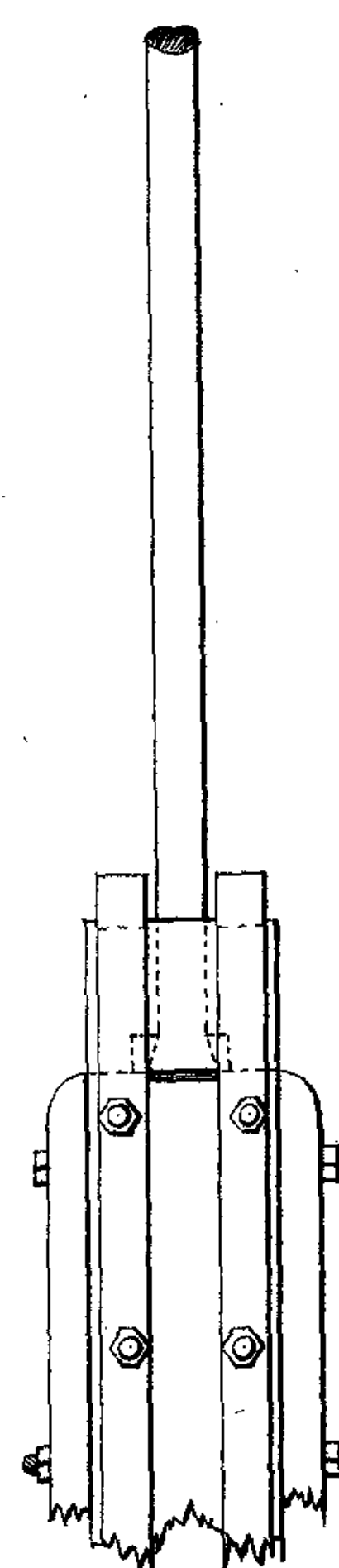


Fig. 5.

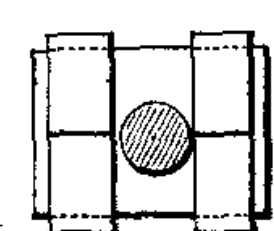








Fig. 1.

Coupe verticale suivant la ligne G G de la Fig. 2.

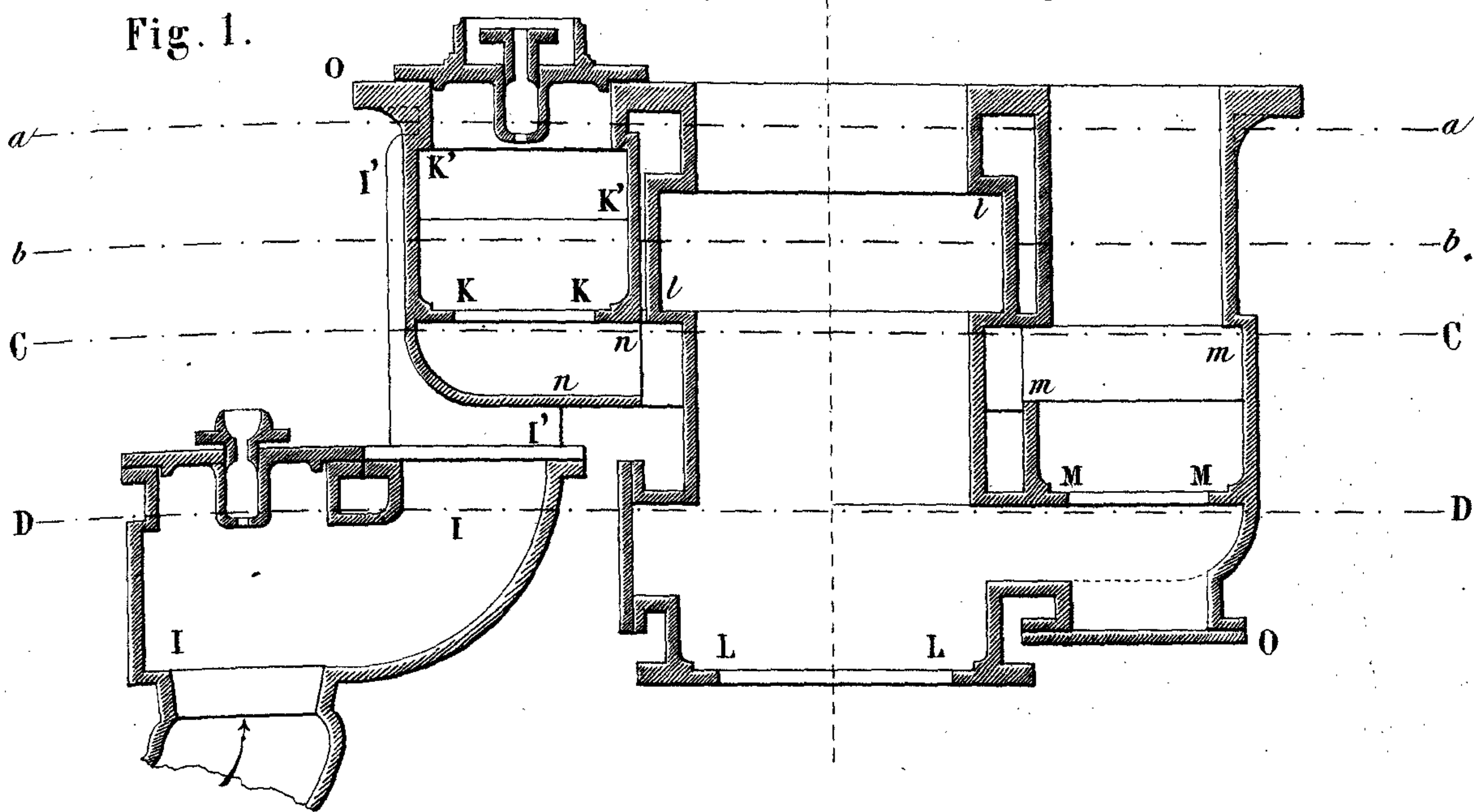


Fig. 2.

Coupe Horizontale suivant la ligne a a' de la Fig. 1.

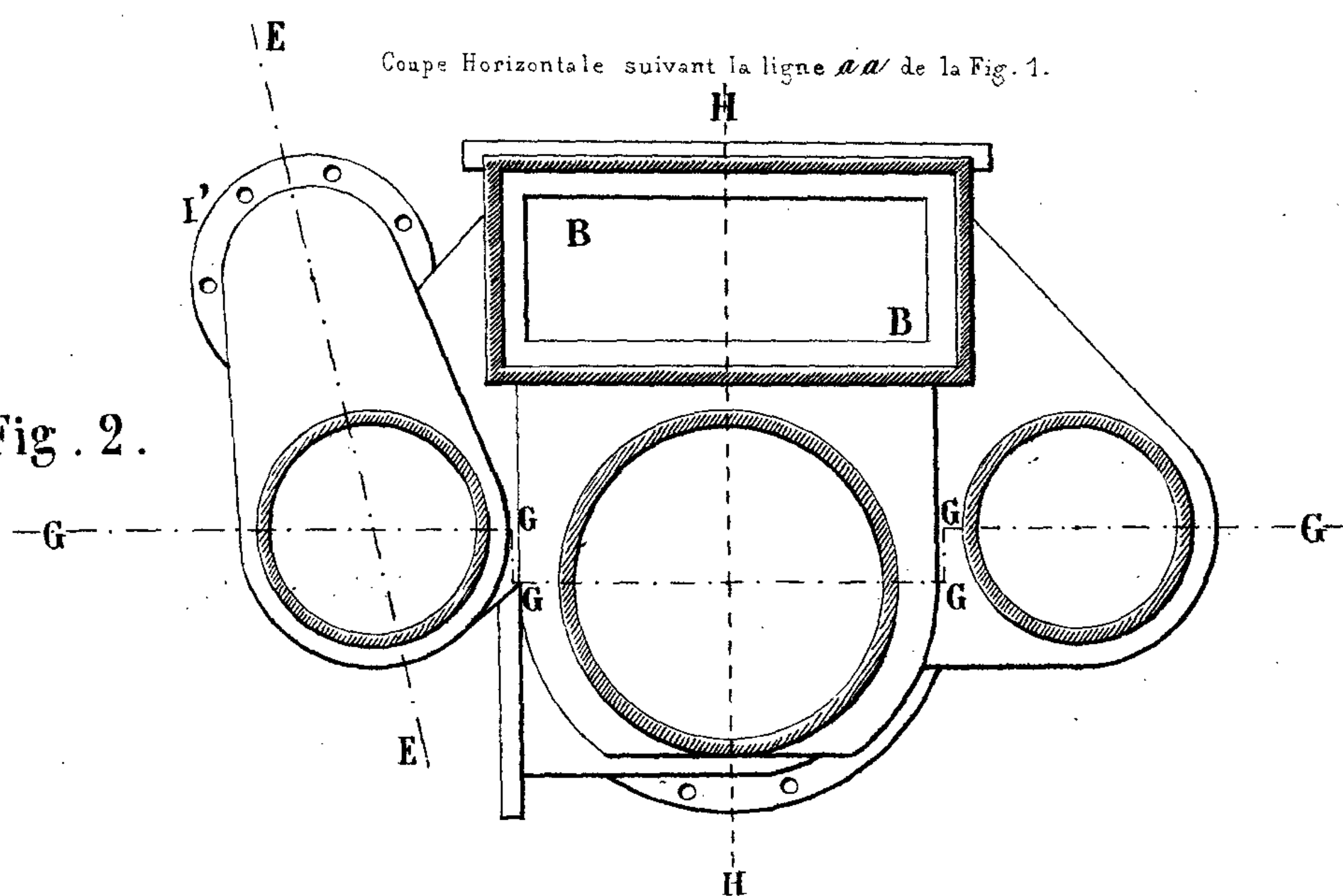


Fig. 3.

Coupe Horizontale suivant la ligne b b' de la Fig. 1.

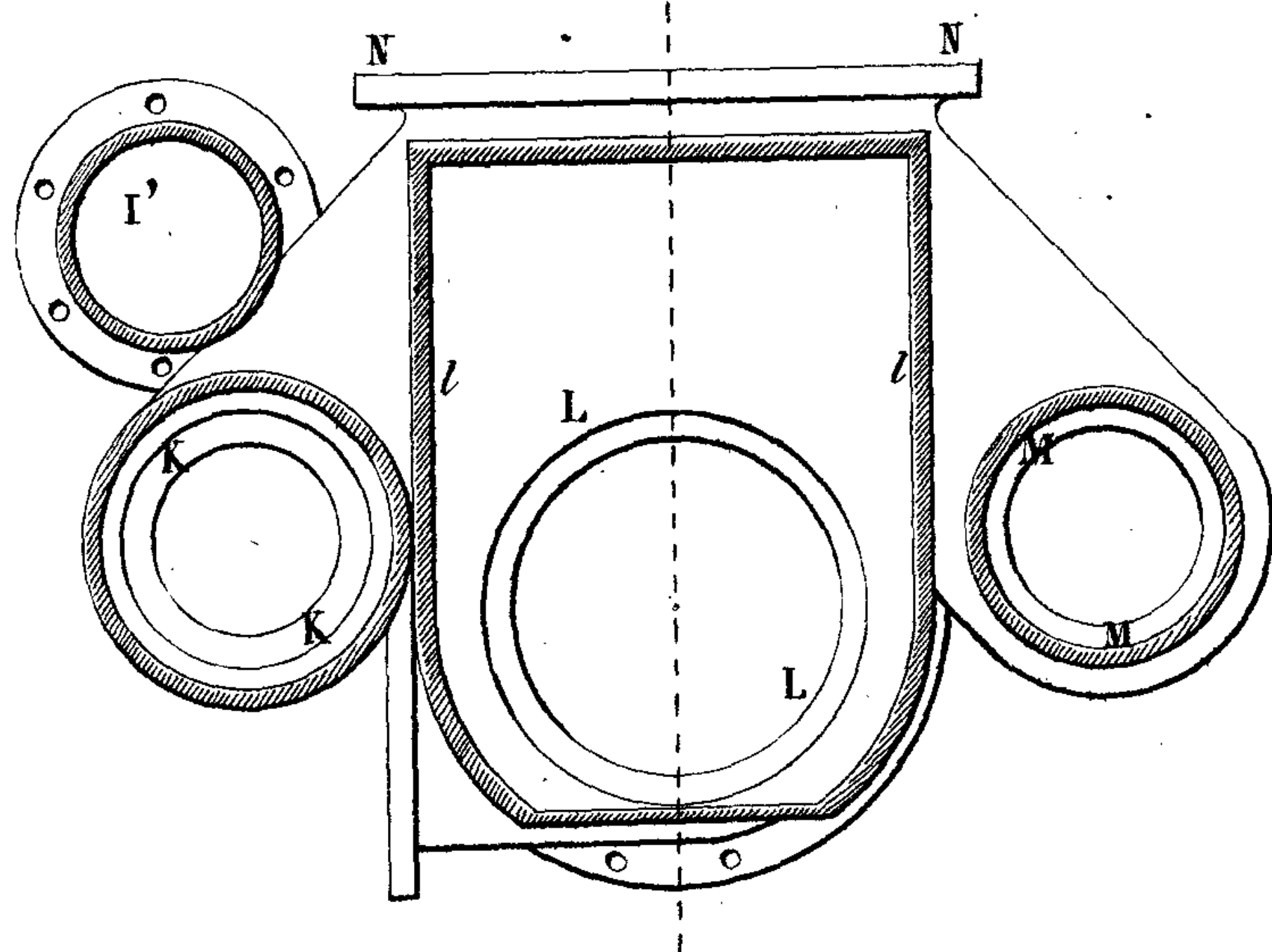
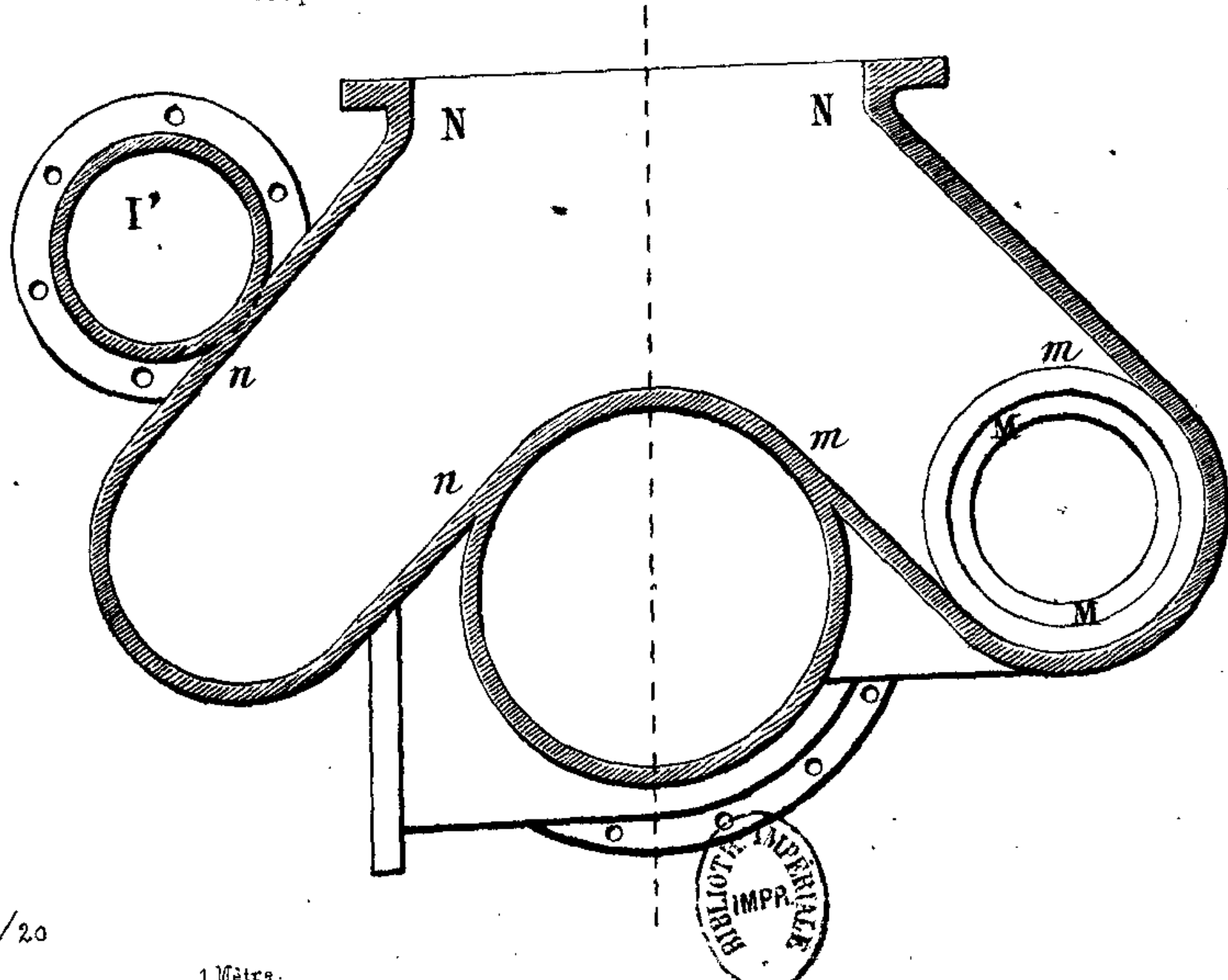


Fig. 4.

Coupe Horizontale suivant la ligne c c' de la Fig. 1.



Echelle de 1/20

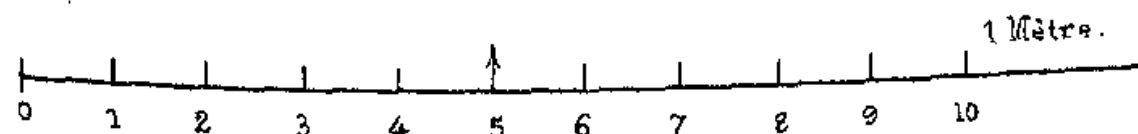
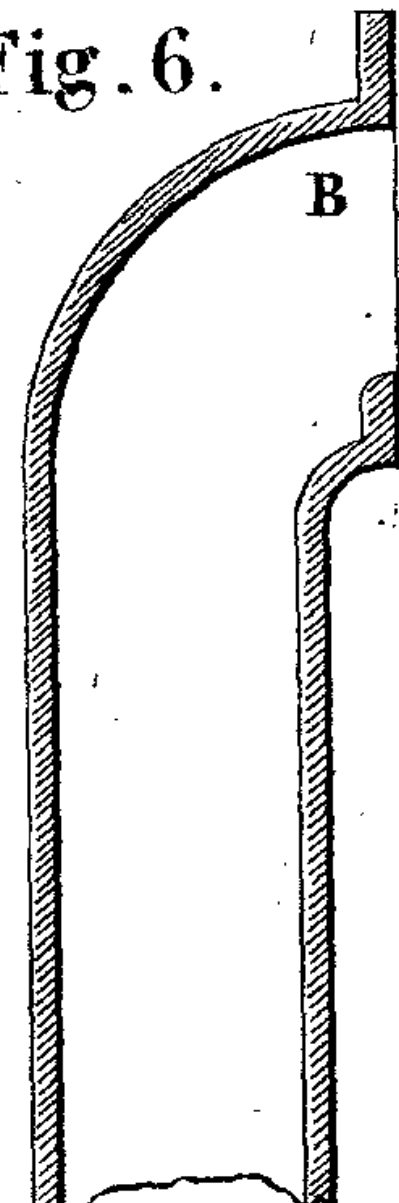


Fig. 6.



Coupe verticale suivant la ligne H H de la Fig. 2.

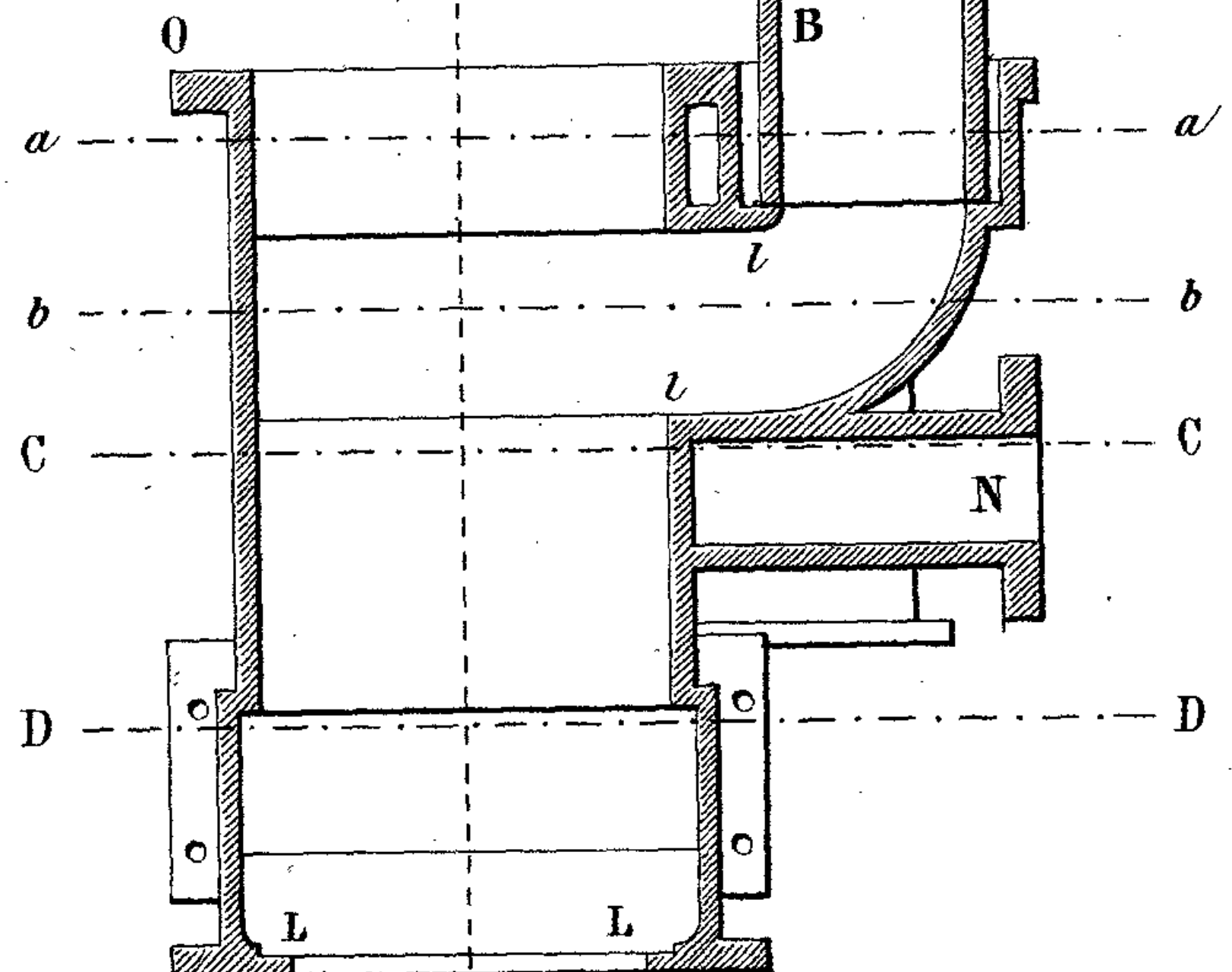
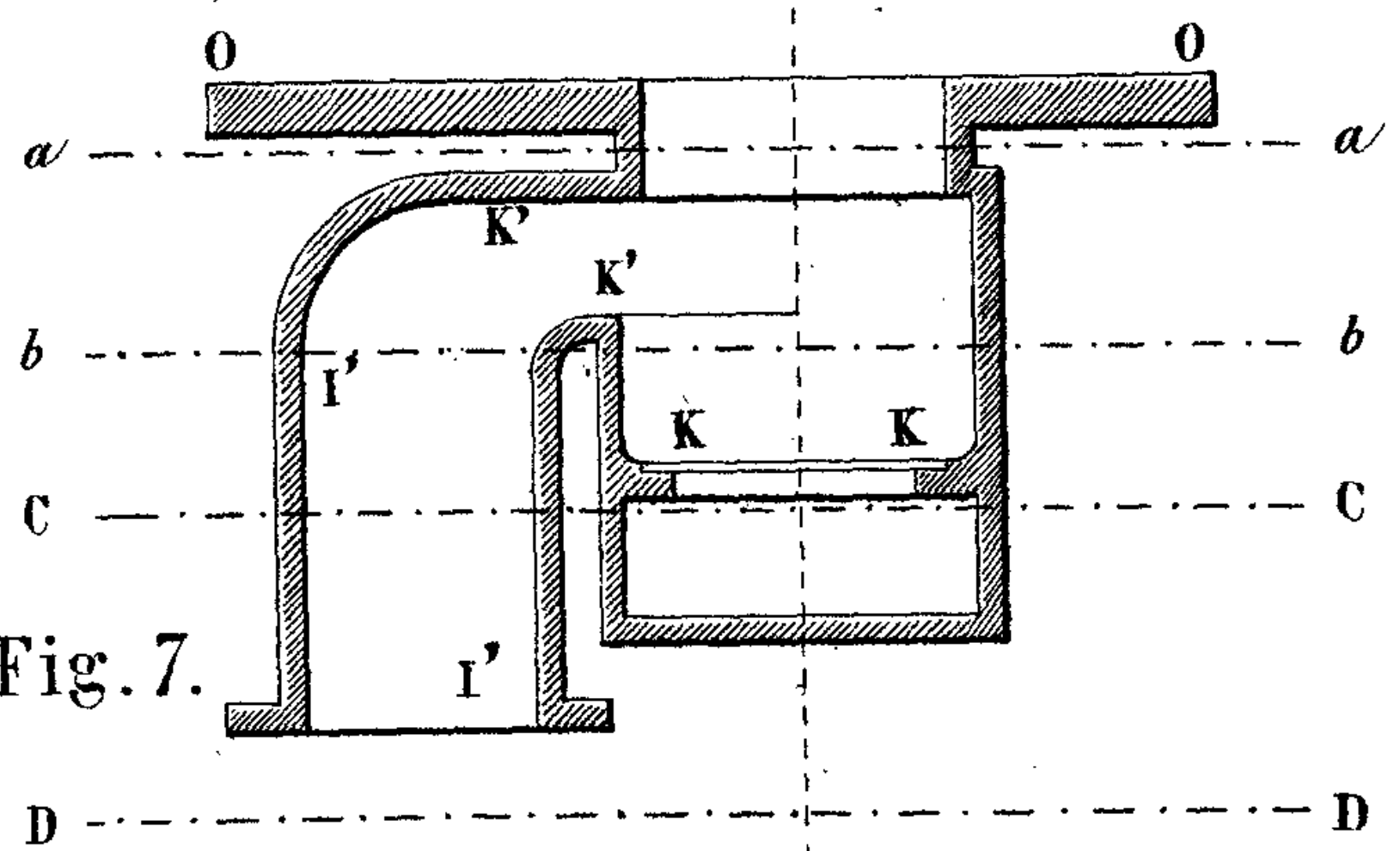


Fig. 7.

Coupe Horizontale suivant la ligne E E de la Fig. 2.



Coupe Horizontale suivant la ligne D D de la Fig. 1.

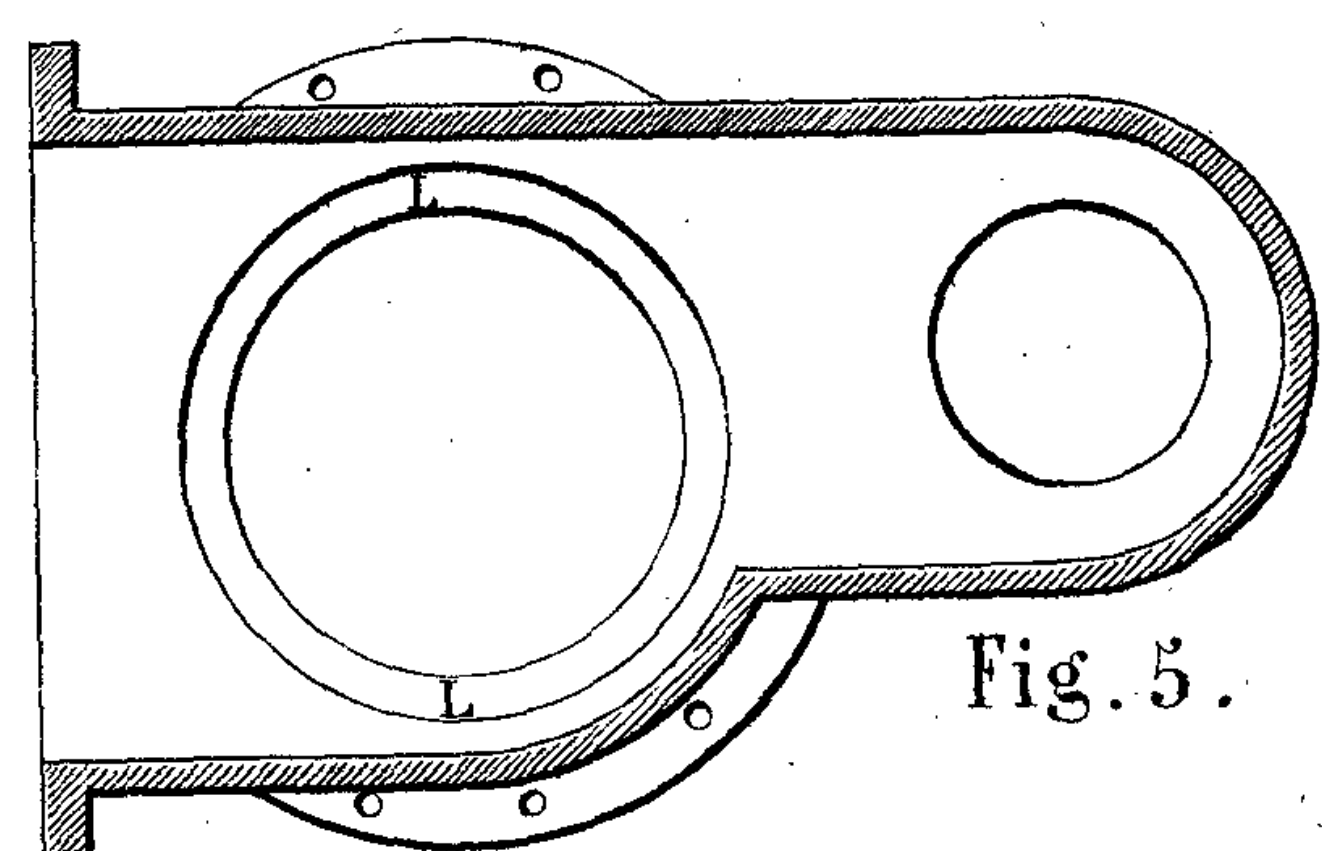
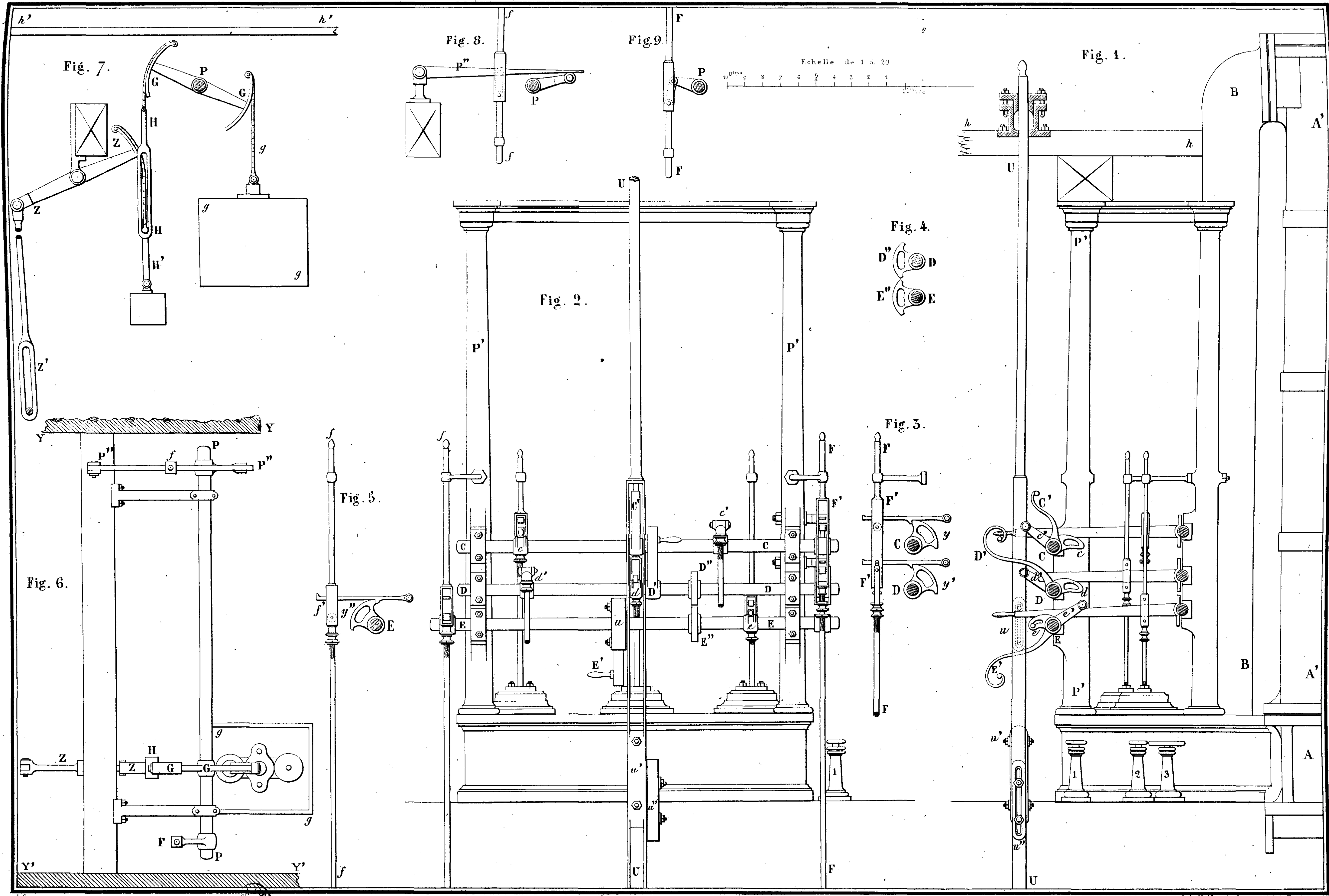


Fig. 5.















MACHINE D'ÉPUISEMENT ÉTABLIE AU MARTORET.  
(Rive-de-Gier)

PL. XXXVI.

Fig. 1.

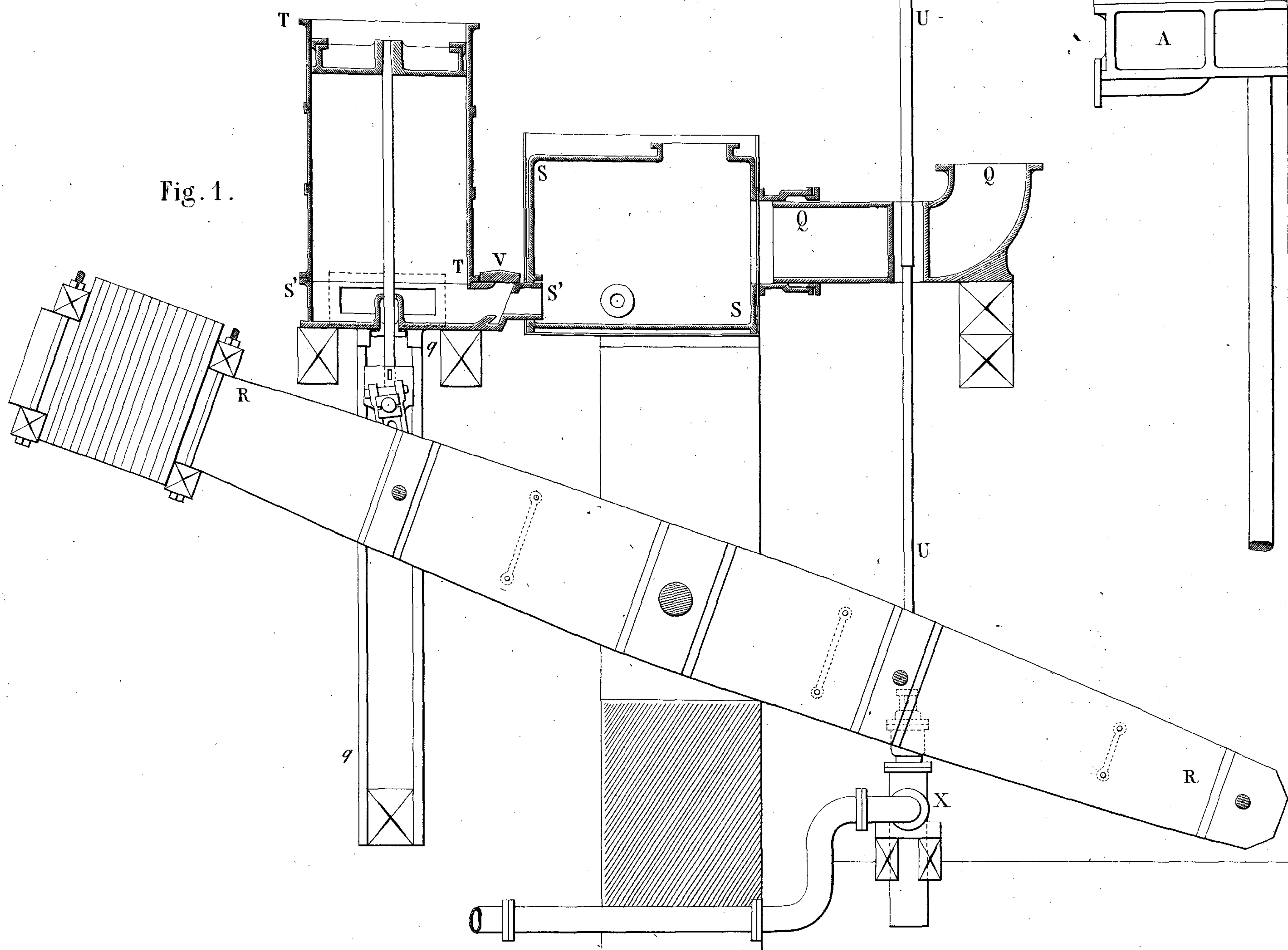


Fig. 2.

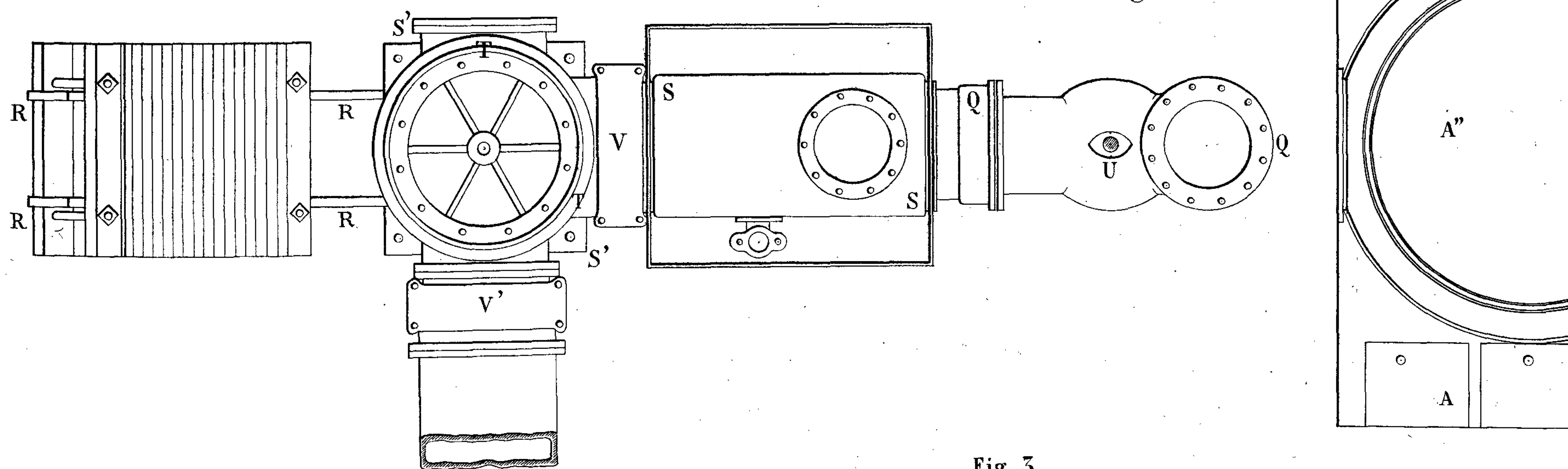


Fig. 3.

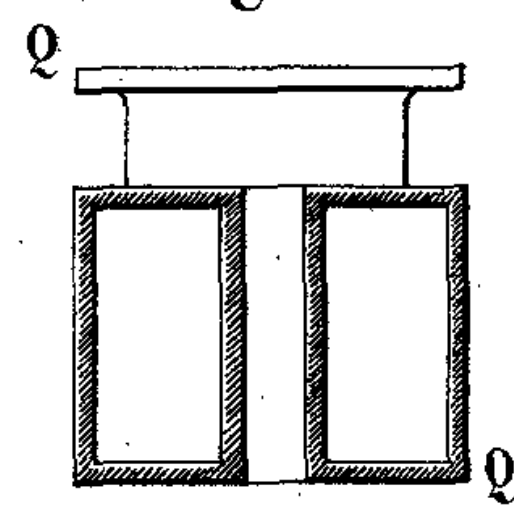


Fig. 4.

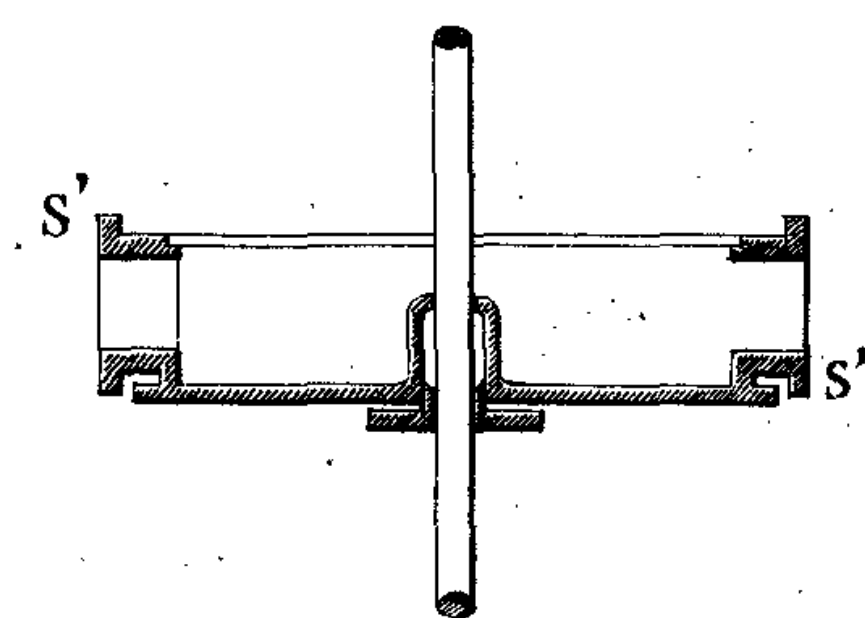


Fig. 5.

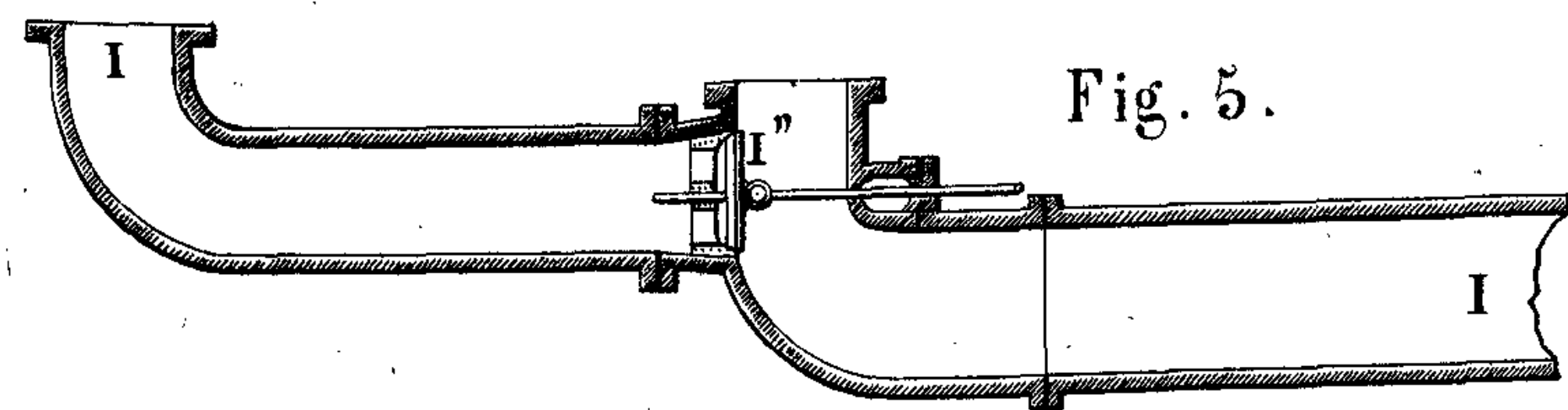
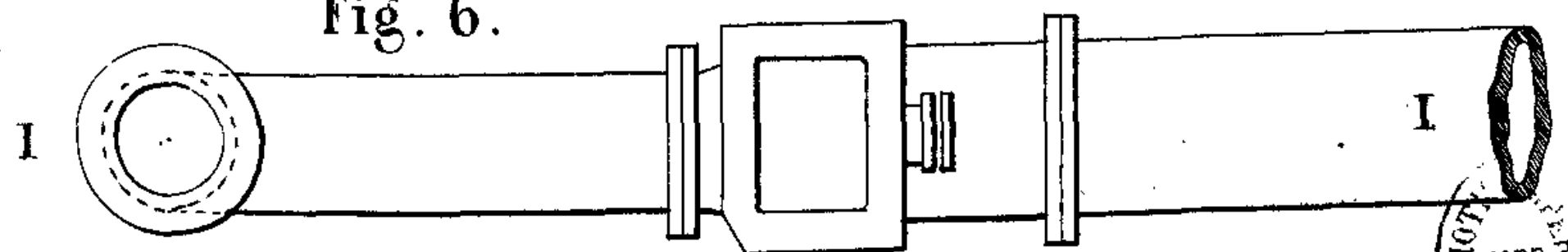
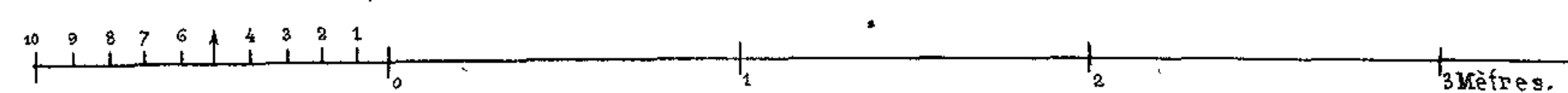


Fig. 6.



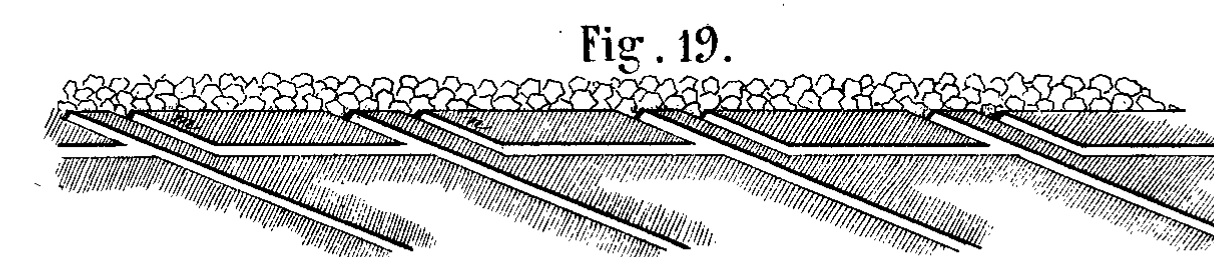
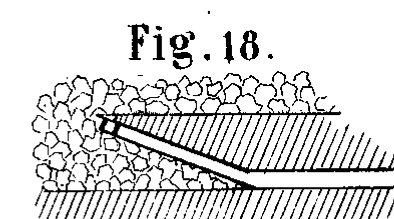
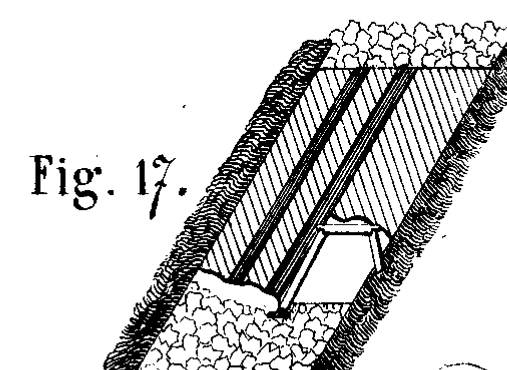
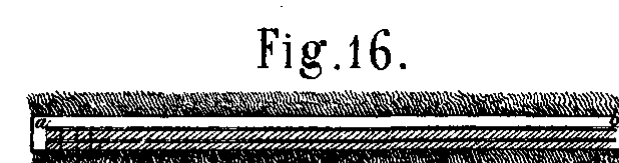
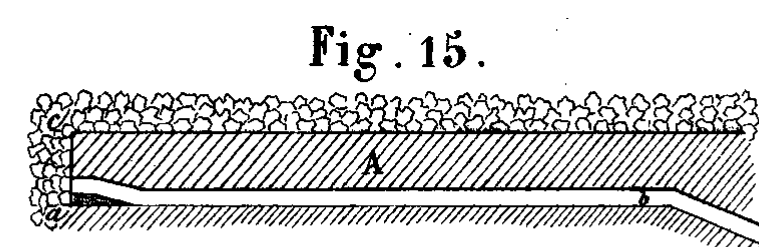
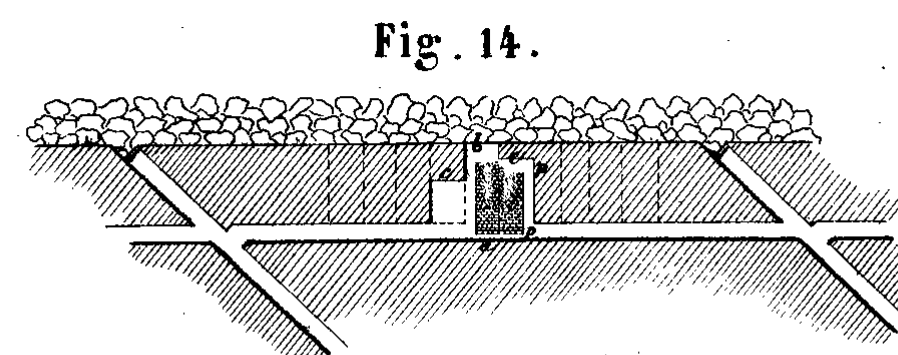
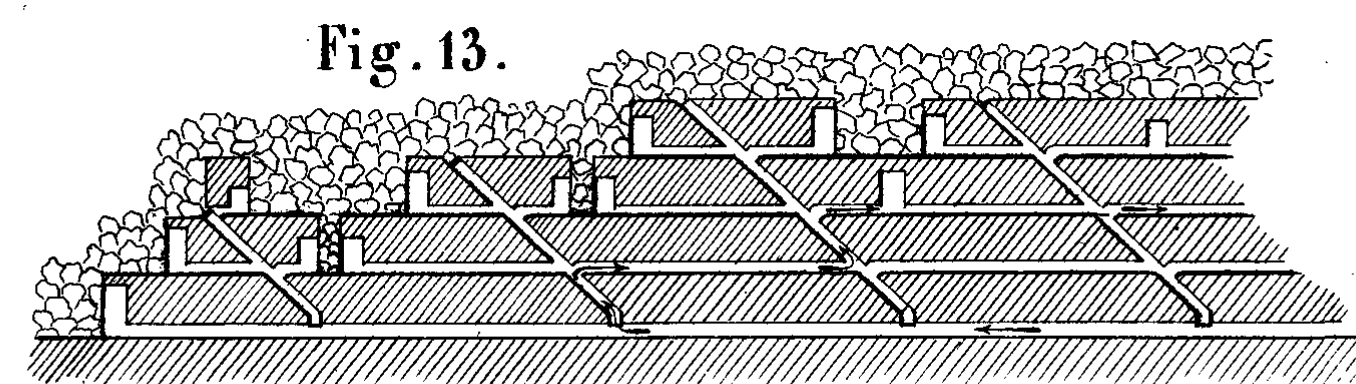
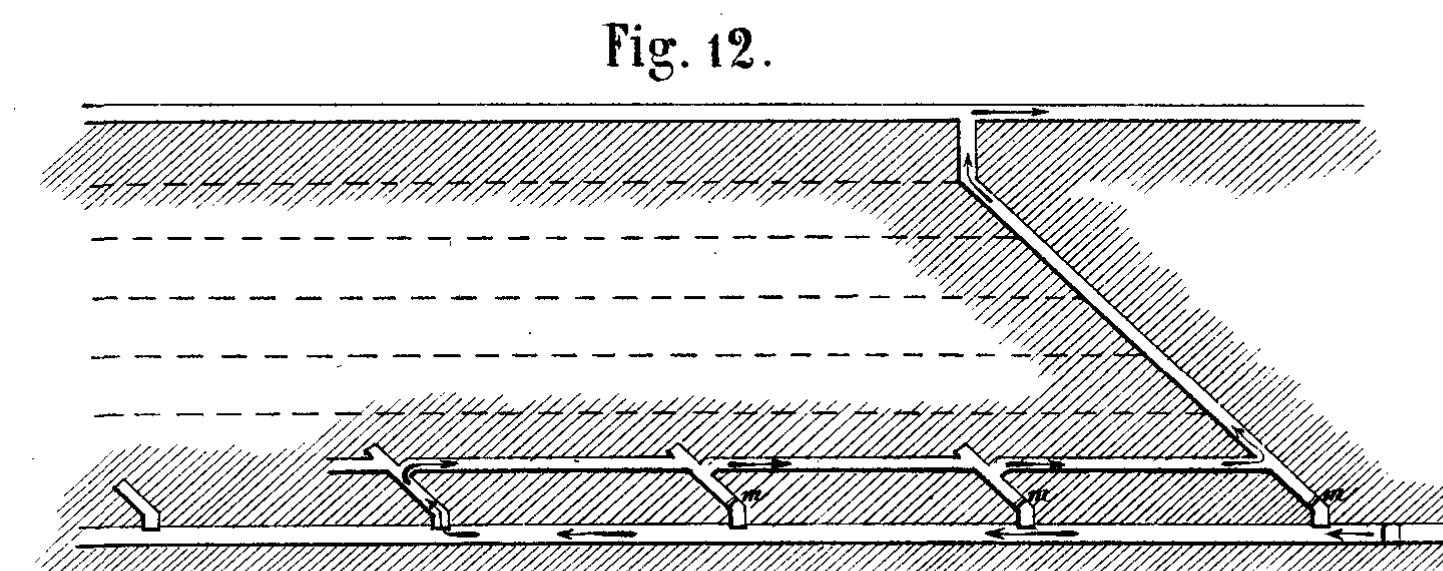
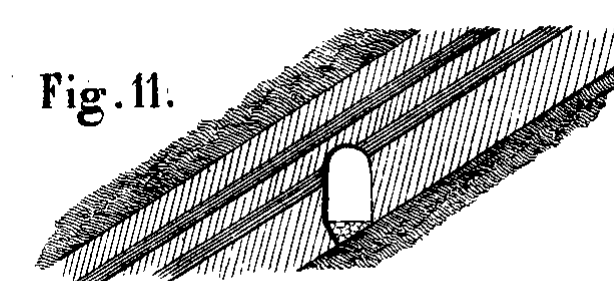
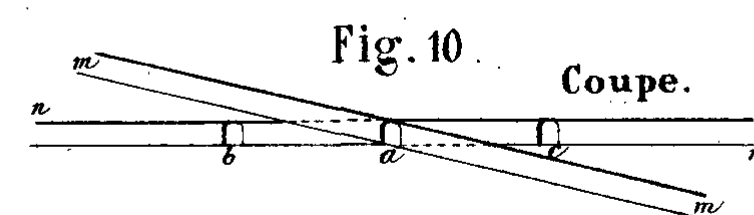
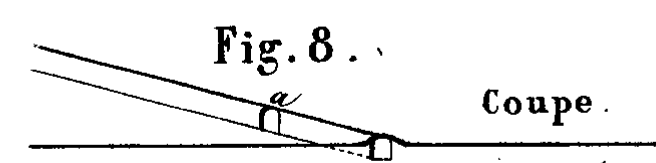
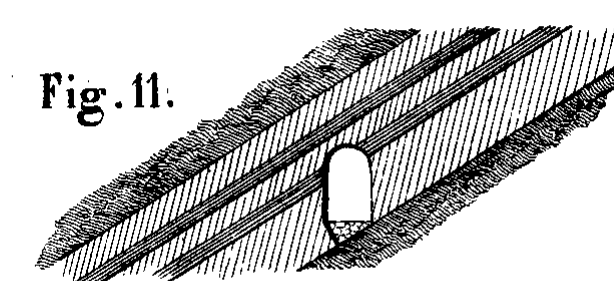
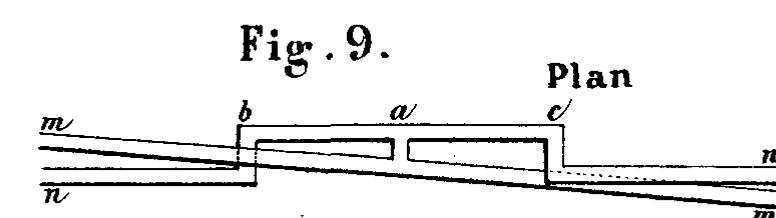
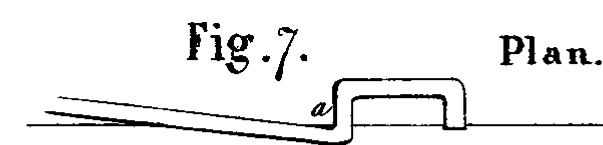
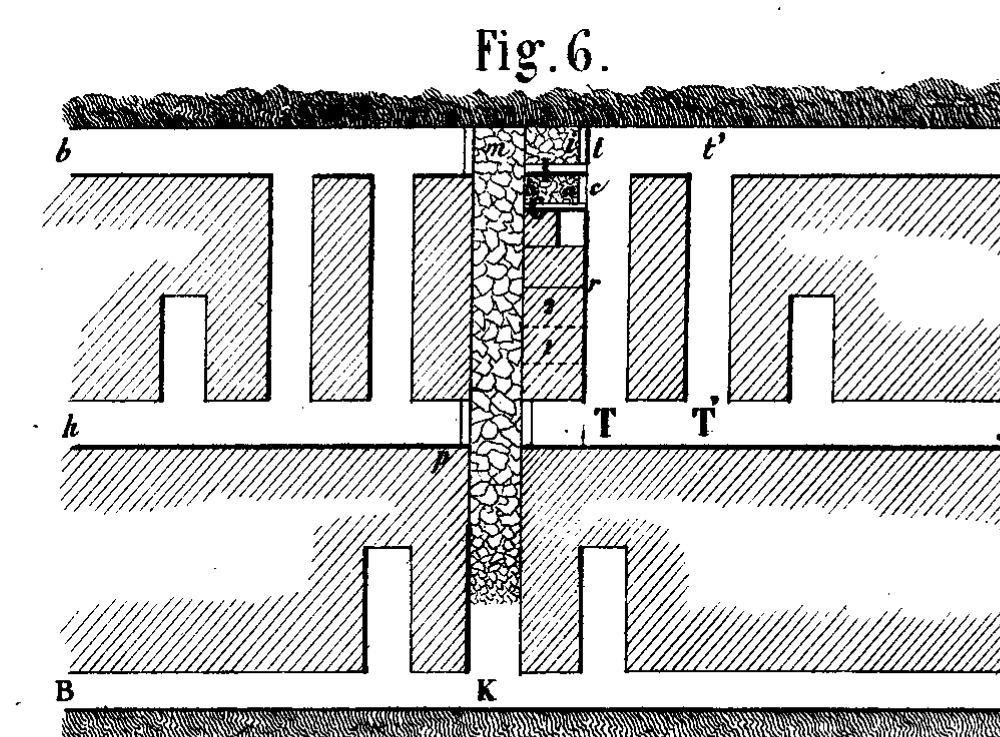
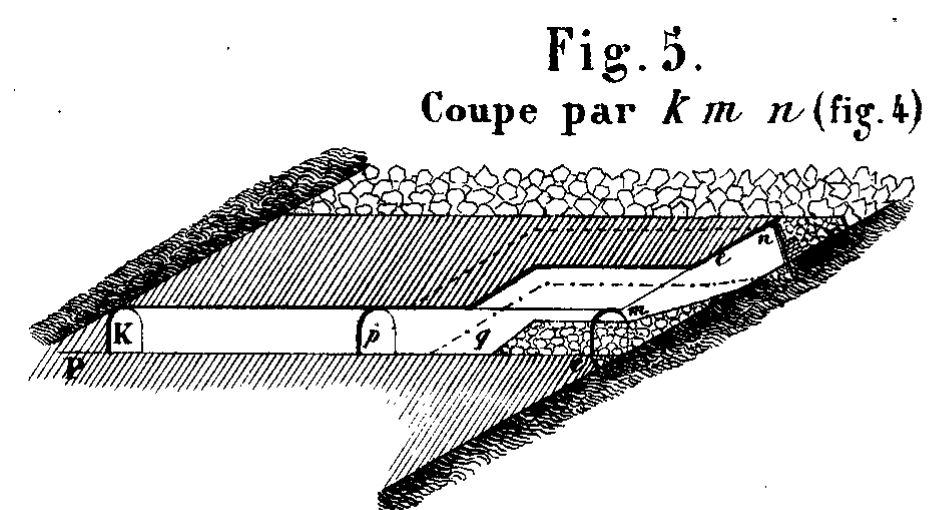
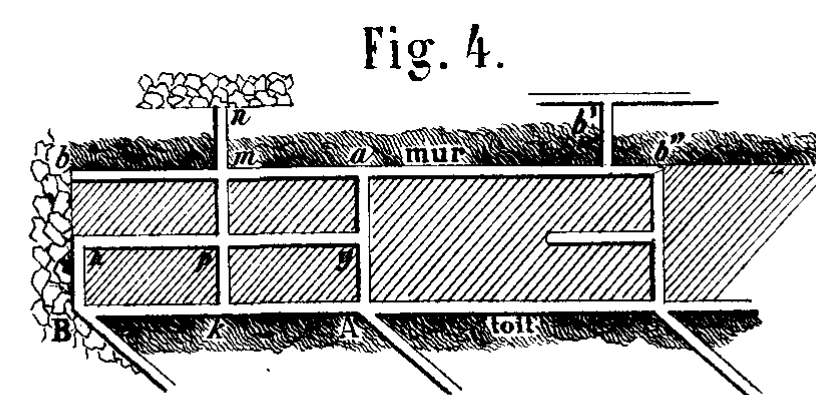
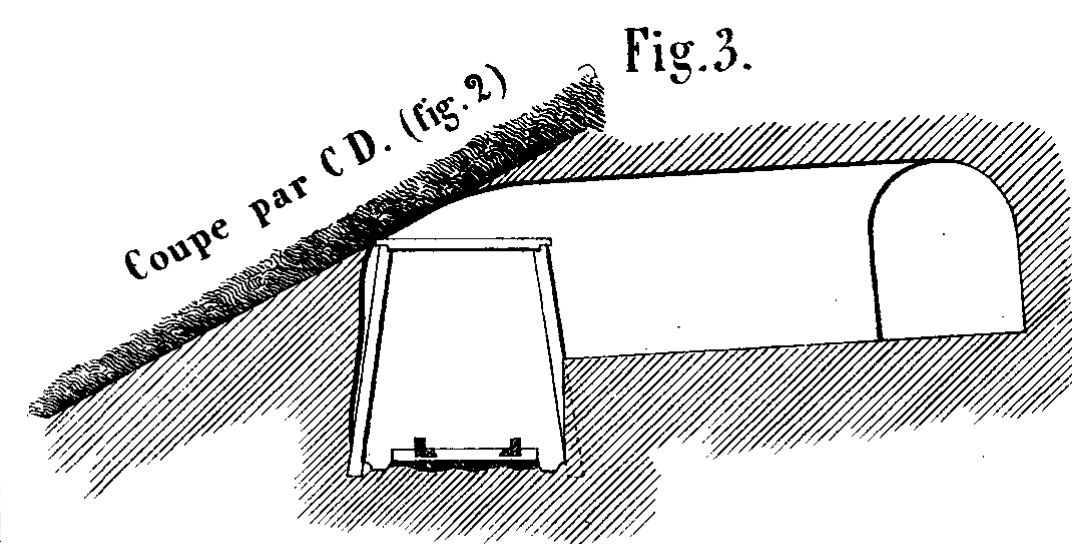
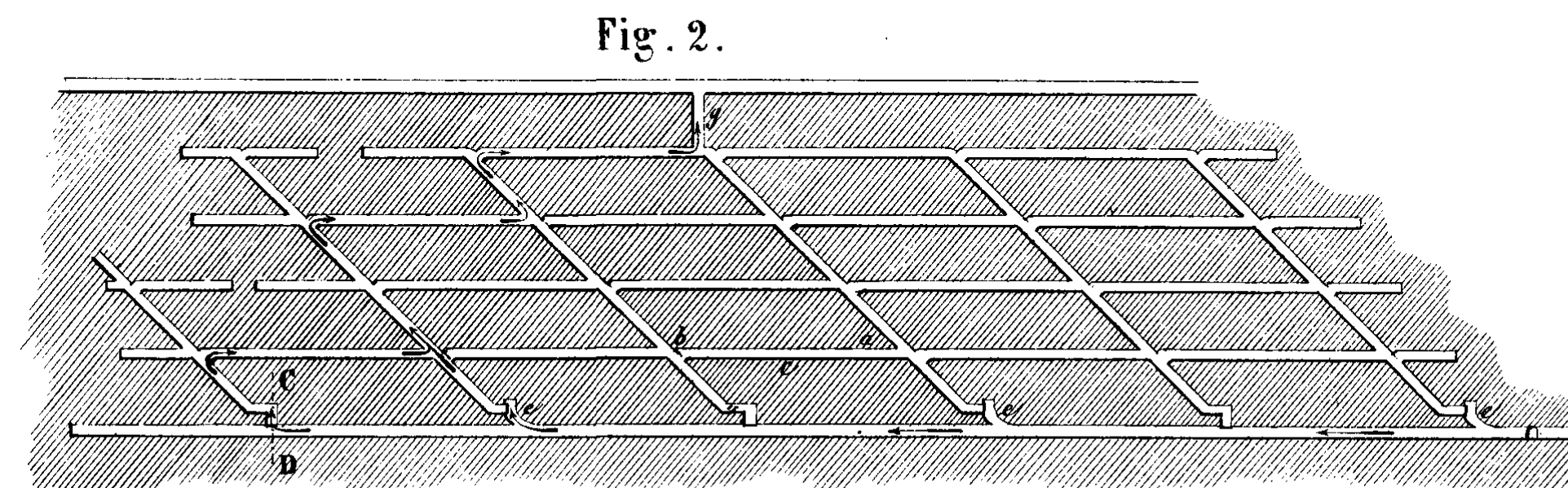
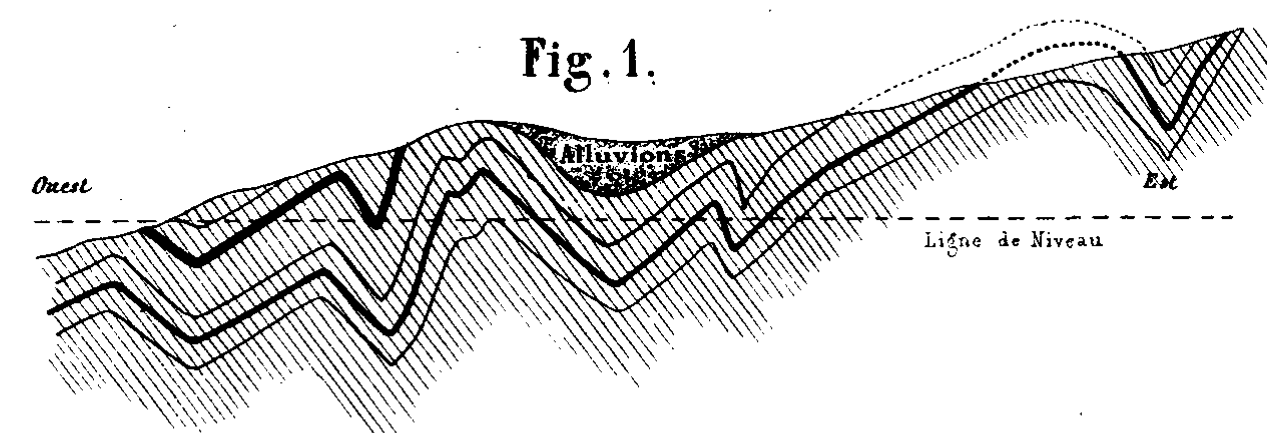
Echelle de 0,025 p<sup>r</sup> 1 Mètre (1/40)







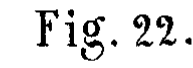
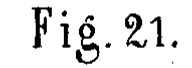
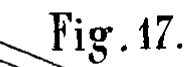
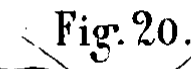
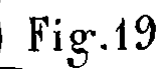
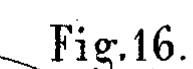
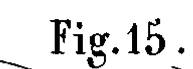
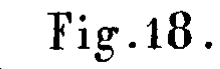
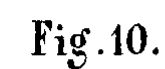
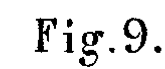
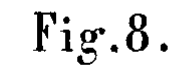
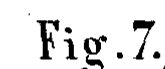
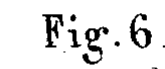
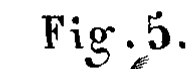
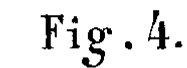
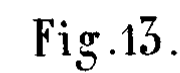
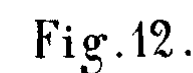
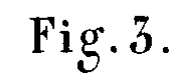
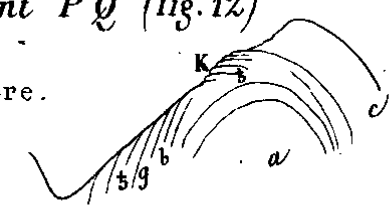
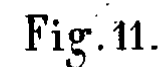
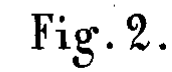
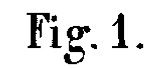






















# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1858-07.

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# ATLAS

DE LA

## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE

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**IV<sup>e</sup> ANNÉE**

**1<sup>re</sup> LIVRAISON**

**Juillet, Août, Septembre,**

**1858.**

*P 1 a 3*



SAINT ETIENNE IMPRIMERIE LITHOGRAPHIQUE  
NUBLAT J<sup>ne</sup> & F<sup>ic</sup> LANTZ  
Place Marengo, 2.

V 2735  
Fda 4.



**ON TROUVE CHEZ**

**NUBLAT J<sup>NE</sup> ET F<sup>IC</sup> LANTZ**

***Place Marengo, 2, à Saint-Etienne :***

La Carte topographique du bassin houiller sur deux feuilles grand aigle, dressée et gravée par J.-B. NUBLAT

La Carte géologique du bassin houiller, par M. GRUNER, ingénieur en chef des mines.

La Carte du département de la Loire.

Le Plan de Saint-Etienne.



Le Papier grand aigle divisé pour Plans de Mines.

Le Papier-Toile à calquer en rouleaux.

Collage sur toile et raccommodage de Plans et Cartes.

Fabrique de Registres et Lithographies en tous genres.

**SPÉCIALITÉ POUR LA FOURNITURE DES MINES & USINES.**



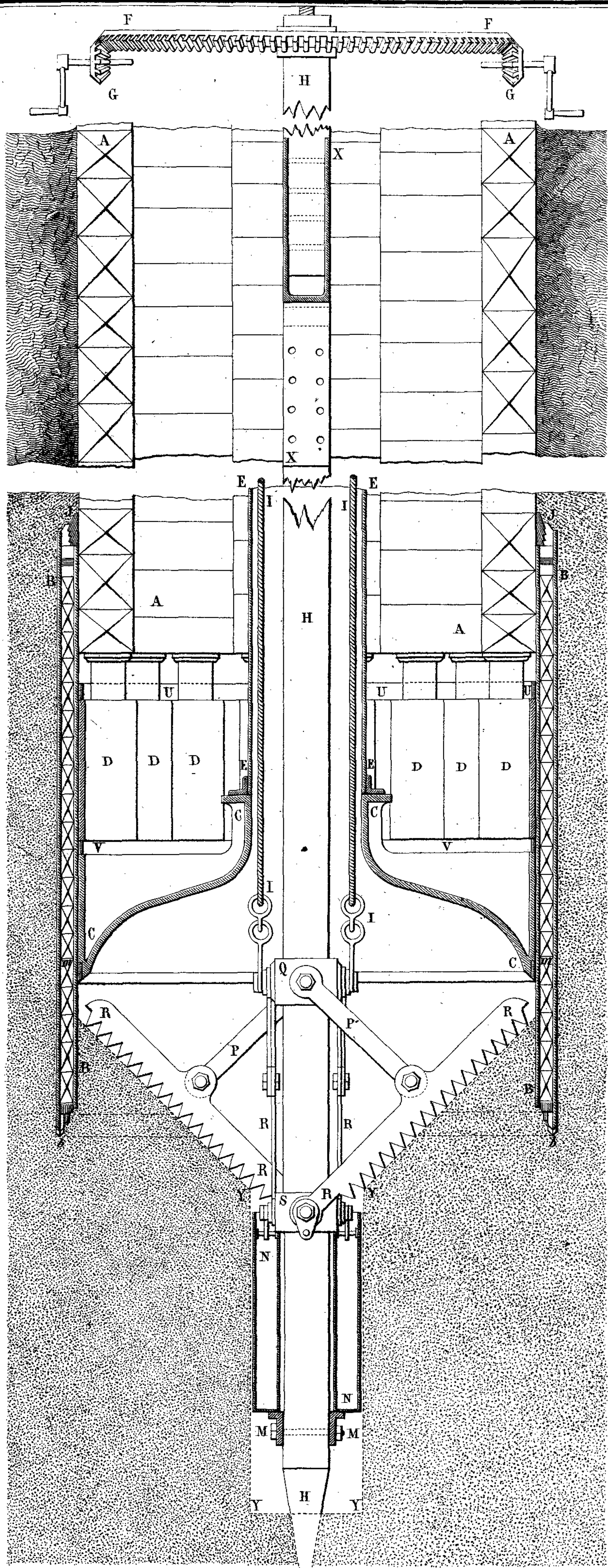


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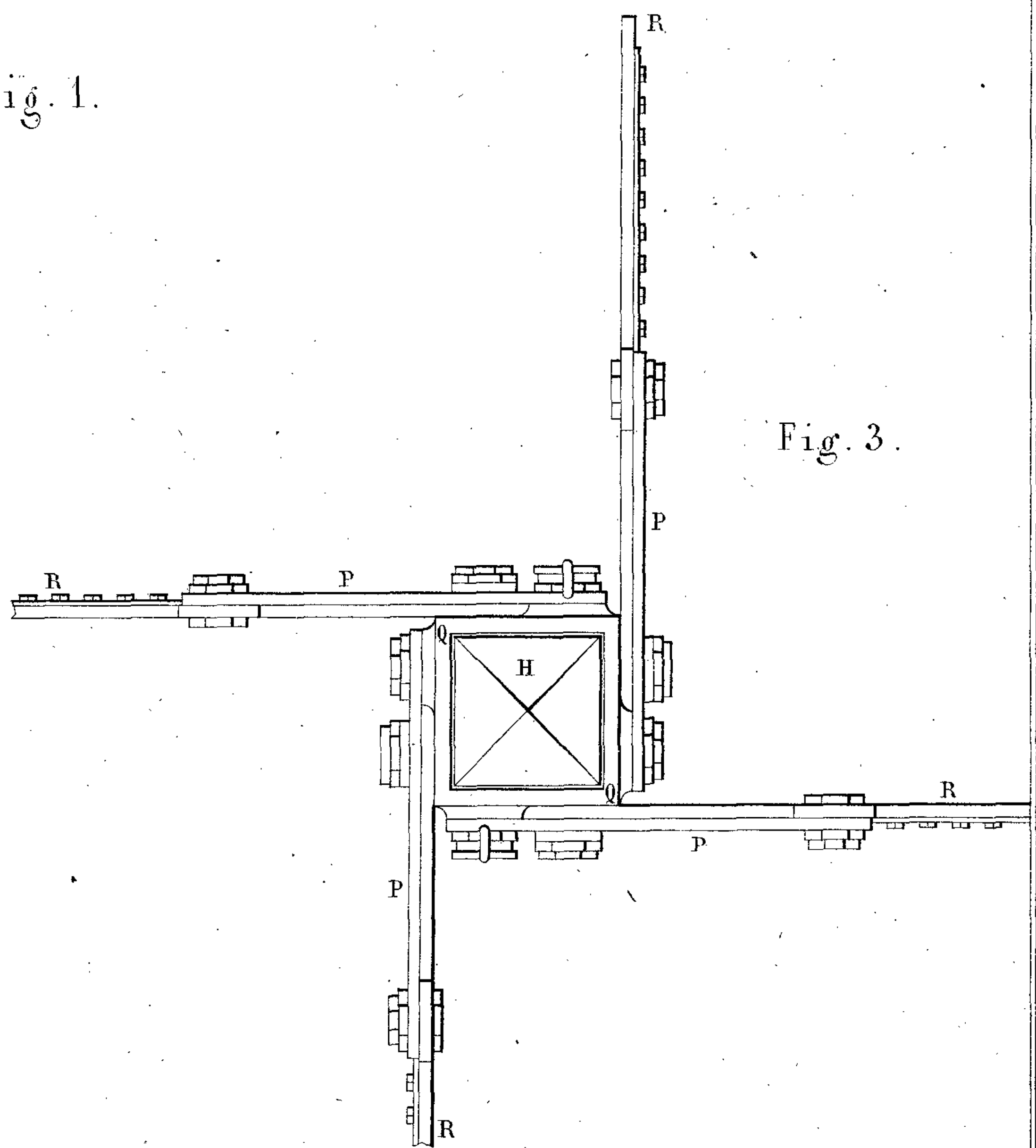


Fig. 3.

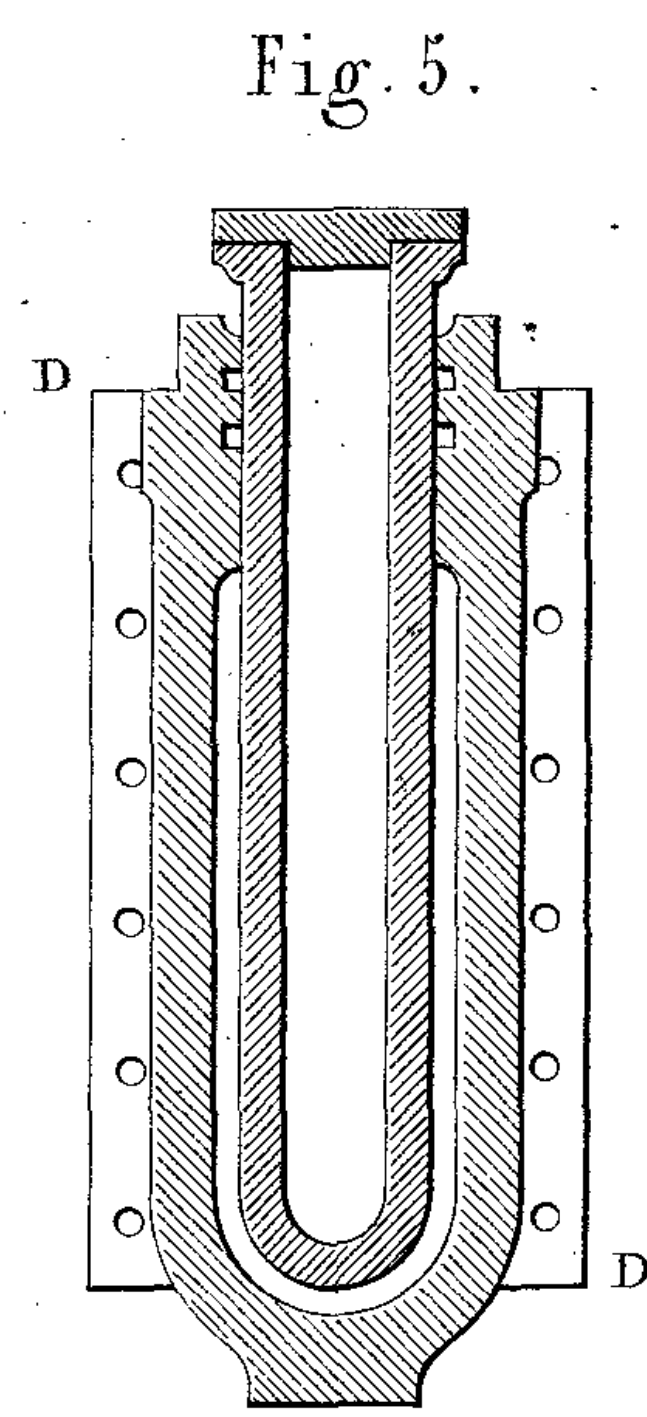


Fig. 5.

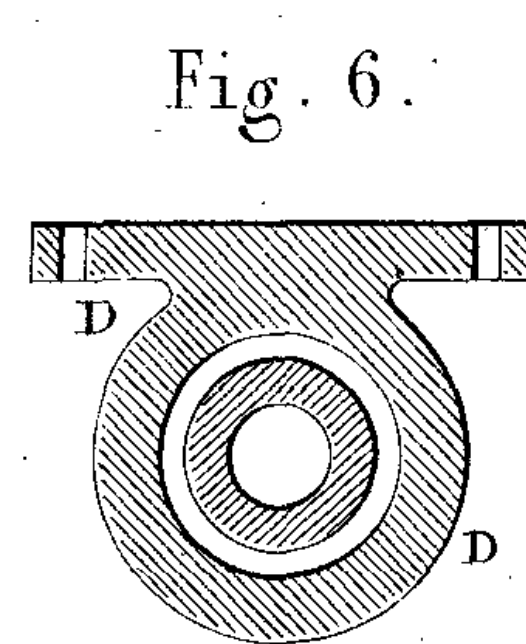


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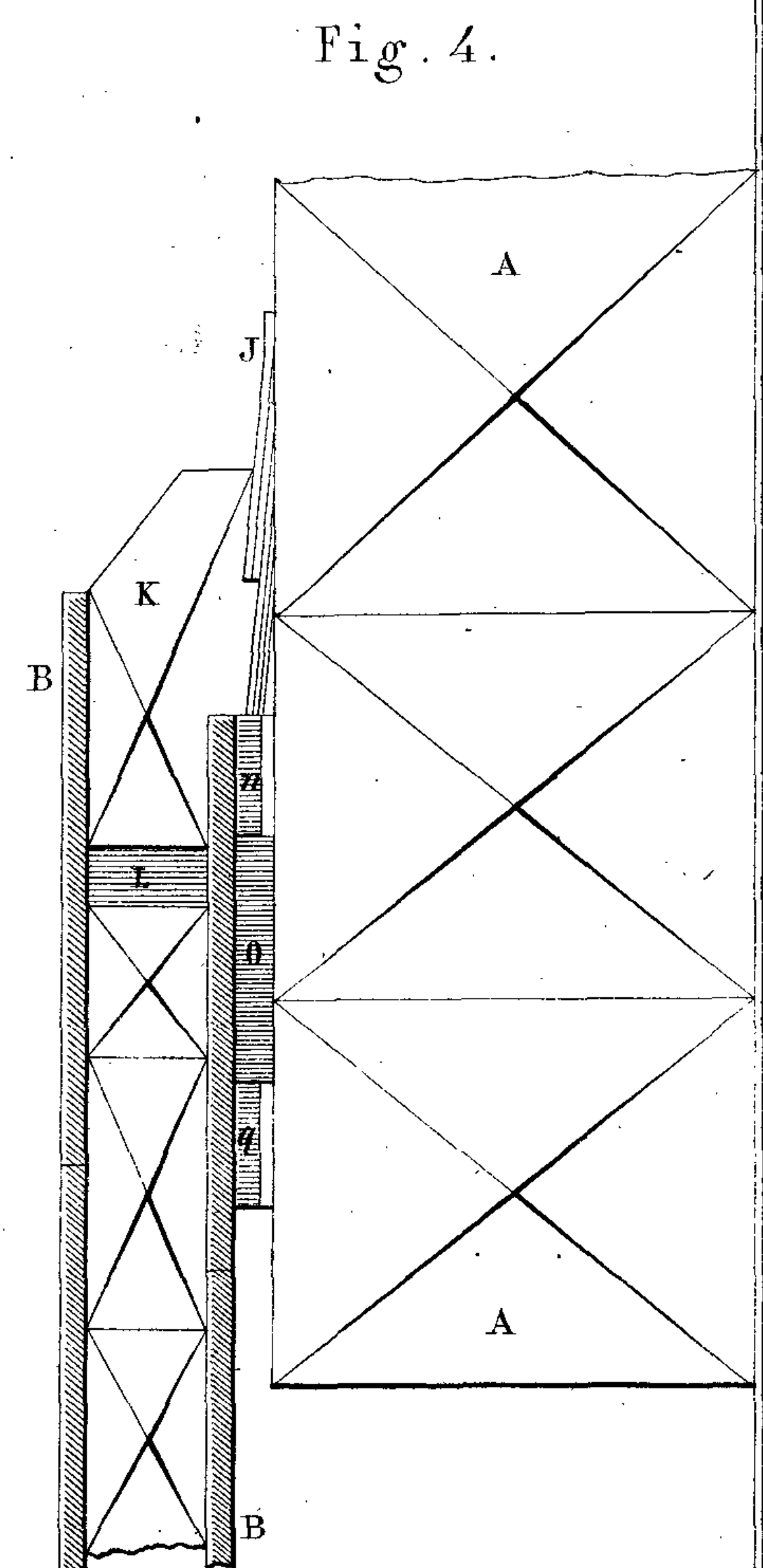
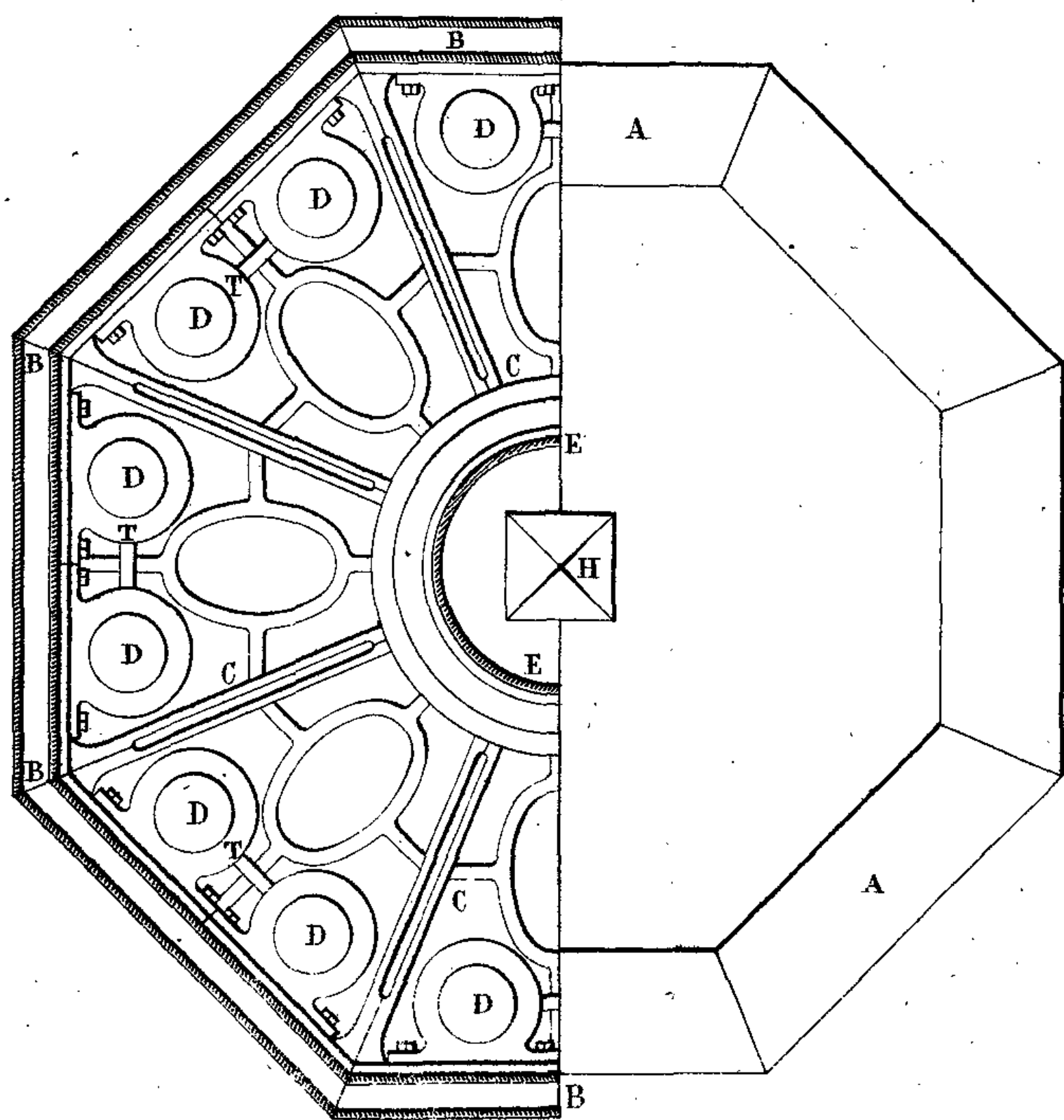


Fig. 4.

Fig. 2.



Echelle des fig. 1 et 2 (0<sup>m</sup>,025 pour 1 mètre)

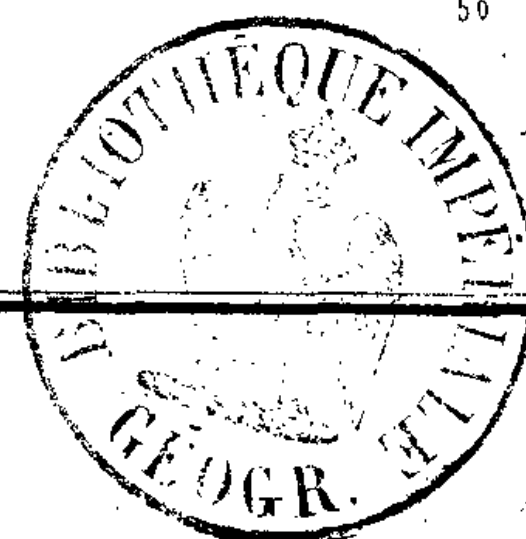
100 50 0 1 2 3 Mèt

Echelle des fig. 3, 5 et 6 (0<sup>m</sup>,05 pour 1 mètre)

100 50 0 1 Mèt

Echelle de la fig. 4 (0<sup>m</sup>,10 pour 1 mètre)

0 50 100 1 Mèt



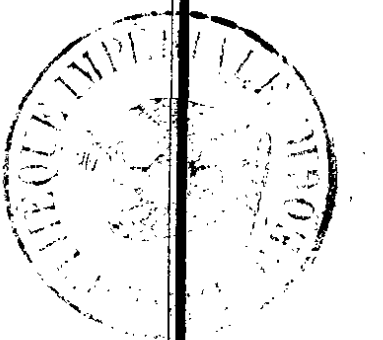
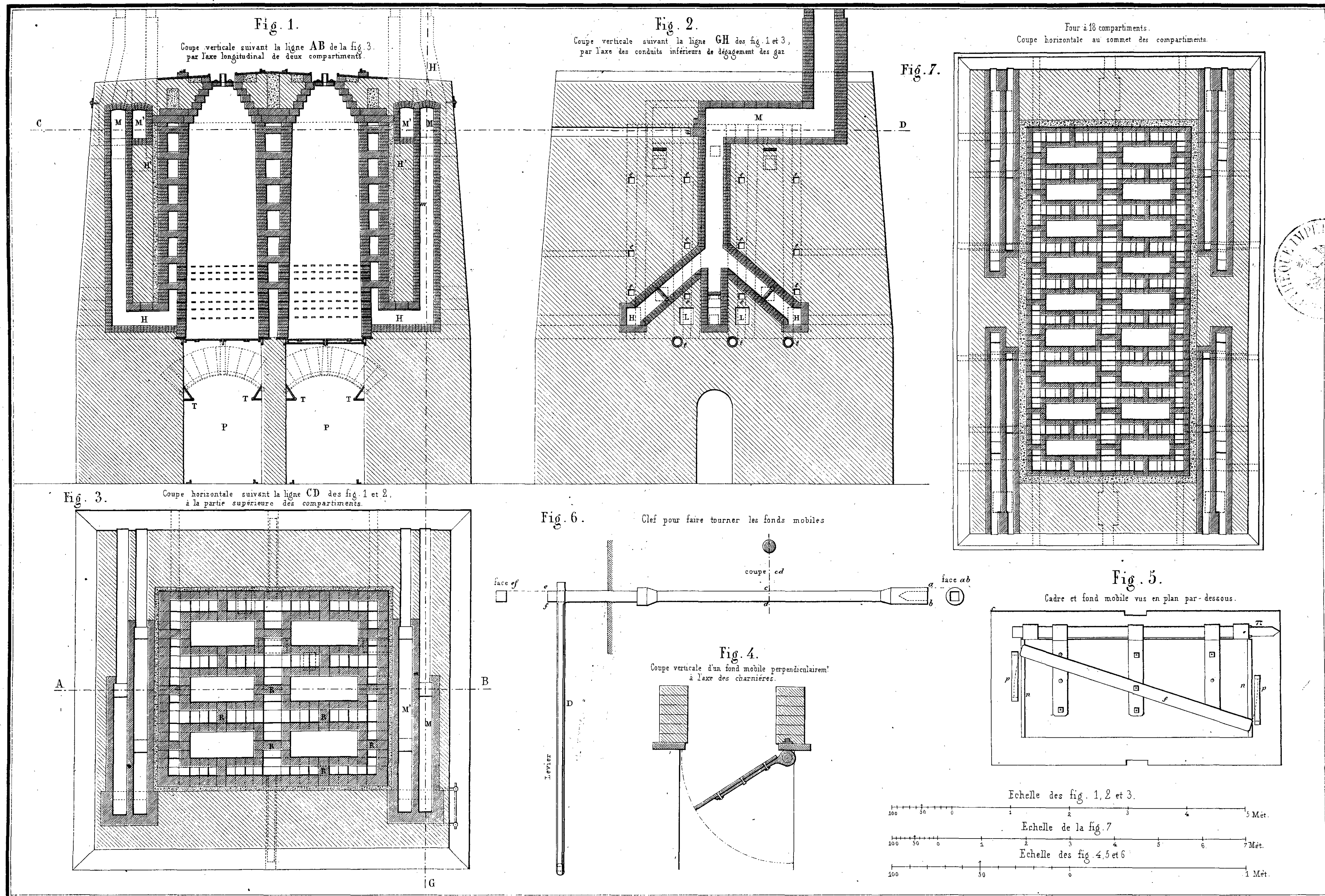
S. Etienne, lith. Nublat et Lantz

DE 12 - 1859





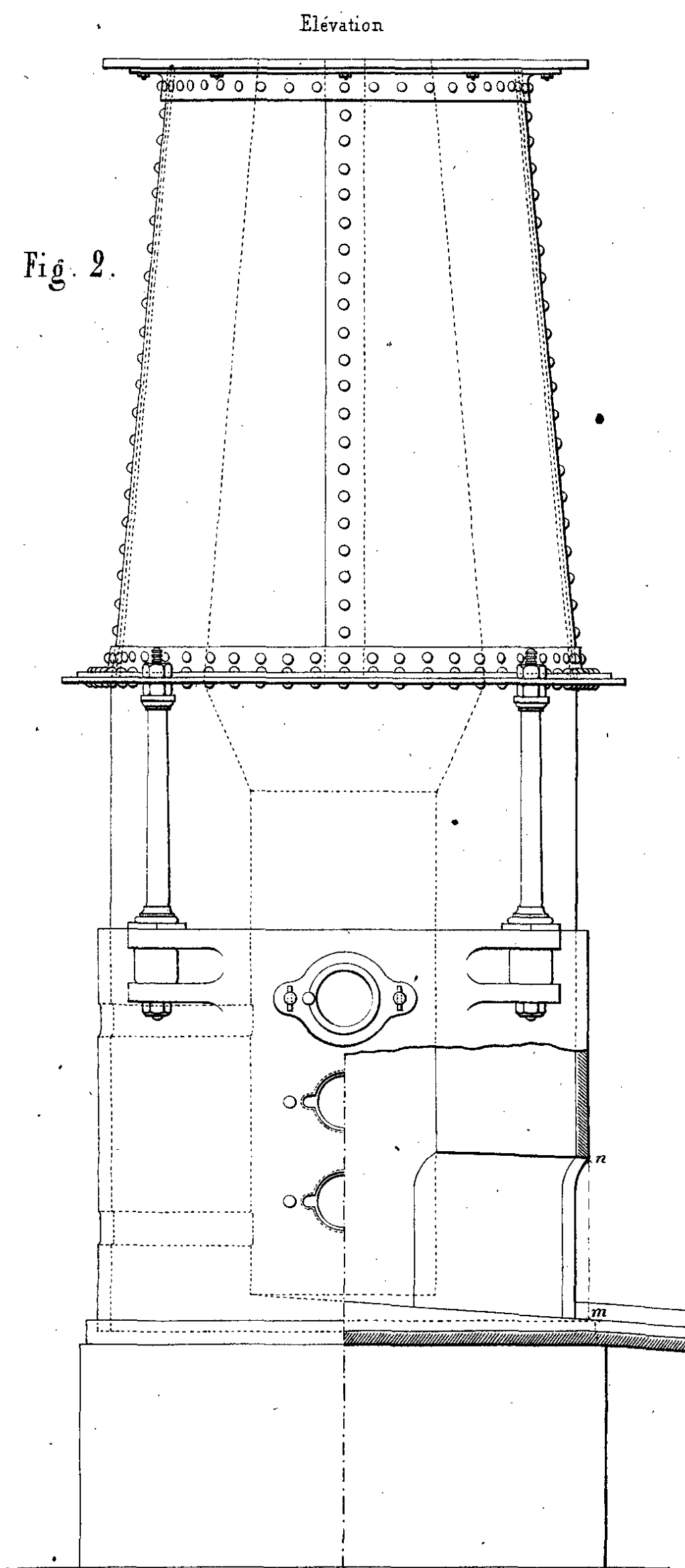
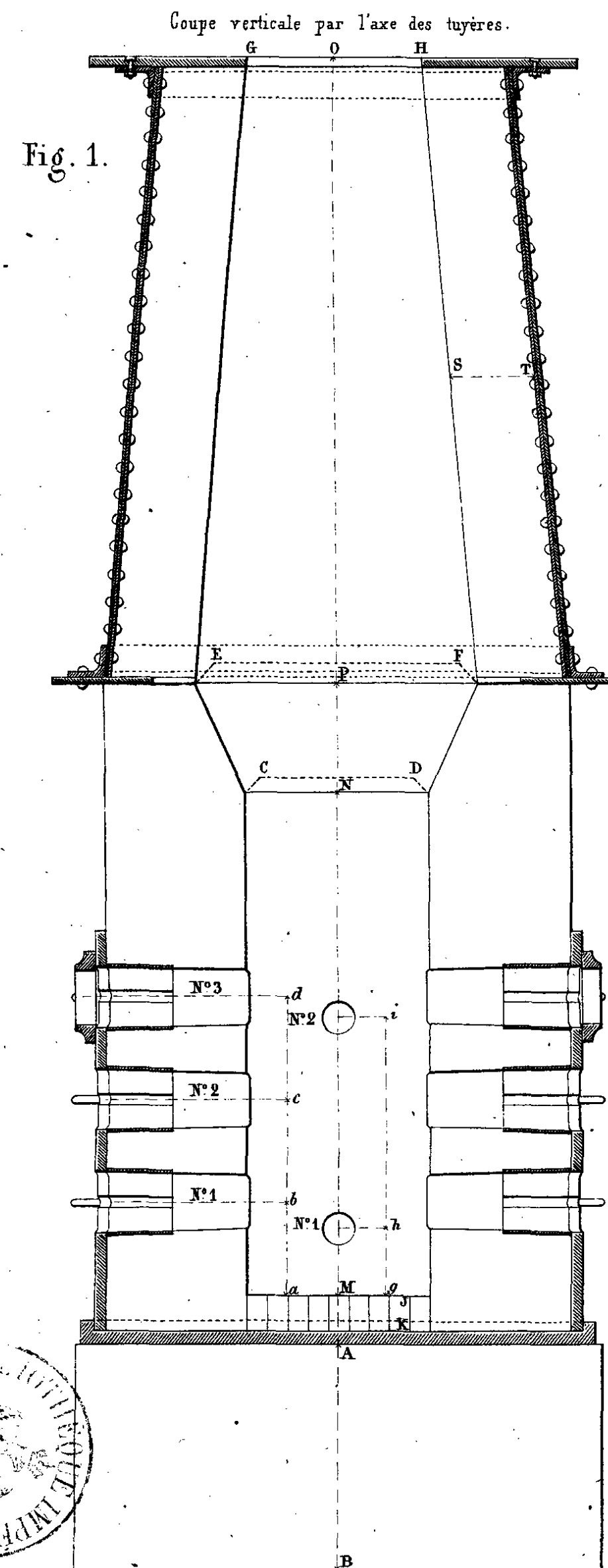












Cuves de trois fourneaux de la contenance de 1000, 2000 et 3000 Kil.

Fig. 3.

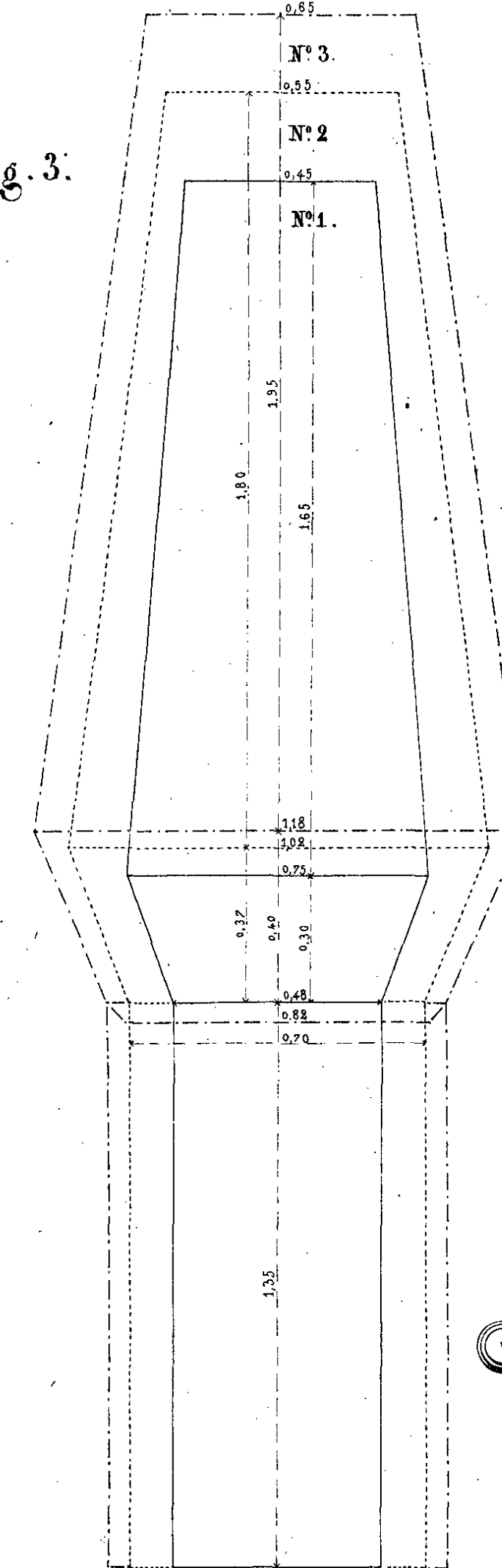


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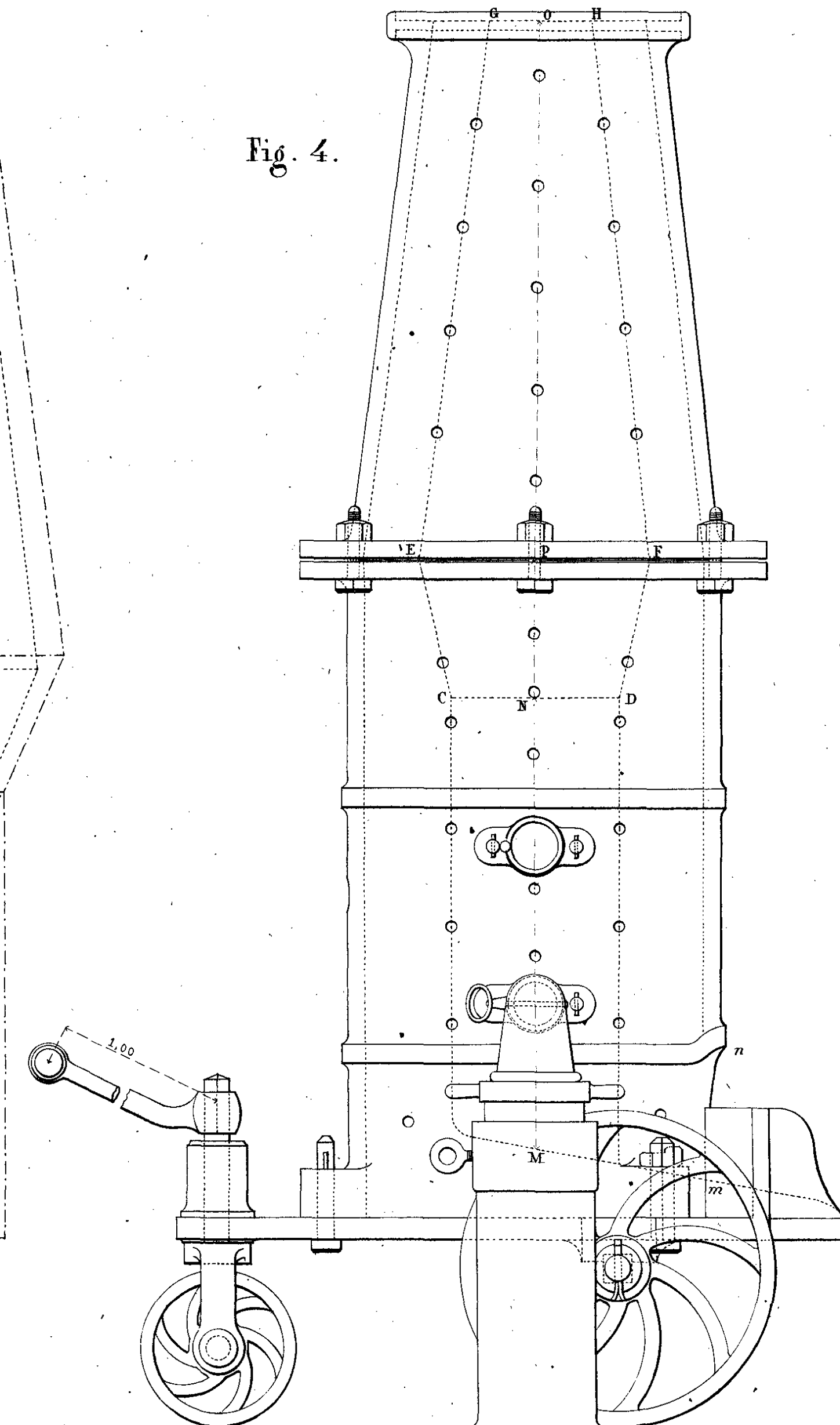
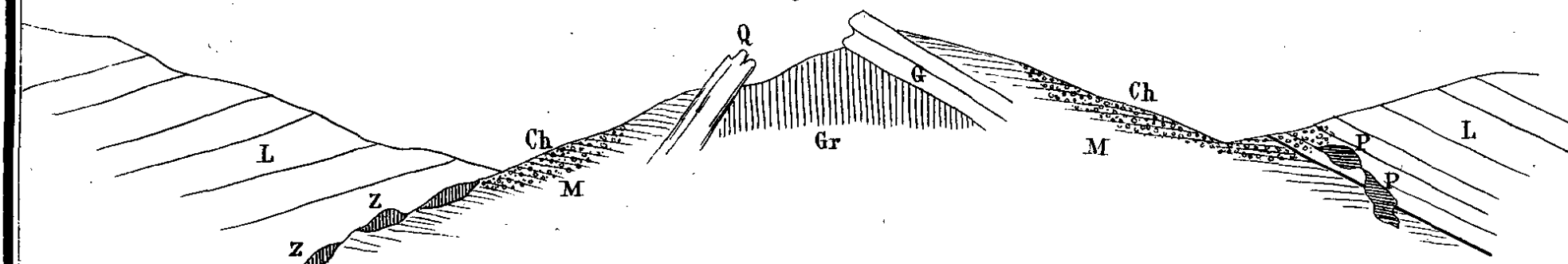


Fig. 5.



- L. Lias
- M. Marnes du Trias
- Gr. Grès inférieurs du Trias
- Q. Dyke quartzieux
- Z. Minerais de zinc de la mine Félix
- P. Minerais de Plomb
- Ch. Chapeau de Fer et pyrites

Echelle des fig. 1, 2 et 3

100 50 0 1 Mèt.

Echelle de la fig. 4

0 50 1 Mèt.

DL 1/1 1889







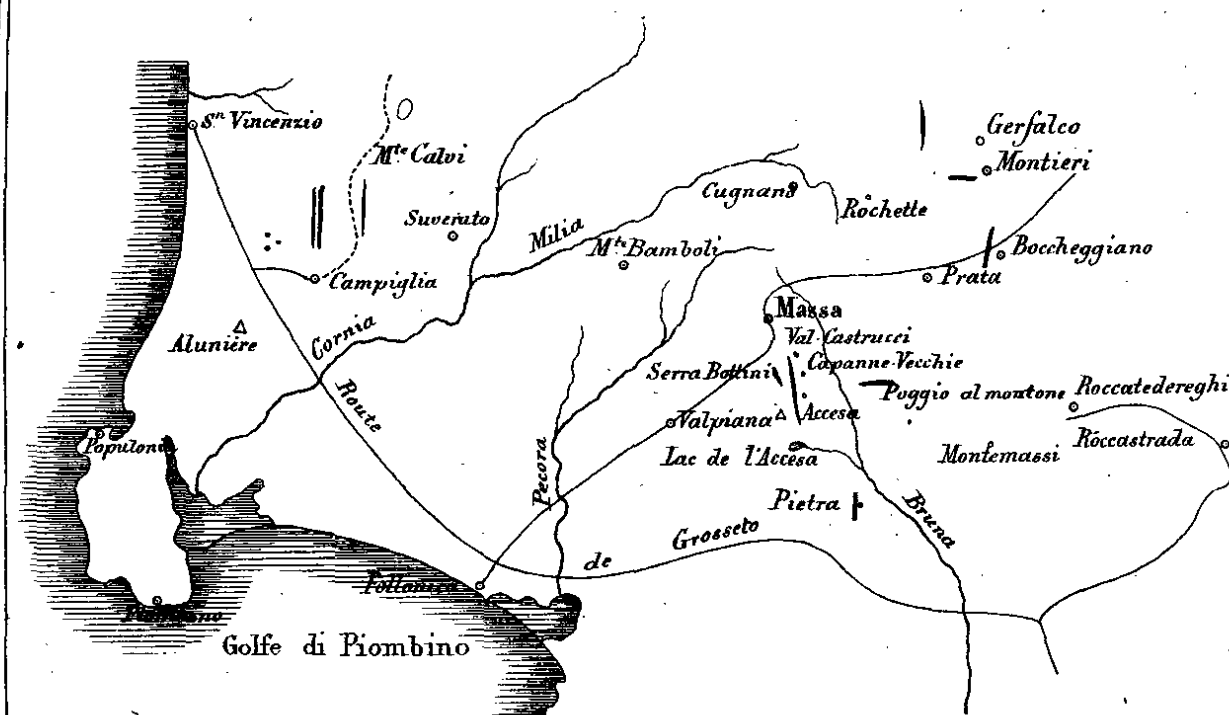


Fig. 1. Carte des Marennes et coupe générale de Gerfalco à San-Vincenzo

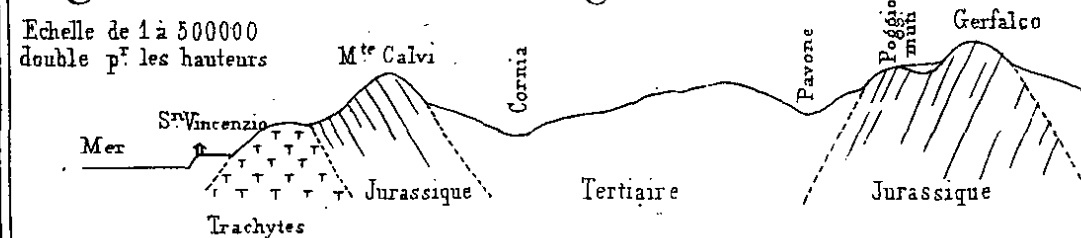


Fig. 5. Disposition relative des mines de Val-Castrucci, Capanne Vecchie, Accesa et Serra-Bottini.

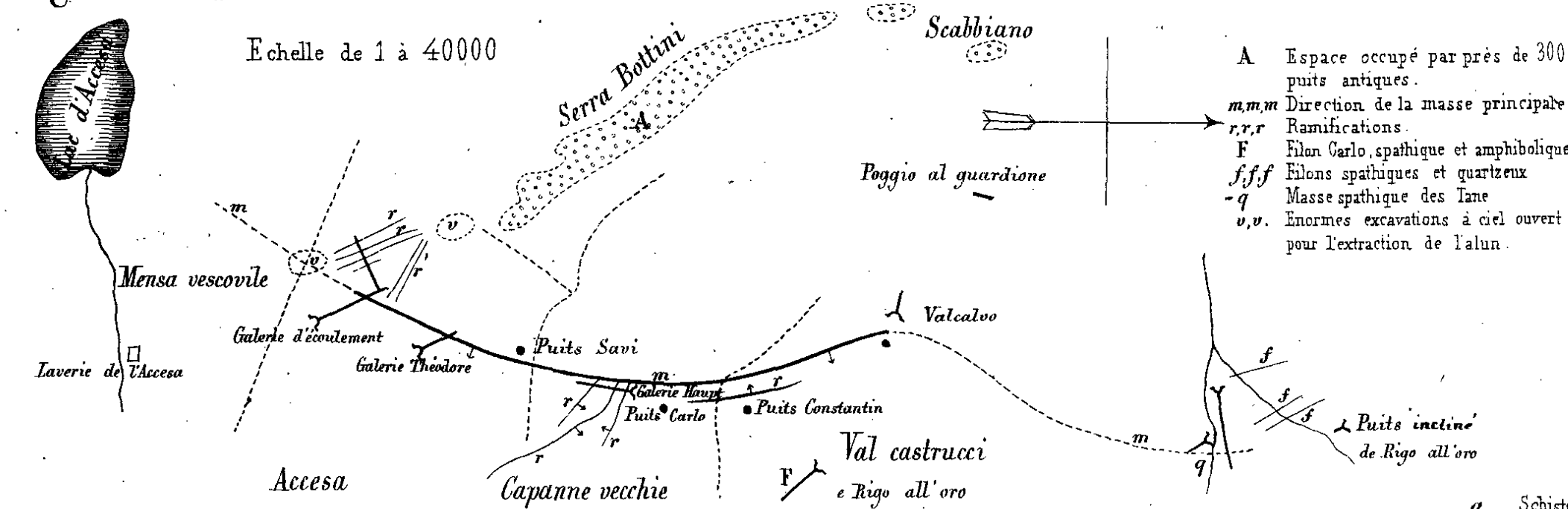


Fig. 7. Travaux del Carpignone (Accesa)

Echelle de 1 à 4000

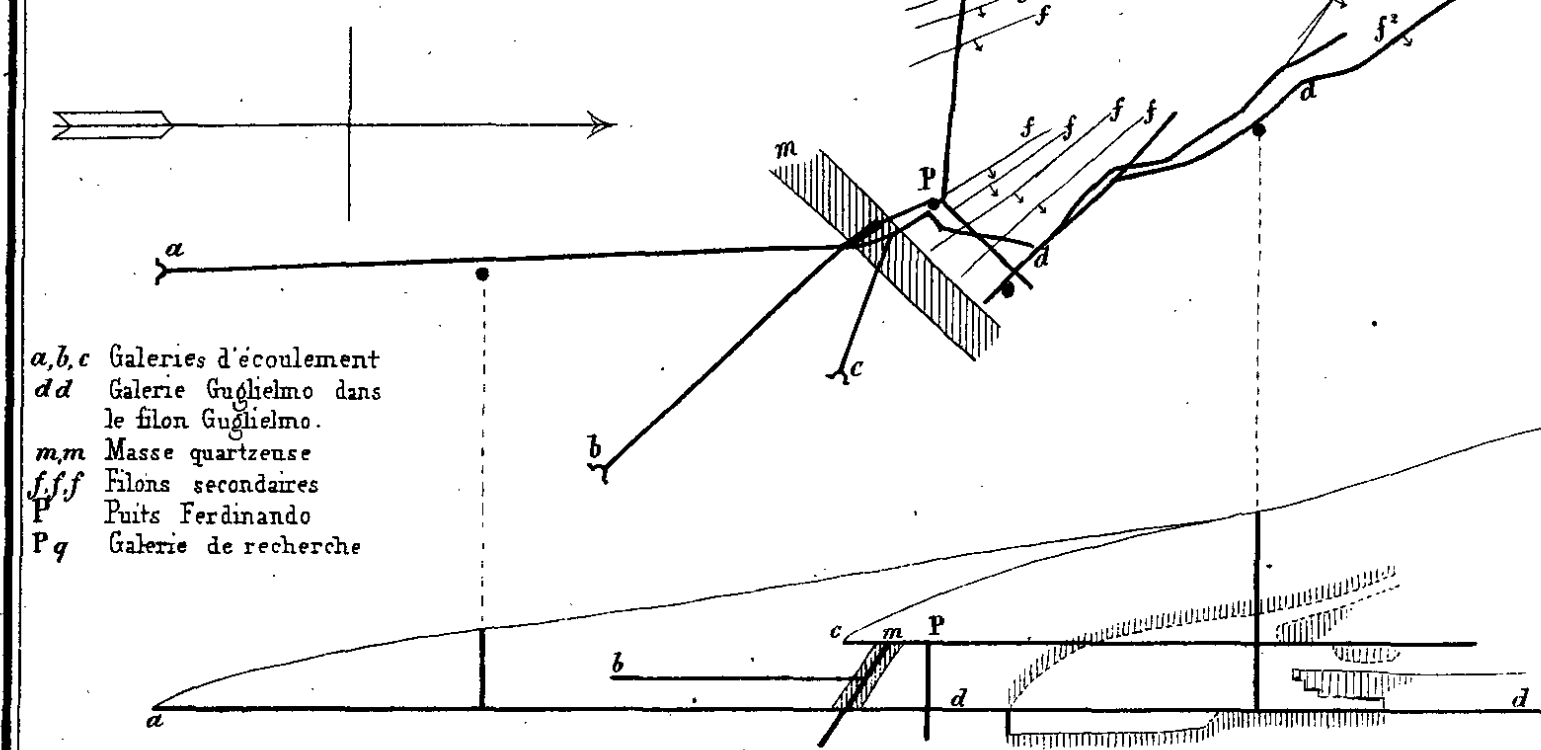


Fig. 9. Filon Carlo.

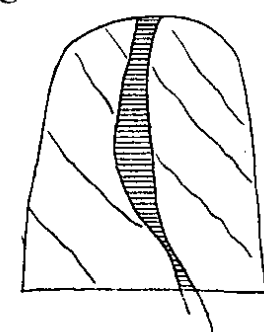


Fig. 11. Bagnolo

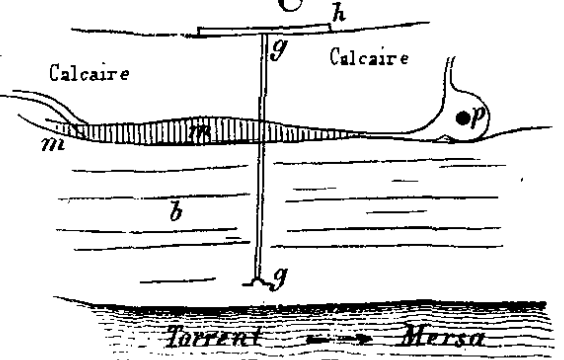


Fig. 12. Cava - Gilli

Fig. 13. Bagnolo.

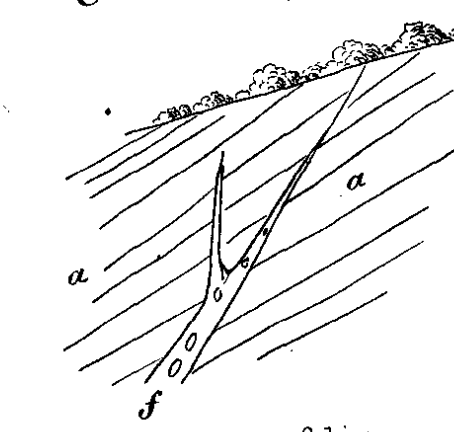


Fig. 14. Montieri.

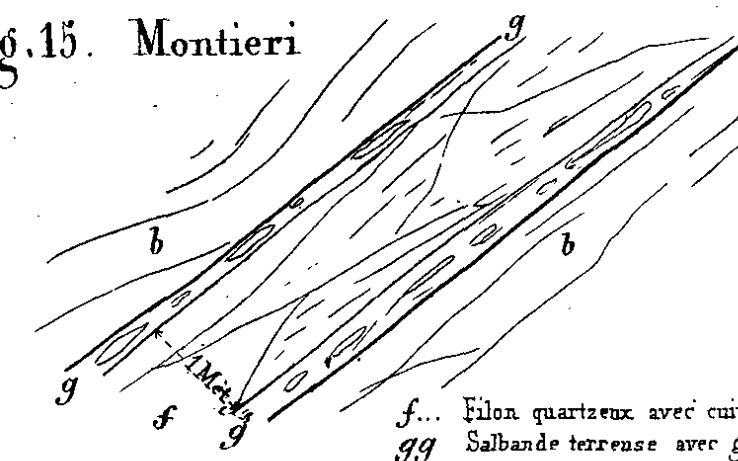


Fig. 15. Montieri.

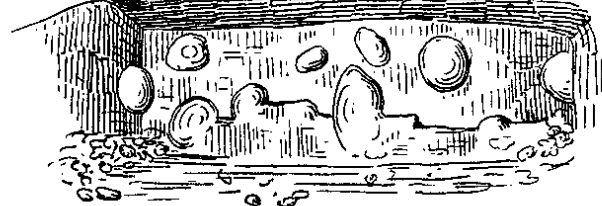


Fig. 16. Disp. des couches d'albâtre à la Castellina Marittima.

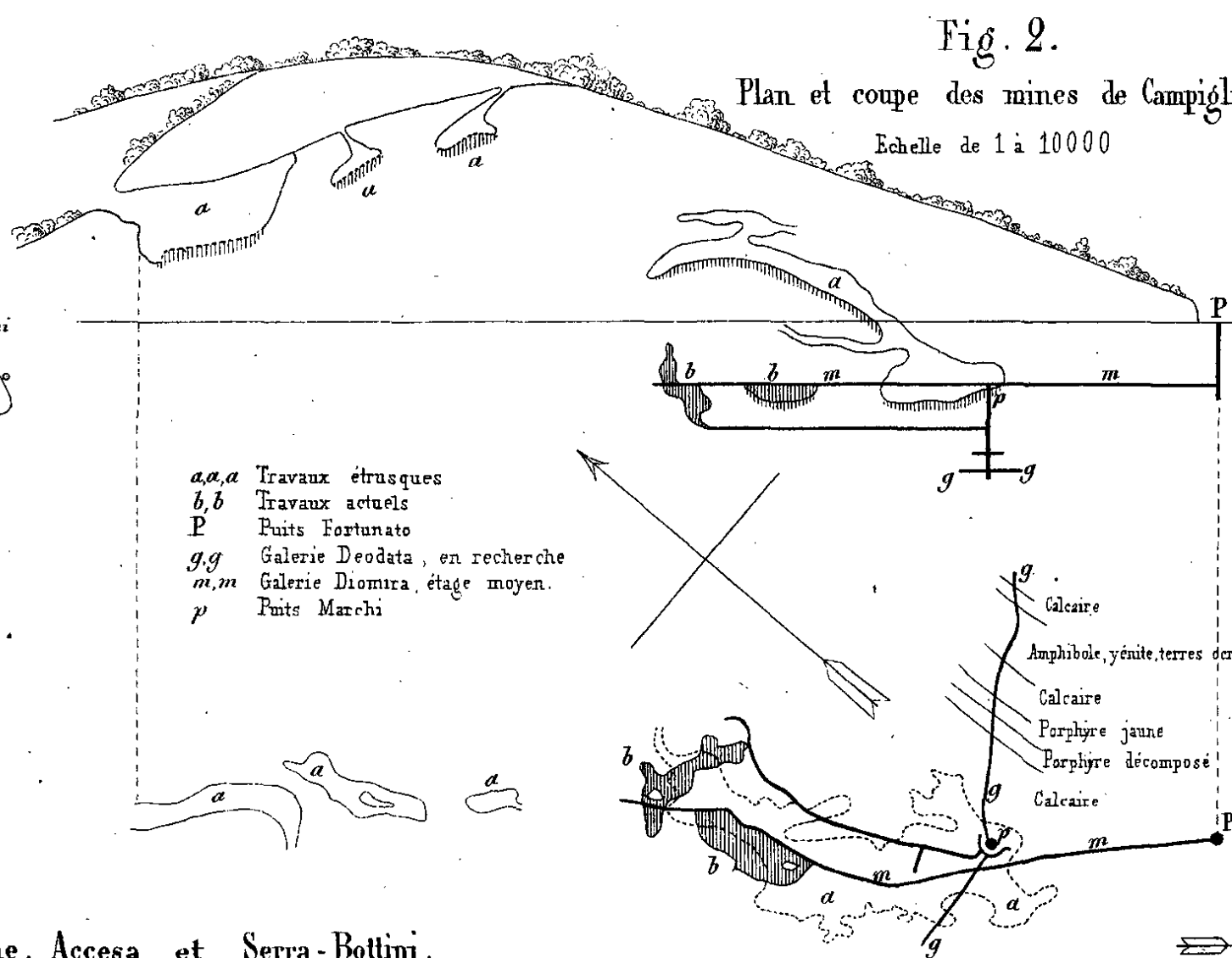
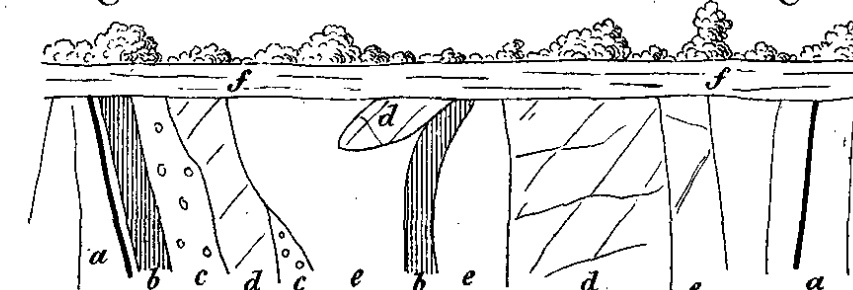


Fig. 2.

Plan et coupe des mines de Campiglia  
Echelle de 1 à 10000

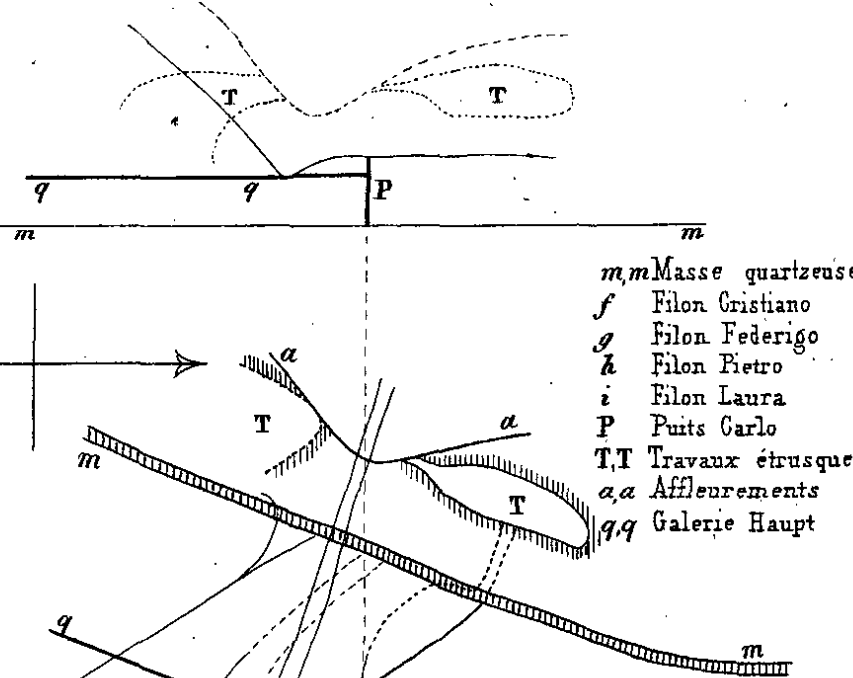
Fig. 3. Affleurement du dike de Campiglia



a,a Calcaire cristallin  
b,b Quartz  
c,c Amphibole  
d,d Roche felspathique porphyroïde  
e,e Ilvaite  
ff Terre végétale

Fig. 6. Travaux des Capanne Vecchie

Echelle de 1 à 4000



m,m Masse quartzueuse  
f Filon Cristiano  
g Filon Federico  
h Filon Pietro  
i Filon Laura  
p Puits Carlo  
T.T Travaux étrusques  
a,a Affleurements  
q,q Galerie Haupt

Fig. 8. Filon Cristiano.

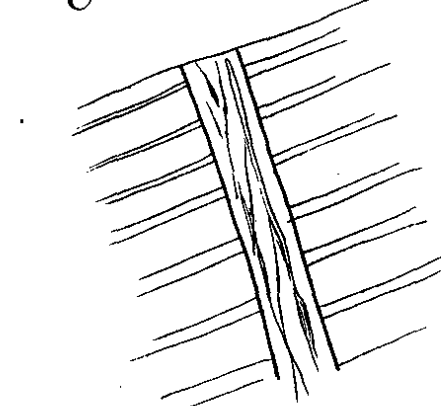
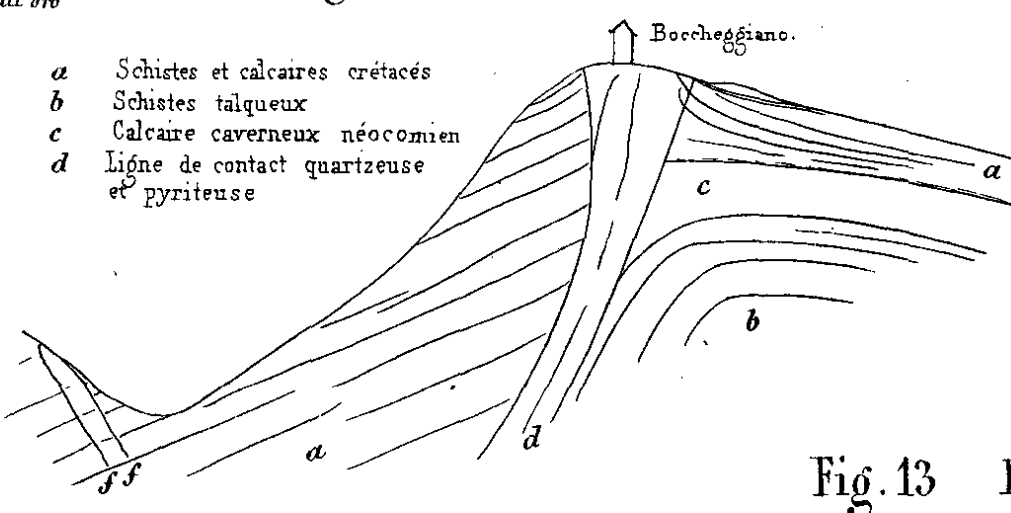
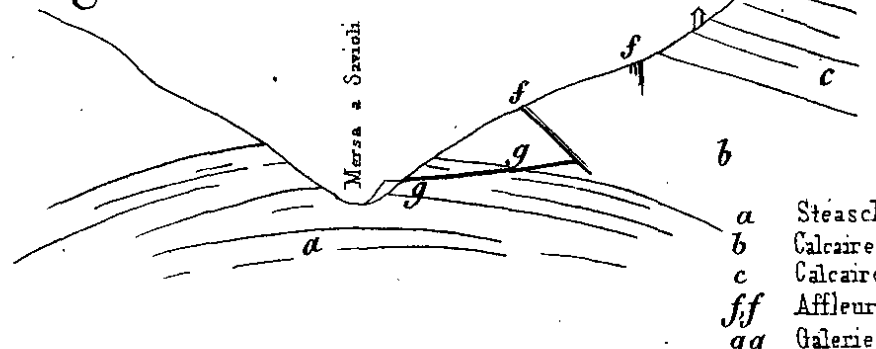


Fig. 10. Boccheggiano.



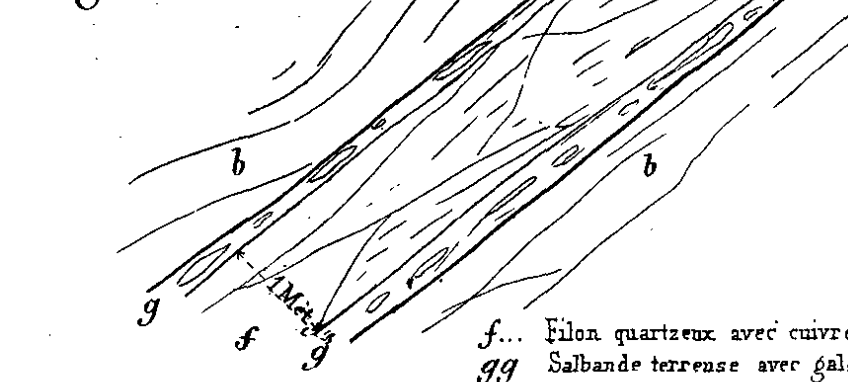
a Schistes et calcaires crétacés  
b Schistes talqueux  
c Calcaire caverneux néocomien  
d Ligne de contact quartzueuse et pyriteuse

Fig. 14. Montieri.



a Steaschistes  
b Calcaire néocomien  
c Calcaires et schistes super  
ff Affleurements quartzueux  
gg Galerie d'écoulement

Fig. 15. Montieri.



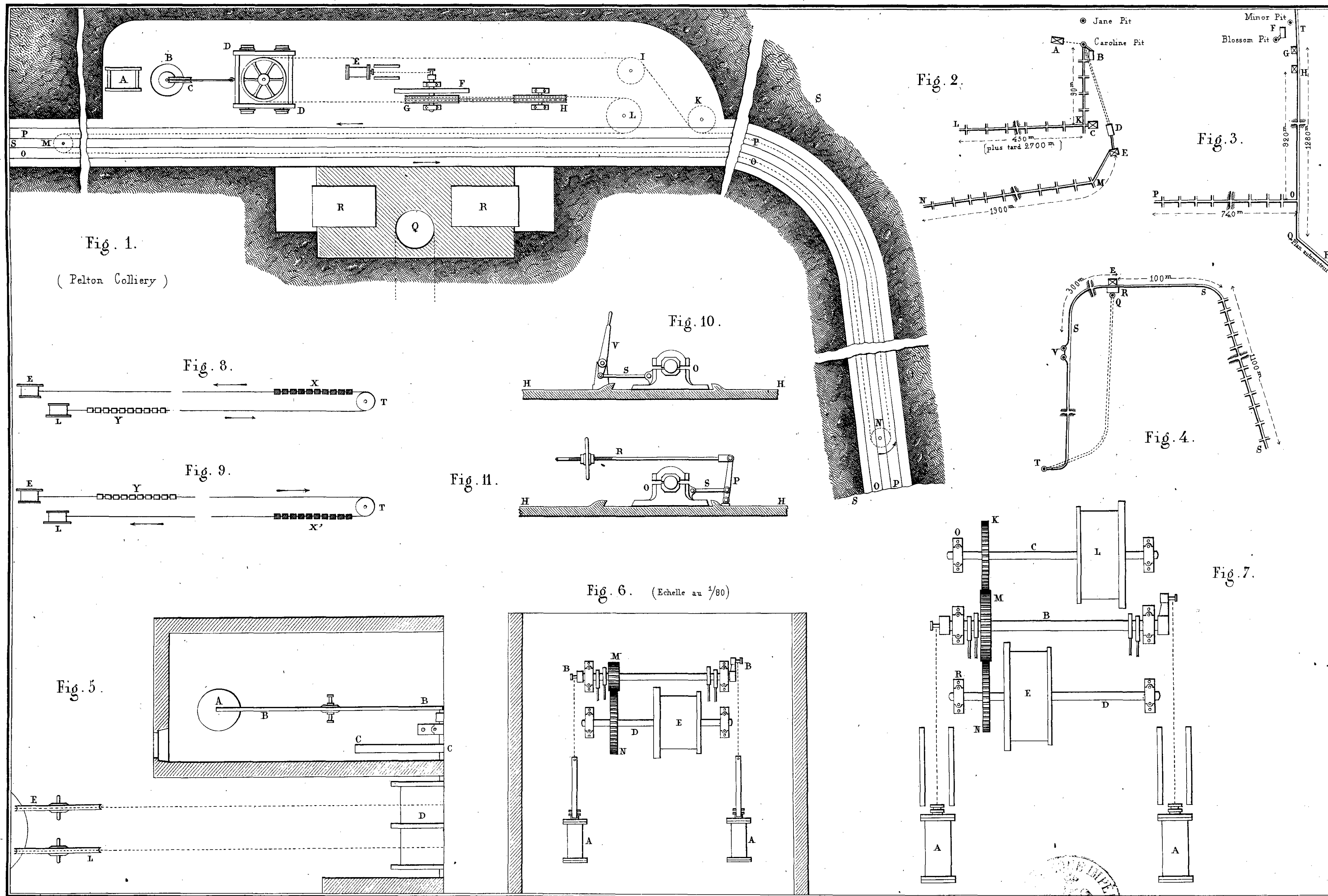
f... Filon quartzueux avec cuivre pyriteux  
gg Salbande terreuse avec galène compacte  
bb Calcaire caverneux

m Gîte de contact pyrite de fer et pyrite cuivreuse  
p Puits de recherche  
gg Galerie à travers banc  
gh Indice de plomb

f. Filon cuivreux







366 1899







Fig. 1.

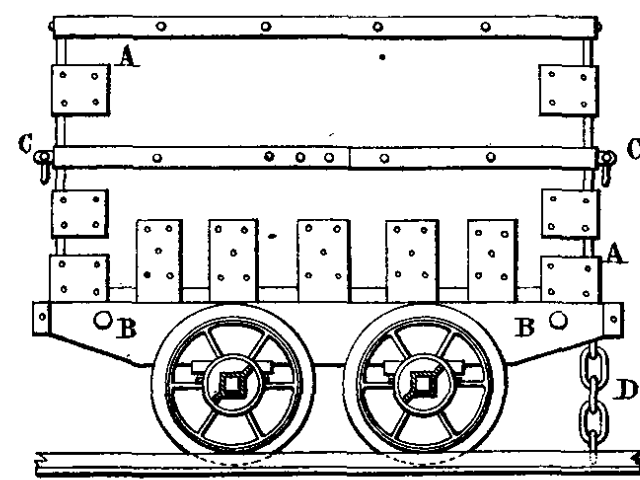


Fig. 2.

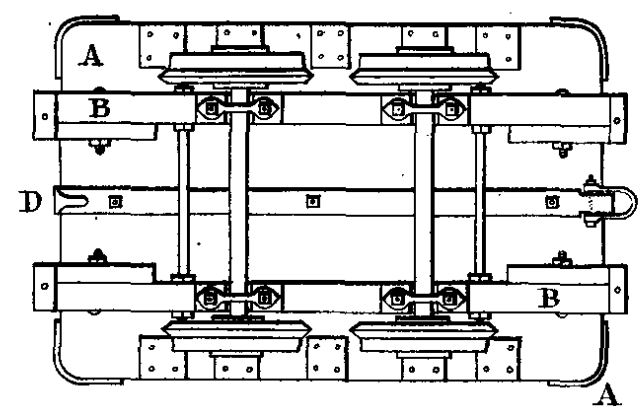


Fig. 3.

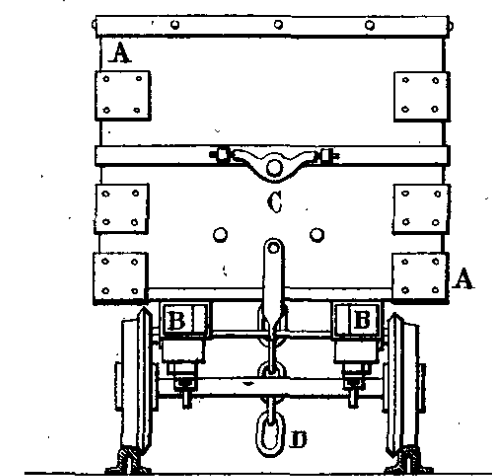


Fig. 4.

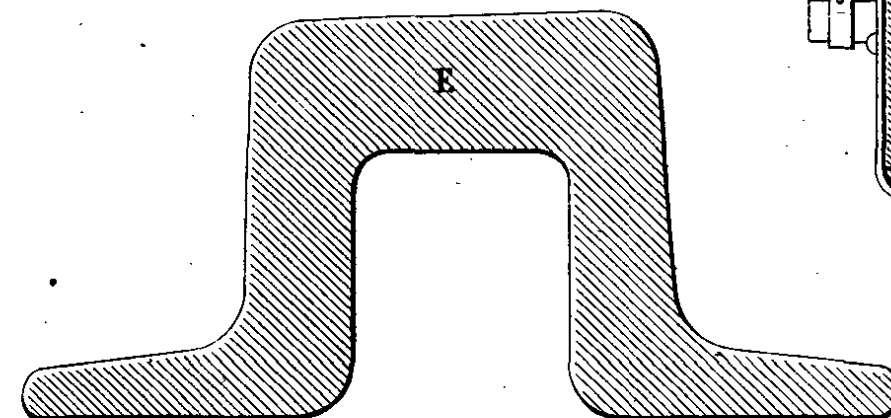


Fig. 6.

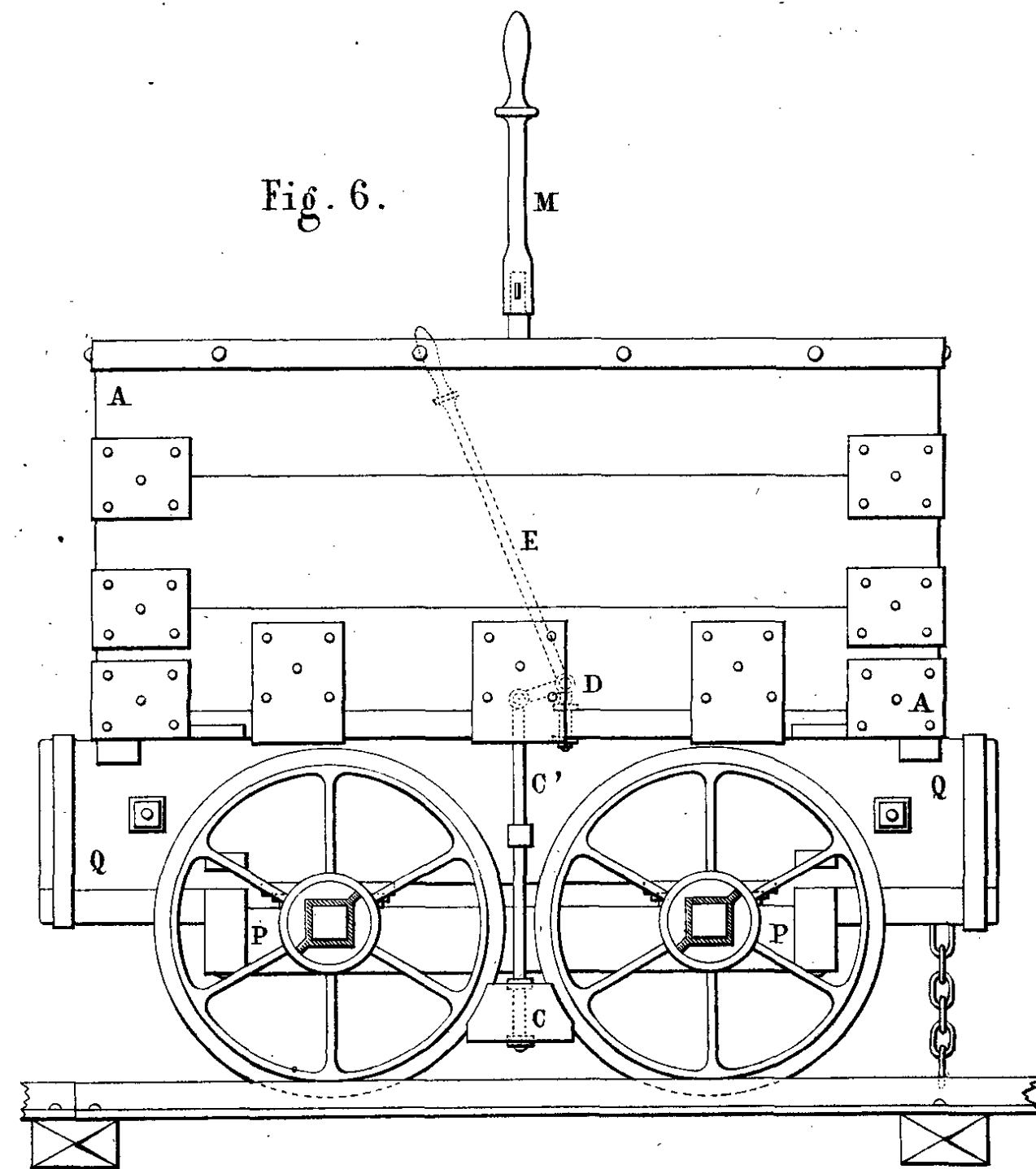


Fig. 7.

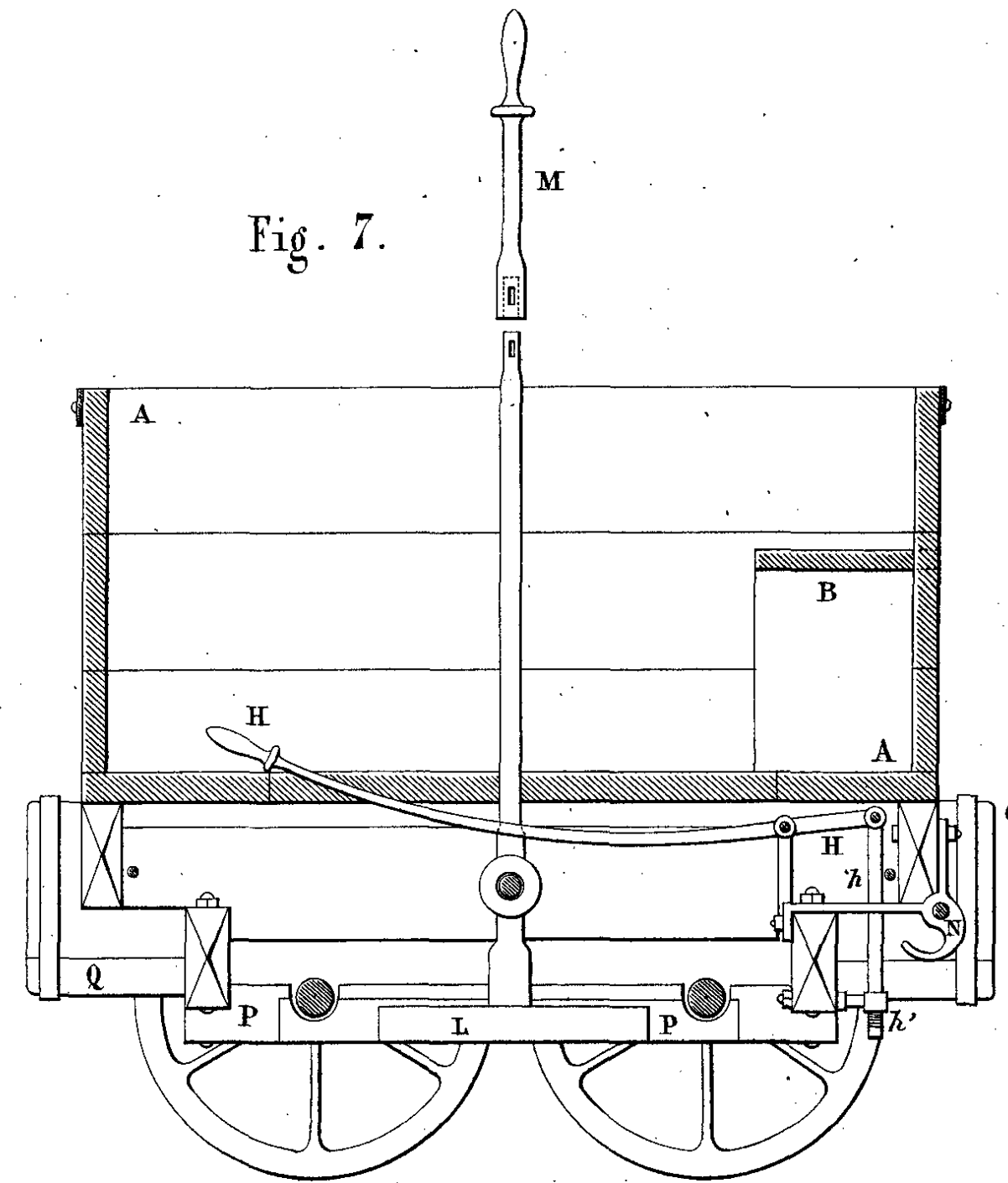


Fig. 8.

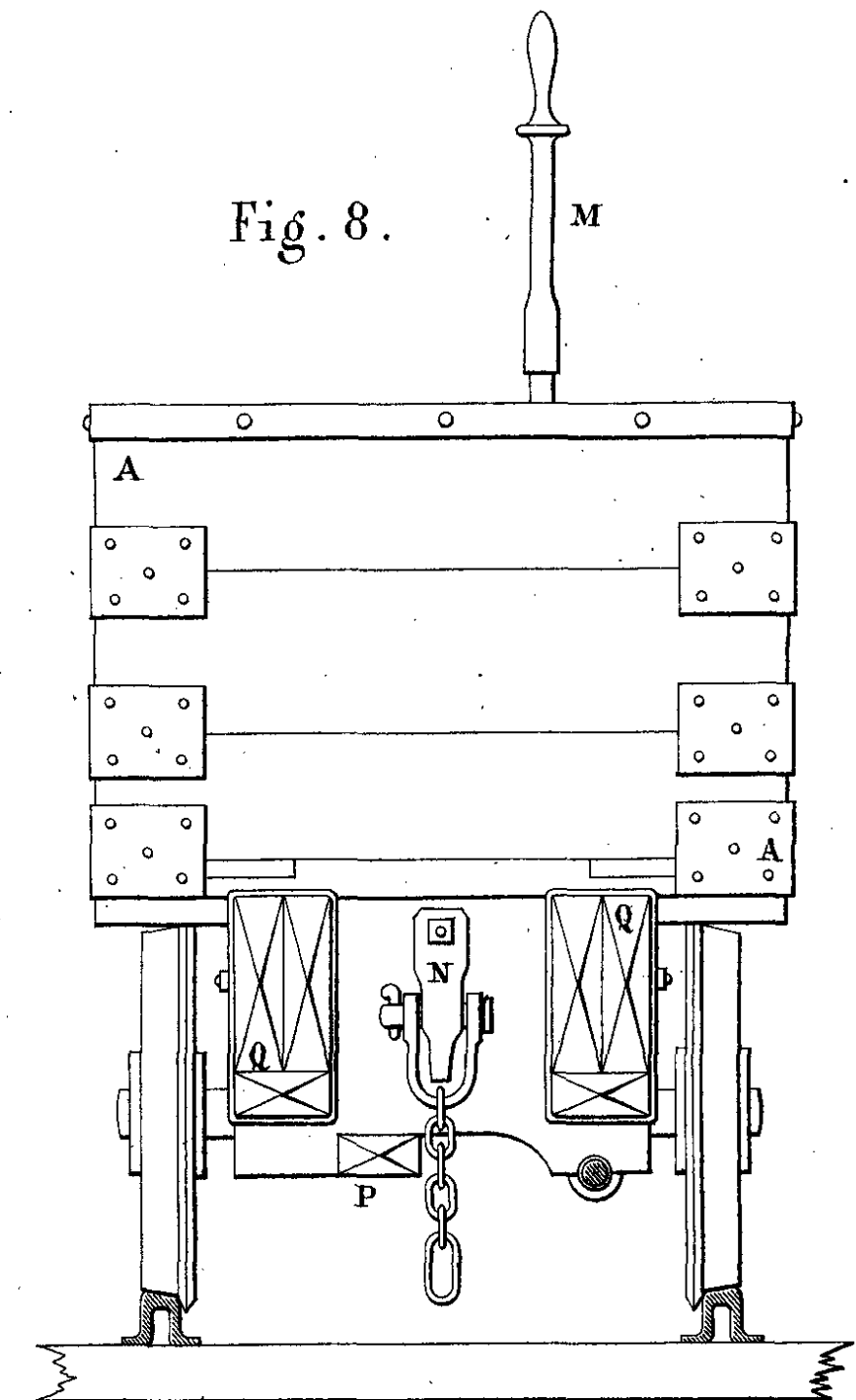


Fig. 9.

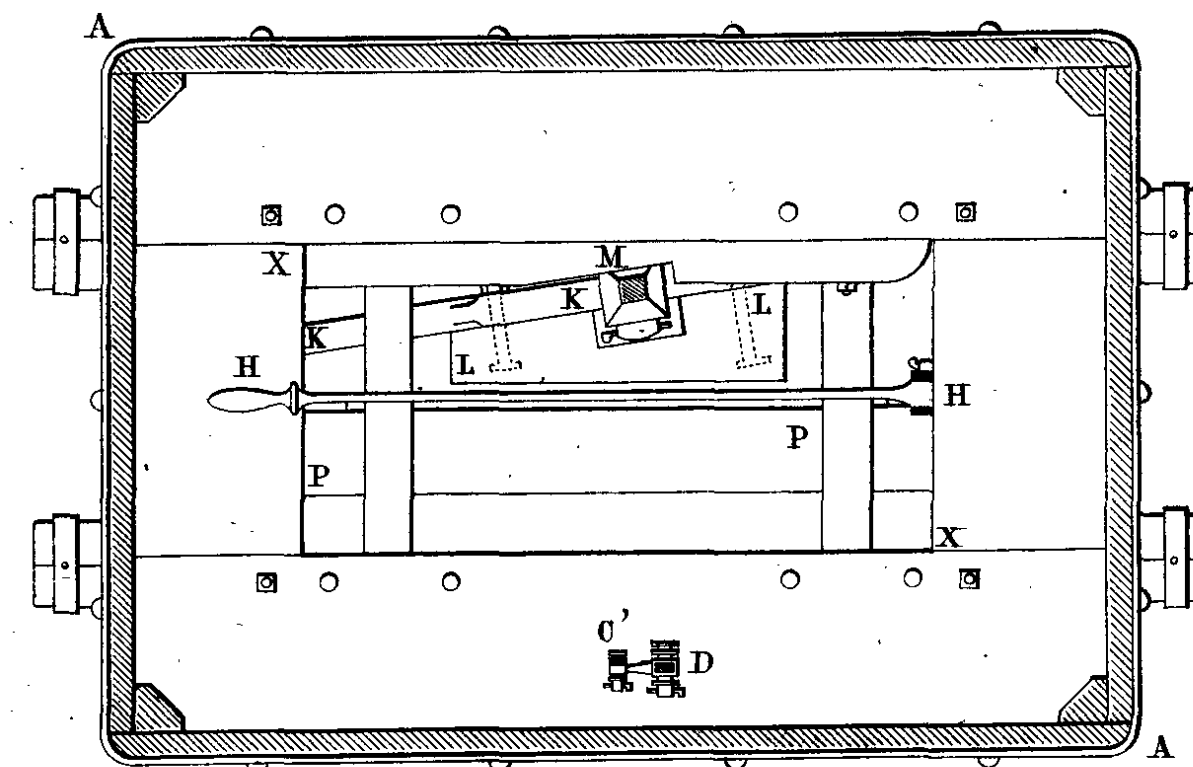


Fig. 10.

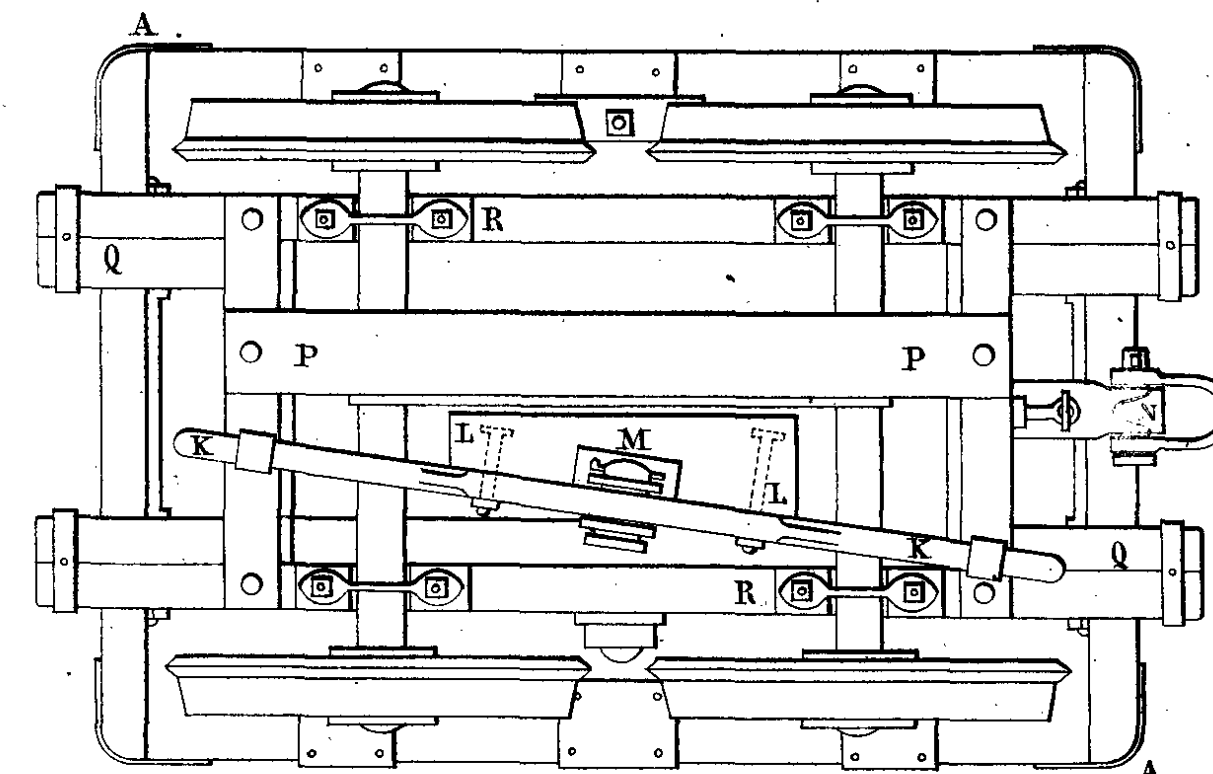
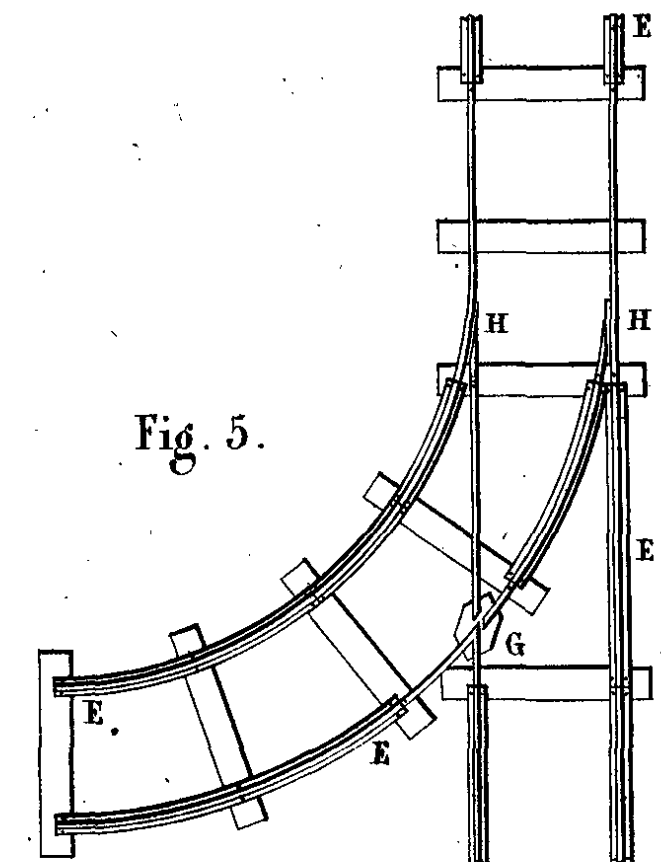


Fig. 5.



Echelle des fig. 1, 2, 3. ( $\frac{1}{24}$ )

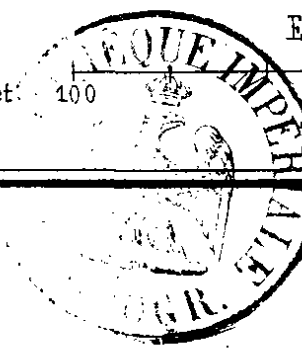
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Echelle de la fig. 5. ( $\frac{1}{48}$ )

100 50 0 1 2 3 Mèt.

Echelle des fig. 6, 7, 8, 9, 10. ( $\frac{1}{12}$ )

100 50 0 1 Mèt.

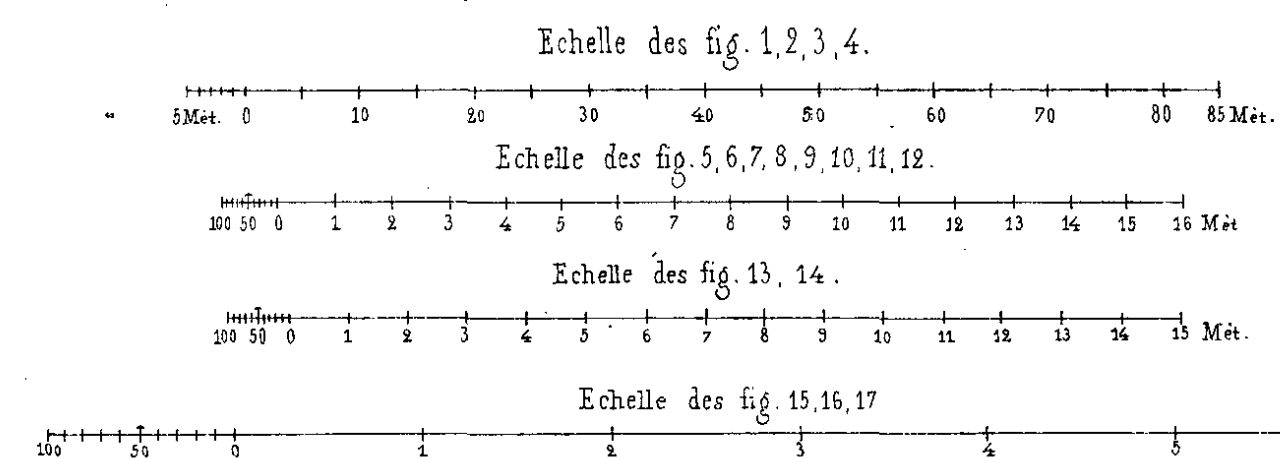
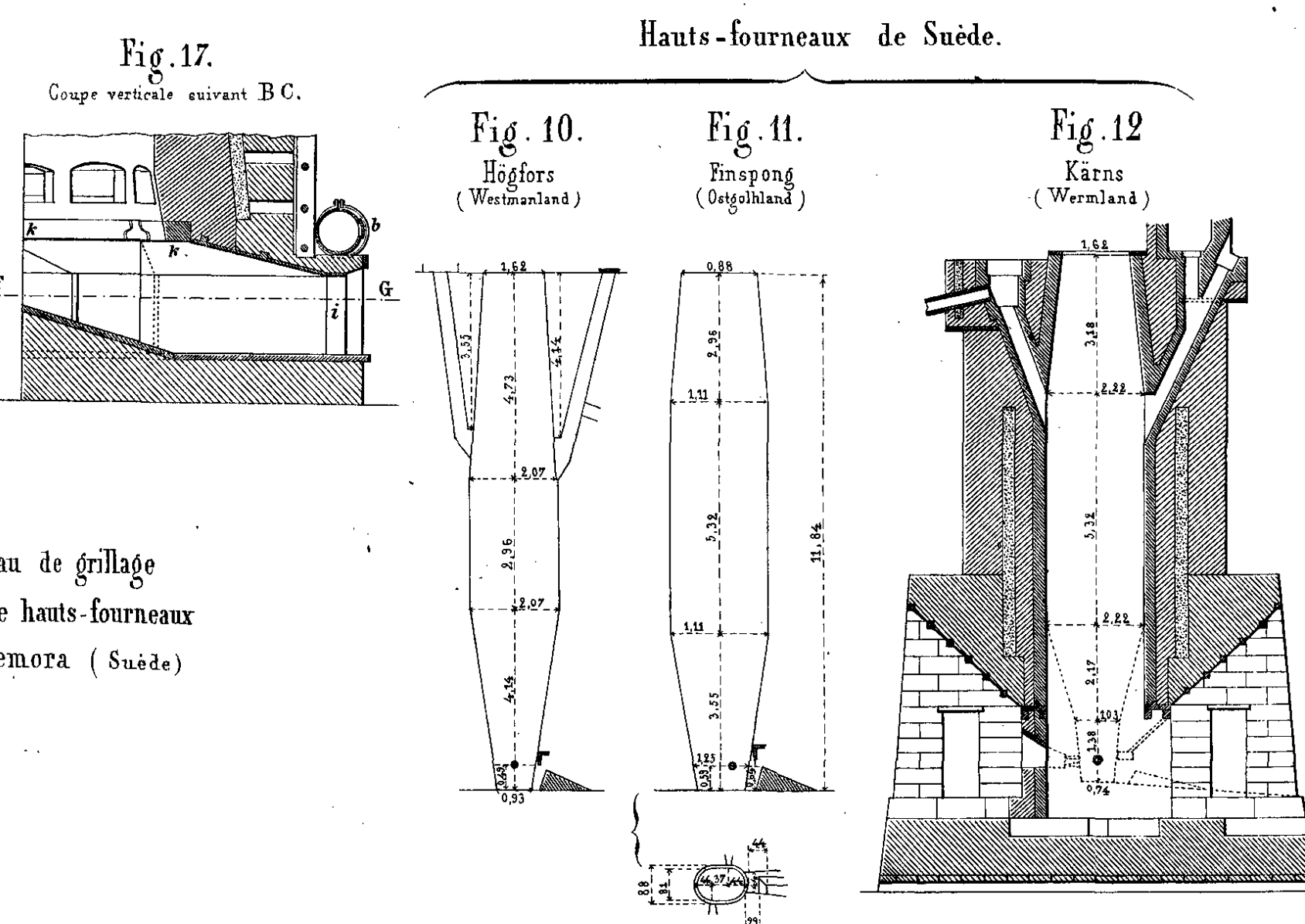
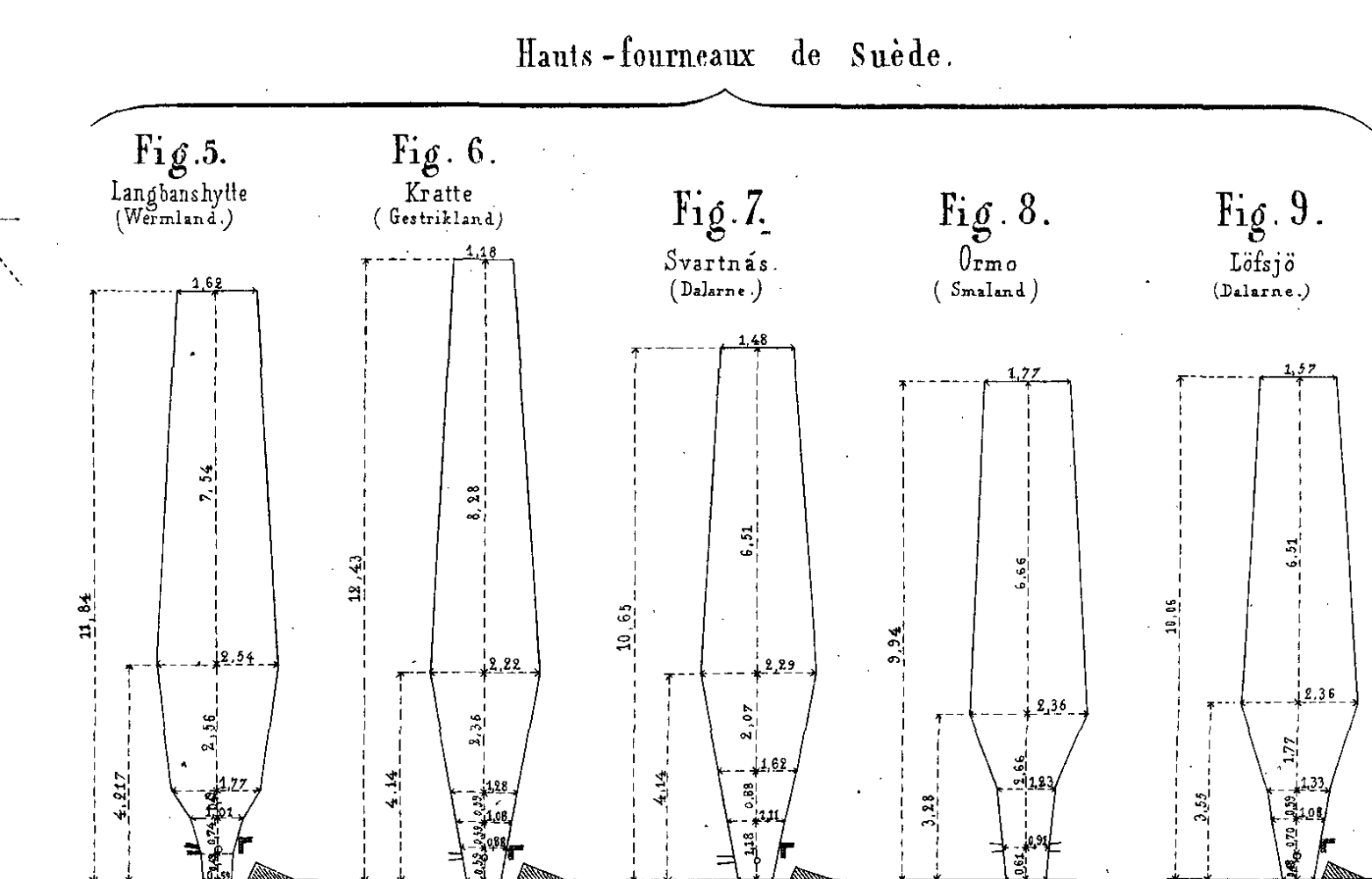
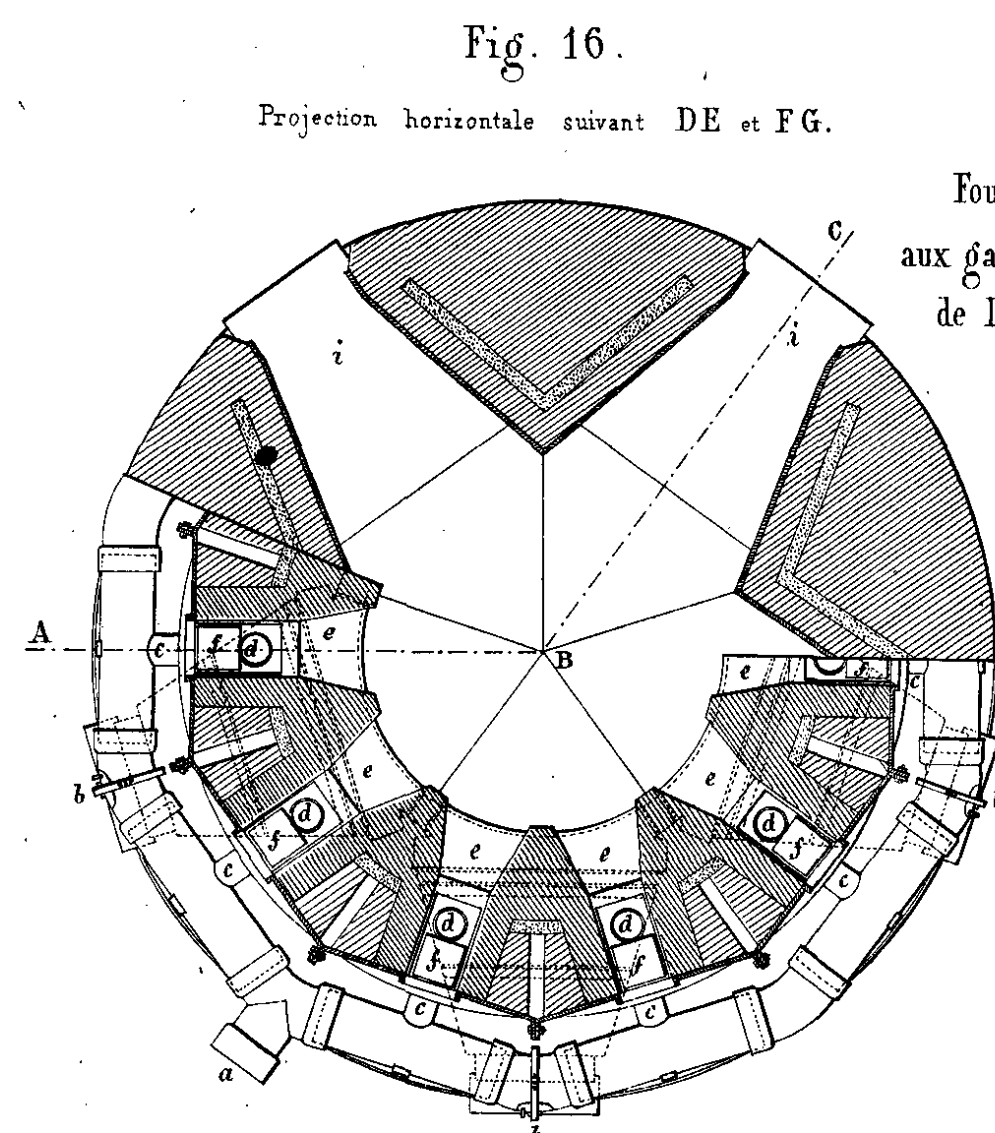
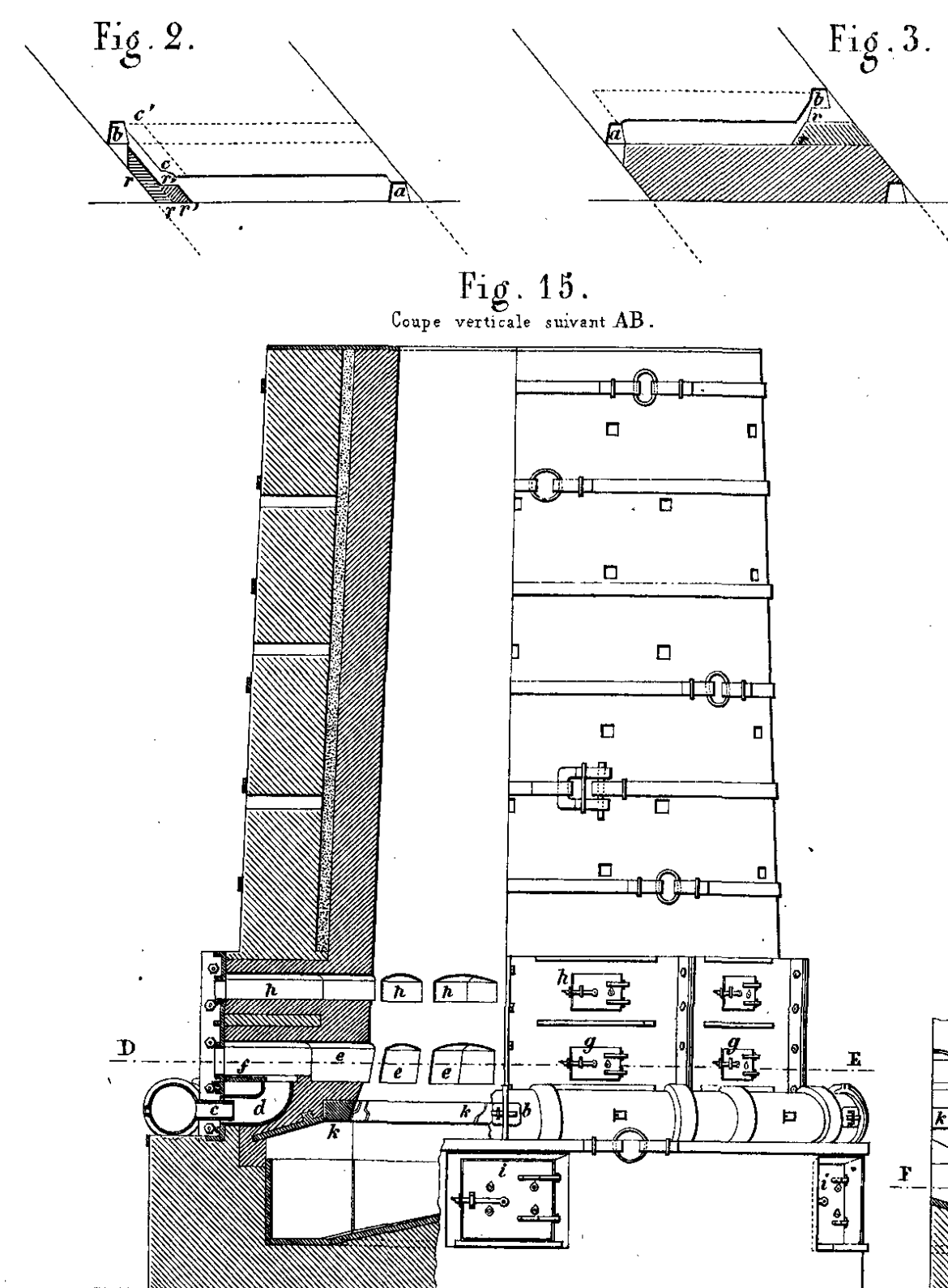
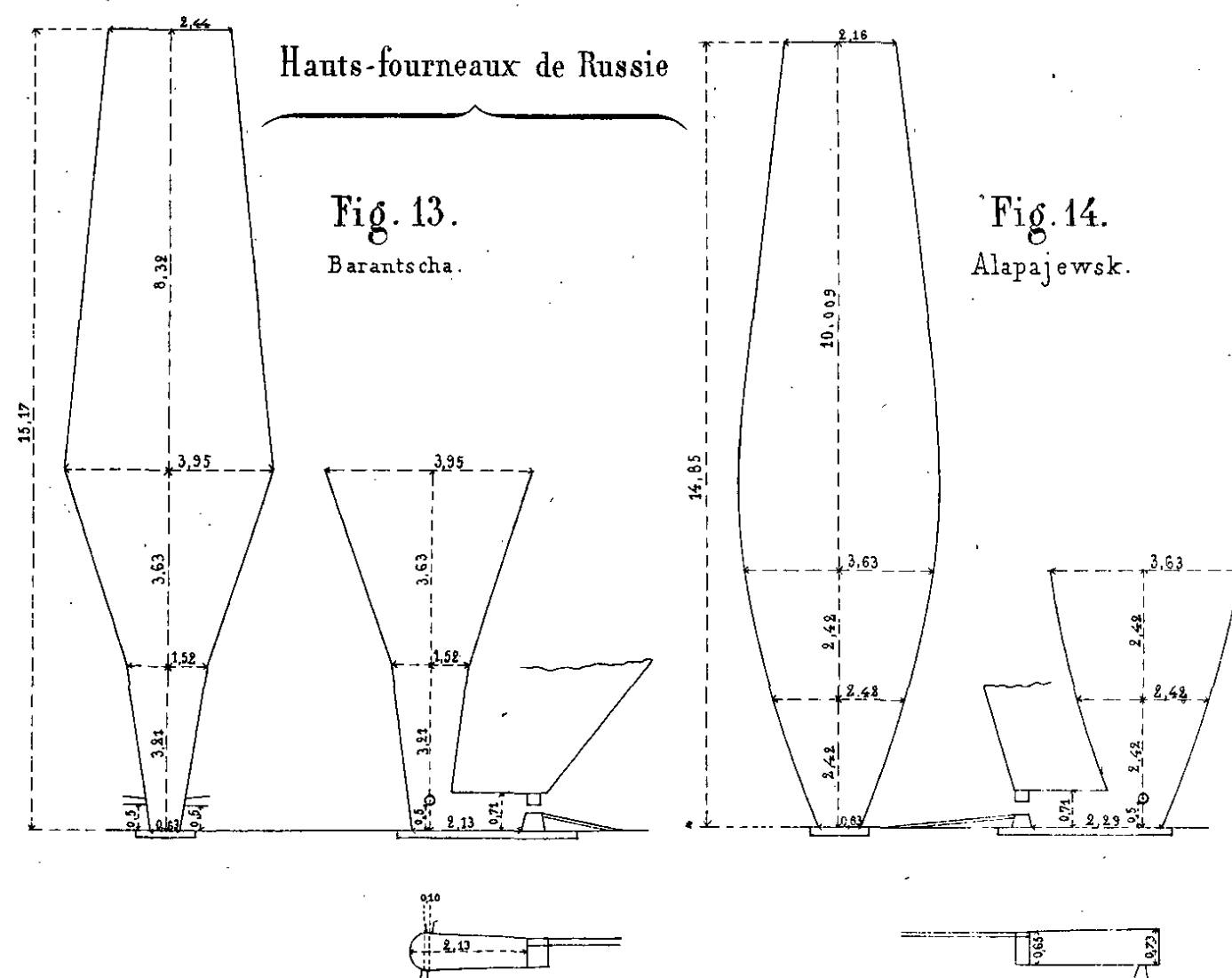


366-1899















# MACHINE A AGGLOMERER

Industrie minérale 4<sup>ème</sup> Année.

Système Evrard, breveté S.G.D.G., appliqué aux mines de la Ghazotte près S'Etienne.

PL. VIII.

Echelle de la fig. 1.

100 50 0 1 2 3 Mèt.

Fig. 1.

Coupe verticale de la Machine.

Fig. 2.

Plan du compartiment des Machines.

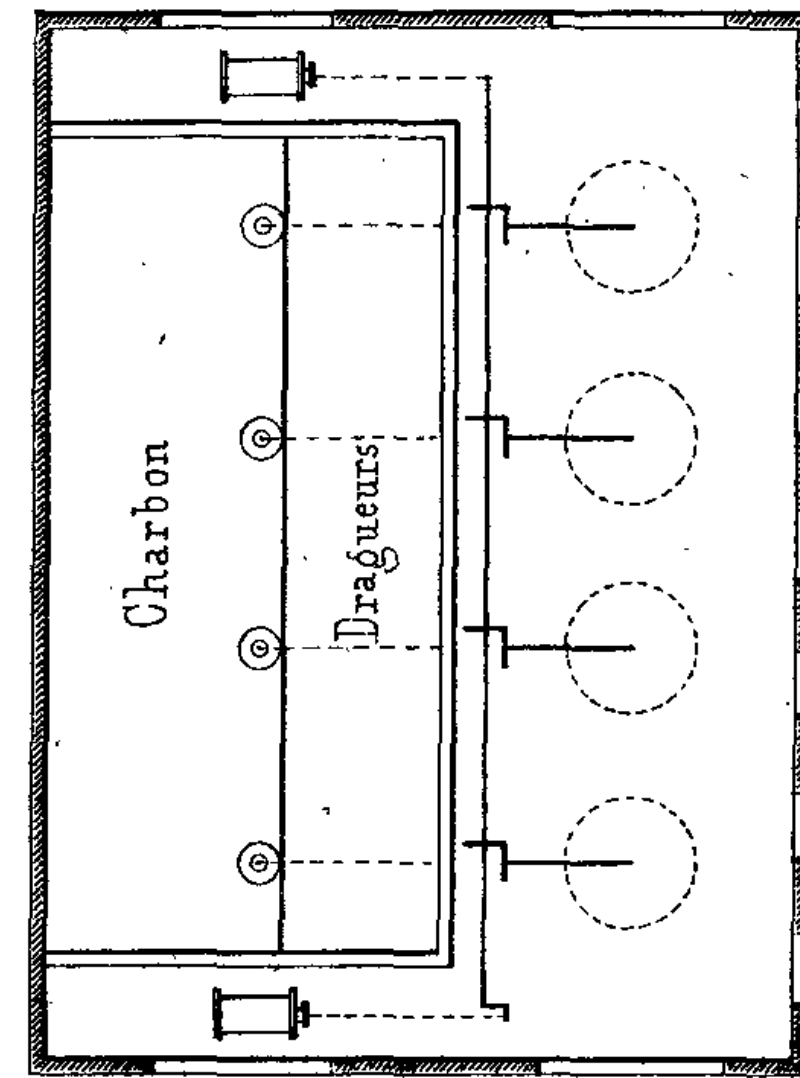
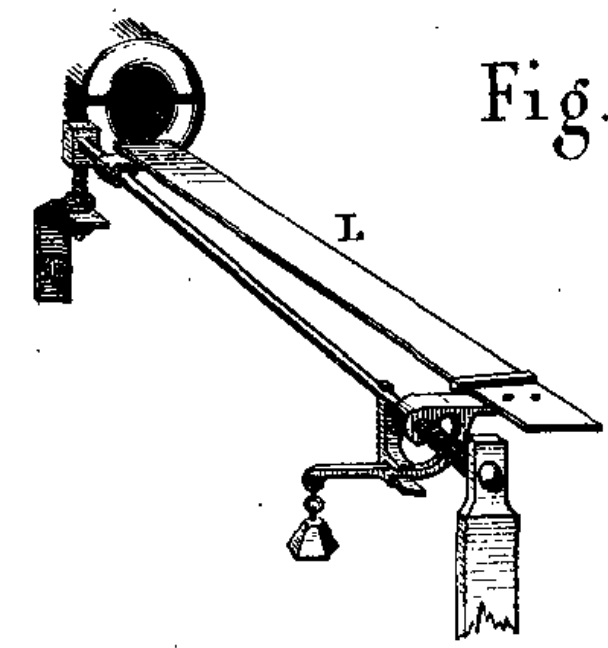


Fig. 3.



S'Etienne, Lith. Vialat et Lant.

246-1859







# MACHINE A AGGLOMERER.

Industrie minière 4<sup>ème</sup> Année

Système Evrard, breveté S.G.D.G., appliqué aux mines de la Chazotte près St Etienne.

PL. IX.

Coupe longitudinale de l'Usine.

Fig. 1.

A Réservoir à Goudron  
B,B Chaudières de concentration.

Fig. 2.

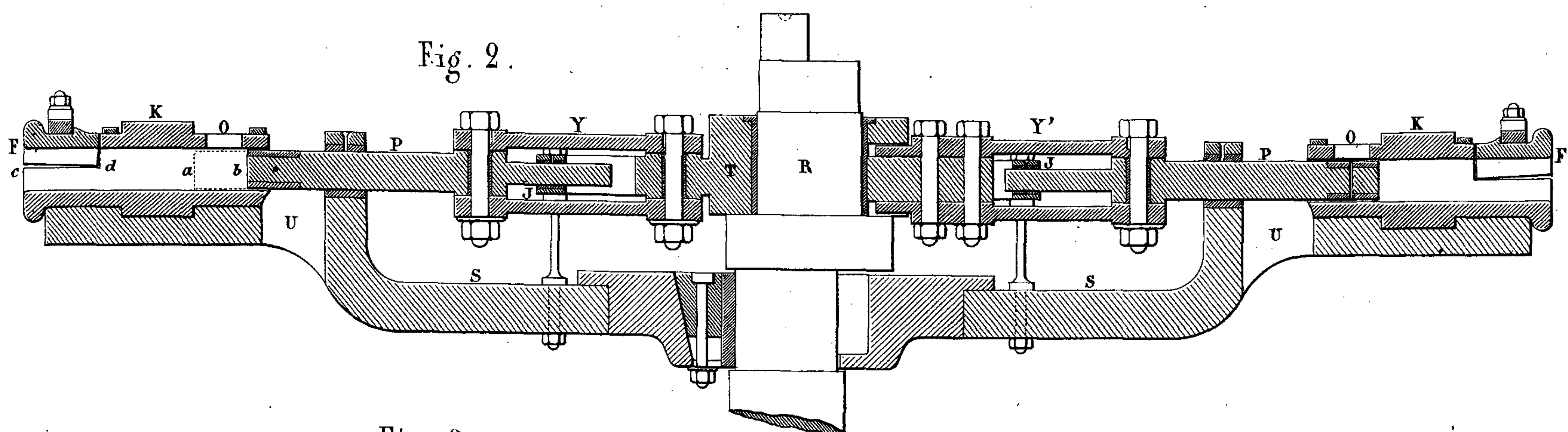


Fig. 3.

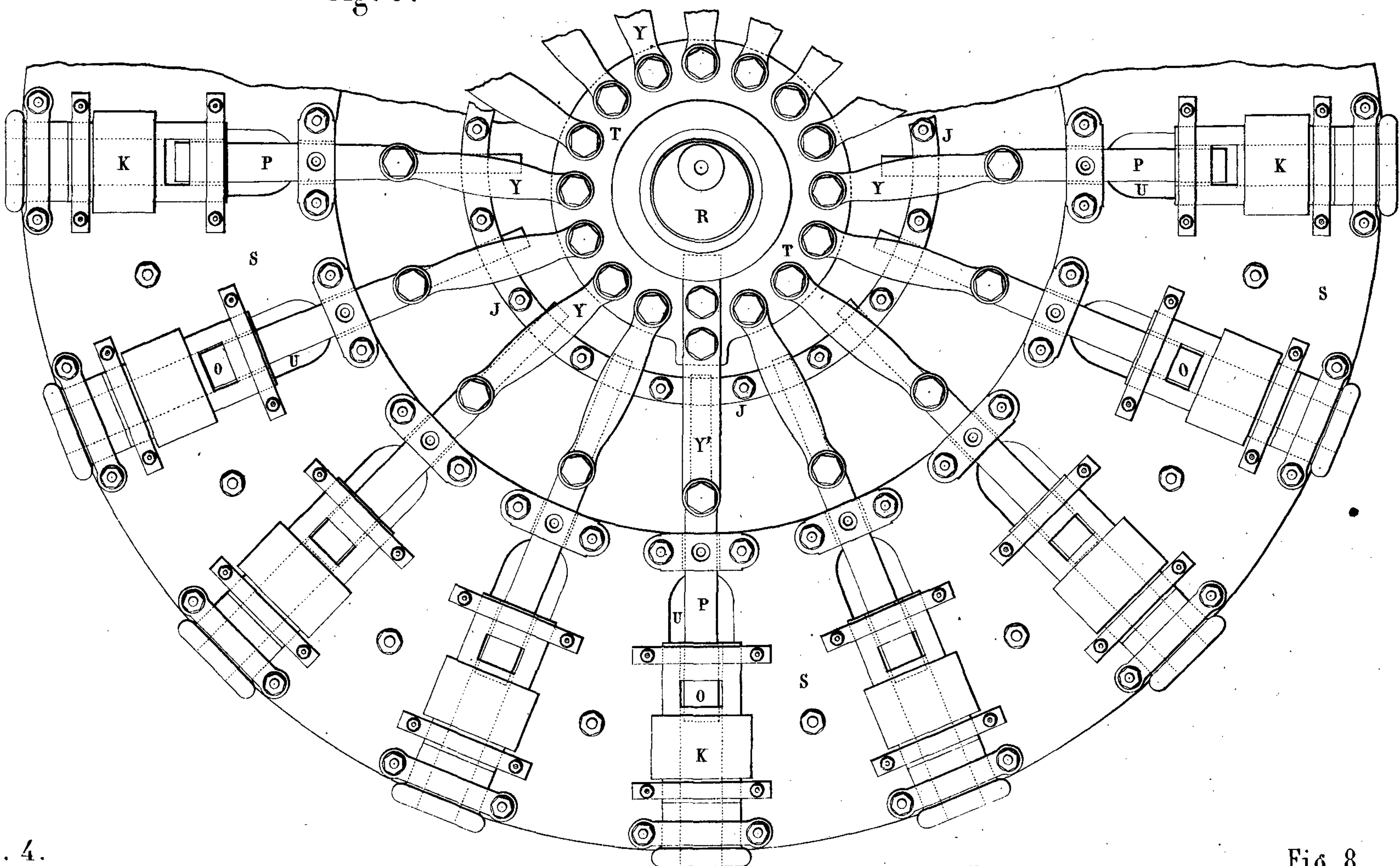


Fig. 4.

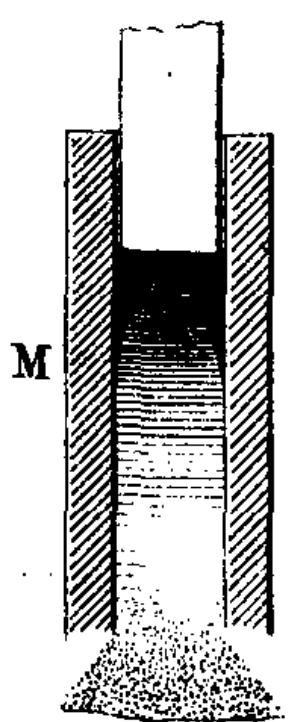


Fig. 5.

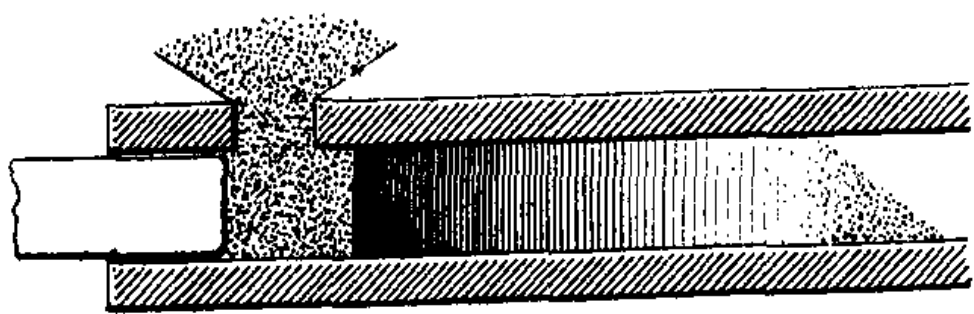


Fig. 6.

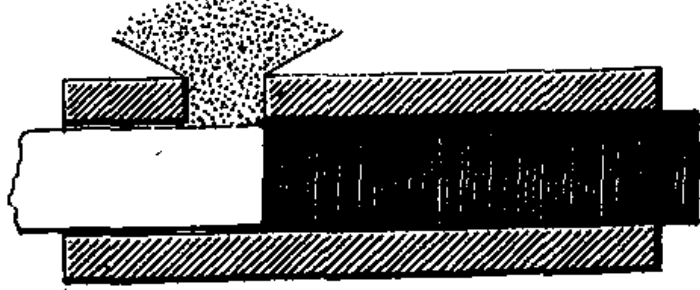


Fig. 7.

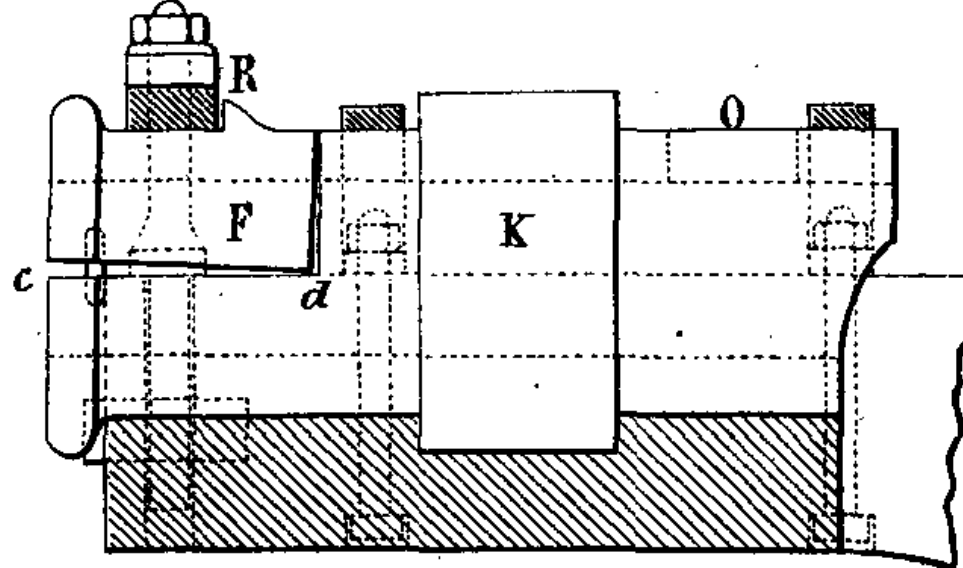
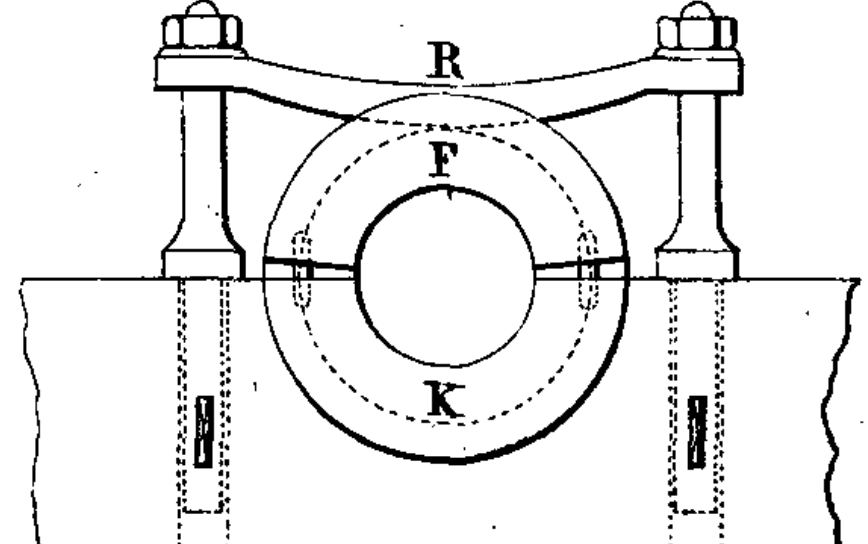


Fig. 8.



Echelle de la fig. 1.

Echelle des fig. 2, 3, 4, 5, 6, 7, 8.

10 5 0 1 2 3 4 5 10 15 20 25 30 Mèt. 100 50 0 1 Mèt.

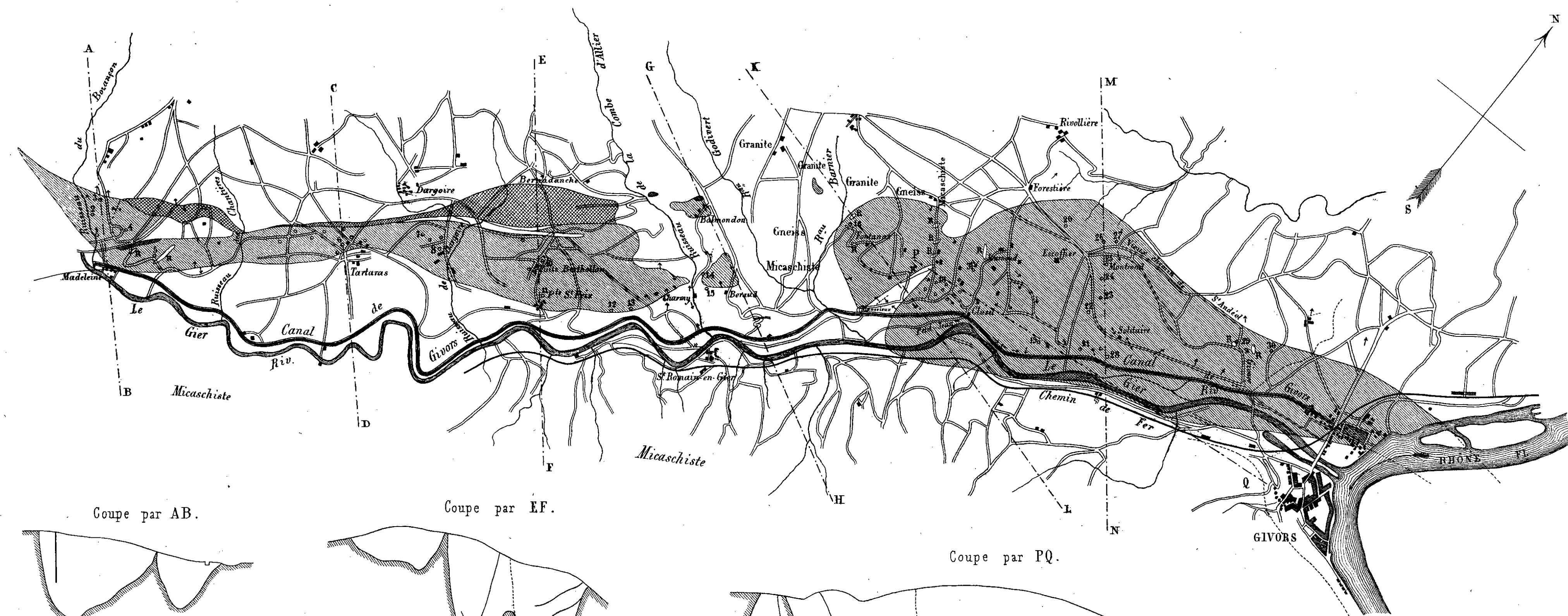
St Etienne, Lith. Nublat et Lantier.

316-1859

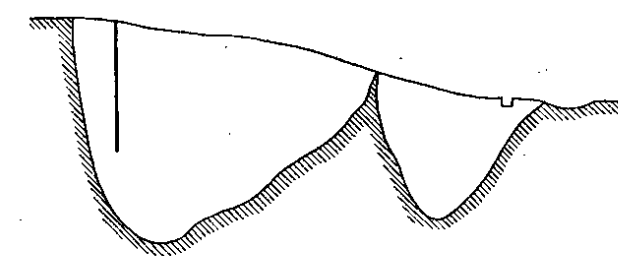




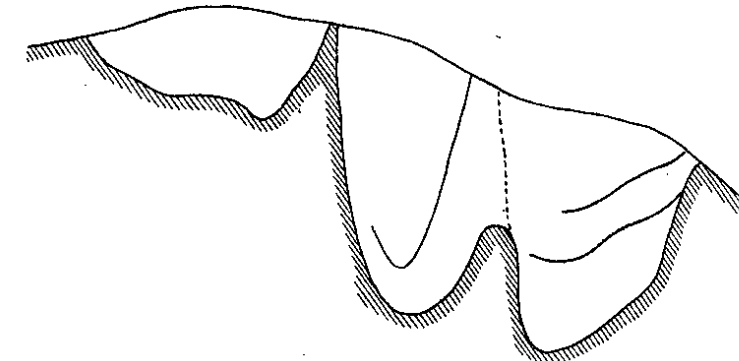




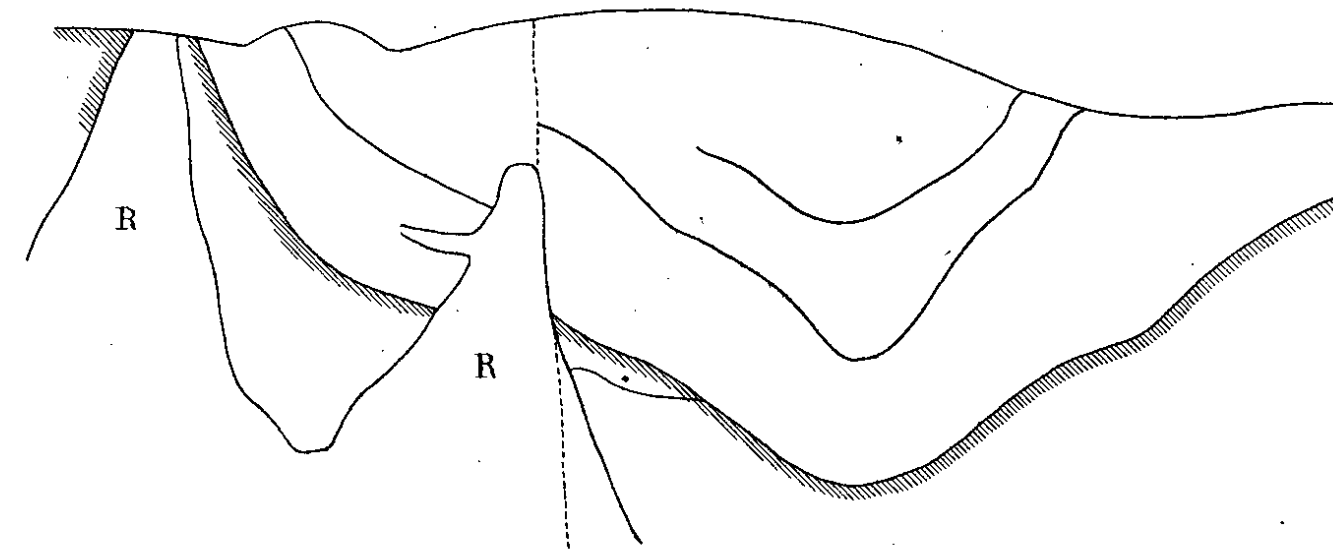
Coupe par AB.



Coupe par EF.



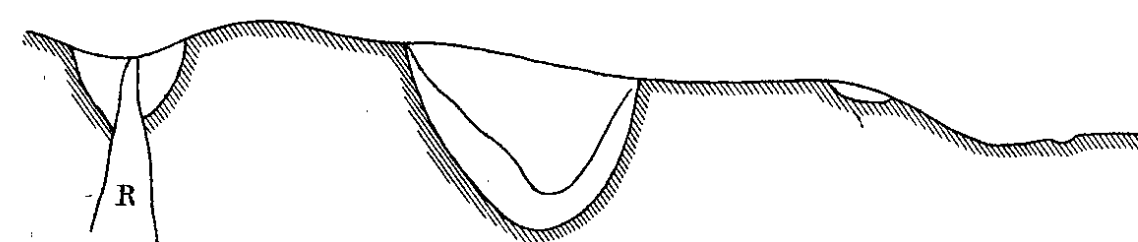
Coupe par PQ.



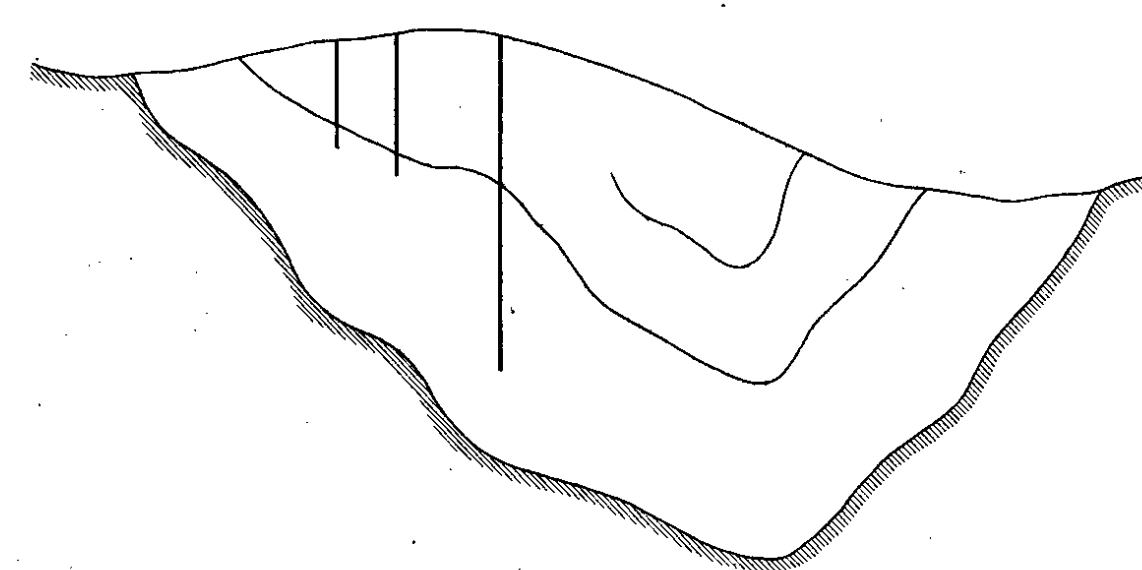
Coupe par CD.



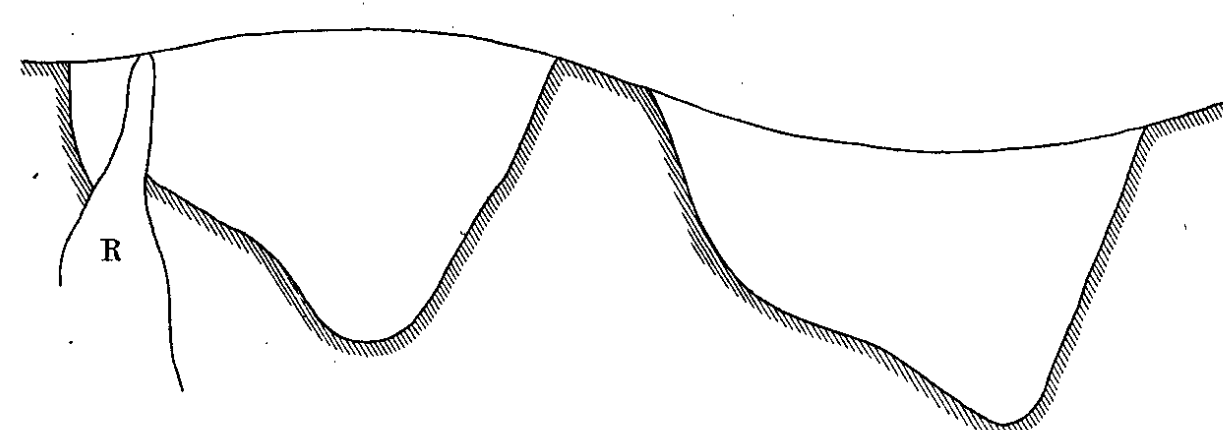
Coupe par GH.



Coupe par MN.



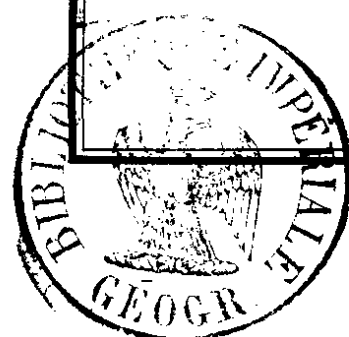
Coupe par KL.



- R Roche verte (Porphyre)
- Limite des alluvions du Rhône.
- Micaschiste
- ▨ Brèches
- ▩ Terrain houiller

Echelle du plan 1/40000

Echelle des coupes 0<sup>m</sup>06 pour 1 Kilom. triple p<sup>r</sup> les Hauteurs.



346-1889







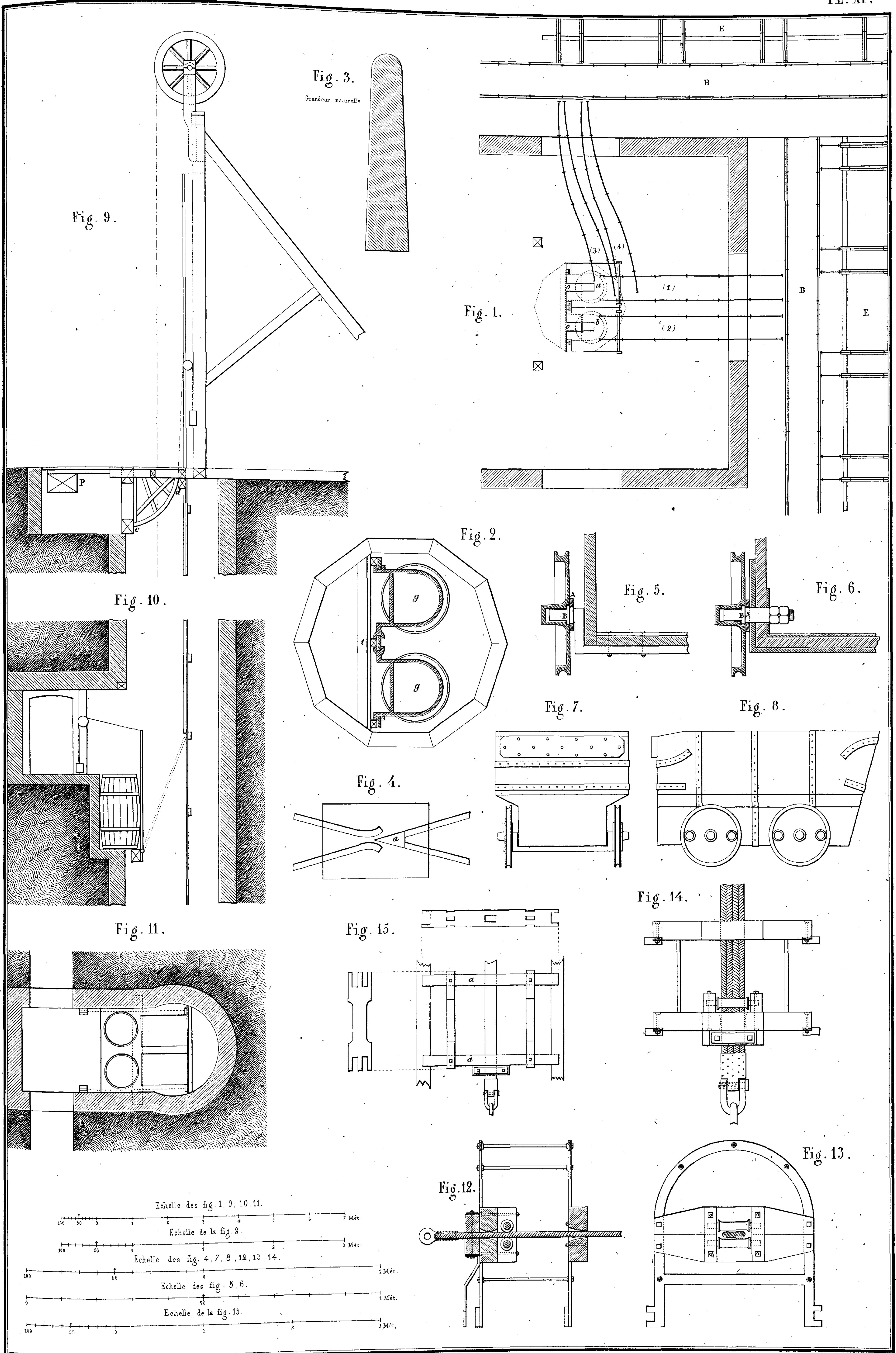








Fig. 1.  
Coupe verticale sur AB.

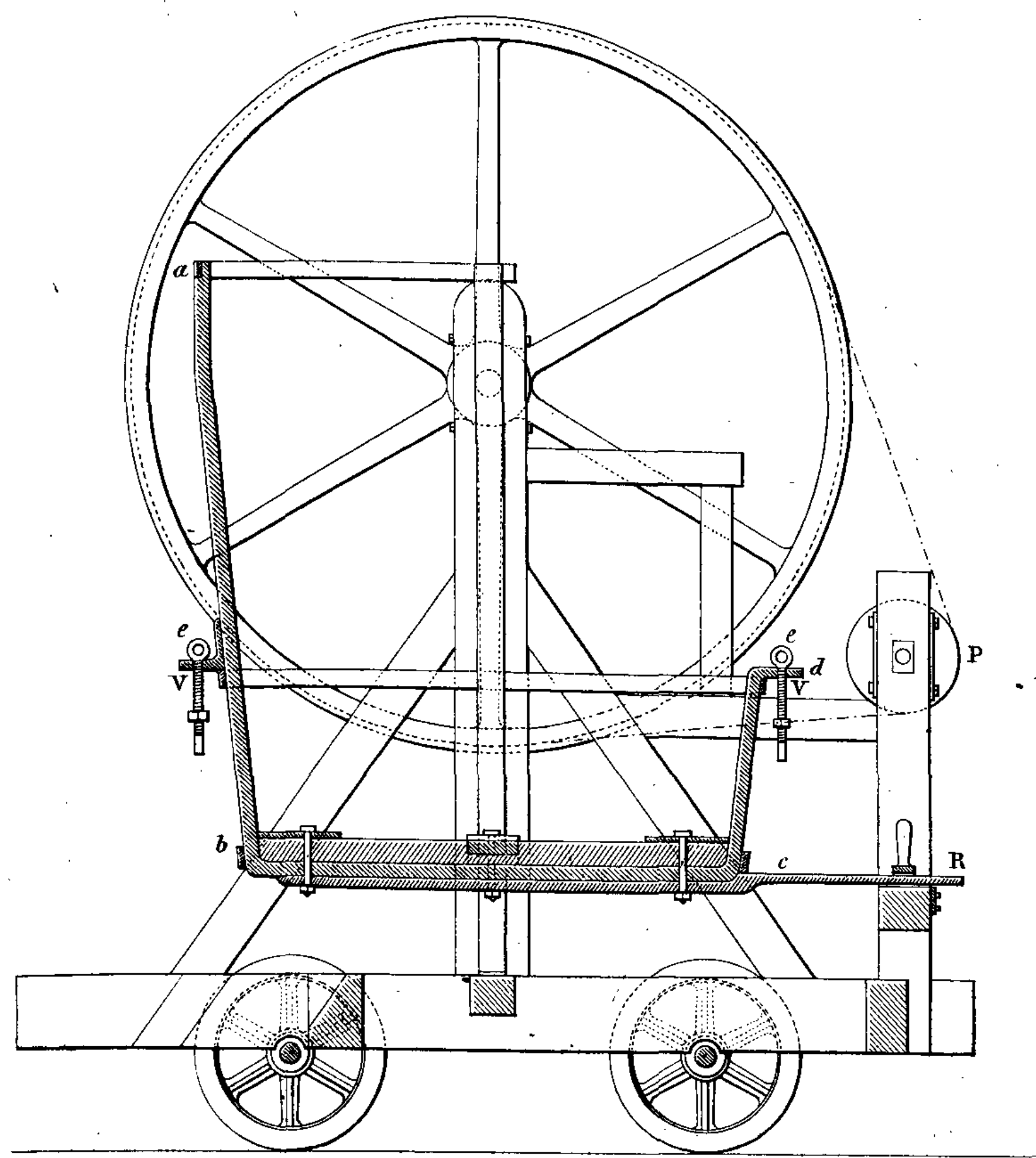


Fig. 2.

Elevation.

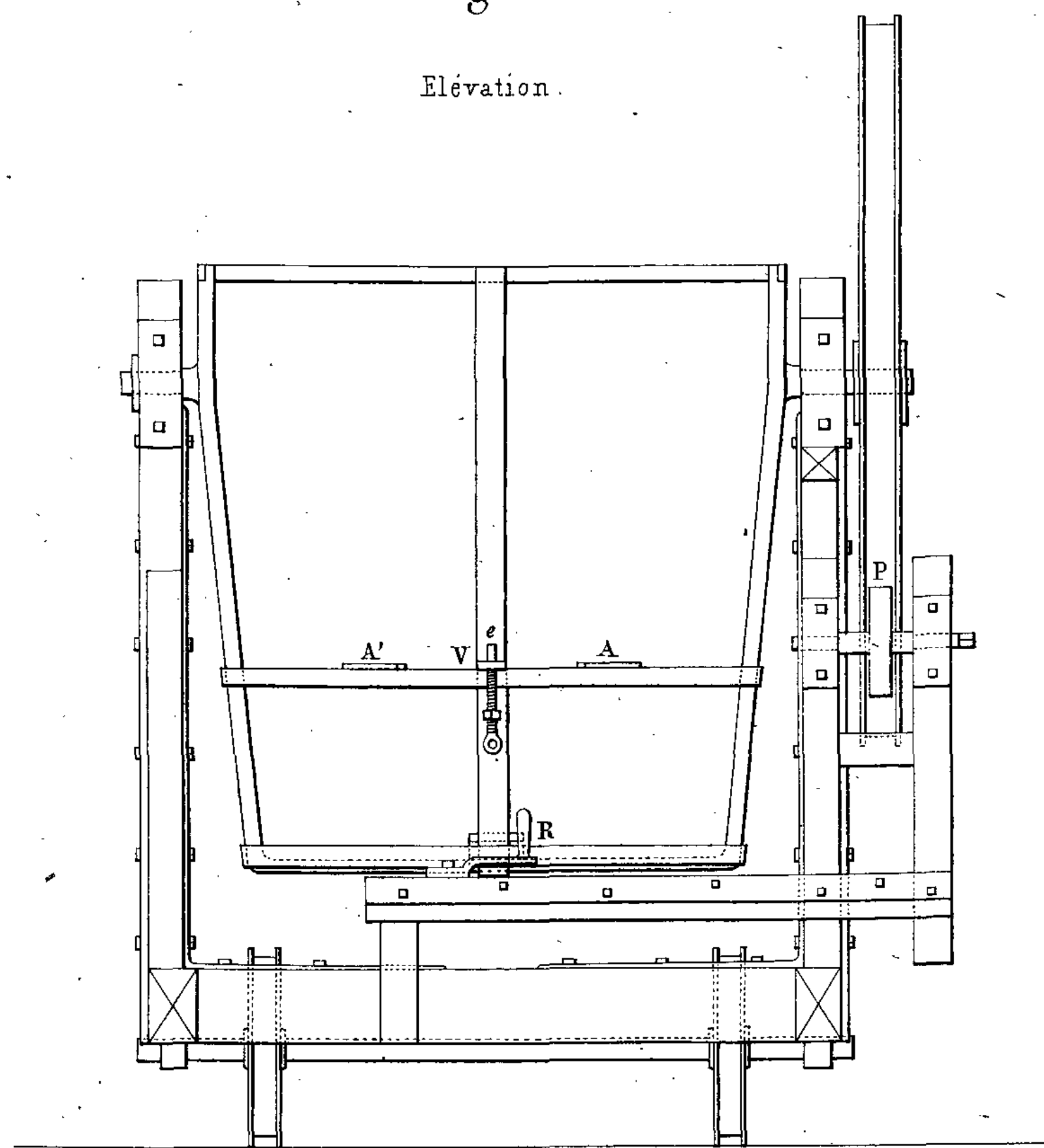


Fig. 3. Plan.

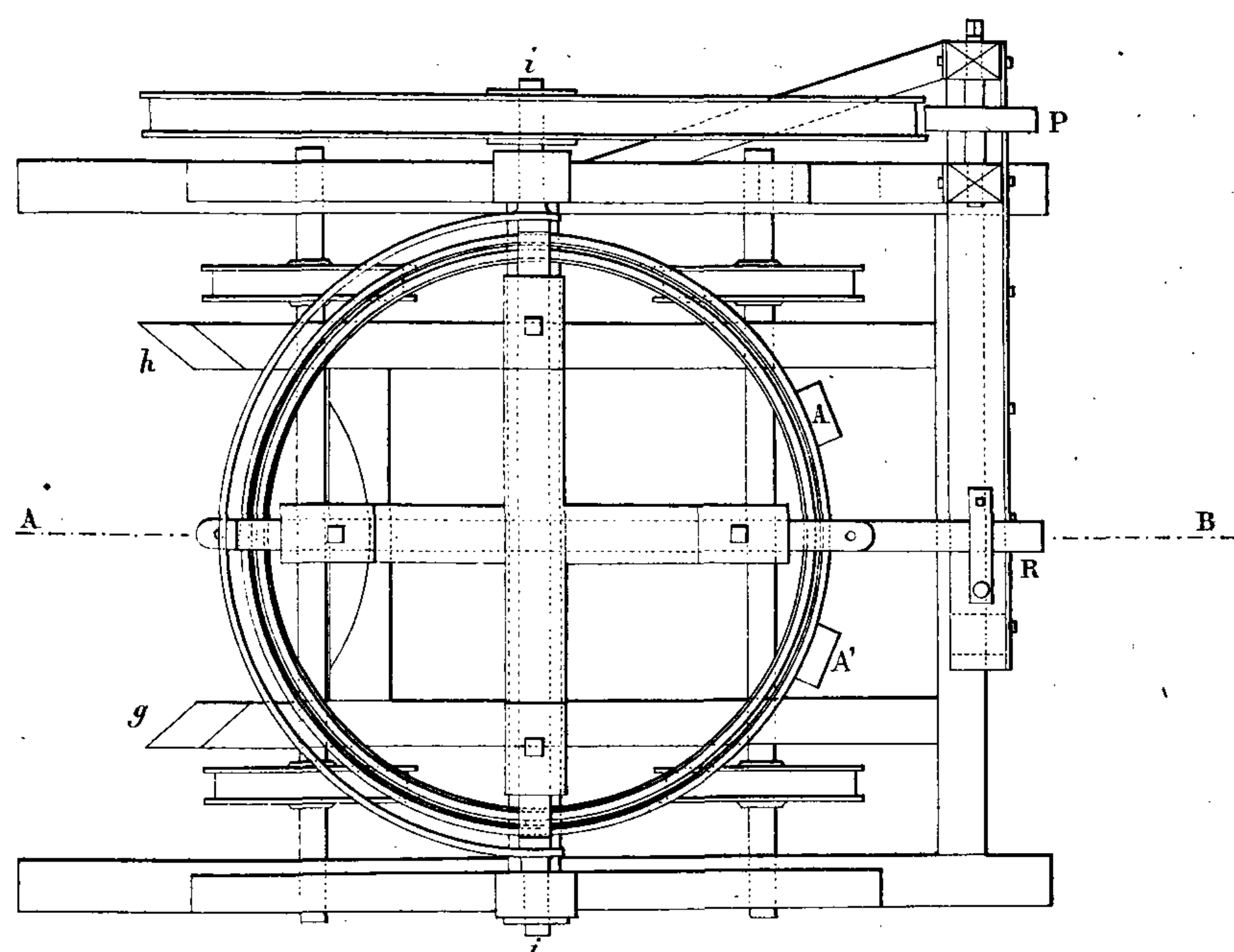


Fig. 5.

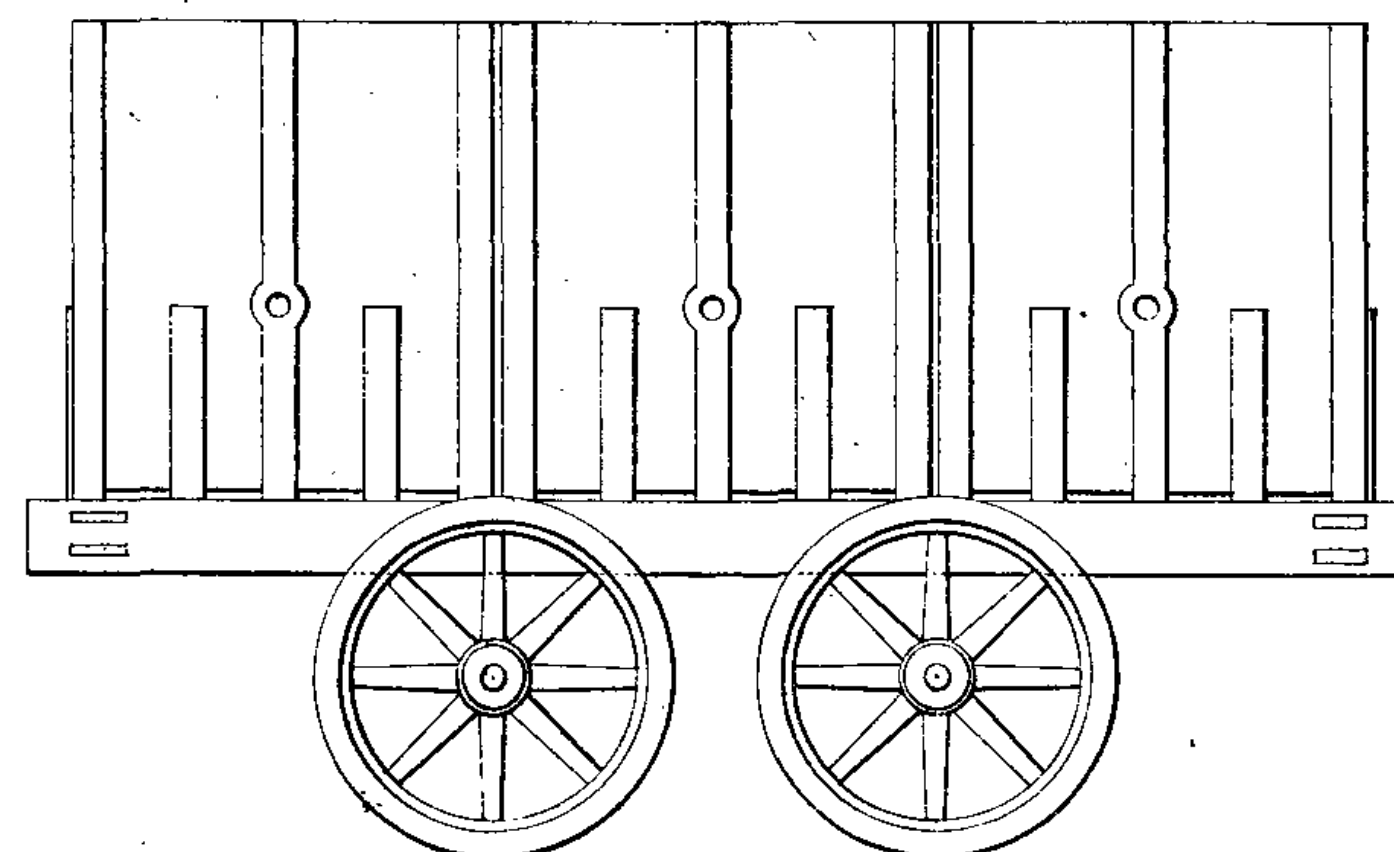


Fig. 6.

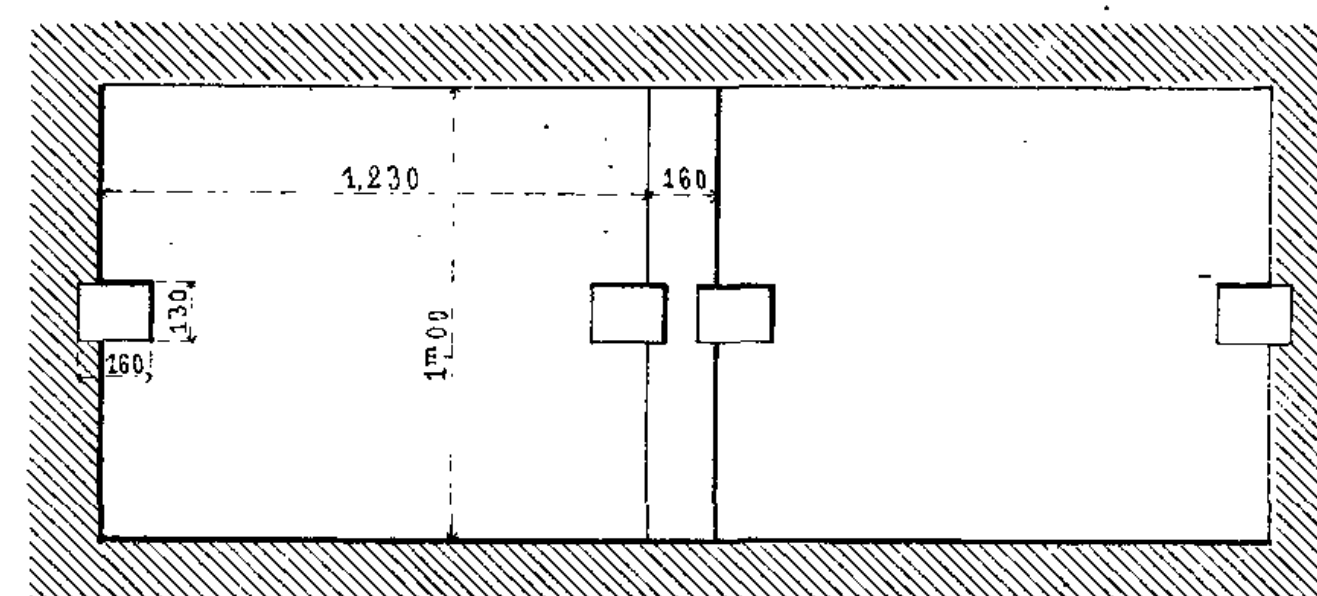


Fig. 4.

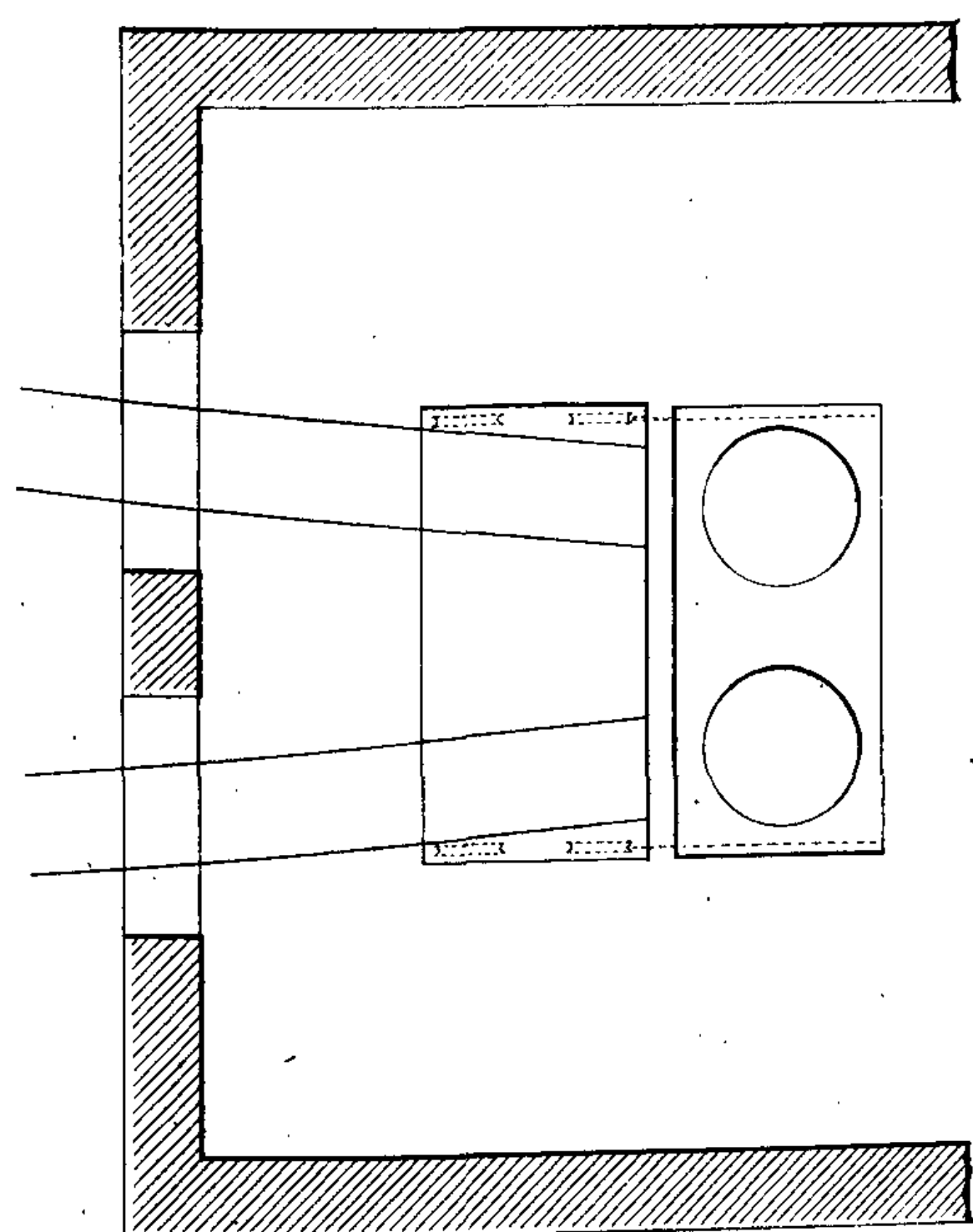


Fig. 7.

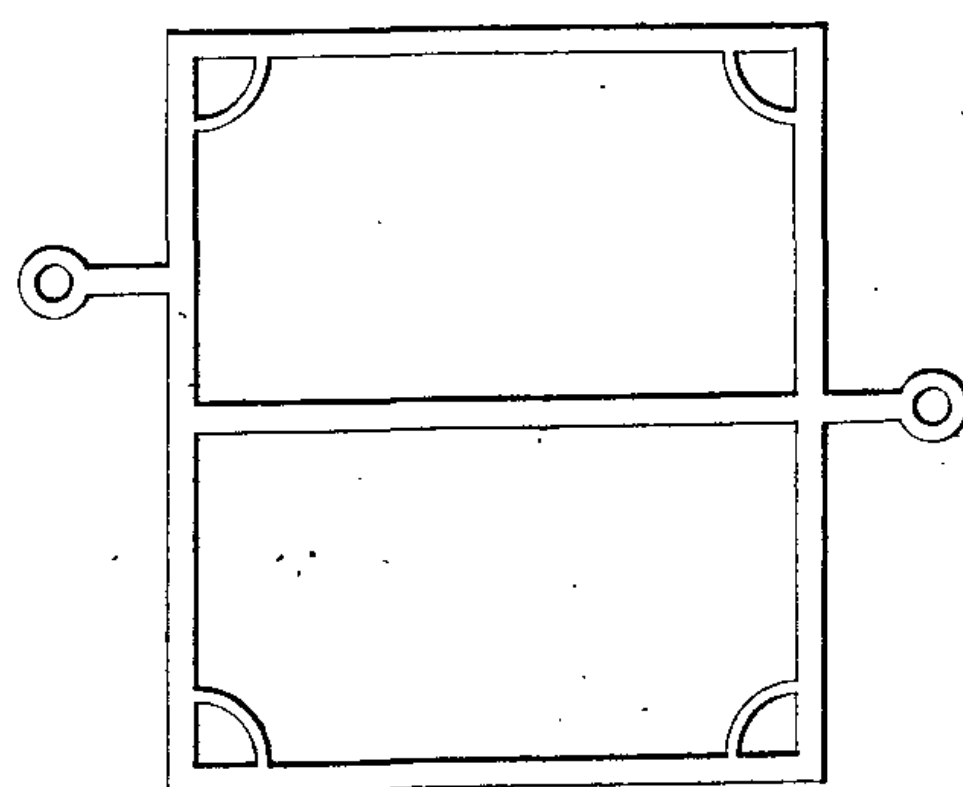


Fig. 8.

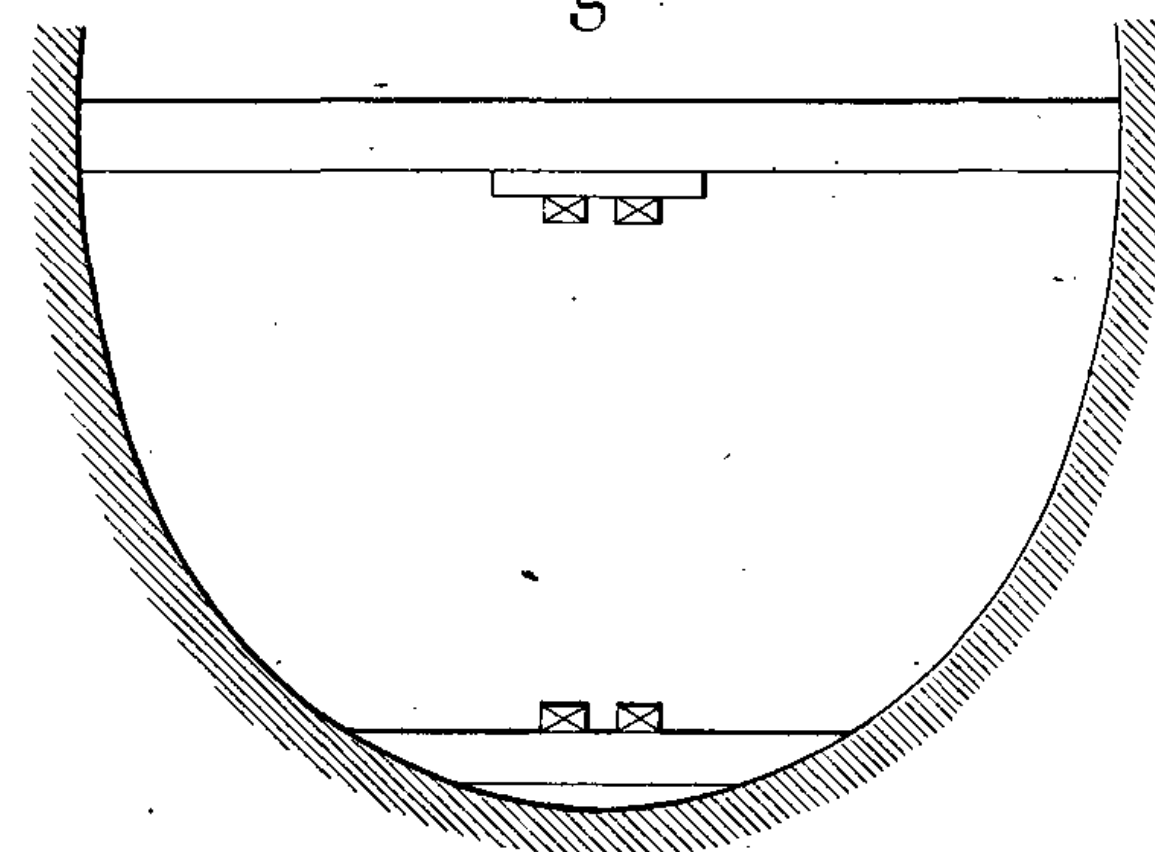
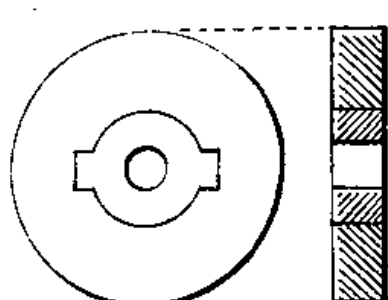


Fig. 9.



Echelle des fig. 1, 2, 3, 7 ( $\frac{1}{20}$ )

100 50 0 1 Met.

Echelle des fig. 4, 5, 6, 8 ( $\frac{1}{40}$ )

100 50 0 1 2 3 Met.



S'Ennen, Lith. Noblat et Lanza

366-1859







Coupe S.N. comprise entre Bleurville et Gironcourt.

Fig. 1.

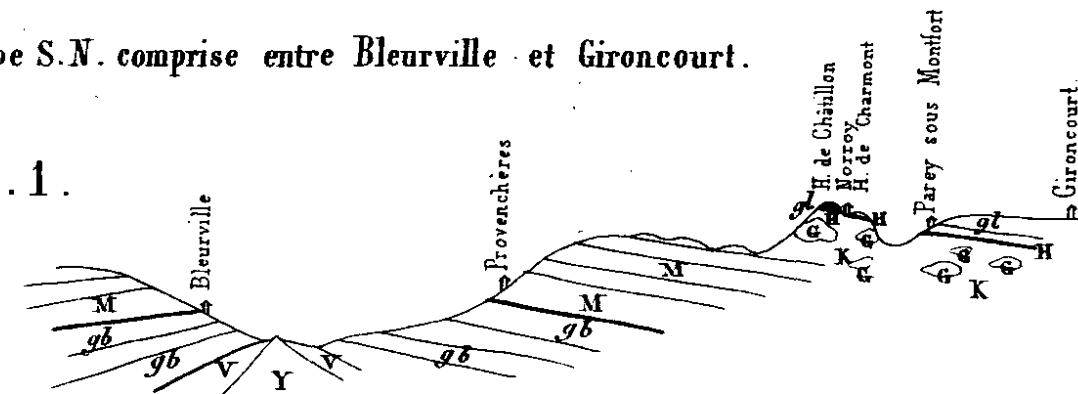
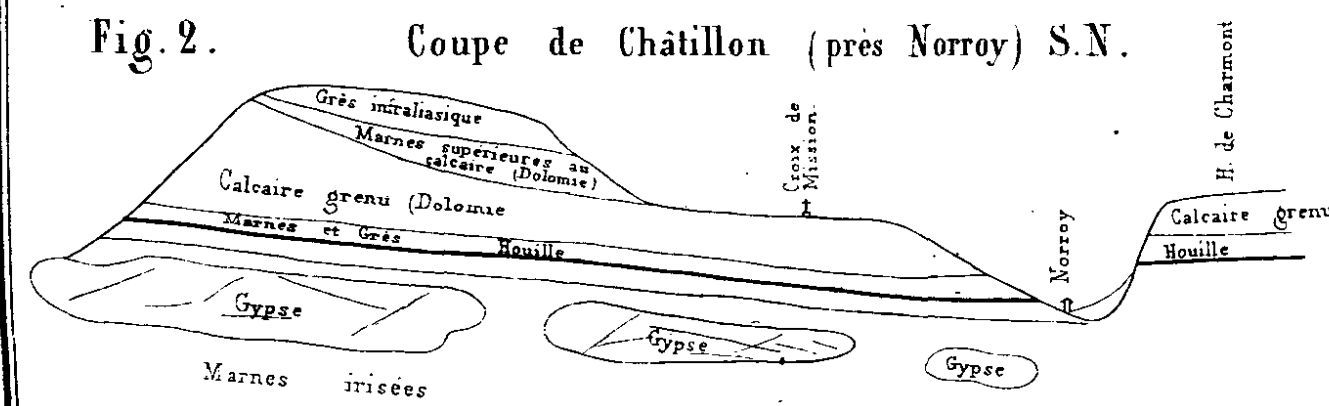


Fig. 2. Coupe de Chatillon (près Norroy) S.N.



- |                 |                        |
|-----------------|------------------------|
| Y Granit        | K Marnes irisées       |
| V Grès vosgien  | H Houille              |
| gb Grès bigarré | gl Grès infra-liasique |
| M Muschelkalk   | G Gypse                |

Fig. 3.

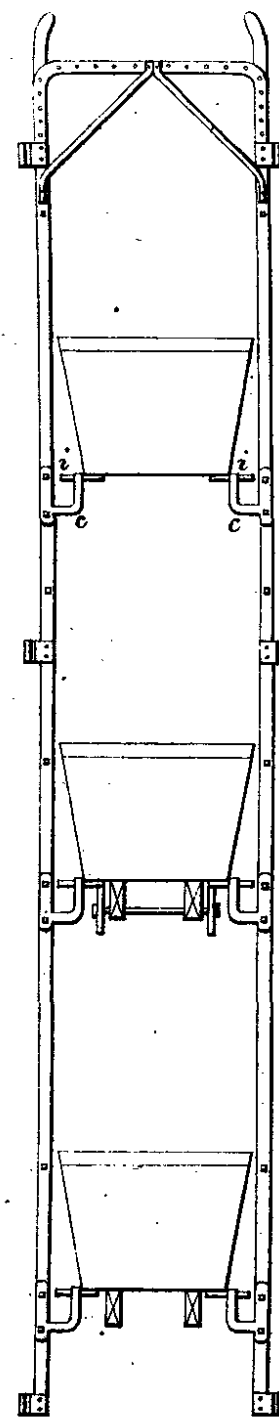


Fig. 4.

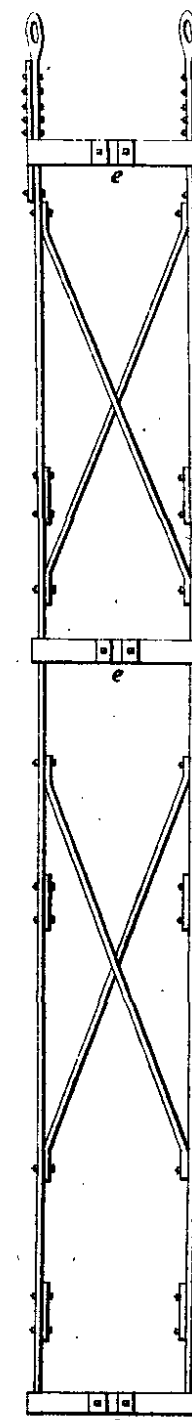


Fig. 5.

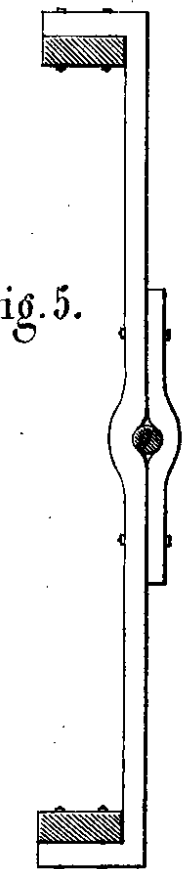


Fig. 11.

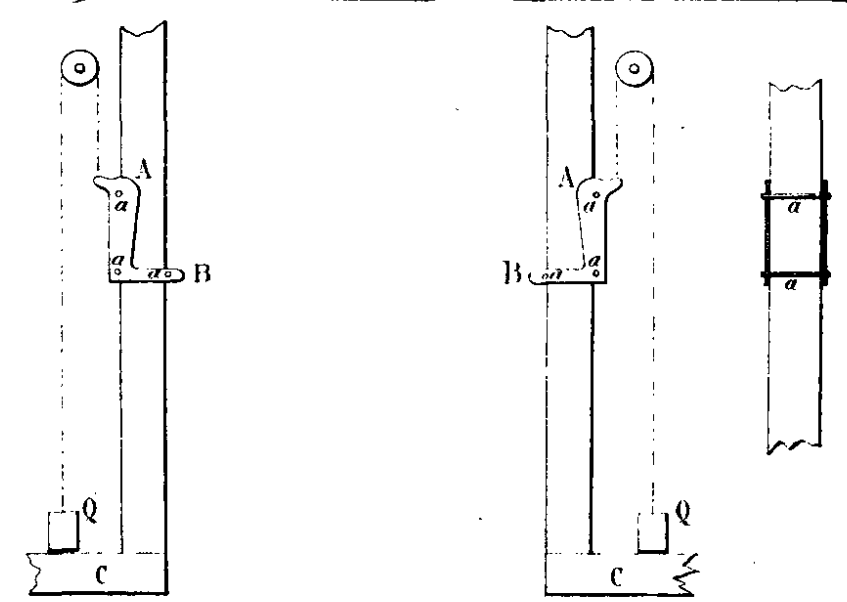


Fig. 7.

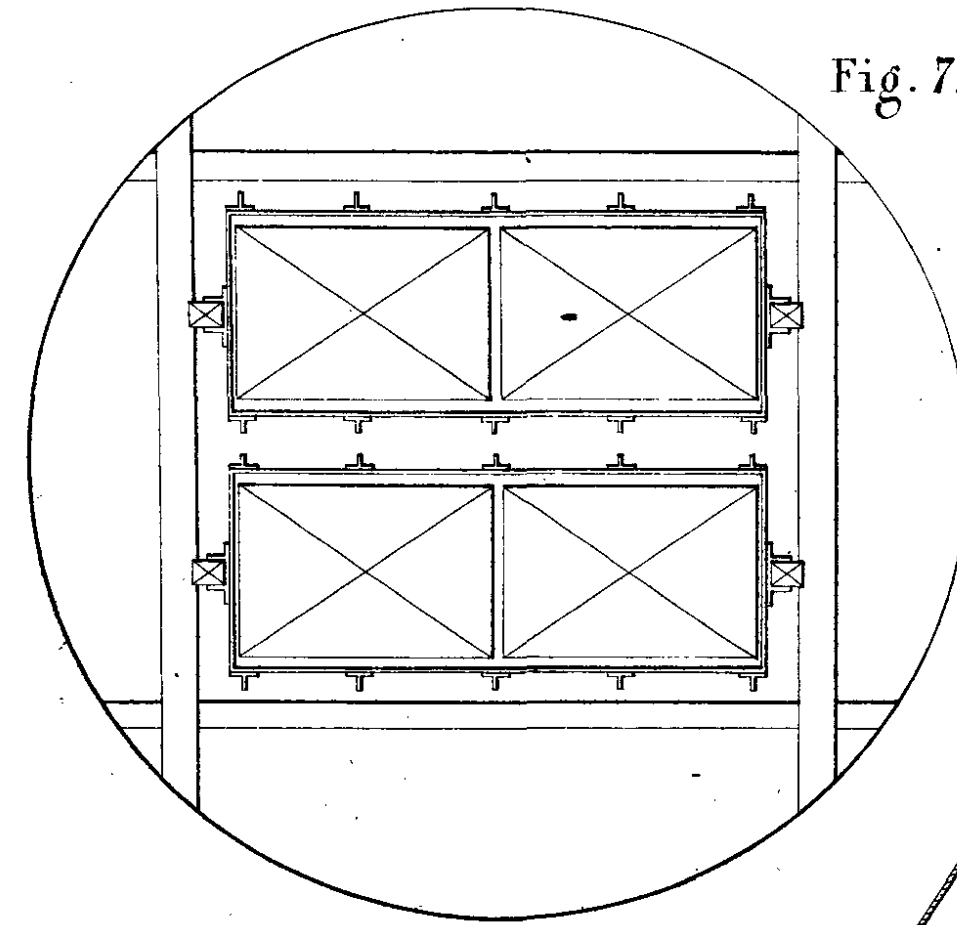


Fig. 6.

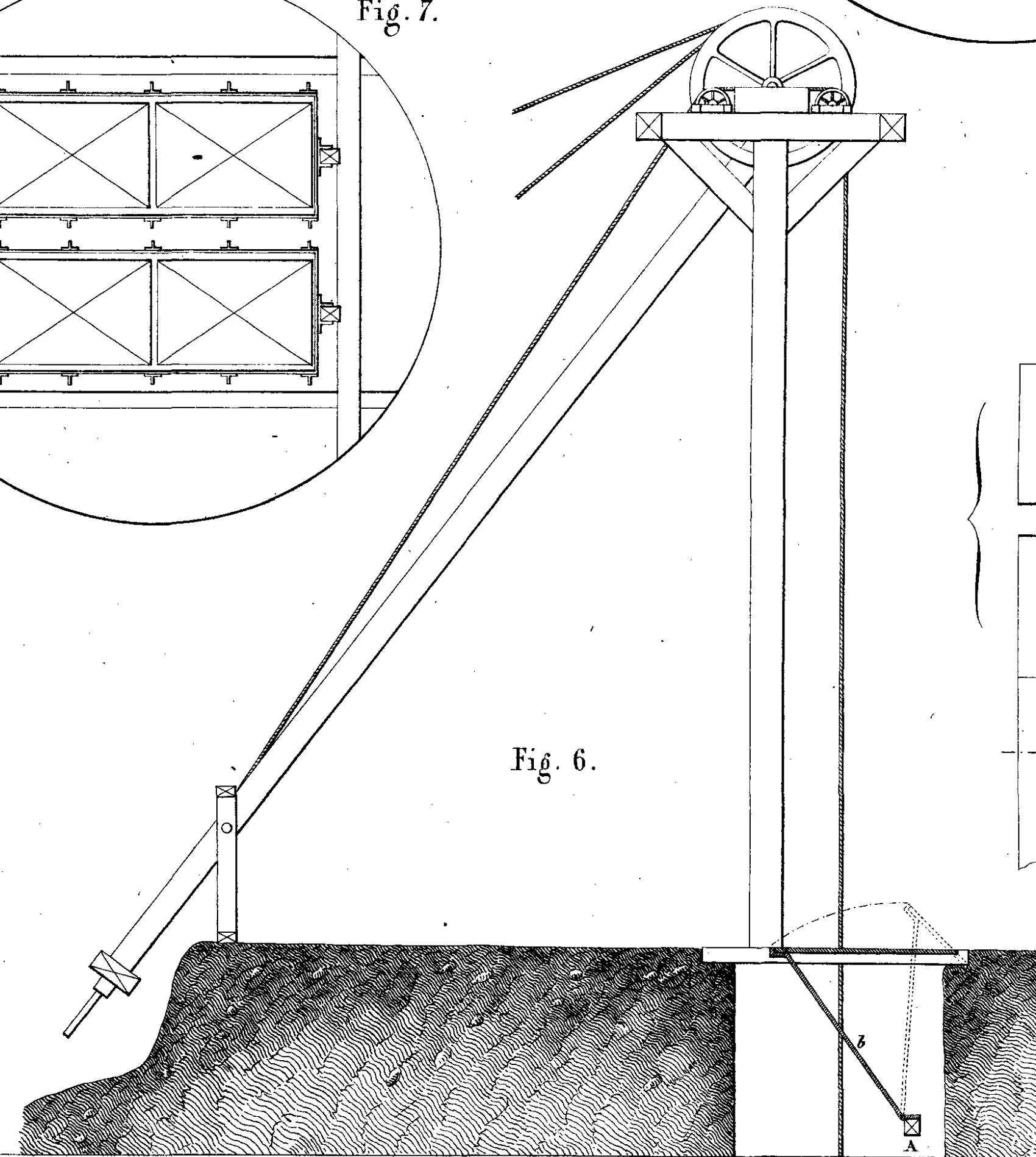


Fig. 8.

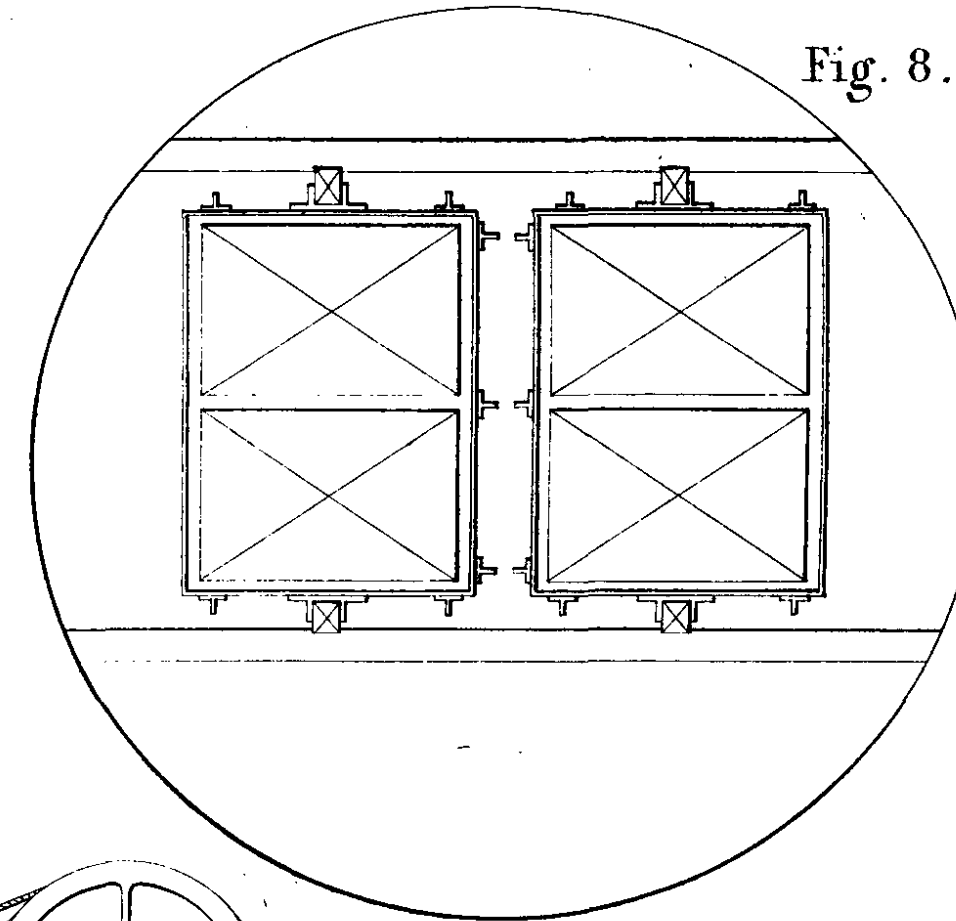


Fig. 9.

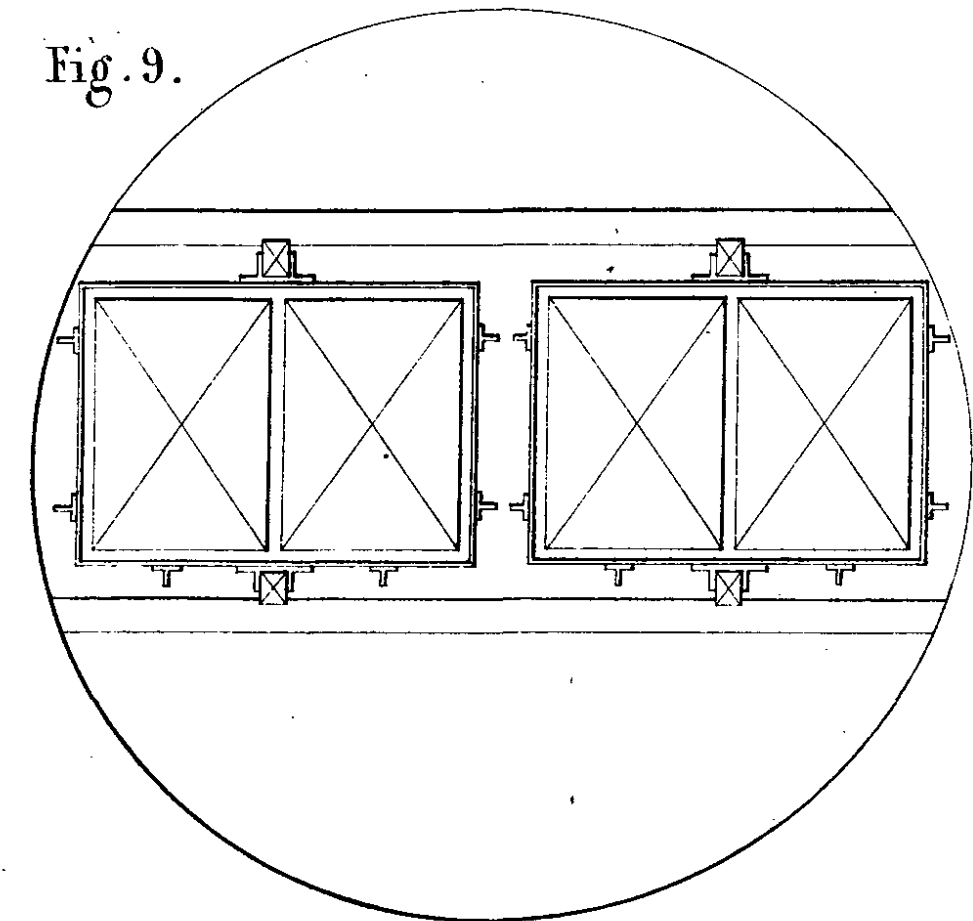
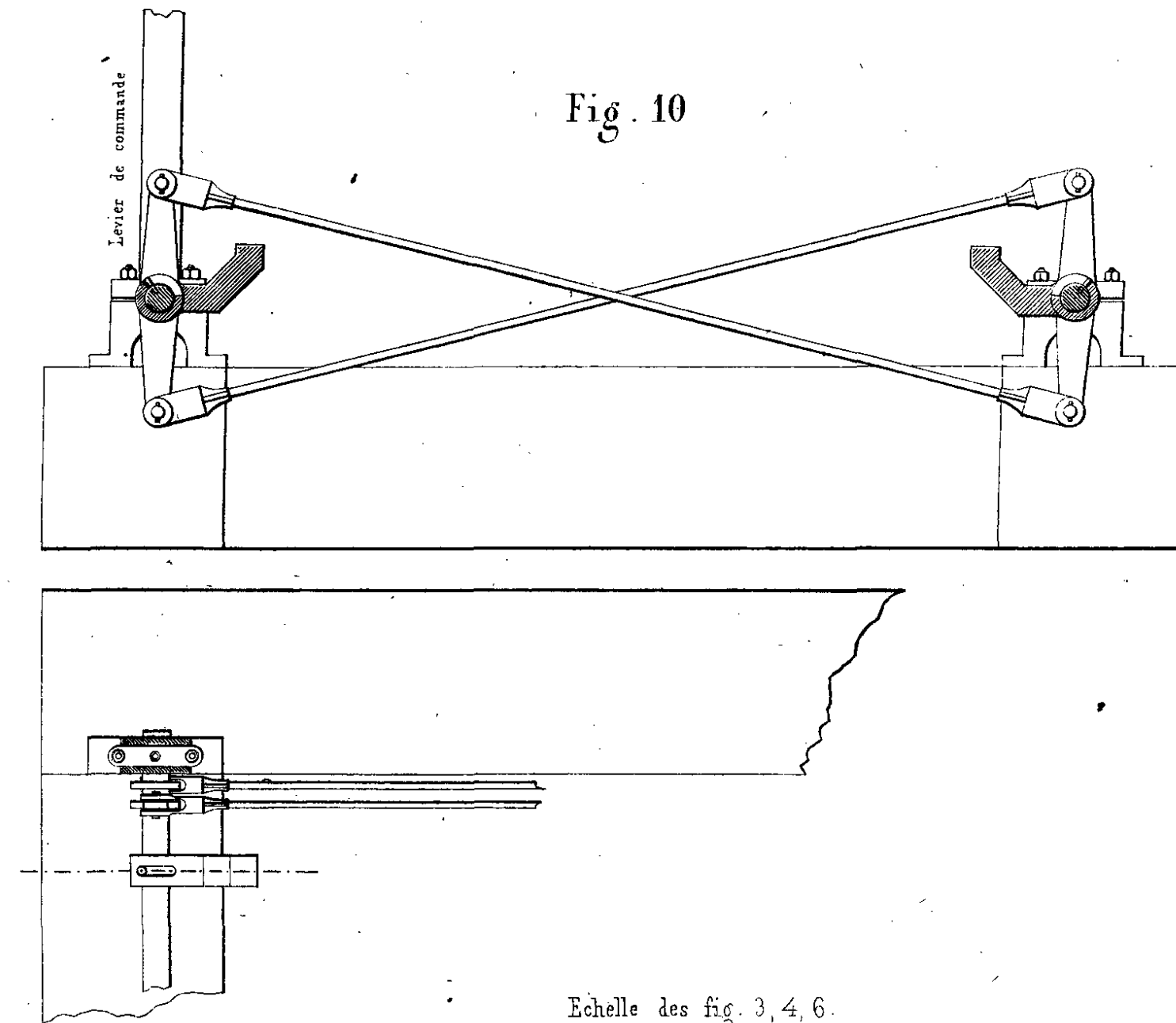


Fig. 10.



Echelle des fig. 3, 4, 6.

100 50 0 1 2 3 4 5 6 7 8 Mèt.

Echelle des fig. 5, 7, 8, 9.

100 50 0 1 2 3 4 Mèt.

Echelle de la fig. 10.

100 50 0 1 Mèt.



346 1899







Fig. 1.

Coupe verticale sur AB fig. 3.

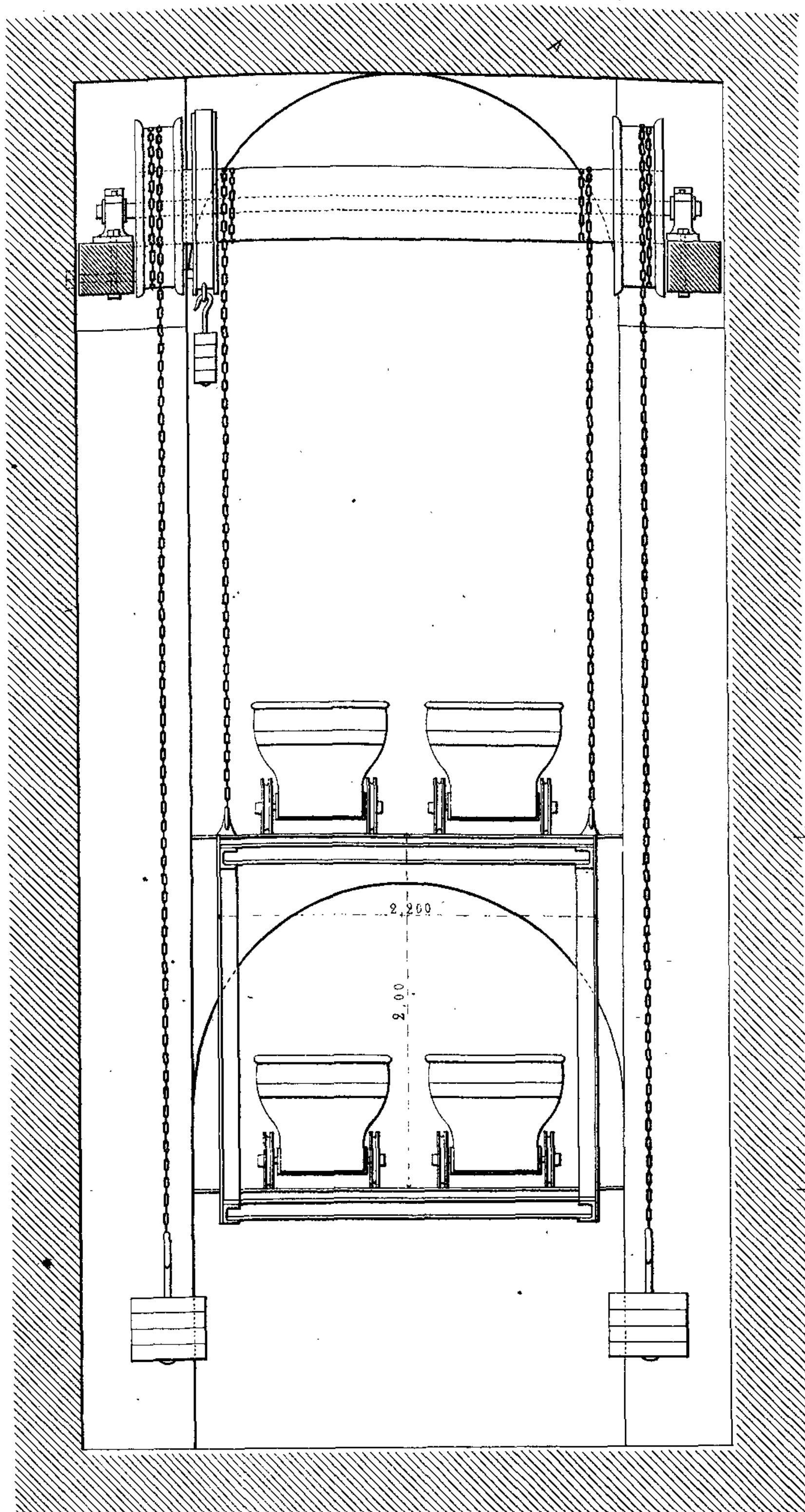
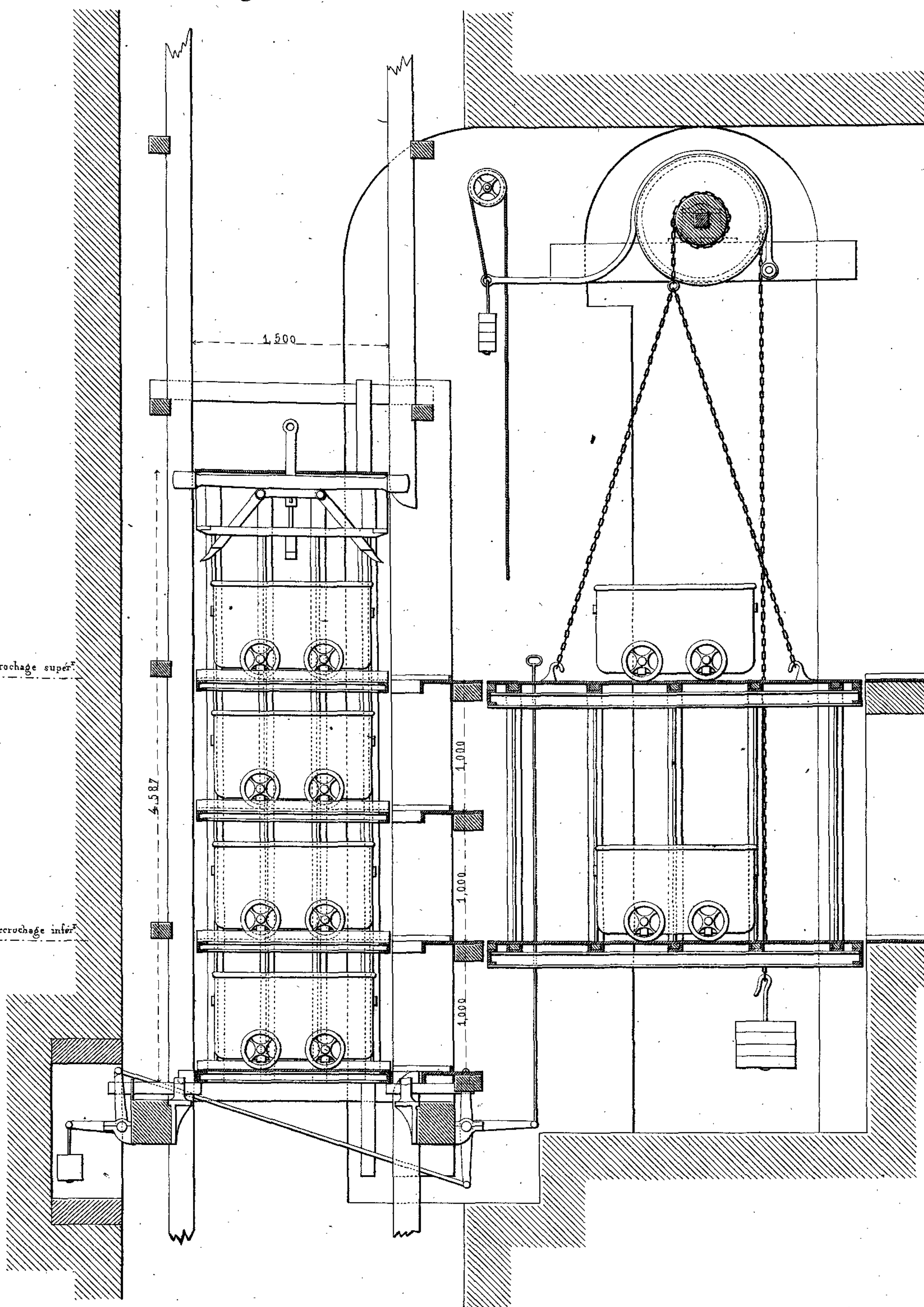


Fig. 2.

Coupe verticale suivant CD, fig. 3.



Détails de construction du pont mobile

Fig. 4.

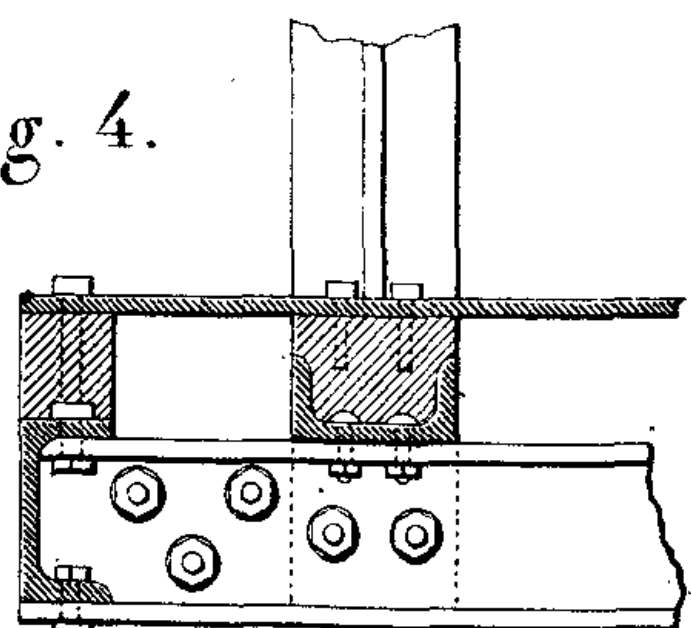


Fig. 5.

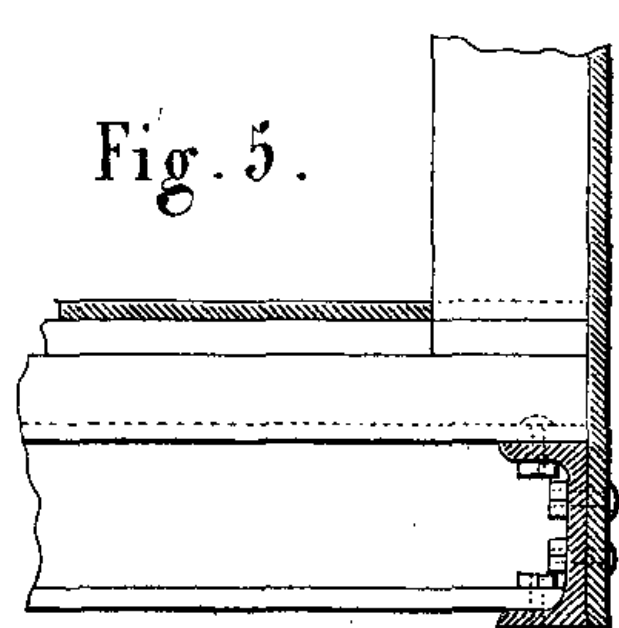


Fig. 6.

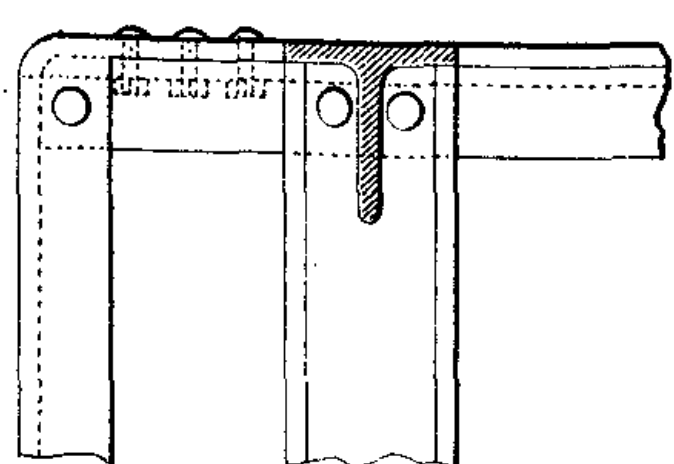


Fig. 7.

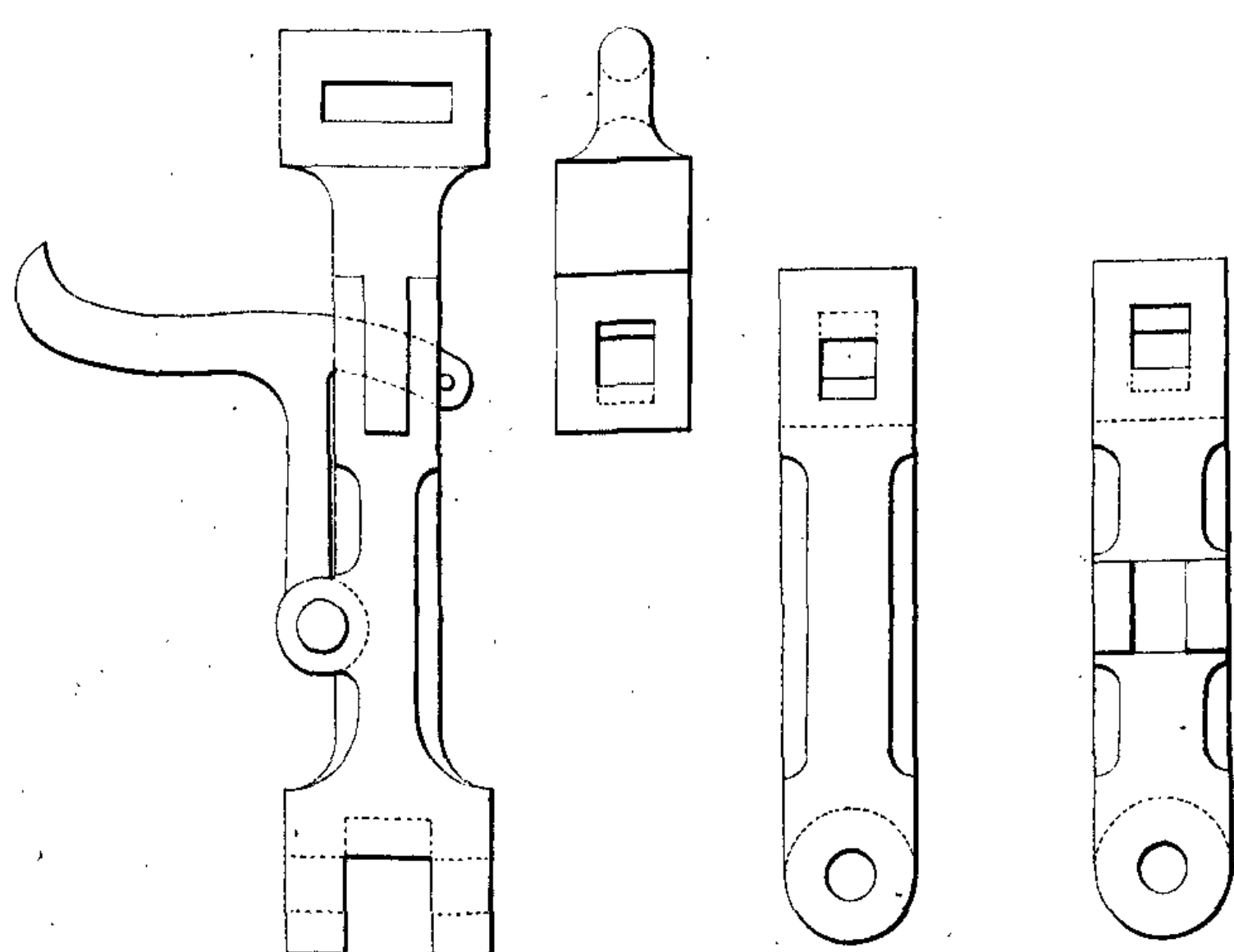
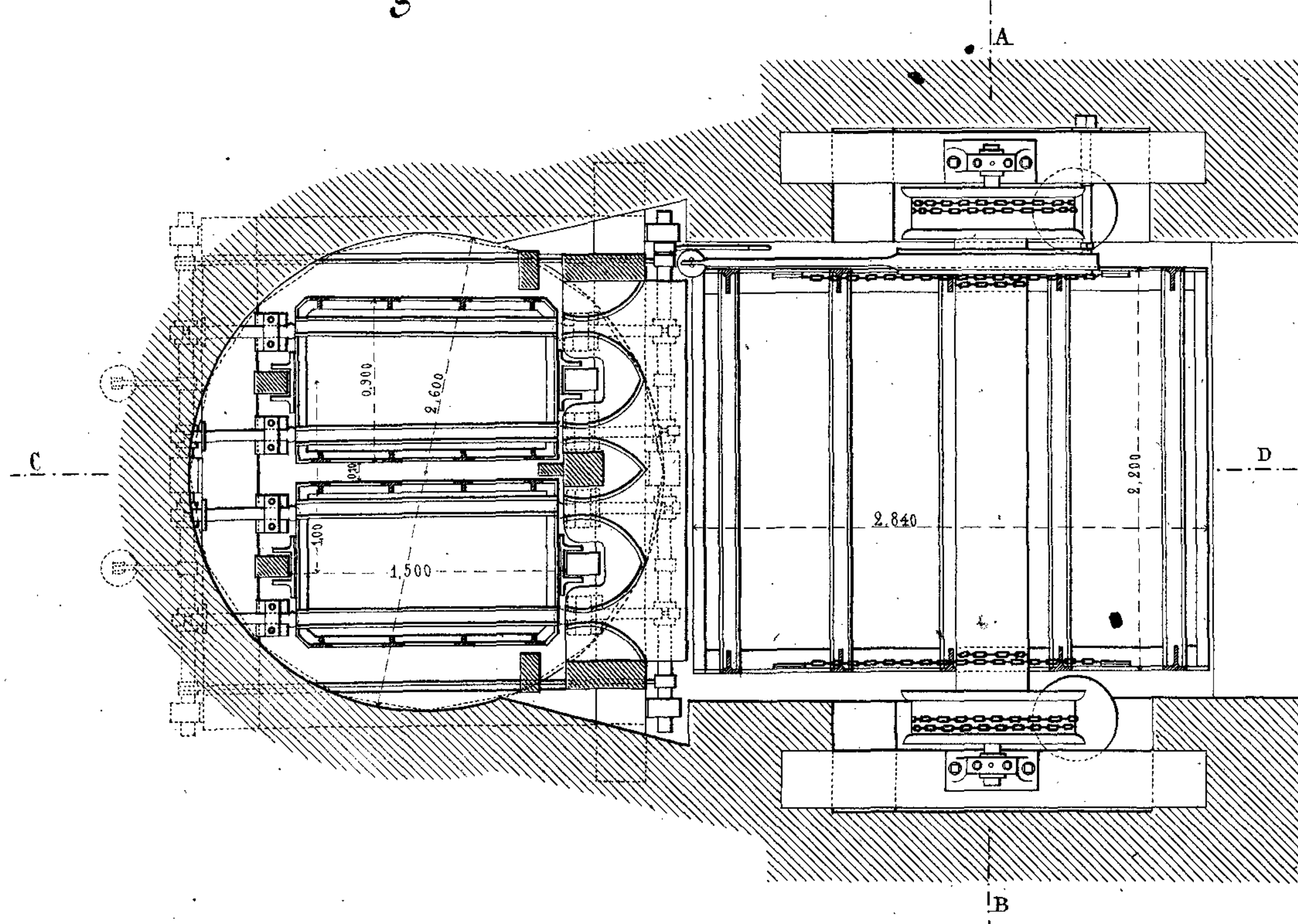


Fig. 3.

Plan.



Echelle des fig. 1, 2, 3.

100 50 0 1 2 3 4 Mèt.

Echelle des fig. 4, 5, 6, 7.

0 50 1 Mèt.

S<sup>t</sup>Etienne, Lith. Nodot et Lantz.



346. 1859







Fig. 1.

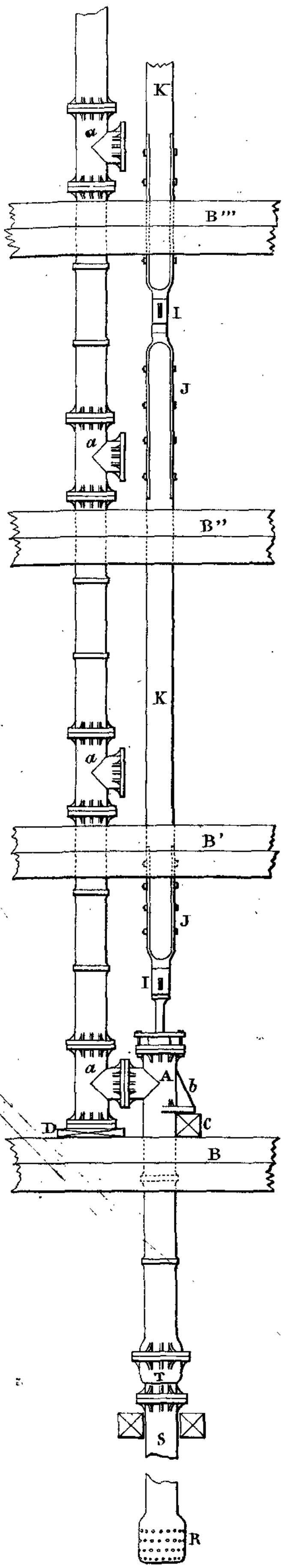


Fig. 3.

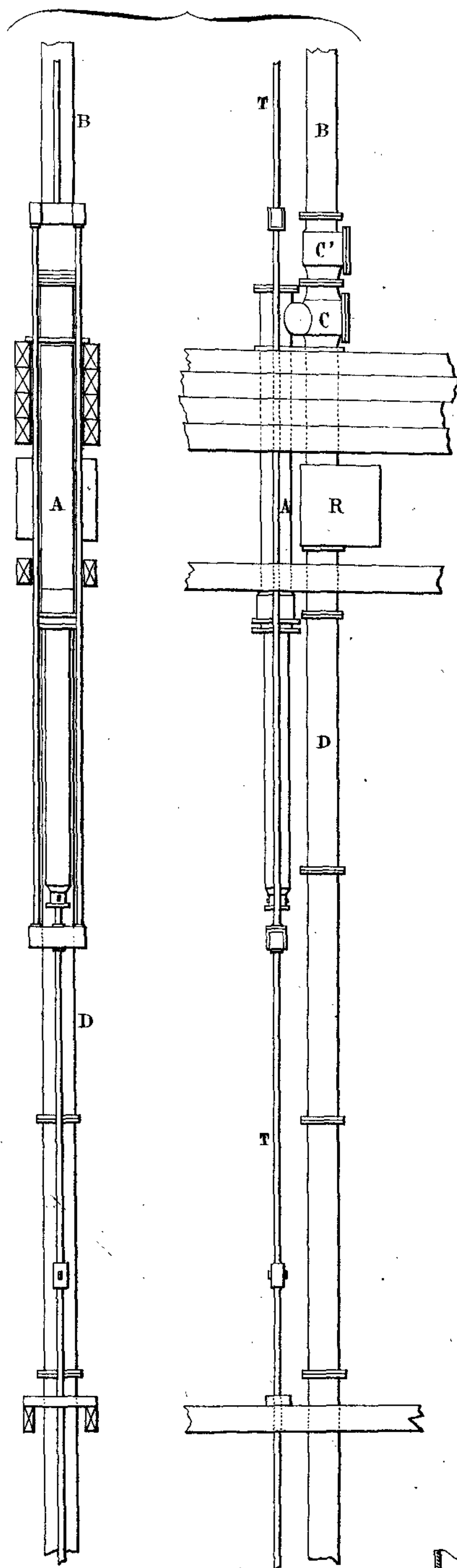


Fig. 4.

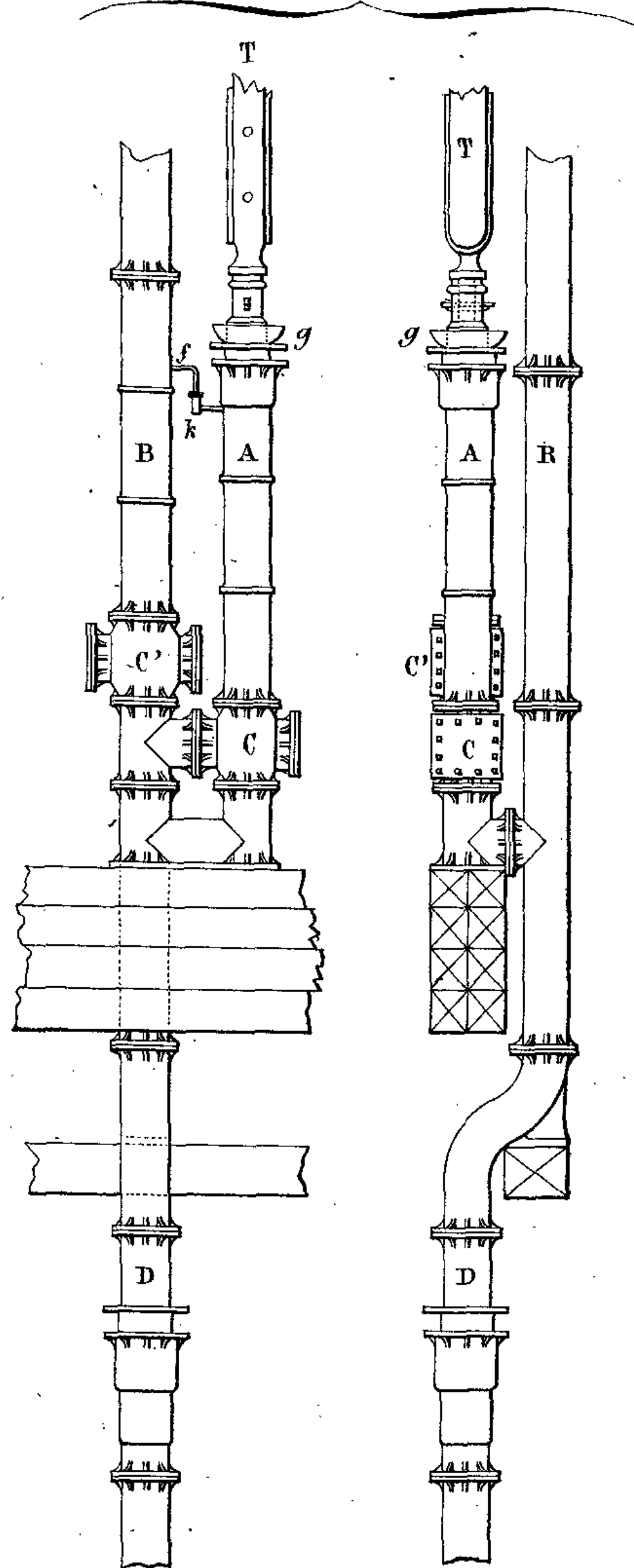


Fig. 5.

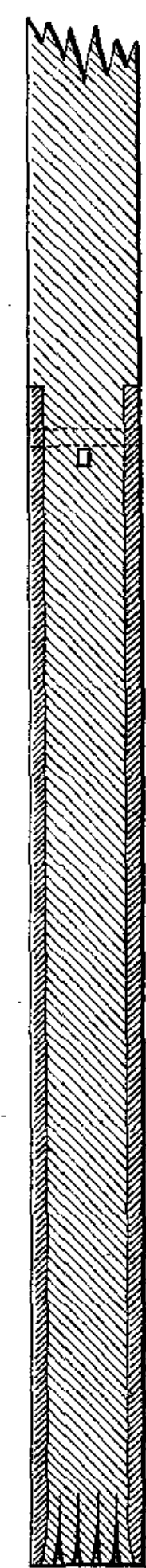


Fig. 6.

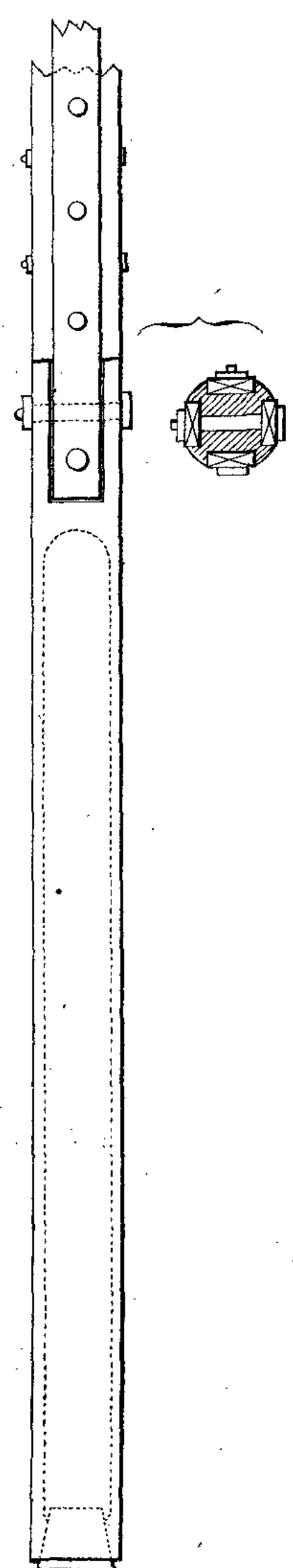


Fig. 8.

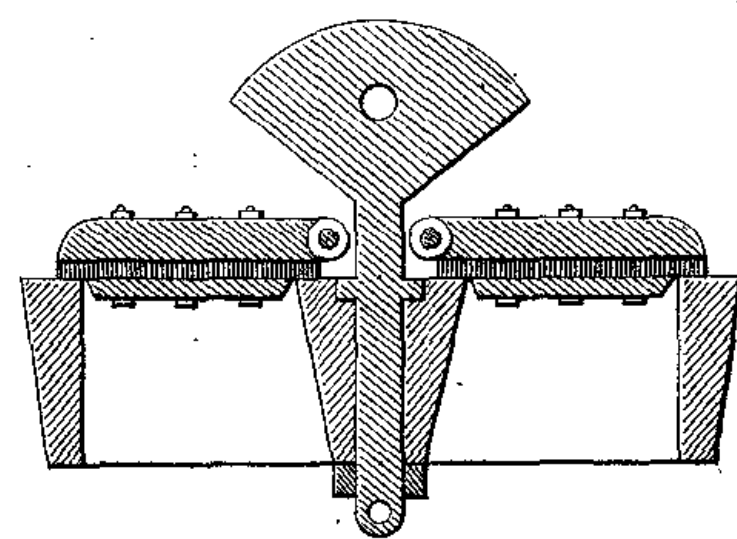


Fig. 9.

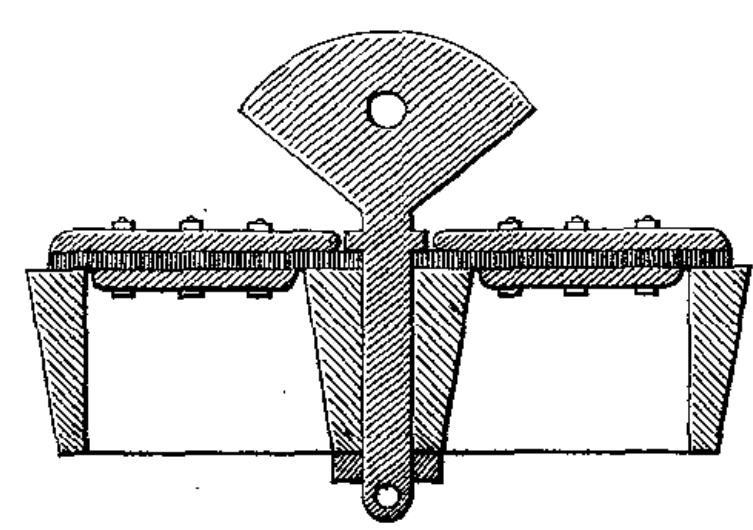


Fig. 7.

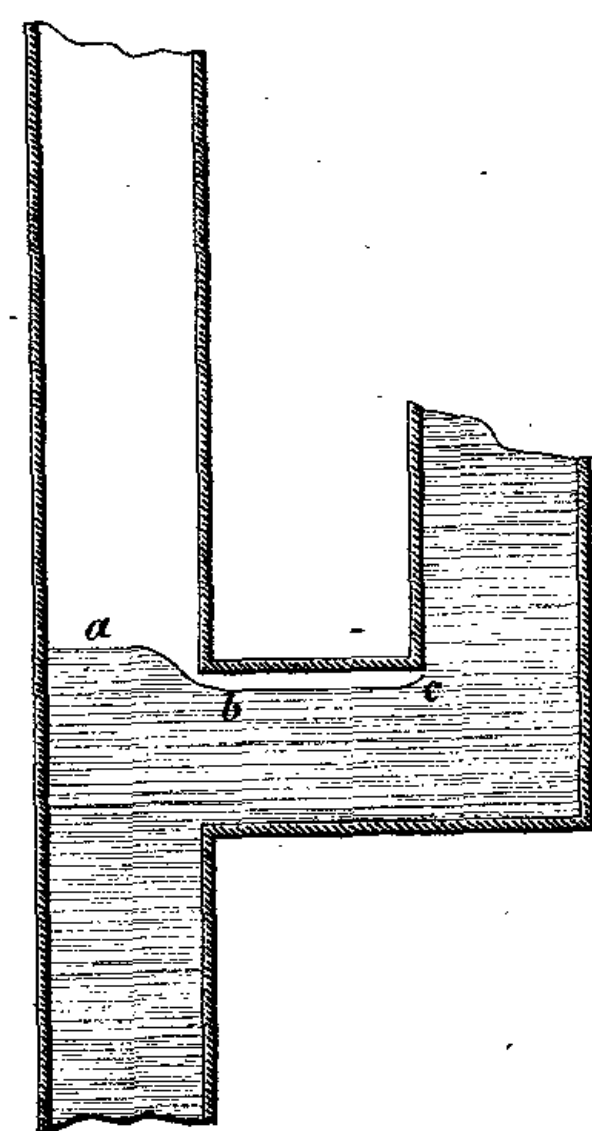


Fig. 10.

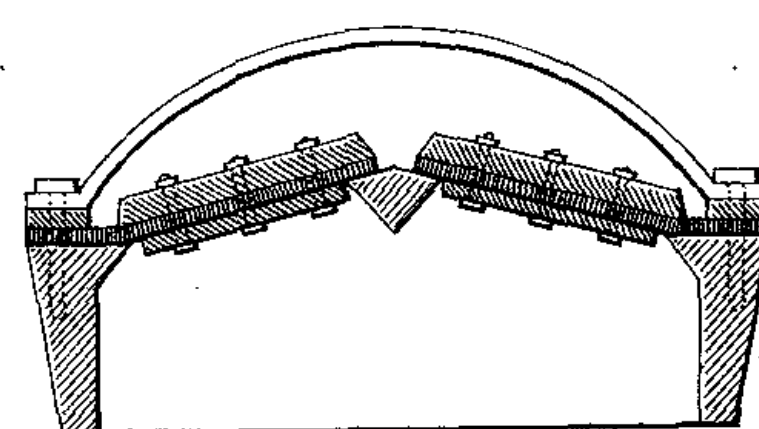


Fig. 11.

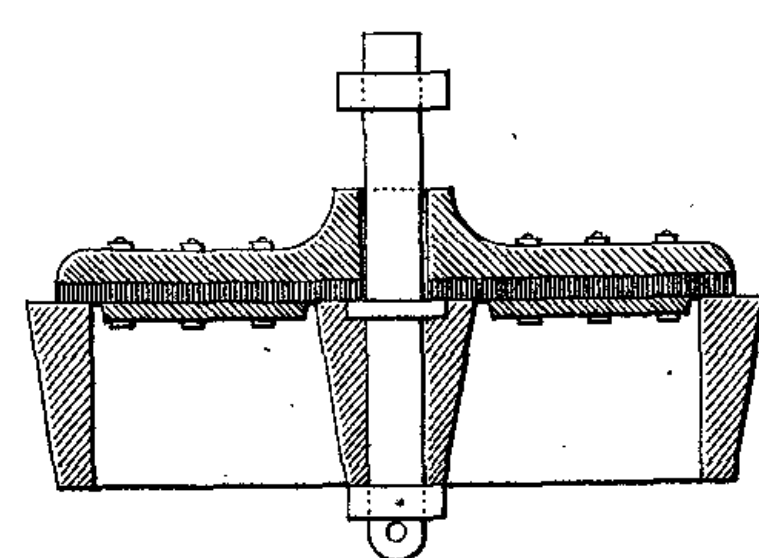


Fig. 12.

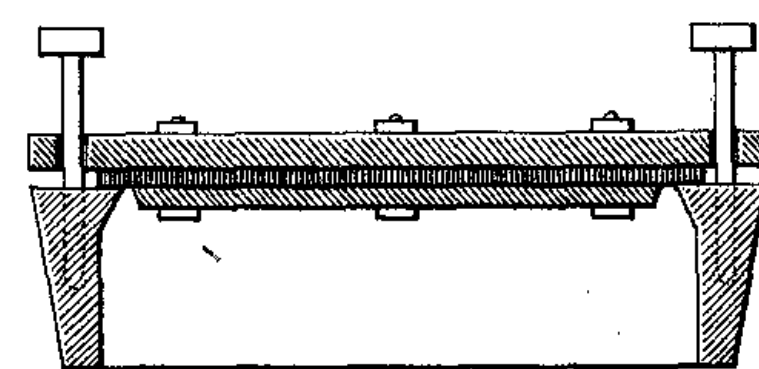


Fig. 13.

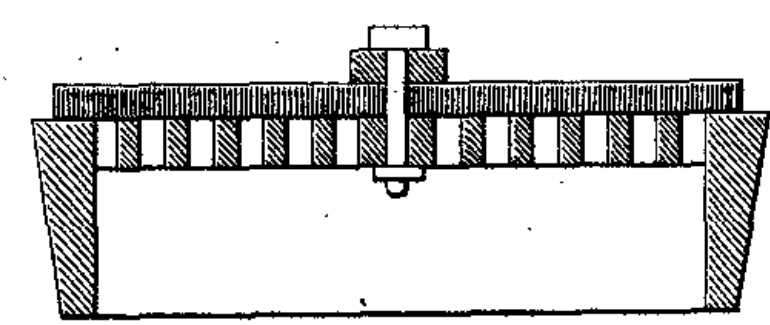


Fig. 15.

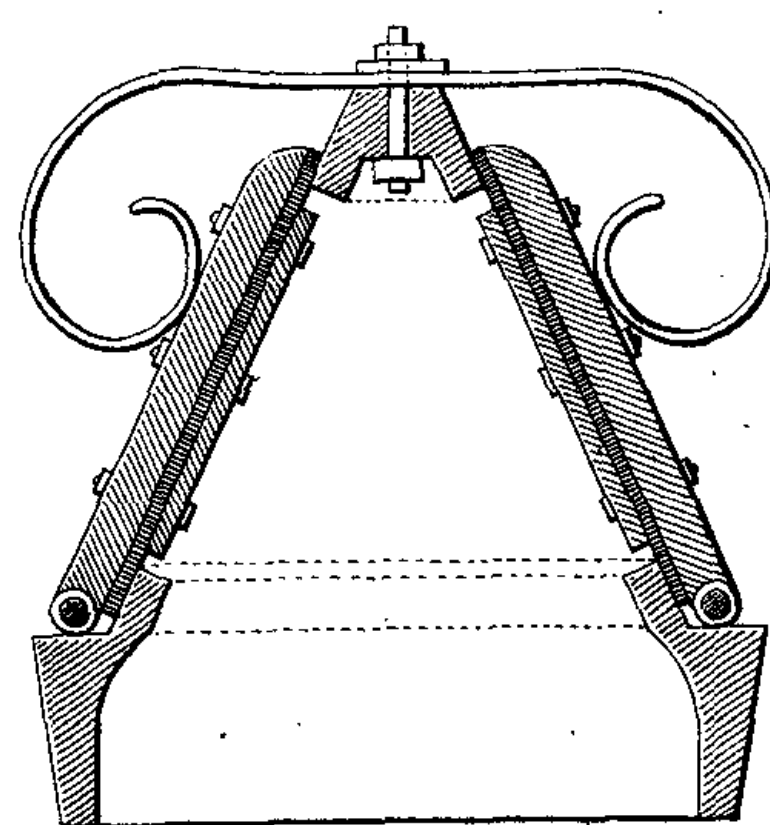


Fig. 16.

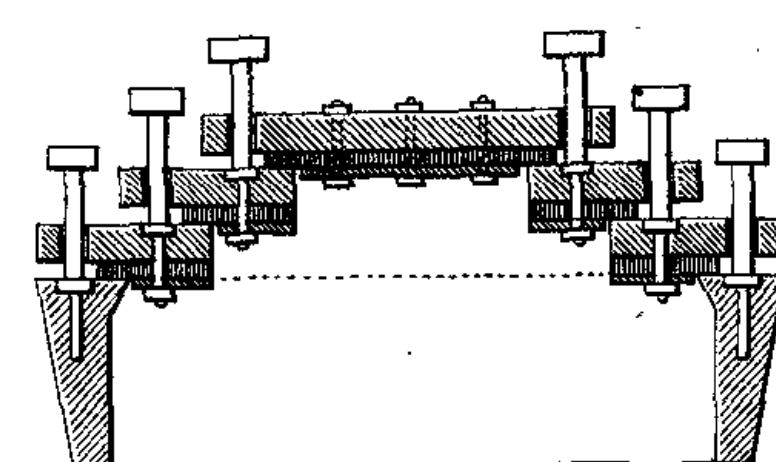


Fig. 17.

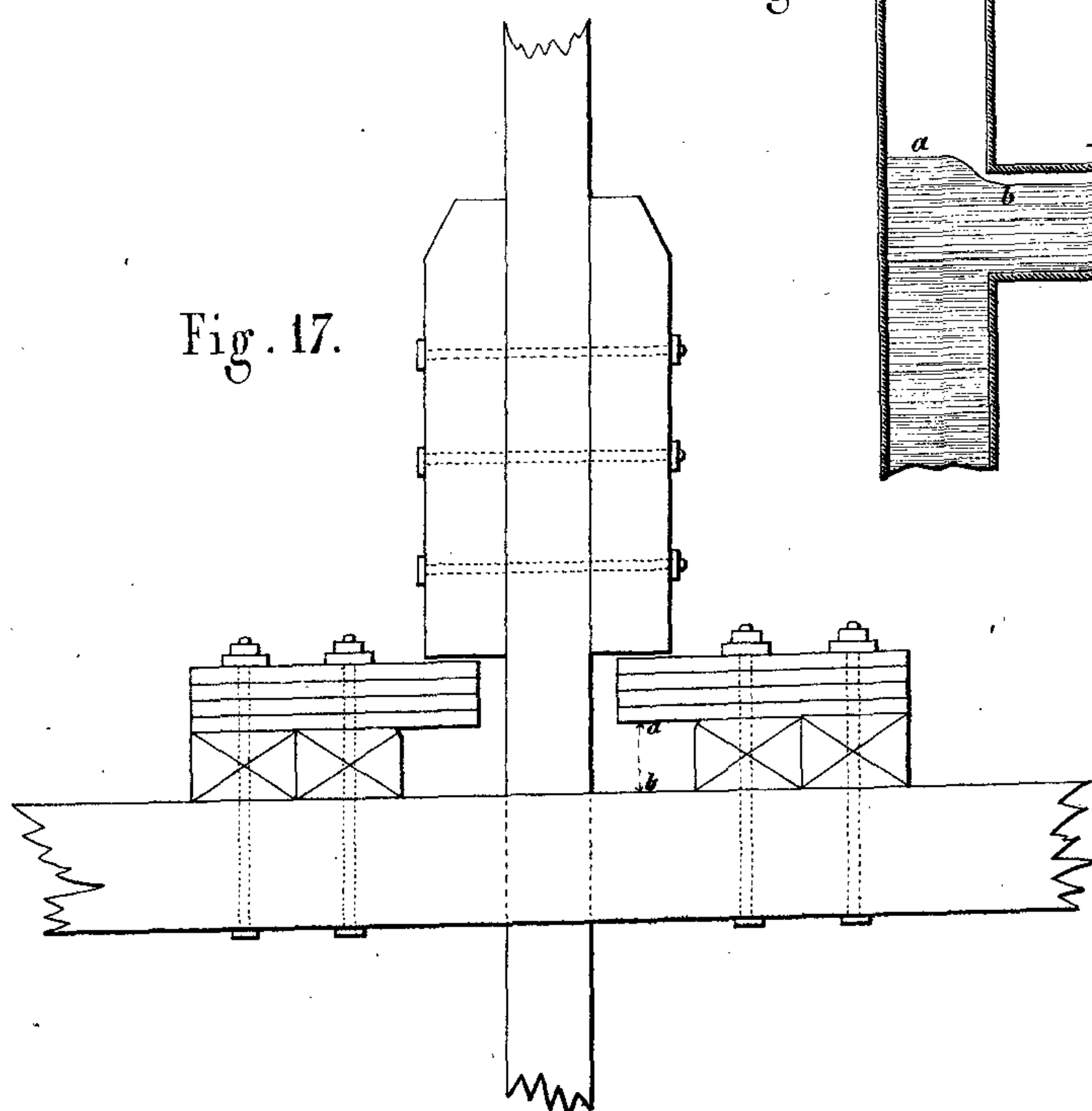


Fig. 14.

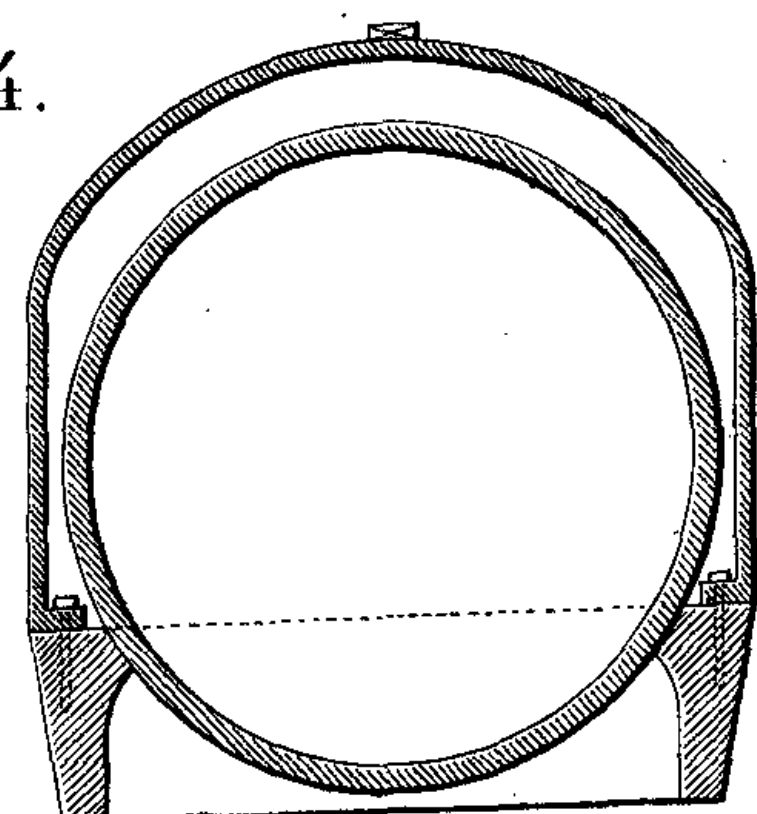


Fig. 2.

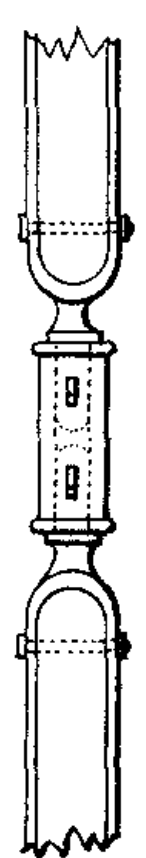


Fig. 18.

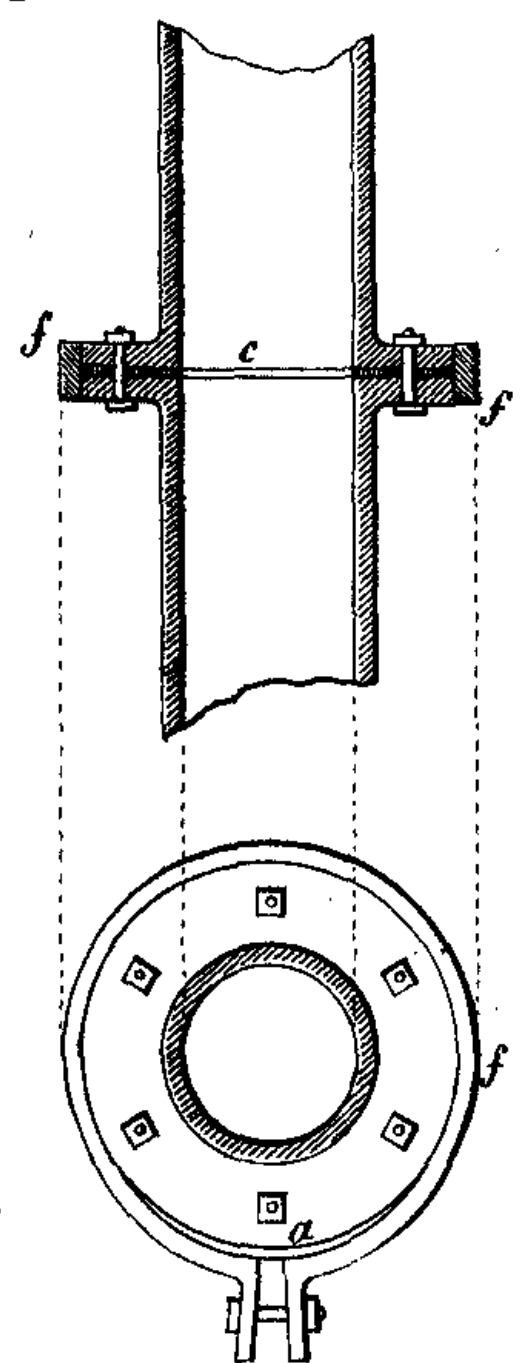
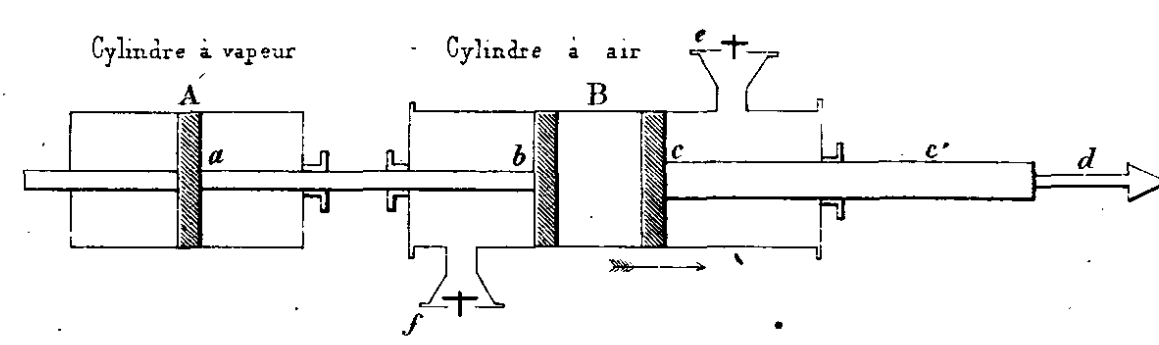




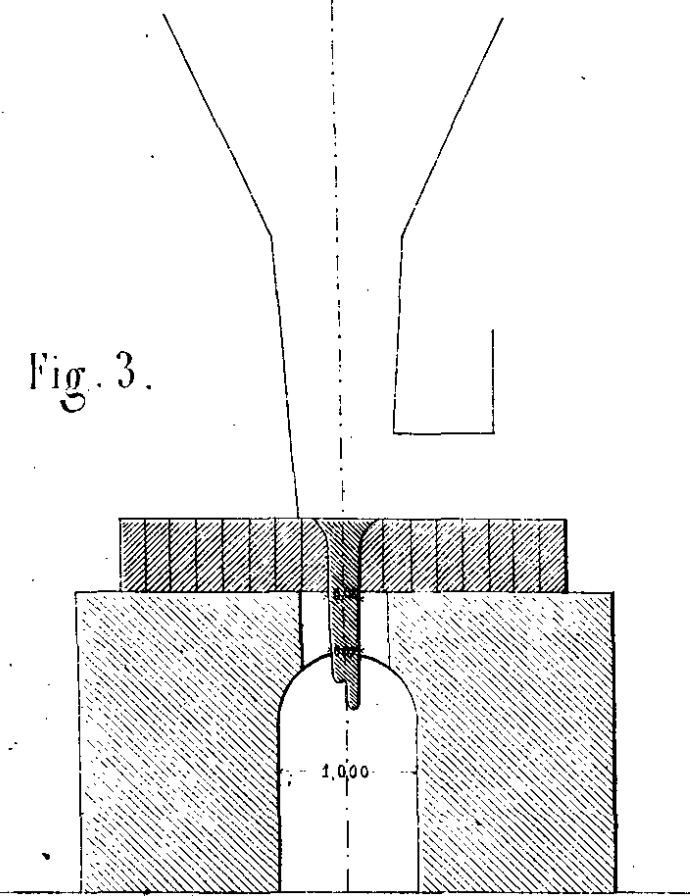




Fig. 1. Locomobile avec cylindre A horizontal.



Accident de haut-fourneau par défaut de la sole.



Accident de haut-fourneau par défaut de la Chemise réfractaire.

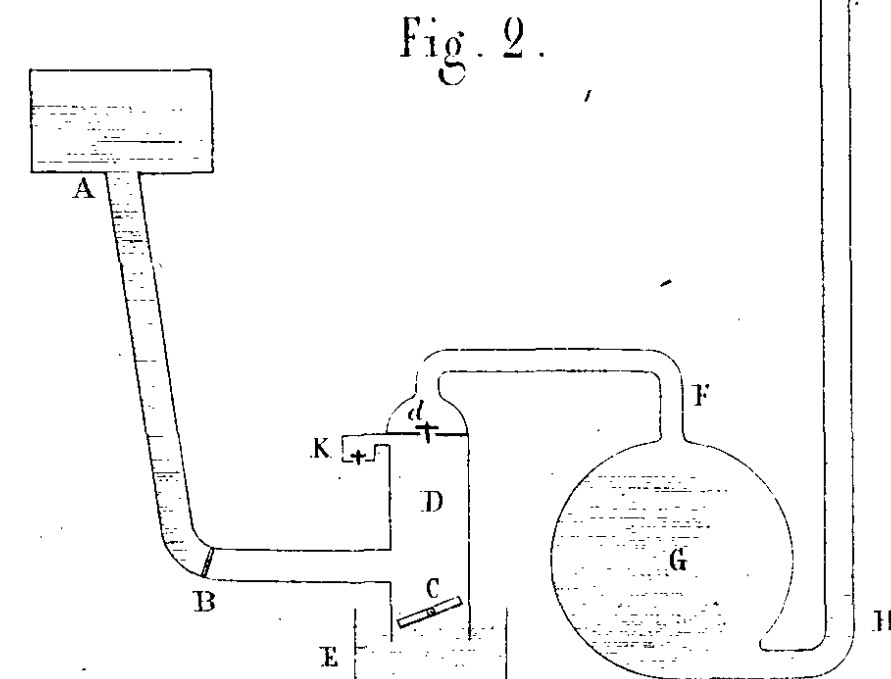
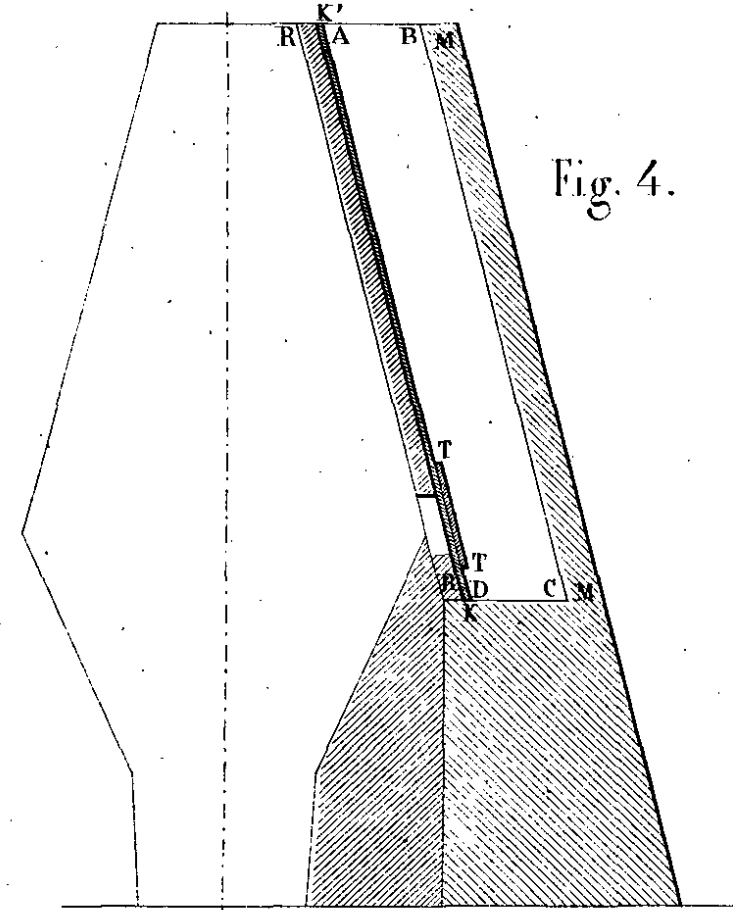
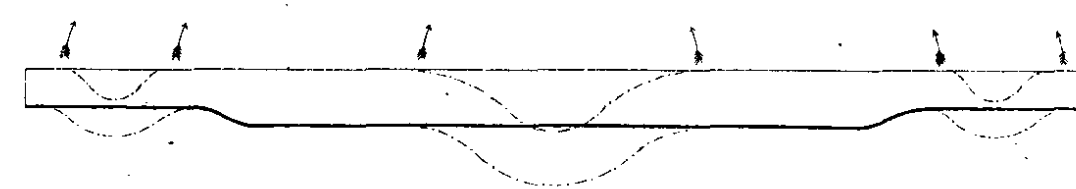


Fig. 2.

Fig. 5. Préparation d'un demi moyeu.



Etampe pour former le moyeu.

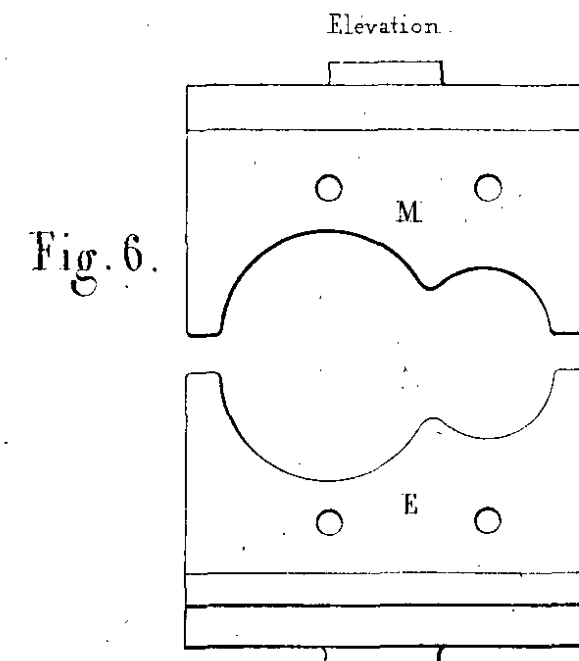


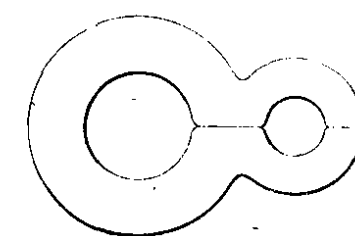
Fig. 6.

Formation des bras.

1<sup>re</sup> Opér<sup>on</sup>. Formation du tenon d'assemblant avec la jante.  
2<sup>e</sup> Op. Refoulement de l'extrémité s'assemblant avec le moyeu.

Moyeu cintré.

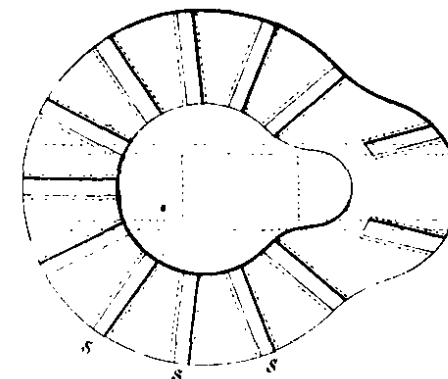
Fig. 7.



Matrices pour diviser le demi moyeu.

Matrice supérieure

Plan



Elevation.

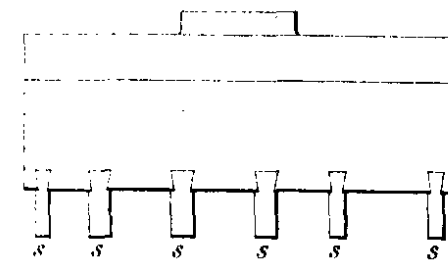
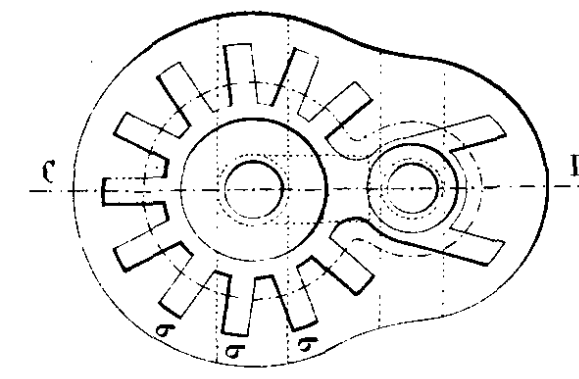


Fig. 8.

Matrice inférieure

Plan



Coupe suivant CD.

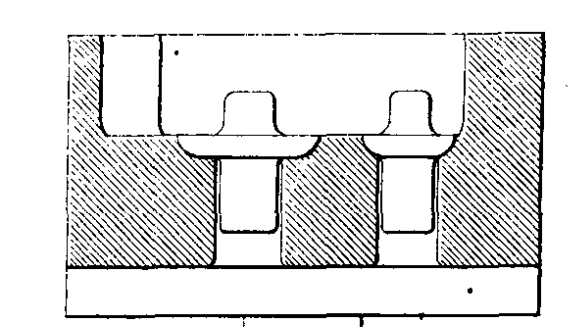
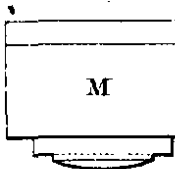


Fig. 9.

Fig. 10.

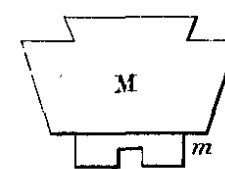
Matrices pour former les tenons des extrémités des bras.

Elevation.



Matrice supérieure.

Vue de côté



Matrice inférieure

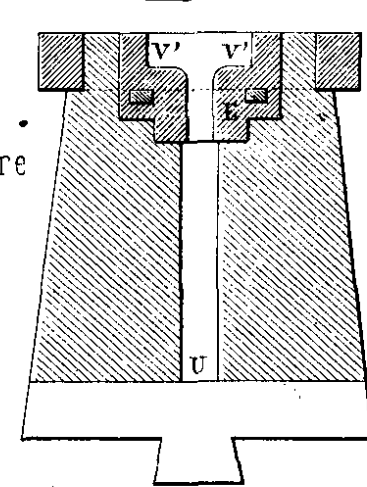
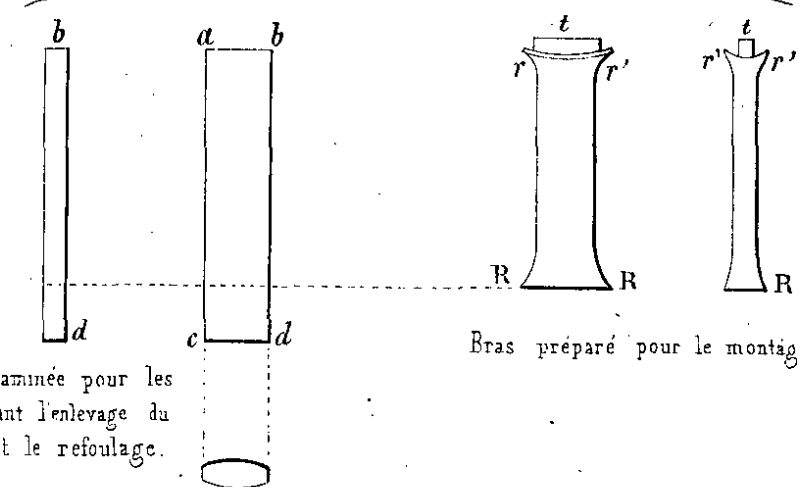


Fig. 11. Bras.

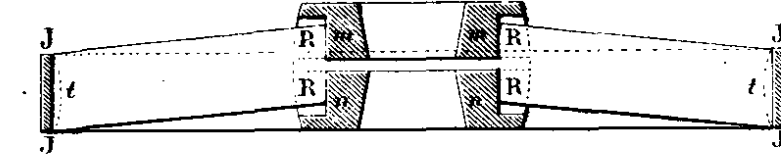


Barre laminée pour les bras avant l'enlèvement du tenon et le refoulement.

Bras préparé pour le montage

Fig. 12.

Montage de la roue à froid.



Matrices pour frapper la roue.

Fig. 13.

Plan de la matrice inférieure.

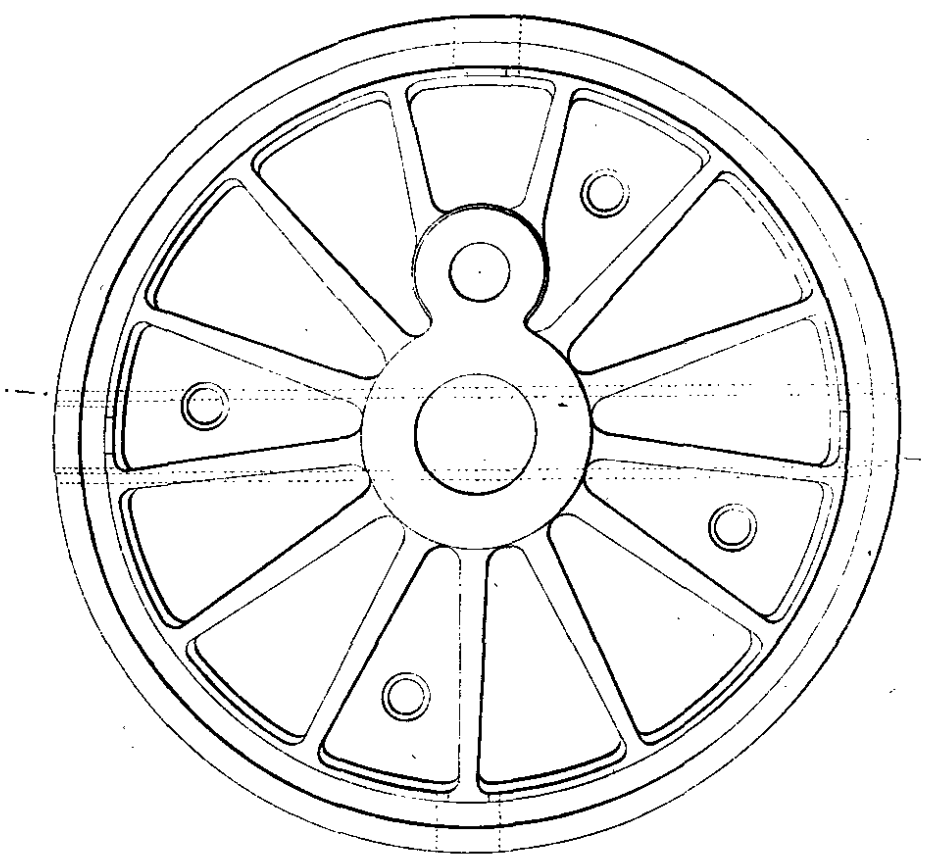
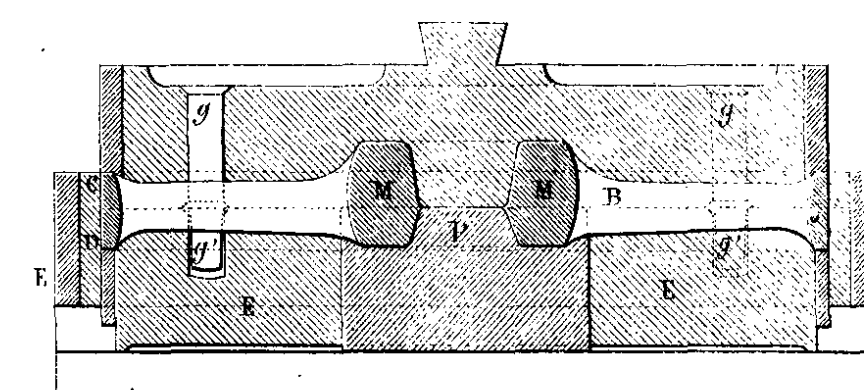


Fig. 14.

Coupe suivant FG.









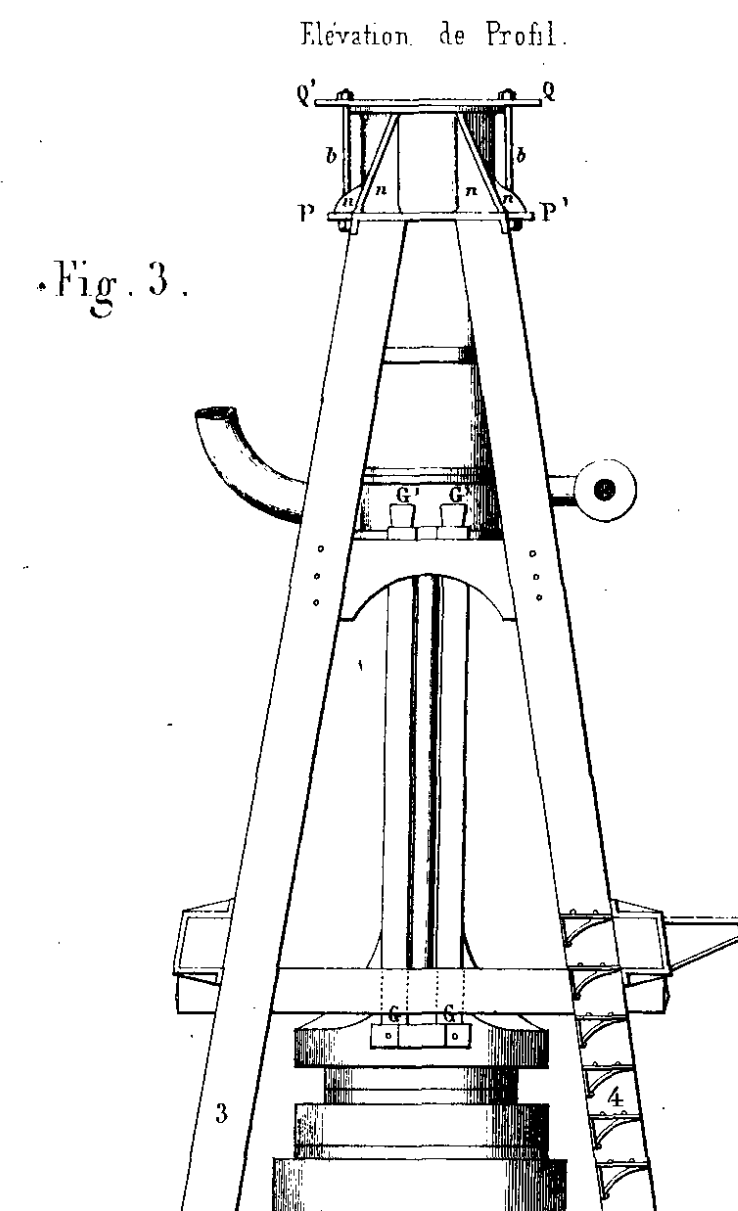
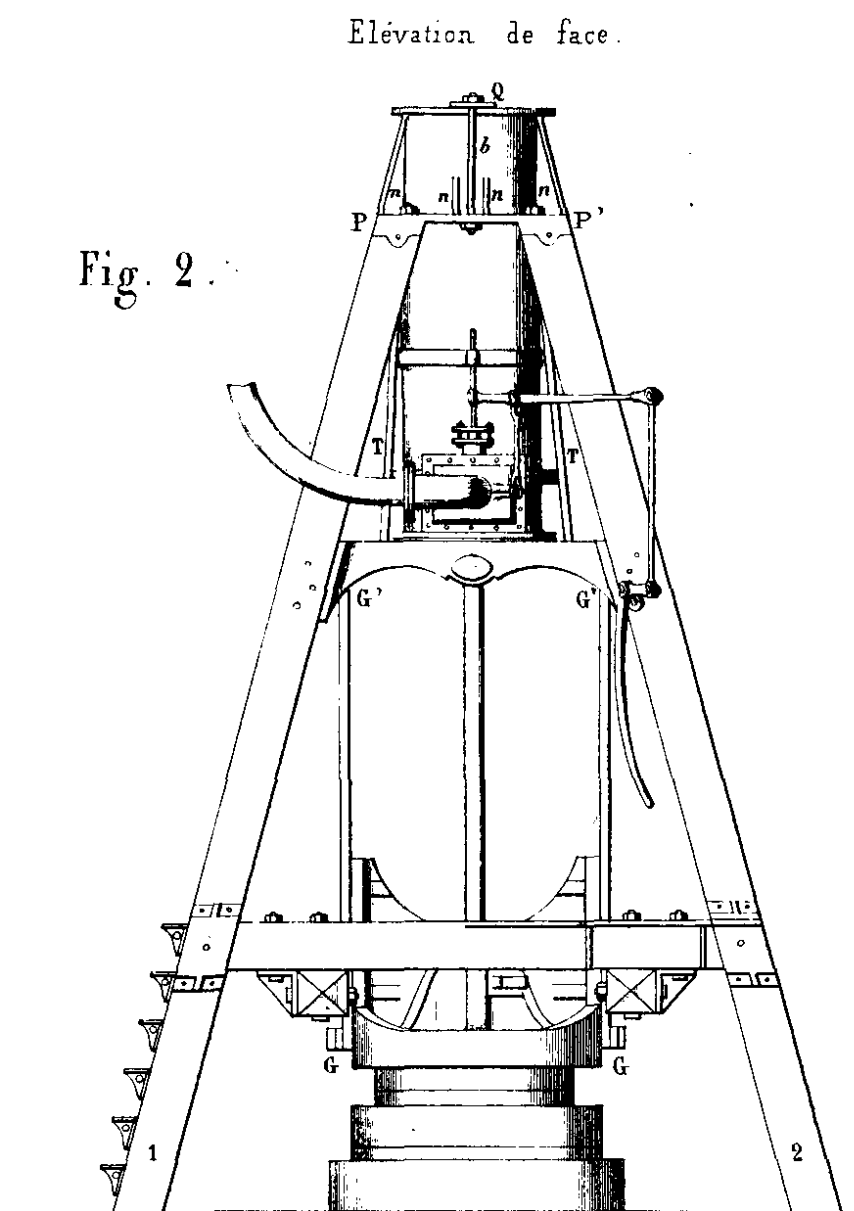
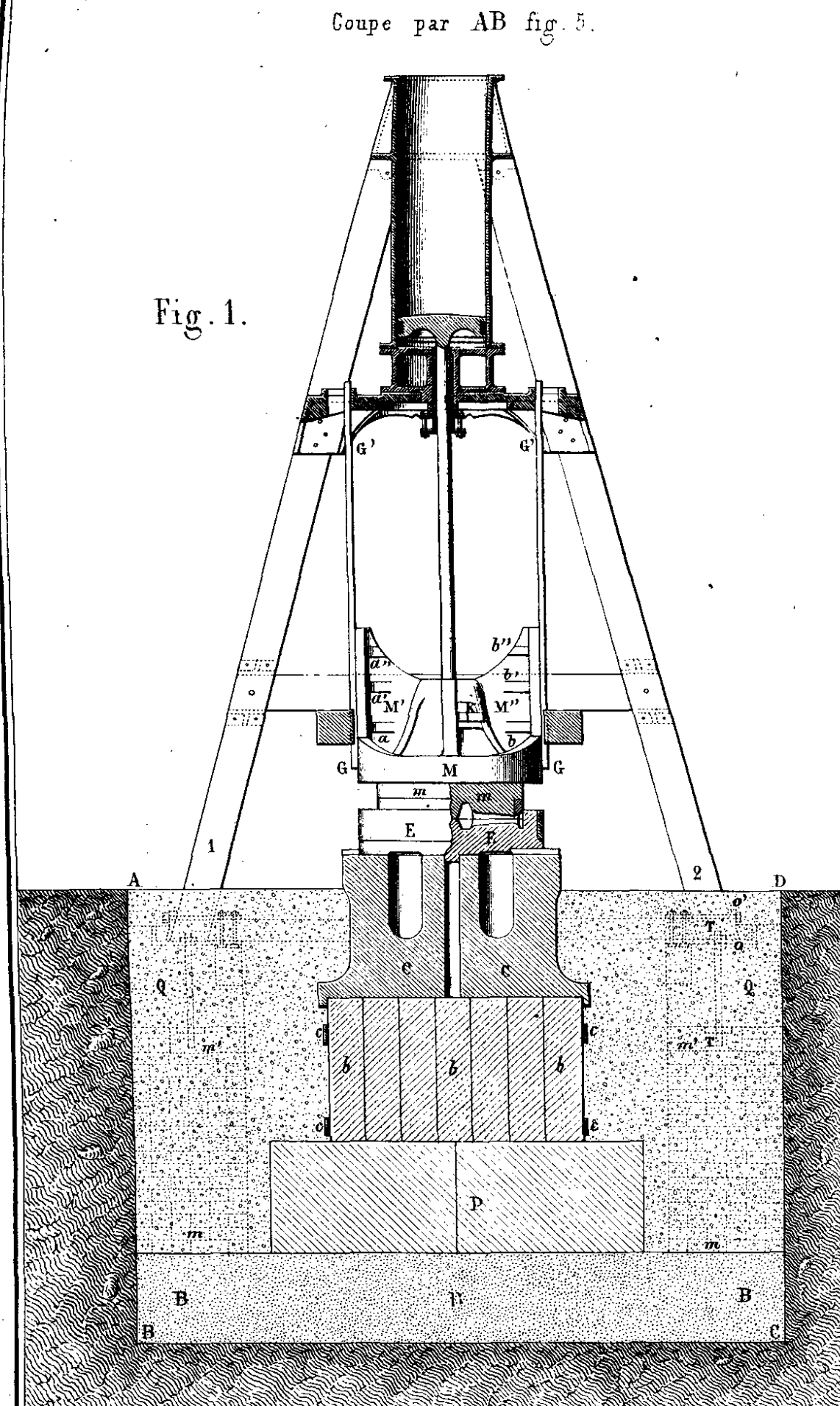


Fig. 6.  
Coupe verticale des parties basses du haut-fourneau  
suivant AB fig. 7.

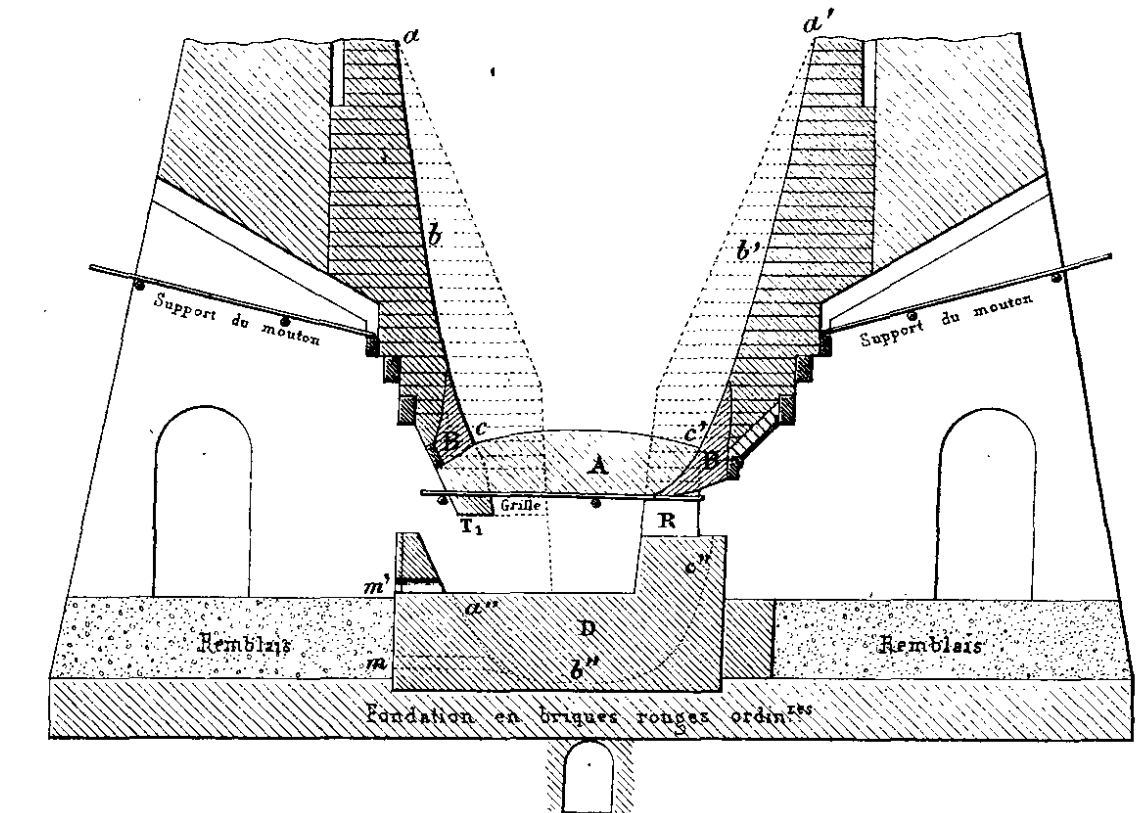


Fig. 7.  
Coupe horizontale à la hauteur des Tuyères.

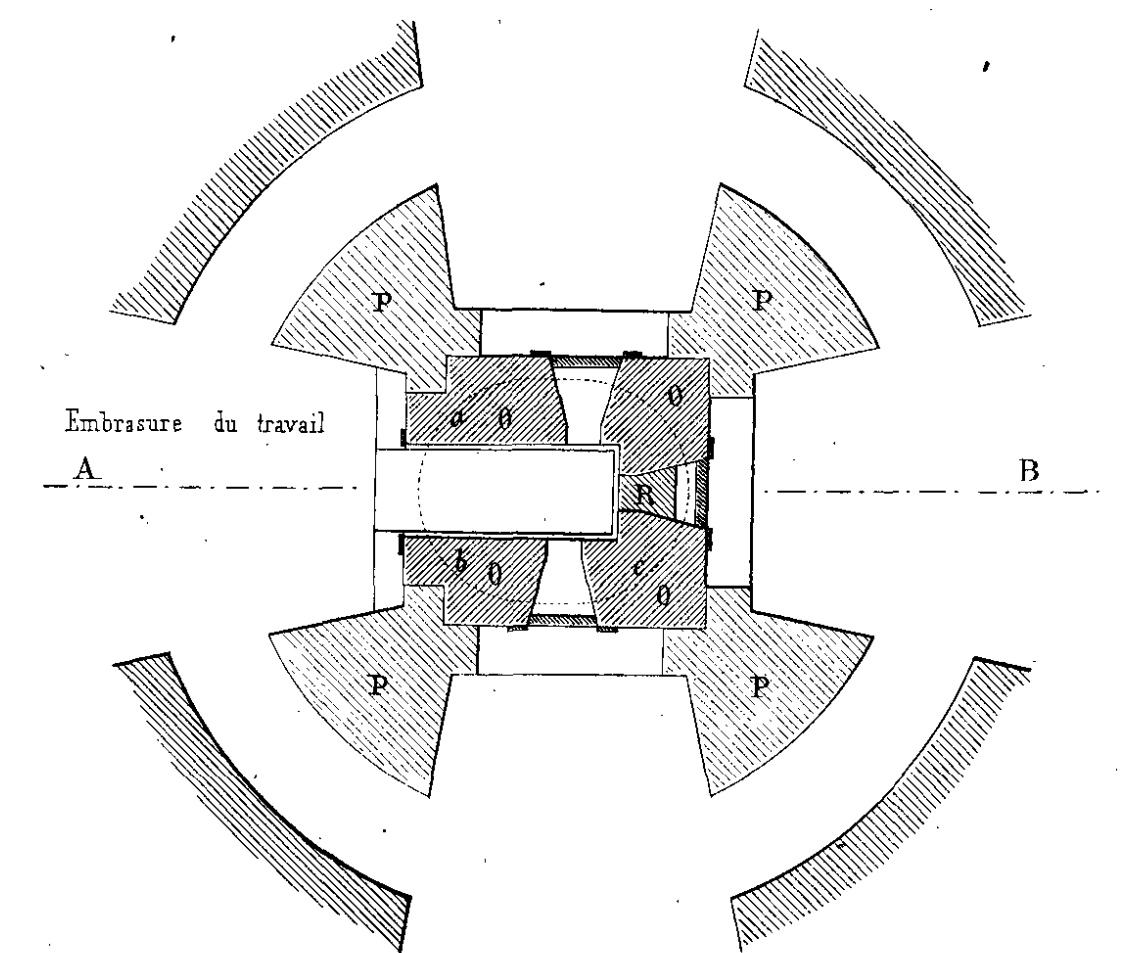


Fig. 4. Coupe au niveau du sol; la chabotte à découvert.

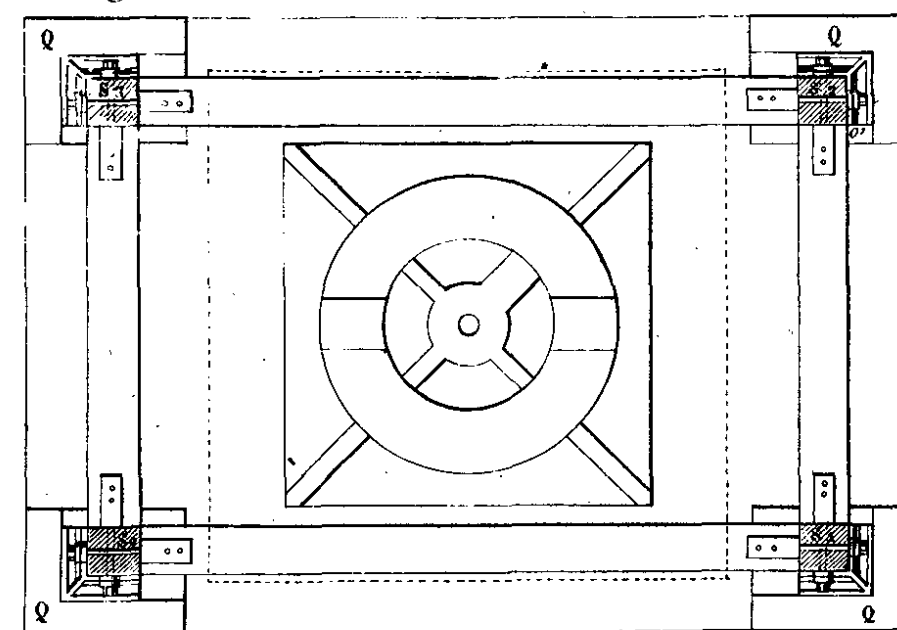
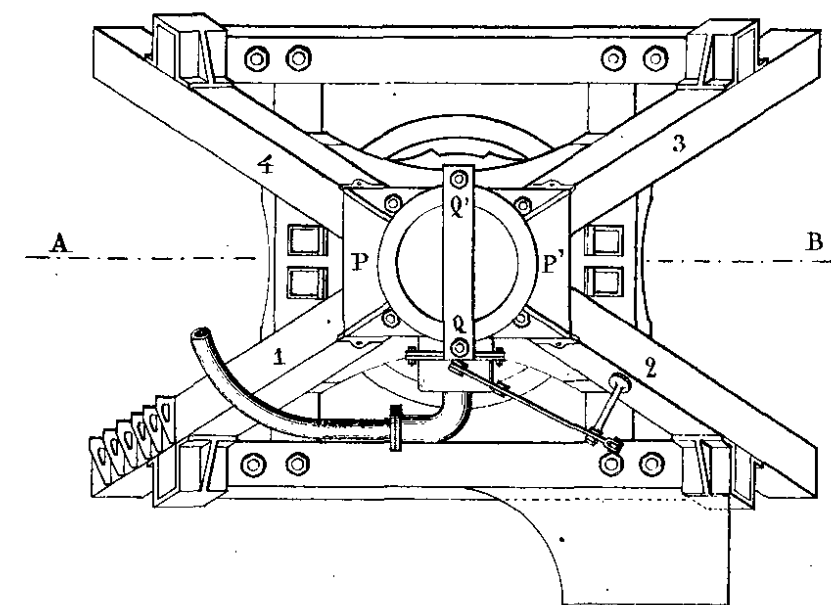


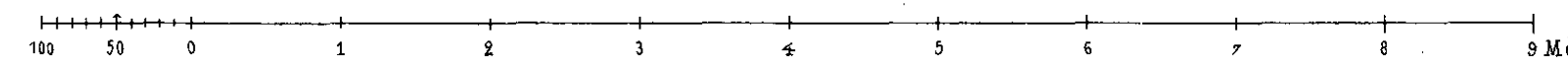
Fig. 5. Plan



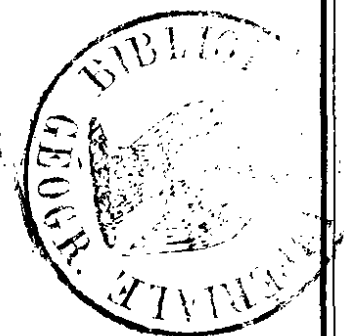
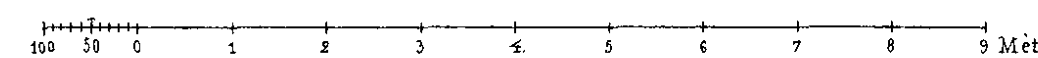
Légende des fig. 6 et 7.

- A Voute en terre glaise. (argile rougeâtre)
- B Bourrage en terre réfractaire.
- T<sub>1</sub> Tympe.
- D Sôles en briques réfractaires
- m Trou de coulée avant la réparation.
- m' Trou de coulée après la réparation.
- R Tuyère d'arrière habituellement fermée, en briques réfractaires d'abord, puis à mesure qu'elle s'use, en terre réfractaire.
- 0,0,0,0, Maçonnerie réfractaire qu'on enlève jusqu'aux piliers de cœur, en cas de réparation complète.
- P,P,P,P, Piliers de cœur en briques rouges ordinaires.

Echelle des fig. 1, 2, 3, 4, 5



Echelle des fig. 6, 7.

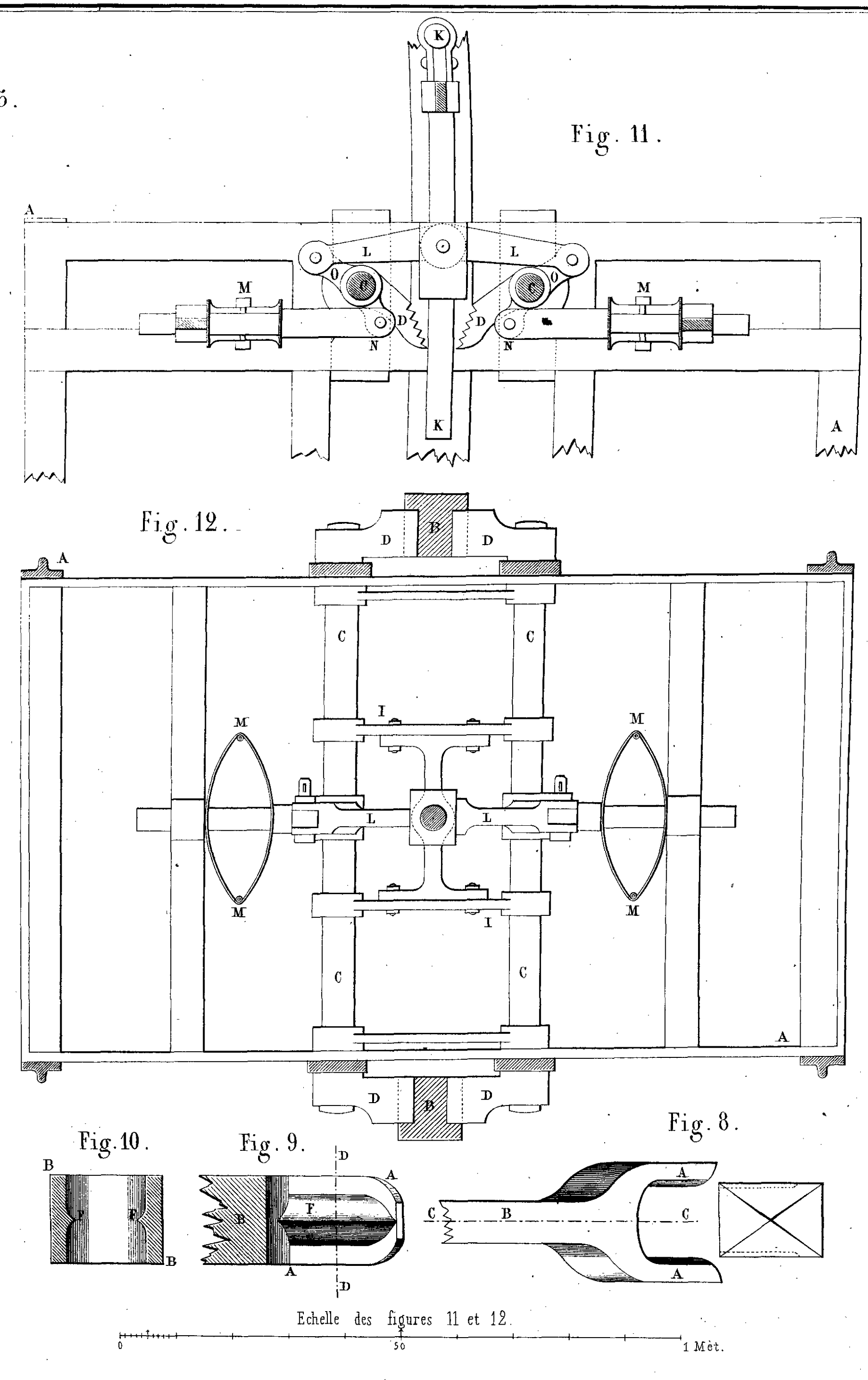
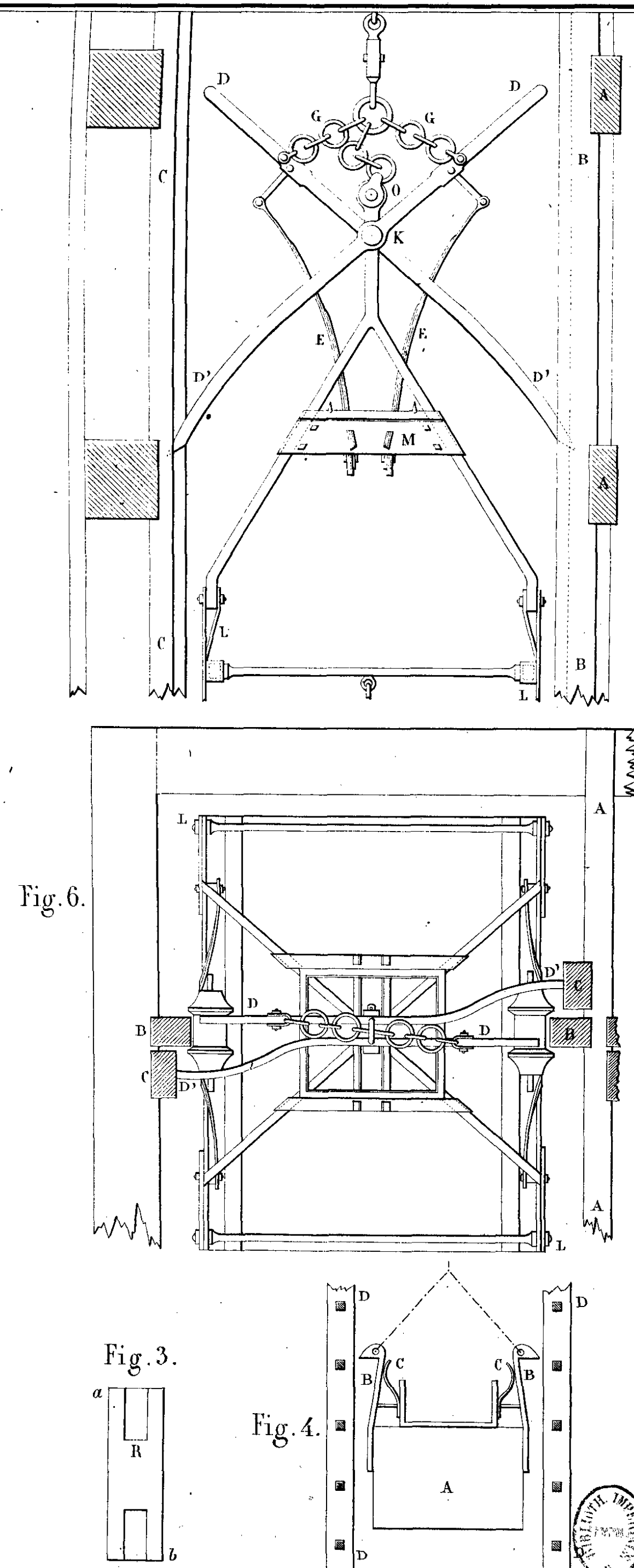
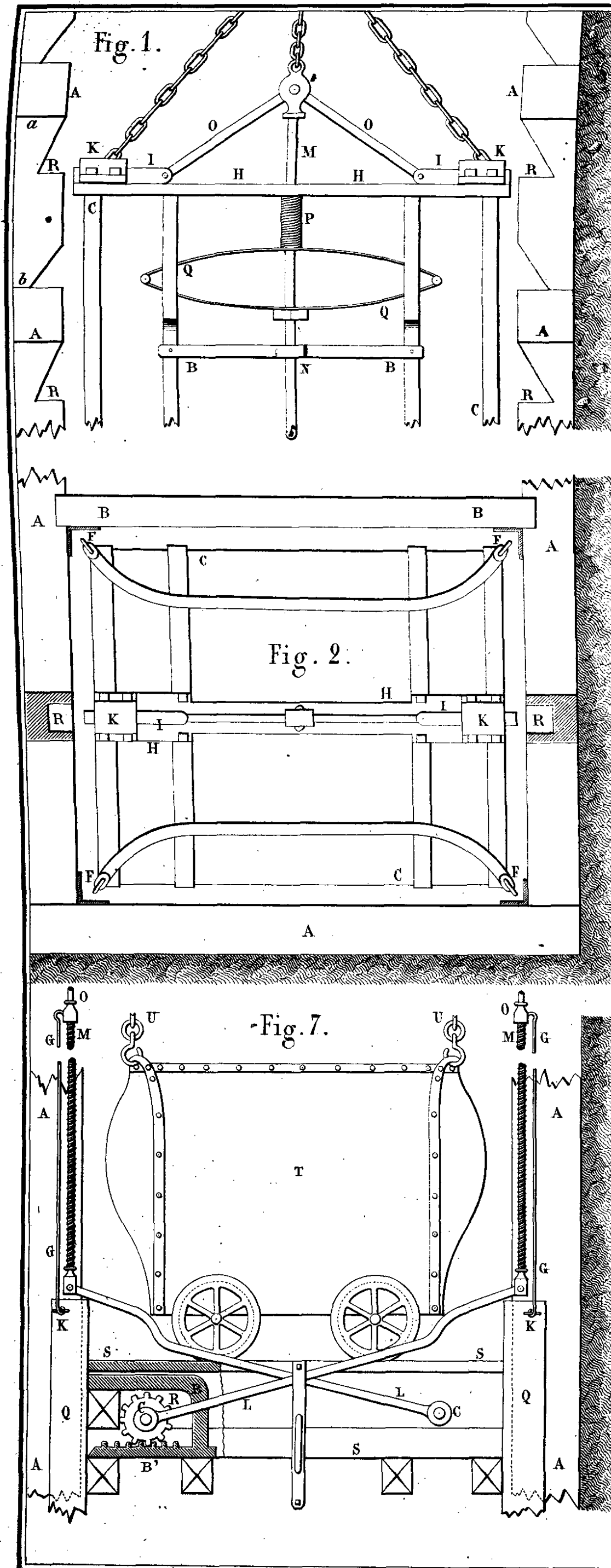


346 1859















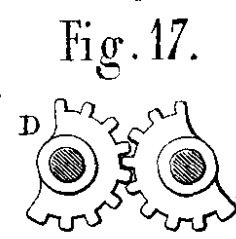
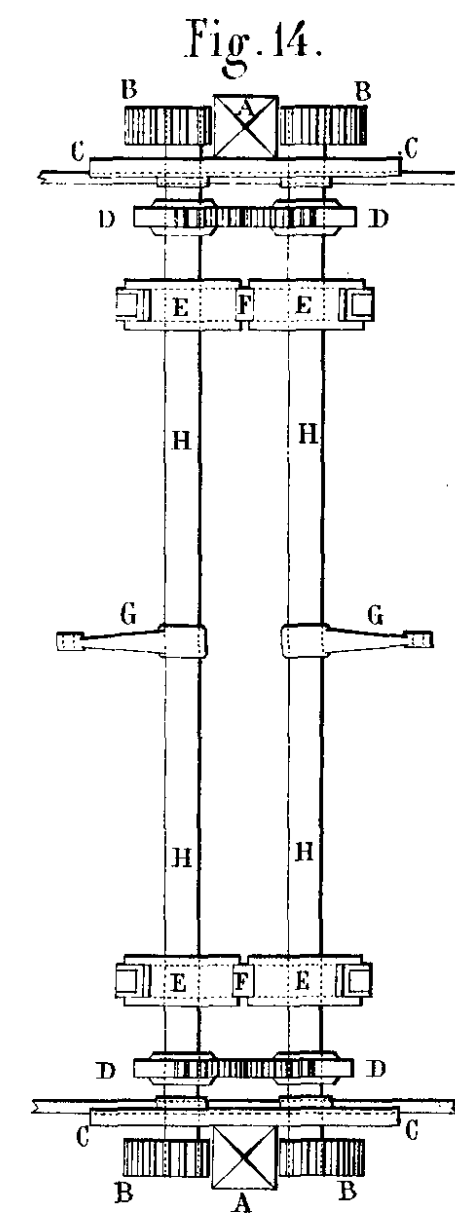
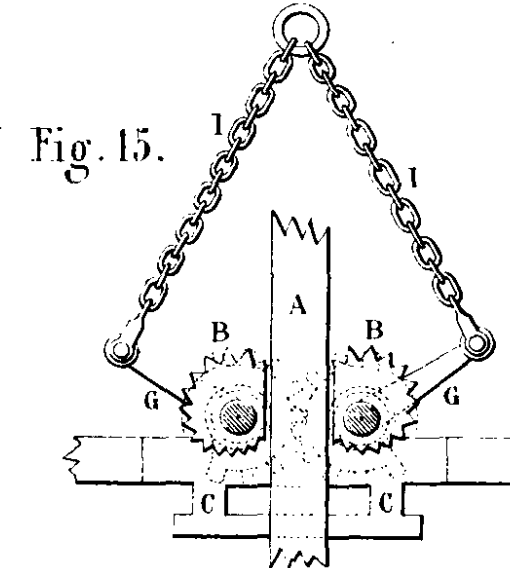
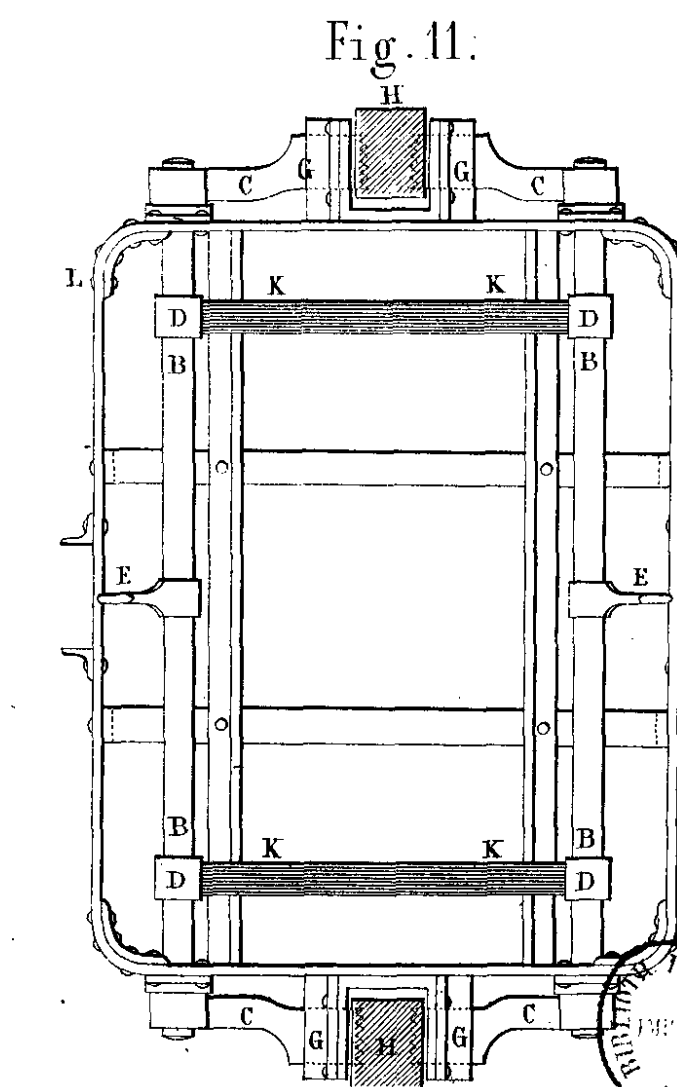
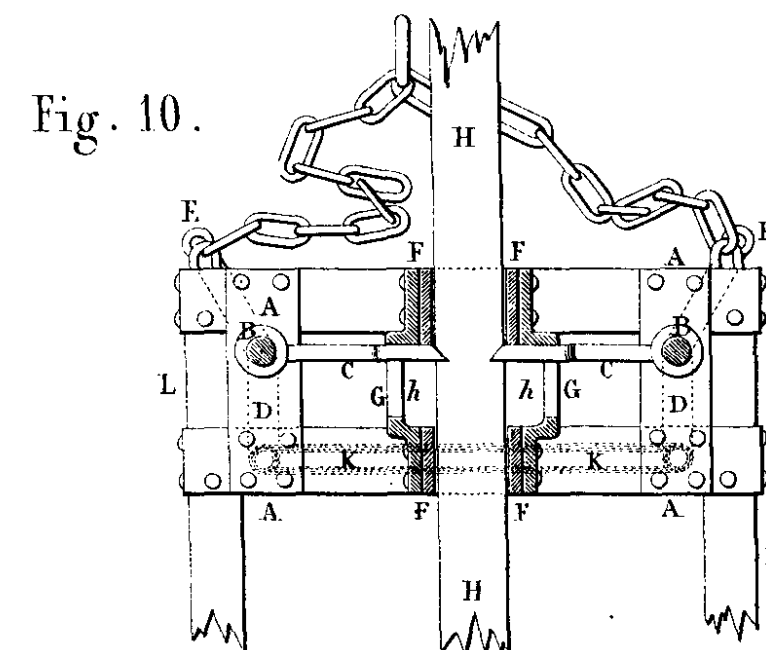
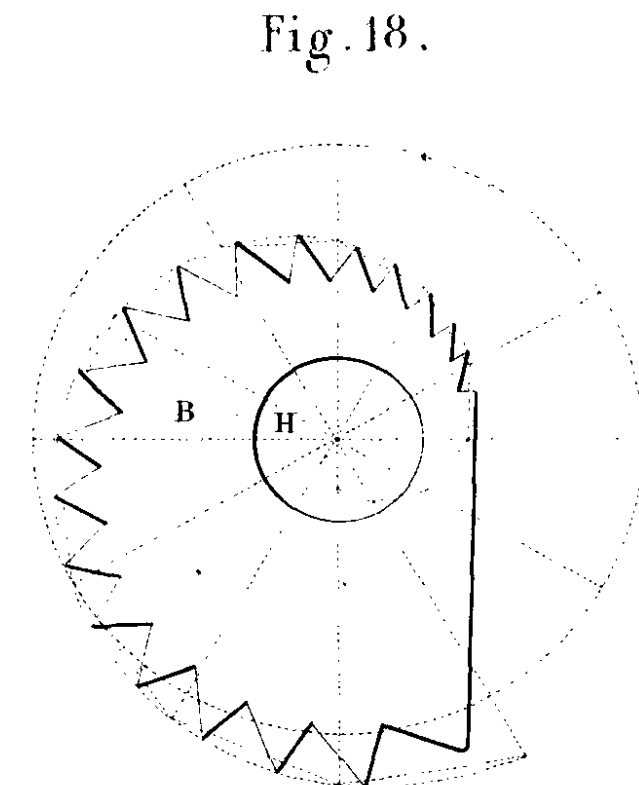
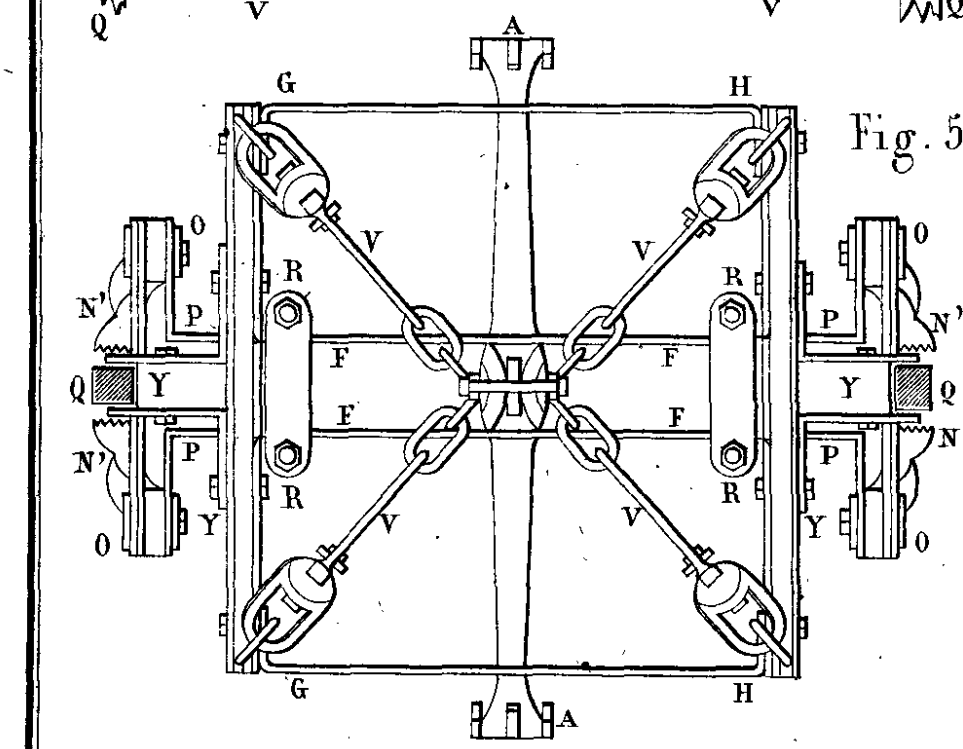
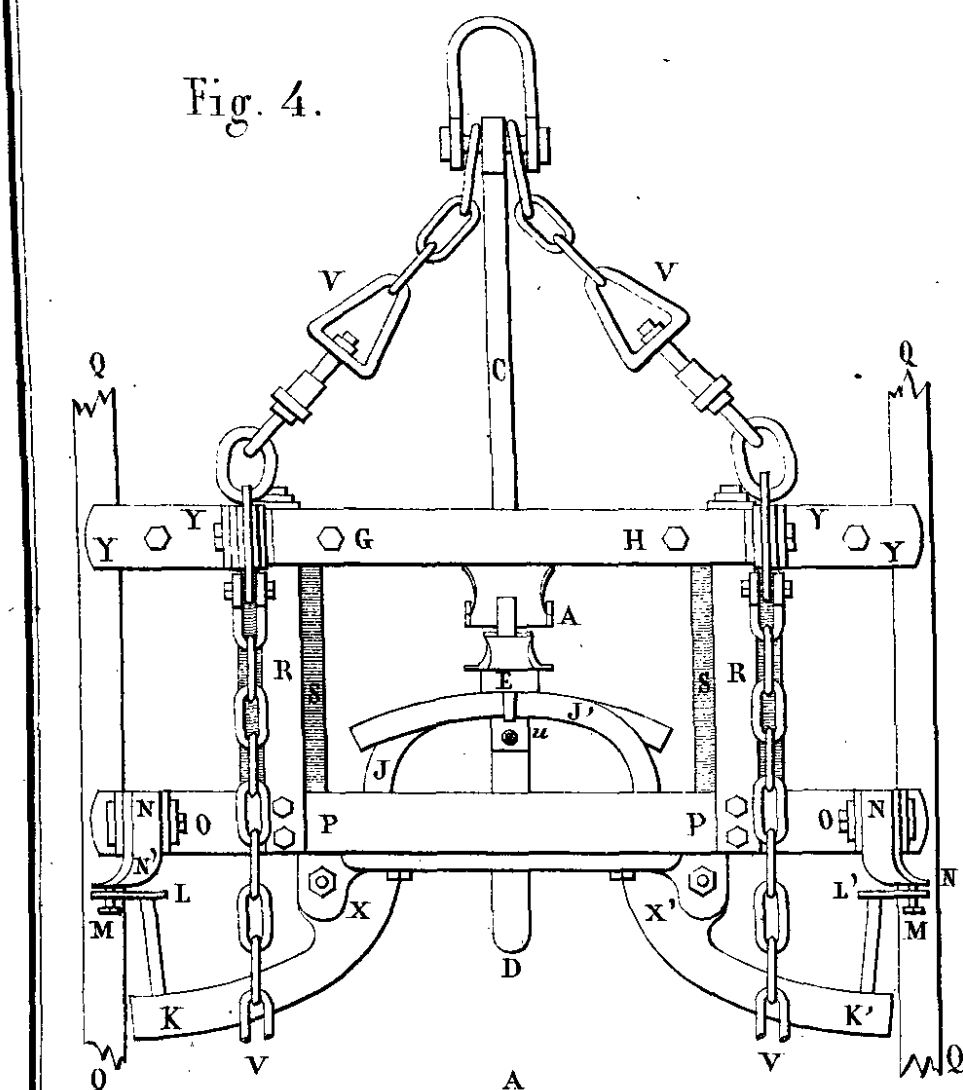
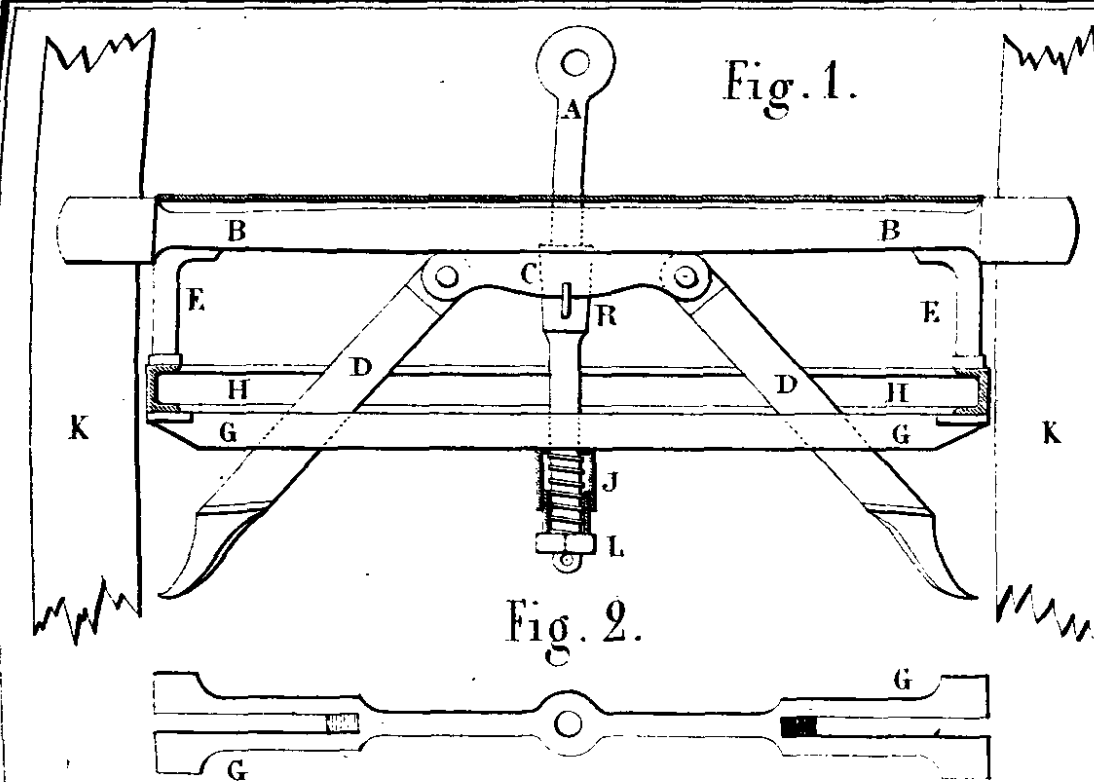
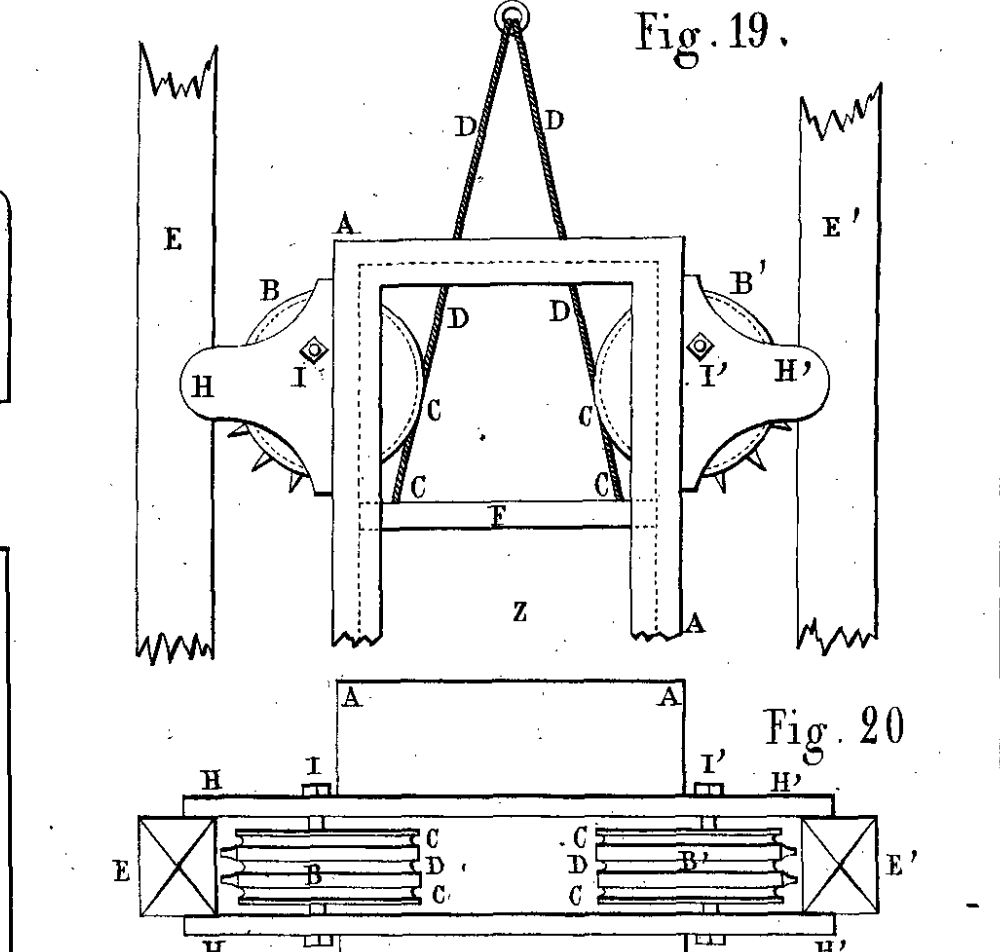
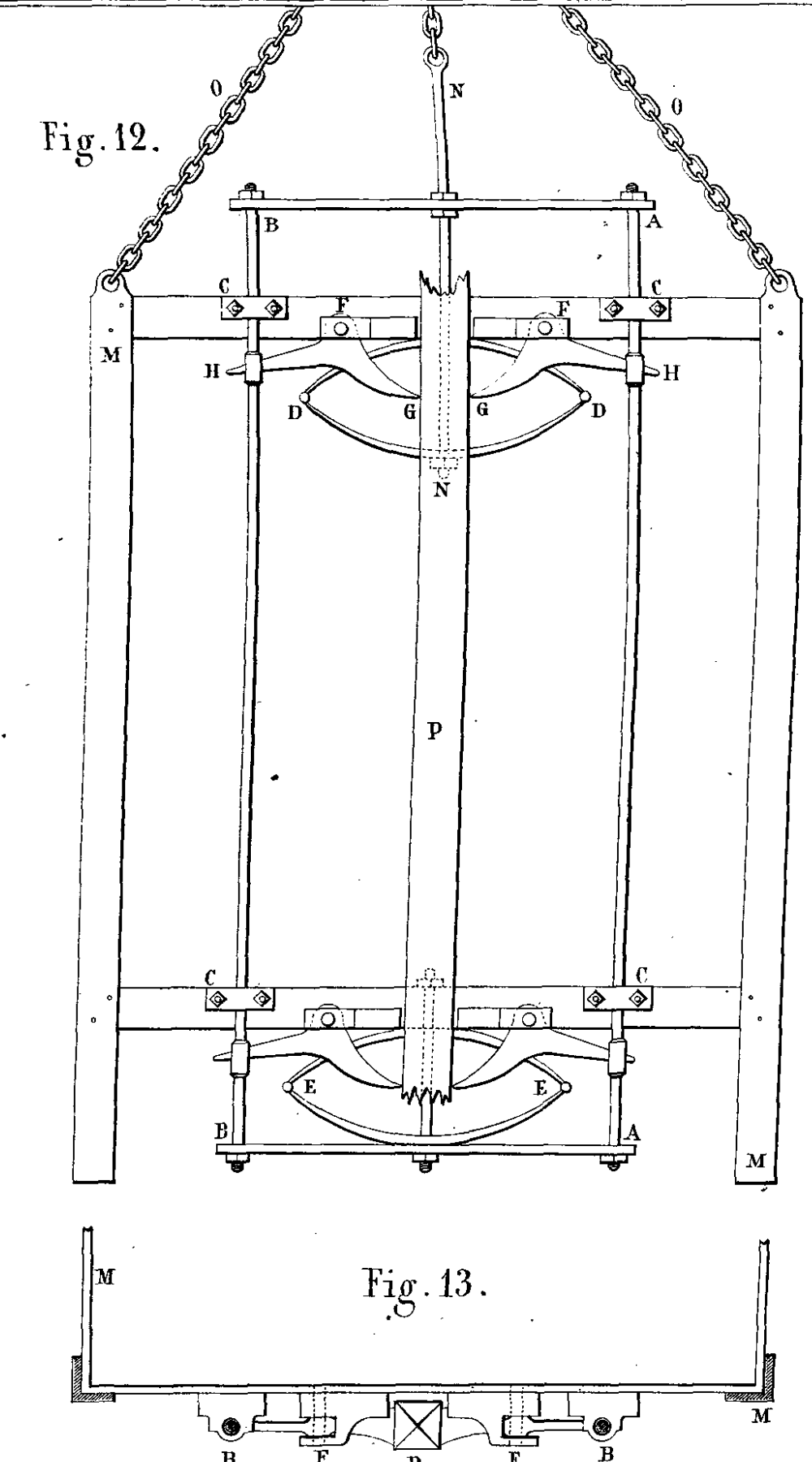
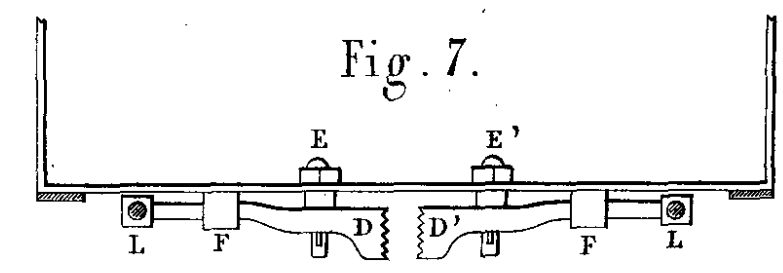
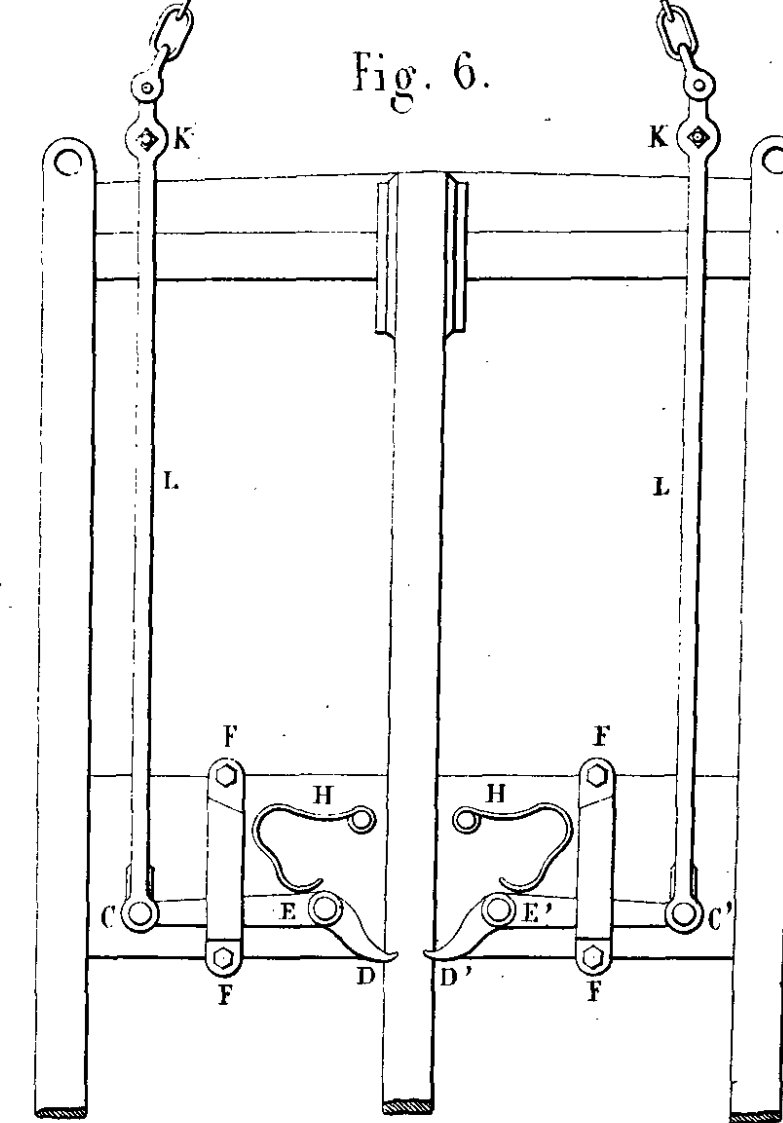
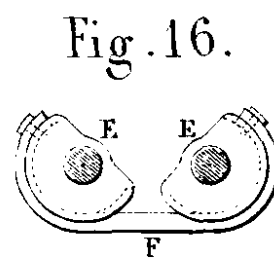
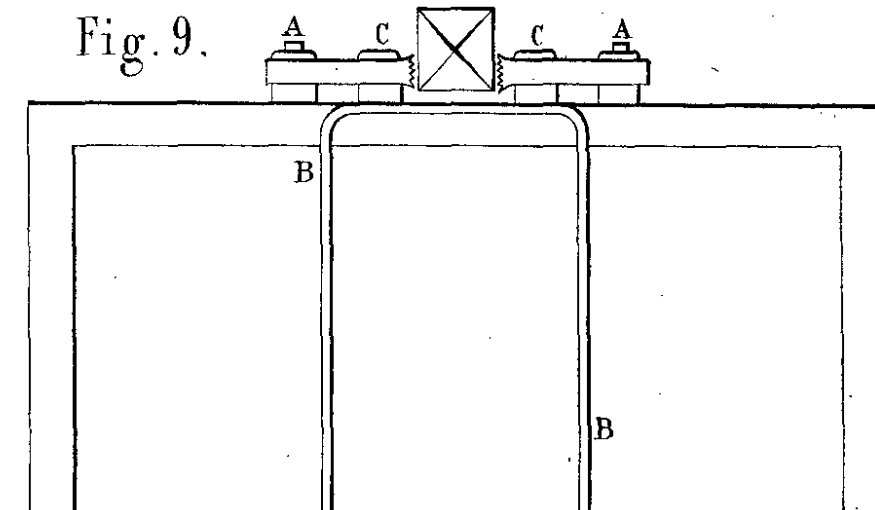
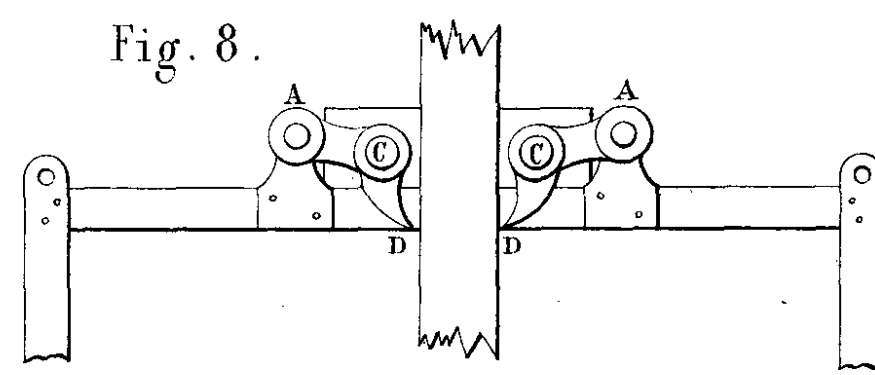


Fig. 10, 11, 14 à 17.  
Echelle de 0<sup>m</sup>05 pour 1 mètre.

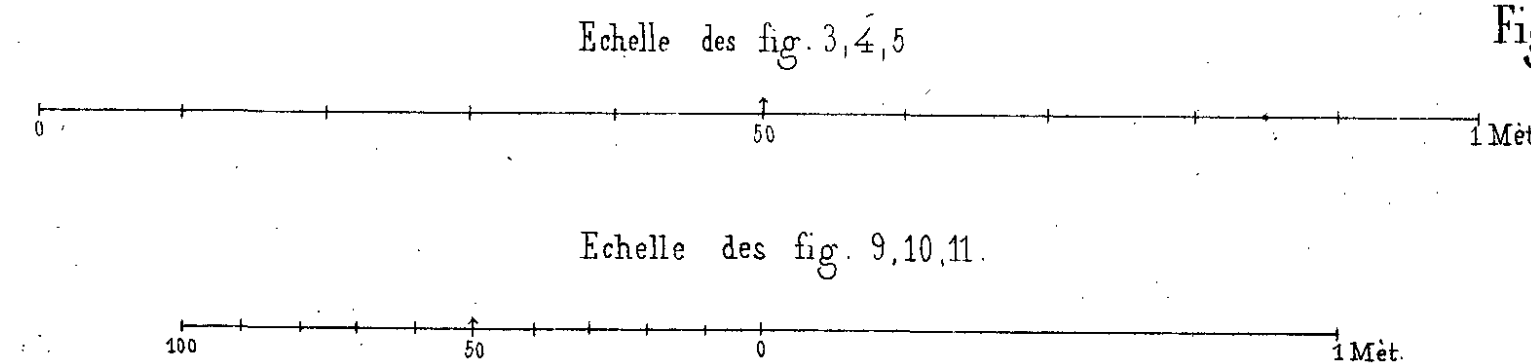
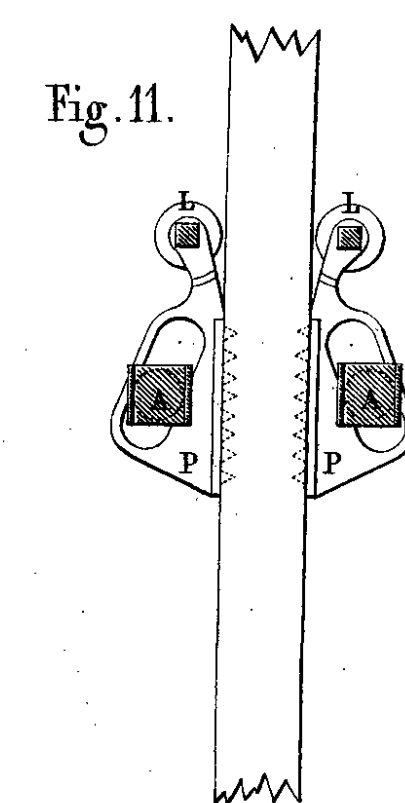
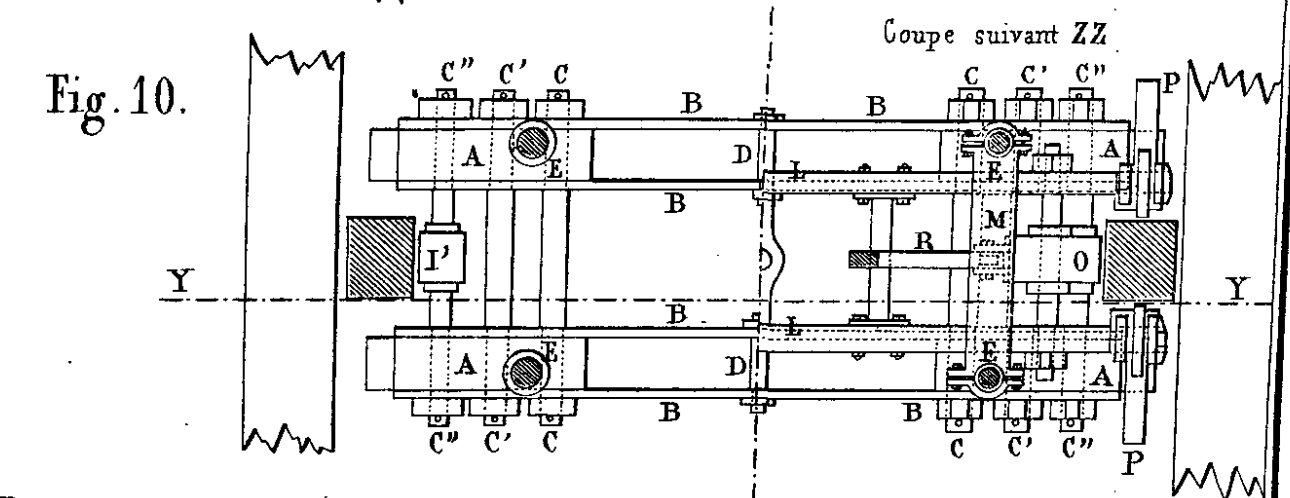
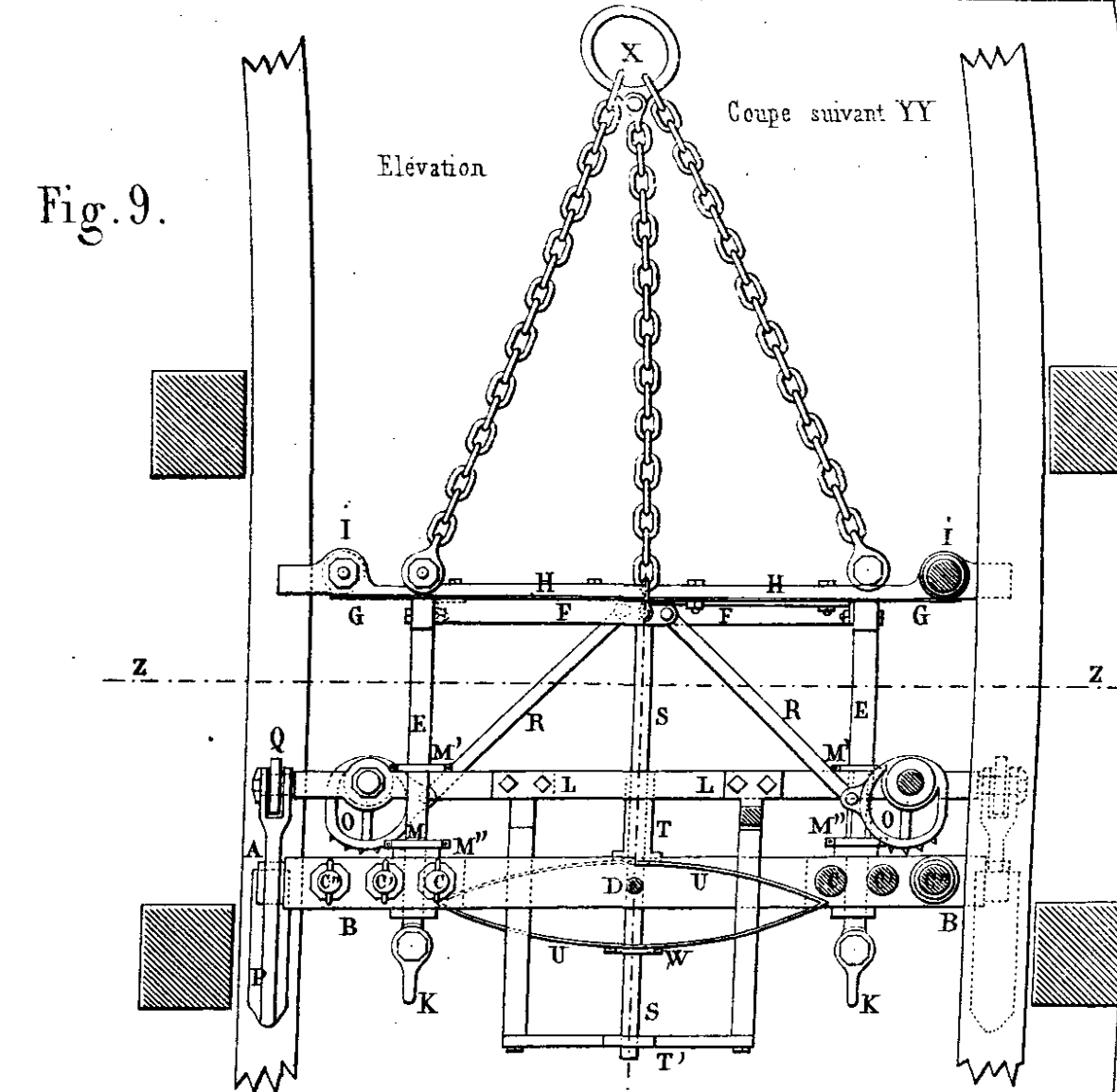
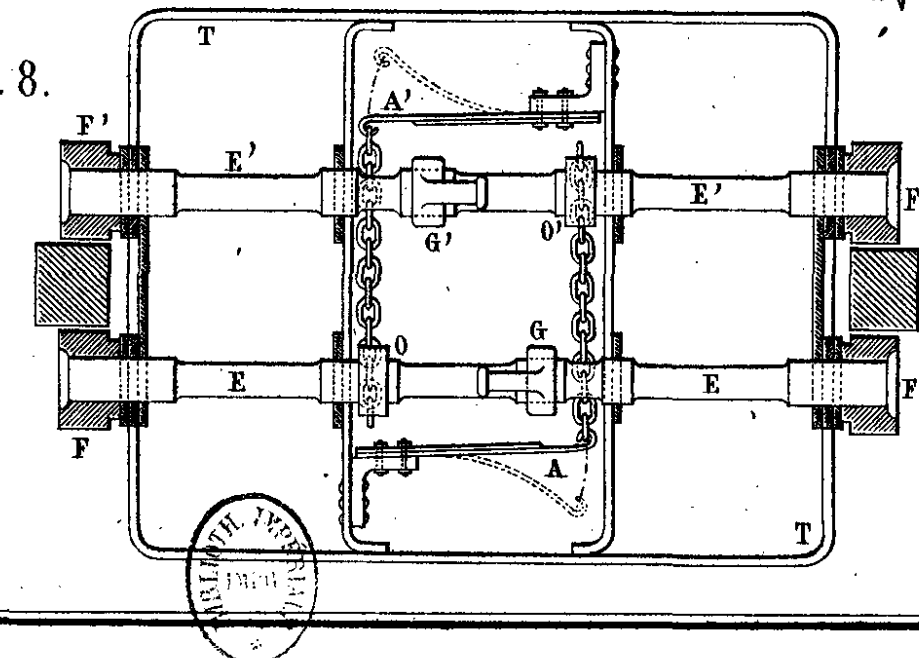
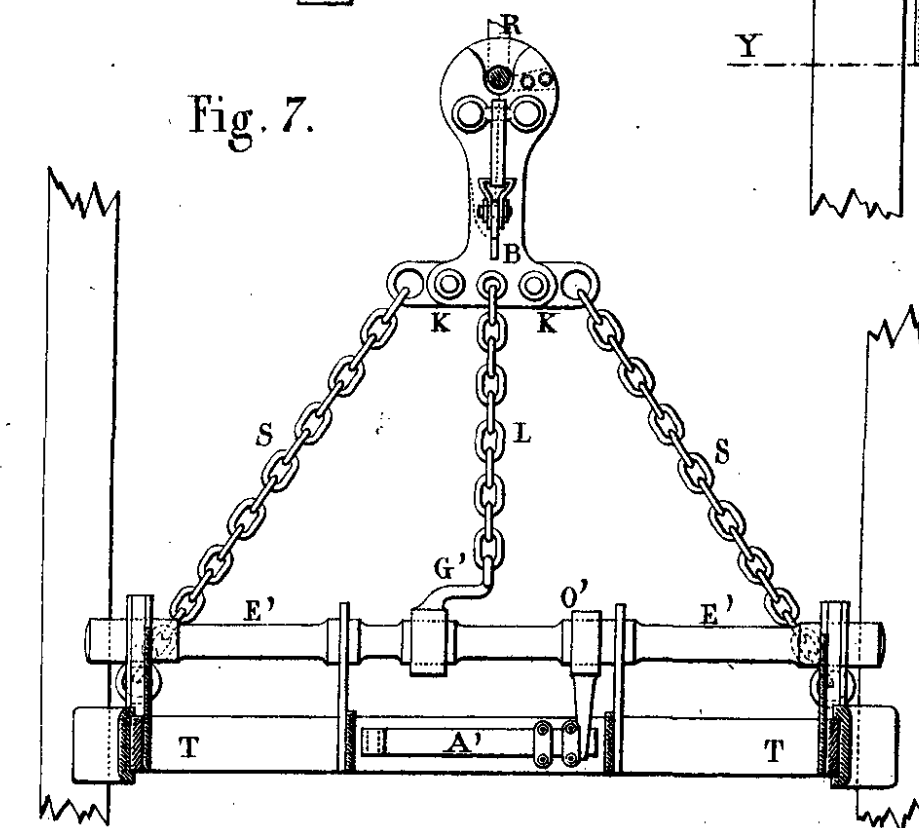
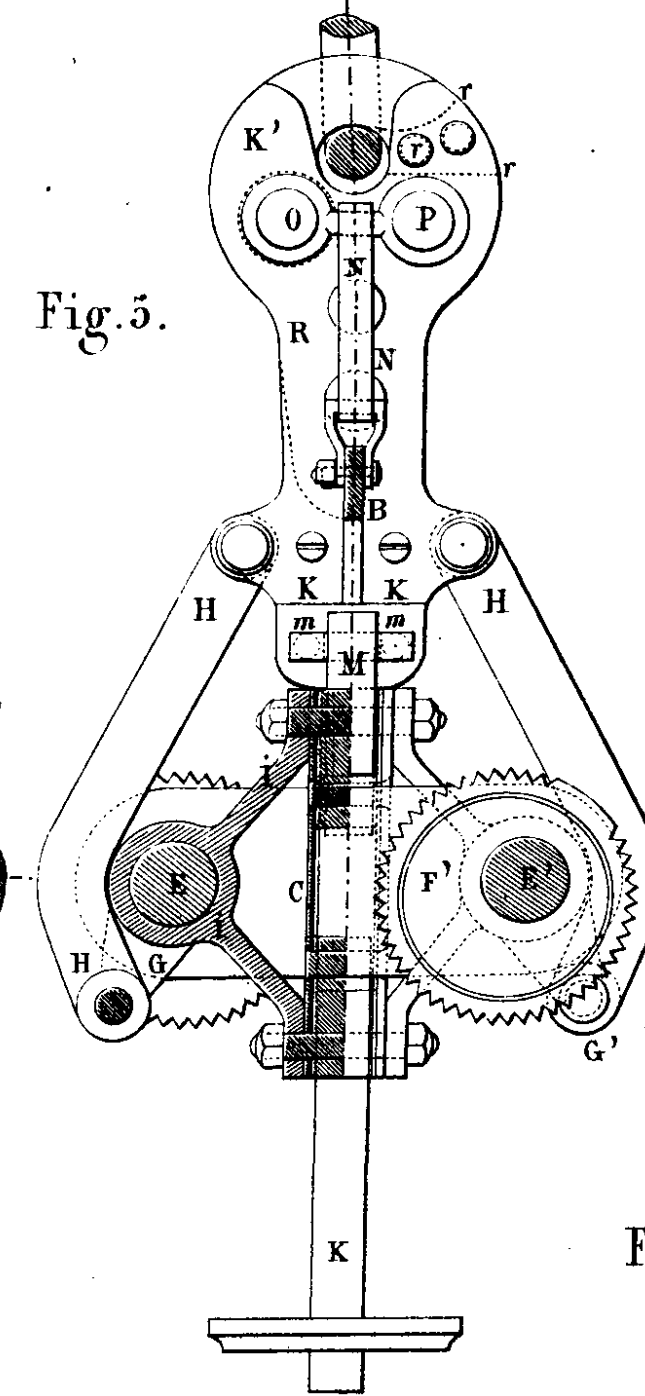
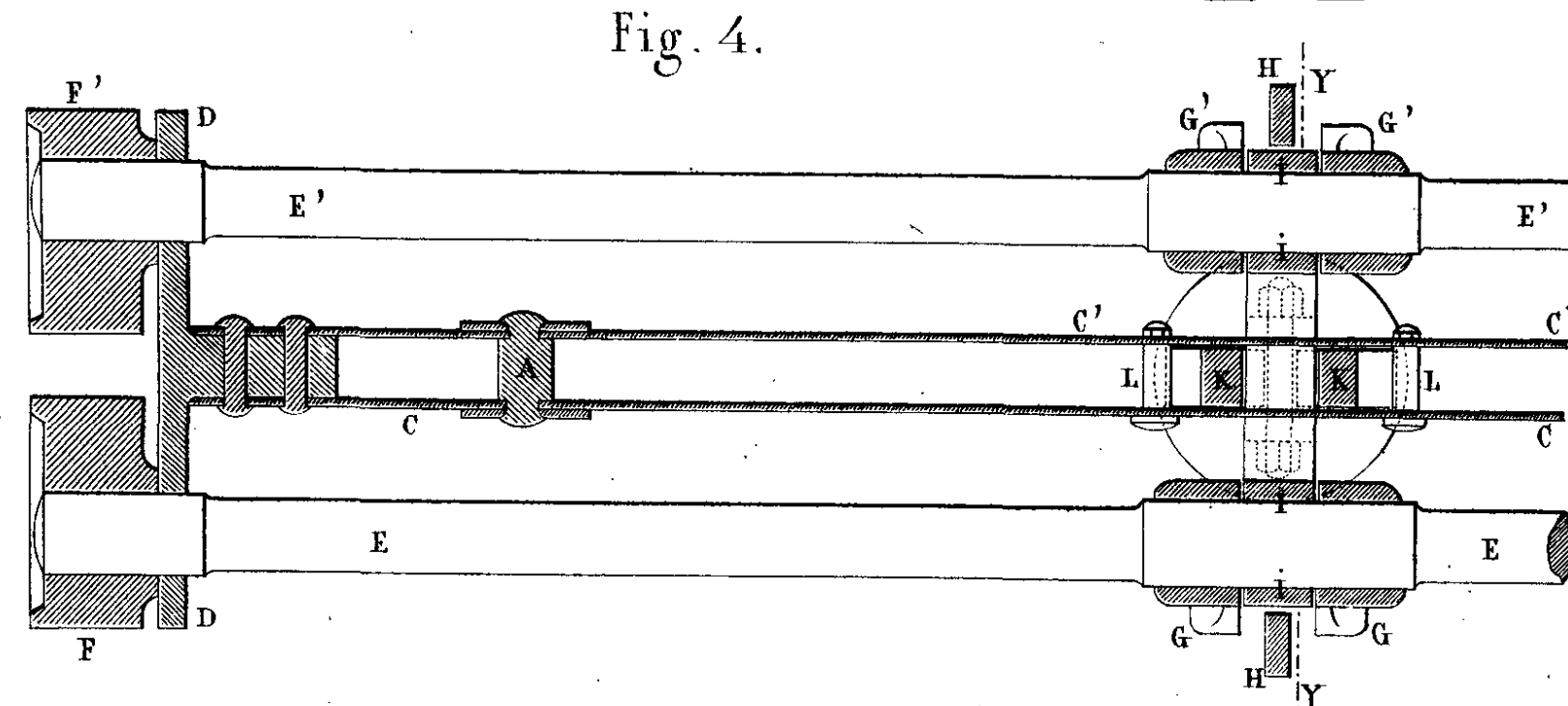
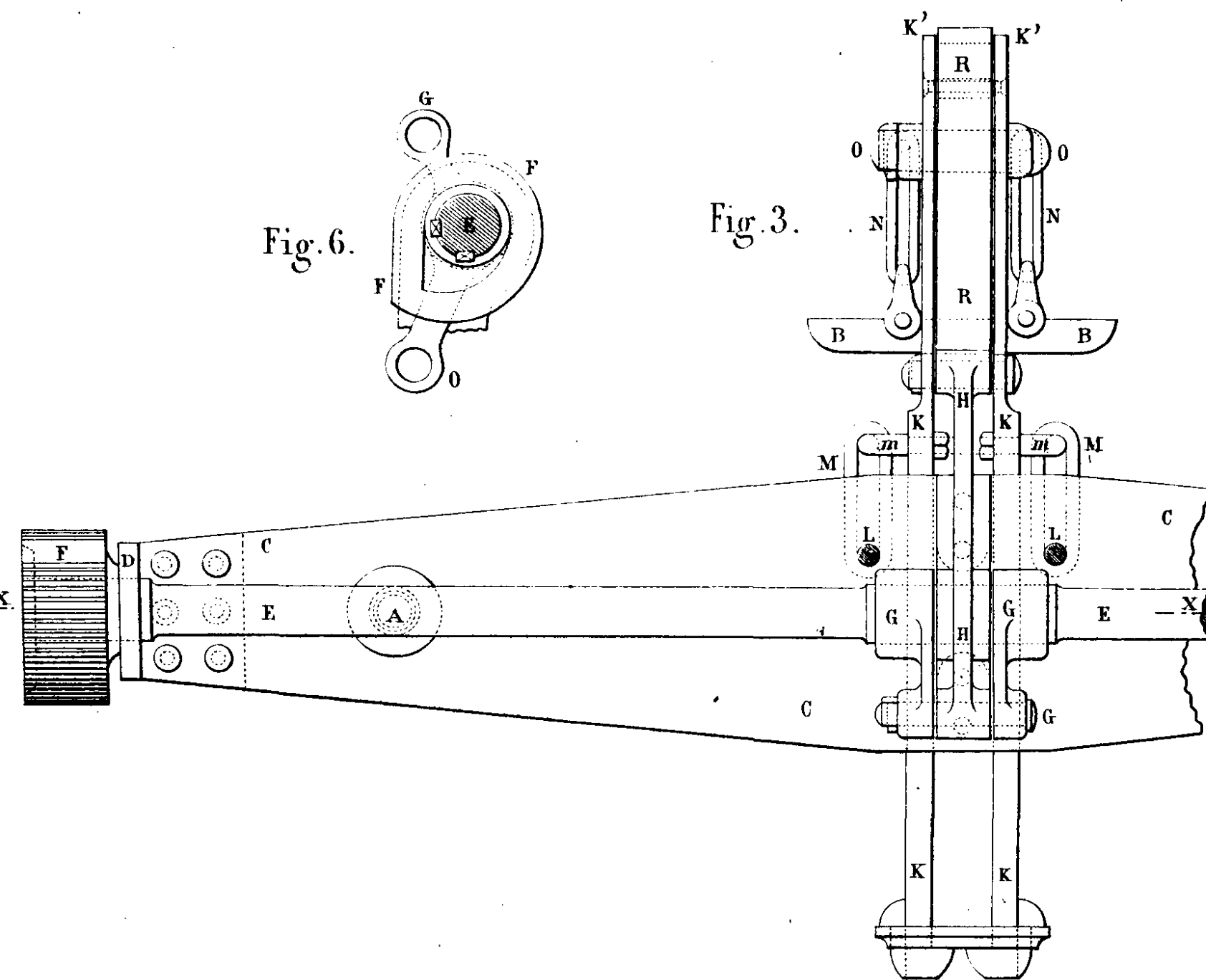
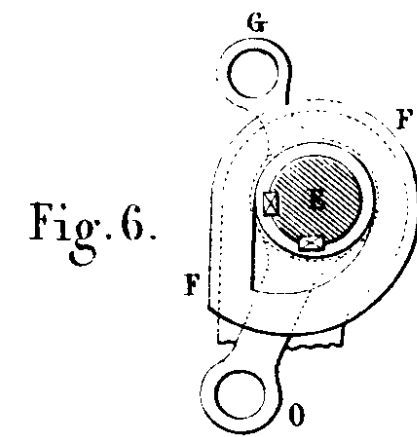
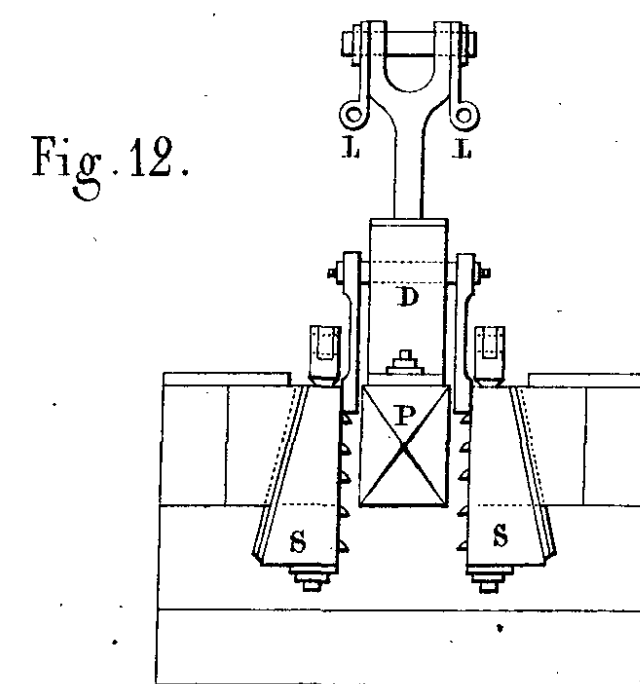
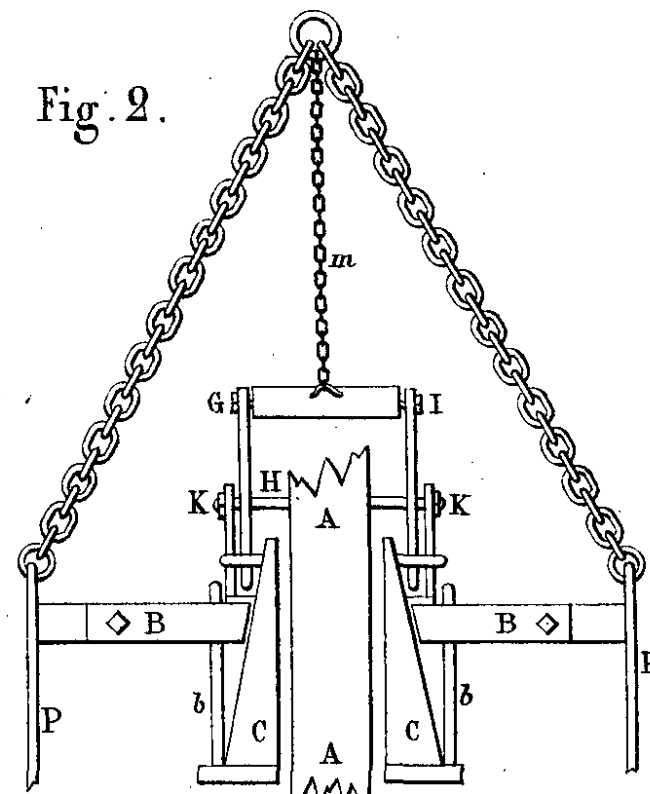
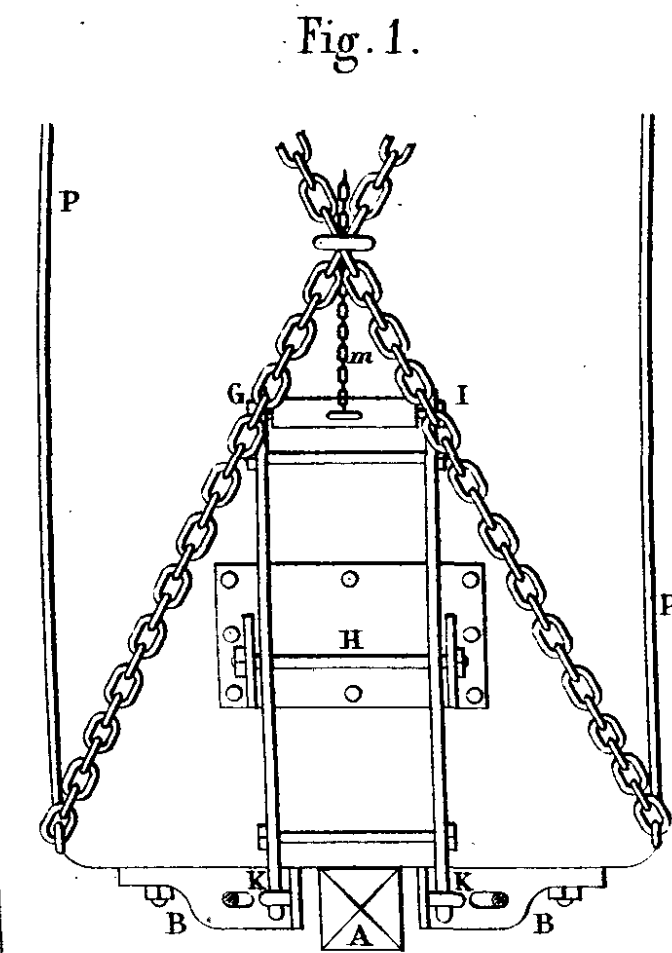
Figure 18.  
Echelle de 0<sup>m</sup>25 pour 1 mètre.

















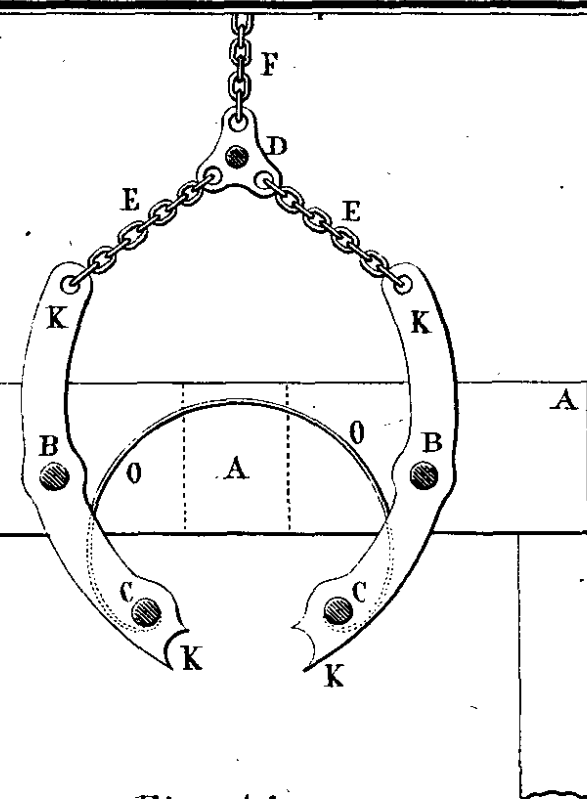


Fig. 14.

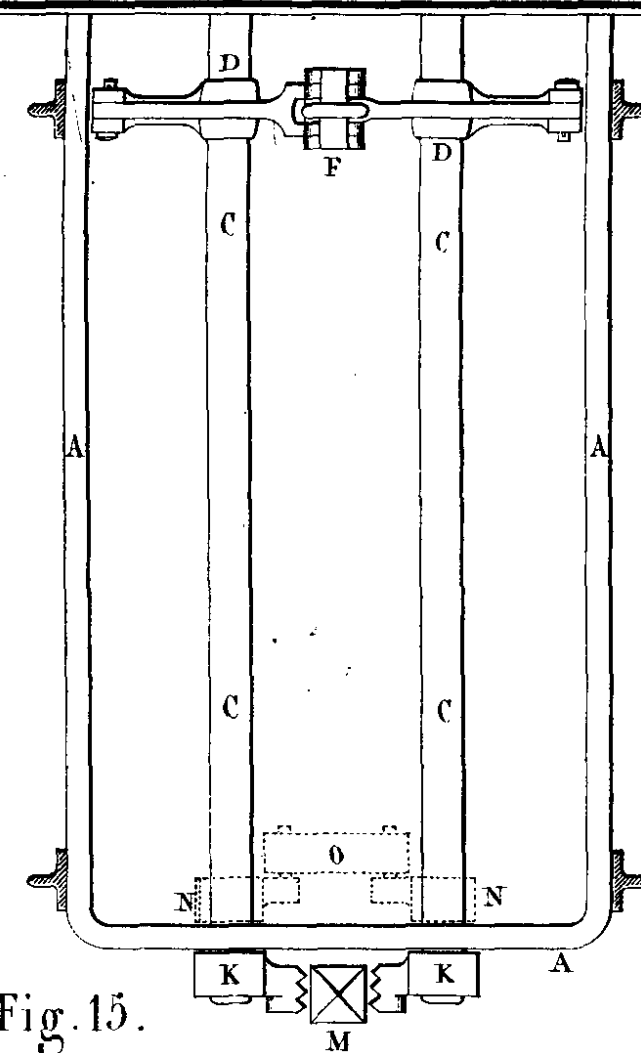


Fig. 15.

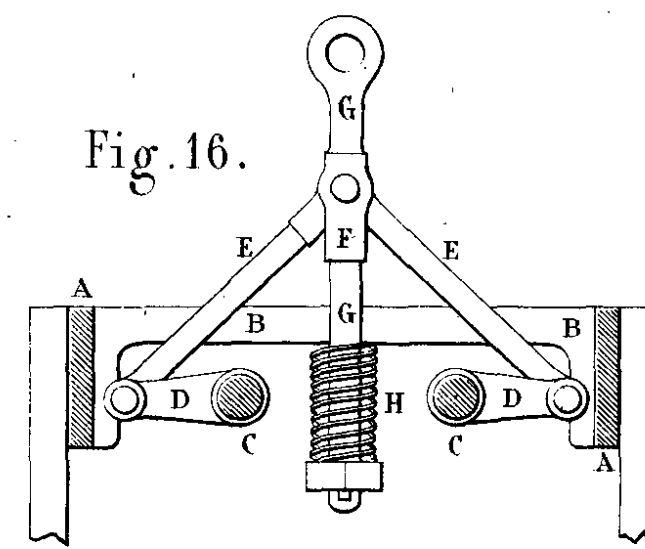


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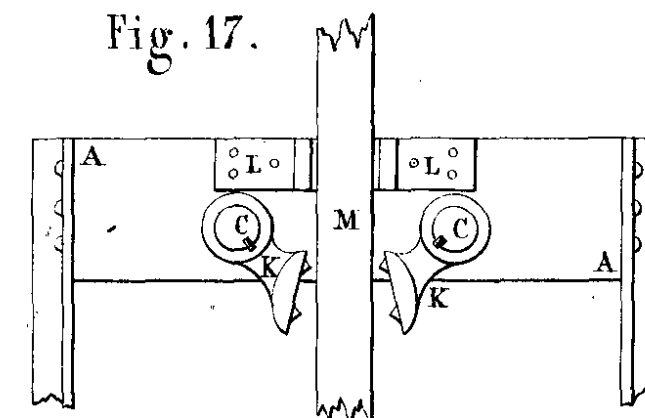


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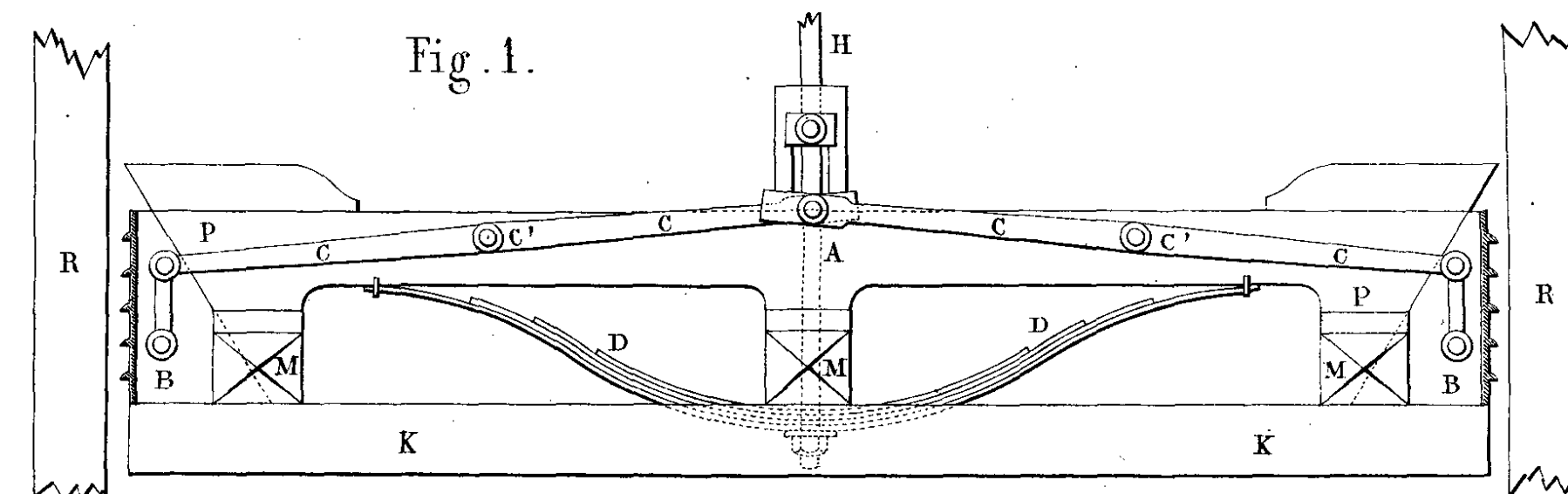


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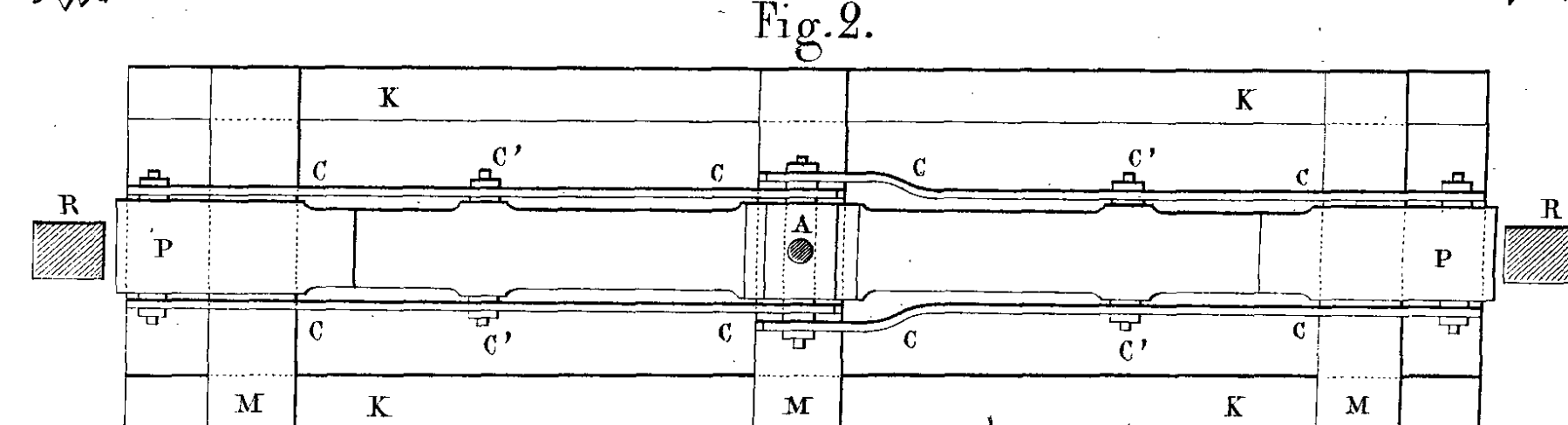


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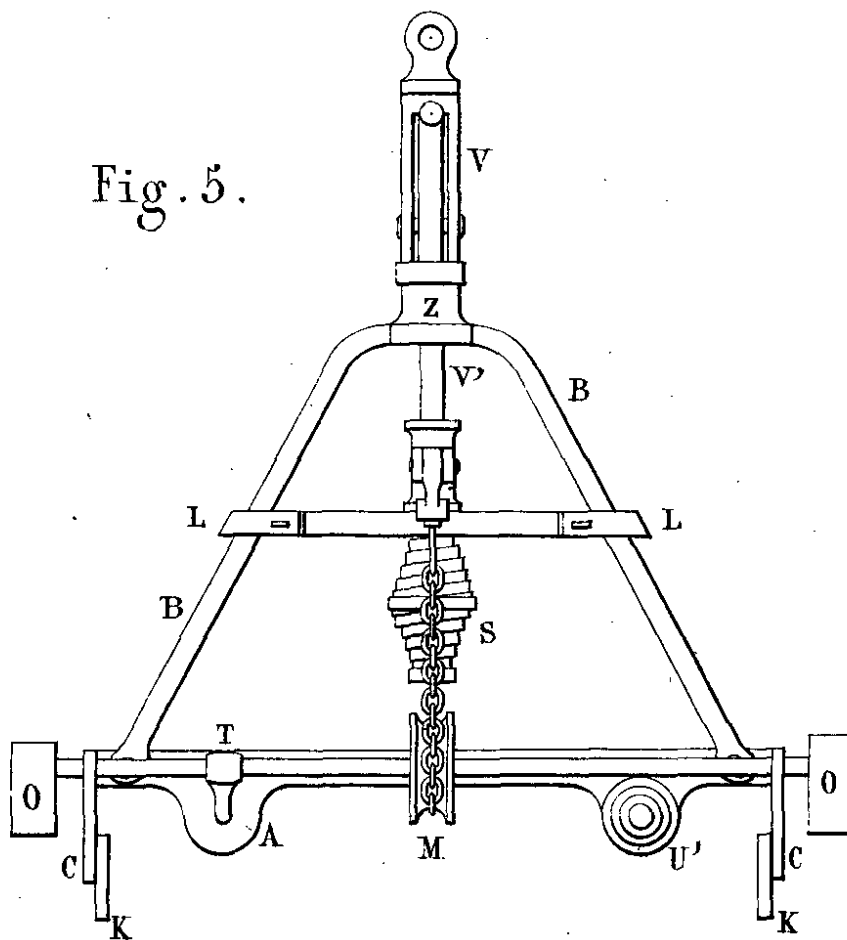


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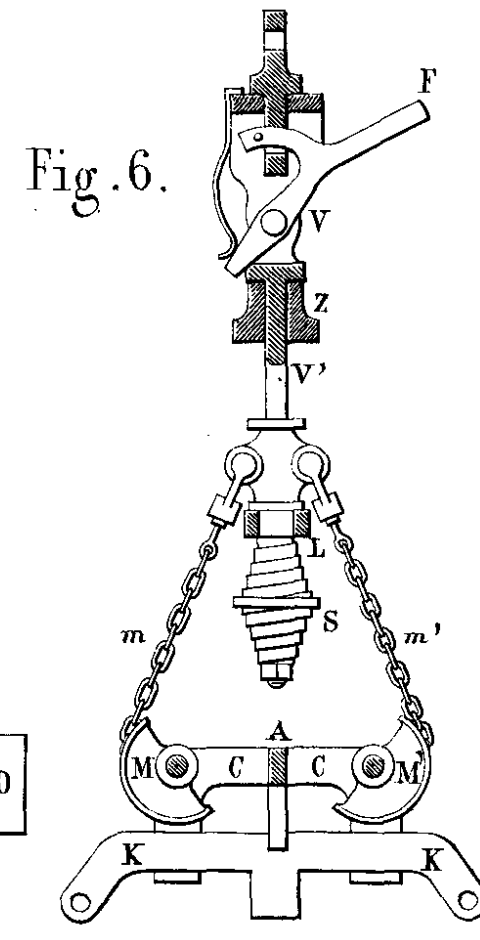


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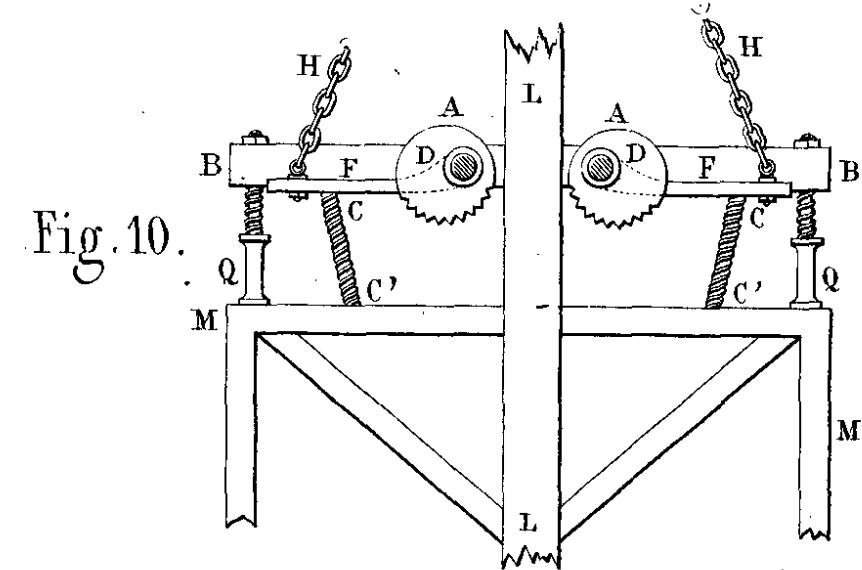


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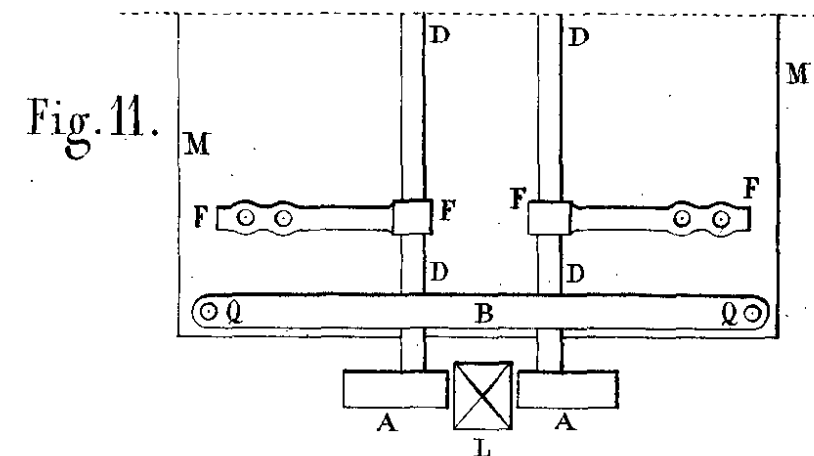


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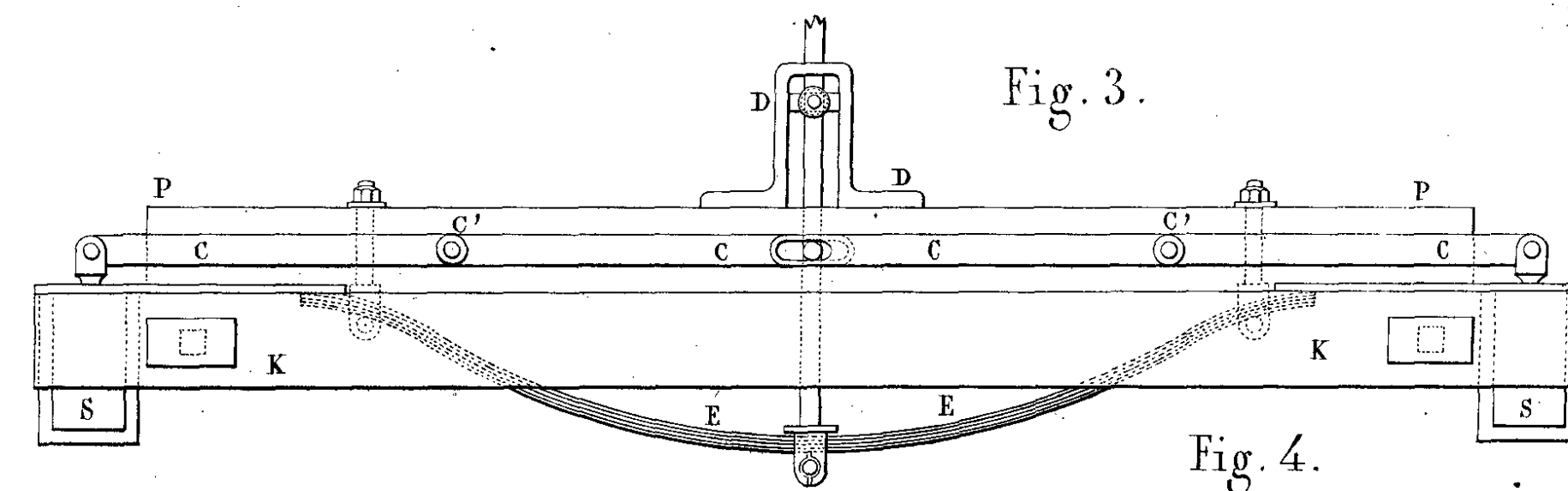


Fig. 3.

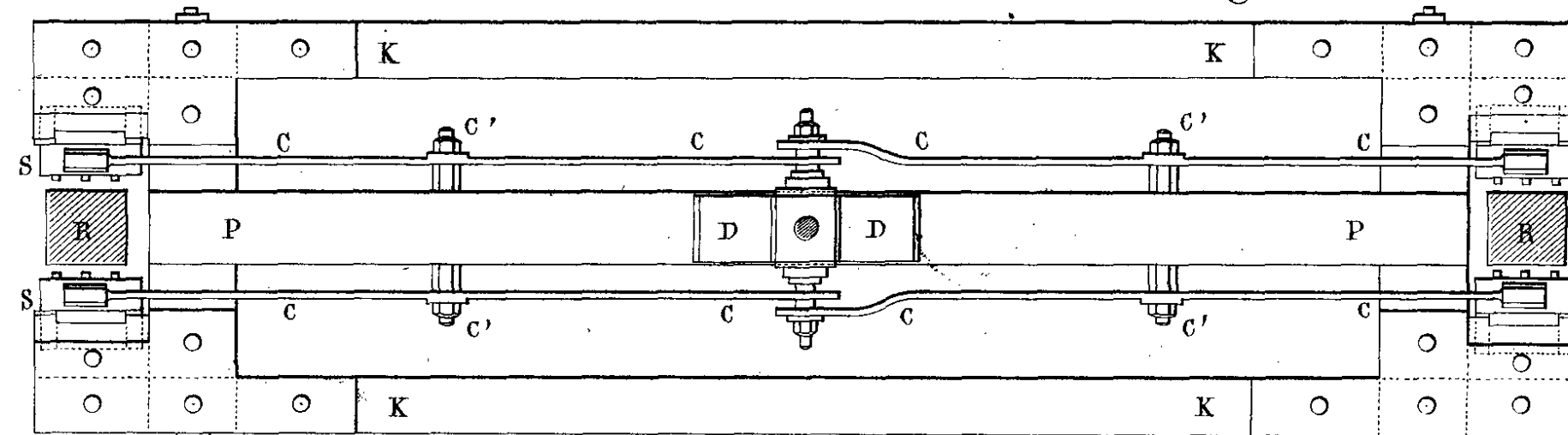


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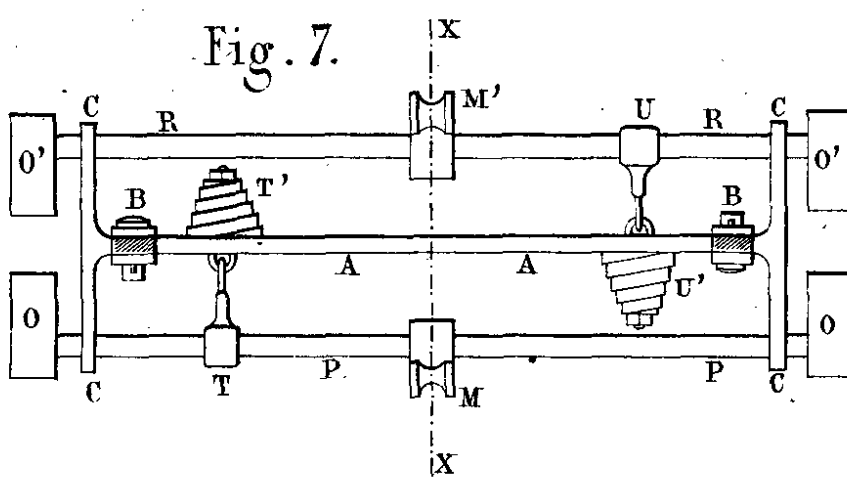


Fig. 7.

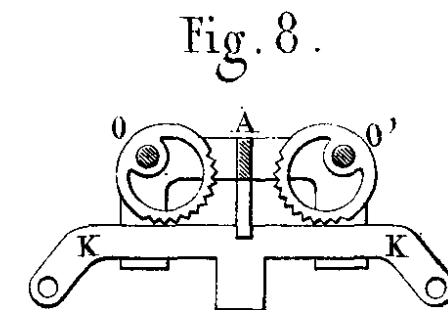


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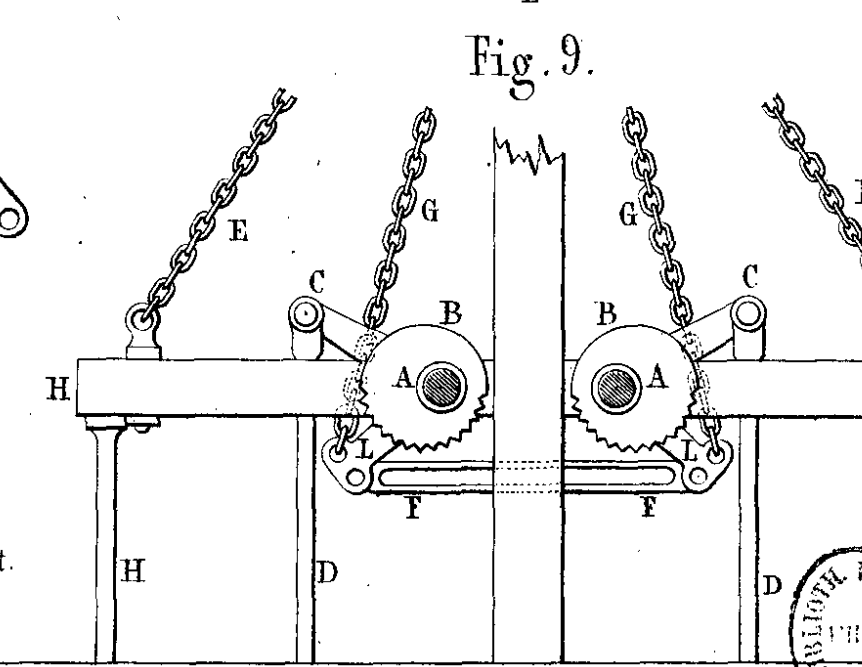


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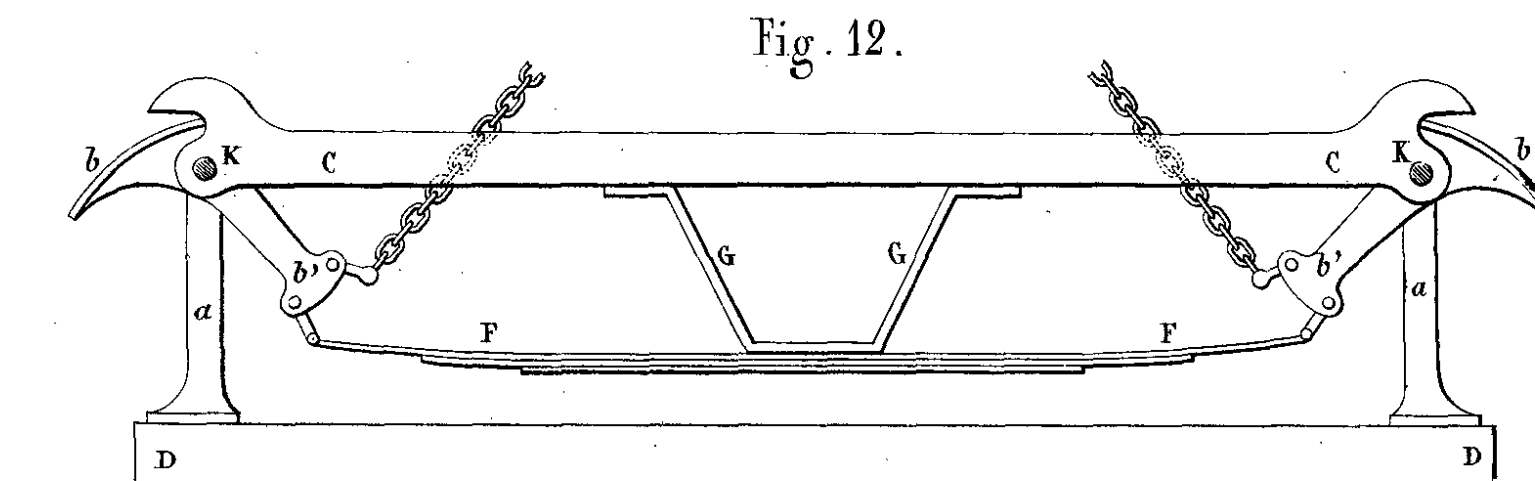


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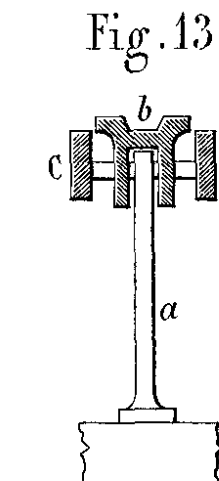


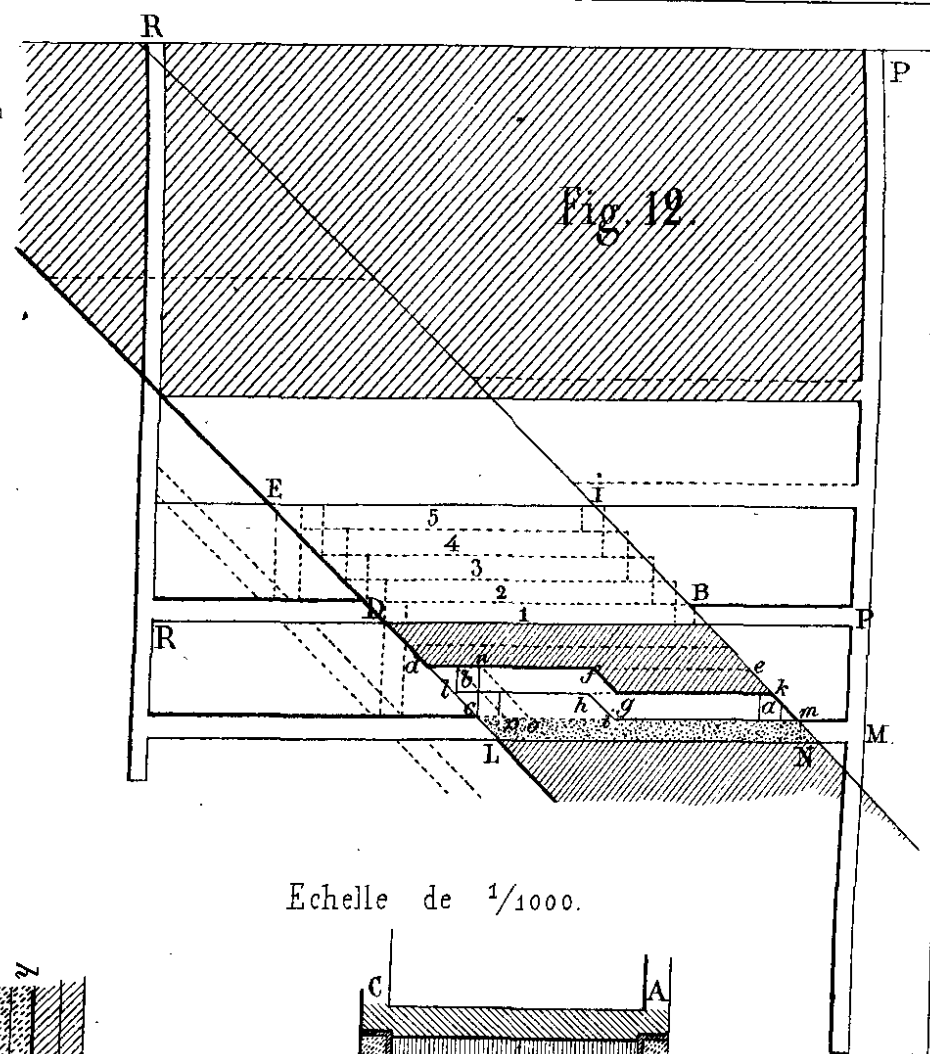
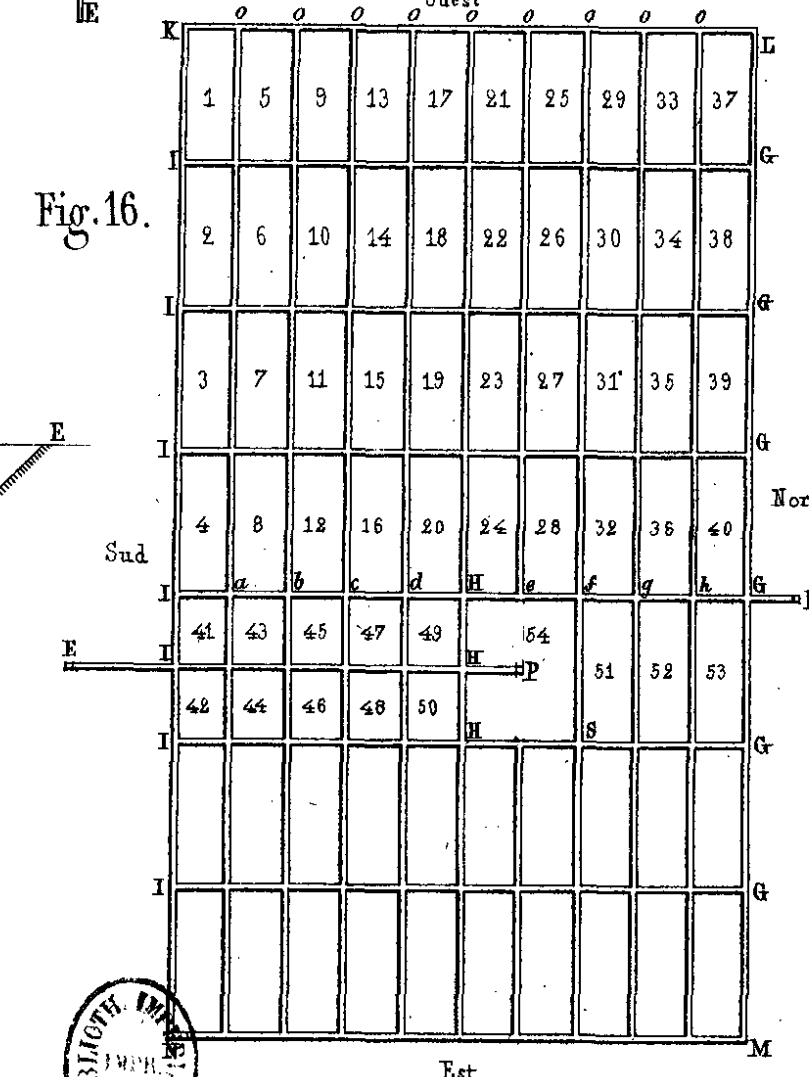
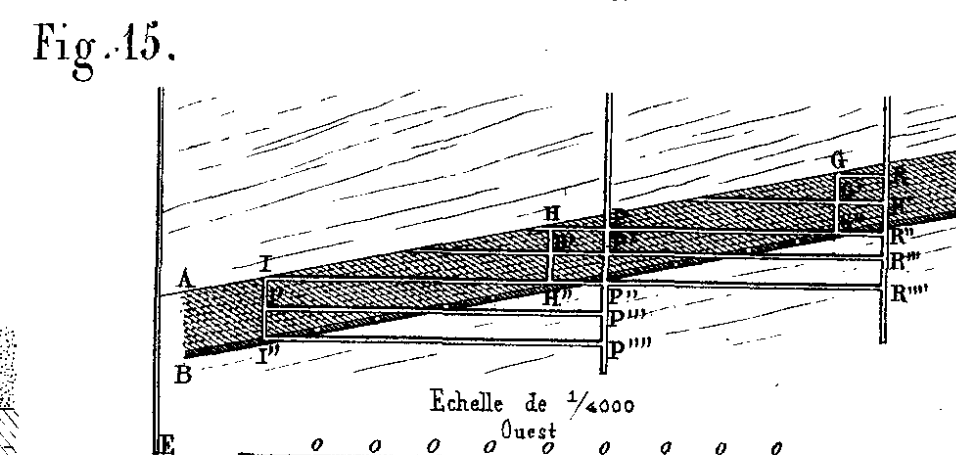
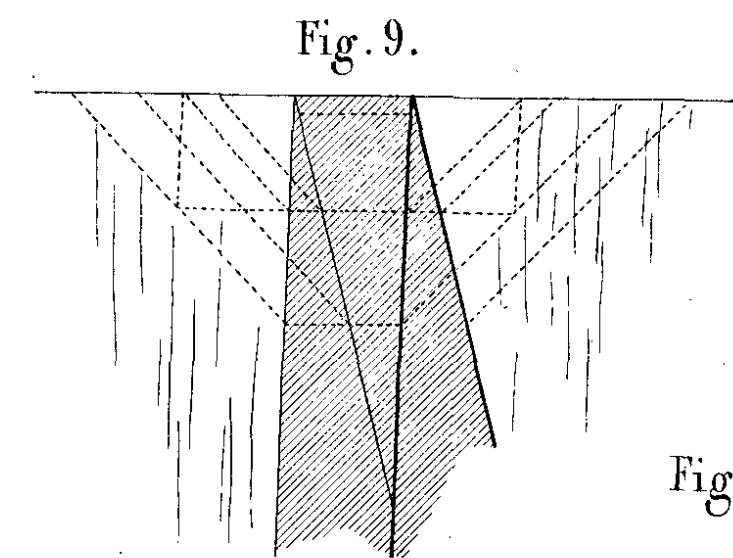
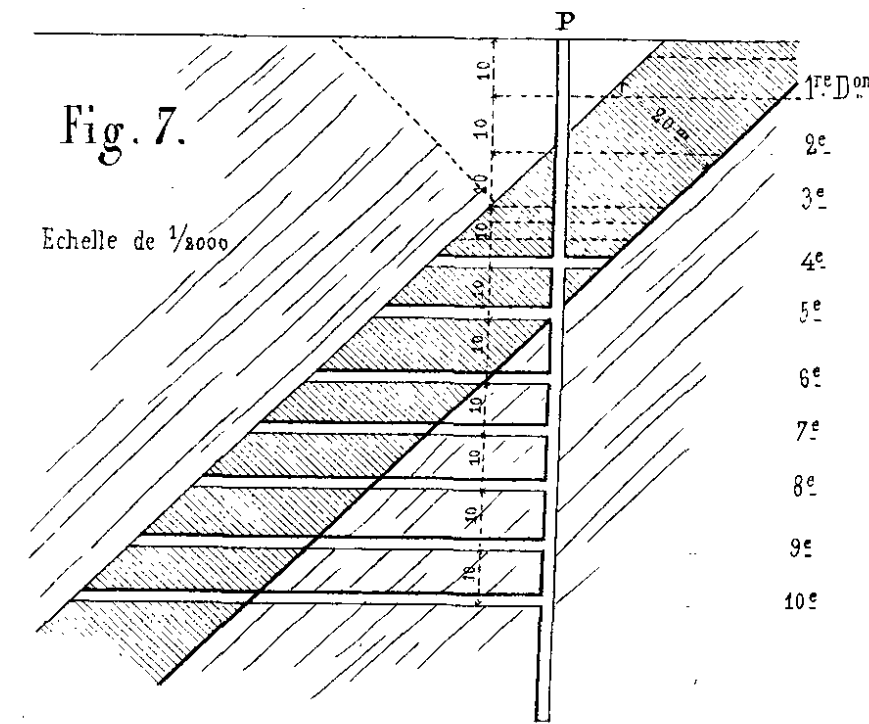
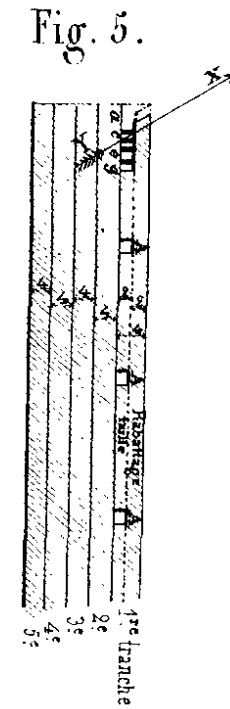
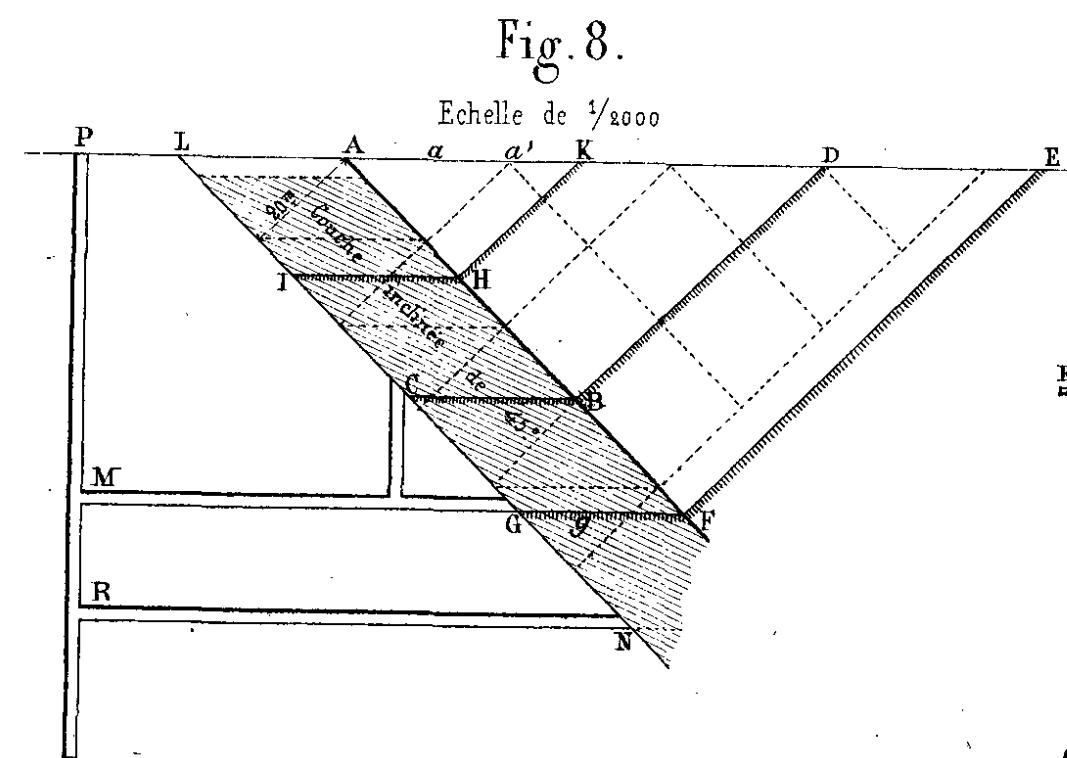
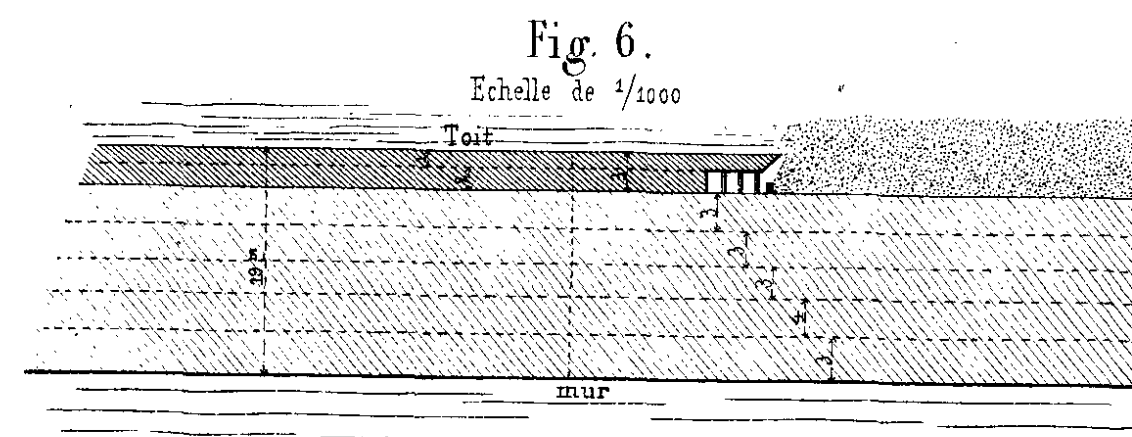
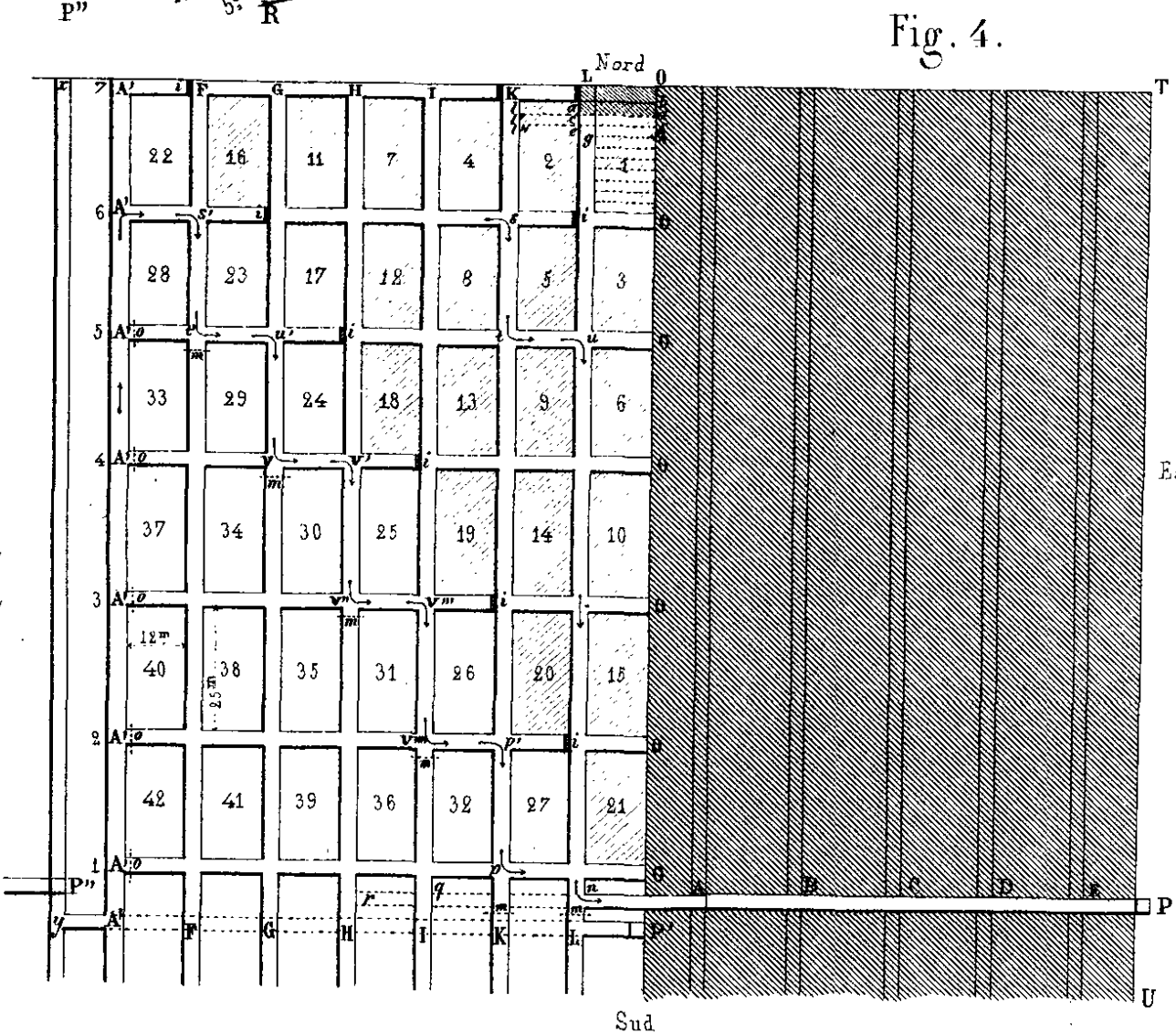
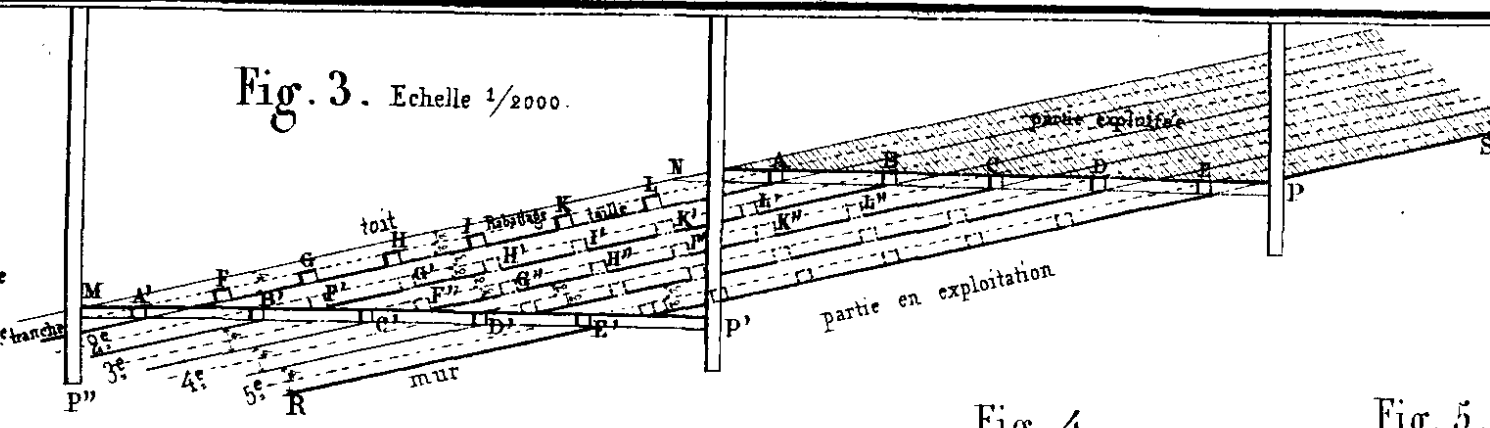
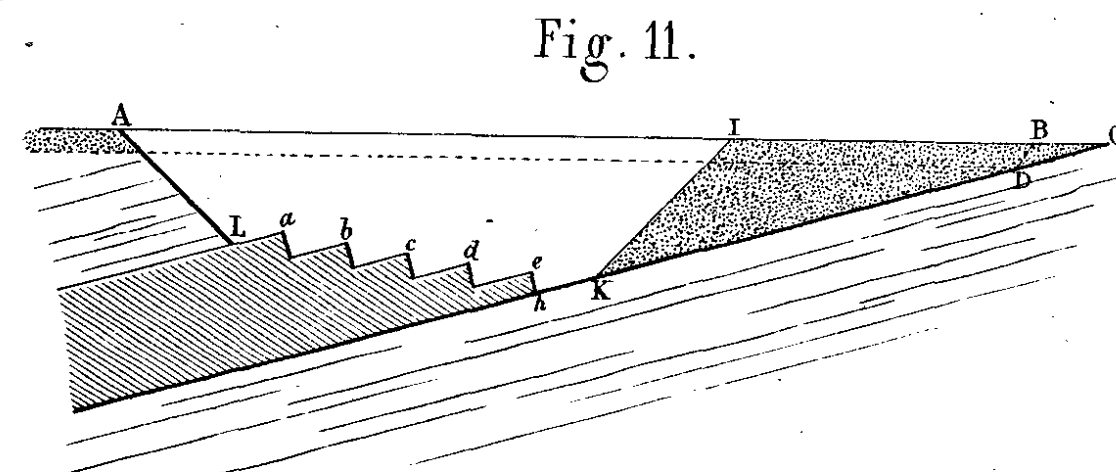
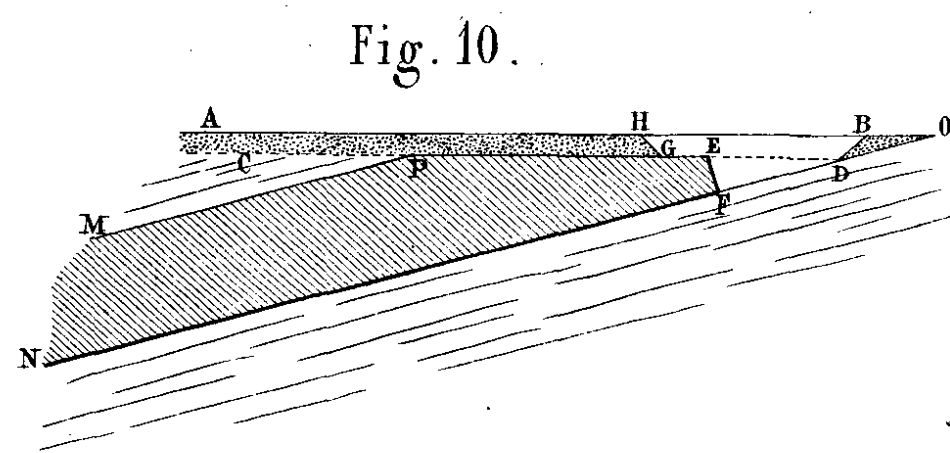
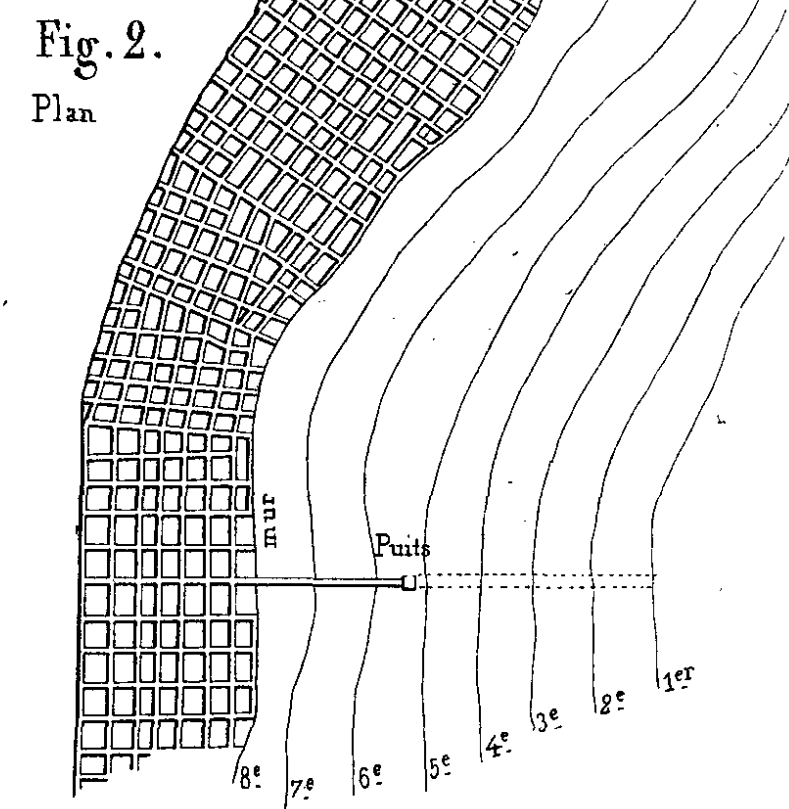
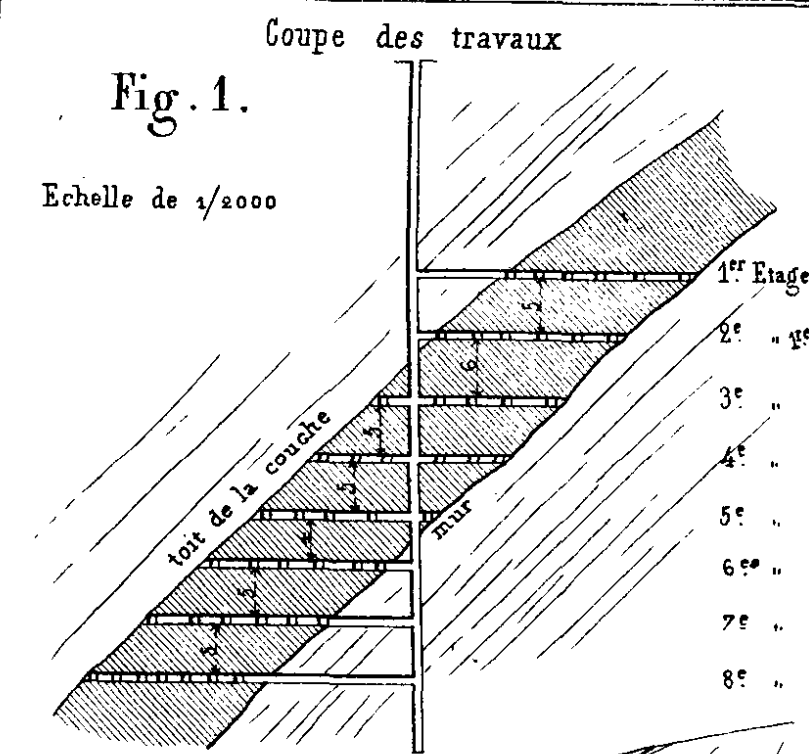
Fig. 13.

Echelle des fig. 1, 2, 15, 16, 17.  
100 50 0 1 Mèt.









Echelle de 1/1000.

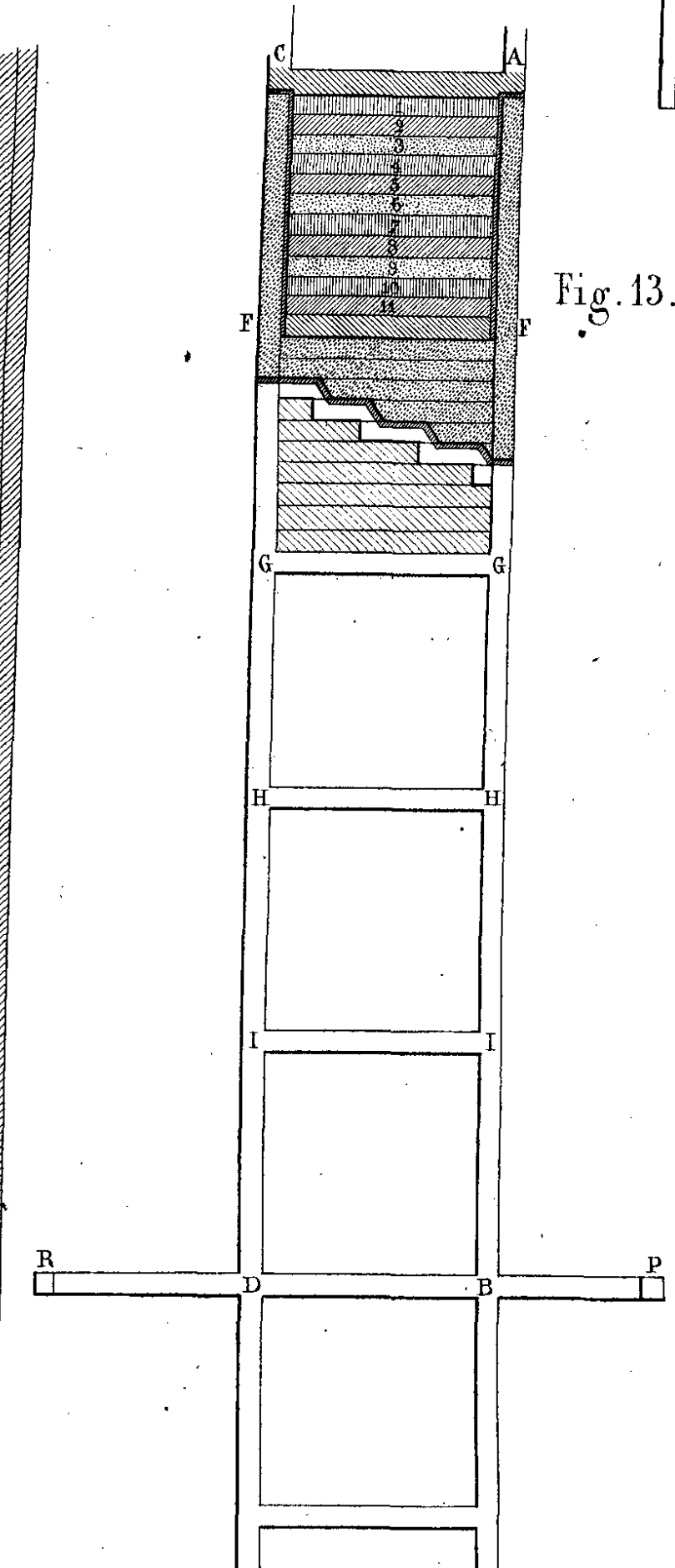








Fig. 1.

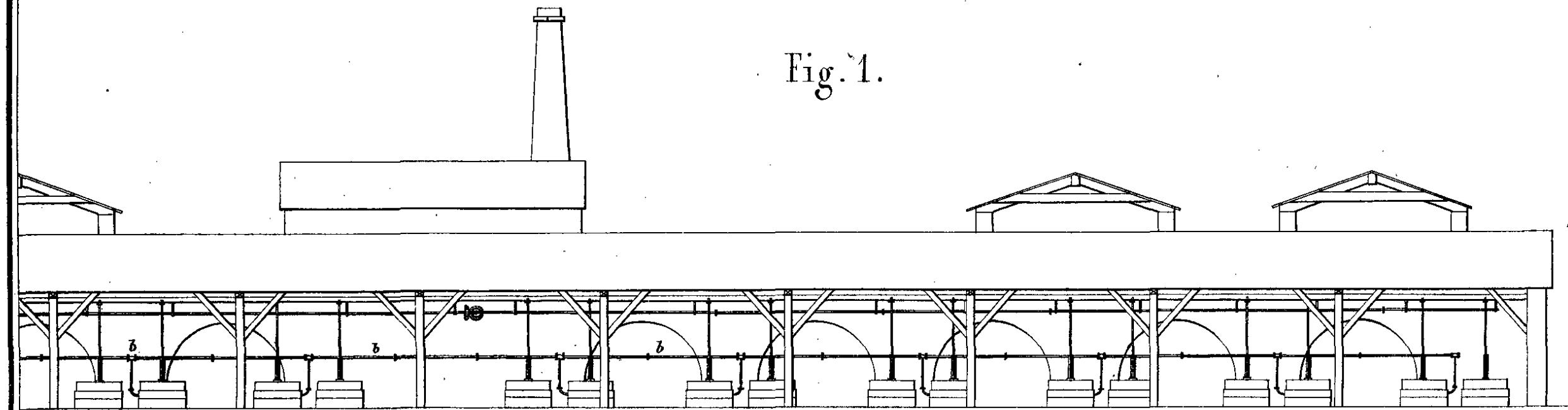
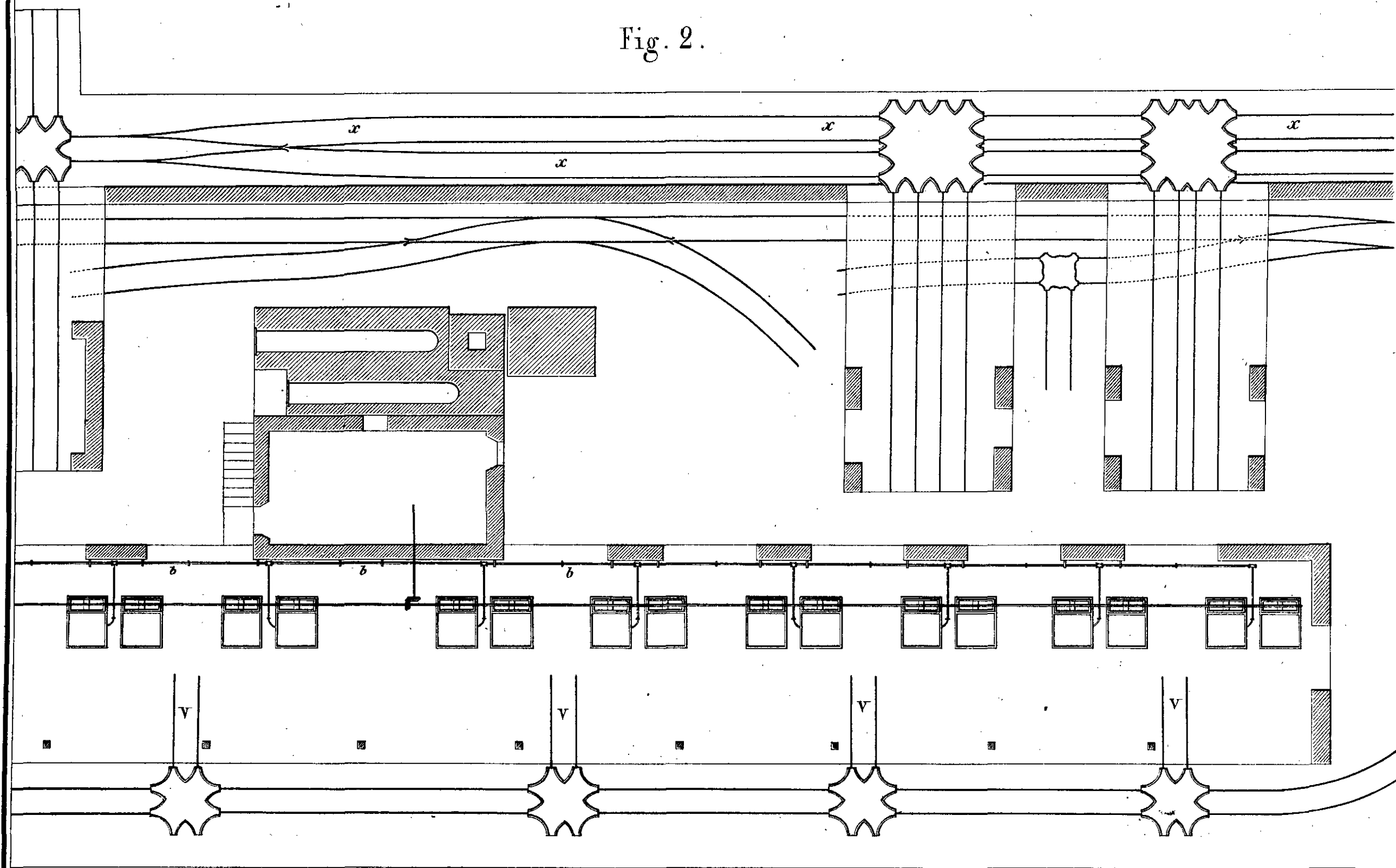


Fig. 2.



Echelle des fig. 1, 2, 3, 4.

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Echelle des fig. 5, 6, 7, 8.

100 50 0 1 2 3 4 5 Mèt.

Fig. 3.

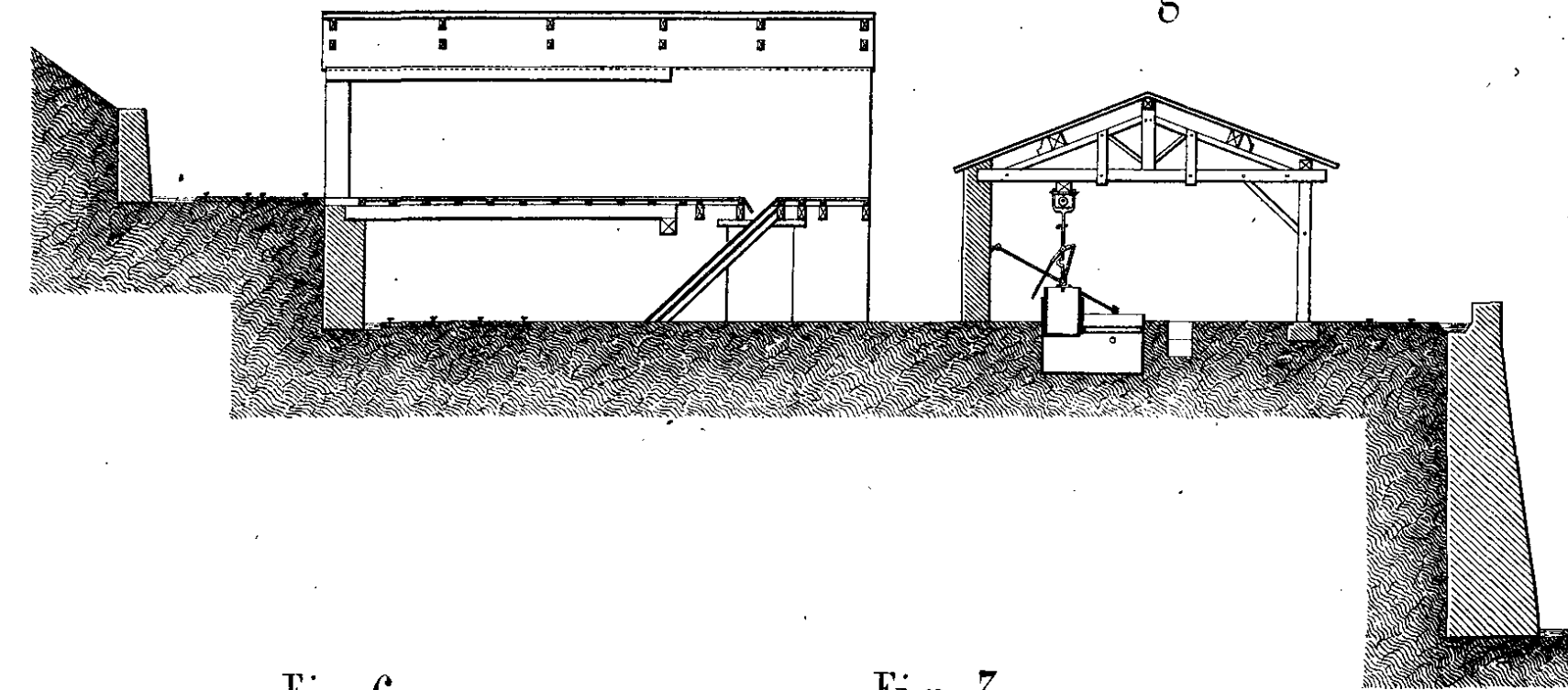


Fig. 6.

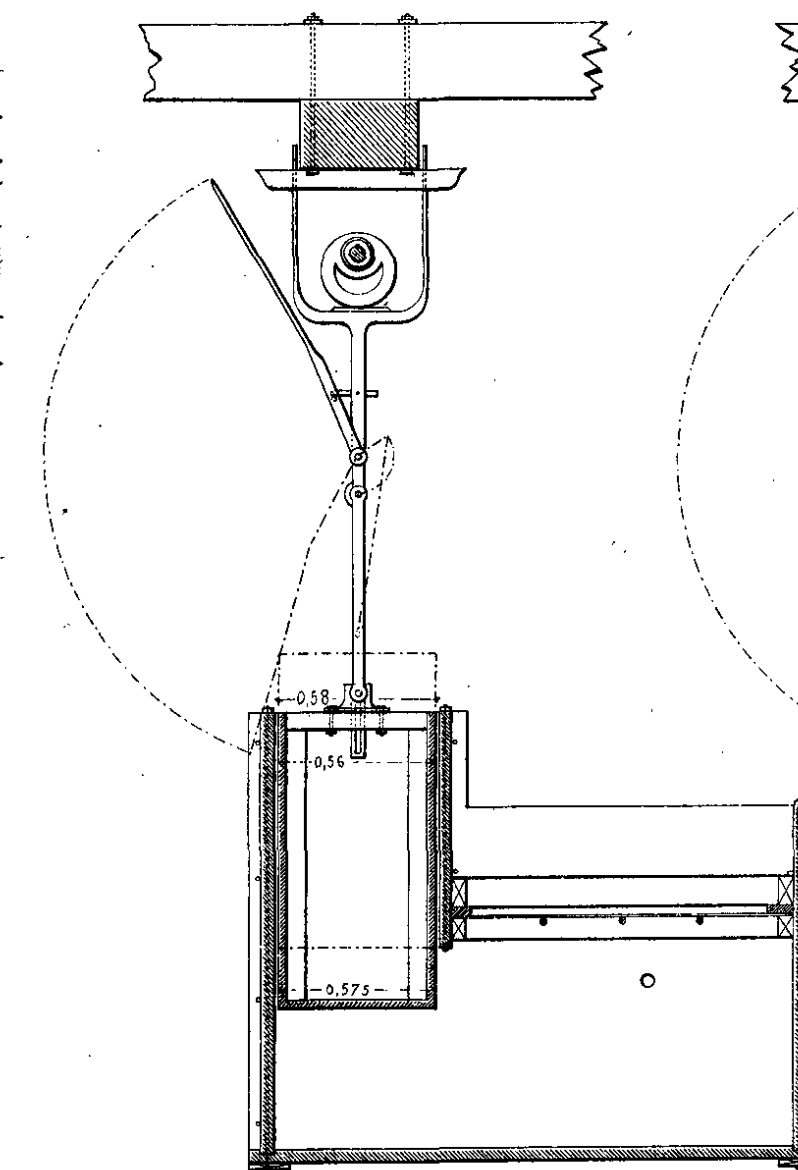


Fig. 7.

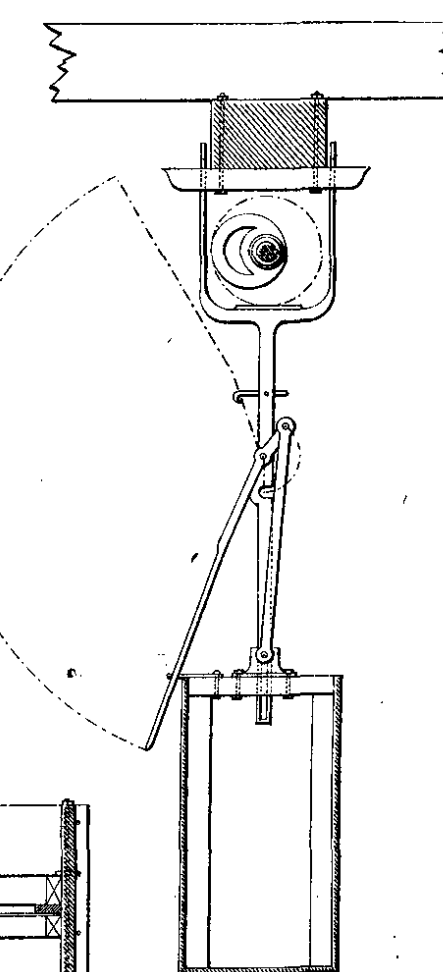


Fig. 8.

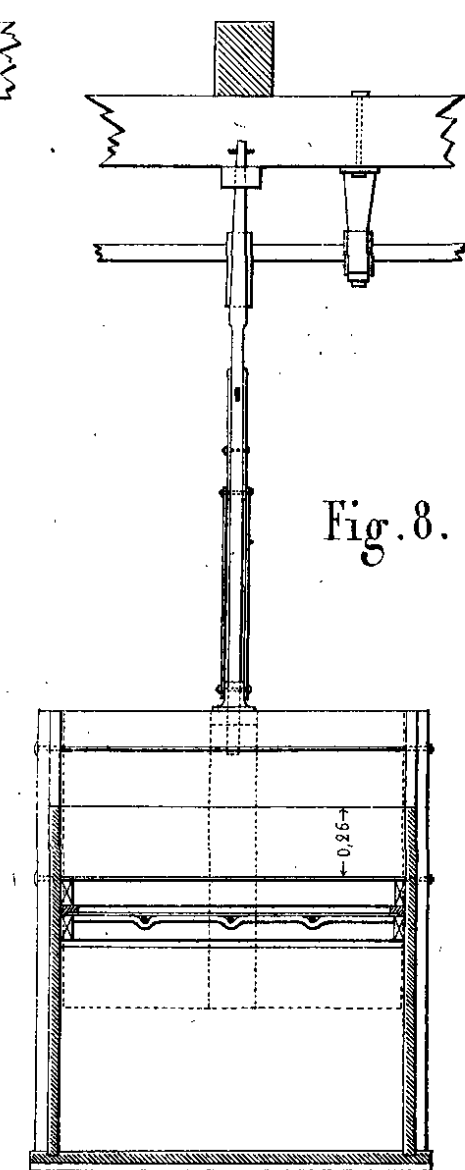


Fig. 5.

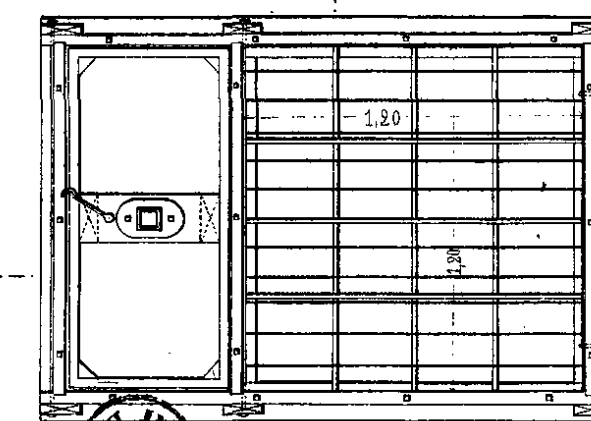
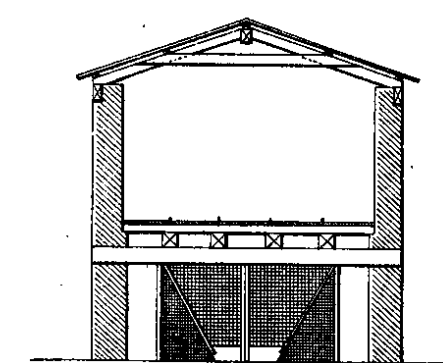


Fig. 4.













# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1861-07-01.

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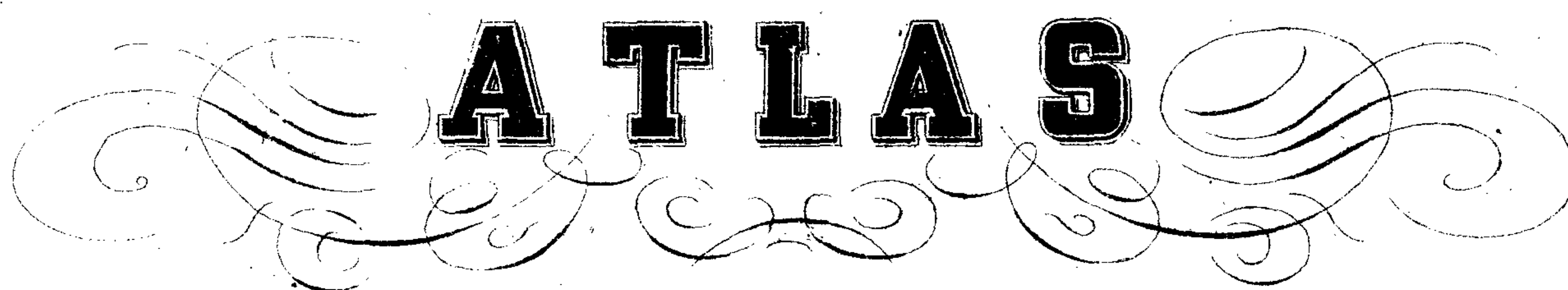
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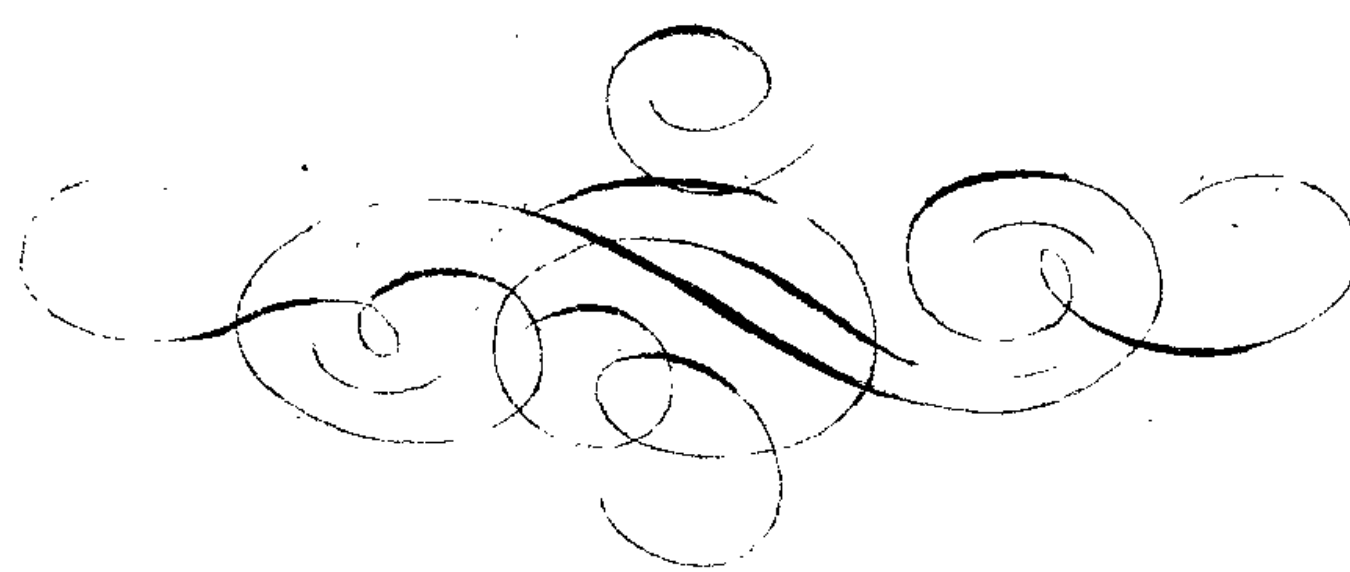


**ATLAS**

DE LA



**SOCIÉTÉ DE L'INDUSTRIE MINÉRALE**

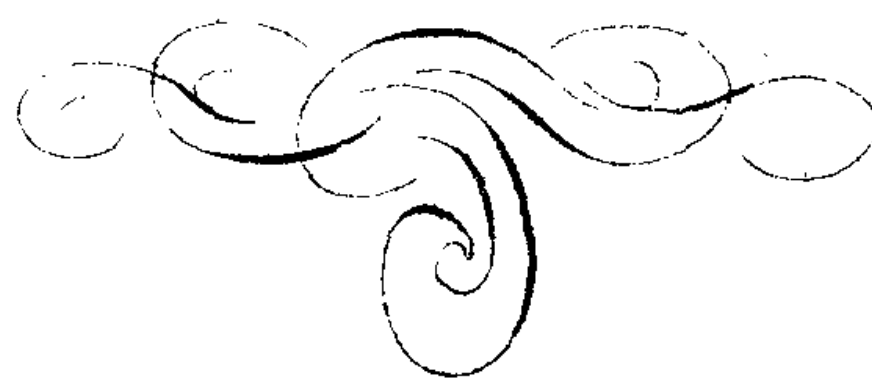


**VI. ANNÉE.**

4<sup>e</sup> LIVRAISON

Avril, Mai, Juin,

1861 .



IMPRIMERIE LITHOGRAPHIQUE

**LANTZ**

RUE DE LA LOIRE 4, S<sup>t</sup> ETIENNE.







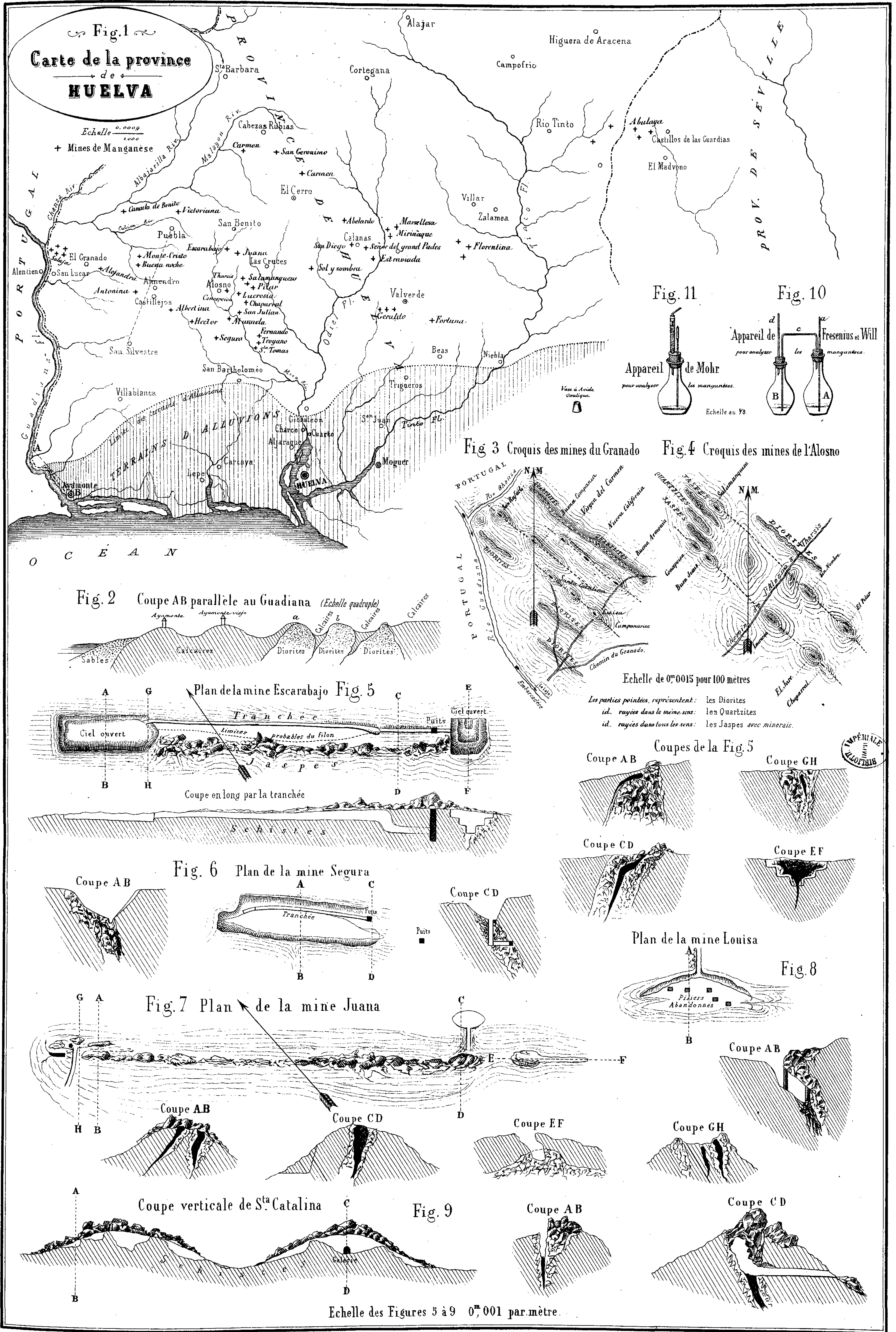








Fig. 1

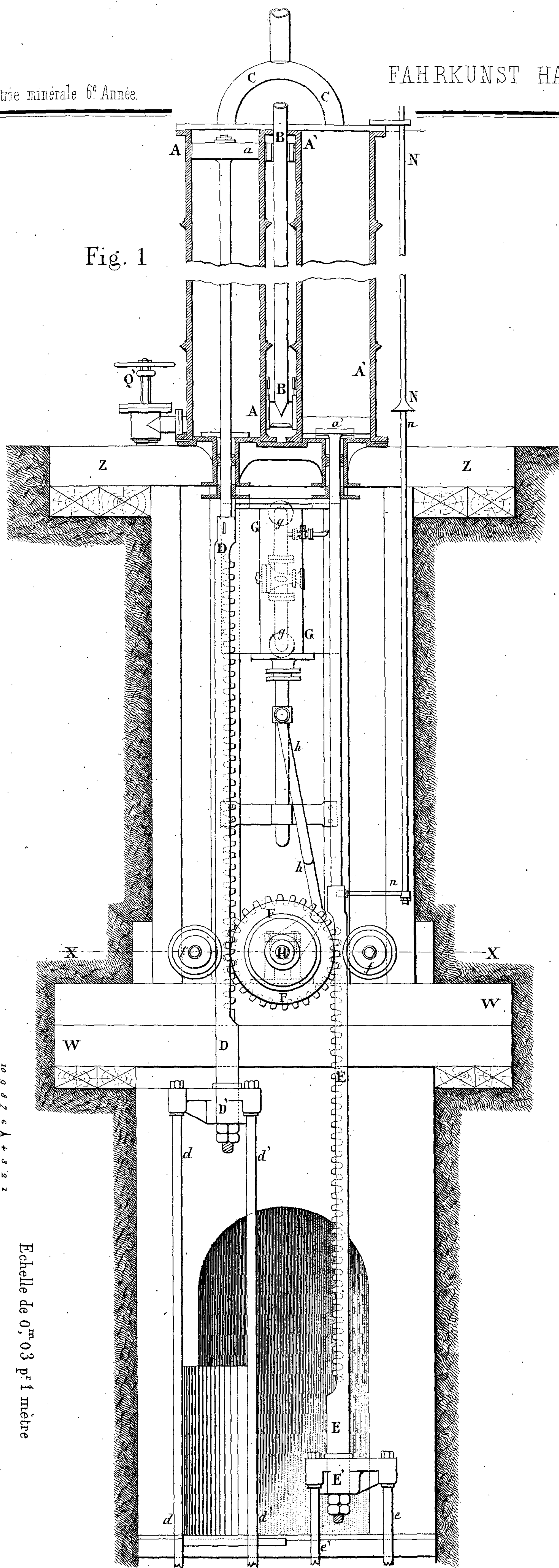


Fig. 3

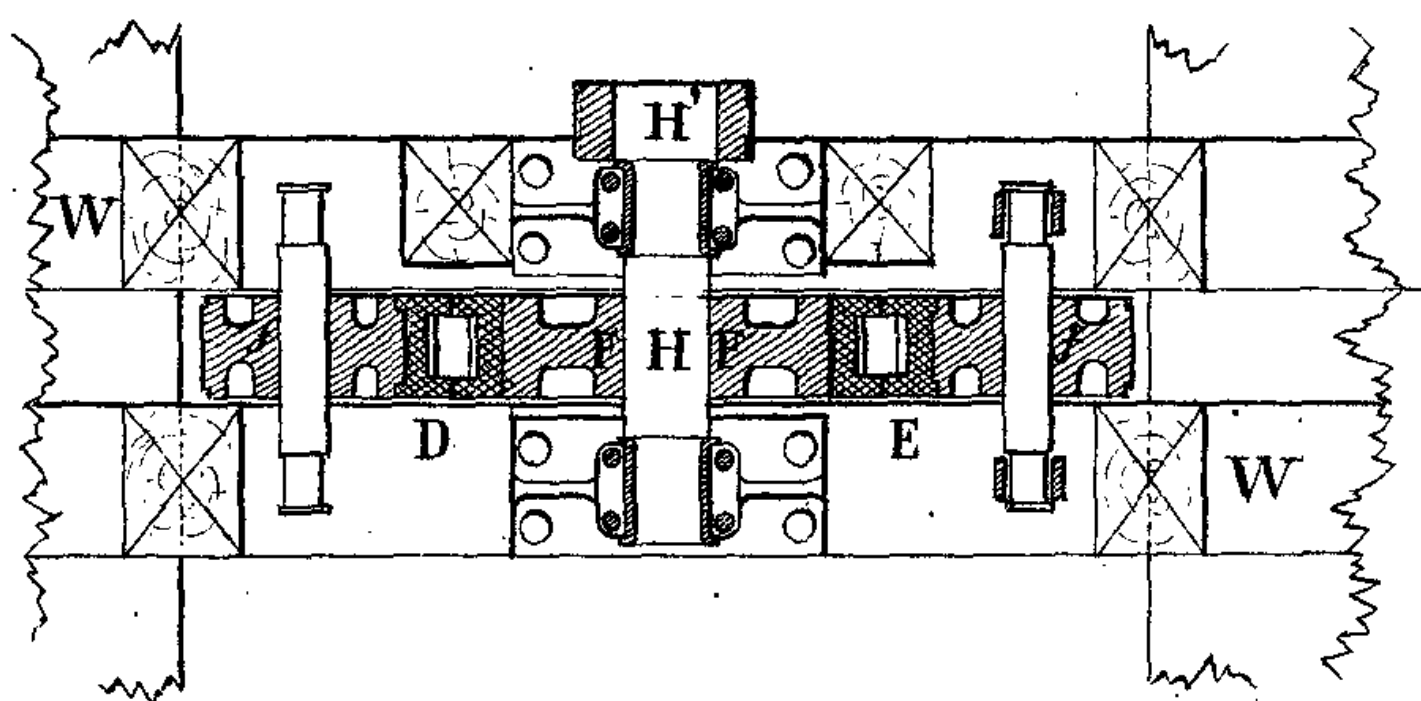


Fig. 2

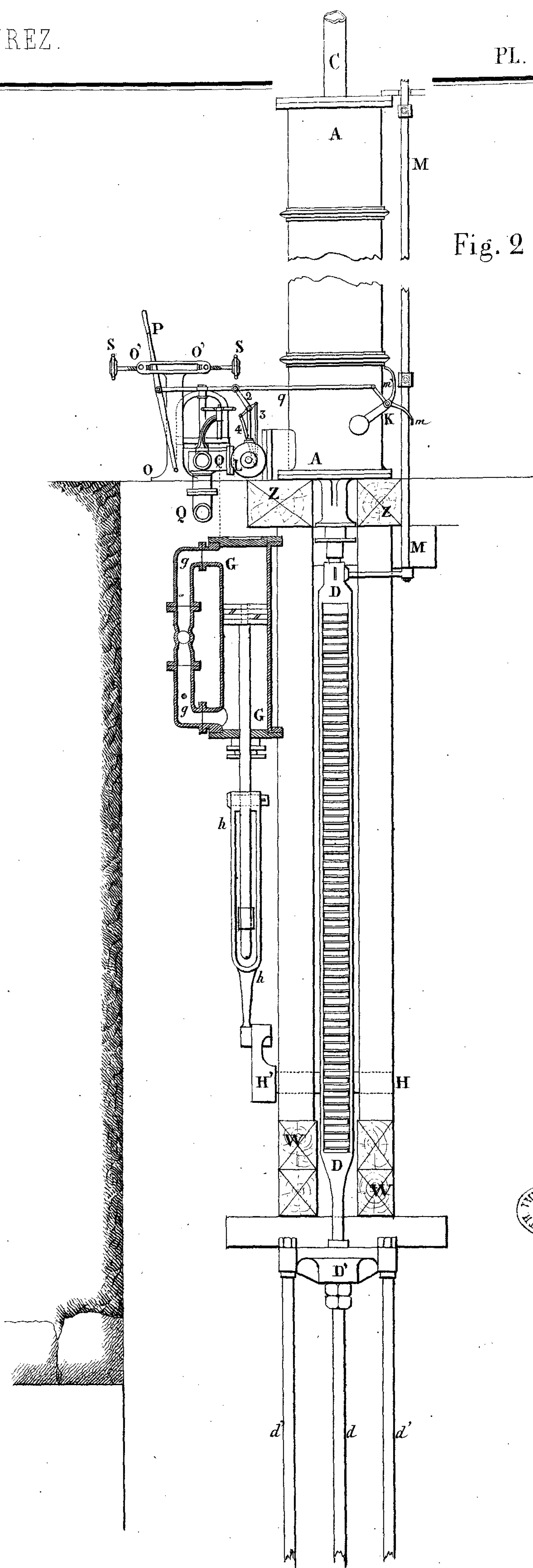
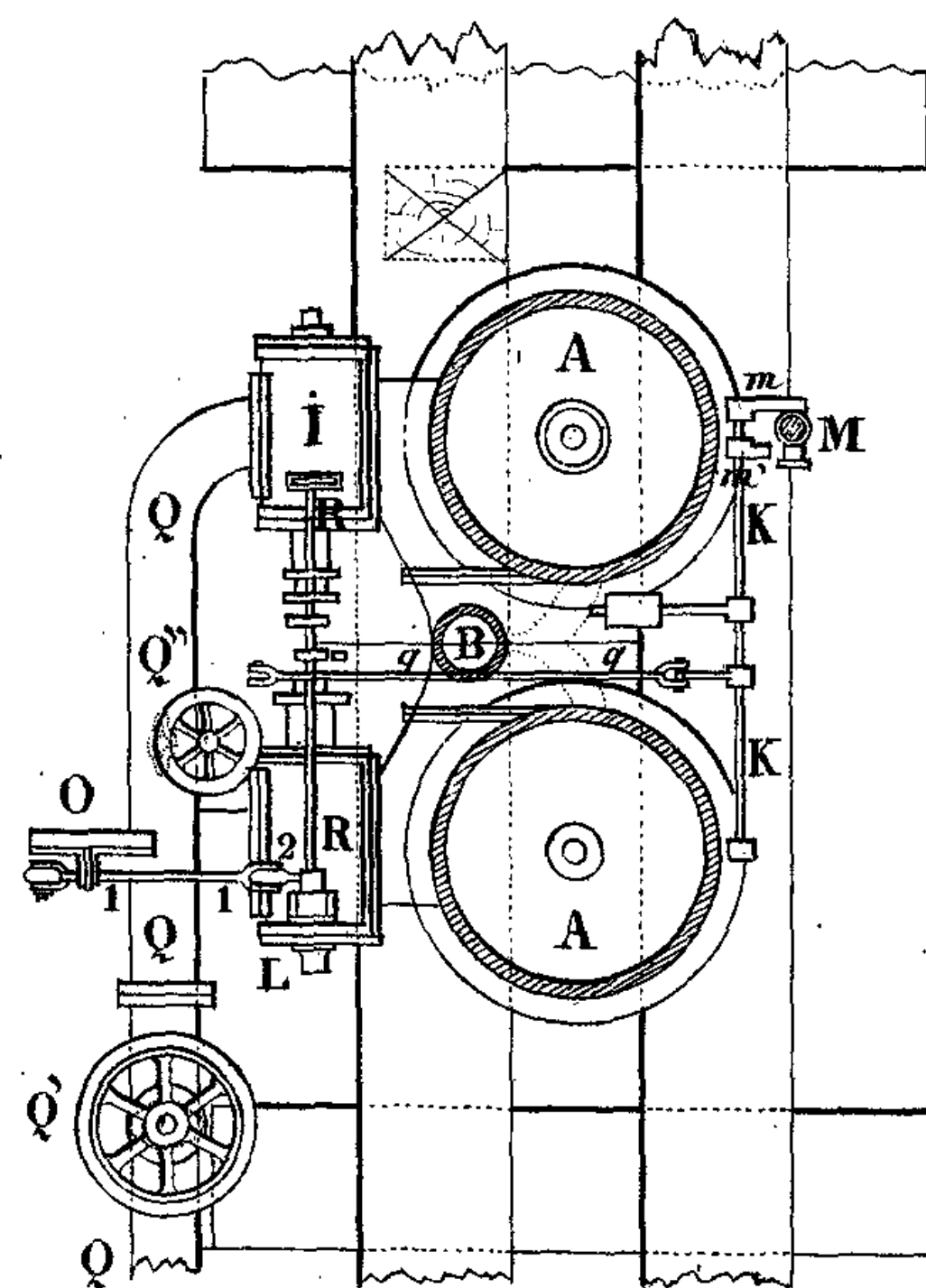


Fig. 4









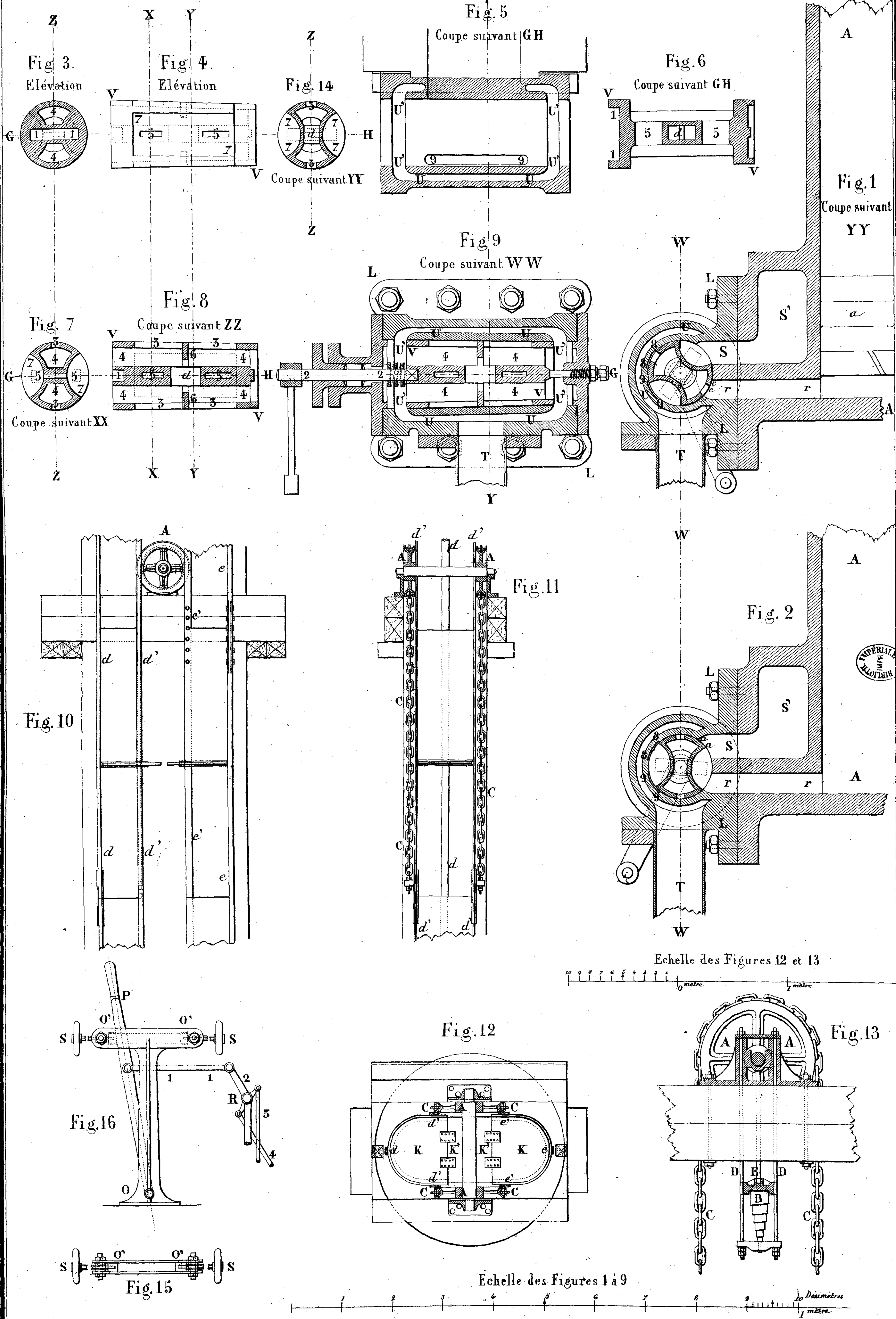








Fig. 1

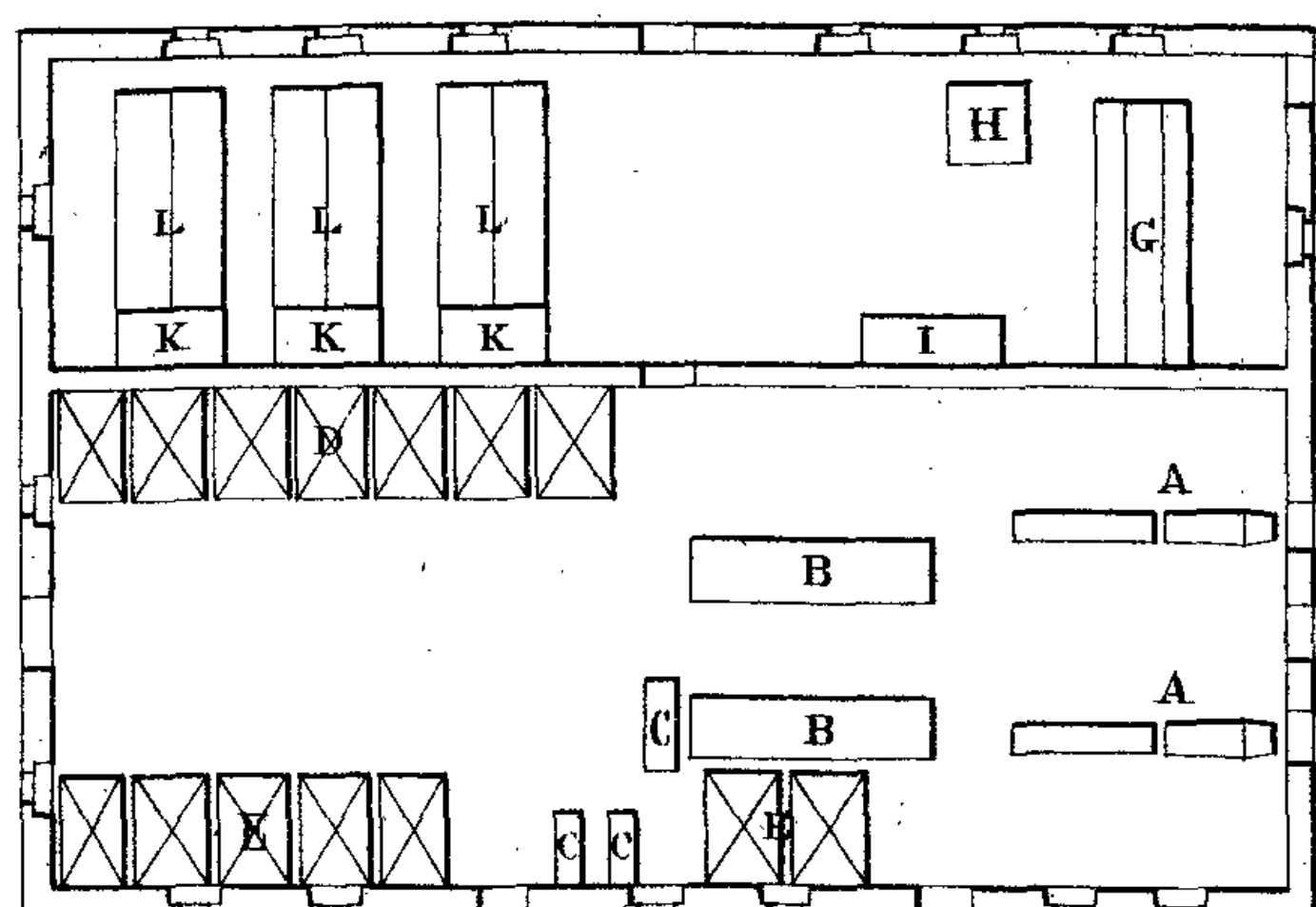


Fig. 2 Coupe AB

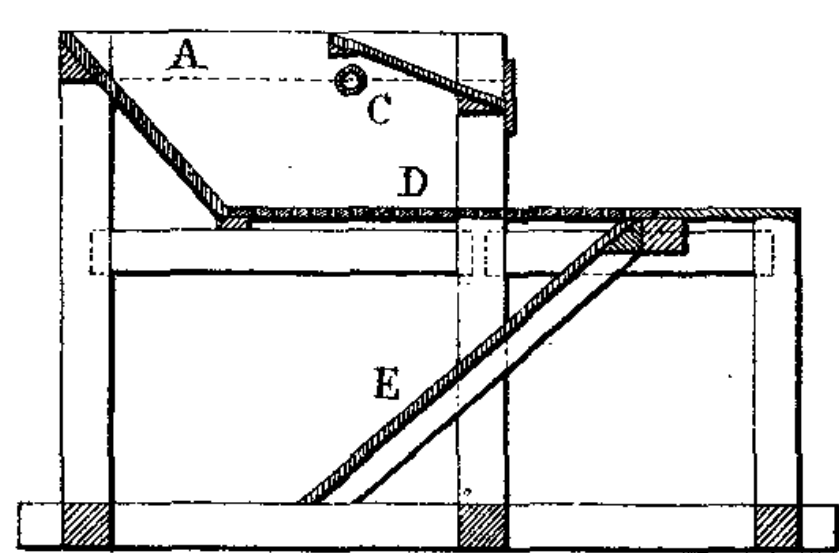


Fig. 3

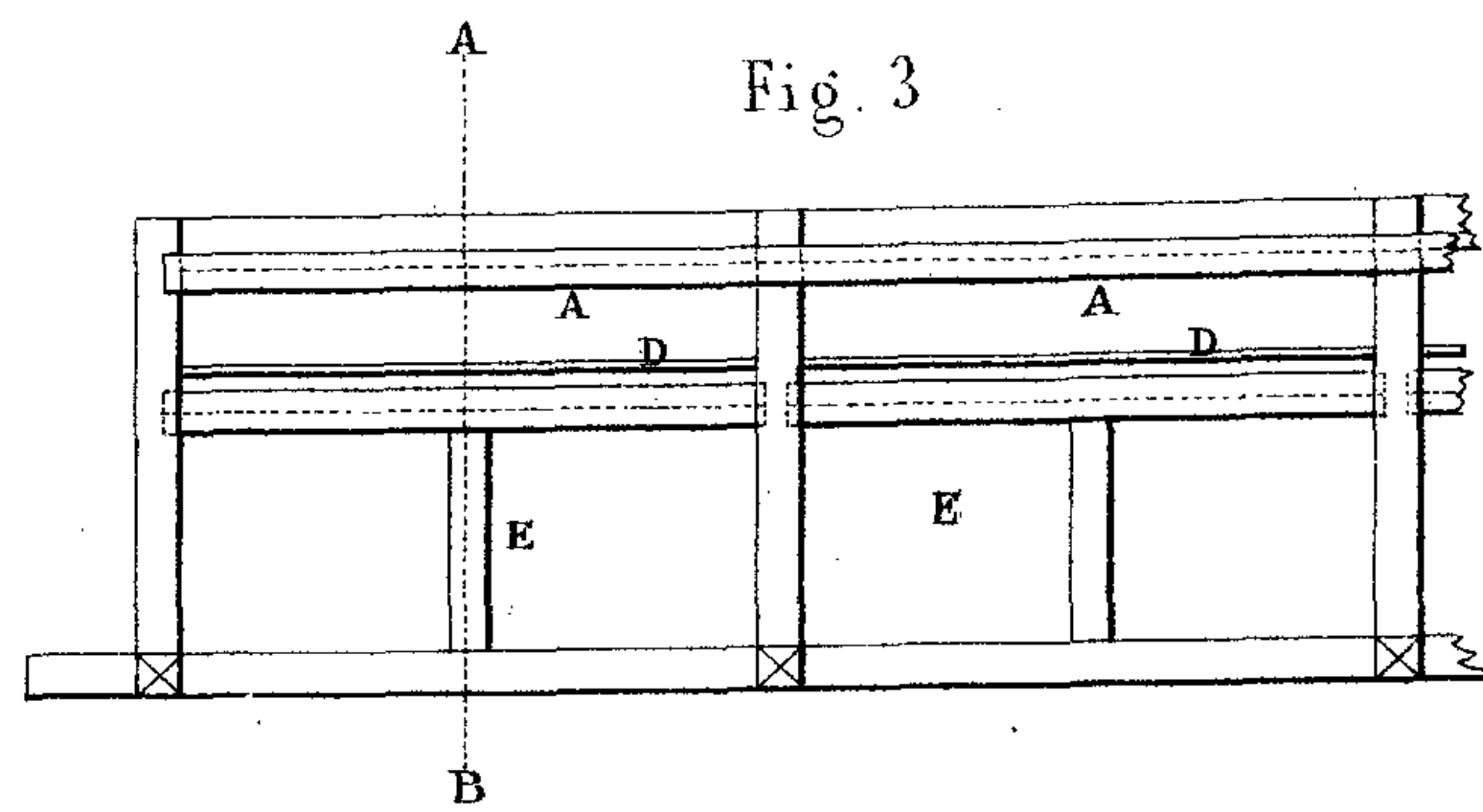


Fig. 4

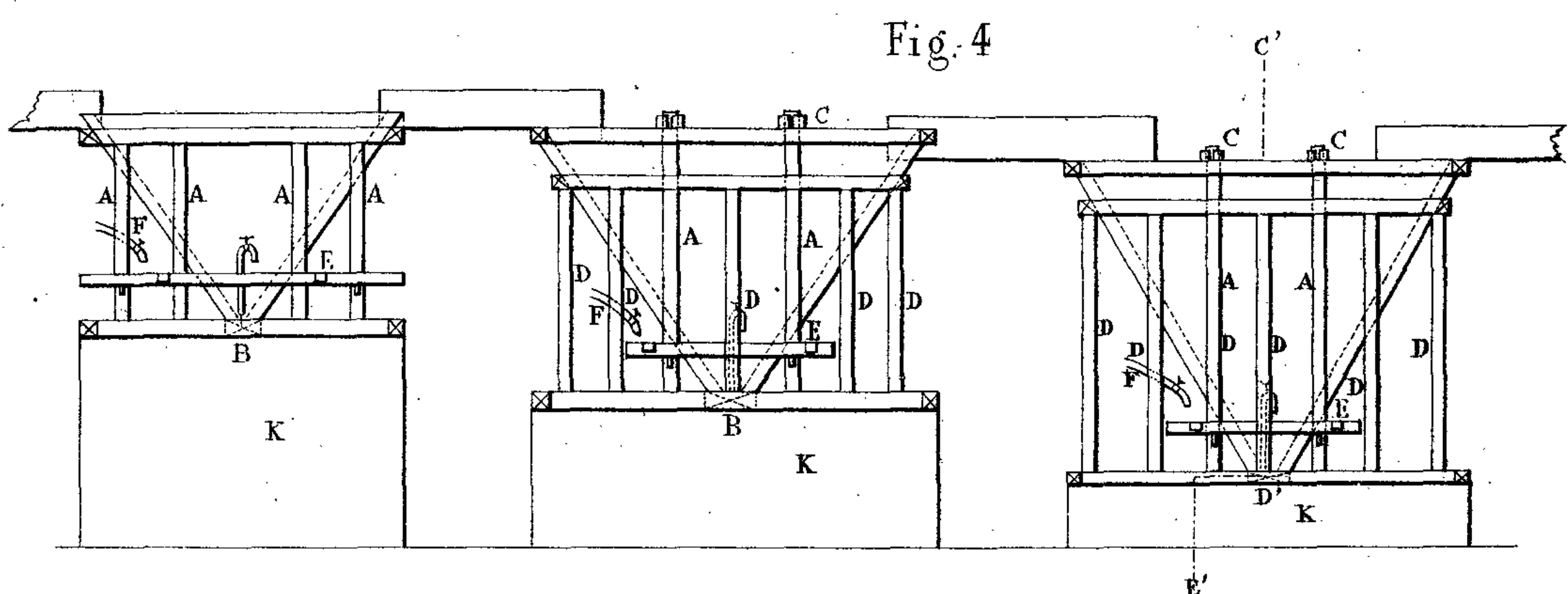


Fig. 5 Coupe suivant C'D'E'

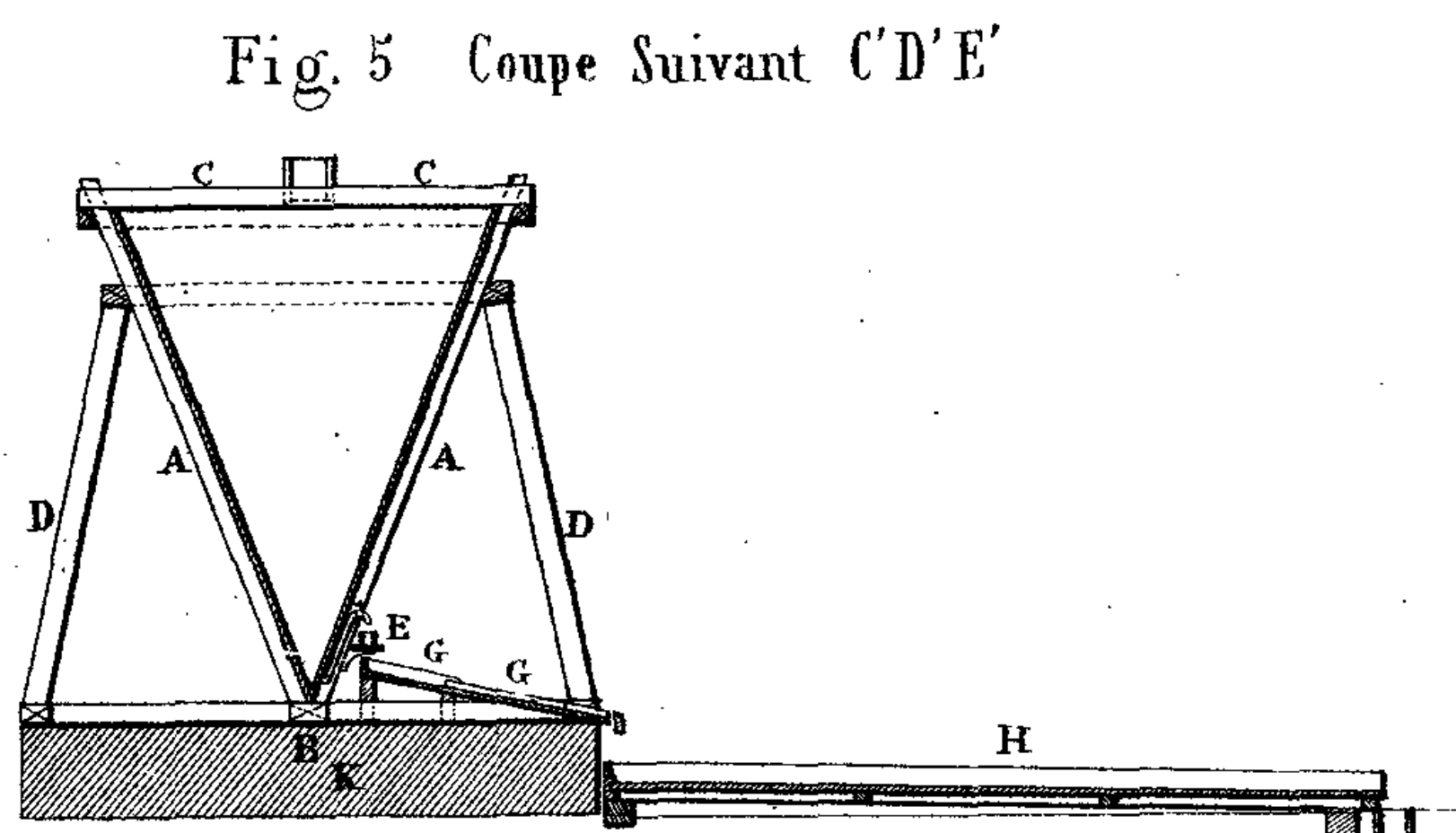


Fig. 7

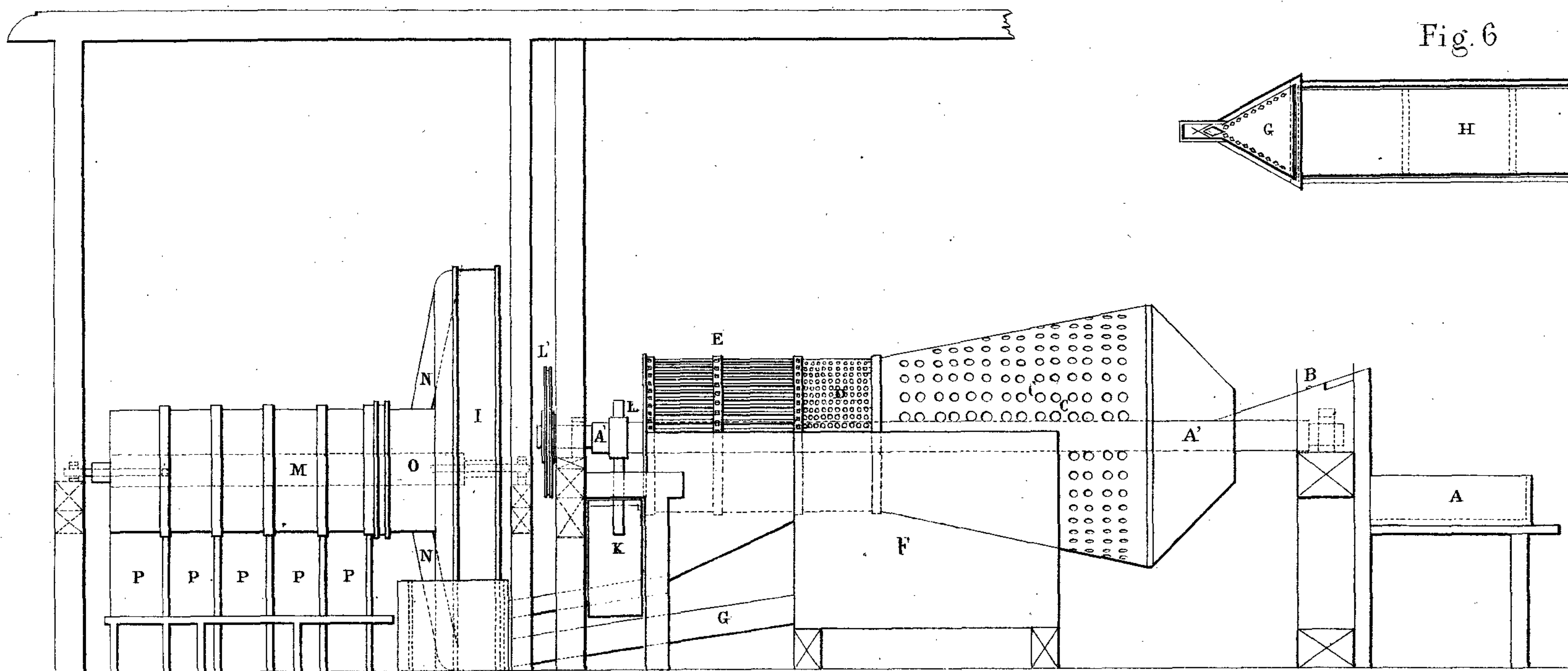


Fig. 6

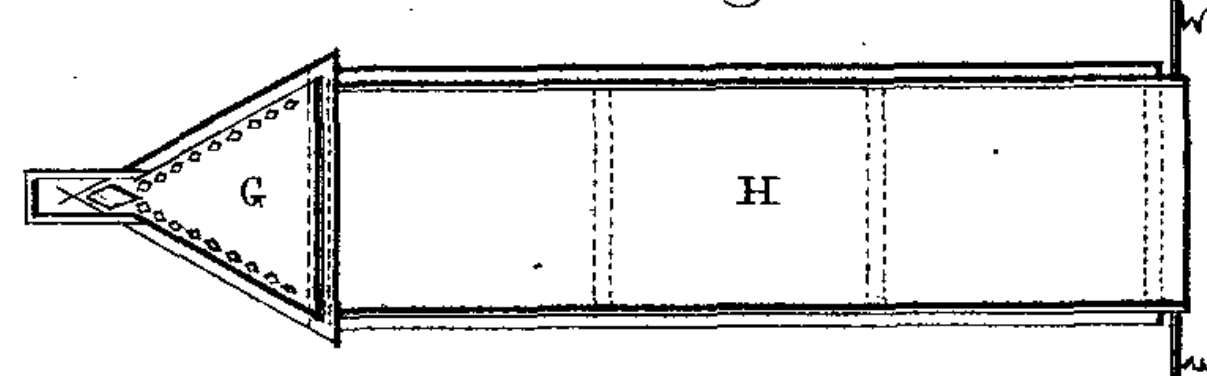
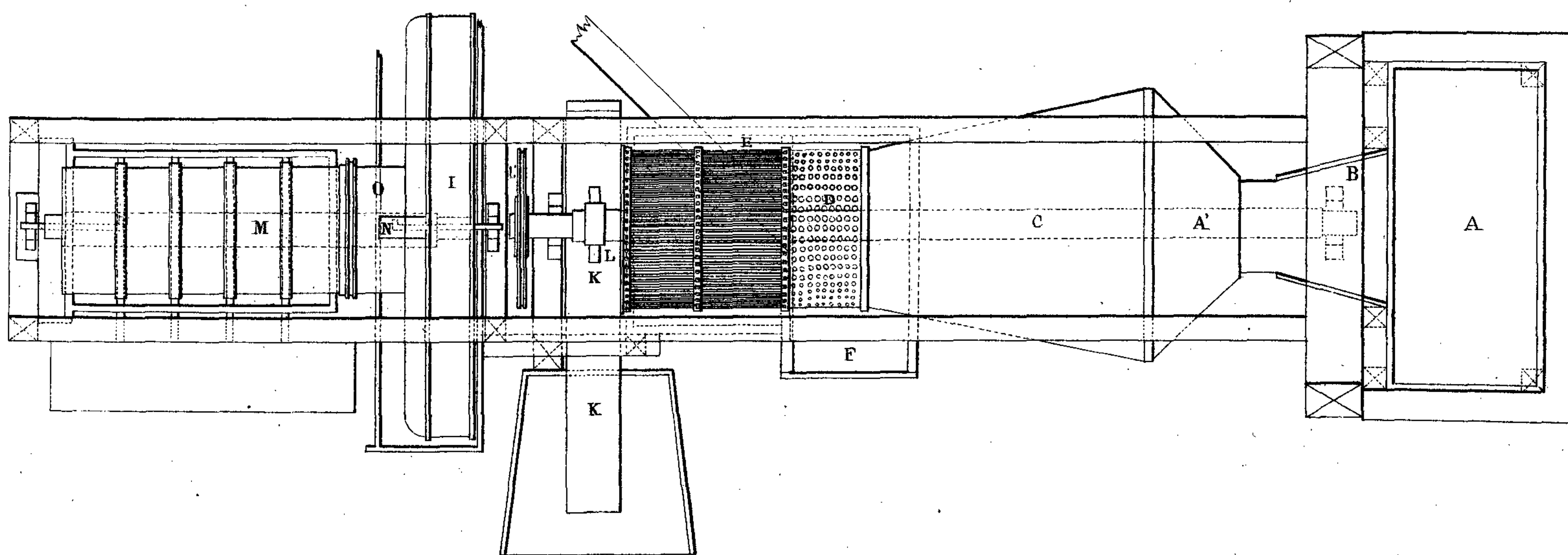
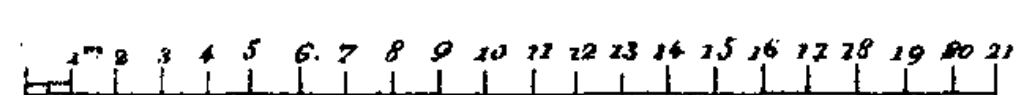


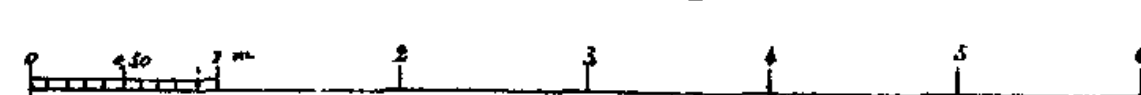
Fig. 8



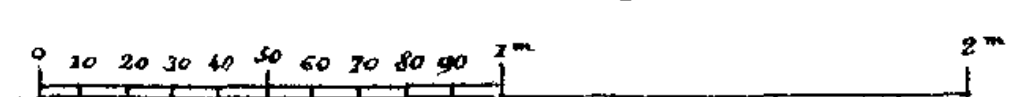
Echelle de la Fig. 1.



Echelle des Fig. 4. 5. 6.



Echelle des Fig. 2. 3.



Echelle des Fig. 7. 8.

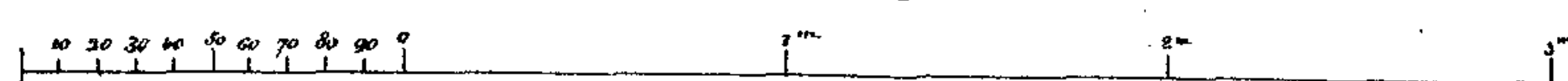








Fig. 1.

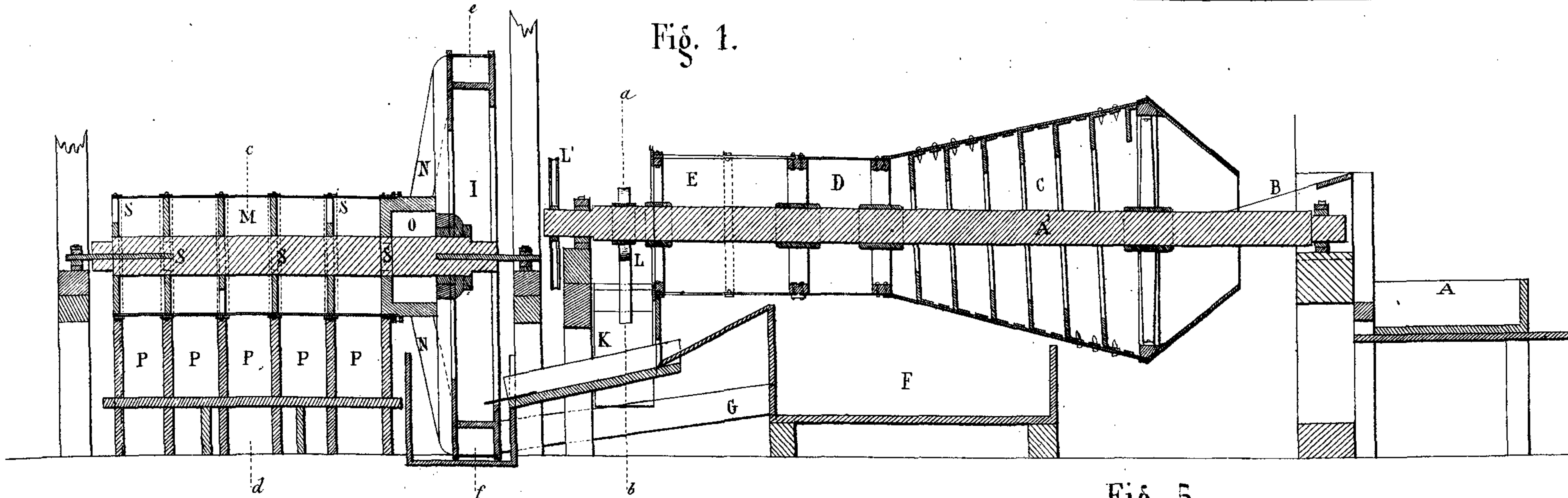


Fig. 2.  
Coupe par  $\alpha\beta$

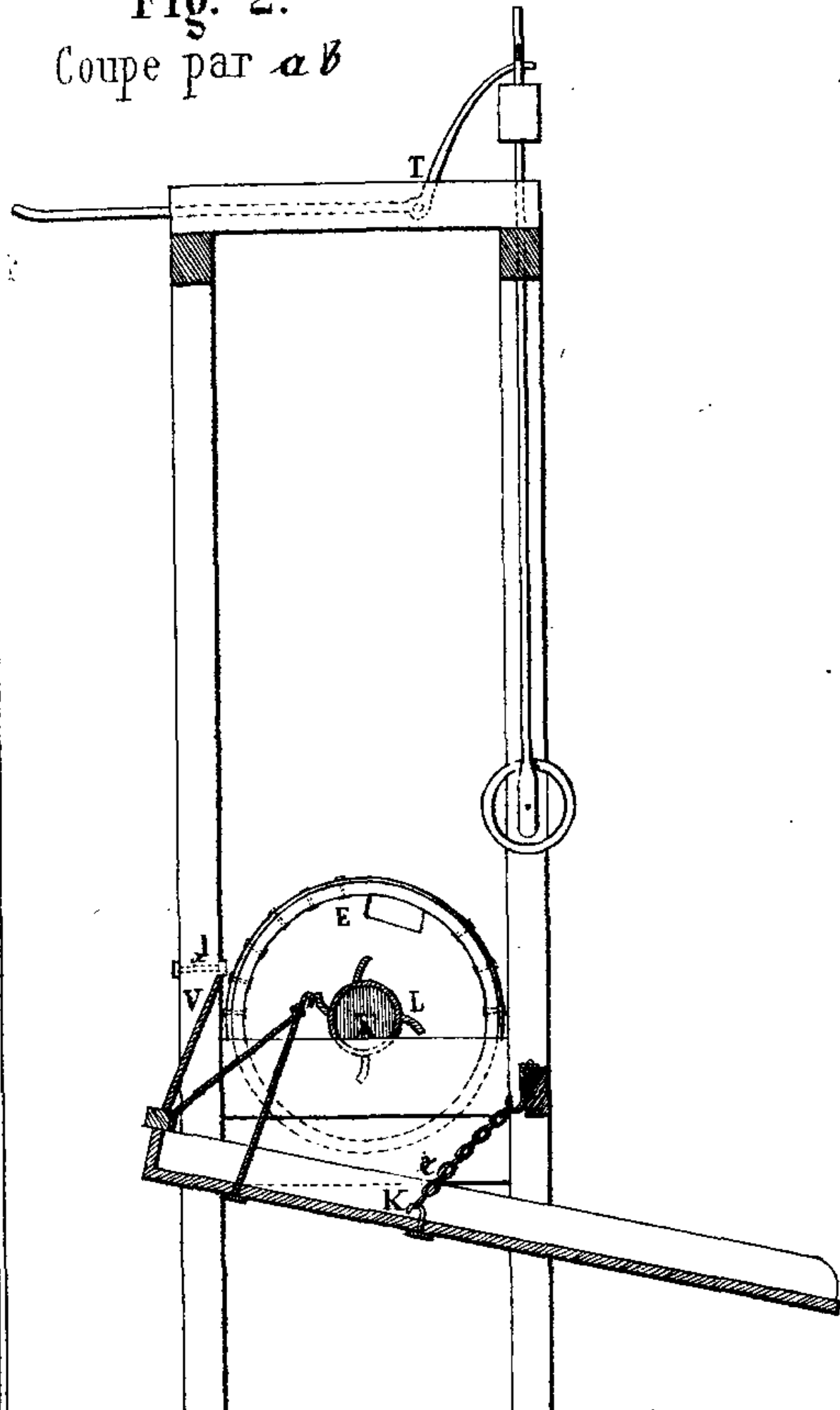


Fig. 3. Coupe par  $\alpha d$

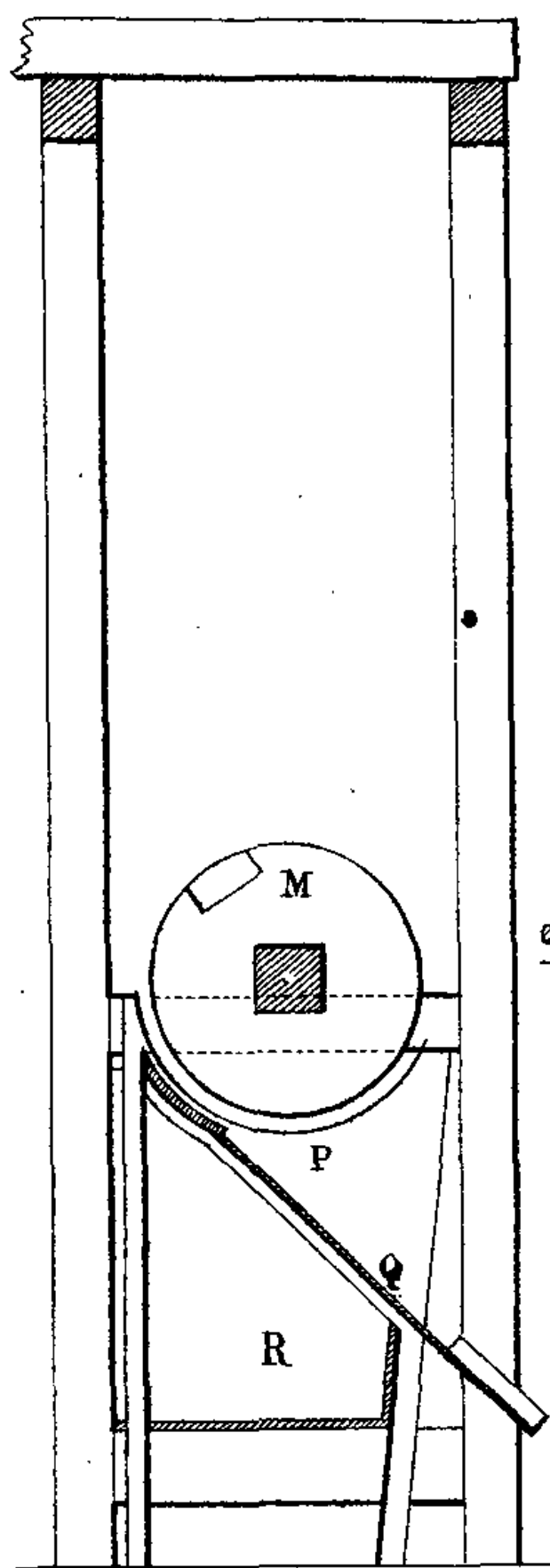


Fig. 4. Coupe par  $ef$

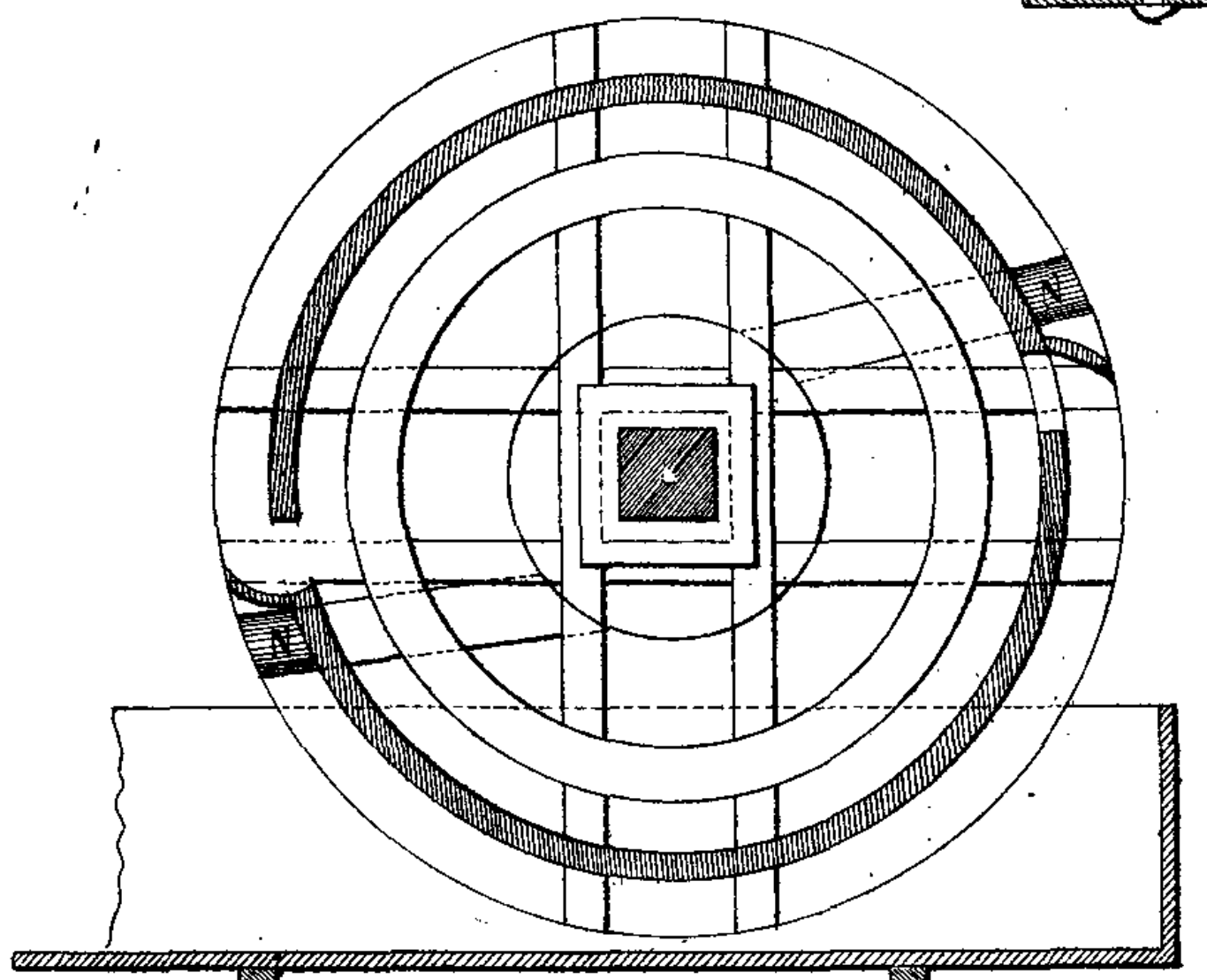


Fig. 5.

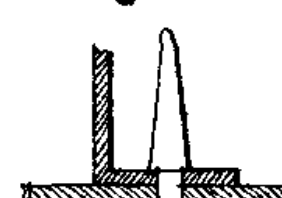


Fig. 9.

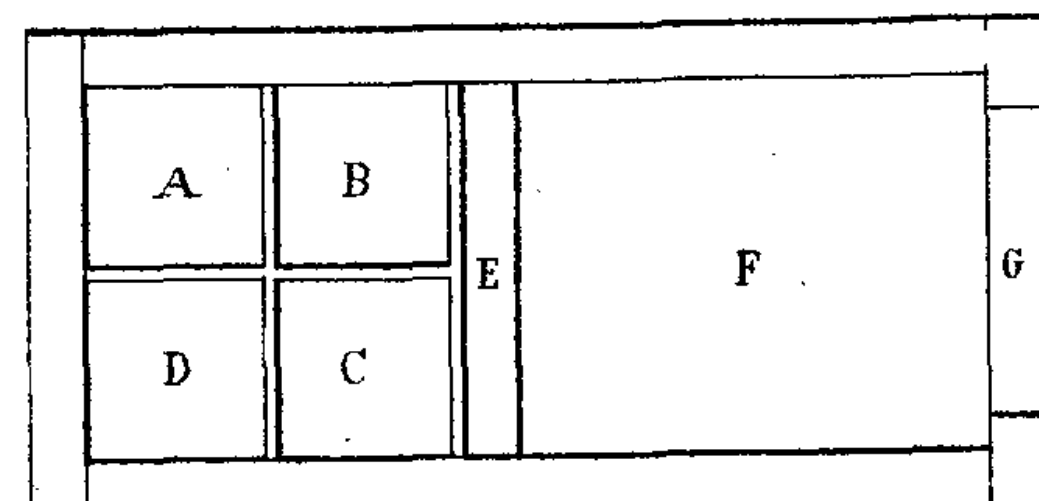


Fig. 10.

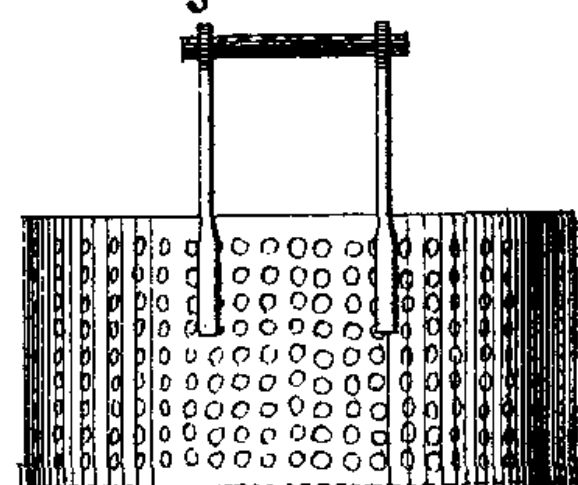


Fig. 16.

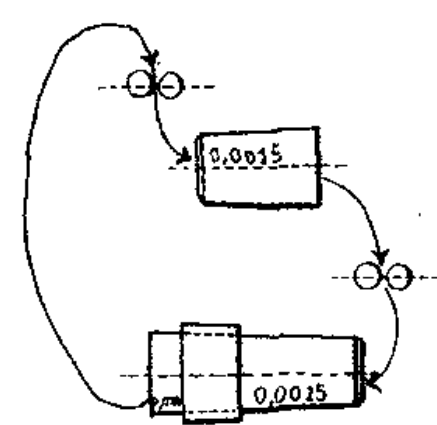


Fig. 11.

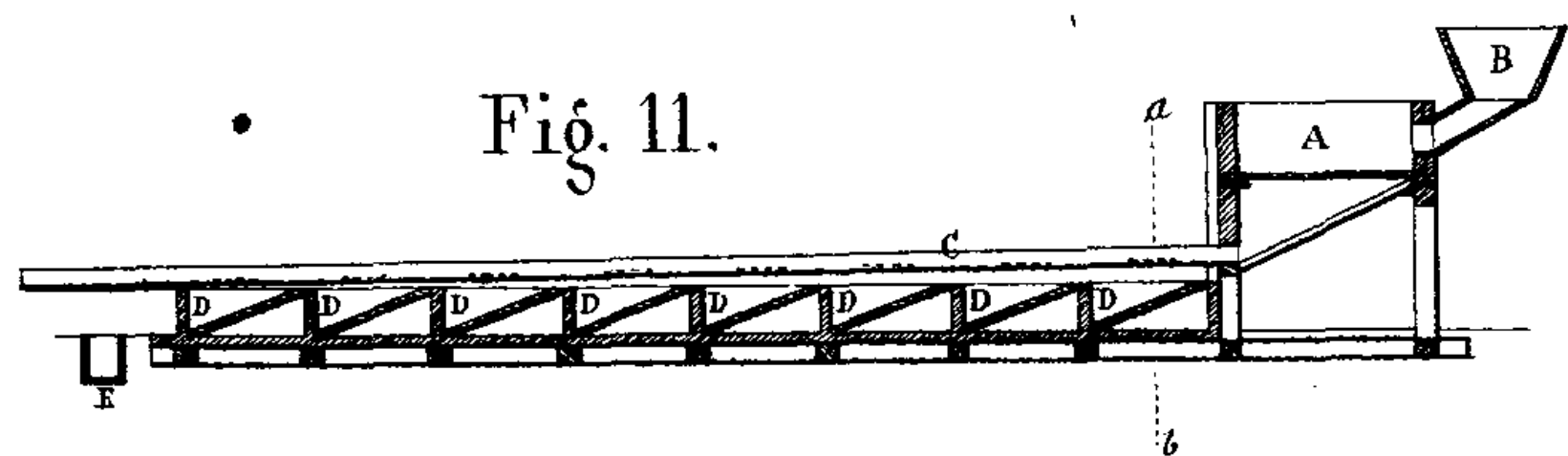


Fig. 6.

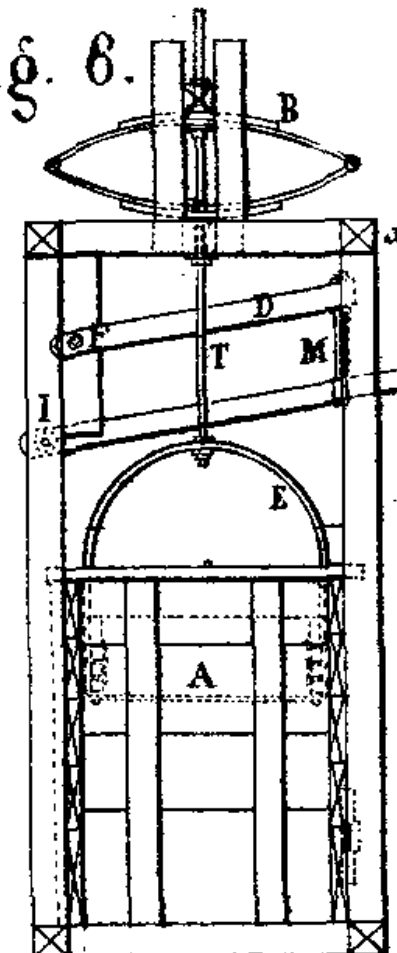


Fig. 7.

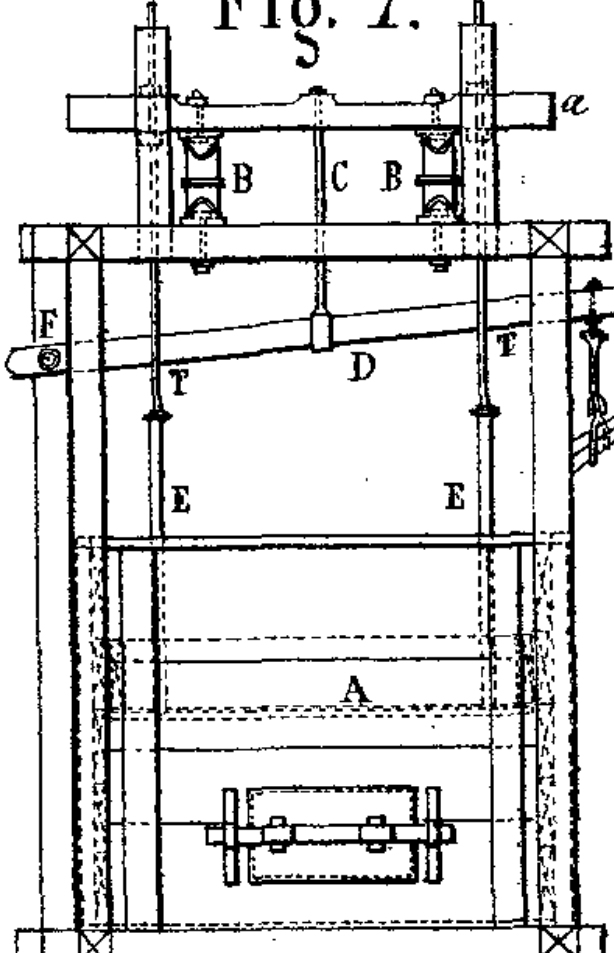


Fig. 14.

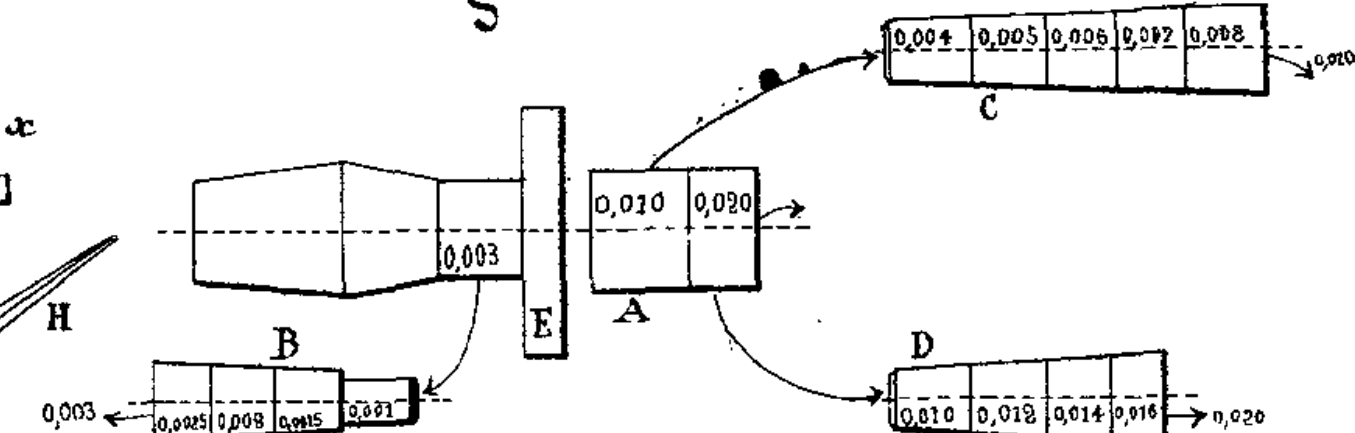


Fig. 15.

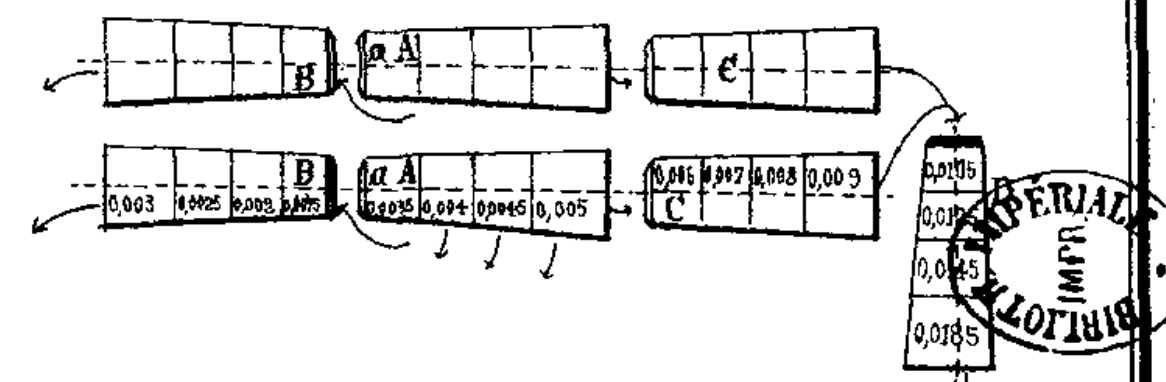


Fig. 8.

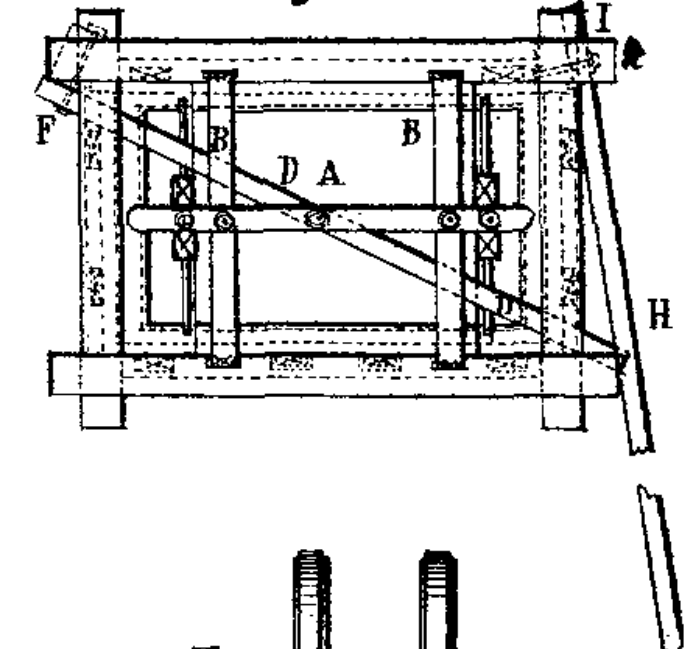


Fig. 12



Fig. 13.

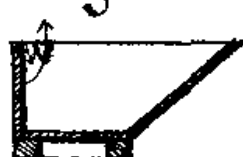


Fig. 17.

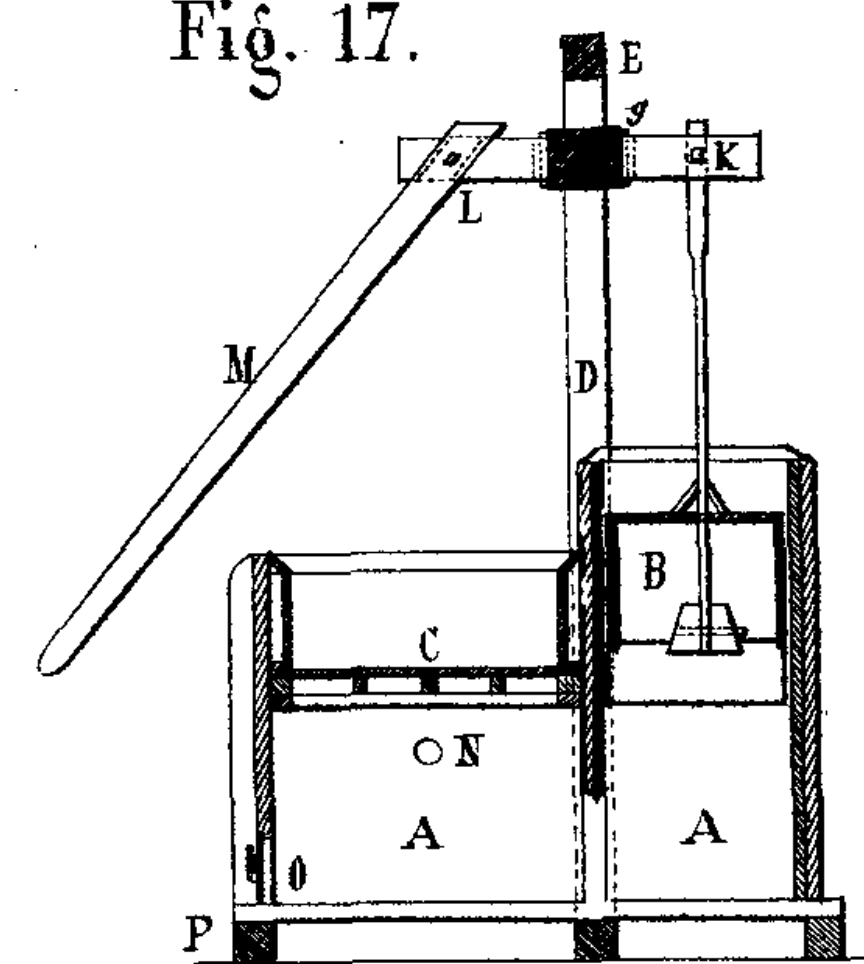


Fig. 18.

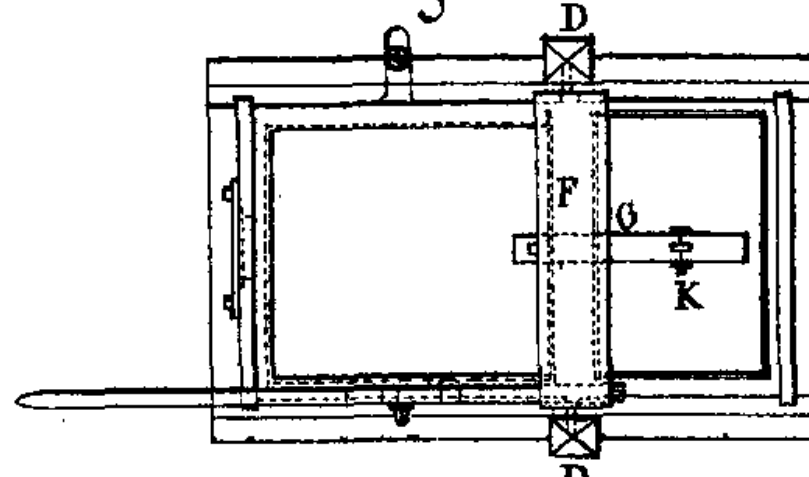


Fig. 19.

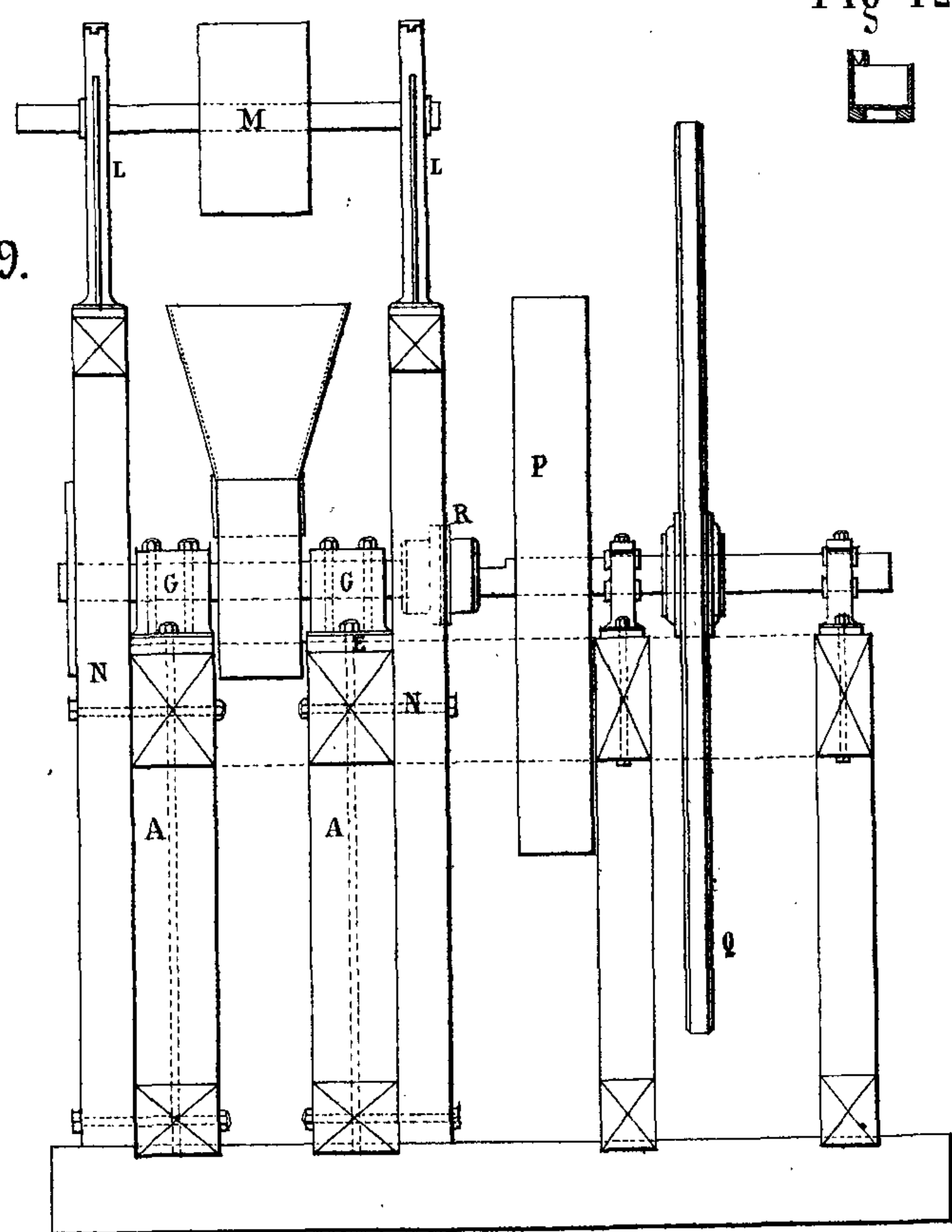
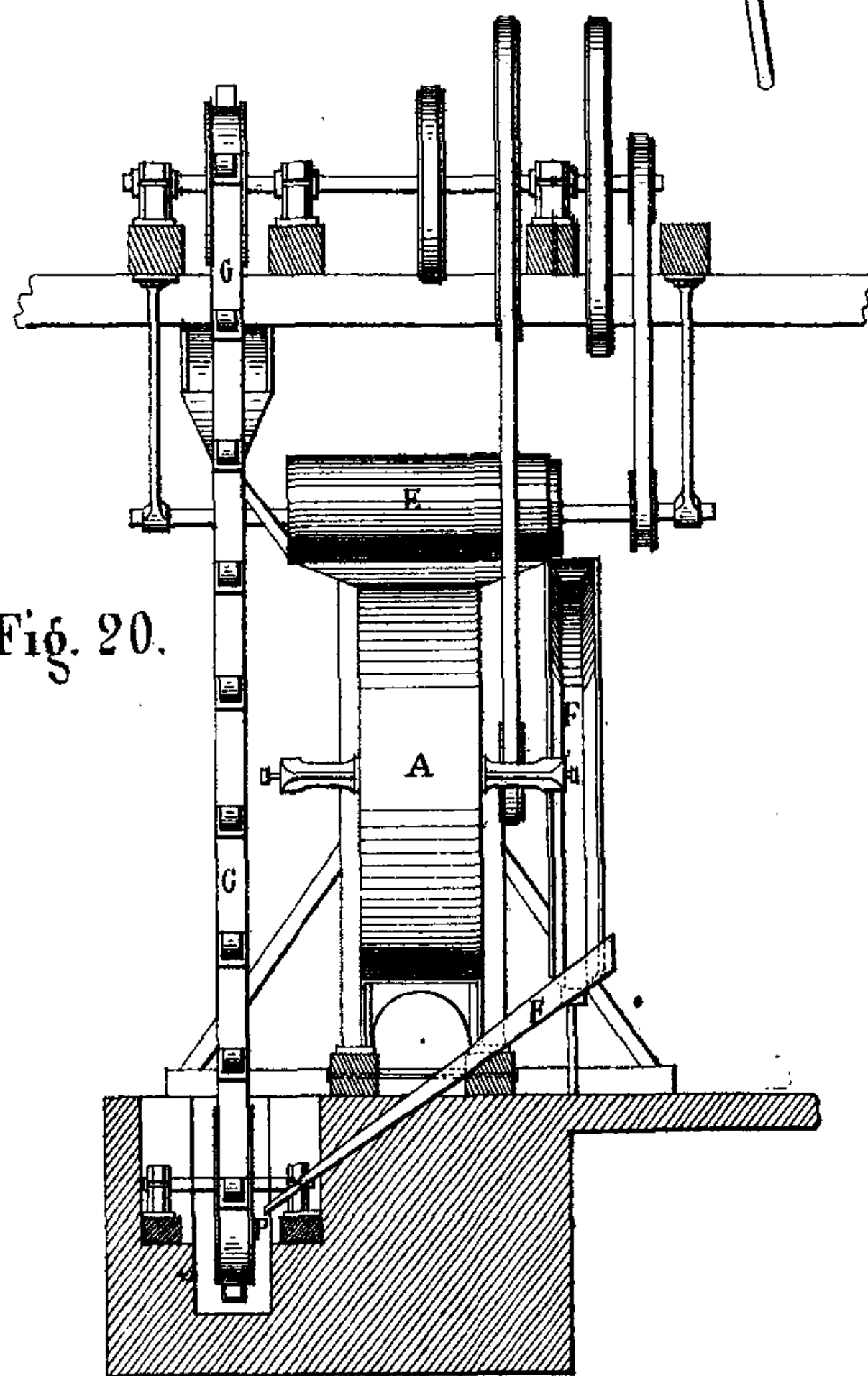


Fig. 20.



Echelle des Fig 1, 2, 3, 4, 17, 18, 19.

Echelle des Fig 5, 20.

Echelle des Fig 6, 7, 8.

Echelle des Fig 9, 11, 12, 13.

Echelle de la Fig. 10.

Echelle des Fig 14, 15, 16.







Fig. 1

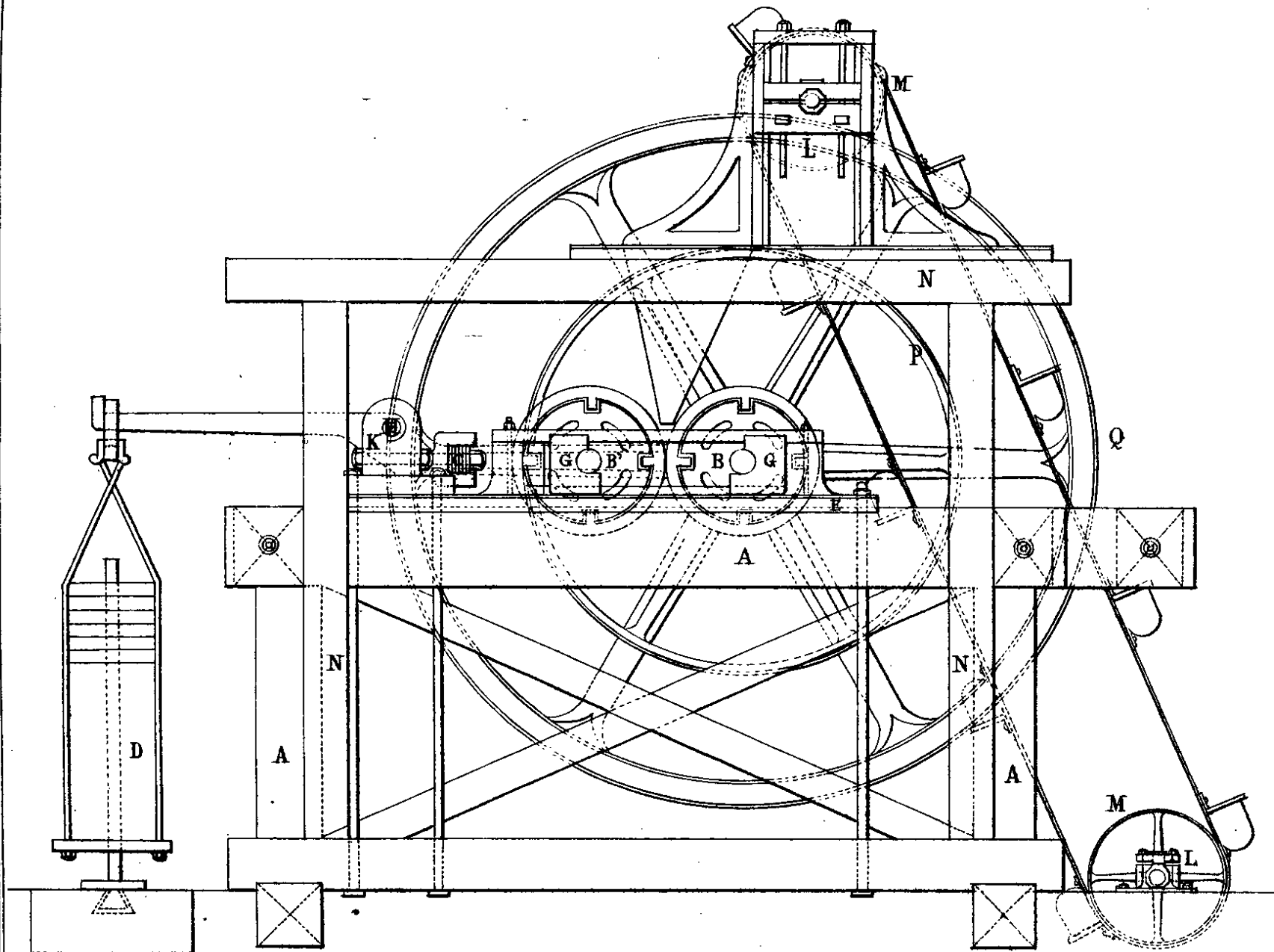


Fig. 3

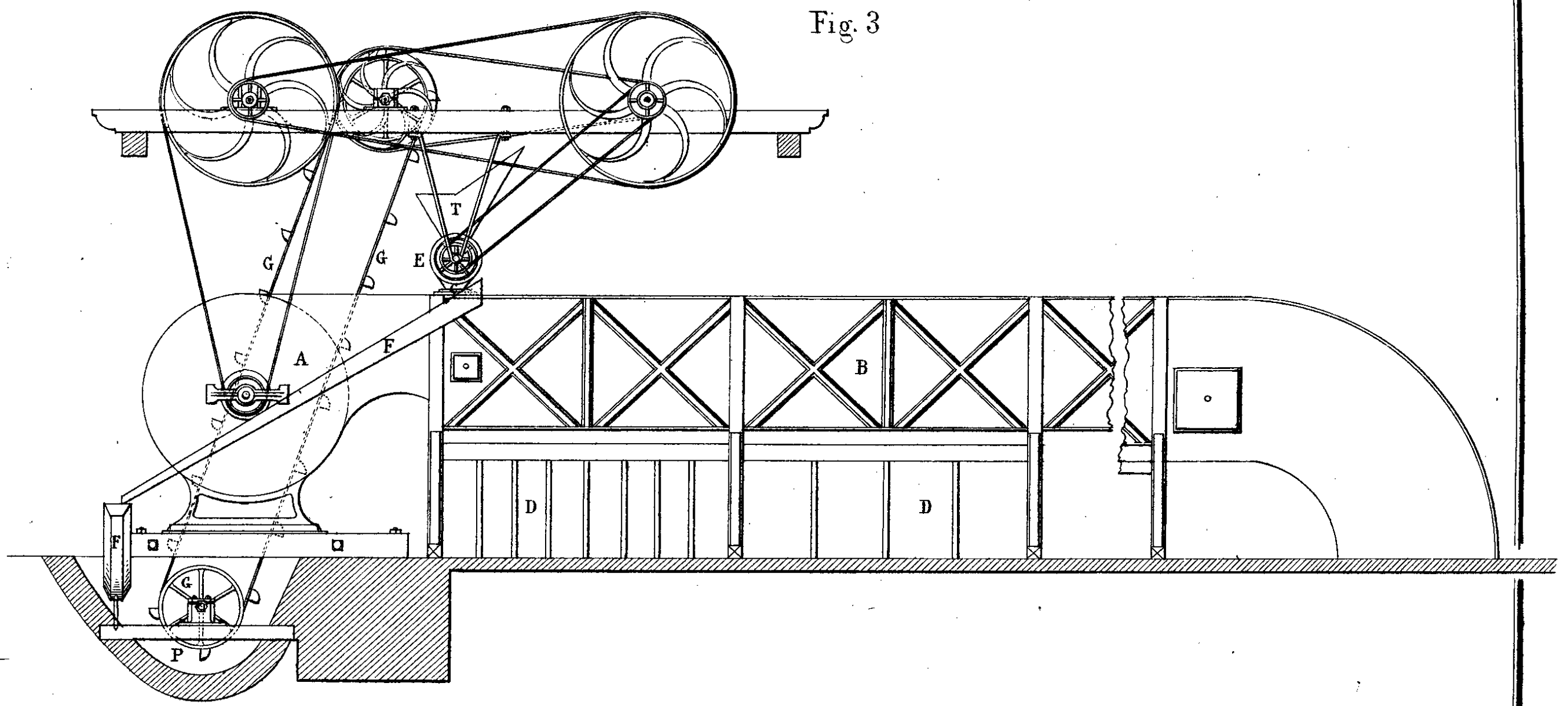


Fig. 2

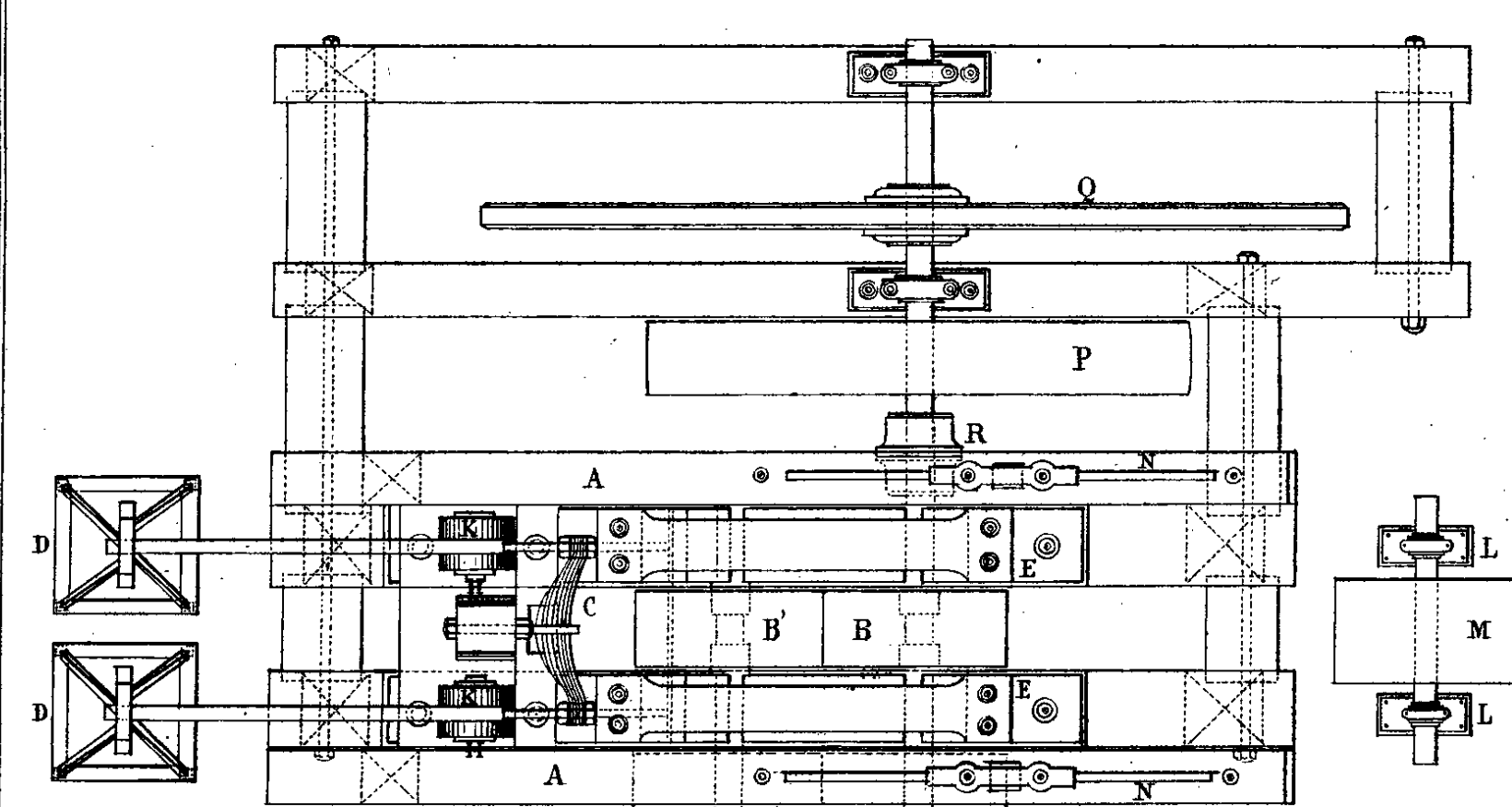
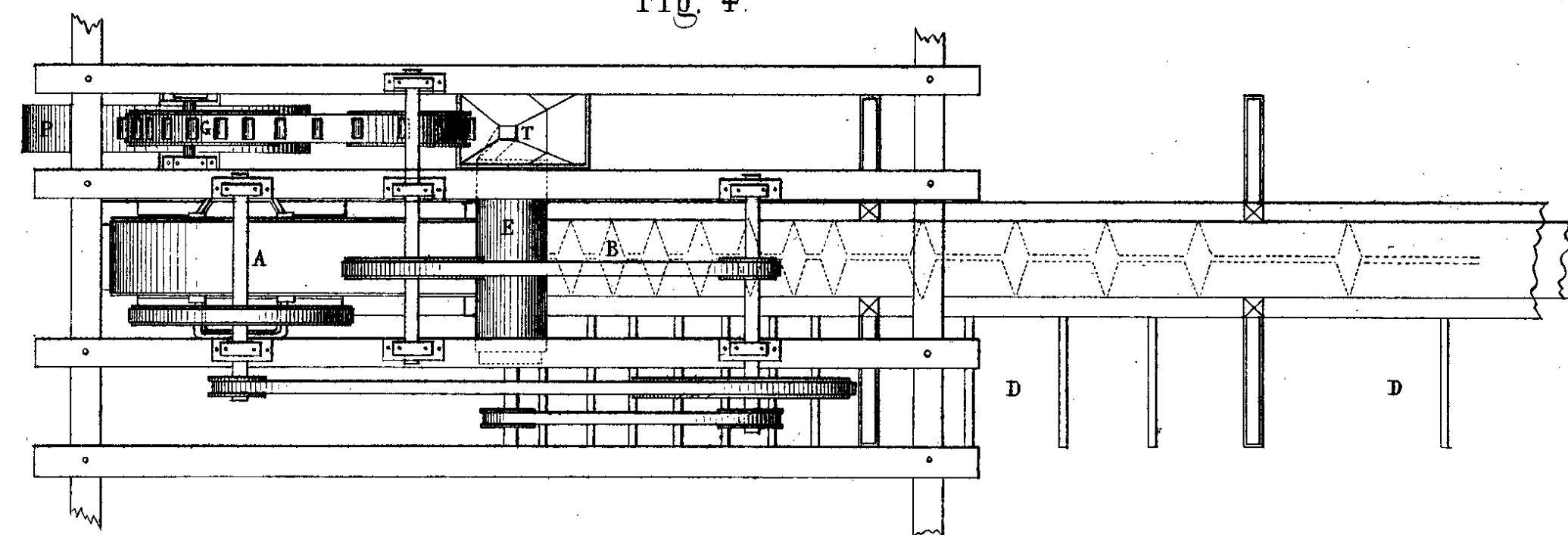
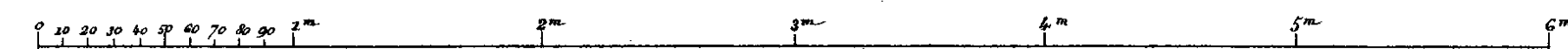


Fig. 4



Echelle des Fig 1, 2.



Echelle des Fig 3, 4.









## Fig. 1

ÉTAT DES  
MINÉRAUX

Fig. 1

MILES ANGLAIS.

Myriamètres

Fig. 2

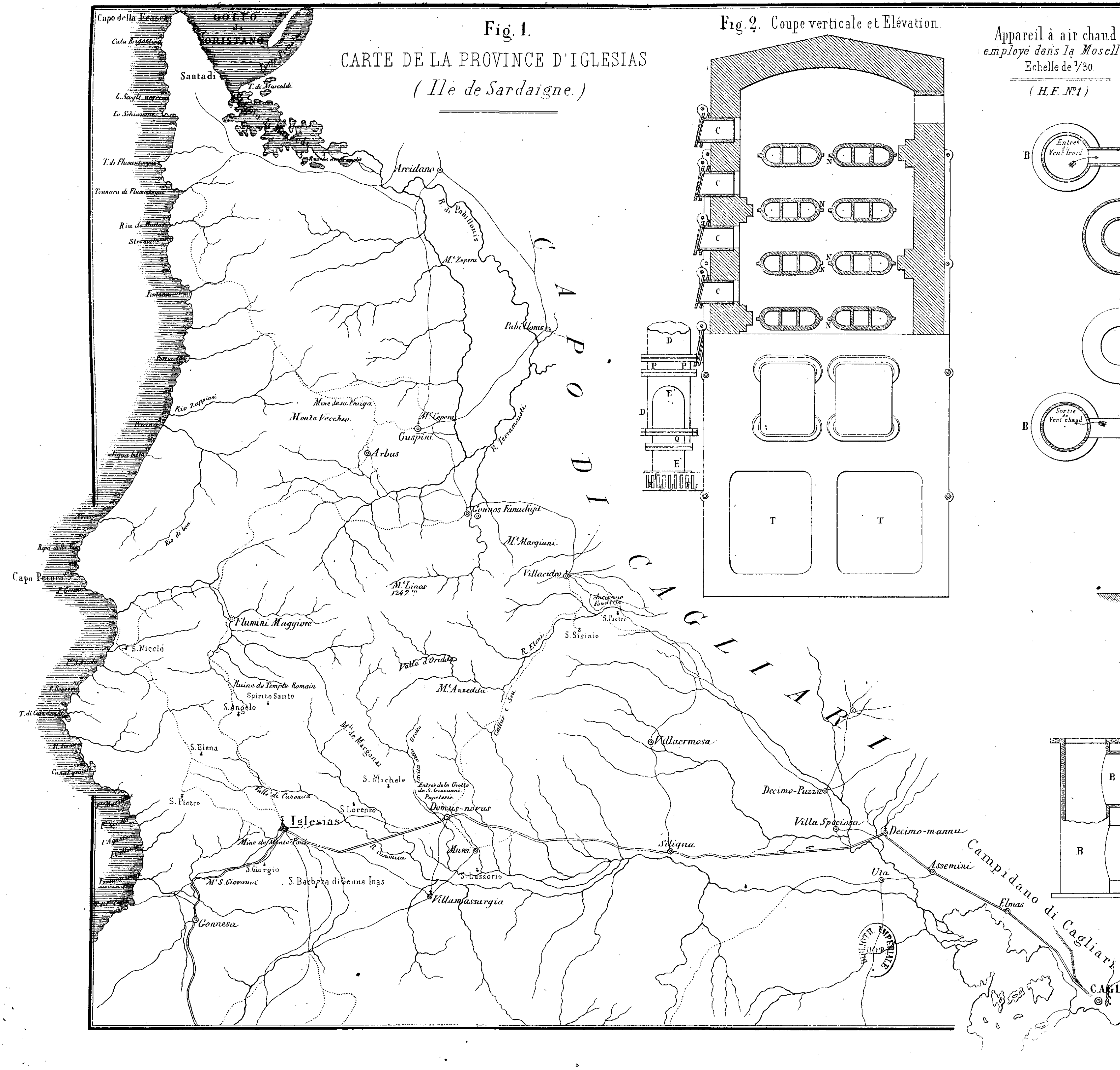
Echelle

*St-Etienne, Rich LAMIZ r de la Loire. 4.*

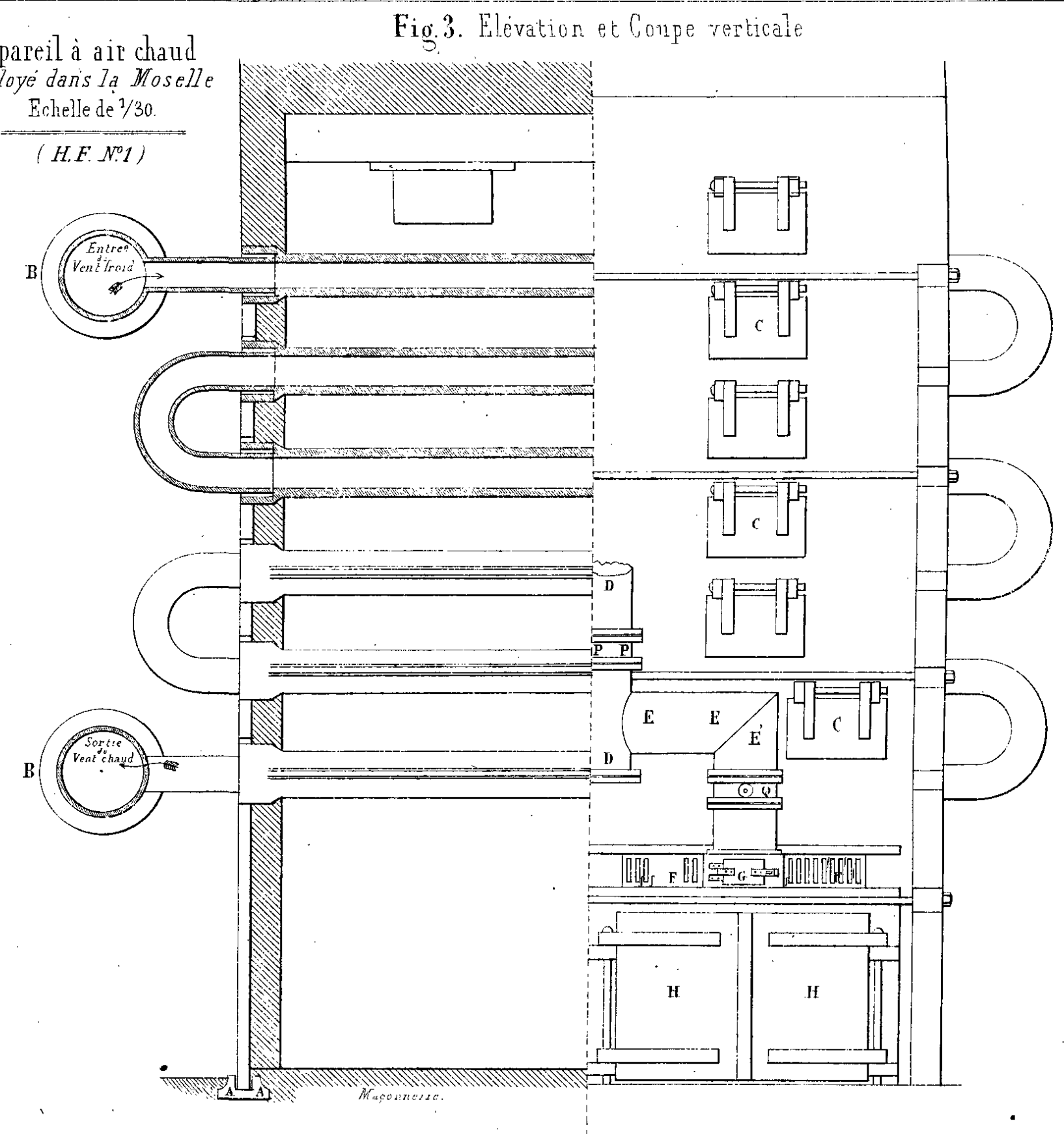




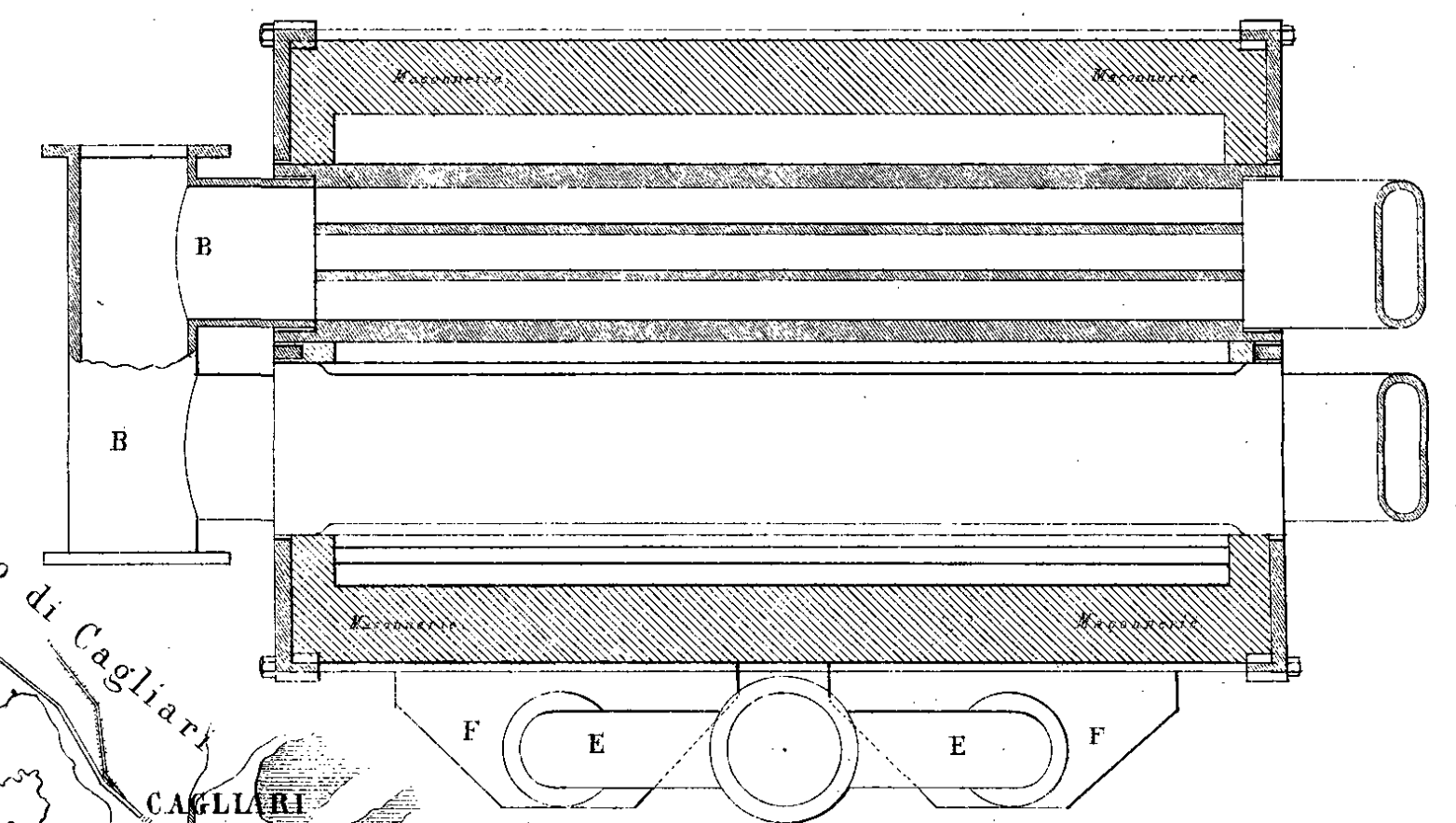




Appareil à air chaud  
employé dans la Moselle  
Echelle de 1/30.  
( H.F. N°1 )



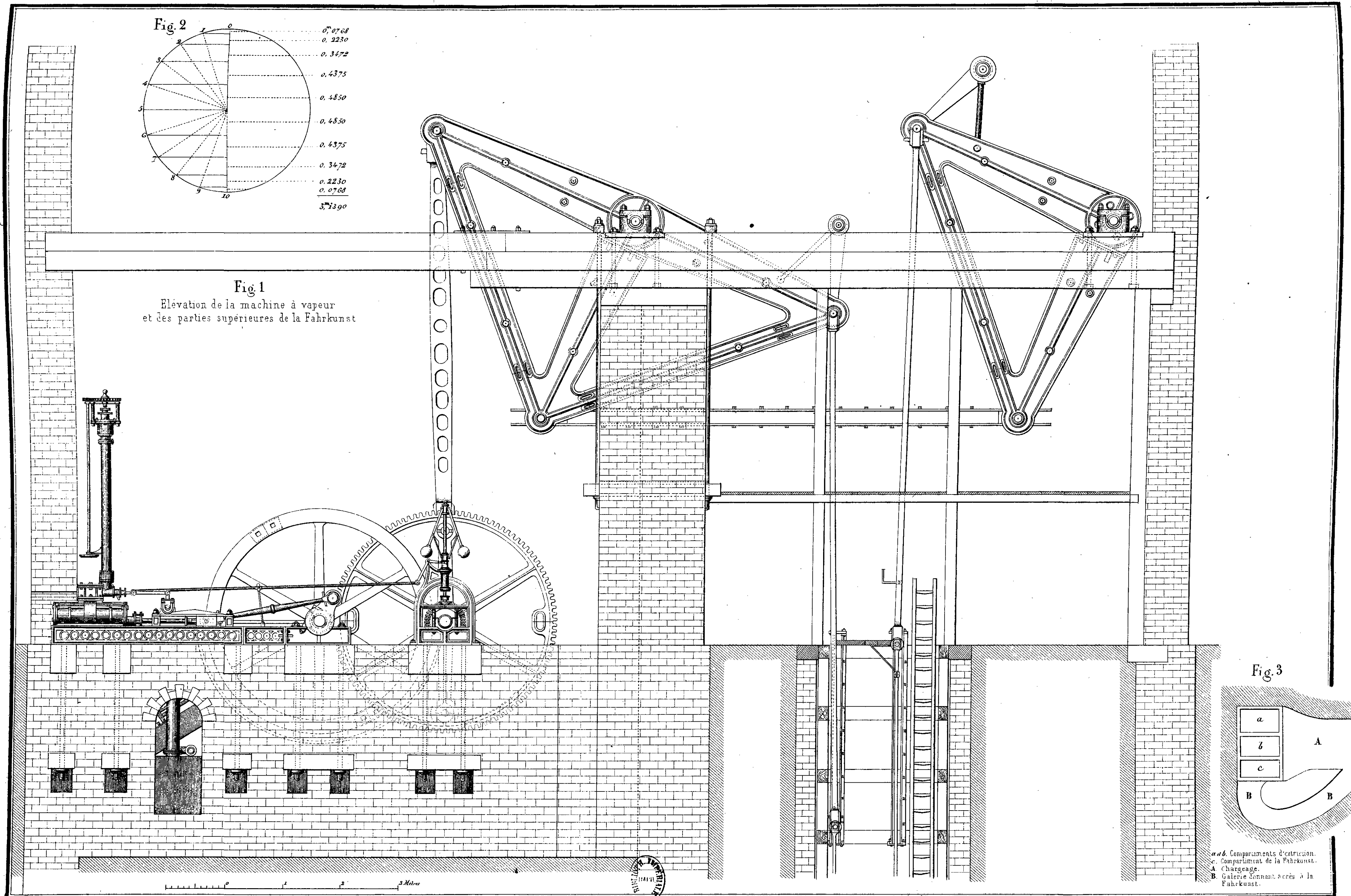
**Fig. 4. Coupe horizontale.**

















*Coupes du Puits et de la Fahrkunst.*

Coupe suivant A B Fig. 6 et 7.

Coupe suivant C D Fig. 6 et 7.

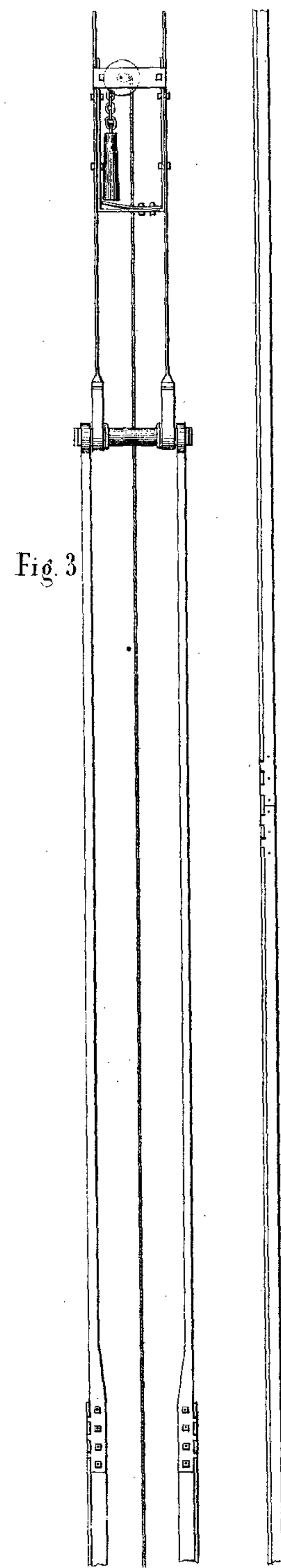
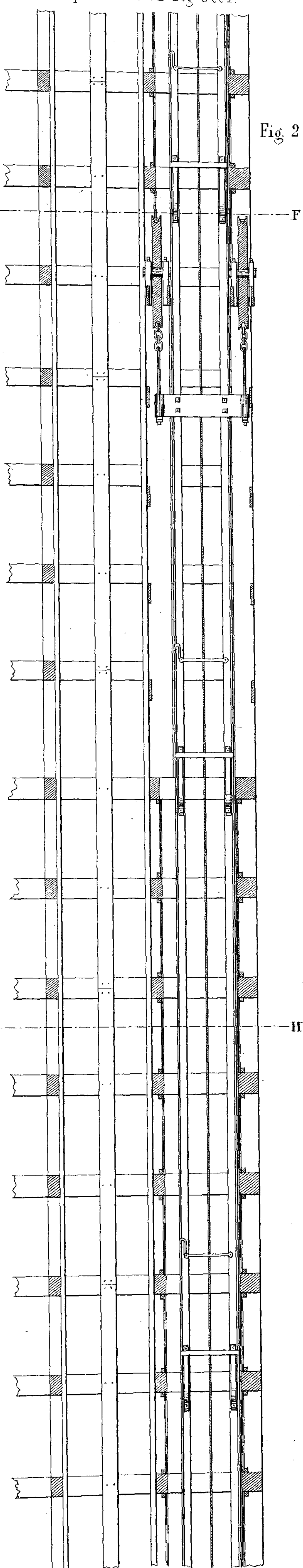
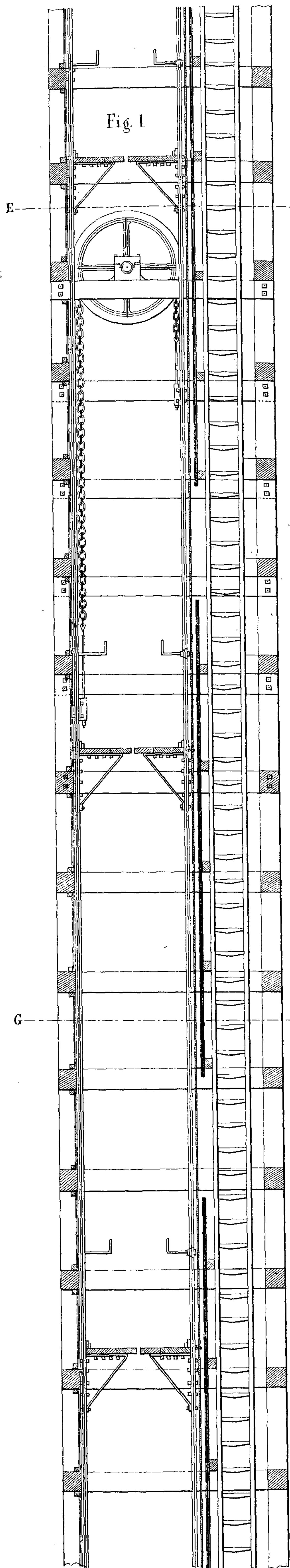
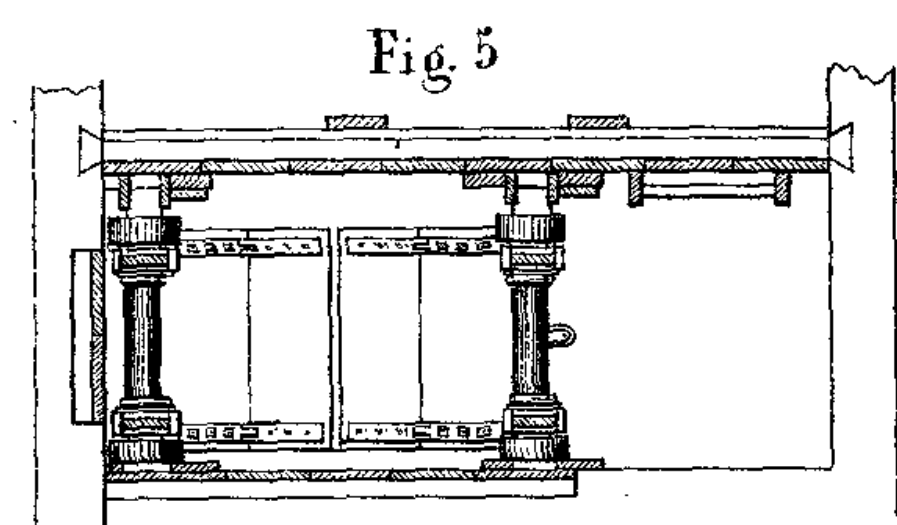
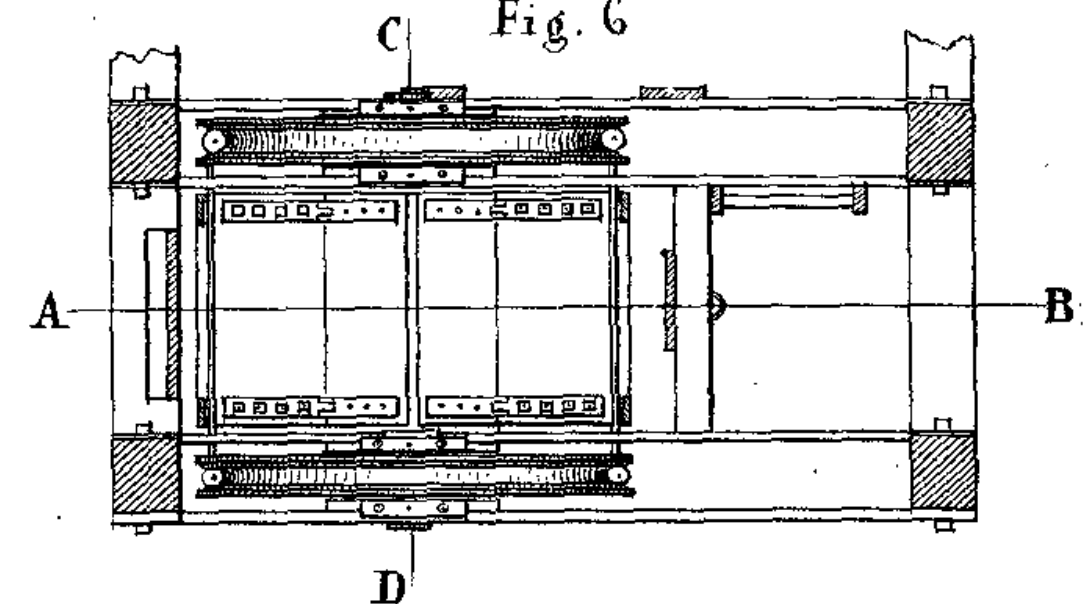


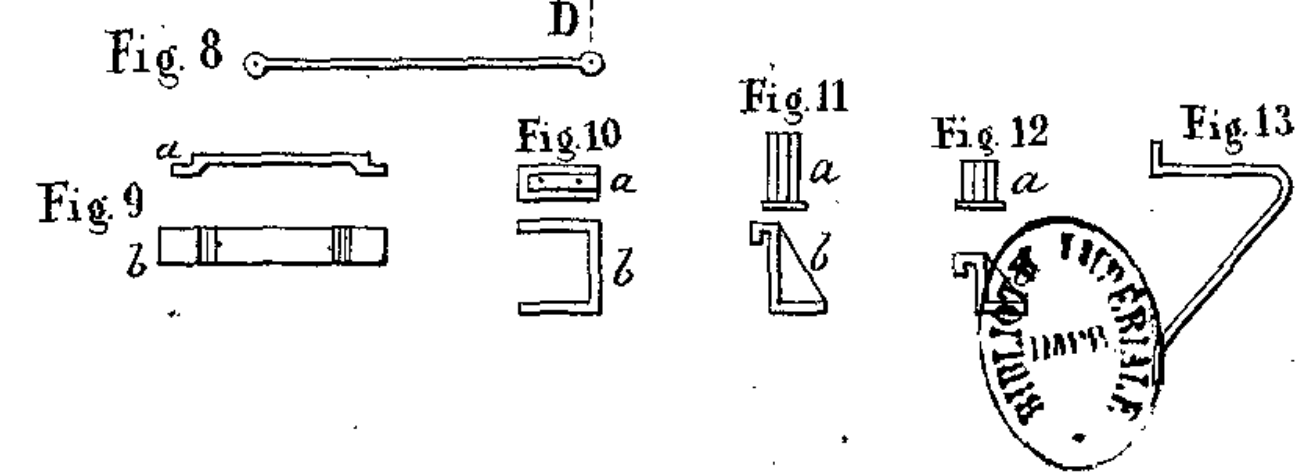
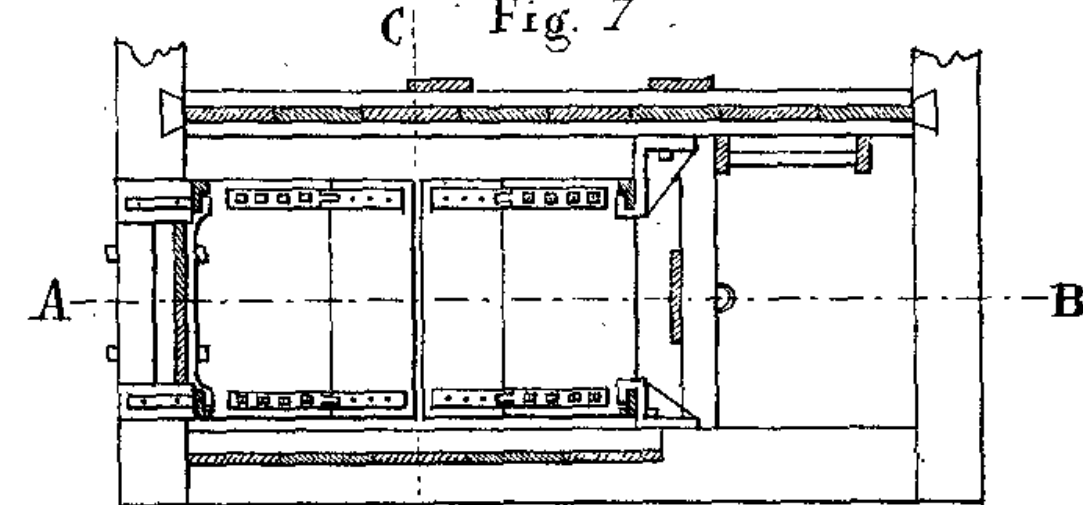
Fig. 4



Coupe suivant E. F. Fig. 1 et 2.



Coupe suivant G. H. Fig. 1 et 2.



Echelle







Fig 1.  
Coupe EF Fig 3.

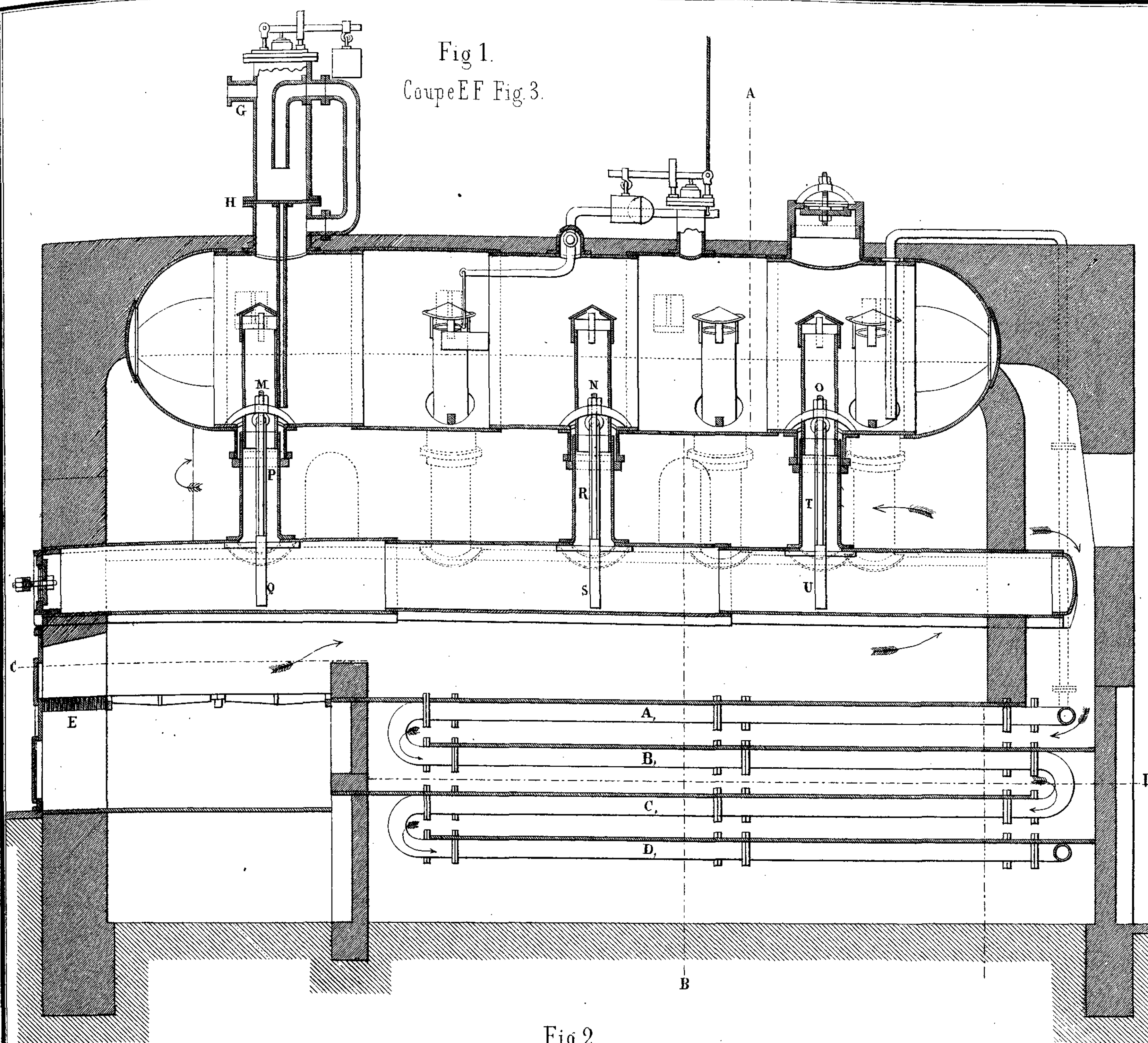


Fig. 3.  
Coupe AB Fig 1

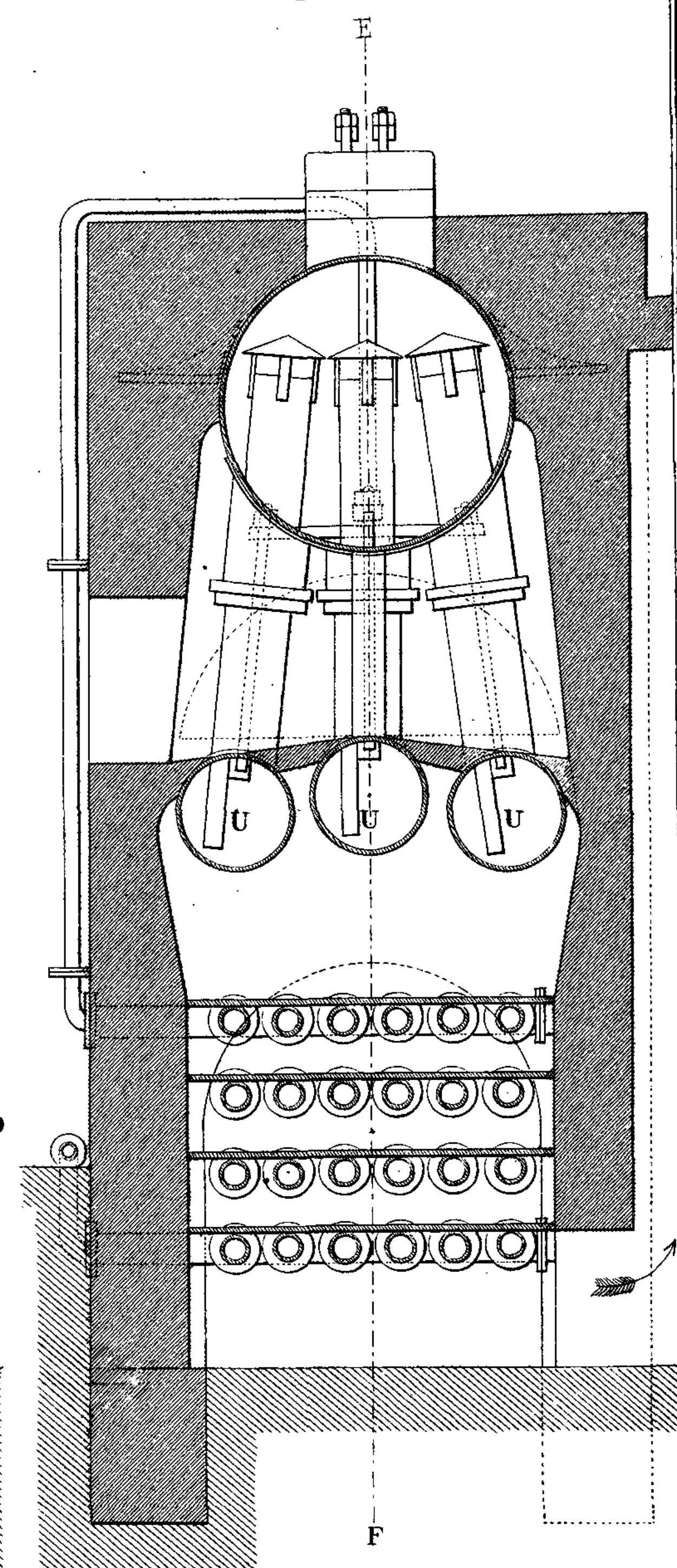


Fig 2  
Coupe CD Fig 1

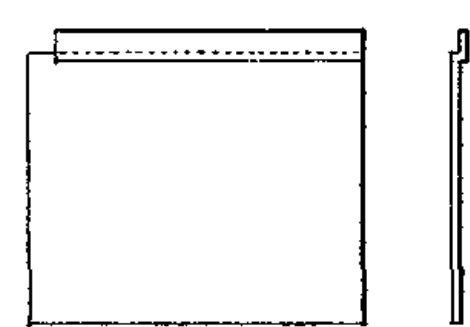
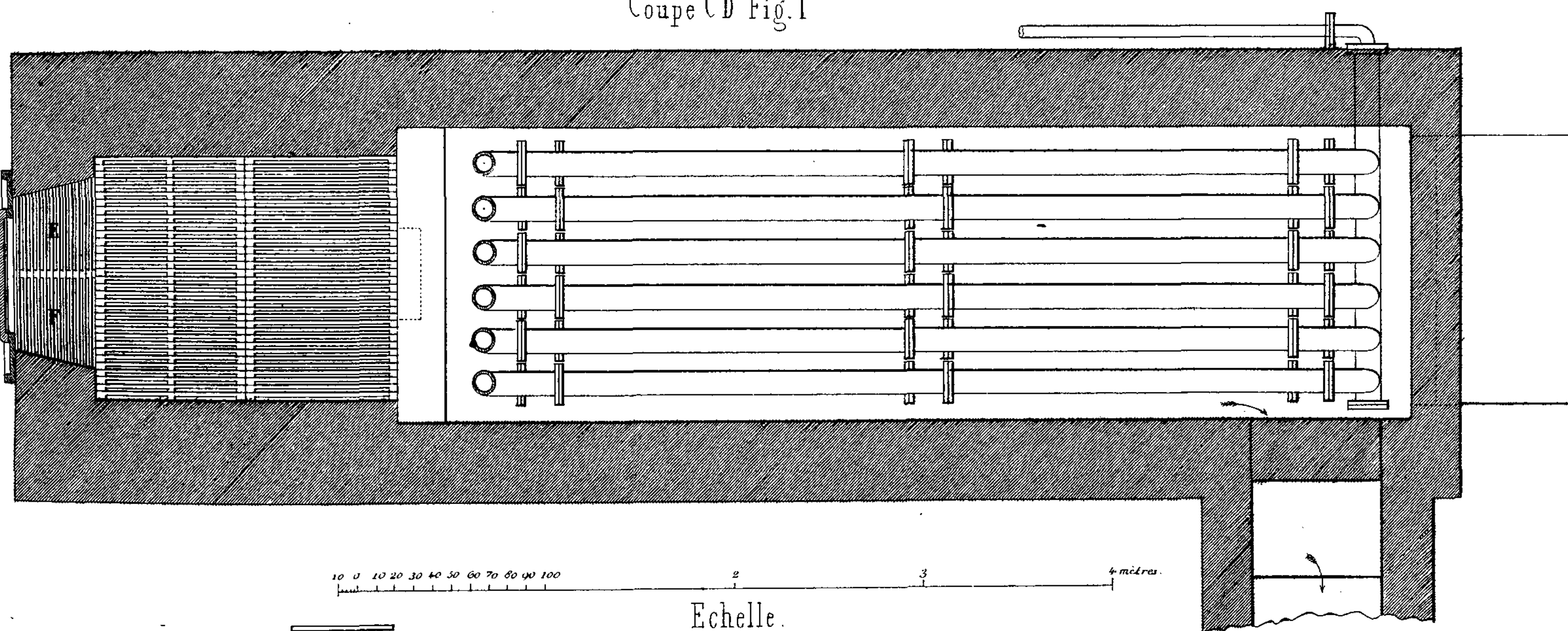


Fig 4.

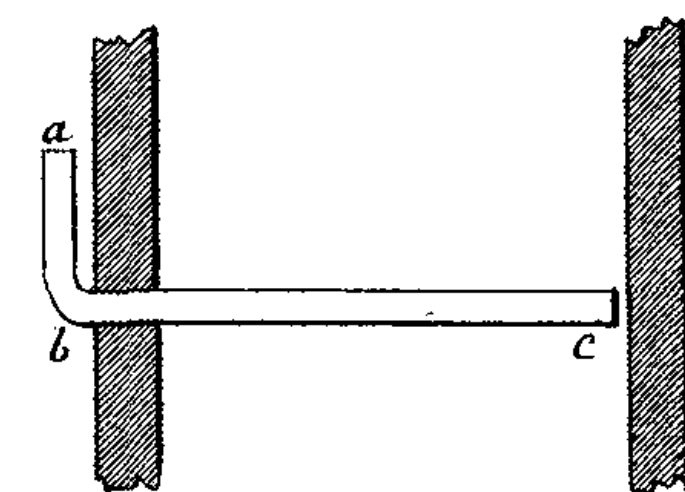
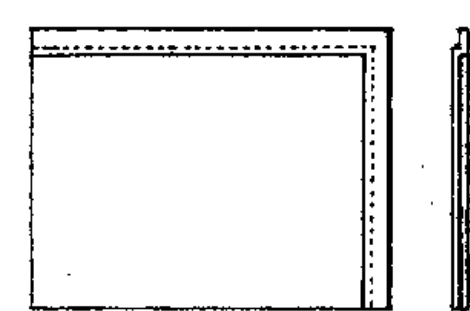


Fig 6

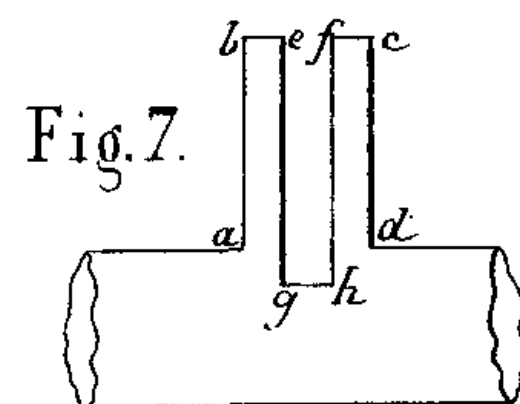


Fig 7.

Fig 5.

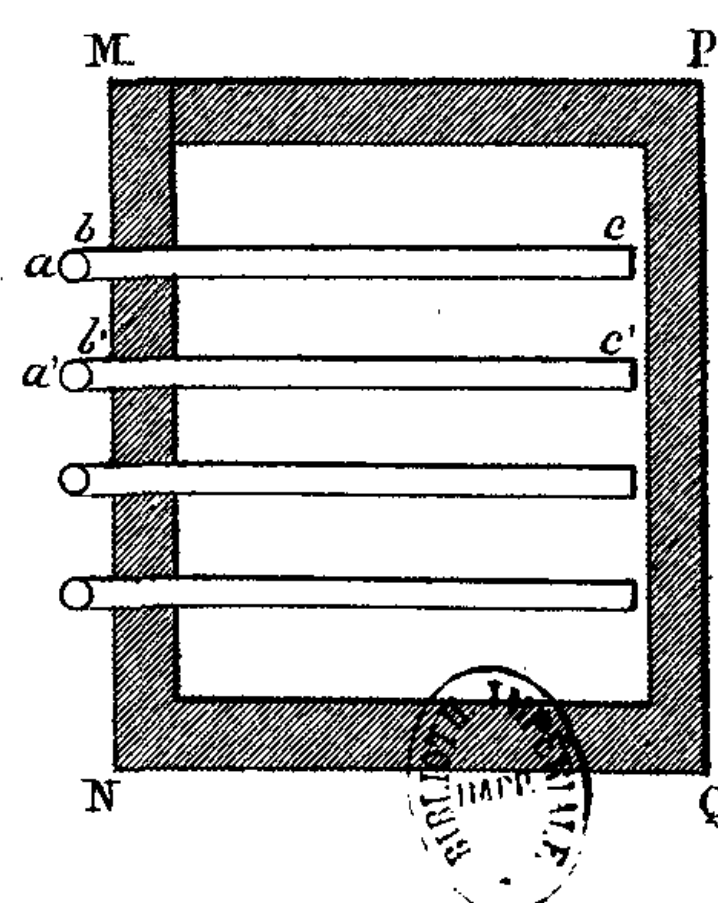
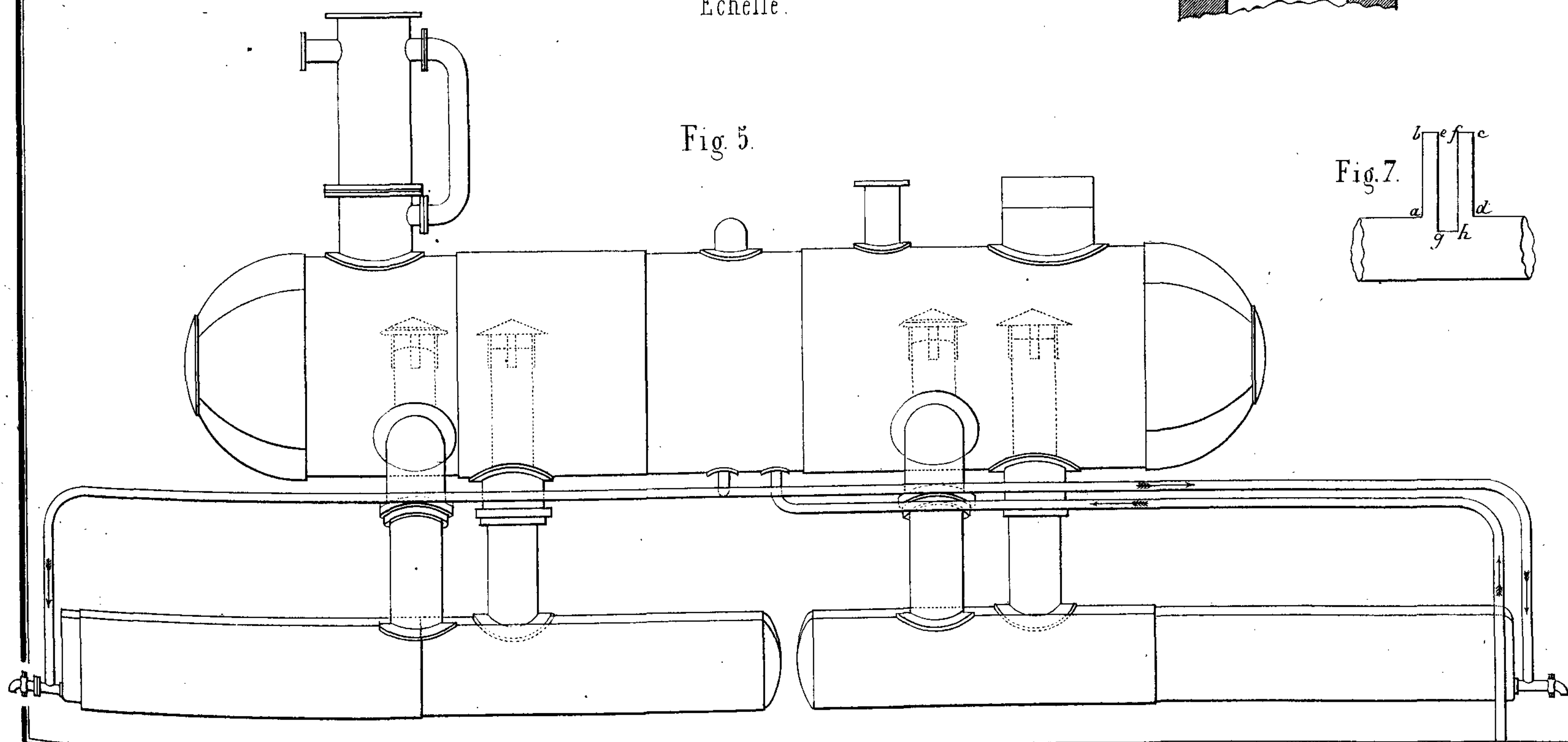








Fig. 1. Coupes prises aux Carrières de Buxières-la-Grue.  
Coupe de la Carrière du Champ de Limoges.

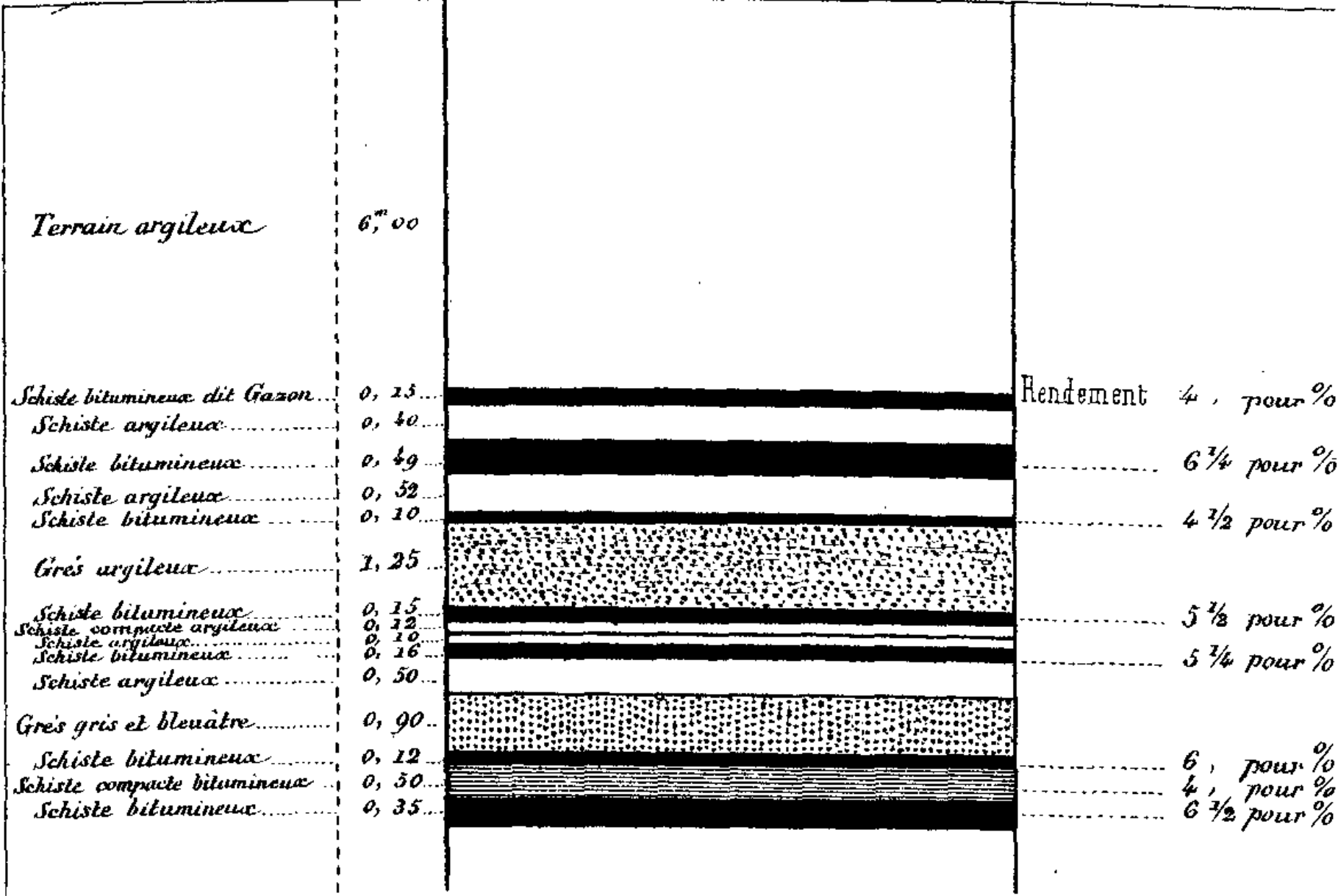


Fig. 2.  
Coupe au Puits du Manège et au Champ des Olivandes.

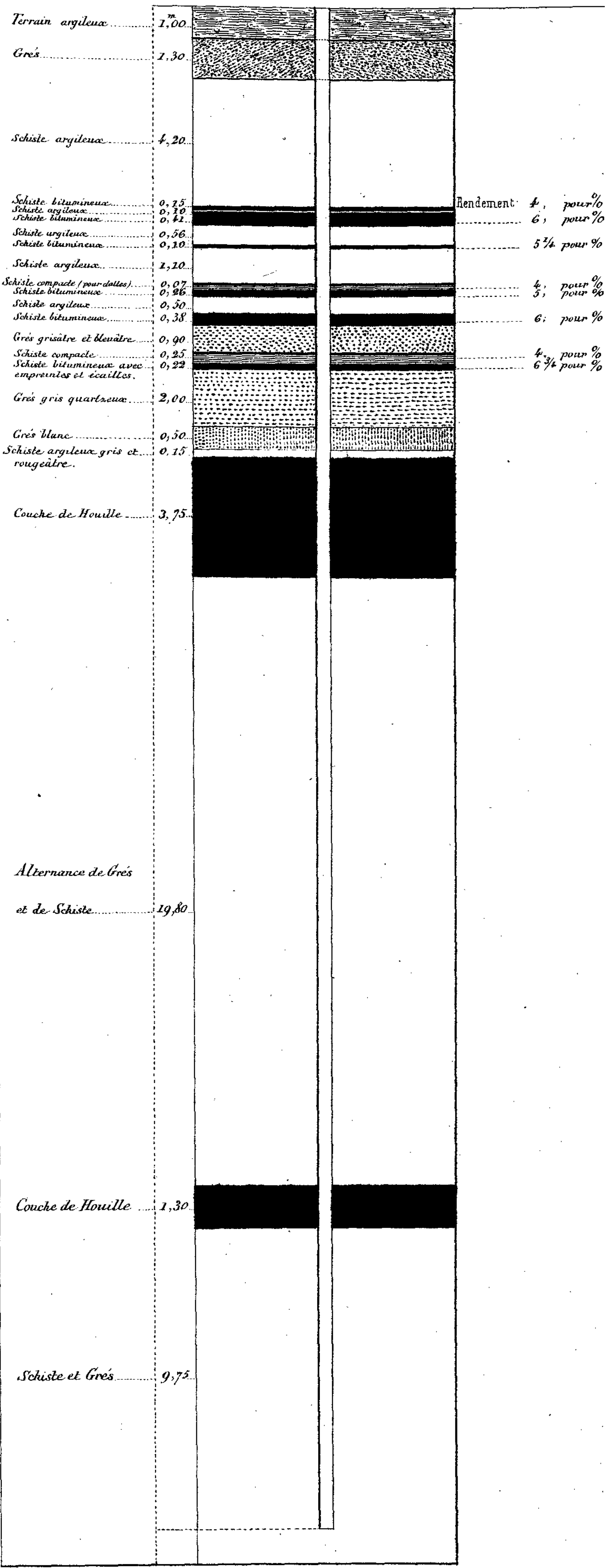


Fig. 3.  
Coupe de la Carrière du Champ-long

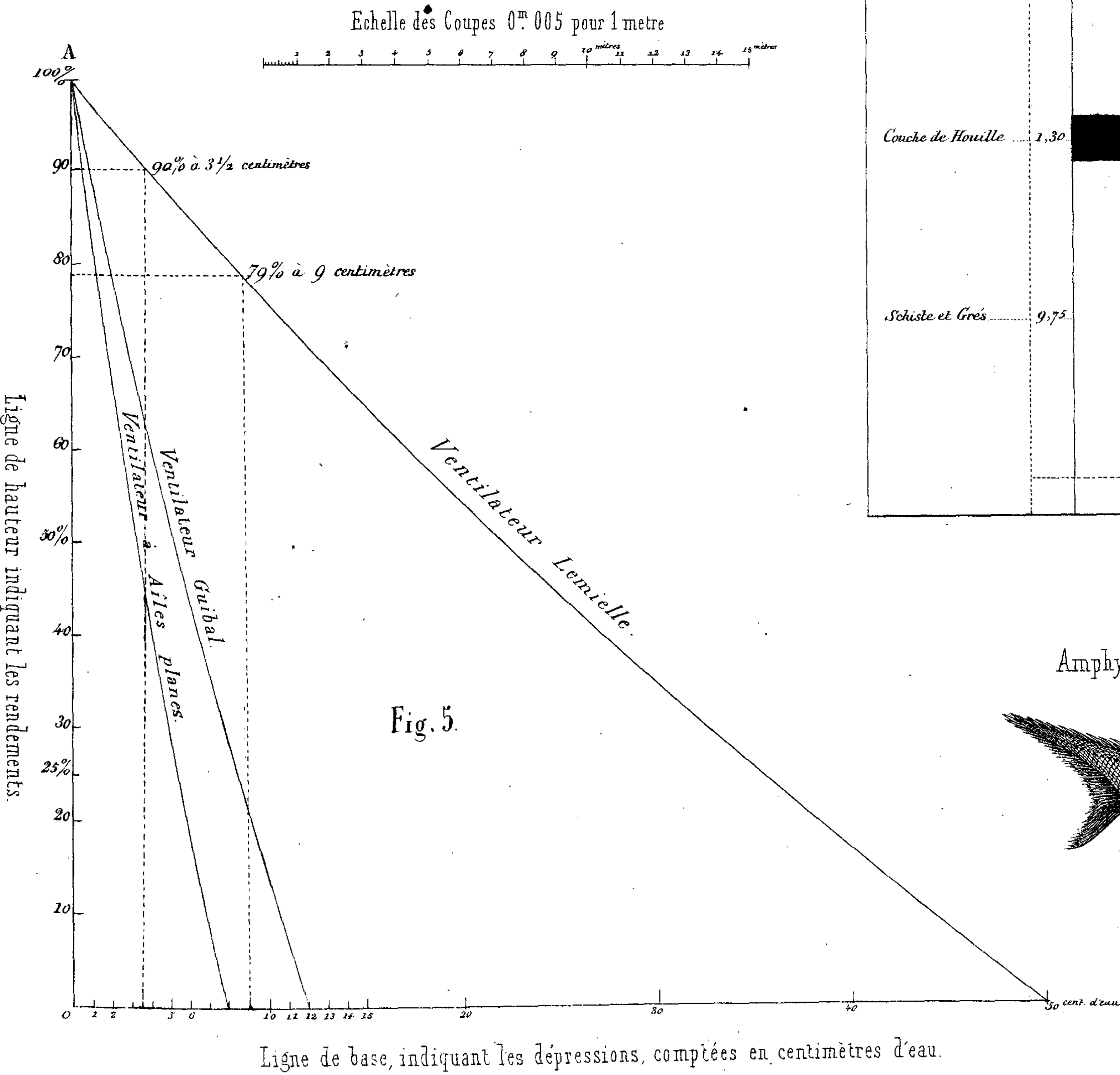
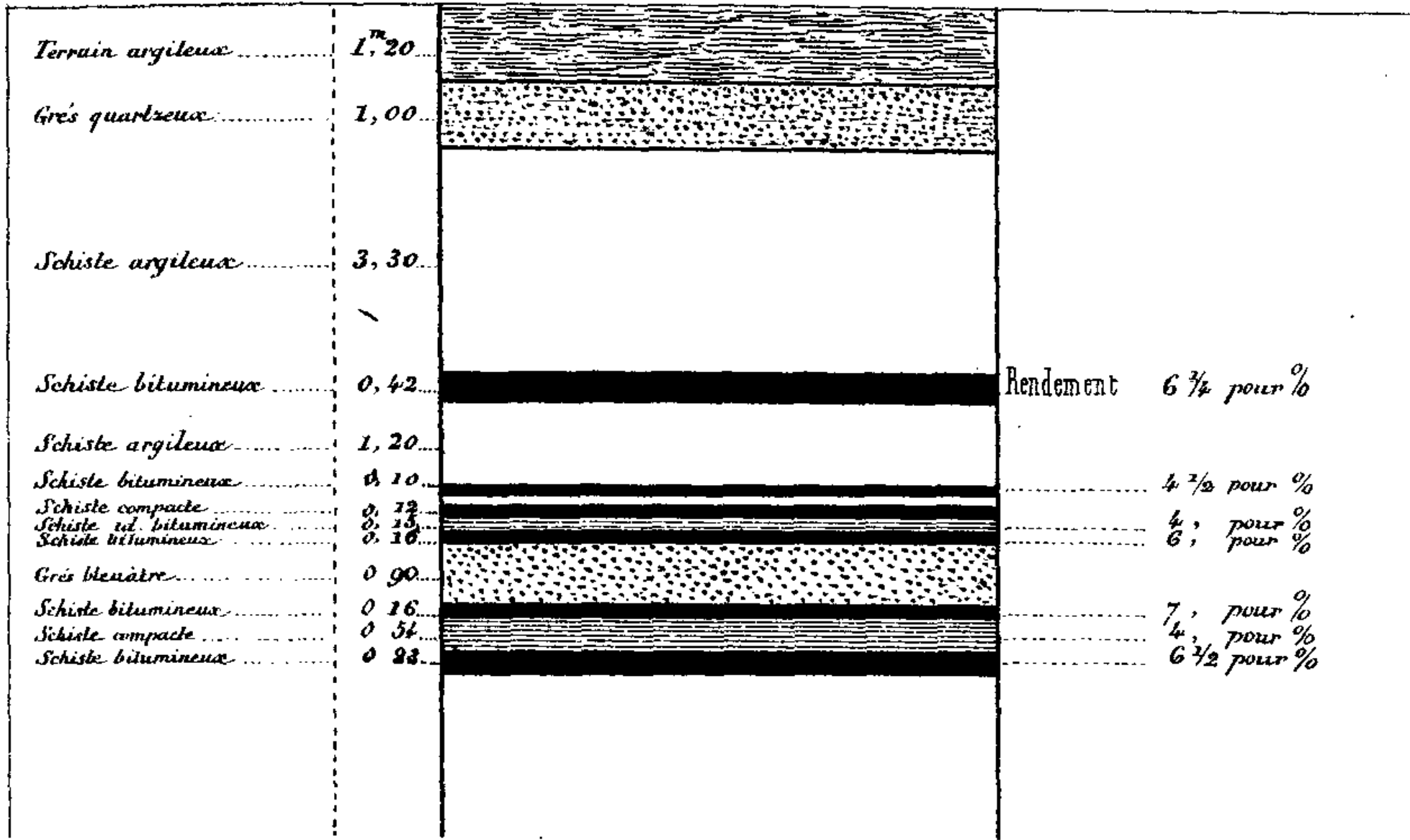


Fig. 4.  
Amphipterus (moitié de grandeur naturelle)

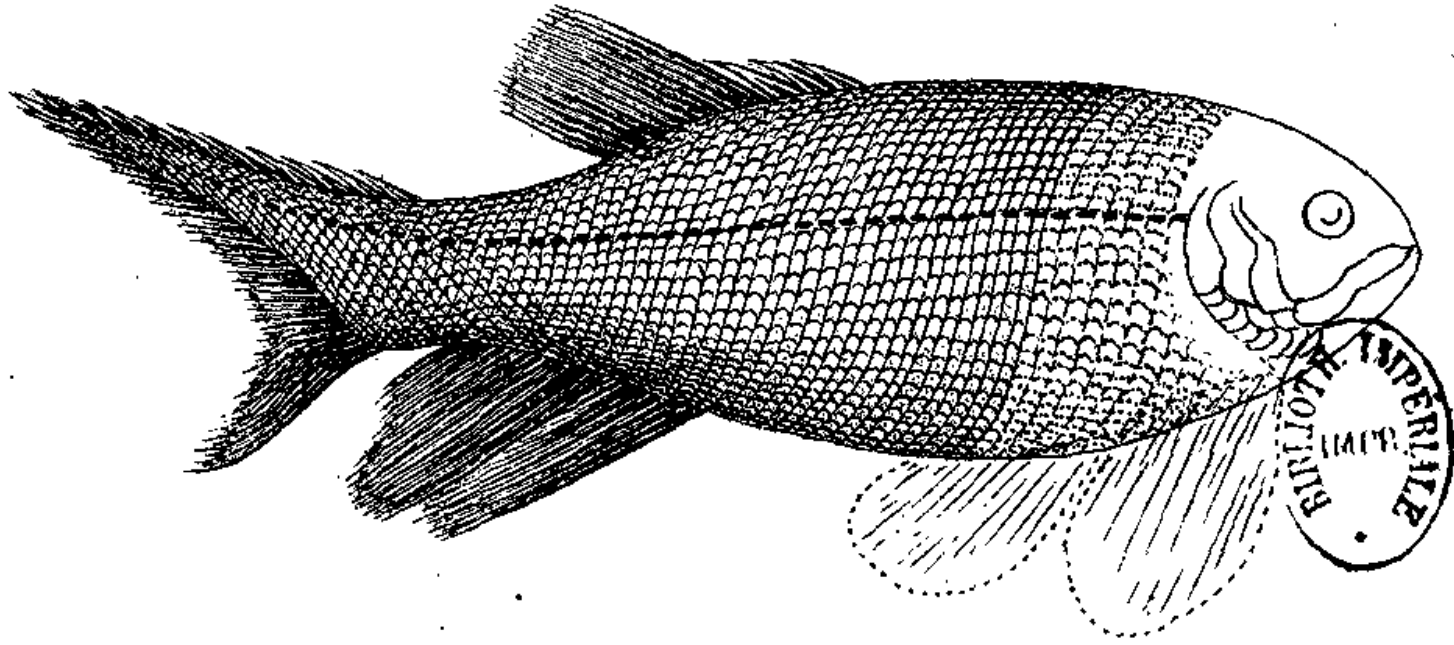








Fig 1.  
Plan.

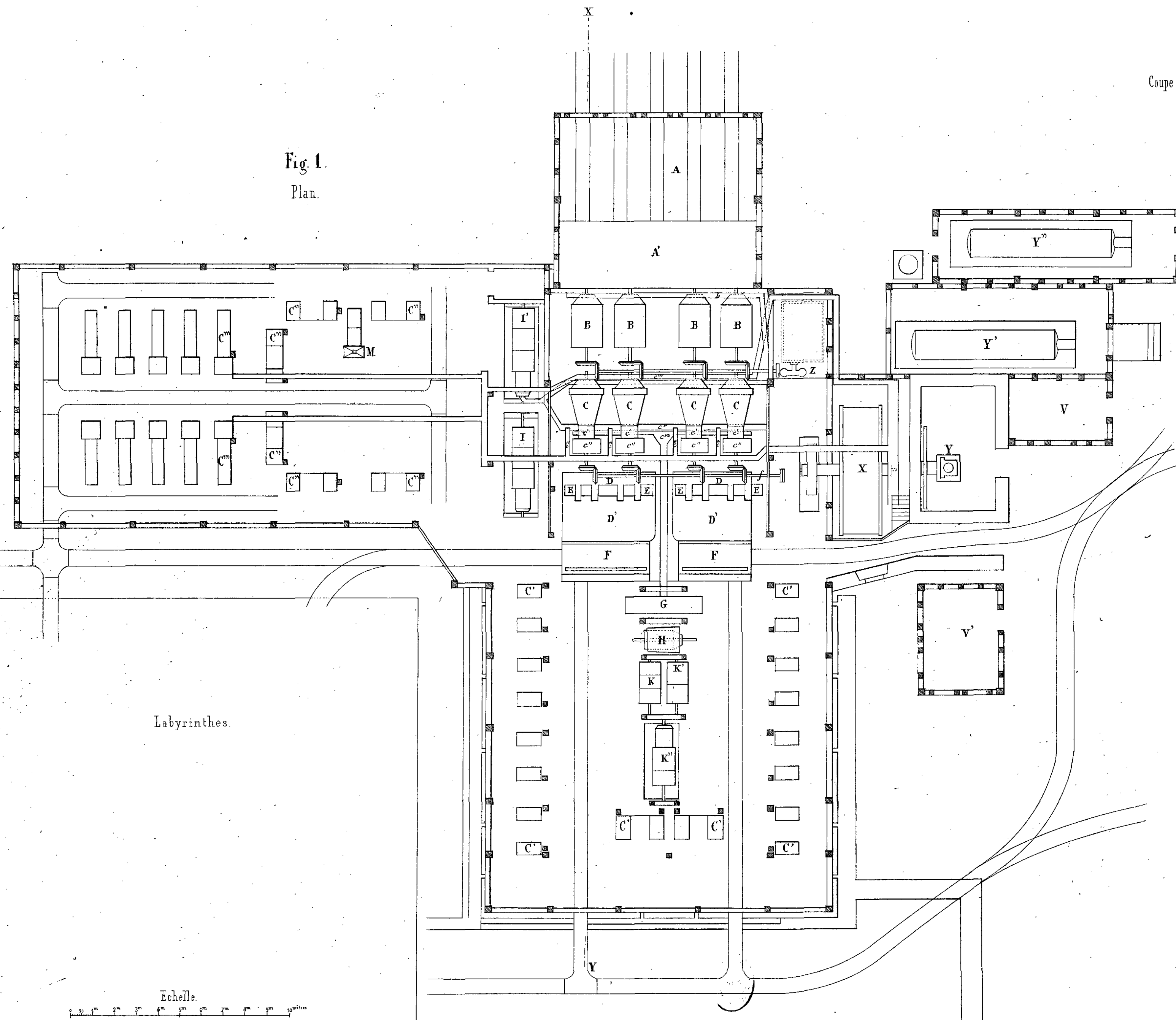
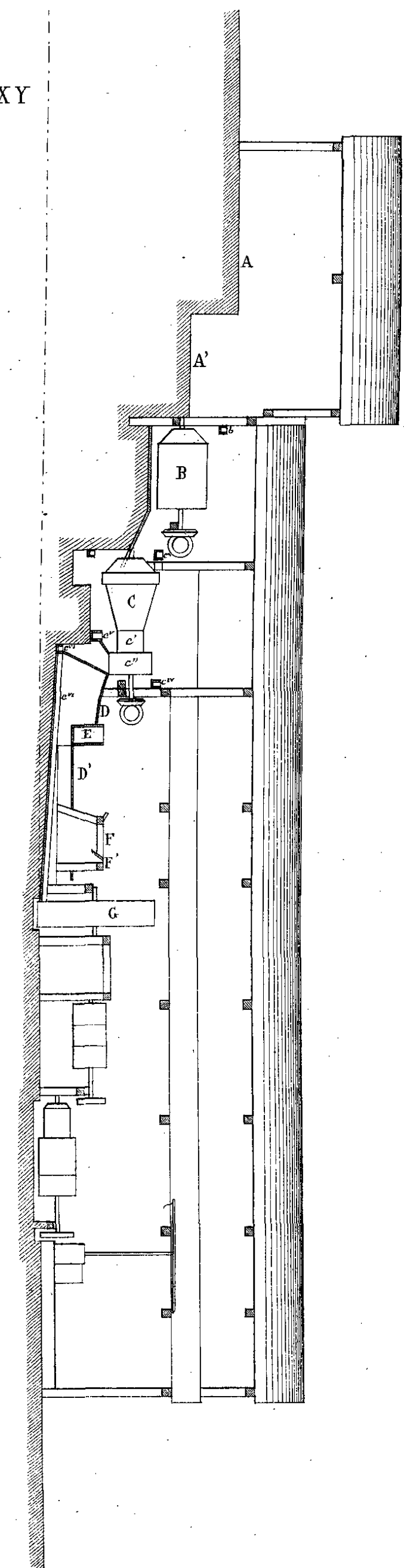


Fig 2.  
Coupe verticale suivant XY









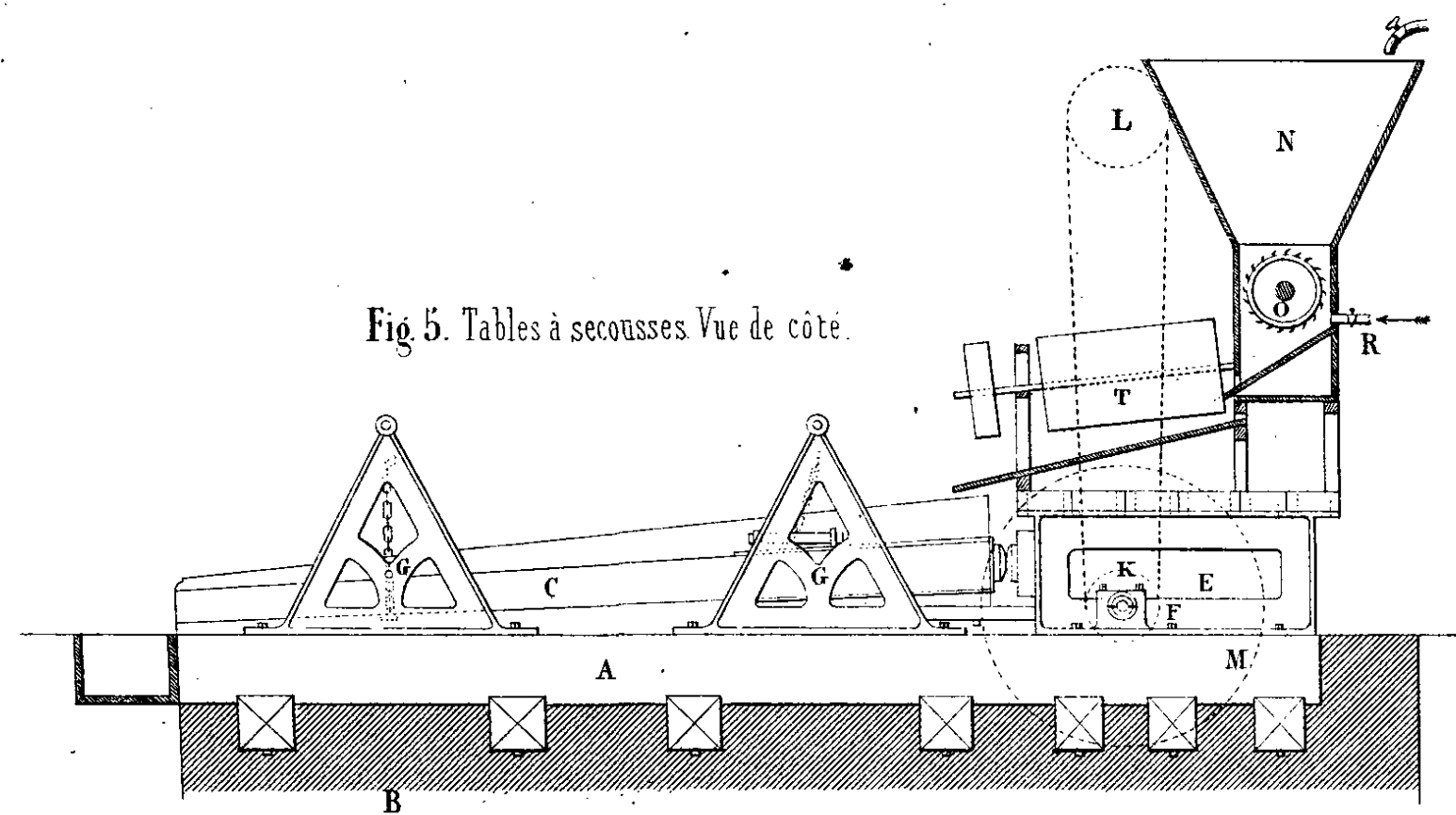


Fig. 5. Tables à secousses Vue de côté.

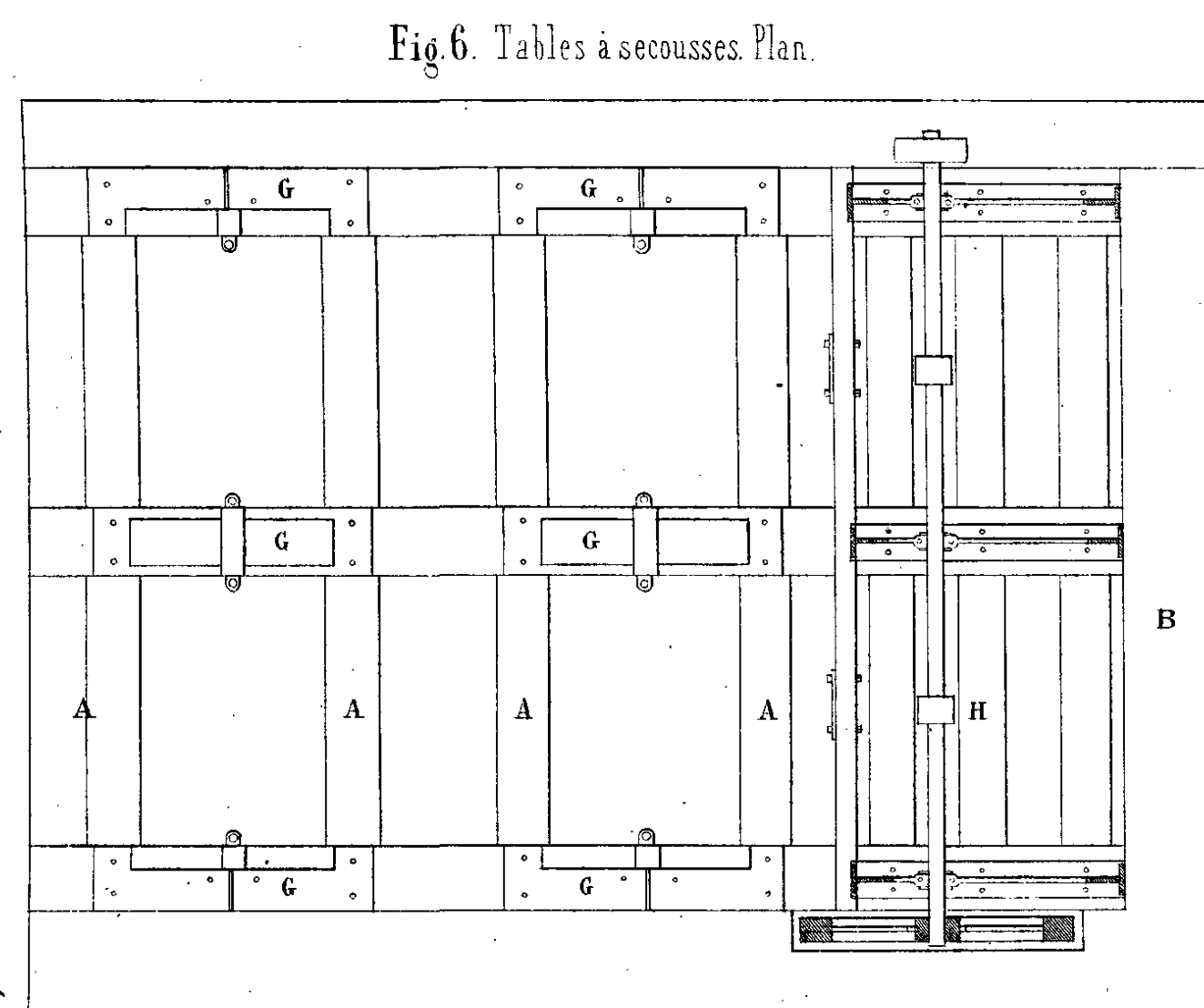


Fig. 6. Tables à secousses. Plan.

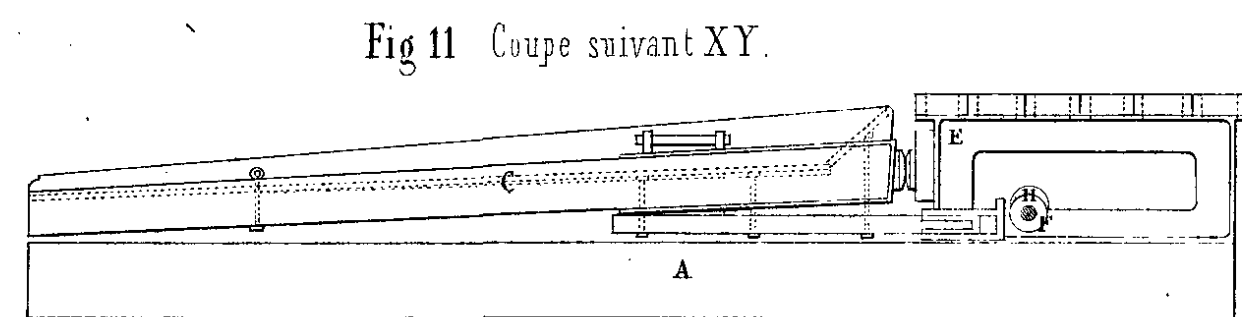


Fig. 11. Coupe suivant XY.

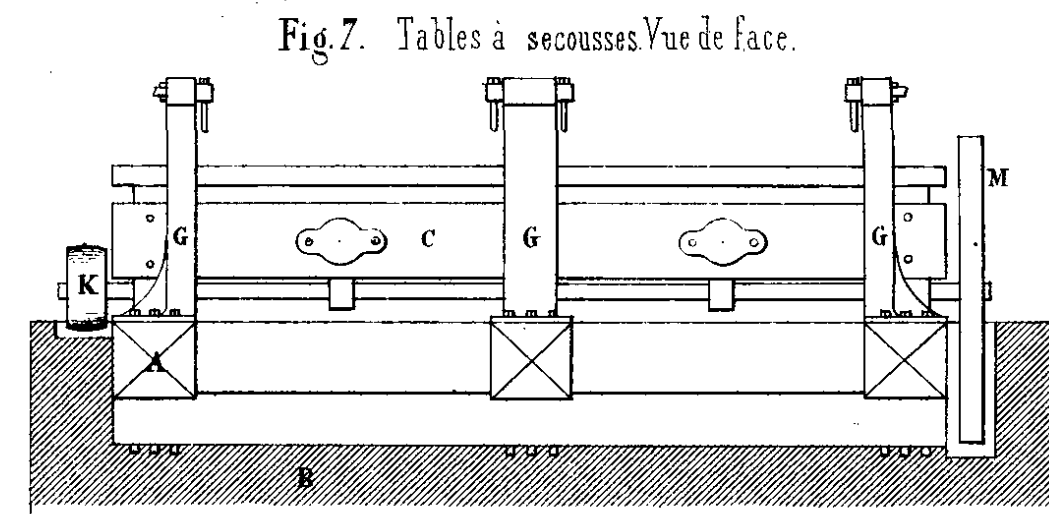
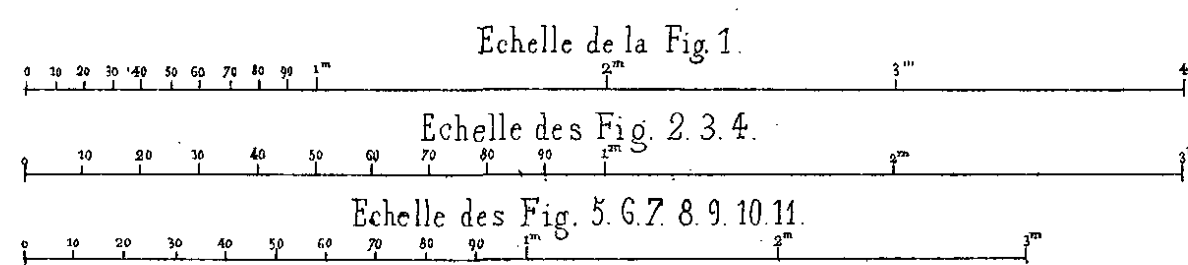


Fig. 7. Tables à secousses Vue de face.

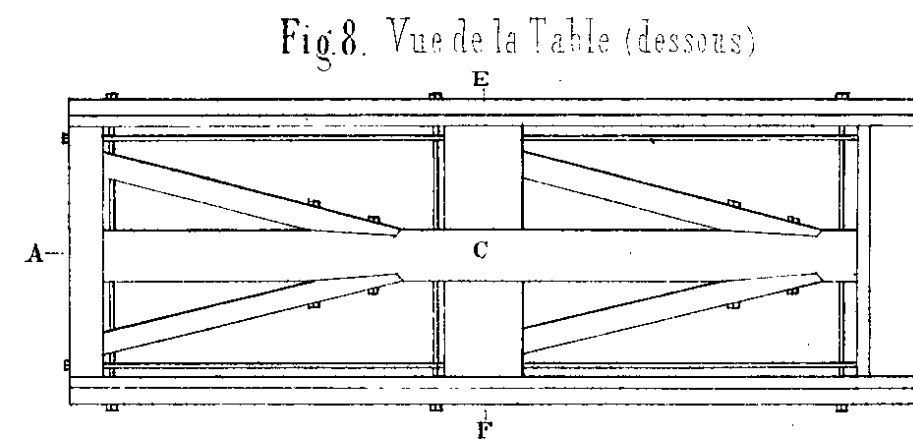


Fig. 8. Vue de la Table (dessous).

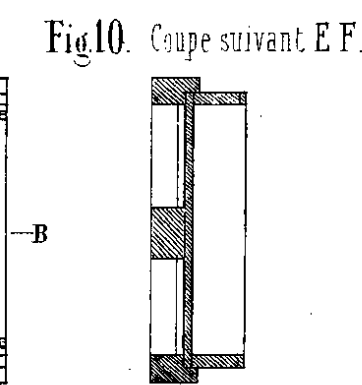


Fig. 10. Coupe suivant E F.

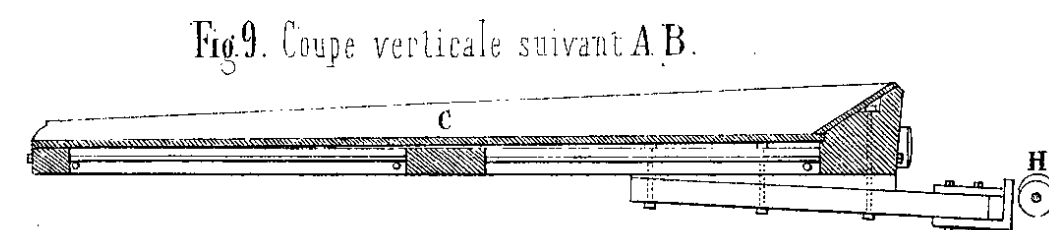


Fig. 9. Coupe verticale suivant A B.

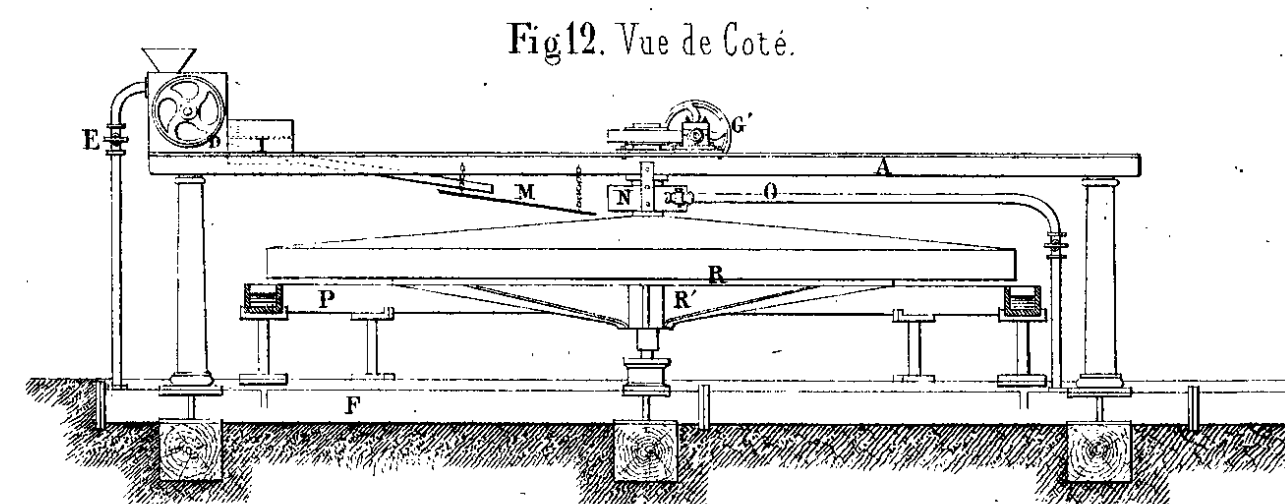


Fig. 12. Vue de Côté.

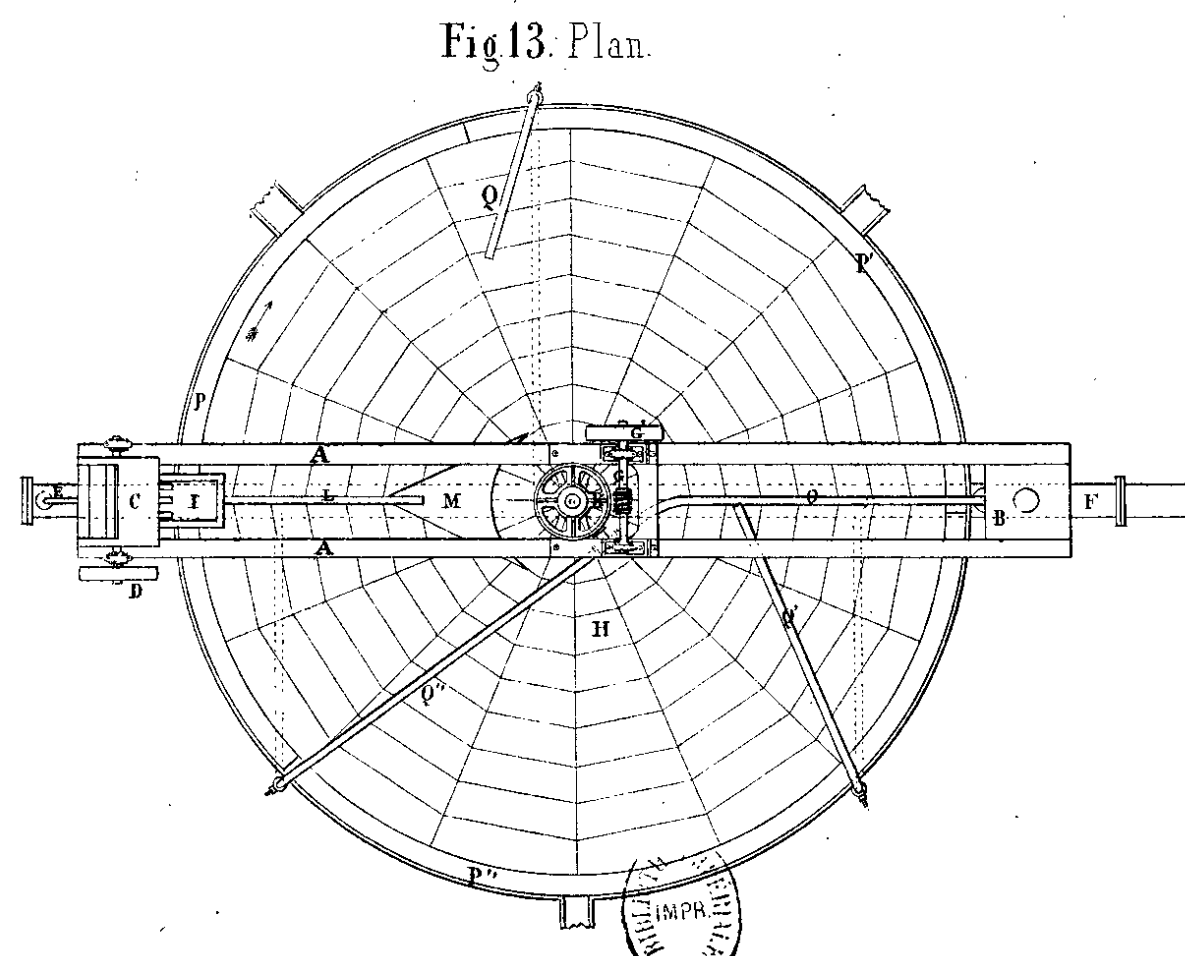


Fig. 13. Plan.

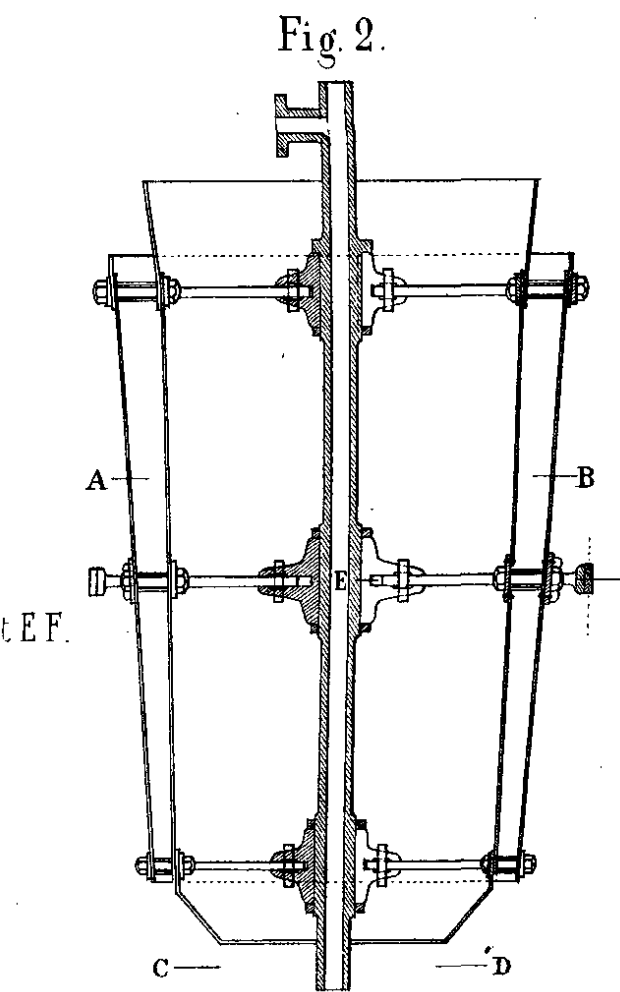


Fig. 2.

Fig. 3. Coupe A B.

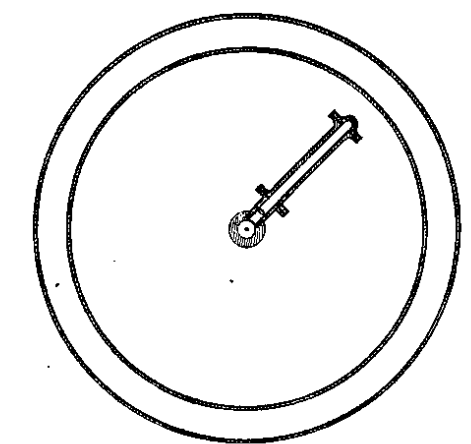


Fig. 4. Vue C D et Coupe par E F.

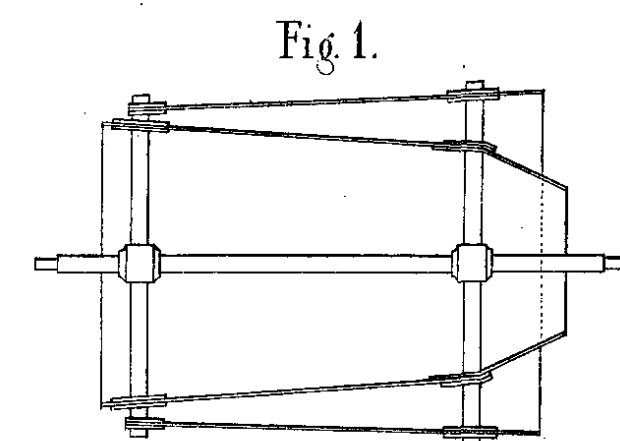
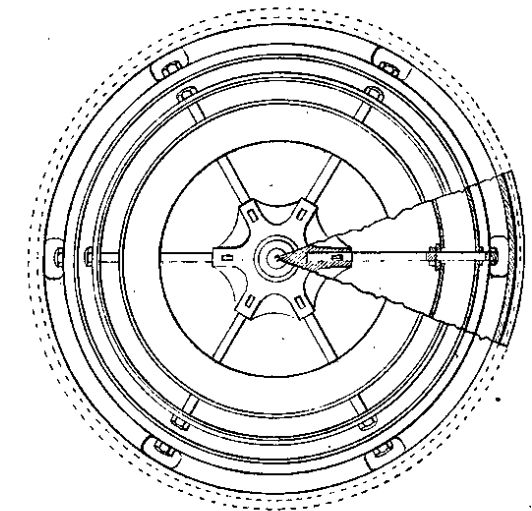


Fig. 1.

Fig. 14. Coupe verticale suivant l'Axe.

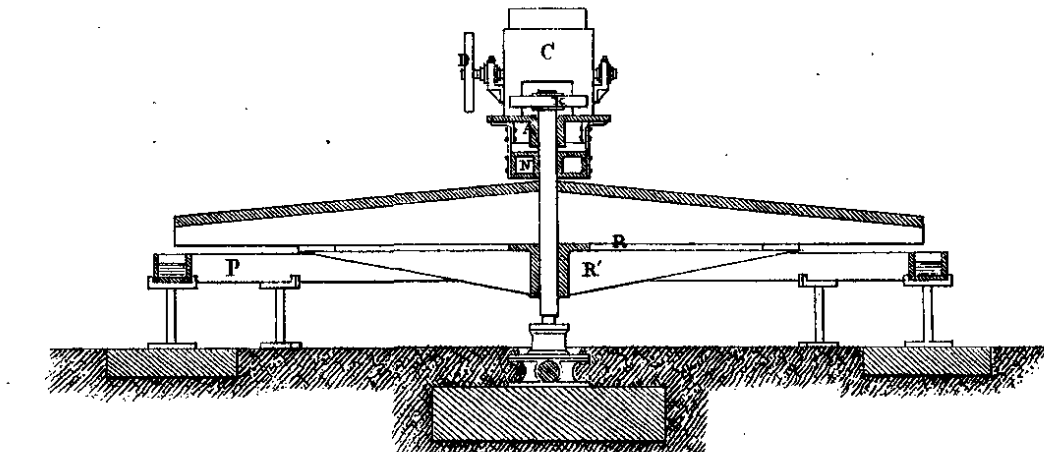
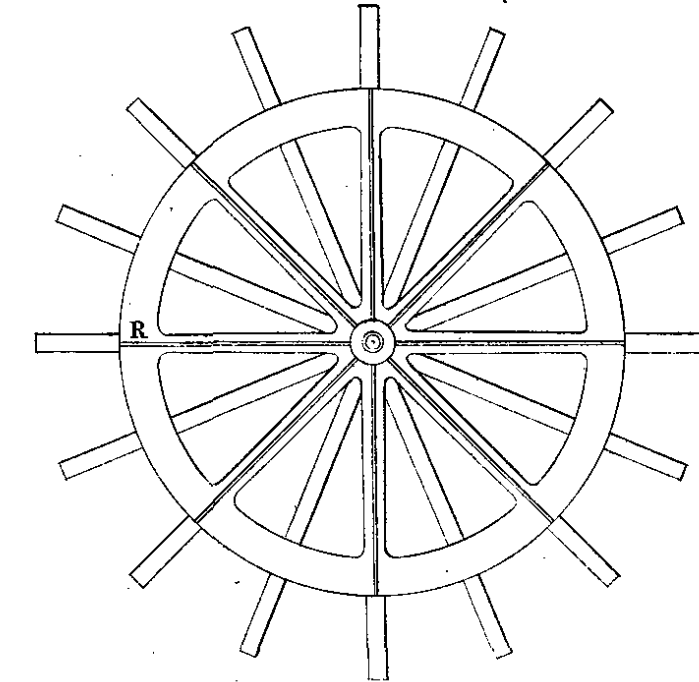


Fig. 15. Vue en dessous.









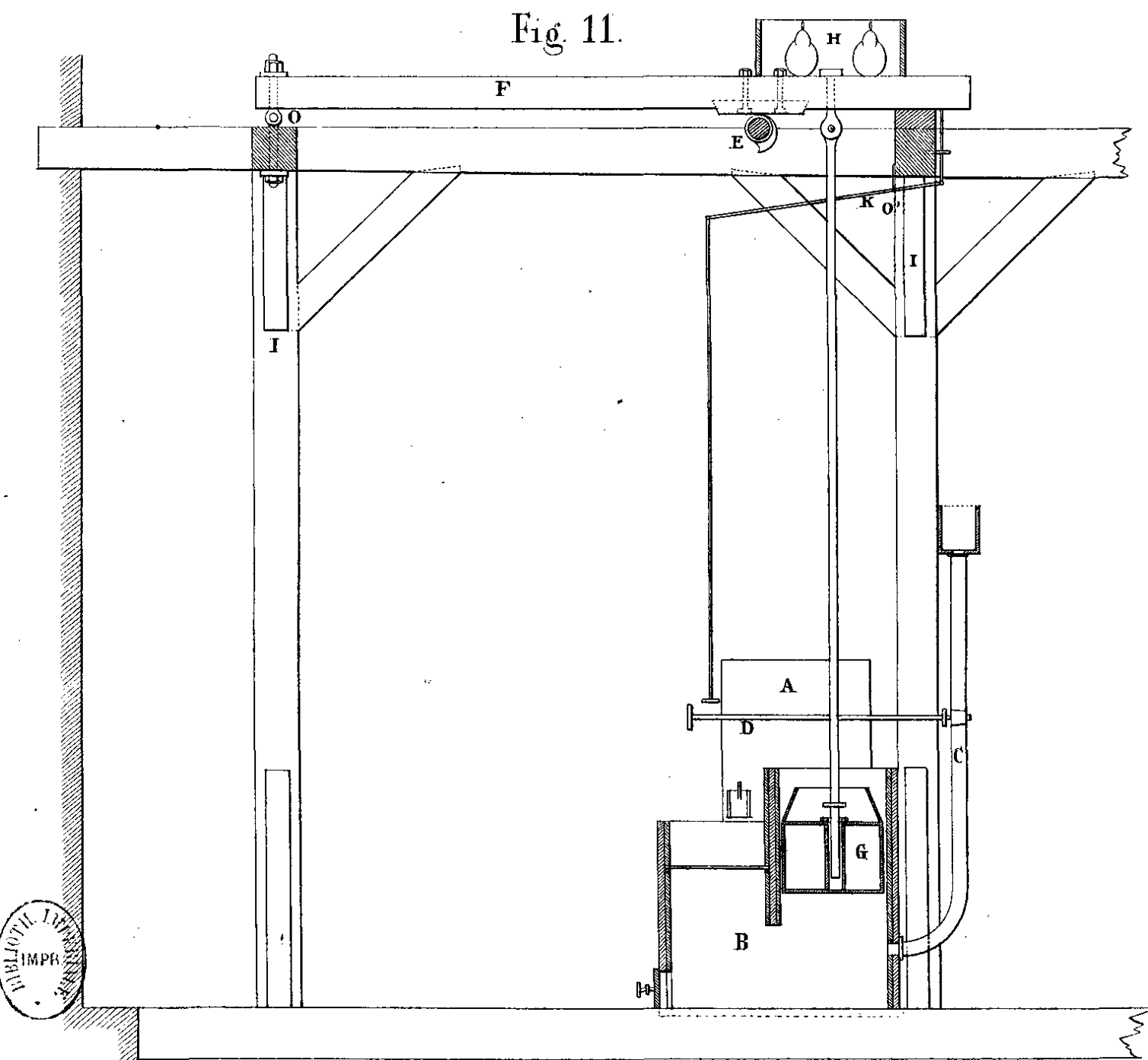
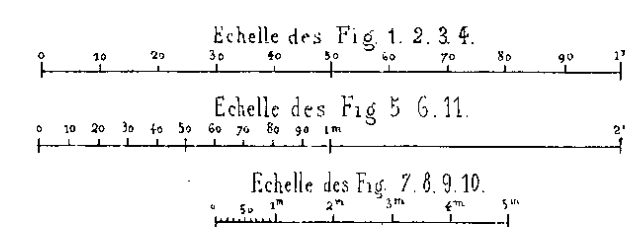
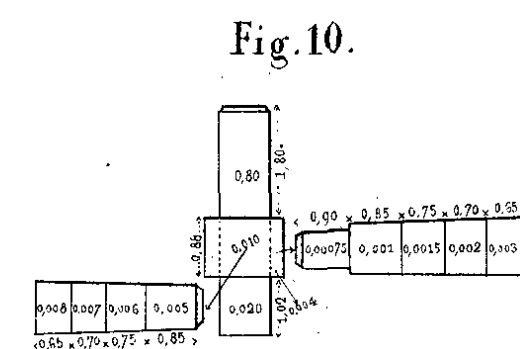
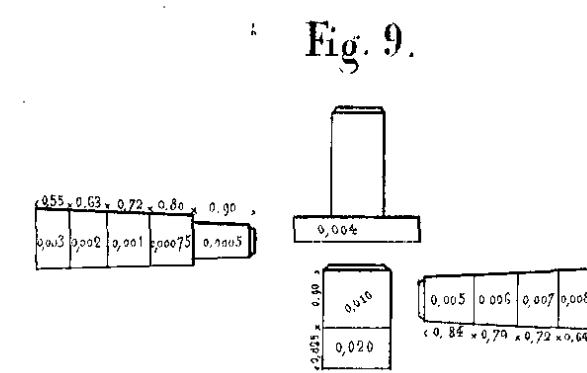
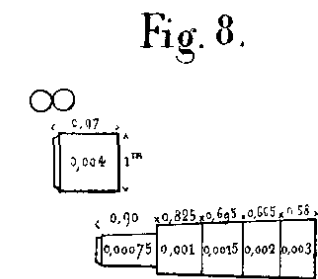
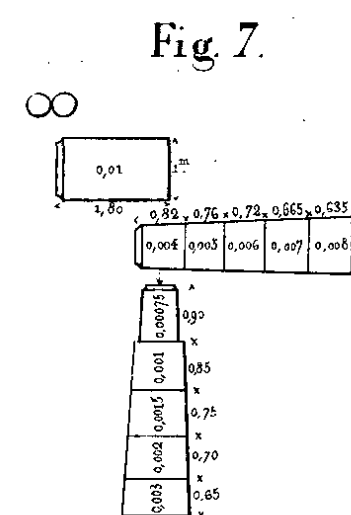
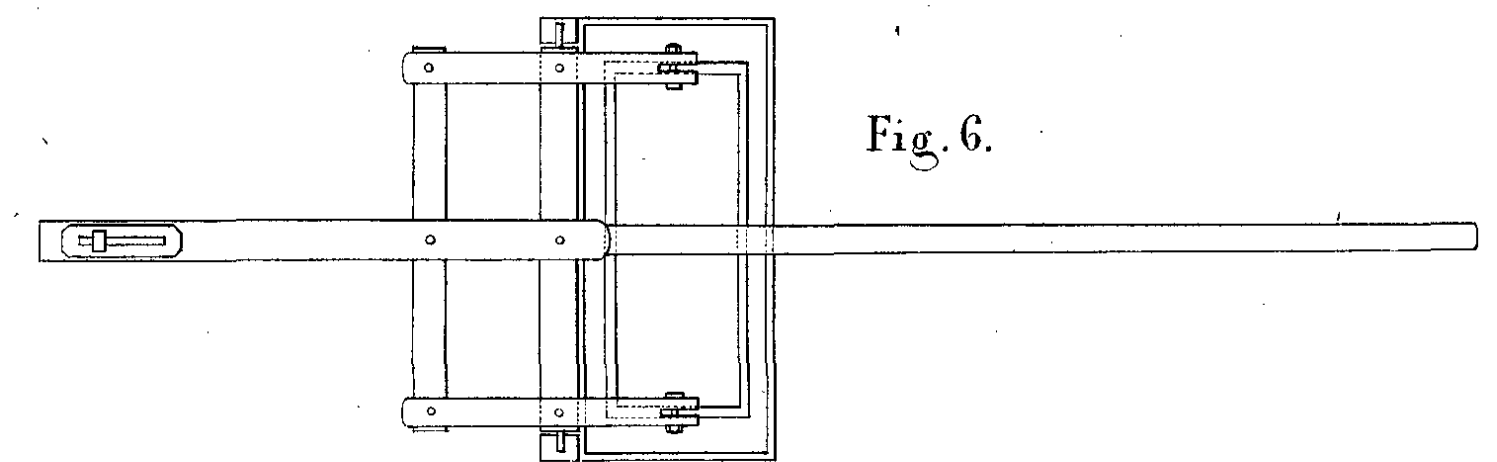
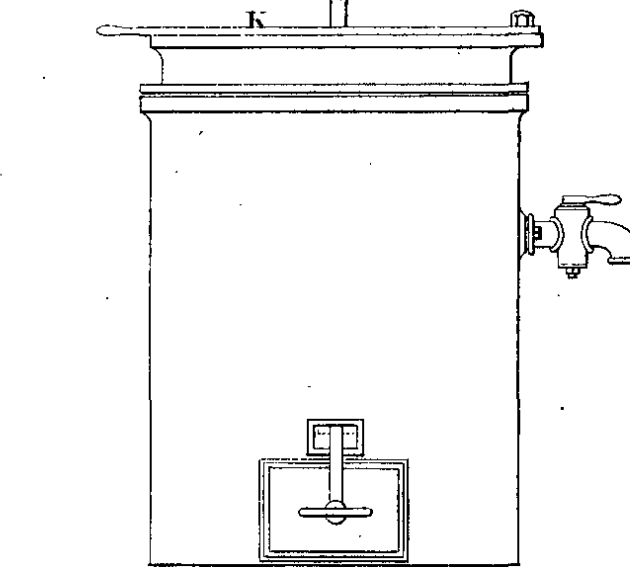
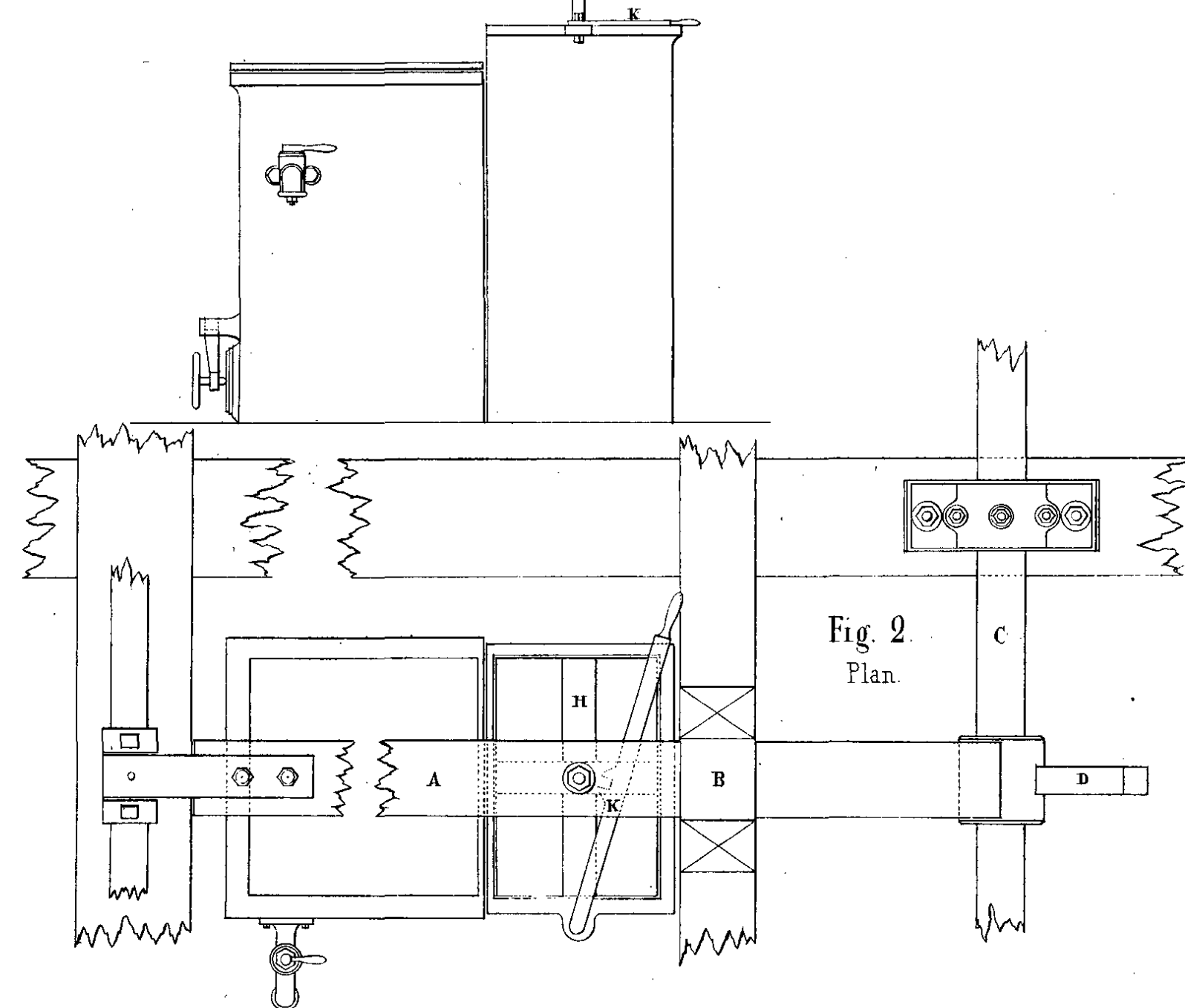
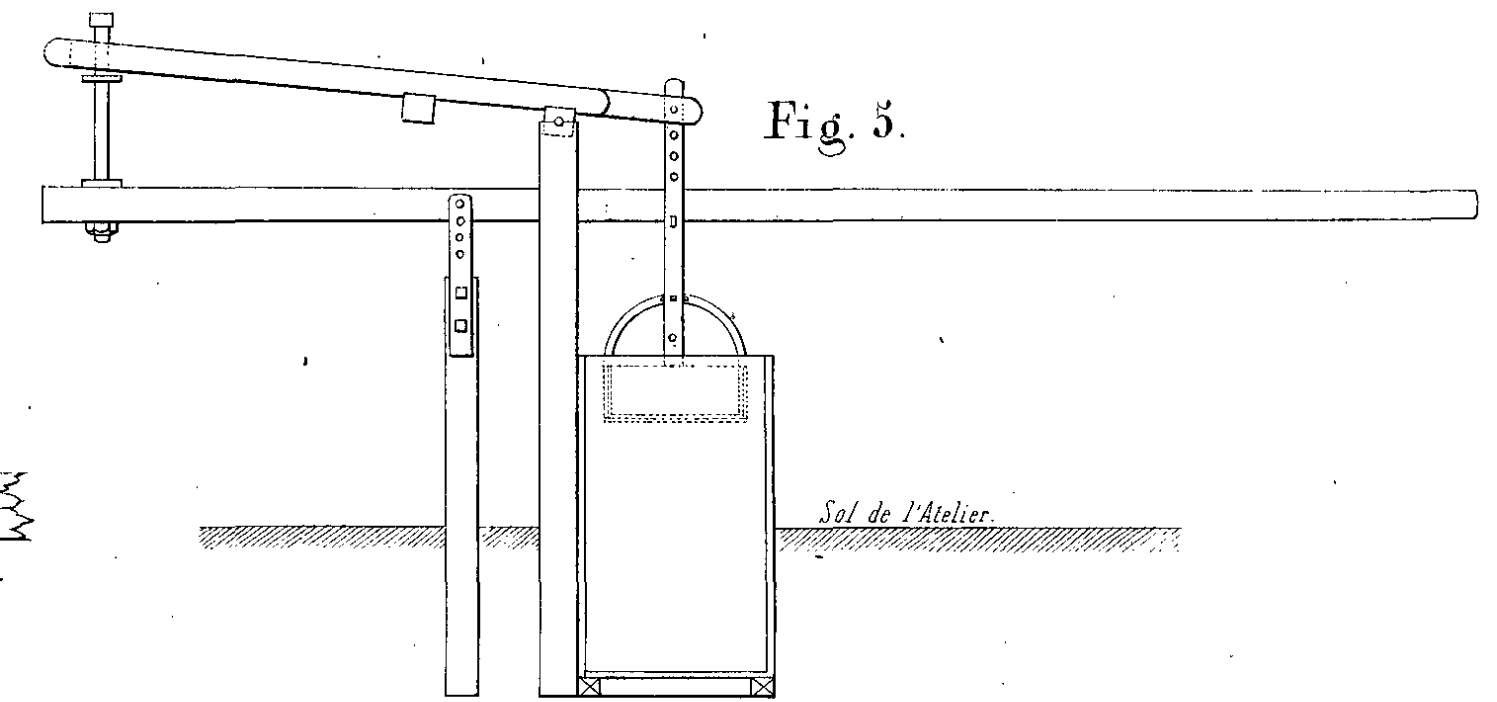
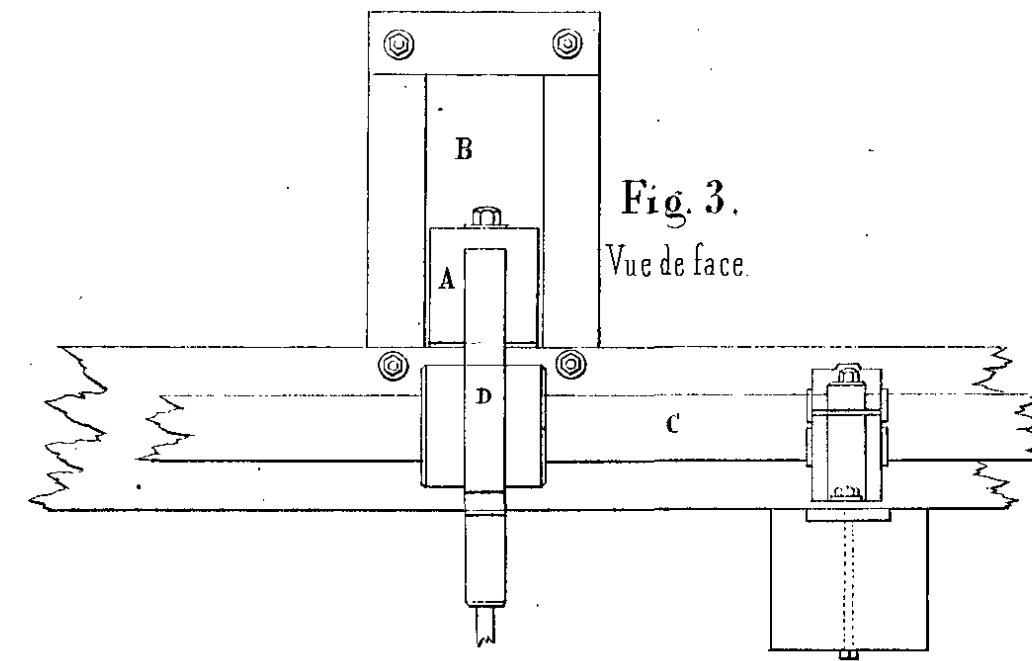
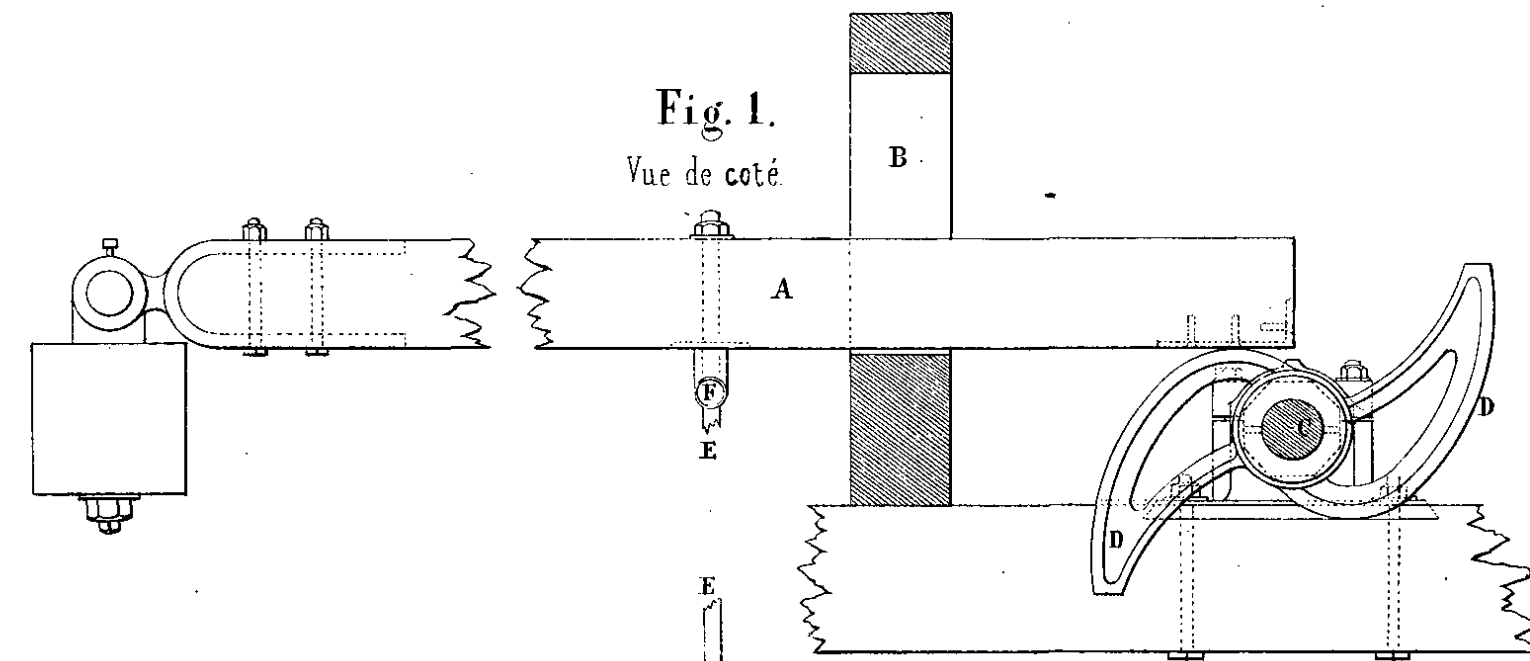








Fig. 1.

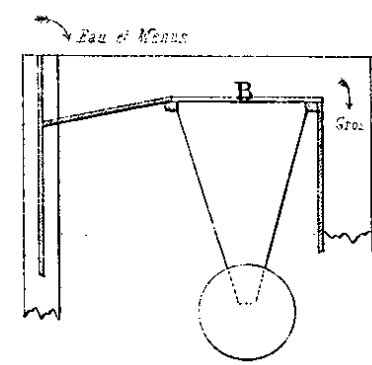


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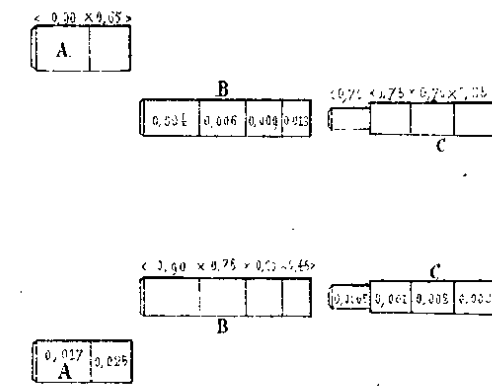


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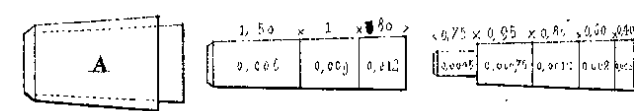


Fig. 9.  
Coupe par ABCD

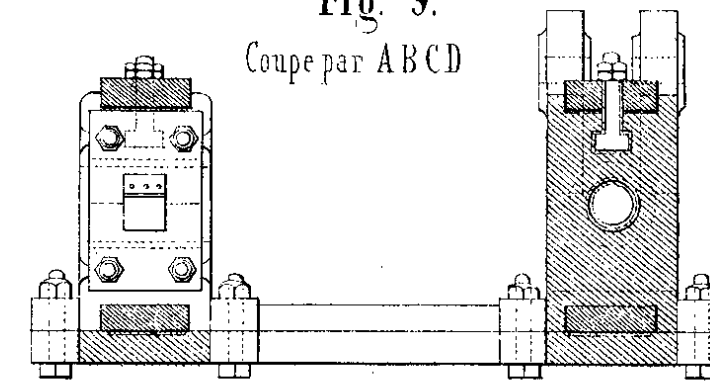


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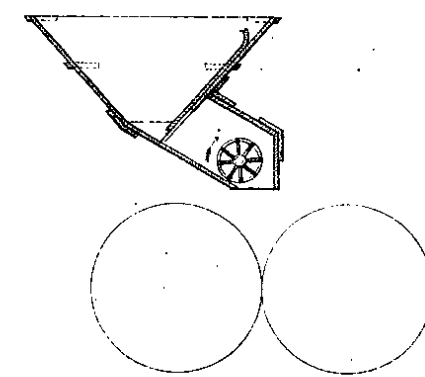


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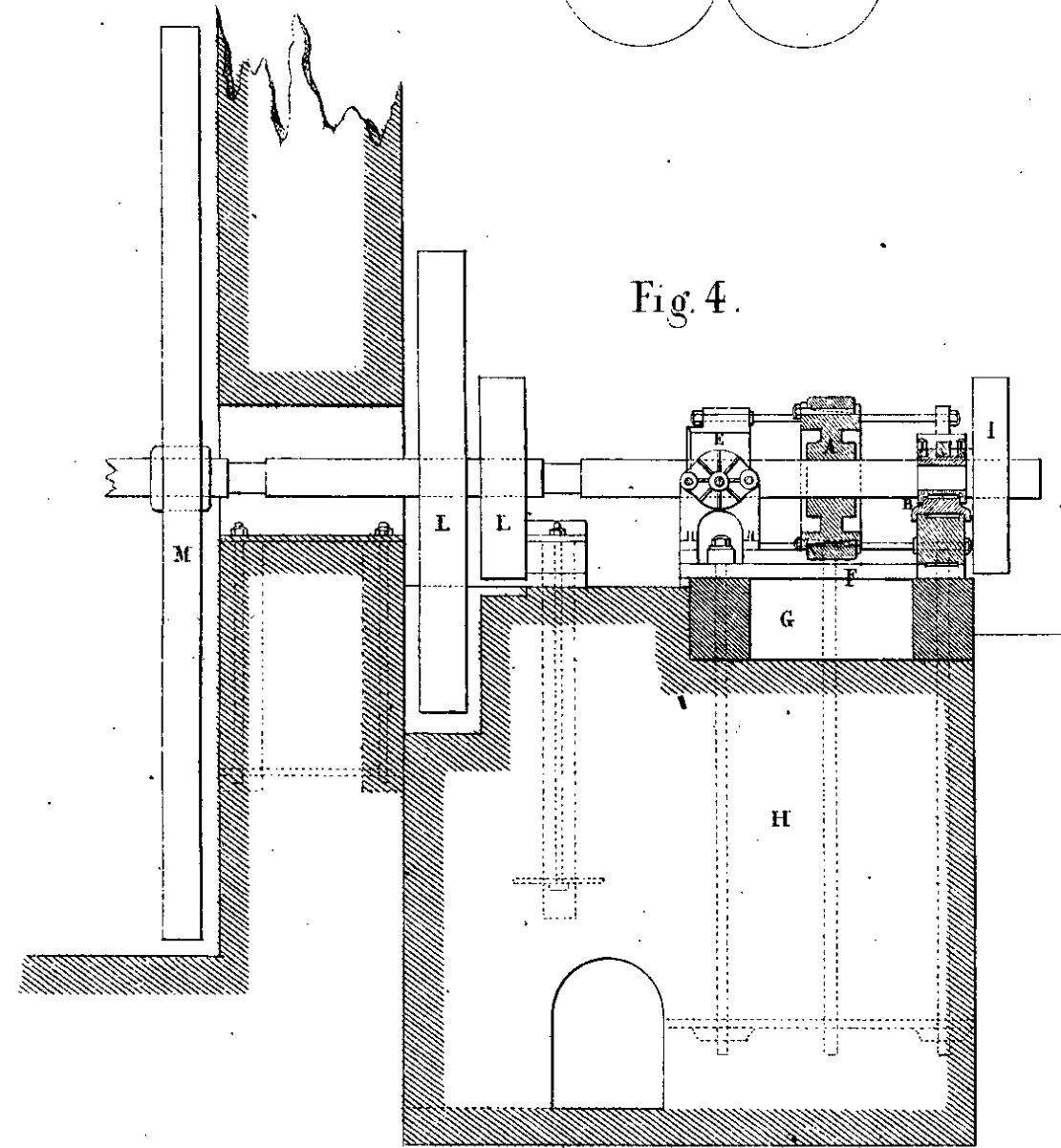


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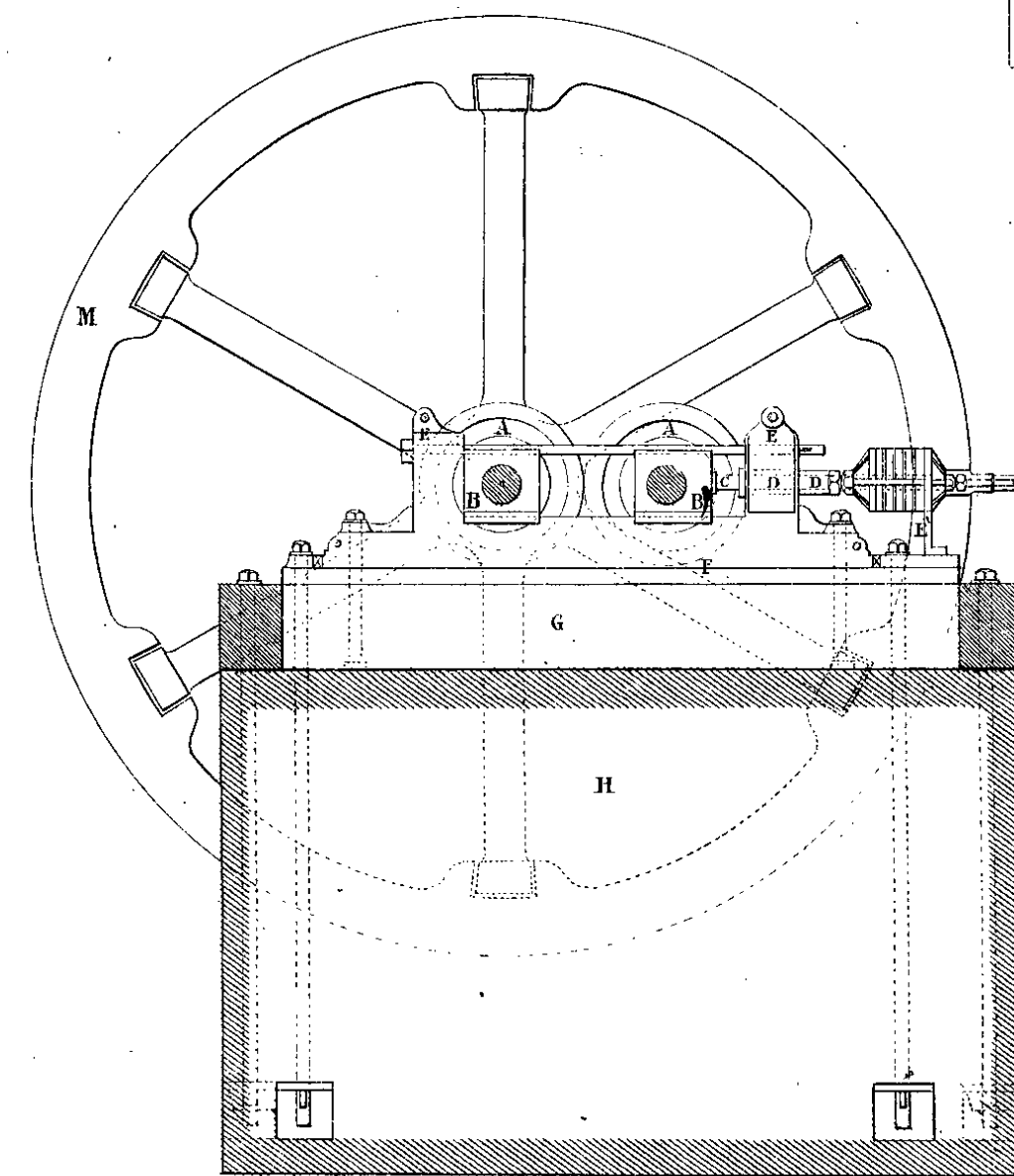


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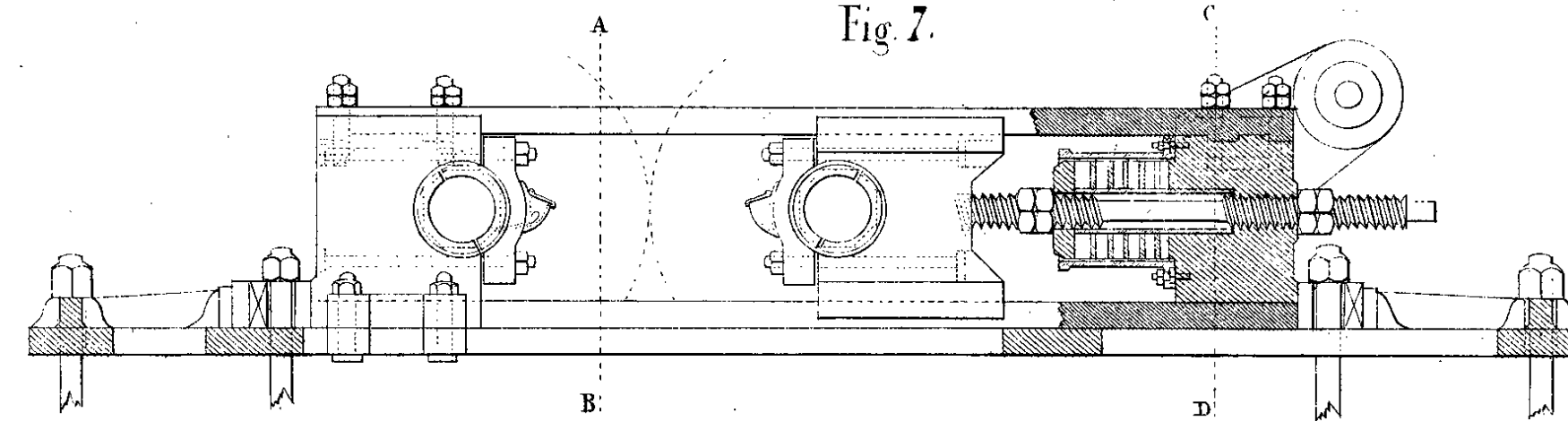


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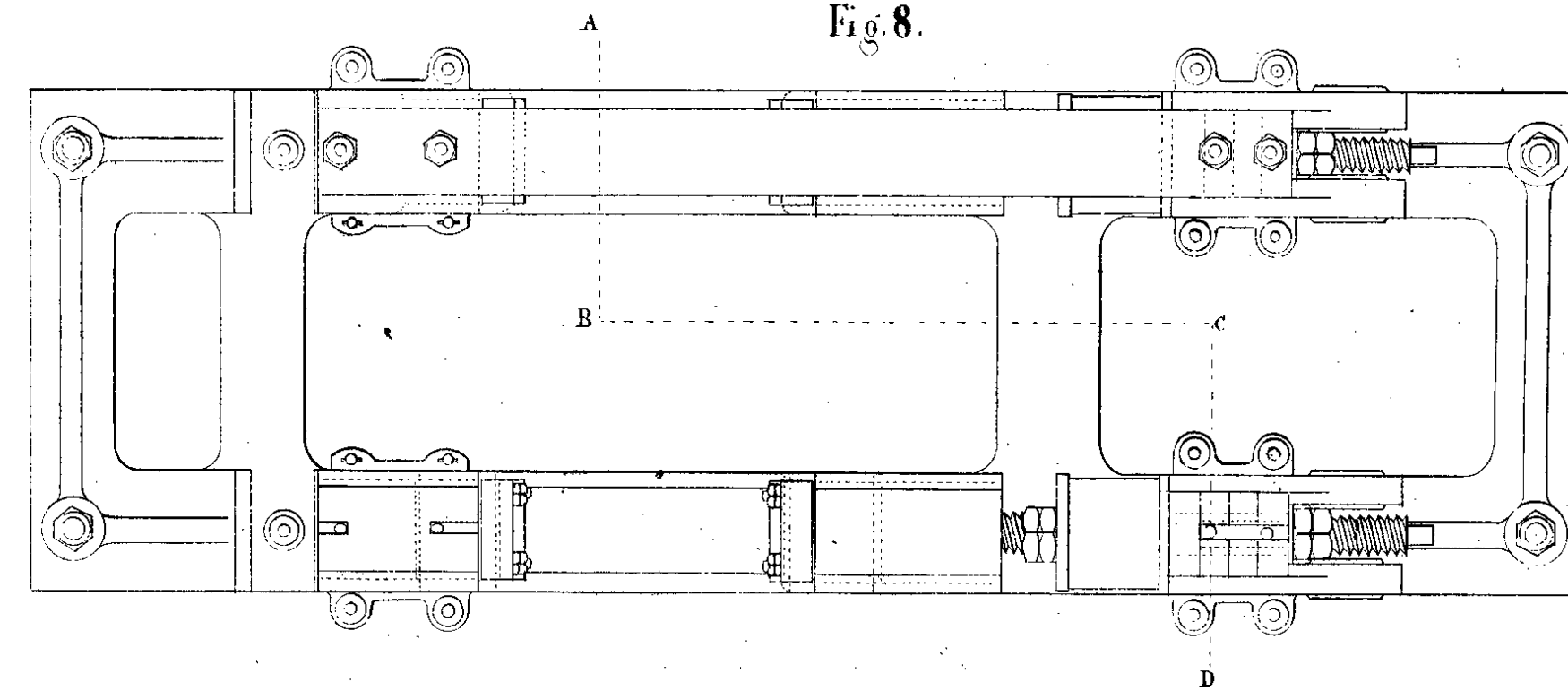


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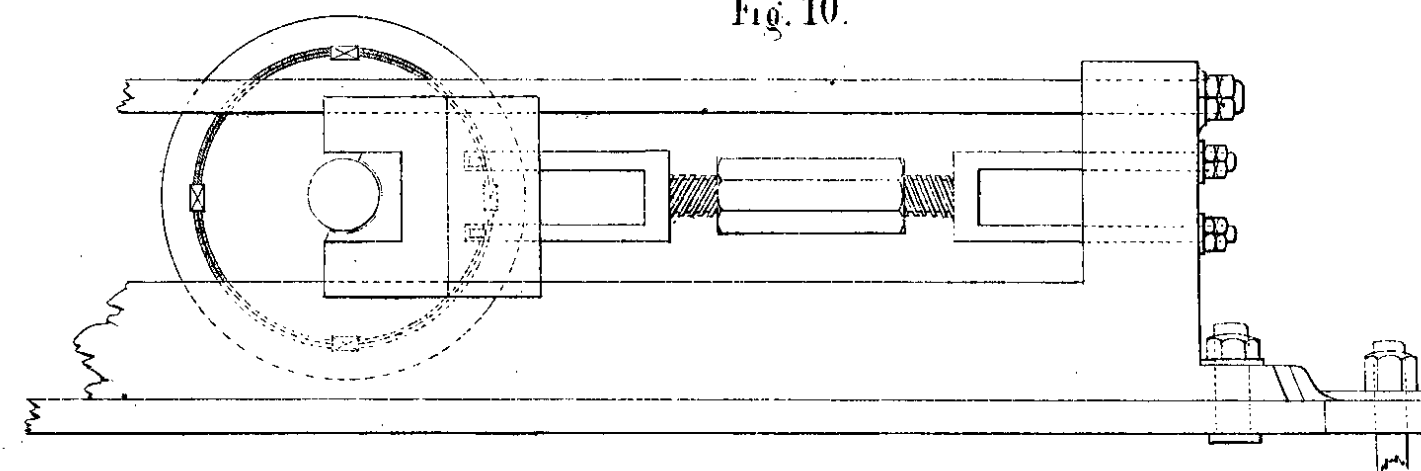
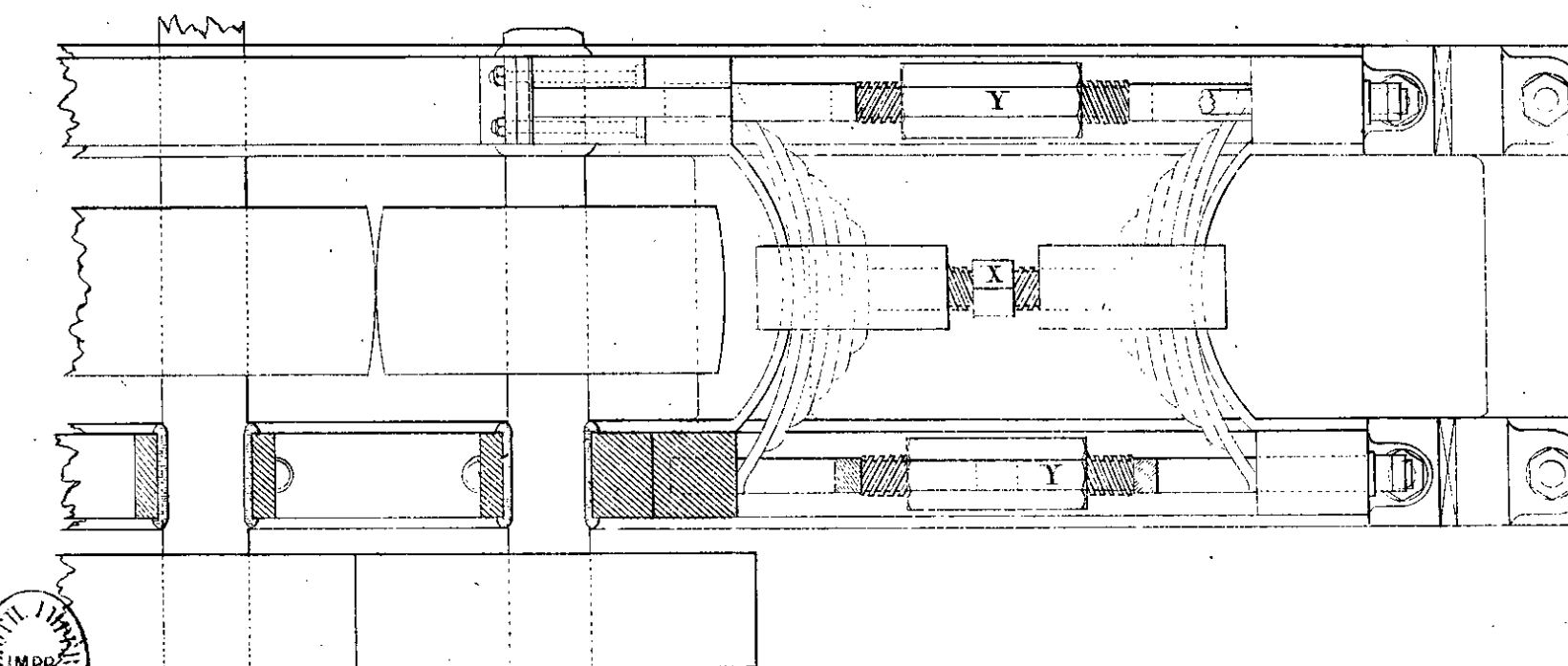
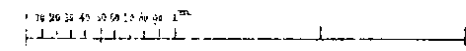


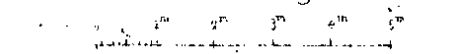
Fig. 11.



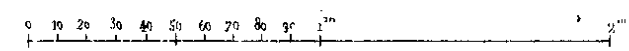
Echelle de la Fig. 1



Echelle des Fig. 2, 3.



Echelle des Fig. 4, 5, 6.



Echelle des Fig. 7, 8, 9, 10, 11.

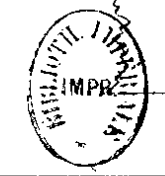
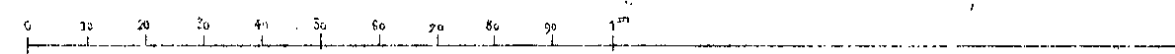








Fig. 1.

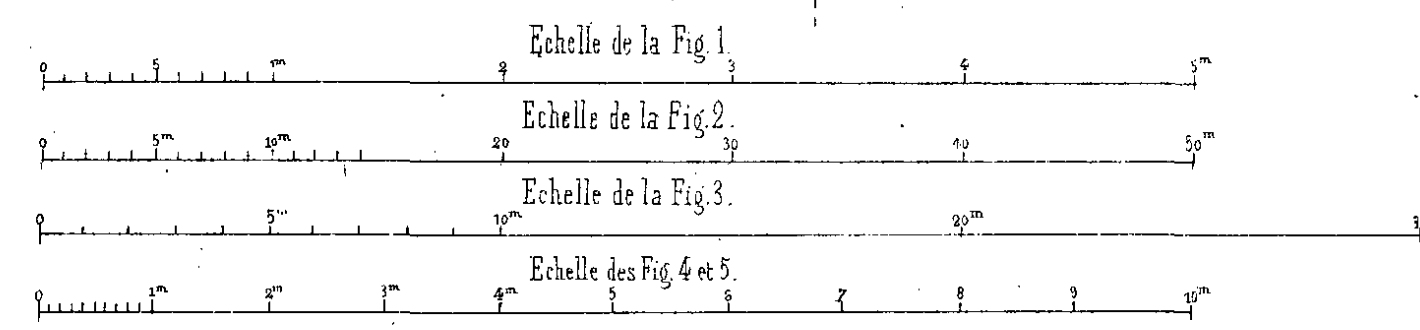
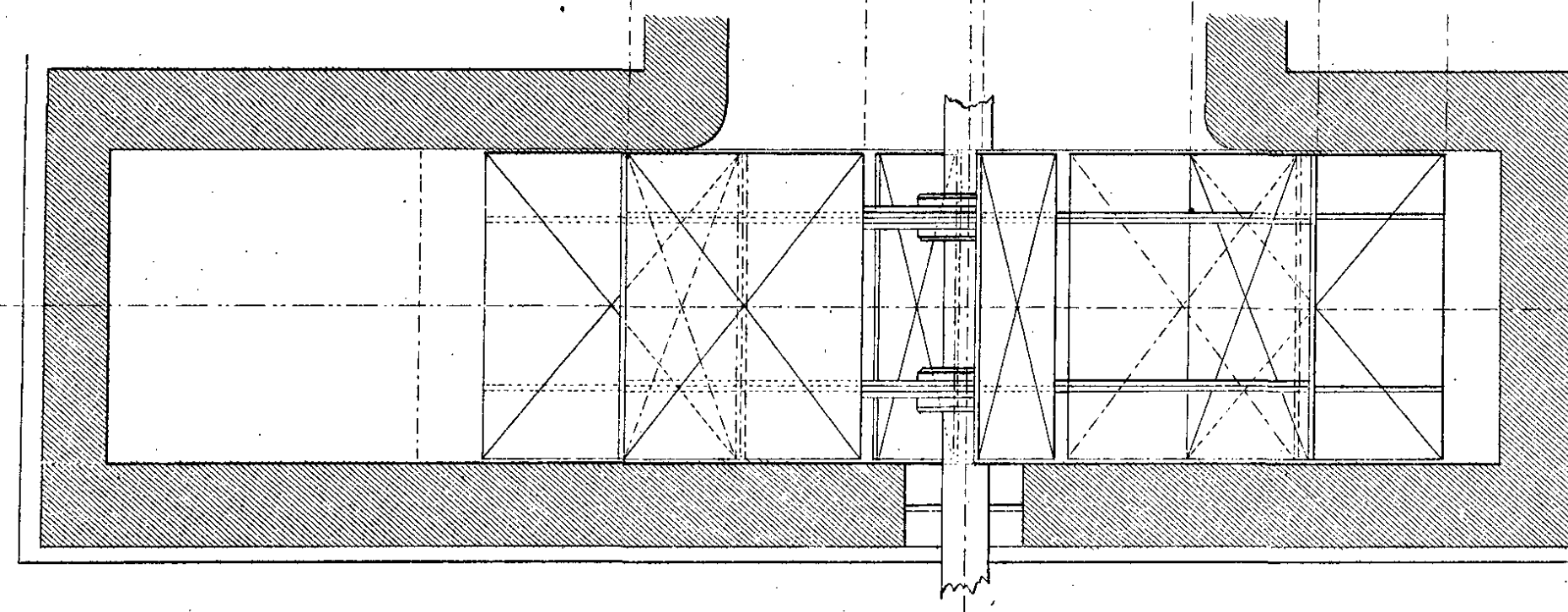
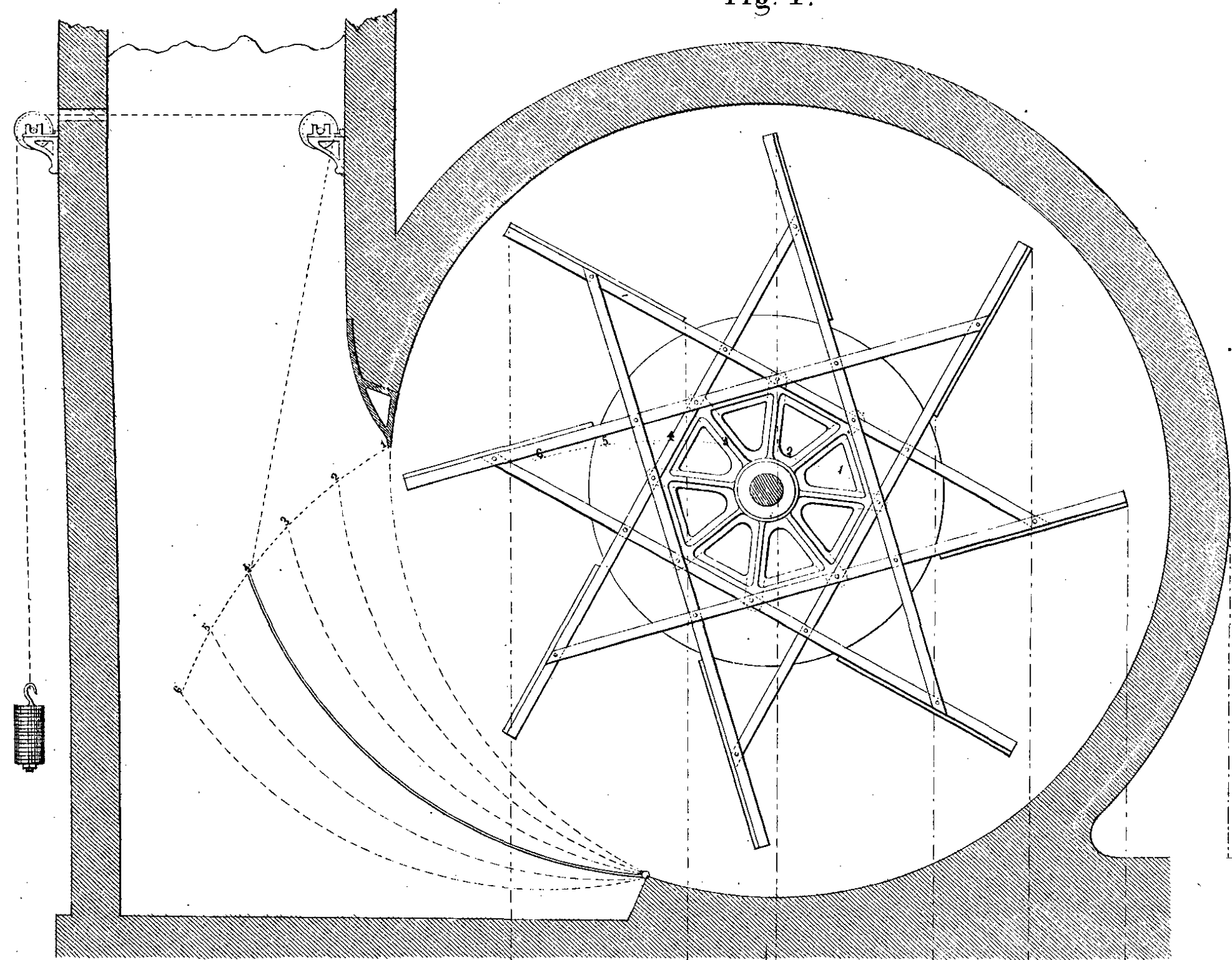


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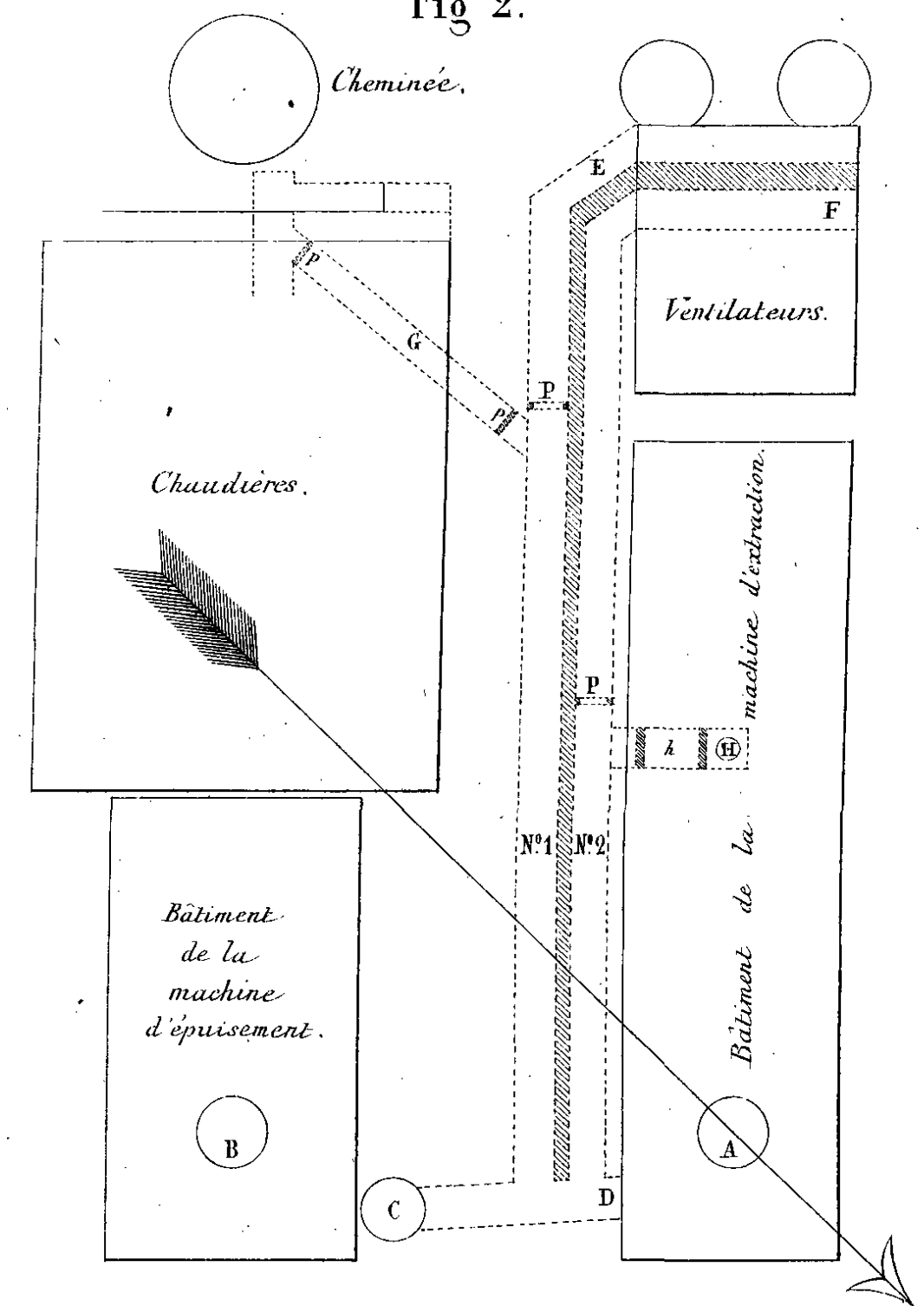


Fig. 3.

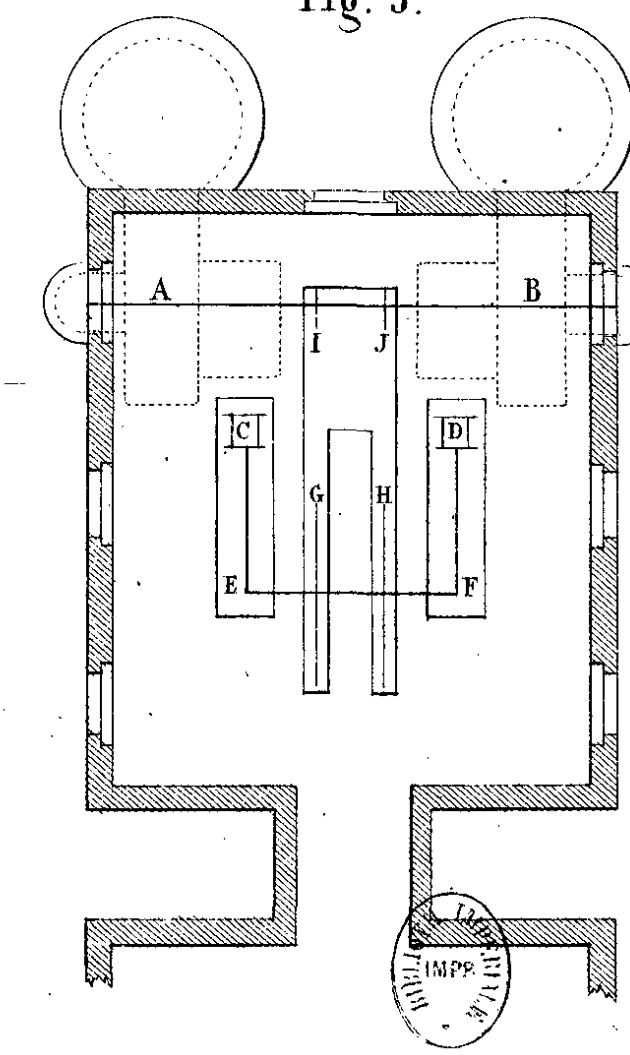


Fig. 4.

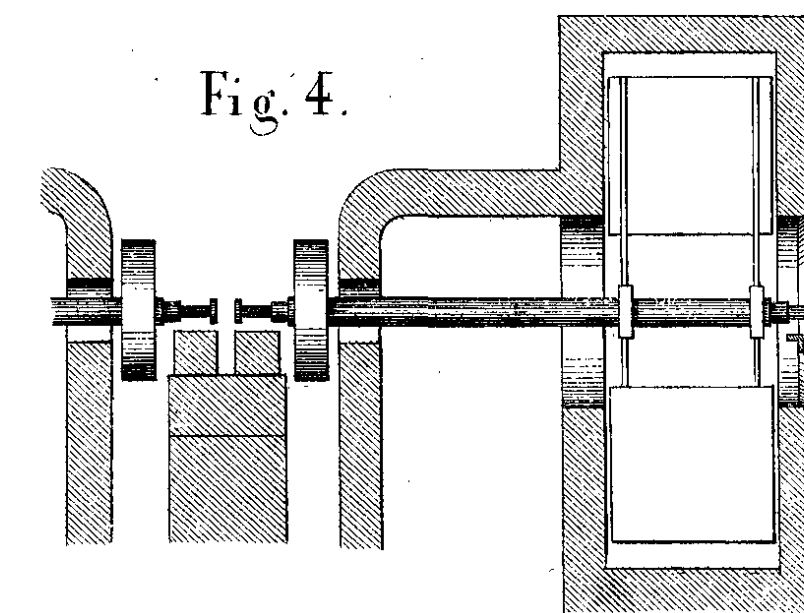
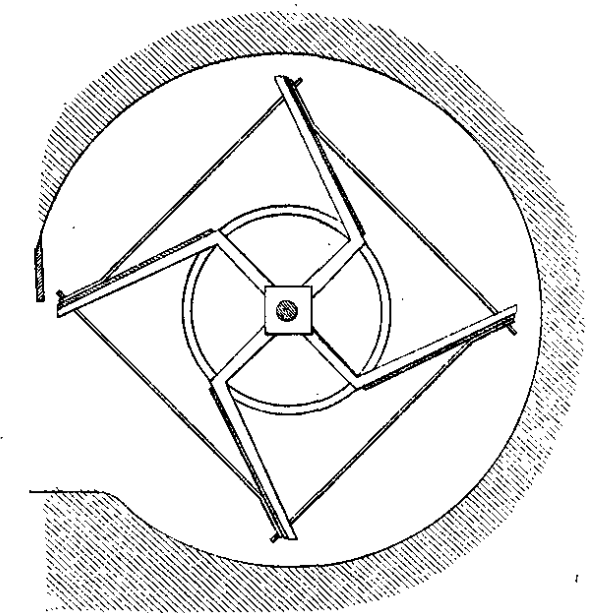


Fig. 5.



- AB Axe des Ventilateurs.  
 CD Cylindres à vapeur.  
 EF Axe des Volants.  
 GH Volants.  
 IJ Petites poulies.







Fig. 1.

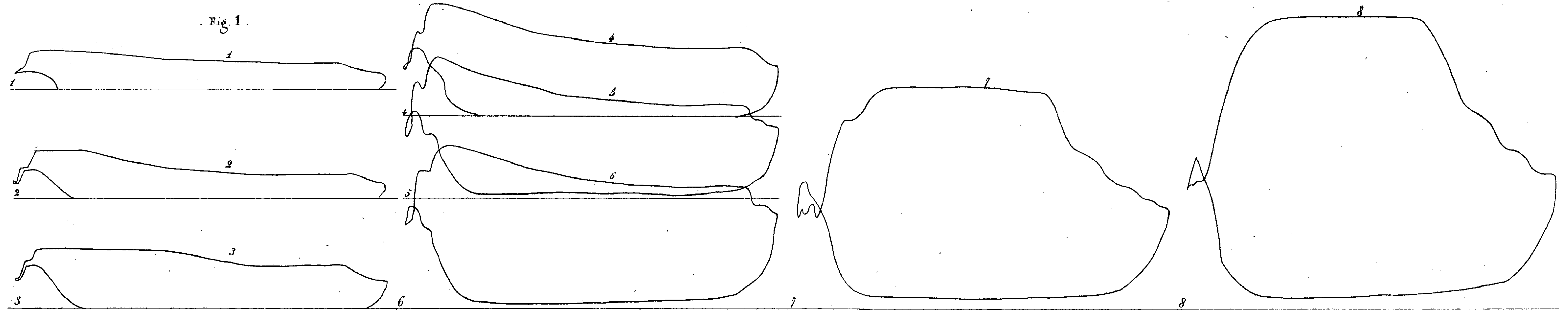


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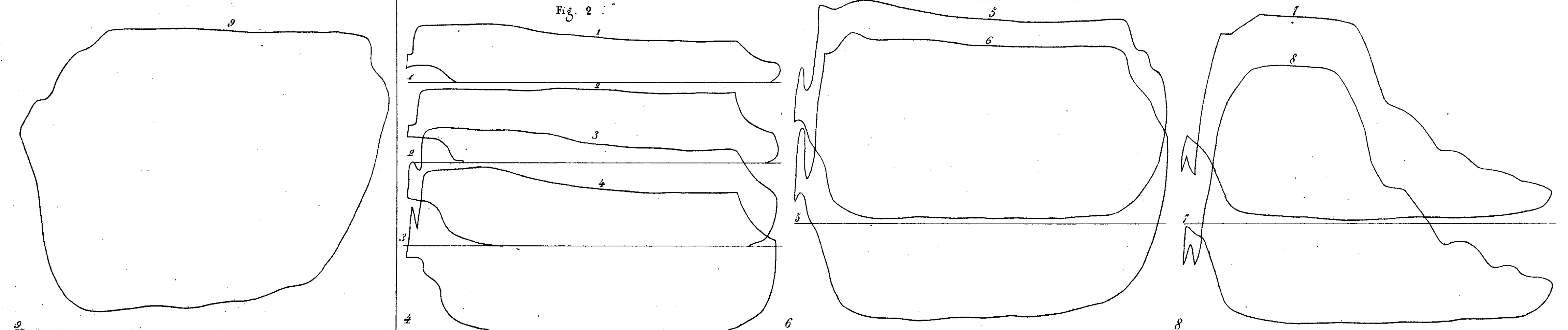


Fig. 3.

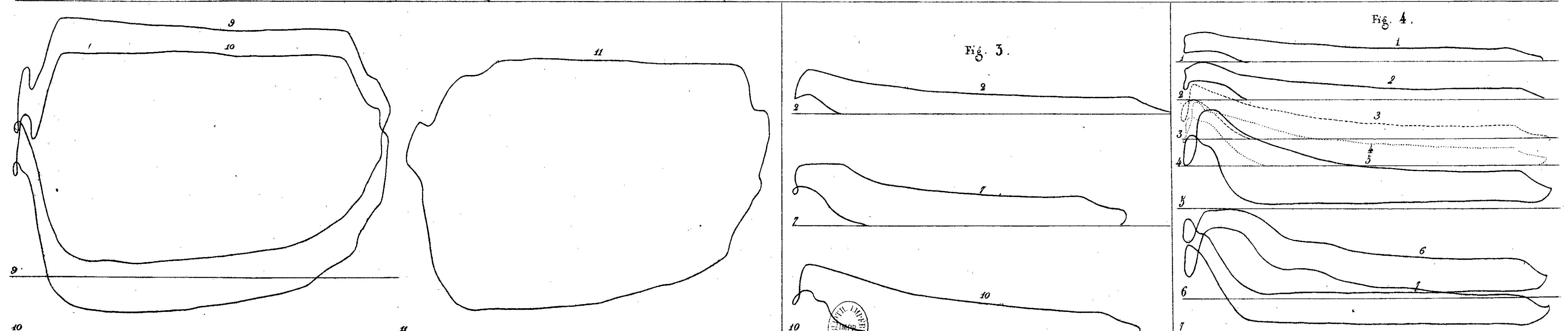
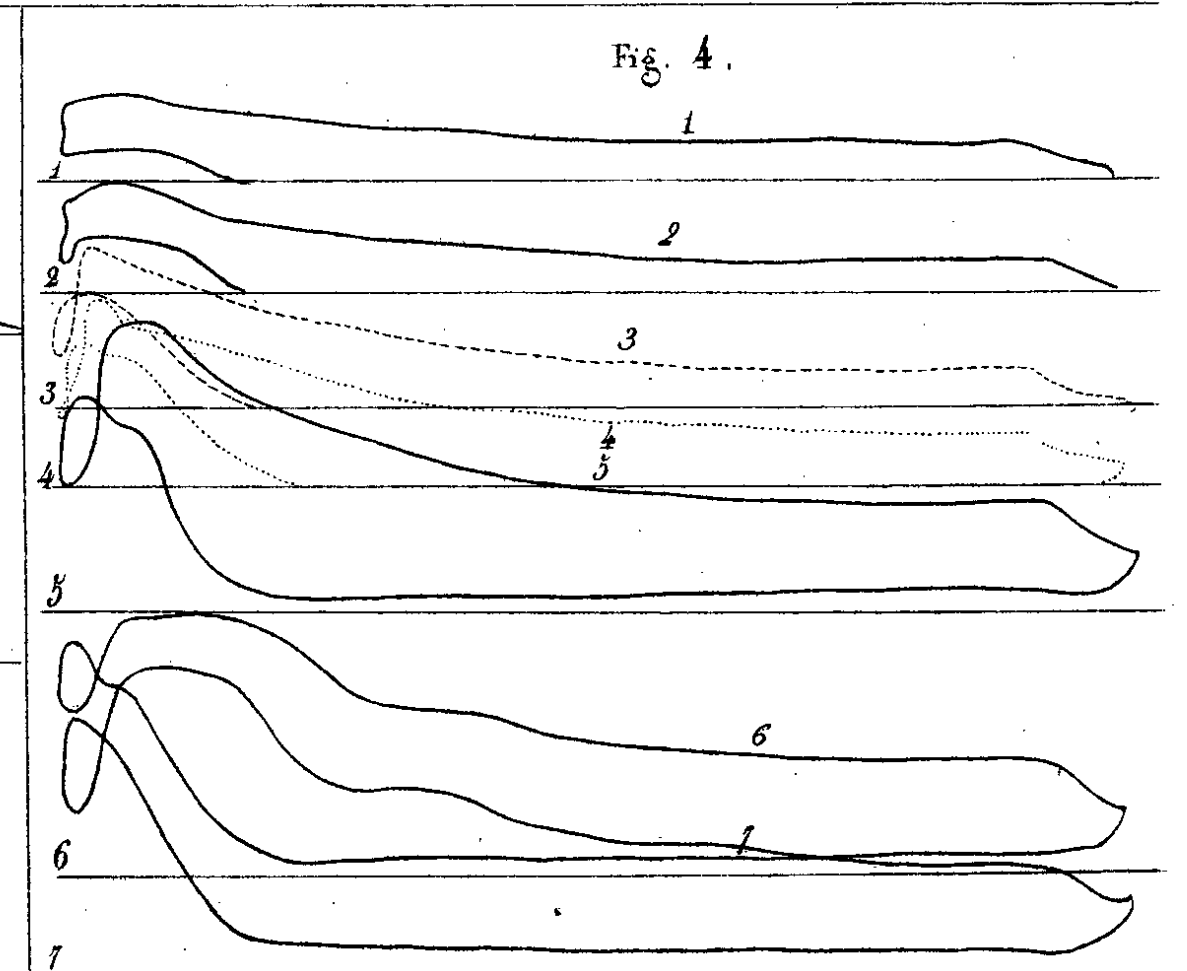


Fig. 4.









PROCÉDÉ BOUCHERIE  
Fig. 1. Elevation générale.

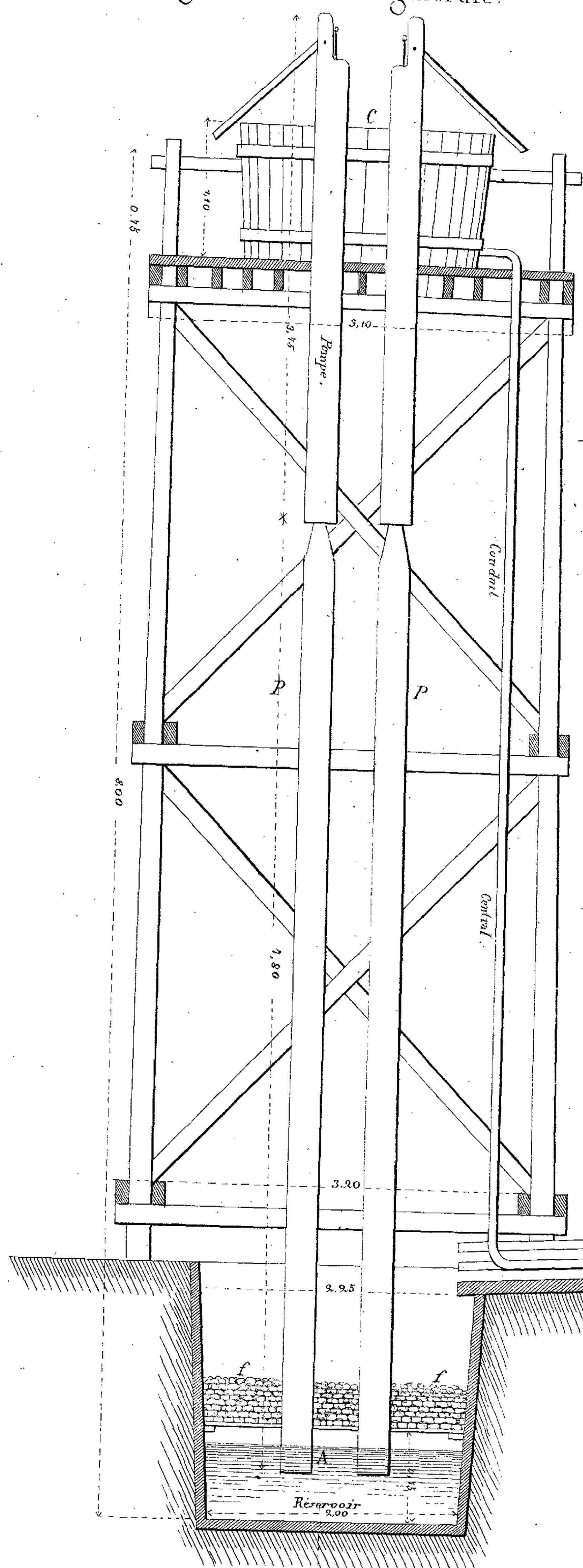


Fig. 4.

Coupe du gîte de pyrite de fer de St Julien de Valgalgues (Gard)

Echelle  $\frac{1}{5000}$

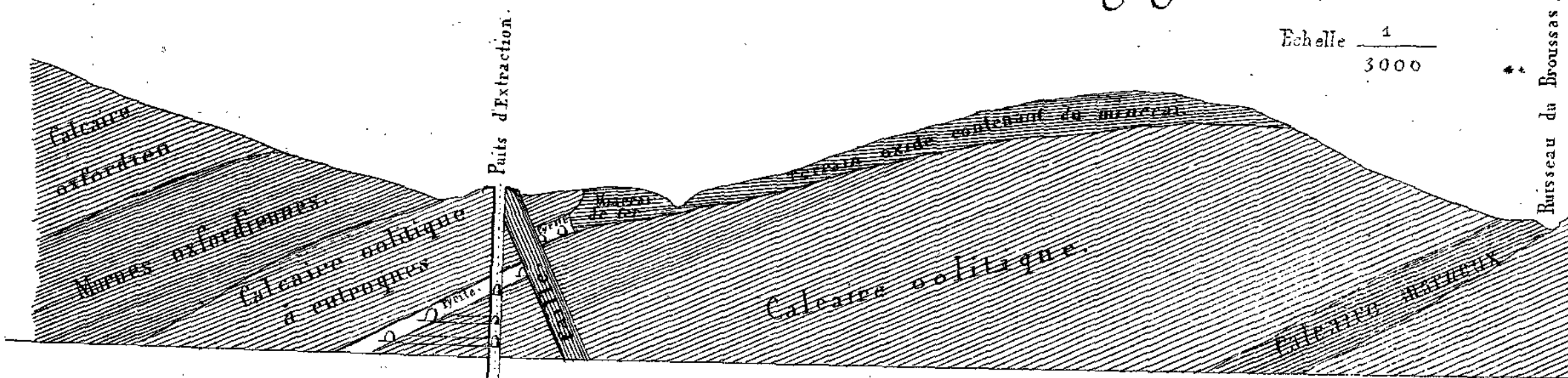


Fig. 3. Coupe transversale XY.

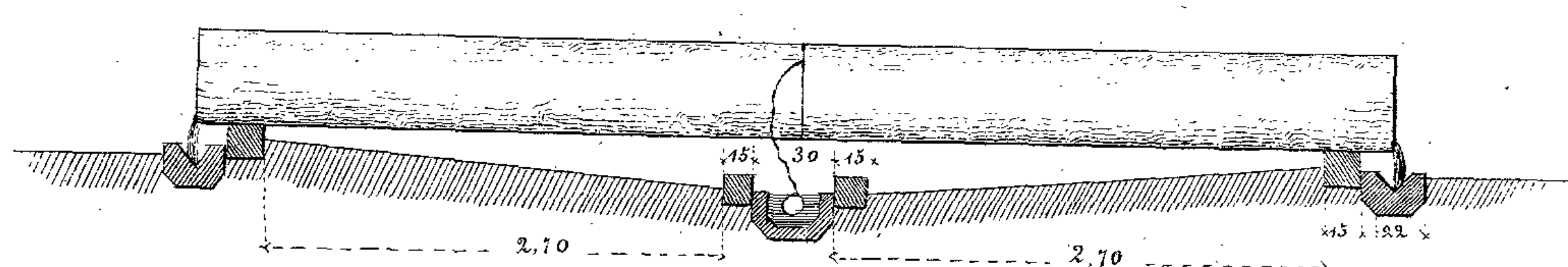
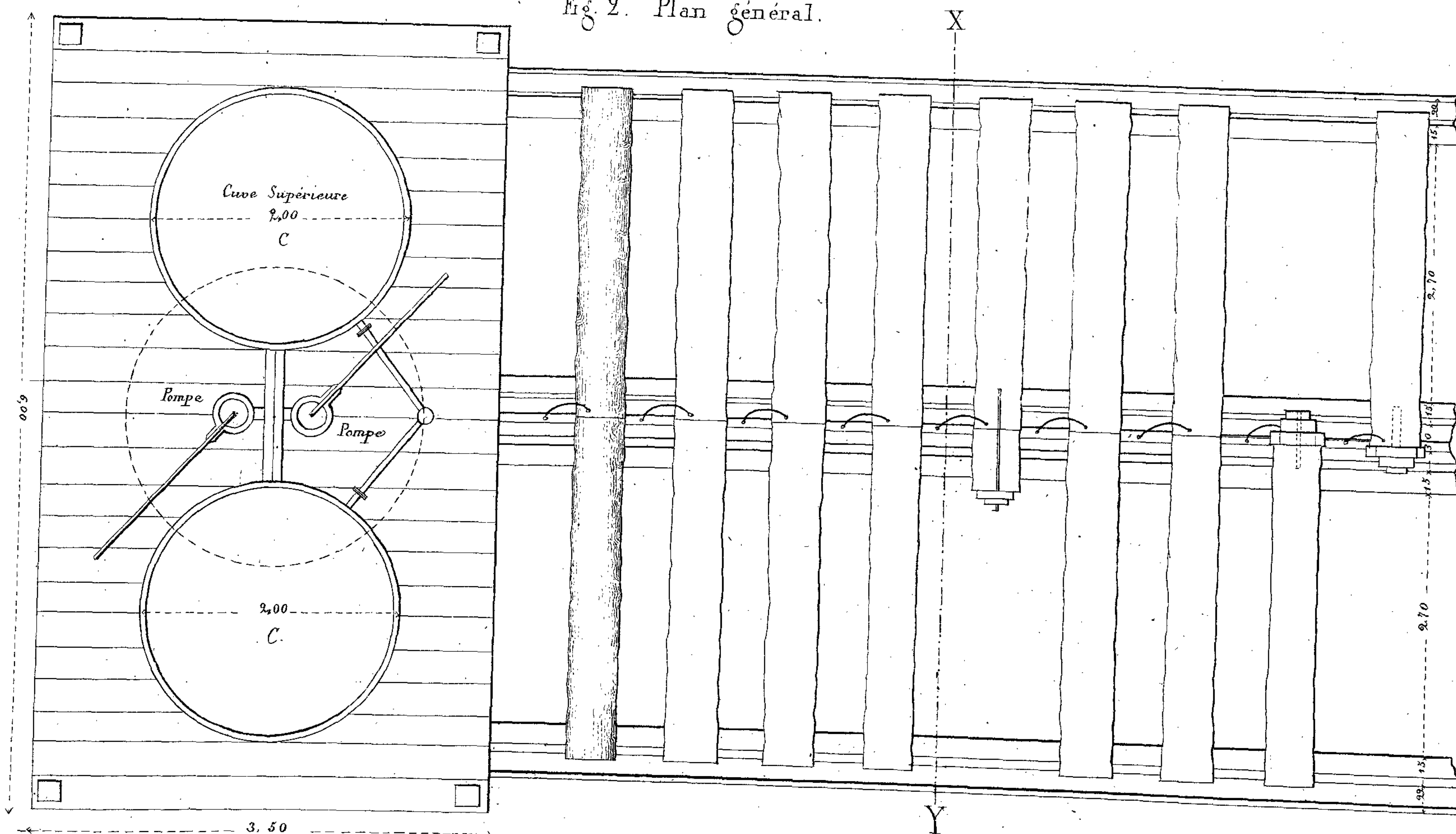


Fig. 2. Plan général.



Echelle de 0<sup>m</sup> 002 P<sup>r</sup> 1<sup>m</sup>







 Poudingue Calcaire, toit de la formation du Minéral de fer.  
**AAB** Alluvions anciennes de la Bresse (Elbe de Beaumont).  
 Terrain Jurassique.

*Puits N°1, d'extraction*

*Puits d'aérage N°2*

*Terrains tertiaires, Argile et Calcaires marneux*

*Ligne horizontale*

*Terrain jurassique*

*M. Formation du Minéral de fer.*

*K K K Amas riches de minerais, ou grains, dans l'Argile jaune.*

*Echelle de 0m00225 par mètre.*







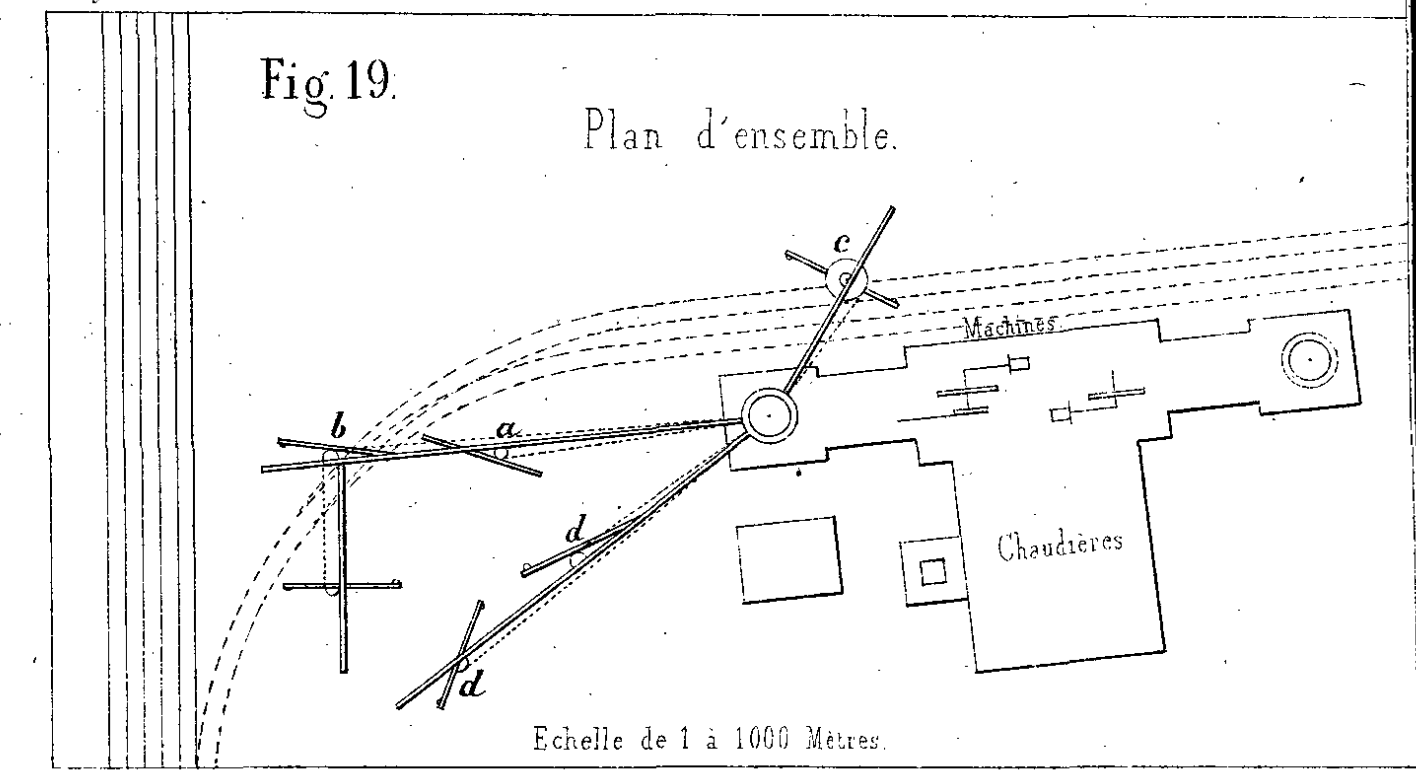
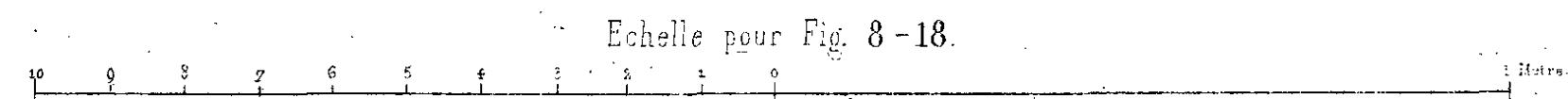
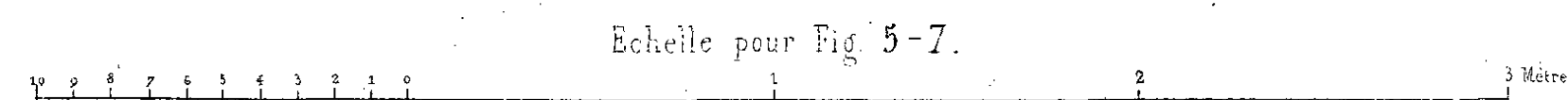
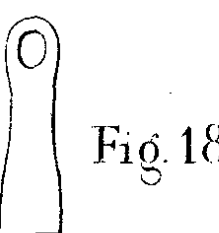
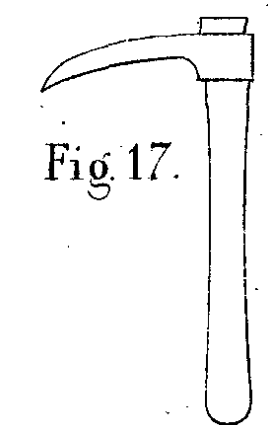
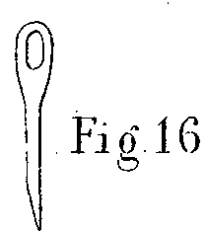
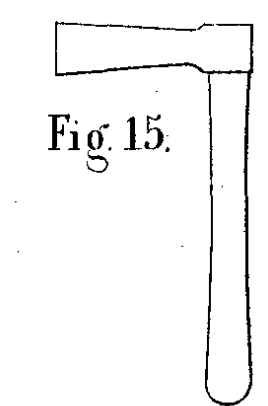
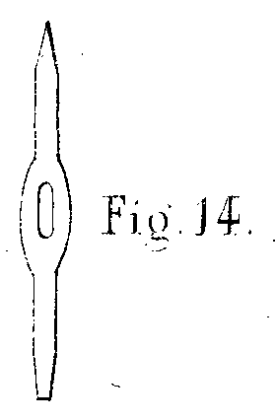
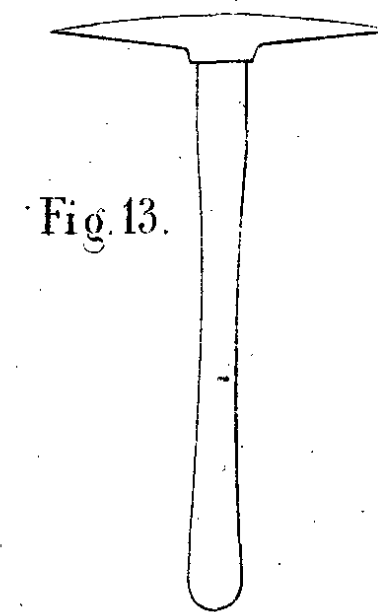
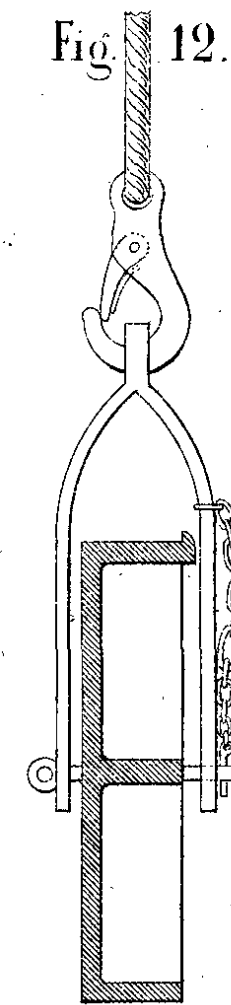
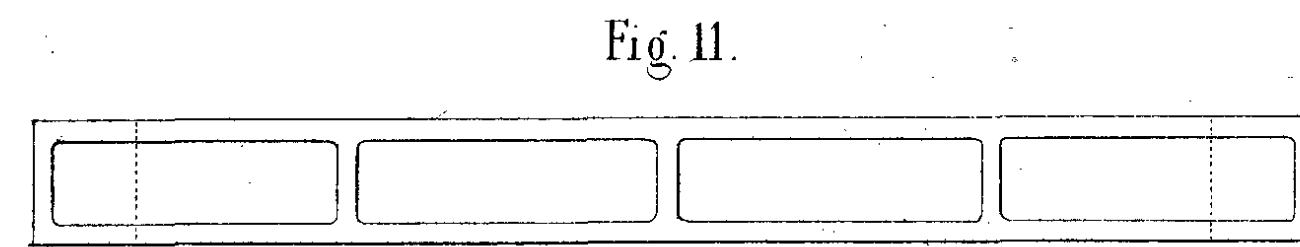
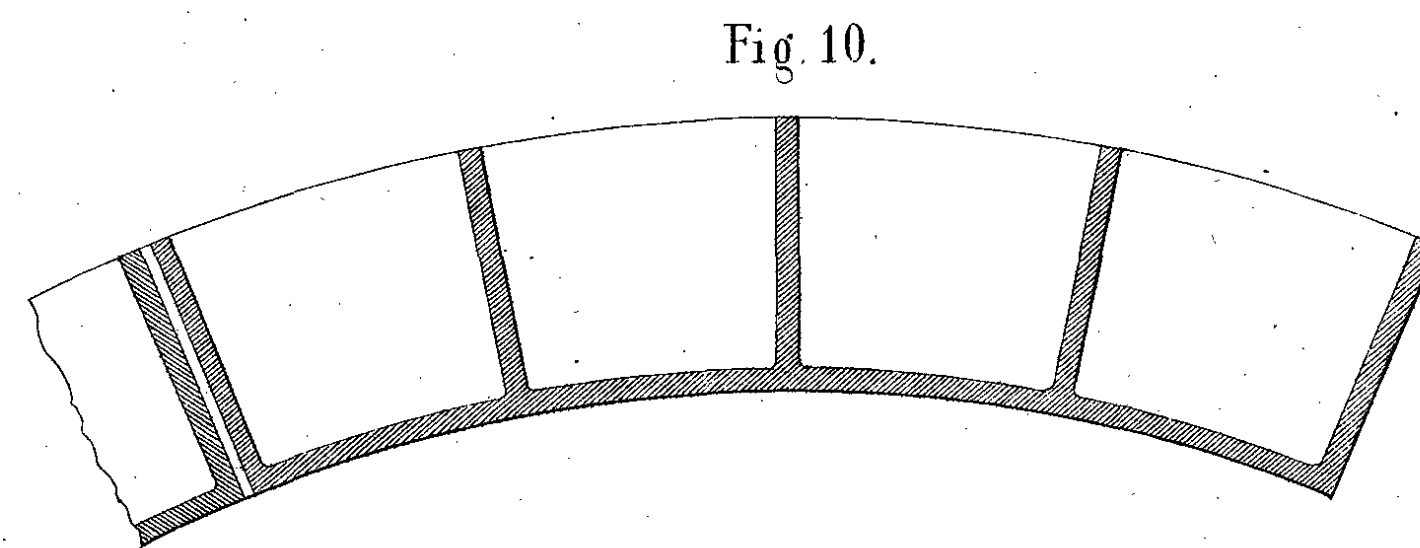
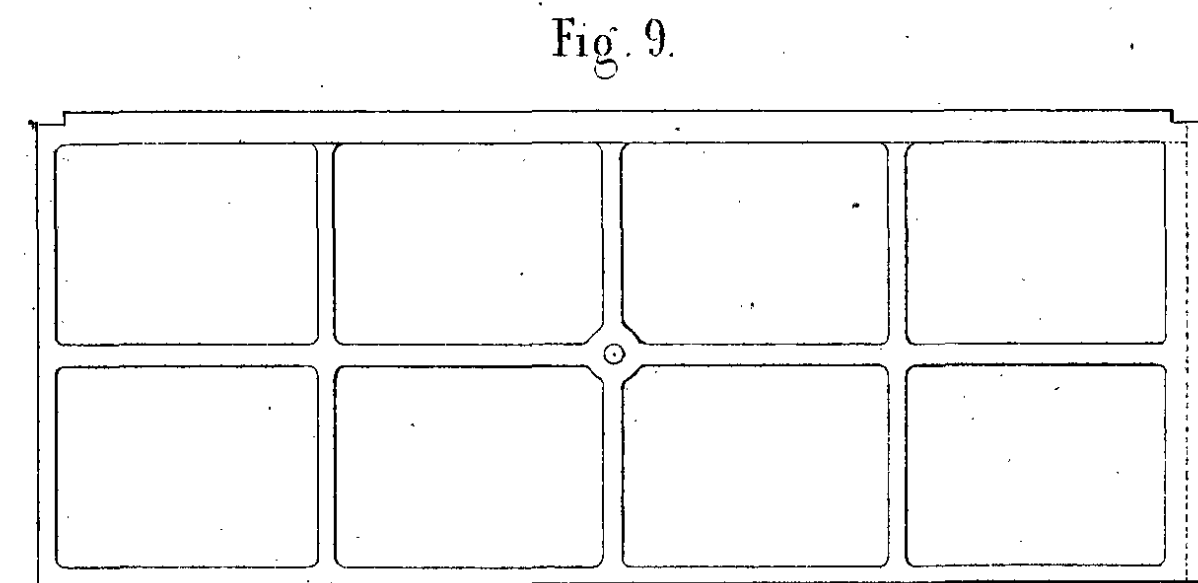
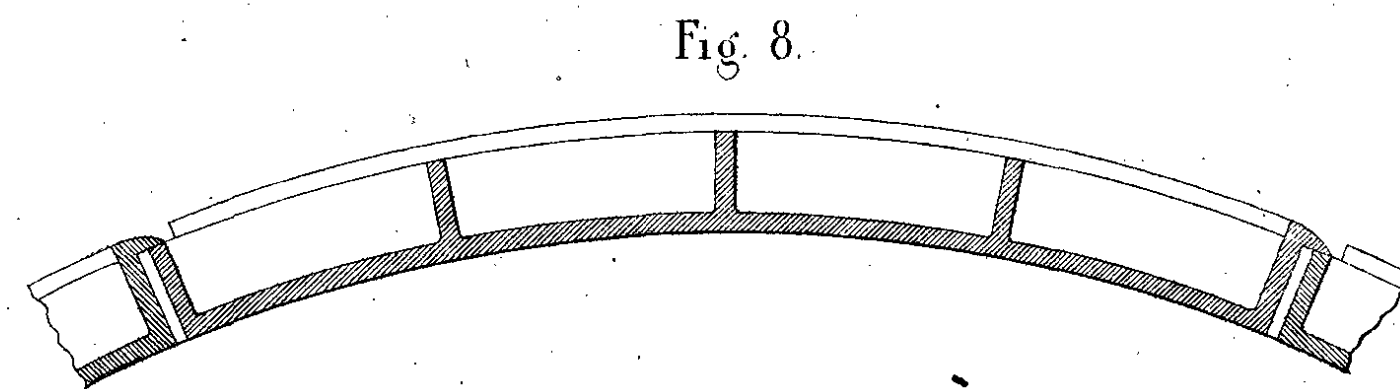
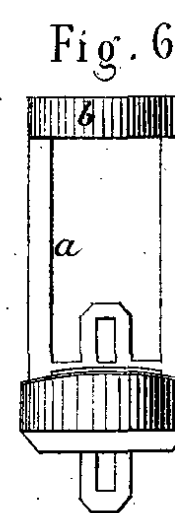
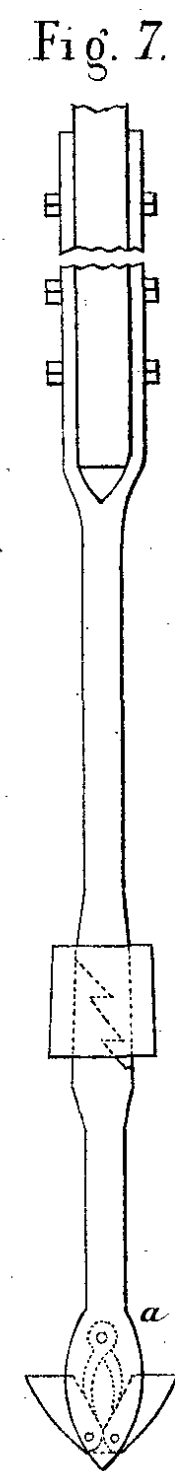
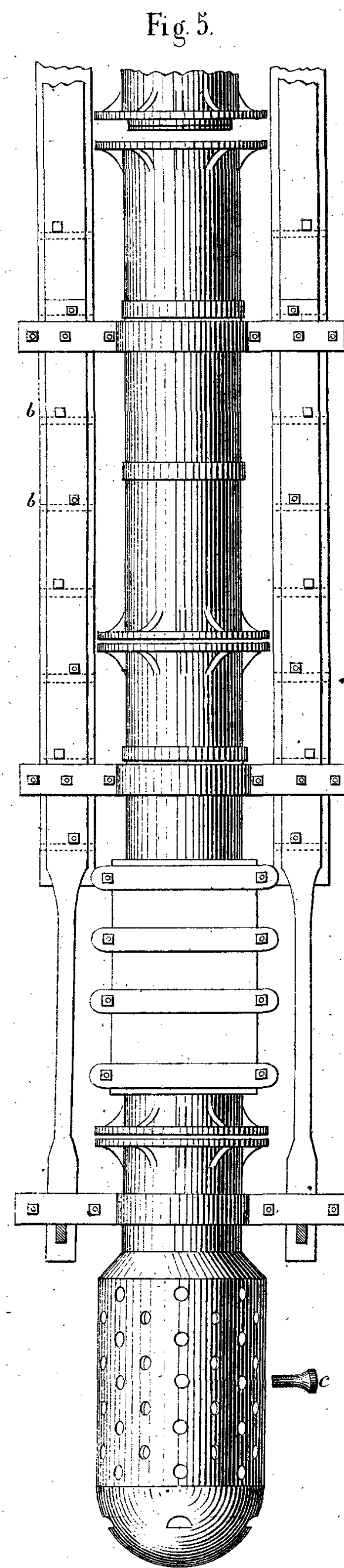








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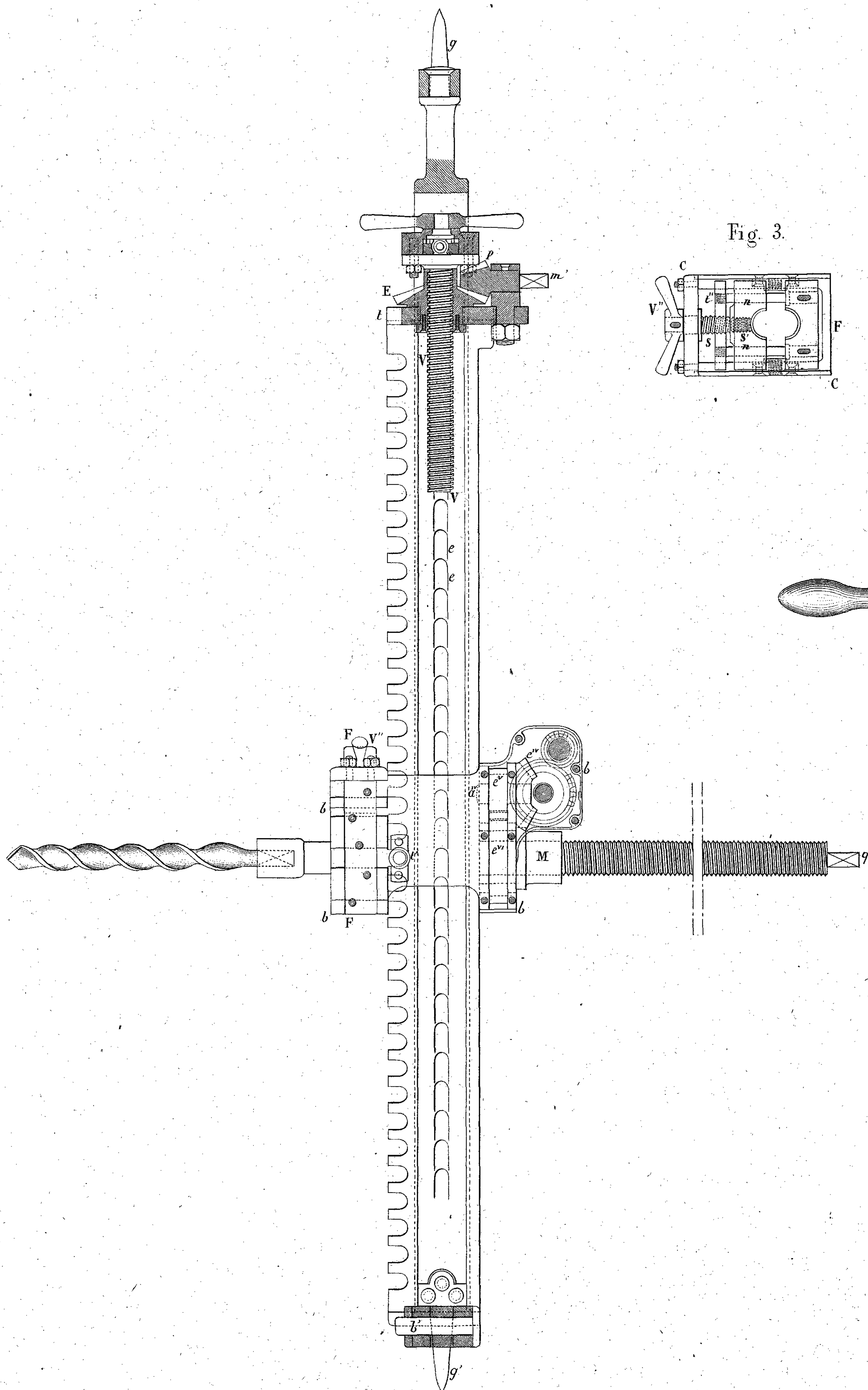


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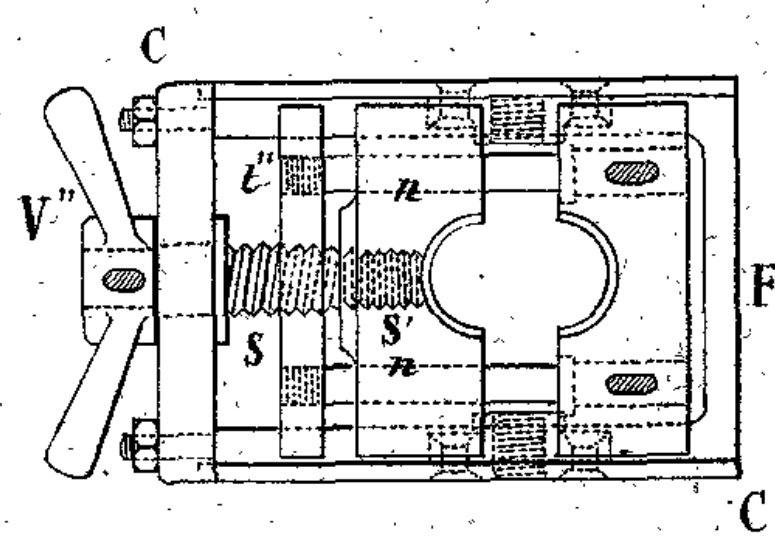


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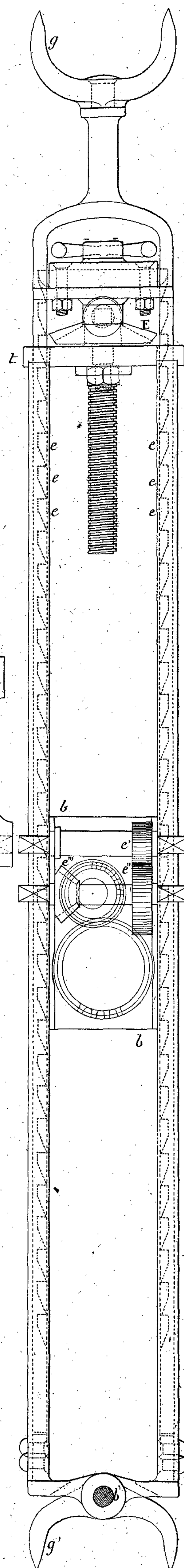








Fig. 10.

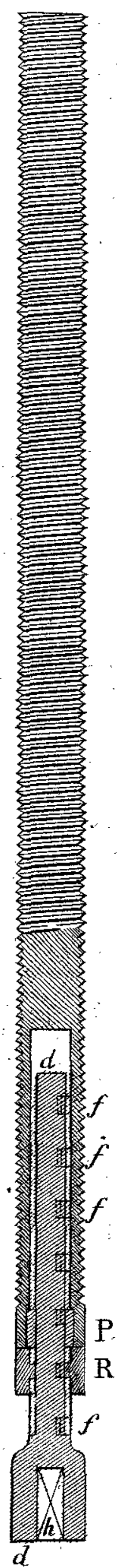


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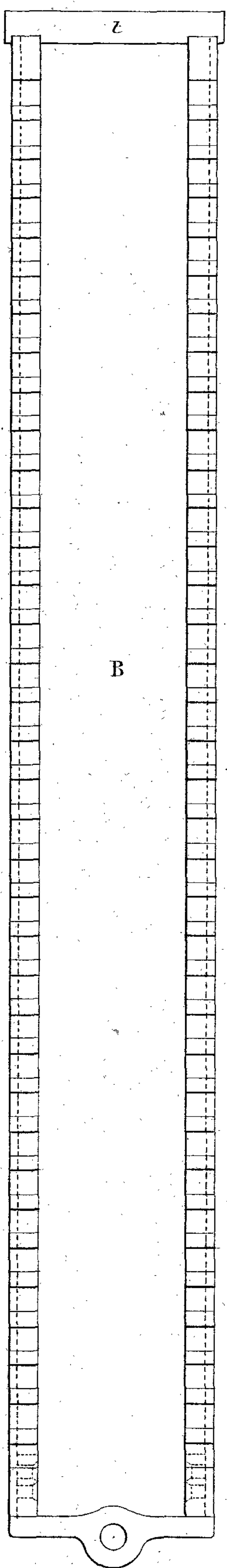


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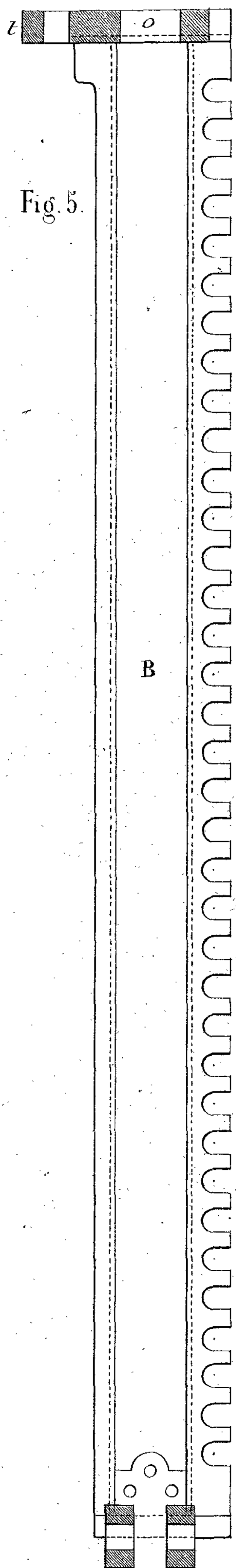


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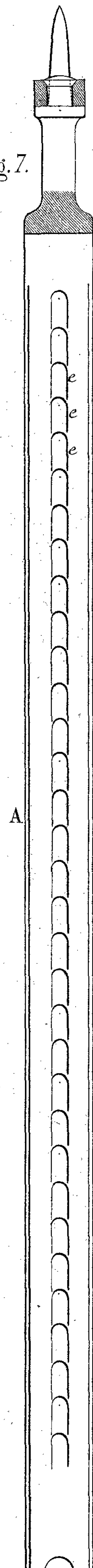


Fig. 9.

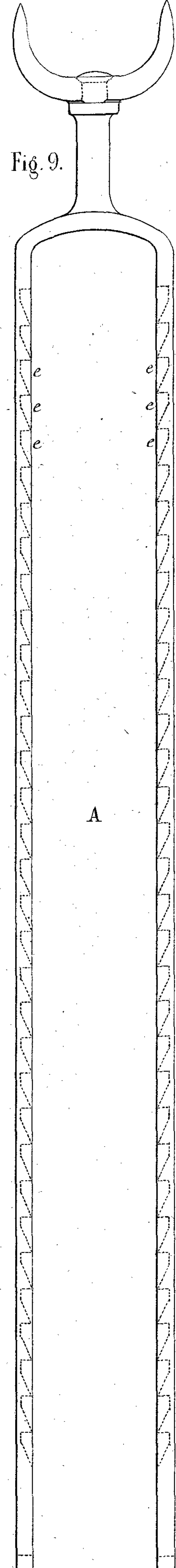


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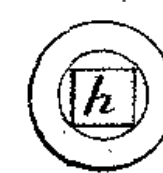


Fig. 12.



Fig. 13.



Fig. 17. Chaudière avec les nouvelles galeries.

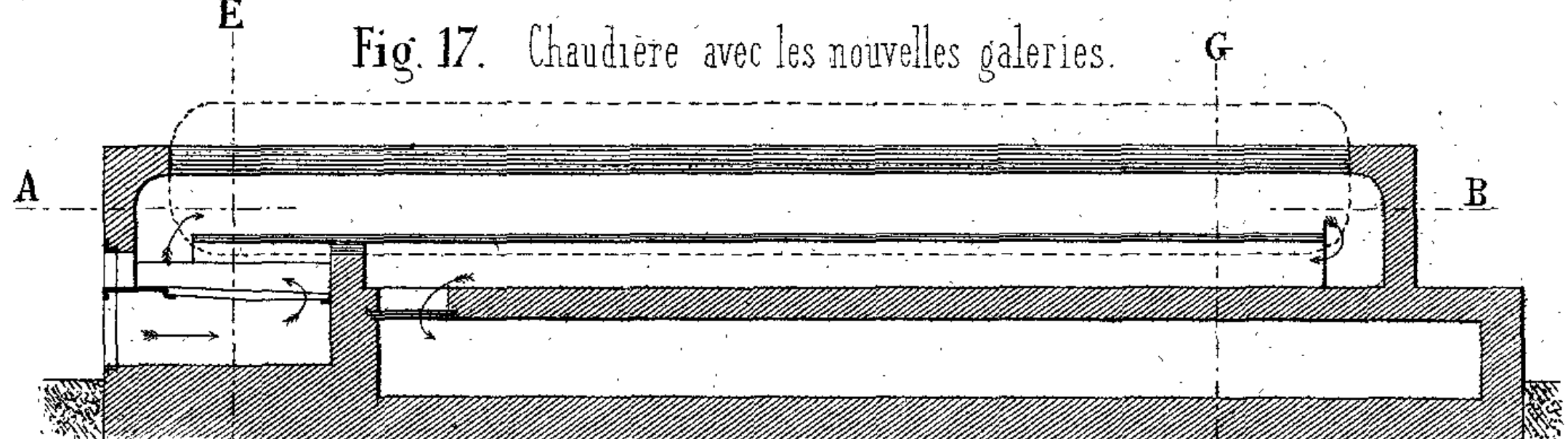


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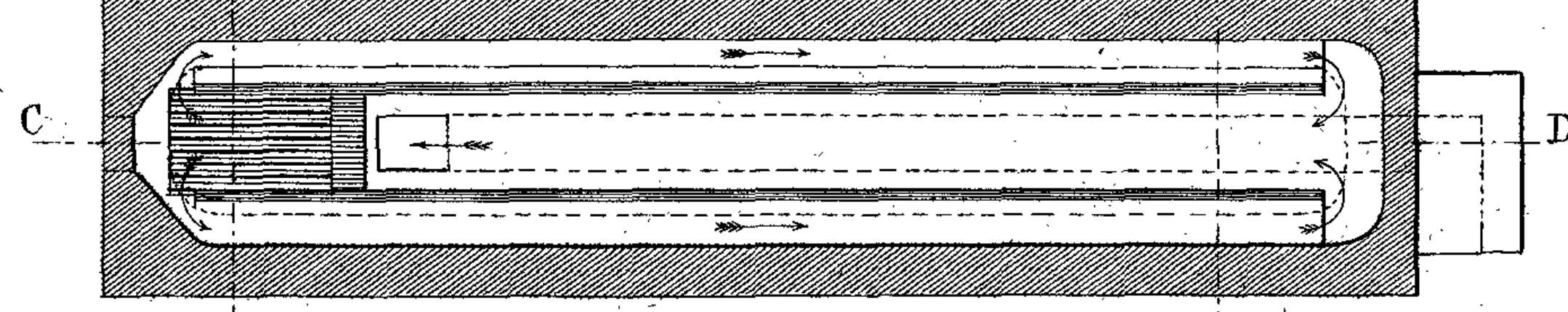


Fig. 21. Chaudière avant la modification du chauffage.

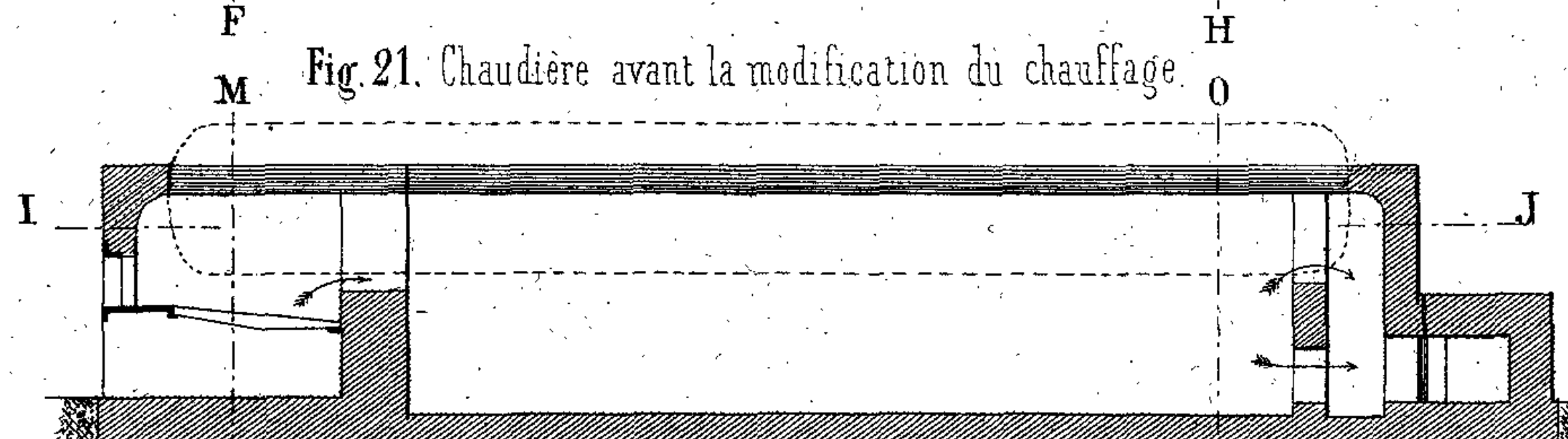
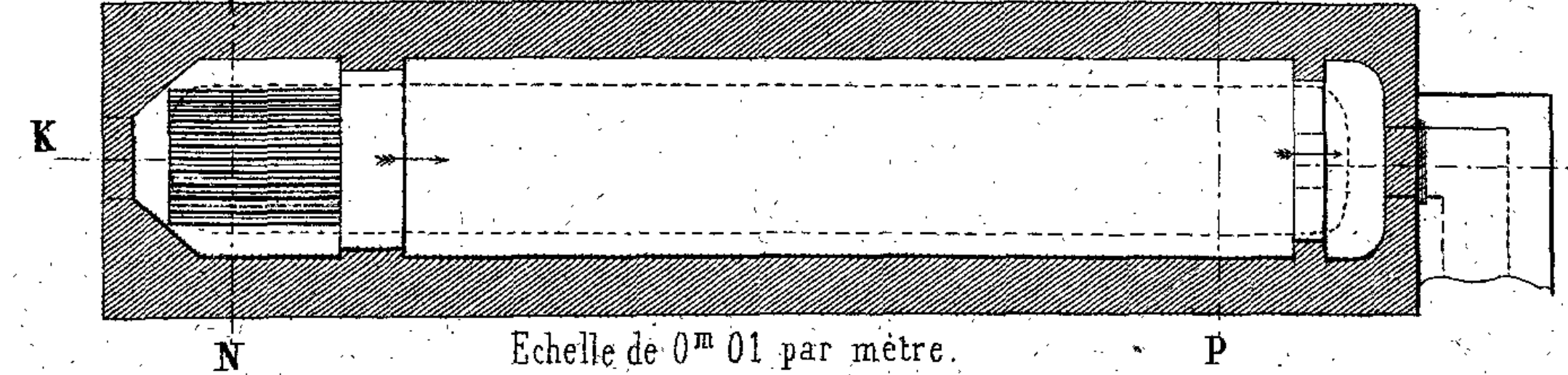


Fig. 22.



Echelle de 0<sup>m</sup> 01 par mètre.

Fig. 6.



Fig. 19.

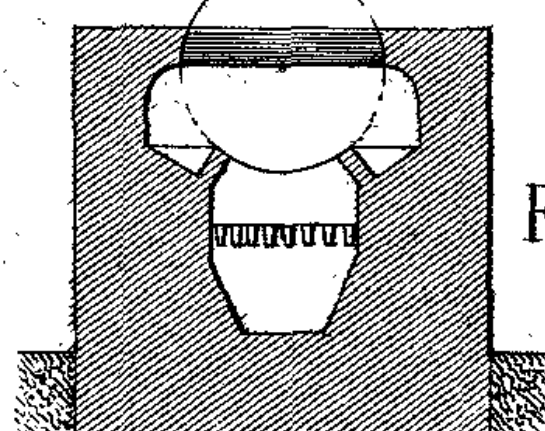


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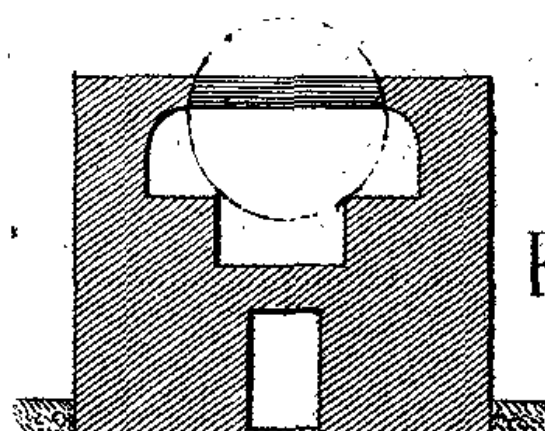


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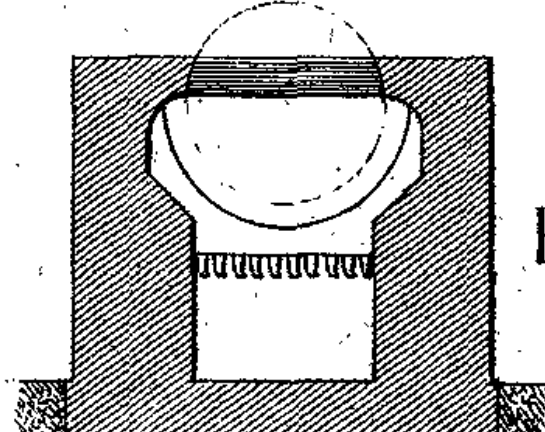


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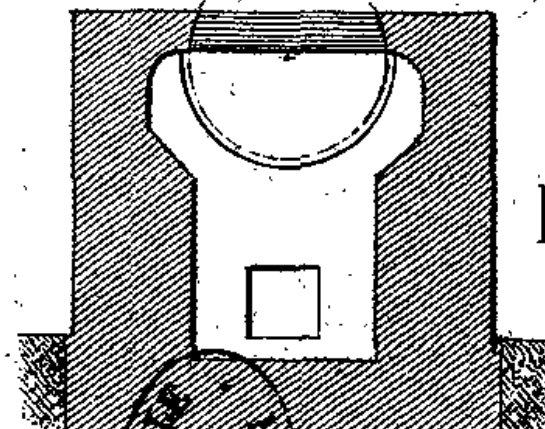


Fig. 8.



Fig. 14.

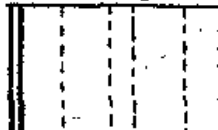
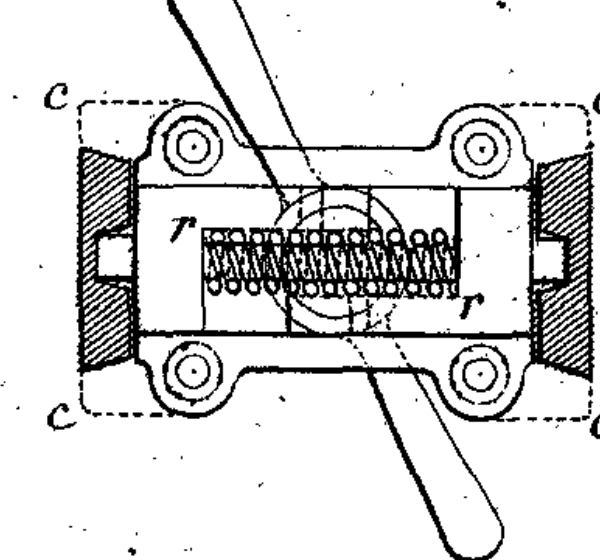


Fig. 15.



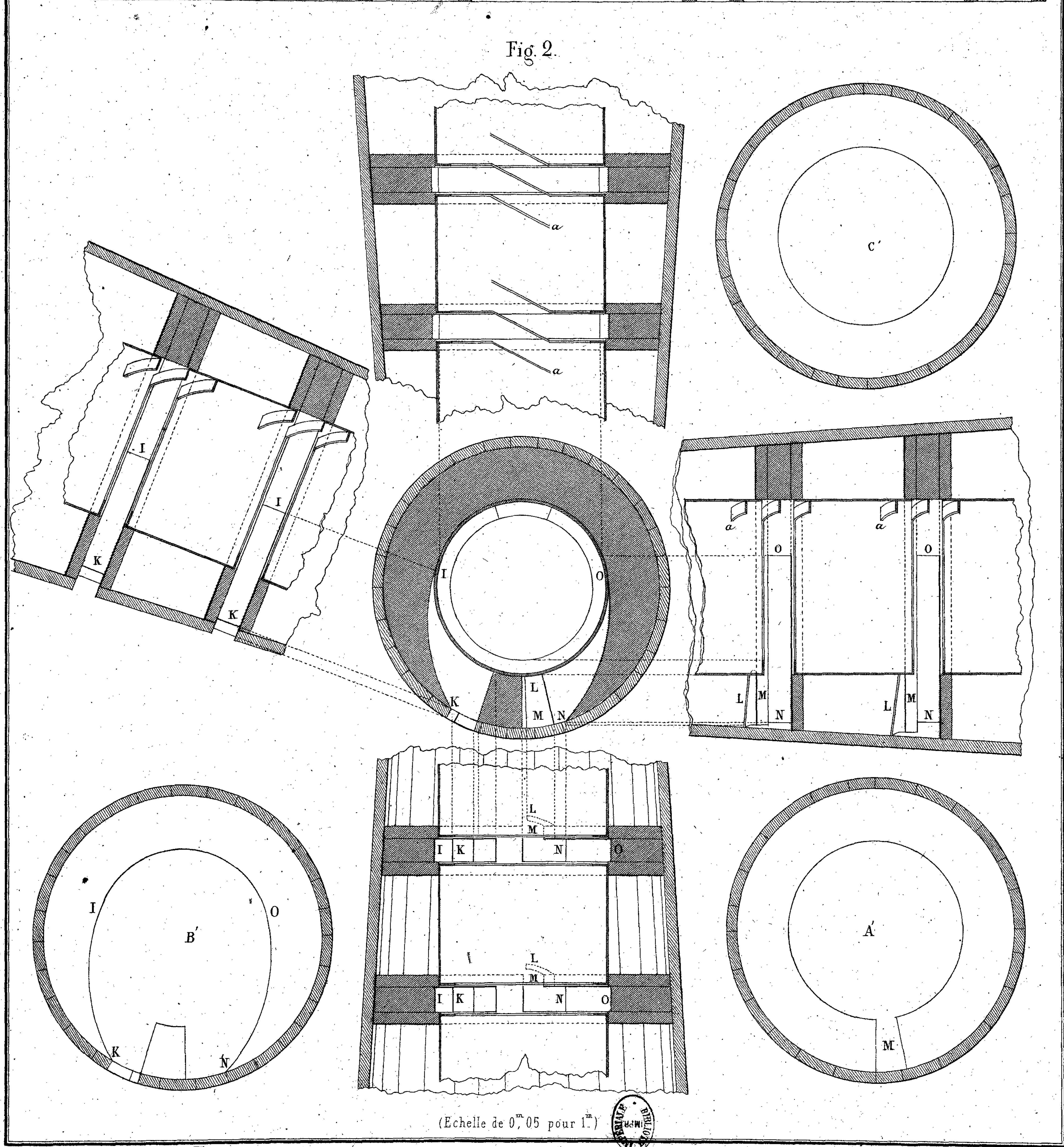
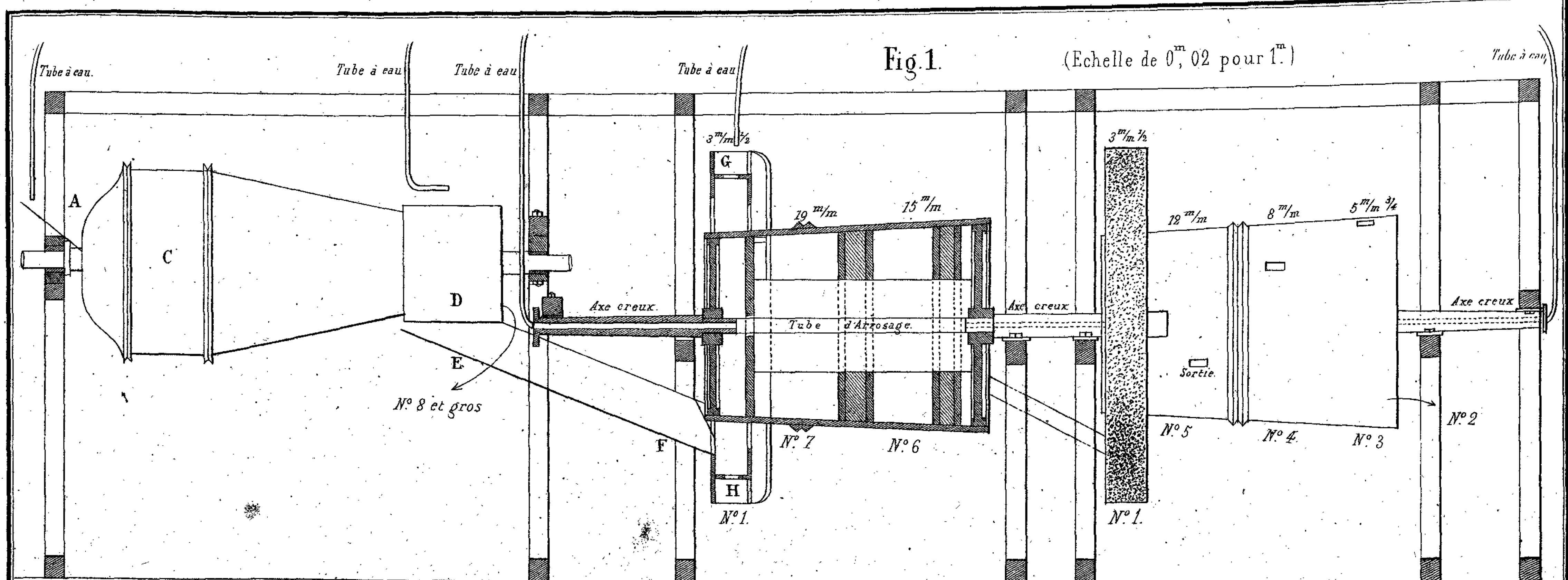
Fig. 16.





















# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1862-04.

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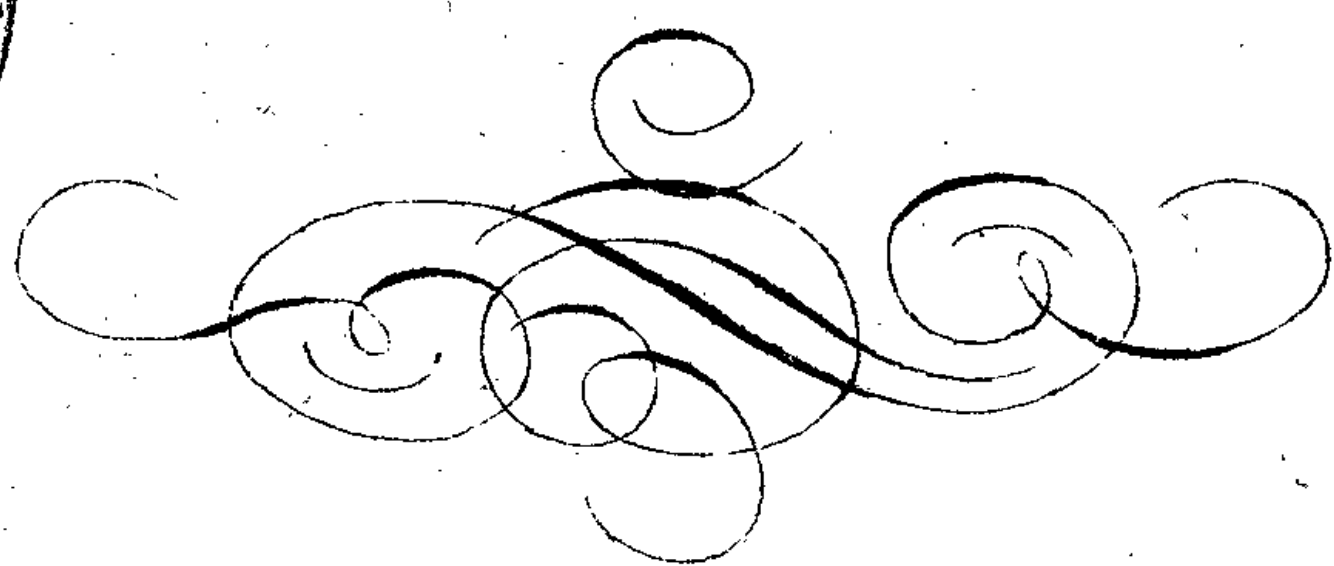




# ATLAS

DE LA

## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE



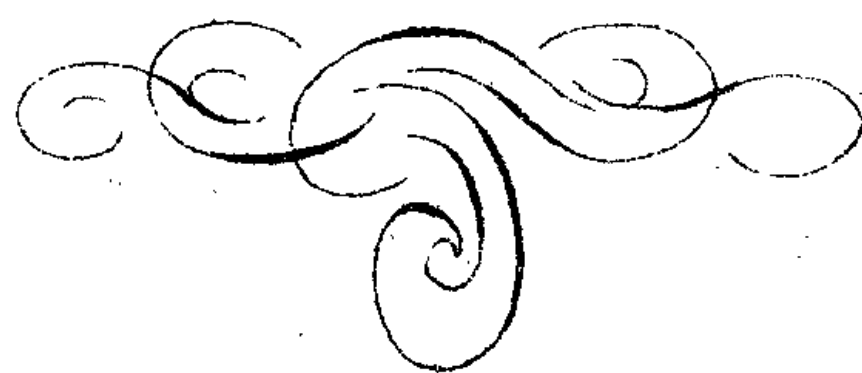
VII<sup>e</sup> ANNÉE.

4<sup>me</sup> LIVRAISON



Avril, Mai, Juin,

1862



IMPRIMERIE LITHOGRAPHIQUE

**LANTZ**

RUE DE LA LOIRE 4, S<sup>t</sup> ETIENNE.

V 2735  
Eda 7.







Fig. 1

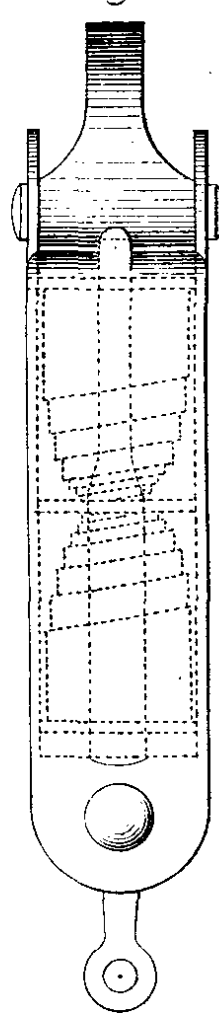


Fig. 2. Peasley (Ensemble)

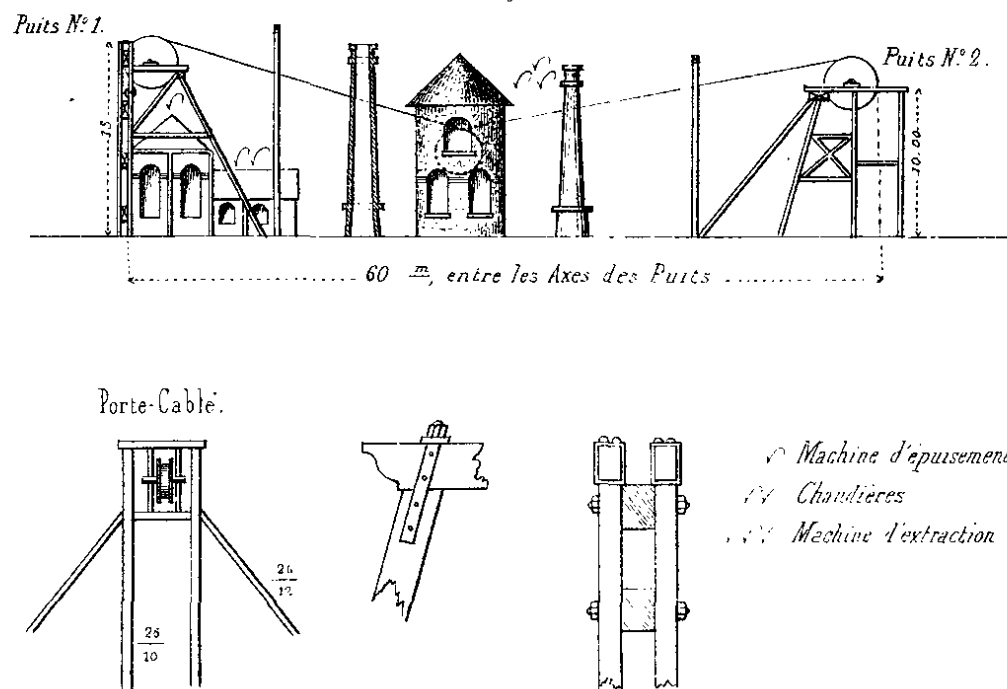


Fig. 3

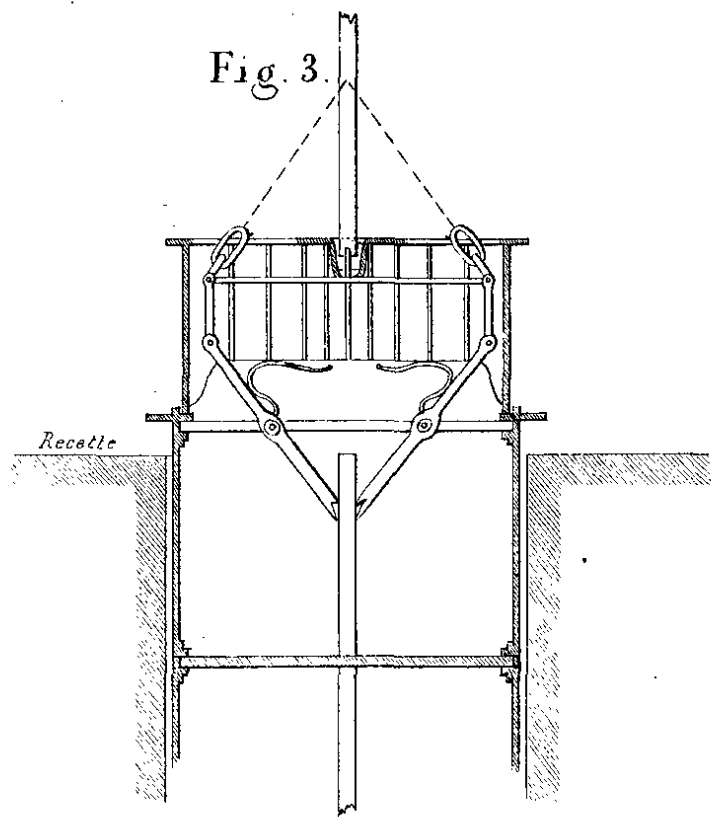


Fig. 4

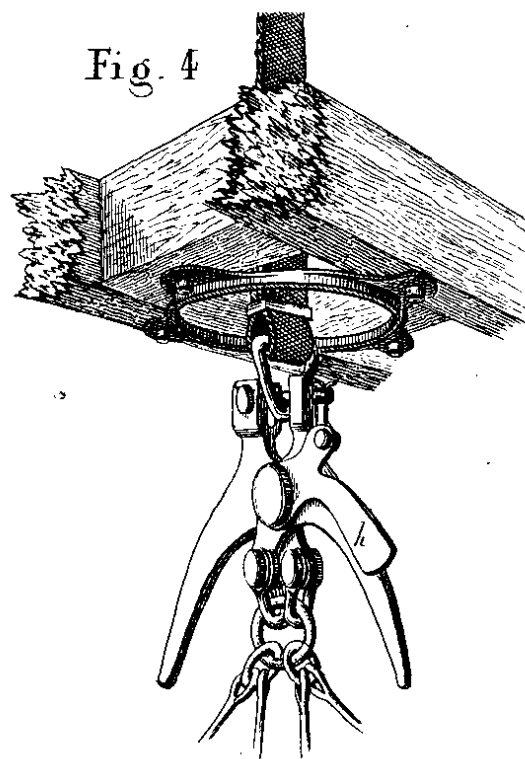


Fig. 5

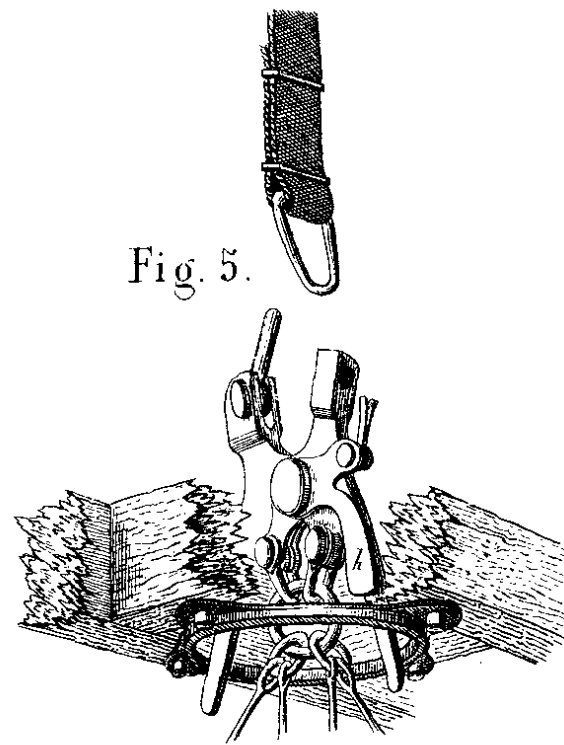


Fig. 6

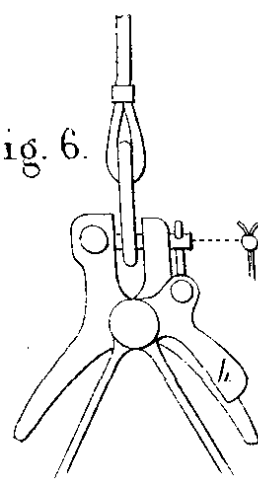


Fig. 7

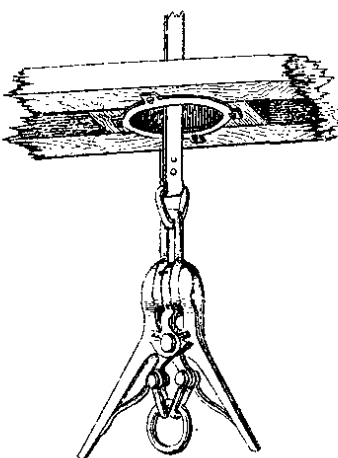


Fig. 8

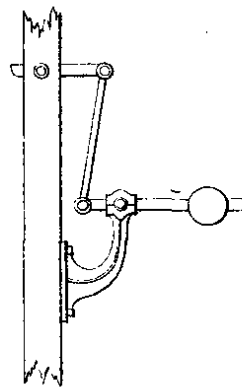


Fig. 12

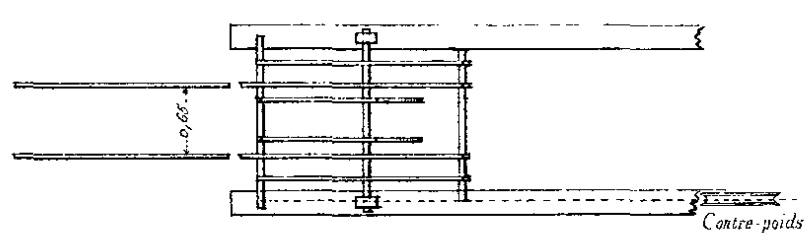


Fig. 11

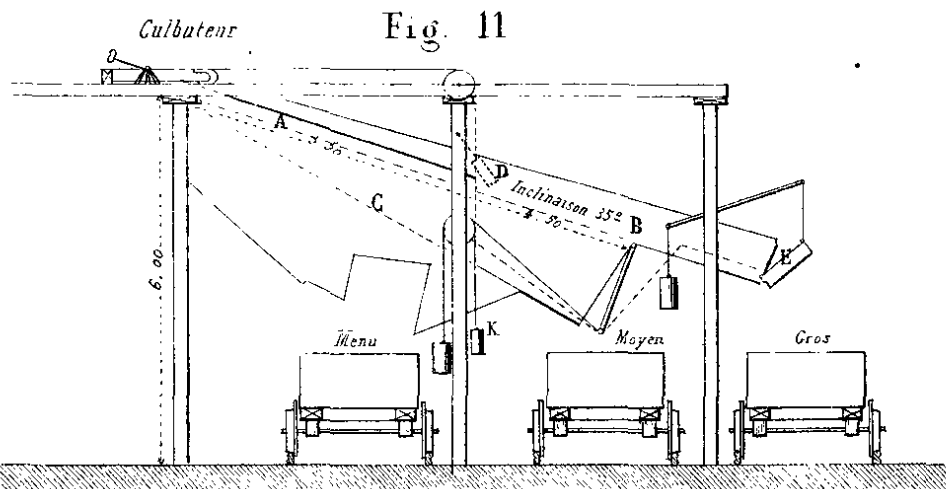


Fig. 10

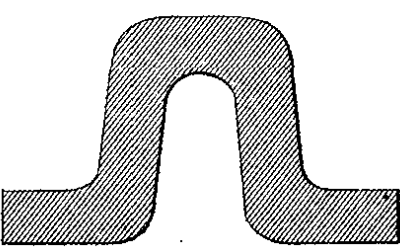


Fig. 9

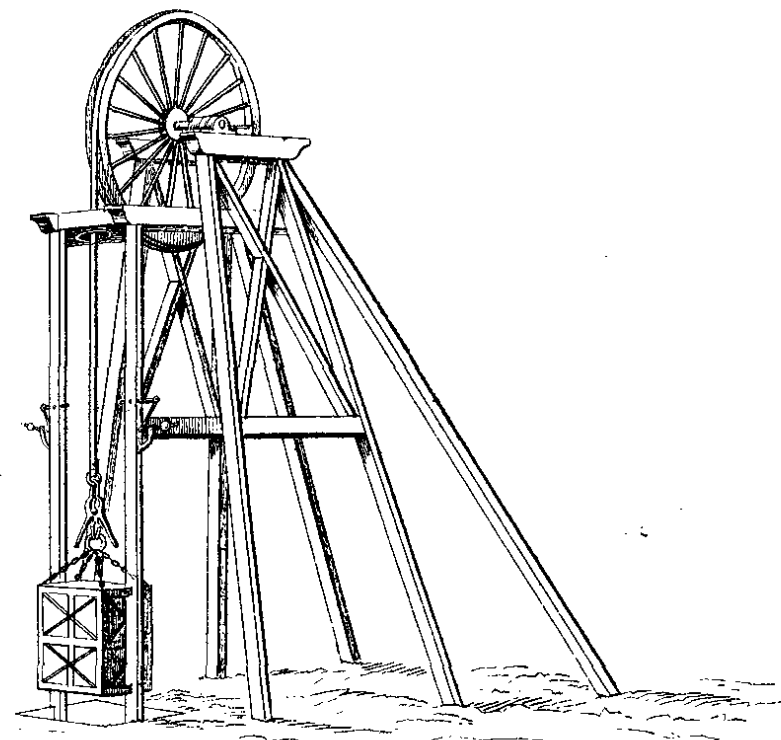


Fig. 13

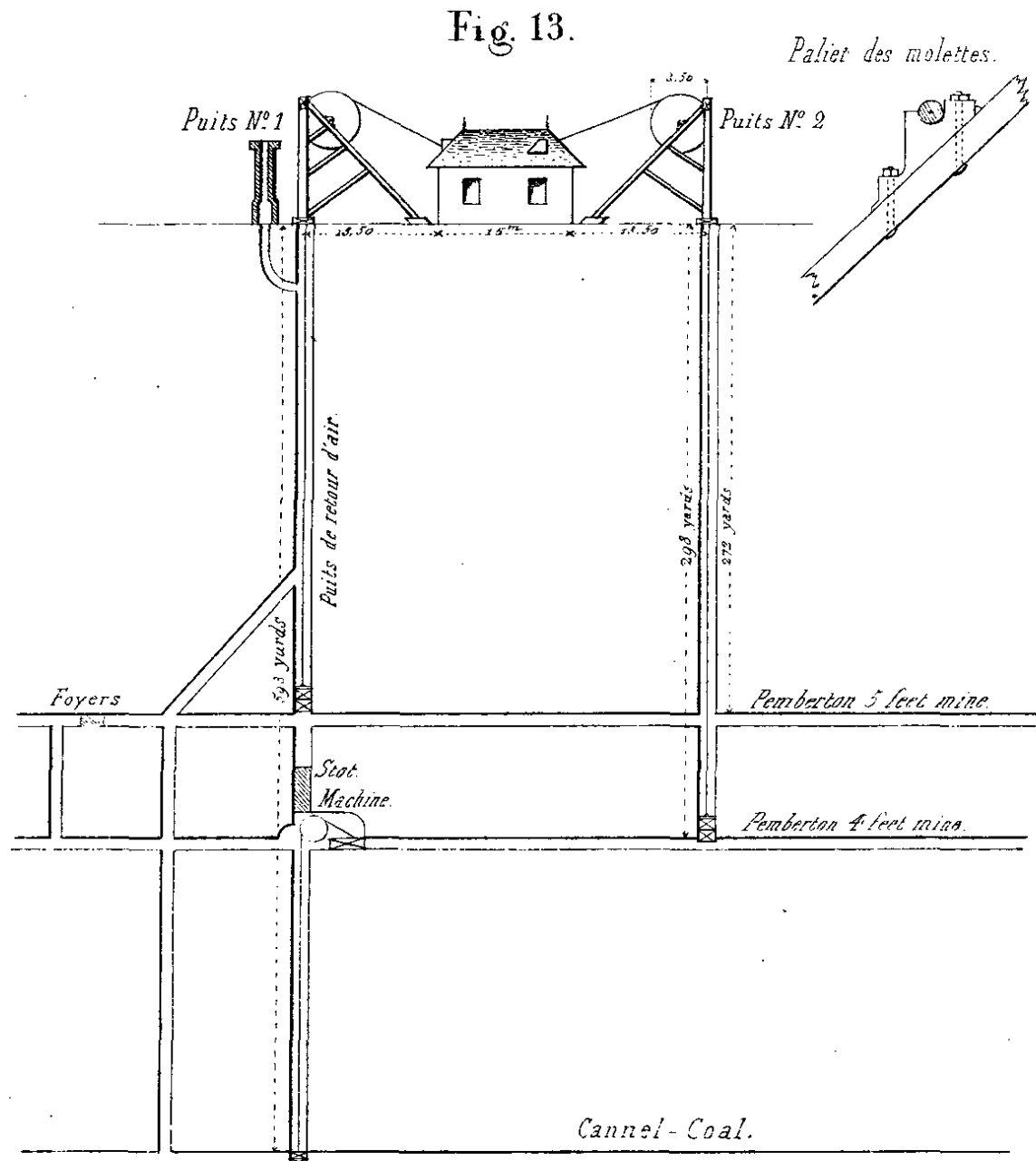


Fig. 15

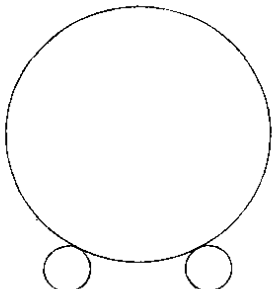


Fig. 14

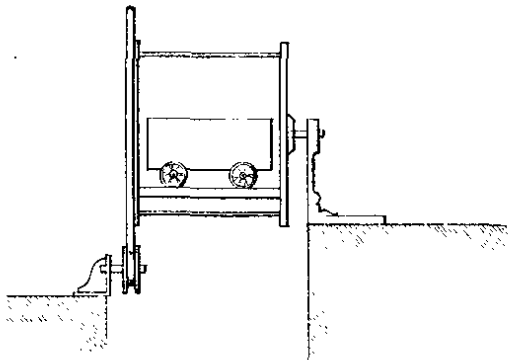


Fig. 19

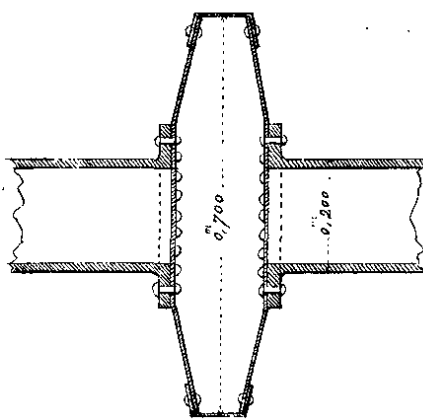


Fig. 16

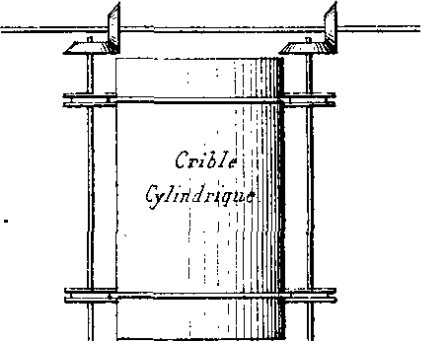


Fig. 17

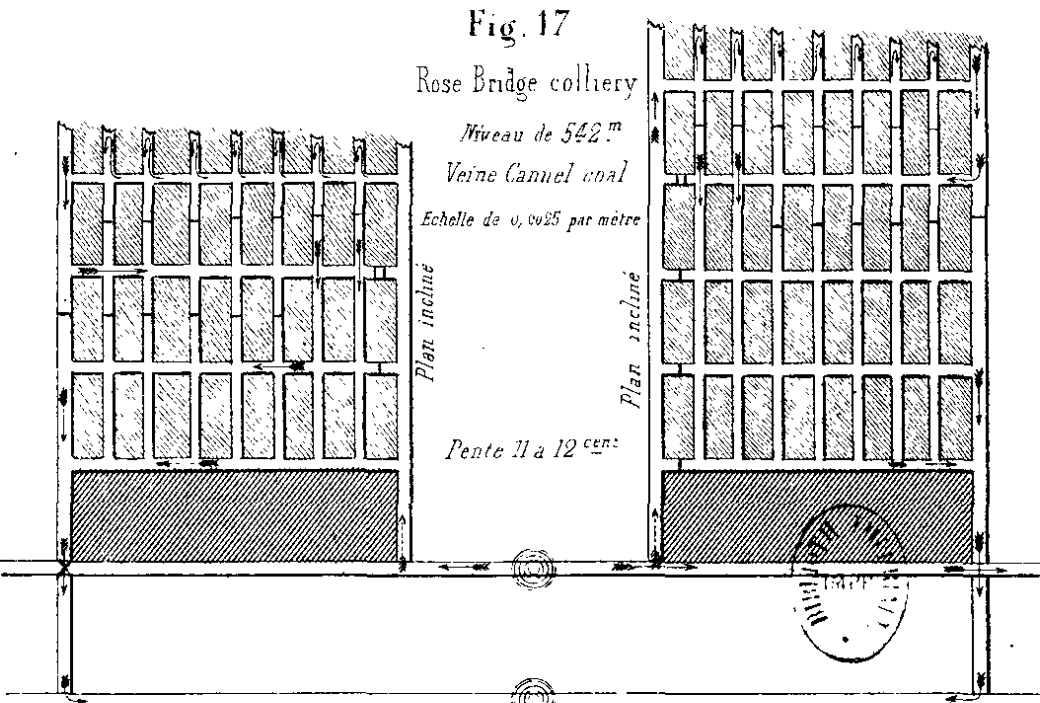


Fig. 18 Fosse en creusement dans le voisinage de Rose-Bridge.

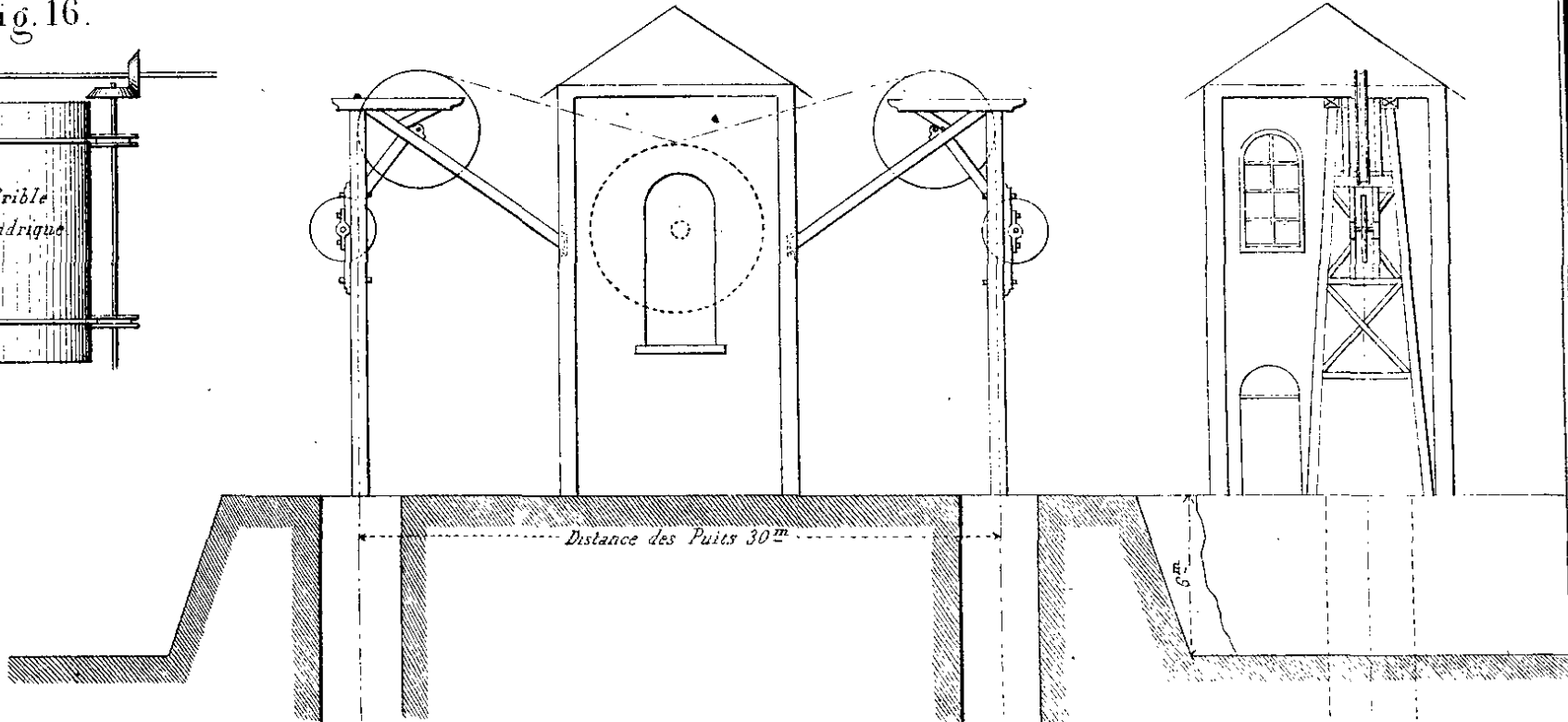








Fig 2. Elevation et Coupe suivant E F.

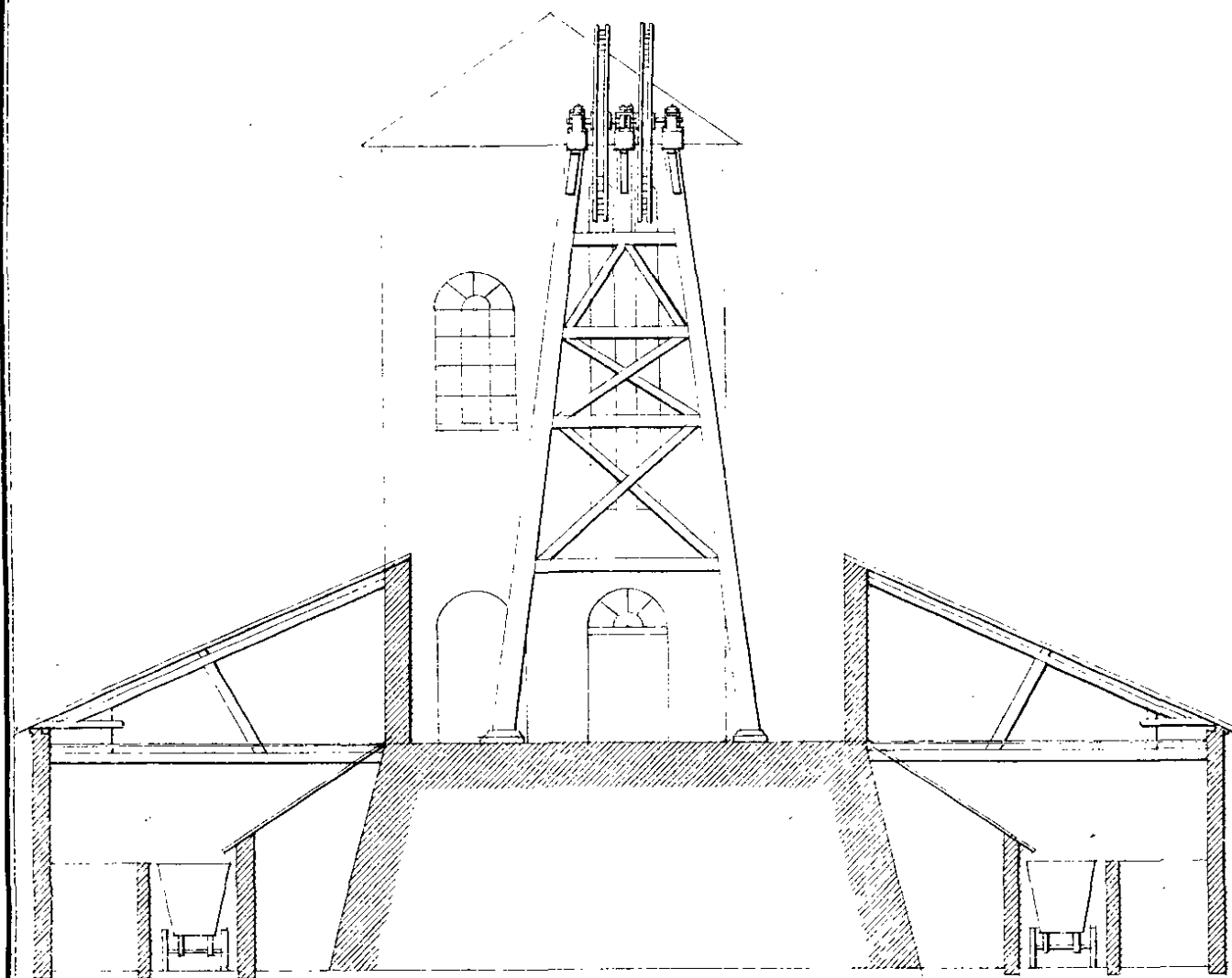


Fig 1. Coupe suivant AB, CD.

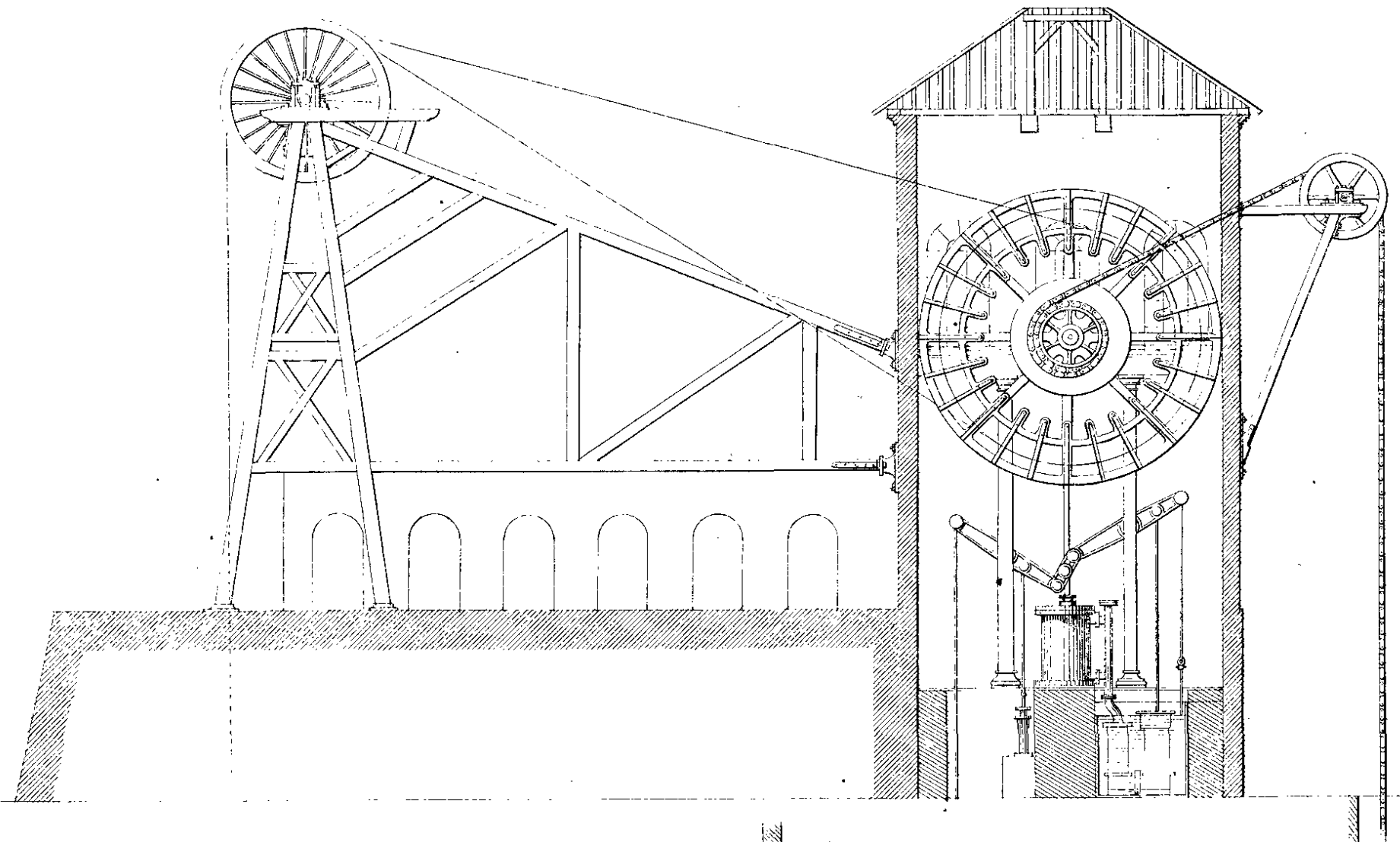


Fig 4. Elevation et Coupe suivant H L.

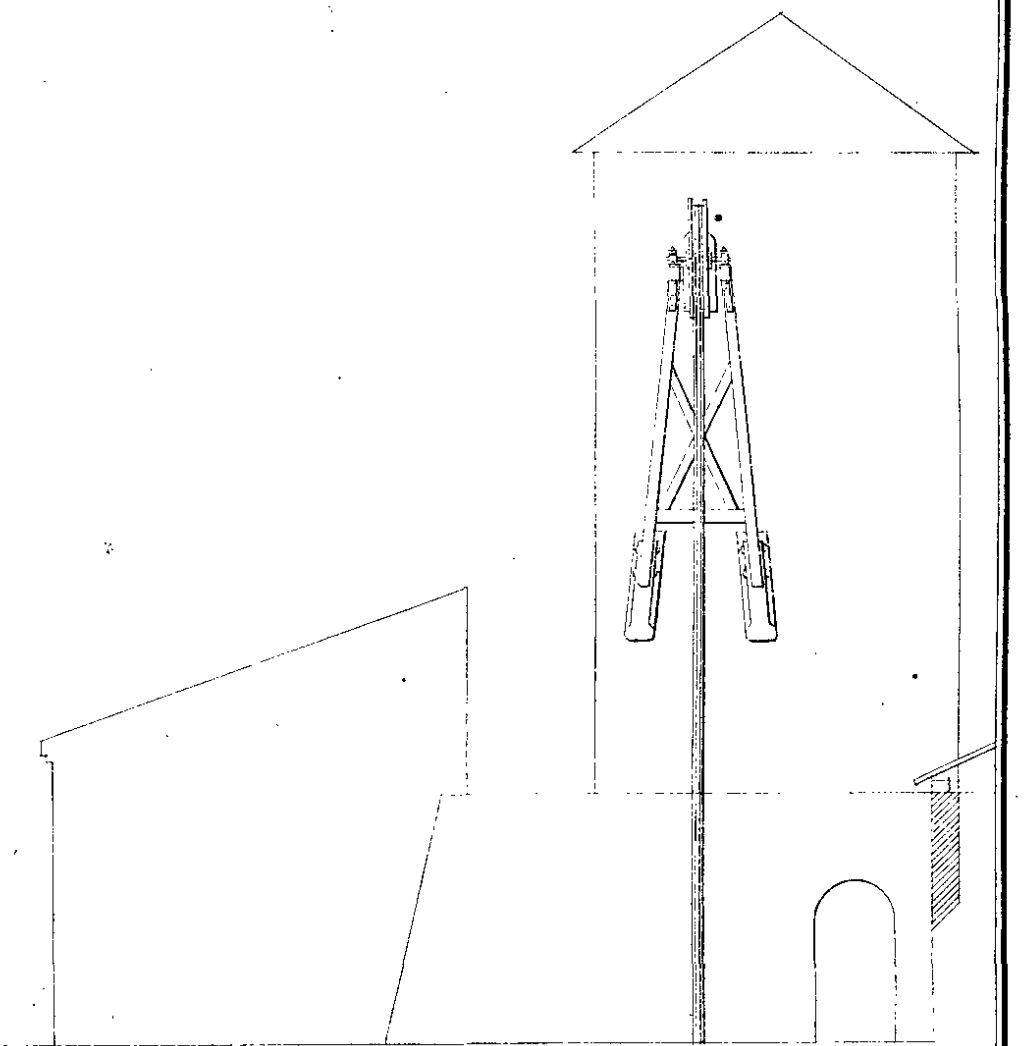


Fig 3.

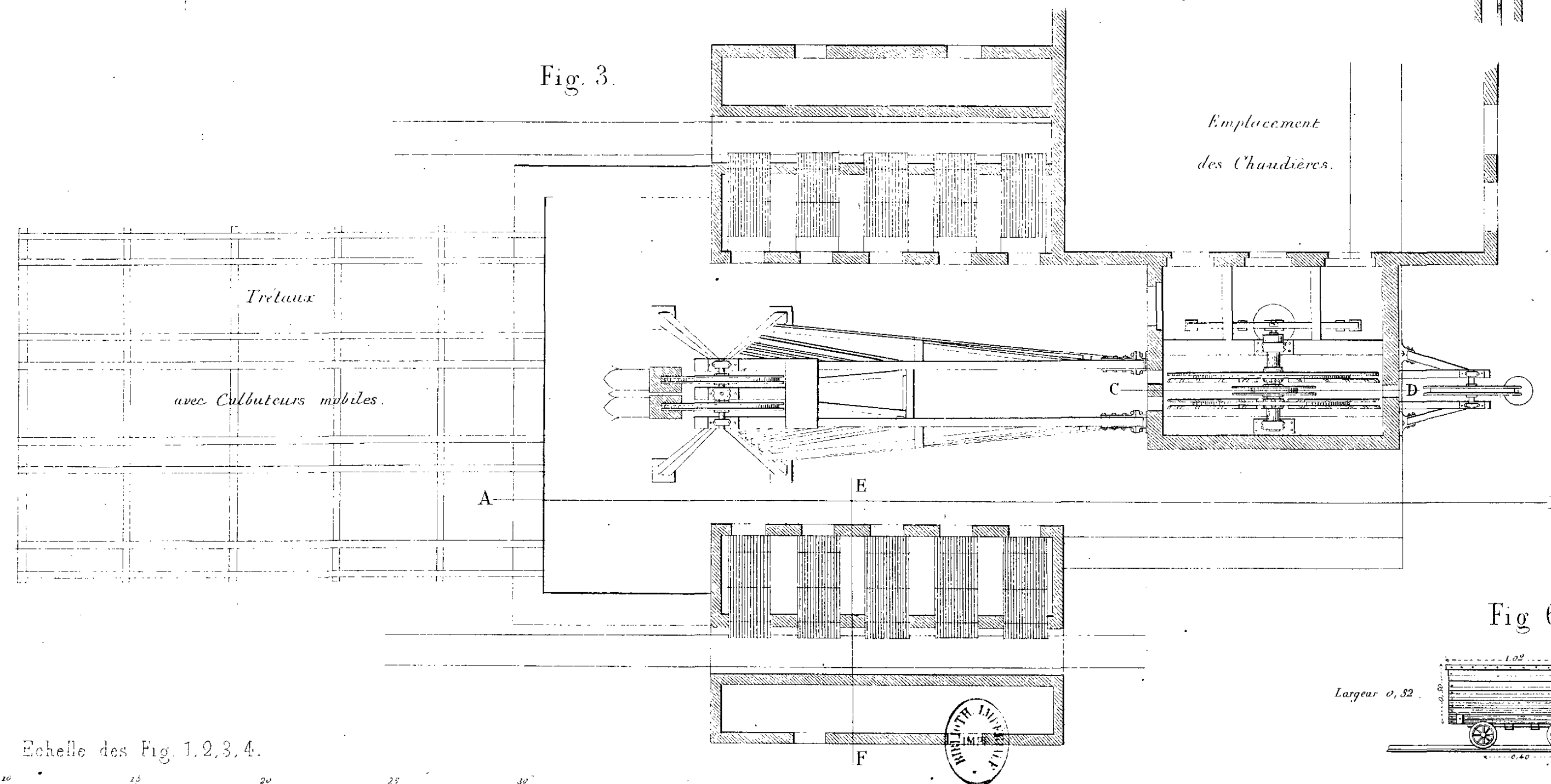


Fig 5.

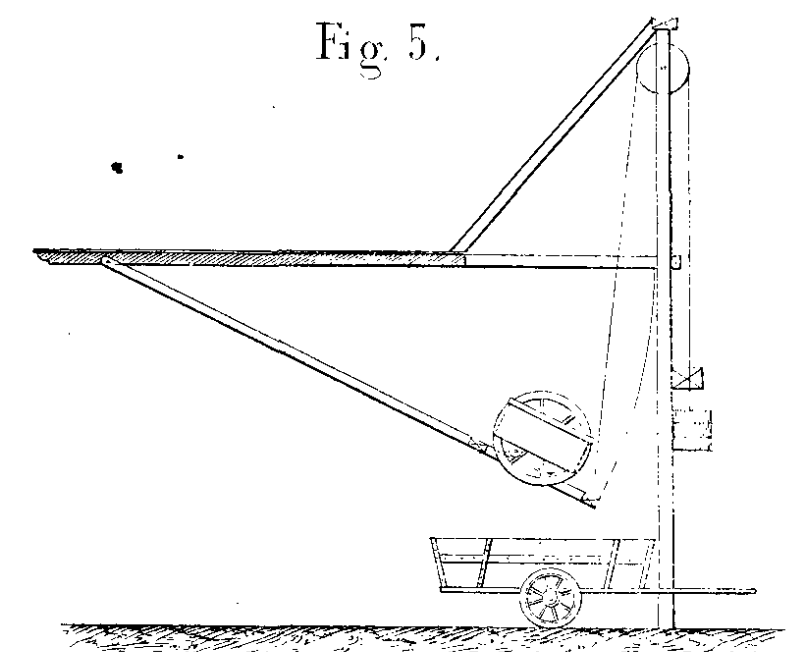


Fig 6.

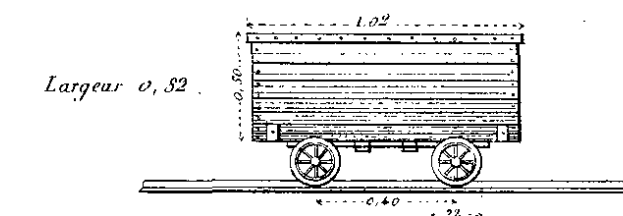
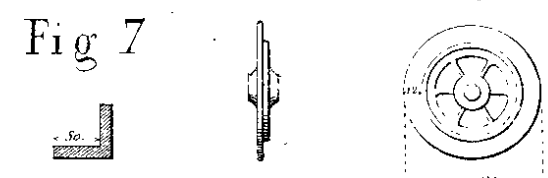


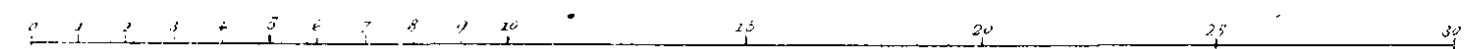
Fig 8.

Fig 9.

Fig 7.



Echelle des Fig. 1, 2, 3, 4.









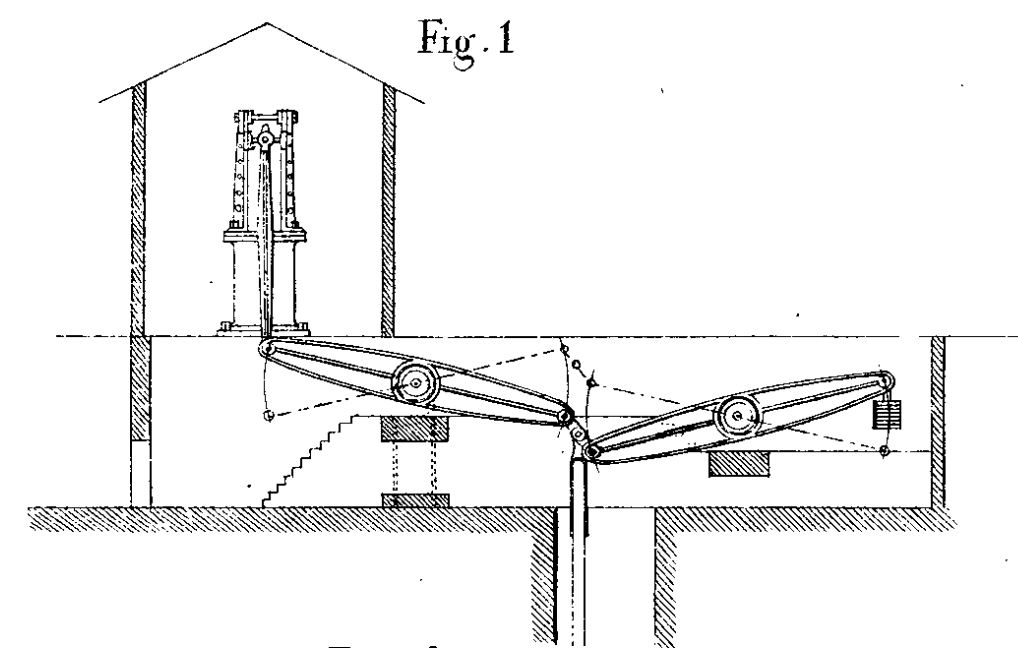


Fig. 2

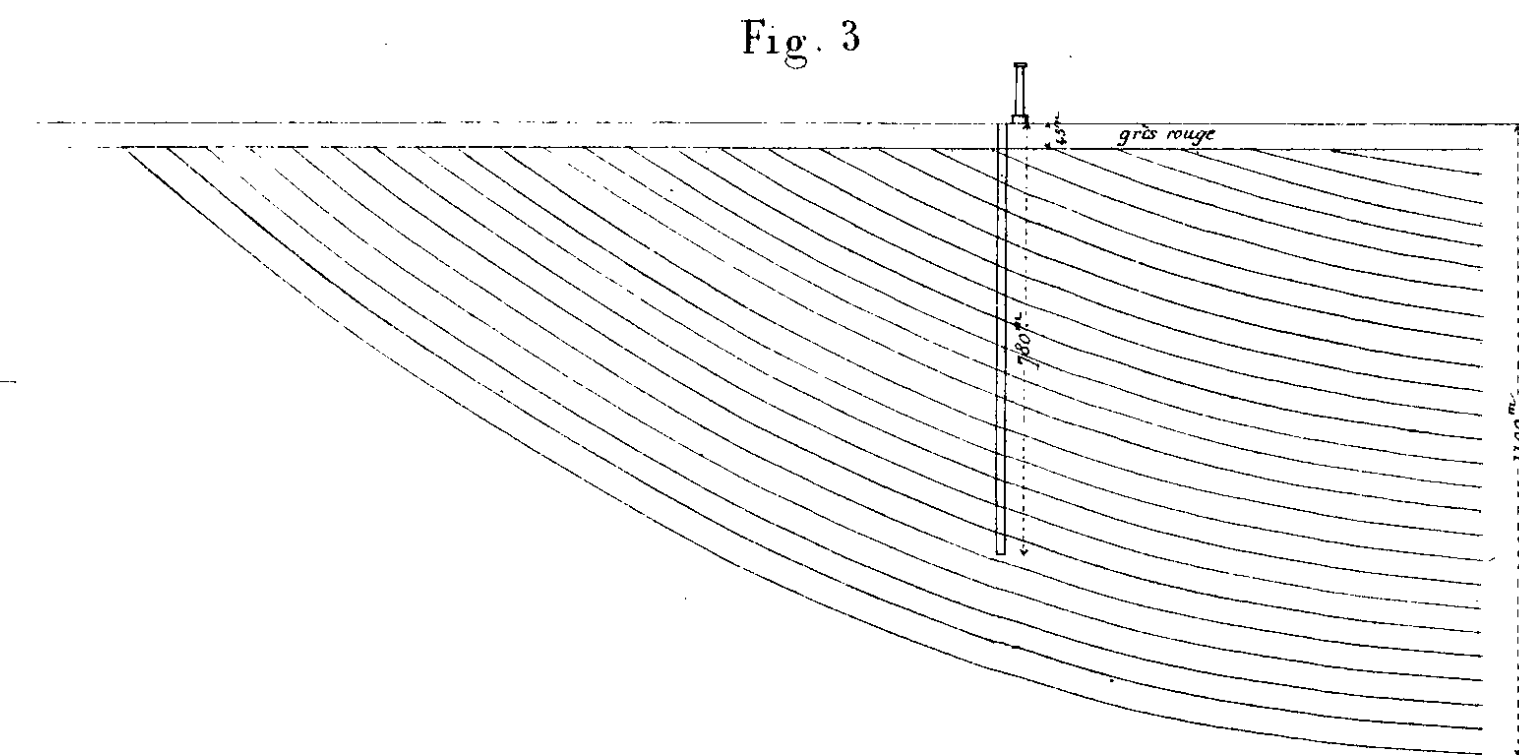
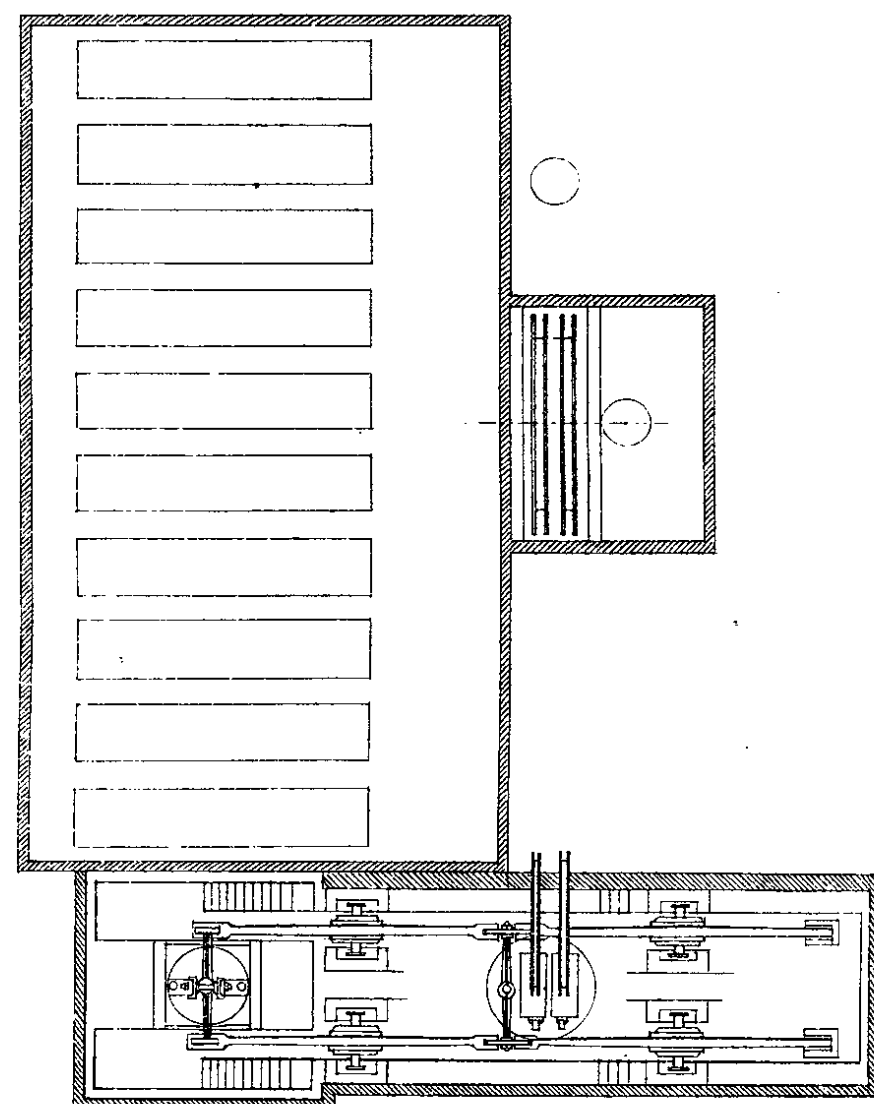


Fig. 3

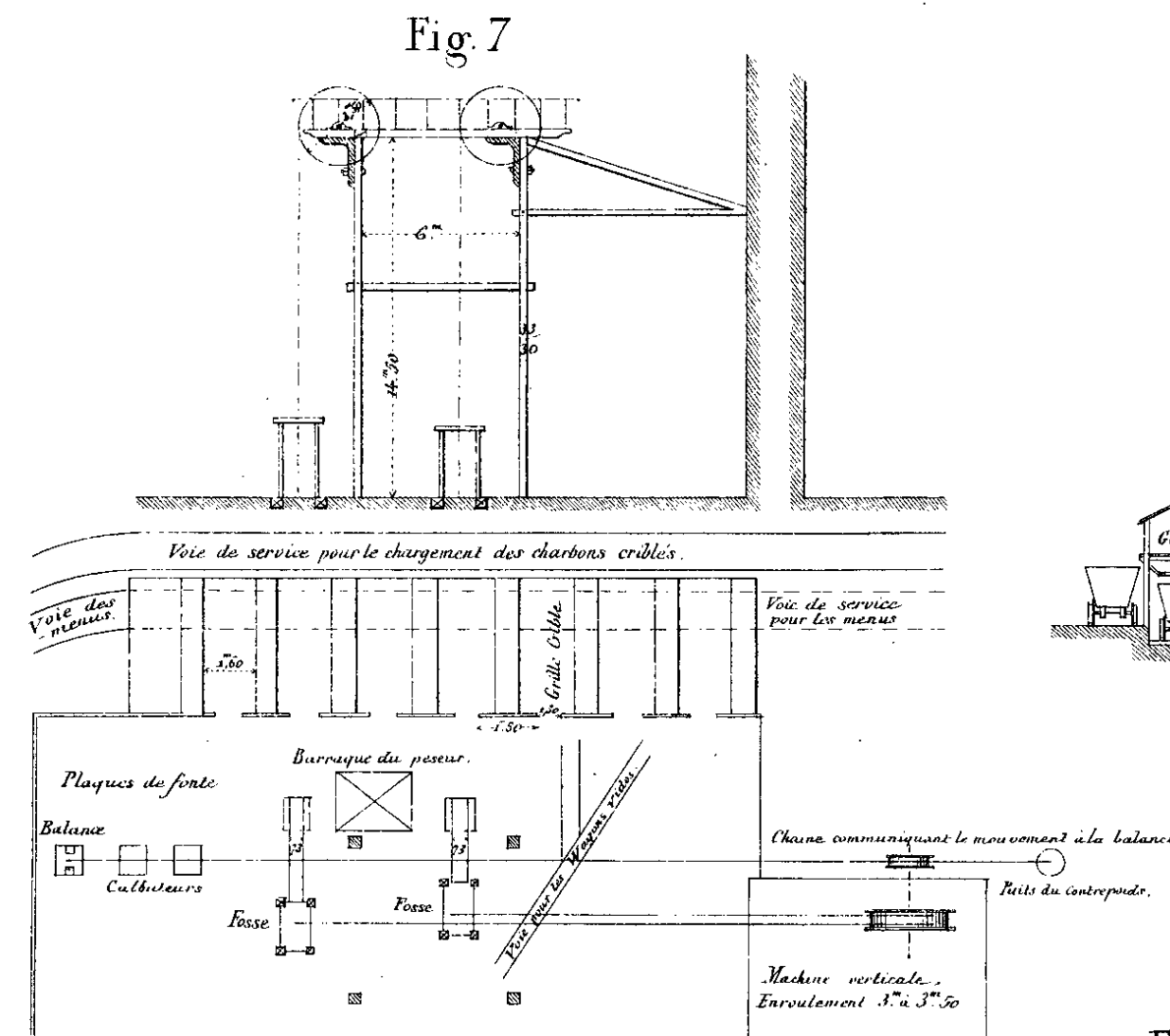


Fig. 7

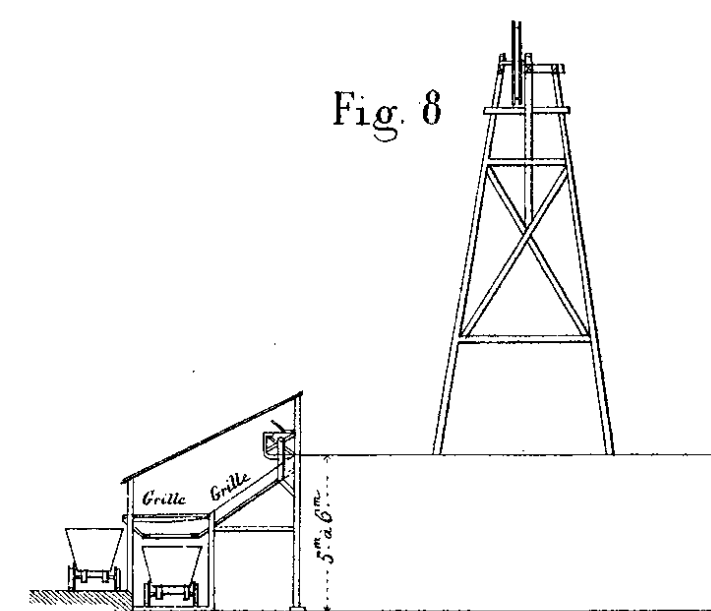


Fig. 8

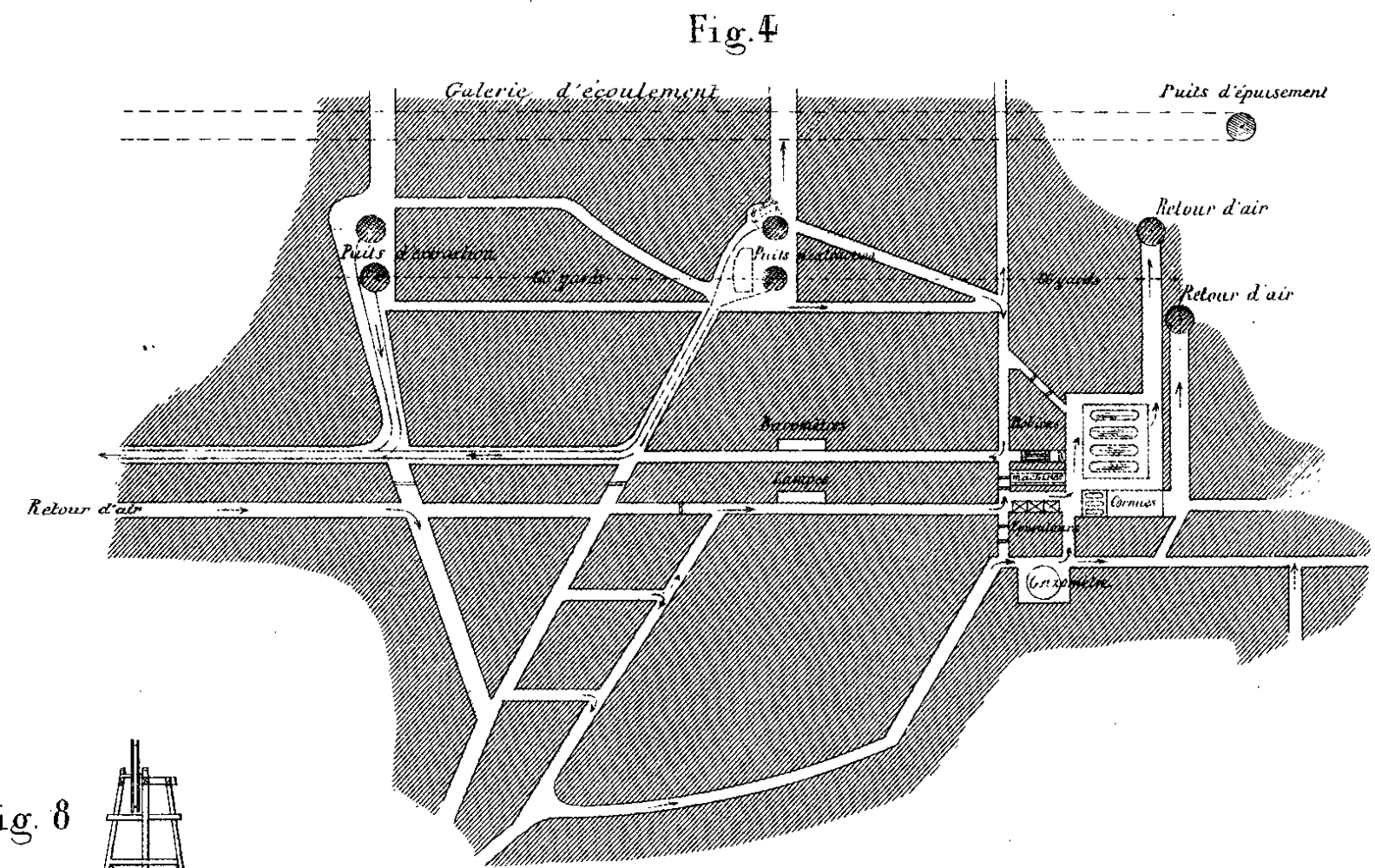


Fig. 4

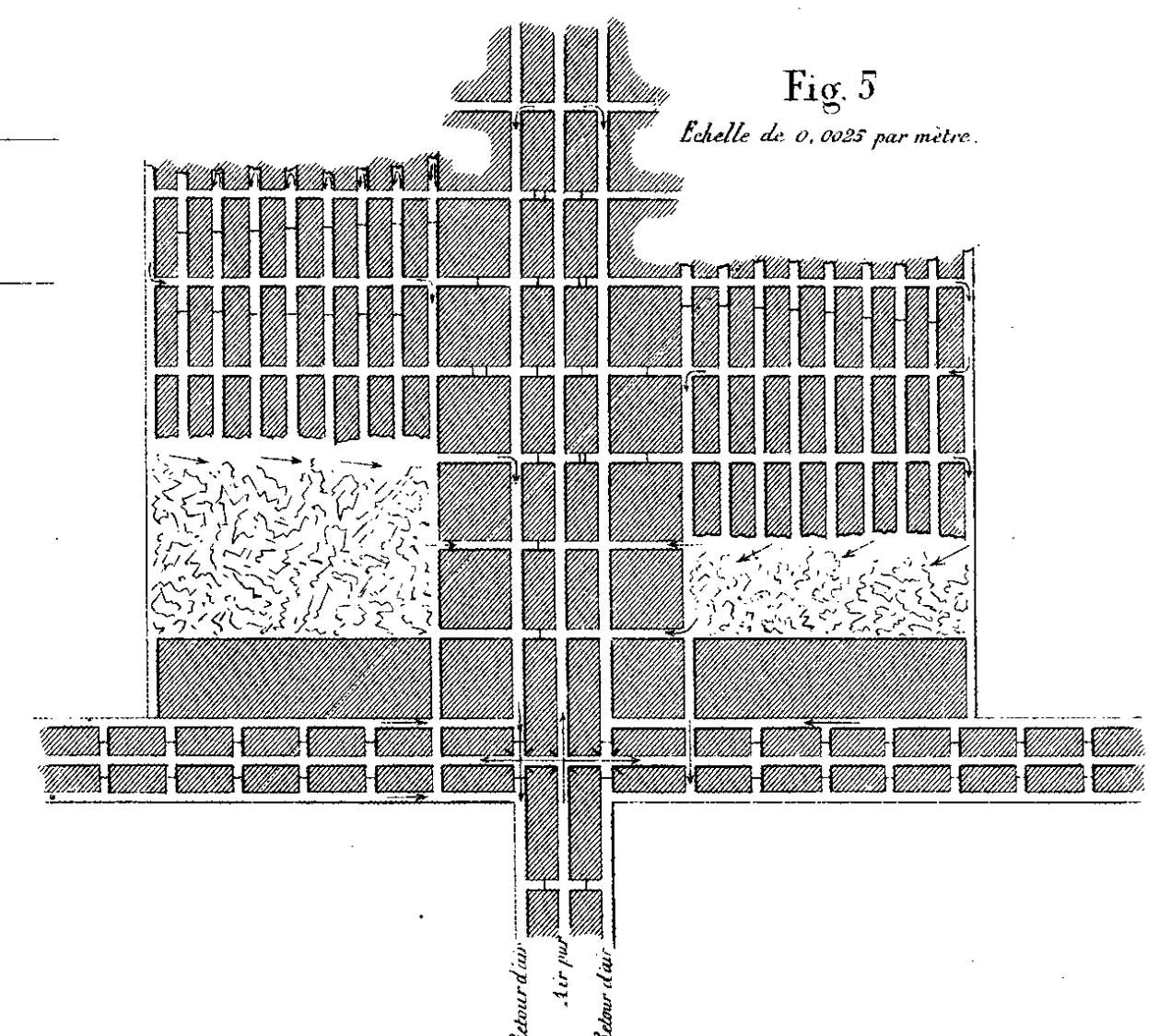


Fig. 5  
Echelle de 0,0025 par mètre.

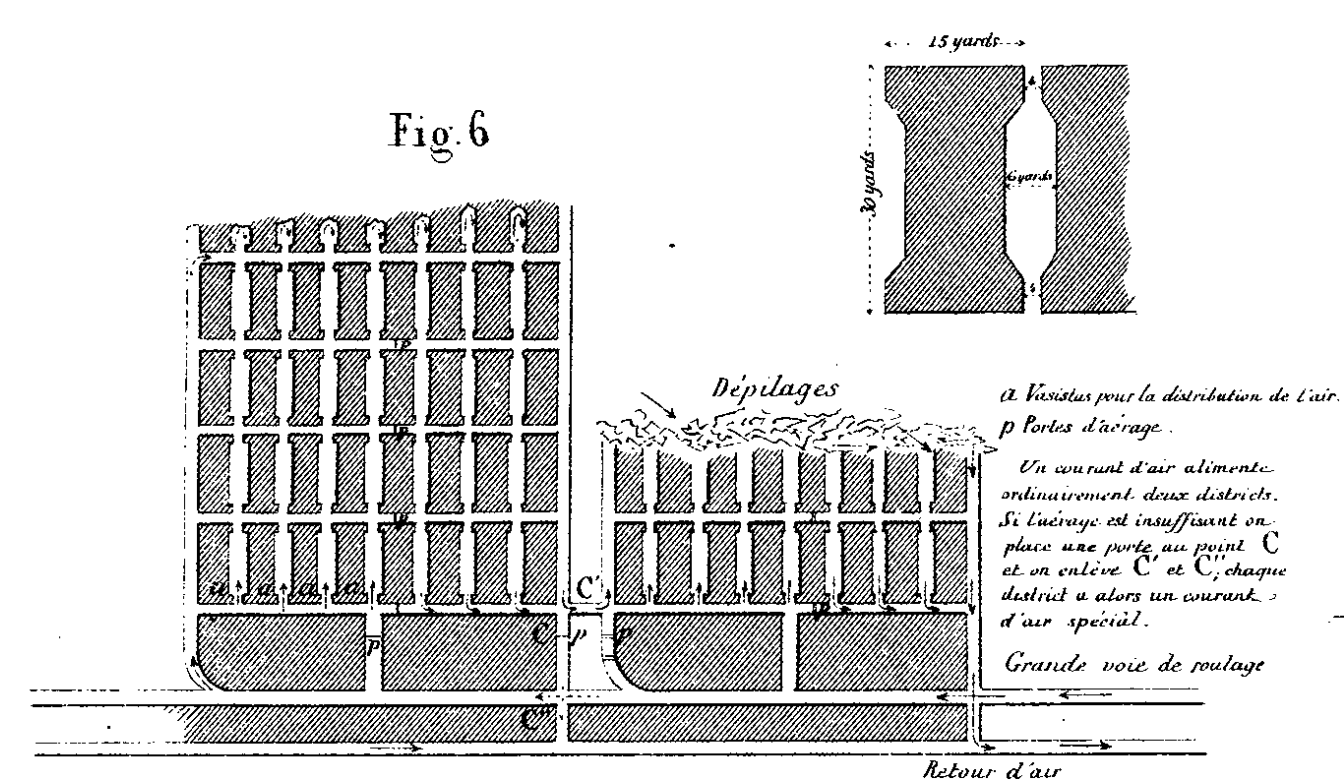


Fig. 6

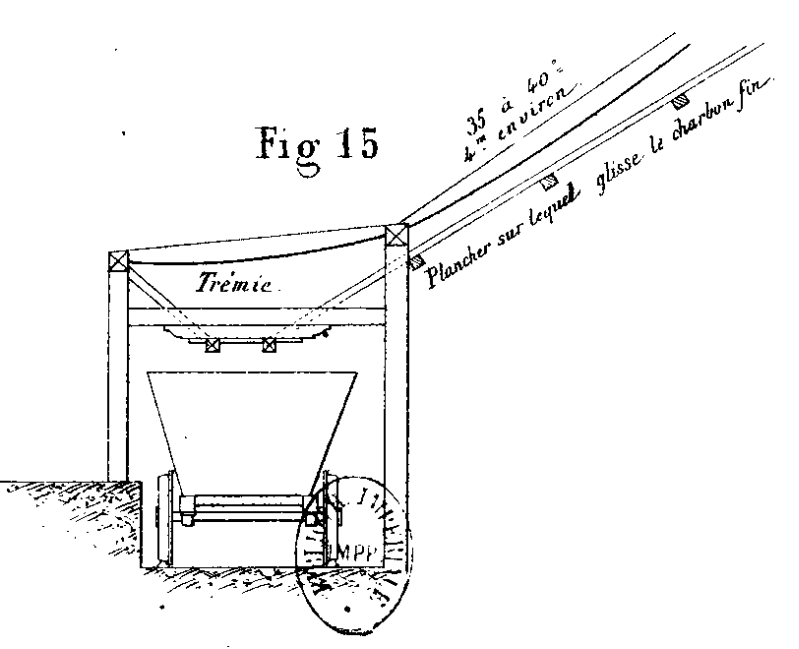


Fig. 15

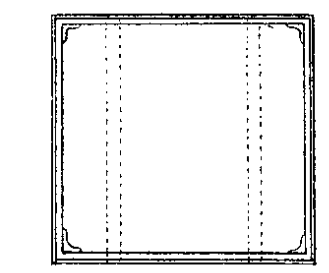


Fig. 9

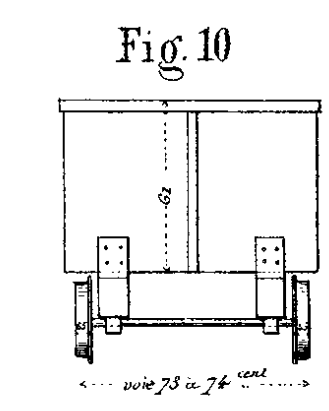


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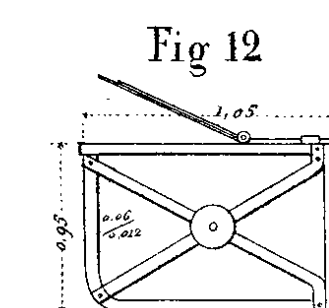


Fig. 12

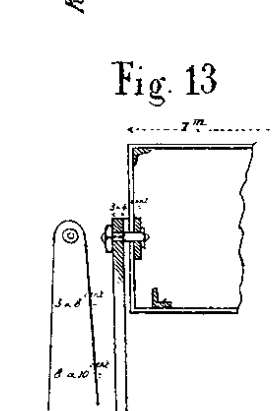


Fig. 13



Fig. 14







Fig. 1. Bassin de Newcastle.

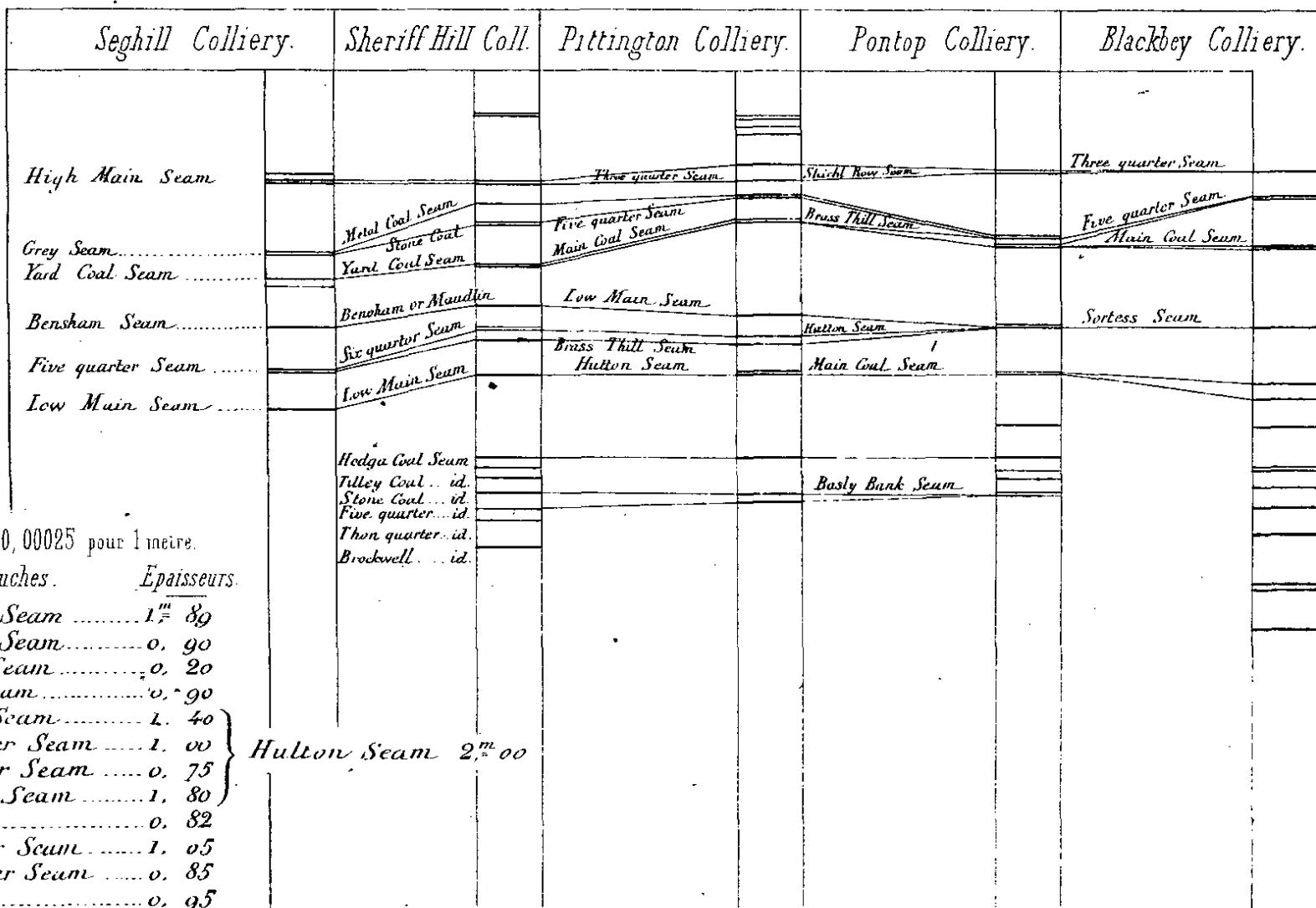


Fig. 2. Bassin de Newcastle.  
Coupe Nord Sud.

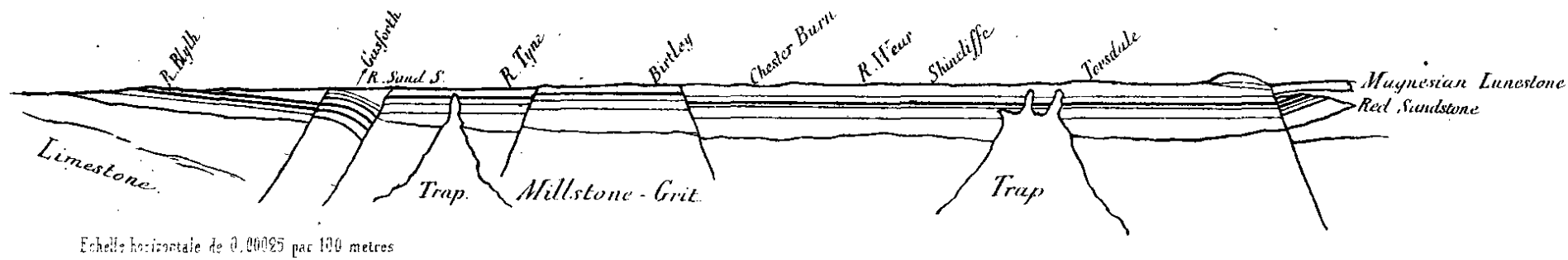


Fig. 11

Ensemble de l'installation de Mouckwearmouth Colliery.

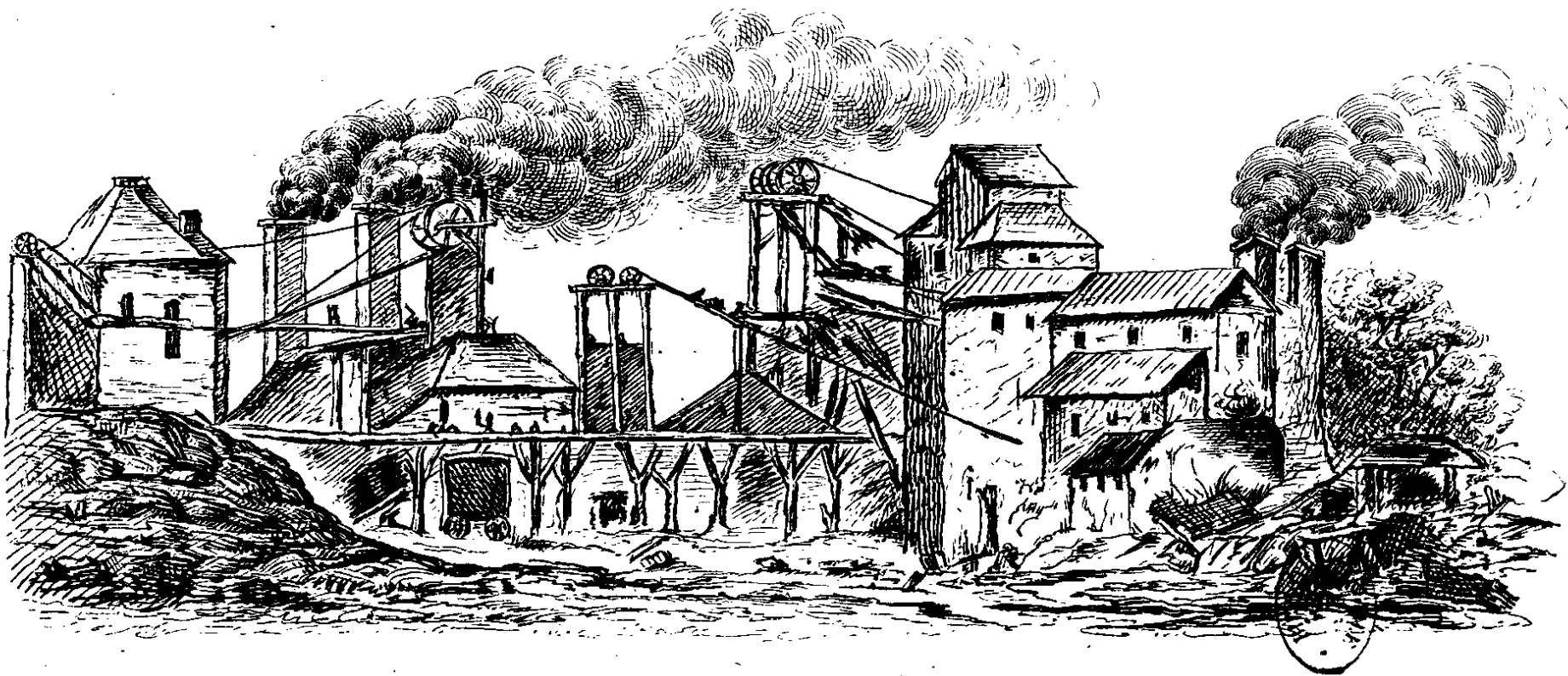


Fig. 3. Disposition du Puits

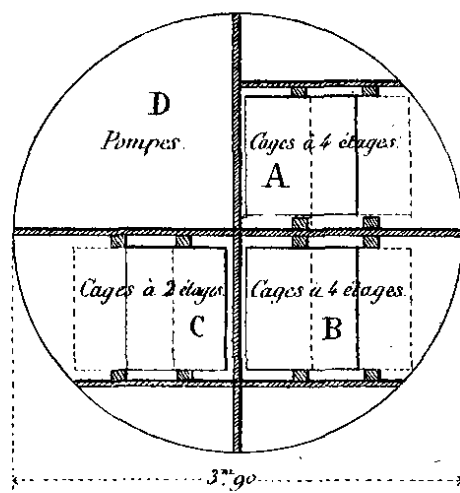


Fig. 12. Disposition du 2<sup>e</sup> Puits.

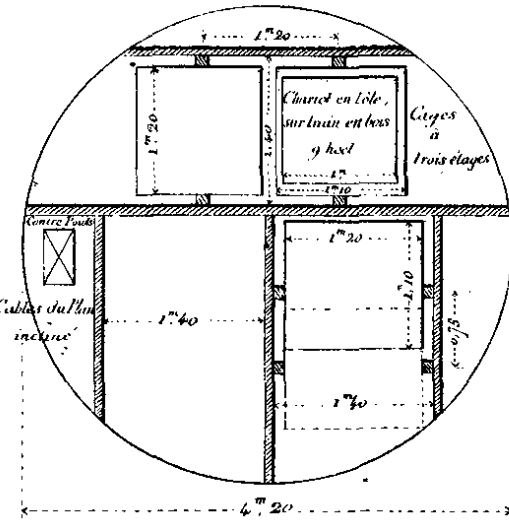


Fig. 13. Disposition du 1<sup>er</sup> Puits.

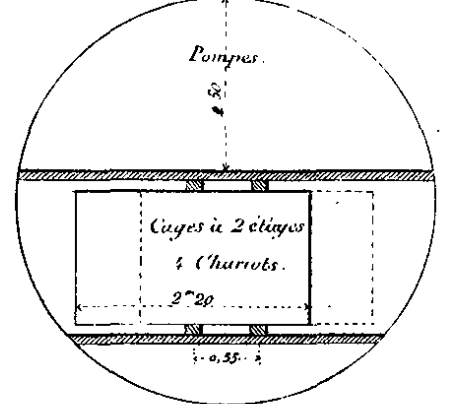


Fig. 4

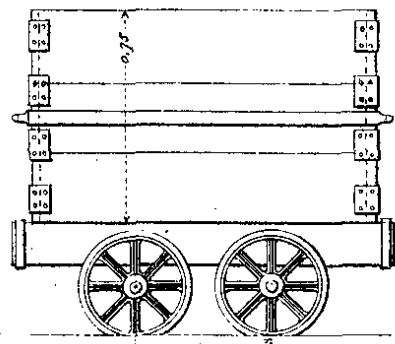


Fig. 5.

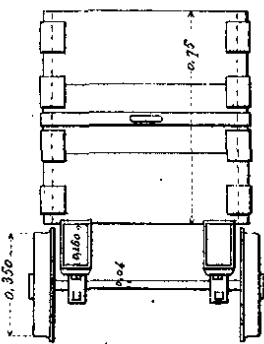


Fig. 7

Chariot parachute du Plan incliné.

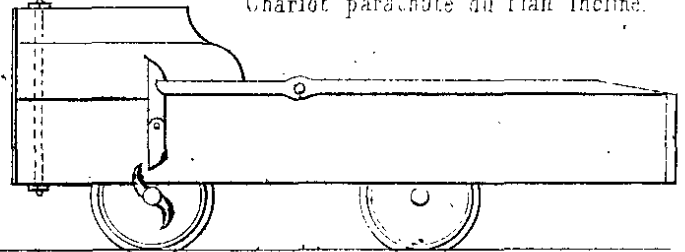


Fig. 10

Plan incliné pour remonter le mineur

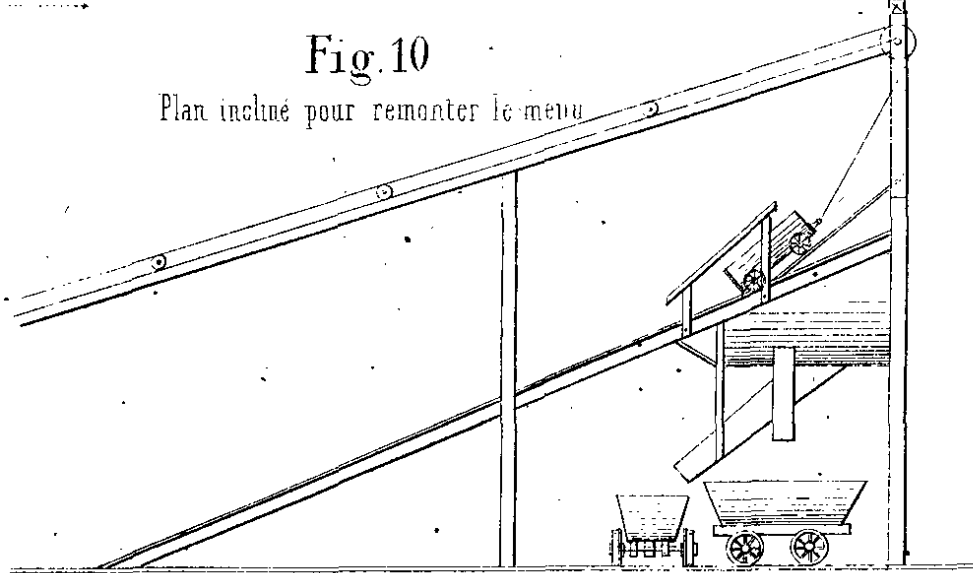


Fig. 6

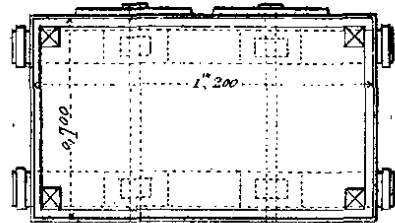


Fig. 8. Reception des Cages au fond.

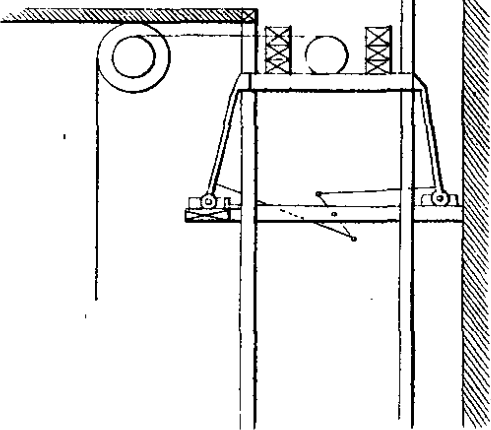


Fig. 9

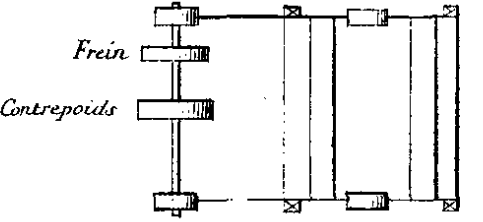


Fig. 17

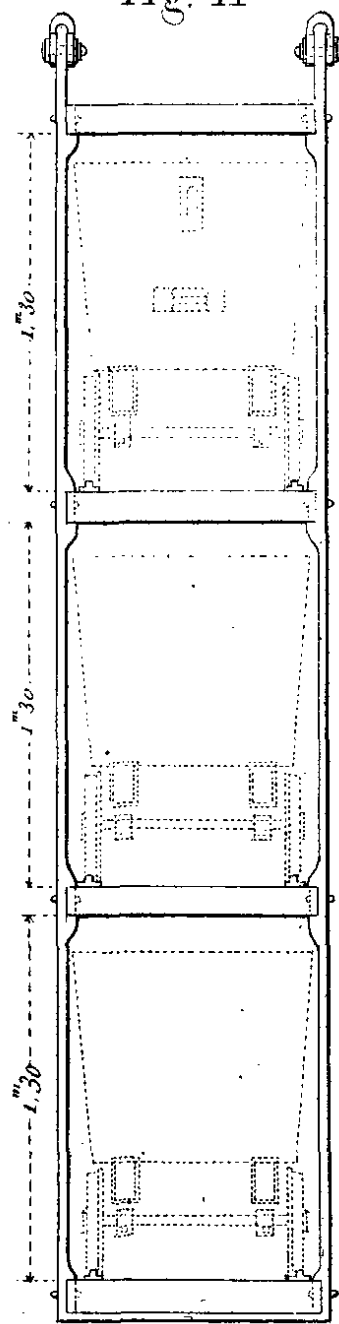


Fig. 18

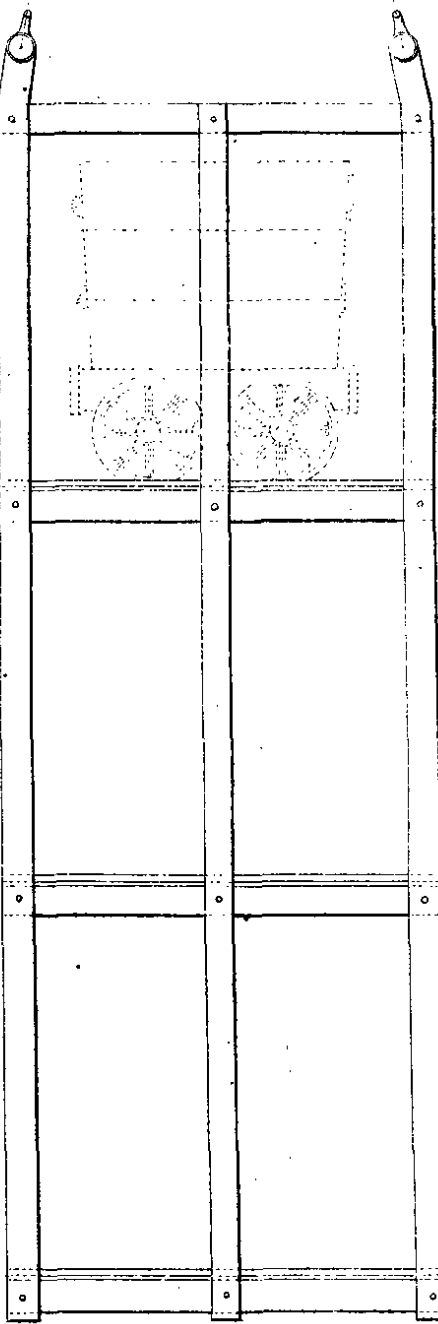


Fig. 14

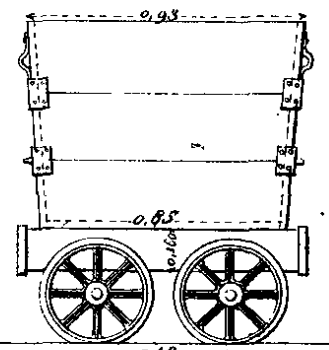


Fig. 15

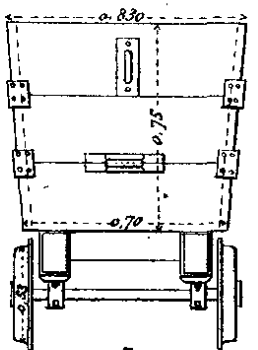


Fig. 16

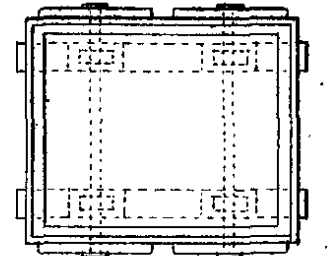


Fig. 19

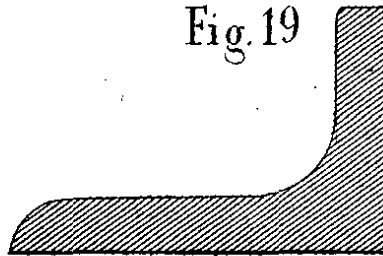
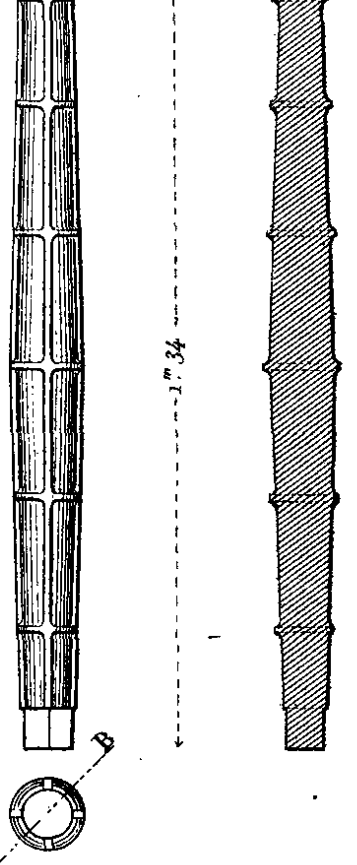


Fig. 20. Coupe par A.B.









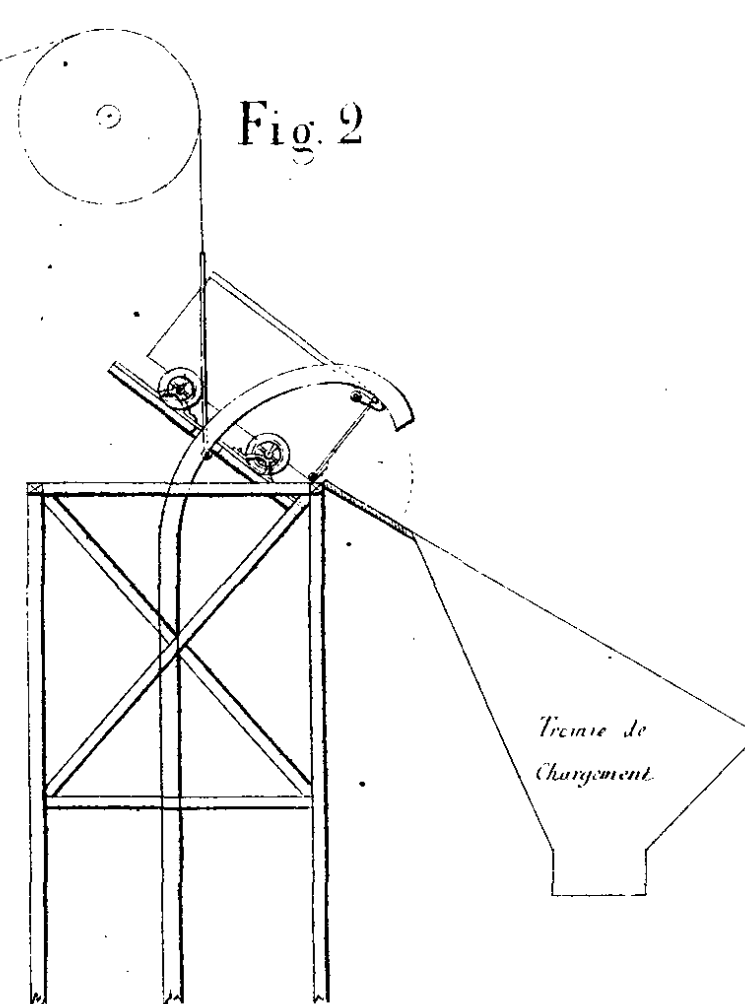
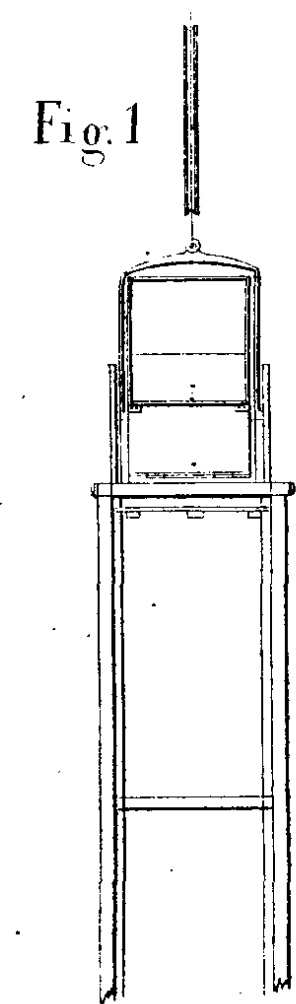


Fig. 3. Elevation et Coupe.

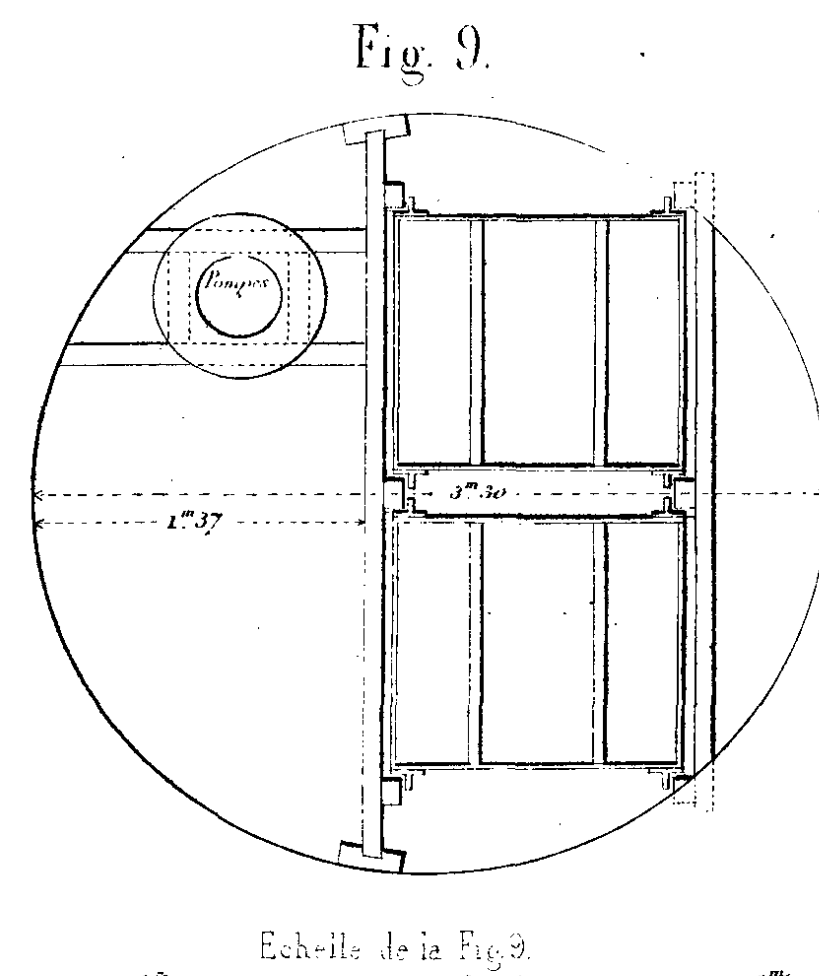
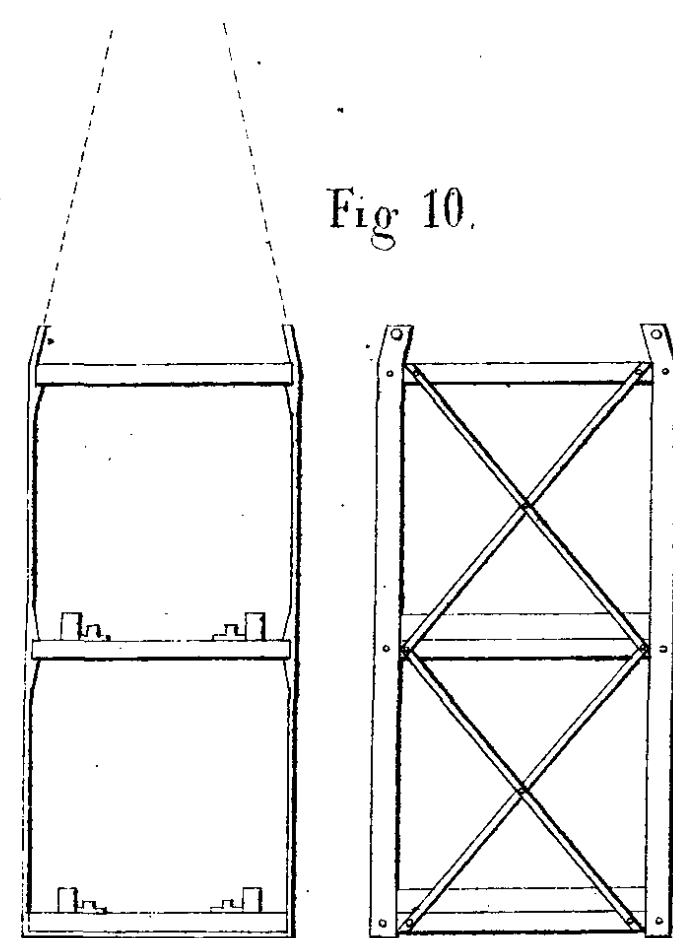
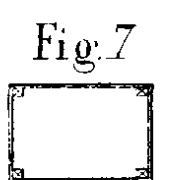
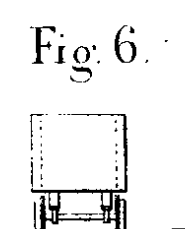
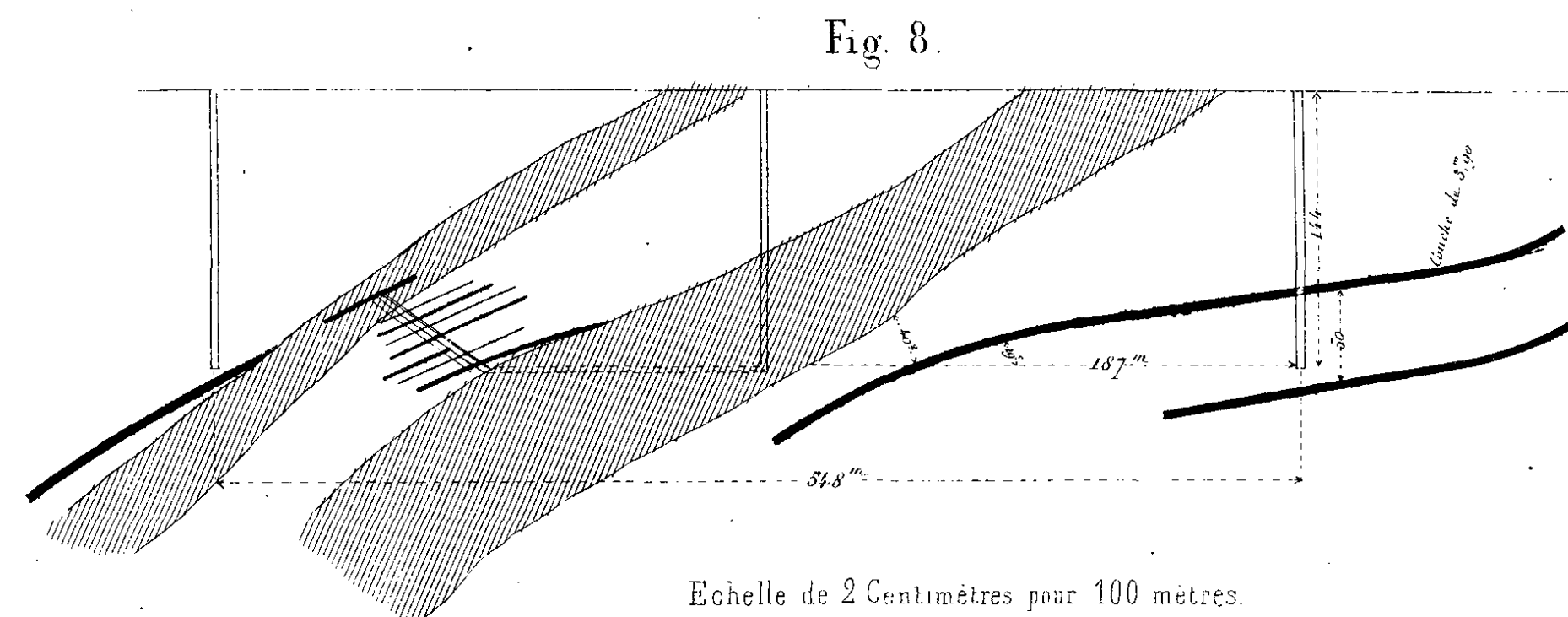
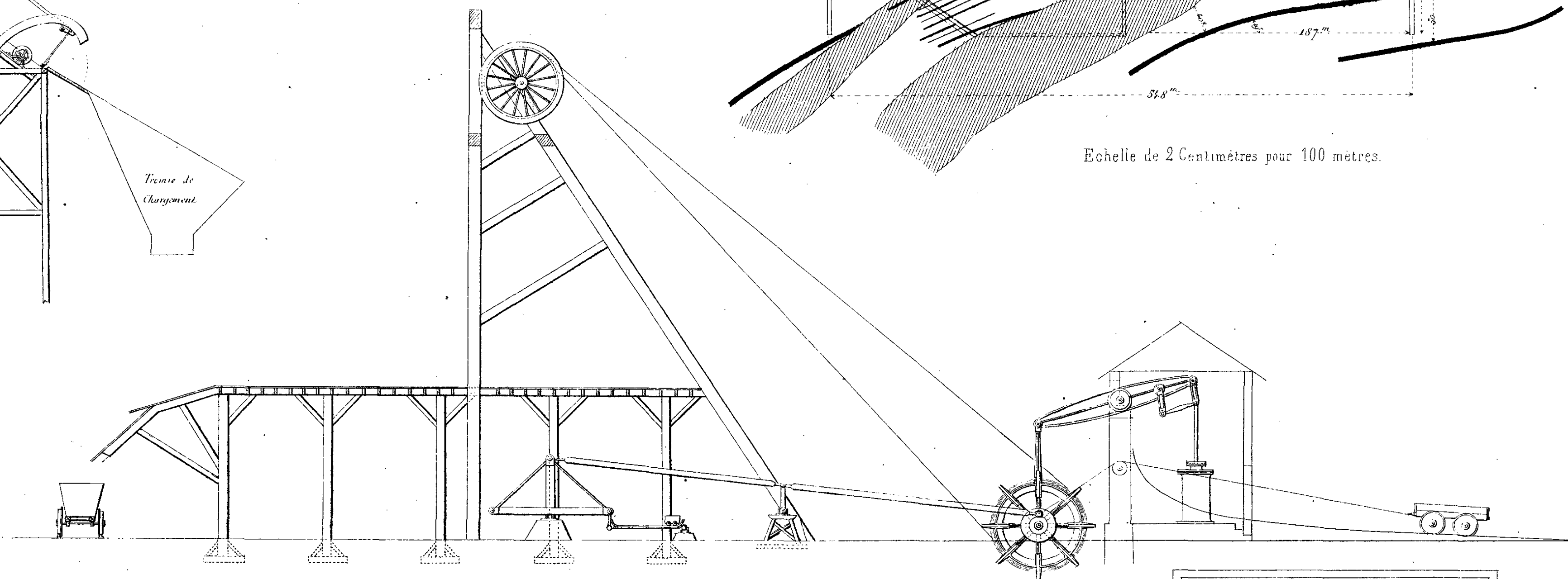
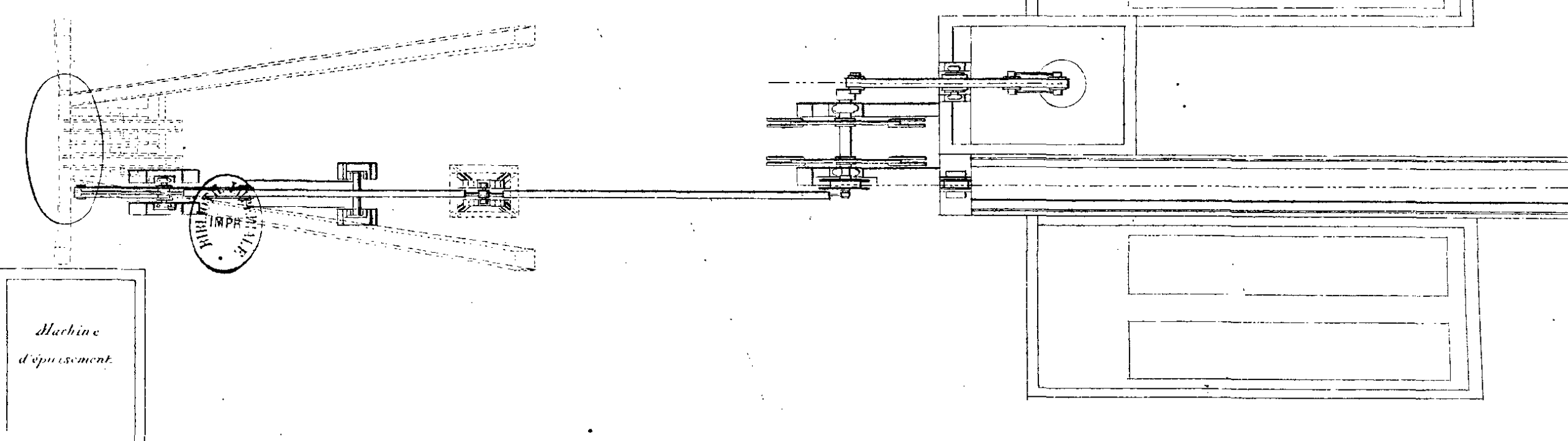


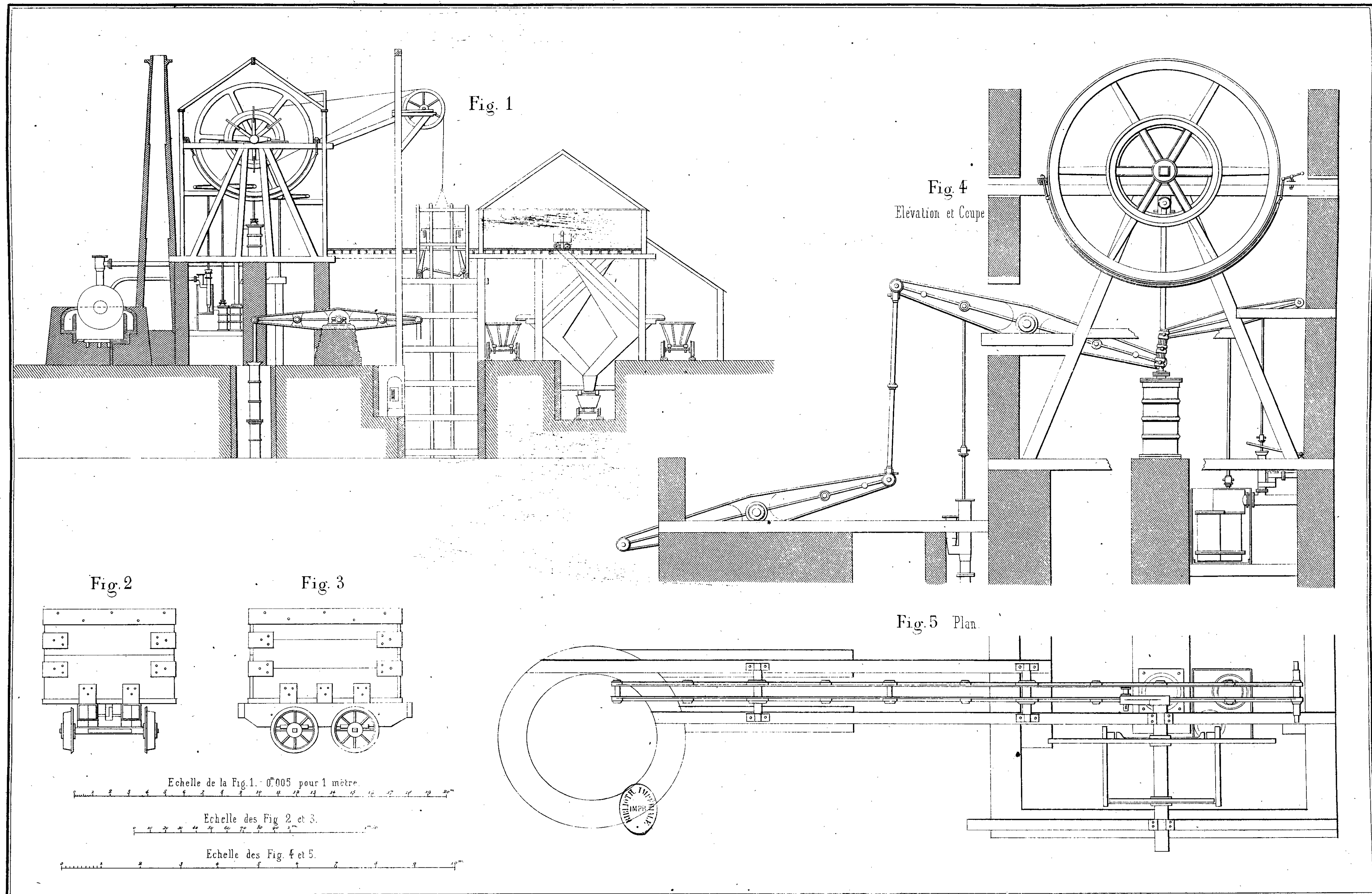
Fig. 4. Plan.







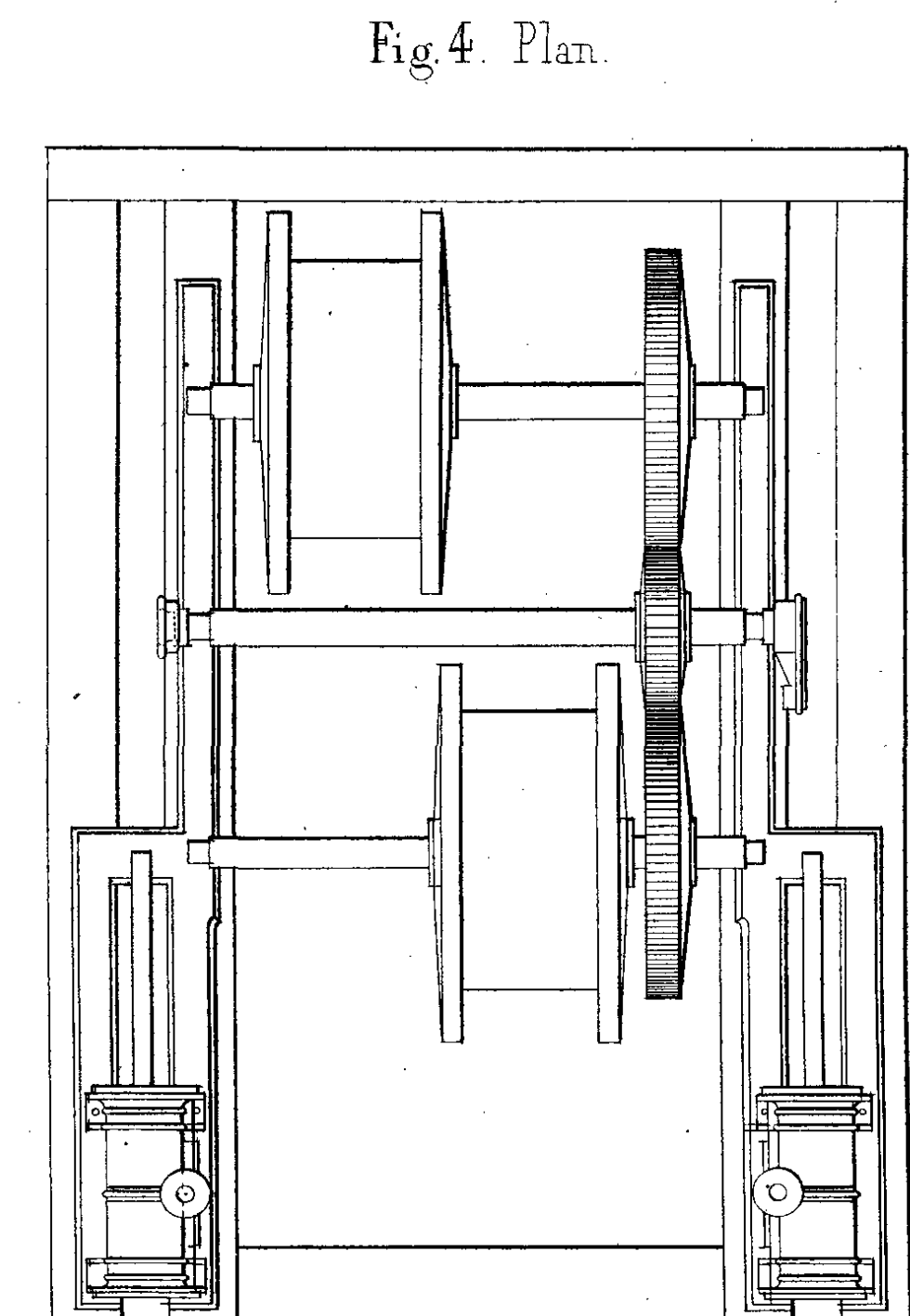
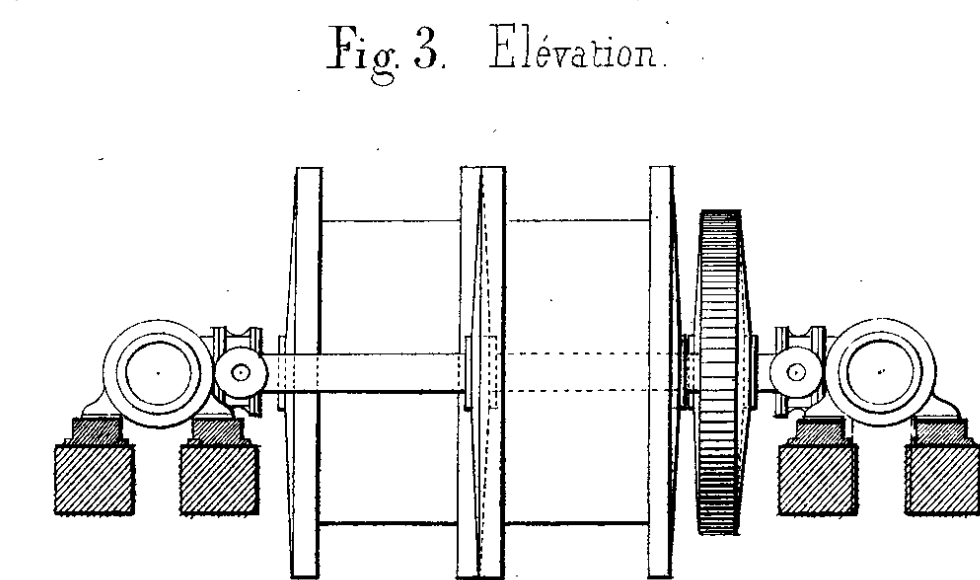
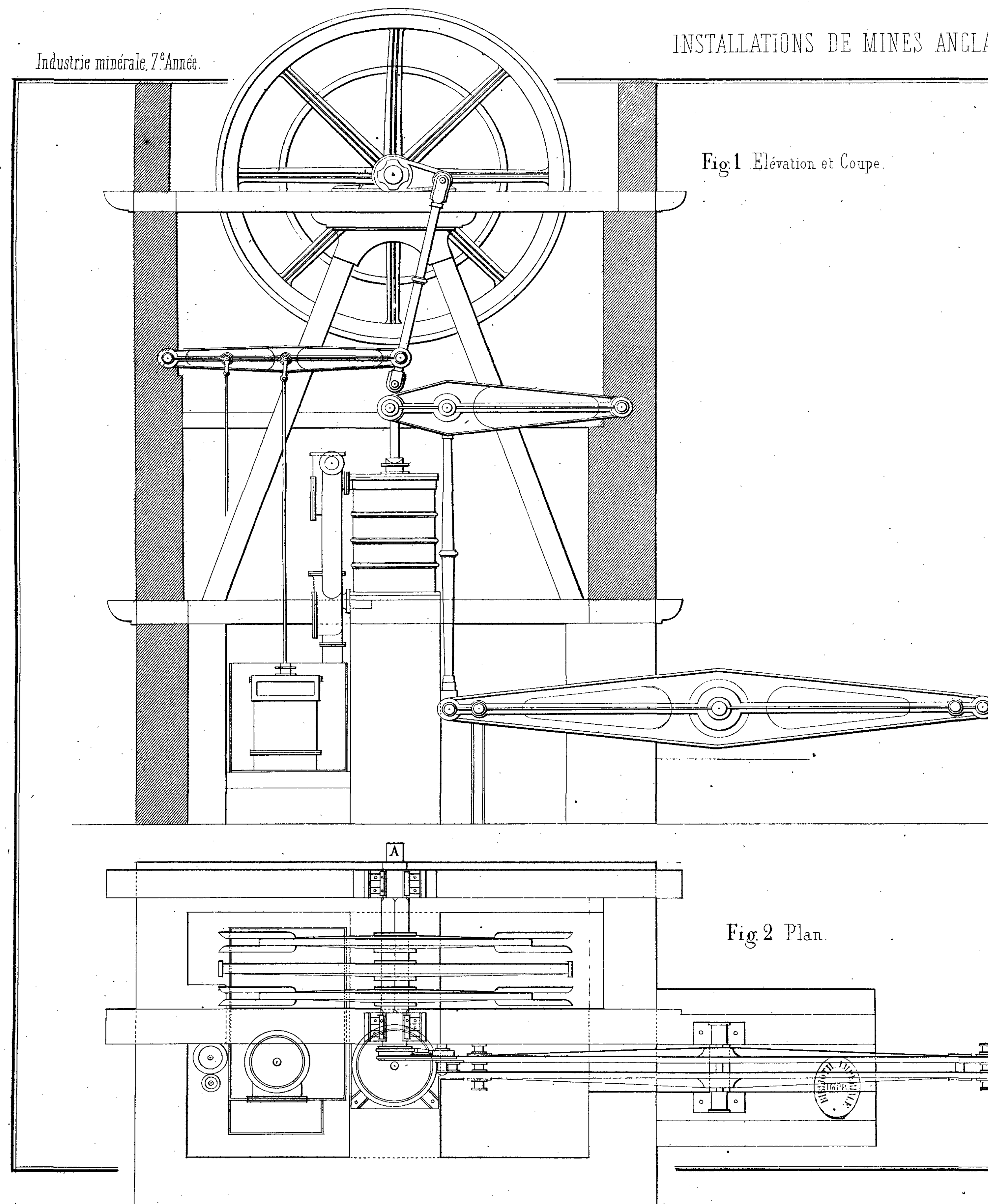












Echelle des Fig 1 et 2.

Echelle des Fig 3 et 4.







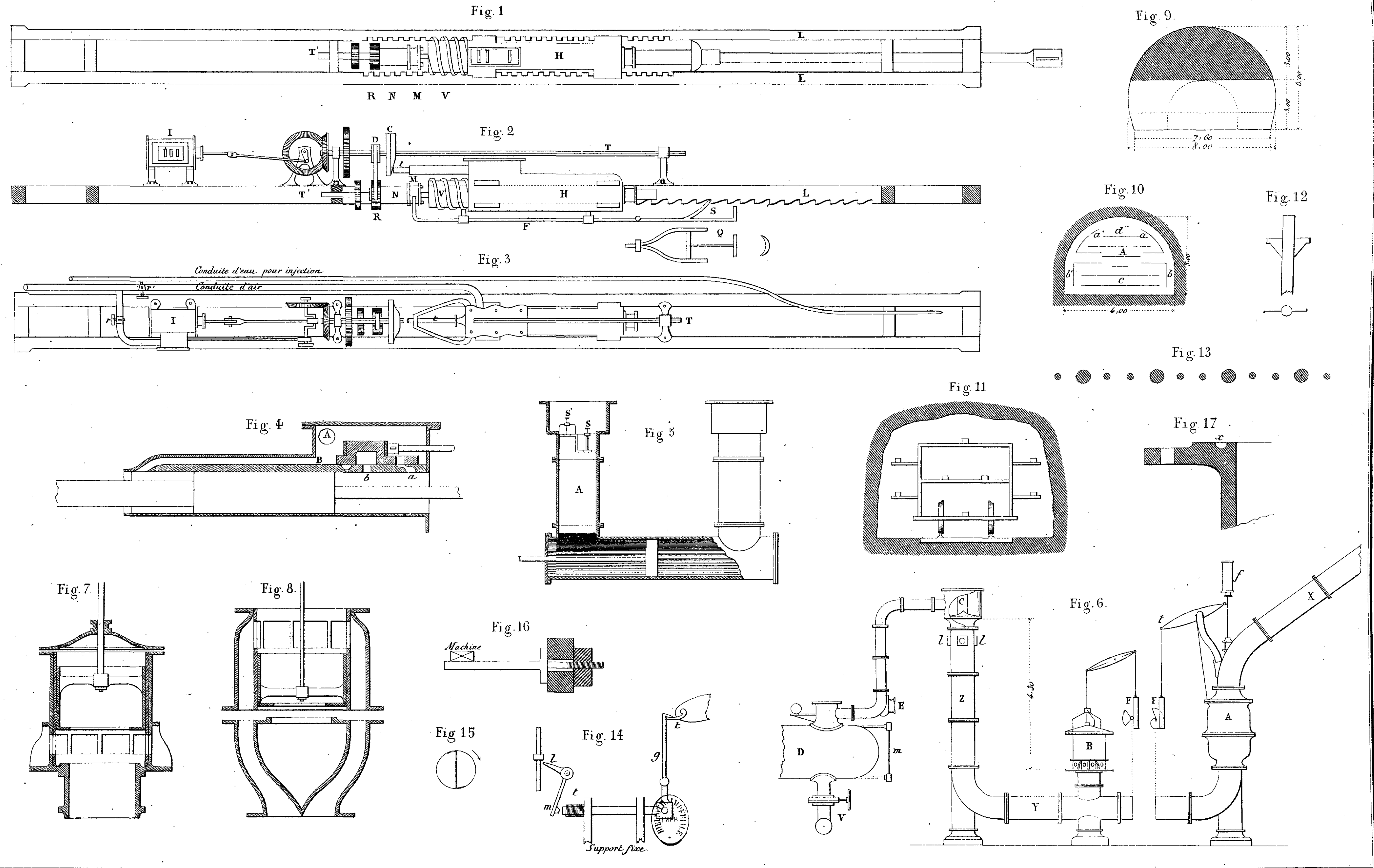














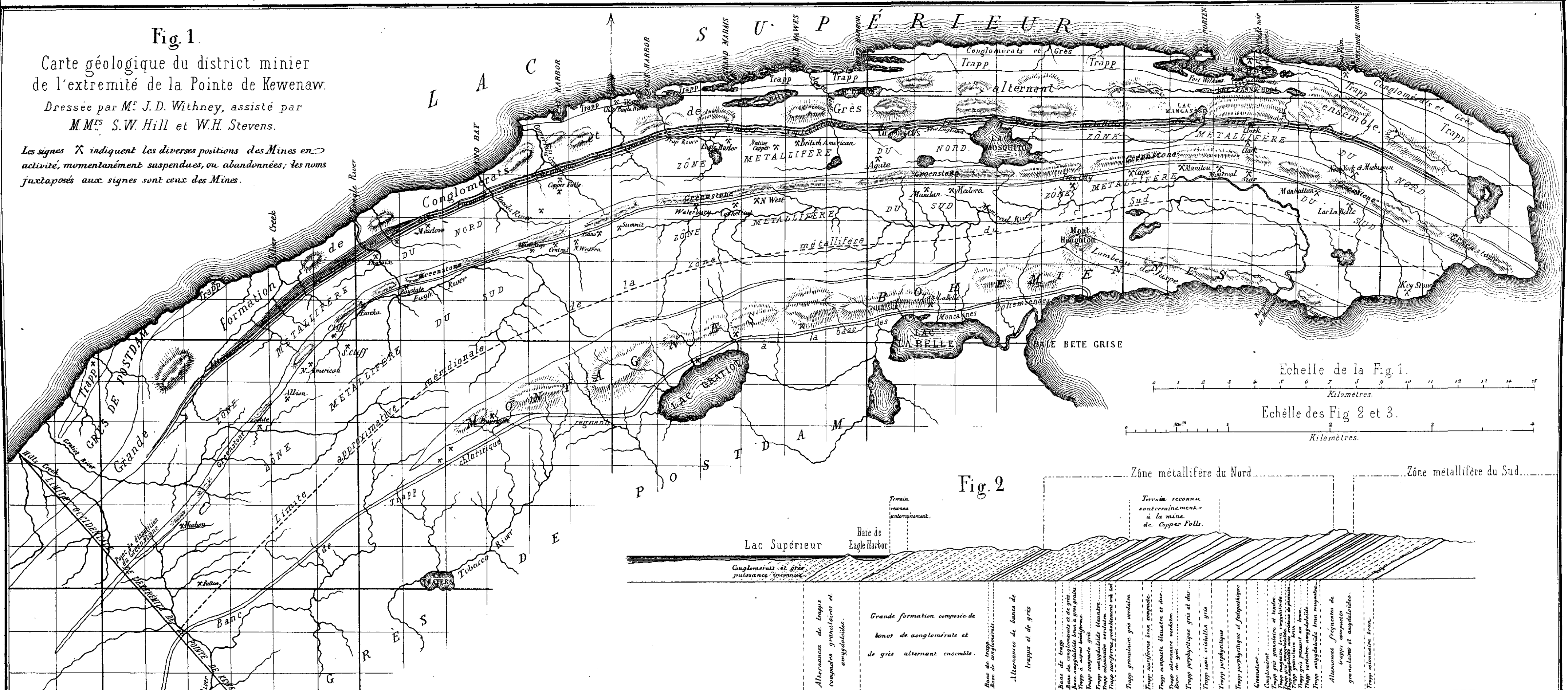


Fig. 1.

Carte géologique du district minier  
de l'extrémité de la Pointe de Kewenaw.

Dressée par M<sup>r</sup> J. D. Withney, assisté par  
M<sup>mes</sup> S. W. Hill et W. H. Stevens.

Les signes X indiquent les diverses positions des Mines en  
activité, momentanément suspendues, ou abandonnées; les noms  
juxtaposés aux signes sont ceux des Mines.



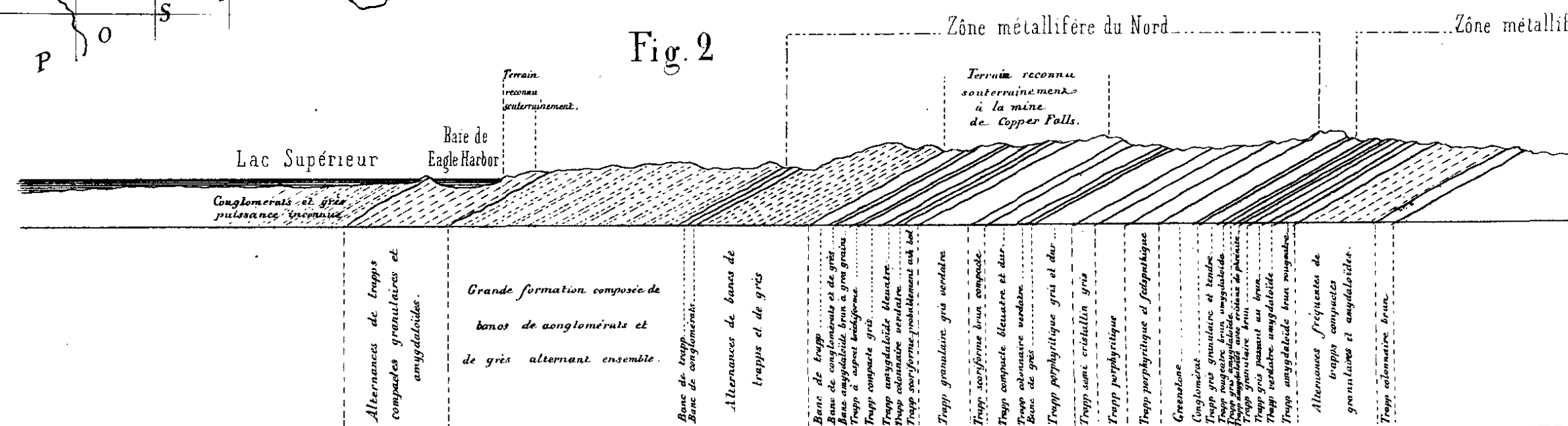
Echelle de la Fig. 1.

Kilomètres.

Echelle des Fig. 2 et 3.

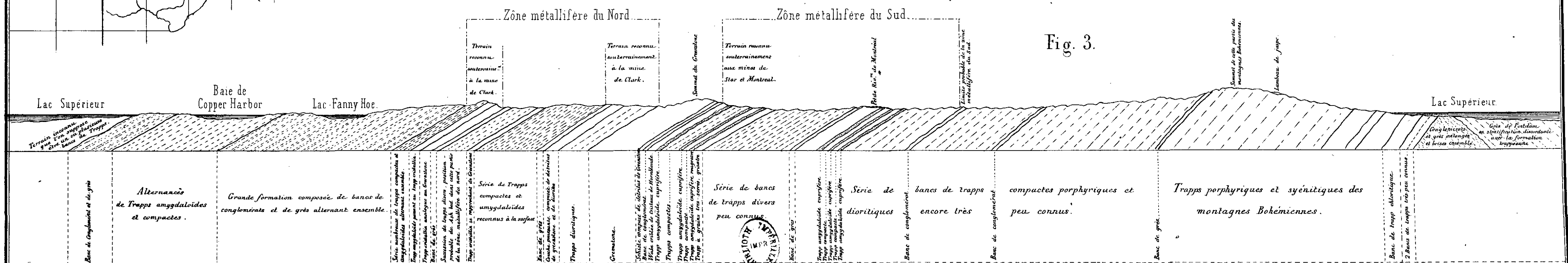
Kilomètres.

Fig. 2.



Coupe géologique dressée par M<sup>r</sup> S. W. Hill, passant par la baie de Eagle Harbor et les Terrains des compagnies des mines de Eagle Harbor et de Waterbury (extrémité de la pointe de Kewenaw).

Fig. 3.



Coupe géologique dressée par l'auteur de la notice, et passant par la baie de Copper Harbor, la mine de Clark et les terrains situés au Sud de cette mine, jusqu'à la rive méridionale de l'extrémité de la pointe de Kewenaw.







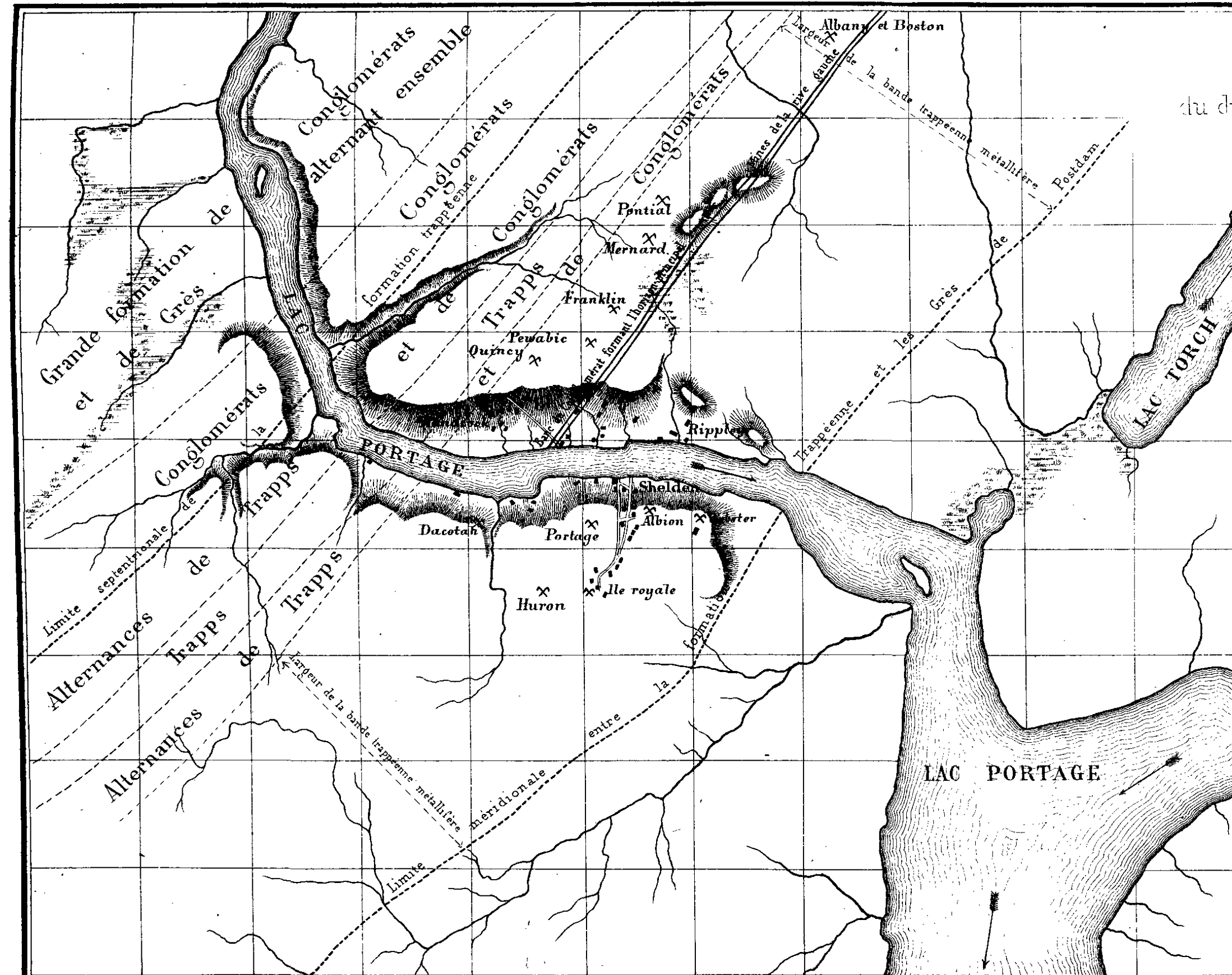


Fig. 4.  
CARTE GÉOLOGIQUE  
du district minier du Portage.

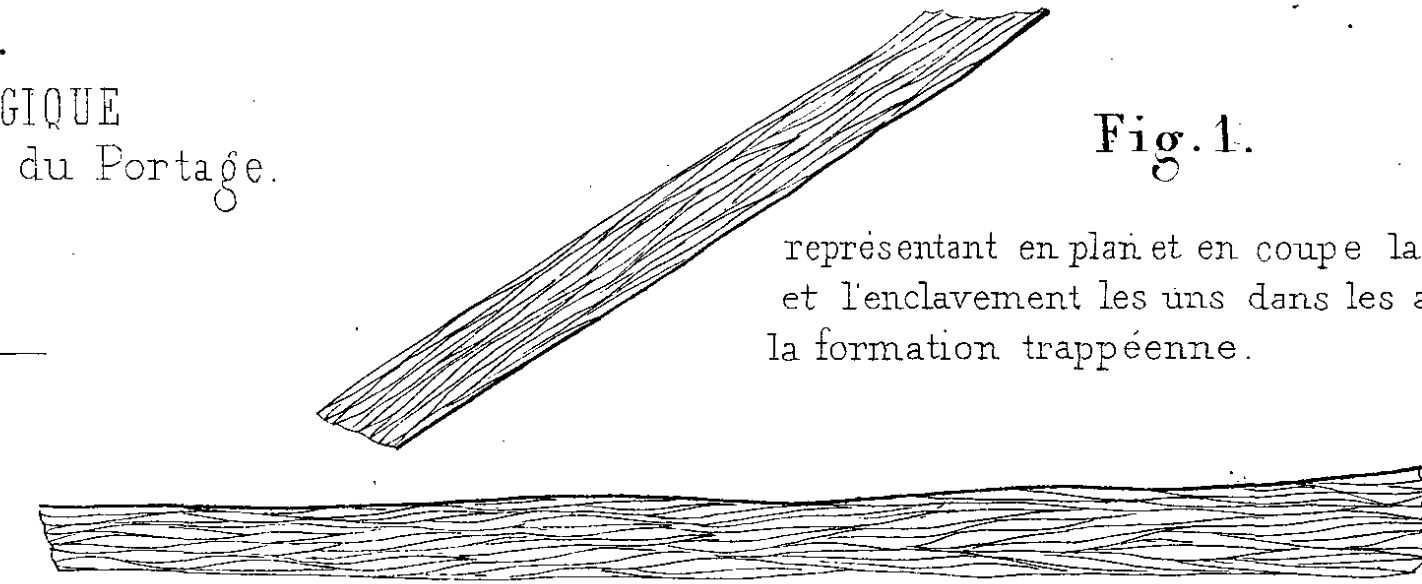
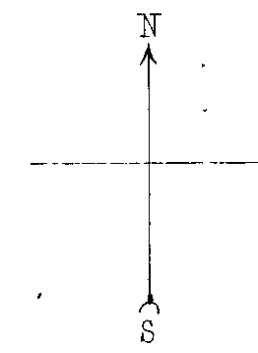


Fig. 1.

représentant en plan et en coupe la forme lenticulaire et l'enclavement les uns dans les autres, des bancs de la formation trappéenne.

Fig. 2.

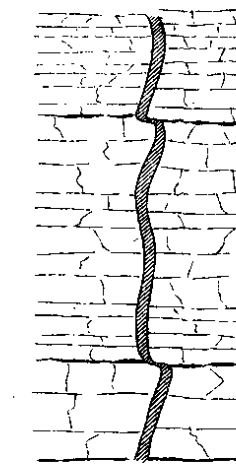


Fig. 3.

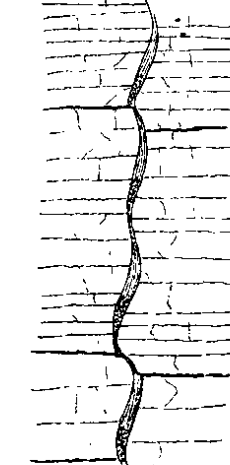


Fig. 5.

CARTE GÉOLOGIQUE  
du district minier d'Ontonagon.

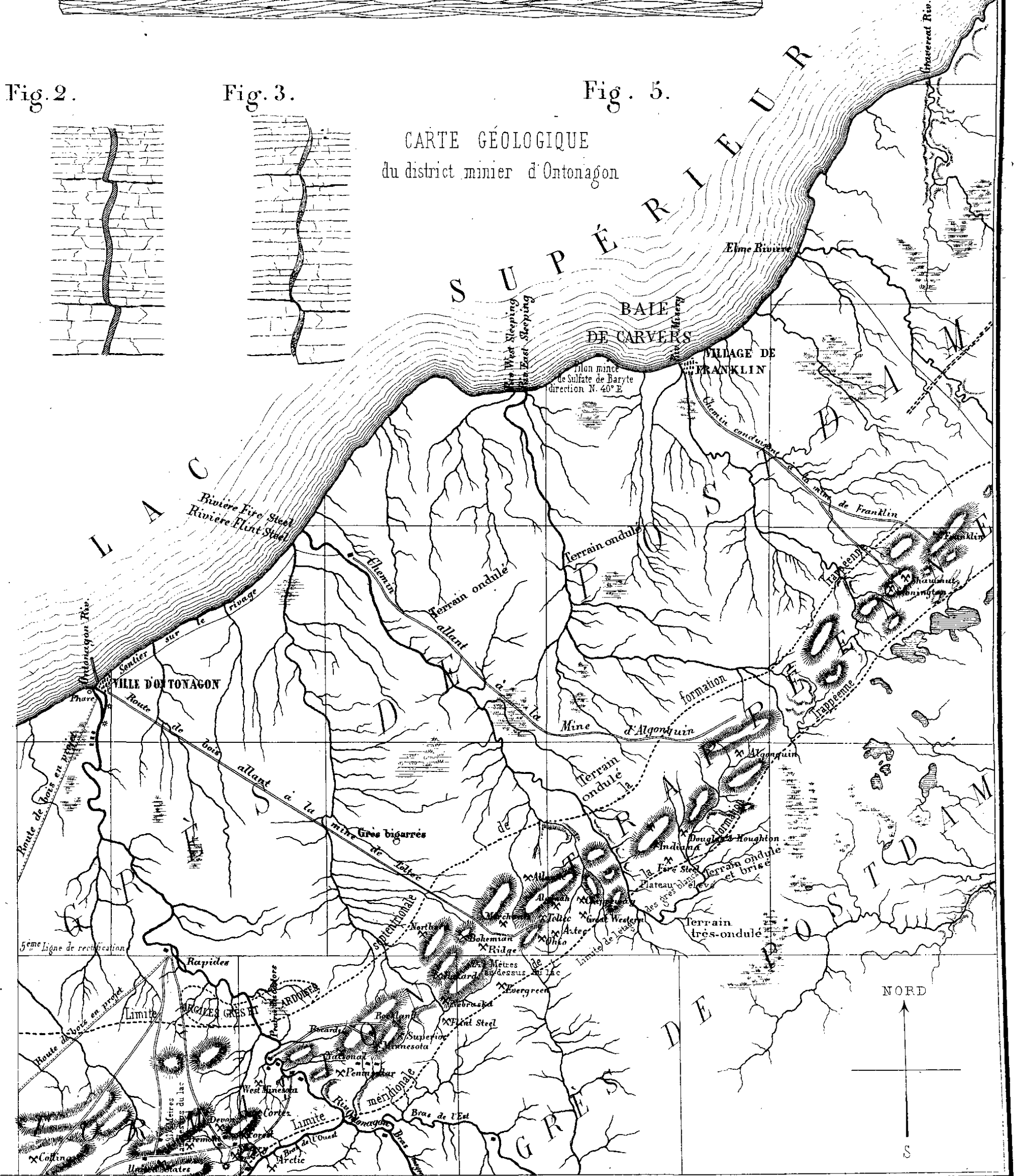
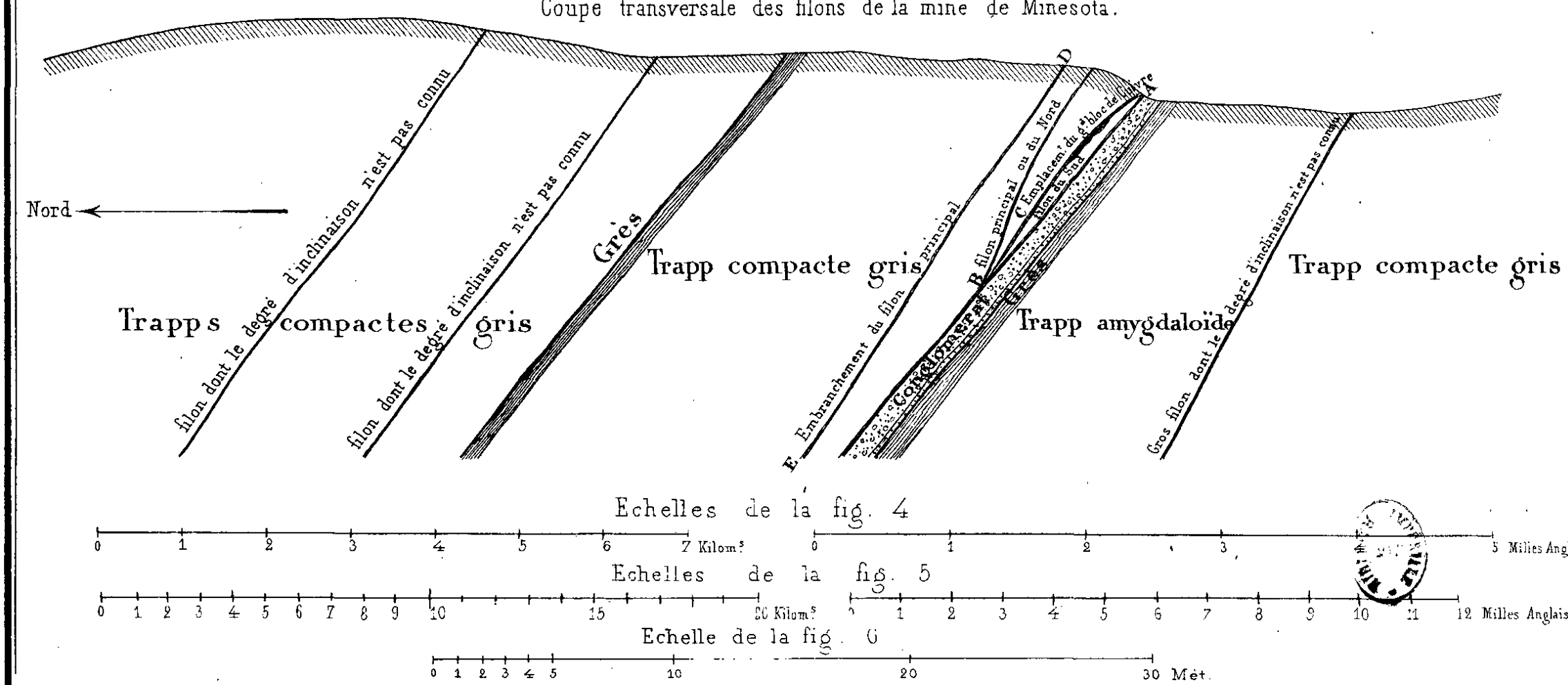


Fig. 6.

Coupe transversale des filons de la mine de Minnesota.



Echelles de la fig. 4

Echelles de la fig. 5

Echelle de la fig. 6









*Mines de la Baconnière (Mayenne)*

Fig 1. Projection verticale.

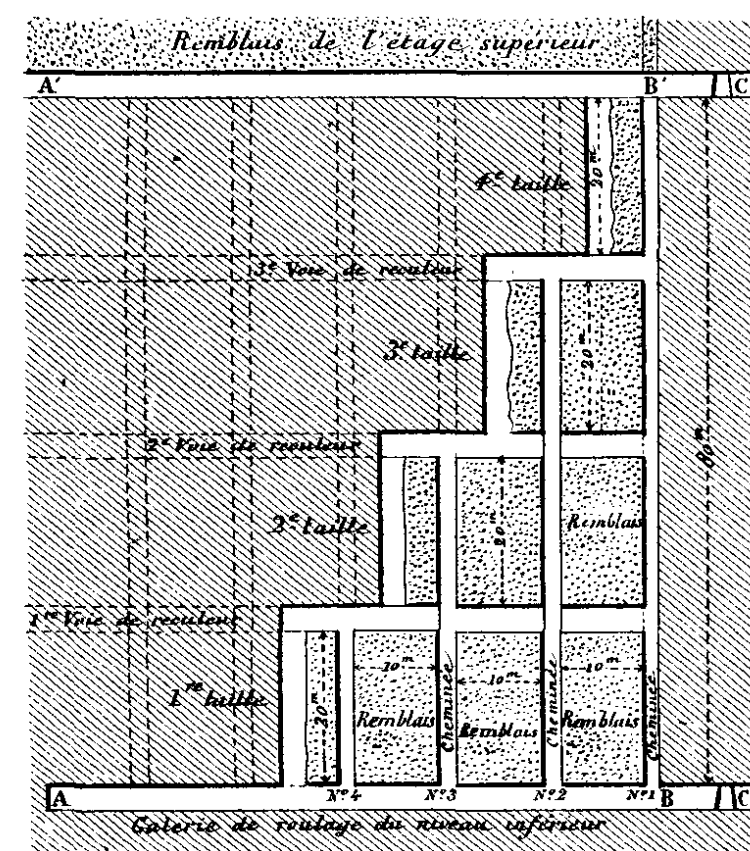


Fig 2. Projection verticale.

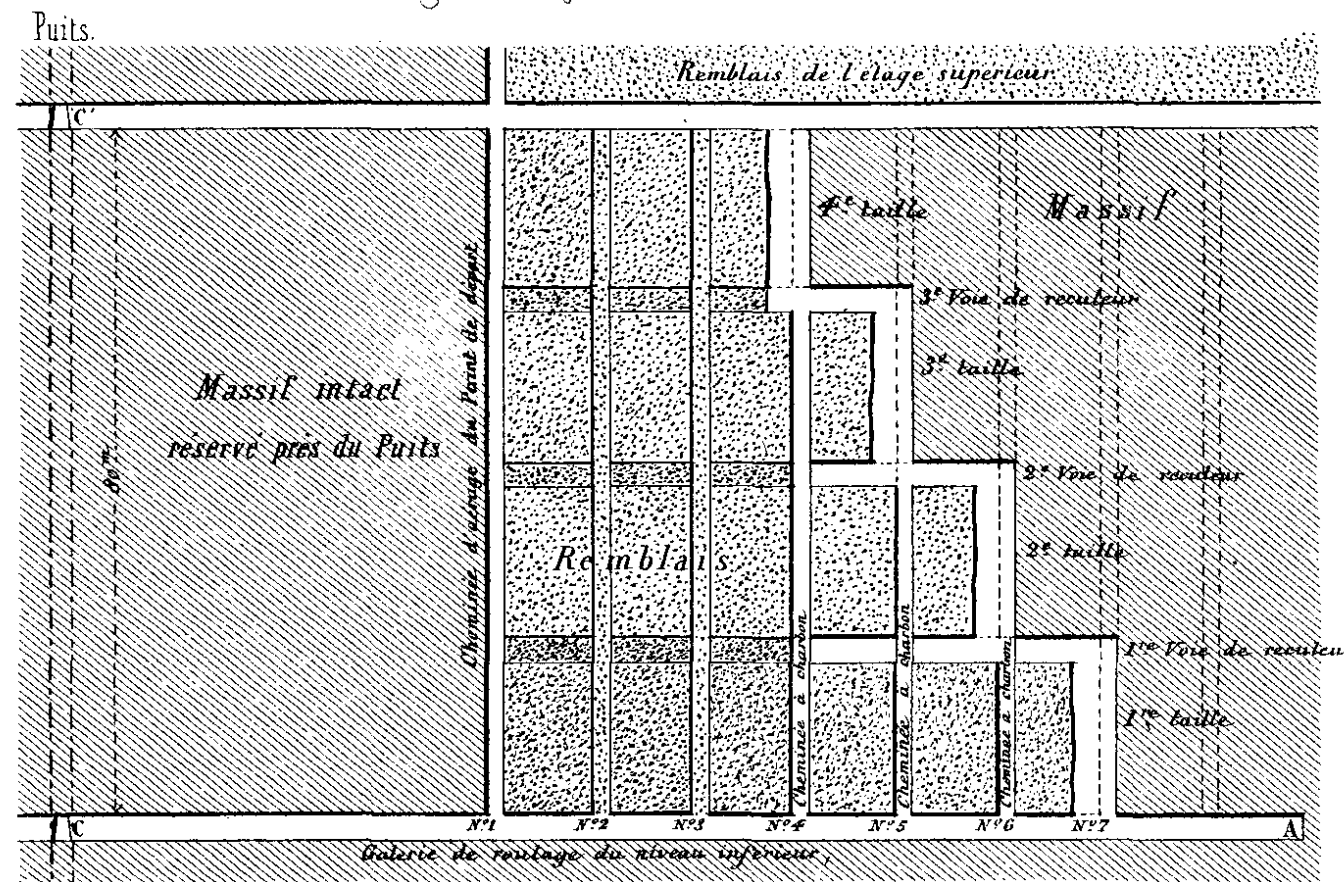


Fig. 4.

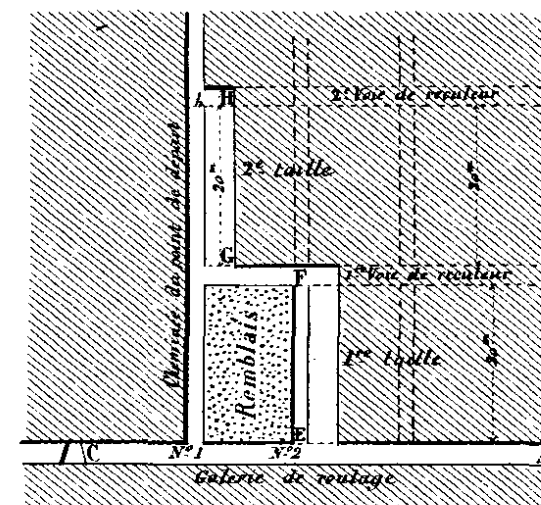


Fig. 5.

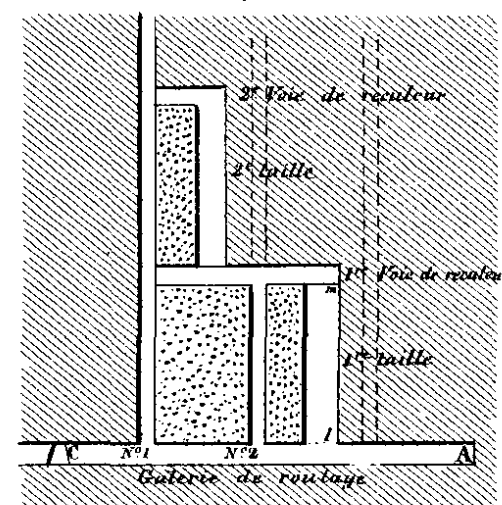


Fig. 3.

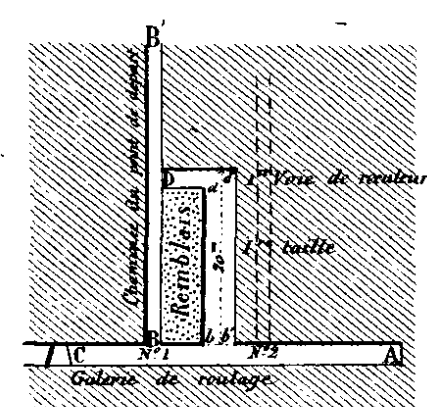
*Mines de Sablé (Sarthe)*

Fig 6. Projection verticale.

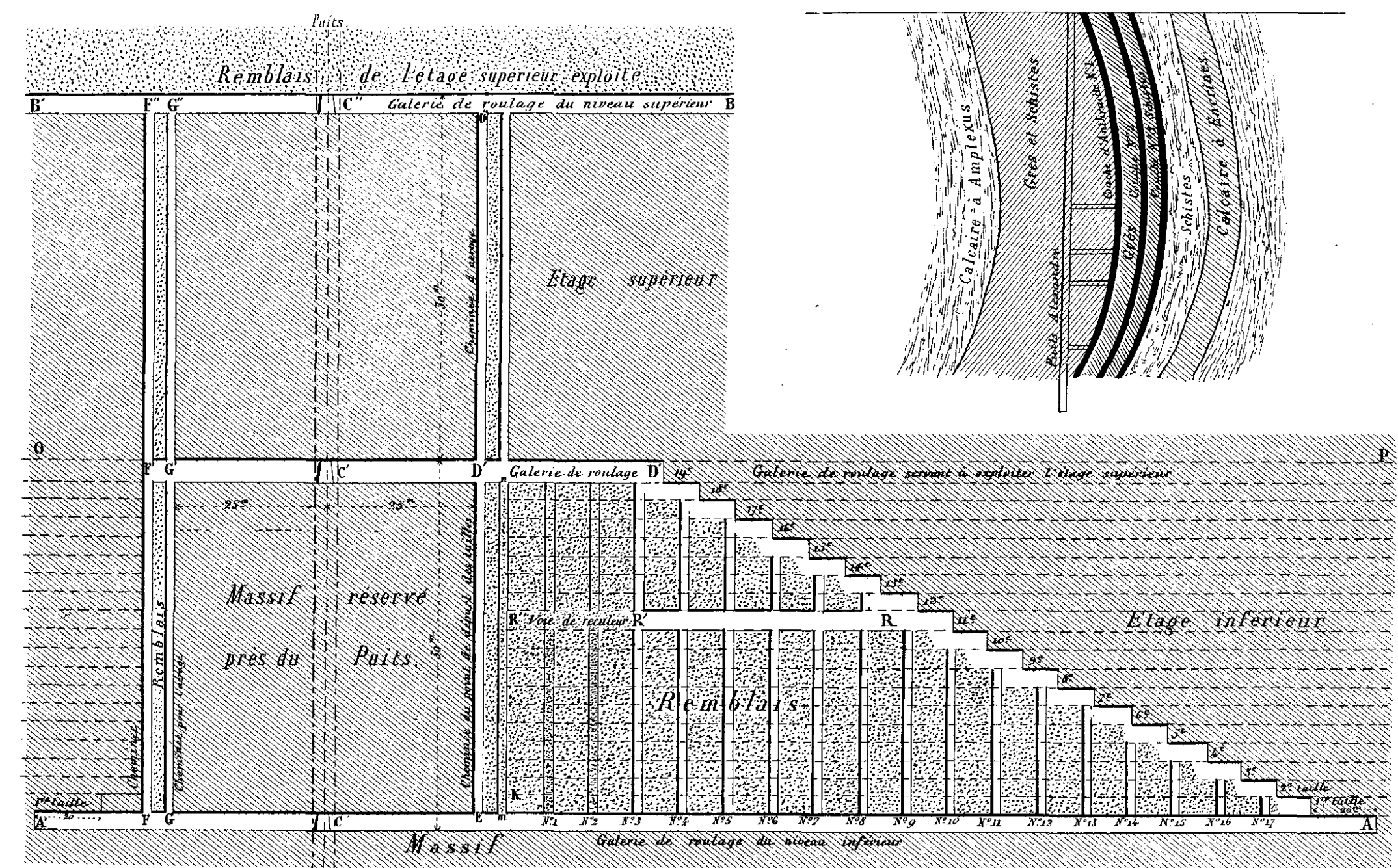


Fig. 7. Coupe verticale des couches, à Fercé près Sablé.

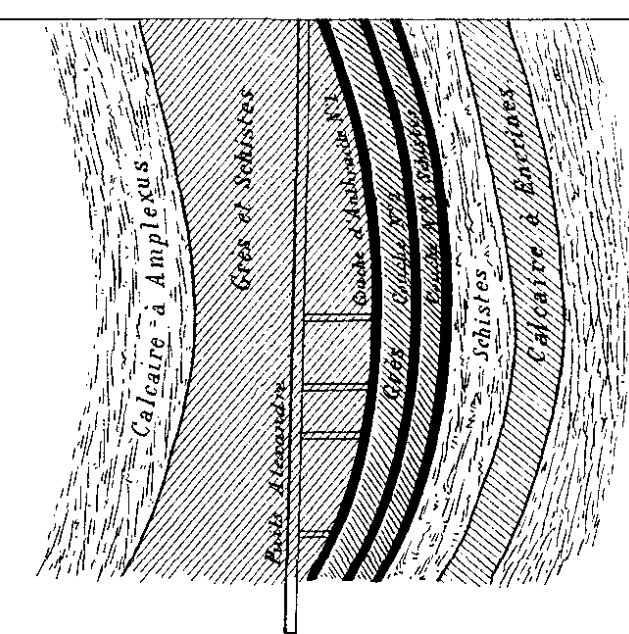
*Mines de Saint Pierre la Cour (Mayenne)*

Fig 8.

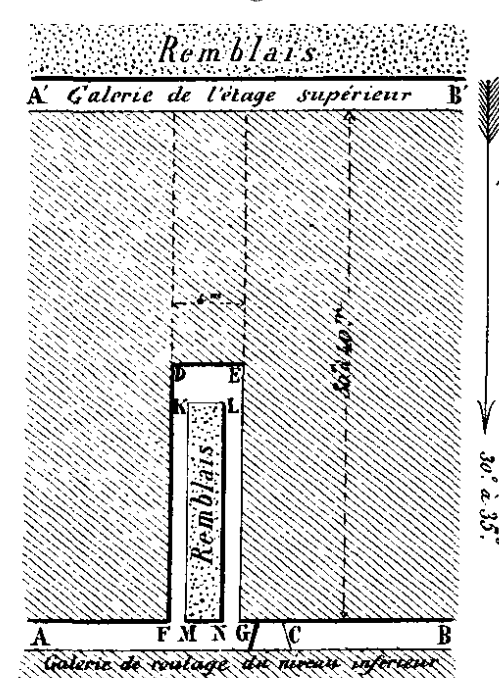


Fig 9.

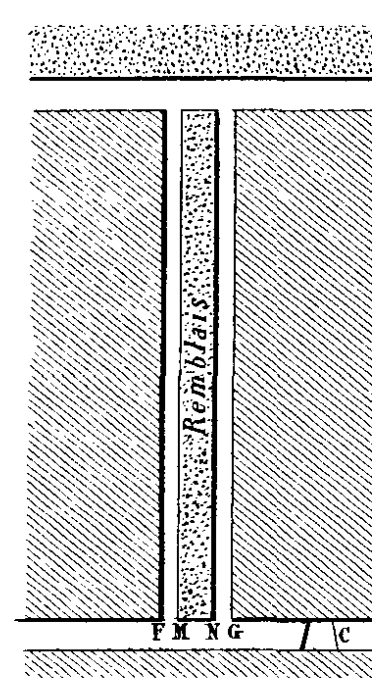


Fig 10.

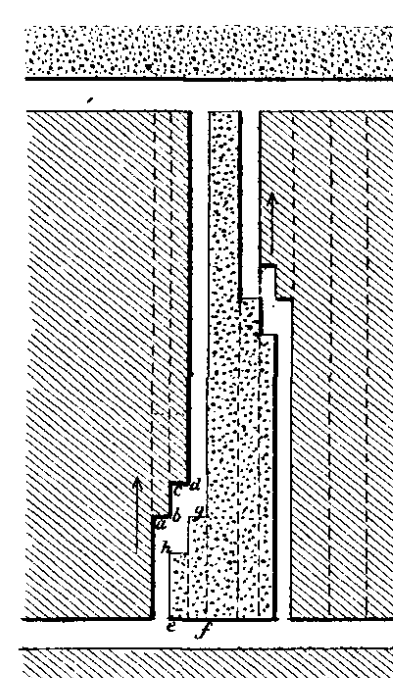


Fig 11.

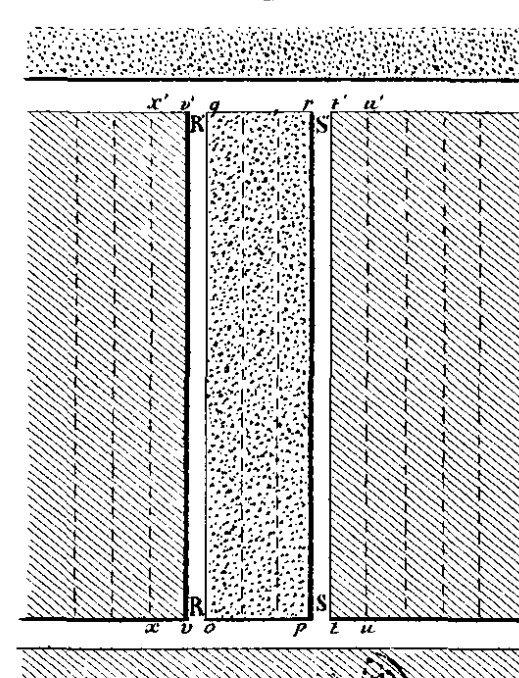


Fig 12. Projection suivant le Plan de la couche.

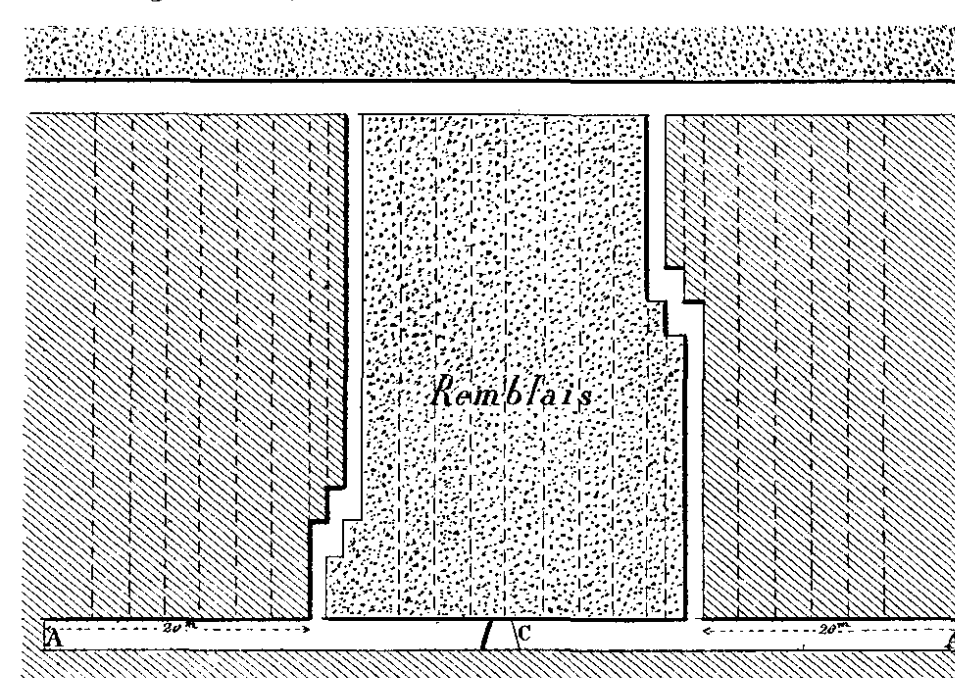


Fig 13. Plan horizontal.

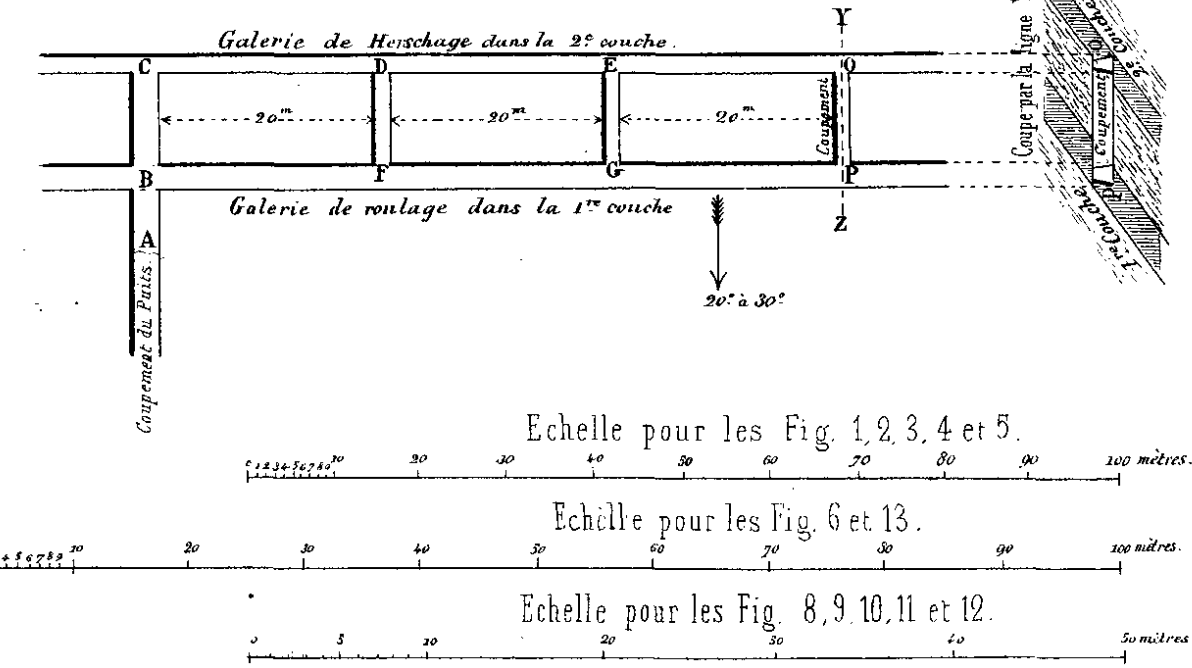








Fig. 2. Elévation du Trépan élargisseur.

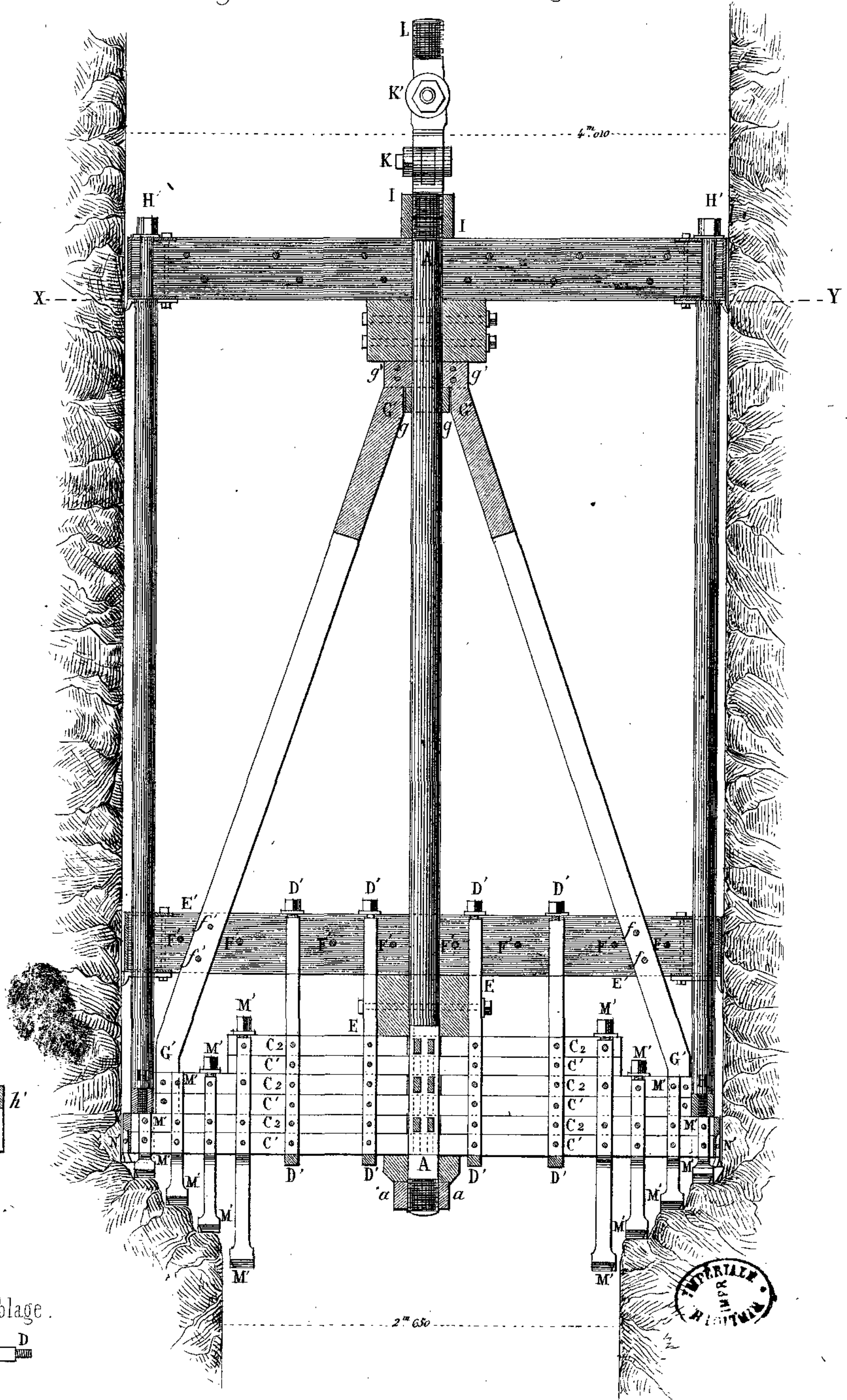


Fig.6. Boulon d'assemblage.

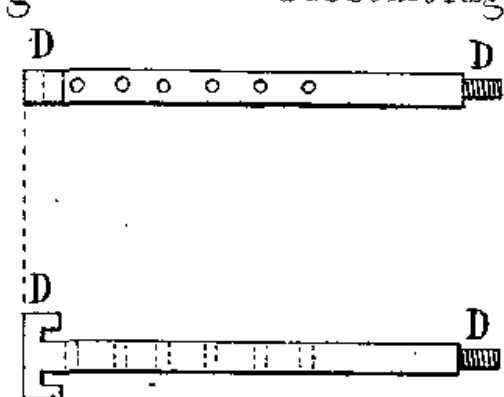


Fig.4. Vue du Trépan par dessous .

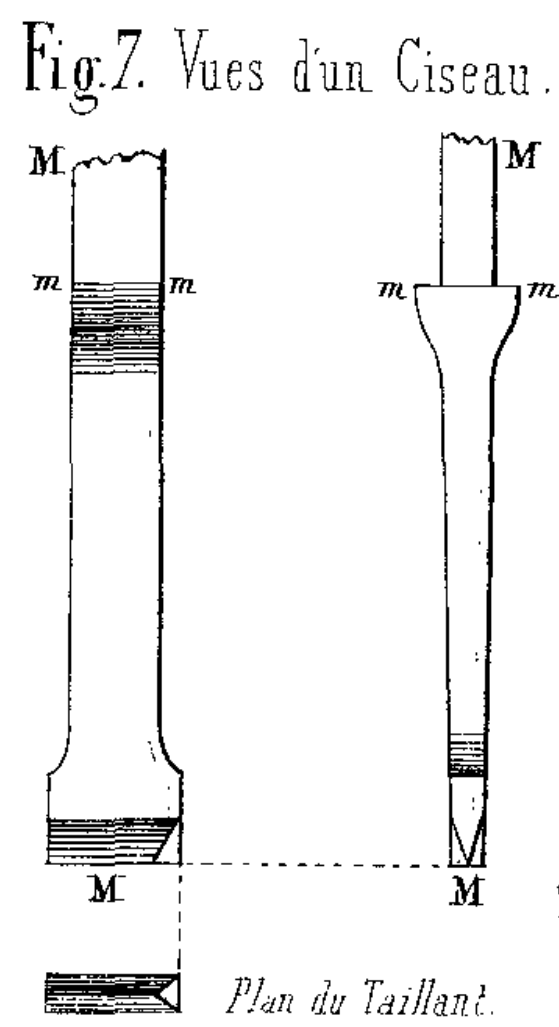


Fig.7. Vues d'un Ciseau.

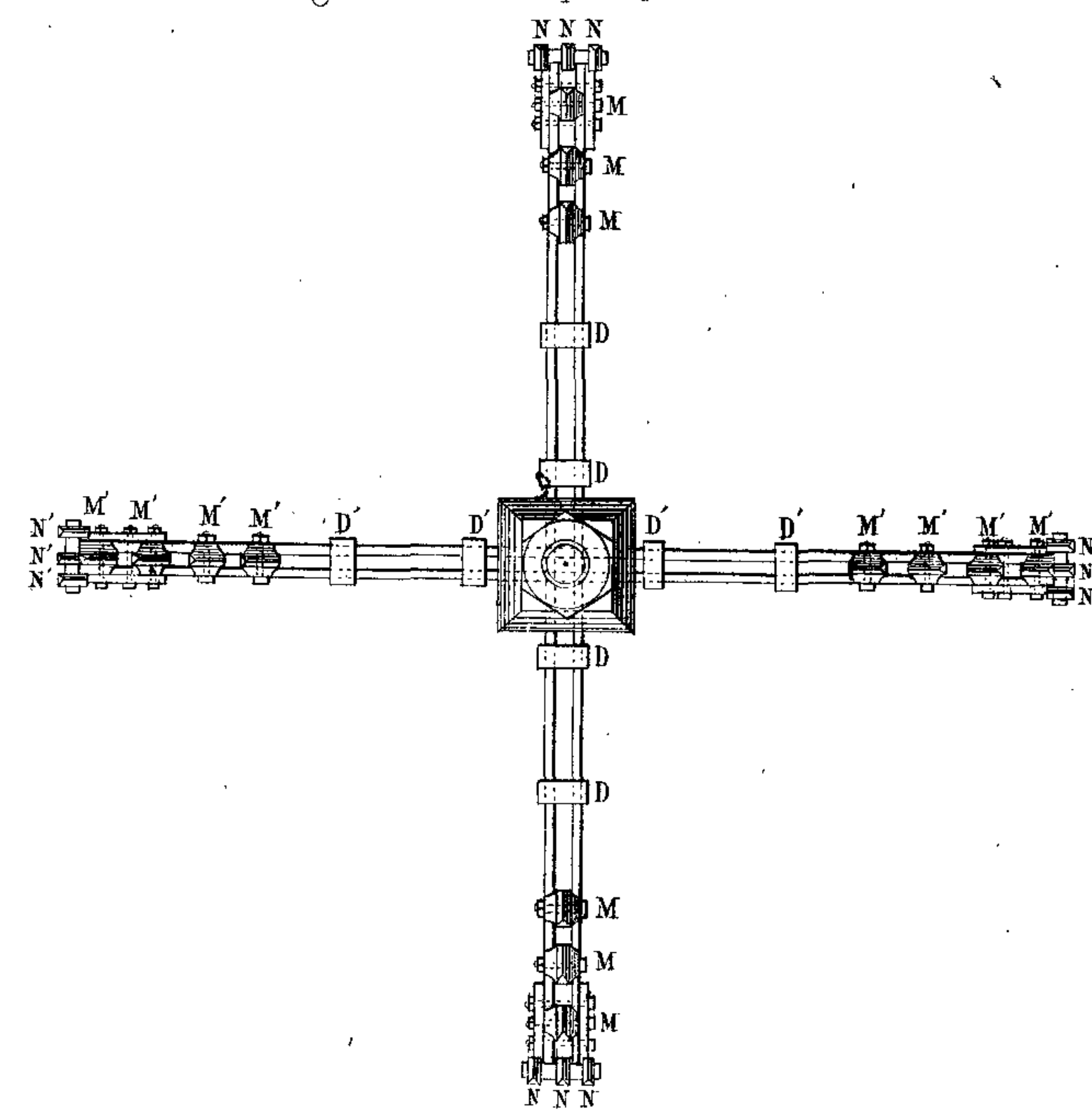


Fig. 10. Diagrams of the projections of a body with a stepped surface. The top diagram, "Projection verticale", shows a stepped profile with heights  $p_1, p_2, p_3$  and widths  $n_1, n_2, n_3$ . The bottom diagram, "Plan horizontal", shows the top view with dimensions  $c_1, c_2, c_3$  and widths  $n_1, n_2, n_3$ .

Echelle de  $\frac{1}{20}$  pour les Fig 7. 8.







Fig.1. Trépan élargisseur

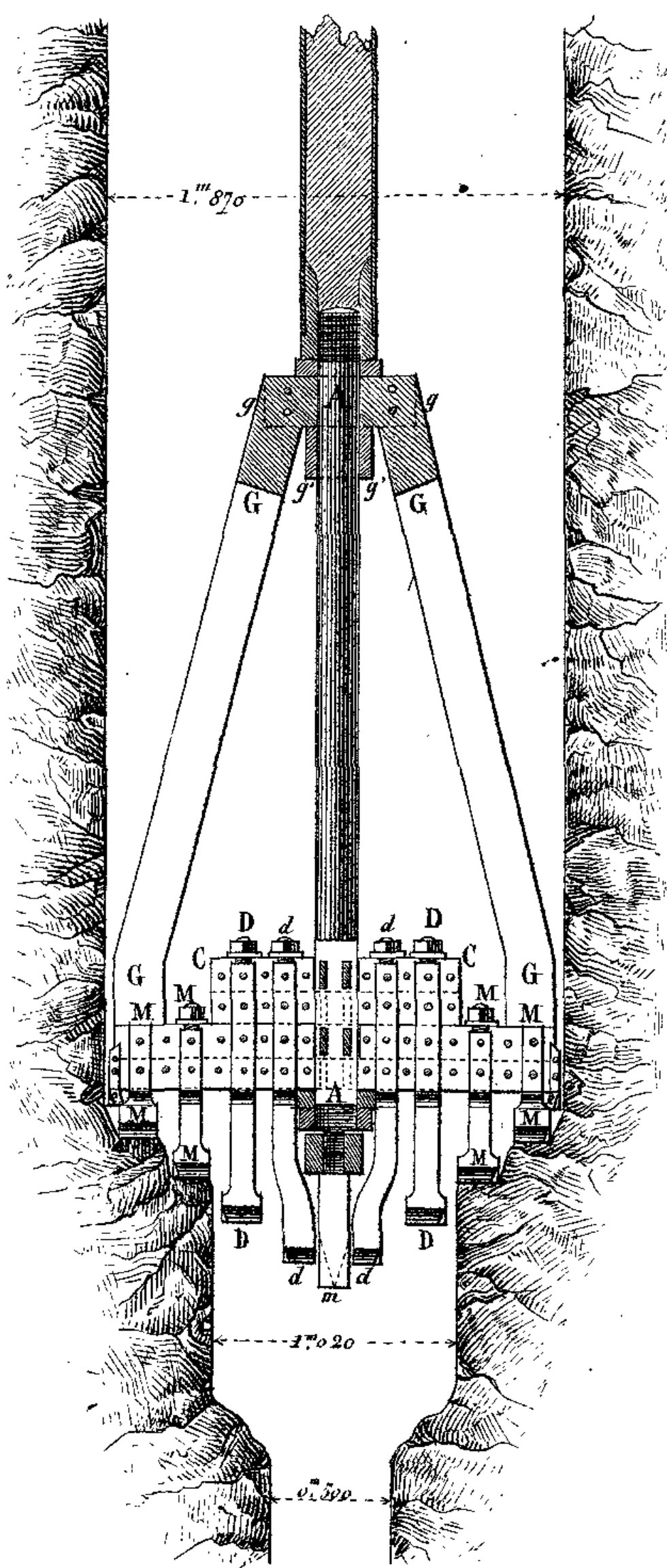


Fig.2. Trépan élargisseur

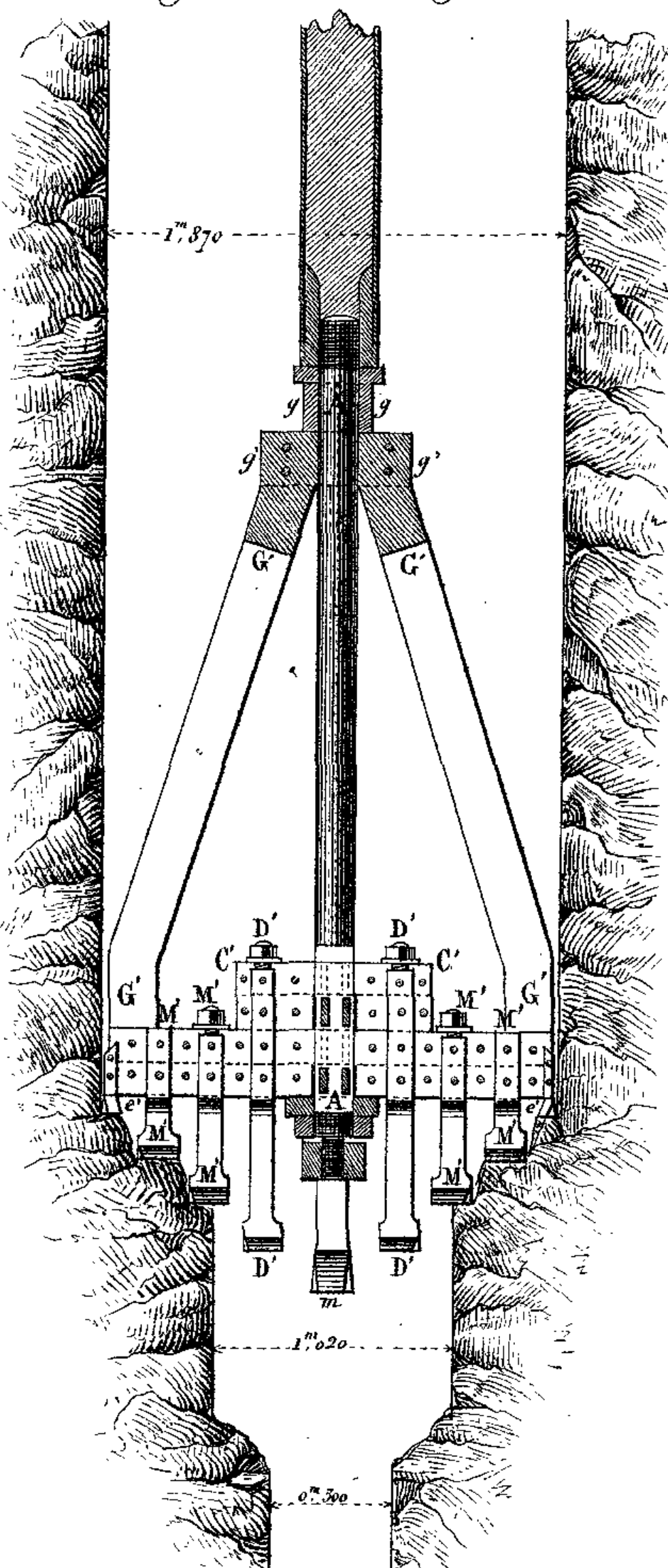


Fig.3. Plan (vue en dessus)

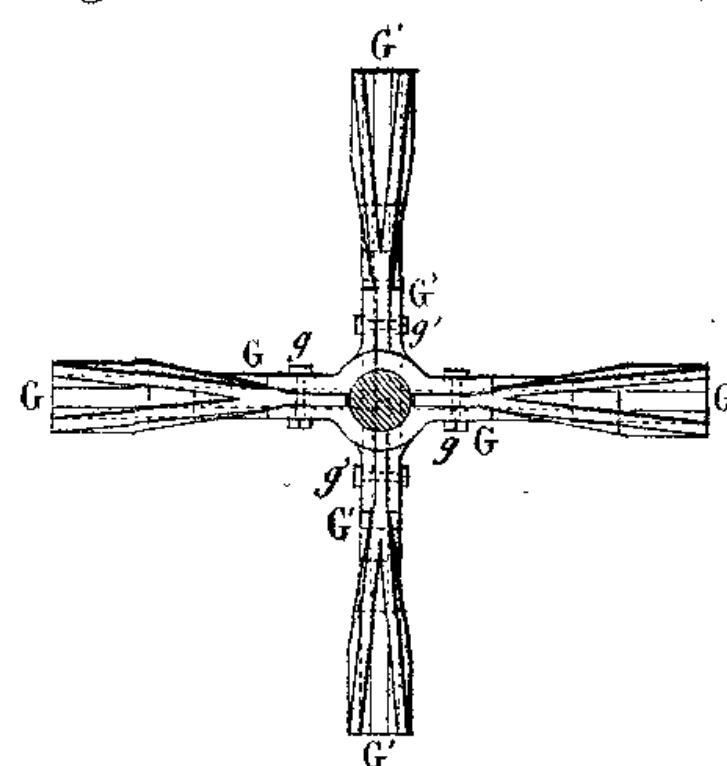


Fig.4. Plan (vue en dessous)

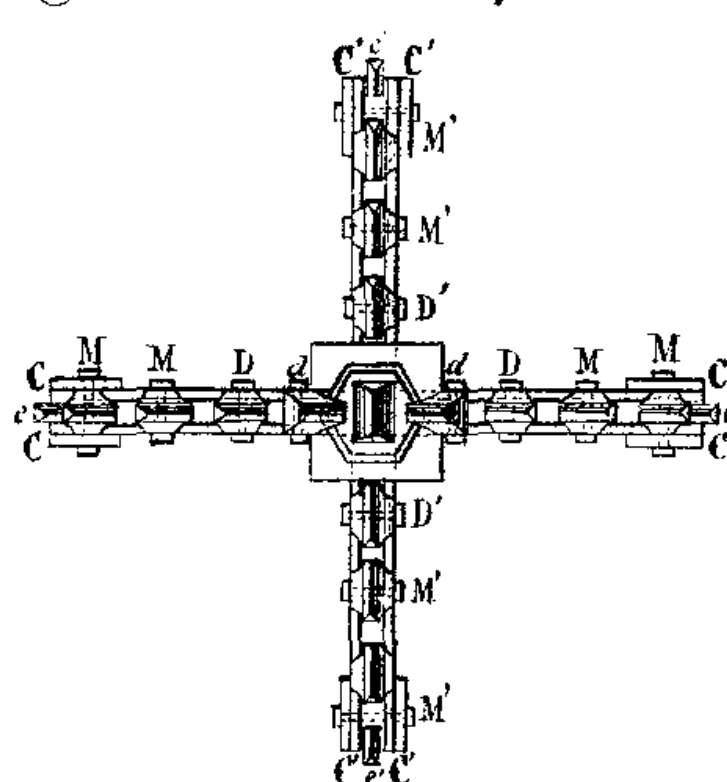


Fig.5. Arbre du Trépan.



Fig.6. Ciseau.

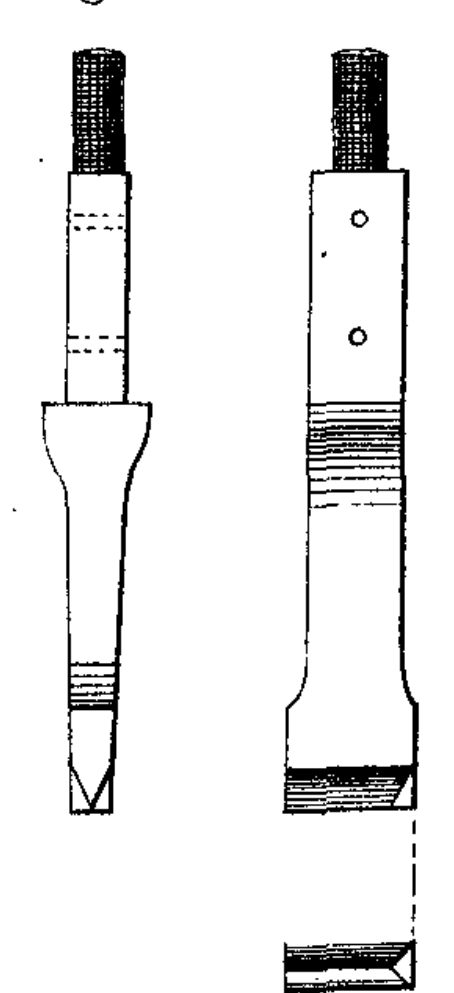


Fig.8. Coupe sur X.Y.  
Alésoir conique.

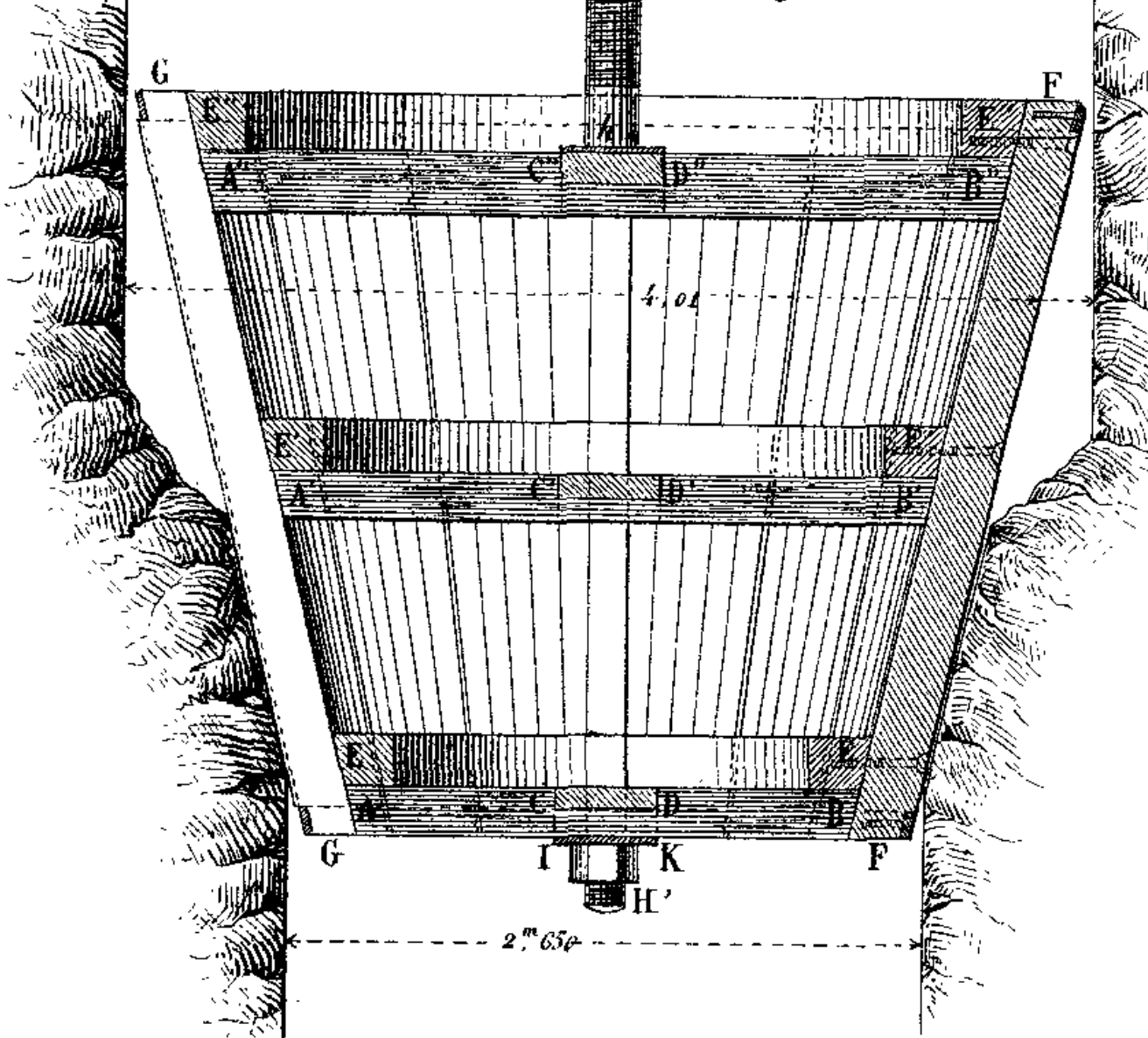


Fig.9 Plan (vue en dessous)

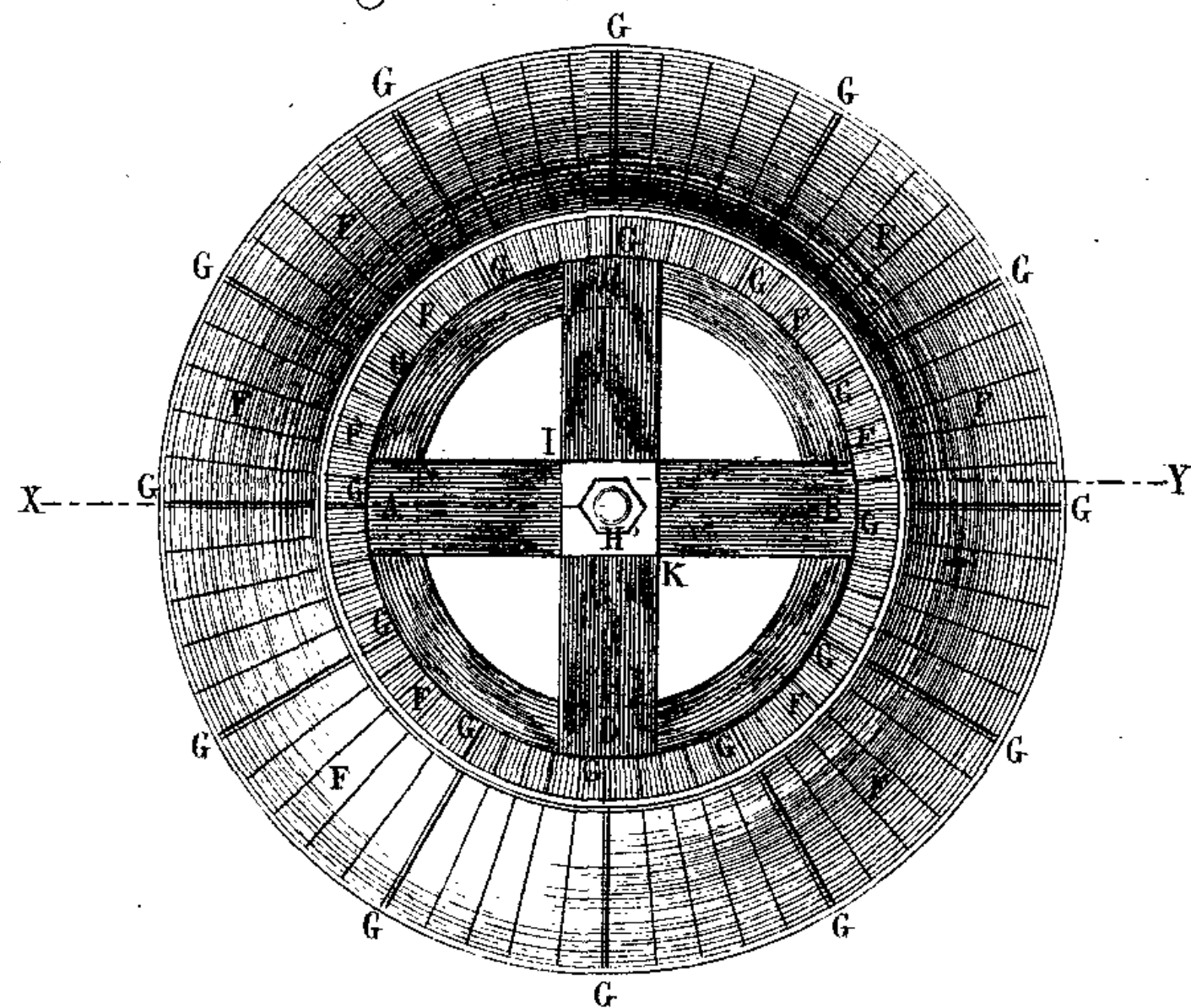


Fig.7. Clame du Trépan.

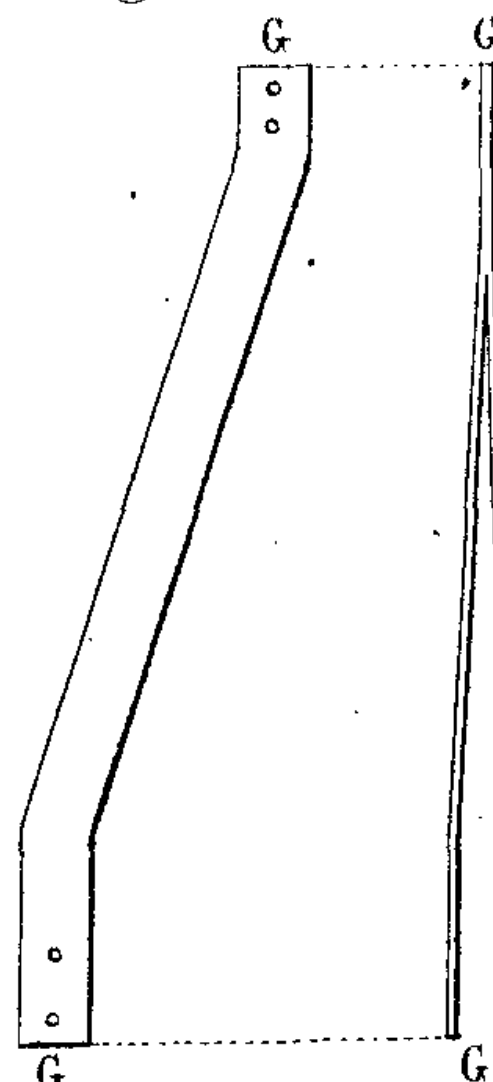


Fig.10. Lame de l'alésoir.



Fig.11. Cuvelage (Elevation)

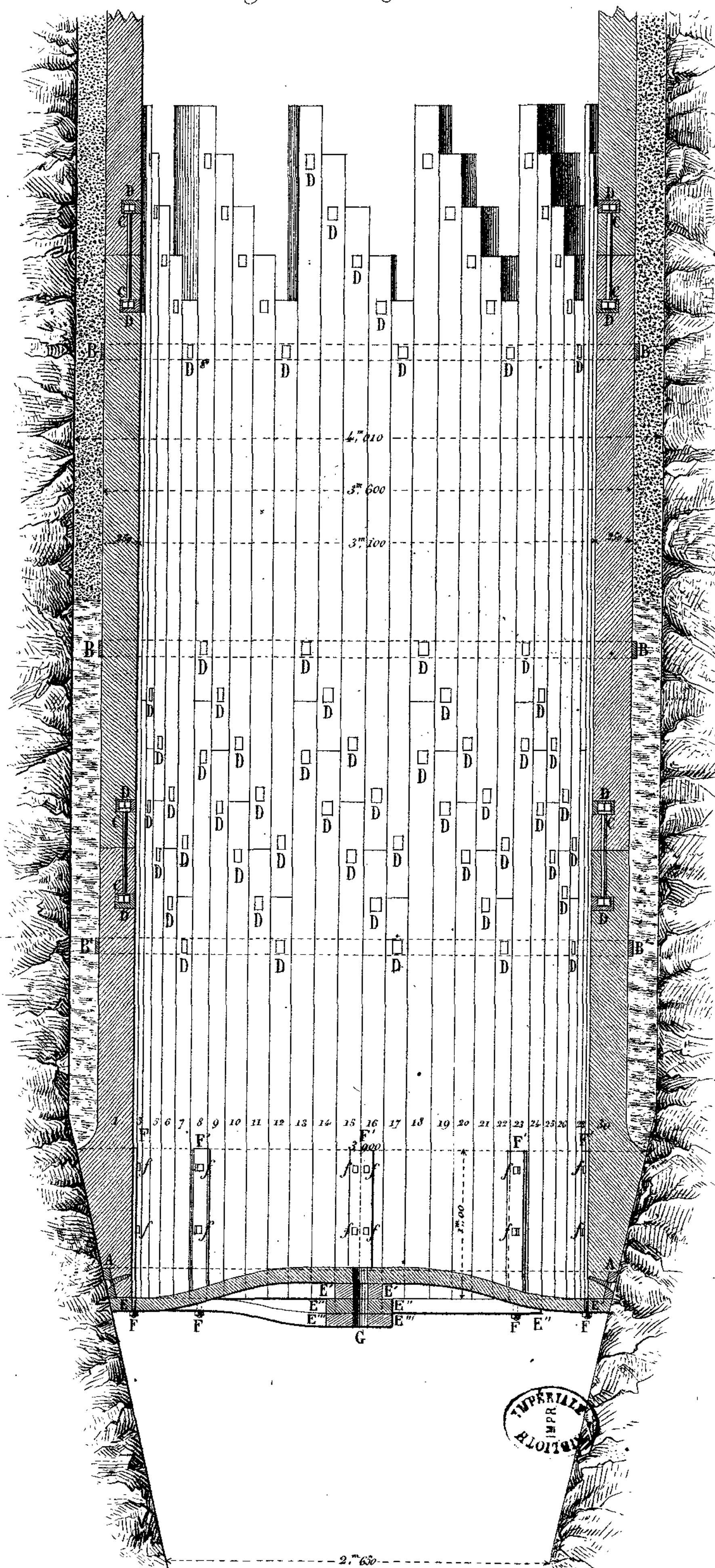


Fig.12. Cuvelage (Plan)

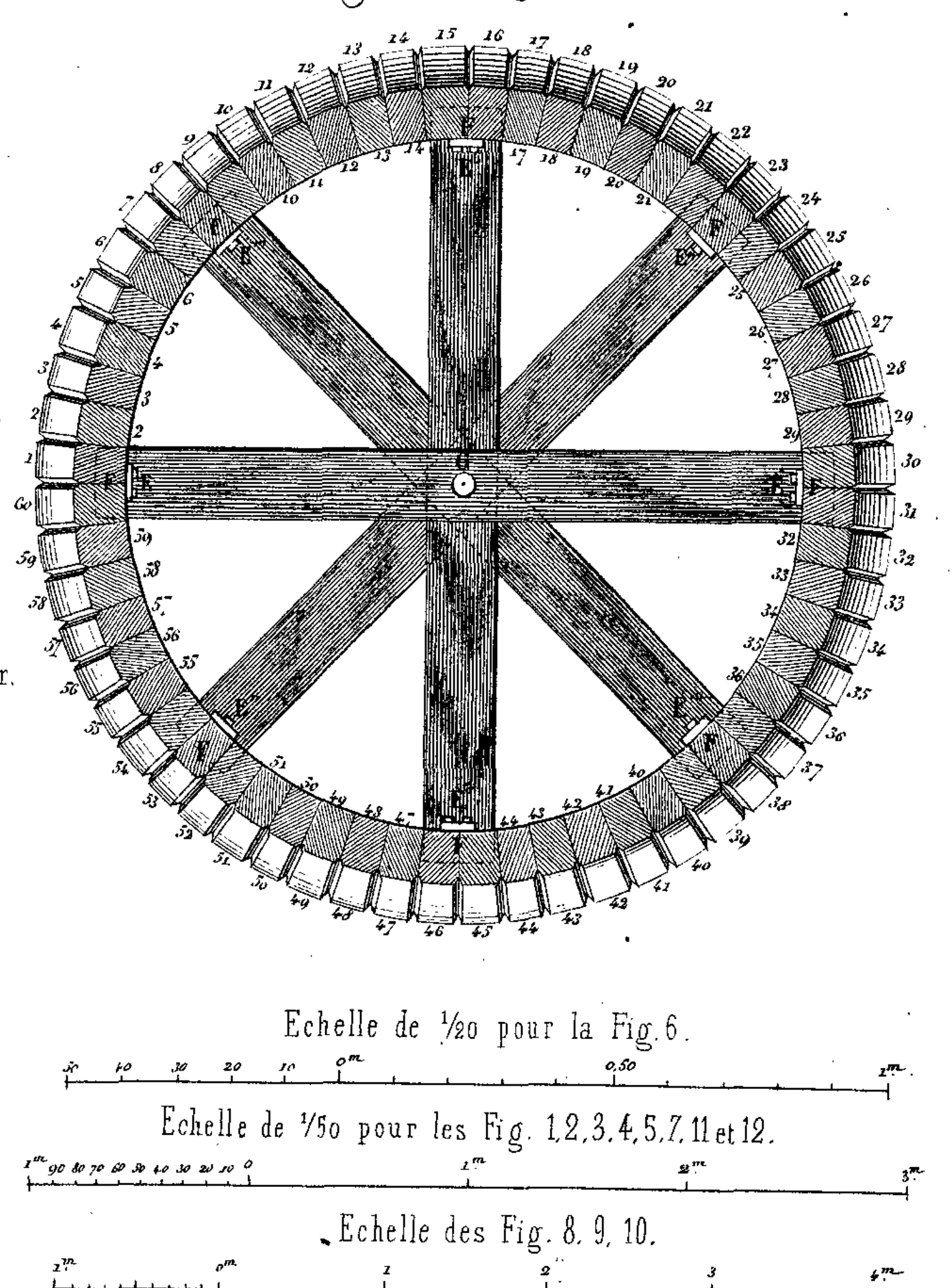








Fig. 1.  
(Moitié de grandeur naturelle)

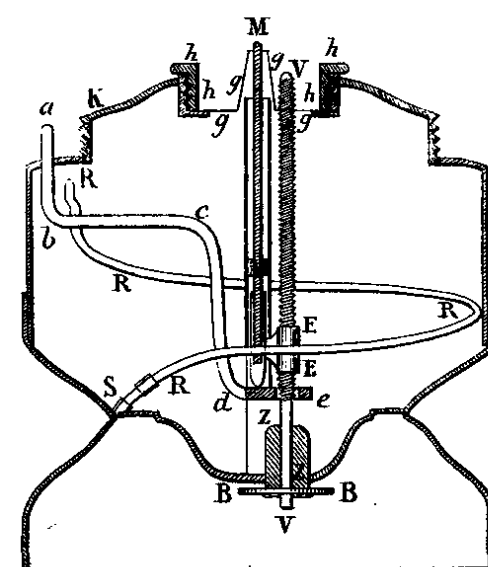
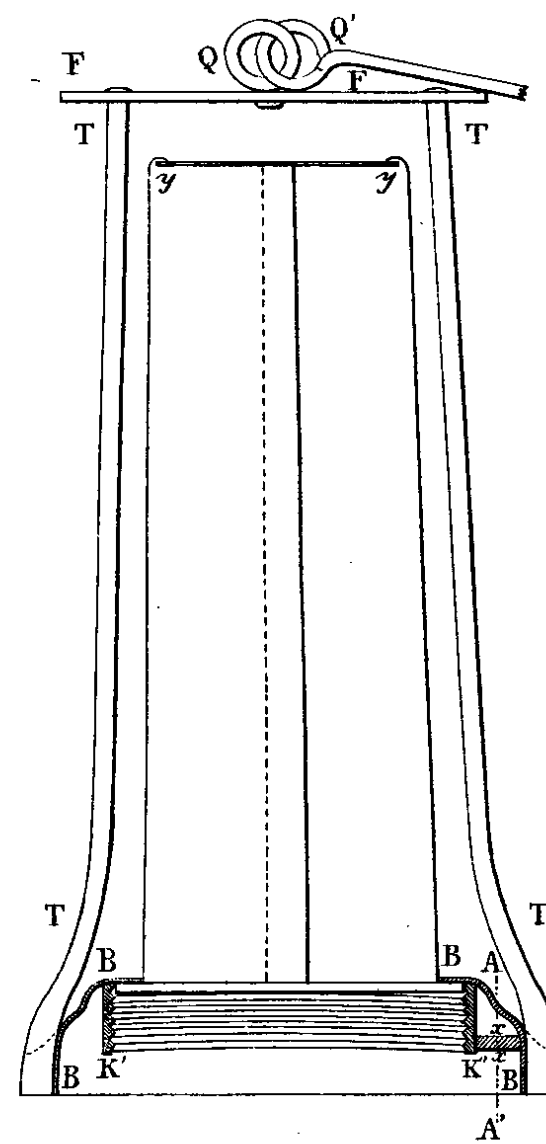


Fig. 2.  
(Echelle 1 pour 1000)

Légende.

- Galeries de la couche S<sup>t</sup>Emile.
- - - d<sup>o</sup> S<sup>t</sup>Auguste.
- Baenures ou Galeries au rocher.
- P. Puits Grangier profond de 90<sup>m</sup> (à la recette).
- K L. Baenures allant vers les couches supérieures au niveau du fond du Puits Grangier.
- a, b, c. Cloisons.
- N<sup>o</sup> 0. Porte double.
- N<sup>o</sup> 1. Porte forçant l'air à passer dans la partie de droite.
- Courant d'air établi pour l'expérience.
- V. V. Voie de fond de S<sup>t</sup>Emile.
- P. S. Baenure de la recette au toit de S<sup>t</sup>Emile.
- Z, Z. Galerie plate communiquant avec la voie de fond V. V. par les remontées a, b, d.

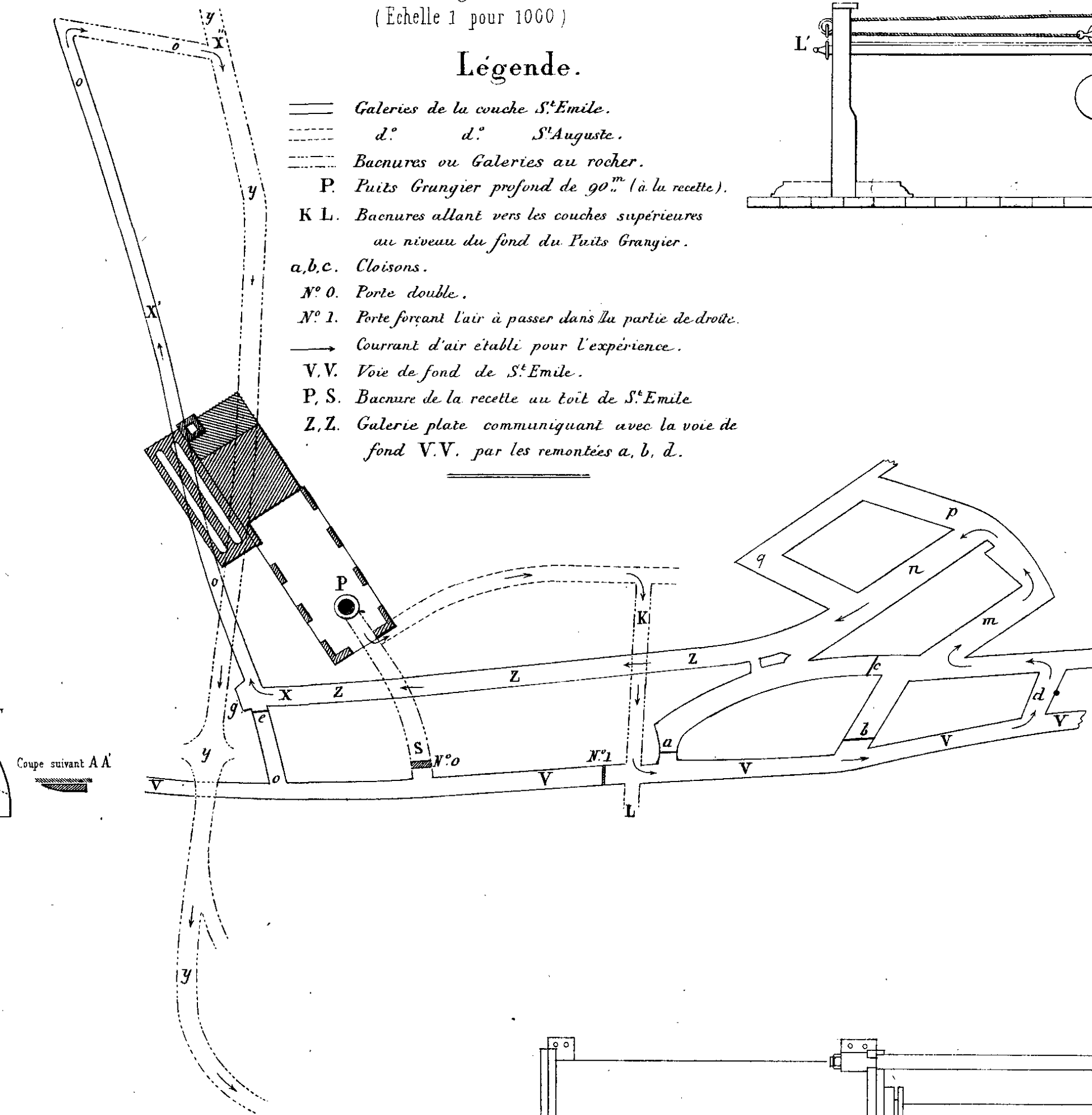


Fig. 3.

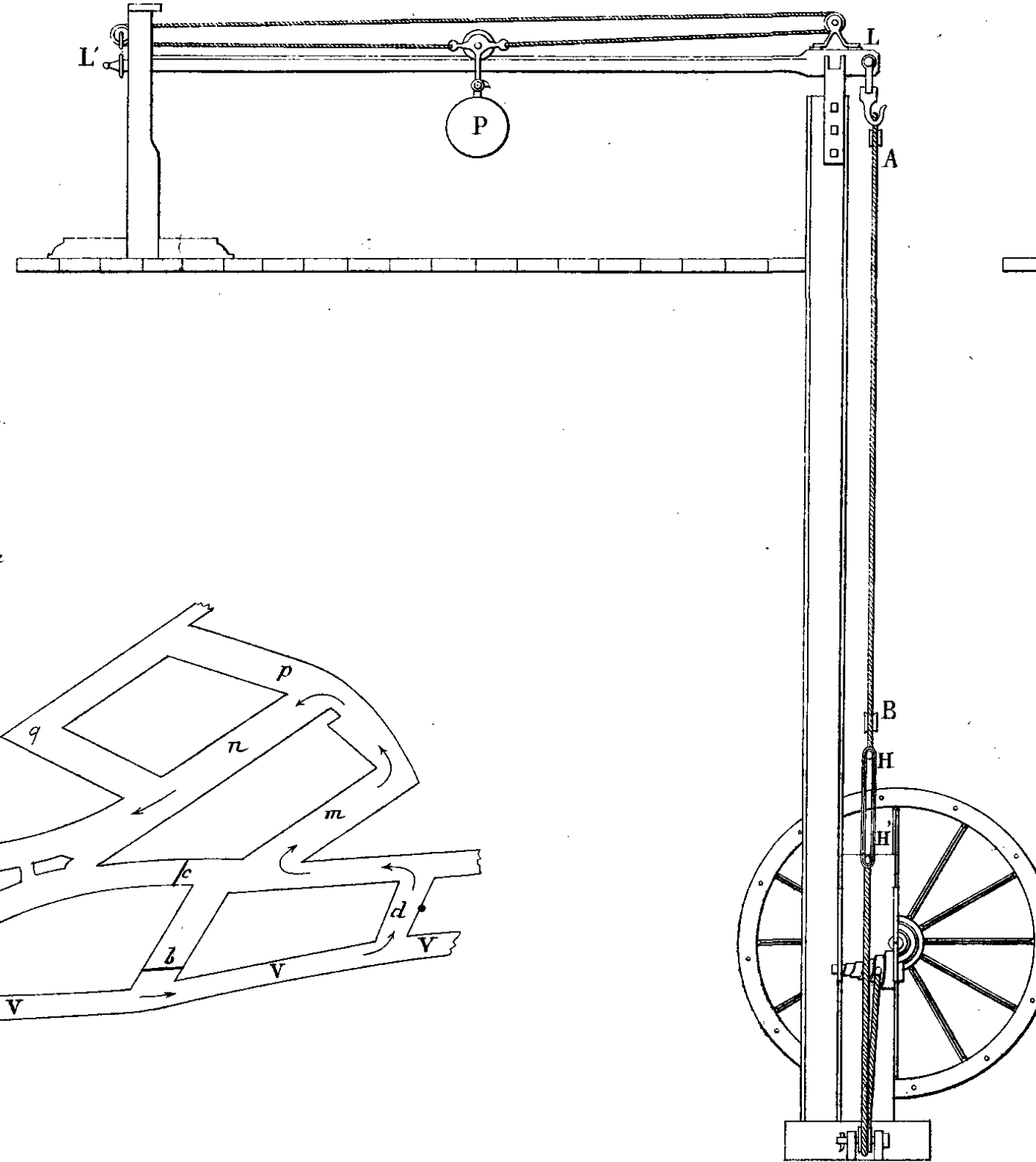


Fig. 4.

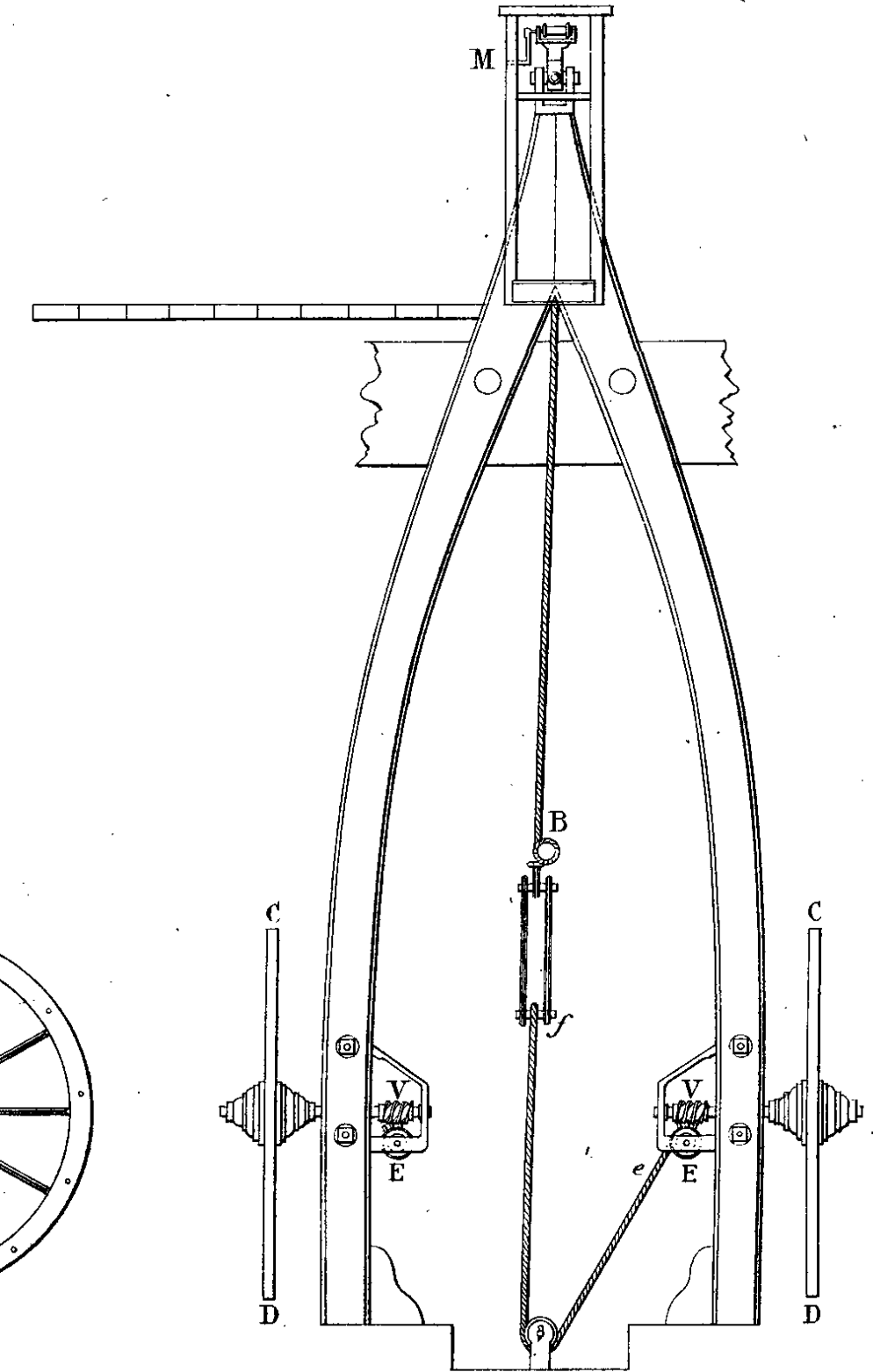


Fig. 5.

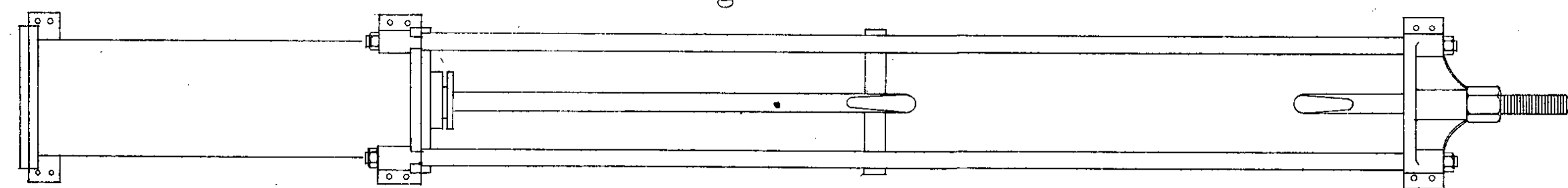
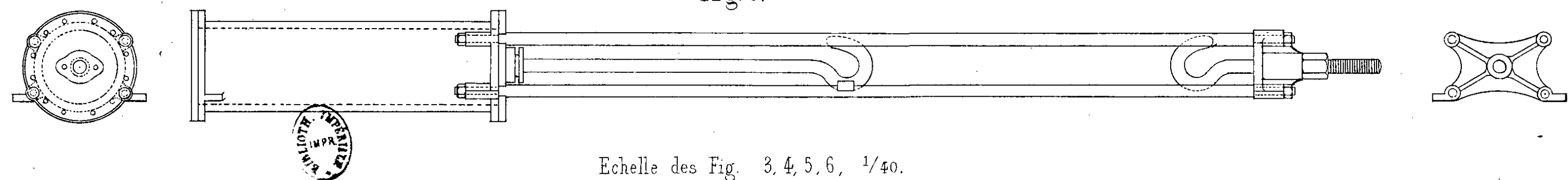


Fig. 6.



Echelle des Fig. 3, 4, 5, 6, 1/40.















Fig. 1.

Mines de la Bazouge (Mayenne)

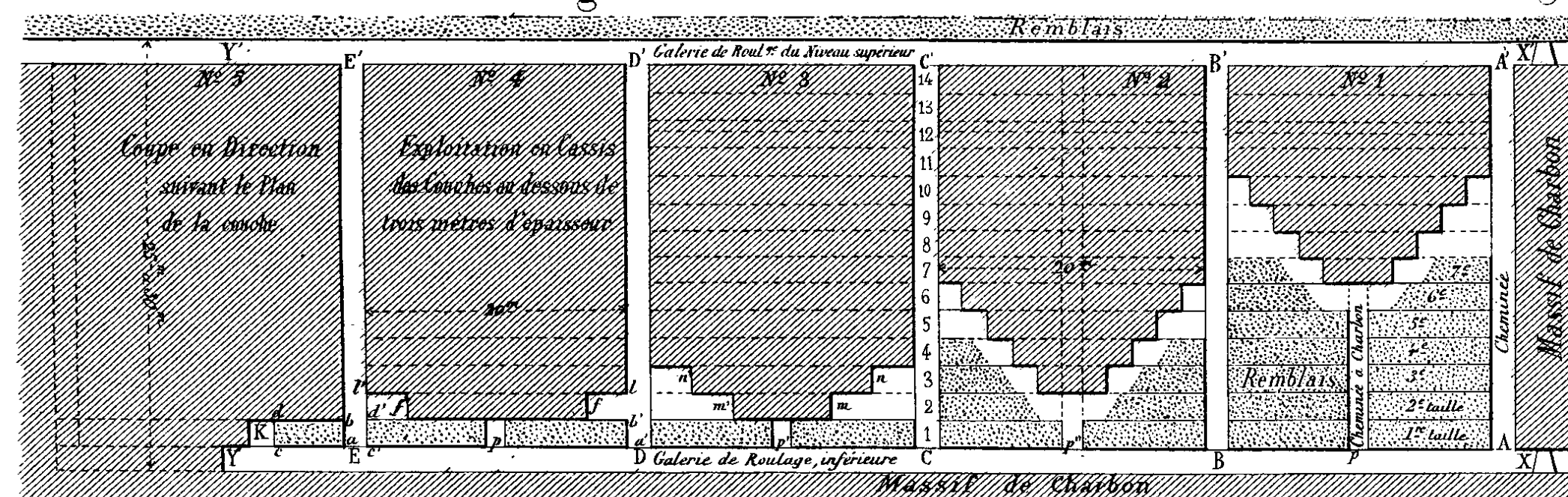


Fig. 6. Projection verticale.

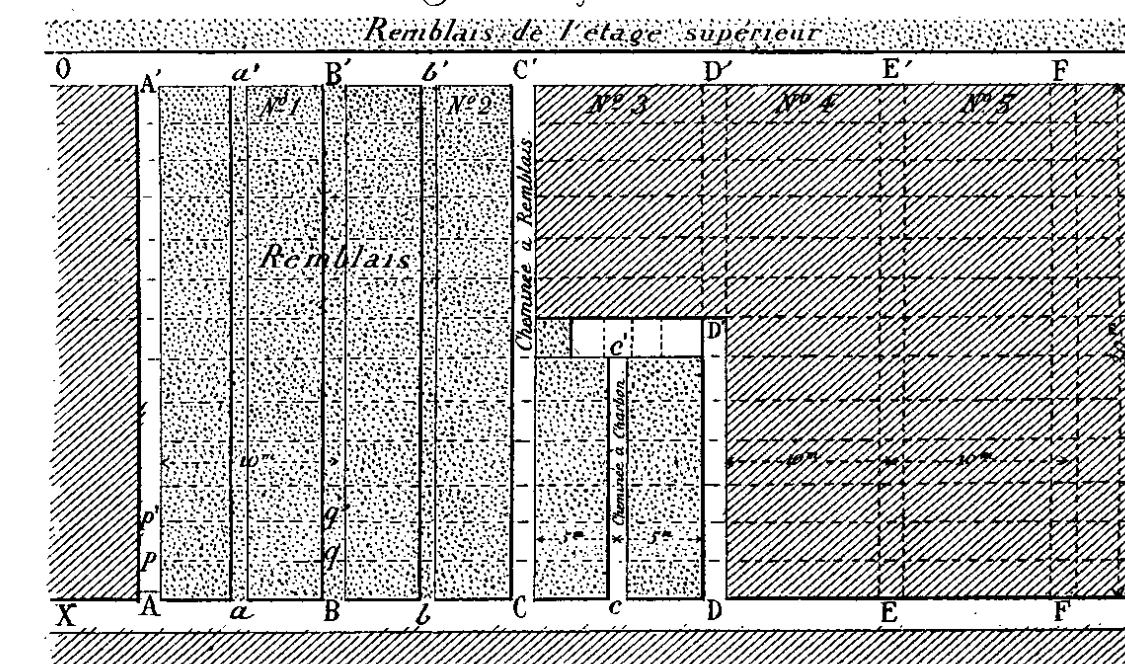


Fig. 5. Coupe en travers.

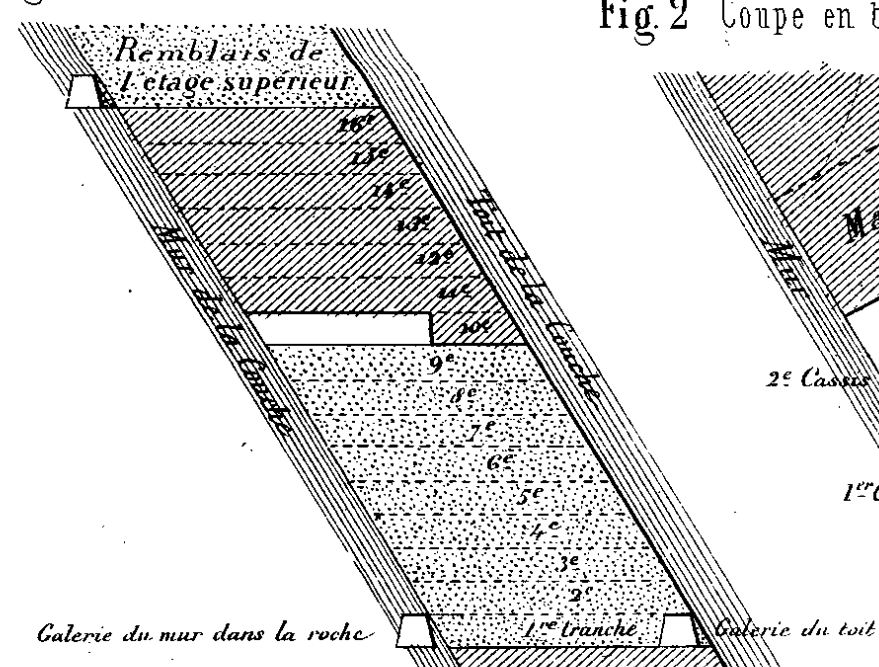


Fig. 2. Coupe en travers.

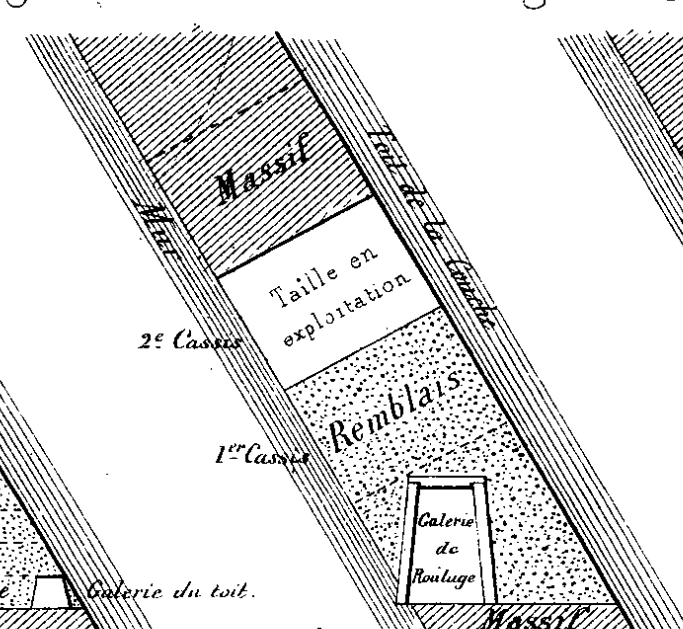


Fig. 3. Coupe en travers.

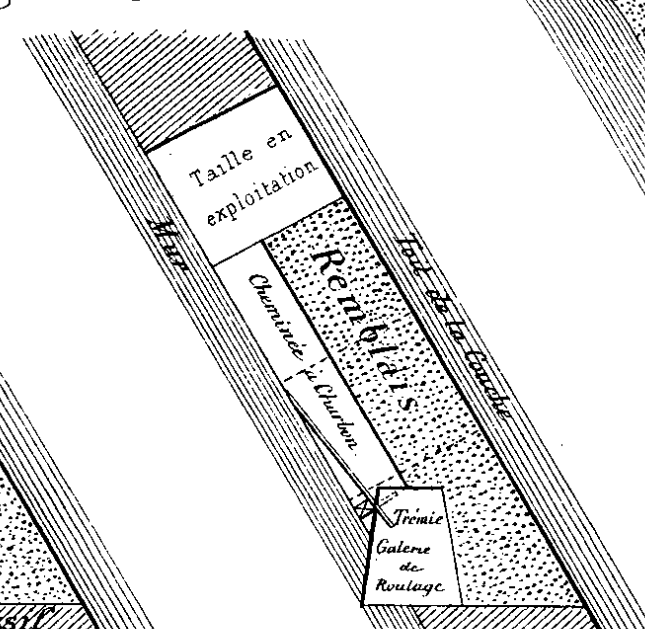


Fig. 4. Coupe en travers.

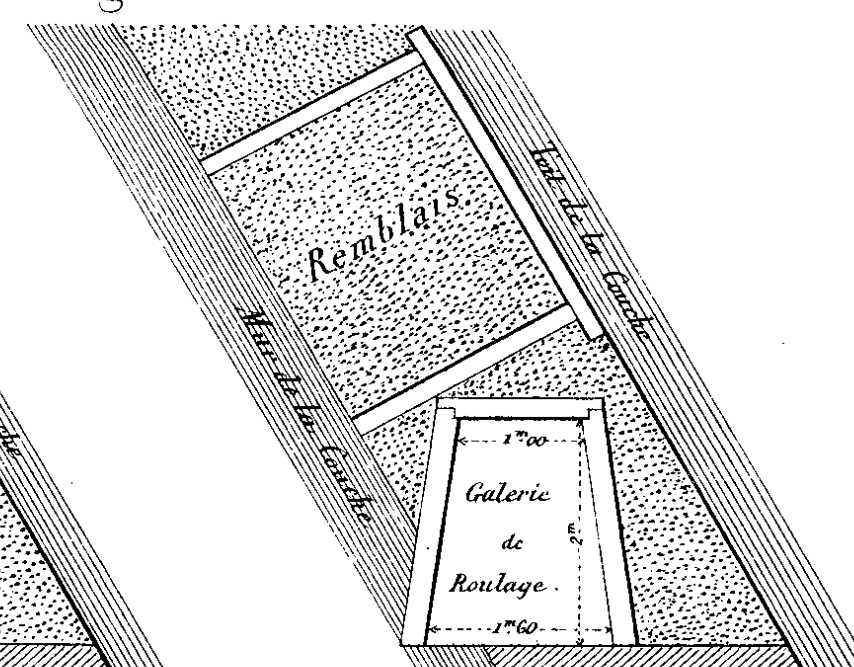


Fig. 7.

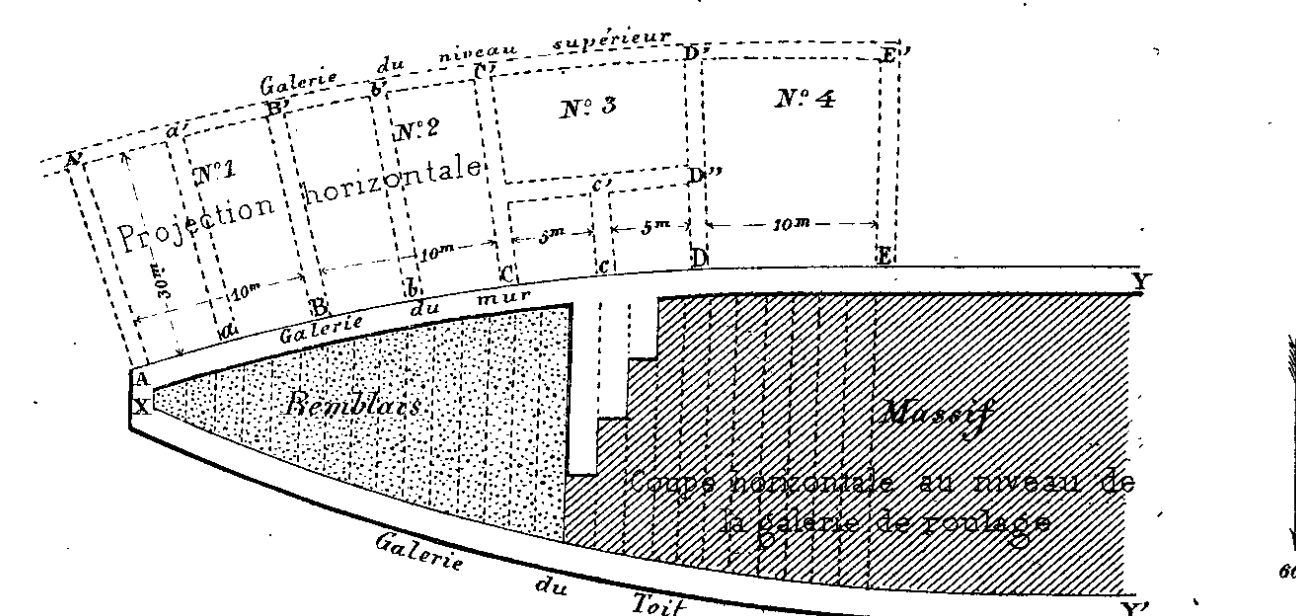


Fig. 8.

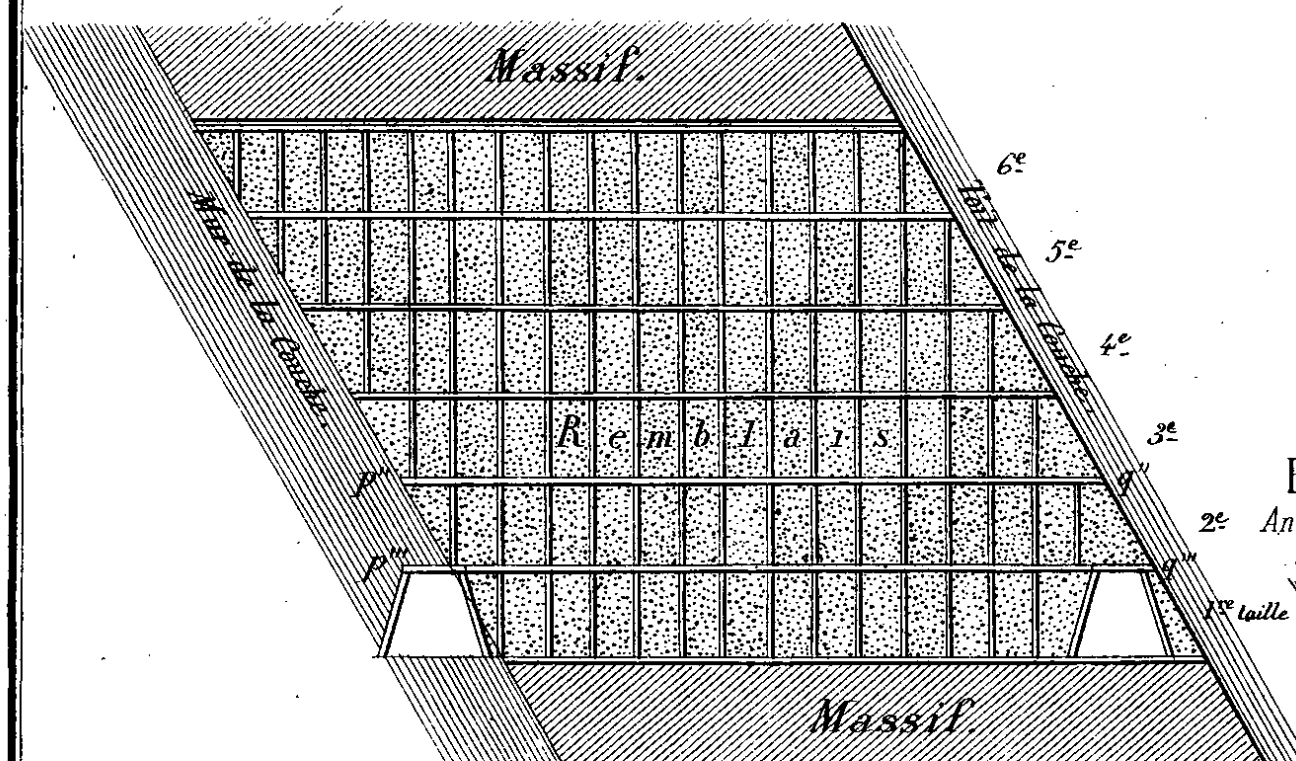


Fig. 9.

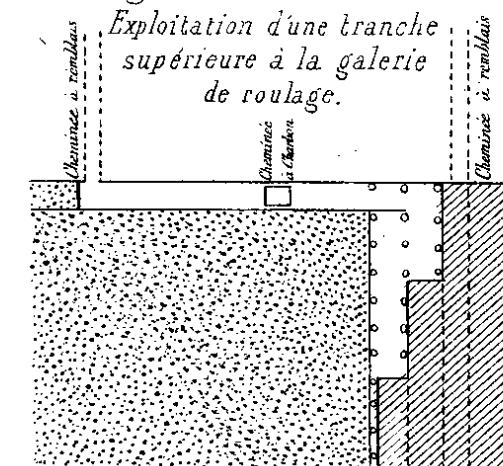


Fig. 10. Coupe en travers. Ancienne méthode d'exploitation attaque de la 1<sup>re</sup> tranche.

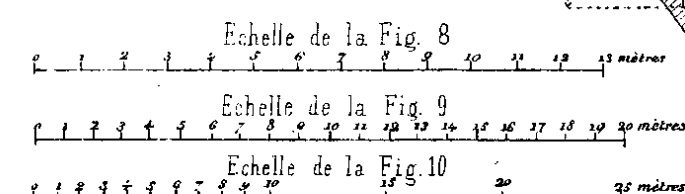
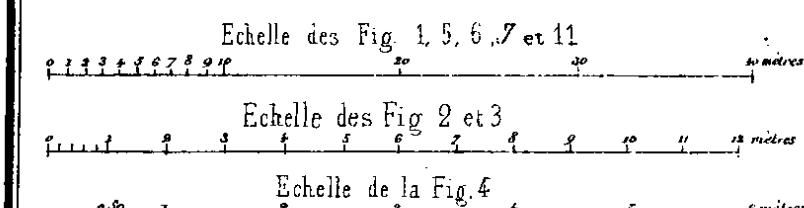
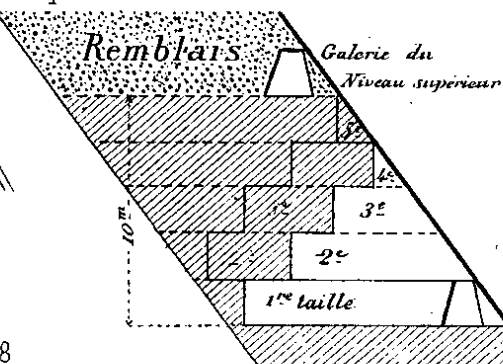
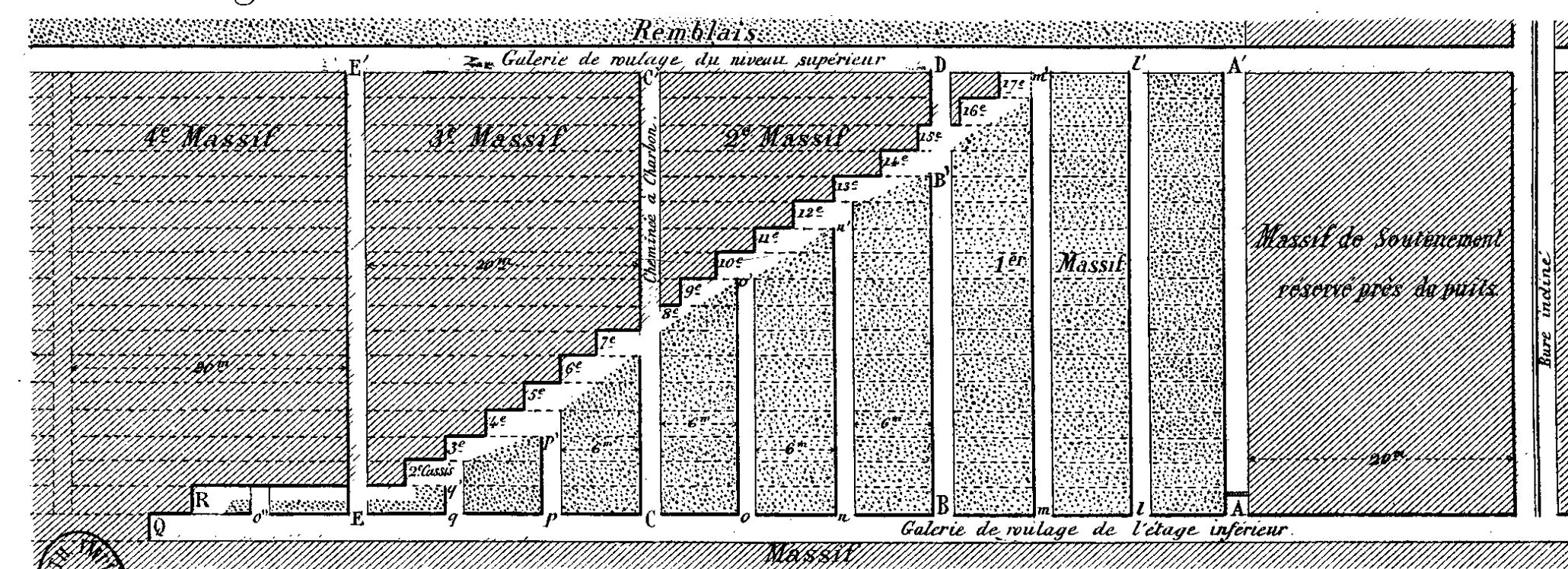


Fig. 11.

Mines de Montigné (Mayenne)









Mines de Montigné (Mayenne)

Fig. 4. Coupe horizontale.

Exploitation de la tranche au Niveau de la Galerie de Roulage.

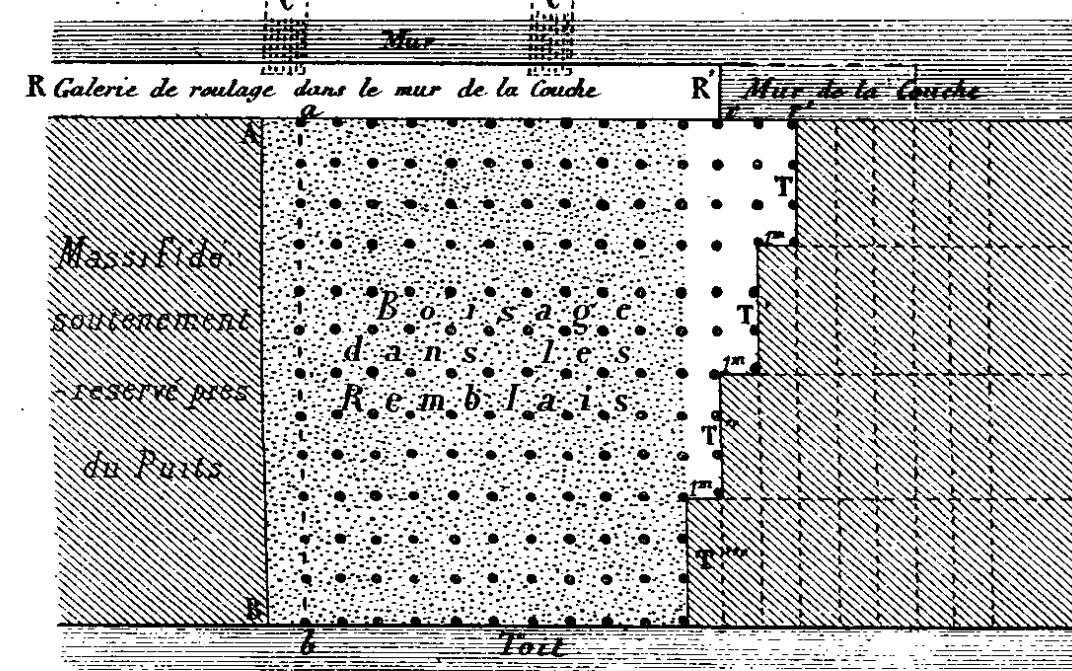


Fig. 5. Coupe horizontale.

Exploitation de la tranche au-dessus de la Galerie de Roulage.

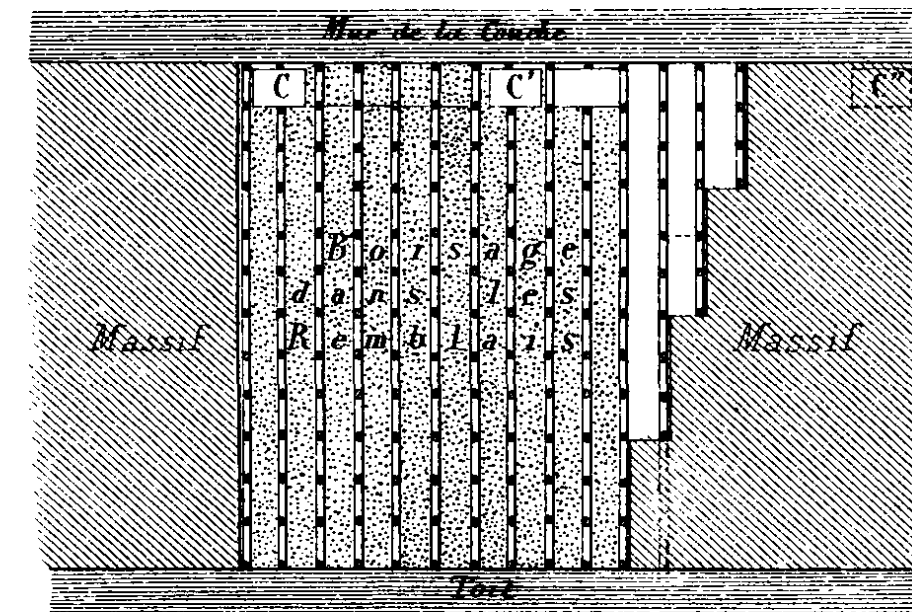


Fig. 8. Coupe horizontale

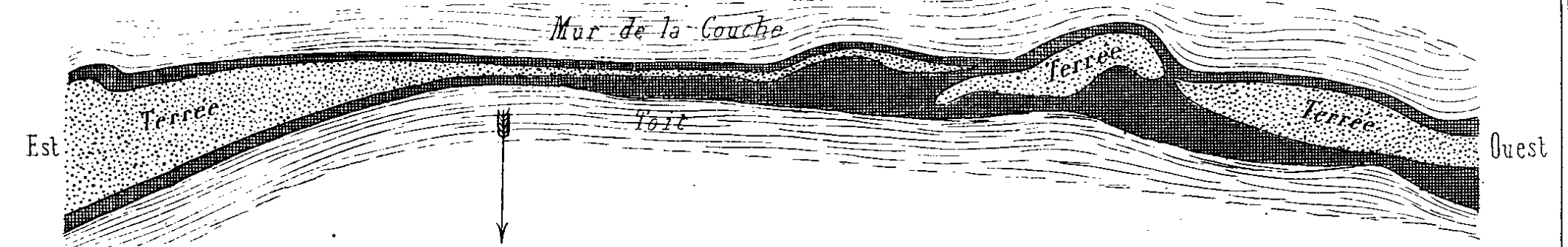


Fig. 7. Coupe horizontale.

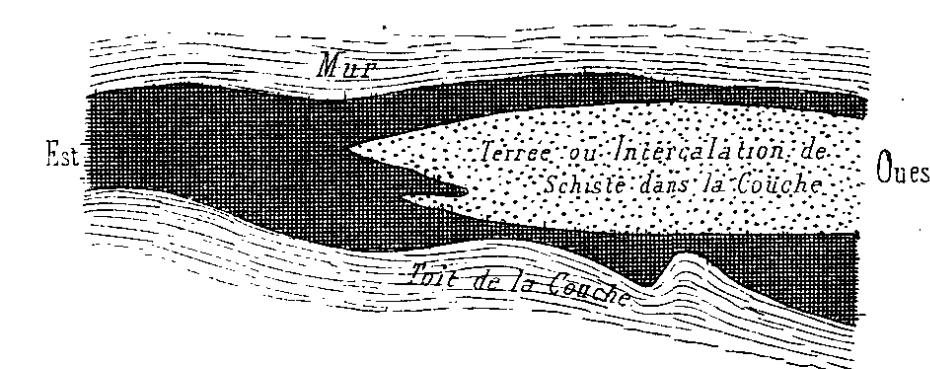


Fig. 9. Coupe verticale en travers.

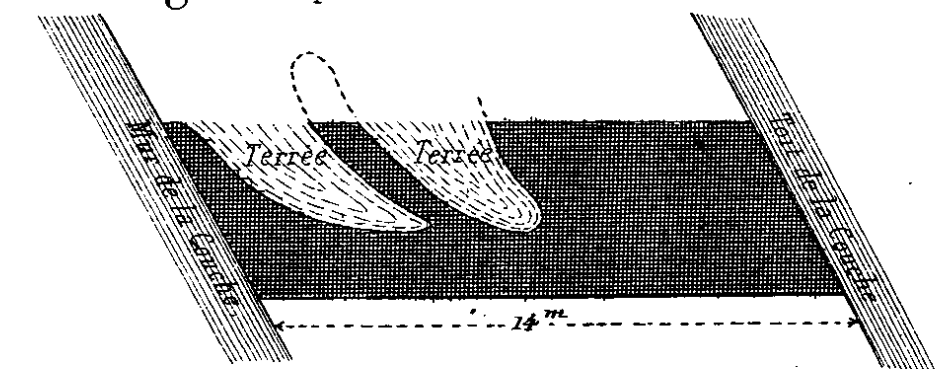


Fig. 1.

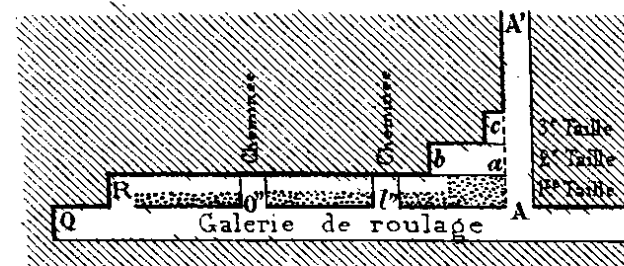


Fig. 2.

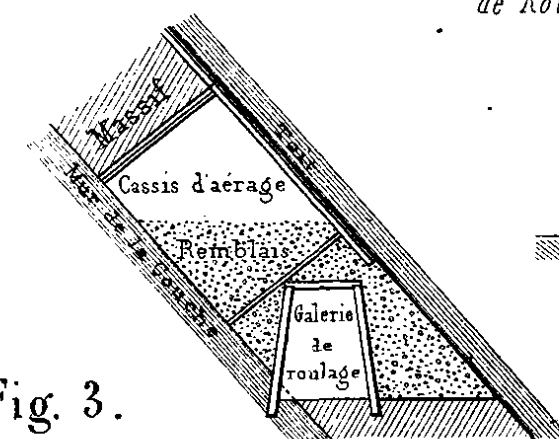
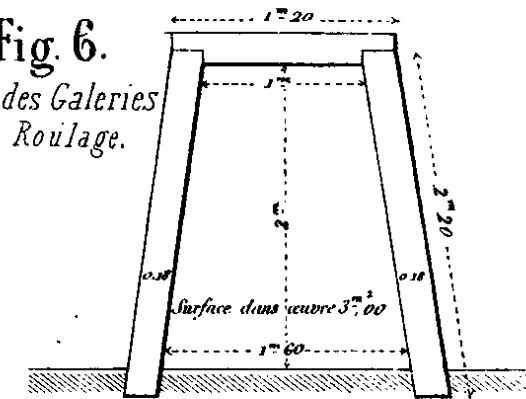


Fig. 6.

Cadre des Galeries de Roulage.



Mines de l'Huisserie. (Mayenne)

Fig. 13.

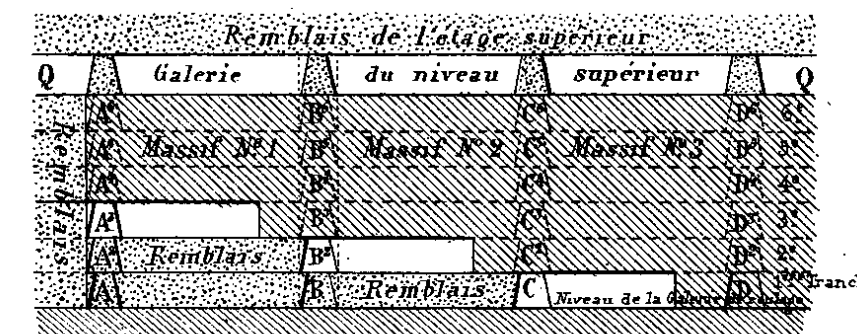


Fig. 15. Coupe verticale en travers

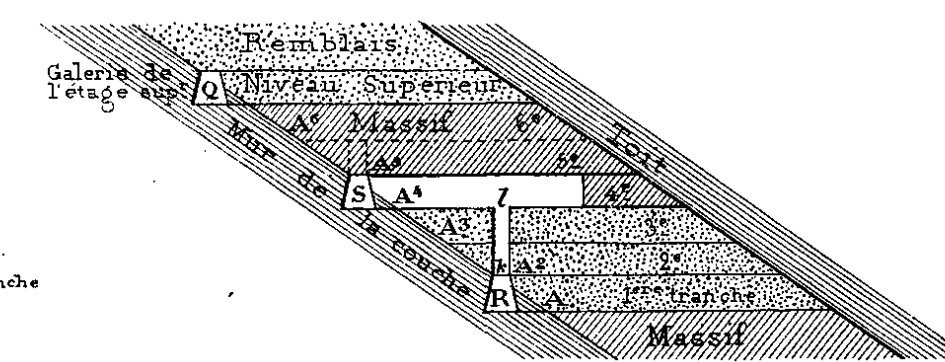


Fig. 21.

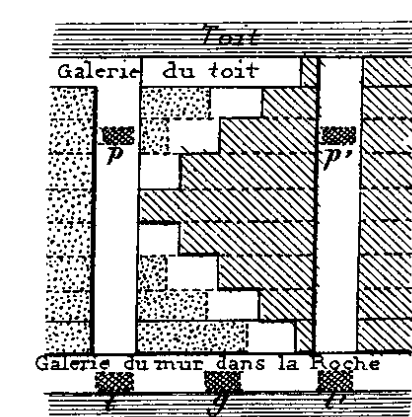


Fig. 10. Coupe verticale en travers.

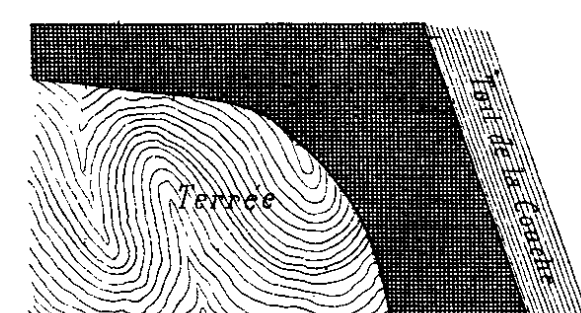


Fig. 3.

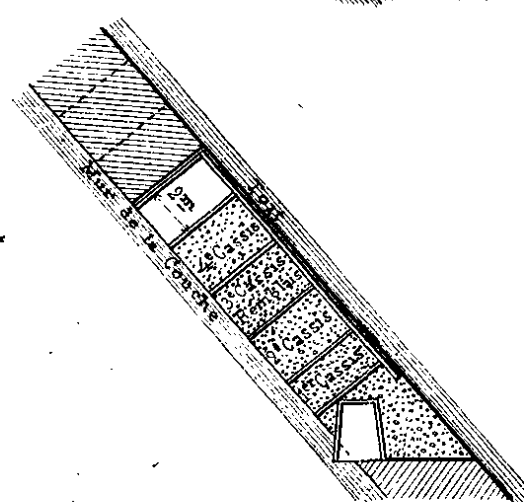


Fig. 14.

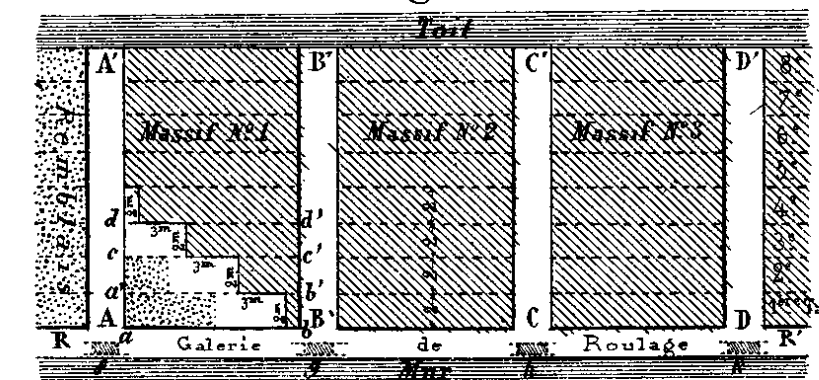


Fig. 16. Coupe verticale en travers.

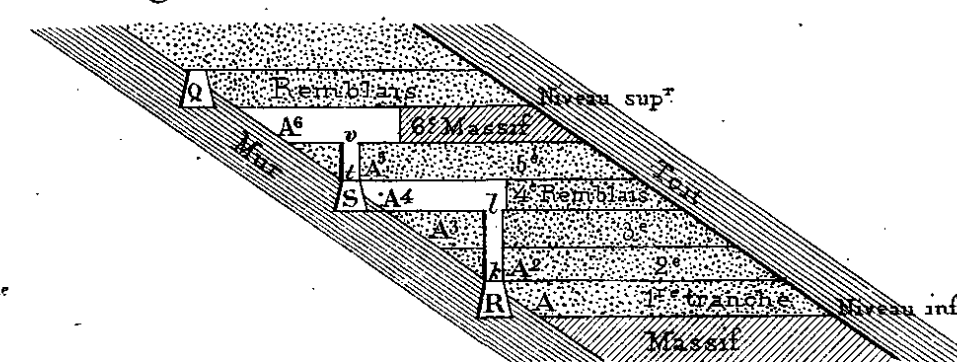


Fig. 22. Coupe verticale en travers.

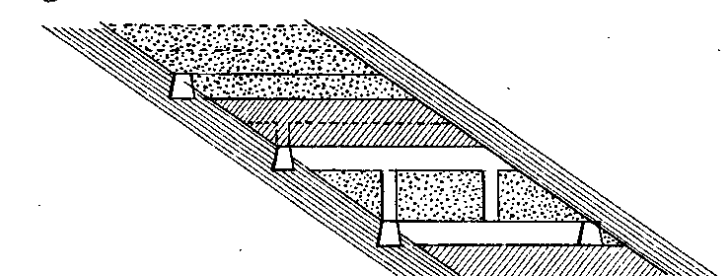


Fig. 11. Coupe verticale en travers.

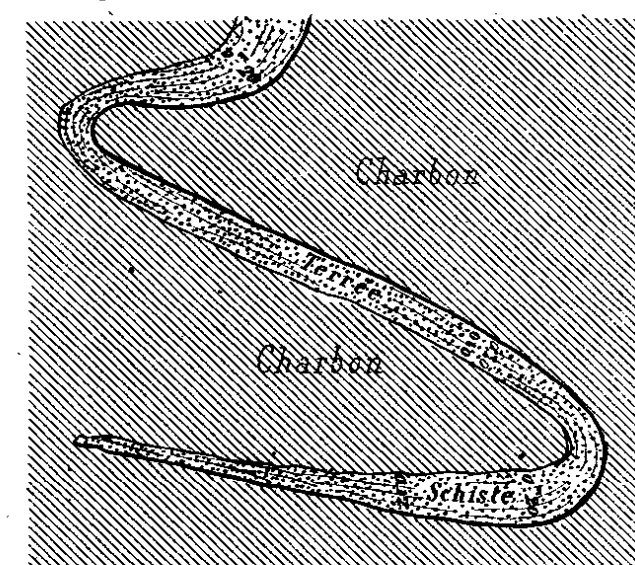
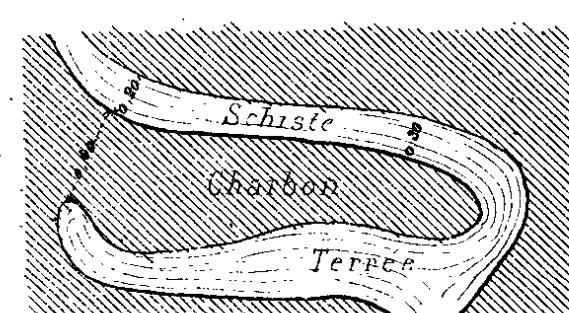


Fig. 12. Coupe verticale en travers.



Echelles.

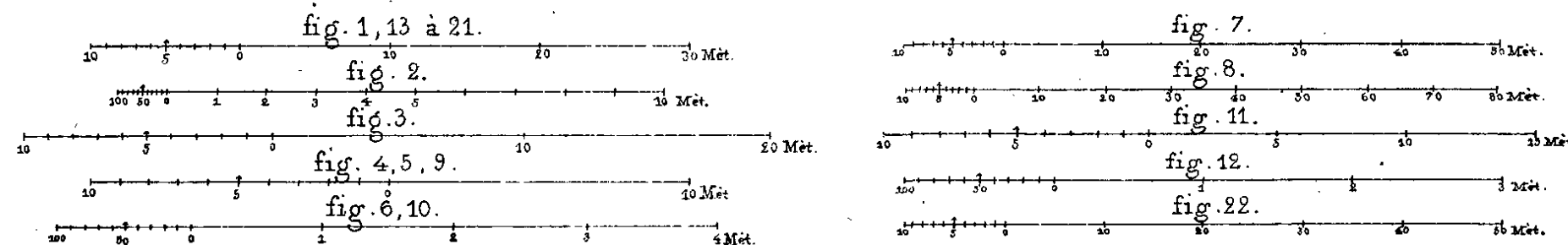


Fig. 17. Coupe horizontale  
Exploitation de la 2<sup>e</sup> tranche

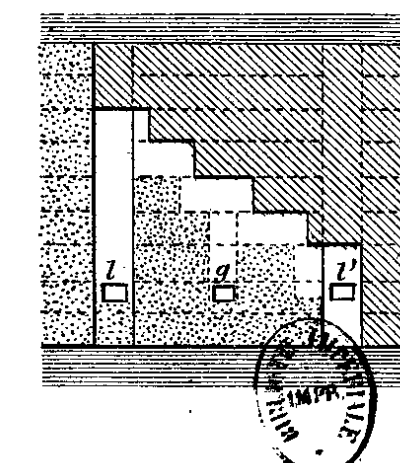


Fig. 18. Coupe horizontale.  
Exploitation de la 4<sup>e</sup> tranche au  
niveau de la Galerie intermédiaire.

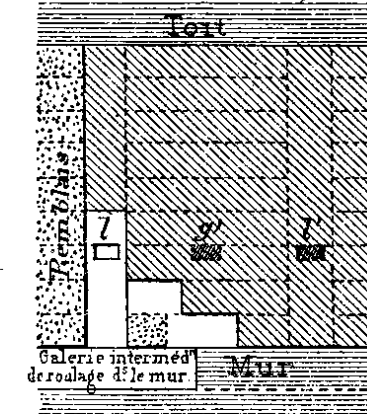


Fig. 19. Coupe horizontale.  
4<sup>e</sup> tranche après son exploitation.

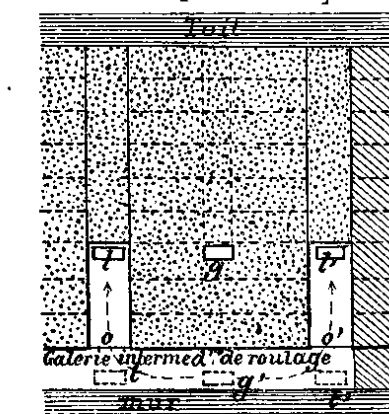


Fig. 20. Coupe horizontale  
Exploitation de la 6<sup>e</sup> ou dernière tranche.

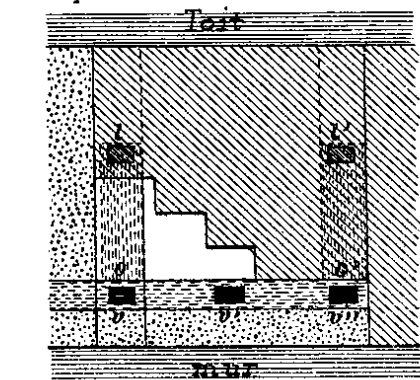








Fig. 10.

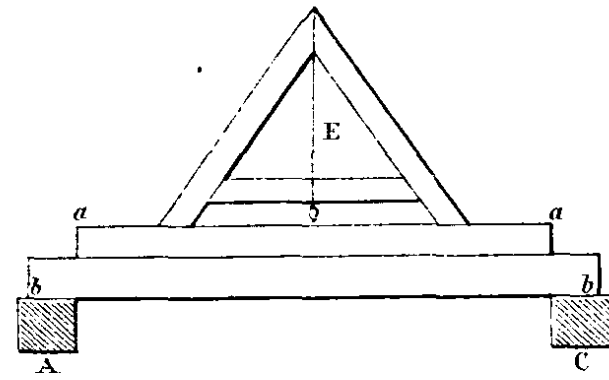


Fig. 1.

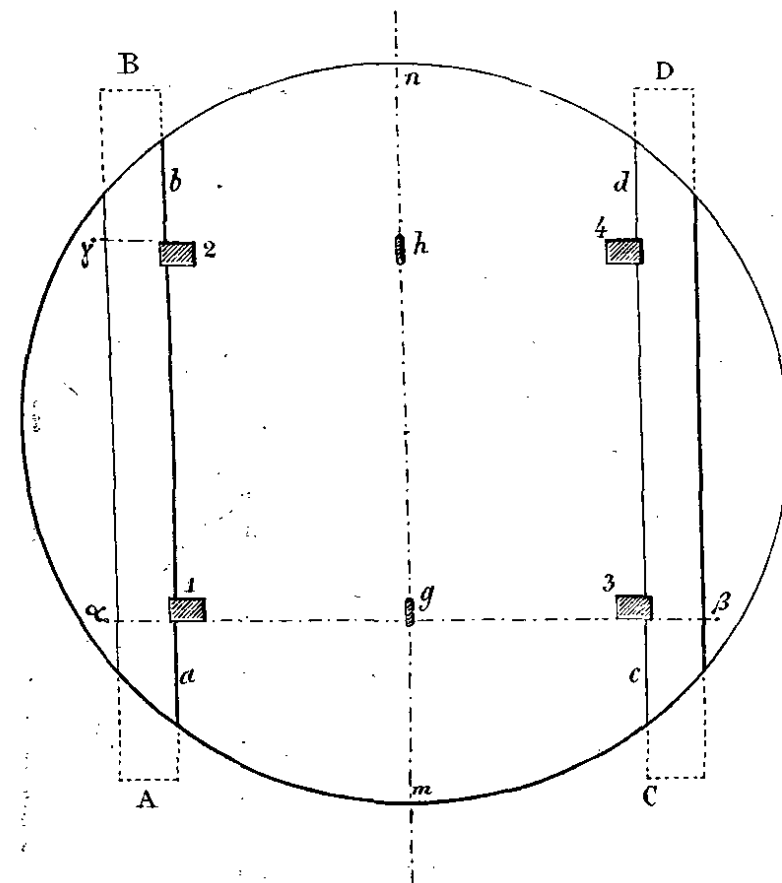


Fig. 9.

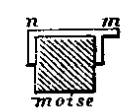
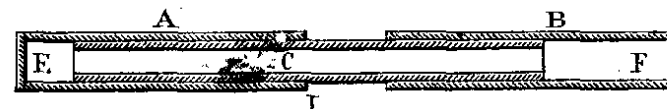


Fig. 7.

Echelle.

100 50 0 1 2 3 Met

Fig. 3.

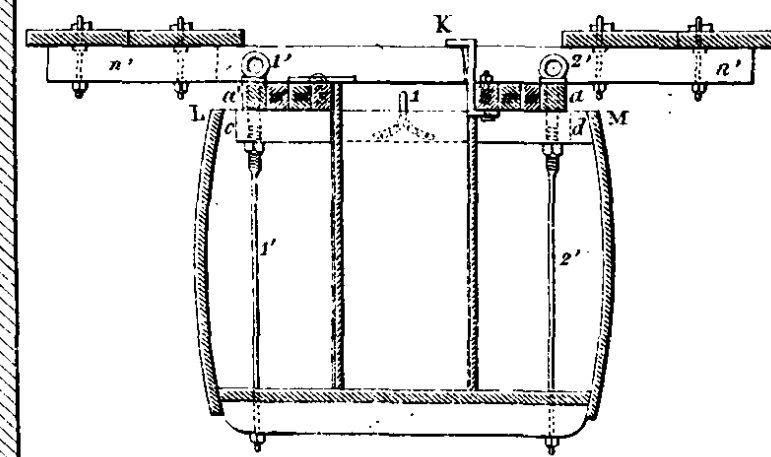


Fig. 2.

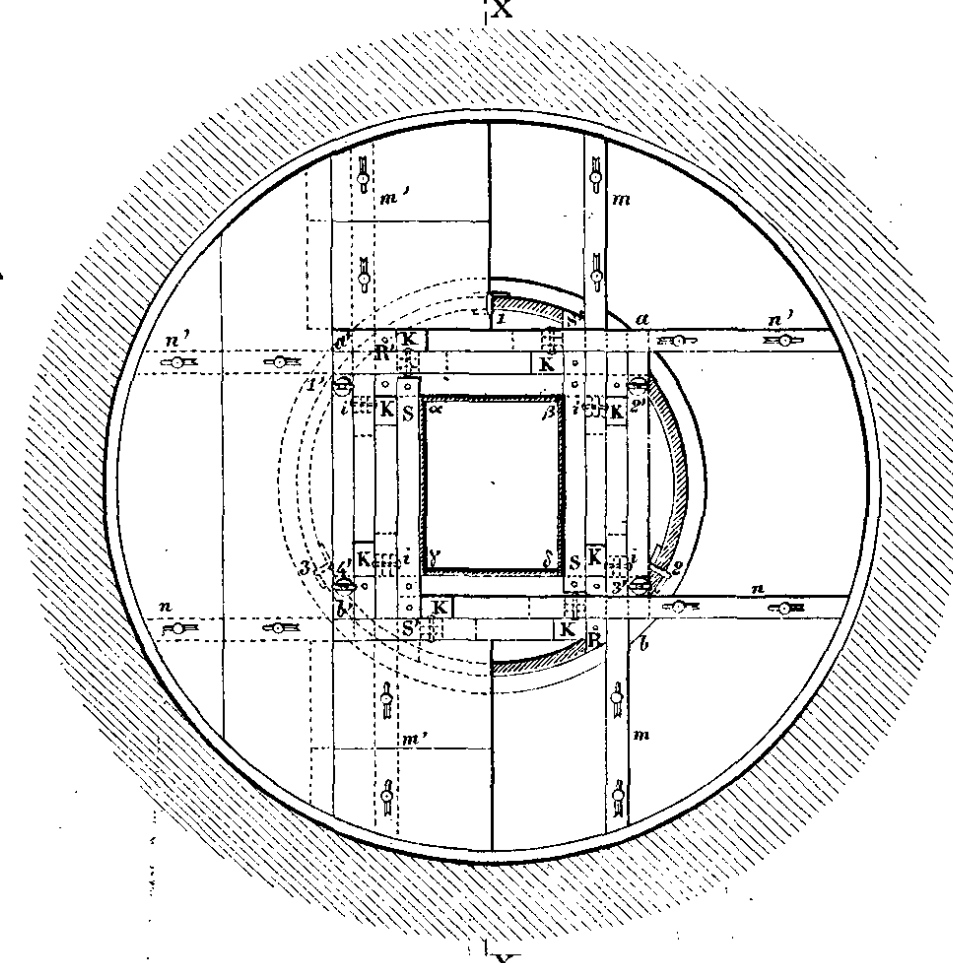


Fig. 11.

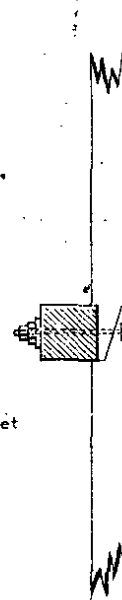


Fig. 4.

Coupe par XY de la fig 2

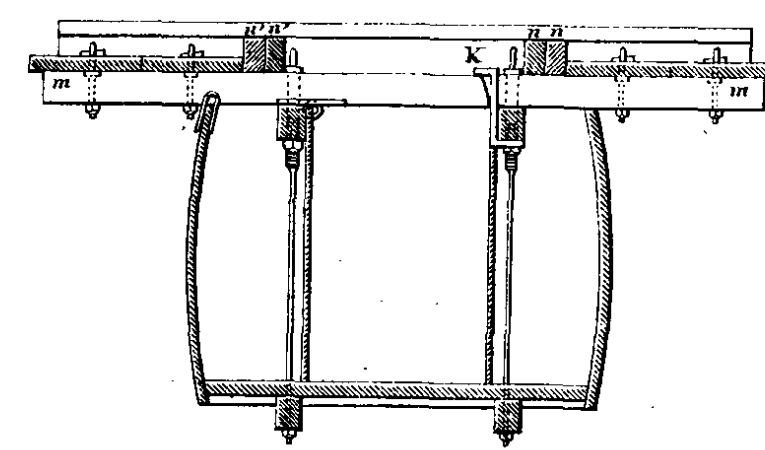


Fig. 15.

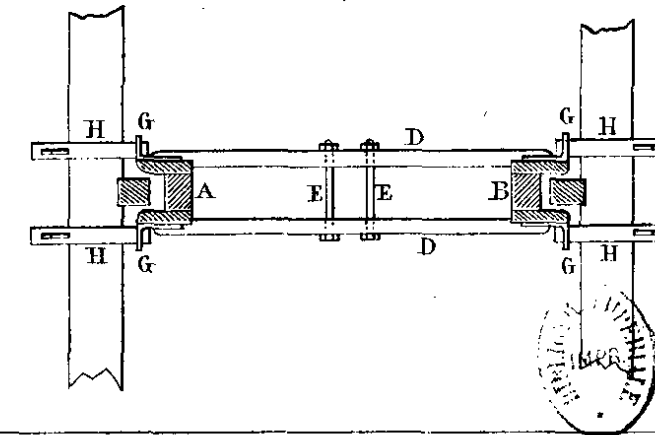
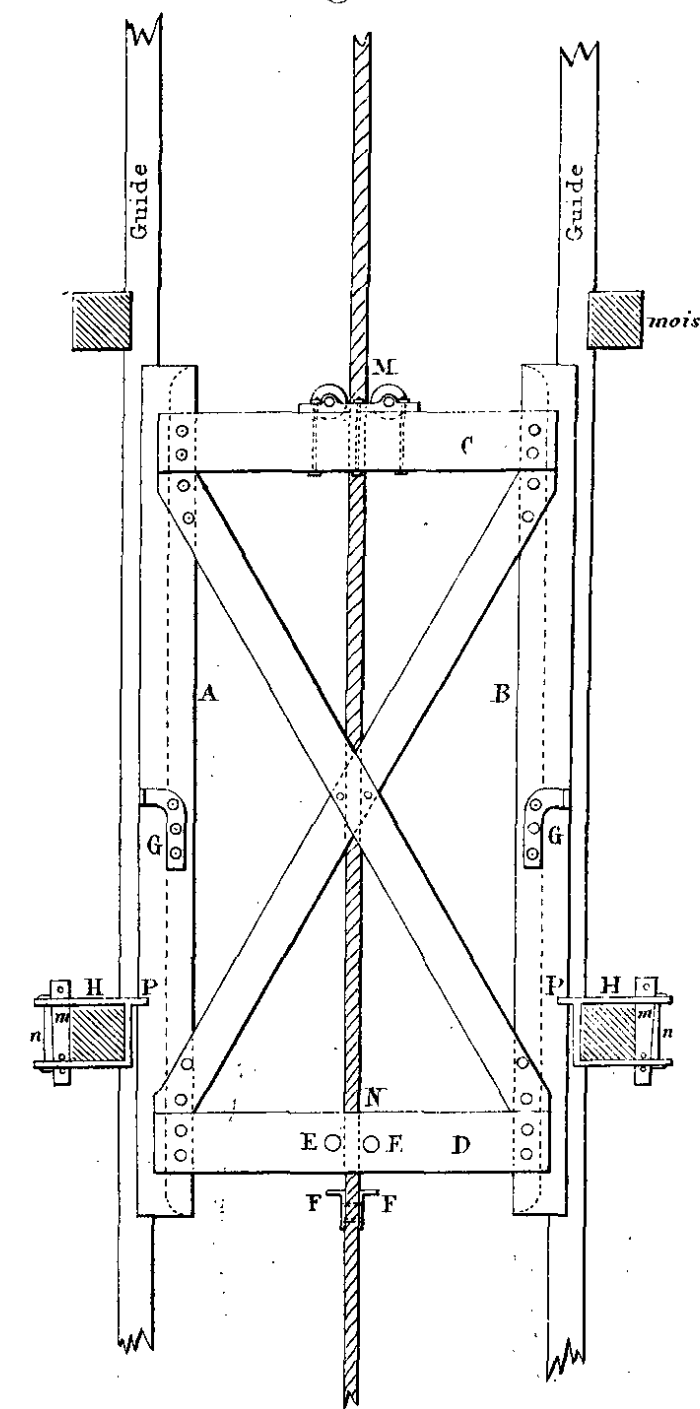


Fig. 5.

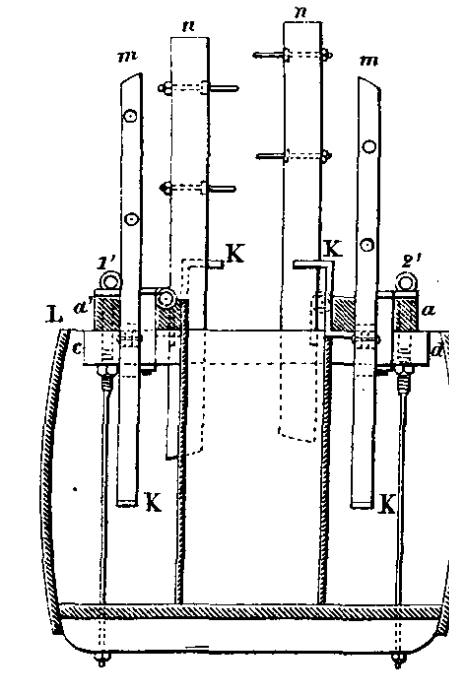


Fig. 6.

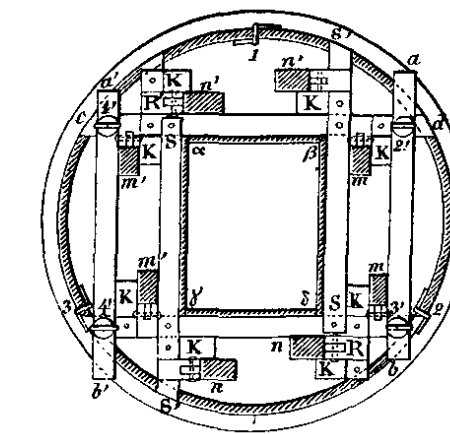


Fig. 12.

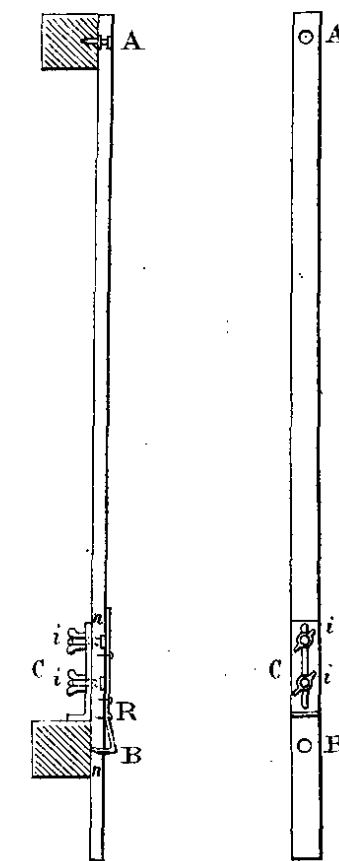


Fig. 8.

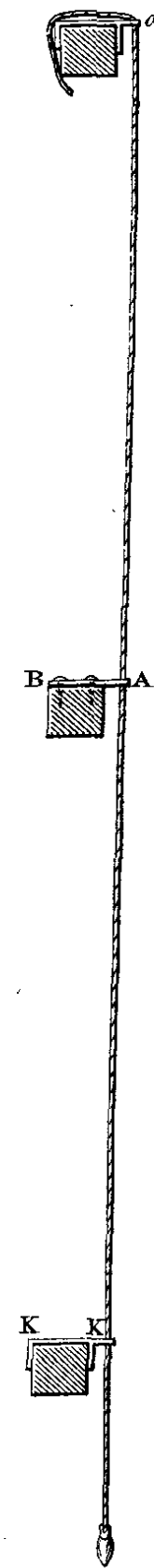


Fig. 13.

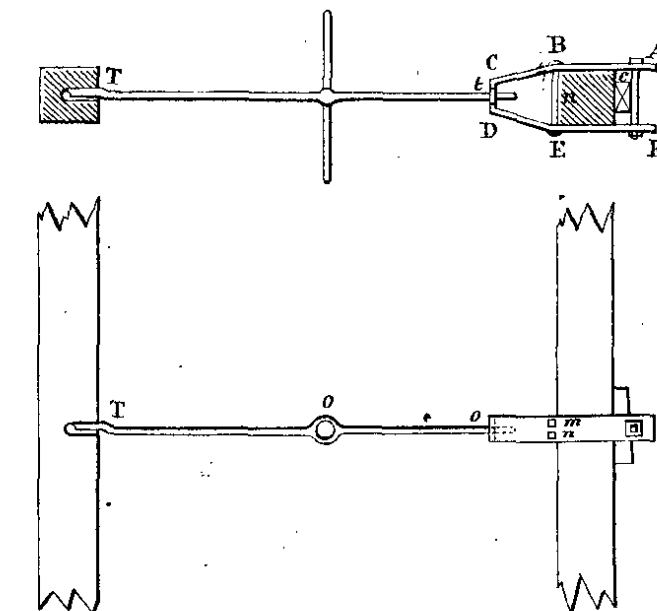


Fig. 14.

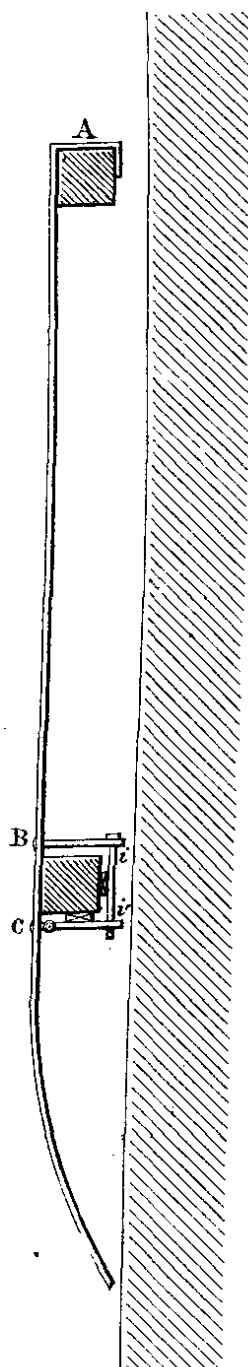








Fig. 1.

Coupe suivant la ligne AB, fig. 3.

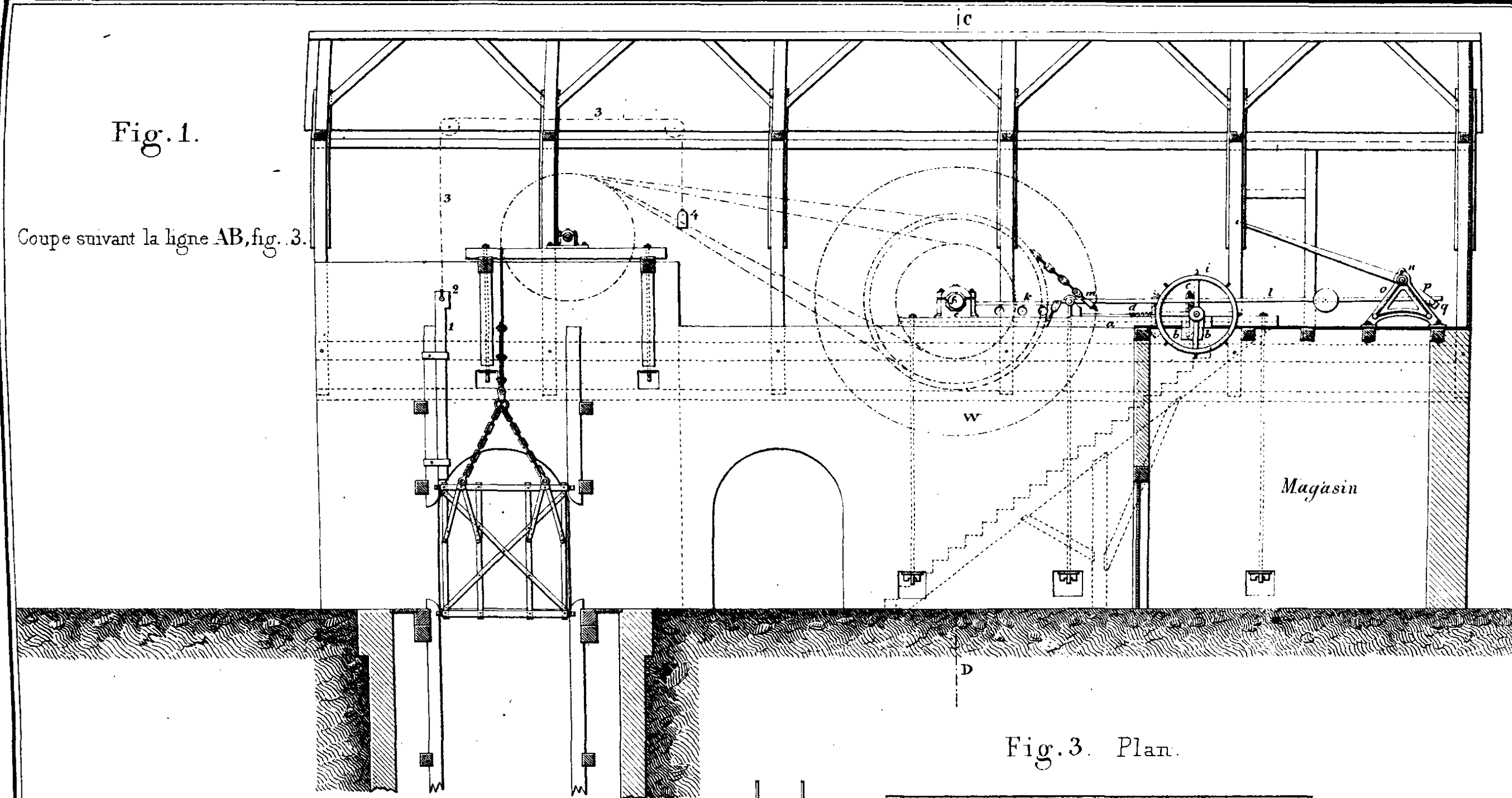
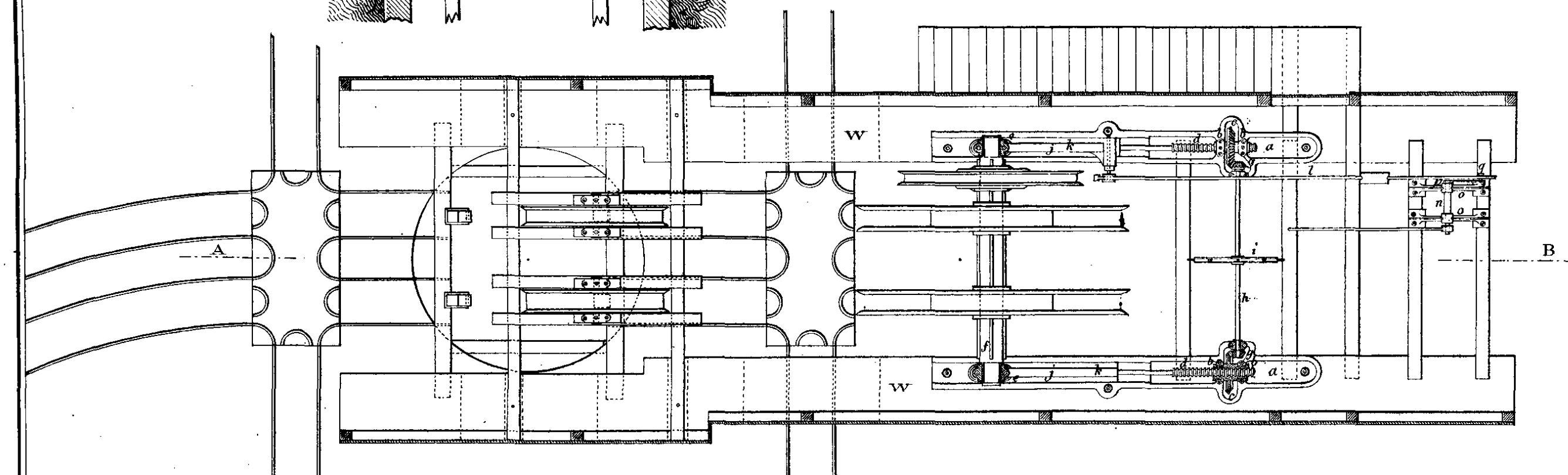


Fig. 3. Plan.



Coupe par OP.

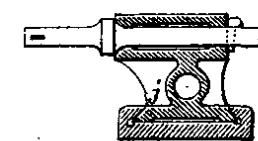


Fig. 4. Elevation de la plaque de fondation et du Palier mobile.

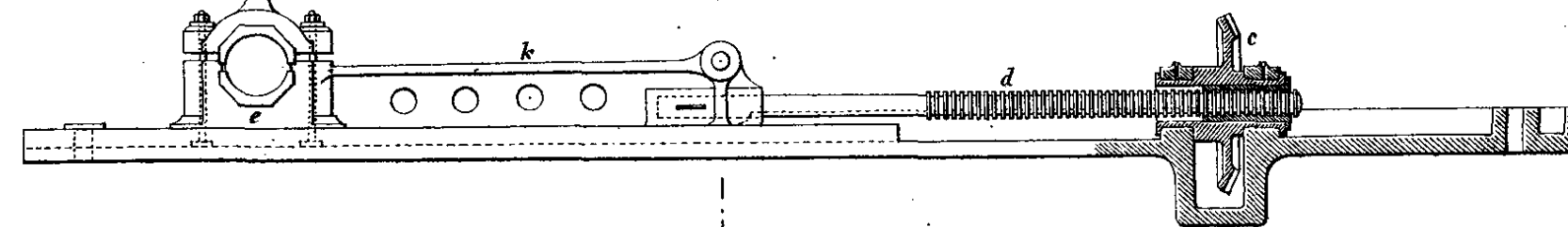
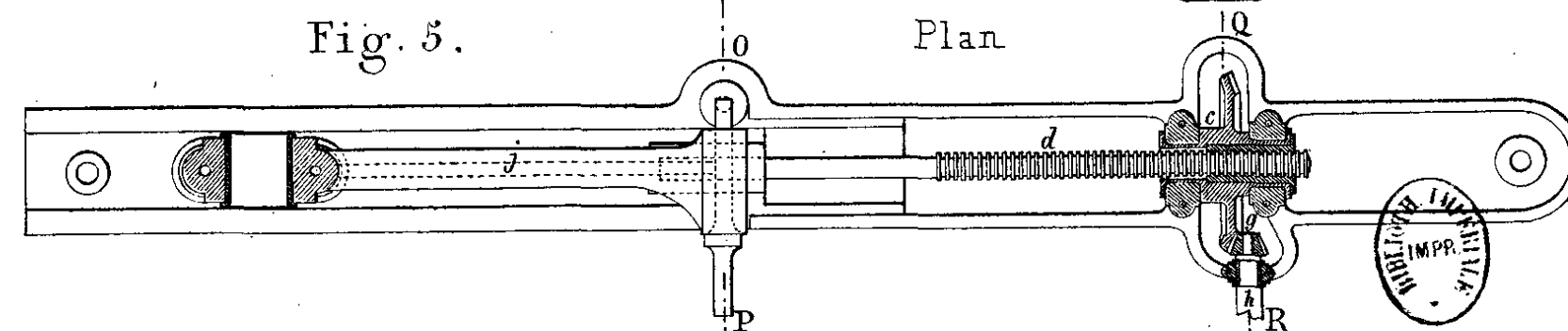


Fig. 5.

Plan



Coupe par QR

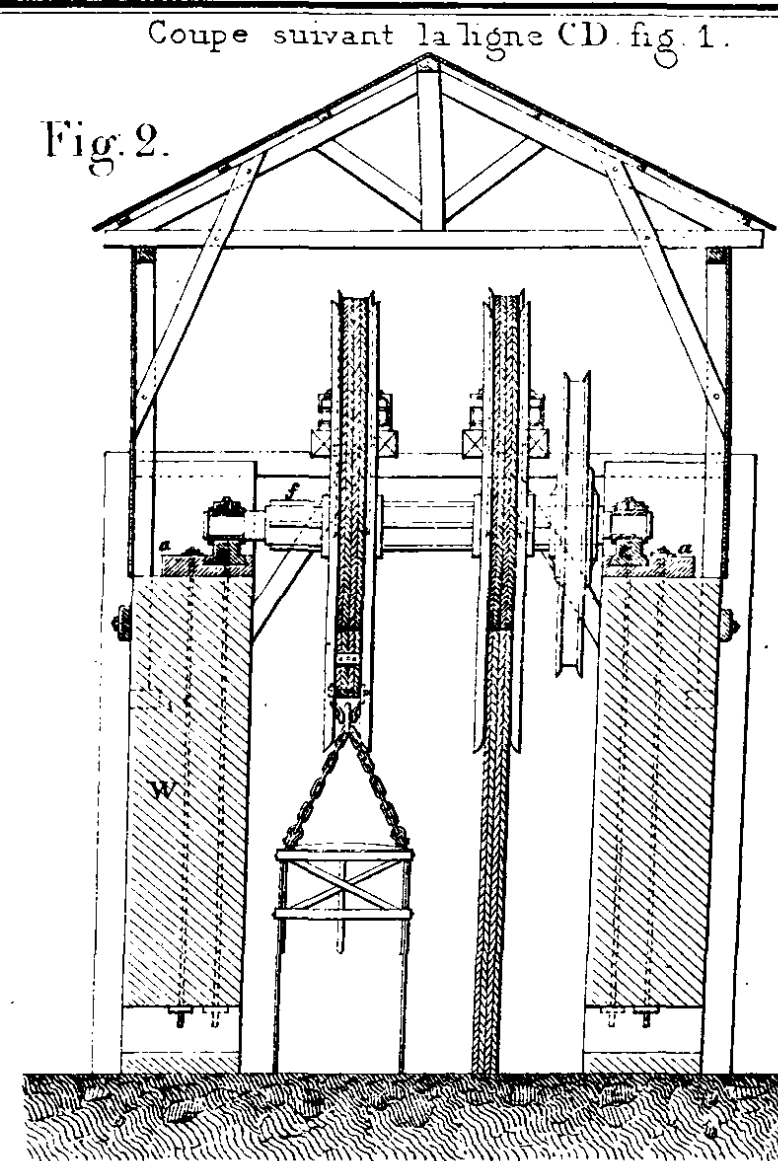
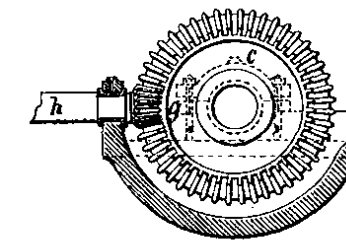


Fig. 2.

Fig. 6.  
Poulie-frein.

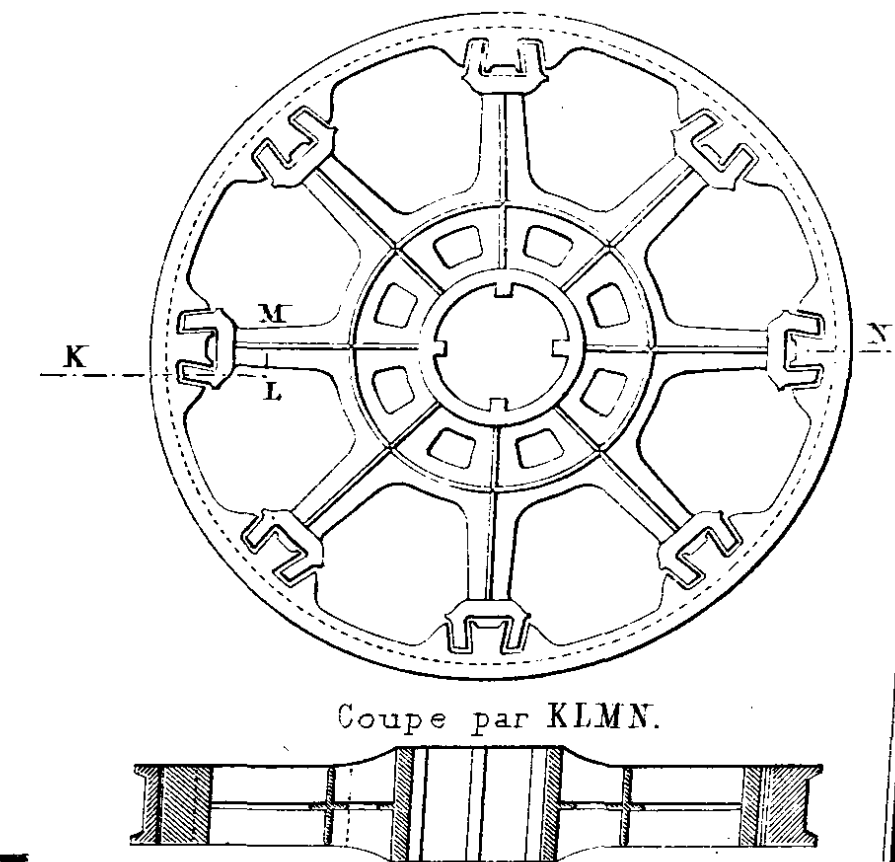
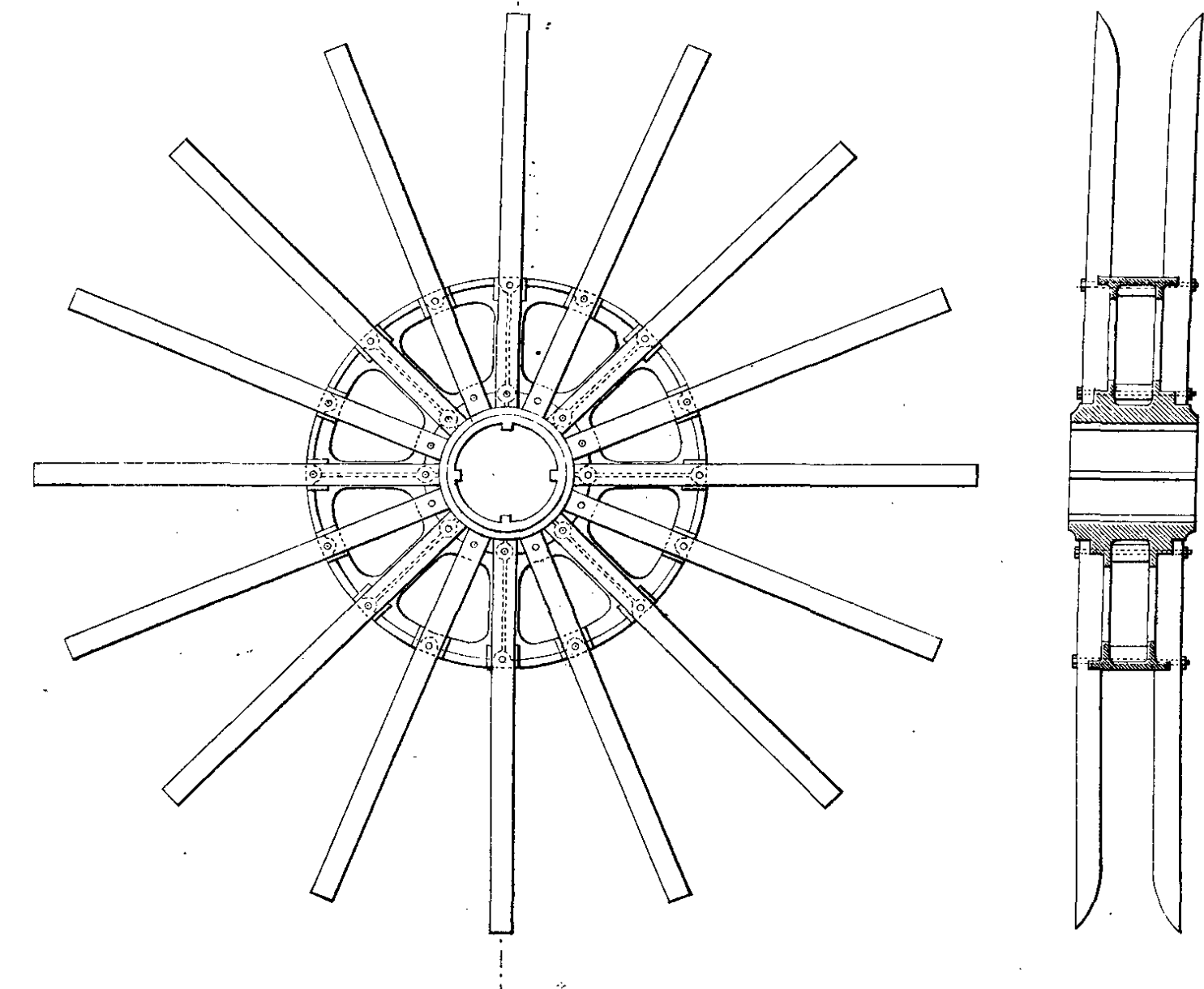
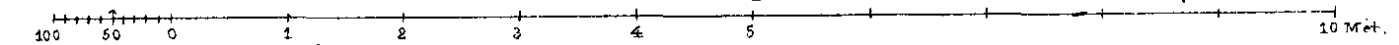


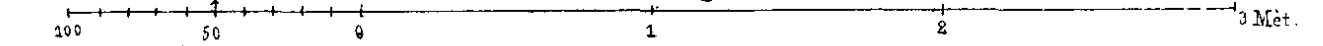
Fig. 7.  
Bobine à bras de bois



Echelle des fig. 1, 2, 3.



Echelle des fig. 4, 5, 6, 7.









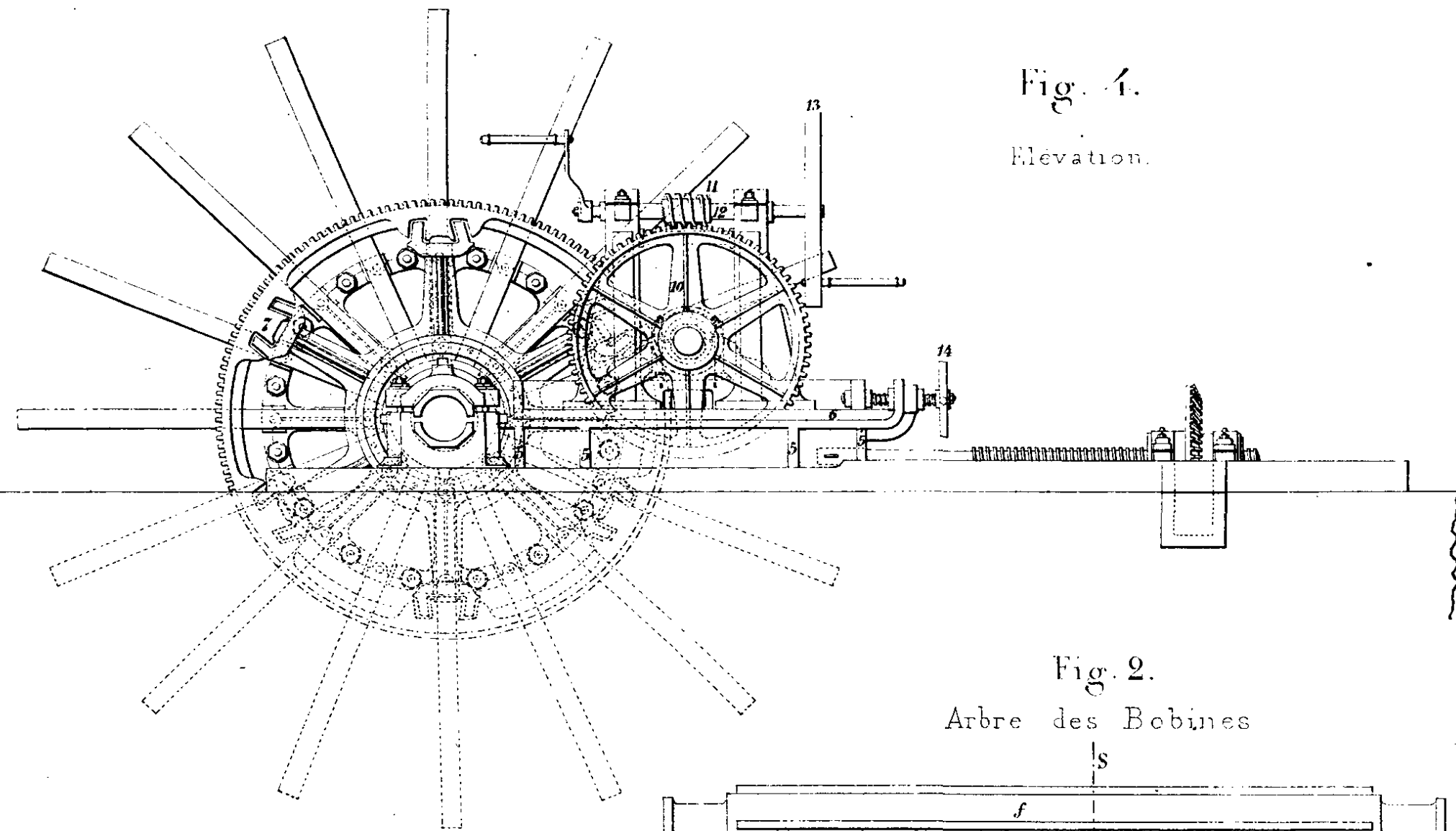
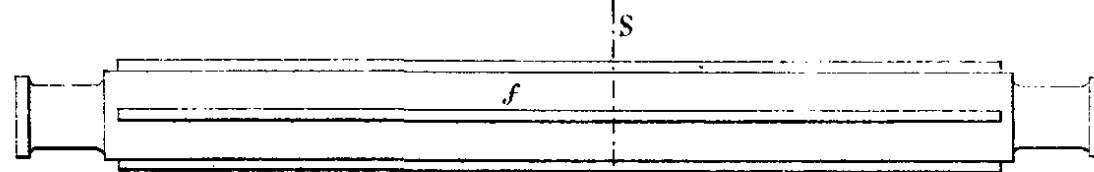


Fig. 2.  
Arbre des Bobines



Coupe suivant la ligne ST.

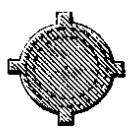


Fig. 3.  
Plan et Coupe.

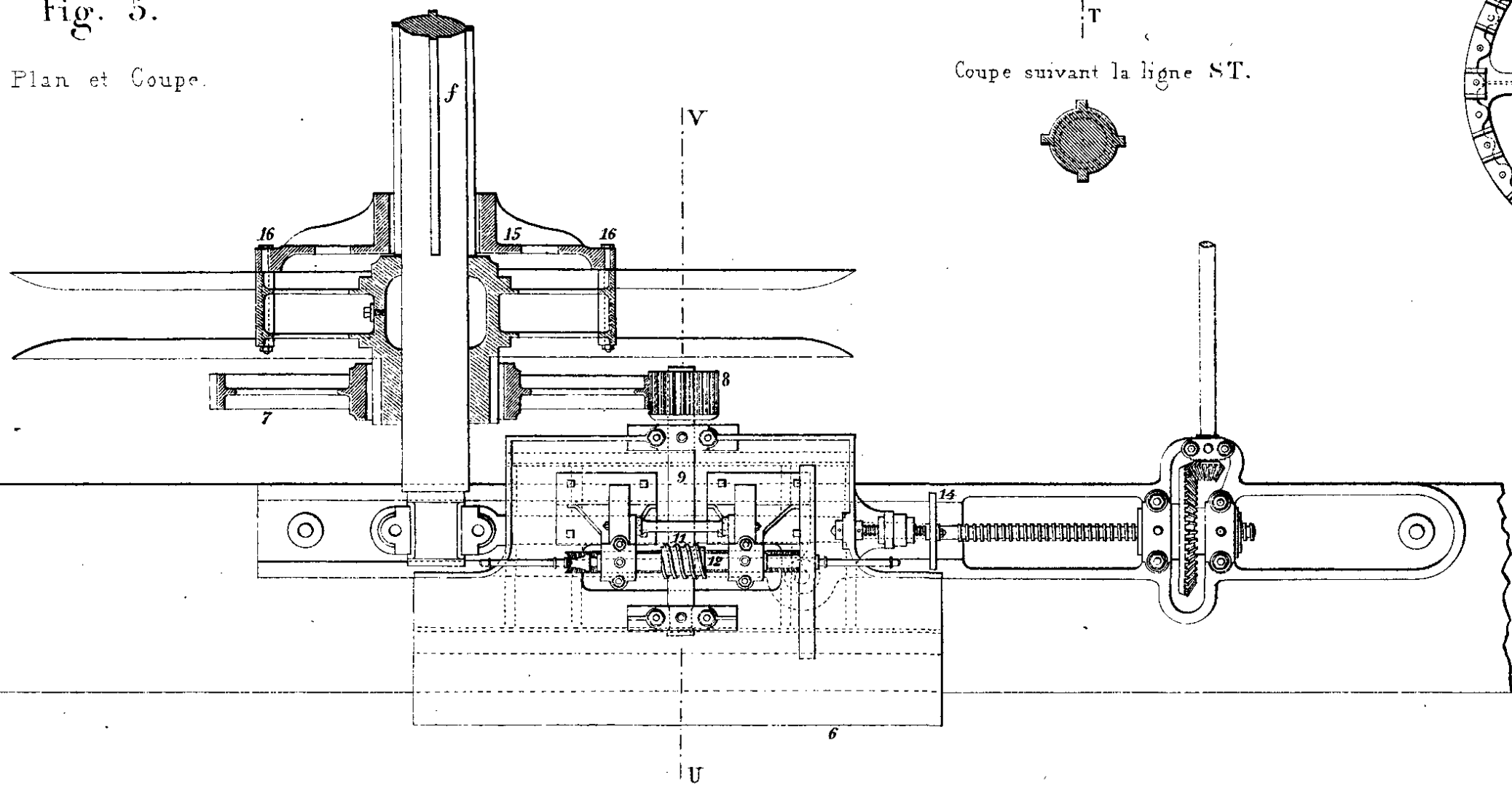


Fig. 6.  
Coupe suivant la ligne UV de la fig. 5

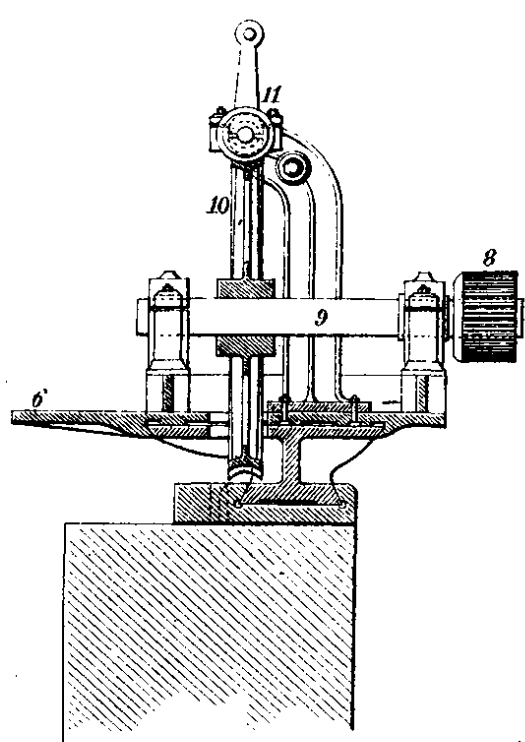
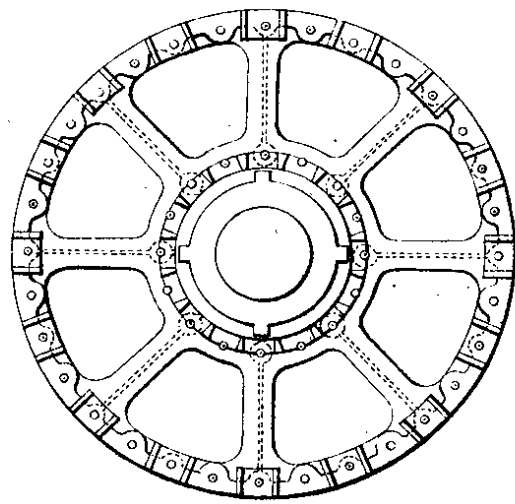


Fig. 7.  
Vue de face de la bobine mobile.



Vue de face du Plateau fixe

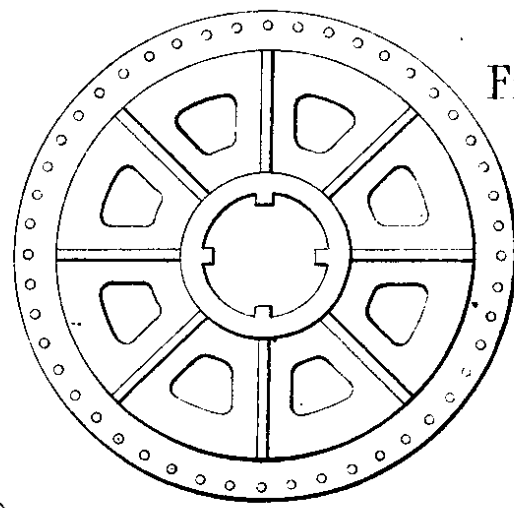
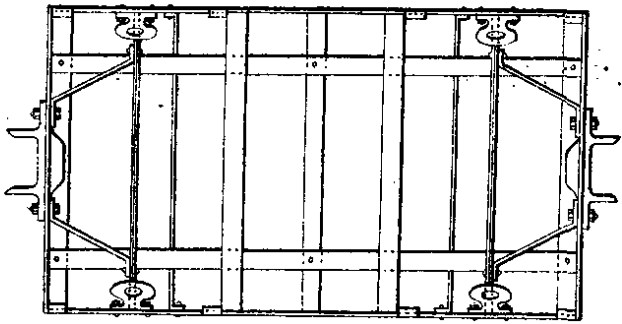
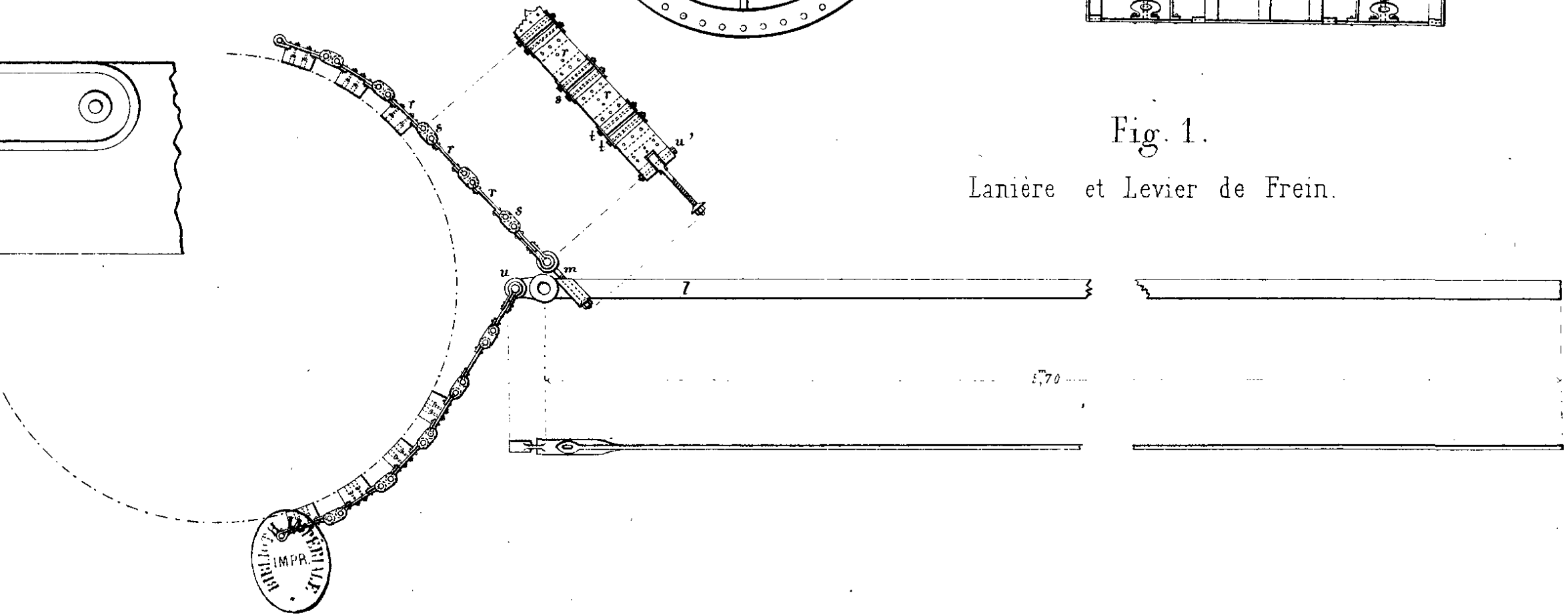


Fig. 8.



Plan.

Fig. 1.  
Lanière et Levier de Frein.



Echelle.

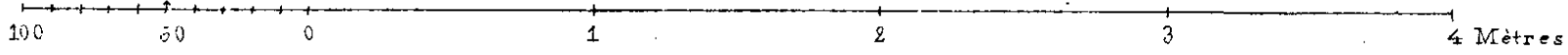








Fig. 2.

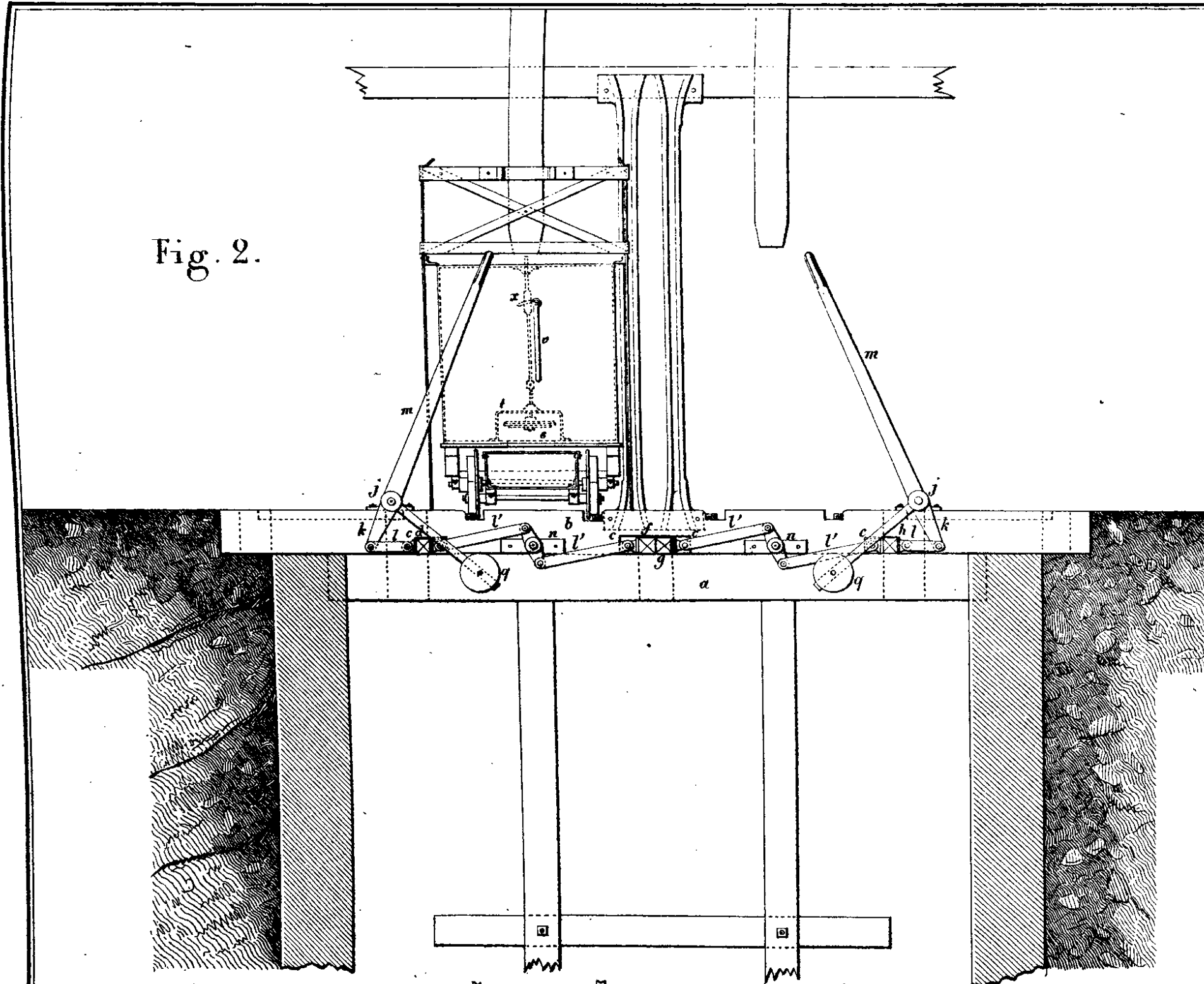


Fig. 1. Plan.

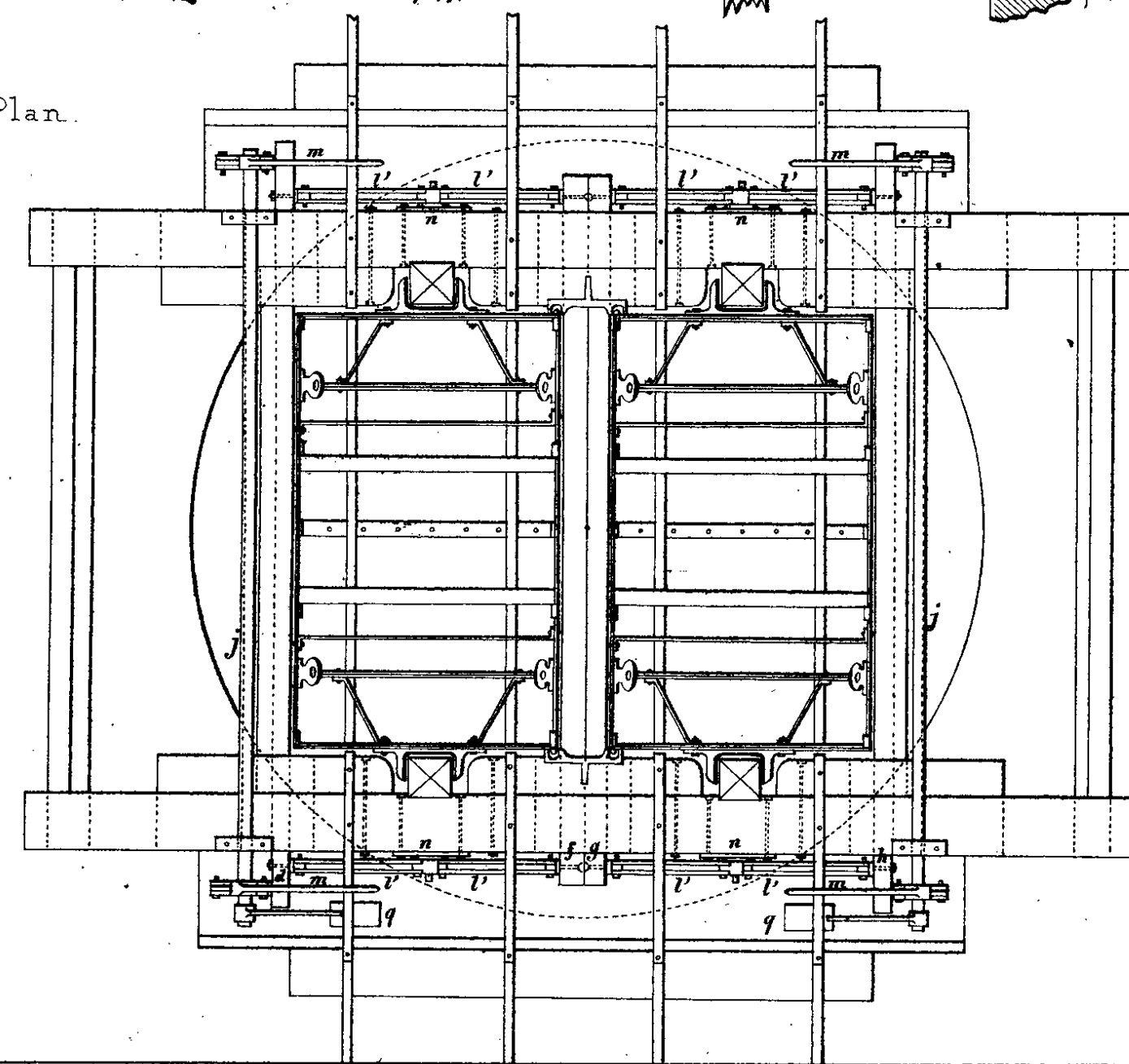
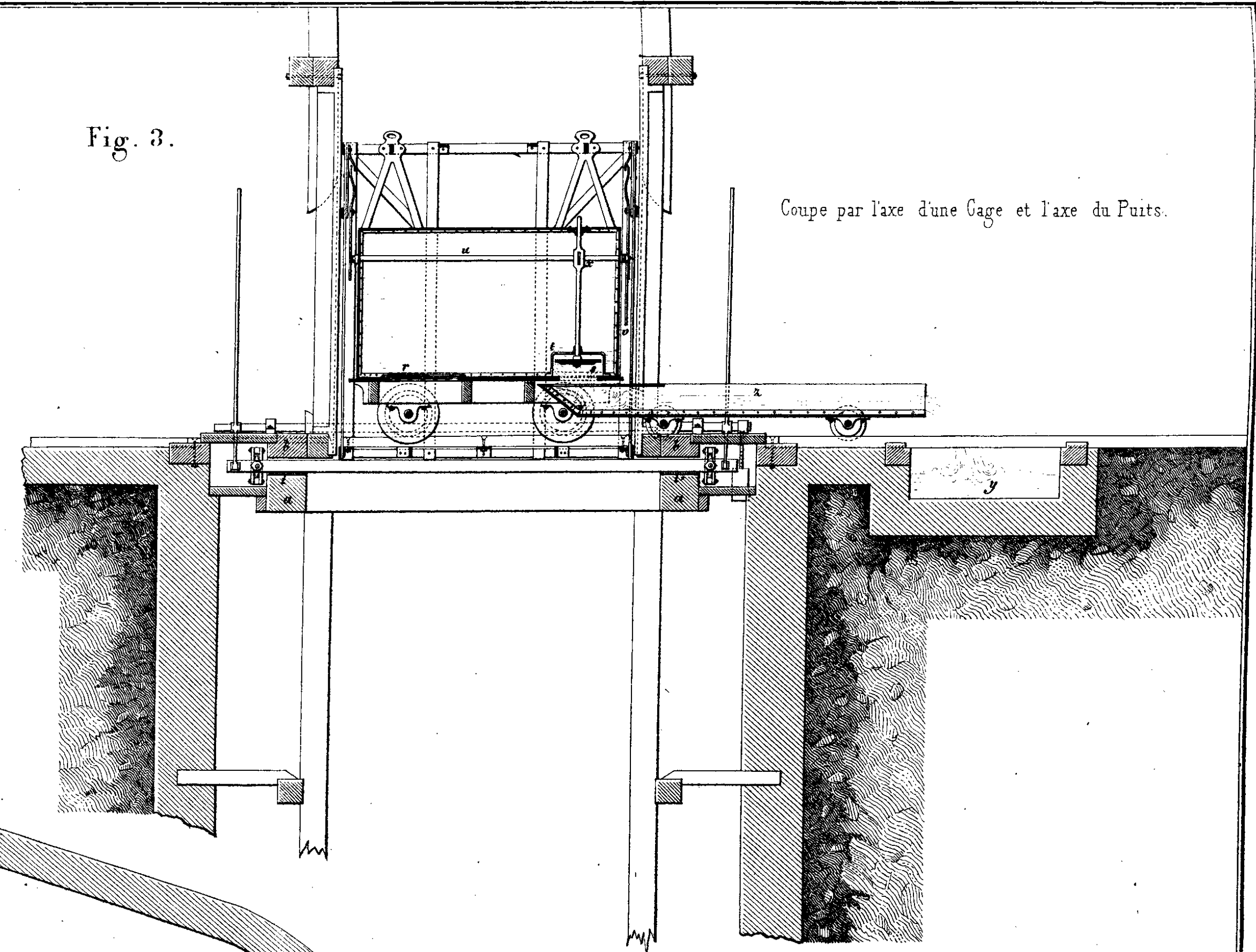


Fig. 3.



Coupe par l'axe d'une Gage et l'axe du Puits.

Fig. 4.

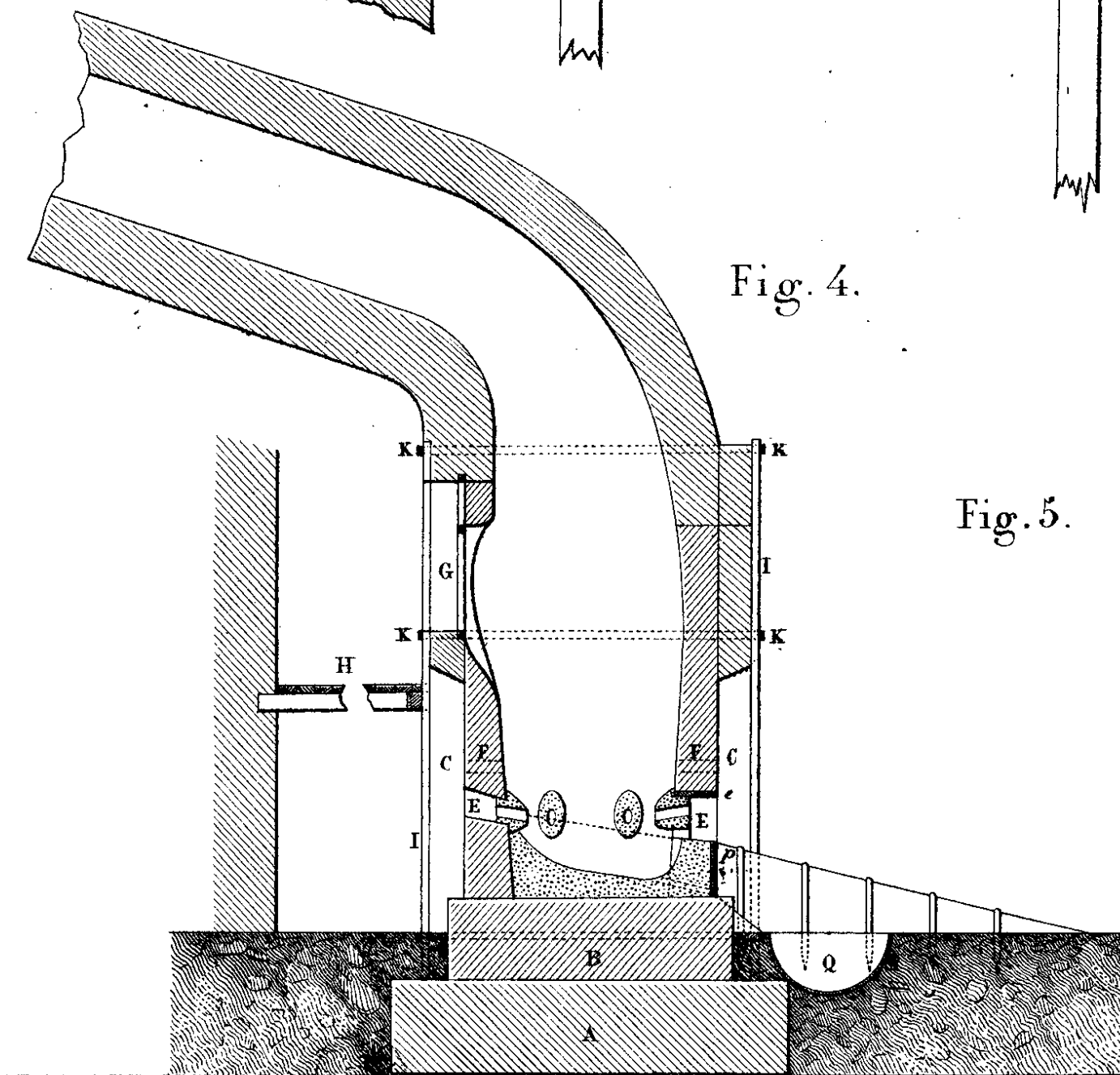
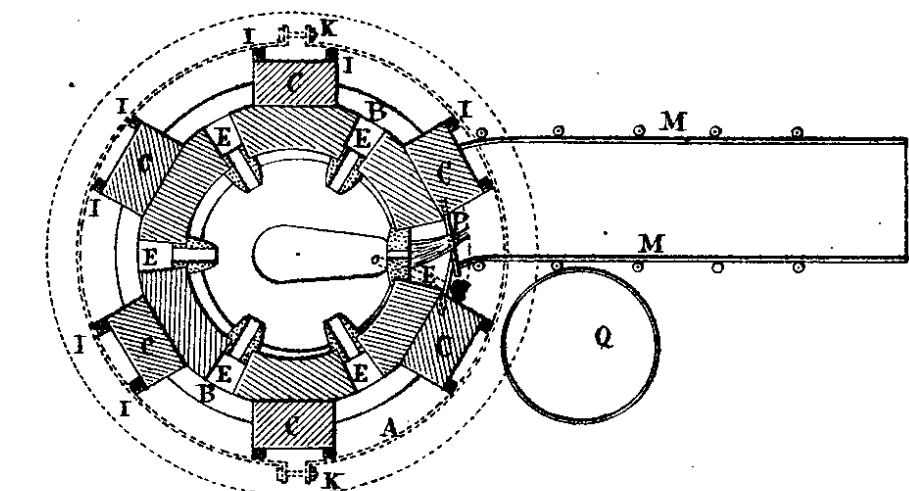


Fig. 5.

Coupe horizontale passant par les Tuyères



Echelle des fig. 1, 2, 3.

100 50 0 1 2 3 4 Mèt.

Echelle des fig. 4 et 5

100 50 0 1 2 3 4 Mèt.







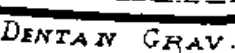








Fig. 1.

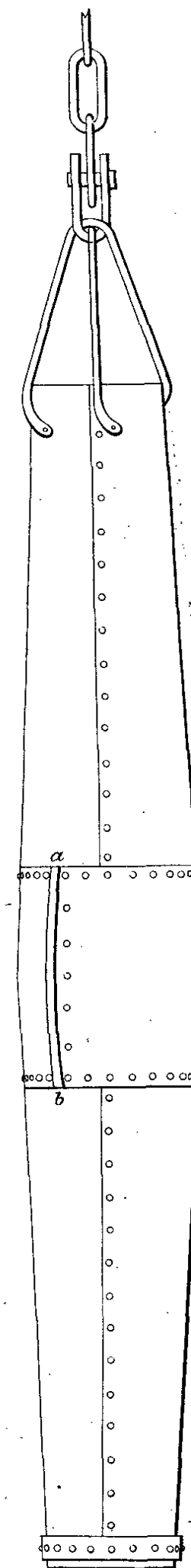


Fig. 3.

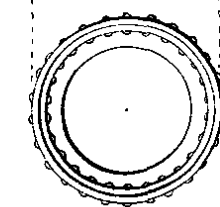


Fig. 2.

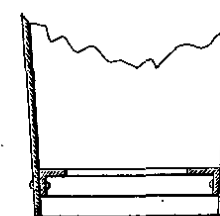


Fig. 4.

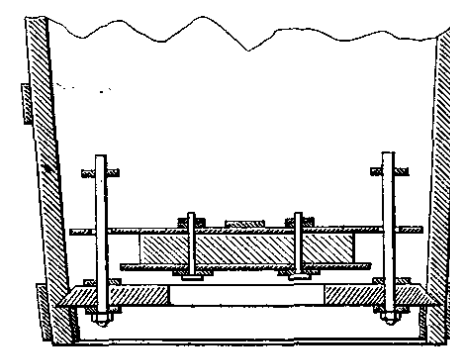


Fig. 5.

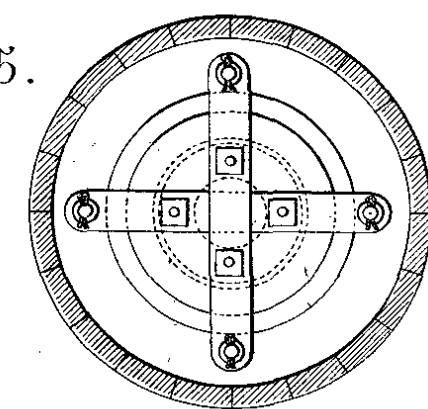


Fig. 20.

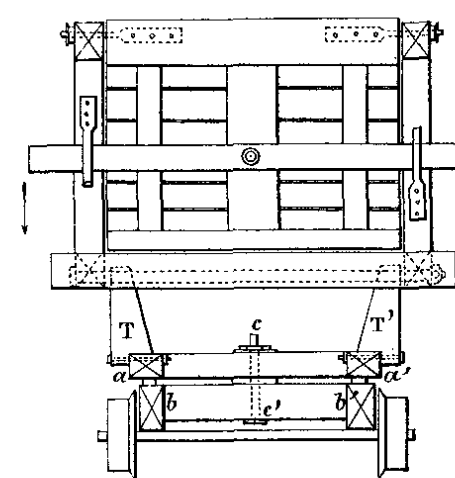


Fig. 6.

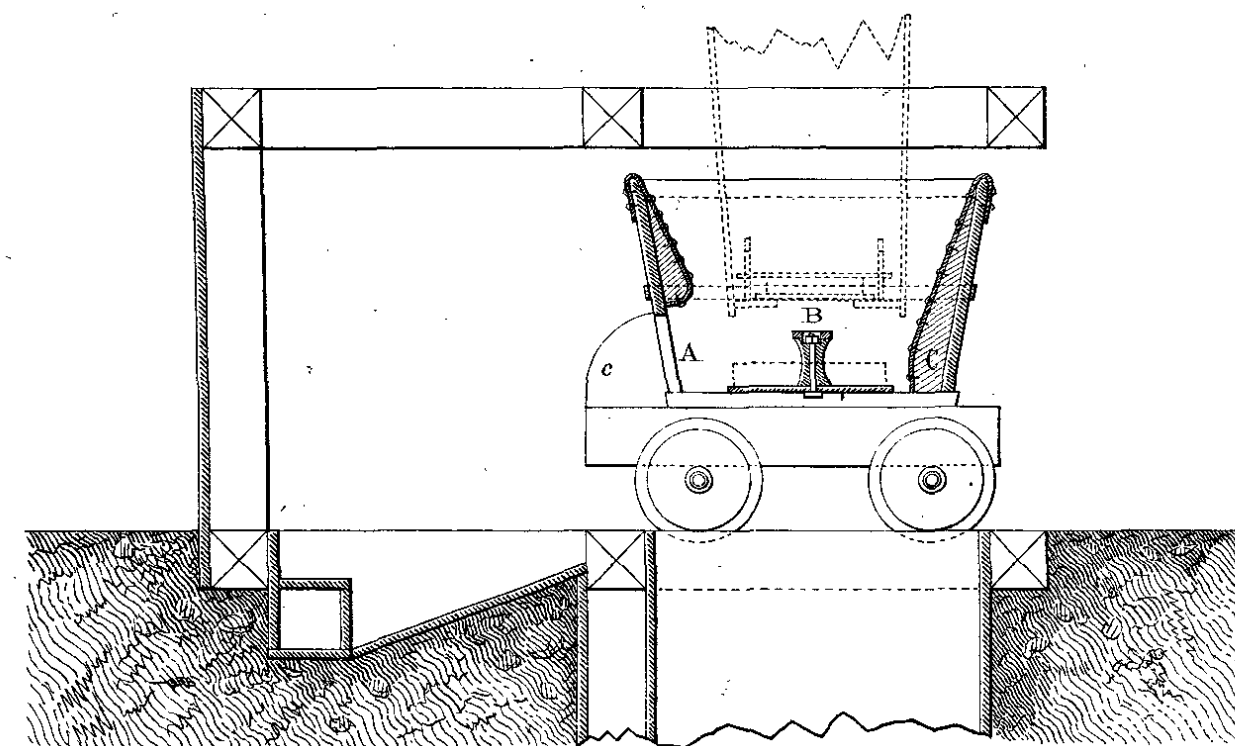


Fig. 7.

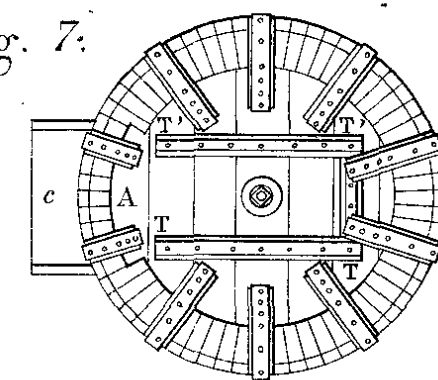


Fig. 14.

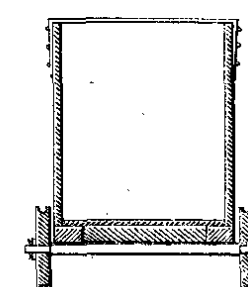


Fig. 15.

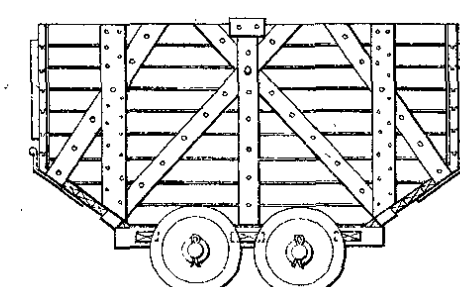


Fig. 21.

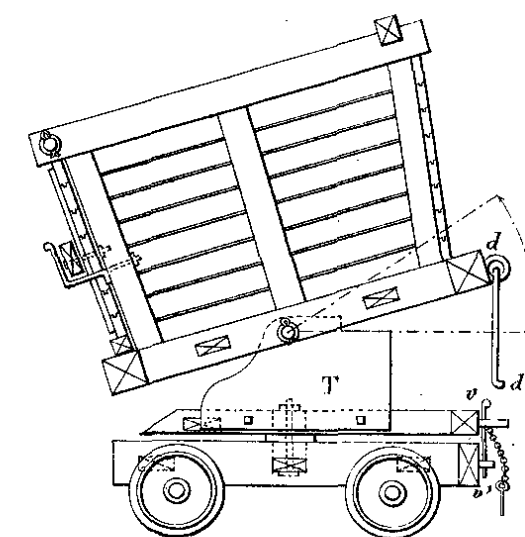


Fig. 13.

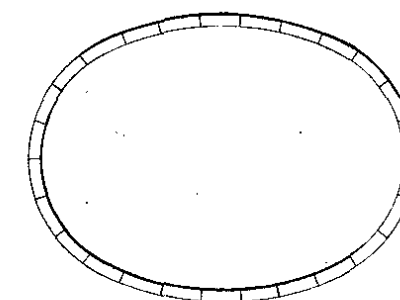


Fig. 8.

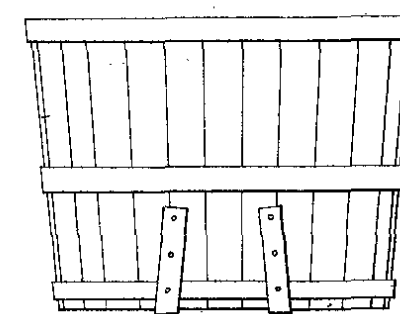
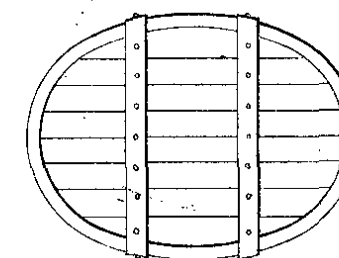


Fig. 12.



Vue de 3/4.

Fig. 27.

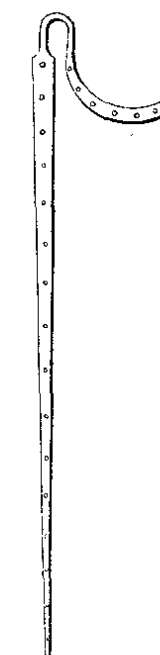


Fig. 16.

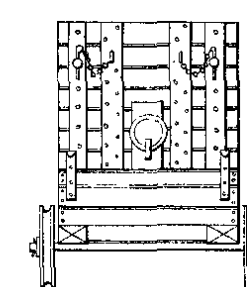


Fig. 22.

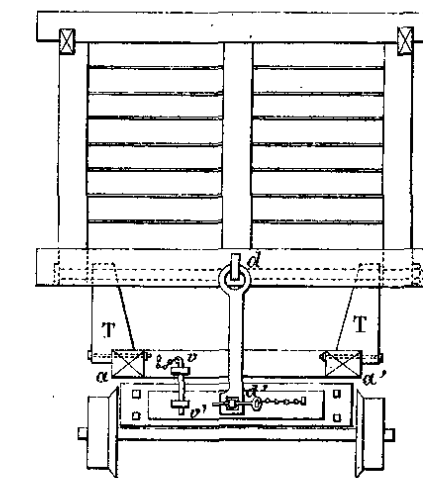


Fig. 17.

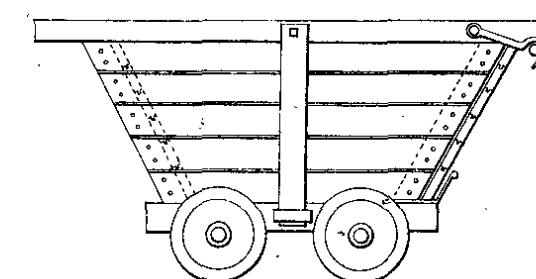


Fig. 11.

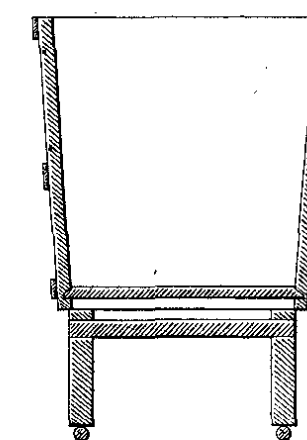


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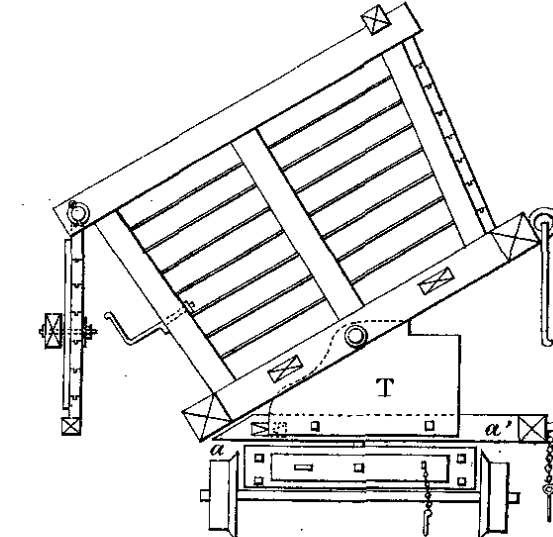


Fig. 18.

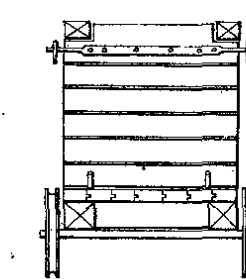


Fig. 19.

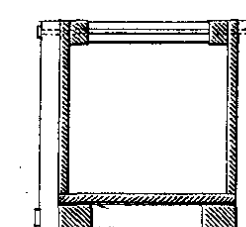


Fig. 9.

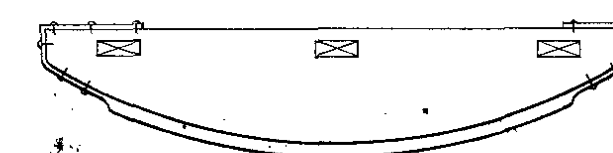


Fig. 10.

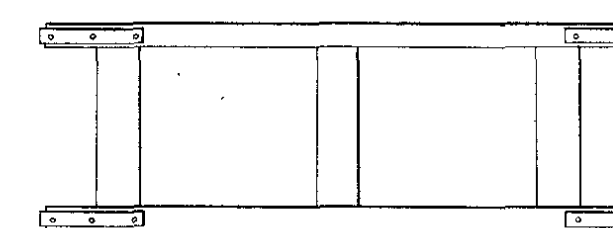


Fig. 26.

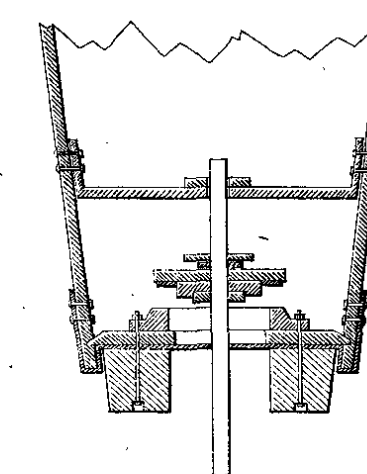
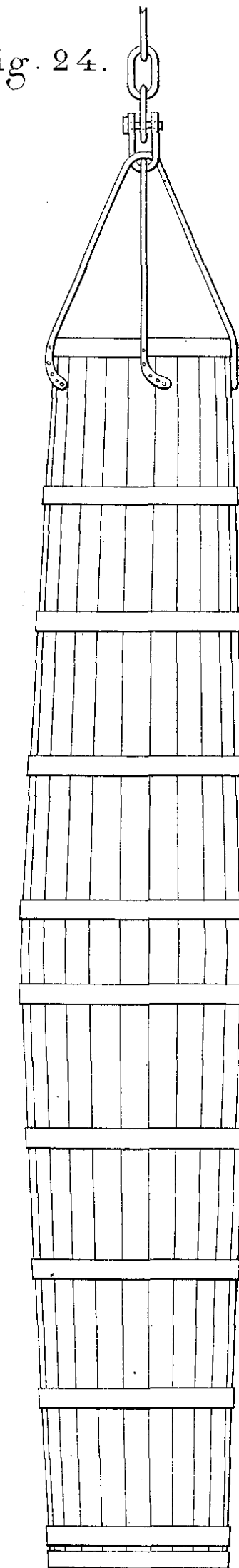


Fig. 24.



Echelle des fig. 1, 2, 3, 6, 7, 14 à 27.

100 50 0 1 2 Mèt.

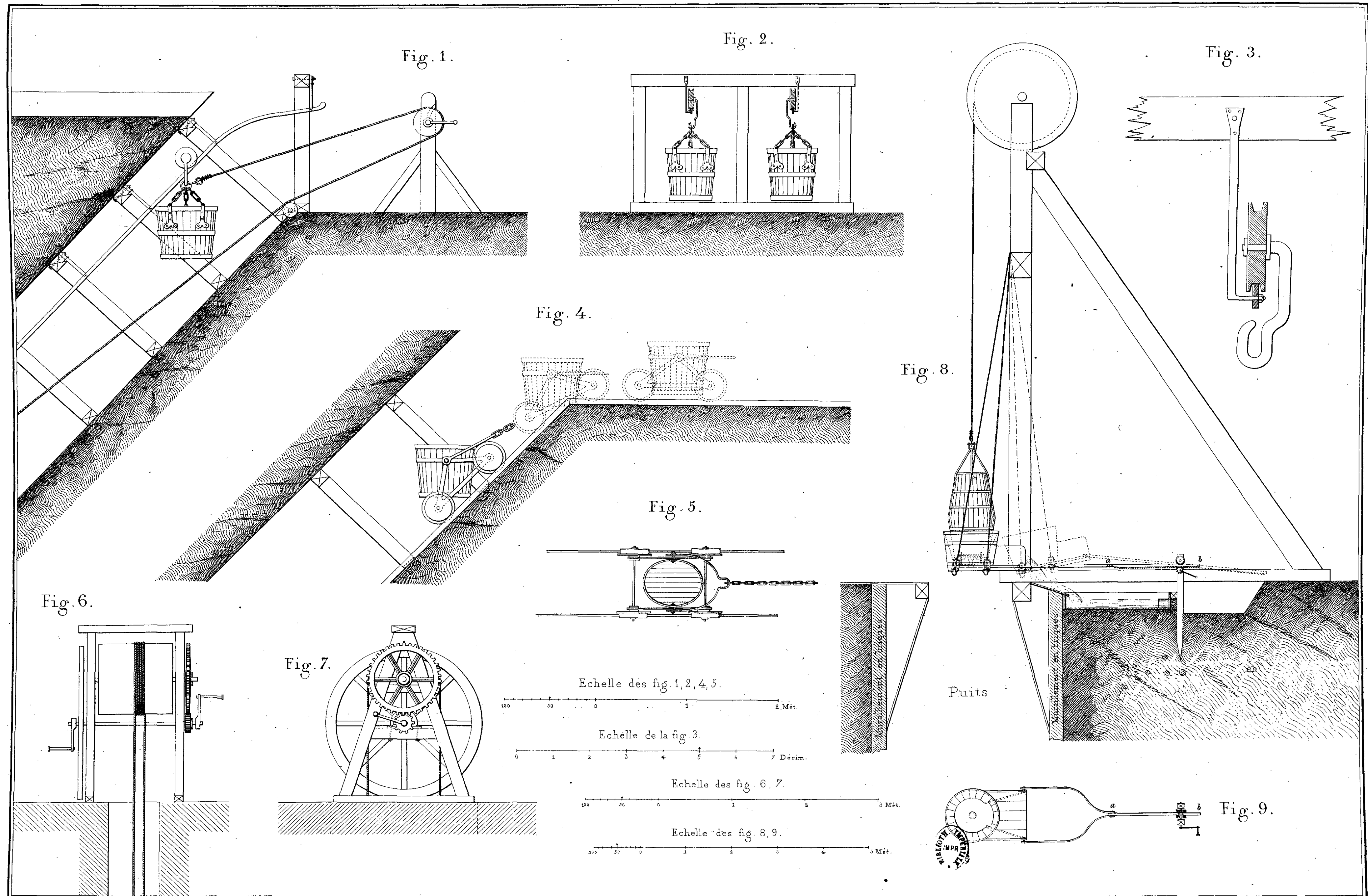
Echelle des fig. 4, 5, 8 à 13.

0 50 1 Mèt.















# BASSIN HOUILLER DE LA MOSELLE.

Industrie minière 7<sup>ème</sup> Année. 1<sup>re</sup> Armature en fonte pour cuvelage en bois. 2<sup>o</sup> Piston pour pompes d'épuisement de mines.

PL. XXVI.

Fig. 4.

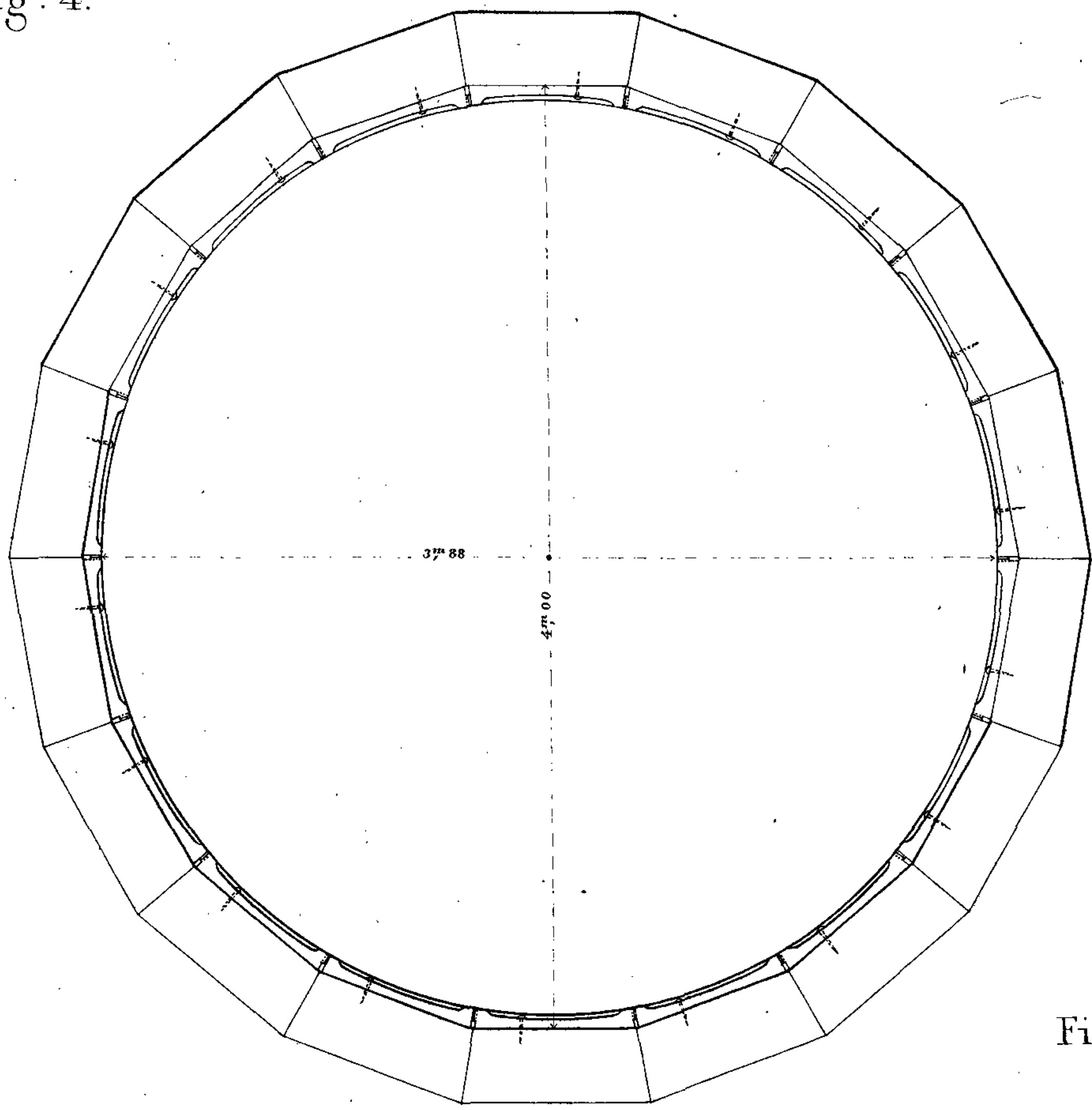


Fig. 5.

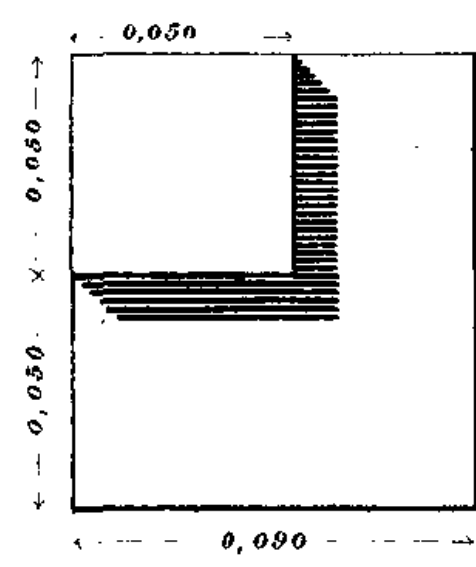


Fig. 7.

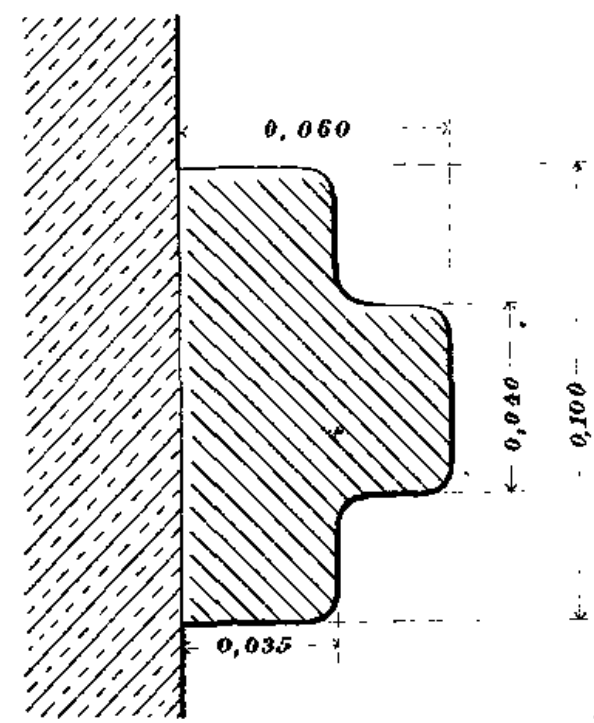


Fig. 6.

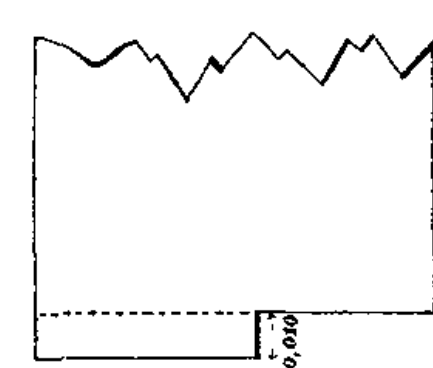


Fig. 8.

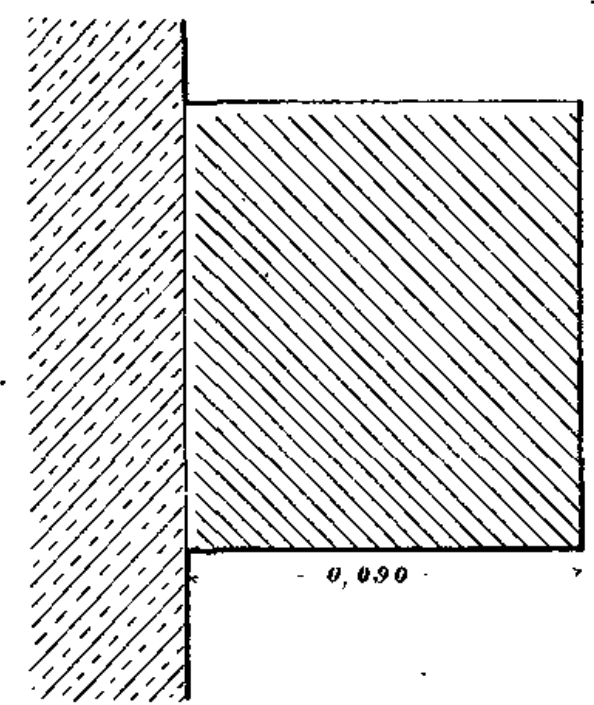


Fig. 2.

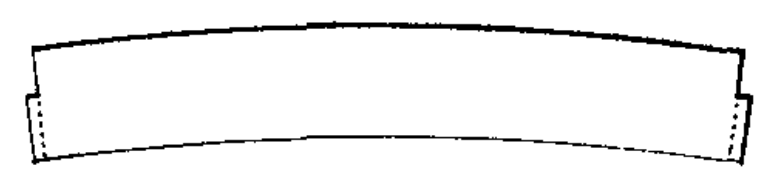


Fig. 1.



Fig. 9.

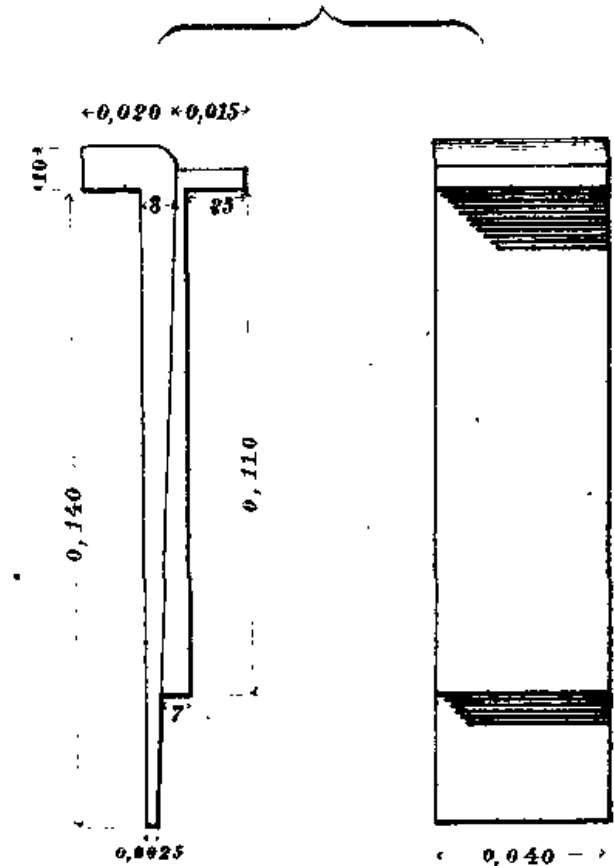


Fig. 3.

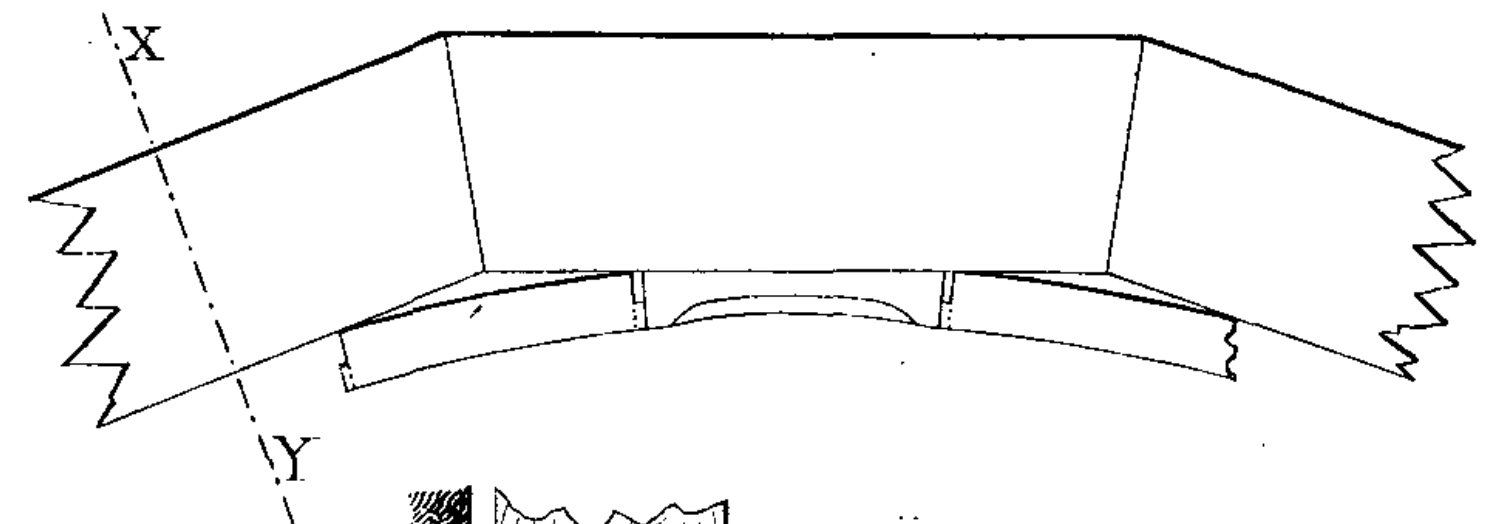


Fig. 10.

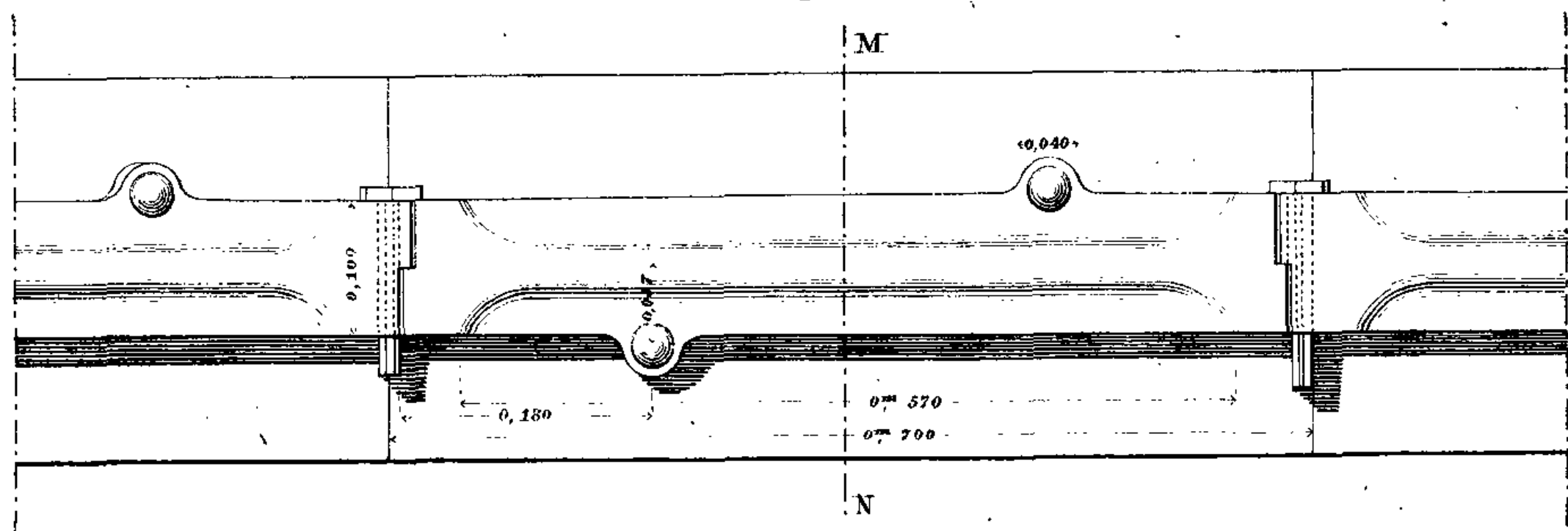


Fig. 11.

Projection horizontale du Piston

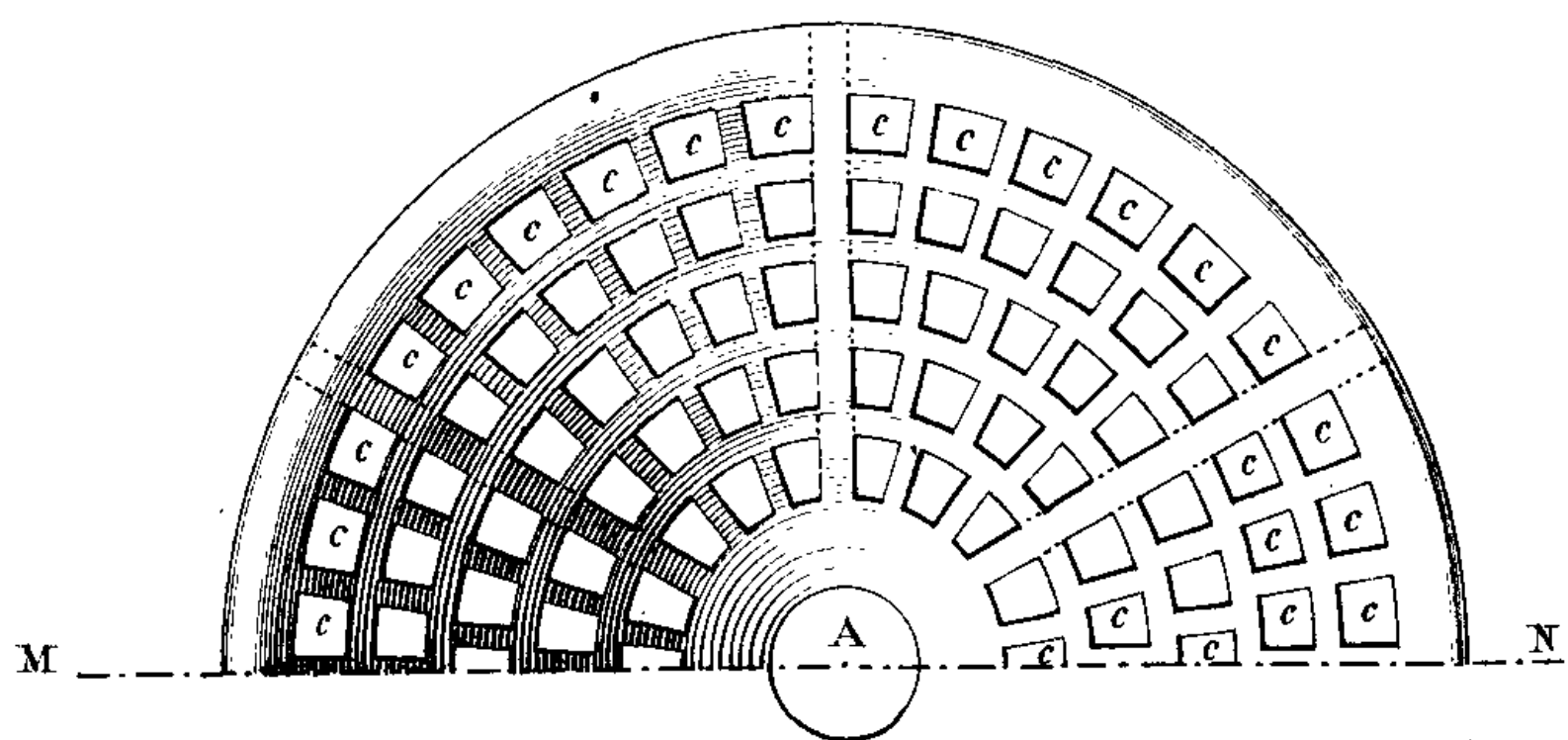


Fig. 13.

Plan d'une Garniture de Piston

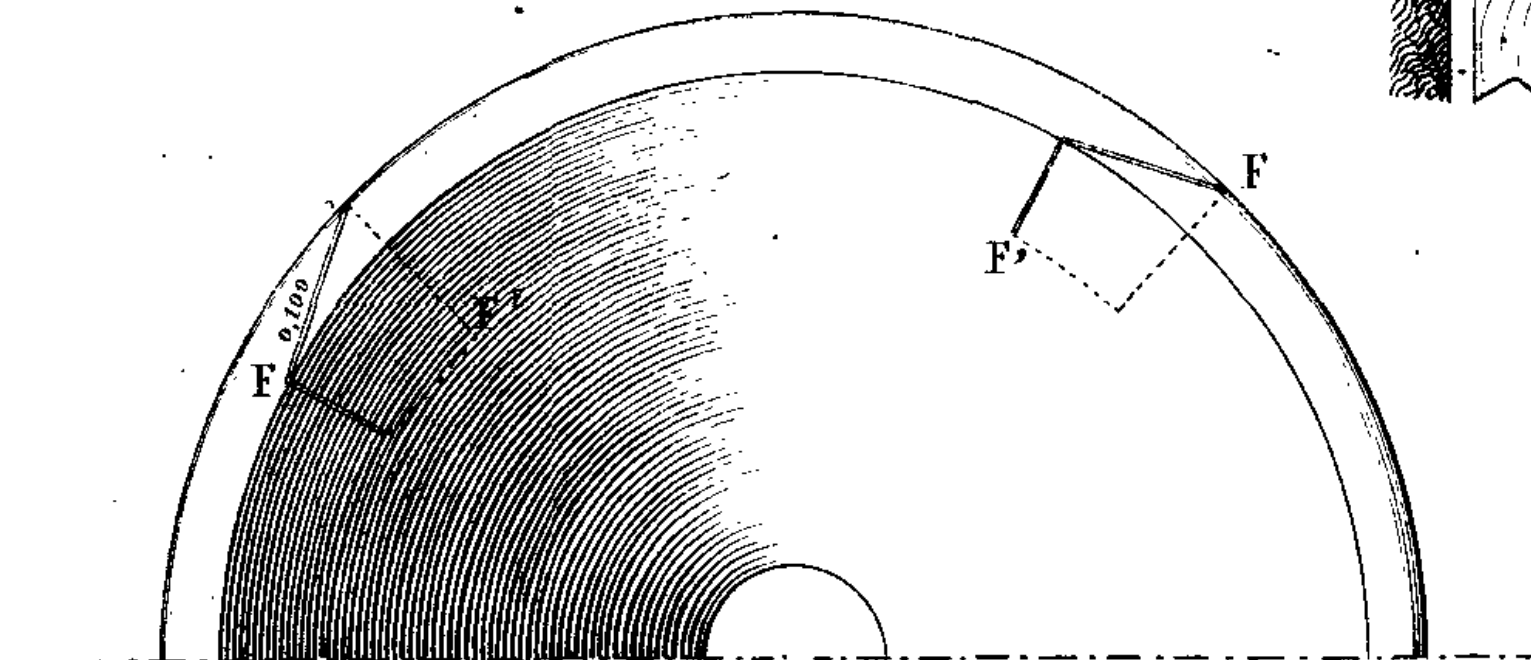


Fig. 3. bis.

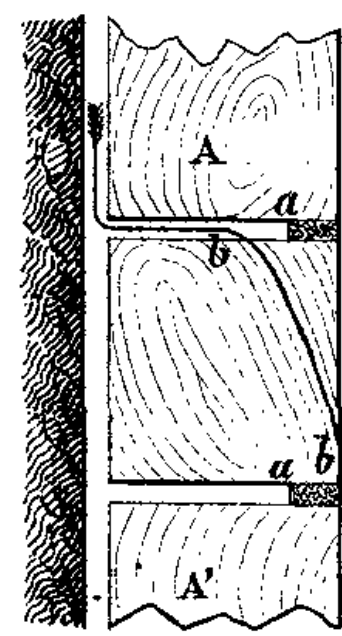


Fig. 14.

Moule de la Garniture.

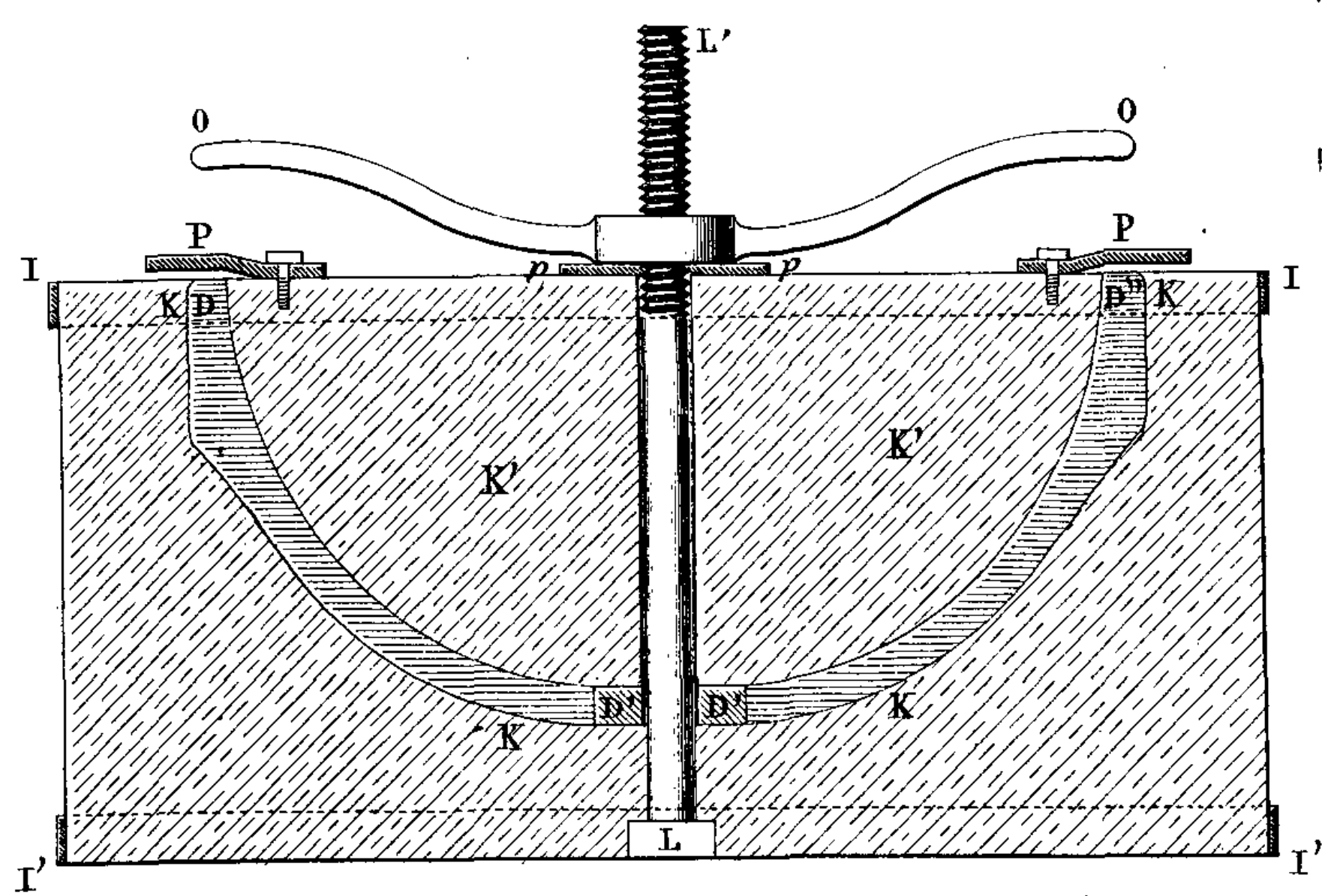
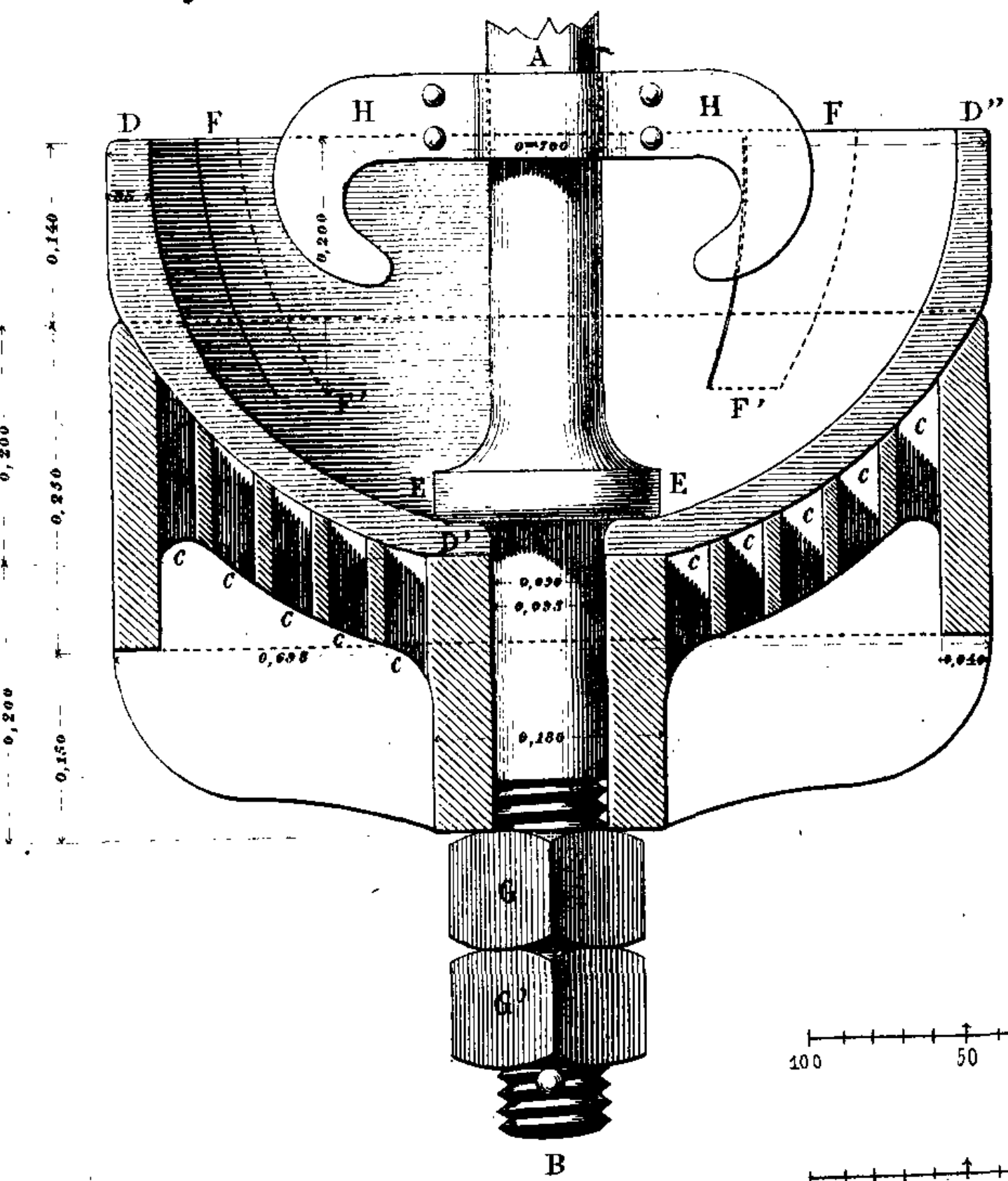


Fig. 12.

Coupe verticale du Piston.



Emménagement du Piston

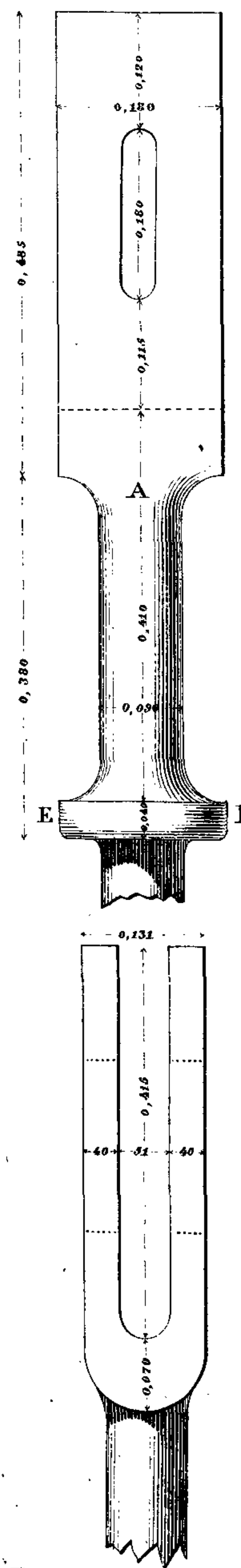


Fig. 15.

Echelle de la fig. 4.

0 100 50 0 1 2 3 4 Mèt.

Echelle des fig. 5, 6, 7, 8 et 9.

0 1 2 3 4 5 Décim.

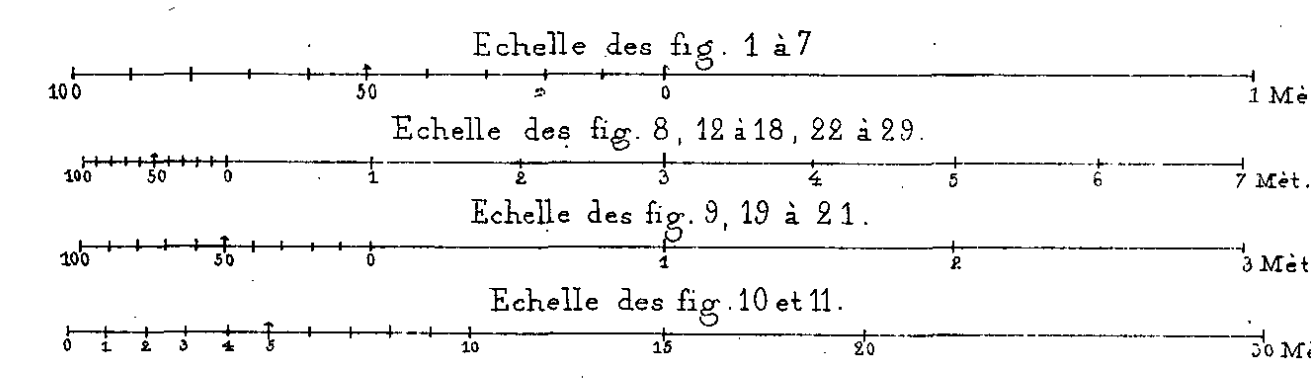
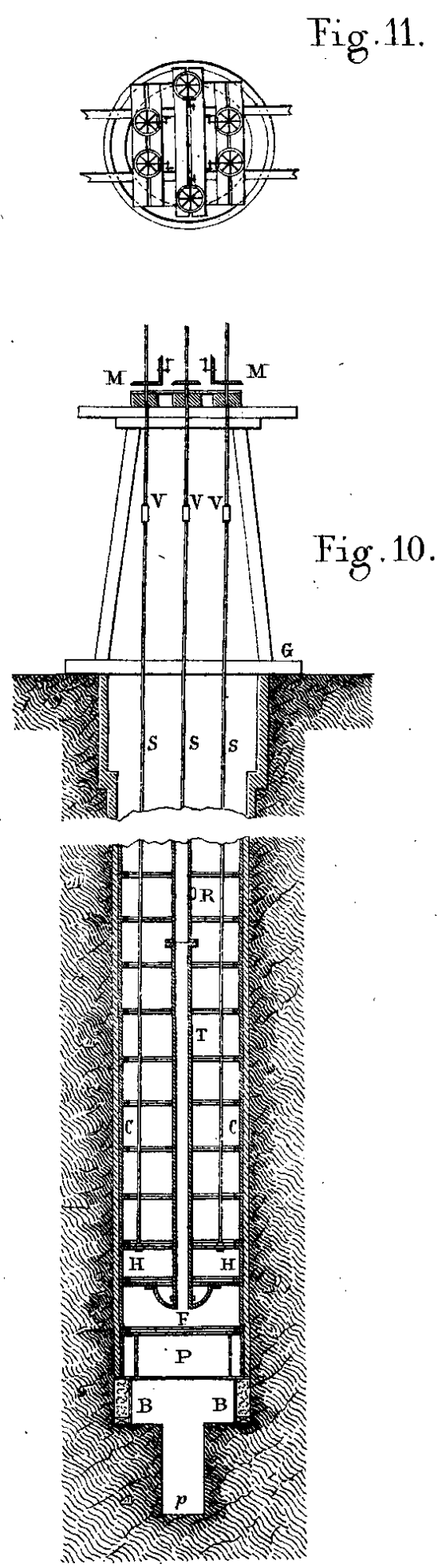
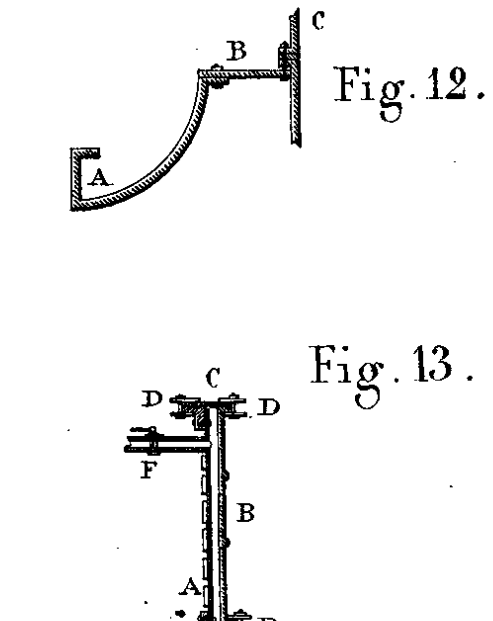
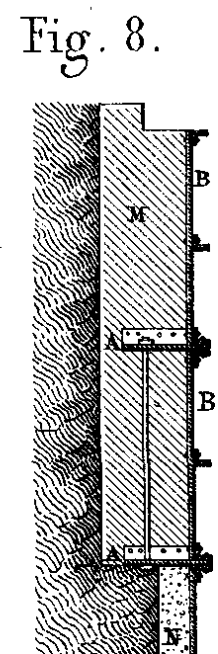
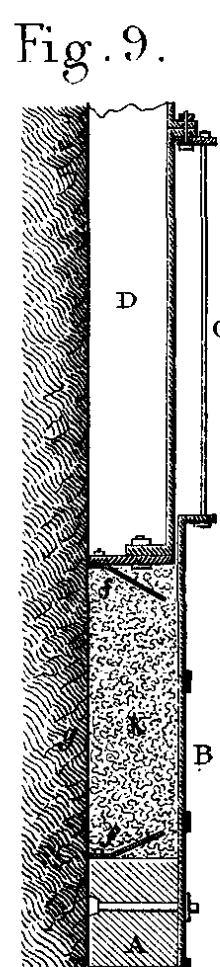
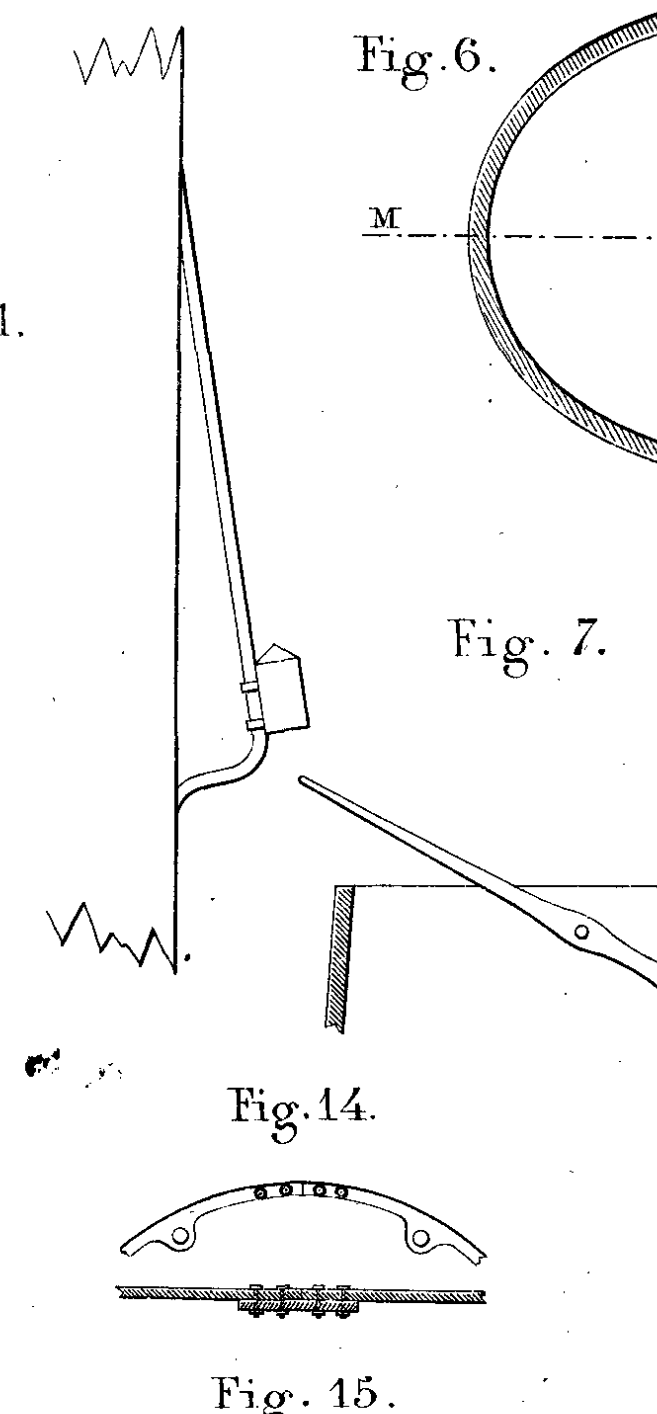
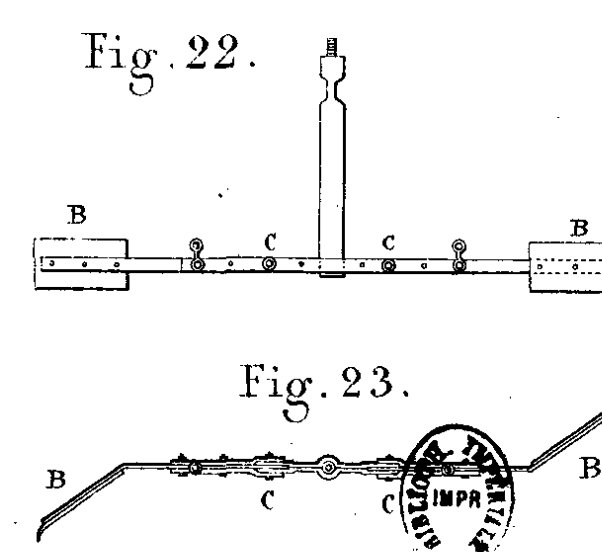
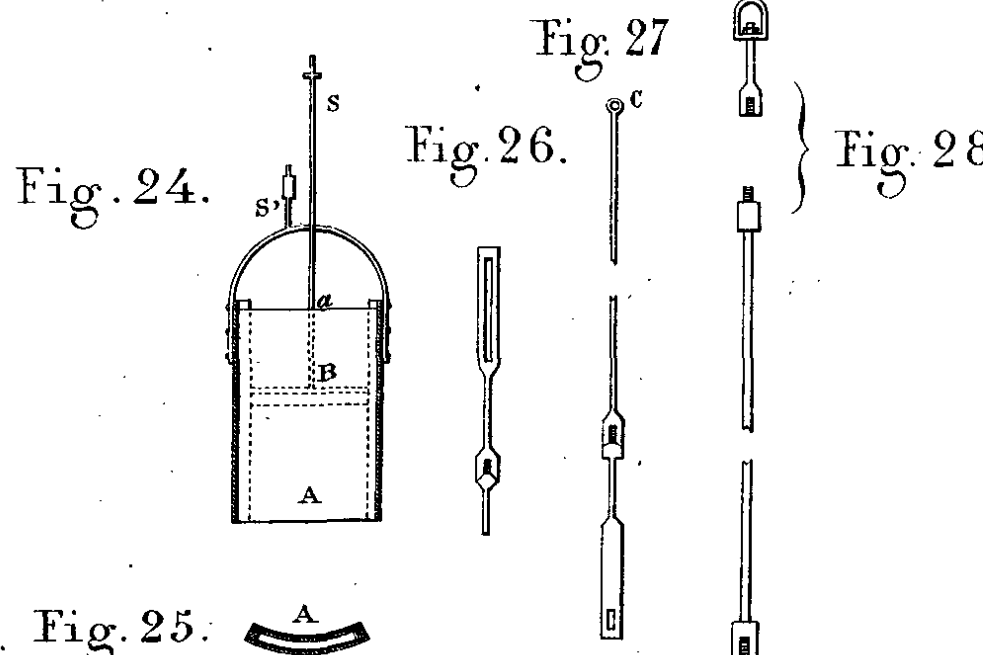
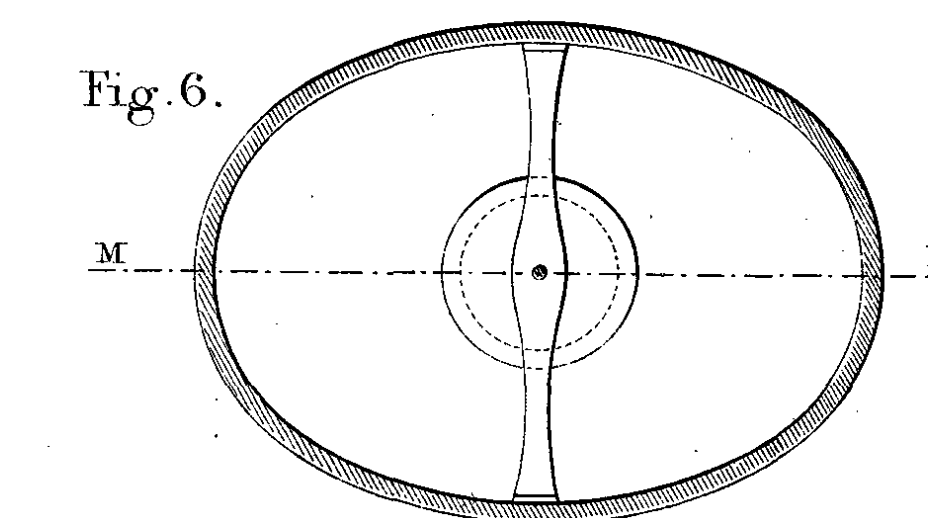
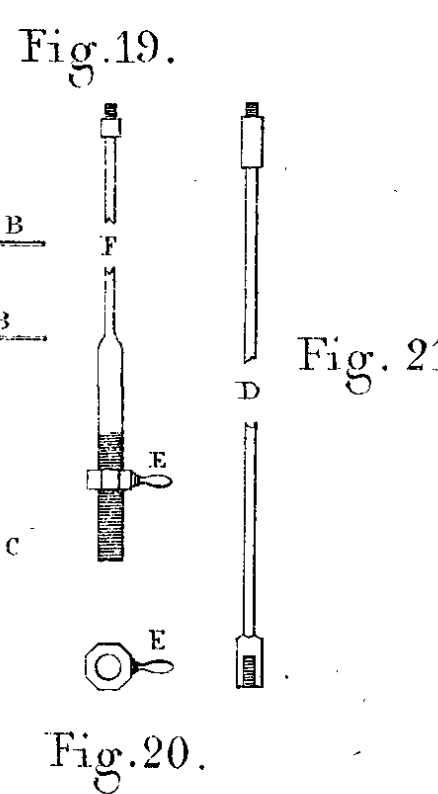
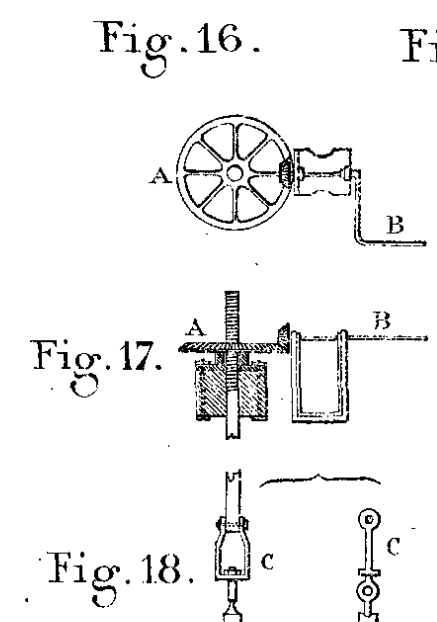
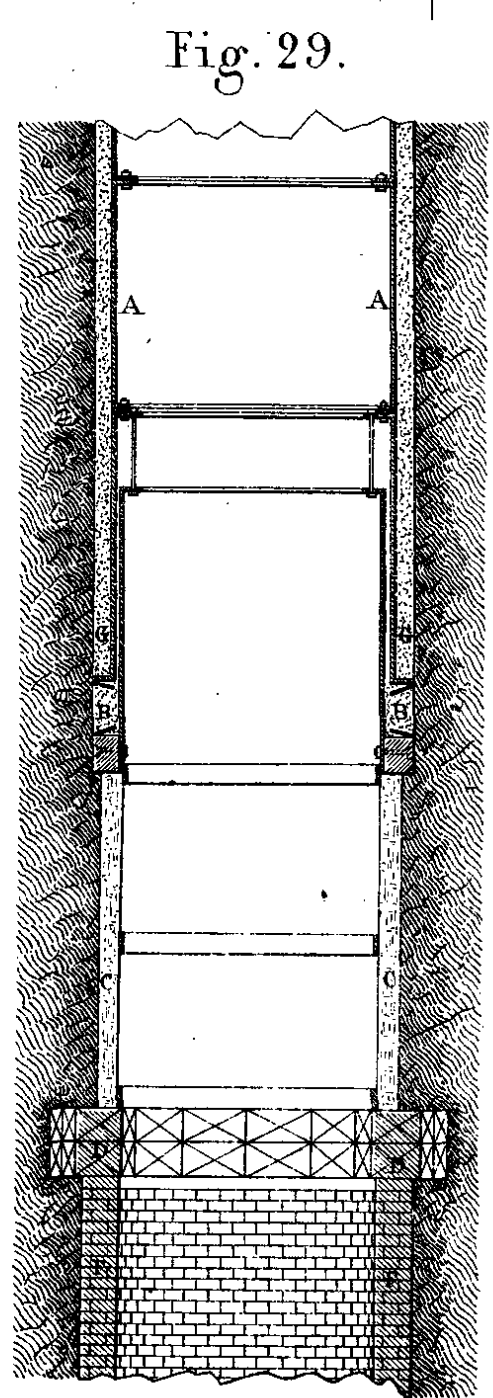
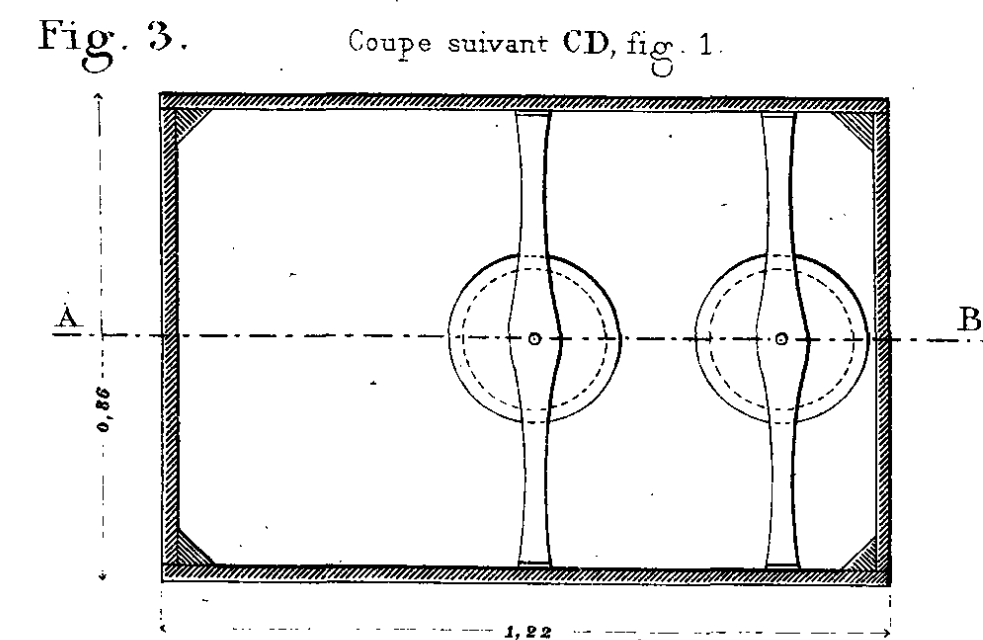
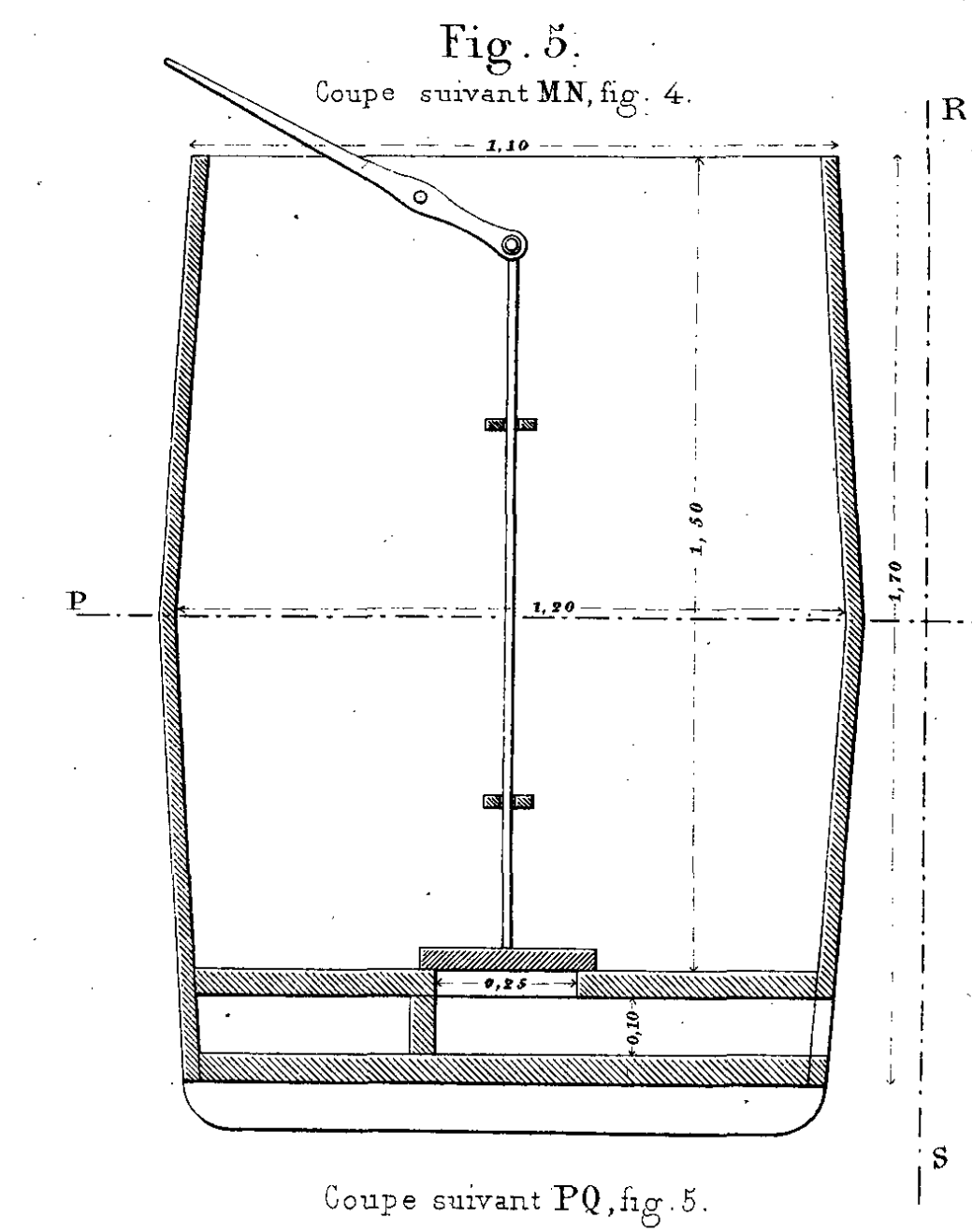
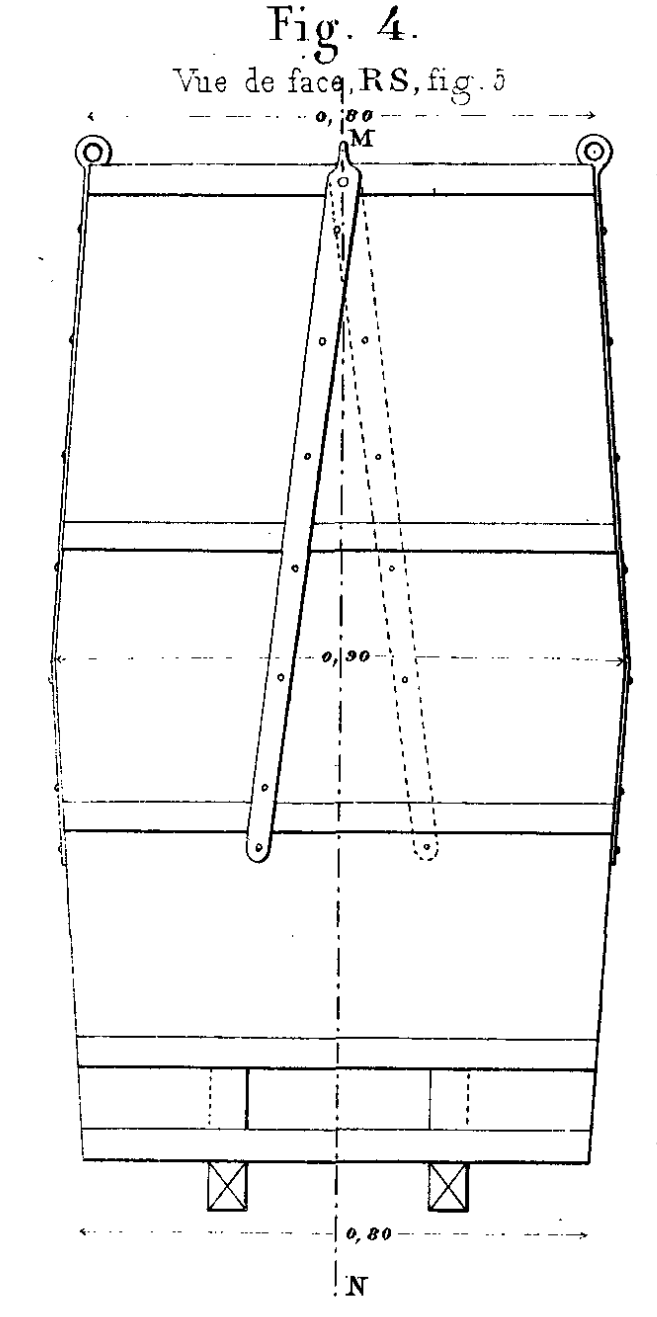
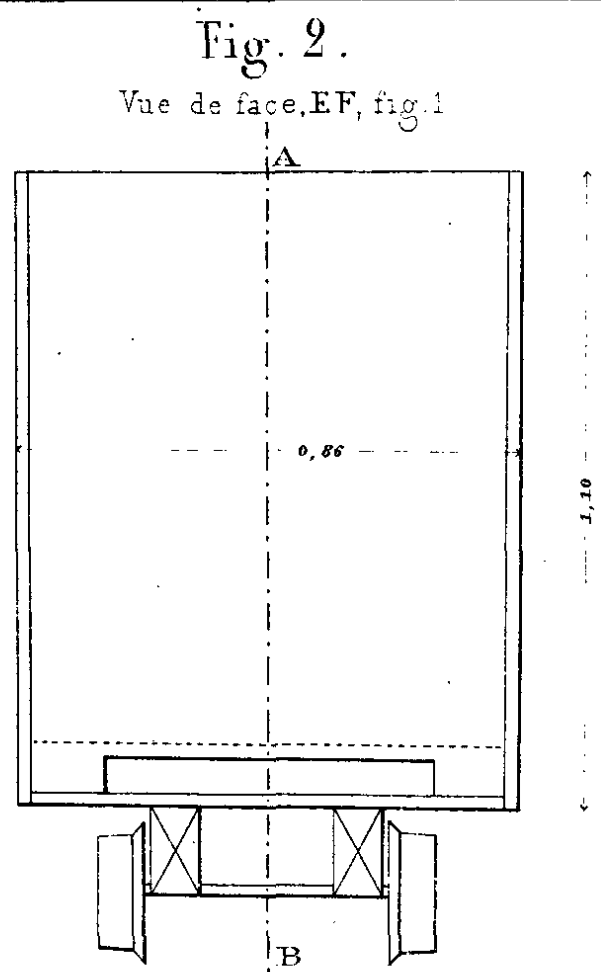
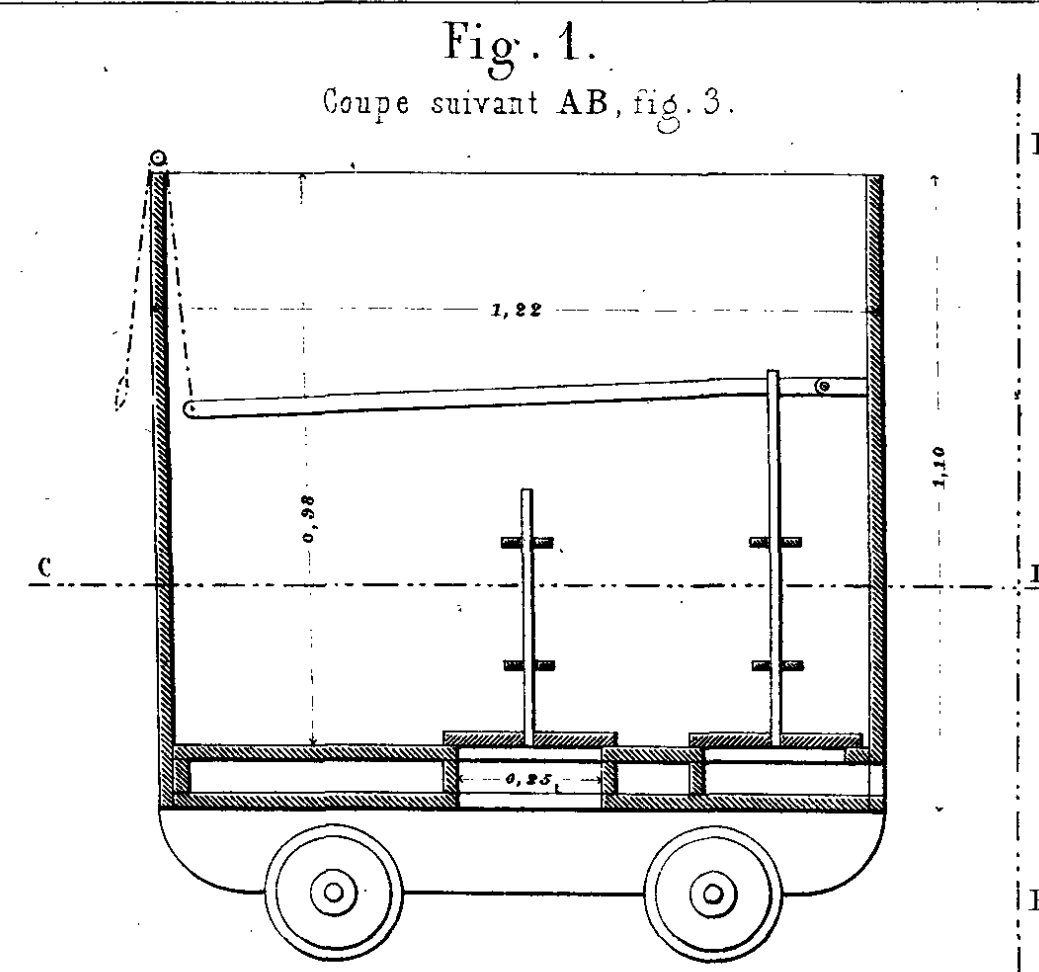
Echelle des fig. 1, 2, 10, 11, 12, 13, 14 et 15.

0 1 2 3 4 5 6 7 8 9 10 Décim.





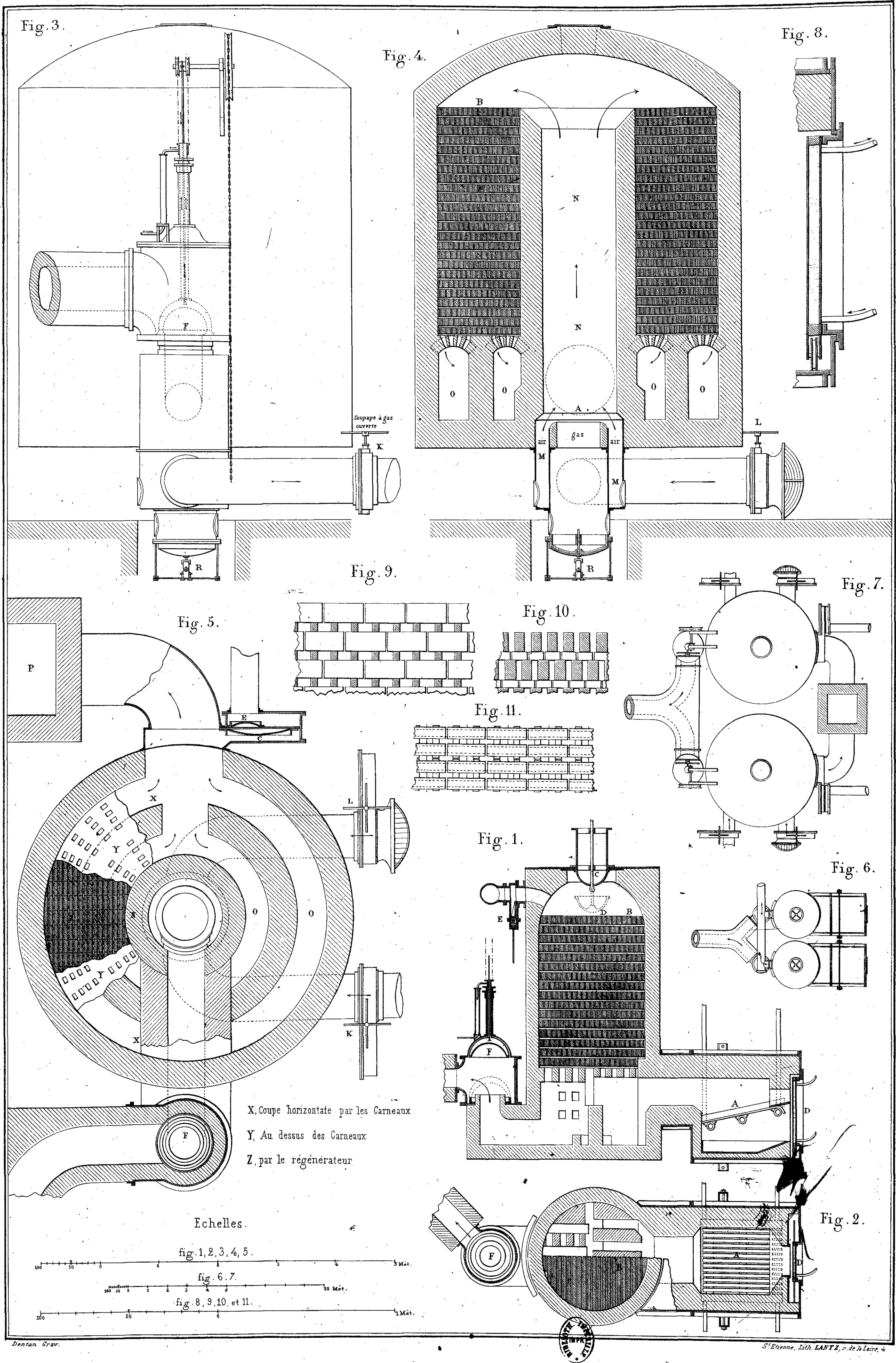






















# Bulletin de la Société de l'industrie minérale. Atlas



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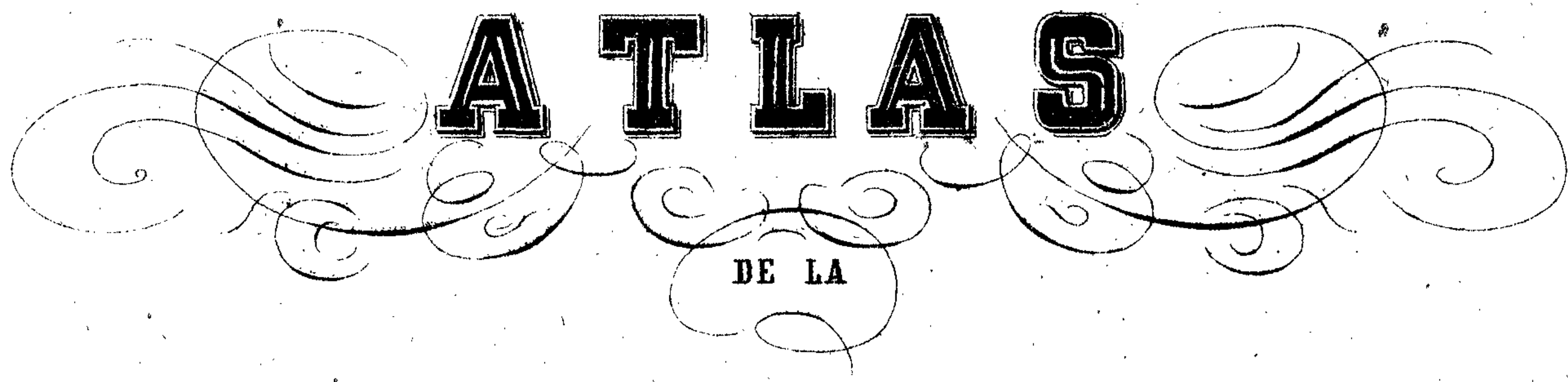
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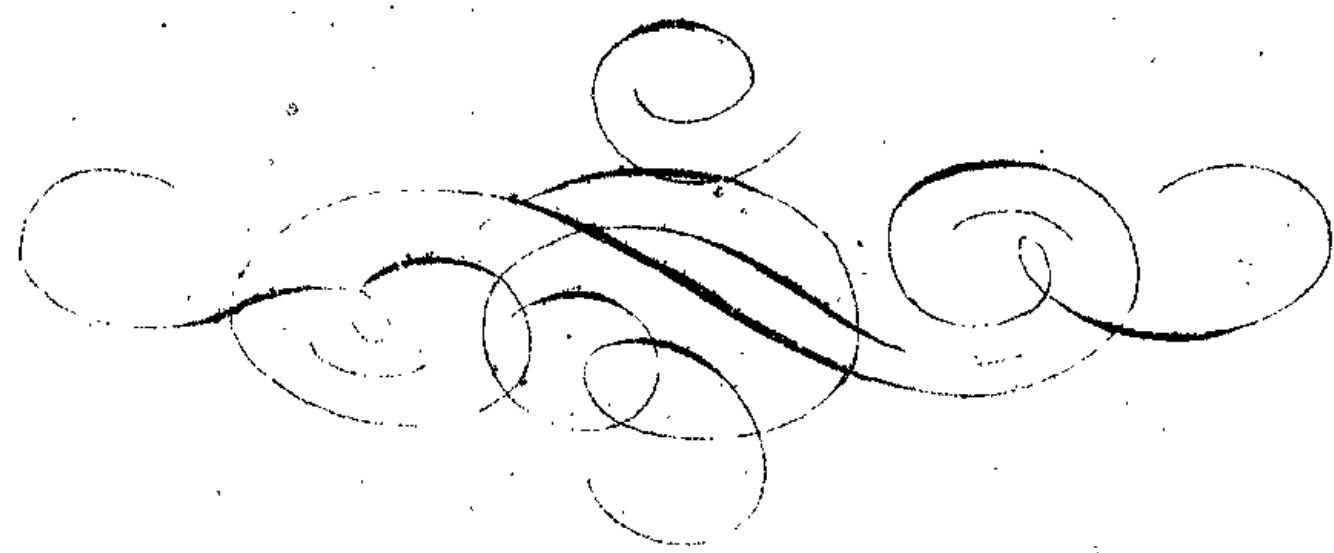


**ATLAS**

DE LA



**SOCIÉTÉ DE L'INDUSTRIE MINÉRALE**



**VII<sup>e</sup> ANNÉE.**

**4<sup>e</sup> LIVRAISON**



Avril, Mai, Juin.

1863



IMPRIMERIE LITHOGRAPHIQUE

**LANTZ**

RUE DE LA LOIRE 4, S<sup>t</sup> ETIENNE.







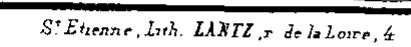








Fig. 8.  
Vue de face

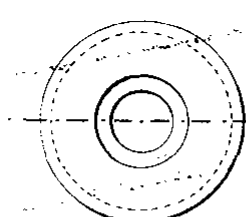


Fig. 7.  
Coupe du Tuyau

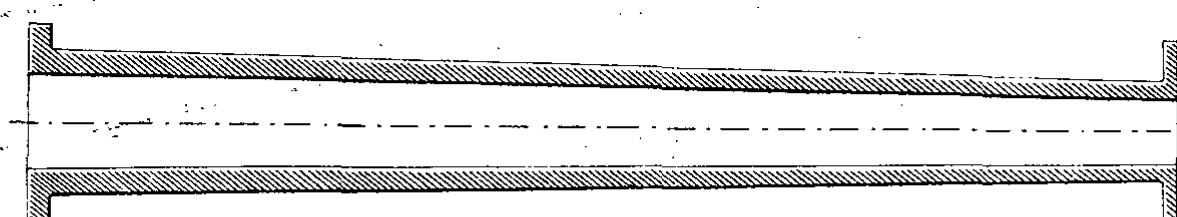


Fig. 5.

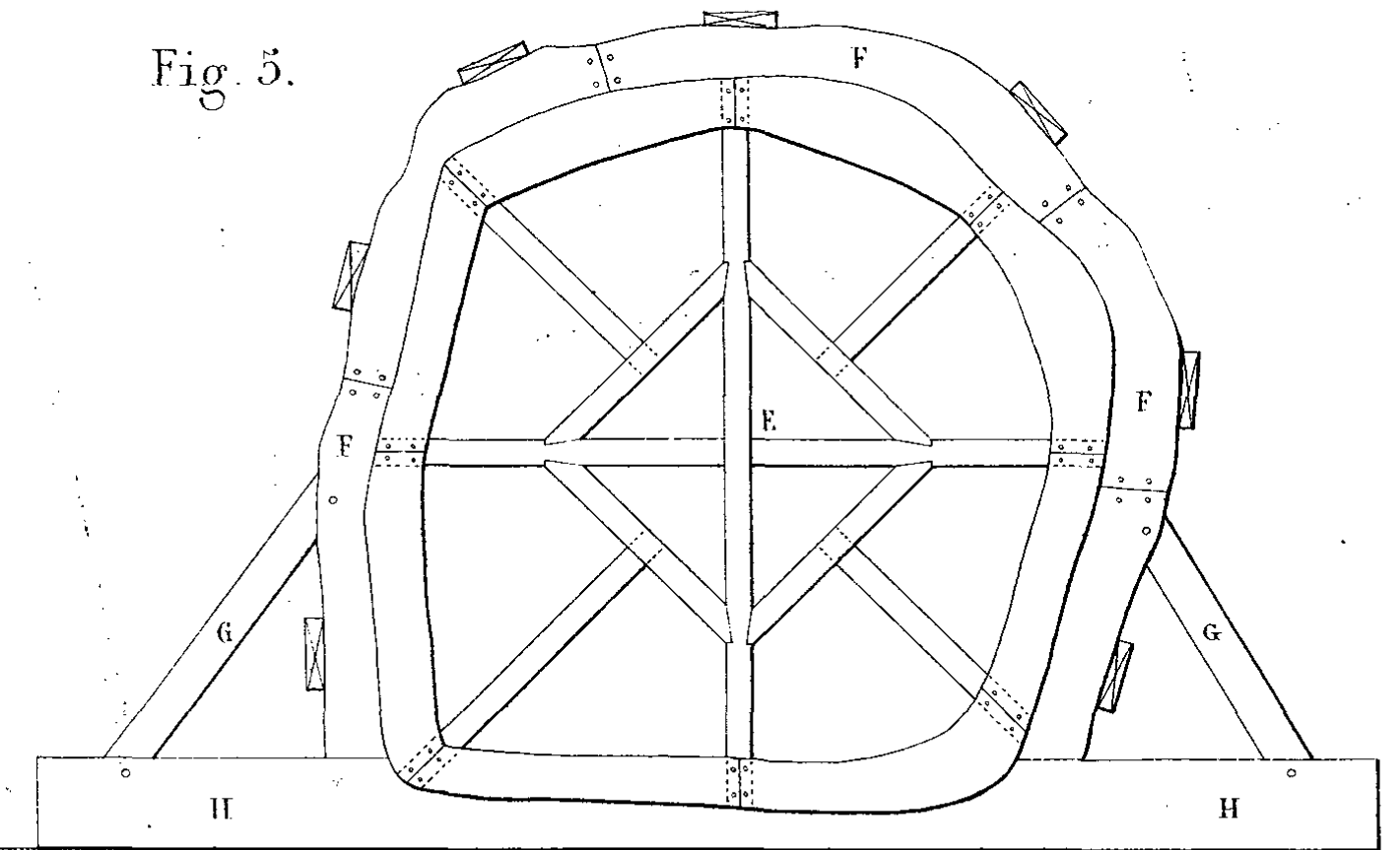
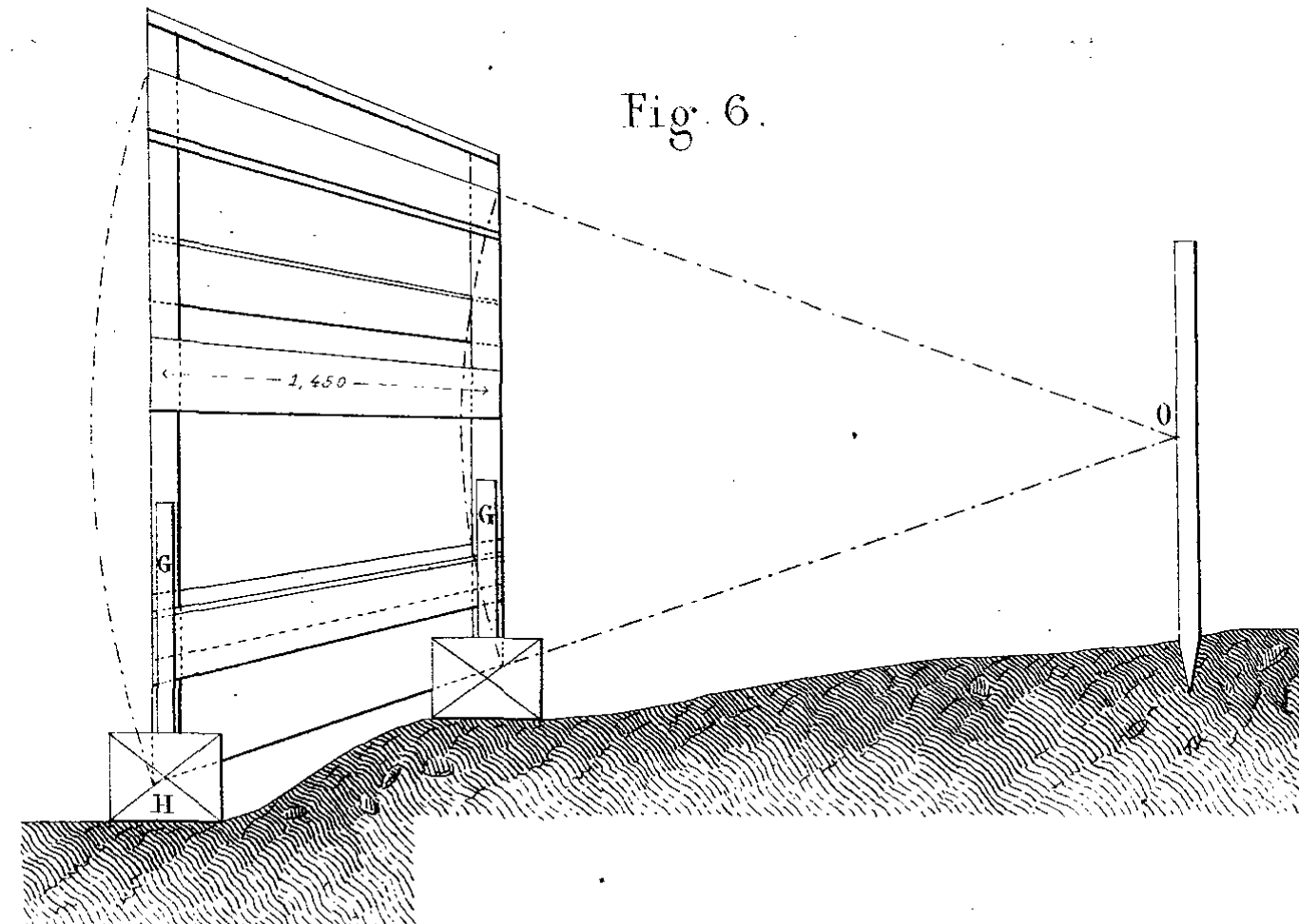


Fig. 6.



Coupe suivant la ligne ABC, fig. 2

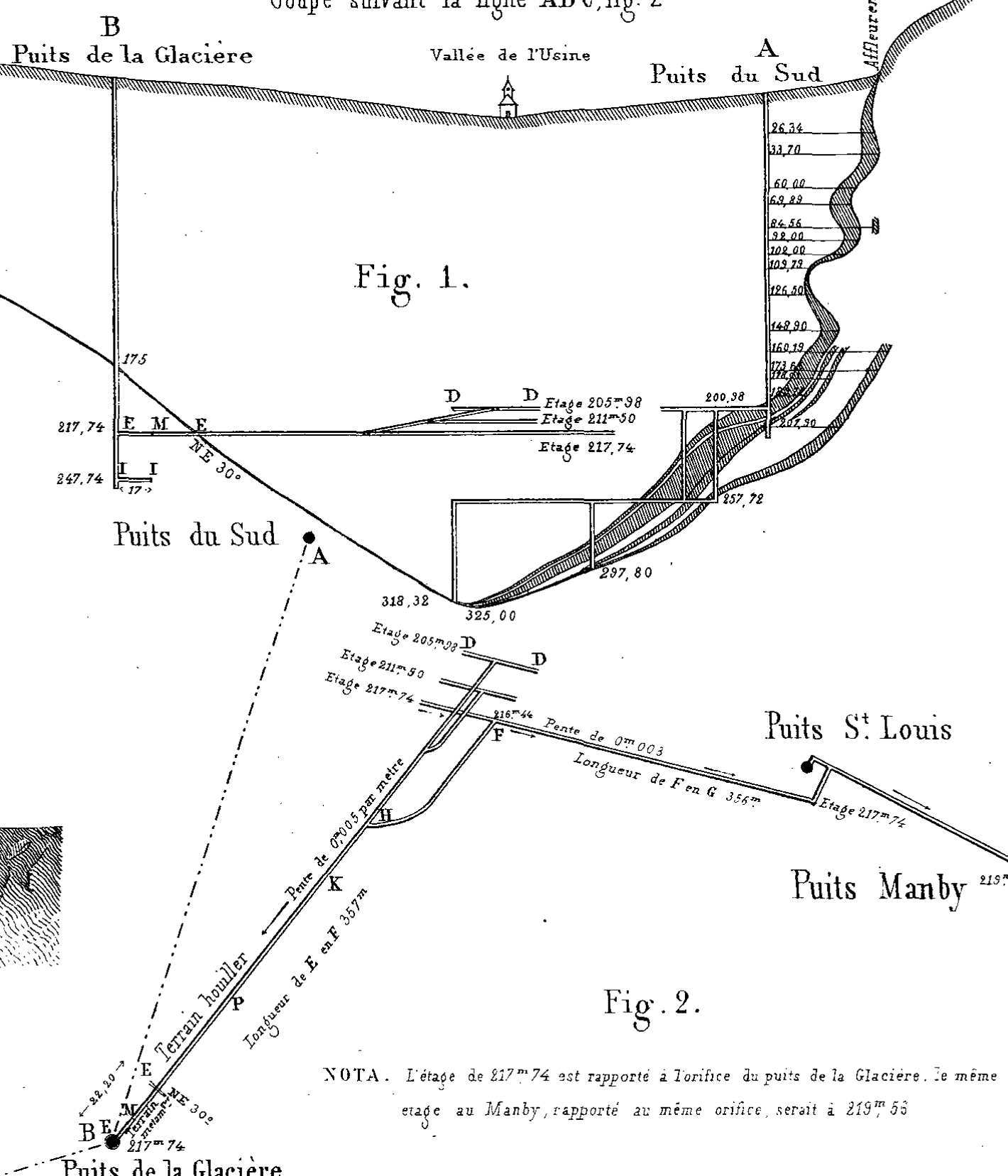


Fig. 2.

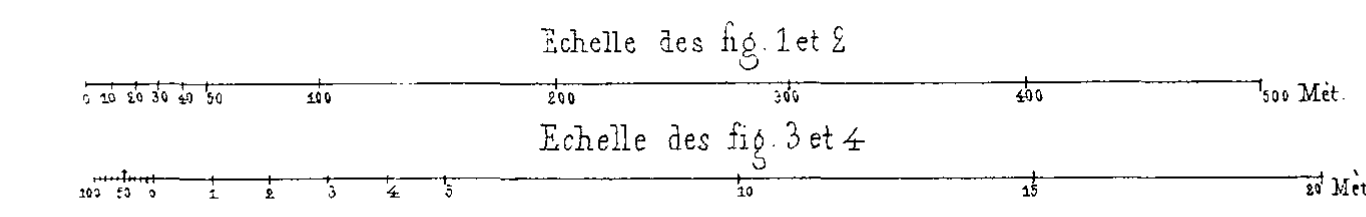
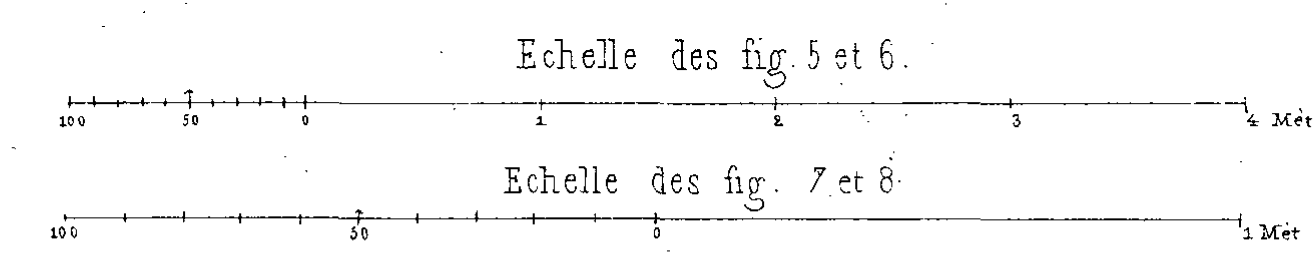


Fig. 3.

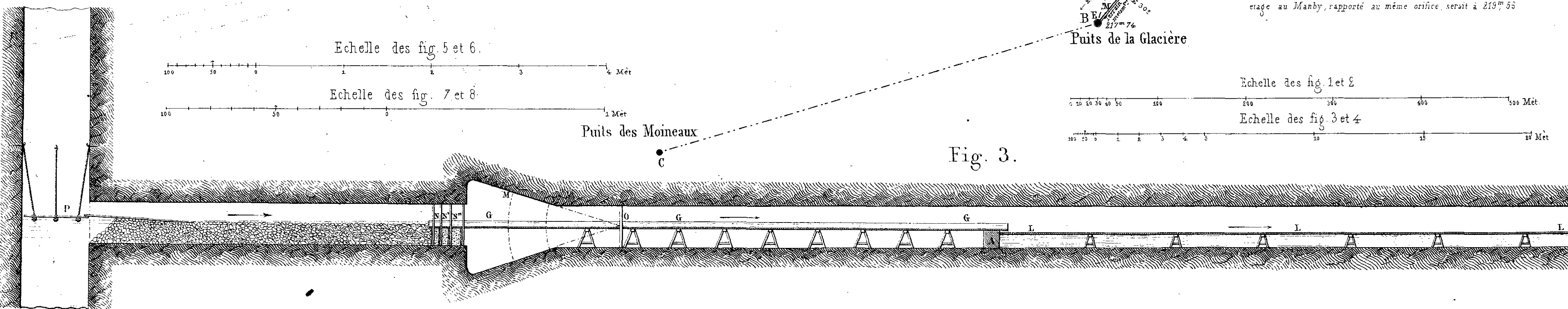
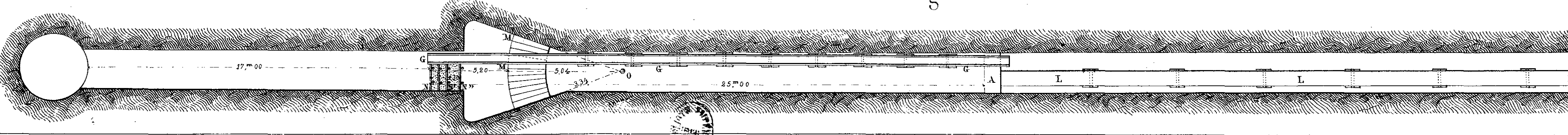


Fig. 4.









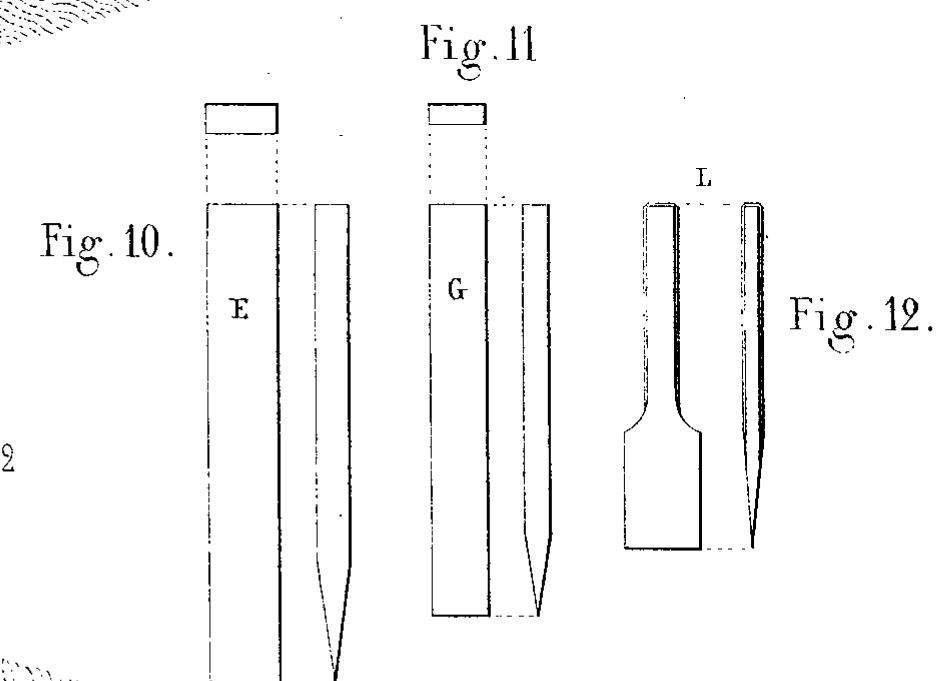
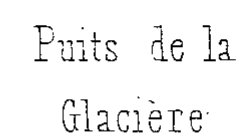


Fig. 9.

Coupe horizontale suivant CD, fig. 2

Charges d'eau  
sur le centre  
des Robinets



Echelle des fig. 4 à 12.







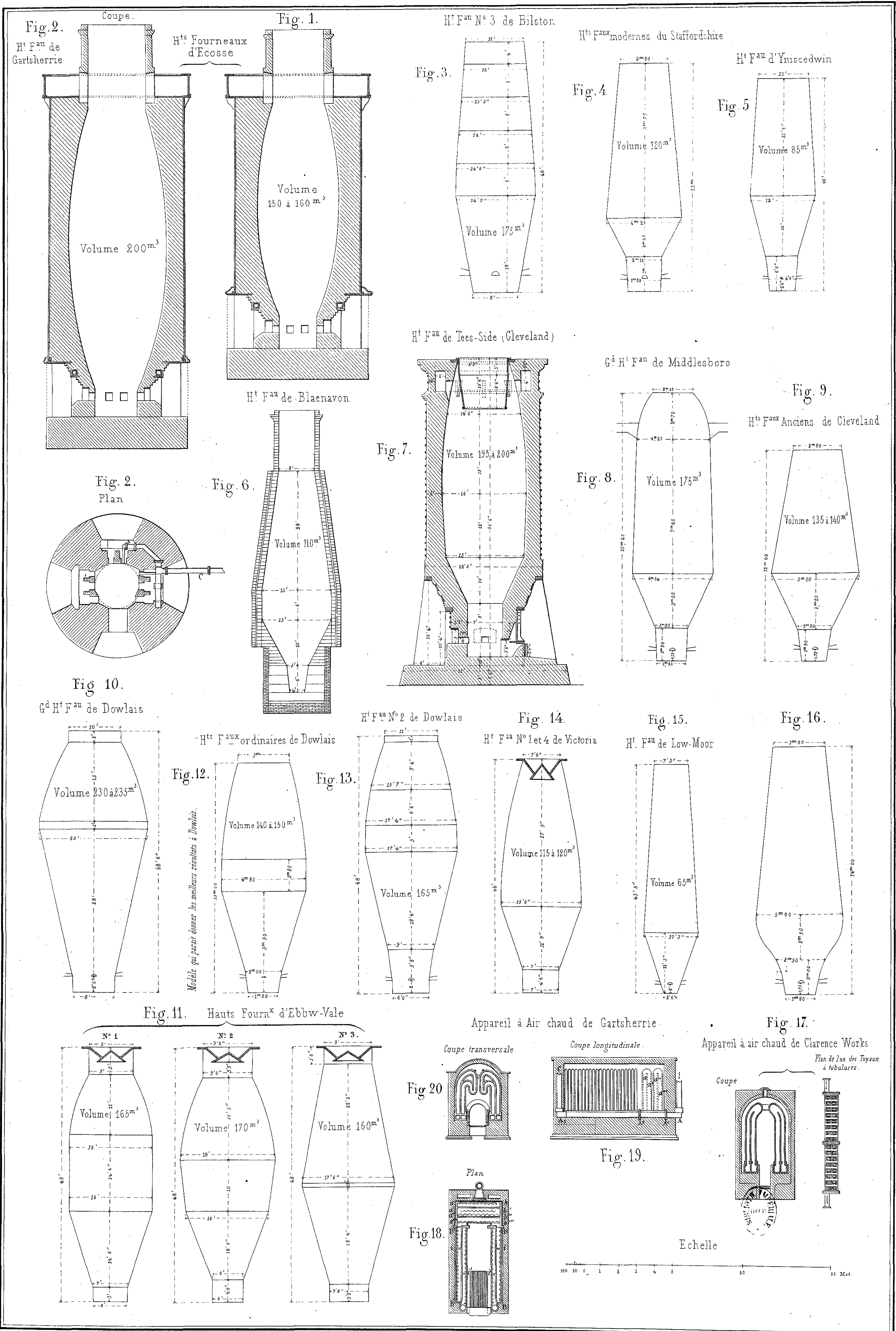








Fig. 2.

Coupe longitudinale de la Mine de Minnesota passant par les points AB, fig. 1 et ABC, fig. 3.

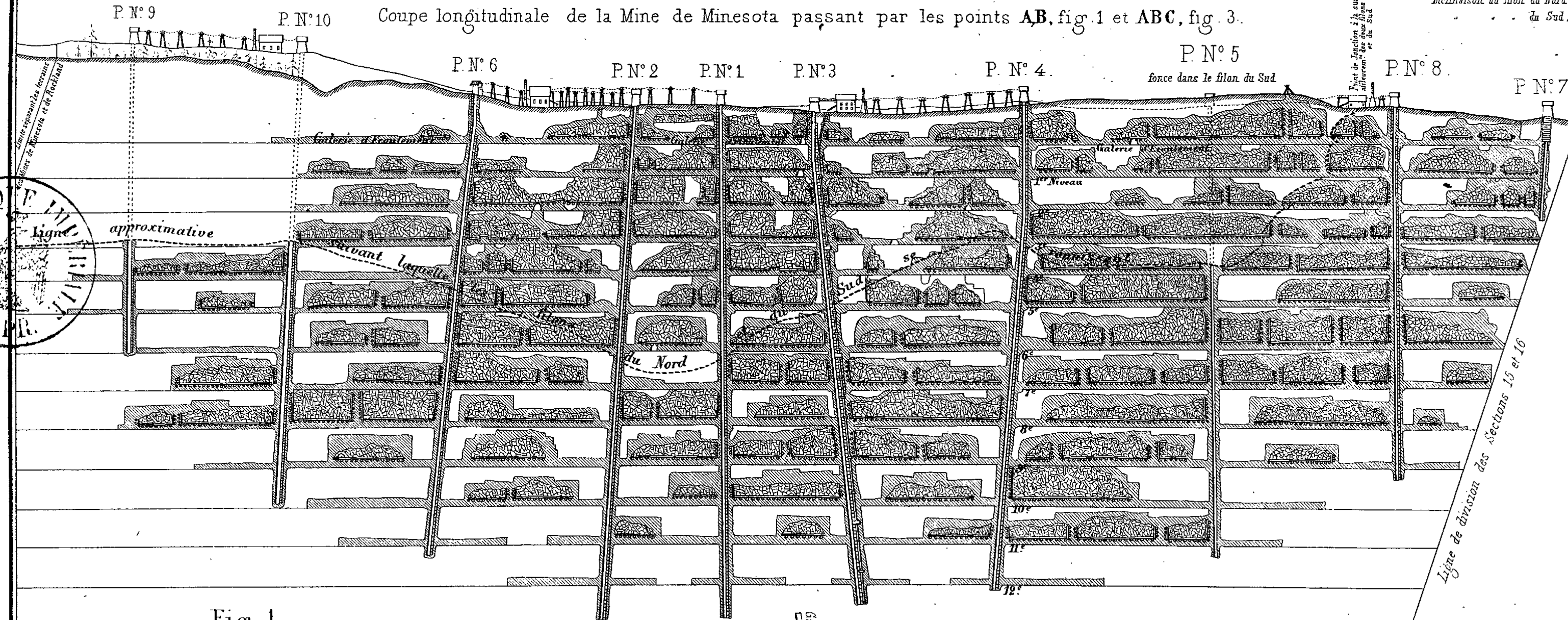


Fig. 3.

Coupe transversale passant par le Puits N° 3, fig. 1 et 2

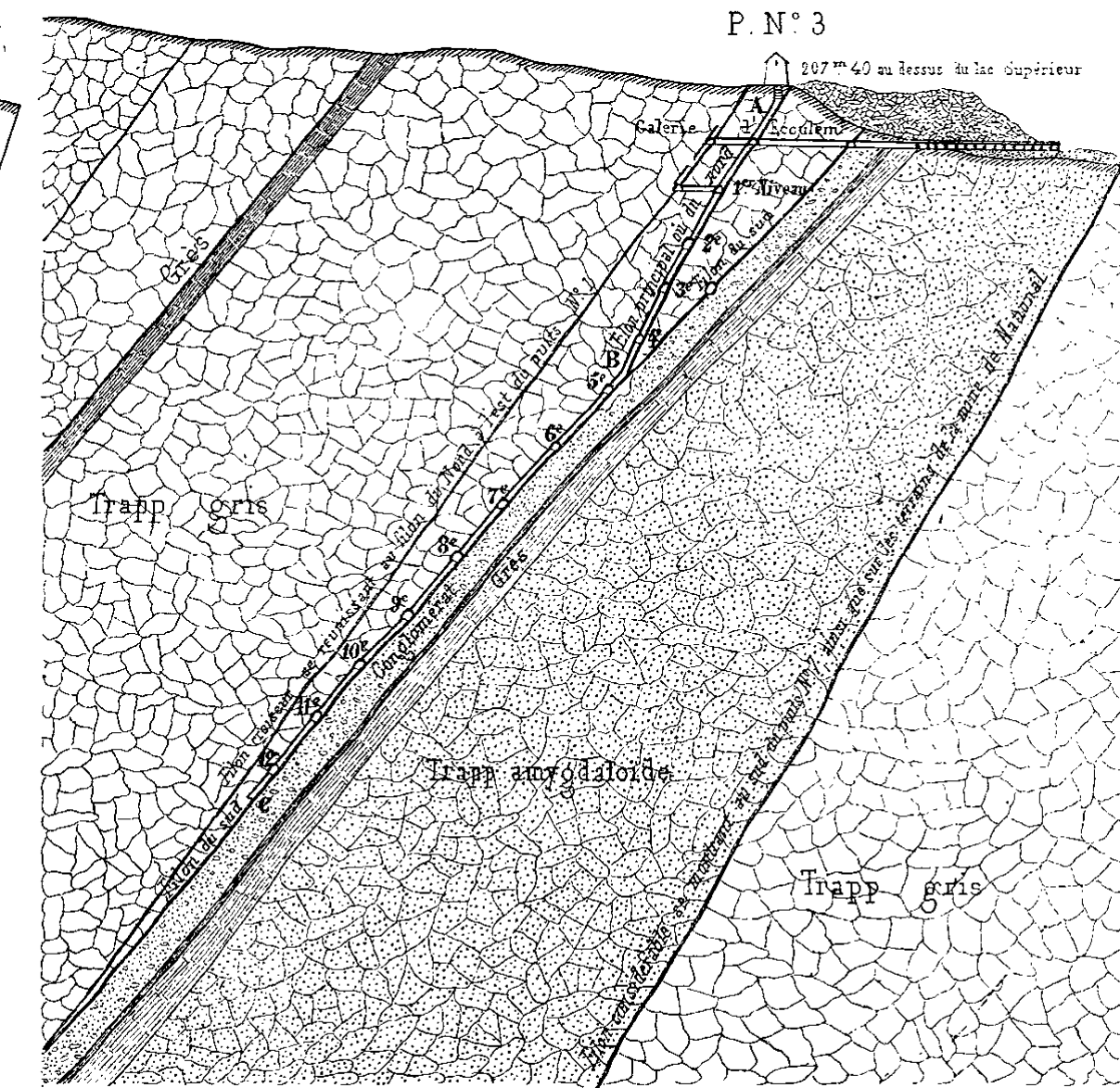


Fig. 1.

Plan passant par les galeries d'écoulement, fig. 2 et 3

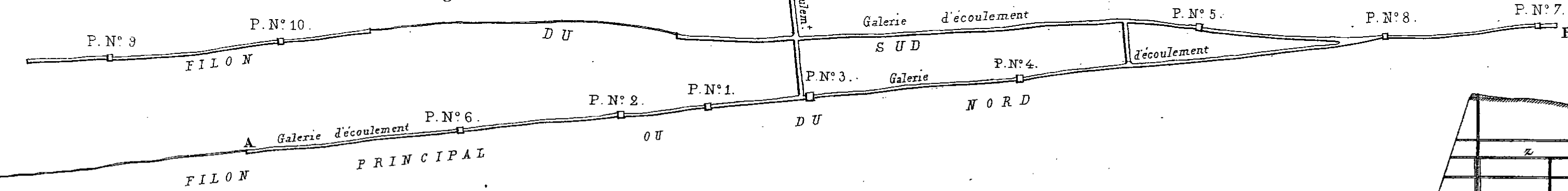
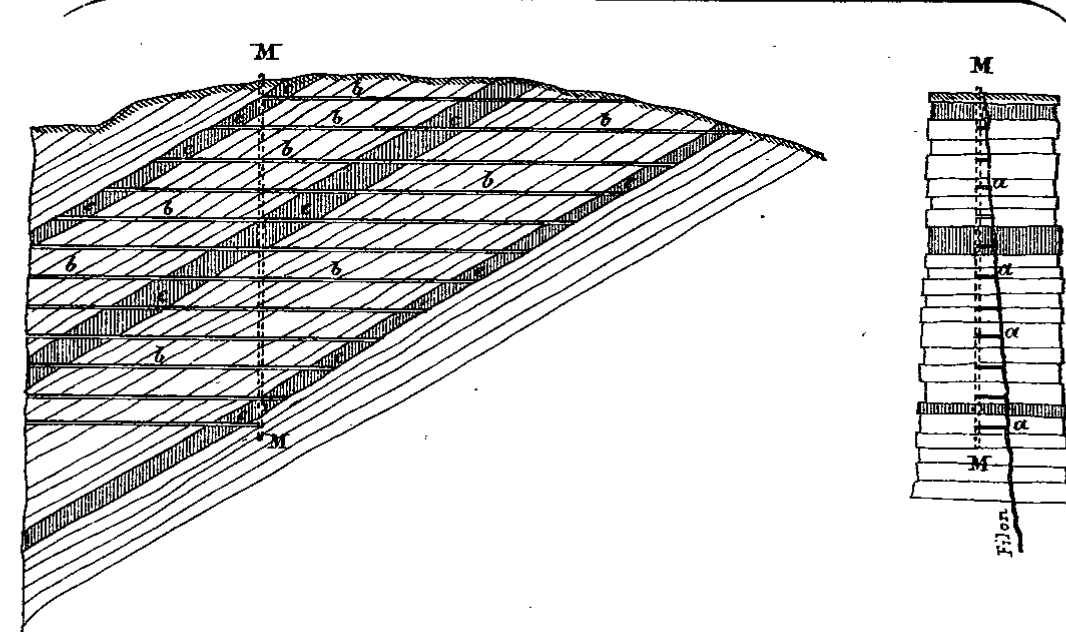


Fig. 6.



Echelle des fig. 1, 2, 3.

0 10 20 30 40 50 60 70 80 90 100 200 300 Mètres

Echelle des fig. 4, 5

0 50 100 200 300 400 500 600 Mètres

Fig. 4.

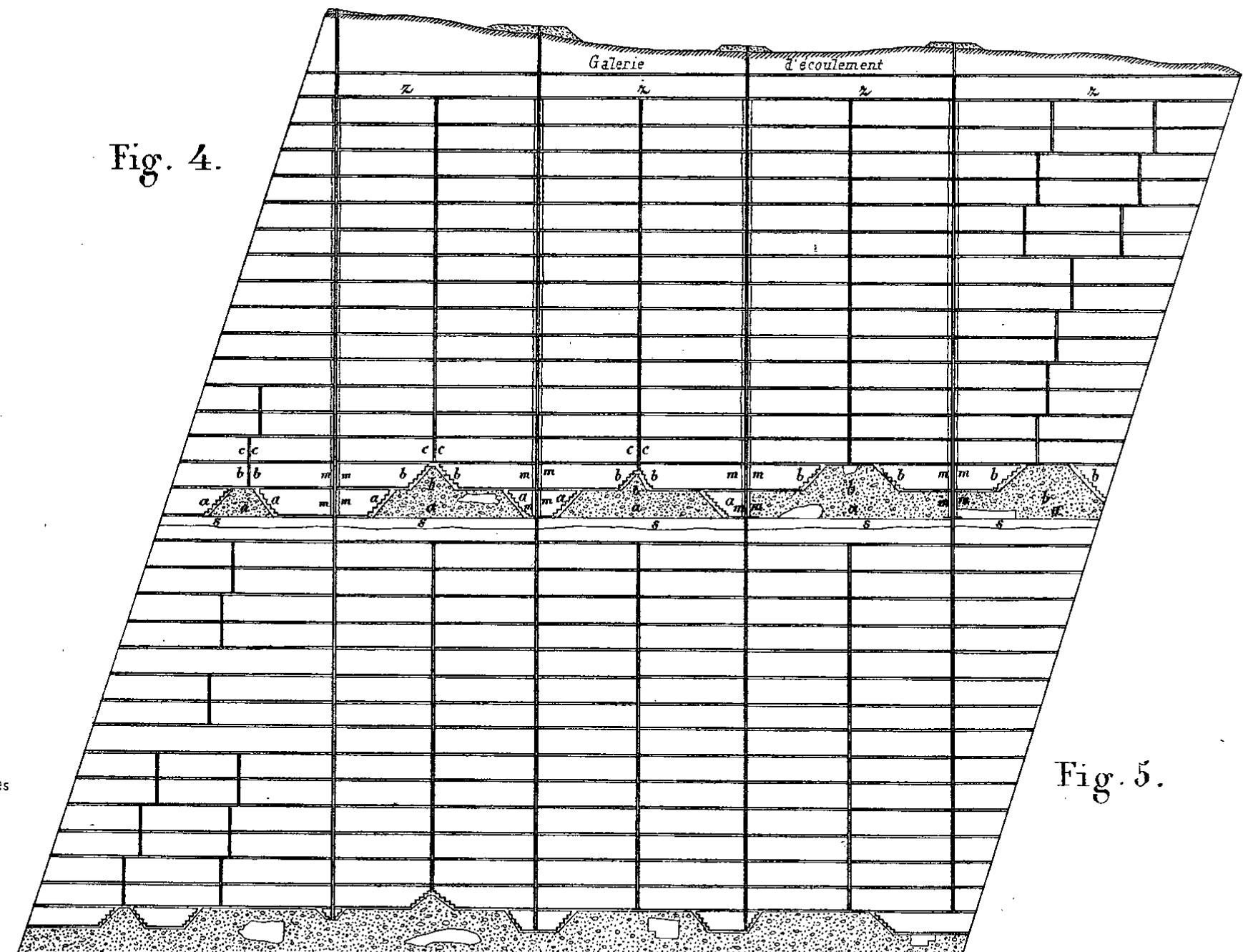
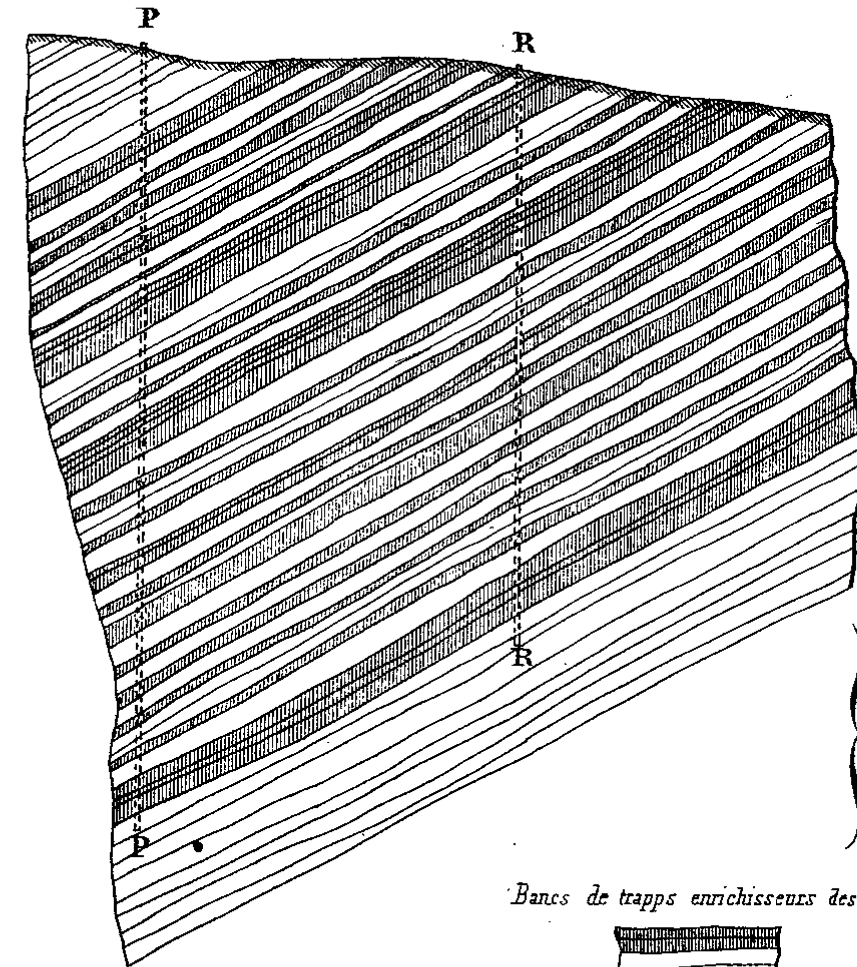


Fig. 5.

Fig. 7.



Bancs de trapps enrichisseurs des filons

Bancs de trapps appauvrisseurs des filons







Fig. 1.

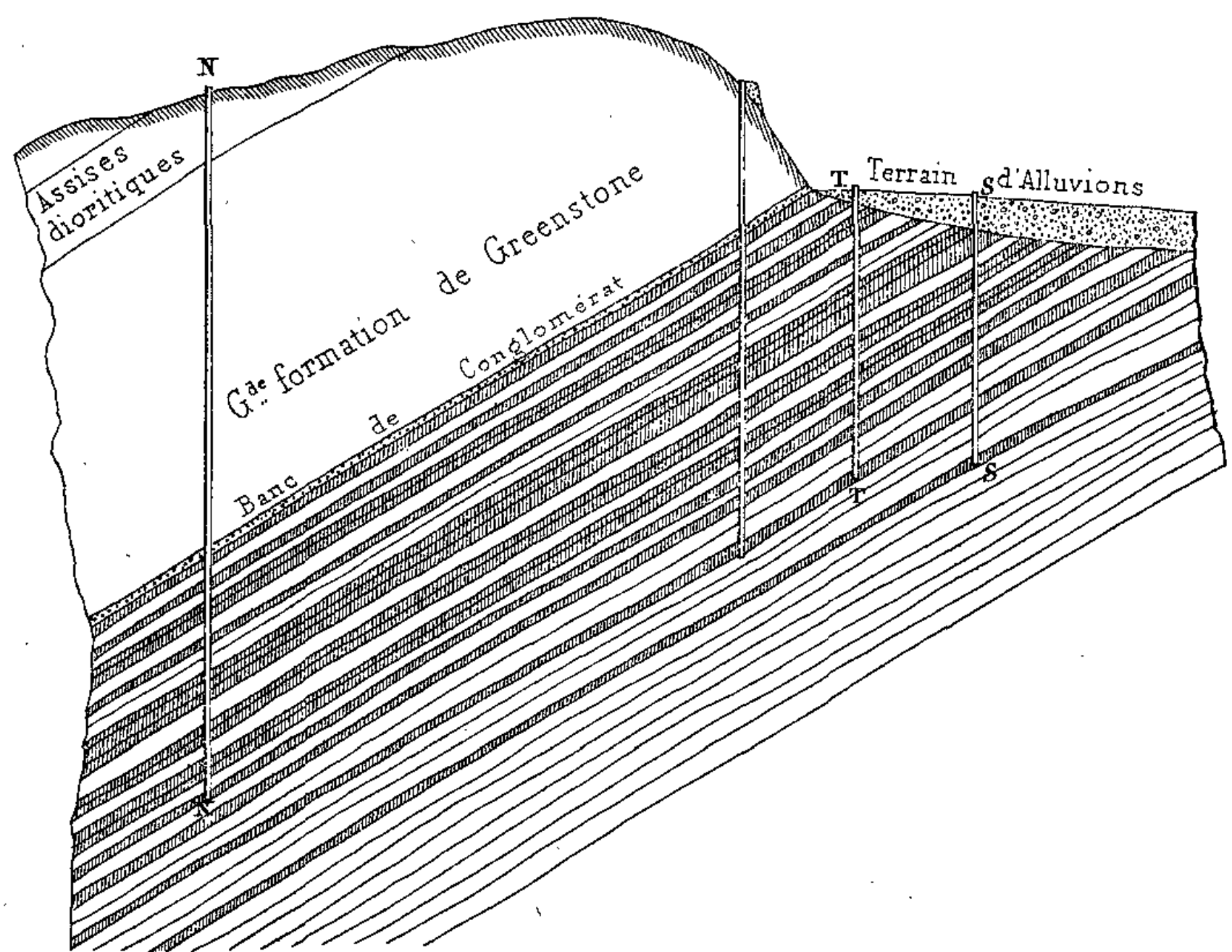


Fig. 2.

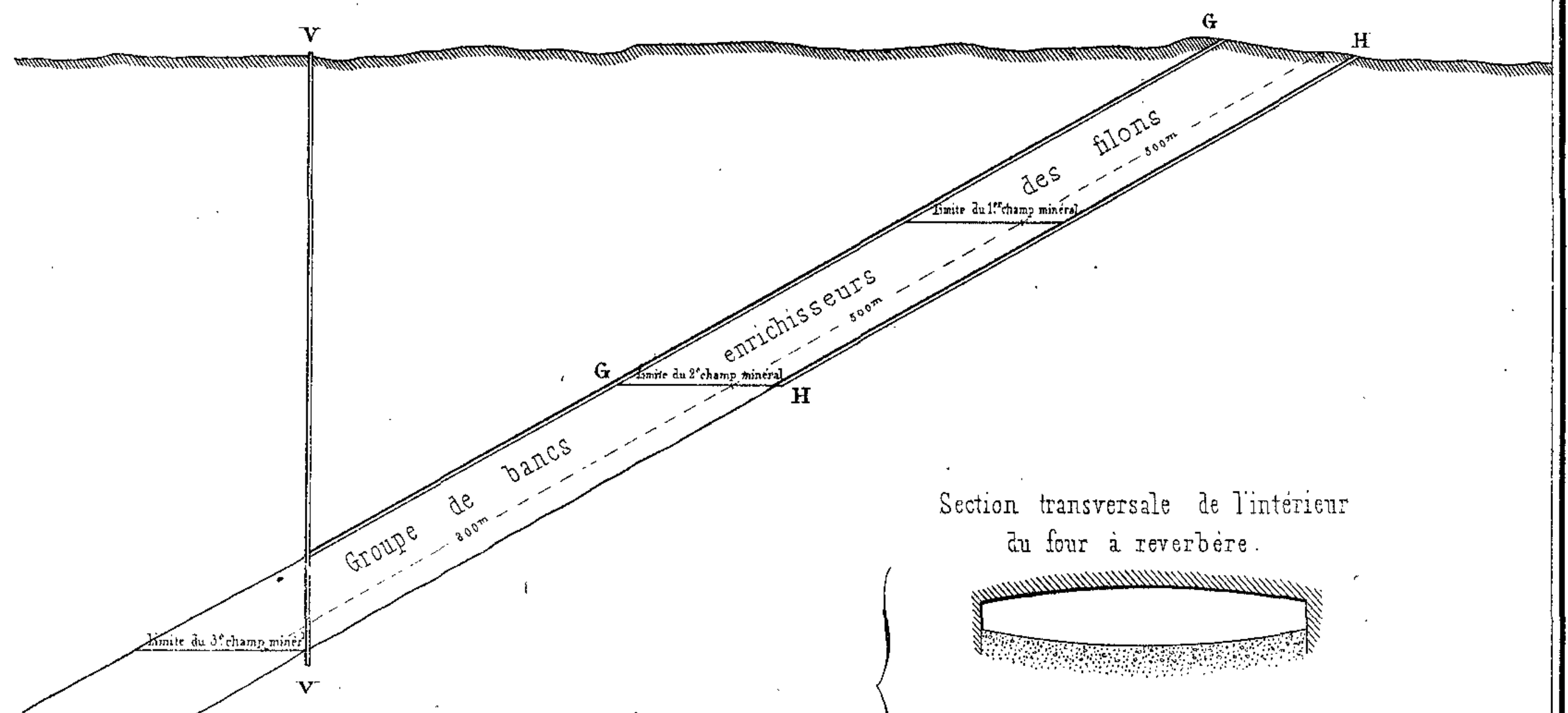


Fig. 3.

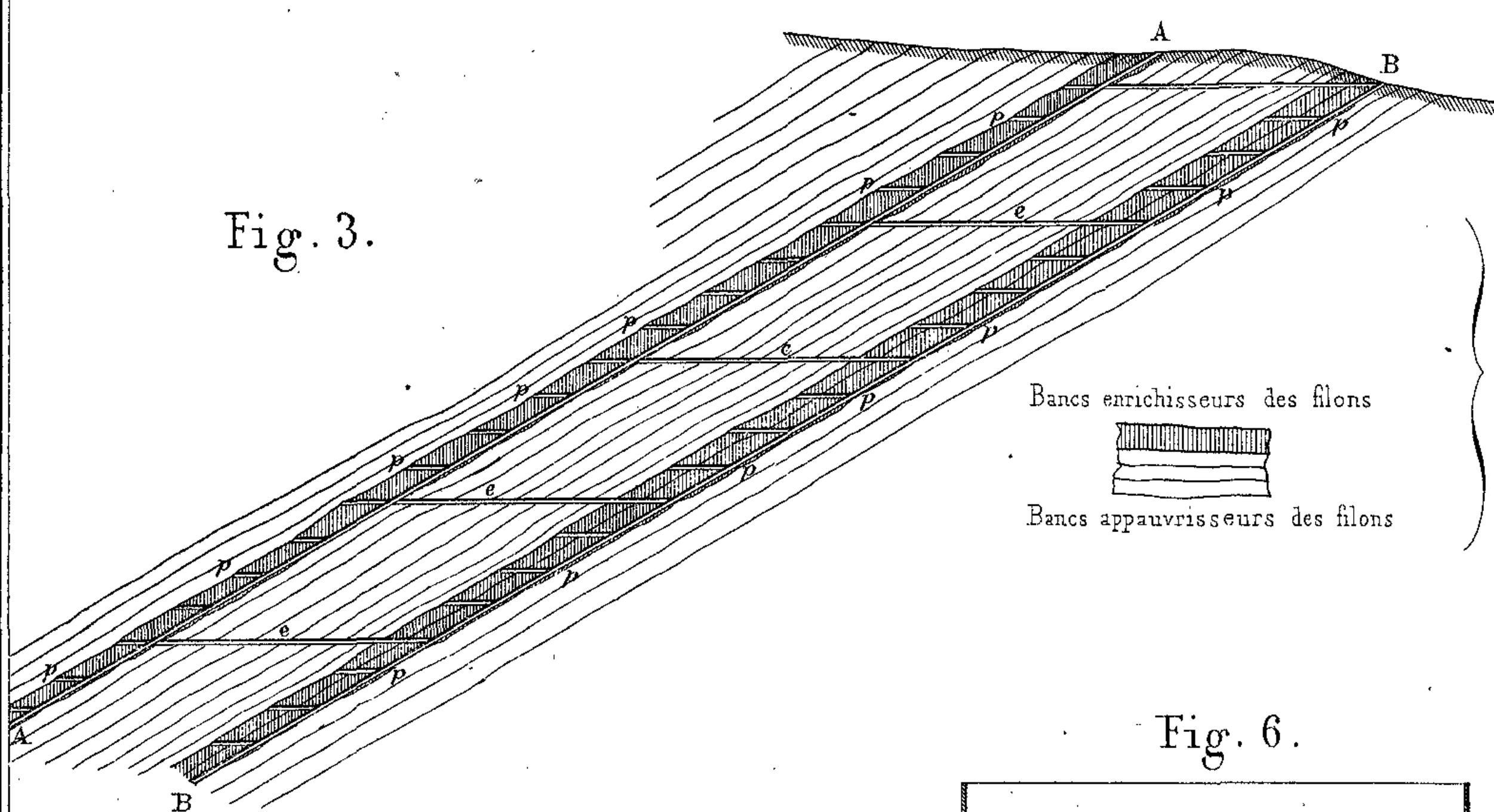


Fig. 6.

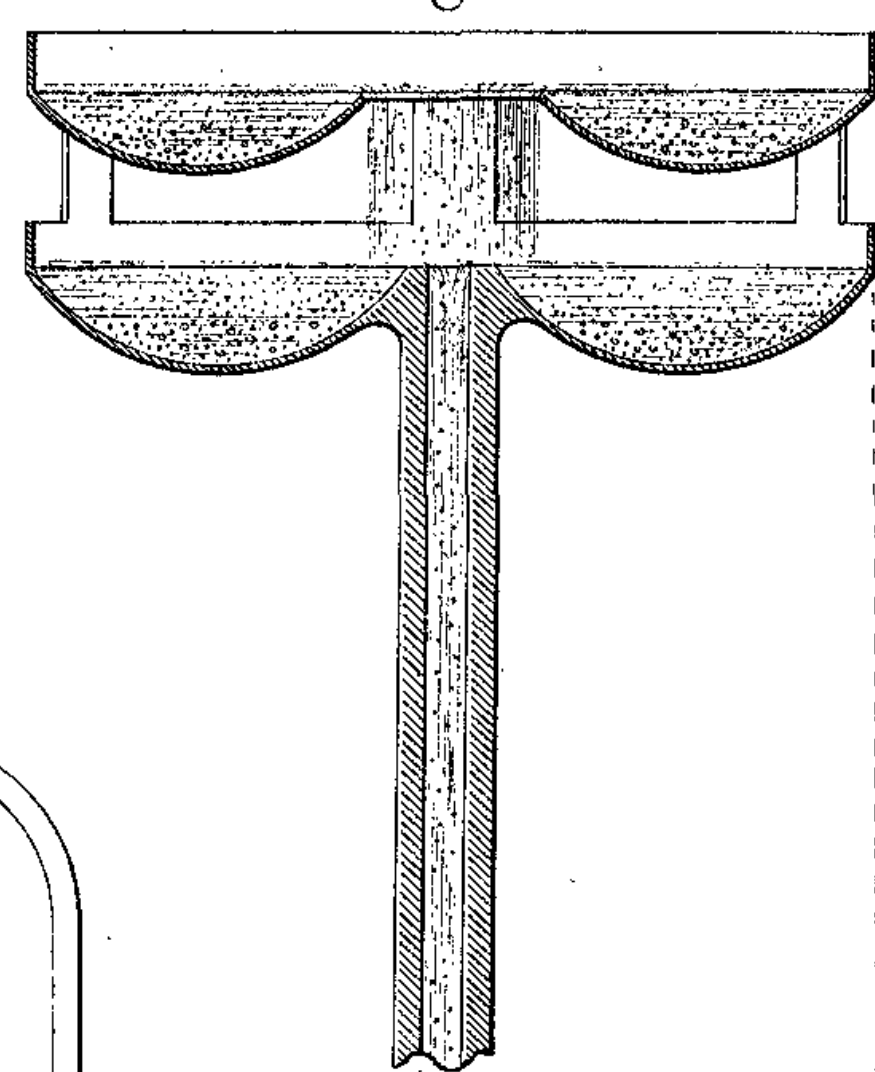


Fig. 4.

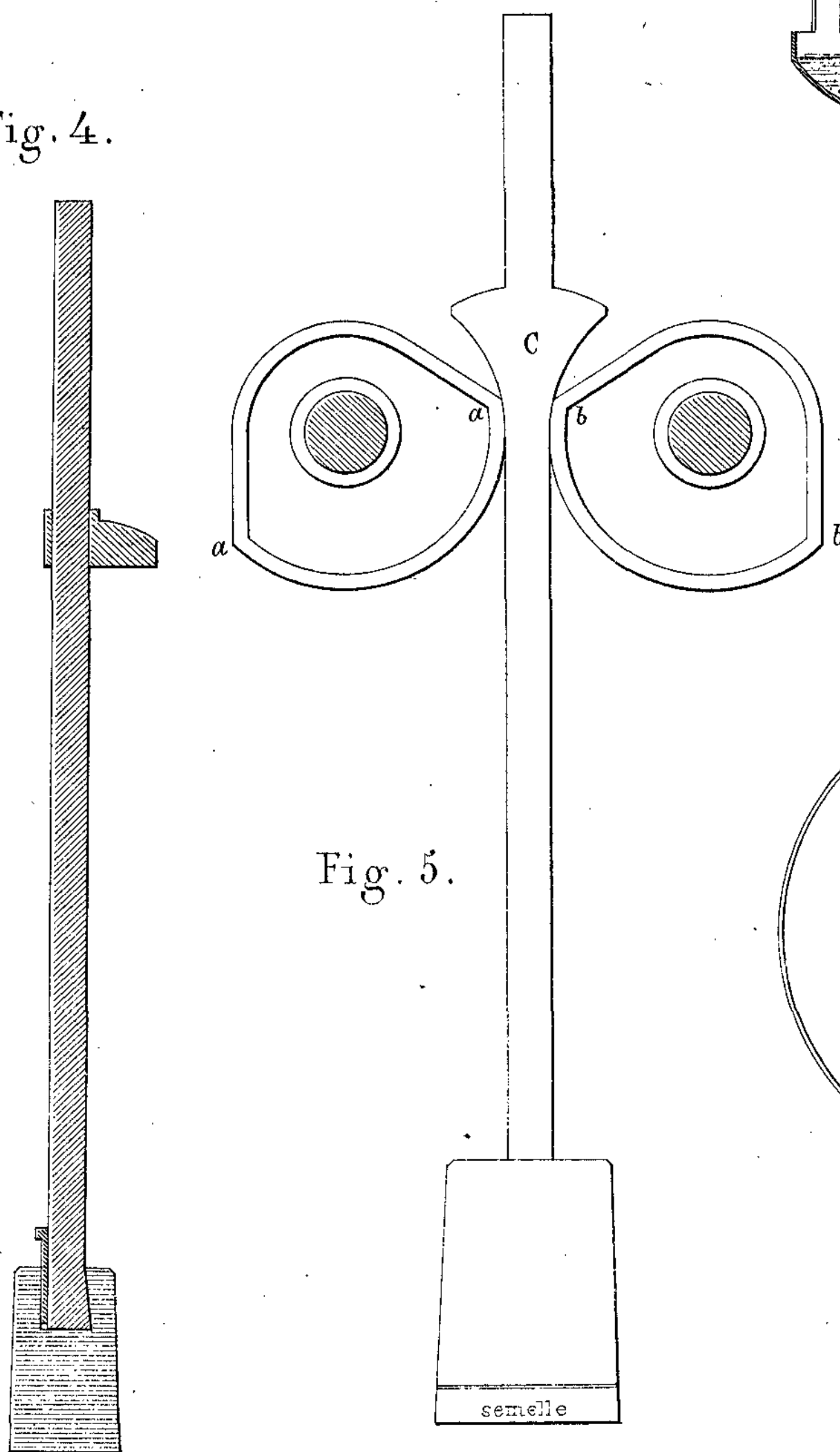


Fig. 5.

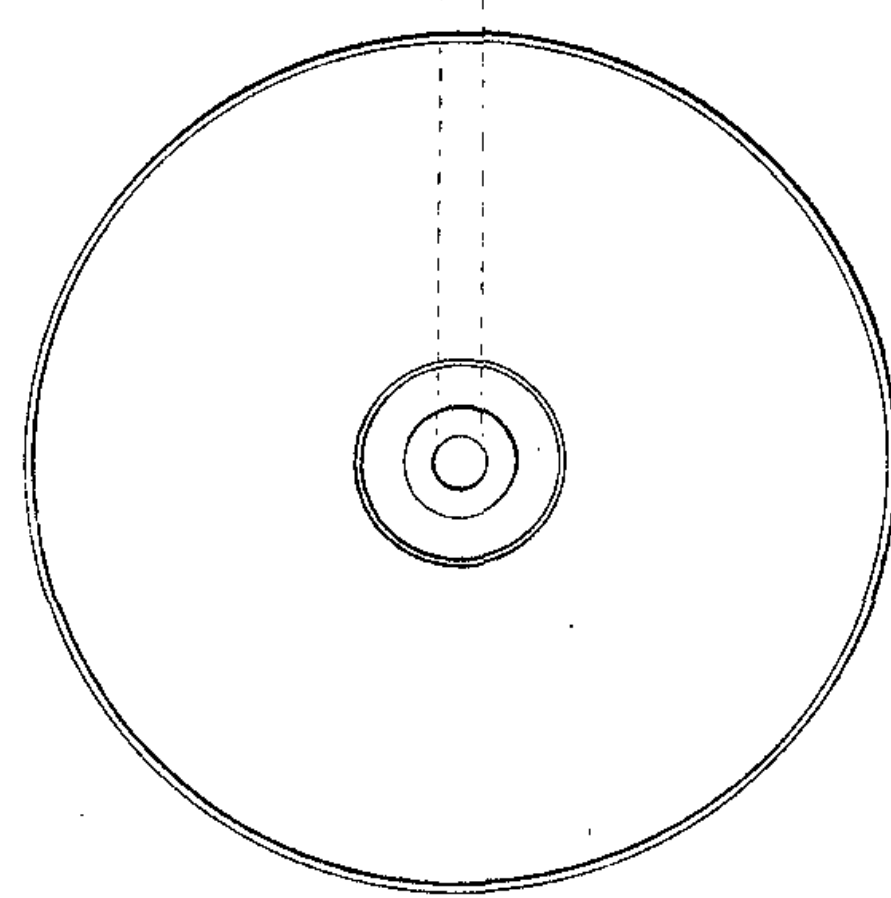


Fig. 7.

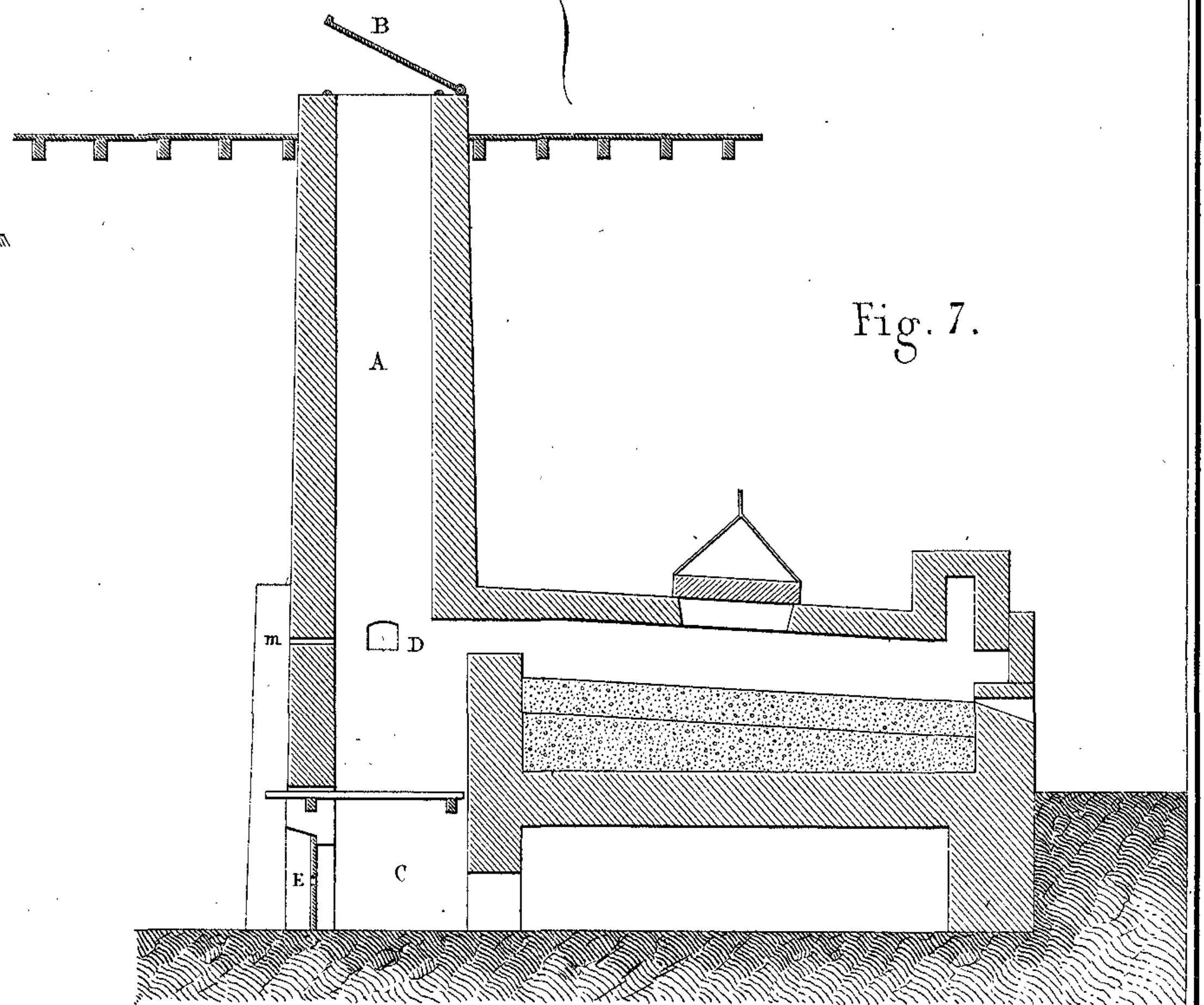
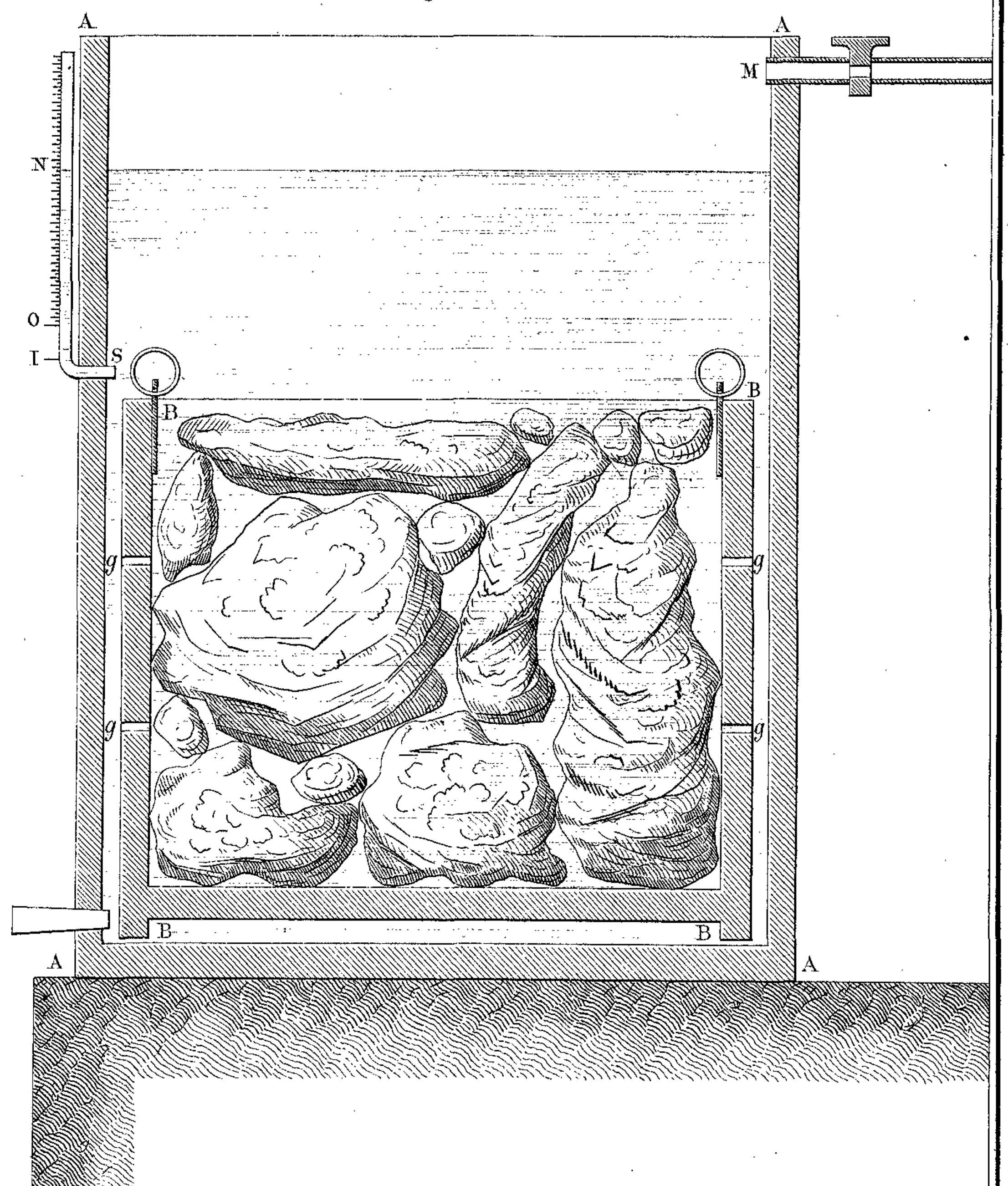


Fig. 8.



Echelle de la fig. 7.

100 50 0 1 2 3 4 5 6 7 8 9 10 Mèt.

Echelle des fig. 4, 5, 6, 8.

100 50 0 1 Mèt.











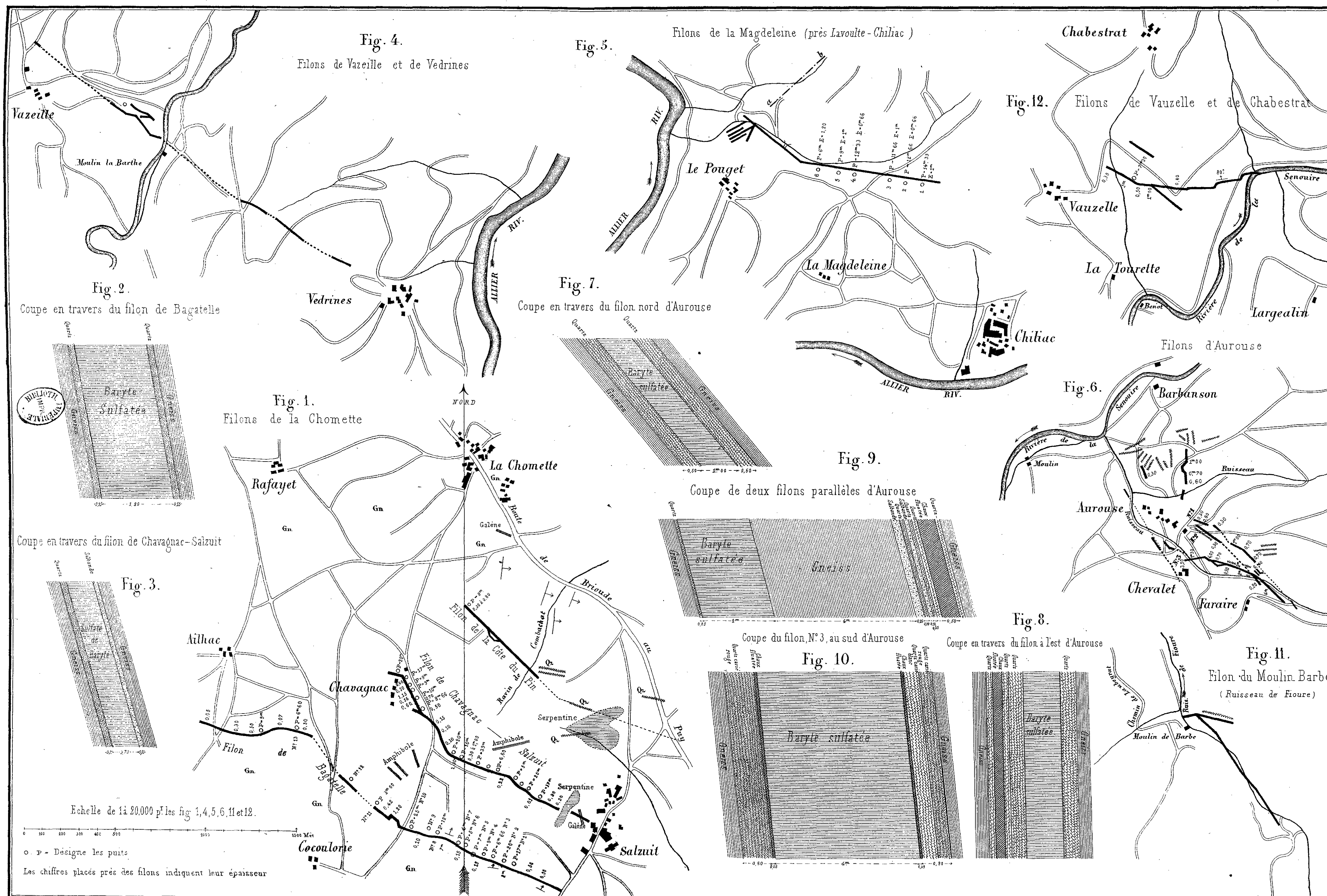


















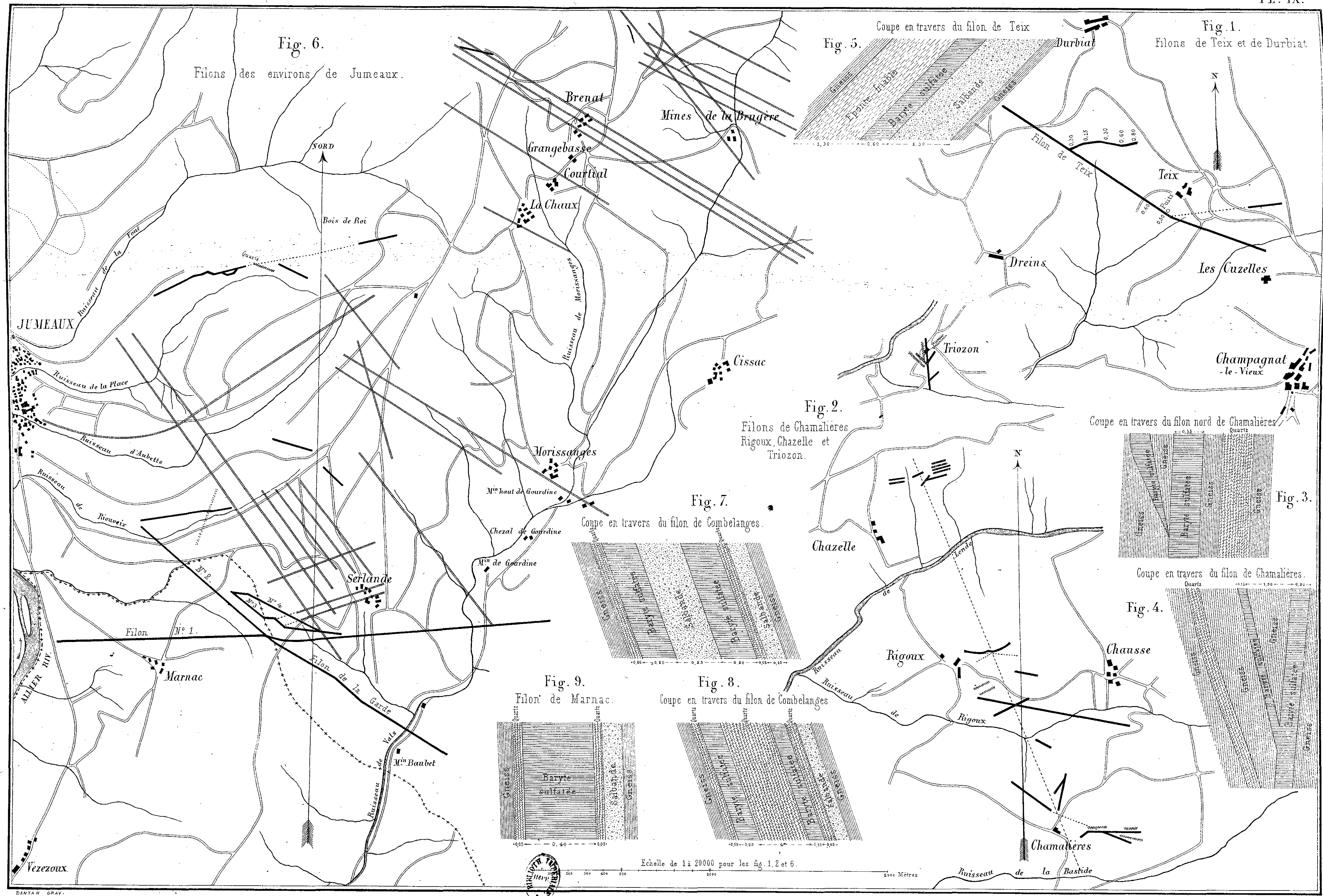










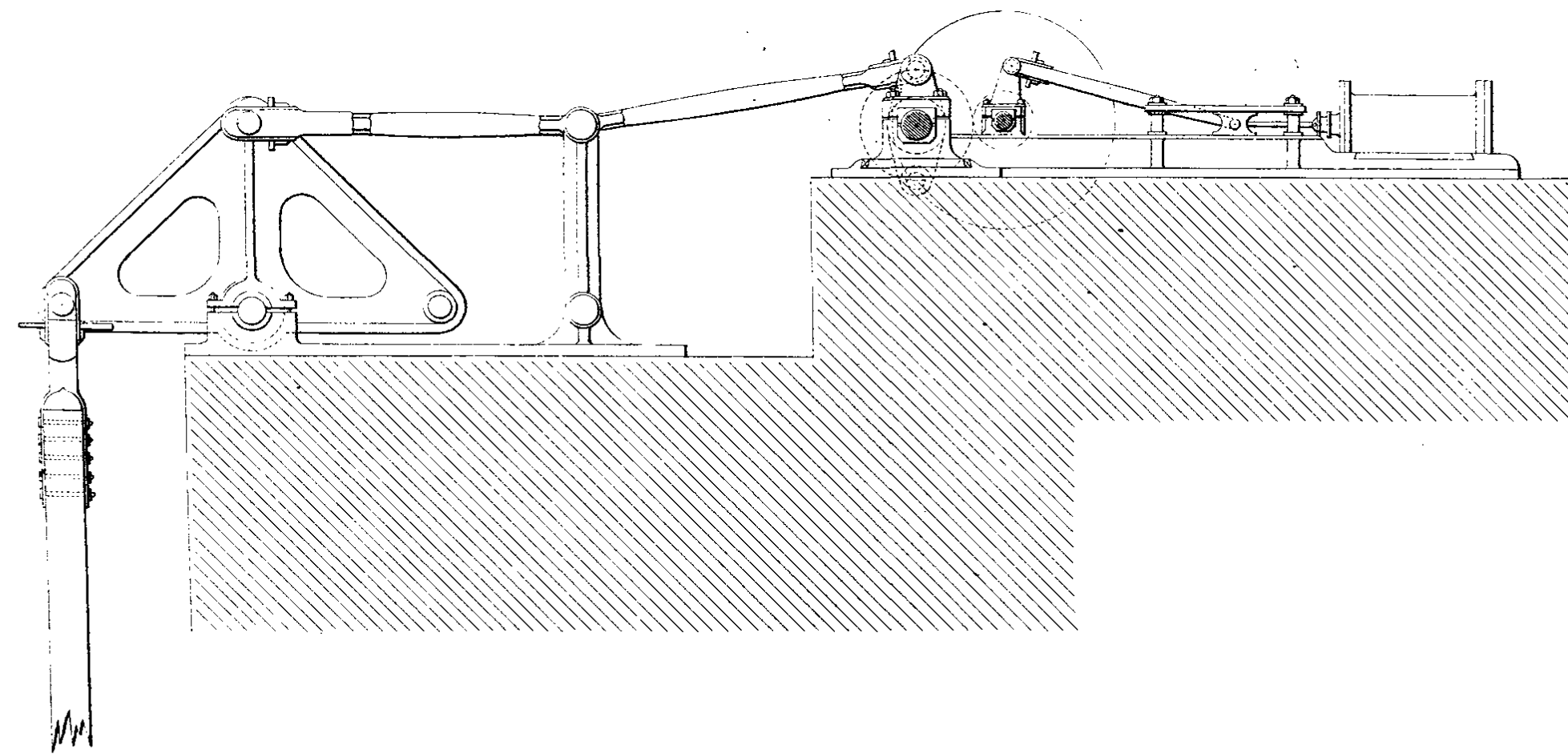






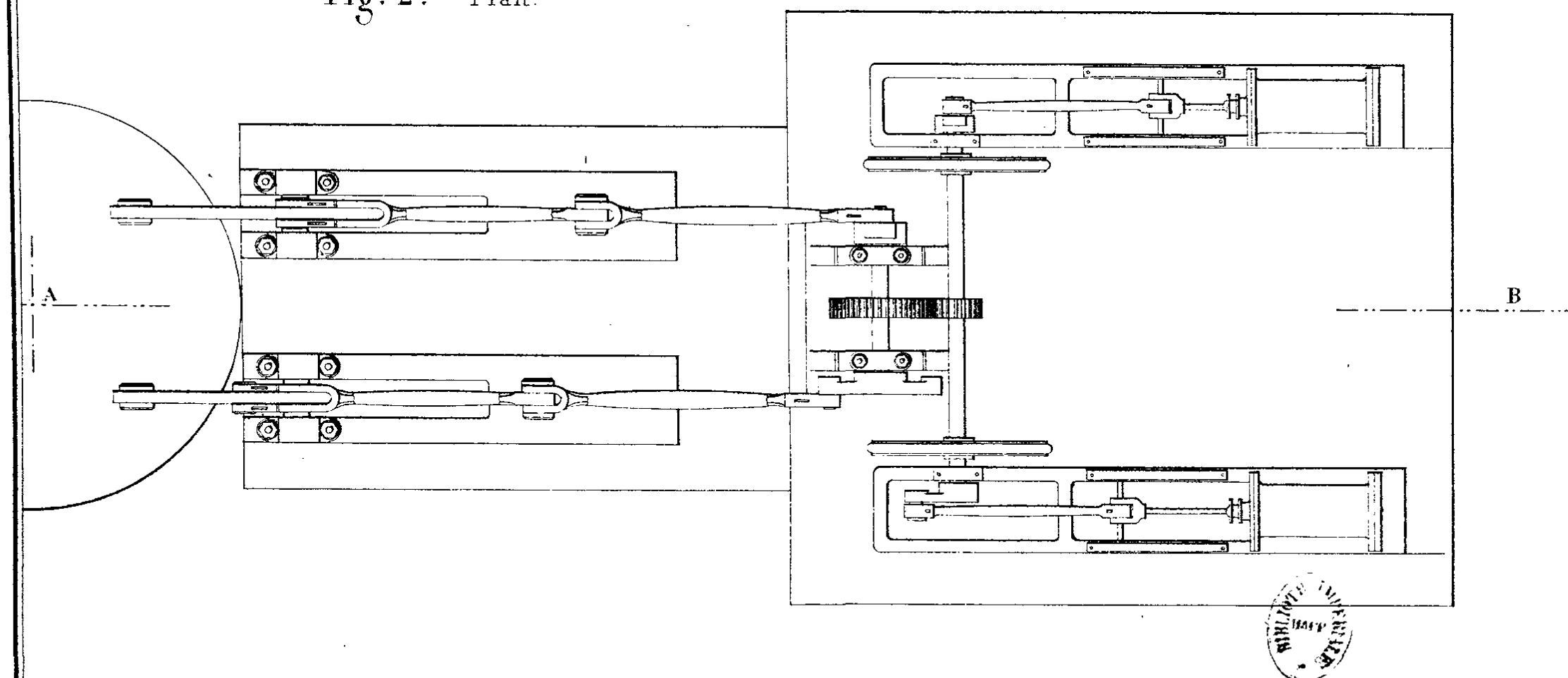
Fig. 1.

Coupe suivant AB, fig. 2.



Epuisement à West Sleekburn.

Fig. 2. Plan.



Echelle

20 50 0 1 2 3 4 5 6 7 8 9 10 Mèt.

Fig. 3.

Epuisement à North Seaton.

Elévation et coupe.

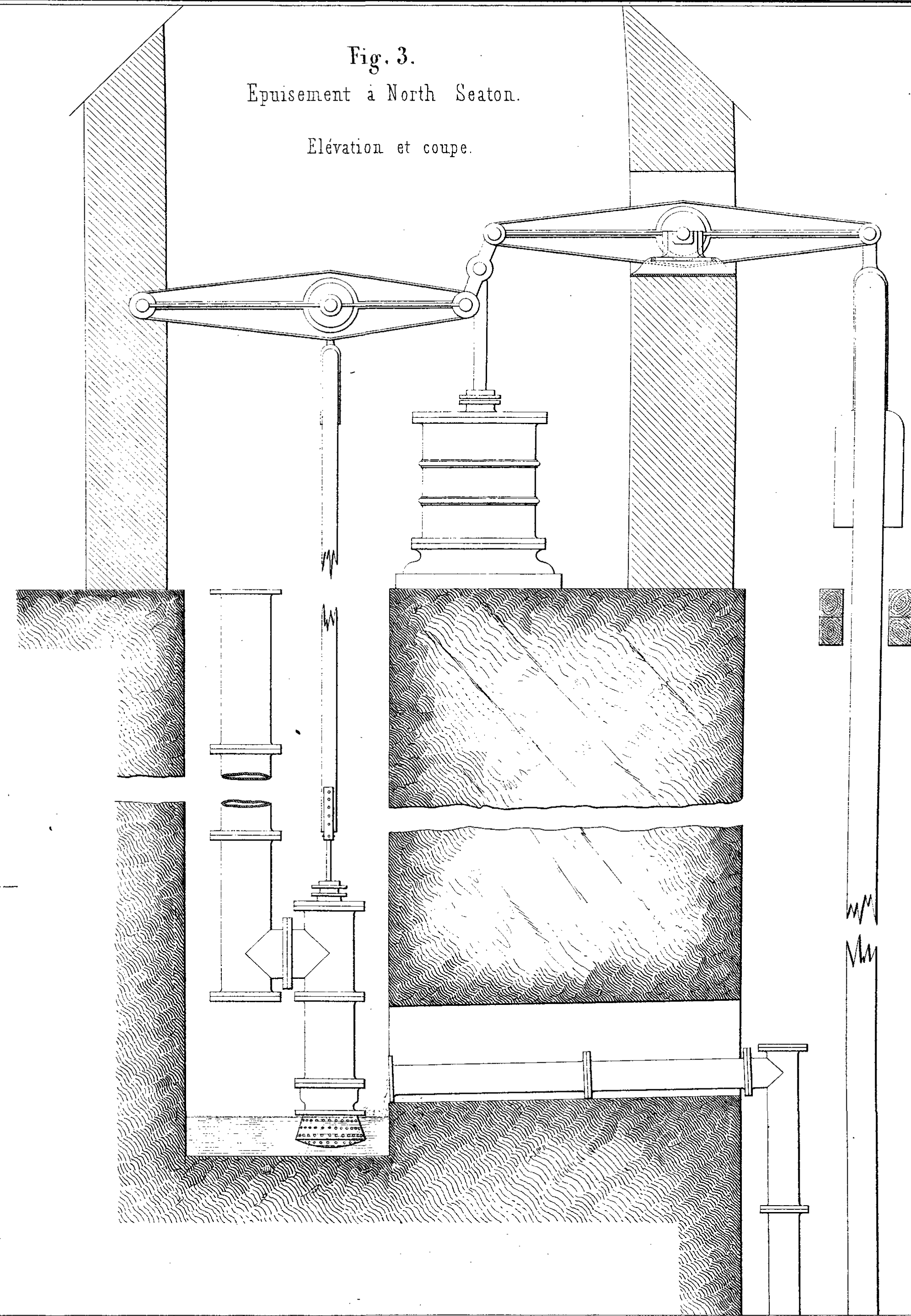








Fig. 1. Vue d'ensemble des mines Cowpen Hartley.

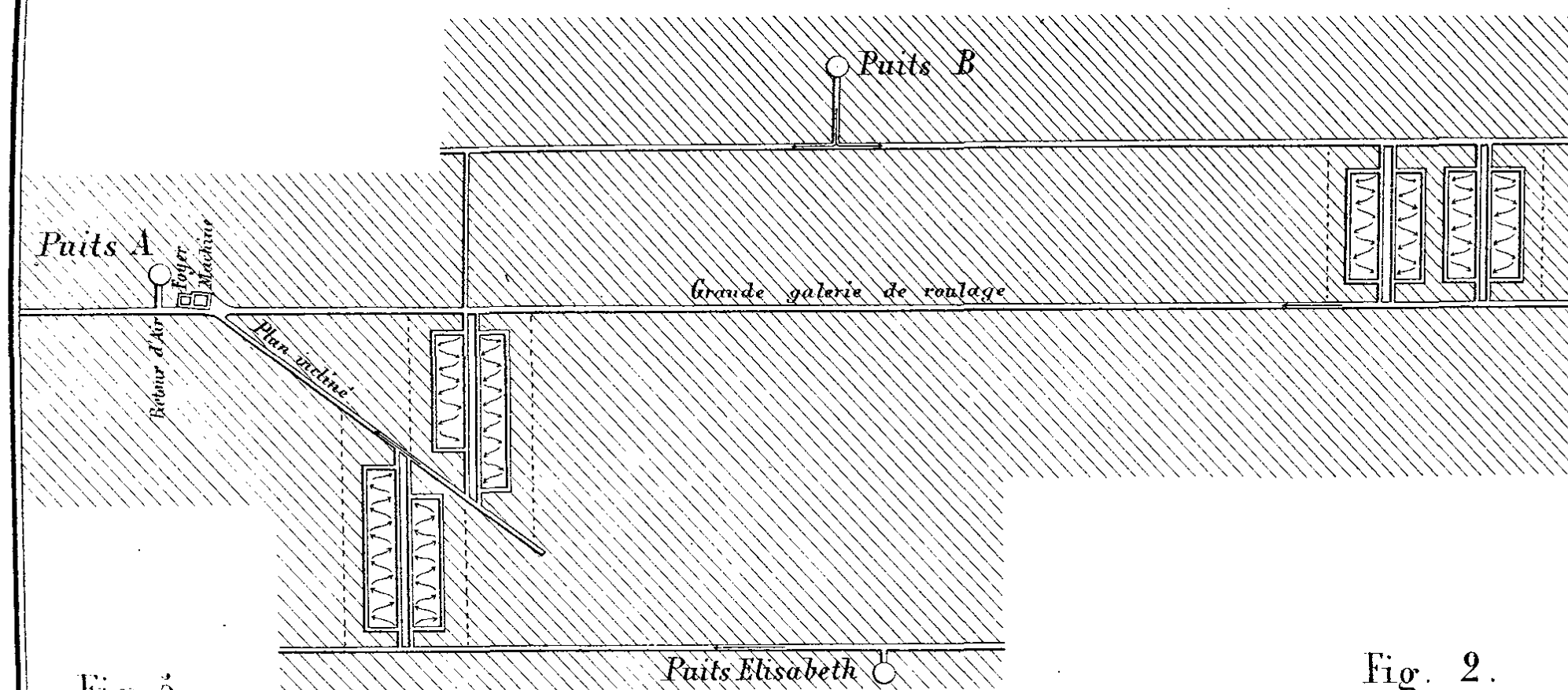


Fig. 5.

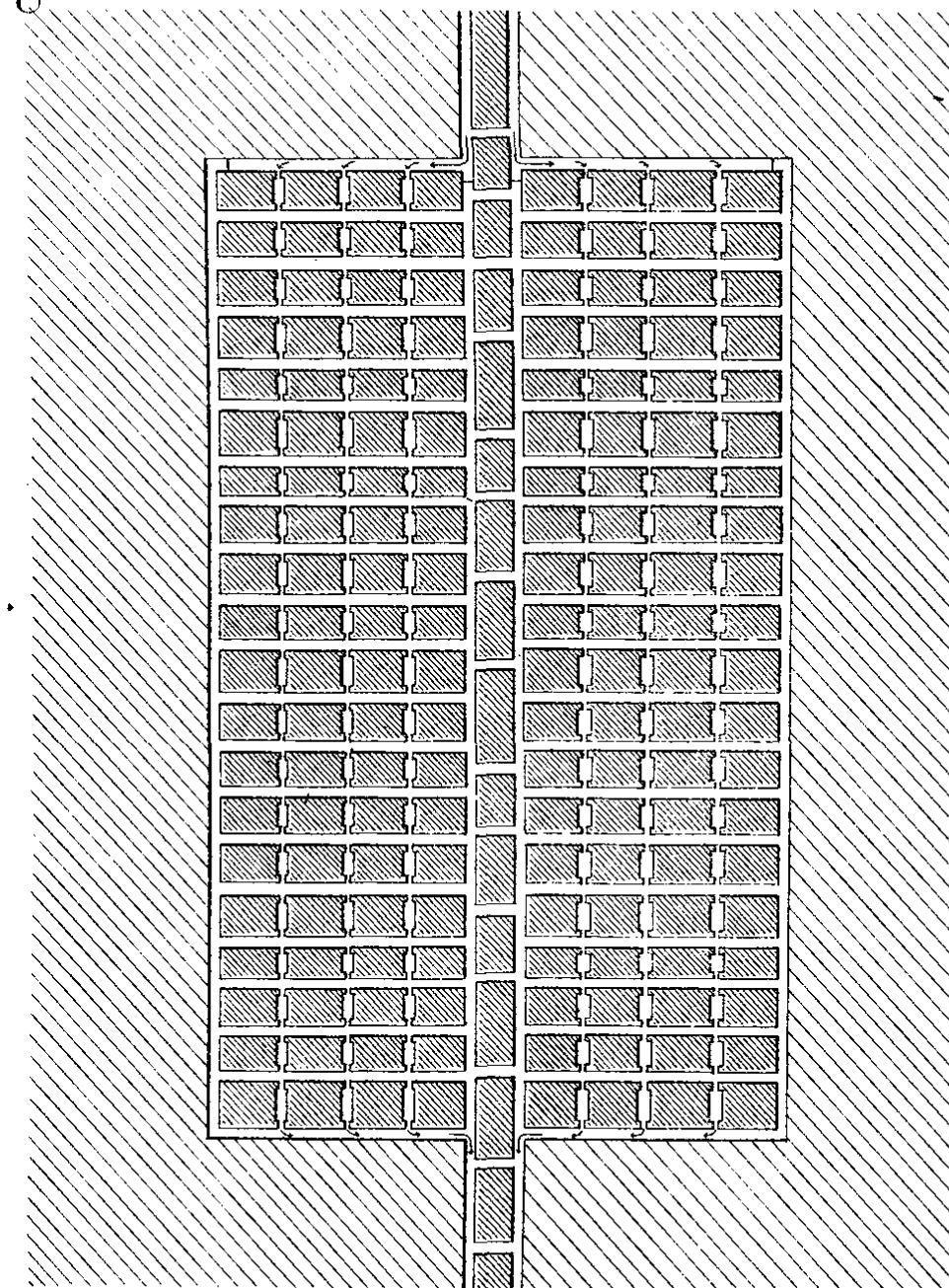


Fig. 2.

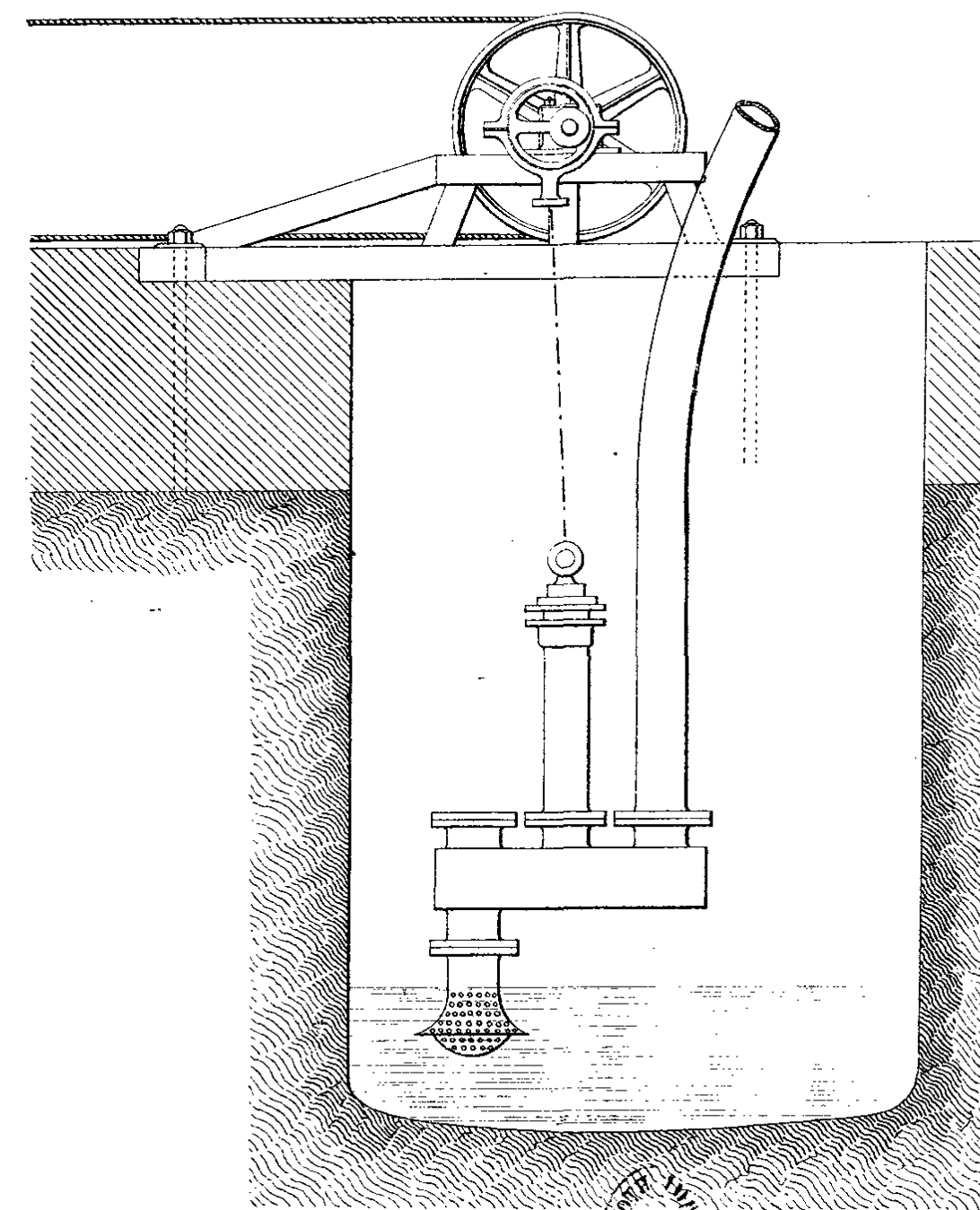


Fig. 3.

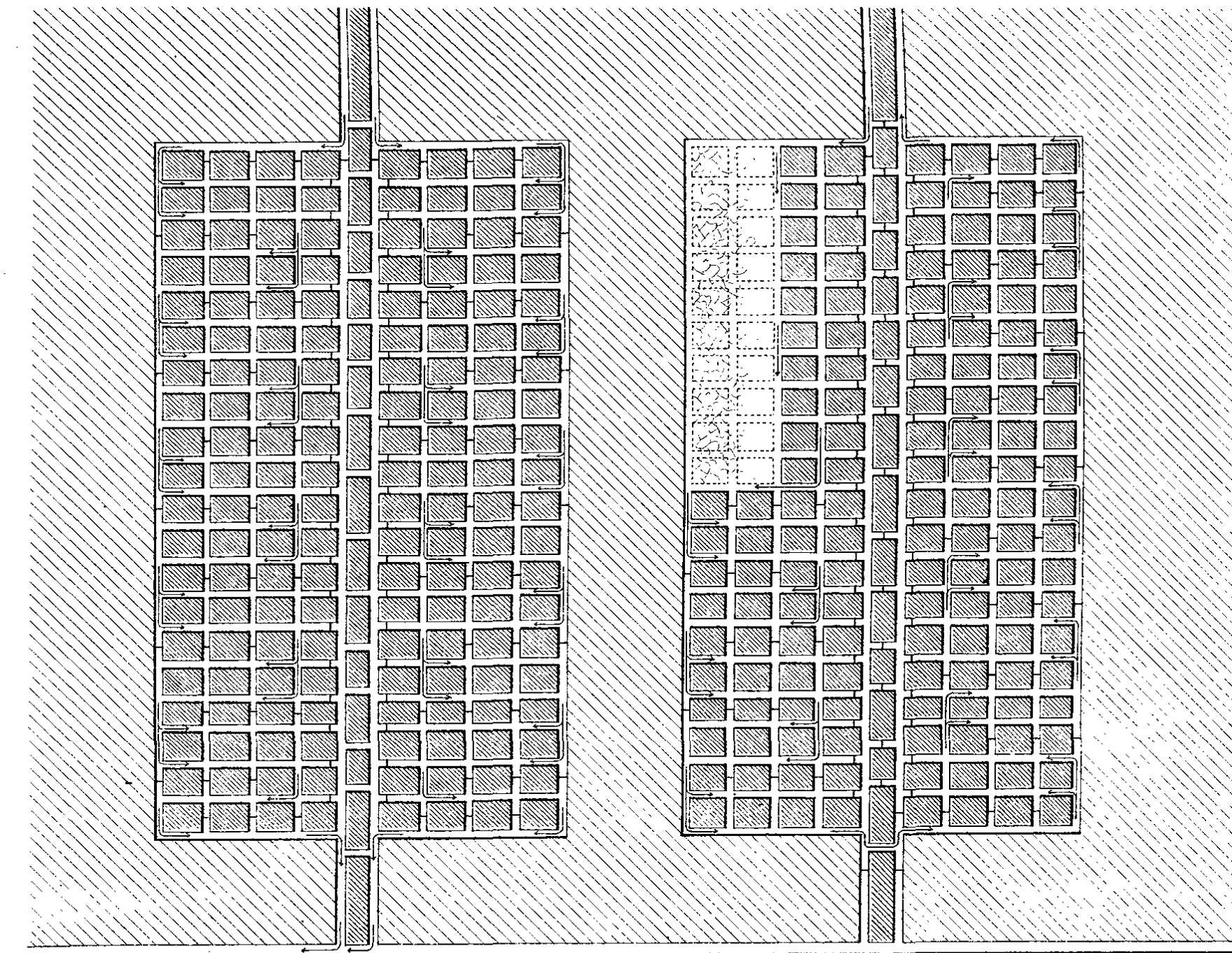
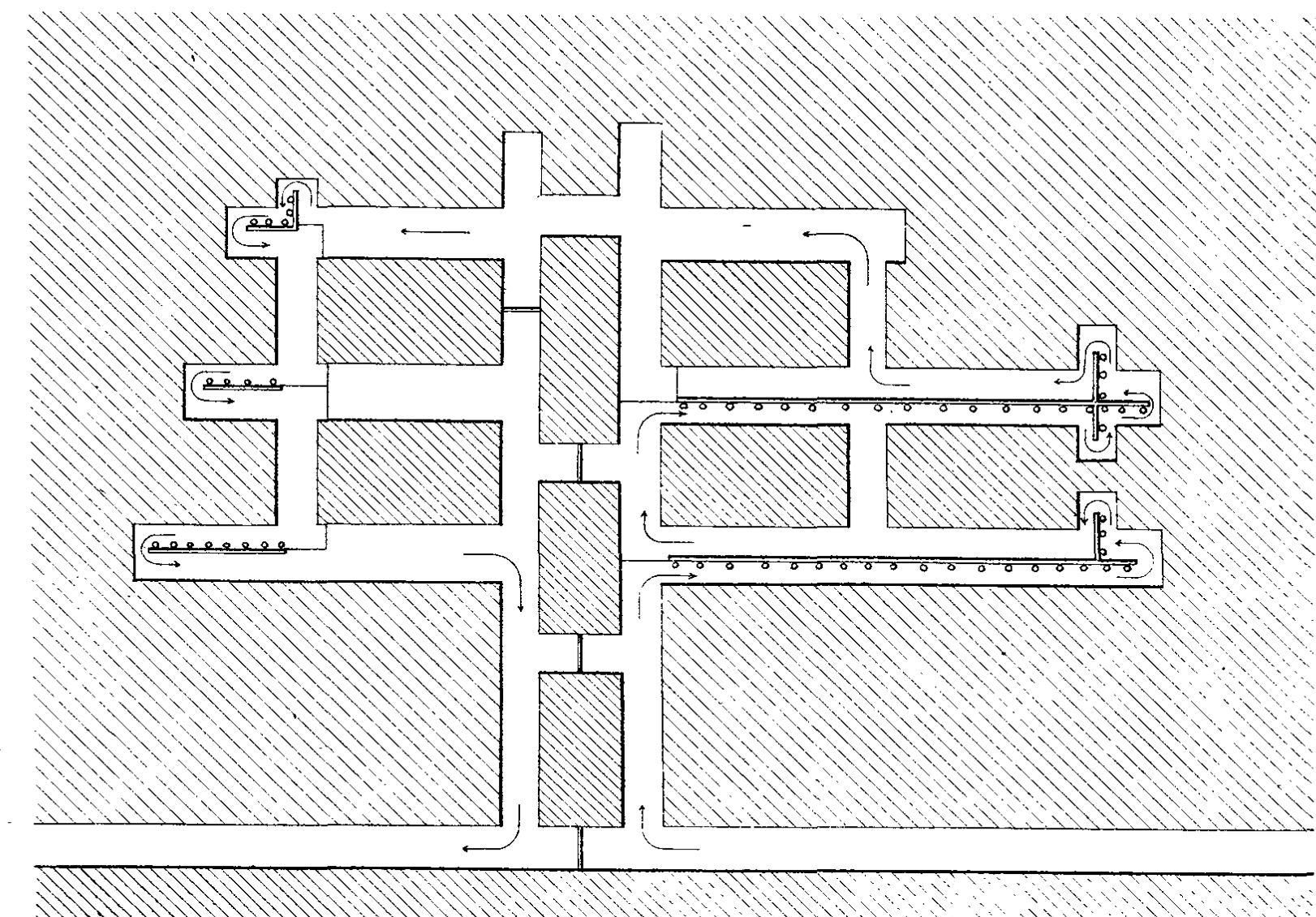
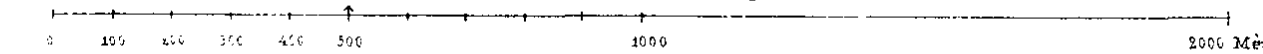


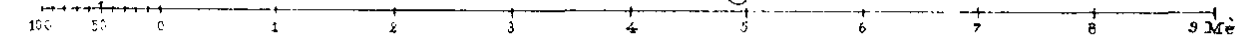
Fig. 4. Exploitation et aérage par la méthode Pannels Works



Echelle de la fig. 1.



Echelle de la fig. 2.



Echelle des fig. 3 et 5.



Echelle de la fig. 4.

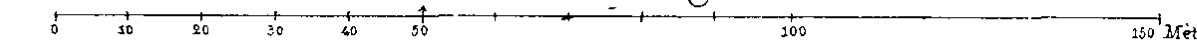
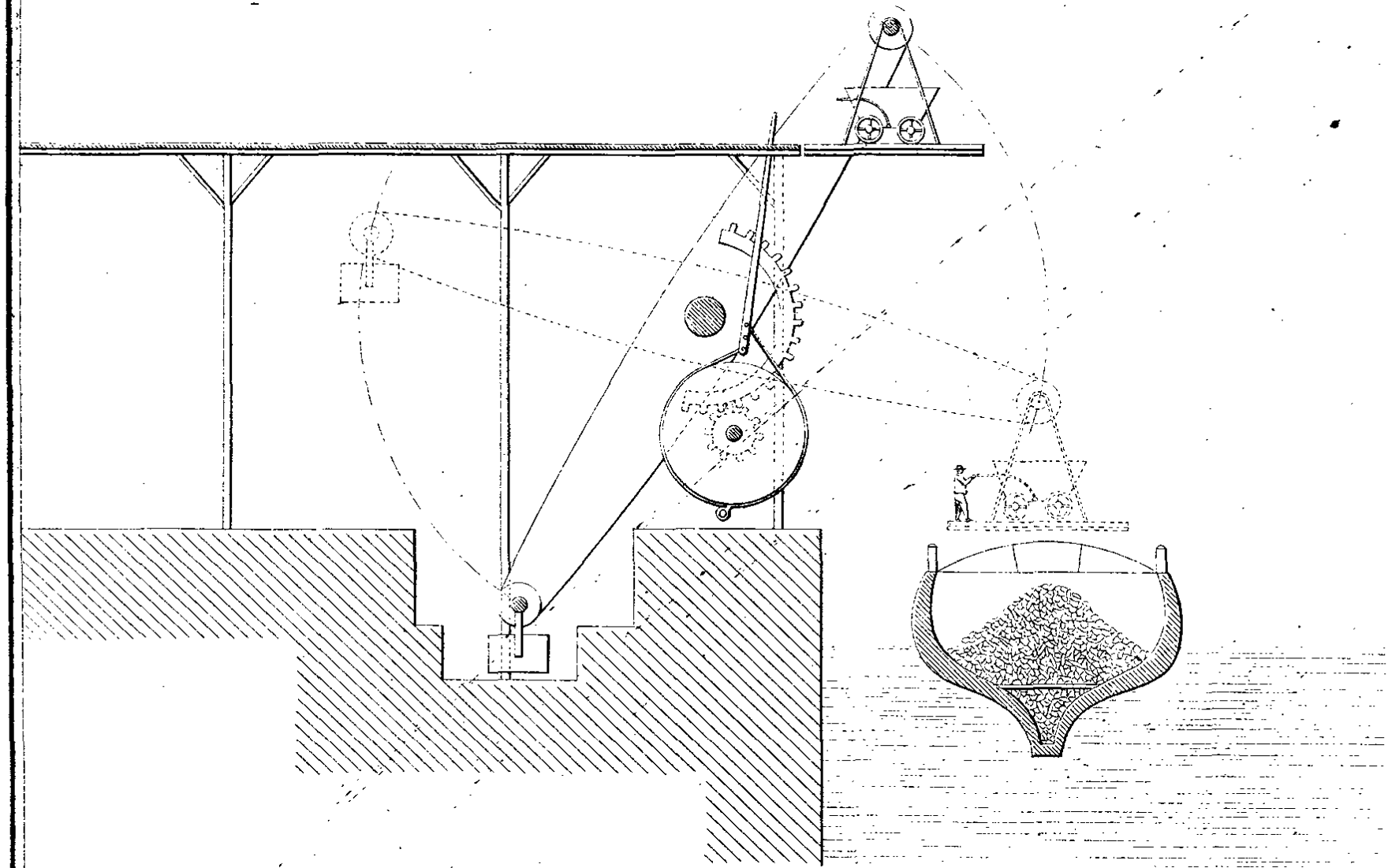








Fig. 1.  
Drap de Sunderland.



Parachute écossais.

Fig. 5.

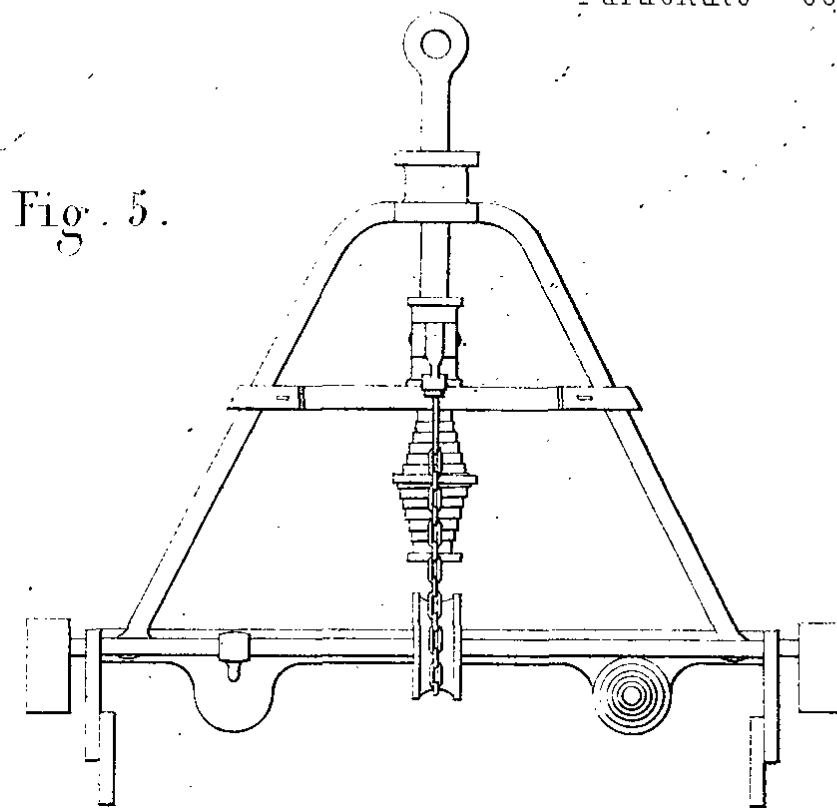


Fig. 6.

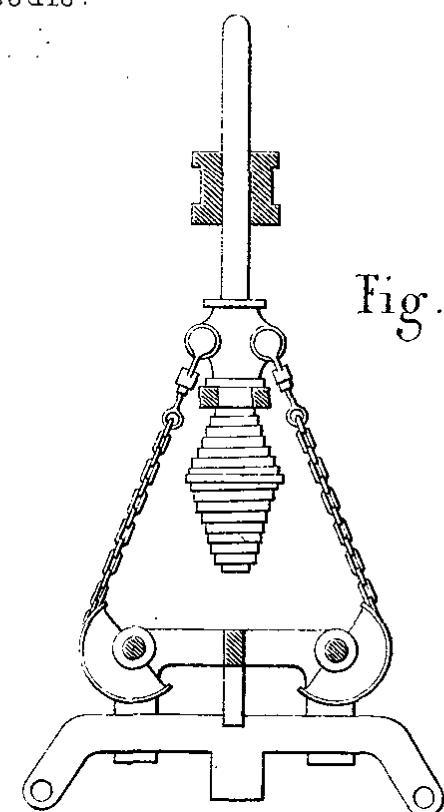


Fig. 4.

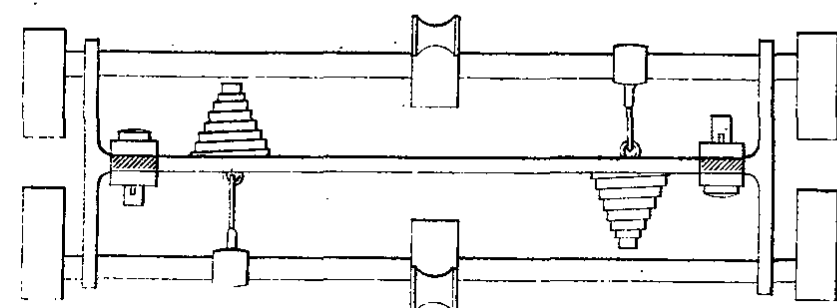


Fig. 7.

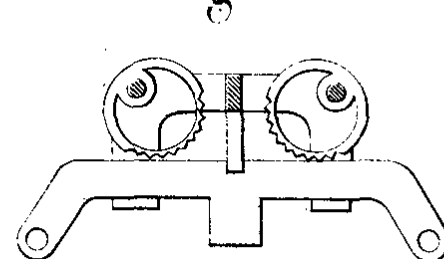


Fig. 3.

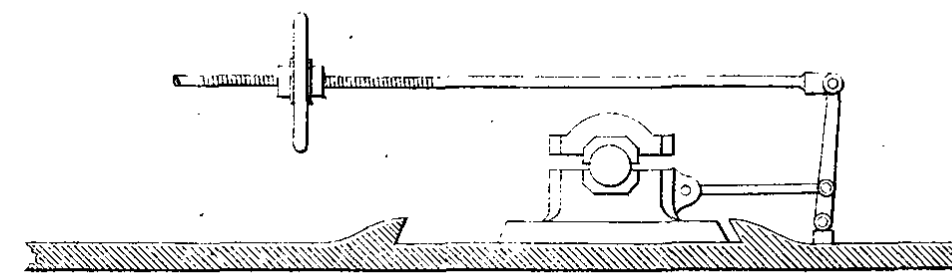


Fig. 2.

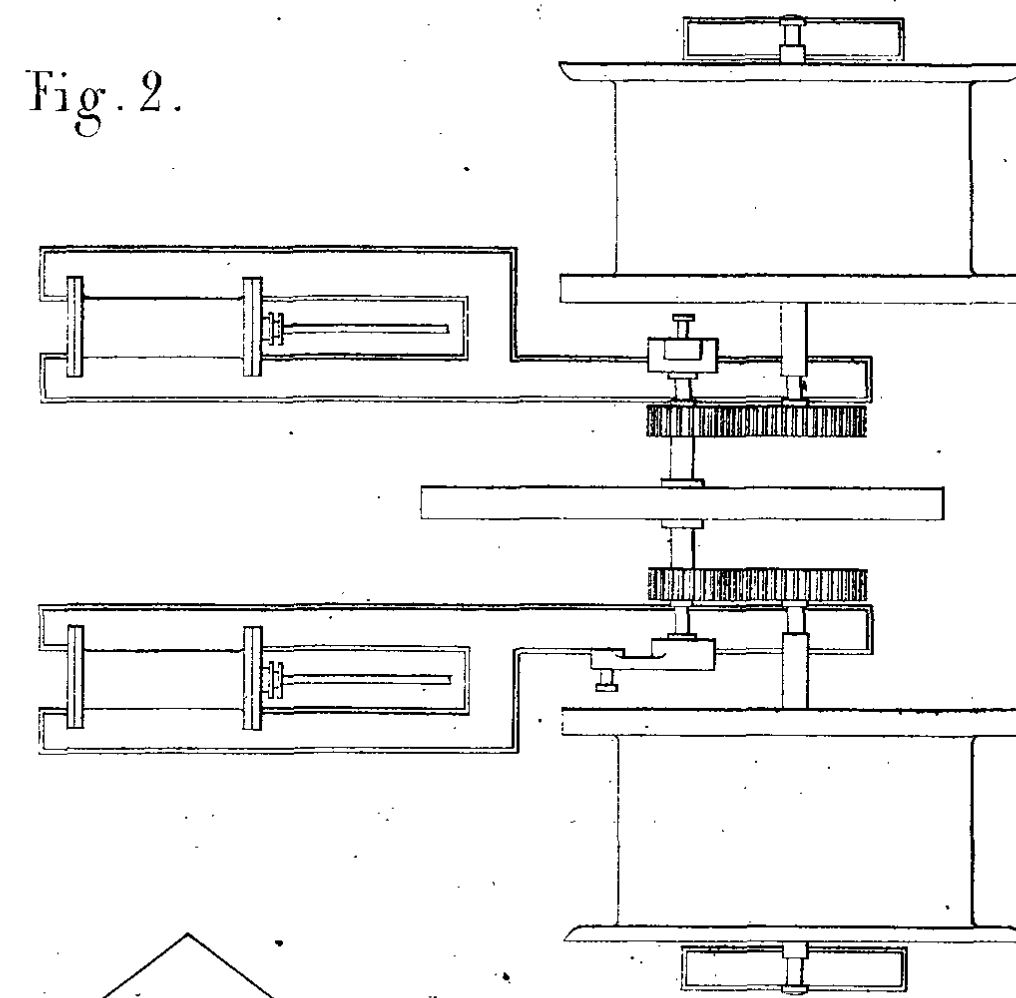
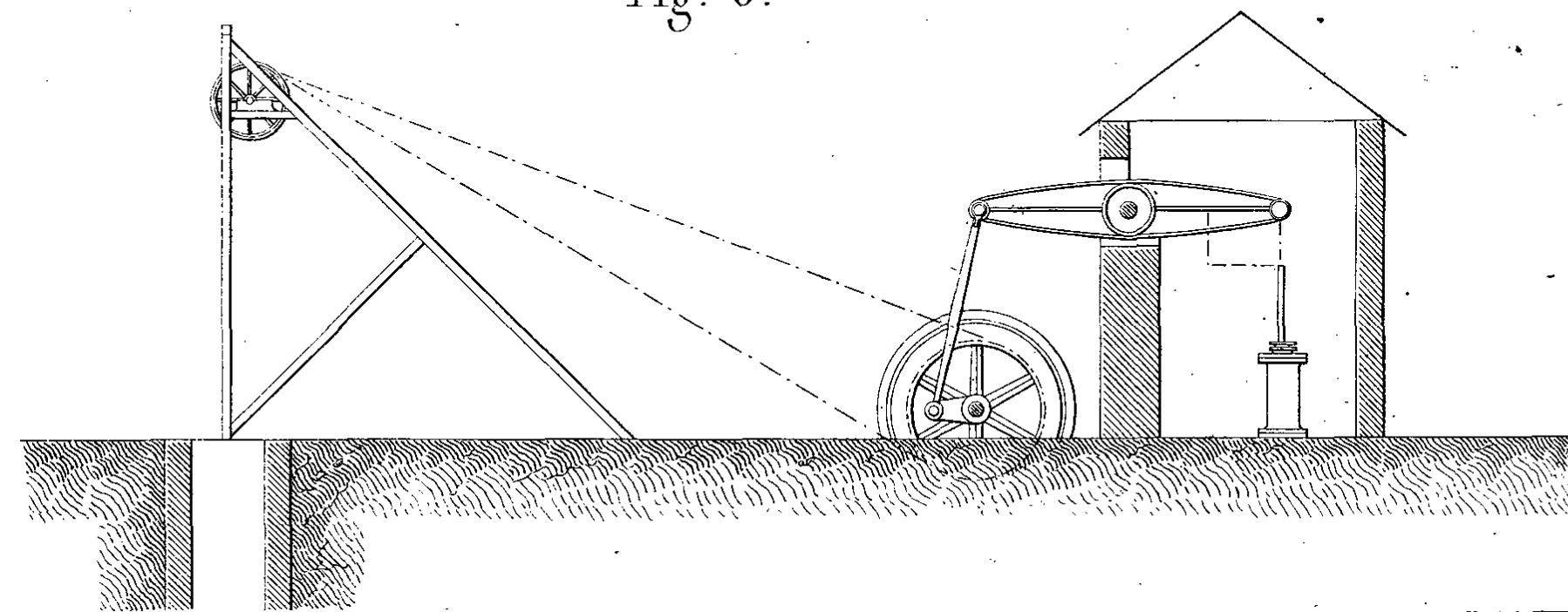
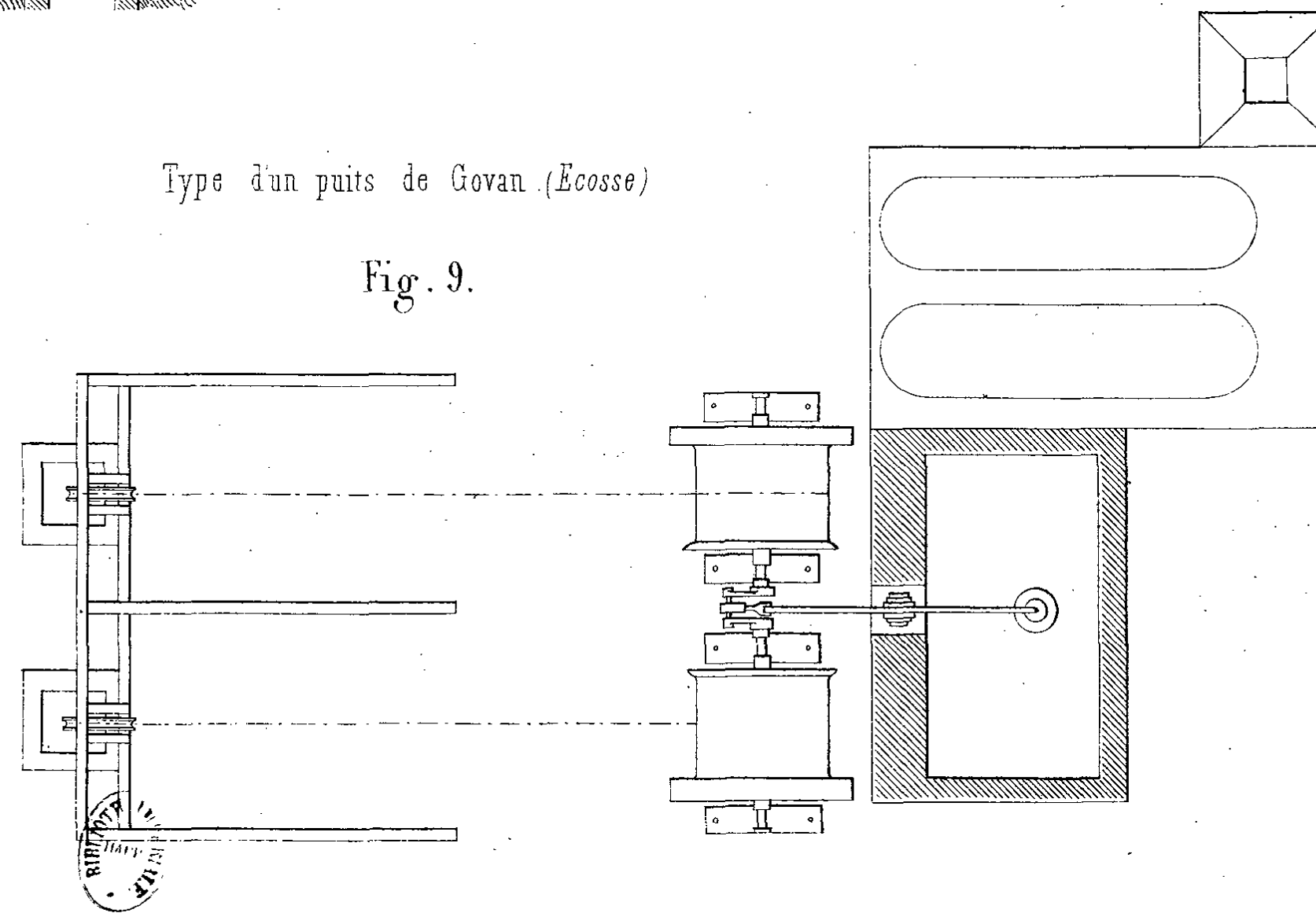


Fig. 8.



Type d'un puits de Govan (Ecosse)

Fig. 9.



Echelle des fig. 1, 8, 9.

Echelle de la fig. 2.

Echelle de la fig. 3.

Echelle des fig. 4, 5, 6, 7.







Fig. 1.

Vue de la grande face.

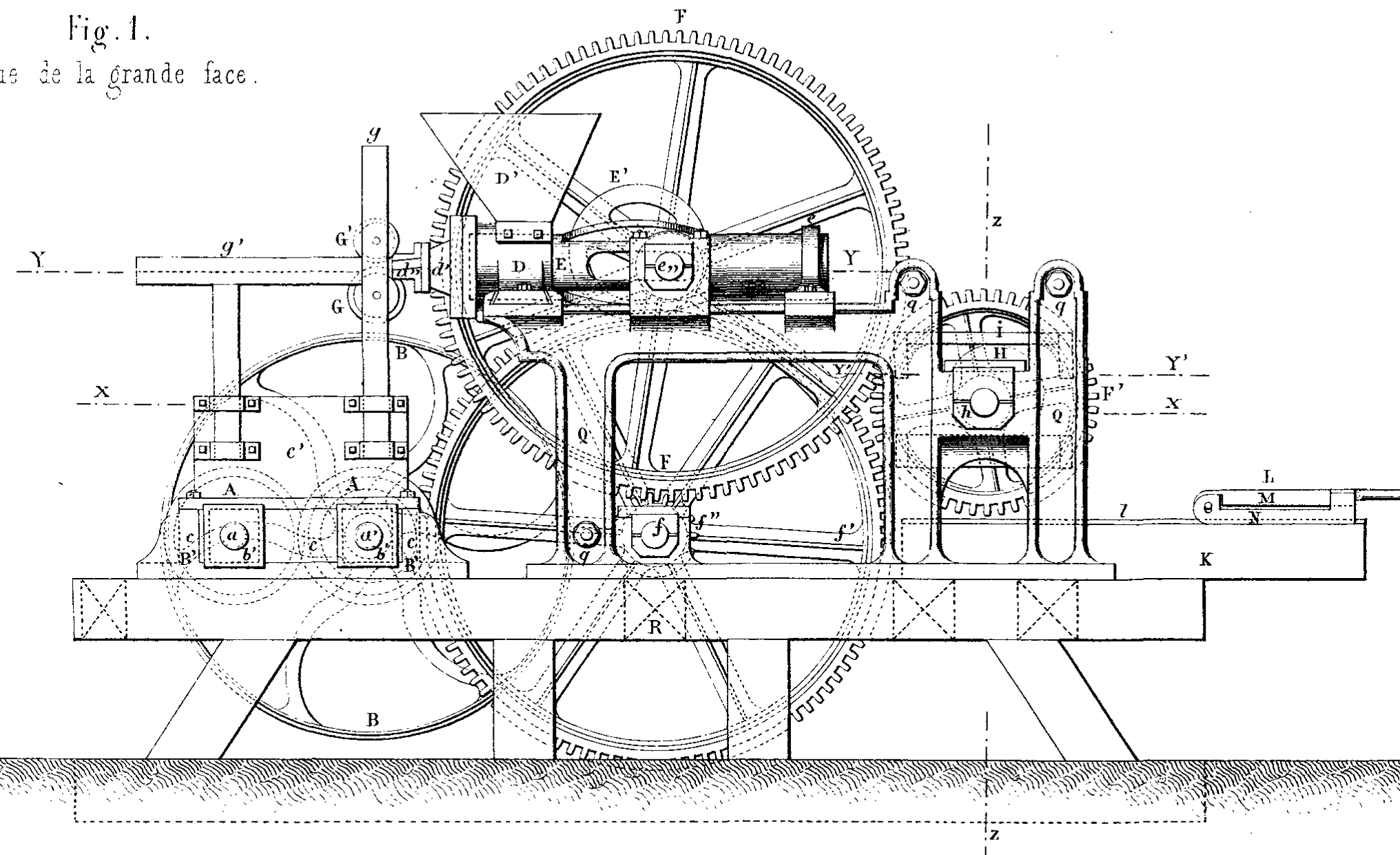


Fig. 2.

Coupe verticale suivant l'axe de la machine.

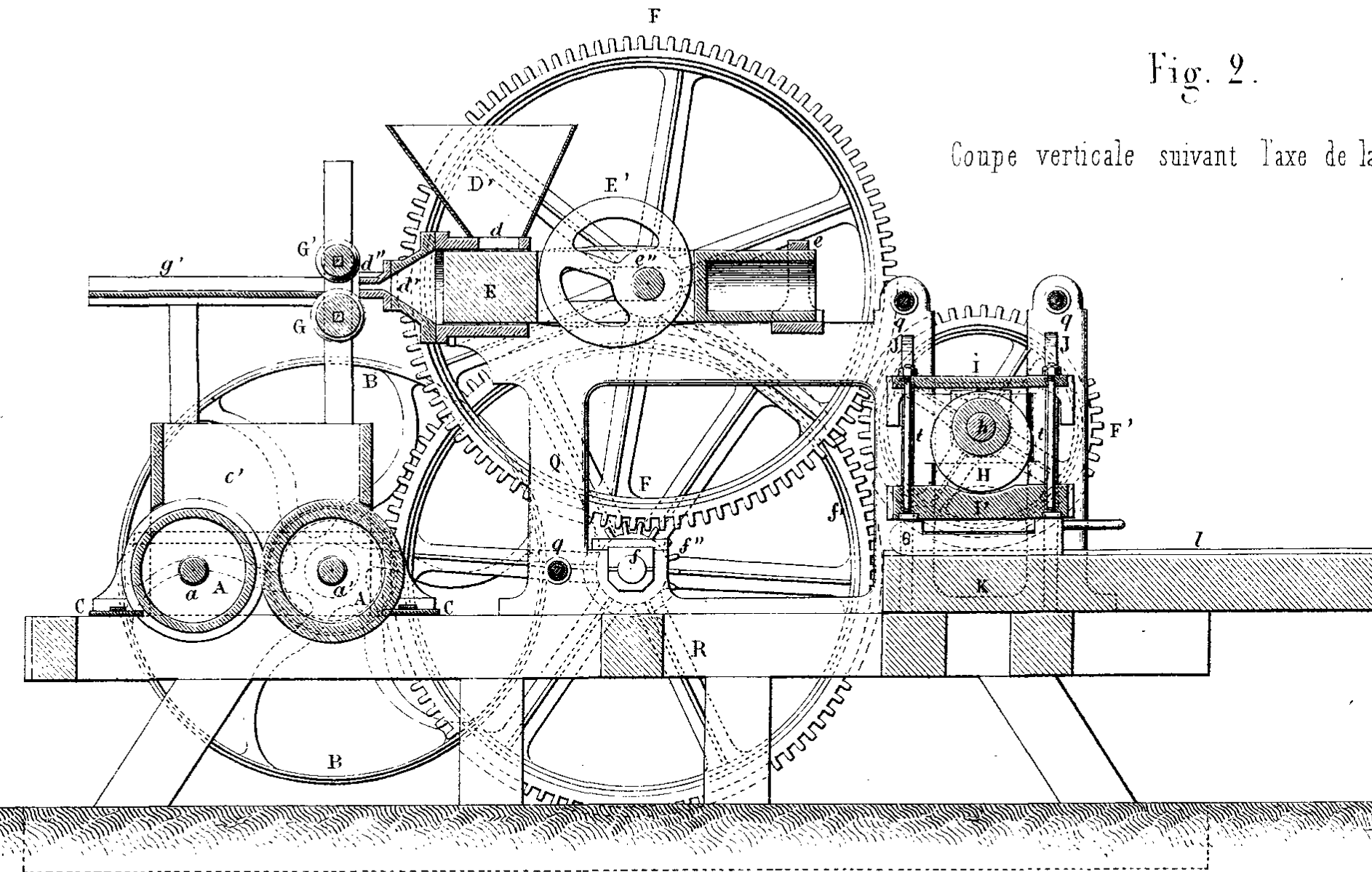


Fig. 3.

Coupe horizontale sur XX de la fig. 1.

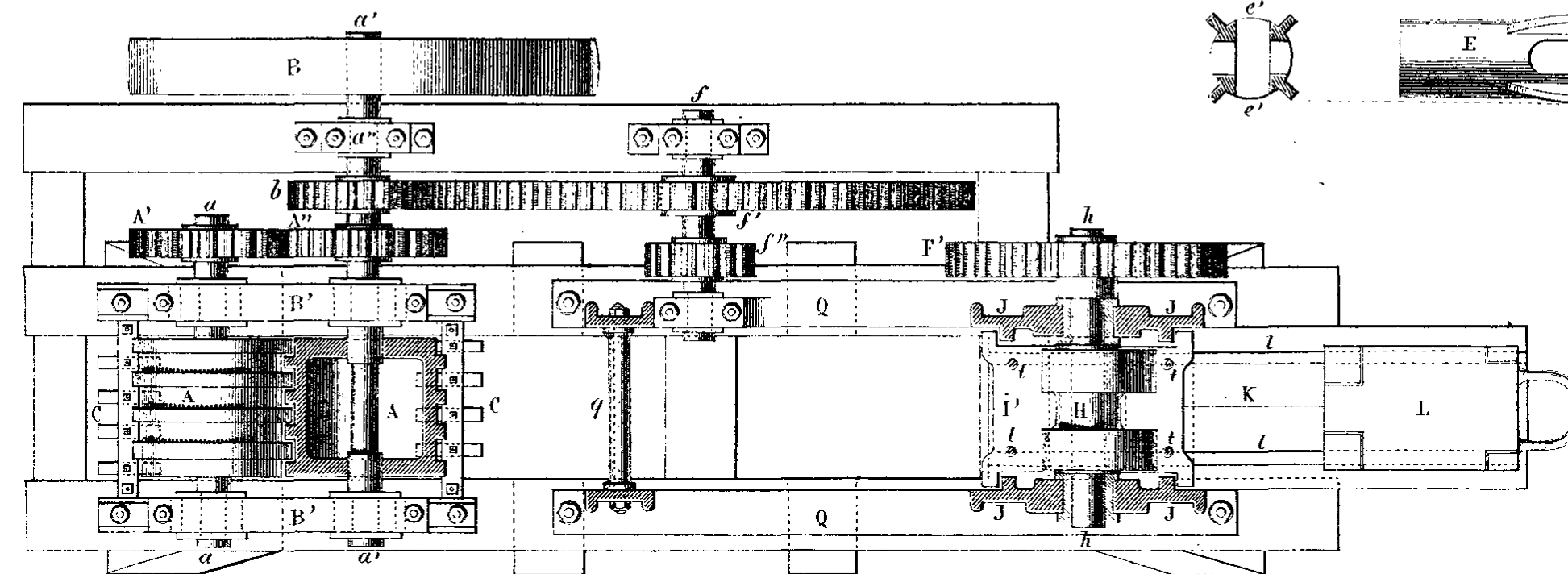


Fig. 6.

Refouloir de la filière.

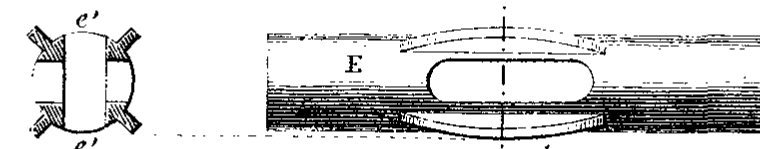
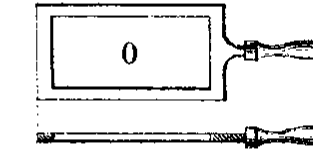
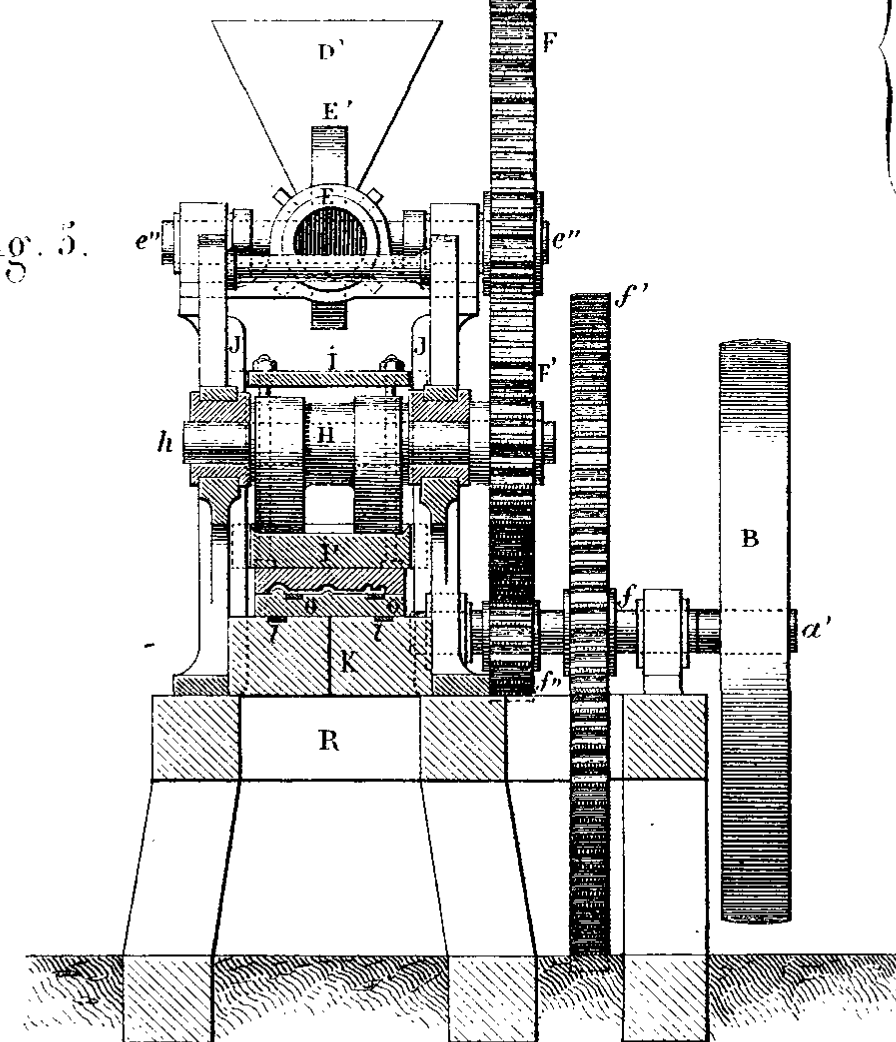


Fig. 10. Main en fer



Coupe verticale sur ZZ de la fig. 1.

Fig. 5.



Collier d'excentrique de la presse

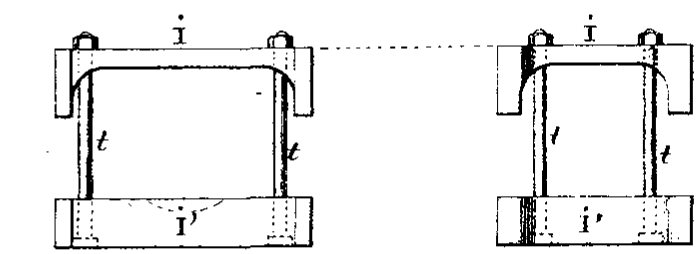
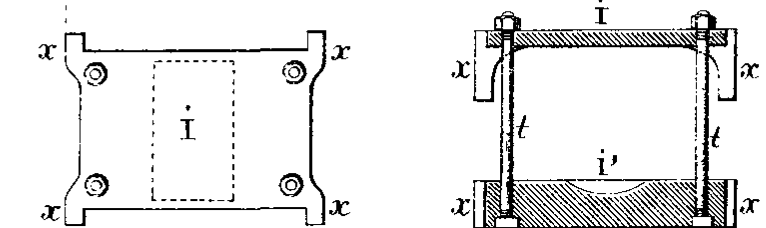


Fig. 7.



Récipient de la filière

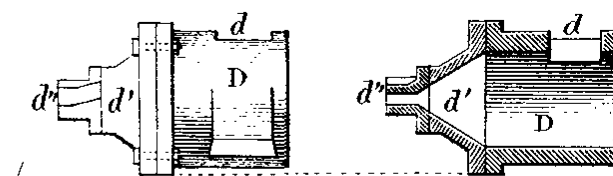


Fig. 8.

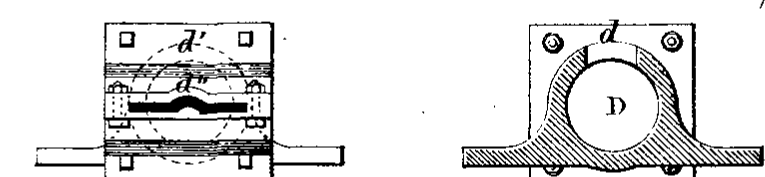


Fig. 4.

Coupe horizontale sur YYYY' de la fig. 1.

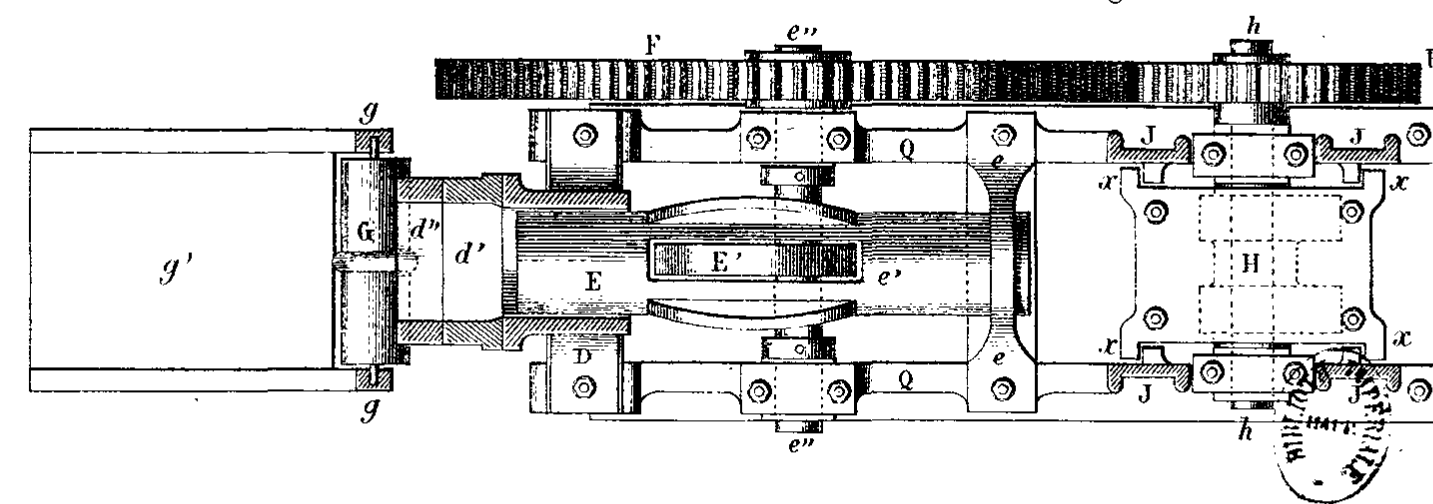
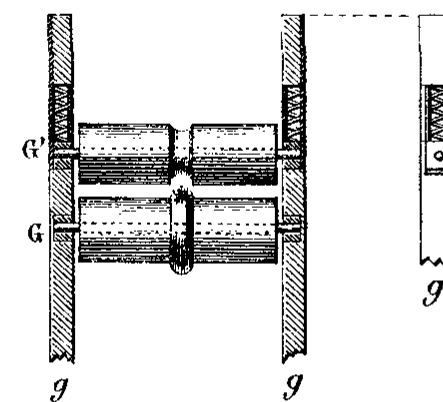


Fig. 9.

Rouleaux de la filière.



Echelle.

100 50 0 1 Mèt.







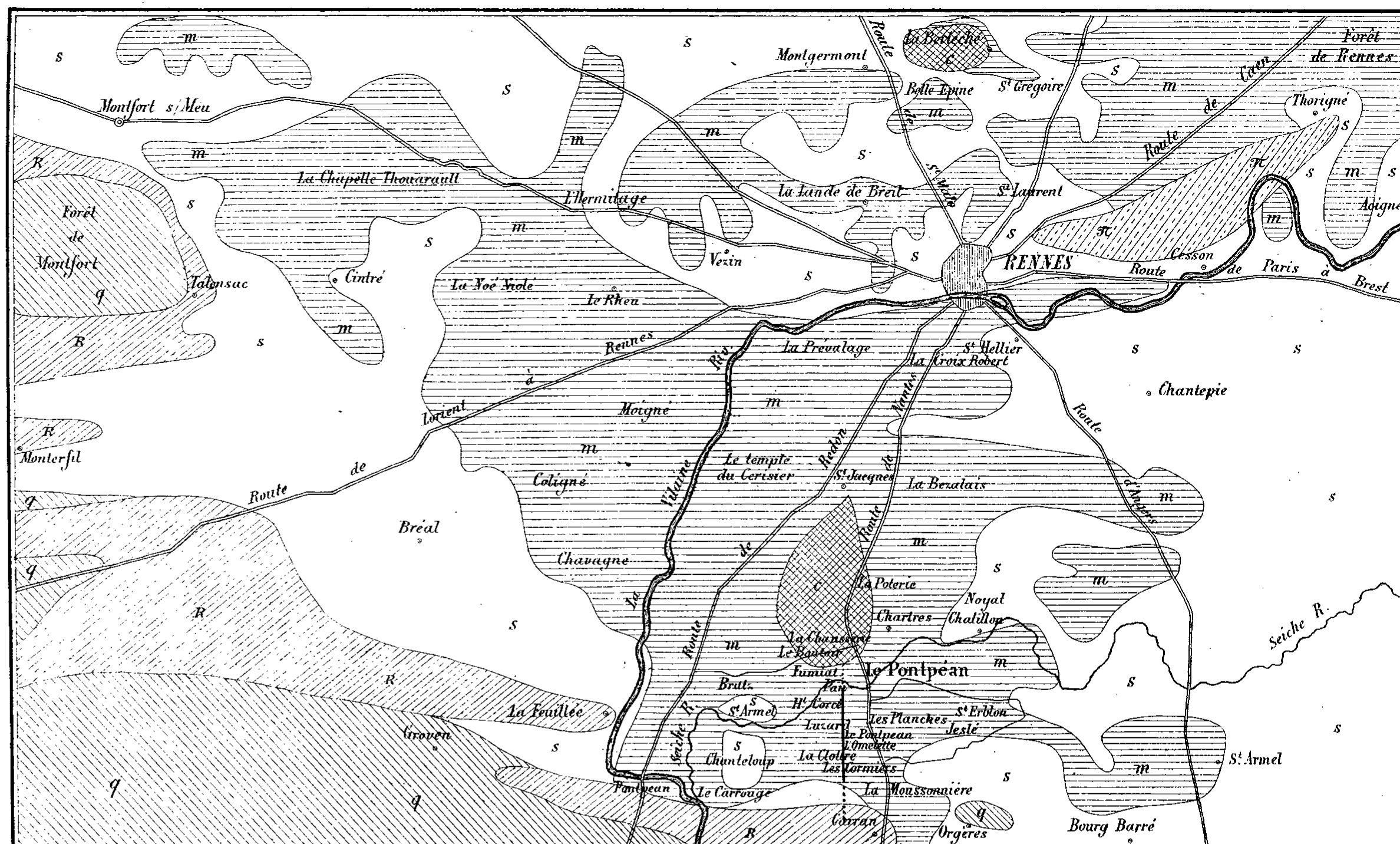
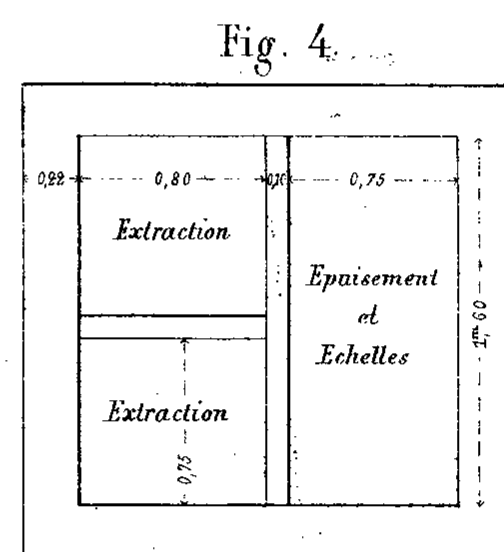
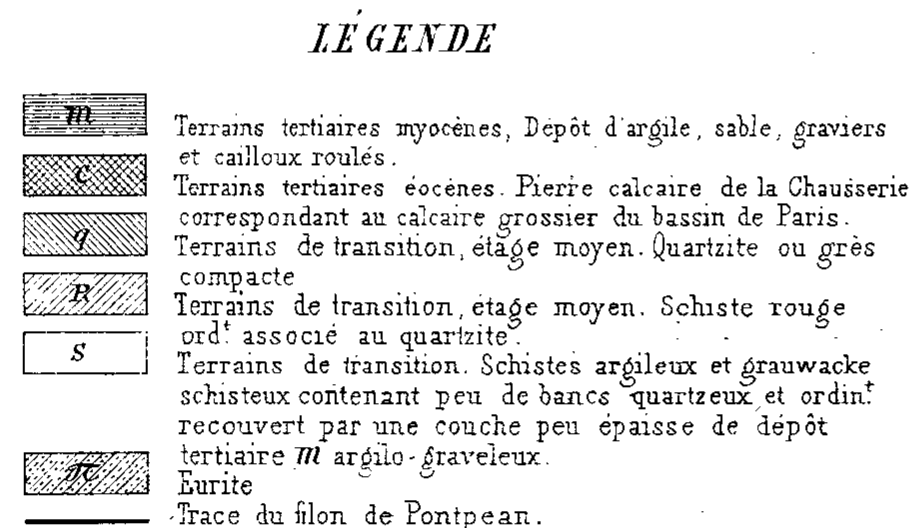
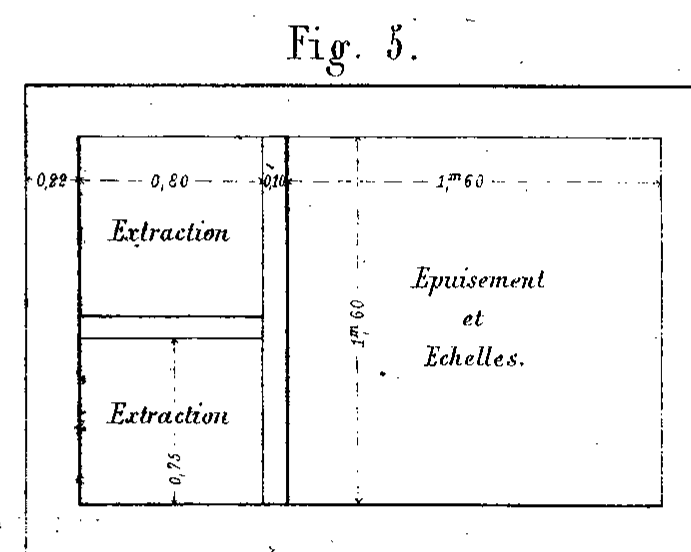


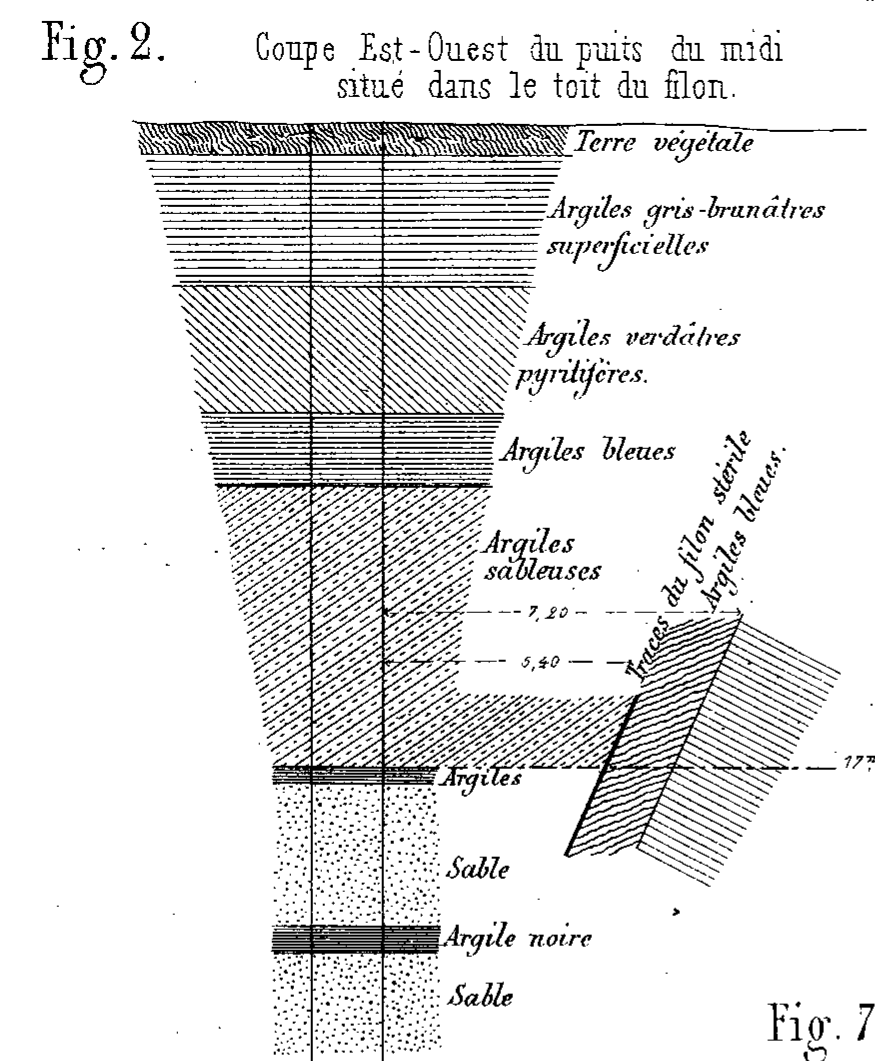
Fig. 1. Extrait de la Carte géologique du département de l'Ille et Vilaine par M. DUROCHER.



Coupe par AB, fig. 6.



Coupe par CD, fig. 6.



Coupe du renflement du filon de Pontpéan au 13<sup>e</sup> niveau sud à 6 mèt. sud du Puits de l'Orme

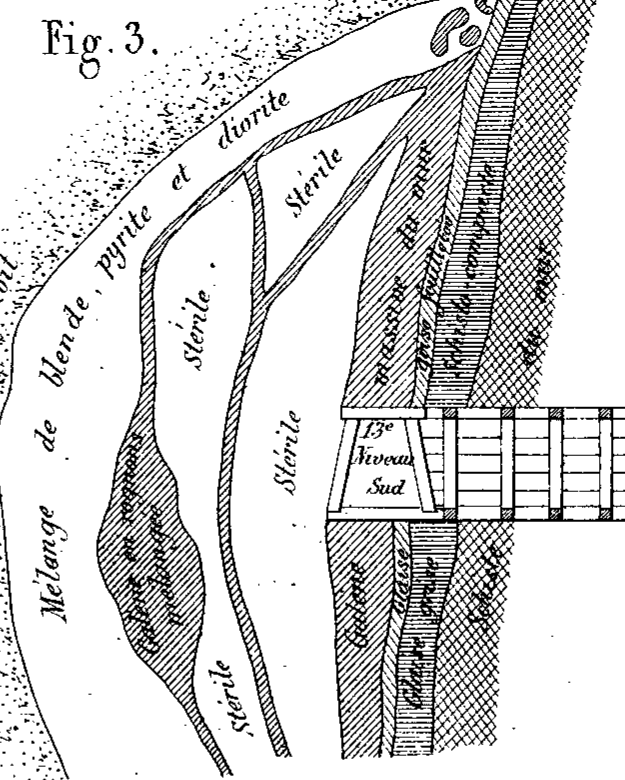
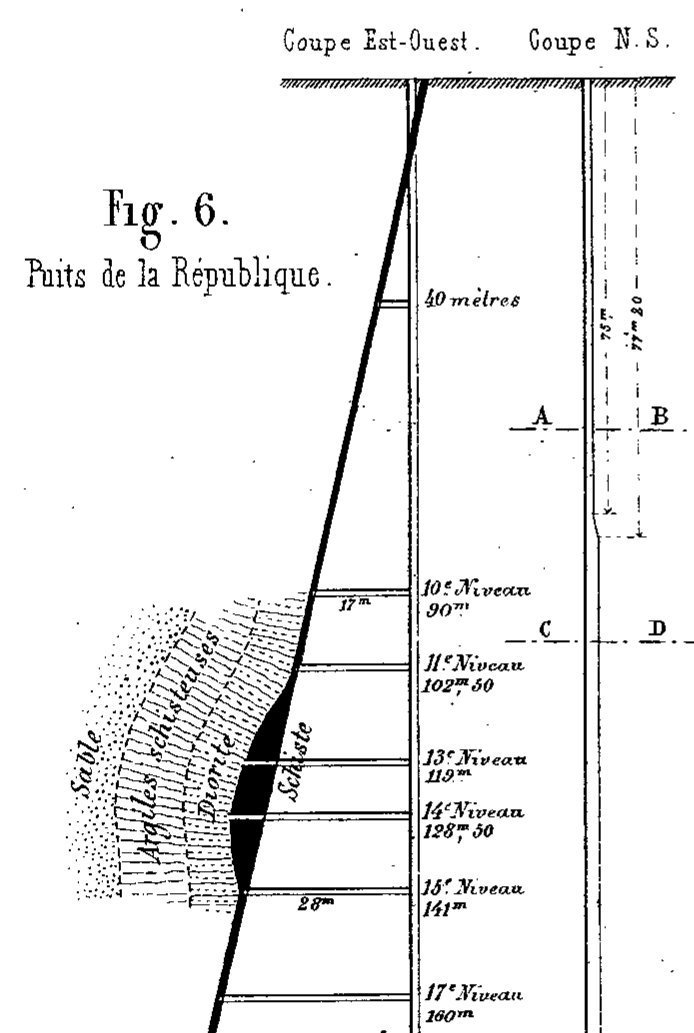
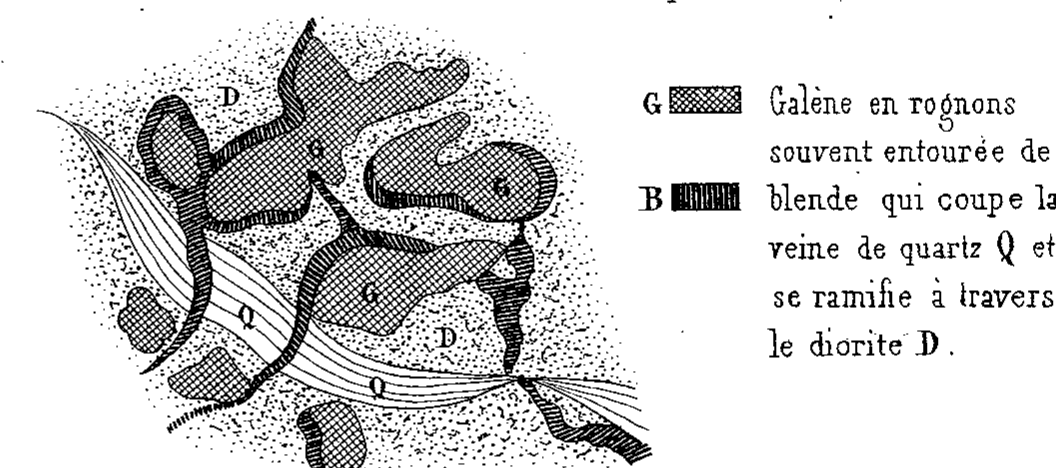


Fig. 7. Disposition des minerais dans le filon parallèle. (Puits St Joseph)



Echelles.

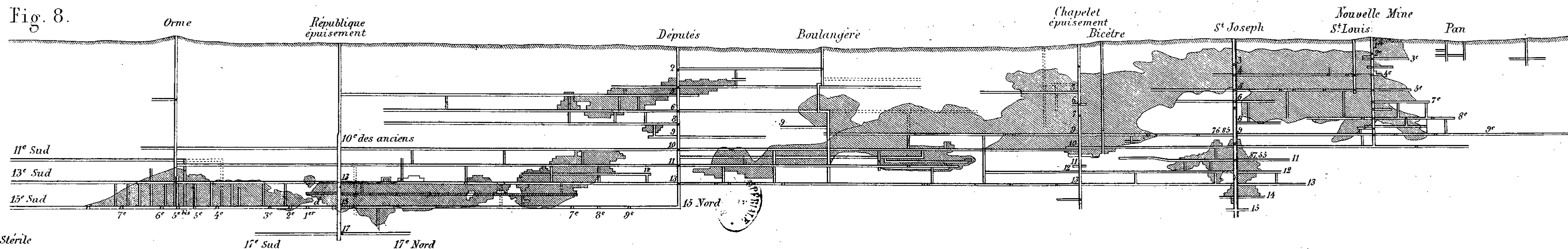
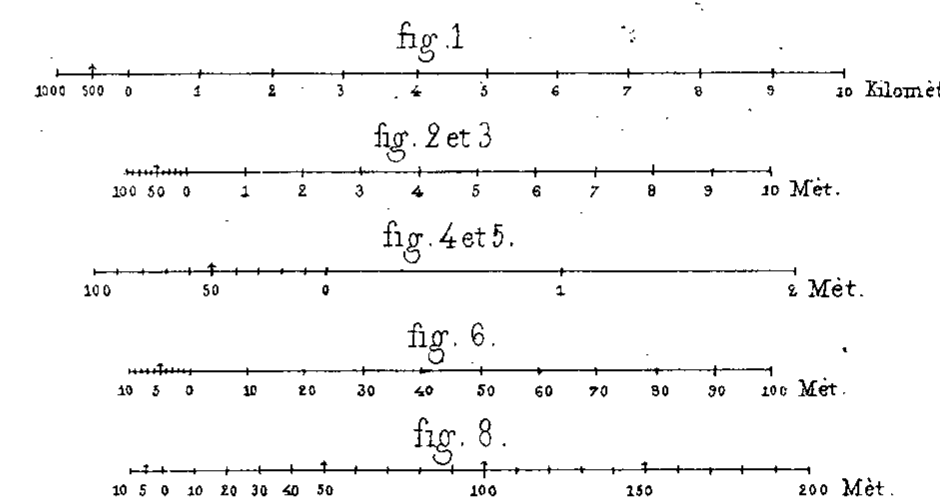








Fig. 1.  
Coupe par le puits des Députés à l'étage de 40 Mètres.

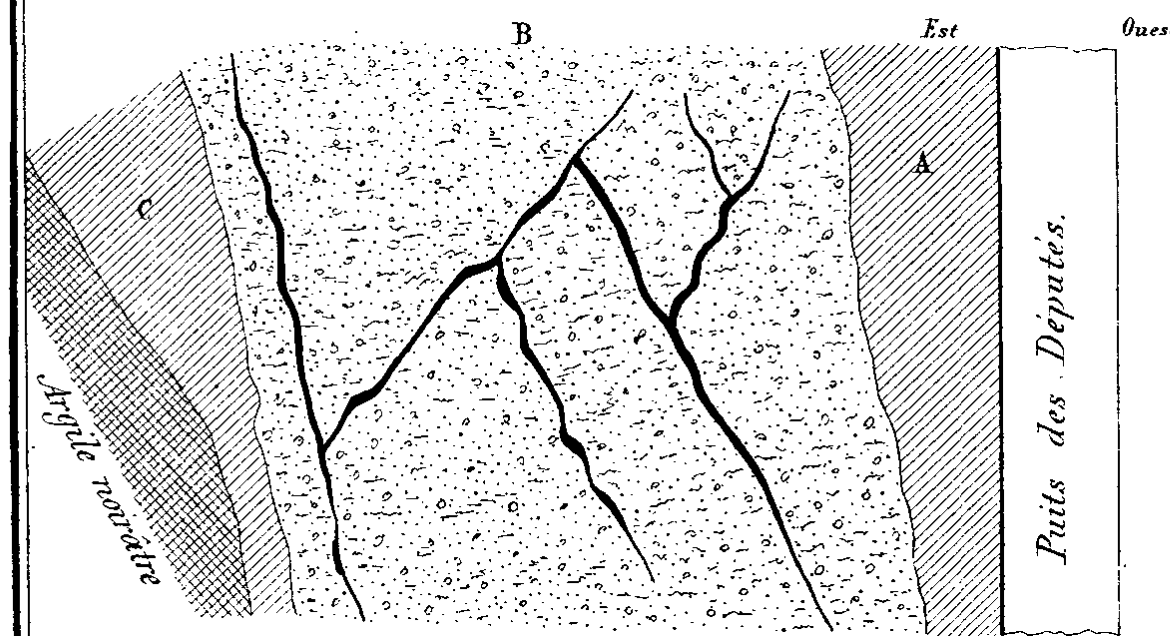


Fig. 2.  
Coupe moyenne du filon dans les environs du puits de l'Homme sous le 13<sup>e</sup> niveau.

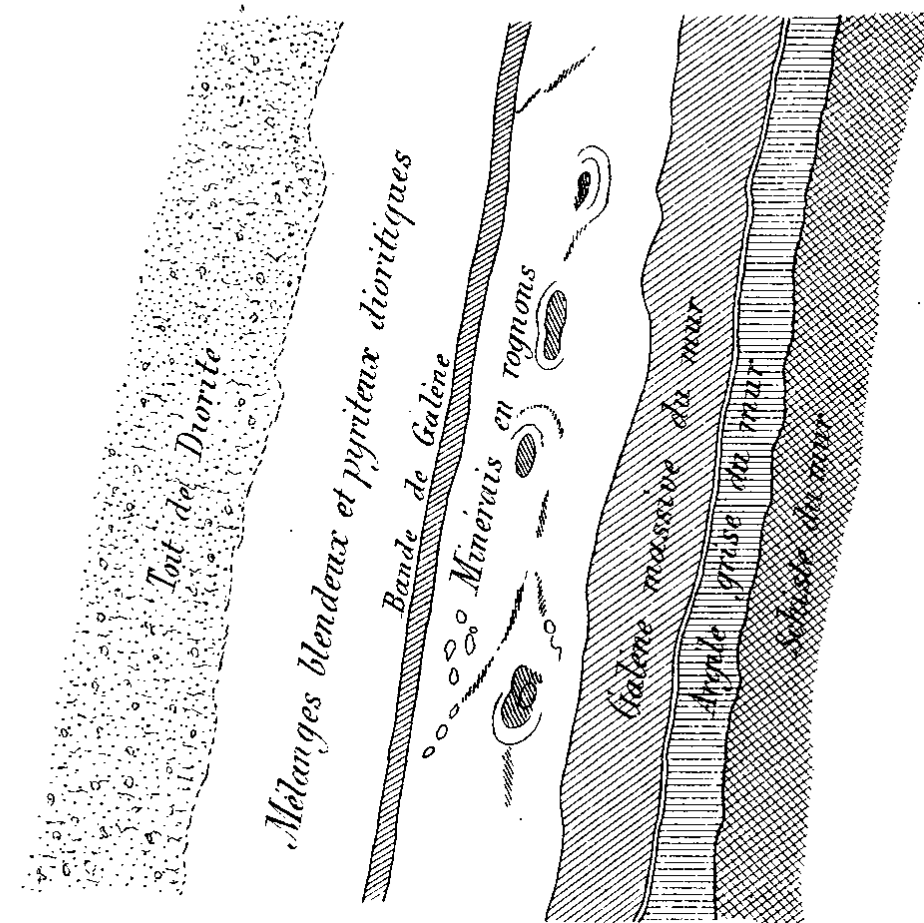
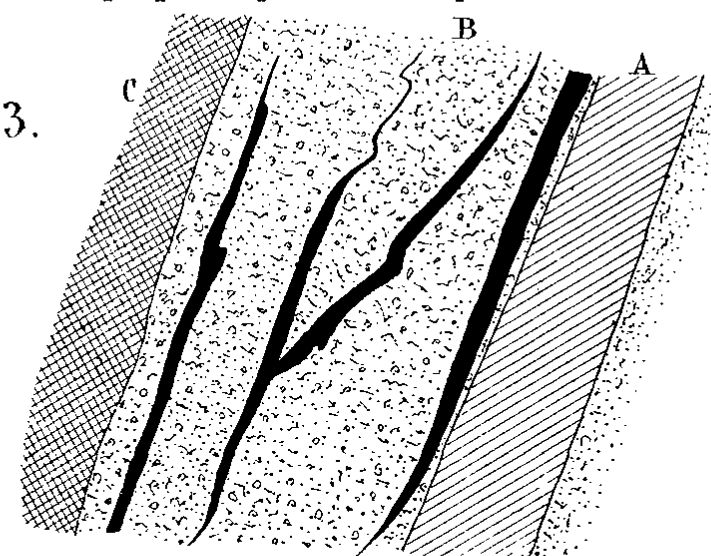
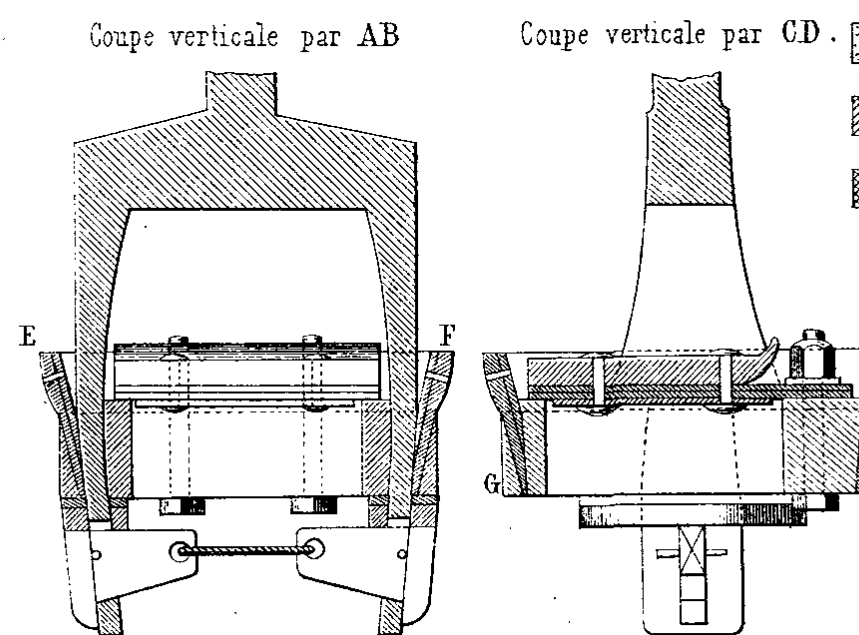
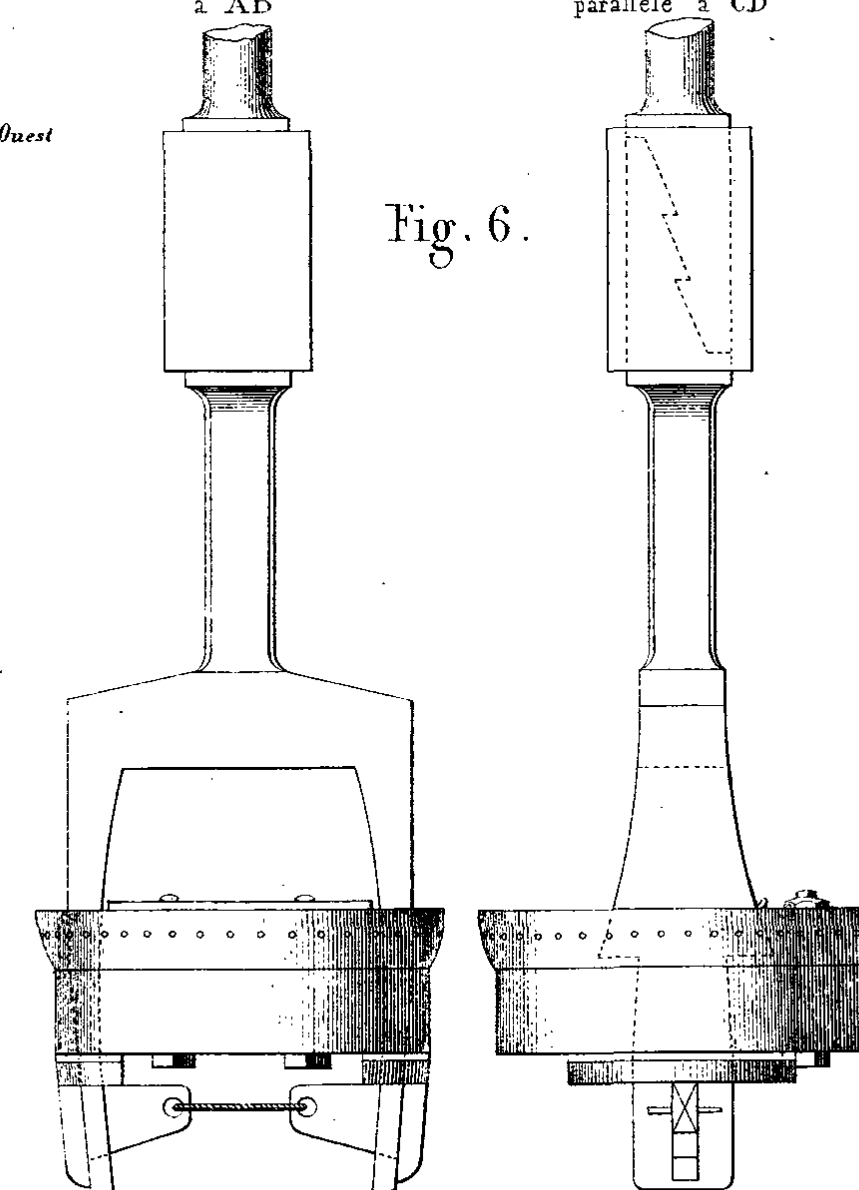


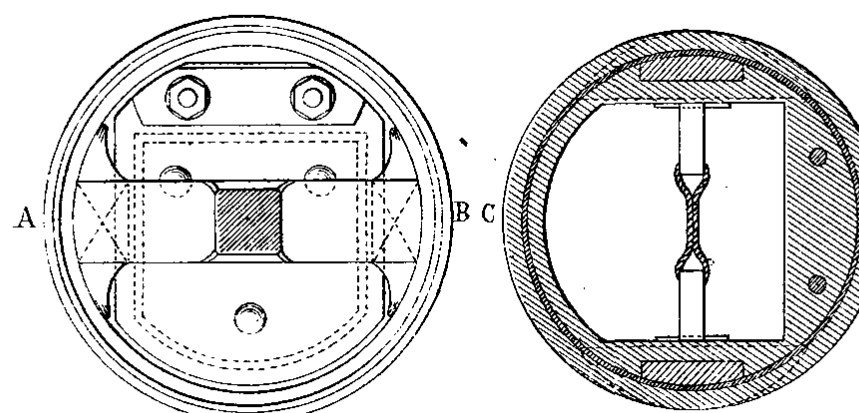
Fig. 3.  
Coupe par le puits du chapelet à 50 mètres



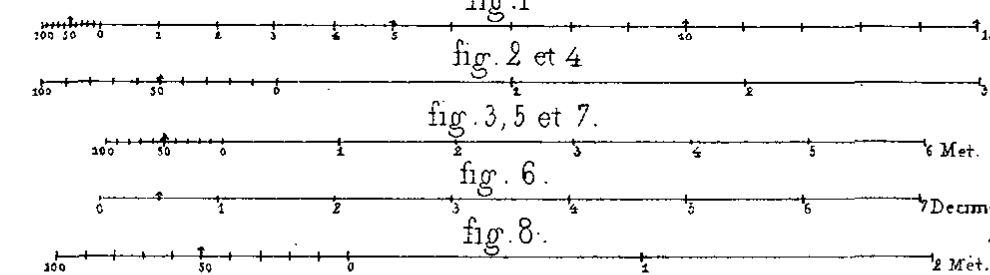
Croquis d'un piston soulevant de la mine de Pontpean.  
Projection verticale sur un plan parallèle à AB  
Projection verticale sur un plan parallèle à CD



Coupe verticale par AB  
Coupe verticale par CD  
Coupe horizontale par EF  
Coupe horizontale par GH



Echelles  
fig 1  
fig 2 et 4  
fig 3, 5 et 7  
fig 6  
fig 8



Coupe du filon stérile entre deux diorites, au 13<sup>e</sup> niveau sud.

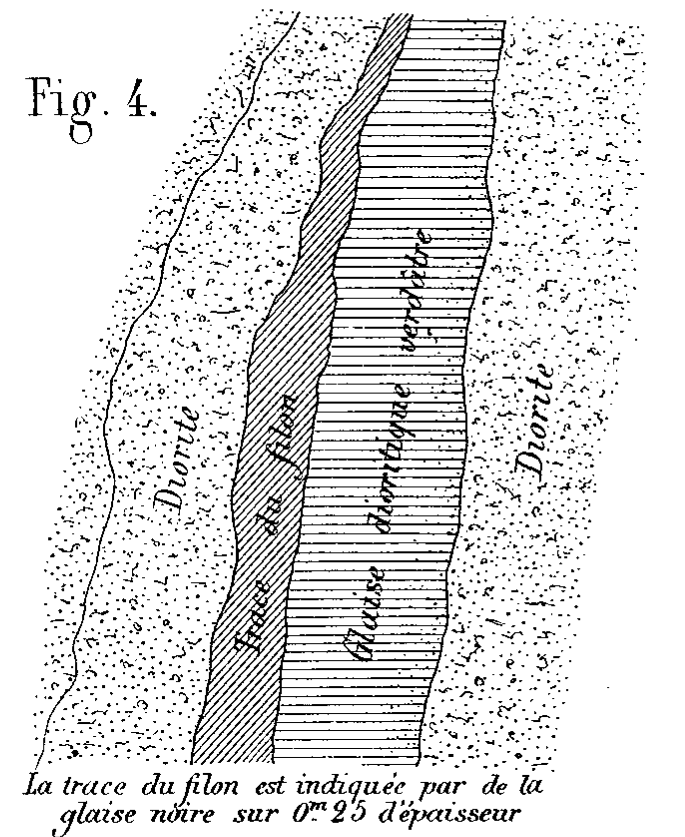


Fig. 5.  
Coupe et inclinaison du filon de la foncée N° 1, au 15<sup>e</sup> niveau du puits de la République

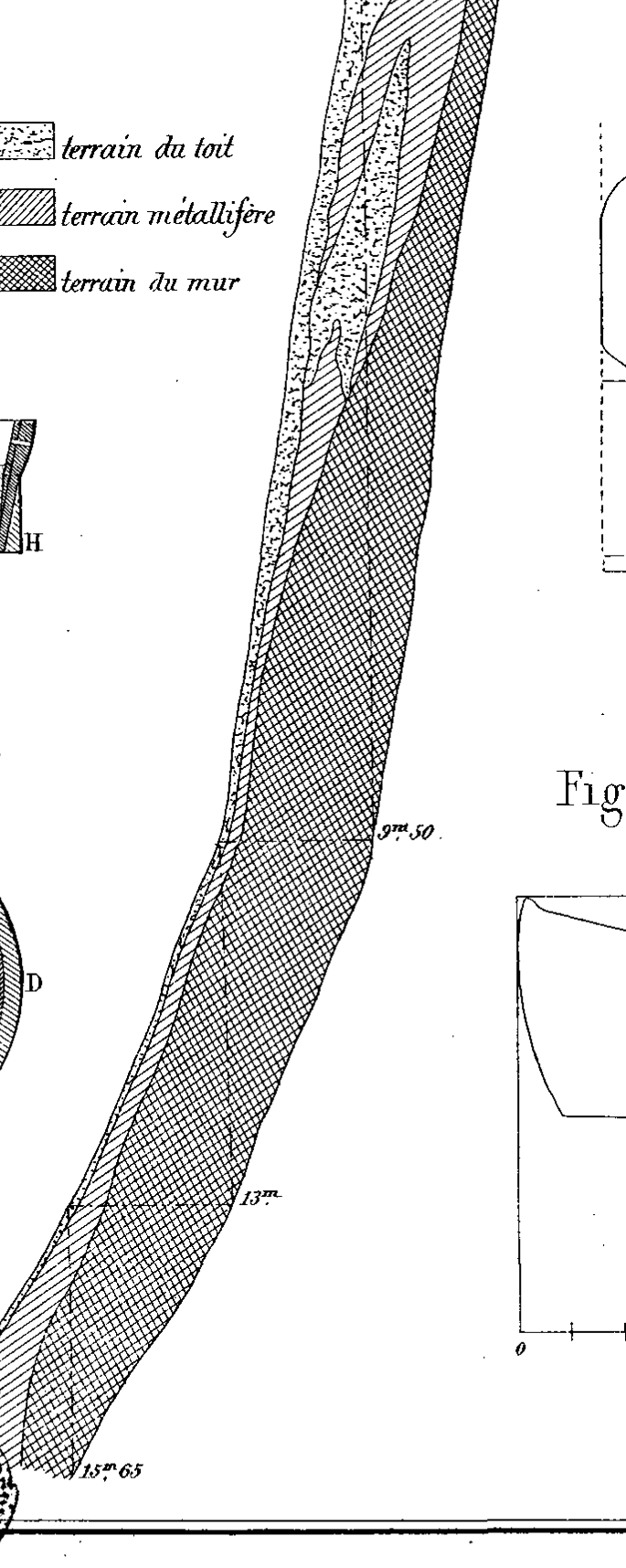


Fig. 7. Debourbeur et Classeur Boudehen.

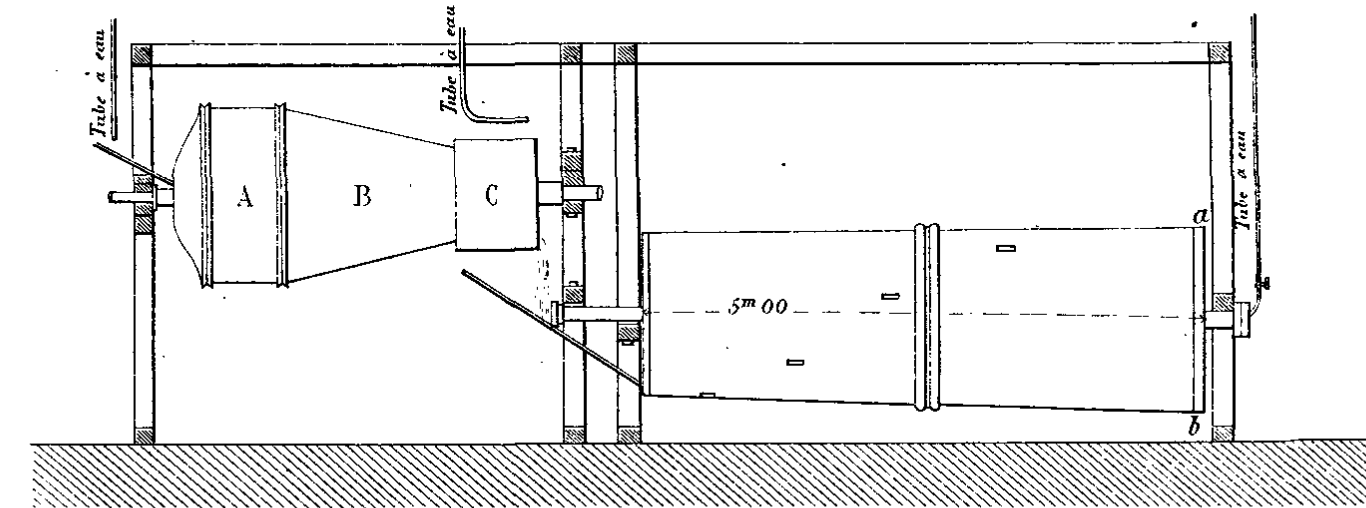


Fig. 8. Coupe longitudinale du Classeur.

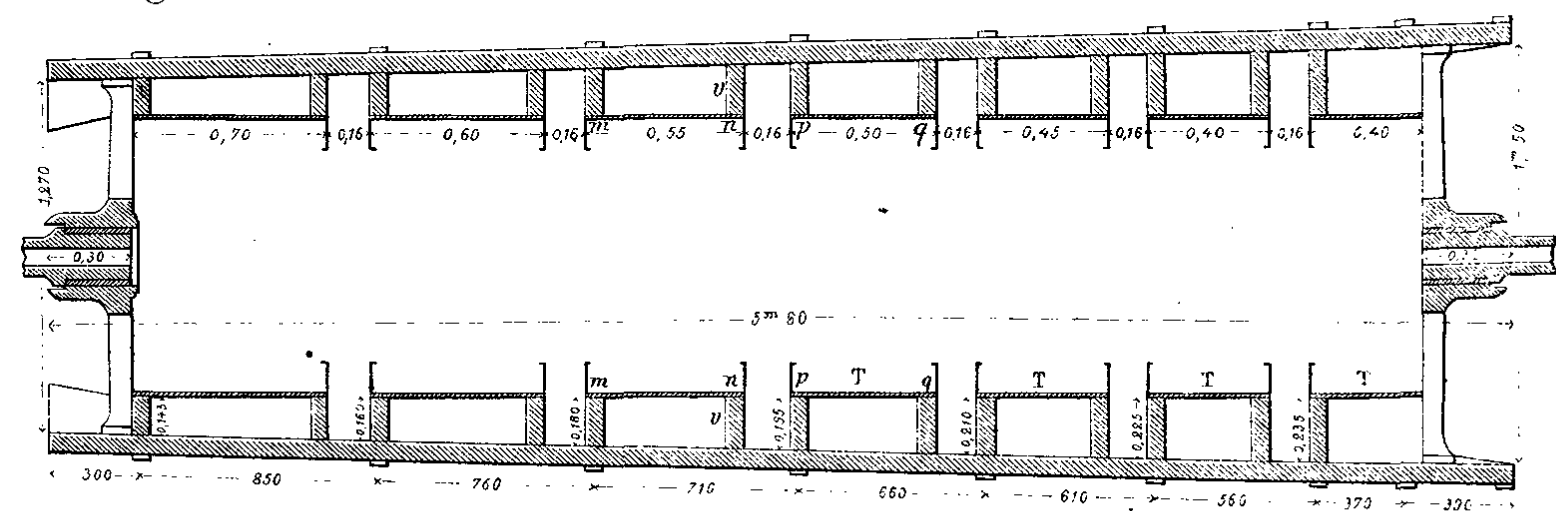


Diagramme levé par M<sup>r</sup> Piot sur la machine de Davey.

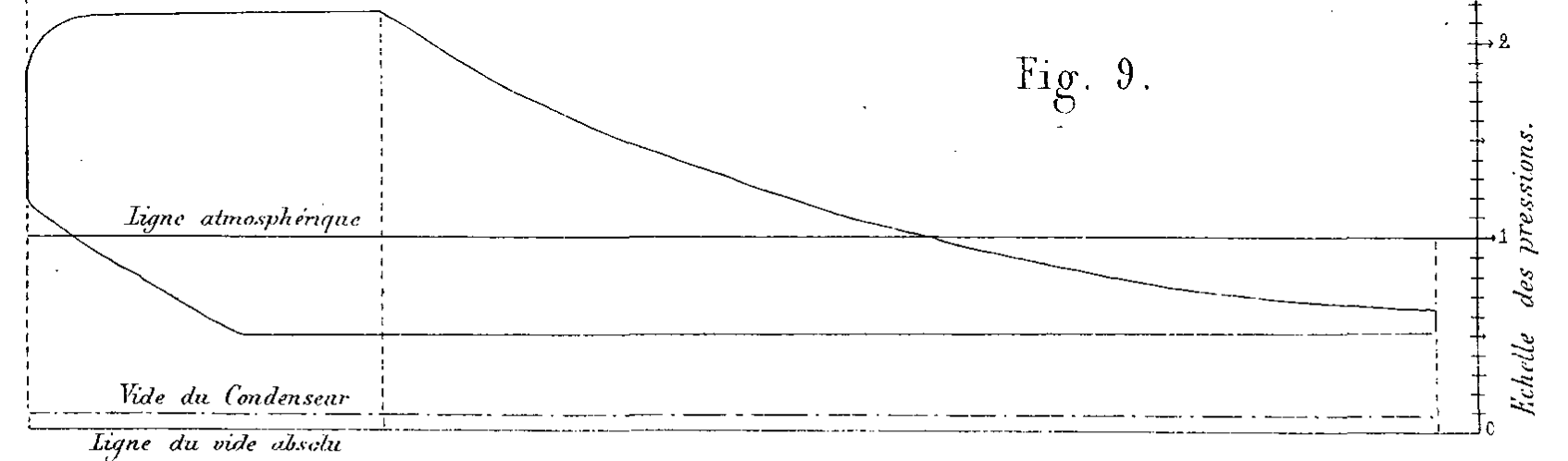
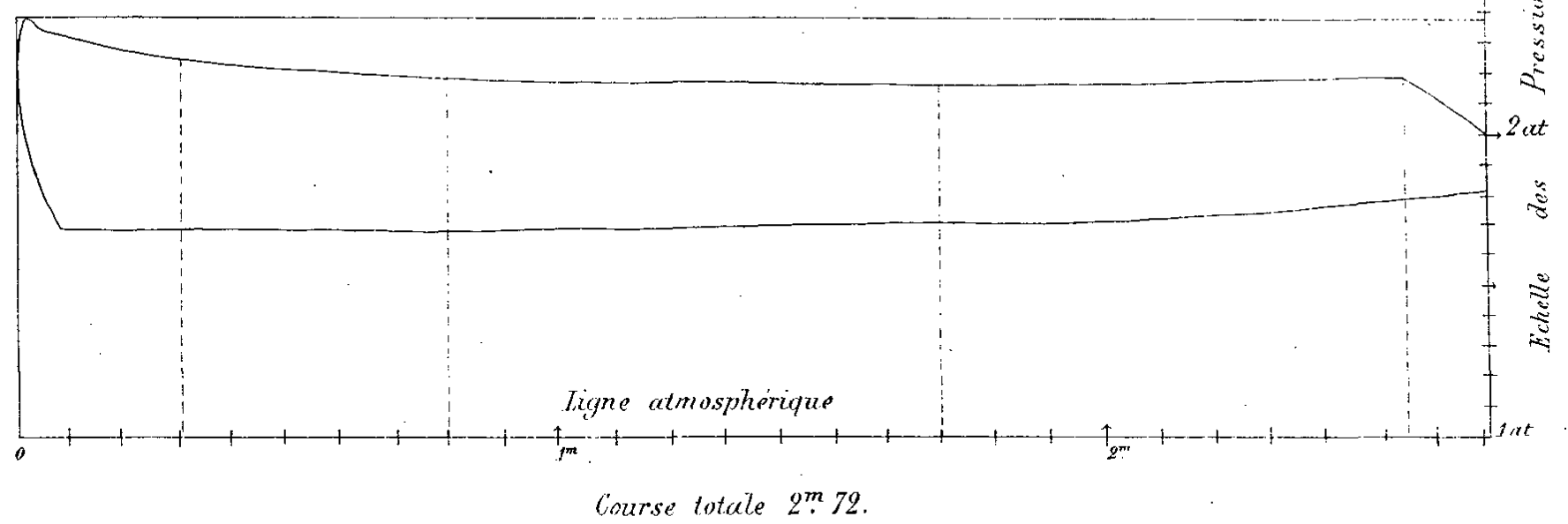


Fig. 10.

Diagramme levé en Août 1858, sur la machine de S<sup>t</sup> Antoine après le changement des corps de pompe foulants.

Pression dans les Chaudières 2<sup>at</sup> 3/8.



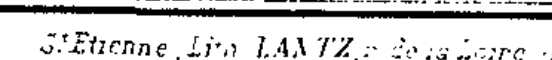
Course totale 2<sup>m</sup> 72.







## DE LA MARCHE DES MINÉRAIS A L'ATELIER DE PRÉPARATION MÉCANIQUE DE PONTPÉAN.









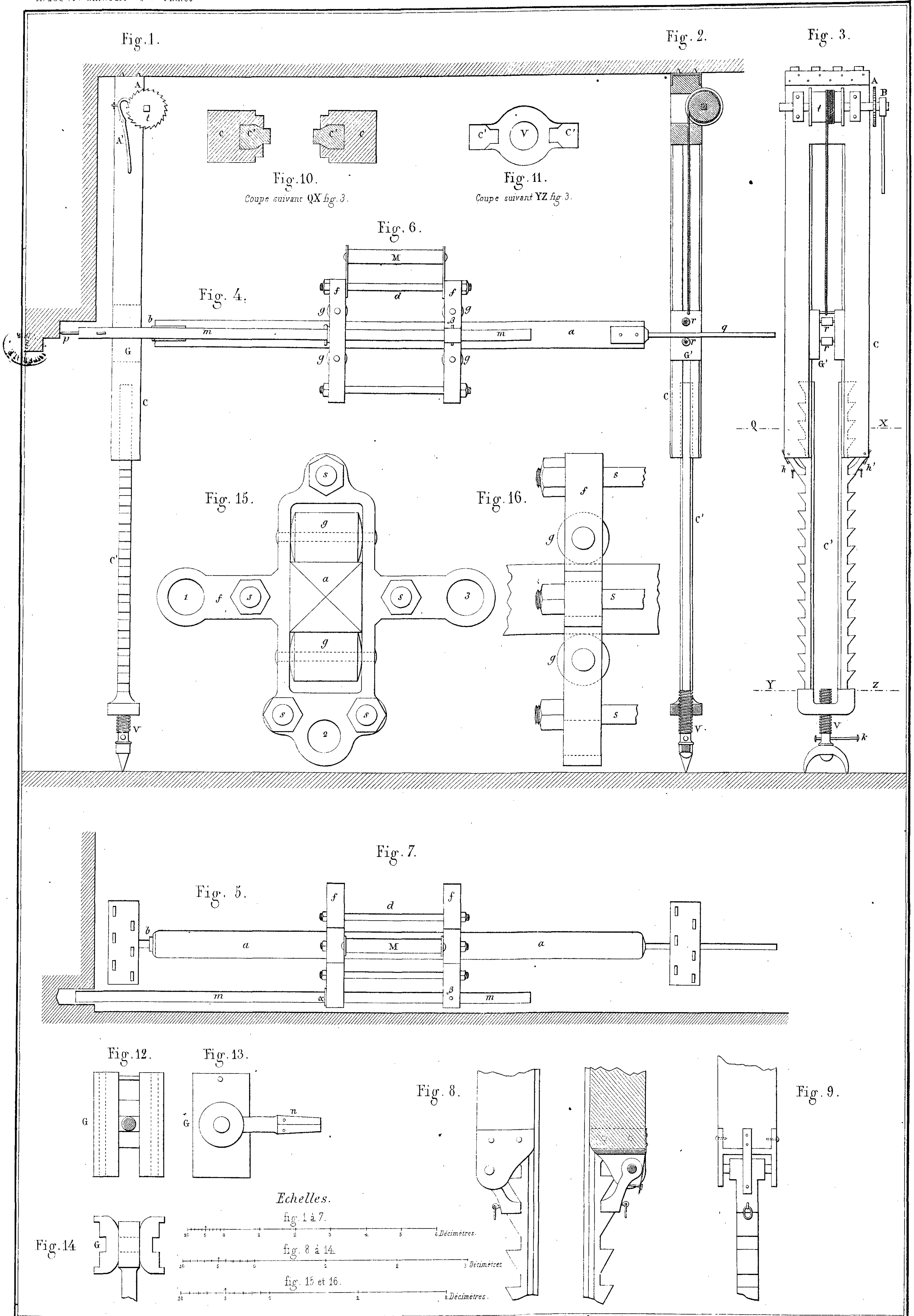








Fig. 1.

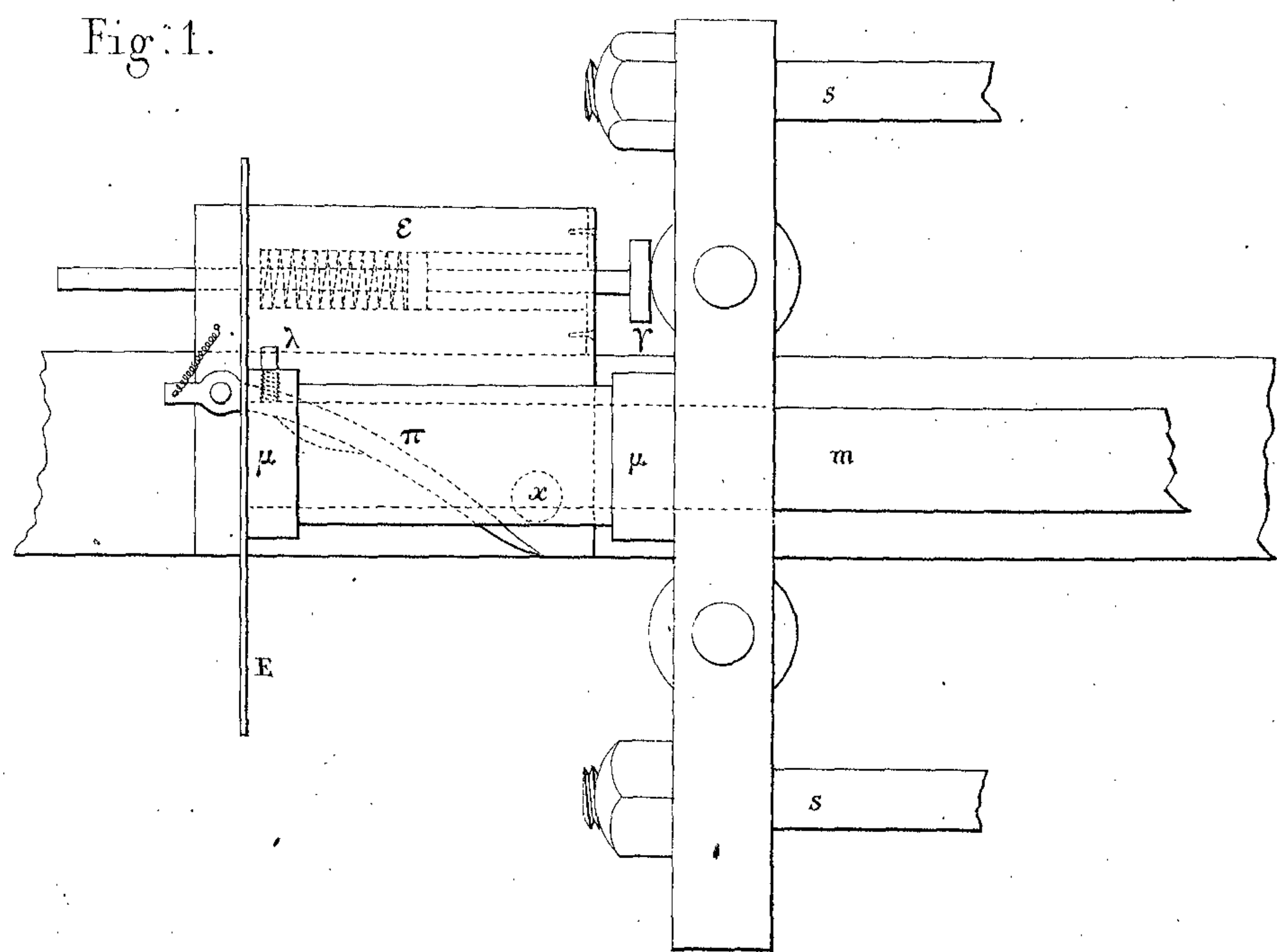


Fig. 2.

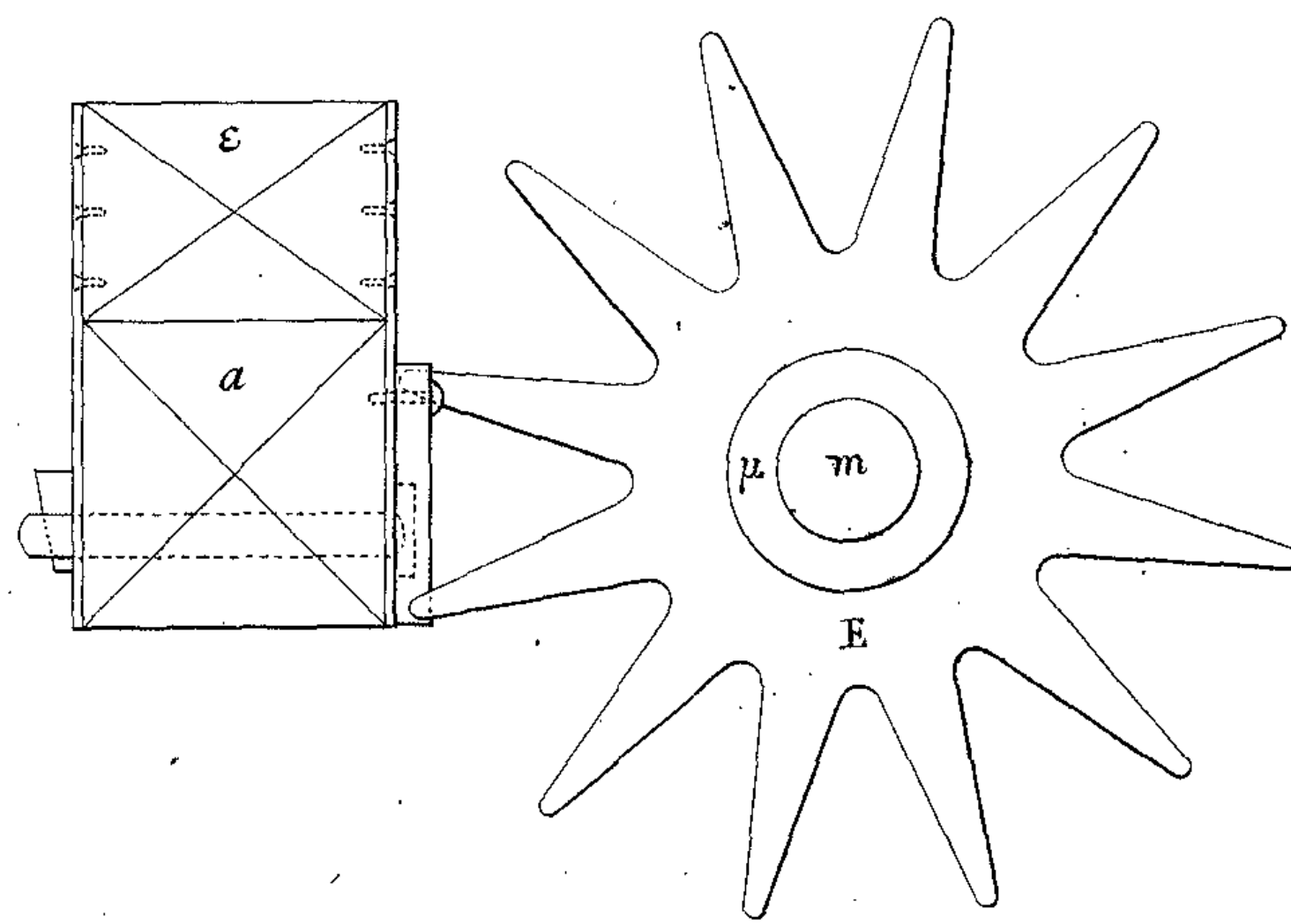


Fig. 3.

Fig. 4.

Fig. 5.

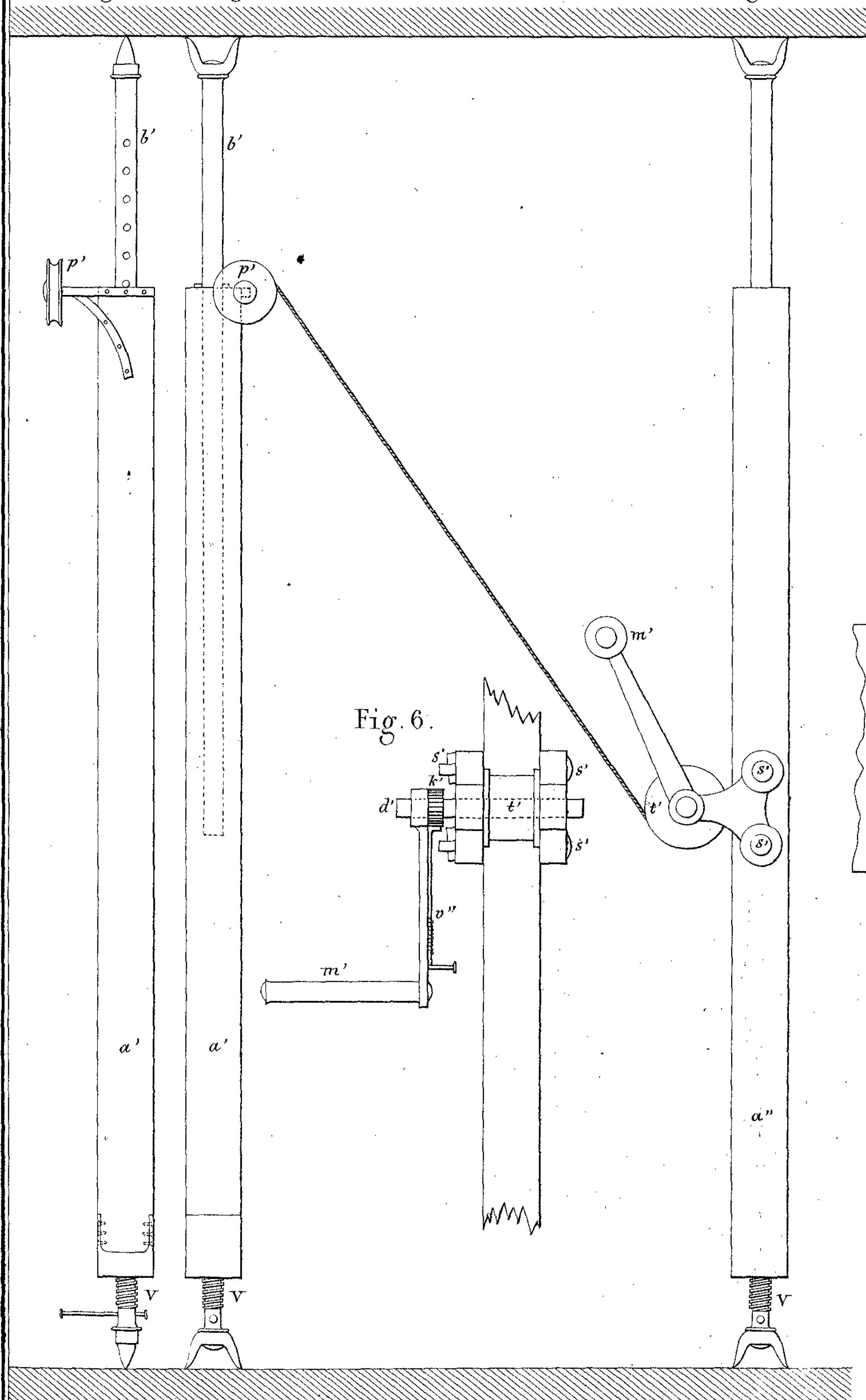
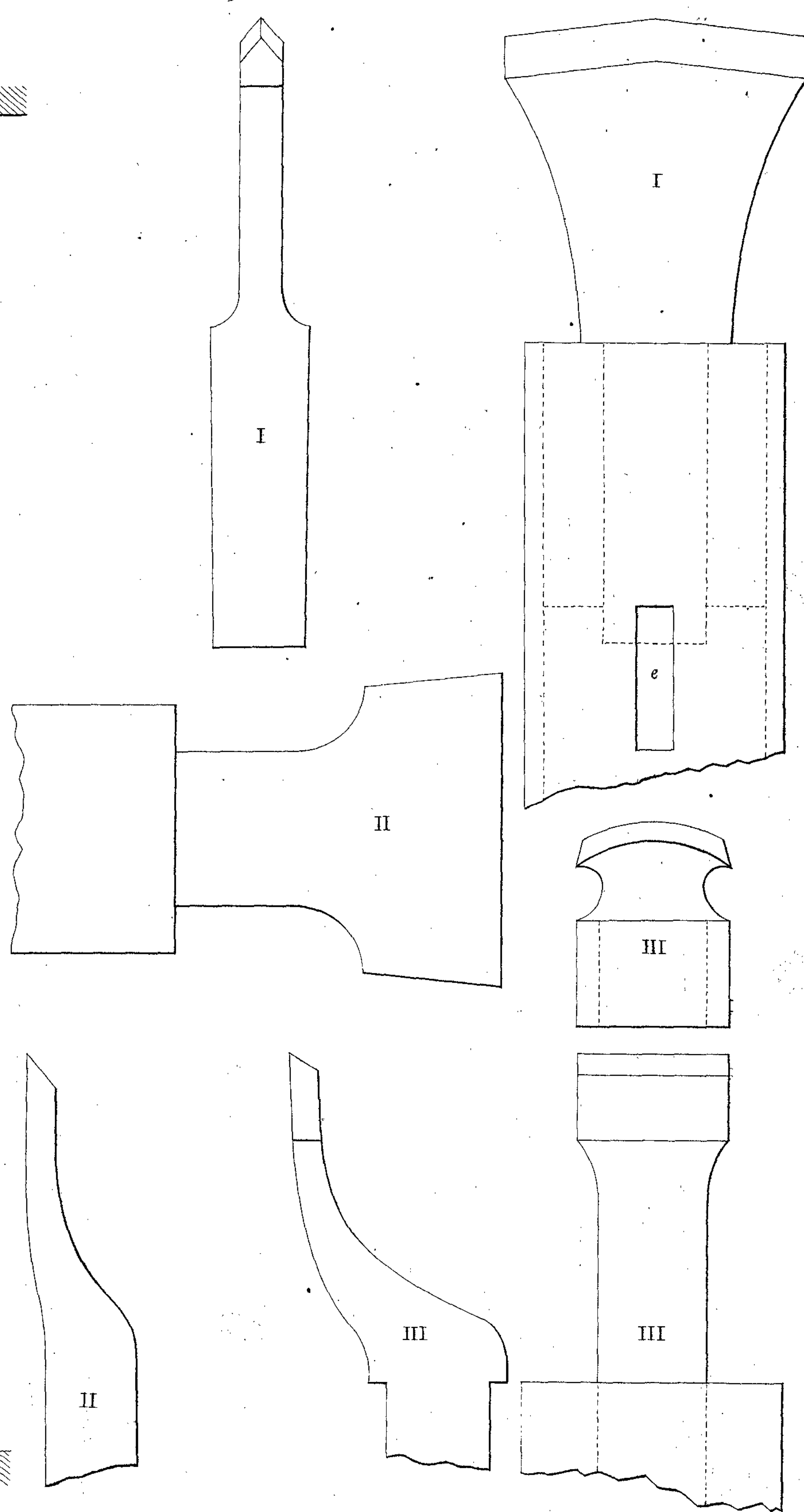


Fig. 6.

Fig. 7.



Echelles.

Fig. 1 et 2.

Fig. 3, 4, 5, 6.

Fig. 7. I, II, III, Grandeur naturelle.

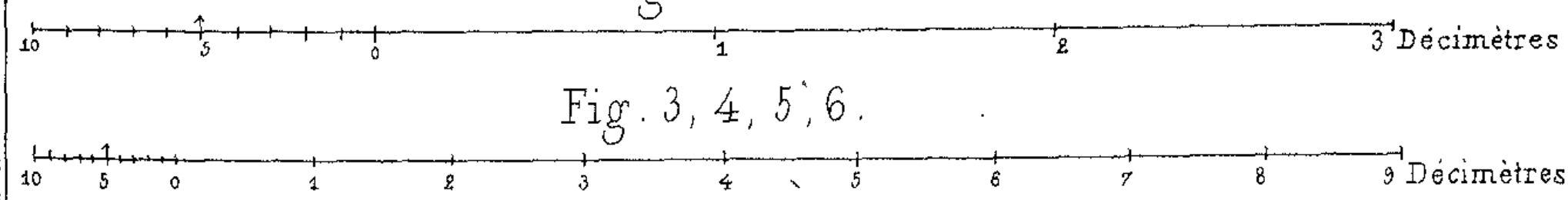
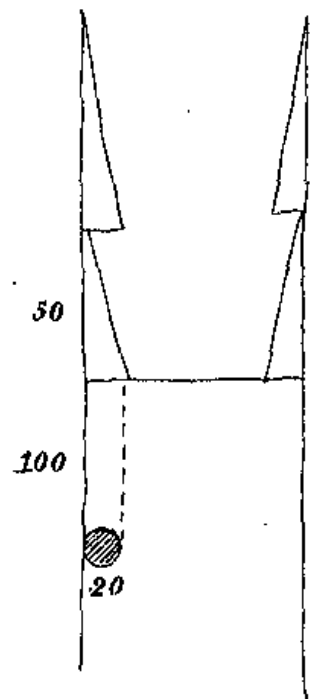


Fig. 8.













# Bulletin de la Société de l'industrie minérale. Atlas



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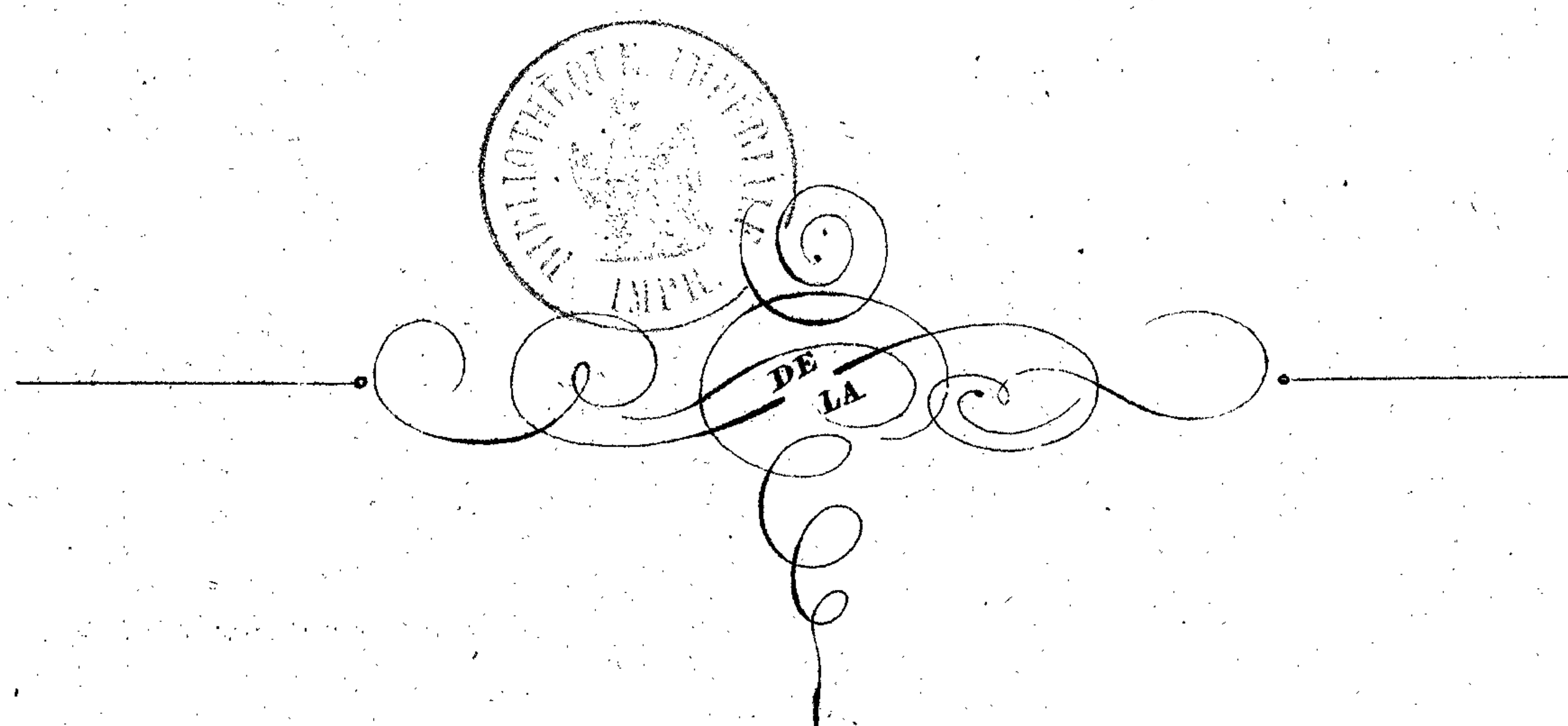
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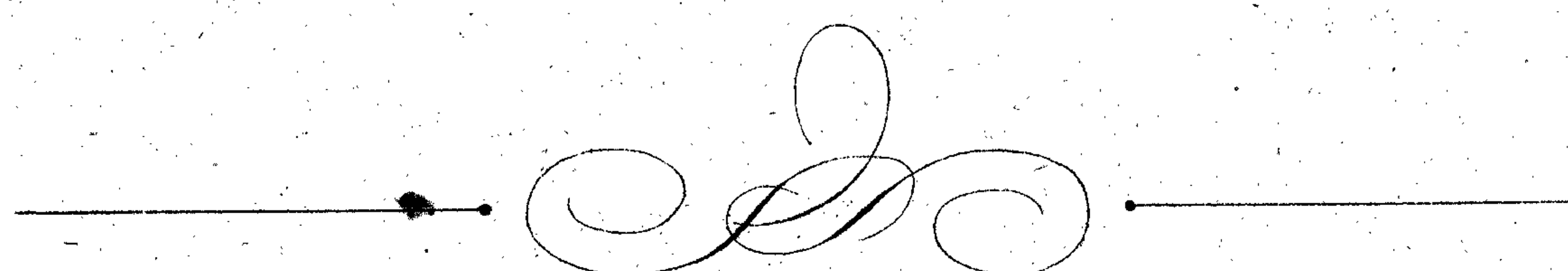




# ATLAS



## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE



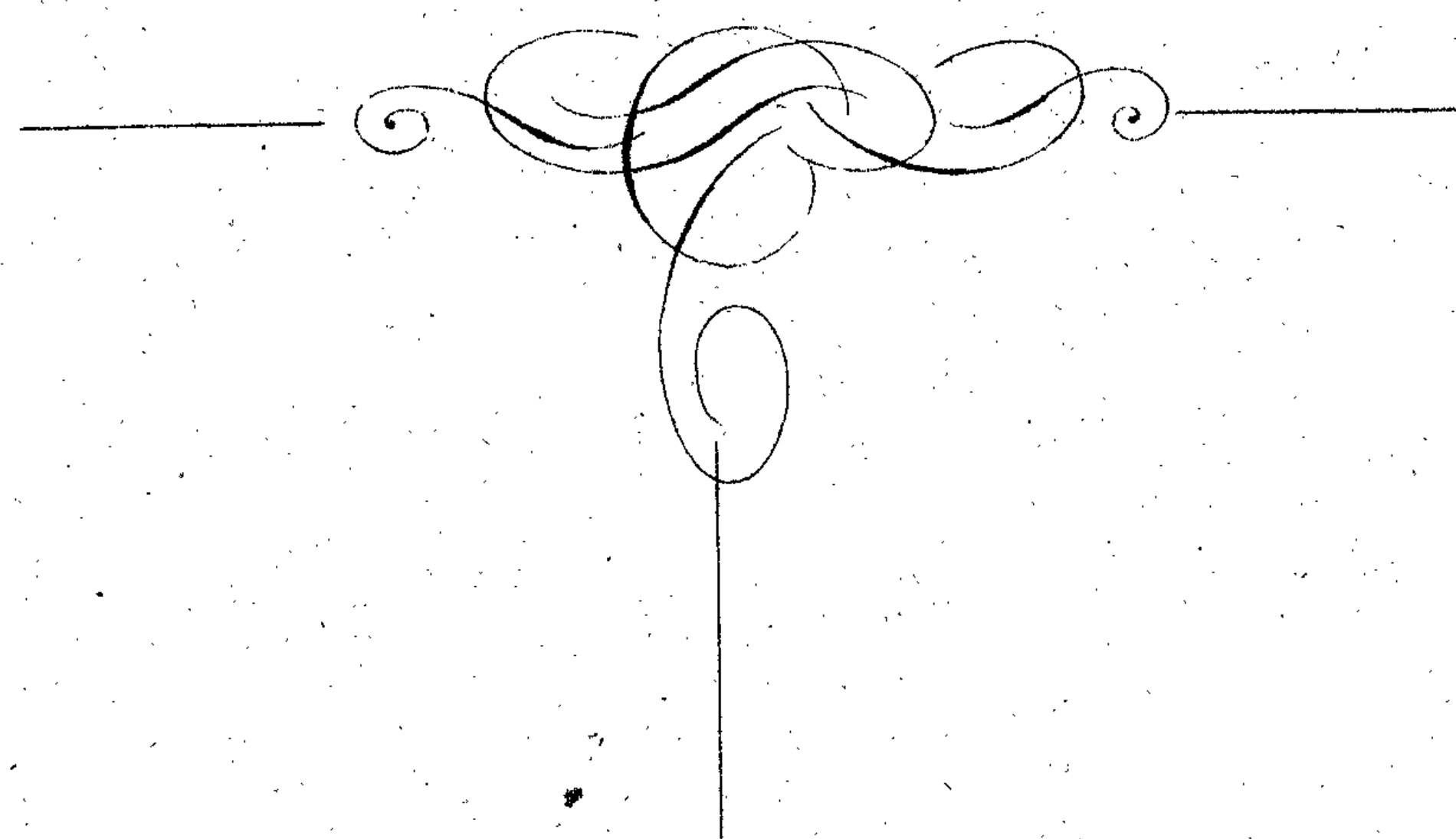
X<sup>e</sup> ANNÉE.

4<sup>e</sup> LIVRAISON

Avril Mai Juin



1864.



PAPETERIE & LITHOGRAPHIE

**LANTZ**

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ST ETIENNE (LOIRE)

Y 2736  
Tda 10







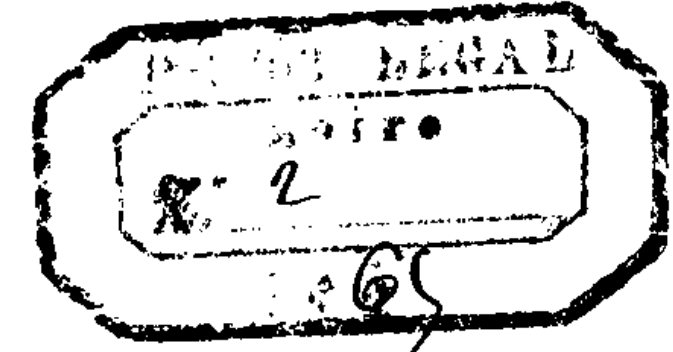


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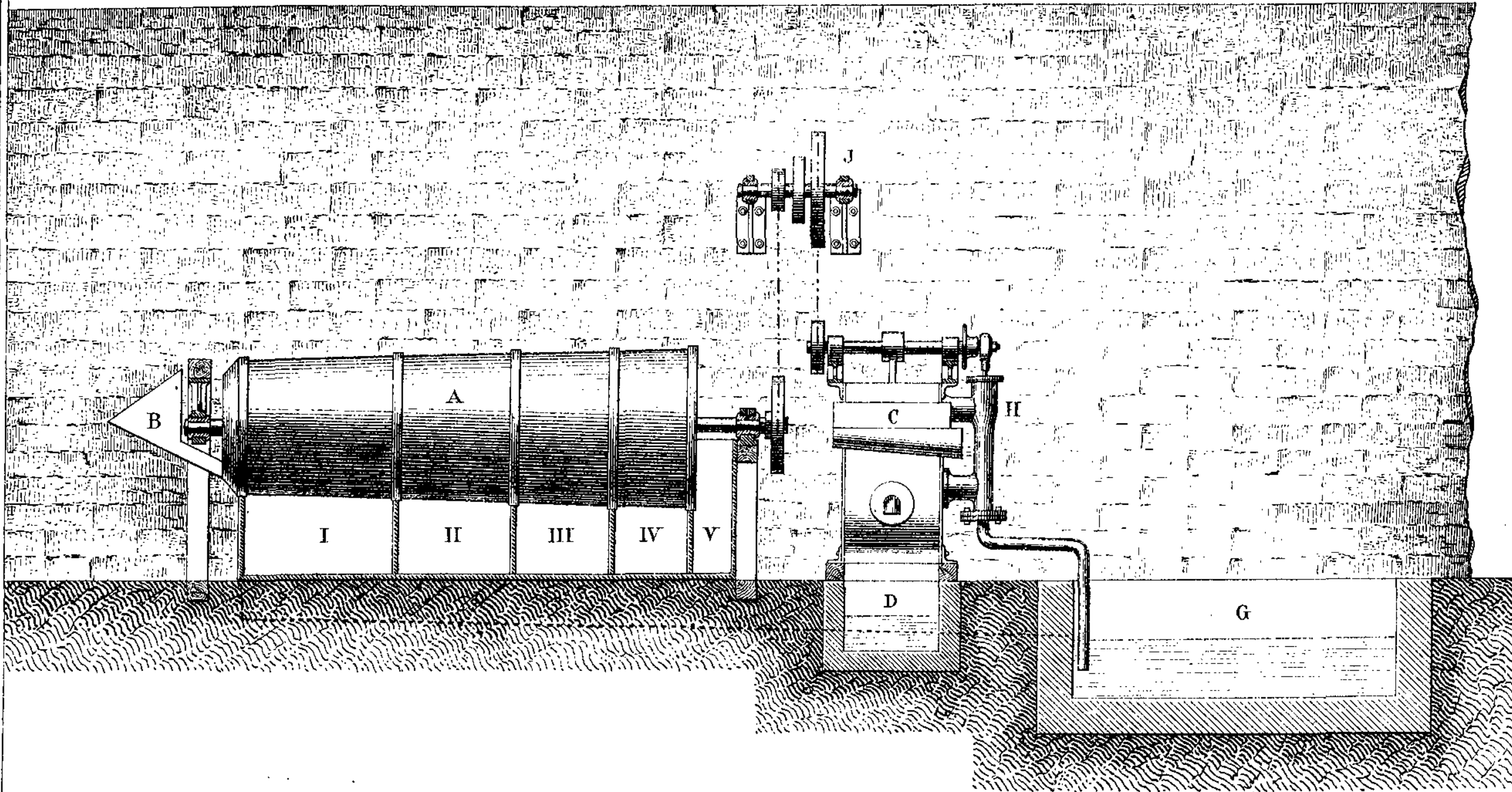


Fig. 3.

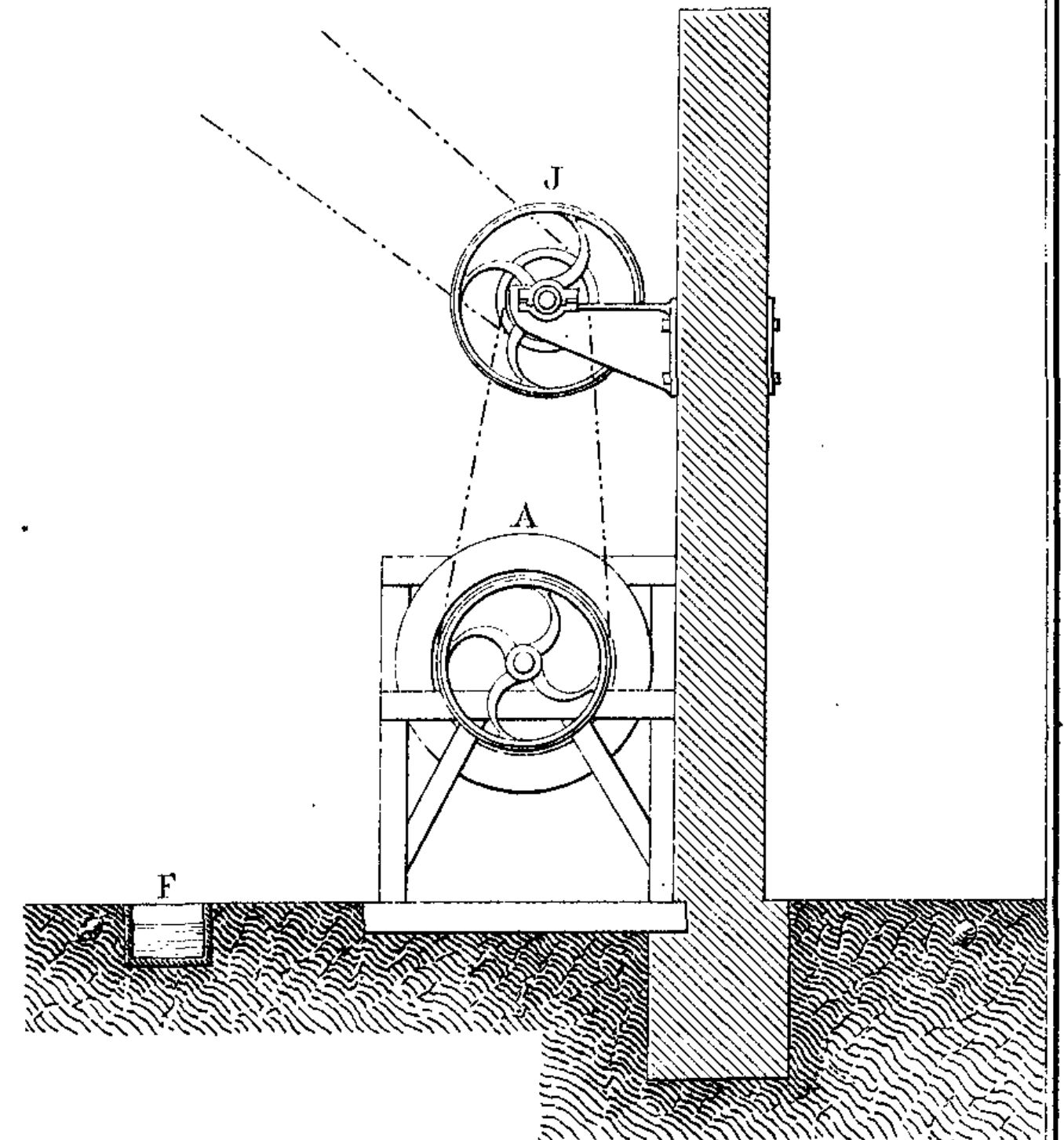


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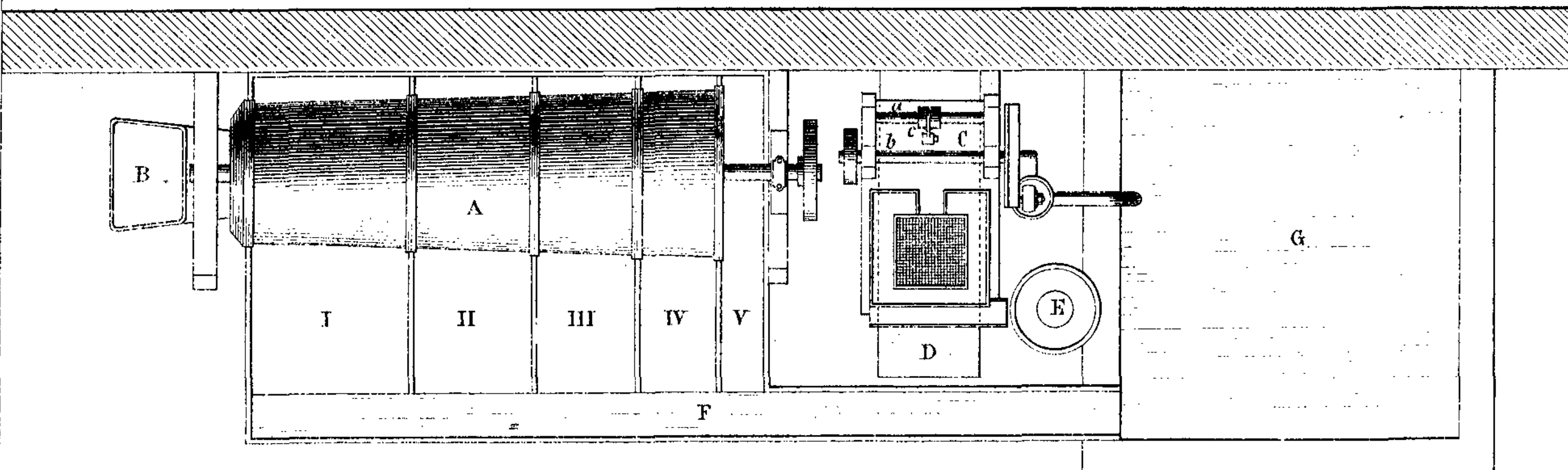
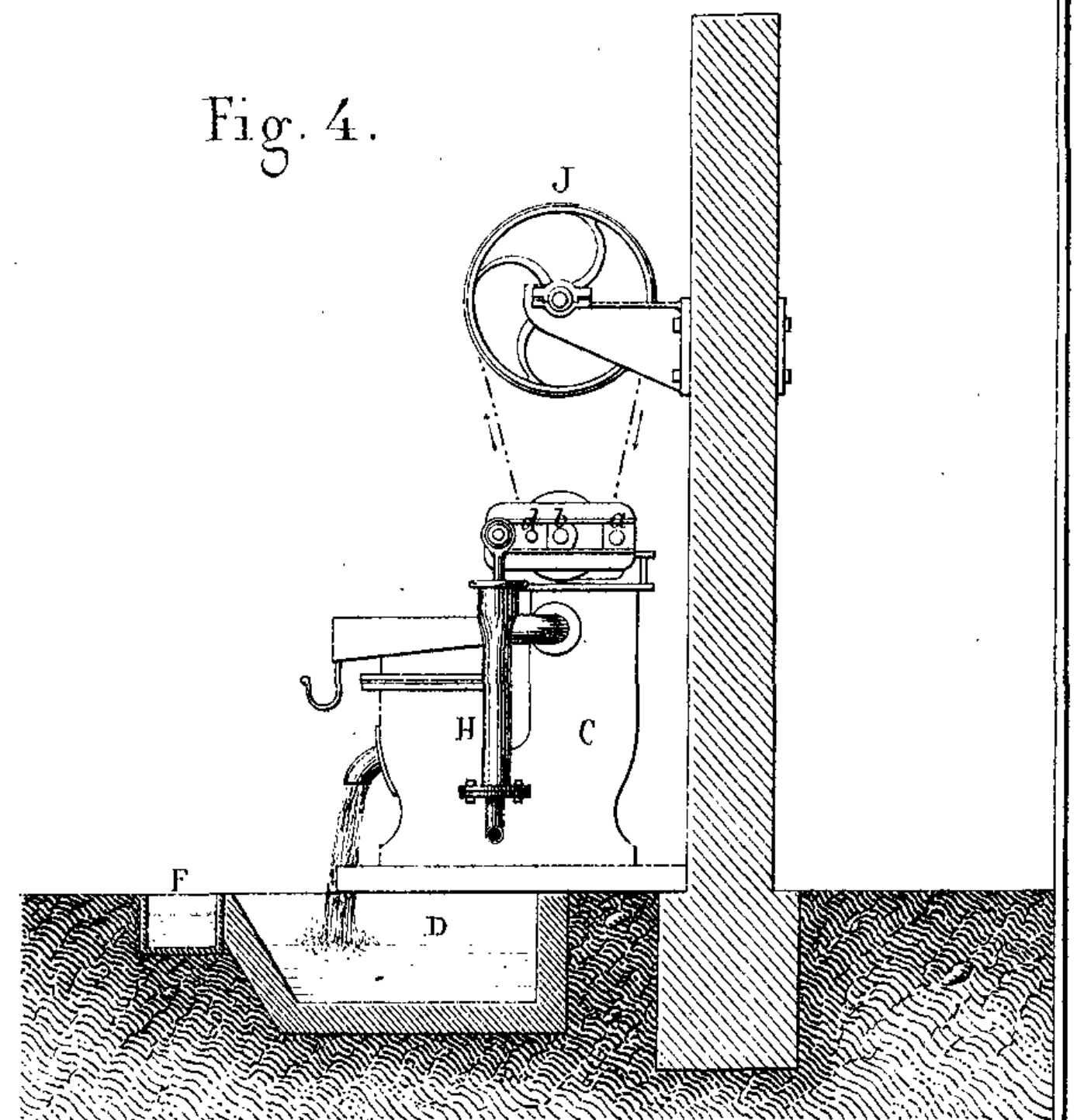


Fig. 4.



Echelle des fig. 1 à 4. 100 50 25 12 6 3 1 1/2 Met.

Echelle des fig. 5 et 6 100 50 25 12 6 3 1 1/2 Met.

Fig. 5. Coupe verticale.

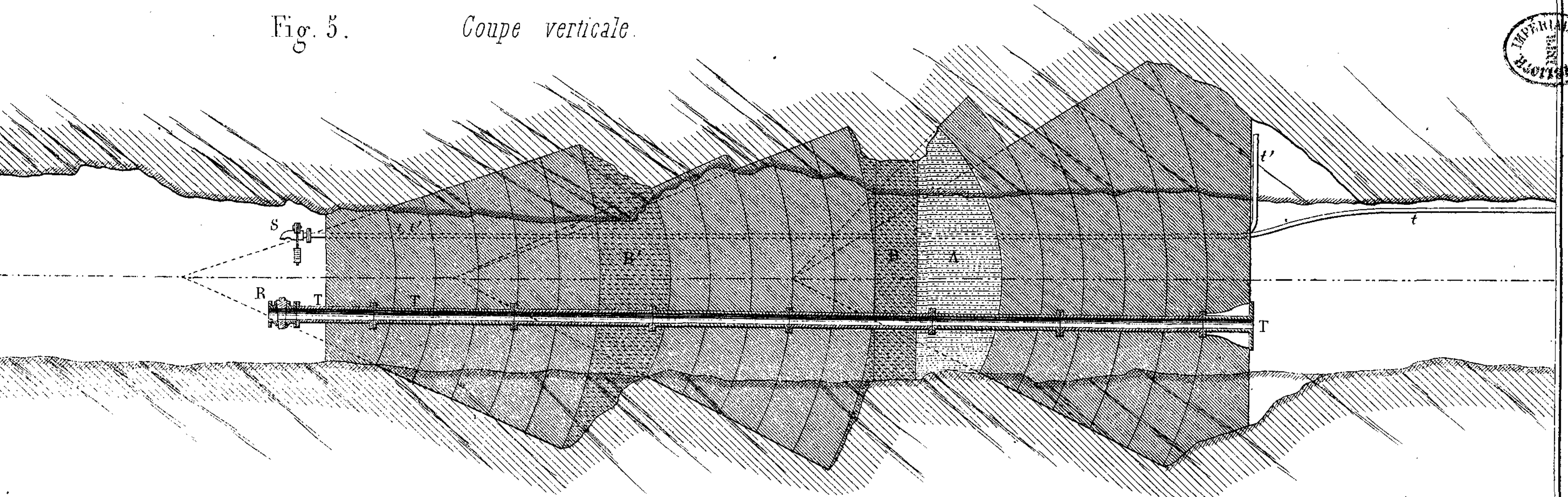
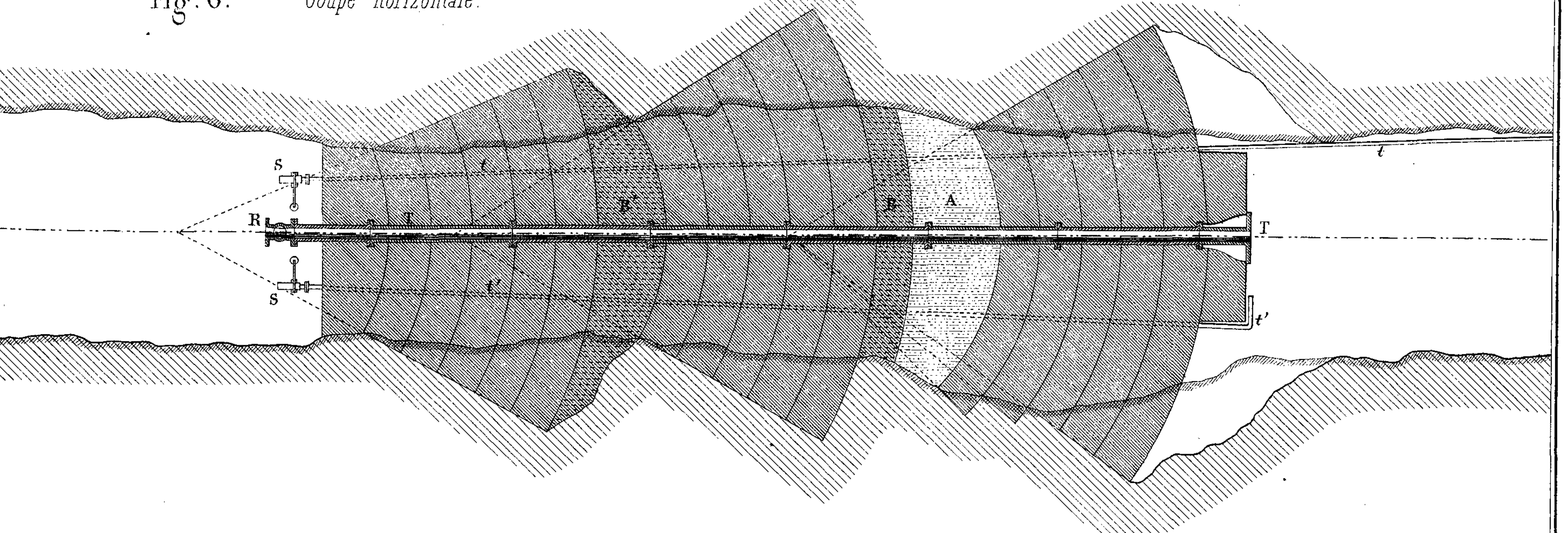


Fig. 6. Coupe horizontale.









DEPOSE LEGAL  
 2  
 1869

SYSTÈMES D'EXTRACTION ET DE GUIDAGE.

PL. II.

Industrie minière 10<sup>ème</sup> Année.

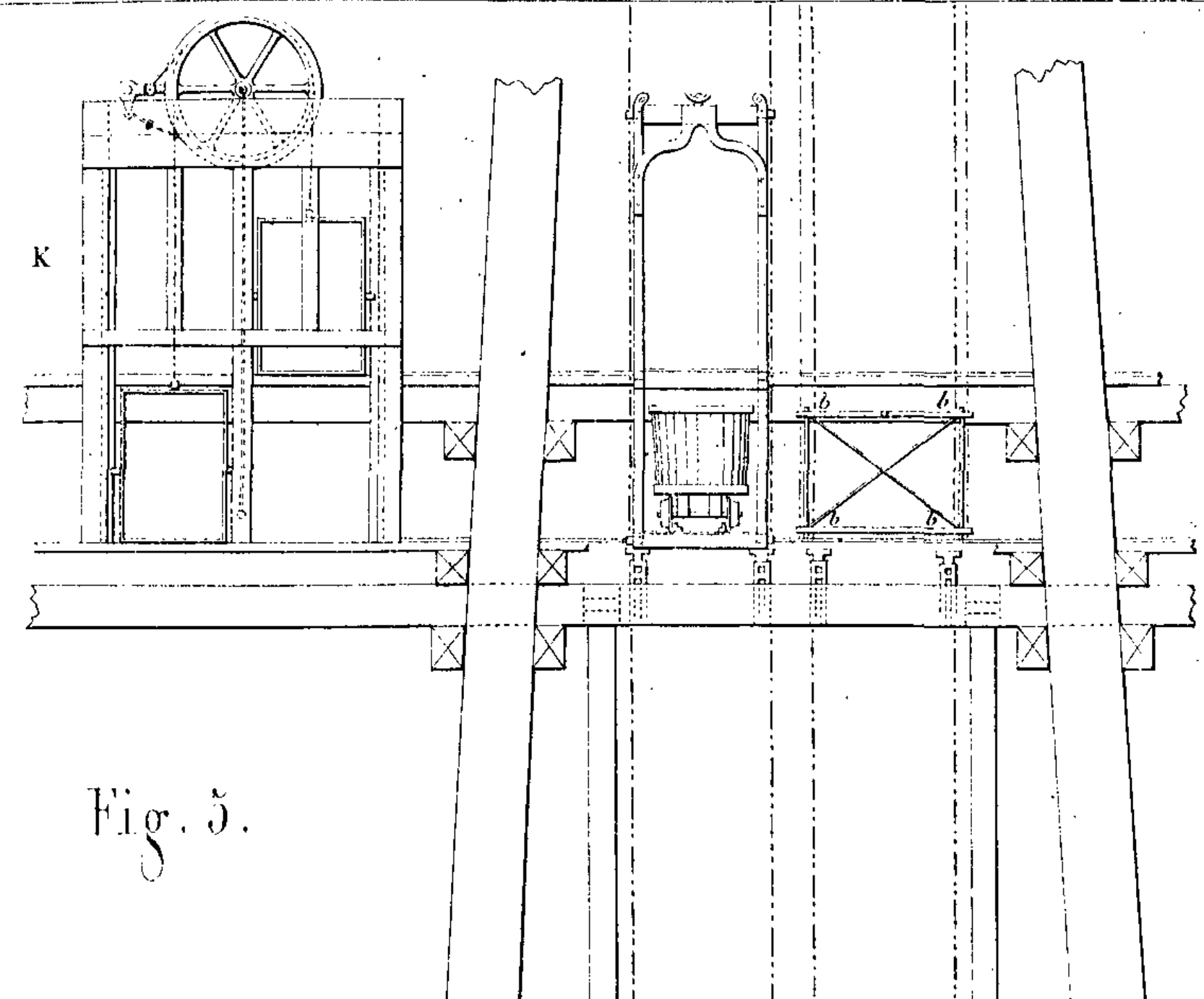


Fig. 5.

Fig. 4.

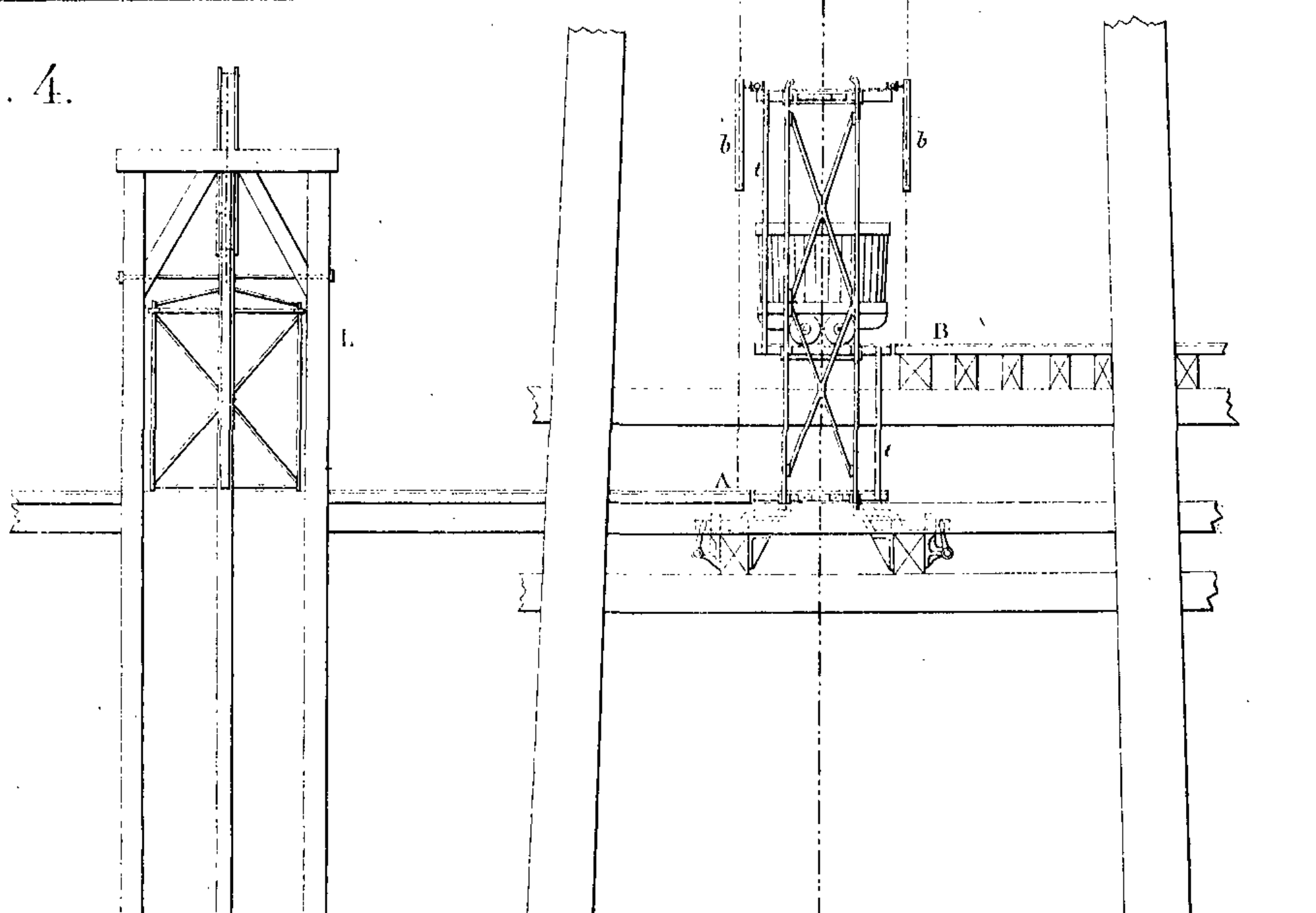


Fig. 1.

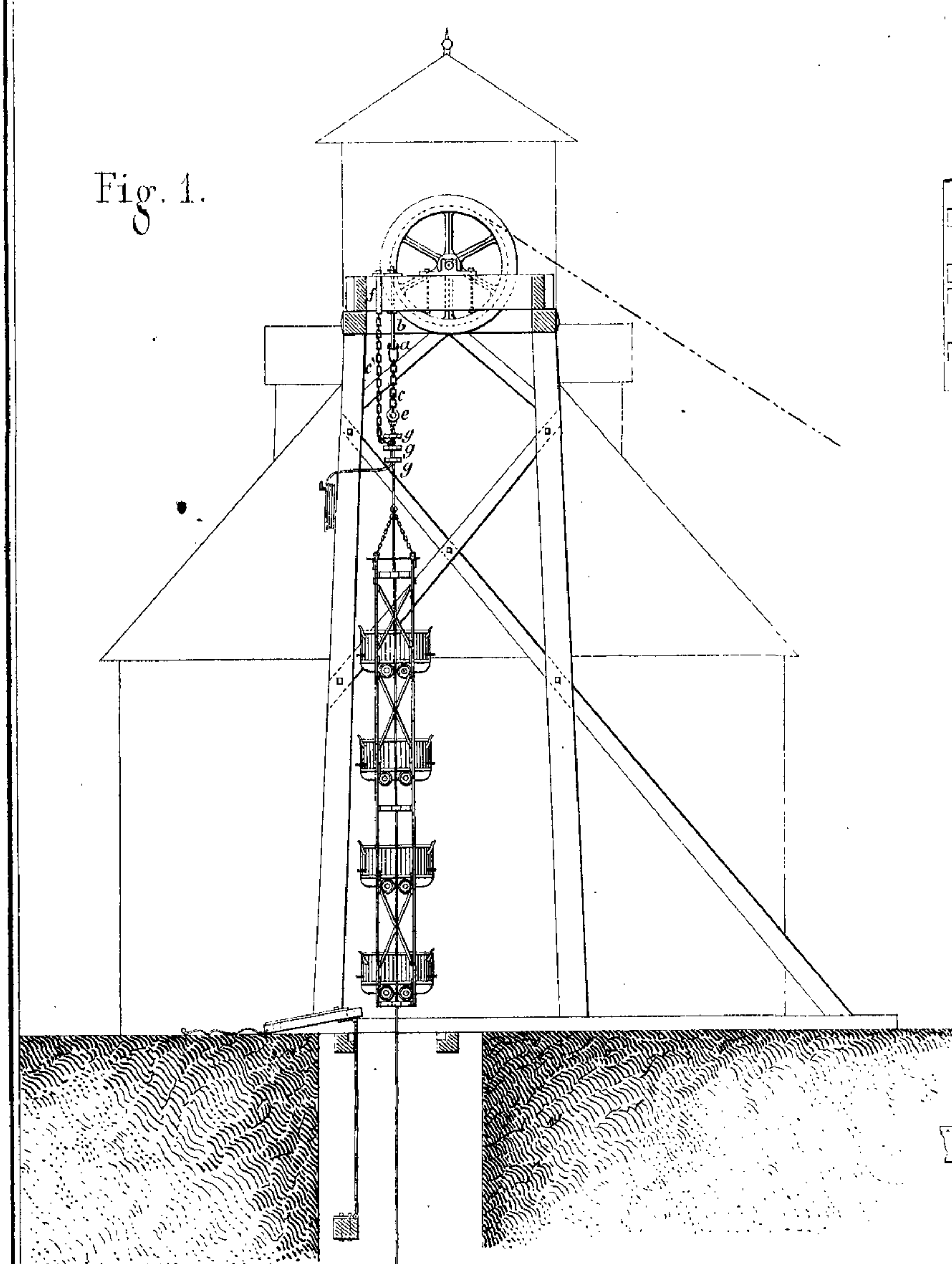


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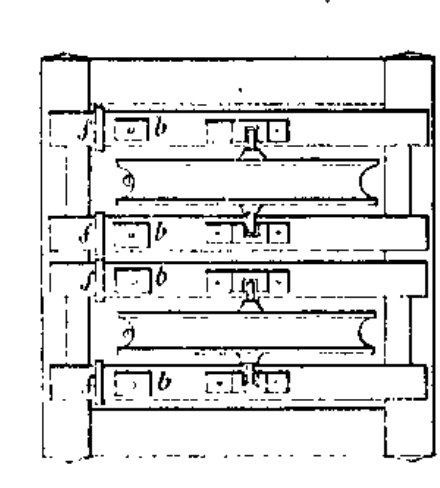


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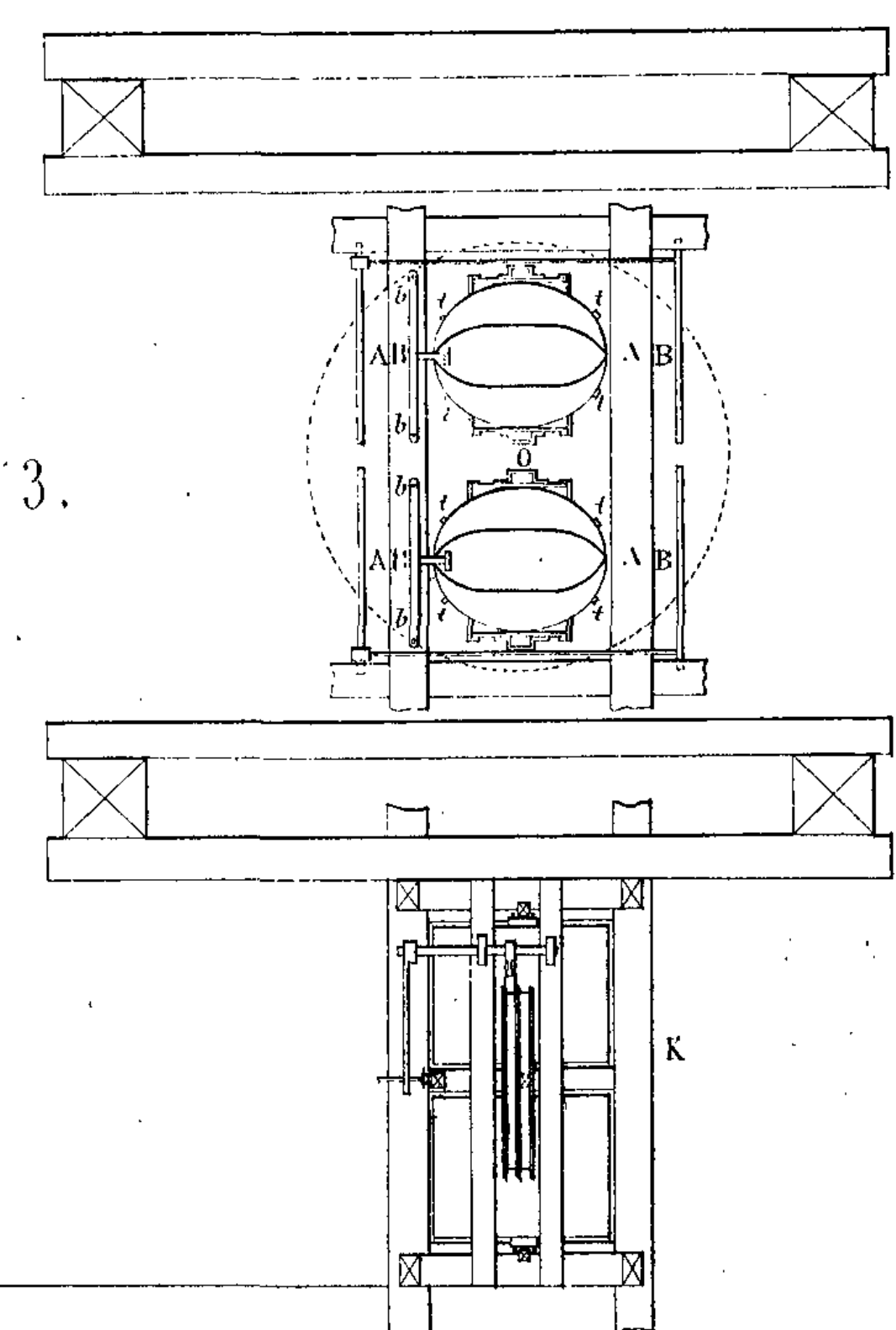


Fig. 4. bis.

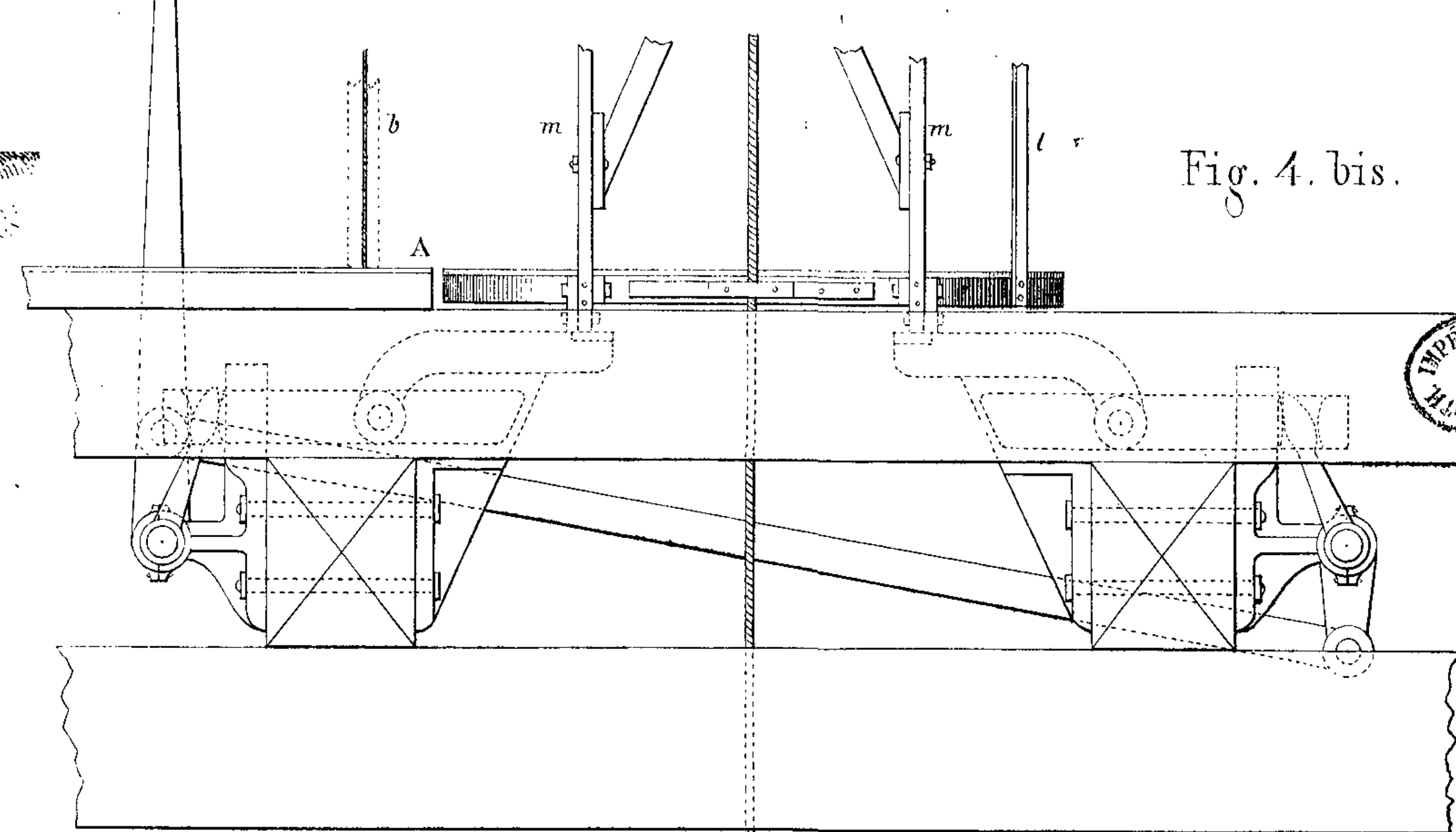


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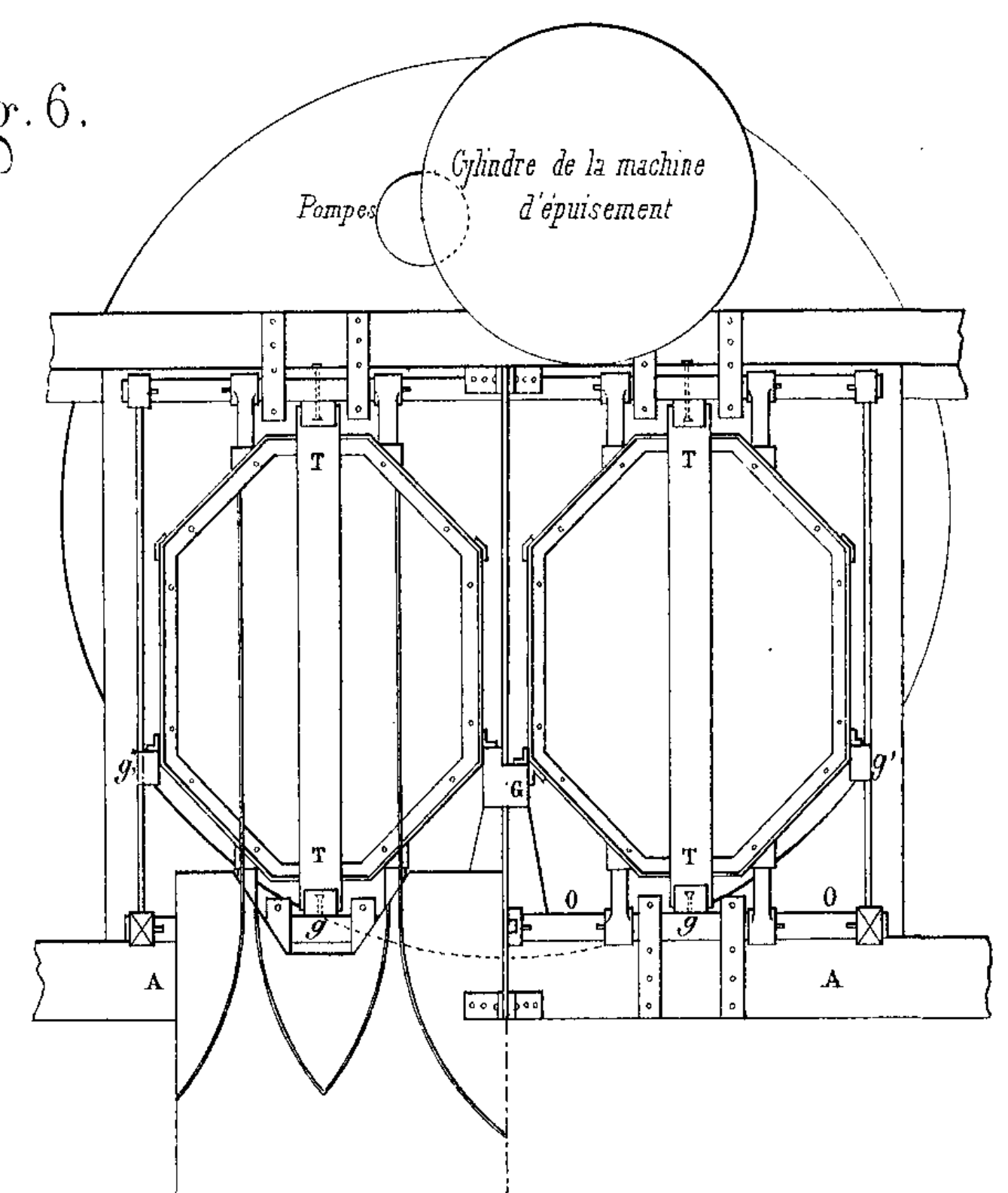
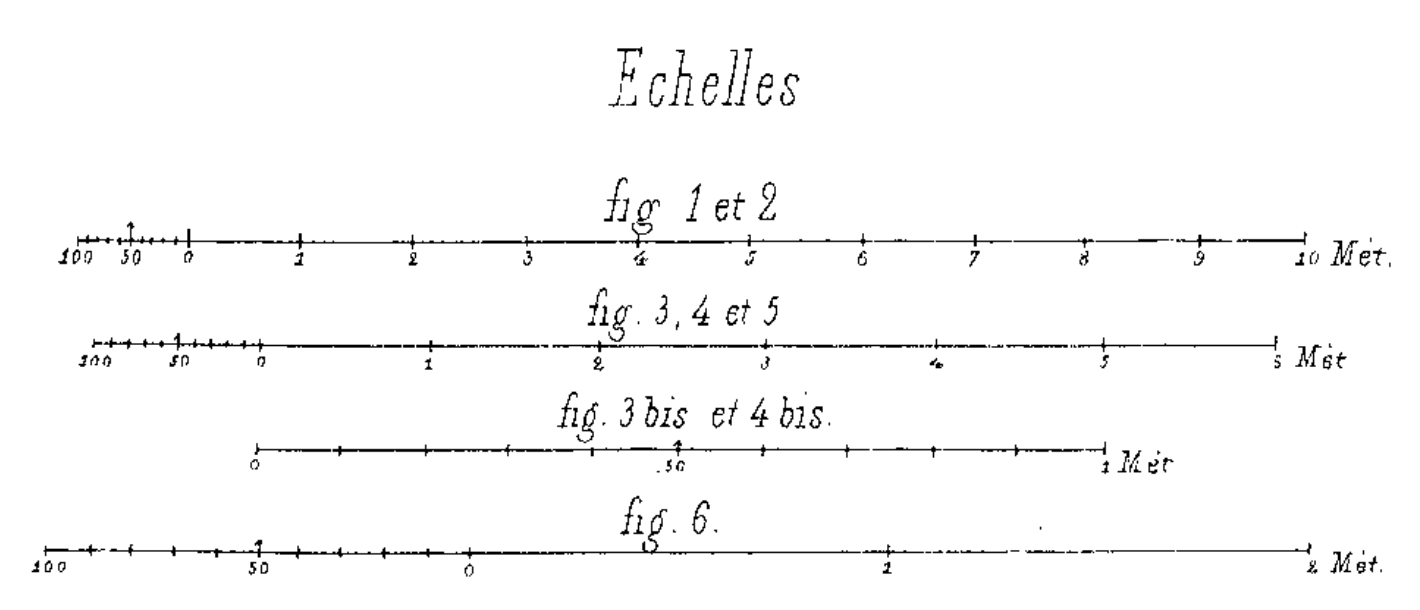
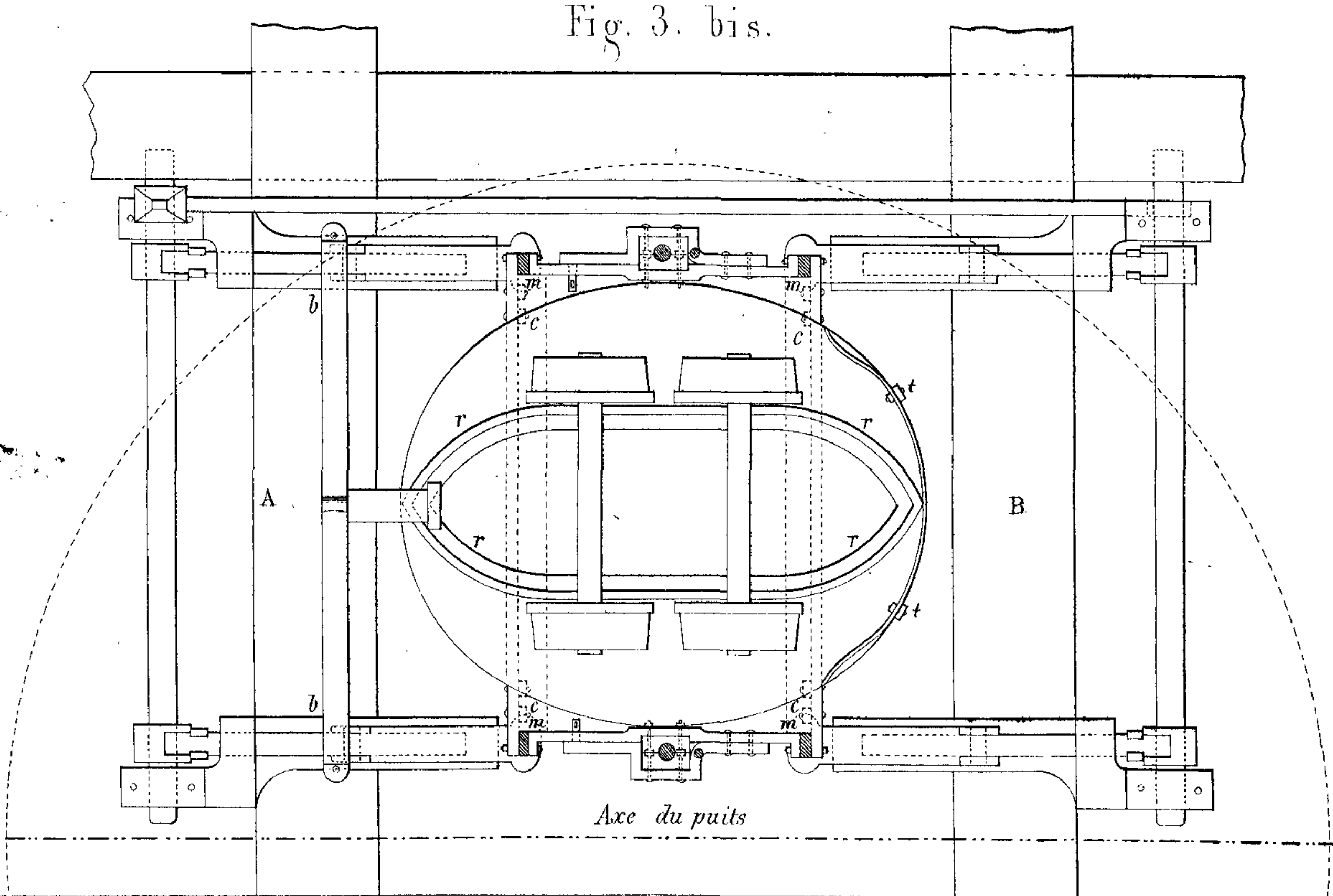


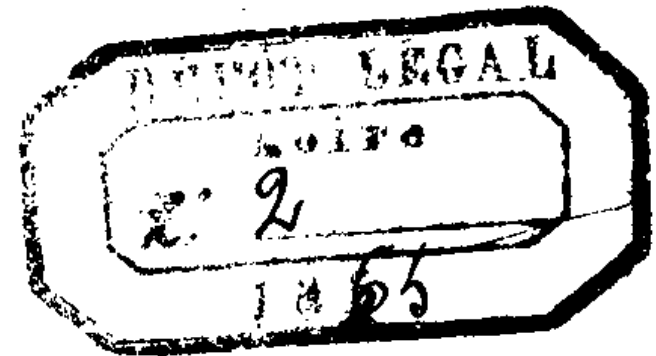
Fig. 3. bis.











SYSTÈMES D'EXTRACTION ET DE GUIDAGE.

Industrie minière 10<sup>ème</sup> Année.

PL. III.

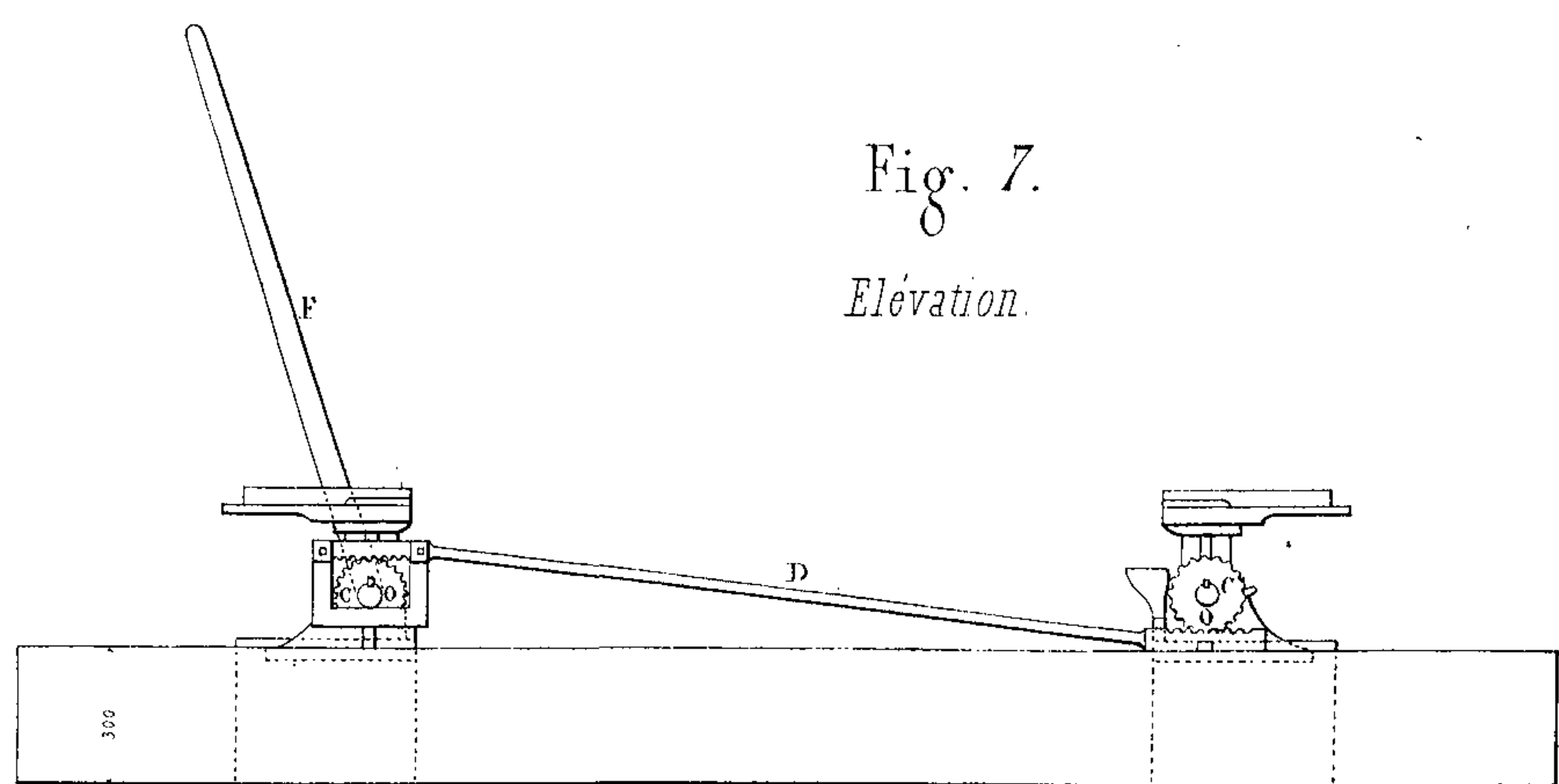


Fig. 7.  
Elevation.

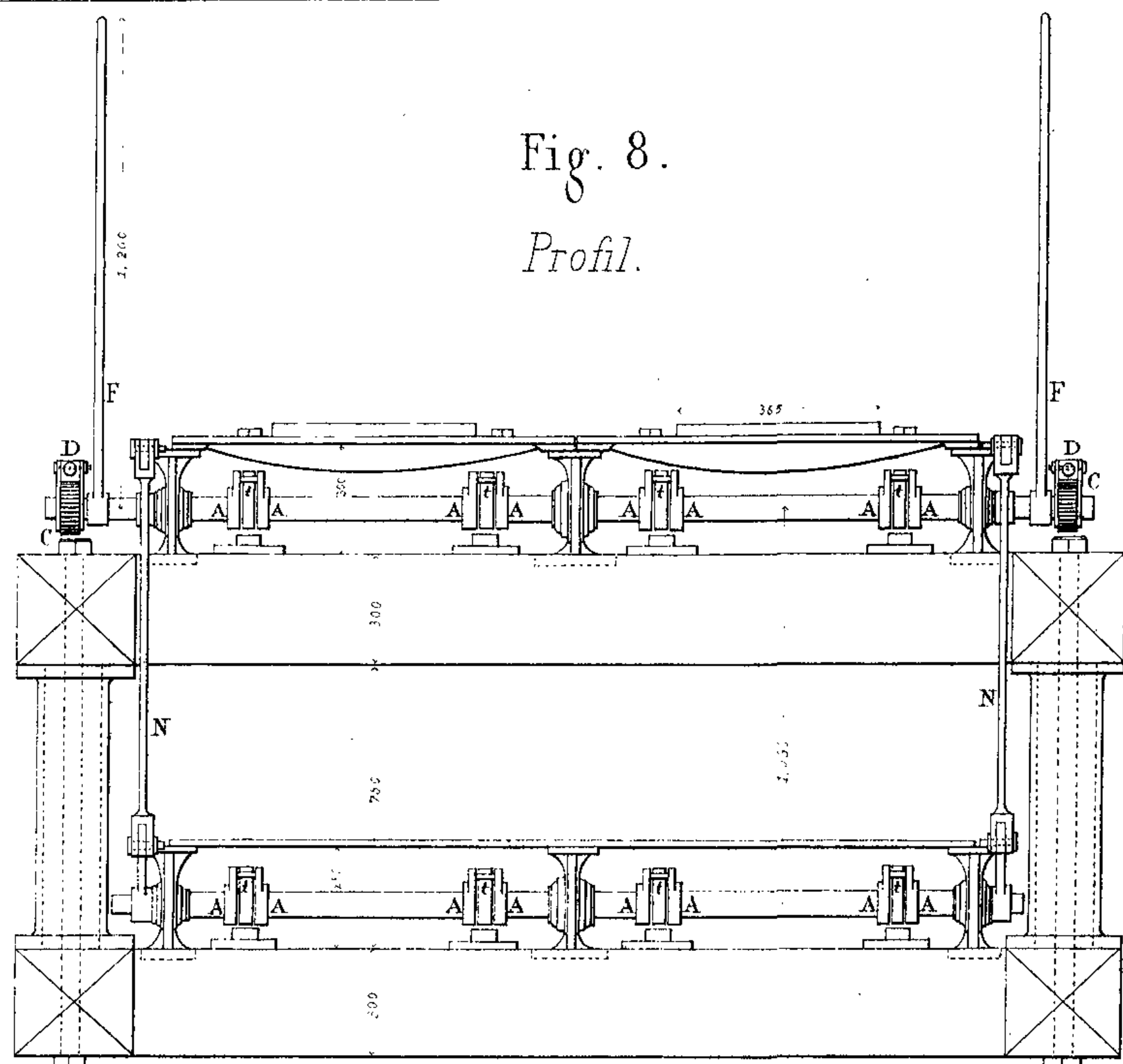


Fig. 8.  
Profil.

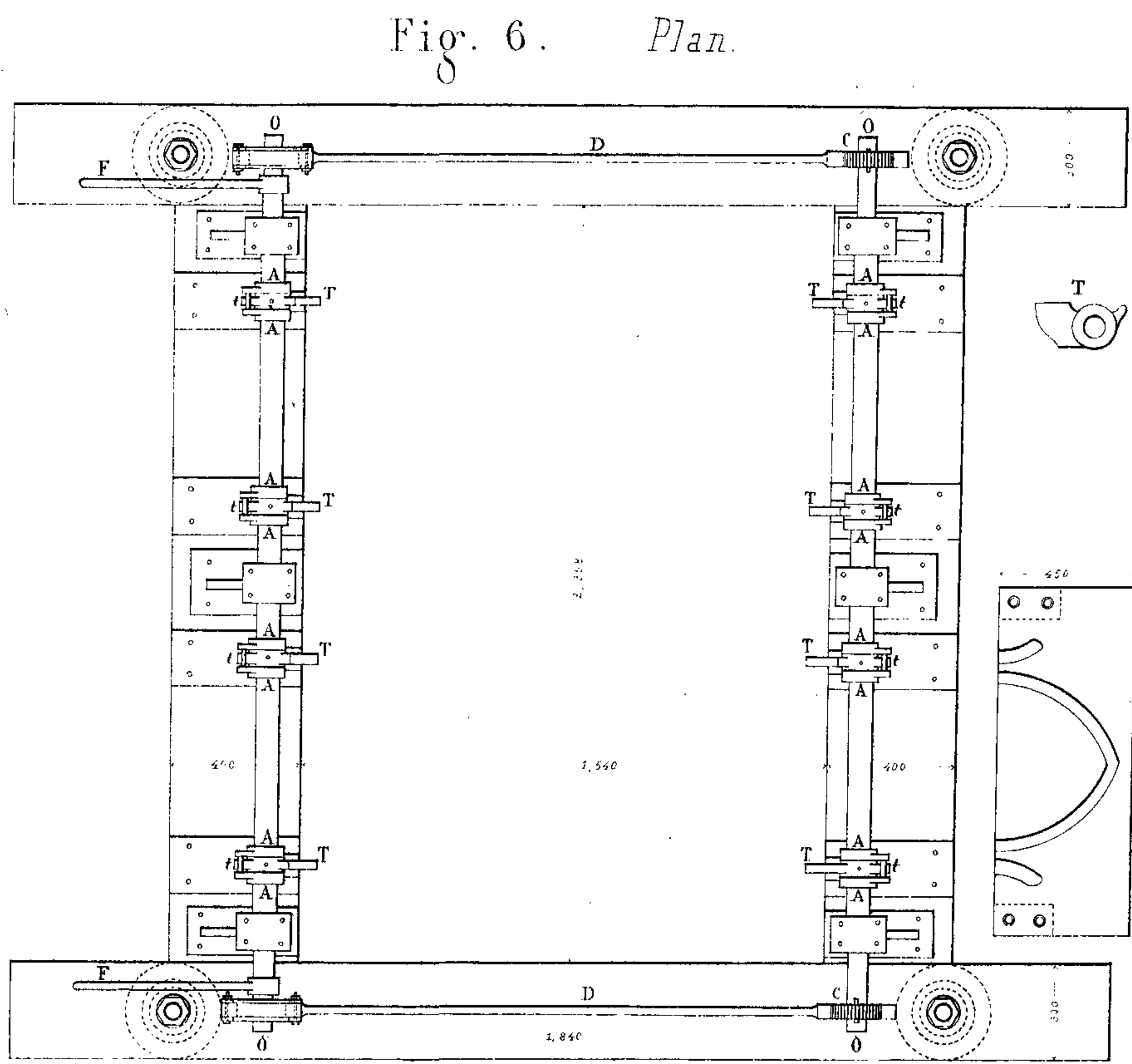


Fig. 6.  
Plan.

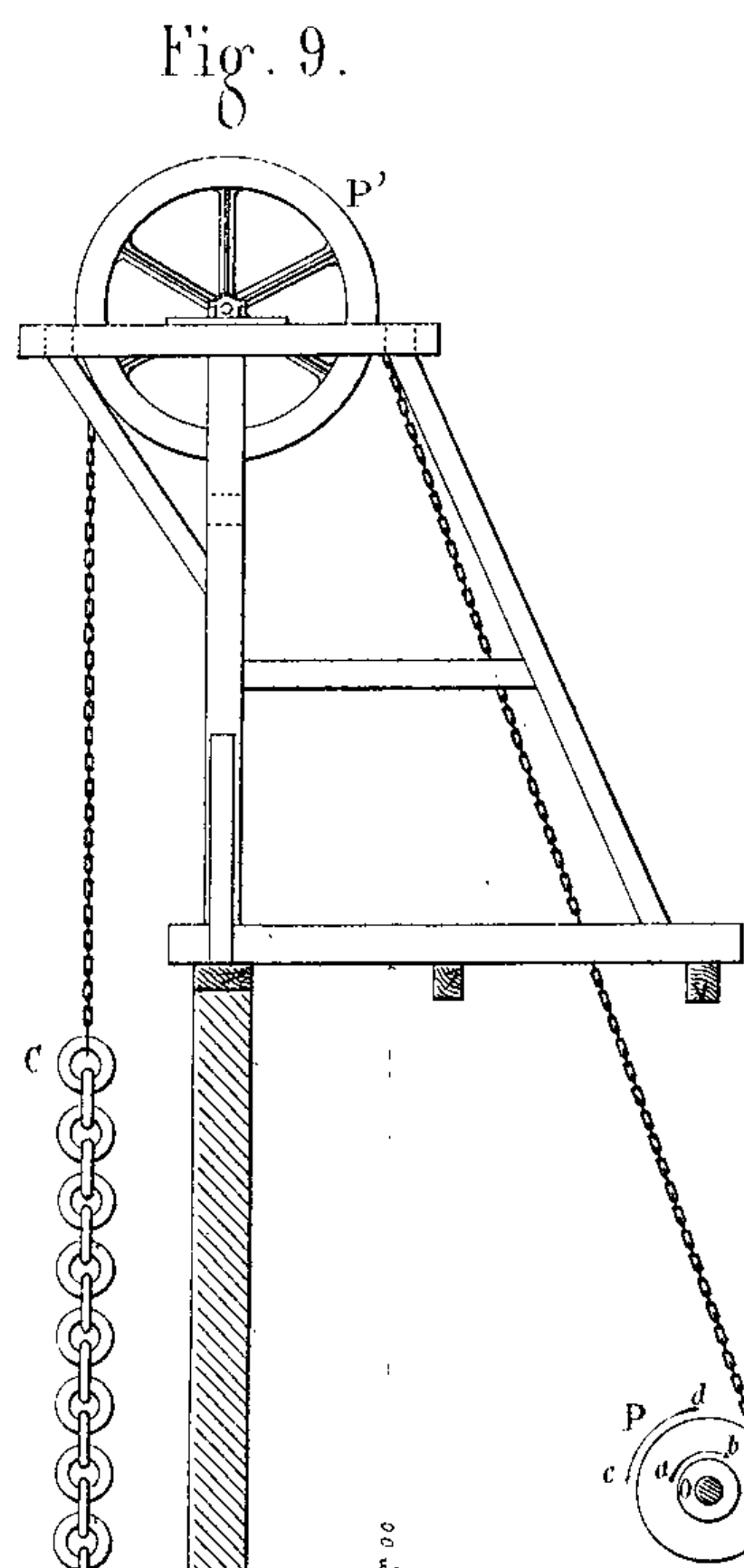


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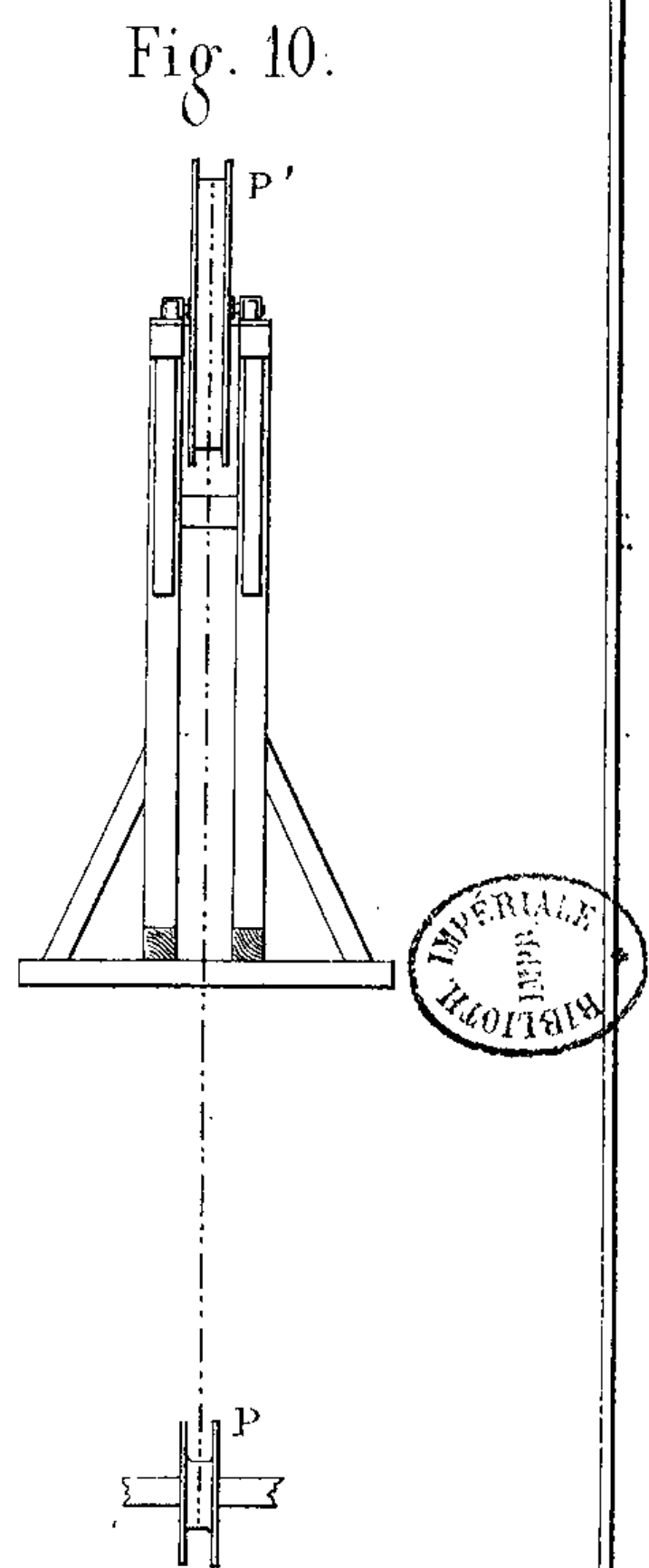


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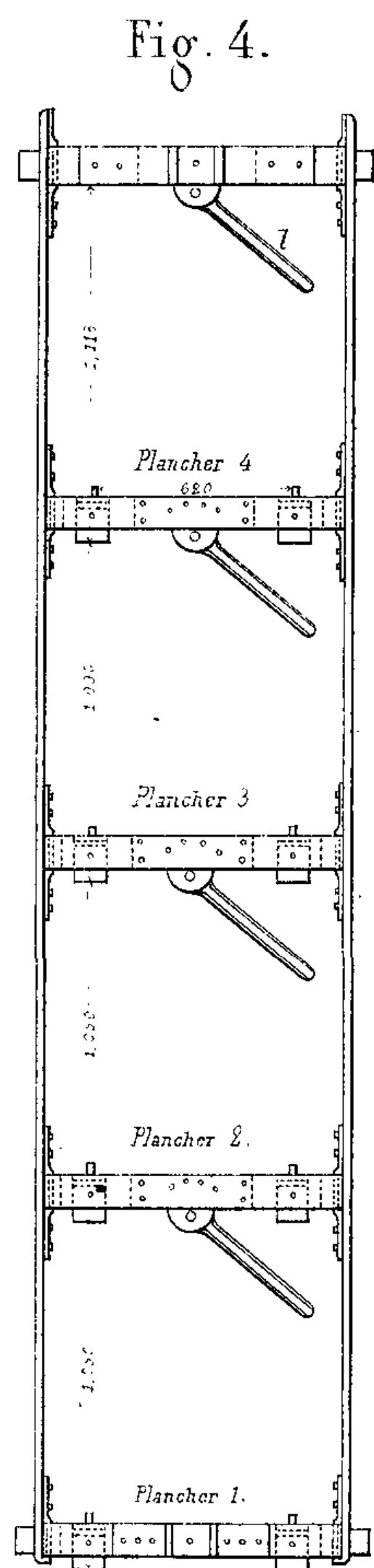


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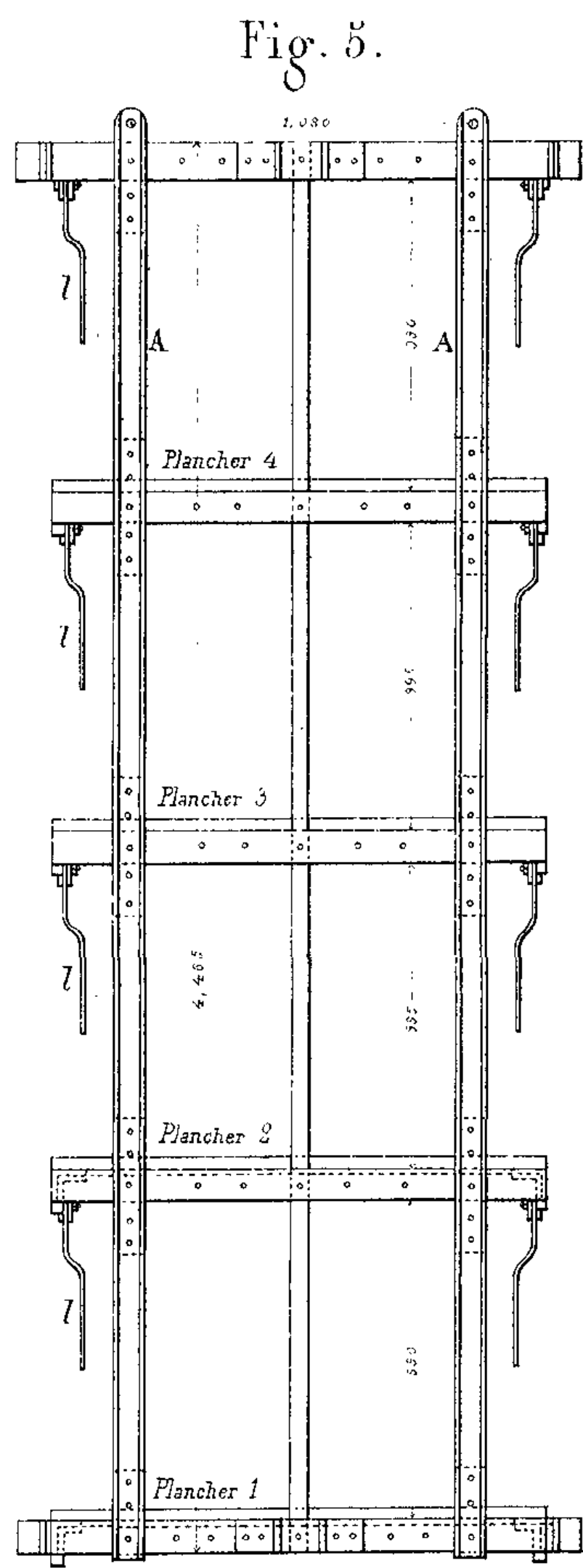


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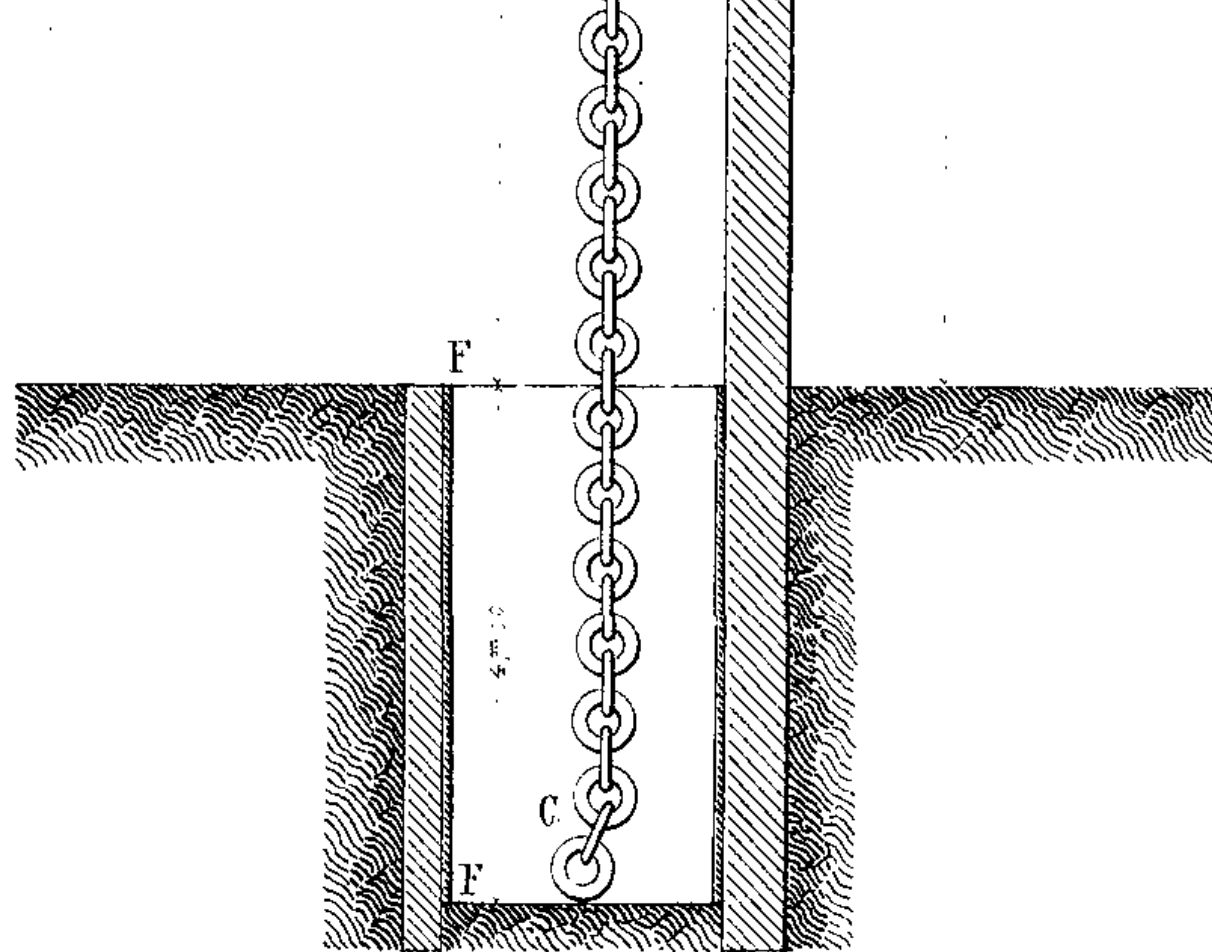


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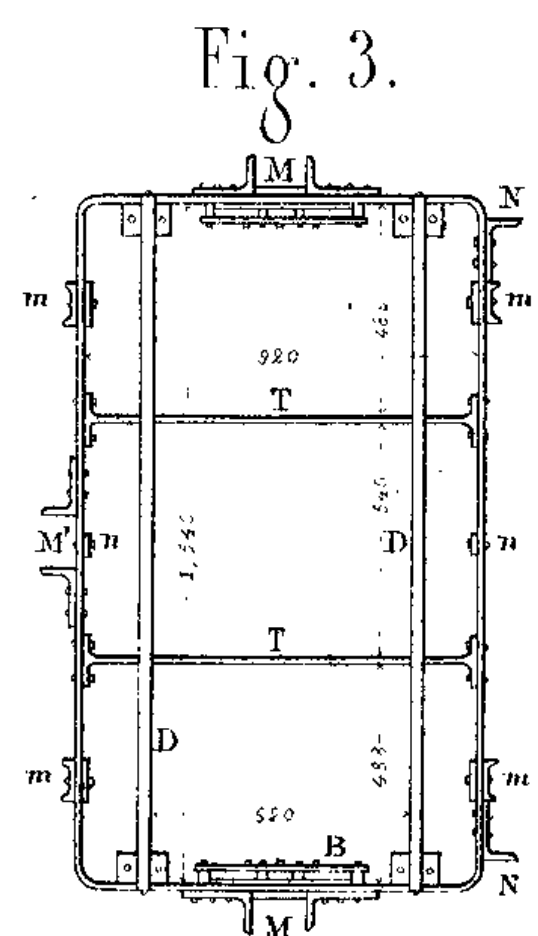


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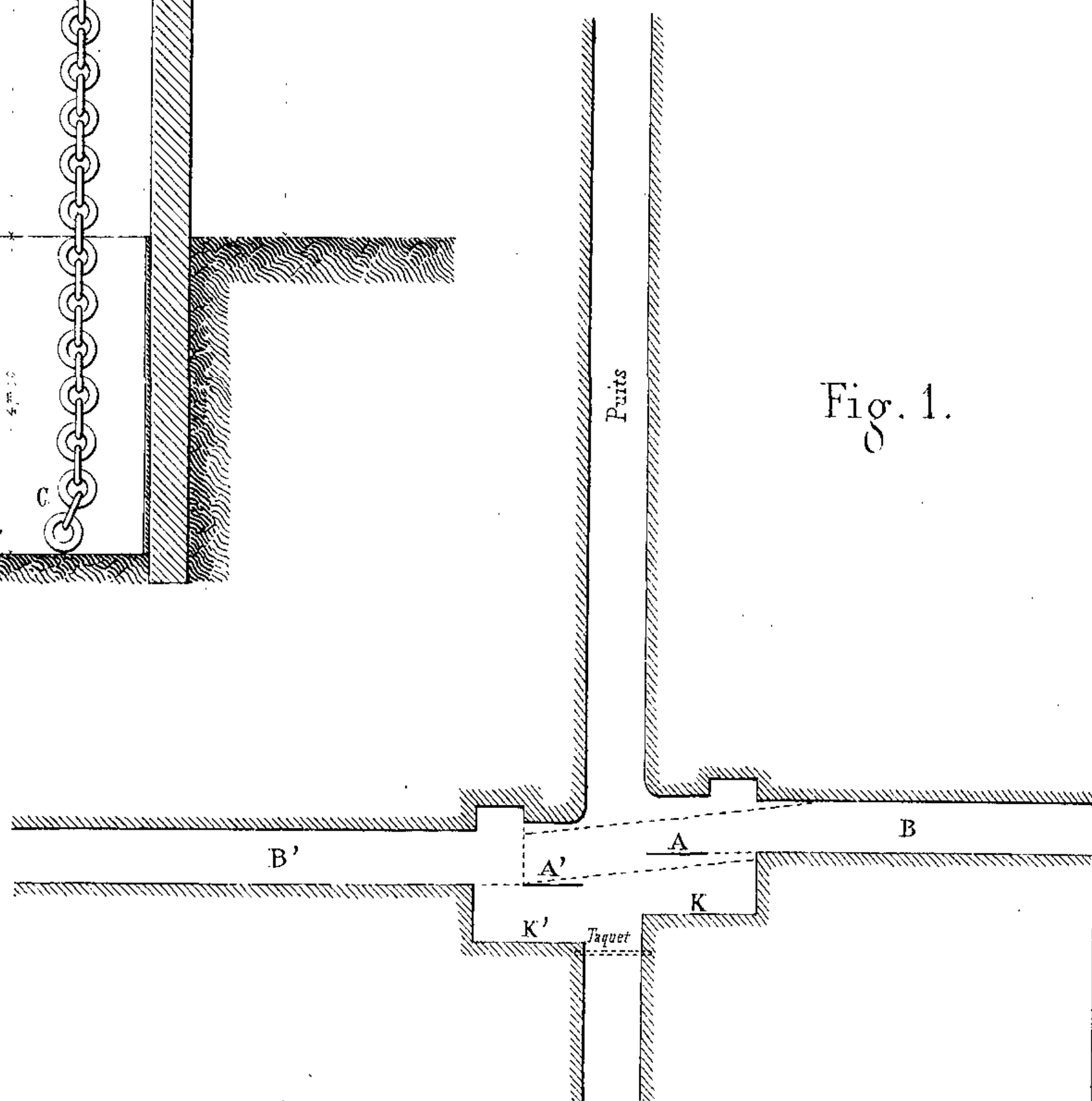
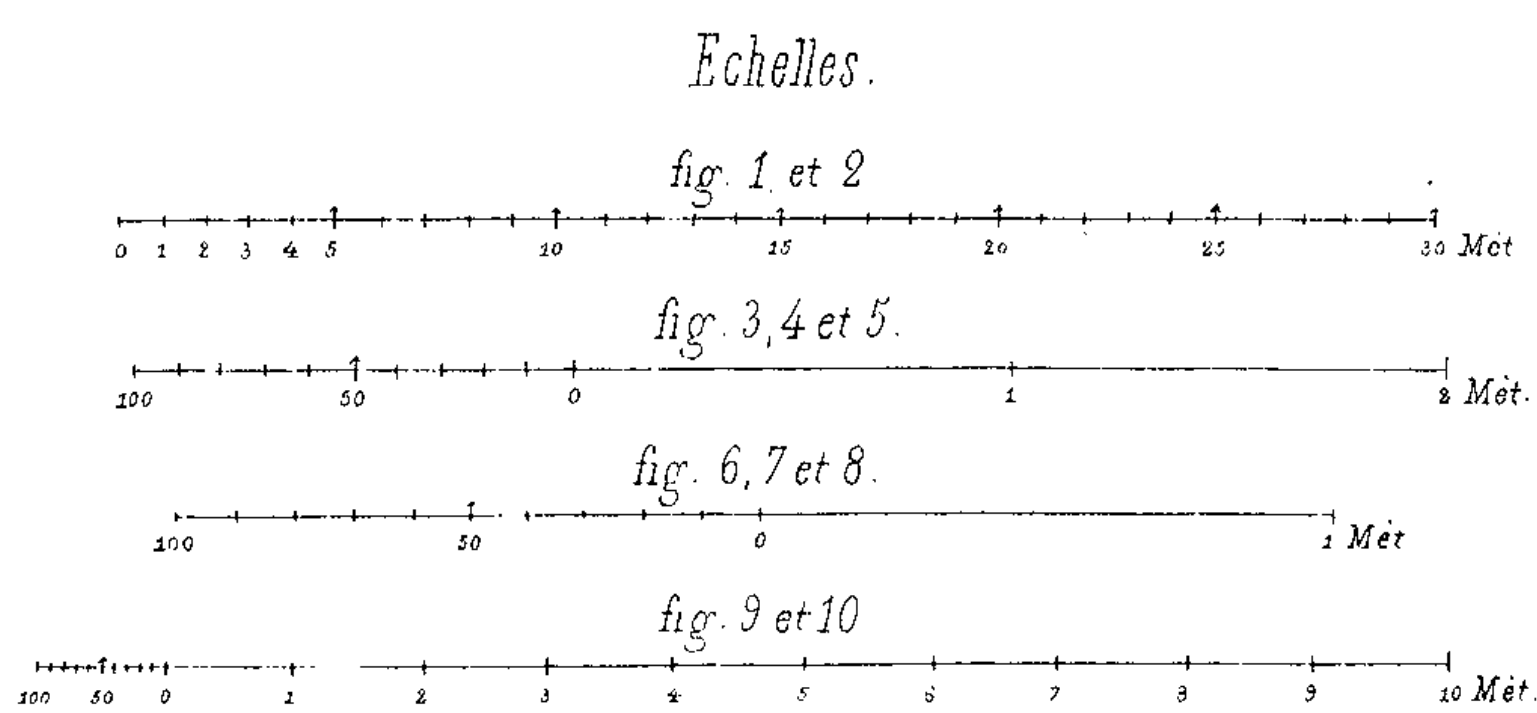


Fig. 2.

A et A' Emplacement des bascules avec 2<sup>m</sup>200 de course.

S Communication de la chambre A à la chambre A'.







Fig. 1.

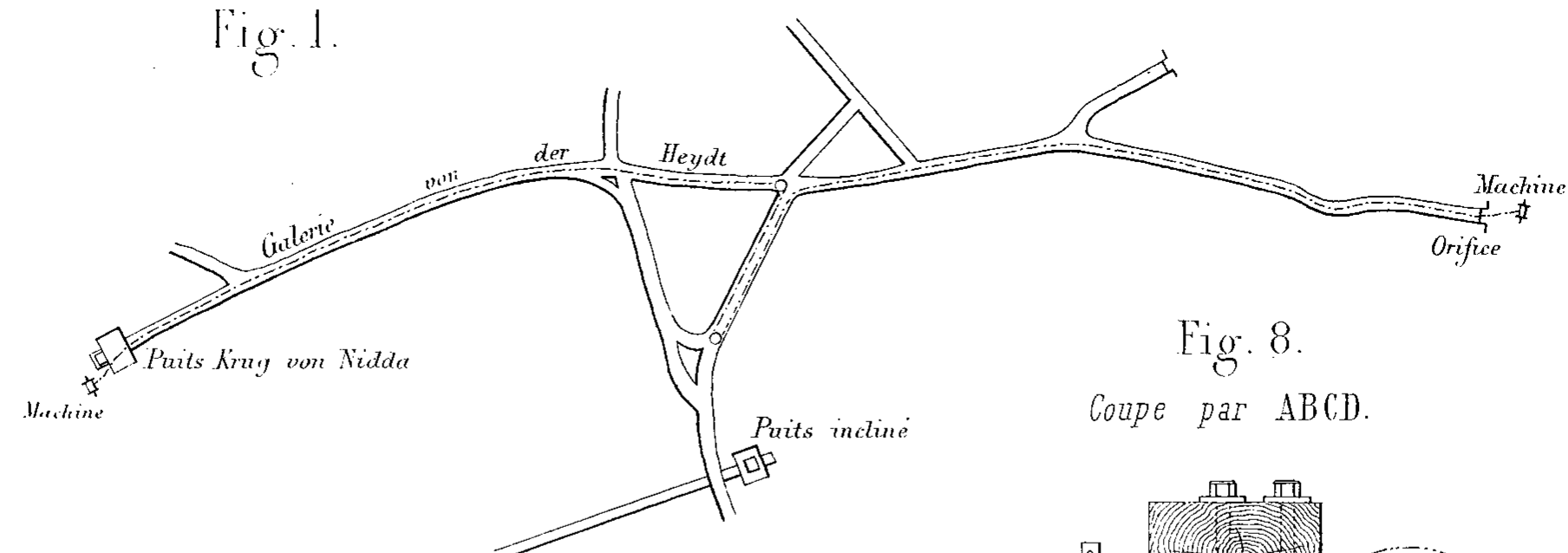


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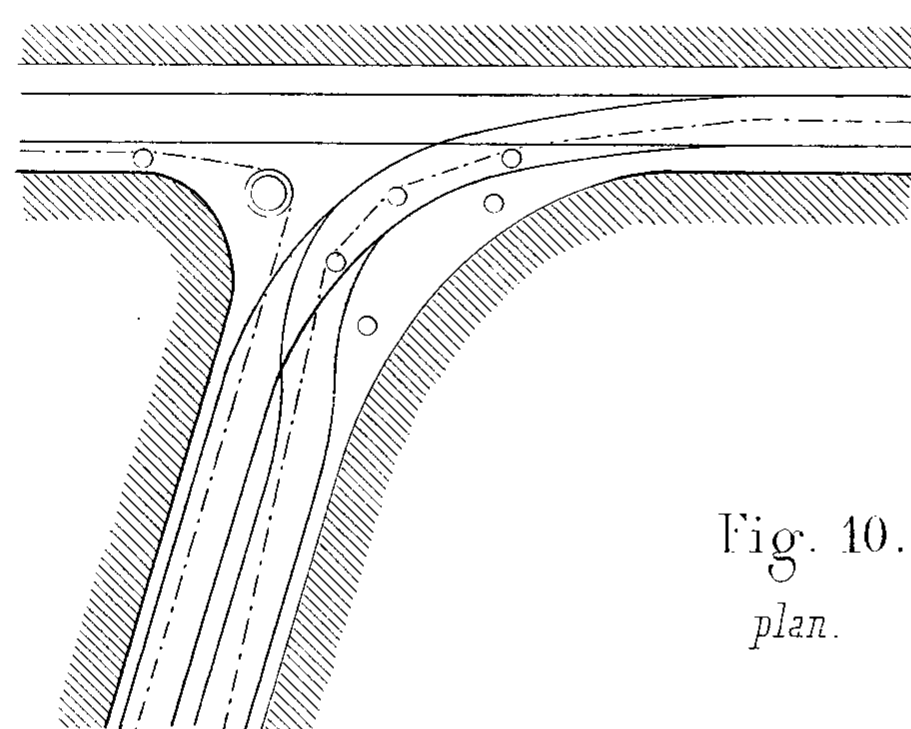


Fig. 10.  
plan.

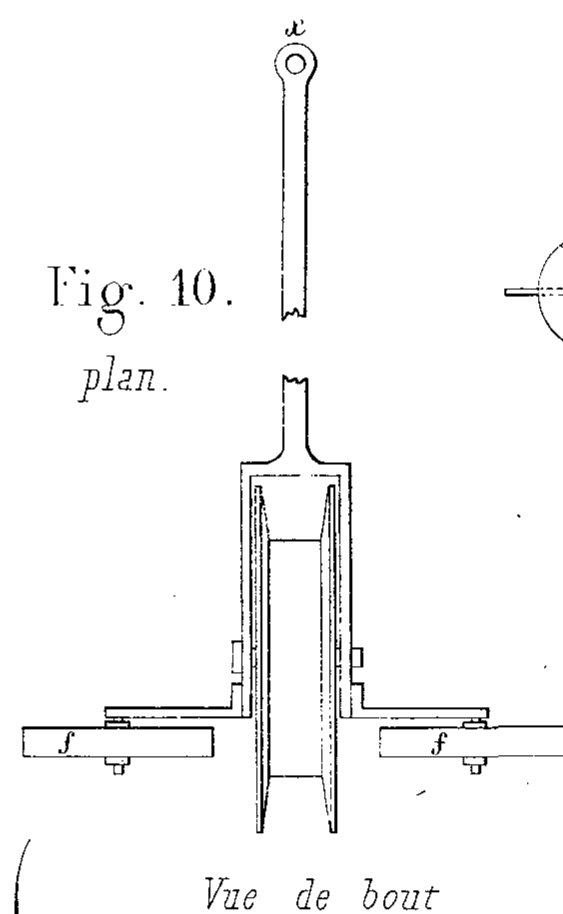


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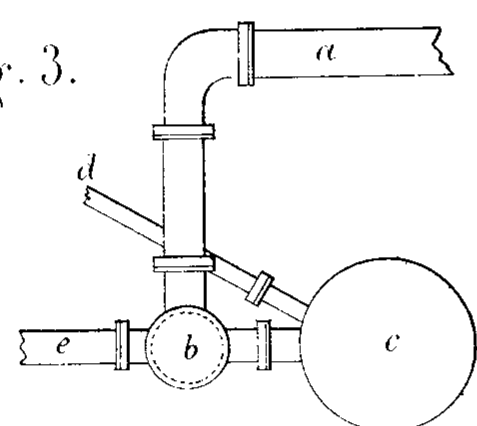


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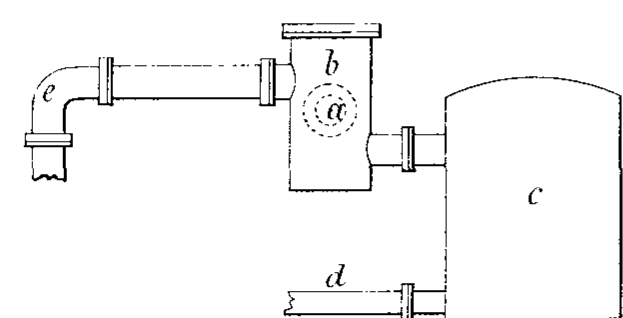


Fig. 8.  
Coupe par ABCD.

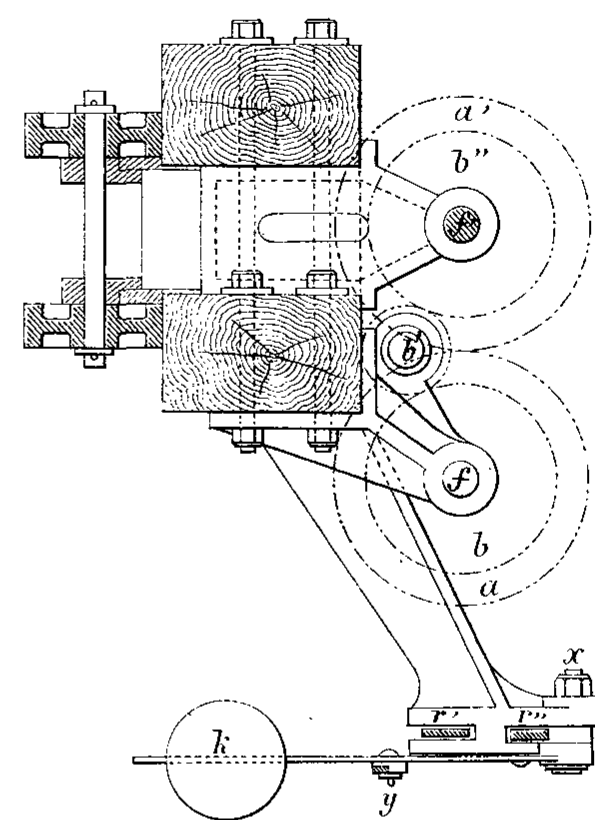


Fig. 13.

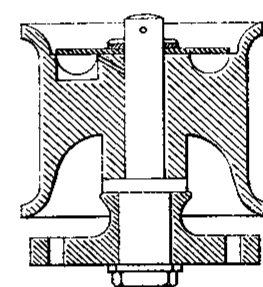


Fig. 5.  
Vue antérieure.

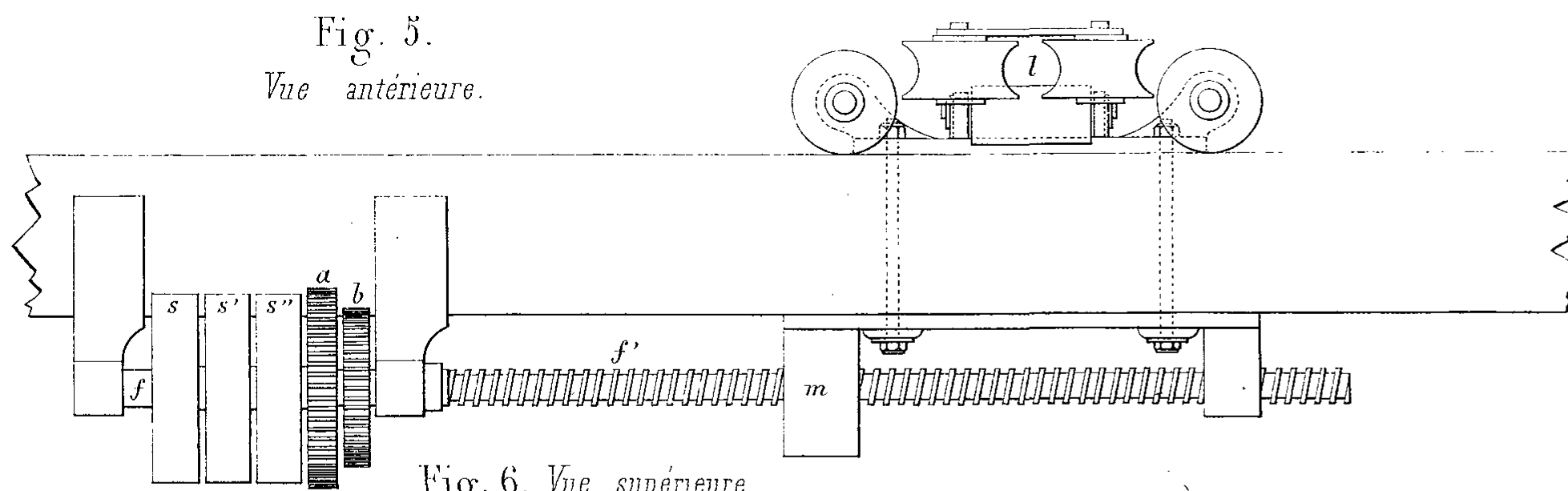


Fig. 6. Vue supérieure.

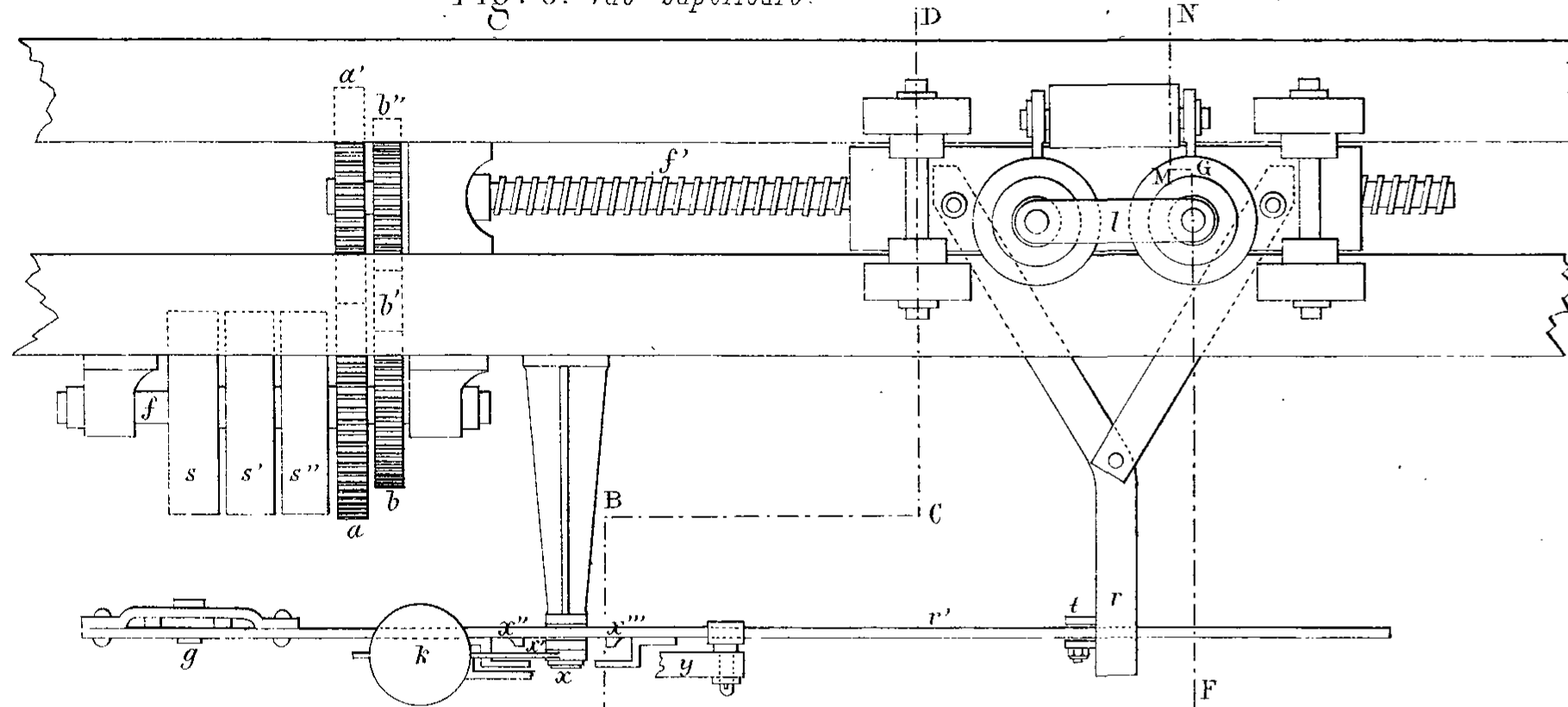


Fig. 7.

Vue antérieure du contrepoids et de la tige conductrice.

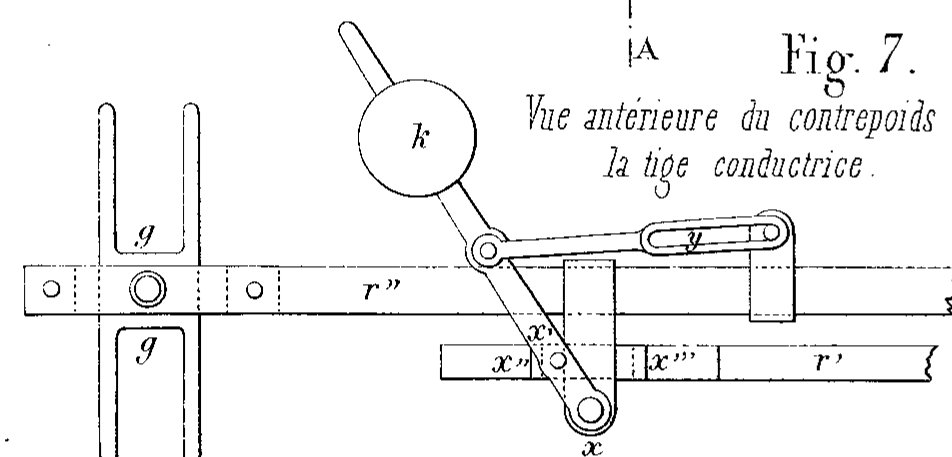


Fig. 16.

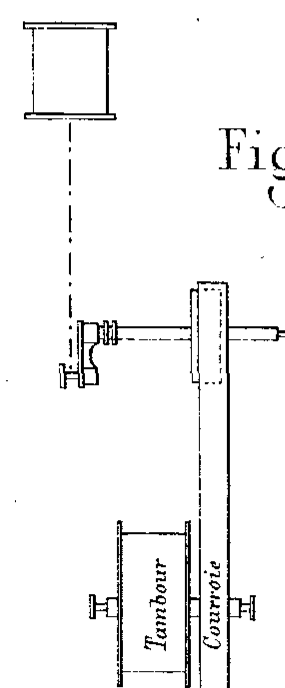


Fig. 9.  
Coupe par FGHN.

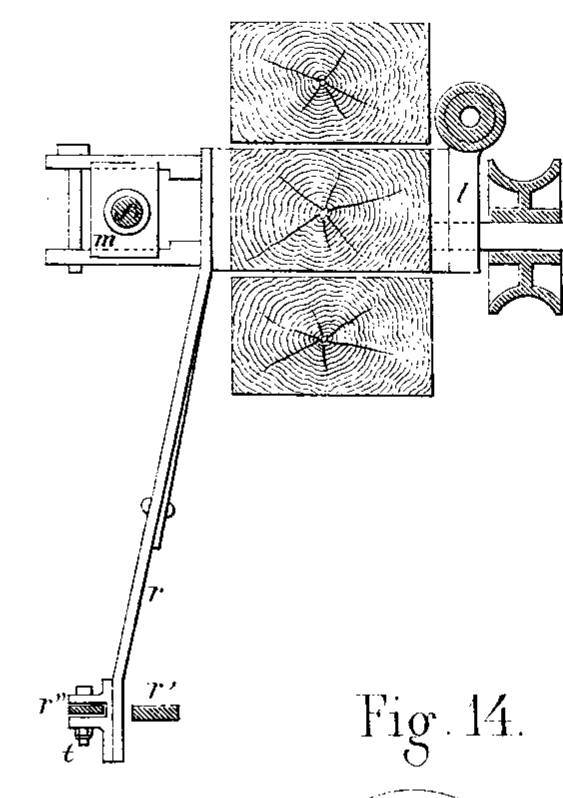


Fig. 14.

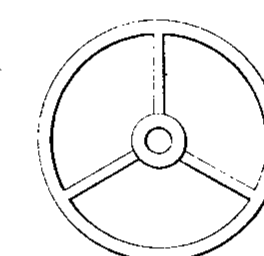


Fig. 15.

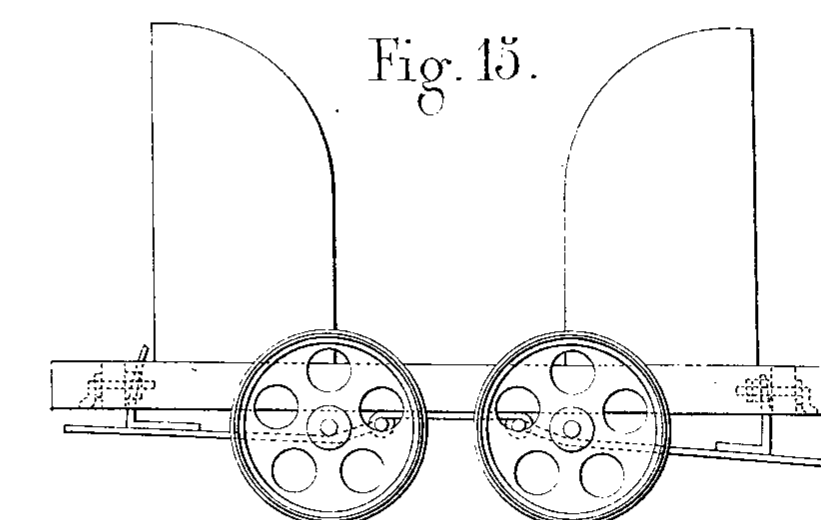


Fig. 12.

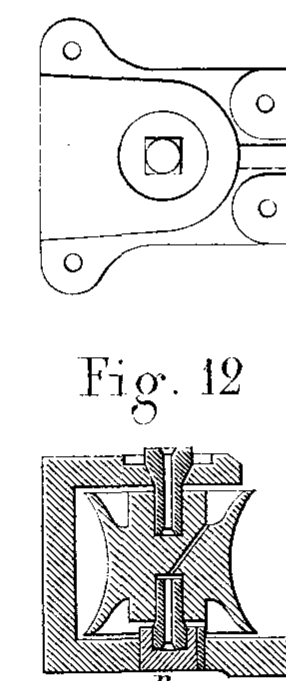


Fig. 17.

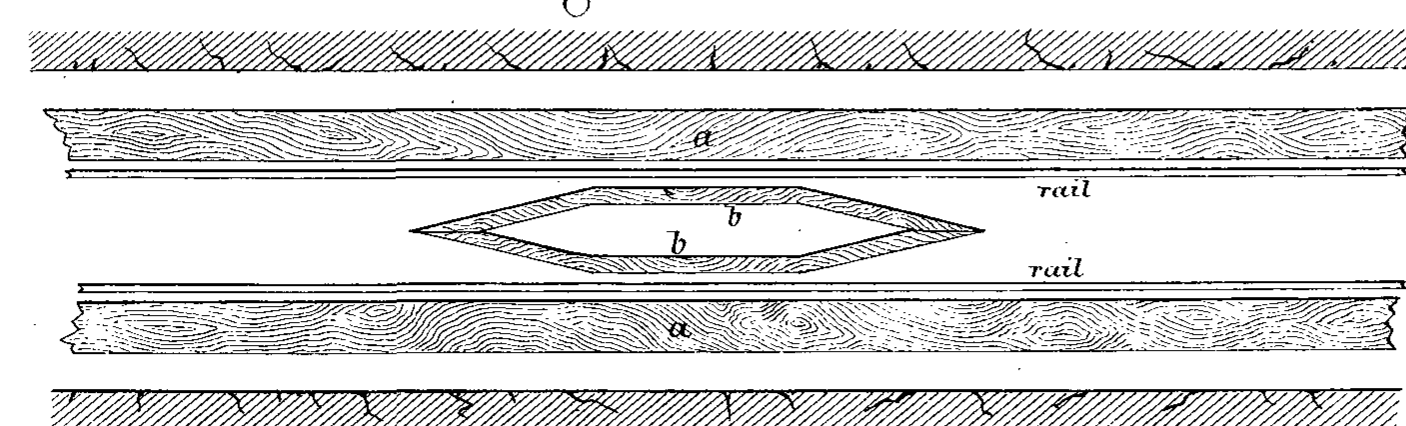
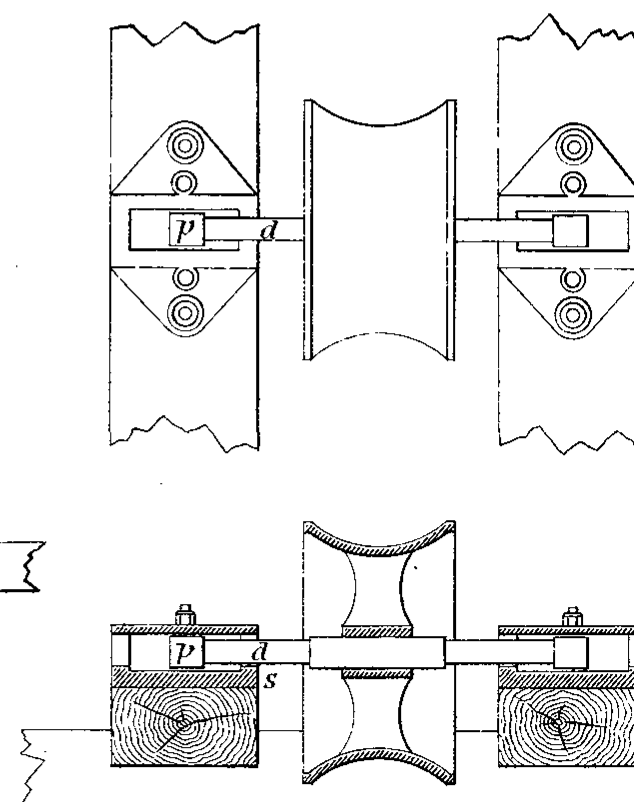
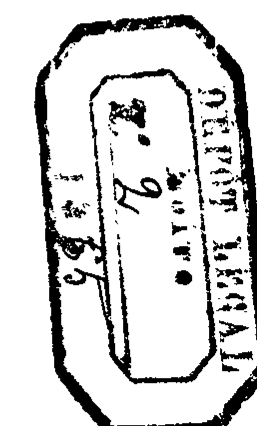
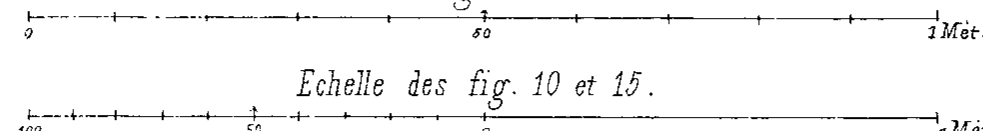


Fig. 11.



Echelle des fig. 5 à 9 et 11 à 14.

Echelle des fig. 10 et 15.









Projection verticale du réservoir.

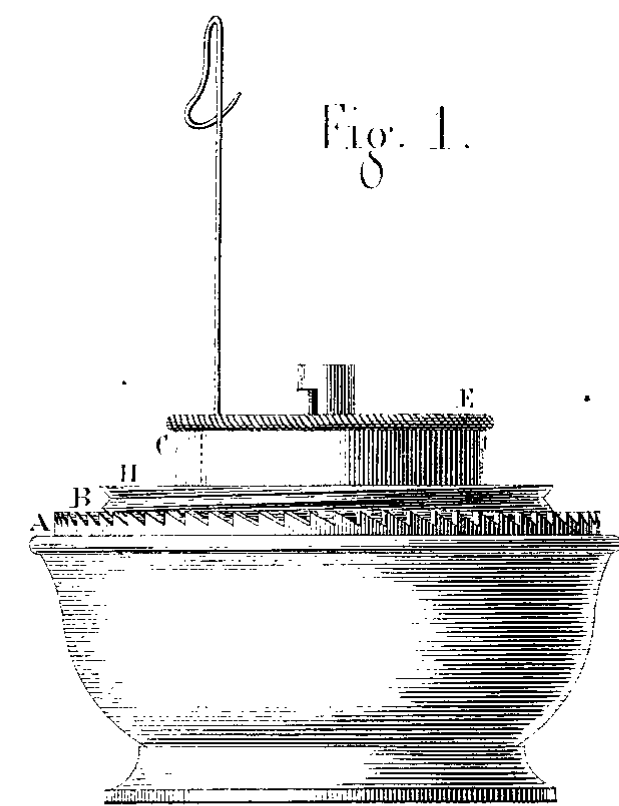


Fig. 2. Projection horizontale du réservoir.

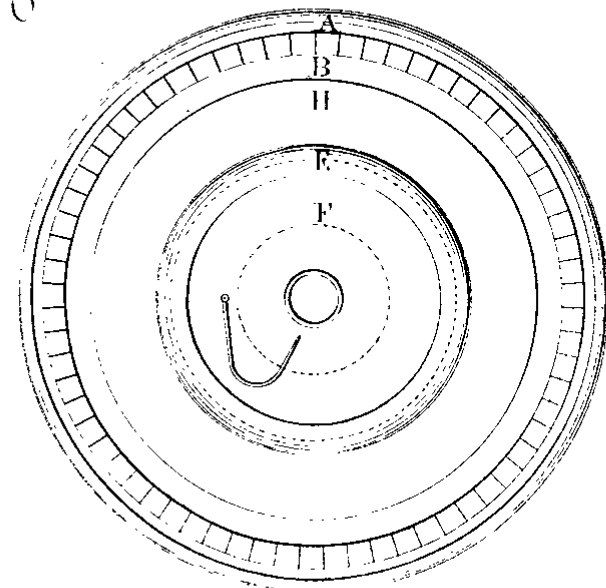


Fig. 8.

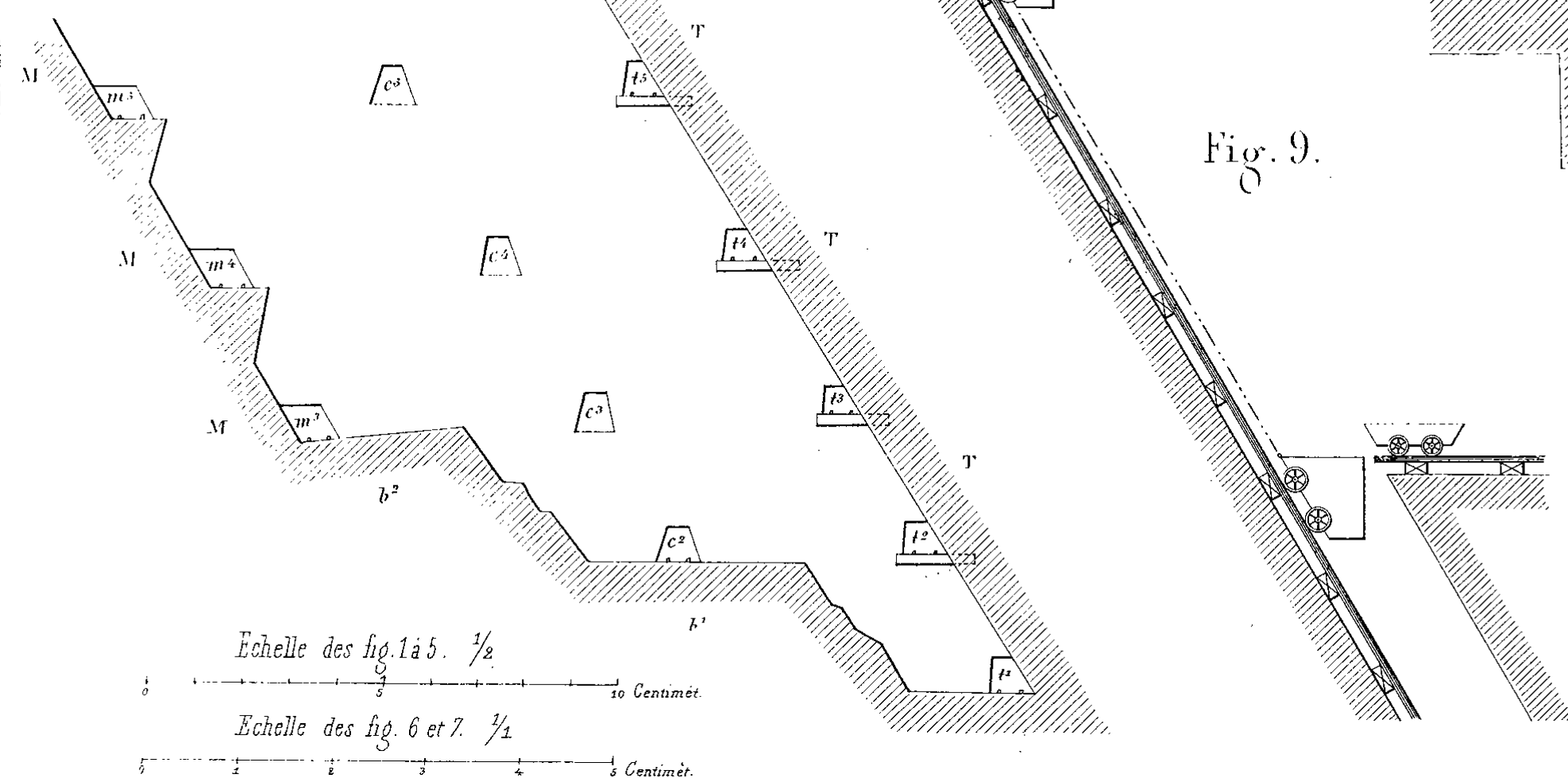
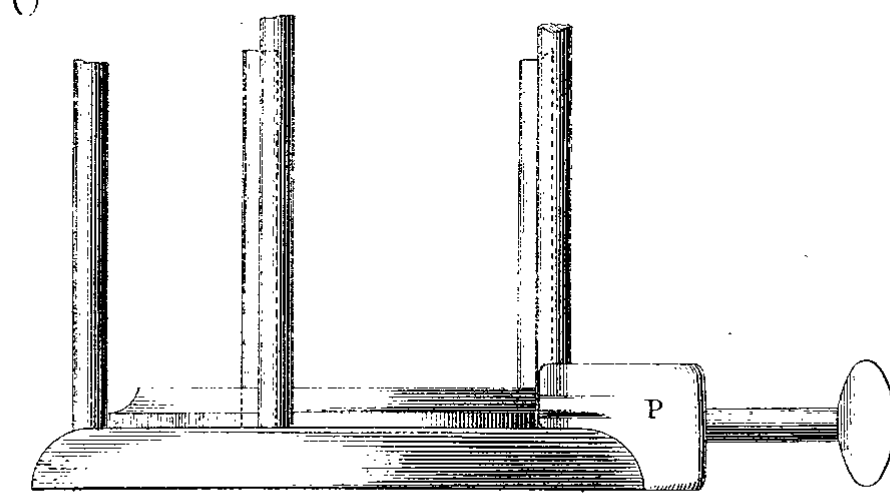


Fig. 3. Projection verticale de la cage.



Vue en dessous de la cage.

Fig. 4.

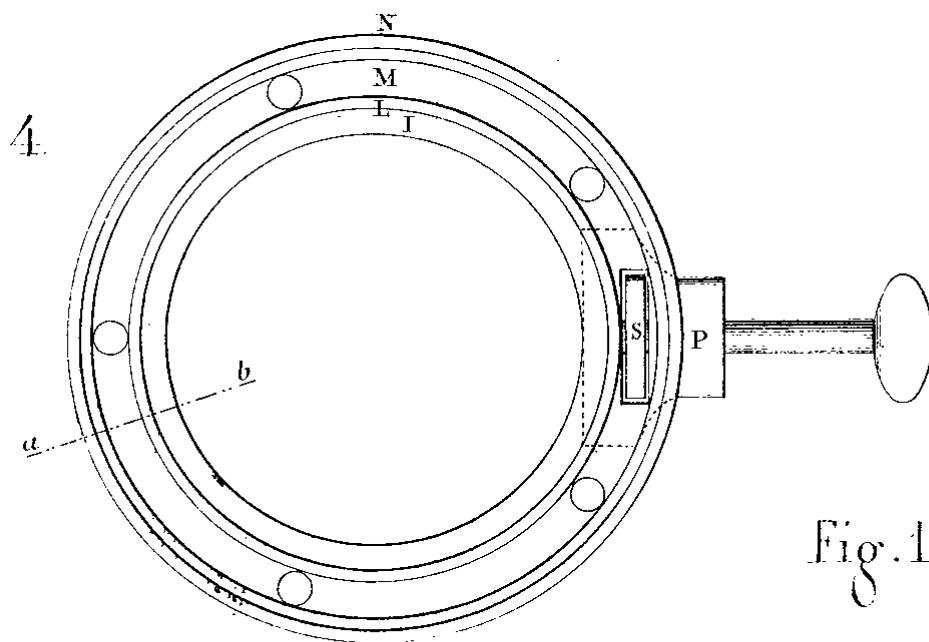


Fig. 10. Aménagement du pissement.

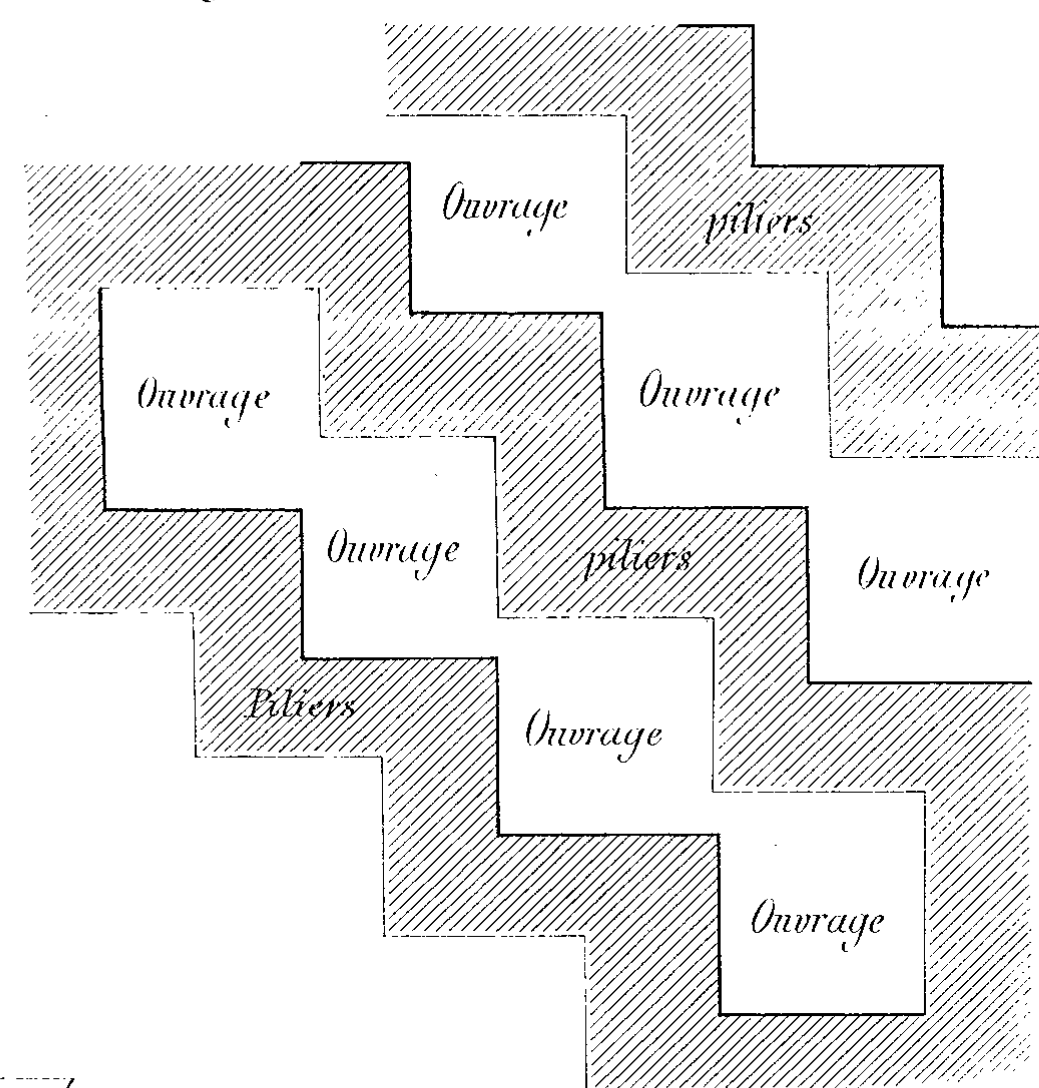


Fig. 6. Vue en dessous de la pièce P.

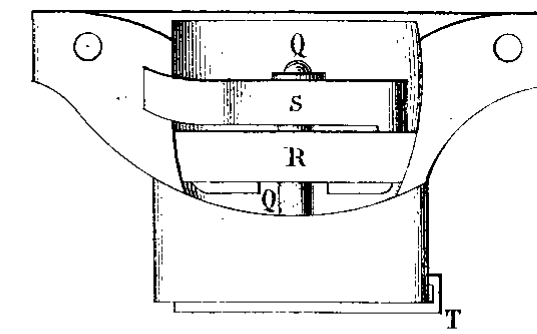


Fig. 7. Vue de face.

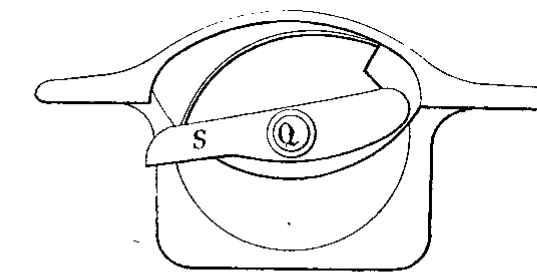


Fig. 11.

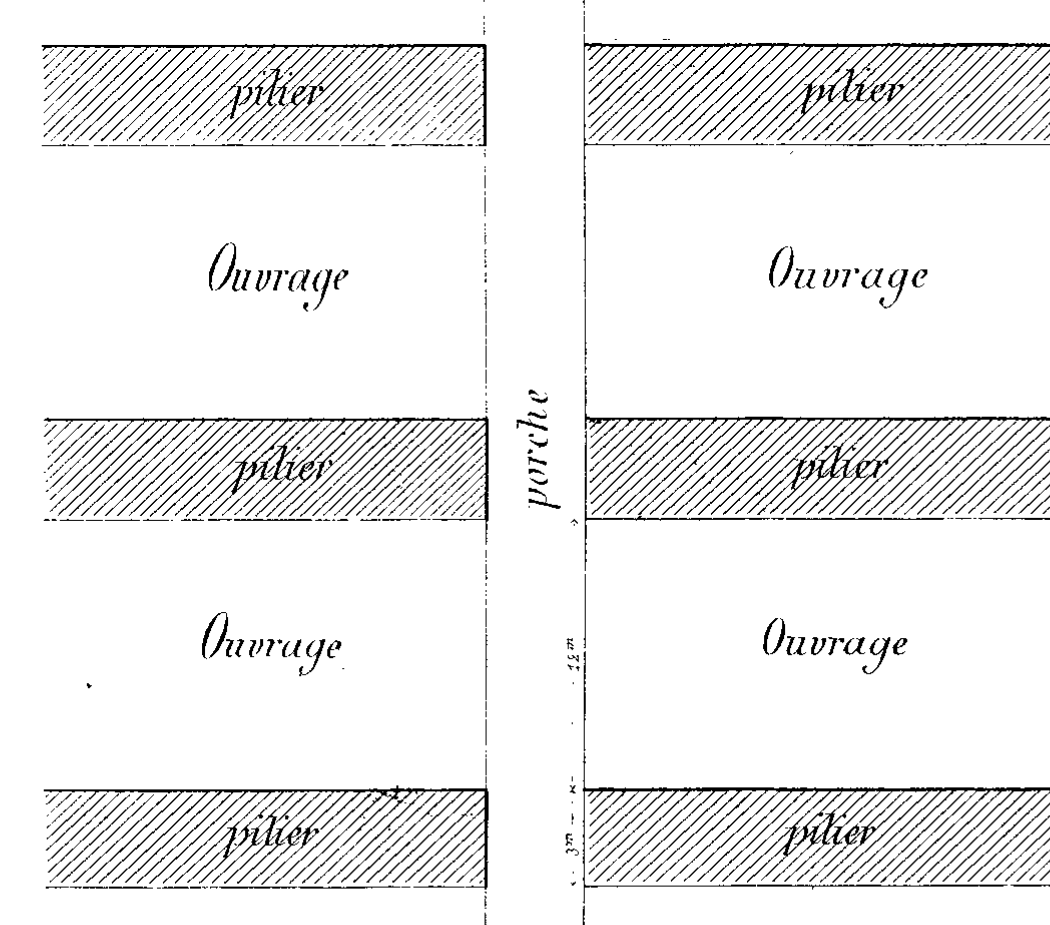


Fig. 12.

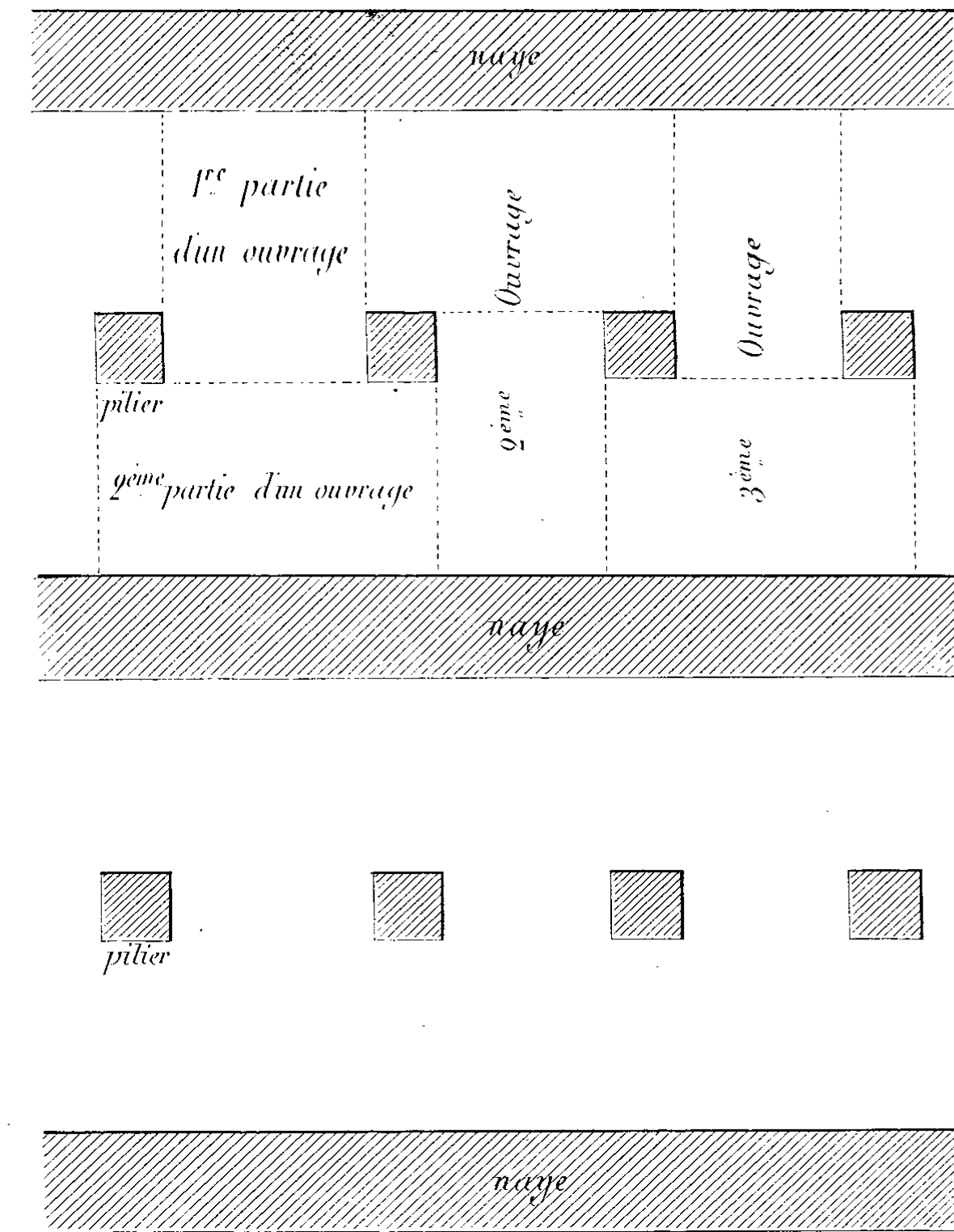
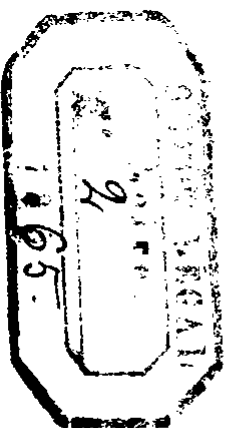
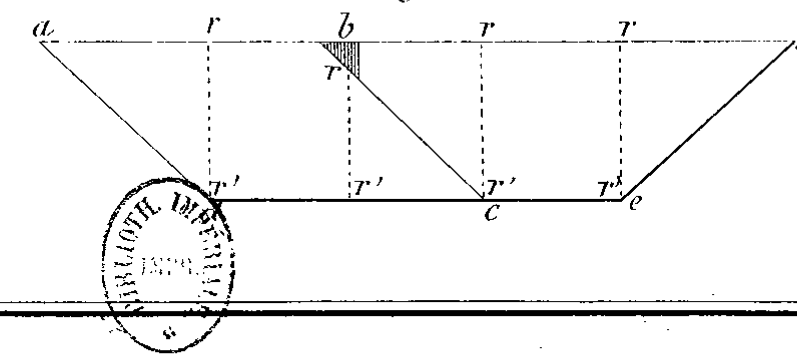


Fig. 13.









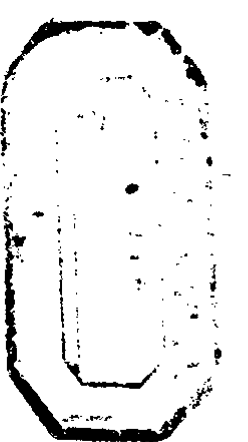
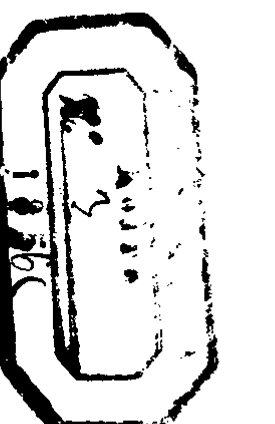
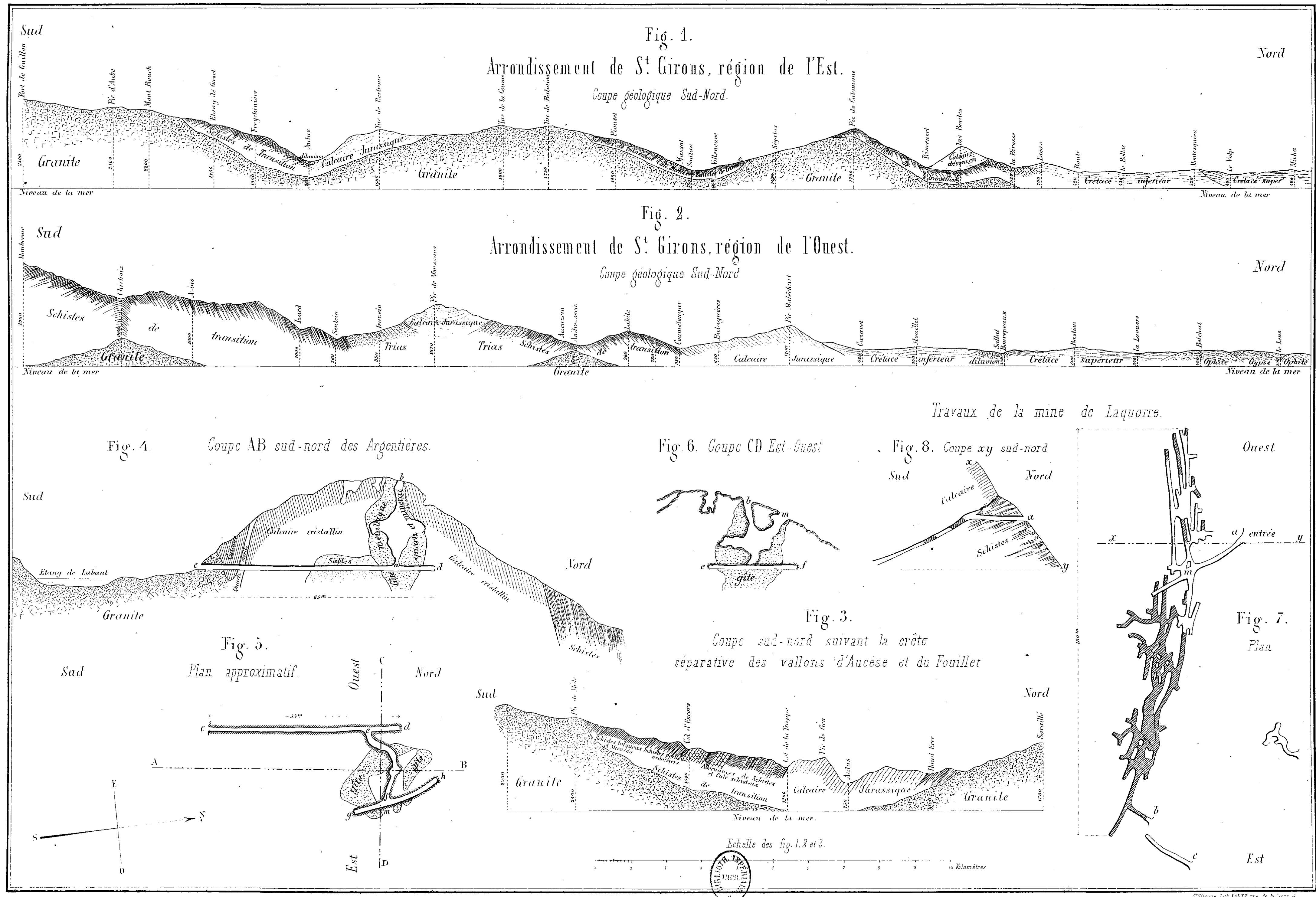








Fig. 1.

Coupe Ouest-Est suivant la direction du filon.

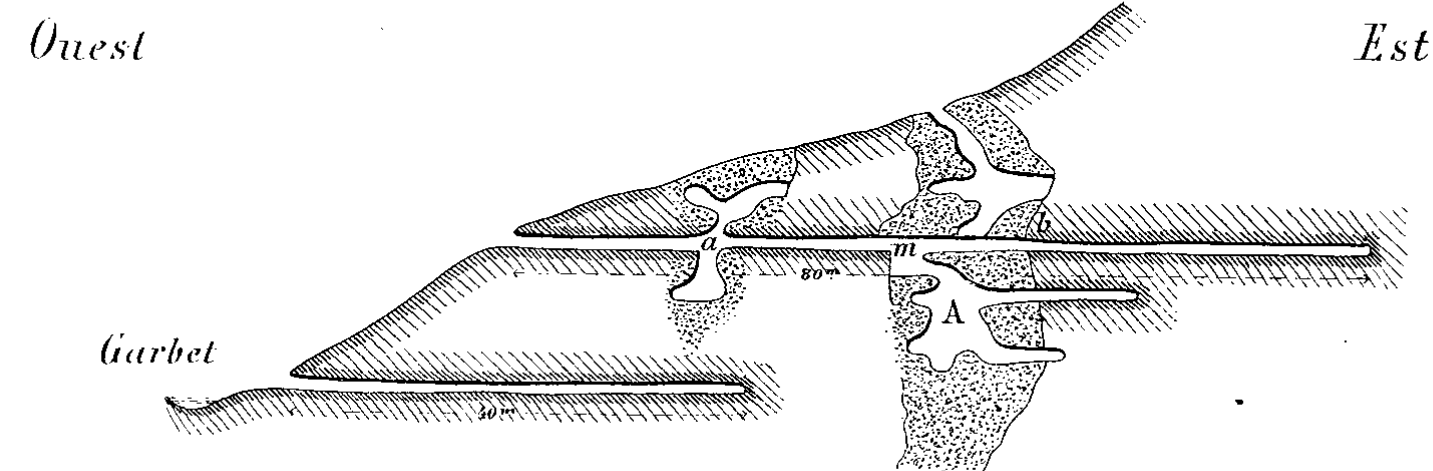


Fig. 3.

Coupe de l'affleurement de Sentein.

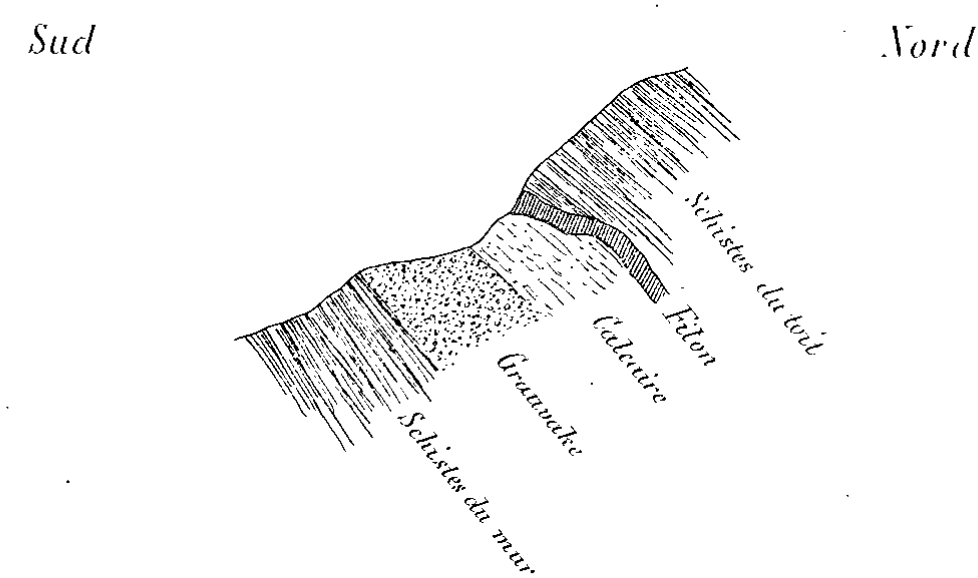


Fig. 2.

Plan de la mine de S<sup>te</sup> Barbe

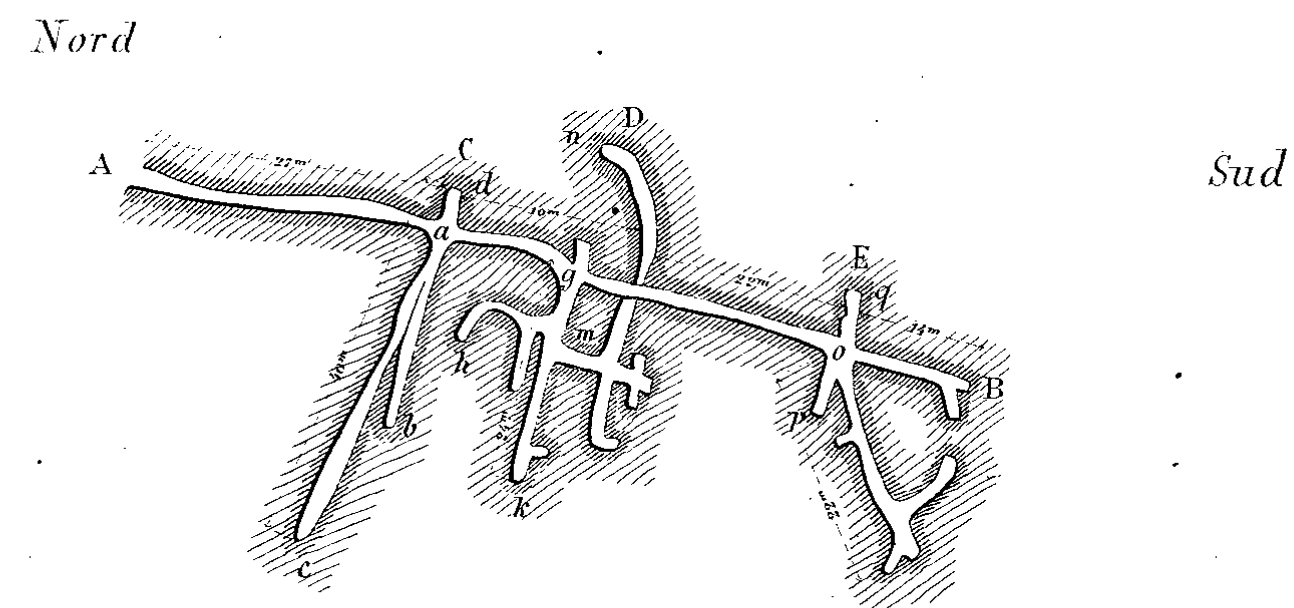


Fig. 4.

Elévation des travaux de Chicoix.

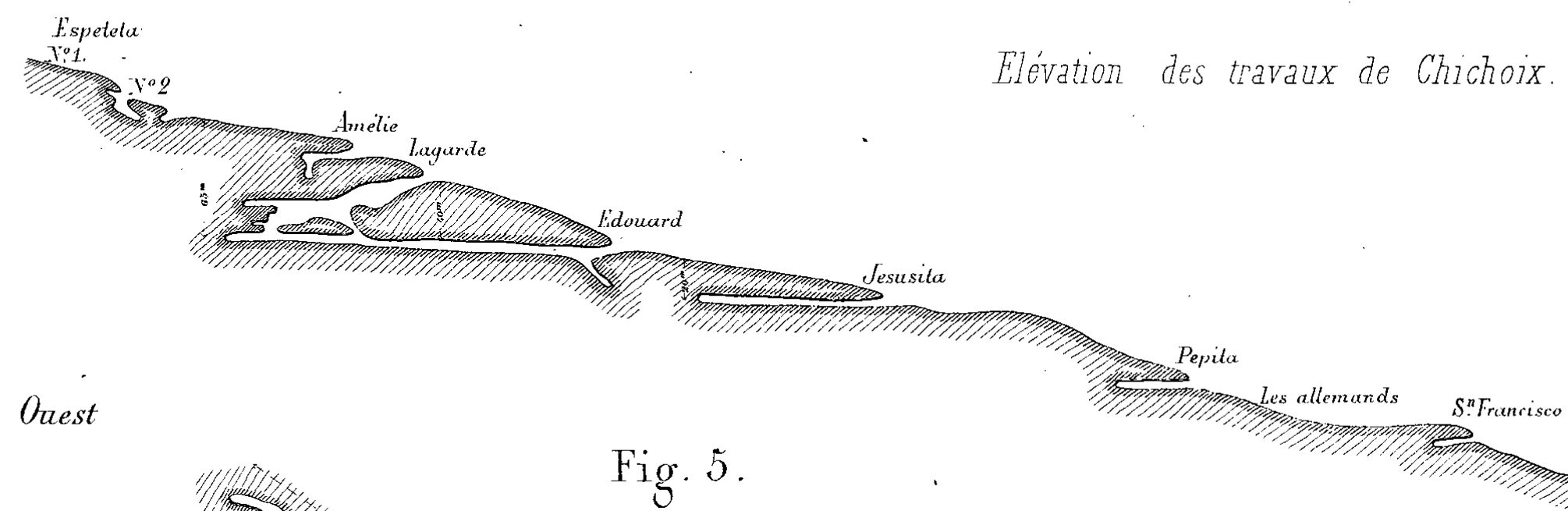


Fig. 5.

Plan des travaux de Chicoix

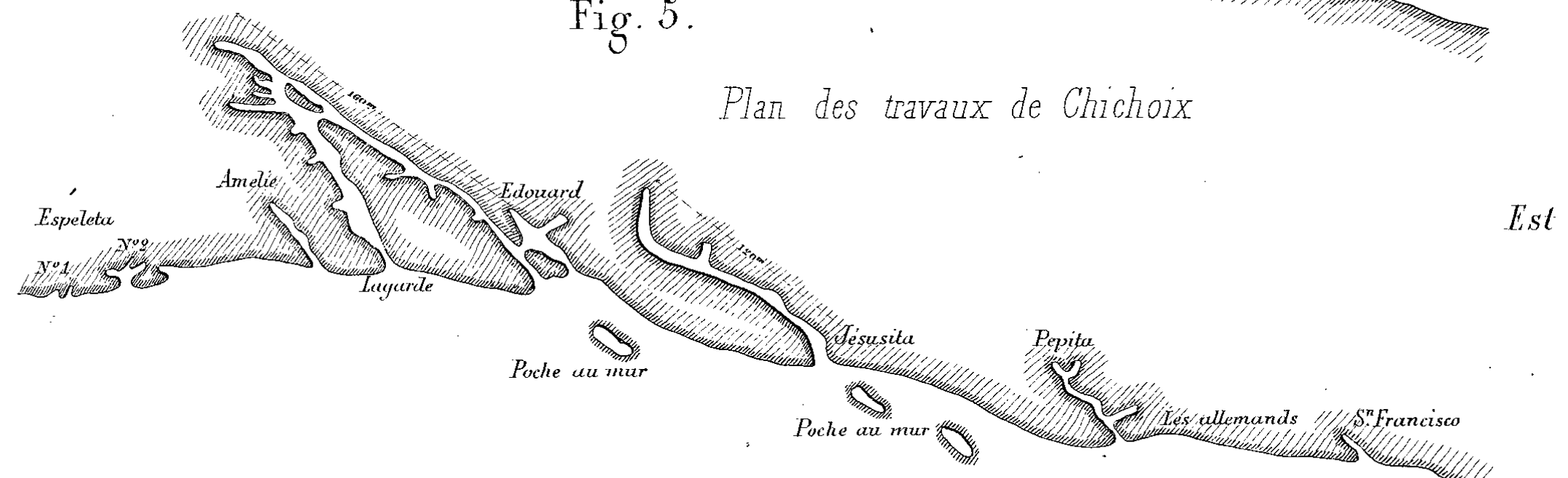


Fig. 6.

Coupe Sud-Nord du vallon de Chicoix

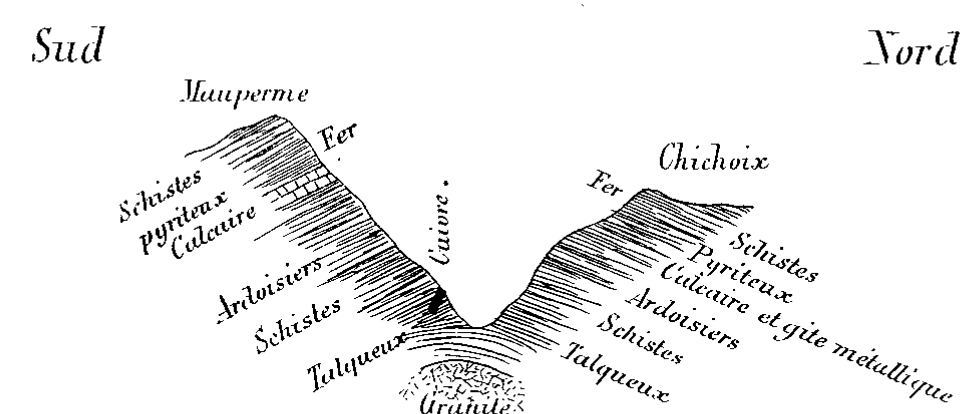


Fig. 7.

Coupe Ouest-Est en direction du filon d'Escalortorte

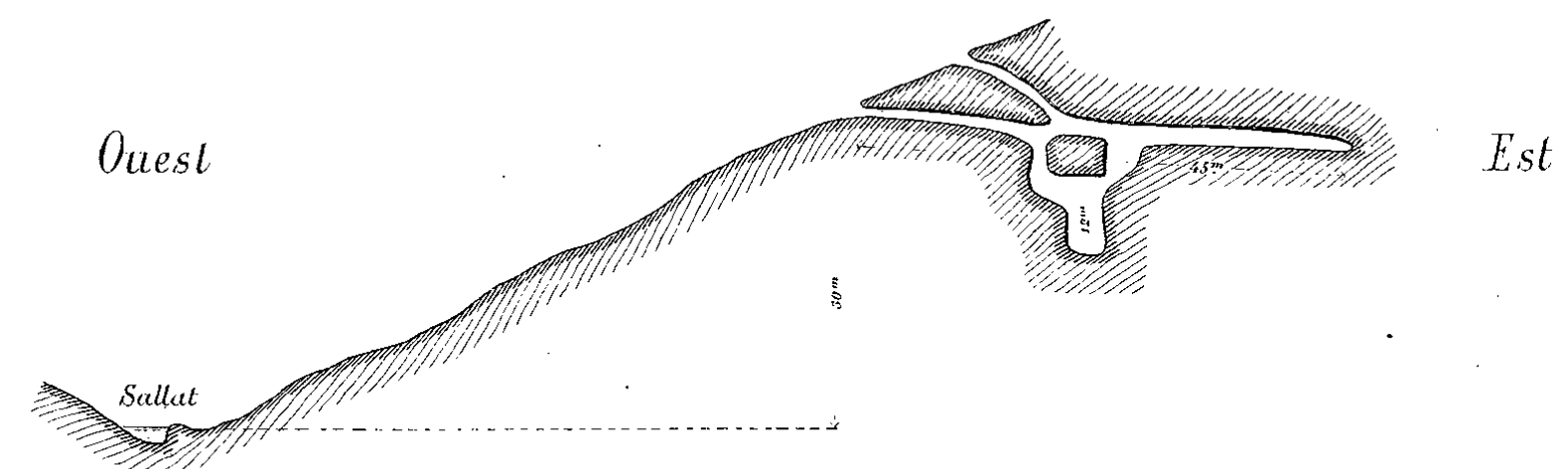
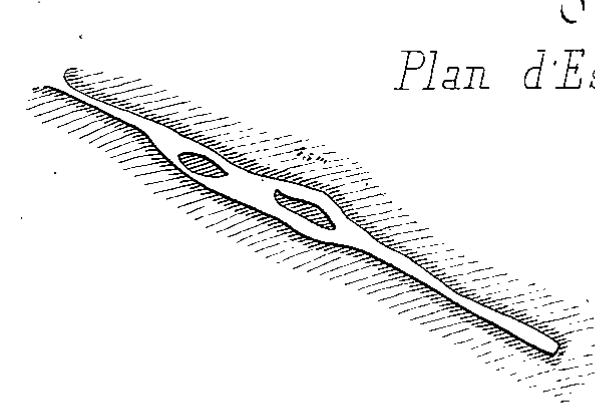
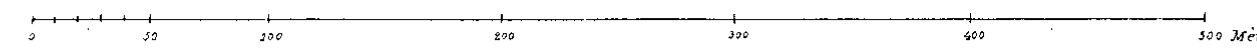


Fig. 8.

Plan d'Escalortorte



Echelle des fig. 4 et 5.



Echelle des fig. 7 et 8.

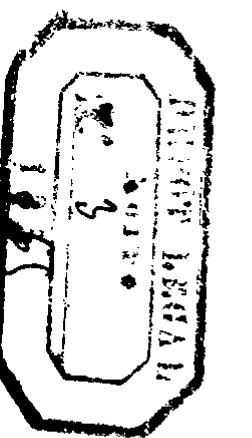
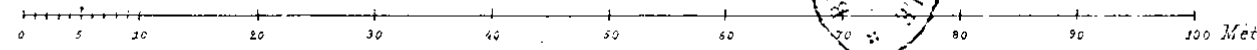








Fig. 2.

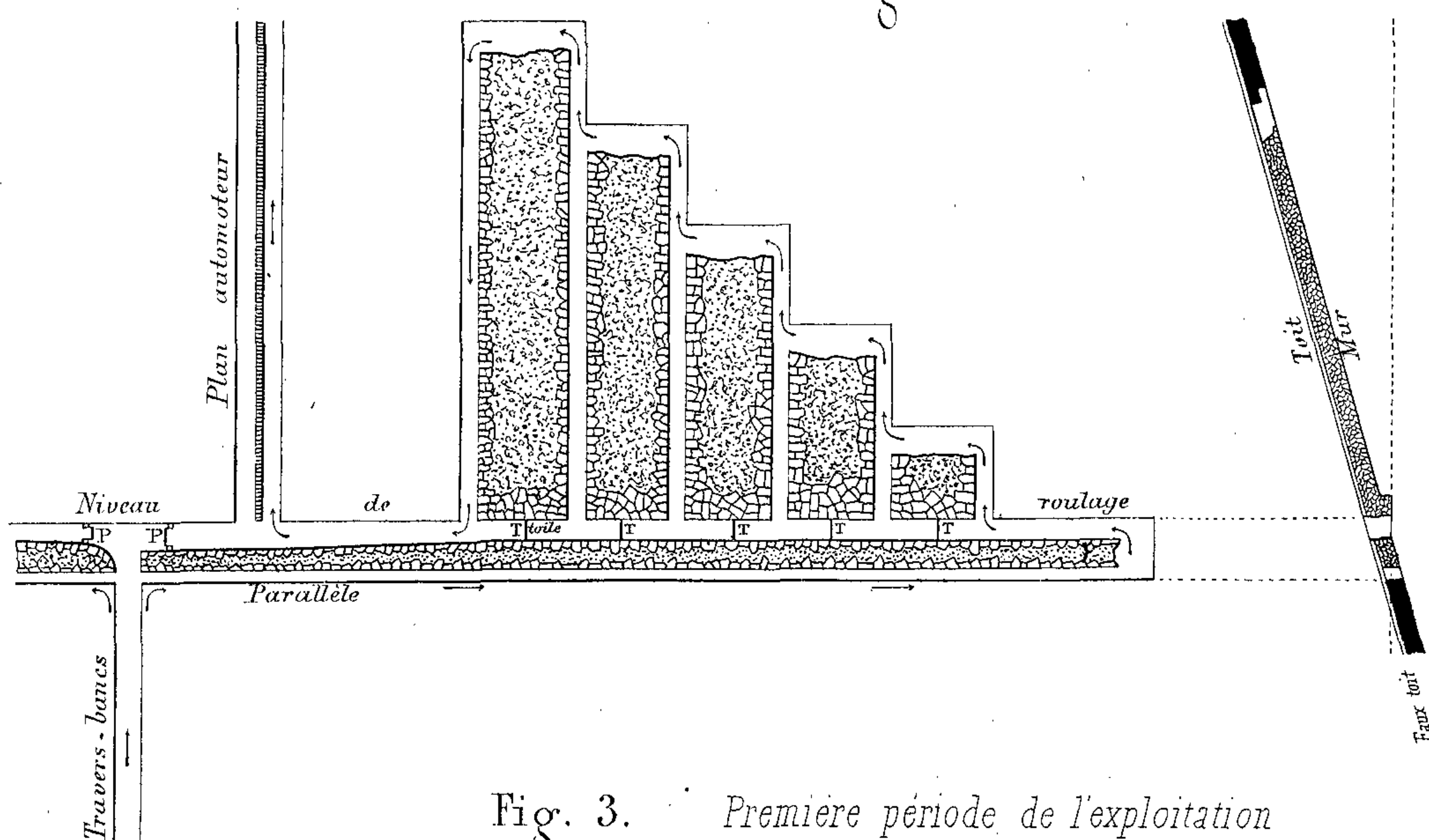


Fig. 3. Première période de l'exploitation

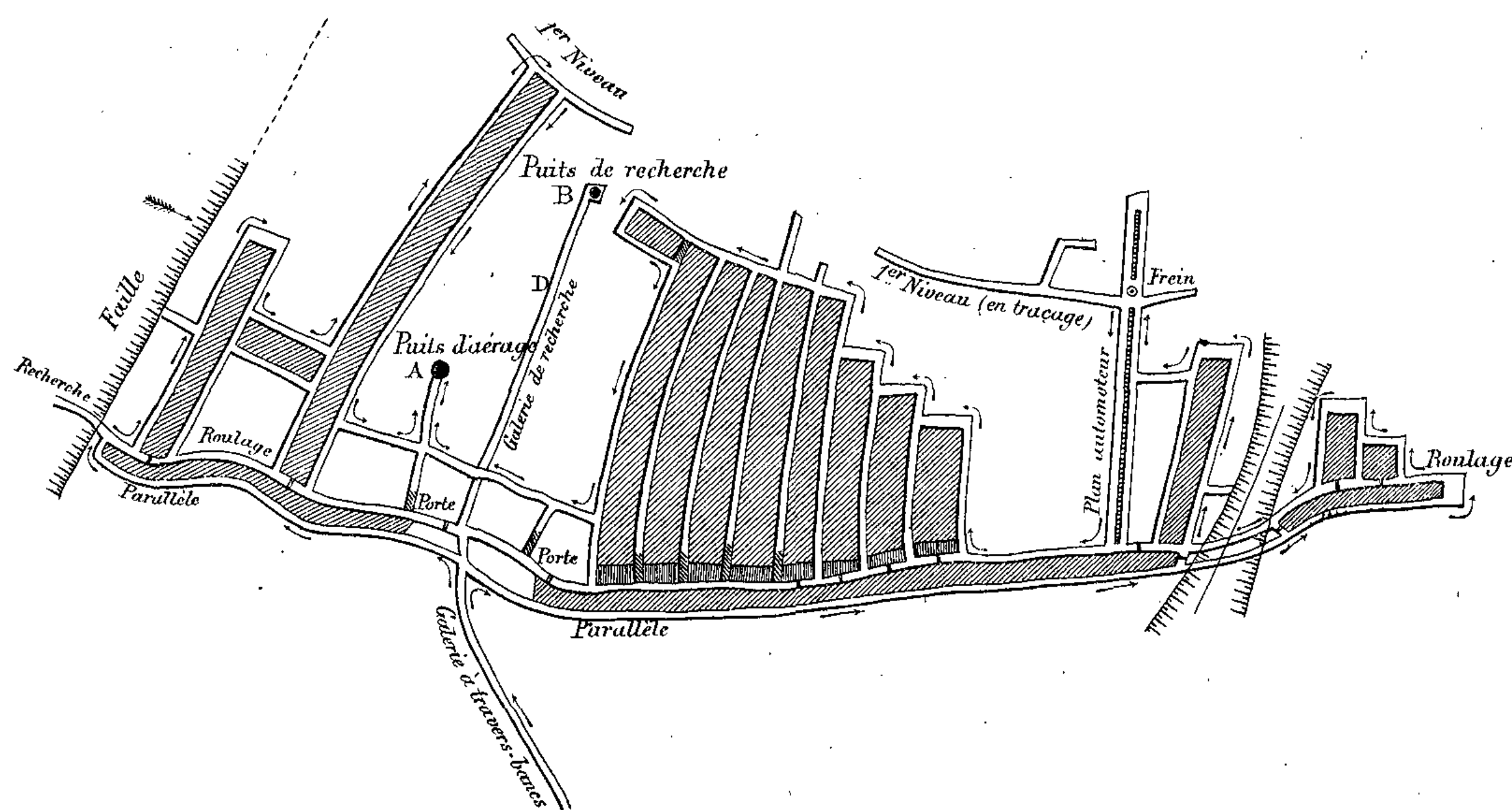


Fig. 1. Coupe de la couche Saint-Augustin.

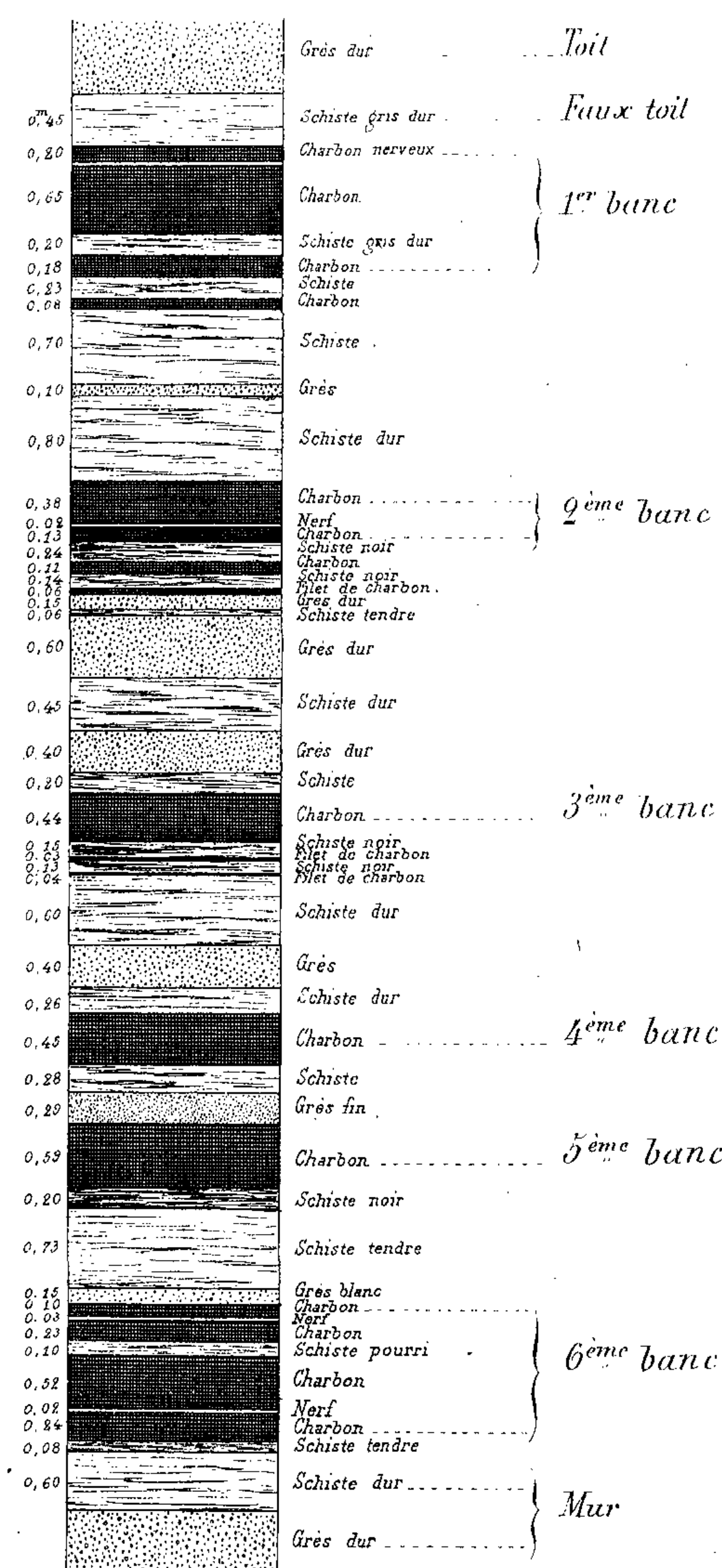


Fig. 5.

Coupe d'un front de taille.

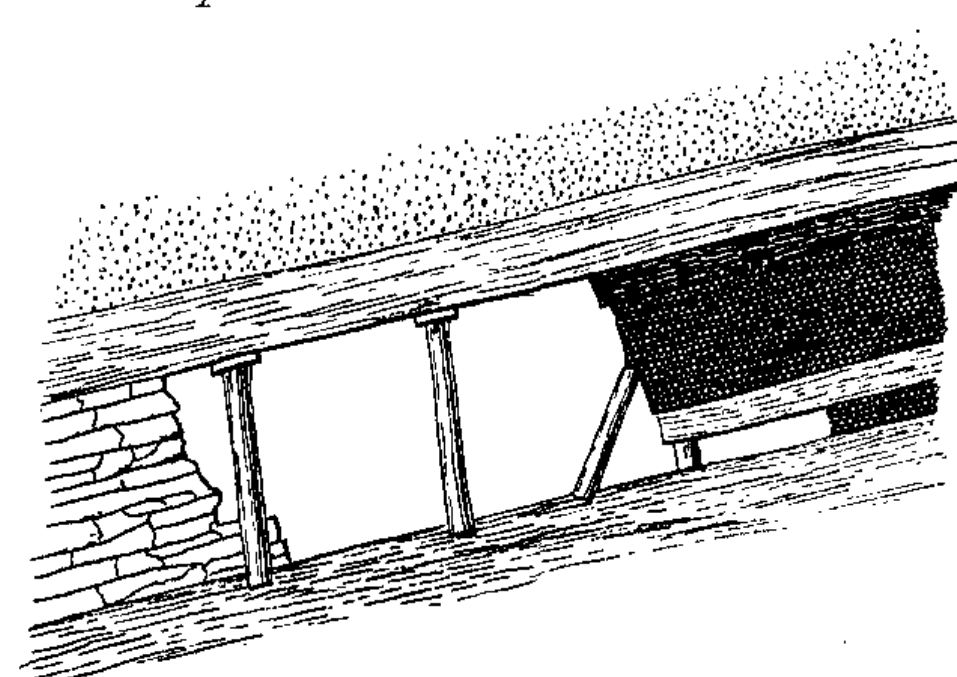
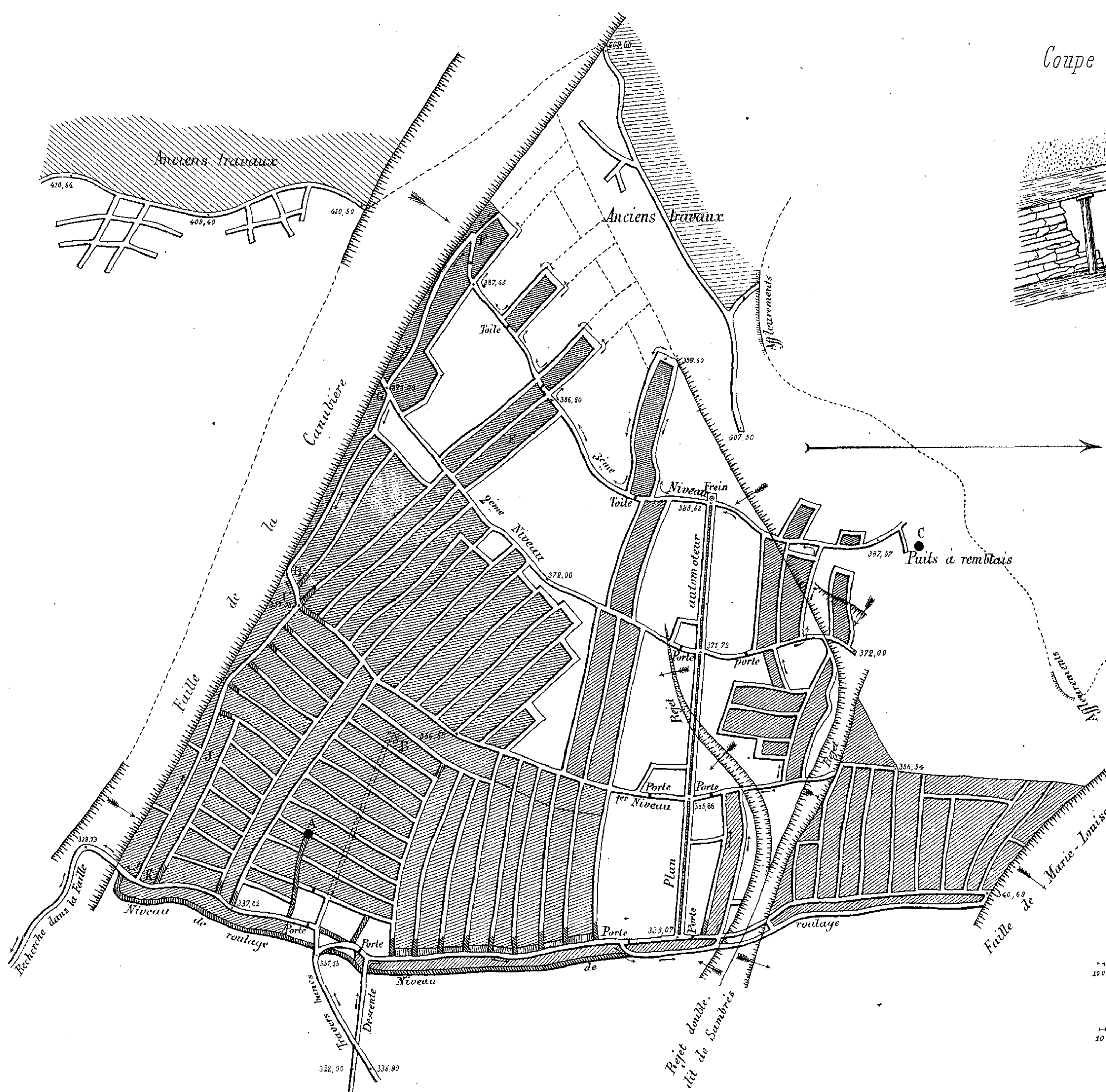


Fig. 4. Plan des travaux.

Etat actuel,  
(15 Décembre 1864)



Echelles.

Fig. 1 et 5.

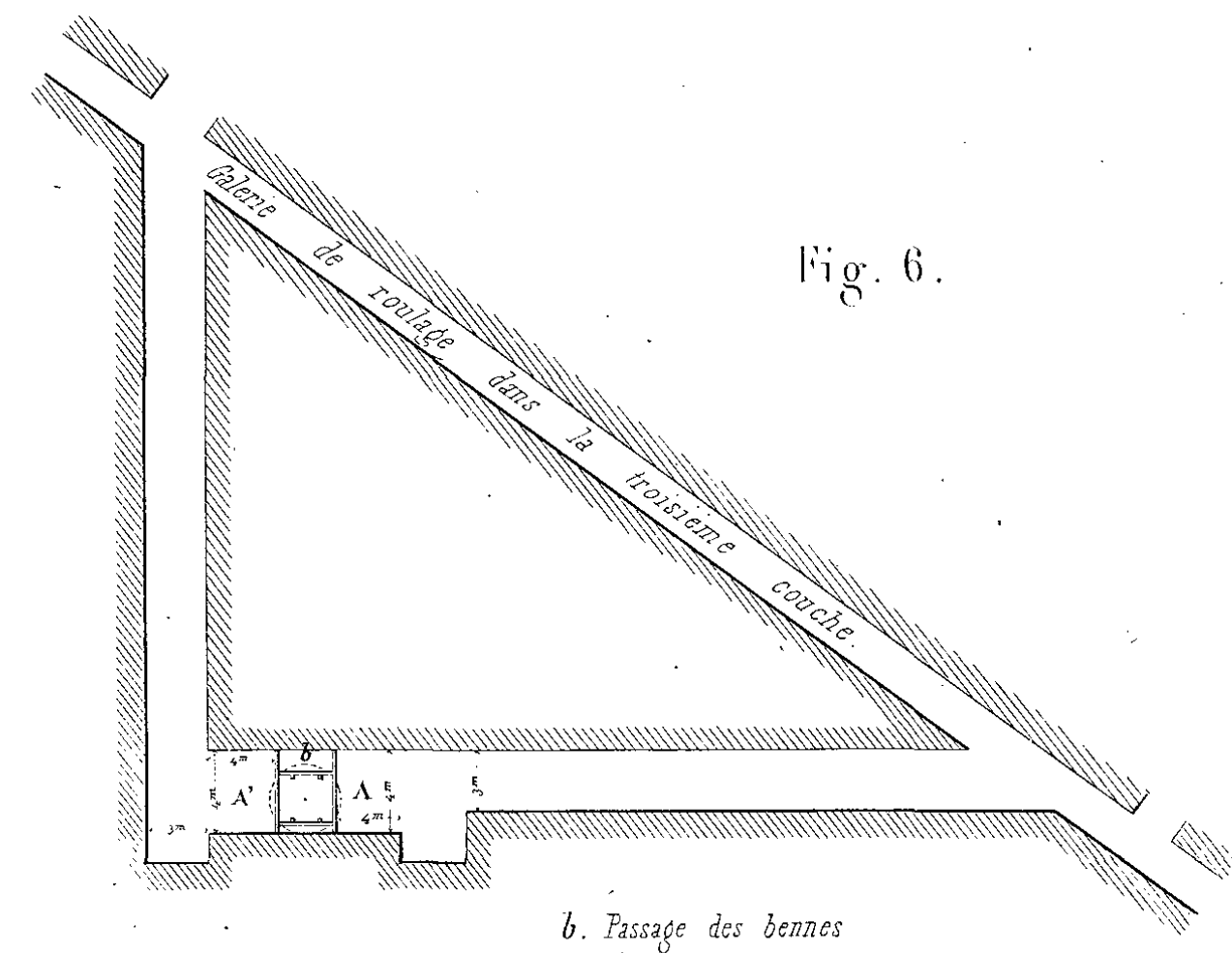
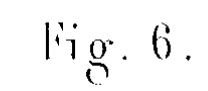
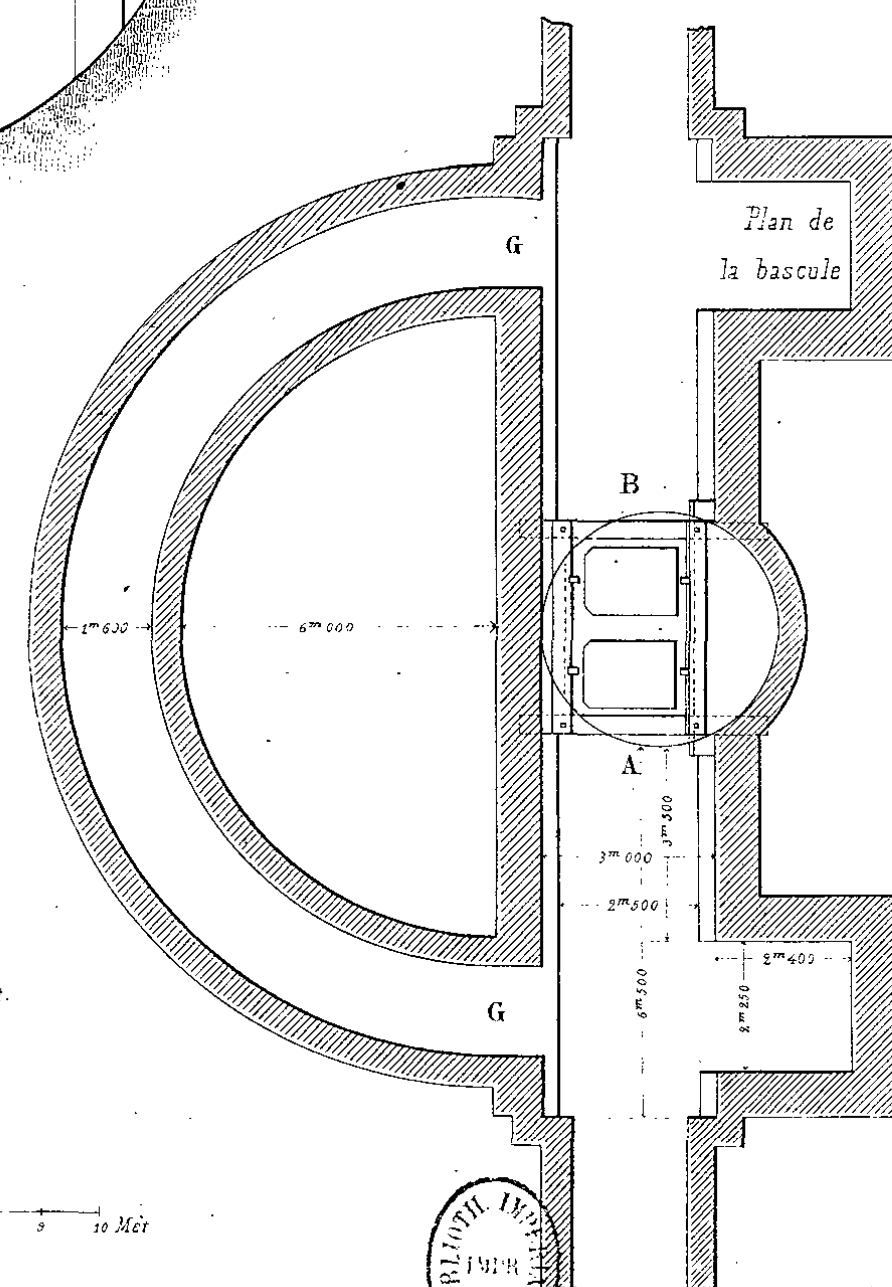
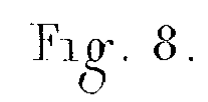
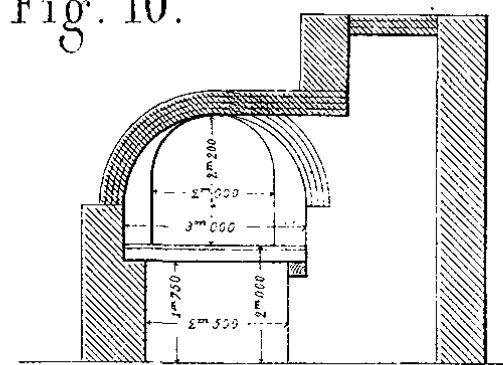
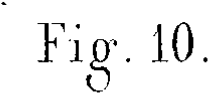
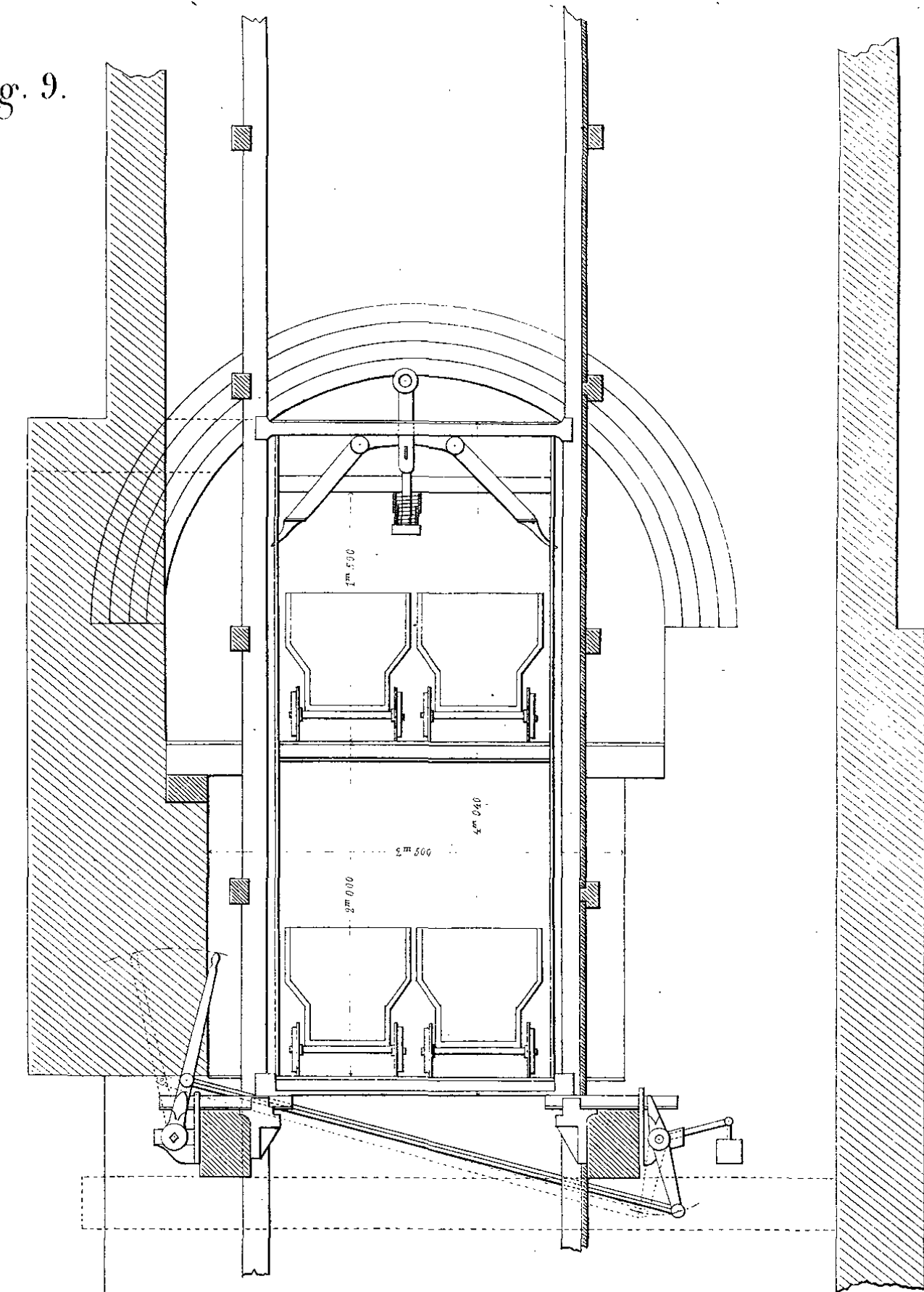
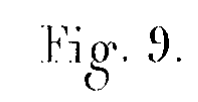
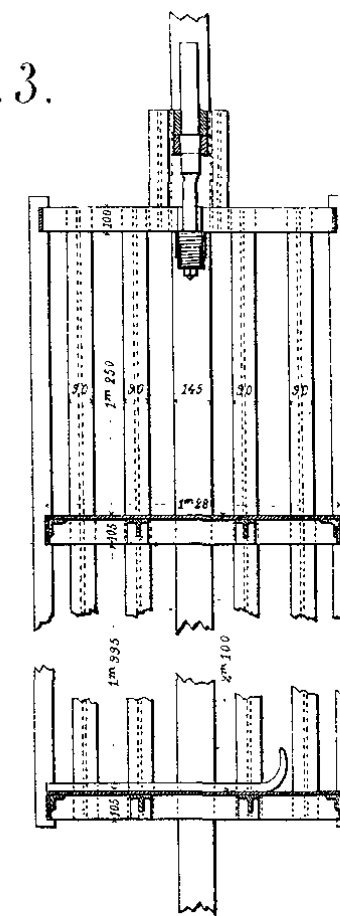
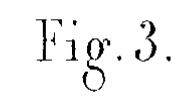
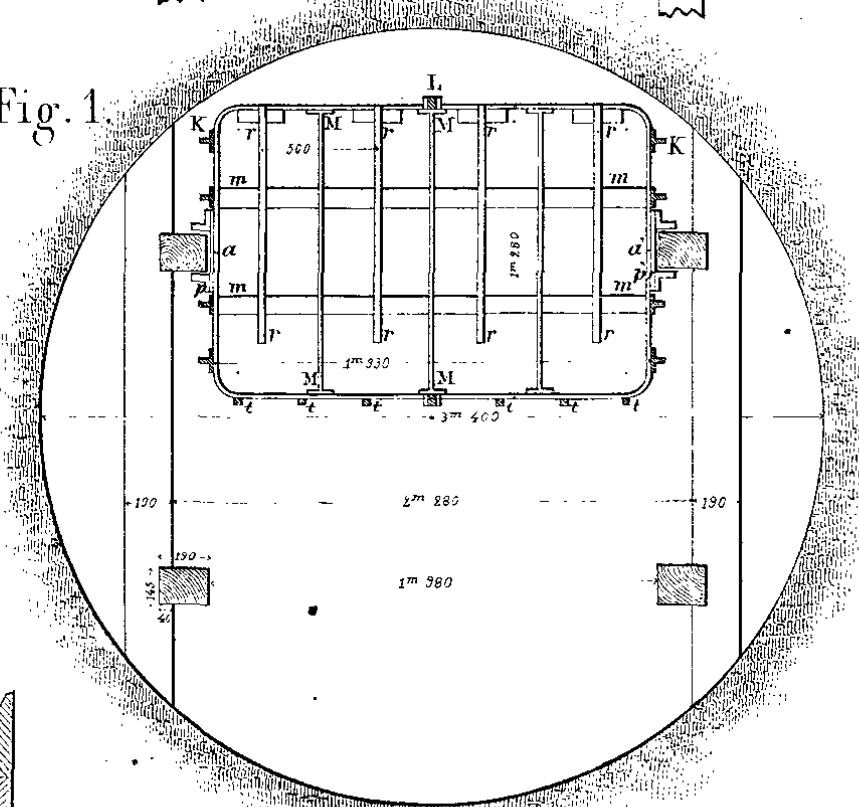
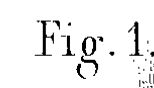
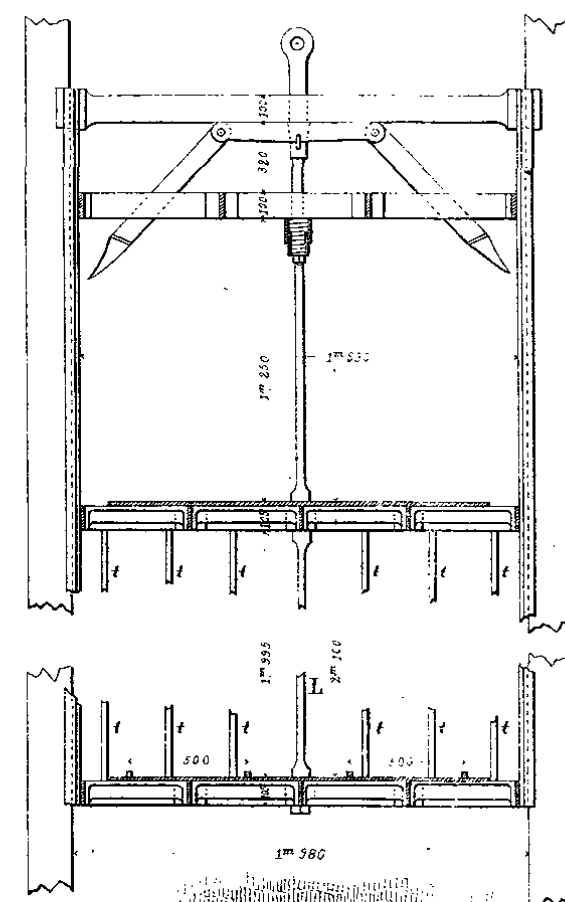
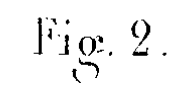
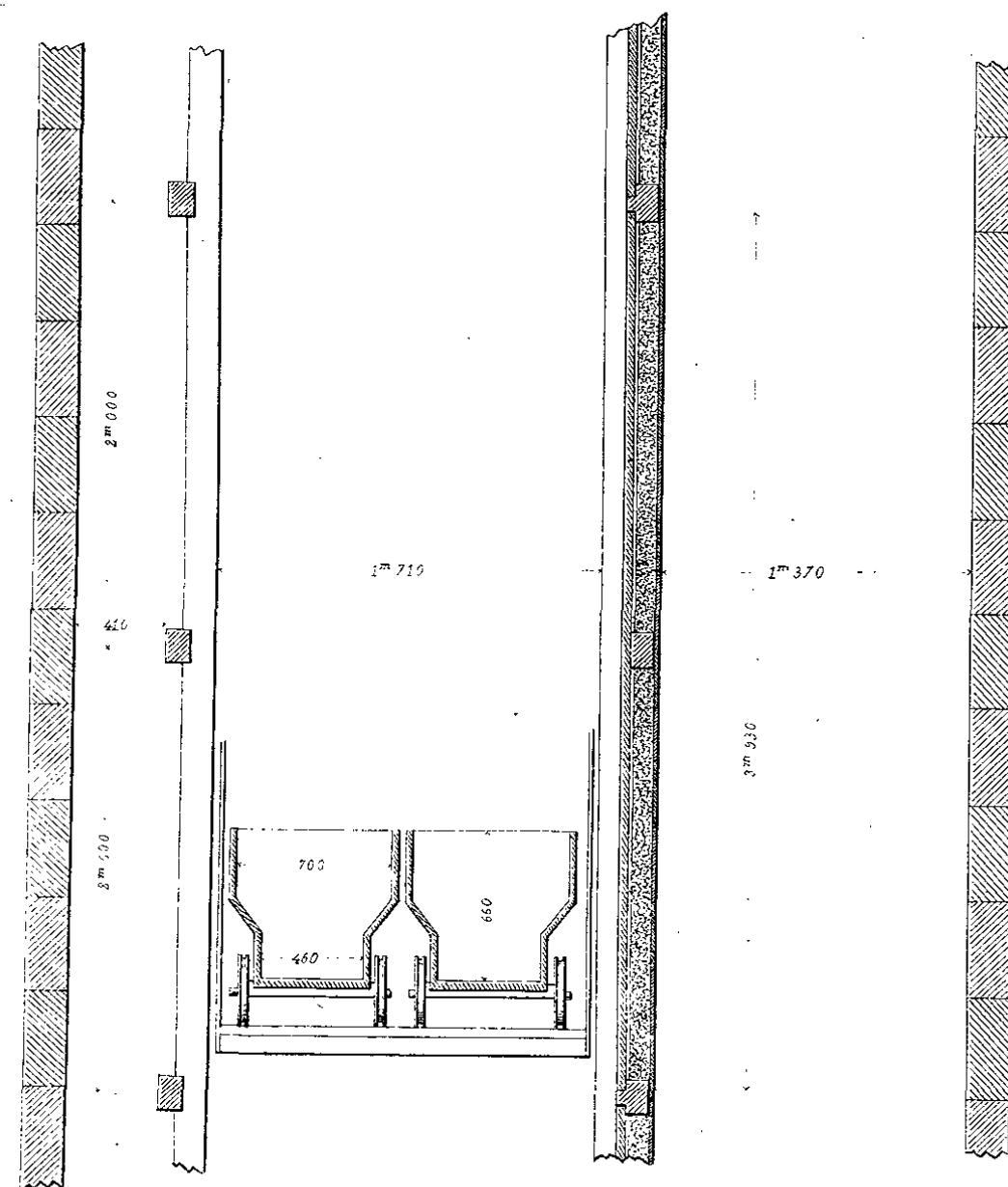
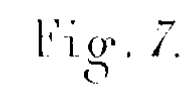
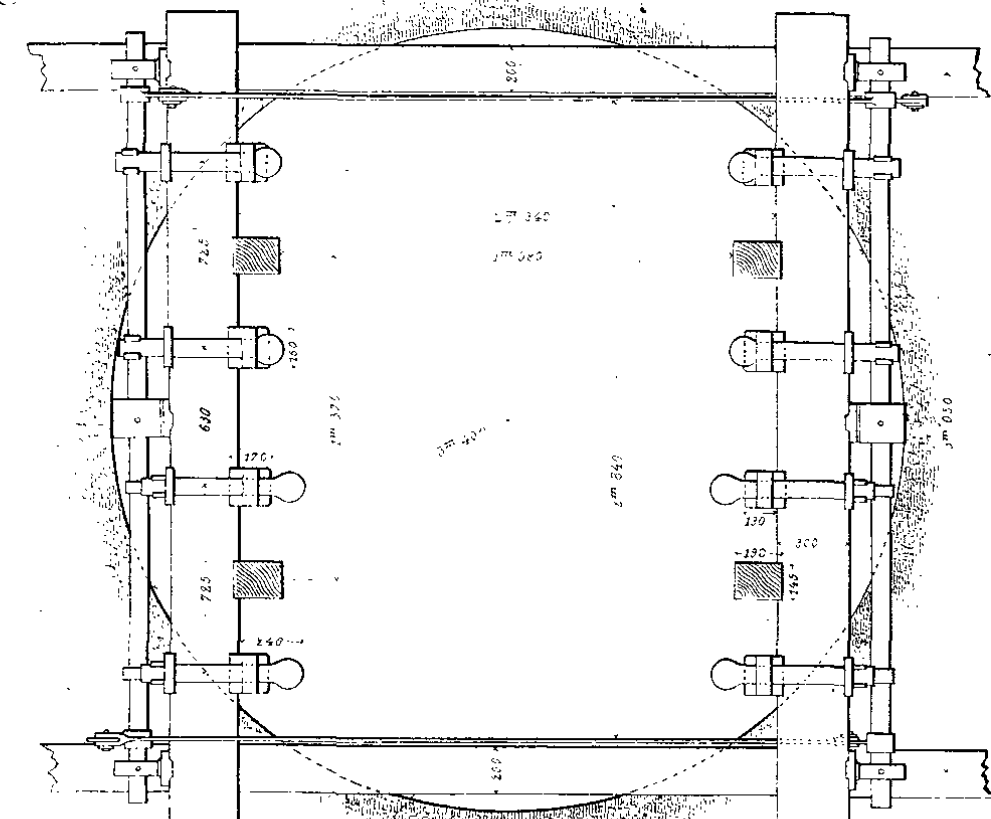
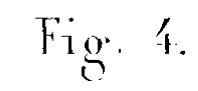
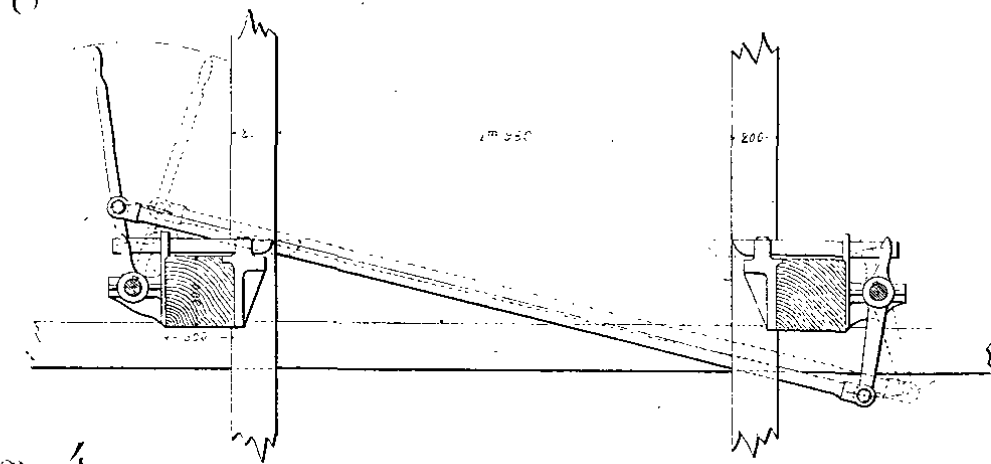
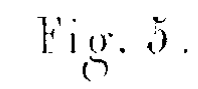
Fig. 2.

Fig. 3 et 4.









Echelle des fig 1 à 5, 7 et 9.

Echelle des fig. 8 et 10.

Plan de  
la bascule

Fig. 1. Diagram showing the rotation of the body of the probe in the layer. The diagram illustrates a cross-section of a probe body (a cylinder) positioned within a layer. The probe body is shown with a central axis and a surrounding layer. The text "Fig. 1" is located to the right of the diagram.

b. Passage des bennes

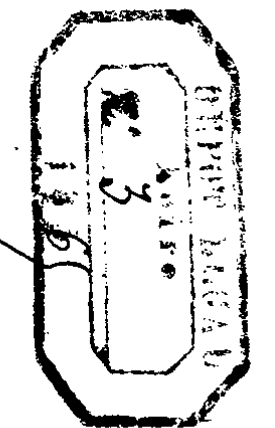








Fig. 2.

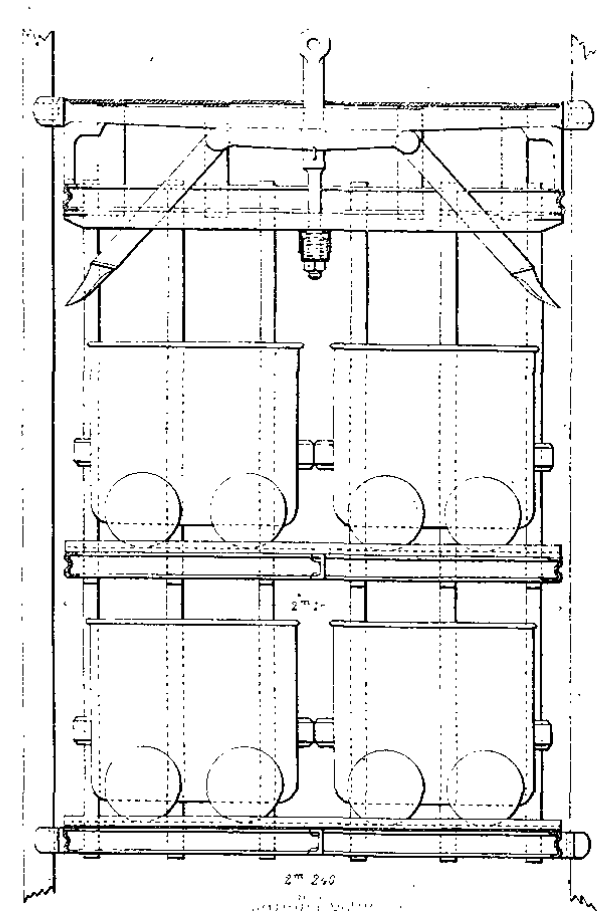


Fig. 3.

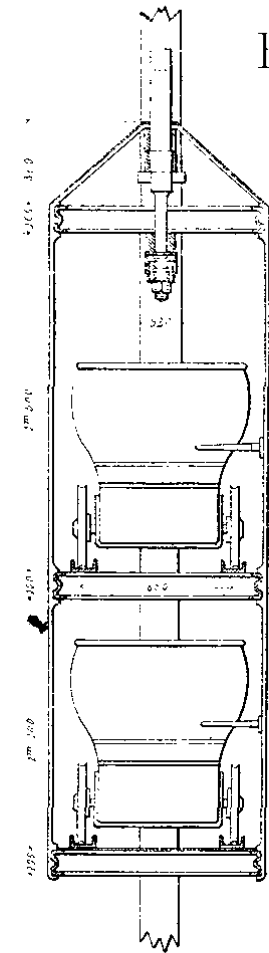


Fig. 7.

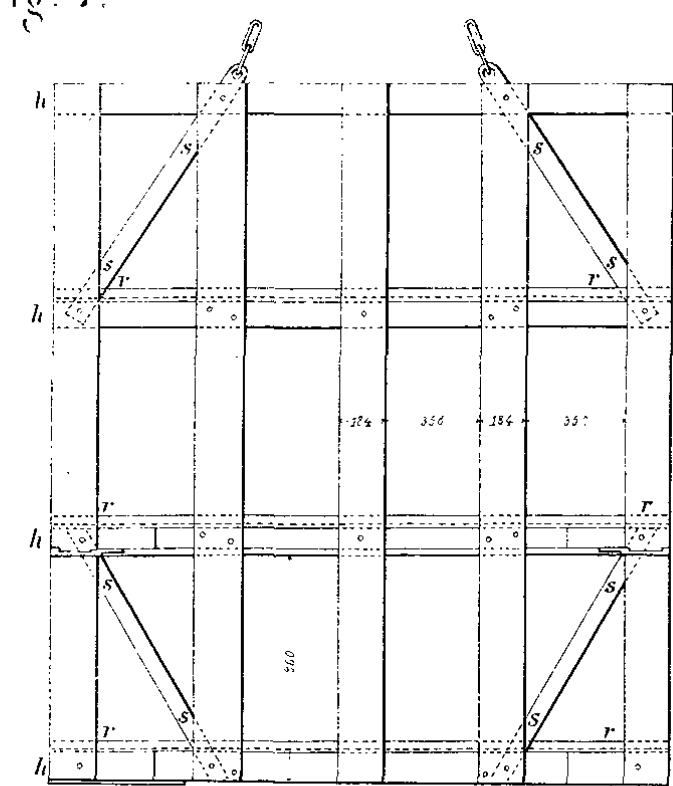


Fig. 8.

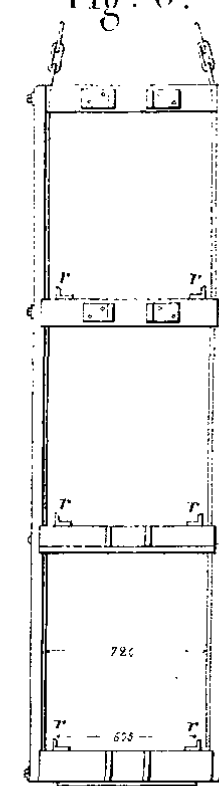


Fig. 15.

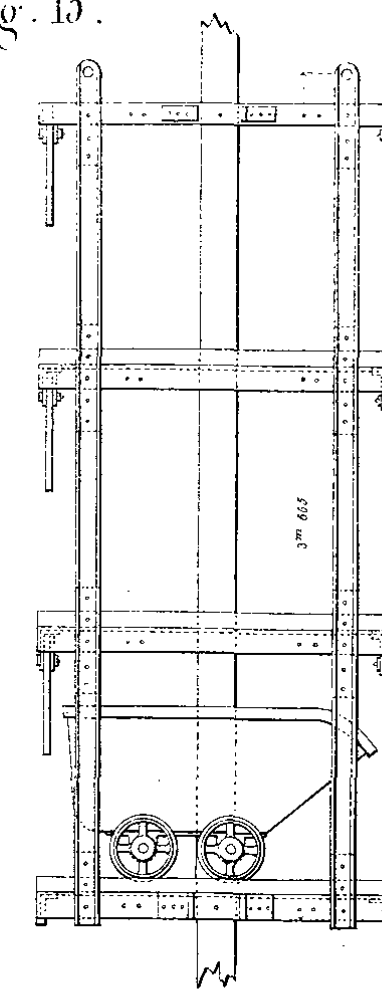


Fig. 14.

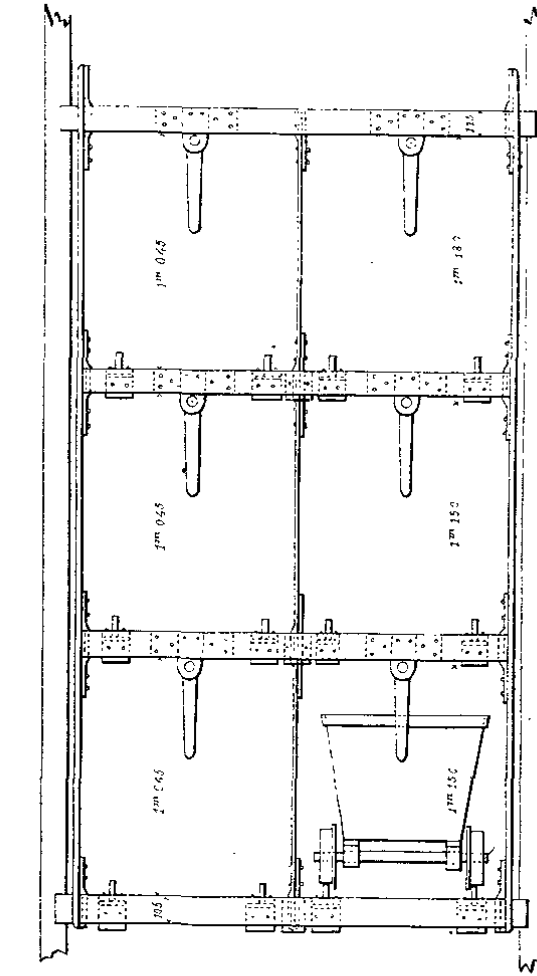


Fig. 1.

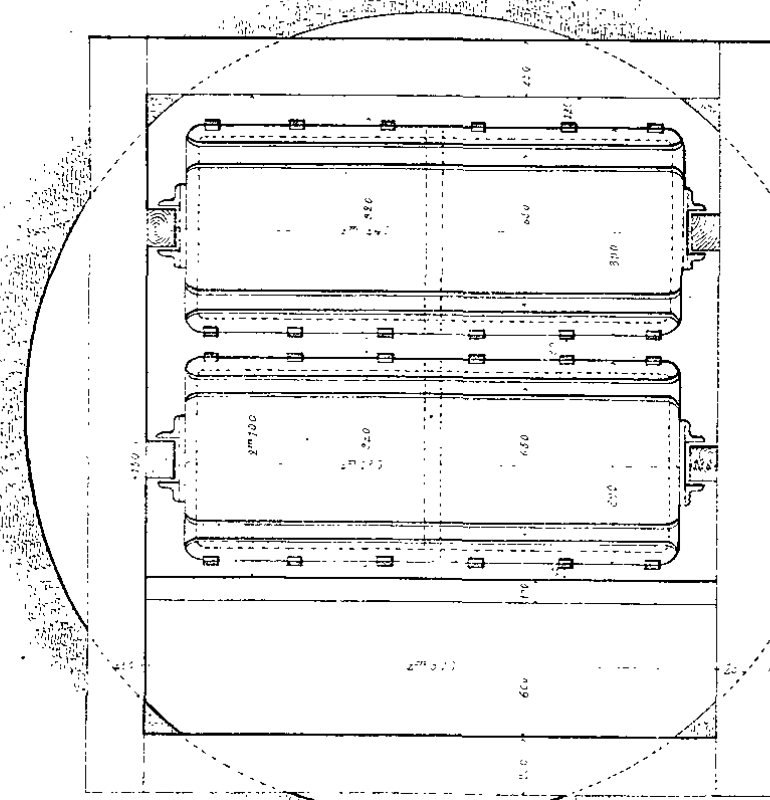


Fig. 6.

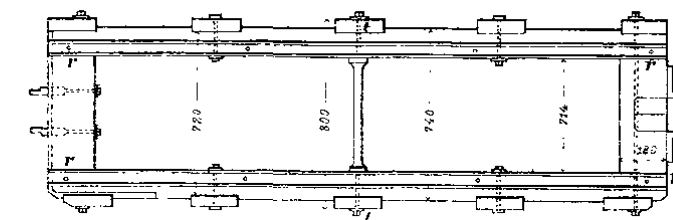


Fig. 4.

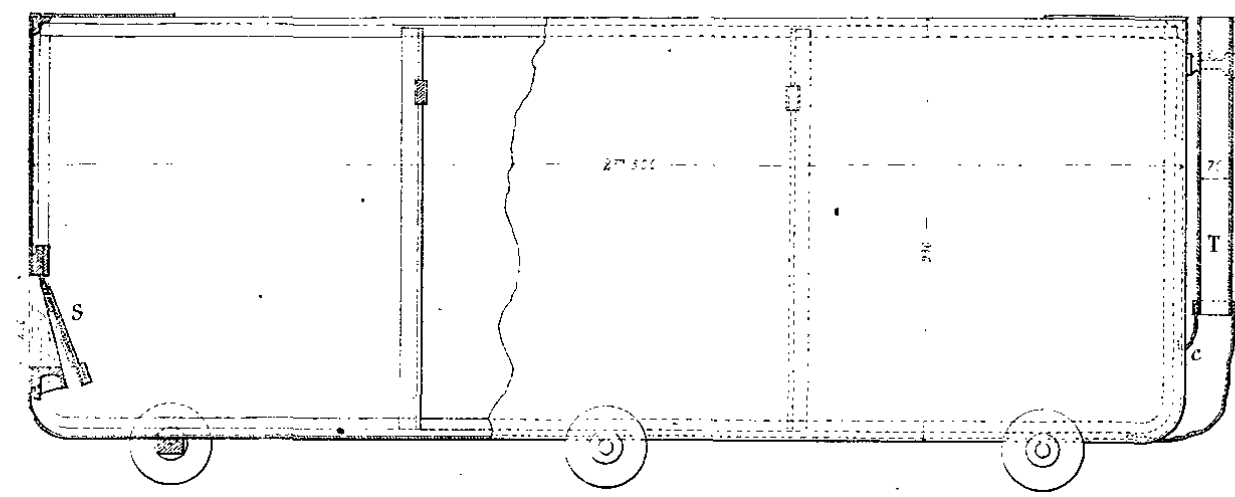


Fig. 5.

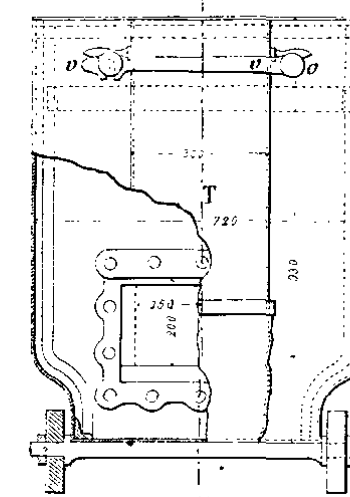


Fig. 16.

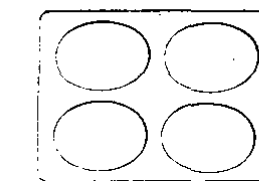


Fig. 13.

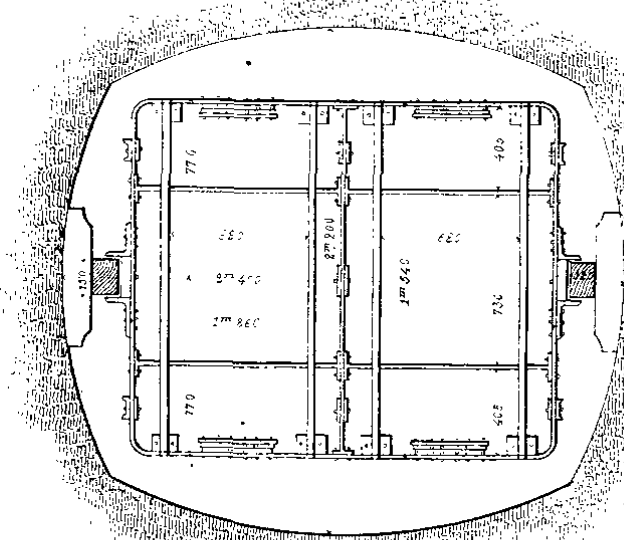


Fig. 12. Elevation.

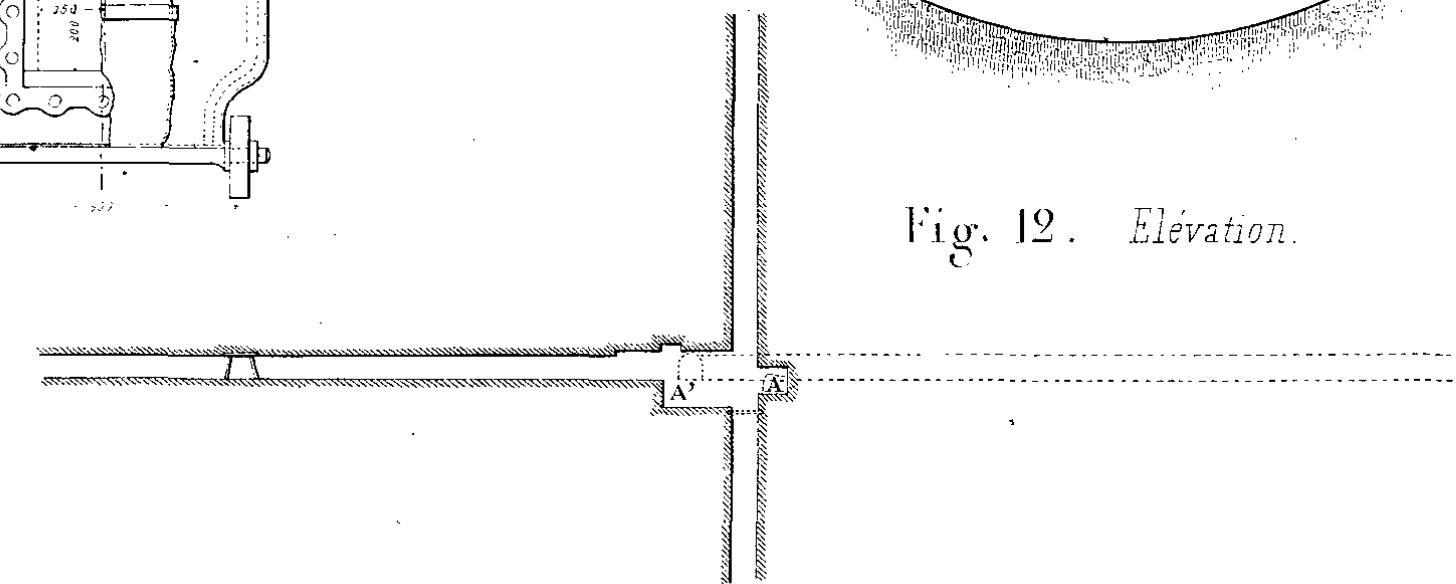


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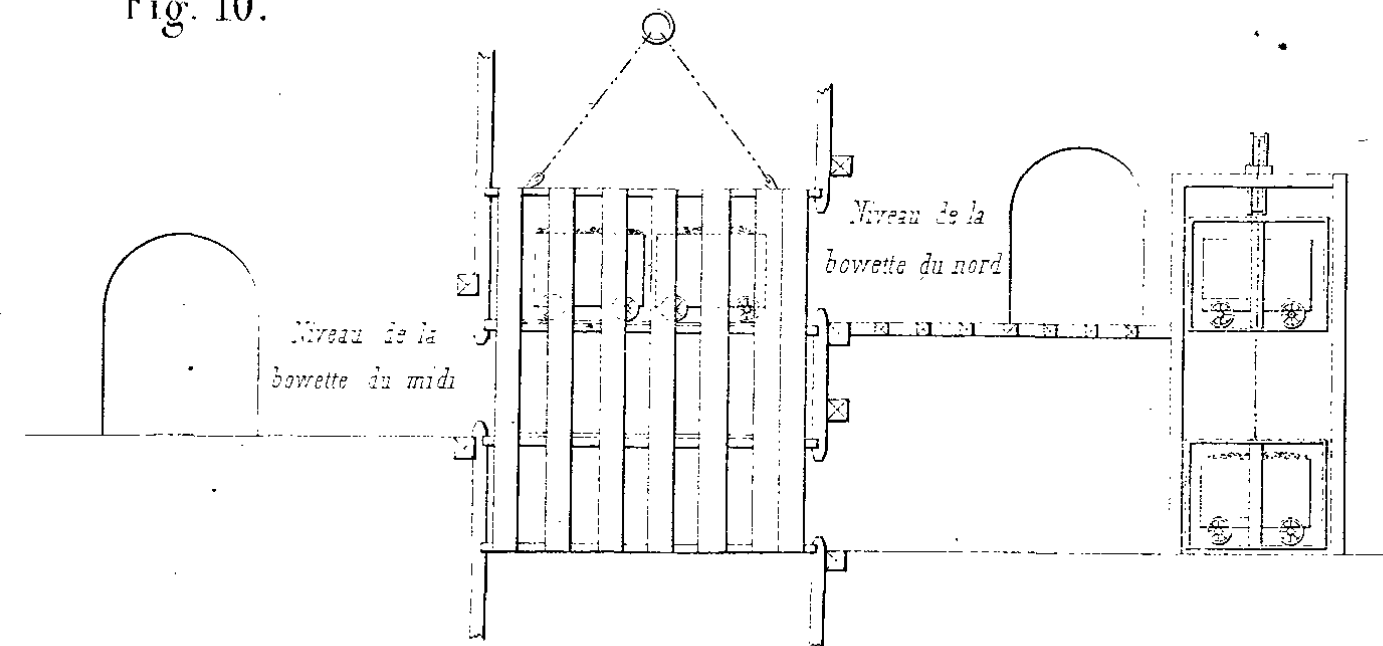


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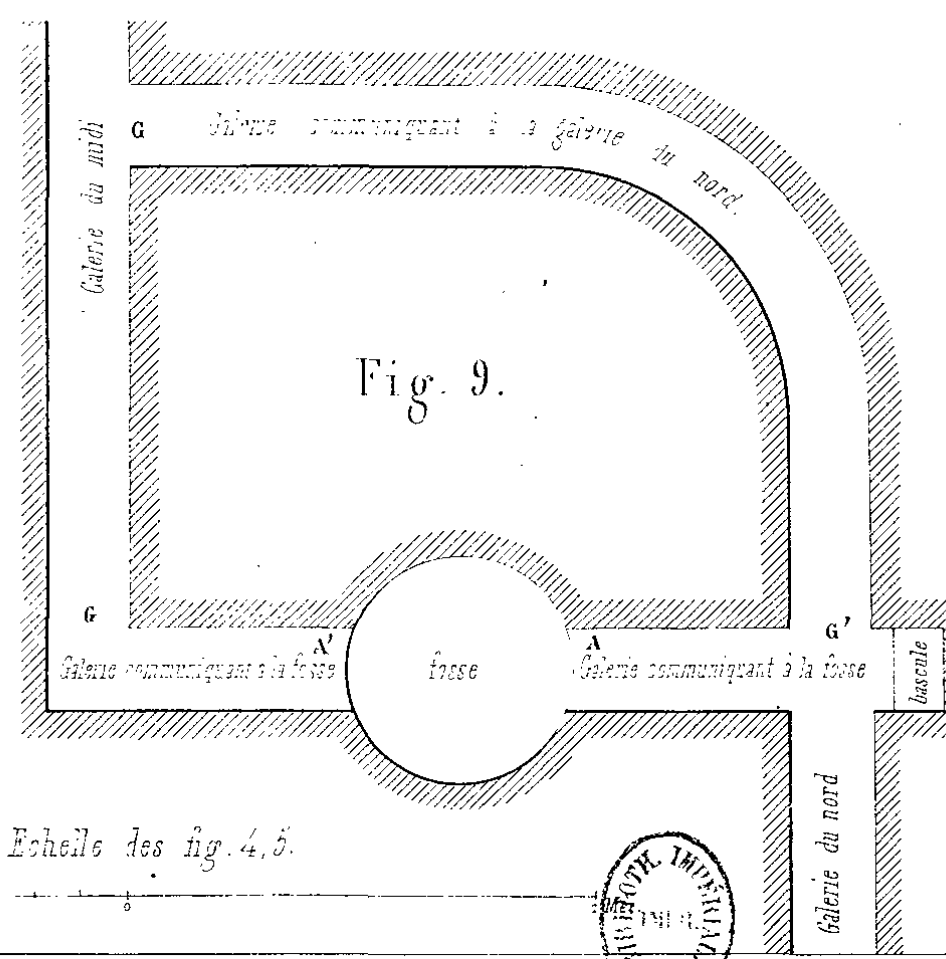
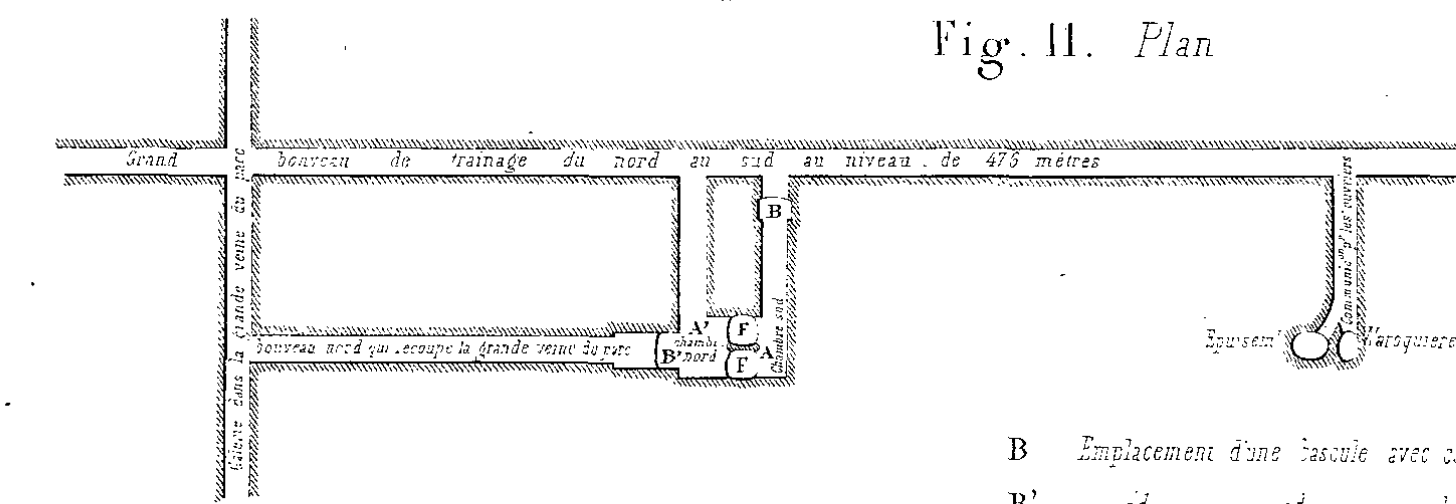


Fig. 11. Plan



Echelle des fig. 1, 2, 3, 5, 7, 8, 13, 14, 15.

0 10 20 30 40 50 60 70 80 90 100 Mètres

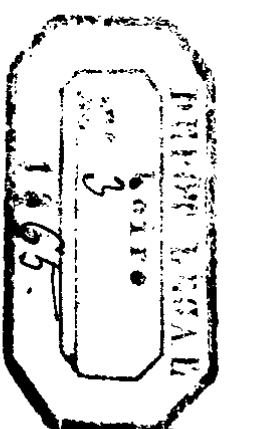
Echelle des fig. 4, 5.

0 10 20 30 40 50 60 70 80 90 100 Mètres

Echelle des fig. 11, 12.

0 10 20 30 40 50 60 70 80 90 100 Mètres

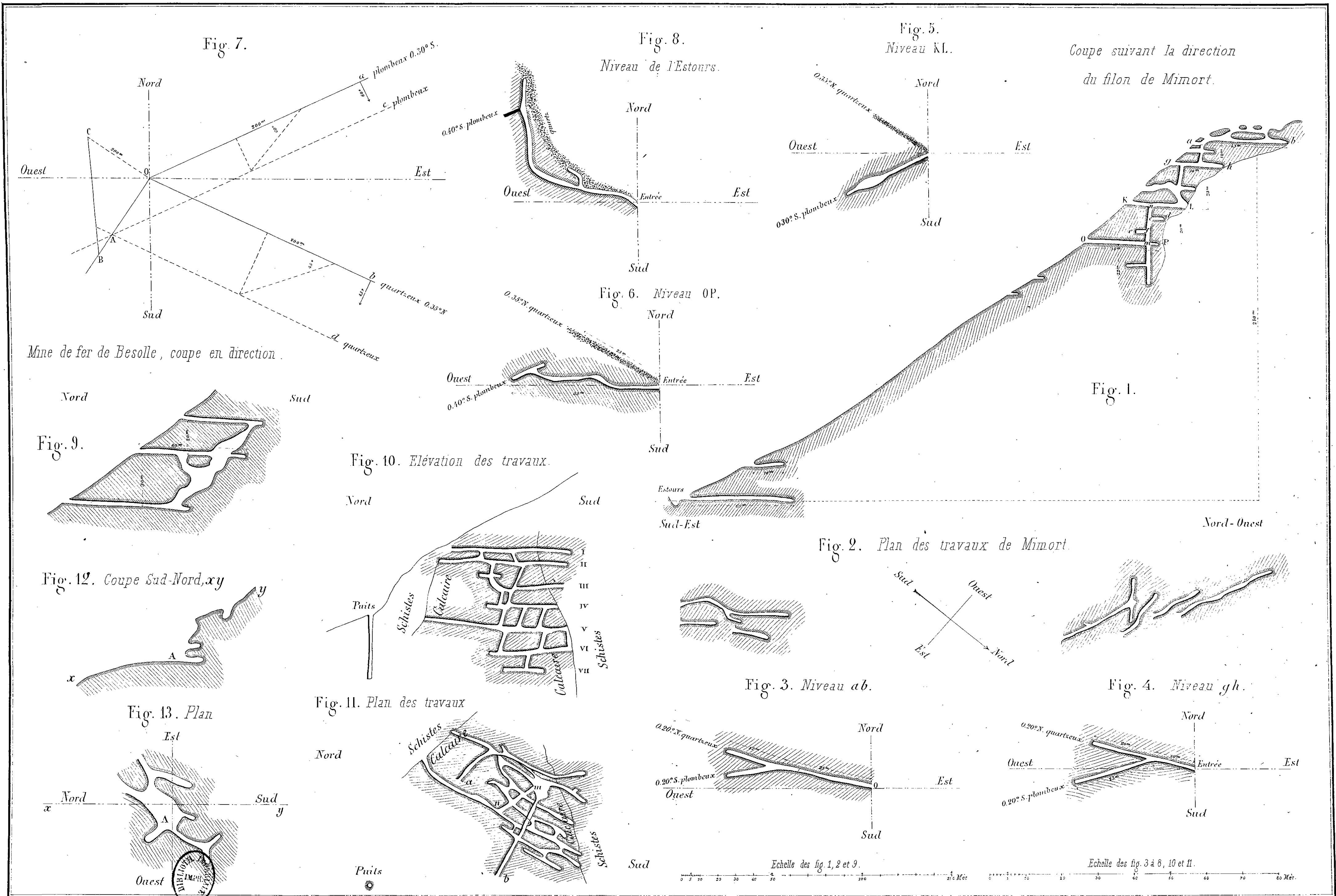
B Emplacement d'une bascule avec course de 1<sup>m</sup>15  
B' id id id 8<sup>m</sup>10  
E.F. Fosses d'extraction







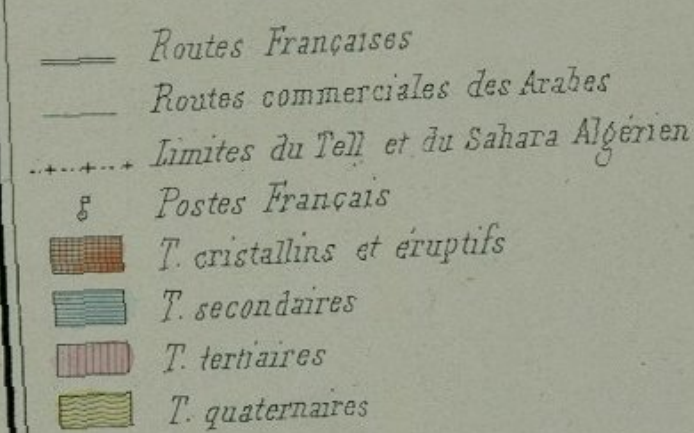


















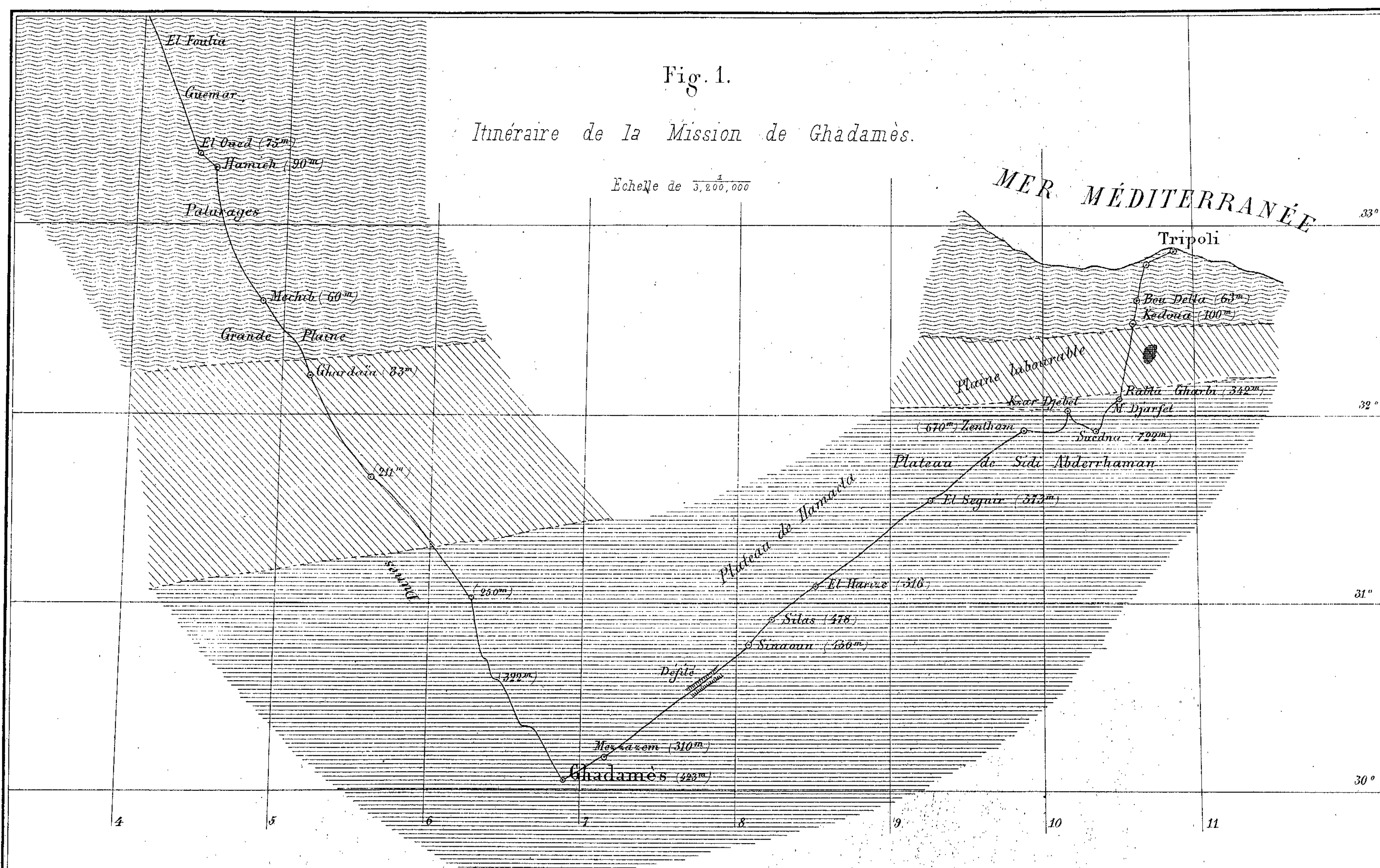


Fig. 2. Profil de Ghadames à Biskra

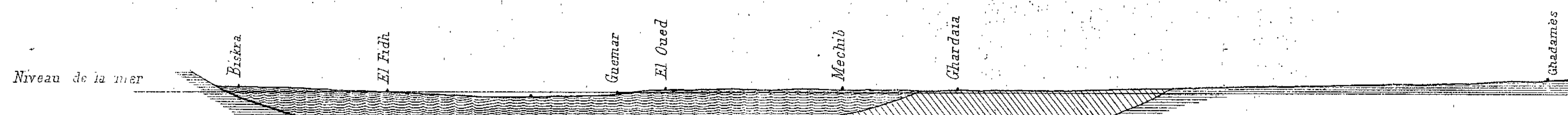
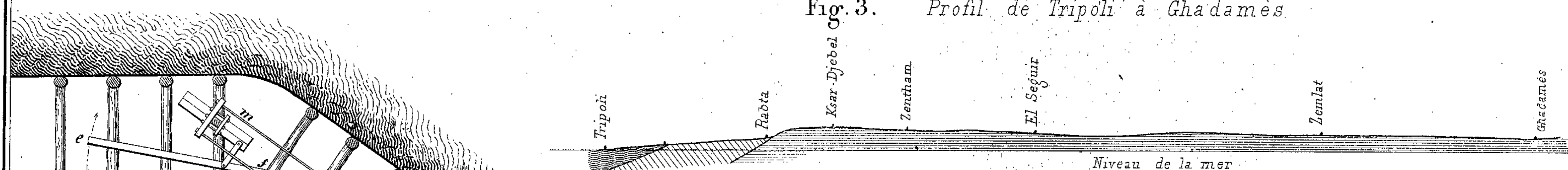


Fig. 3. Profil de Tripoli à Ghadamès



Echelle de  $\frac{1}{3,200,000}$  pour les long<sup>rs</sup> et de  $\frac{1}{200,000}$  pour les haut<sup>rs</sup>.

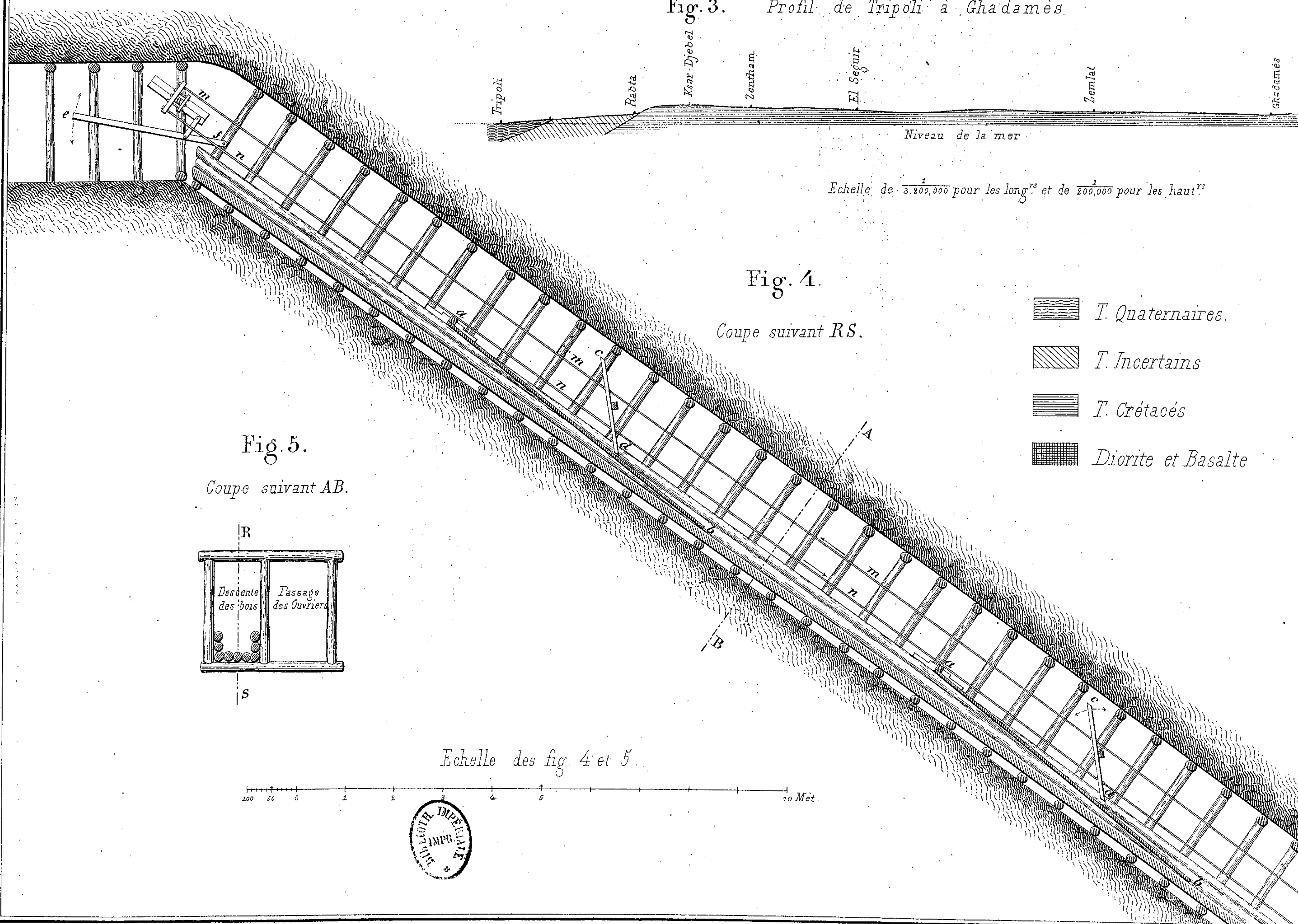


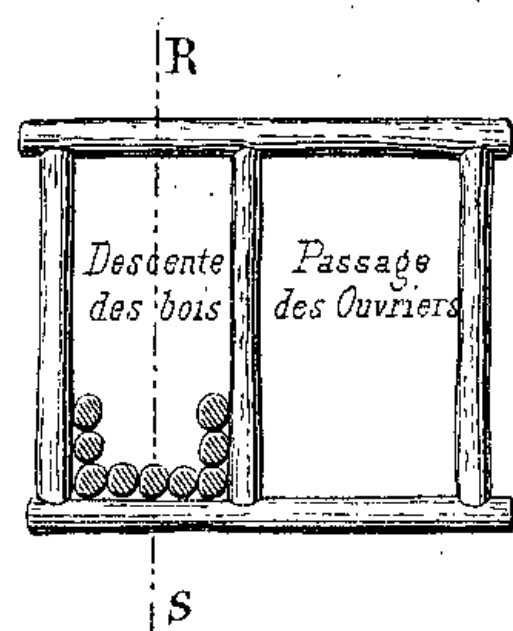
Fig. 4.

*Coupe suivant RS.*

- |                                                                                       |                           |
|---------------------------------------------------------------------------------------|---------------------------|
|  | <i>T. Quaternaires.</i>   |
|  | <i>T. Incertains</i>      |
|  | <i>T. Crétacés</i>        |
|  | <i>Diorite et Basalte</i> |

Fig. 5.

*Coupe suivant AB.*



Echelle des fig. 4 et 5.

B. K. onno, lith. LANTZ, rue de la Loi, 4







①



# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1864-01.

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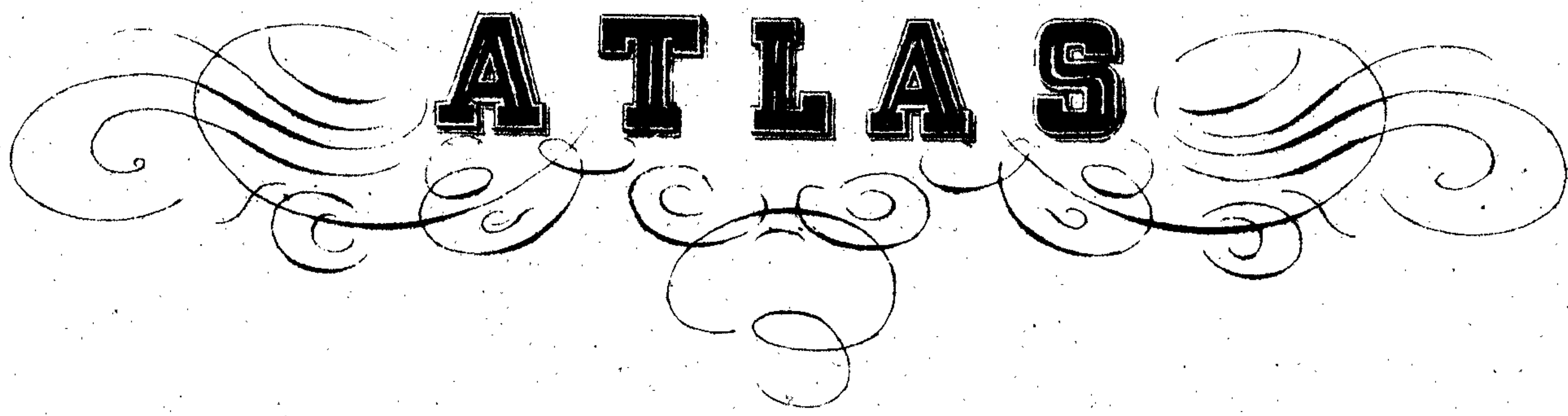
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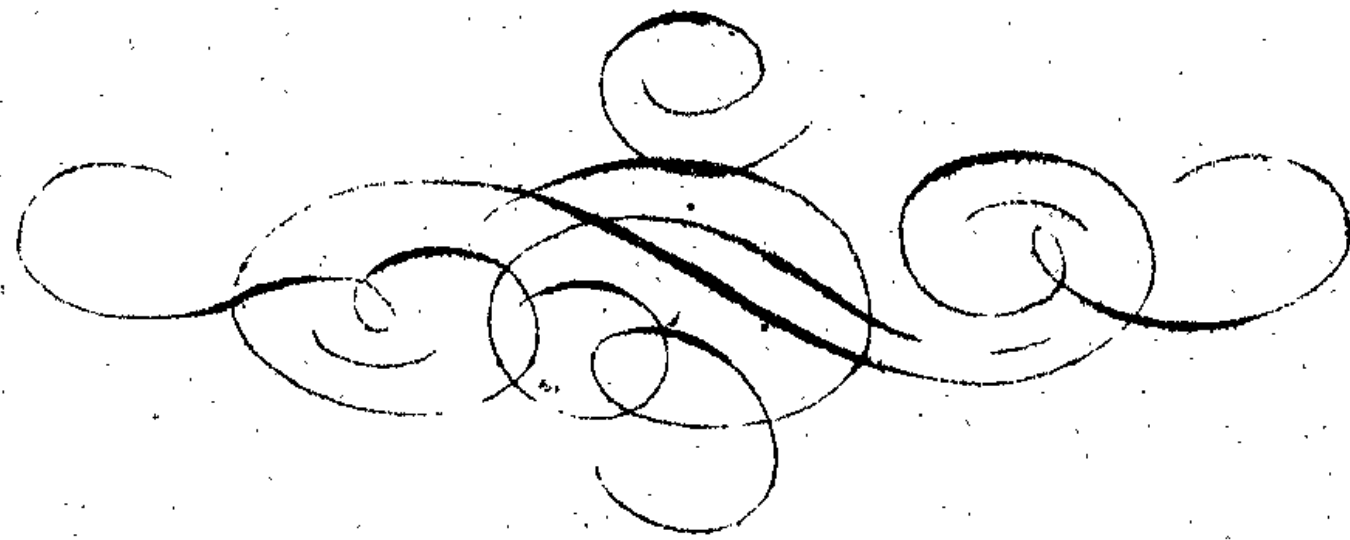




**ATLAS**

DE LA

# **SOCIÉTÉ DE L'INDUSTRIE MINÉRALE**



**IX<sup>e</sup> ANNÉE.**

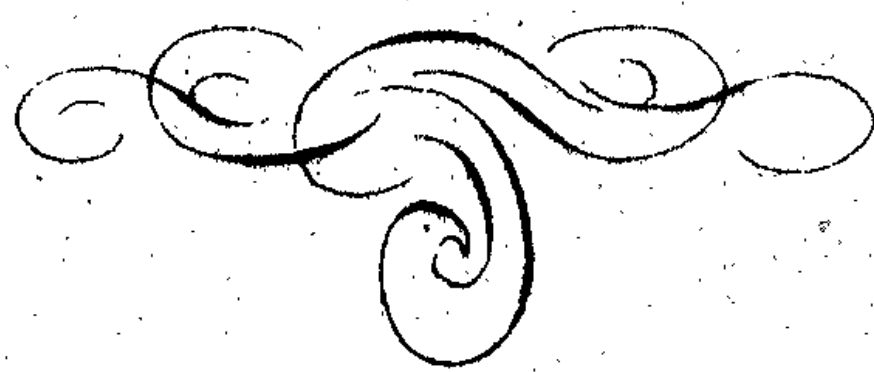


**3<sup>e</sup> LIVRAISON**

**Janvier, Février, Mars.**



**1864**



**IMPRIMERIE LITHOGRAPHIQUE**

**LANTZ**

**RUE DE LA LOIRE 4, S<sup>t</sup> ETIENNE.**

V 2735  
Tda 9







Fig. 1.

Elevation et vue en long.

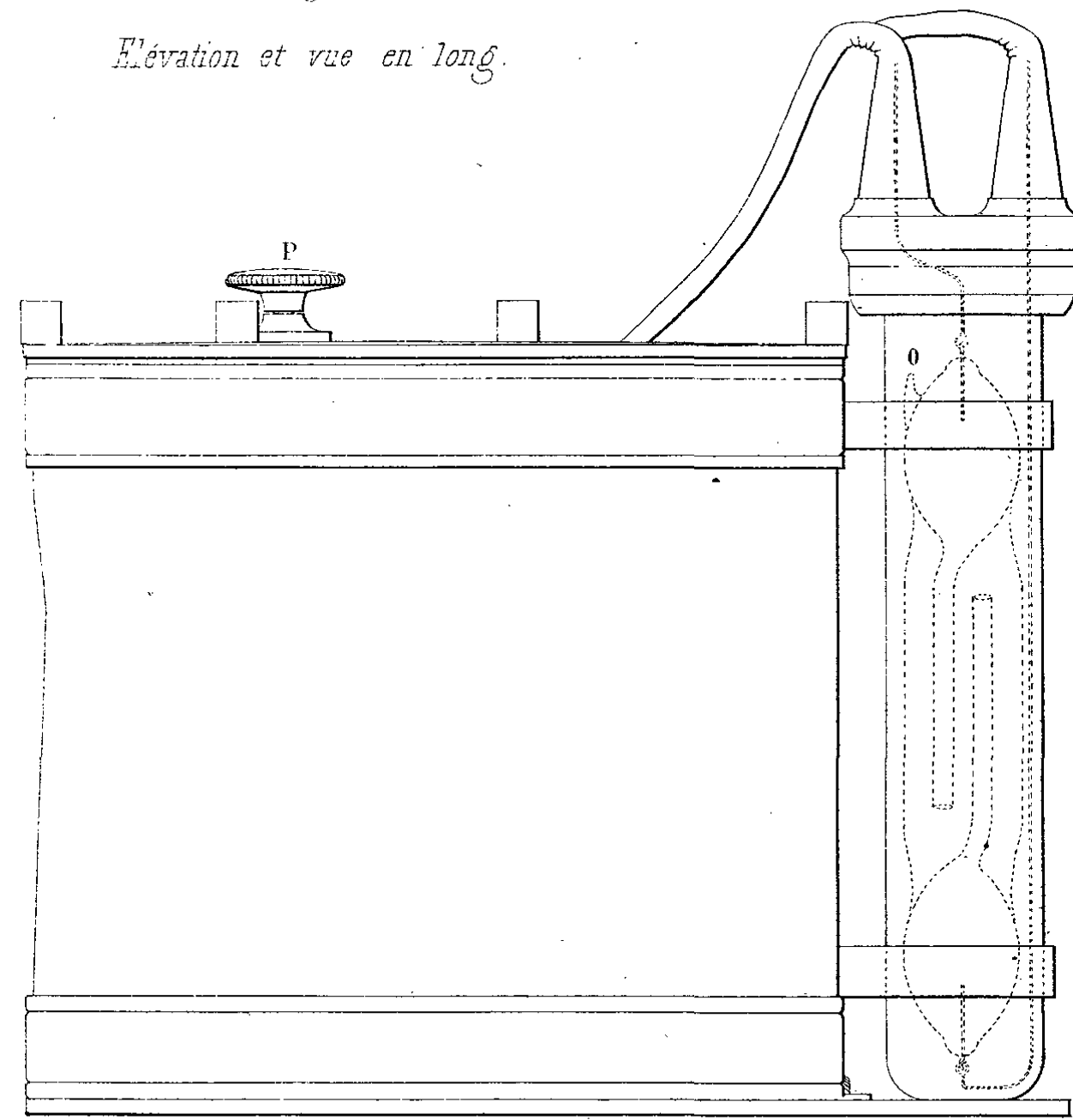


Fig. 3.

Coupe en long et en élévation.

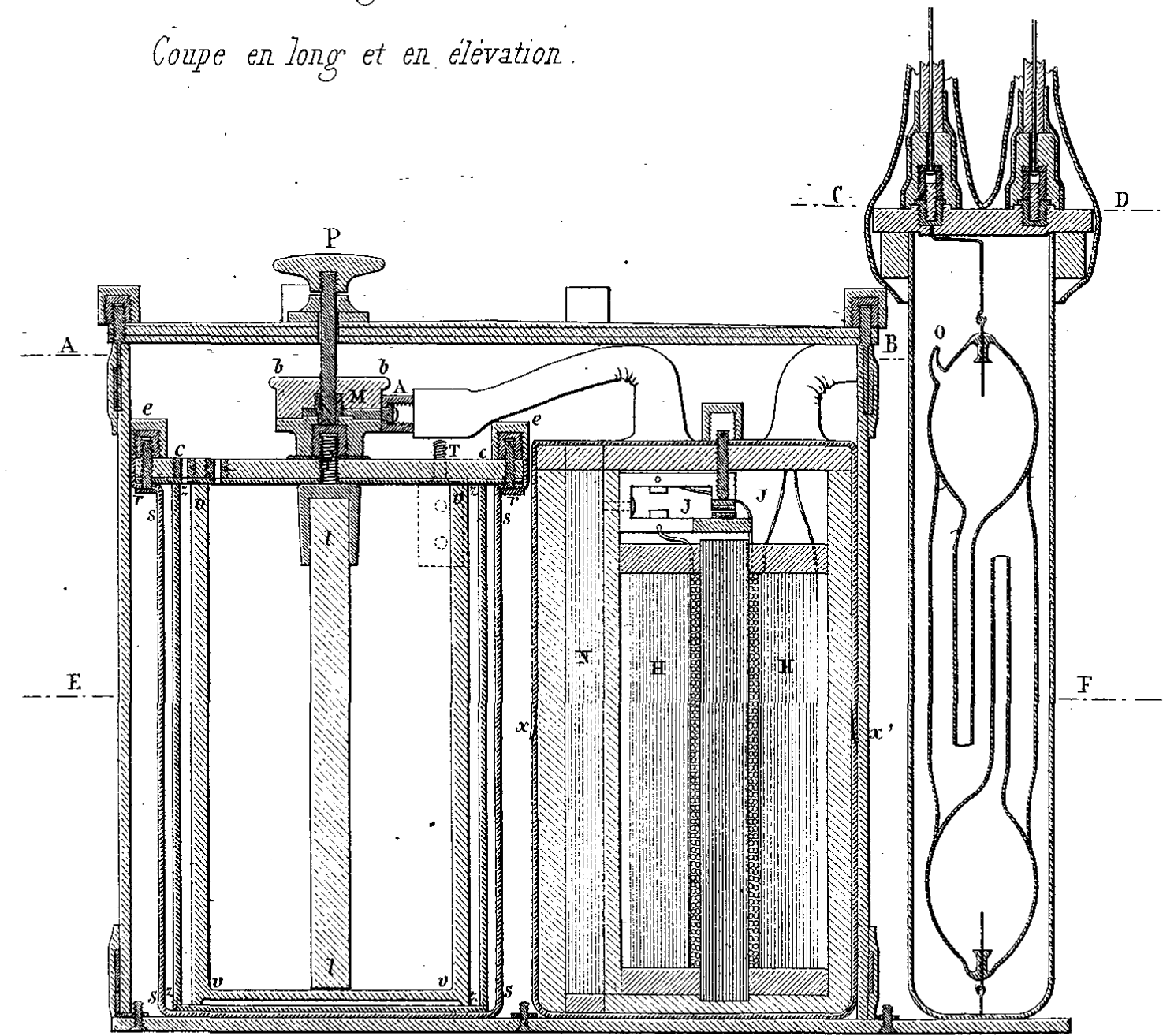


Fig. 5.

Vue de face et élévation de l'appareil.

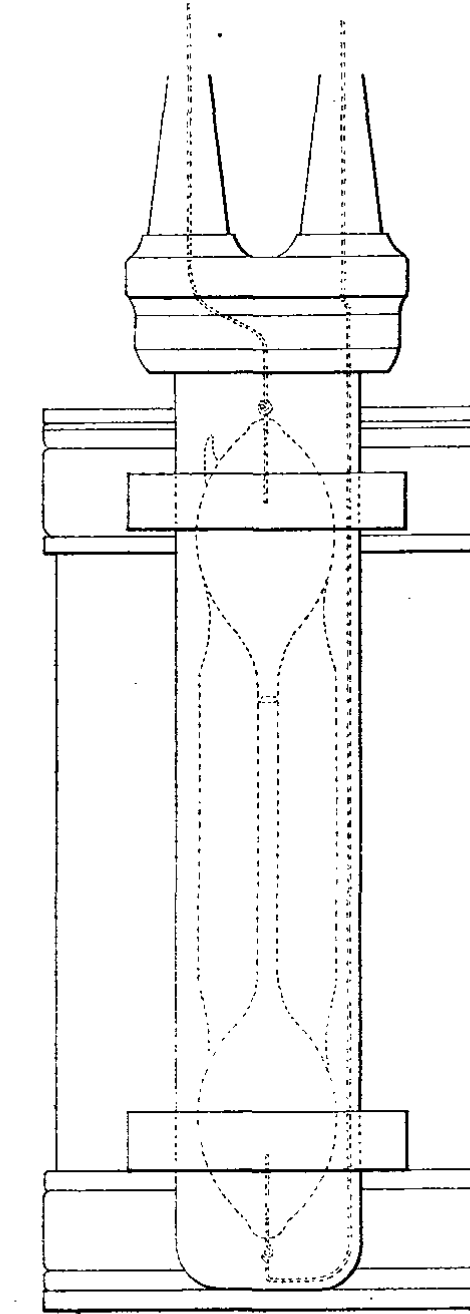


Fig. 6.

Coupe de la Bobine, suivant LM de la fig. 7.

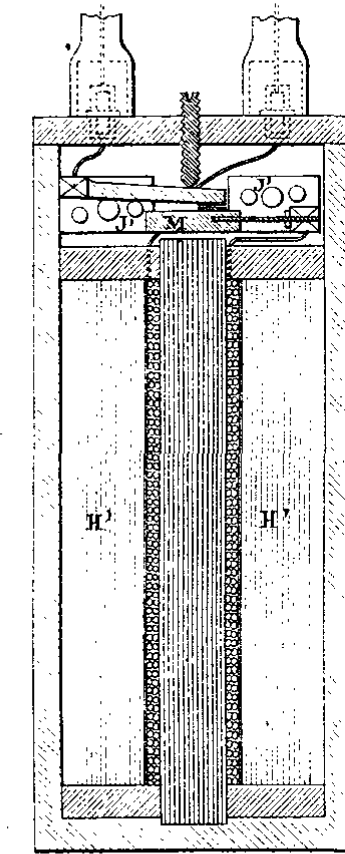


Fig. 2.

Projection horizontale et vue sur le couvert.

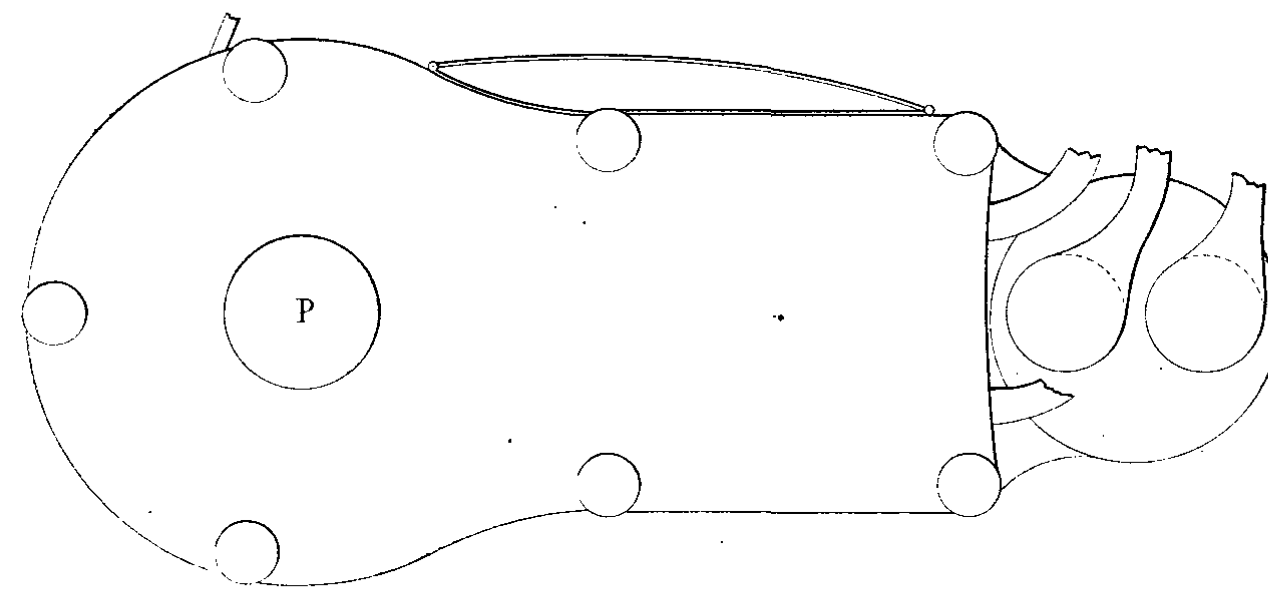


Fig. 4.

Coupe horizontale suivant ABCD de la fig. 3.

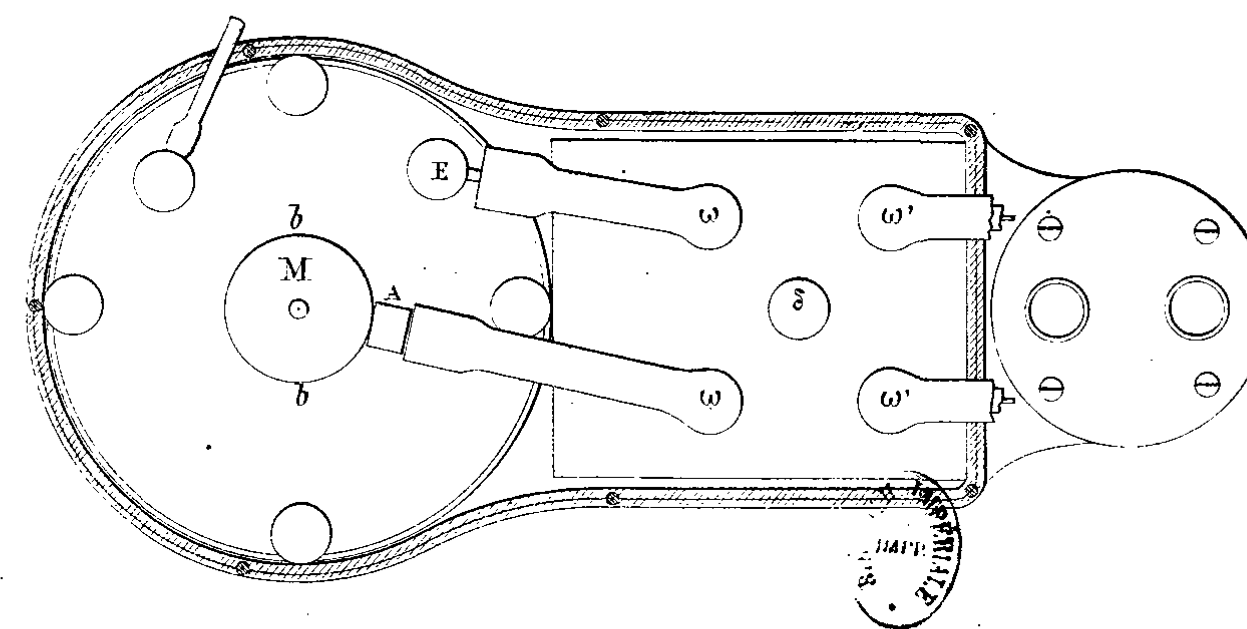
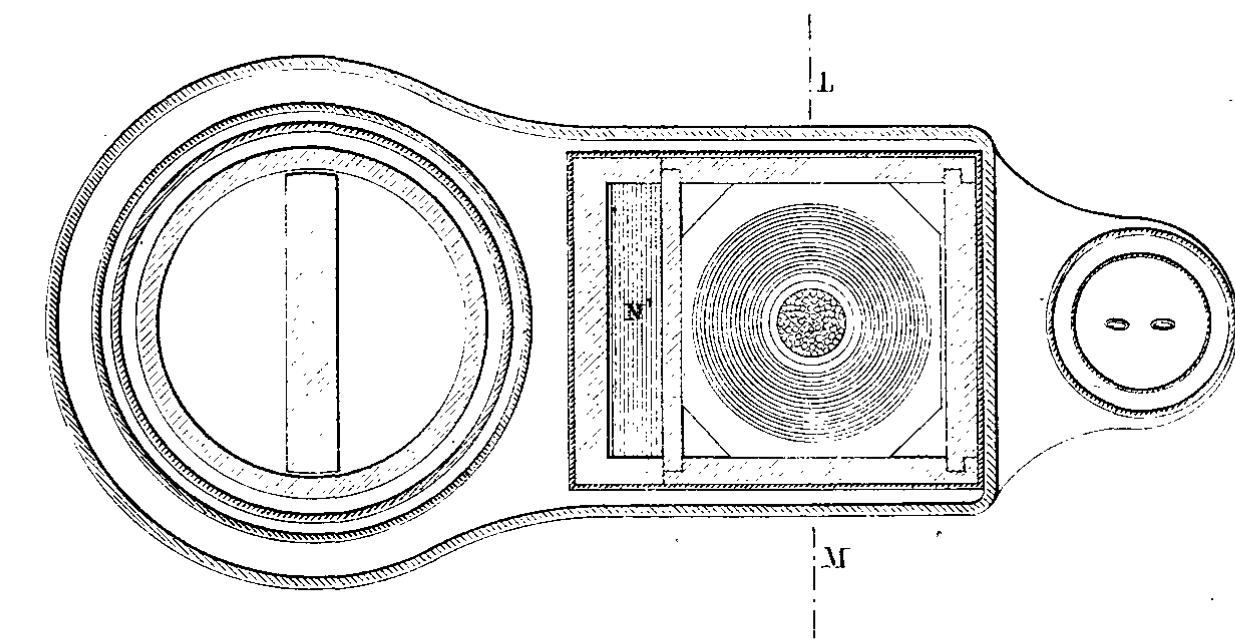


Fig. 7.

Coupe horizontale suivant EF de la fig. 3.



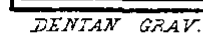
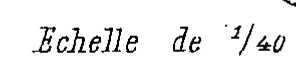
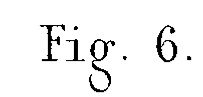
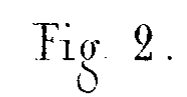
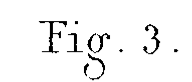
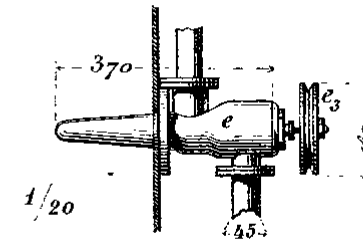
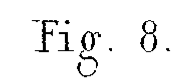
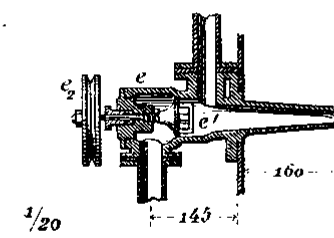
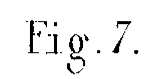
Echelle

100 50 0 1 2 Décimètres.















Patente prise par M. Haswell.

Fig. 1.

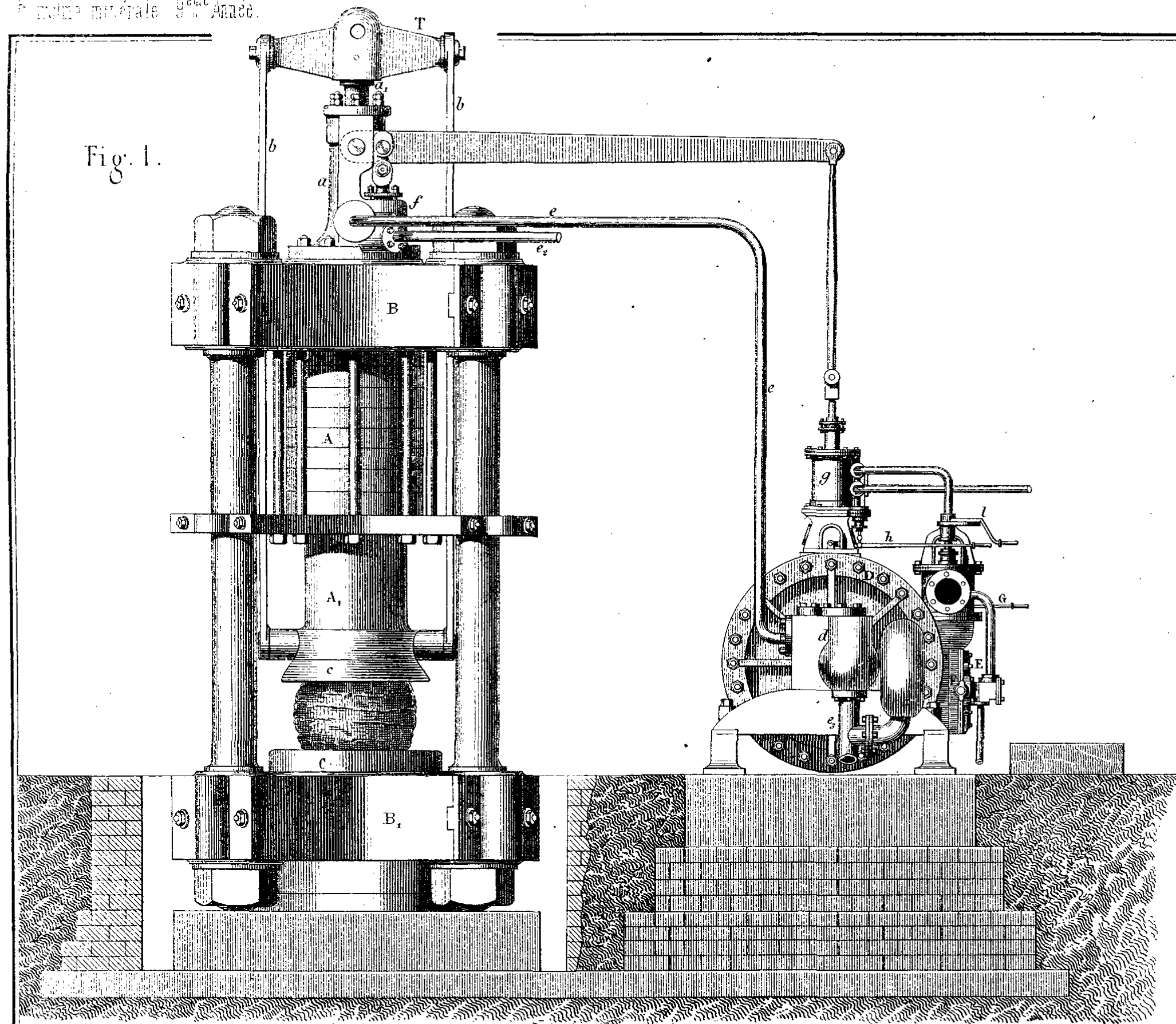


Fig. 2.

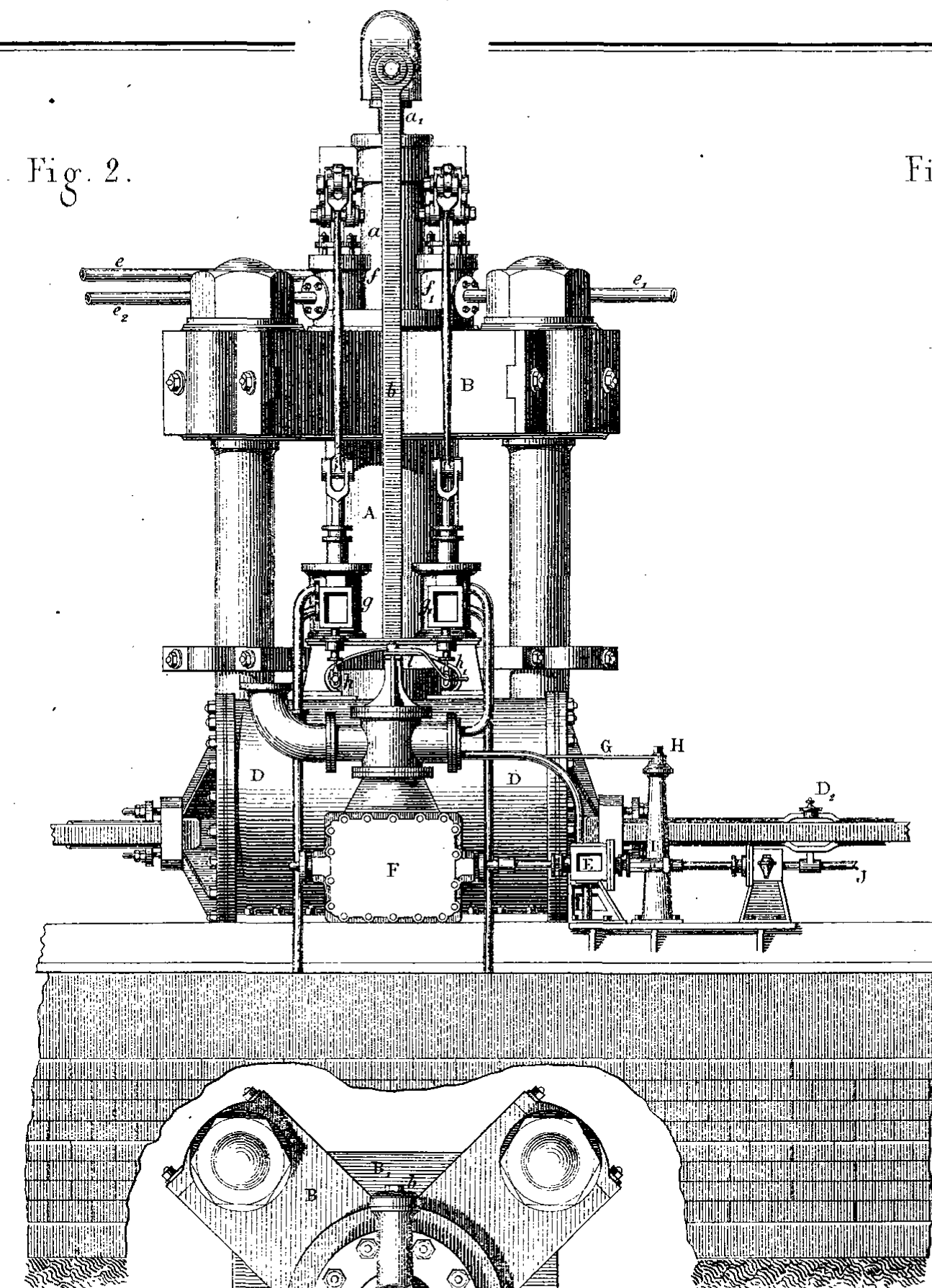


Fig. 3.

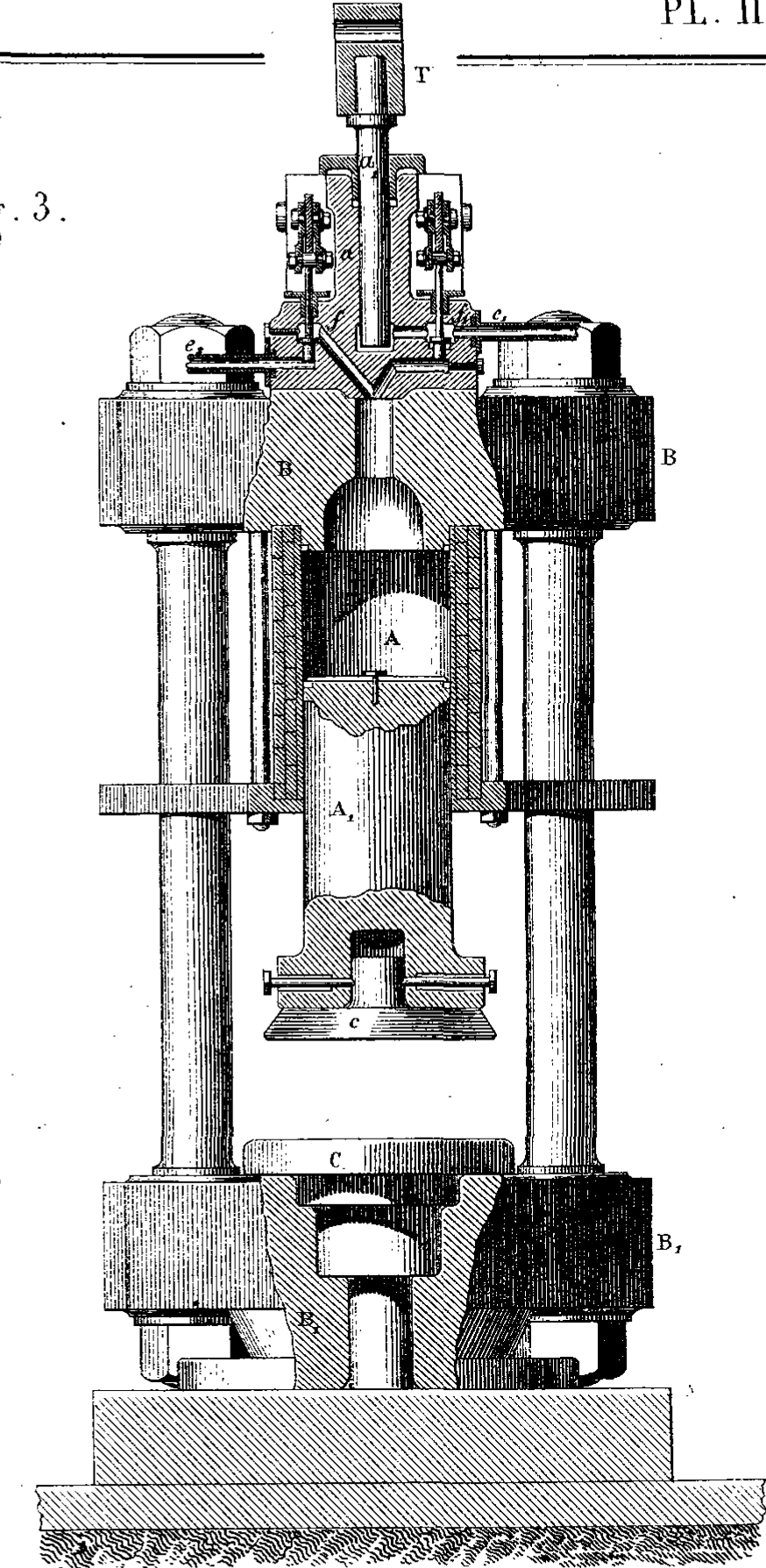
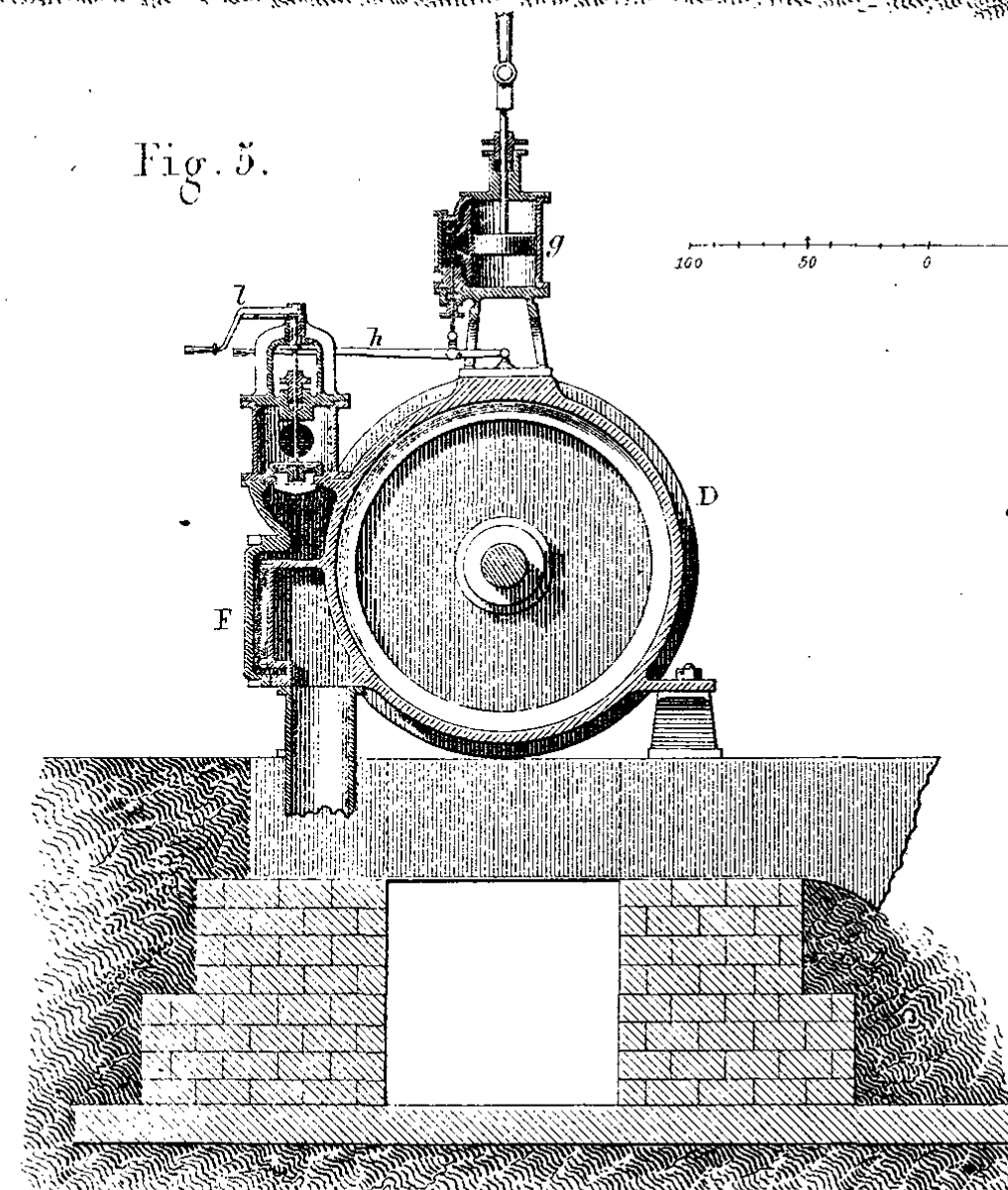


Fig. 5.



Echelle.

100 50 0 1 2 3 Mètres

Fig. 4.

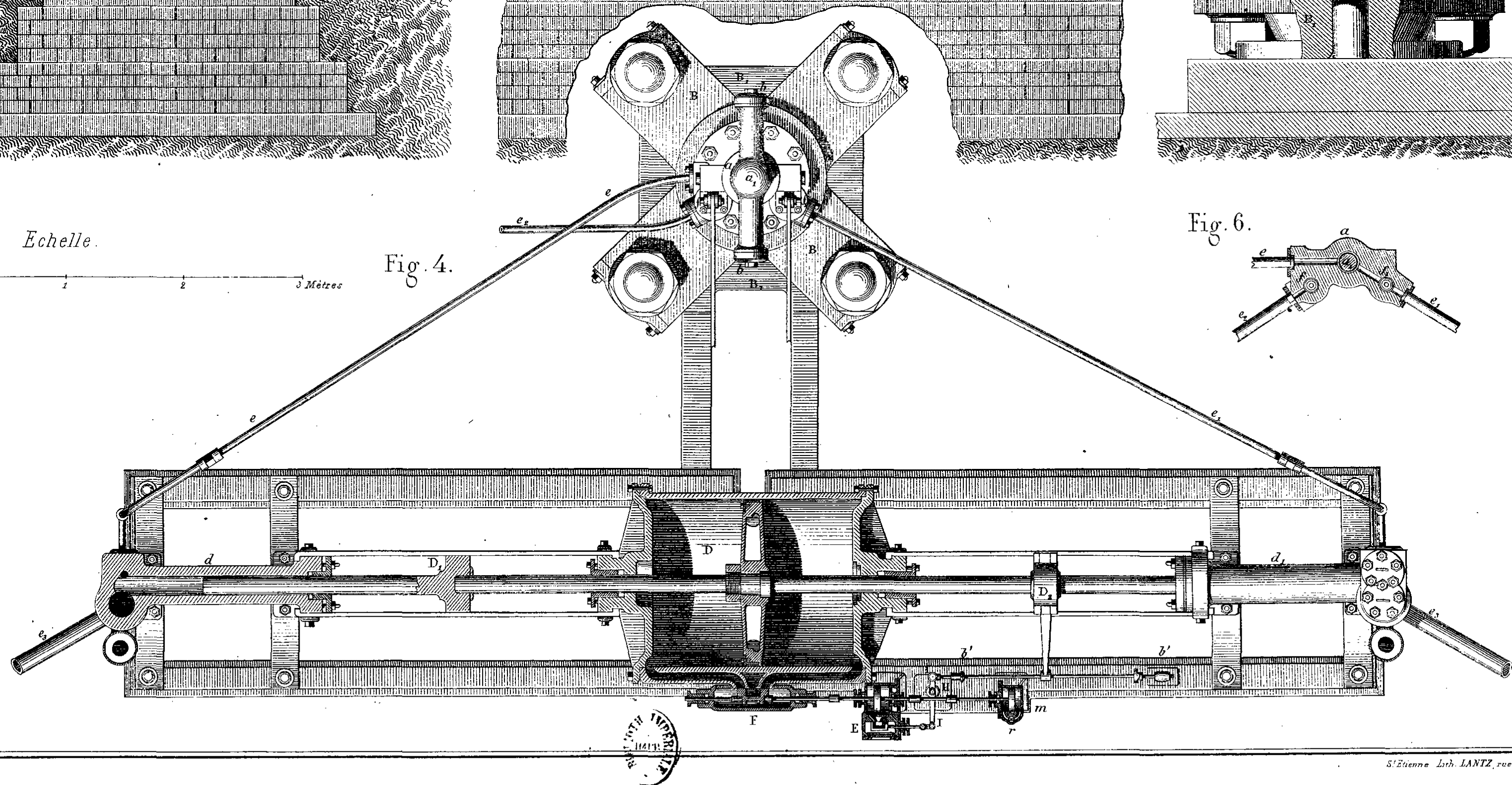


Fig. 6.

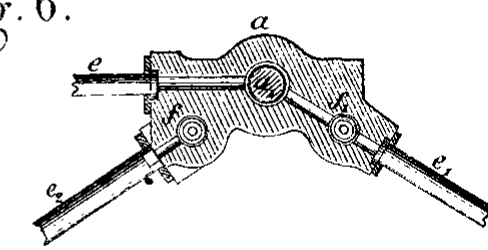








Fig. 4.

*Haut - fourneau d'Ulverstone (Cumberland)*

Fig. 5.

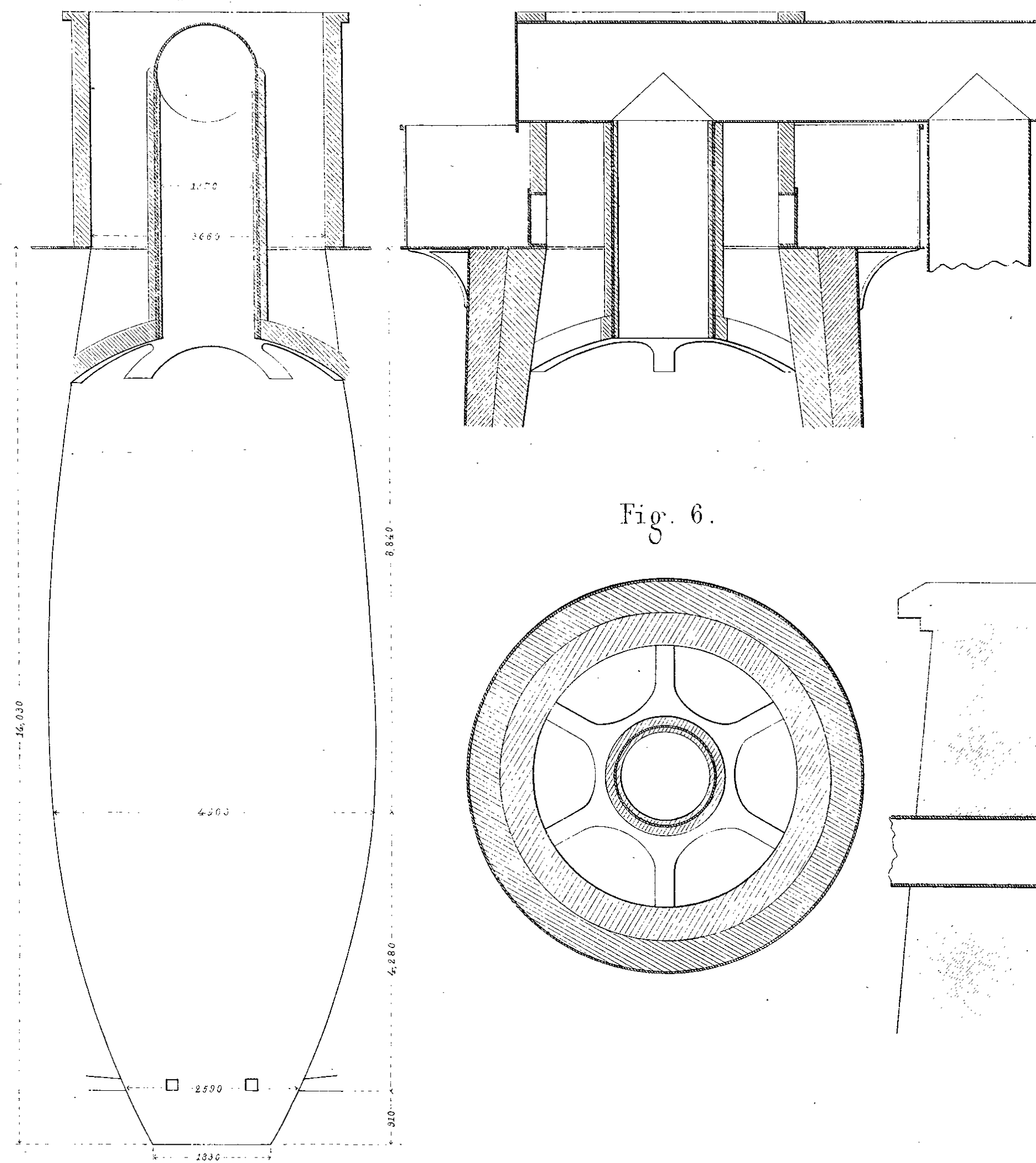


Fig. 6.

Fig. 1.

Appareil de chargement de M. J. Prénat (Givors)

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 2.

Fig. 3.

*Echelles:*

fig. 1, 2, 3, 7, 8 et 9.

fig. 4, 5 et 6

100 50 0 1 2 3 4 5 6 7 8 9 10 11 Met.







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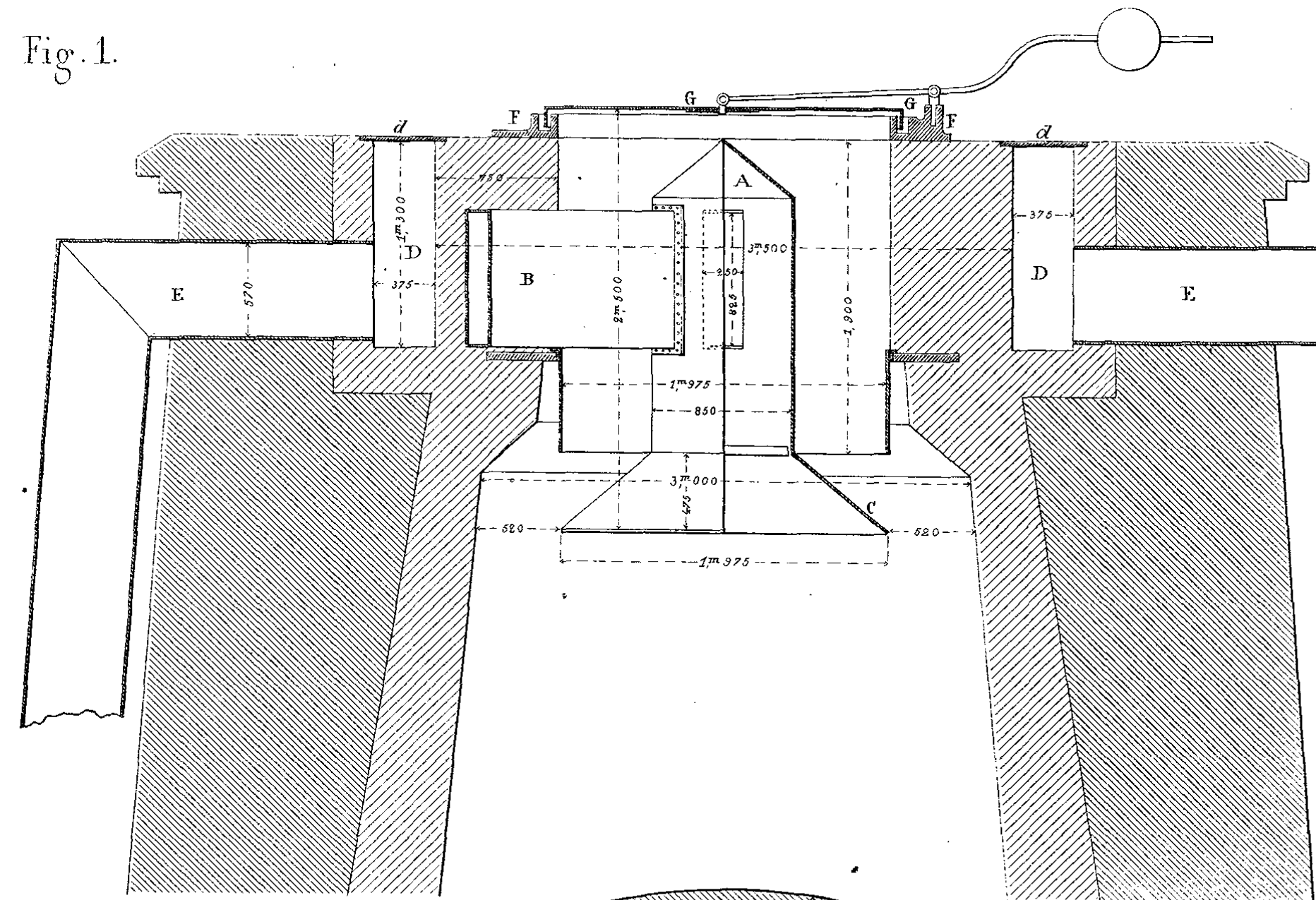
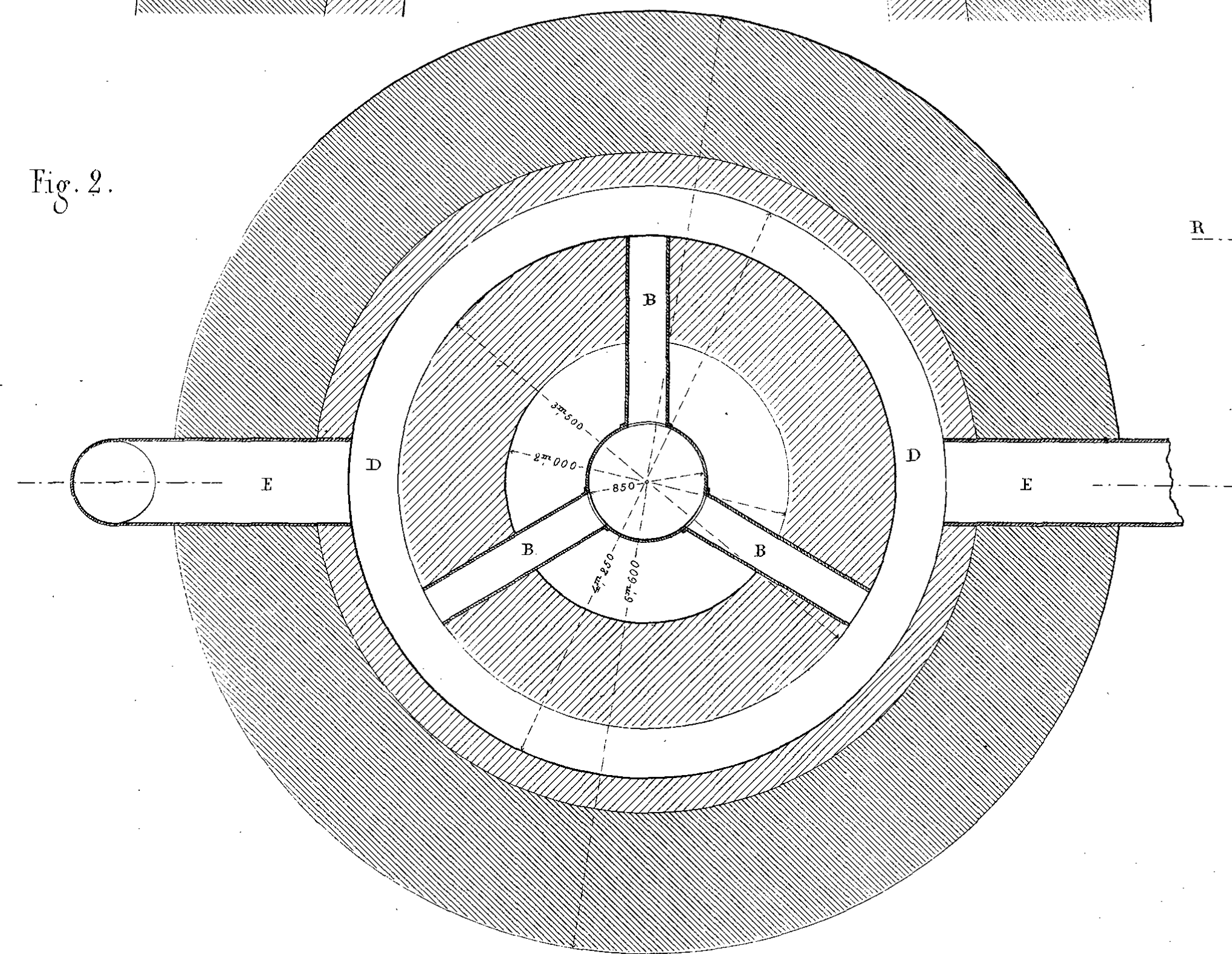
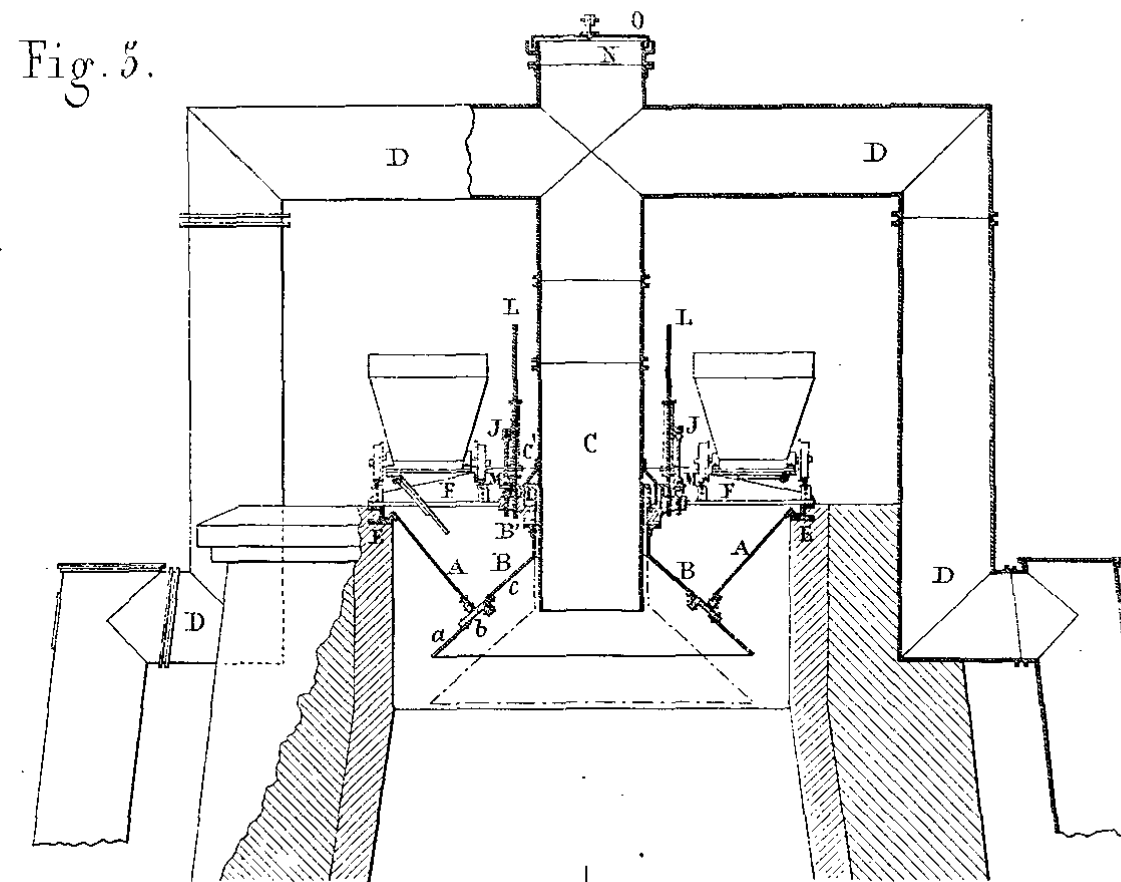


Fig. 2.



Coupe verticale suivant RSTV, fig. 4

Fig. 3.



Projection horizontale.

Fig. 4.

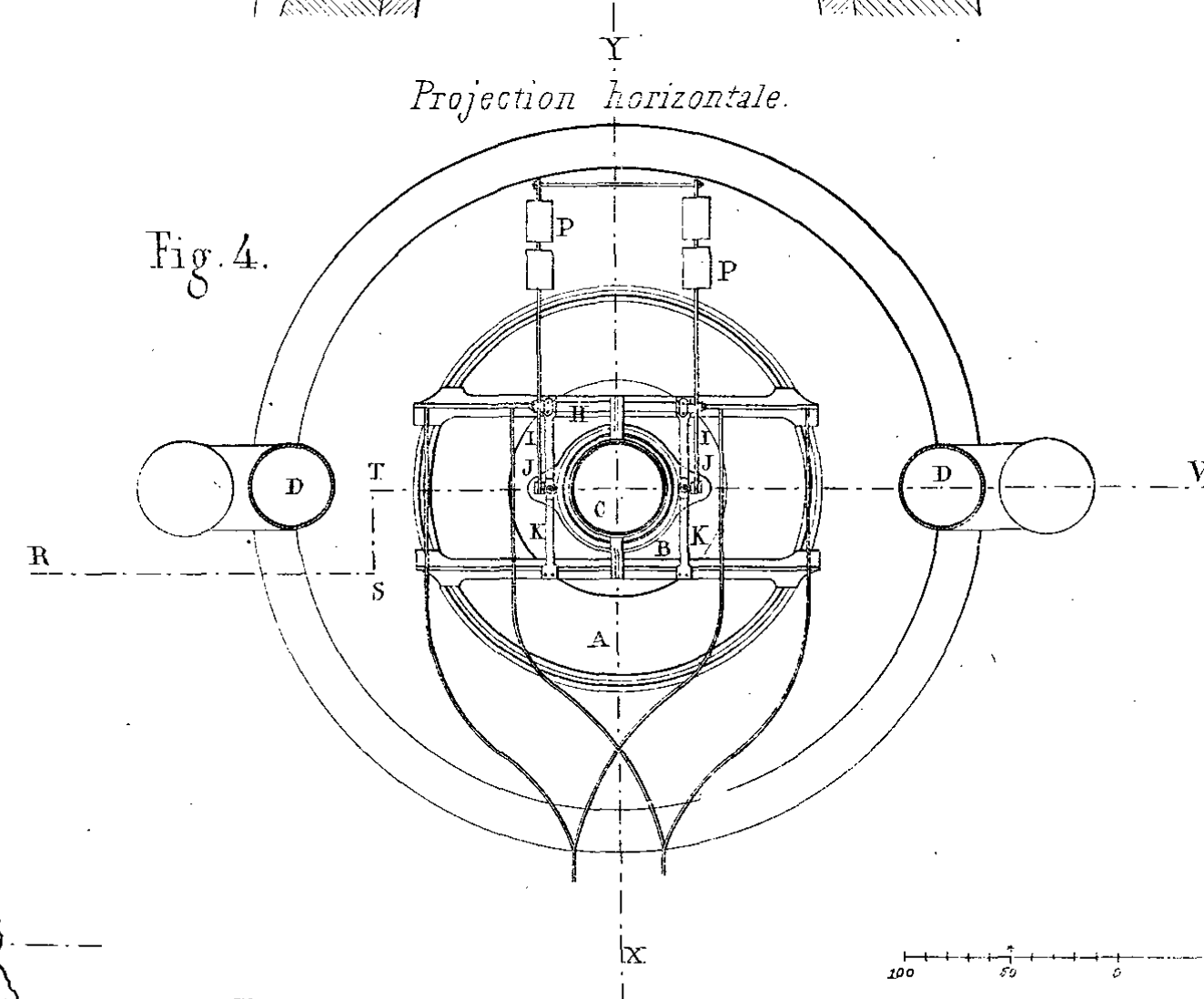
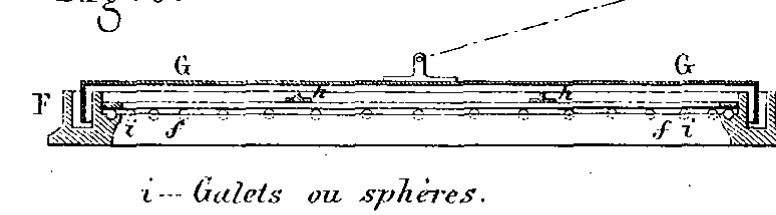


Fig. 3.



i. Gulets ou sphères.

Fig. 9.

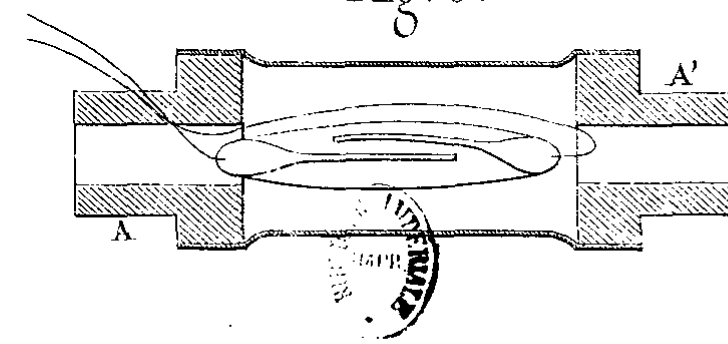


Fig. 7.

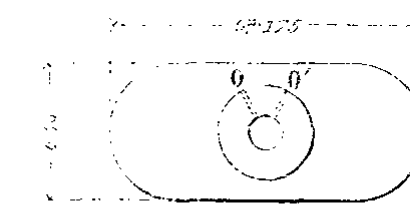


Fig. 10.

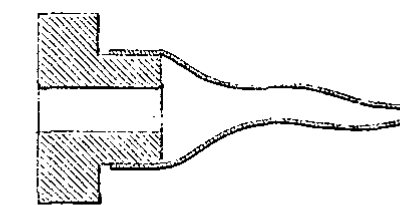
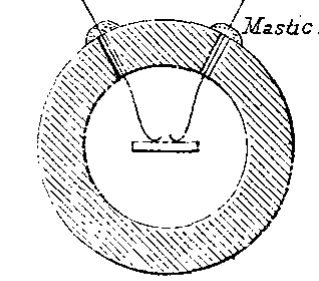
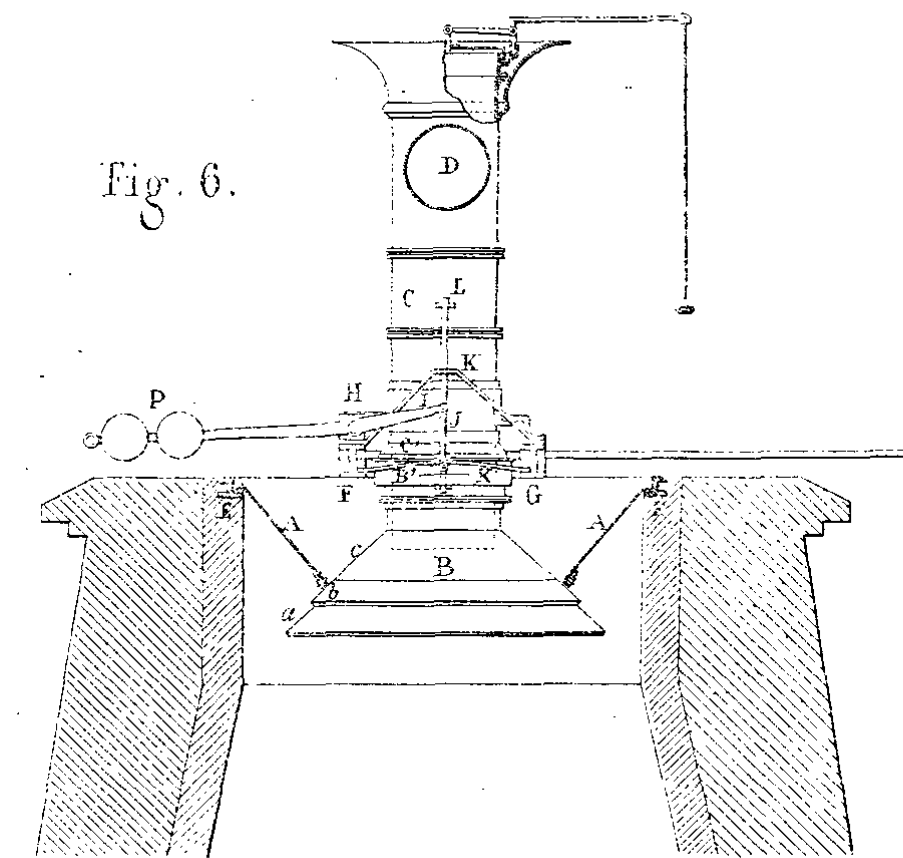


Fig. 11.



Projection verticale suivant XY, fig. 4

Fig. 6.



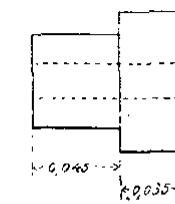
## LÉGENDE

- A. Trémie
- BB' Cône répartiteur et obturateur
- C. Tuyau de prise de gaz.
- C' Anneau plongeur complétant avec B' une fermeture hydraulique.
- D. Conduites de gaz
- E. Couronne supportant la trémie.
- F et G. Marâtres
- H. Arbre sur lequel sont calés les leviers II.
- I. Leviers à l'aide desquels on fait mouvoir le distributeur
- J. Bielles de suspension.
- K. Guides fixés sur les marâtres
- L. Tiges ou coulisseurs fixés au cône BB'
- M. Point d'attache des bielles
- N et O. Soupape hydraulique.

Echelle des fig. 1 à 6

100 20 0 1 2 3 4 5 6 Mèt.

Fig. 8.



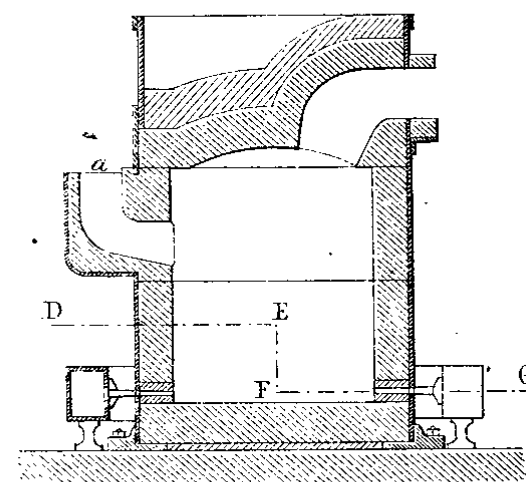
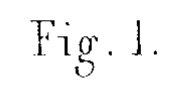






*Four Bessemer d'Edsken, (Sue'dois)*

*Coupe verticale par ABC, fig. 2.*



Coupe horizontale par DEFG, fig.1.

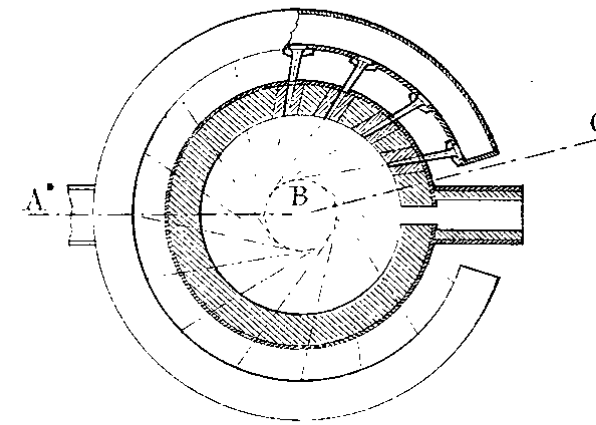
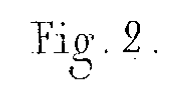


Fig. 3.

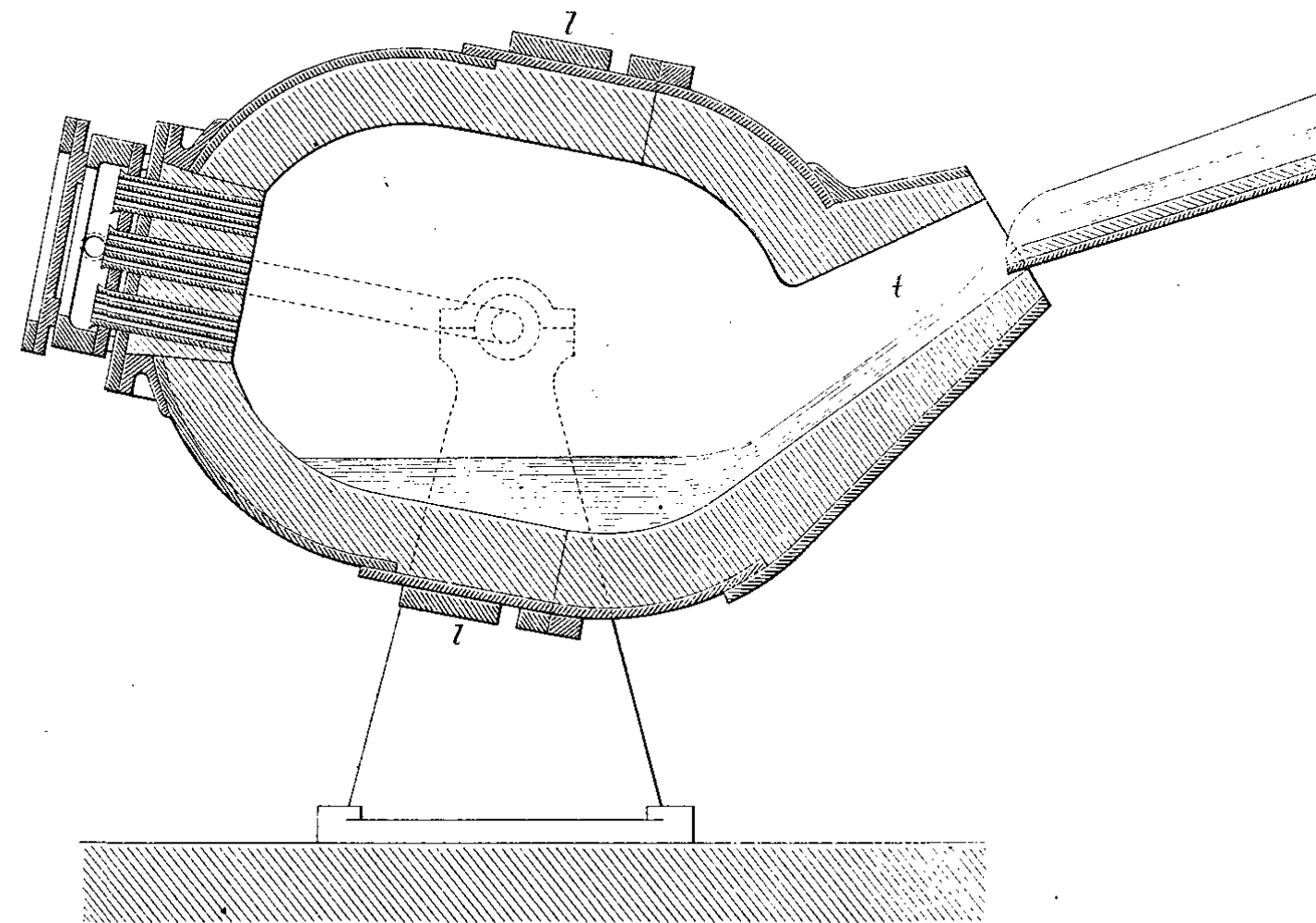


Fig. 4.

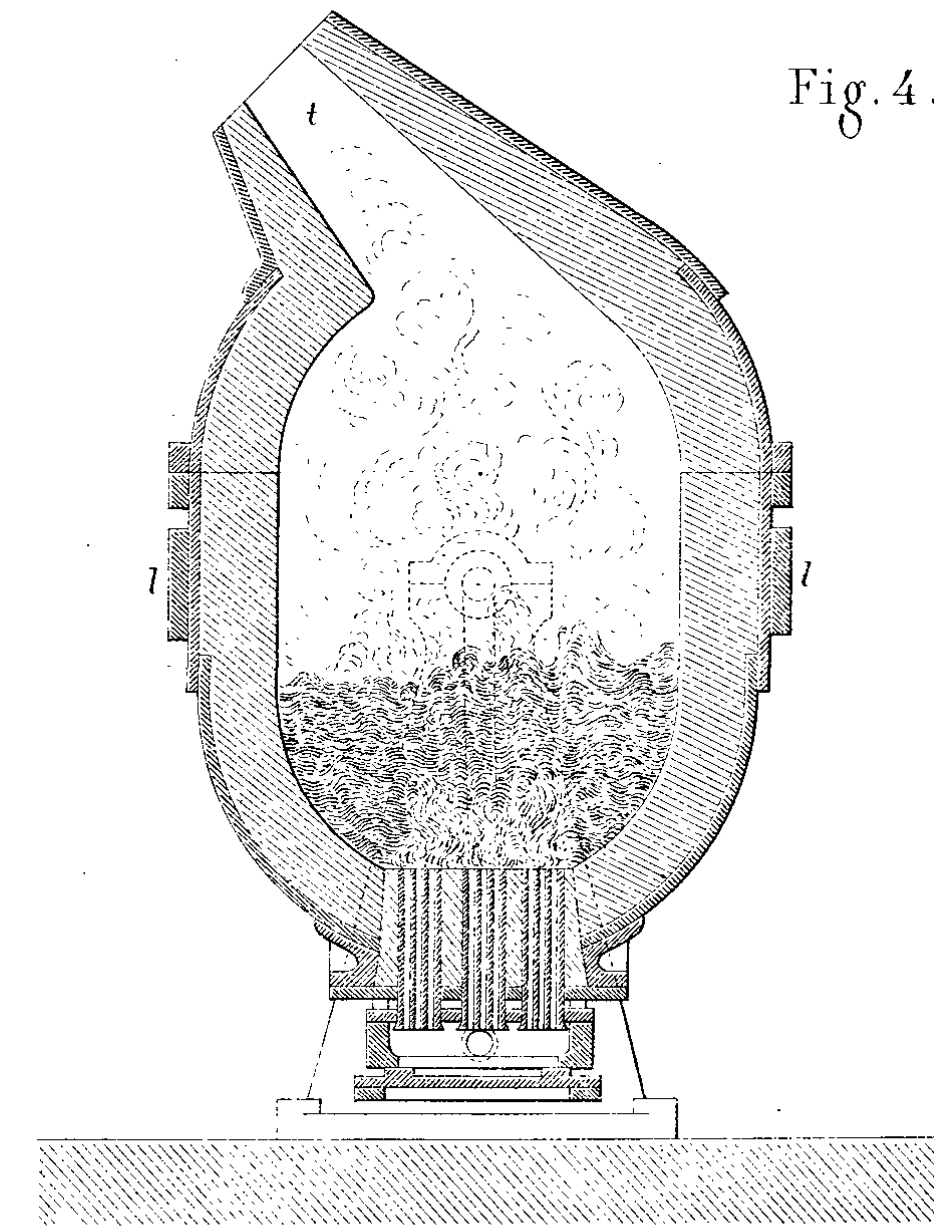


Fig. 6.

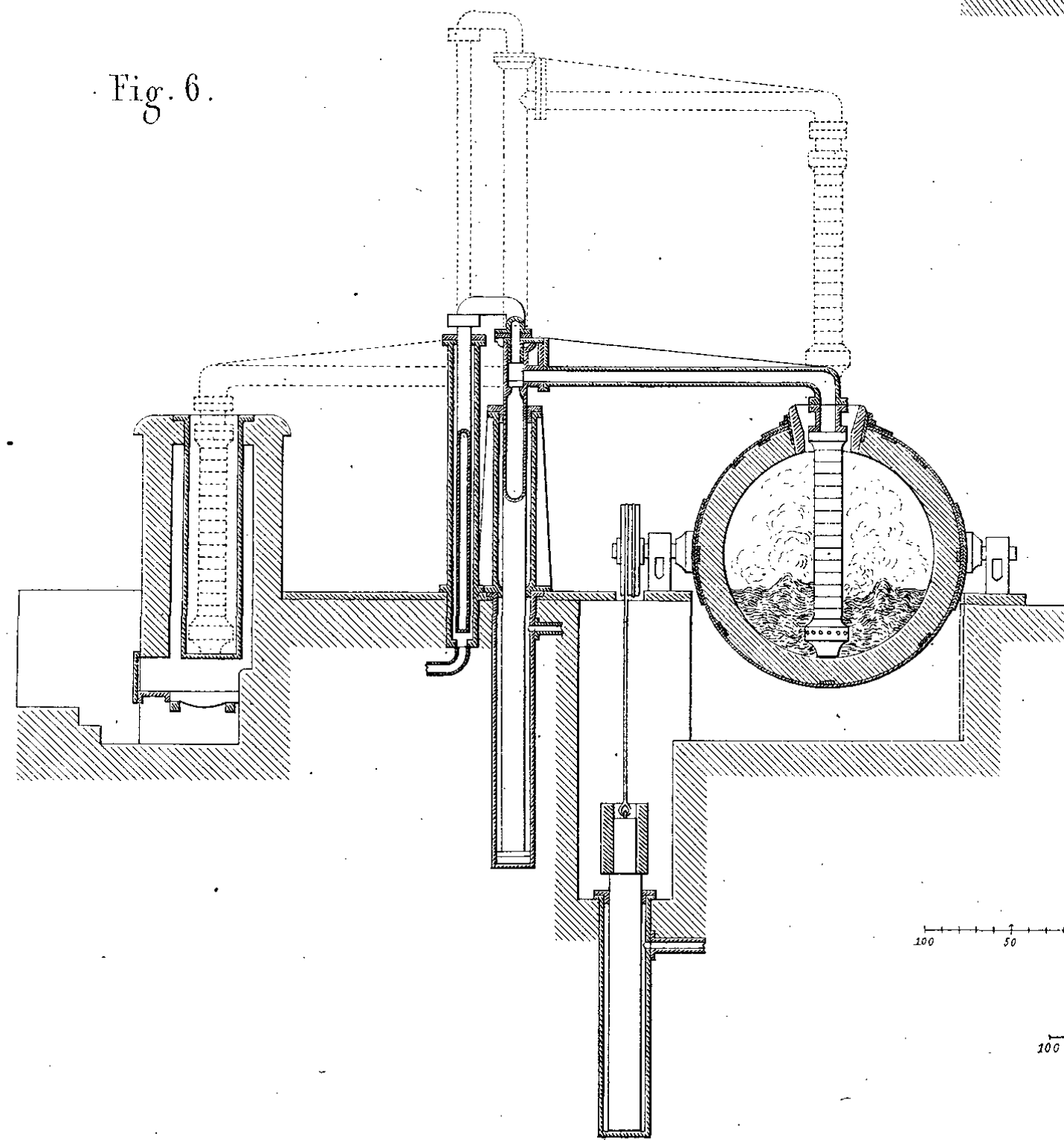


Fig. 7.

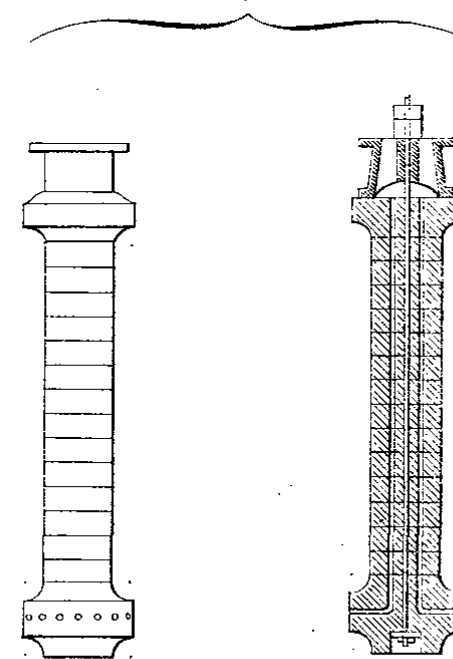
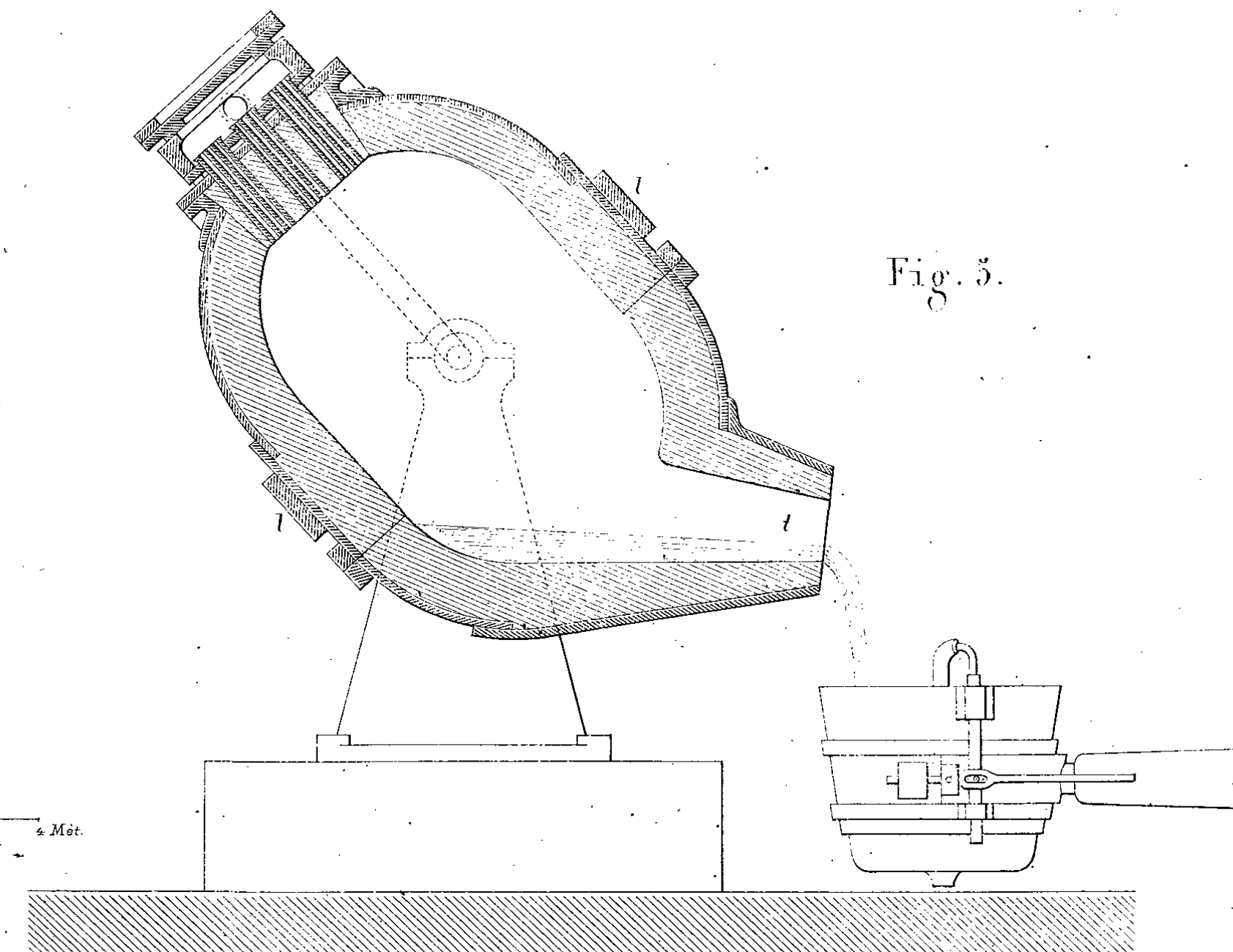


Fig. 5.



Echelle des fig. 1 et 2

Echelle des fig. 3, 4, 5.

4. Mô

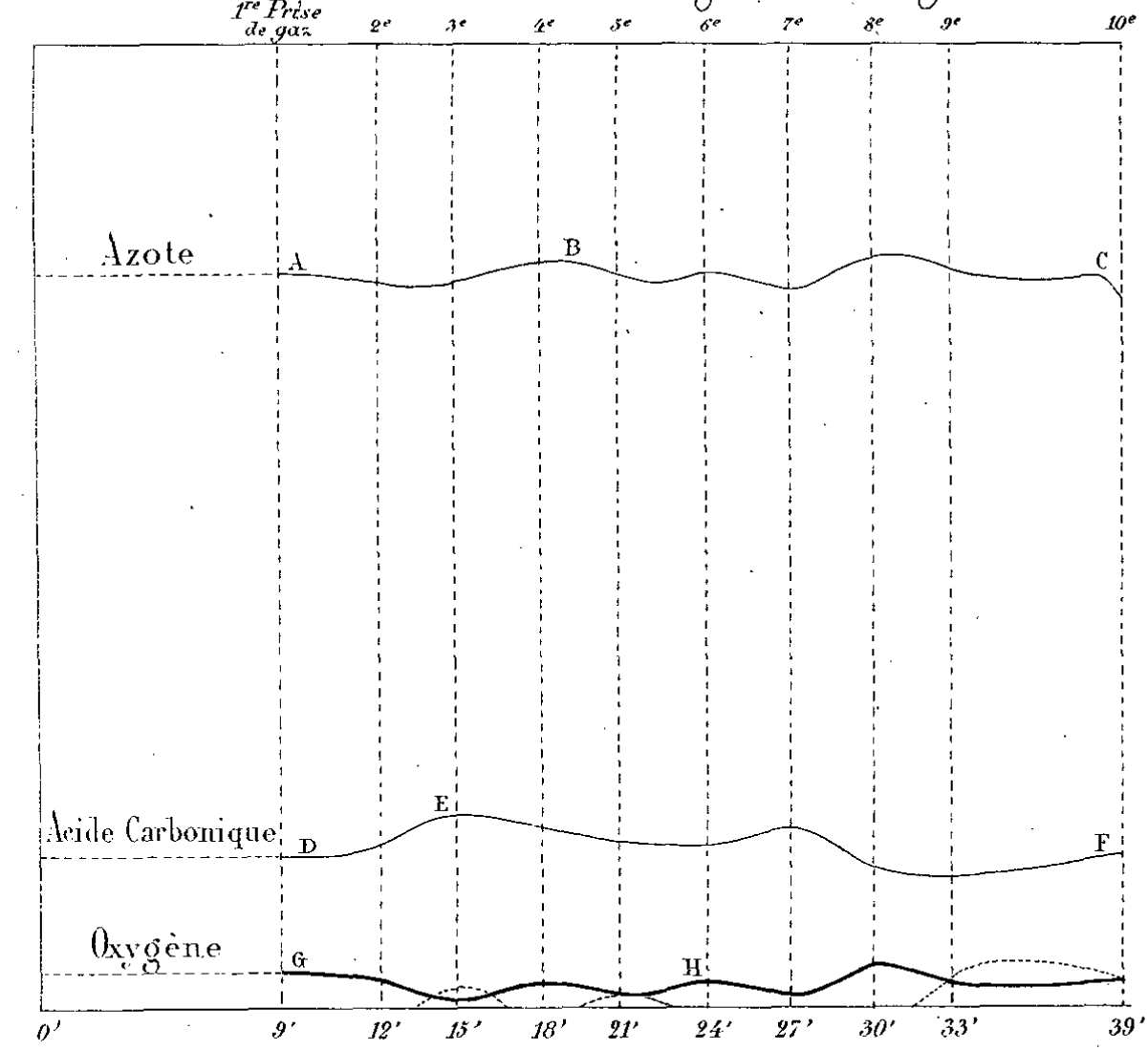
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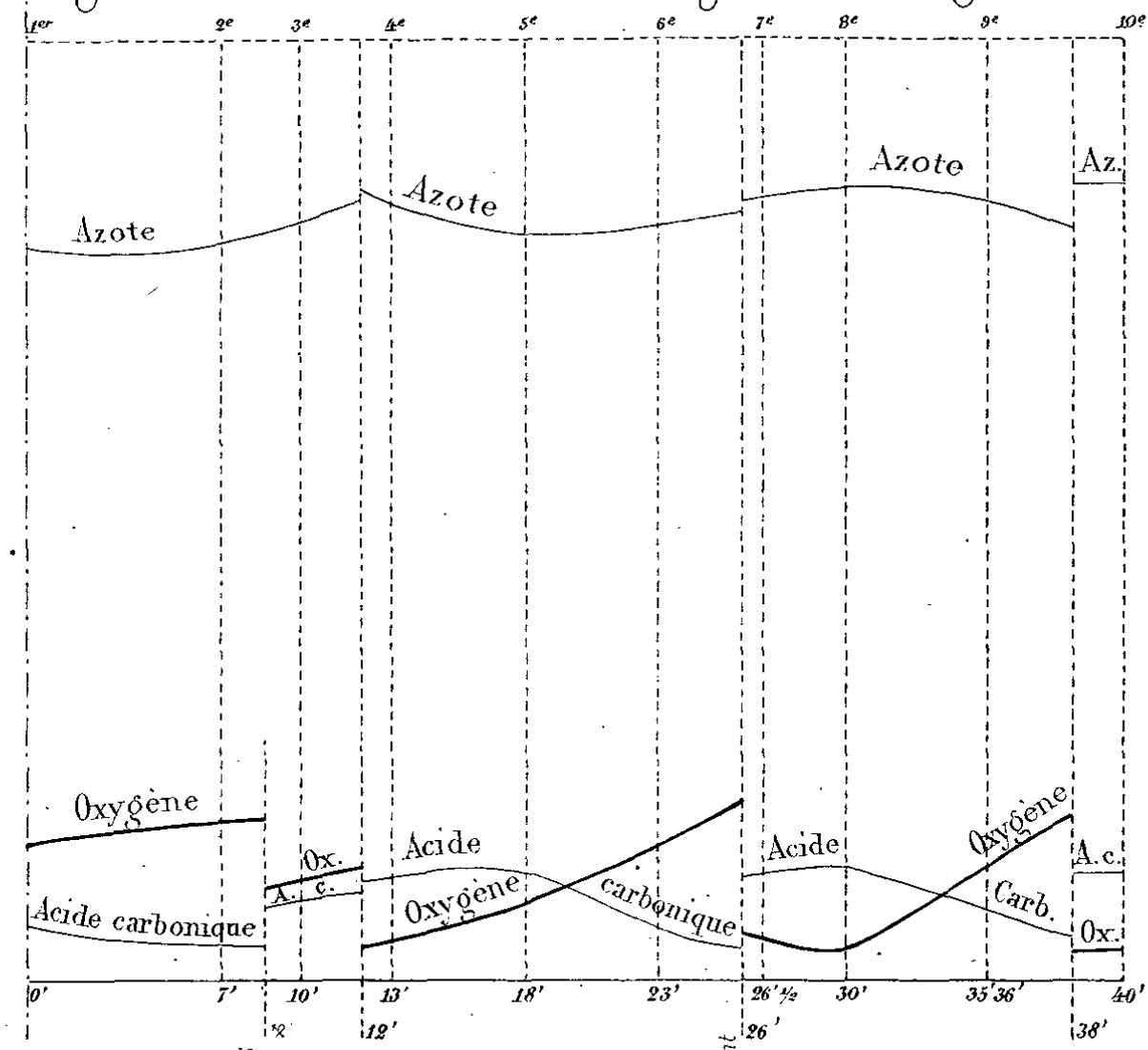


Fig. 2. Chaudière de locomotive. — Composition des gaz — Prise des gaz.



La ligne pointillée figure les gaz combustibles.

Fig. 3. Chaudière fixe. — Composition des gaz — Prise de gaz.



On a chargé

Chargement

On a chargé

Chargement

On a chargé

Chargement

On a chargé

Chargement

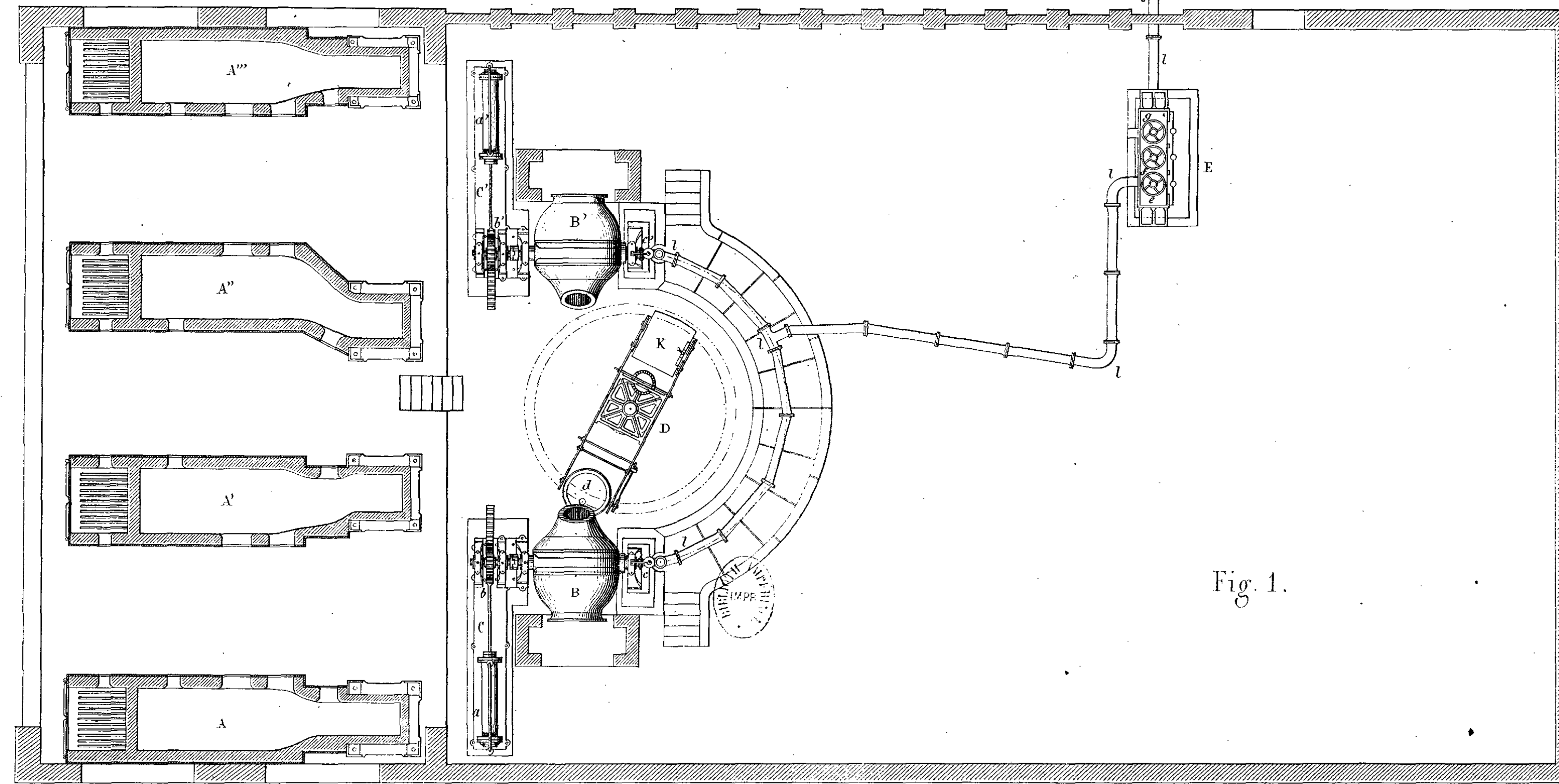
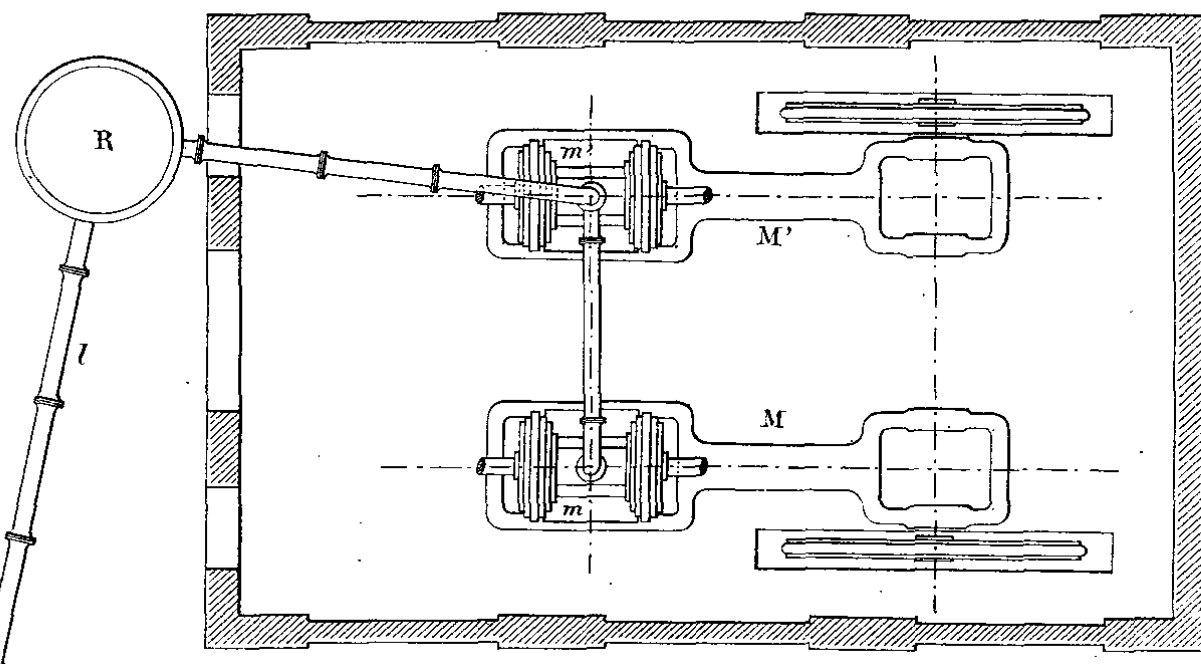


Fig. 1.



Echelle.



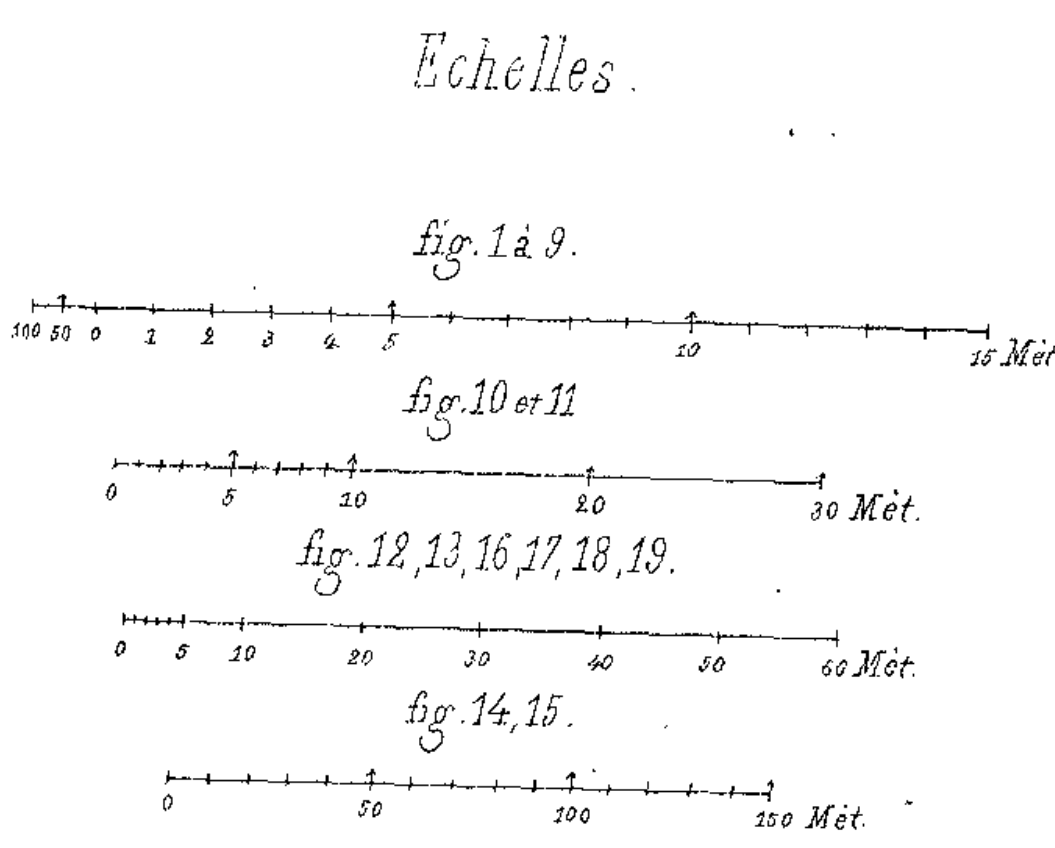
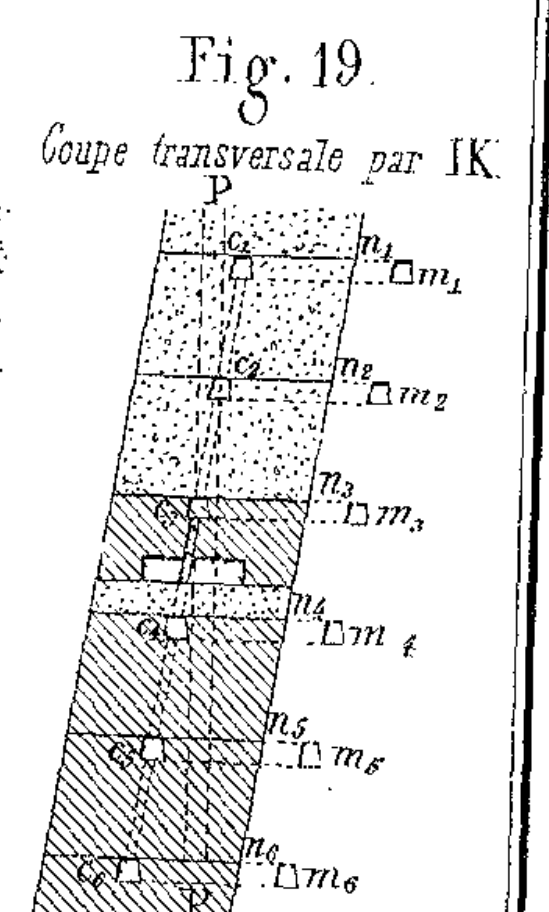
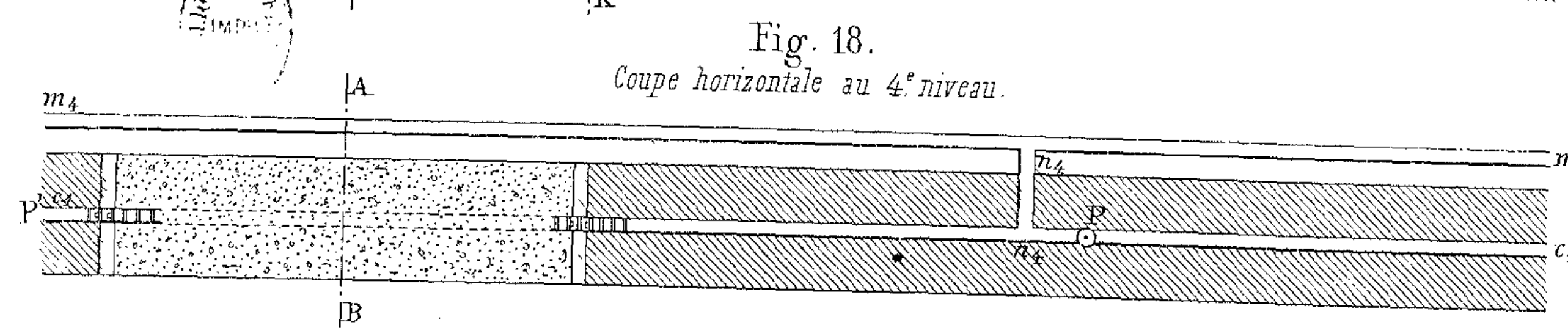
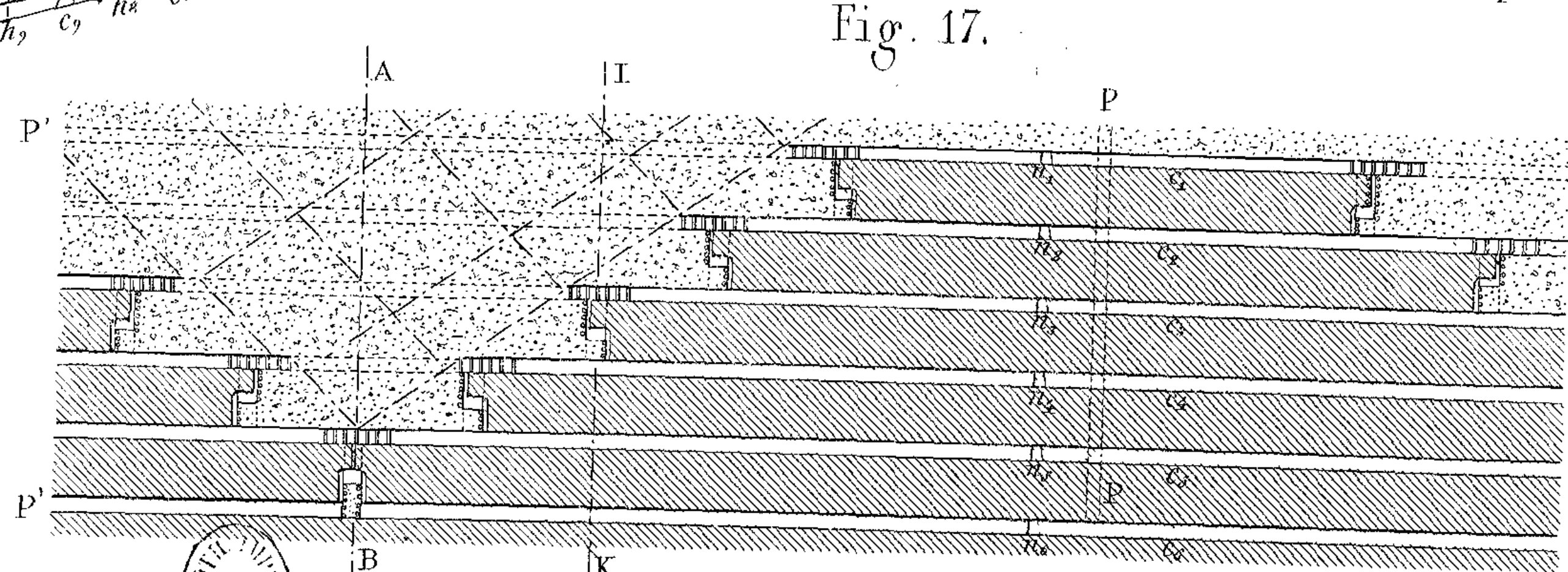
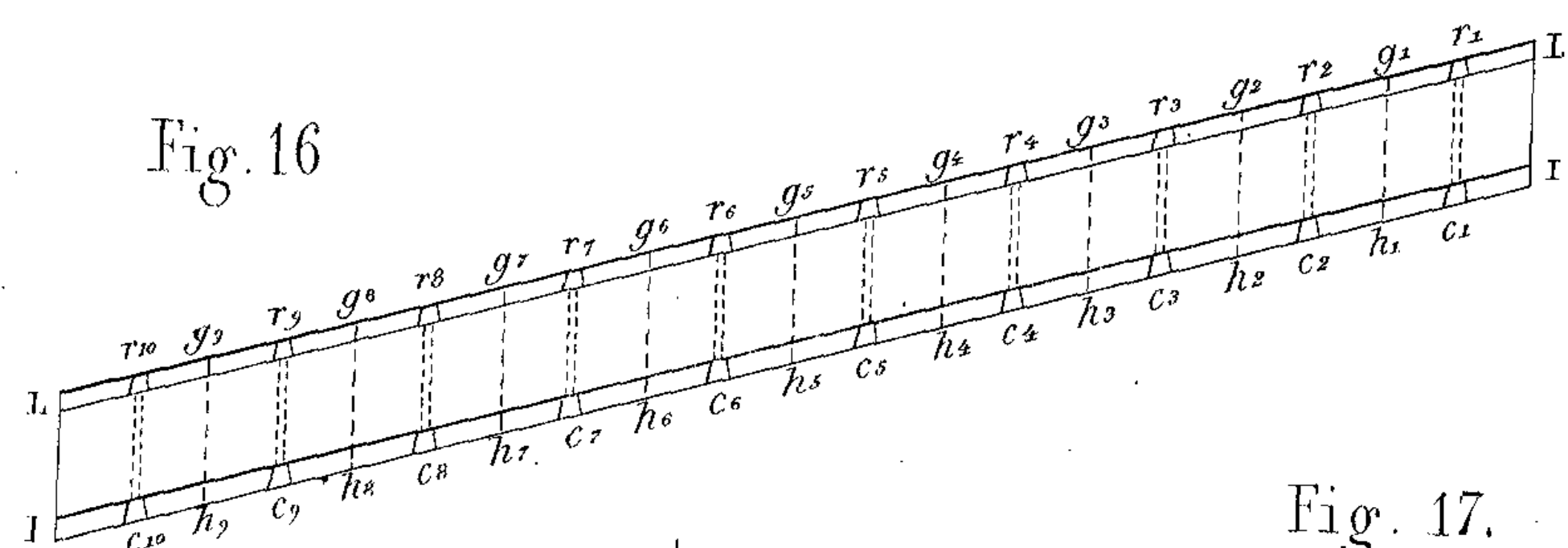
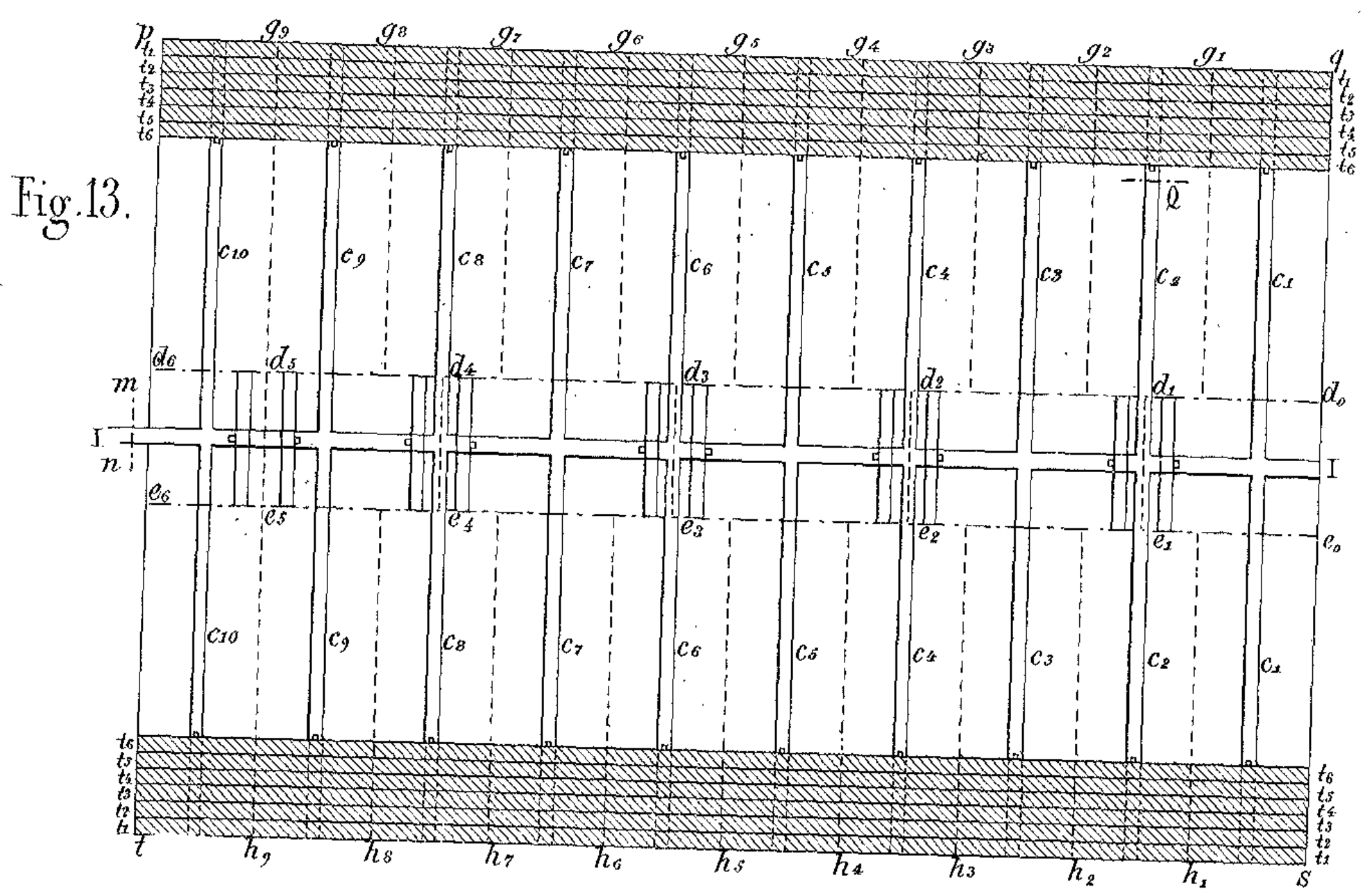
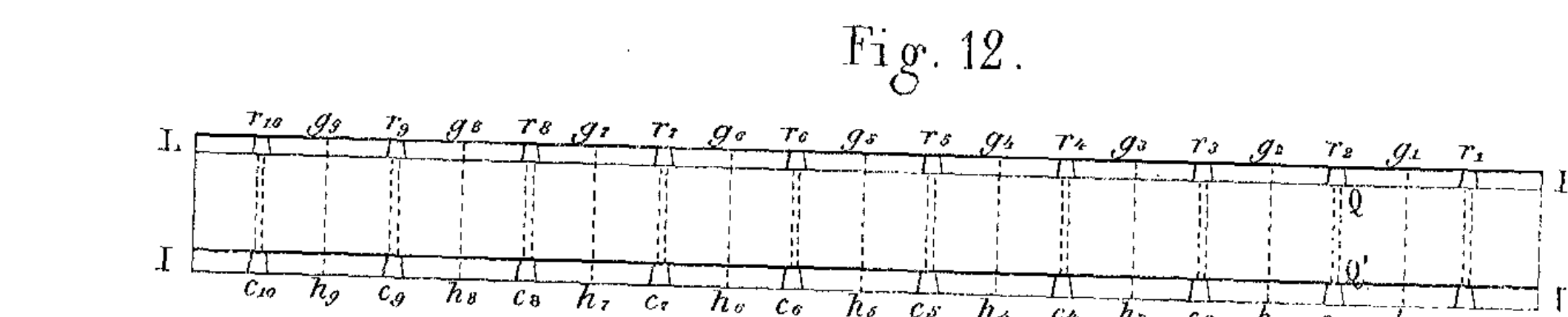
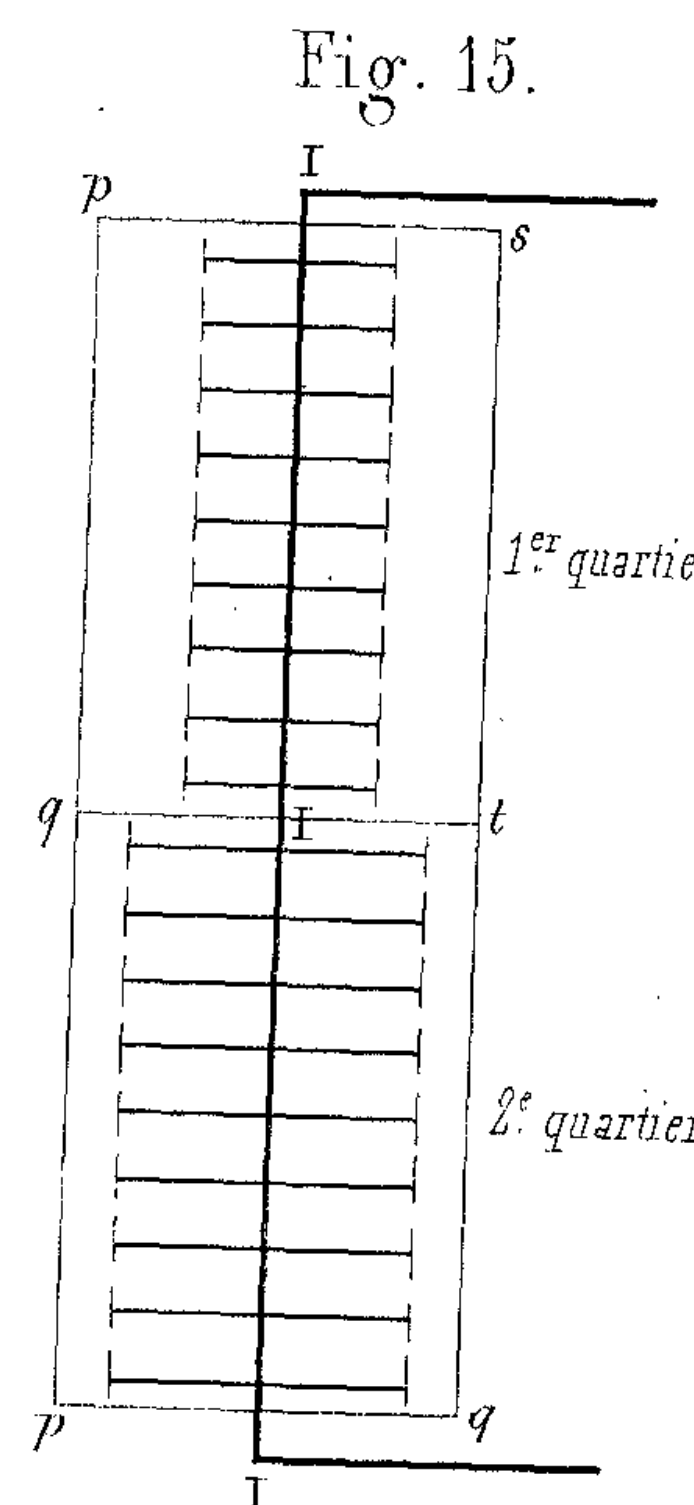
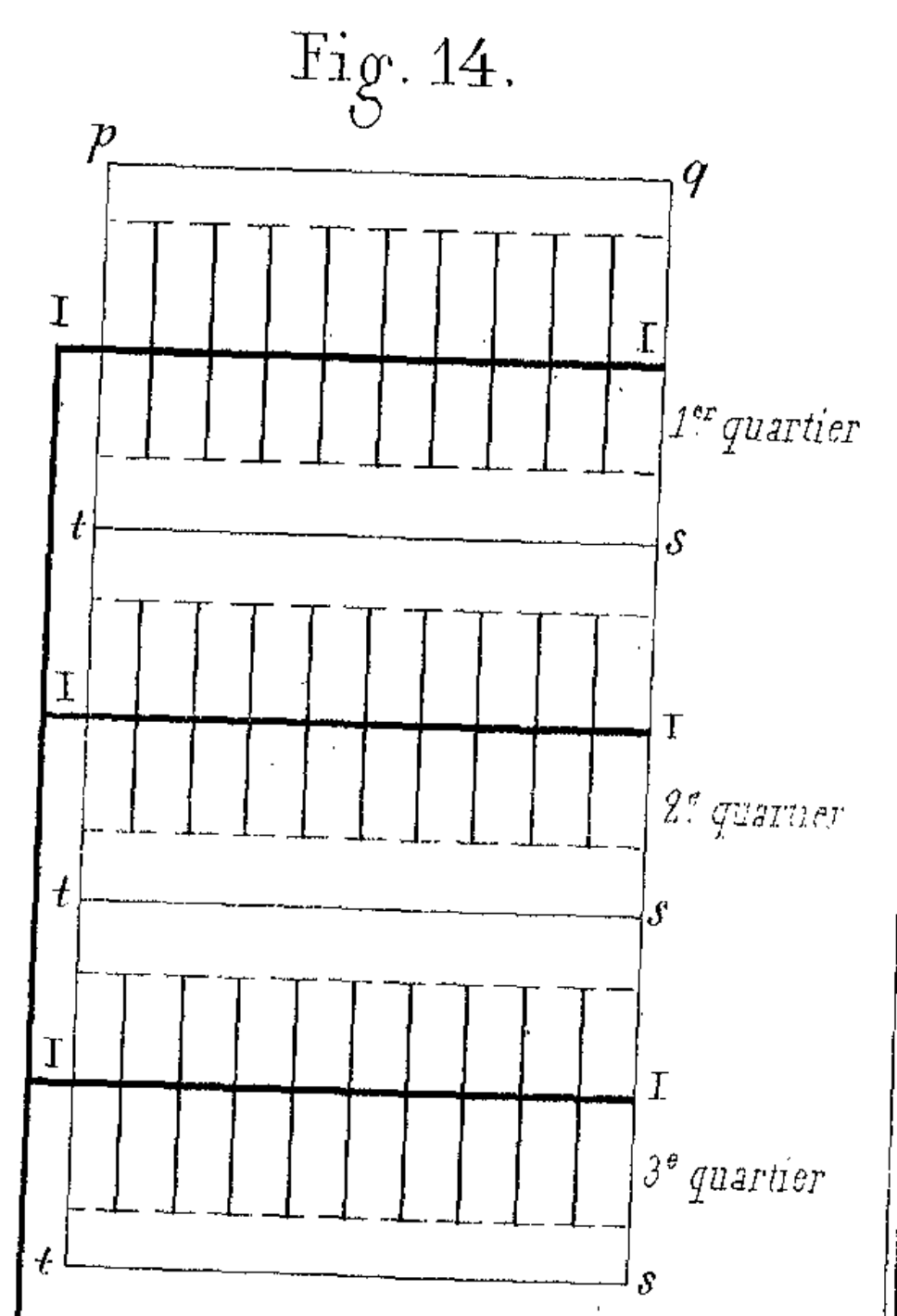
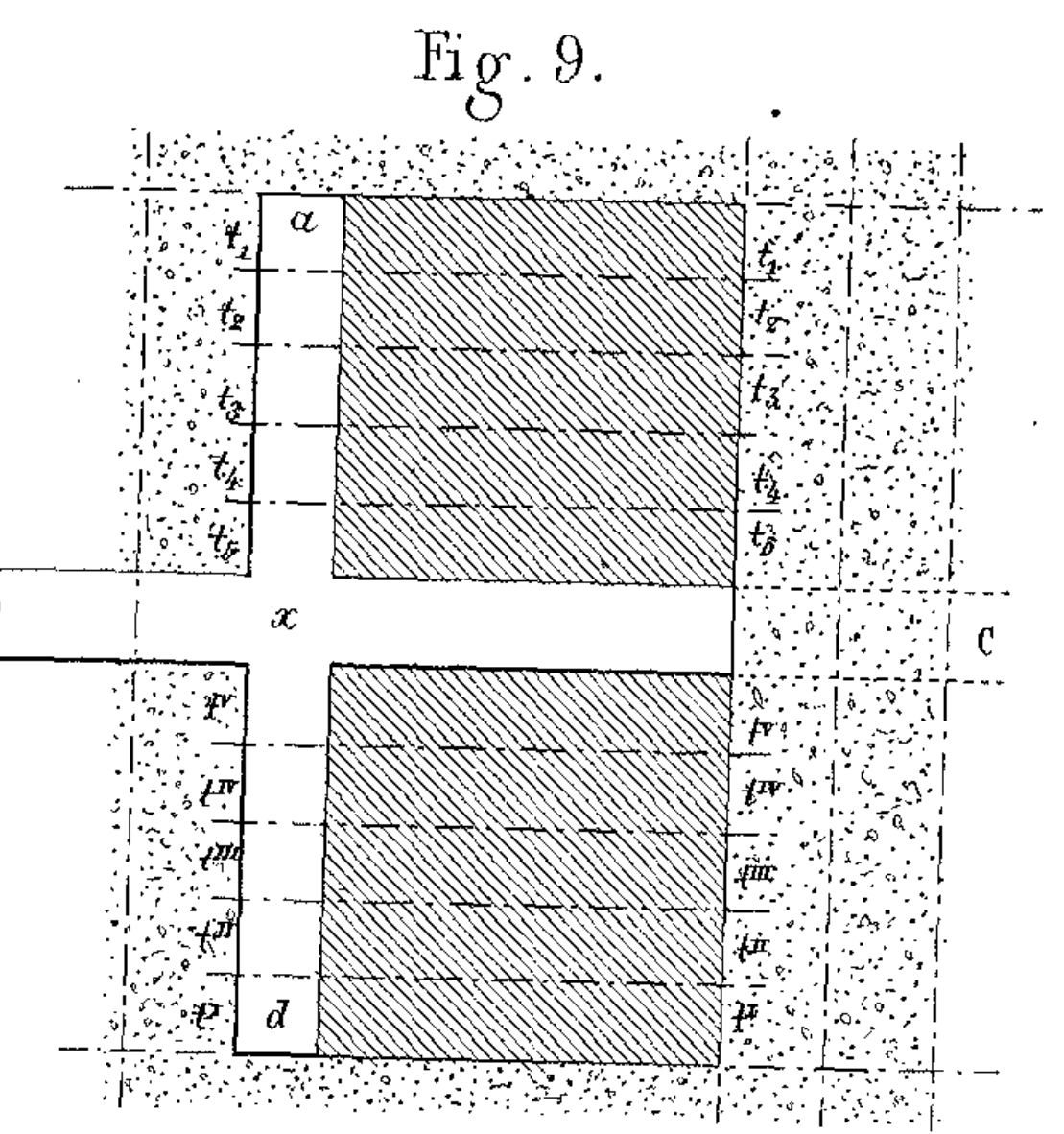
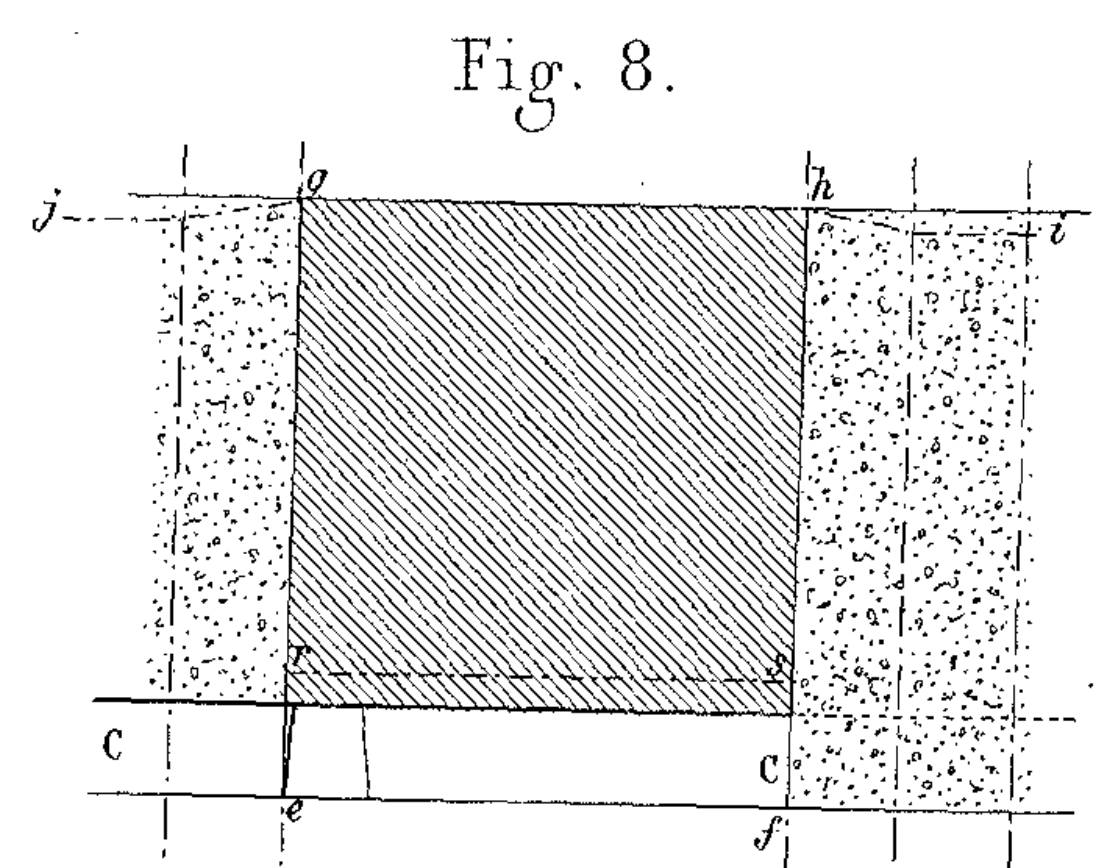
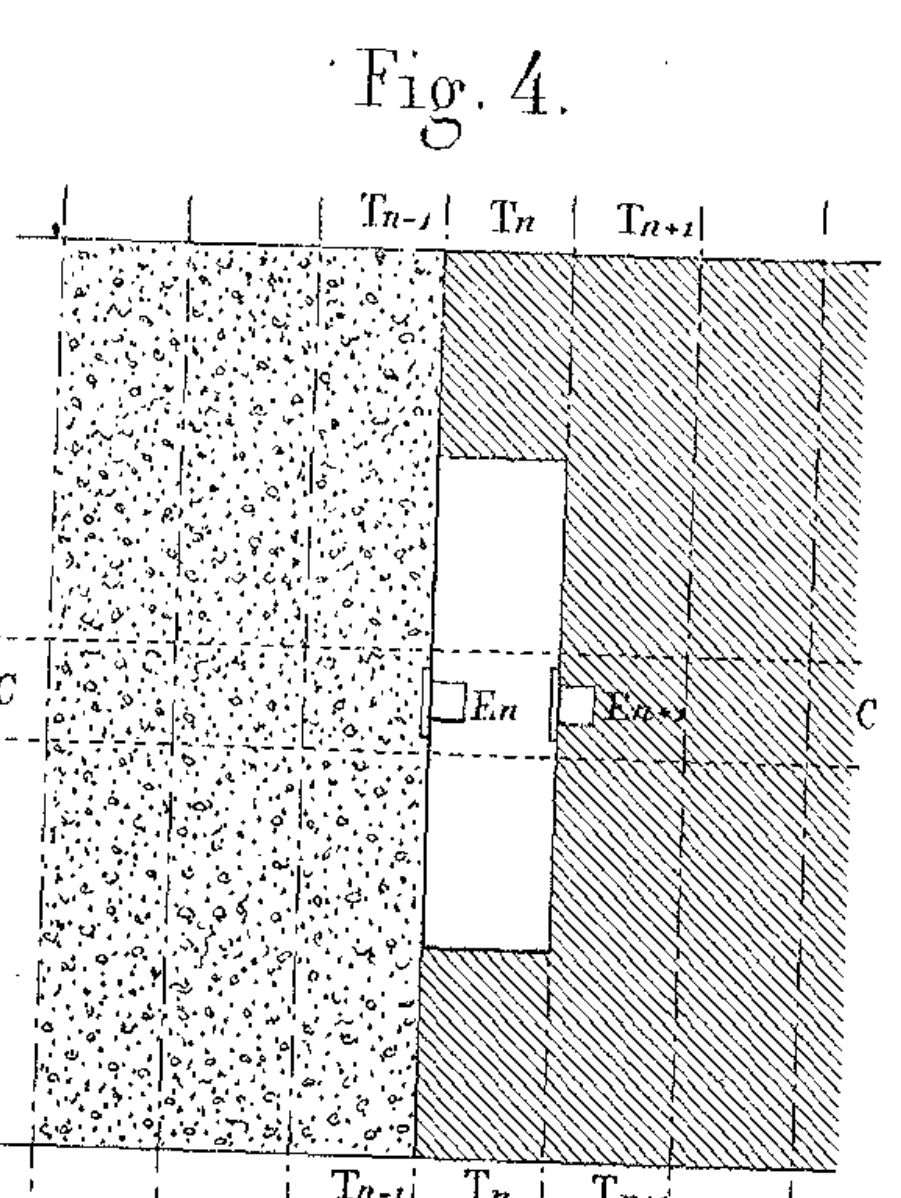
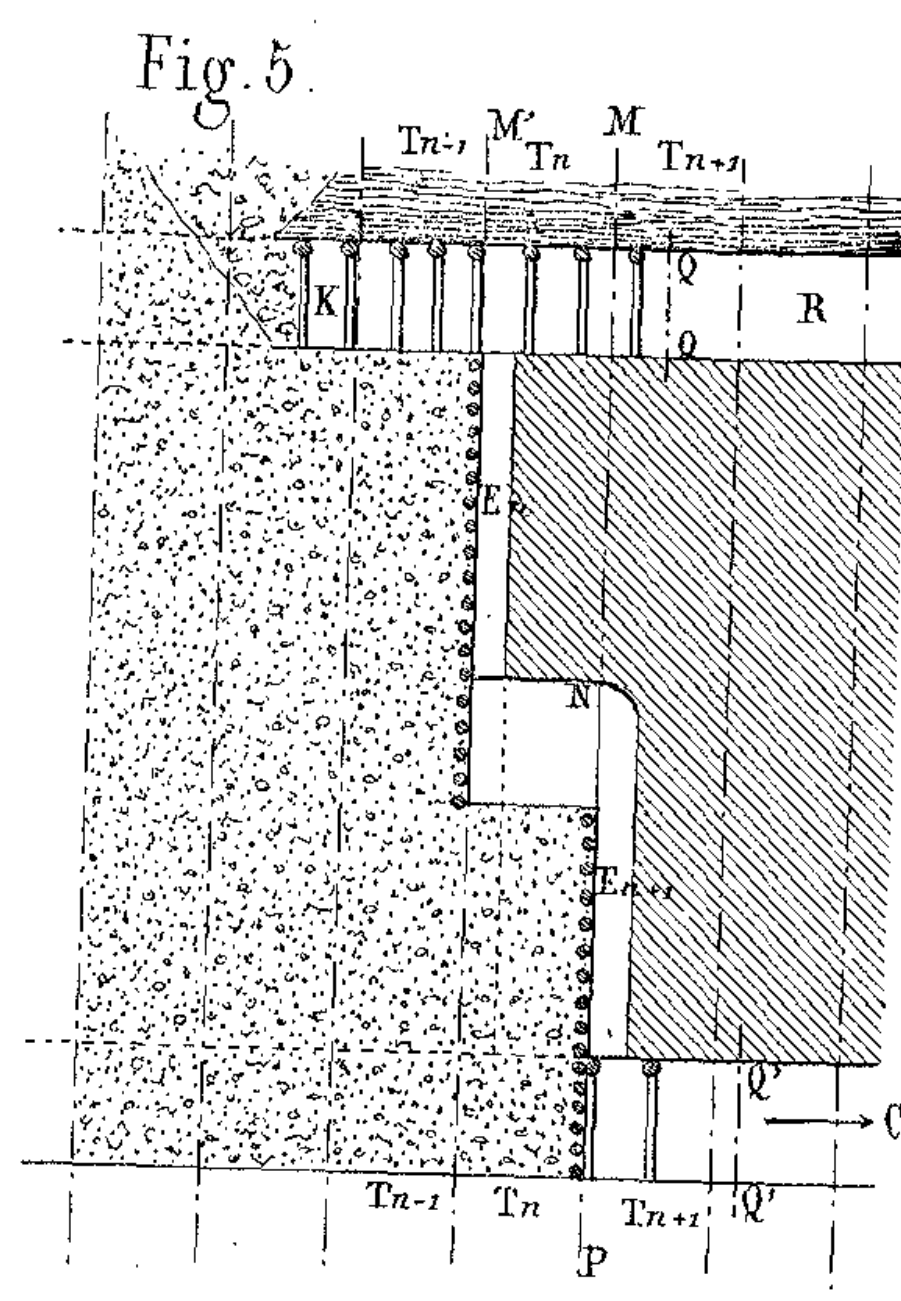
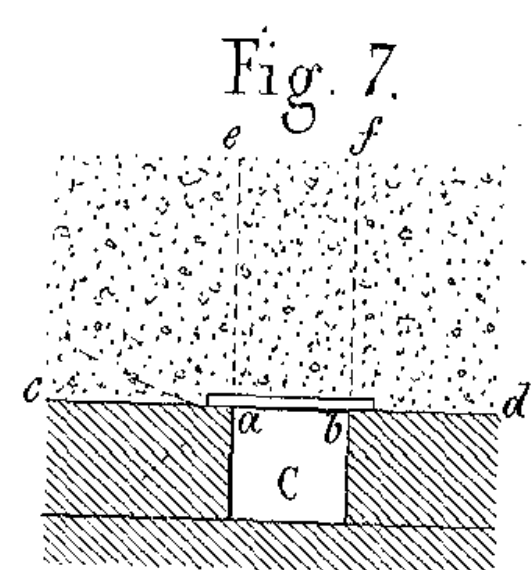
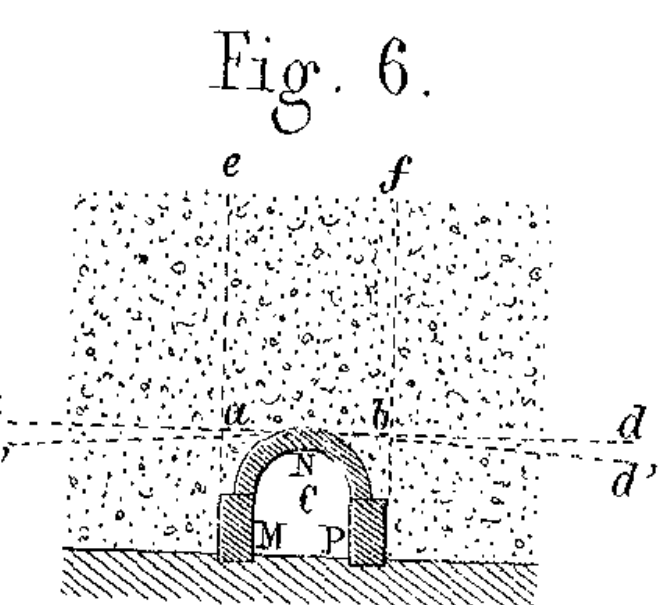
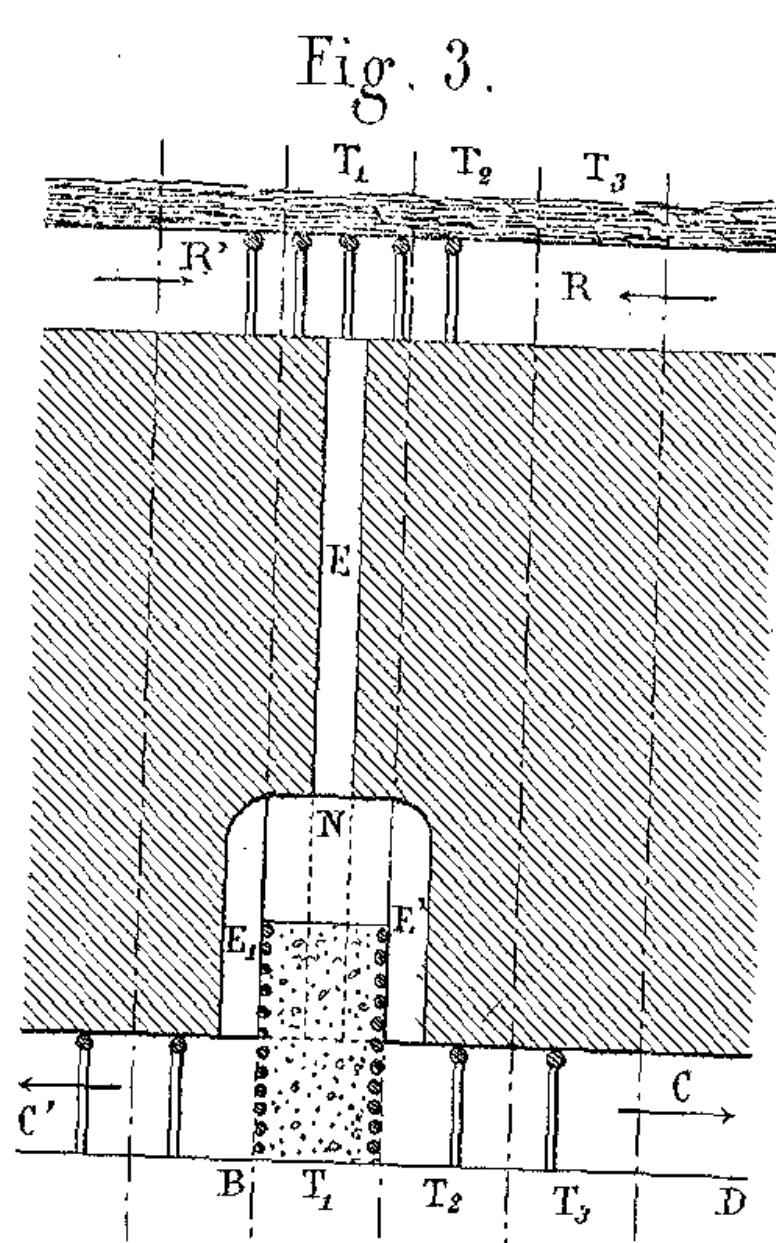
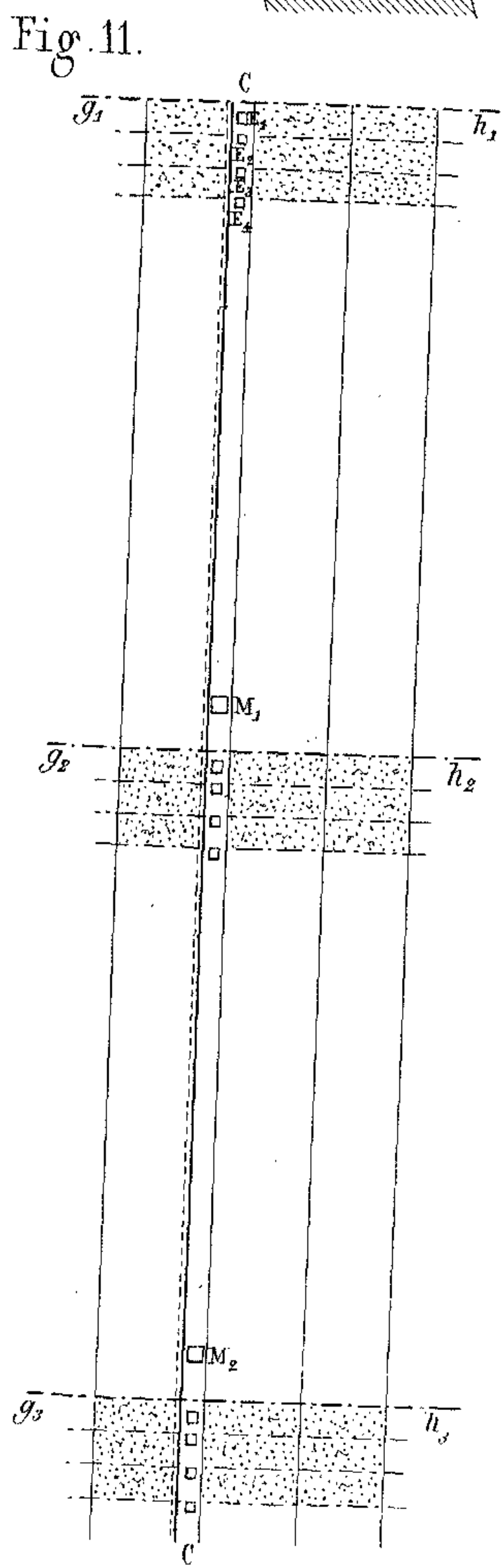
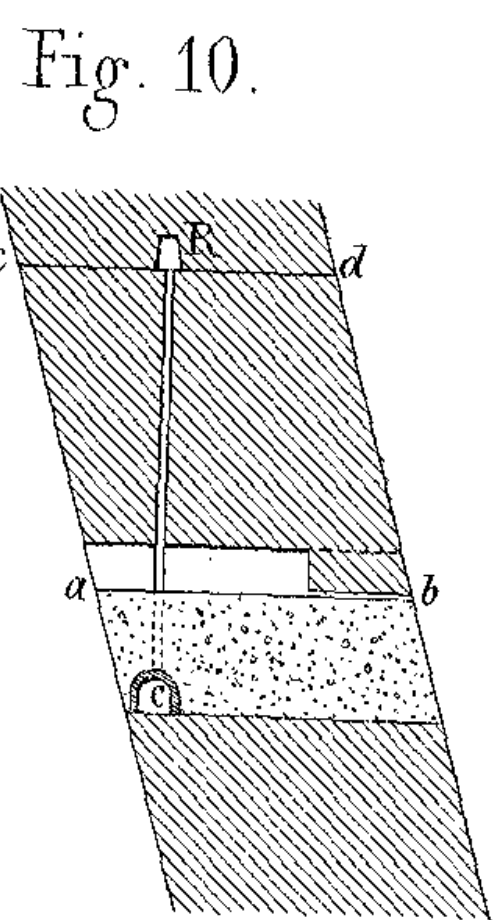
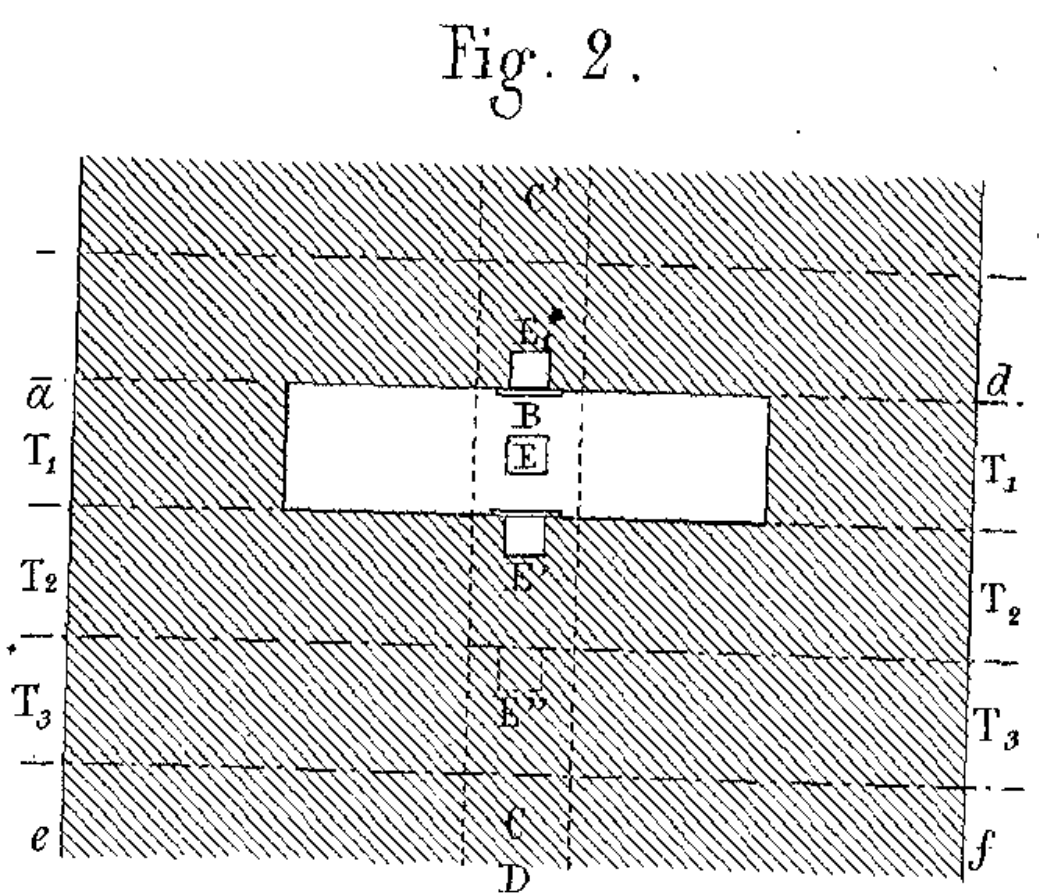
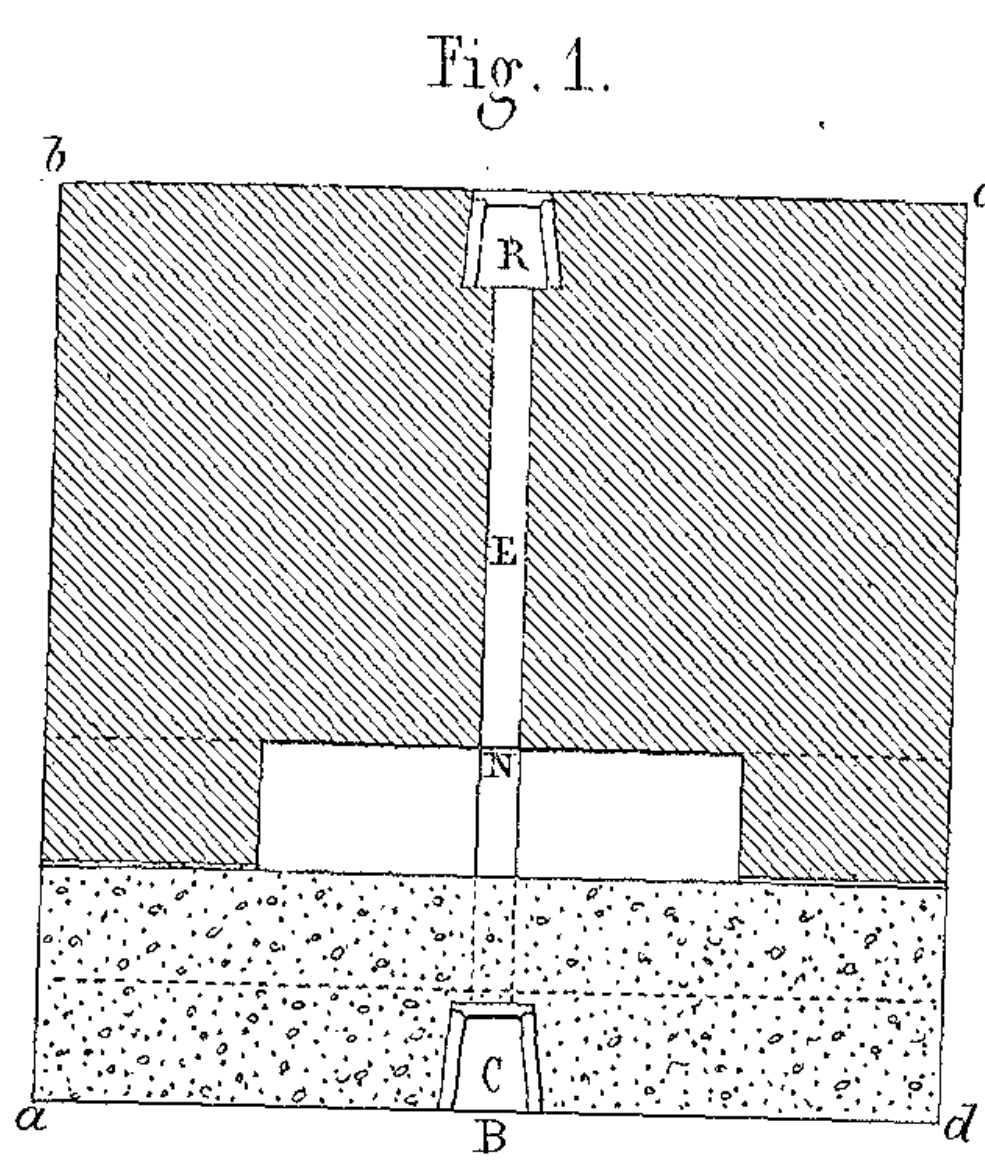
LÉGENDE.

- AAAA', Fours à reverbère.
- B, B', Appareils convertisseurs.
- C, C', Appareils hydrauliques pour la manœuvre des convertisseurs.
- a, Cylindre où l'eau comprimée agit sur un piston.
- b, Roue dentée calée sur l'un des tourillons du convertisseur et mise en mouvement par une crémaillère que porte la tige du piston a.
- a', b', Mêmes détails pour l'autre appareil.
- D, Grue hydraulique.
- d, Poche qui reçoit le métal affiné.
- K, Contrepoids.
- III, Tuyau de conduite pour l'air.
- c, c', Tourillons creux par où l'air arrive aux convertisseurs.
- E, Table d'où se commandent les manœuvres.
- e, f, g, Volants manivelles commandant respectivement l'introduction de l'air dans les convertisseurs, les mouvements des convertisseurs et les mouvements de la grue hydraulique.
- R, Régulateur de vent.
- M, M', Machines soufflantes.
- m, m', Cylindres soufflants.















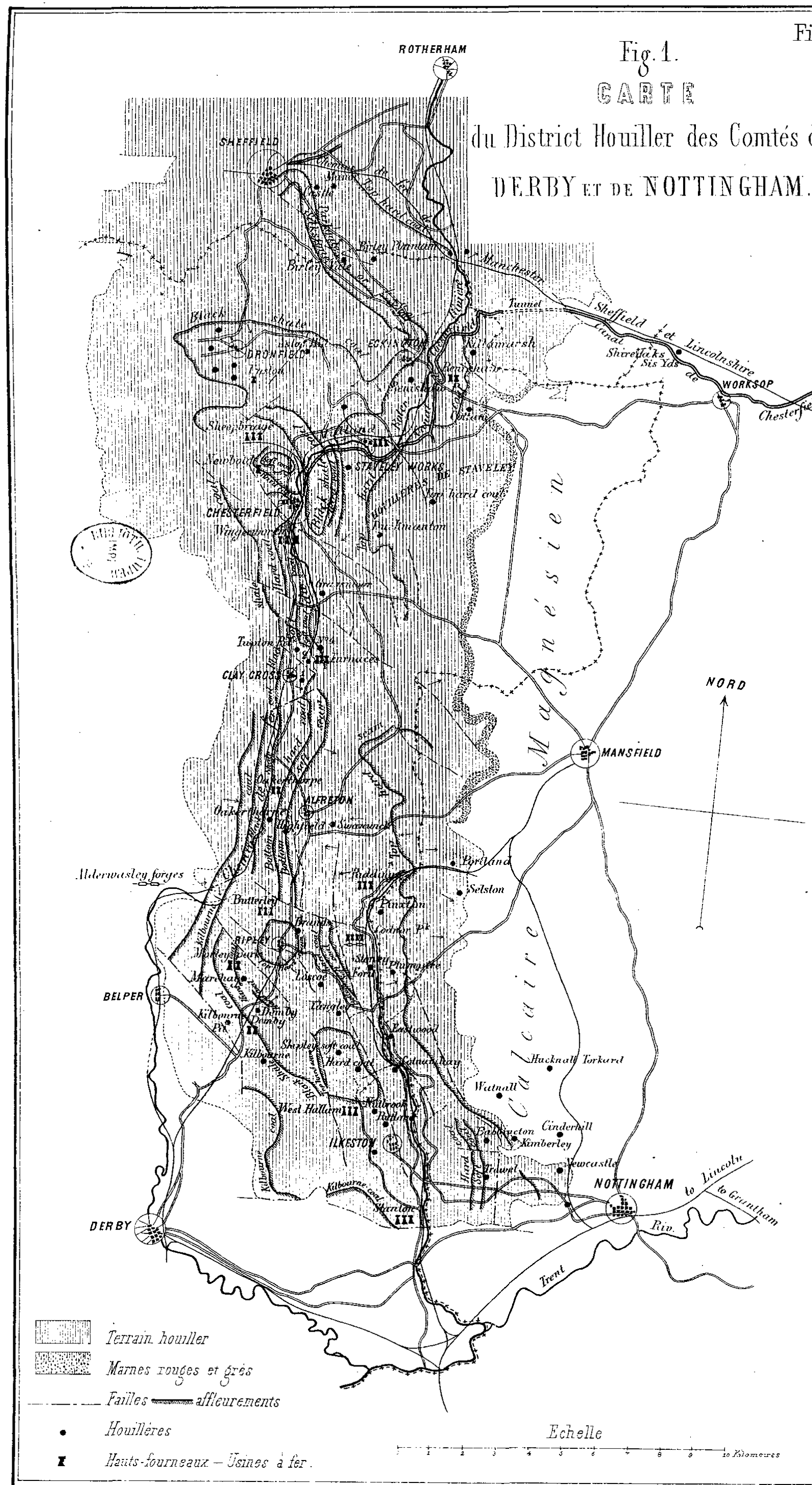


Fig. 2. Coupe des couches du terrain houiller du Derbyshire.

|                              | Puissances partielles | Profondeurs |
|------------------------------|-----------------------|-------------|
| Calcaire magnésien           |                       |             |
| Hills coal (houille)         | 1 <sup>re</sup> 21    | 457.23      |
| Coal (houille)               | 0 <sup>re</sup> 30    | 817.65      |
| Coal                         | 0.68                  | 93.48       |
| Yard coal                    | 0.83                  | 98.10       |
| Minéral de fer<br>Balls rake | 4.36                  | 138.13      |
| Top hard coal                | 1.90                  | 157.61      |
| Dunsill coal                 | 0.91                  | 174.98      |
| Waterloo coal                | 1.11                  | 205.81      |
| Brown Rake                   | 1.54                  | 238.16      |
| Black Rake — EN coal         | 1.77<br>0.68          | 309.08      |
| Bottom soft coal             | 1.29                  | 320.18      |
| Blue Rake                    | 2.04                  | 334.27      |
| Bottom hard coal             | 1.06                  | 335.34      |
| Piper's coal                 | 1.21                  | 352.71      |
| Dog tooth Ironstone          | 4.26                  | 369.47      |
| Furnace coal                 | 1.37                  | 393.86      |
| Three quarter Rake           | 4.57                  | 400.26      |
| Black Shale Rake             | 15.54                 | 488.46      |
| Black Shale coal             | 1.37                  | 494.85      |
| Kilbourn coal                | 1.84<br>0.33          | 580.58      |

Fig. 3.  
Plan du système d'exploitation  
et d'aérage adopté à la houillère de Shipley  
( Comté de Derby )  
Couche tendre

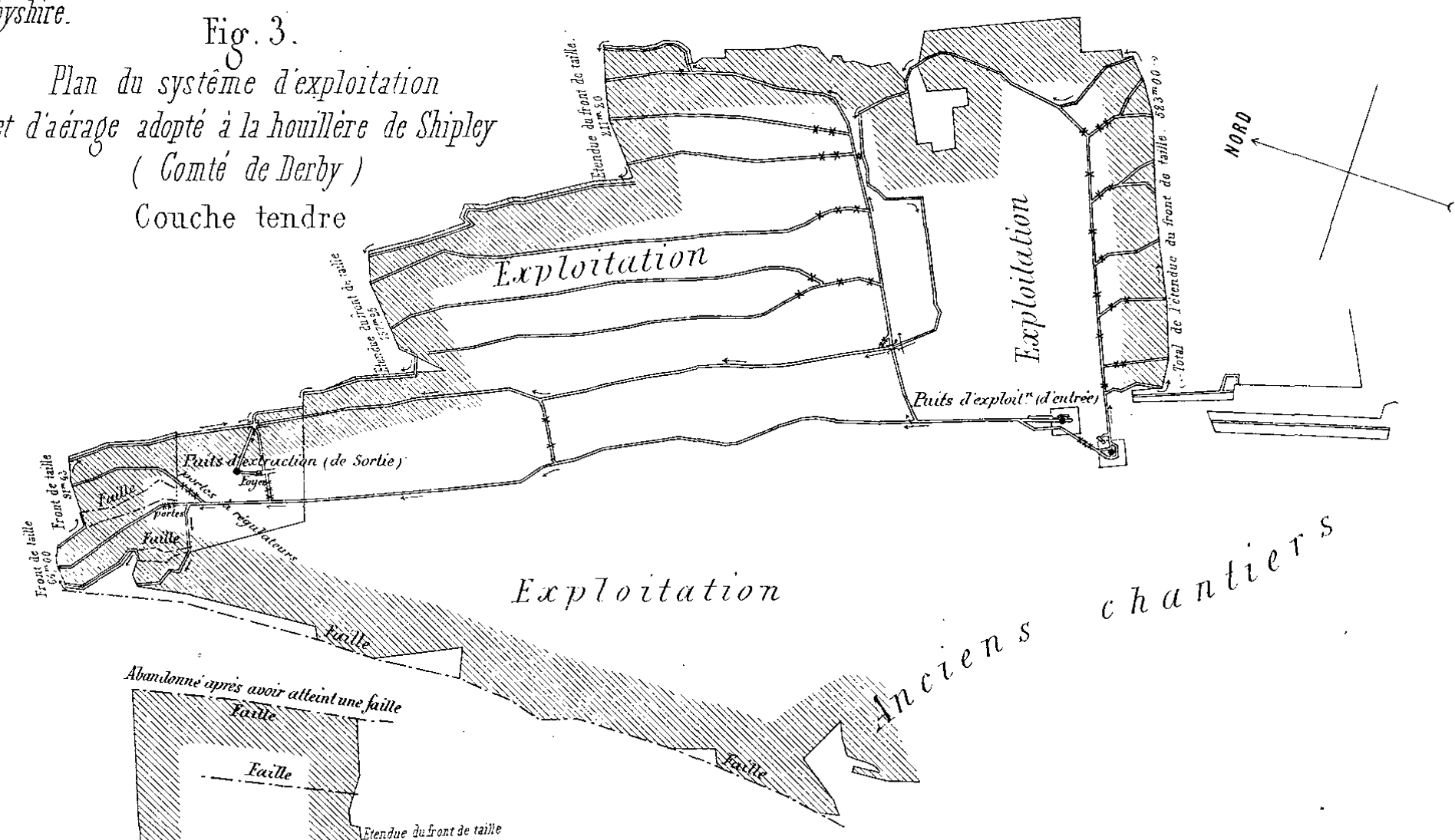


Fig. 4.  
Plan du système d'exploitation et d'aérage  
adopté à la houillère de Shipley ( Comté de Derby )  
Couche dure.

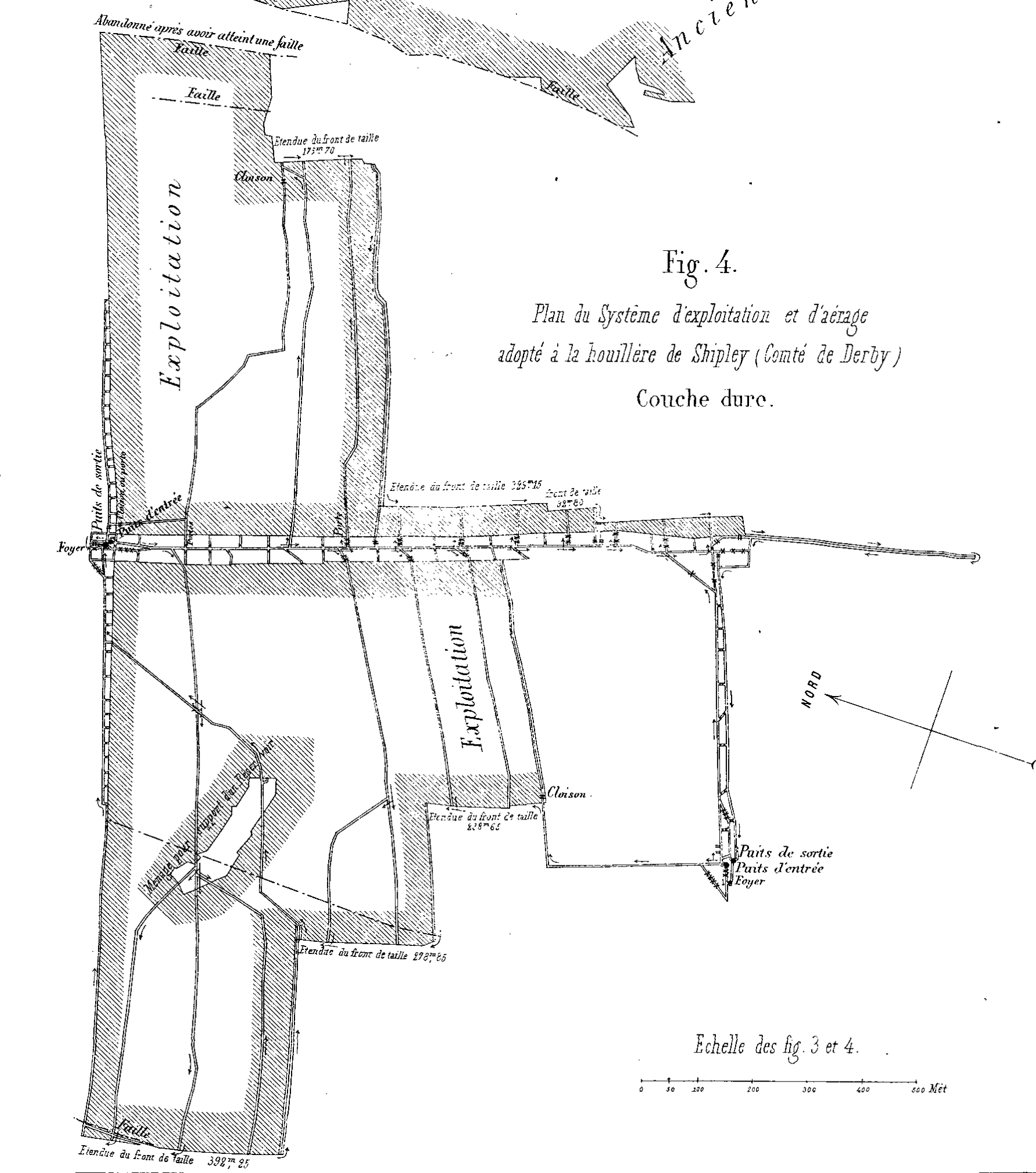








Fig. 1. Plan général du terrain houiller du Yorkshire Mérid<sup>al</sup>.

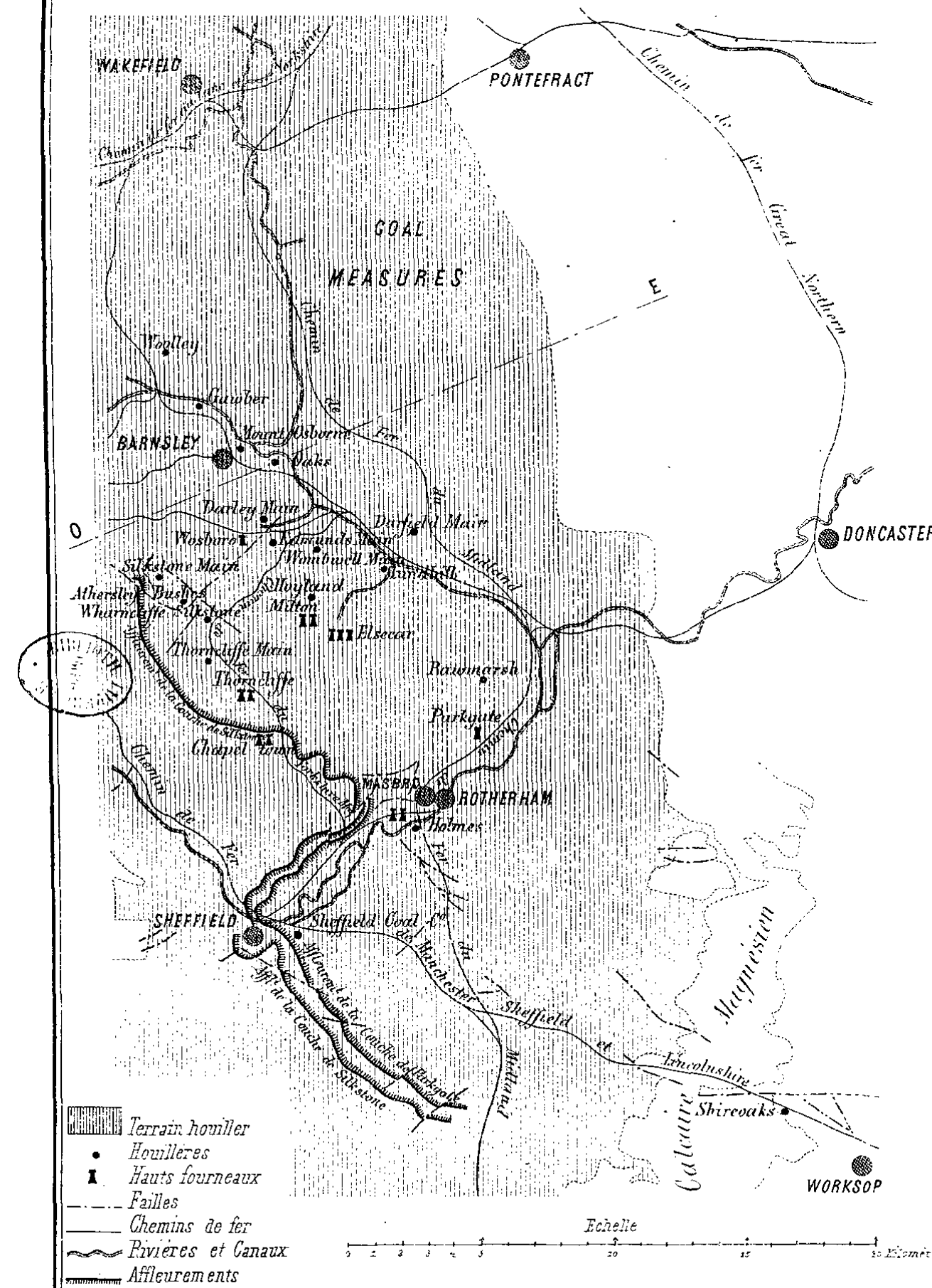


Fig. 5.

Ouvrage étroit ou petites tailles.

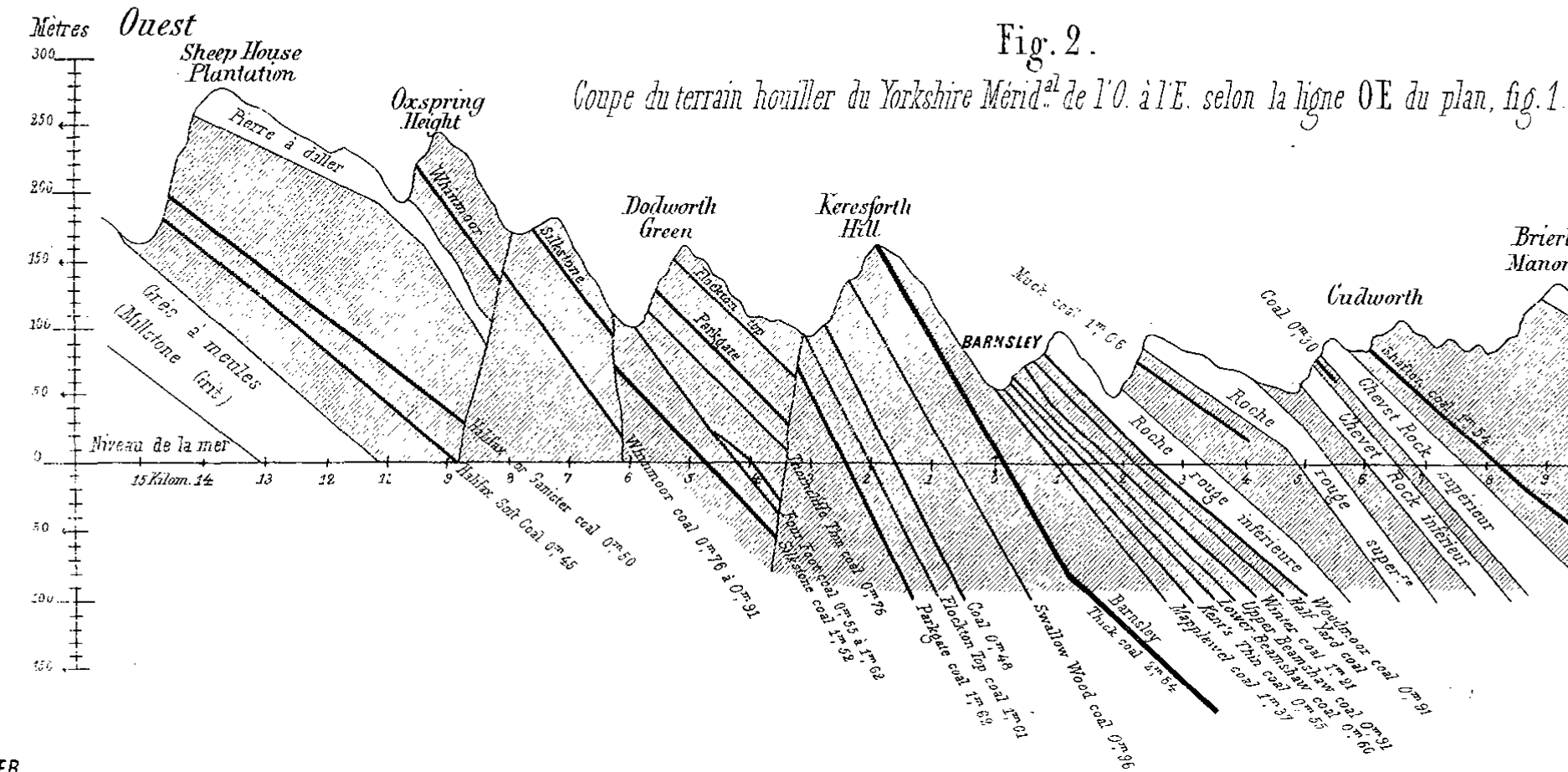
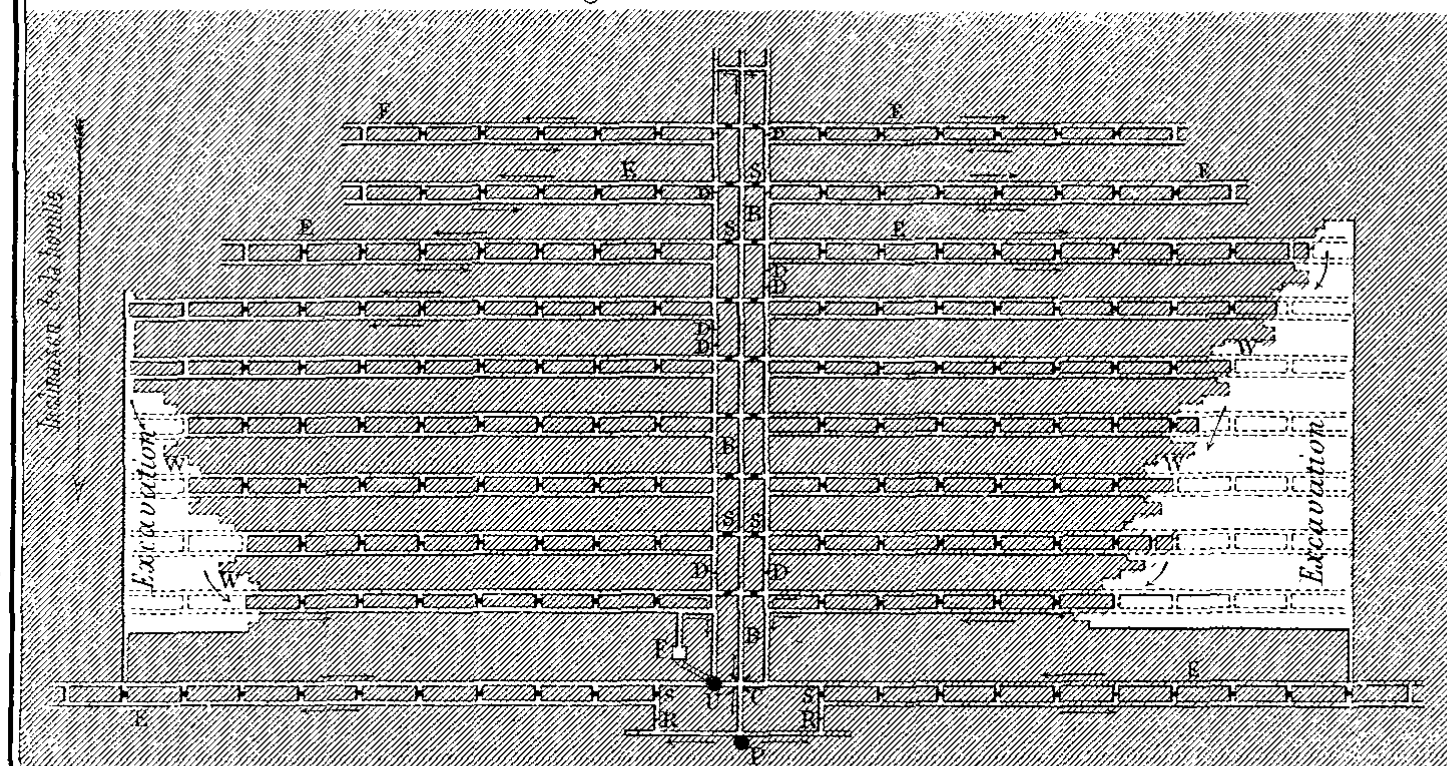


Fig. 8.

Galeries et Tailles longues

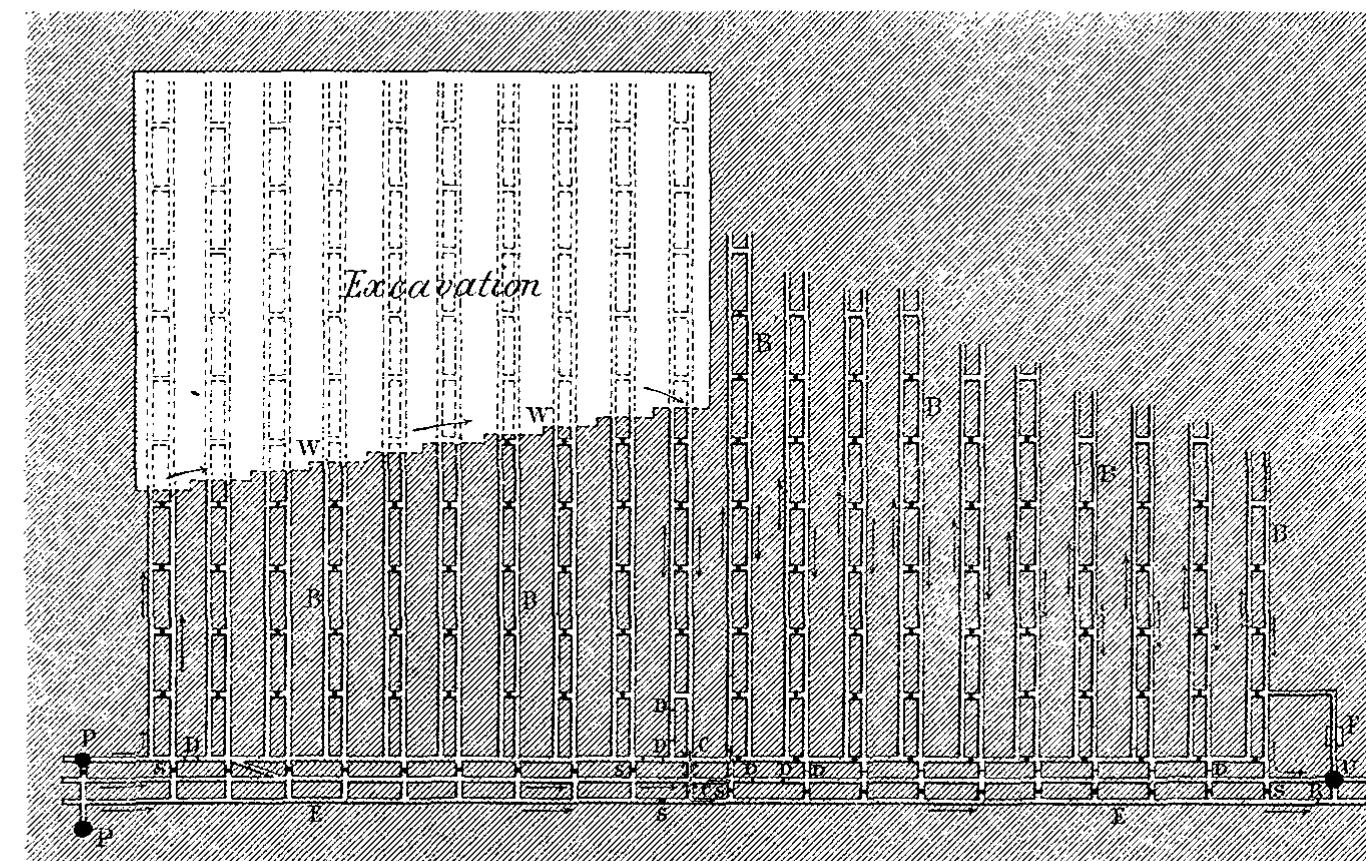


Fig. 6.

Tailles longues (1<sup>er</sup> mode)

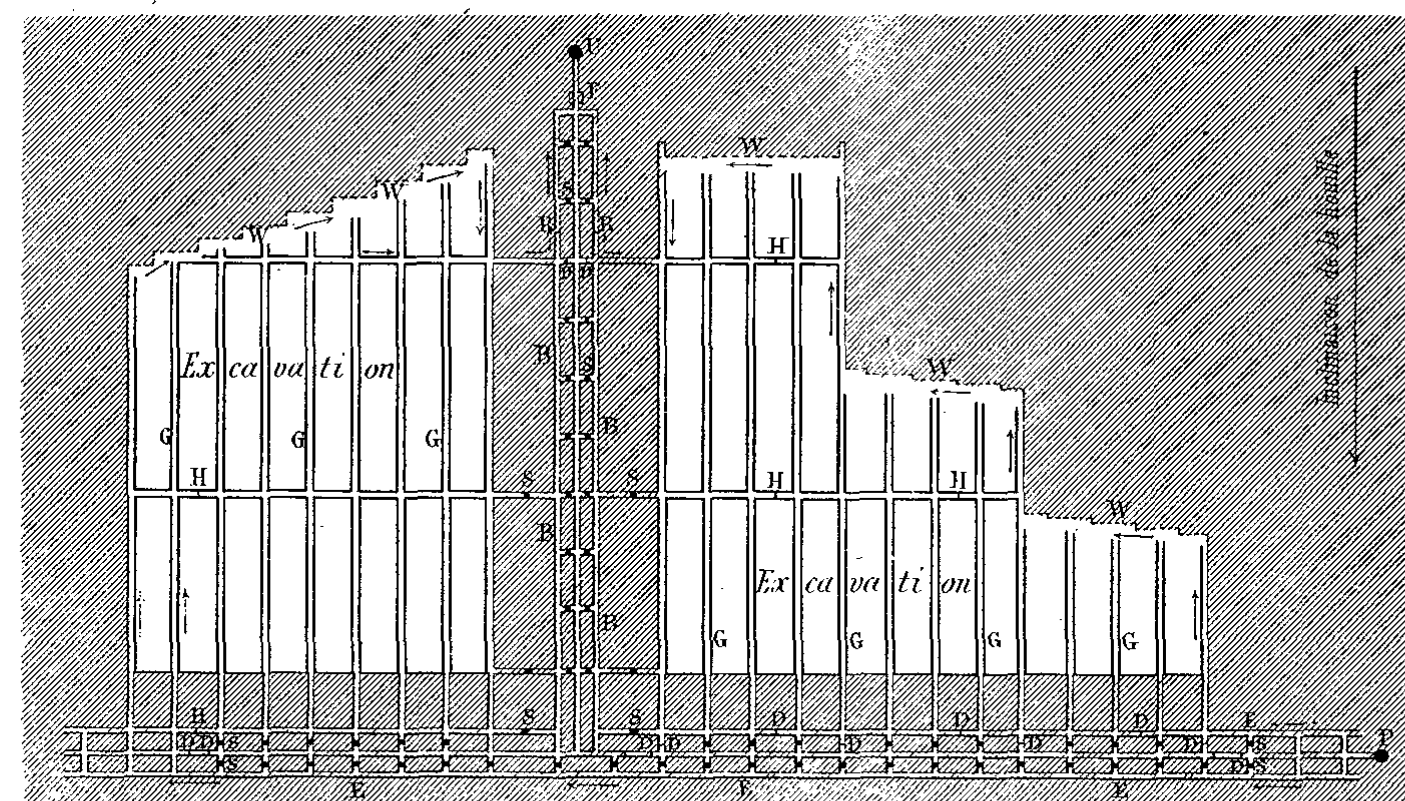


Fig. 3. Coupe verticale des strates du terrain houiller à Wath Wood

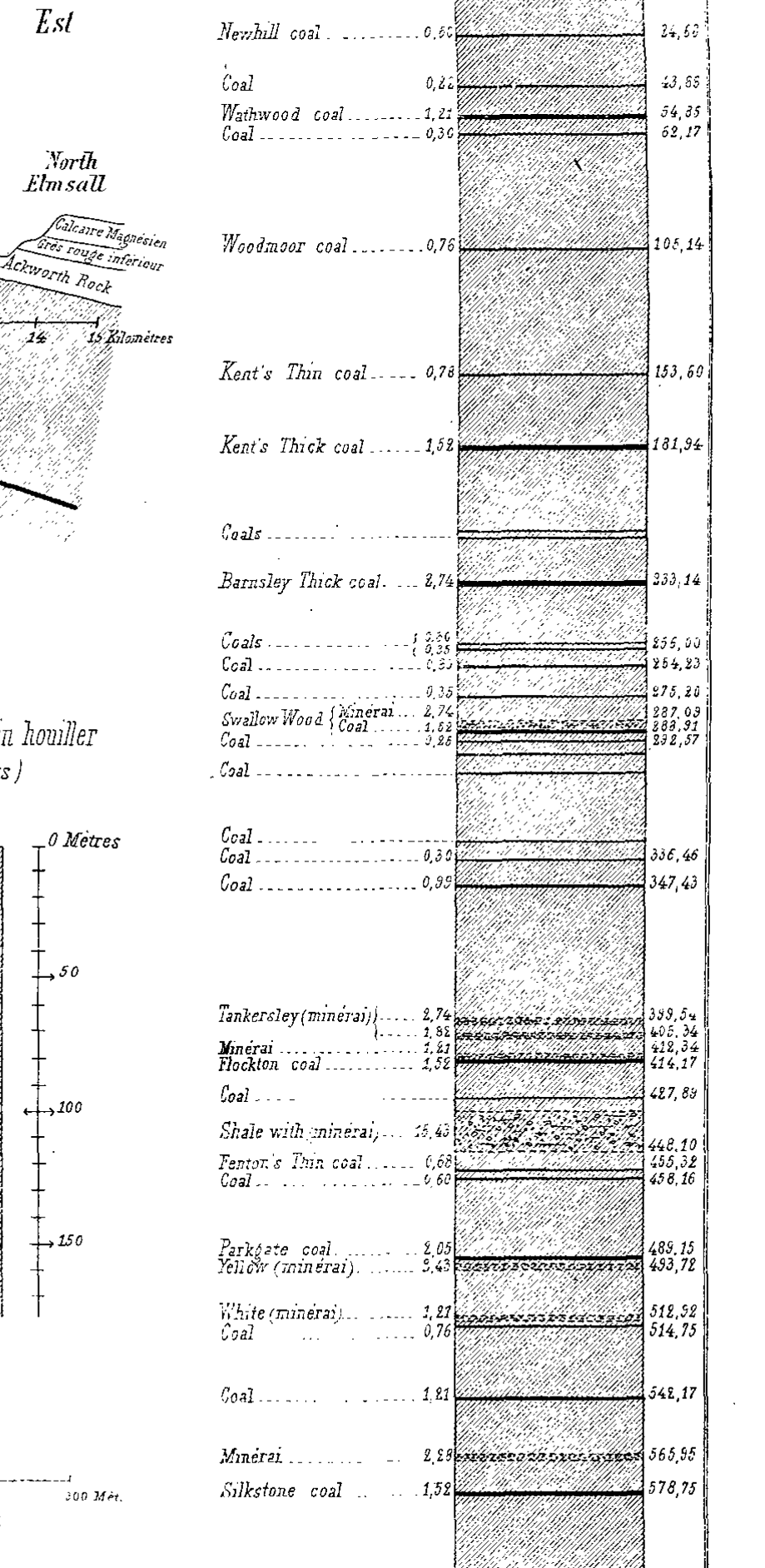


Fig. 4.

Coupe verticale des strates du terrain houiller à la Houillère des Chènes (Oaks)

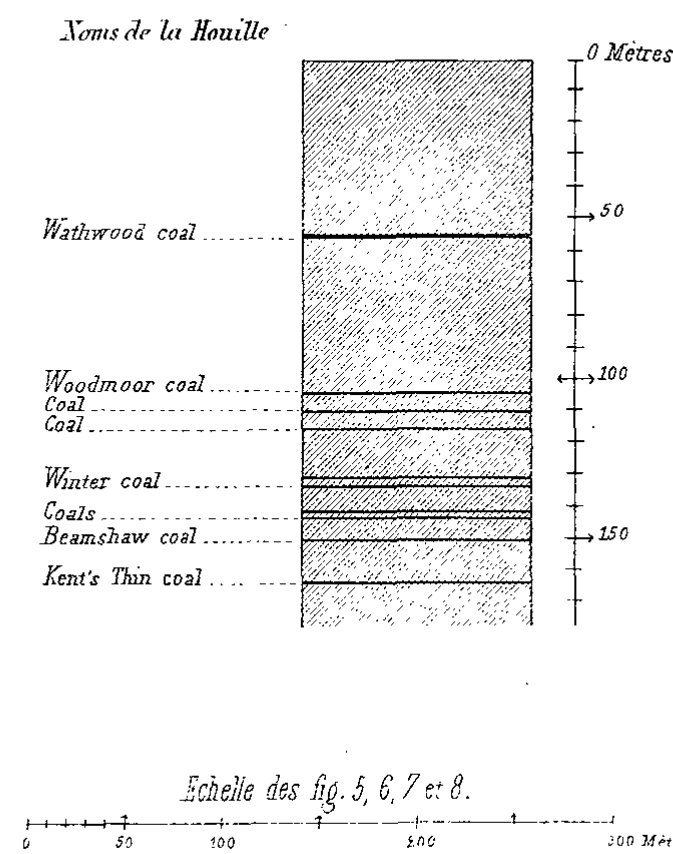


Fig. 7.

Tailles longues (2<sup>ème</sup> mode)

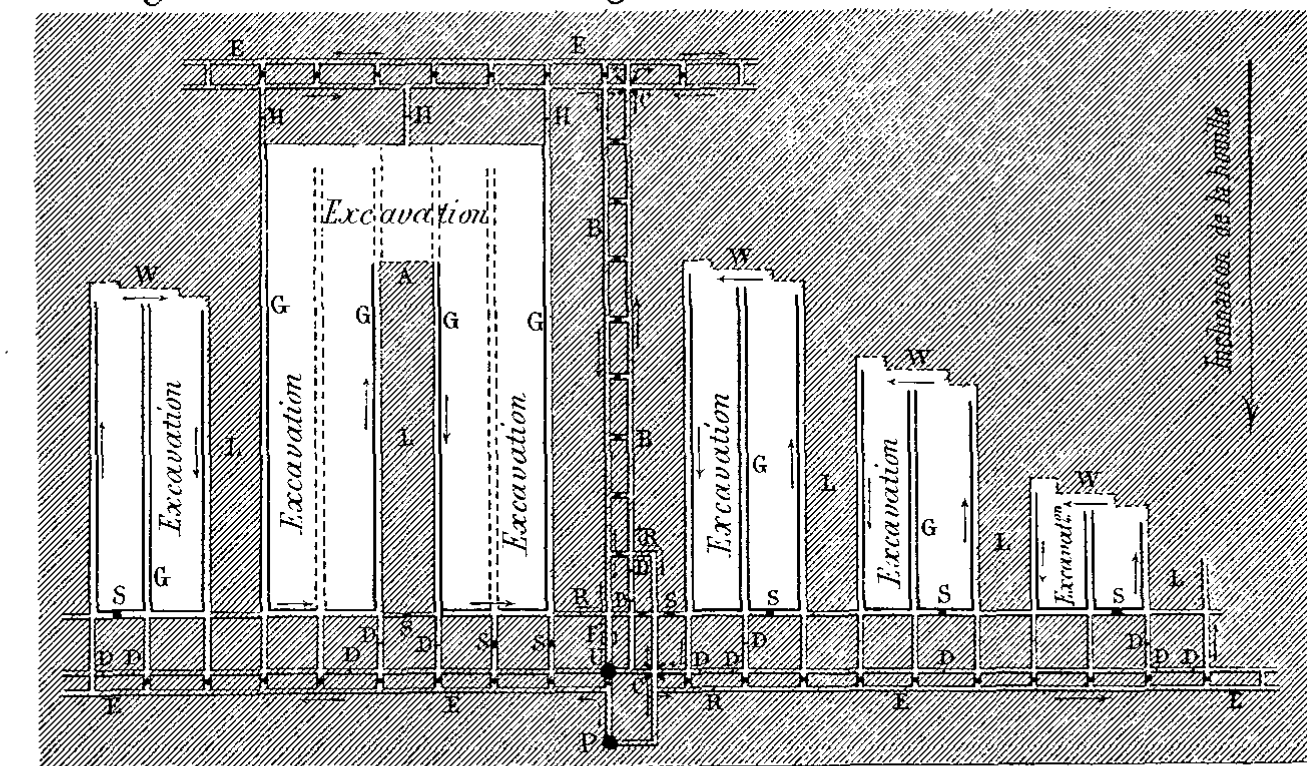








Fig. 1. Ouvrage large

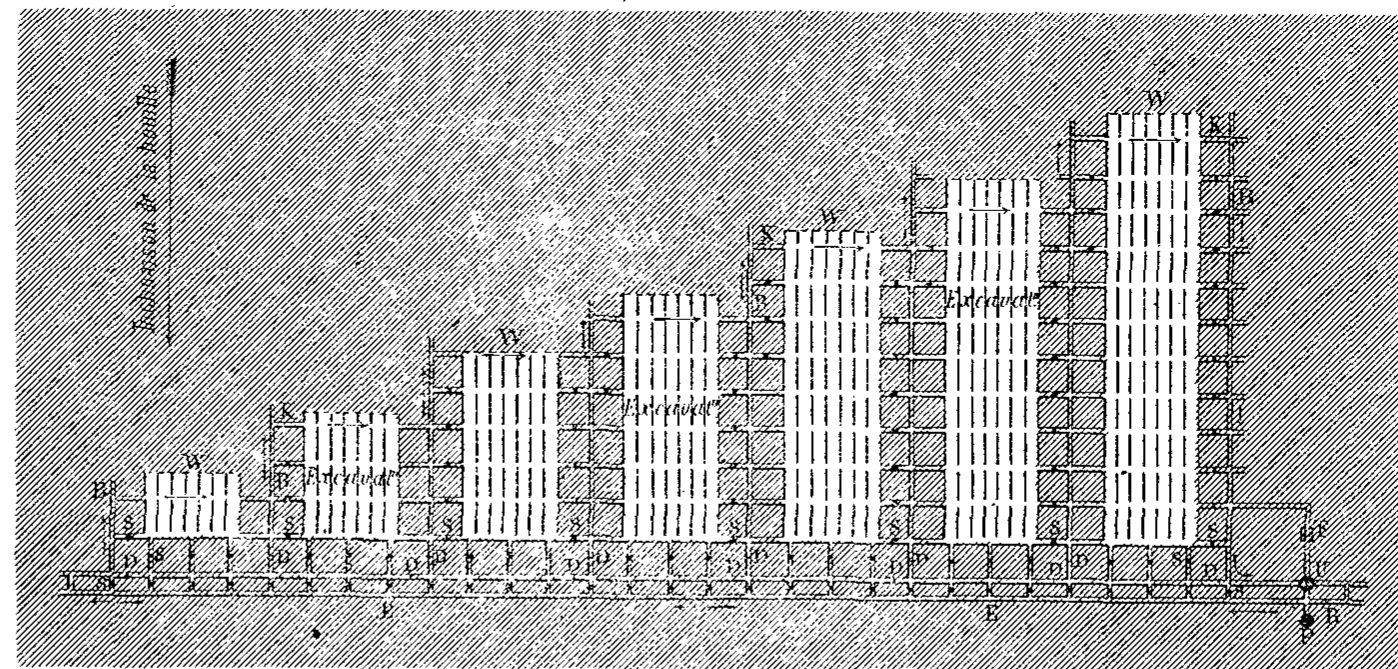


Fig. 2. Massifs

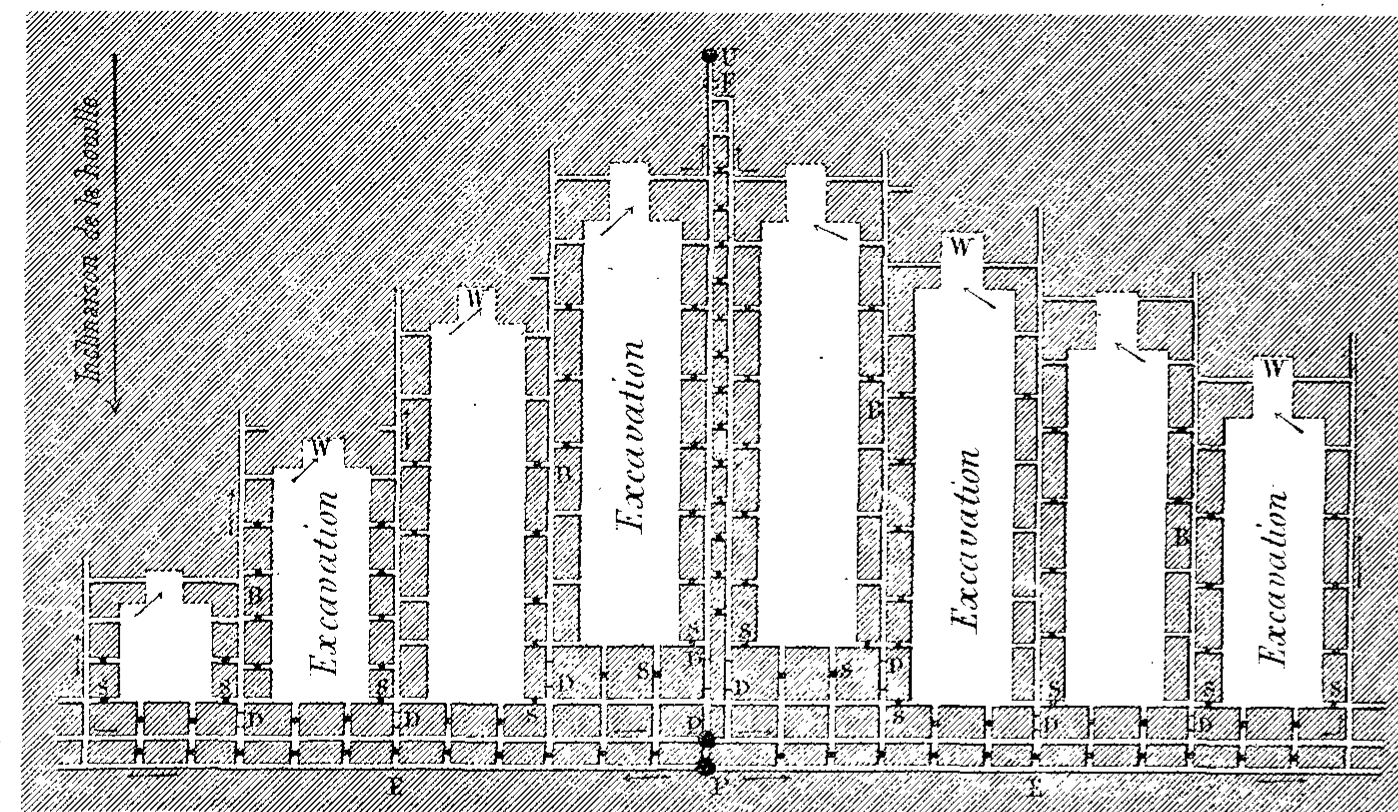


Fig. 9. Elévation du Foyer

Fig. 10. Coupe du Dumb Drift

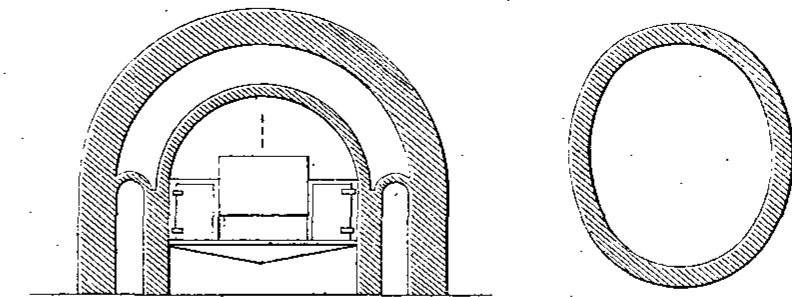


Fig. 3.

Long Wall (Long mur)  
Exploitation de la couche de Parkgate à la houillère de Wharcliffe Silkestone.

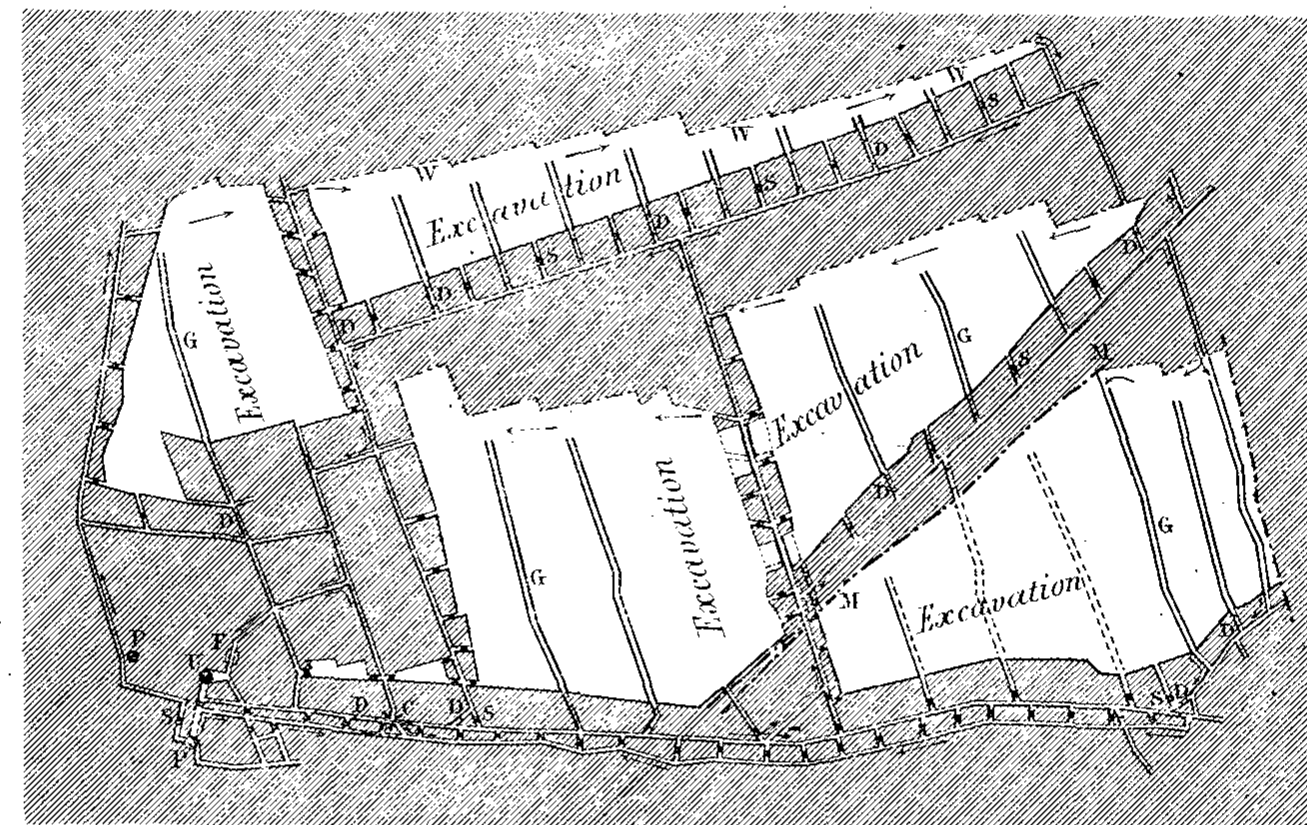


Fig. 6. Coupe longitudinale du Dumb Drift (Tuyau de conduite du retour d'air) et du Foyer d'aérage.

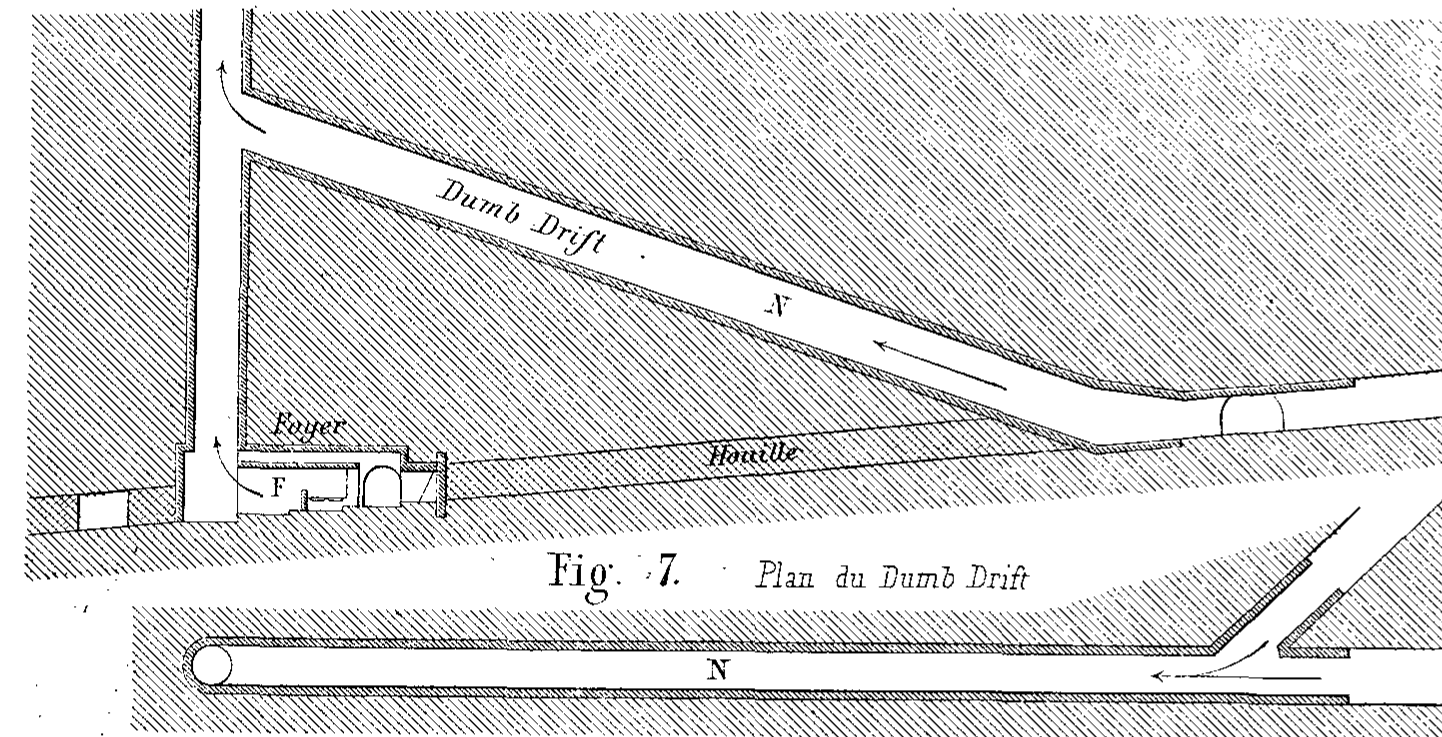


Fig. 7. Plan du Dumb Drift

Fig. 8. Plan du Foyer

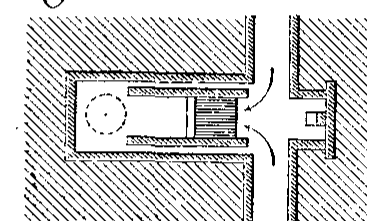


Fig. 4.

Fig. 11.

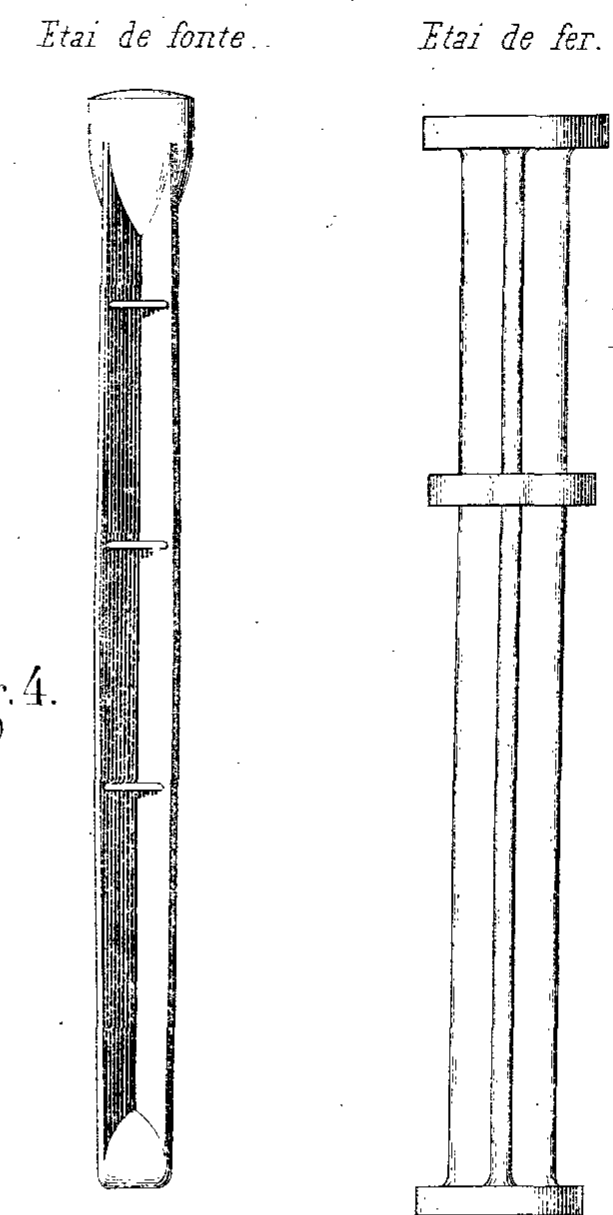
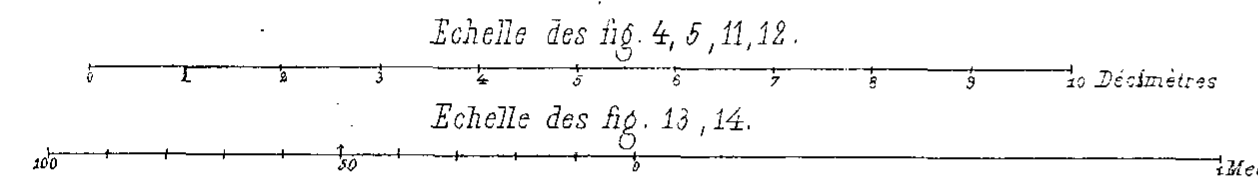
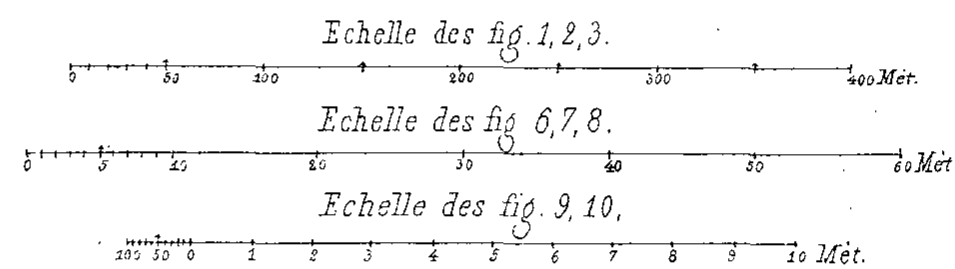


Fig. 5.

Fig. 12.



Trommel briseur et classeur de M<sup>r</sup> Villiers.

Fig. 13.

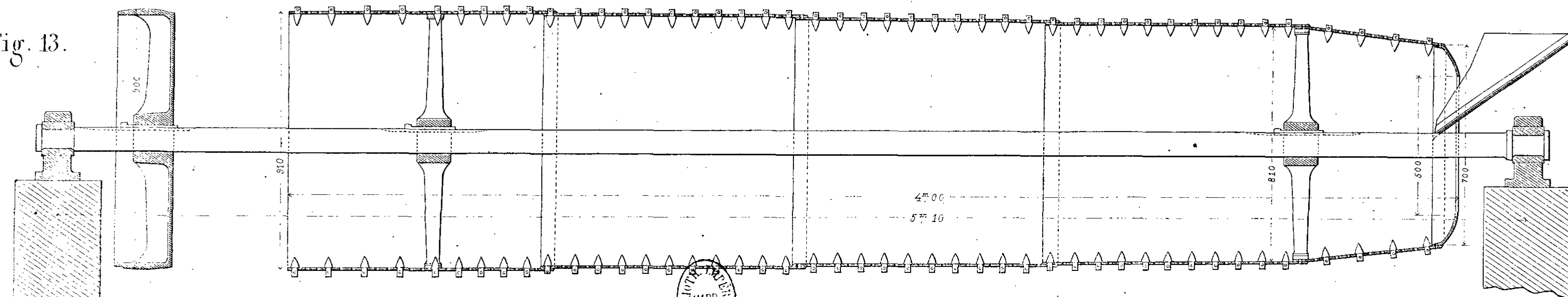
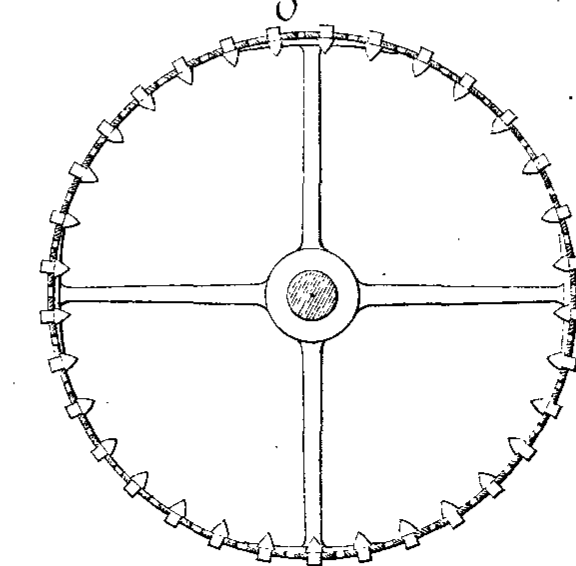


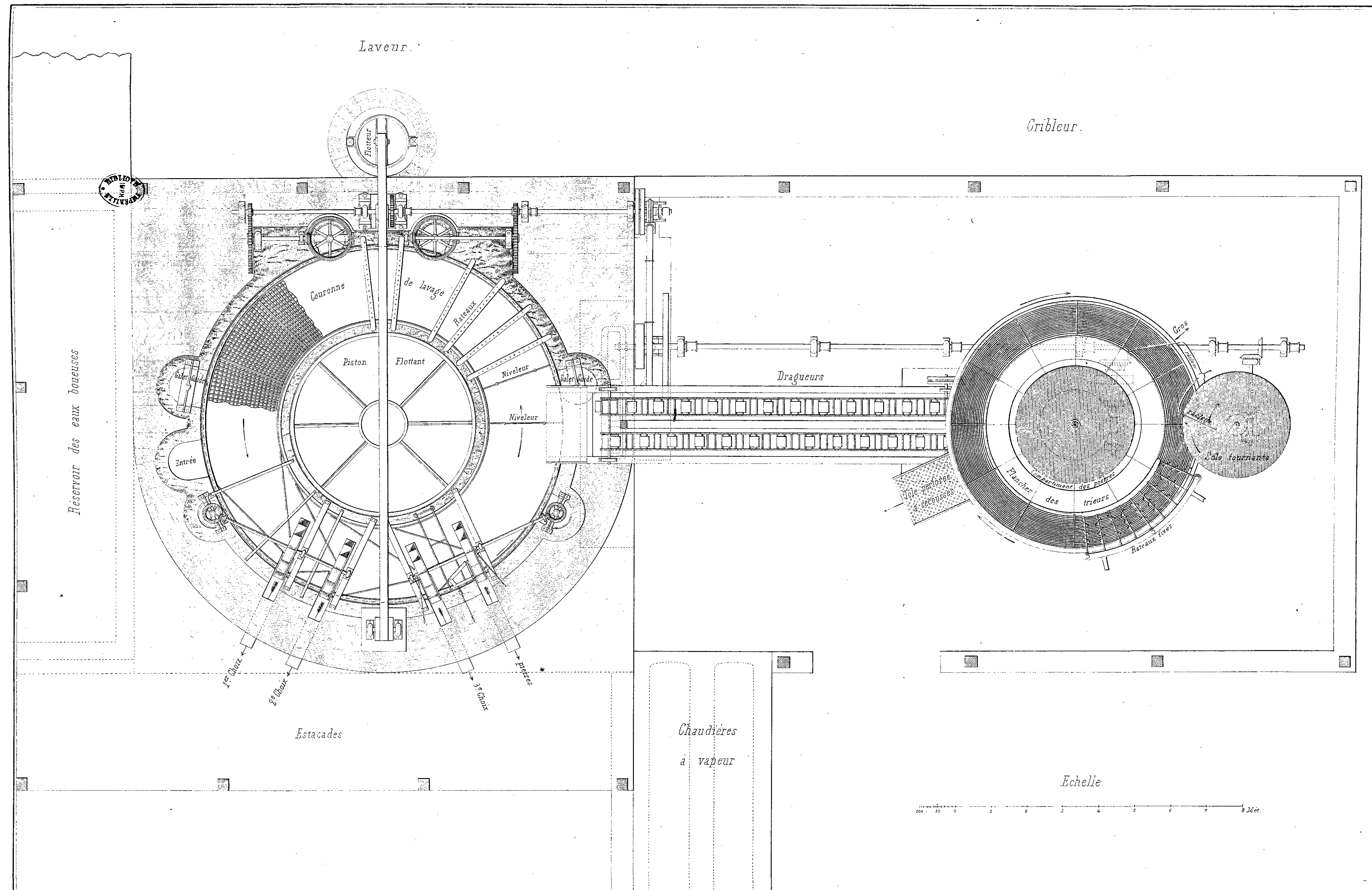
Fig. 14.

















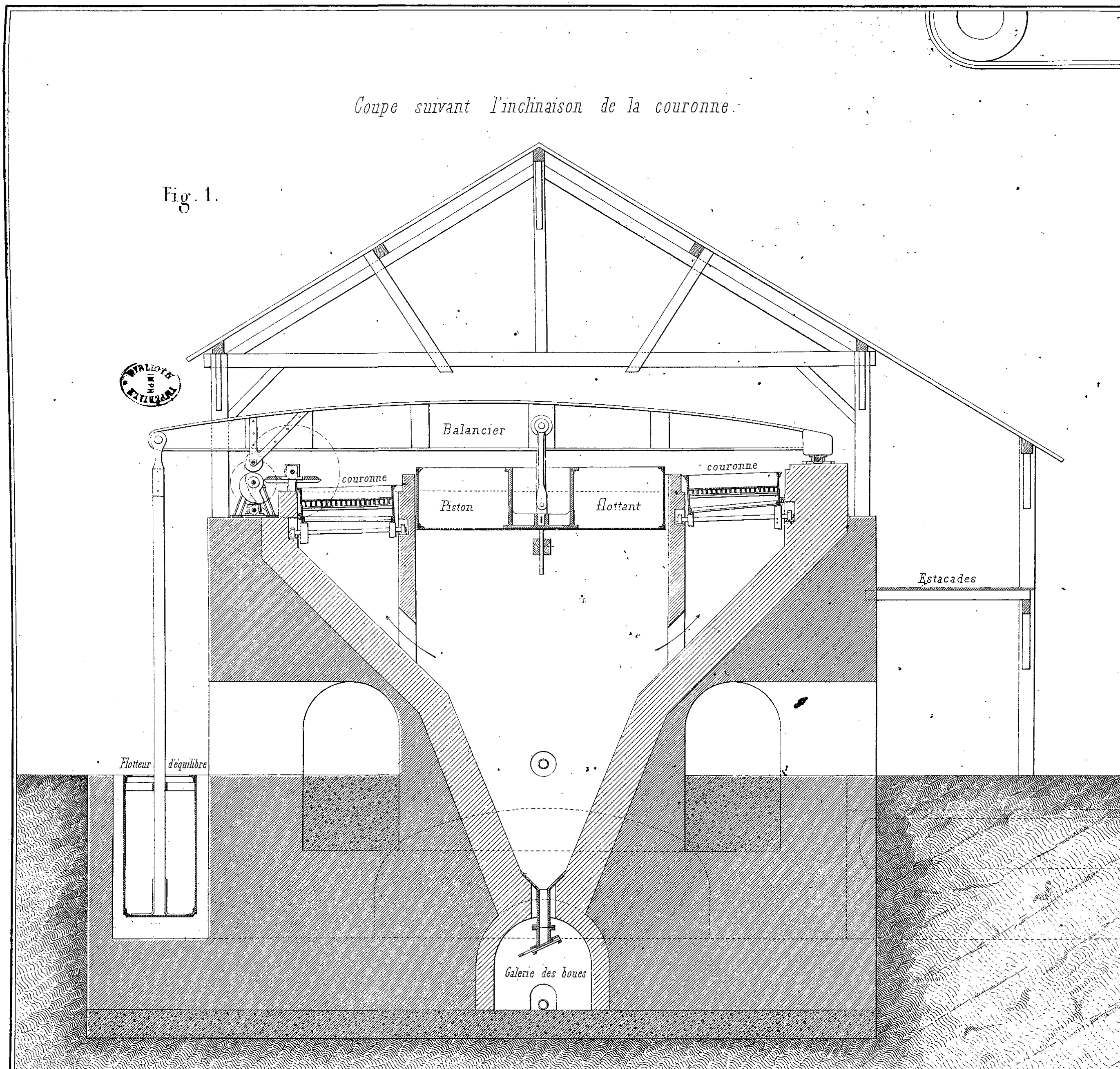


Fig. 1.

Echelle de la fig. 1.

100 50 0 50 100 10 Met.

Echelle des fig. 2, 3, 4, 5.

100 50 0 50 100 10 Met.

Fig. 2.  
Projection verticale.

Transmission au balancier.

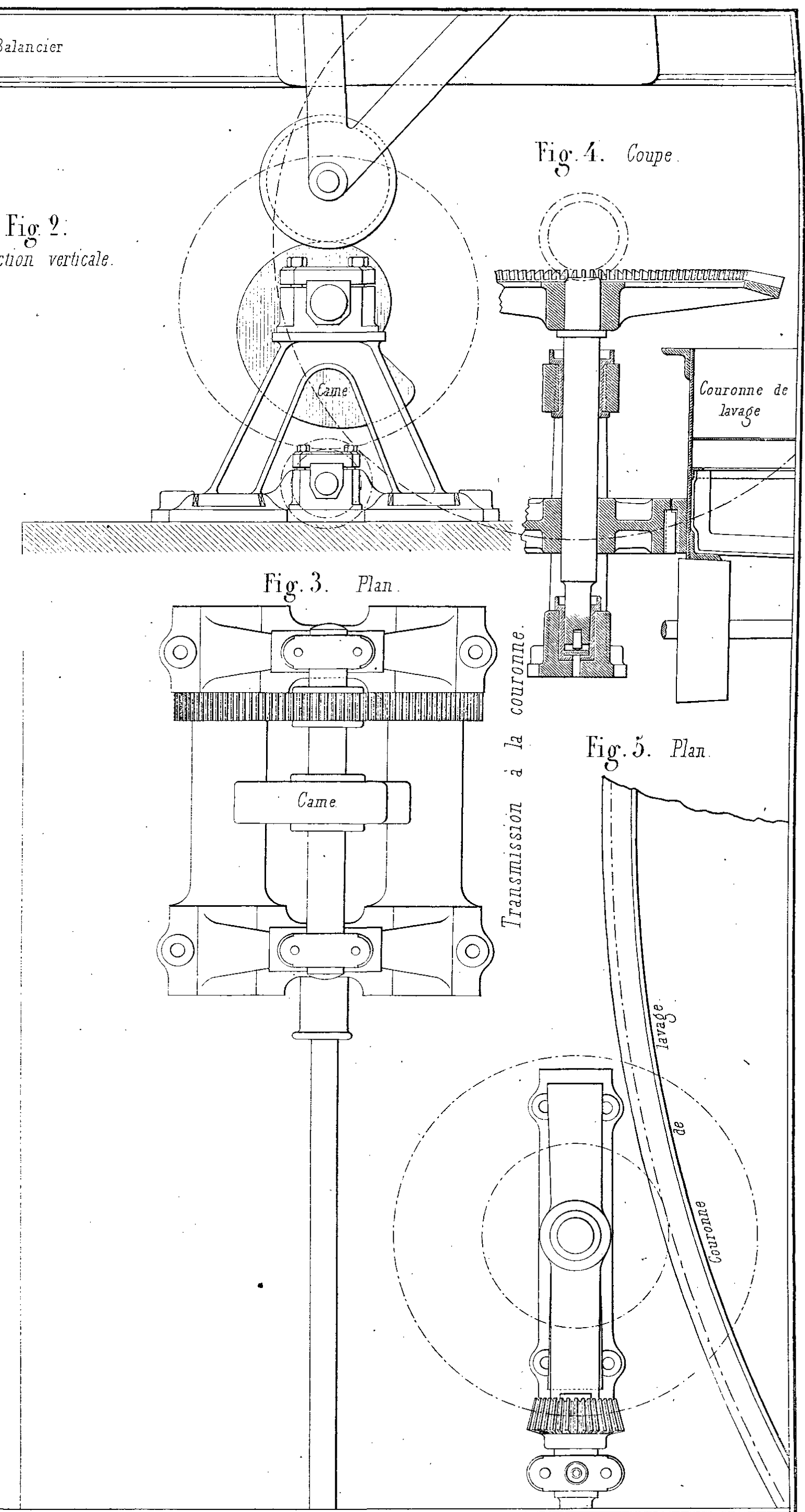


Fig. 3. Plan.

Fig. 4. Coupe.

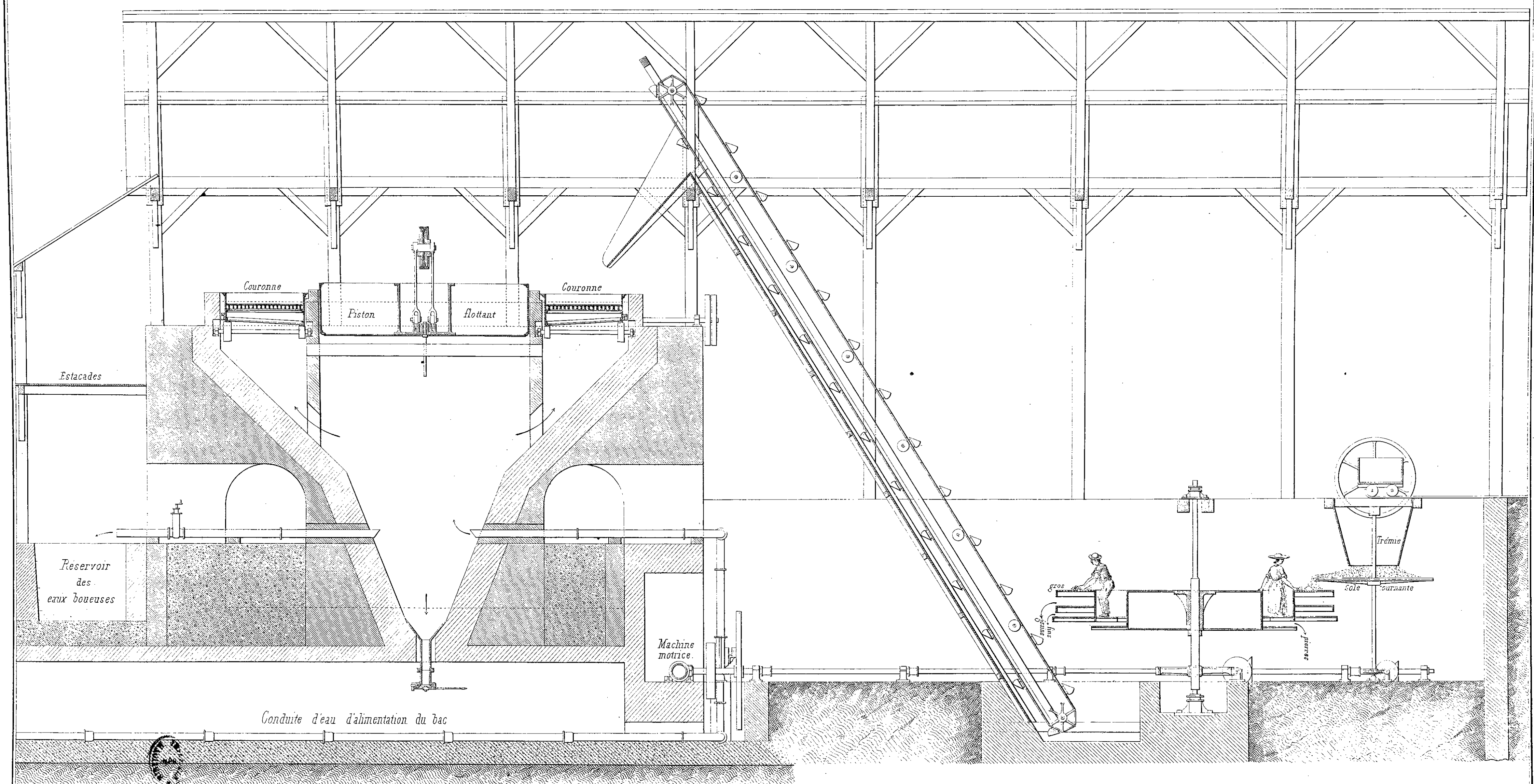
Fig. 5. Plan.







Coupe longitudinale du Laveur et du Cribleur.



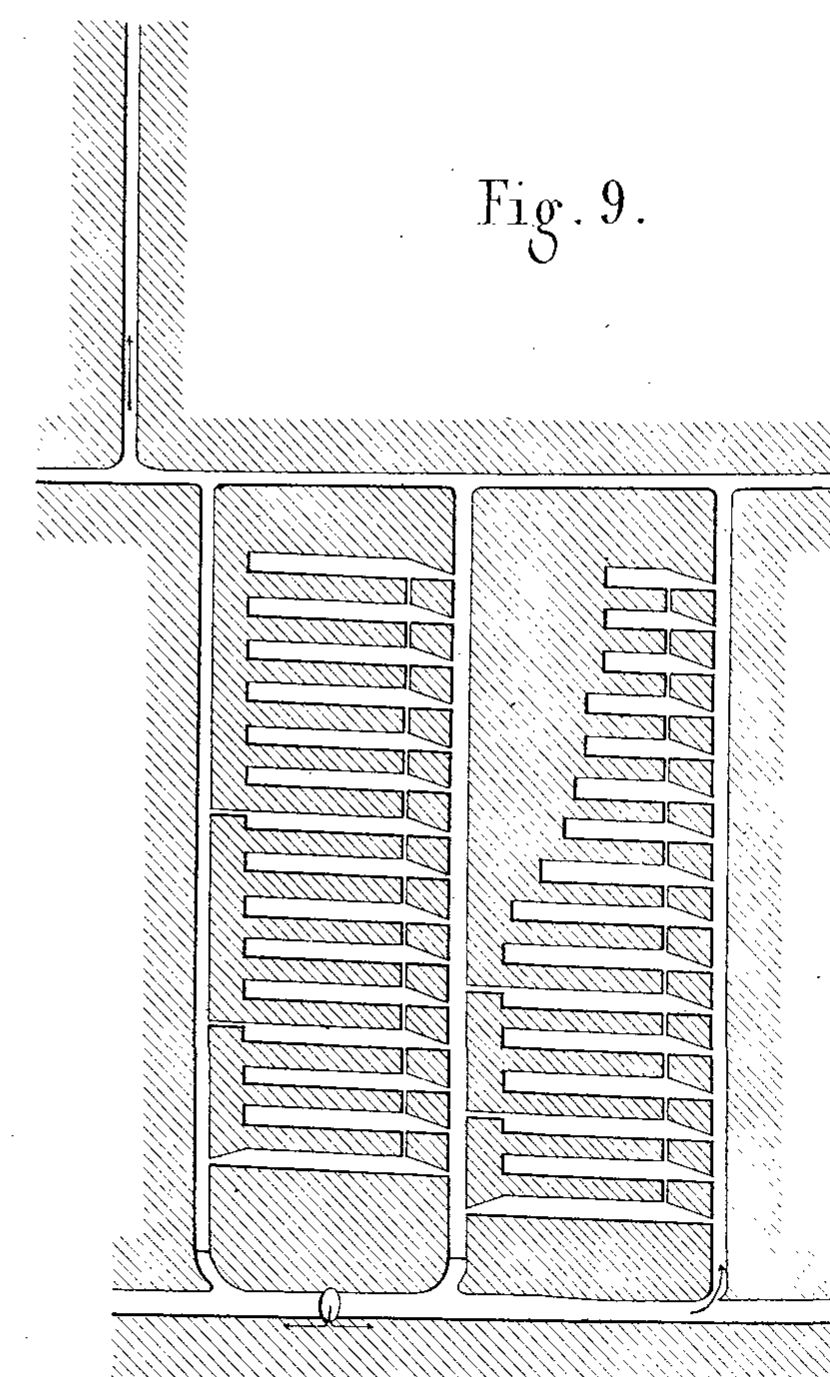
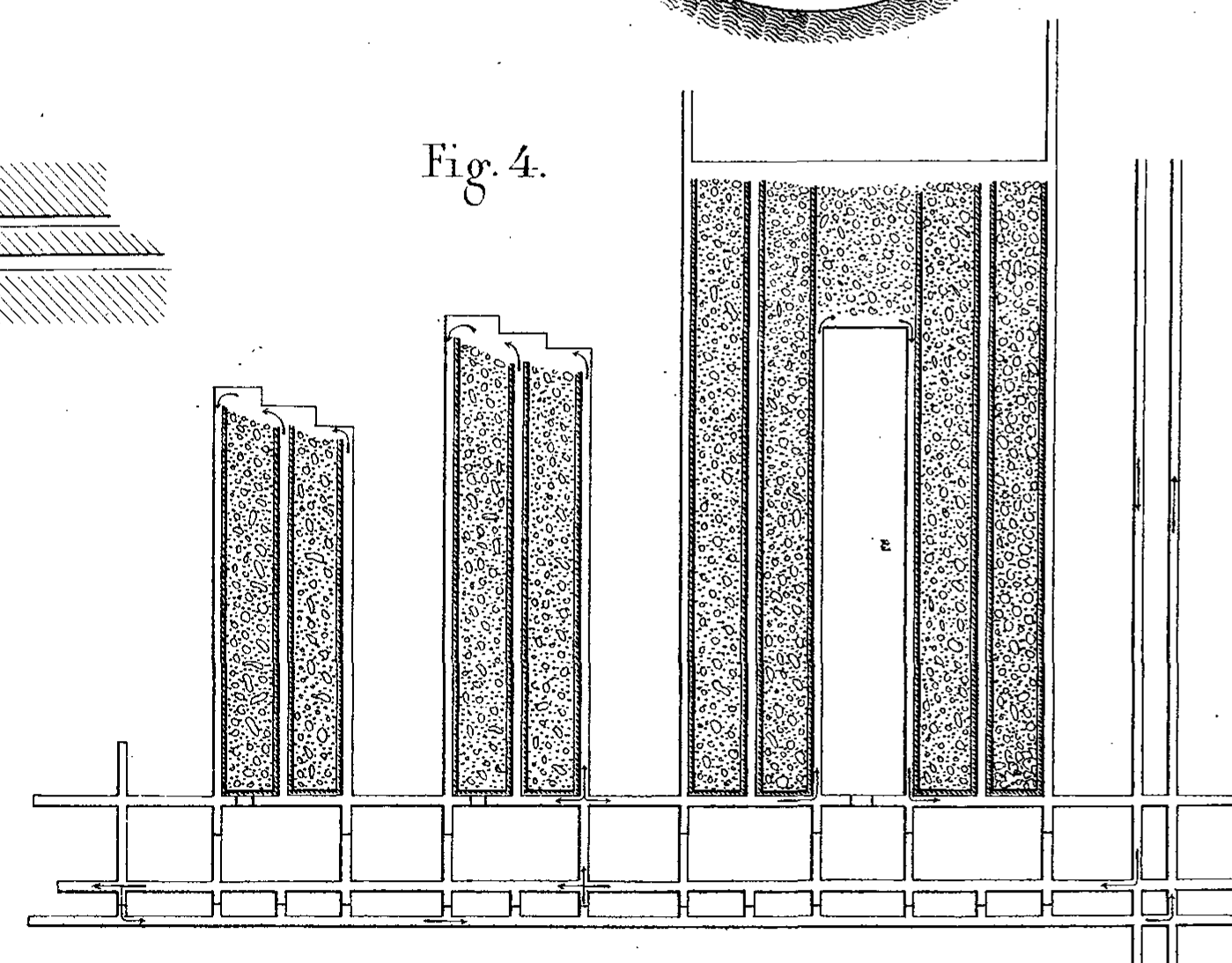
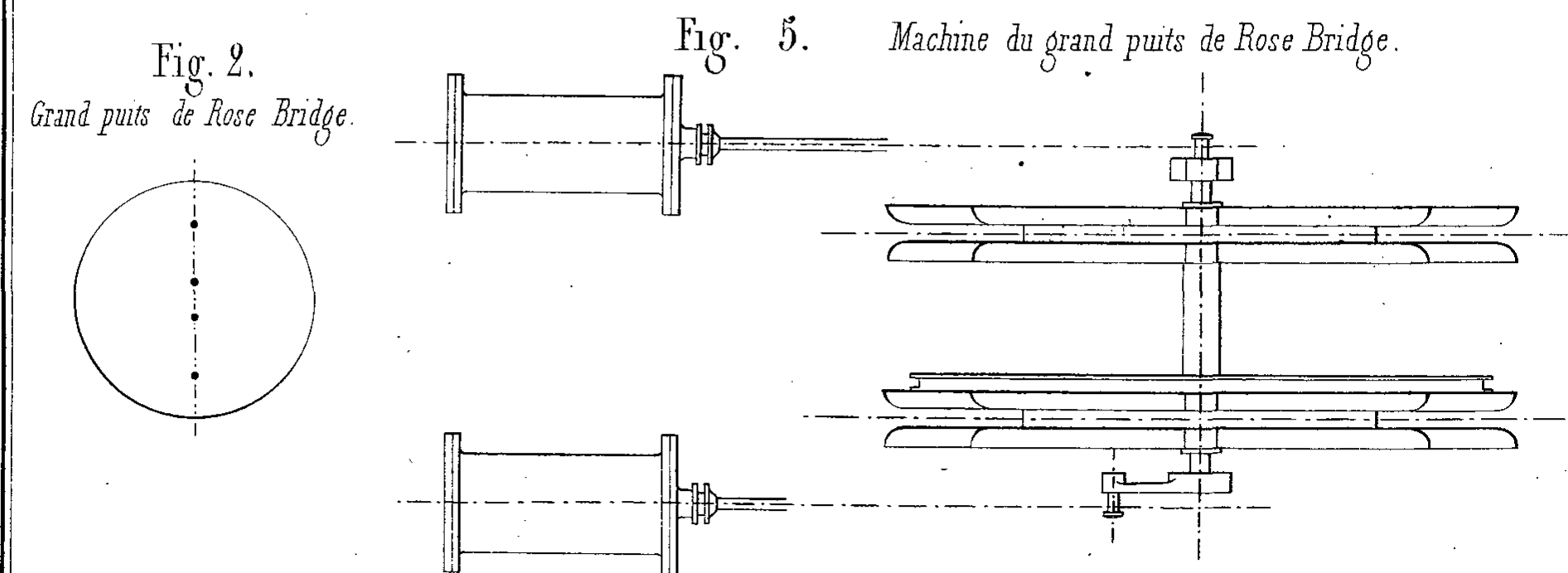
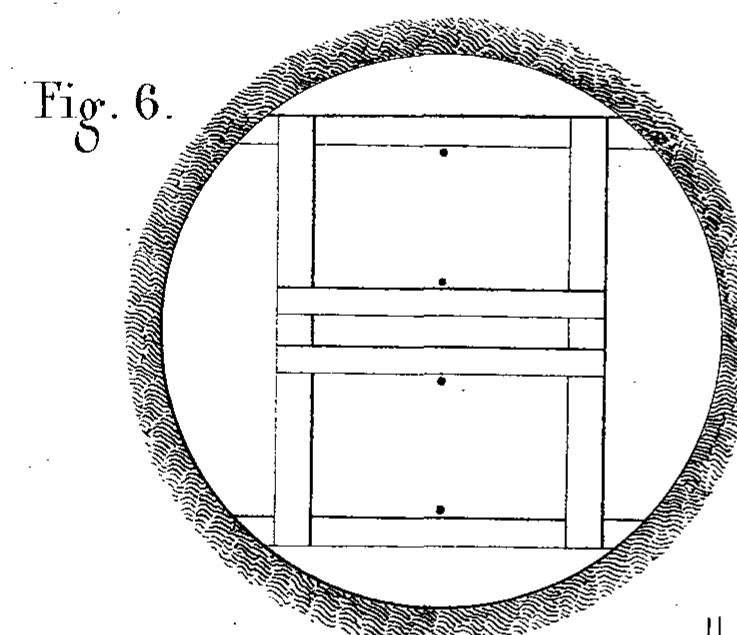
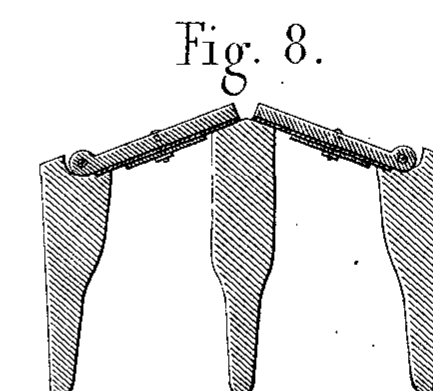
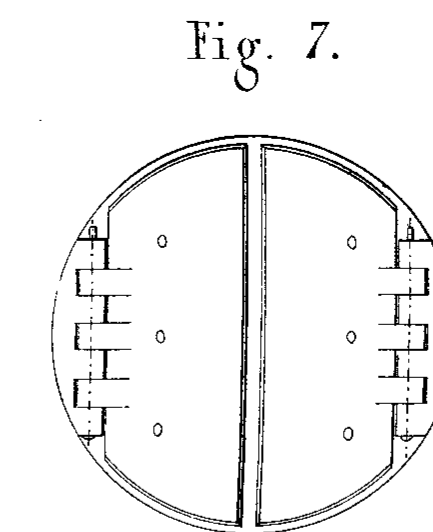
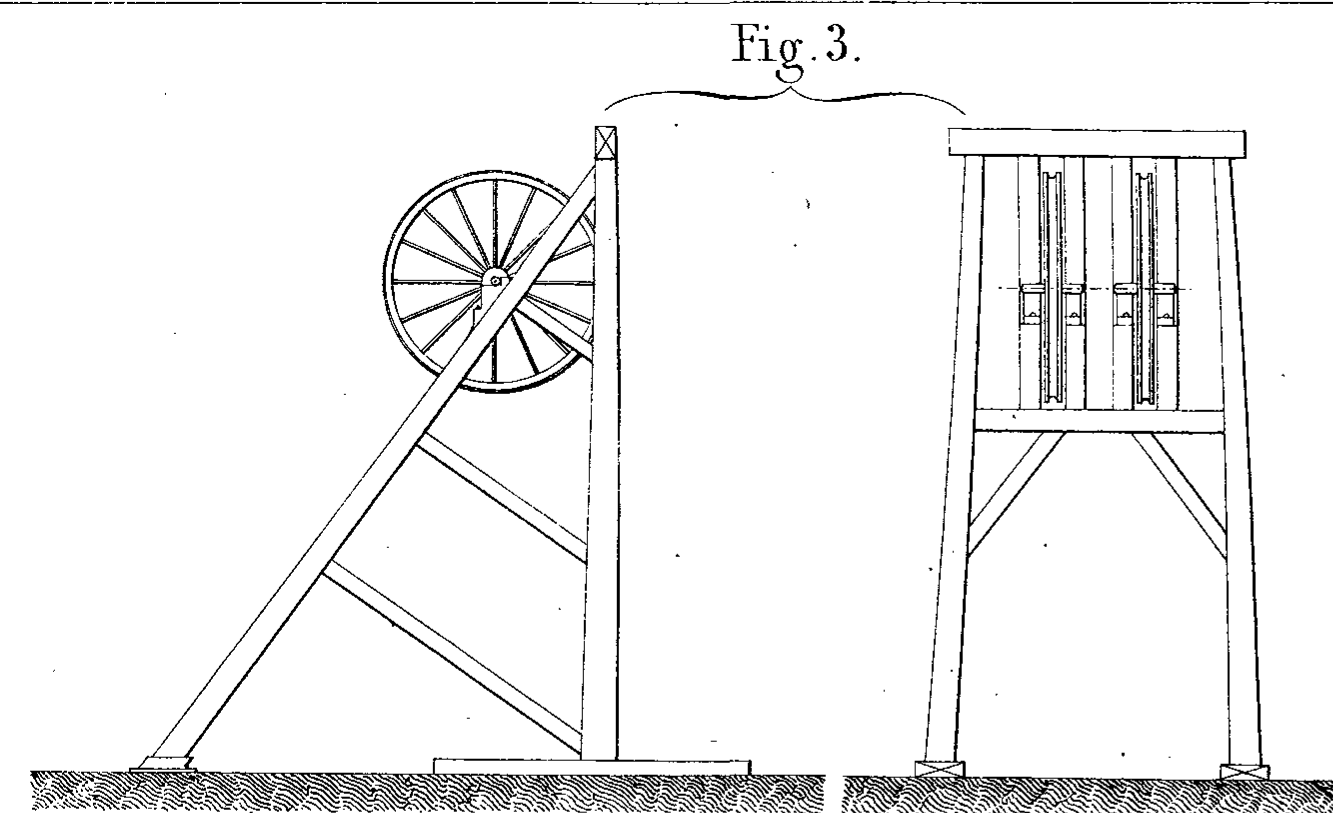
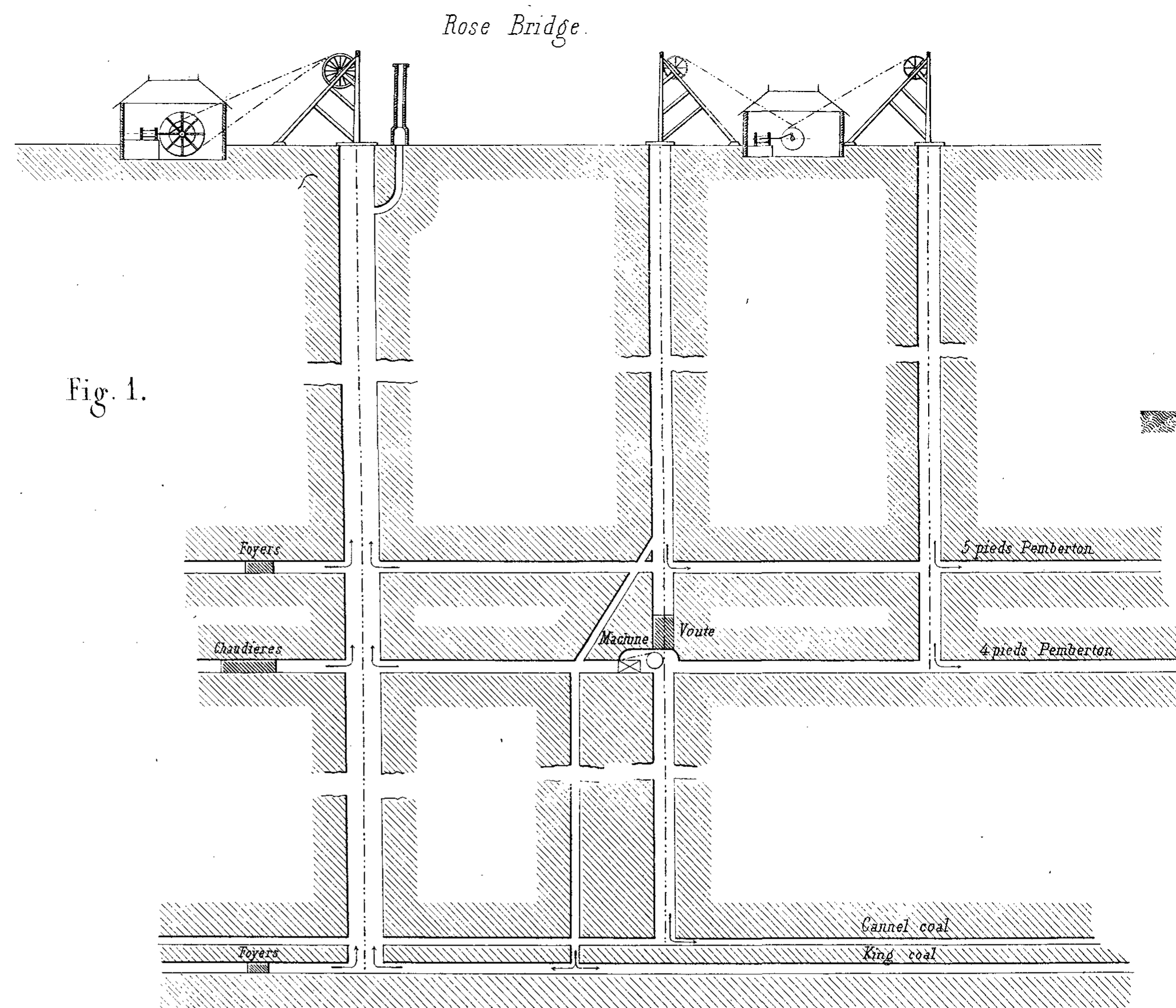
Echelle.

100 50 0 1 2 3 4 5 6 7 8 9 10 Mèt.









Echelle de la fig. 1  
0 10 20 30 40 50 60 70 80 90 100 Mèt.

Echelle de la fig. 2  
0 1 2 3 4 5 6 7 8 9 10 Mèt.

Echelle de la fig. 3.  
0 10 20 30 40 50 60 70 80 90 100 Mèt.

Echelle de la fig. 4.  
0 100 200 300 400 Mèt.

Echelle de la fig. 9.  
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Echelle des fig. 5, 6, 7 et 8.  
0 1 2 3 4 5 6 7 8 9 Mèt.







Fig. 1.

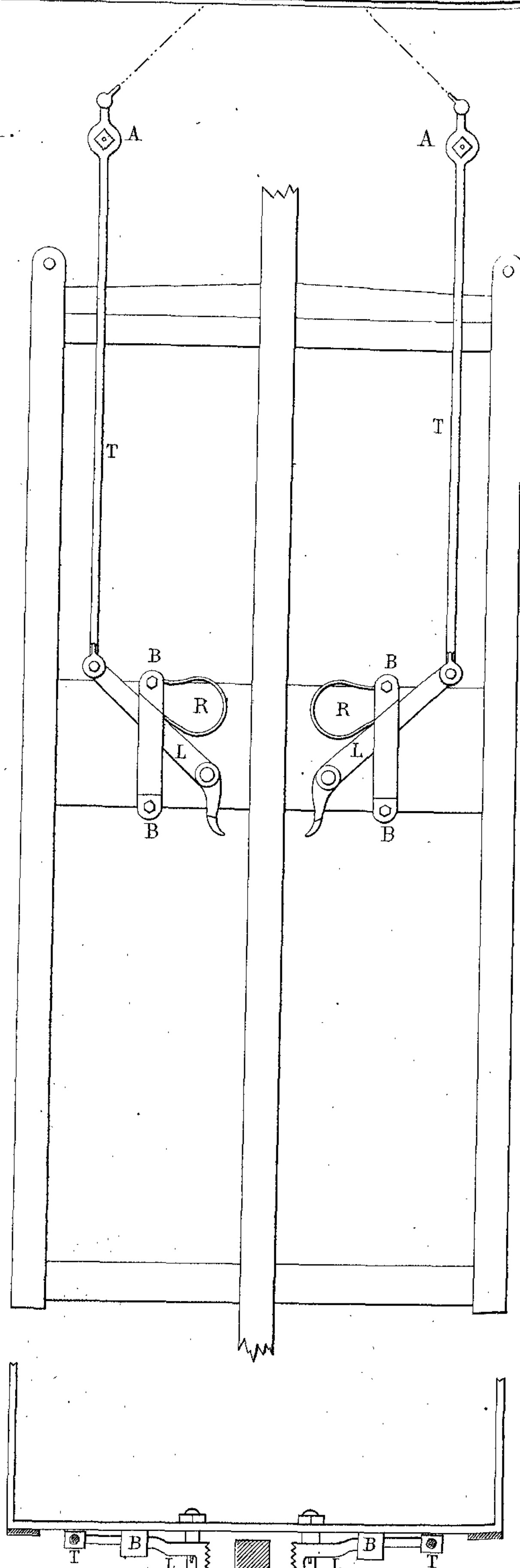


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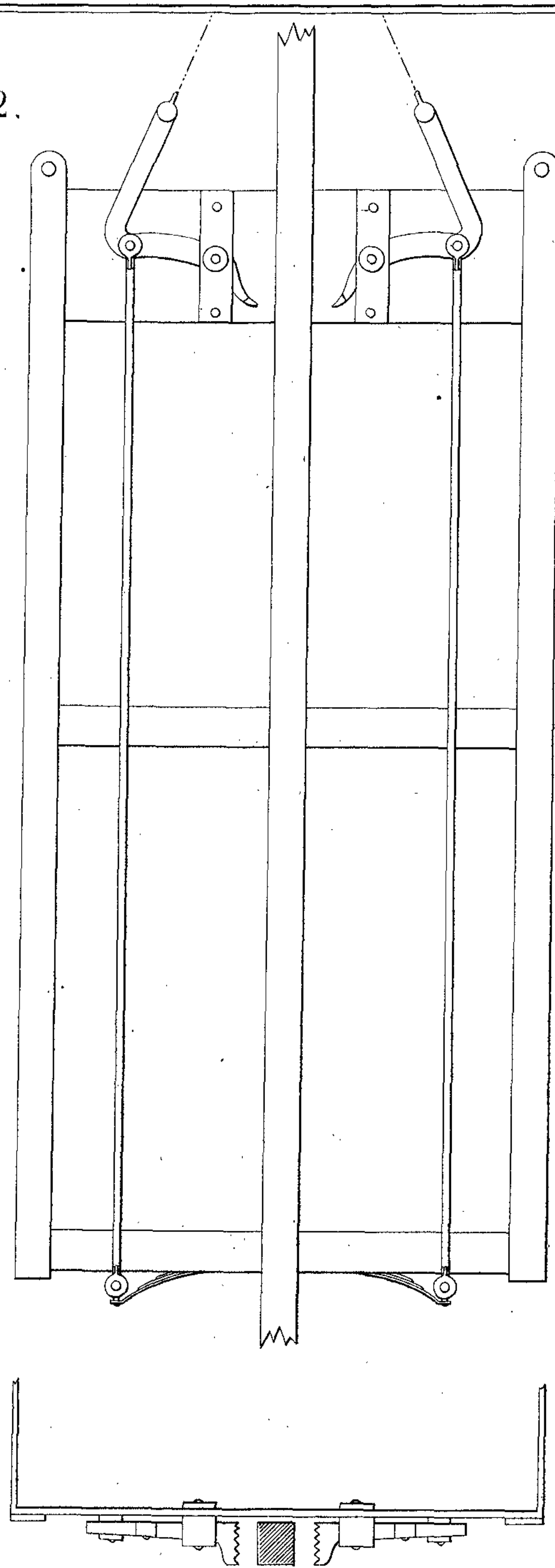


Fig. 4.

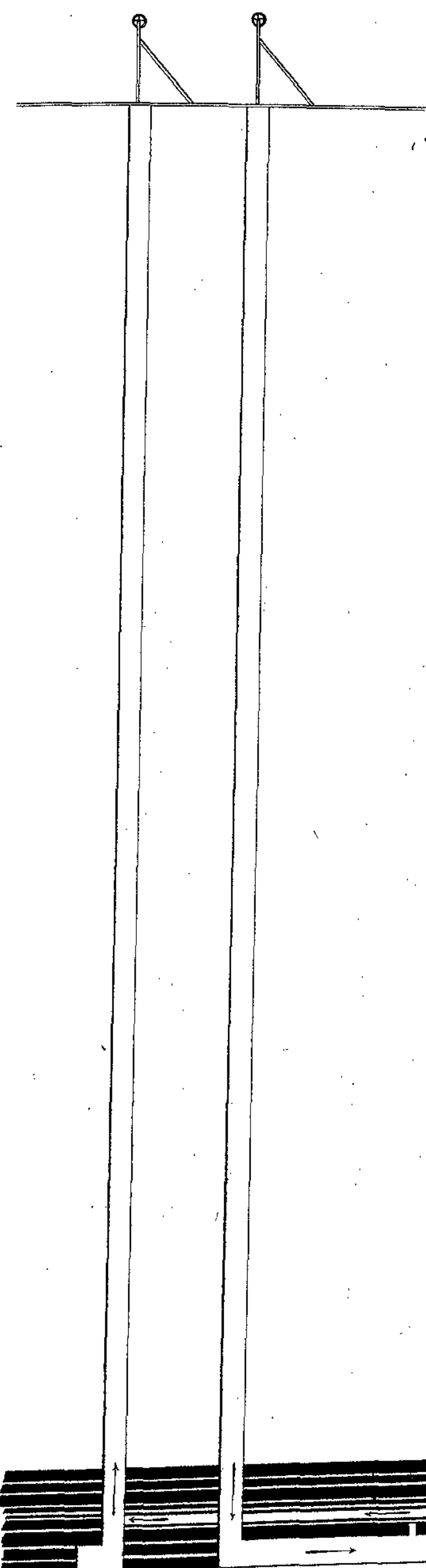


Fig. 3.

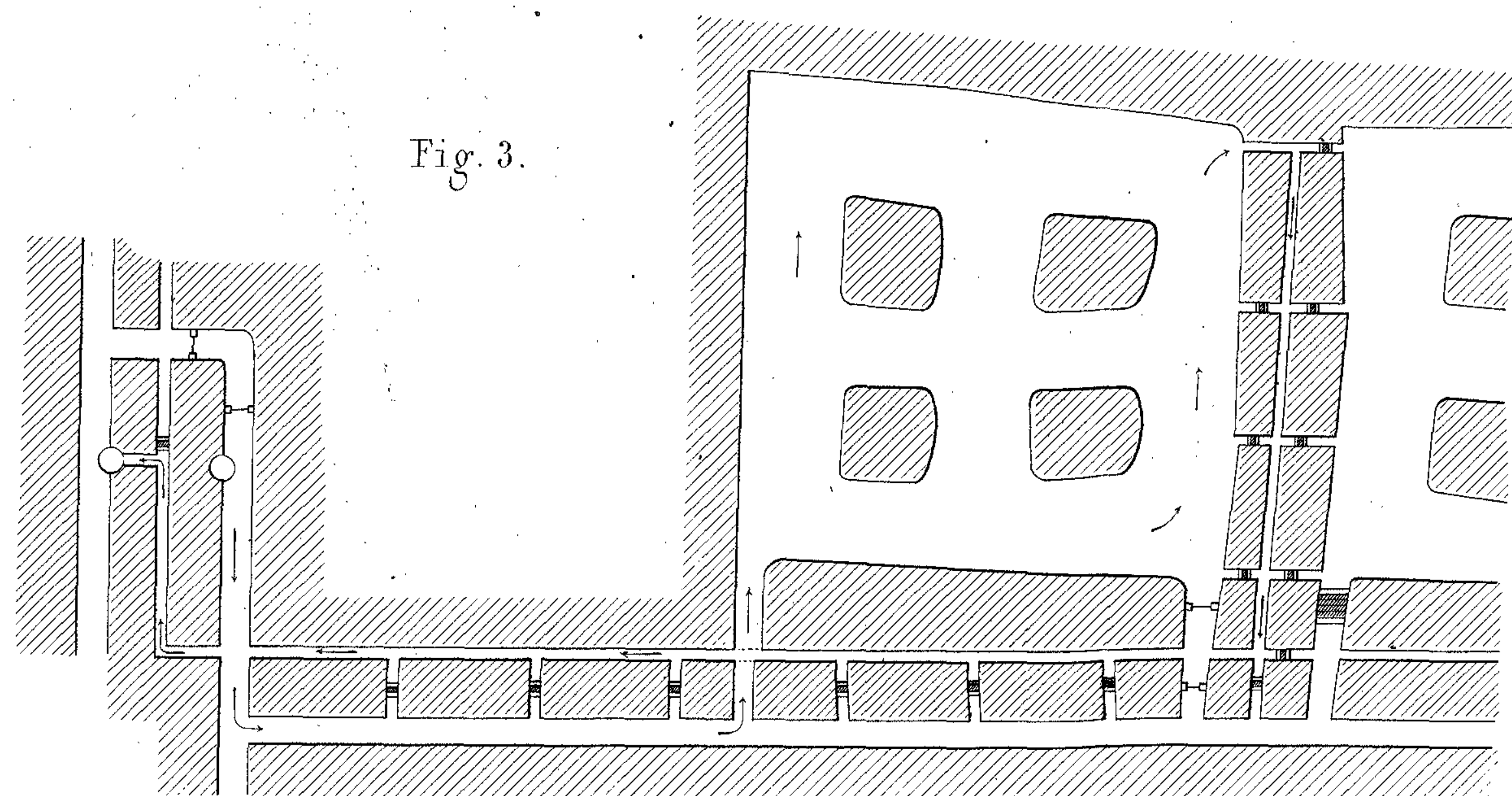
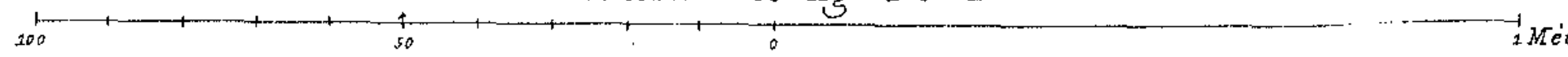


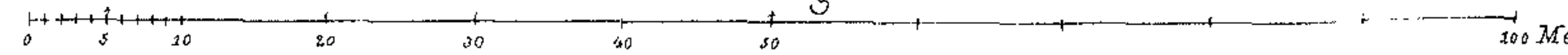
Fig. 5. Coupe de la couche Ten Yards.

| Y <sup>4</sup> P <sup>4</sup> P <sup>4</sup> | Mètres |
|----------------------------------------------|--------|
| Roofs..... 1' 0" 0"                          | 0,91   |
| White coal..... 1' 1" 0"                     | 1,21   |
| Floors..... 1' 0"                            | 0,30   |
| Tows..... 2' 3"                              | 0,68   |
| Middles..... 2' 3"                           | 0,68   |
| Brasils..... 1' 6"                           | 0,45   |
| Parting..... 6"                              | 0,15   |
| Fine coal..... 2' 3"                         | 0,68   |
| Veins..... 2' 0"                             | 0,60   |
| Stone coal parting..... 6"                   | 0,15   |
| Stone coal..... 2' 0"                        | 0,60   |
| Patchels..... 2' 0"                          | 0,60   |
| Sawyer..... 2' 0"                            | 0,60   |
| Slipper..... 1' 0" 0"                        | 0,91   |
| Benchies..... 1' 0" 0"                       | 0,91   |

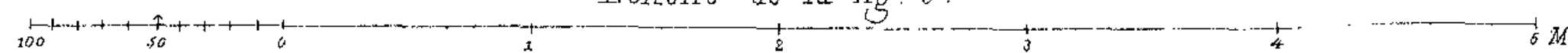
Echelle des fig. 1 et 2.



Echelle des fig. 3 et 4.



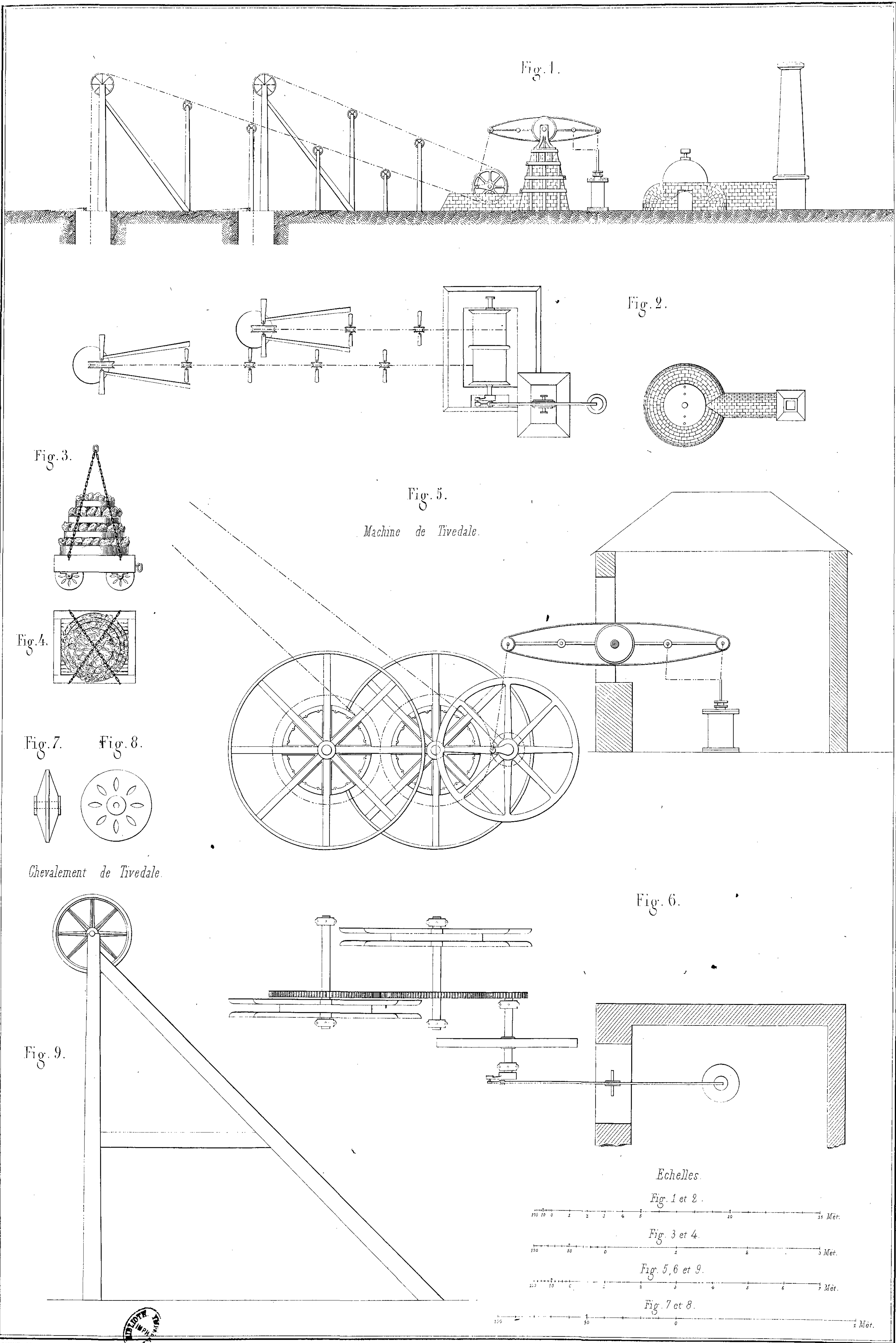
Echelle de la fig. 5.







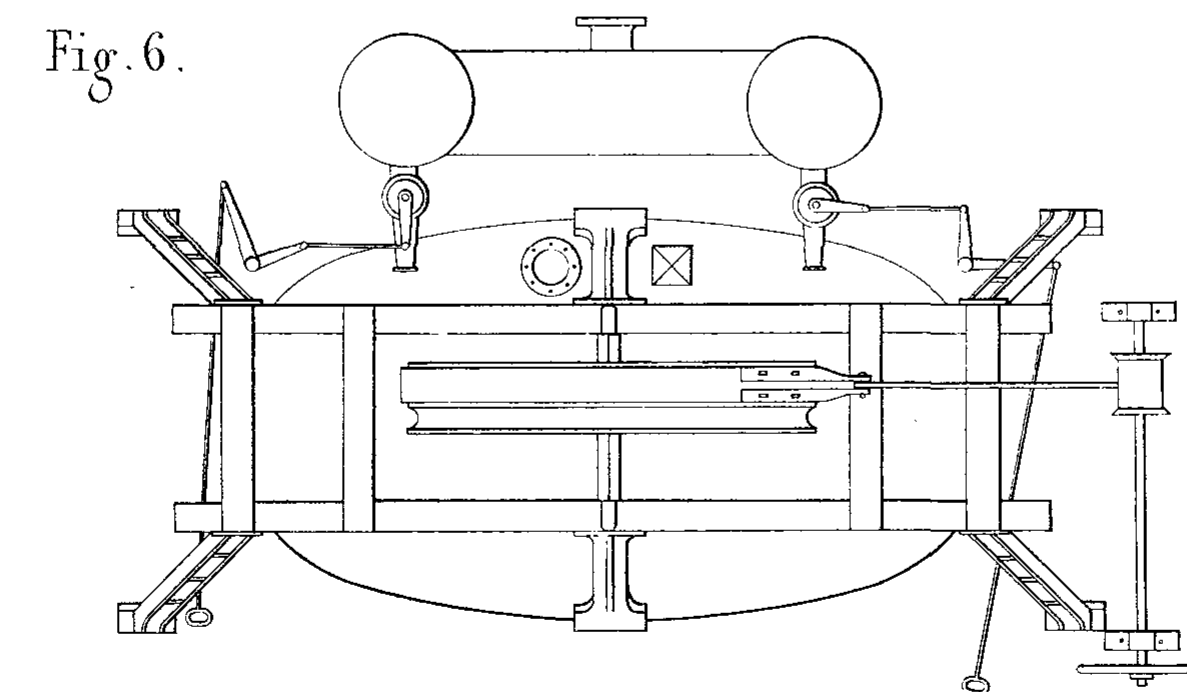
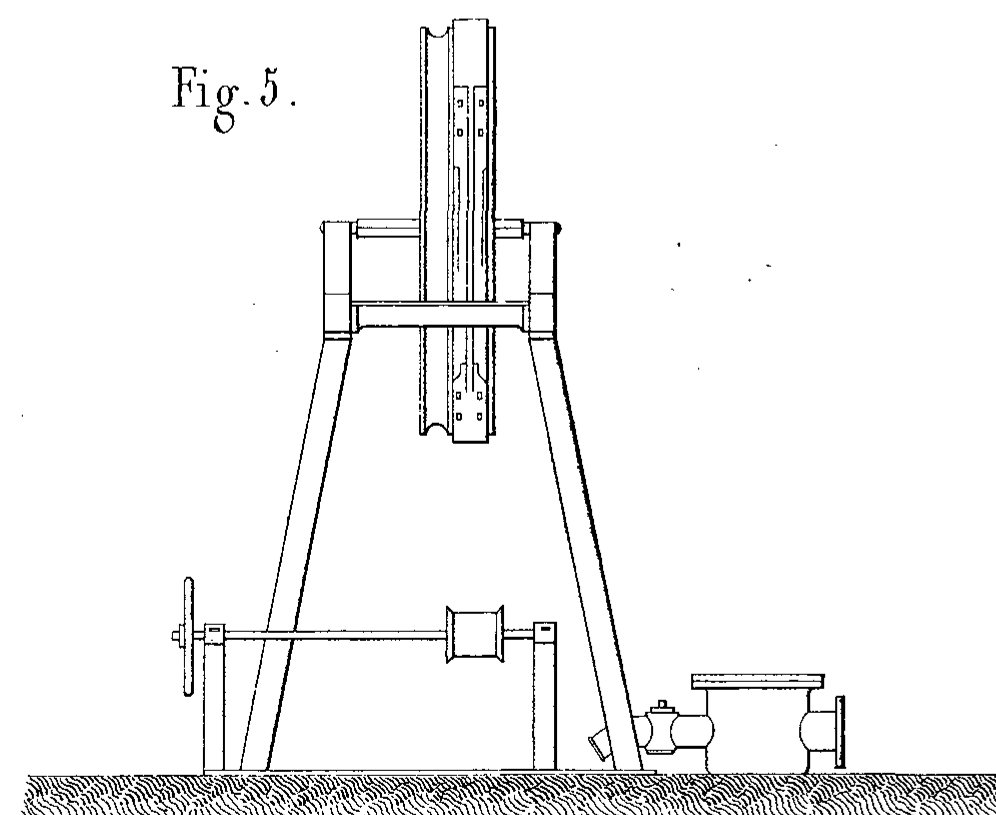
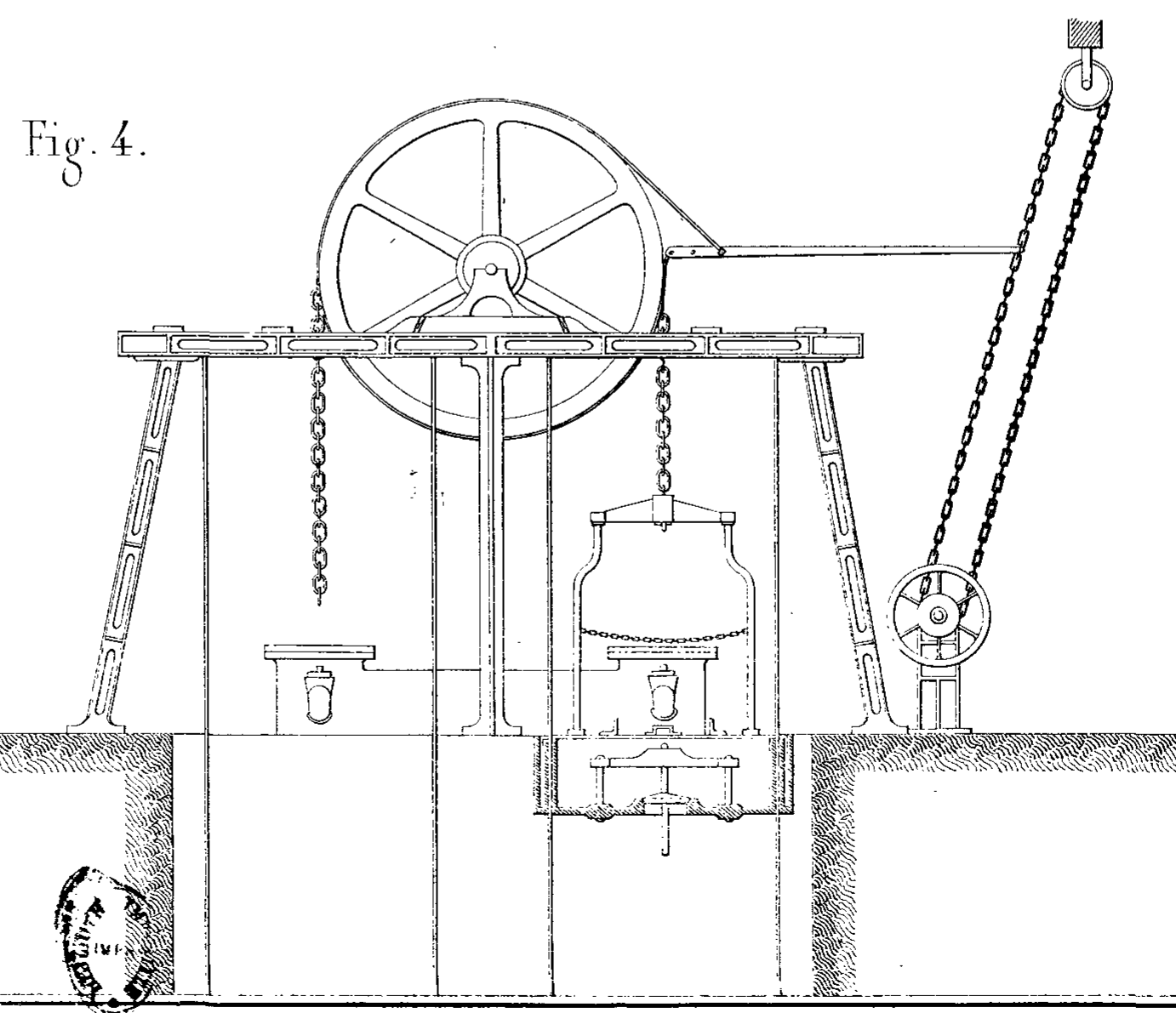
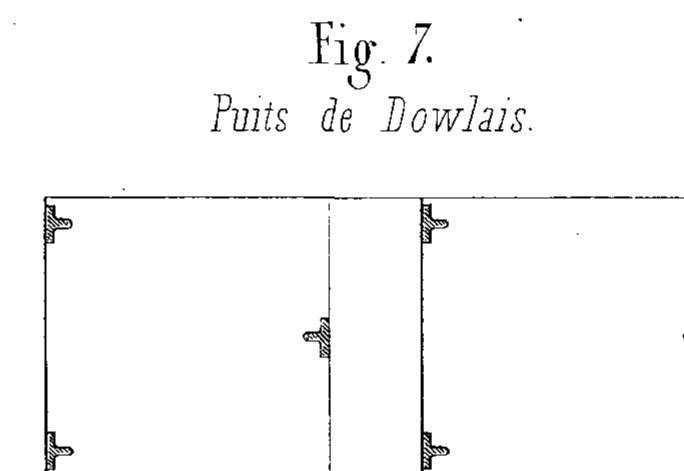
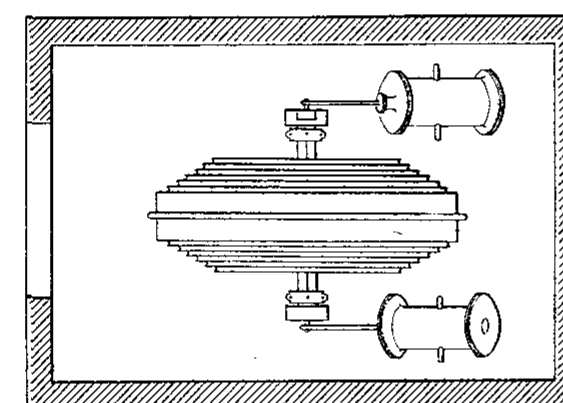
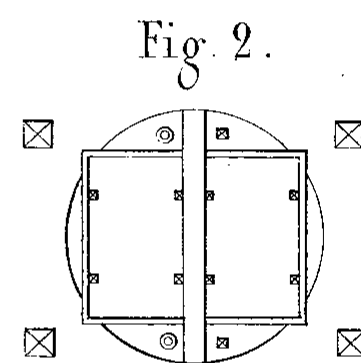
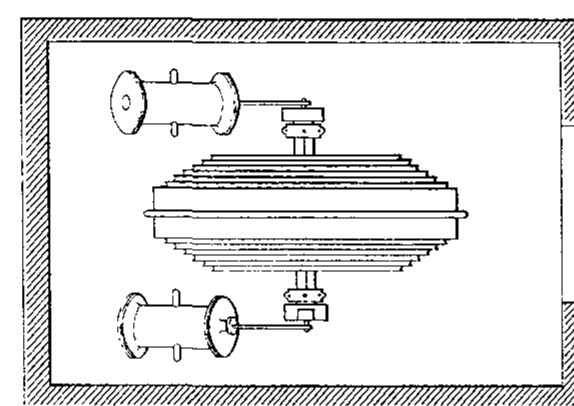
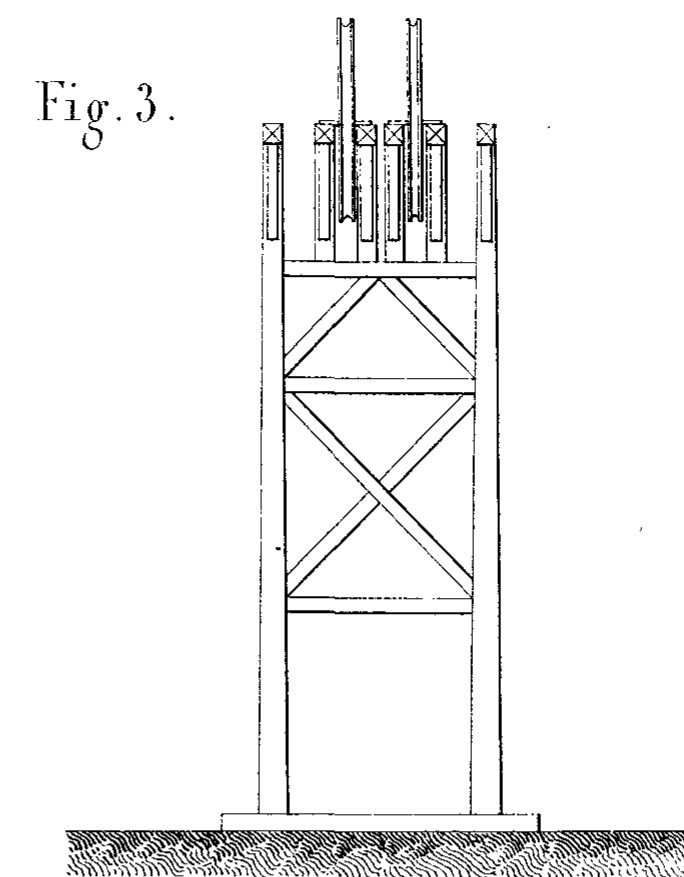
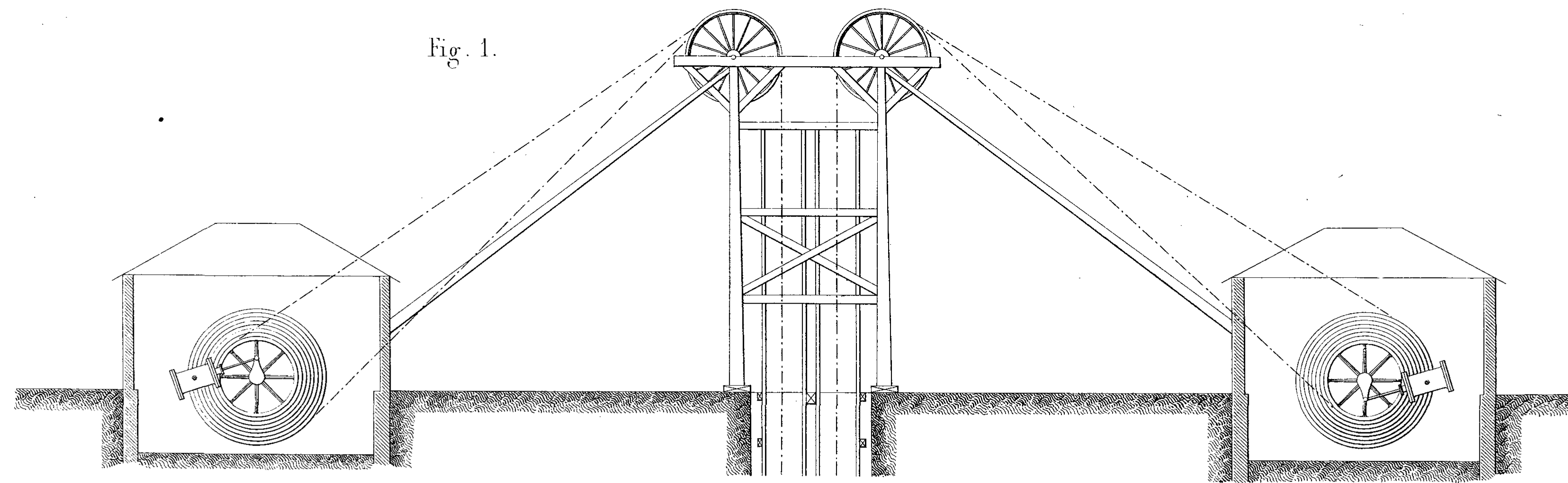












Echelle des fig. 1, 2 et 3.

Echelle des fig. 4, 5, 6 et 7.







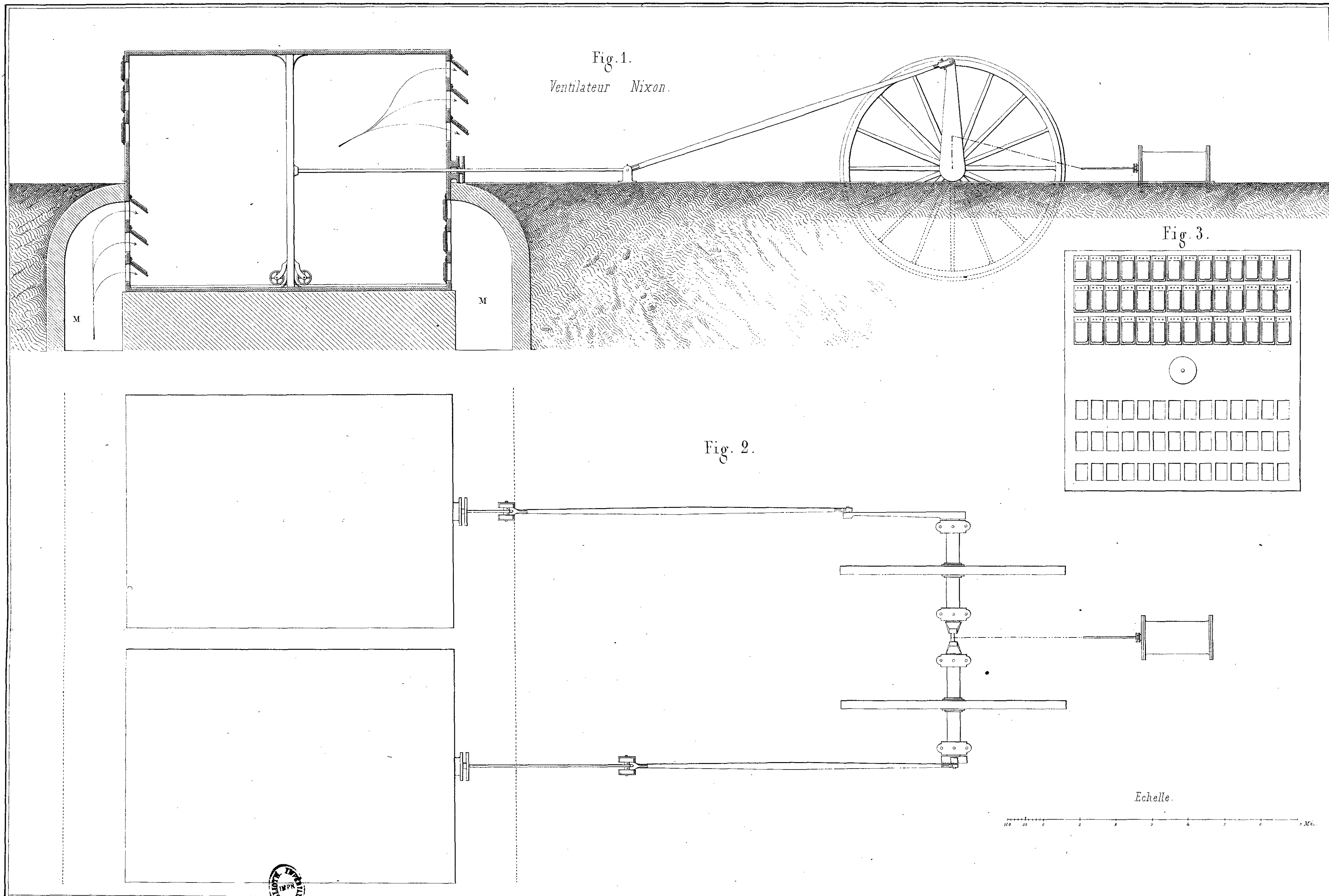








Fig. 1.

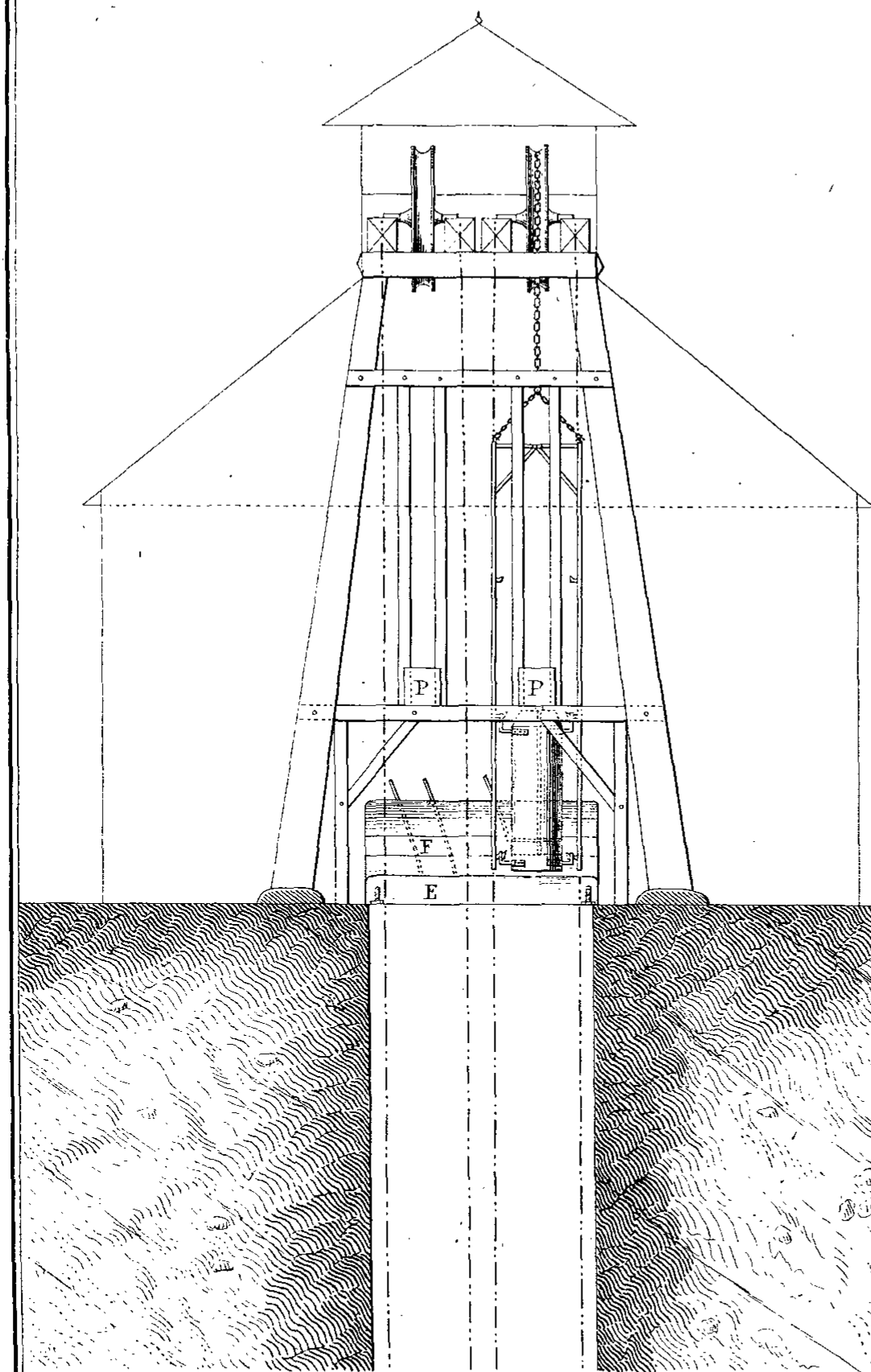


Fig. 2.

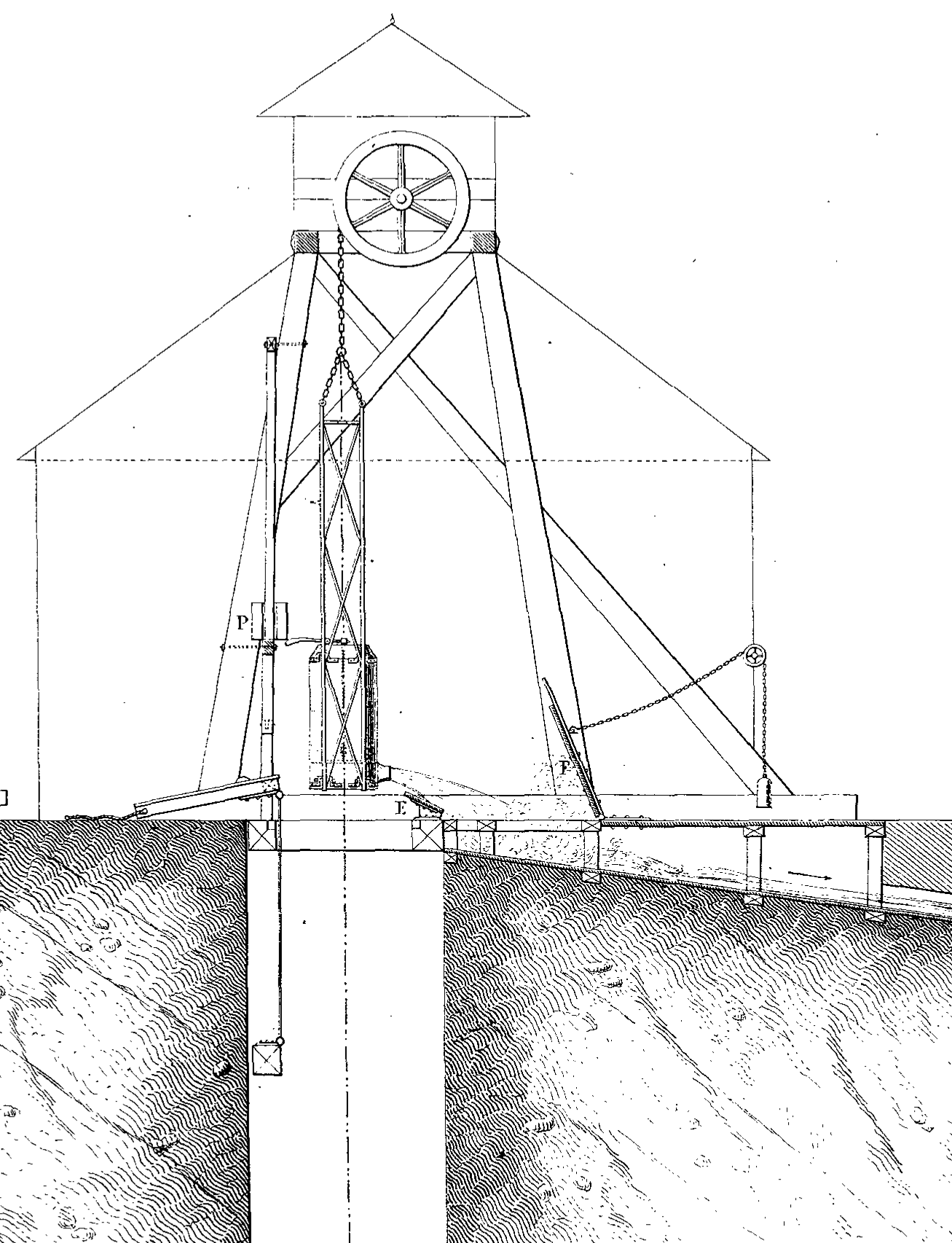


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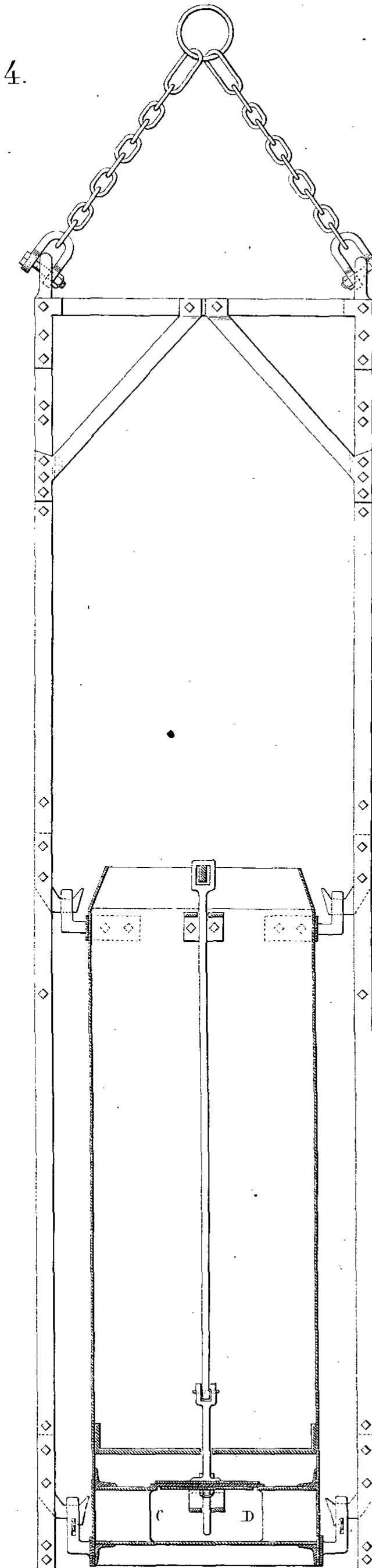


Fig. 5.

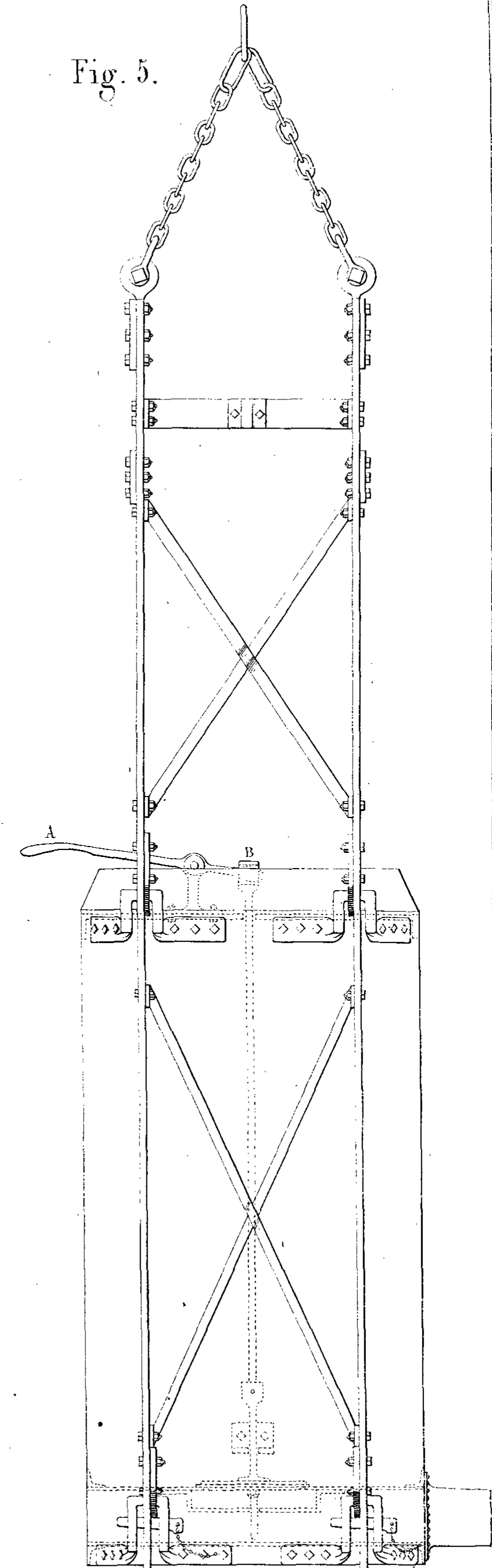


Fig. 6.

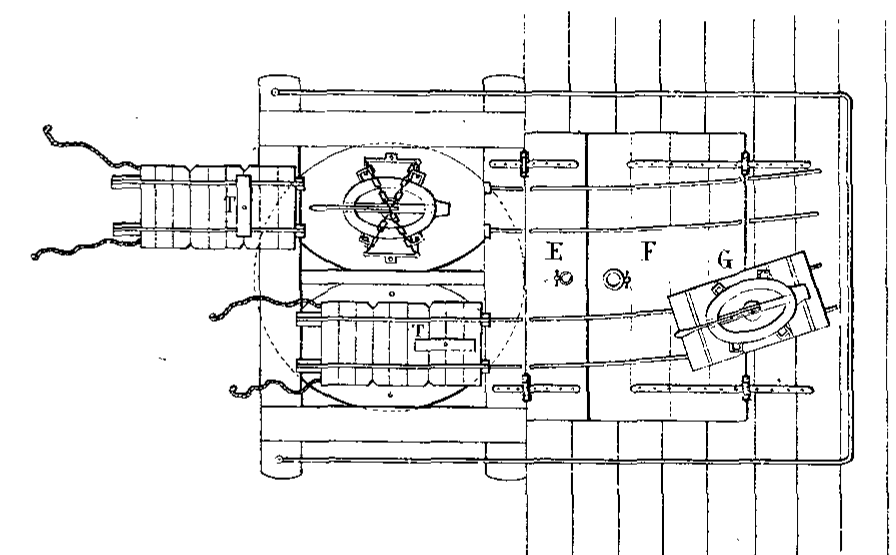
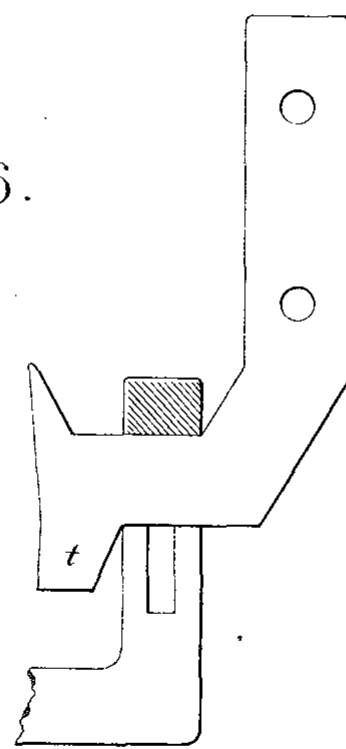


Fig. 3.

Echelle des fig. 1, 2 et 3.

100 50 0 1 2 3 4 5 Mèt.

Echelle des fig. 4 et 5.

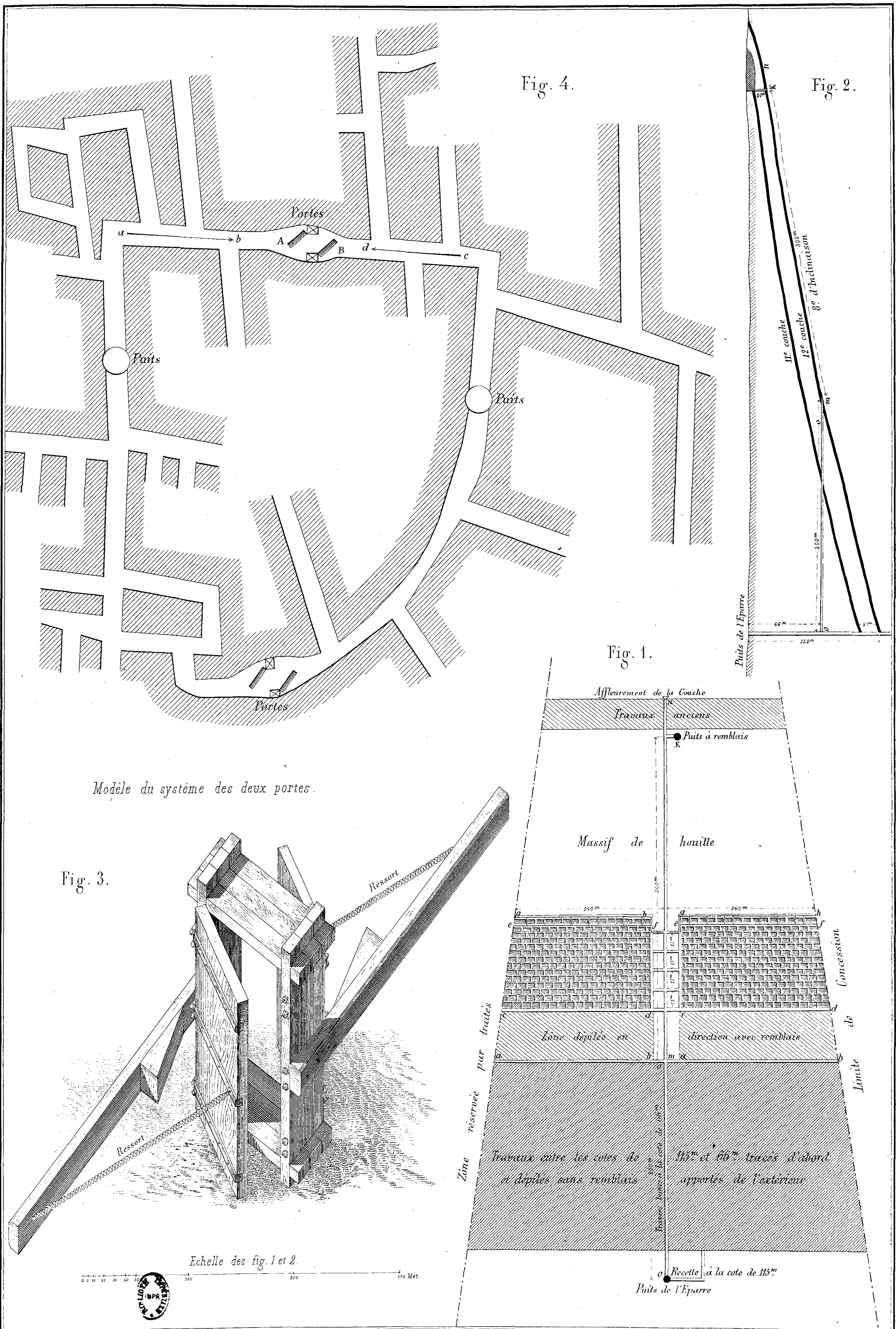


1 Mèt.









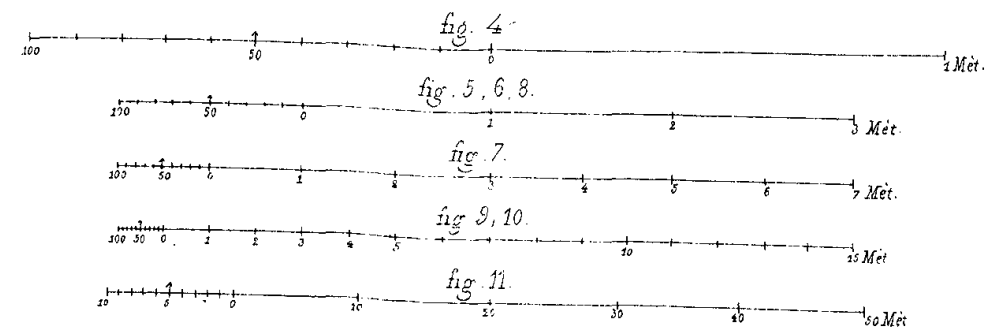
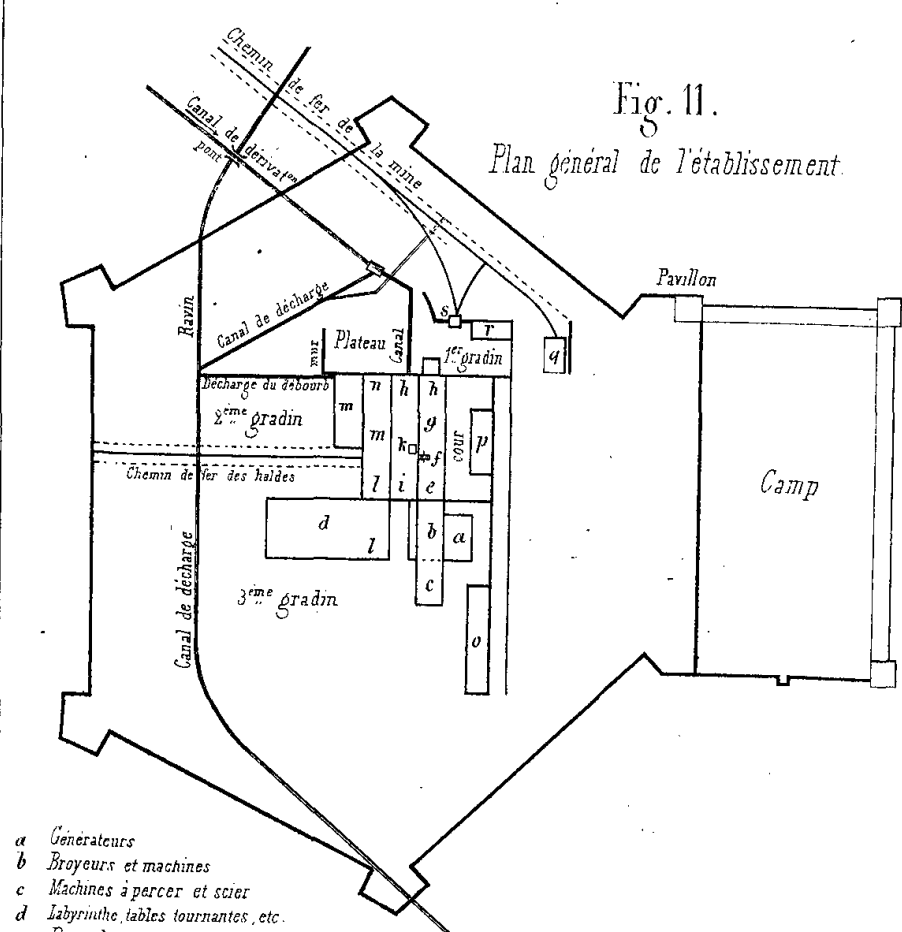
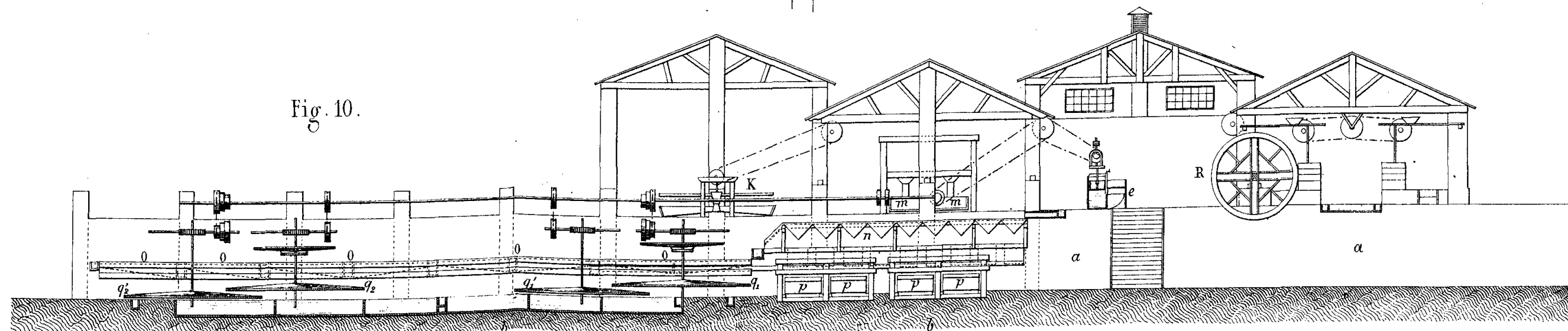
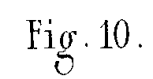
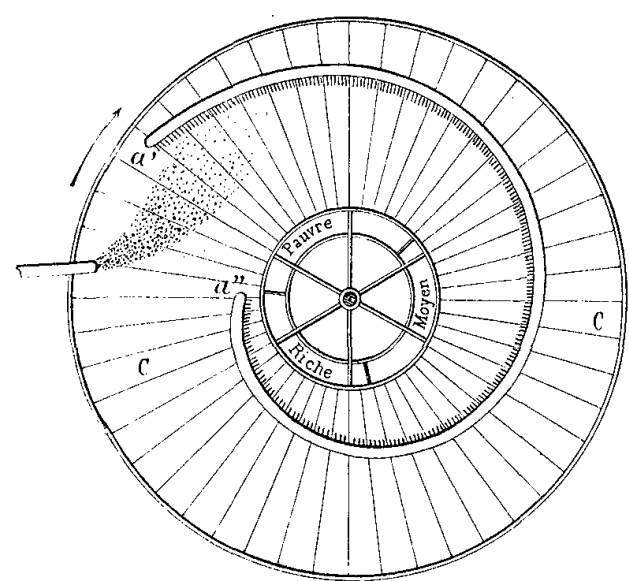
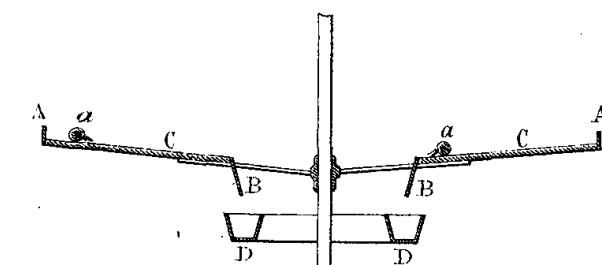
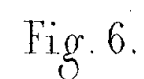
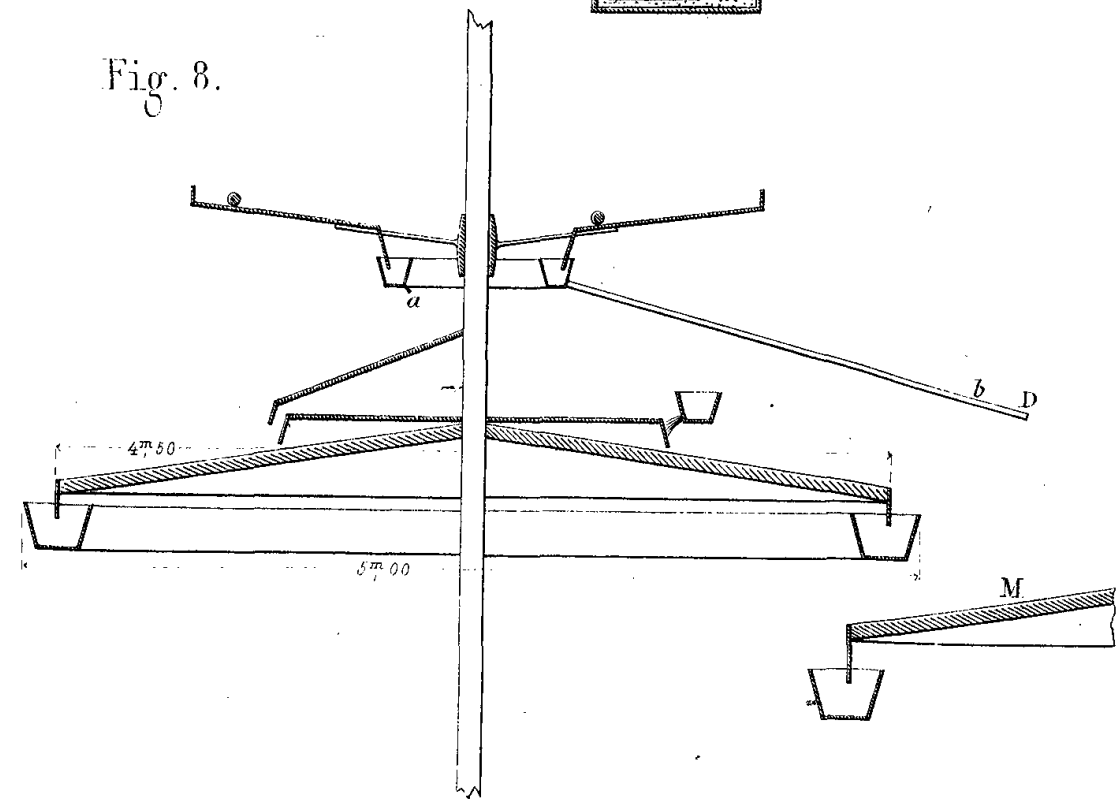
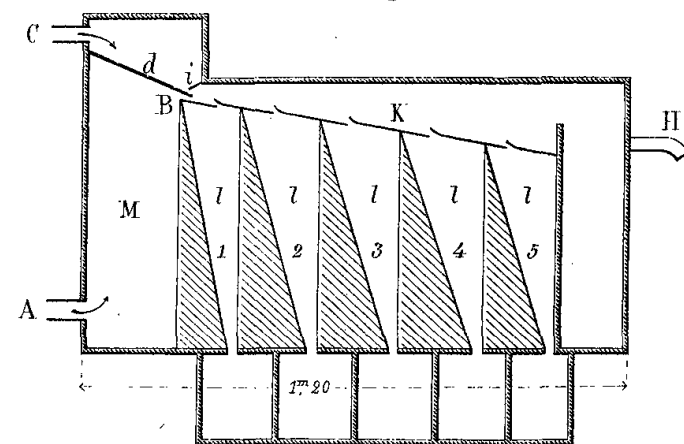
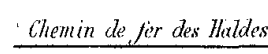
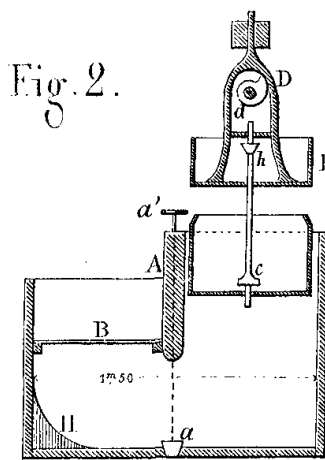
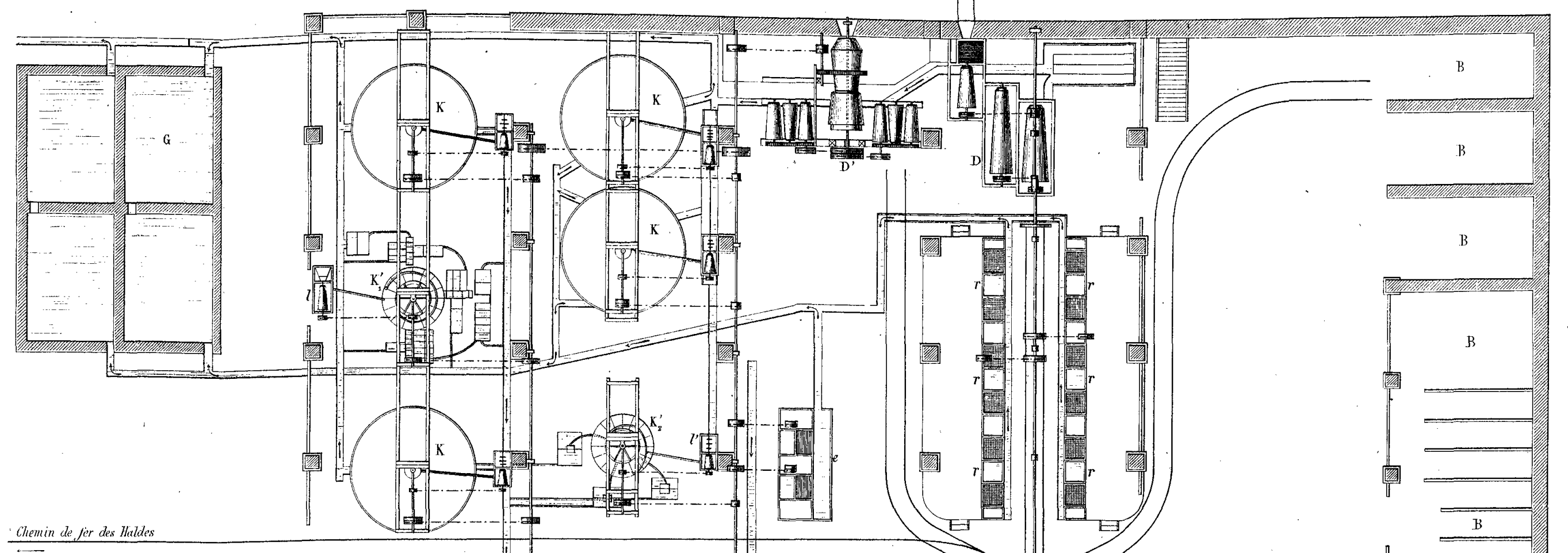
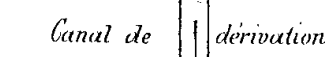












- a Générateurs
- b Broyeurs et machines
- c Machines à parer et scier
- d Lixivantes, tables tournantes, etc.
- e Écarts
- f Roue élévaire
- g Table du menu
- h,h Débourrage
- i Gribilage du gros
- k Pénit broyeur
- l,l Tables à secousses
- m,m Tables à cone renversé
- n Round-buddle
- o Forge et combustible
- p Bureau et magasin
- q Hangar des wagons
- r Triage
- s Déchargement et bascule

Les gradins sont de 3 en 3 mèt. de contrebas

DENTAN GRAV

S<sup>t</sup> Etienne, lith. LANTZ rue de la Loire 4.







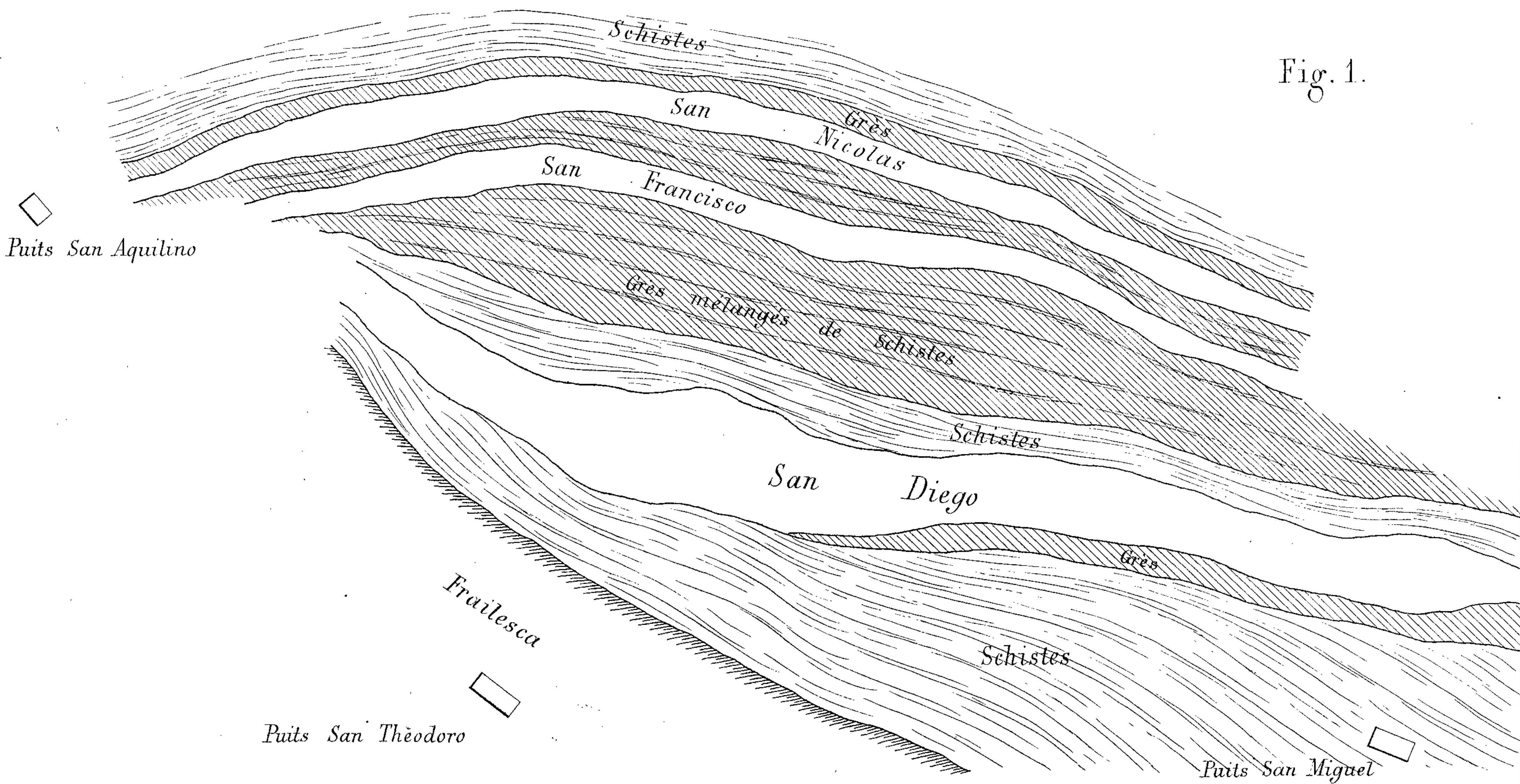


Fig. 1.

Fig. 2.  
Coupe suivant l'axe du filon

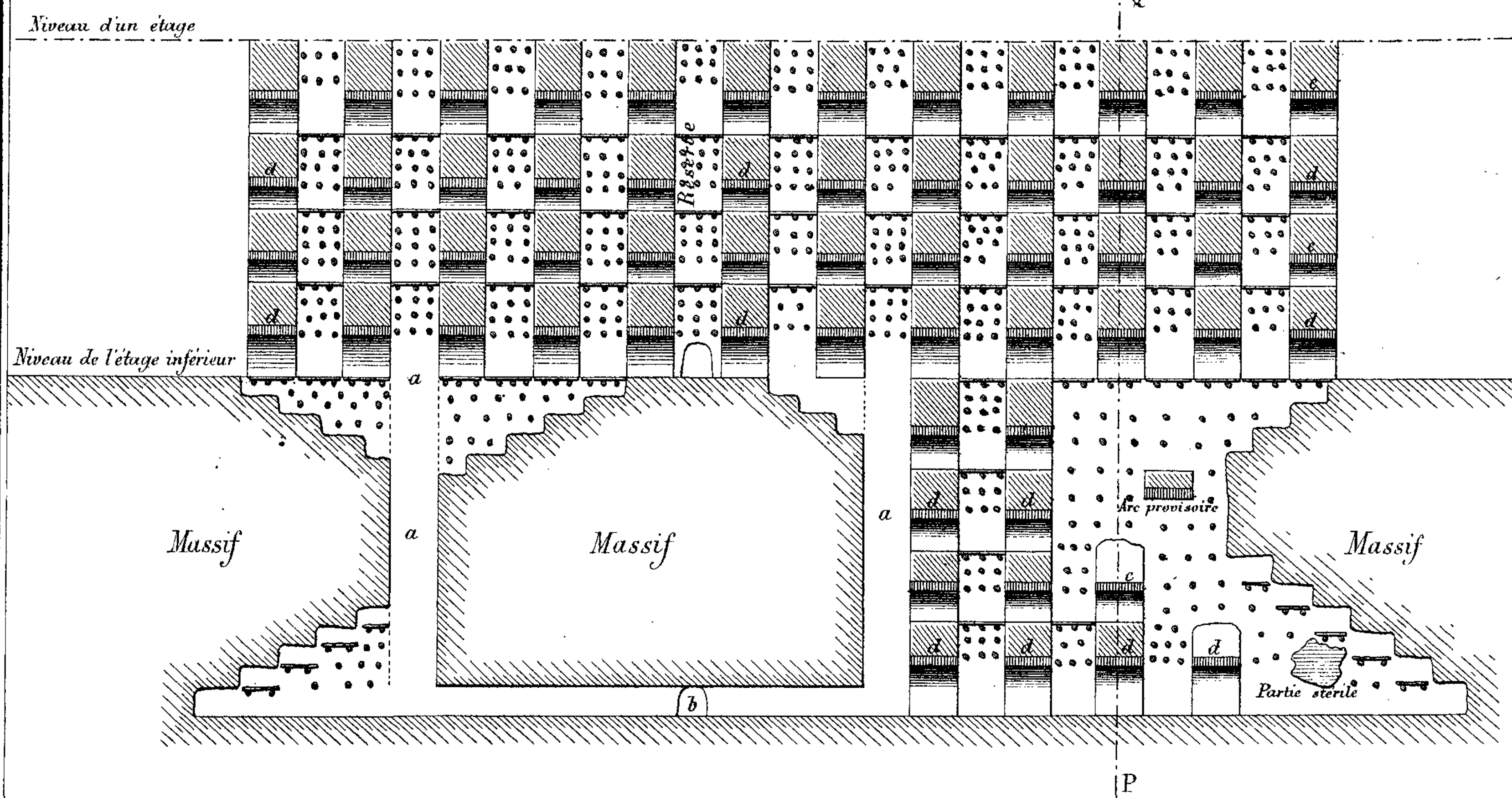


Fig. 3.  
Coupe suivant PQ de la fig. 2

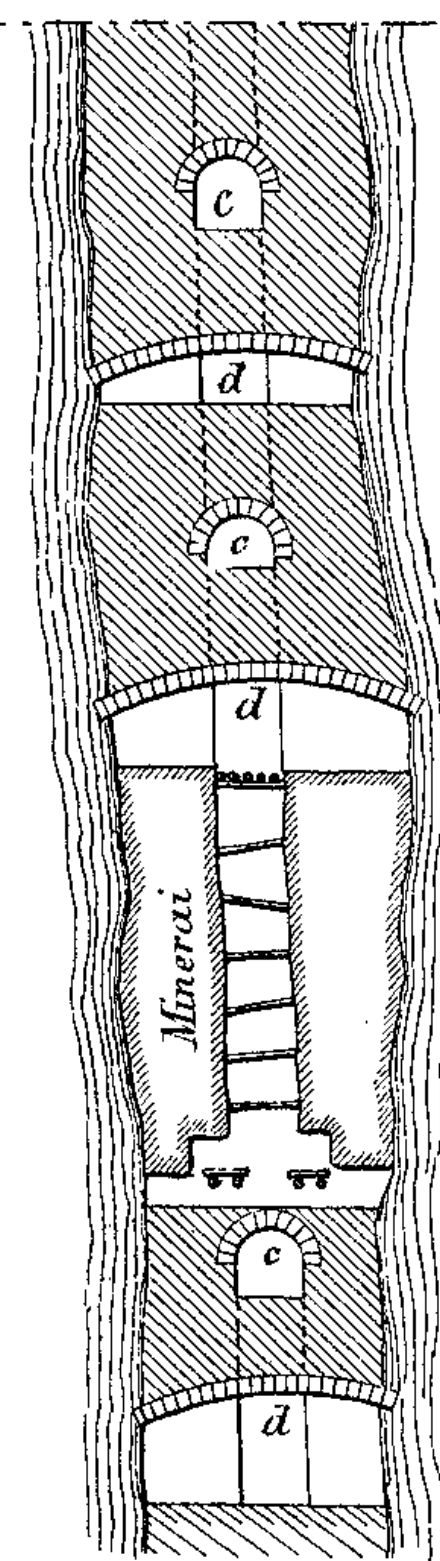


Fig. 4.  
Four à Aludèles  
Coupe

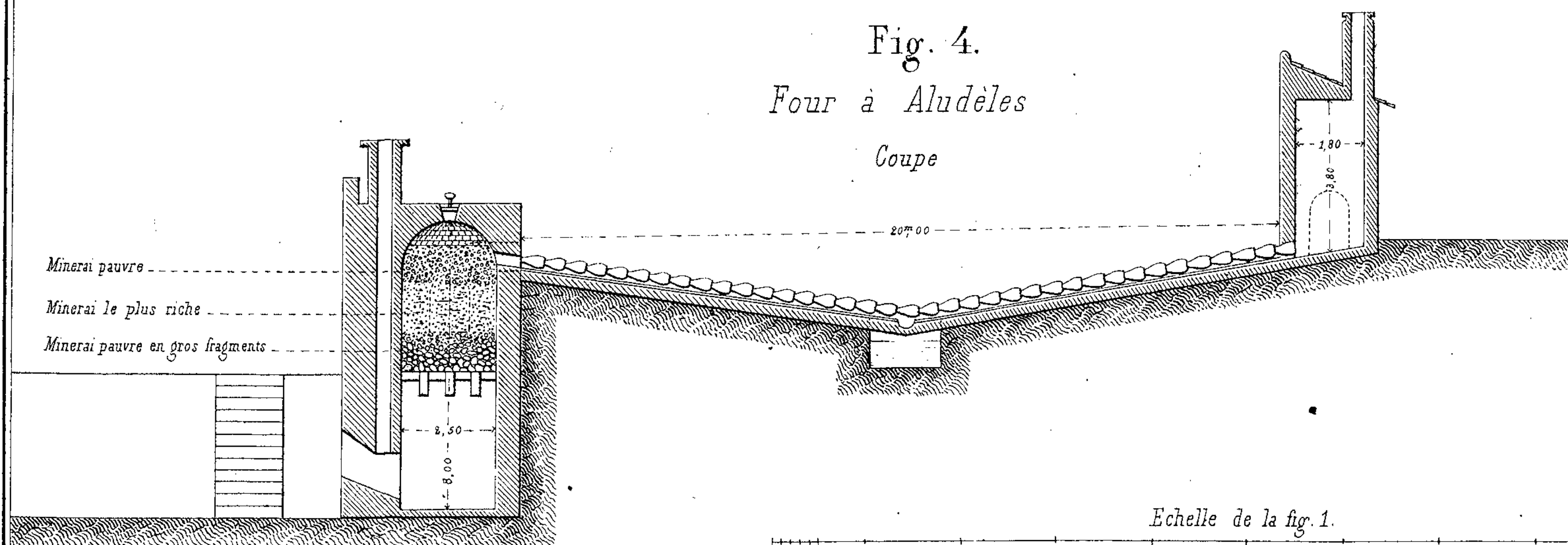
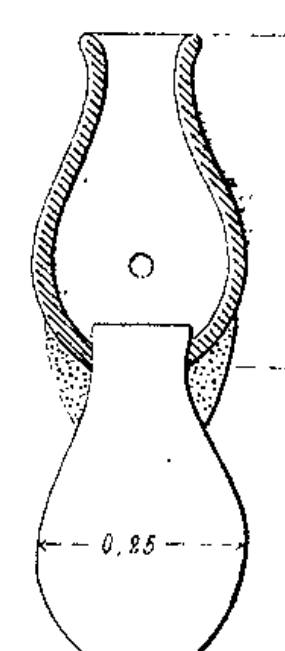
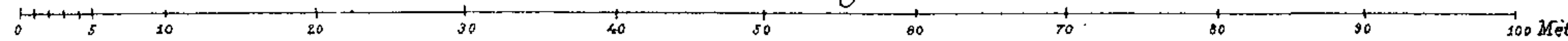


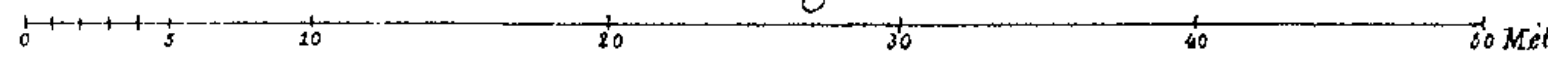
Fig. 5.  
Aludèles.



Echelle de la fig. 1.



Echelle des fig. 2 et 3.



Echelle de la fig. 4.

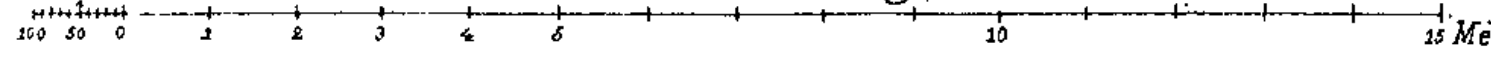








Fig. 1.

Pan de bois moisé et chariot à la décharge.

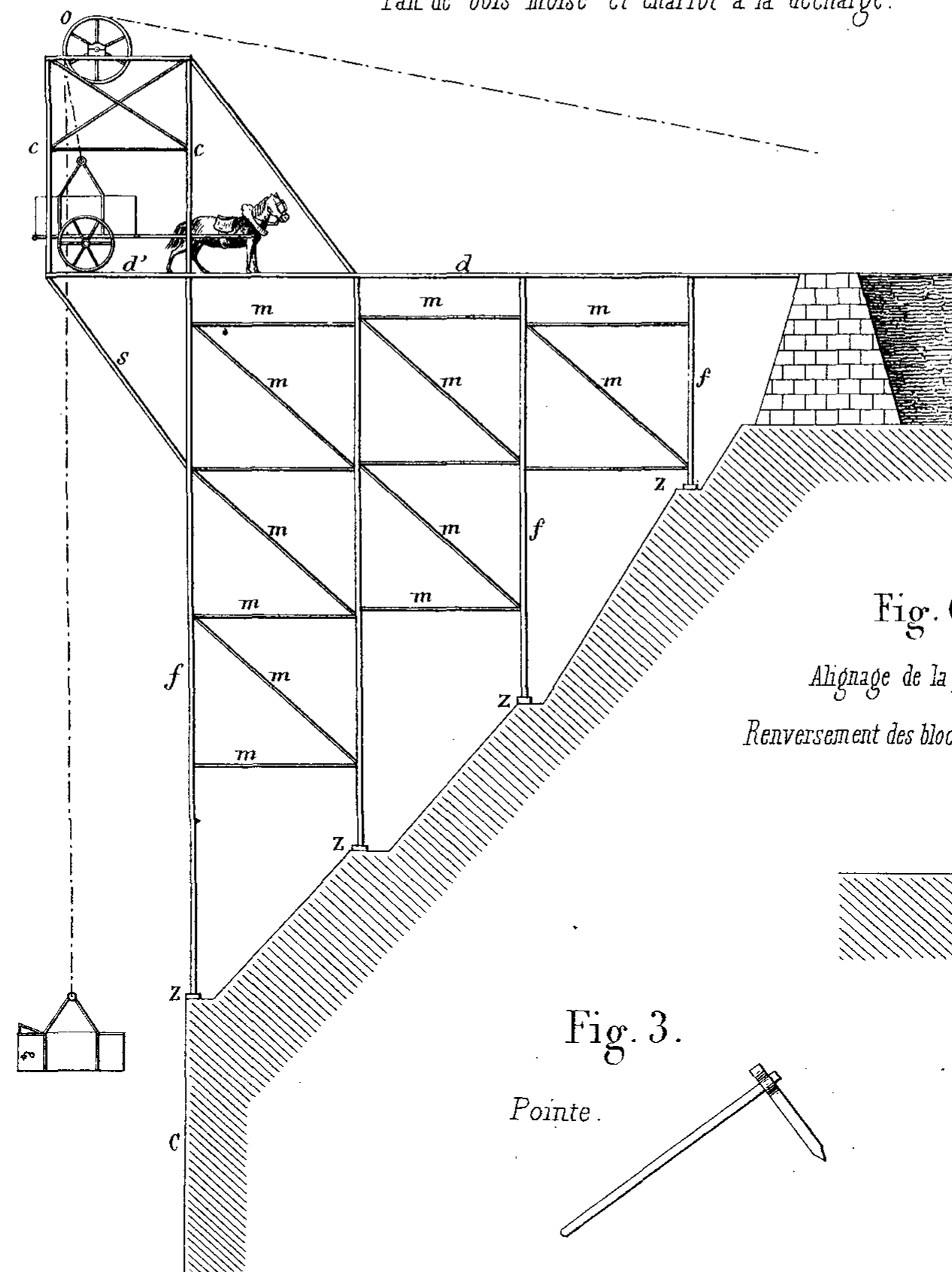


Fig. 2.

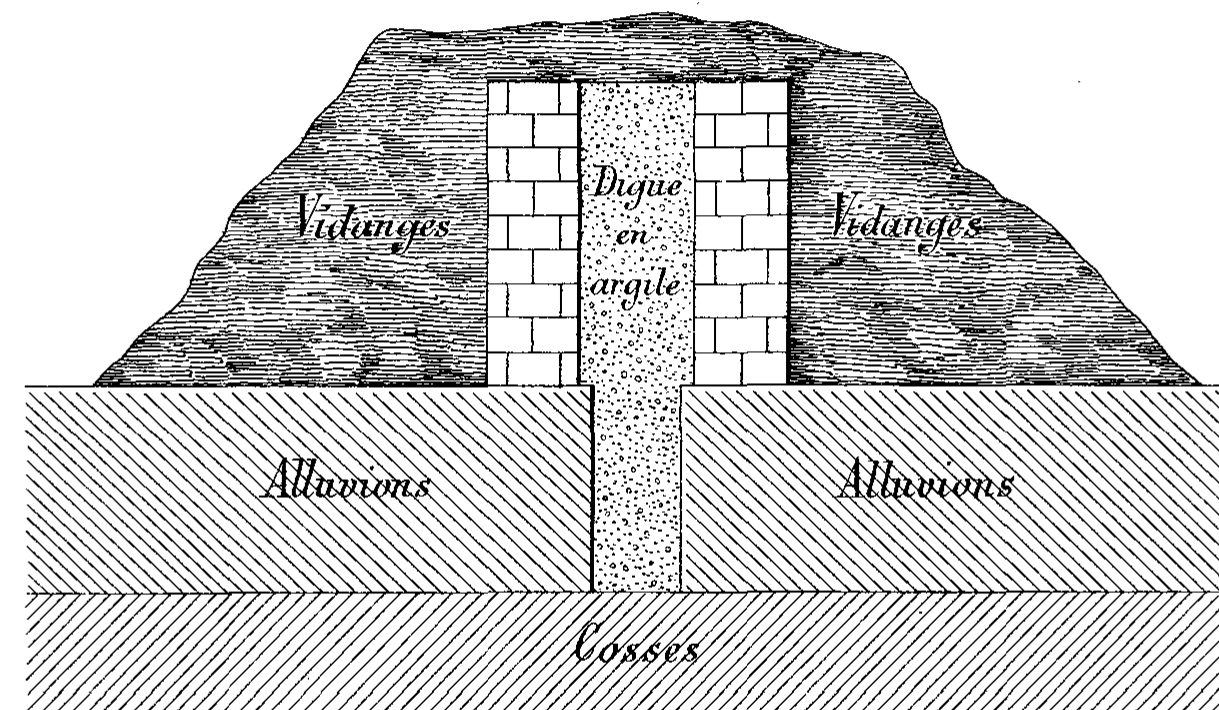


Fig. 7.

Système des billons de conduite.

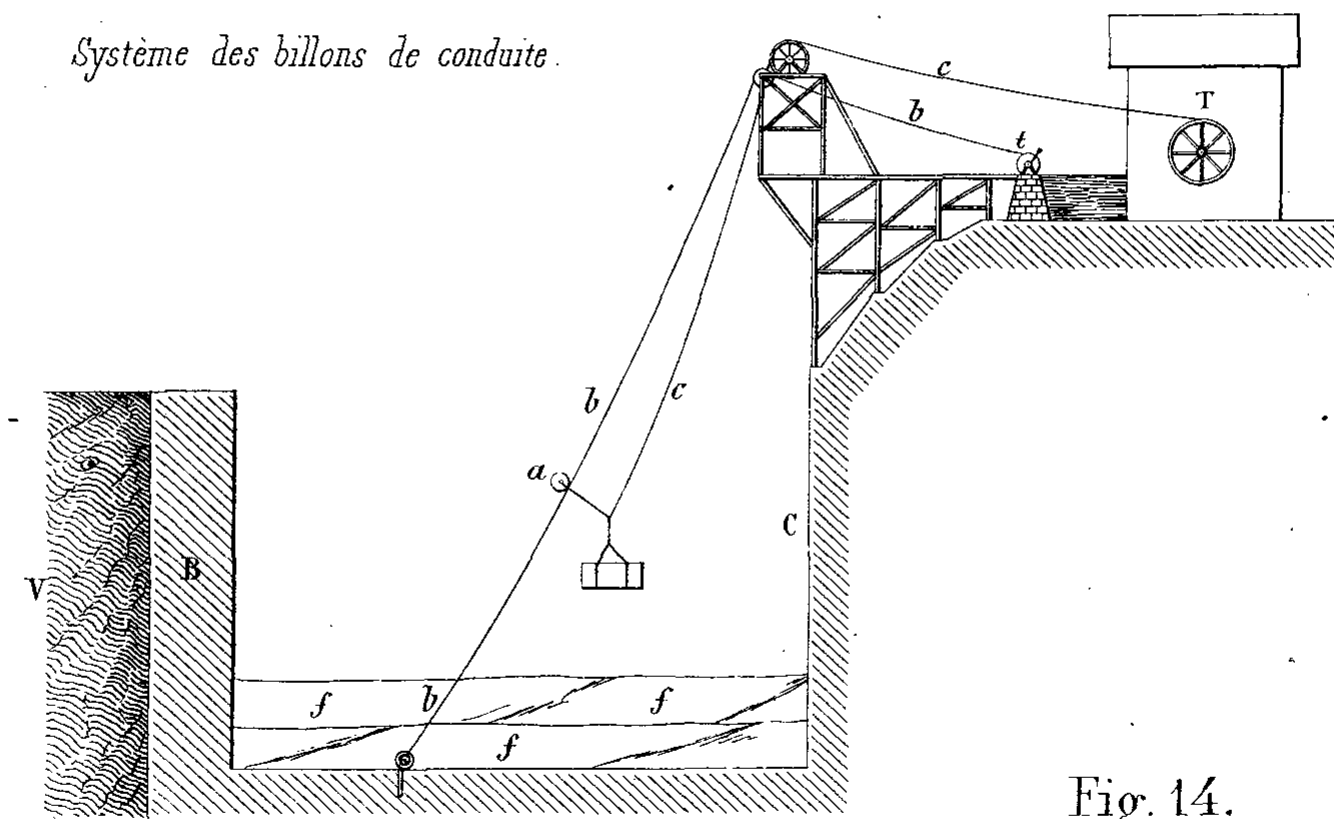


Fig. 6.

Alignage de la pierre.  
Renversement des blocs de rocher

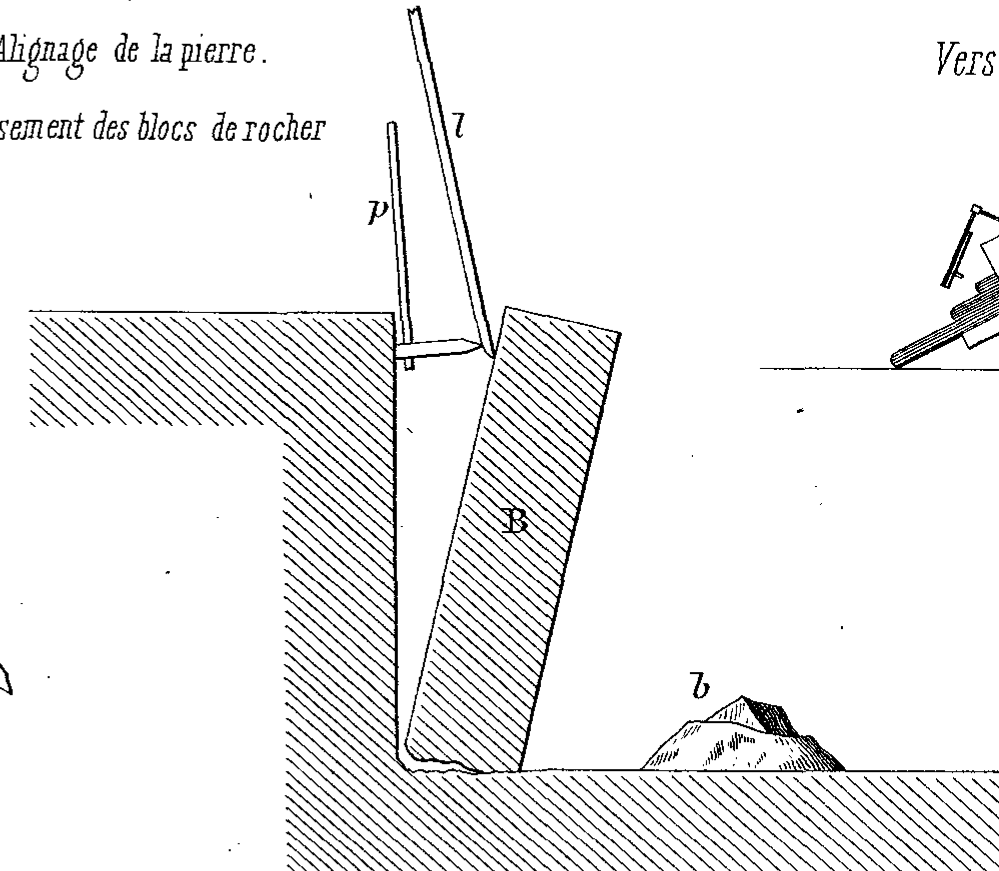


Fig. 9.

Verse de la pierre aux fendeurs.

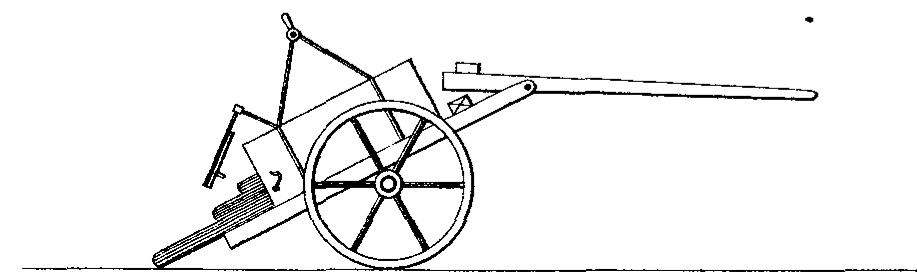


Fig. 14.

Chapus.

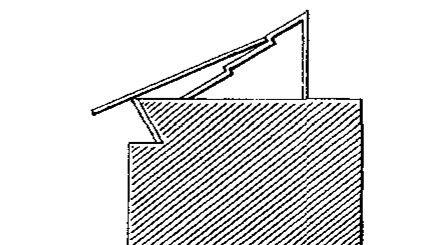


Fig. 8.

Système des billons de rappel.

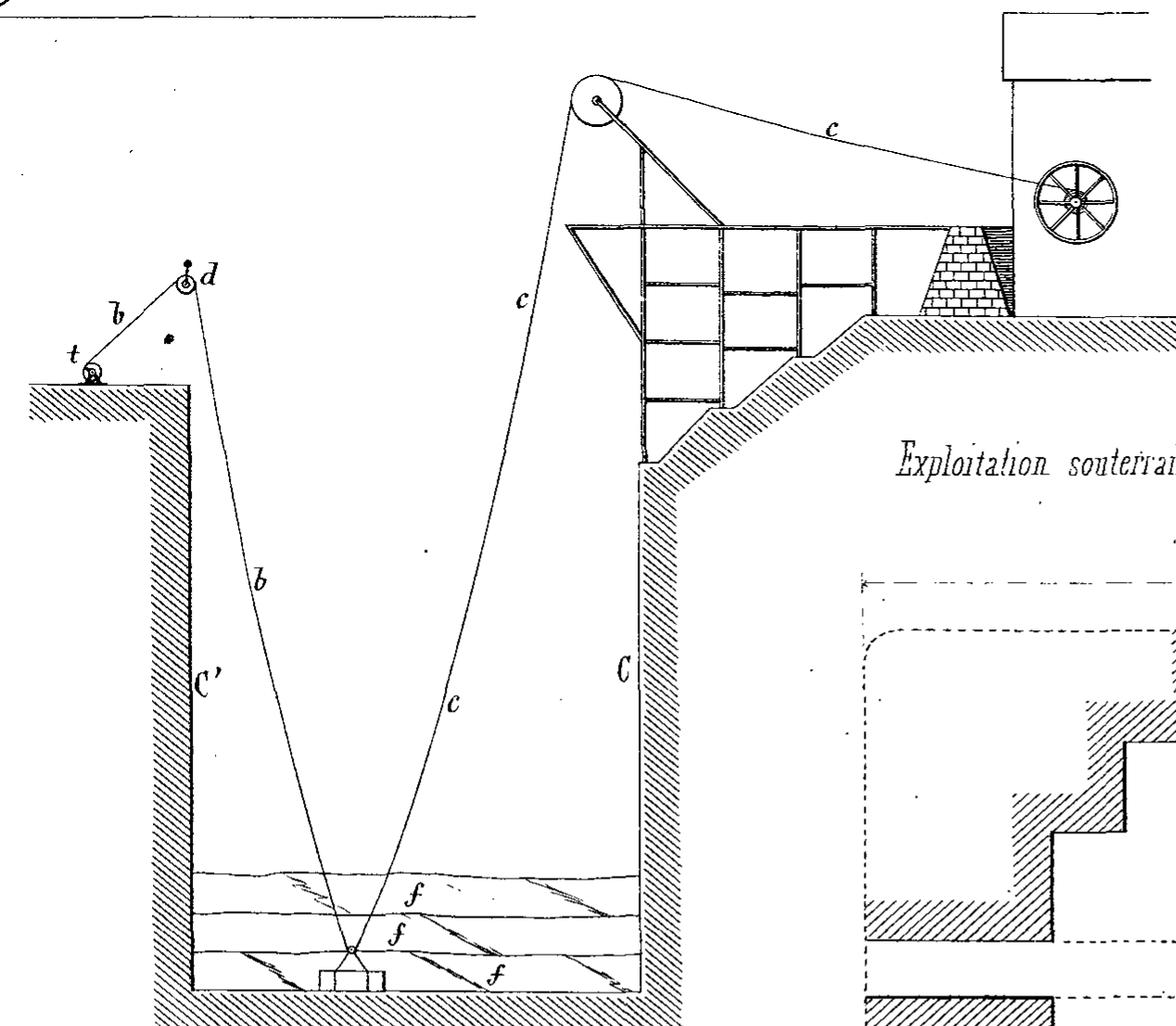


Fig. 15.

Exploitation souterraine. — Confection de la voûte.

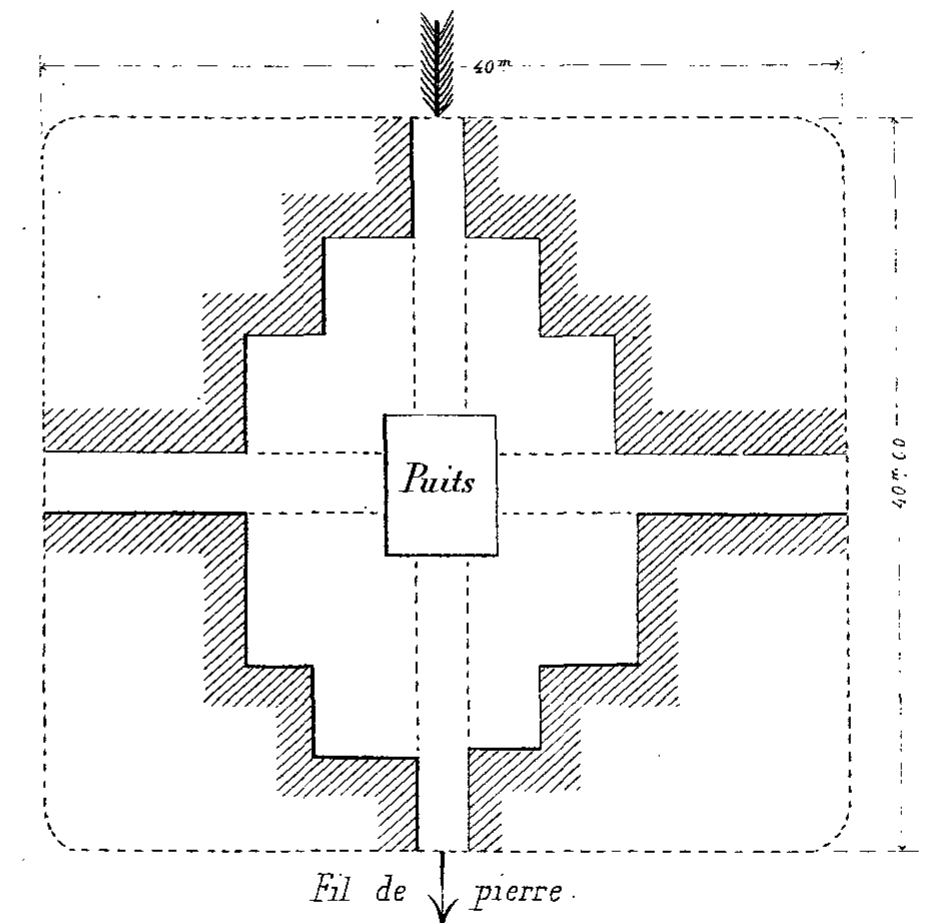


Fig. 3.

Pointe.

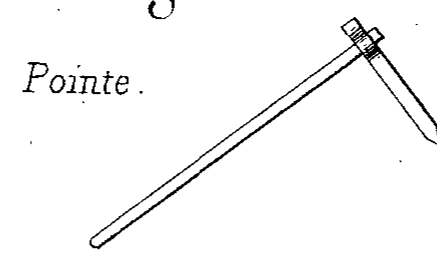


Fig. 5.

Pic moyen.

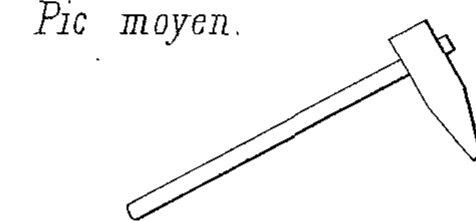


Fig. 10.



Fig. 12.

Giseau de Fendeur.

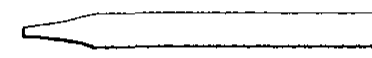


Fig. 13.

Dolleau.

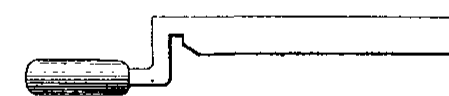


Fig. 11.

Repartage d'un morceau de schiste.

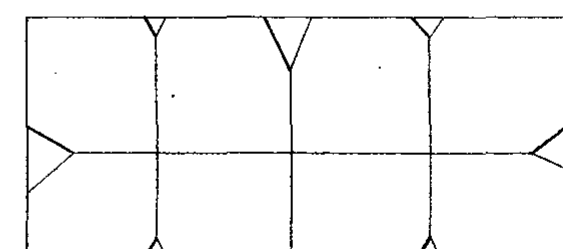
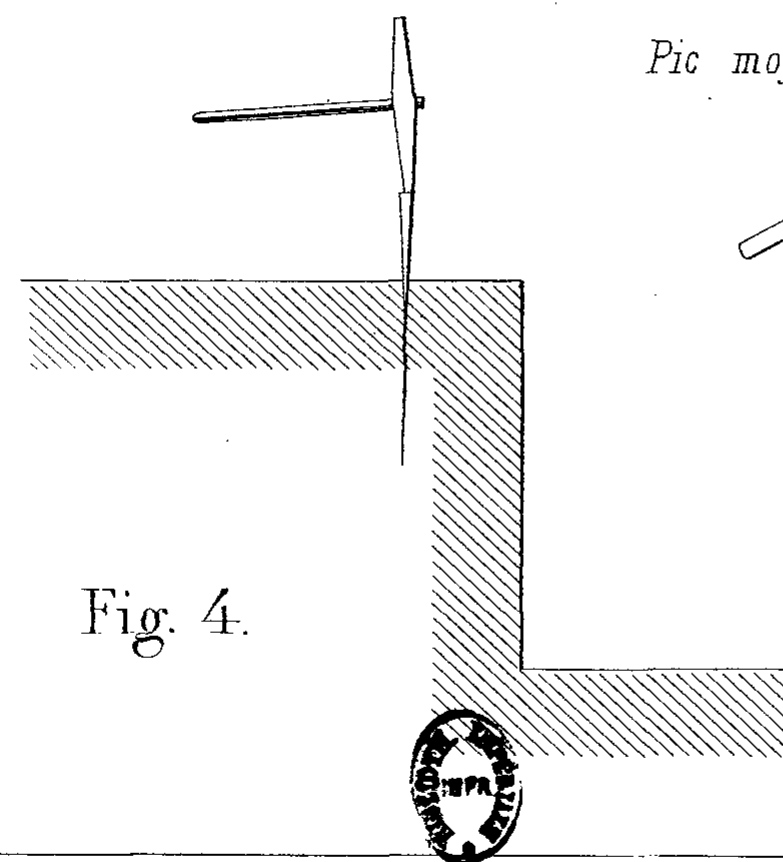
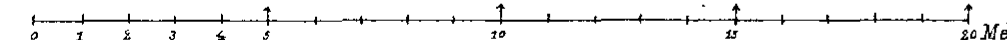


Fig. 4.

Frappage des quilles avec le pic.



Echelle de la fig. 1.













# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1869-07.

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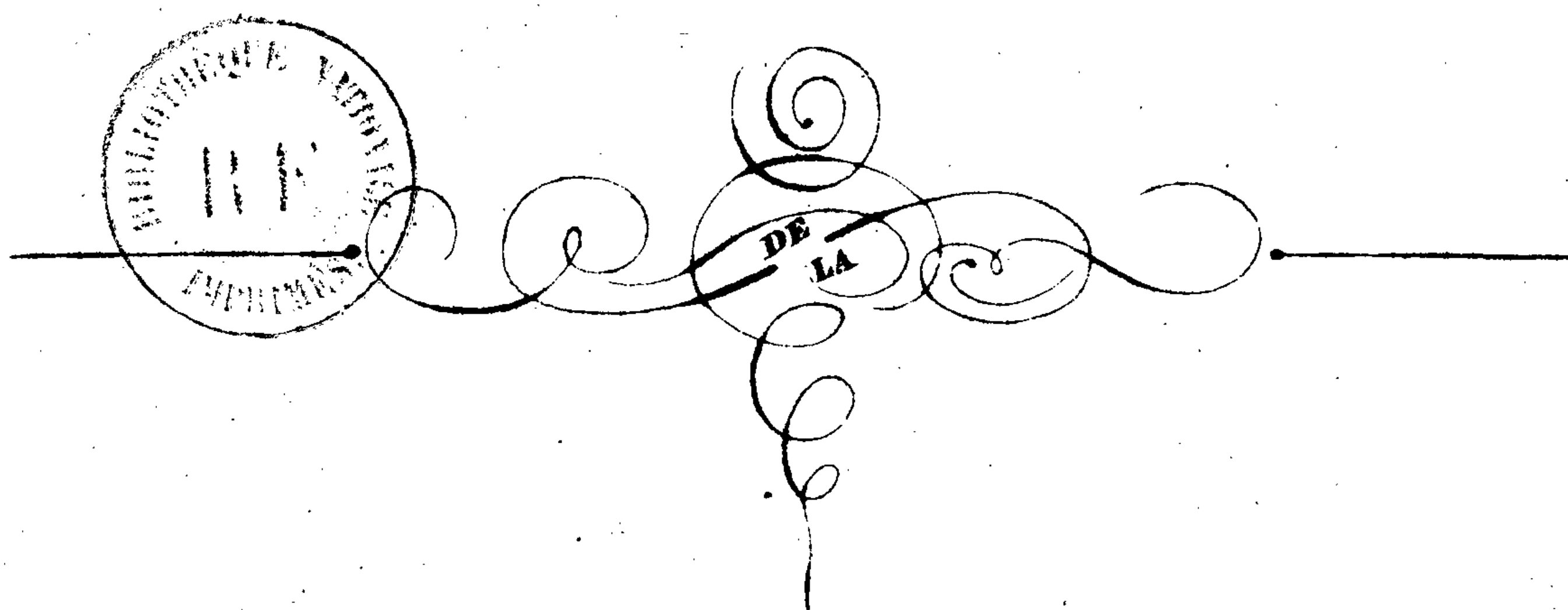




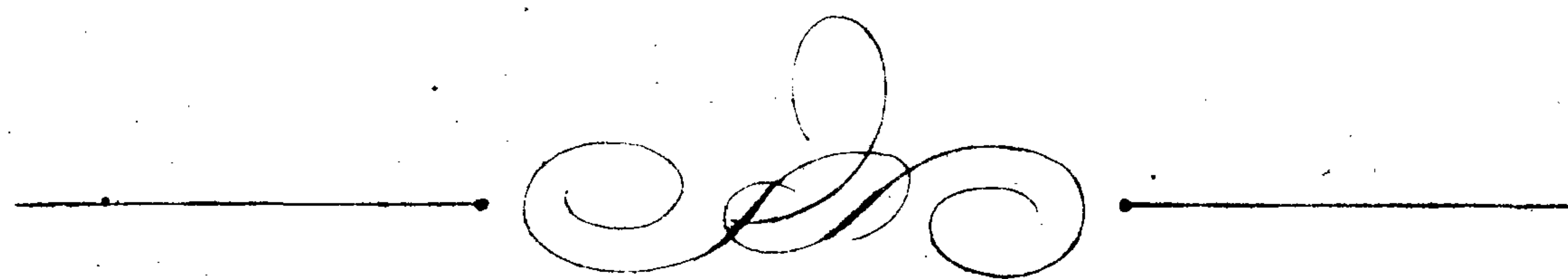


*— Comma la Comma —*

# ATLAS



## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE



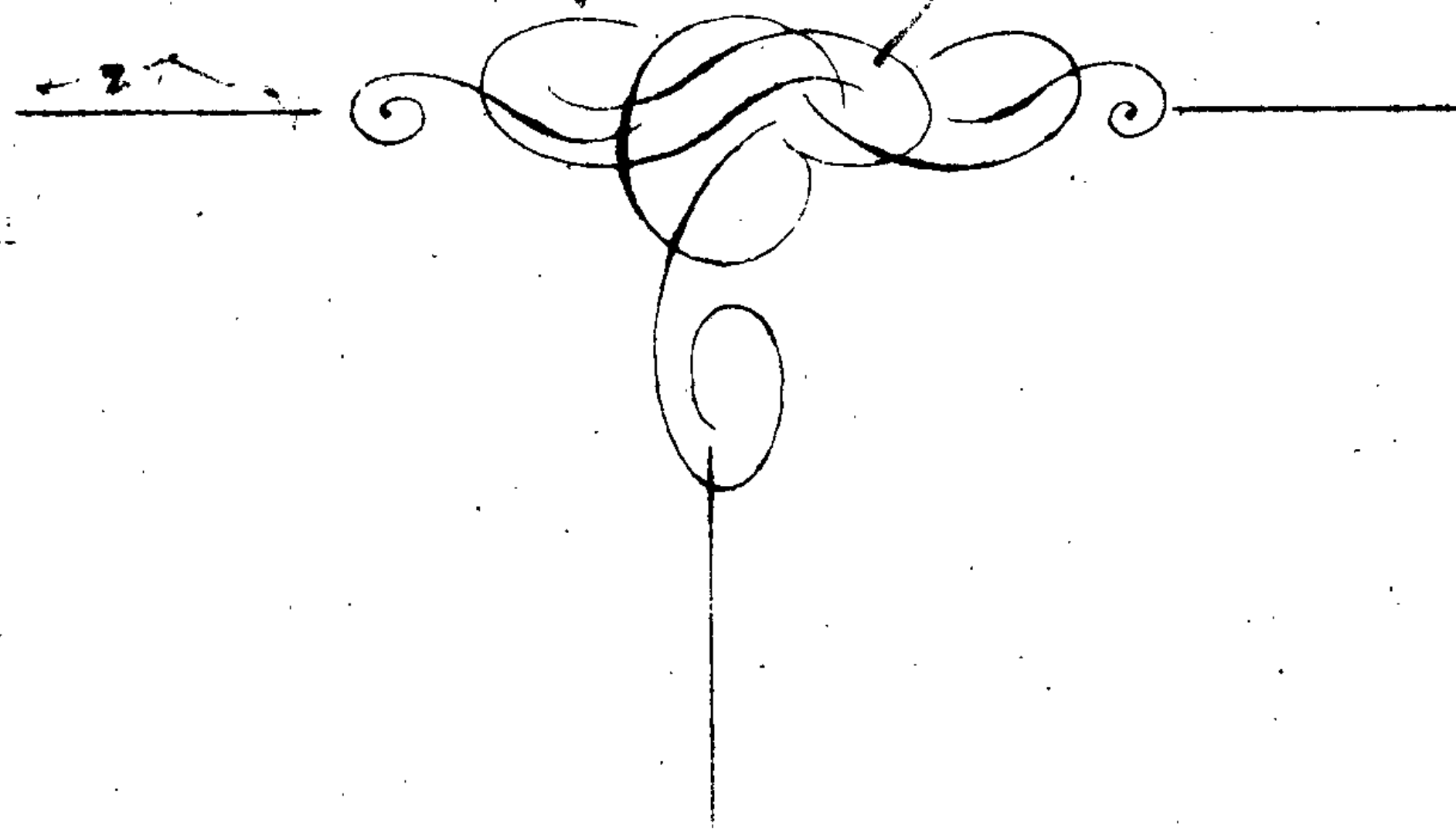
XV<sup>e</sup> ANNÉE.

~~1<sup>re</sup> LIVRAISON.~~

~~Juillet Août Septembre.~~

~~1869.~~

*1870-1871*



PAPETERIE & LITHOGRAPHIE

FREDERIC LANTZ

RUE DE LA LOIRE, 4.

ST ETIENNE (LOIRE)







Convertor Heaton.

Fig 1  
Elevation et Coupe

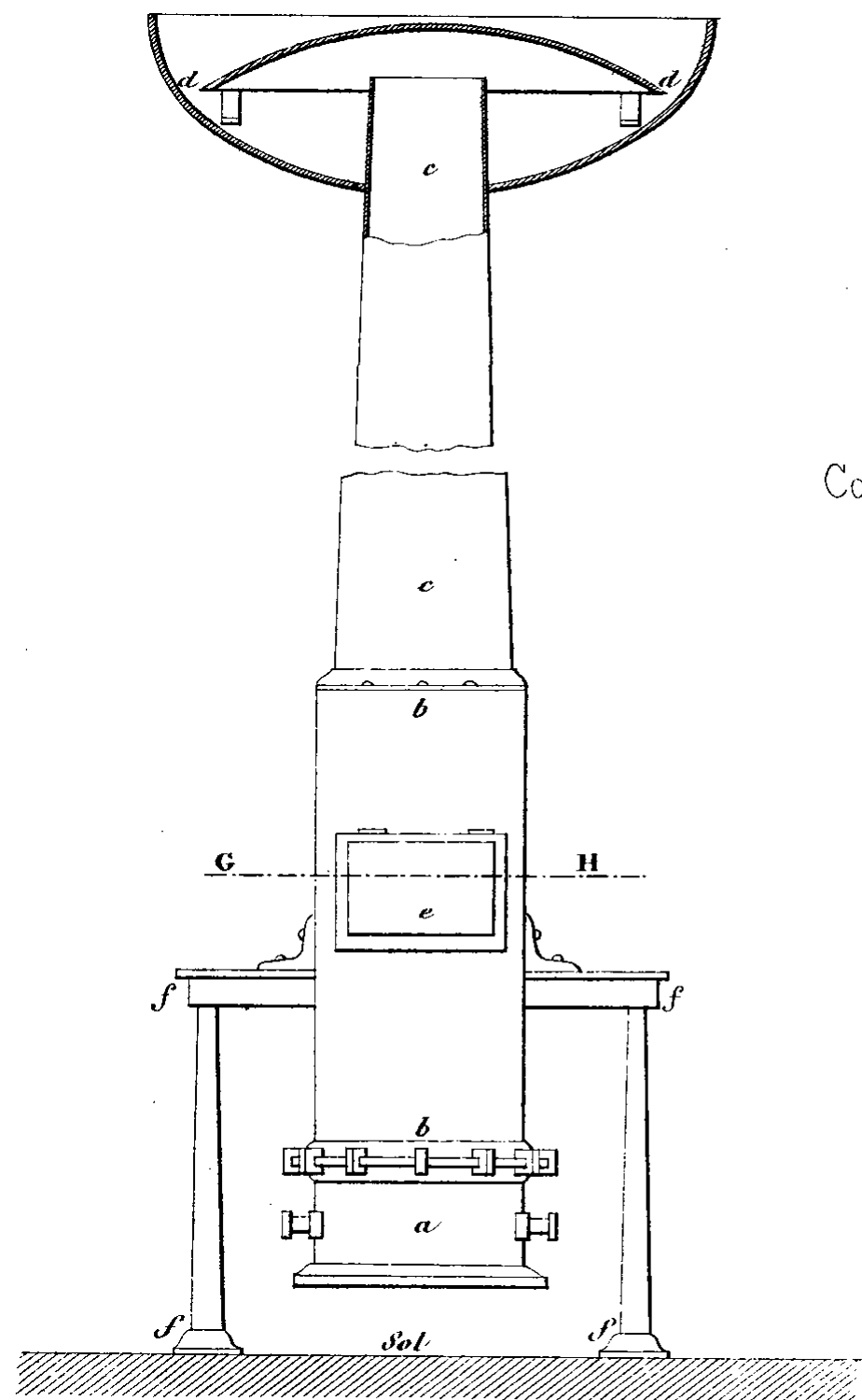


Fig 3  
Coupe horizontale suivant G.H.

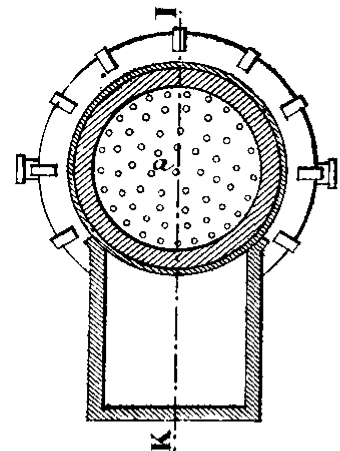


Fig 2  
Coupe verticale suivant I.K.

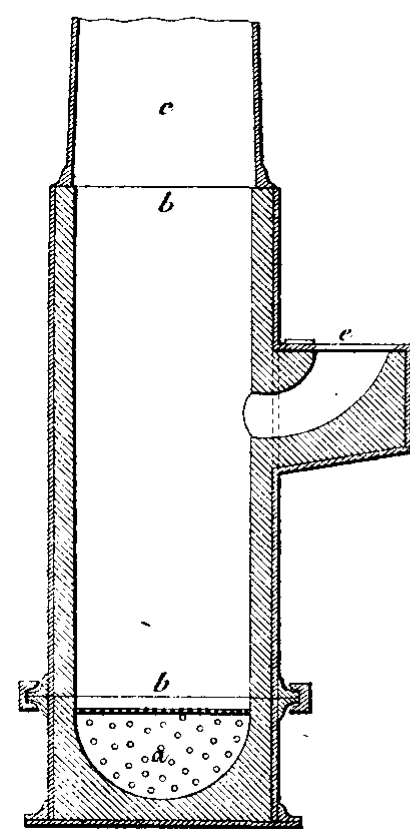


Fig 4  
Elevation du Chariot portant le creuset

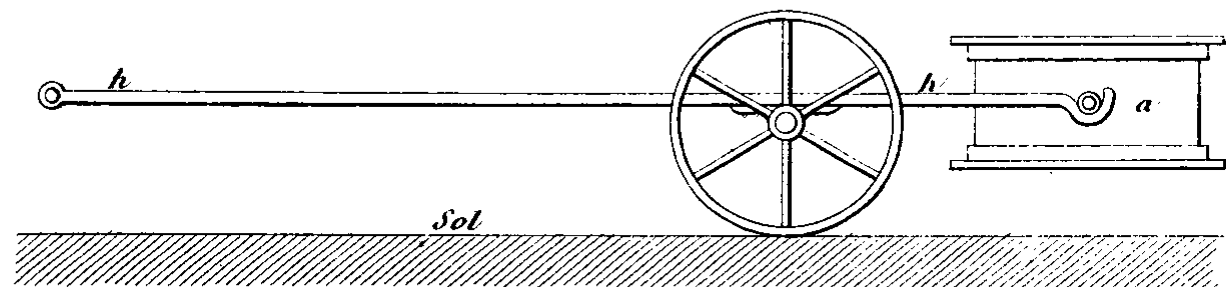
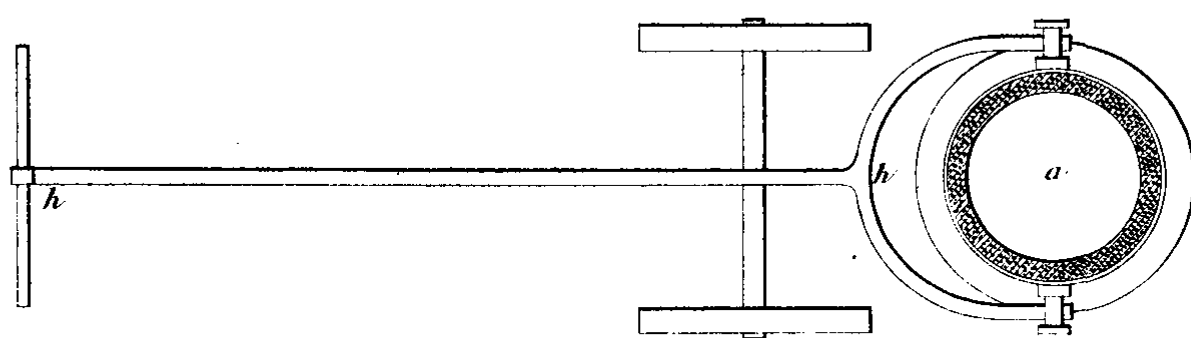


Fig 5  
Plan du Chariot portant le creuset



Générateur Boëtius.

Fig 6  
Coupe suivant E.F.

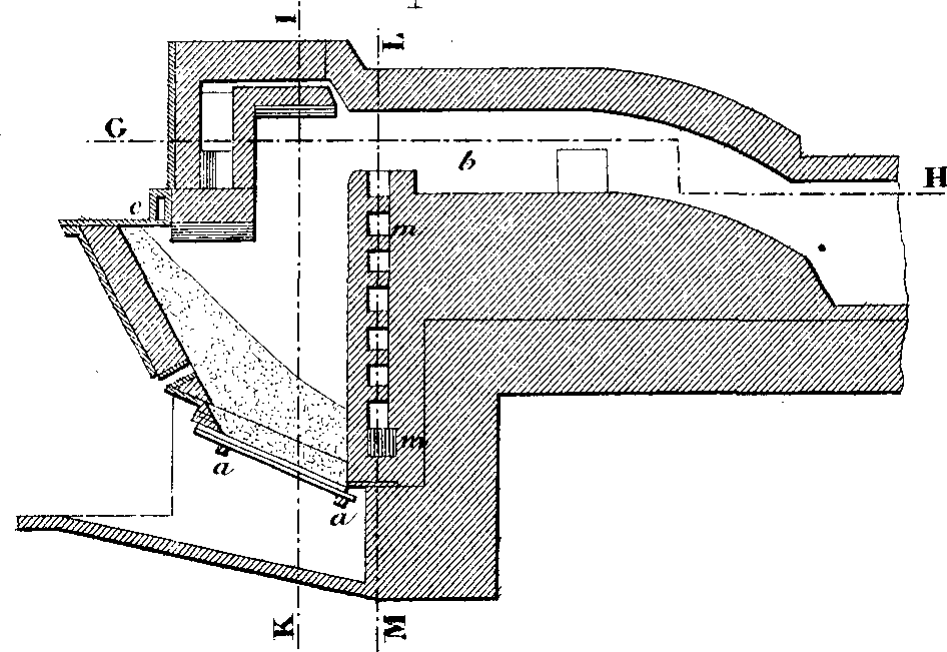


Fig 7  
Coupe horizontale par G.H.

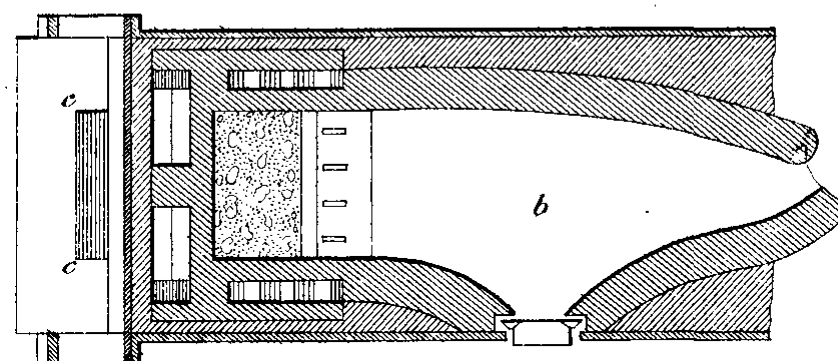


Fig 8  
Coupe sortant I.K.

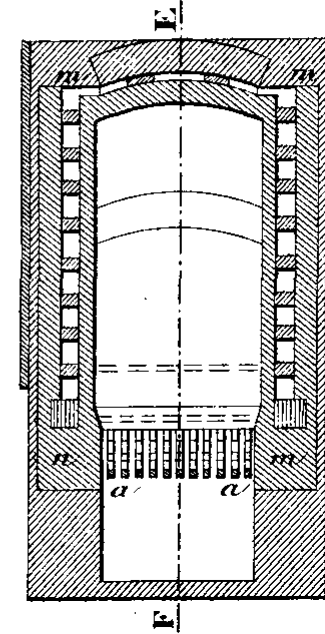
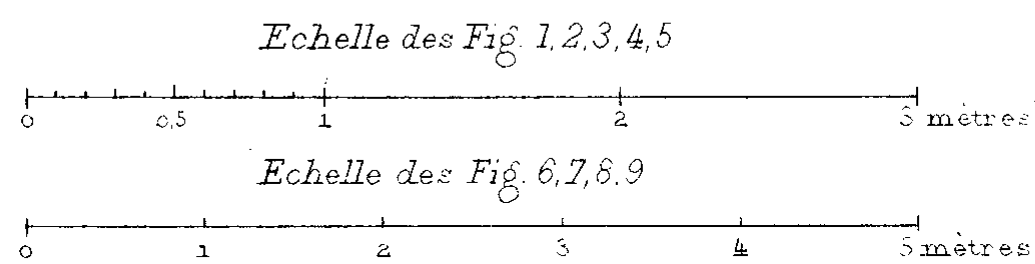
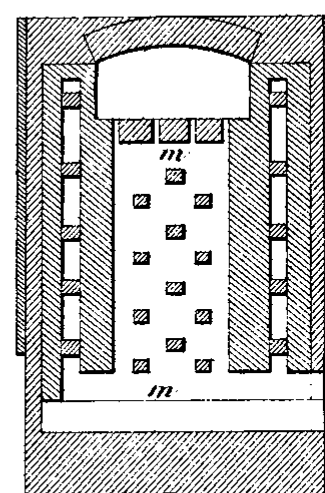


Fig 9  
Coupe suivant L.M.







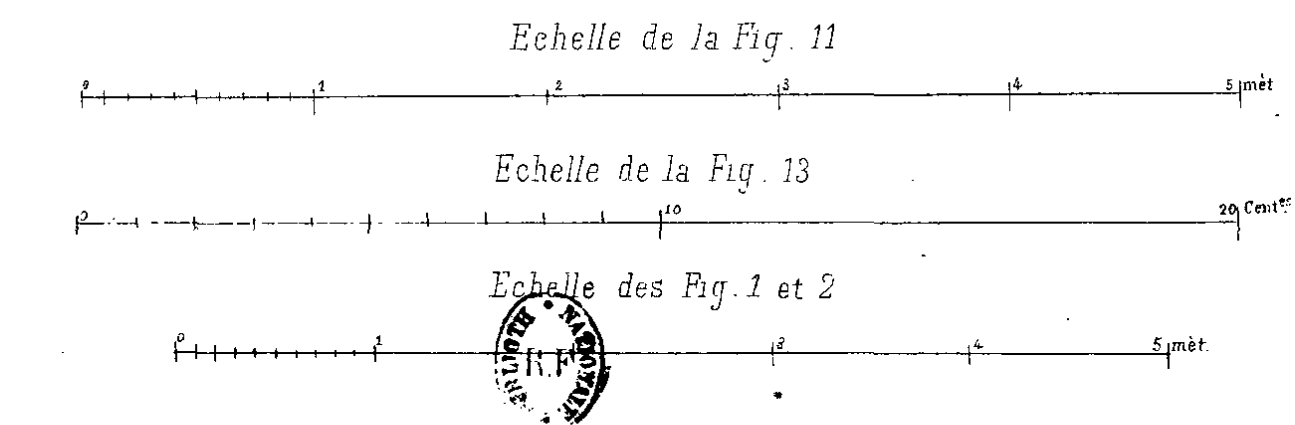
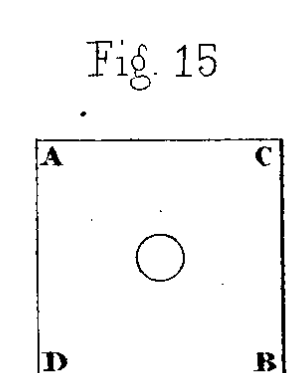
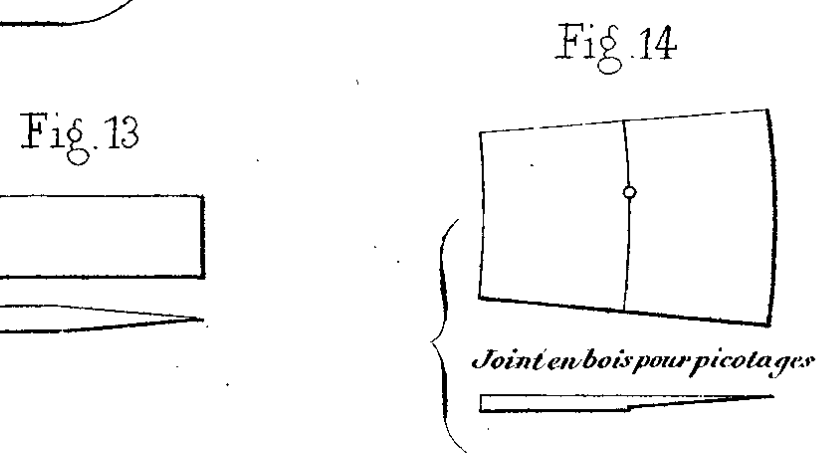
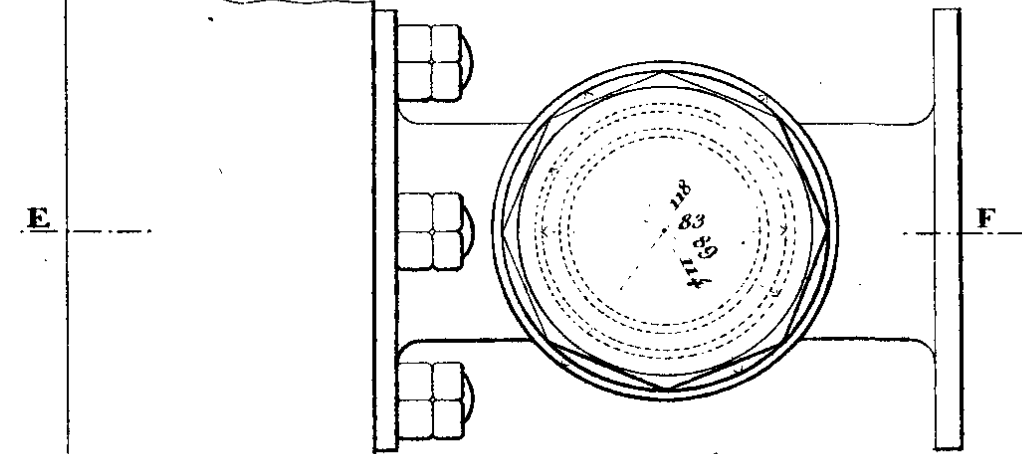
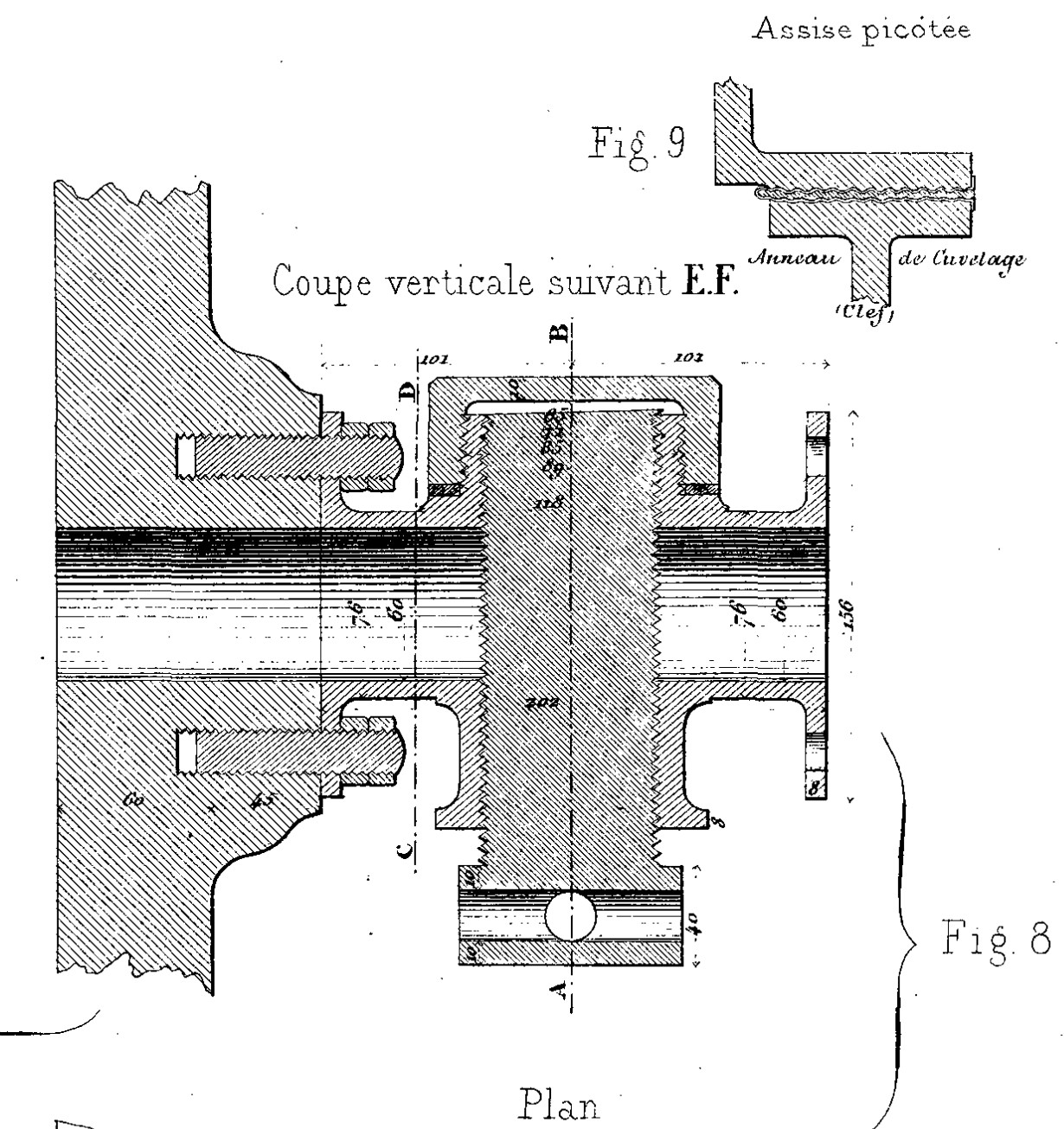
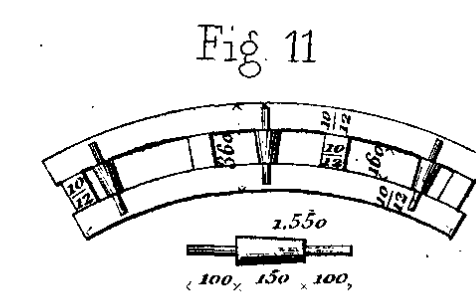
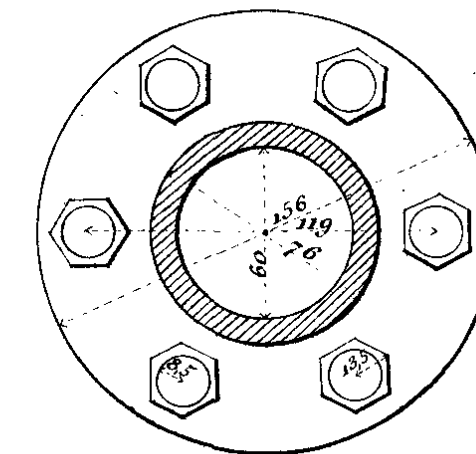
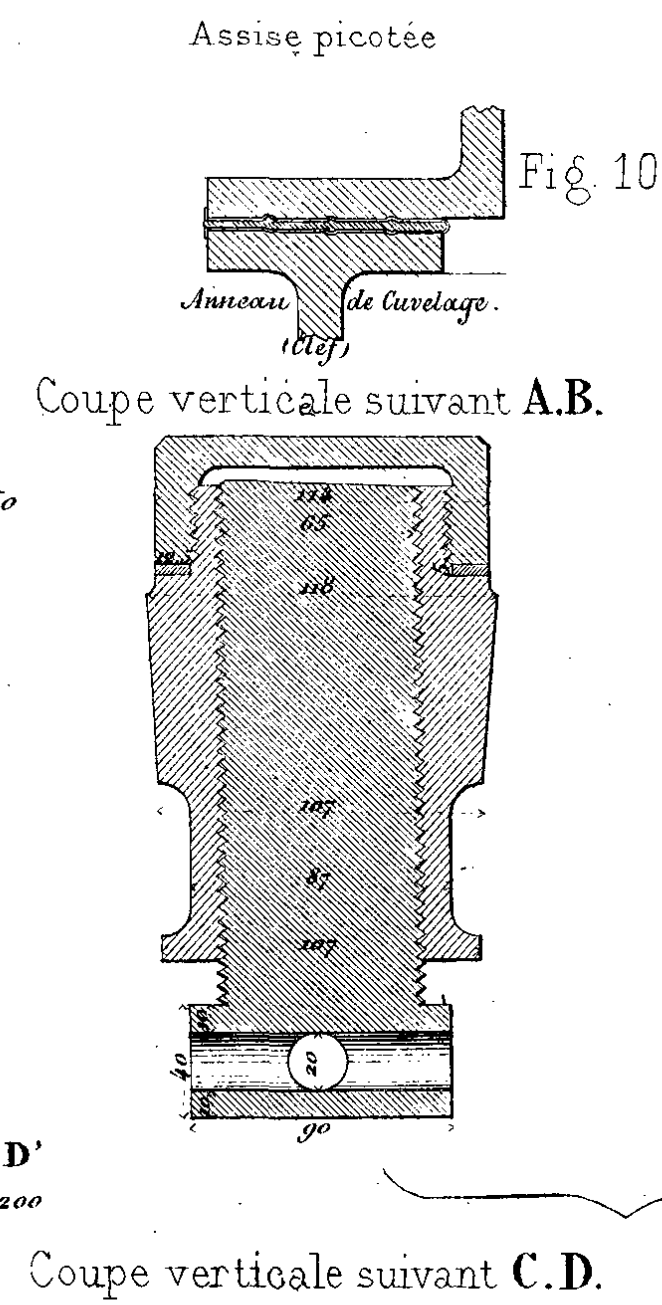
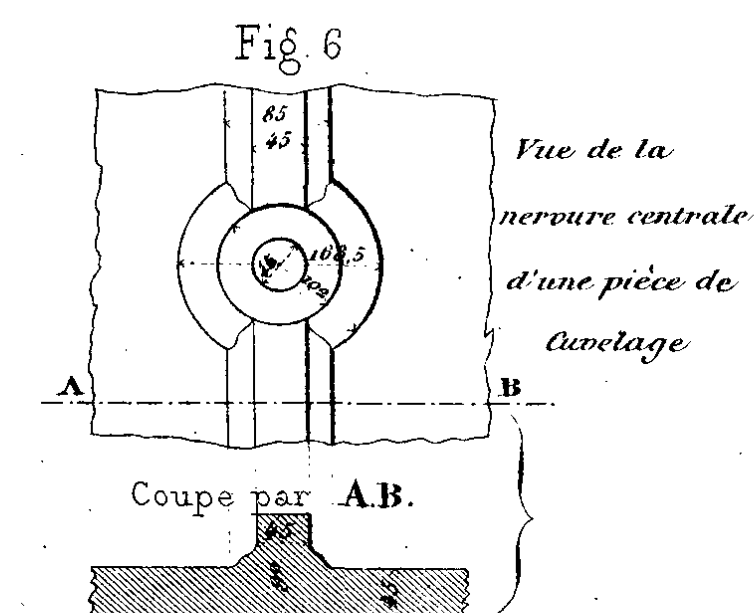
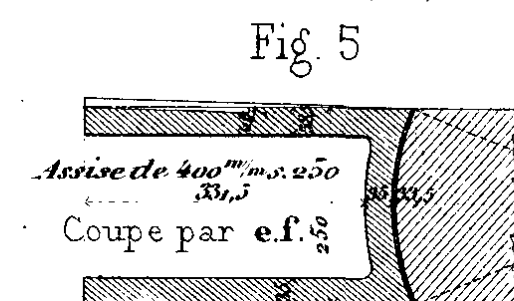
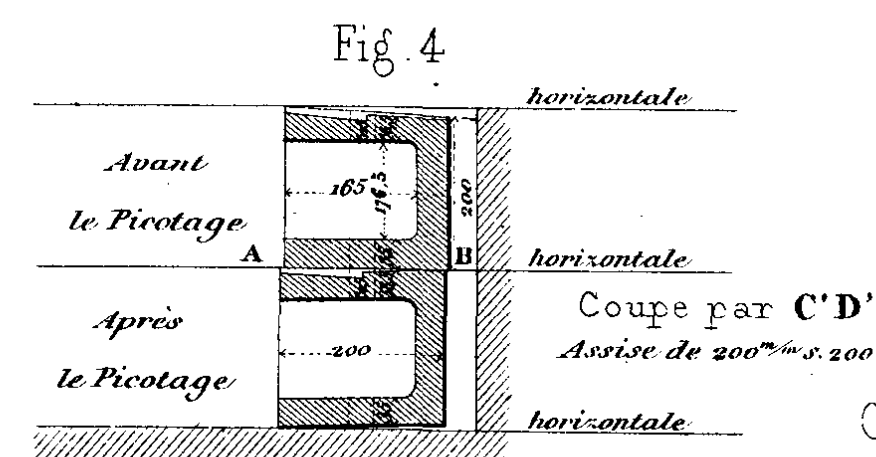
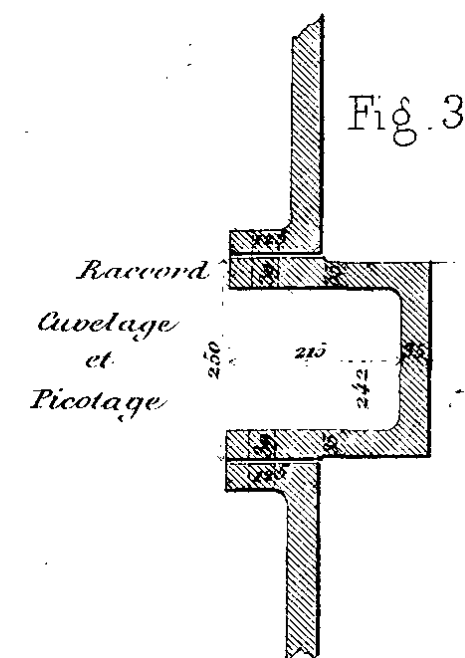
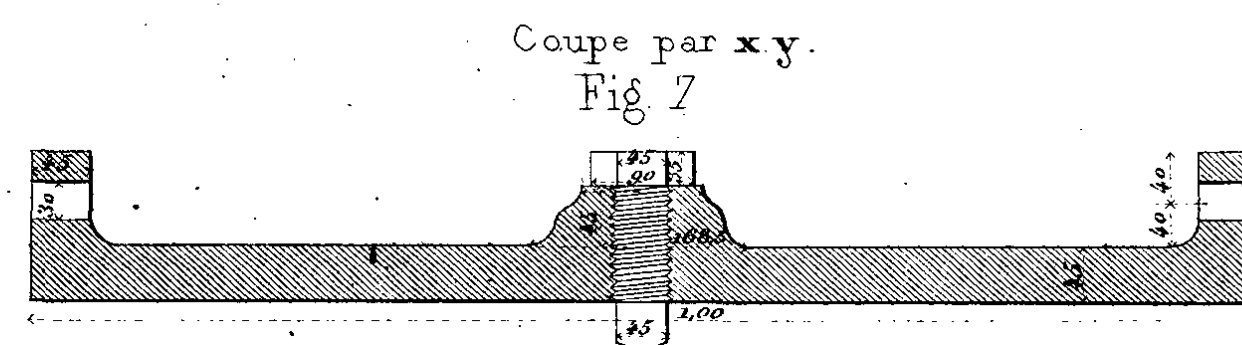
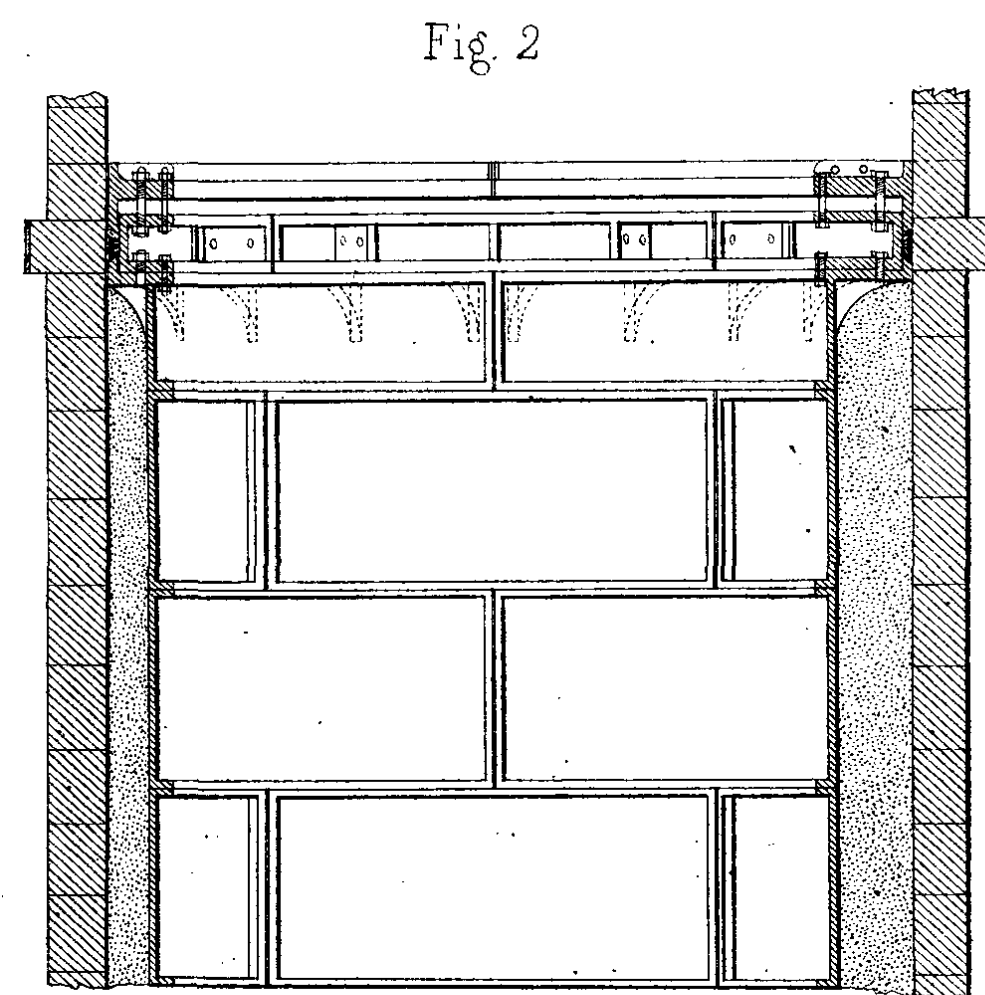
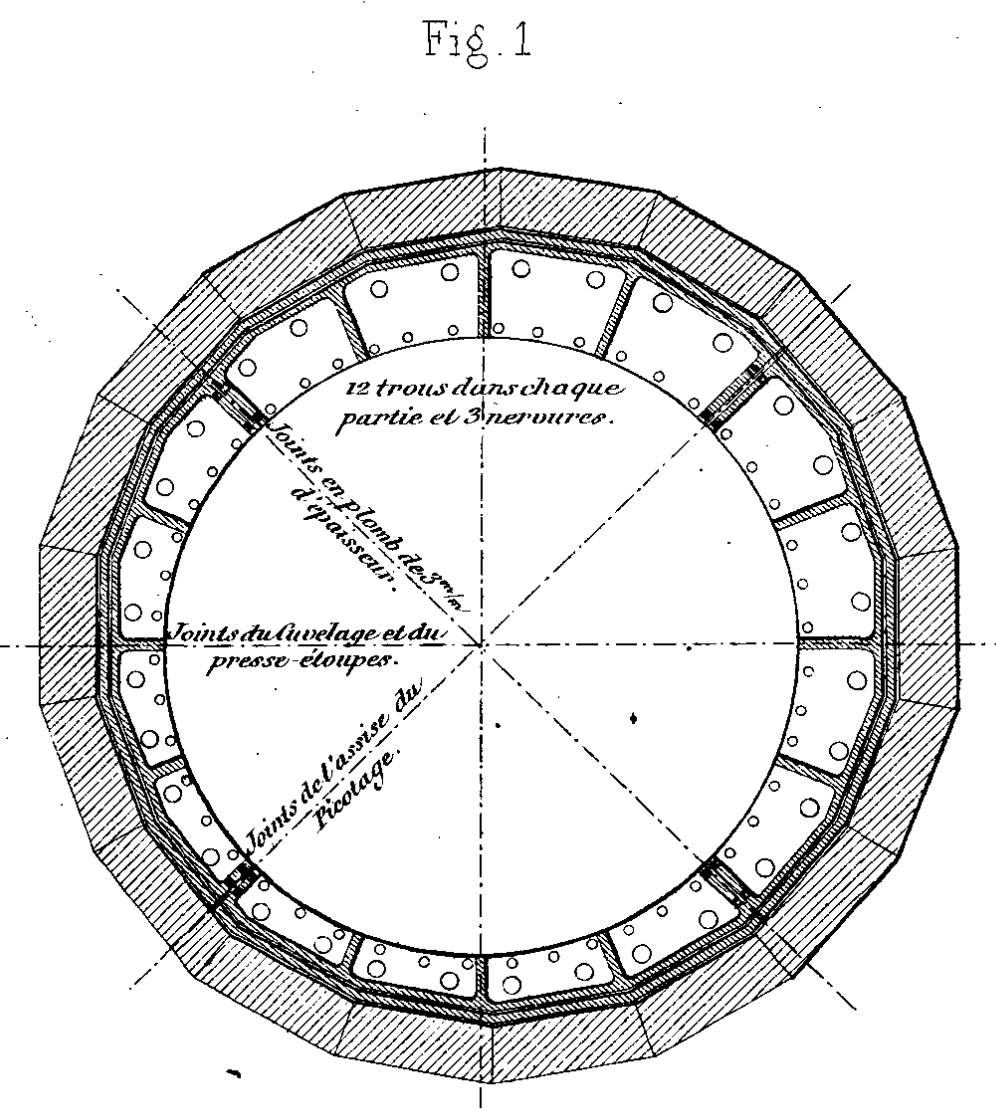


















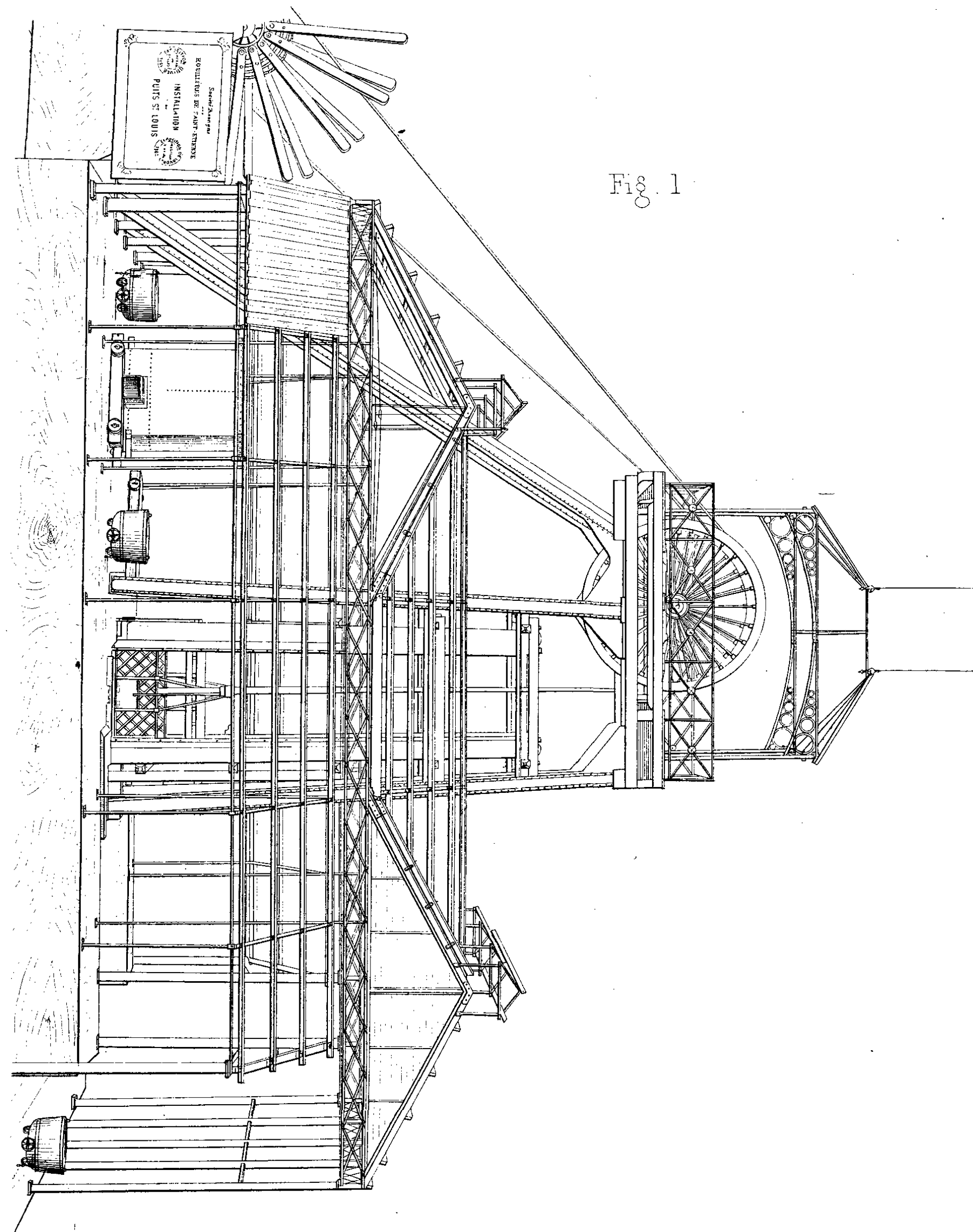


Fig. 1

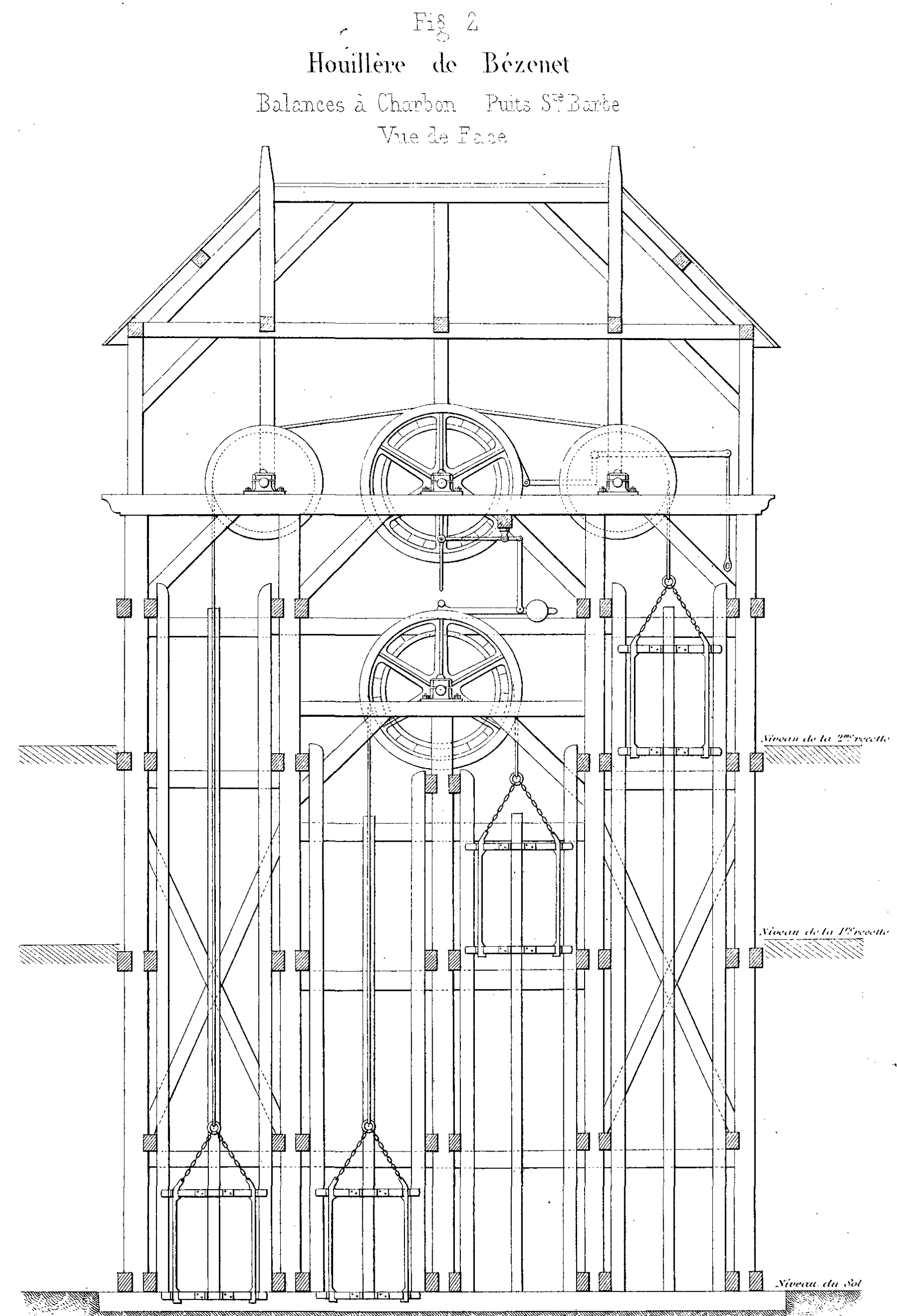


Fig. 2

Houillère de Bézenet

Balances à Charbon Puits St-Barthe

Vue de Face

Echelle de la Fig. 2

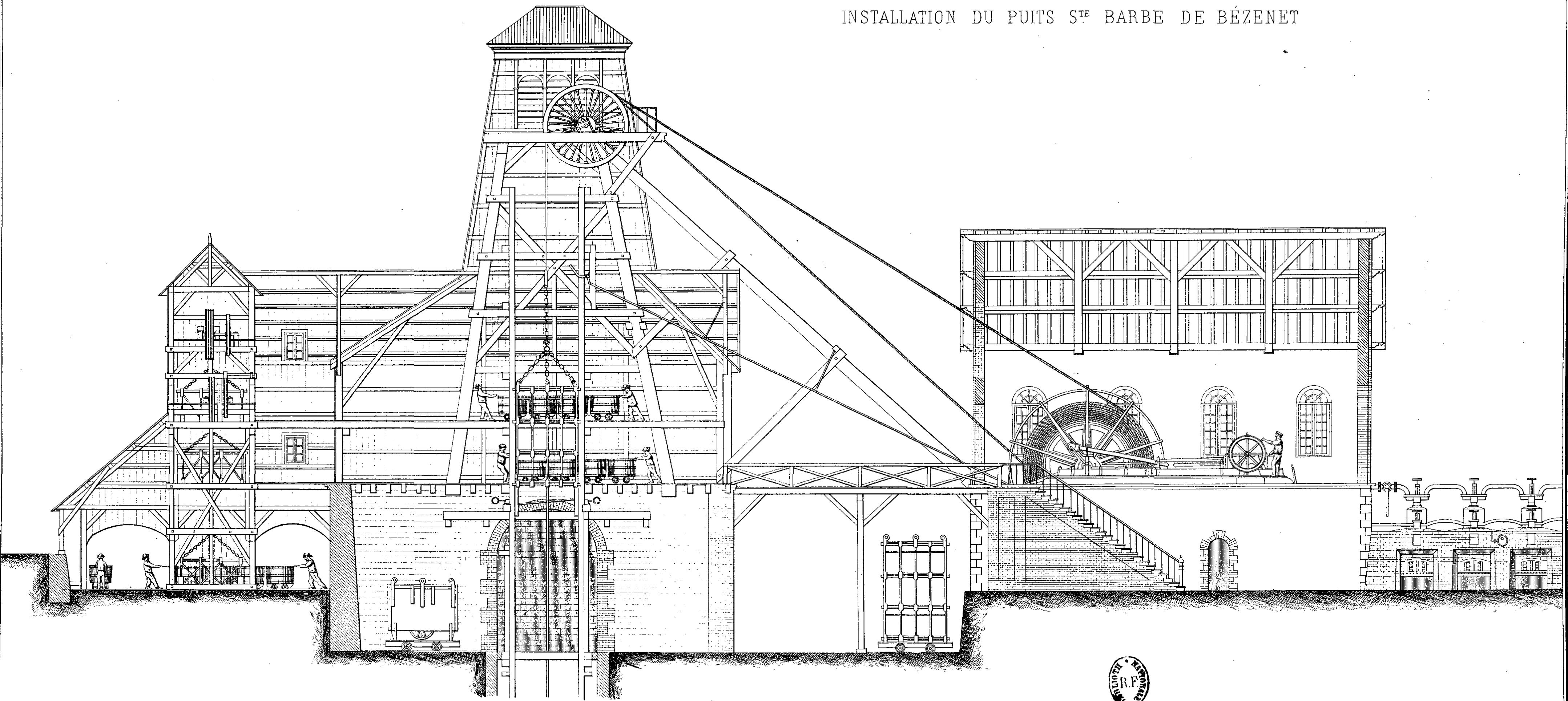




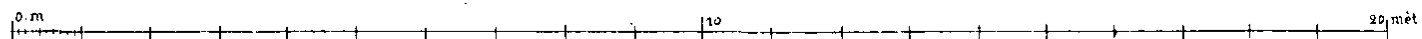




INSTALLATION DU PUIT S<sup>T</sup> BARBE DE BÉZENET



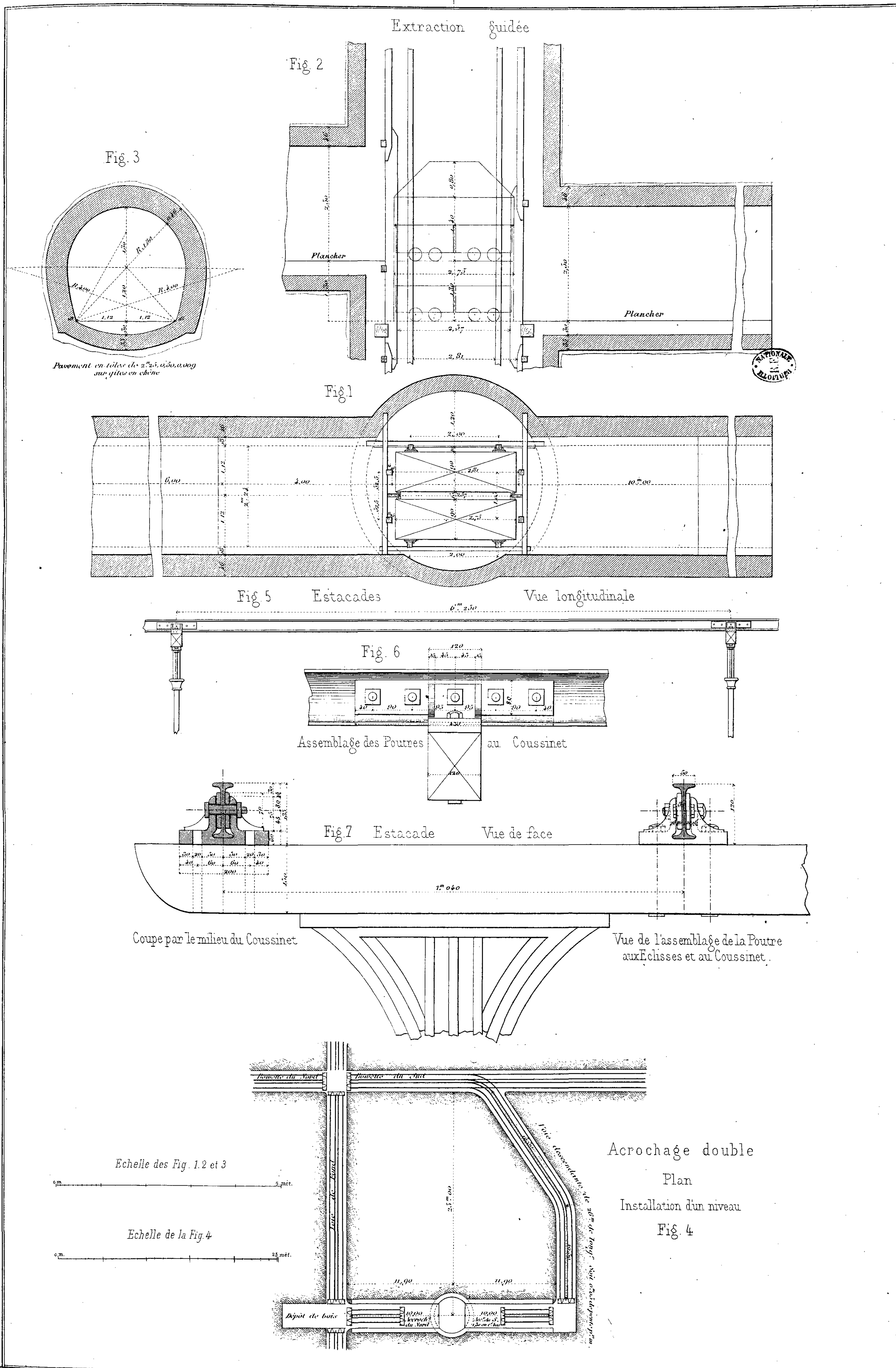
Echelle







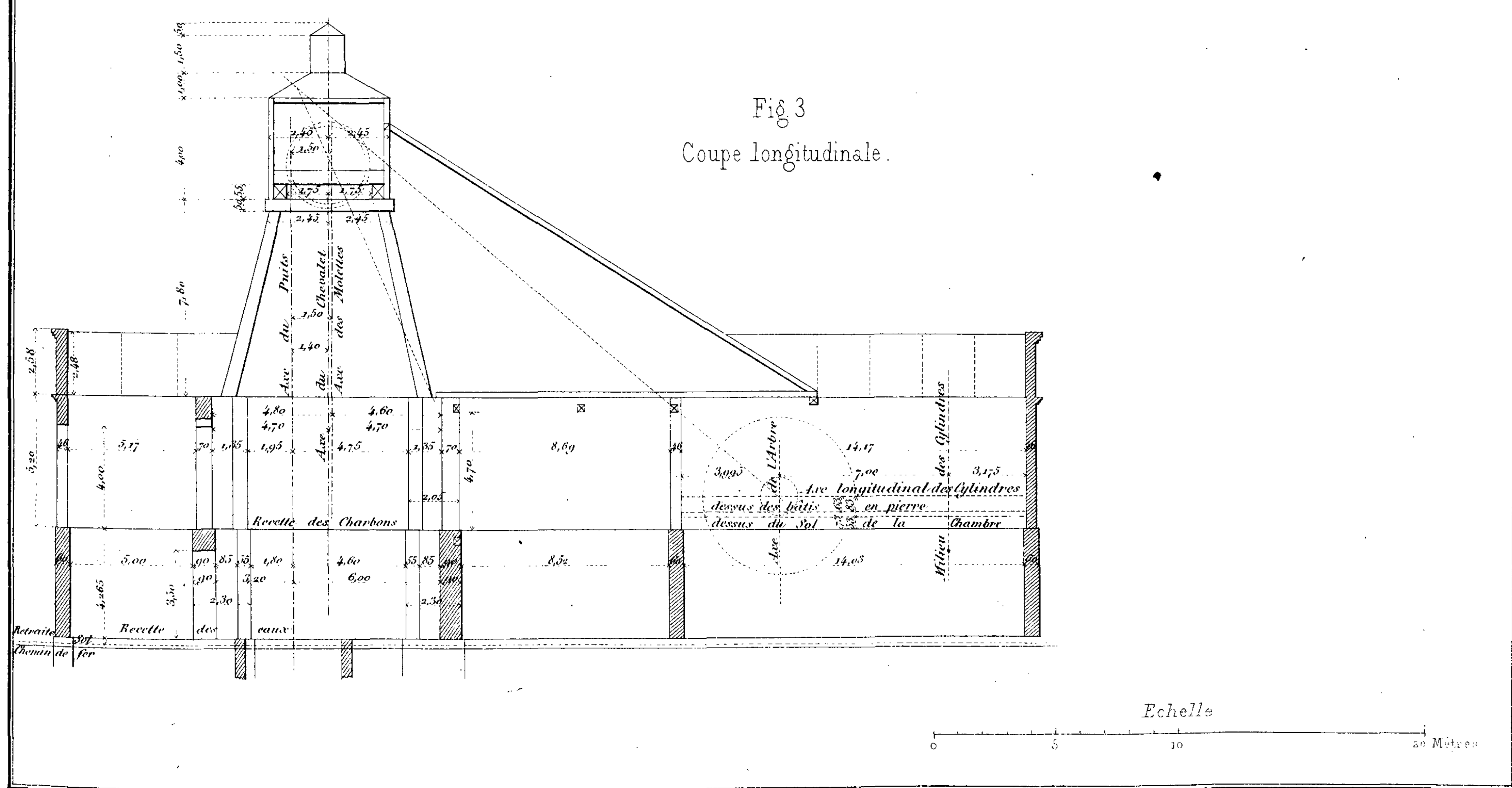
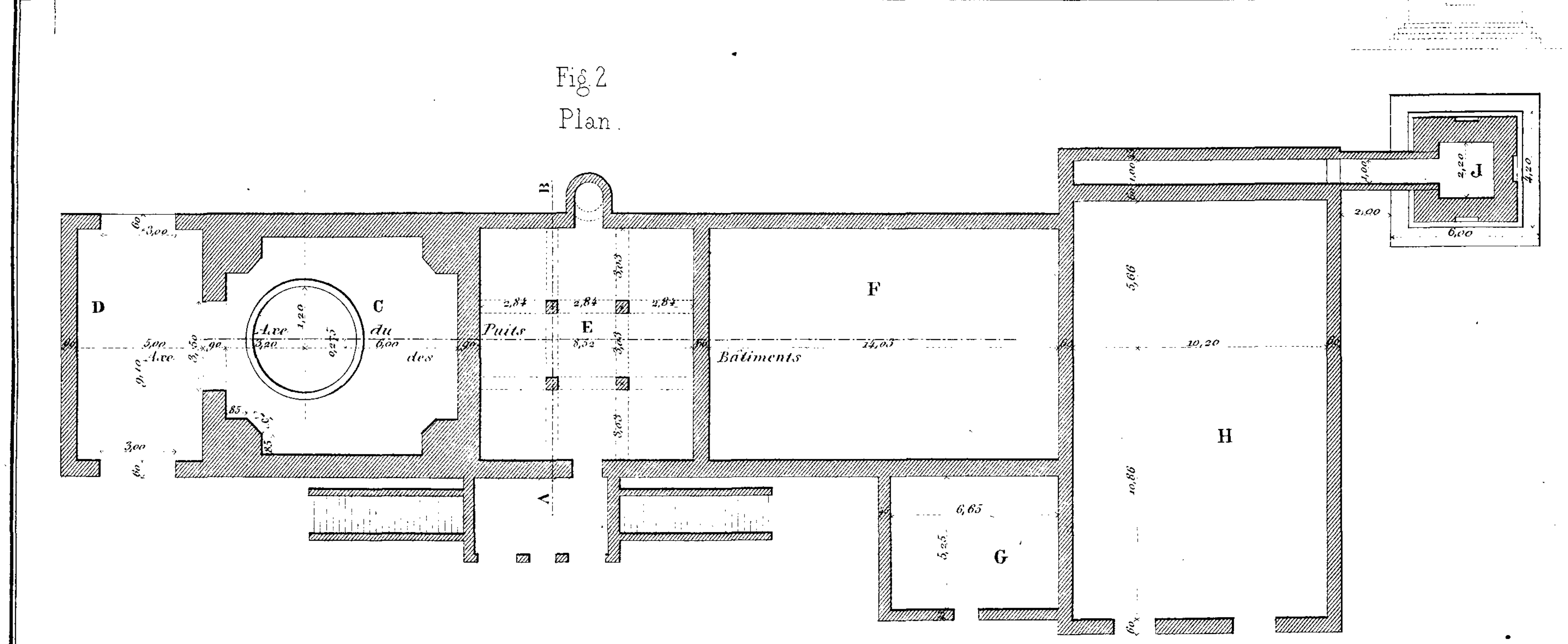
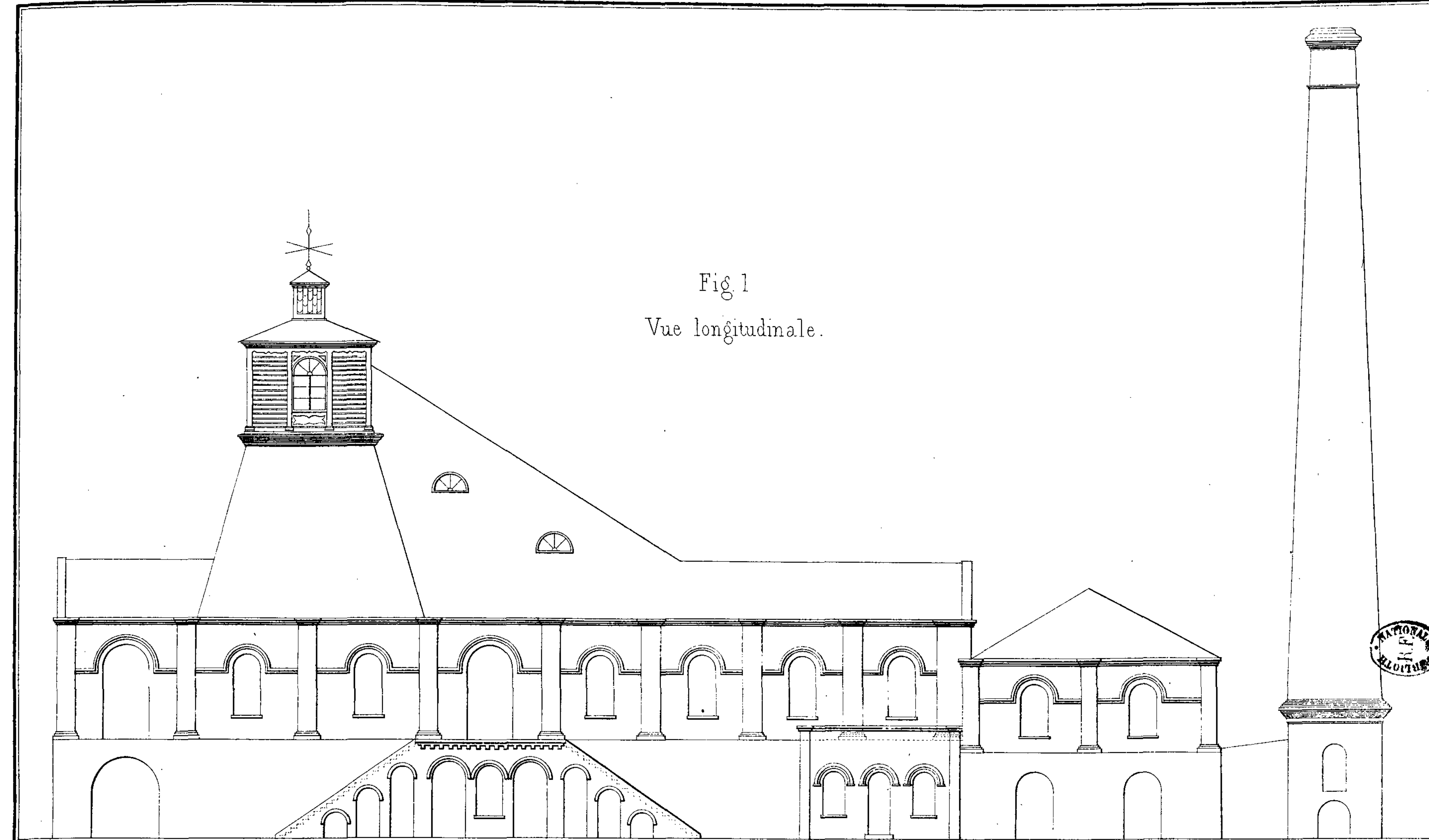


















Chevalet et Charpente de Croupe

Fig. 1

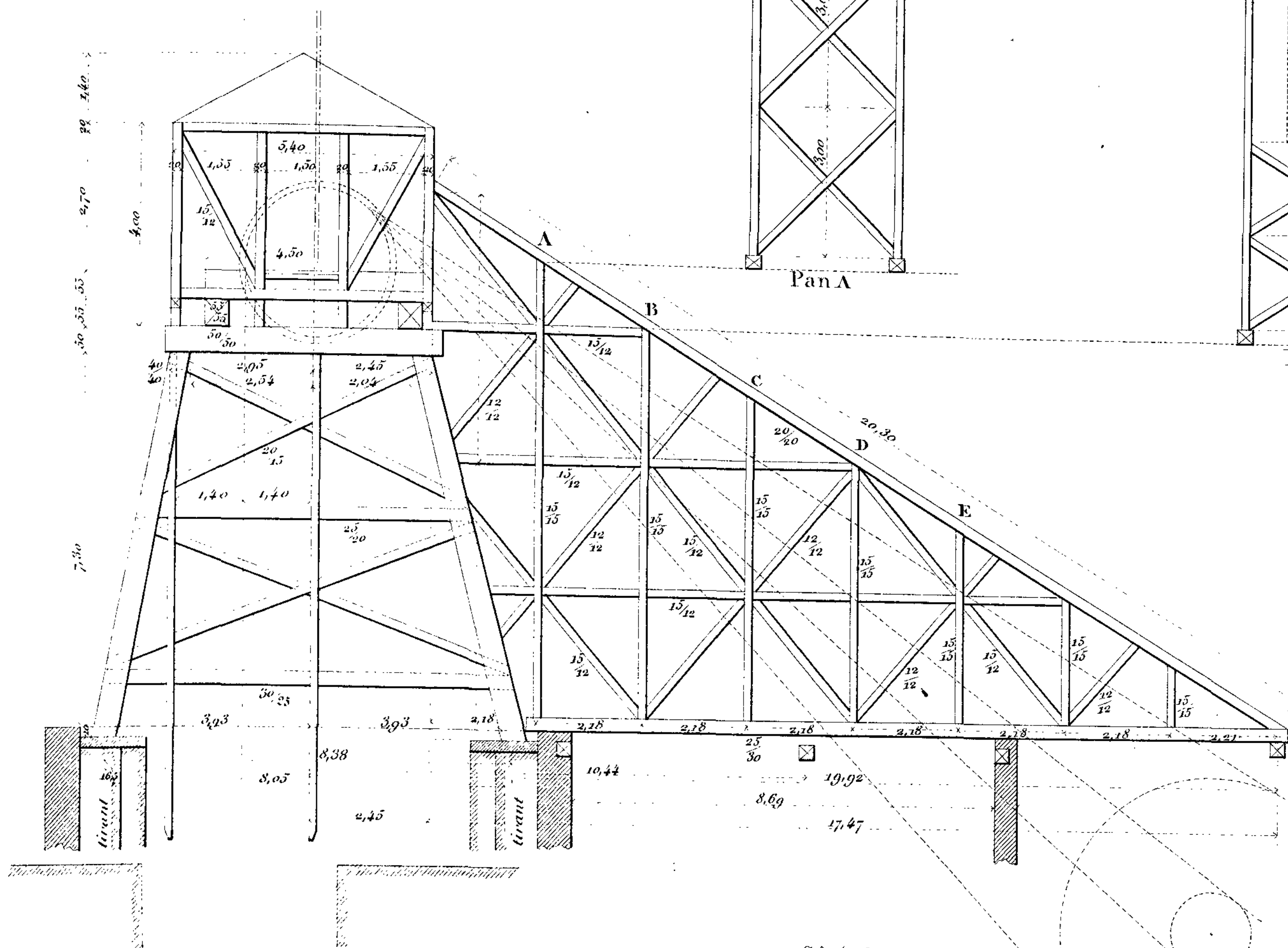
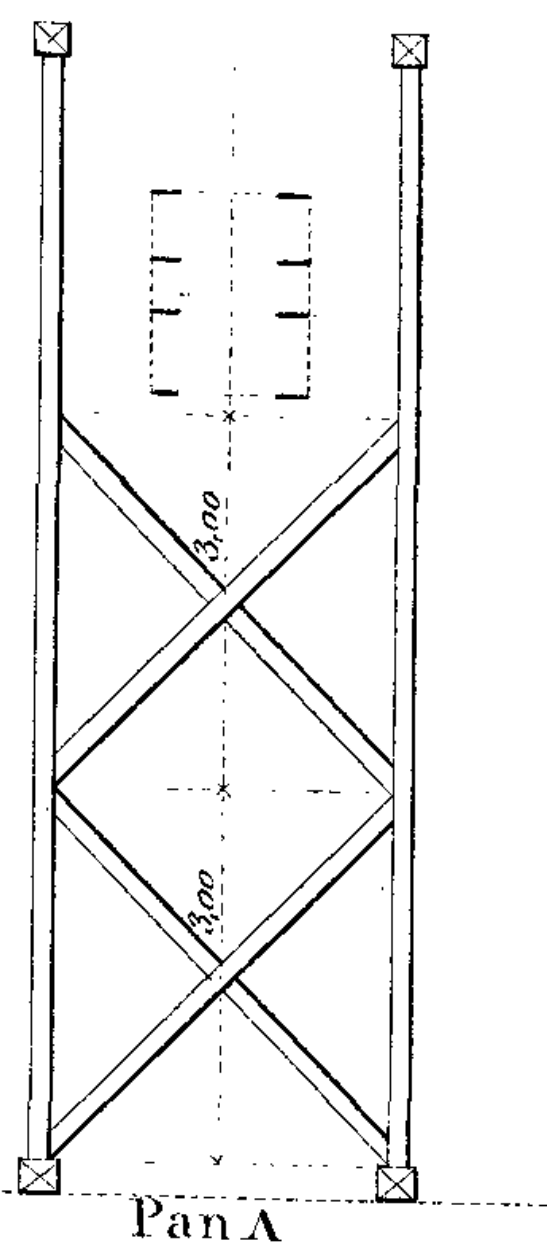
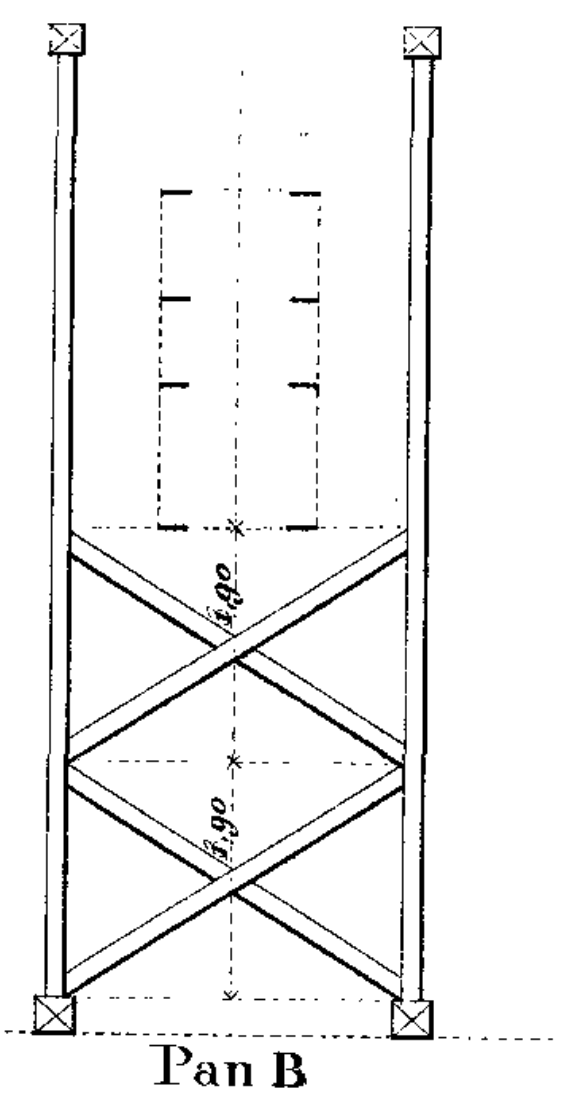


Fig. 2



Pan A

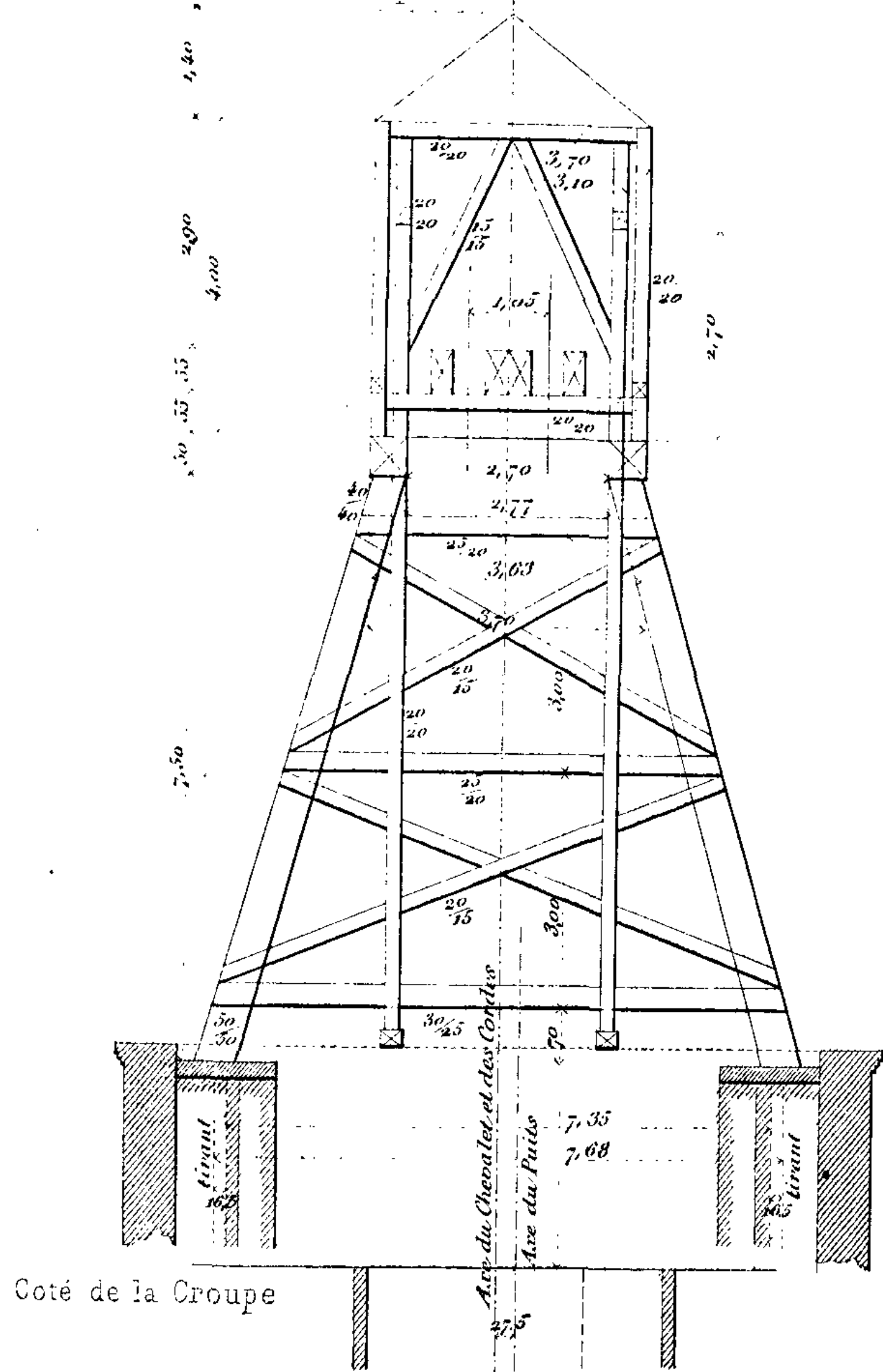
Fig. 3



Pan B

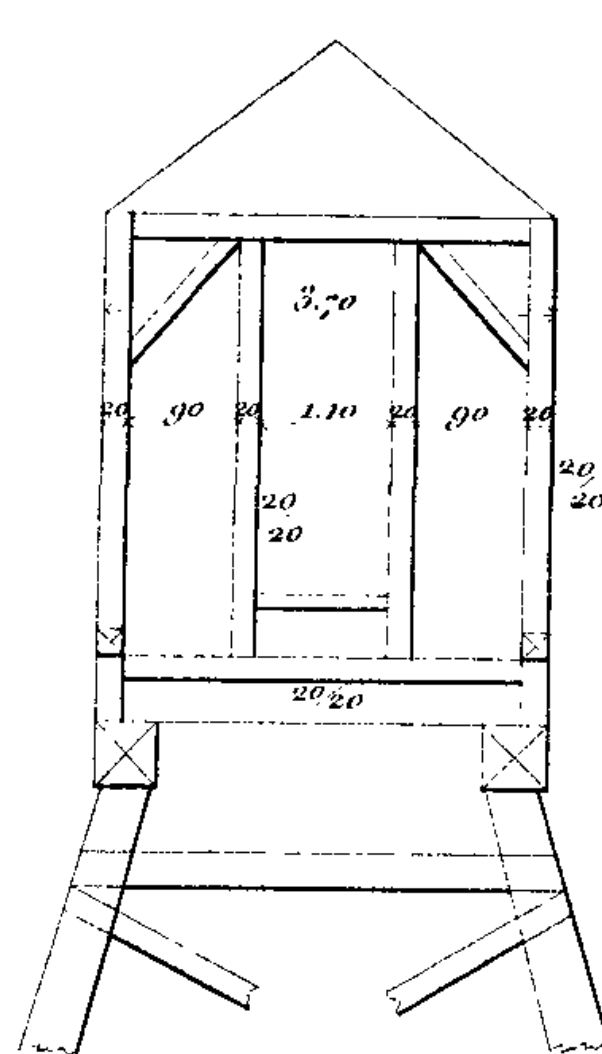
Fig. 4

Côté de la Croupe



Côté du devant

Fig. 5



Coupe d'une travée.

Fig. 7

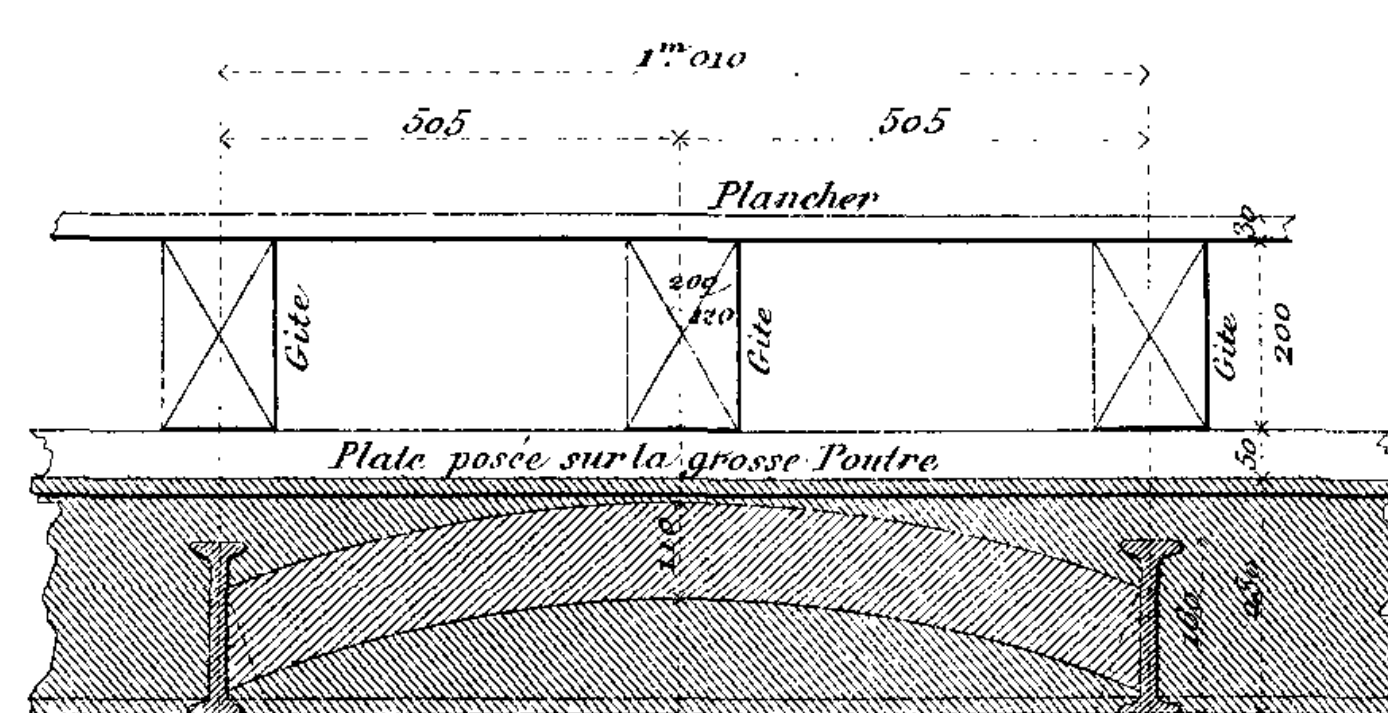
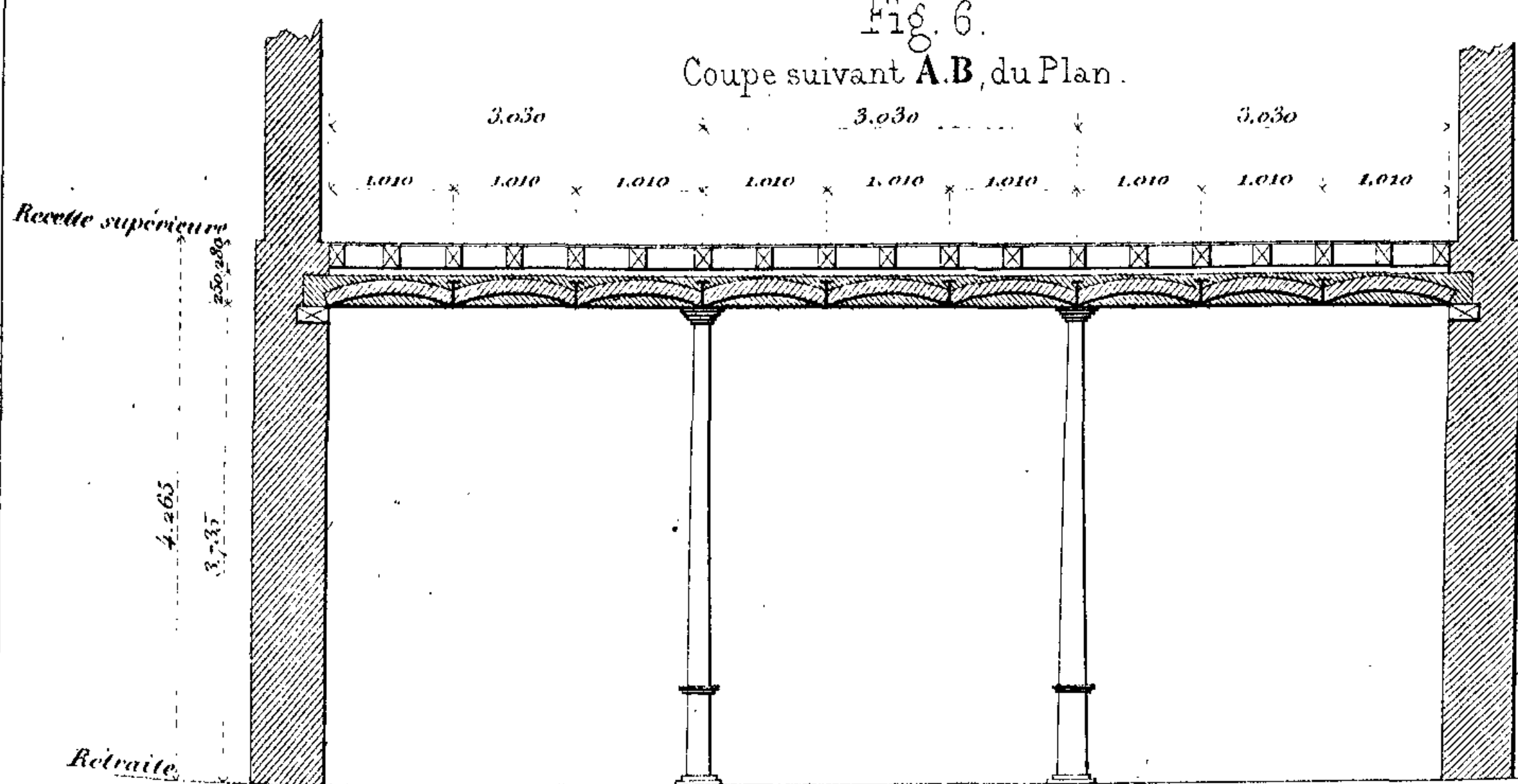
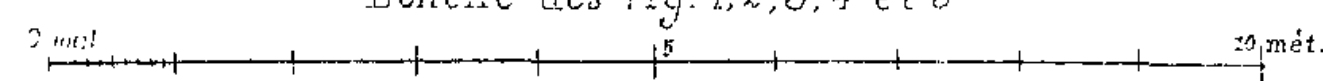


Fig. 6

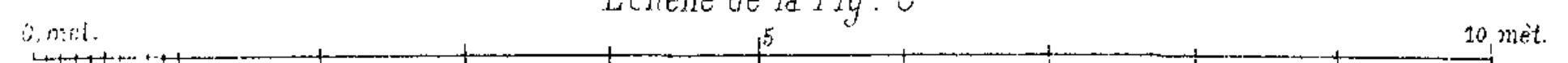
Coupe suivant A.B. du Plan.



Echelle des Fig. 1, 2, 3, 4 et 5



Echelle de la Fig. 6



Echelle de la Fig. 7

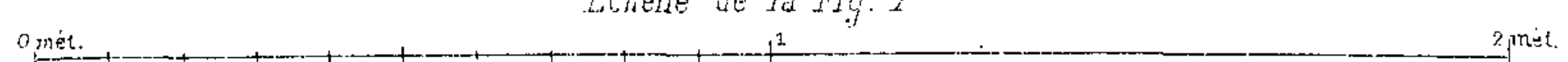








Fig. 5  
Parachute ouvert

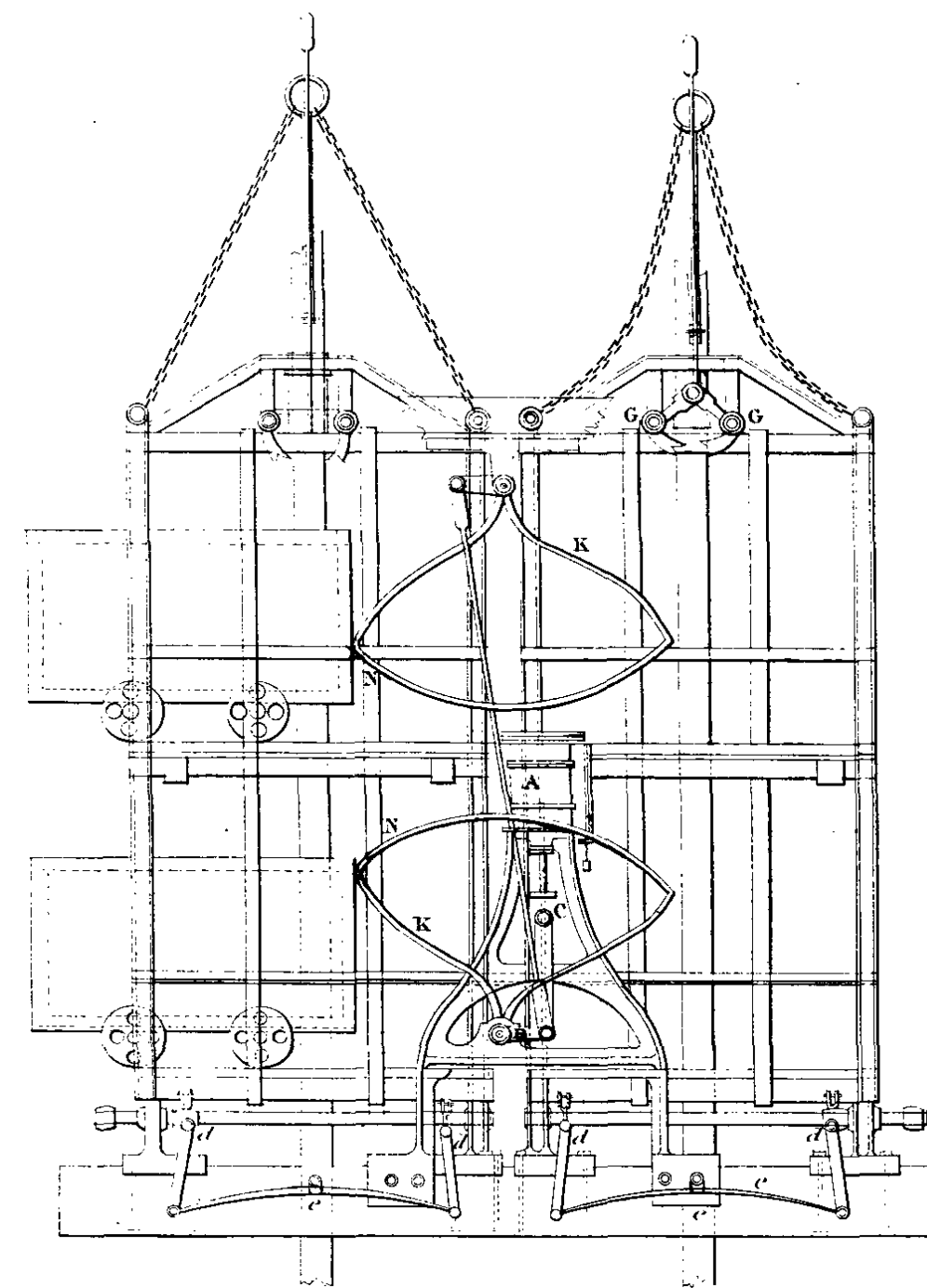


Fig. 6  
Parachute fermé  
Vue de côté

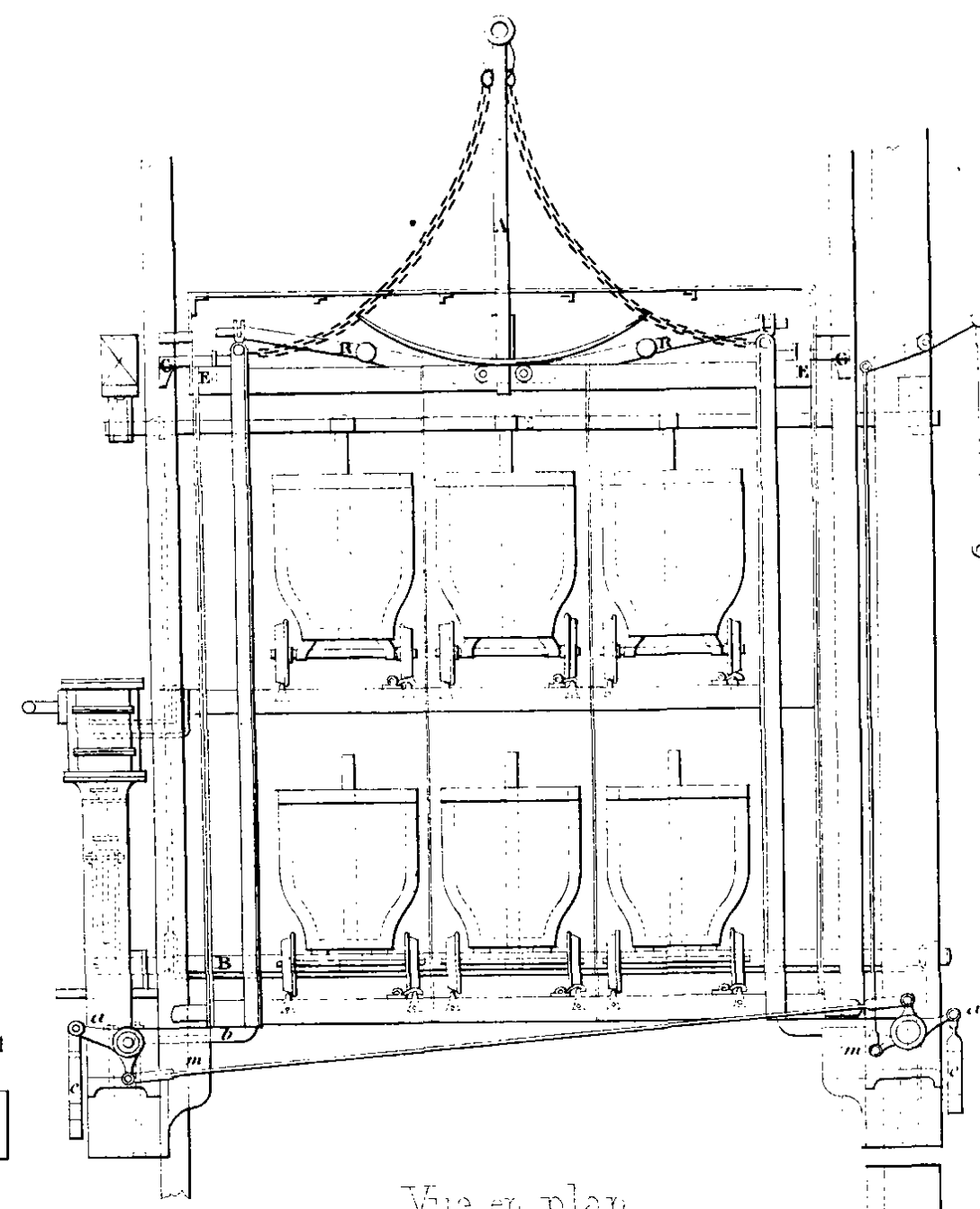
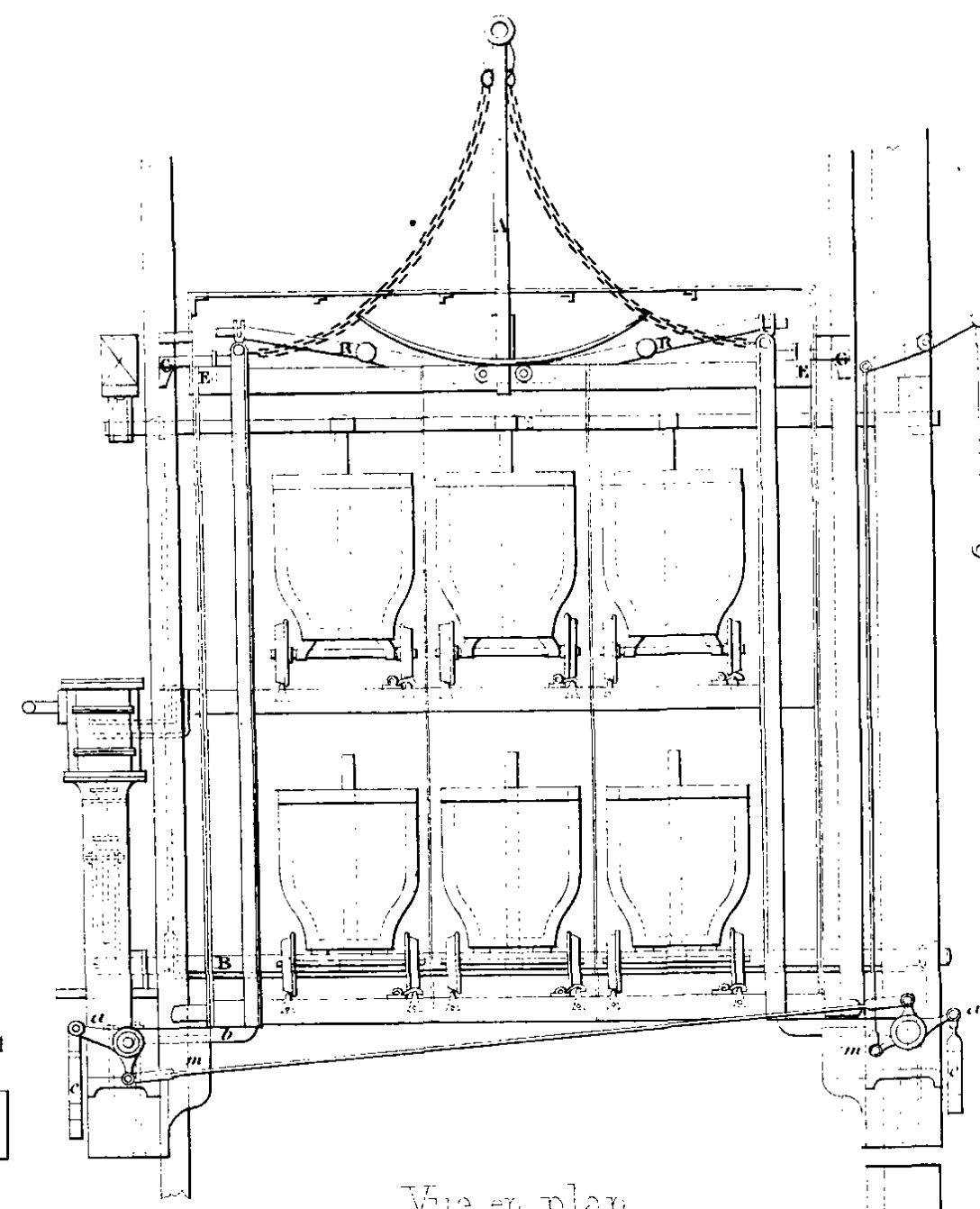
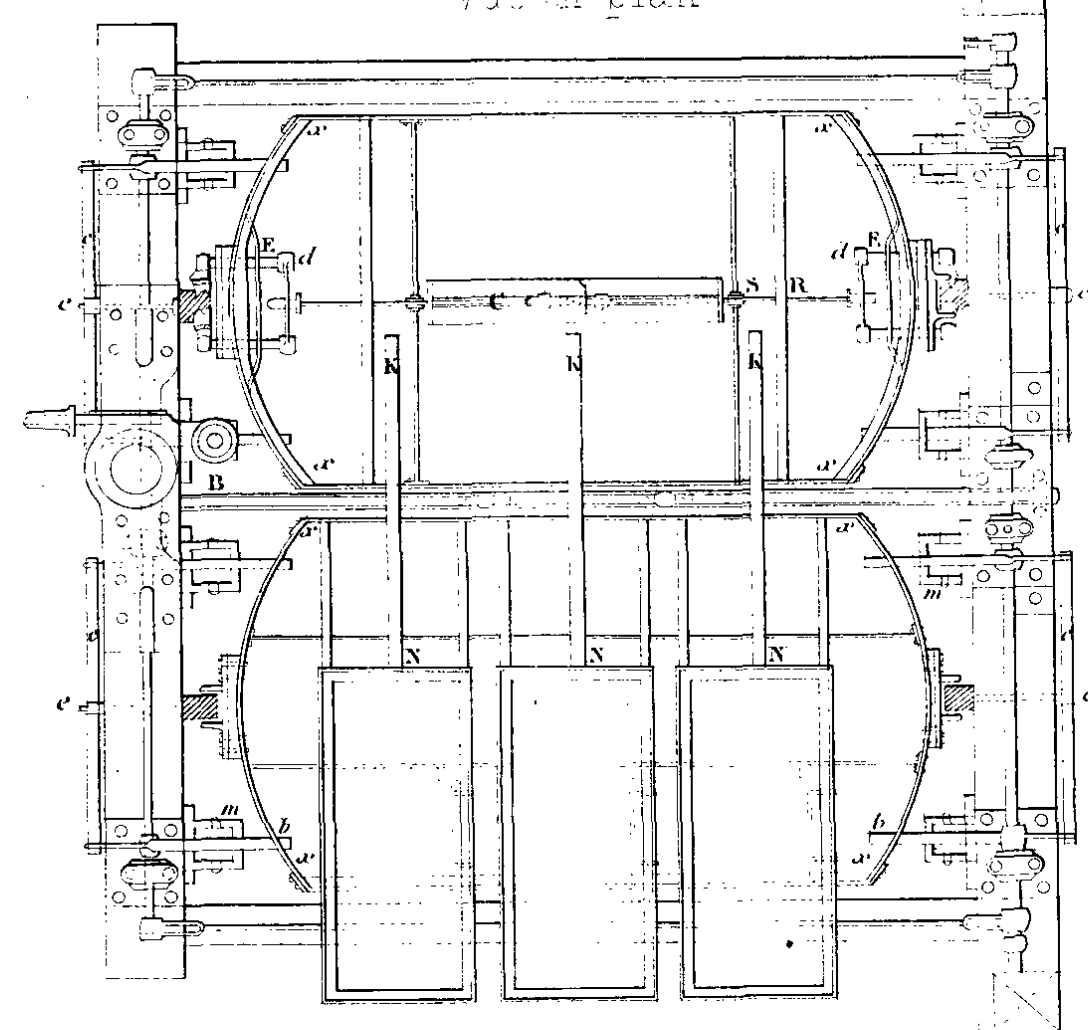


Fig. 7  
Vue de face



Vue en plan



Vue en plan

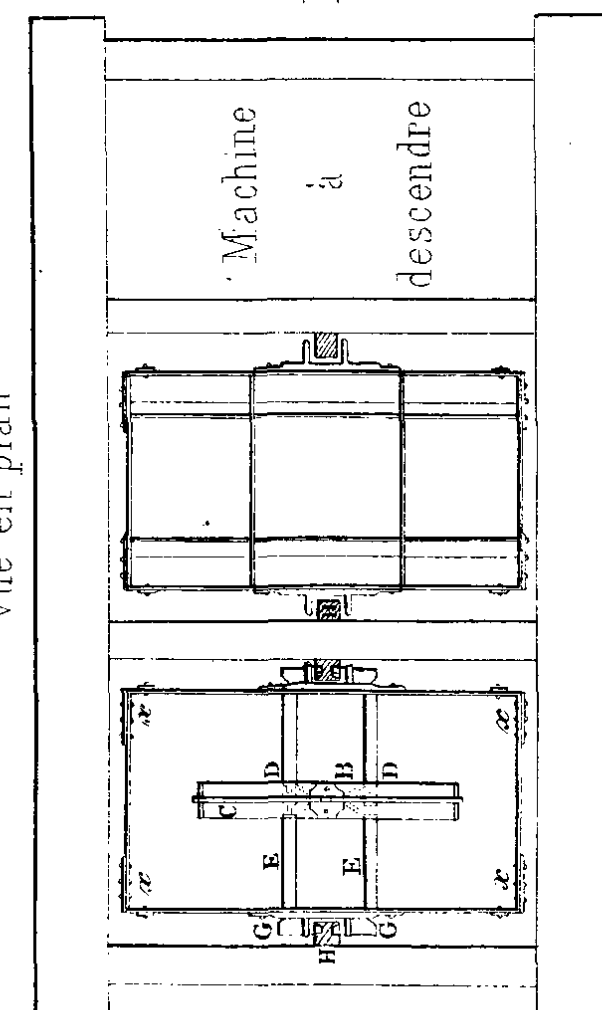
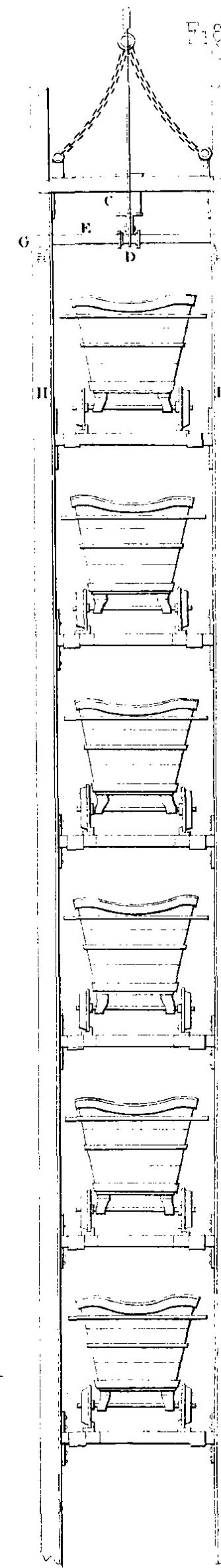
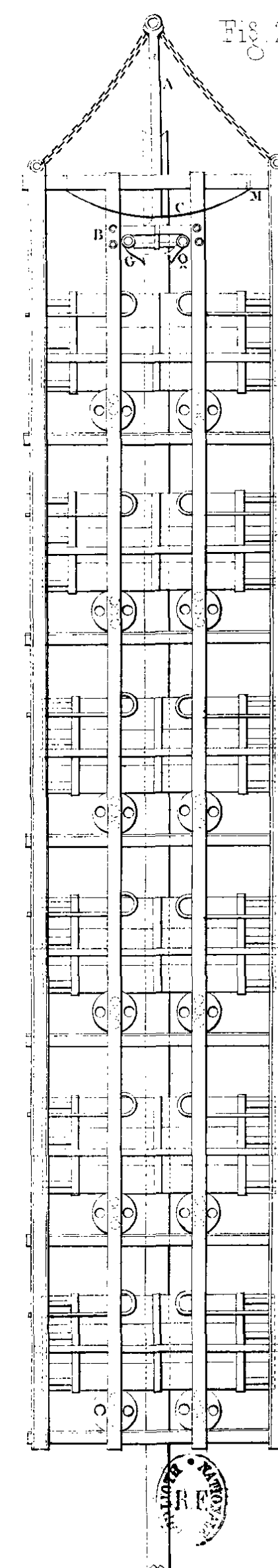


Fig. 4  
Machine à descendre

Vue de face  
Fig. 1



Parachute fermé  
Vue de côté  
Fig. 2



Parachute ouvert  
Fig. 3

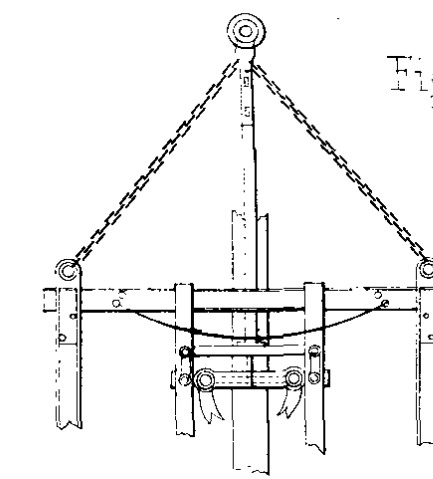


Fig. 9  
Premier appareil électrique

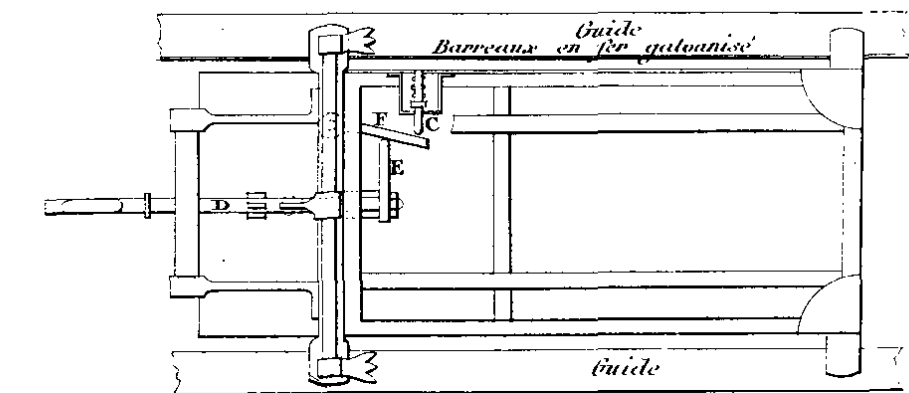


Fig. 10

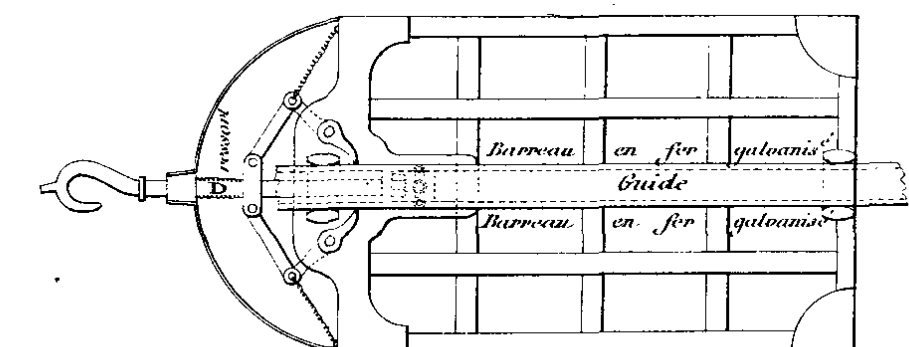
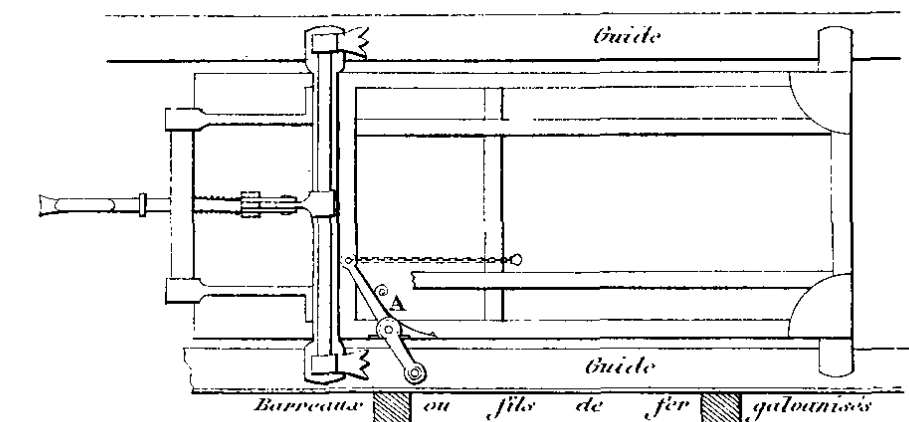


Fig. 11  
Deuxième appareil électrique









Coupes longitudinales et transversales d'un Rivaie ou magasin.

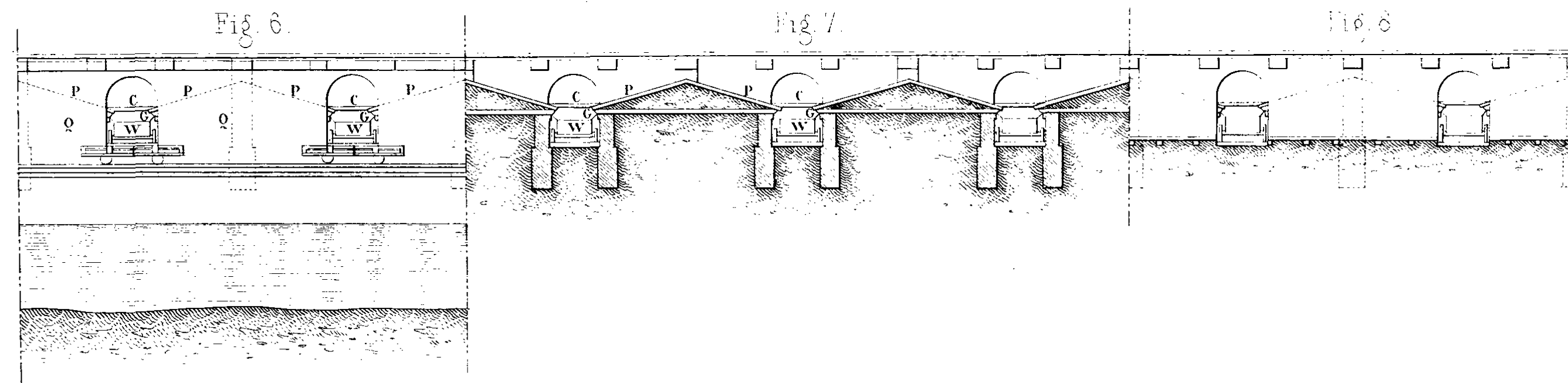
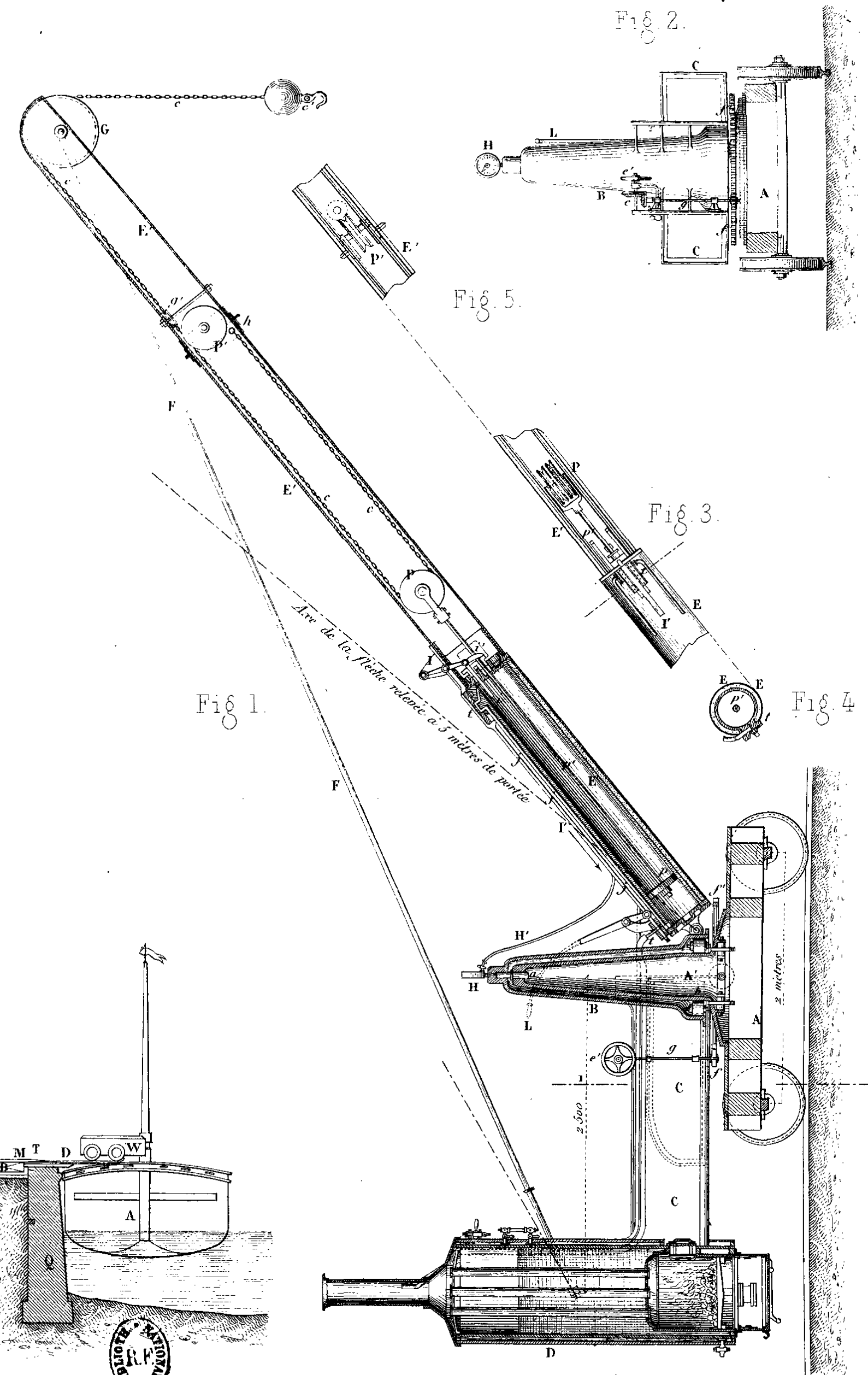
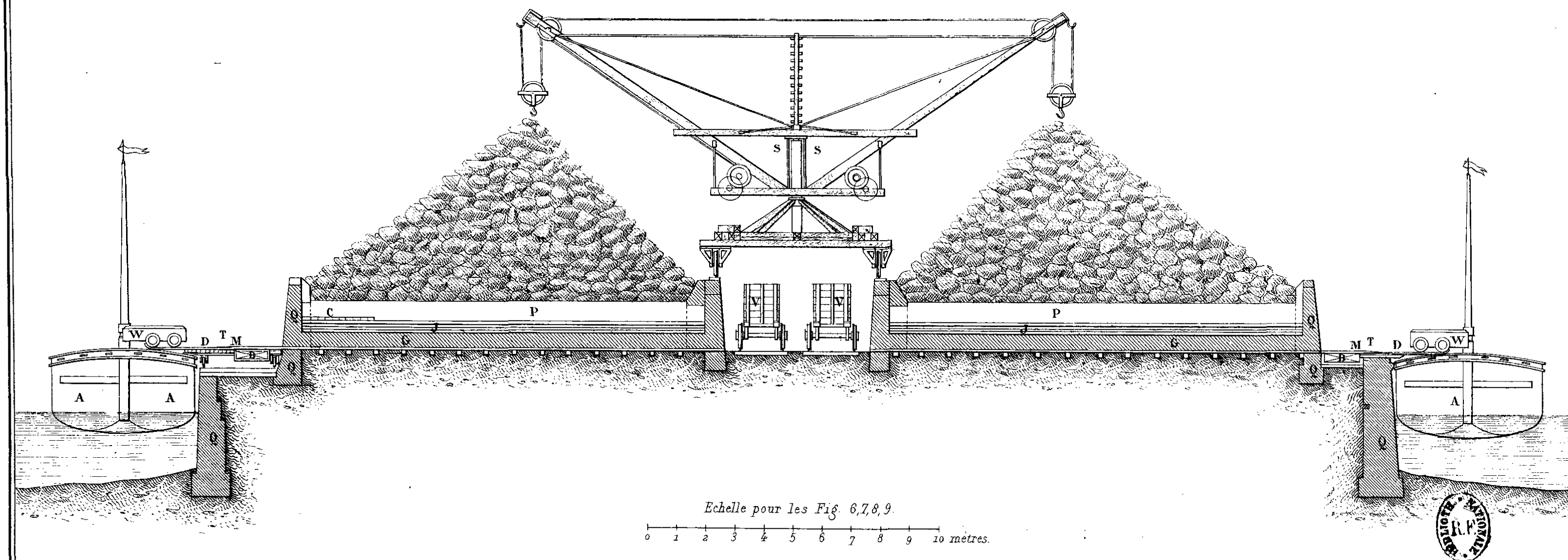


Fig. 9.









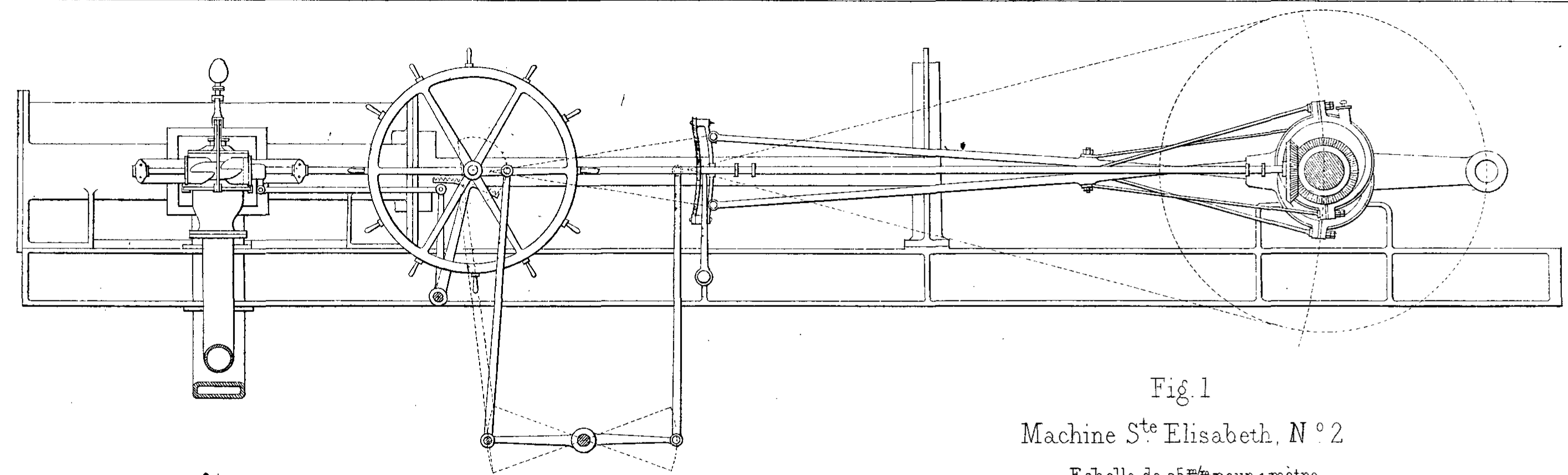
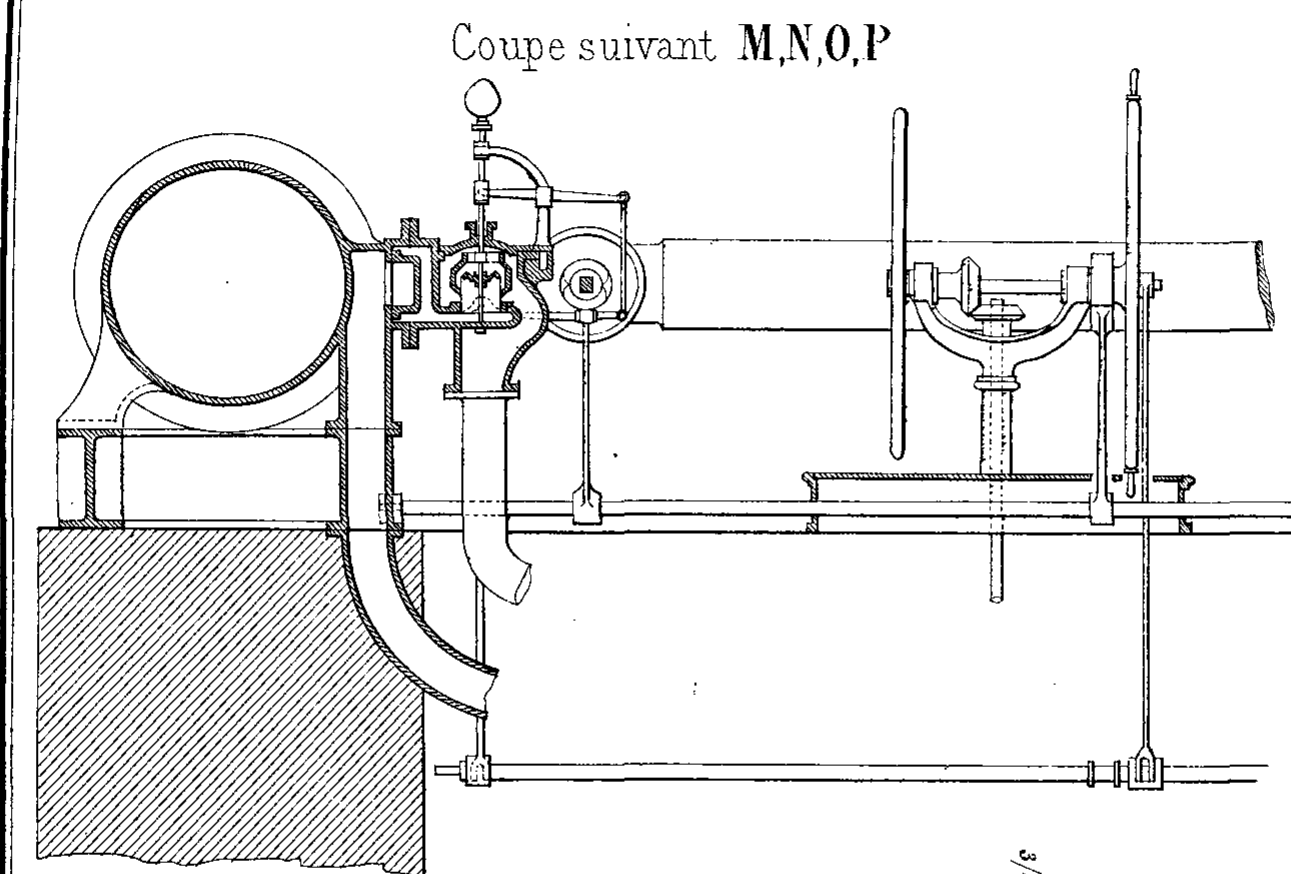
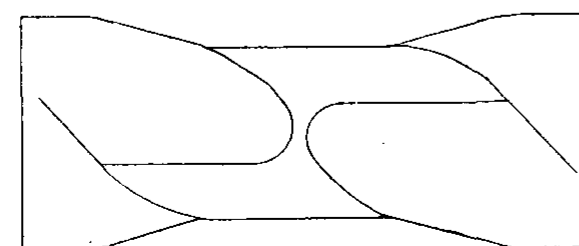


Fig. 1  
Machine S<sup>te</sup> Elisabeth, N° 2  
Echelle de 25<sup>m</sup> pour 1 mètre.

Fig 2 \_Came de détente



Echelle au  $\frac{1}{8}$

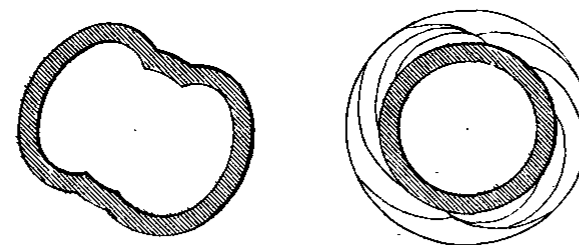
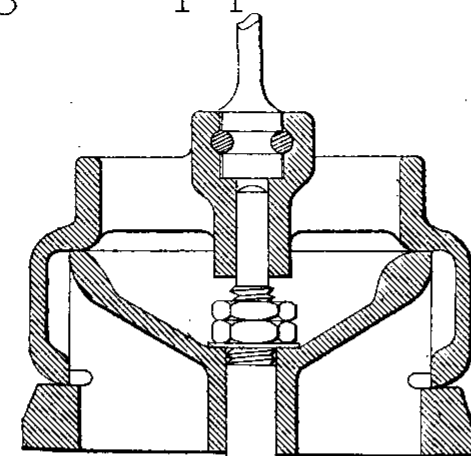


Fig 3. Soupape de détente



Echelle au  $\frac{1}{6}$

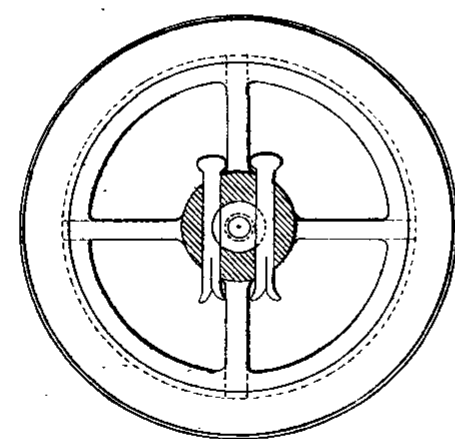
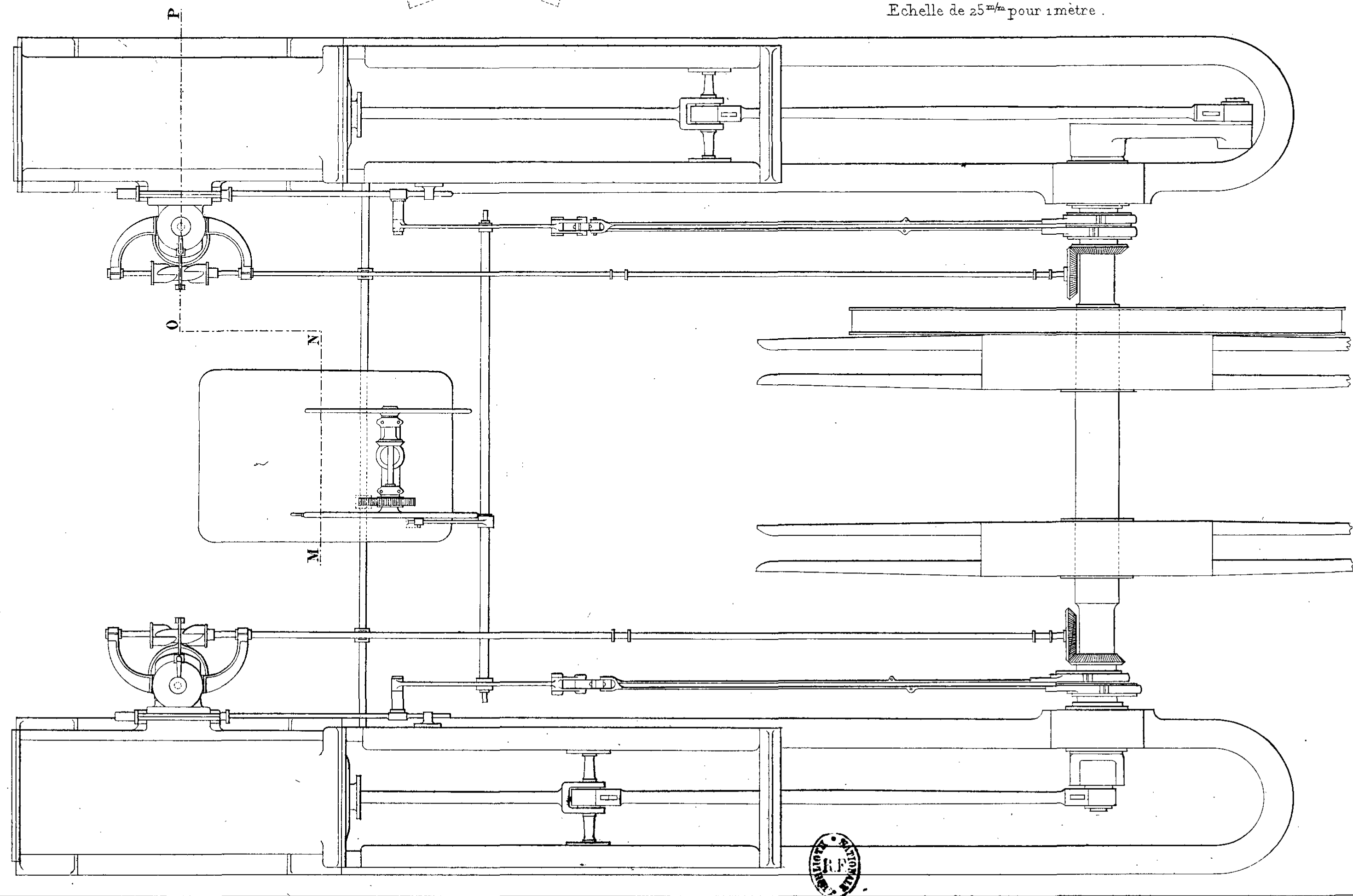
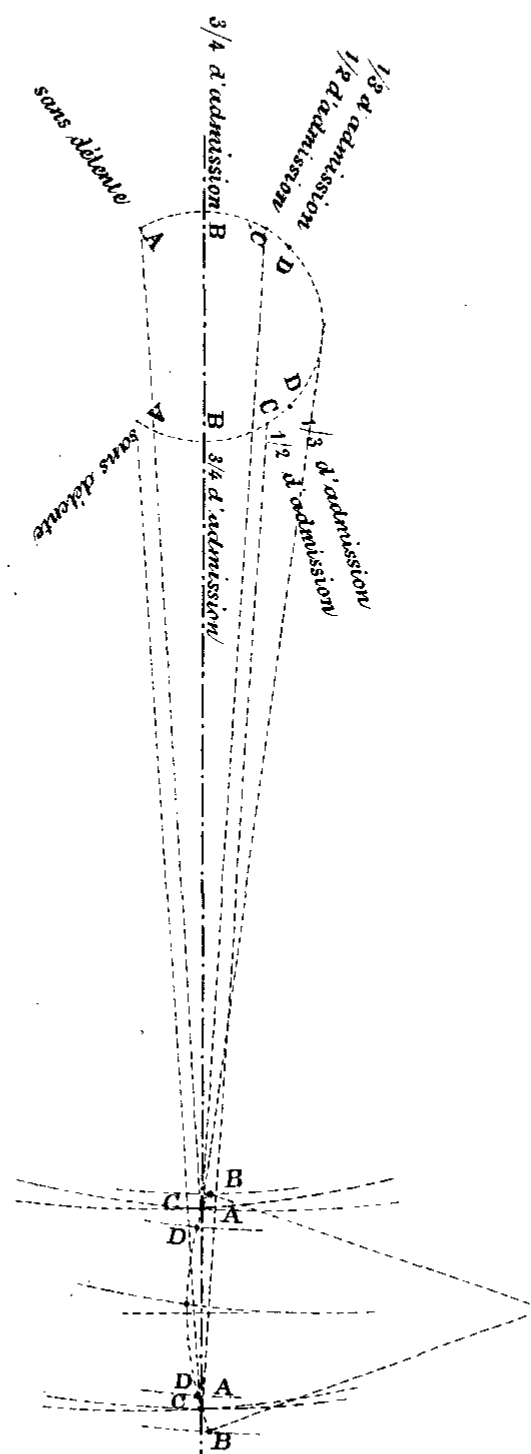


Fig 4 Epure du  
mouvement de la Coulisse









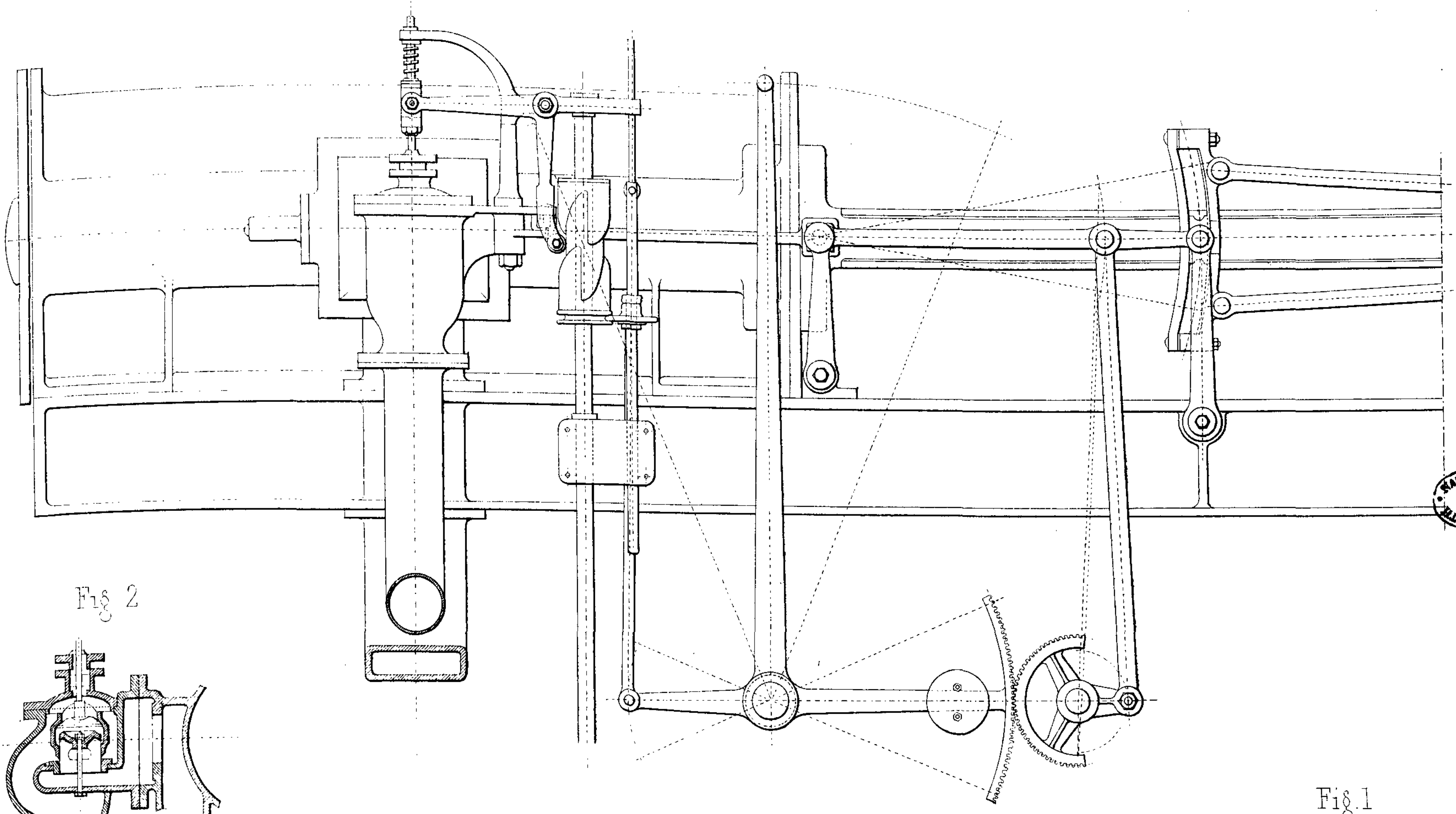


Fig. 1  
Machine St. François

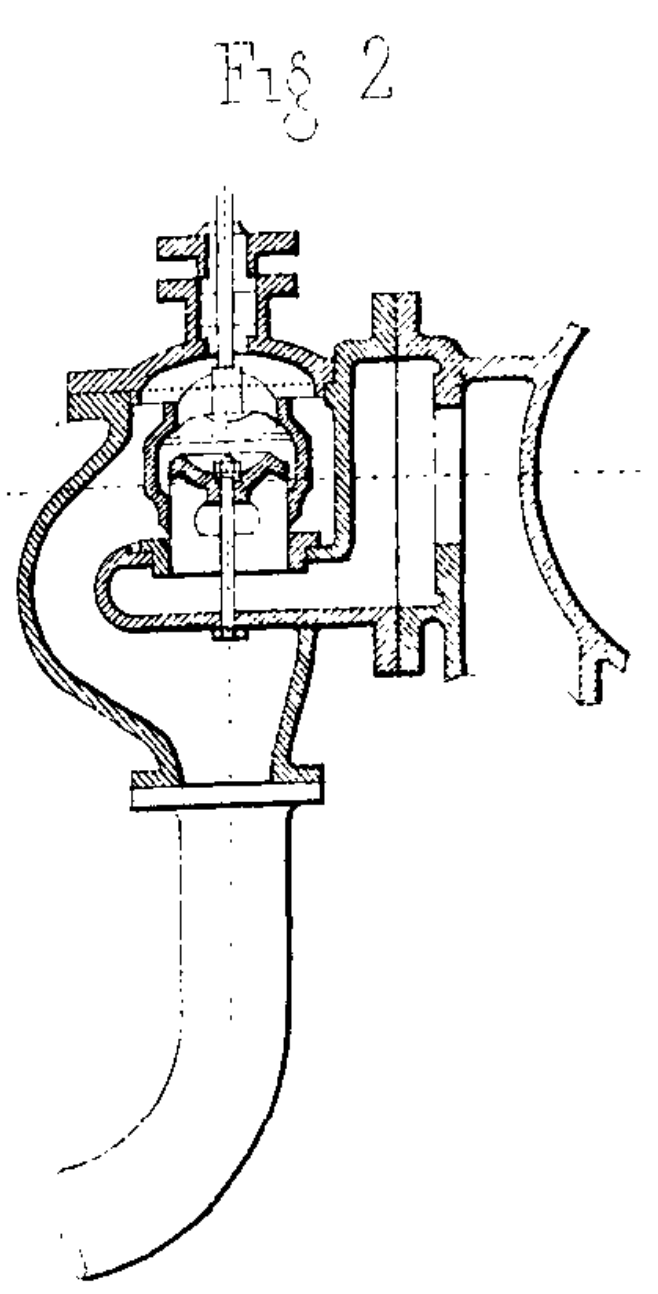


Fig. 2

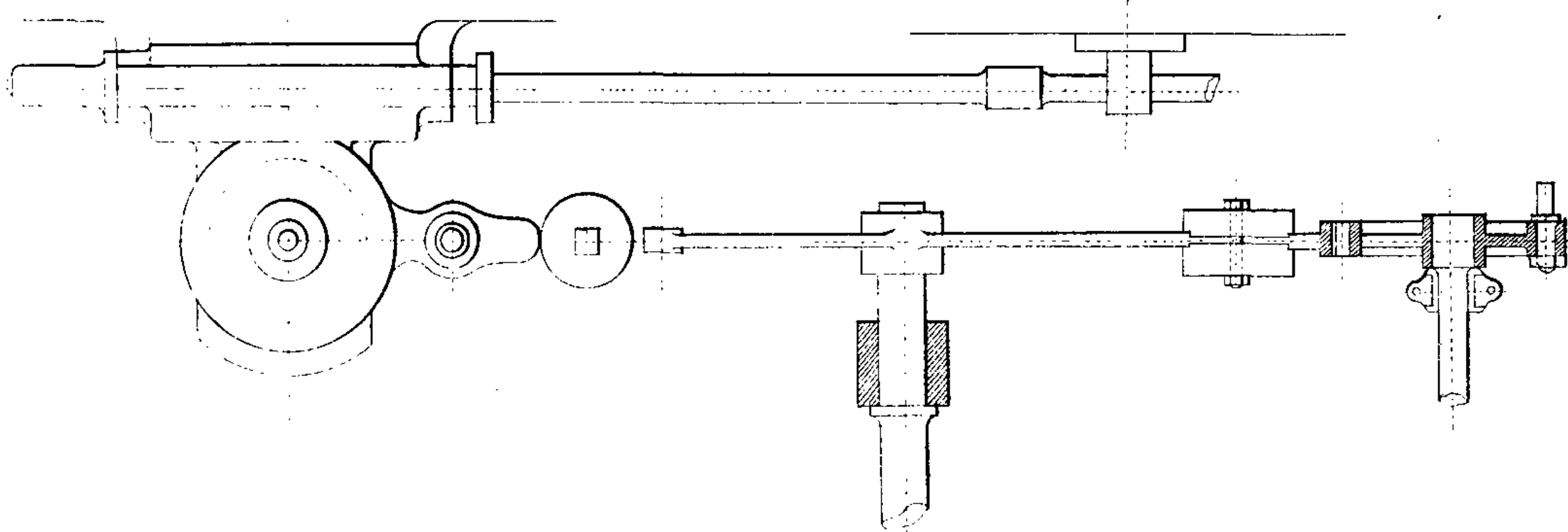


Fig. 4

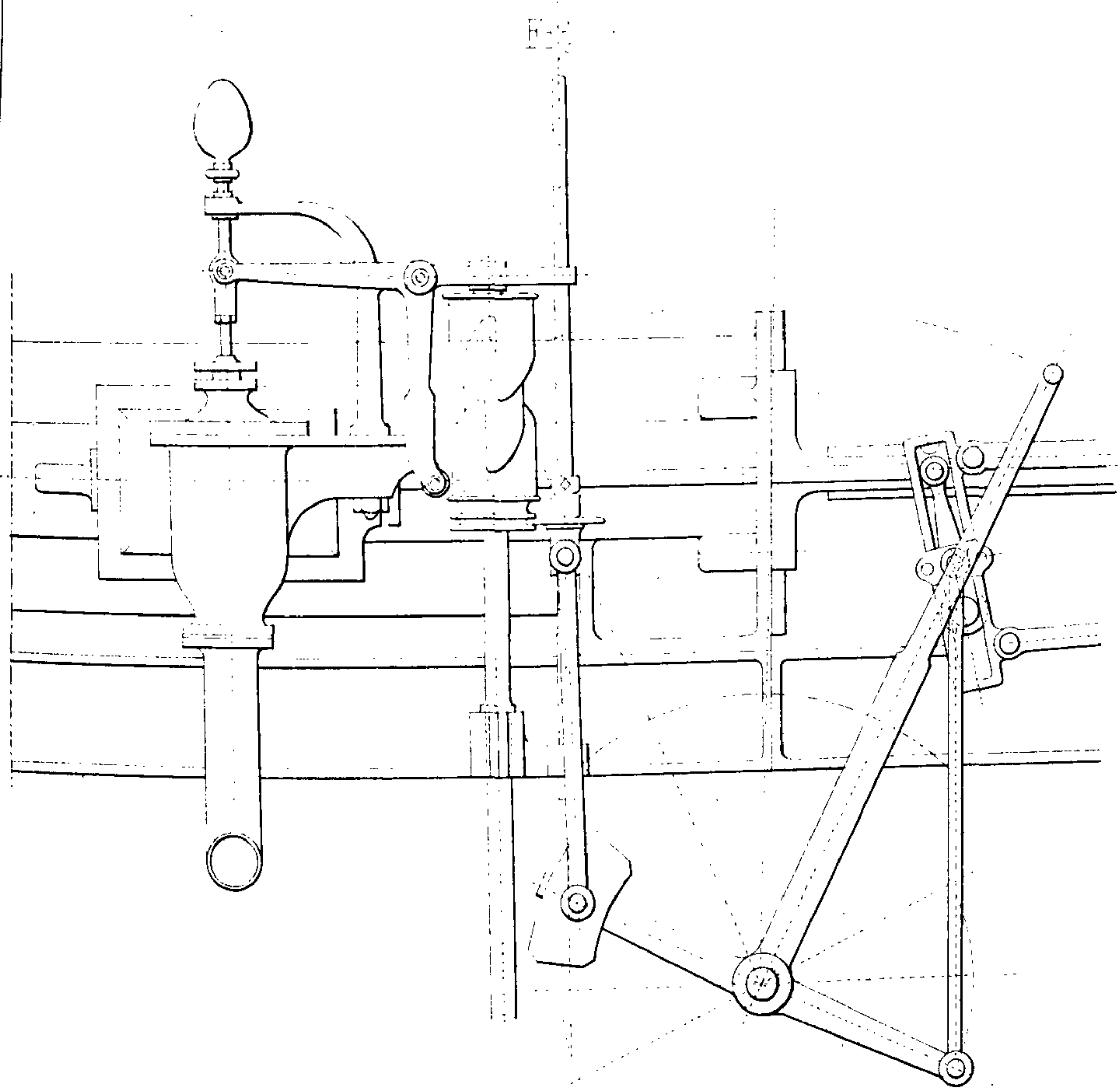


Fig. 5  
Machine St. Marie

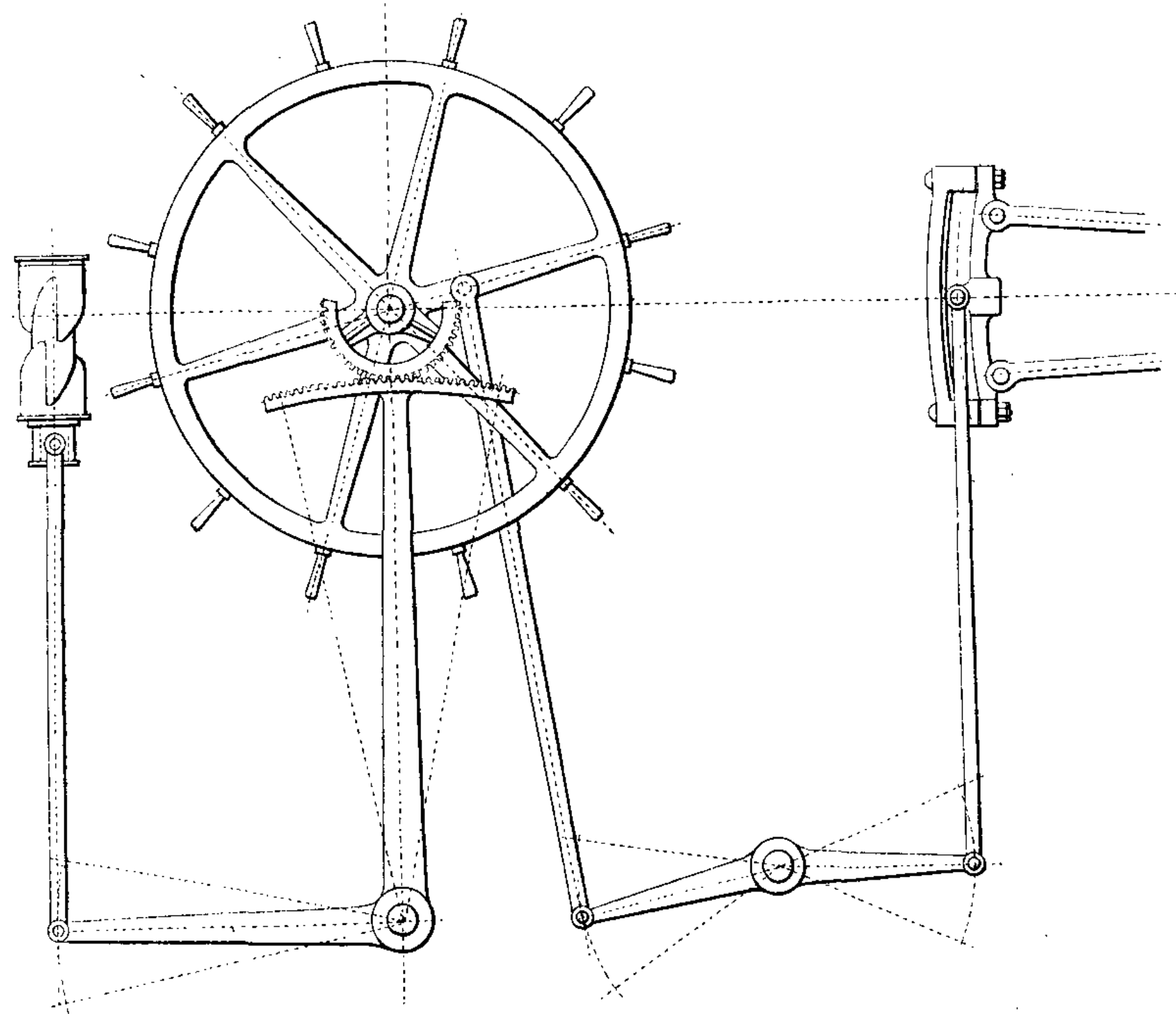
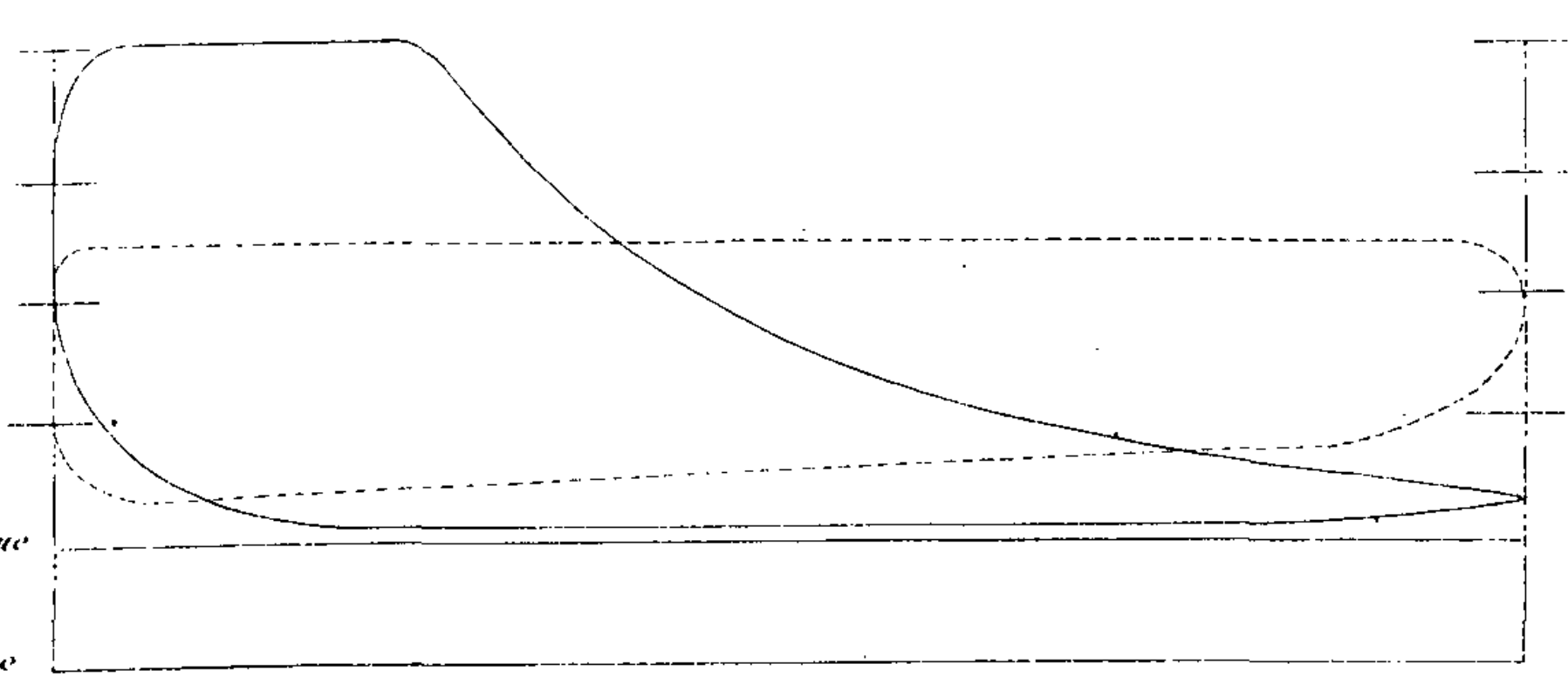
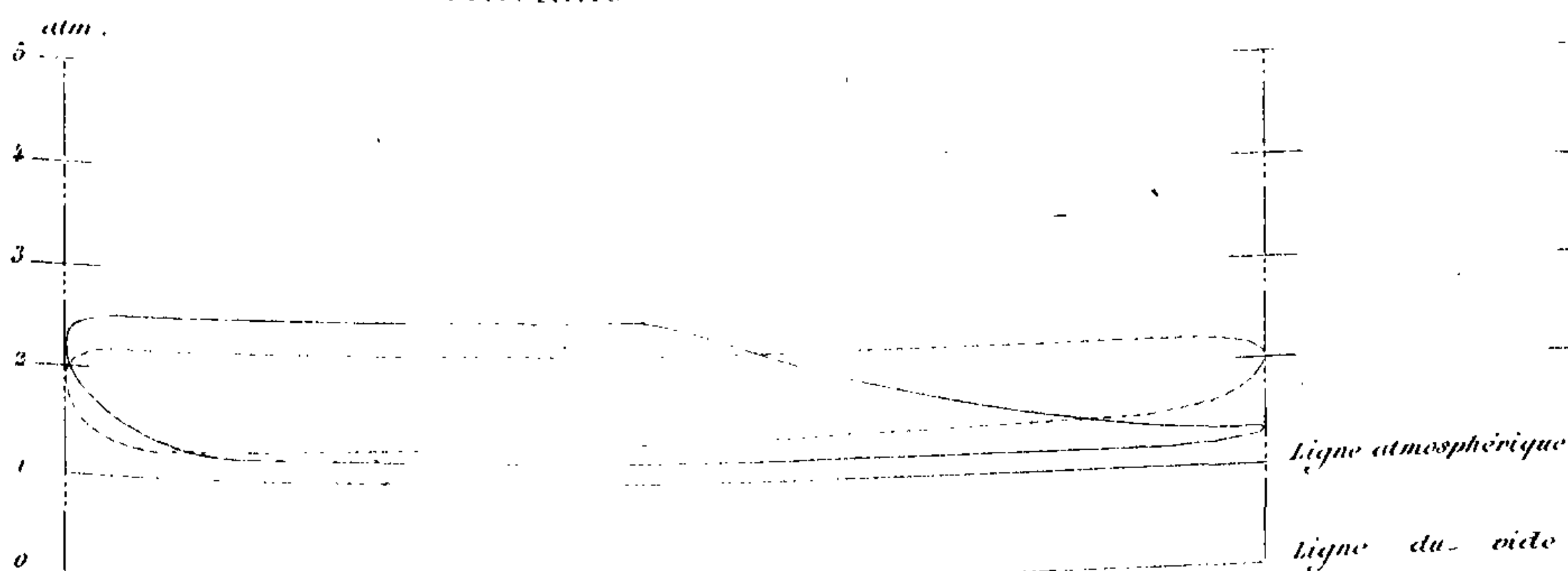


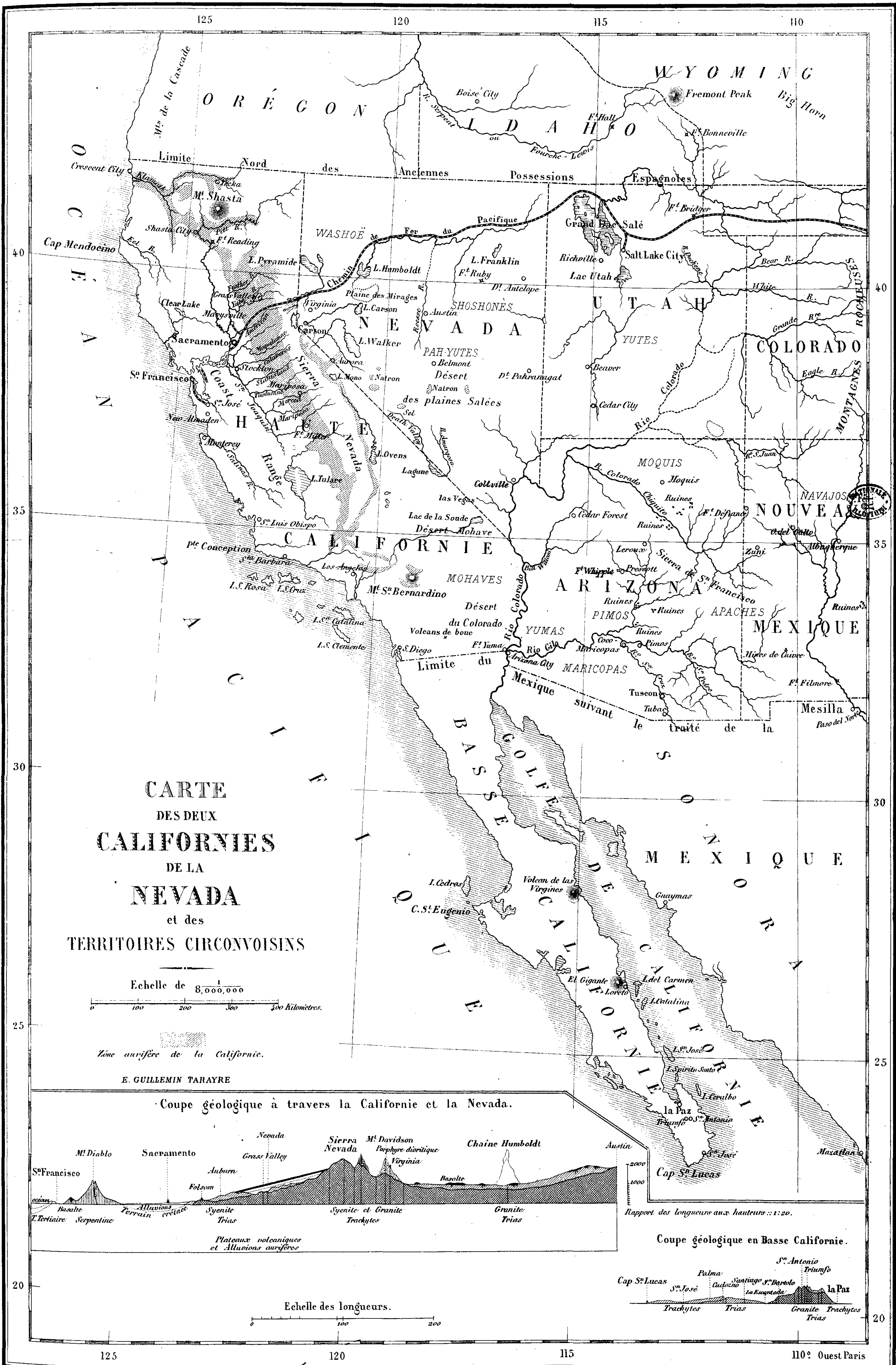
Fig. 6  
Machine Lucy 4







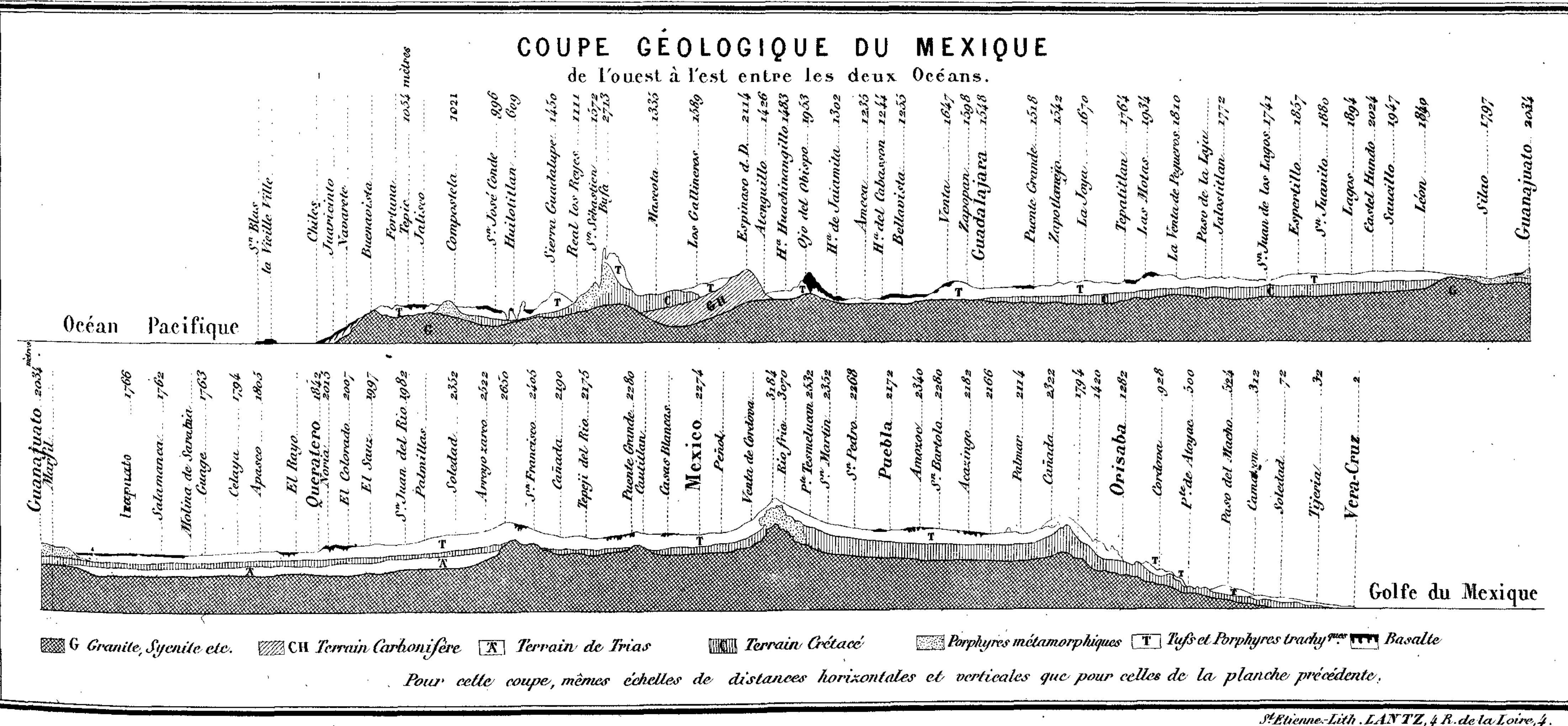
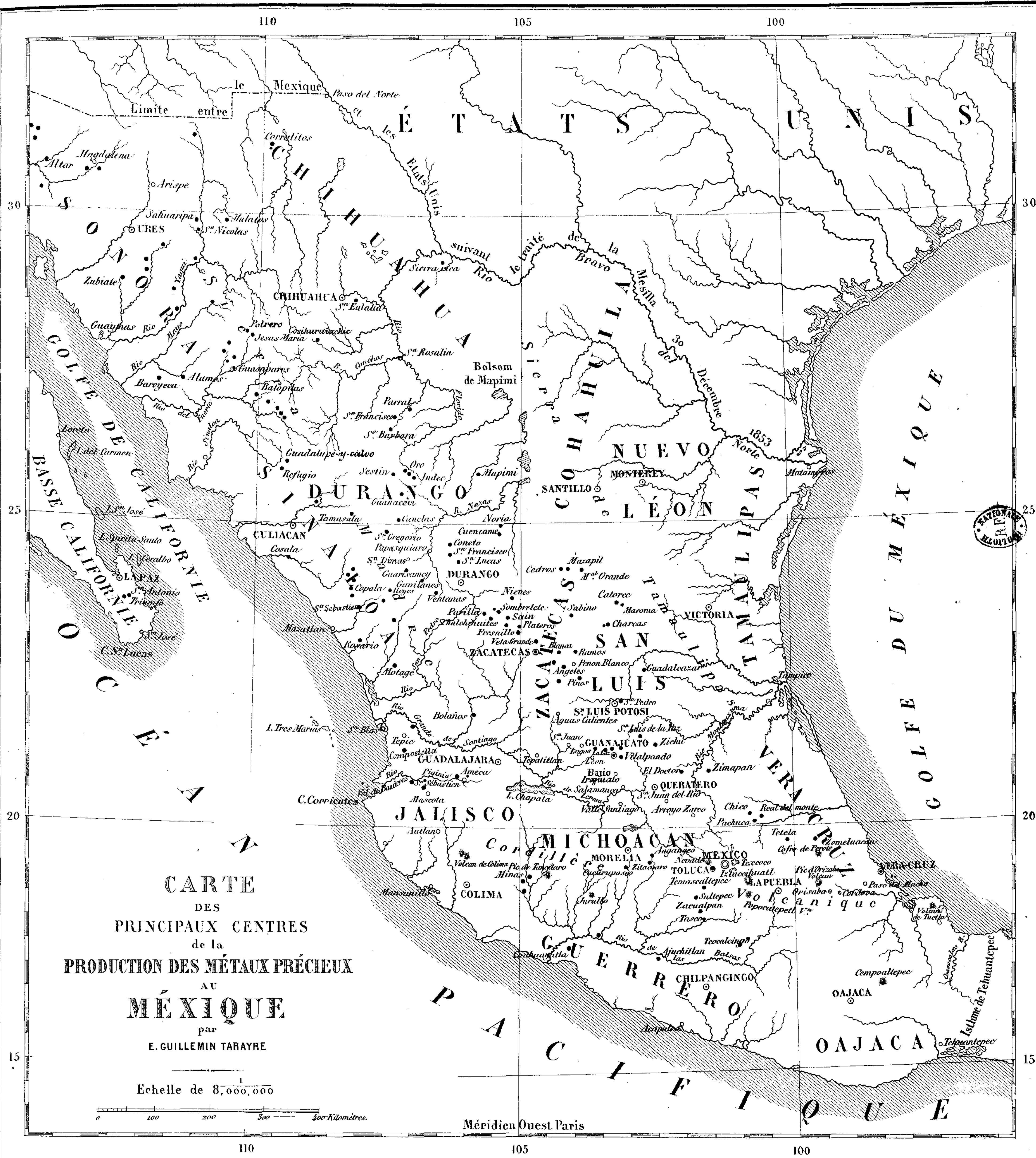


















Coupe de la lampe ouverte  
suivant la ligne A.B. du Plan

Fig. 1

Fig. 2

Coupe de la lampe fermée  
suivant la ligne A.B.

Fig. 3

Groupe N° 5

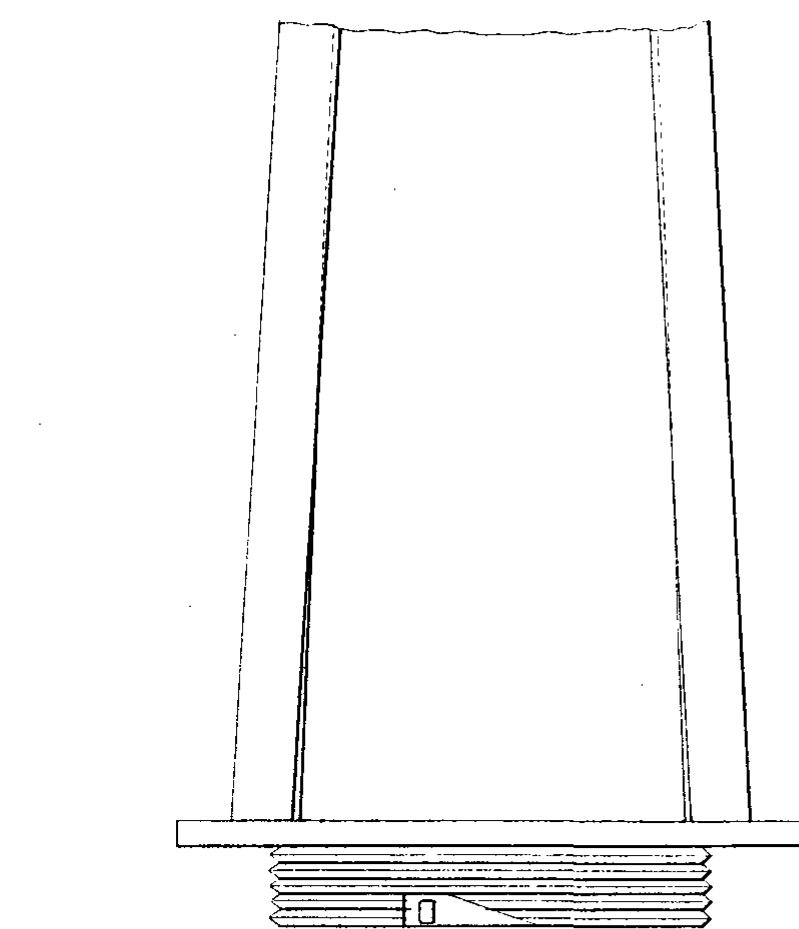
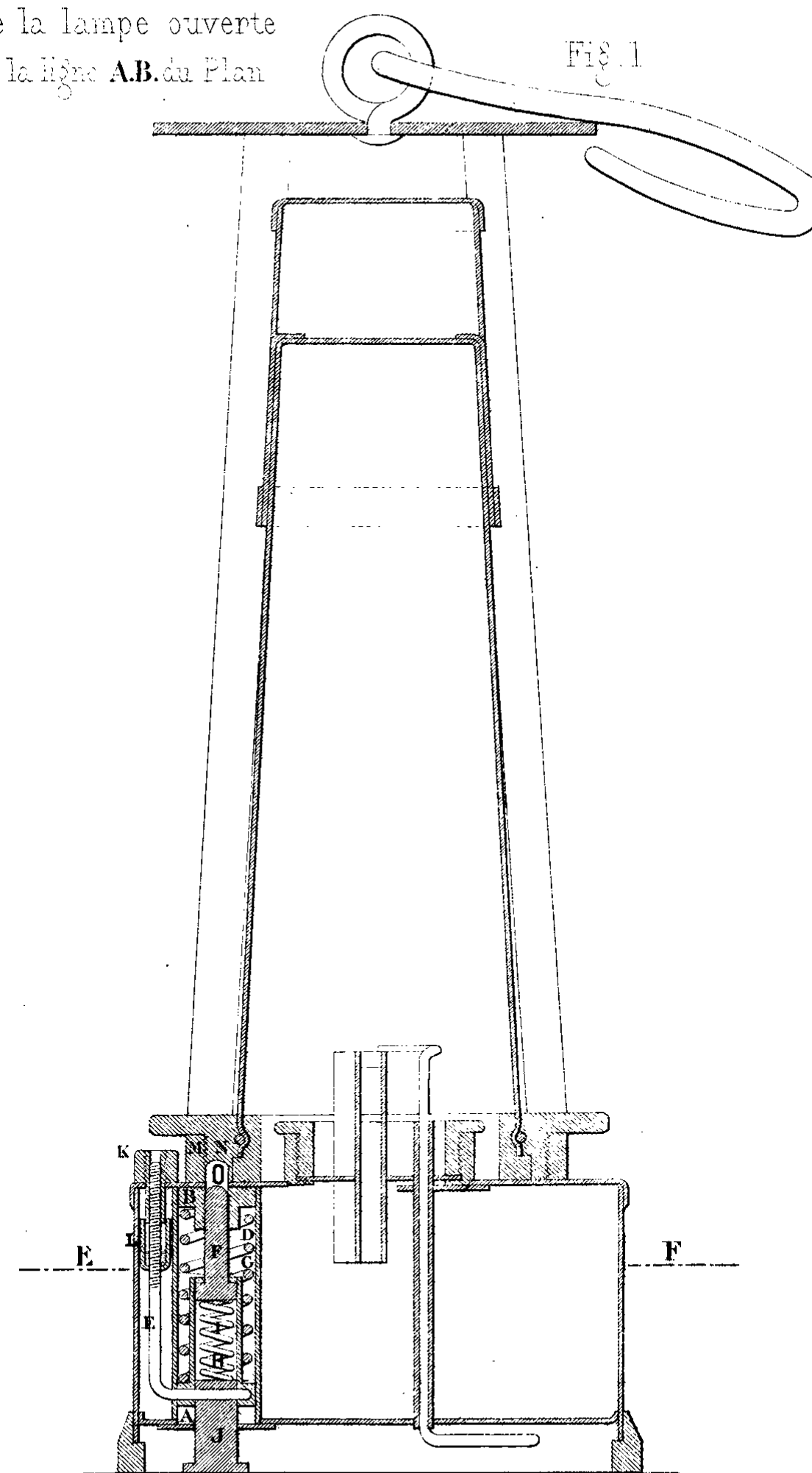
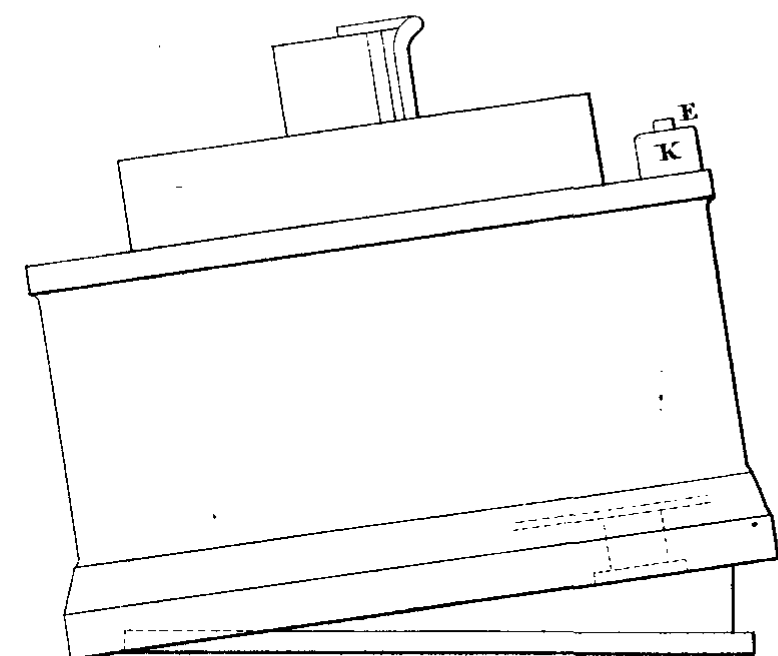
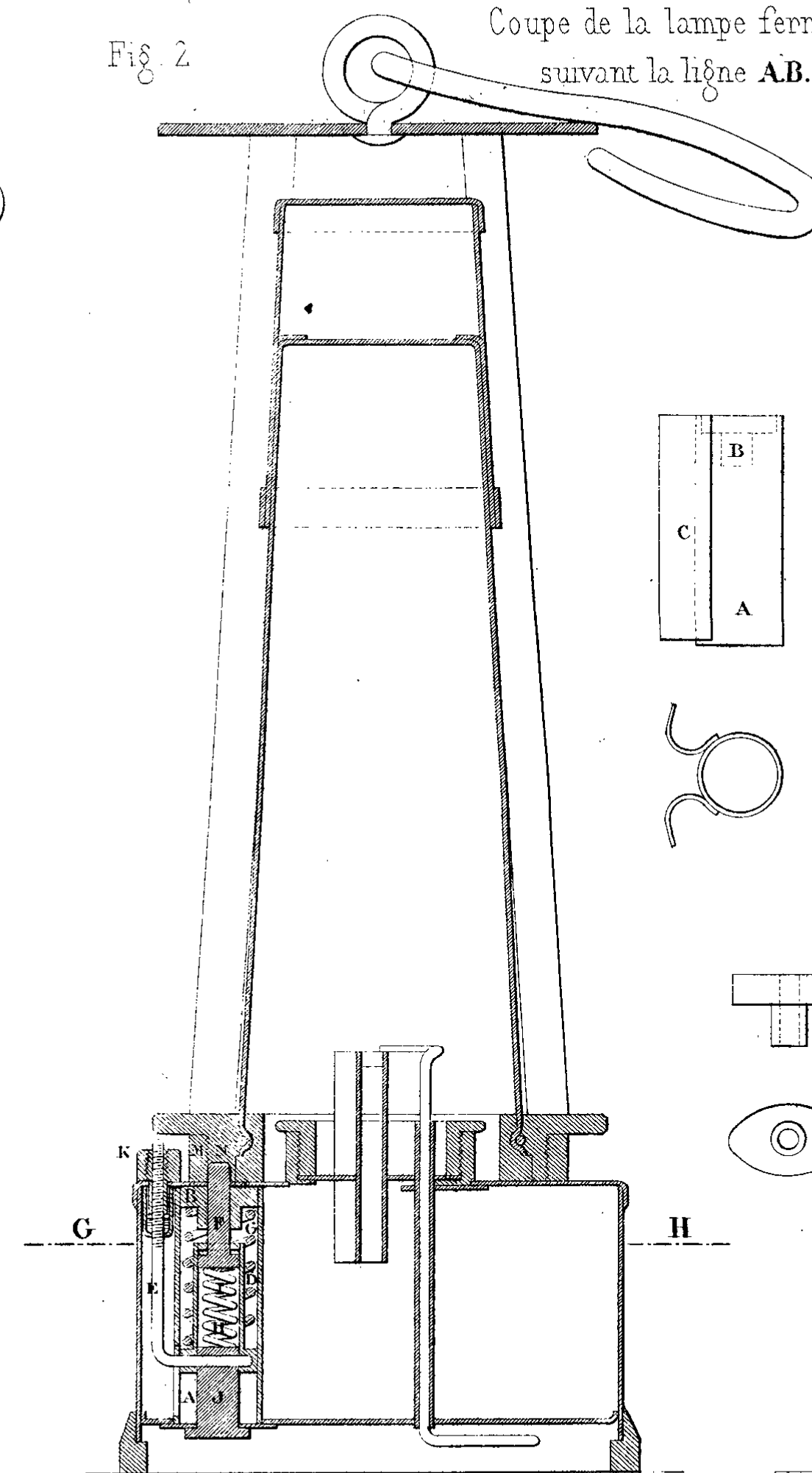
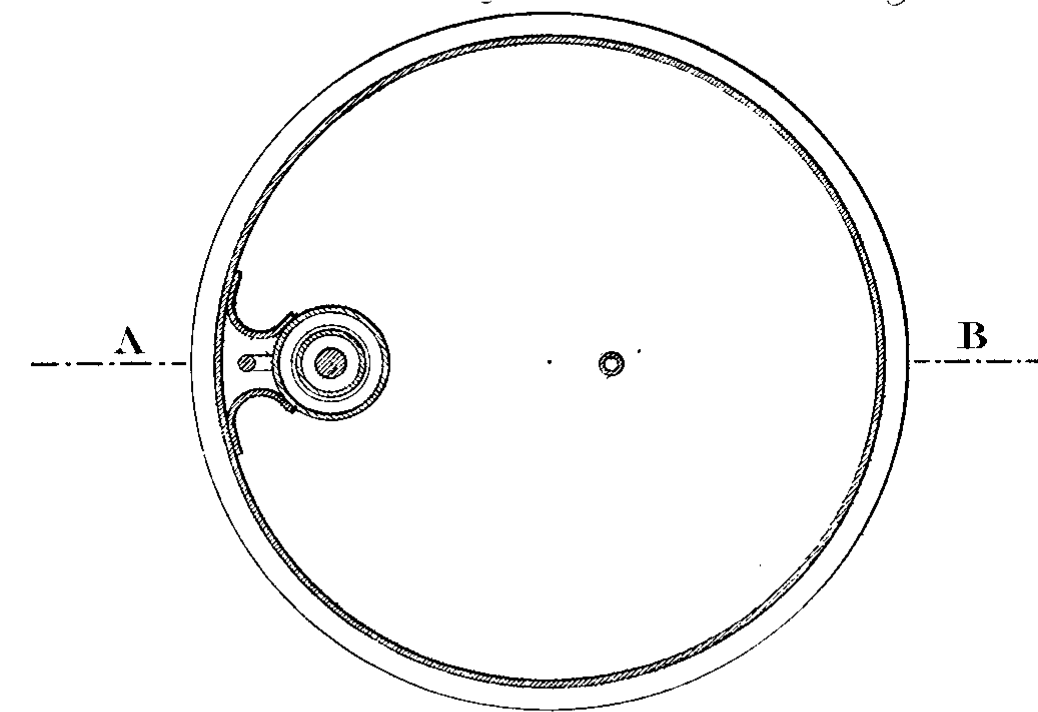


Fig. 4



Plan suivant la ligne E.F. de la Coupe Fig. 1



Plan suivant la ligne G.H. de la Coupe Fig. 2

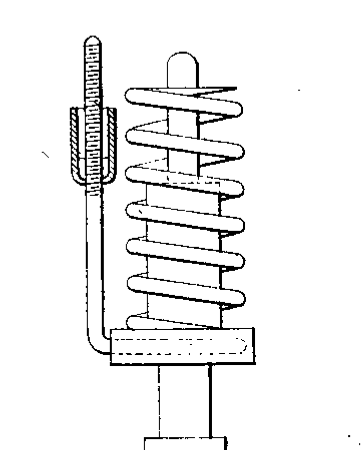
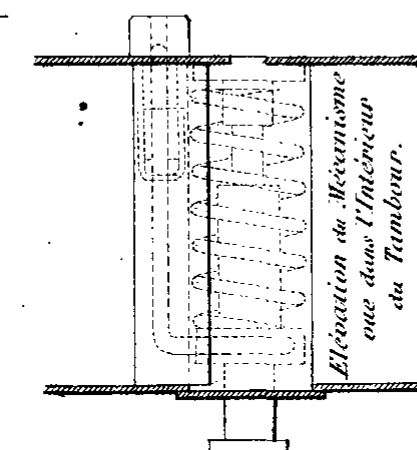
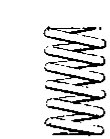
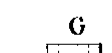
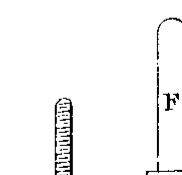
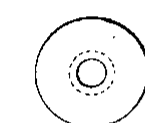
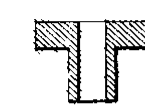
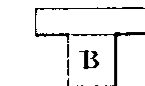
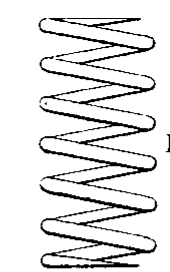
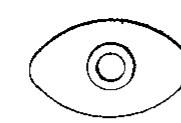
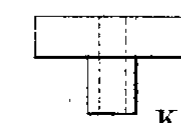
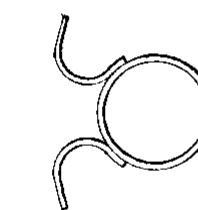
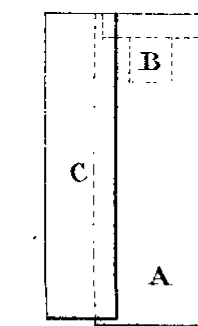
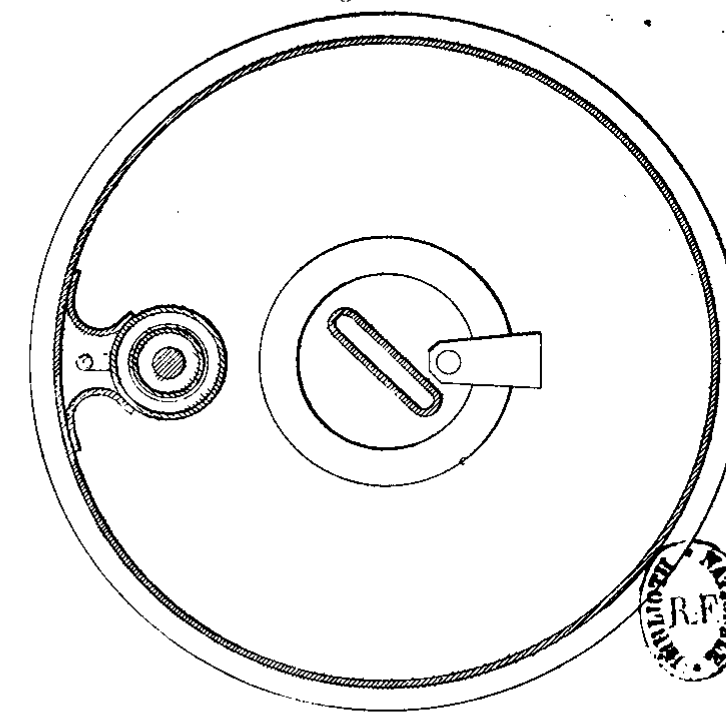
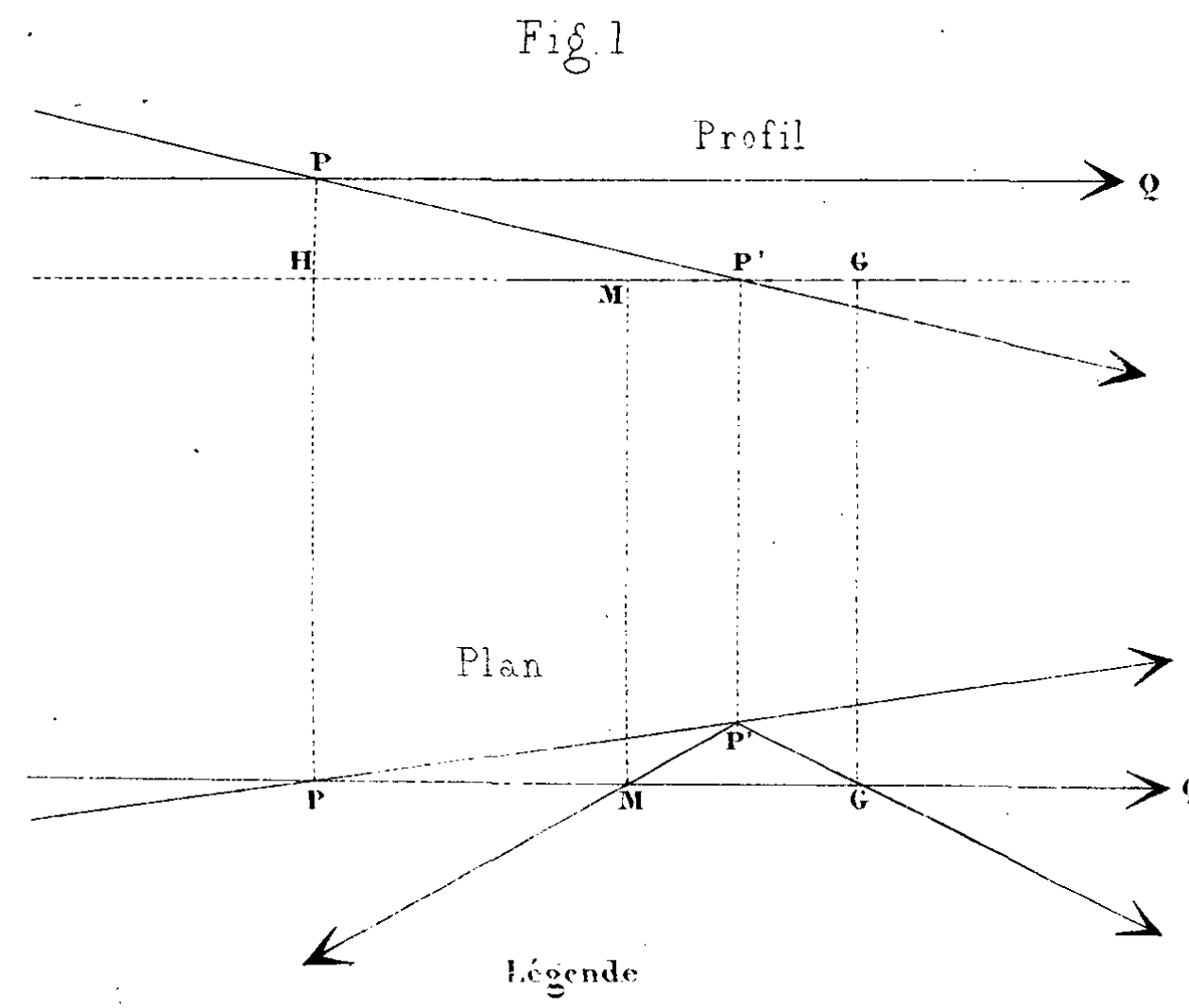








Fig. 1



**Légende**  
 P Q Direction du courant d'eau.  
 P H Hauteur de chute.  
 P P' Direction du mouvement du crible et amplitude du criblage.  
 P & P' Positions du point de chargement du crible aux deux extrémités de sa course.  
 P M & P' G Directions suivies par le minéral et par la gangue.

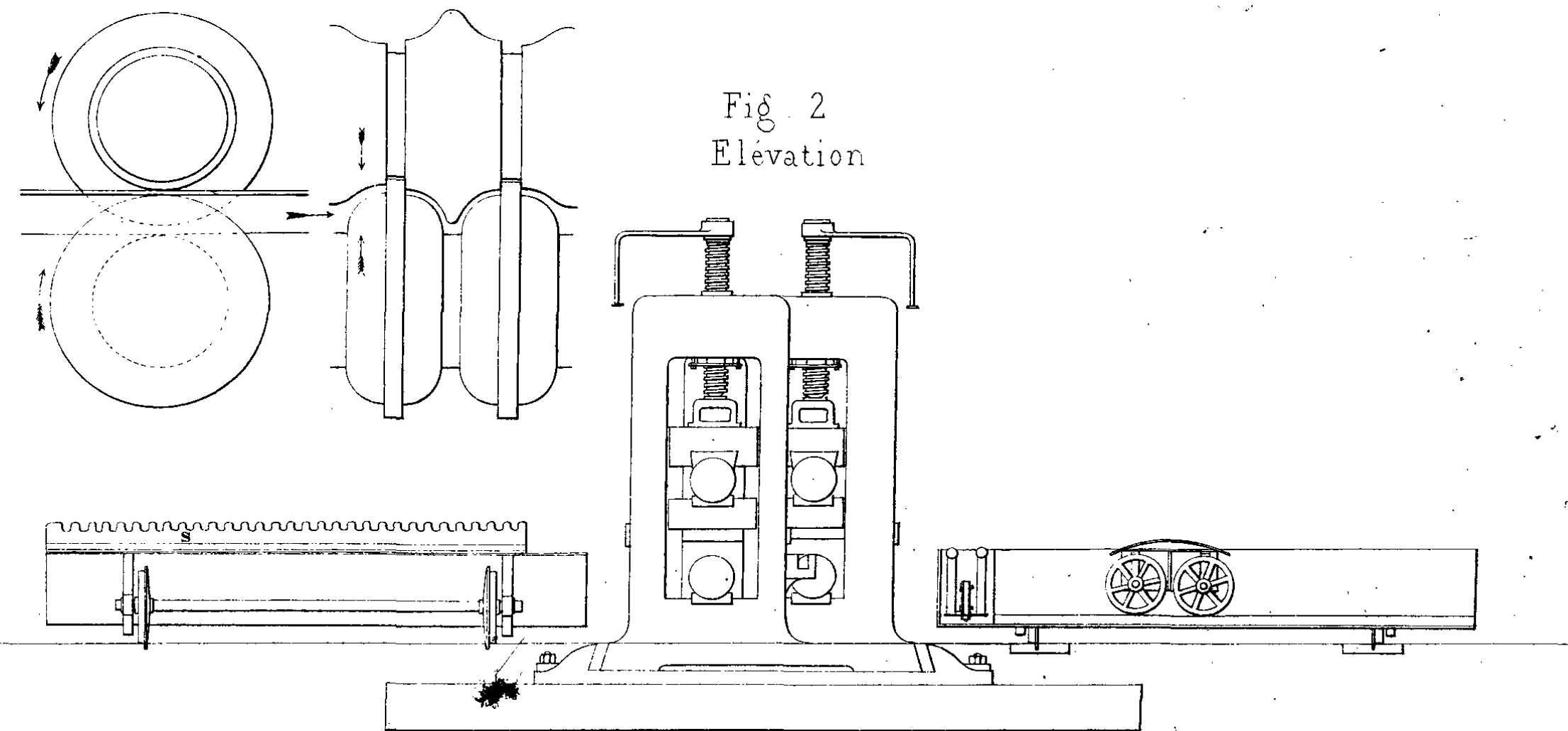
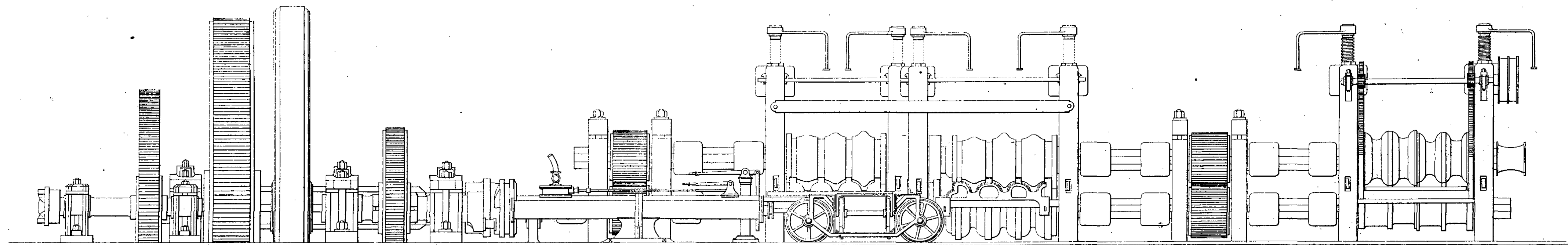


Fig. 3



Echelles des Fig. 2 et 3.

1 m. 5 m. 10 m.

Abg. 1-18







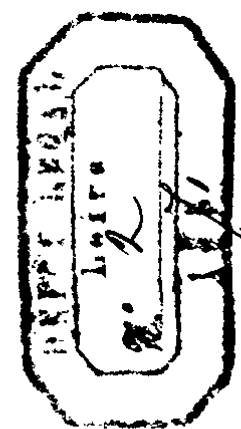


Fig. 2

Plan

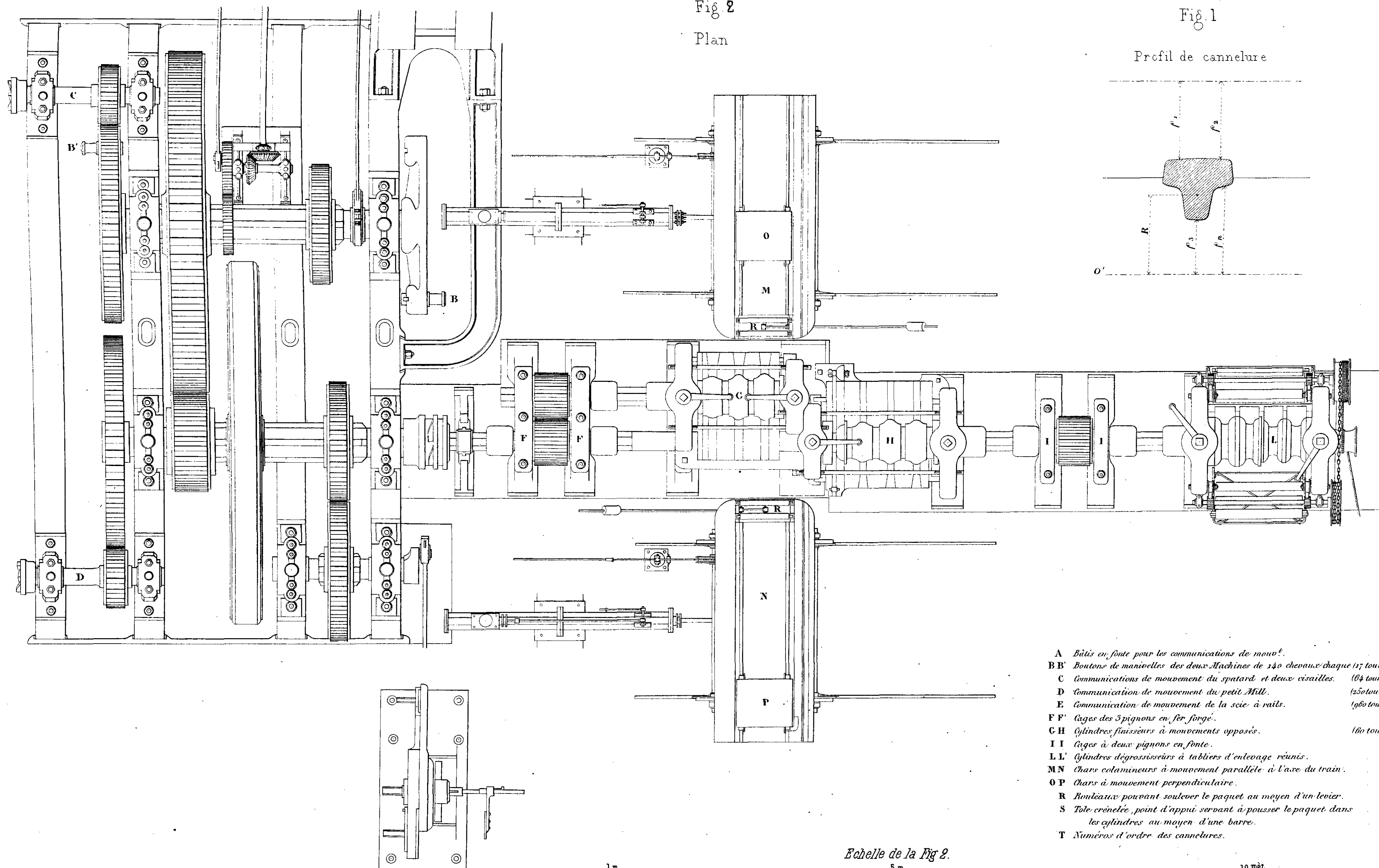


Fig. 1

Profil de cannelure

- A Bâti en fonte pour les communications de mouvt.  
 BB' Boutons de manivelles des deux Machines de 140 chevaux chaque (17 tours)  
 C Communications de mouvement du spatard et deux cisailles. (64 tours)  
 D Communication de mouvement du petit Mill. (250 tours)  
 E Communication de mouvement de la scie à rails. (960 tours)  
 FF' Cages des 3 pignons en fer forgé.  
 GH Cylindres finisseurs à mouvements opposés. (60 tours)  
 II Cylindres à deux pignons en fonte.  
 LL' Cylindres dégrossisseurs à tabliers d'enlèvement réunis.  
 MN Chars colamineurs à mouvement parallèle à l'axe du train.  
 OP Chars à mouvement perpendiculaire.  
 R Rouleaux pouvant soulever le paquet au moyen d'un levier.  
 S Tôle crénelée, point d'appui servant à pousser le paquet dans les cylindres au moyen d'une barre.  
 T Numéros d'ordre des cannelures.

Echelle de la Fig. 2.

1 m.

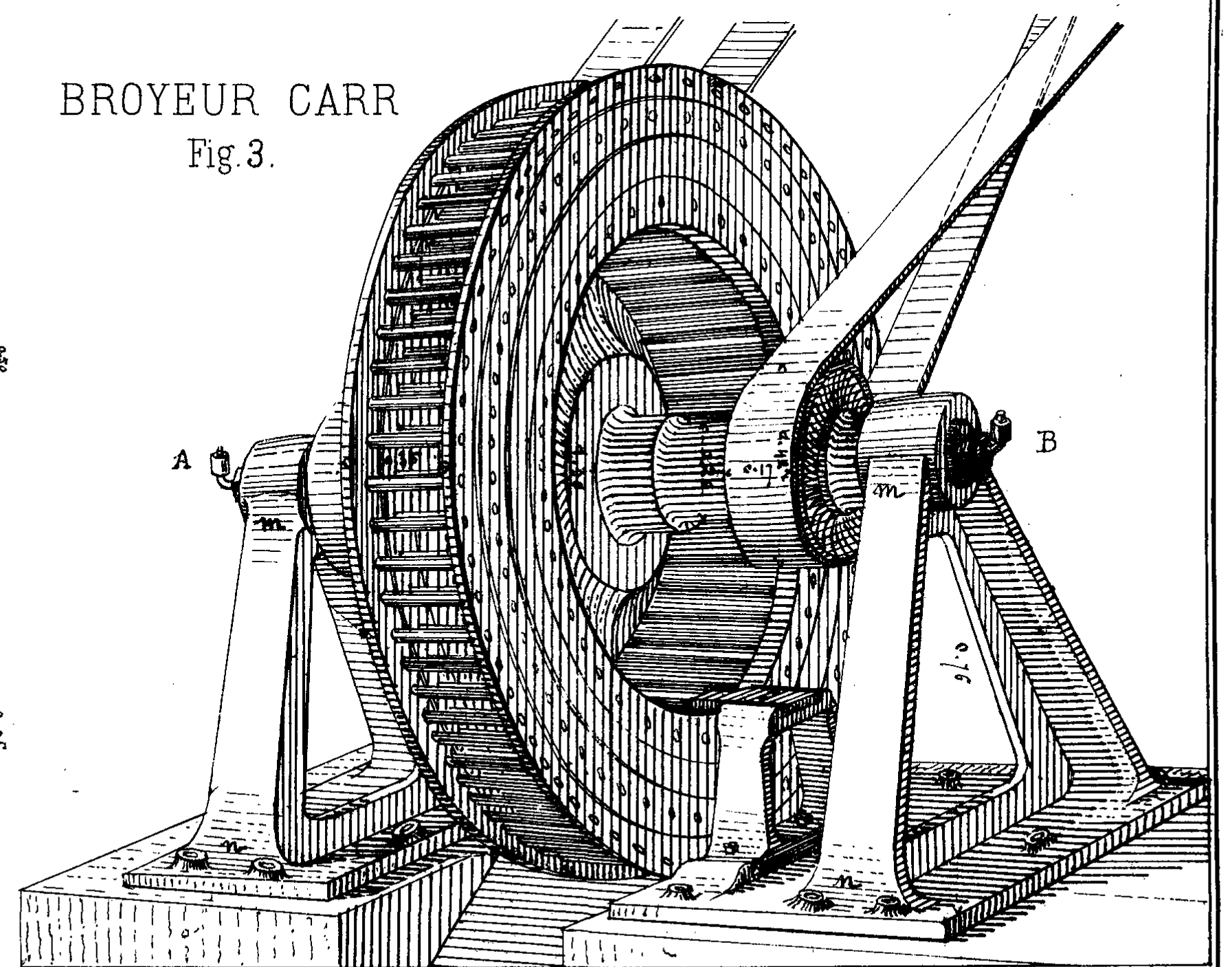
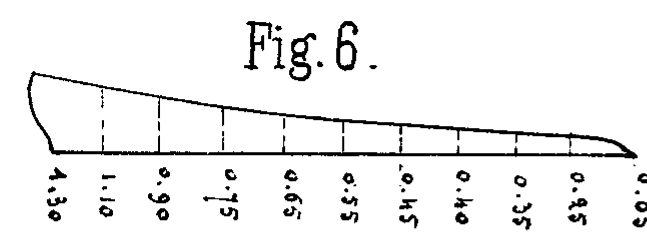
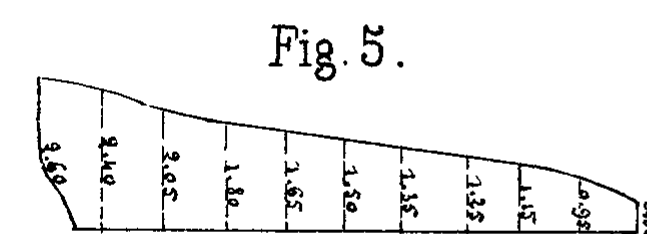
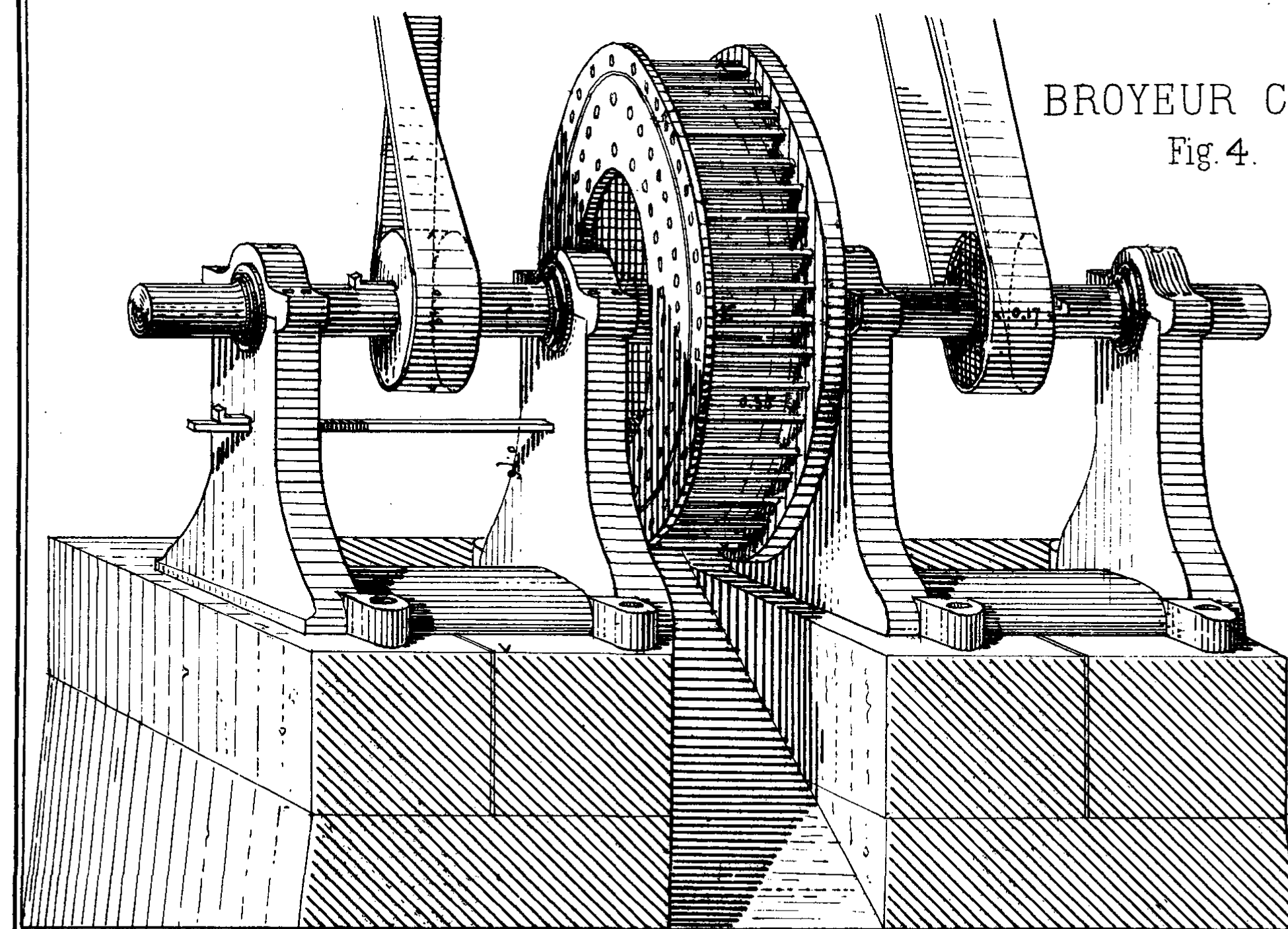
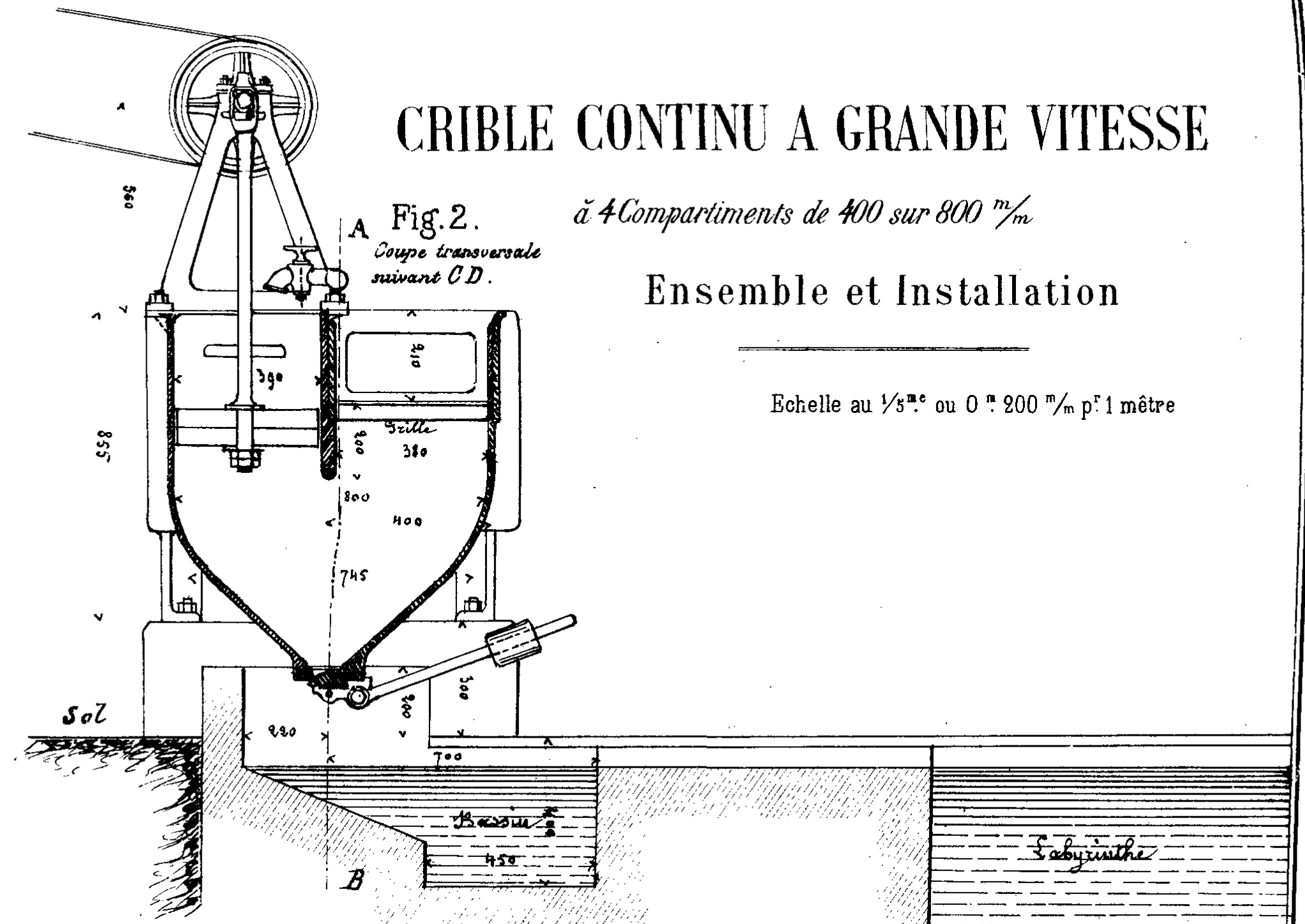
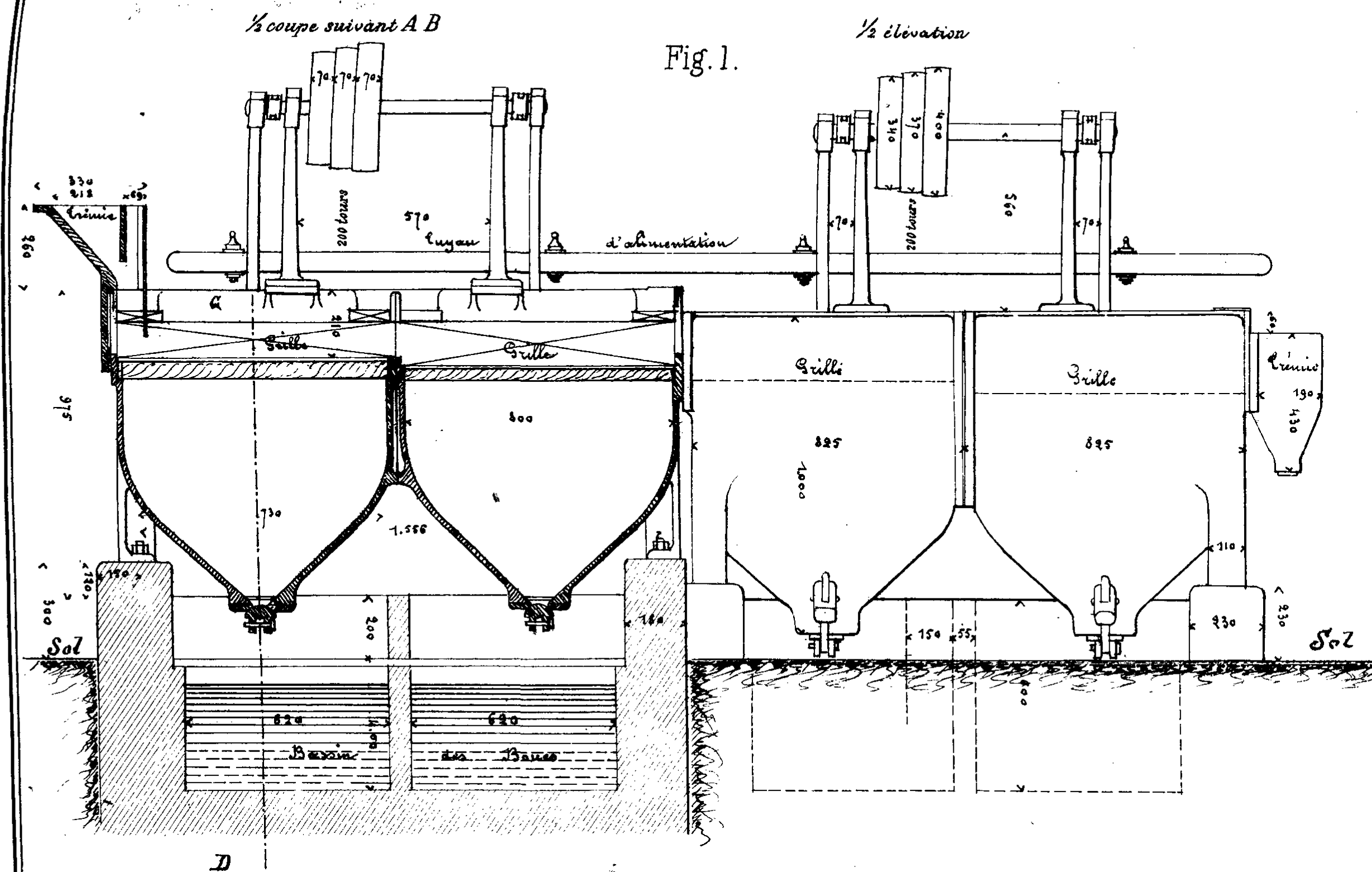
5 m.

10 m.





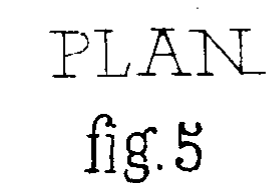
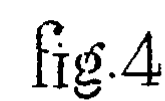
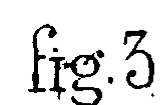
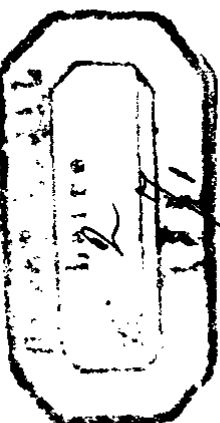












PLAN ETCOUPES  
POUR SERVIR AU CLASSEMENT  
DE LA COUCHE RENCONTRÉE PAR  
LE PUITS MARS  
ALA PROFONDEUR DE 278.<sup>m</sup> 80<sup>c</sup>

Echelle de 1 à 10.000







Fig. 4 — COUPE CC' PASSANT PAR LES PUIITS S<sup>t</sup> LOUIS ET MARS

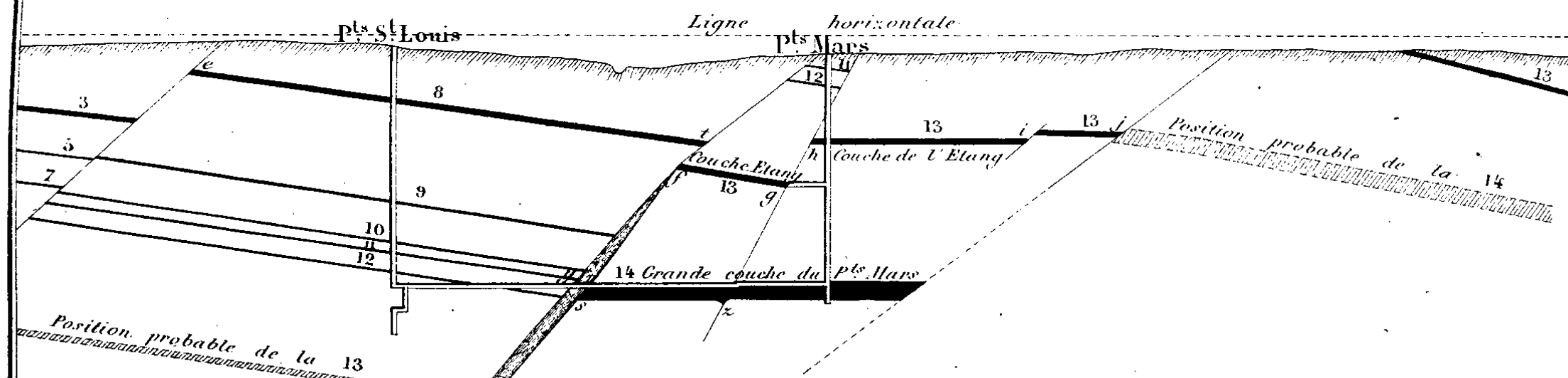


Fig. 5 — COUPE **KK'** PASSANT PAR LES PUITS ST LOUIS ET ST CLAUDE.

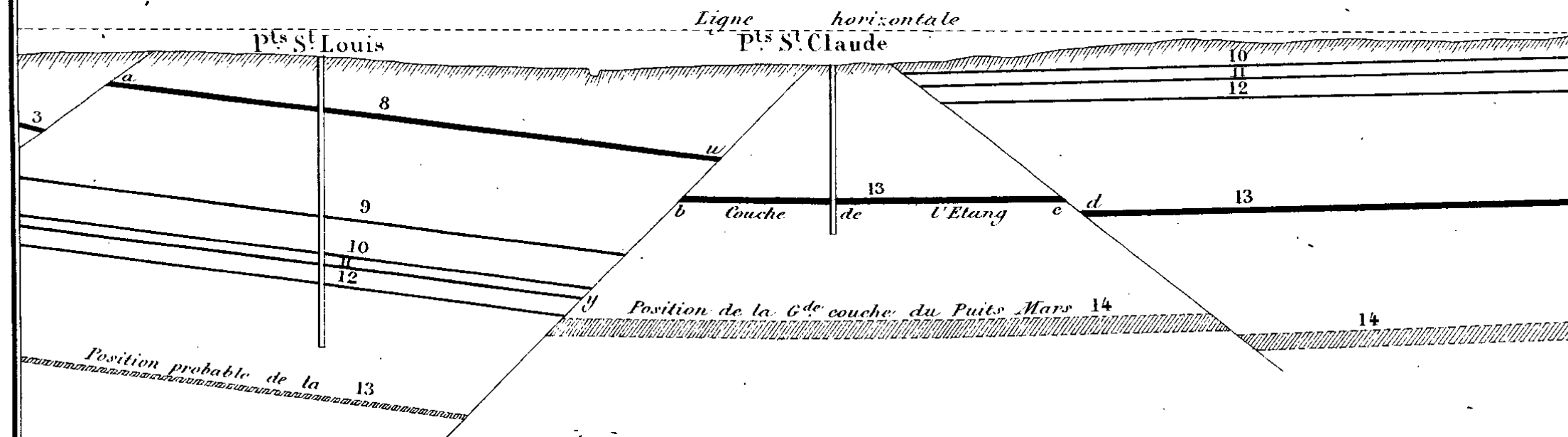


Fig. 1

PARTIE SUD-OUEST  
du Grand-Duché  
DE LUXEMBOURG.

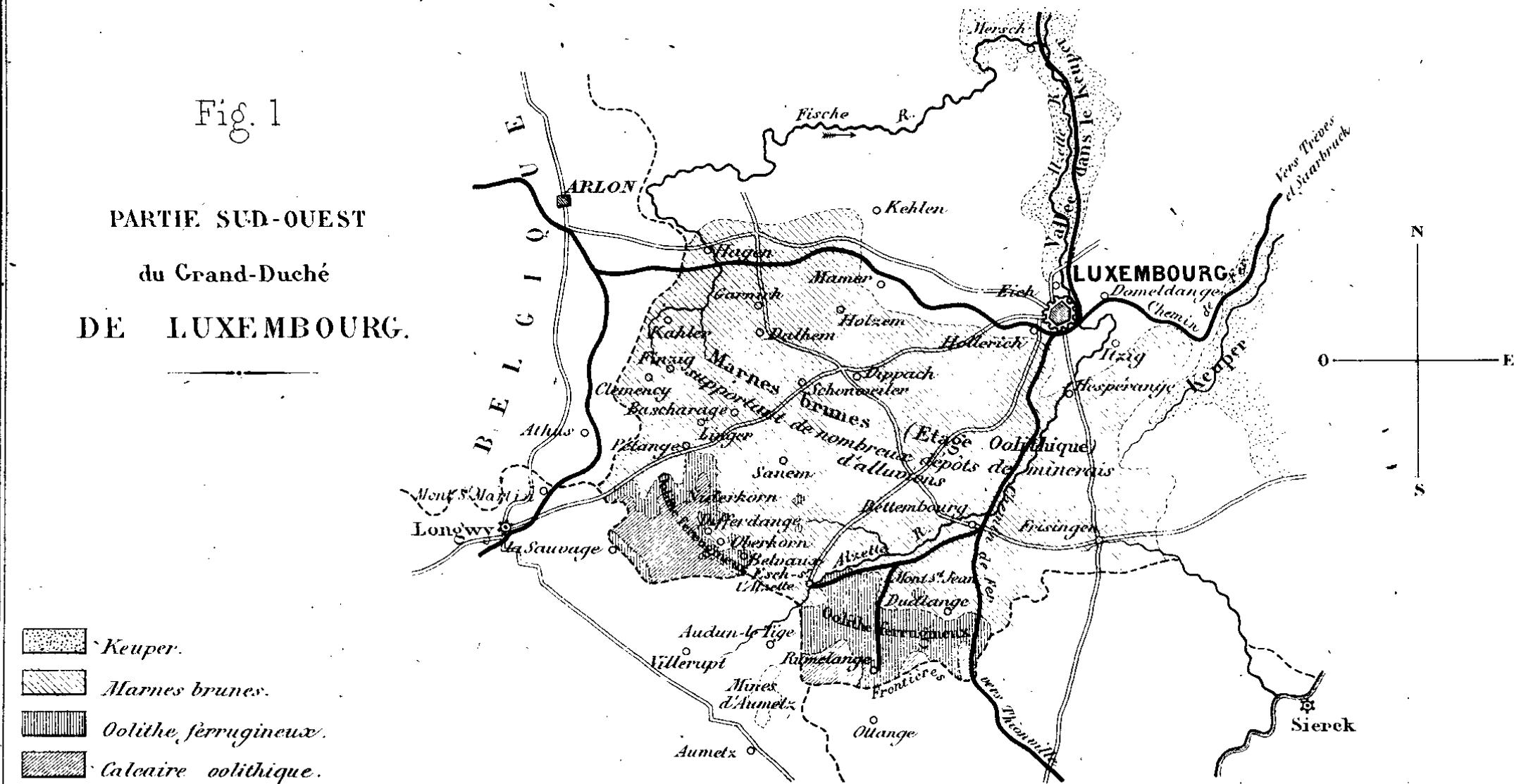
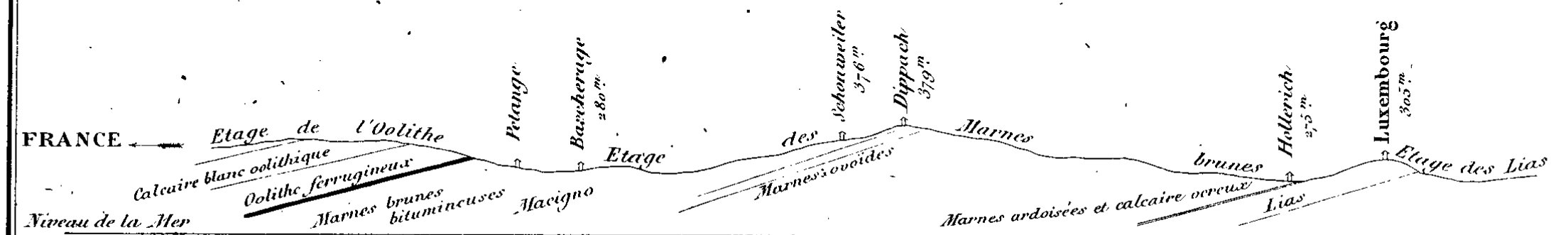


Fig. 2 . Coupe du S. au N. d'après M.<sup>r</sup> Majérus.



PLAN  
Fig.3

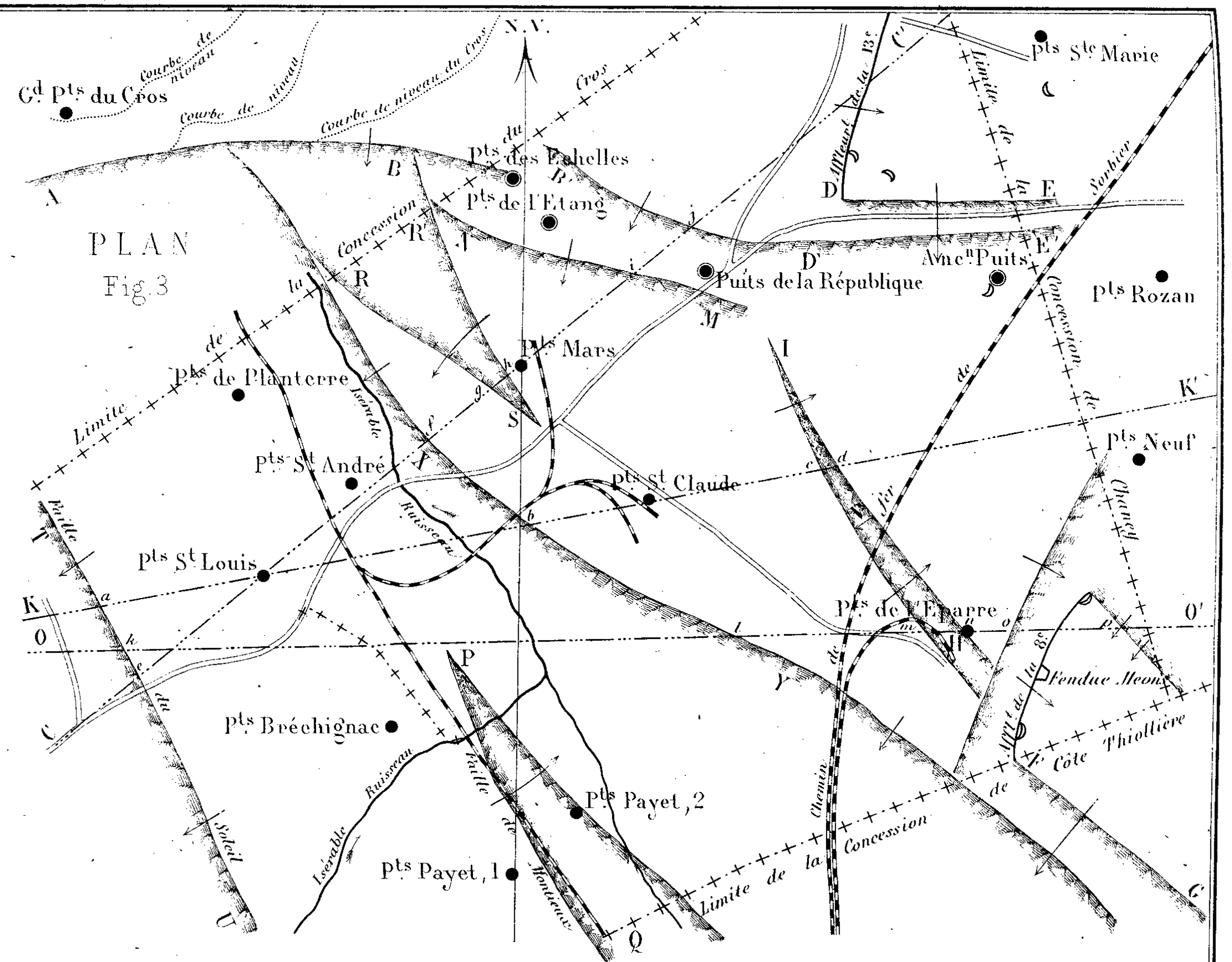
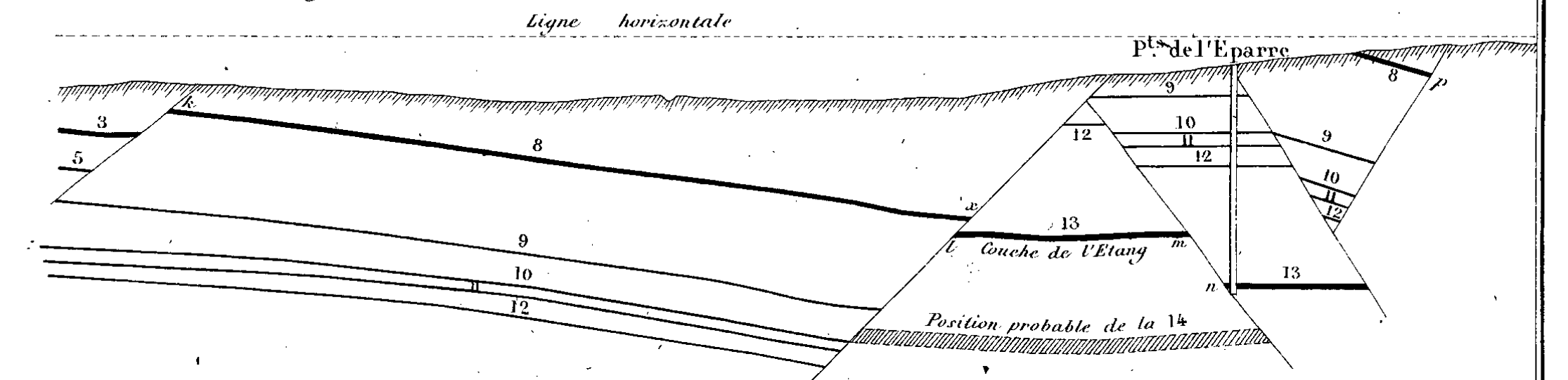


Fig. 6 - COUPE 0 0' PASSANT PAR LE PUITS DE L'ÉPARRE.



LÉGENDE.

..+..+..+..+..+.. *Limite des Concessions.*

 *Intersection des Failles et des Couches.*

..... Lignes suivant lesquelles passent les coupes.

———— Couches connues.

*Couches probables.*

..... *Courbes de niveau dans la C<sup>on</sup> du Cros.*

Echelle du plan et des coupes : de 1 à 10.000 .







Tiroir circulaire équilibré, de M<sup>r</sup> Schivre

Fig.1-Vue latérale extérieure

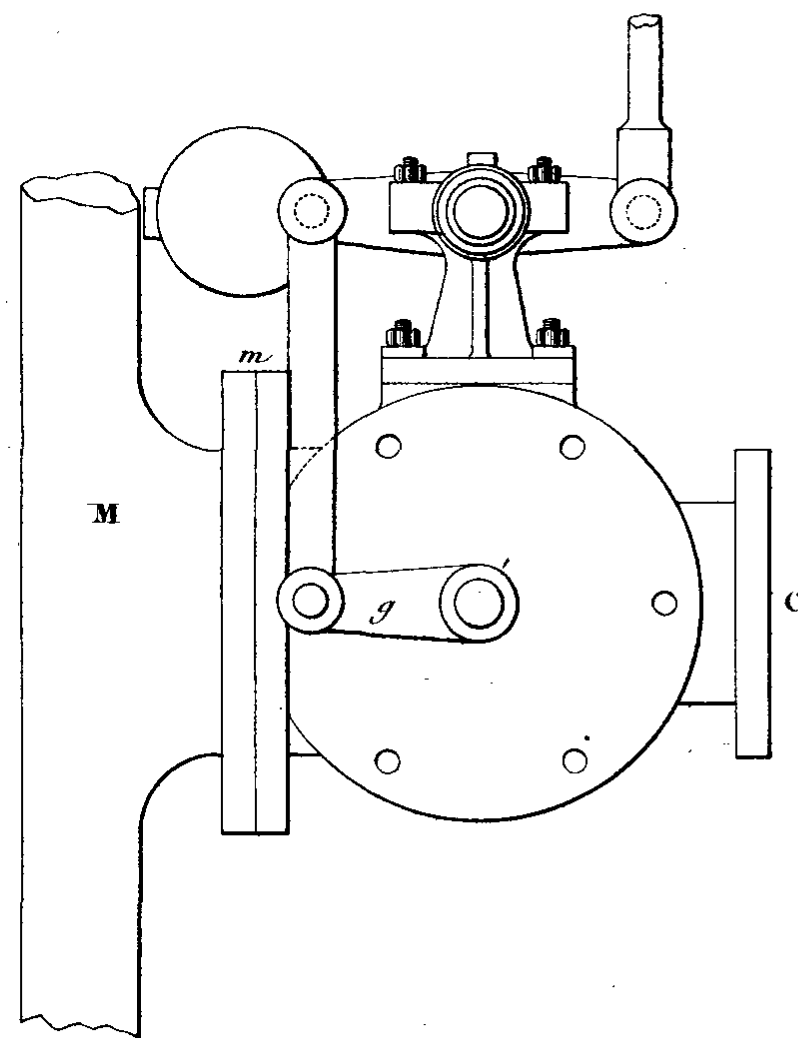


Fig.2-Coupe suivant la ligne 5.6.

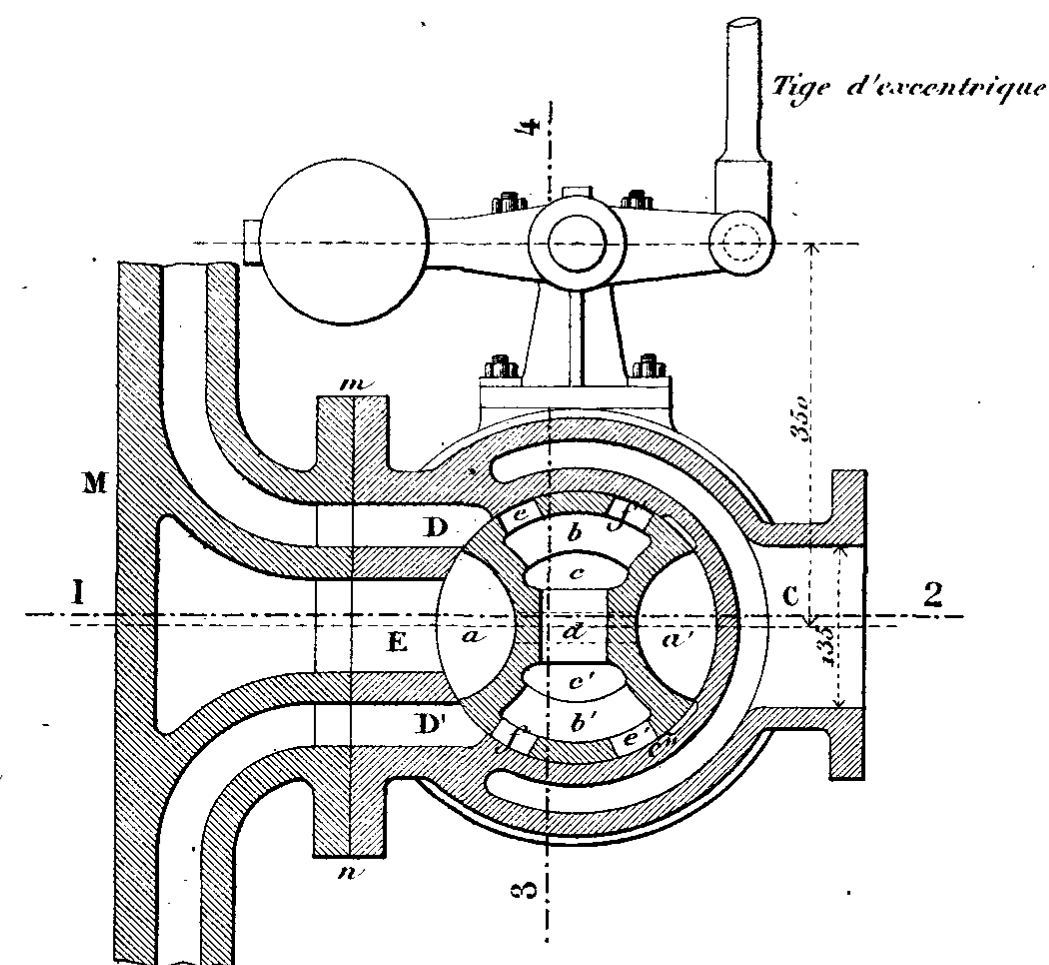


Fig.3-Coupe suivant la ligne 1.2.

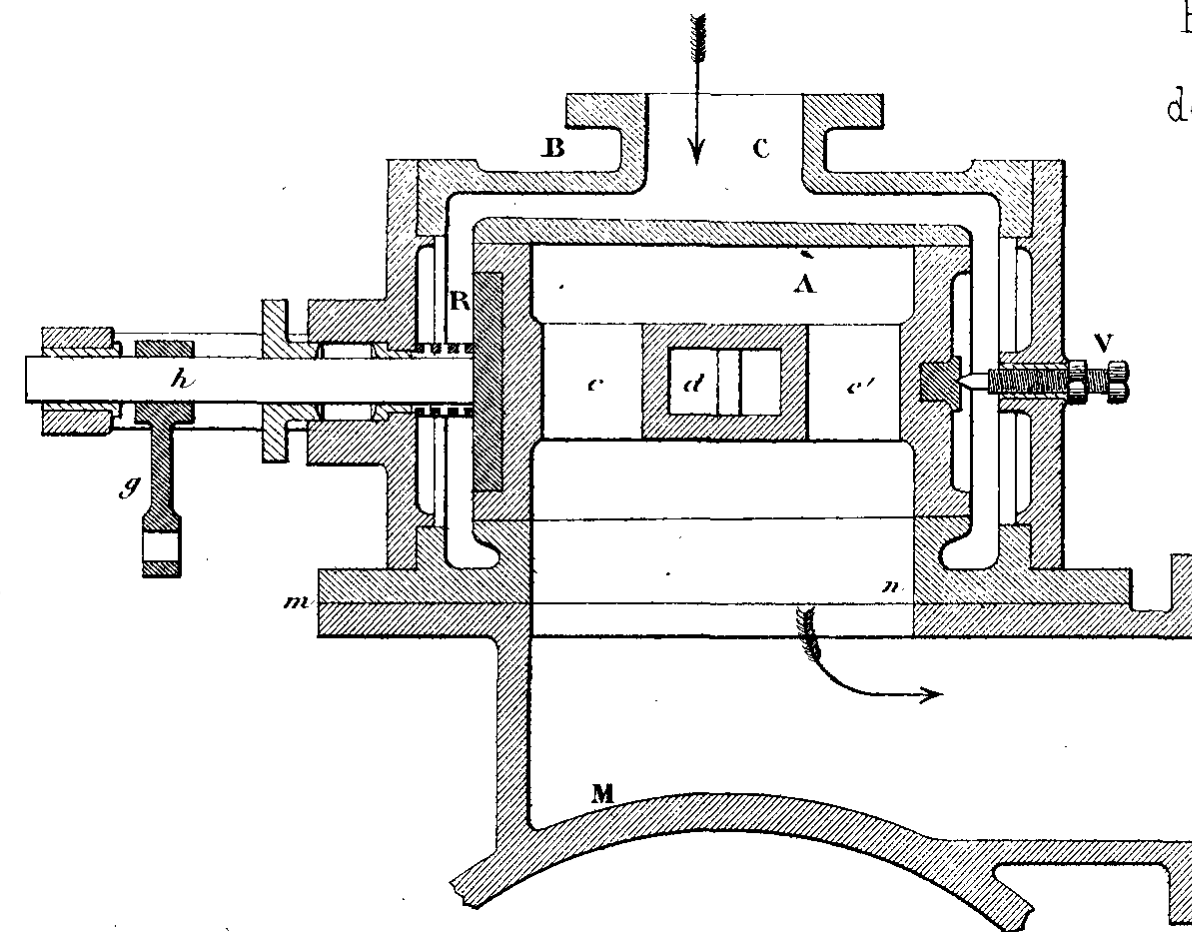
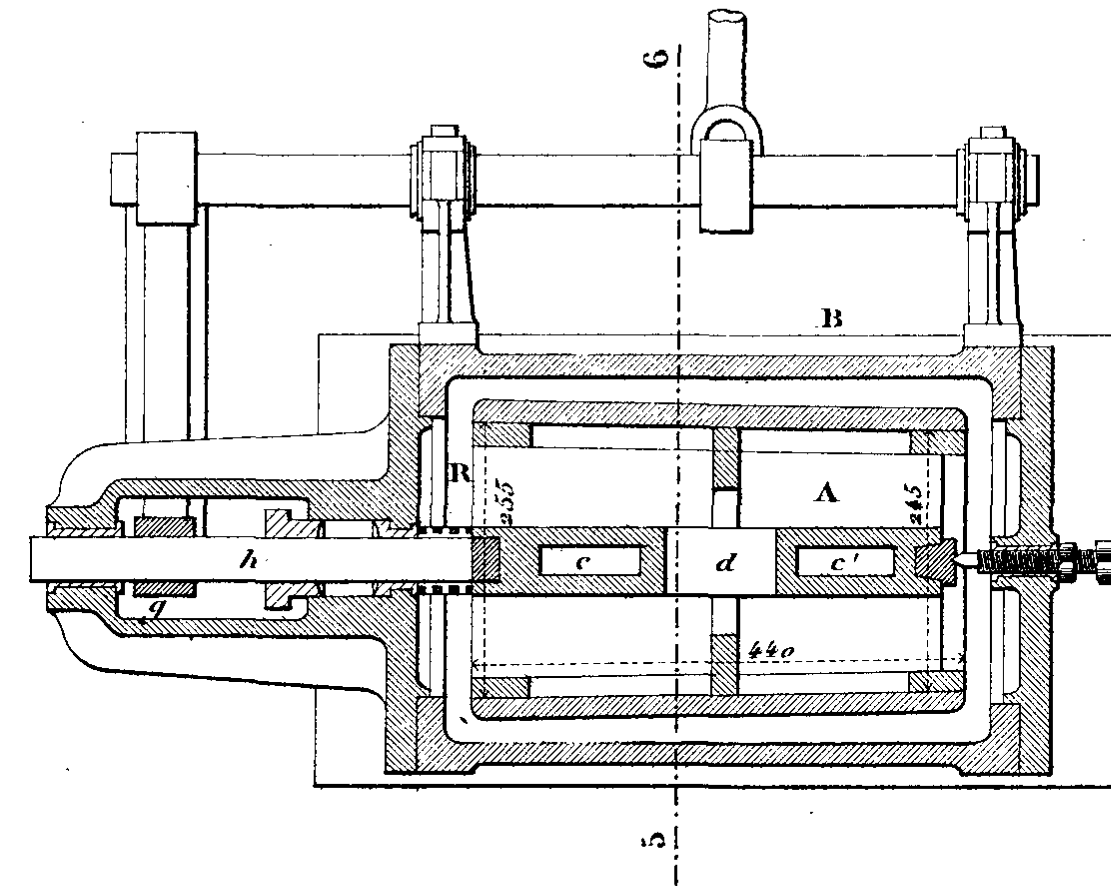


Fig.4-Coupe suivant la ligne 3.4.



Echelle des Fig.1, 2, 3 et 4.

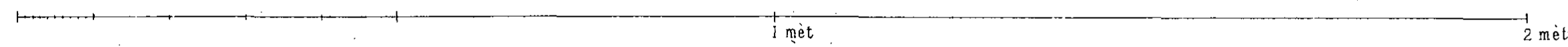


Fig.5

Frein à vapeur à pression variable  
des houillères de Commentry, (Allier)

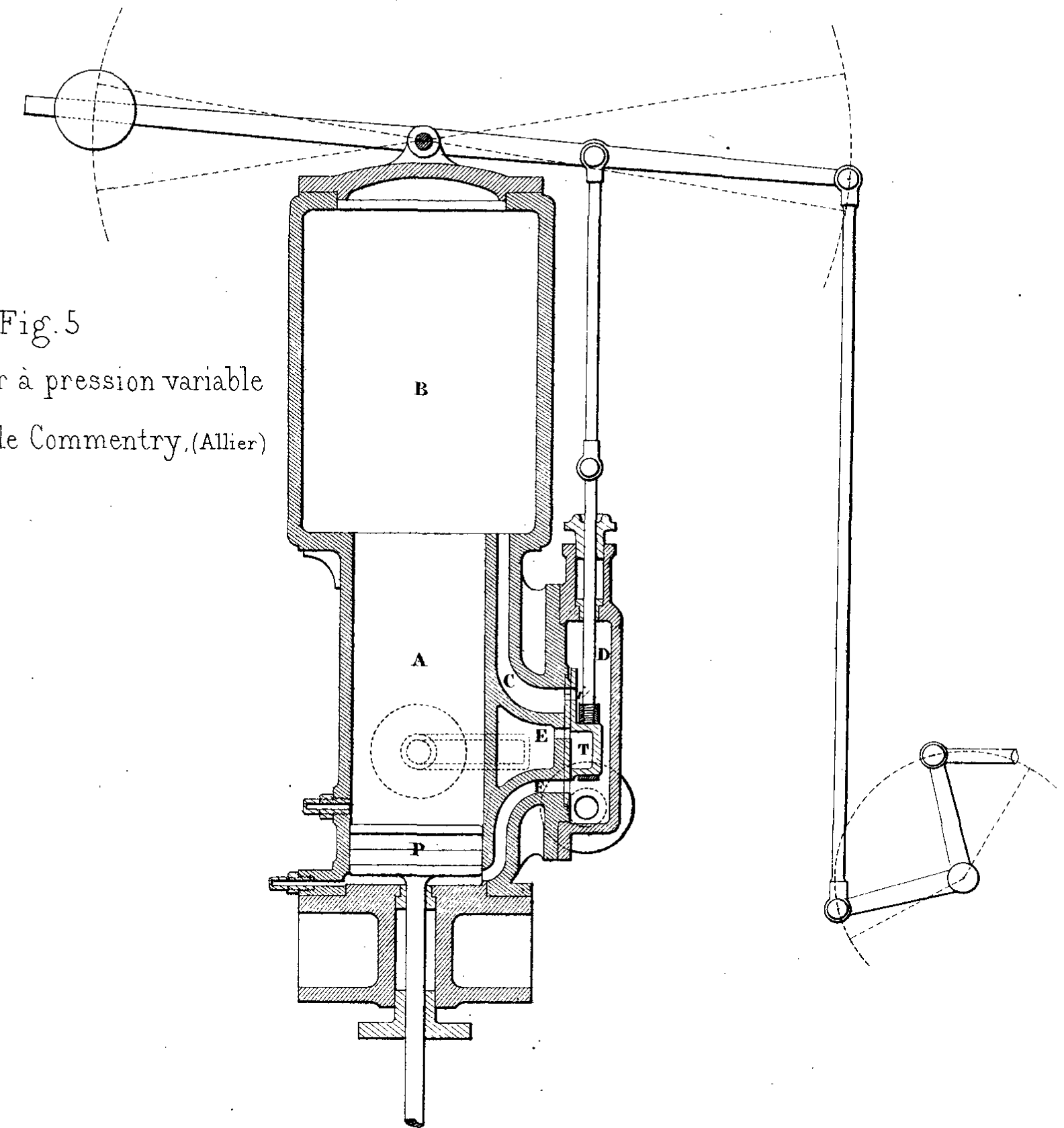
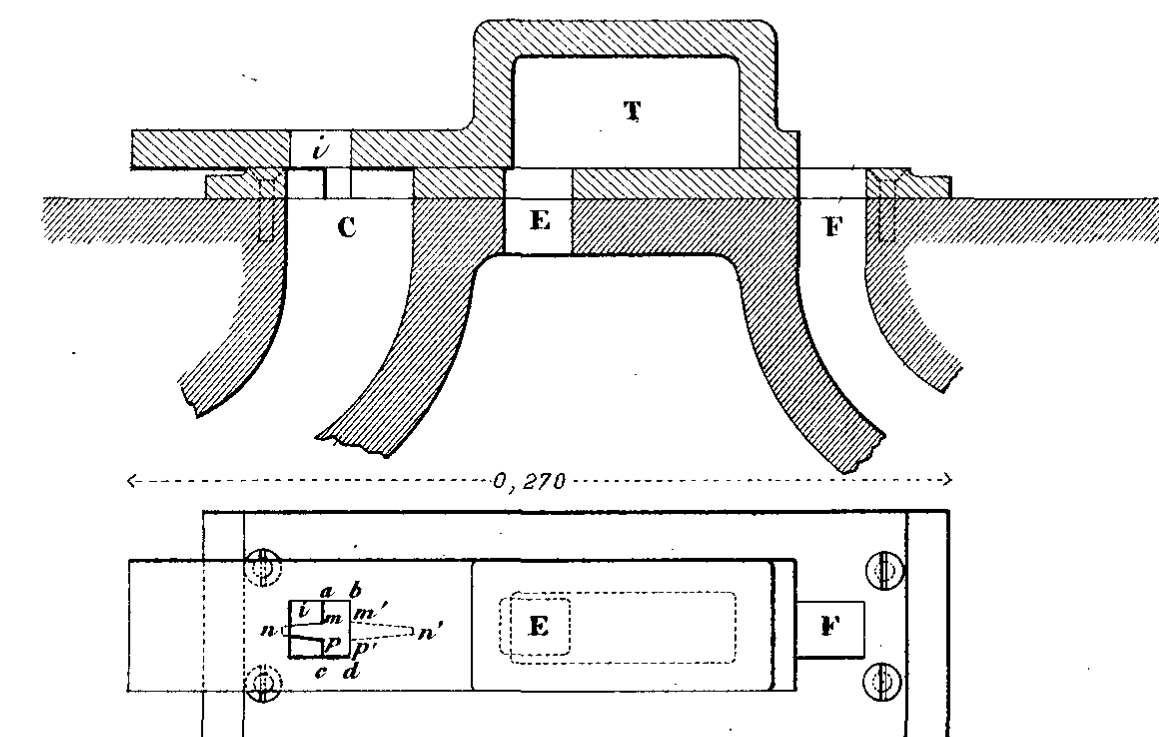


Fig.6 - Tiroir et glace du tiroir.

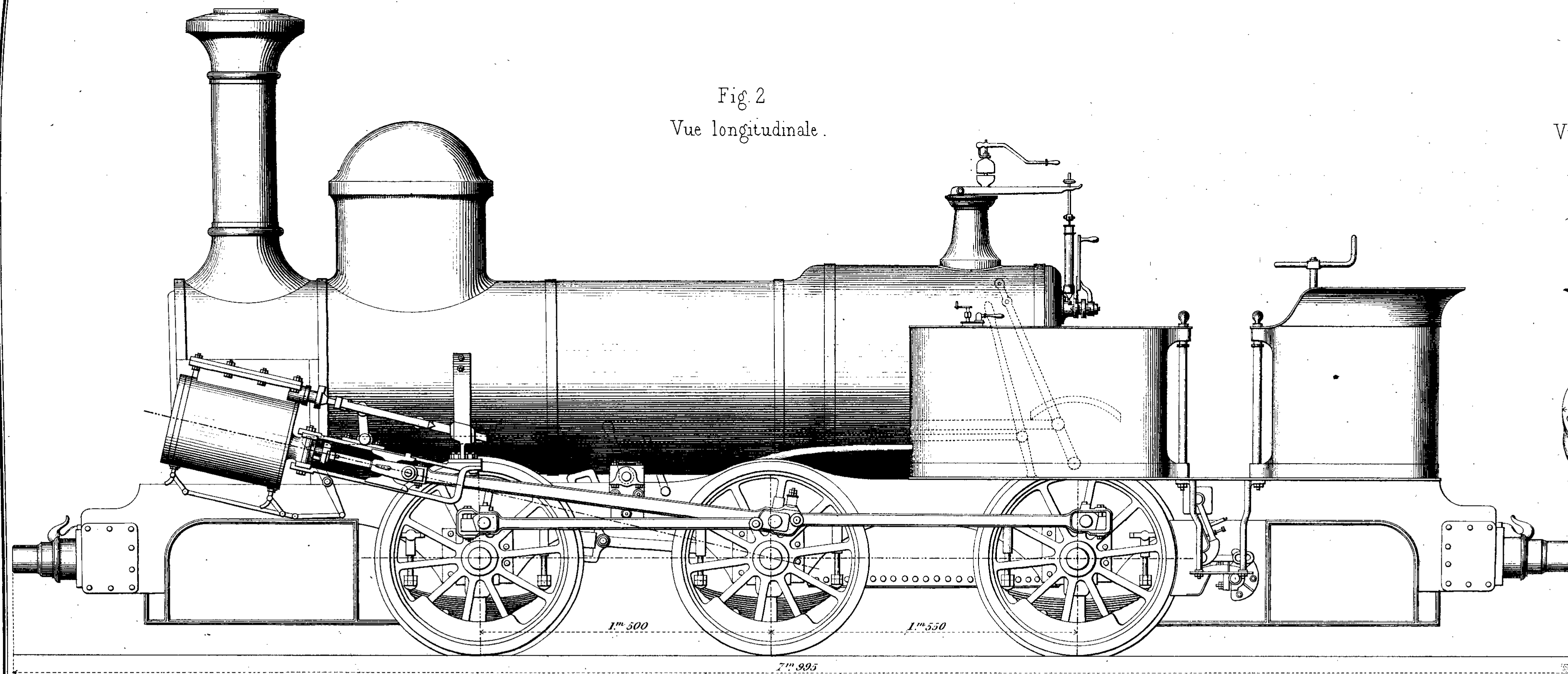


Echelle de la Fig.6.







Fig 2  
Vue longitudinale.

Vue par bout

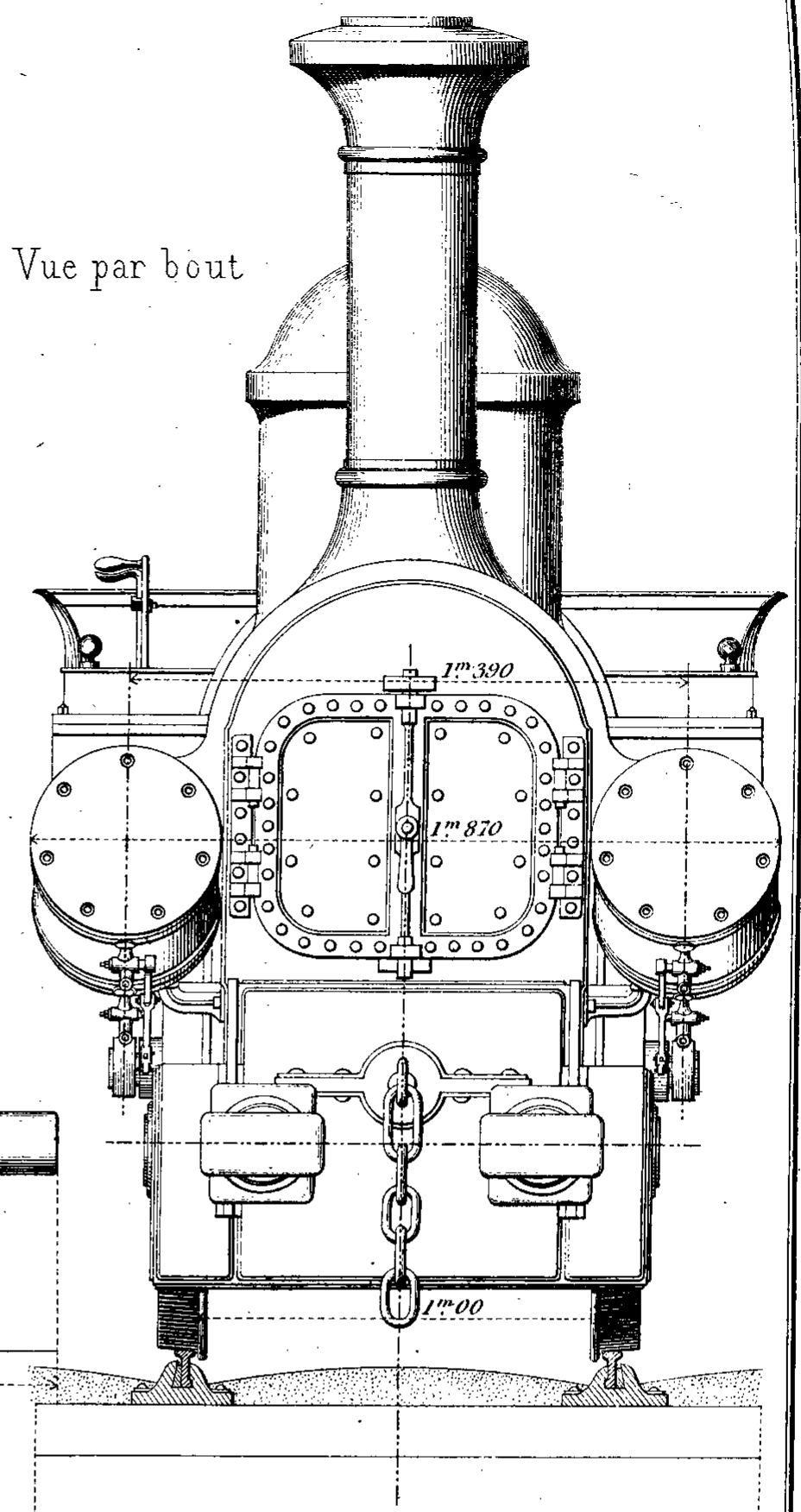
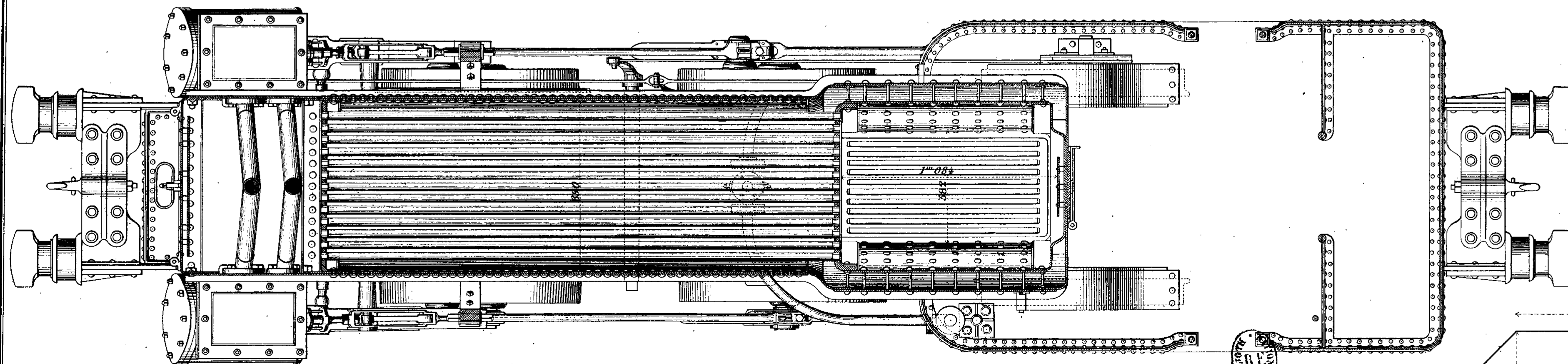


Fig 3 - Coupe horizontale.



|                                                         |                      |
|---------------------------------------------------------|----------------------|
| Surface de chauffe.....                                 | 37 m <sup>2</sup> 67 |
| Tension de la vapeur.....                               | 8 kil.               |
| Contenance en eau.....                                  | 2400 litres          |
| Contenance en combustible.....                          | 850 kilog.           |
| Poids de la machine vide.....                           | 15100 kilog.         |
| Poids de la machine avec<br>ses approvisionnements..... | 19700 kilog.         |

Echelle de 0,004 pour mètre.

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

2

3

4 mètres

Port de Montluçon

1000 m

2500 m

2 locomotives

135 m

13000 m

7 locomotives

Commentry

Fig 1  
Profil du chemin de fer  
de Commentry au Canal du Berry.











# Bulletin de la Société de l'industrie minérale. Atlas



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**5/** Les présentes conditions d'utilisation des contenus de Gallica sont régies par la loi française. En cas de réutilisation prévue dans un autre pays, il appartient à chaque utilisateur de vérifier la conformité de son projet avec le droit de ce pays.

**6/** L'utilisateur s'engage à respecter les présentes conditions d'utilisation ainsi que la législation en vigueur, notamment en matière de propriété intellectuelle. En cas de non respect de ces dispositions, il est notamment passible d'une amende prévue par la loi du 17 juillet 1978.

**7/** Pour obtenir un document de Gallica en haute définition, contacter [utilisation.commerciale@bnf.fr](mailto:utilisation.commerciale@bnf.fr).







*B. g. H 39-41*



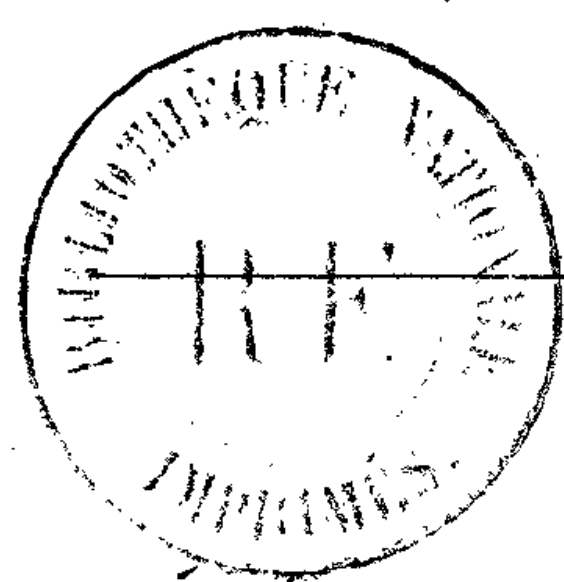
*Grueses.*

*B. g. à Recl. N° 24070*

# ATLAS

DE LA

## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE



XIV<sup>e</sup> ANNÉE

4<sup>e</sup> LIVRAISON

Avril, Mai, Juin.

4853-69

1869



SAINT ETIENNE IMPRIMERIE LITHOGRAPHIQUE

NUBLAT J<sup>re</sup> & F<sup>re</sup> LANTZ

Place Marengo, 2.







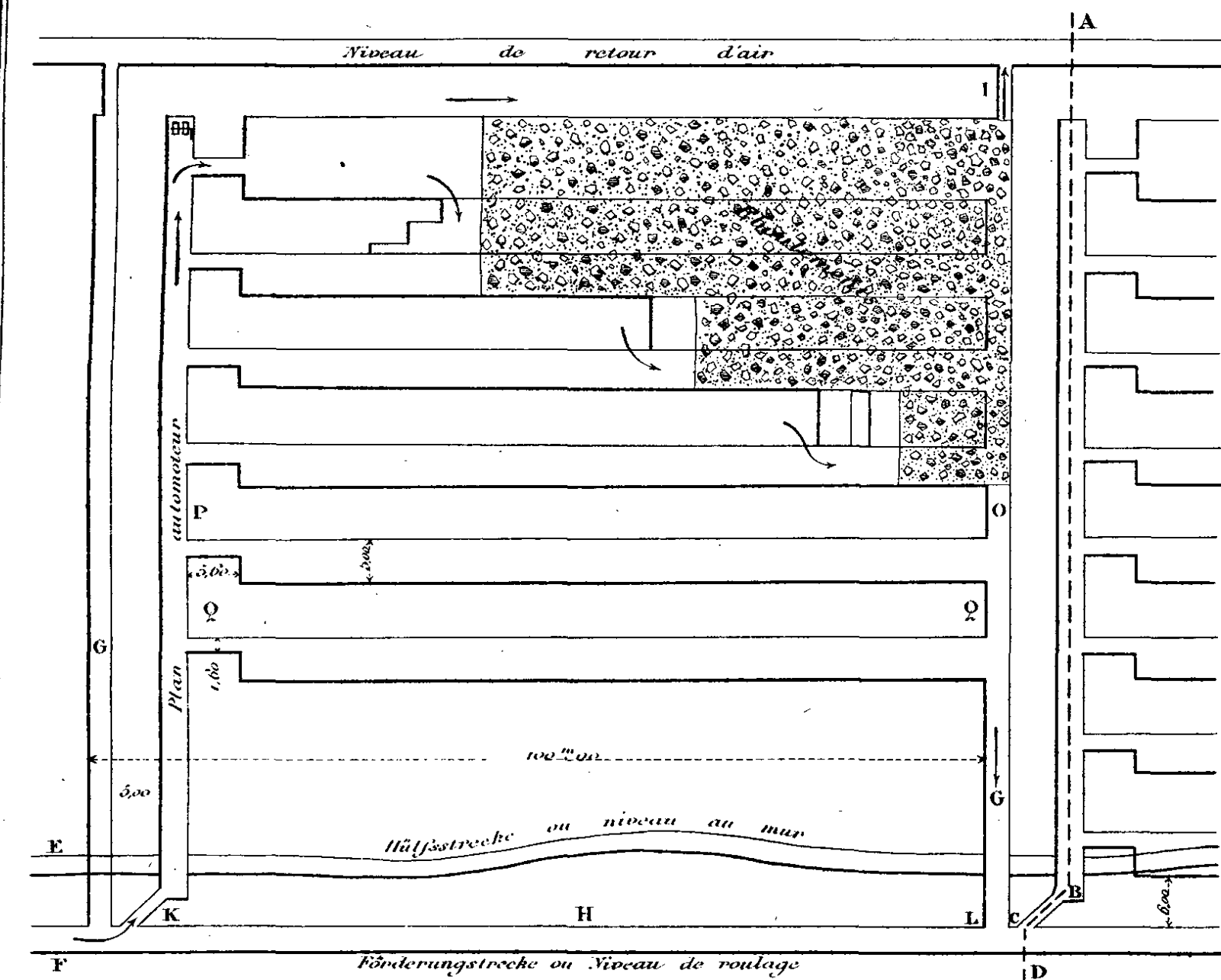


Fig. 1. Königsgarbe, plan d'un panneau

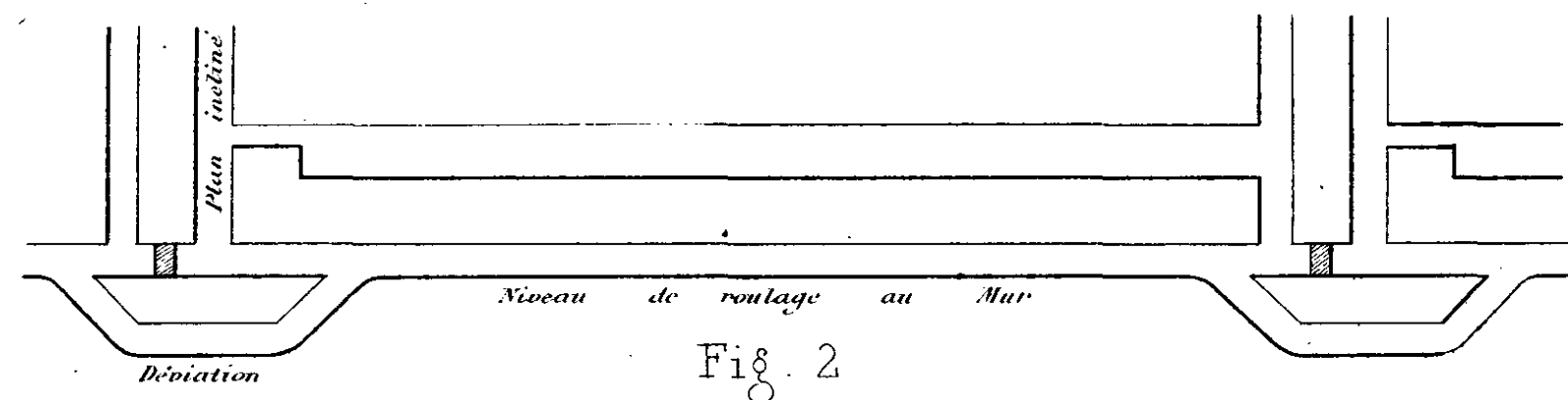


Fig. 2

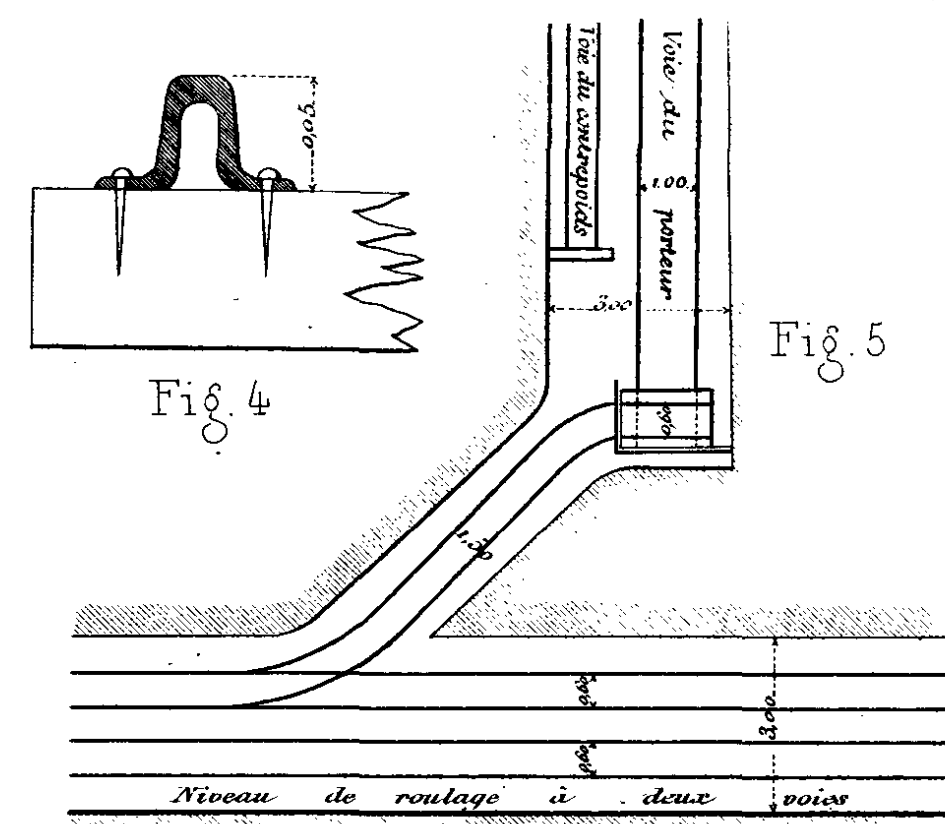


Fig. 4

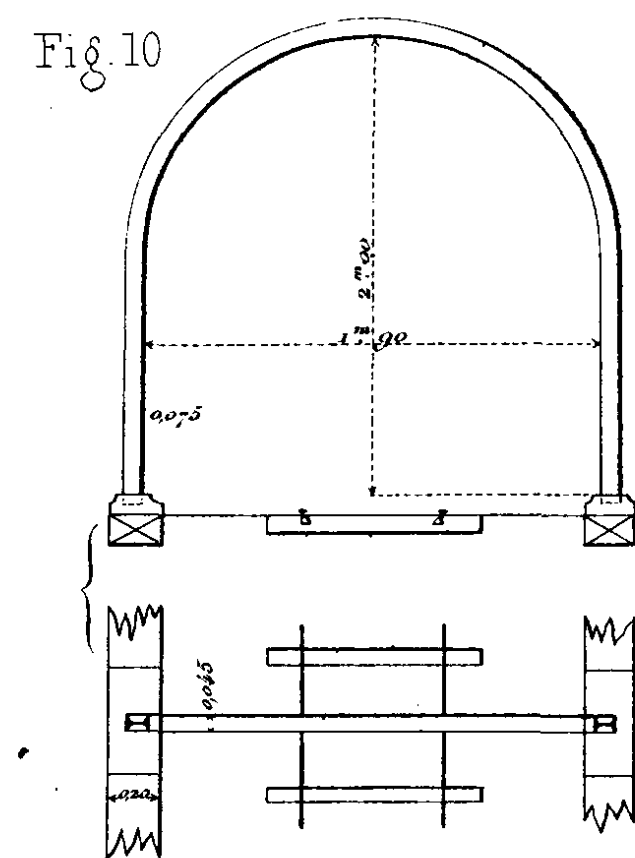


Fig. 5

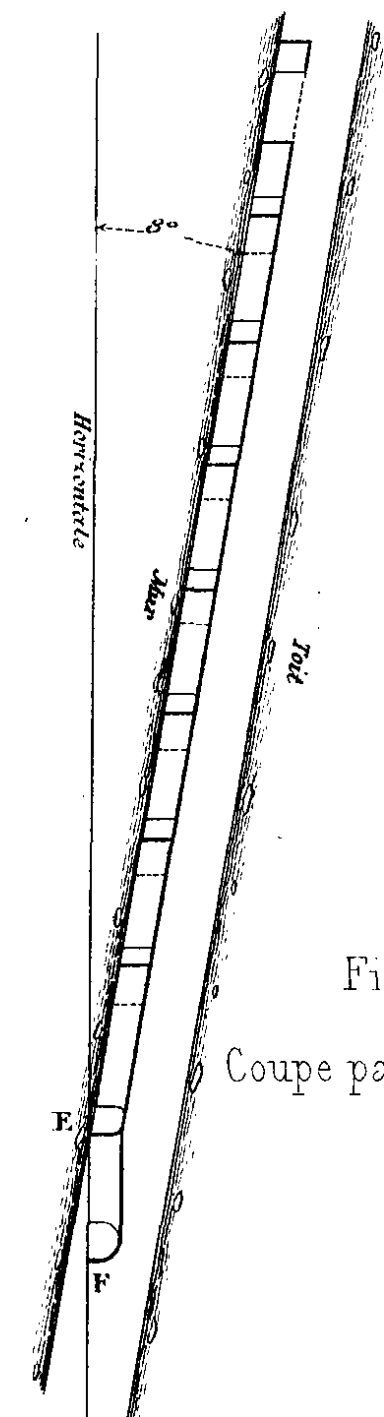


Fig. 3  
Coupe par ABCD

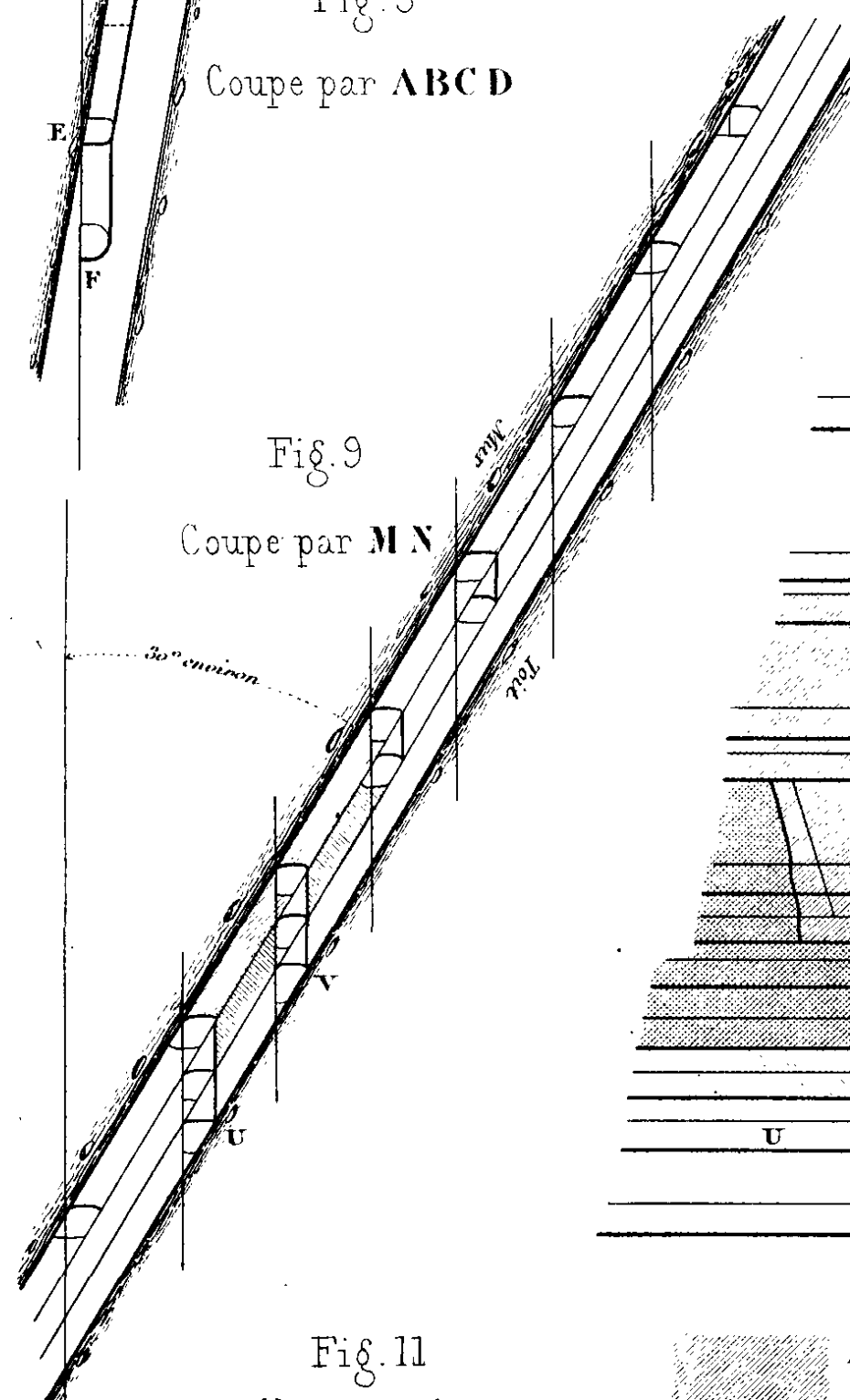


Fig. 9  
Coupe par MN

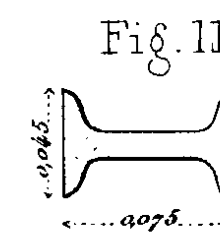


Fig. 11

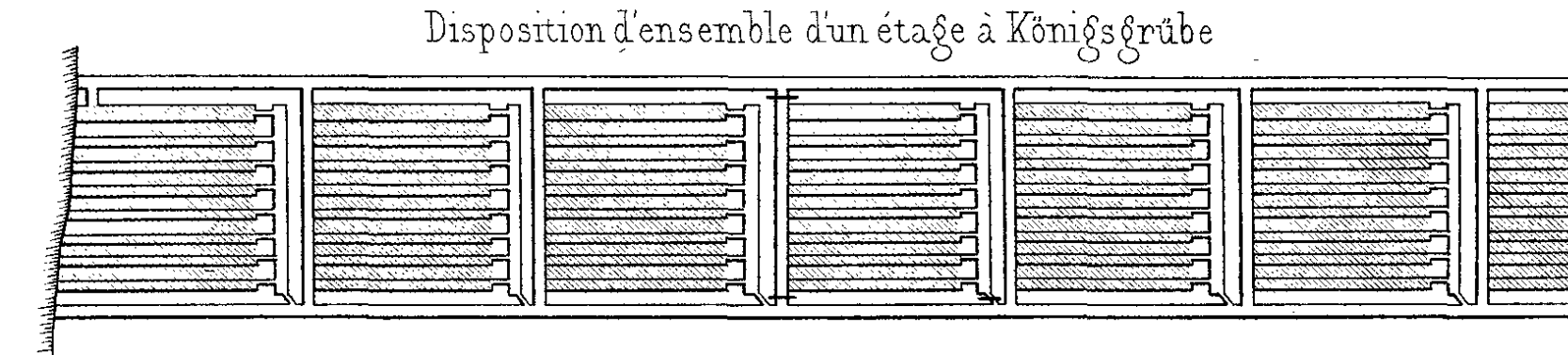


Fig. 6

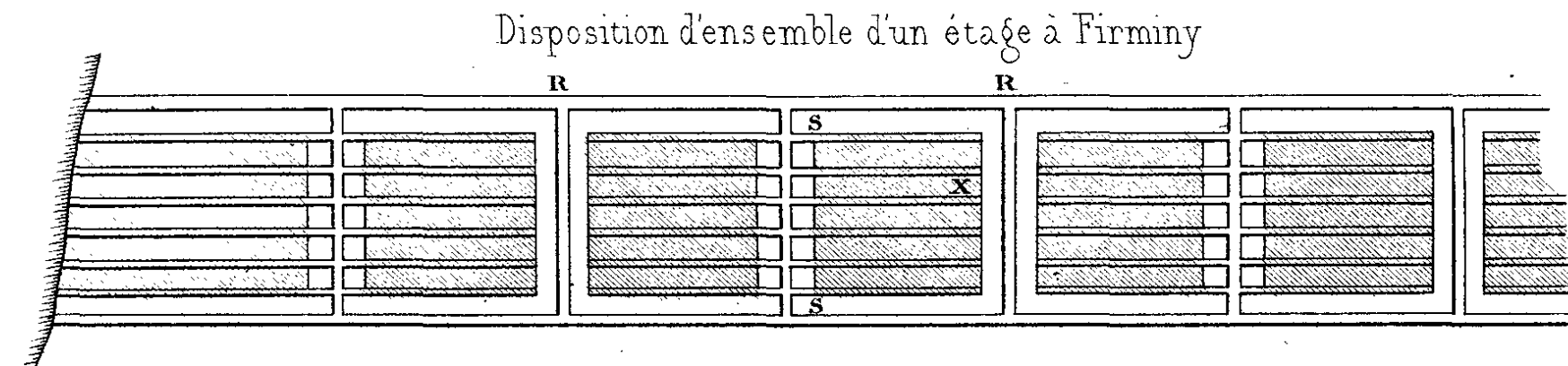


Fig. 7

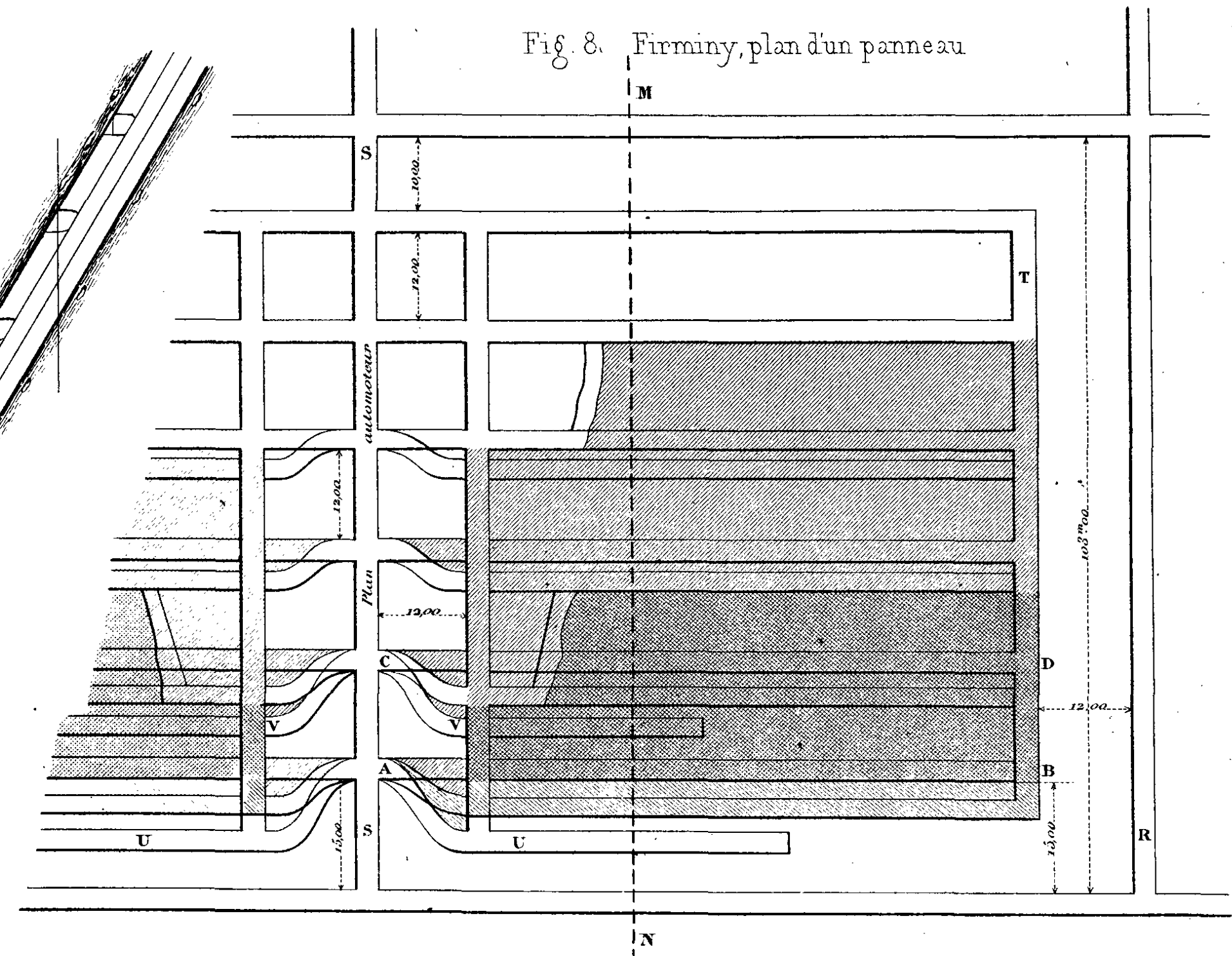


Fig. 8. Firminy, plan d'un panneau

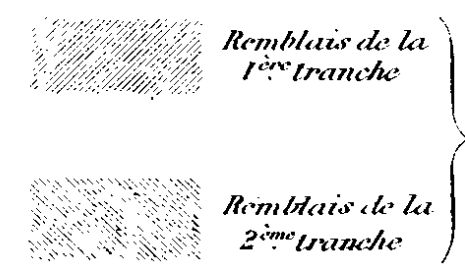
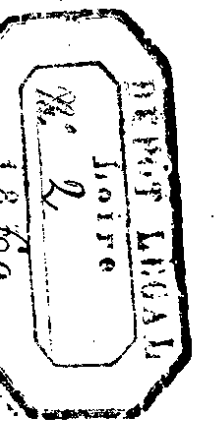
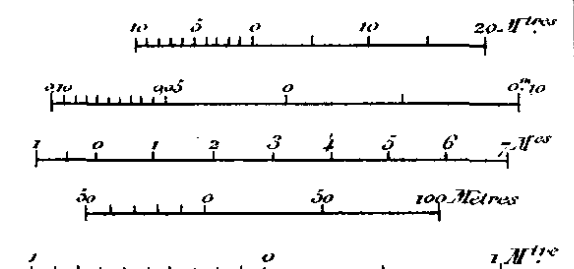


Fig. 8

Echelle des fig. 1, 2, 3, 8, 9 1 à 1000 = 0,001  
 de la fig. 5 1 à 5 = 0,2  
 de la fig. 6 1 à 200 = 0,005  
 des fig. 6, 7 1 à 5000 = 0,0002  
 de la fig. 10 1 à 50 = 0,02









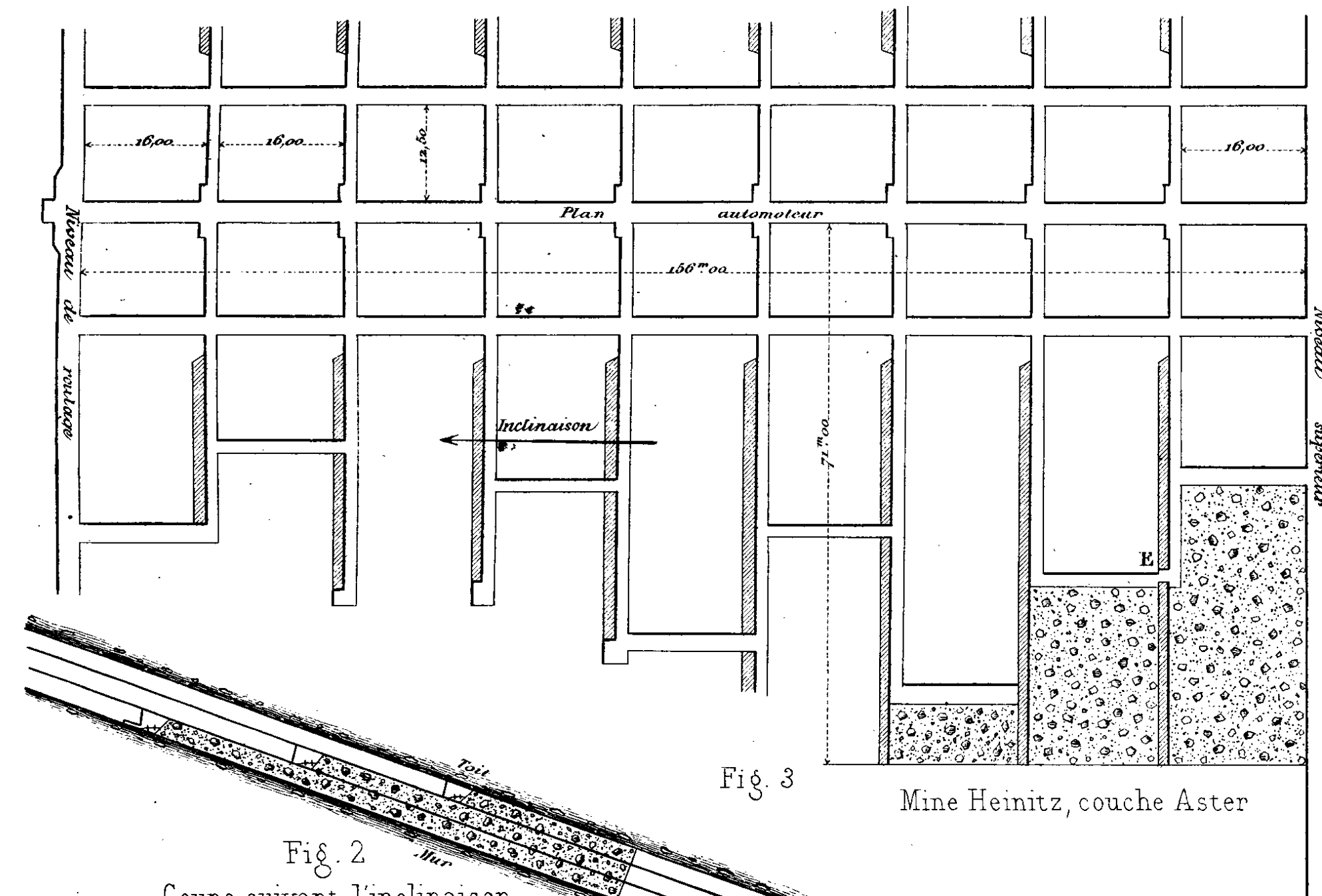
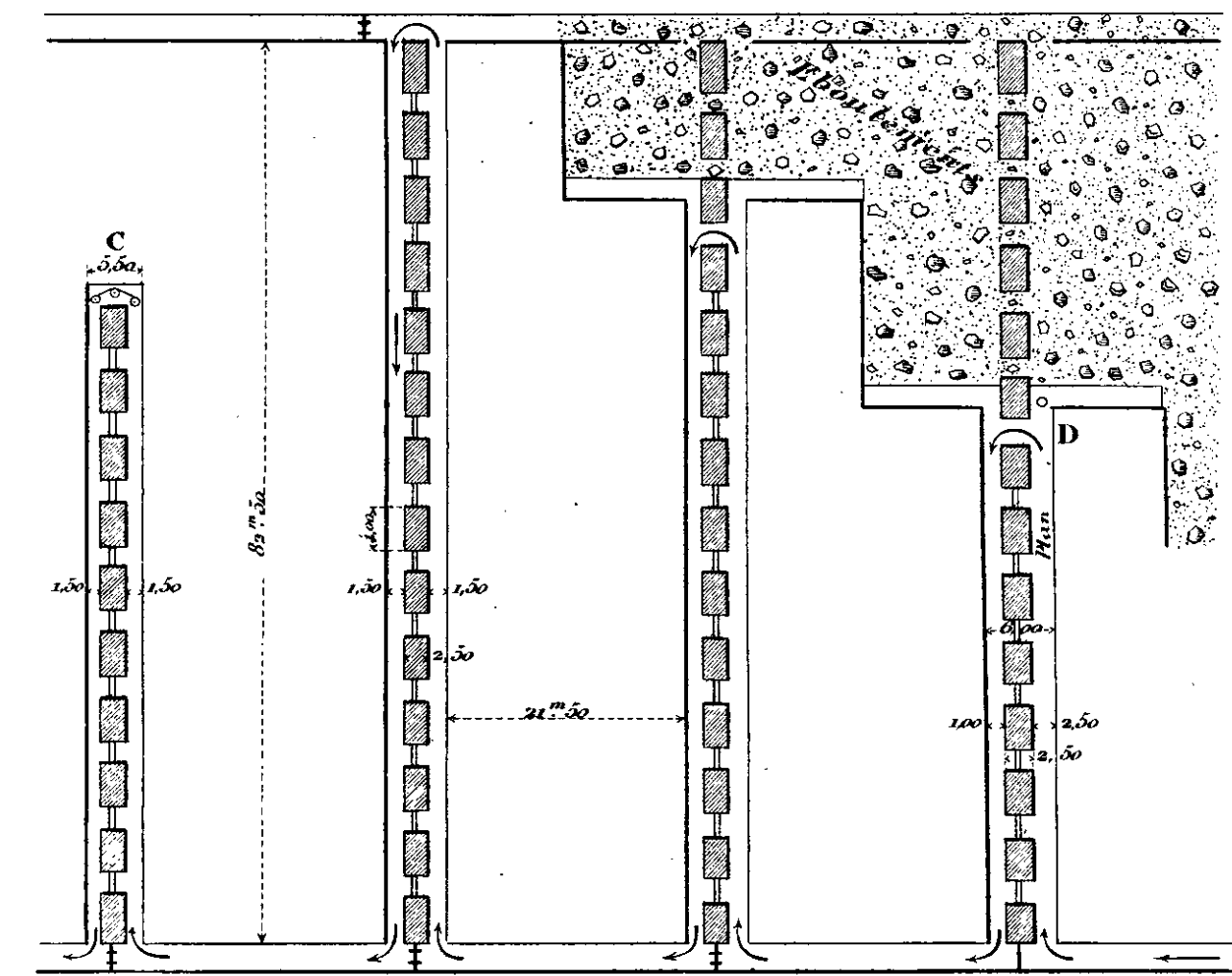
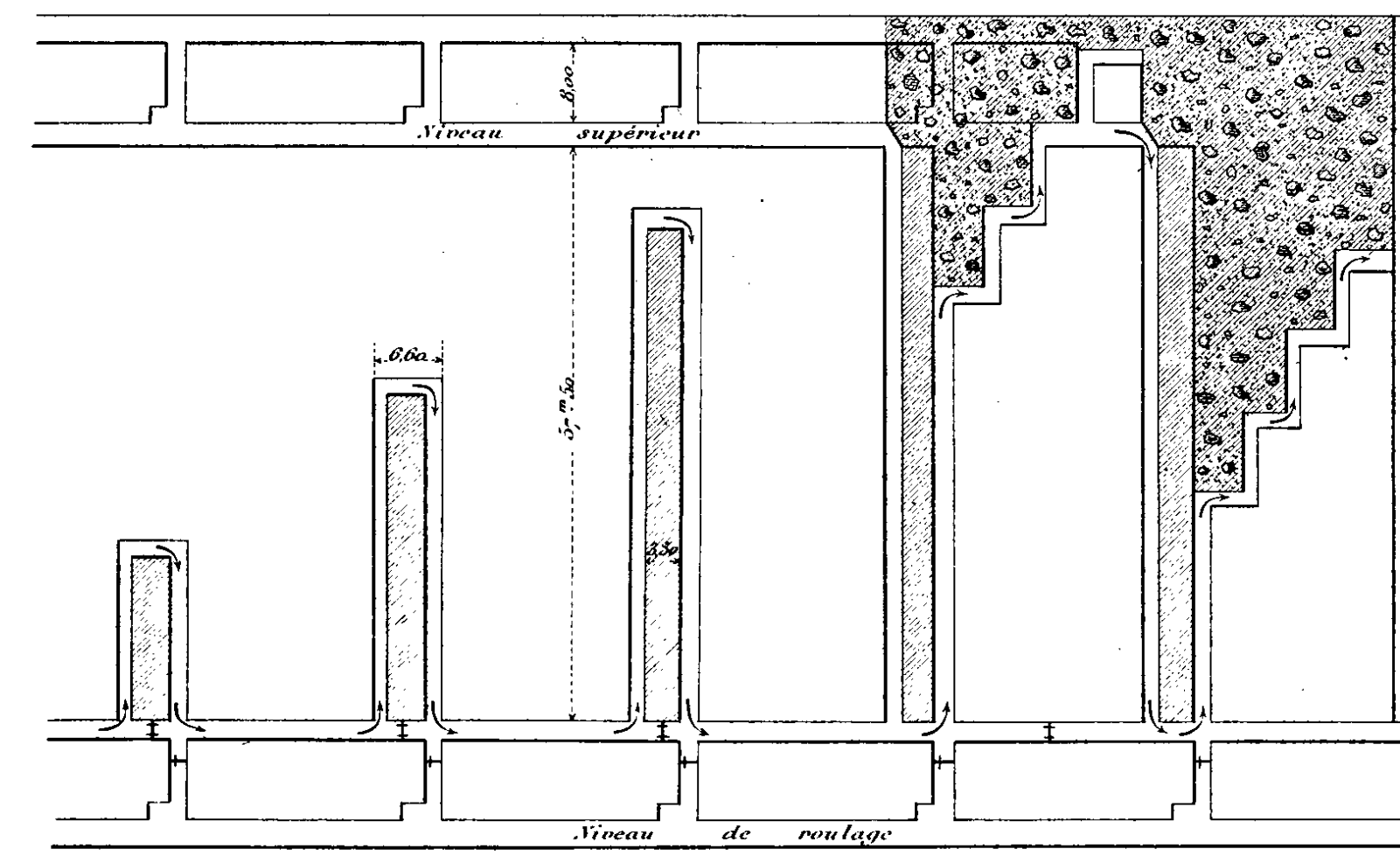
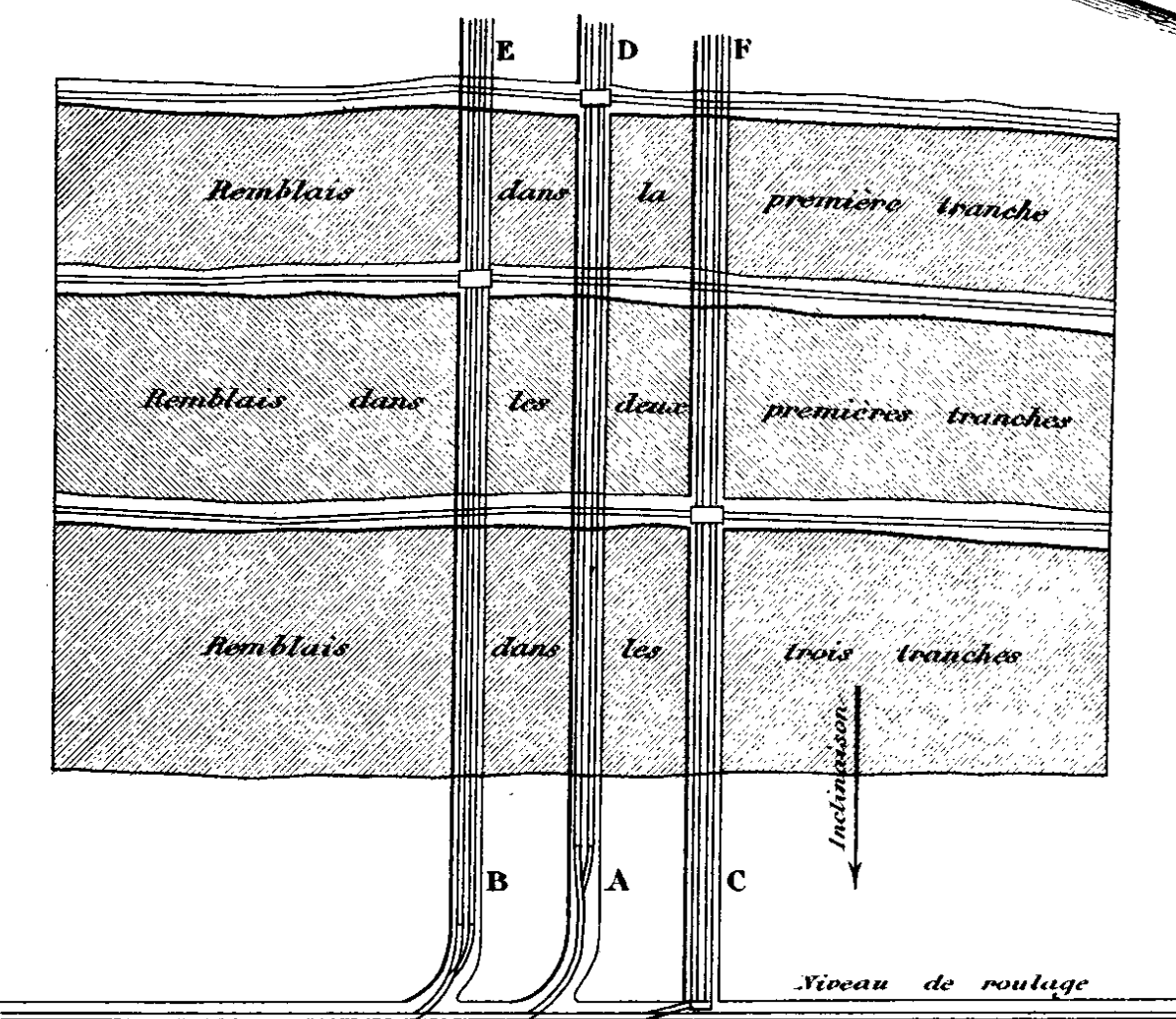
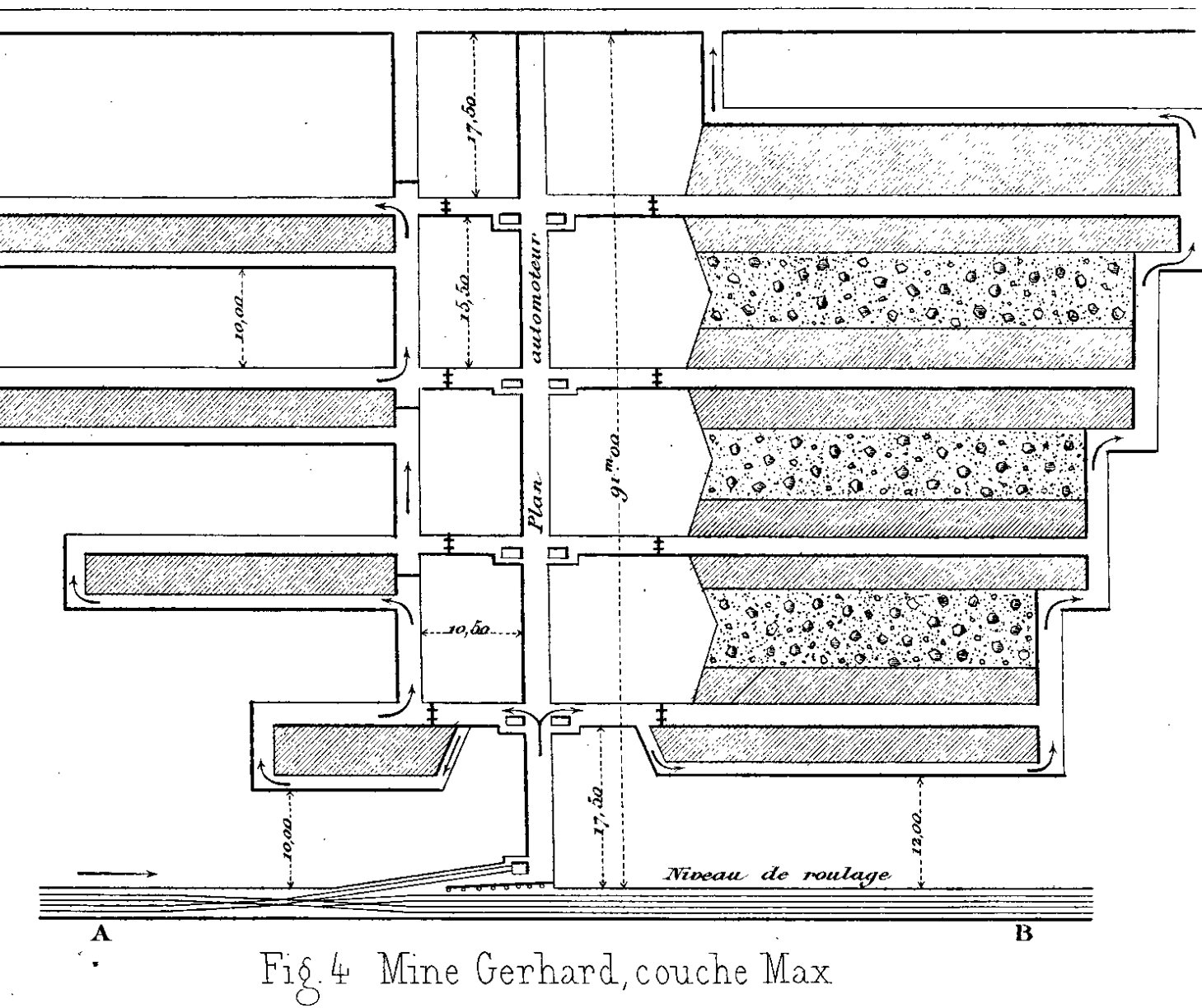
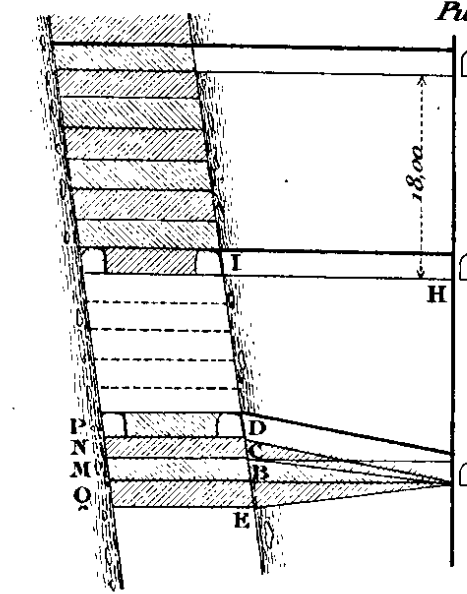


Fig. 7 Mines du Creusot



Echelle de toutes les Figures: 1 à 1000







Fig. 1

Vue en perspective

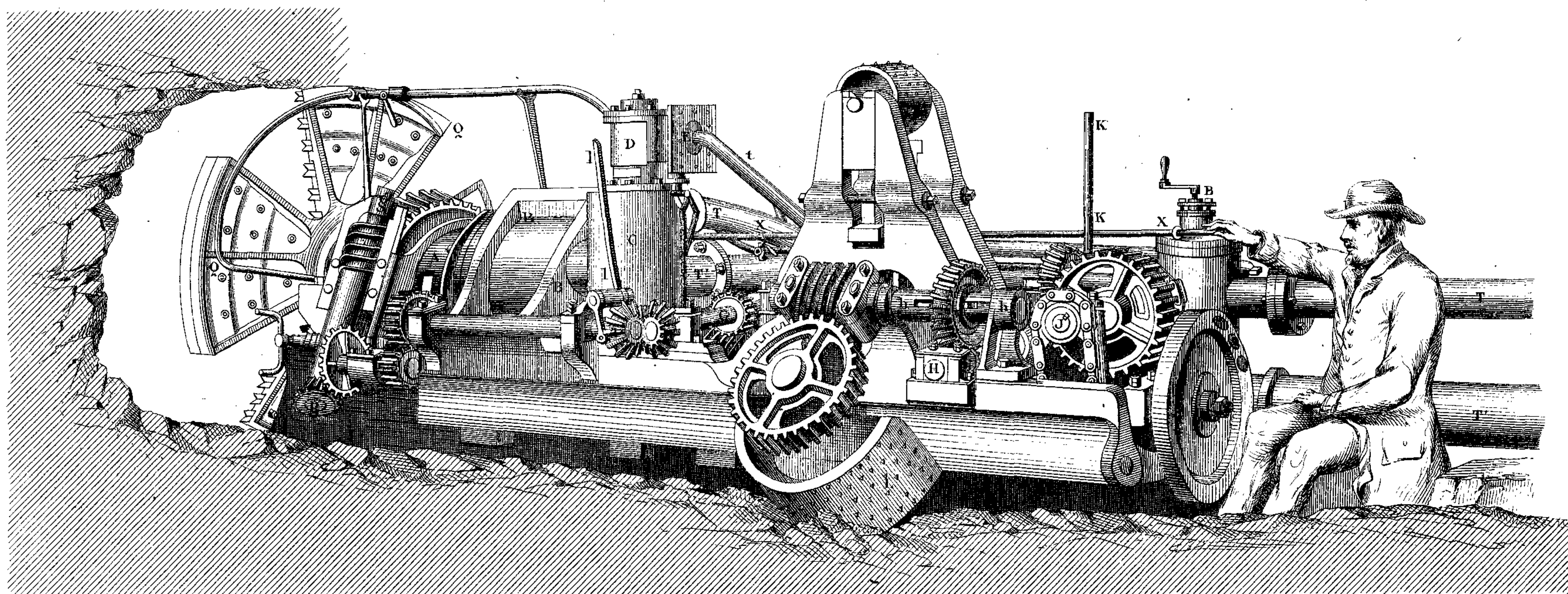
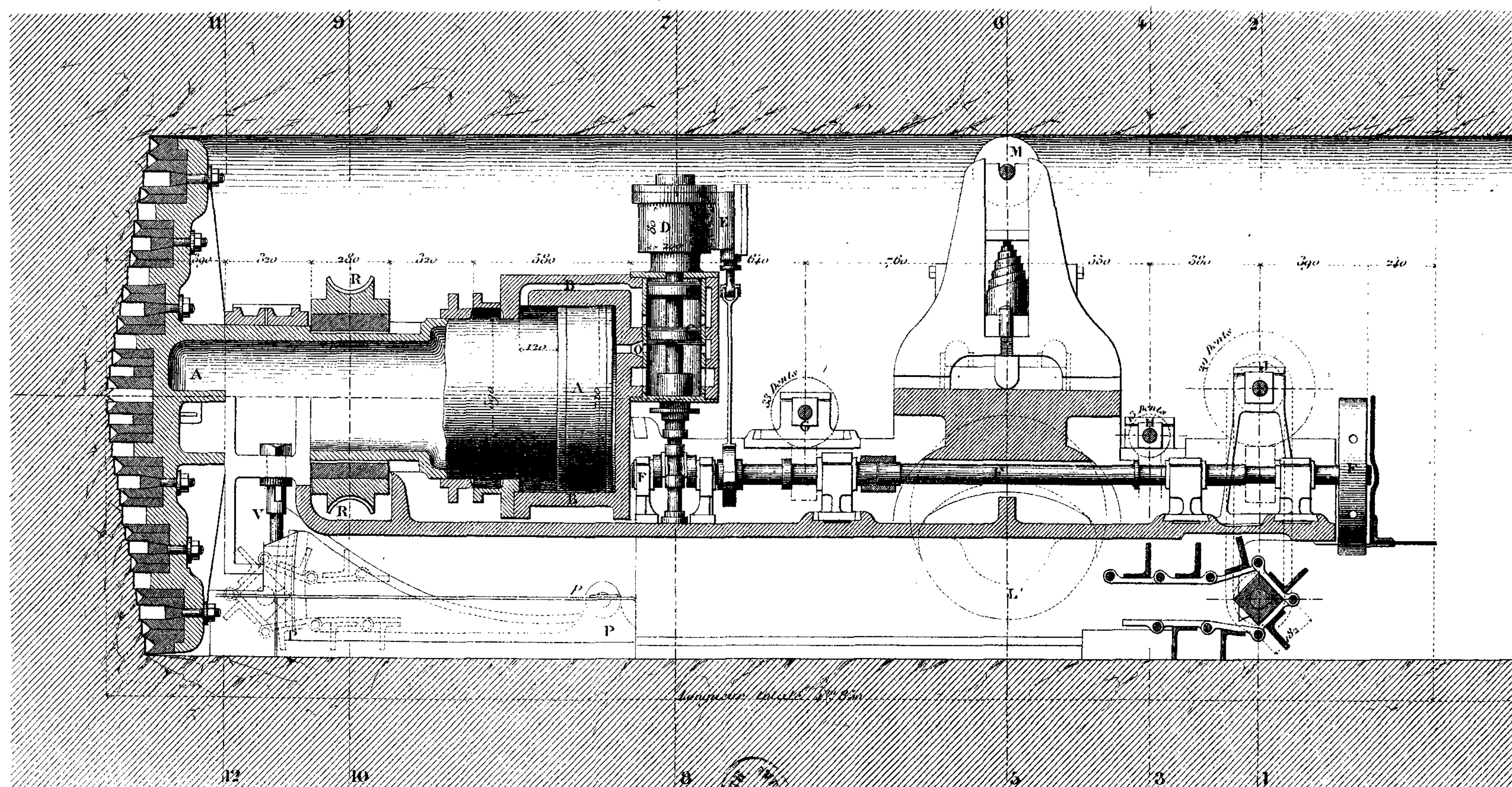


Fig. 2

Coupe longitudinale suivant l'axe



Echelle

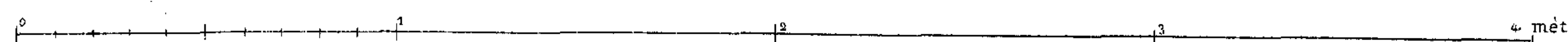








Fig. 1

Coupes diverses

Coupe suivant 1,2

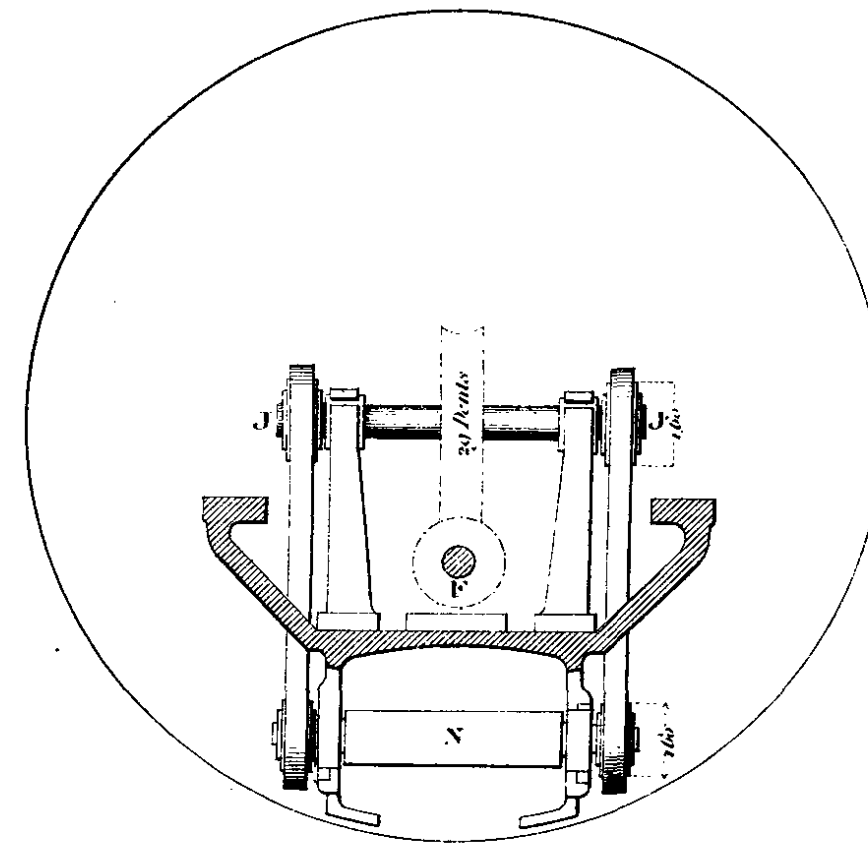
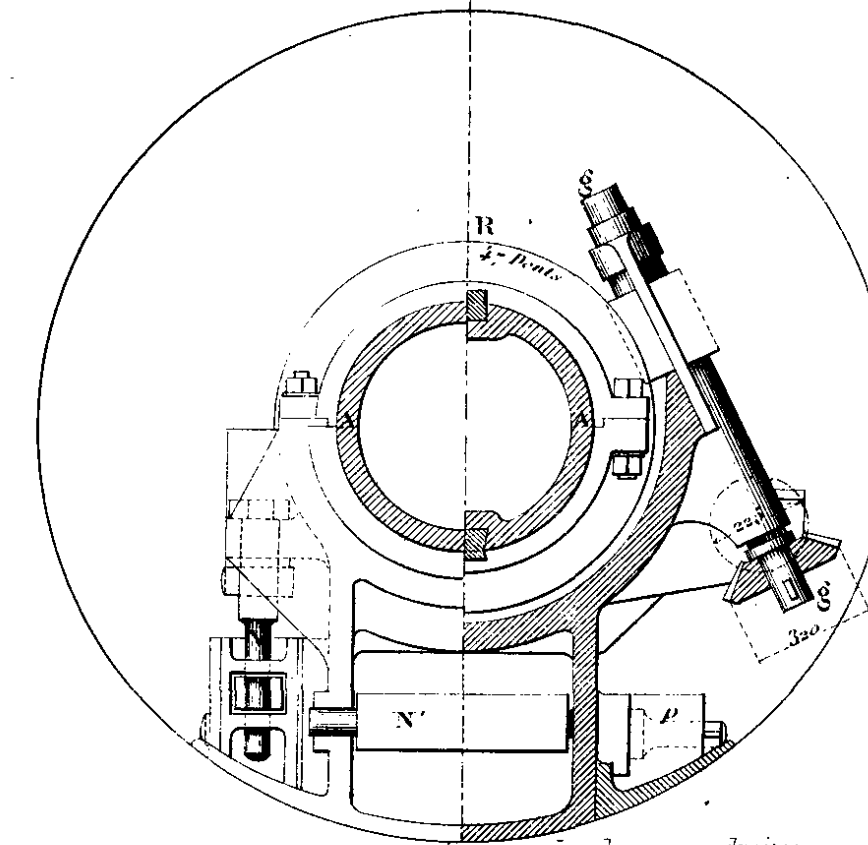


Fig. 2

Coupe suiv<sup>t</sup> 11,12 Coupe suiv<sup>t</sup> 9,10



Les deux roues droites, et les deux roues d'angle de la transmission intermédiaire sont égales entre elles, deux à deux.

Fig. 8

Vue de face

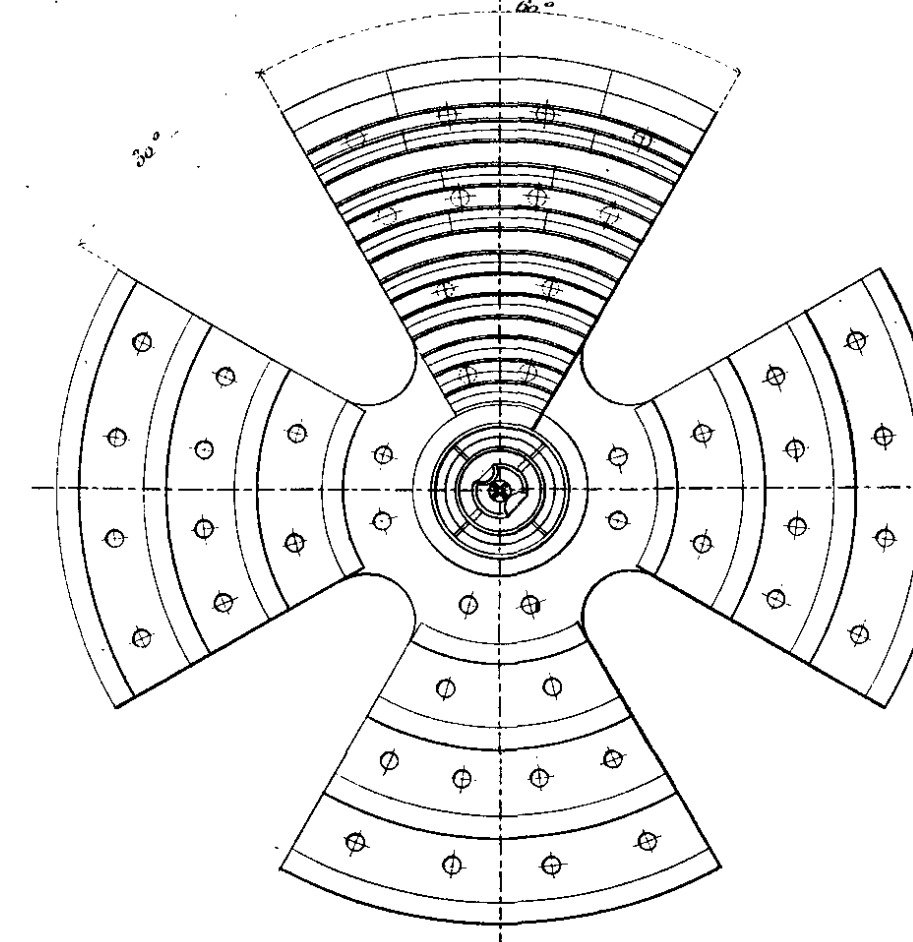


Fig. 6

Détails de la tête ou trépan

Nouvelle tête

Coupe suivant l'axe

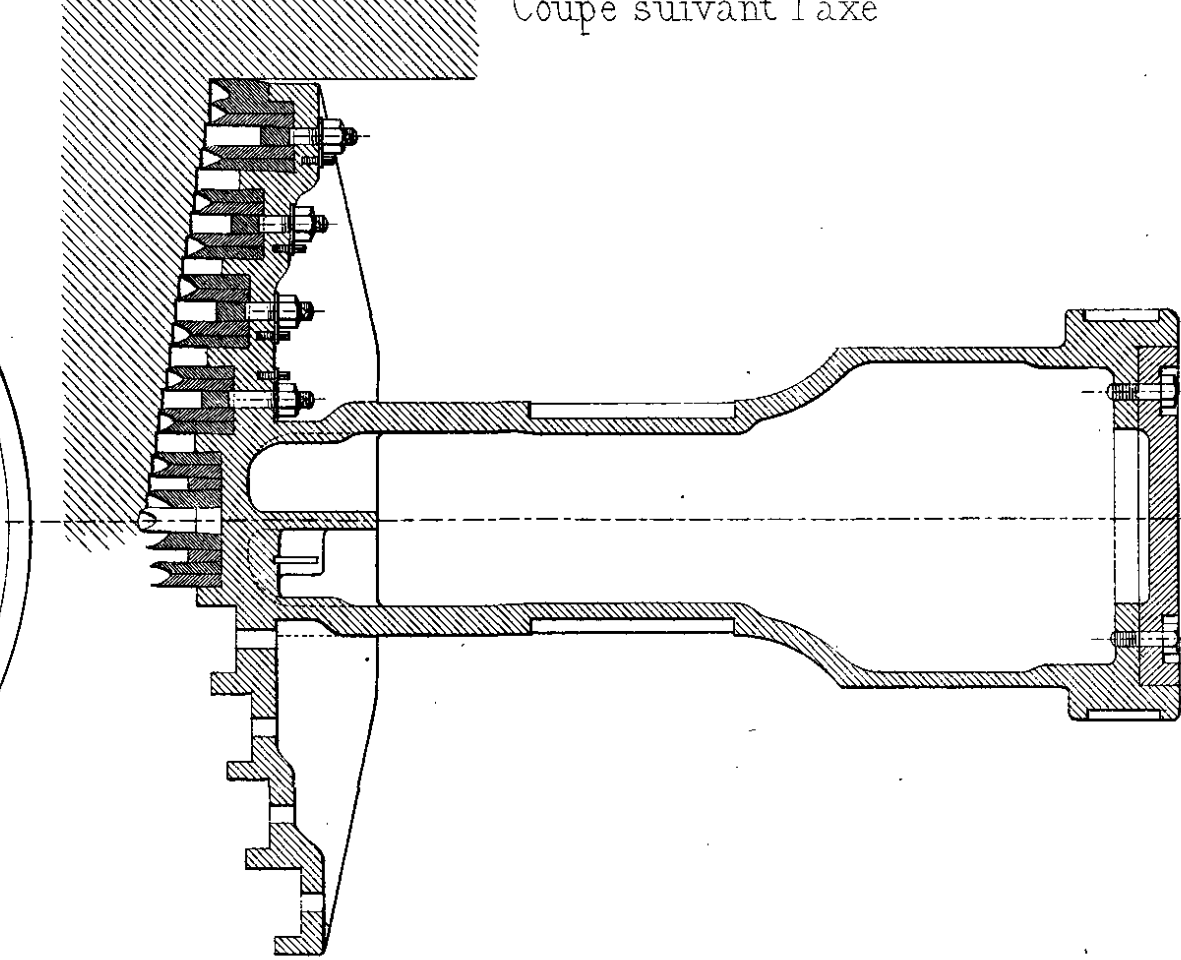


Fig. 3

Coupe suivant 7,8

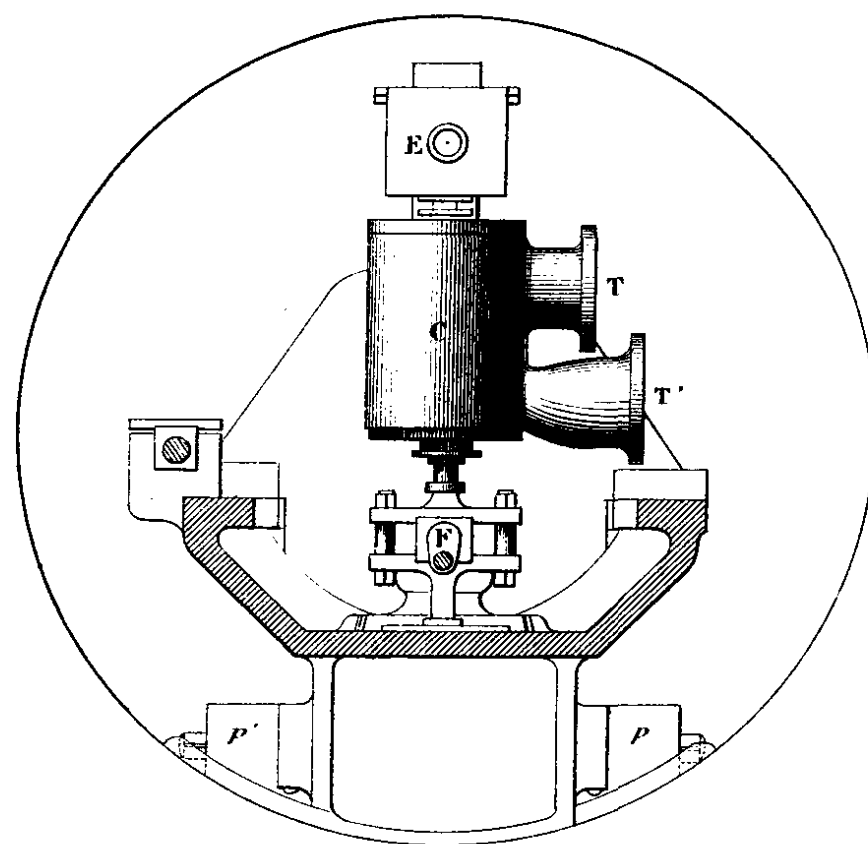


Fig. 4

Coupe suivant 5,6

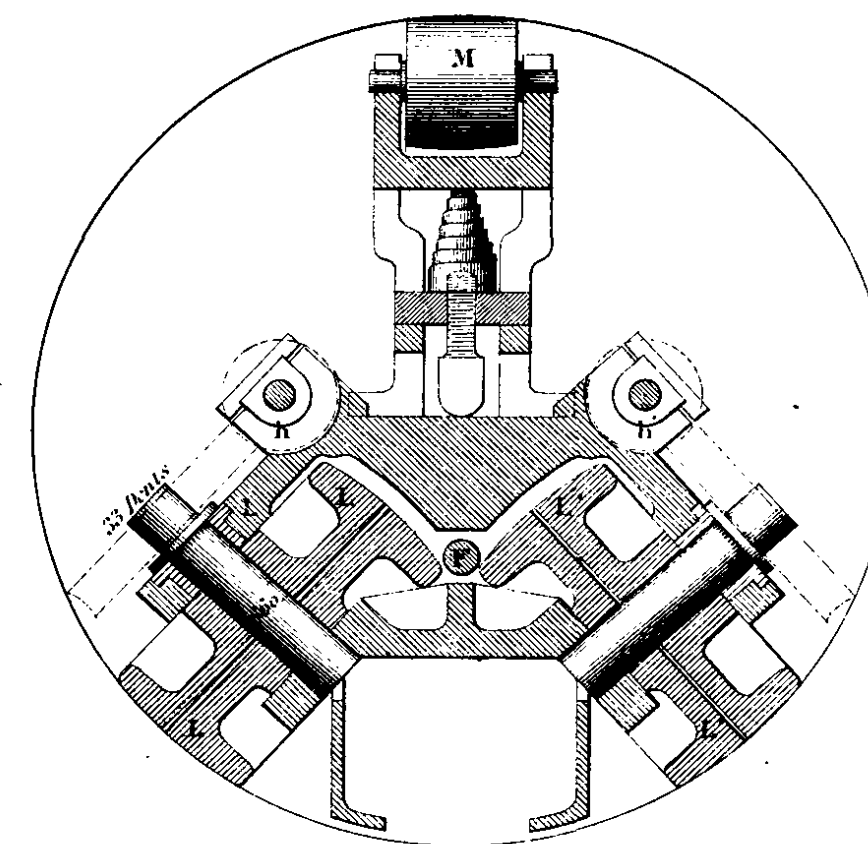


Fig. 5

Coupe suivant 3,4

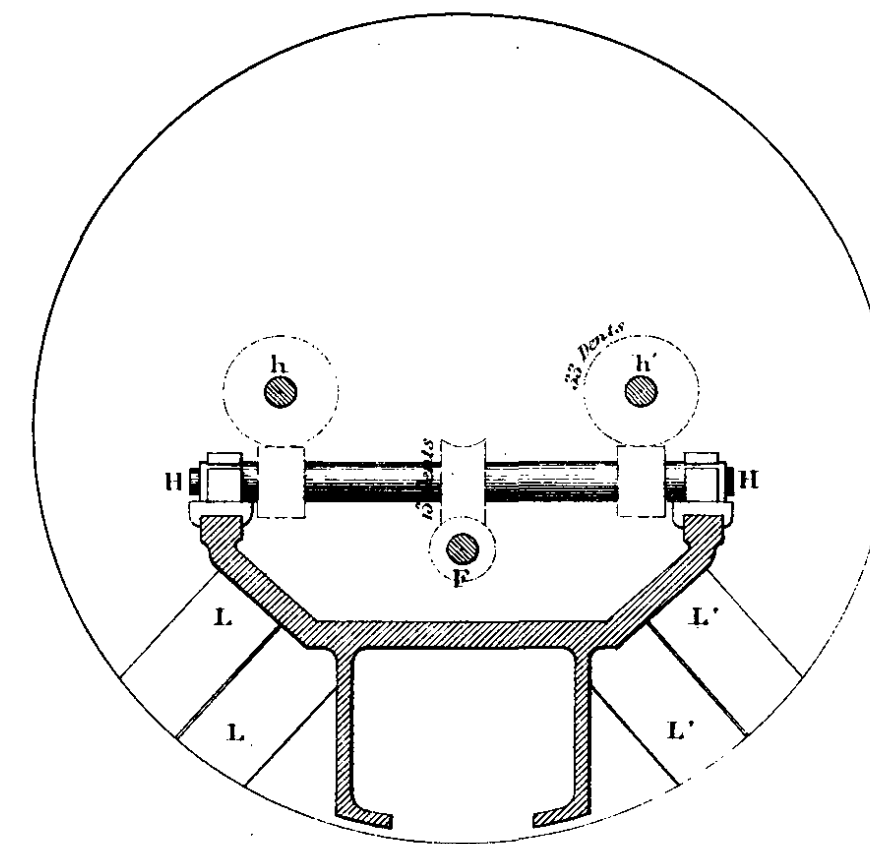


Fig. 7

Mode d'action des ciseaux

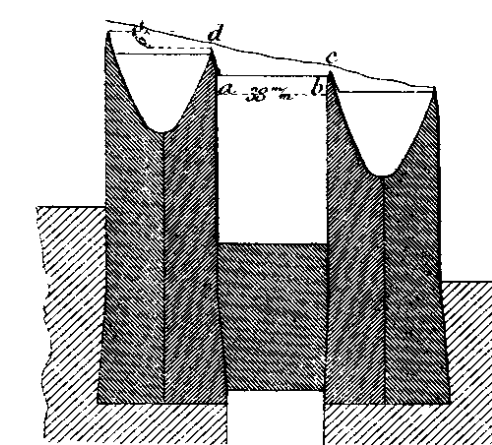
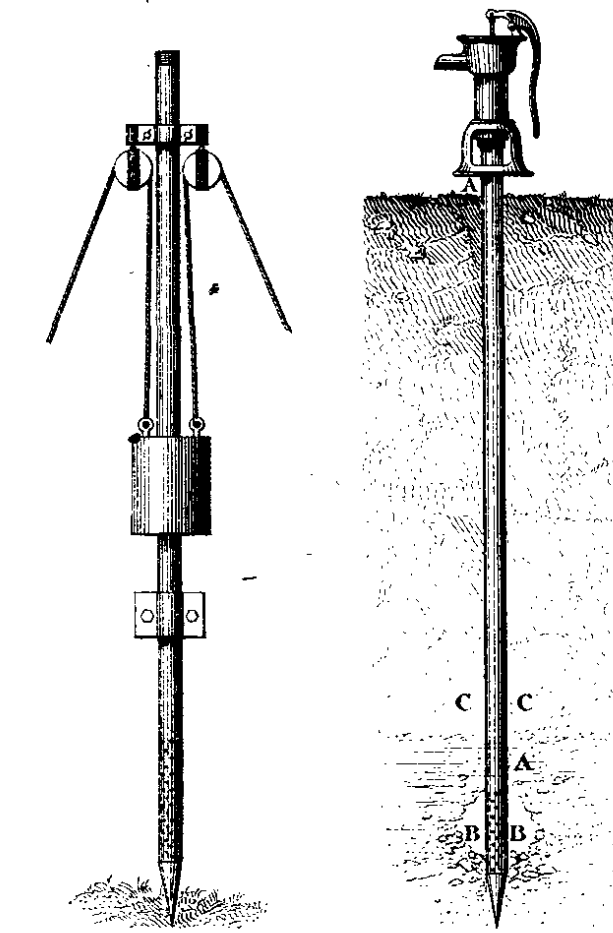


Fig. 9

Norton's patent tube Well dits Puits instantanés



Echelle des Fig. 1,2,3,4,5

0 0,50 1 mètre

Echelle de la Fig. 6

0 0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1 mètre

Echelle de la Fig. 7

0 0,10 0,20

Echelle de la Fig. 9

0 0,2 0,4 0,6 0,8 1,00 2 mètres







Laminoir oscillant à bielles

Fig. 1  
Coupe longitudinale

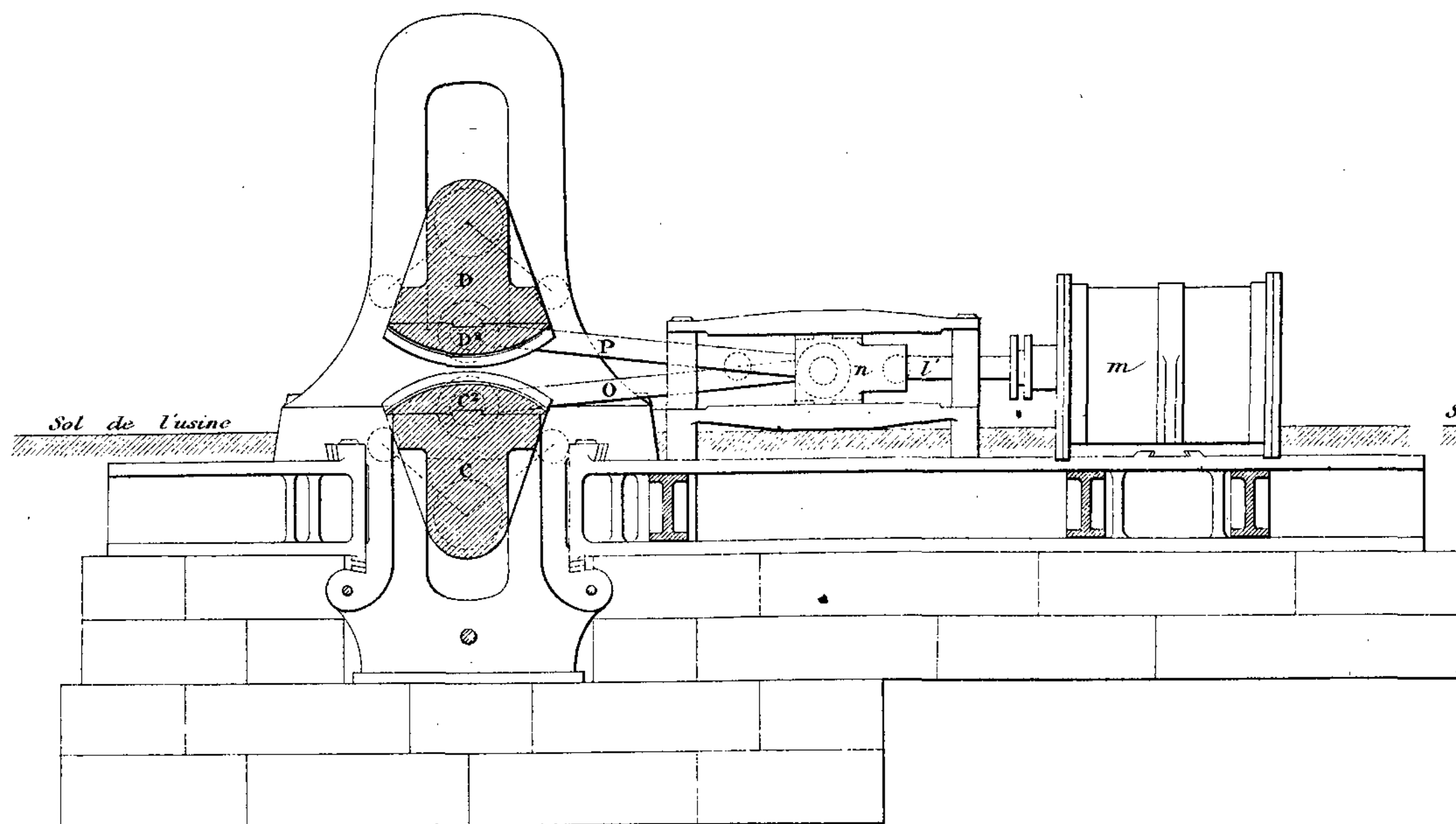


Fig. 3  
Élévation latérale

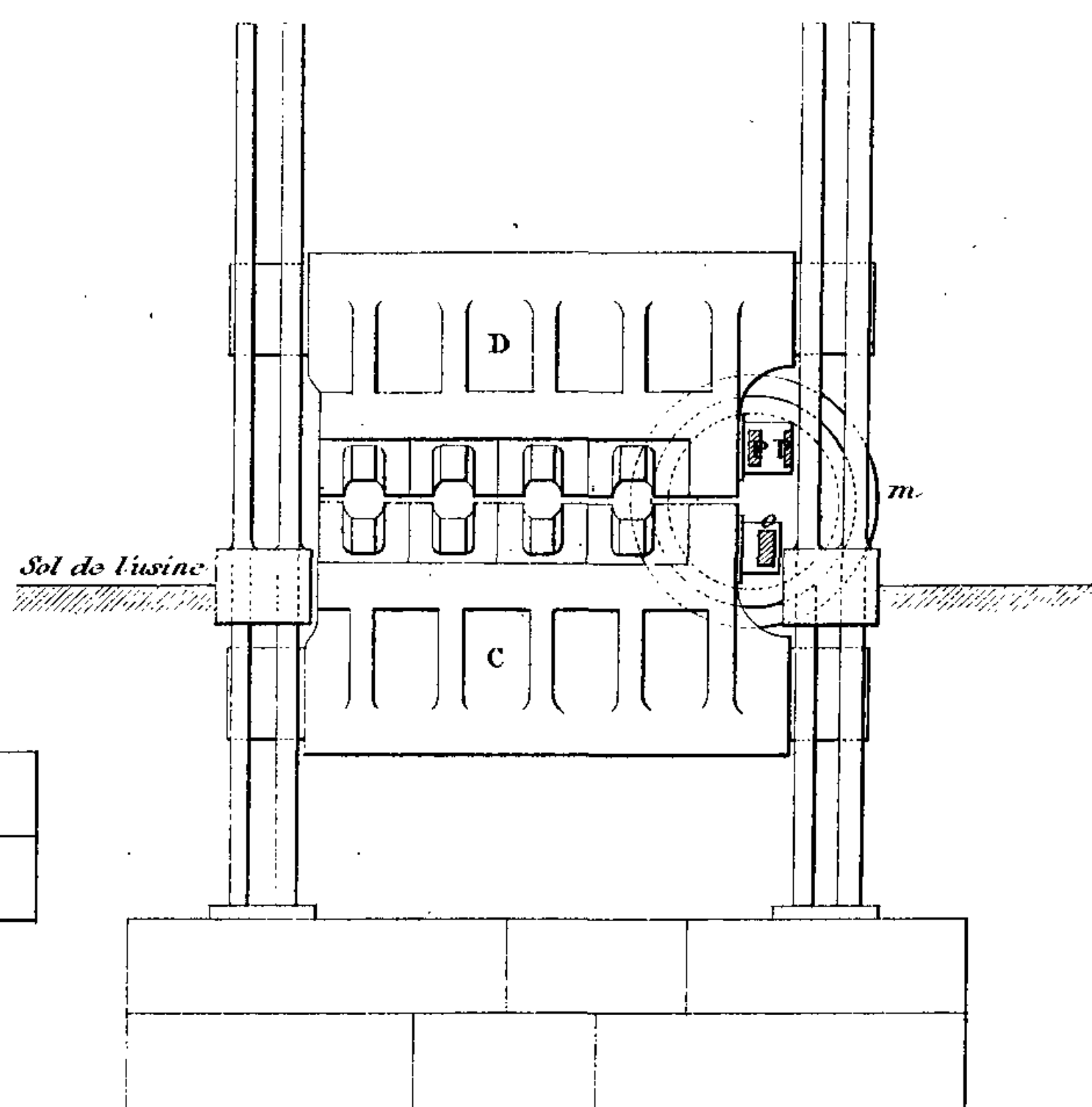


Fig. 2 Plan

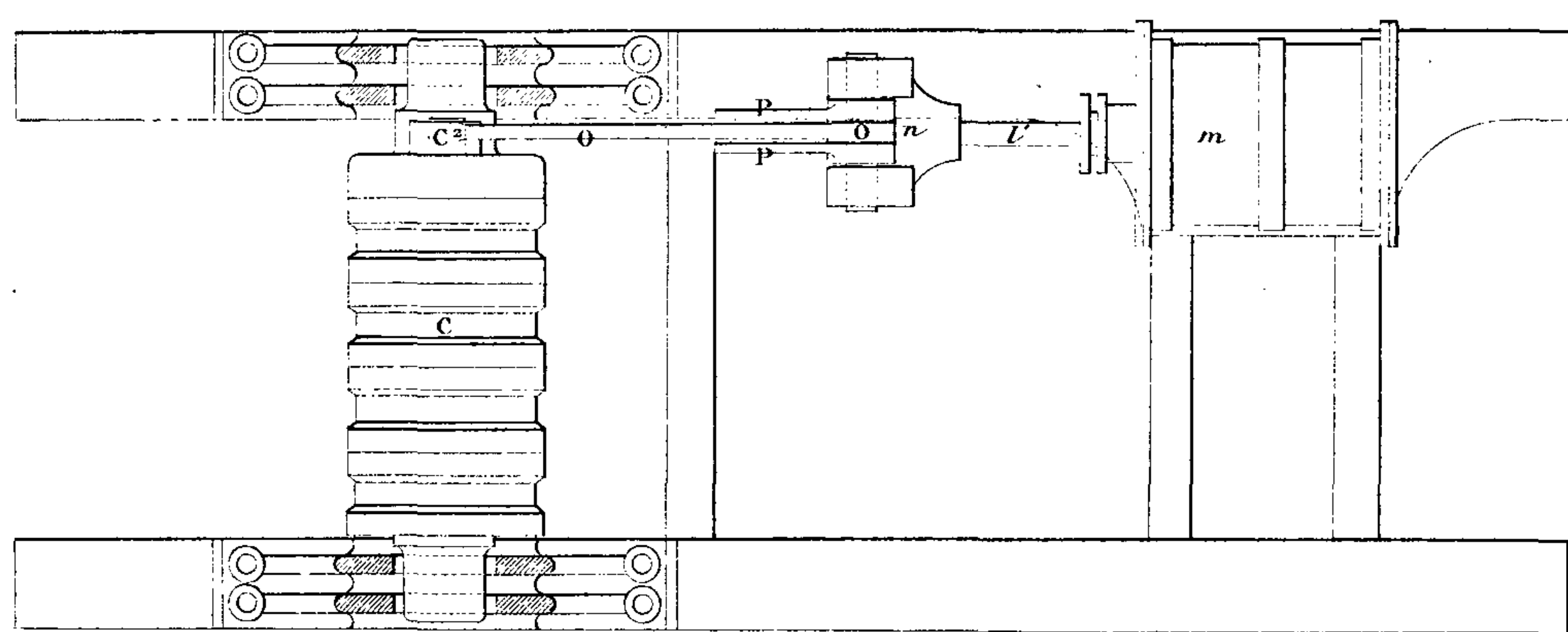
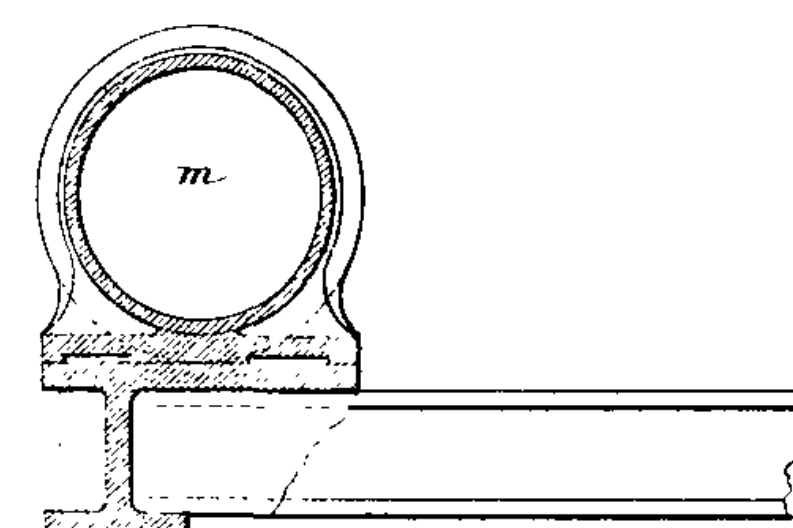


Fig. 4  
Coupe du cylindre à vapeur



Laminoirs oscillants à crémaillères

Fig. 5  
Coupe longitudinale

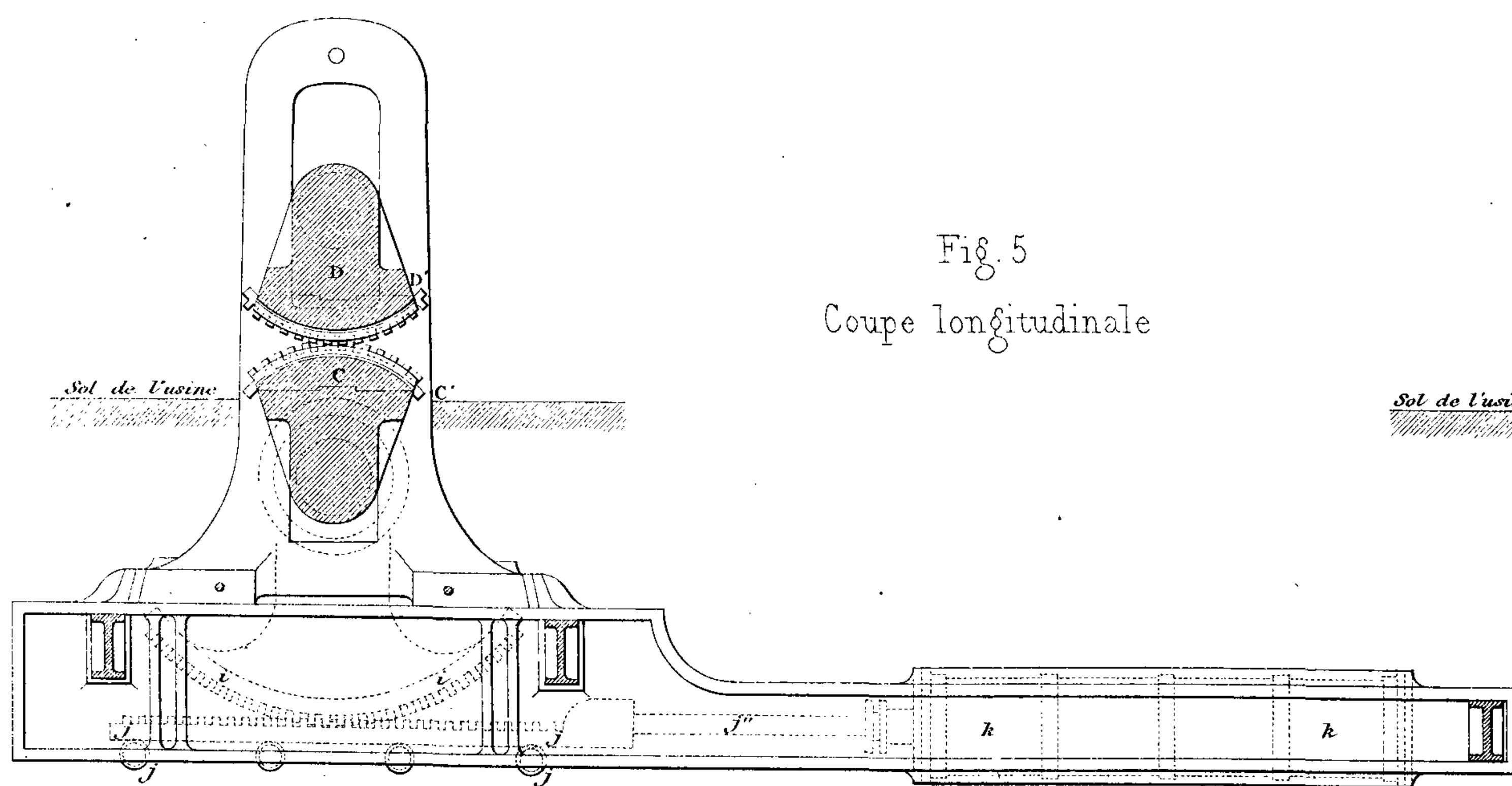


Fig. 6  
Coupe transversale

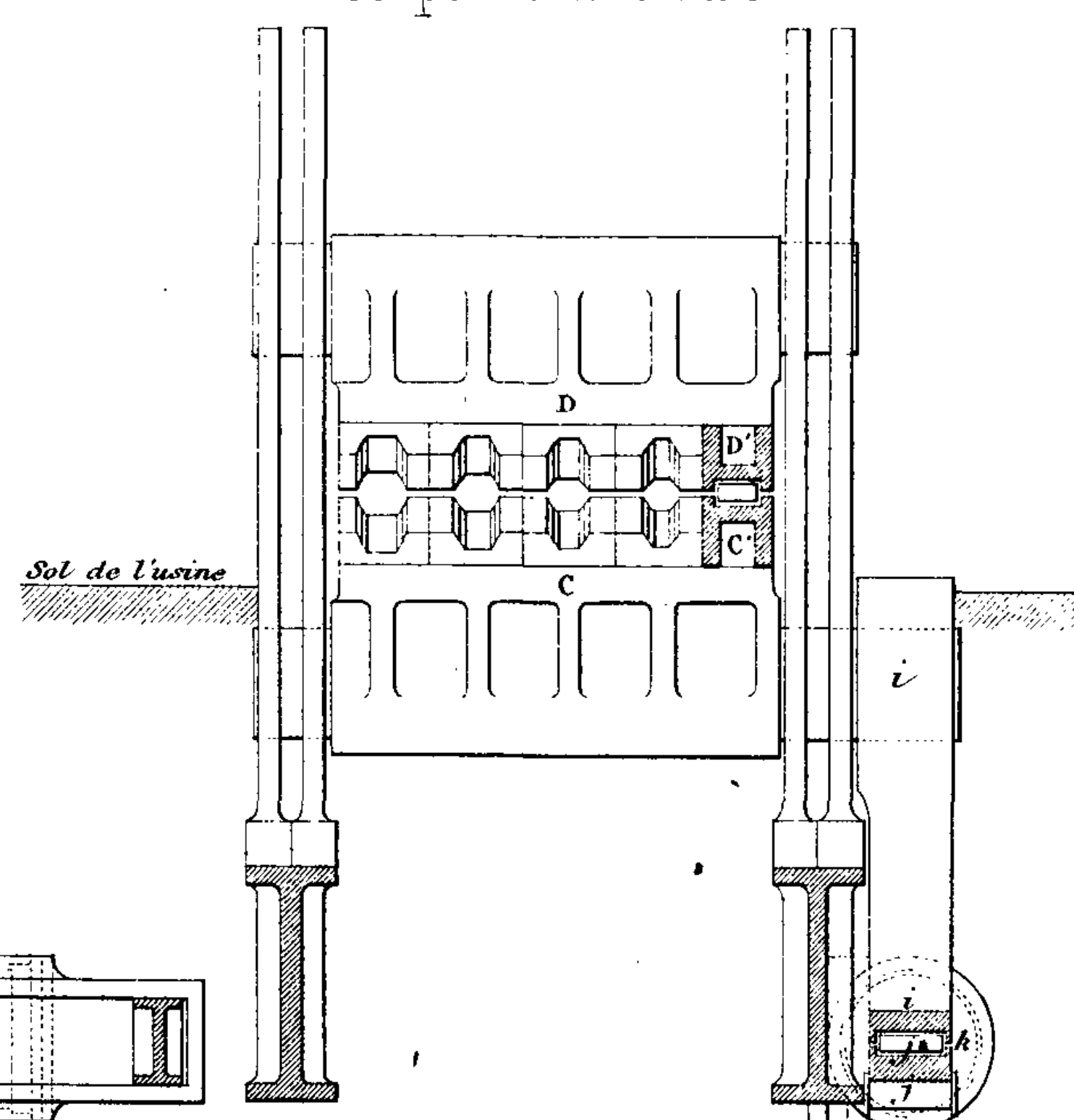


Fig. 7 Coupe longitudinale

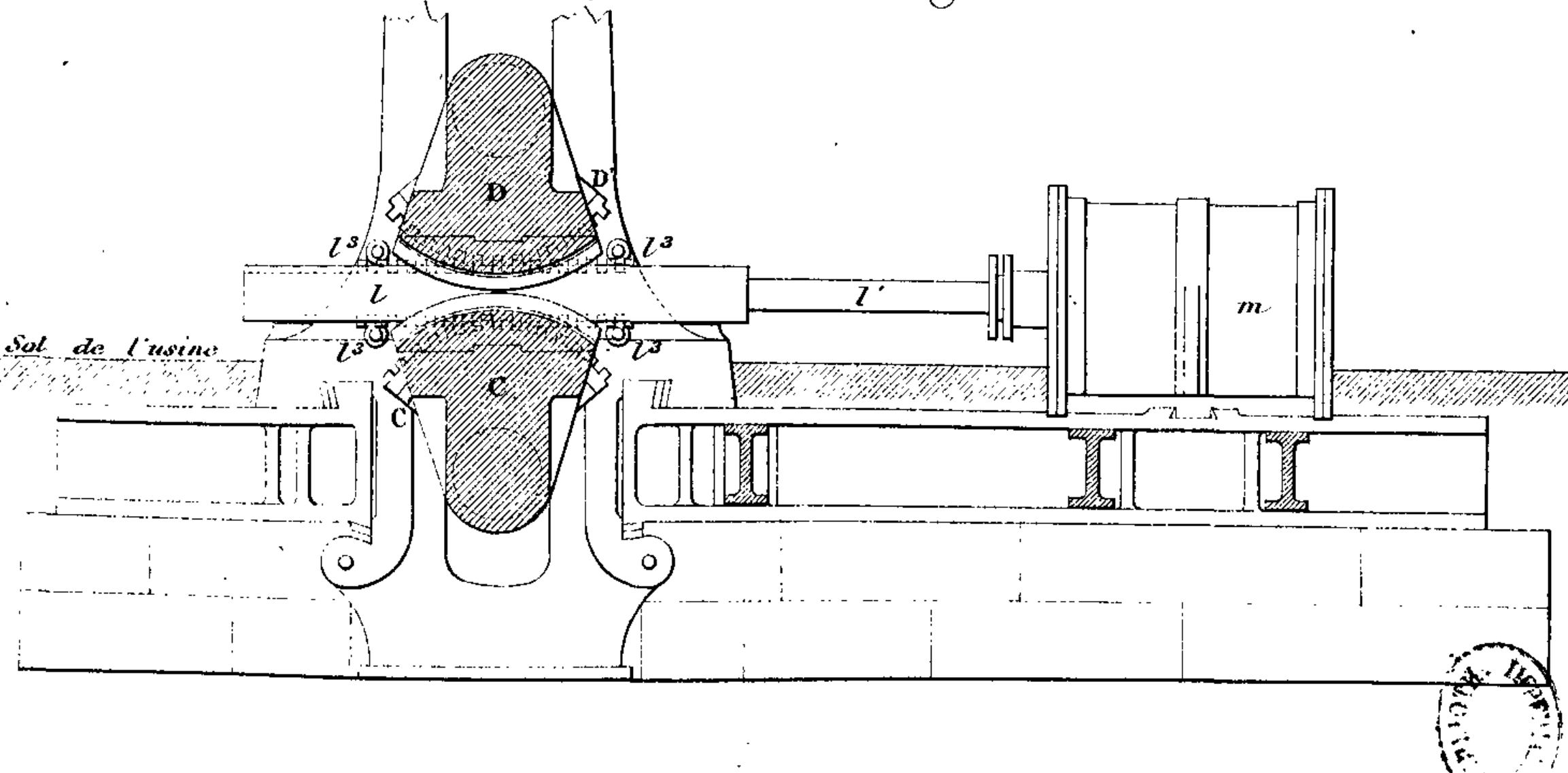
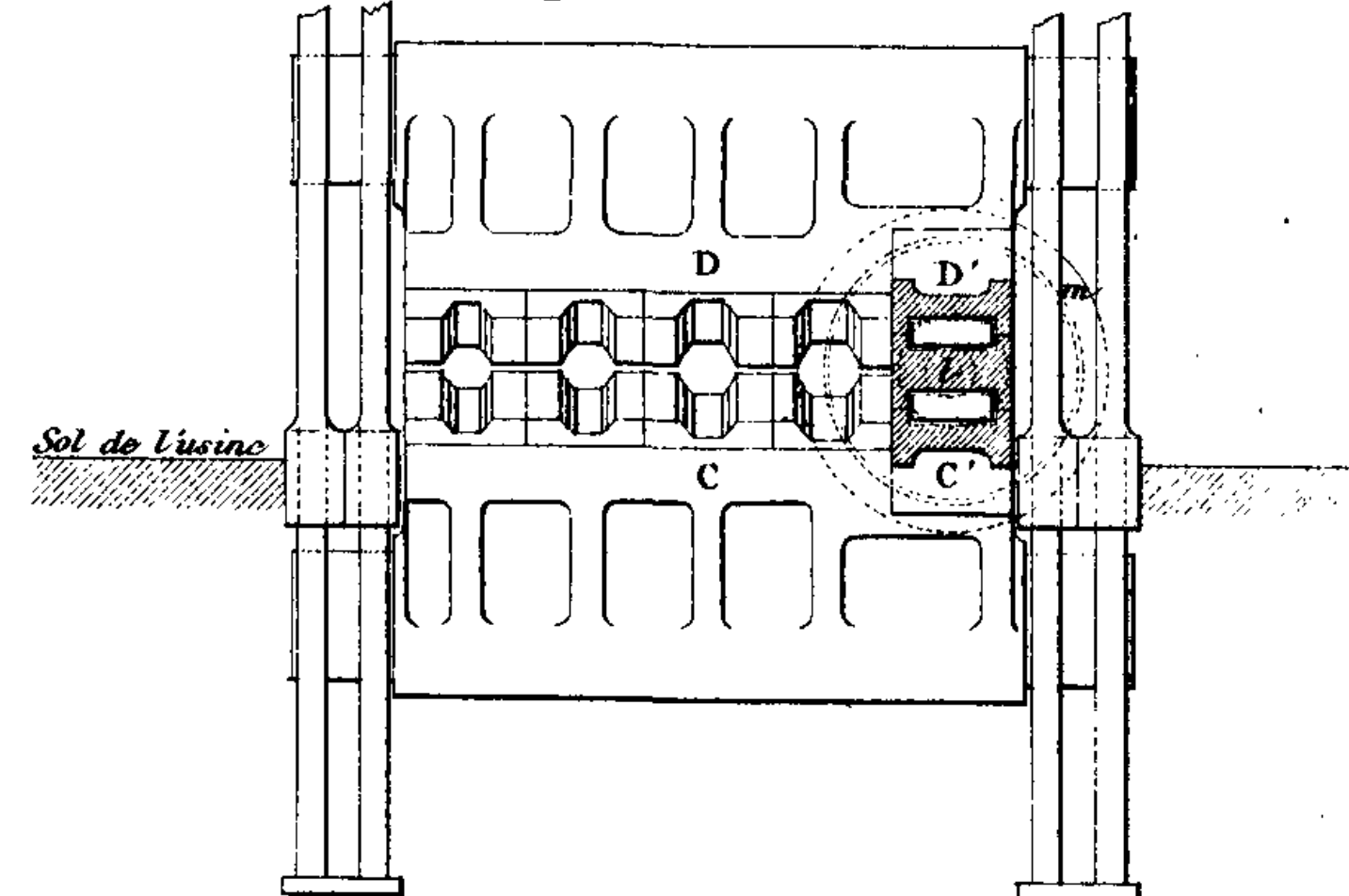


Fig. 8  
Coupe transversale



Echelle

0 1 2 3 4 5 6 Mètres



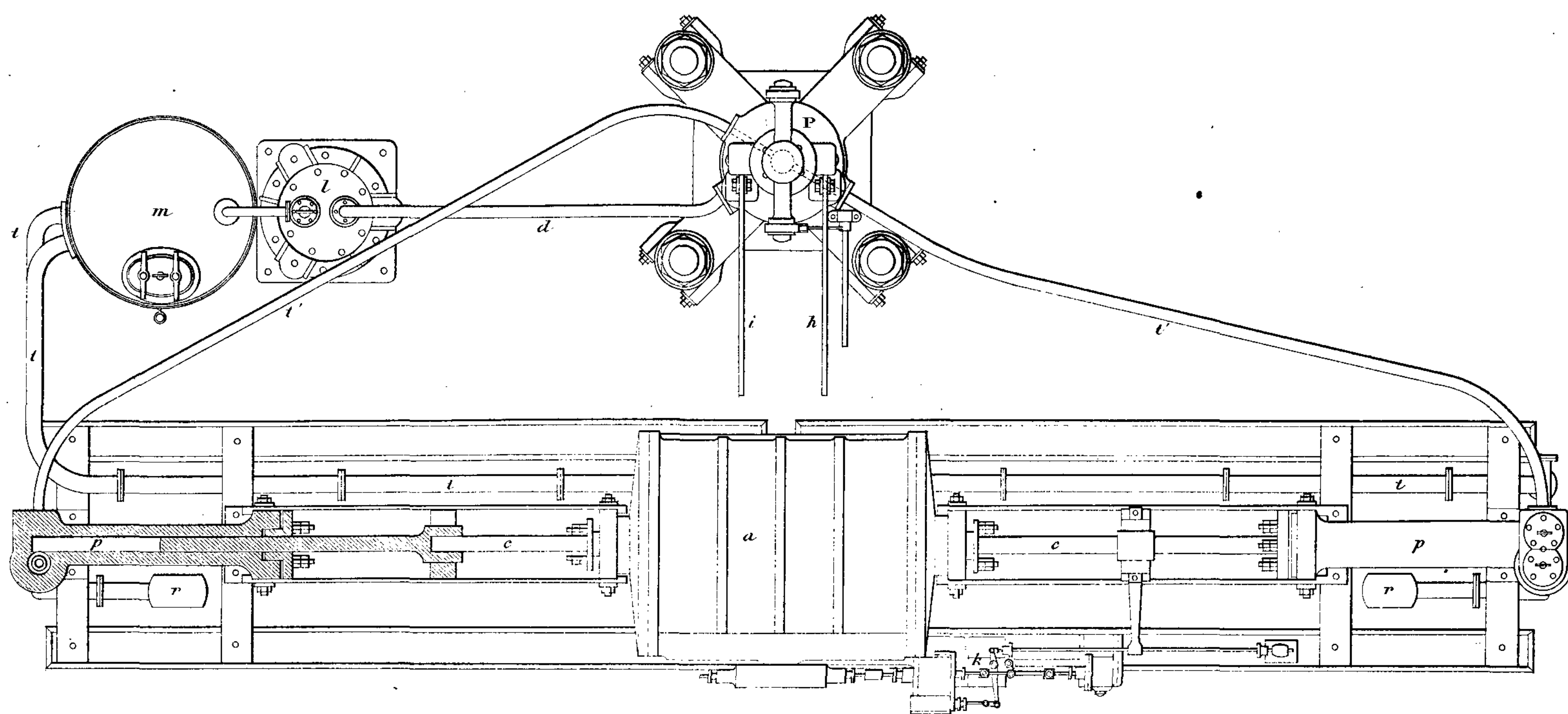




1869

Plan de la presse à forger de M<sup>r</sup> Haswell de Vienne

Fig. 1



Echelle de la Fig. 1

0 1 2 3 4 5 Mètres

Presse à forger de M<sup>r</sup> Haswell de Vienne

Croquis de la presse à forger de M<sup>r</sup> Bessemer

Fig. 2

Elevation

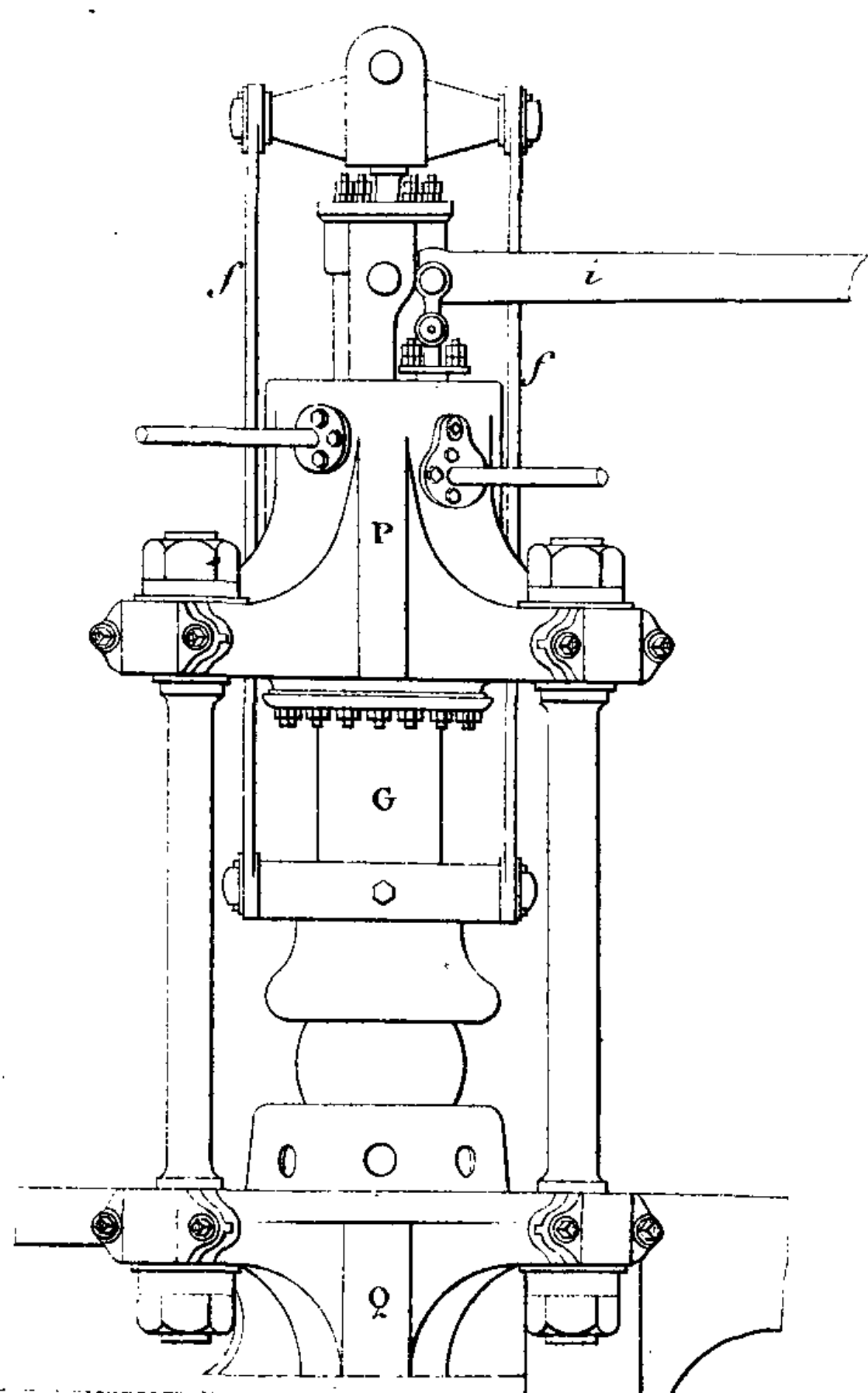


Fig. 3

Coupe

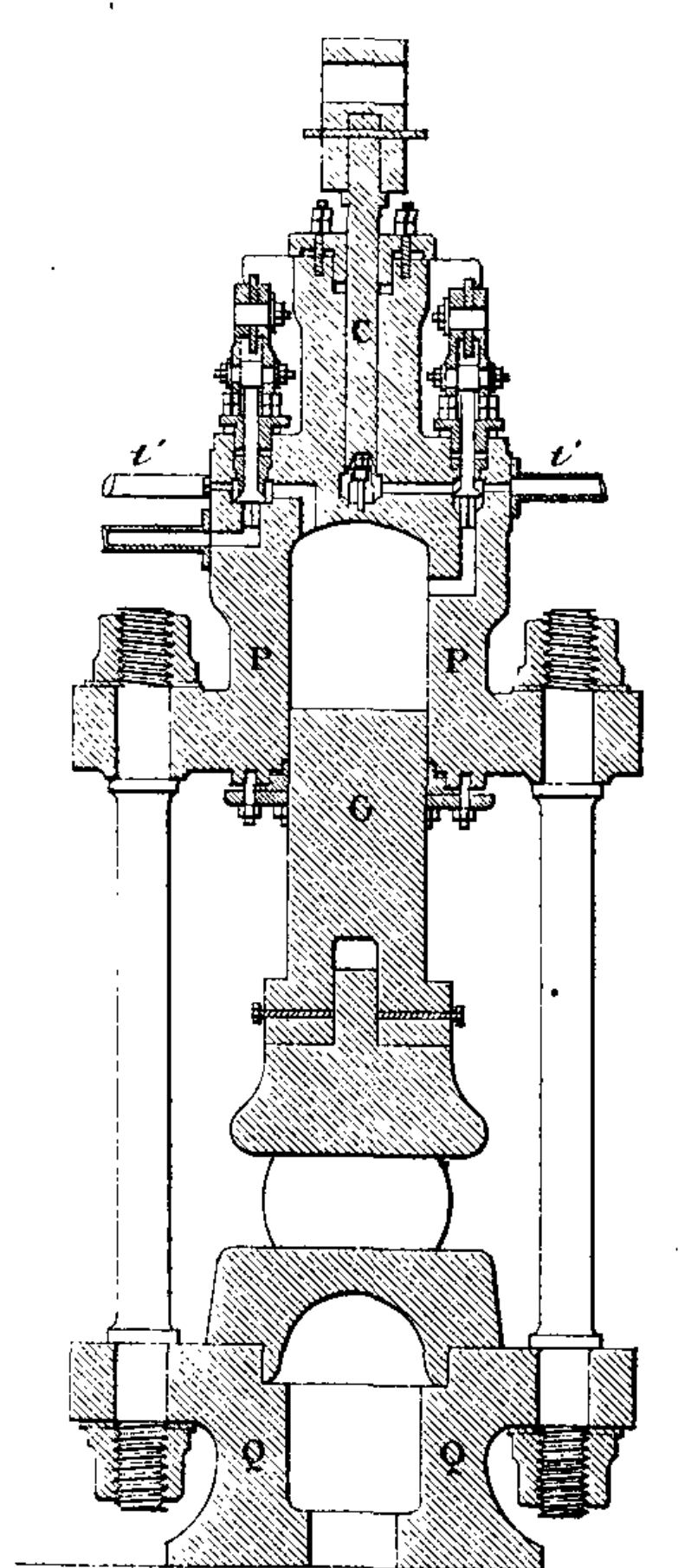
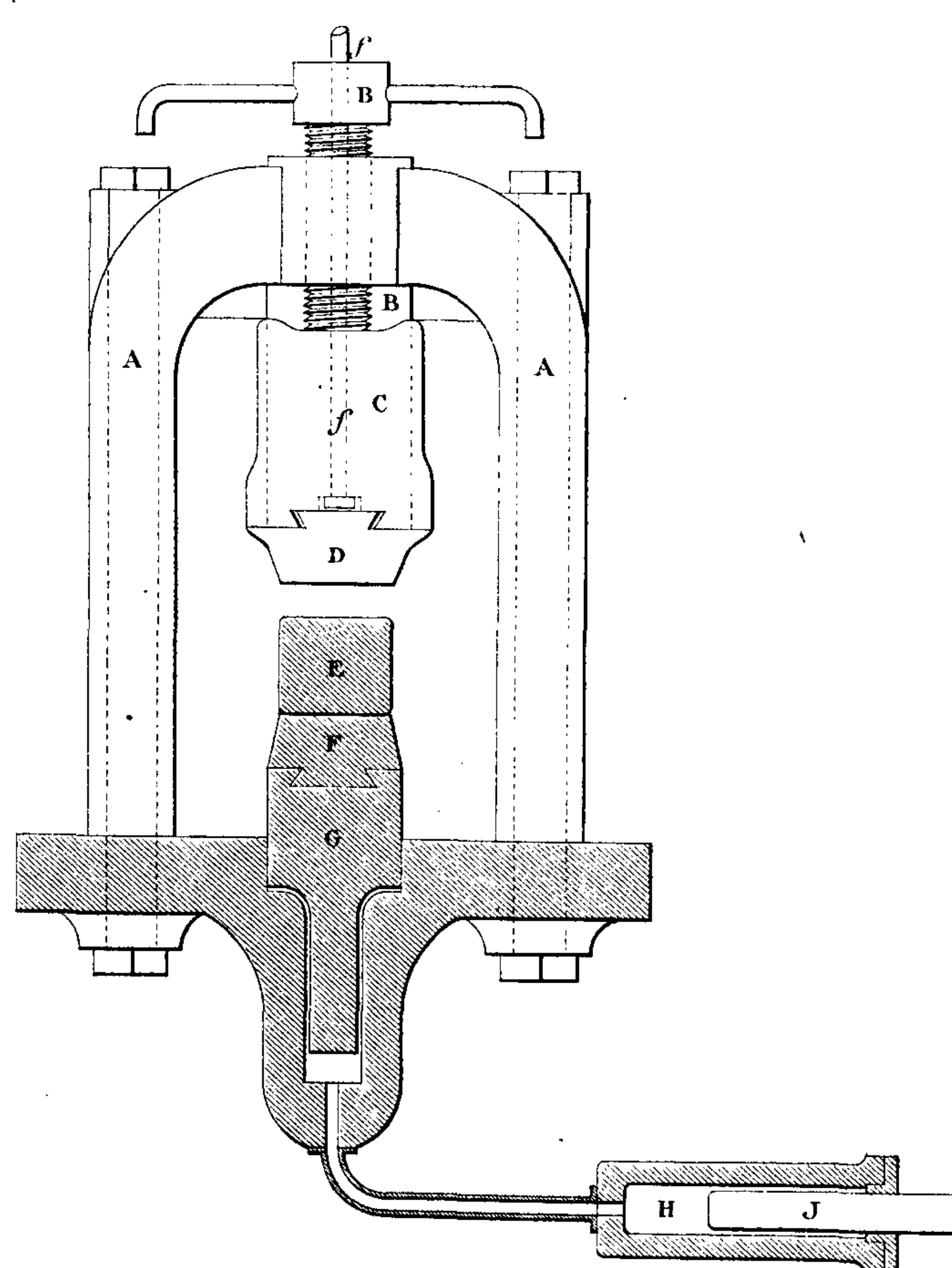


Fig. 4



Echelle des Fig. 2 et 3

0 1 2 3 4 5 Mètres









Marteau double de M<sup>r</sup> Ramsbottom.

Fig 3  
Coupe transversale par UV.

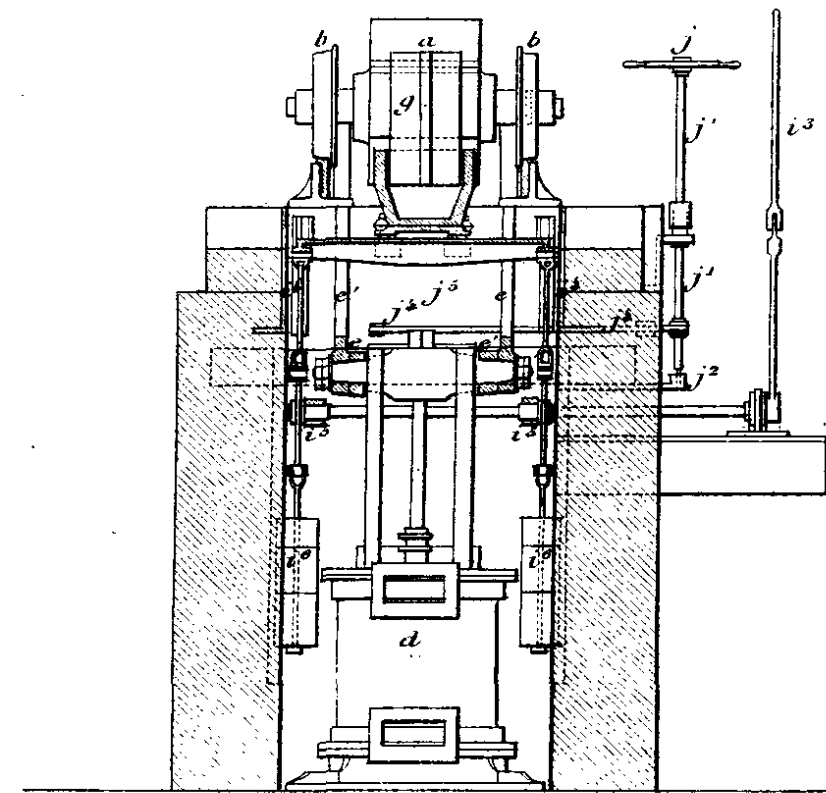


Fig 4  
Coupe transversale par XY.

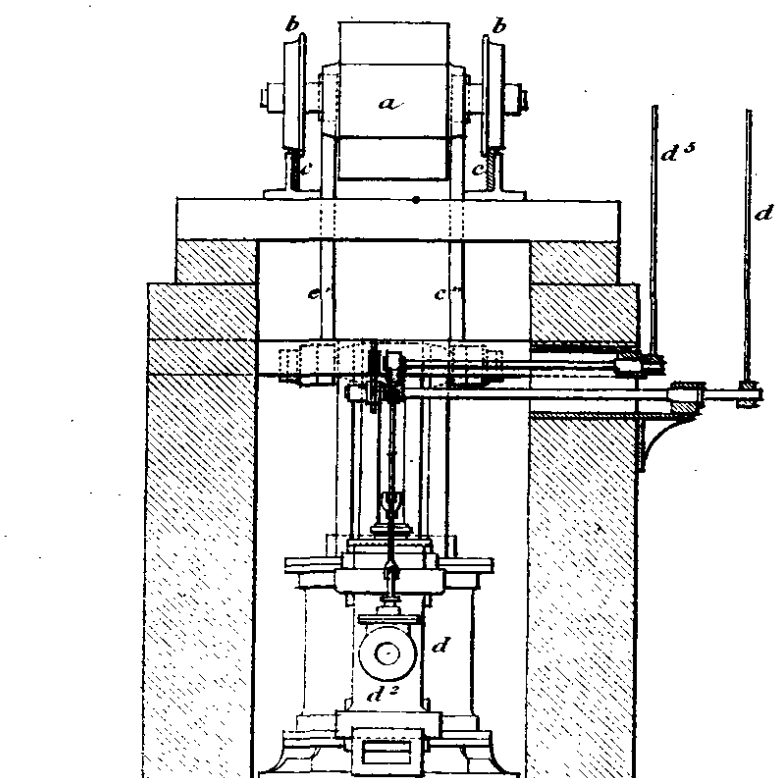


Fig 1  
Coupe longitudinale

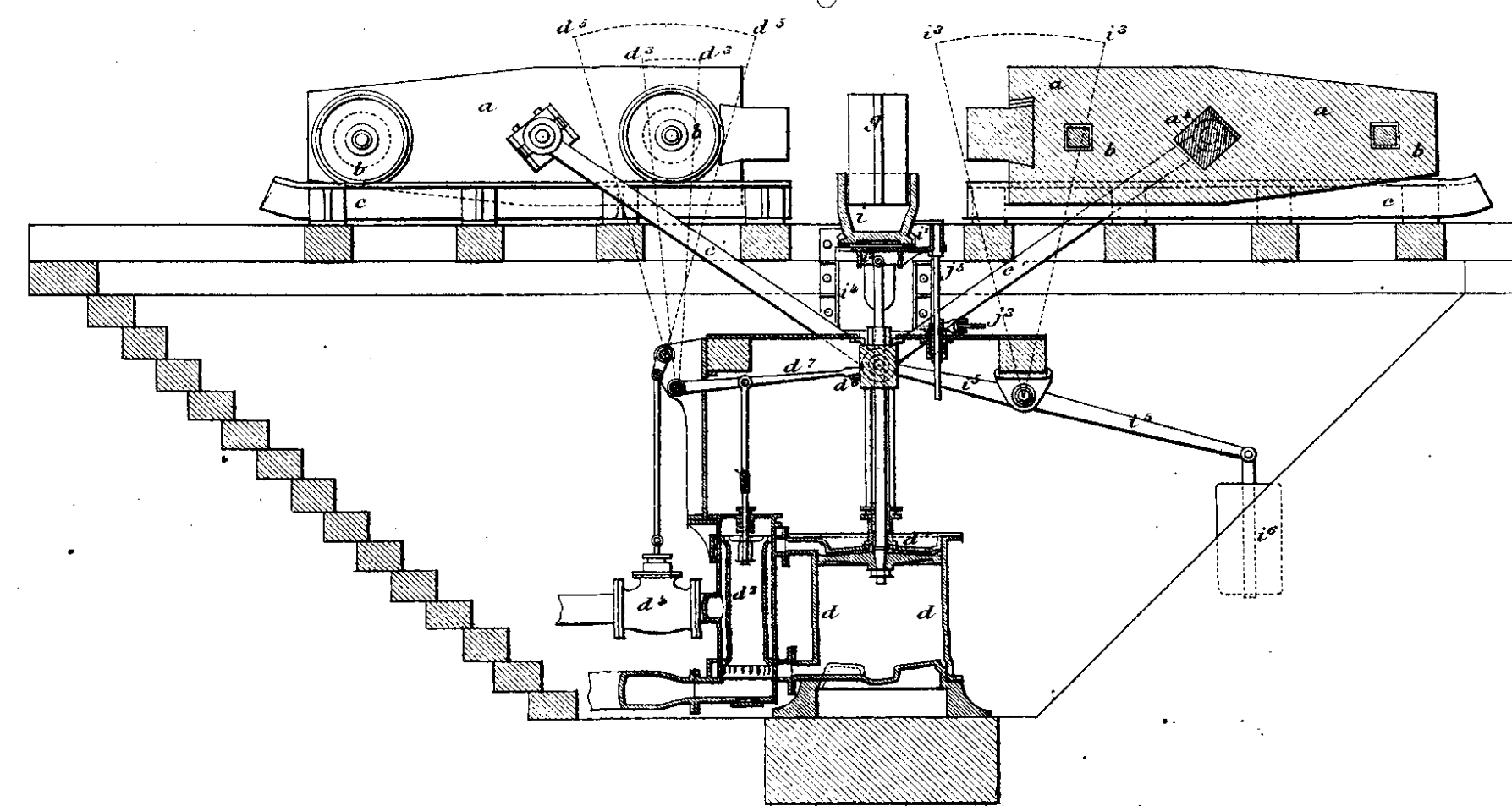
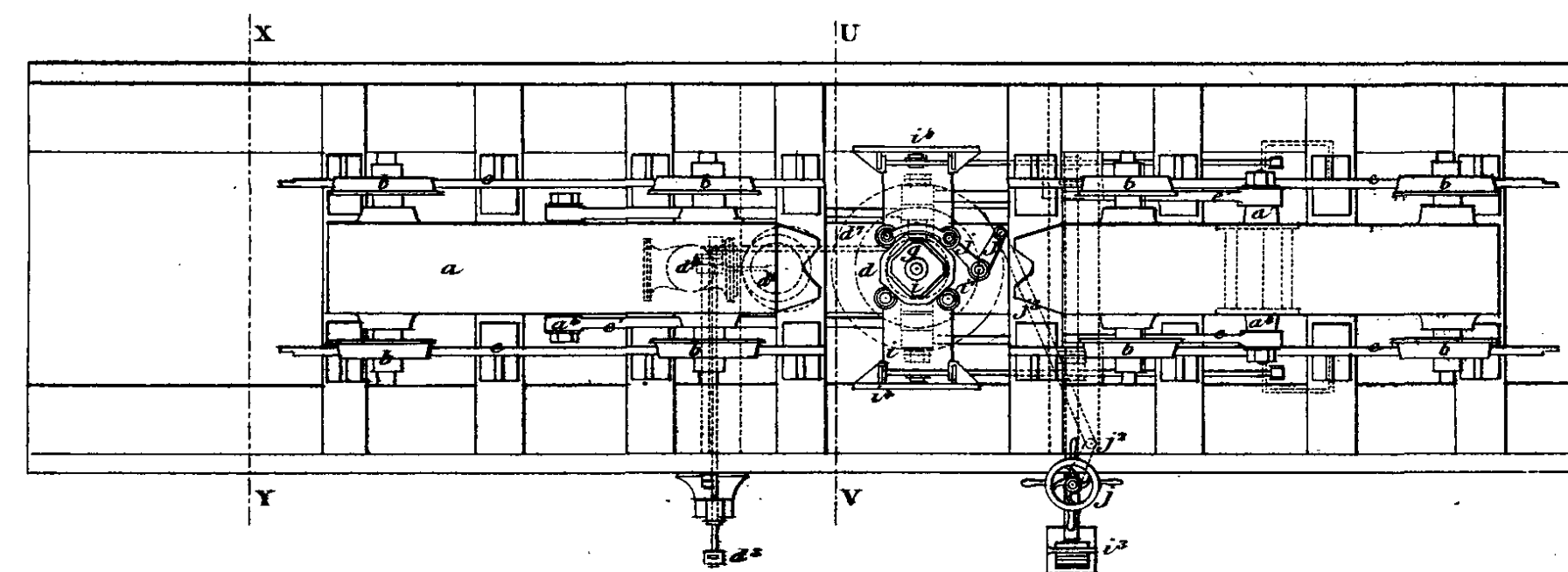
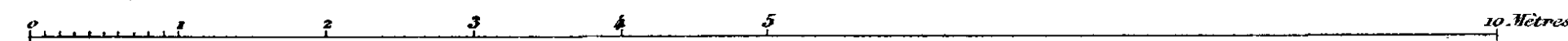


Fig 2  
Plan



Echelle



1869  
1869  
1869







Marteaux doubles de M<sup>r</sup> Ramsbottom à poussée directe

(Fig 6 et 7)

Fig. 6

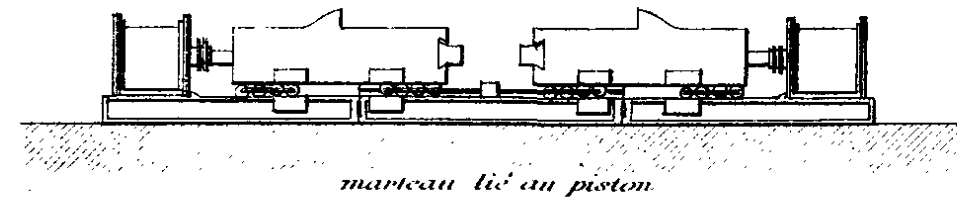
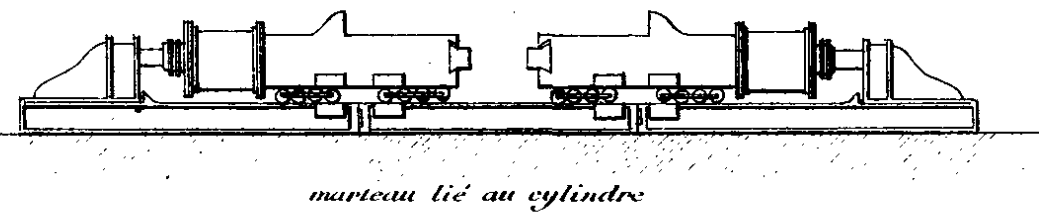


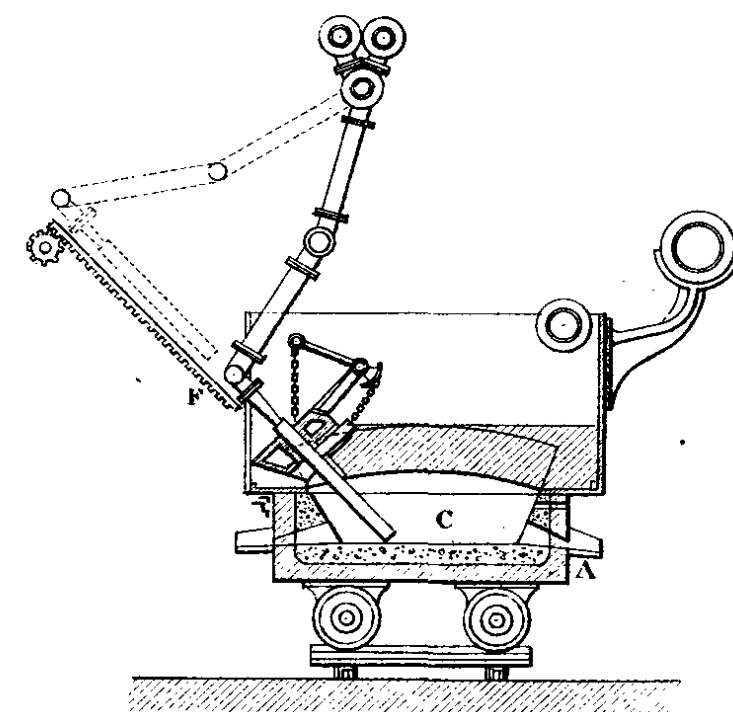
Fig. 7



Echelle des Fig. 6 et 7  $\frac{1}{256}$

Fig. 2

Coupe transversale suivant XY

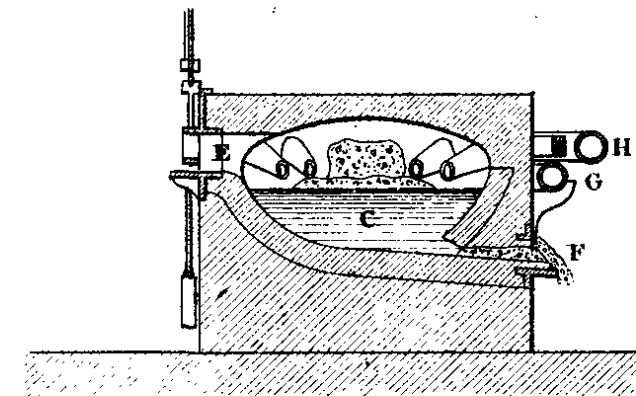


Echelle des Fig. 1, 2, 3, 4 et 5

0 1 2 3 4 5 6 Mètres

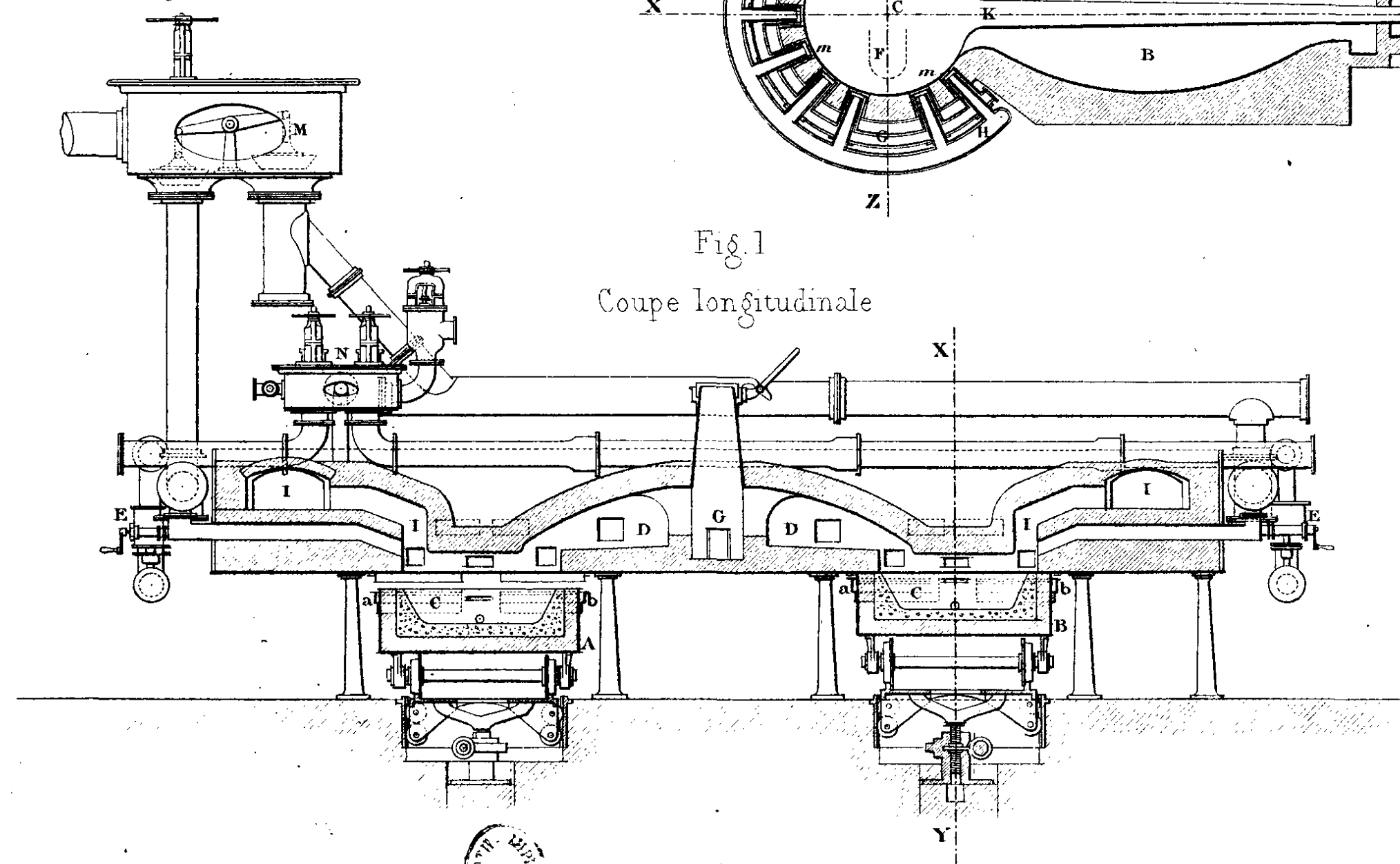
Fig 3

Coupe par UZ



Four à acier de M<sup>r</sup> Bérard

(Fig 1 et 2)



Four à acier de M<sup>r</sup> Heath

(Fig. 3 à 5)

Fig. 4

Coupe par XY

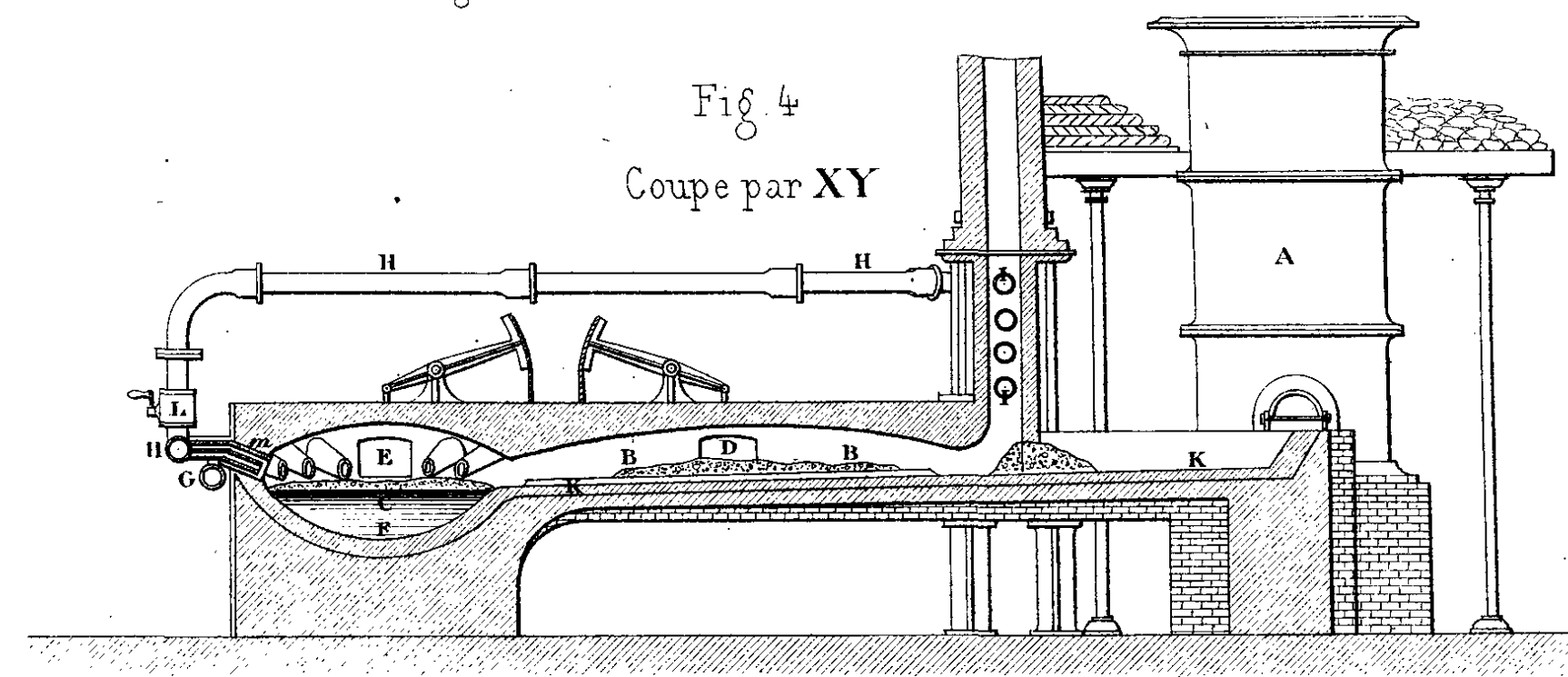
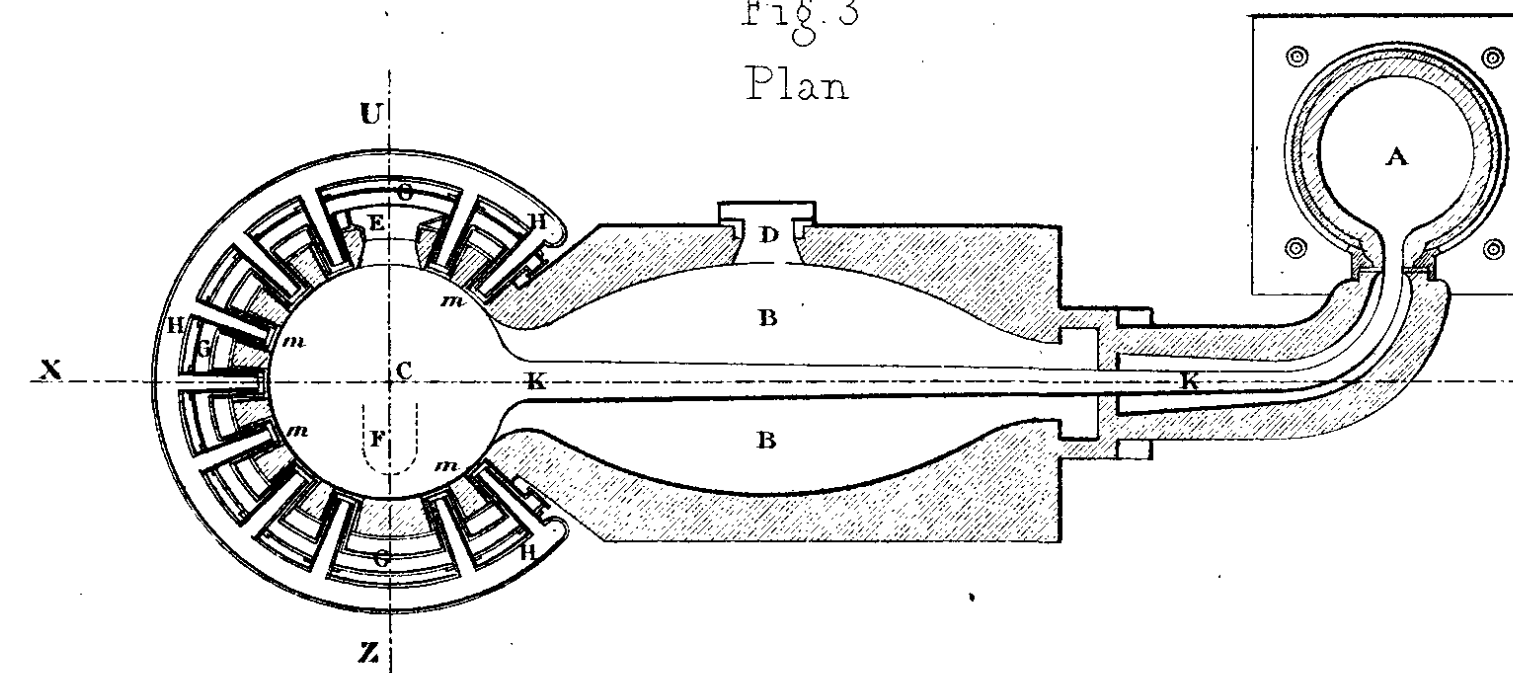


Fig. 3

Plan

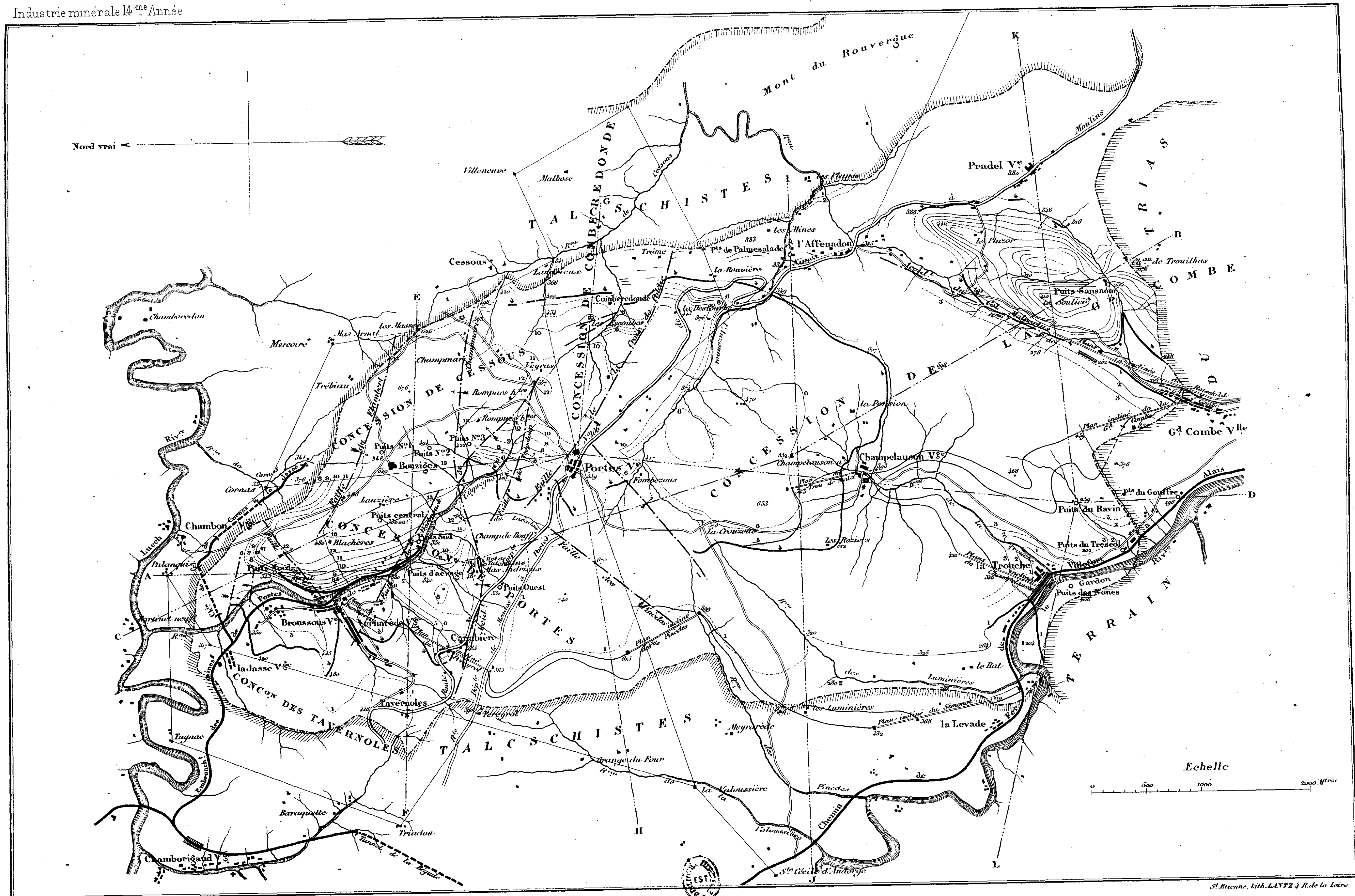


1872  
2  
1872







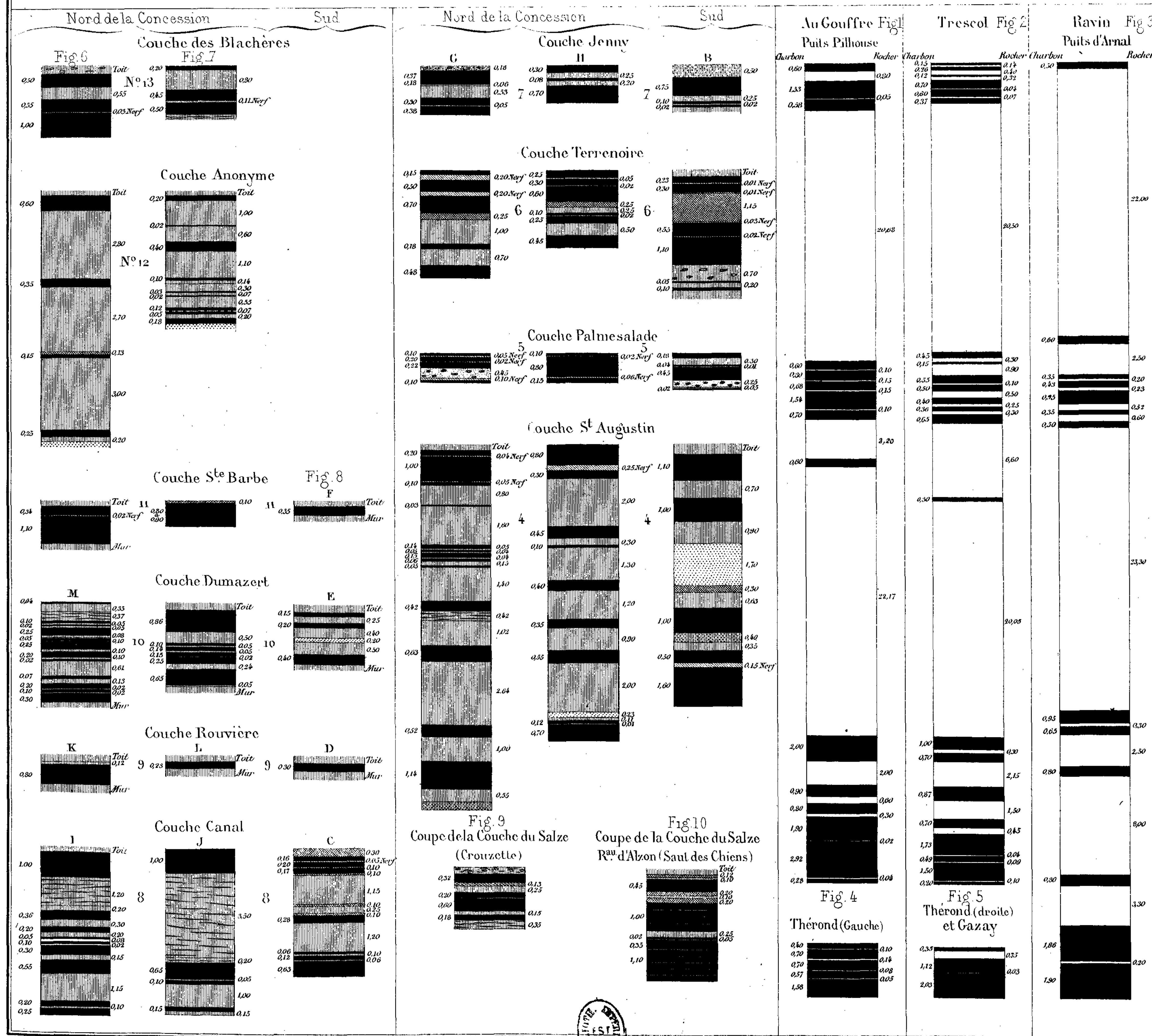
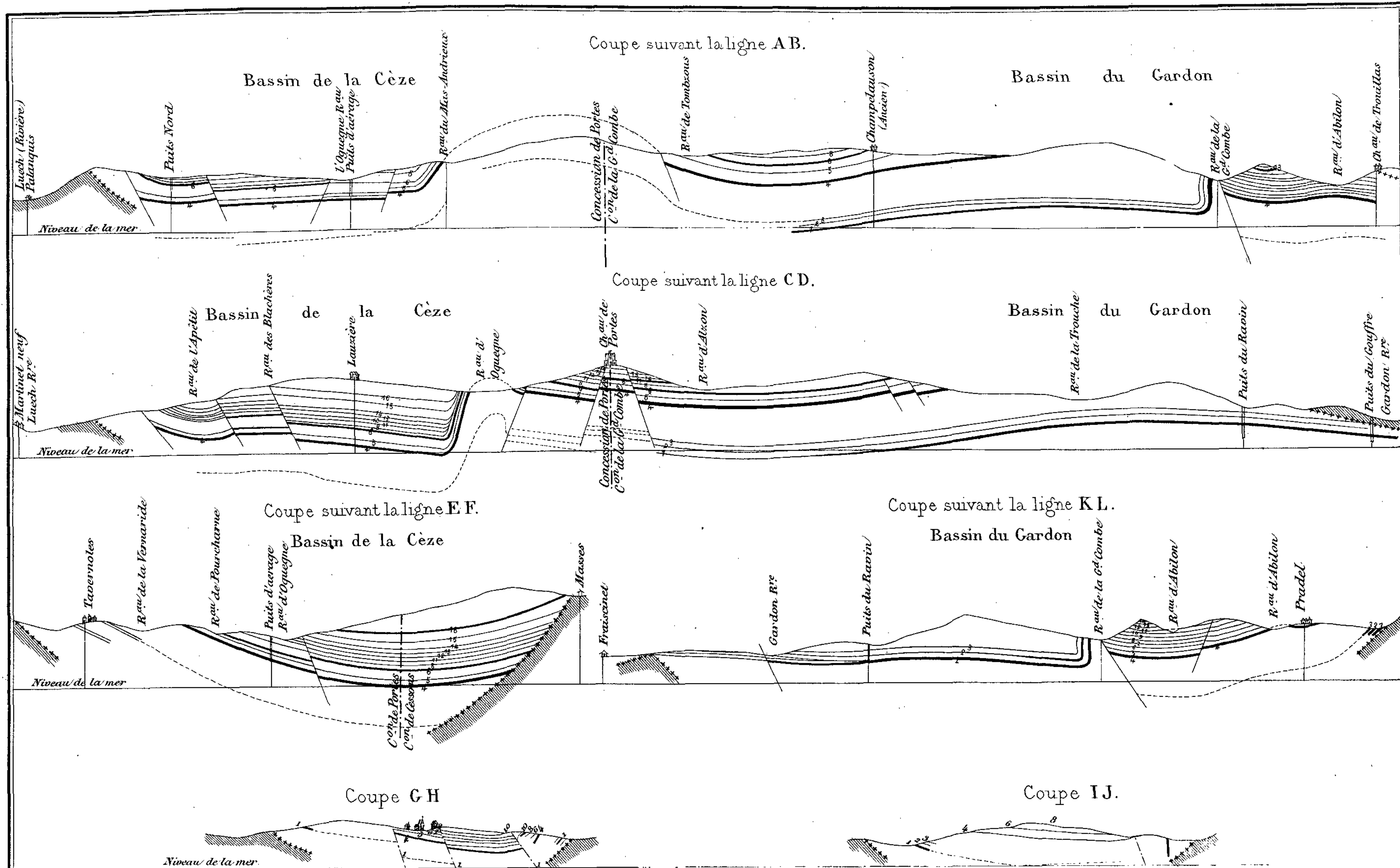








1869



Charbon, Charbon ferrugineux, Grès, Grès schisteux, Schiste, Schiste charbonneux, Minéral.















Fig. 51 Coupe de la Région Anonyme  
au dessus du plan N°3

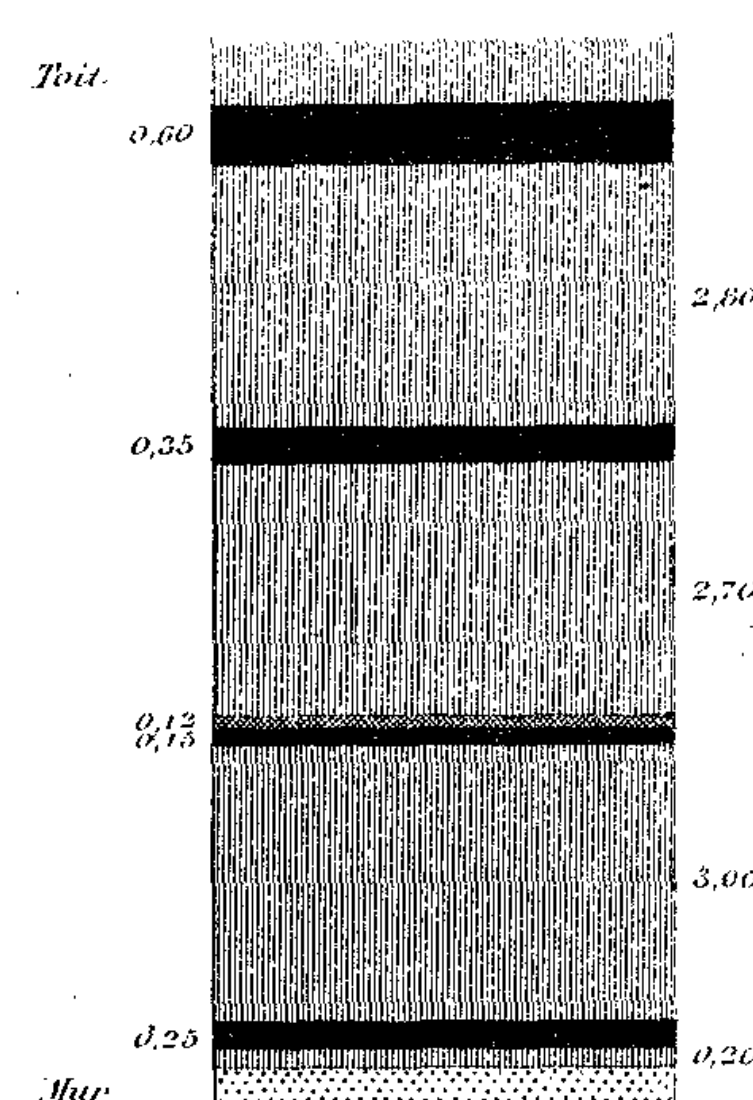


Fig.52 Région Anonyme  
*Alas de l'Appétit*

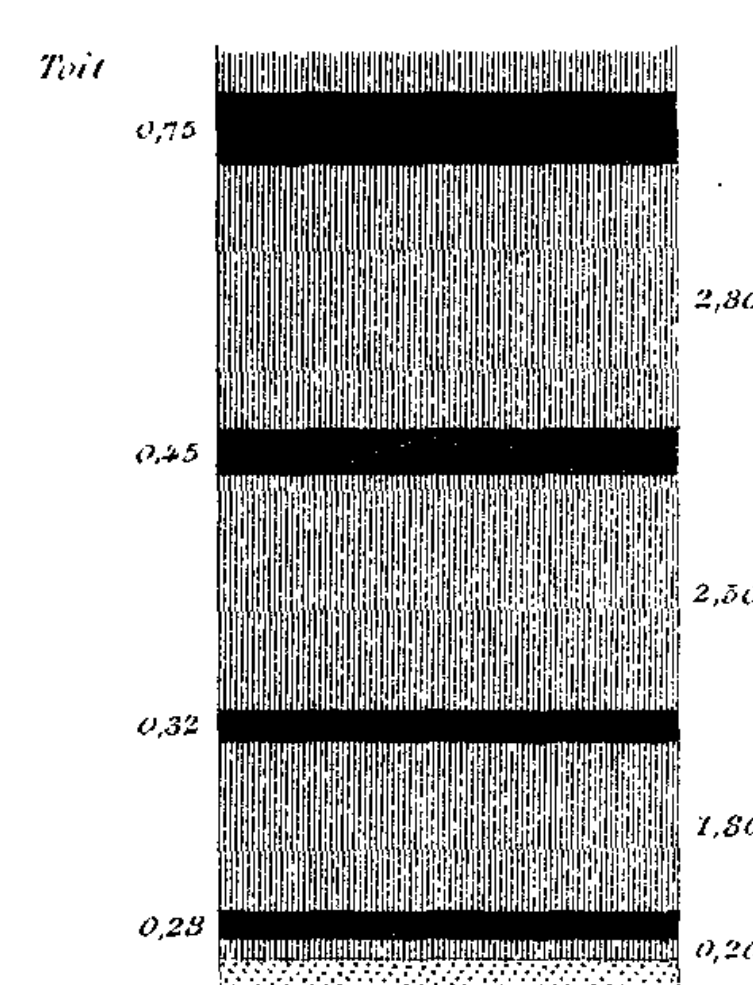


Fig 53 Coupe de la Couche des Blachères  
à la mine de la Lauzière

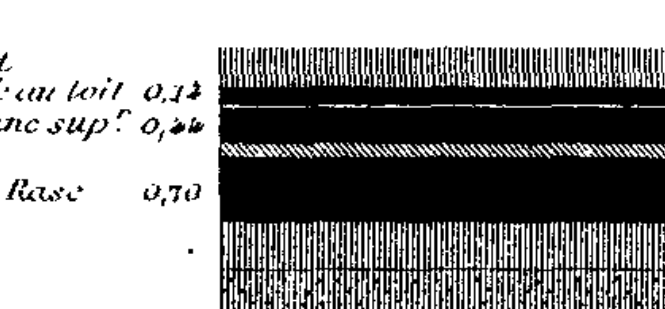


Fig. 54 Coupe de la Couche des Blachères prise à l'affleurement, près du Mas des Blachères

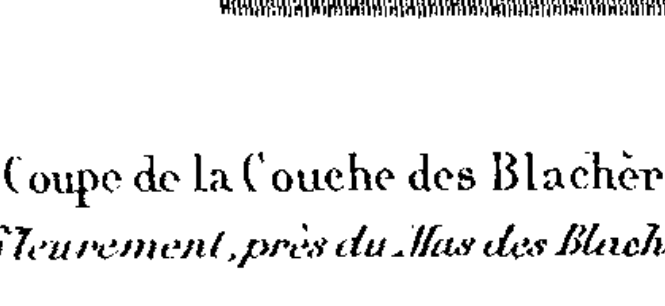


Fig.46 Coupe Dumazert  
au dessus du plan N°3

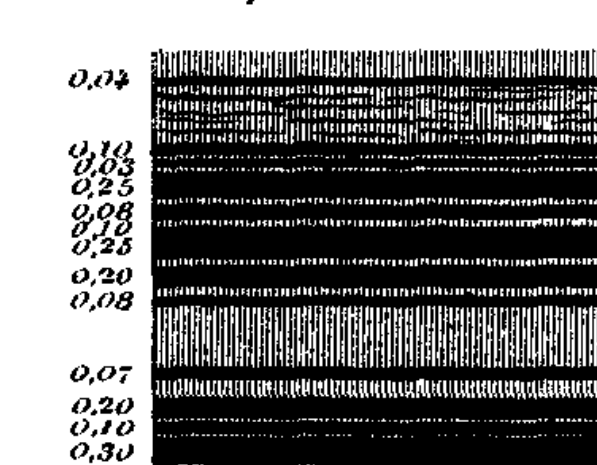


Fig.39 Coupe de la Couche Palmesalade  
à la Vernarède

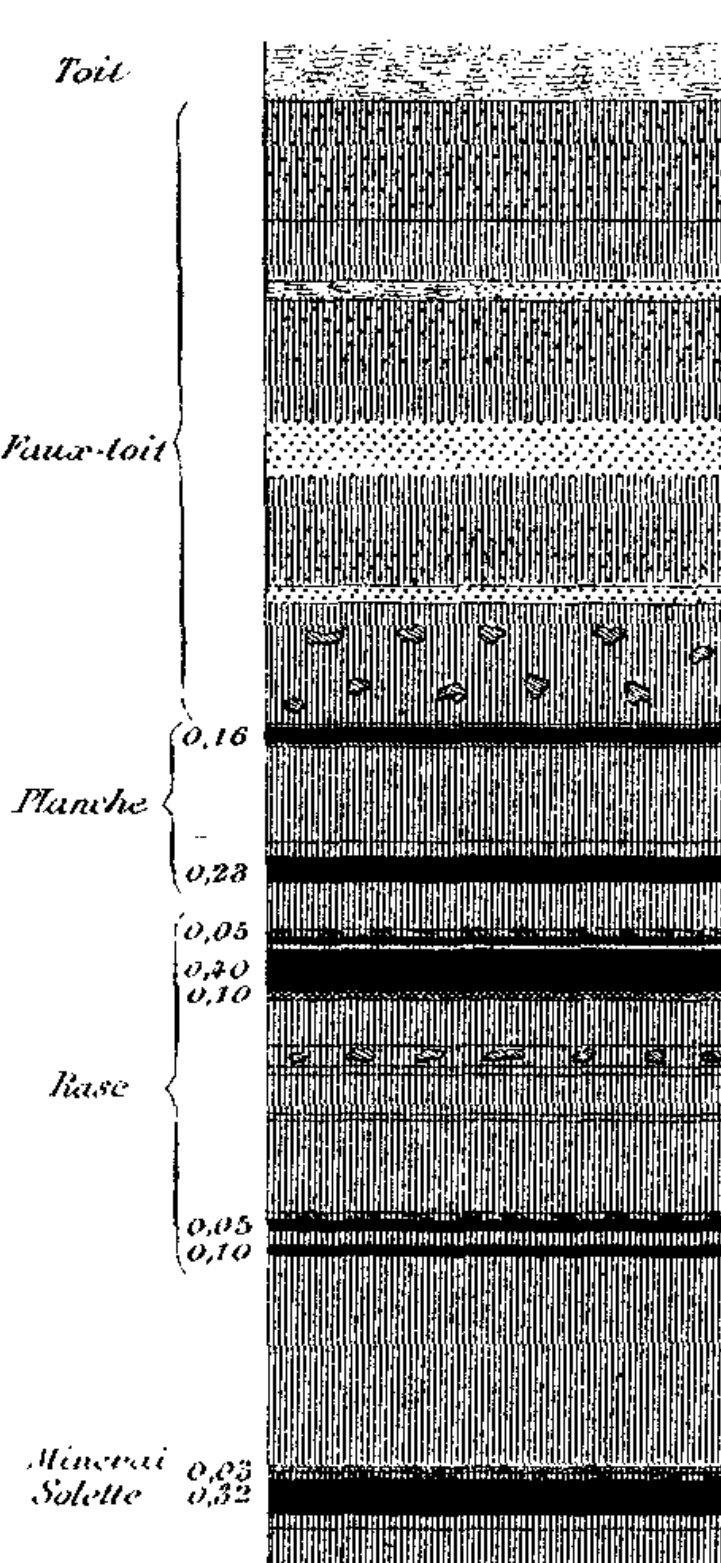


Fig. 31 Couche St Augustin.  
Coupe prise dans le travers bancs de St Augustin N<sup>ou</sup> de St<sup>e</sup> Inélie

Fig. 49 Coupe Ste Barbe

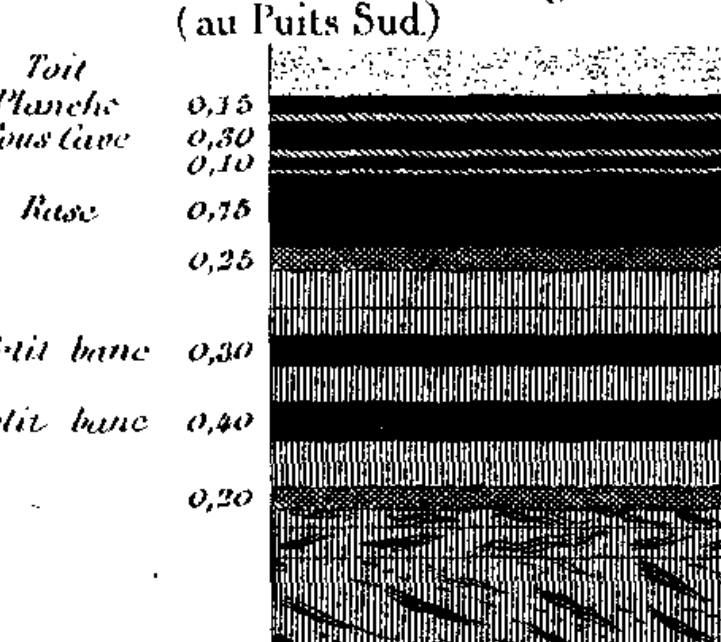


Fig 41 Coupe de la Couche Terrennoire  
dans la mine S<sup>te</sup> Amélie

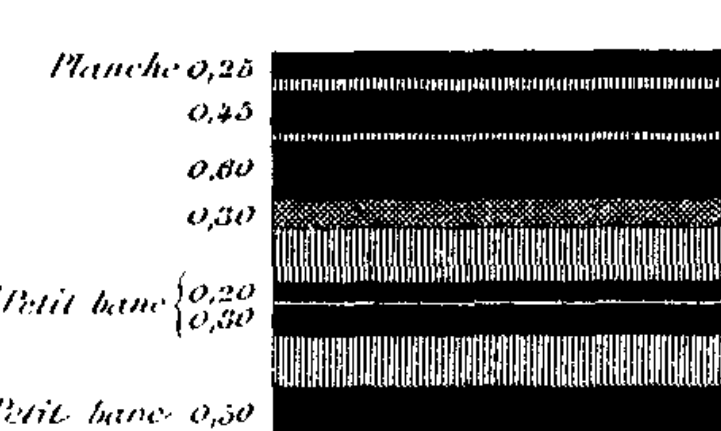
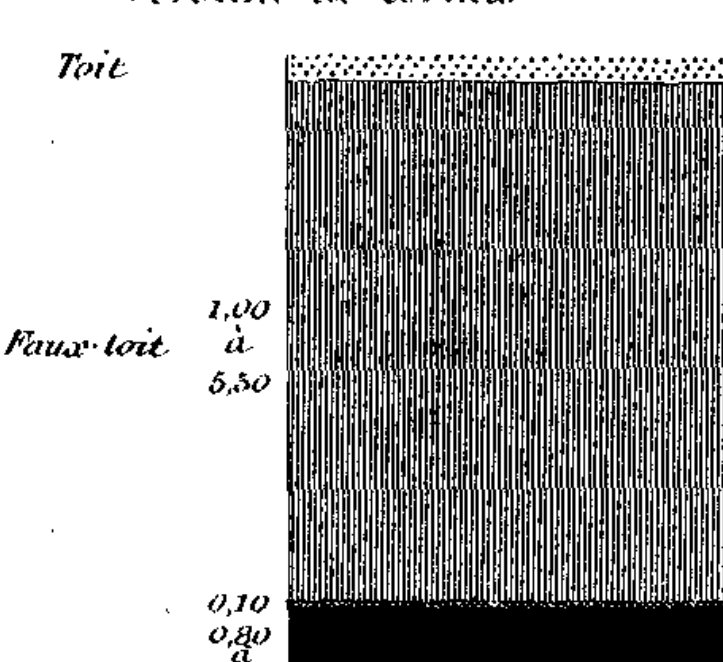


Fig.50 Coupe de la Couche S<sup>te</sup> Barbe  
*Versant de Cornay*



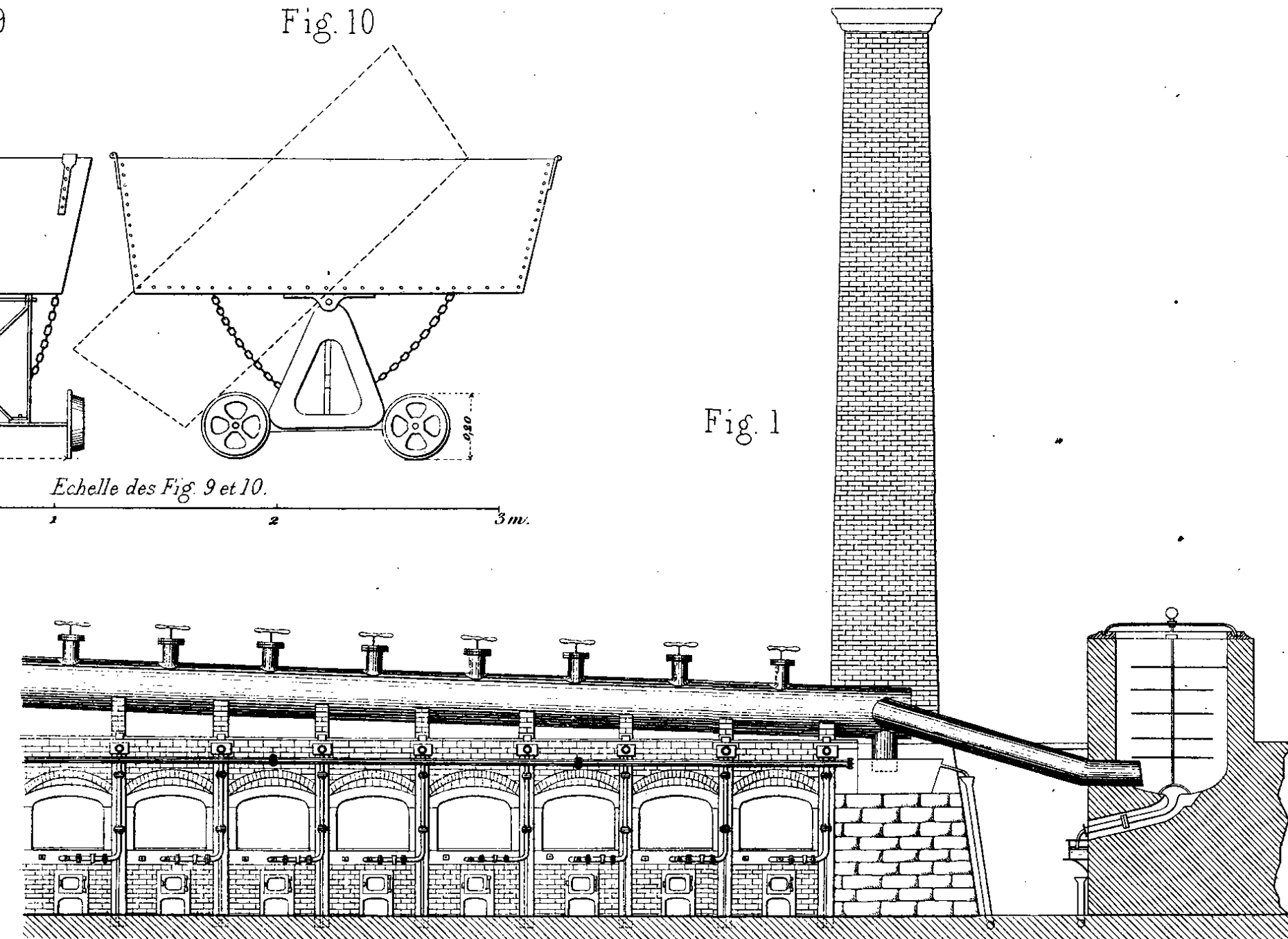
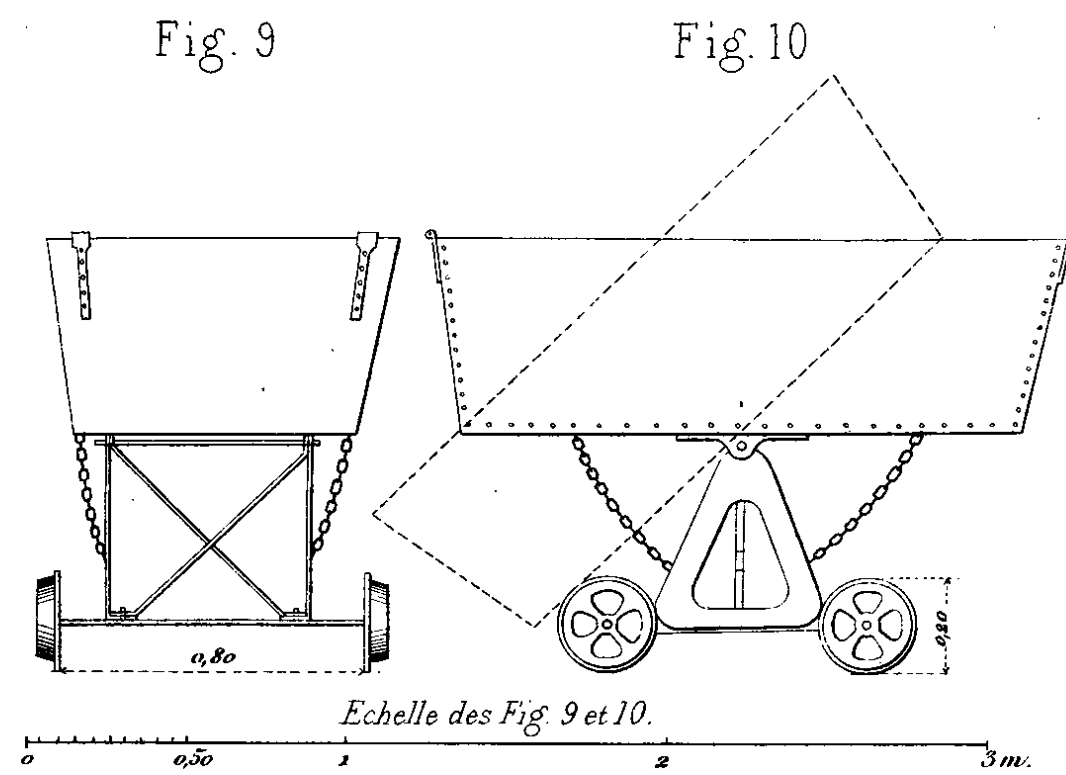
## Signes Conventionnels

|                                   |                                                                                       |
|-----------------------------------|---------------------------------------------------------------------------------------|
| <i>Charbon</i> .....              |  |
| <i>Charbon ferrin</i> .....       |  |
| <i>Rochs</i> .....                |  |
| <i>Grès</i> .....                 |  |
| <i>Grès schisteux</i> .....       |  |
| <i>Schiste</i> .....              |  |
| <i>Schiste charbonneux</i> .....  |  |
| <i>Schiste avec minéral</i> ..... |  |
| <i>Minéral</i> .....              |  |
| <i>Verf</i> .....                 |  |
| <i>Gratte</i> .....               |  |









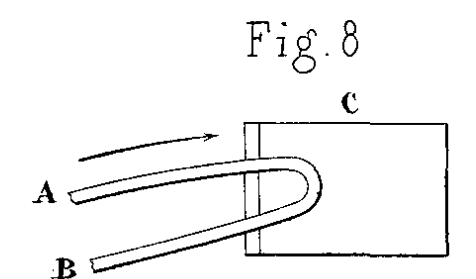
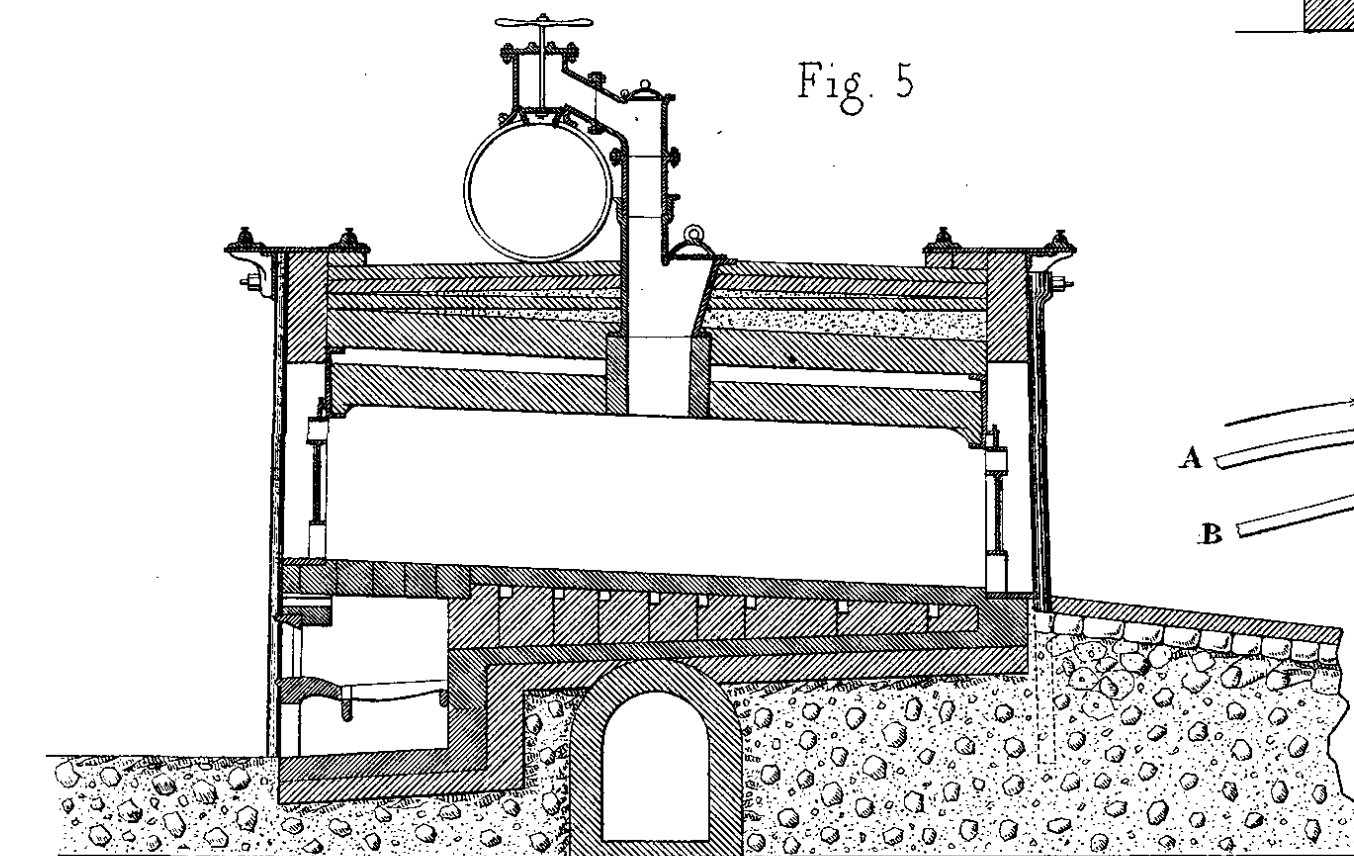
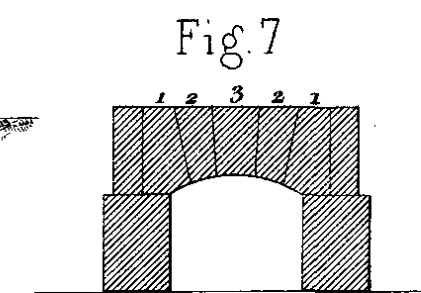
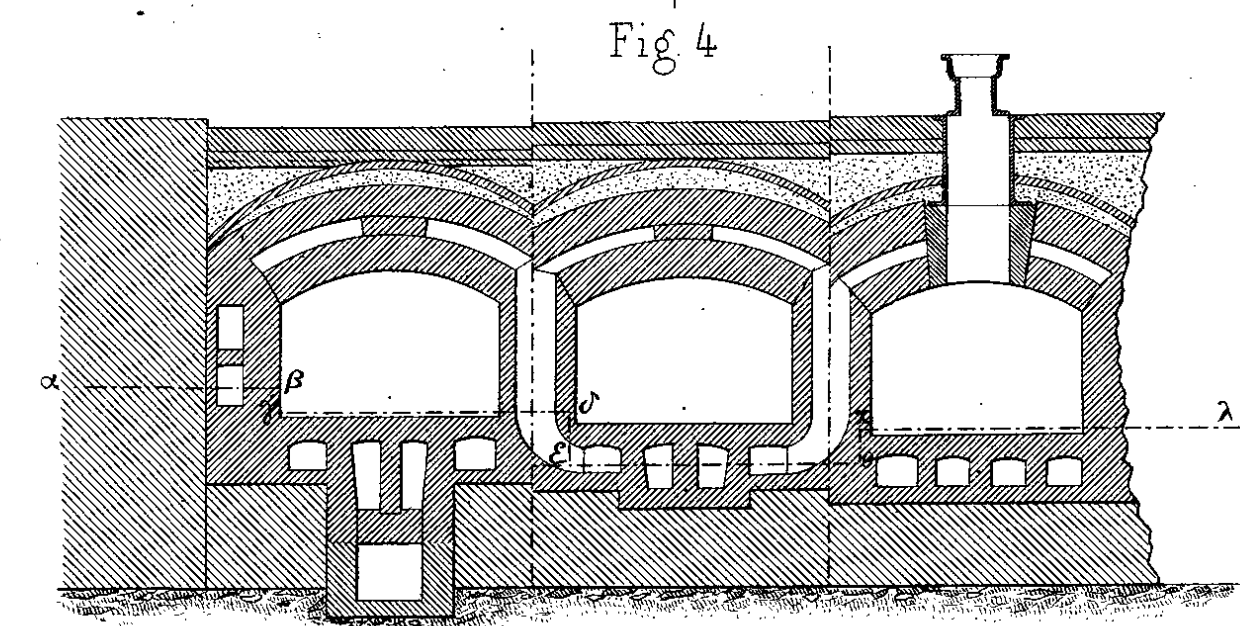
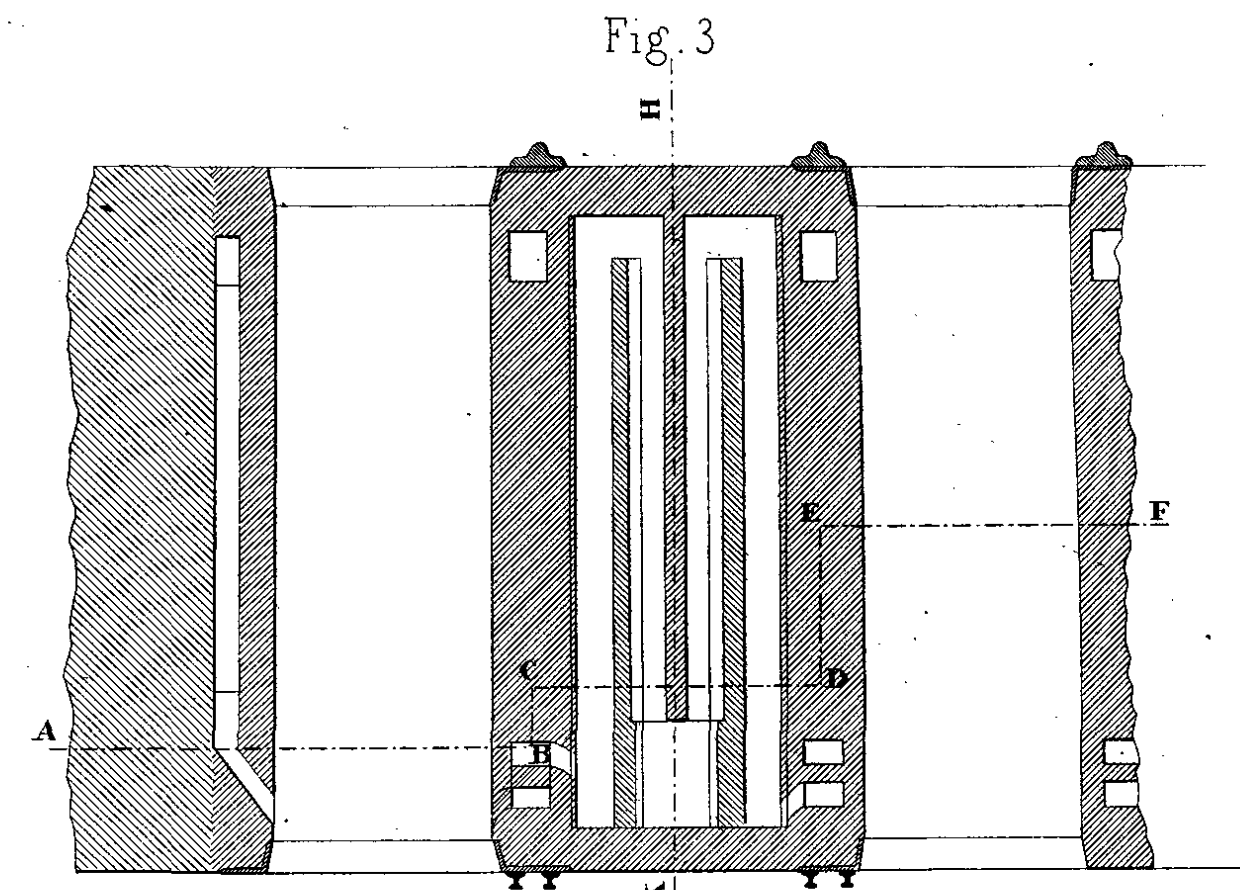
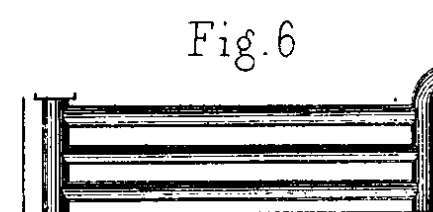
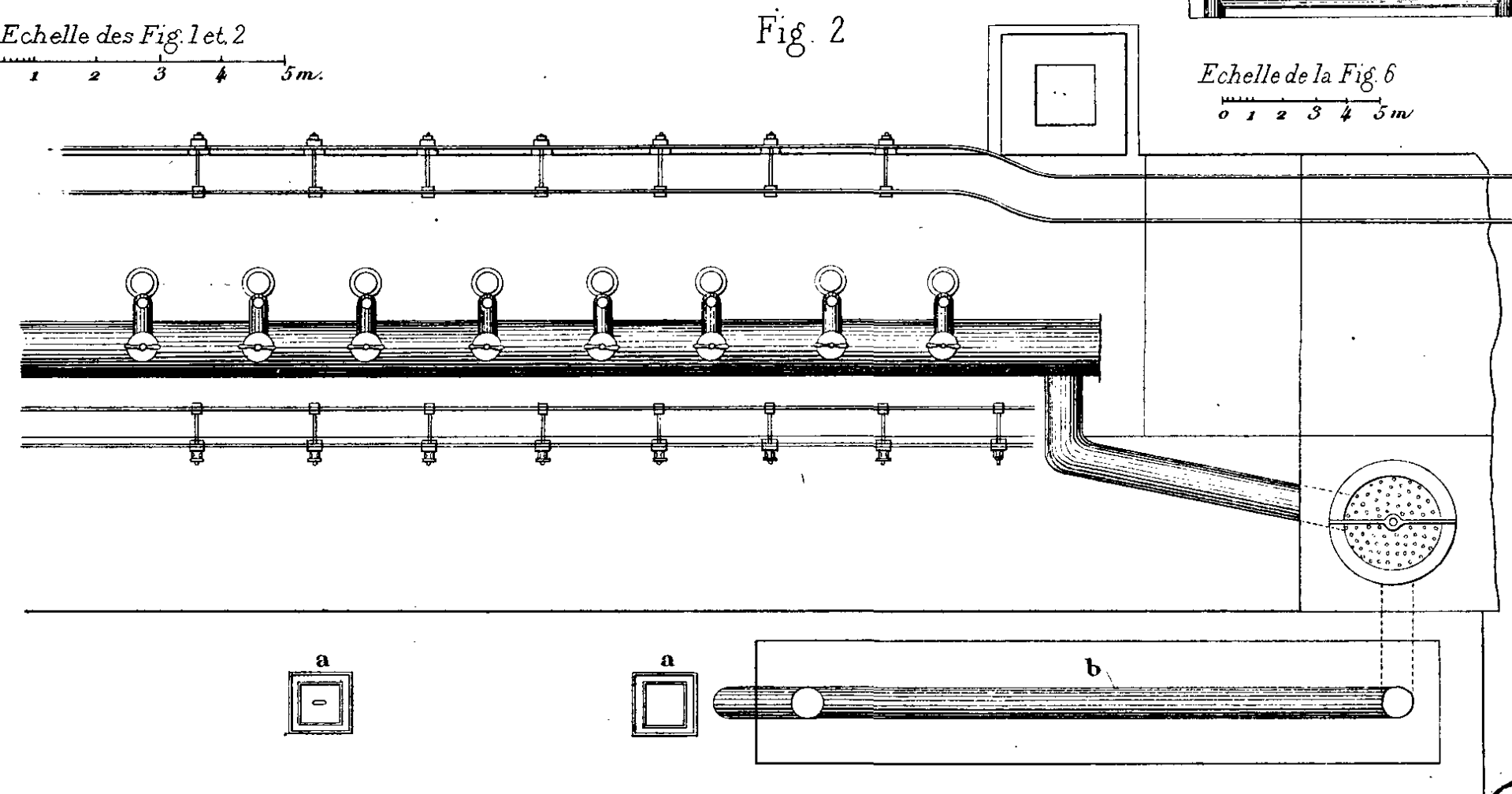
Légende de la Fig. 2.

a, a Soupapes de sûreté des deux premières chambres à coke.

b Bassin de condensation figuré à une échelle de moitié de la fig. 6.

Echelle des Fig. 1 et 2.

0 1 2 3 4 5 m.









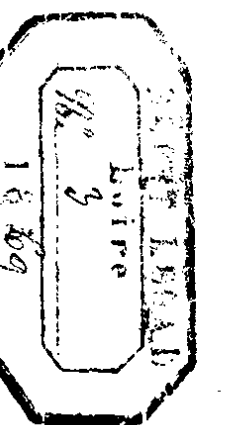
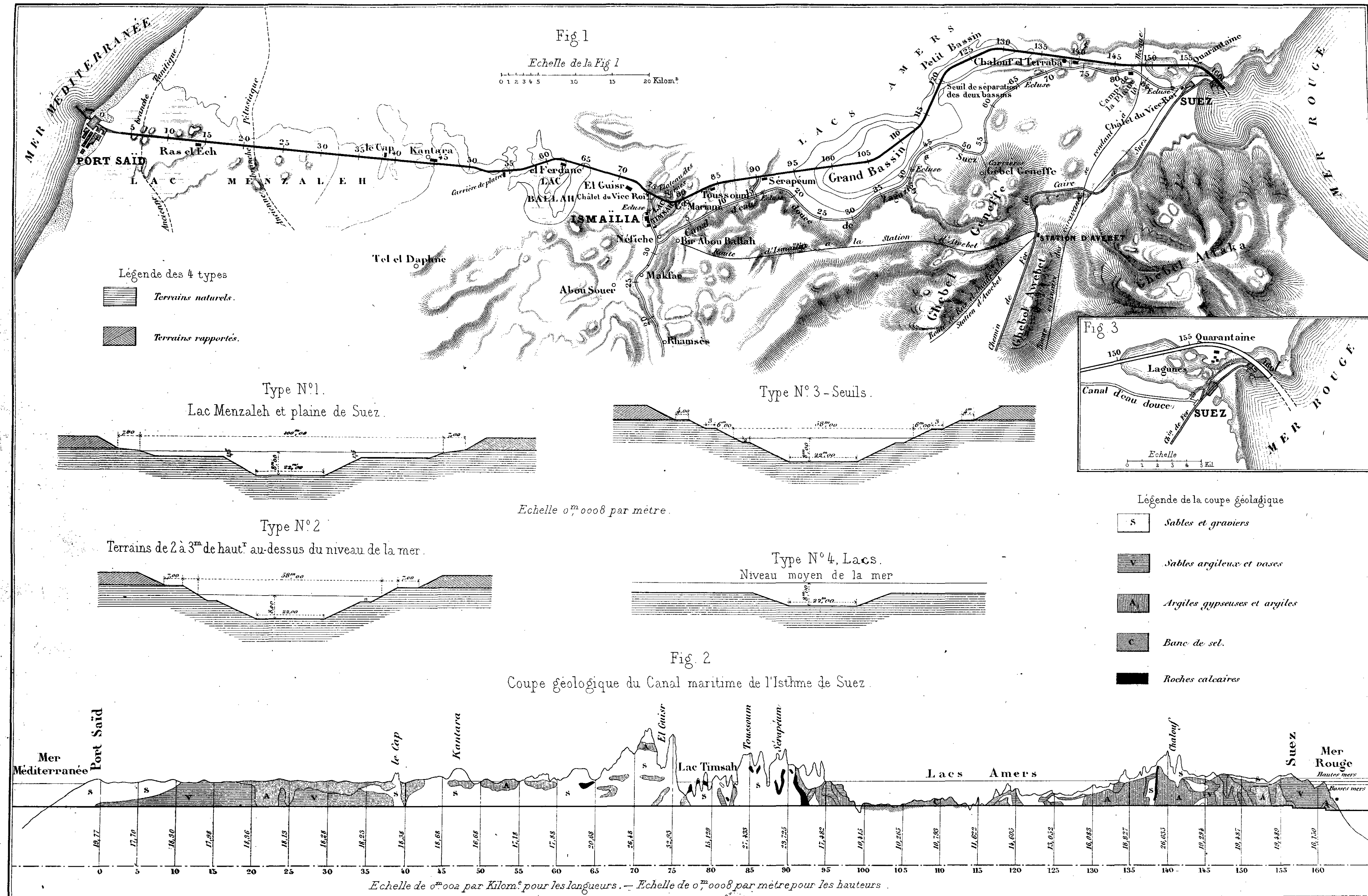








Fig 4  
Coupe verticale du tiroir.

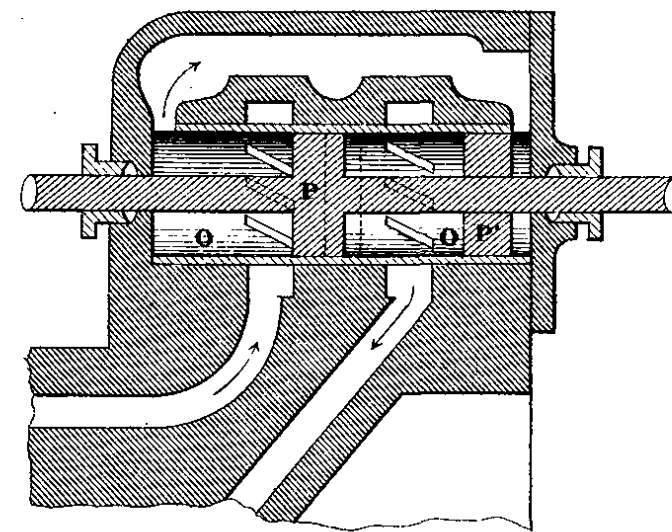


Fig 5  
Plan-coupe.

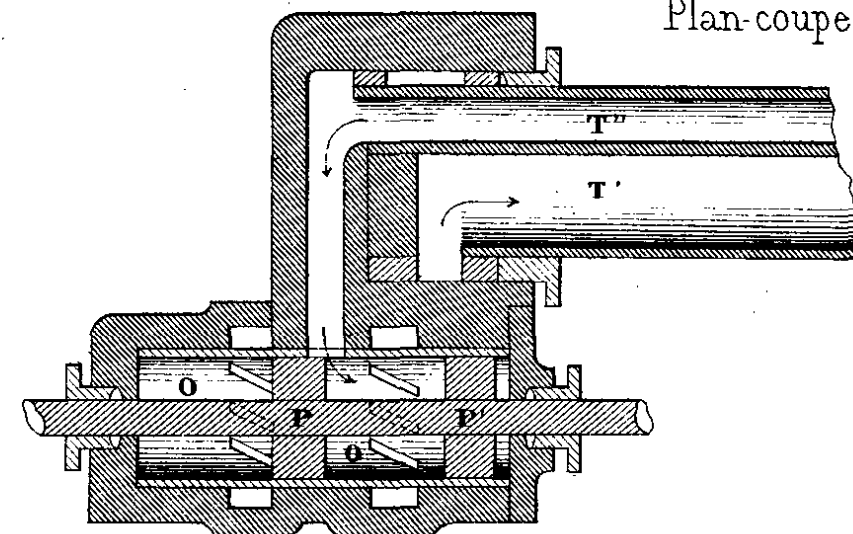


Fig 8  
Plan-coupe suivant la ligne brisée a,b,c,d, de fig 6

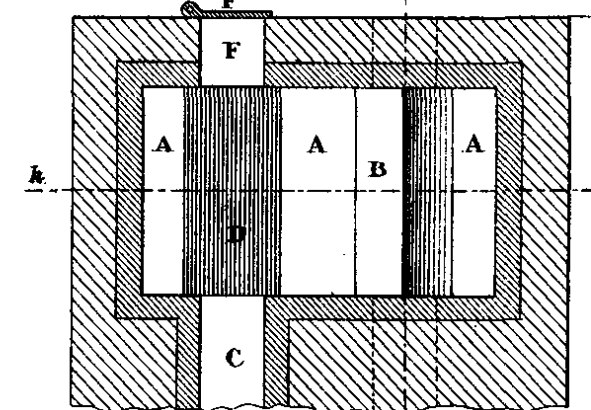
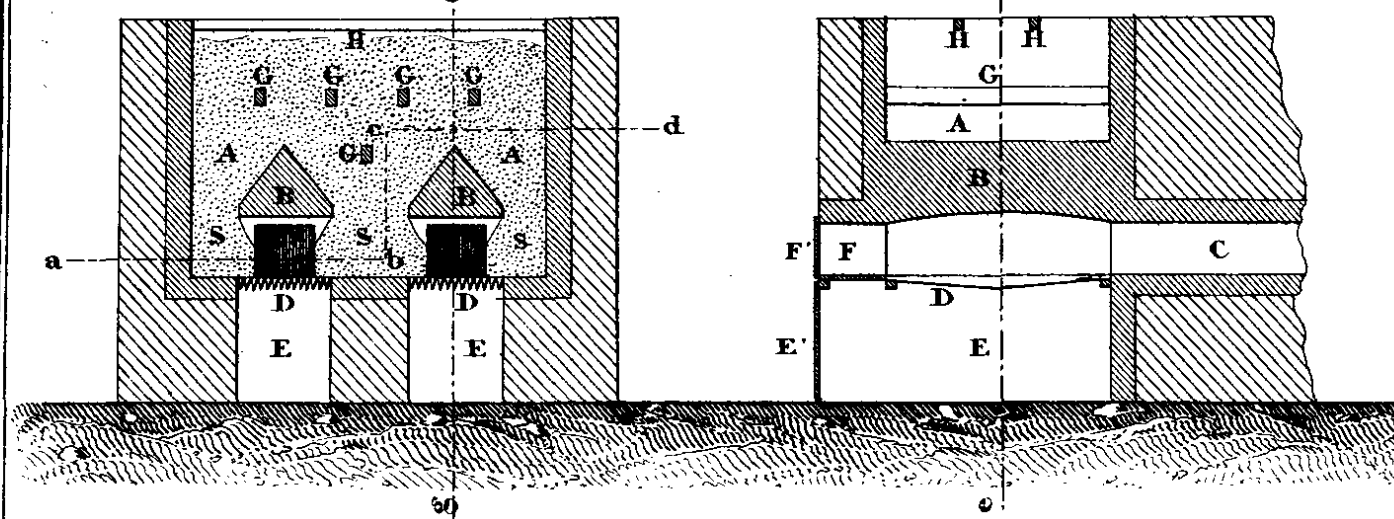


Fig 6 Four à brûler la Tannée - Fig 7  
Coupe verticale suiv<sup>t</sup> e,f, de fig 7 et k,l de Fig 8 Coupe verticale suiv<sup>t</sup> g,h de fig 6 et i,j de fig 8



Echelle des fig 1,2,3 de 0<sup>m</sup>0625 pour 1 m.

Echelle des fig 4 et 5 de 0<sup>m</sup>1250 pour 1 m.

Fig 2  
Coupe verticale.

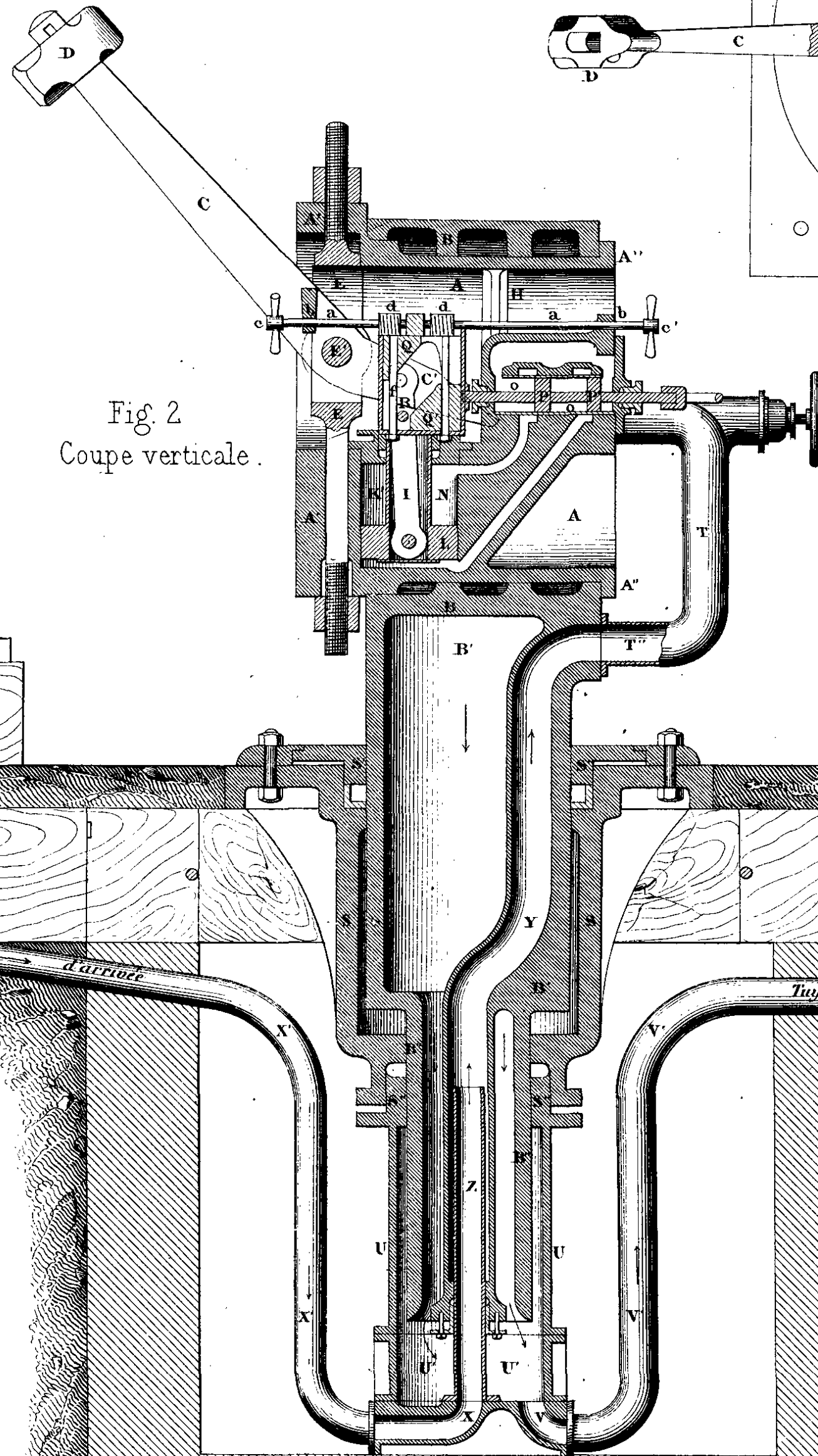


Fig 3-Plan-coupe.

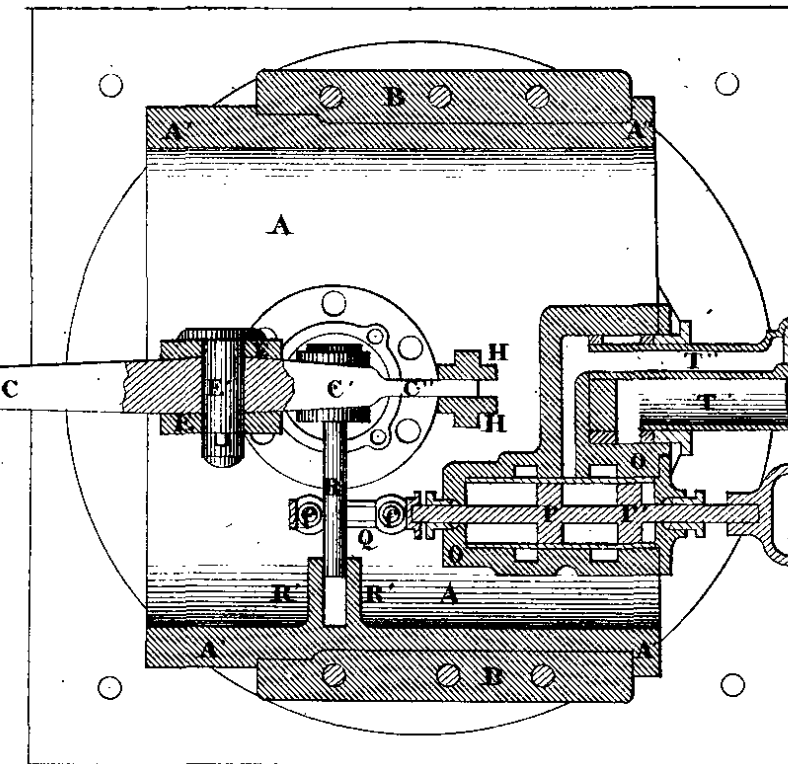
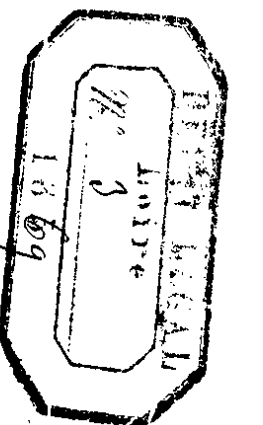
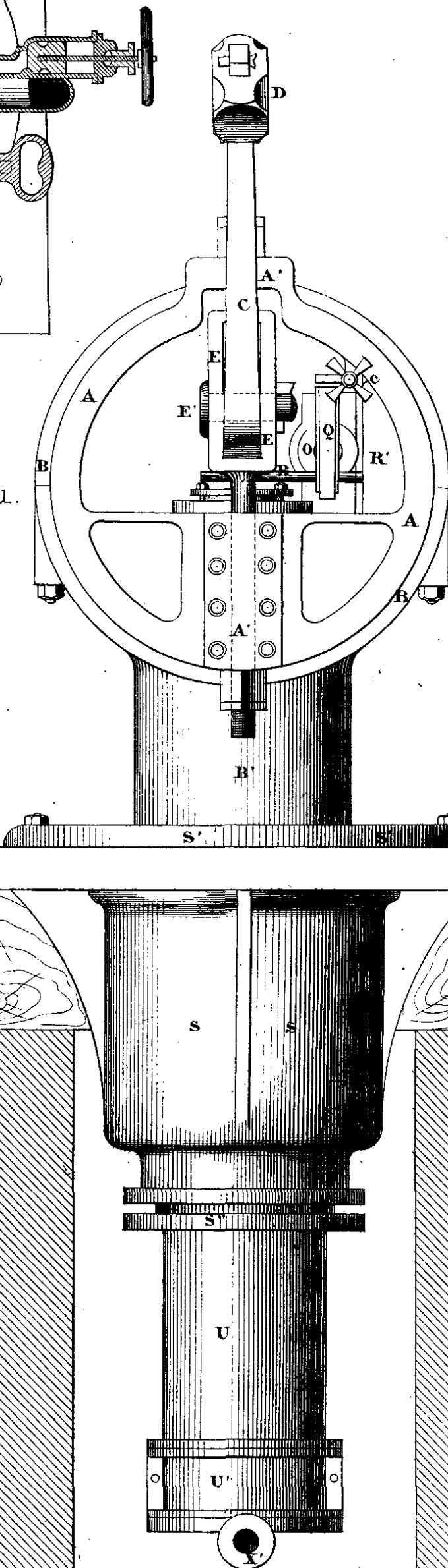


Fig 1  
Elevation de face du marteau.

















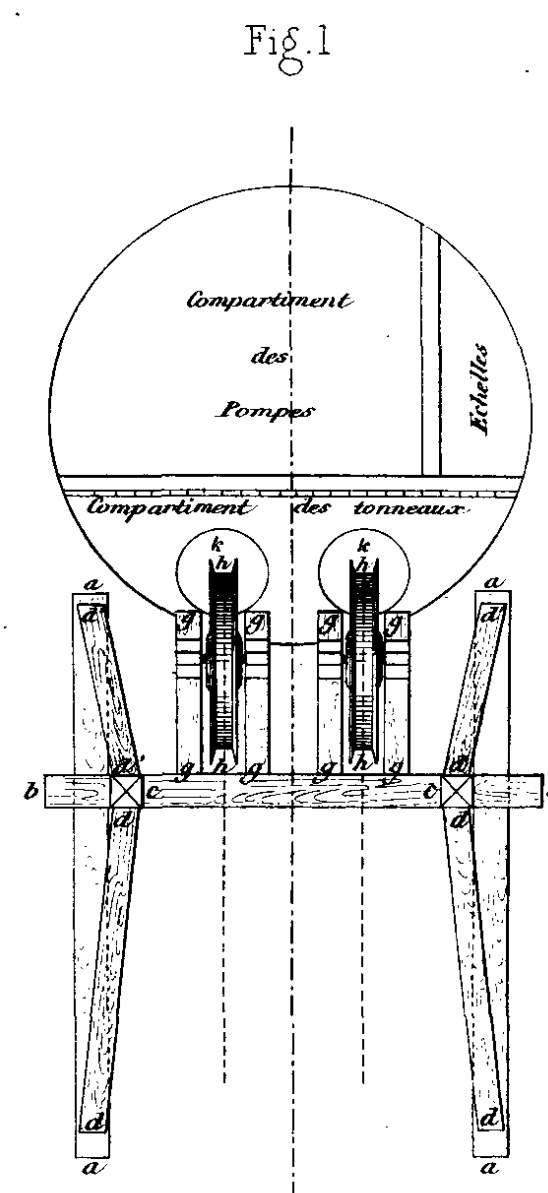
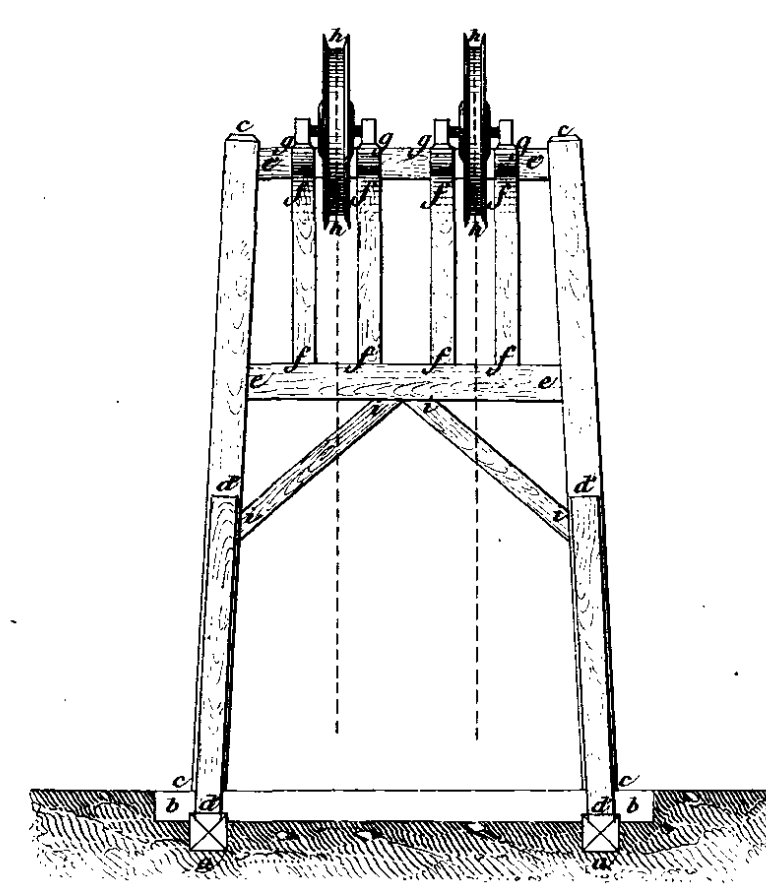
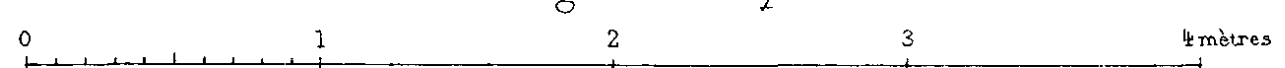


Fig. 3



Echelle de la Fig. 4. de 0<sup>m</sup>025 p<sup>r</sup> 1 mètre



Echelle des Fig. 1. 2. 3. de 0<sup>m</sup>01 p<sup>r</sup> 1 mètre

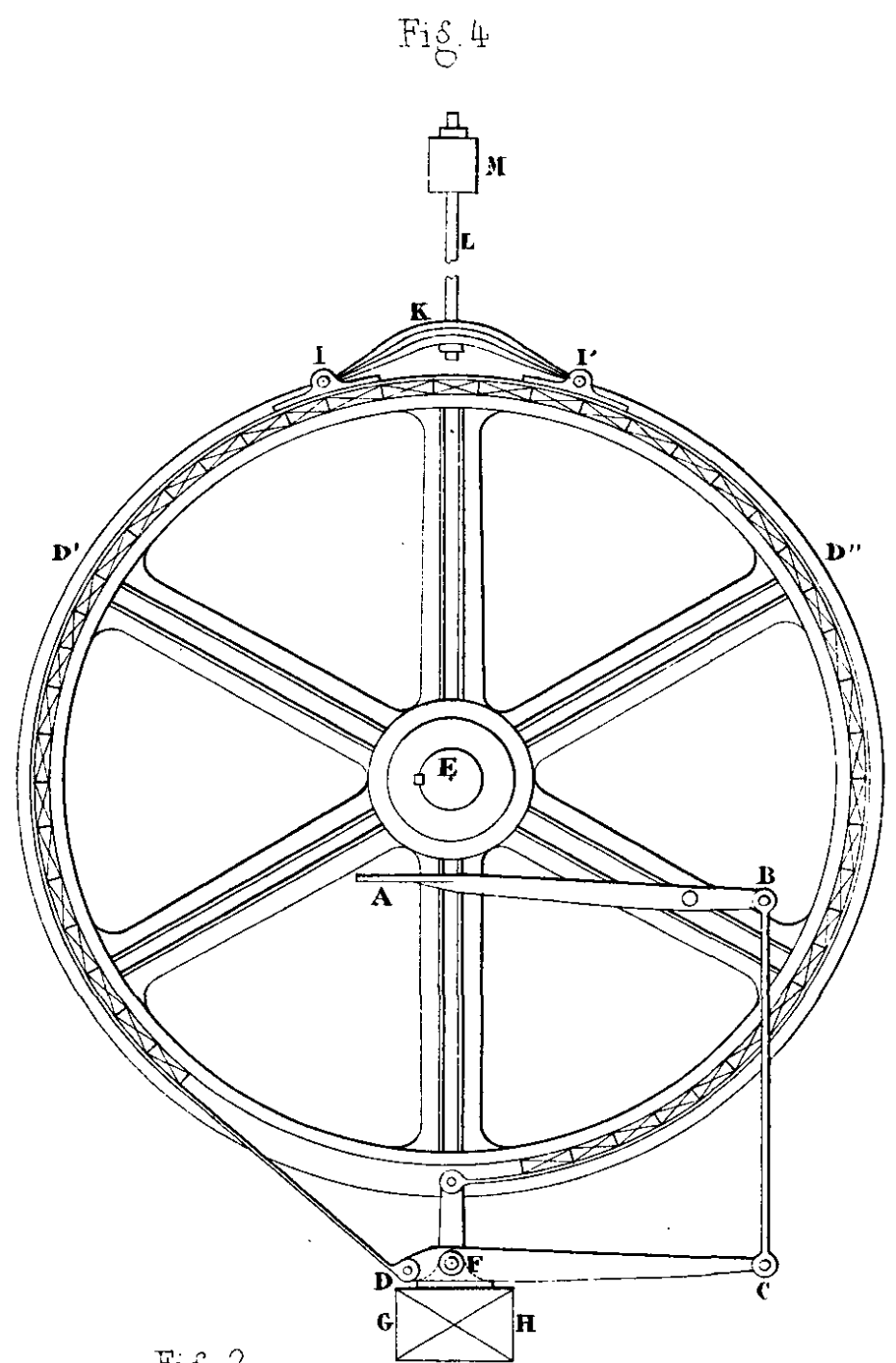
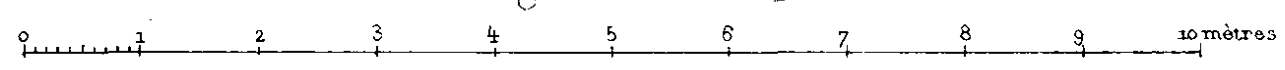


Fig. 2

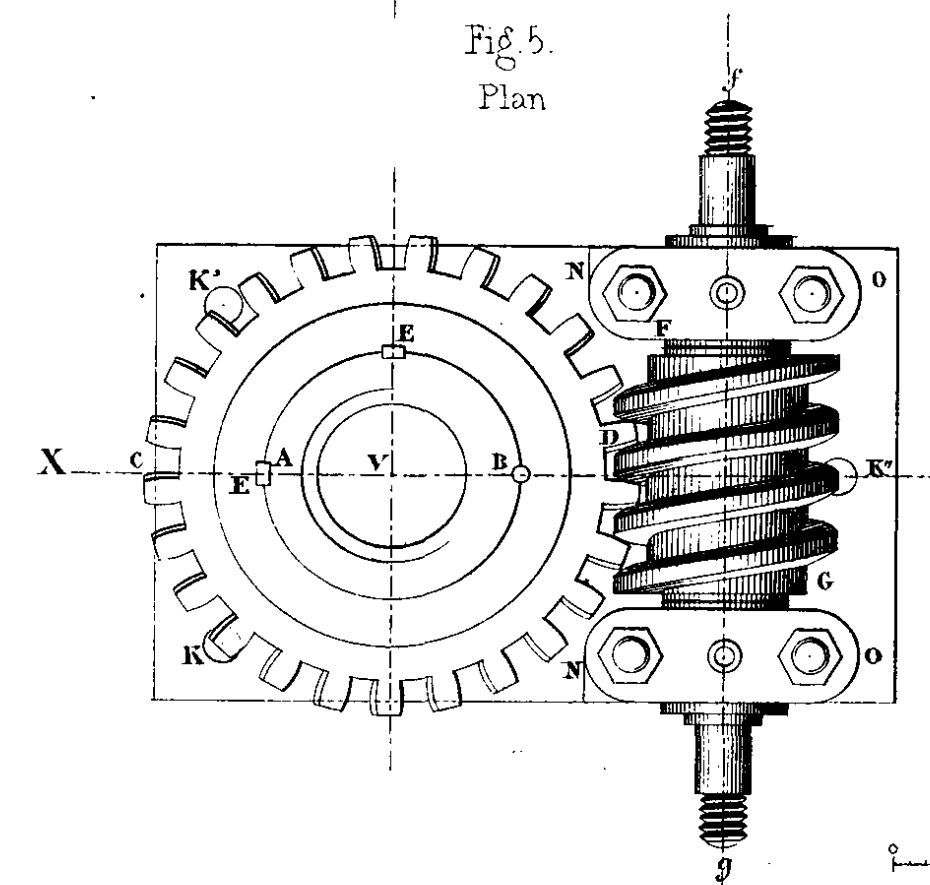
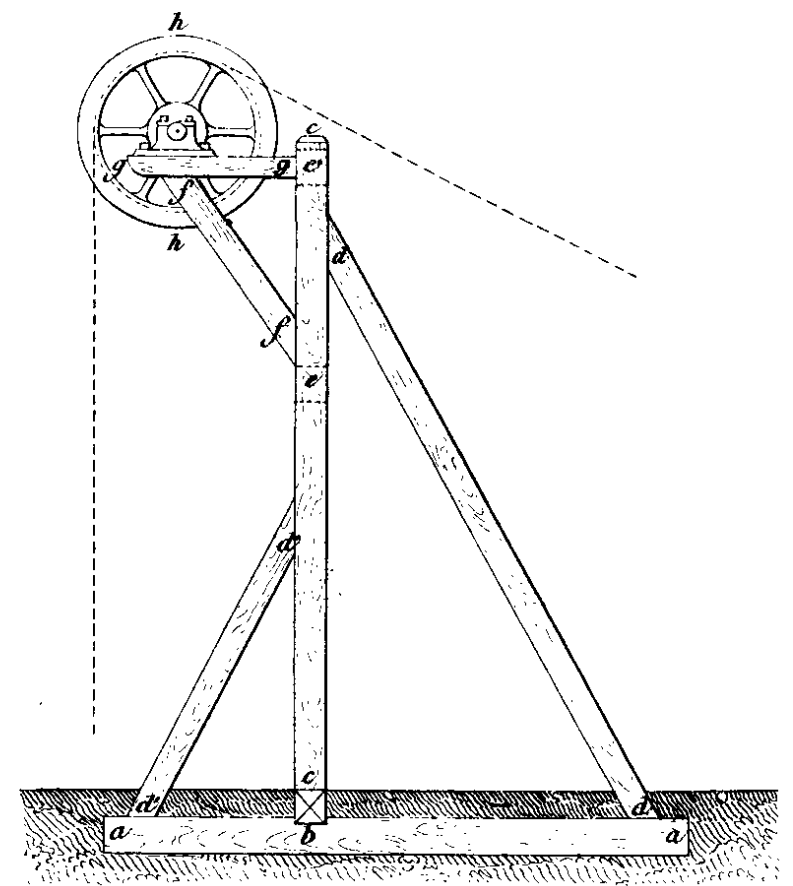


Fig. 5.  
Plan

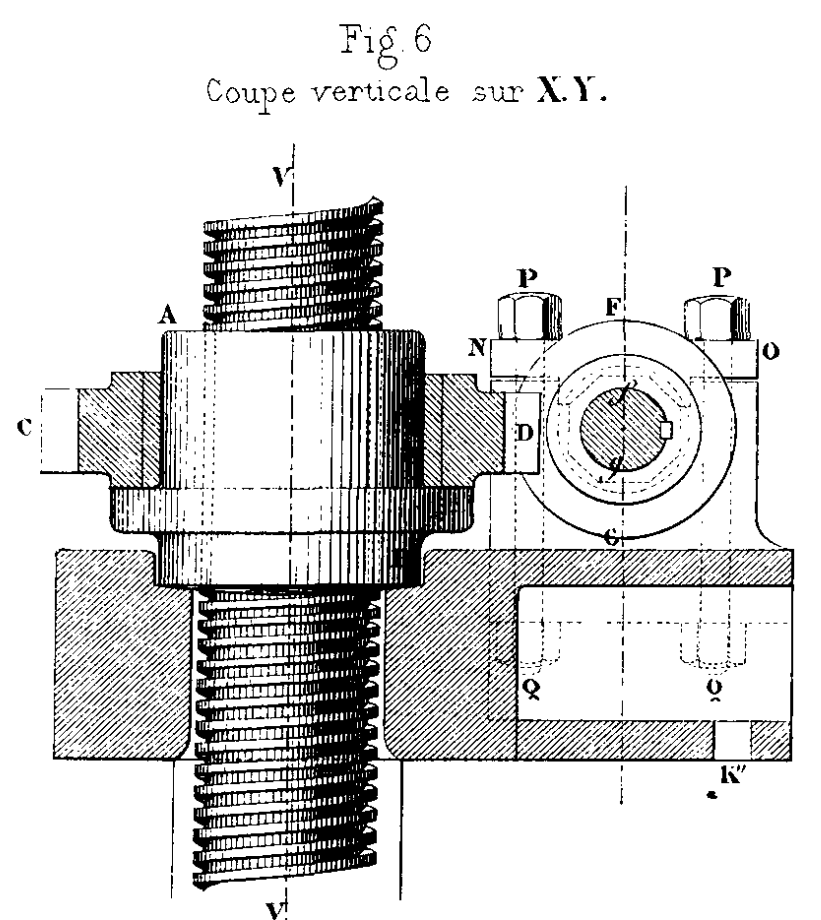


Fig. 6  
Coupe verticale sur X.Y.

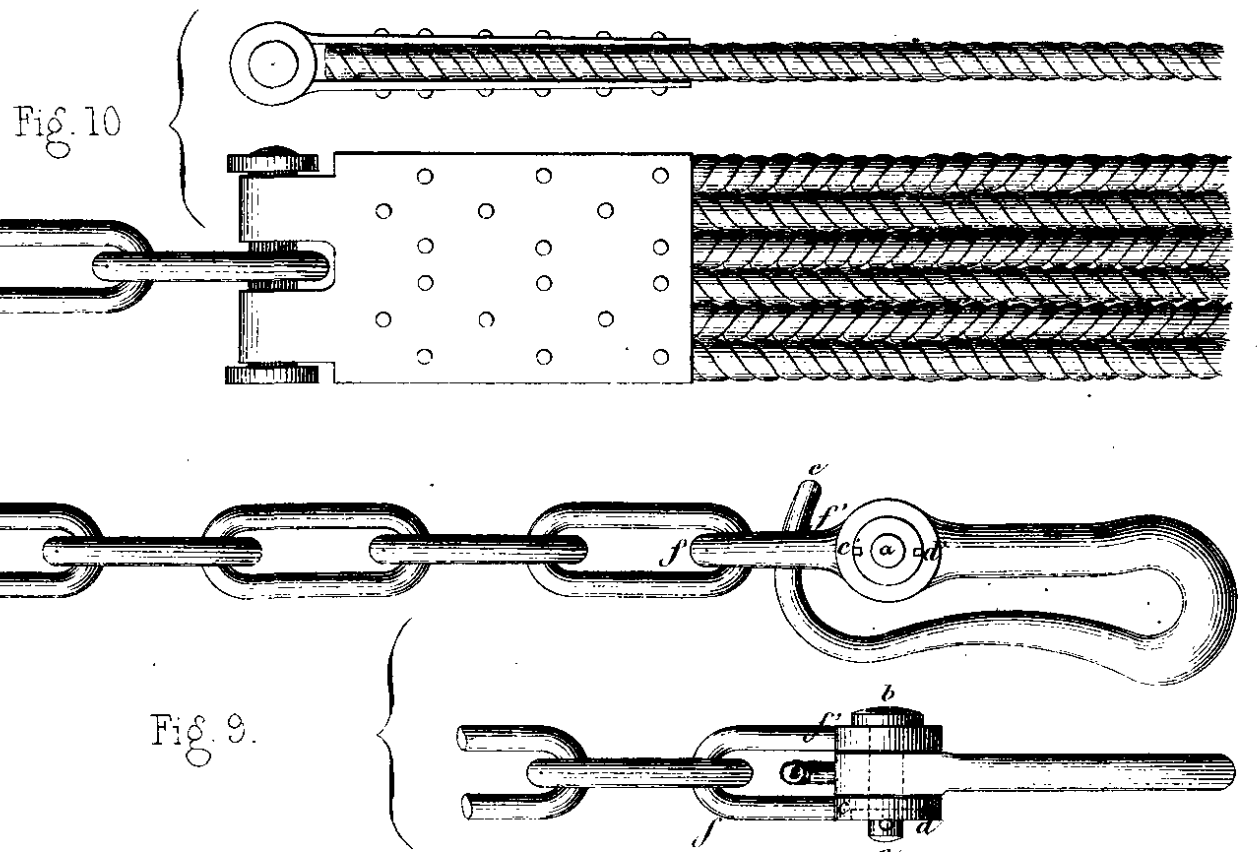


Fig. 9.

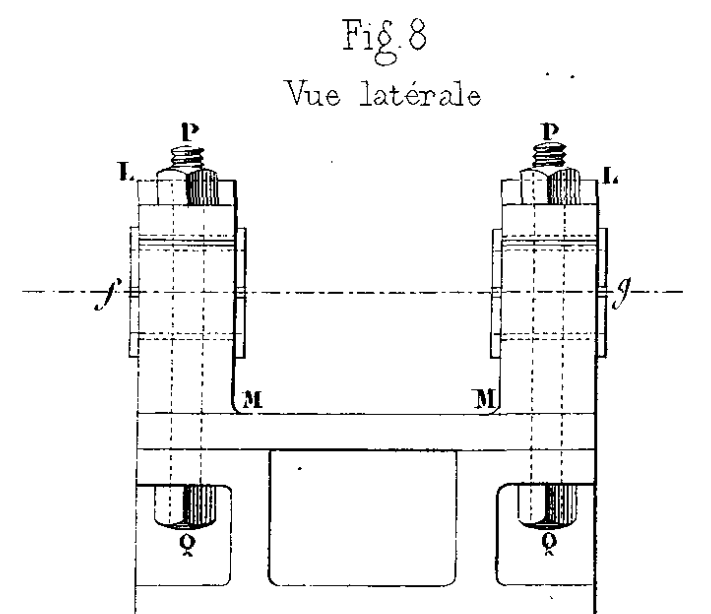


Fig. 8  
Vue latérale

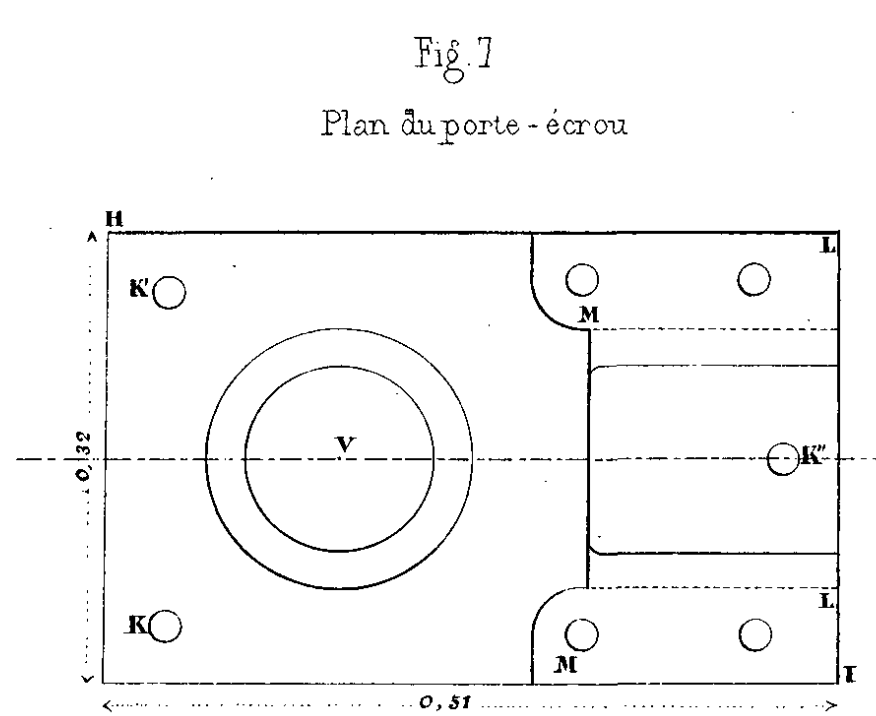
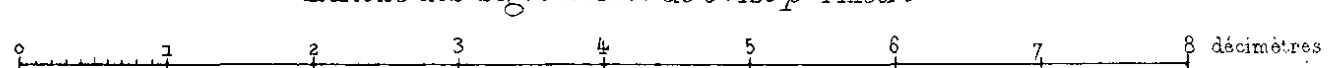


Fig. 7  
Plan du porte-écrou

Echelle des Fig. 5. 6. 7. 8. de 0<sup>m</sup>125 p<sup>r</sup> 1 mètre



Echelle des Fig. 9 et 10. de 0<sup>m</sup>01 p<sup>r</sup> 1 mètre

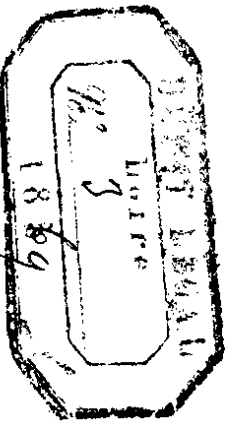


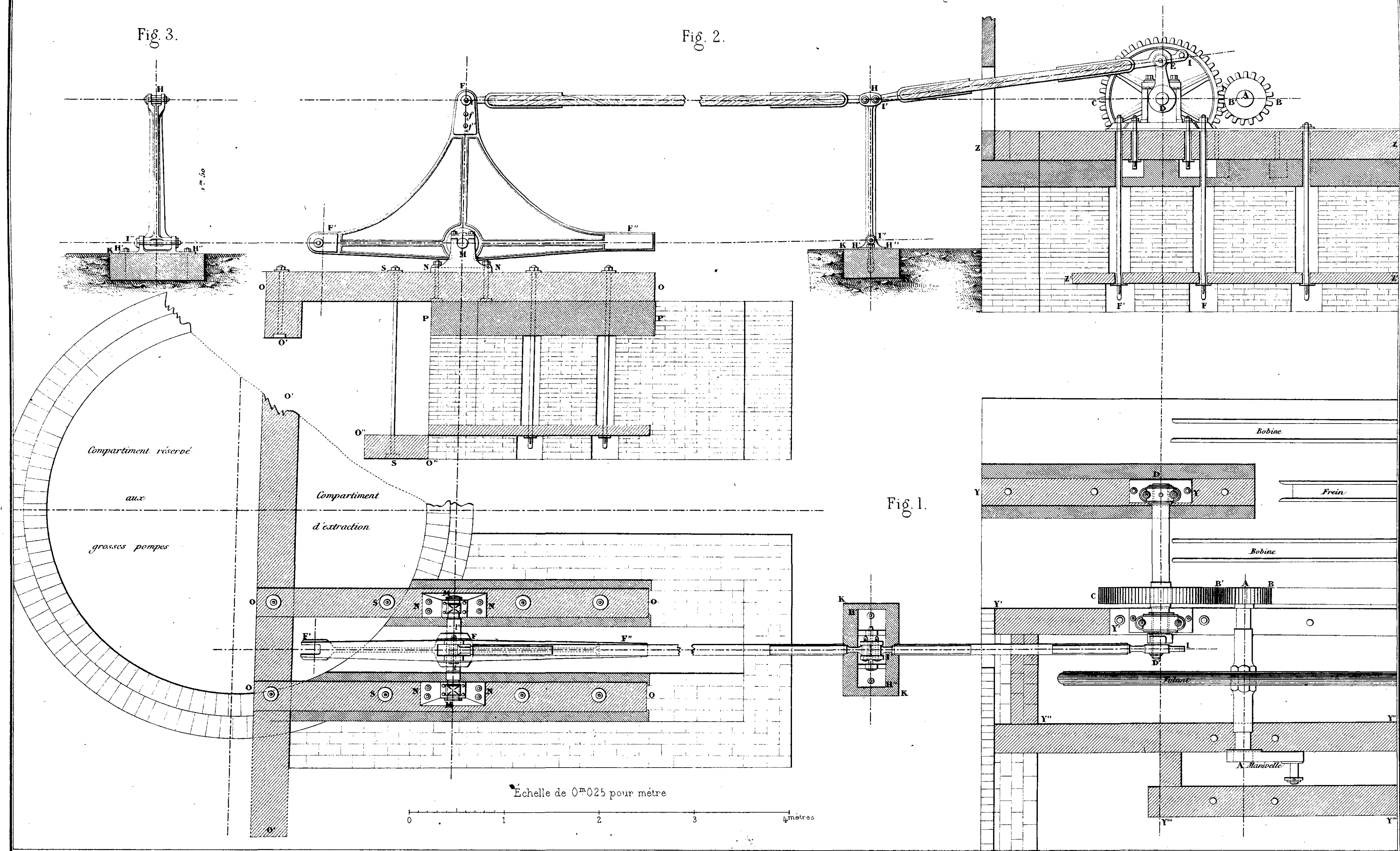






Fig. 3.

Fig. 2.



Échelle de 0<sup>m</sup>025 pour mètre

*S<sup>t</sup> Etienne. Lith. LANTZ, 4 R. de la Loire.*







325

265

40

15, 17

60

55

100

220

130

120

22

267

40

10 9 8 7 6 5 4 3 2 1 0 1 2 mètres

Échelle des Fig 3 4 et 5 om 025 pour 1 mètre

10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 mètres

Fig. 7.

10 9 8 7 6 5 4 3 2 1 0 1 2 3 décimètres

Echelle des Fig. 7.8 et 9. de 0 m. pour 1 mètre

0 1 2 3 4 5 6 7 8 9 décimètres







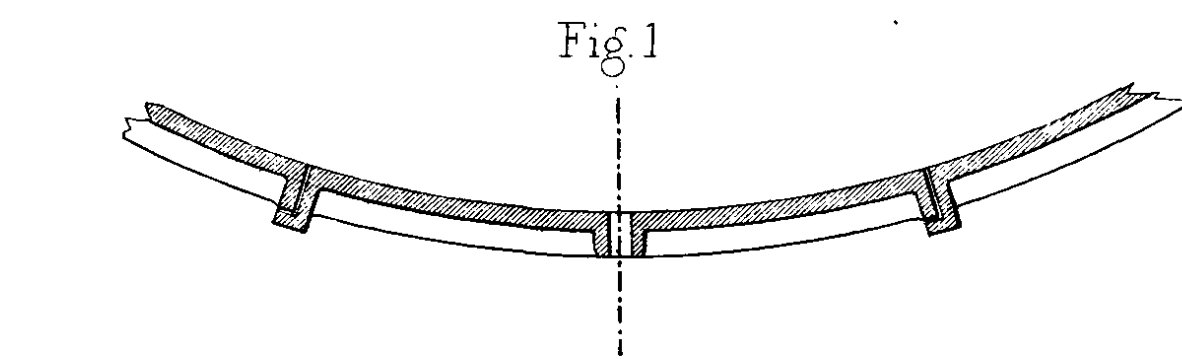


Fig 1

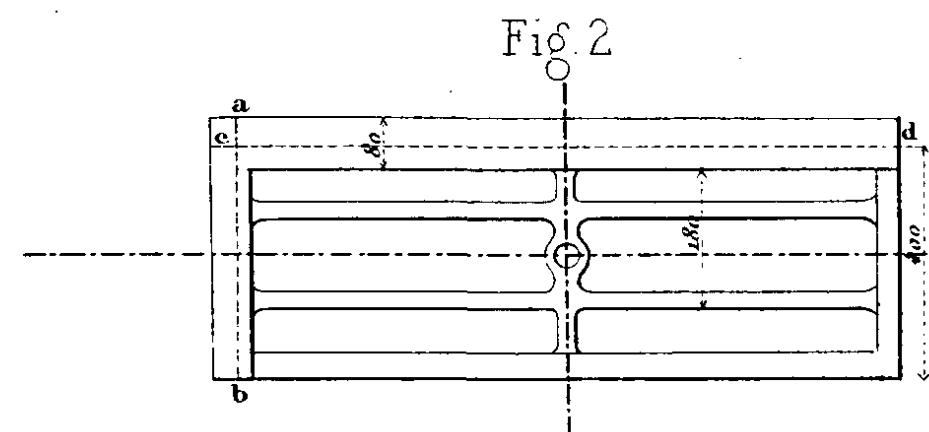


Fig 2

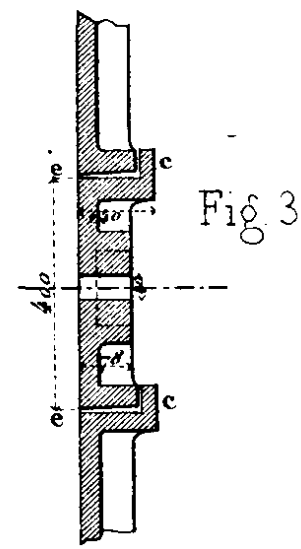


Fig 3

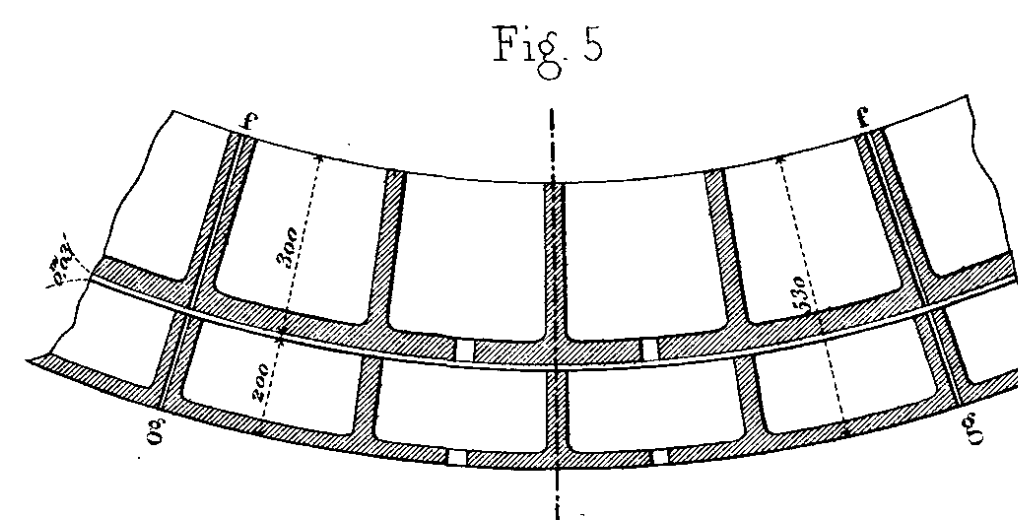


Fig 5

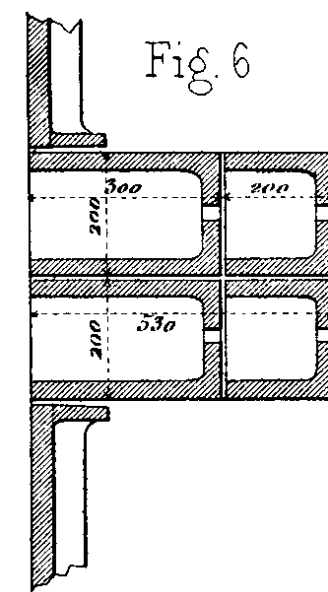


Fig 6

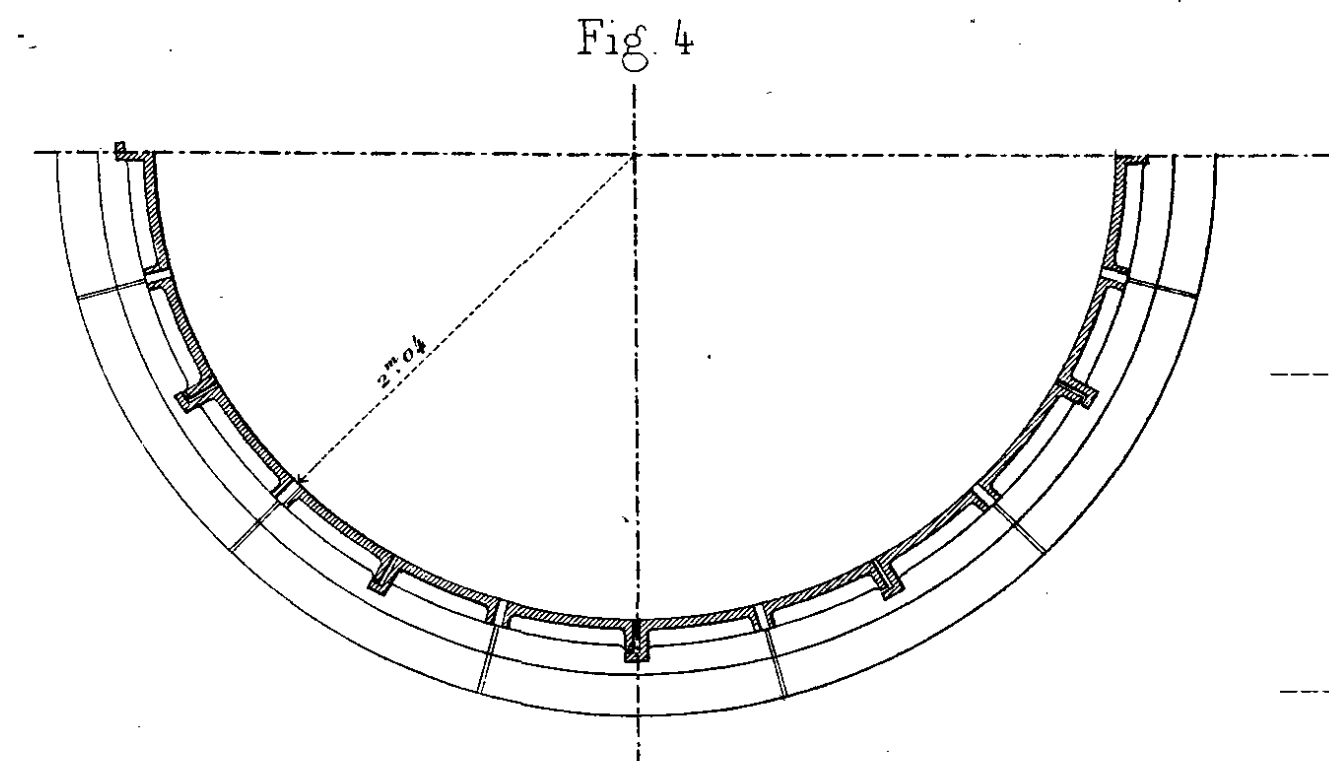


Fig 4

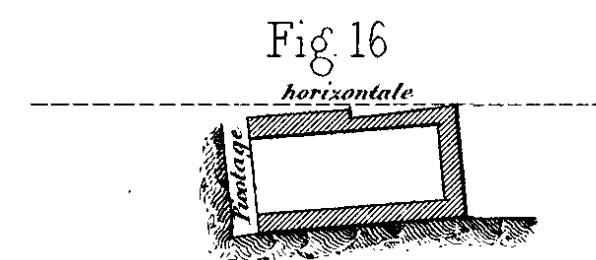


Fig 16  
horizontale

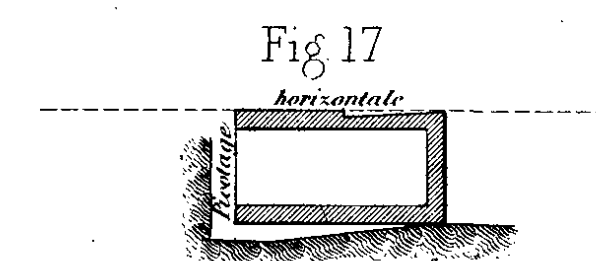


Fig 17  
horizontale

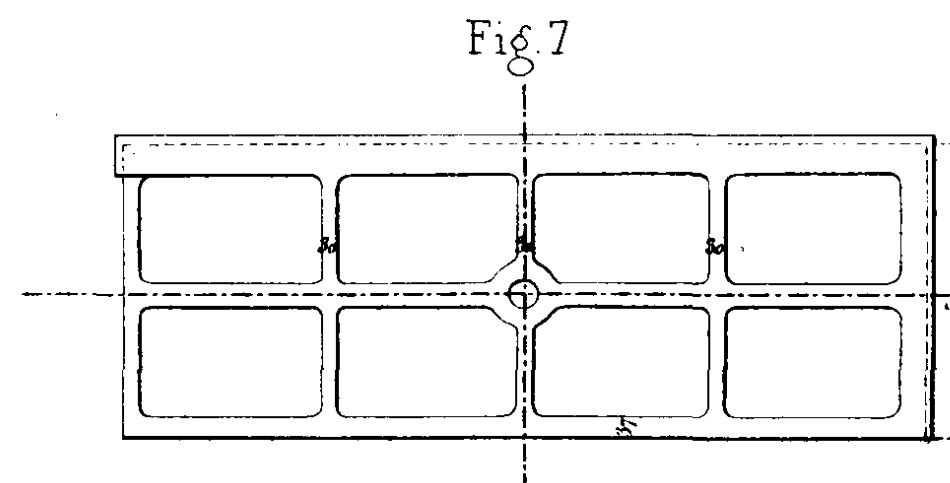


Fig 7

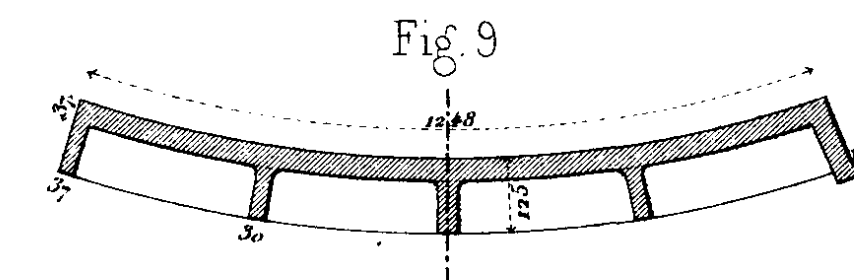


Fig 9

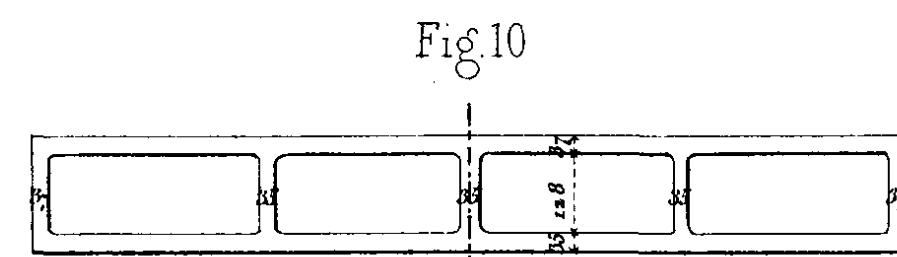


Fig 10

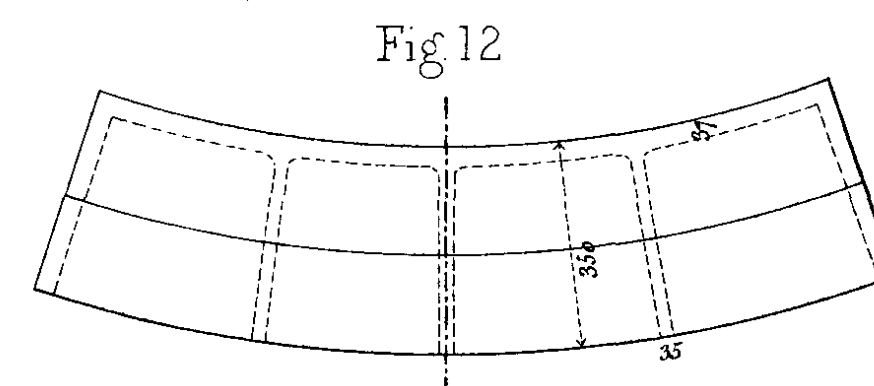


Fig 12

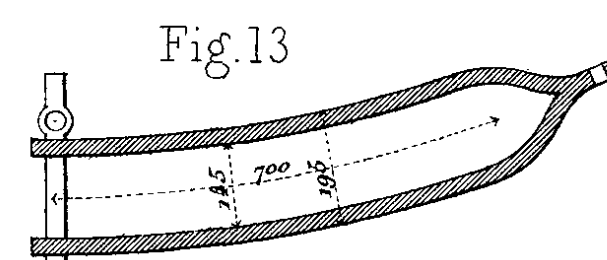


Fig 13

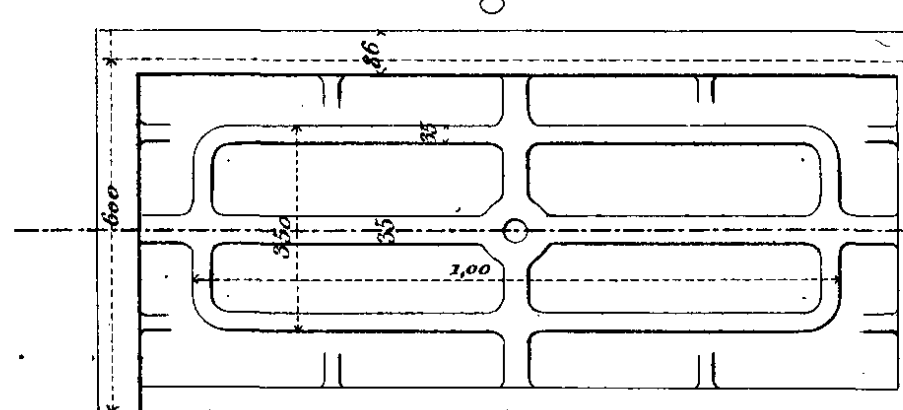


Fig 18

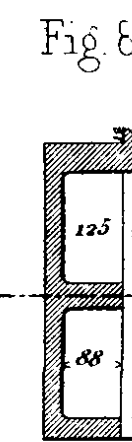


Fig 8

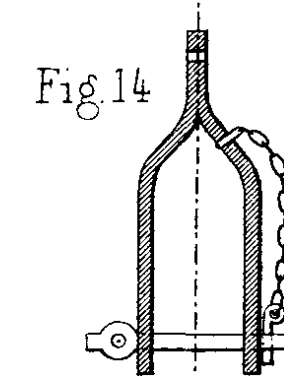


Fig 14

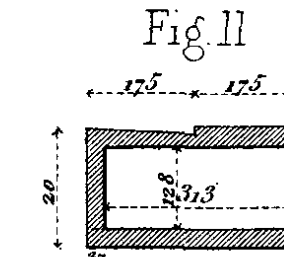


Fig 11

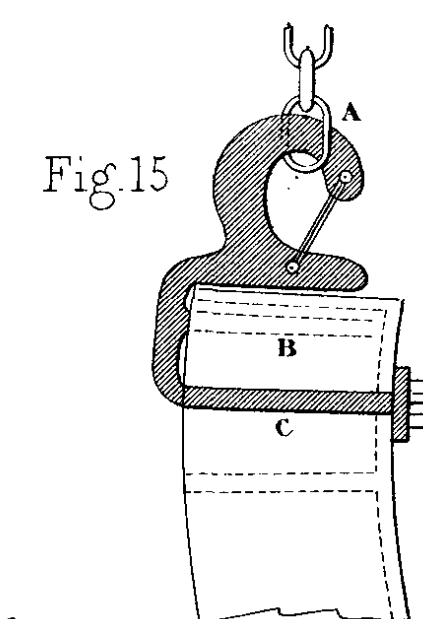


Fig 15

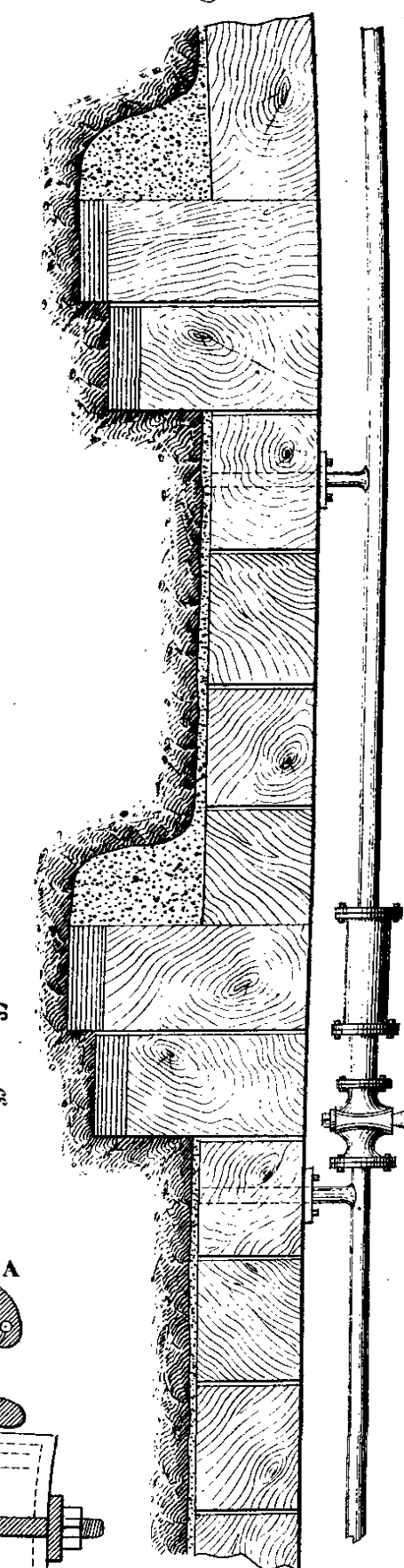


Fig 19

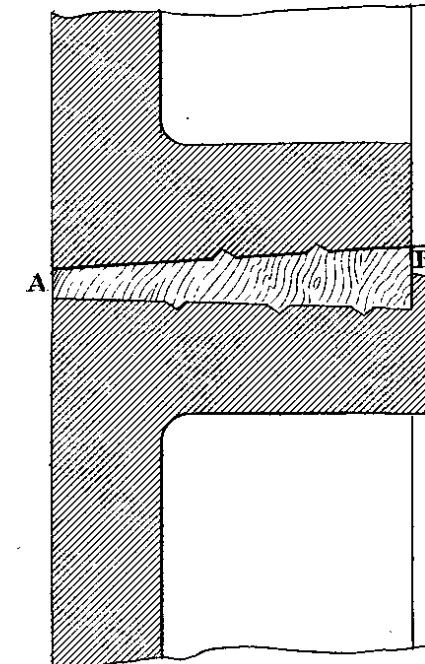


Fig 22 1/4 de grandeur naturelle.

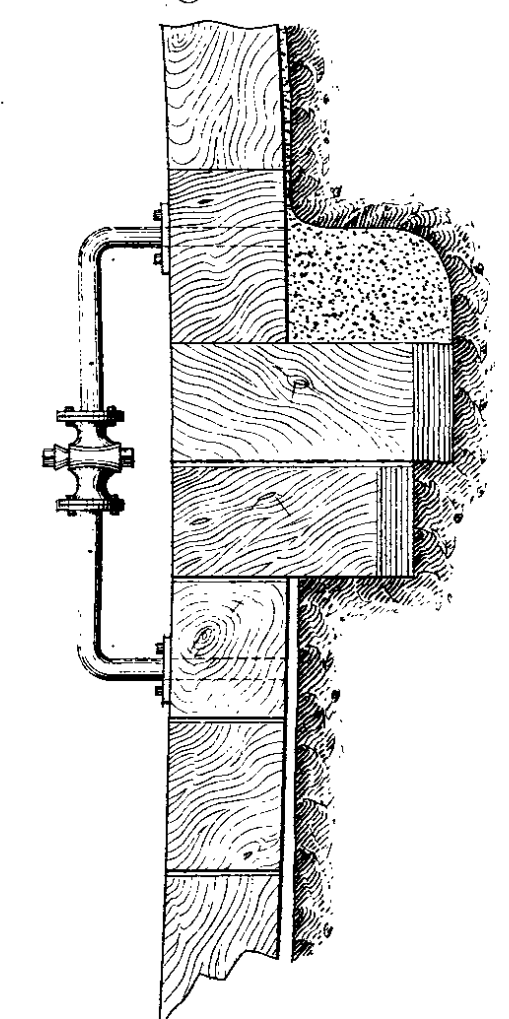


Fig 20

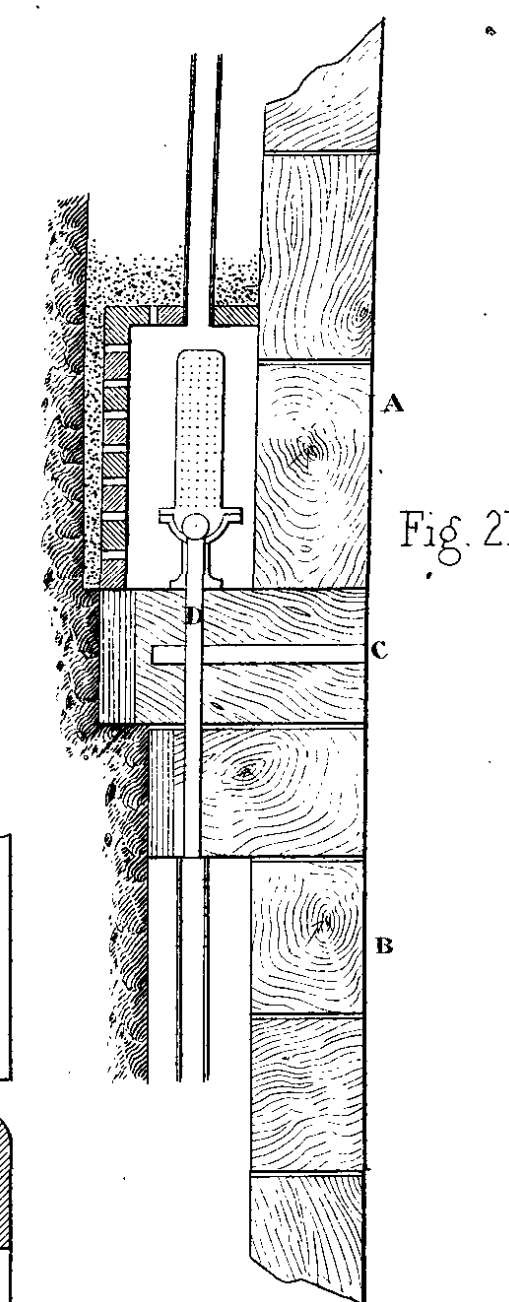
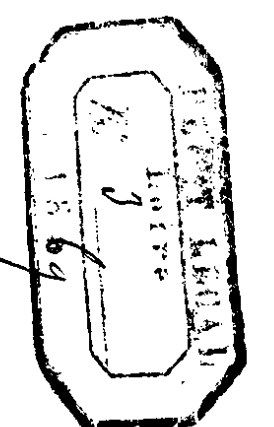


Fig 21

Echelle des Fig 1, 2, 3, 5 à 21 inclusiv<sup>t</sup>, de 0<sup>m</sup>05 pour 1 mètre.  
Echelle de la Fig 4, de 0.02 pour 1 mètre









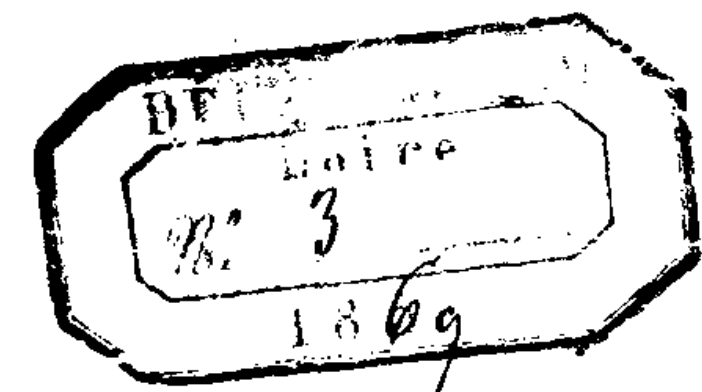


Fig 1

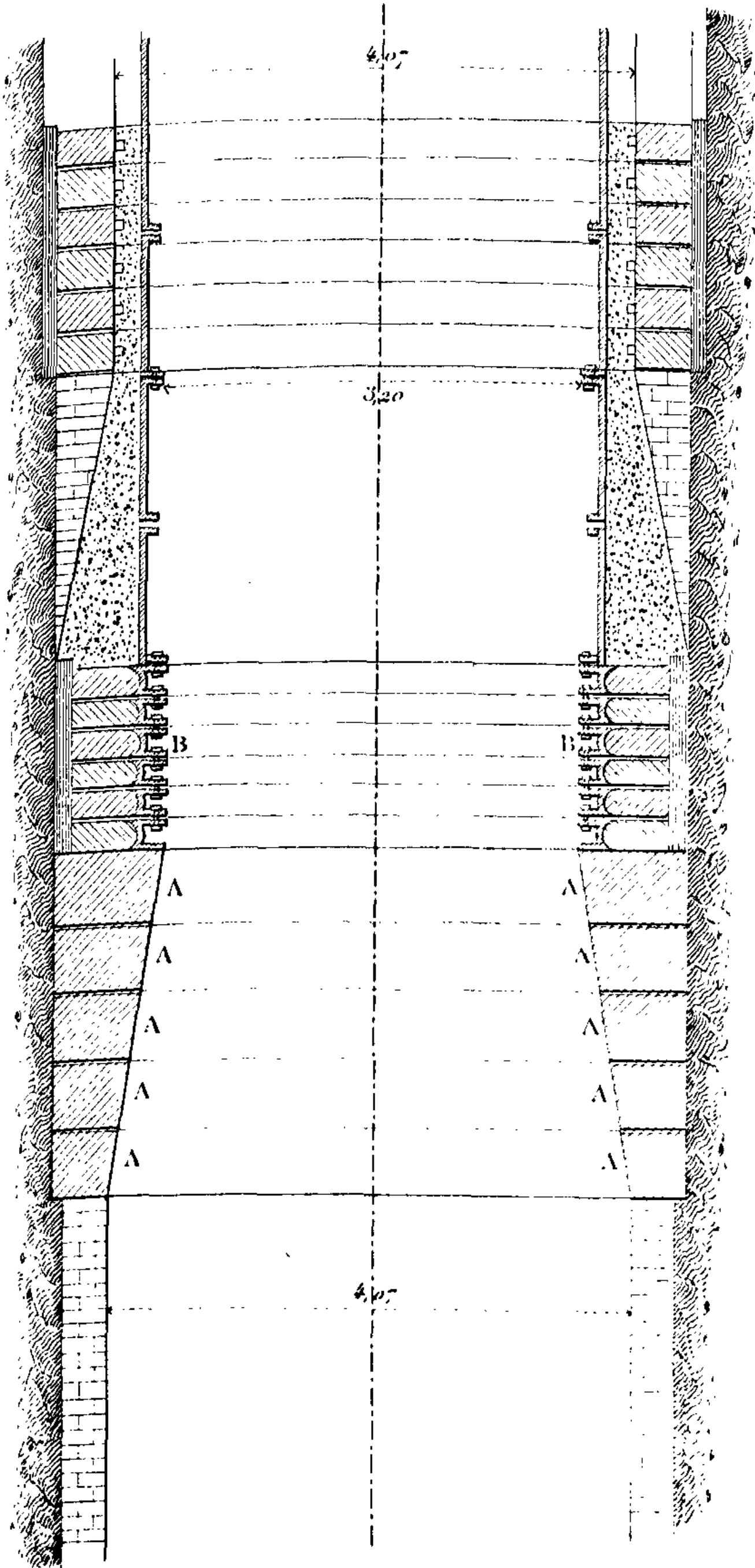


Fig 7

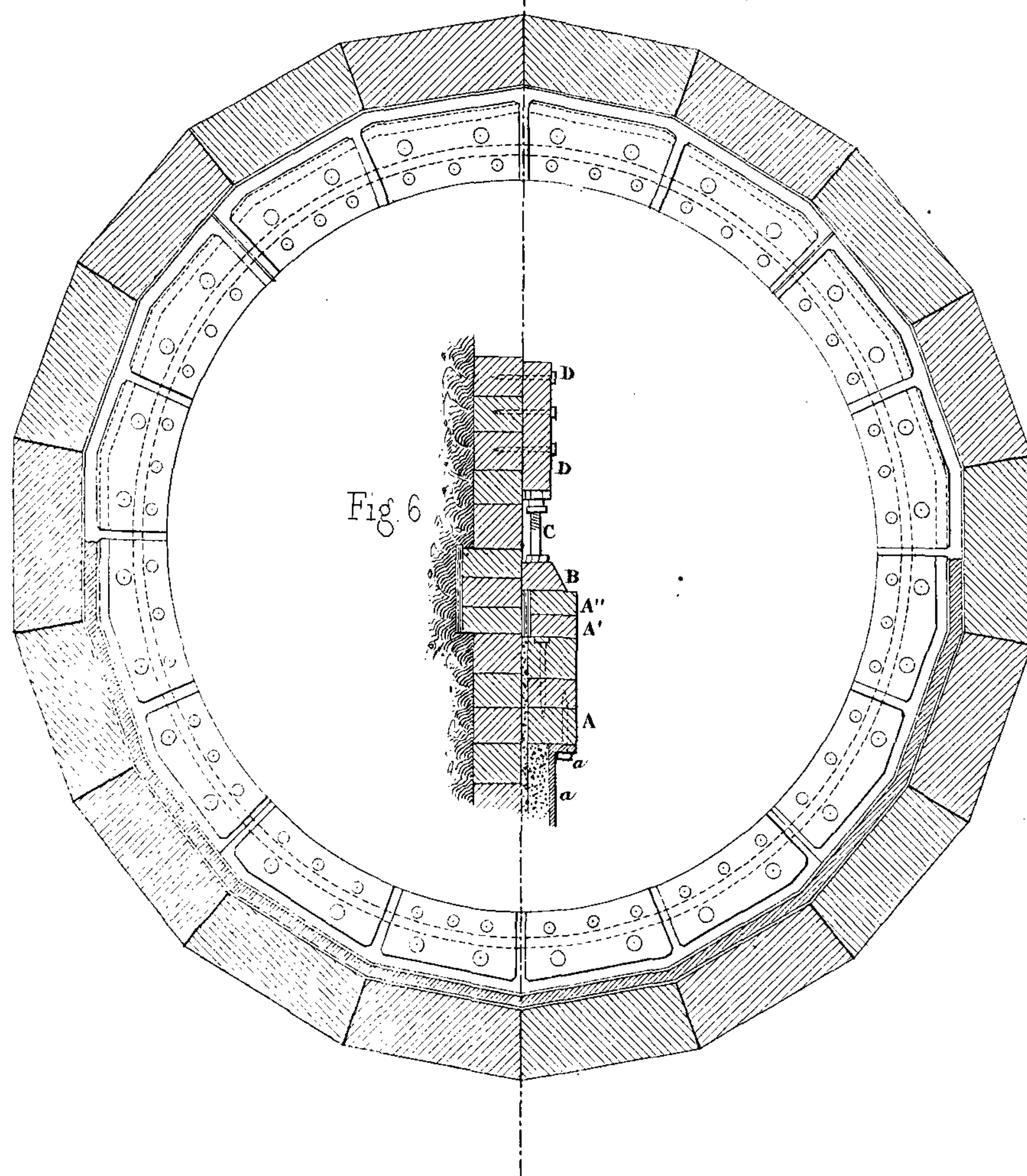


Fig 2

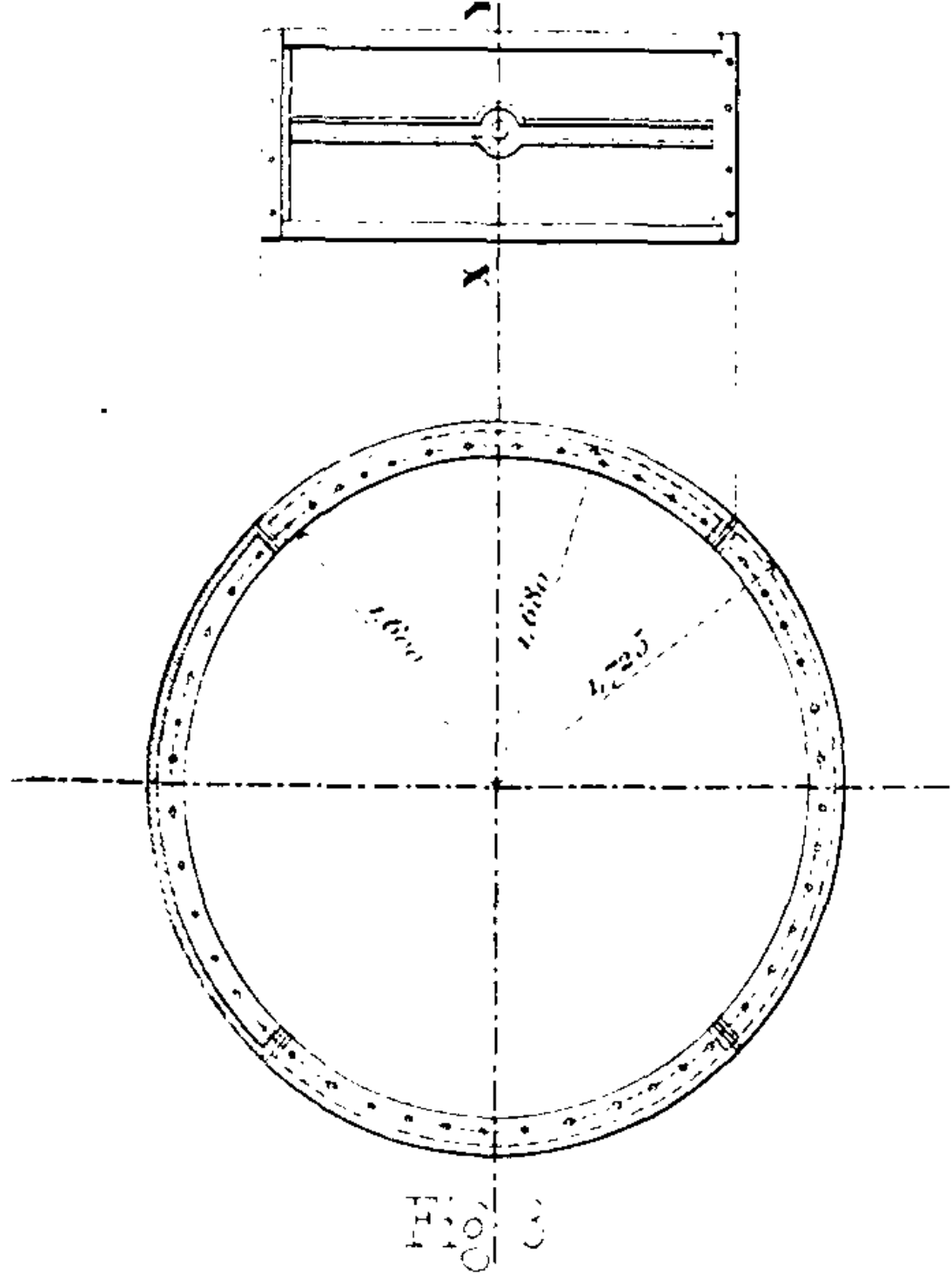


Fig 8

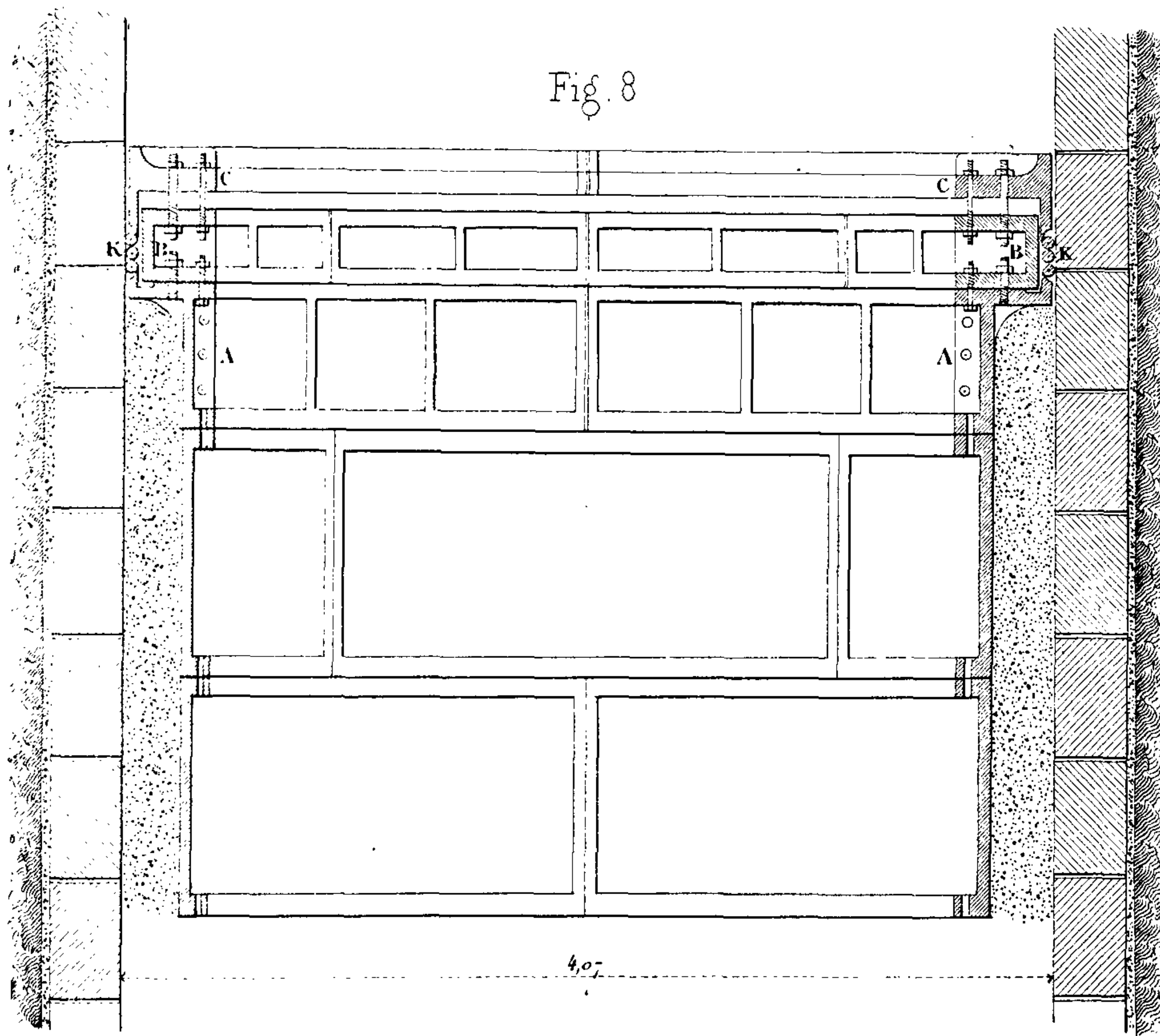


Fig 4

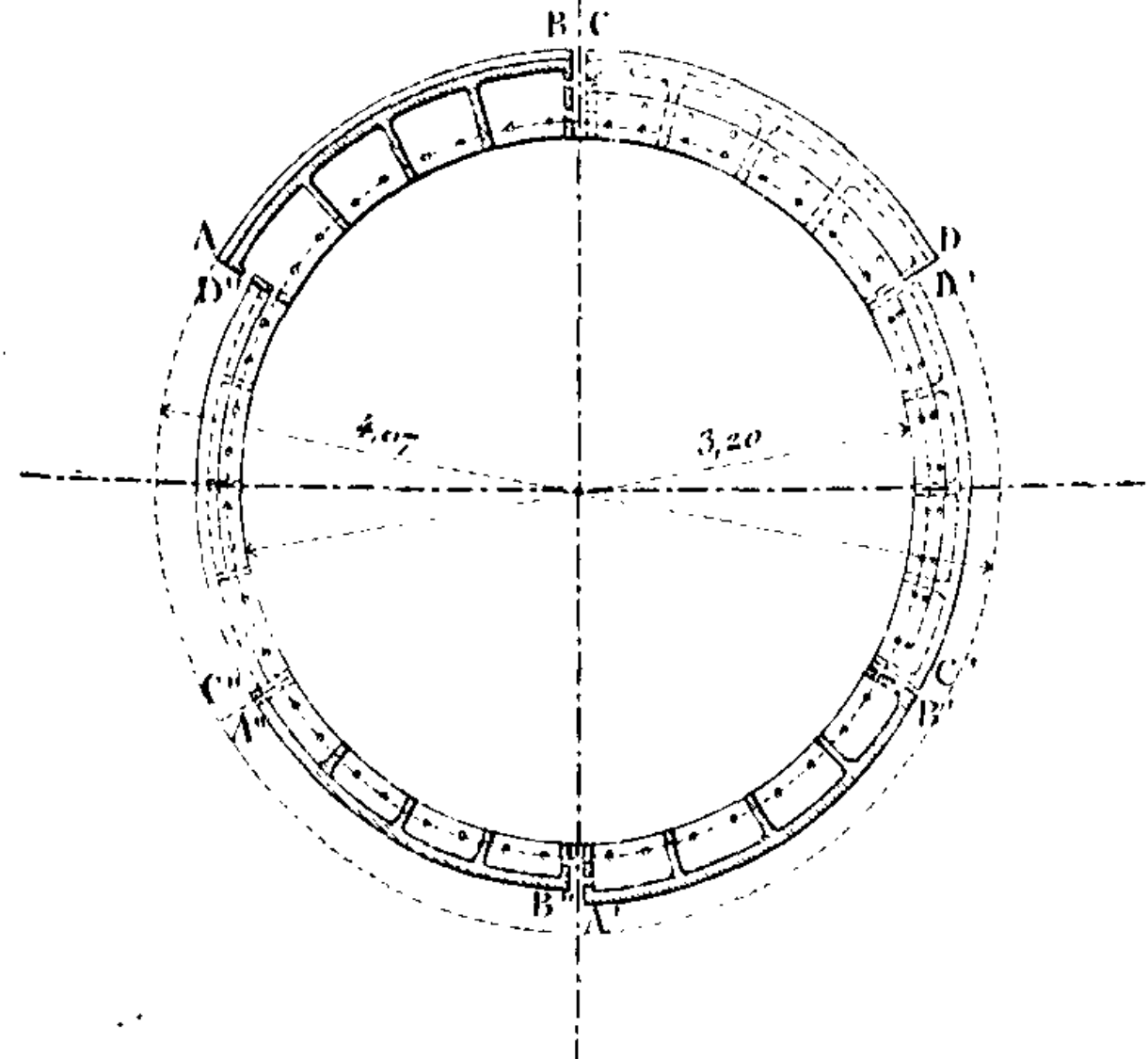
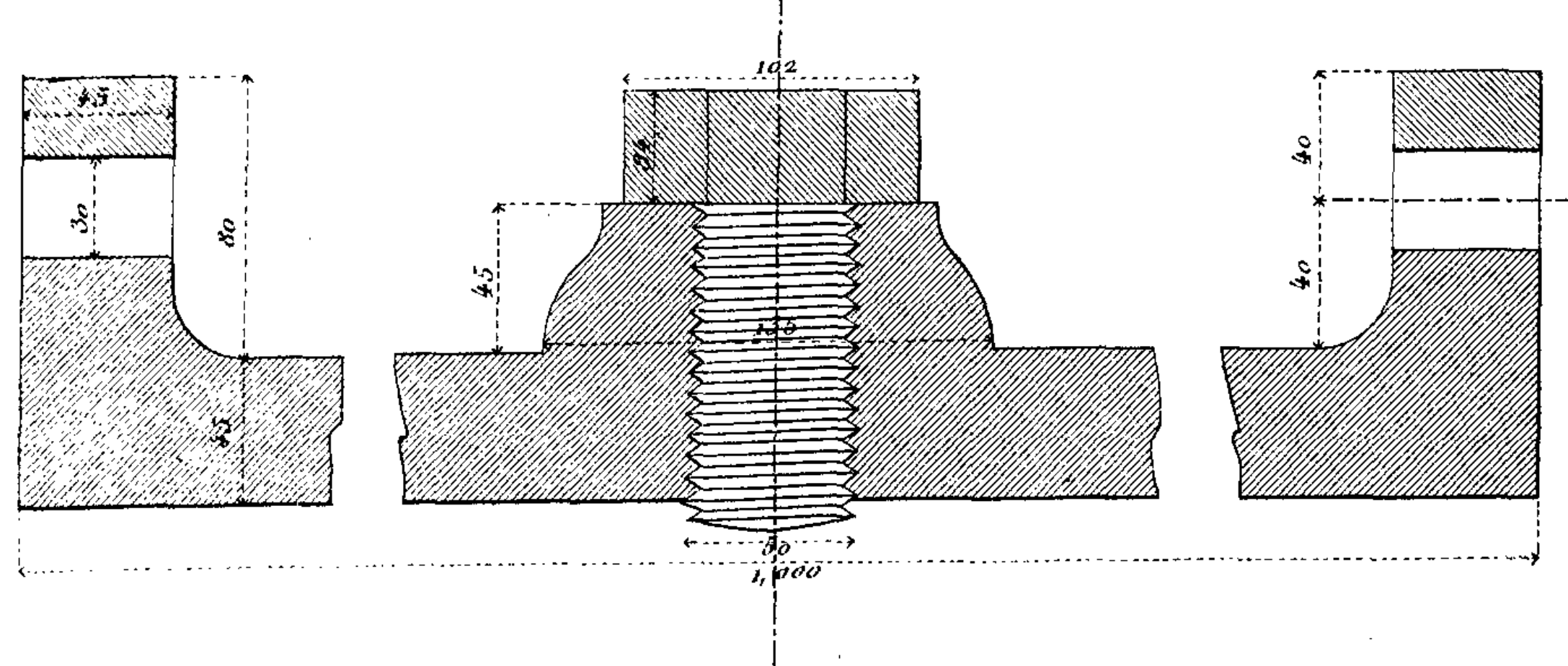


Fig 5 Coupe sur XY.



Echelle des Fig 1, 2, 3, 4 et 6, de 0<sup>m</sup>0125 pour 1 mètre.

10 5 0 1 2 3 4 5 6 7 8 mètres

Echelle des Fig 7 et 8, de 0<sup>m</sup>025 pour 1 mètre.

10 5 0 1 2 3 4 mètres

Echelle de la Fig 5.

1/4 de grandeur naturelle.







Fig. 3.

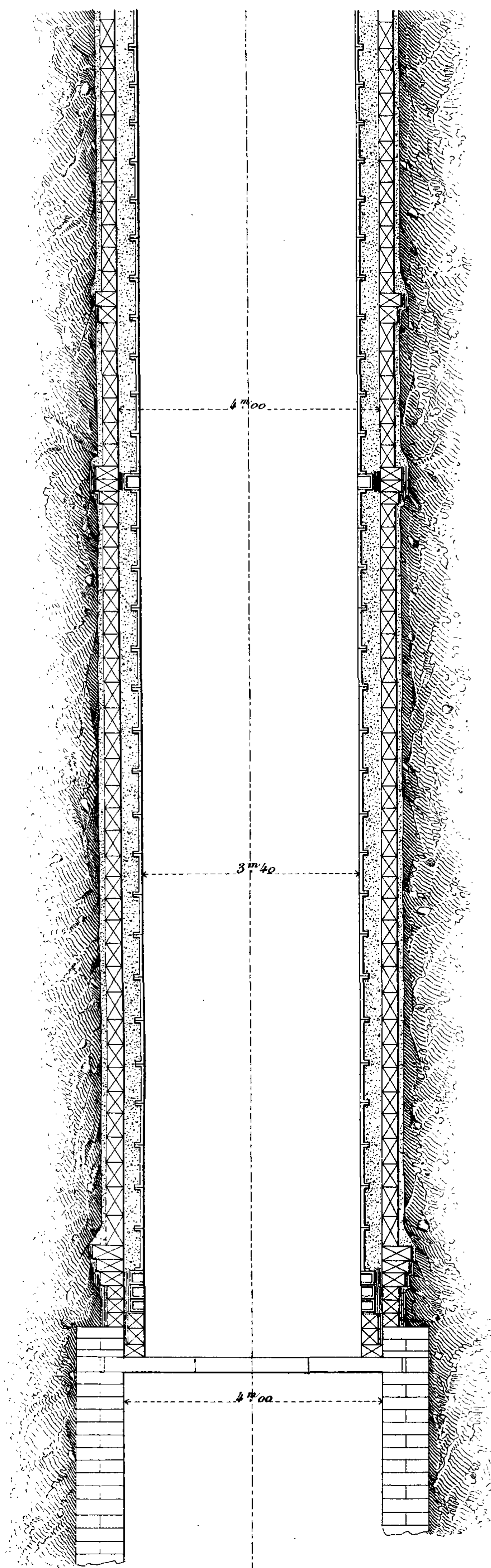


Fig. 4.

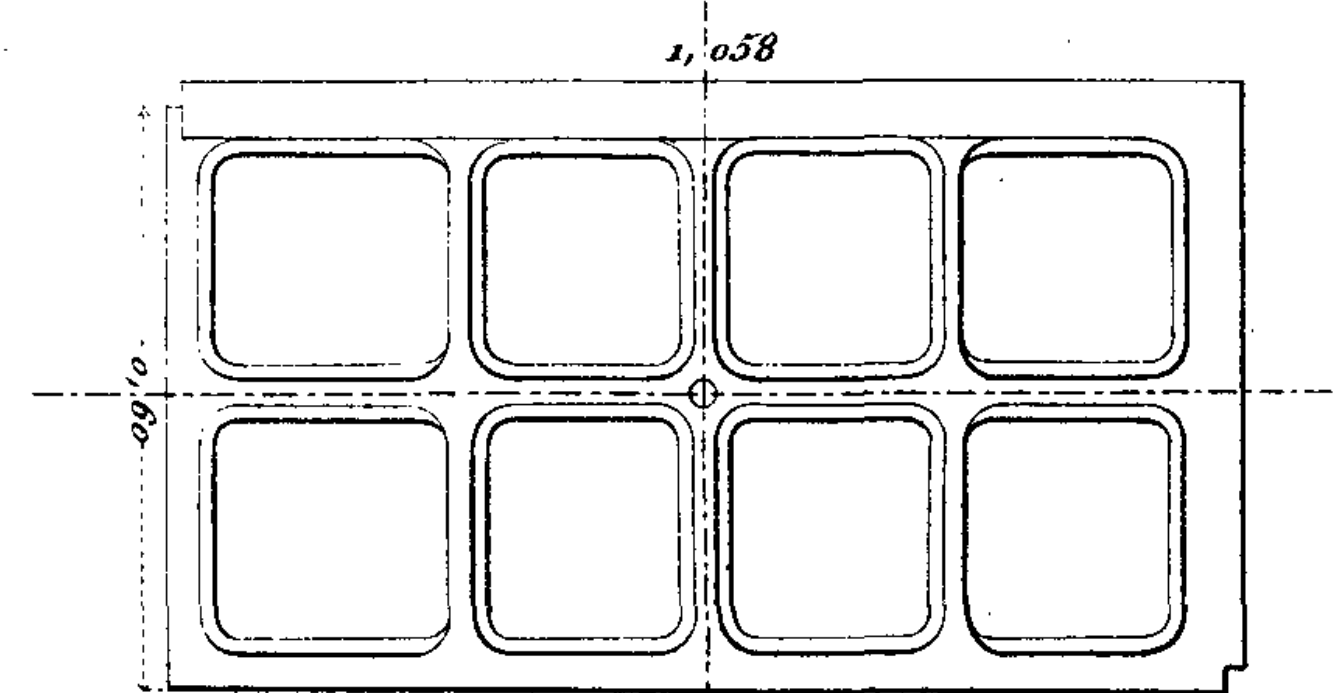


Fig. 5.

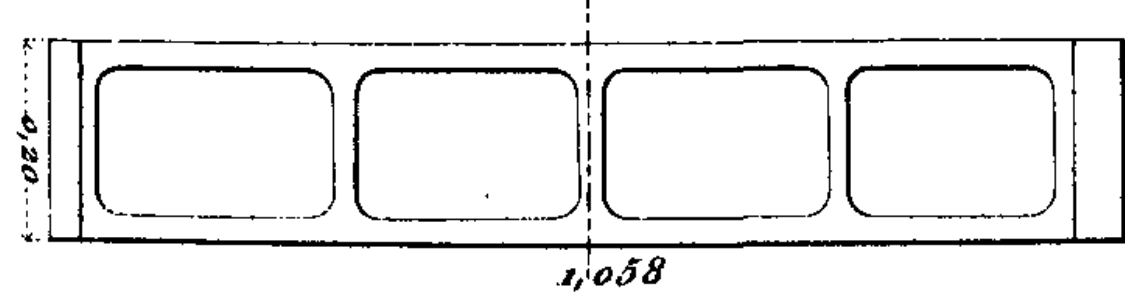


Fig. 1.

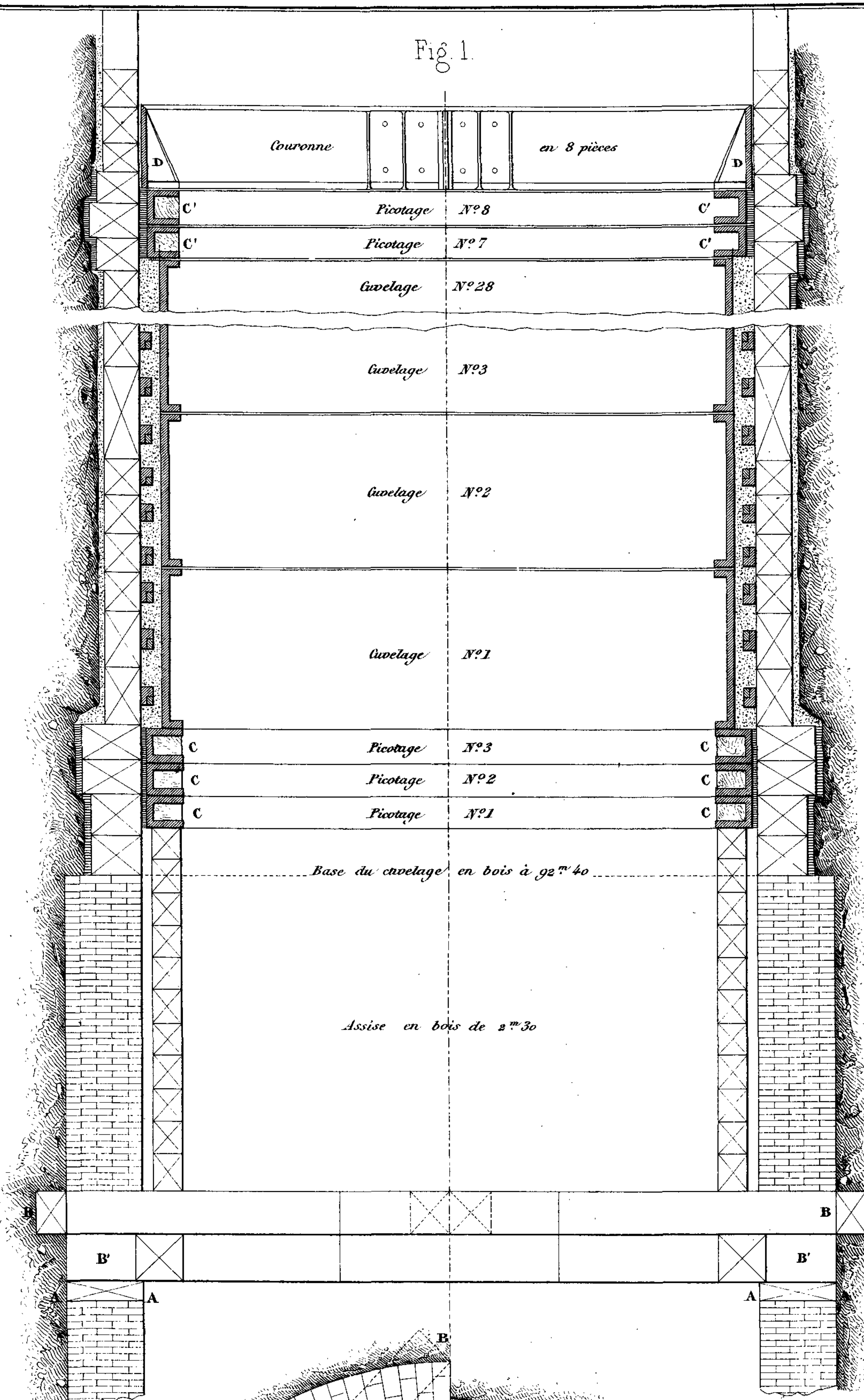
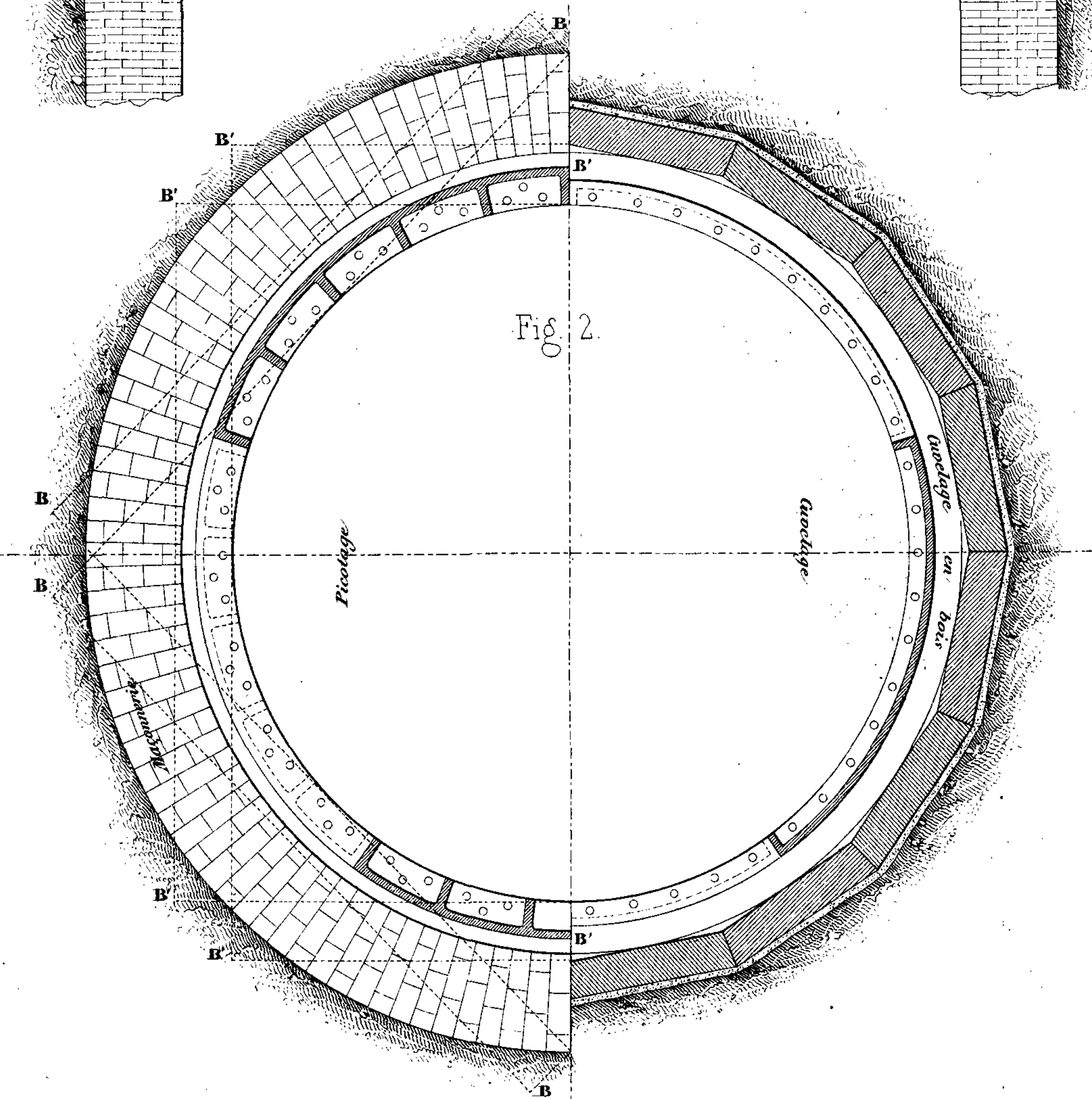


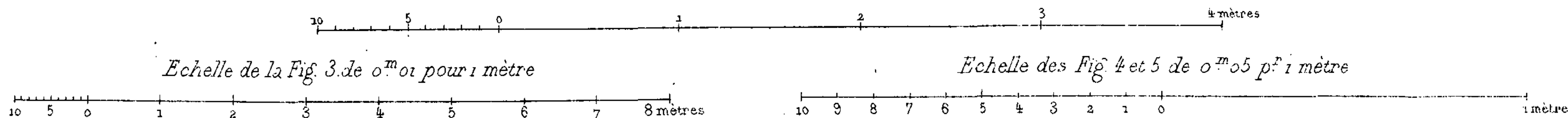
Fig. 2.



Echelle des Fig. 1 et 2. de 0m025 p<sup>r</sup> 1 mètre

Echelle de la Fig. 3. de 0m01 pour 1 mètre

Echelle des Fig. 4 et 5 de 0m05 p<sup>r</sup> 1 mètre

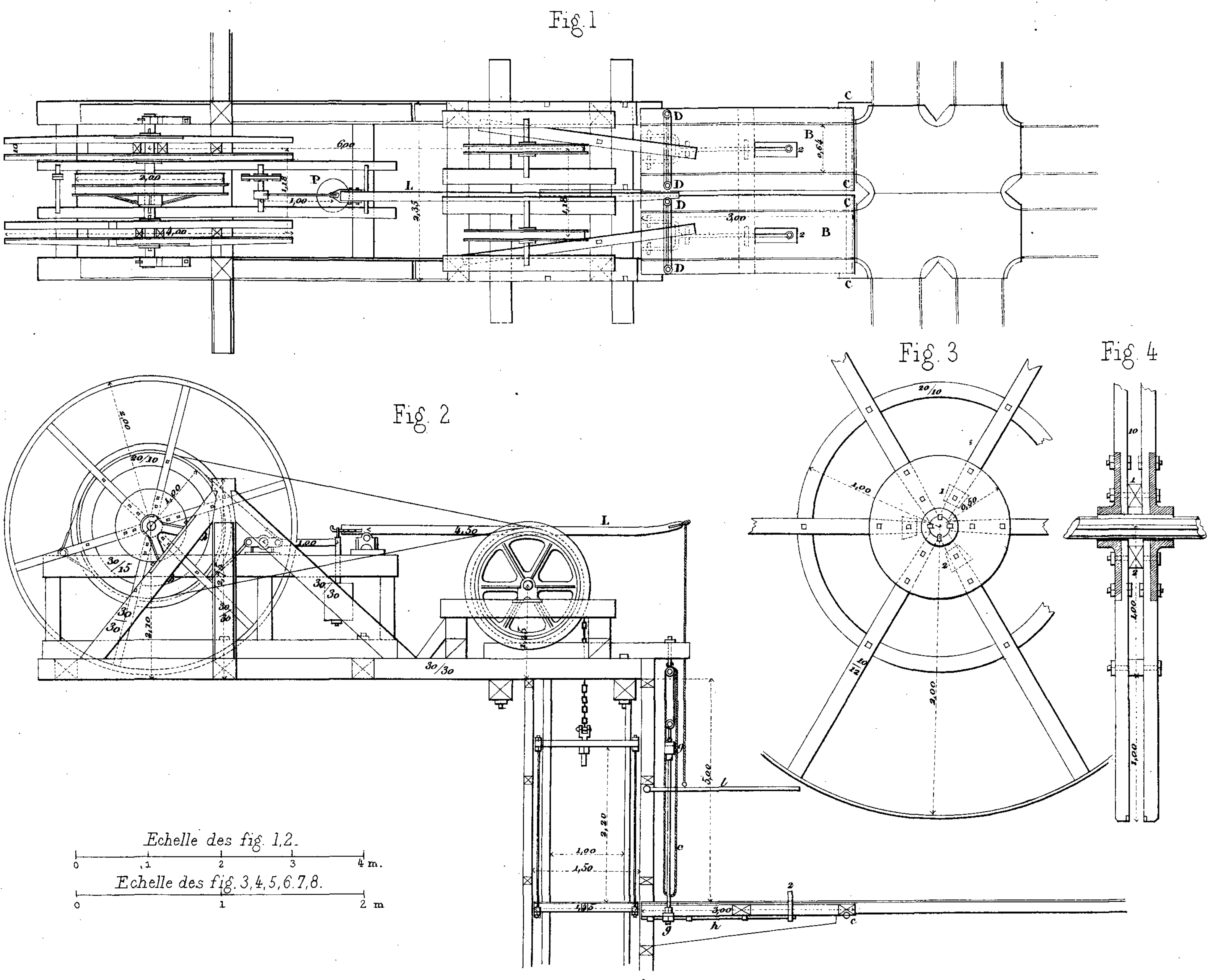








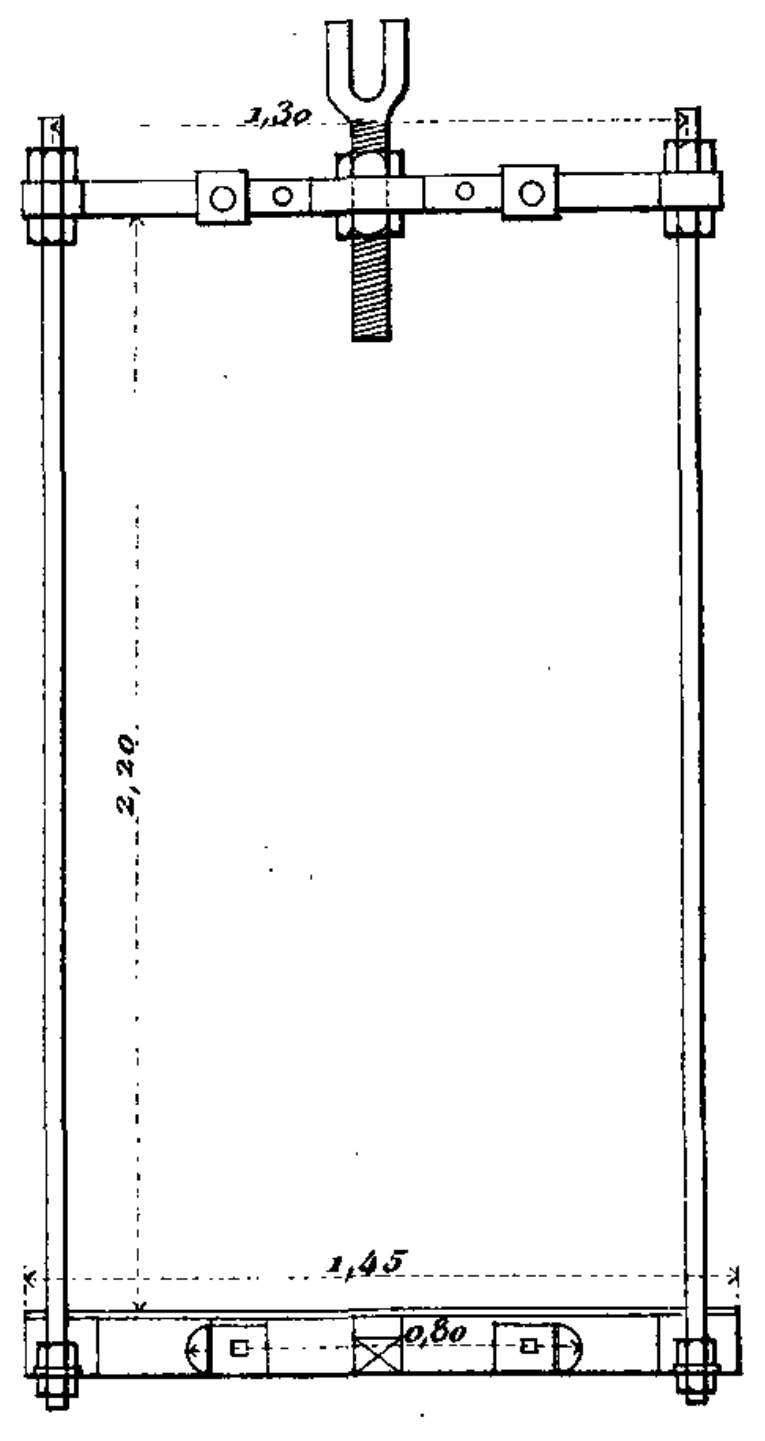
3  
1869



Echelle des fig. 1, 2.  
0 1 2 3 4 m.  
Echelle des fig. 3, 4, 5, 6, 7, 8.  
0 1 2 m.

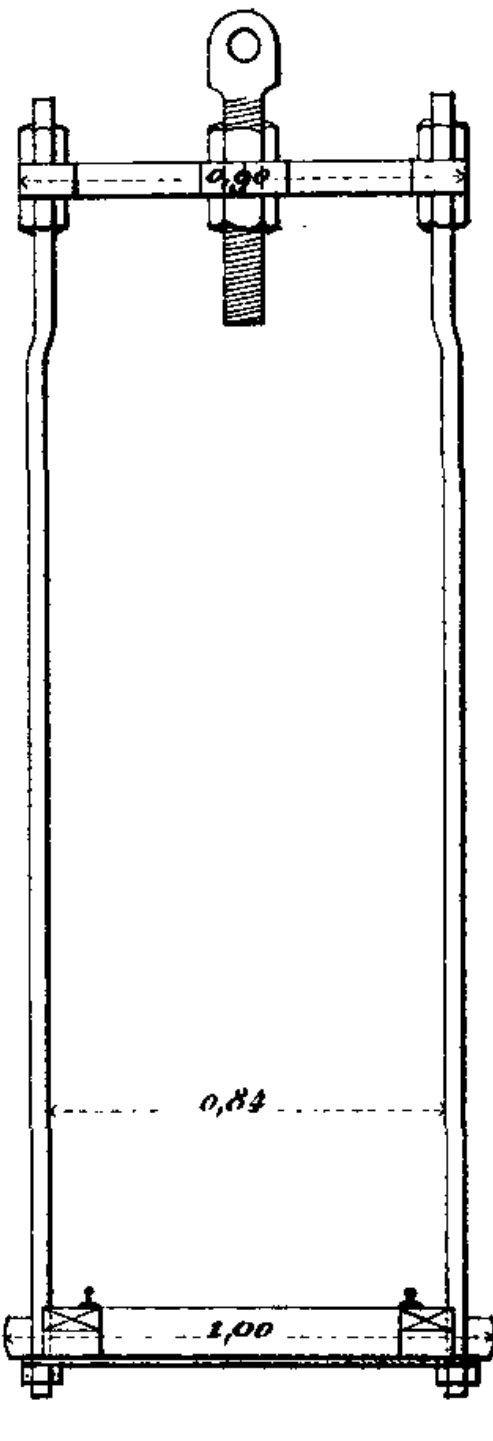
Vue en long de la cage.

Fig. 5



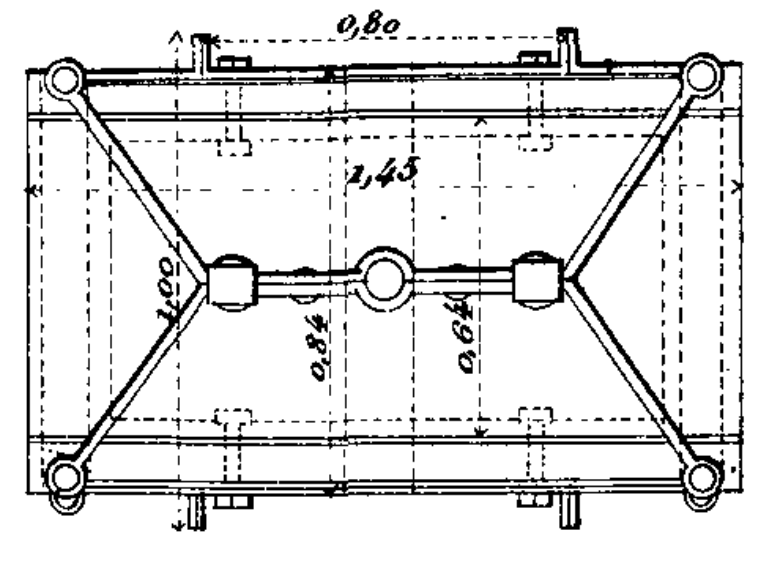
Vue en travers.

Fig. 6



Plan de la cage avec le Croisillon.

Fig. 7



Croisillon.

Fig. 8

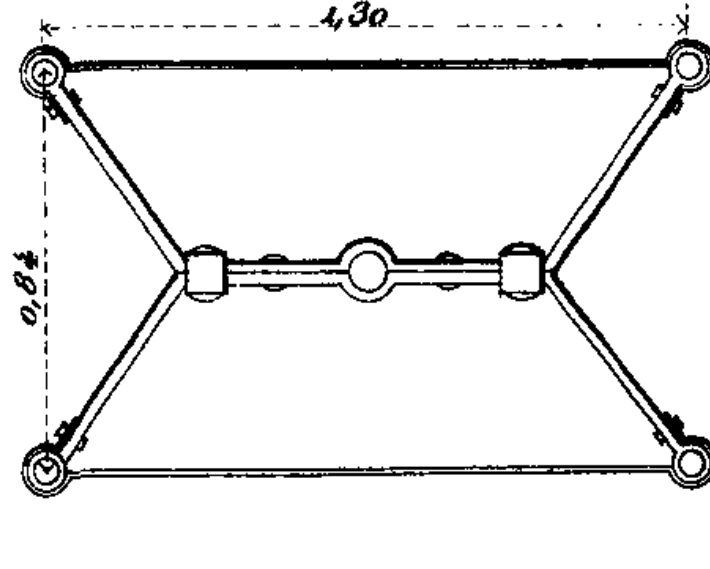


Fig. 9

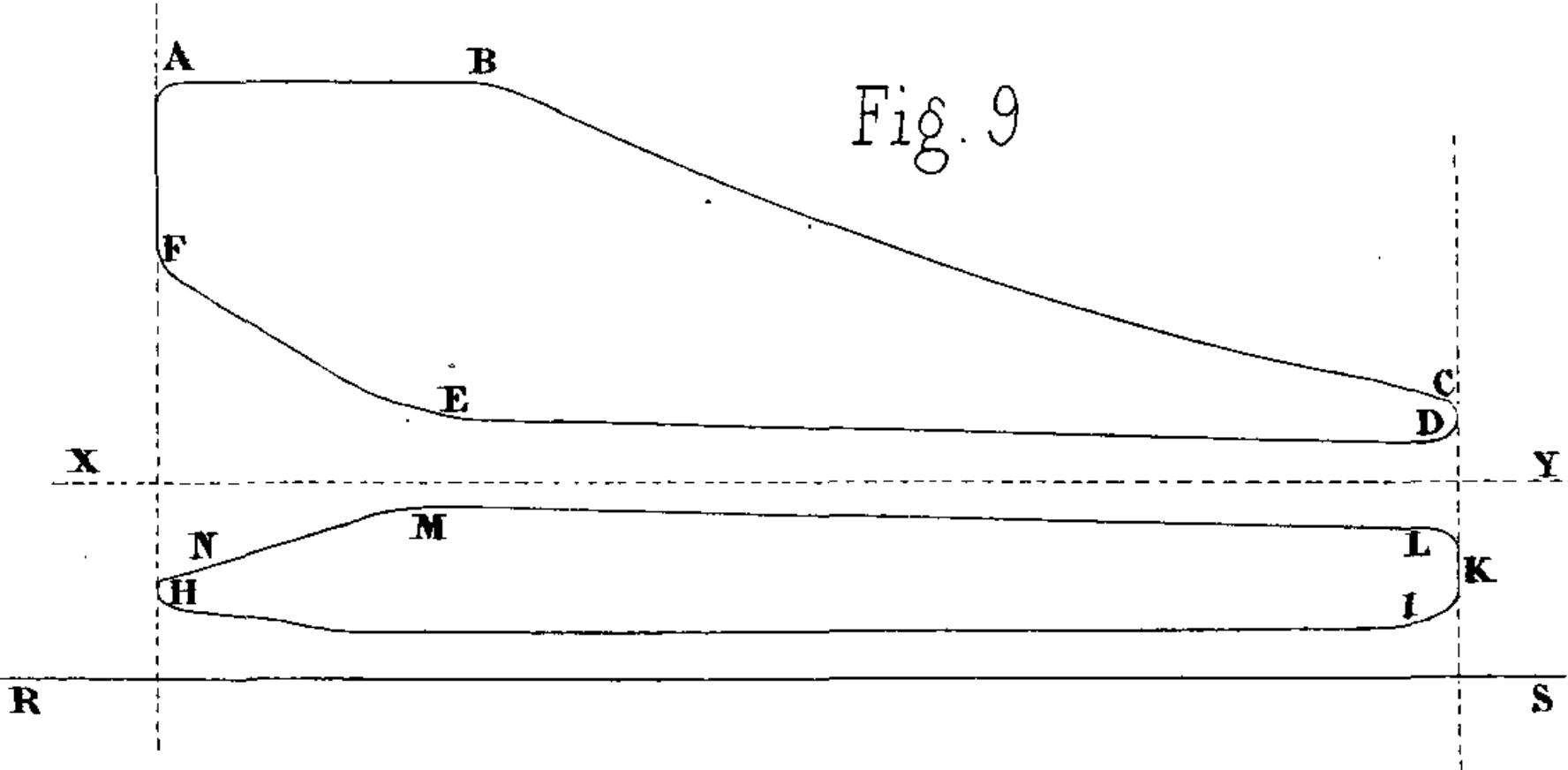
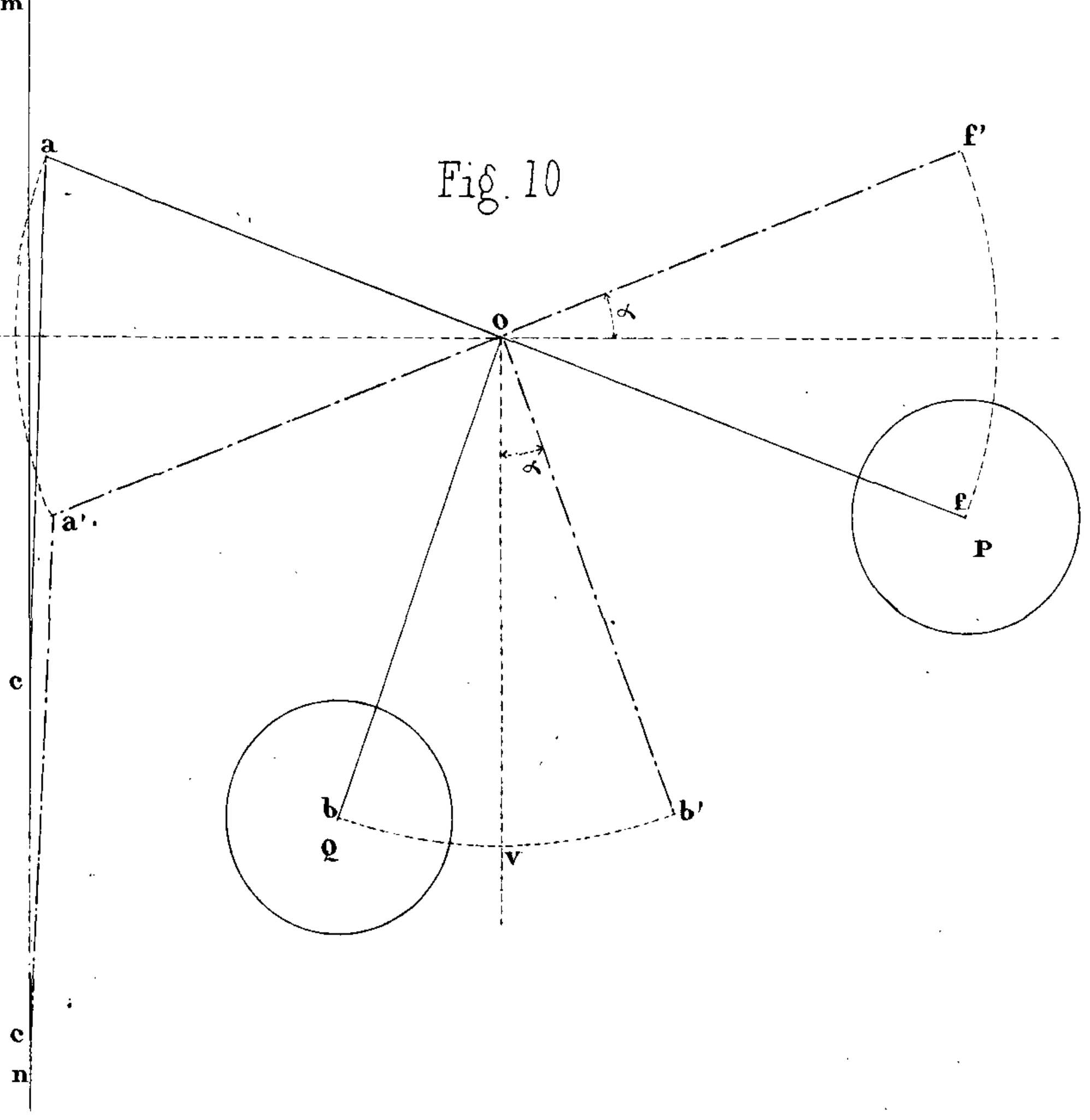


Fig. 10









REVUE GÉRAL  
N° 4  
1869

Fig. 1.

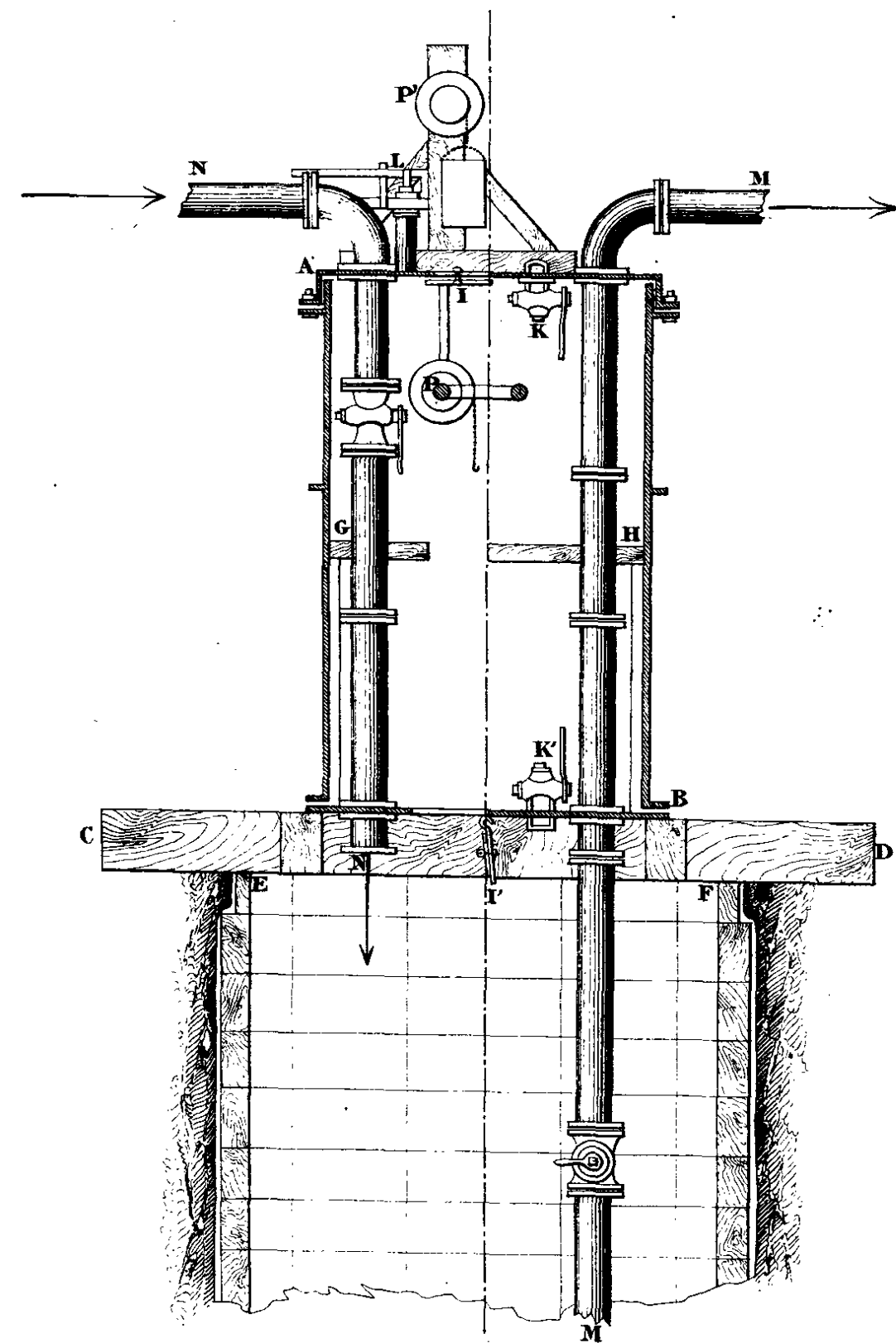


Fig. 2.

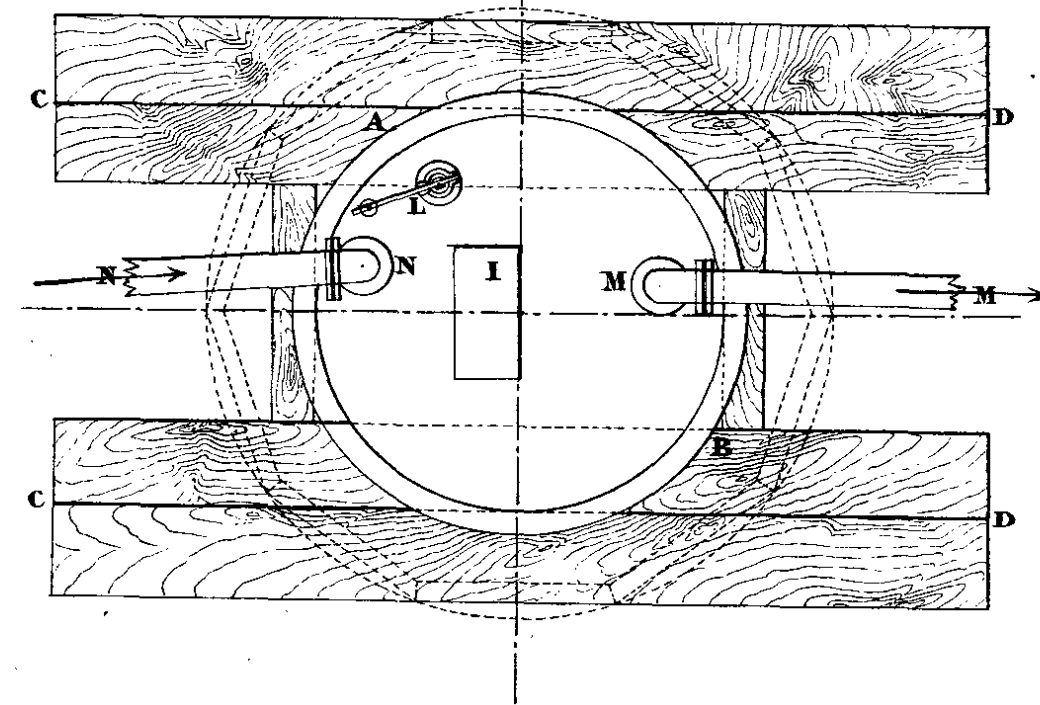
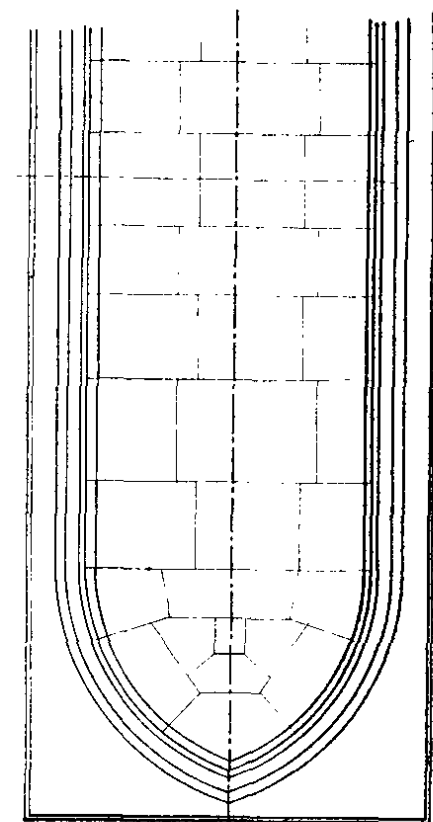


Fig. 5



Echelle des Fig. 1 et 2, de 0<sup>m</sup>015 p<sup>r</sup> 1 mètre

1 0 1 2 3 4 5 6 mètres

Fig. 3

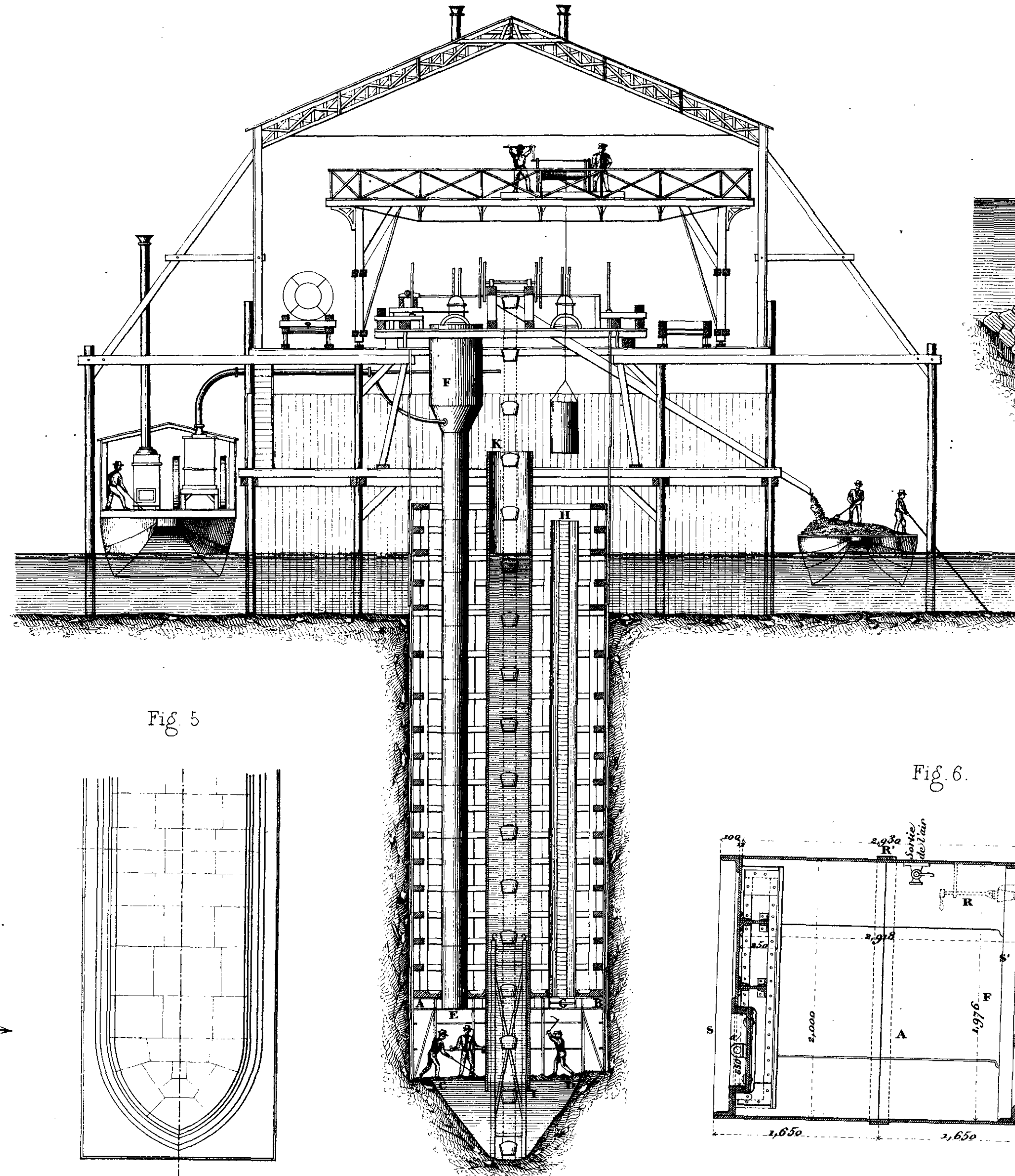


Fig. 4

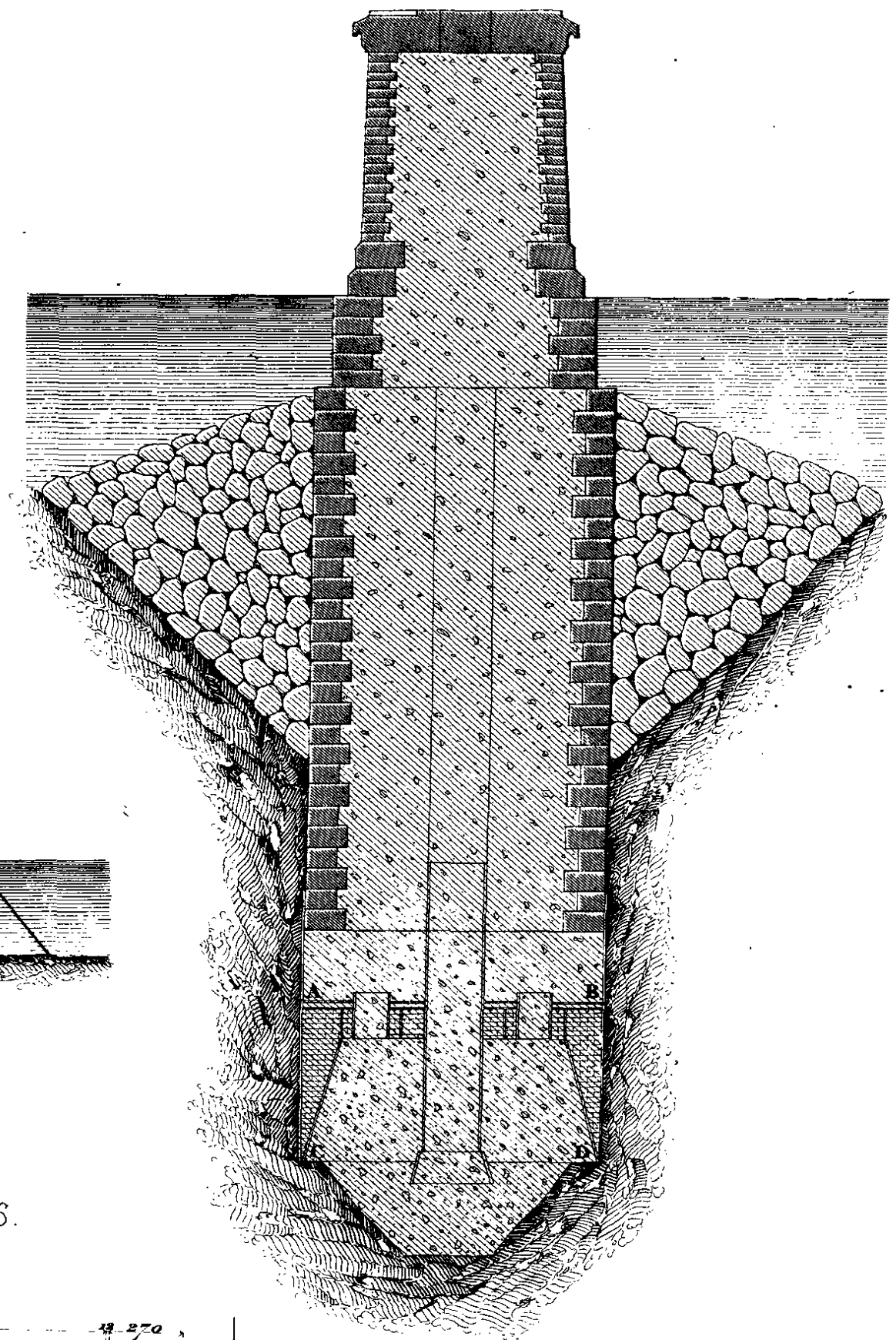
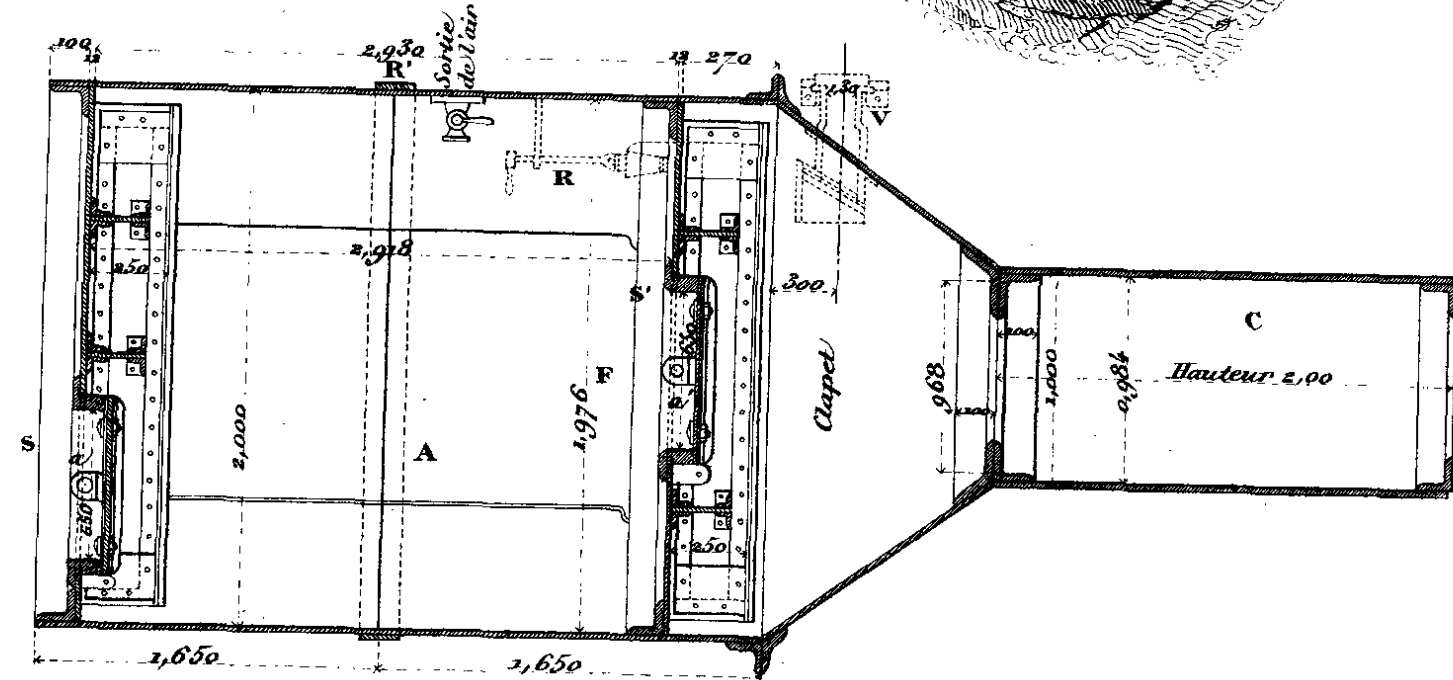


Fig. 6.



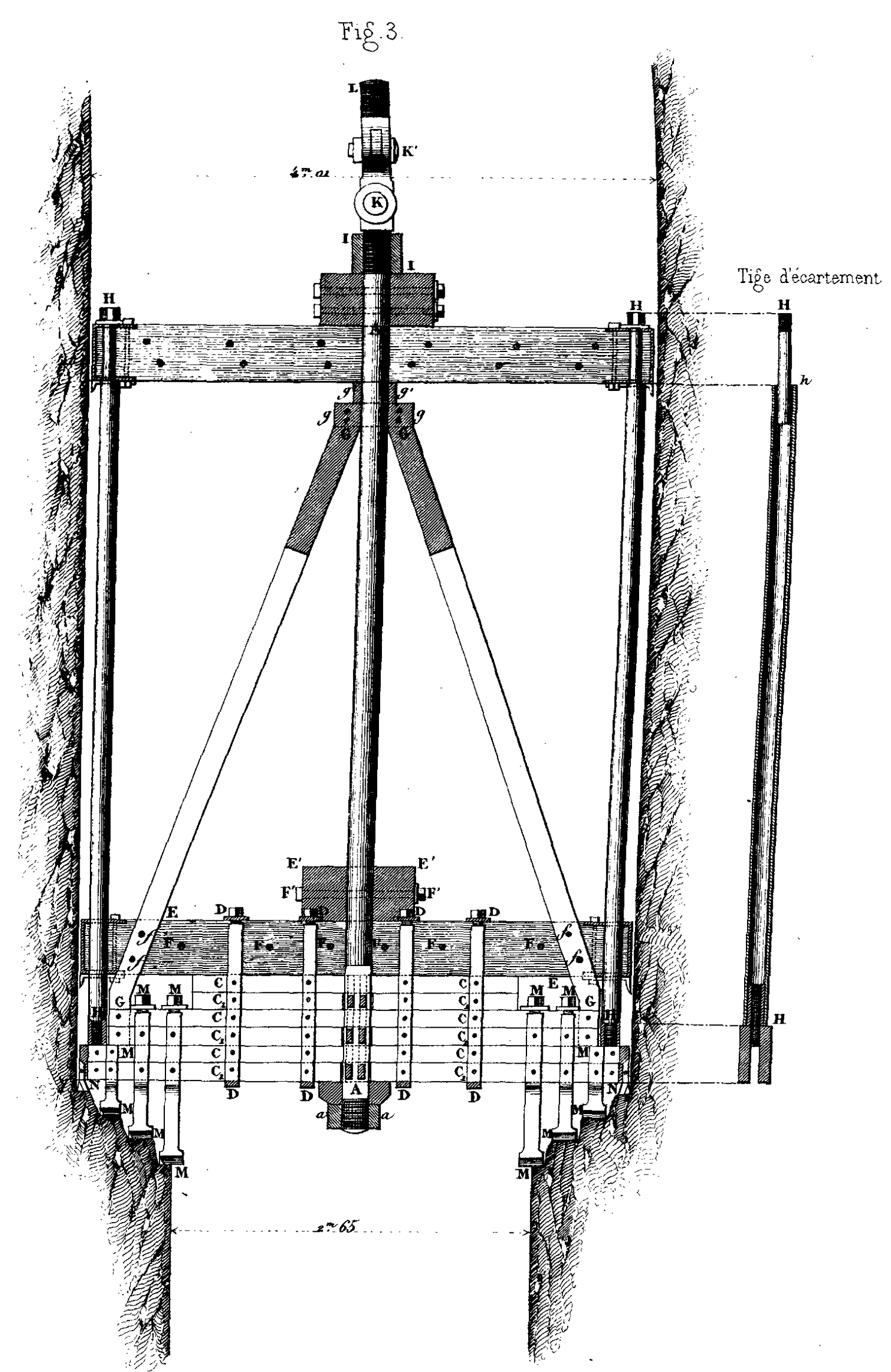
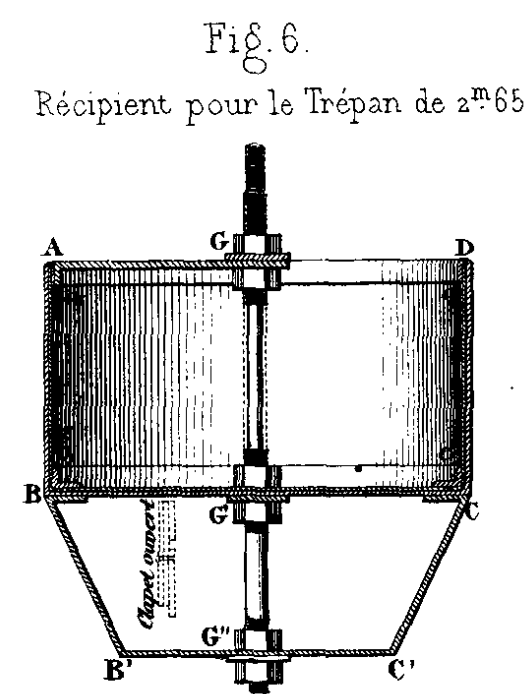
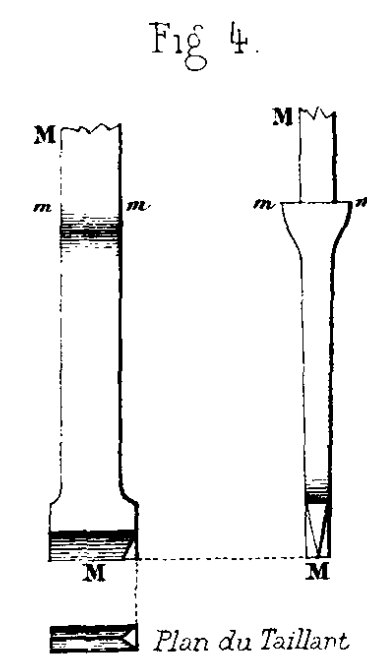
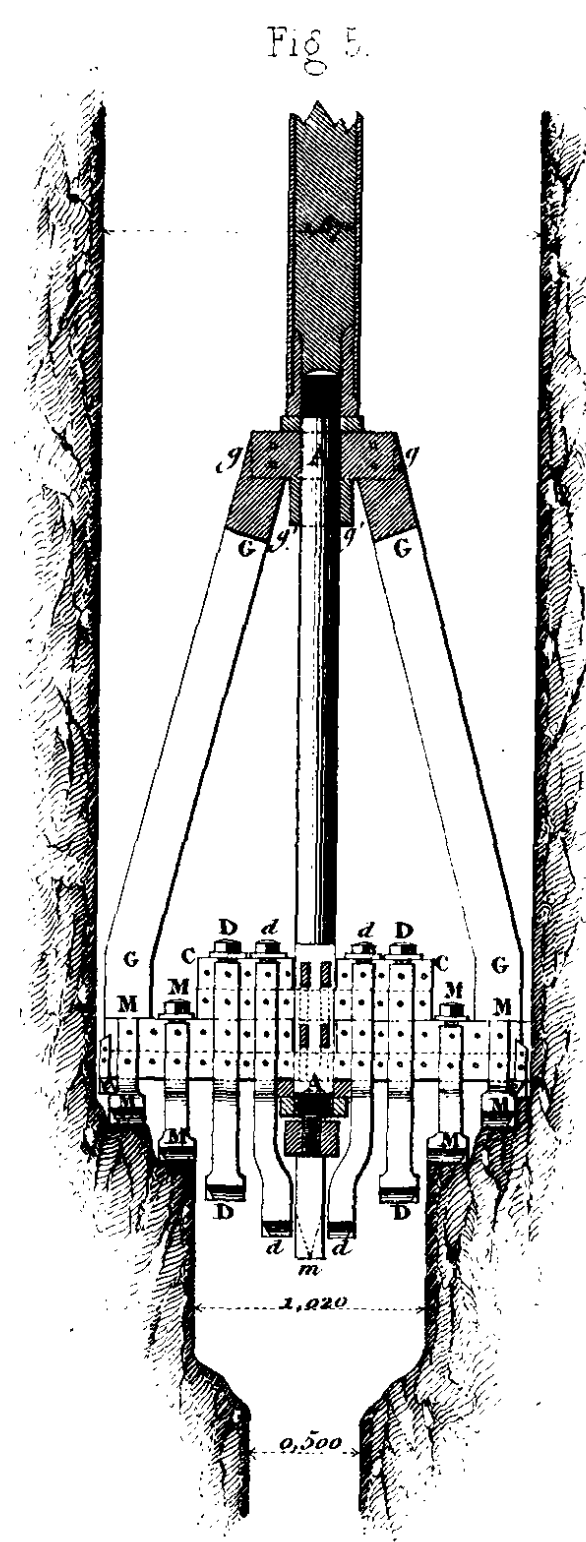
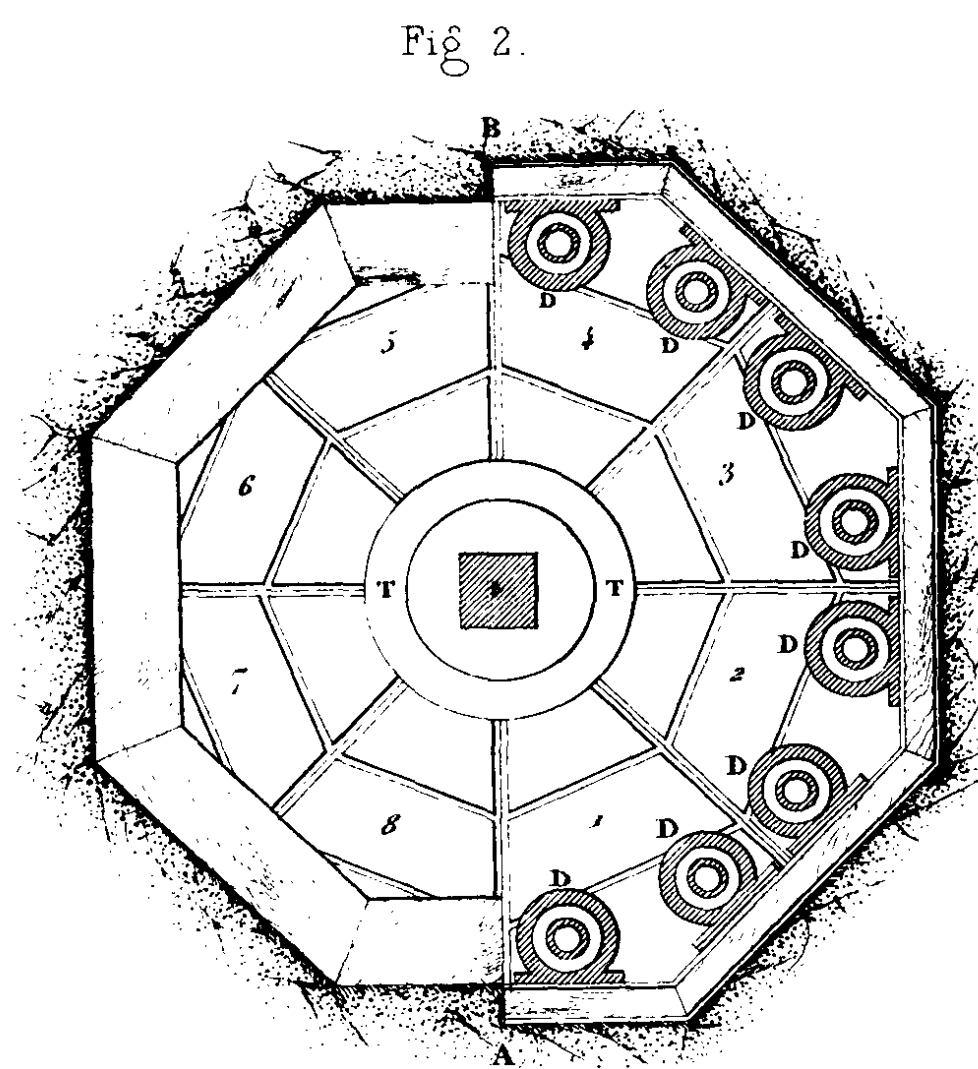
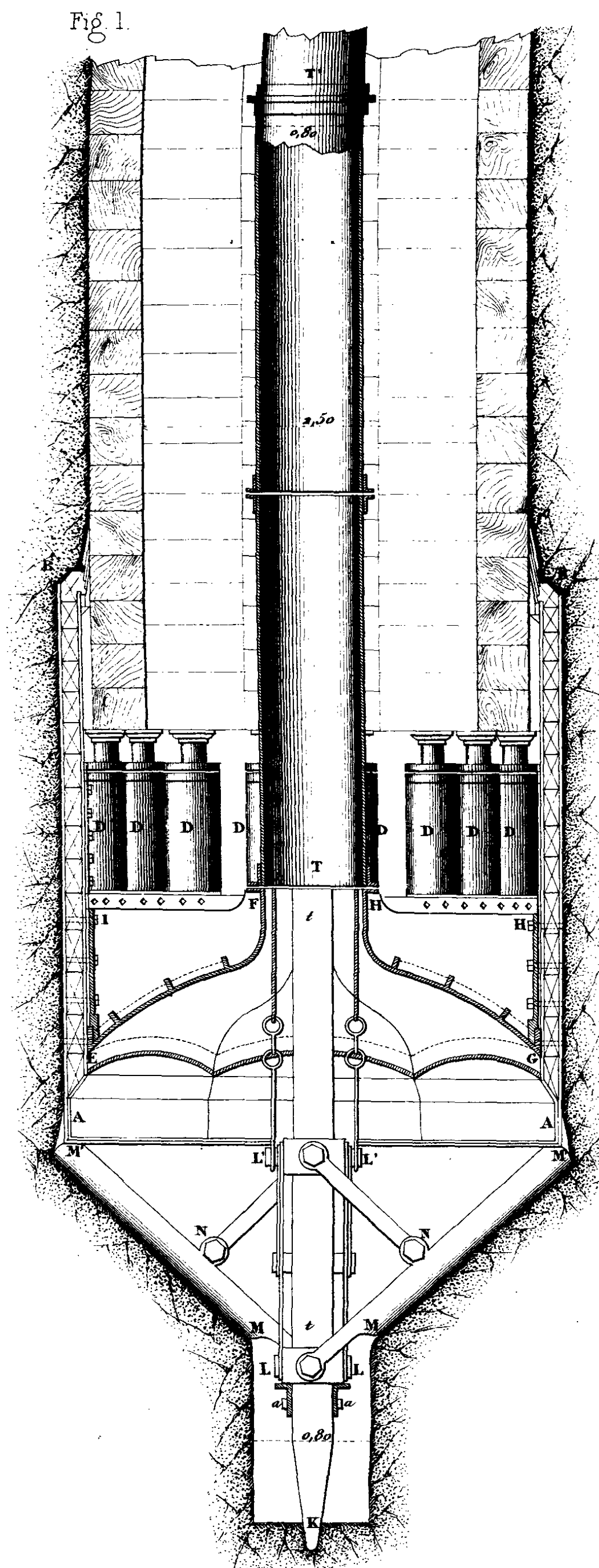
Echelle des Fig. 3, 4, 5, de 0<sup>m</sup>005 p<sup>r</sup> 1 mètre

1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 mètres









*Echelle des Fig. 1, 2, 3, 5 et 6, de 0<sup>m</sup>02 pour 1 mètre*

Echelle de la Fig. 4. de 0<sup>m</sup>05 pour 1 mètre

1 0.90 0.80 0.70 0.60 0.50 0.40 0.30 0.20 0.10 0 mètre







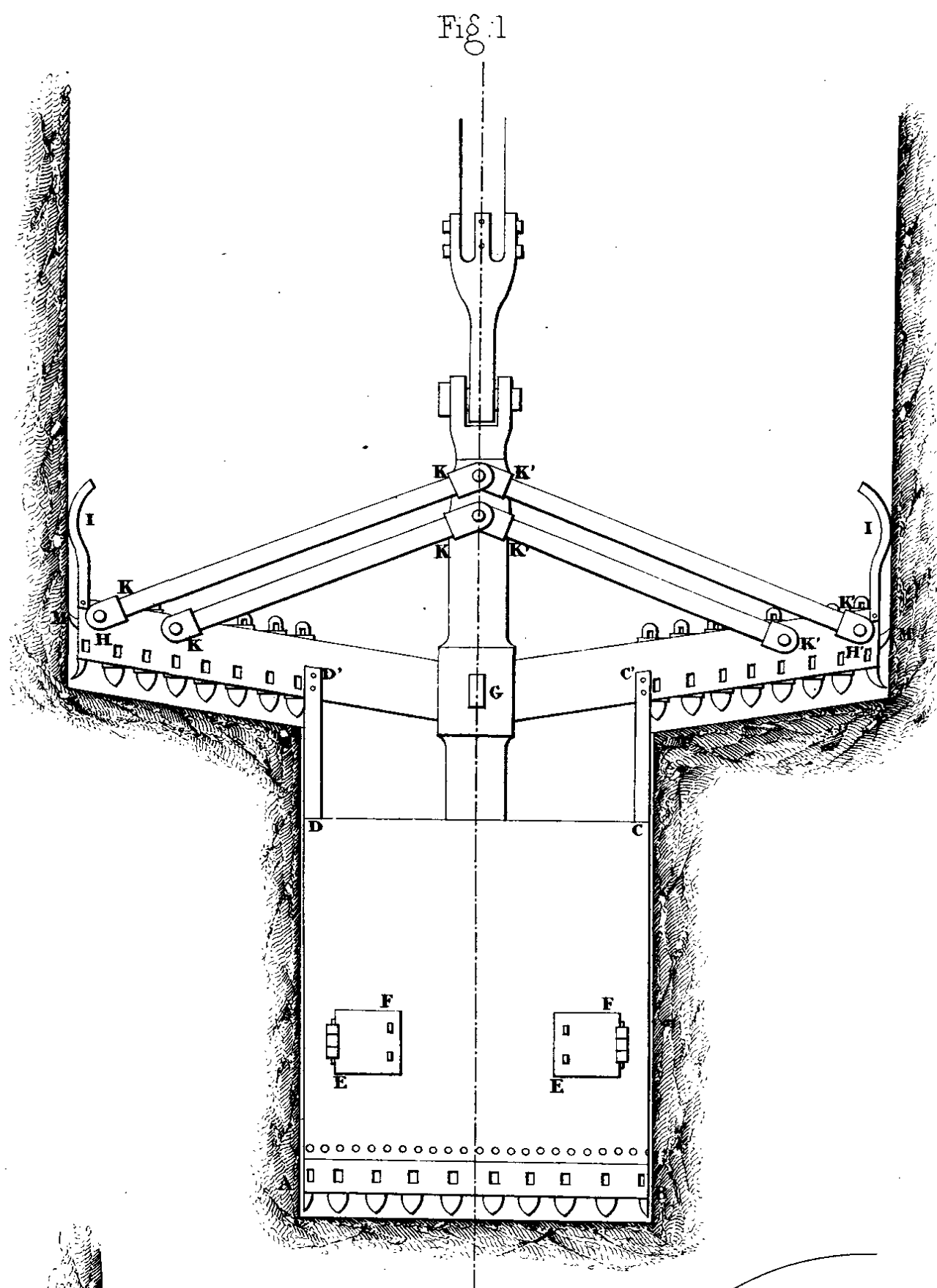


Fig. 14

Echelle de la Fig. 1. de 0<sup>m</sup>025 pour 1 mètre

0 1 2 3 4 5 6 7 8 9 10 mètres

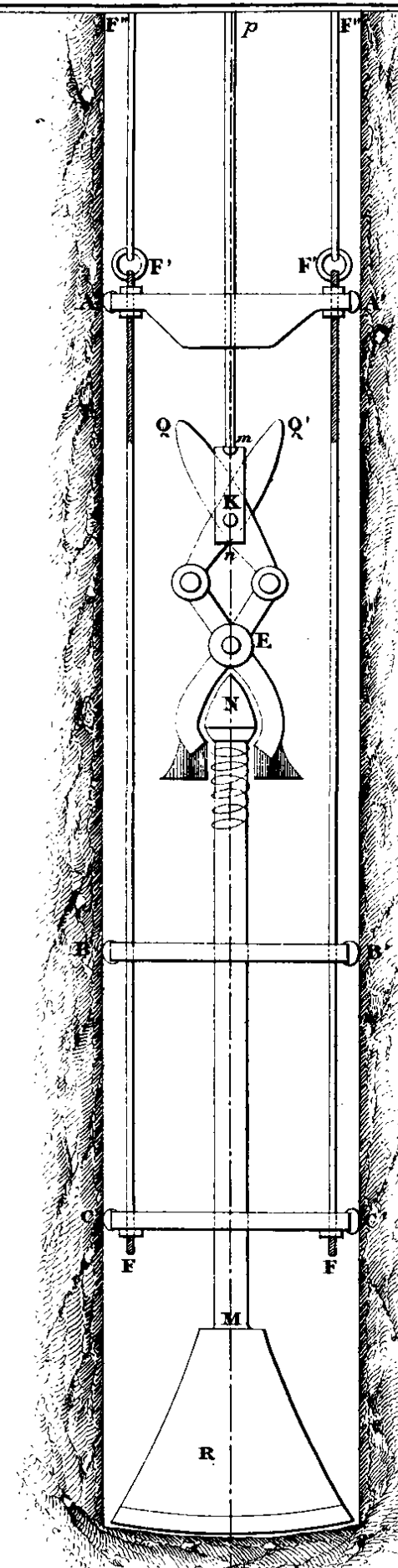


Fig. 2

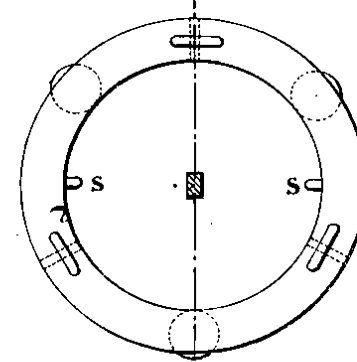


Fig. 4

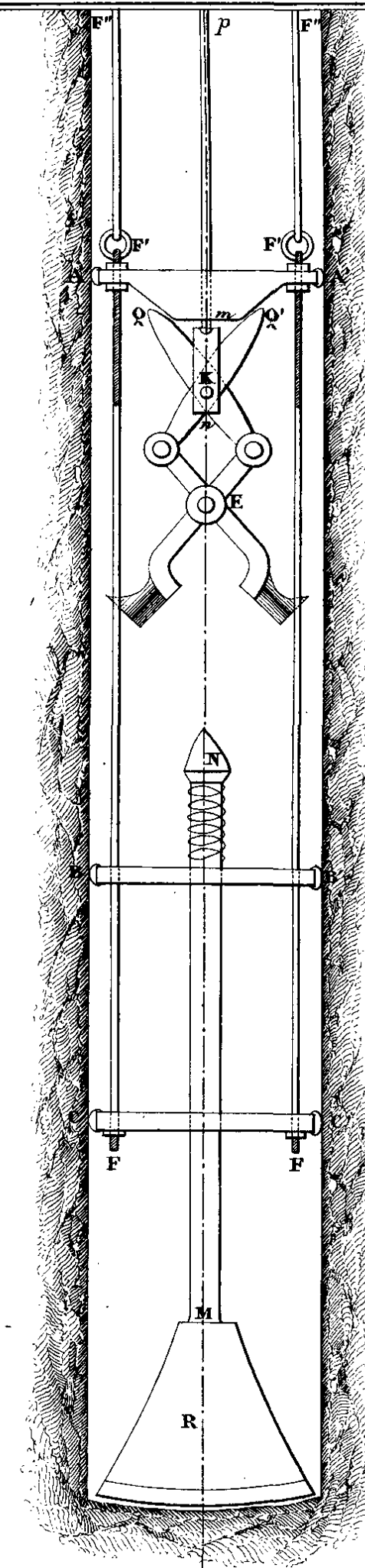


Fig. 3

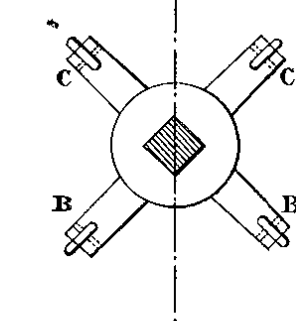


Fig. 5

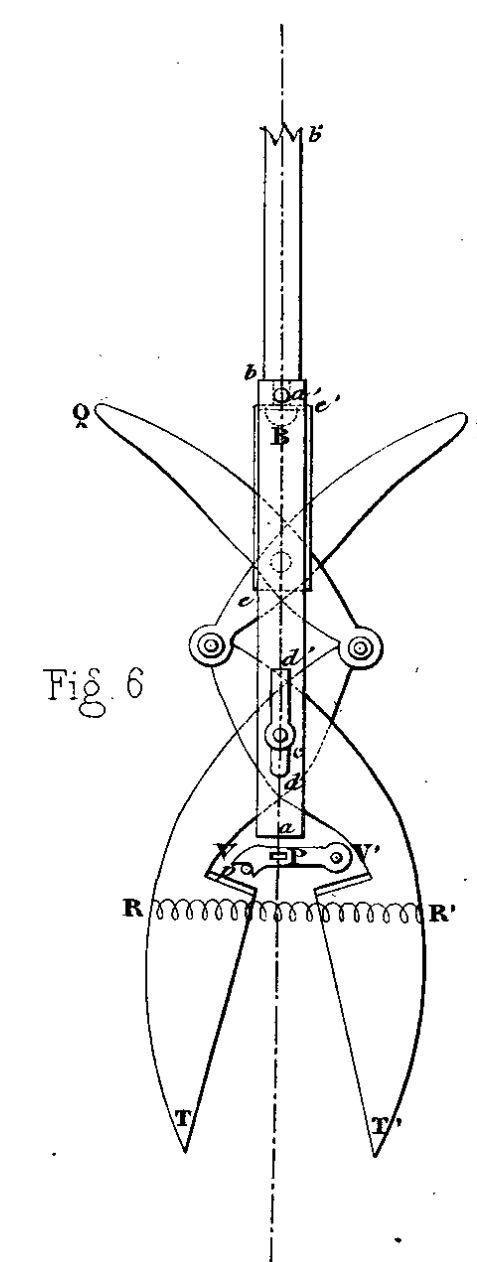


Fig. 6

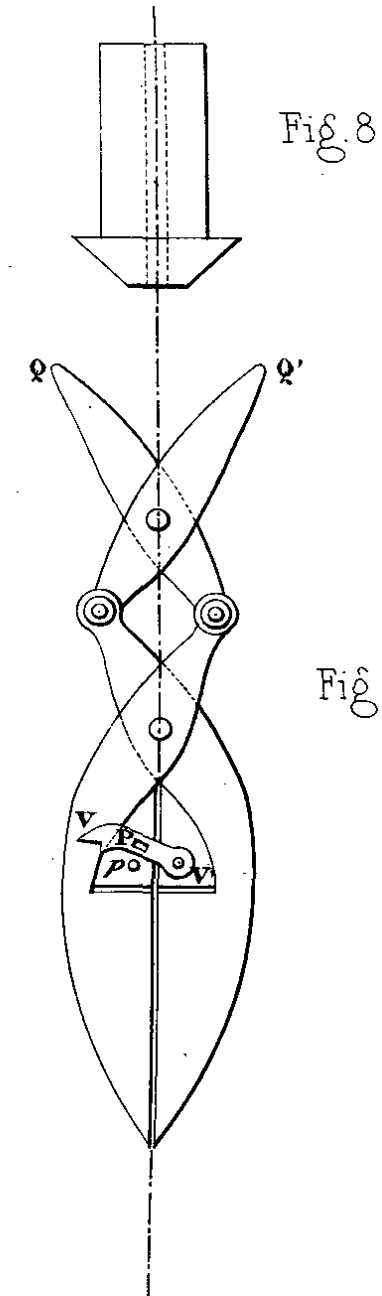


Fig. 7

Fig. 10

Fig. 11

Fig. 12

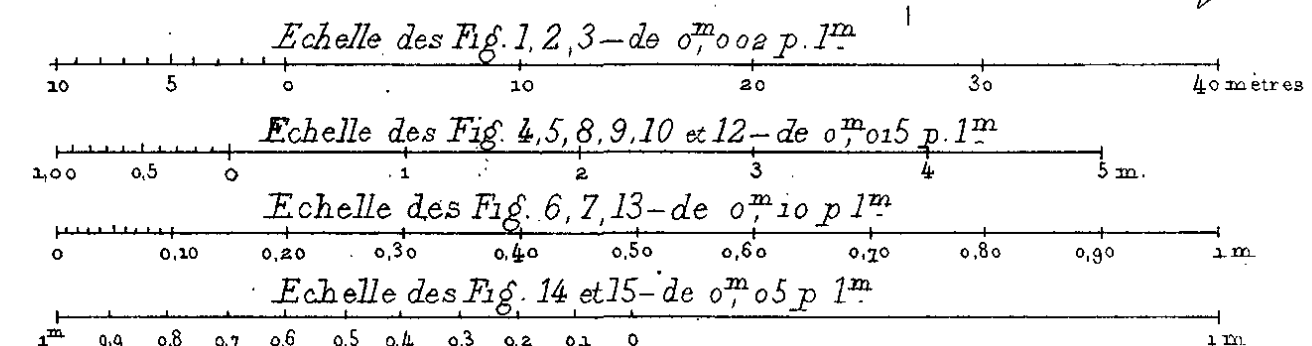
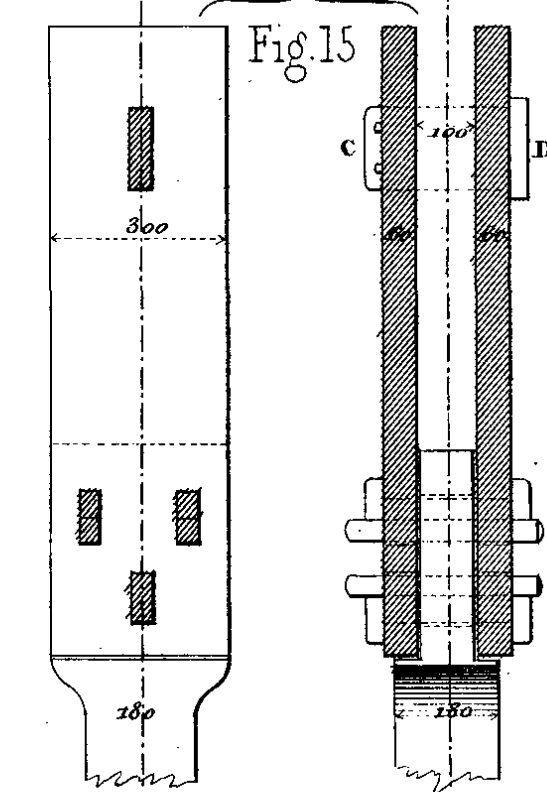
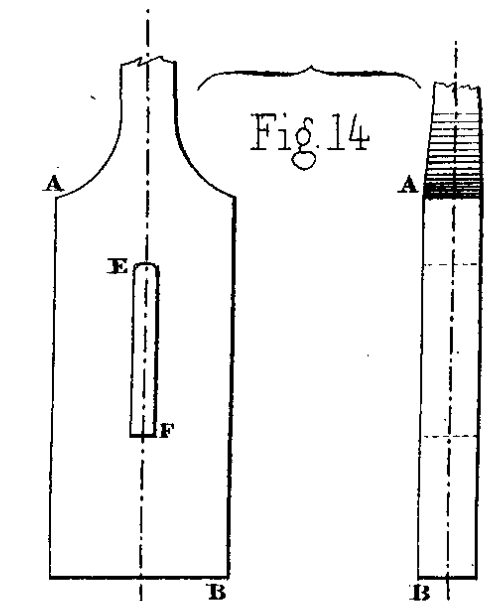
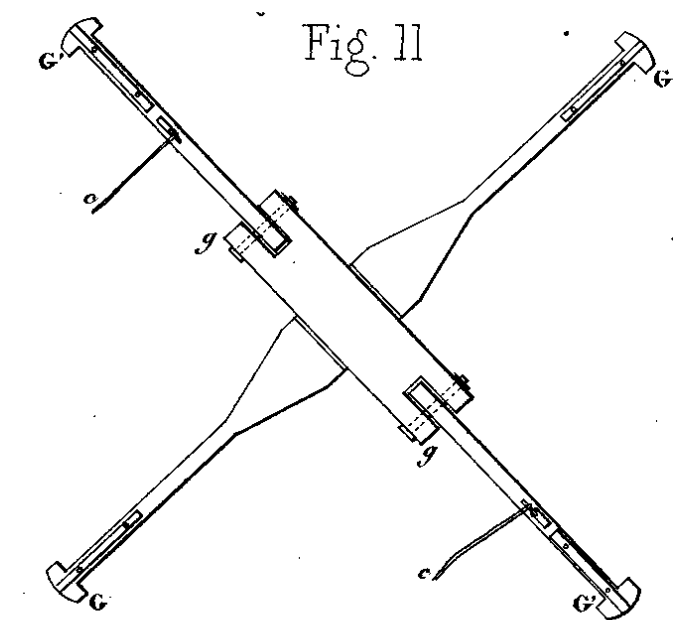
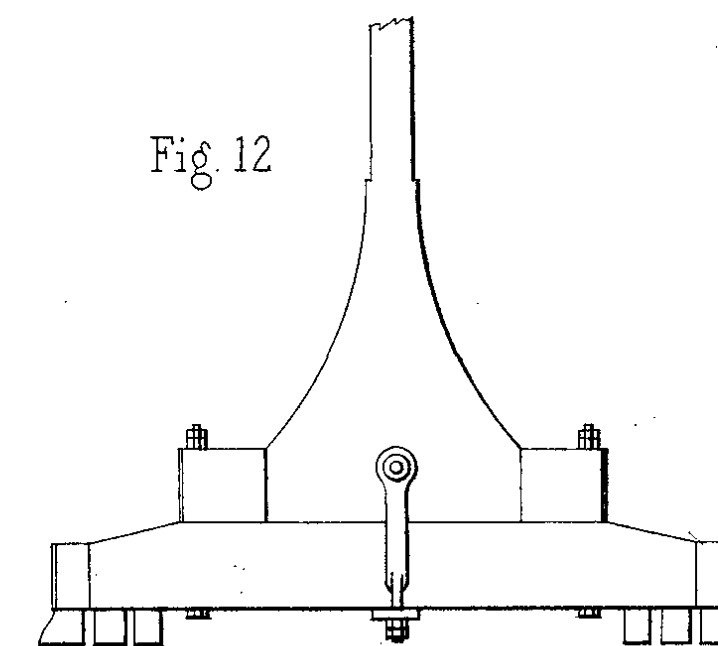
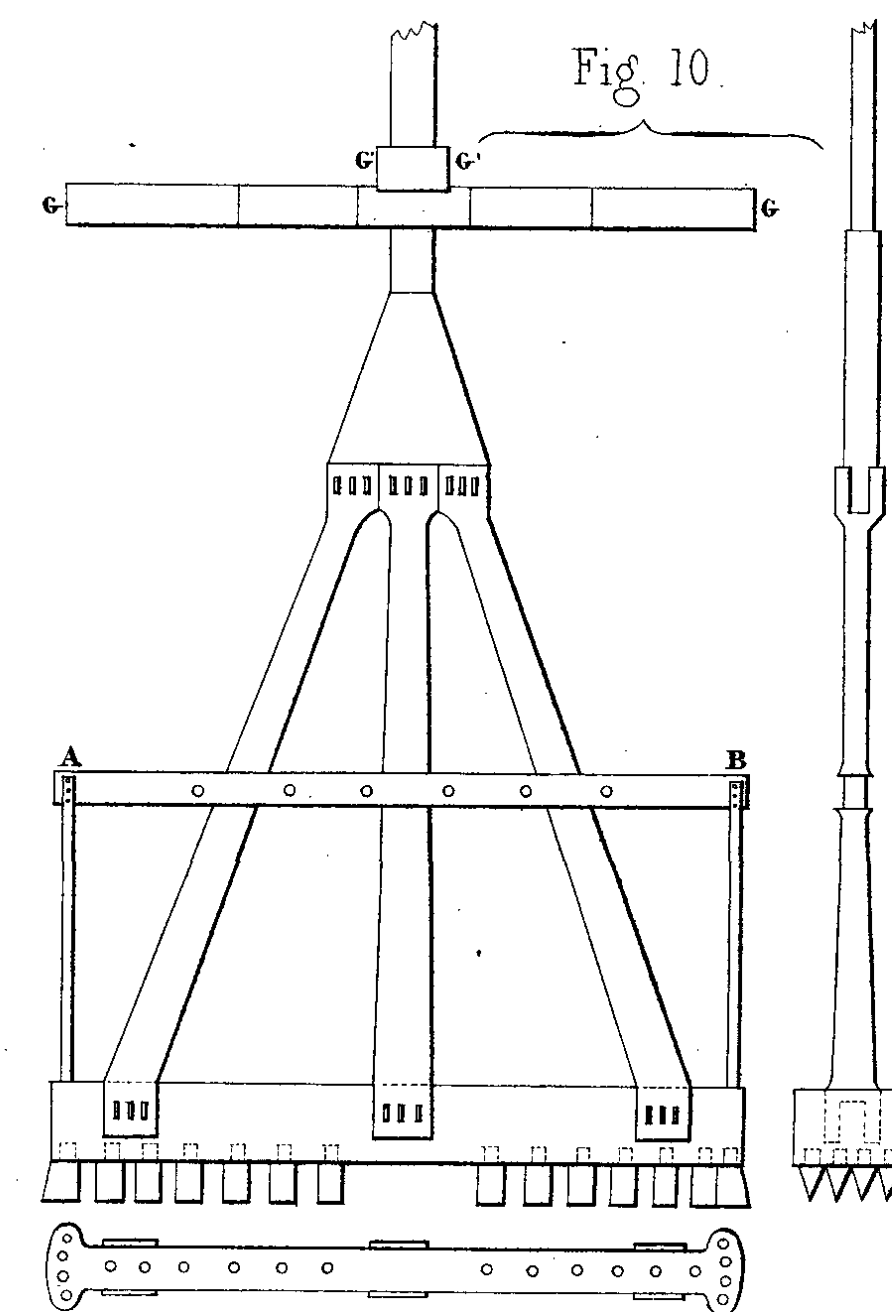
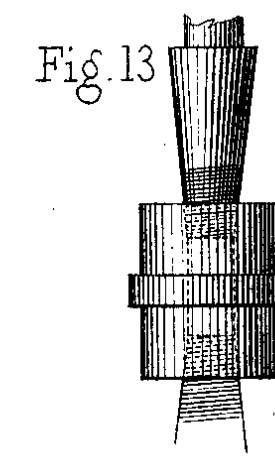
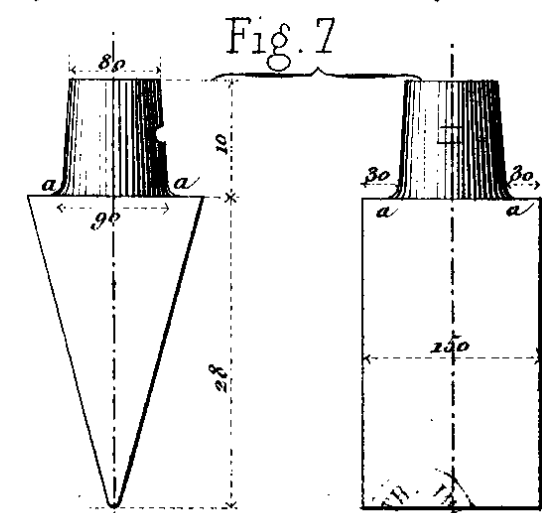
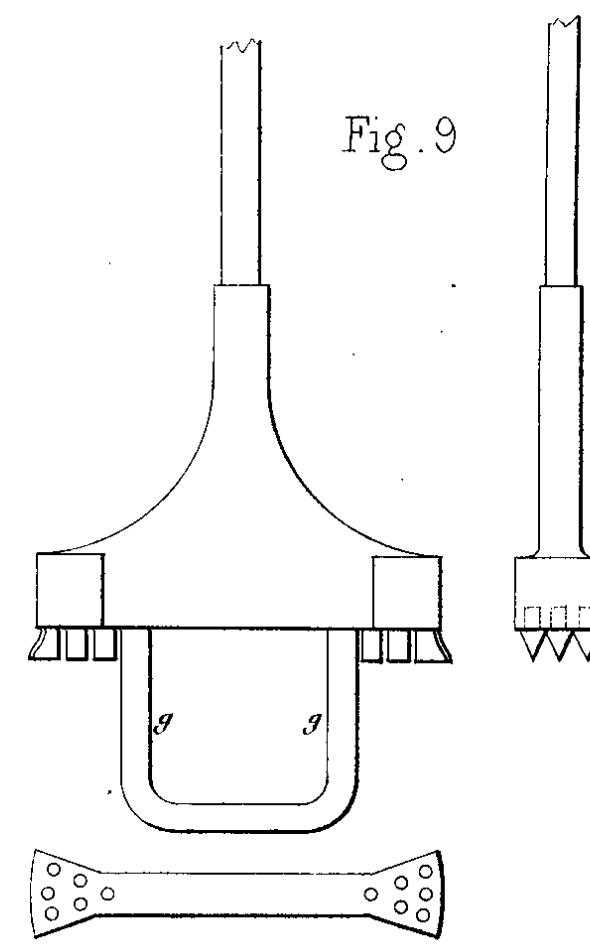
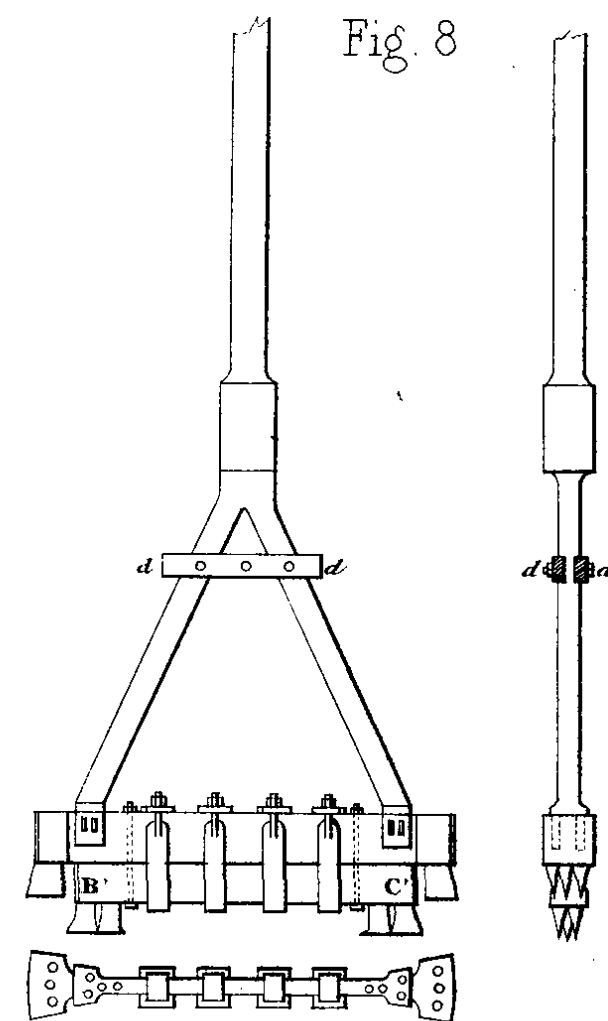
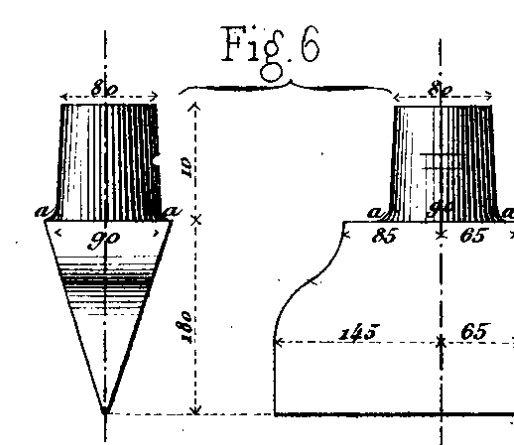
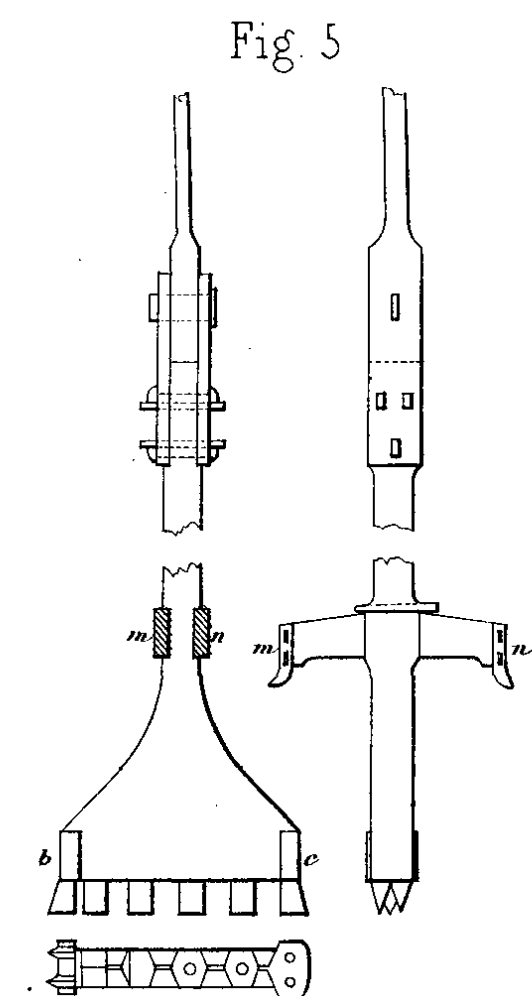
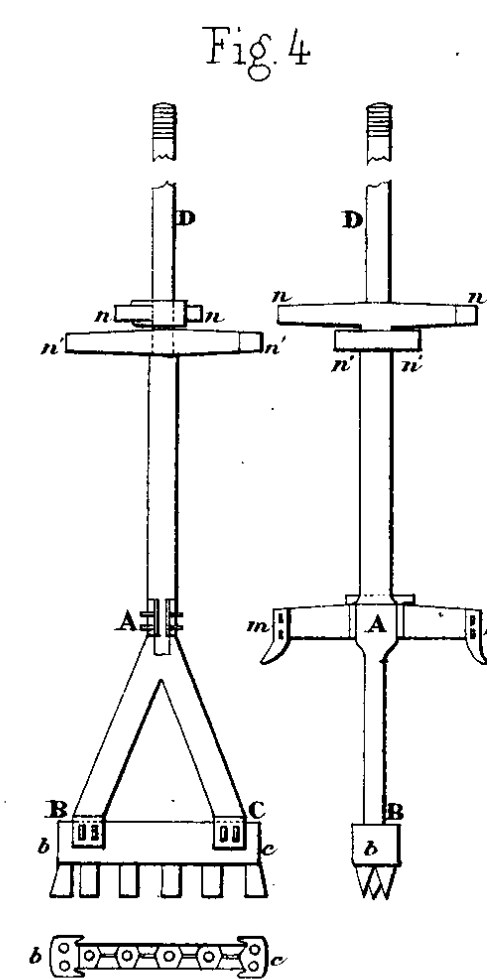
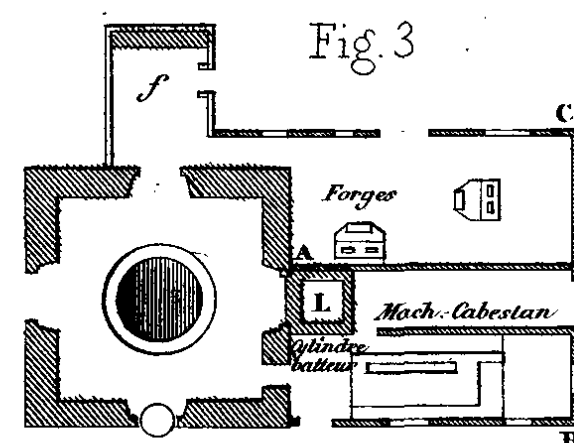
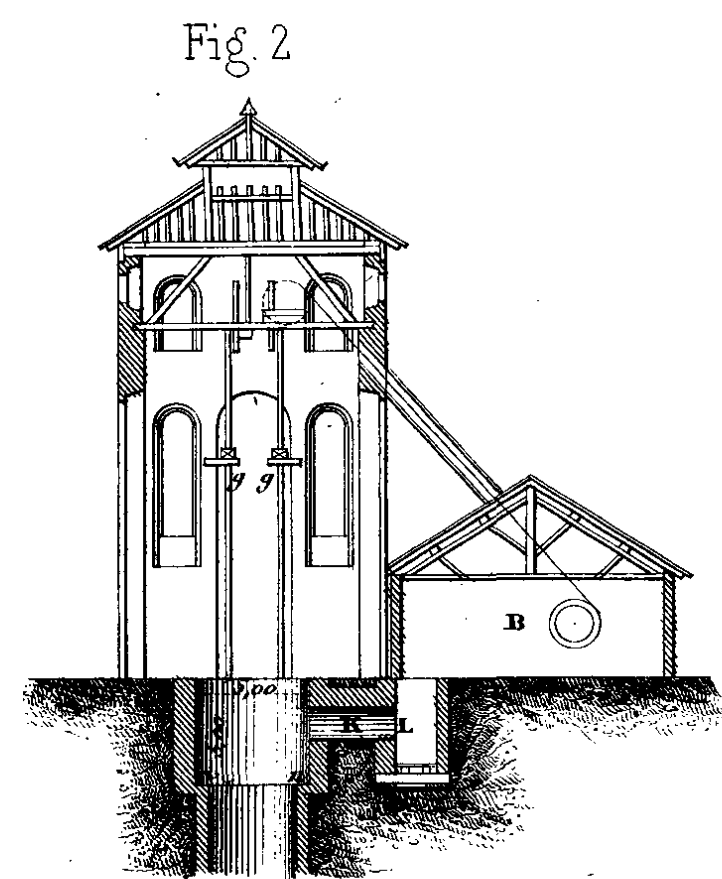
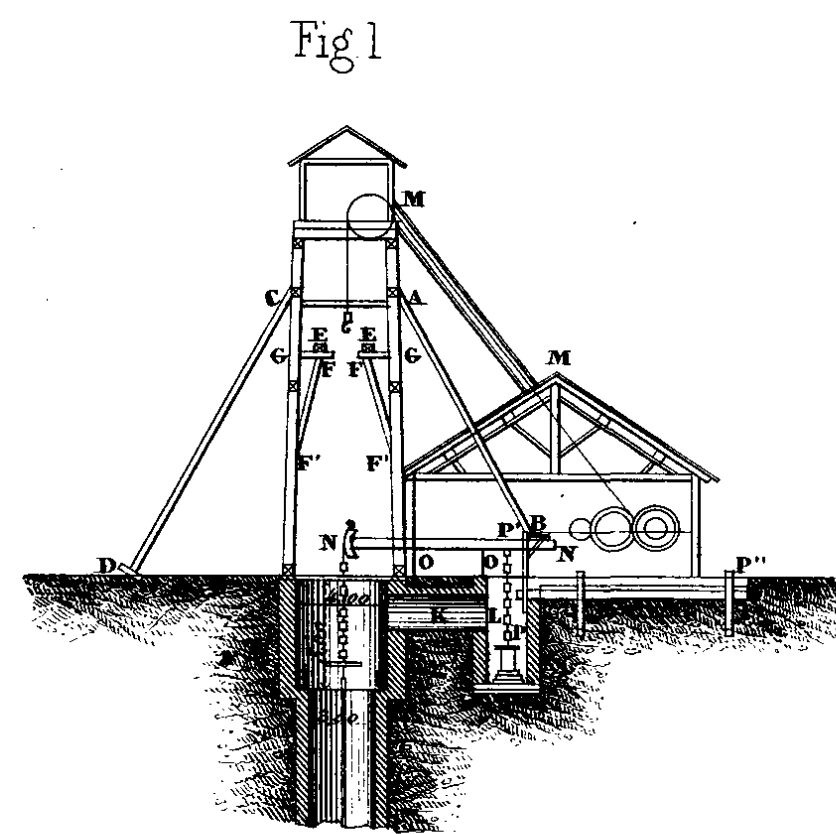
Echelle des Fig. 3 & 12 de 0<sup>m</sup>02 pour 1 mètre

1 0.50 0 1 2 3 4 mètres















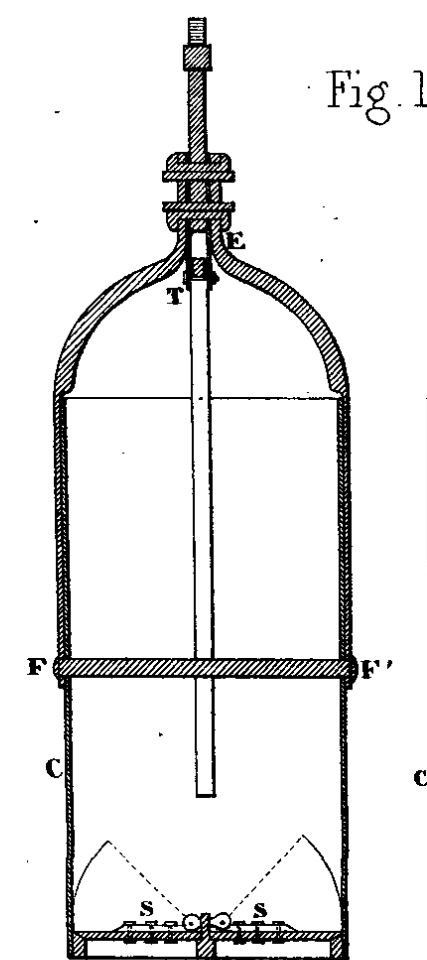


Fig. 1

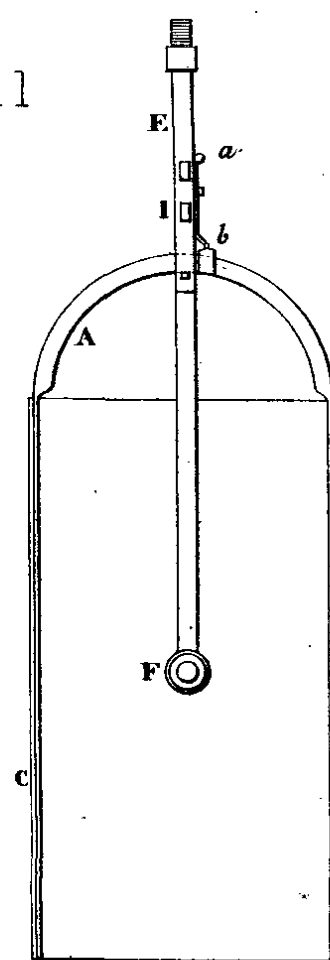


Fig. 2

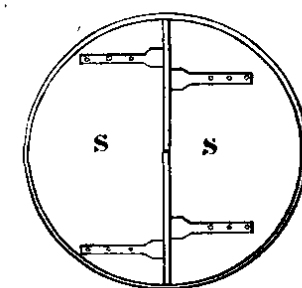


Fig. 3

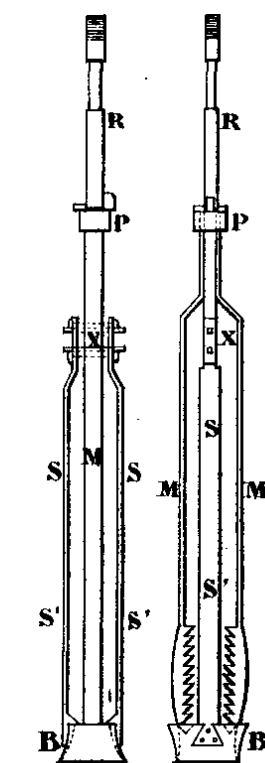


Fig. 4

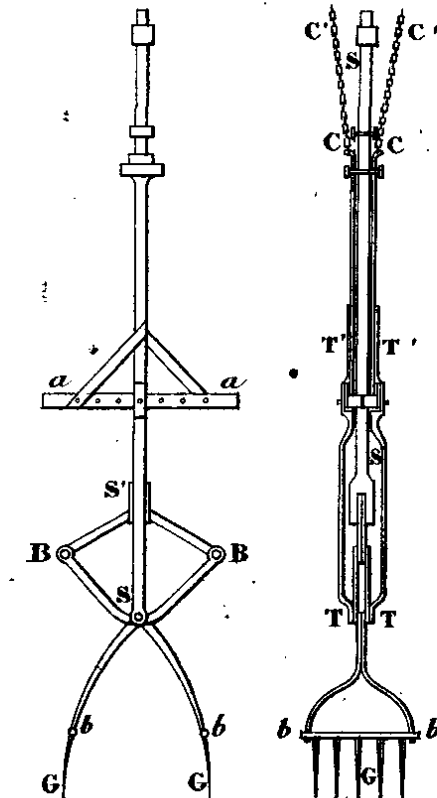


Fig. 5

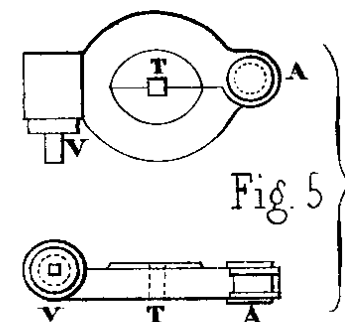
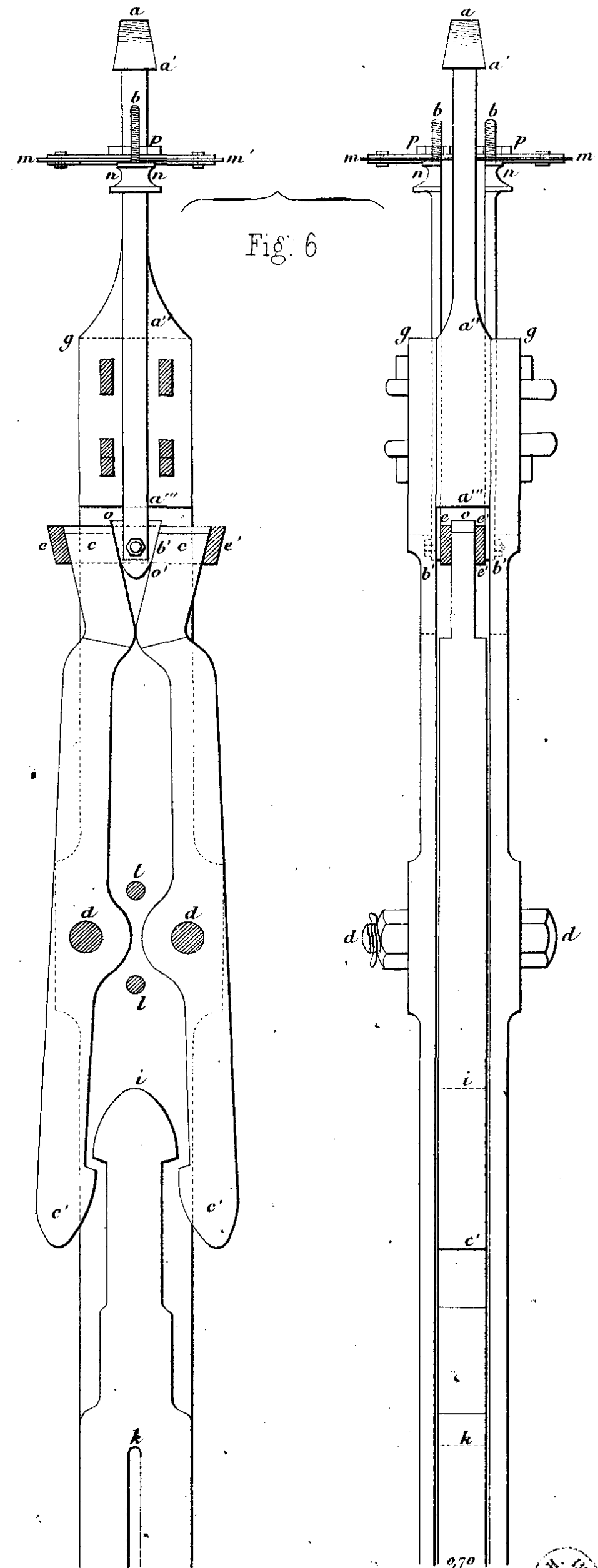


Fig. 6



Suite de la Fig. 6.

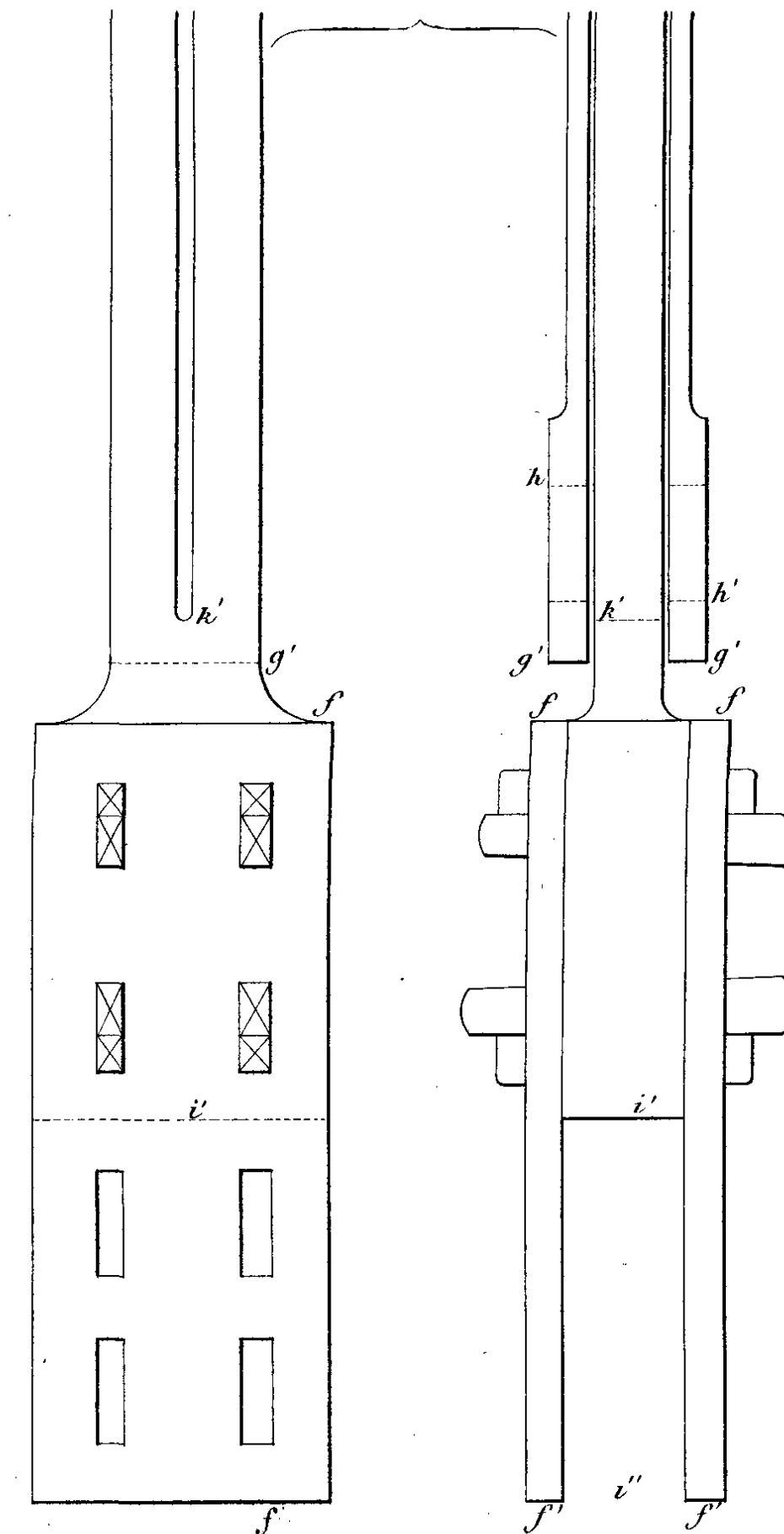


Fig. 8

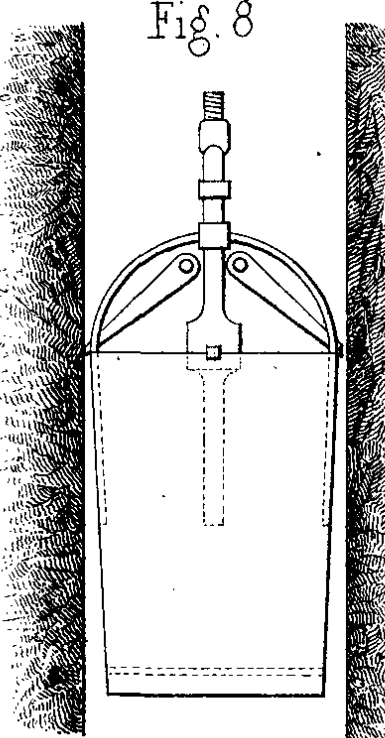


Fig. 9

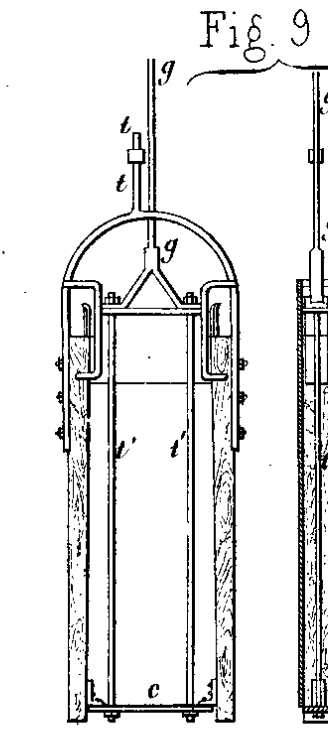


Fig. 10

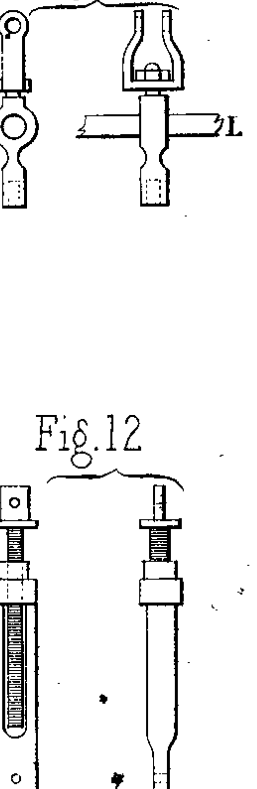


Fig. 11

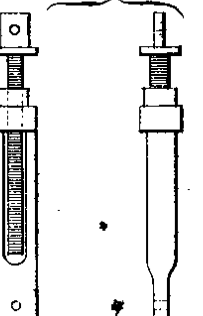


Fig. 12



Fig. 13

Echelle des Fig. 1, 2, 3, 5, 10, 11, 12, 13 - de 0<sup>m</sup>025 p<sup>r</sup> 1<sup>m</sup>

Echelle des Fig. 4, 7, 8, 9 - de 0<sup>m</sup>0125 p<sup>r</sup> 1<sup>m</sup>

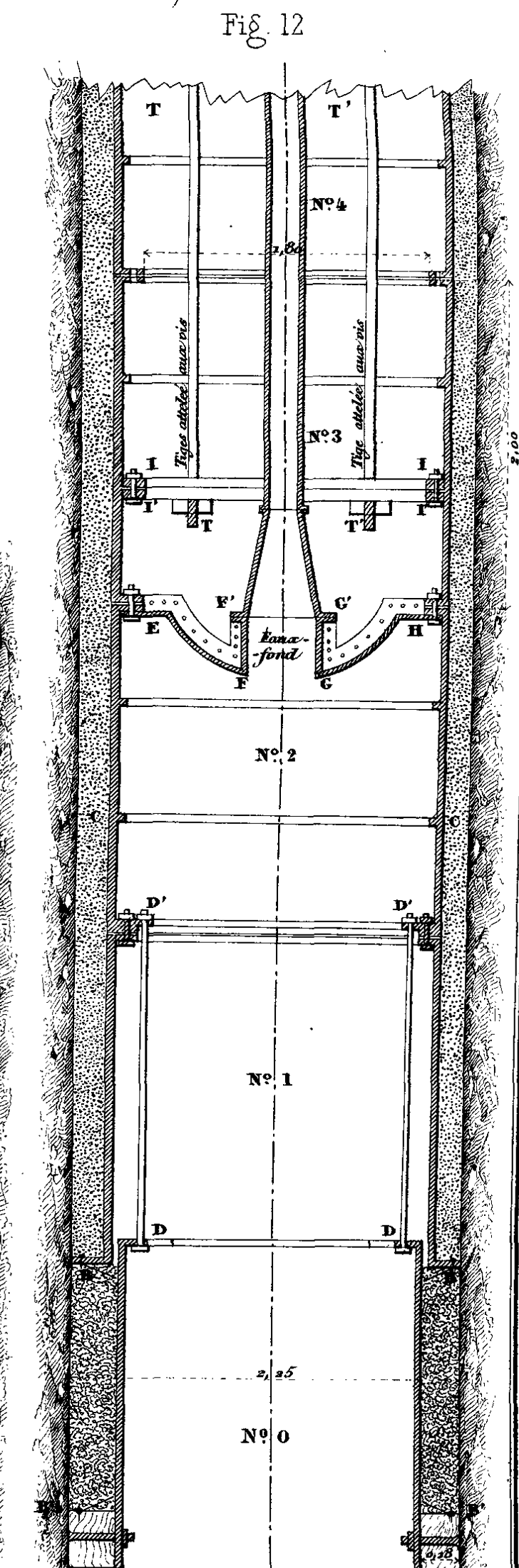
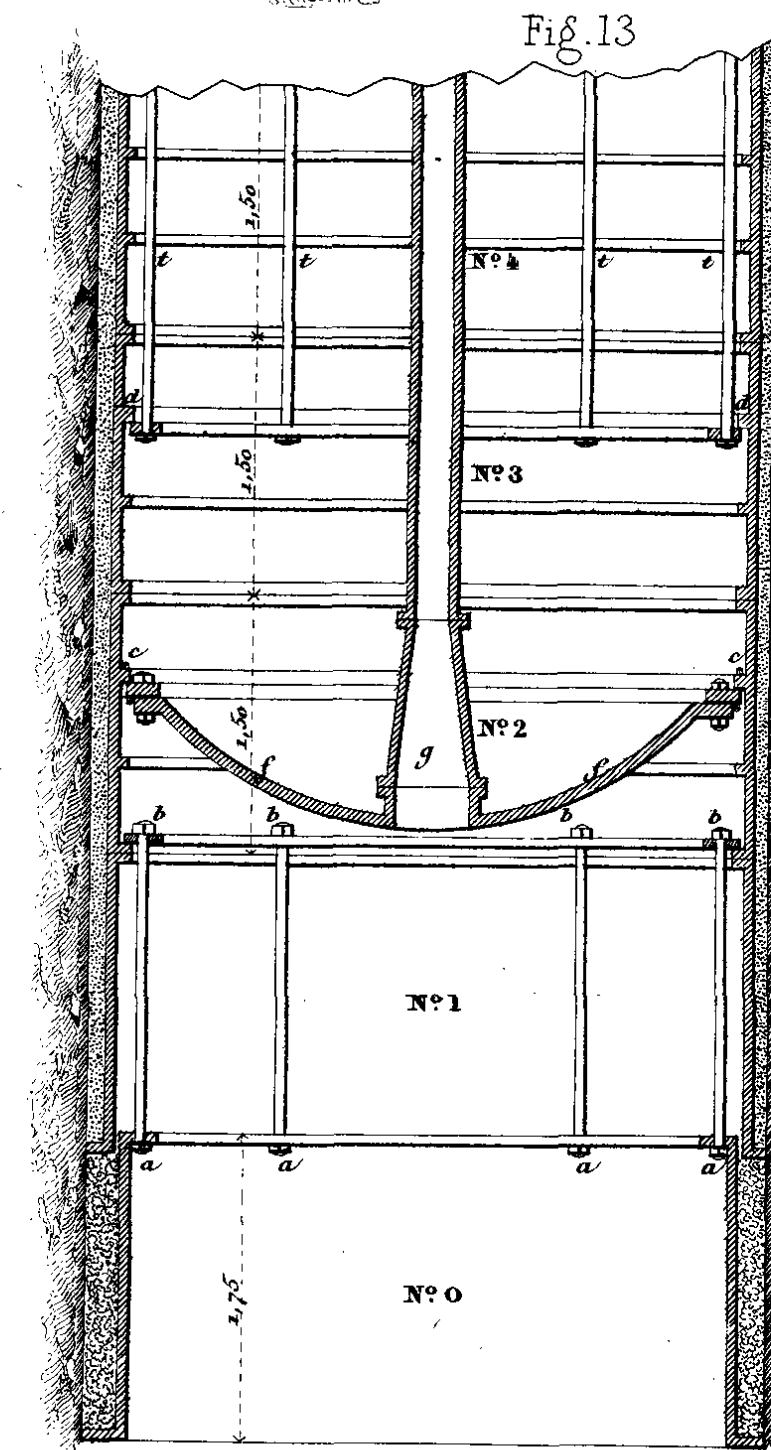
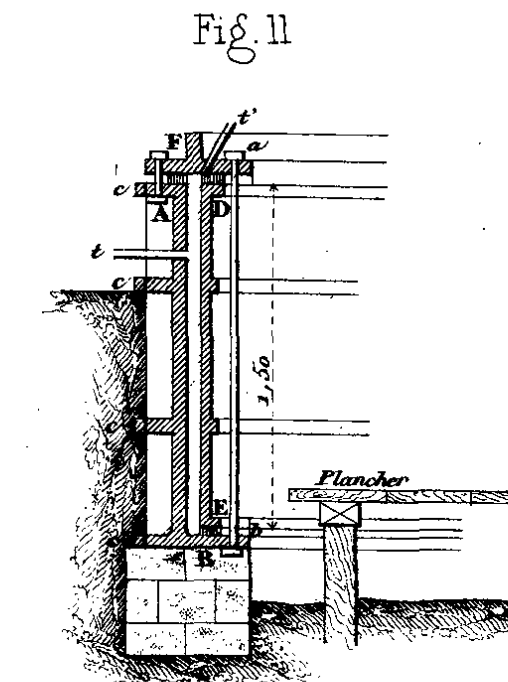
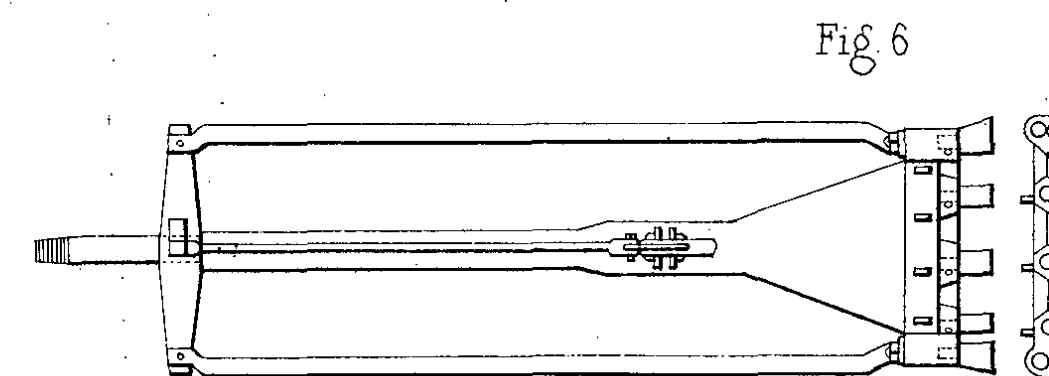
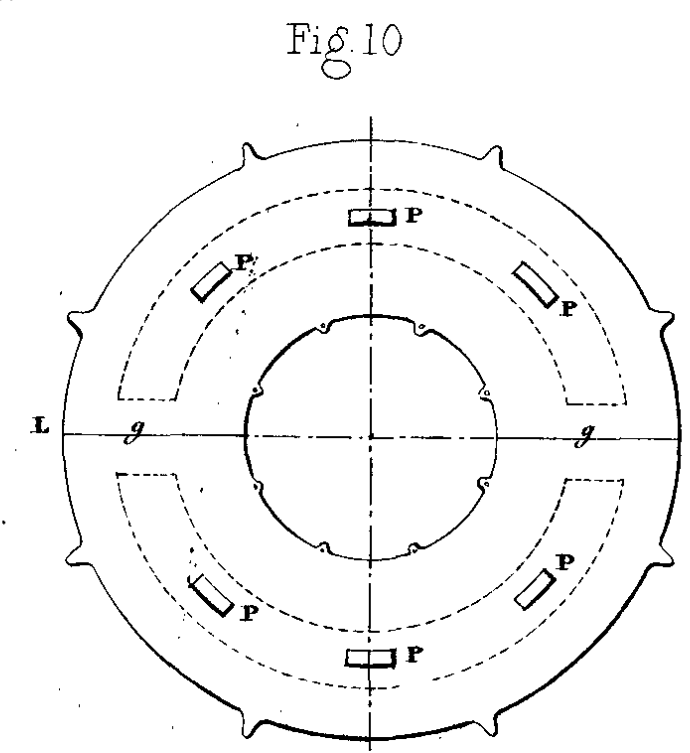
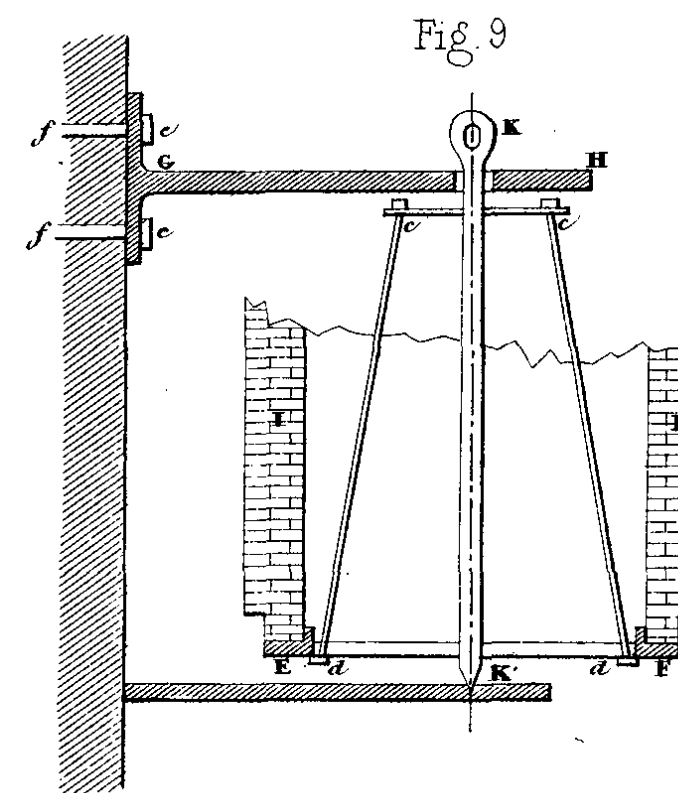
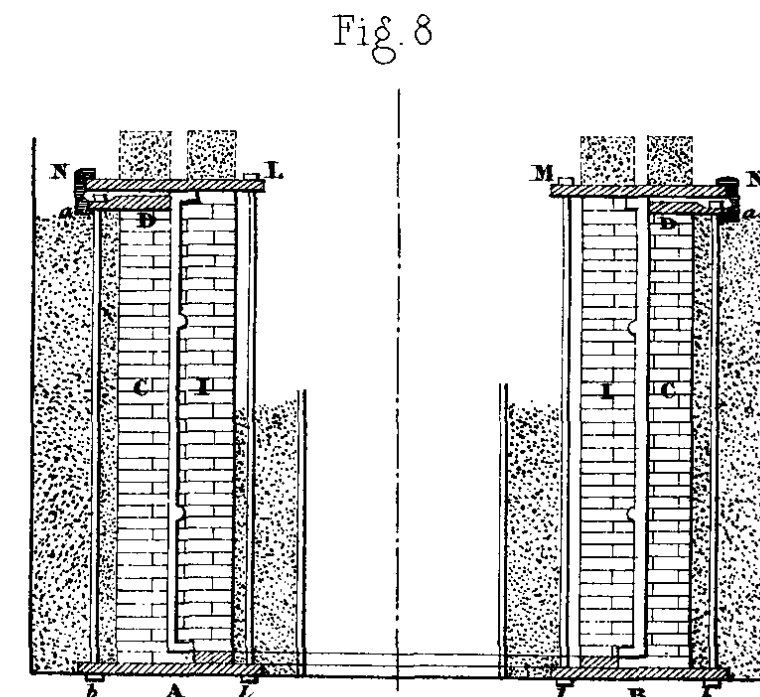
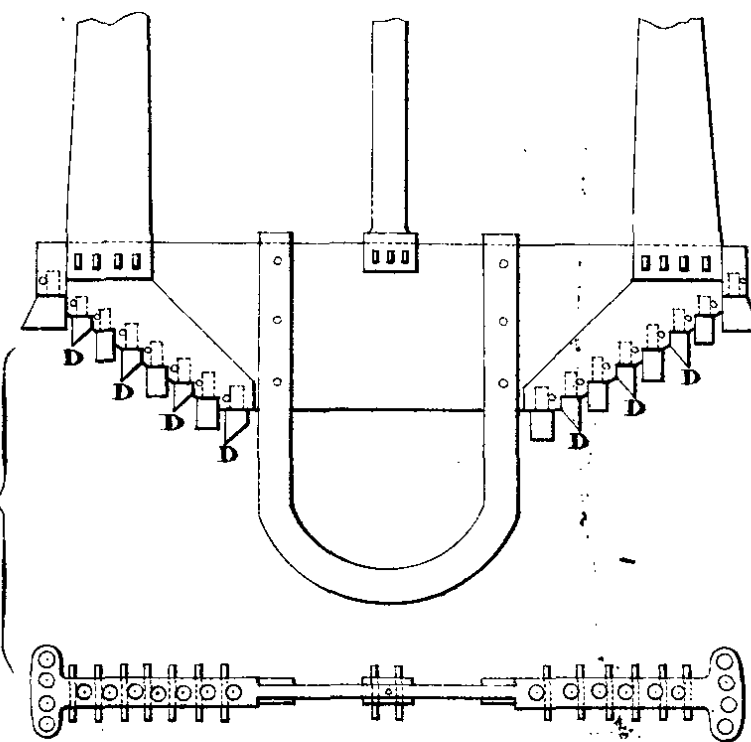
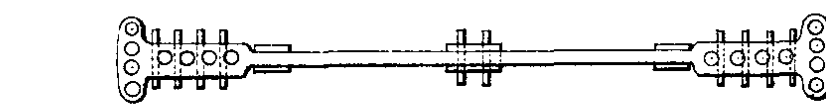
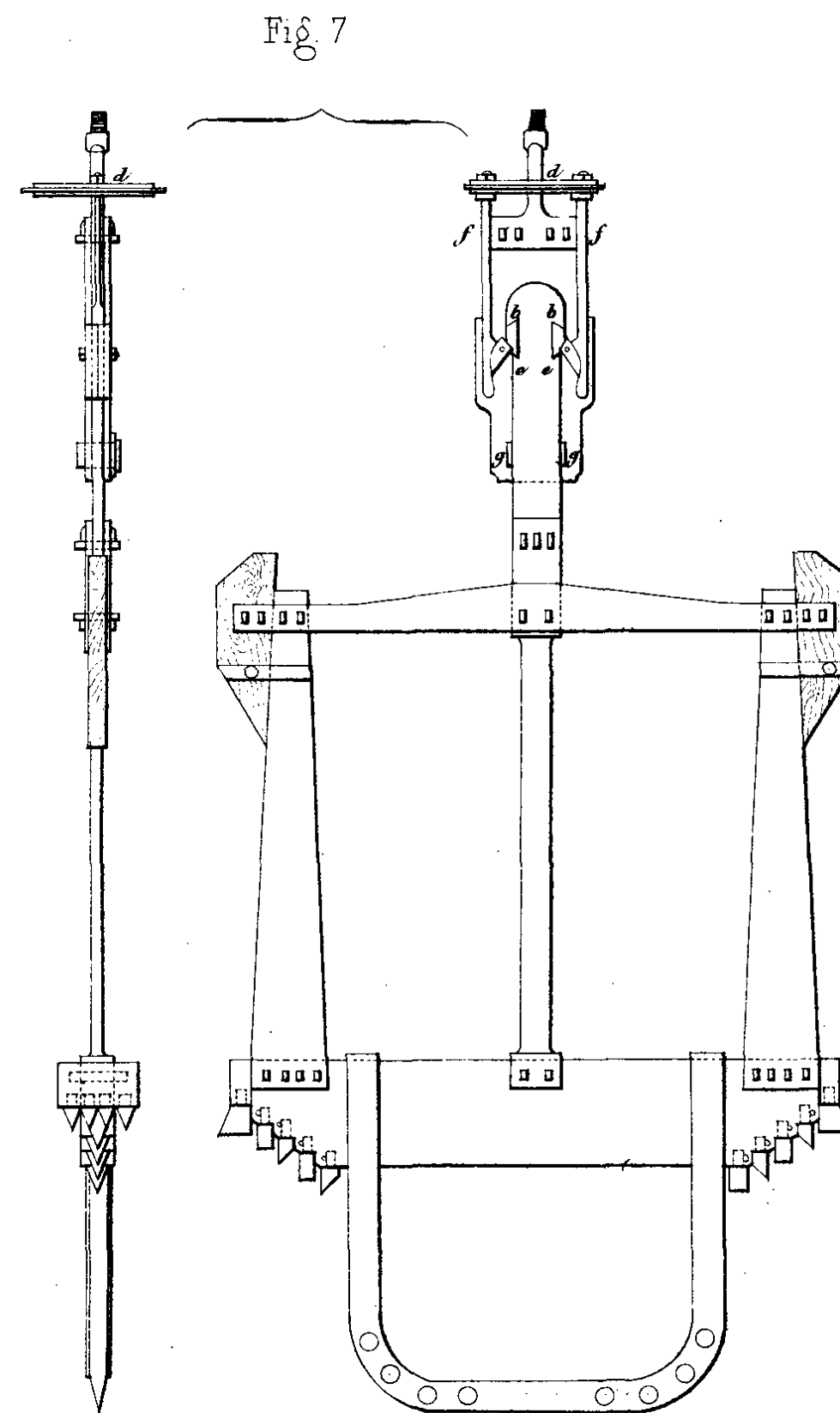
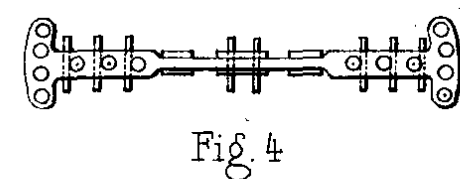
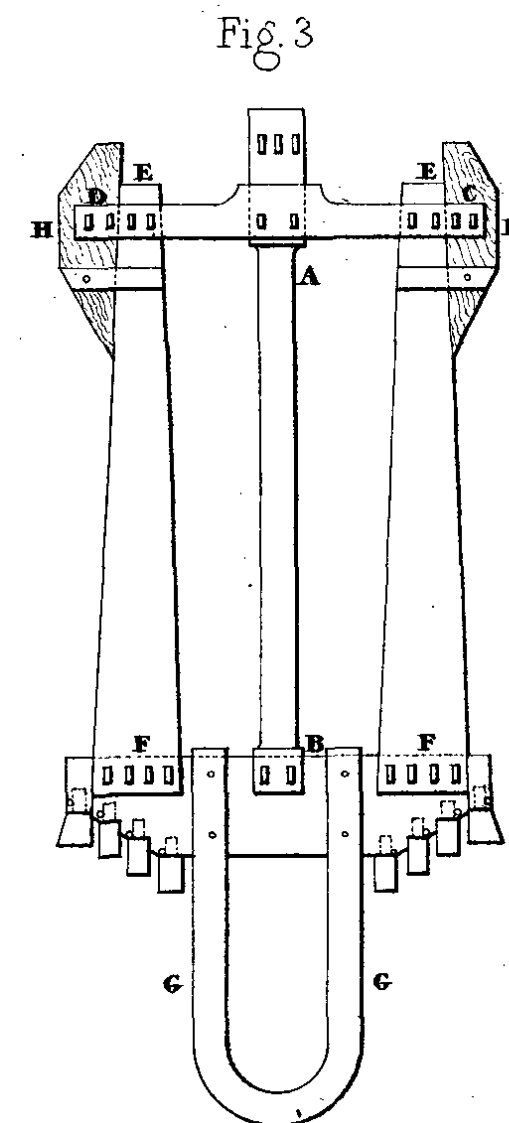
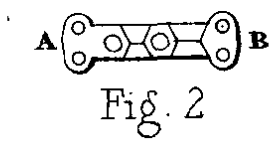
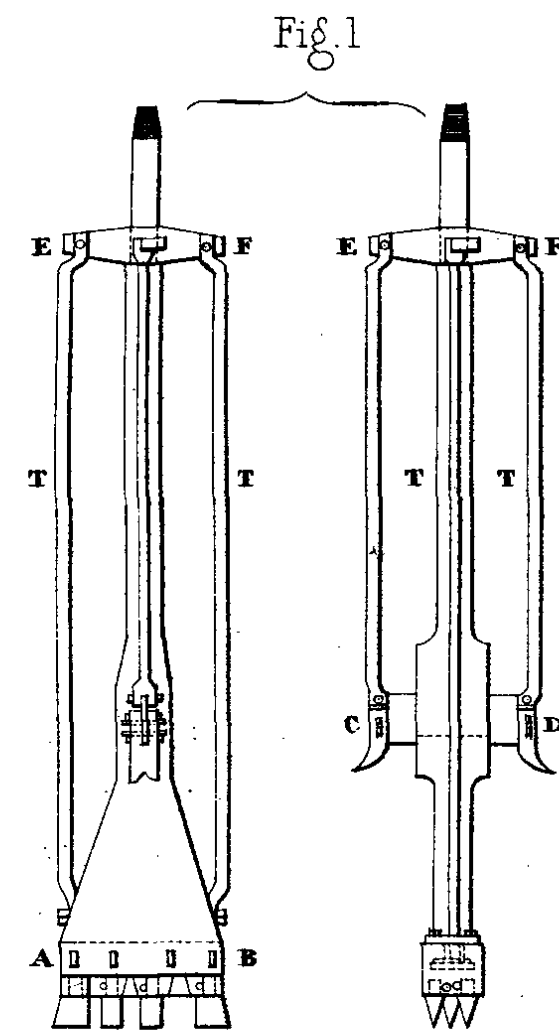
Echelle de la Fig. 6 - de 0<sup>m</sup>01 p<sup>r</sup> 1<sup>m</sup>

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8









Echelle des Fig. 1 à 7 et 13. de 0.<sup>m</sup>015 p.<sup>r</sup>1 mètre

Echelle des Fig. 8 à 12. de 0.<sup>m</sup>02 p.<sup>r</sup>1 mètre

*S. Etienne Lith. LANTZ, rue de la Joire 4.*







4  
69

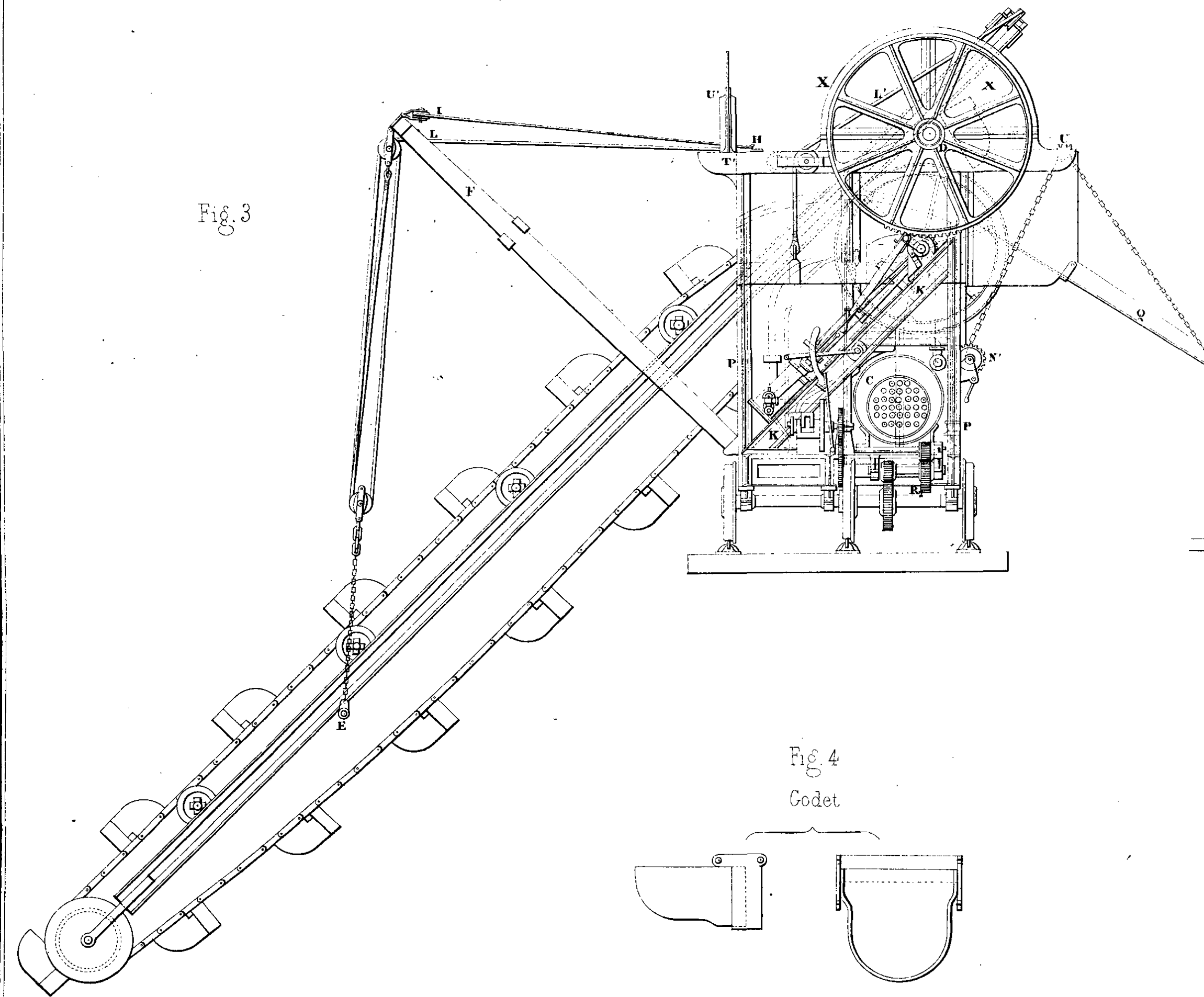


Fig. 3

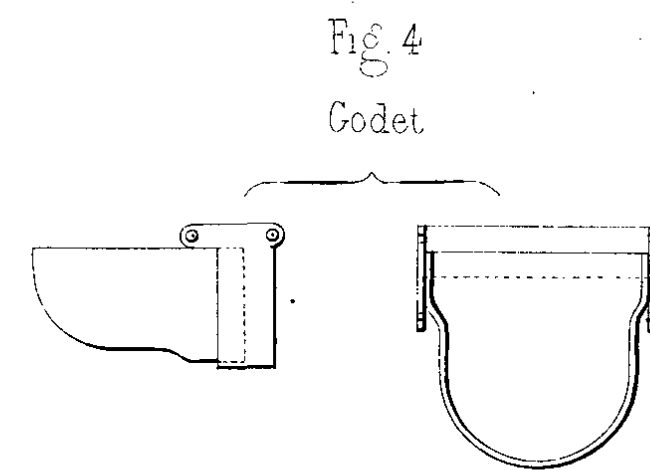


Fig. 4  
Codet

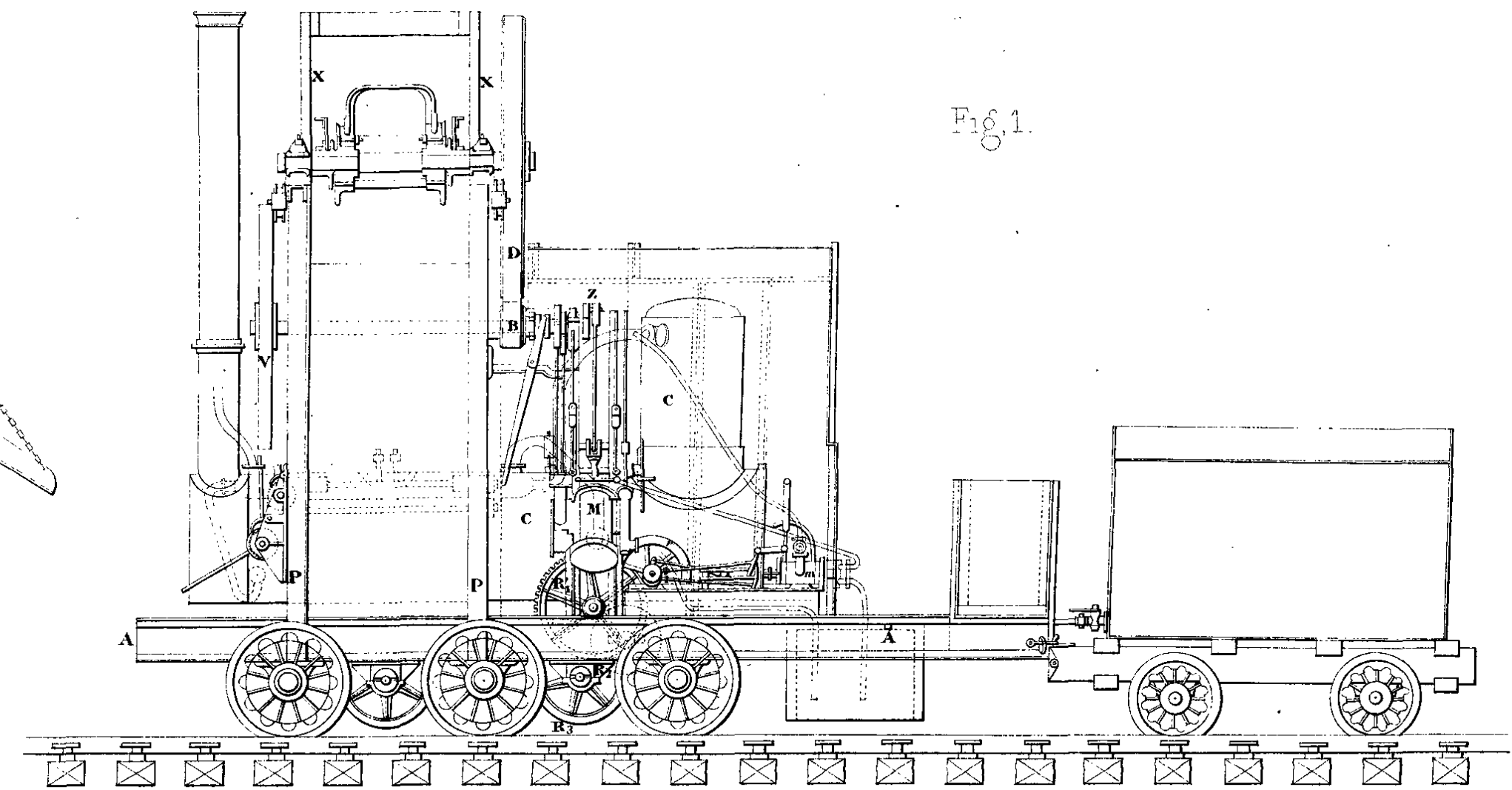
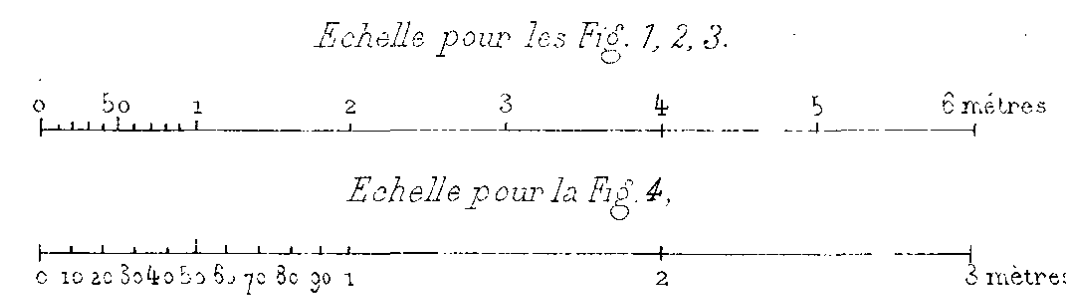


Fig. 1.

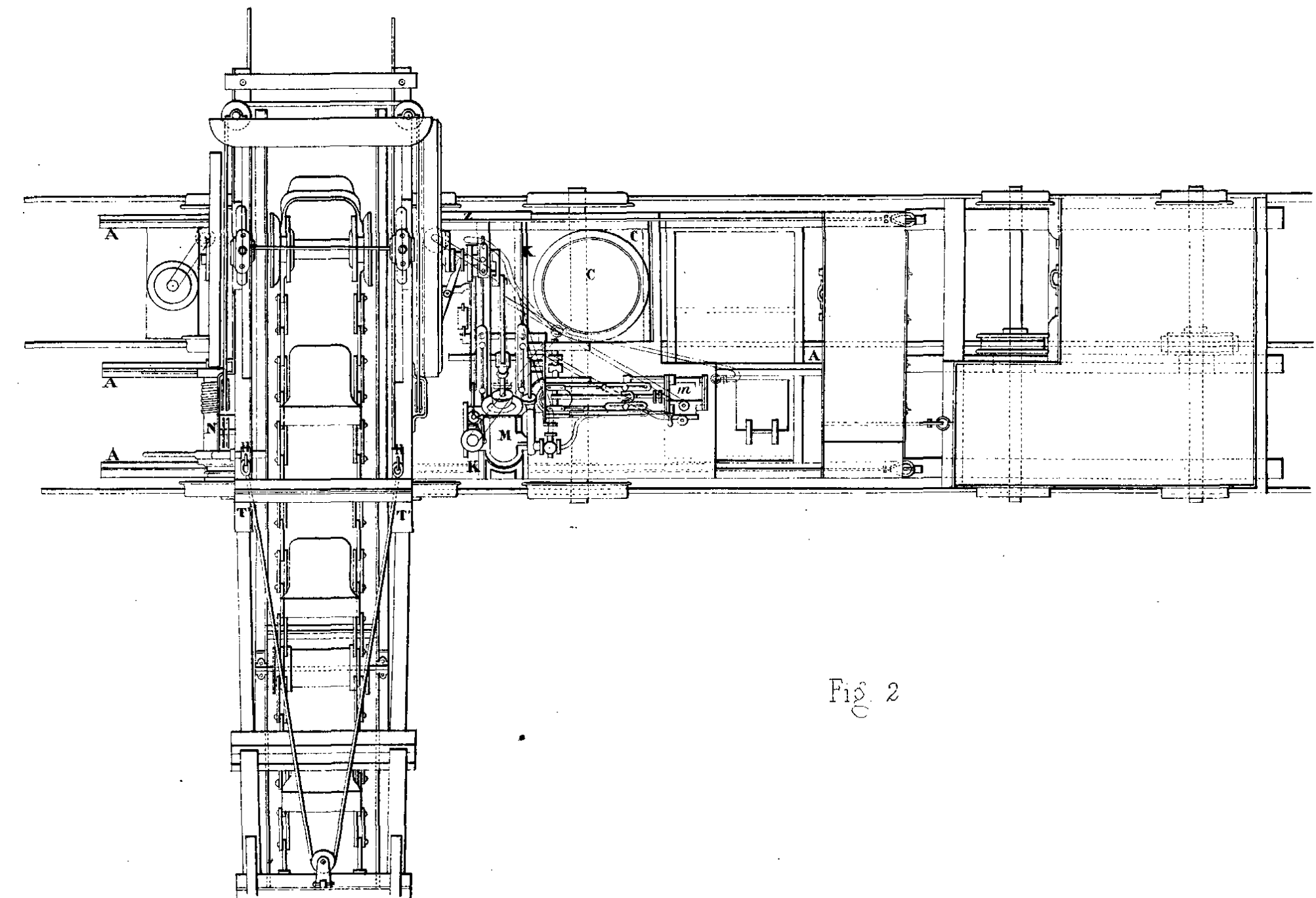


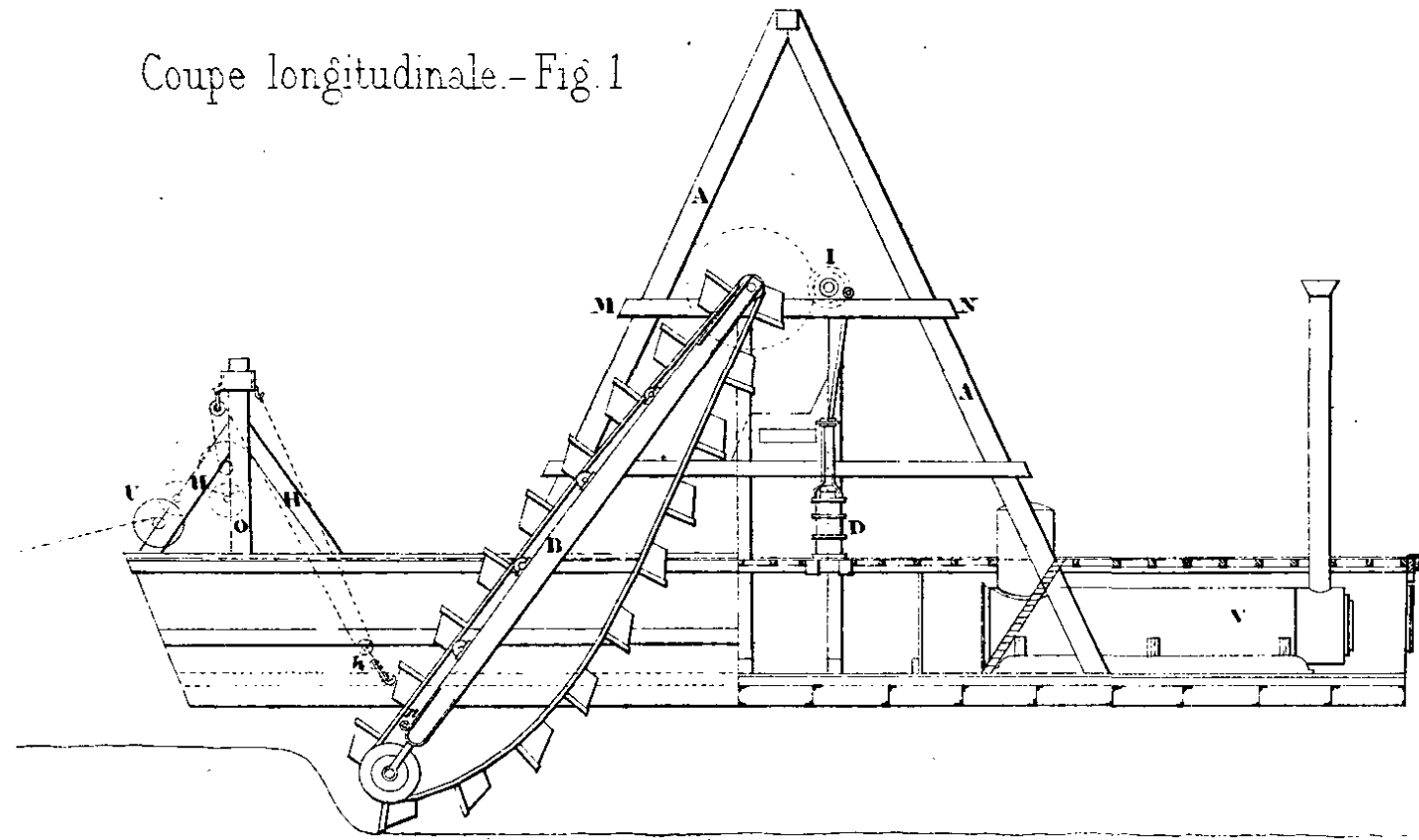
Fig. 2



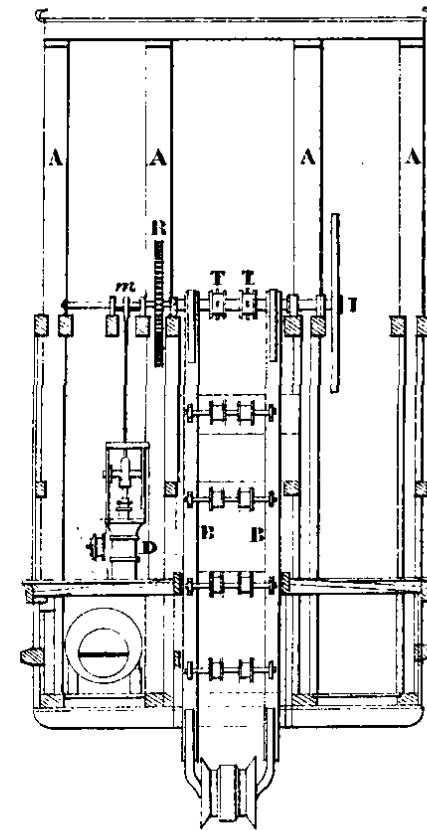




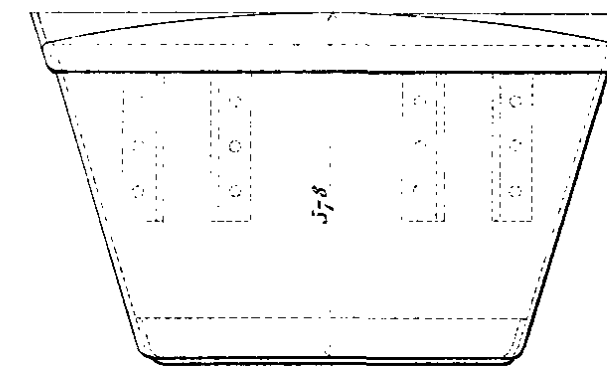
Petite drague  
Coupe longitudinale.—Fig. 1



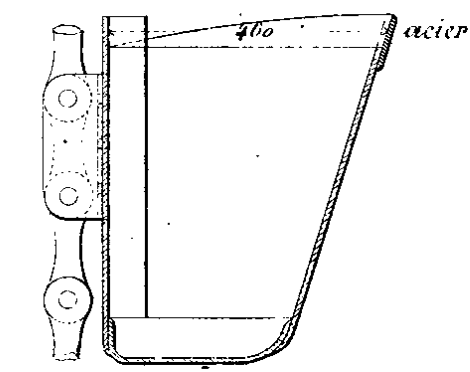
Coupe transversale.—Fig. 3



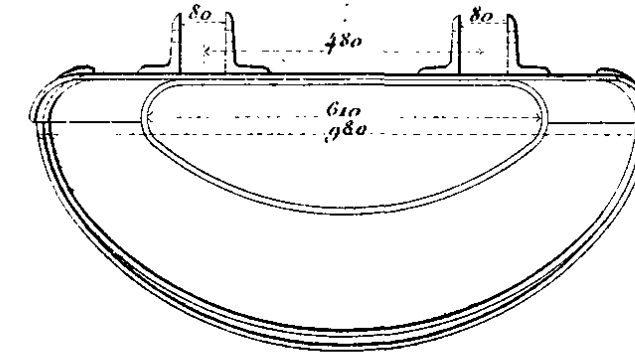
Codets de la drague Combes. (Capacité 100 à 110 litres)  
Elevation.—Fig. 5



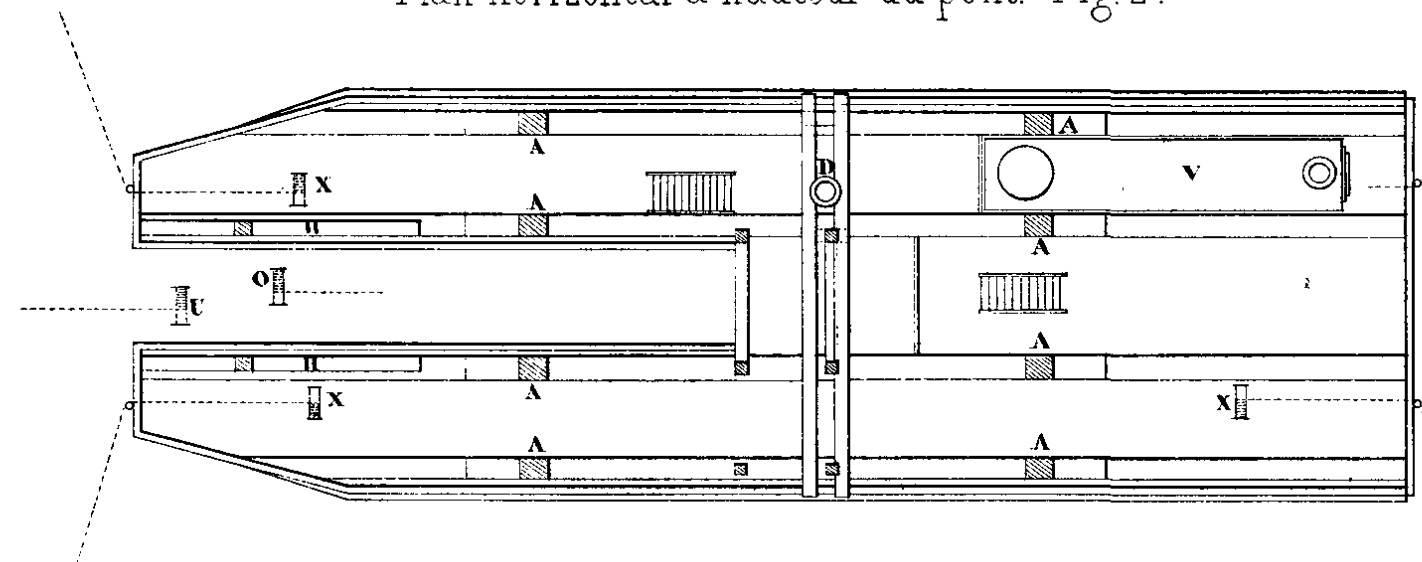
Coupe transversale. Fig. 6



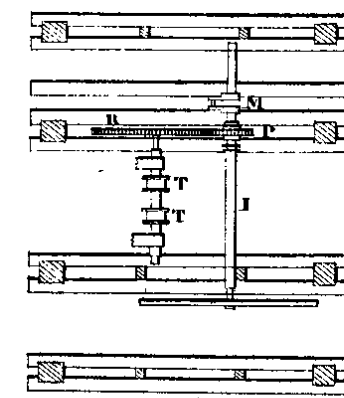
Vue en dessus.—Fig. 7



Plan horizontal à hauteur du pont.—Fig. 2.

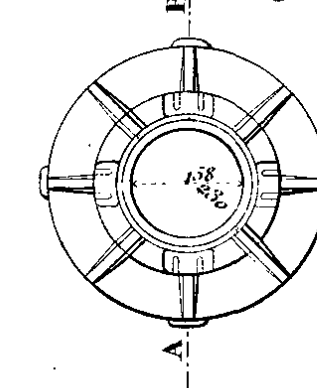


Plan à hauteur de  
la ligne MN.—Fig. 4

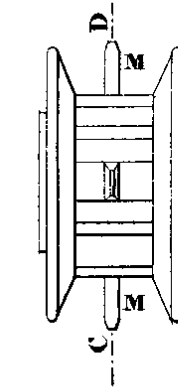


Tourteau supérieur

Elevation.—Fig. 8

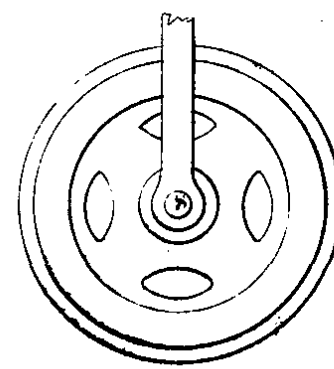


Profil.—Fig. 9.

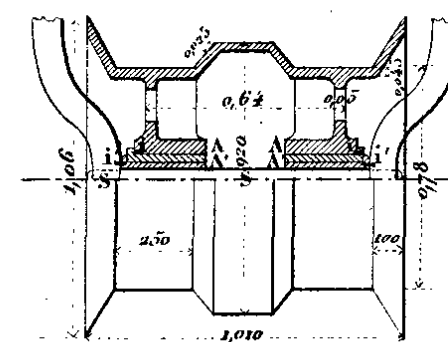


Tourteau inférieur.

Vue latérale.—Fig. 12

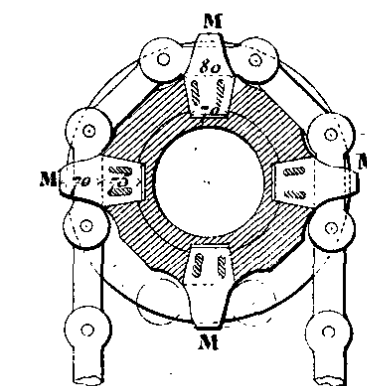


Coupe longitudinale.—Fig. 13

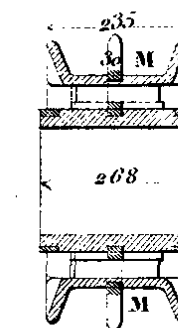


Vue en long

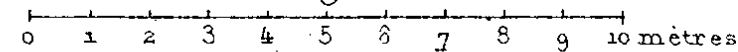
Coupe en C.D. Fig. 10



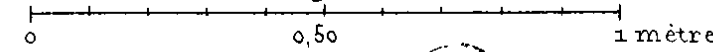
Coupe en AB.—Fig. 11.



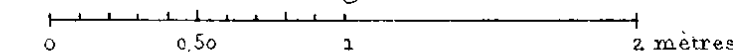
Echelle des fig. 1, 2, 3, 4.



Echelle des fig. 5, 6, 7, 8, 9, 10, 11.



Echelle des fig. 12, 13.









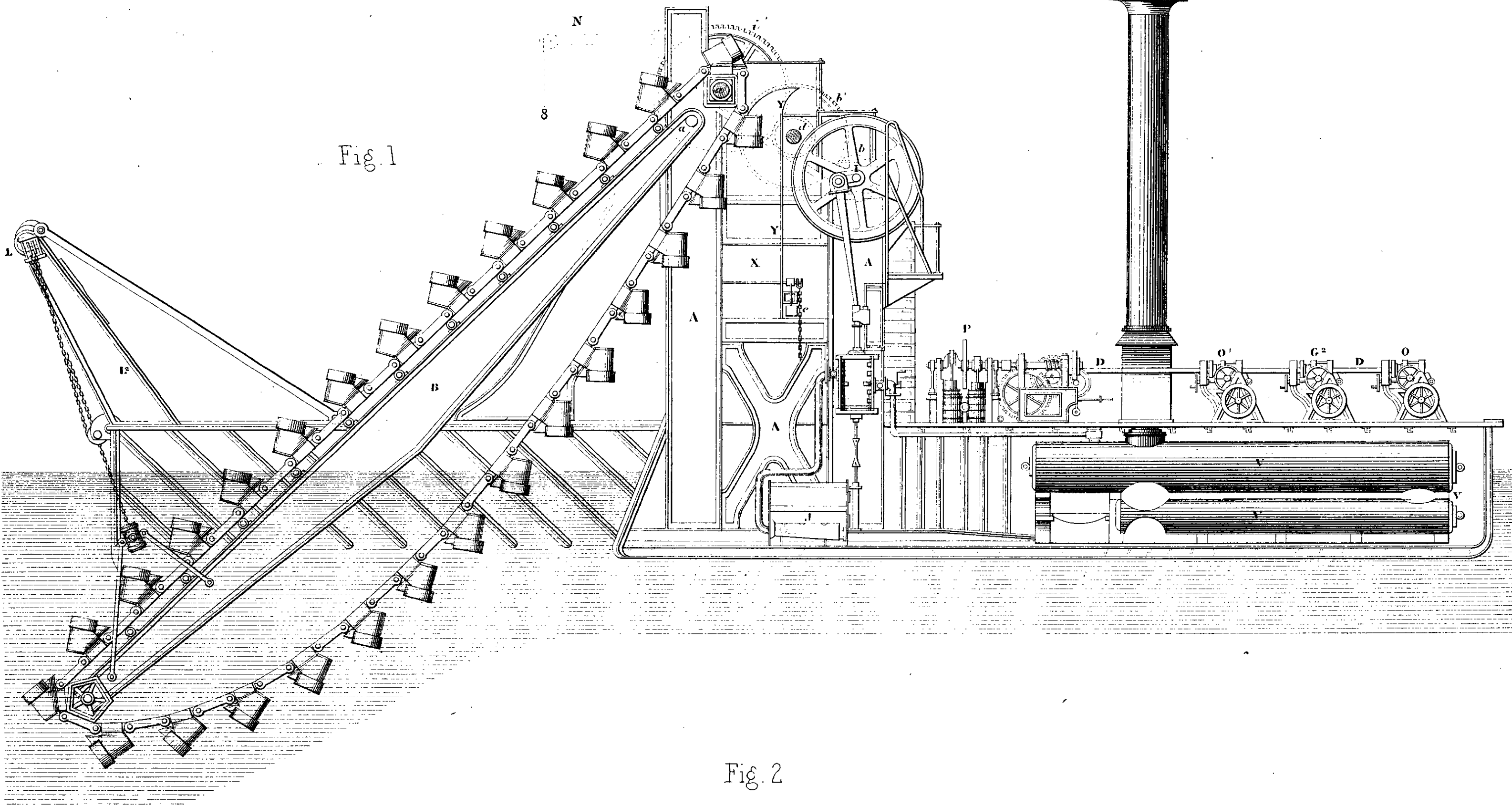


Fig. 1

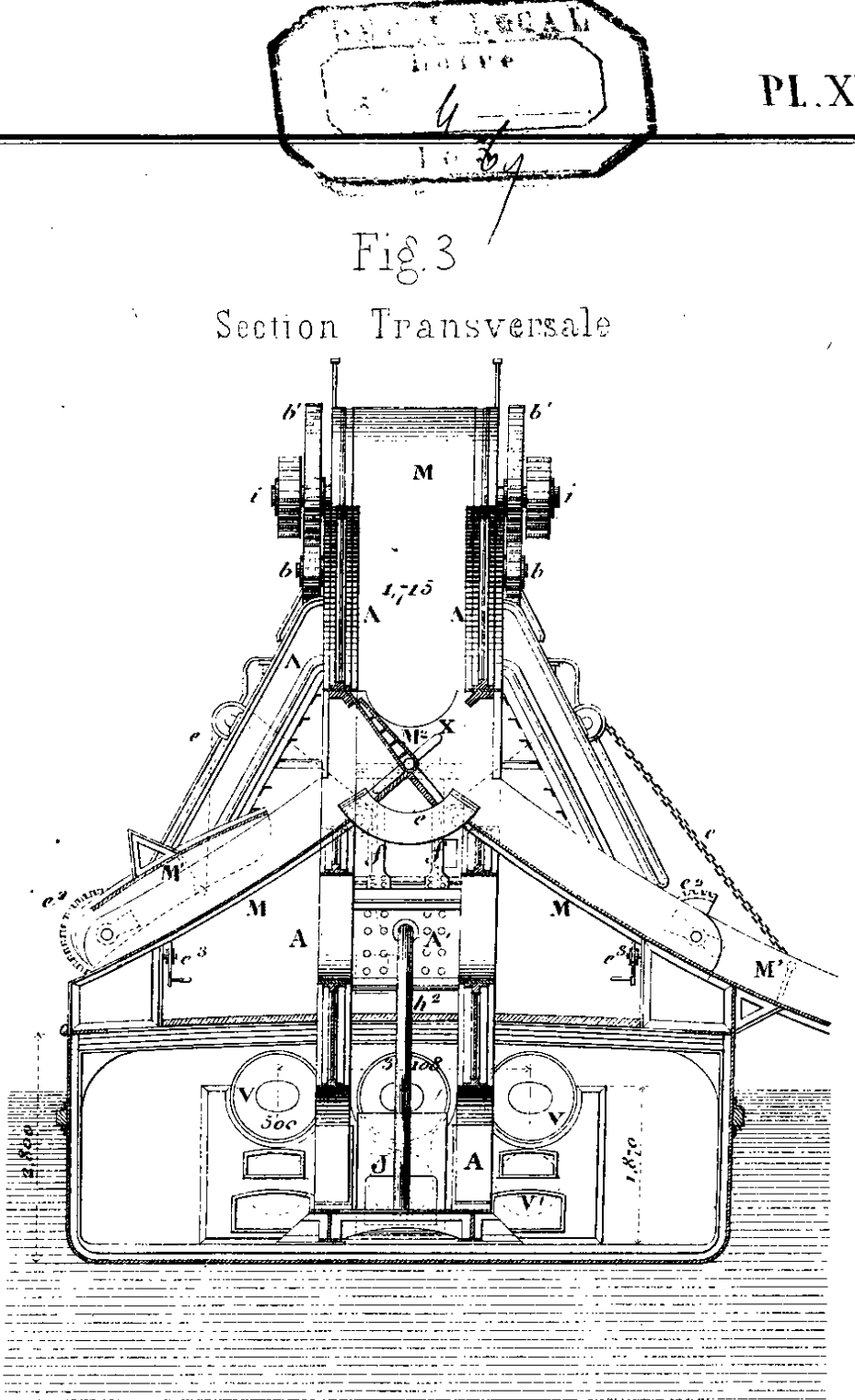


Fig. 3

Section Transversale

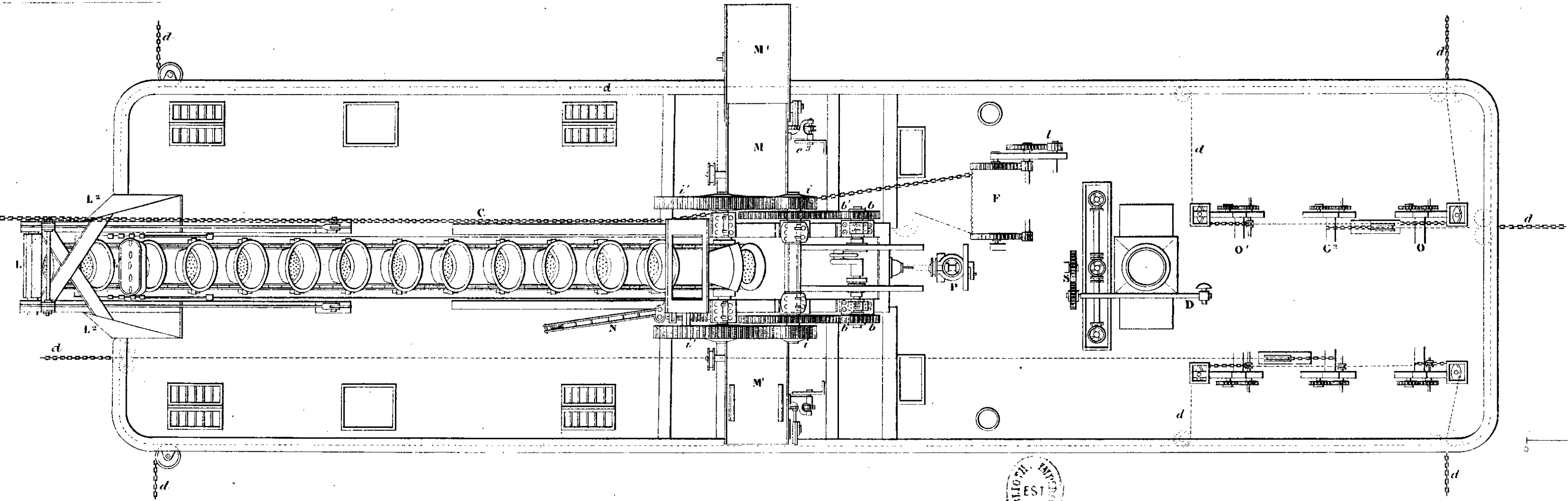


Fig. 2

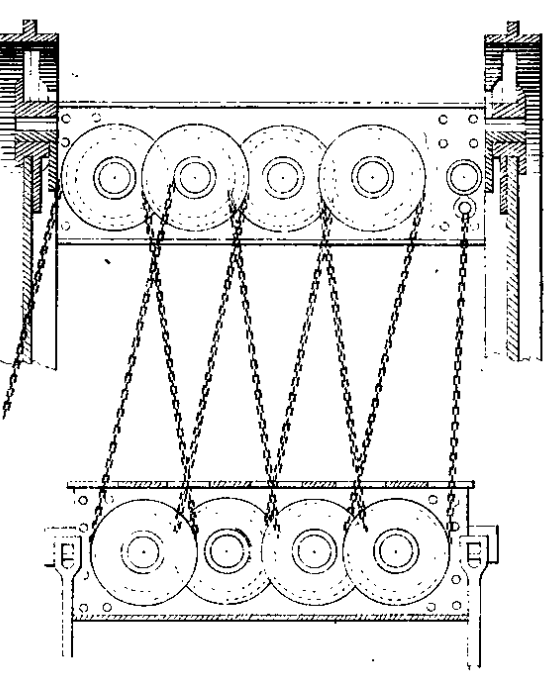
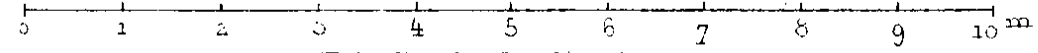


Fig. 4

Echelle des fig. 1, 2, 3.



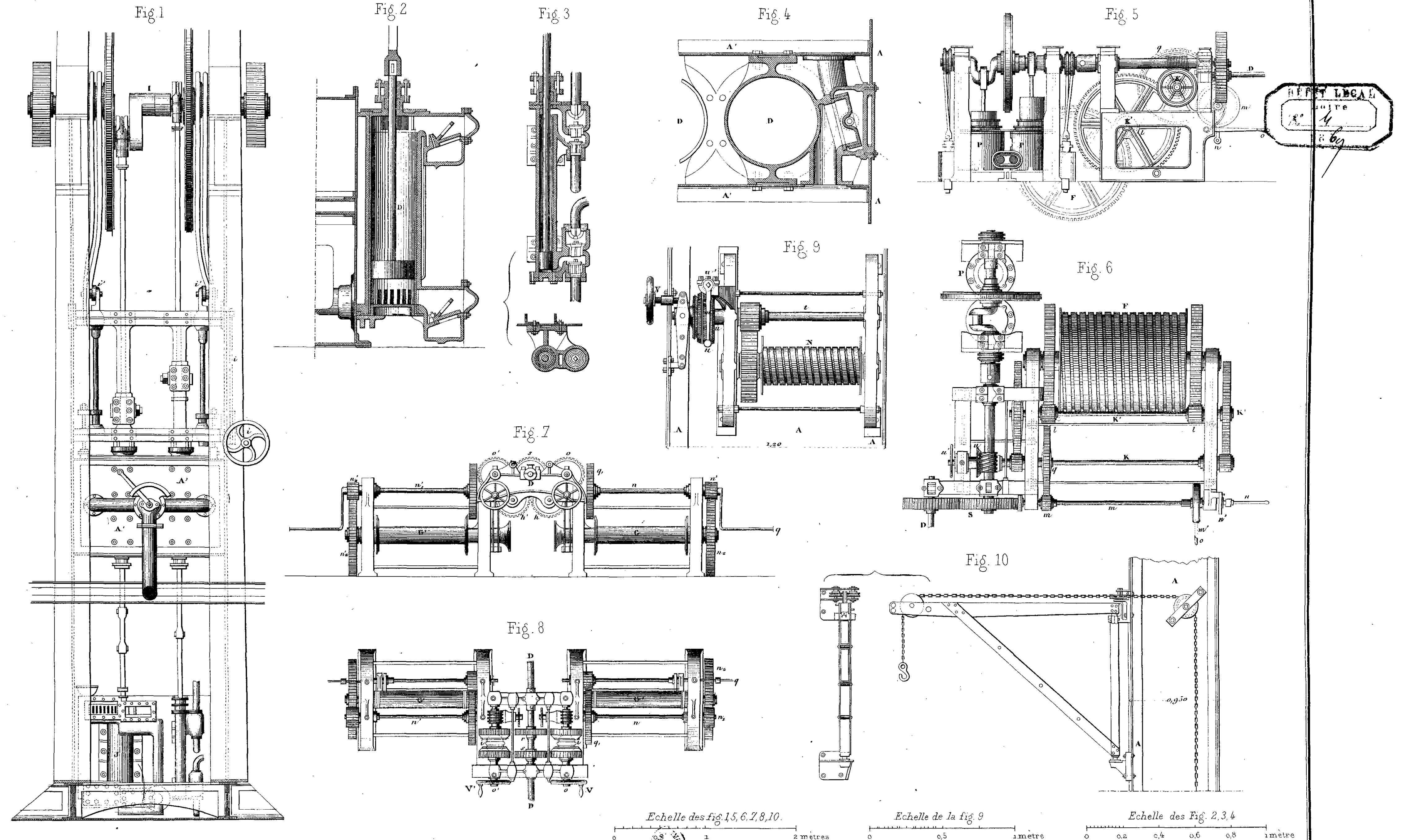
Echelle de la fig. 4







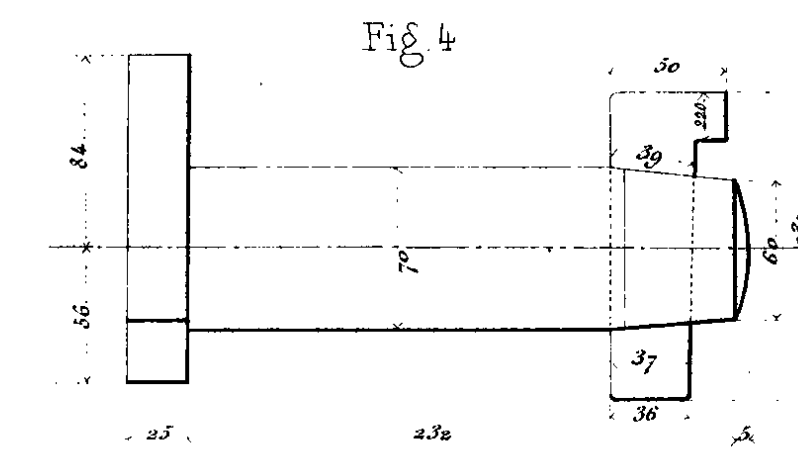
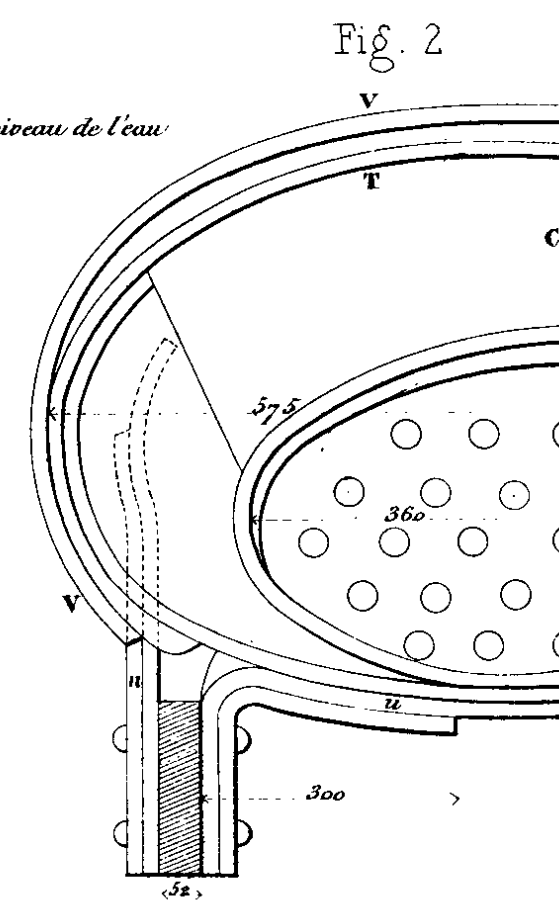
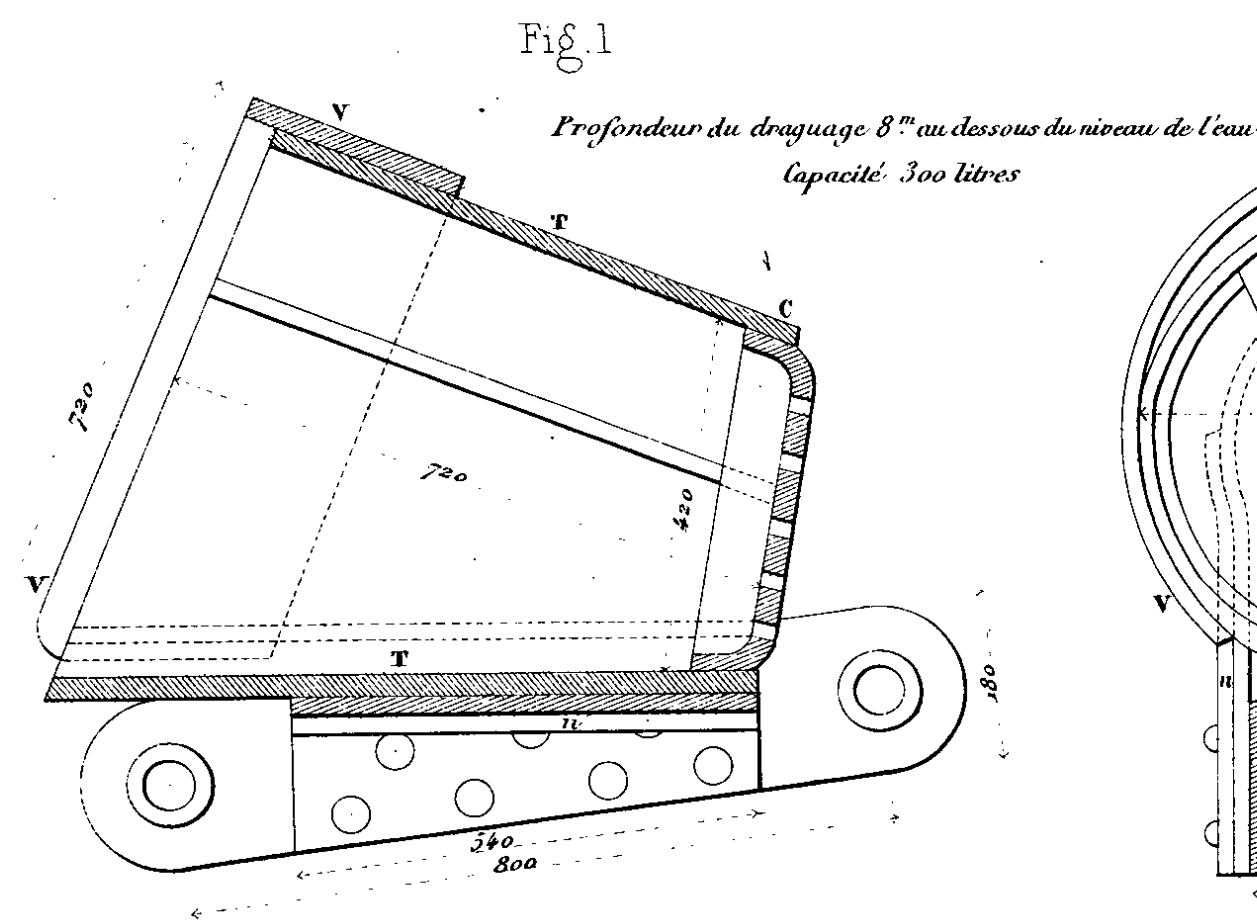




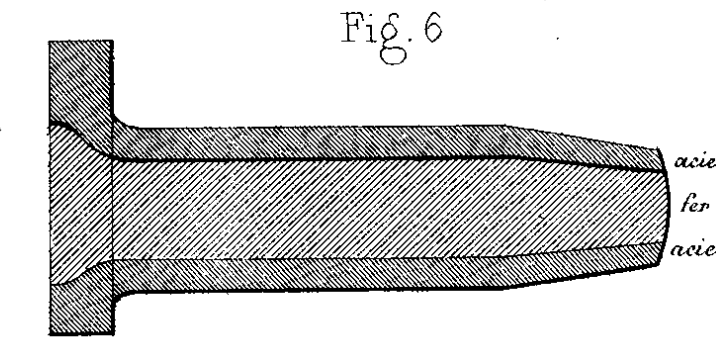
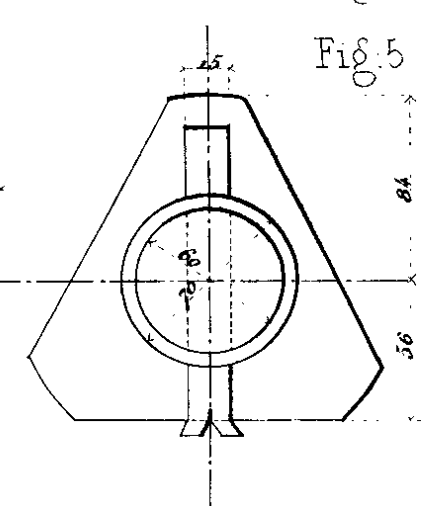








Boulon de Drague



Tambour supérieur de la grande drague

Fig. 8 Coupe suivant A.B.

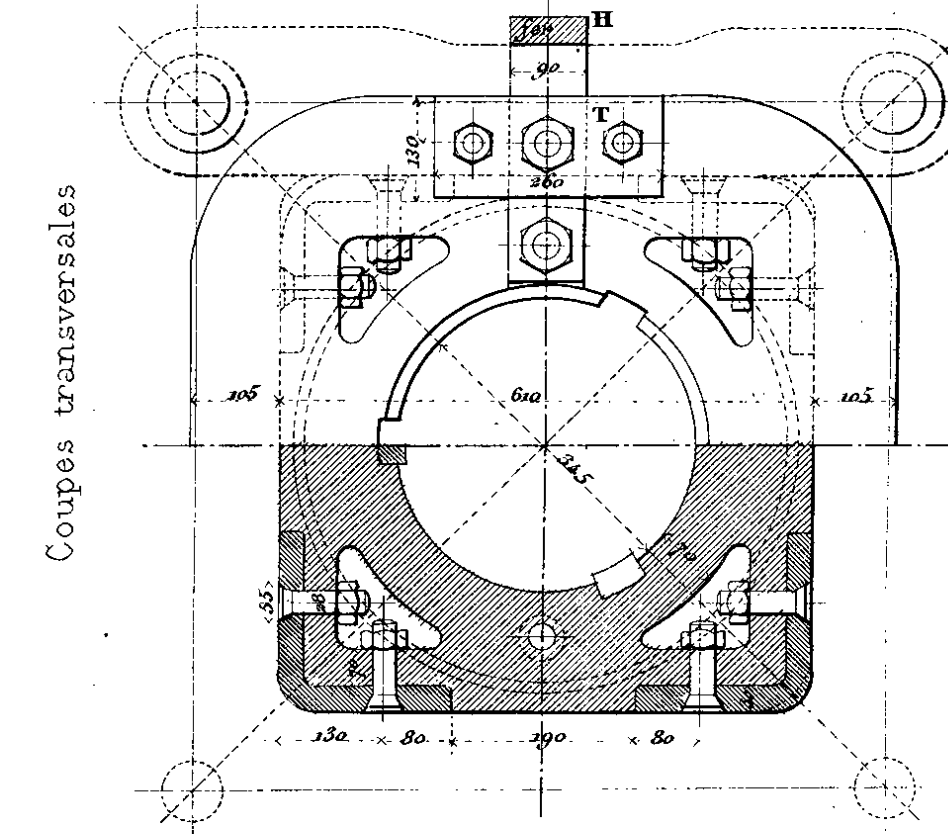
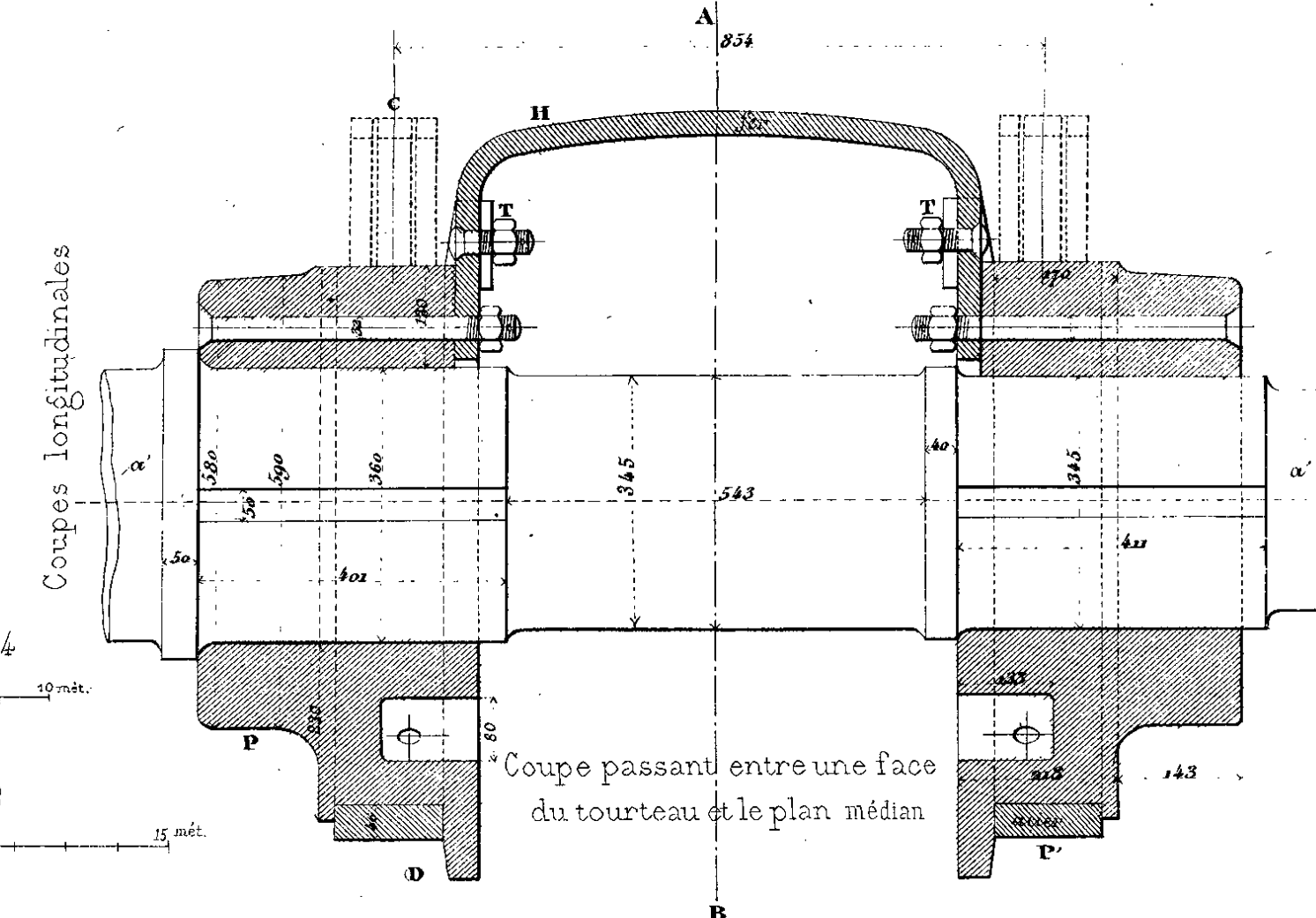


Fig. 7 Coupe suivant l'axe



Coupe passant entre une face du tourteau et le plan médian

Gabares à clapets de fond

Fig. 9. Coupe suivant l'axe du bateau

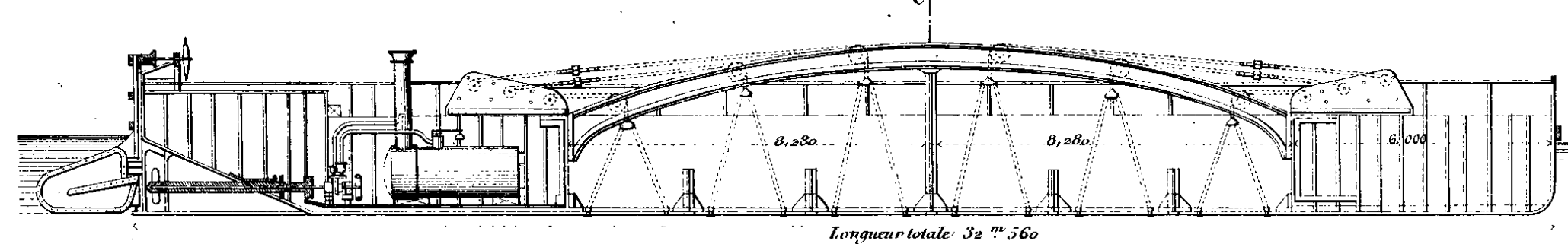
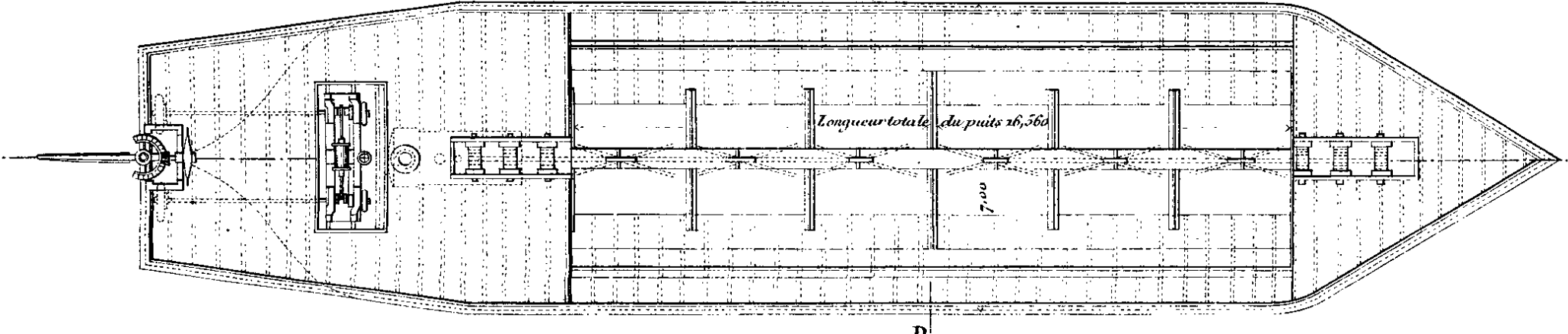


Fig. 10. Plan



Gabares à clapets latéraux

Fig. 12 Coupe suivant l'axe du bateau

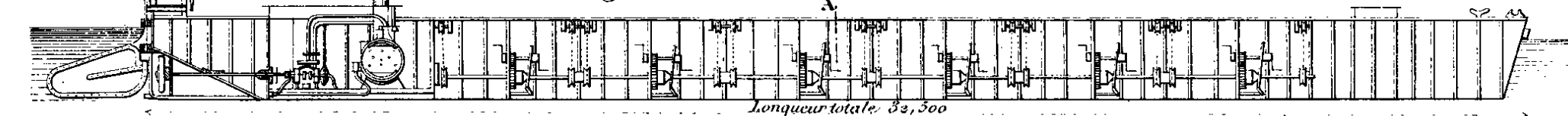


Fig. 13. Plan

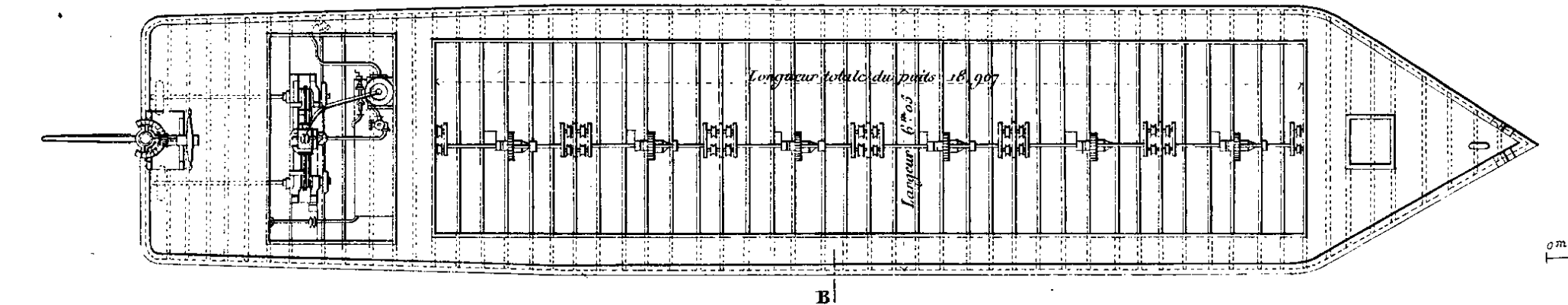
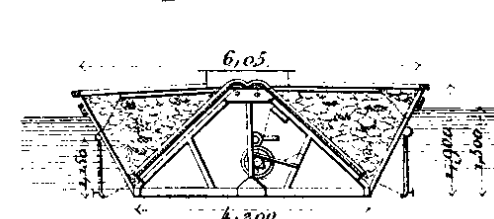
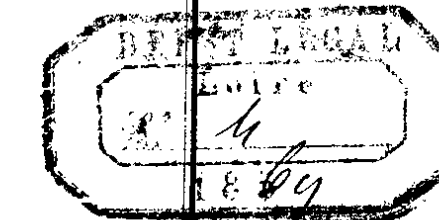


Fig. 14 Coupe suivant A.B.



Echelle des Fig. 9. 10. 11. 12. 13. 14

Echelle des Fig. 1. 2. 3. 4. 5. 6. 7. 8







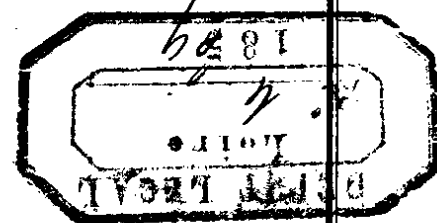
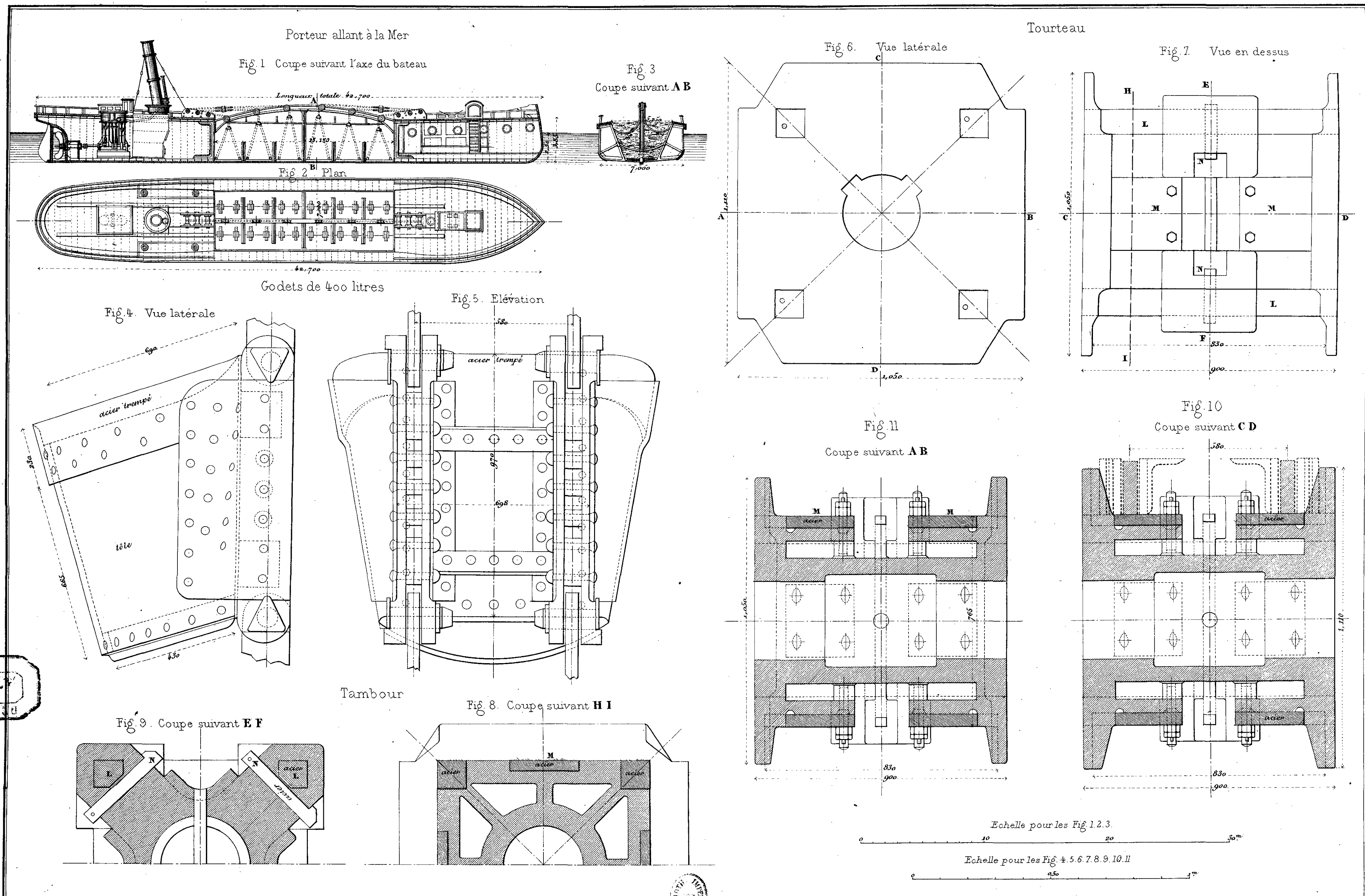


Echelle pour la Fig. 4.















Drague à long couloir

Fig. 1.  
Elévation

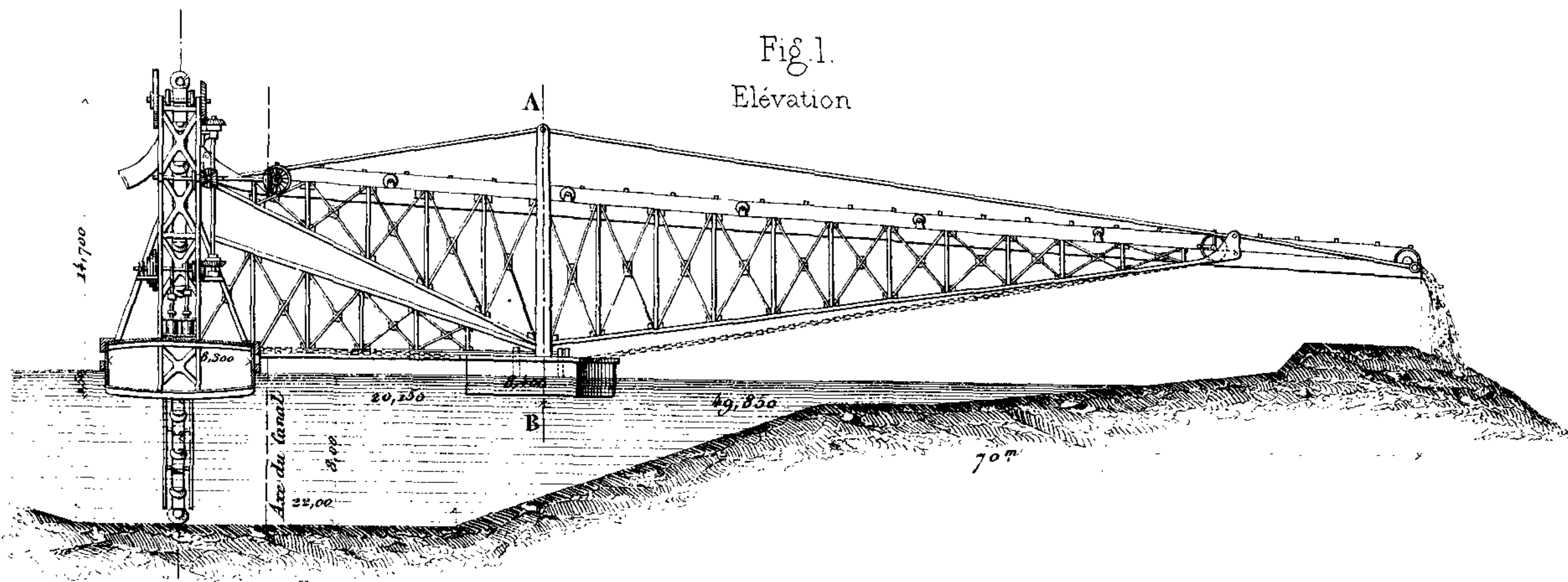


Fig. 3.  
Coupe suivant A.B

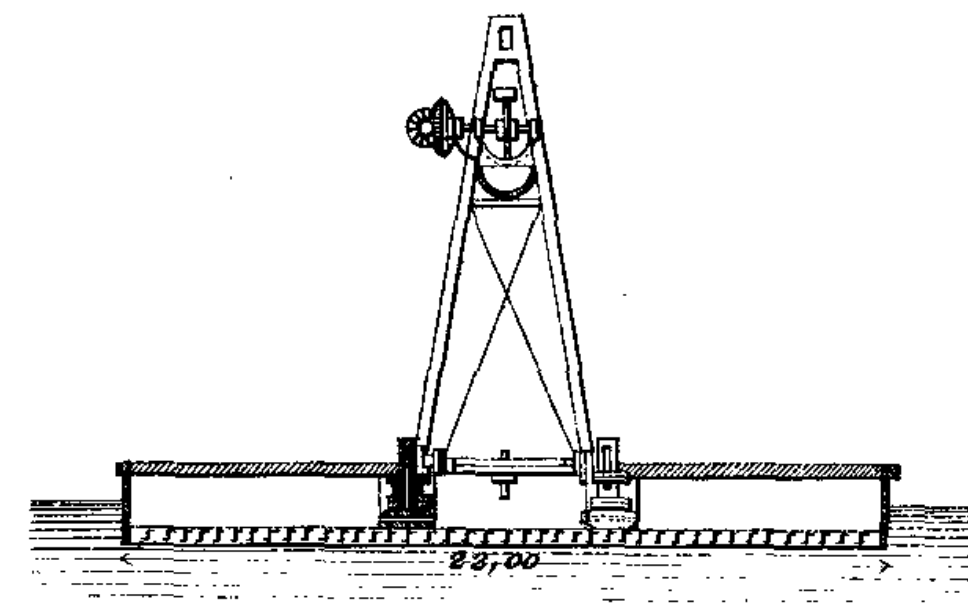
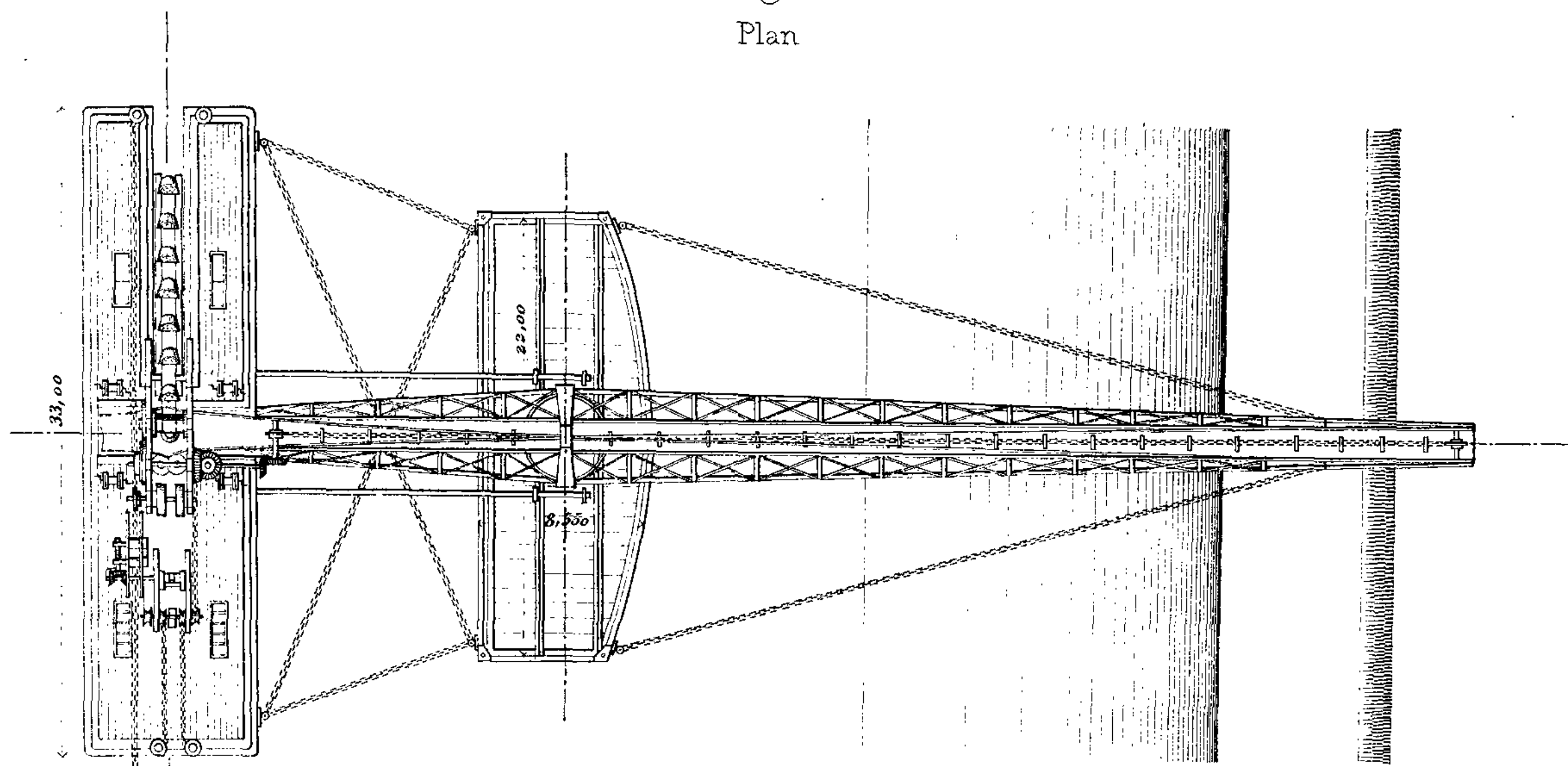


Fig. 2.  
Plan



Appareil Elevateur

Fig. 4.  
Elévation

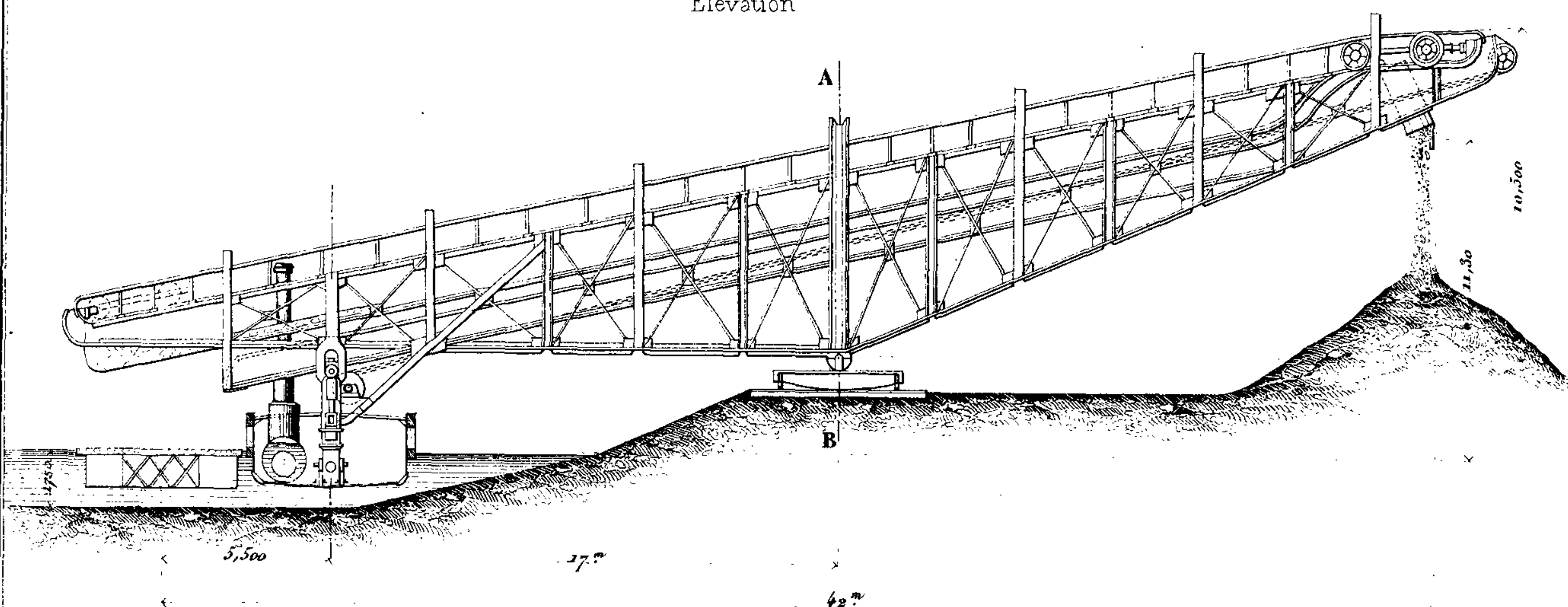


Fig. 6.  
Coupe suivant A.B

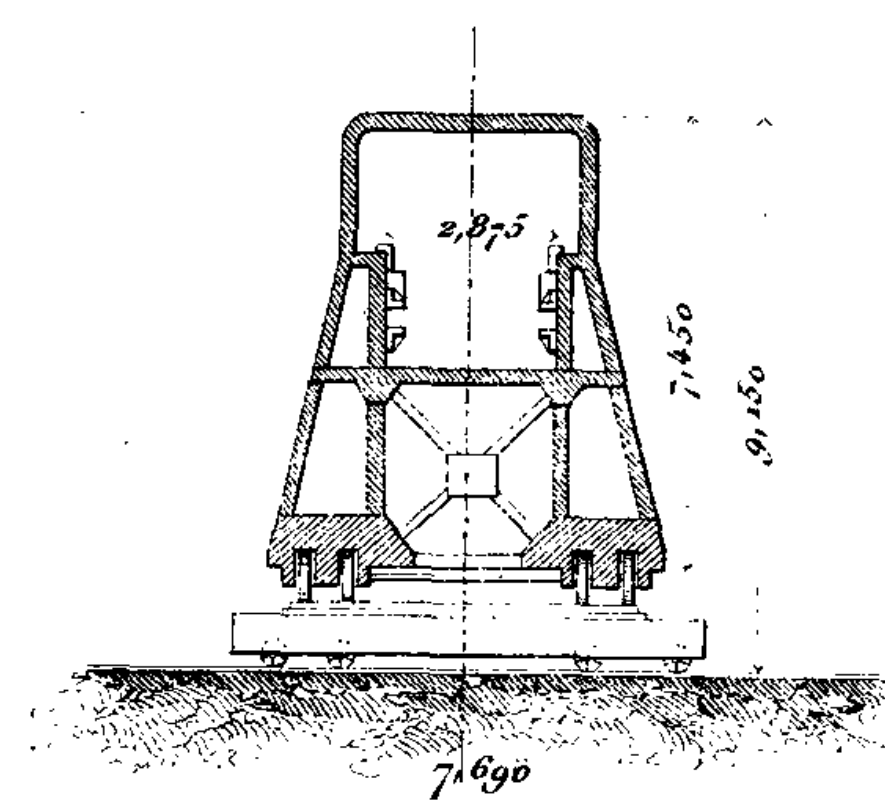
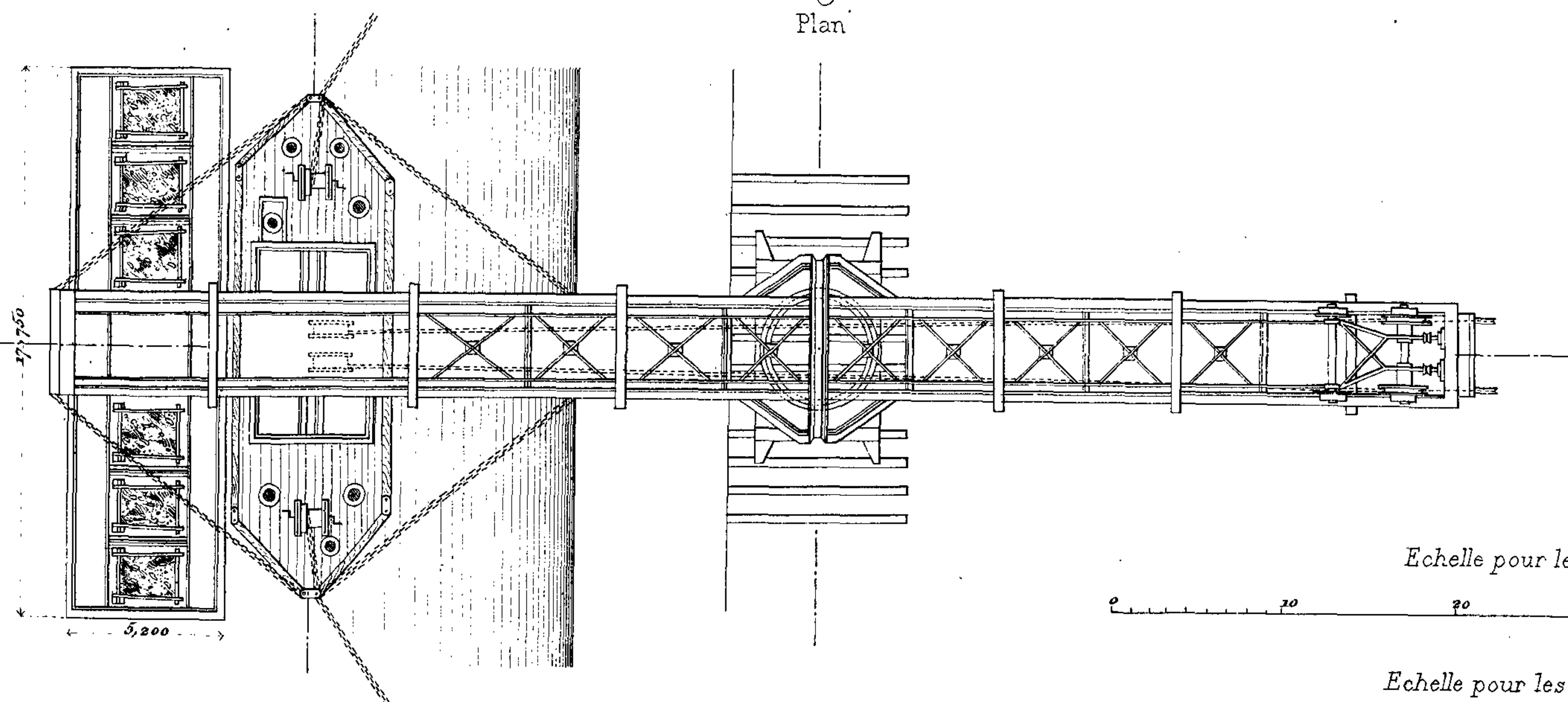
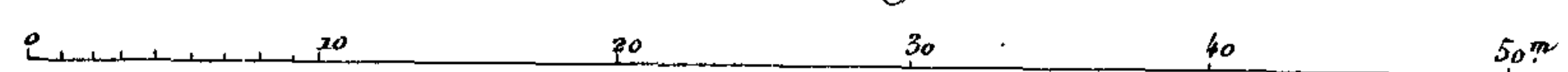


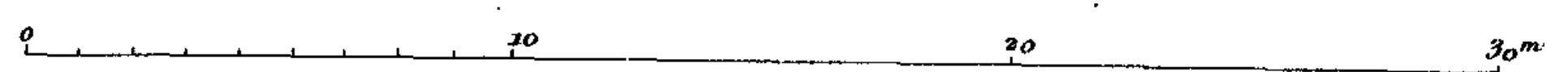
Fig. 5.  
Plan



Echelle pour les Fig. 1. 2. 3.



Echelle pour les Fig. 4. 5. 6.

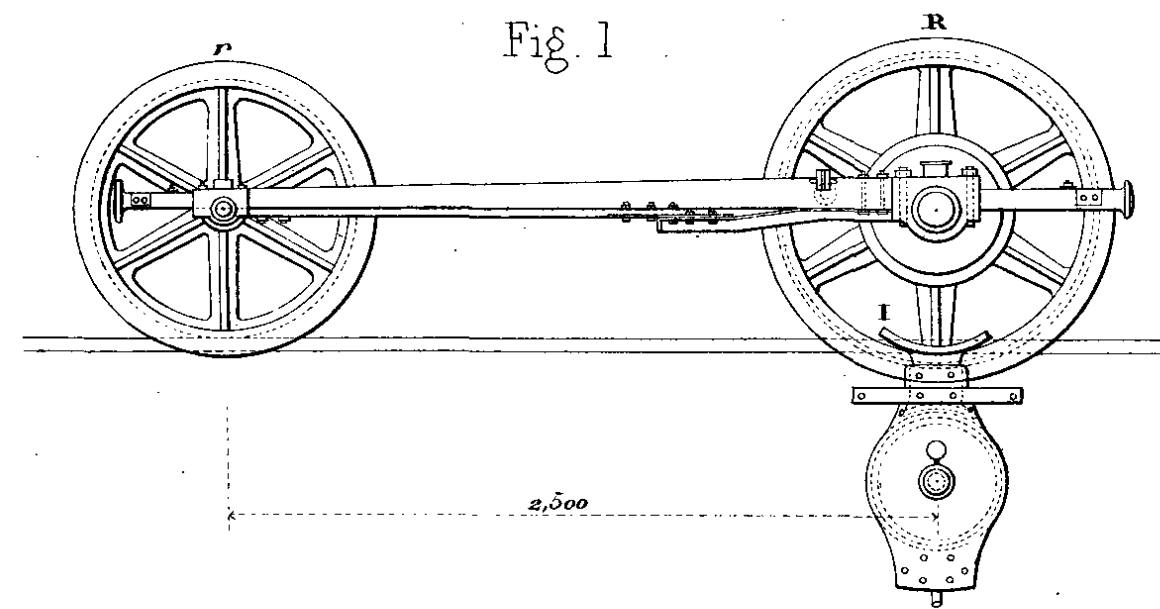




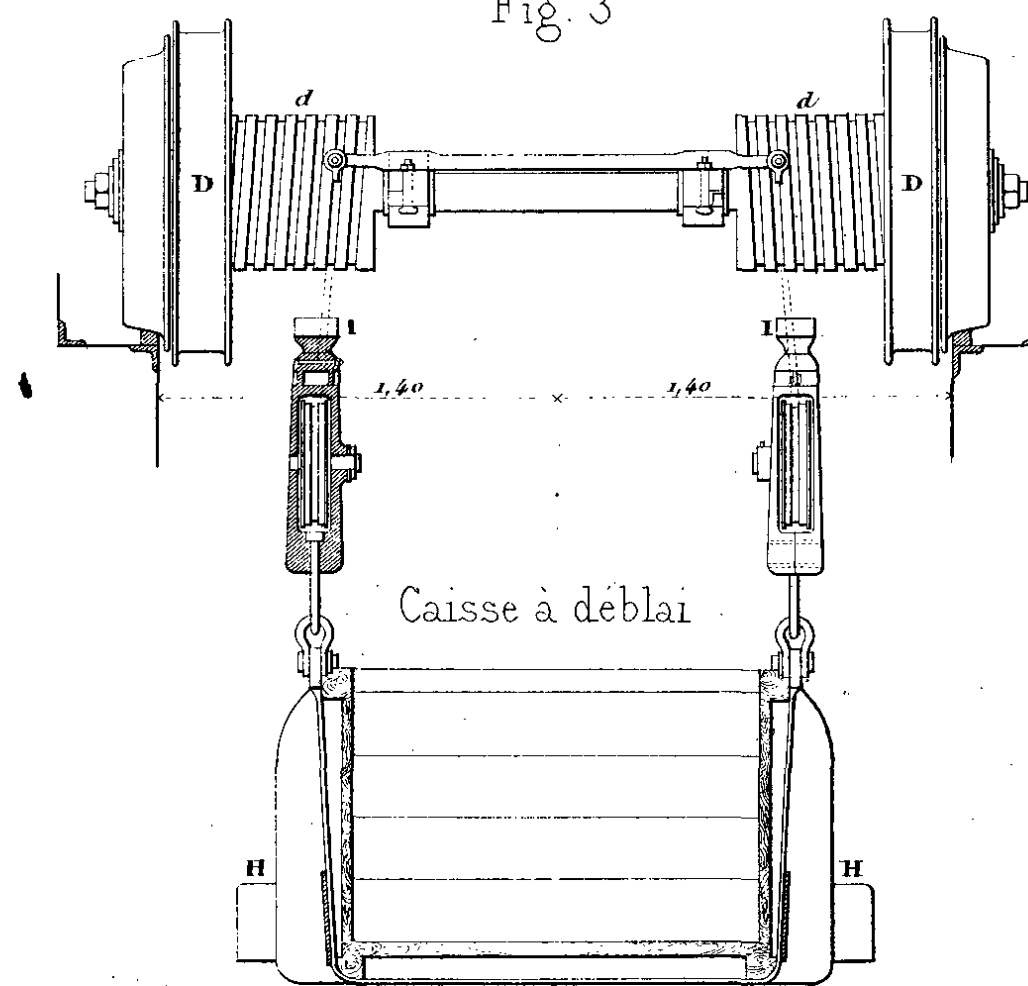




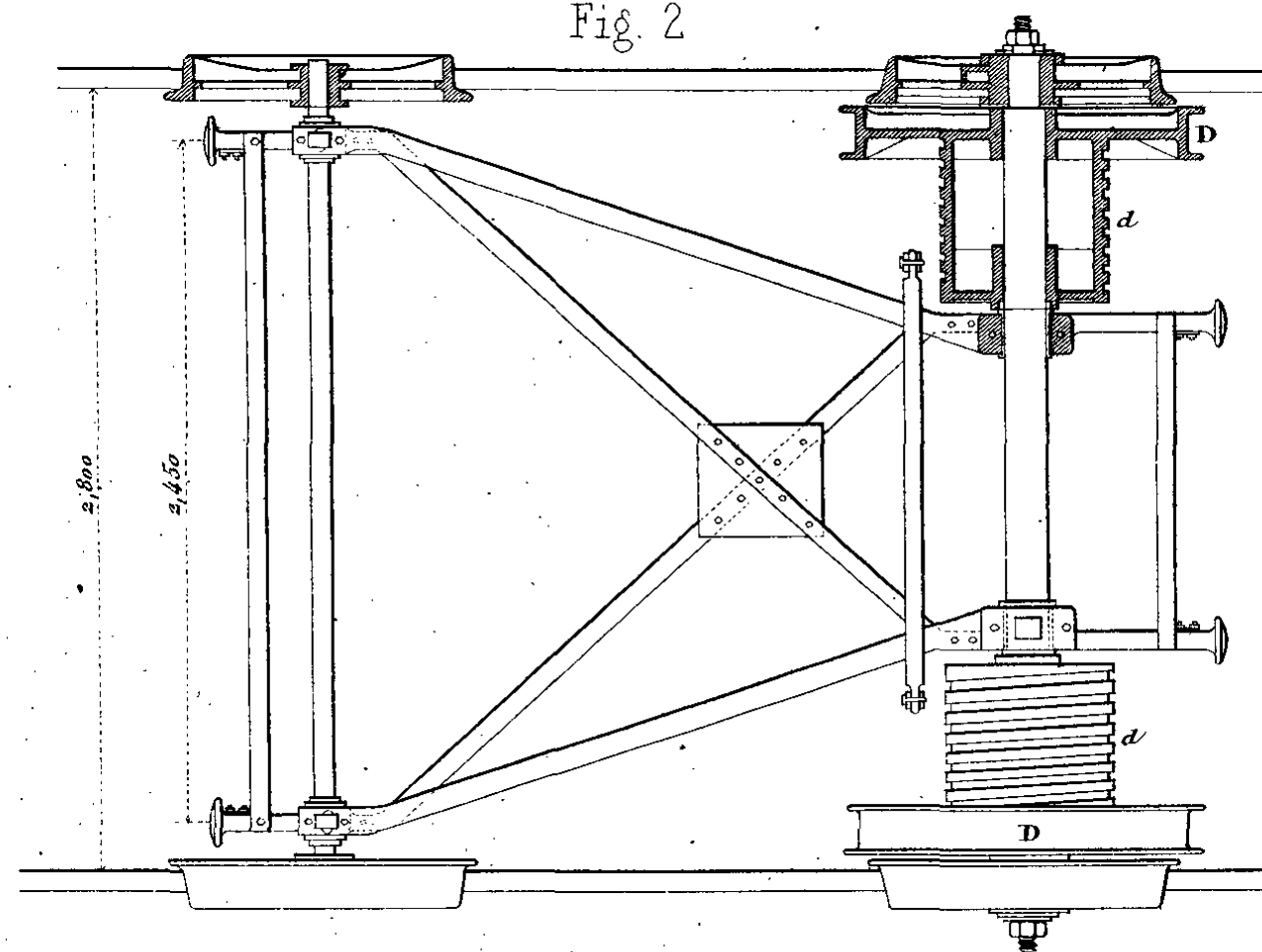
Chariot - Elevation  
Fig. 1



Vue latérale et Coupe transversale  
Fig. 3



Plan et Coupe horizontale  
Fig. 2



Ancres-herses pour l'amarrage des dragues.

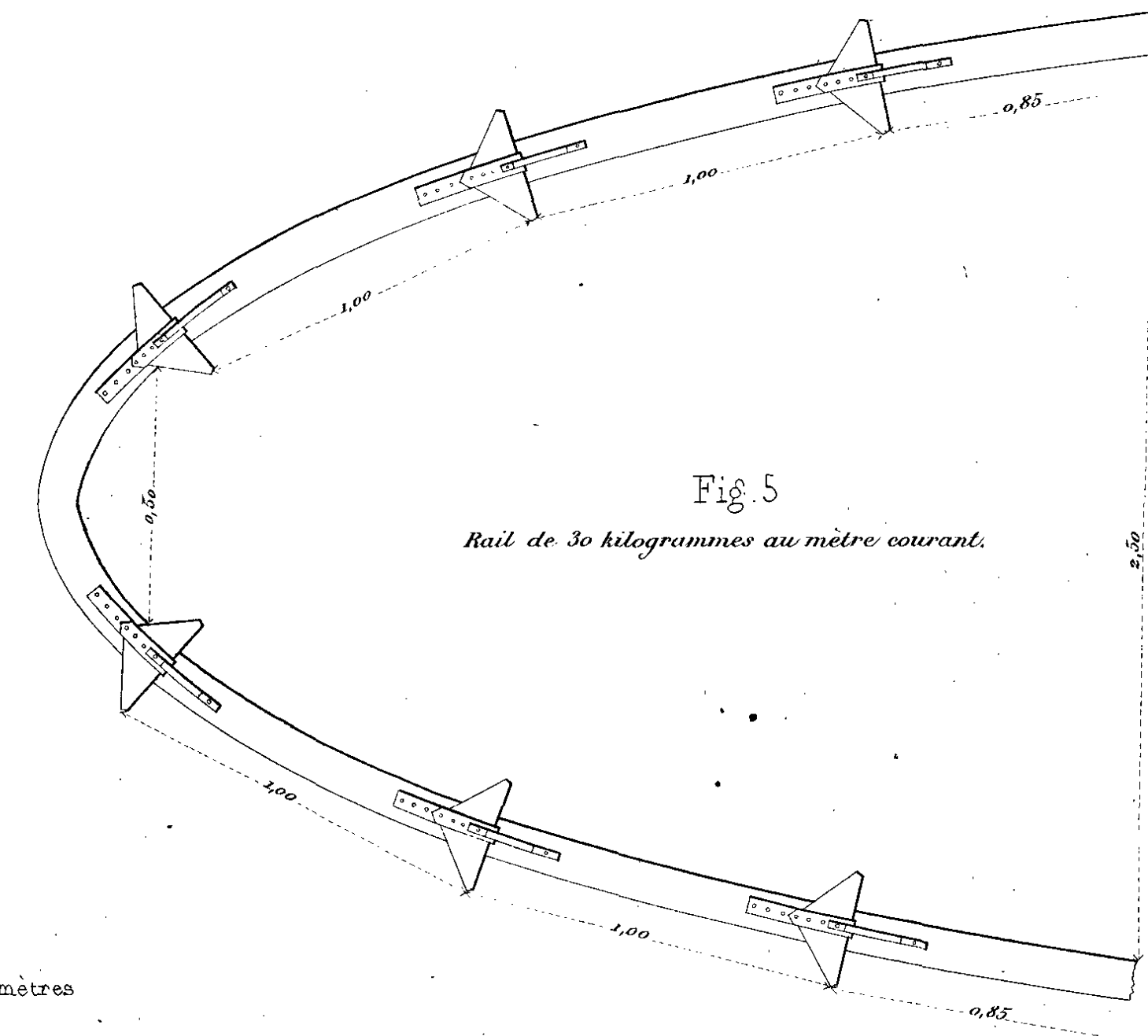


Fig. 5

Rail de 30 kilogrammes au mètre courant.

Echelle pour les Fig. 1, 2, 3.

0 0,5 1 2 3 mètres

Echelle pour la Fig. 5.

0 0,25 0,5 0,75 1 2 mètres

Echelle pour les Fig. 6, 7.

0 0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1 mètre

Fig. 4

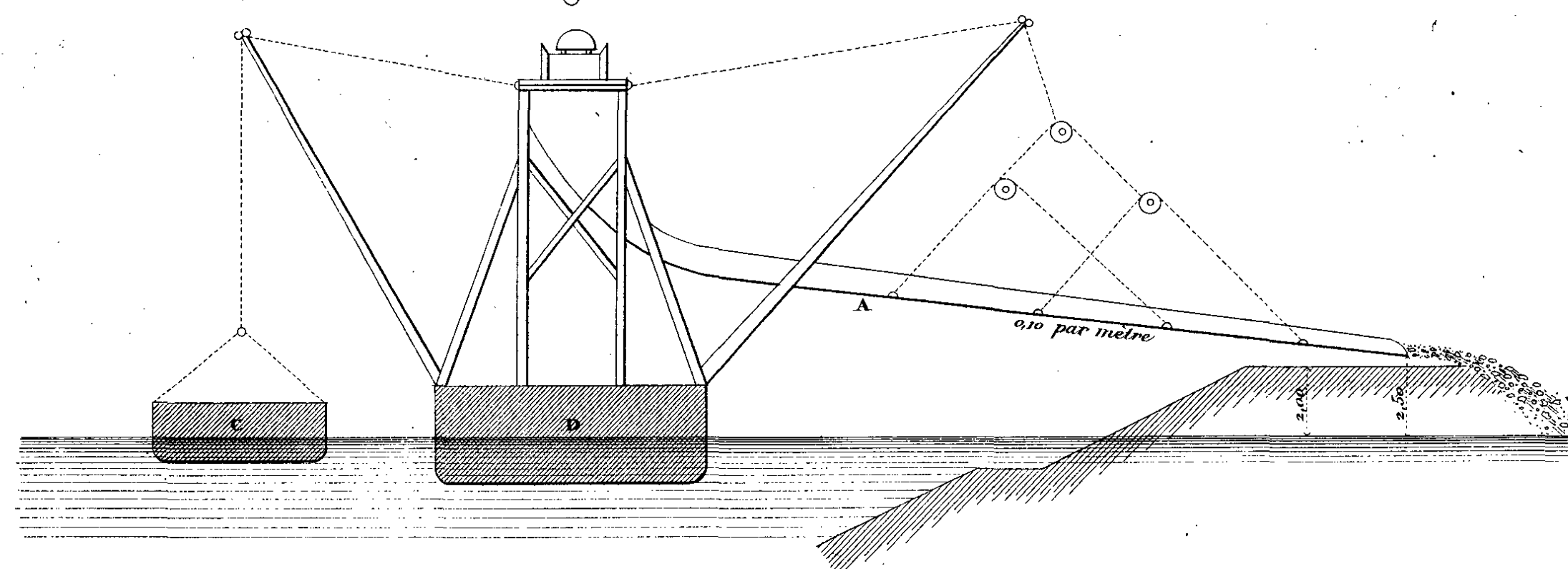
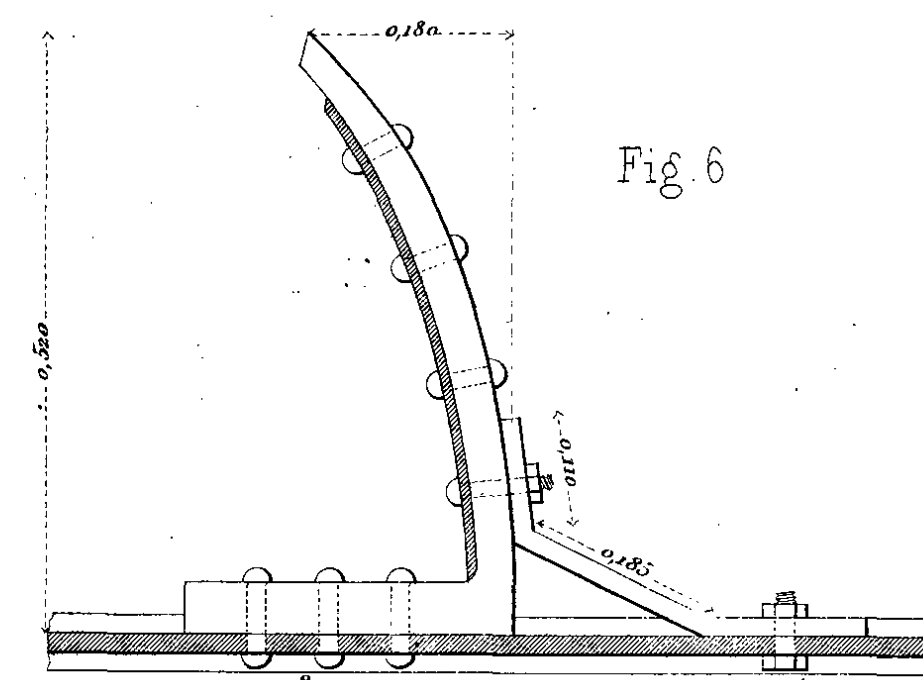
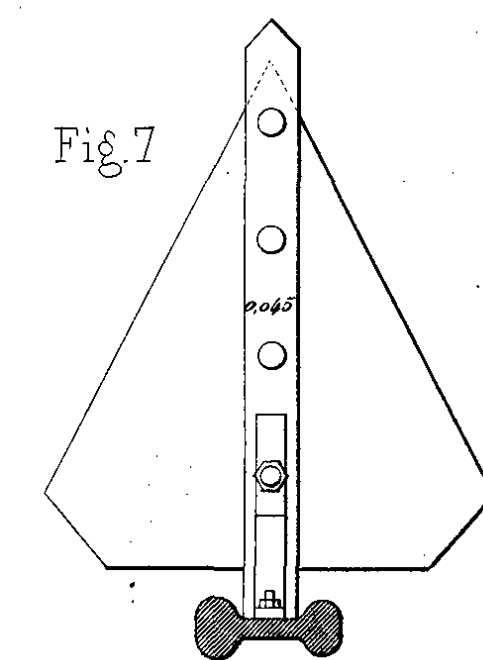


Fig. 6

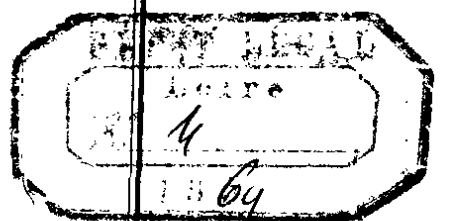


Vue latérale d'une dent

Fig. 7



Vue d'arrière













# Bulletin de la Société de l'industrie minérale. Atlas



Société de l'industrie minérale (France). Auteur du texte. Bulletin de la Société de l'industrie minérale. Atlas. 1875.

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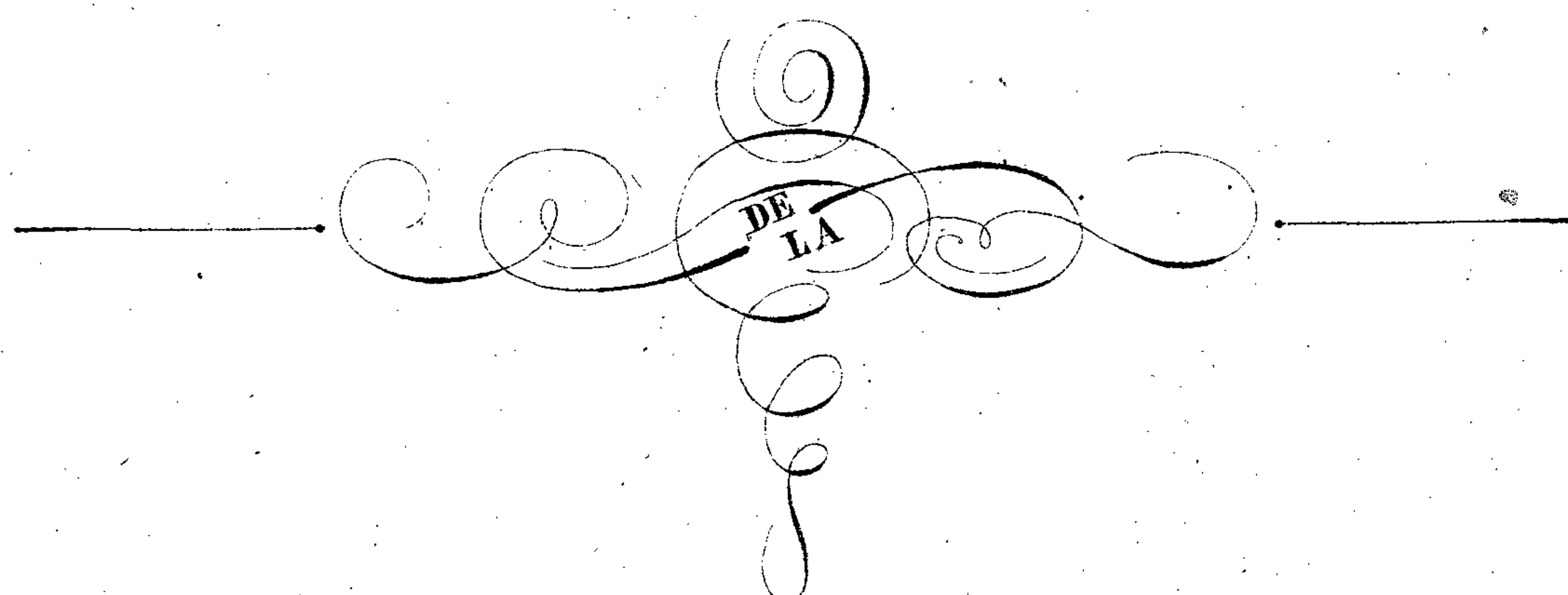




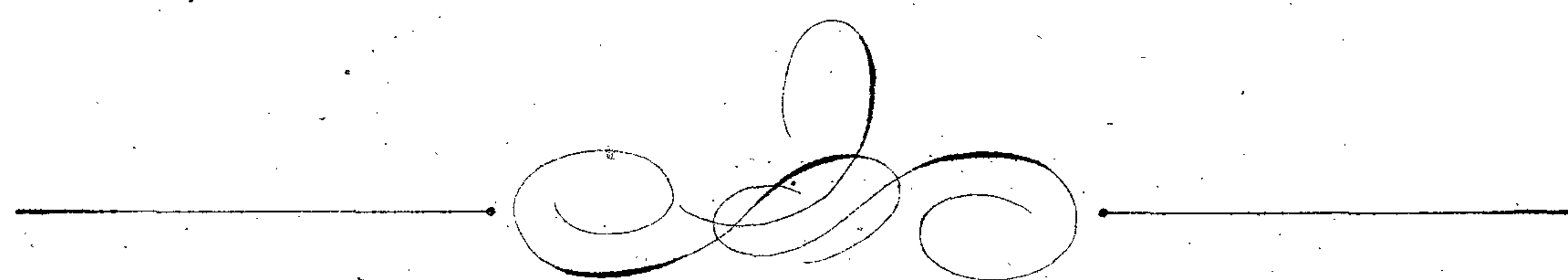




# ATLAS



## SOCIÉTÉ DE L'INDUSTRIE MINÉRALE

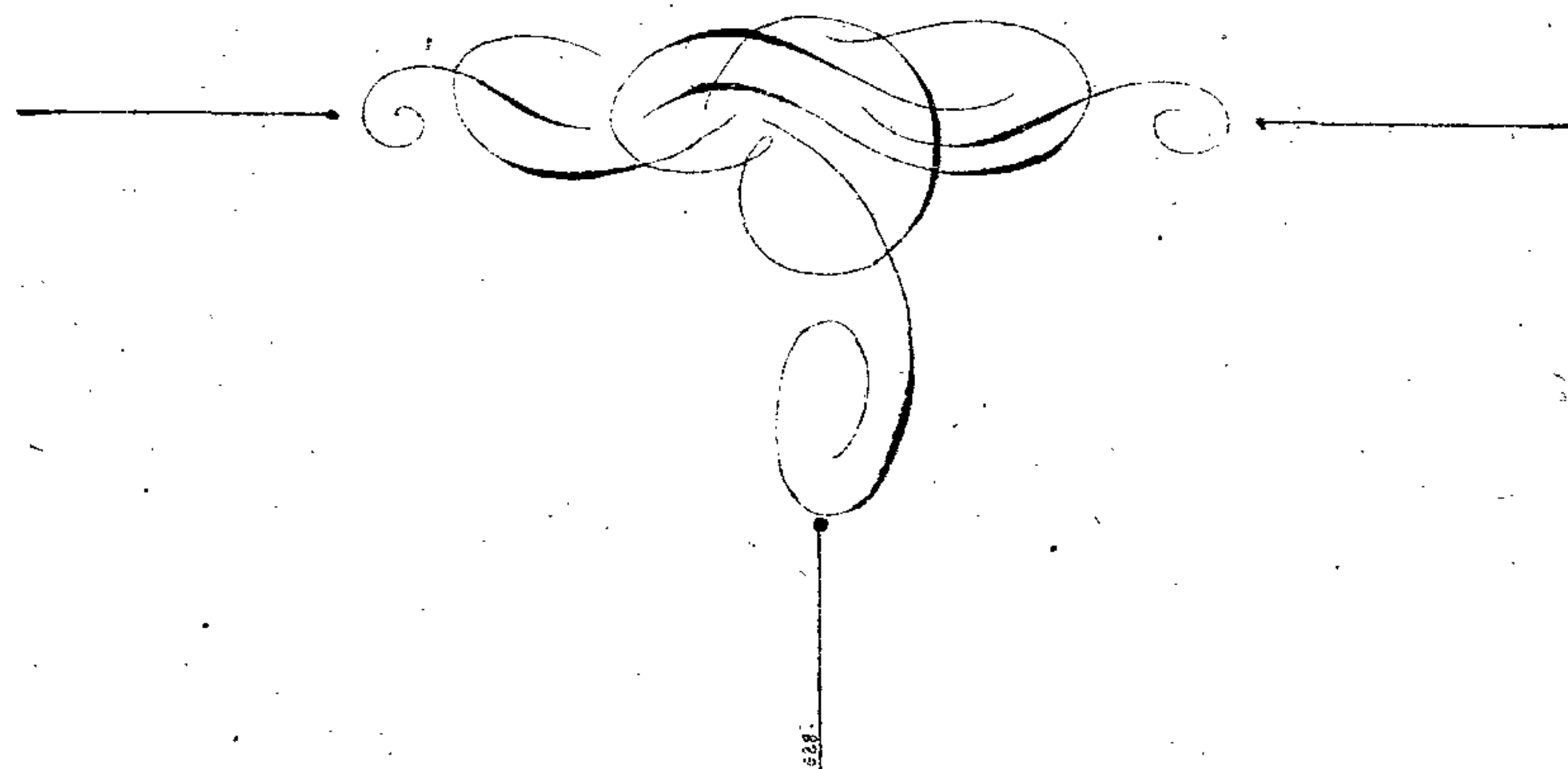


2<sup>ème</sup> SÉRIE

TOME 4

2<sup>me</sup> Livraison

1875



IMPRIMERIE, PAPETERIE & LITHOGRAPHIE

**FRÉDÉRIC LANTZ**

RUE DE LA LOIRE, 4

ST ETIENNE (Loire)















# LES DYNAMITES

Extrait des Mémoires de M<sup>r</sup> le Capitaine Fritsch.  
par M<sup>r</sup> A. Henry, Ingénieur des mines.

Fig 1

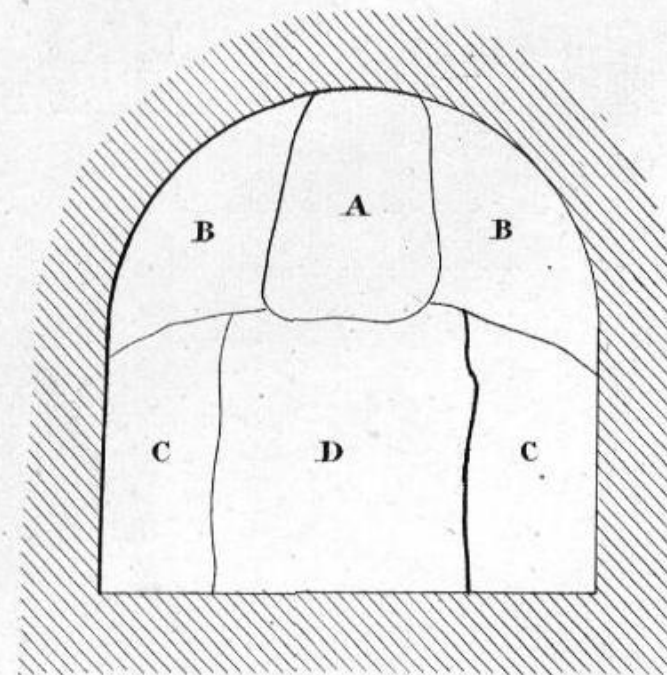


Fig 2

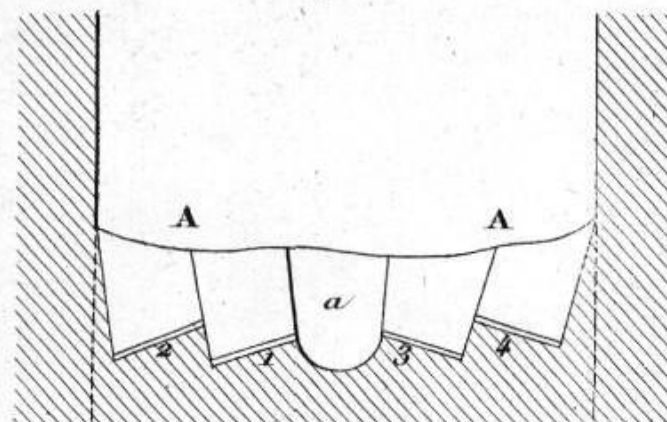


Fig 3

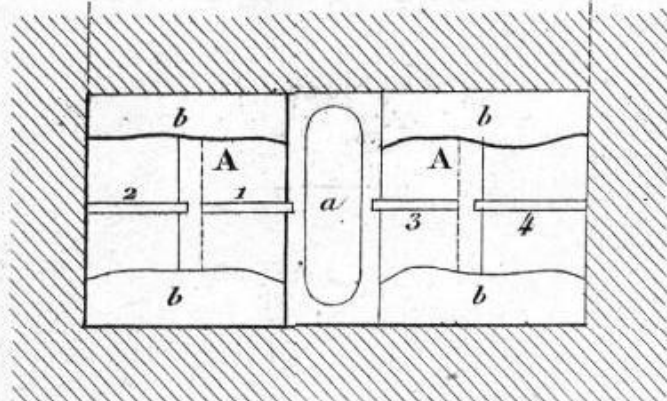


Fig 10

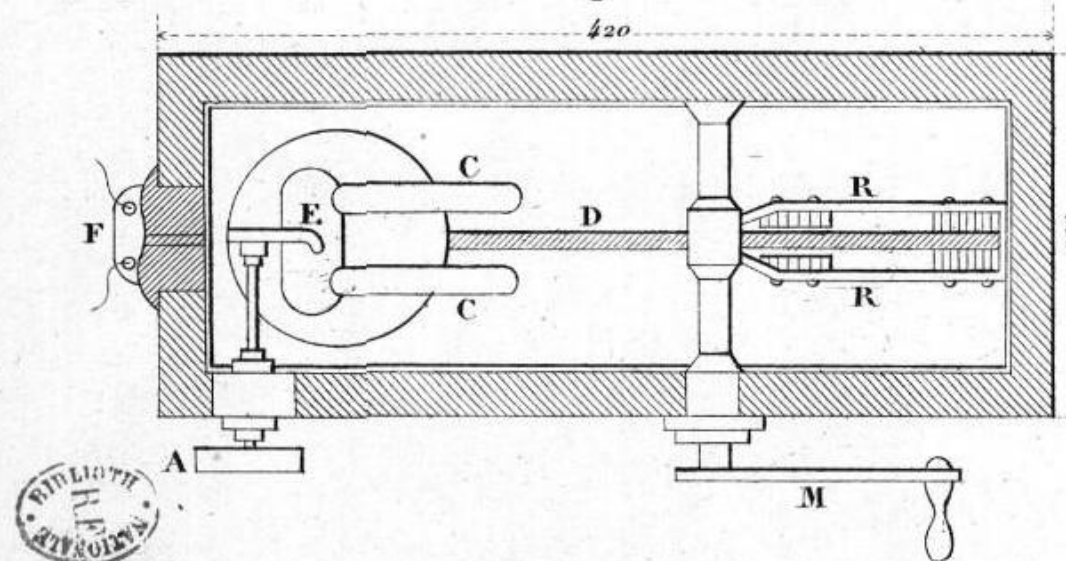


Fig 4

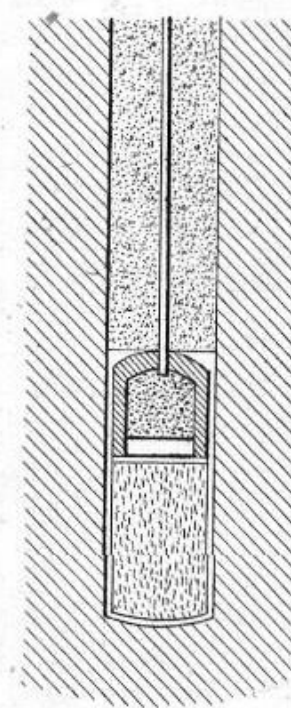


Fig 5

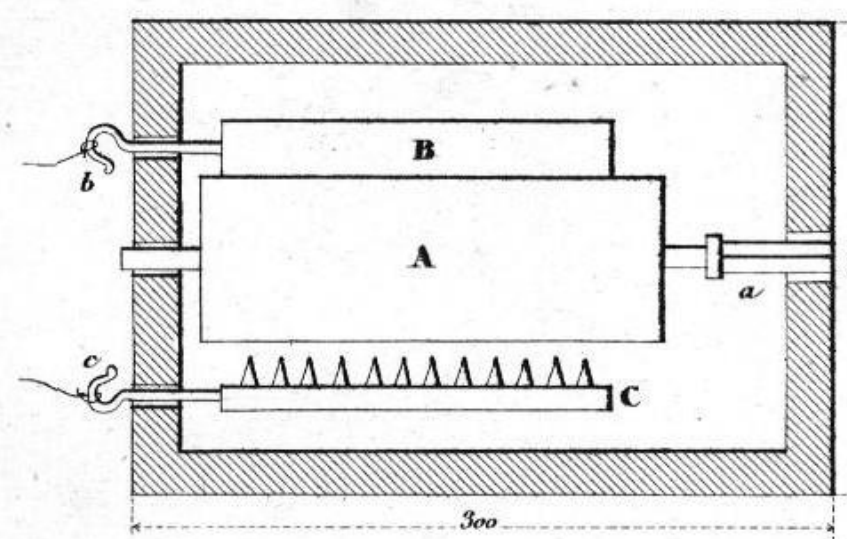


Fig 6

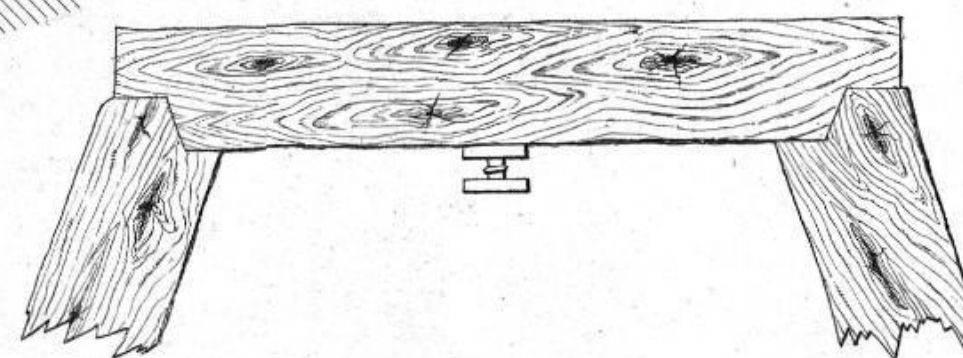


Fig 7

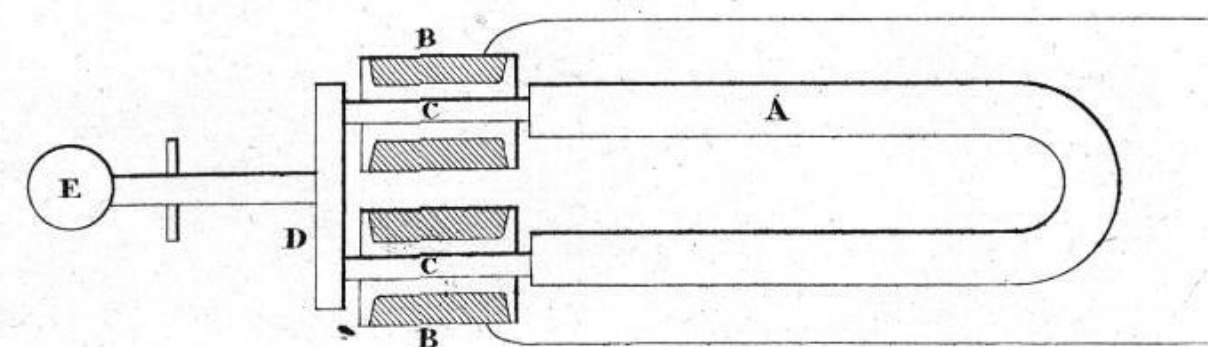


Fig 8

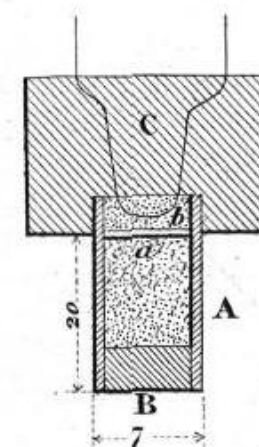


Fig 9

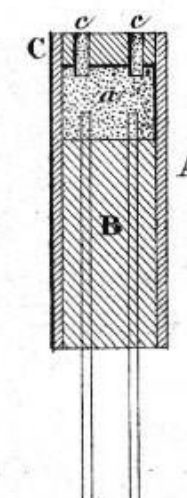
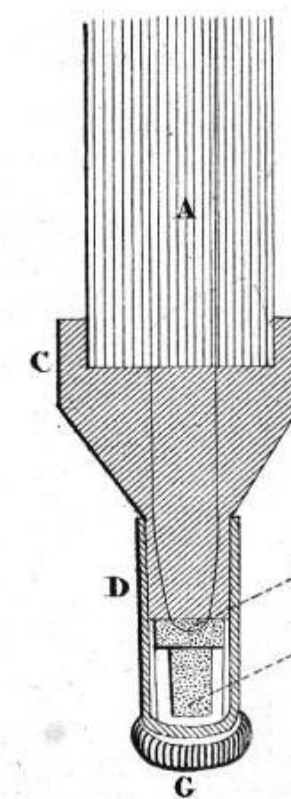


Fig 11



## APPAREIL A DOSER LE ZINC.

Fig 12

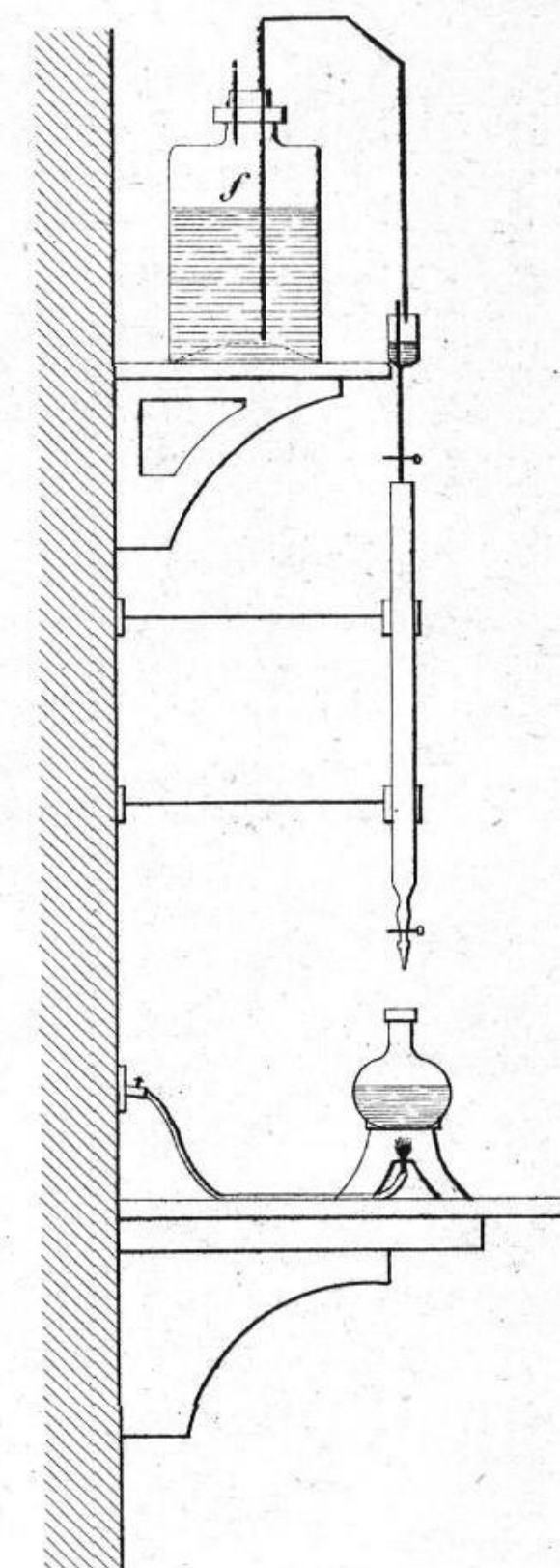
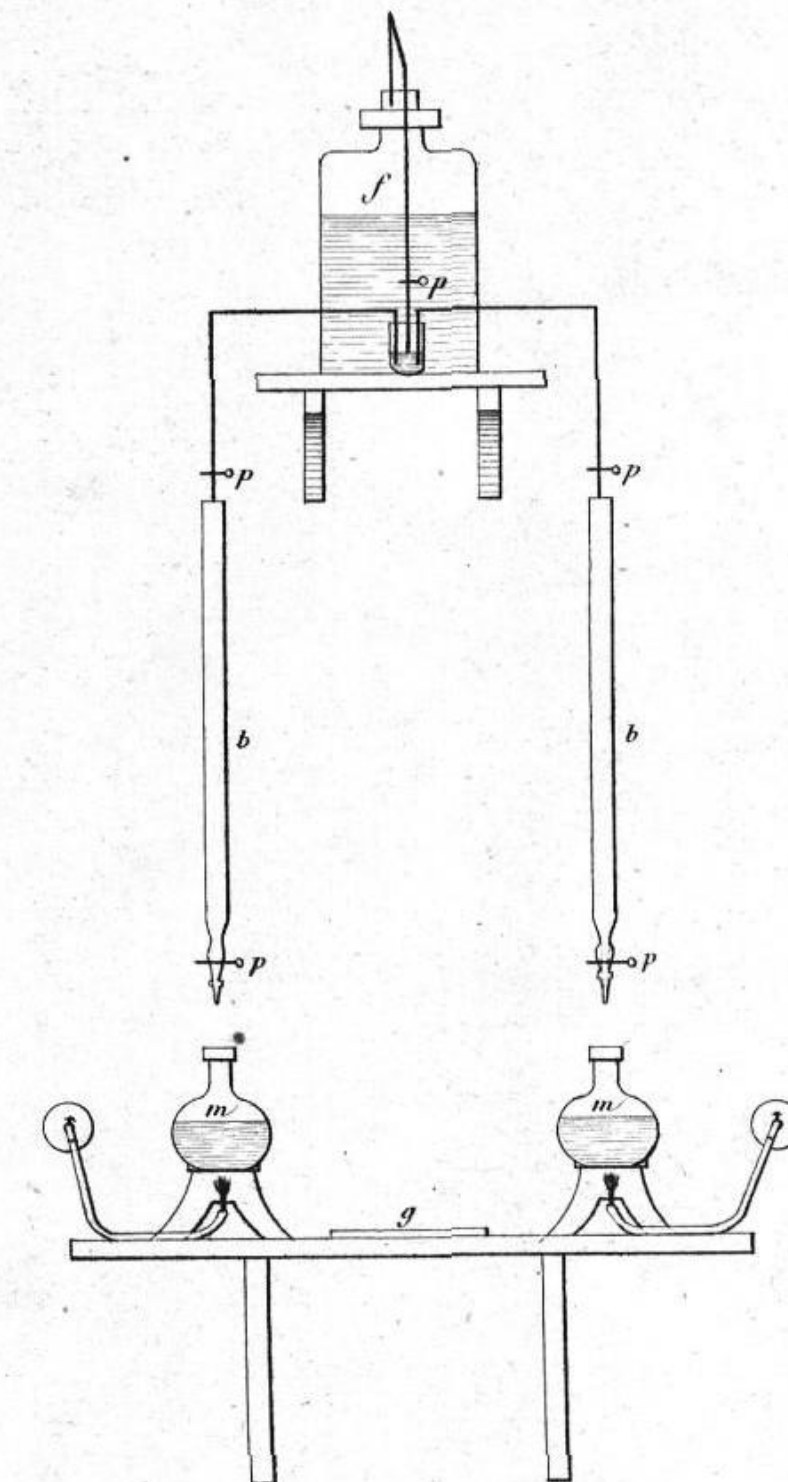
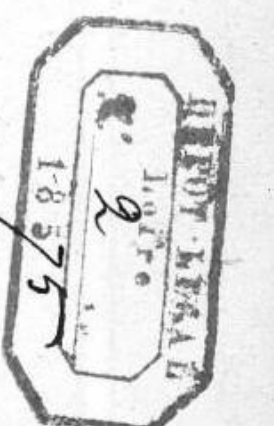


Fig 13



*f, f'* Flacon jaune contenant le sulfure de Sodium.  
*b, b* Burettes Mohr graduées en 1/10 de cube.  
*p, p* Pinces sur tuyau en caoutchouc pour l'écoulement du titre.  
*m, m* Matras contenant la liqueur à titrer.  
*g* Glace pour observer la couleur du grumeau par réflexion devant l'opérateur.



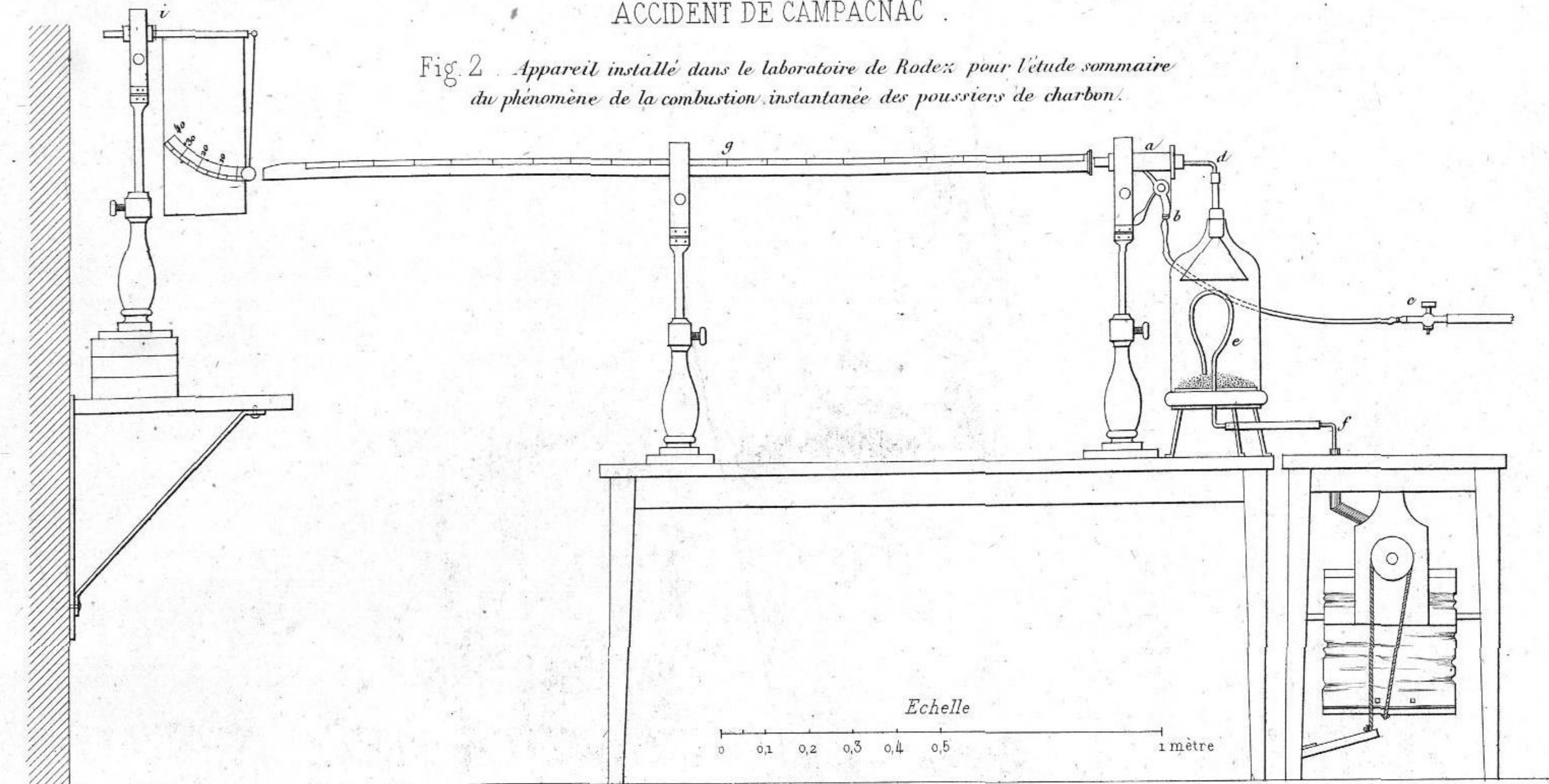






ACCIDENT DE CAMPACNAC

Fig. 2. Appareil installé dans le laboratoire de Rodex pour l'étude sommaire du phénomène de la combustion instantanée des poussières de charbon.



MINE DE CAMPAGNAC

Fig. 1. — Plan partiel.  
Accident du 2 Novembre 1874.

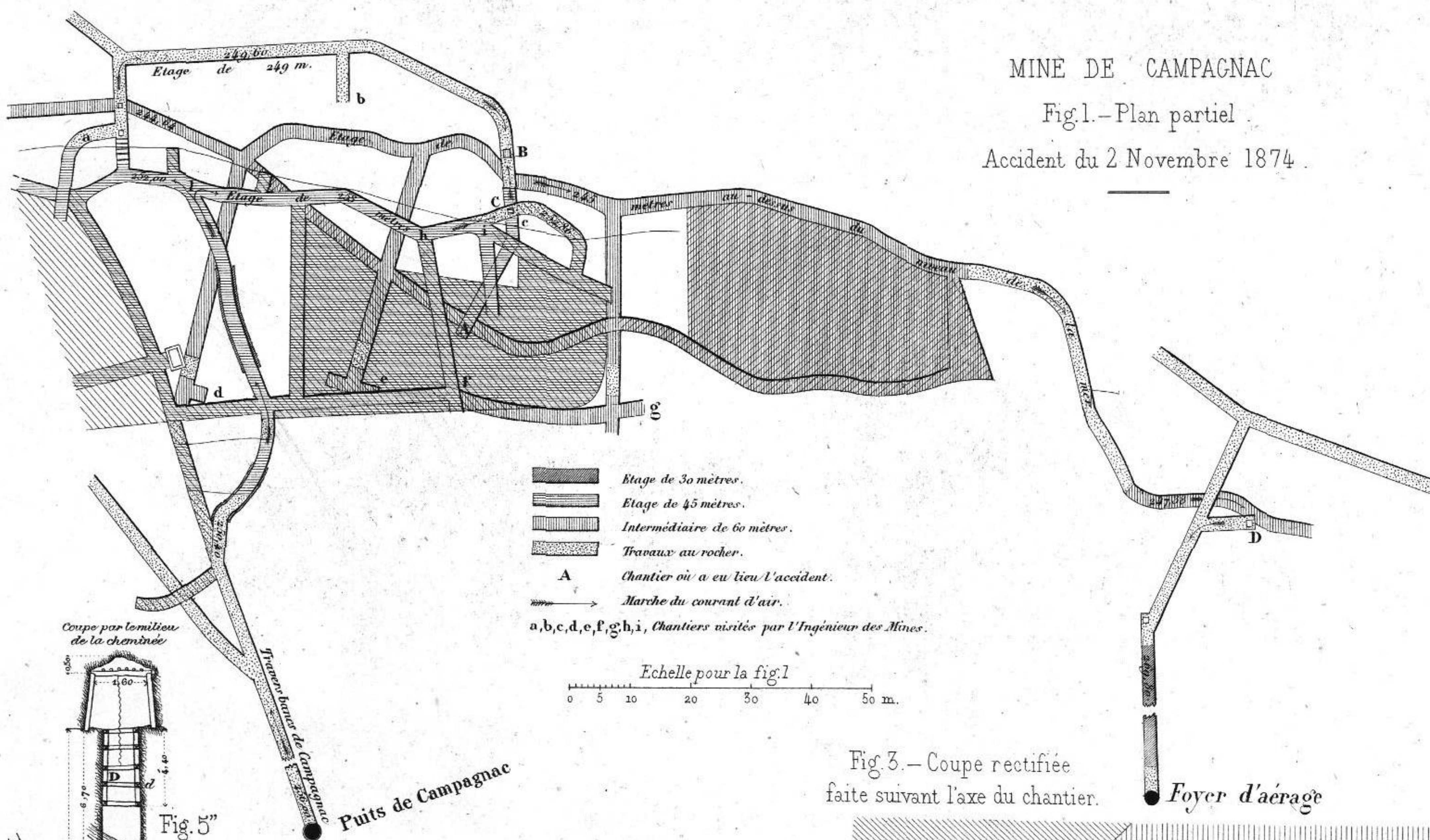
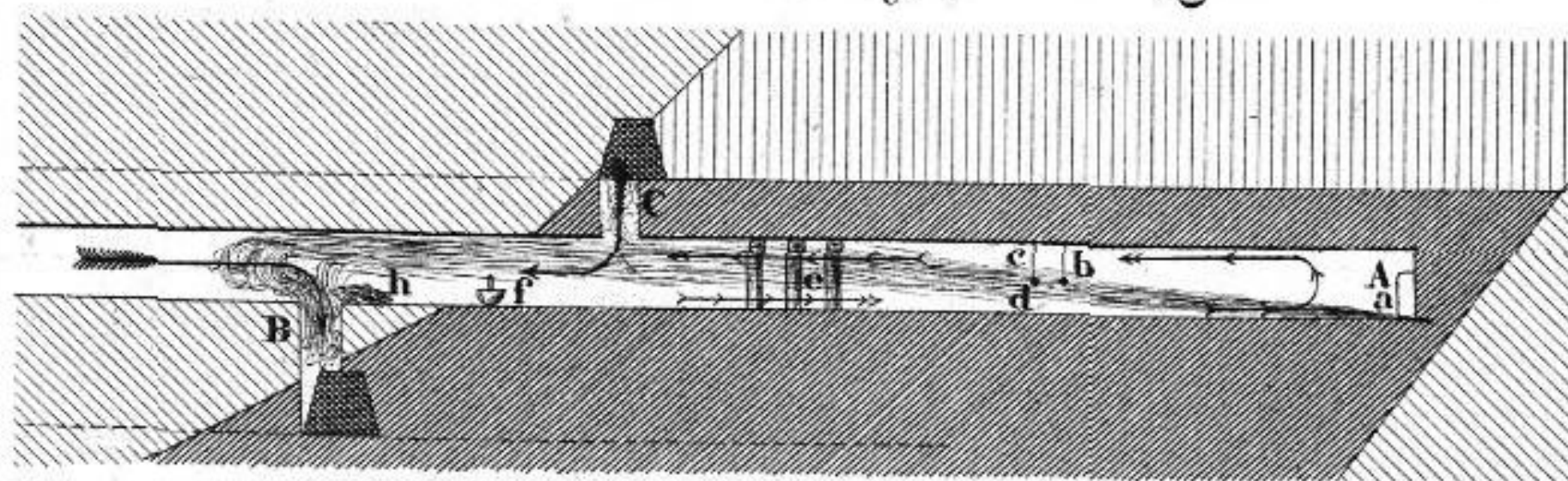
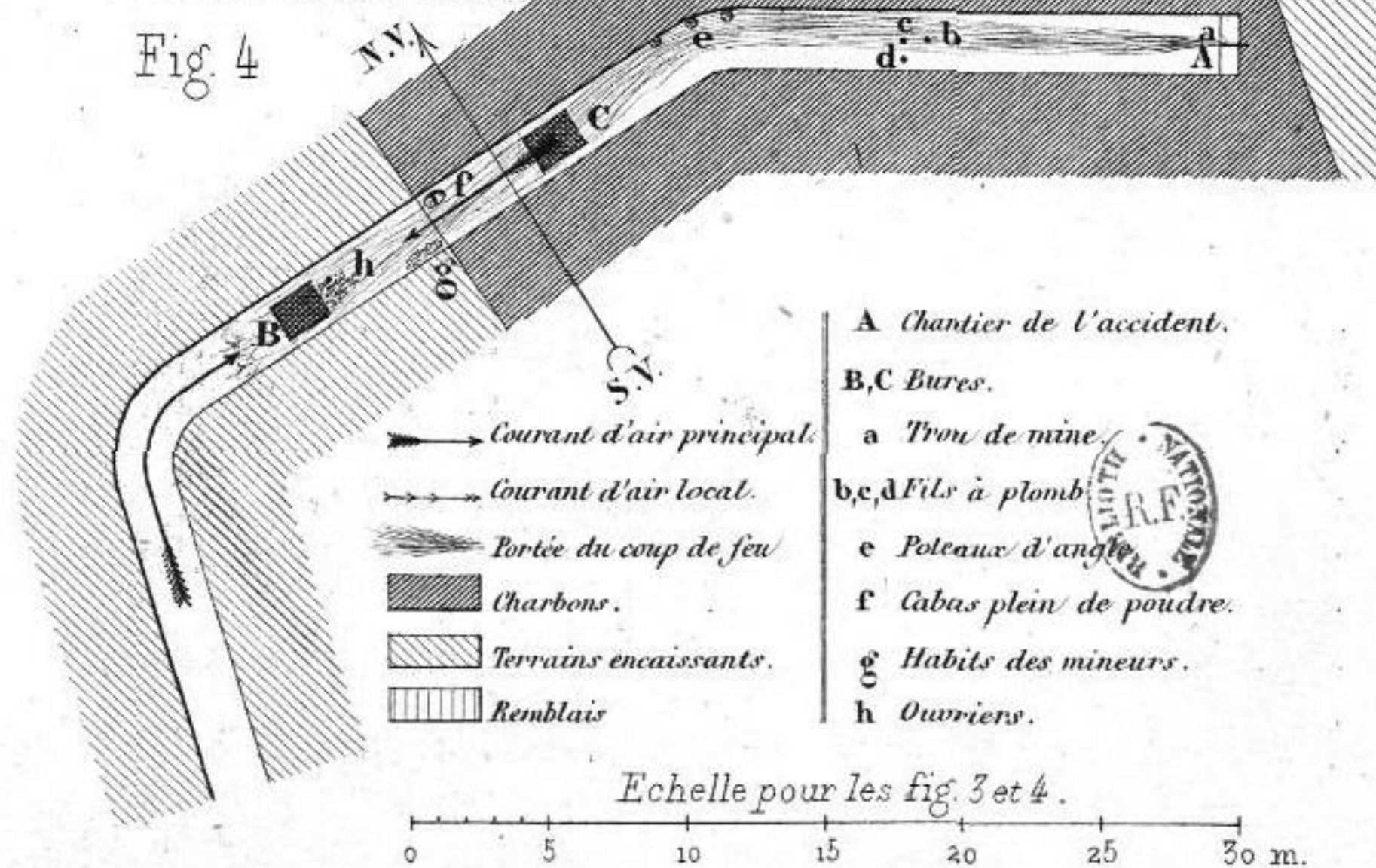


Fig. 3. — Coupe rectifiée faite suivant l'axe du chantier. Foyer d'aérage

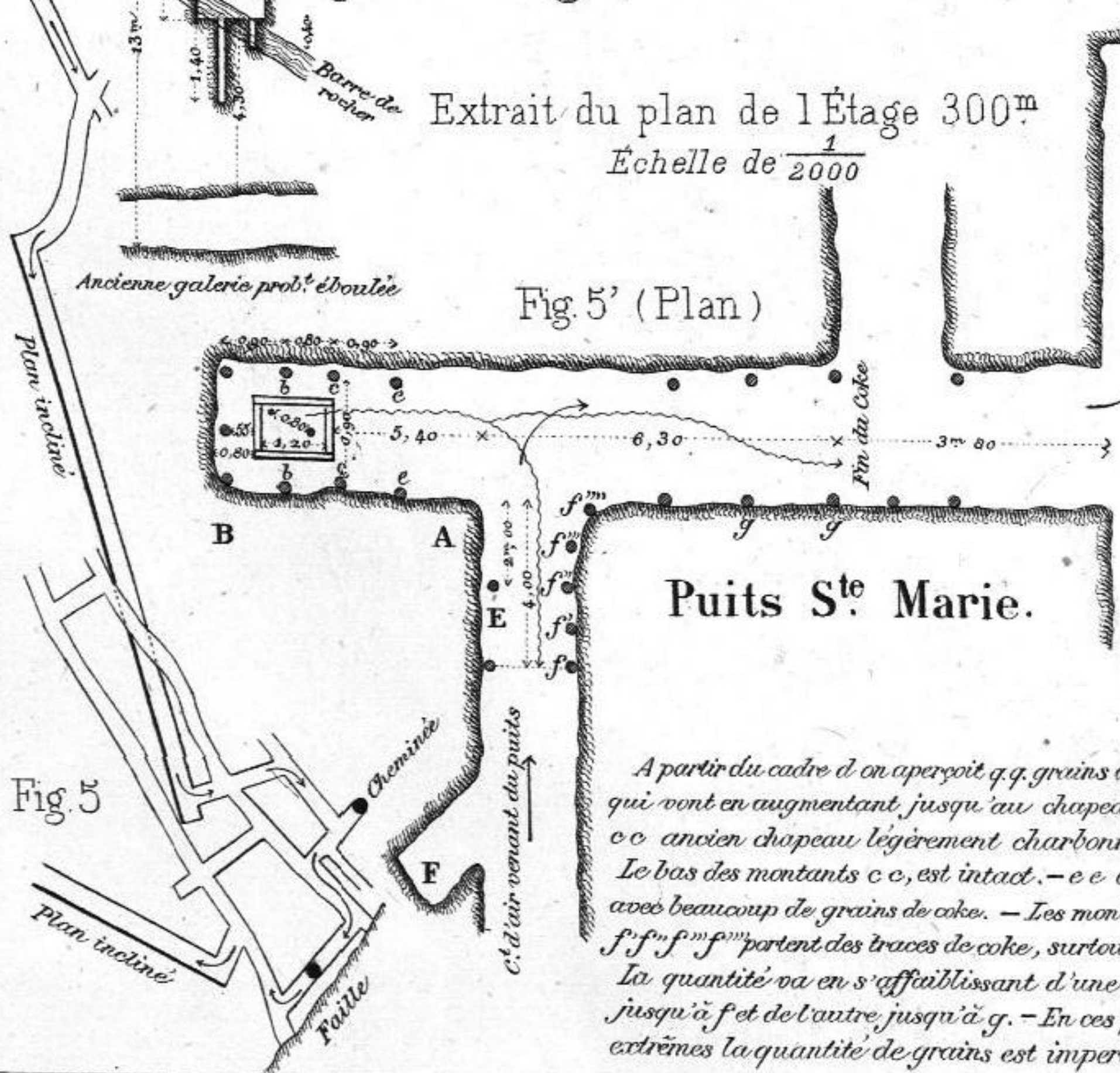


Plan du chantier de l'accident.



Extrait du plan de l'Étage 300<sup>m</sup>  
Echelle de 2000

Fig. 5' (Plan)



A partir du cadre d en aperçoit q. g. grains de coke qui vont en augmentant jusqu'au chapeau. b b c c ancien chapeau légèrement charbonné. Le bas des montants c c, est intact. — e e chap. avec beaucoup de grains de coke. — Les montants f f, f' f'' f''' portent des traces de coke, surtout f'. La quantité va en s'affaiblissant d'une part jusqu'à f et de l'autre jusqu'à g. — En ces points extrêmes la quantité de grains est imperceptible.







RÉGULATEUR  
à courbe d'équilibre

*Modèle exécuté dans la fabrique de MM<sup>rs</sup> Colcombet  
à la Seauve (Haute Loire)*

*et appliqué à régulariser le mouvement d'une turbine*

par

A. THIOILLIER.

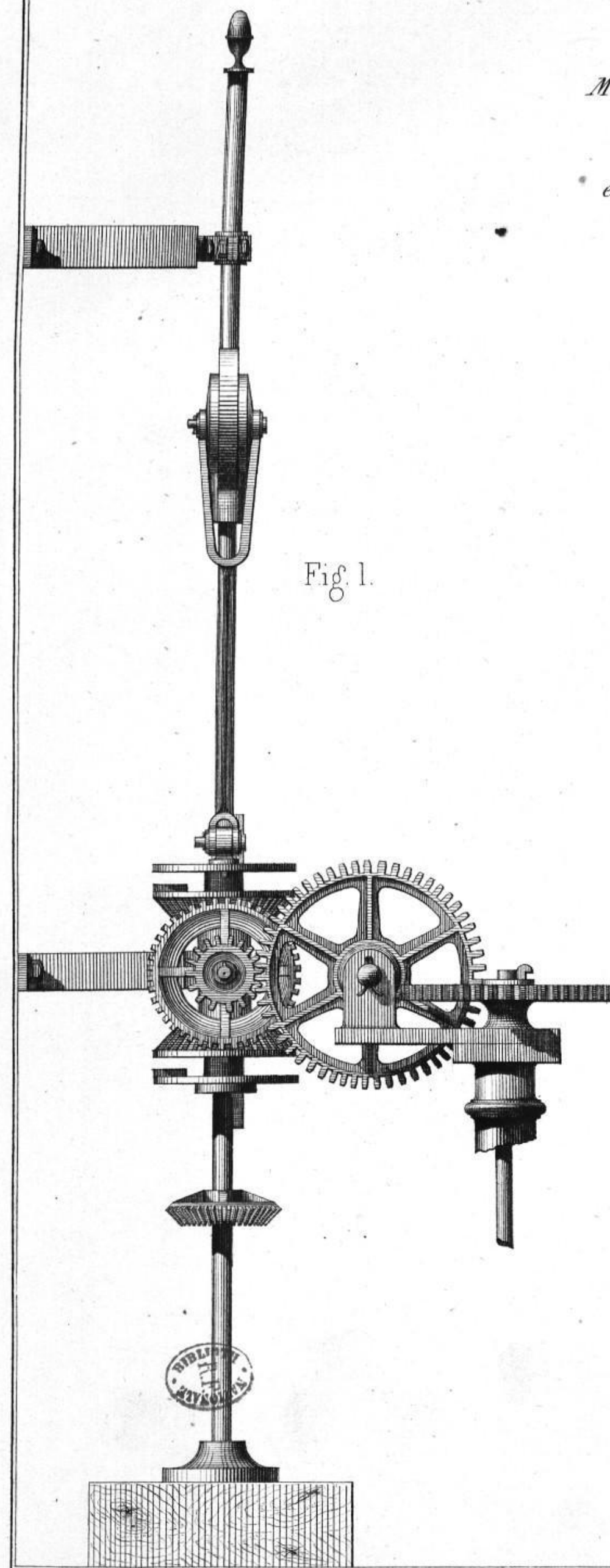


Fig. 1.

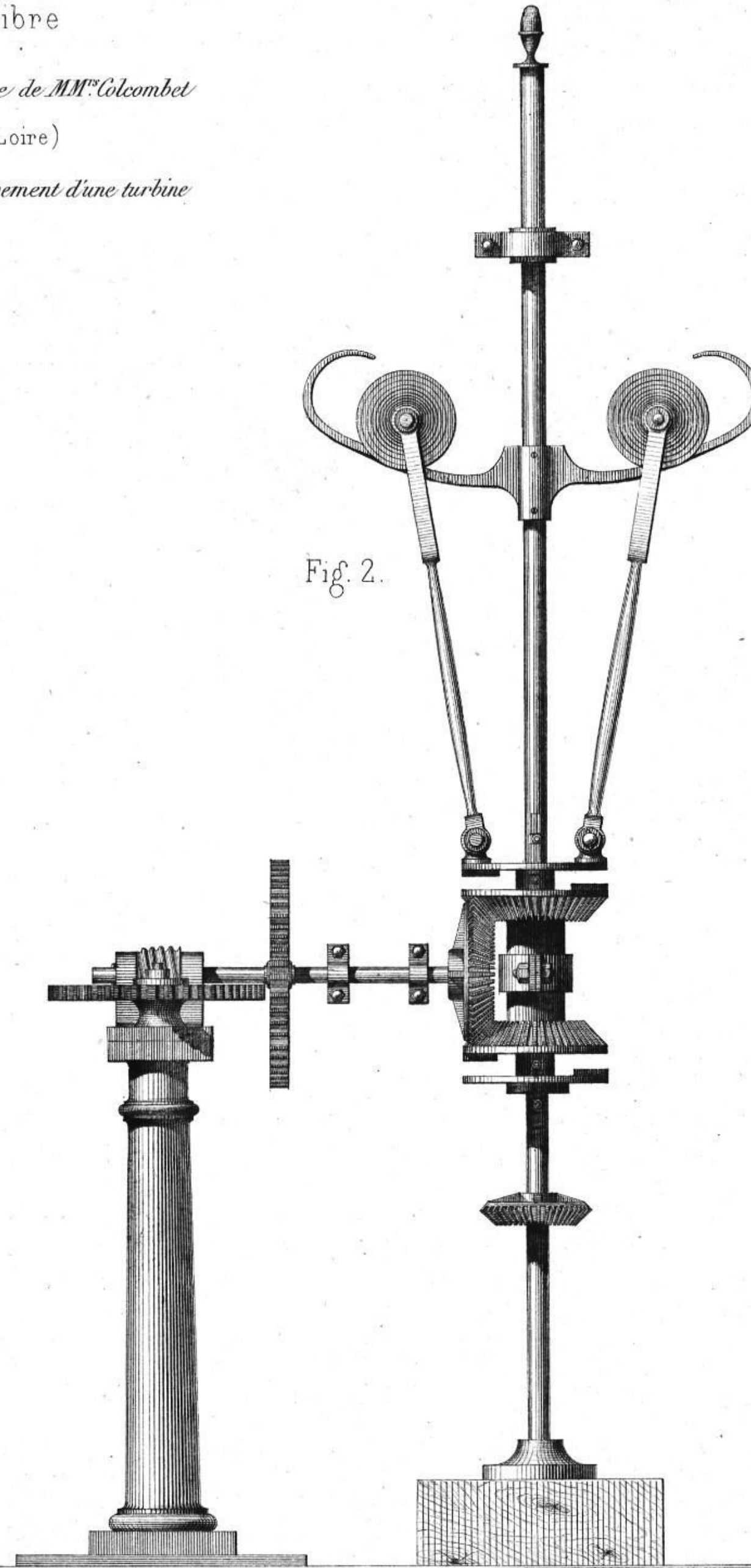


Fig. 2.

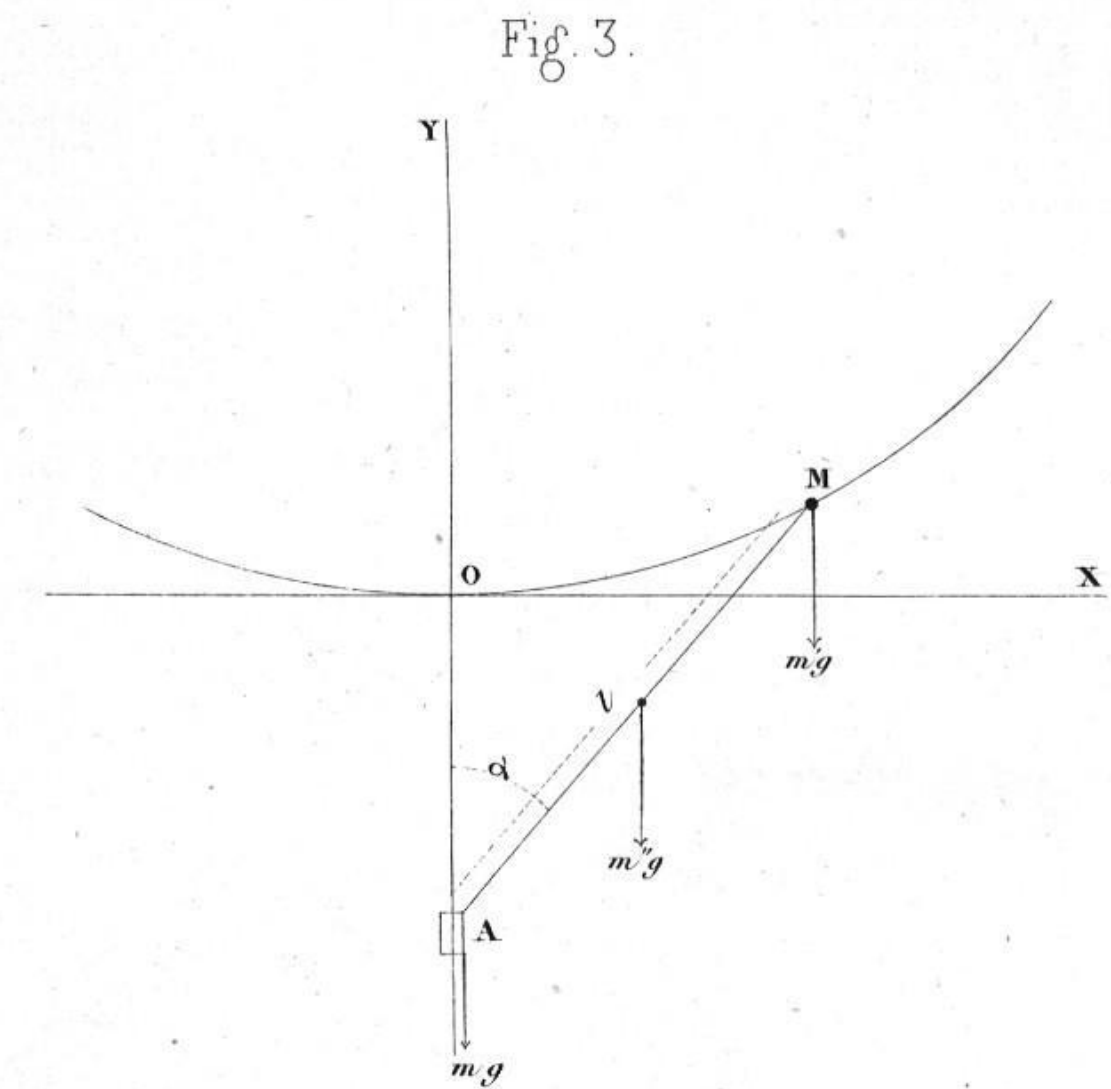


Fig. 3.

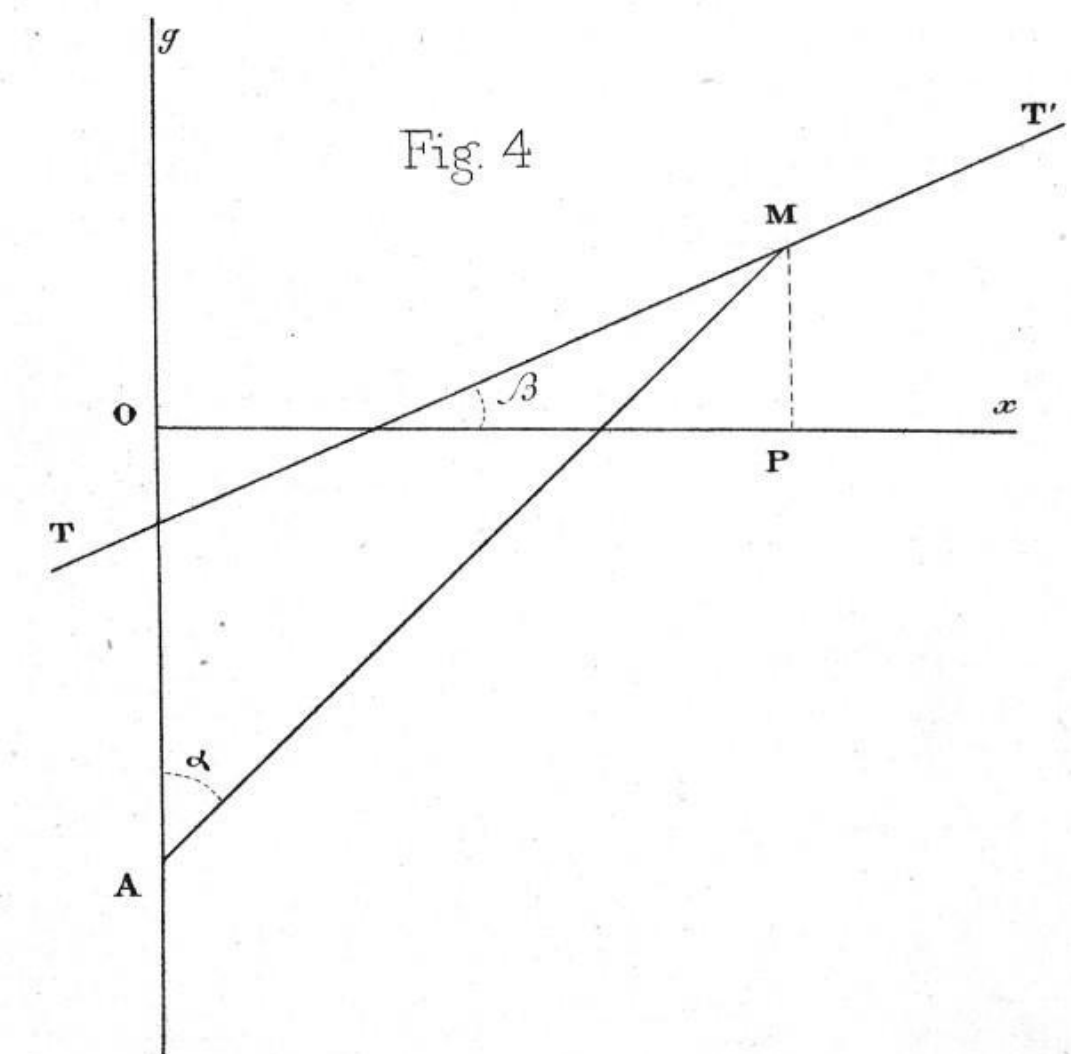
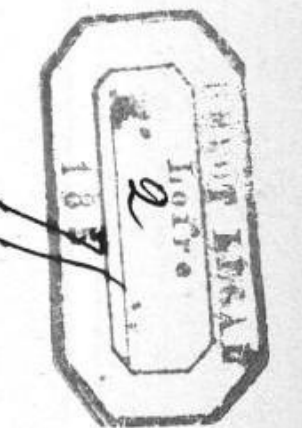


Fig. 4.









## Mines de Beaubrun

Méthode appliquée à la grande couche du Puits Montmartre

Fig. 1.

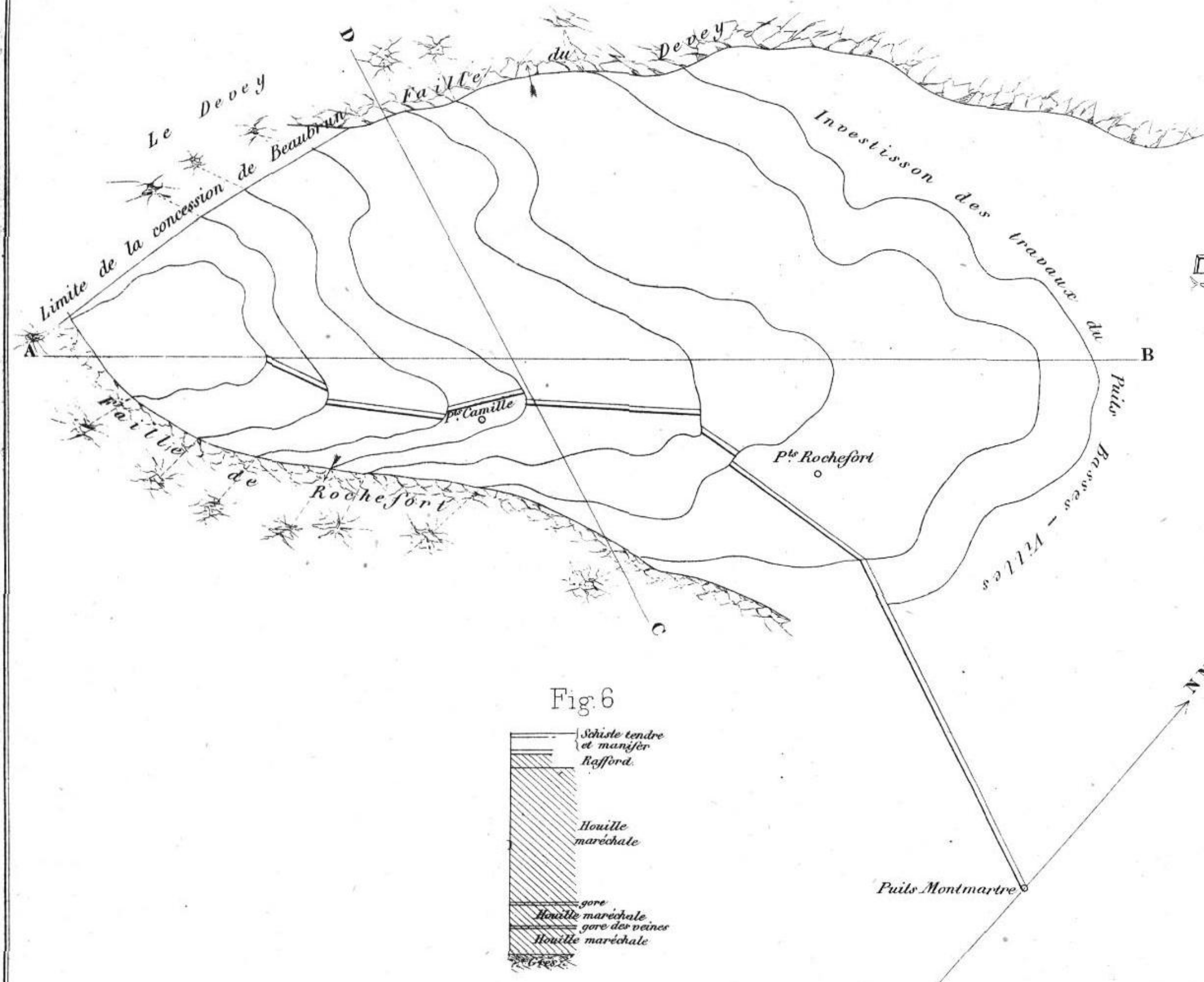
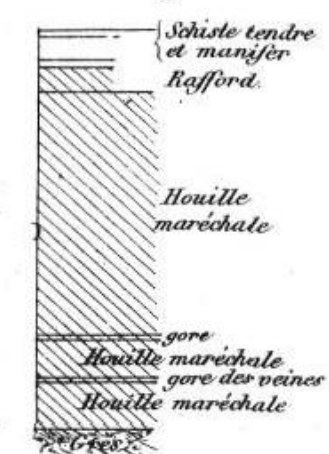


Fig. 6



Echelle de la Fig. 1

0 100 200 300 400 500 mèt.

Echelle des Fig. 2, 2<sup>bis</sup>, 3, 4 et 5.

0 0.5 1 2 3 4 5 6 7 8 9 10 mèt.

Fig. 2.

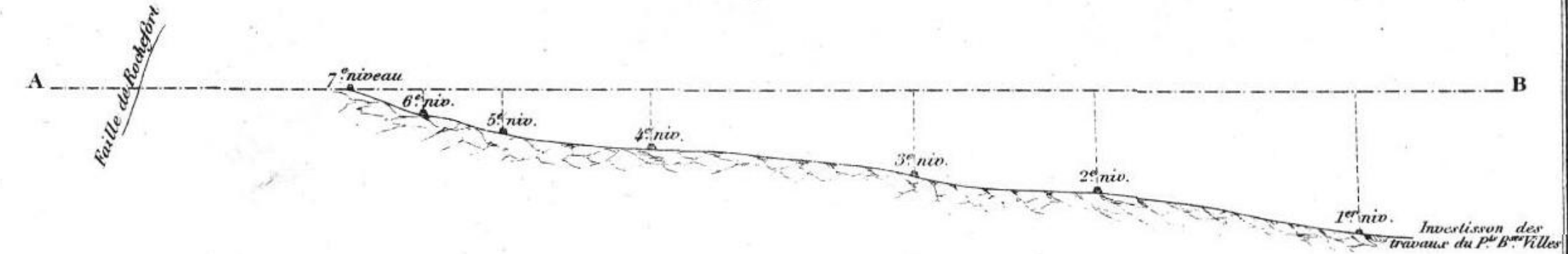
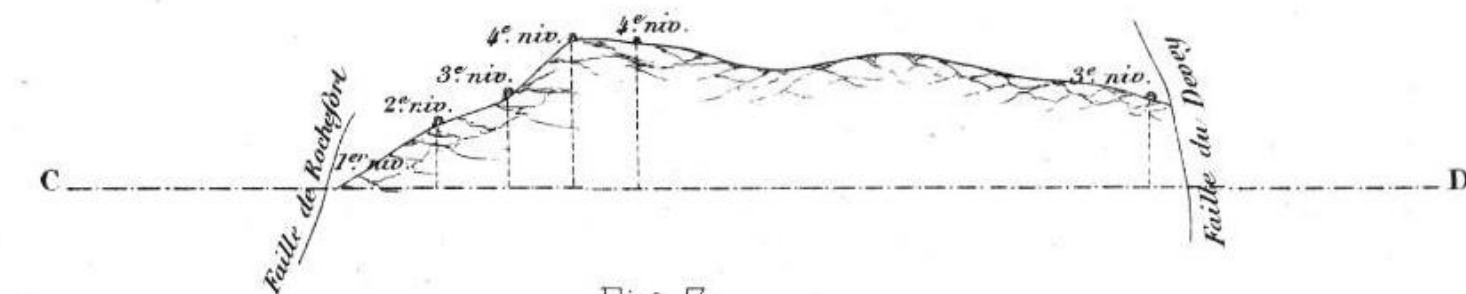
Fig. 2<sup>bis</sup>

Fig. 3.

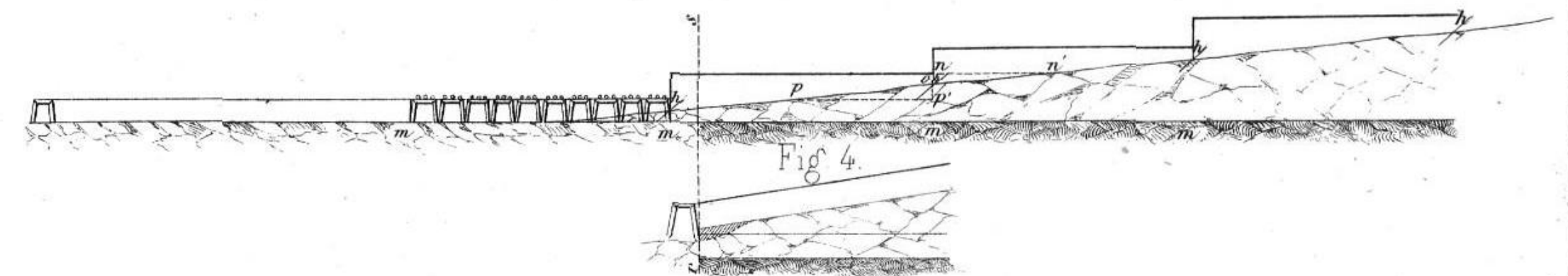


Fig. 4.

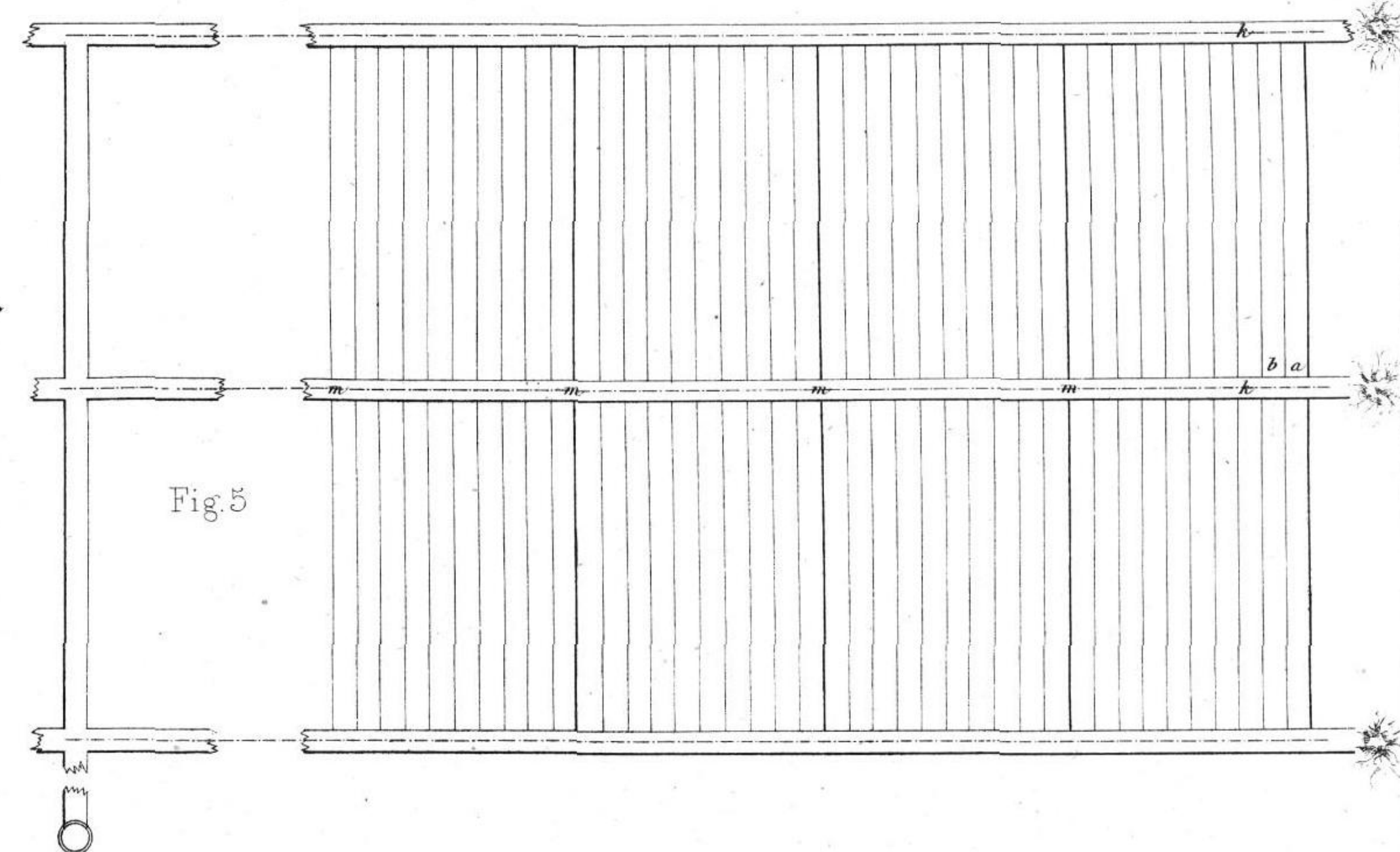
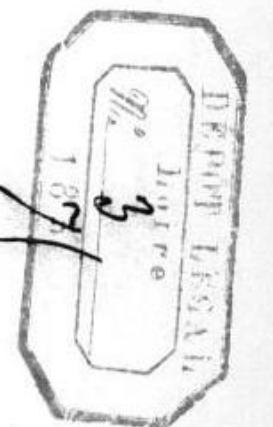


Fig. 5

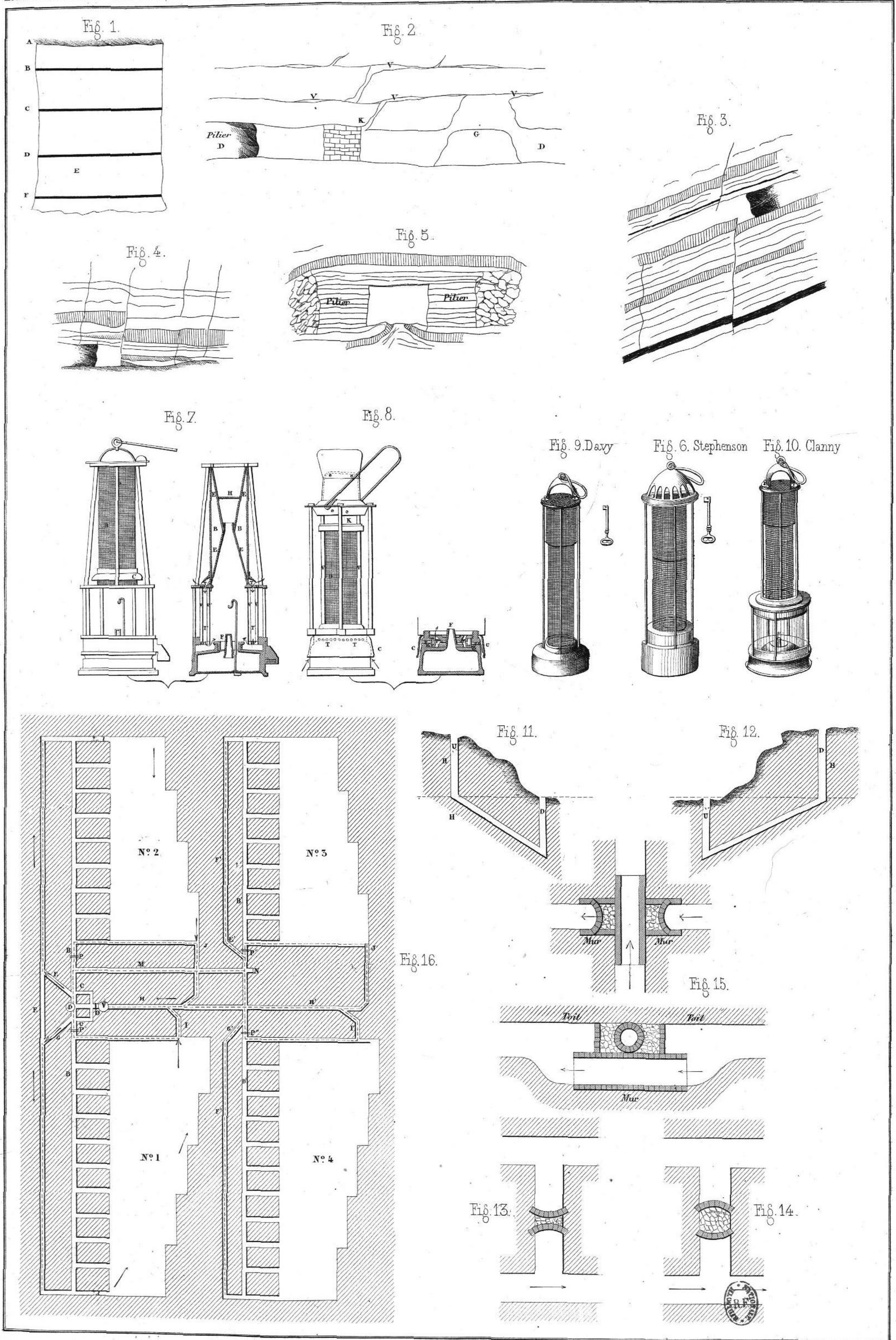








DEPOT LEGAL  
3  
7









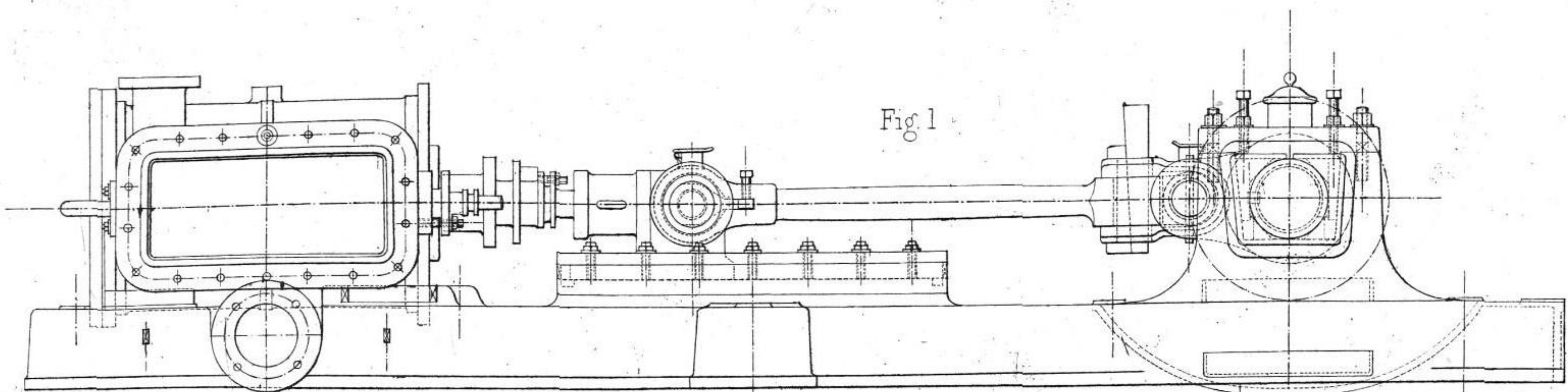


Fig 1

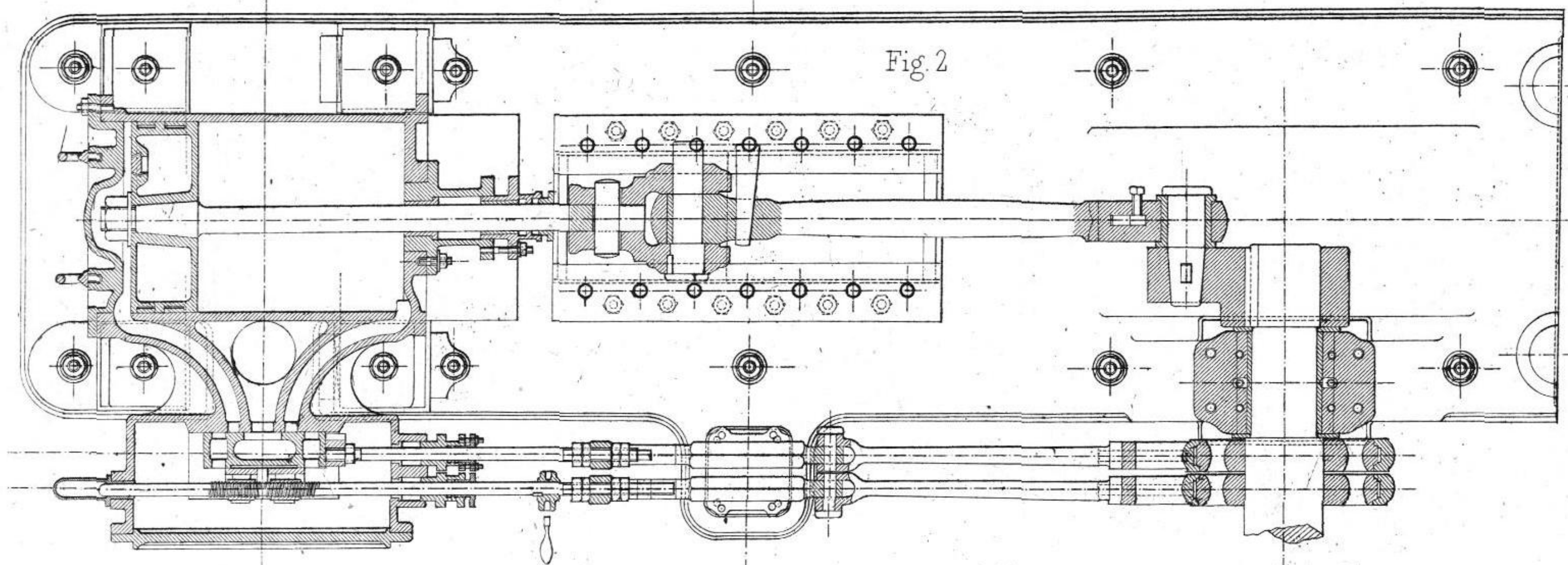


Fig 2

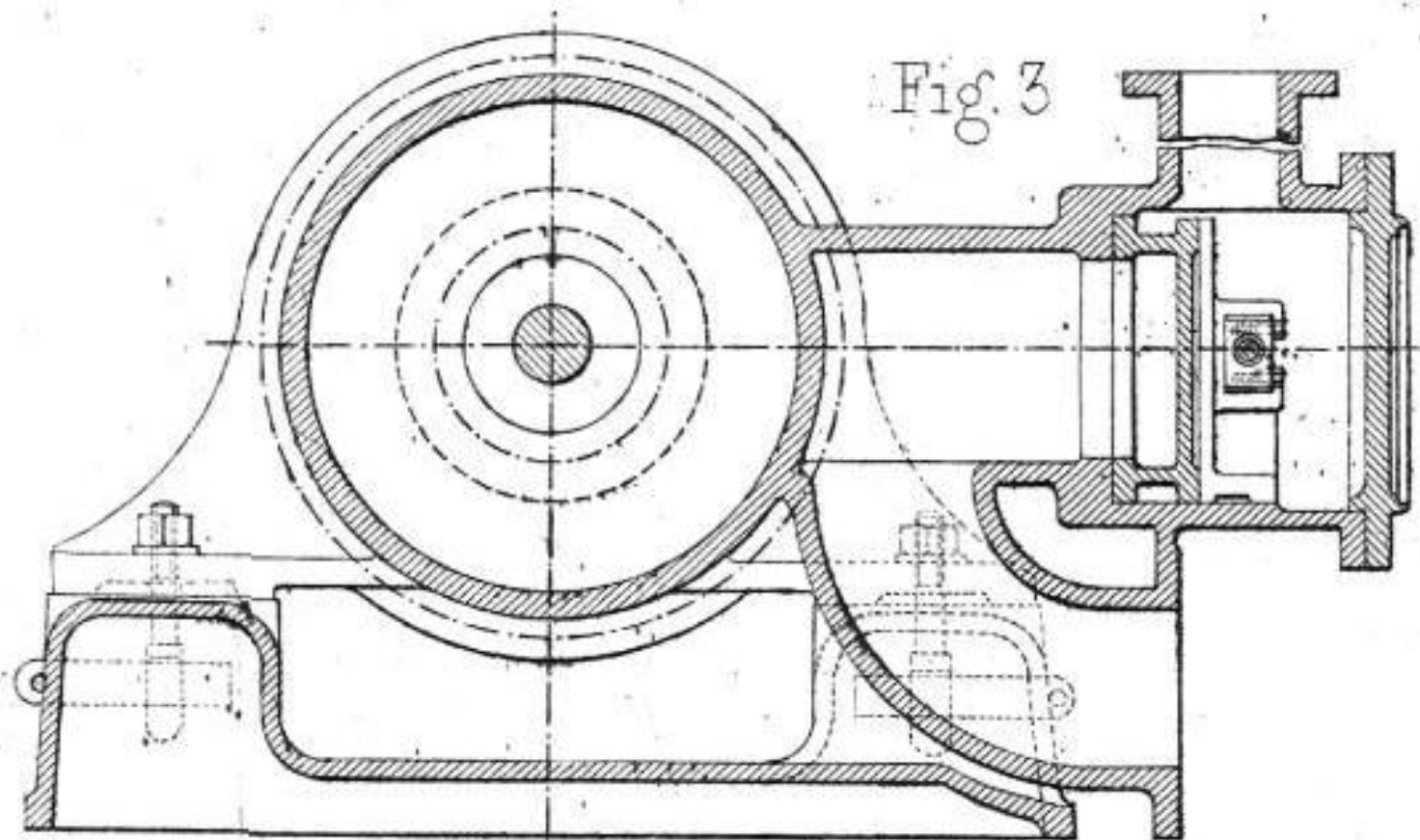


Fig 3

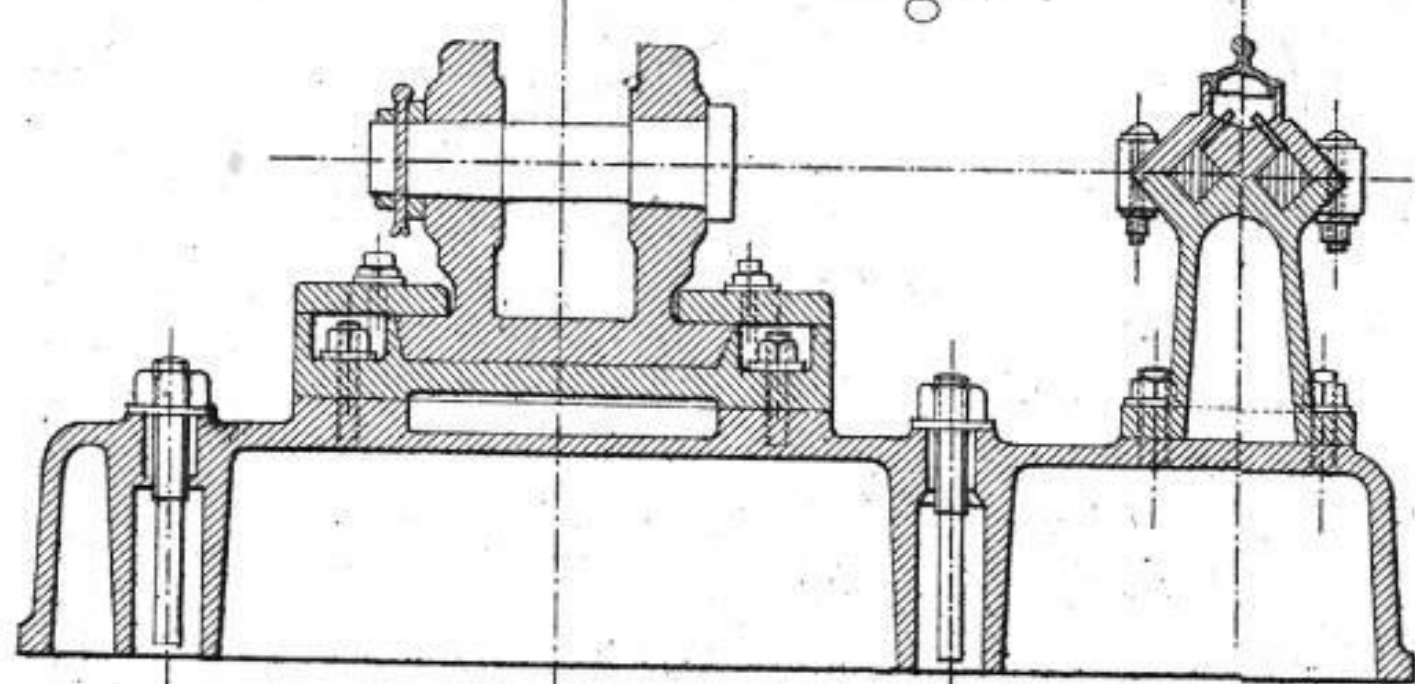


Fig 4

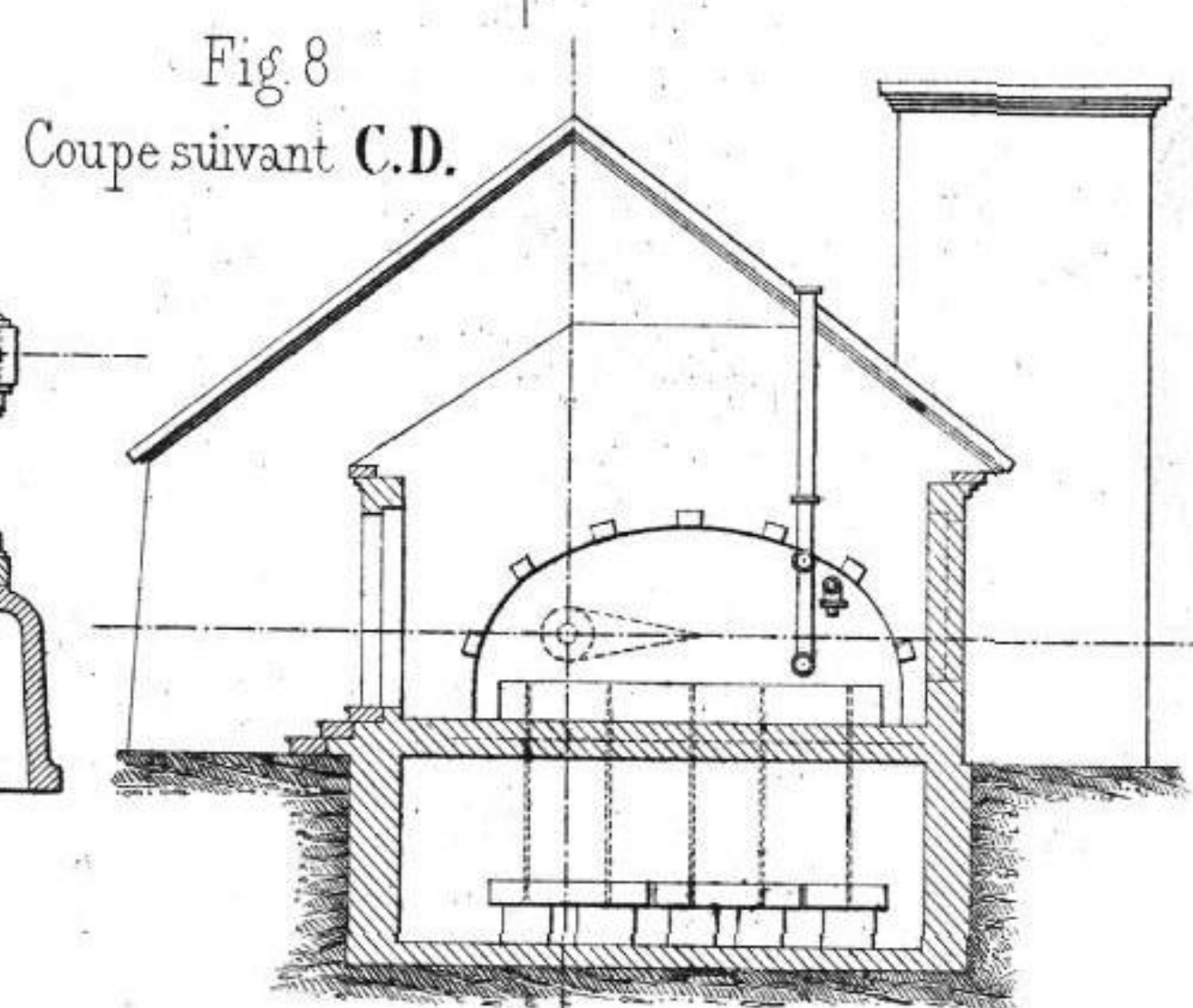


Fig 8  
Coupe suivant C.D.

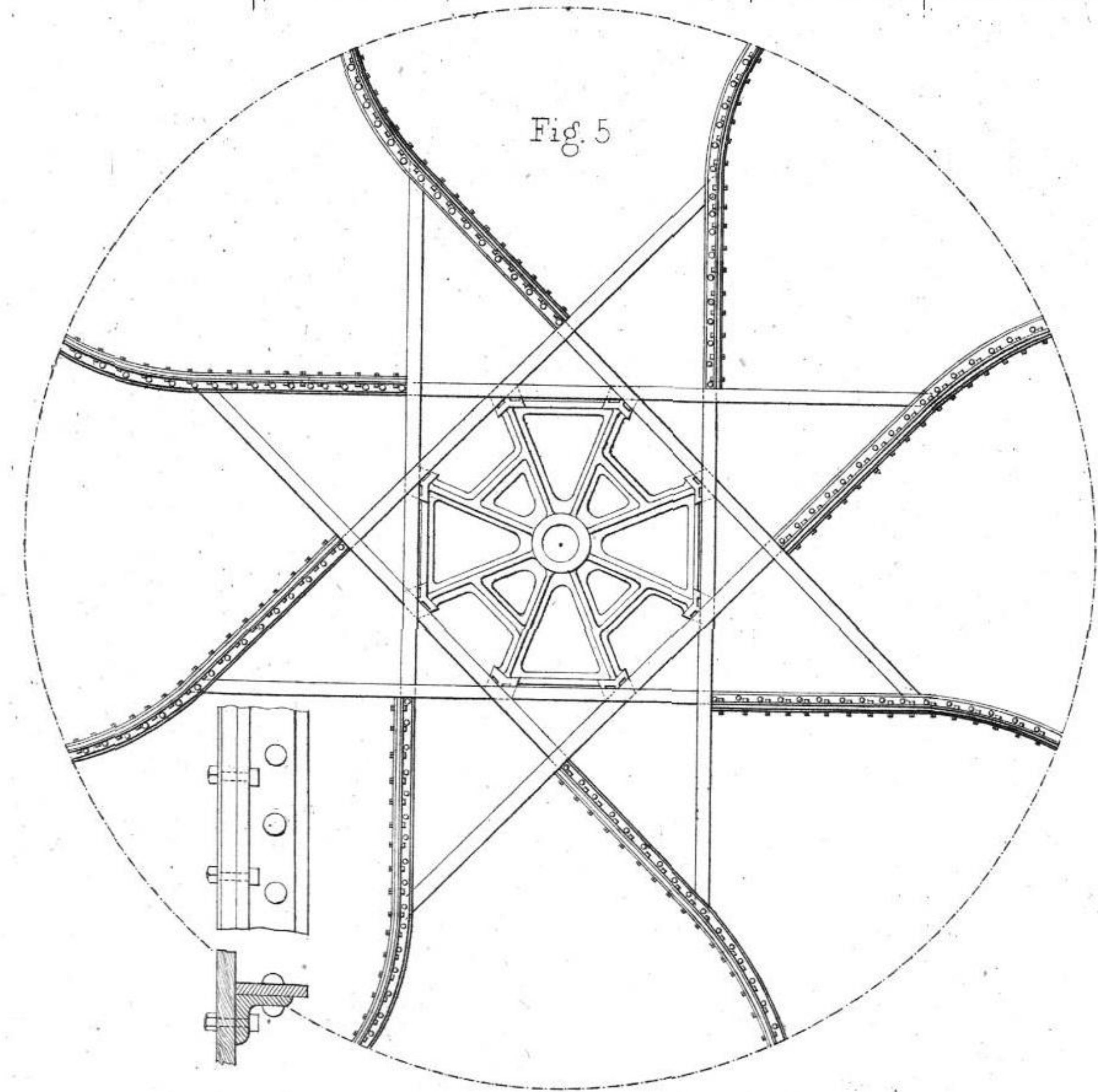


Fig 5

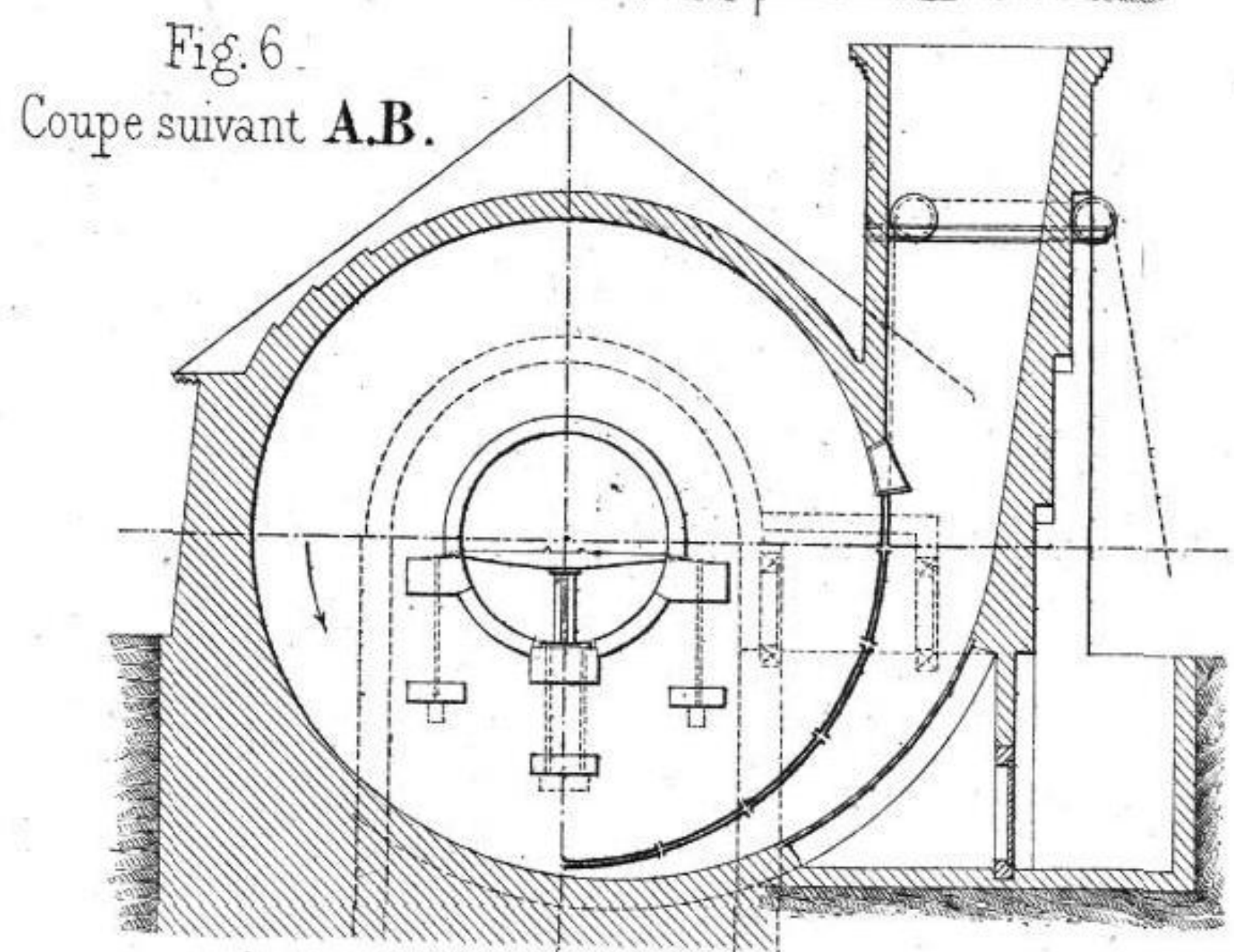


Fig 6  
Coupe suivant A.B.

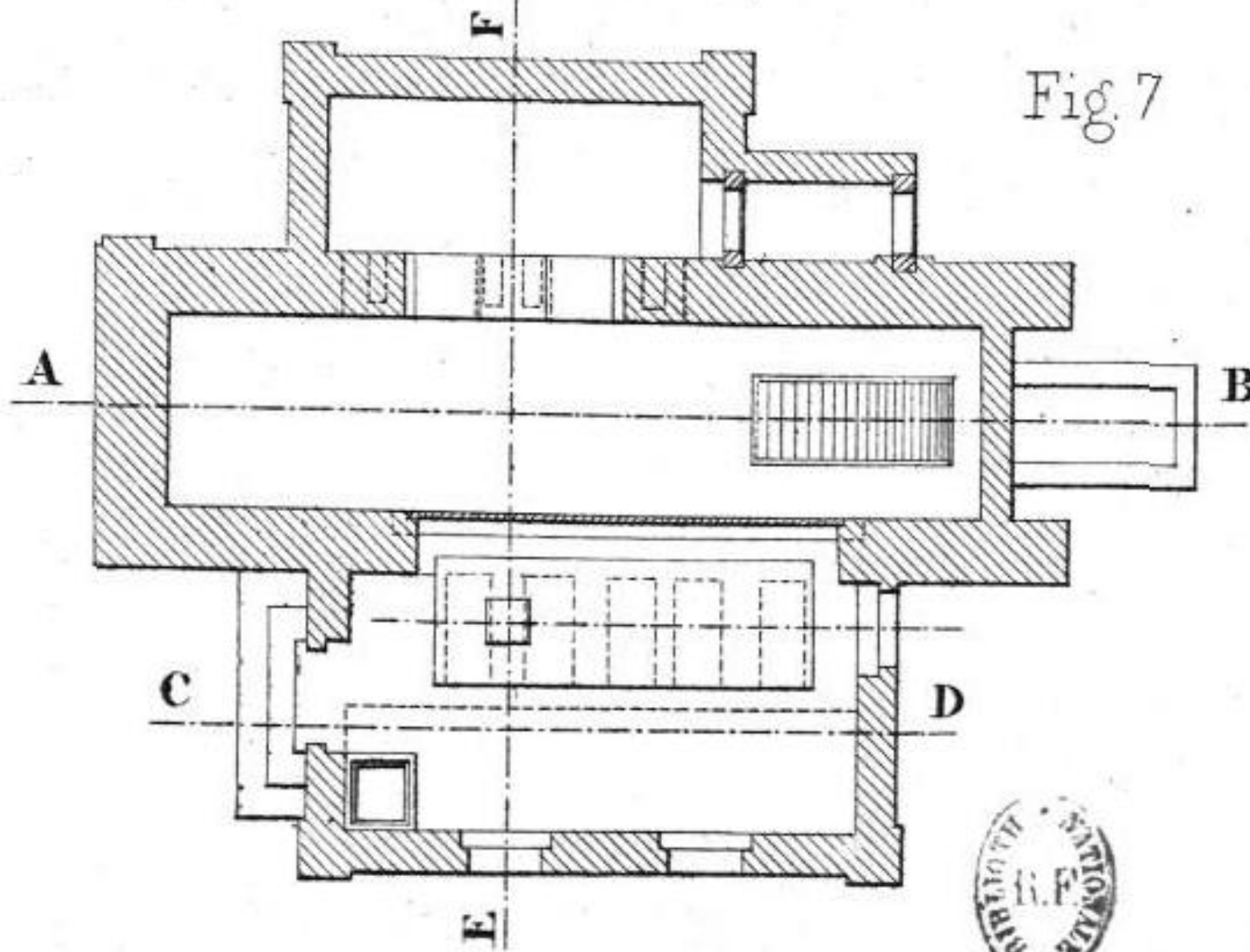


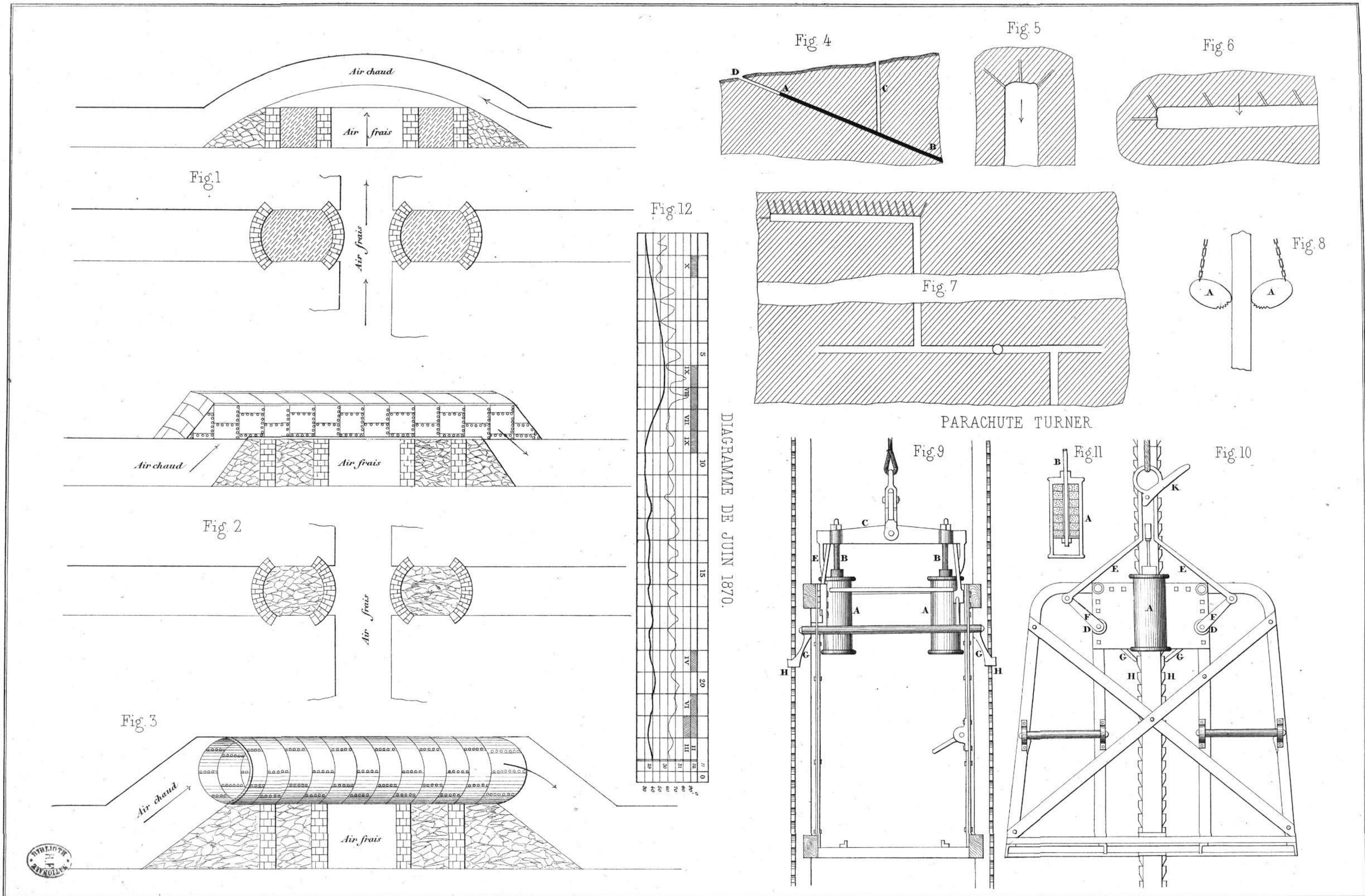
Fig 7

Échelle  
0 0,5 1m. 2m.





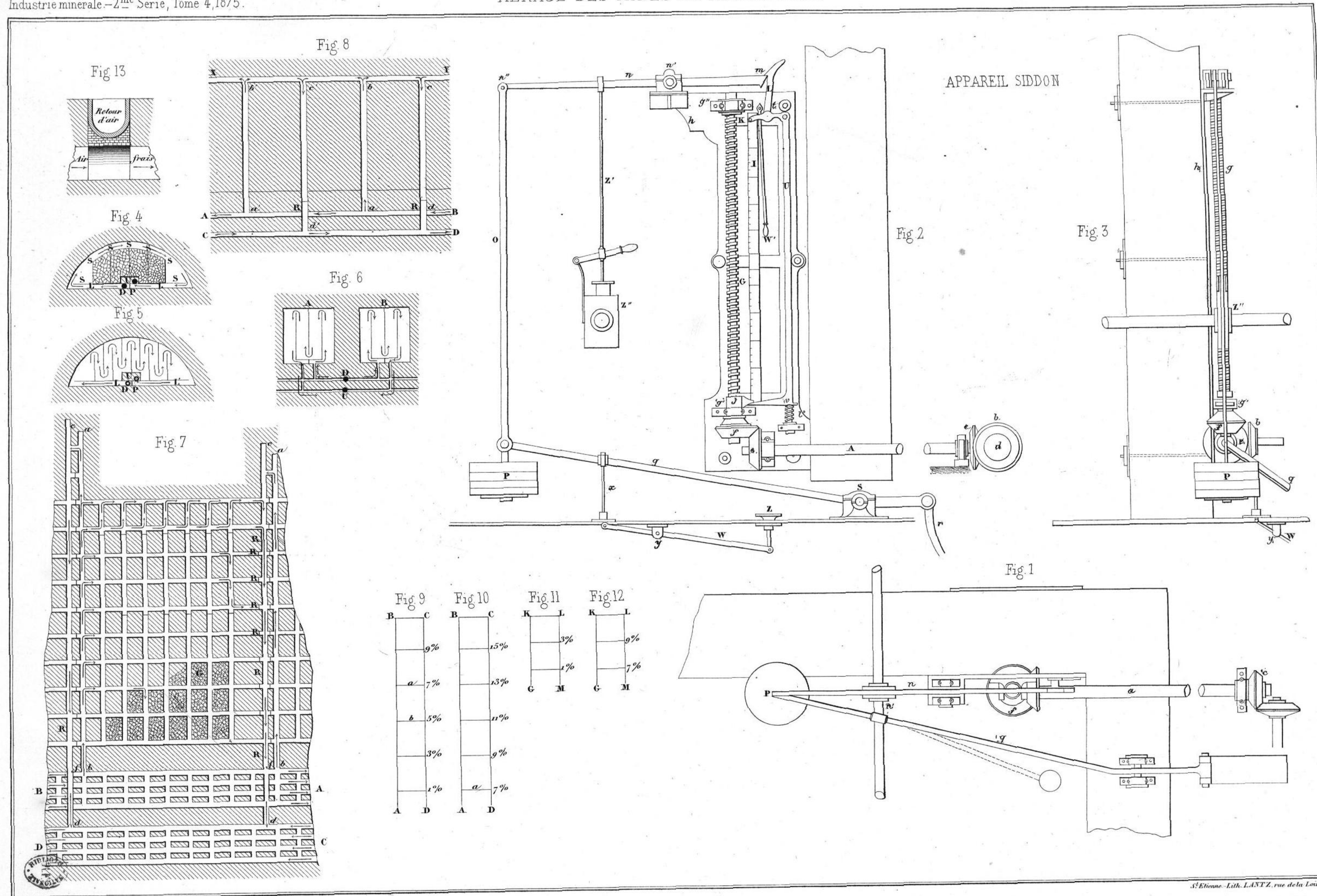










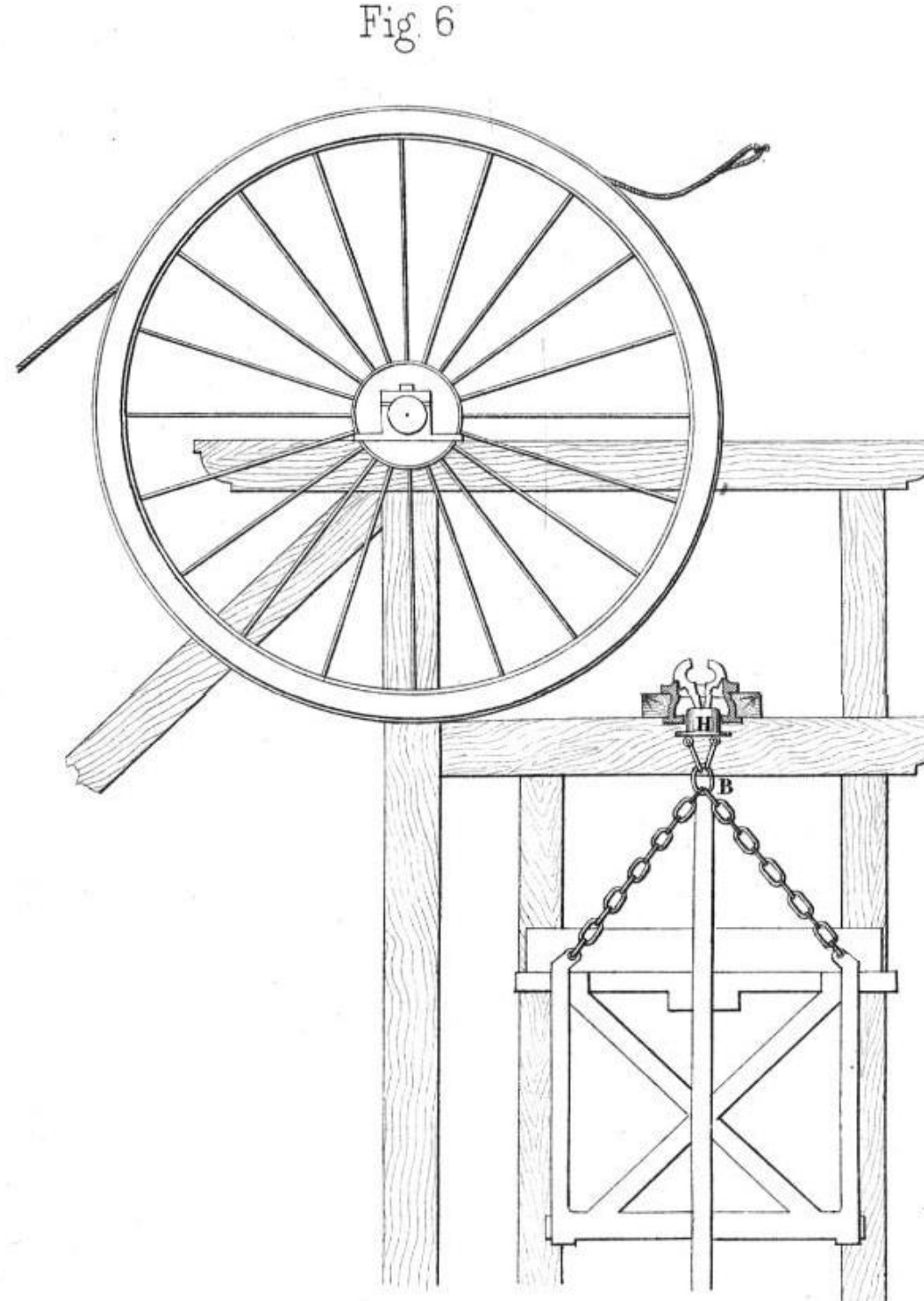
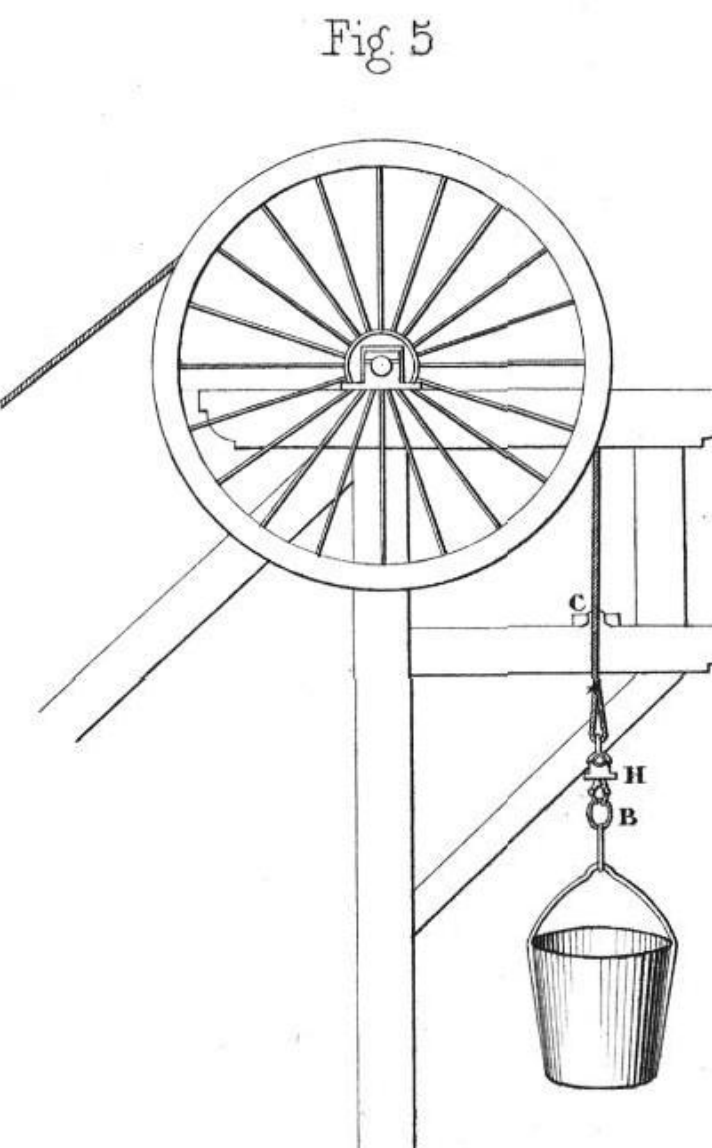
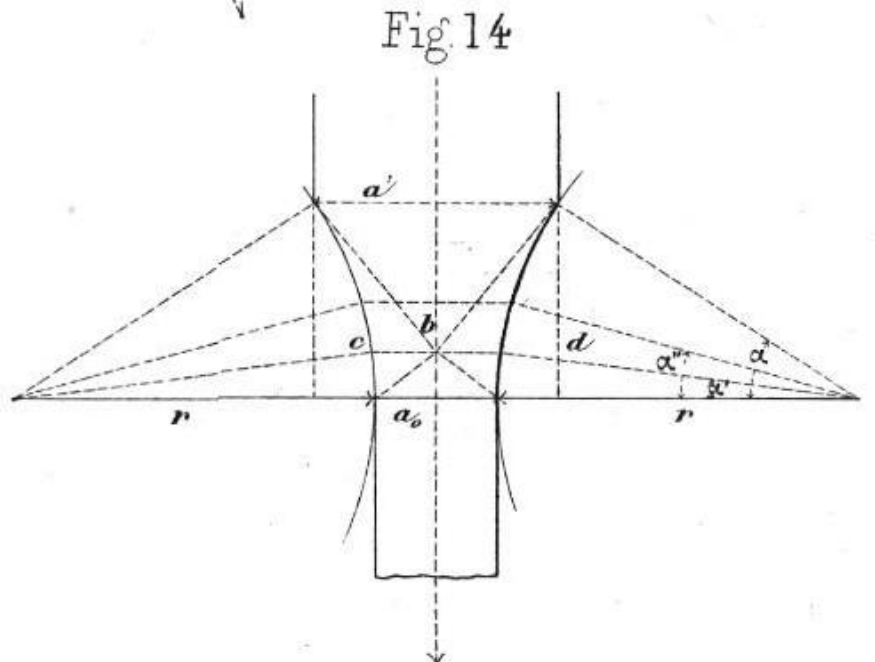
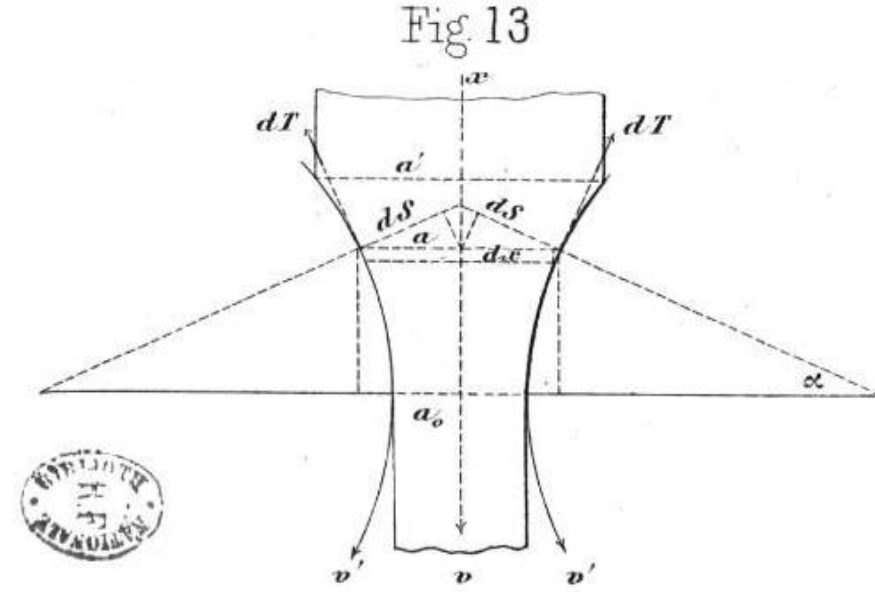
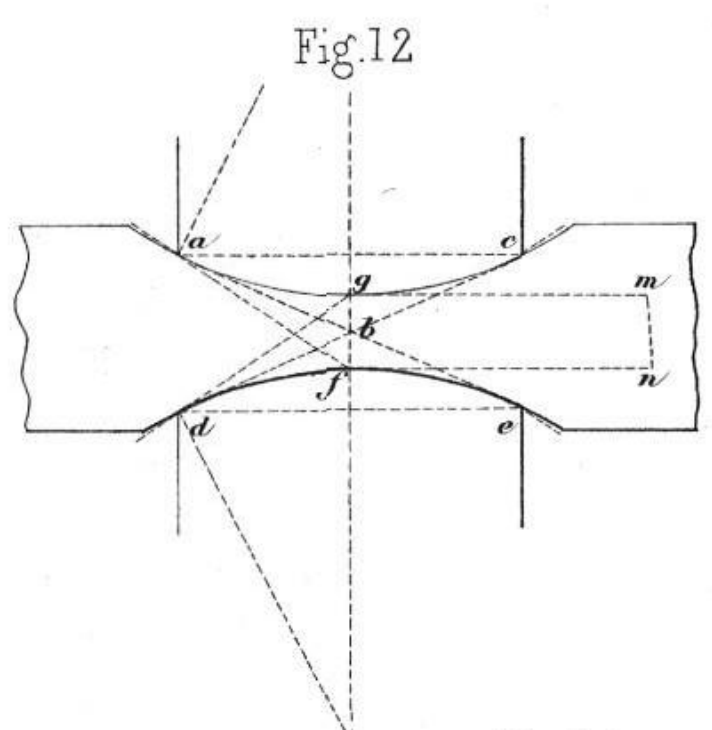
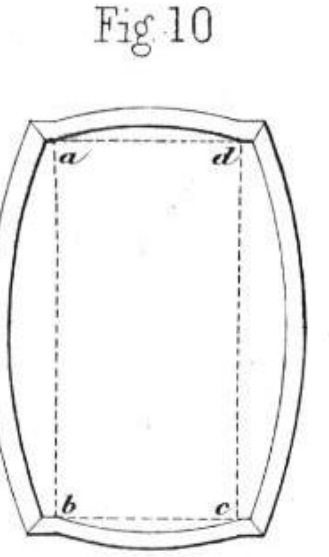
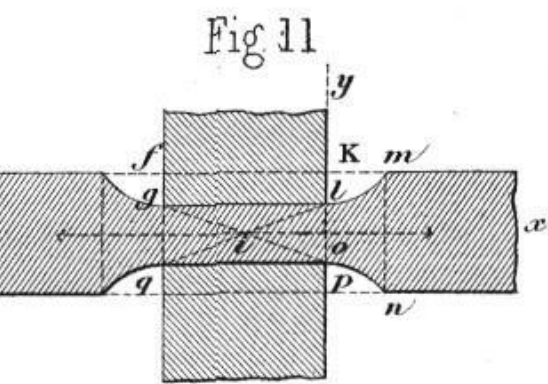
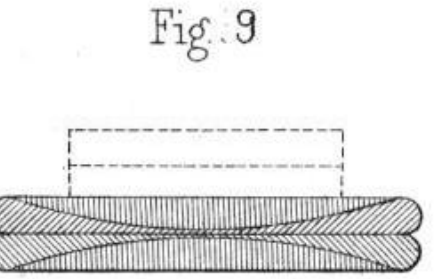
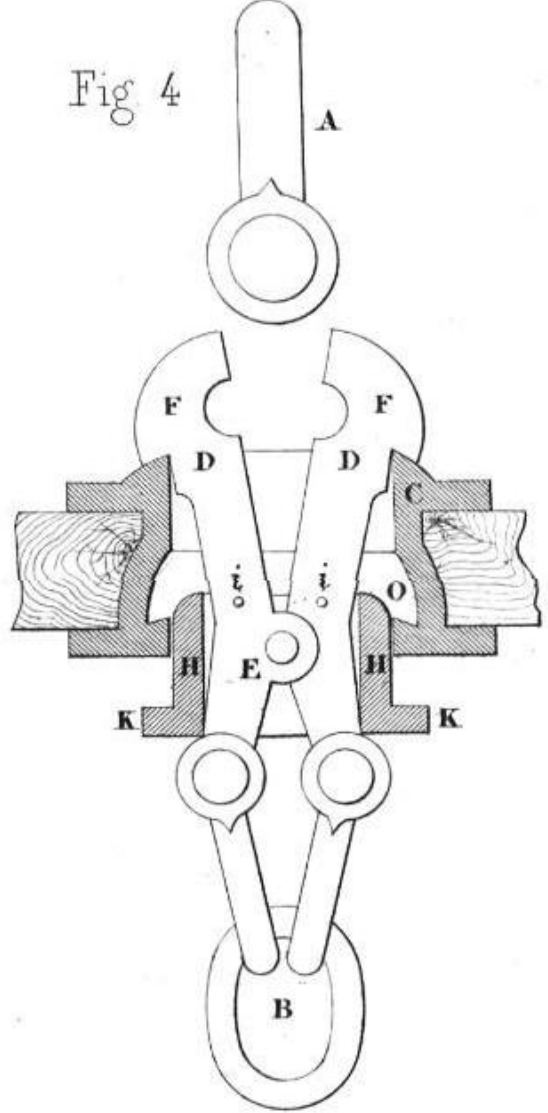
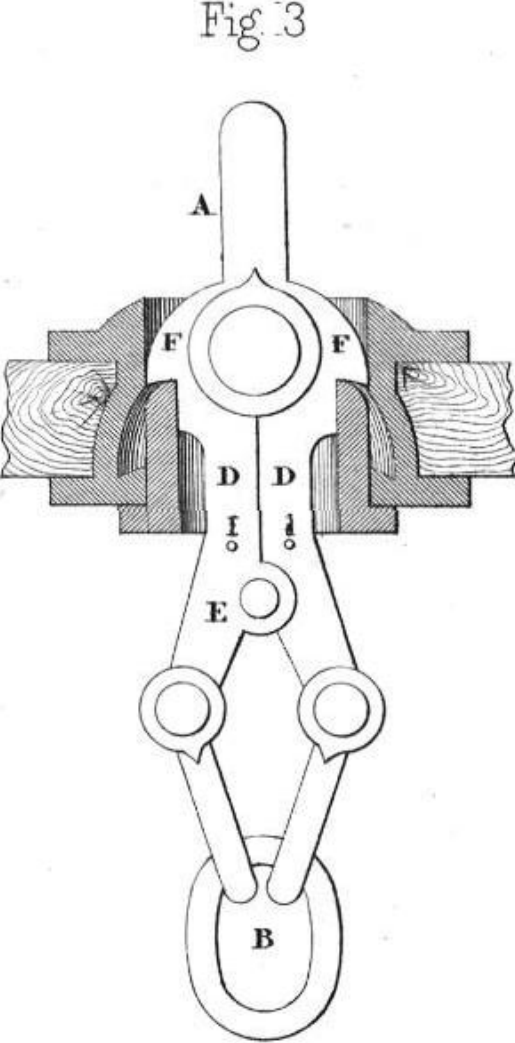
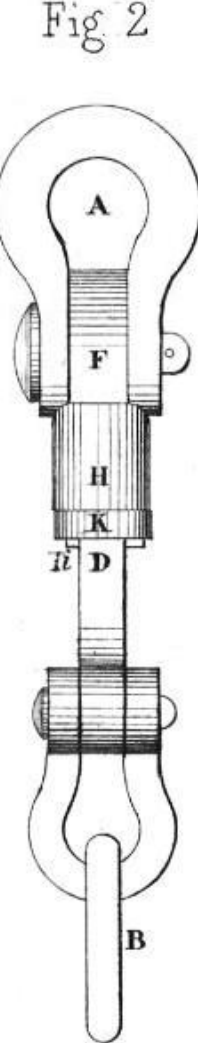
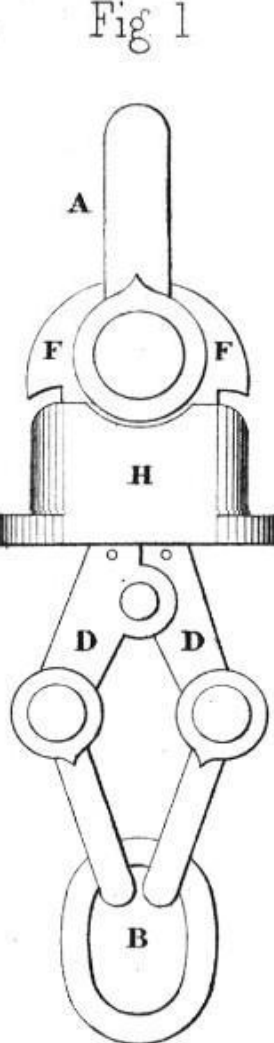
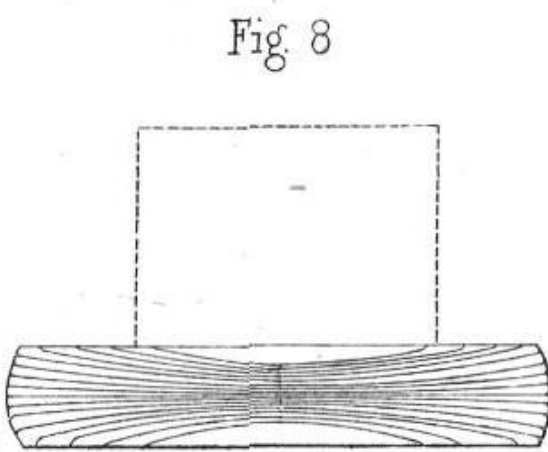
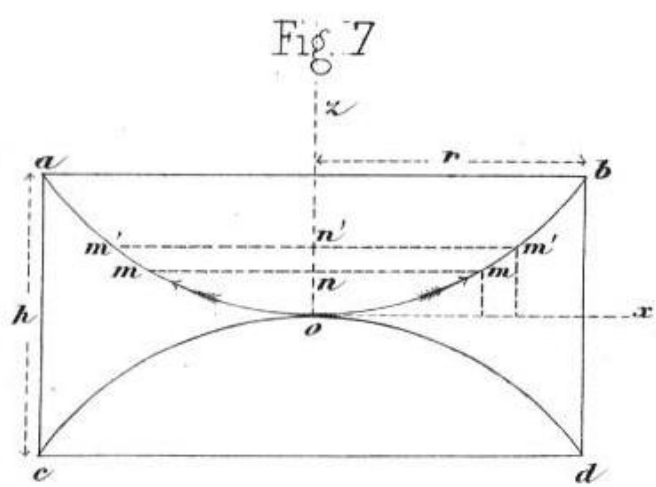








APPAREIL WALKER











Nivellement de Nouvelle Veine.

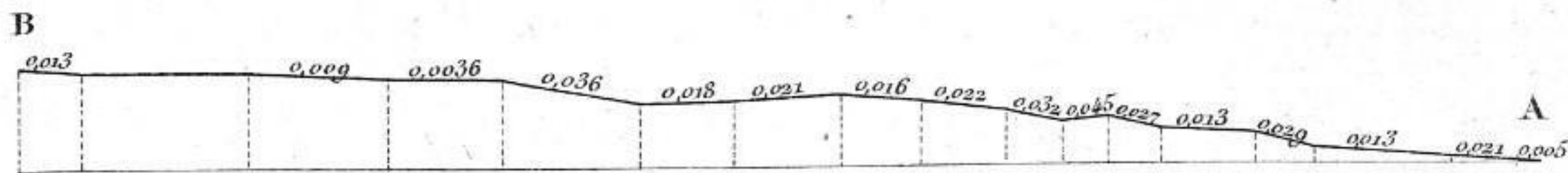


Fig 3  
Gare d'arrivée

Fig 2  
Gare des Fronts

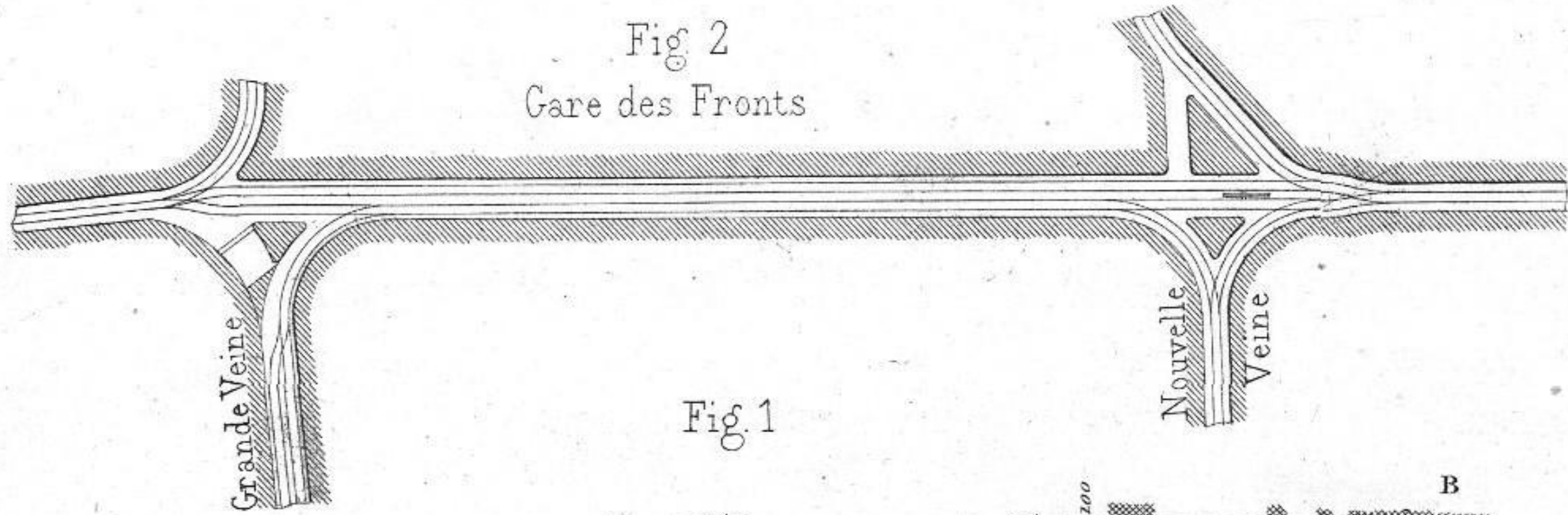
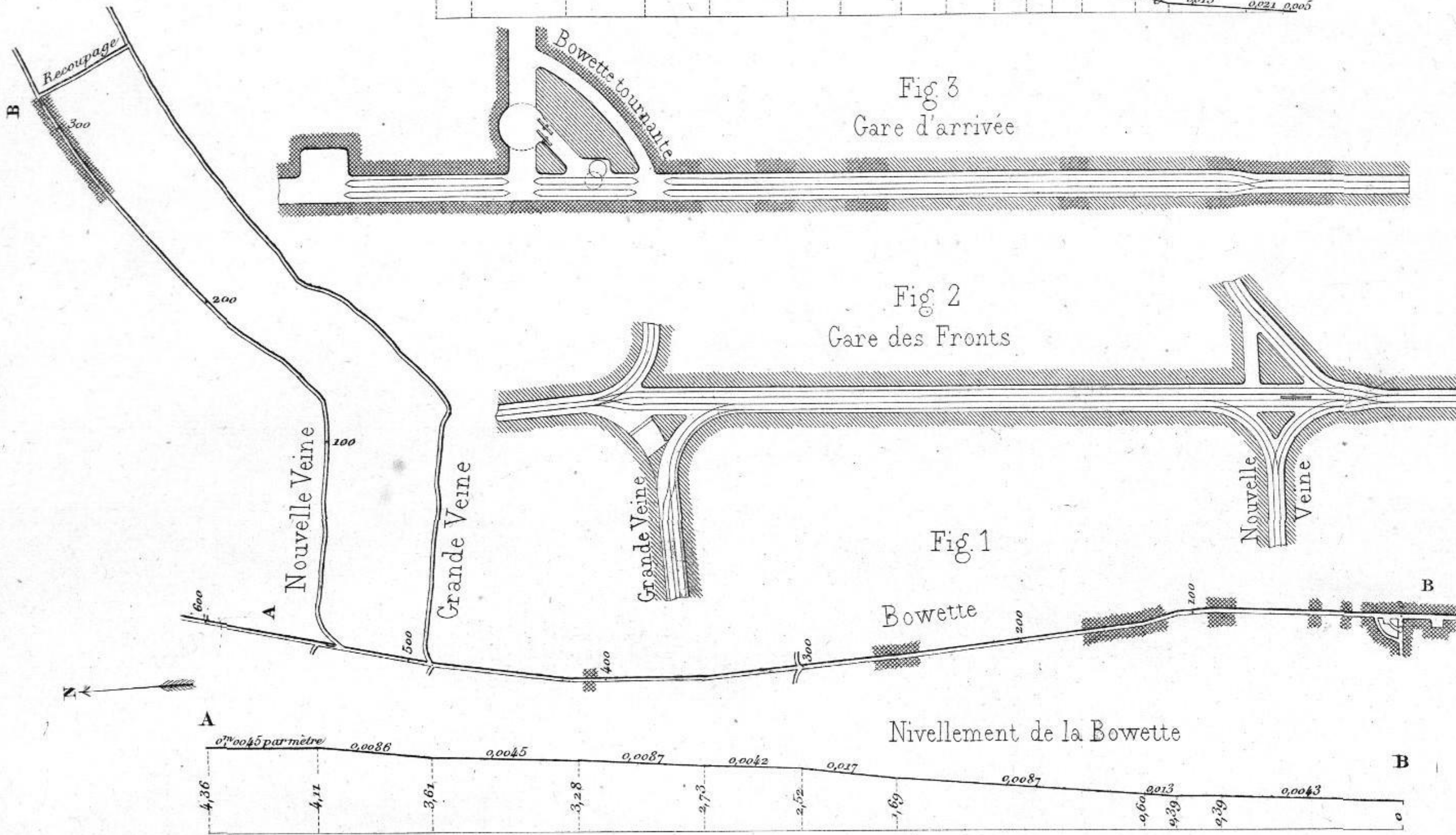


Fig 1



Légende

Parties non maçonnées. Parties maçonnées.

Fig 1 Échelles Fig 2, 3.  
Nivellements { 0,003 pour les longueurs.  
                  { 0,002 pour 1 mètre pour les hauteurs.

Fig 4  
Plan d'ensemble

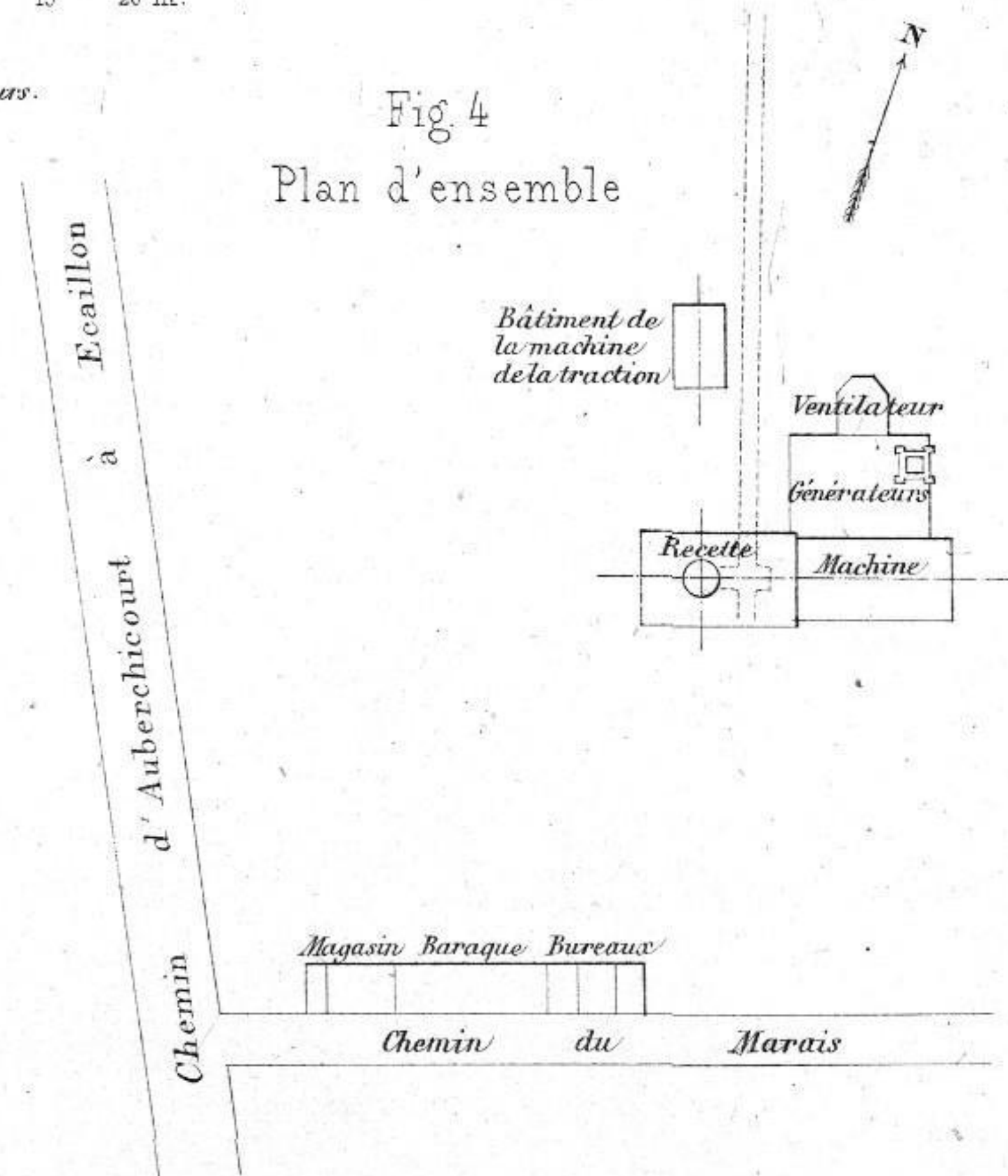
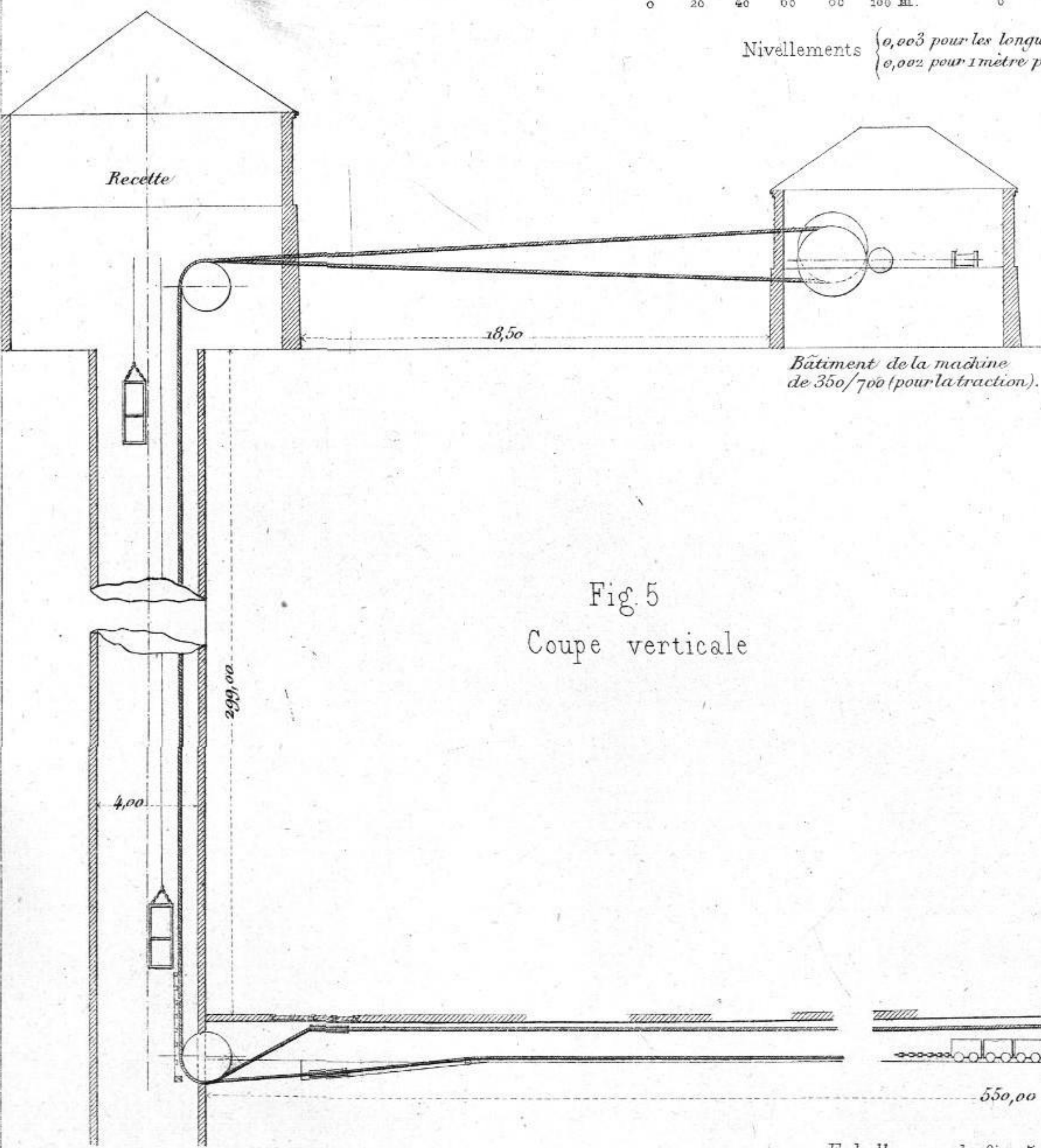
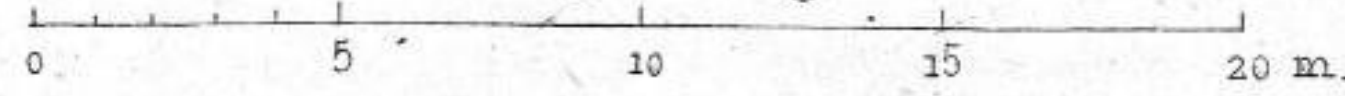


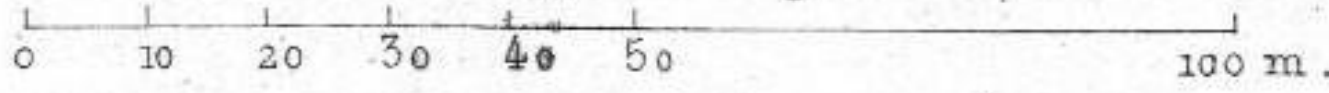
Fig 5  
Coupe verticale



Echelle pour la fig. 5



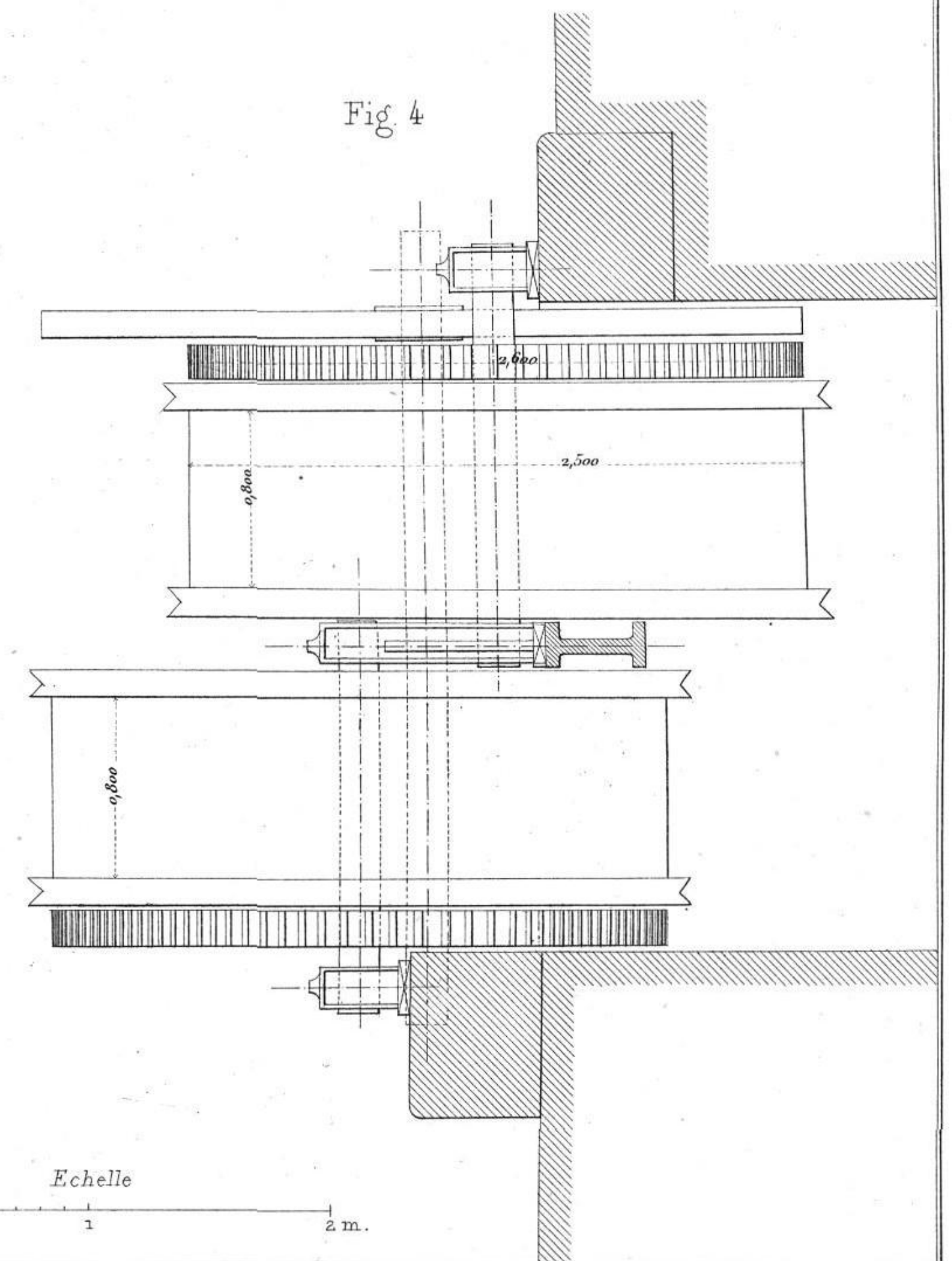
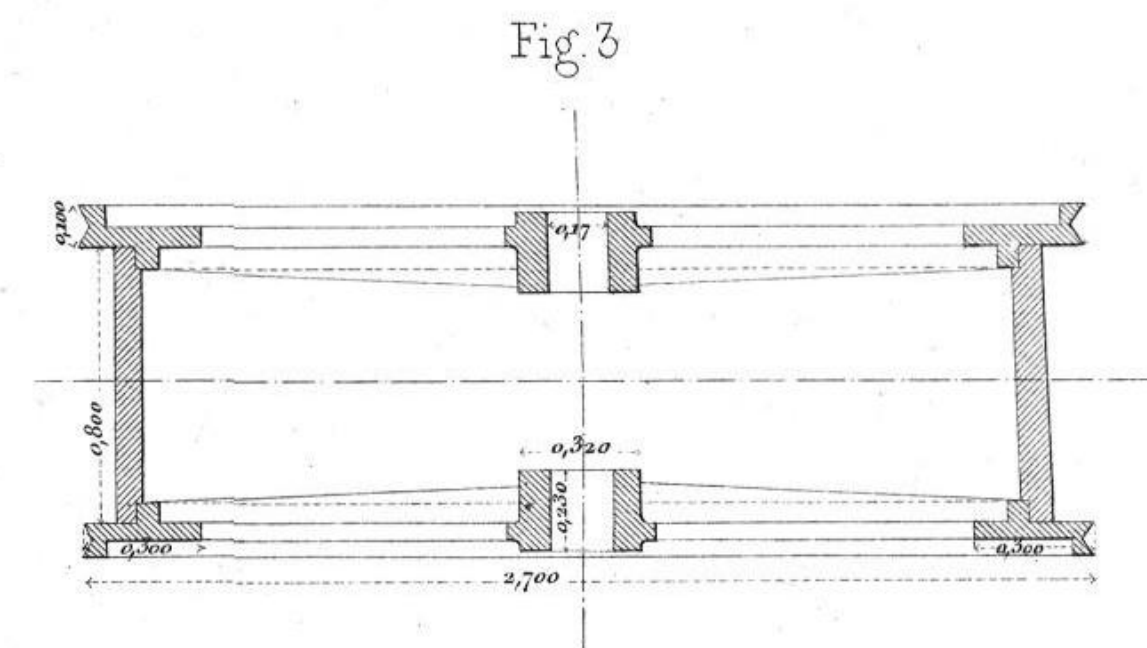
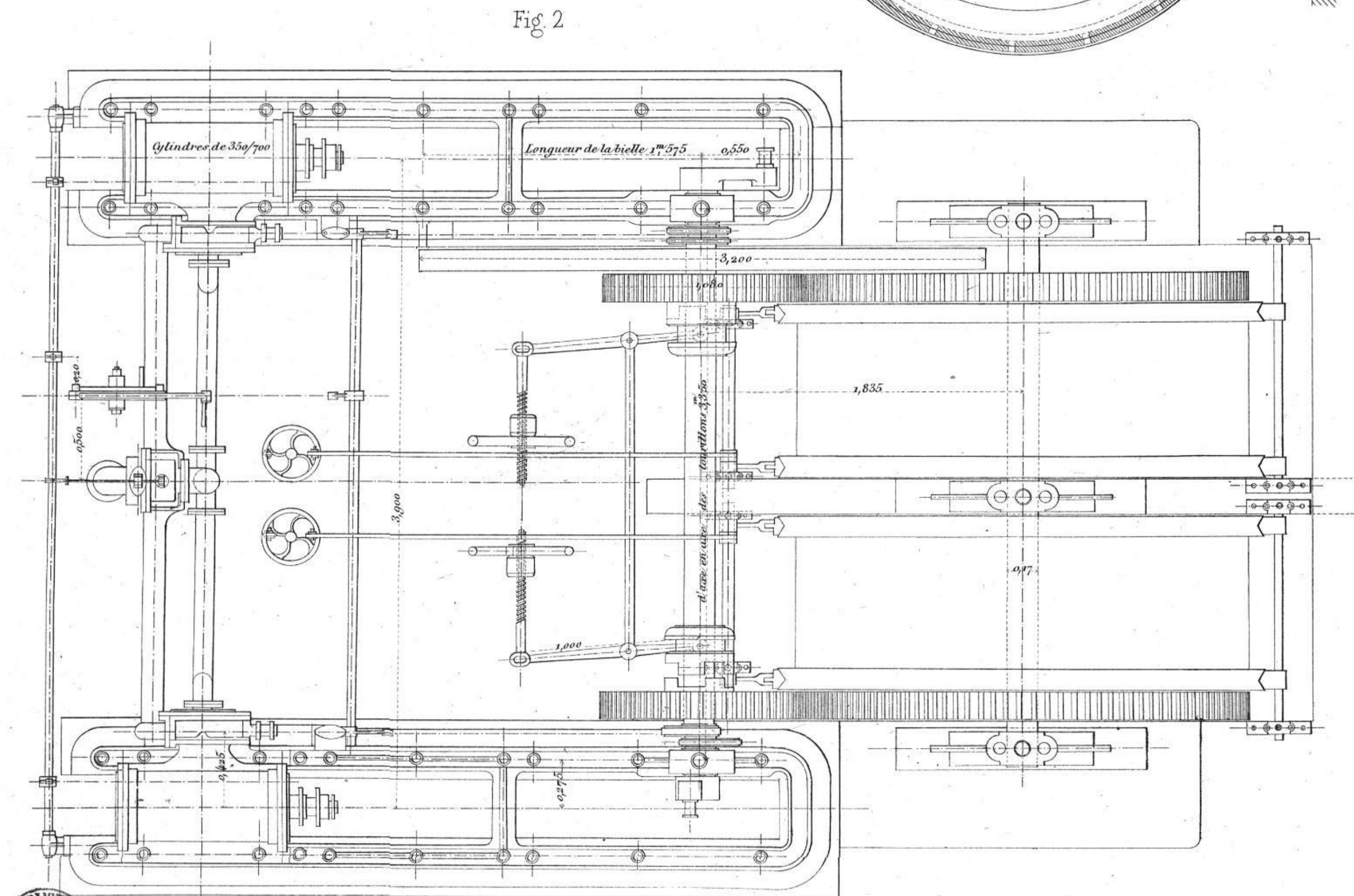
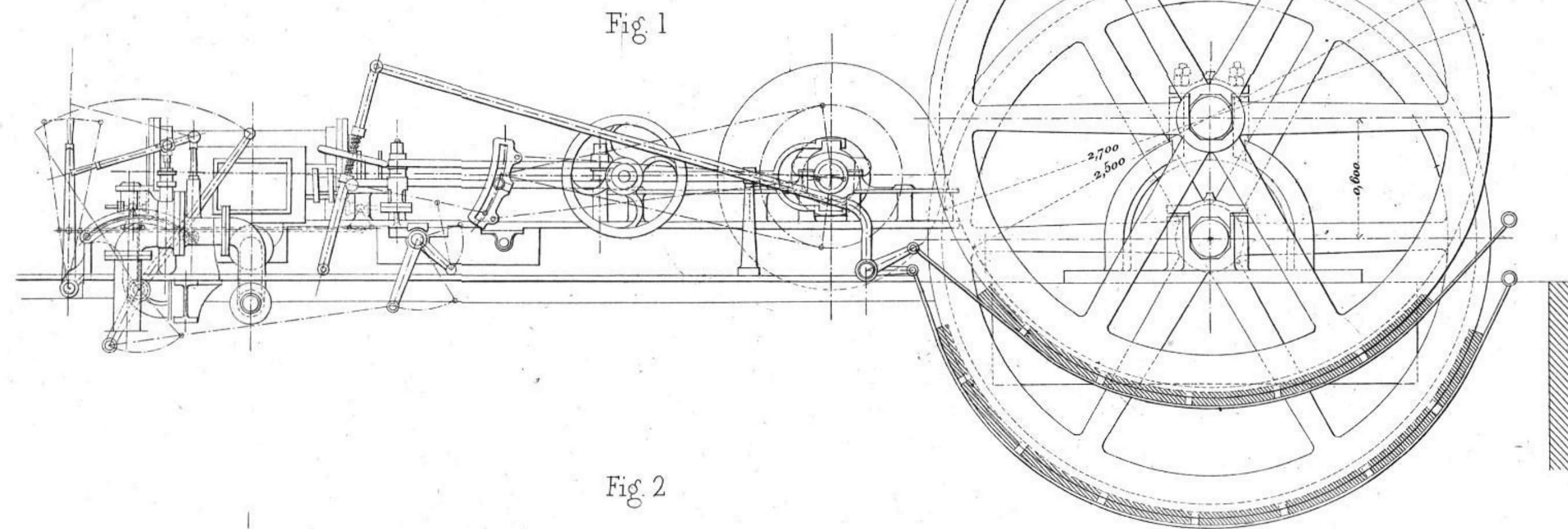
Echelle pour la fig 4



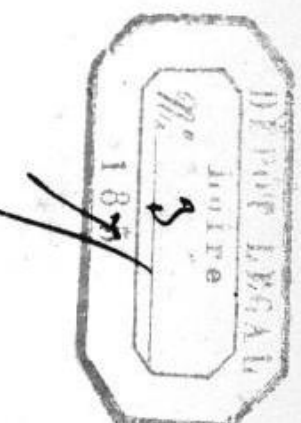








Echelle  
0 1 2 m.









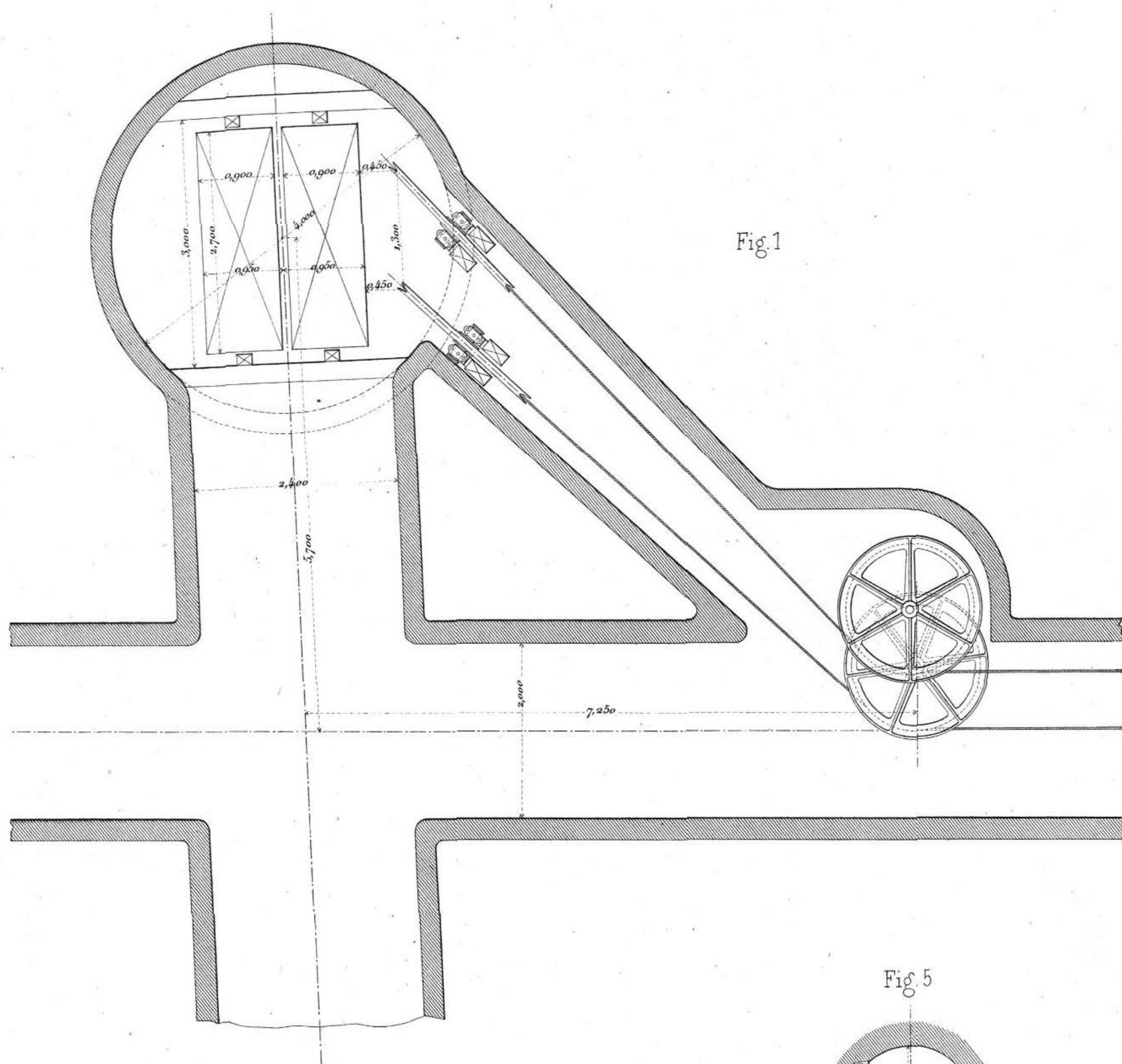


Fig.1

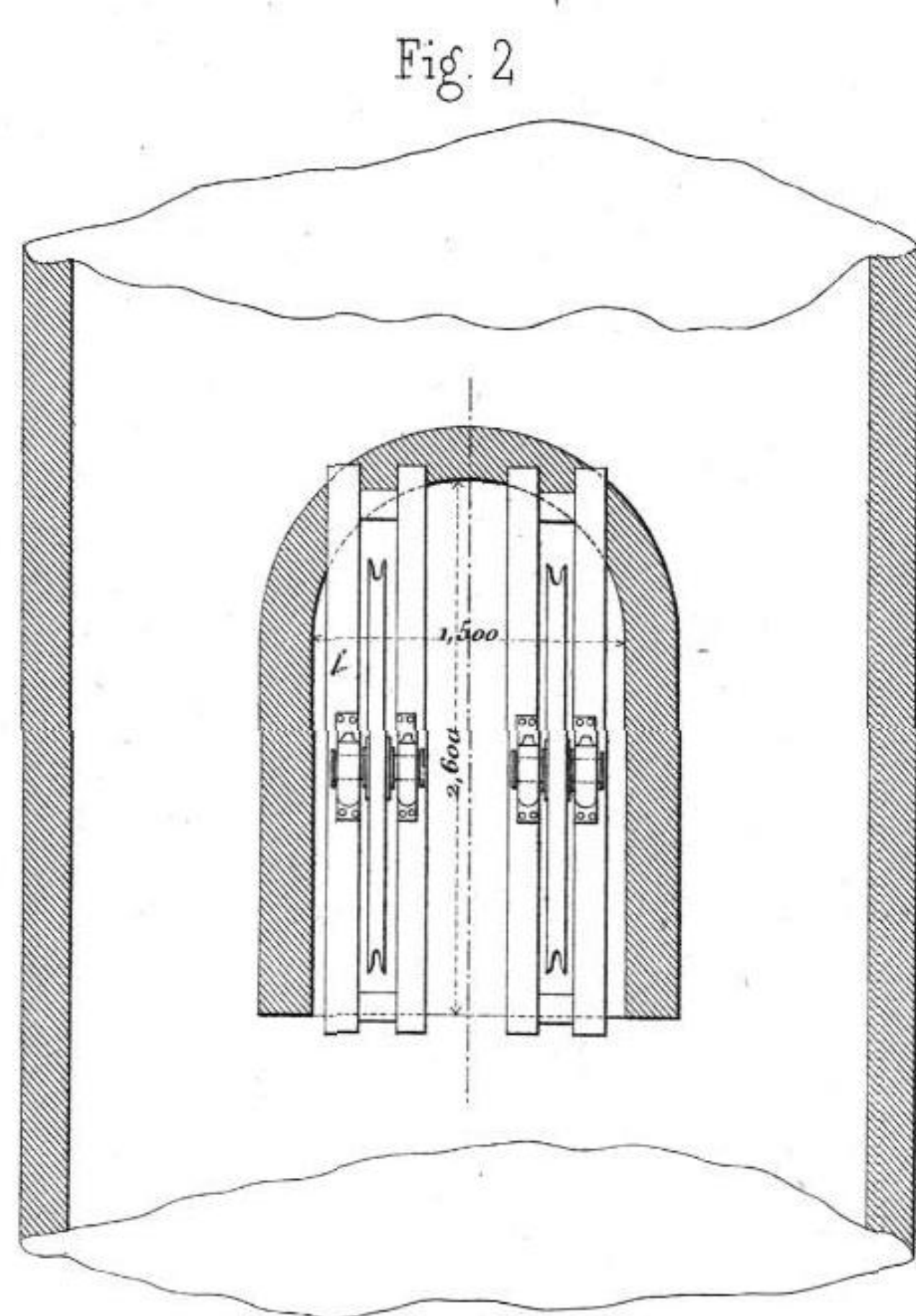


Fig. 2

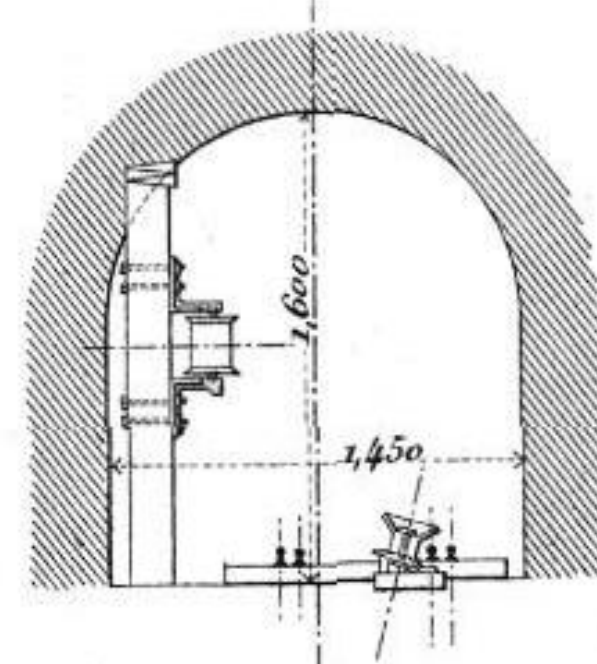


Fig. 5

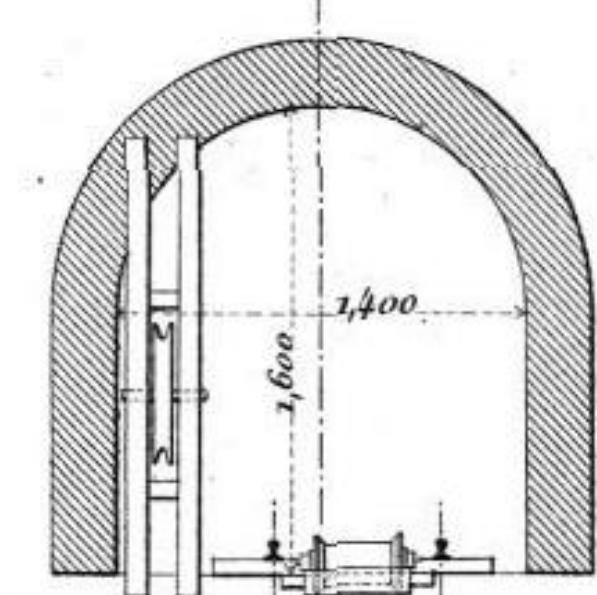


Fig. 6

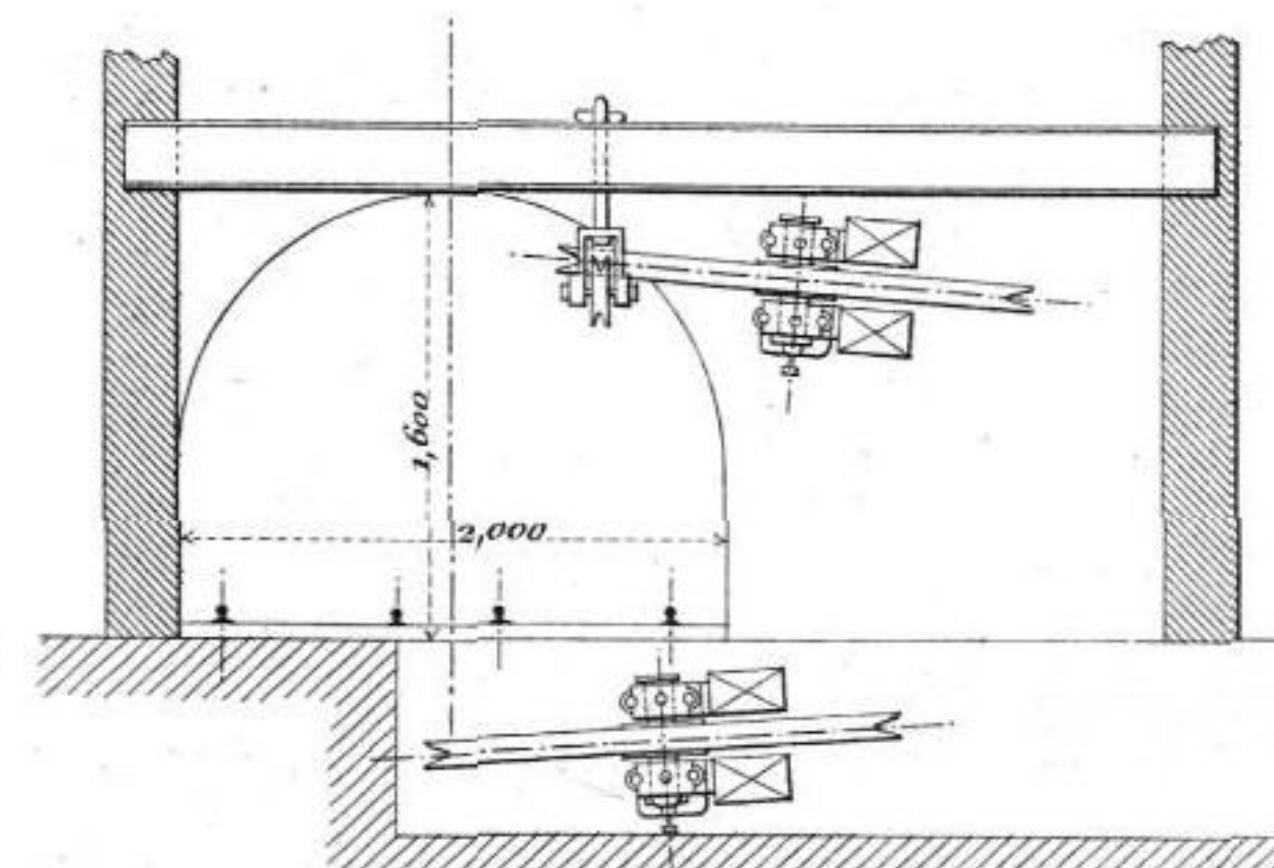
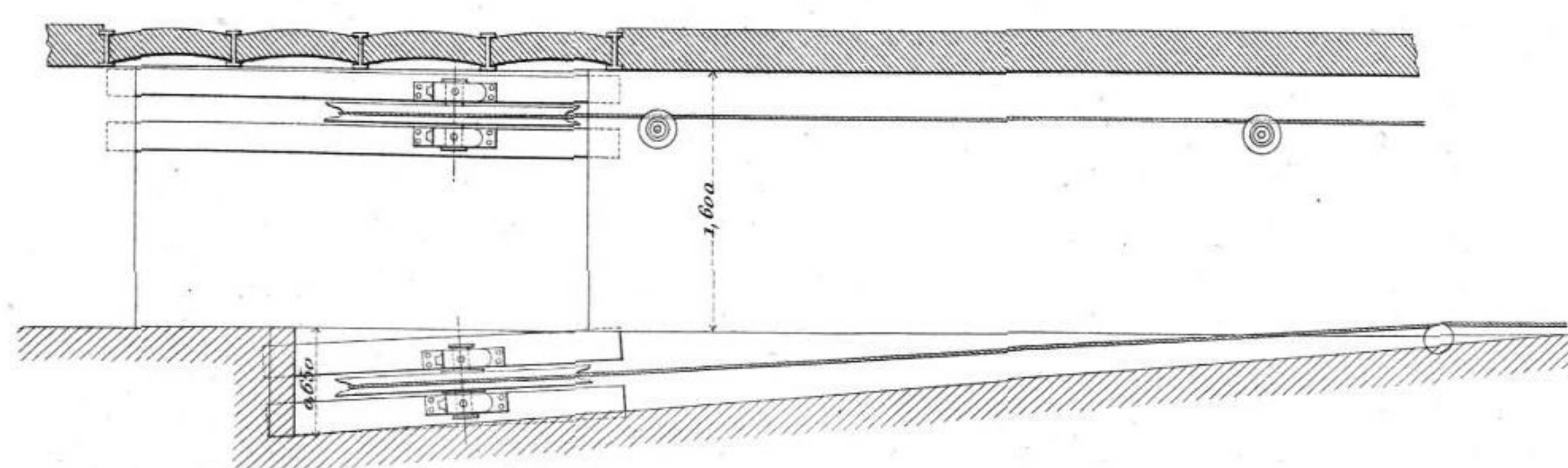


Fig. 4

Fig. 3

Echelle









3  
7

Fig 1

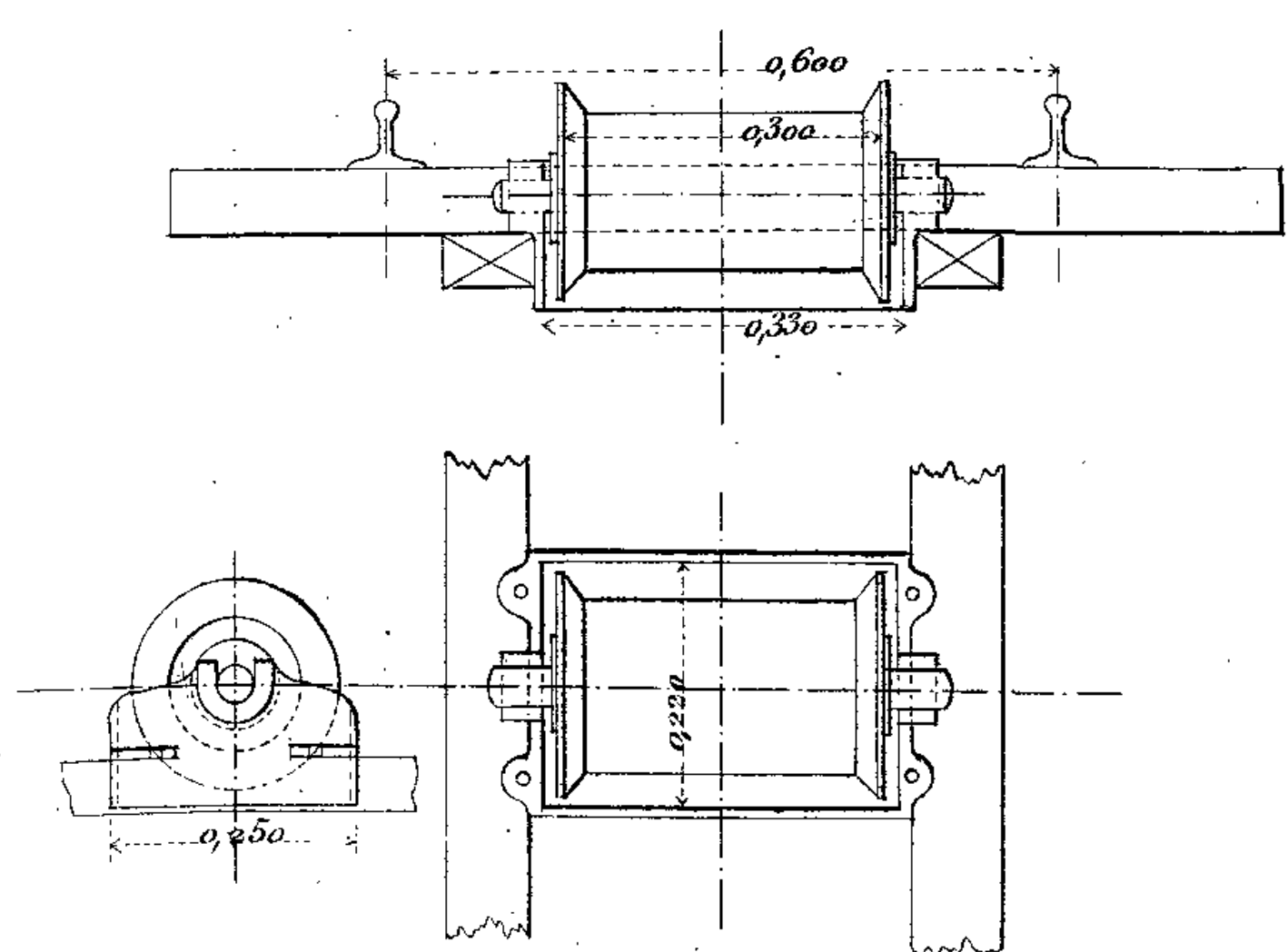


Fig 2

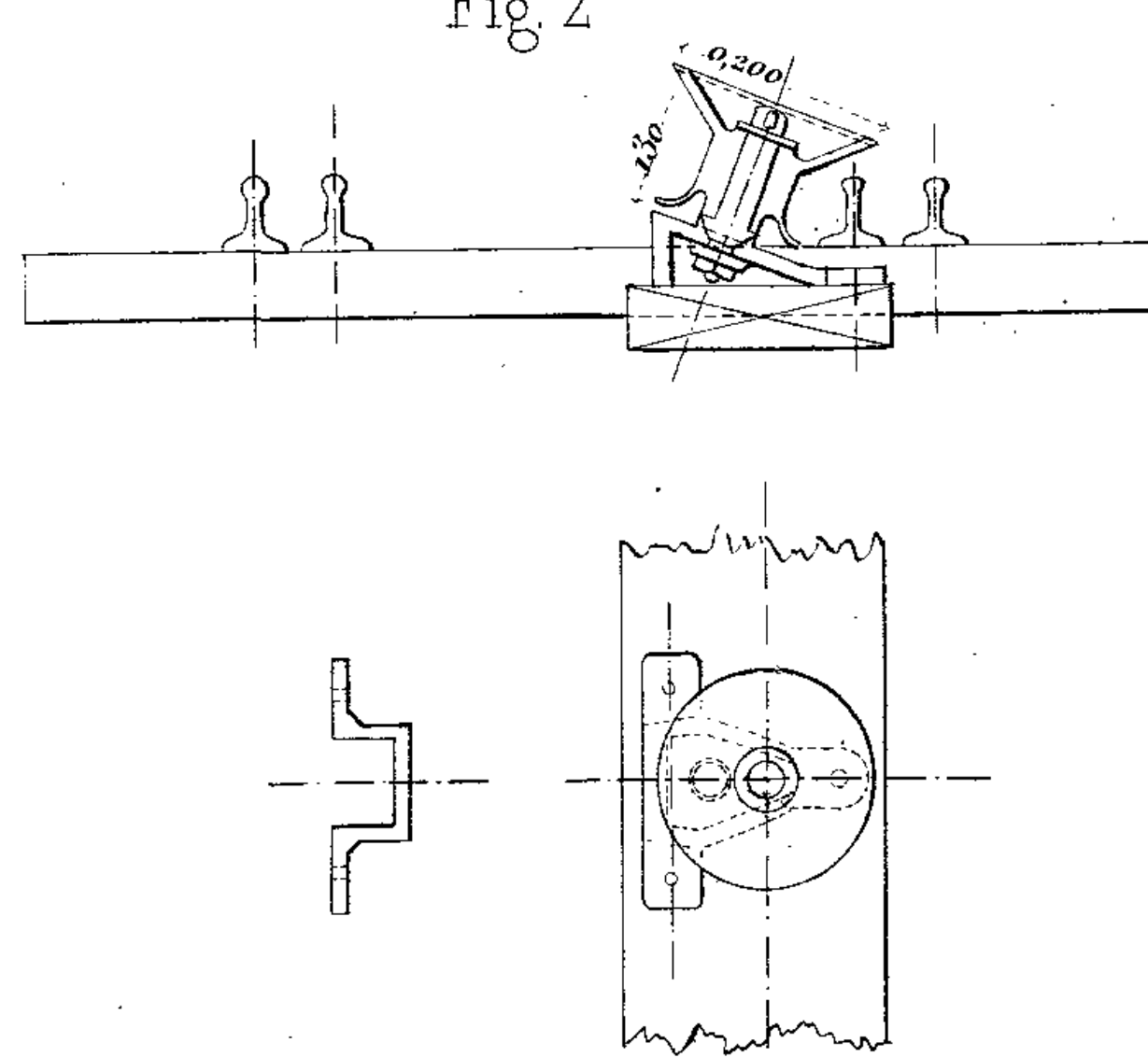


Fig 4

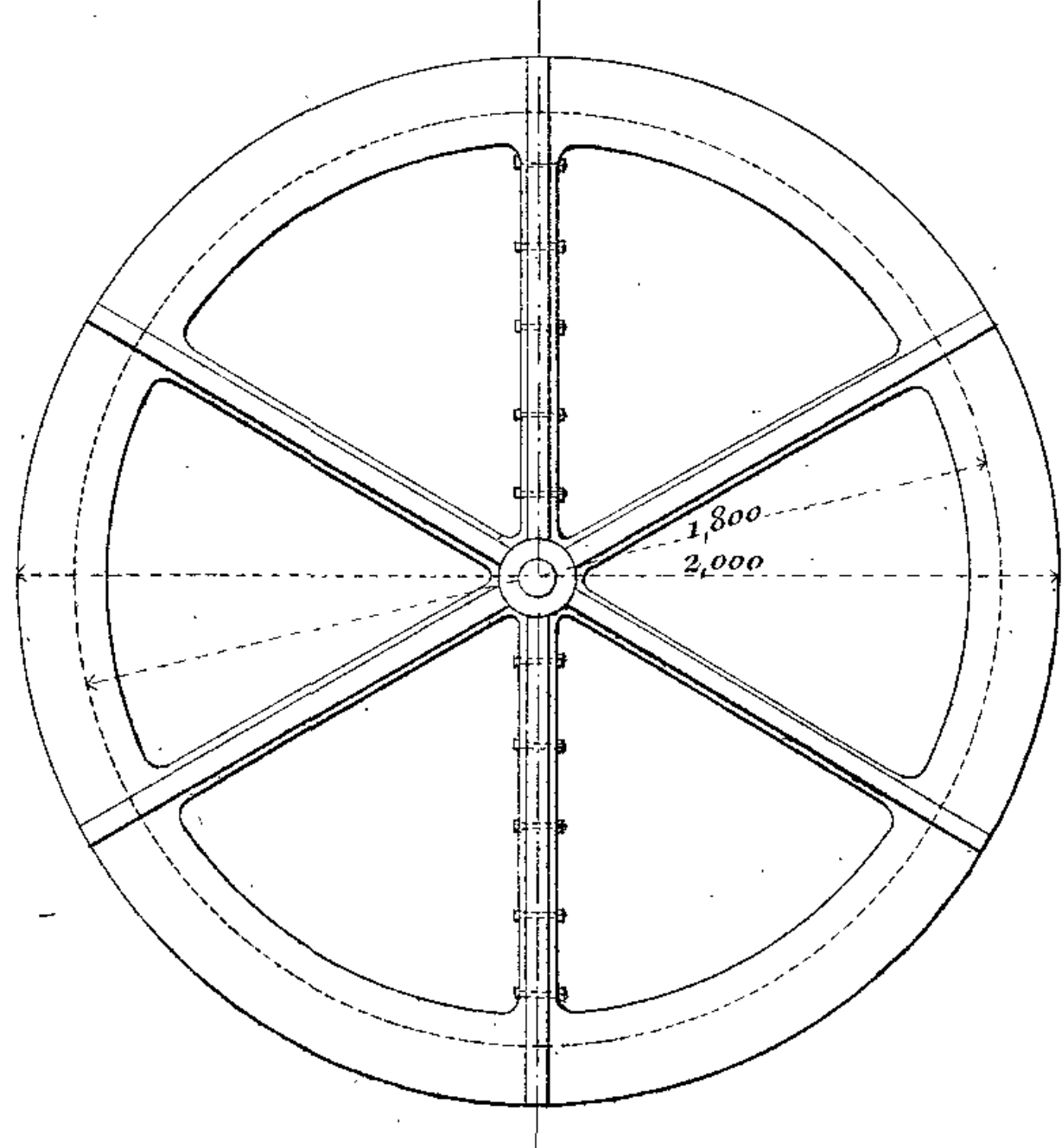


Fig 5

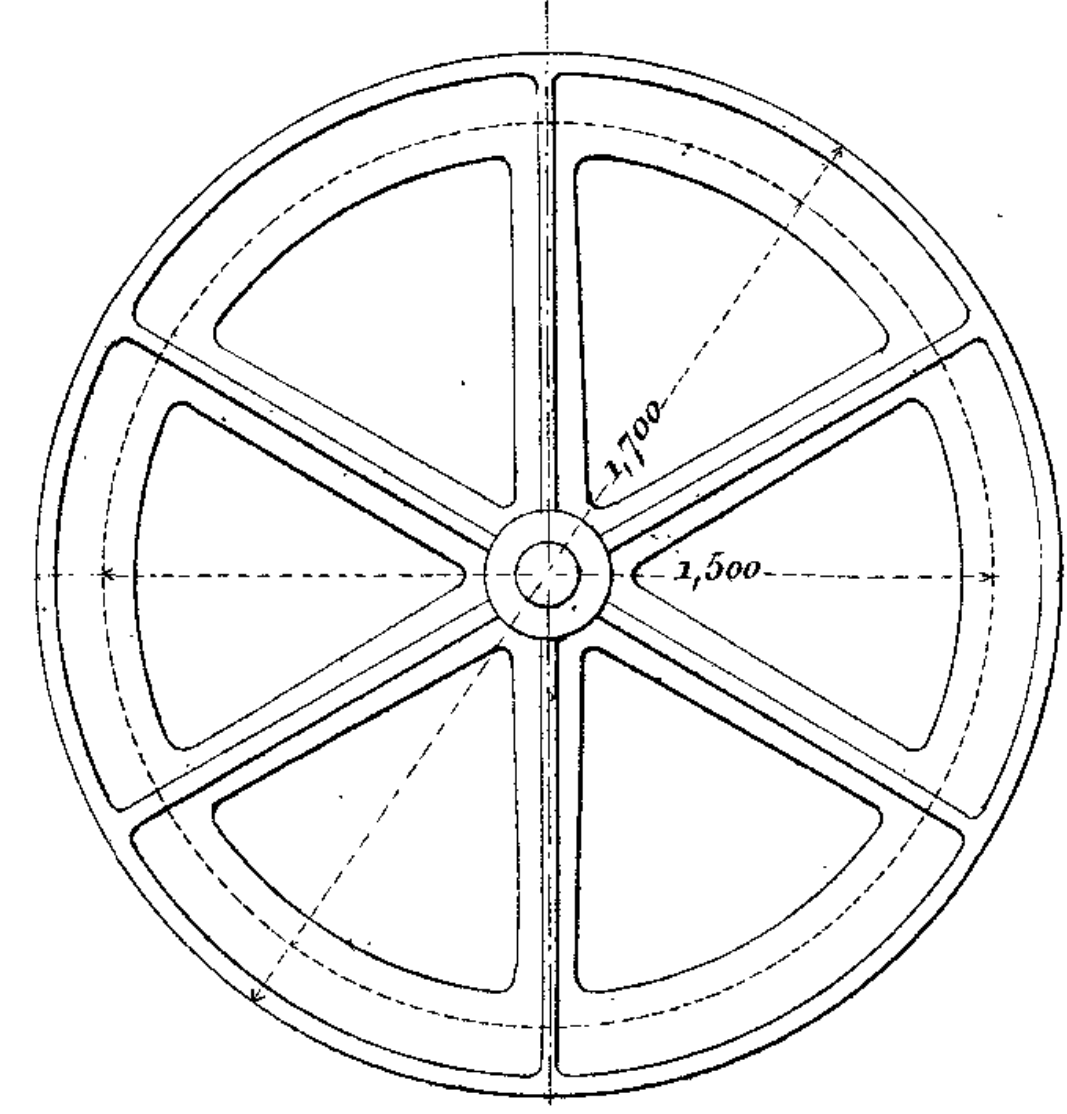


Fig 3

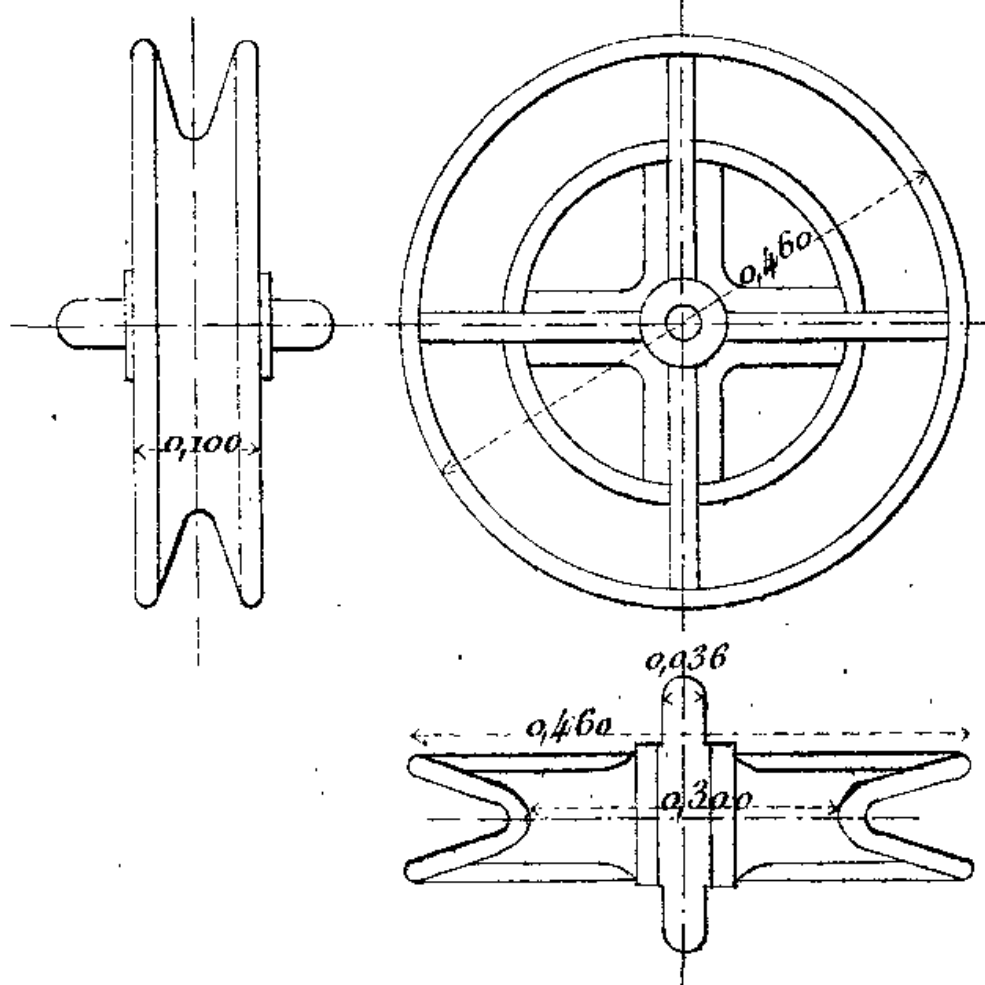


Fig 6

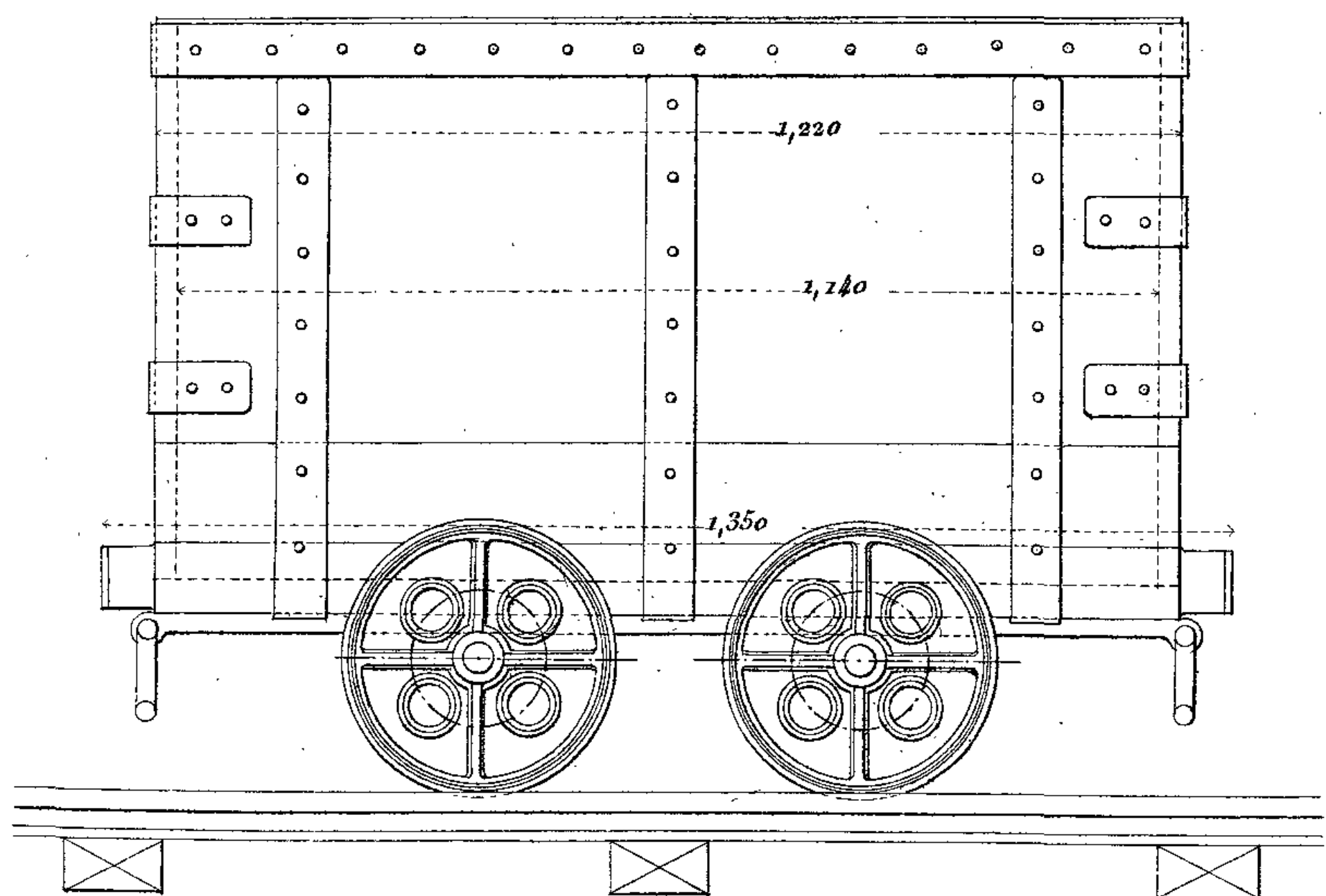


Fig 7

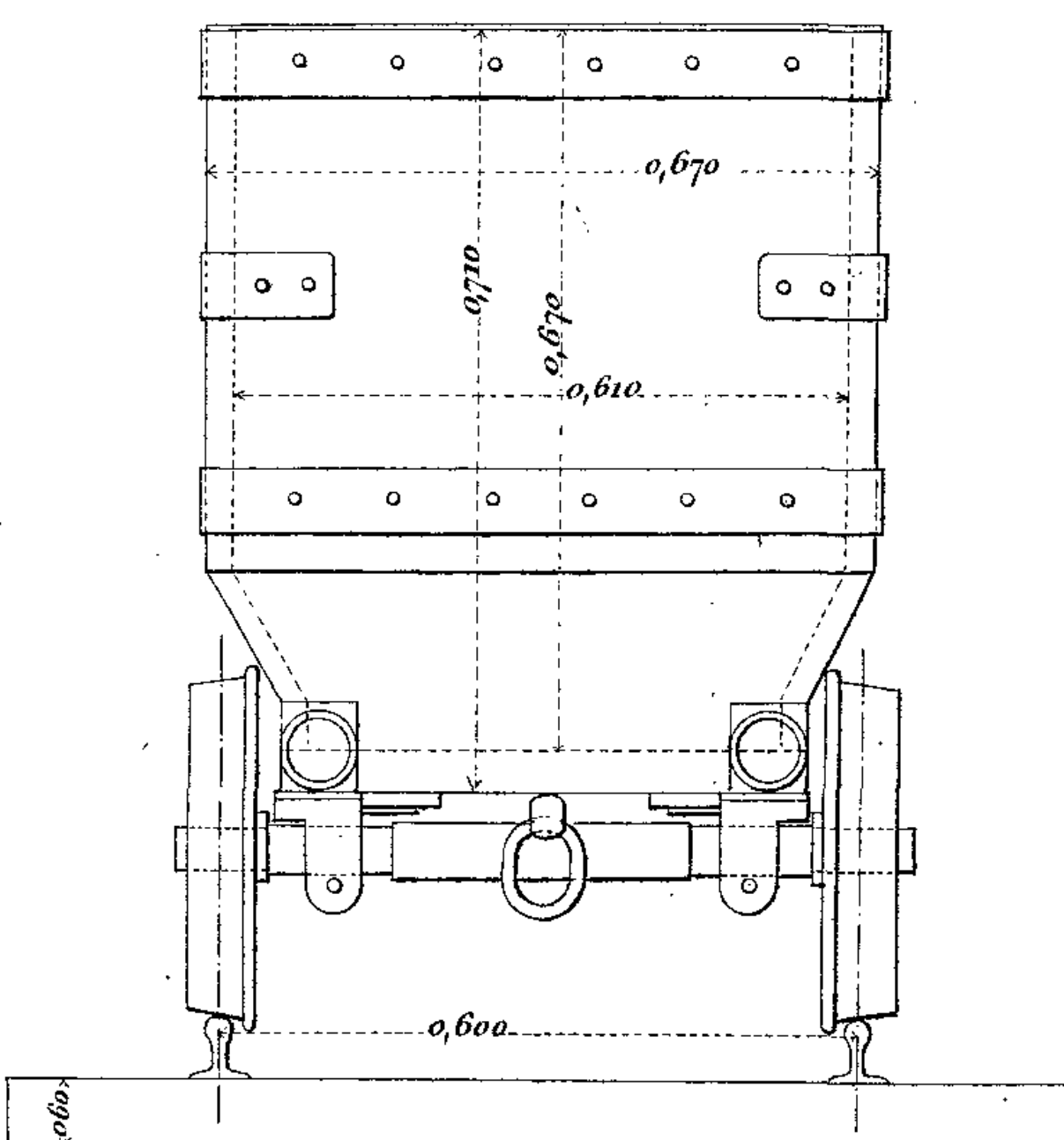


Fig 11

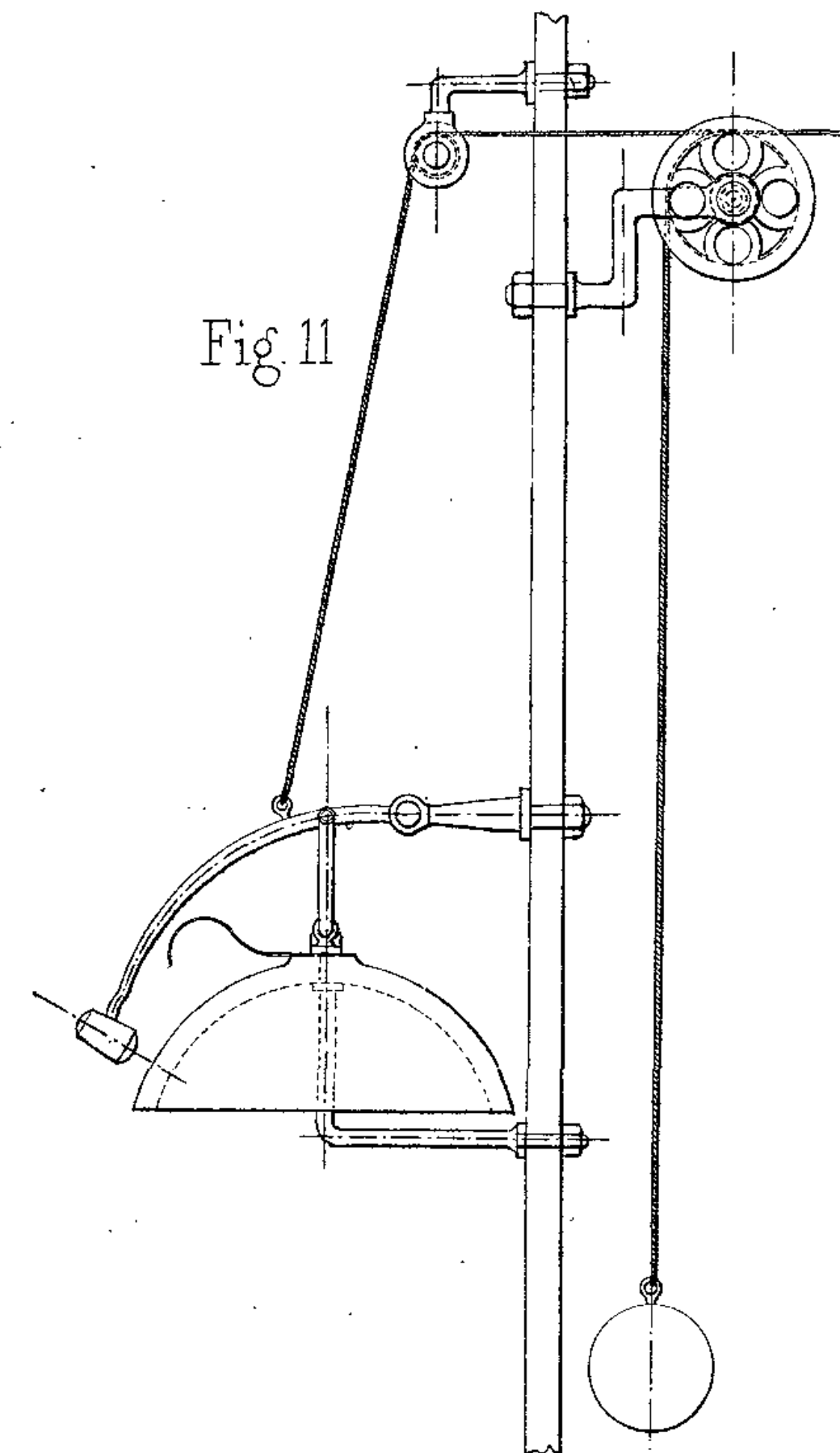


Fig 8

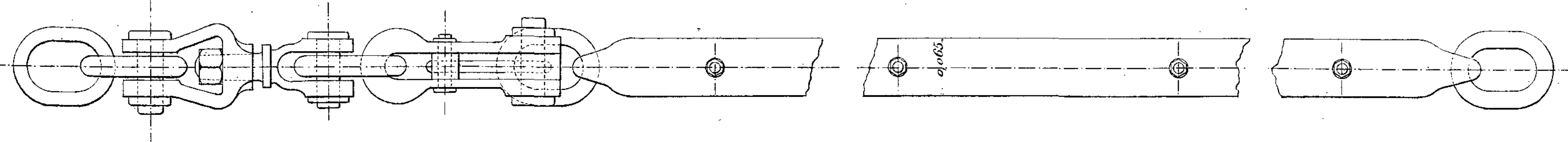


Fig 9

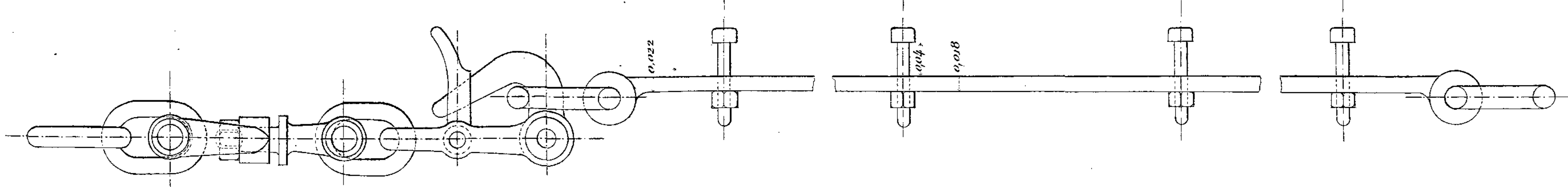
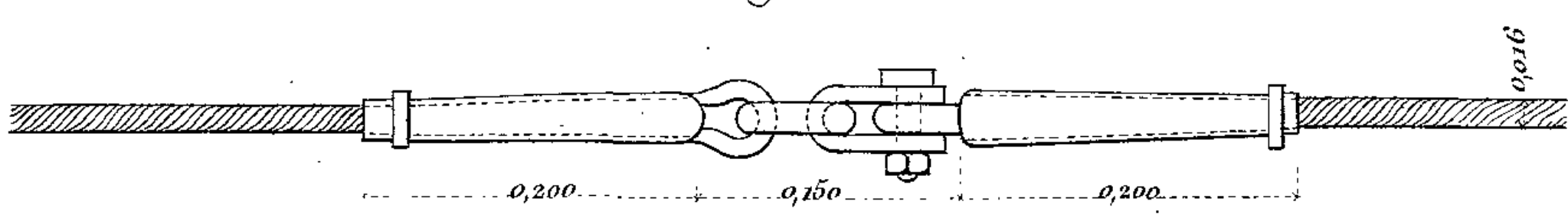


Fig 10



Echelle p<sup>r</sup> les Fig 1, 2, 3, 6, 7, 11.  
0 0,5 1 mètre  
Echelle p<sup>r</sup> les Fig 4, 5.  
0 1 2 mètres  
Echelle p<sup>r</sup> les Fig 8, 9, 10.  
0 0,25 0,50



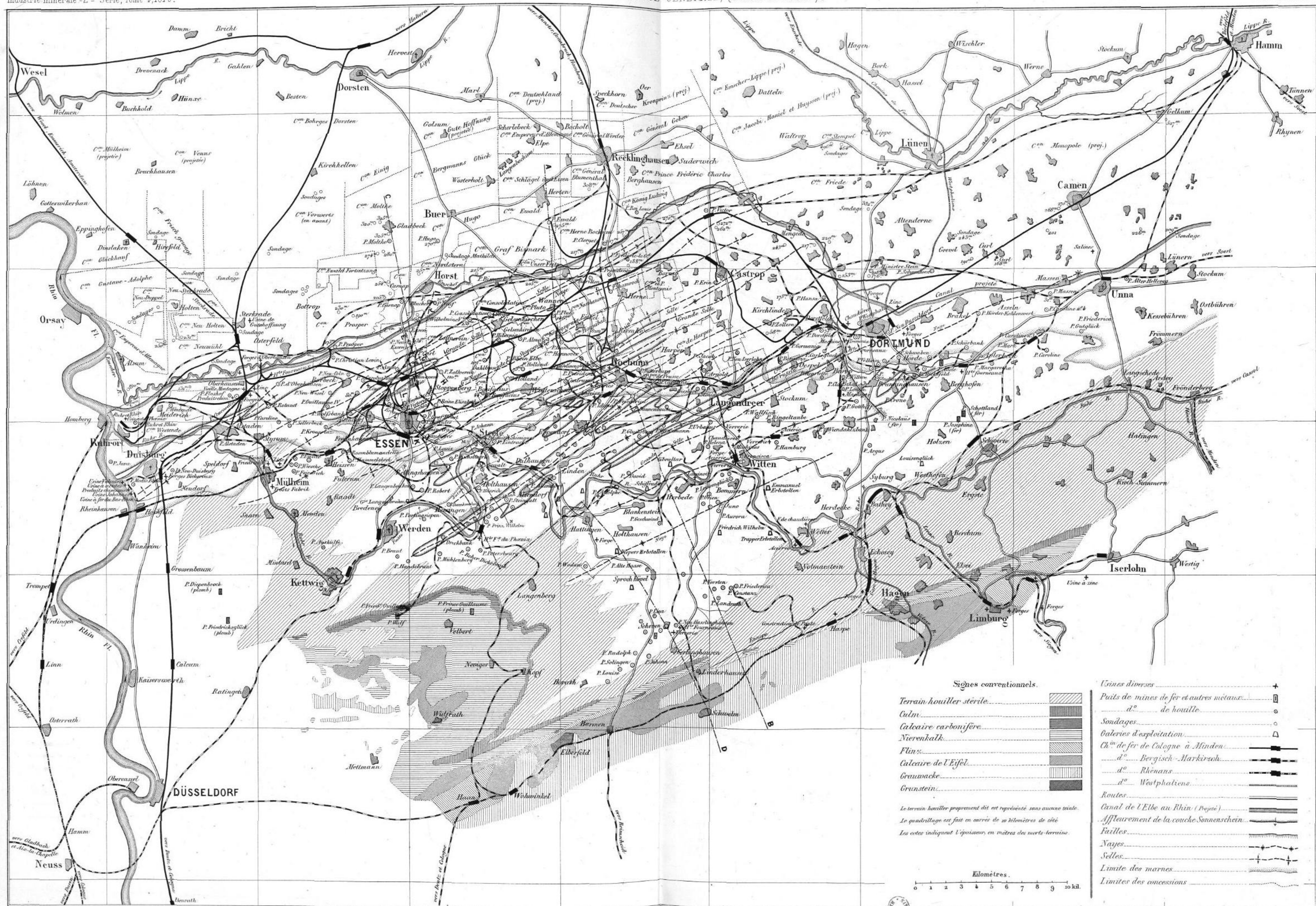


















## BASSIN DE LA RUHR — Coupes transversales du bassin.

- a. Couche Diomedes ou Rotgerbank  
b. Couche Dickebank ou Sonnenschein  
c. Couche Maueggatt ou Hundsmacken

Fig. 1. — Coupe verticale passant par ou près Wannen, Bochum et Herbede, suivant la ligne brisée AB de la carte — Echelle : 1 à 77.000

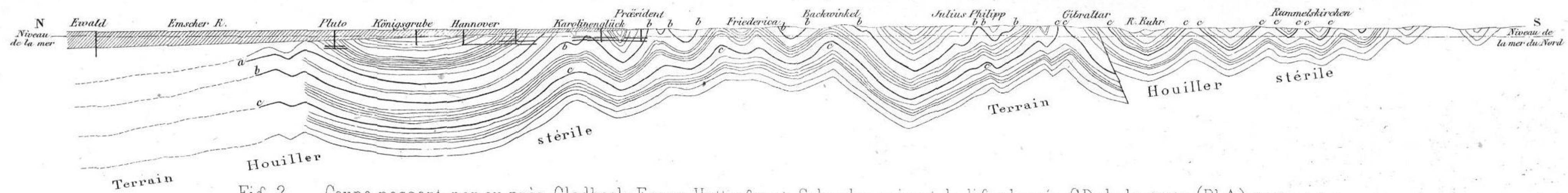
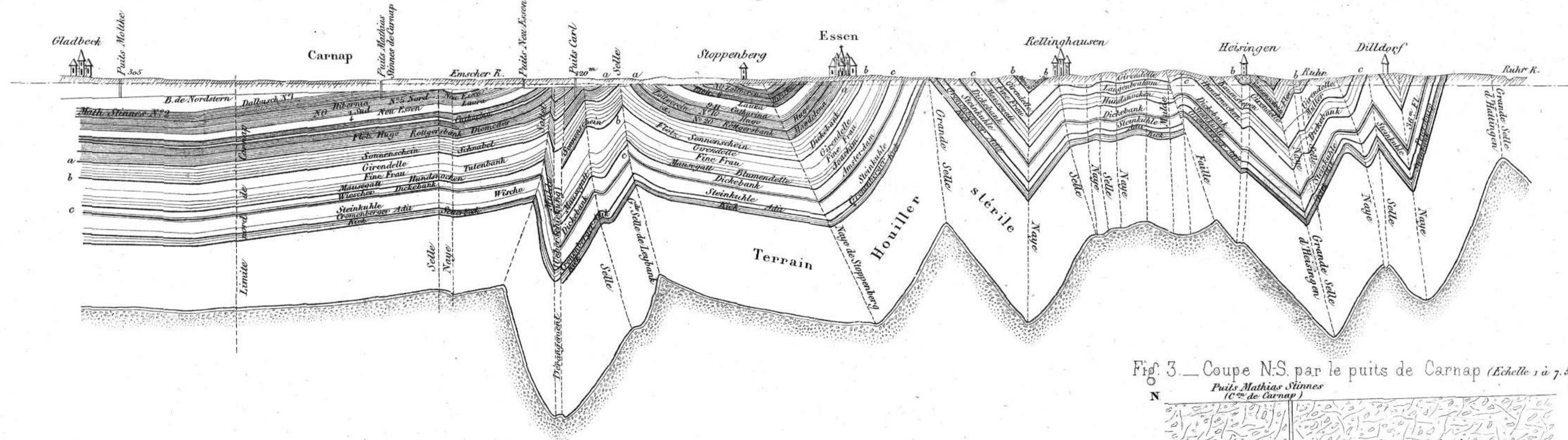


Fig. 2. — Coupe passant par ou près Gladbeck, Essen, Hattingen et Schwelm suivant la ligne brisée CD de la carte (P.L.A.) Echelle : 1 à 75.000.



suite de la coupe CD.

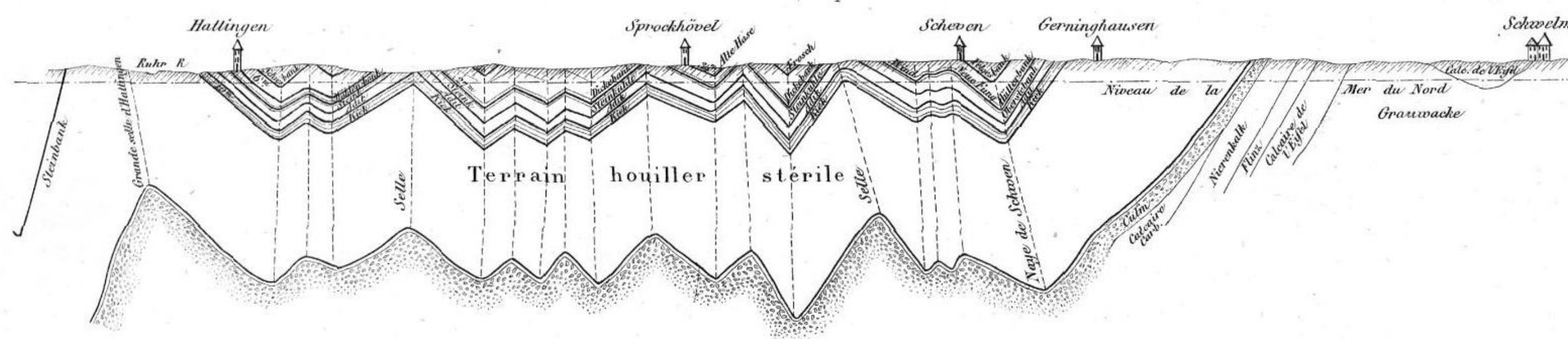


Fig. 3. — Coupe N.S. par le puits de Carnap (Echelle 1 à 7.500)

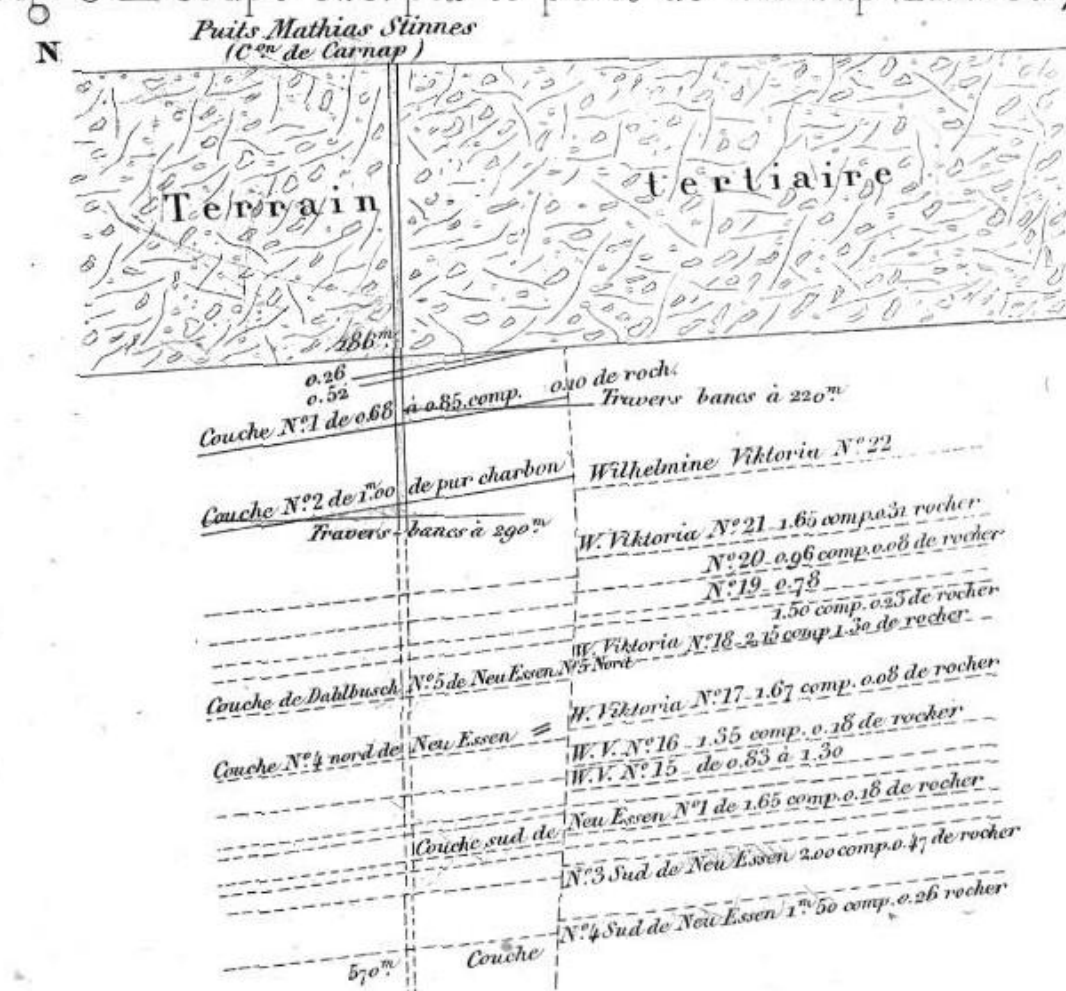








Fig. 2. — Coupe du N-N.O. au S.S.E. suivant EF par les puits de Neu Essen et Carl (Echelle 1 à 7.500.)

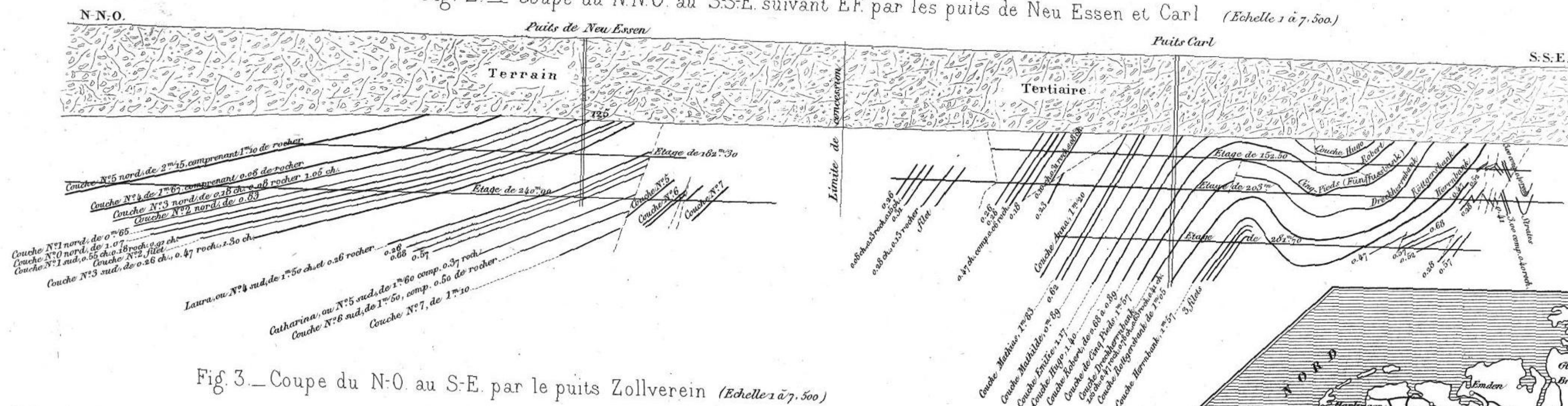


Fig. 3. — Coupe du N-O. au S-E. par le puits Zollverein (Echelle 1 à 7.500.)

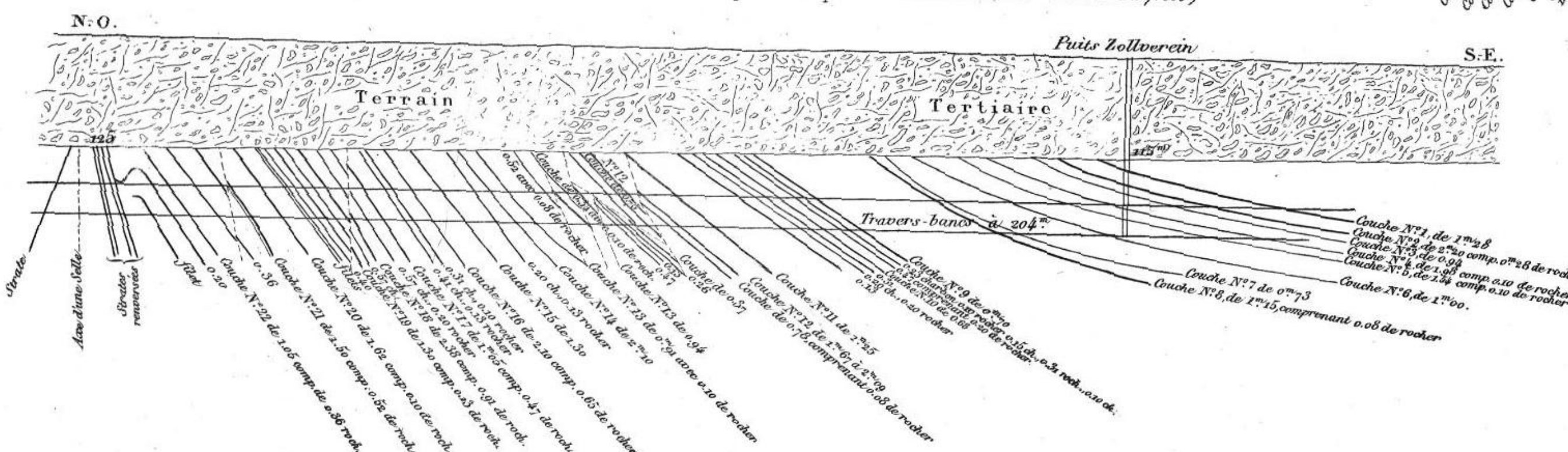


Fig. 4. — Coupe N-S. par le puits Blücher de Nordstern (Echelle 1 à 7.500.)

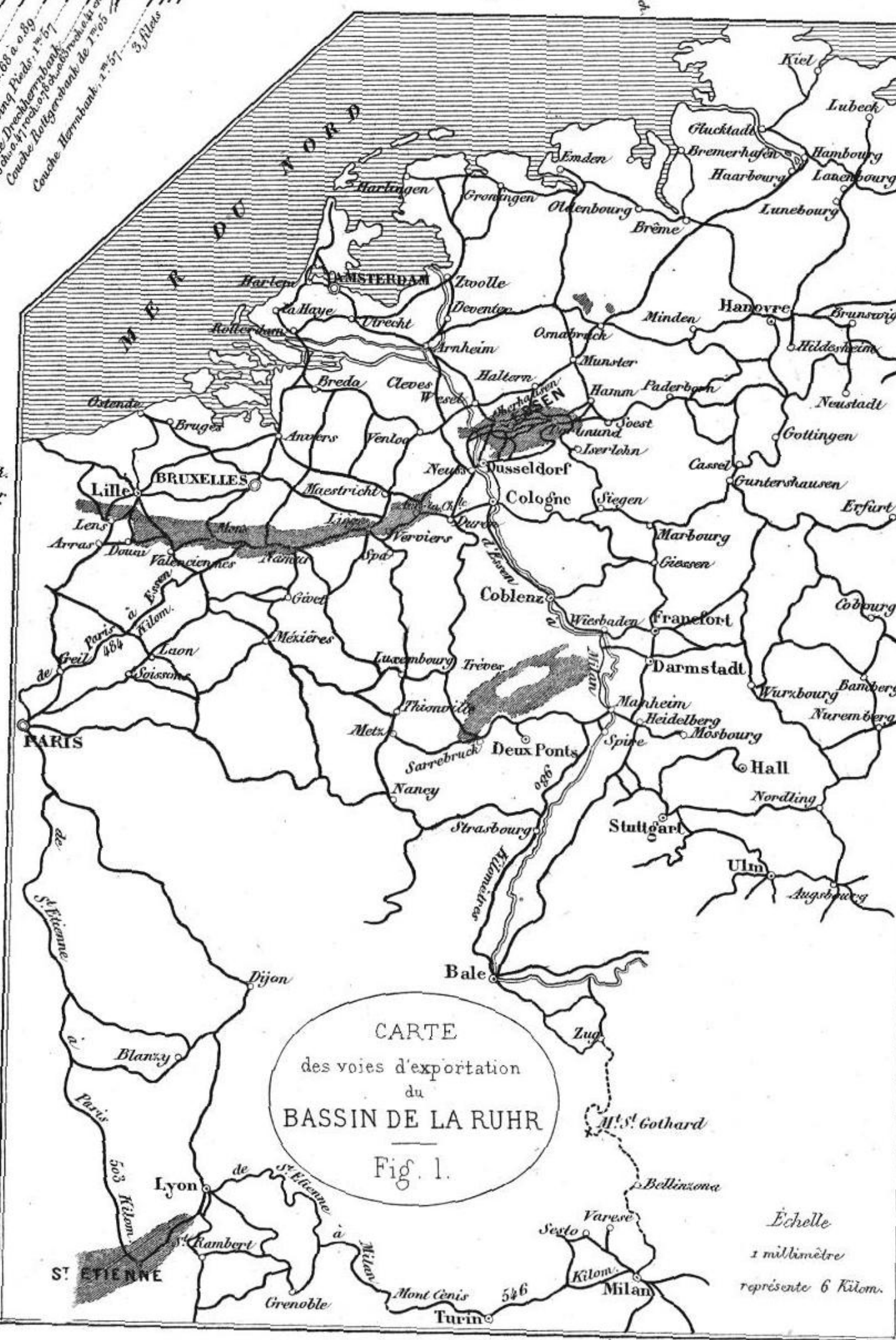
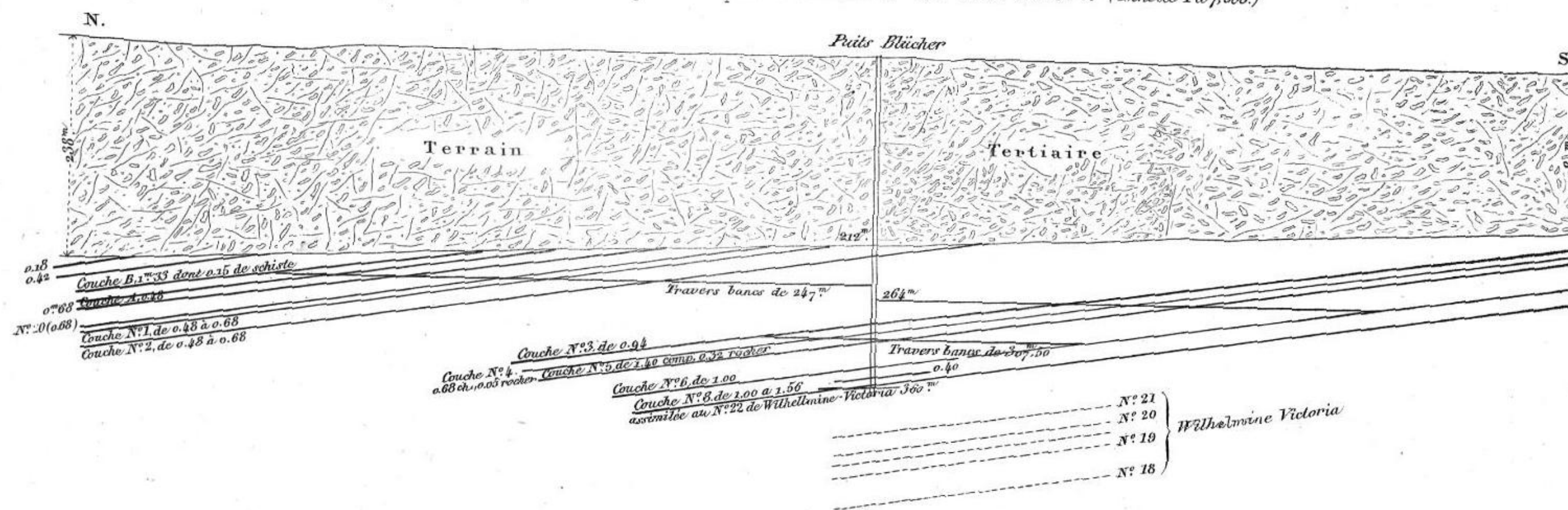
















Fig. 1. Coupe du terrain de Dortmund (1/7.500)

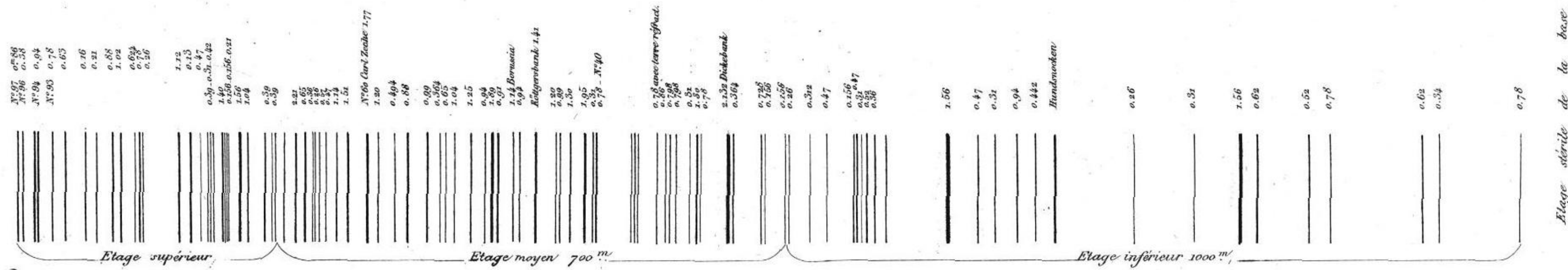


Fig. 2. Coupe du terrain d'Essen et Gelsenkirchen (1/7.500)

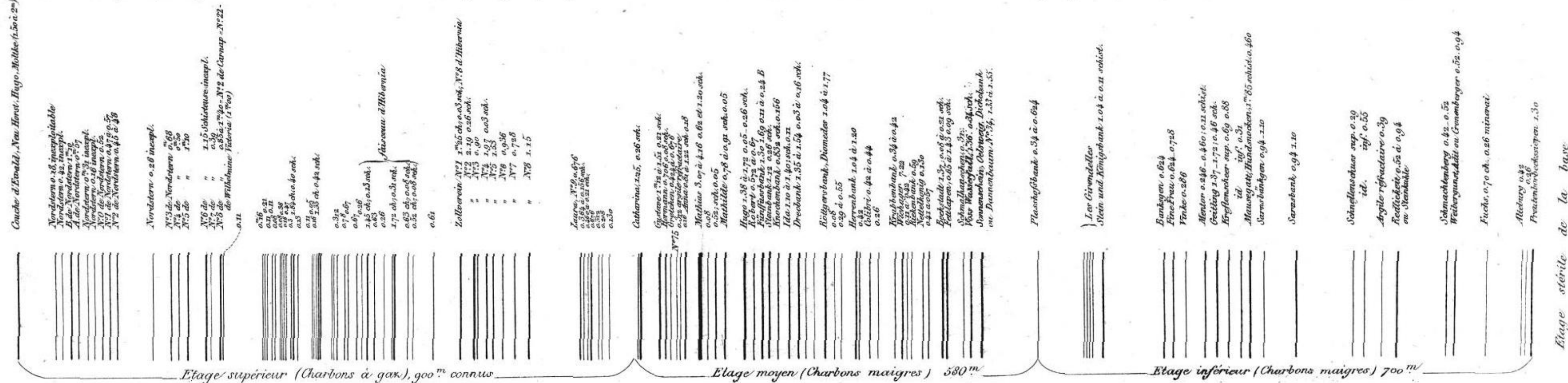
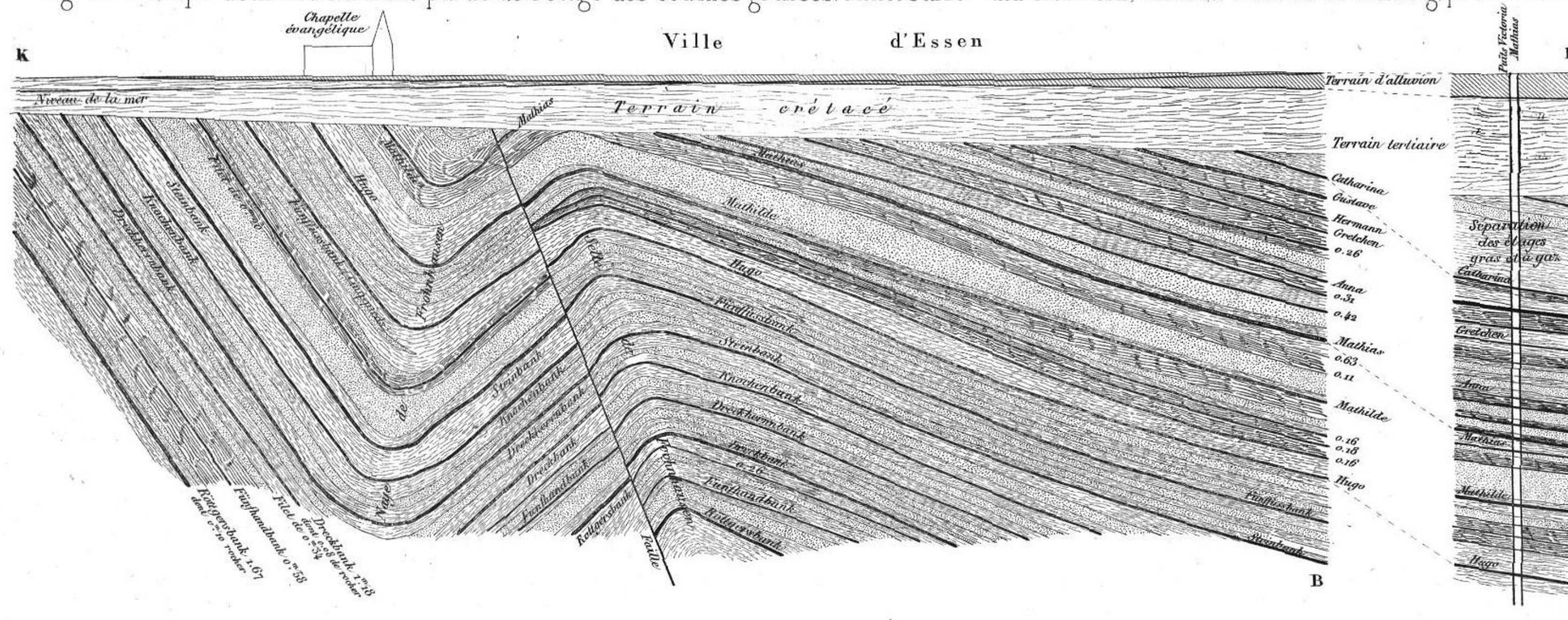


Fig. 3. Coupe détaillée KL d'une partie de l'étage des couches grasses. Mines Salzer und Neu Ack, Victoria Mathias et Hoffnung, près Essen.



Légende de la Fig. 3.

| Grès et Psammiles                                       | Schiste argileux                                | Schiste bitumineux           |
|---------------------------------------------------------|-------------------------------------------------|------------------------------|
| Puissance des couches de houille de la coupe ci contre. |                                                 |                              |
| Filet de houille                                        | Puits Victoria Mathias et celle de Frohnhausen. | Noye de Frohnhausen          |
| Catharina                                               | 0.21                                            | 0.20                         |
| Oustave                                                 | 1.26                                            | 1.41 dont 0.39 rocher        |
| Hermann                                                 | 1.52 dont 0.24 rocher                           | 0.95 dont 0.14 rocher        |
| Grächen                                                 | 0.81 à 0.92 de 0.07 à 0.22 rocher               | 1.56 dont 0.25 rocher        |
| Filet de houille                                        | 0.04                                            | 1.18 dont 0.05 à 0.10 rocher |
| Anna                                                    | 0.26                                            | 0.34                         |
| Filet                                                   | 0.94 dont 0.05 rocher                           | 0.58                         |
| Filet                                                   | 0.31                                            | 1.67 dont 0.10 rocher        |
| Filet                                                   | 0.42                                            |                              |
| Mathias                                                 | 4.20 dont 1.76 rocher                           |                              |
| Couche                                                  | 0.63 dont 0.13 rocher                           |                              |
| Filet de houille                                        | 0.25 dont 0.16 rocher                           |                              |
| Mathilde                                                | 0.62 dont 0.02 rocher                           |                              |
| Filet de houille                                        | 0.16                                            |                              |
| Filet de houille                                        | 0.18                                            |                              |
| Filet de houille                                        | 0.16                                            |                              |
| Hugo                                                    | 1.44 dont 0.05 rocher                           |                              |
| Függelbank (Casp. Beds)                                 | 1.87 dont 0.08 rocher                           |                              |
| Filet de houille                                        | "                                               |                              |
| Steinbank                                               | 0.86 dont 0.26 rocher                           |                              |
| Knochenbank                                             |                                                 |                              |
| Drecherbank                                             |                                                 |                              |
| Drecherbank                                             |                                                 |                              |
| Filet de houille                                        | 0.26                                            |                              |
| Függelbank                                              |                                                 |                              |
| Rüttgerbank                                             | 1.67 dont 0.08 de rocher                        |                              |







Fig. 2  
Plan des Affleurements d'une partie de la Vieille Ruhr  
entre Werden et Steele

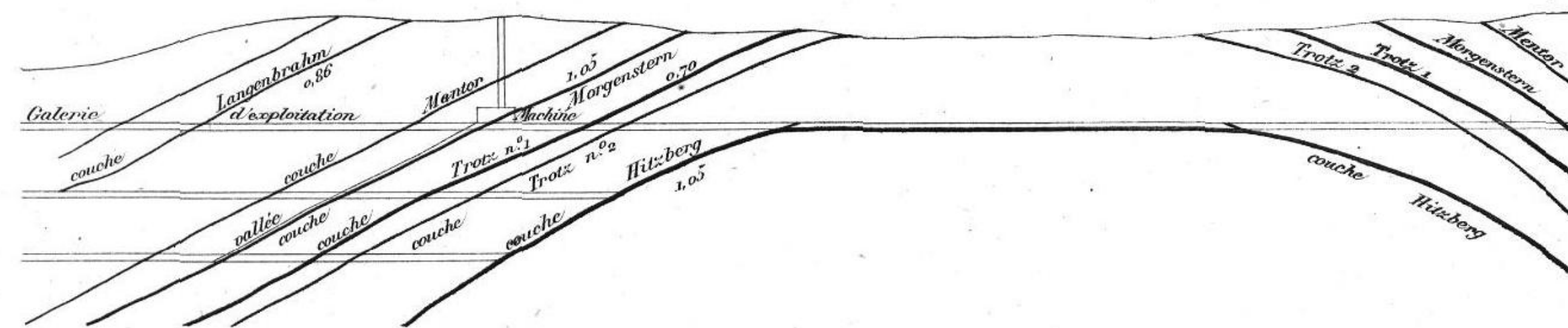


Fig 4  
Exploitation de la couche Girendelle  
à la mine Kamsbank

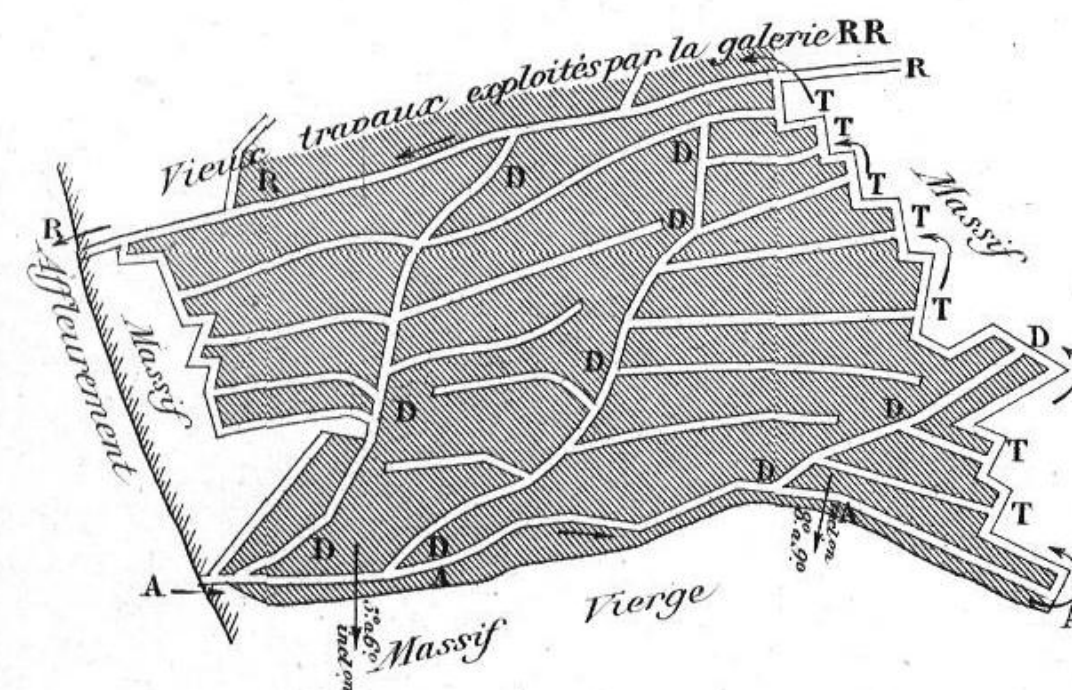


Fig. 5  
Mine Sälzer und  
Neu-Ack  
*Exploitation de la  
couche Dreckbank*

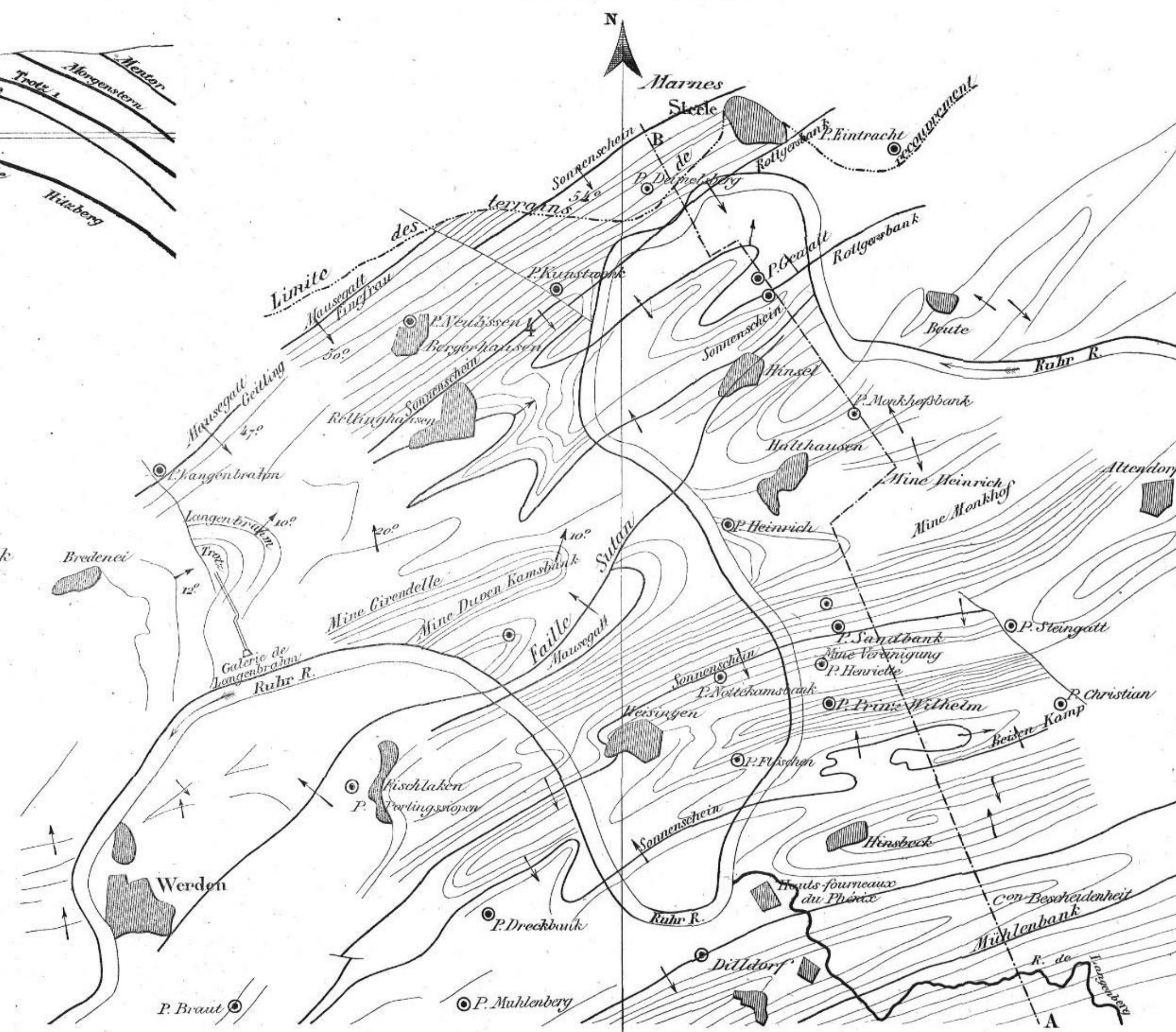
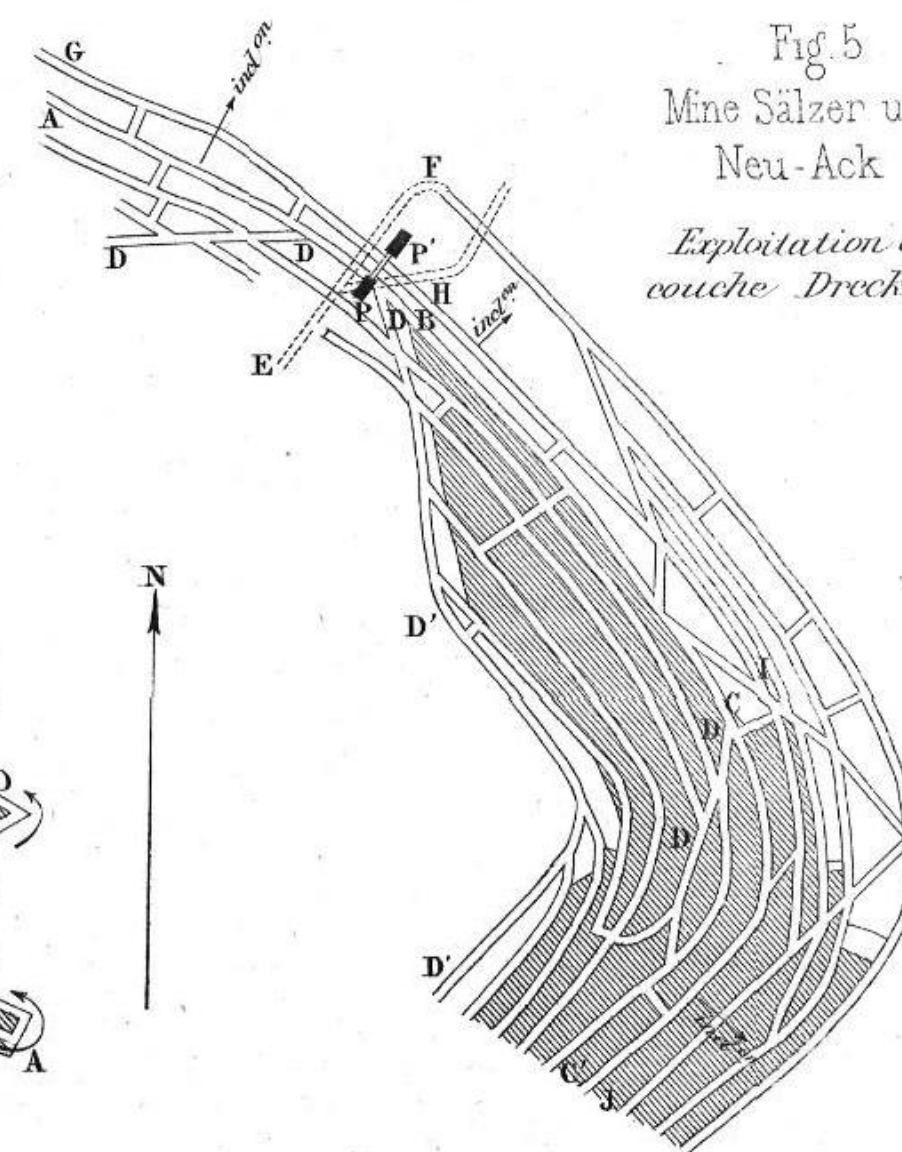
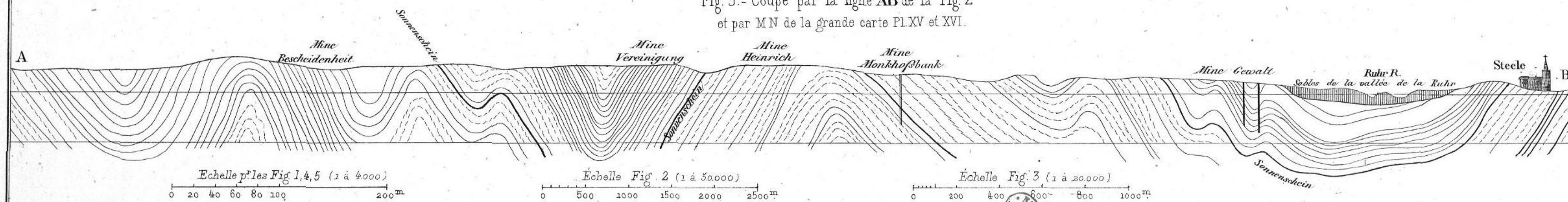


Fig. 3.- Coupe par la ligne **AB** de la Fig. 2  
et par MN de la grande carte PL.XV et XVI.







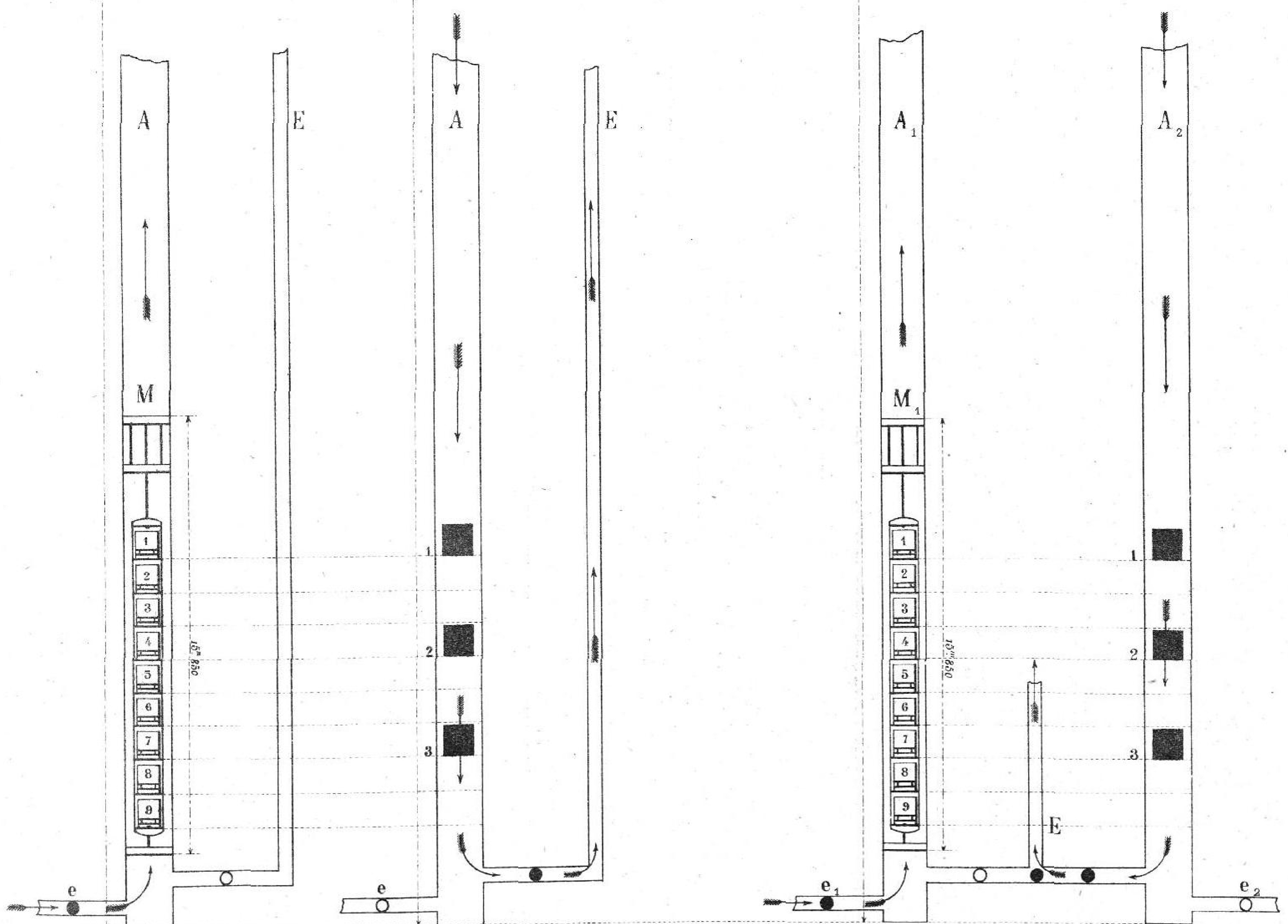
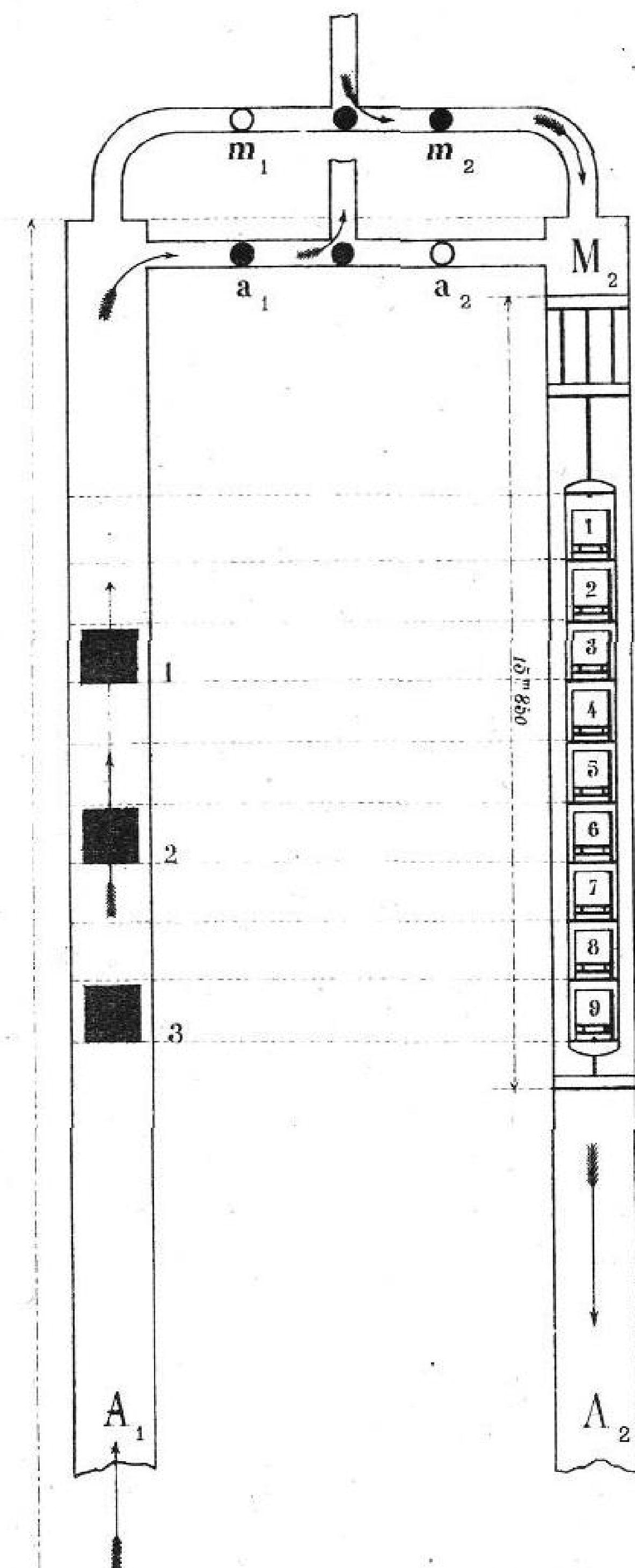
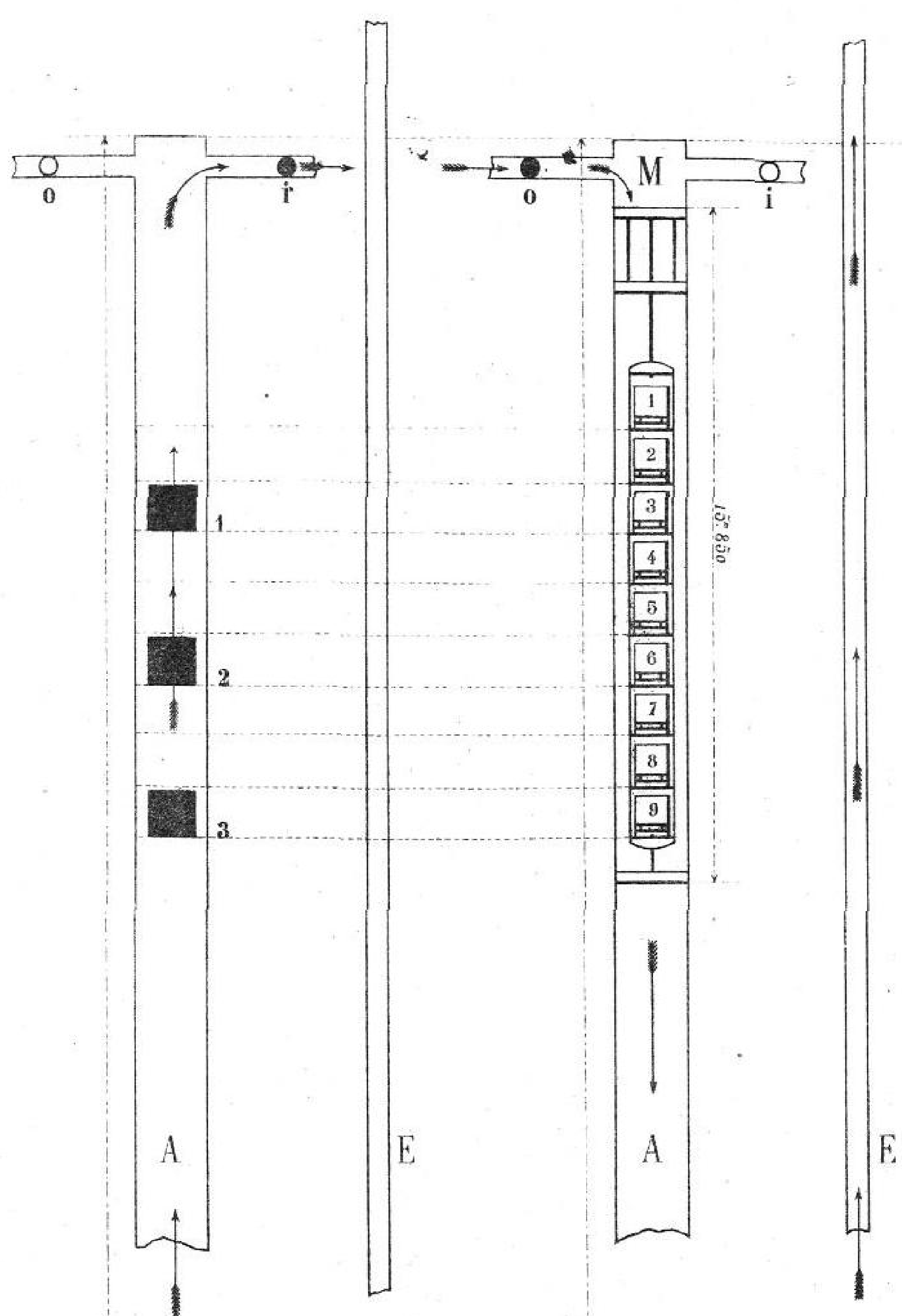


# TUBE ATMOSPHERIQUE DU PUIT HOTTINGUER

par  
l'ingénieur ZULMA BLANCHET

Directeur de la Société anonyme des Houillères et du Chemin de fer d'Epinae  
Industrie minière 2<sup>e</sup> Serie, Tome IV, 1875.

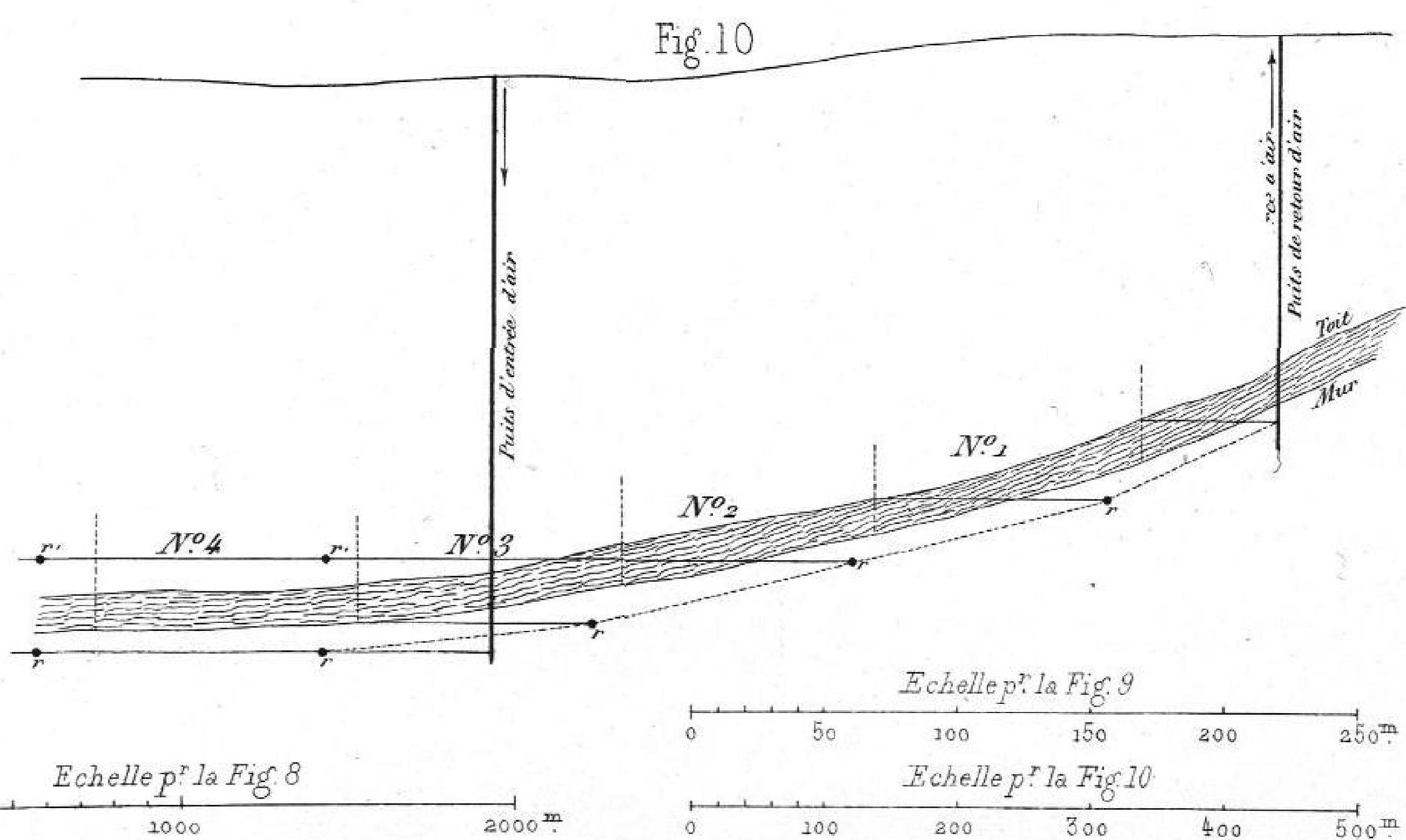
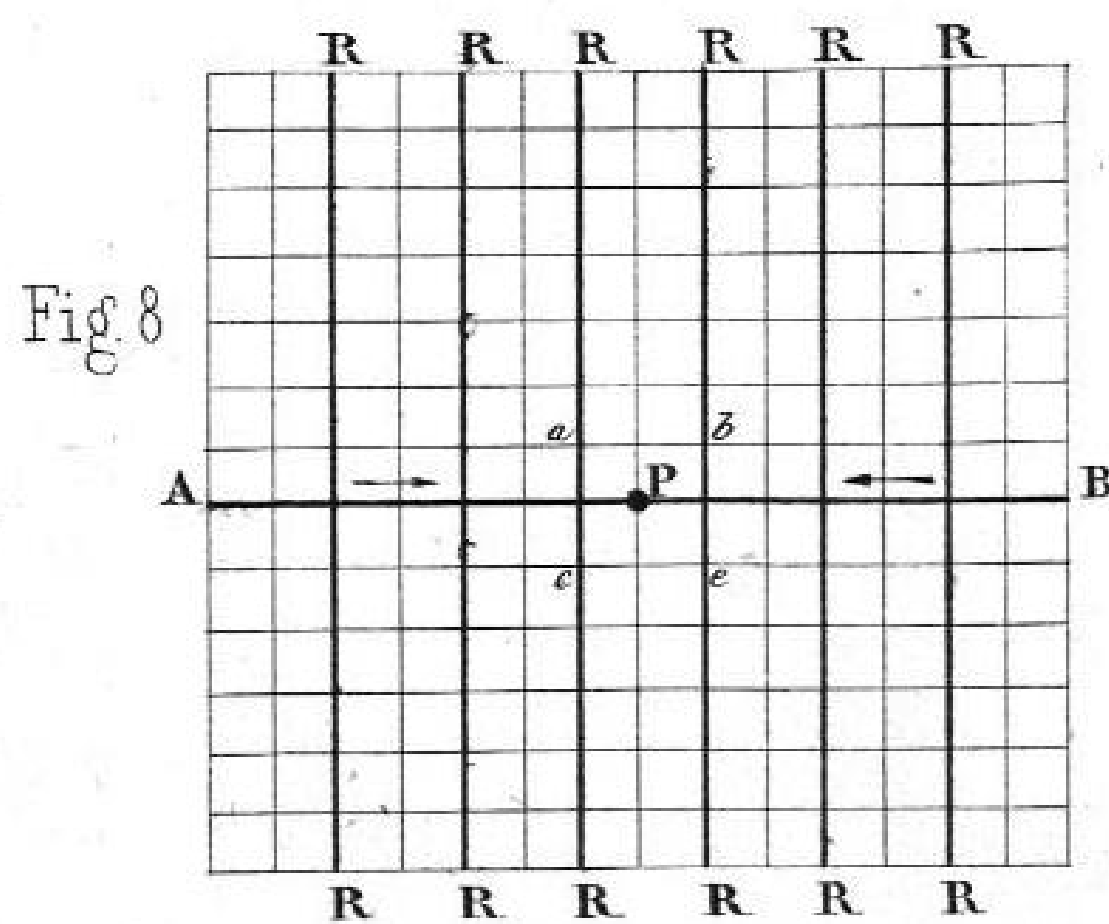
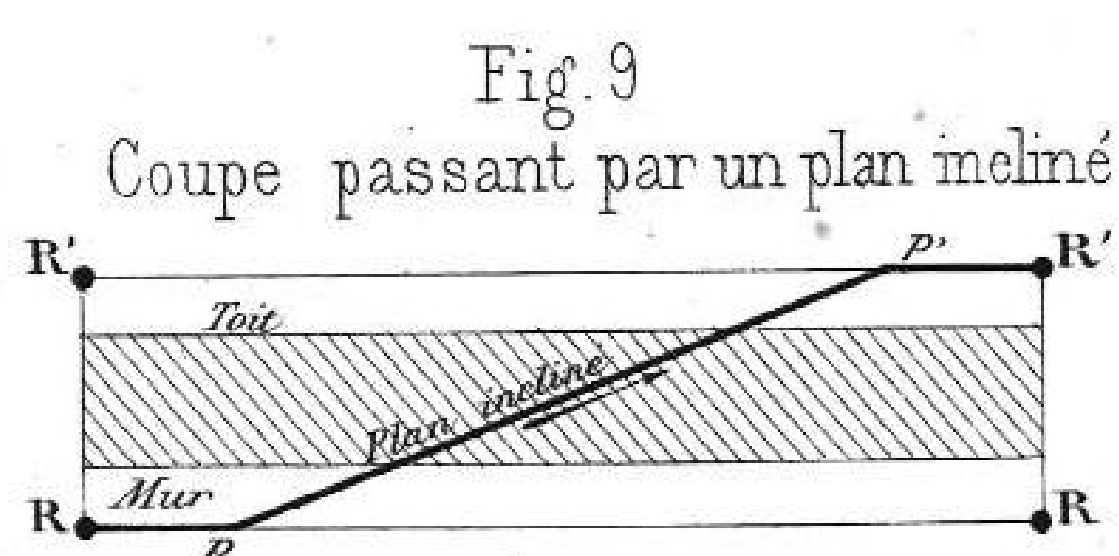
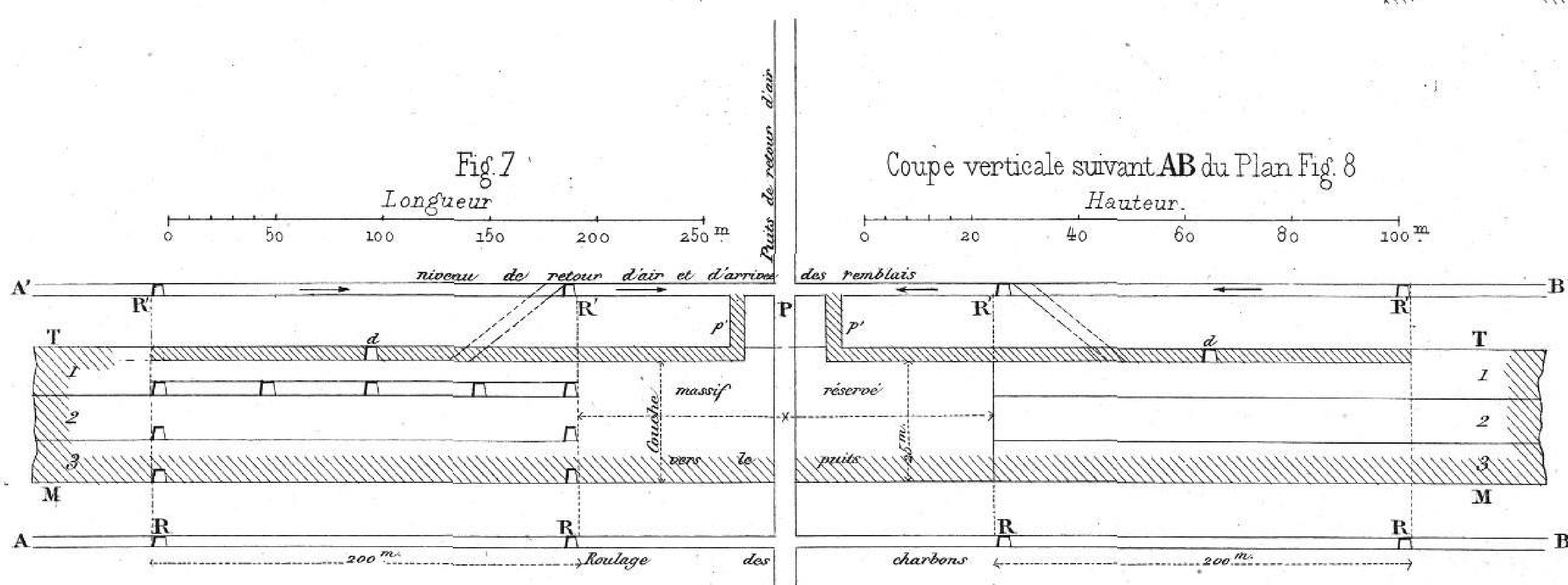
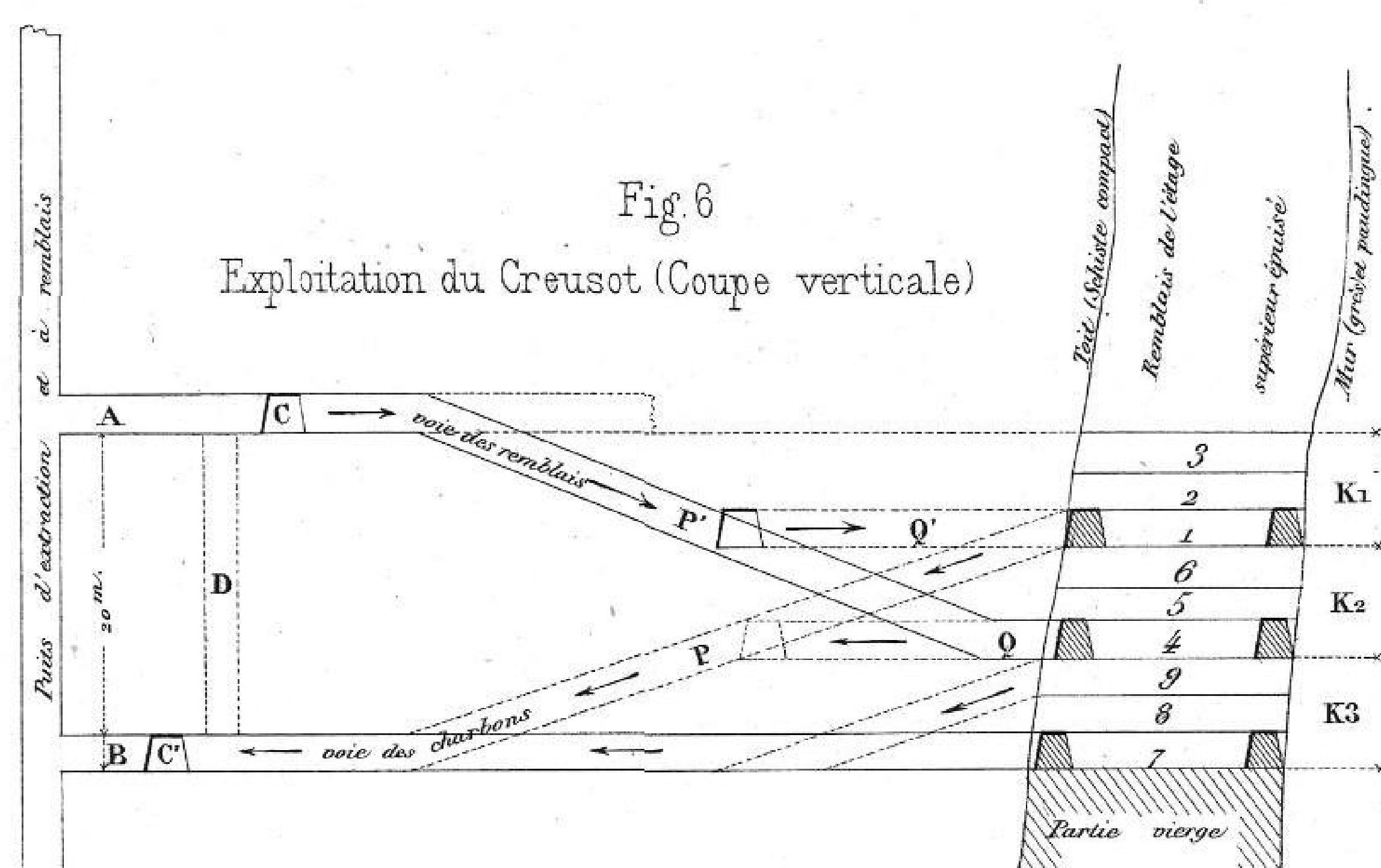
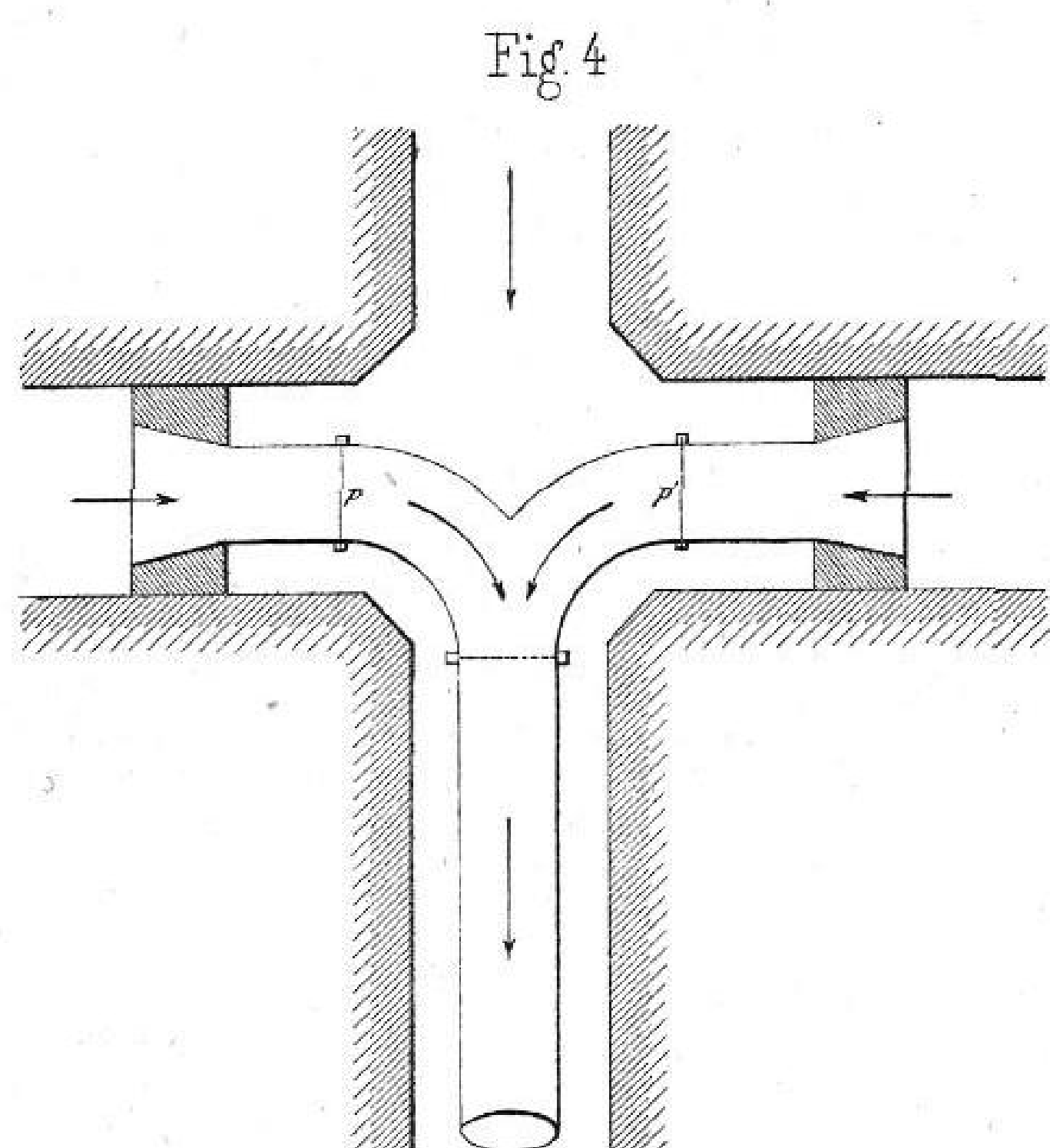
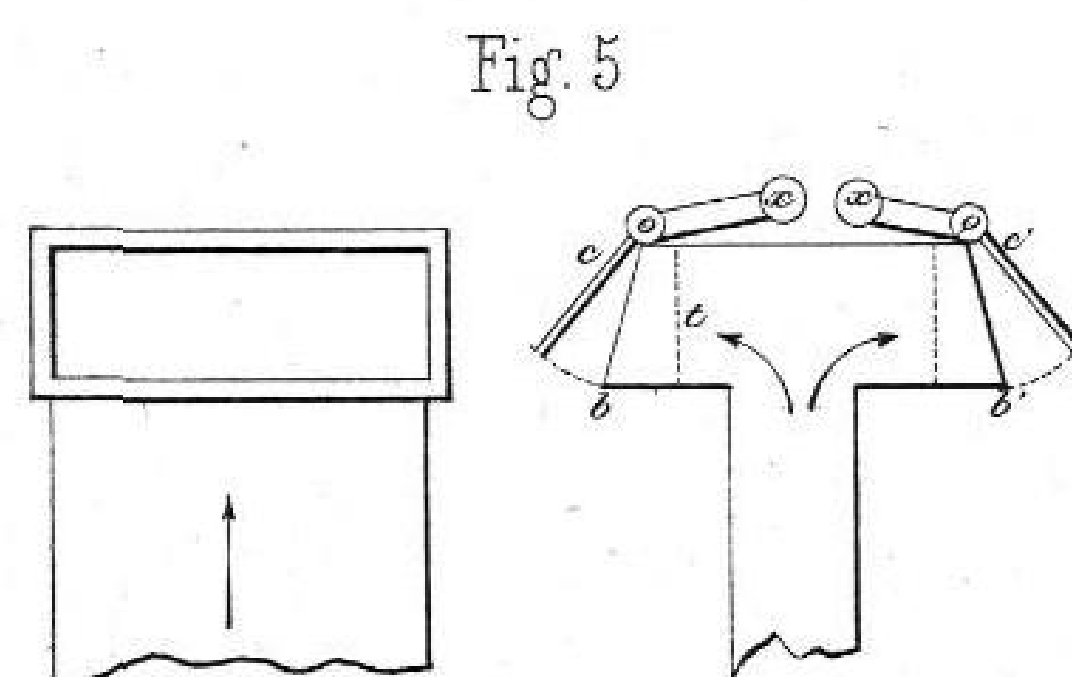
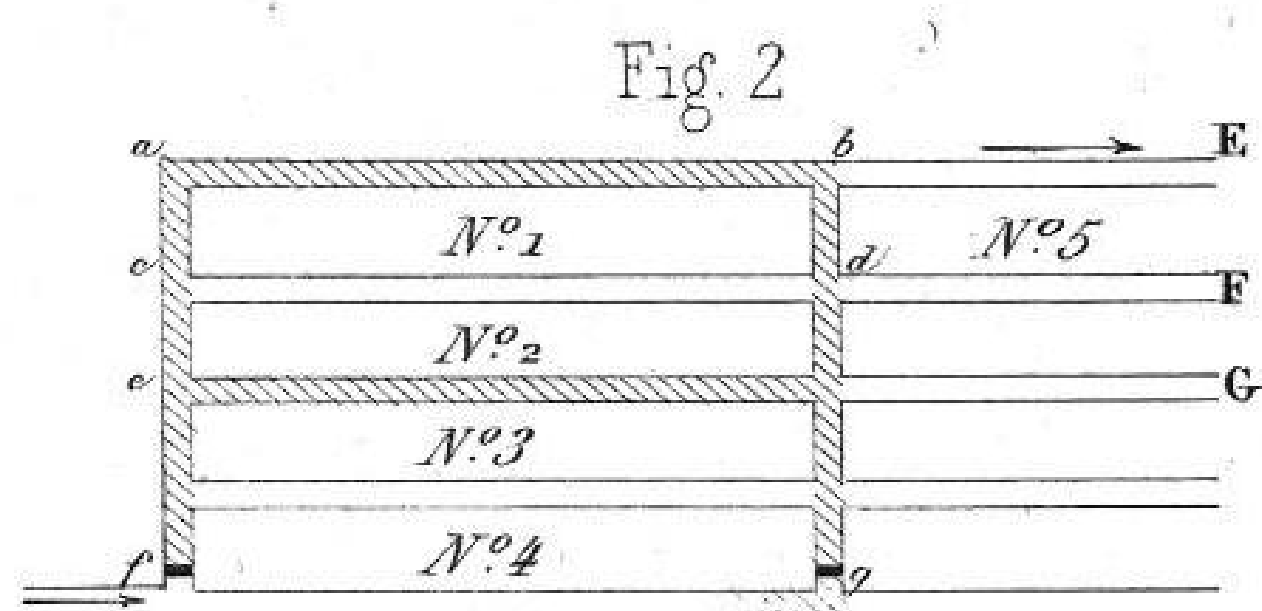
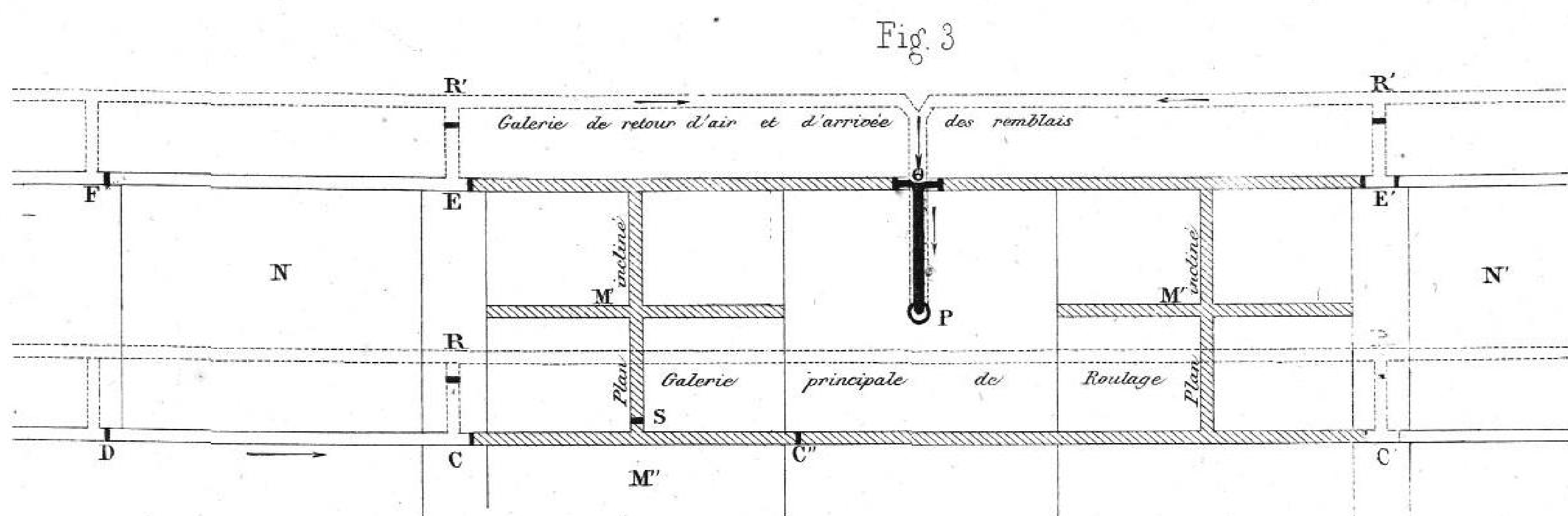
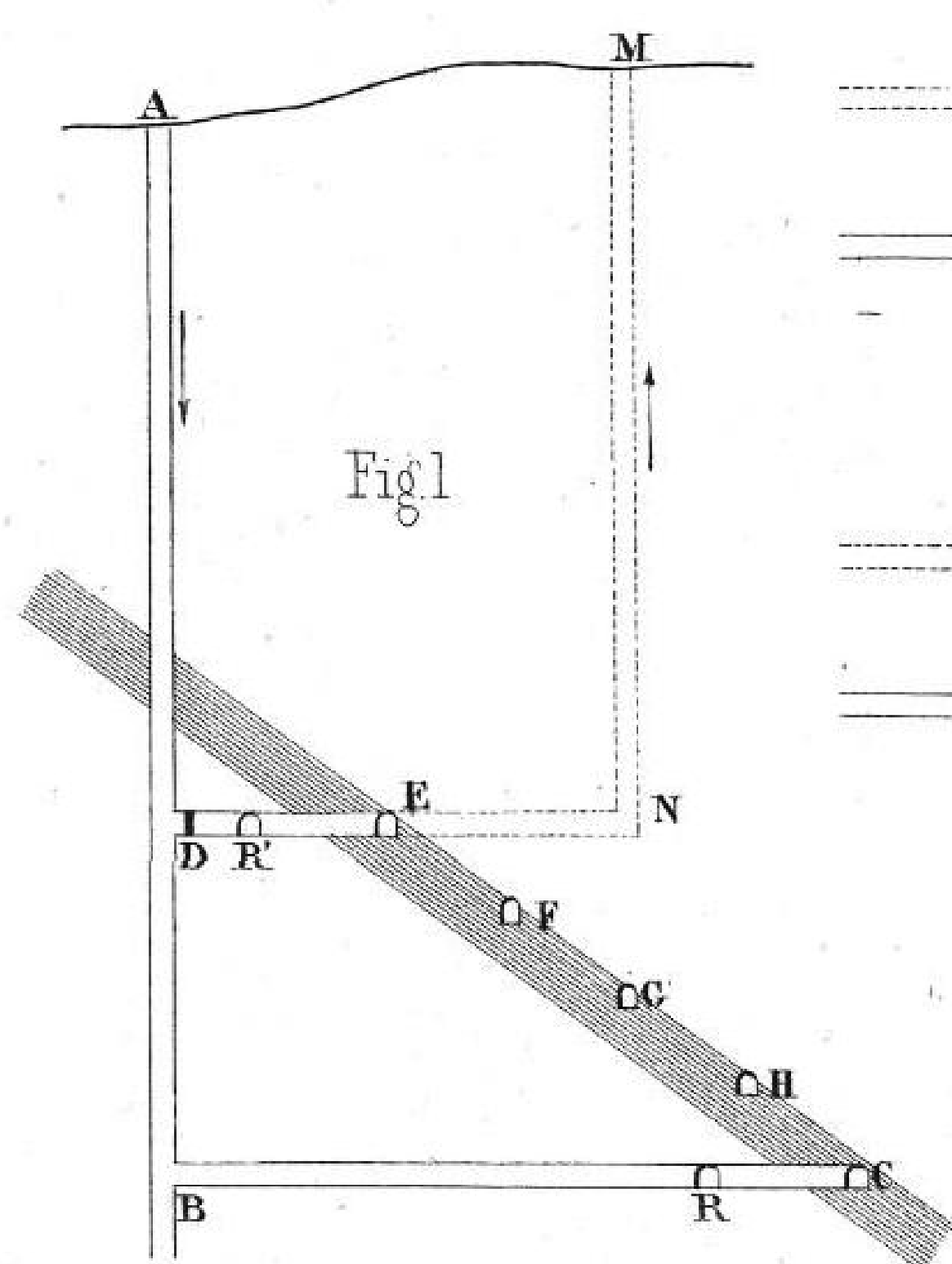
Pl. XXII

















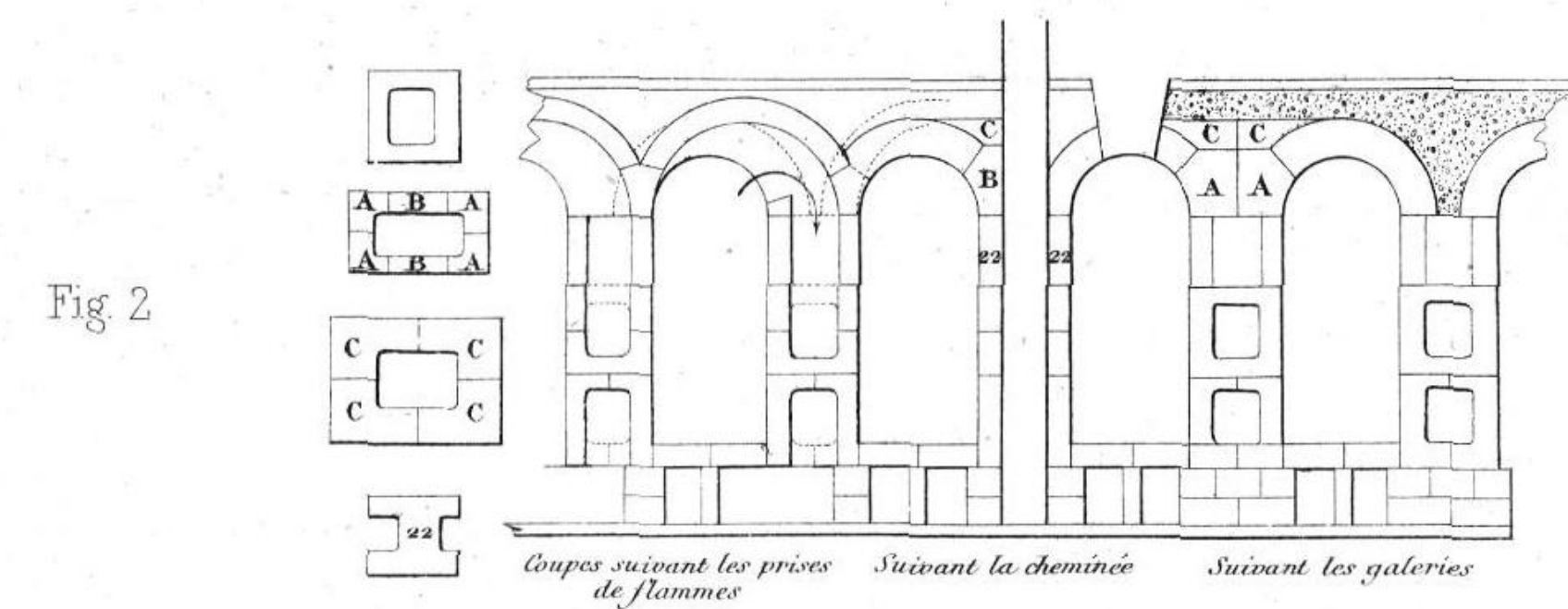
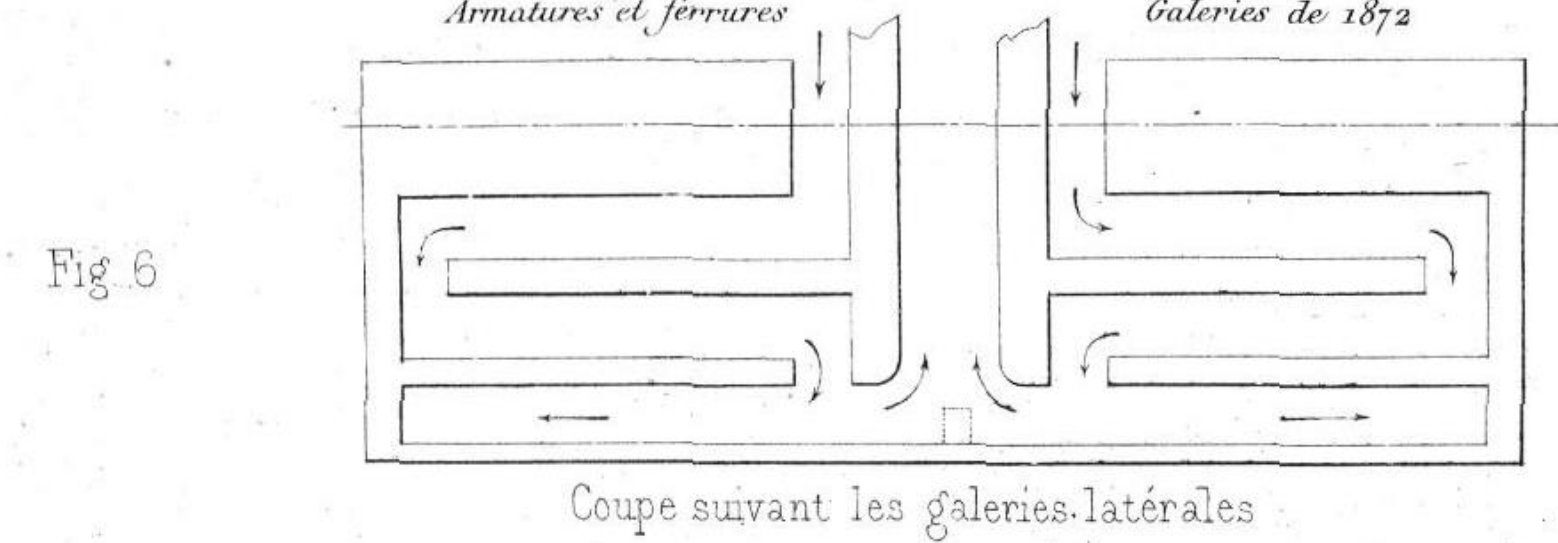
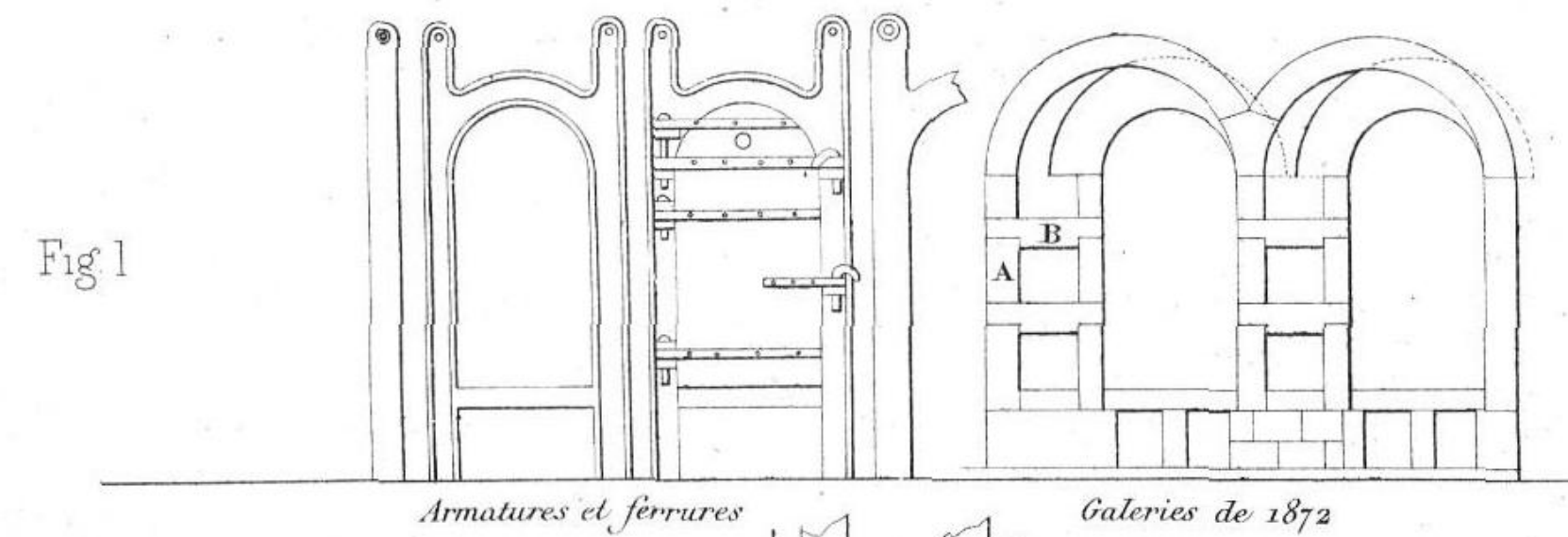
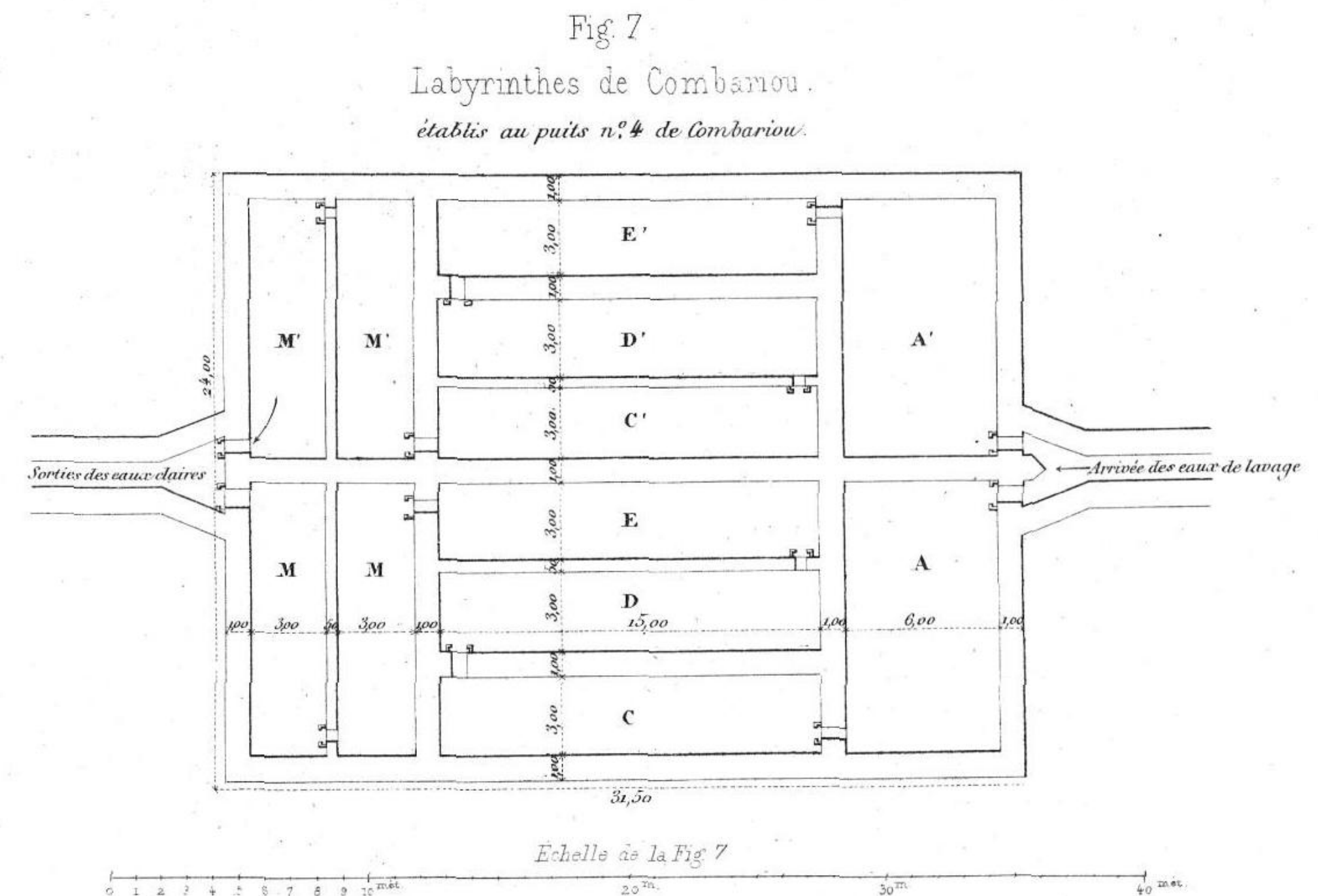
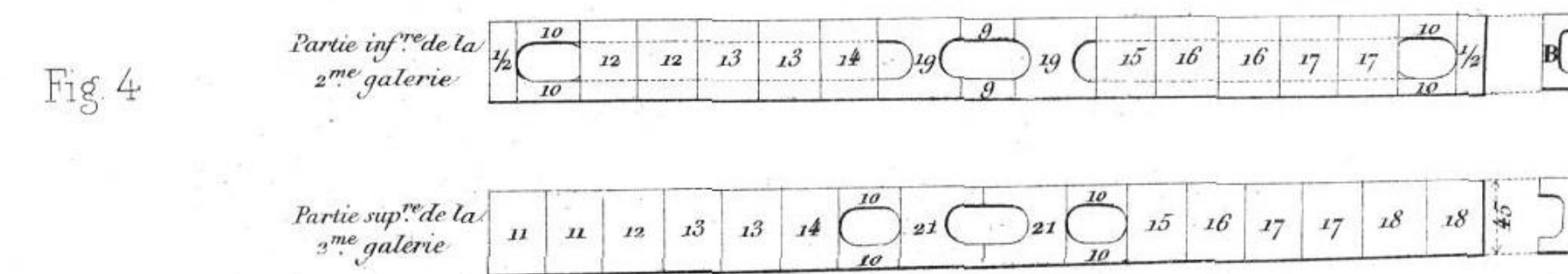
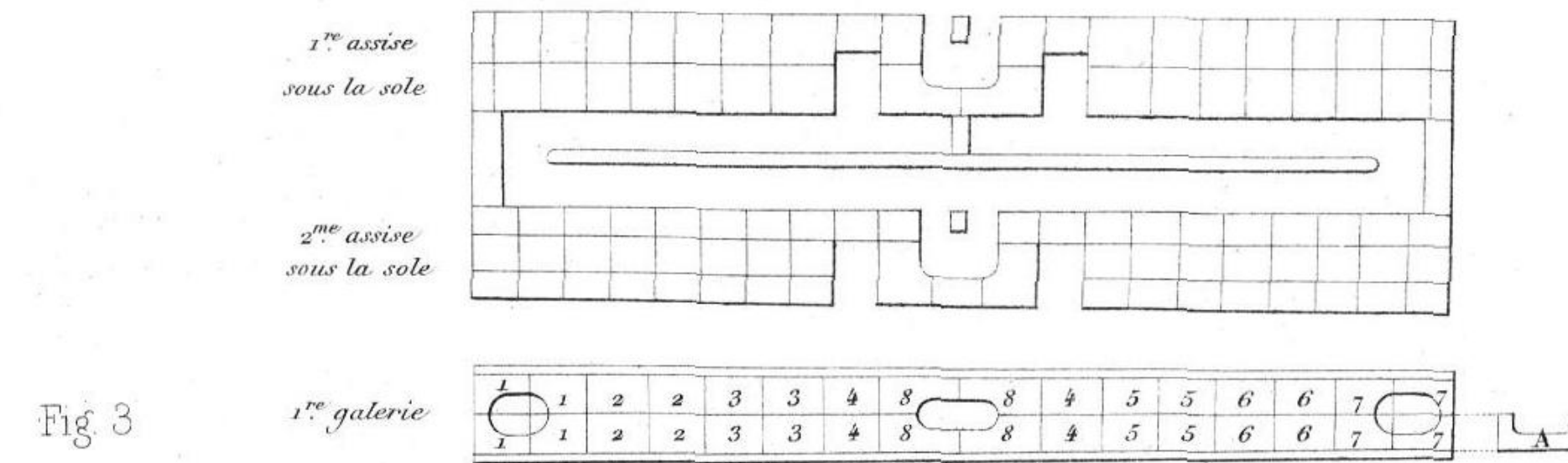


Fig 5

|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                  |     |     |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------------------|-----|-----|
| 1/2 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 23 | 23 | 22 | 20 | 20 | 20 | 20 | 20               | 20  | 1/2 |
| 11  | 11 | 12 | 13 | 13 | 14 | 10 | 21 | 21 | 10 | 15 | 16 | 17 | 17 | 18 | 18               |     |     |
| 1/2 | 10 | 12 | 12 | 13 | 13 | 14 | 19 | 9  | 19 | 15 | 16 | 16 | 17 | 17 | 10 <sup>60</sup> | 1/2 |     |
| 1   | 1  | 2  | 2  | 3  | 3  | 4  | 8  | 8  | 4  | 5  | 5  | 6  | 6  | 7  | 7                |     |     |
|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                  |     |     |

Disposition des briques à l'intérieur du four









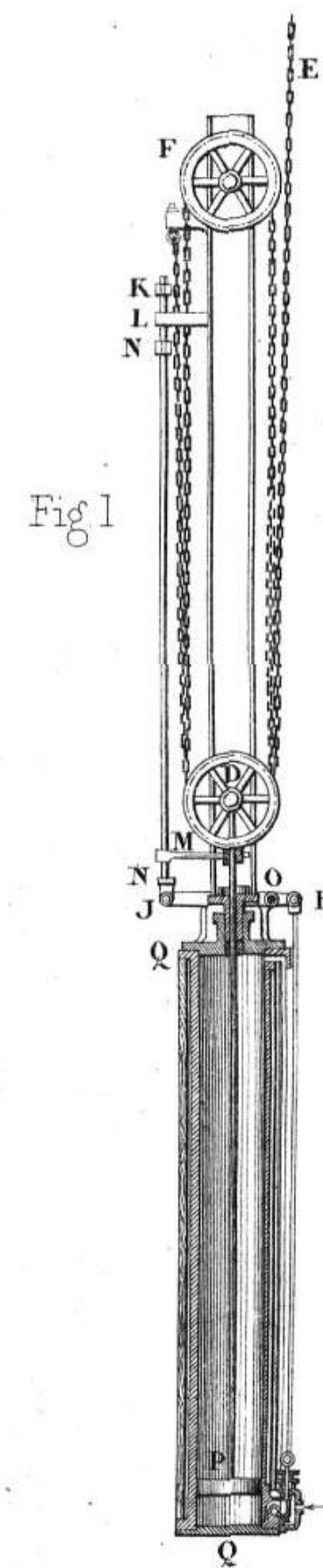


Fig 1

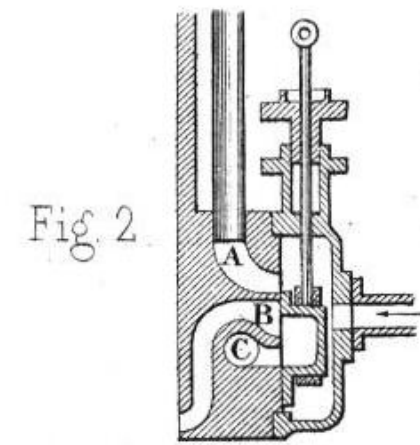


Fig 2

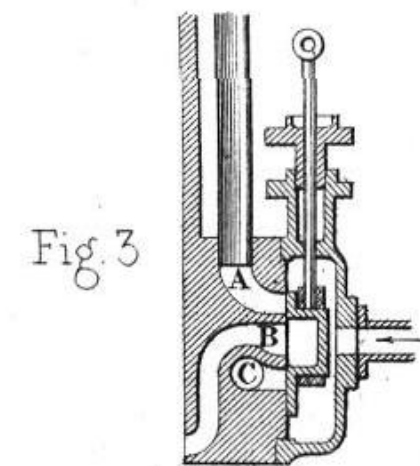


Fig 3

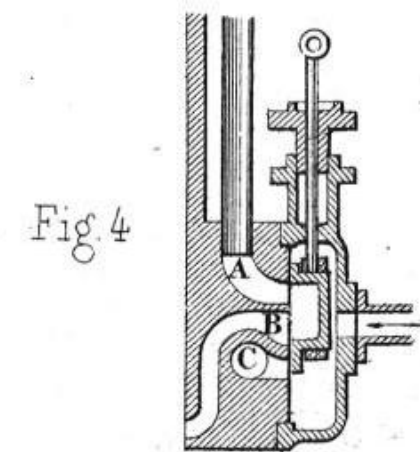


Fig 4

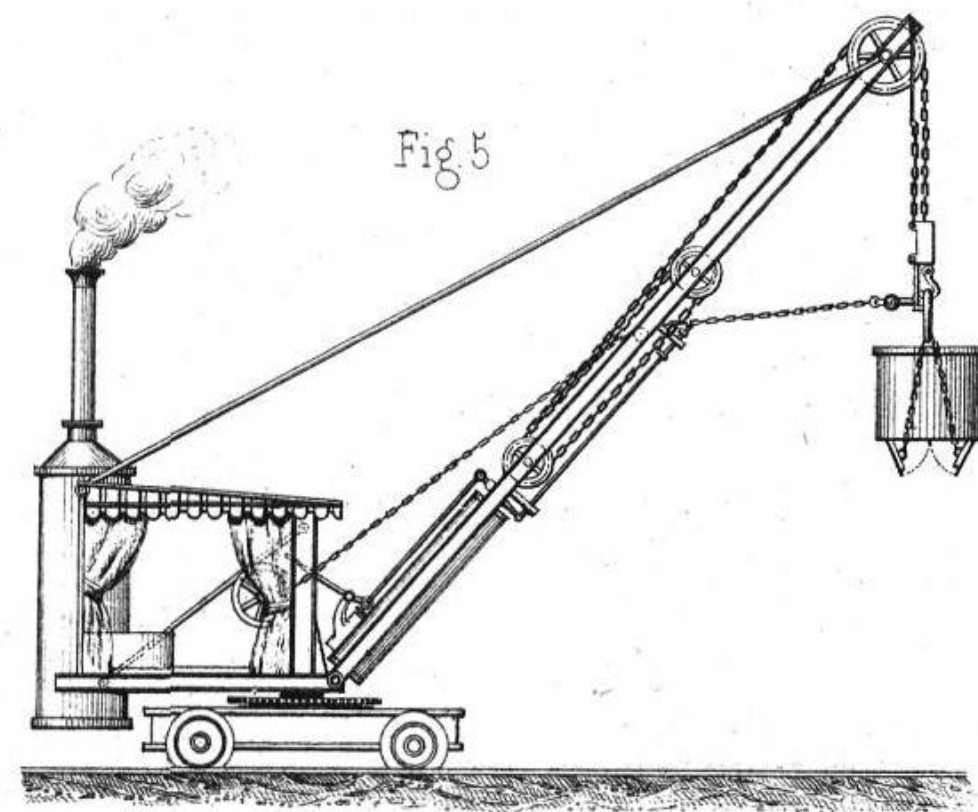


Fig 5

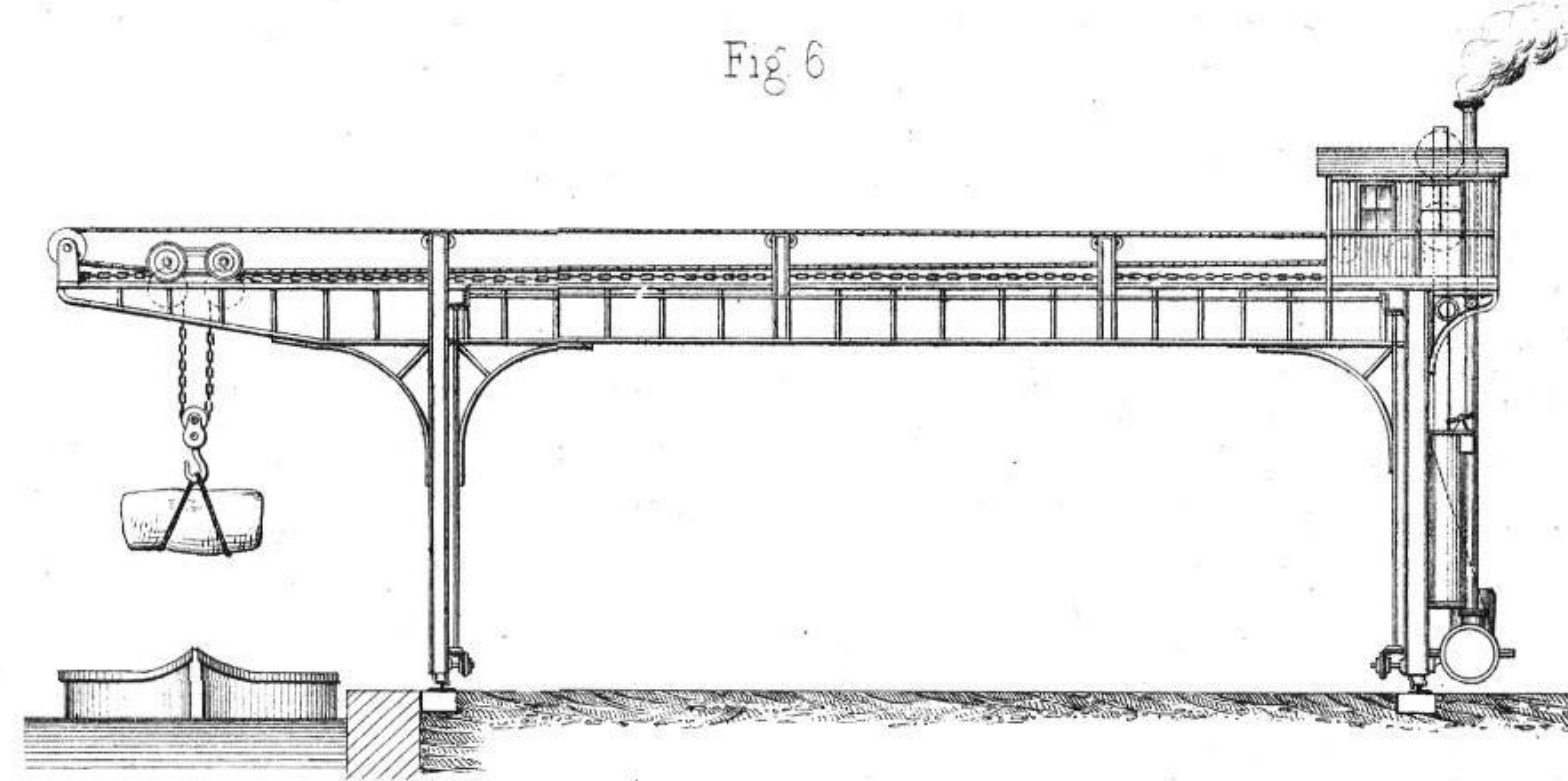


Fig 6

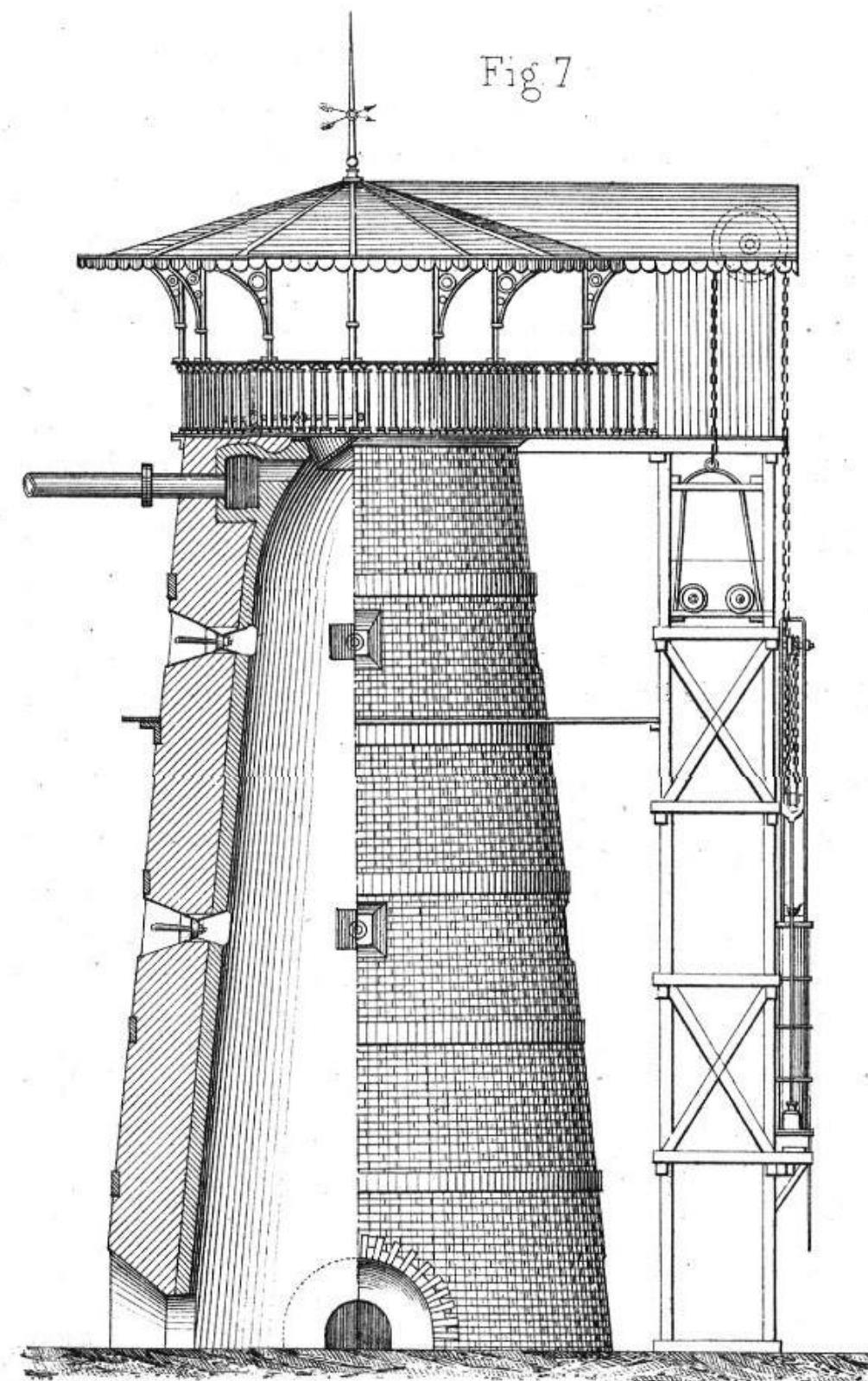


Fig 7

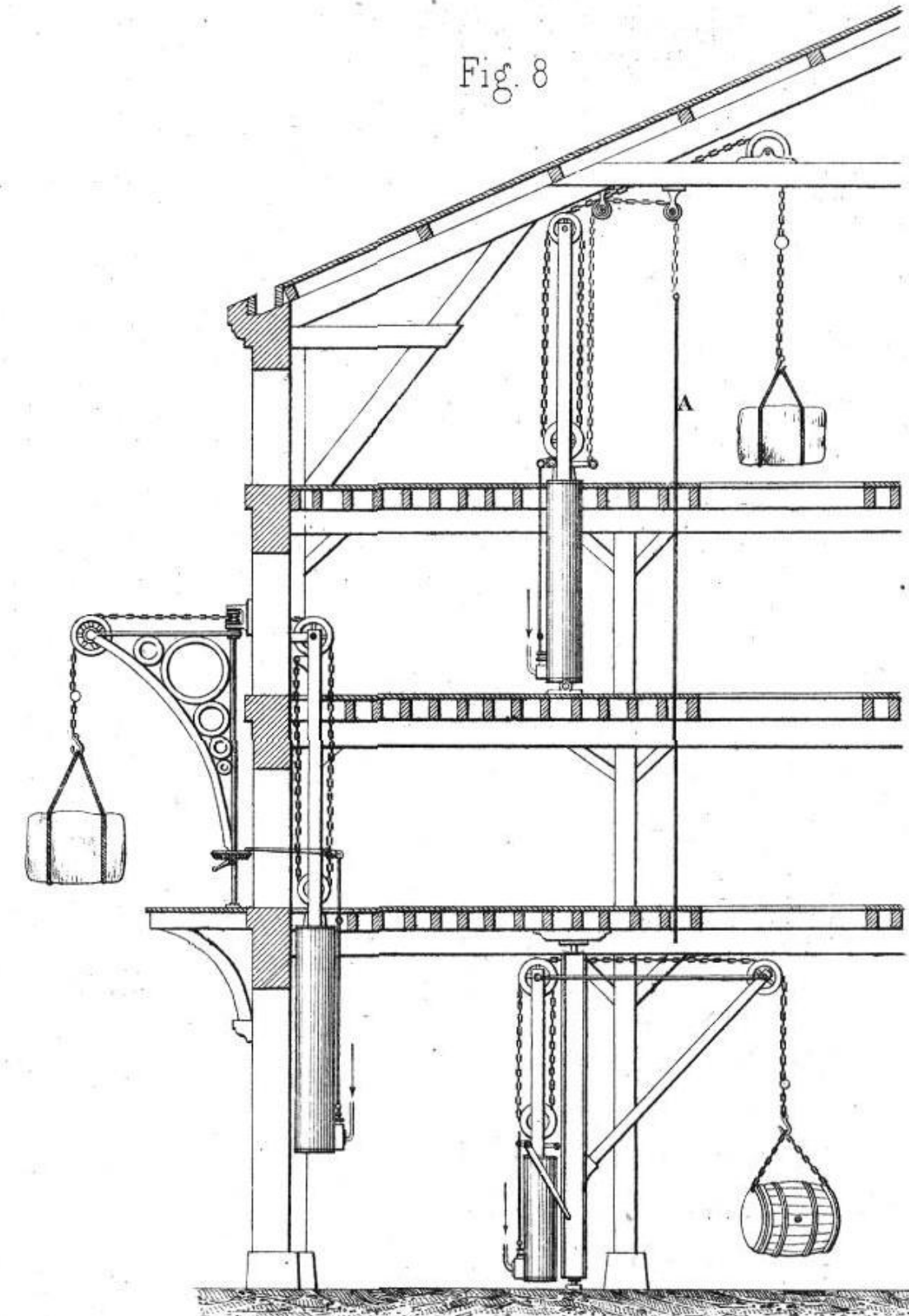


Fig 8

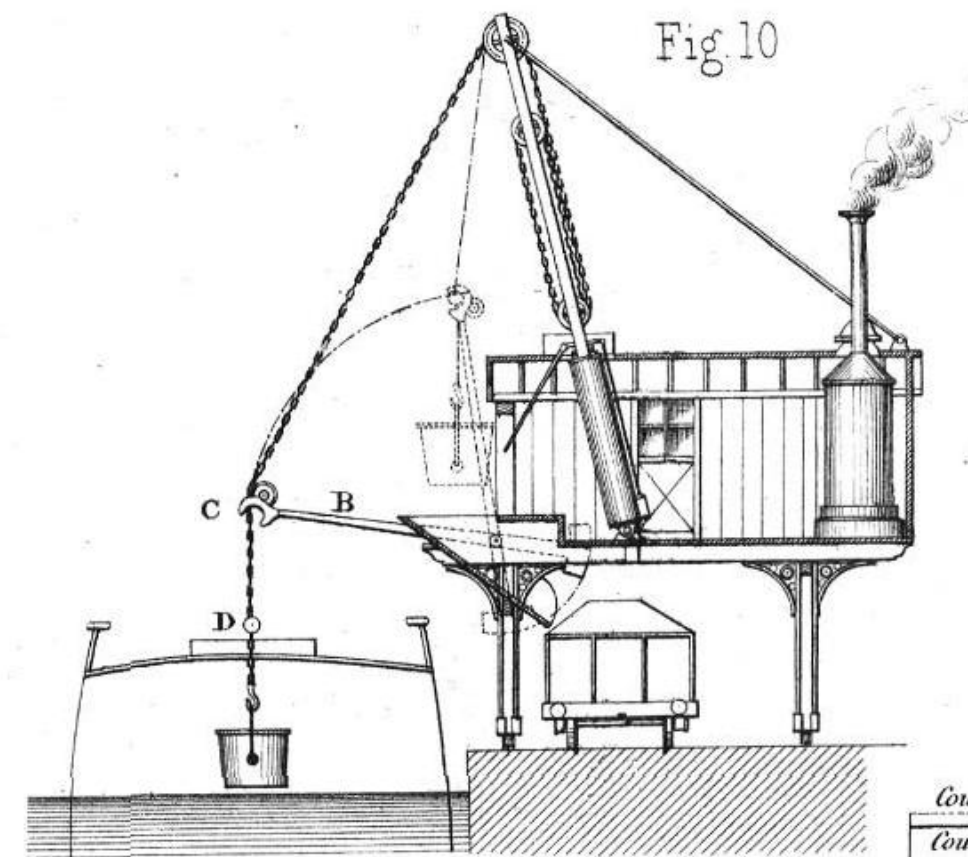


Fig 10

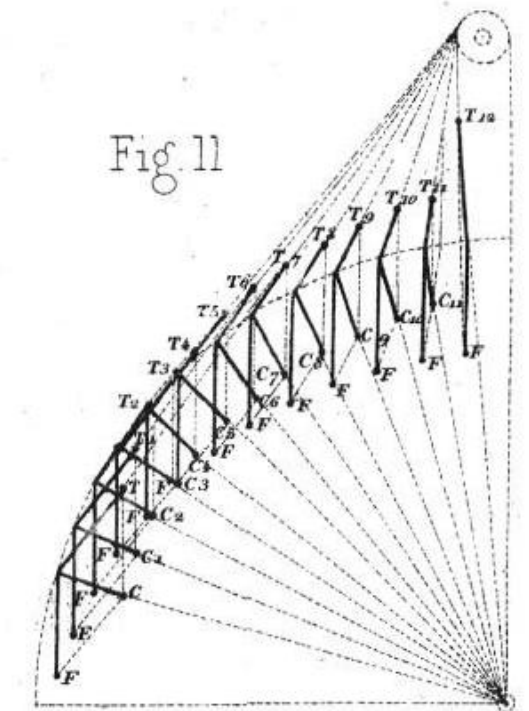


Fig 11

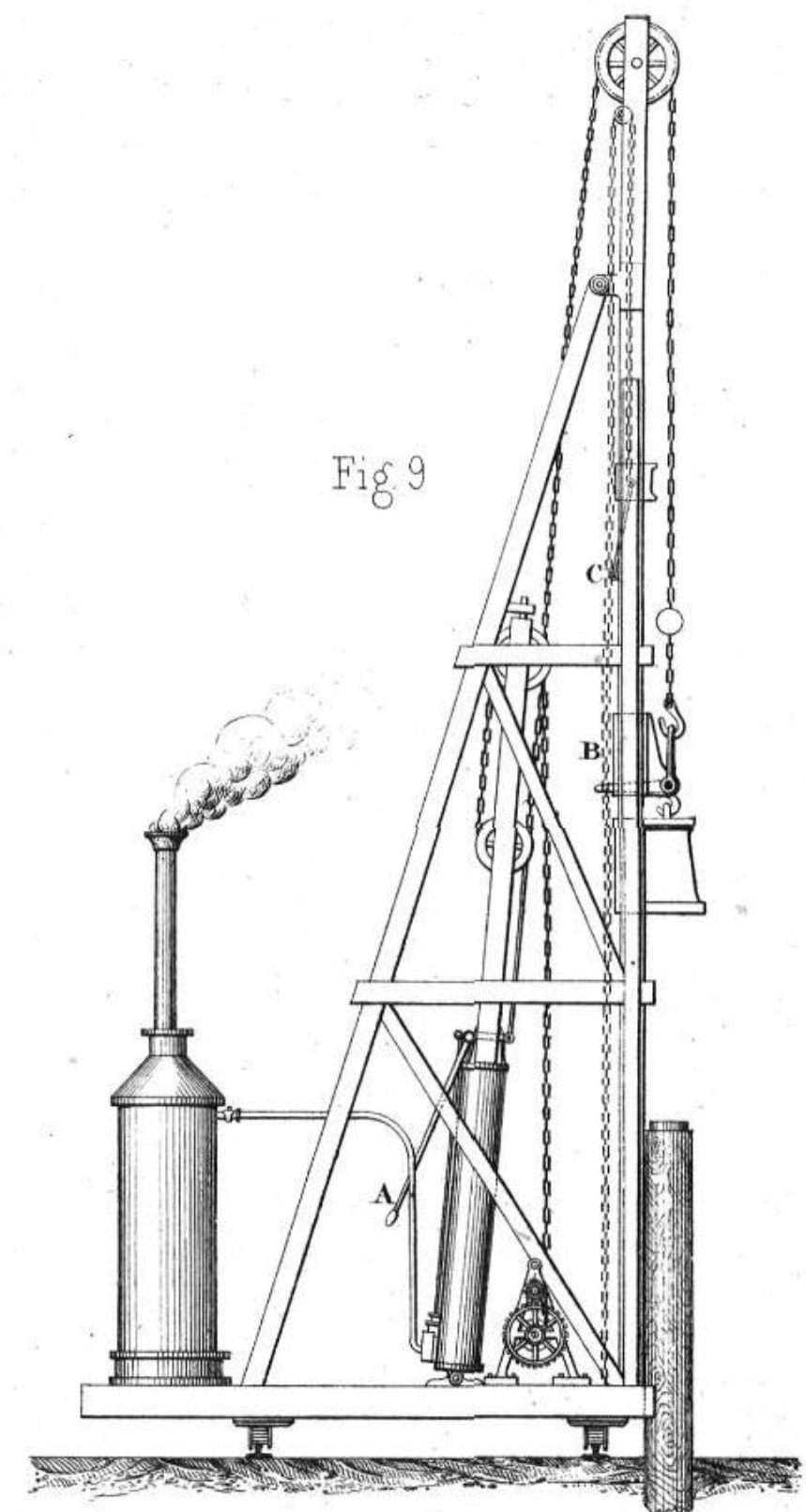
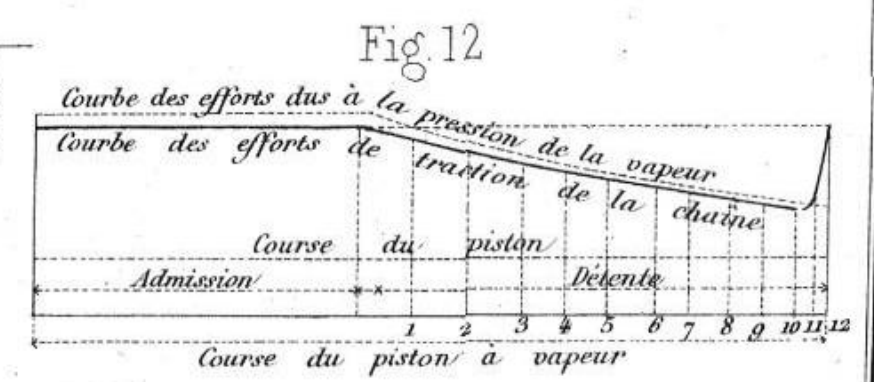


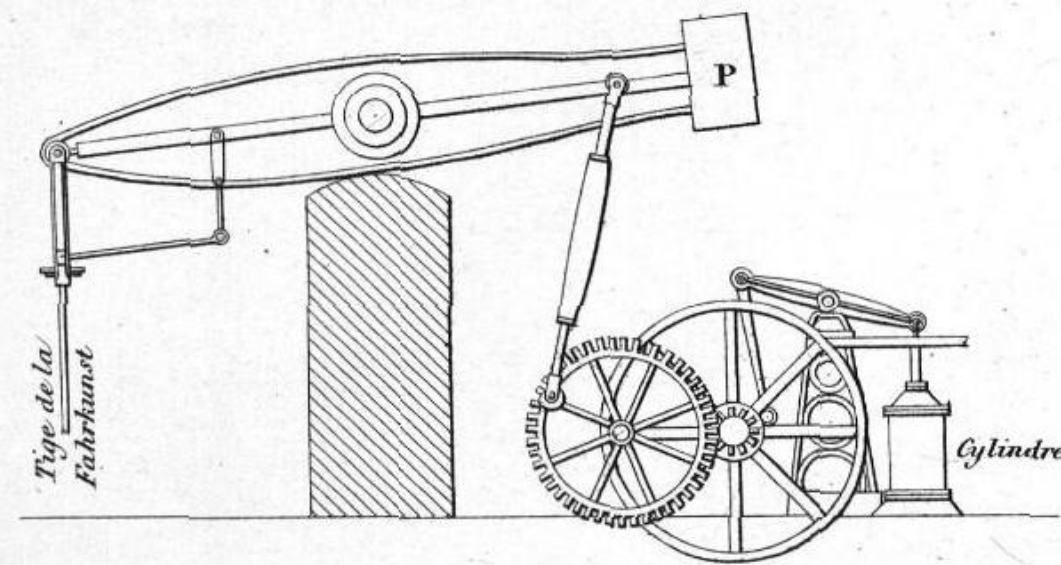
Fig 9







Fig 3. - Machine motrice de la Fahrkunst d'Oberhausen



MINES D' OBERHAUSEN.

Fig 1. - Plan

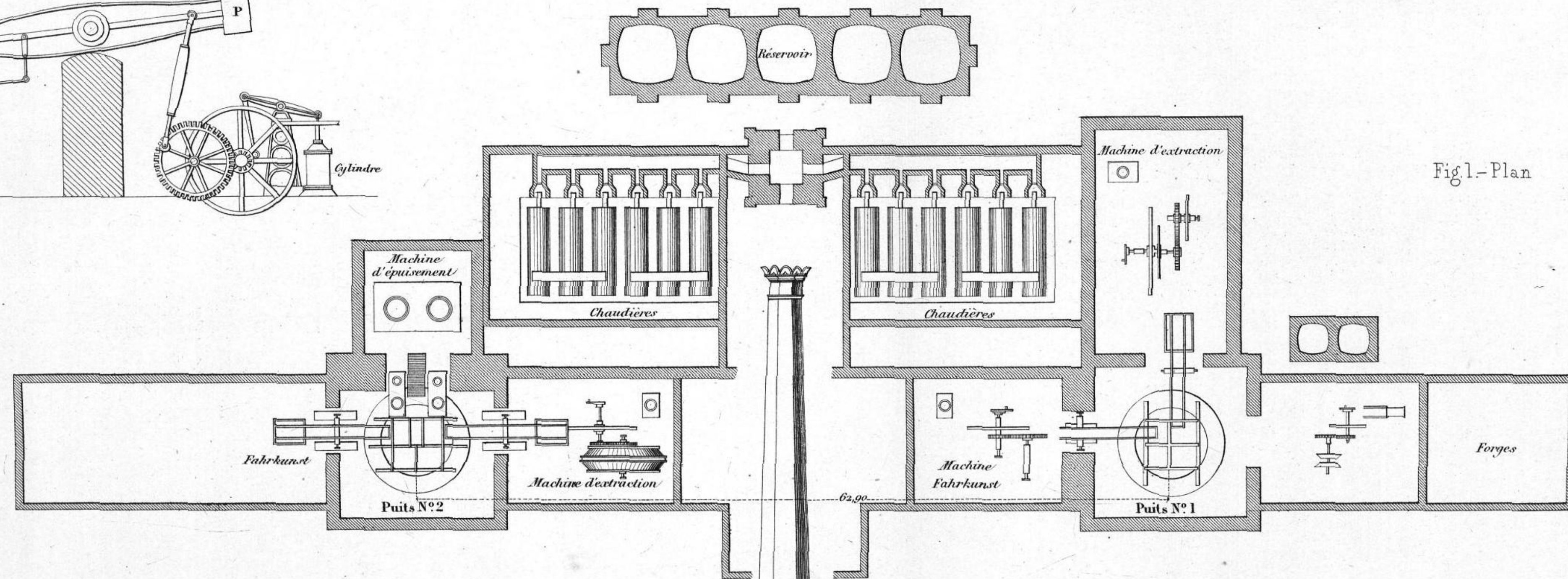
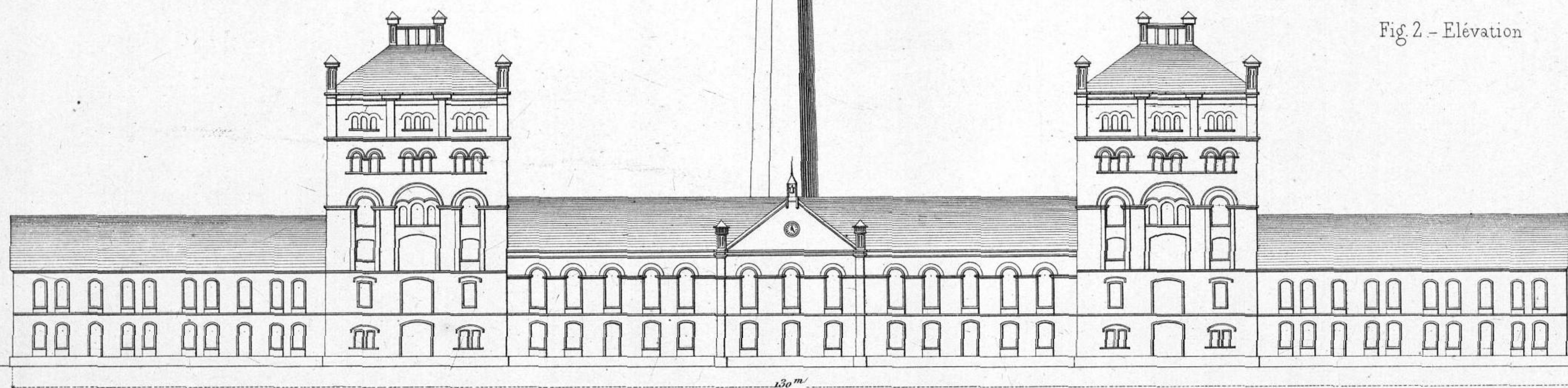


Fig 2. - Elévation



Echelle p<sup>r</sup> les Fig 1 et 2

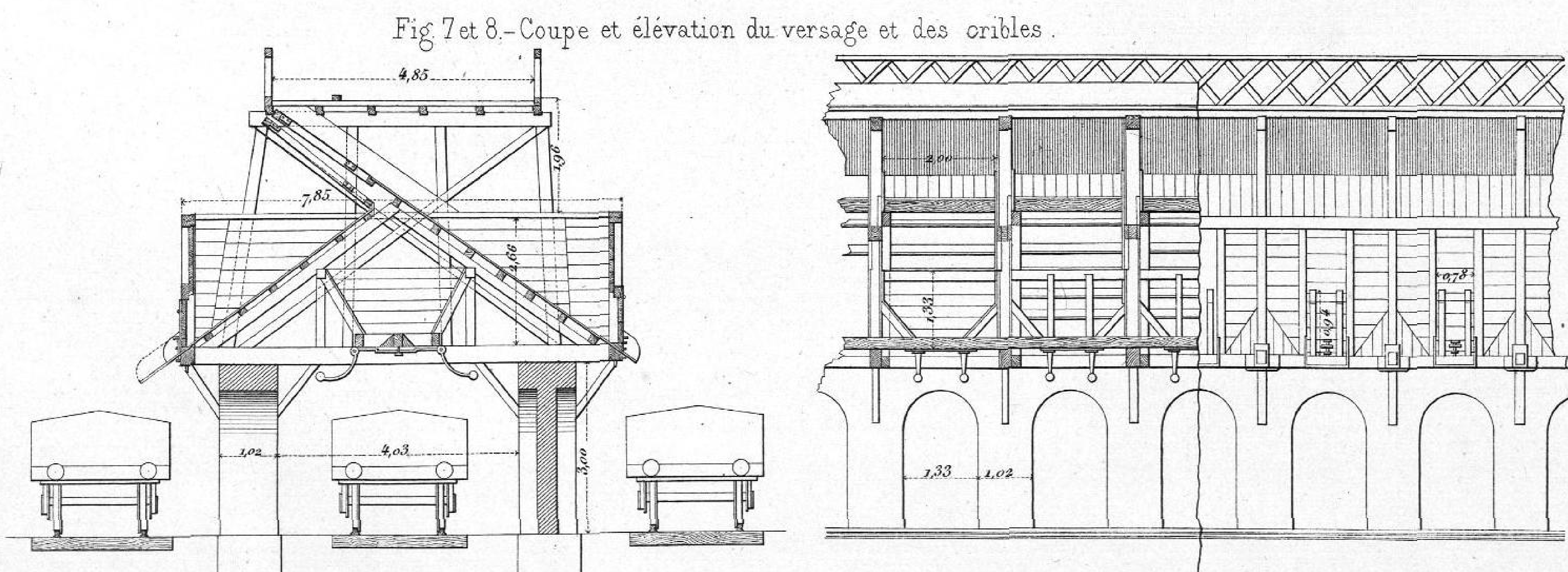
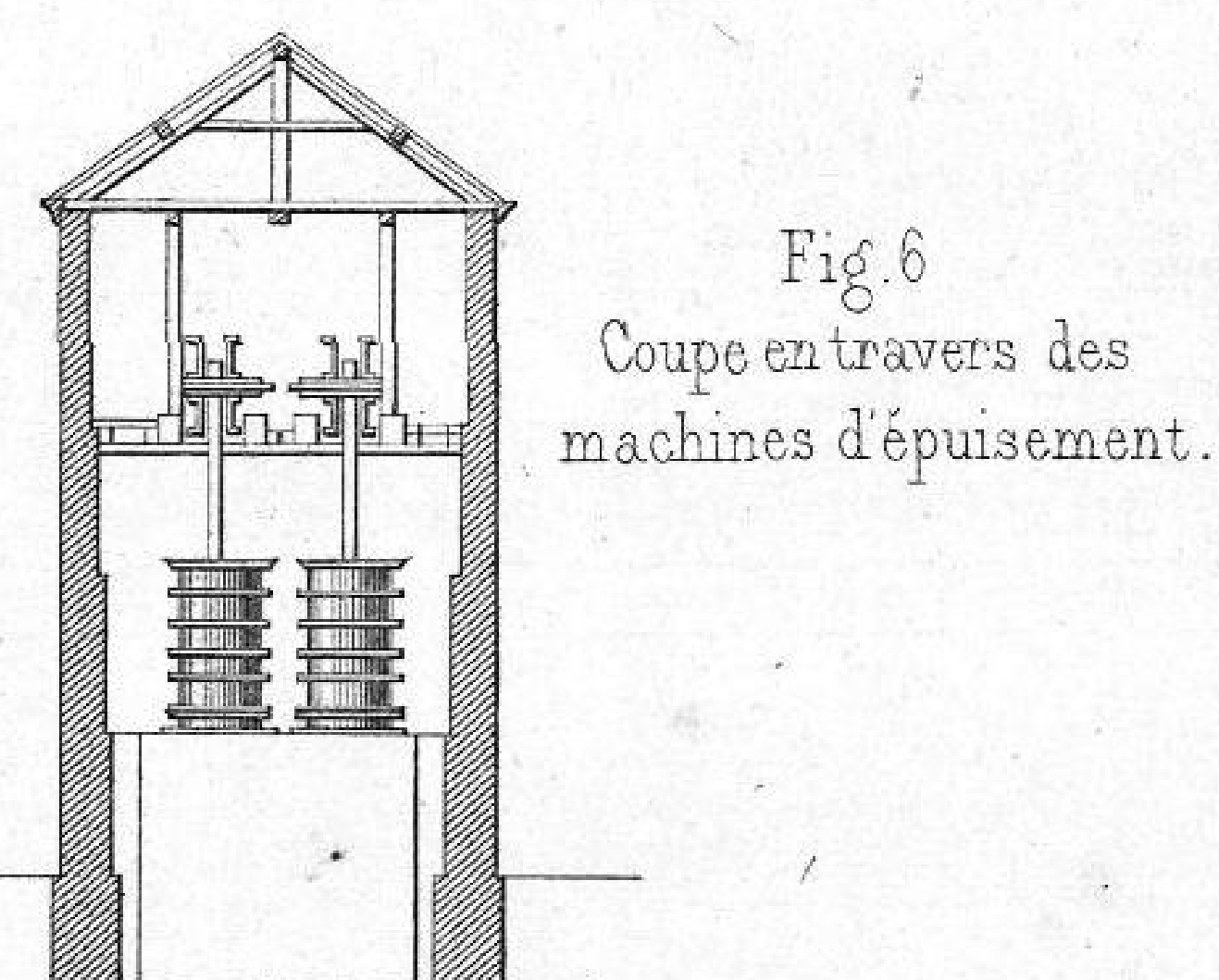
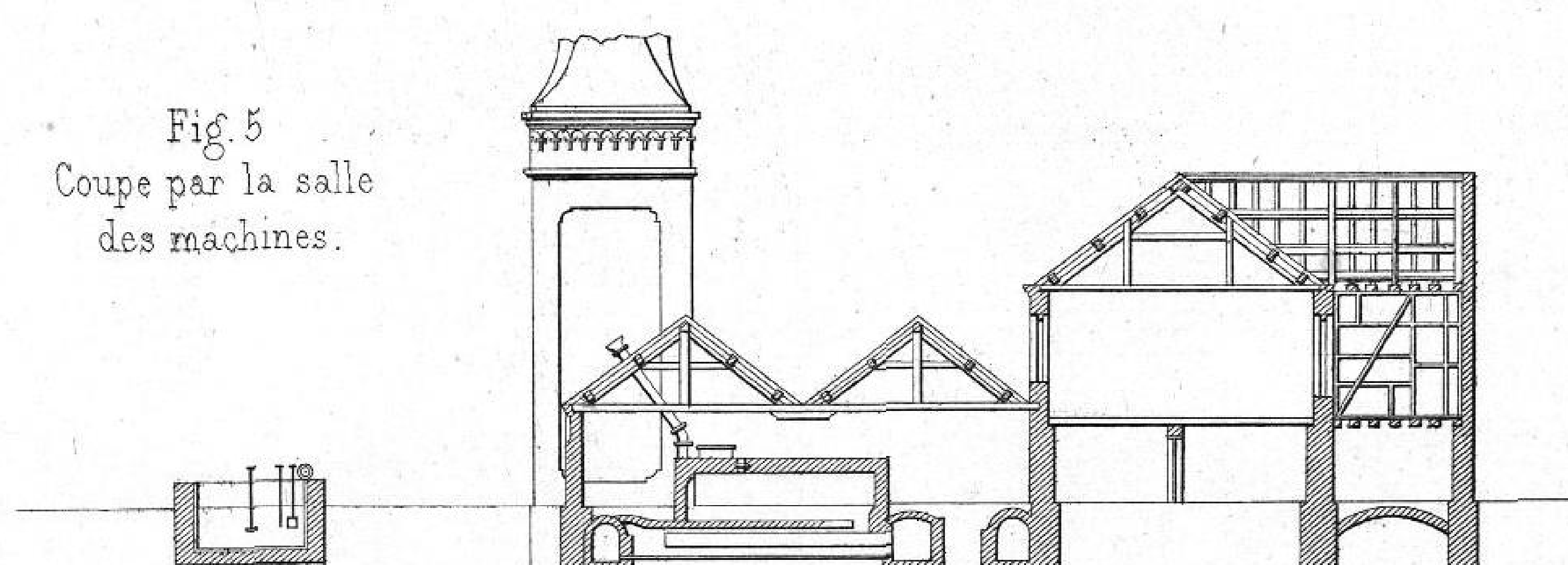
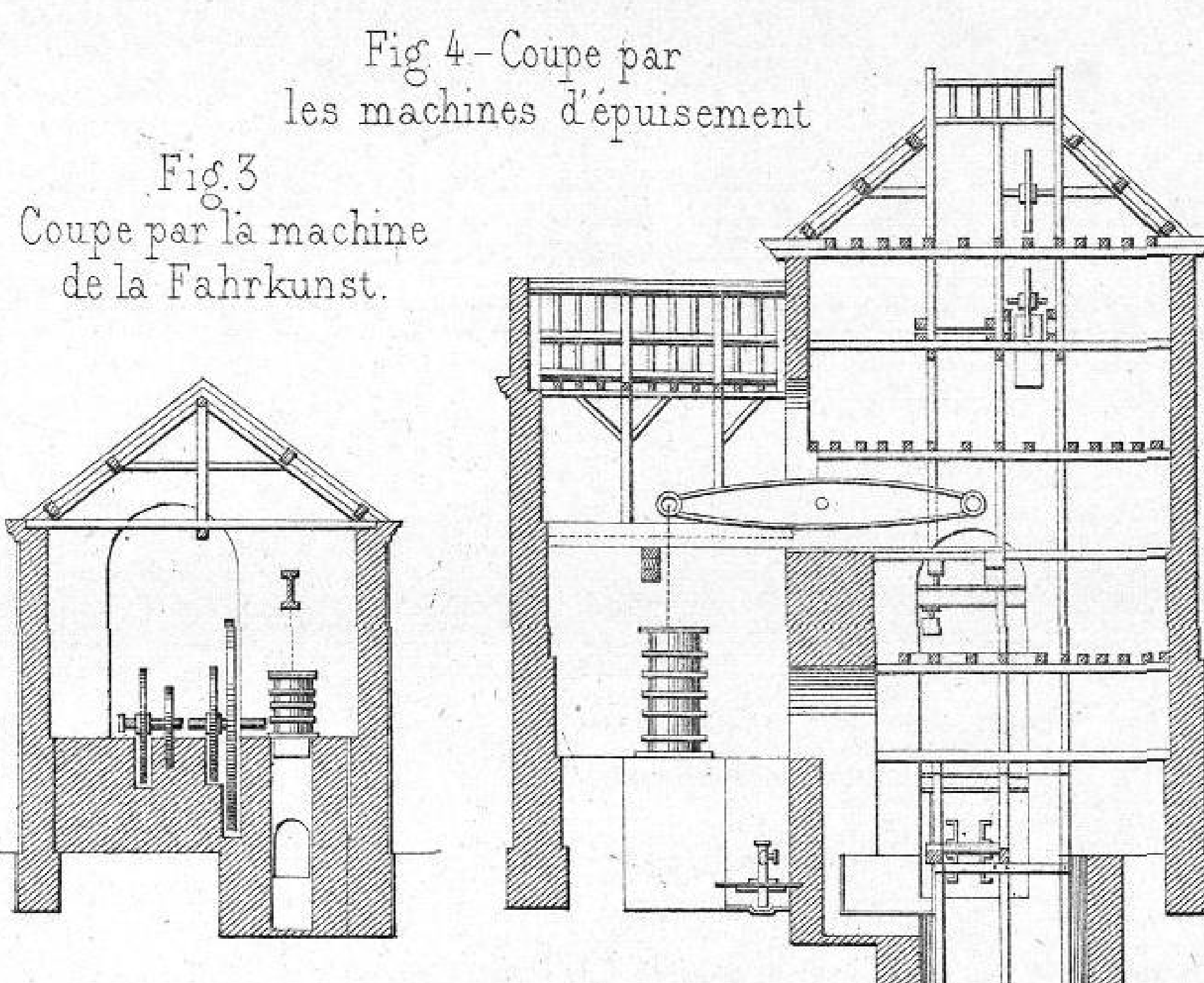
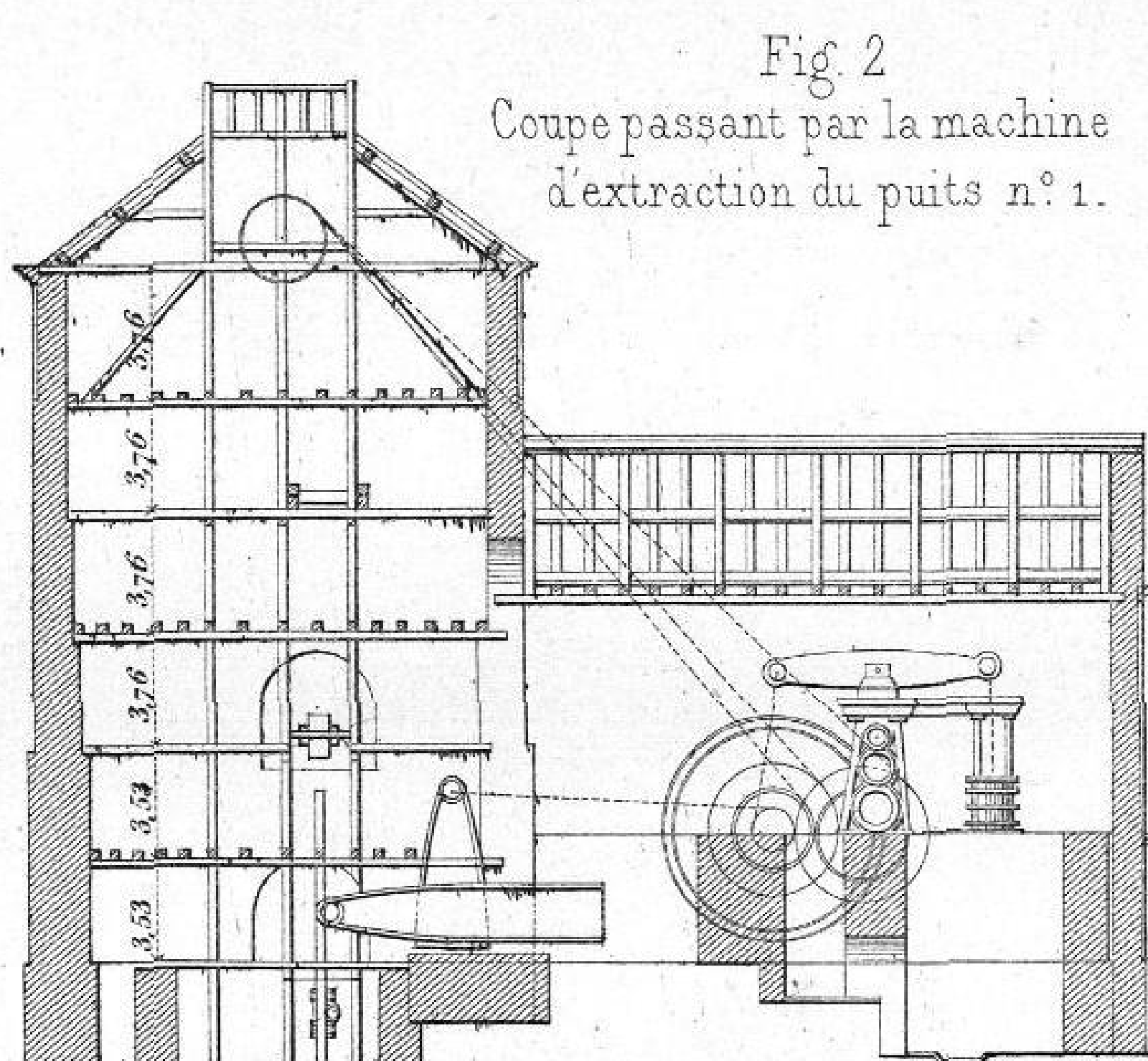
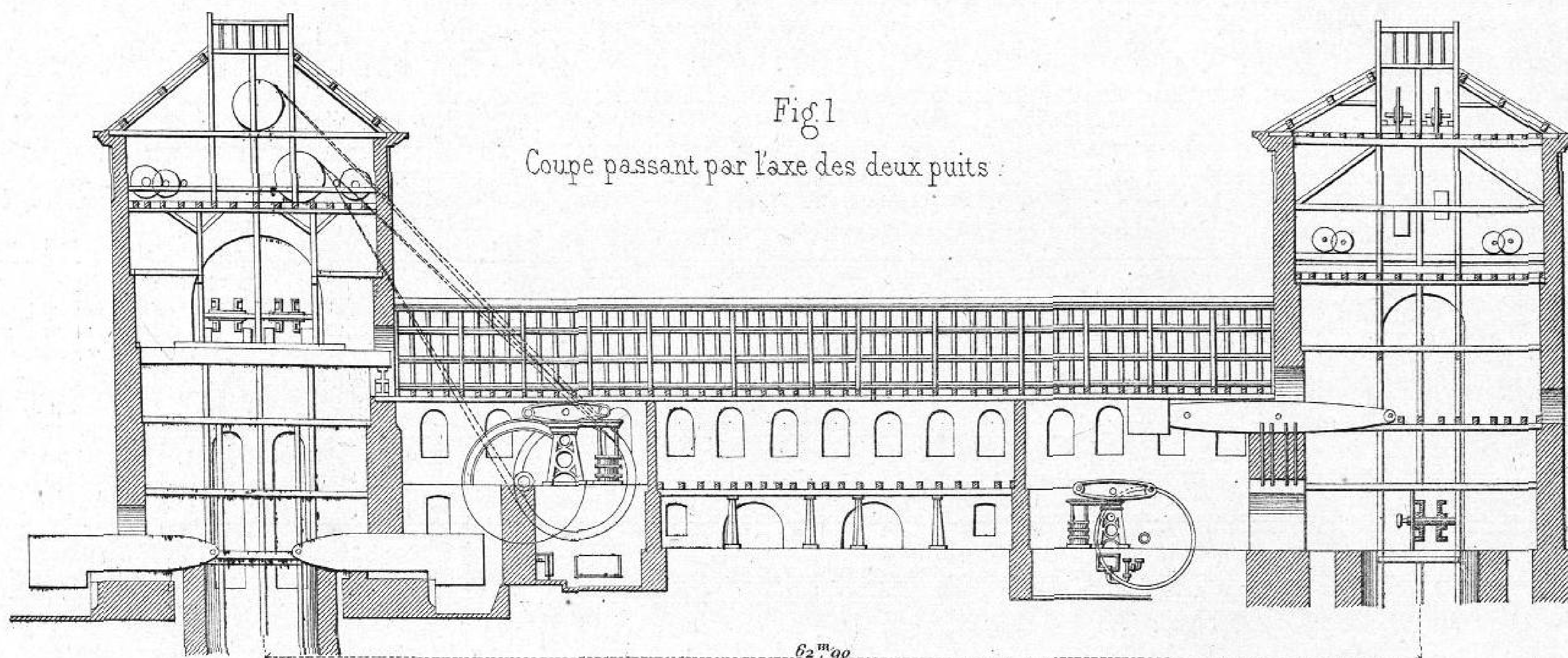
0 1 2 4 6 8 10 20 40 m







Charbonnage d'Oberhausen.



Echelle p<sup>r</sup> les Fig 1, 2, 3, 4, 5, 6.

Echelle p<sup>r</sup> les fig 7 et 8







Puits de Rhein-Elbe.  
Ensemble de l'installation.

Fig. 1. - Élévation.

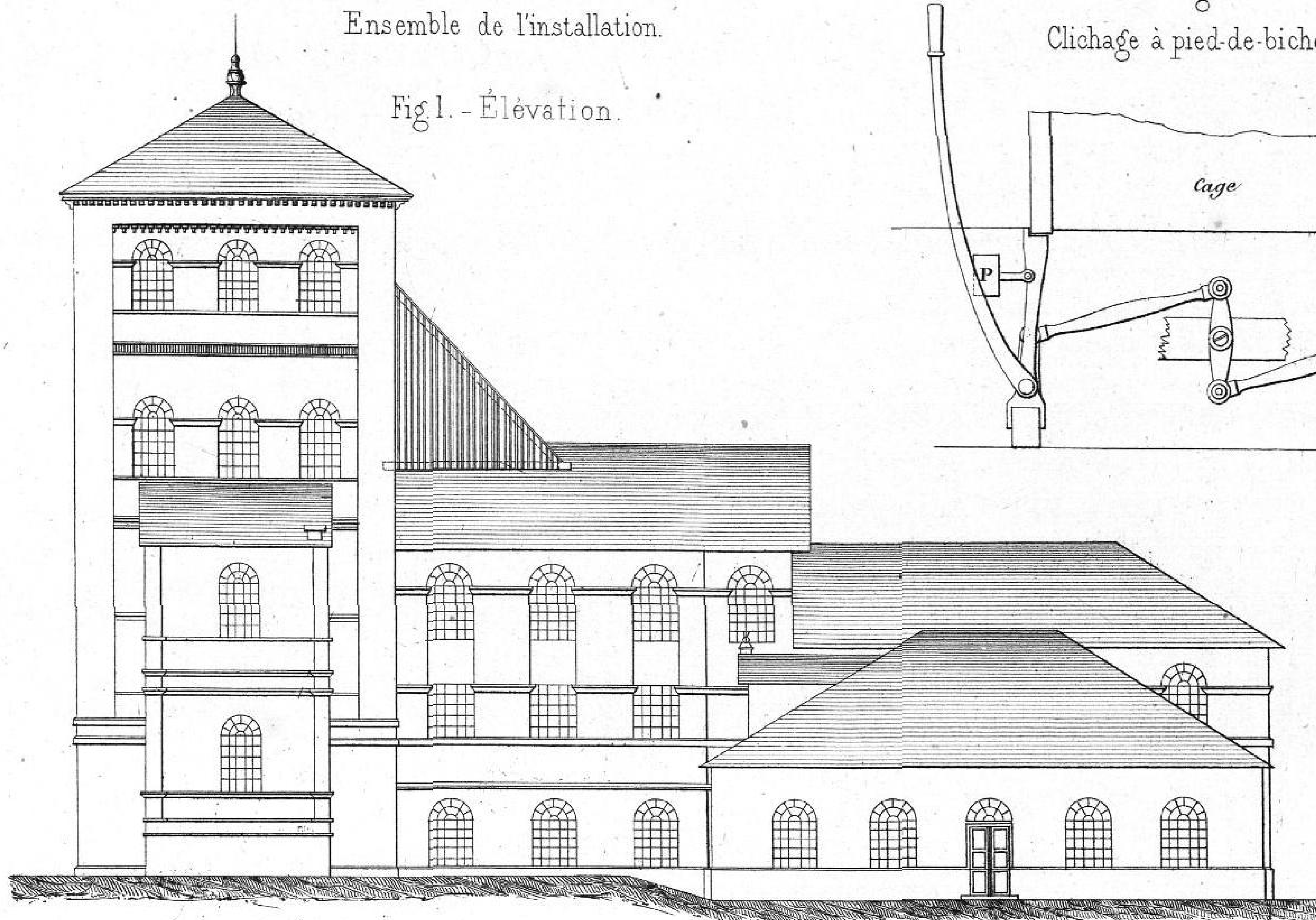


Fig 4

Clichage à pied-de-biche.

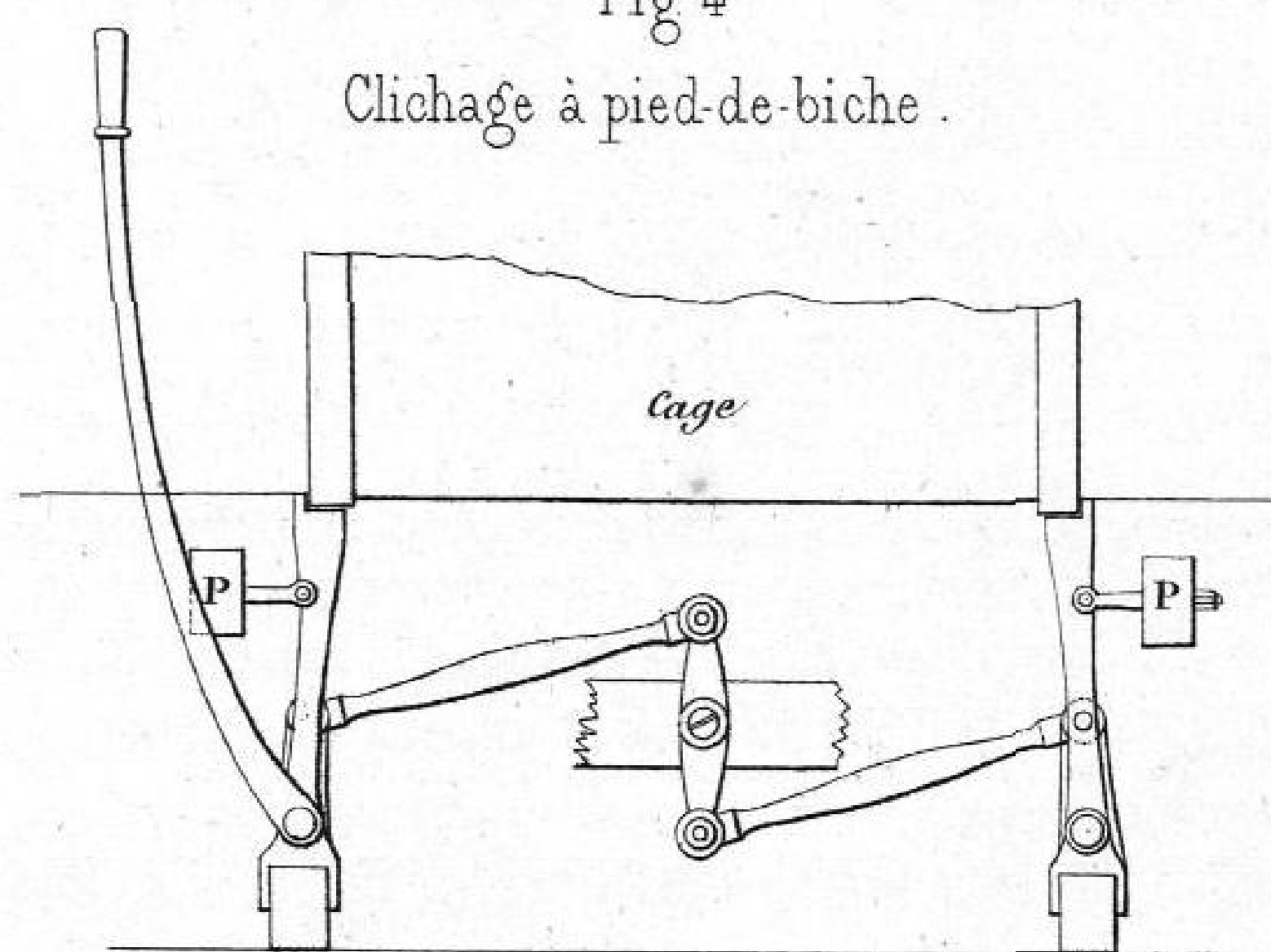


Fig. 2. - Coupe longitudinale

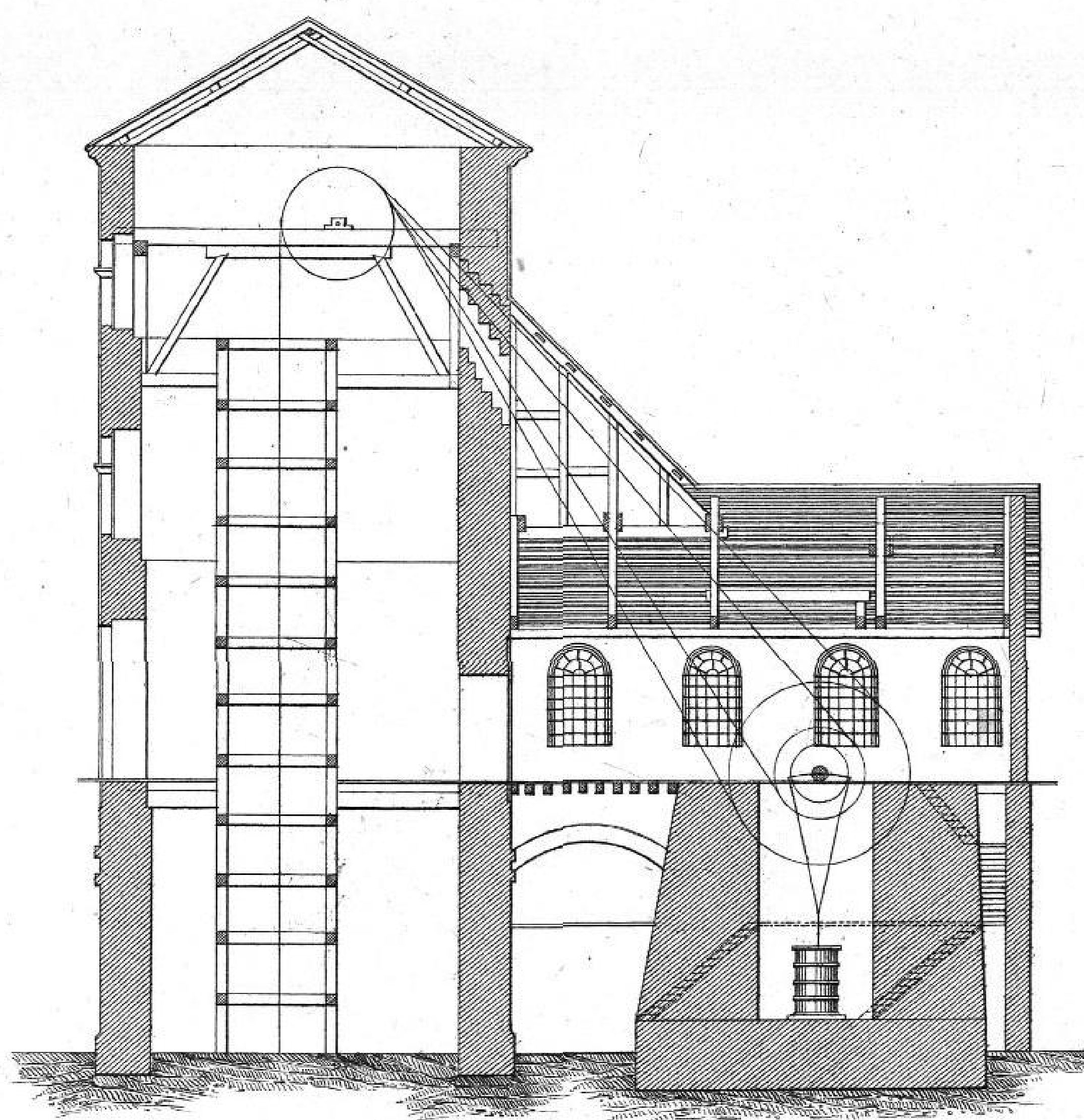


Fig. 3. - Coupe transversale.

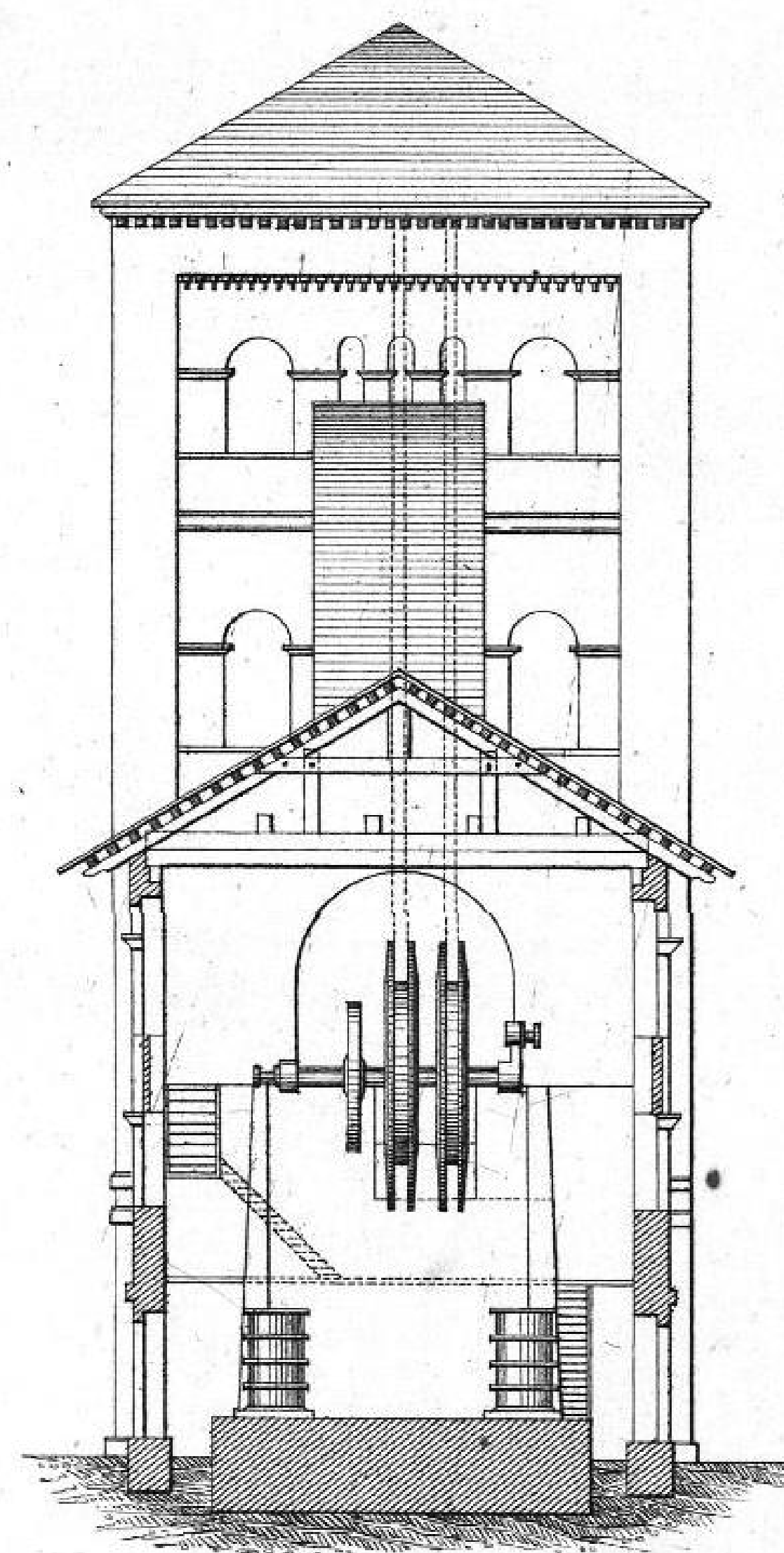
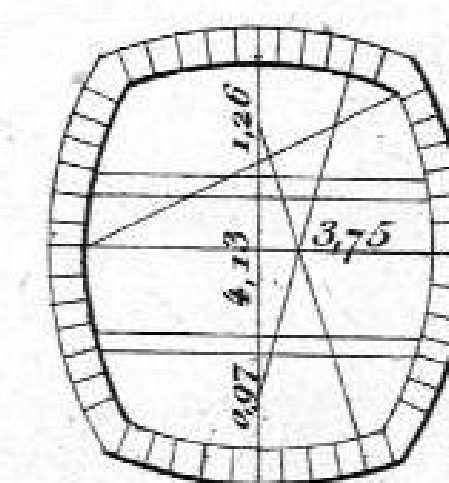
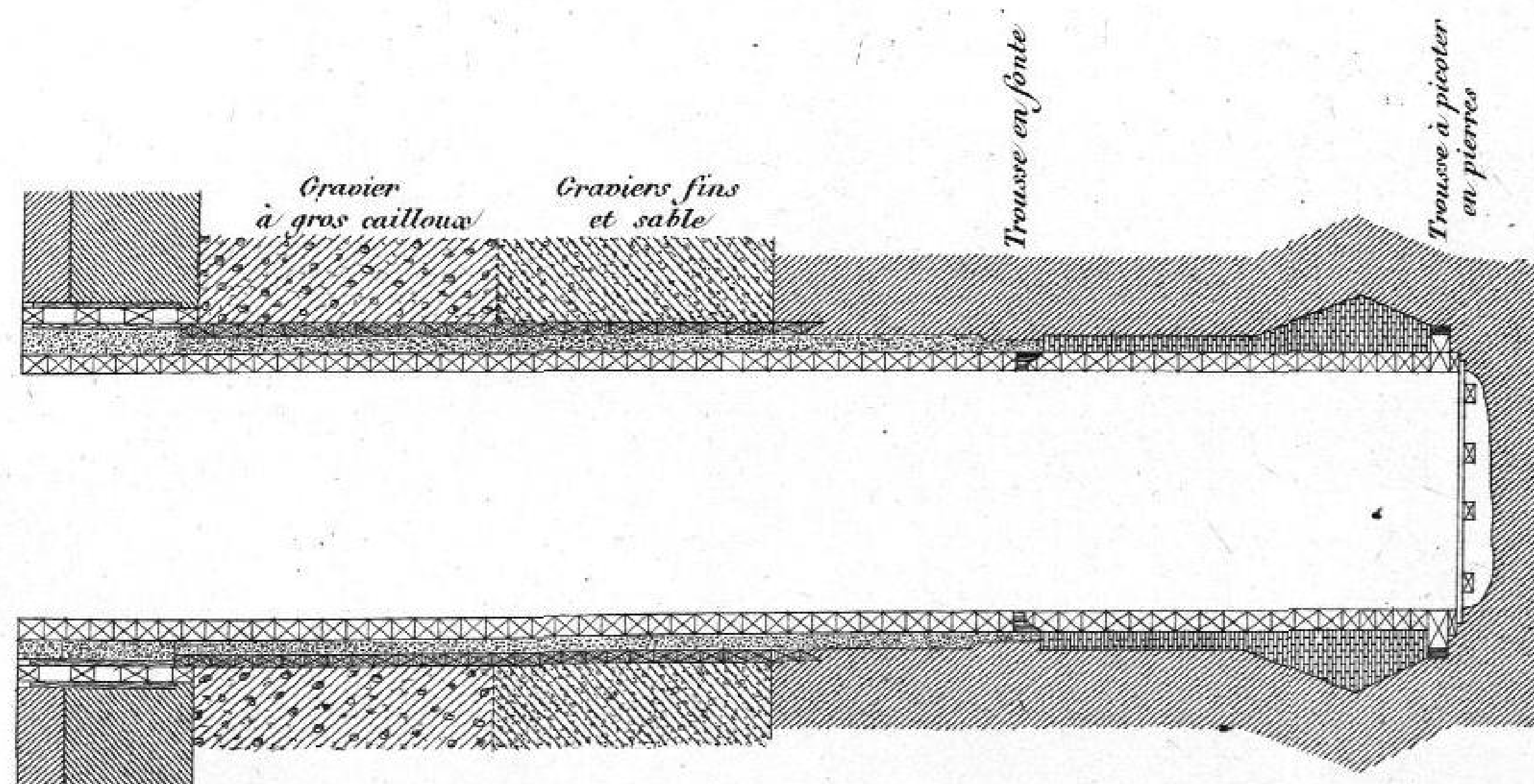


Fig 5 - Cuvelage en pierres de taille de  
la Société de Mulheim sur la Ruhr.



Echelle pour les fig. 1. 2. 3 (1 à 250).

0 1 2 3 4 5 10 20 m.

Echelle p<sup>r</sup> la fig. 5 (1 à 200).

0 1 2 3 4 5 6 7 8 9 10 m.









Fig 4  
Plan et Profil  
de la Mine de Rhein-Elbe

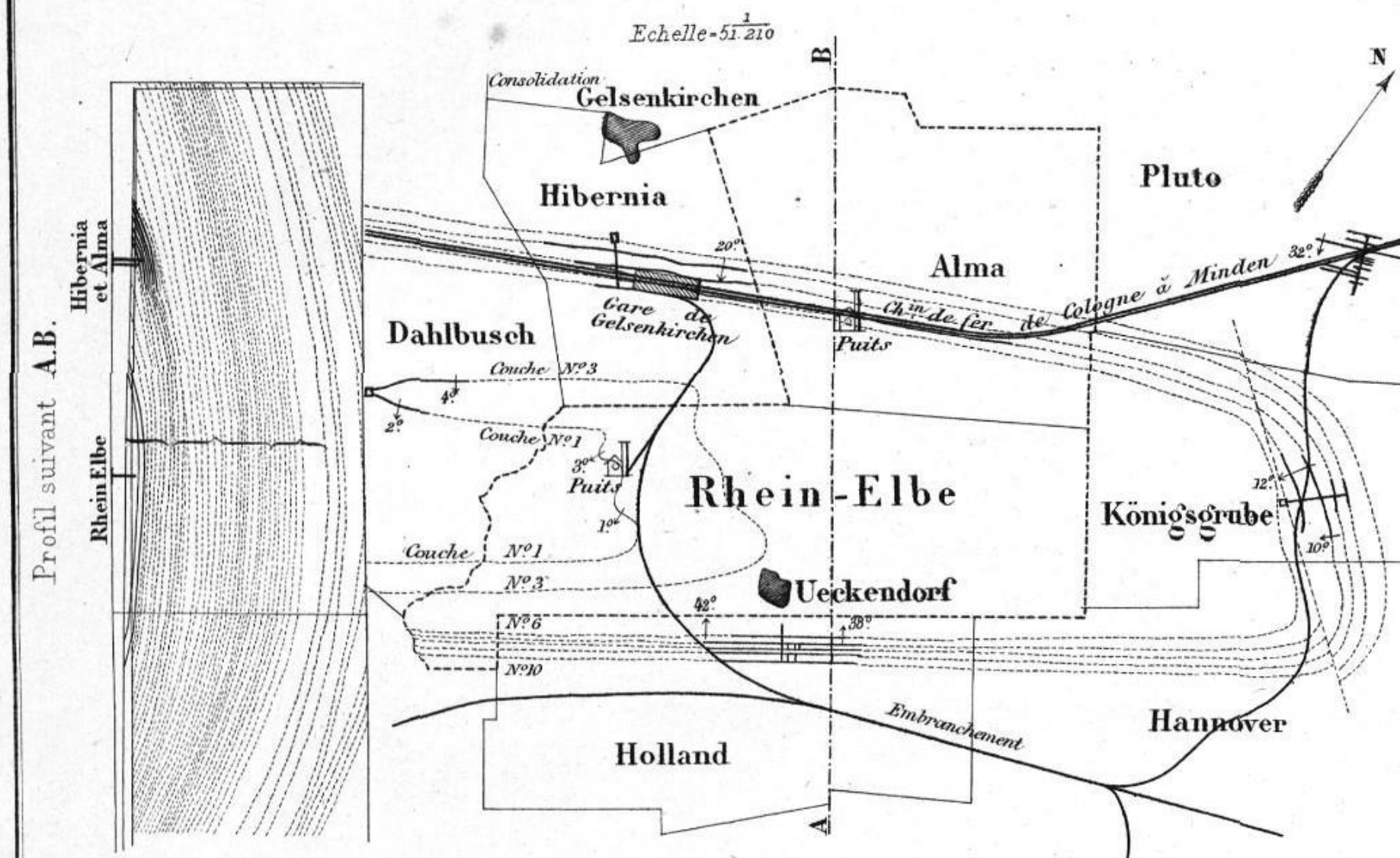
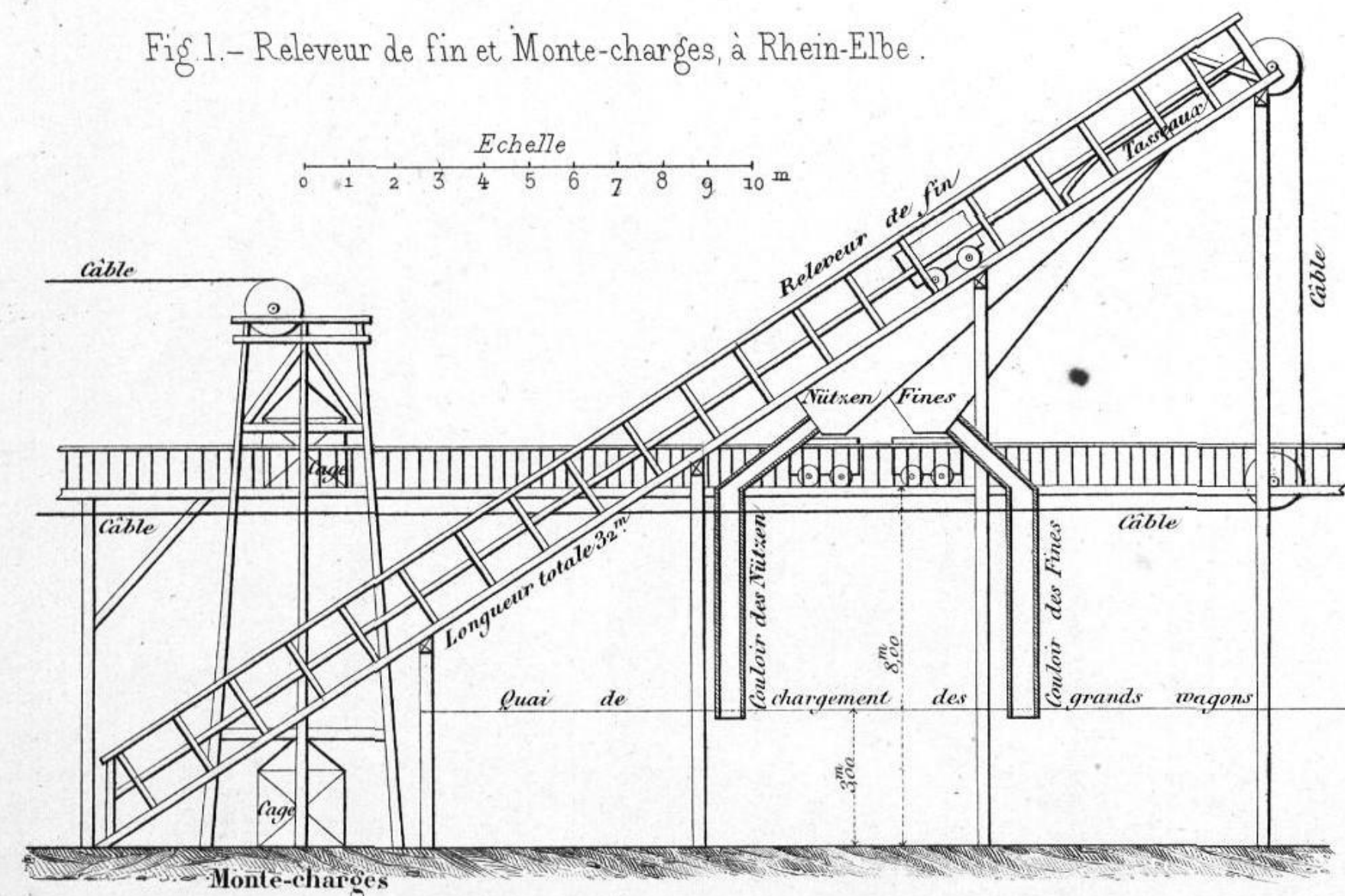


Fig 1.- Releveur de fin et Monte-charges, à Rhein-Elbe.



Sonnerie électrique de Rhein-Elbe.

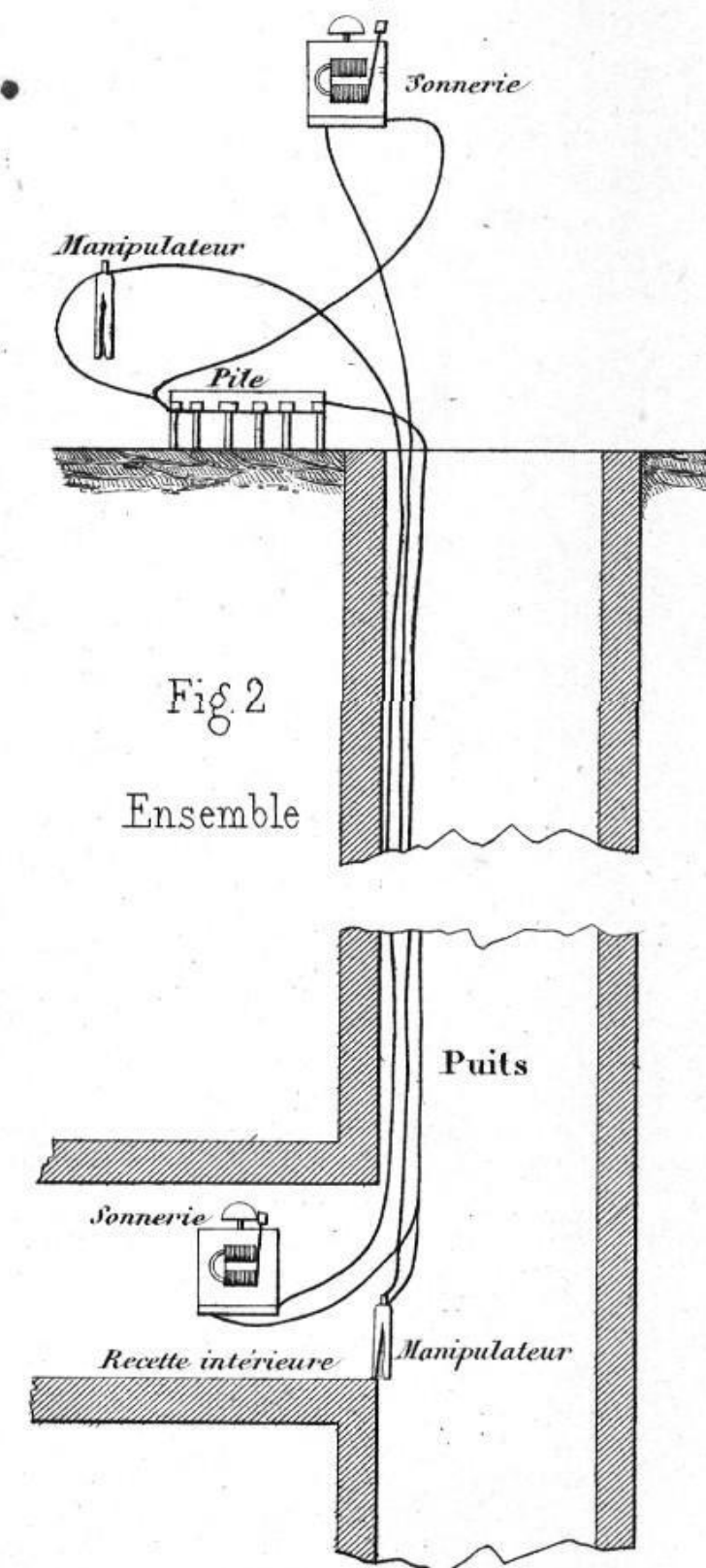


Fig 3.- Manipulateur.

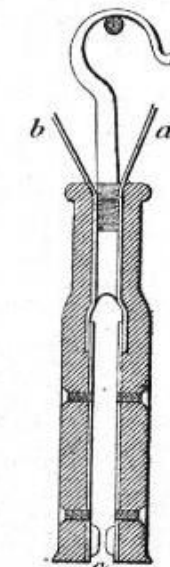
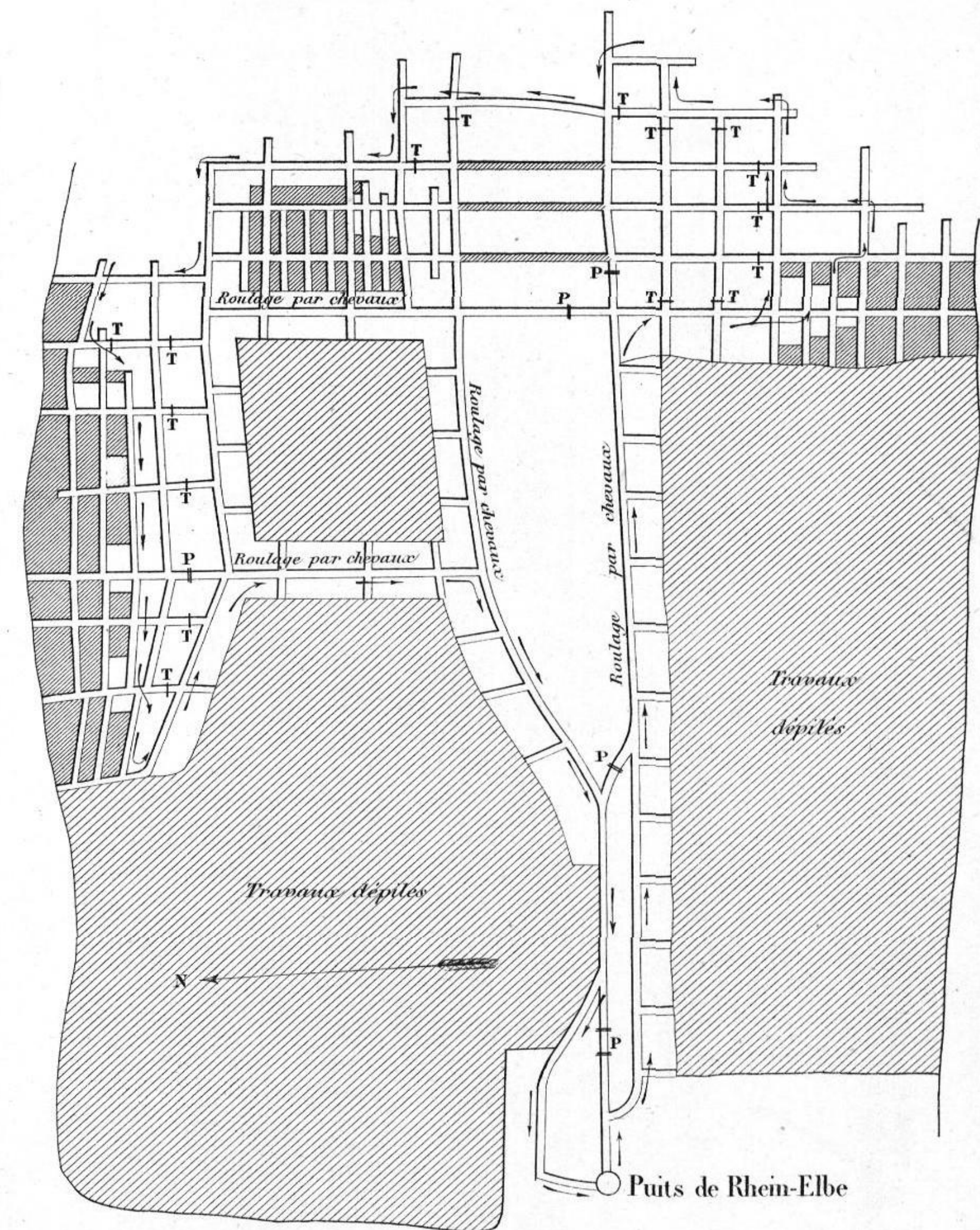


Fig 5 - Plan d'une partie des travaux de Rhein-Elbe.  
(Couche de 1<sup>re</sup> 20)



T Toiles d'aérage.  
P Portes d'aérage.

Echelle-1 à 2500  
0 25 50 100 150 200 250 m









Fig 1  
Plan d'ensemble des installations d'Hibernia

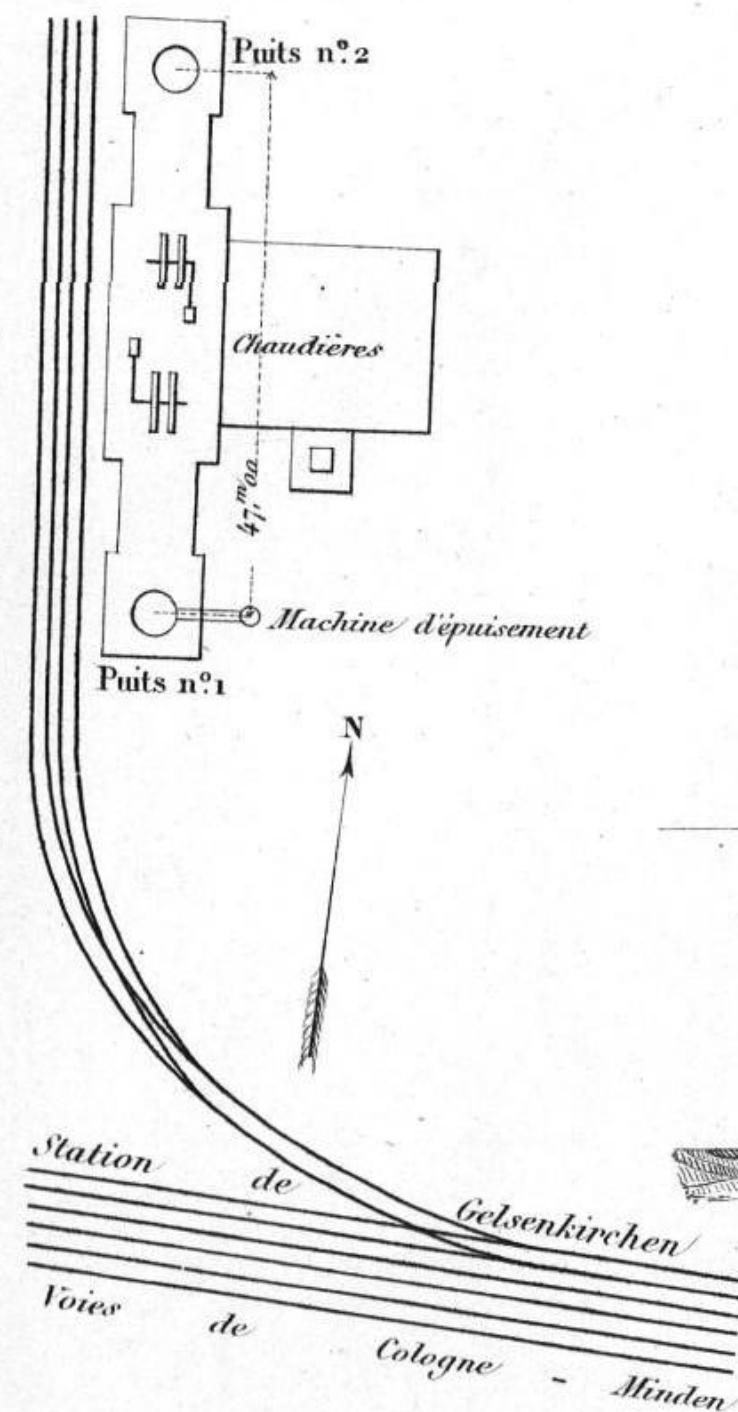


Fig 2  
Section du puits n°1 d'Hibernia

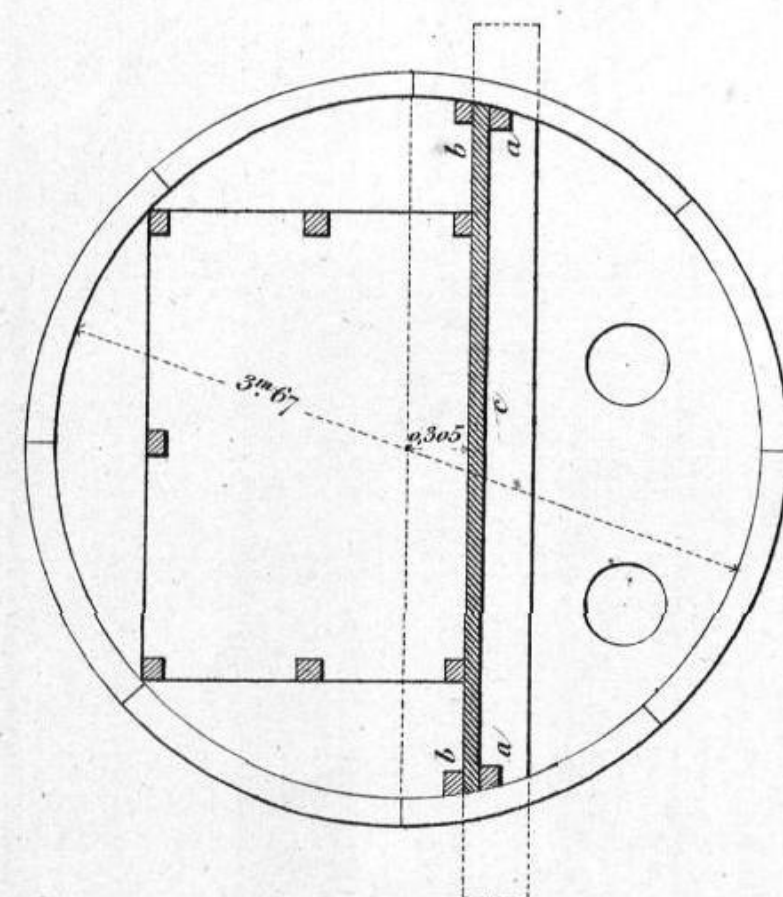
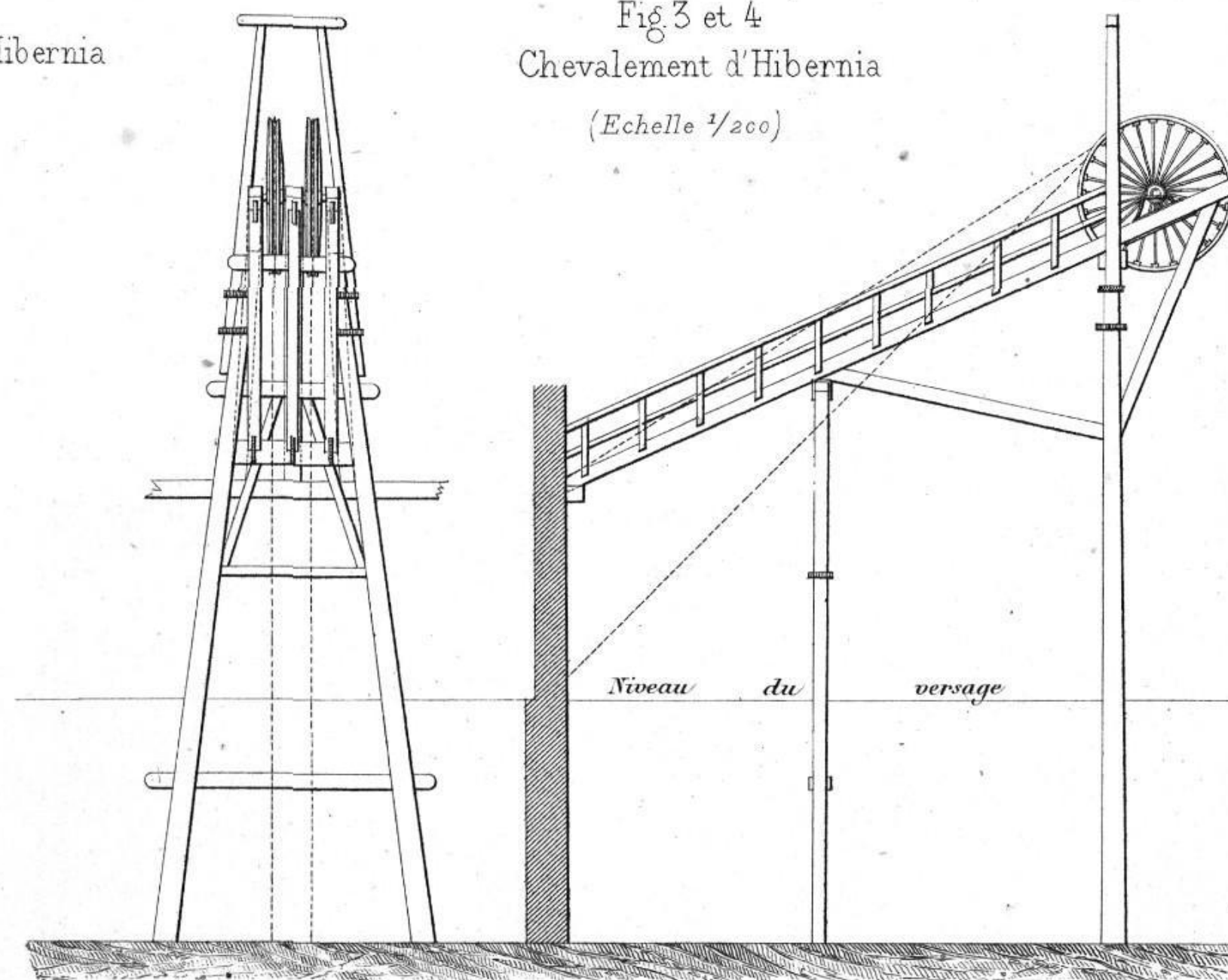


Fig 3 et 4  
Chevalement d'Hibernia  
(Echelle 1/200)



Criblage et triage des charbons à Hibernia.

Fig 5. Coupe longitudinale.

(Echelle 1/100)

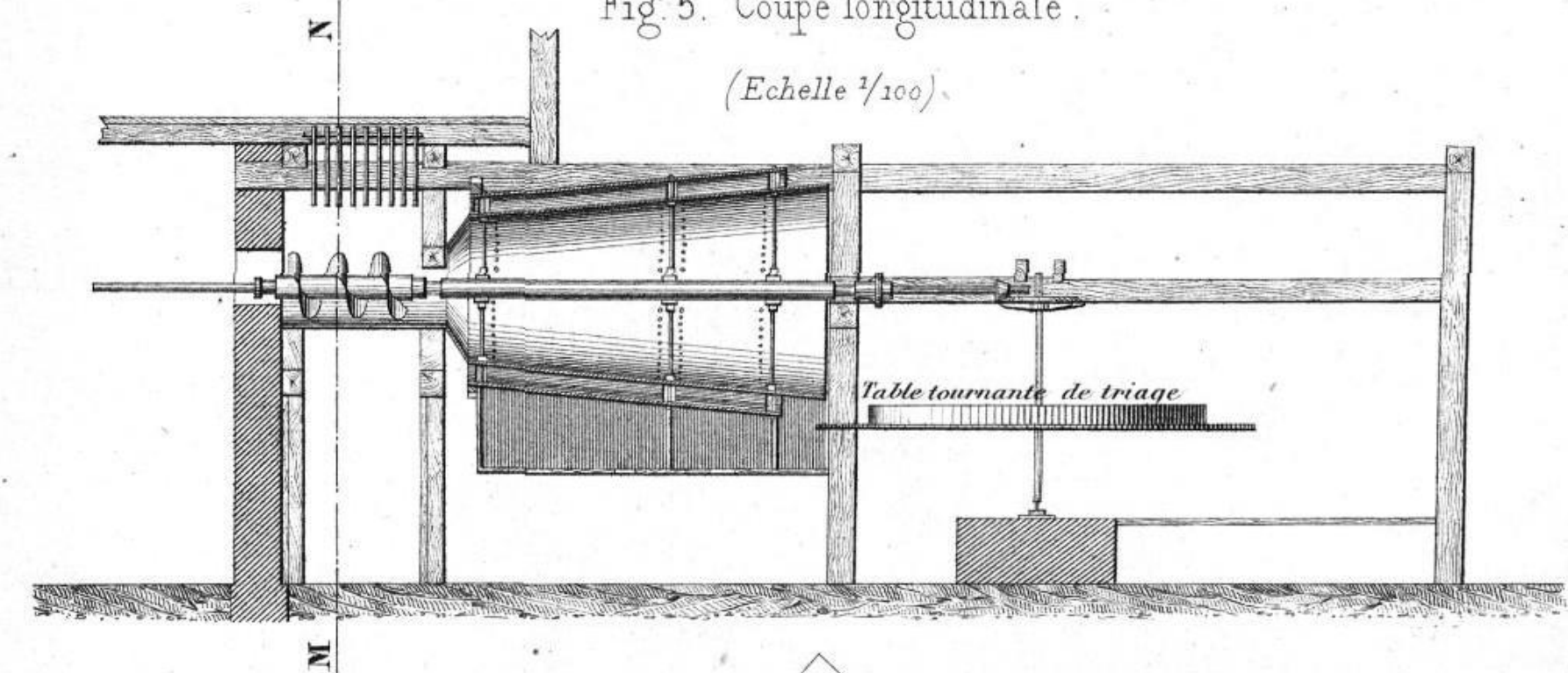


Fig 6 Coupe suivant la ligne  
verticale MN de la Fig 5

(Echelle 1/100)

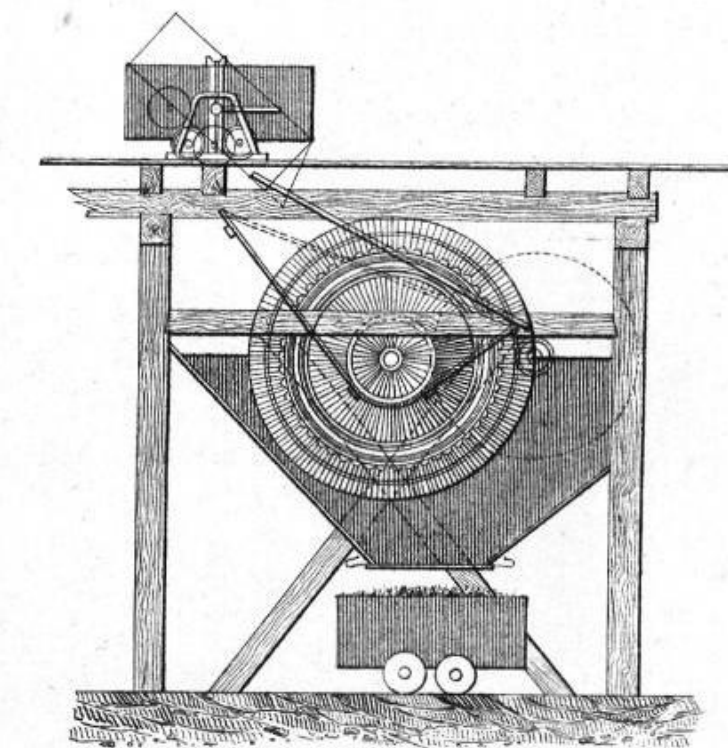


Fig 7  
Piston élévatoire  
de Rhein-Elbe  
(fonçage)

(Echelle 1/10)

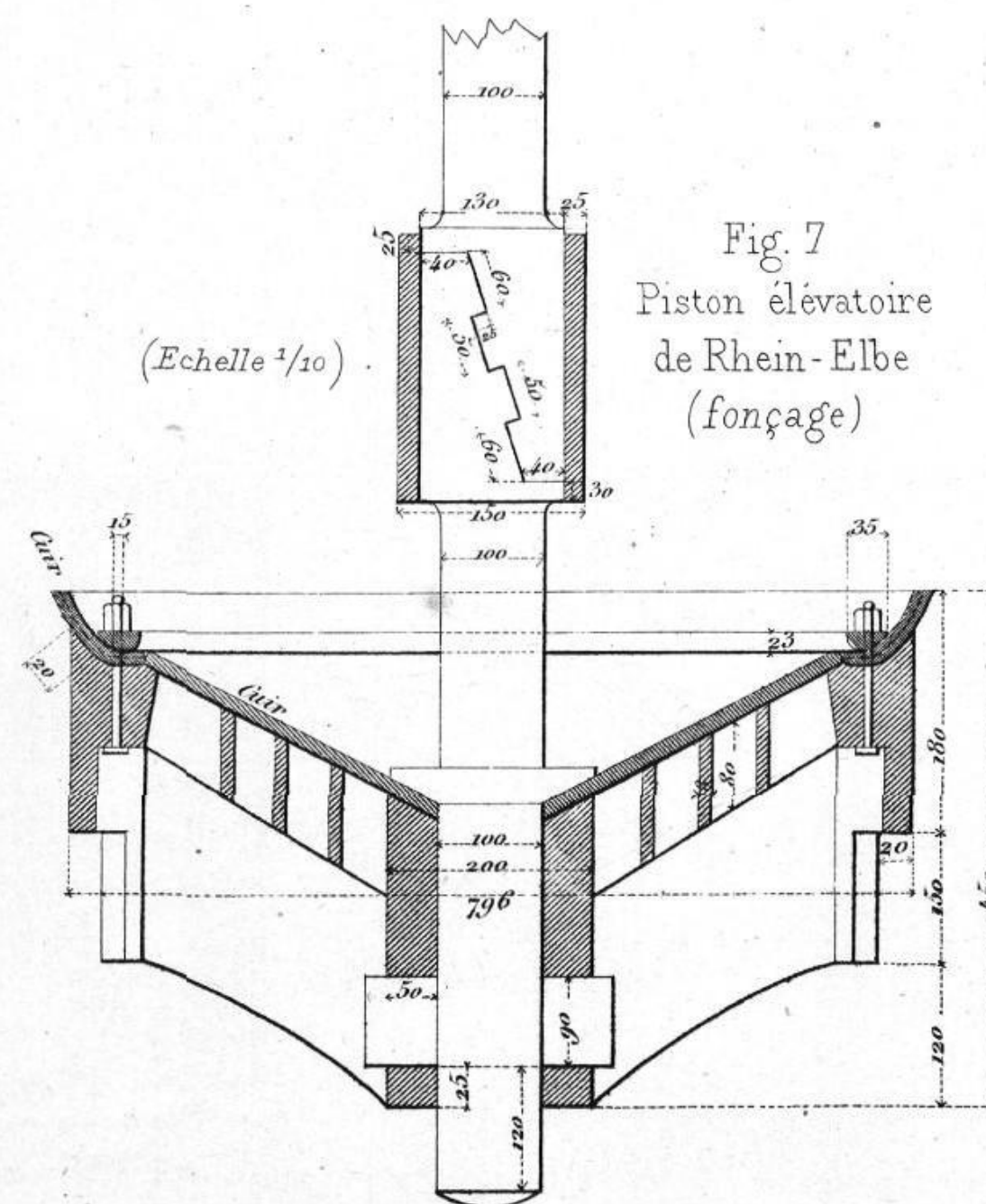
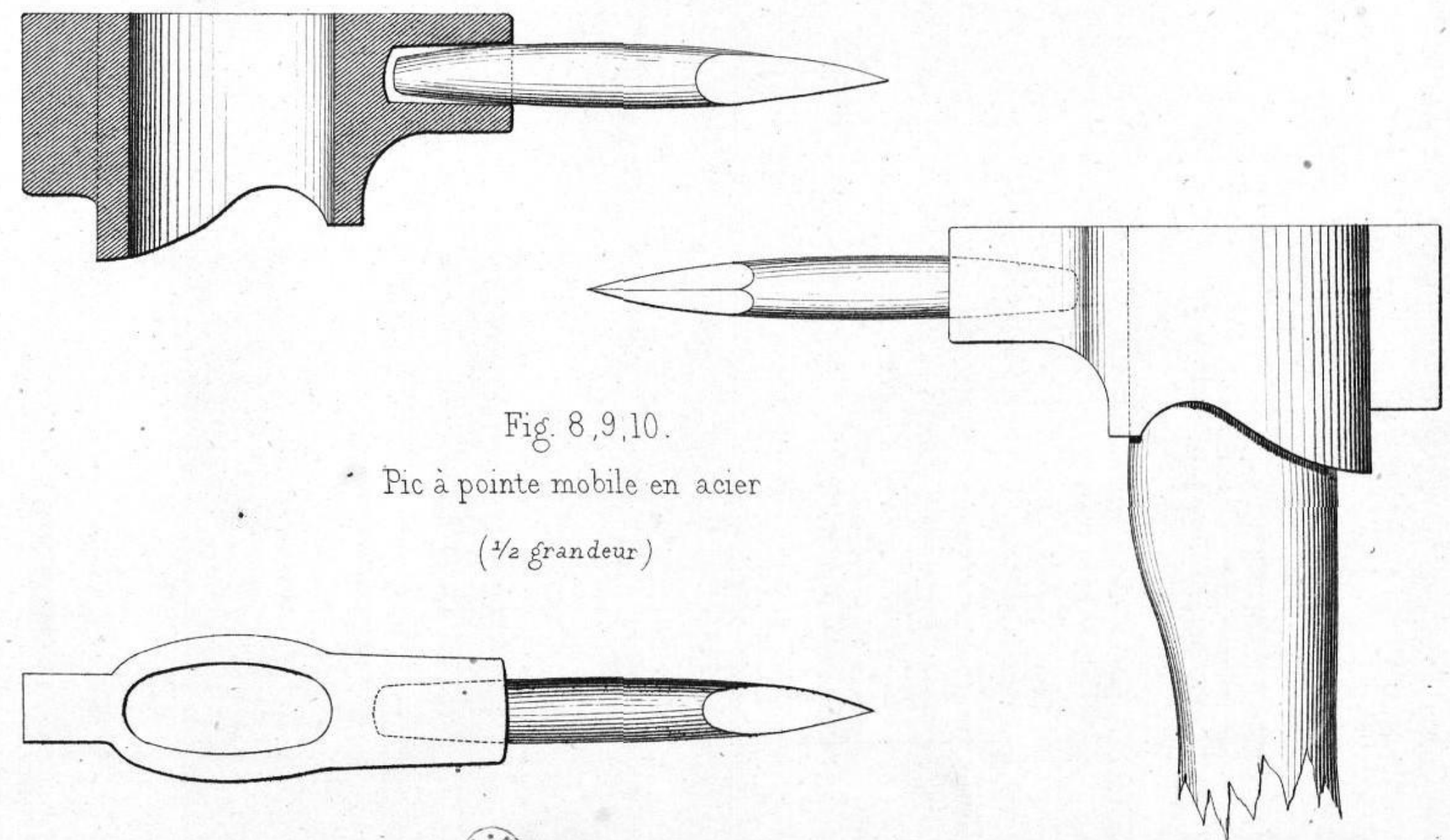


Fig. 8, 9, 10.

Pic à pointe mobile en acier

(1/2 grandeur)









N<sup>au</sup> système de balancier pour machine d'épuisement  
à traction directe et à détente par M<sup>r</sup> G. Wellner.

Fig. 1

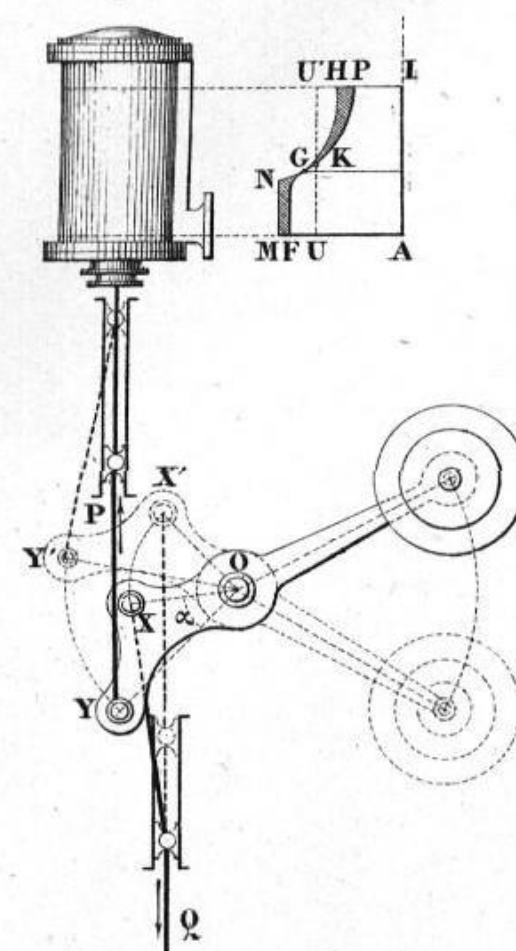


Fig. 2

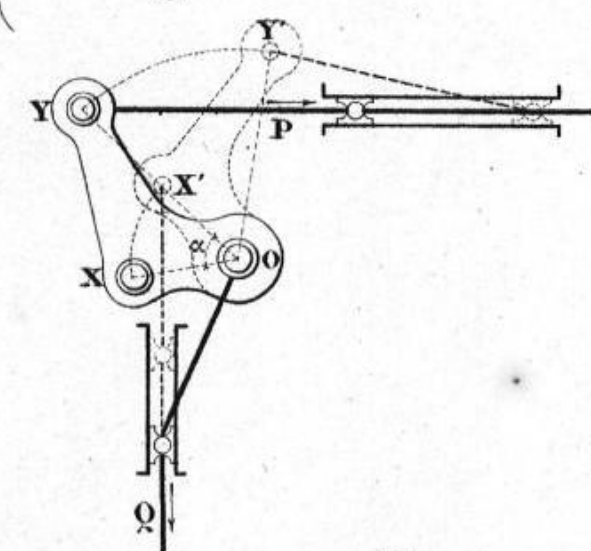


Fig. 4

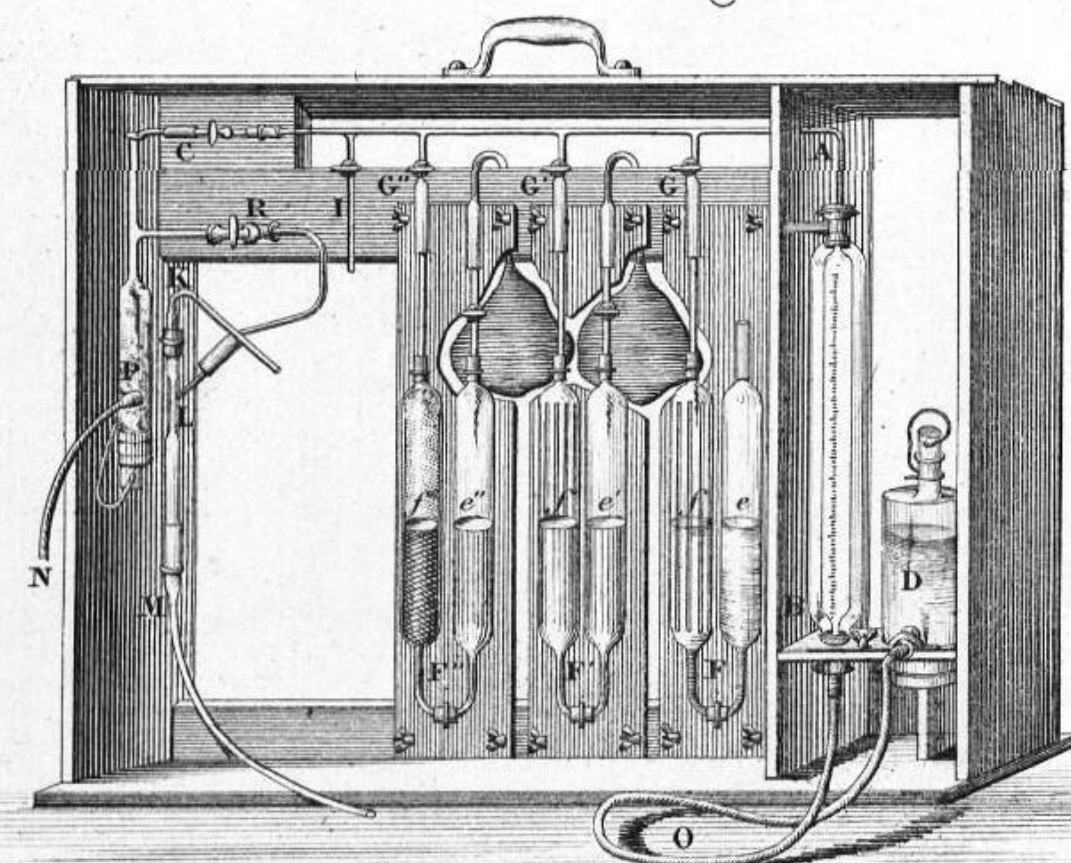


Fig. 3  
Four à puddler Godfrey et Howson  
Elévation-Coupe

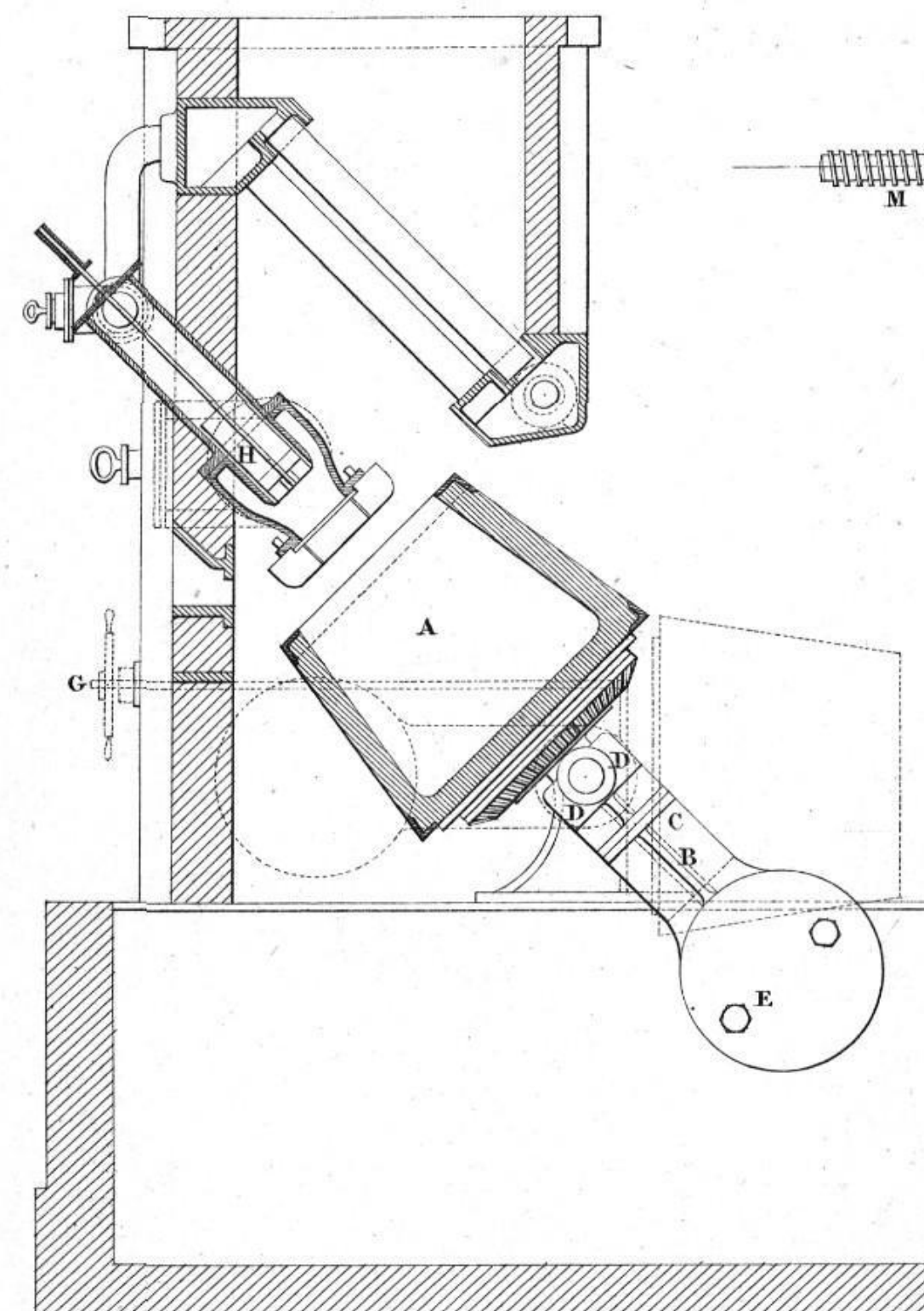
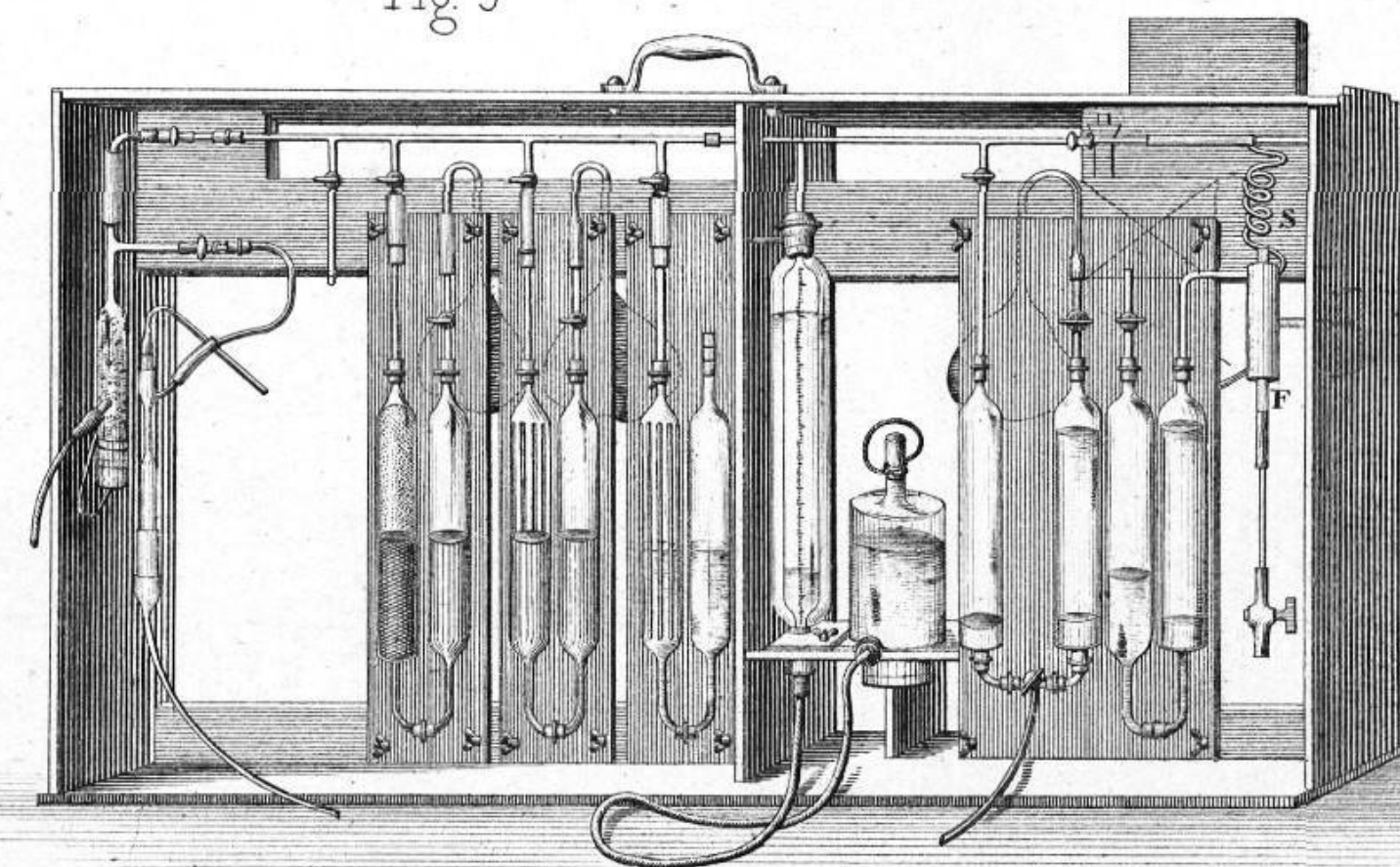
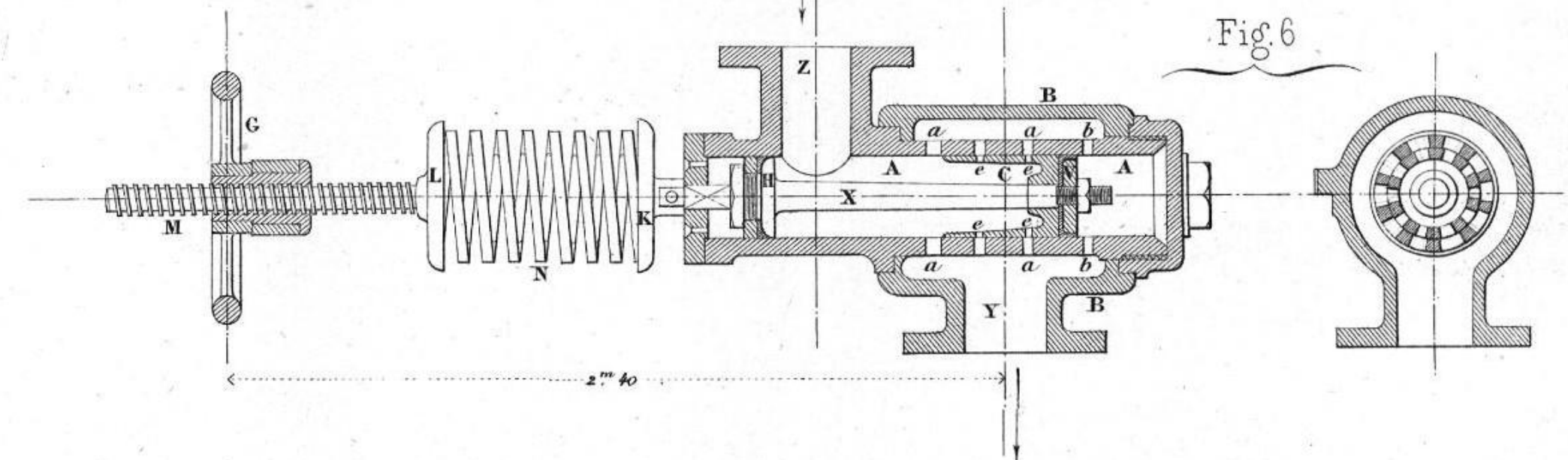


Fig. 5



Appareil Ribourt pour locomotives à air comprimé,  
destiné à maintenir automatiquement une pression  
constante pour l'air qui se rend du réservoir-magasin  
aux cylindres moteurs.

Fig. 6



Fourneau de chaudière à réchauffage de l'air, Système Keye

Fig. 7

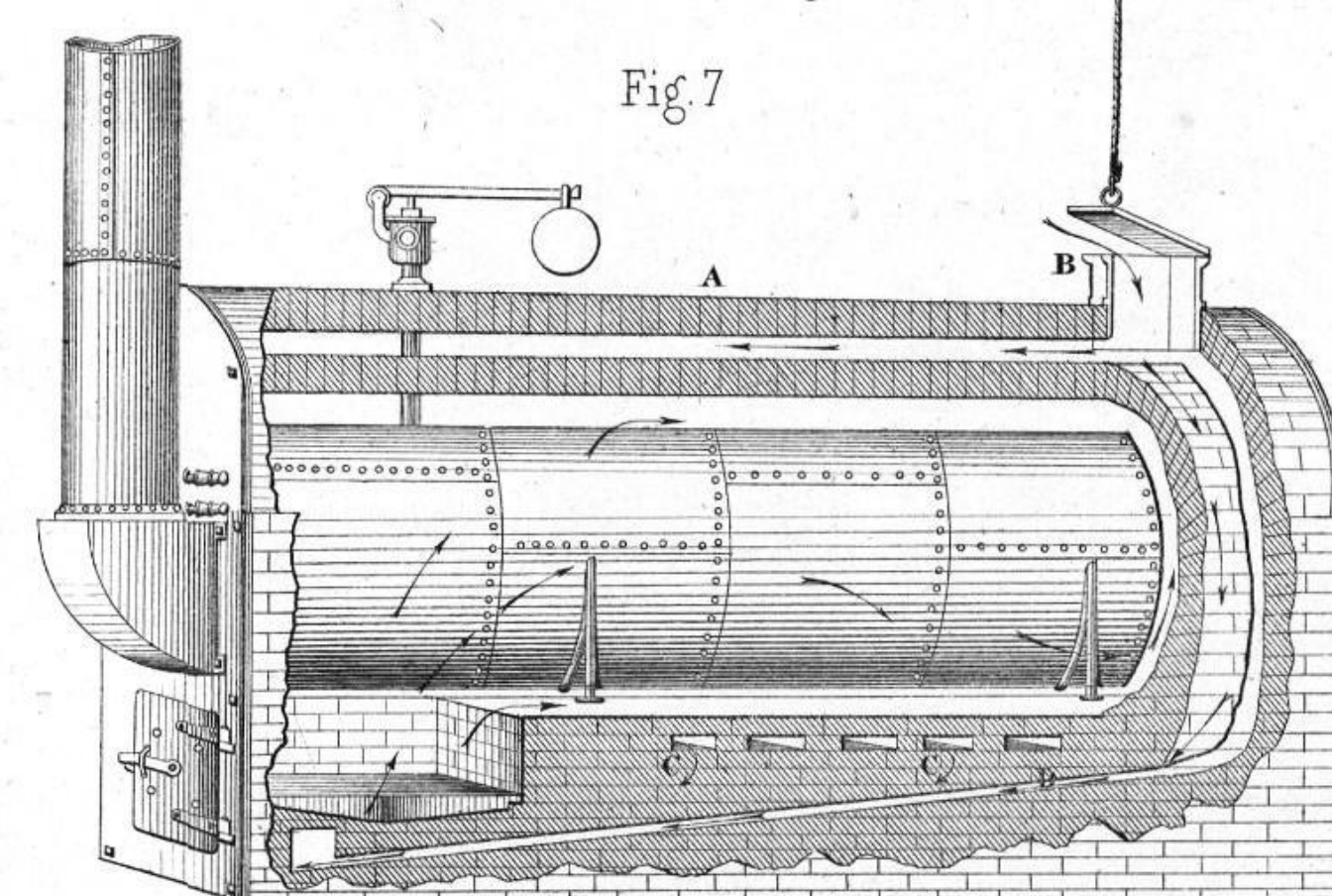


Fig. 8

