

Fig. 1. Figure schématique du différentiel

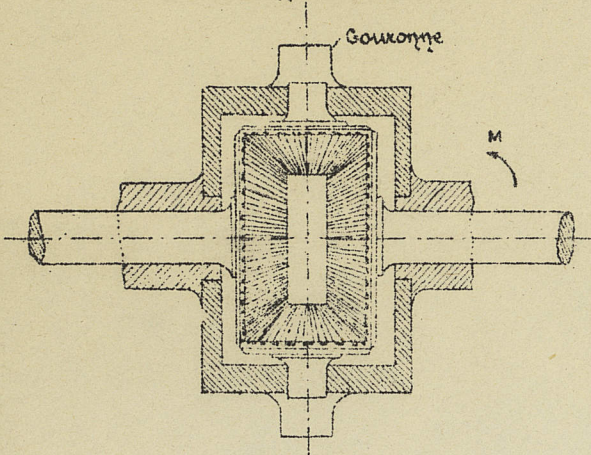
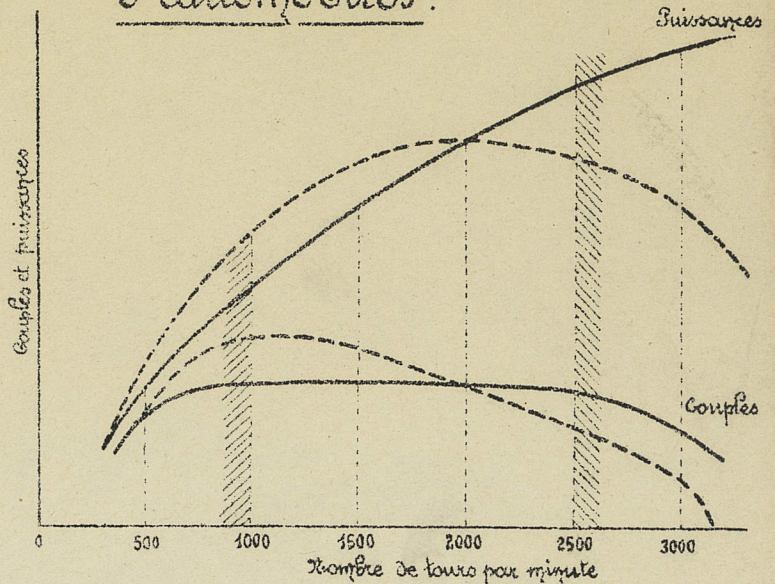


Fig. 2. Caractéristiques schématiques des moteurs d'automobiles.



En trait pleins courbes des couples et des puissances d'un moteur dit poussé.  
En ponctué courbes d'un moteur dit étouffé.  
(M. Boyer-Guilton)

Fig. 3. Glissement élastique du pneumatique

(d'après M. Boyer-Guilton)

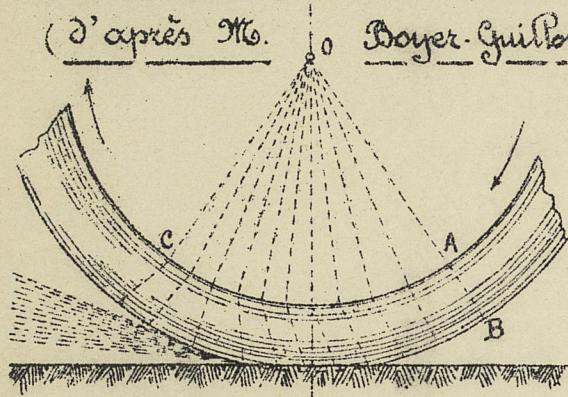


Fig. 4. Diagramme des grandeurs d'empreinte et d'écrasement de divers types de bandages. (d'après l'Ing. Dott. Raffaele Ariano)

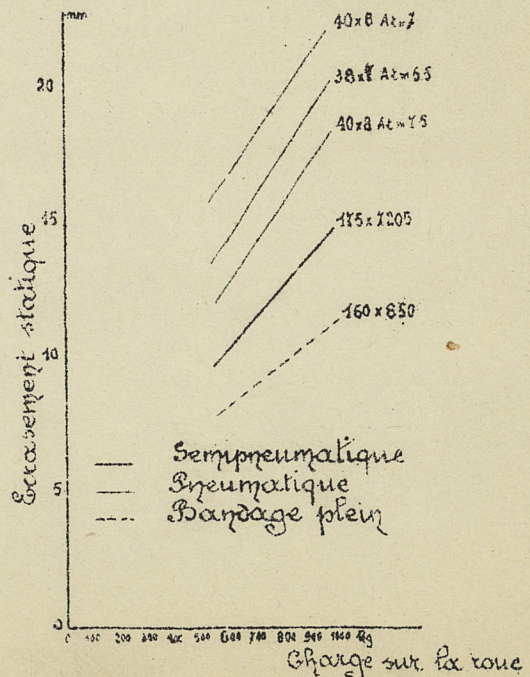
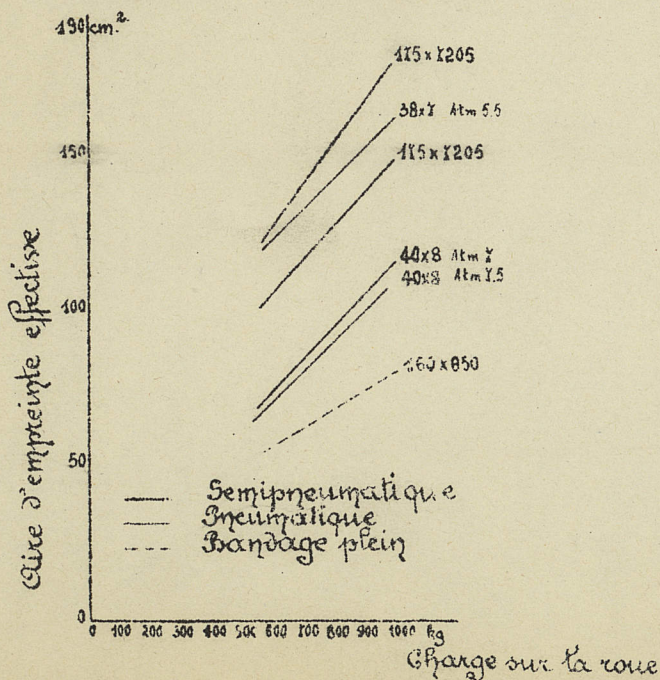


Fig. 1. Caractéristiques expérimentales de moteurs d'automobiles (d'après M. Boyer-Guillon)

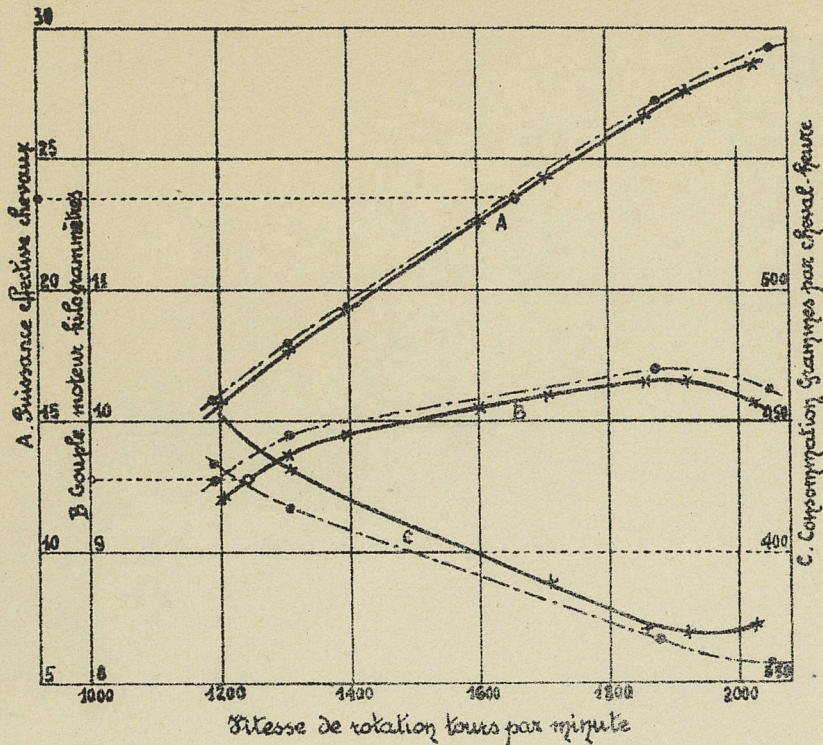


Fig. a) Légende. Ses traits pleins représentent les courbes d'expérience avec allumage 12 millimètres d'avance. — Ses traits interrompus représentent les courbes d'expérience avec allumage 10 millimètres d'avance.

Fig. 2. Schéma de lacet de montagne. (prescriptions françaises.)

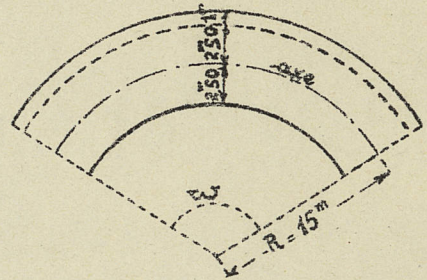


Fig. b) Courbes d'essai d'un moteur Jeffry.

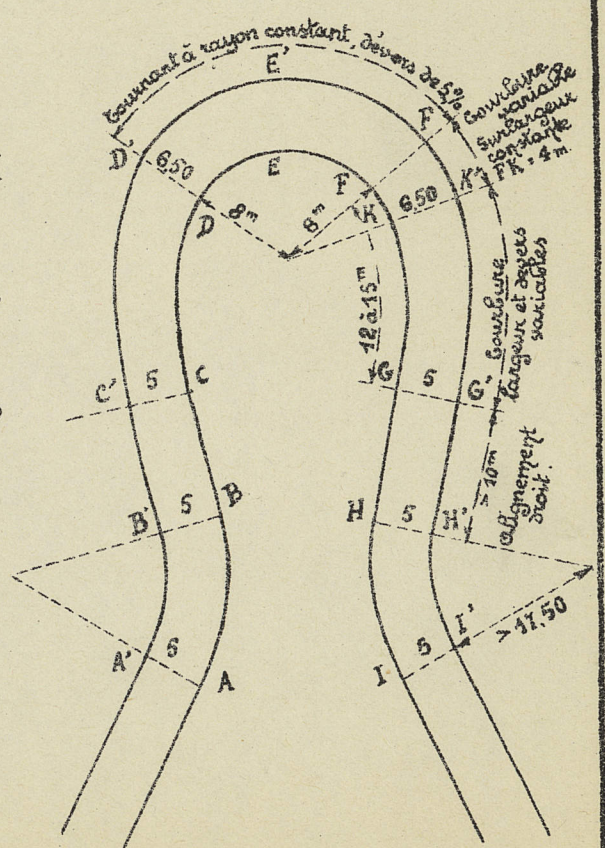
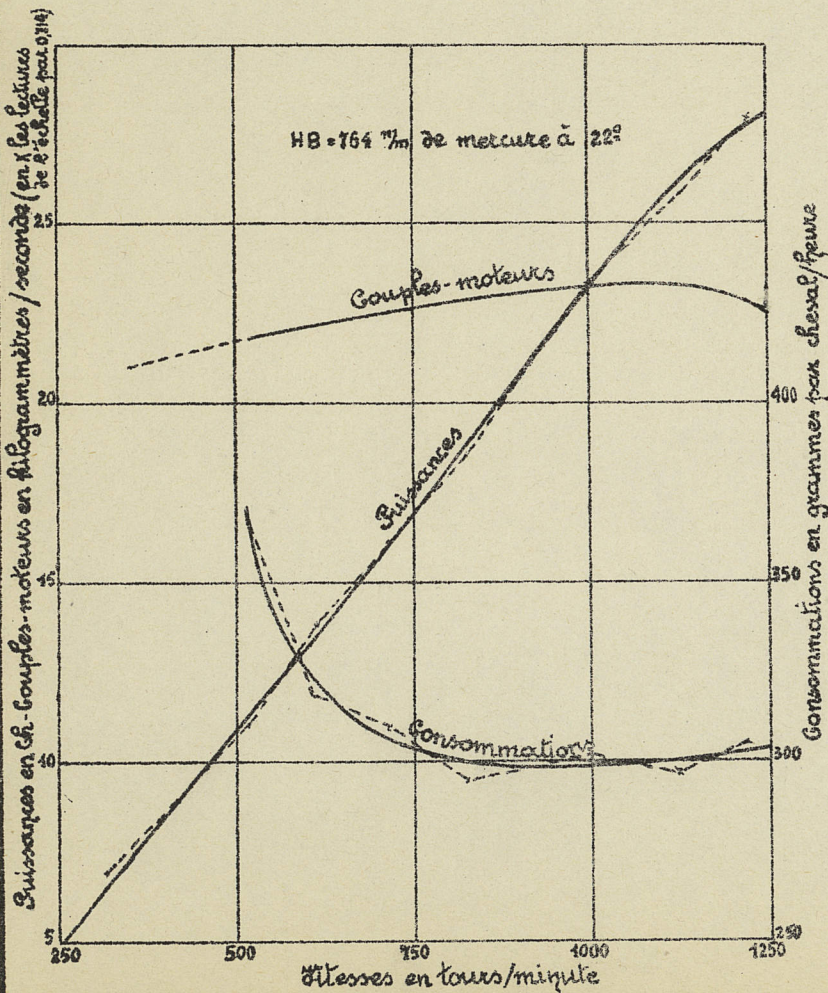


Fig. 1. Schéma de raccordement progressif à centre conservé

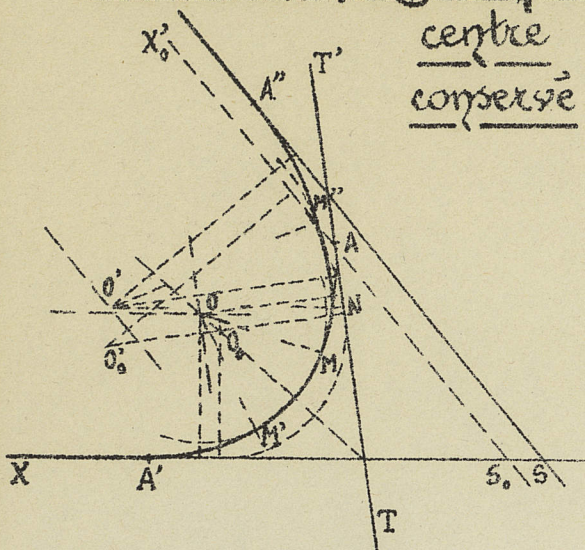


Fig. 2. Schéma de raccordement progressif à rayons conservés

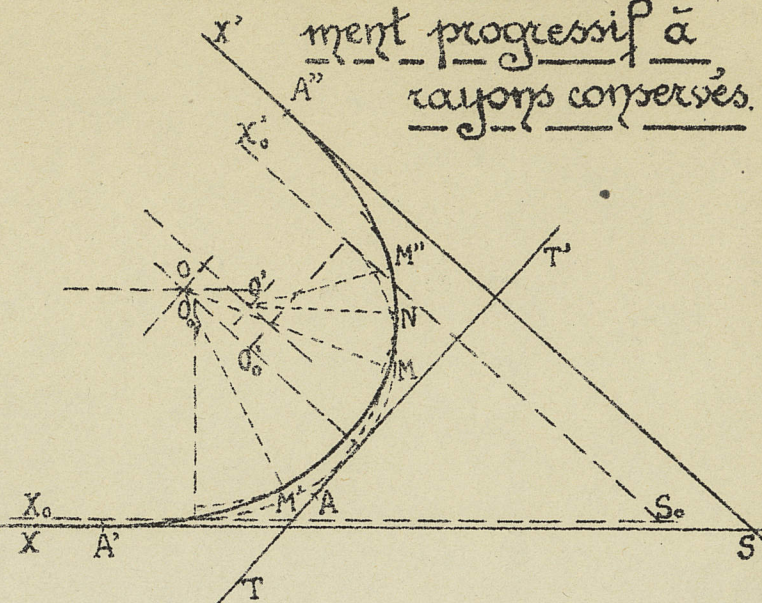
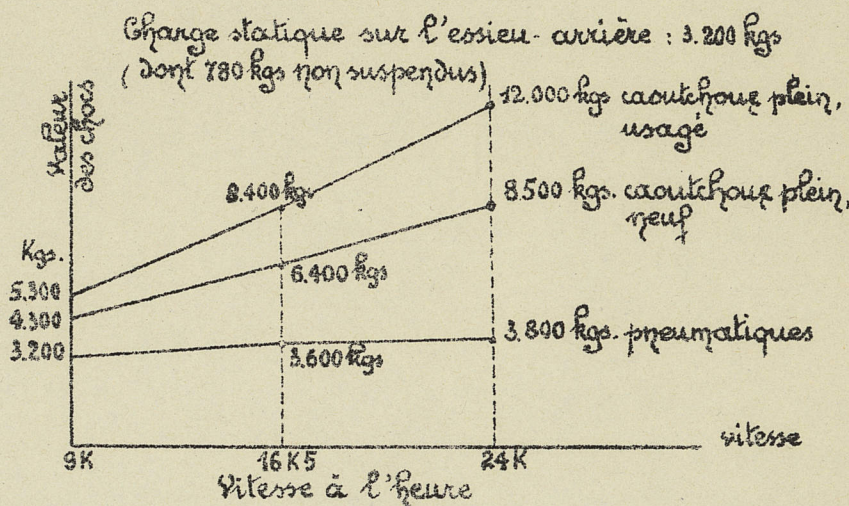


Fig. 3. Influence de la nature des bandages sur les chocs.



Vitesse km à l'heure	150	140	130	115	100	100	115	130	140	150
Pente %	26	21	17	11	6	6	11	17	21	26

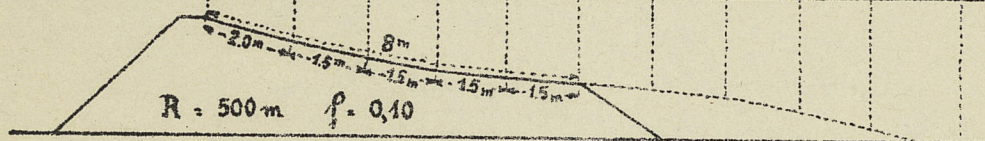


Fig. 4. Profil de virage à devis variable

(d'après M. A. Kolousek)

Fig. 5. Type de route départementale



Fig. 6. Profil type de route départementale française.

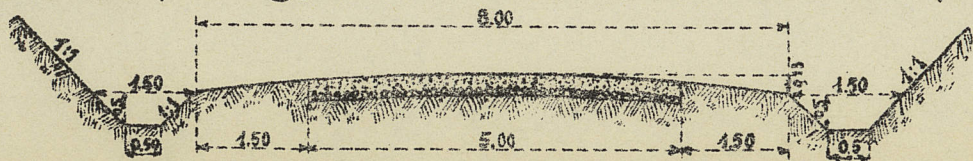


Fig. 1. Profil type de route nationale française

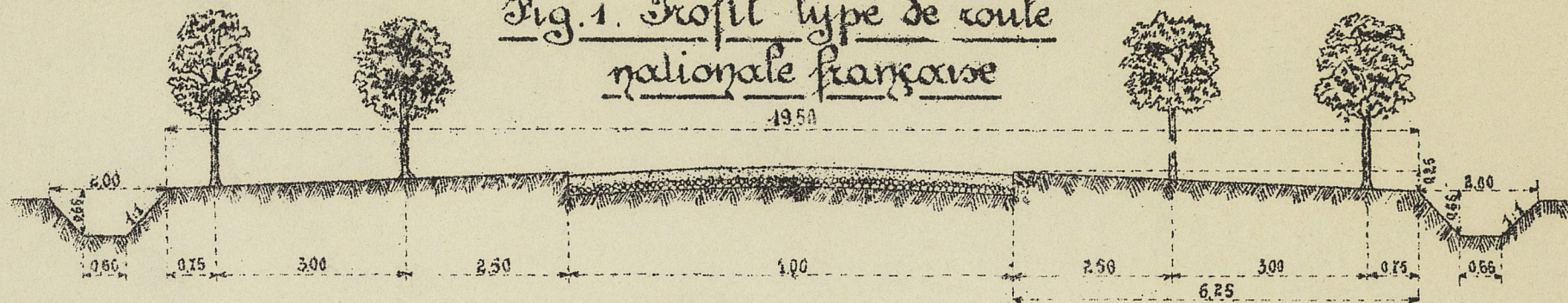


Fig. 2. Type de route en Haute Italie

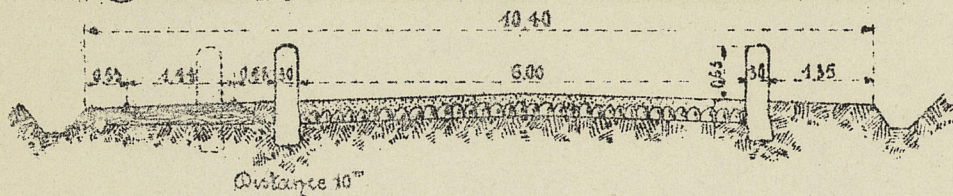


Fig. 3. Type de route de montagne.

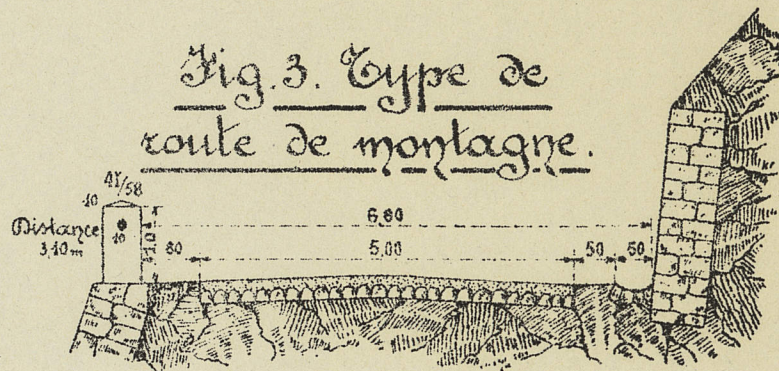


Fig. 4. Route de la vallée de la Mourg (Forêt-Noire)

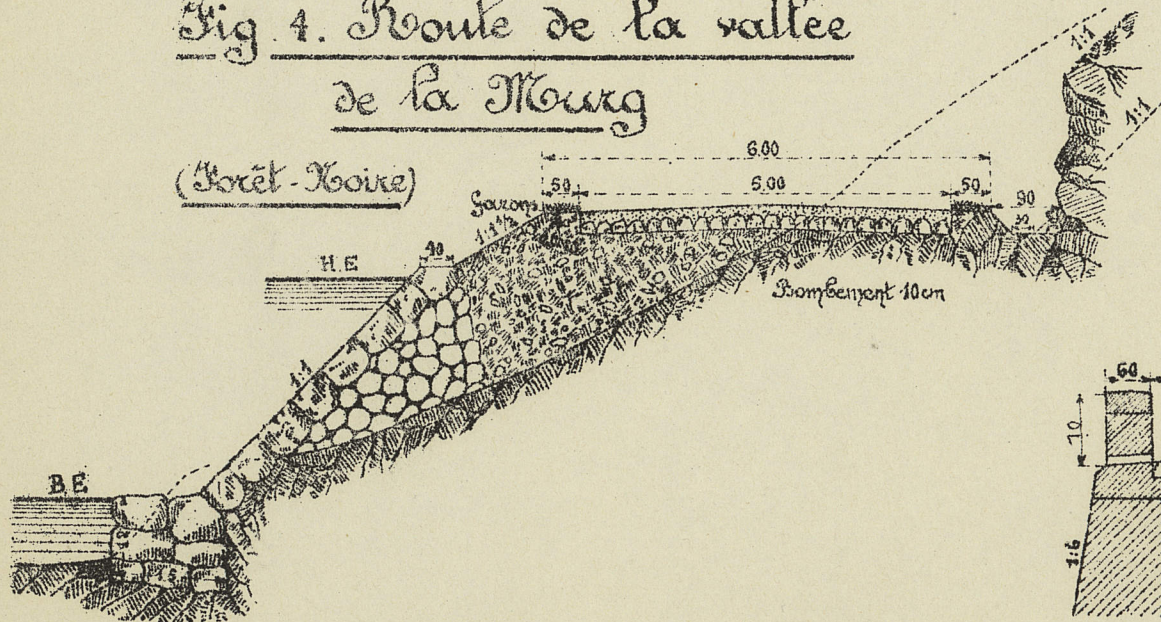


Fig. 5. Route de Brenner.

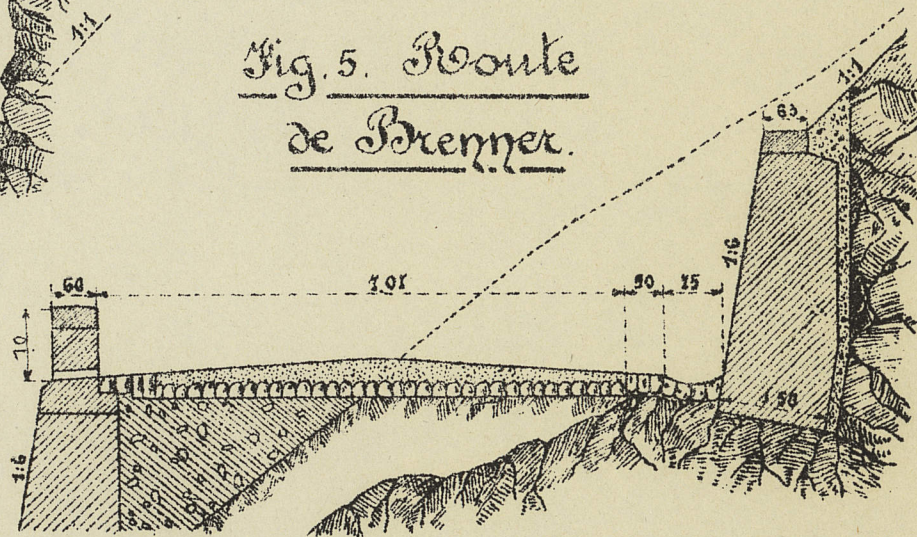


Fig. 1. Chemin empierré de montagne  
(ancienne route de Stelsio)

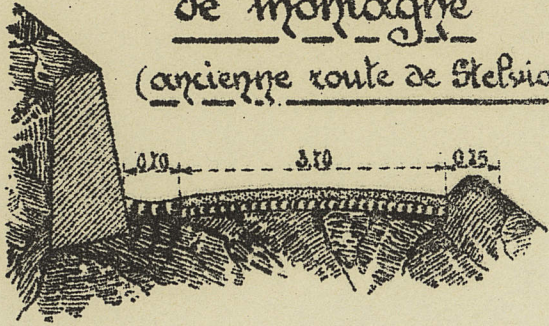


Fig. 2. Chemin de montagne  
(Canton des Grisons)

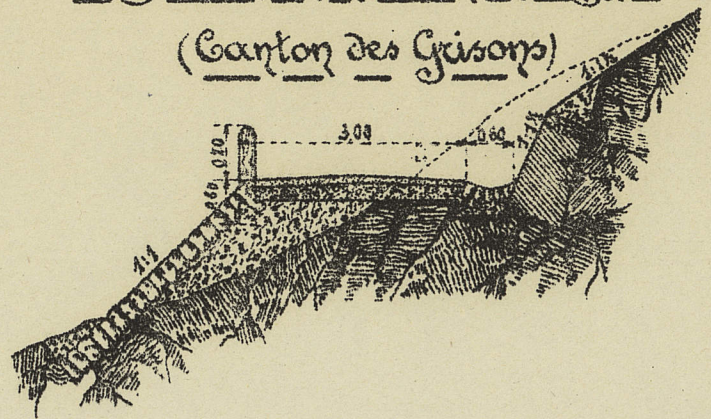


Fig. 3.

Route de Pontebba  
a) à flanc de rocher.      b) en tunnel

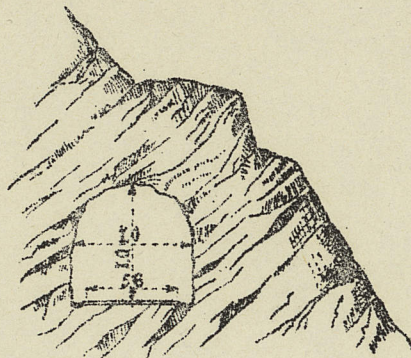
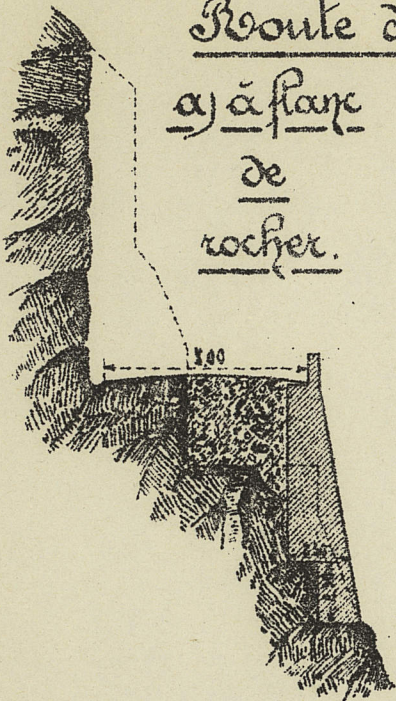


Fig. 4. Route avec rocher en surplomb.

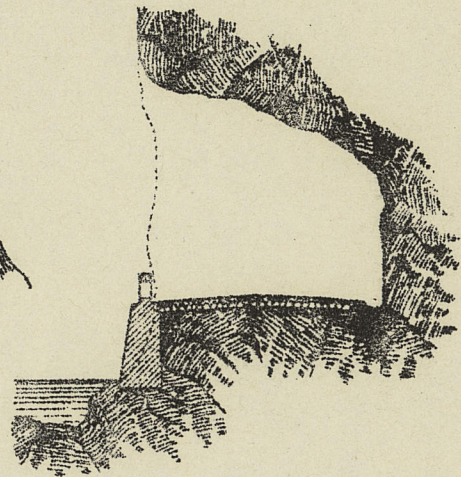


Fig. 5. Route sur arcades.

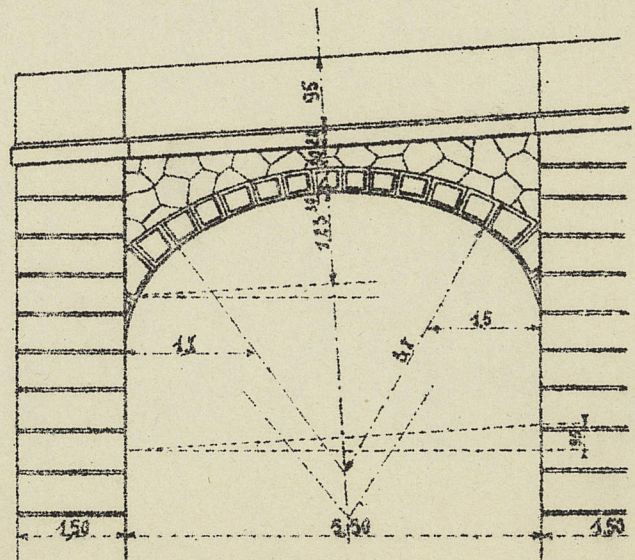
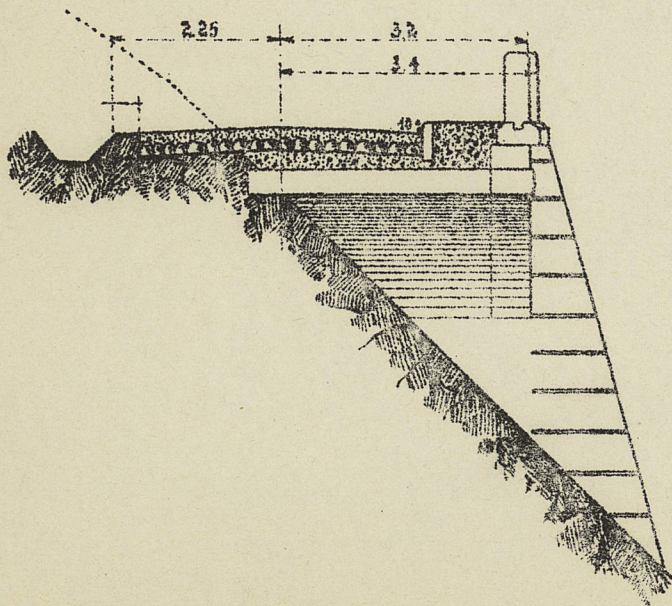
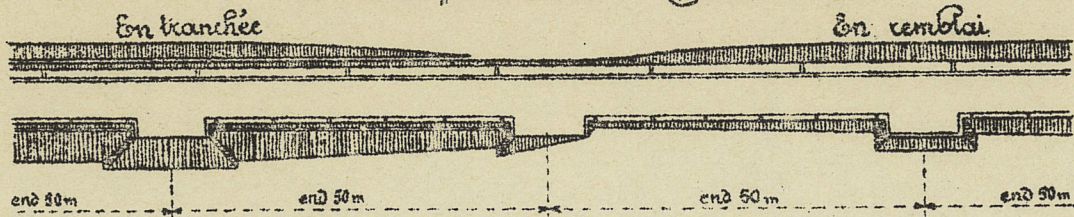


Fig. 1. Dépôts de matériaux.  
a) disposition générale



b) détails

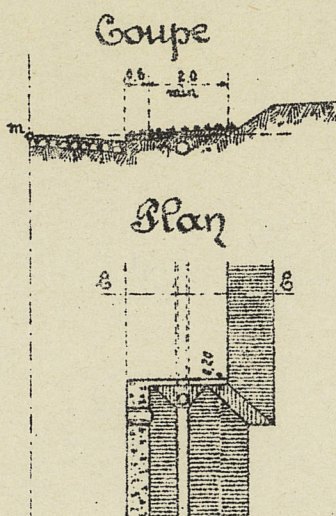
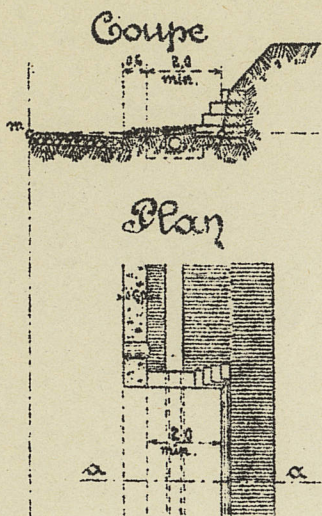
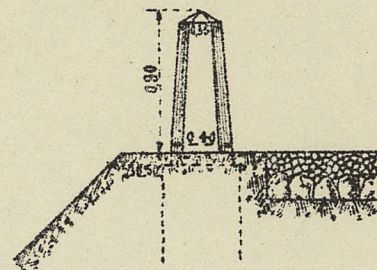
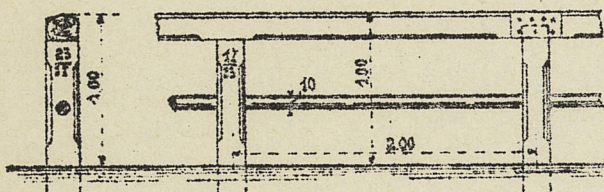


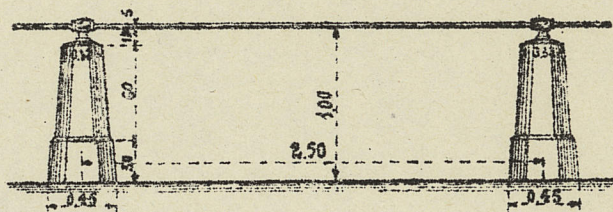
Fig. 2. Dispositifs de protection.  
a) Bornes de protection.



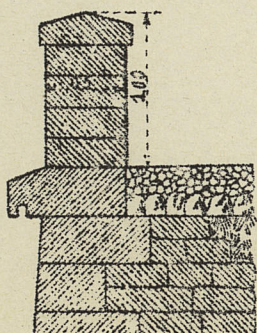
b) Garde corps en bois.



c) Garde corps en pierre et métal.



d) Garde corps sur le mur de soutènement.



e) Garde corps en maçonnerie du val de l'Arda.

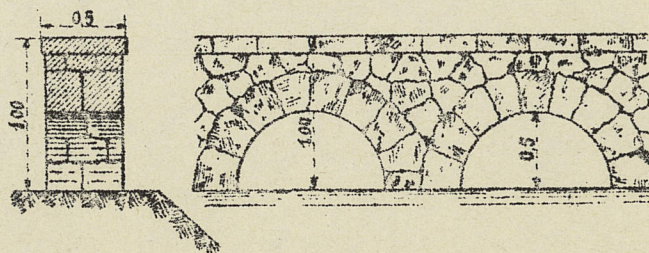


Fig. 1. Caniveaux pavés dans la traversée des agglomérations.

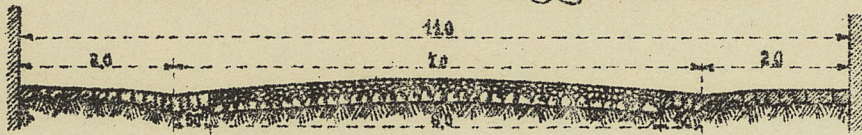
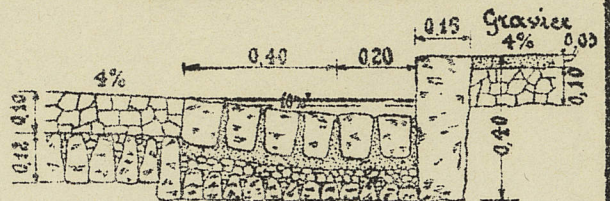


Fig. 2. Demi-revers pavé et trottoir surélevé.

a) avec bordure



b) sans bordure

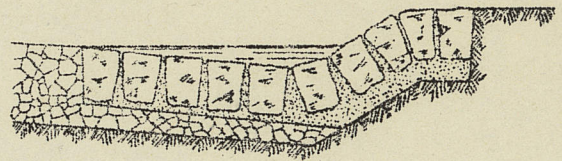


Fig. 3. Constitution provisoire d'une route à paver ultérieurement (dans l'intérieur d'une agglomération).

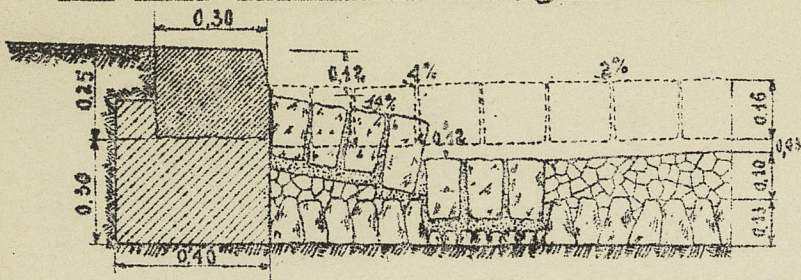
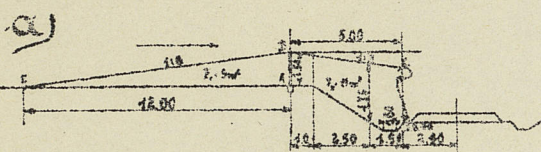
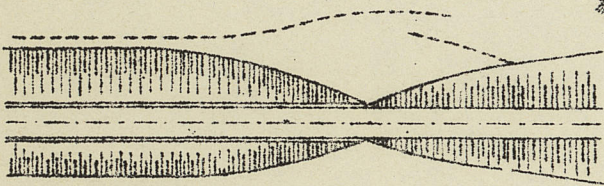


Fig. 4. Action théorique et dispositions de palissades pare-neige.



b)



c)

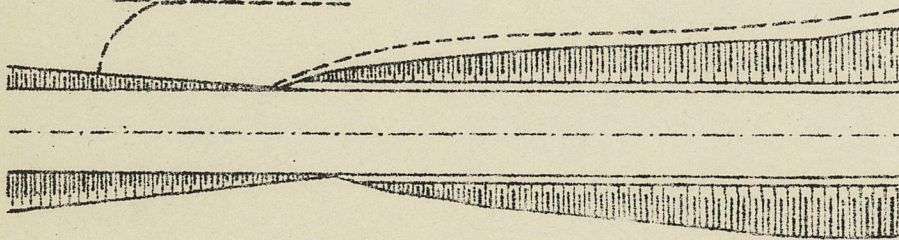
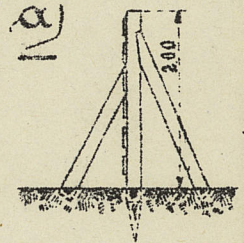
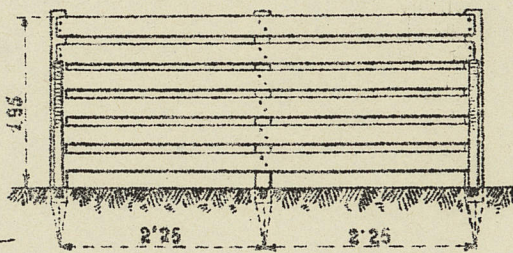
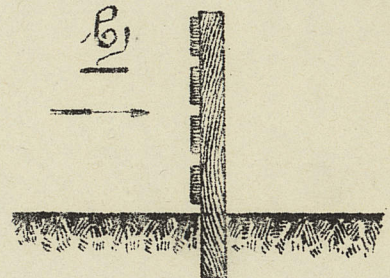


Fig. 5. Types de palissades pare-neige en bois.



b)



c)

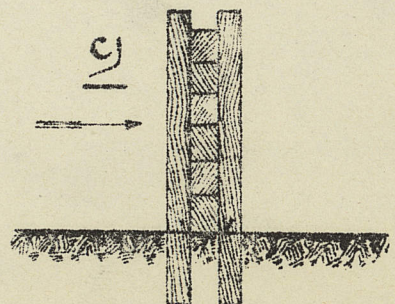


Fig. 6. Pare-neige du système russe.

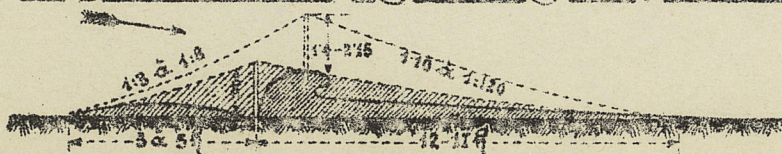


Fig. 1. Pare-neige type Danois.

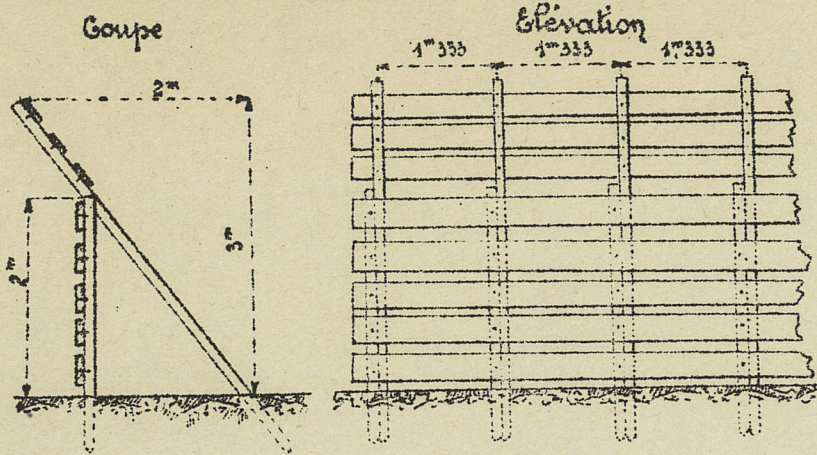


Fig. 2. Dispositifs d'arrêt des avalanches par levées et plantations.

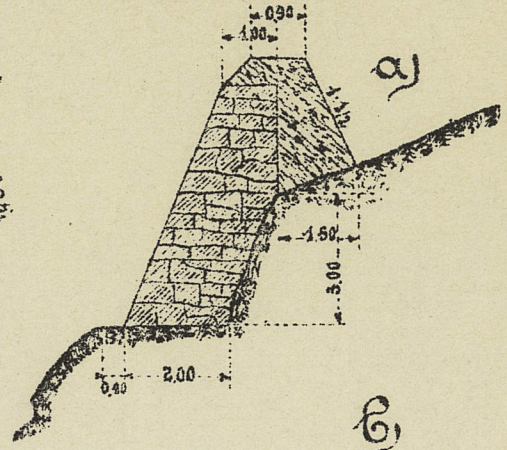


Fig. 3. Galerie de protection contre les avalanches.

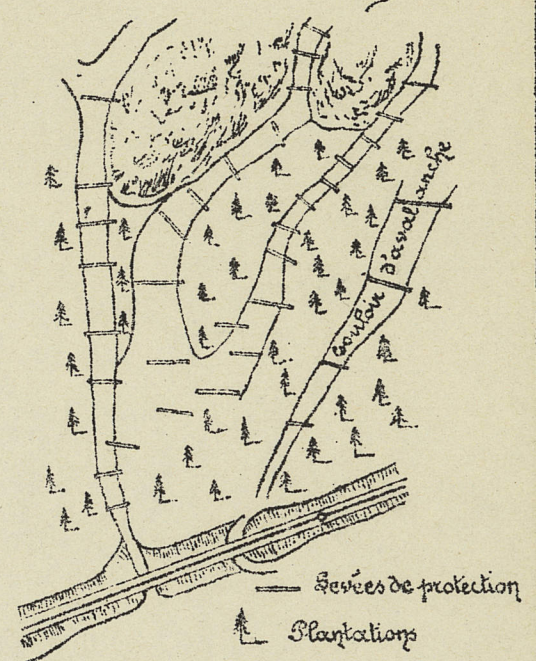
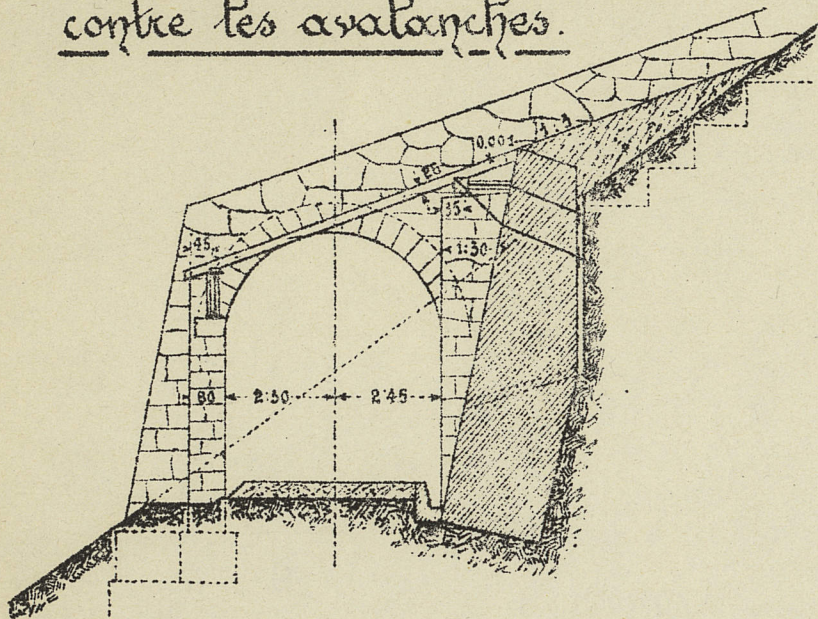


Fig. 4. Mur de protection contre les chutes de pierres.

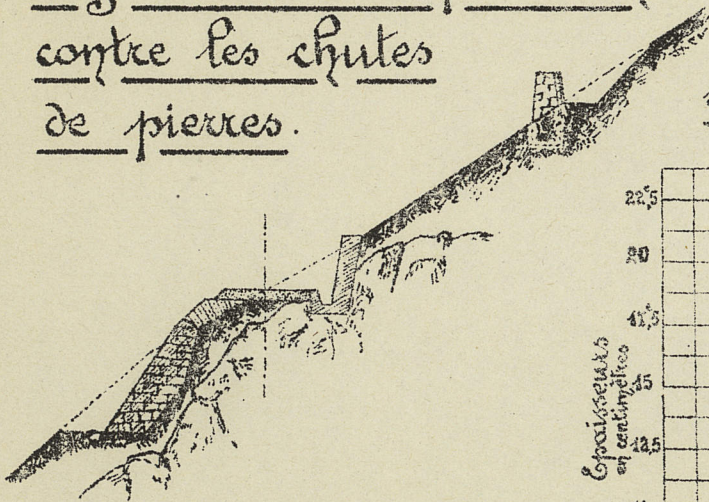
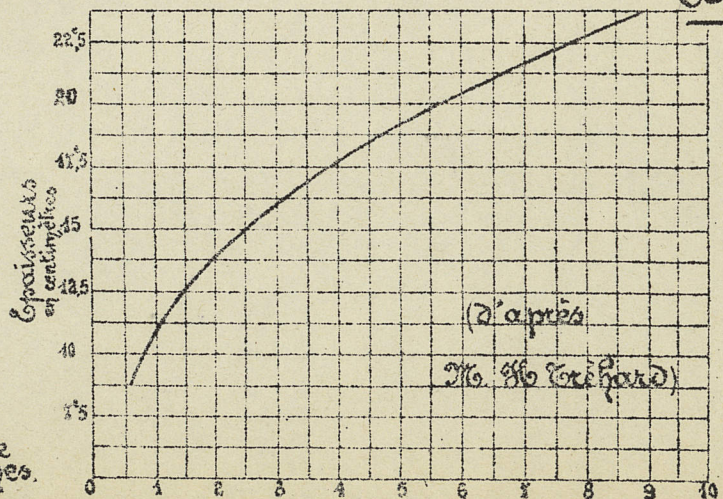


Fig. 6. Graphique des épaisseurs à donner aux revêtements en béton



Poids total de camions en tonnes.

(d'après M. H. Lottin)



Fig. 1. Courbes montrant la variation de la force portante d'un sol en fonction du degré d'humidité.

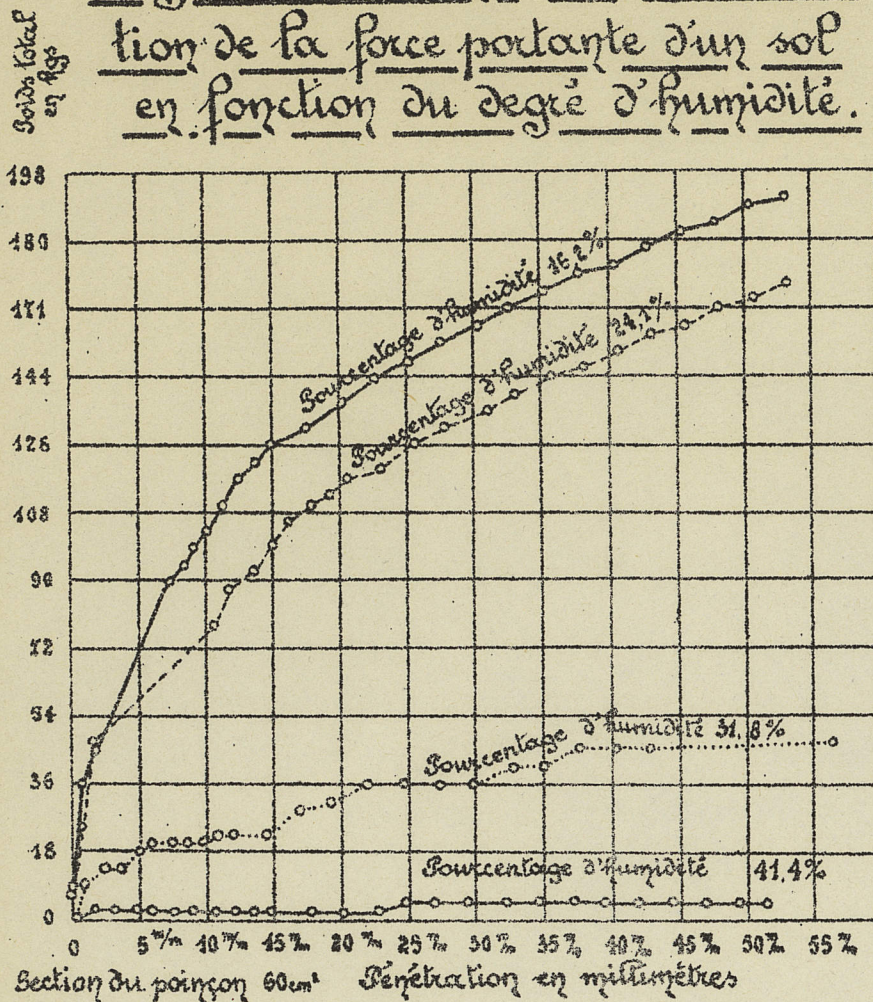
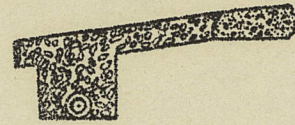


Fig. 2. Types de drains longitudinaux  
a) Tuyau de drainage



b) Pierres plates

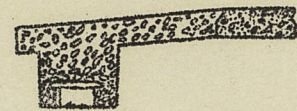
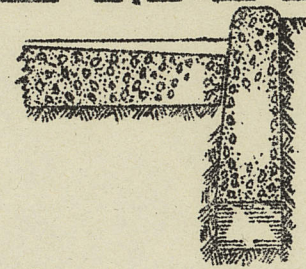


Fig. 3. Bordures de routes en béton  
a) indépendantes



b) Solidaire

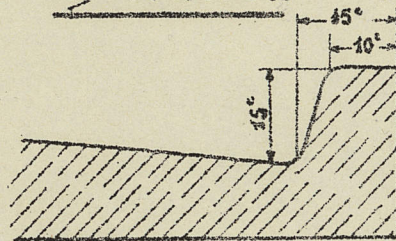


Fig. 4. Dispositions schématiques de drains pour les routes américaines en béton.

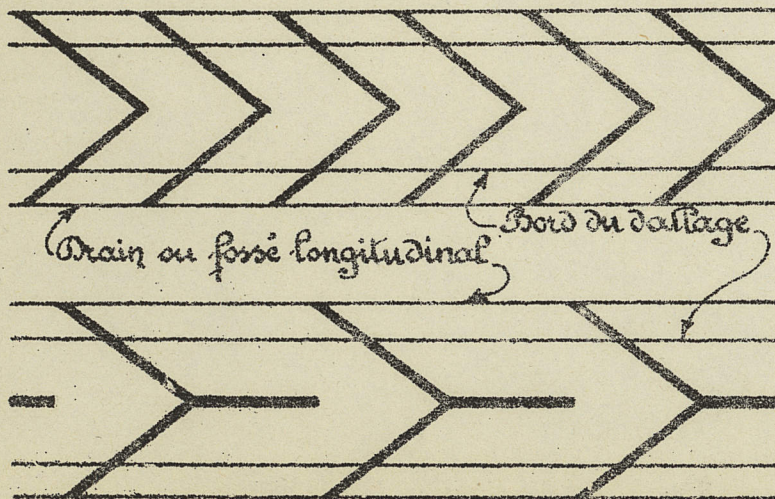
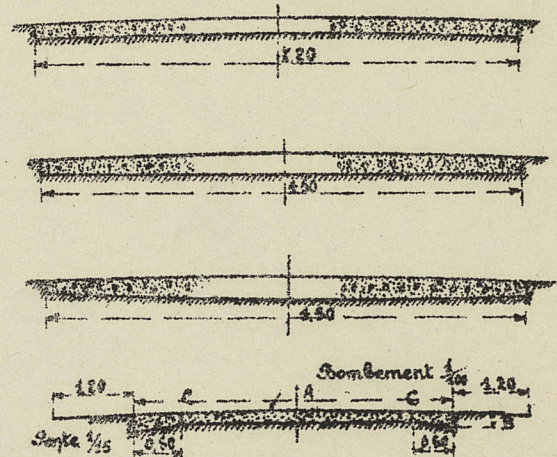


Fig. 5. Types de sections de routes en béton.



Dimensions.

Type	A	B	C
5"40 x 0.15	5.40	0.220	0.15
4"80 x 0.15	4.80	0.225	0.15
4"80 x 0.125	4.80	0.20	0.125

Fig. 1. Coupes de chaussées drainées en béton

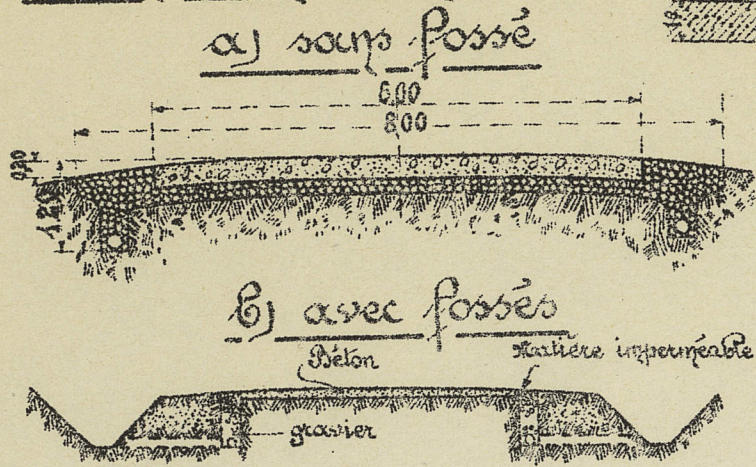


Fig. 2. Pavage rangé irrégulier sur sable

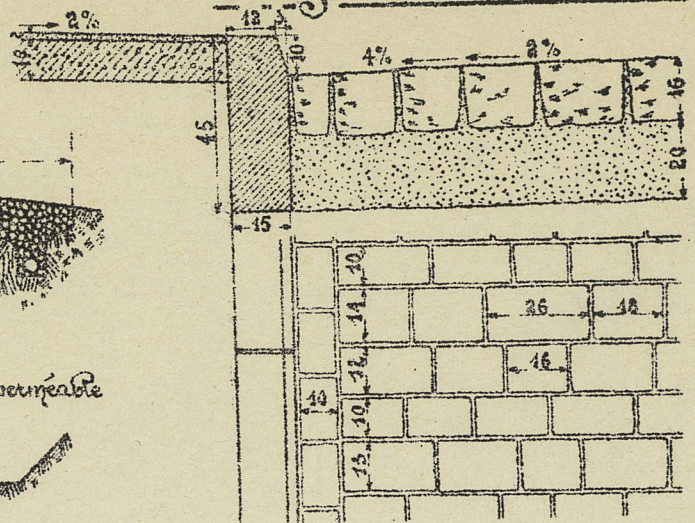


Fig. 4. Pavage d'échantillon sur empierrement

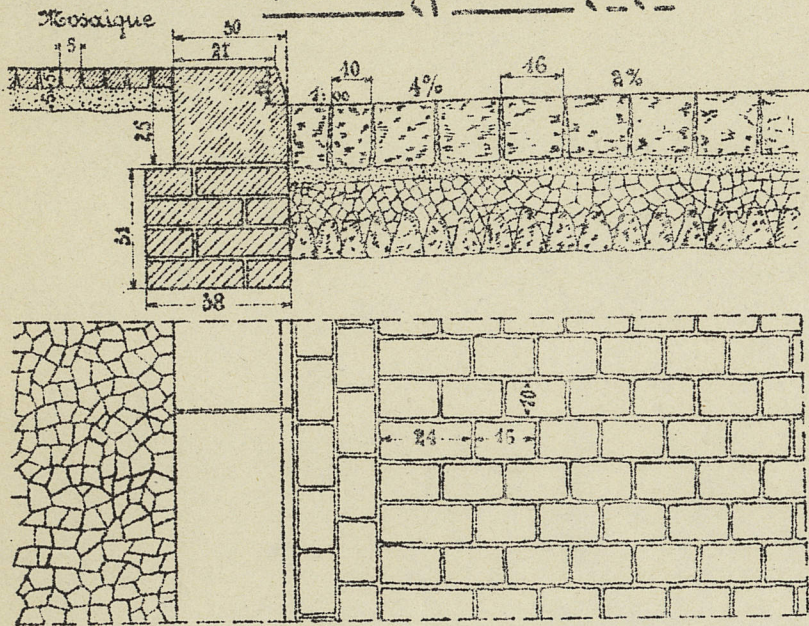


Fig. 3. Pavage irrégulier.

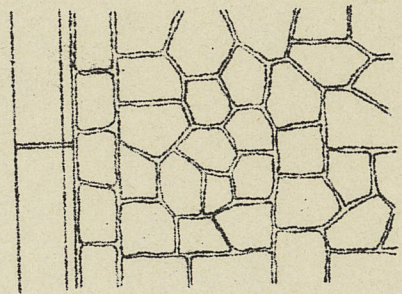


Fig. 5. Pavage italien en dalles de granit à filet d'eau central.

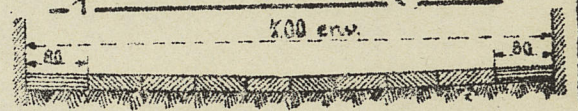


Fig. 6. Pavage à joints d'asphalte sur fondation en béton (Schéma)

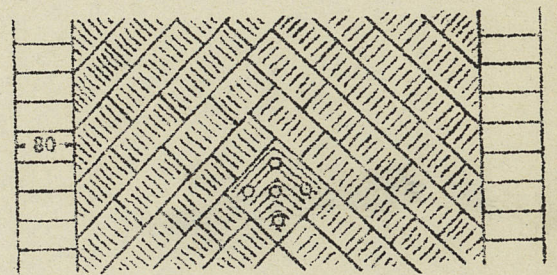
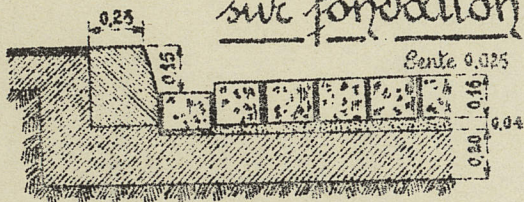


Fig. 7. Pavage en galets avec chemins de roulement et trottoirs en dalles de granit et filet d'eau central (Sombardie)



Fig. 1. Pavage en petits pavés sur empierrement (Schéma)

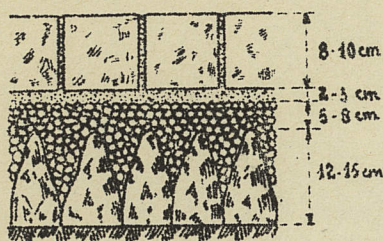


Fig. 3. Graphique des compositions lumineuses pour routes.

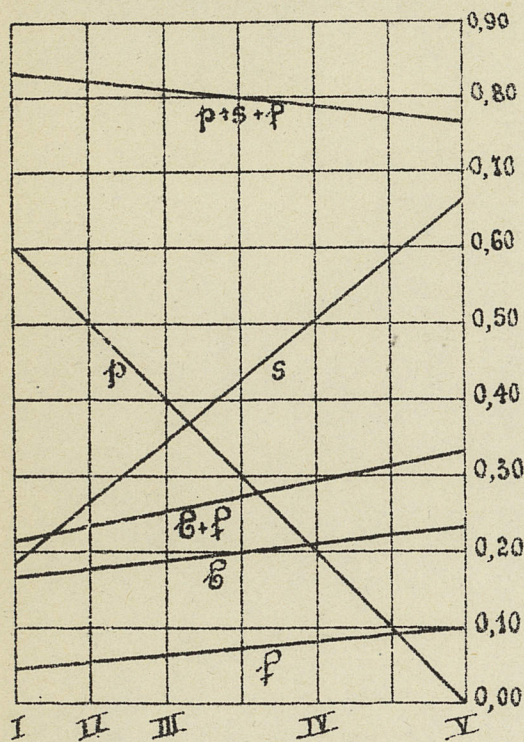
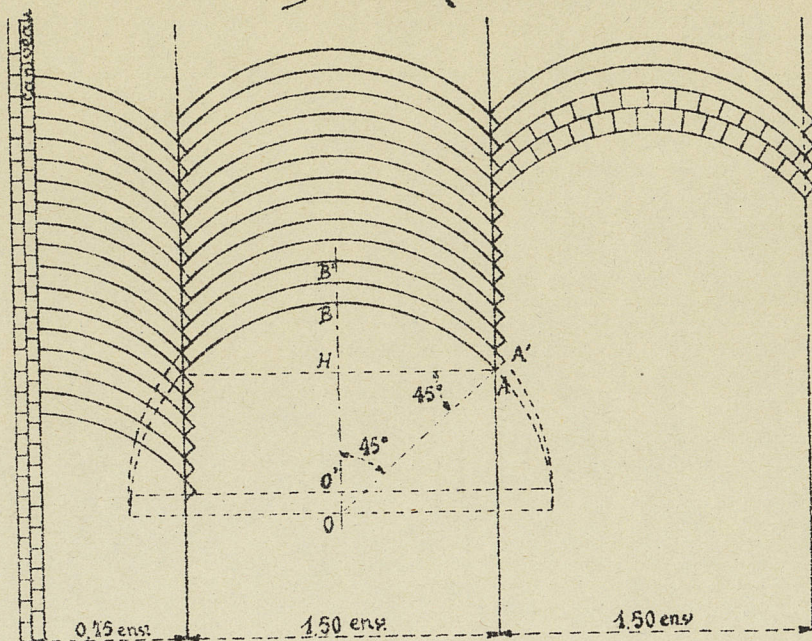


Fig. 2. Dispositions des petits pavés en arcs de cercle orthogonaux  
a) ordinaire



b) à redans

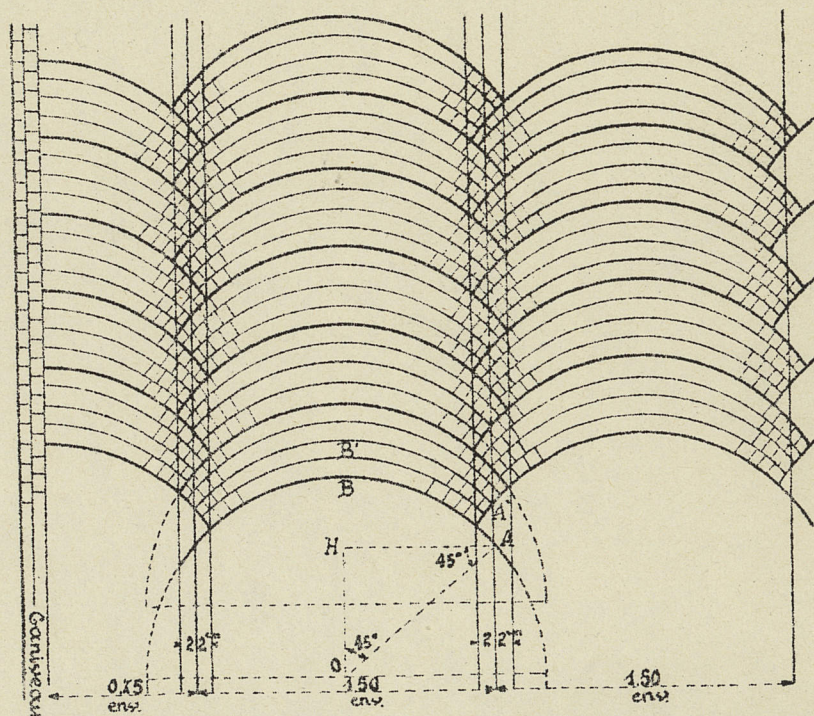


Fig. 4.

Revêtement en béton, boursoufflé par la gelée.

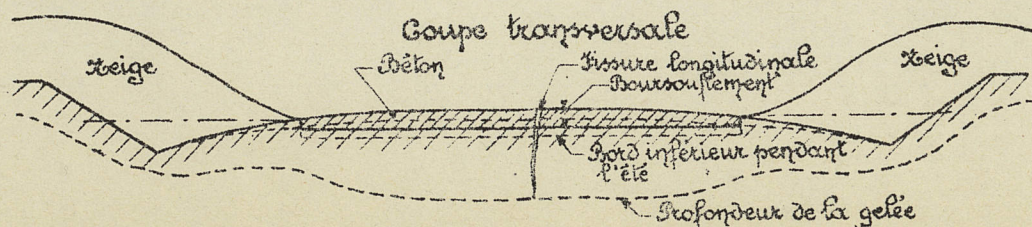


Fig. 1. Revêtement en béton isolé contre la gelée.

Coupe transversale.

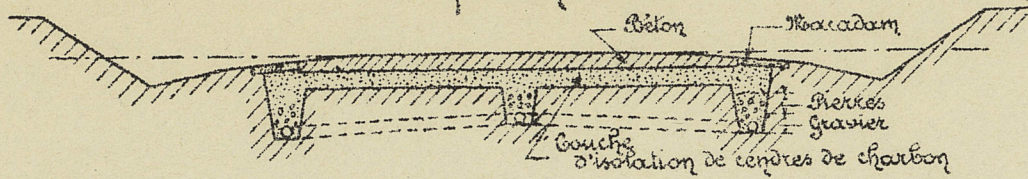


Fig. 2. Pose de rails de tramways dans chaussée en asphalte (Tramways Bruxellois.)

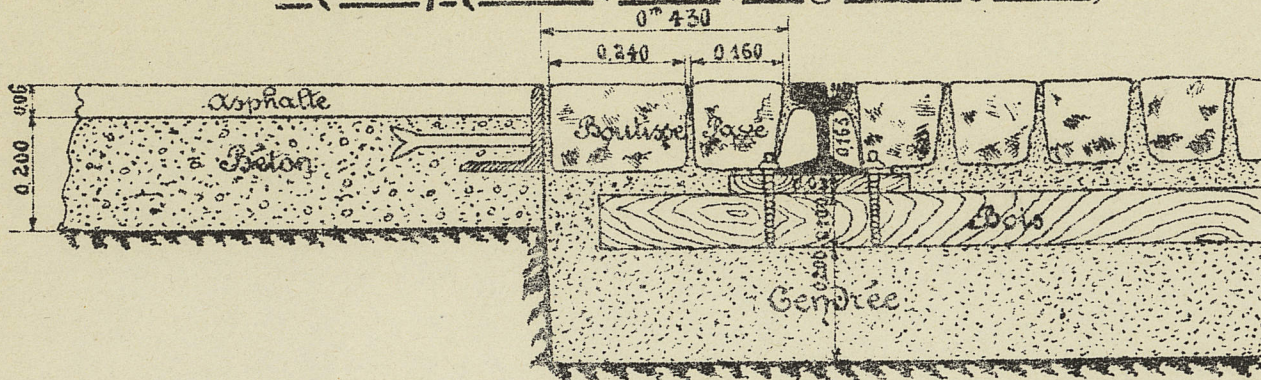


Fig. 3. Mouvements ondulatoires d'un revêtement en béton dus aux variations de température, d'après les expériences de Pittsburg (Cal.)

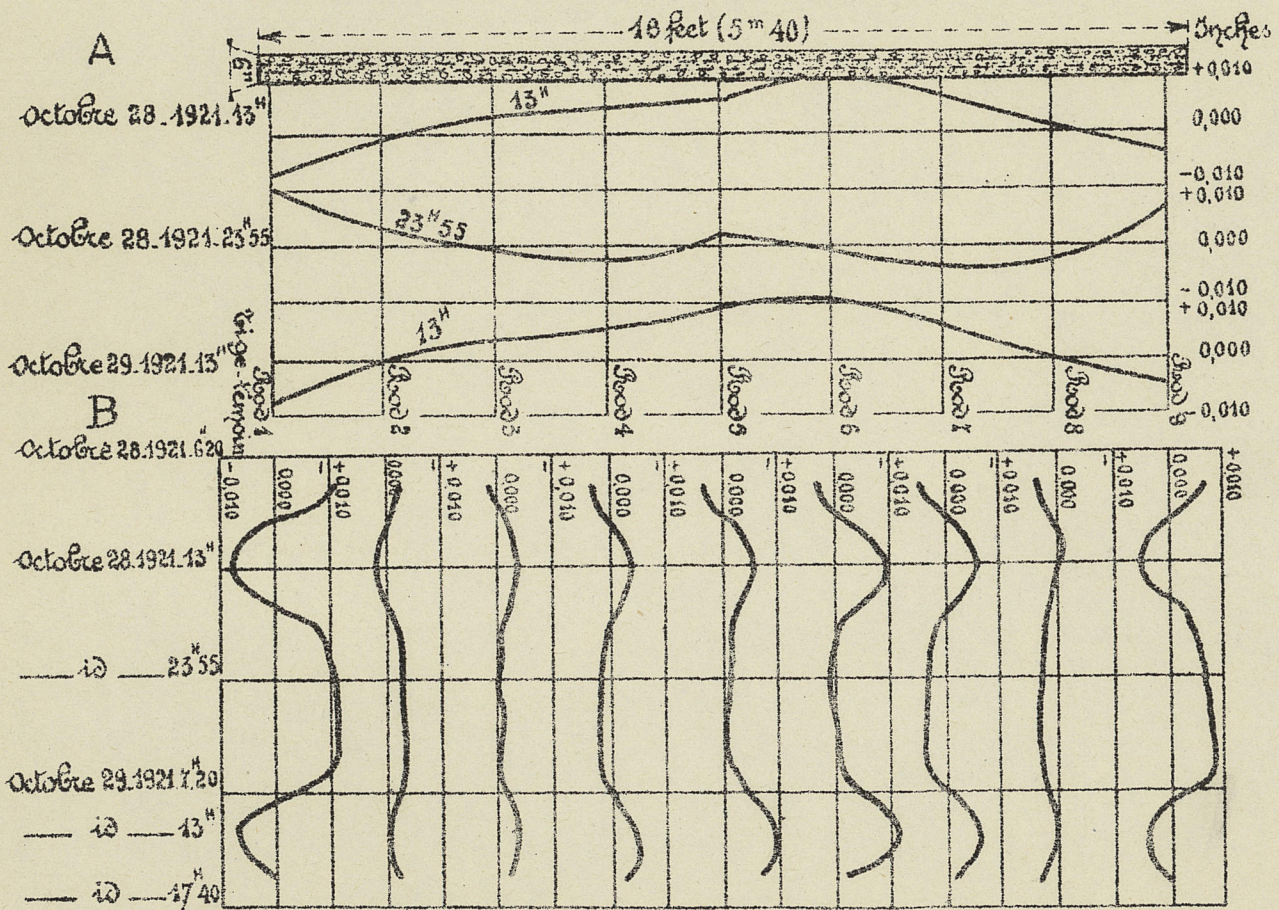
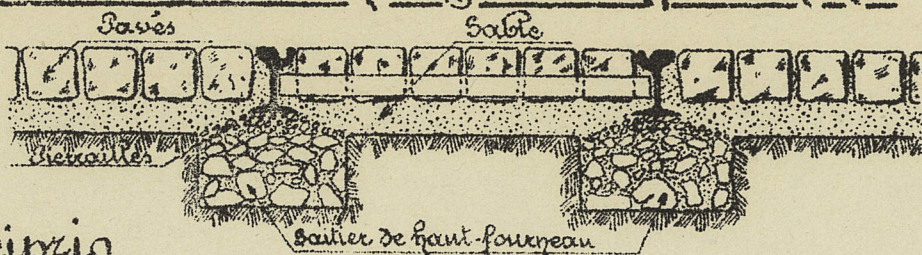


Fig. 1. Pose de voies de tramways sur empierrement.

a) Roubaix



b) Leipzig

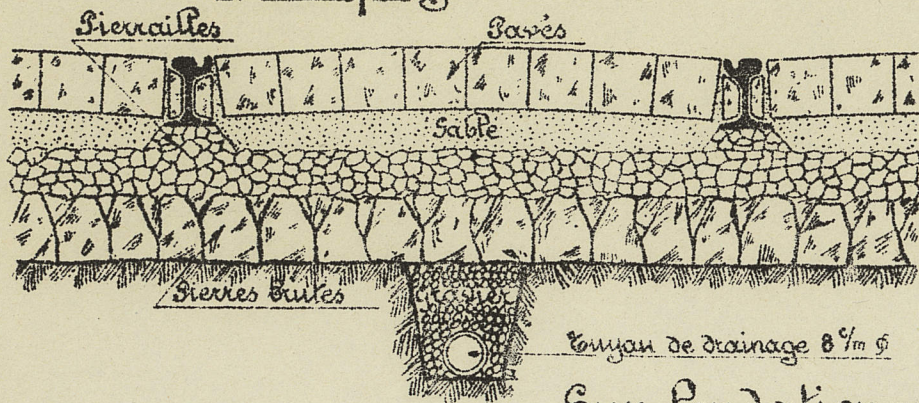


Fig. 2. Sur fondation en béton (Bâle)

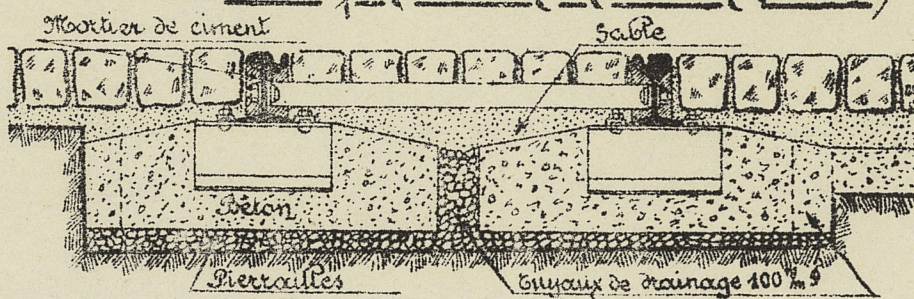


Fig. 3.

Sur traverses en bois (Montréal)

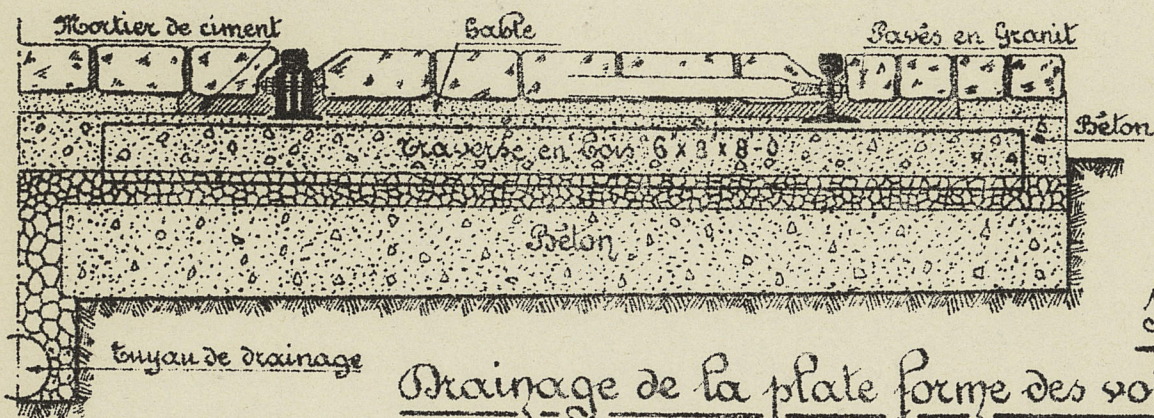


Fig. 4.

Drainage de la plate forme des voies de tramways.

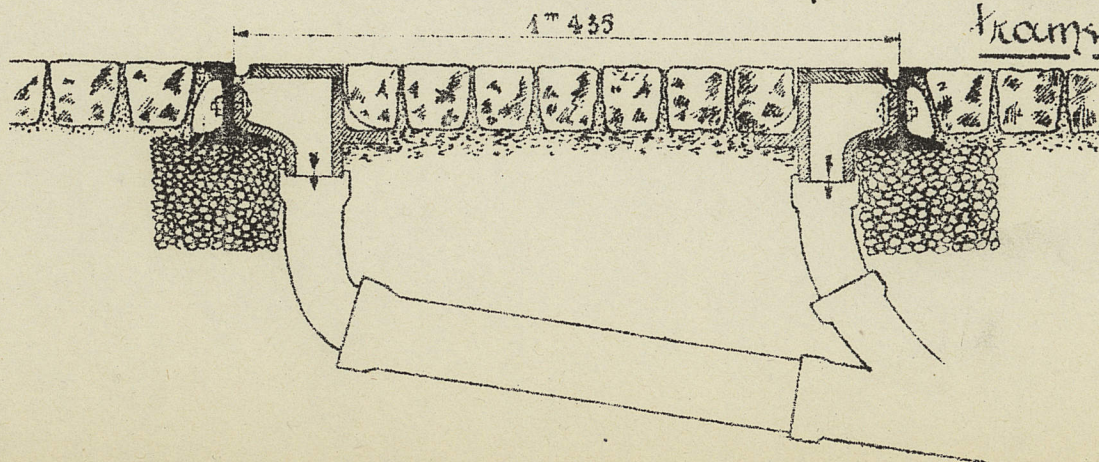
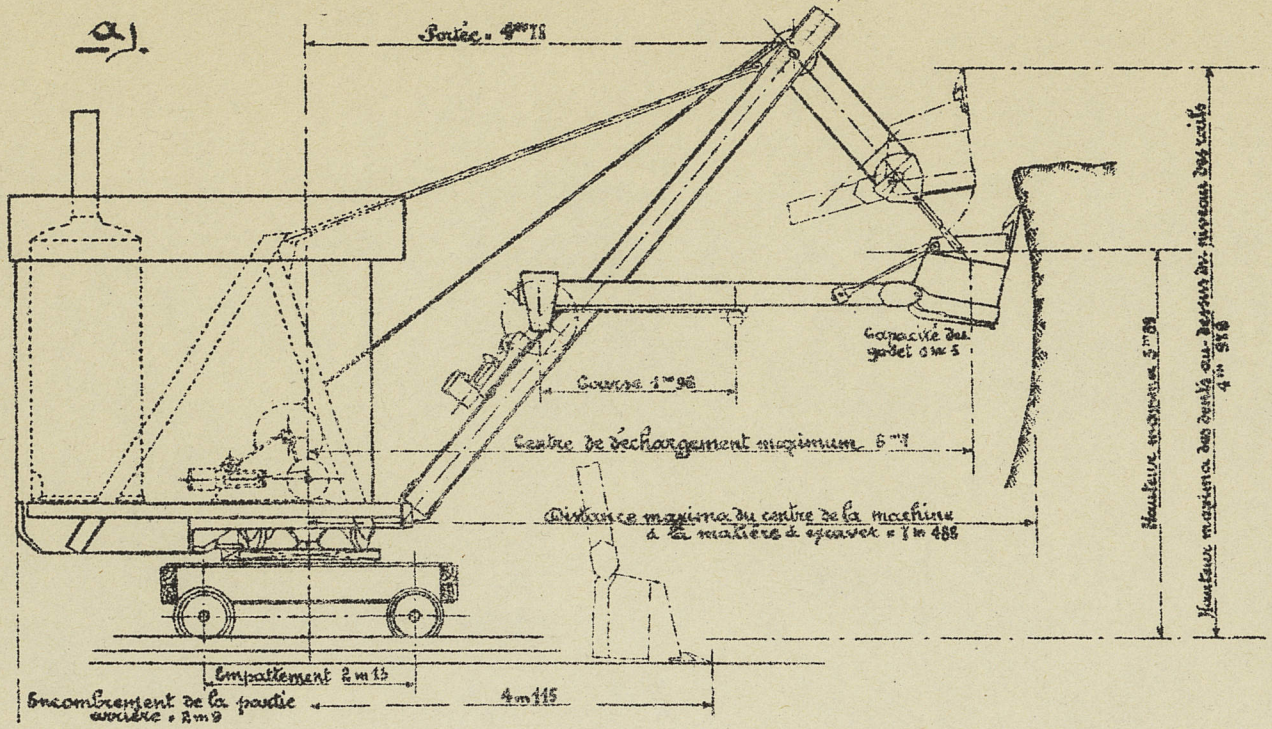
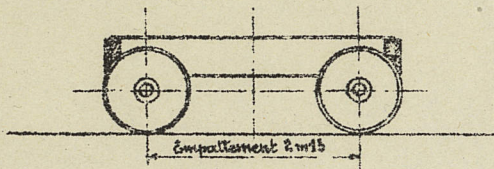


Fig. 1. Pelle à vapeur.



b) Roues à jantes plates.



c) Chéville

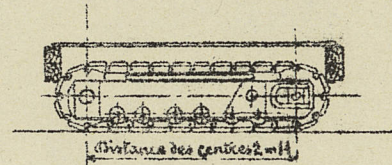
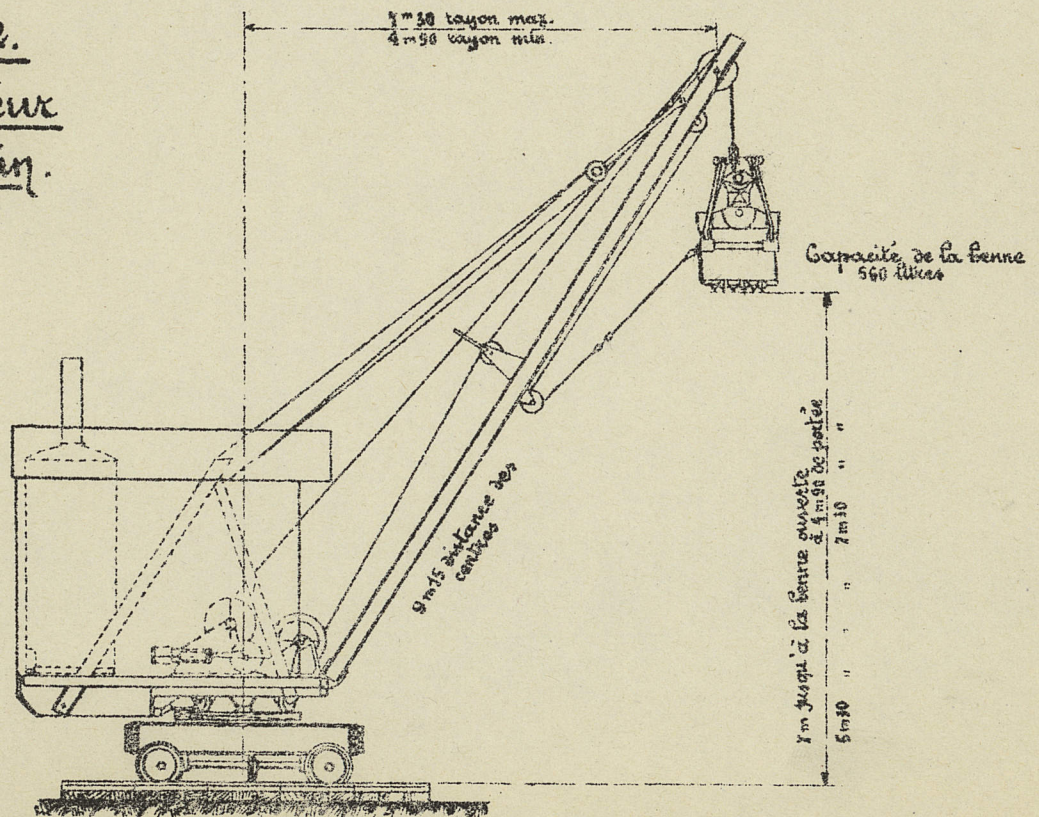
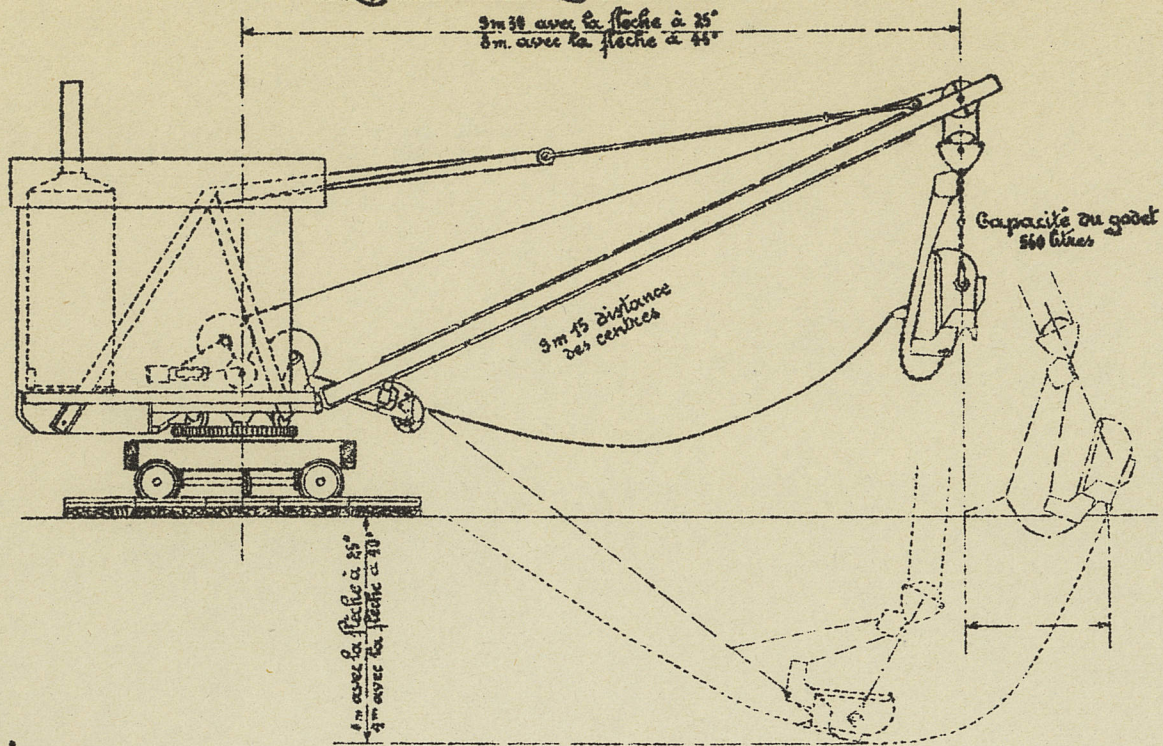


Fig. 2.  
Excavateur  
à grappin.



— Fig. 1. Drag-line. —



— Fig. 2. —  
Excavateurs à godets.

a) à chaîne flottante.

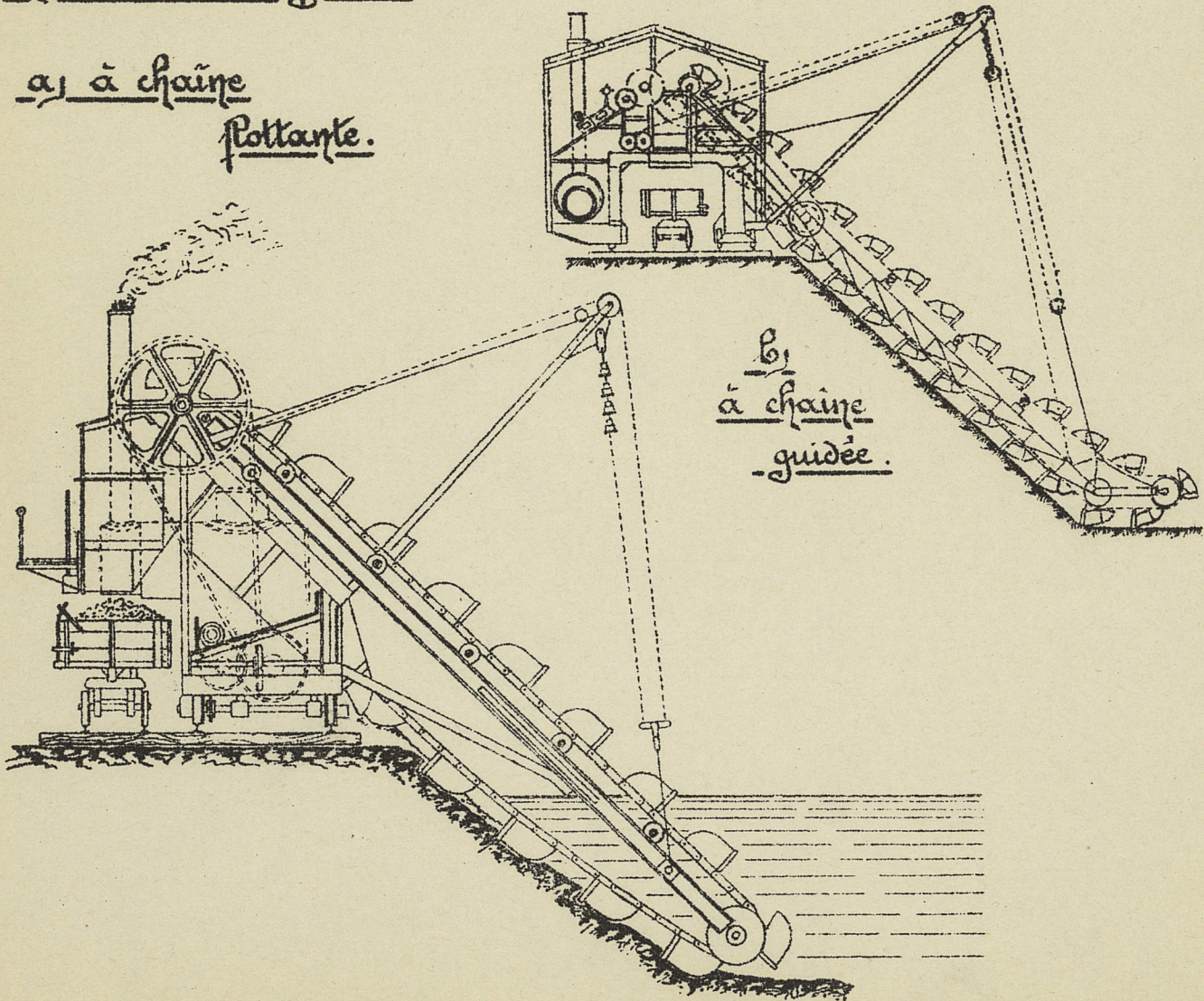


Fig. 1. Excavateurs à godets (suite) et à élince articulée et transporteur.

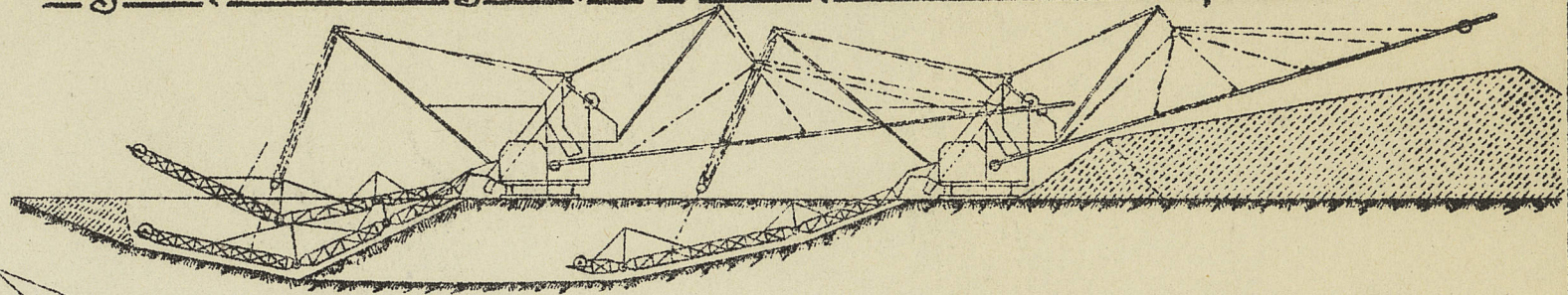
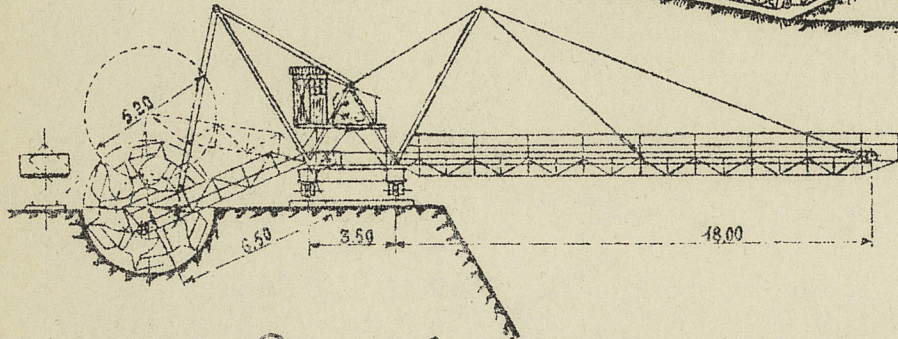


Fig. 2.  
Machine à  
remblayer à pelle Clère.



et travaillant en butte par dessus.

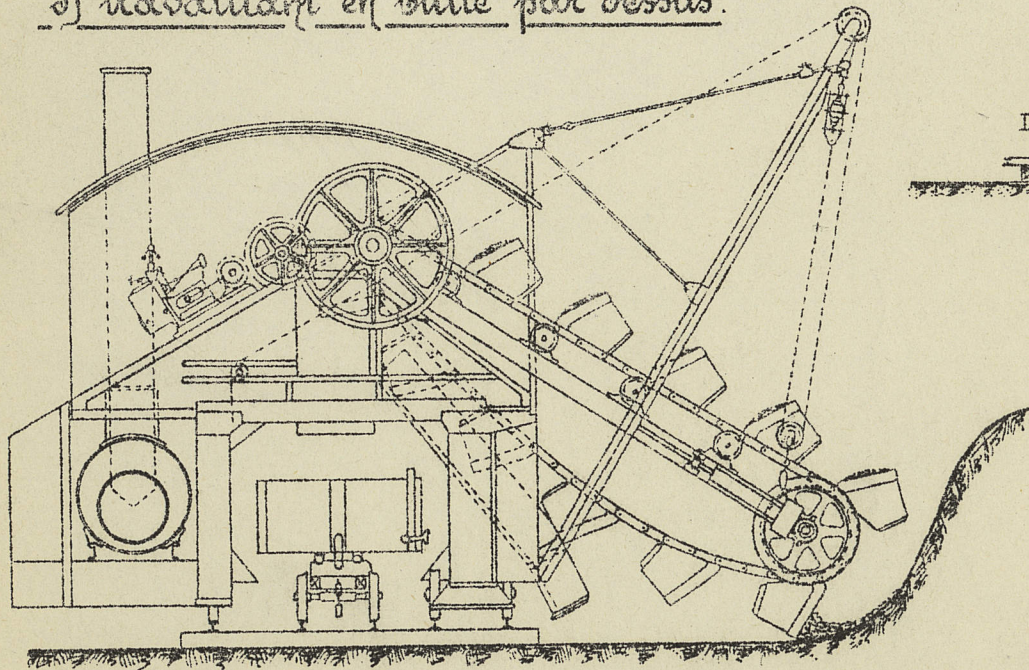
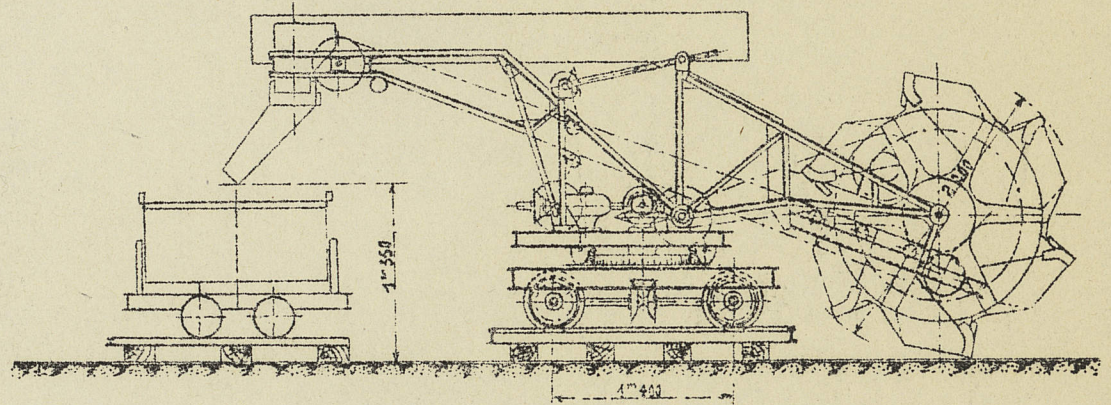


Fig. 3. Pelle Clère sur rails, petit modèle.



et travaillant en butte par dessous.

