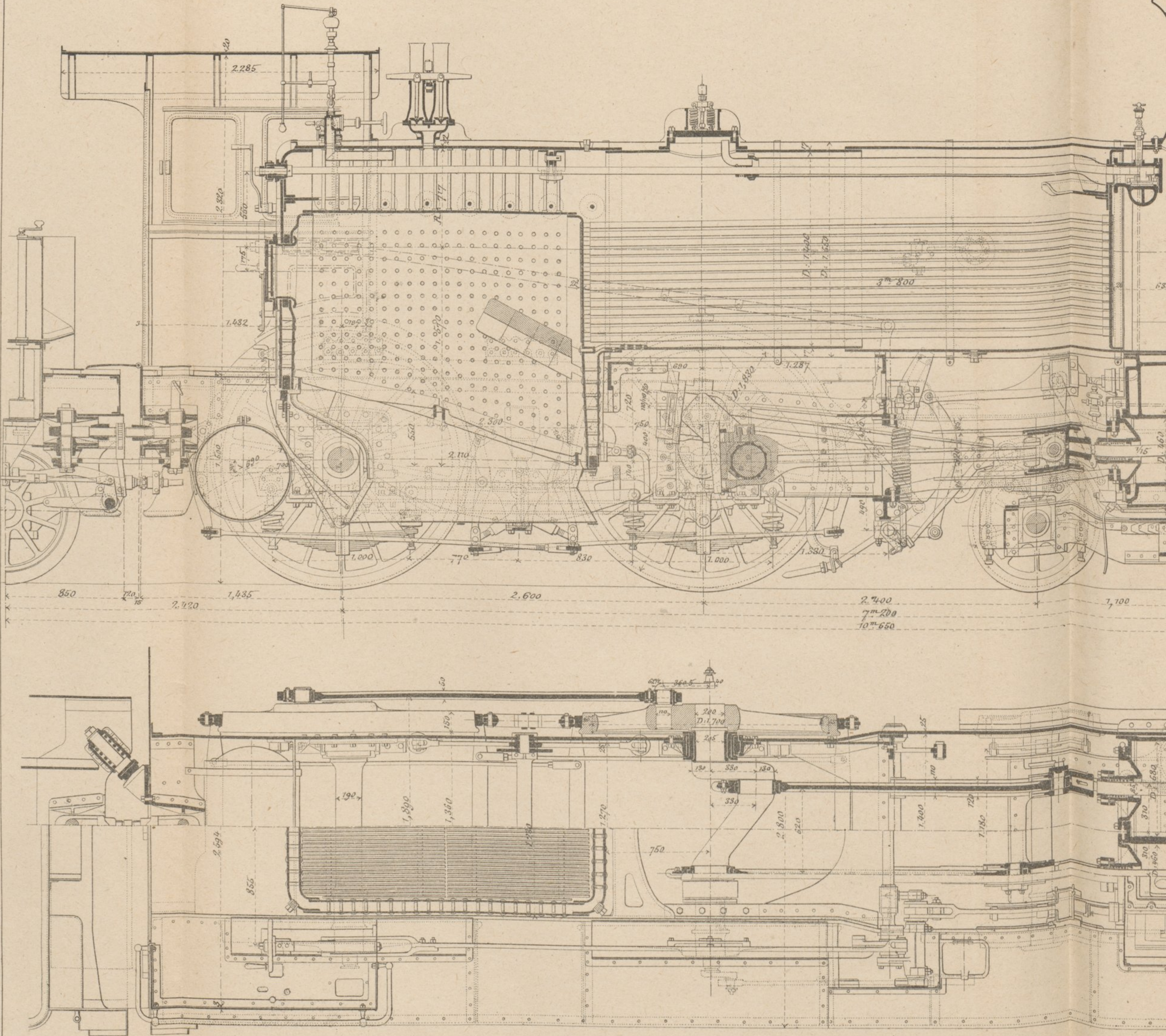
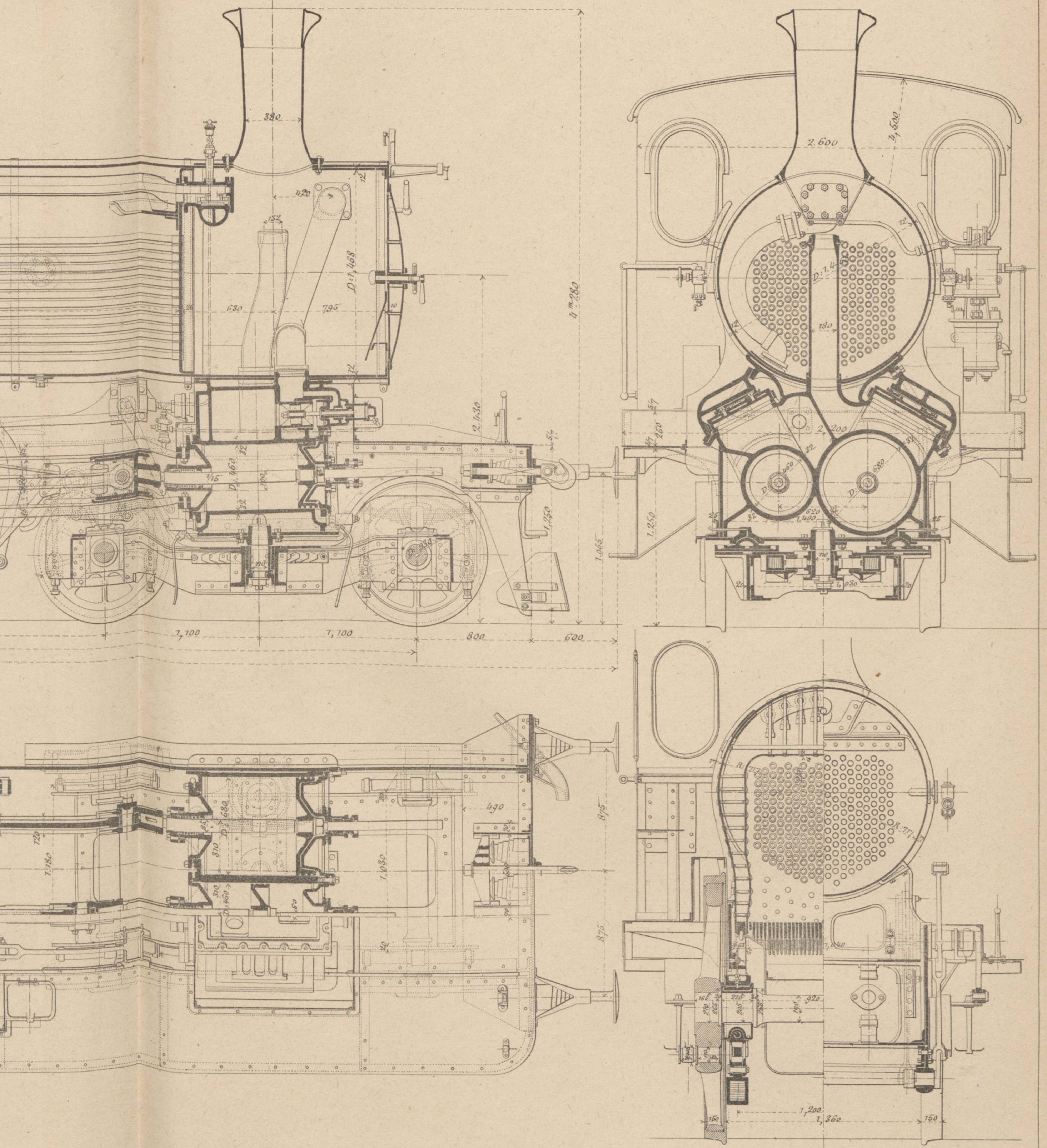


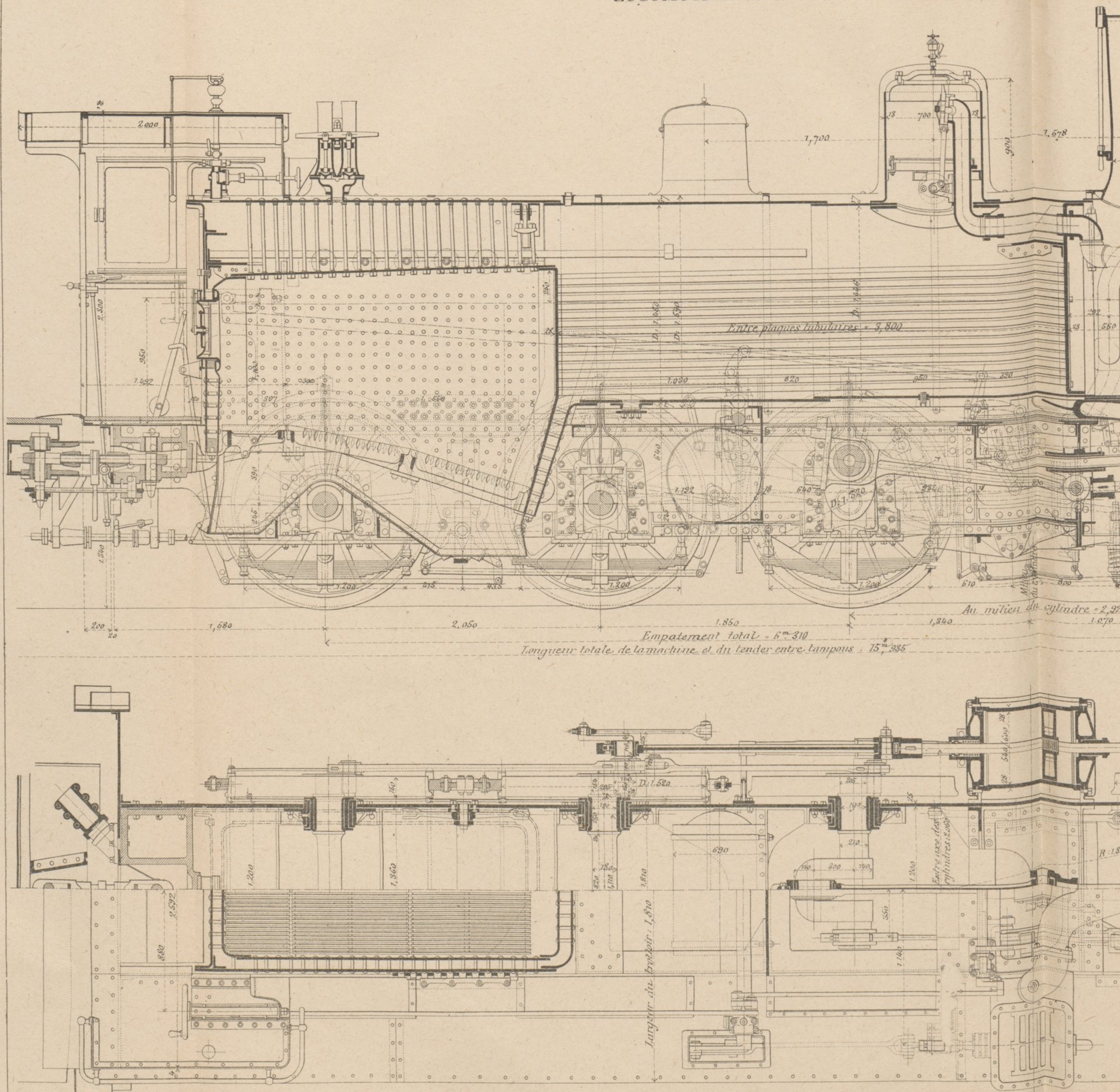
LOCOMOTIVE COMPOUND A DEUX CYLINDRES DU NO



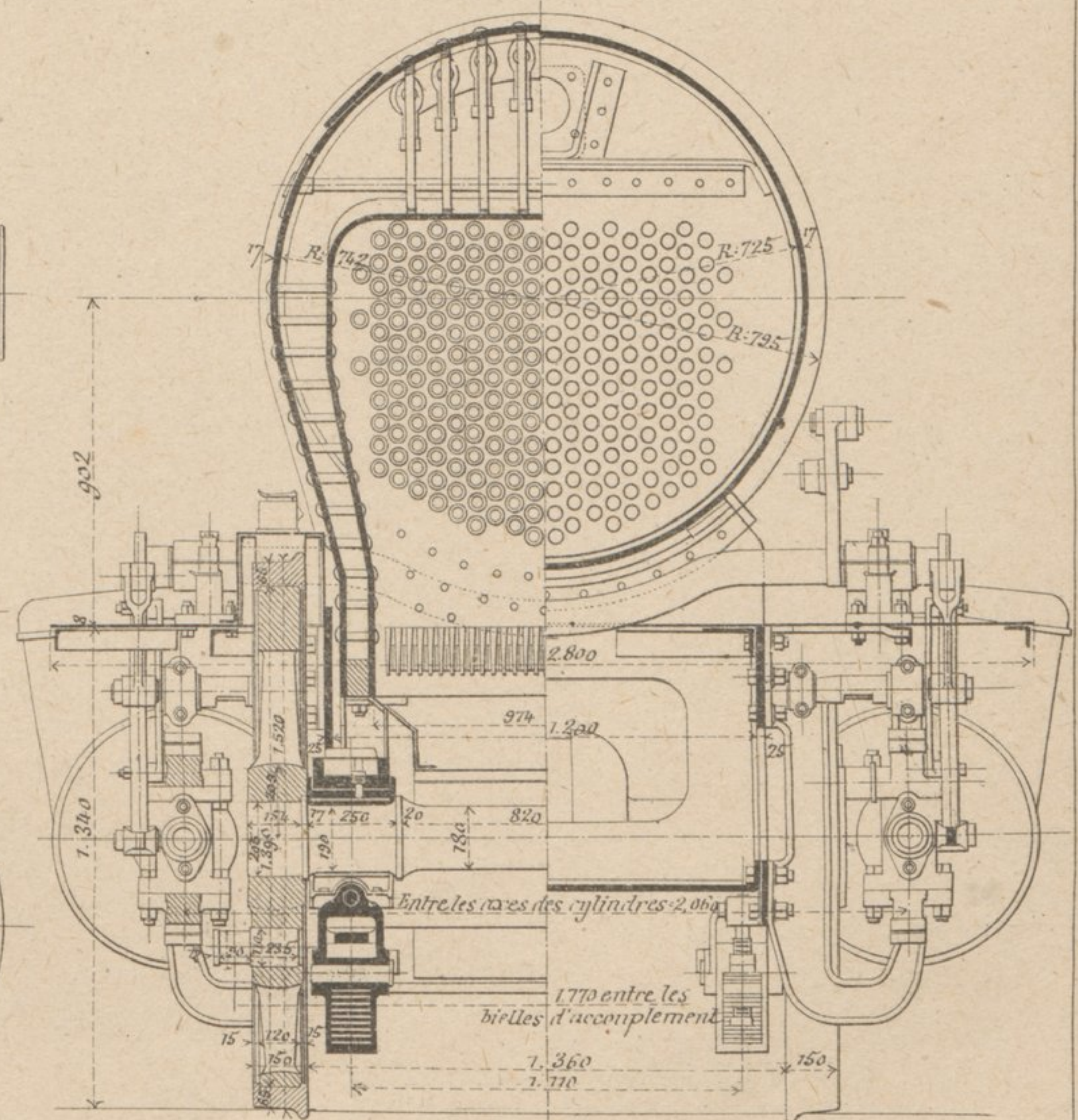
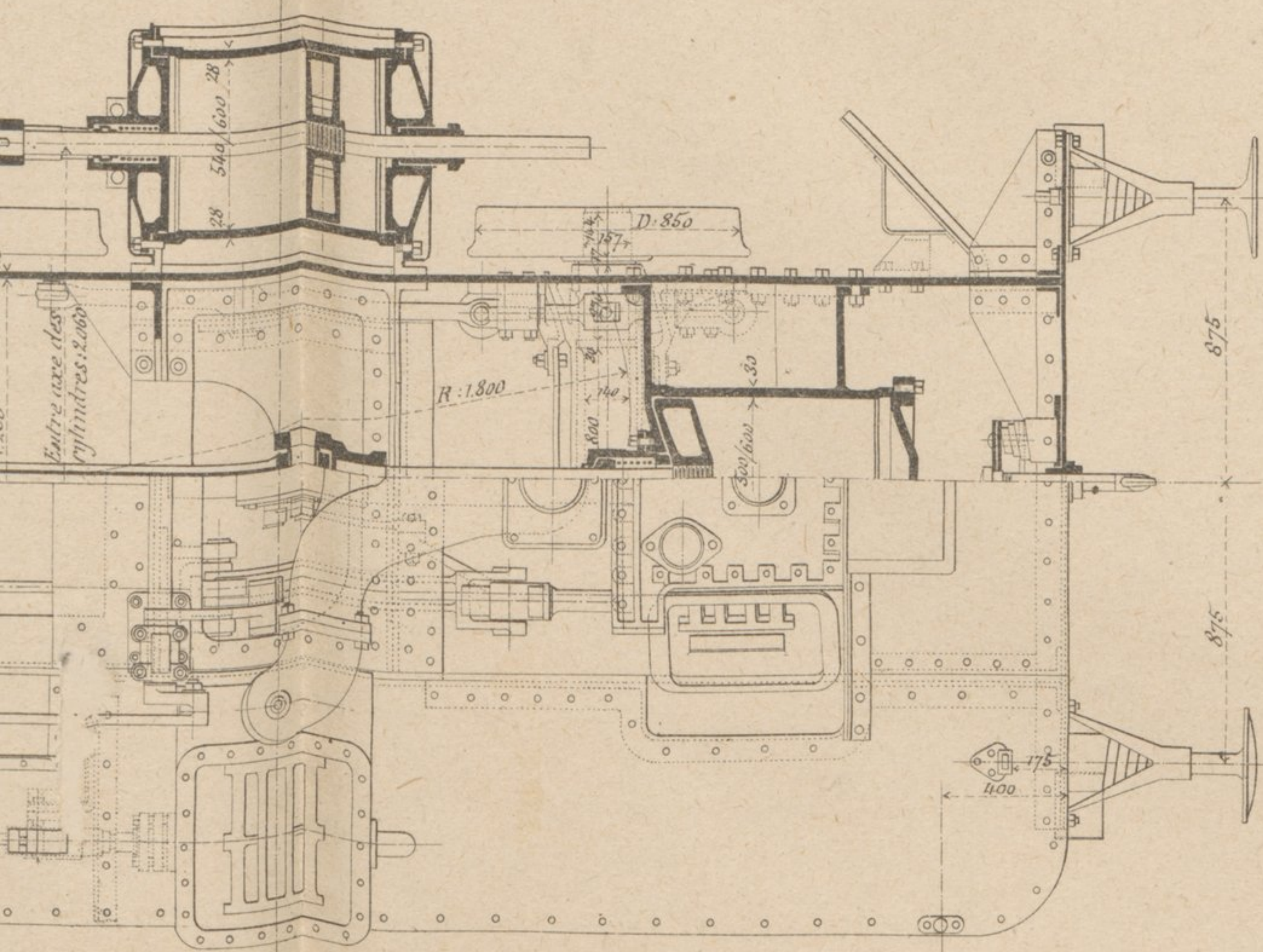
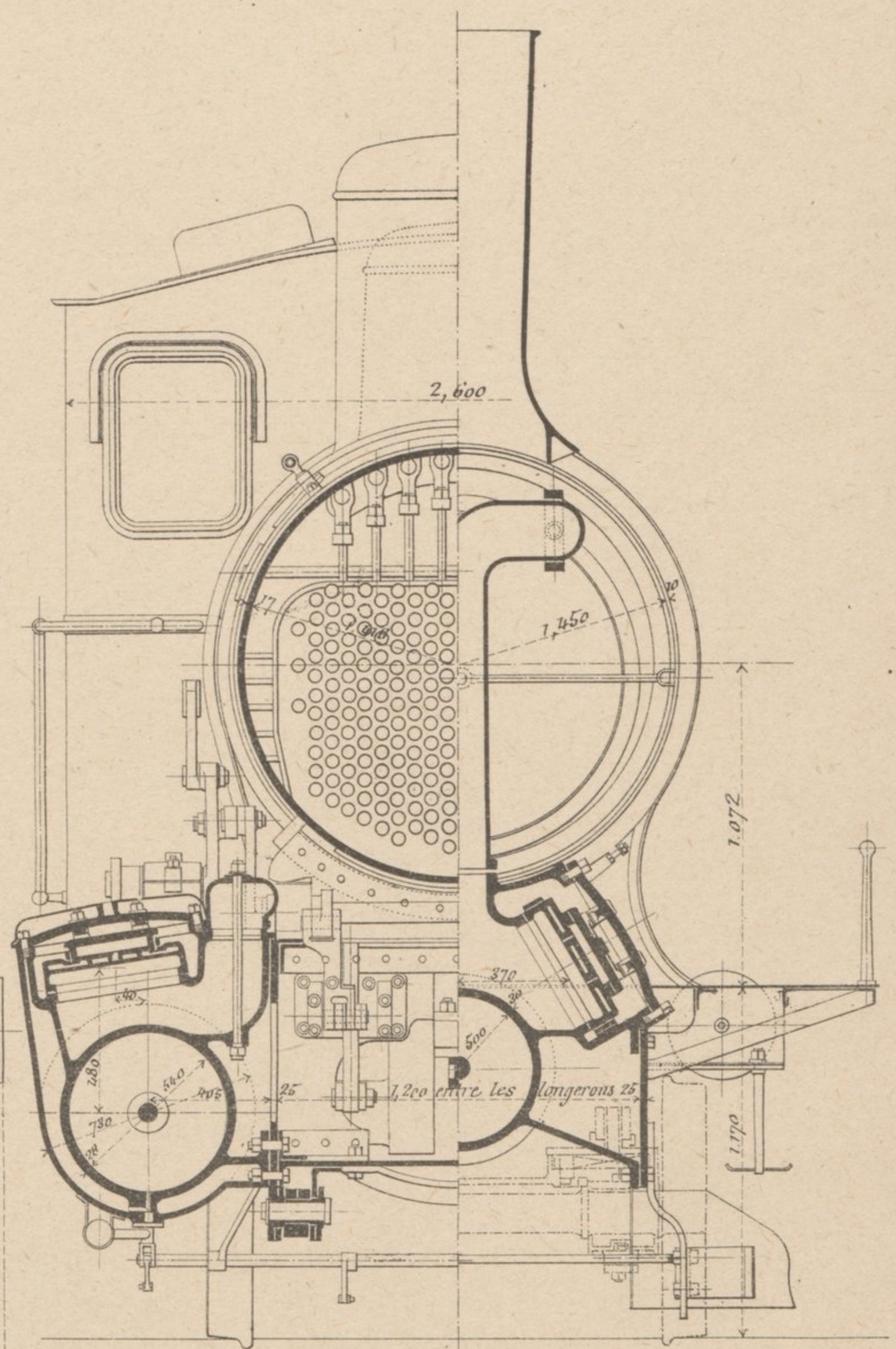
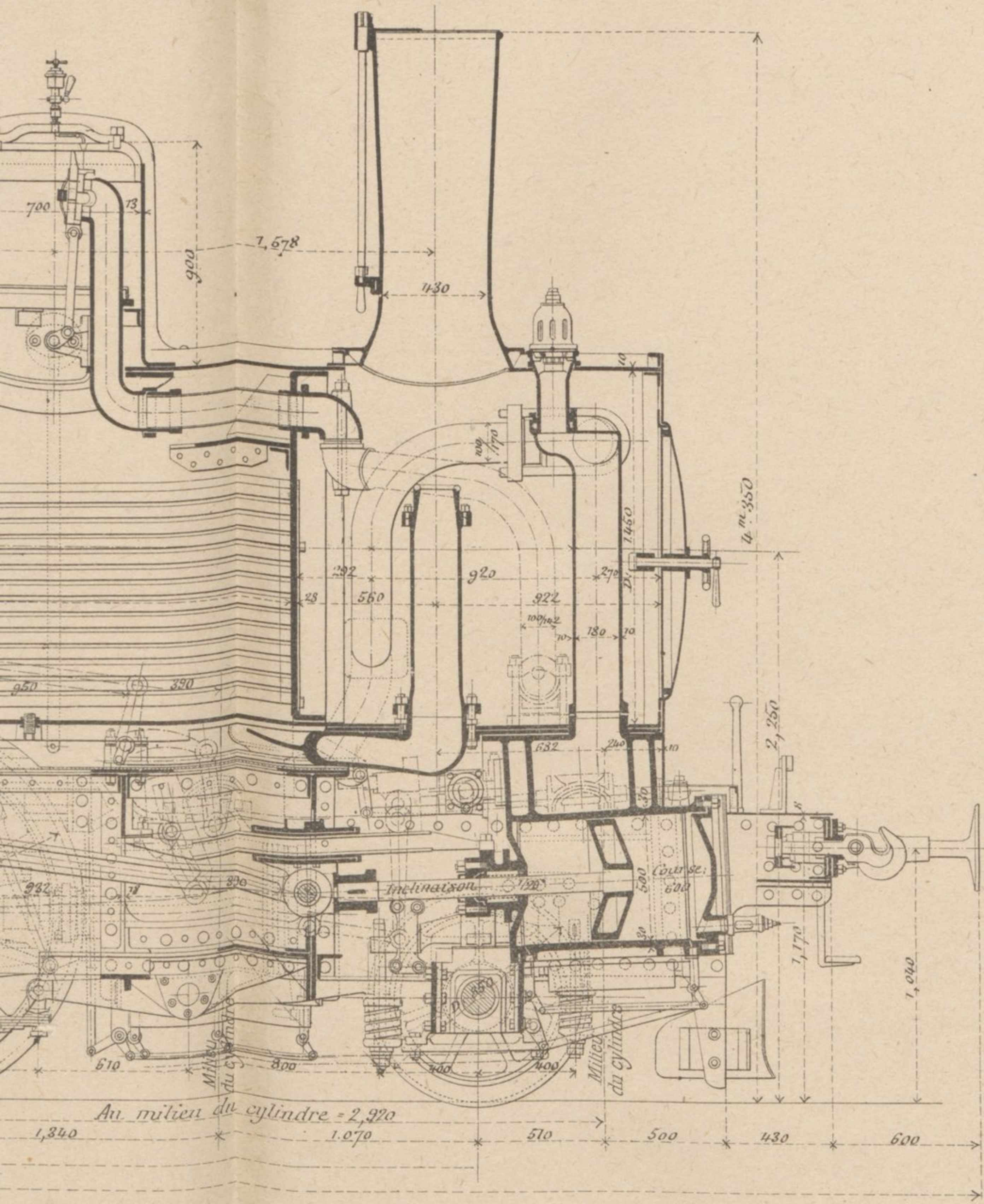
DEUX CYLINDRES DU NORD-EST SUISSE



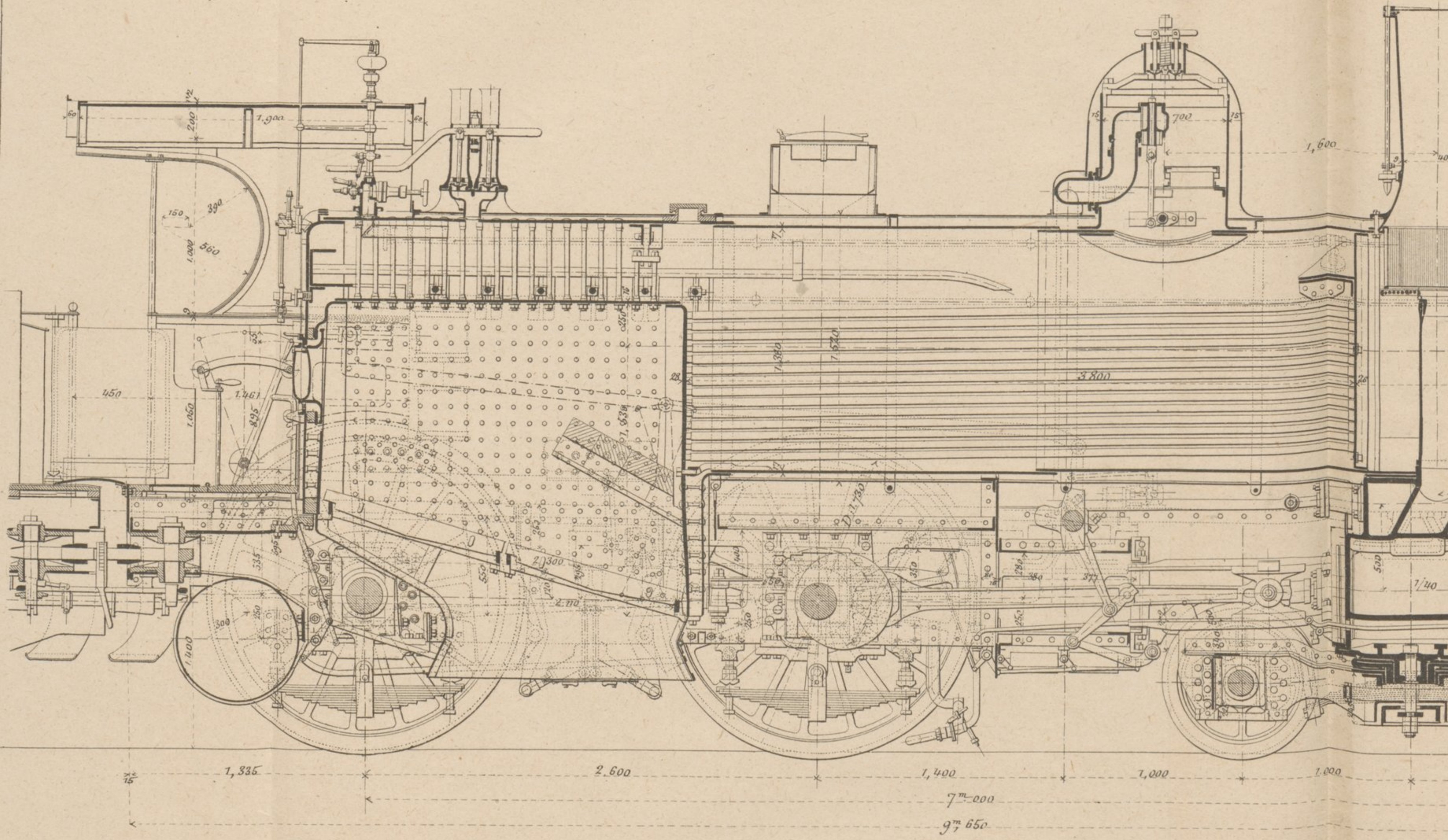
LOCOMOTIVE COMPOUND A TROIS CYLINDRES DU JUR



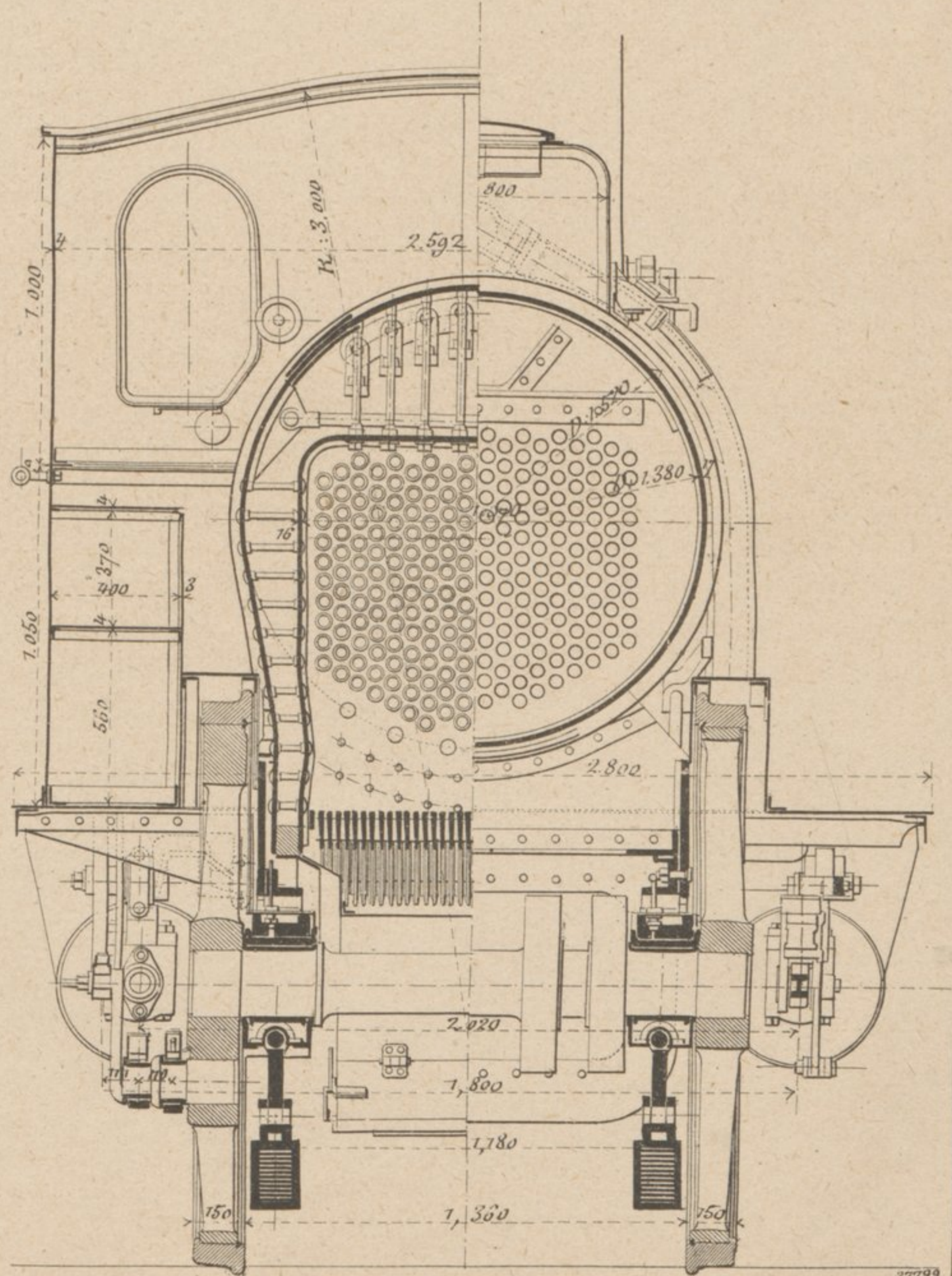
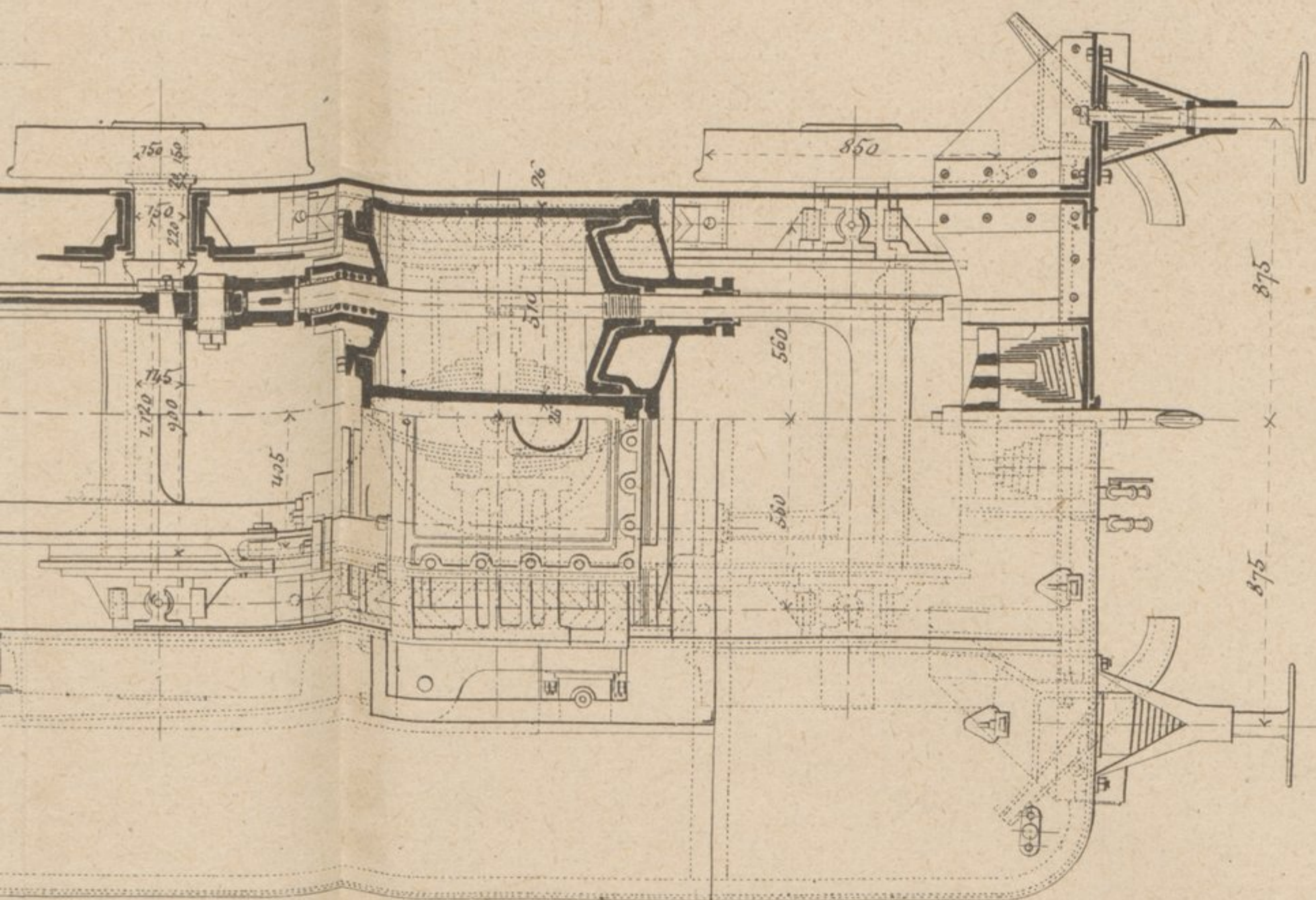
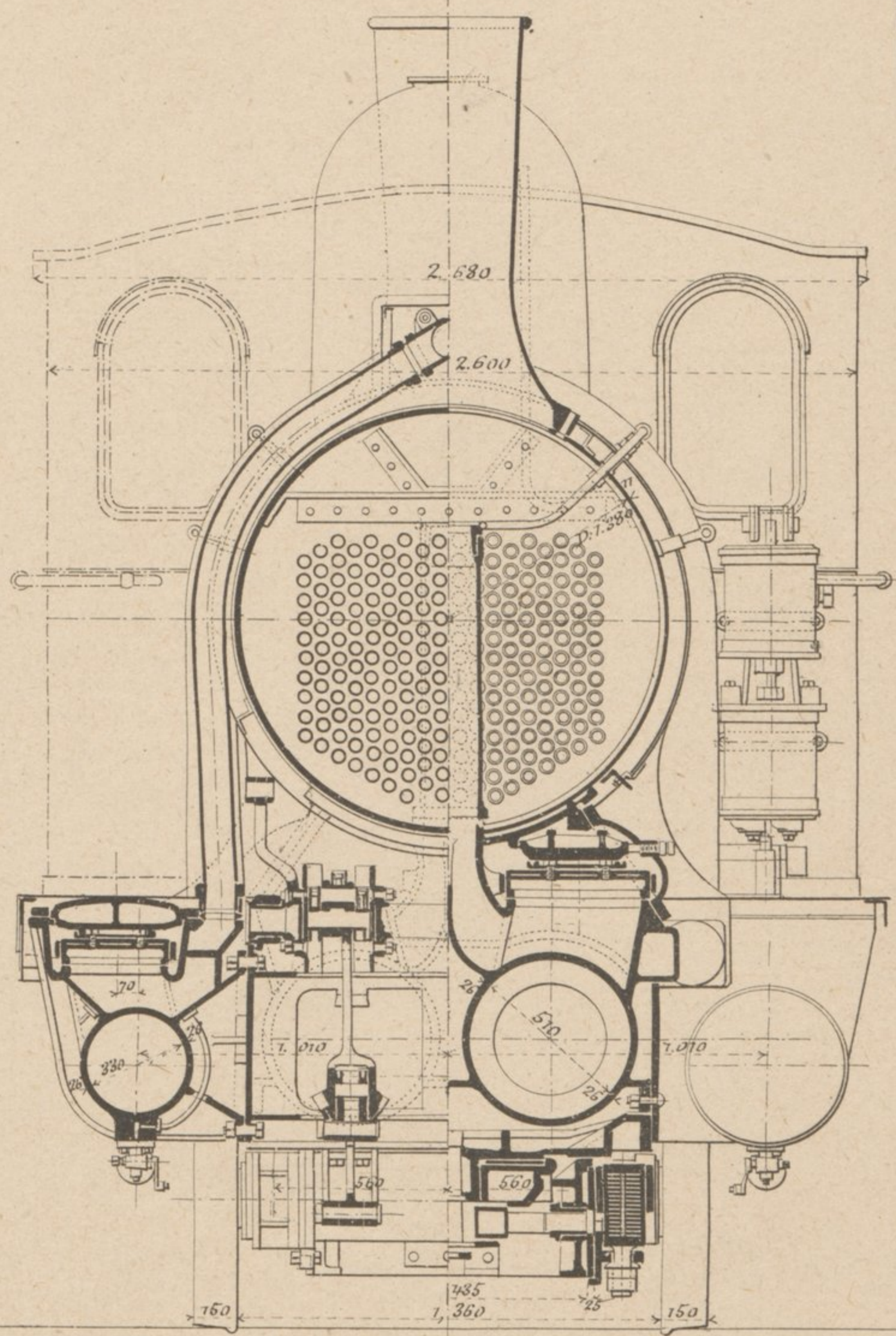
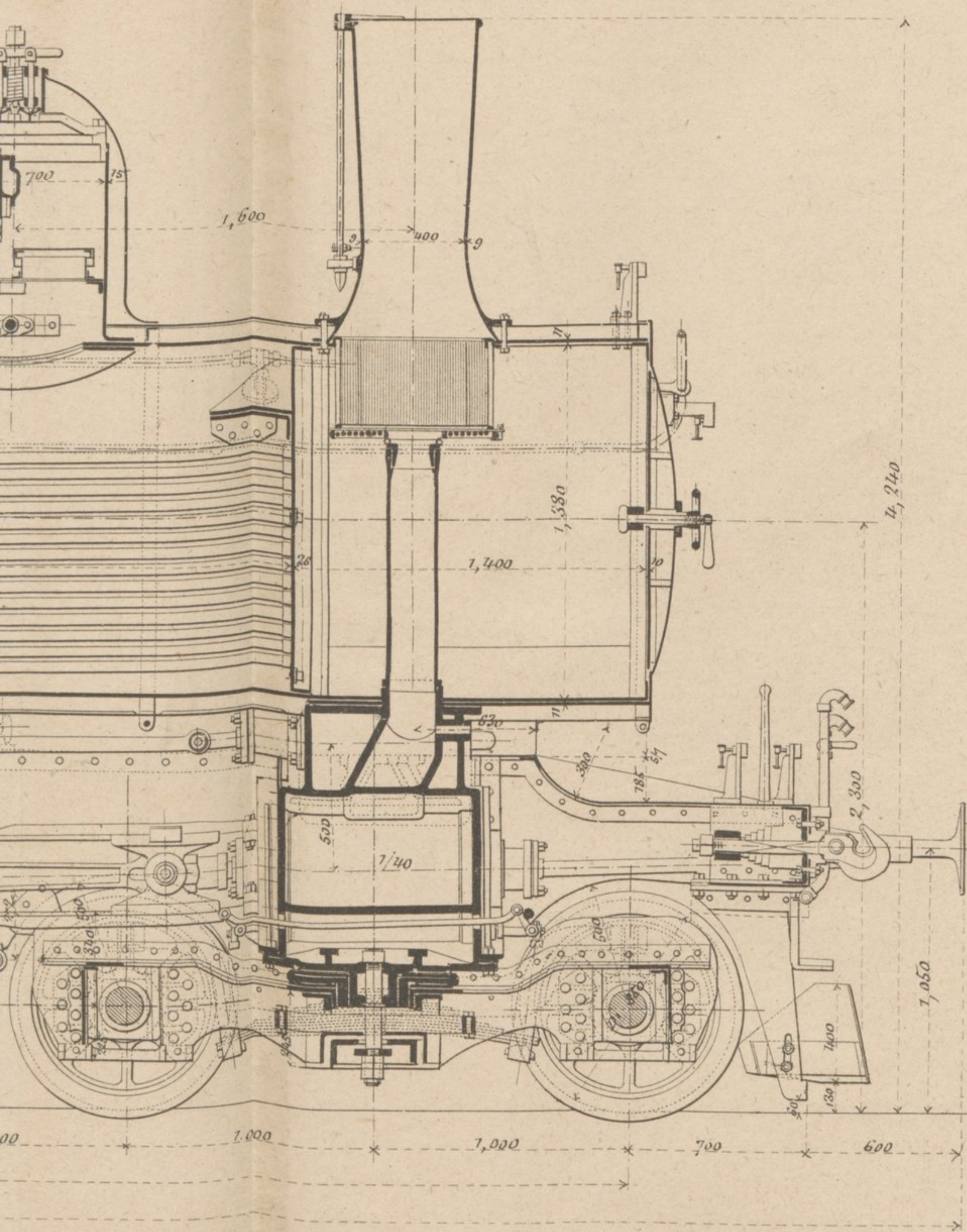
MOIS CYLINDRES DU JURA-SIMPLON



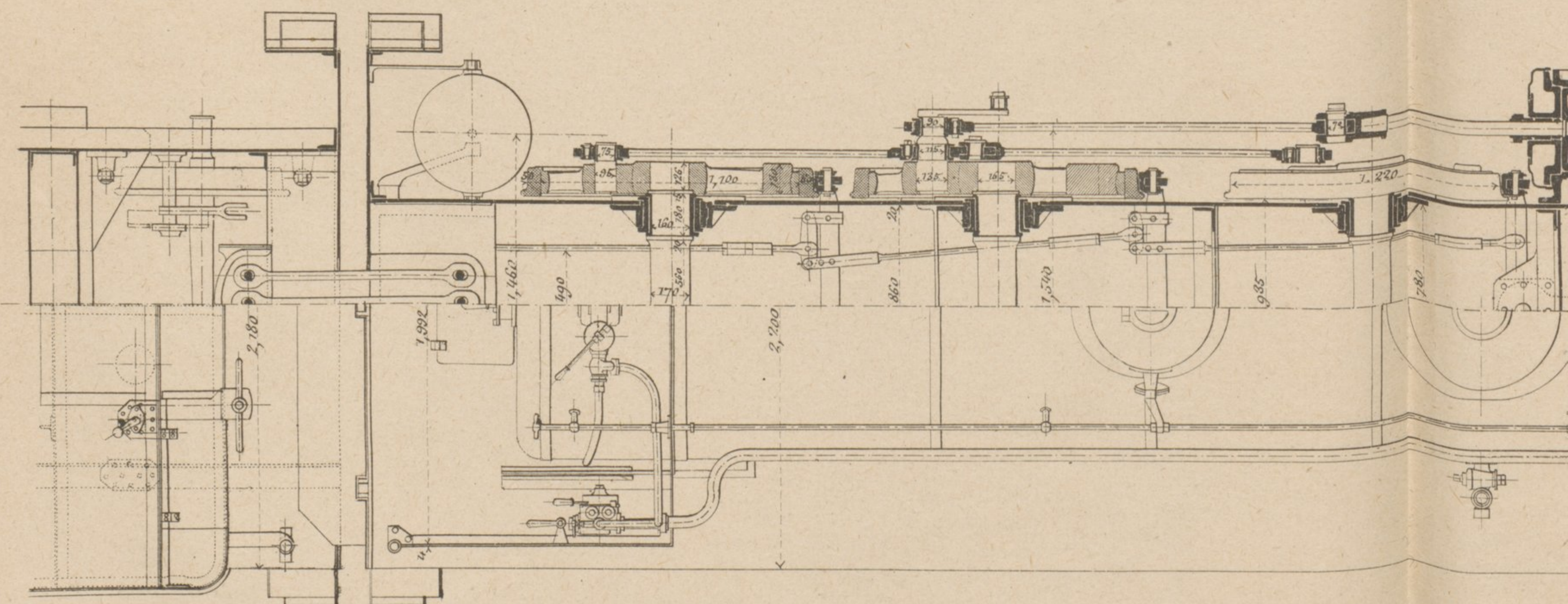
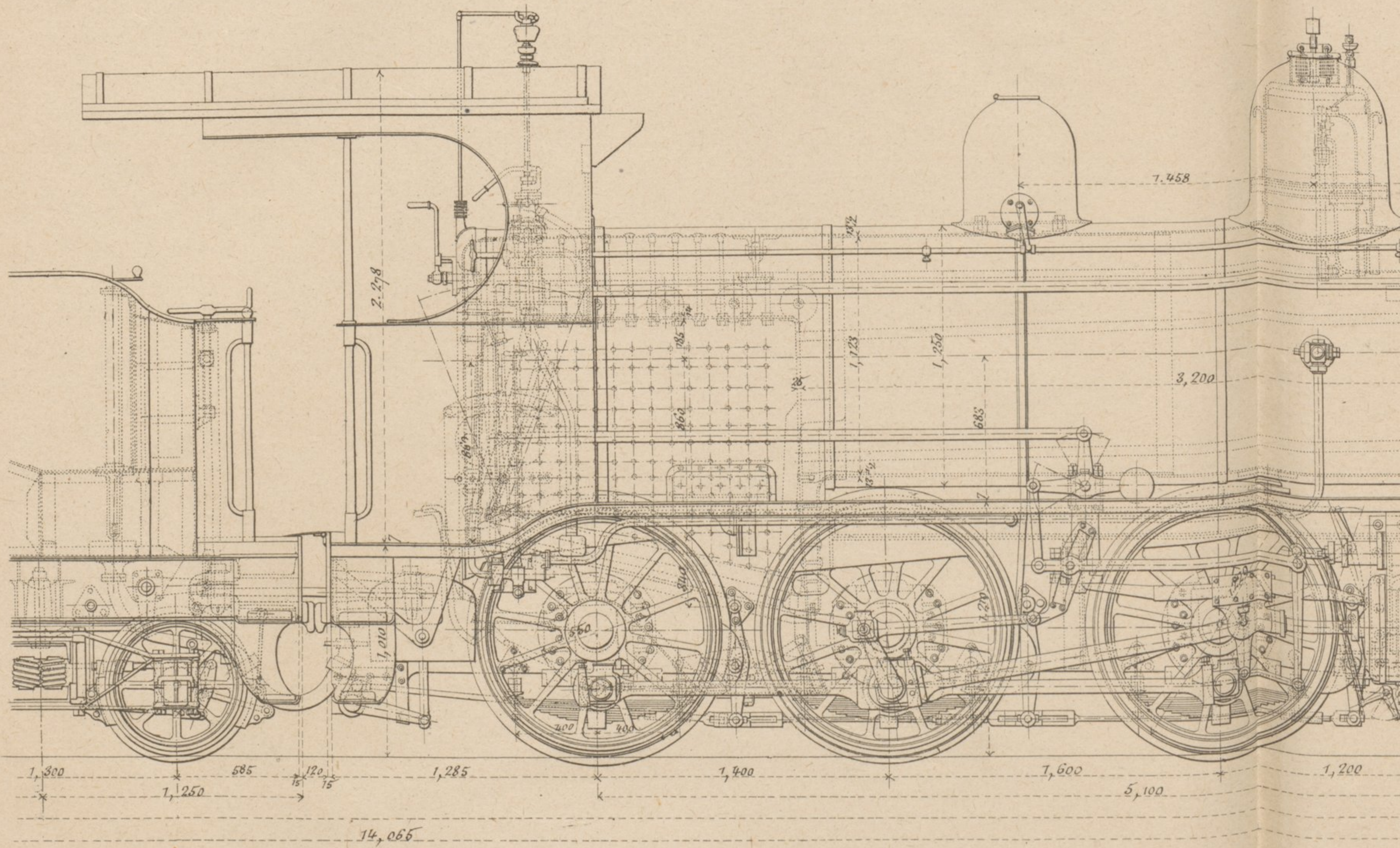
LOCOMOTIVE COMPOUND A QUATRE CYLINDRES DU CENTRE



RE CYLINDRES DU CENTRAL SUISSE



LOCOMOTIVE POUR VOIE DE 1^m00 DES CHEM



VOIE DE 1^{re}00 DES CHEMINS DE FER ÉTHIOPIENS

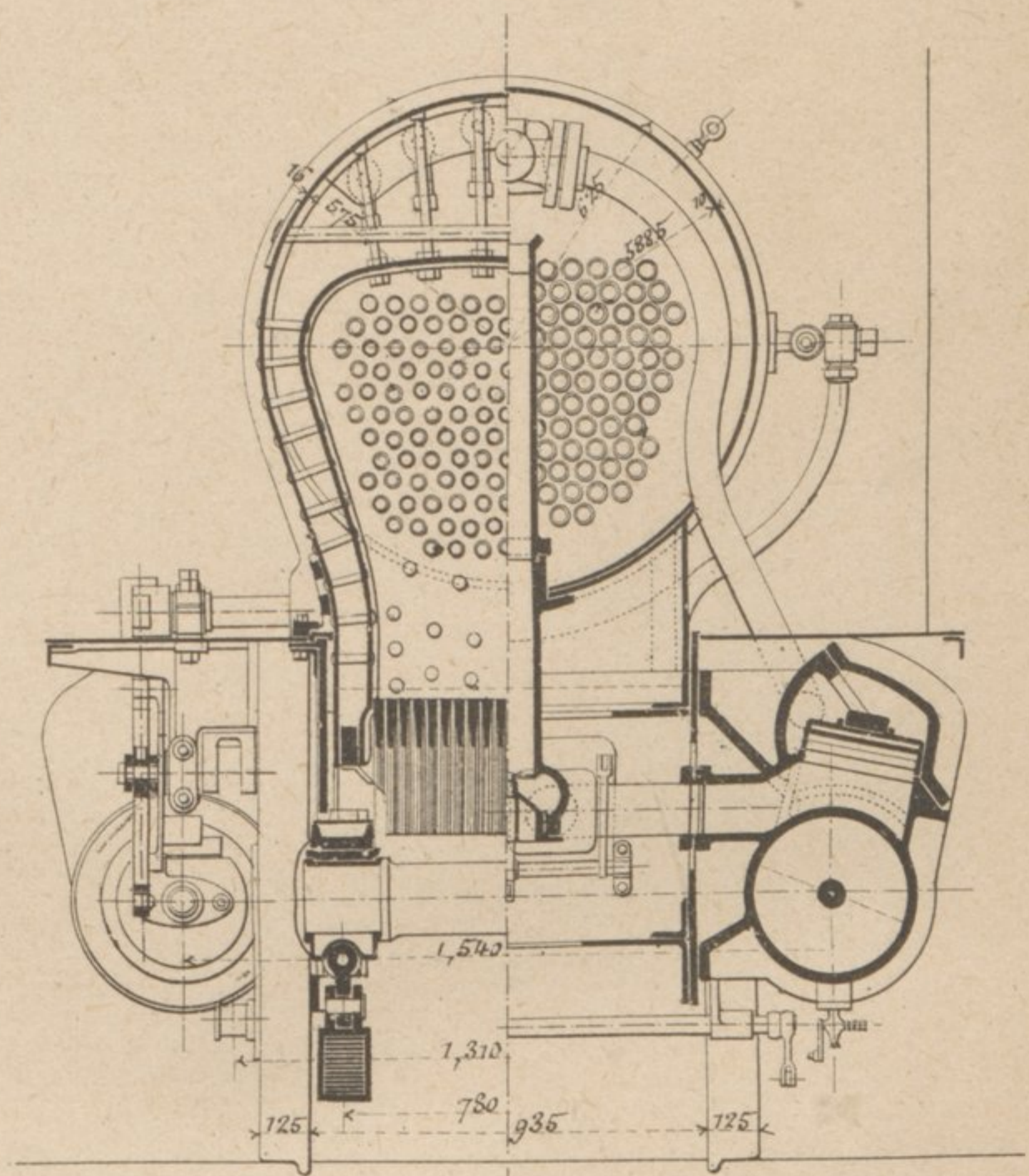
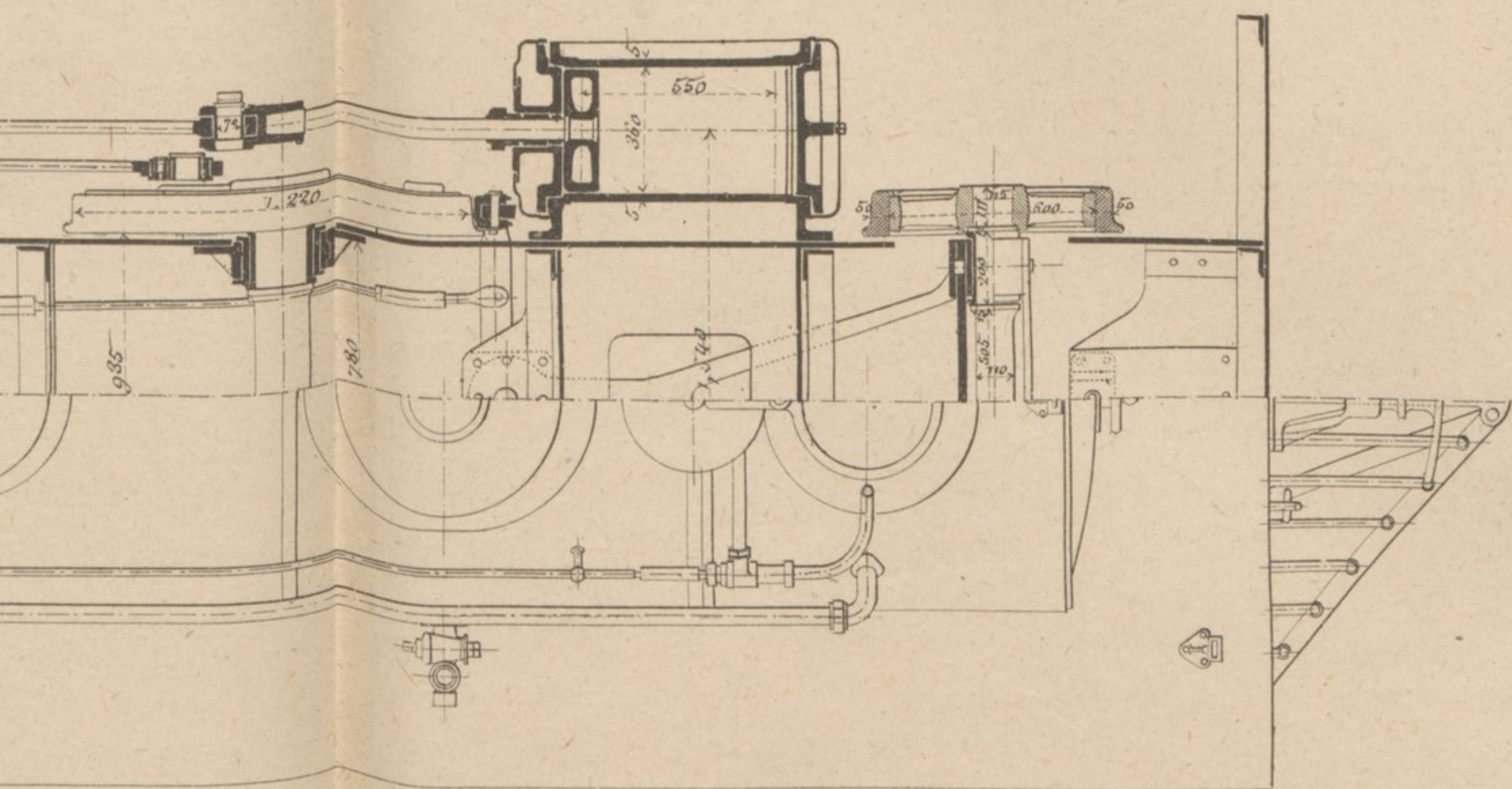
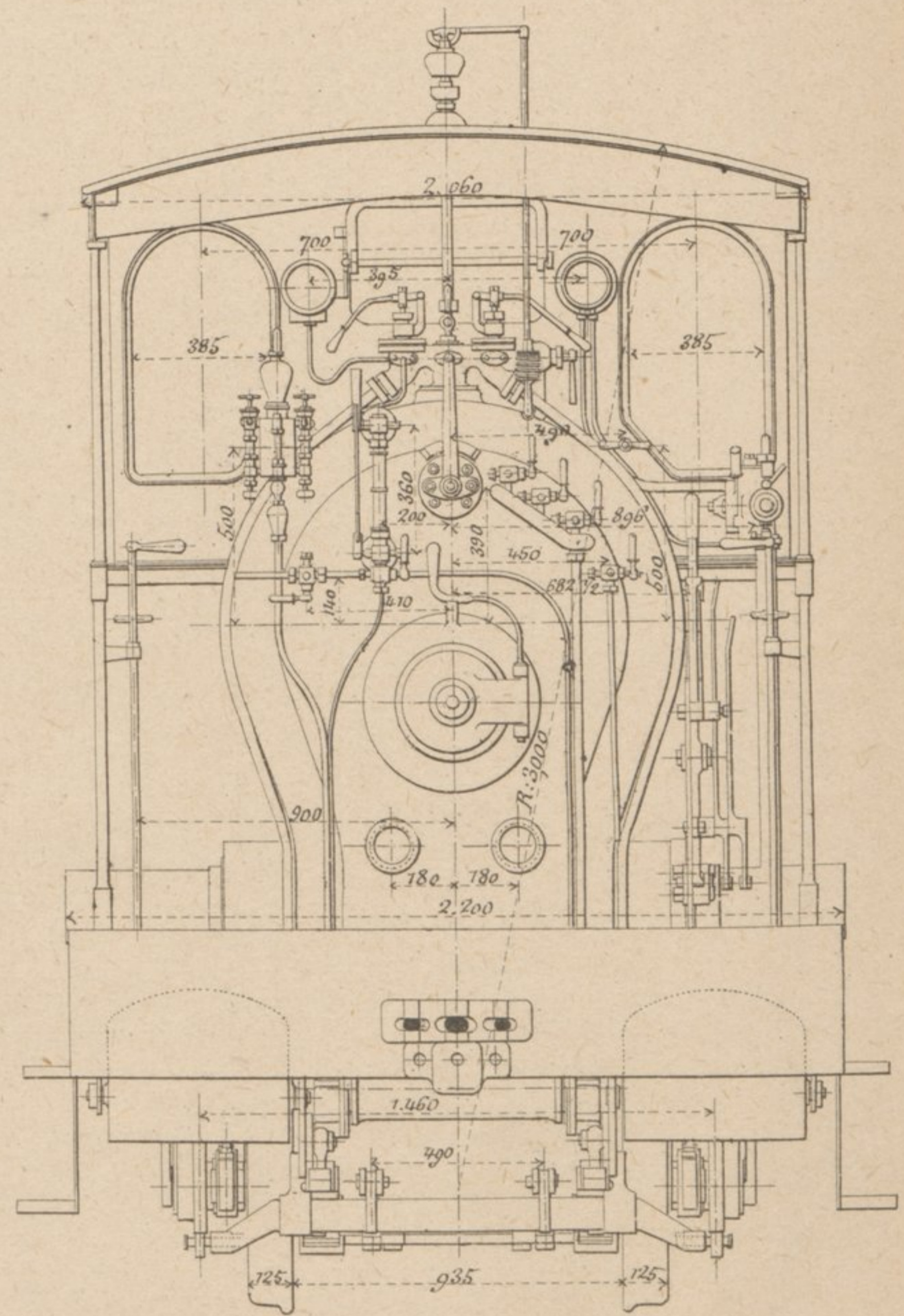
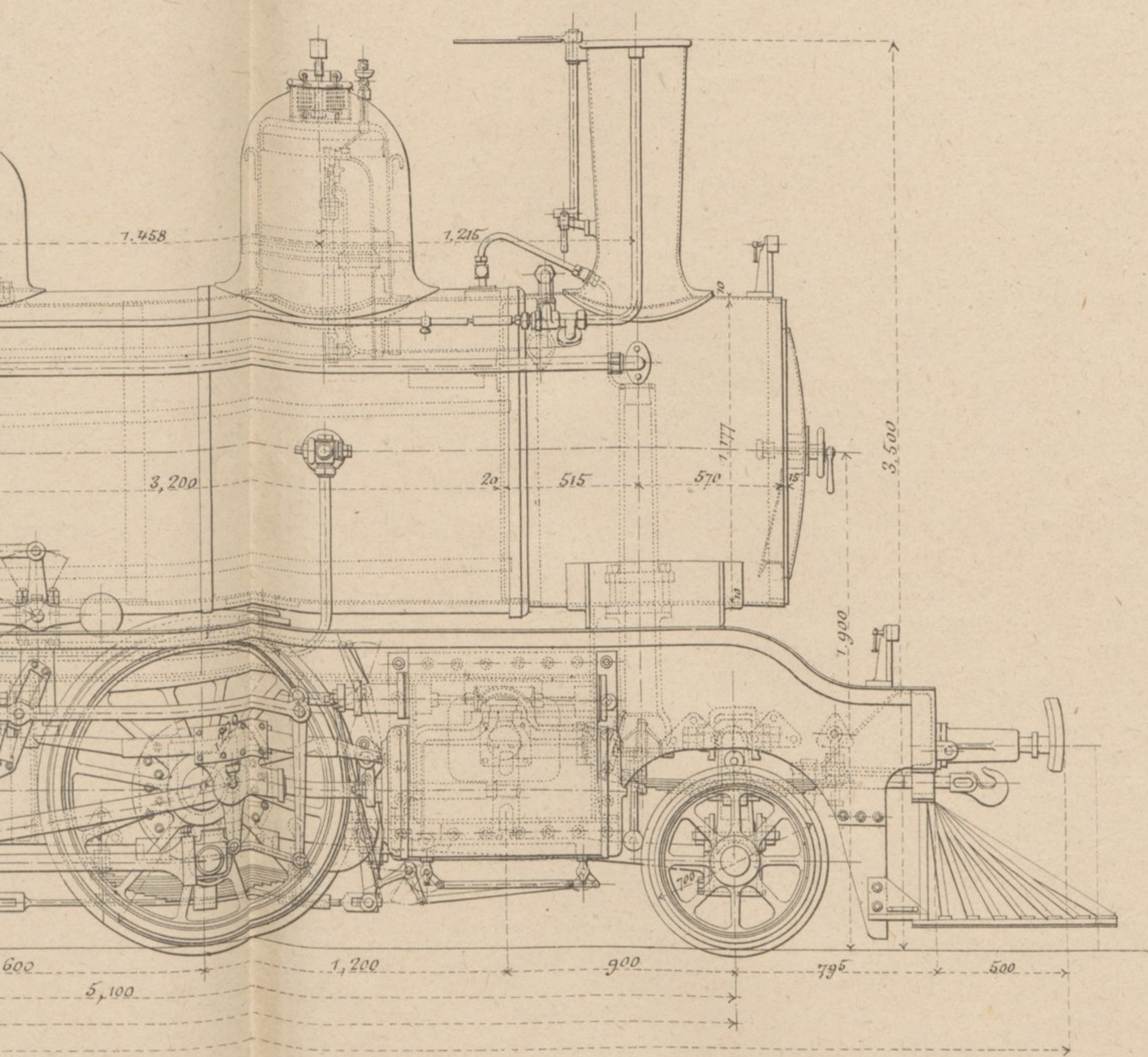
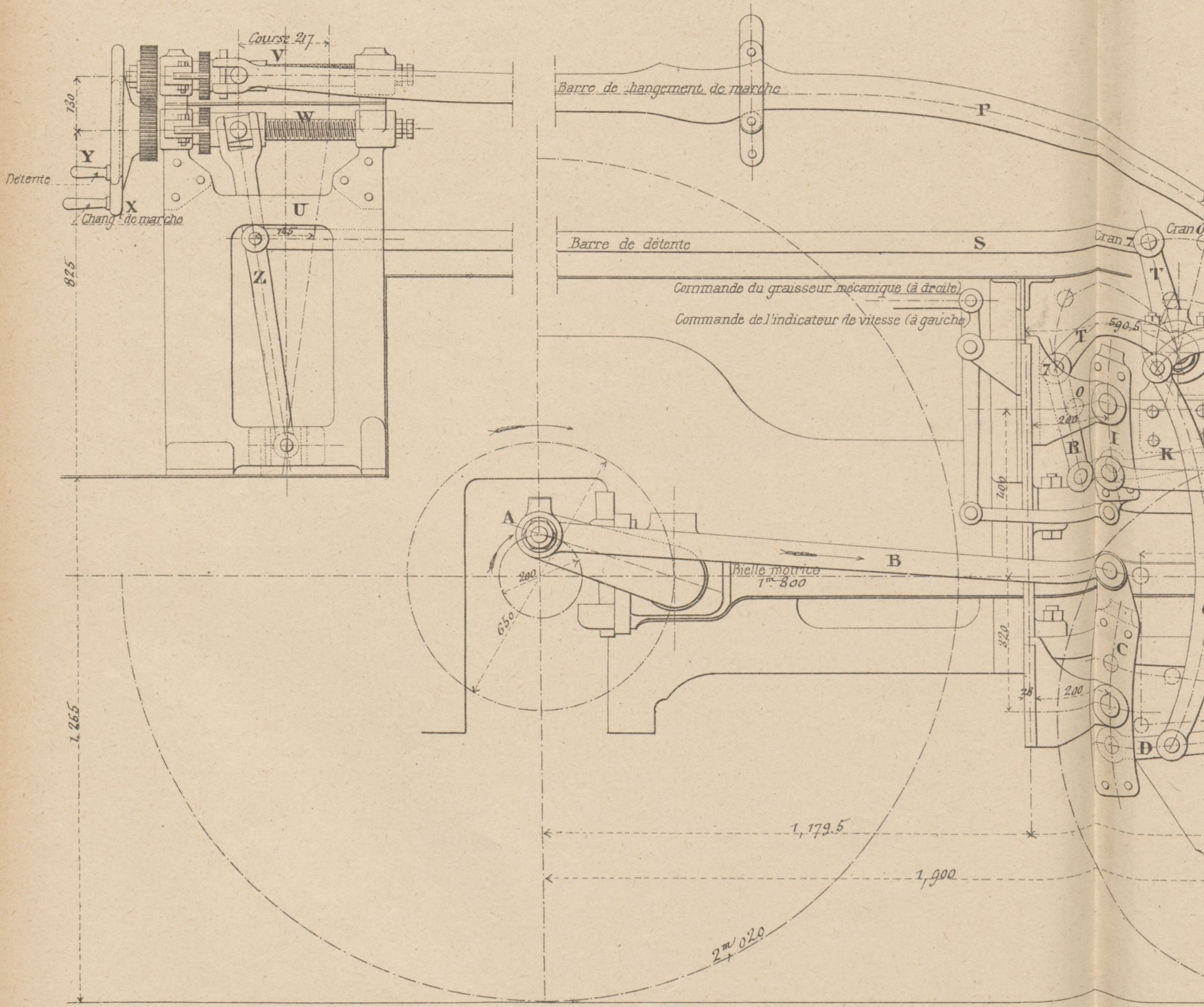


Fig. 1. — SYSTÈME DE DISTRIBUTION A TIROIRS CYLINDRIQUES ET A ÉCHAPPEMENT IN

Imaginé par M. BERTH, Dessinateur principal au Service Central du Matériel et de la Tracti

Mouvement



T A ÉCHAPPEMENT INDÉPENDANT

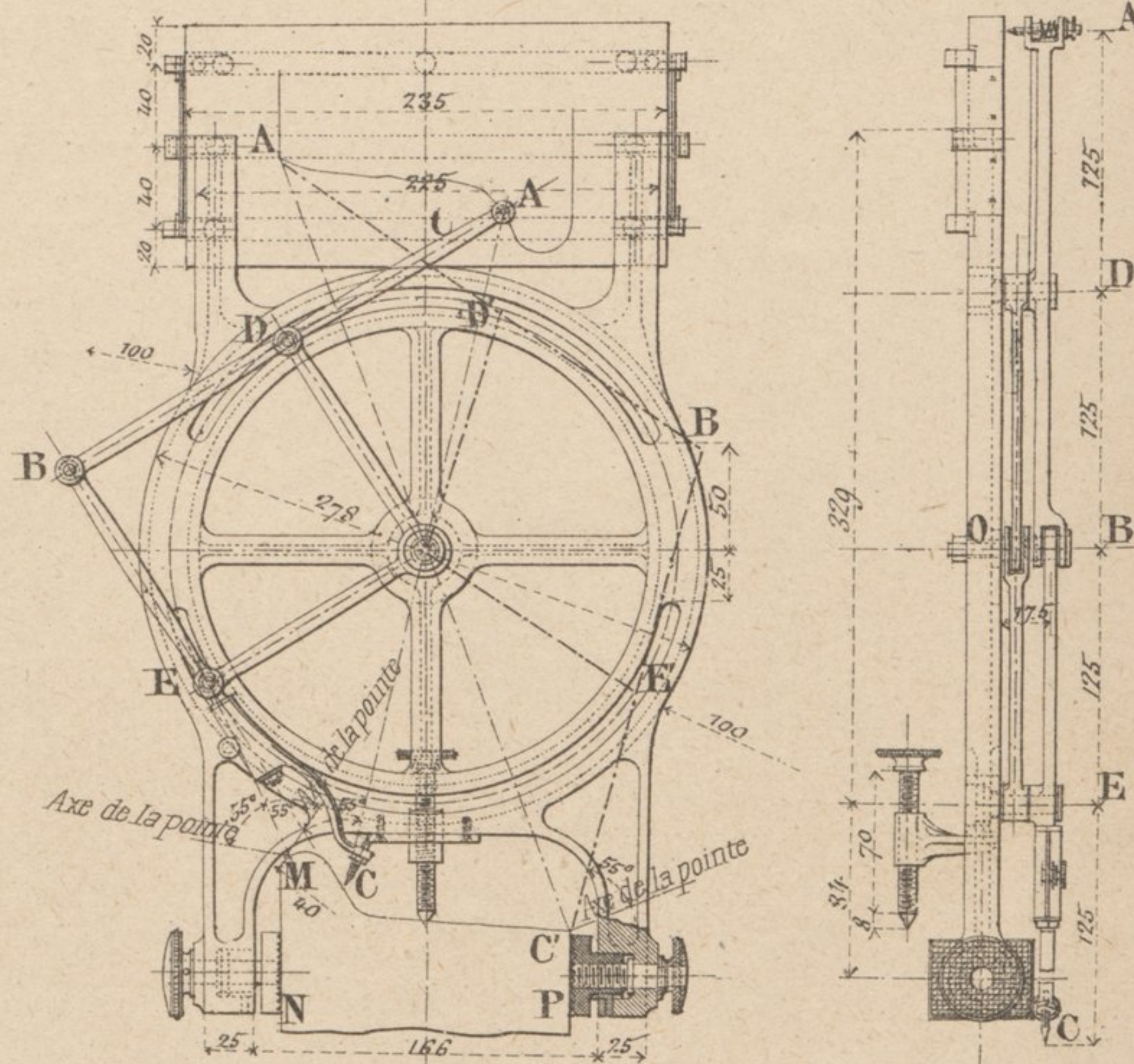
du Matériel et de la Traction.

Fig. 2.

Fig. 3

Fig. 2 et 3
Appareil
à relever le Profil
des bandages

Échelle 1/6



Position des tiroirs, le piston moteur étant à fond de course AV

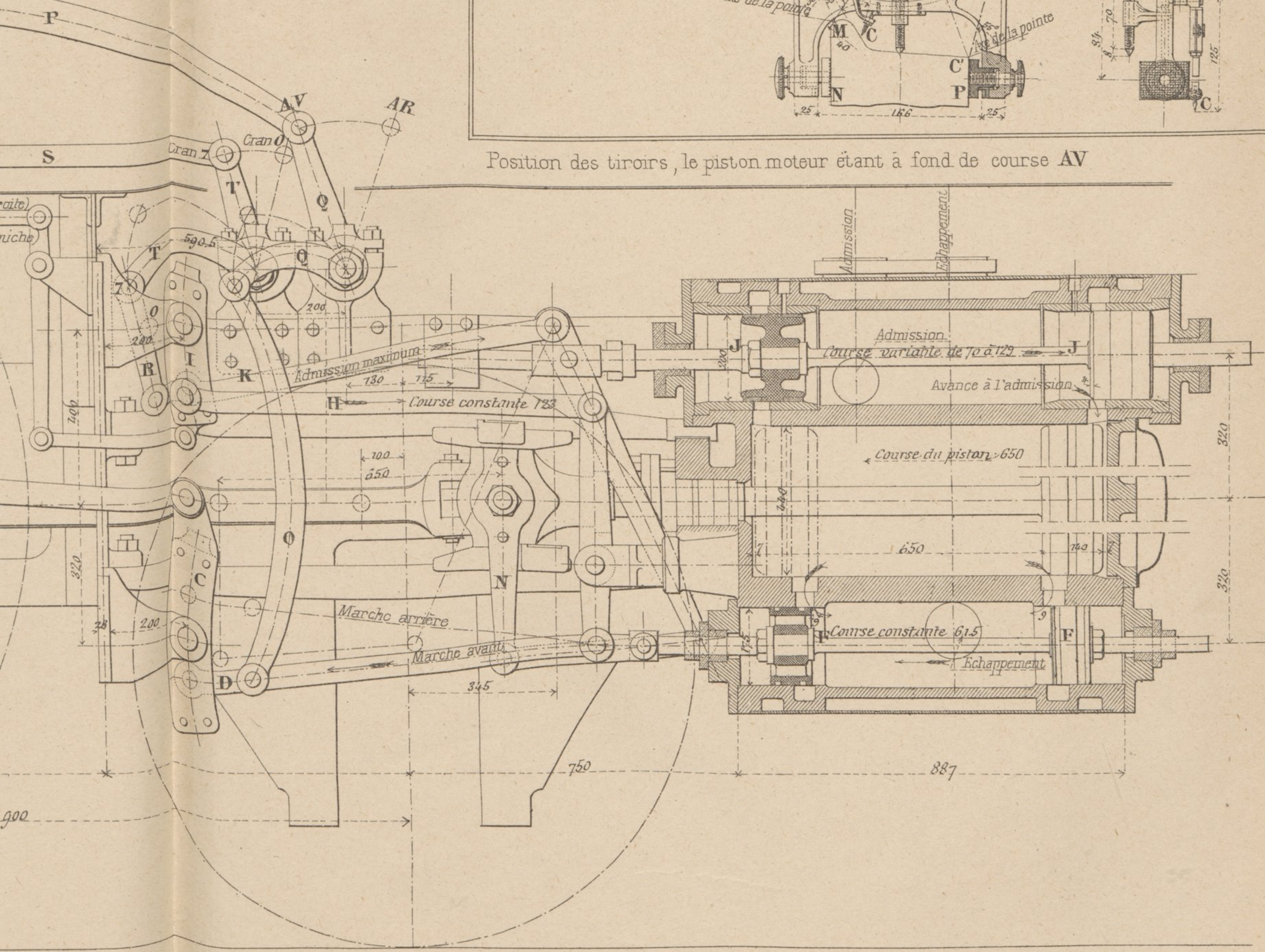


Fig. 1. — Locomotive tender à voyageurs

Élévation

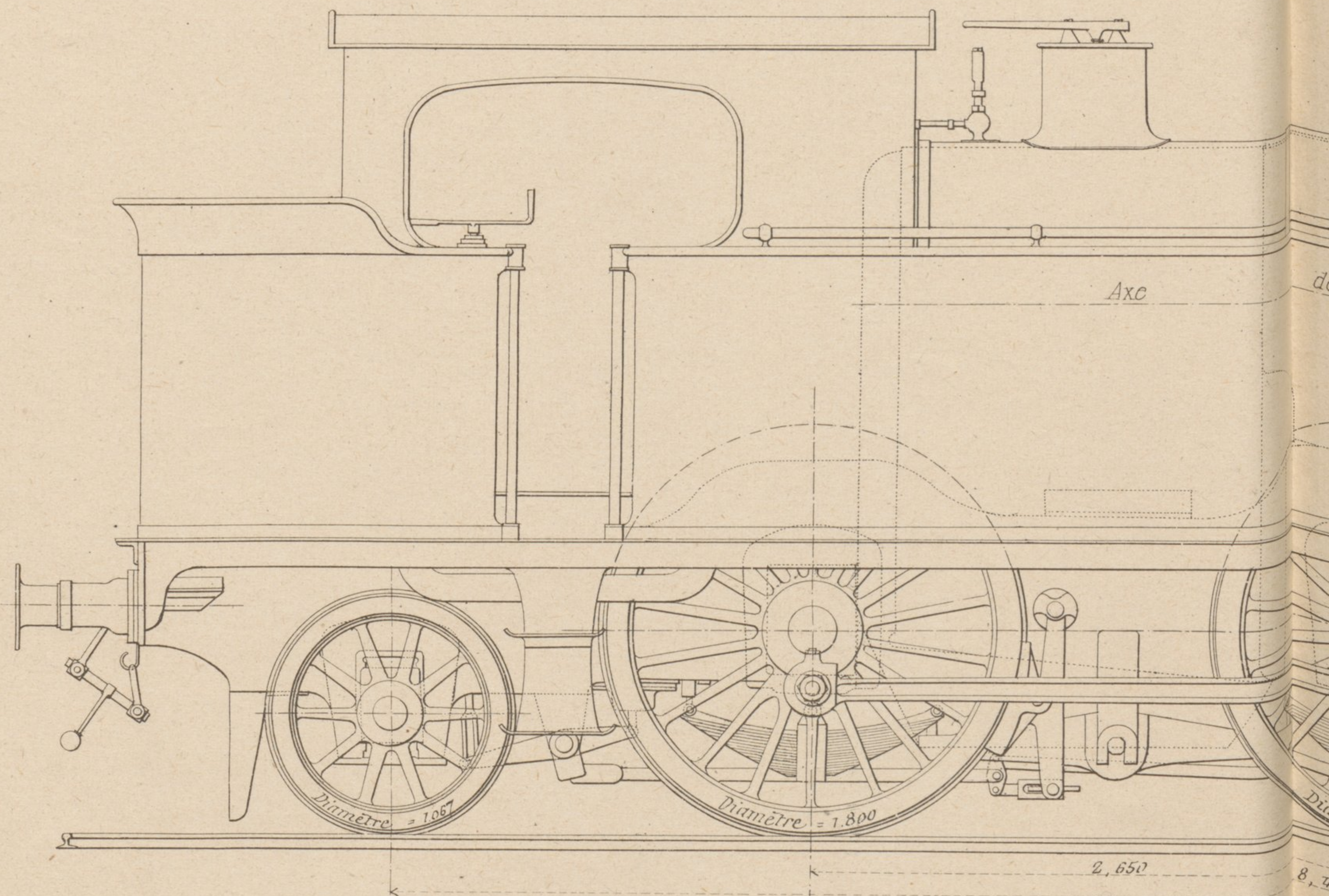
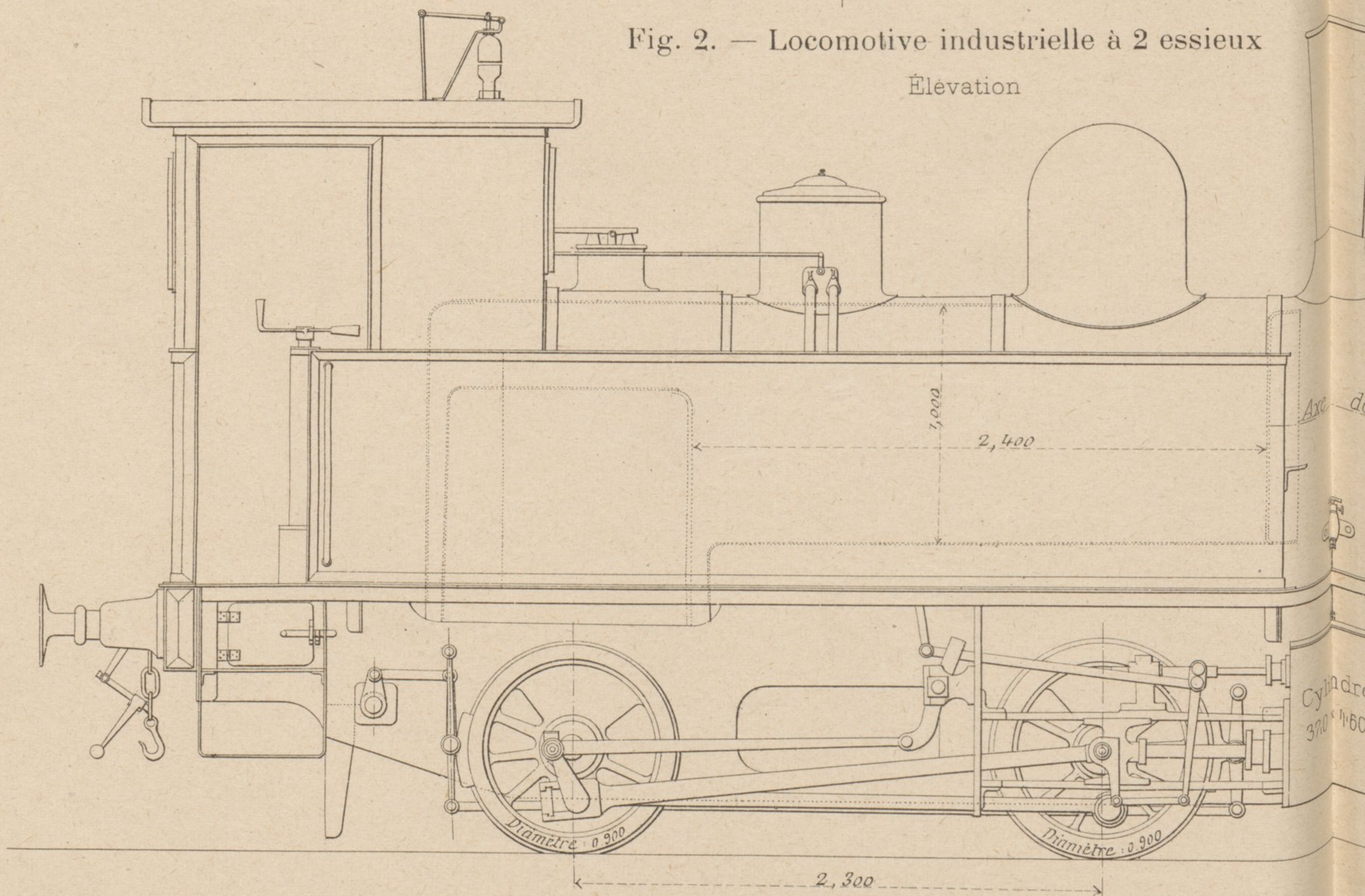
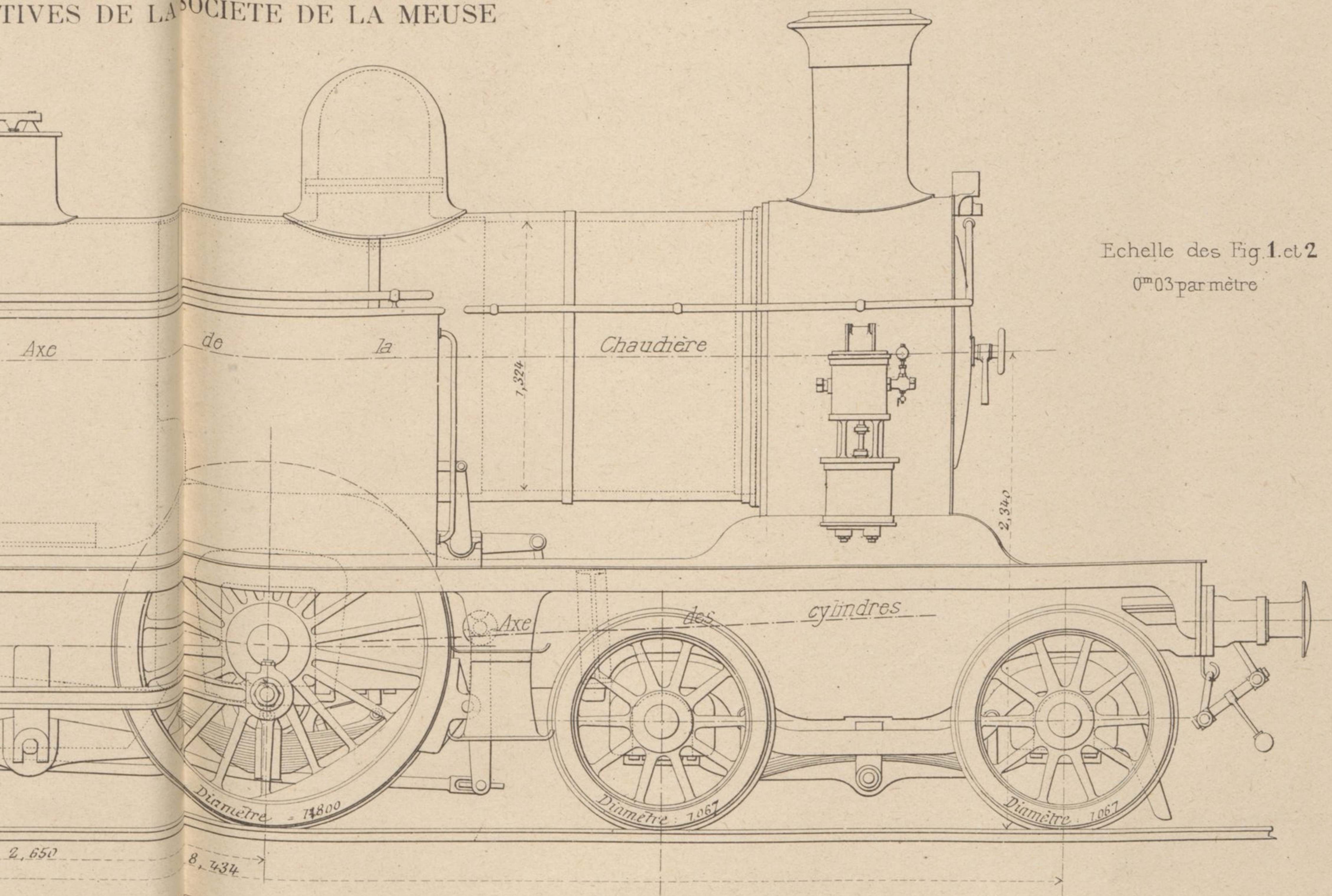


Fig. 2. — Locomotive industrielle à 2 essieux

Élévation

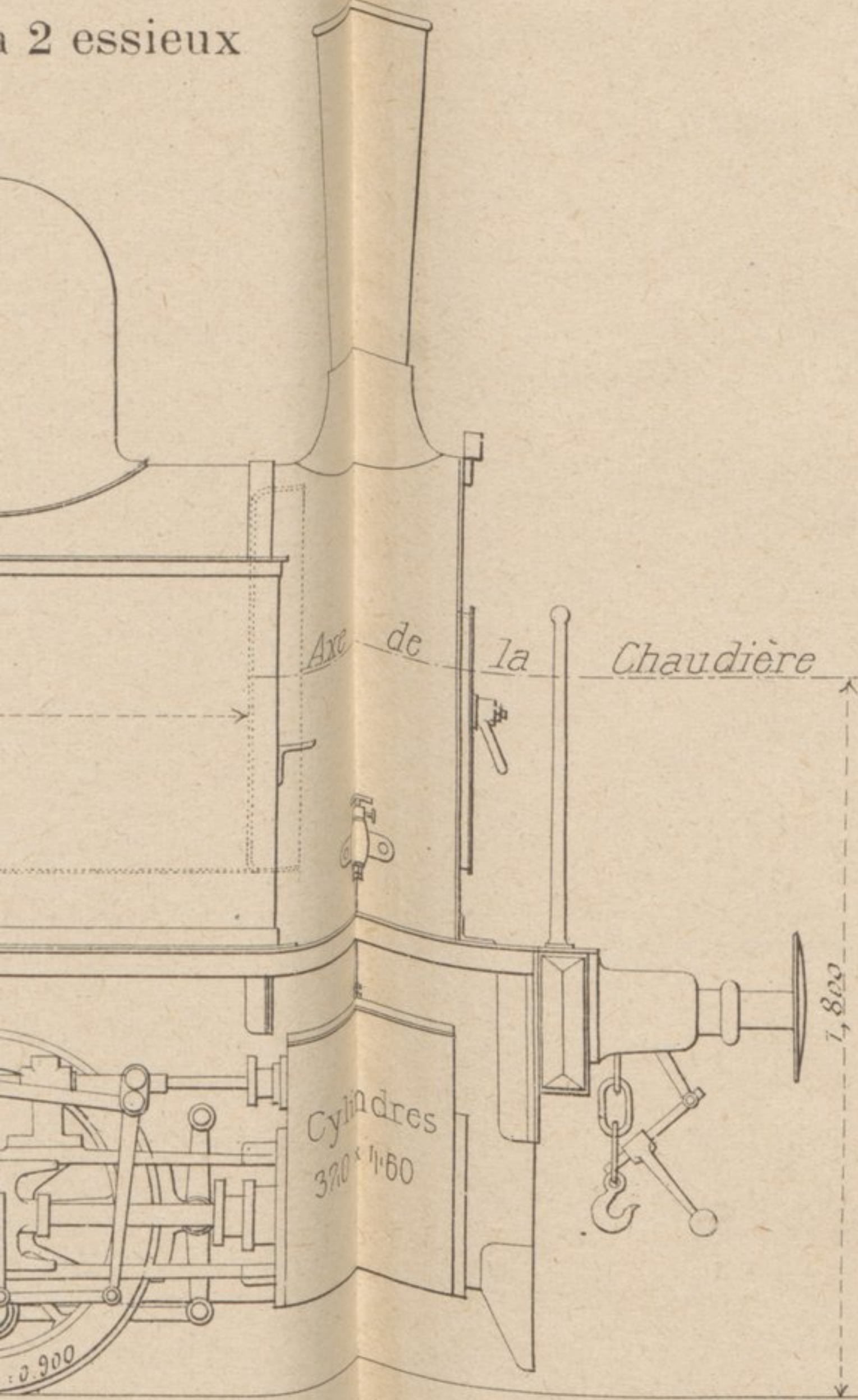


LOCOMOTIVES DE LA SOCIÉTÉ DE LA MEUSE



Echelle des Fig. 1. et 2.
0^m03 par mètre

à 2 essieux



Dimensions principales :

	Locomotive-tender à Voyageurs	Locomotive industrielle
Surface de grille	m.q. 1,80	1,00
Longueur des tubes entre plaques	m. 3,122	2,40
Surface de chauffe en contact avec les gaz	du foyer	m.q. 10,26
	des tubes	m.q. 85,52
	totale	m.q. 95,78
Diamètre moyen du corps cylindrique	m. 1,324	1,00
Hauteur de l'axe de la chaudière au-dessus du rail	m. 2,340	1,800
Timbre	atm. 11	12
Cylindres	nombre	2
	diamètre	m. 0,430
	course des pistons	m. 0,610
Nombre total d'essieux	5	2
— d'— d'essieux accouplés	2	2
Diamètre des roues accouplées	m. 1,800	0,900
— d'— porteuses	m. 1,067	"
Empattement	m. 8,434	2,300
Approvisionnement dans les caisses	charbon	Kg. 2.500
	eau	lit. 6.500
Poids à vide	T. 52	18,5
Poids en charge maximum	T. 61,8	24,0
Effort théorique de traction	Kg. 7120	6490

LOCOMOTIVES A MARCHANDISES A 3 ESSIEUX ACCOUPLES DES SOCIÉTÉS DE

Fig. 1. Vue en élévation

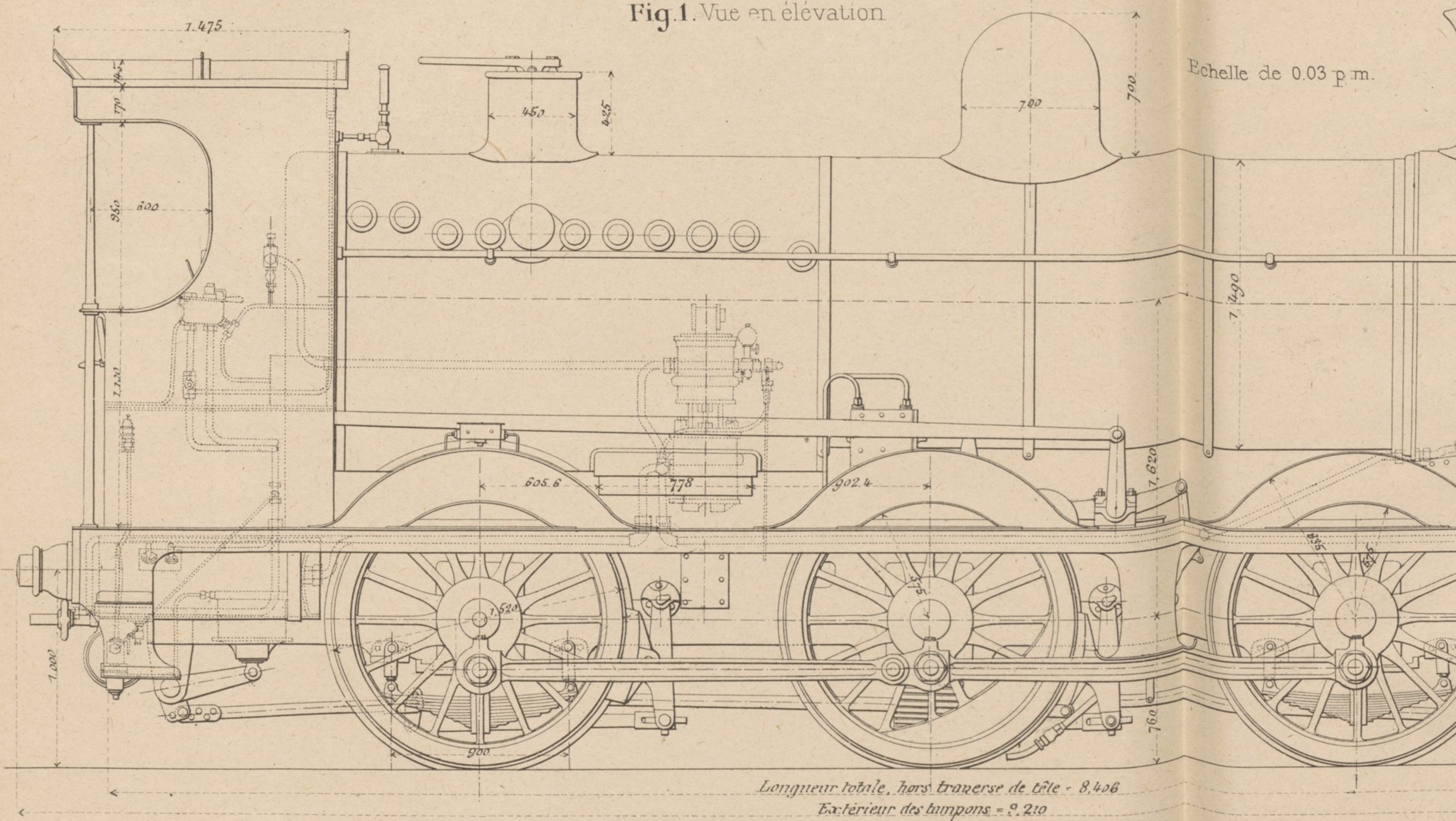
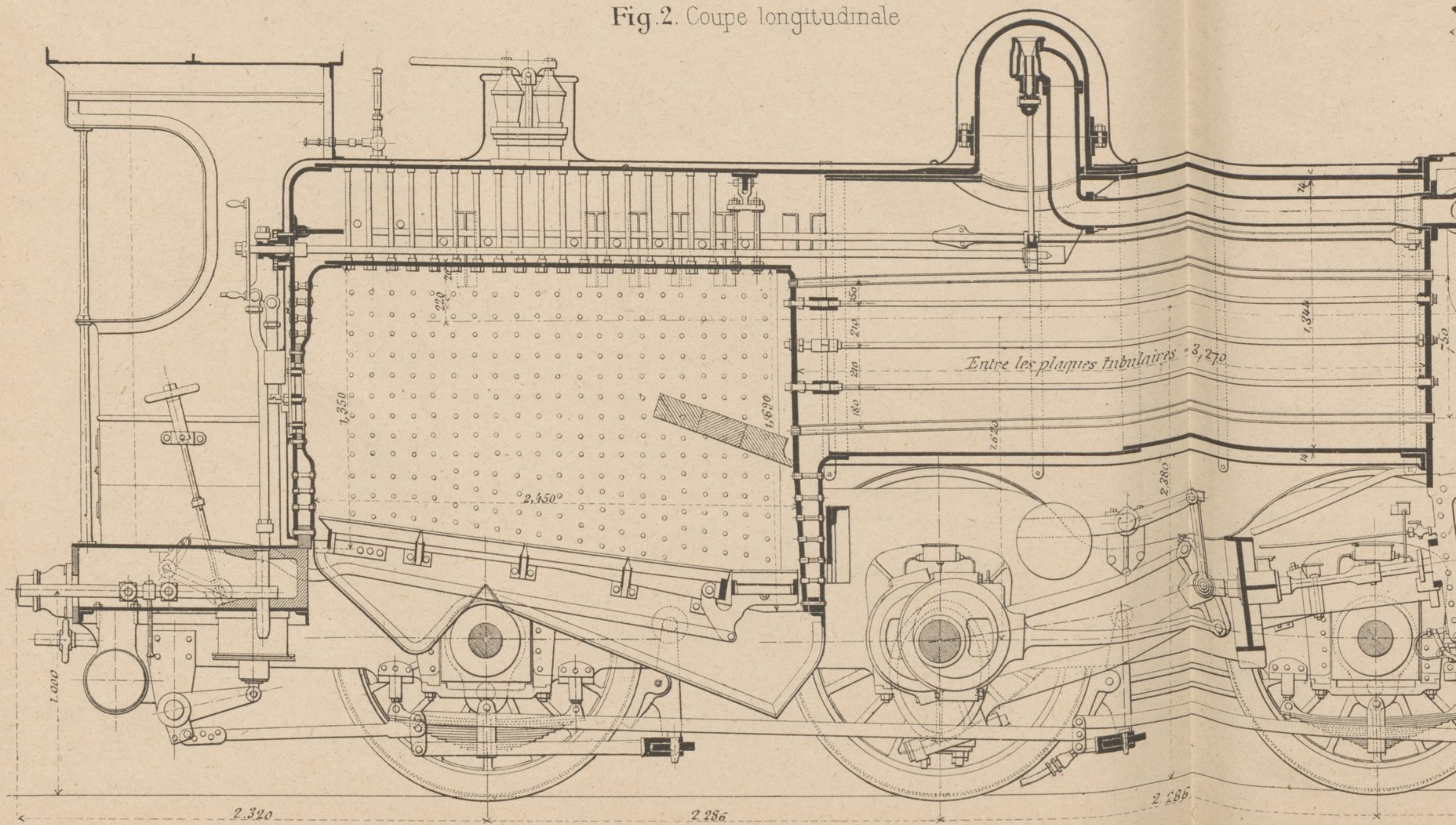
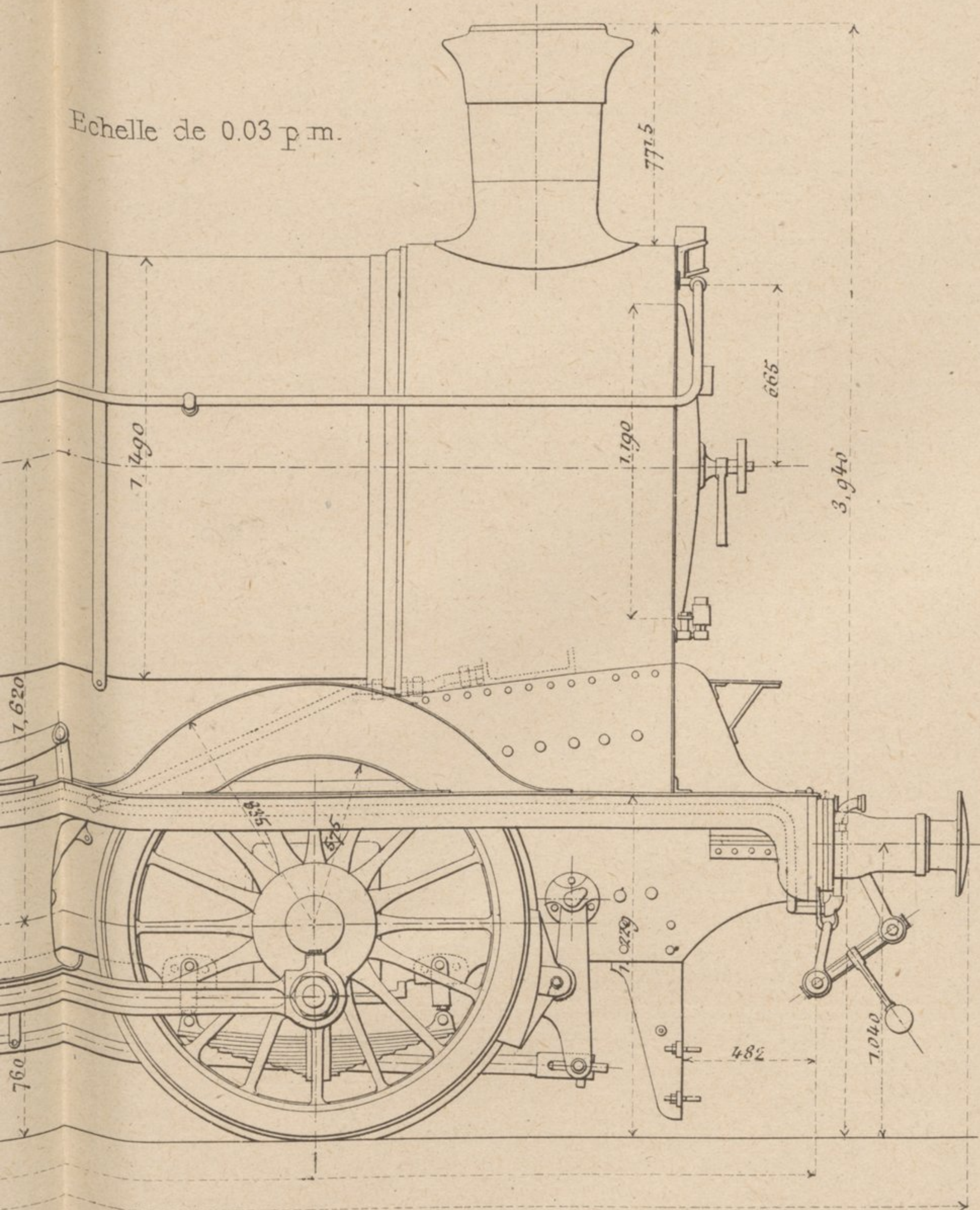


Fig. 2. Coupe longitudinale



PLÈS DES SOCIÉTÉS DE HAINE-S'-PIERRE ET DE S'-LÉONARD

Dimensions principales:



Poids à vide	K ^{os}	42.500
Poids en charge maximum		46.000
Diamètre des cylindres		457
Course des pistons		660
Effort de traction théorique	K ^{os}	10.300
Diamètre des roues		1.520
Distance des essieux extrêmes		4.572
Longueur totale hors traverses de tête		8.406
Largeur maxima		2.674
Hauteur maxima		3.940
Timbre	atm	11
Surface de chauffe des tubes	m ²	101,33
— d° — d° du foyer	m ²	13,10
— d° — d° totale	m ²	114,43
— d° de grille	m ²	2,52
Diamètre moyen de la chaudière		1.372
Longueur des tubes entre plaques tubulaires		3.270
Diamètre extérieur des tubes		45
Nombre de tubes		215

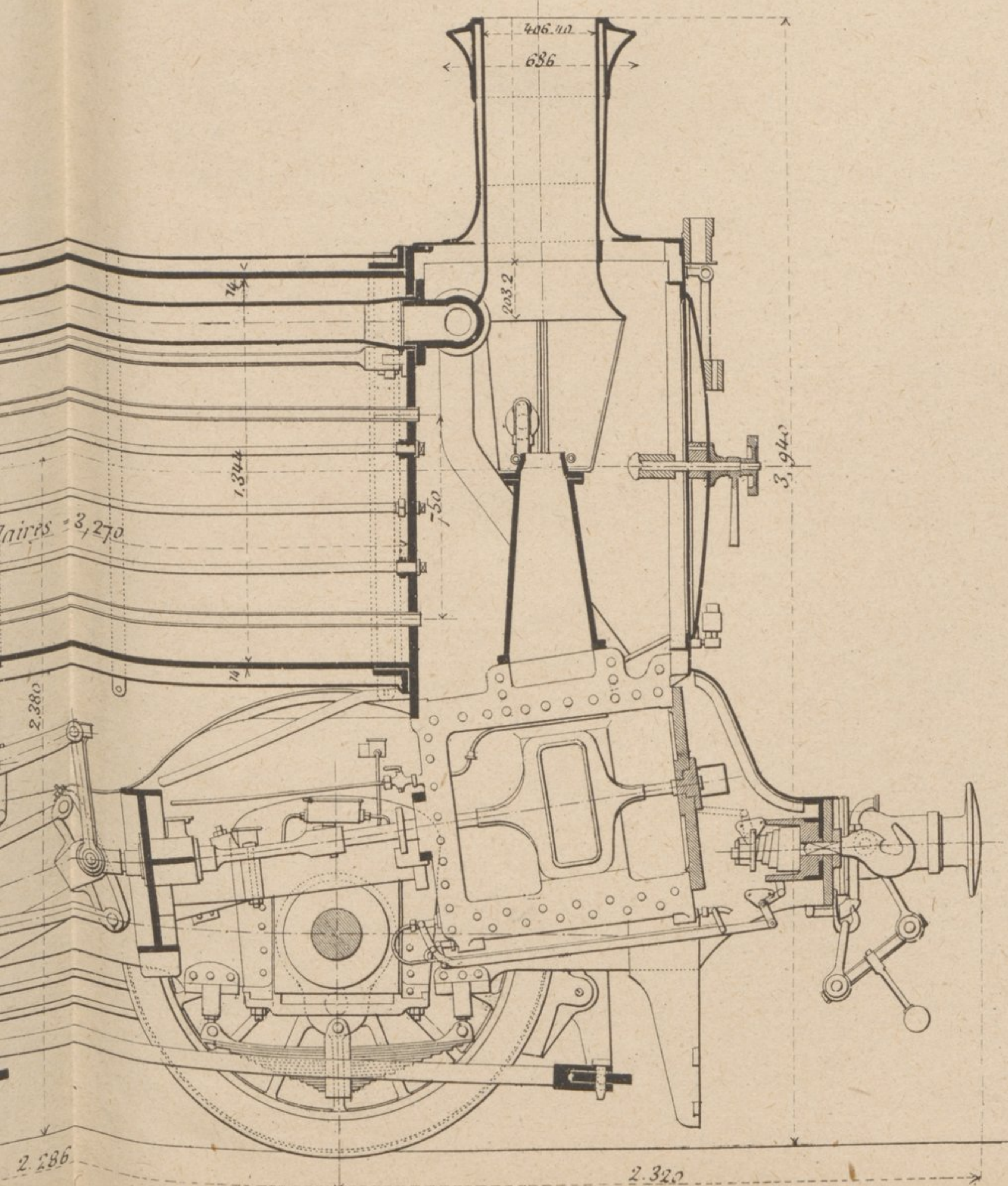
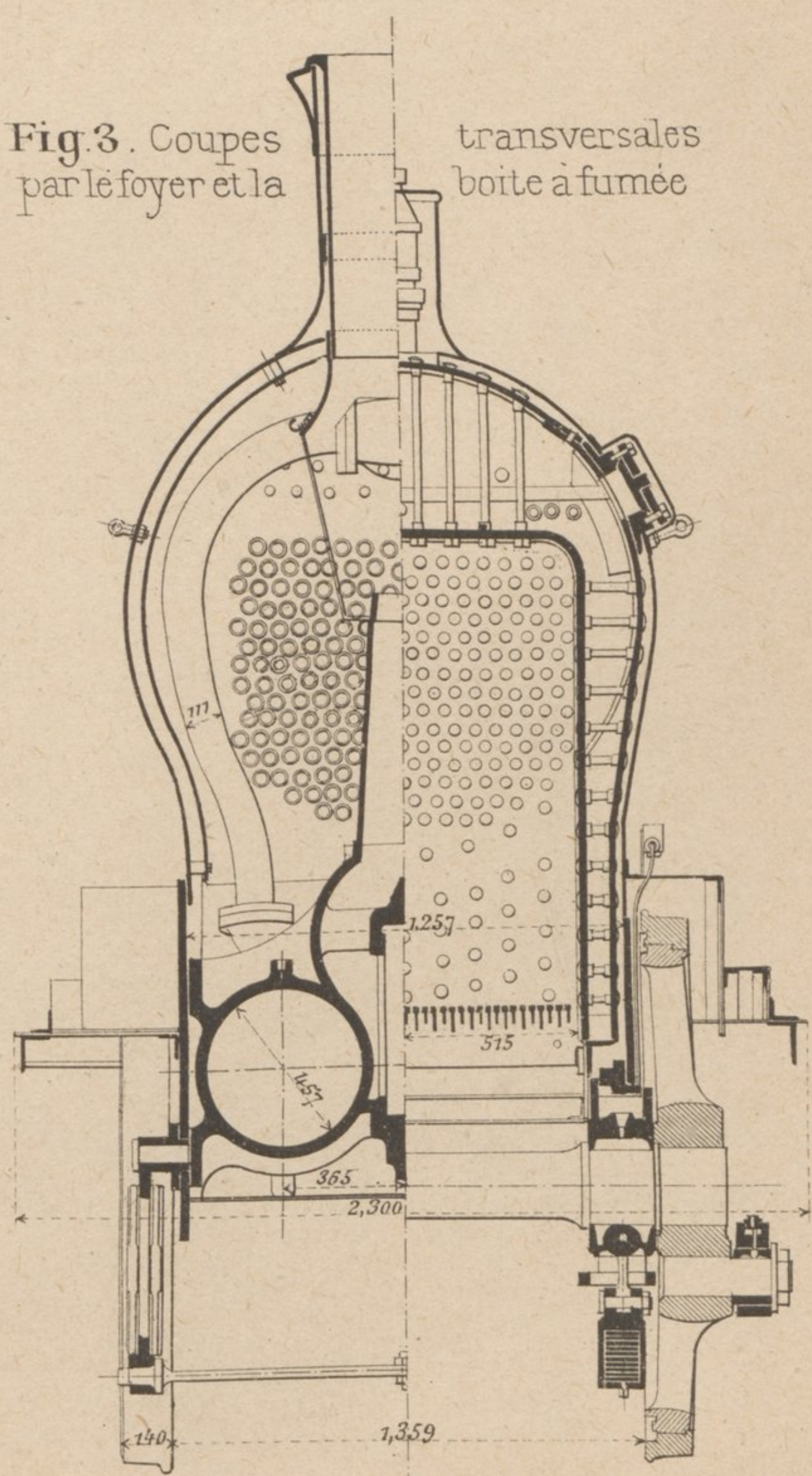


Fig.3. Coupes transversales par le foyer et la boîte à fumée



LOCOMOTIVE-TENDER A 4 ESSIEUX DONT 3 ACCOUPLES

Fig. 1.
Vue en élévation de la machine

Echelle des Fig. 1 et 2 : 1/40

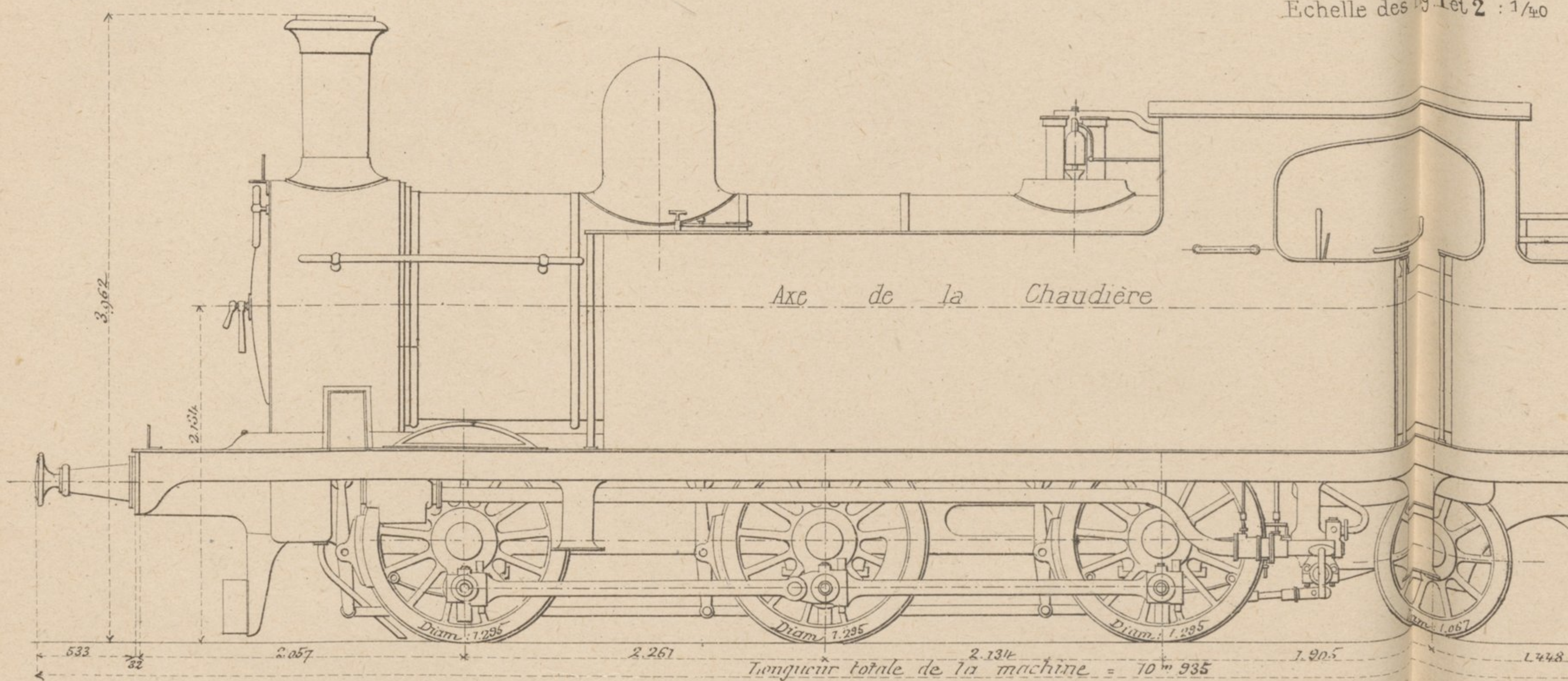
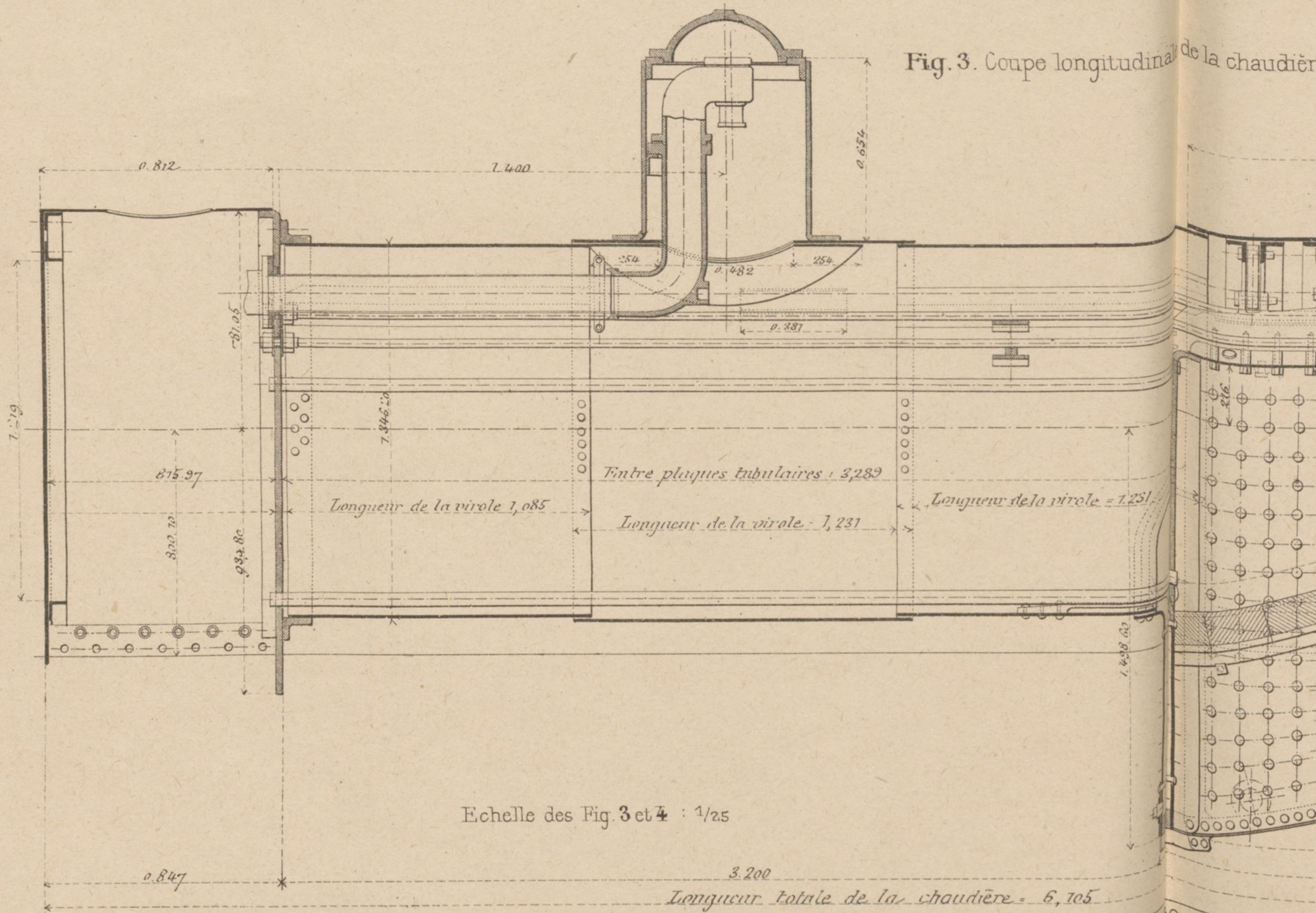


Fig. 3. Coupe longitudinale de la chaudière

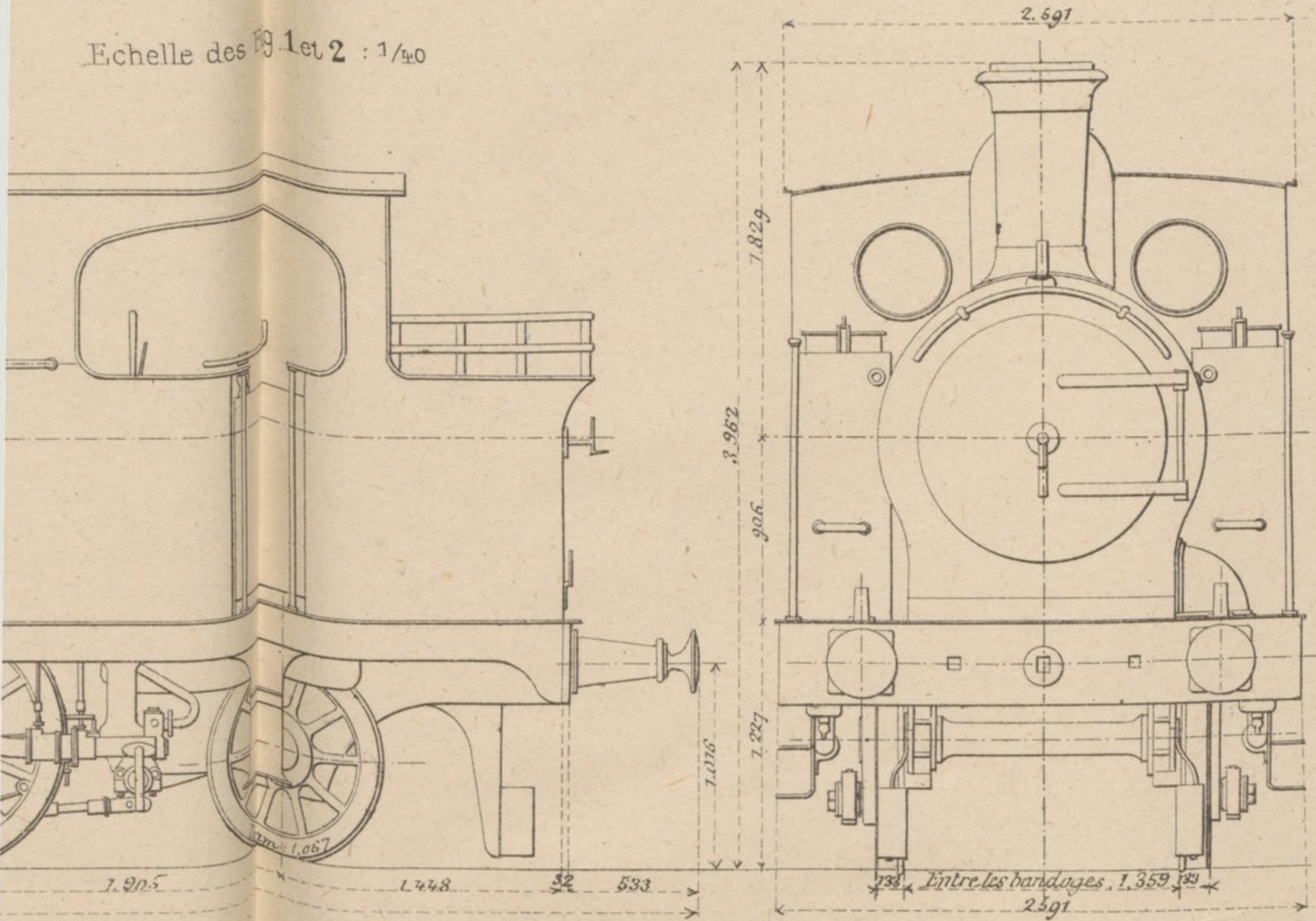


Echelle des Fig. 3 et 4 : 1/25

LOCOMOTIVES ACCOUPLES DE LA SOCIÉTÉ FRANCO-BELGE

Fig. 2
Vue en bout de la machine

Echelle des Figs 1 et 2 : 1/40



Dimensions principales

Diamètre des cylindres	m/m	457
Course des pistons	m/m	660
Nombre des roues motrices		6
Diamètre des roues motrices	m/m	1 ^m 235
Nombre des roues porteuses		2
Diamètre des roues porteuses	m/m	1 ^m 067
Ecartement des essieux extrêmes	m/m	6 ^m 300
Surface de la grille	m ²	1,88
Surface de chauffe du foyer	m ²	10,13
Surface de chauffe des tubes	m ²	94,07
Surface de chauffe totale	m ²	104,20
Nombre de tubes		182
Diamètre extérieur des tubes	m/m	50,80
Timbre de la chaudière	atm	10 1/2
Eau dans la chaudière	lit.	3750
Eau dans les soutes	lit.	5800
Charbon dans les soutes	K ^{cs}	2000
Poids approximatif à vide	K ^{cs}	45.000
Poids approximatif en ordre de marche	K ^{cs}	56.600
Poids adhérent maximum	K ^{cs}	48.000

Coupe longitudinale de la chaudière

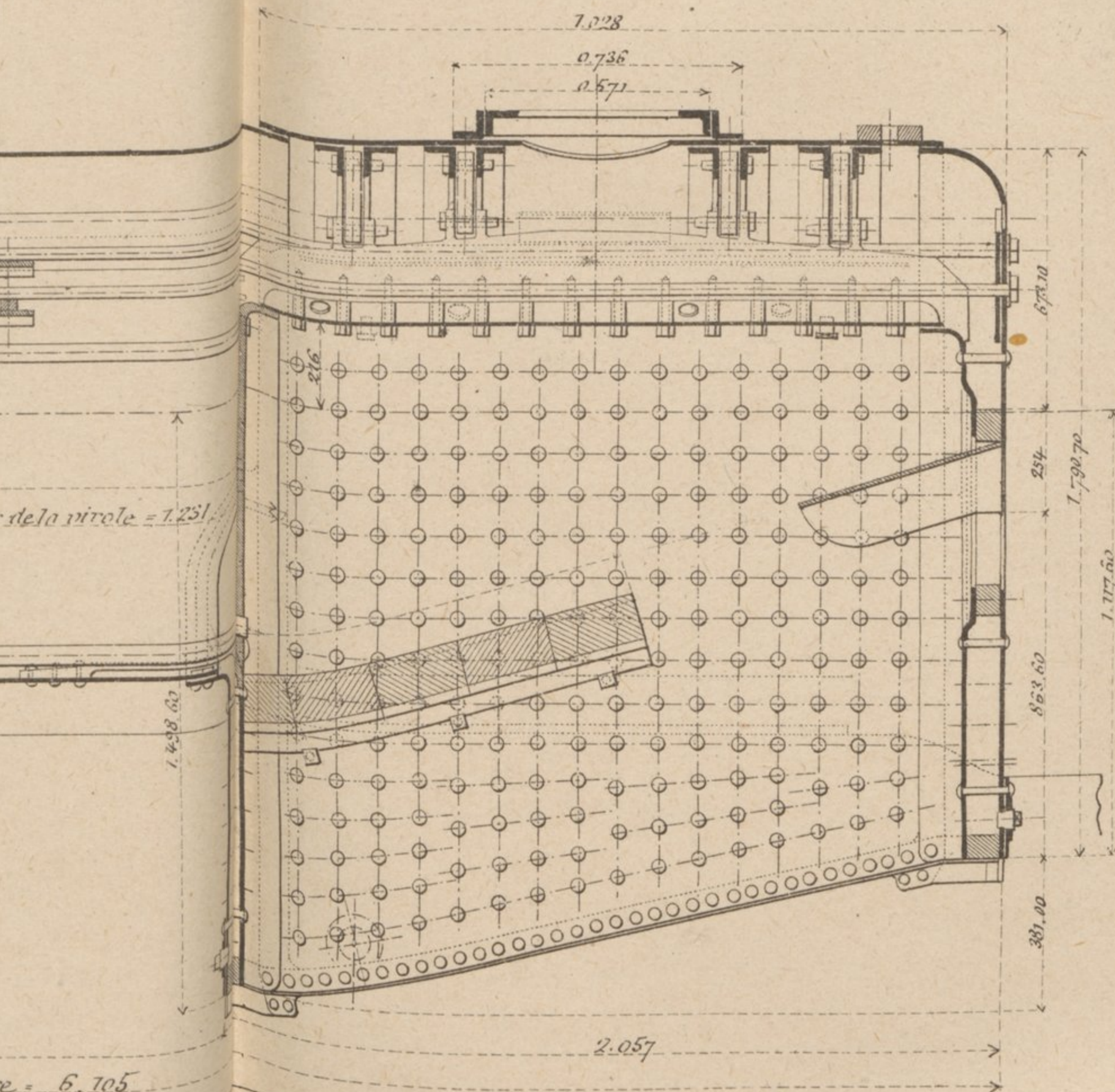
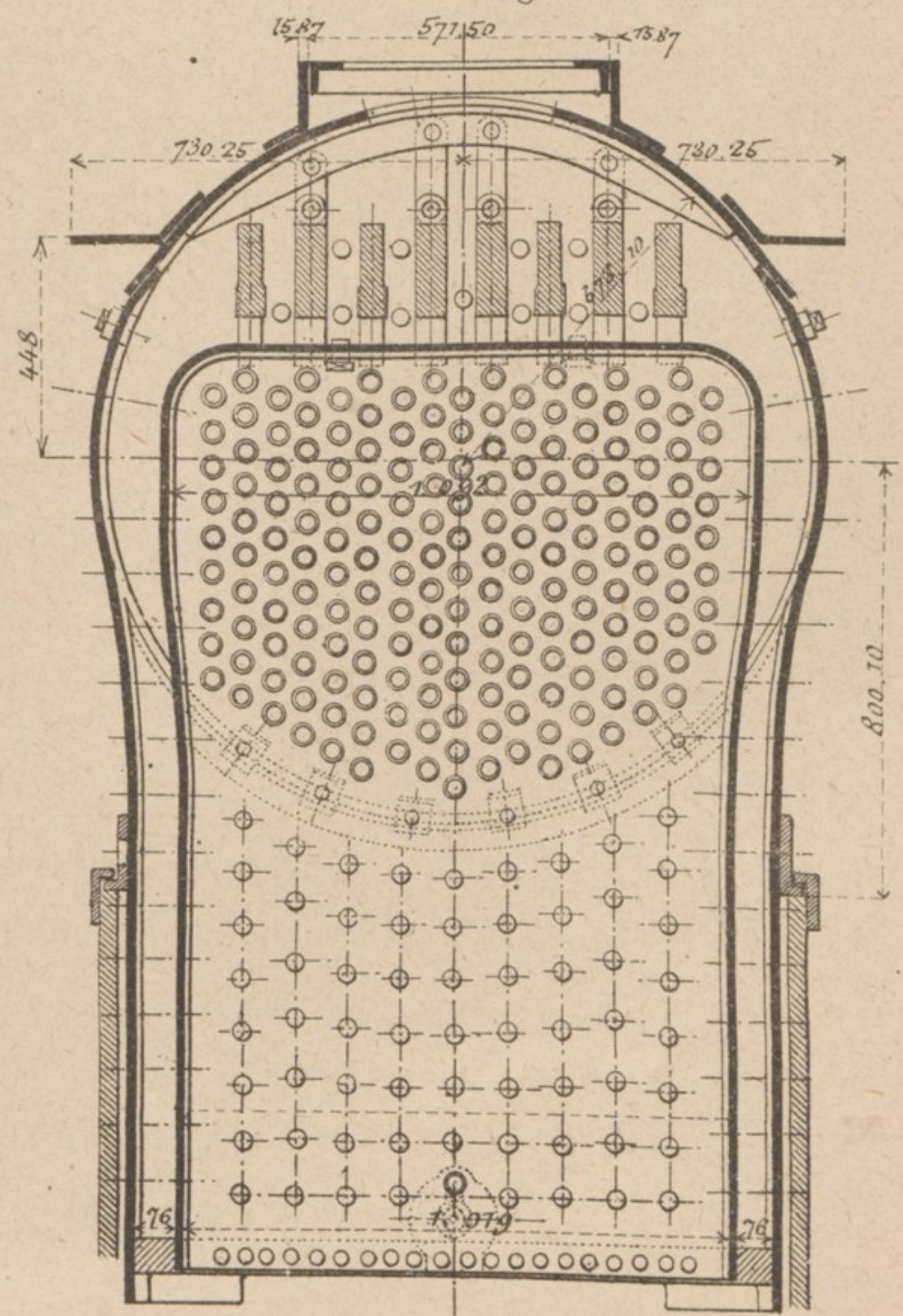


Fig. 4. Coupe transversale de la chaudière par le foyer



LOCOMOTIVE-TENDER A 3 ESSIEUX DONT 2 ACCOUPLES D

Fig.1. Vue en élévation

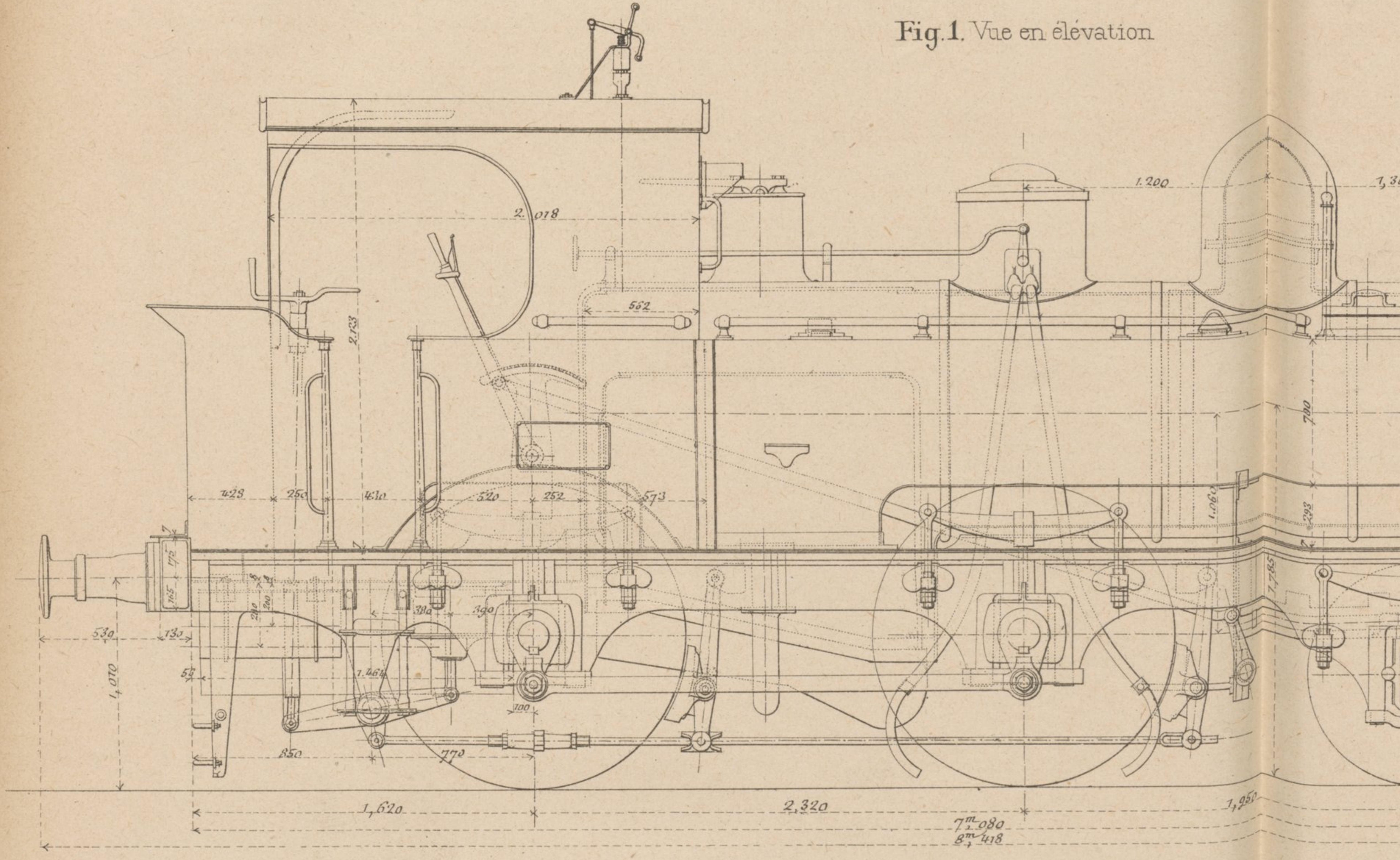
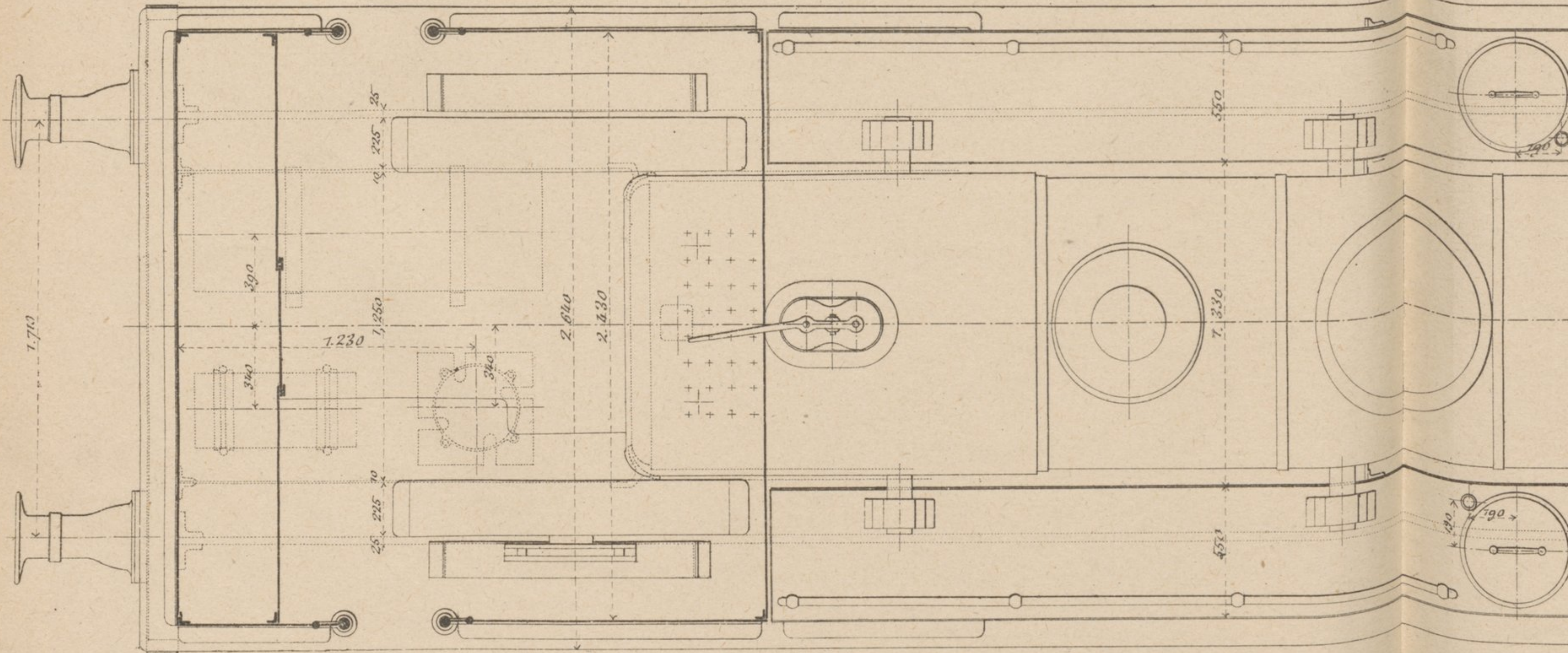


Fig.3. Vue en plan



DONT 2 ACCOUPLES DE MM. ZIMMERMANN-HANREZ ET C^o

tion

Echelle 1/30

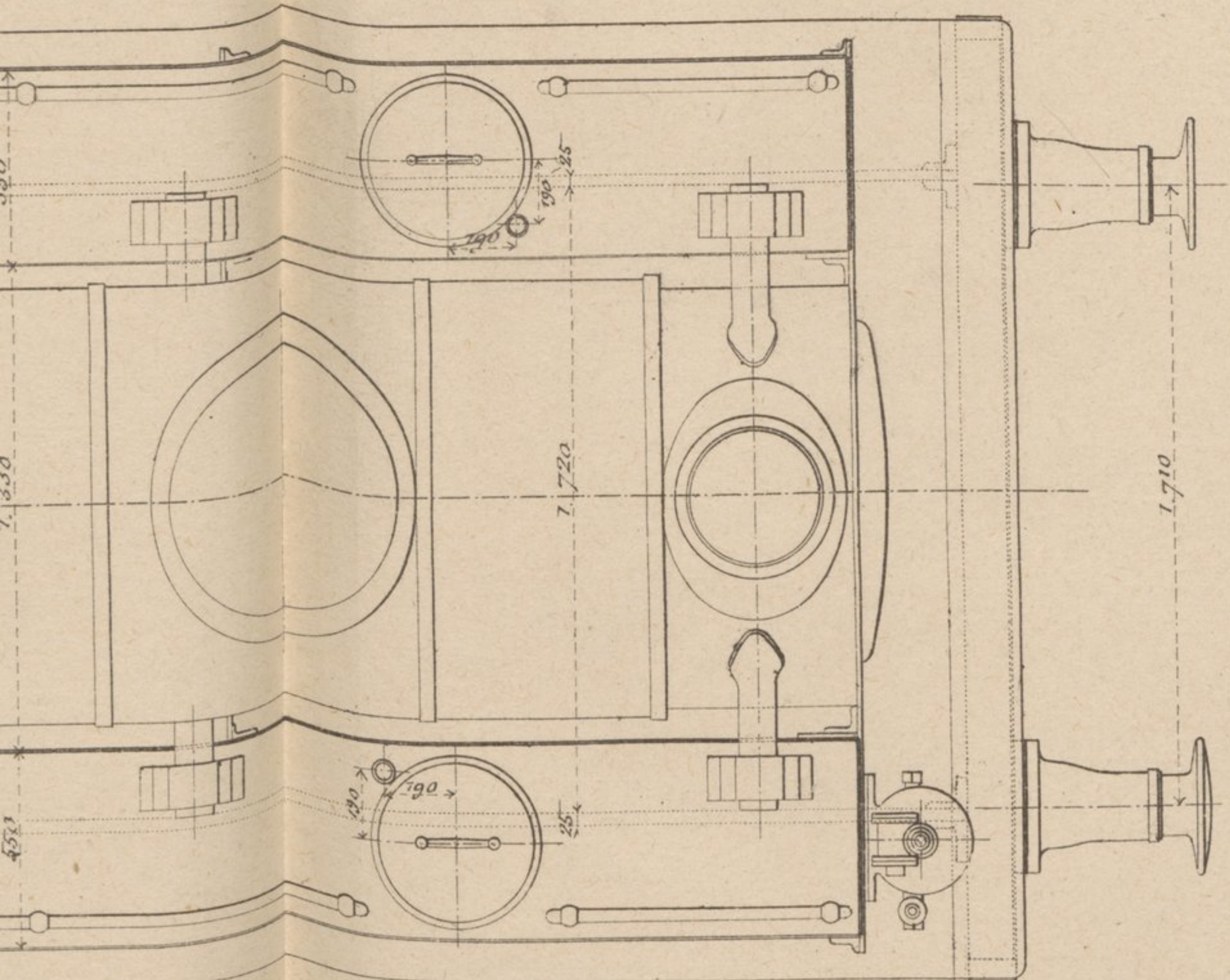
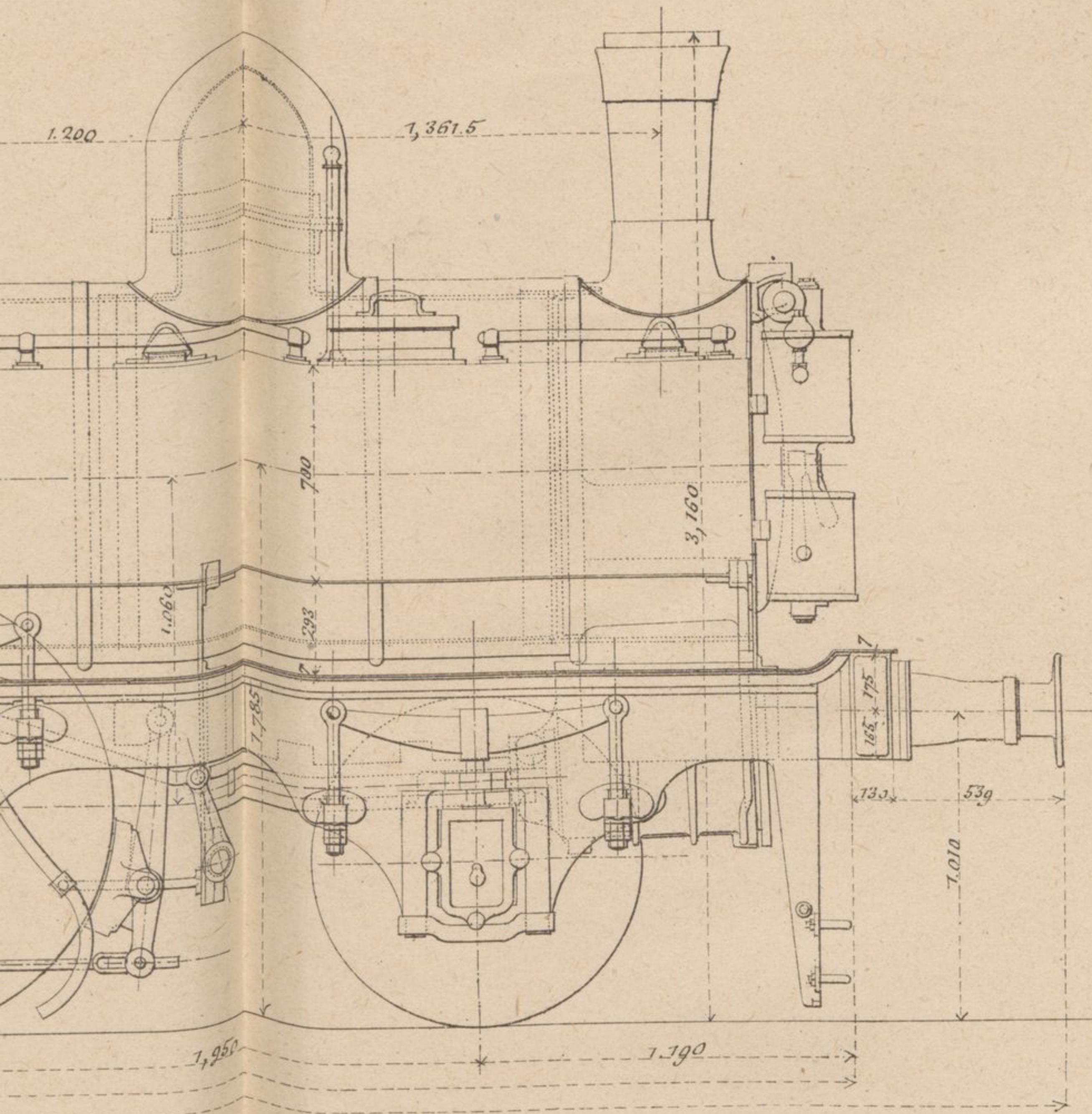
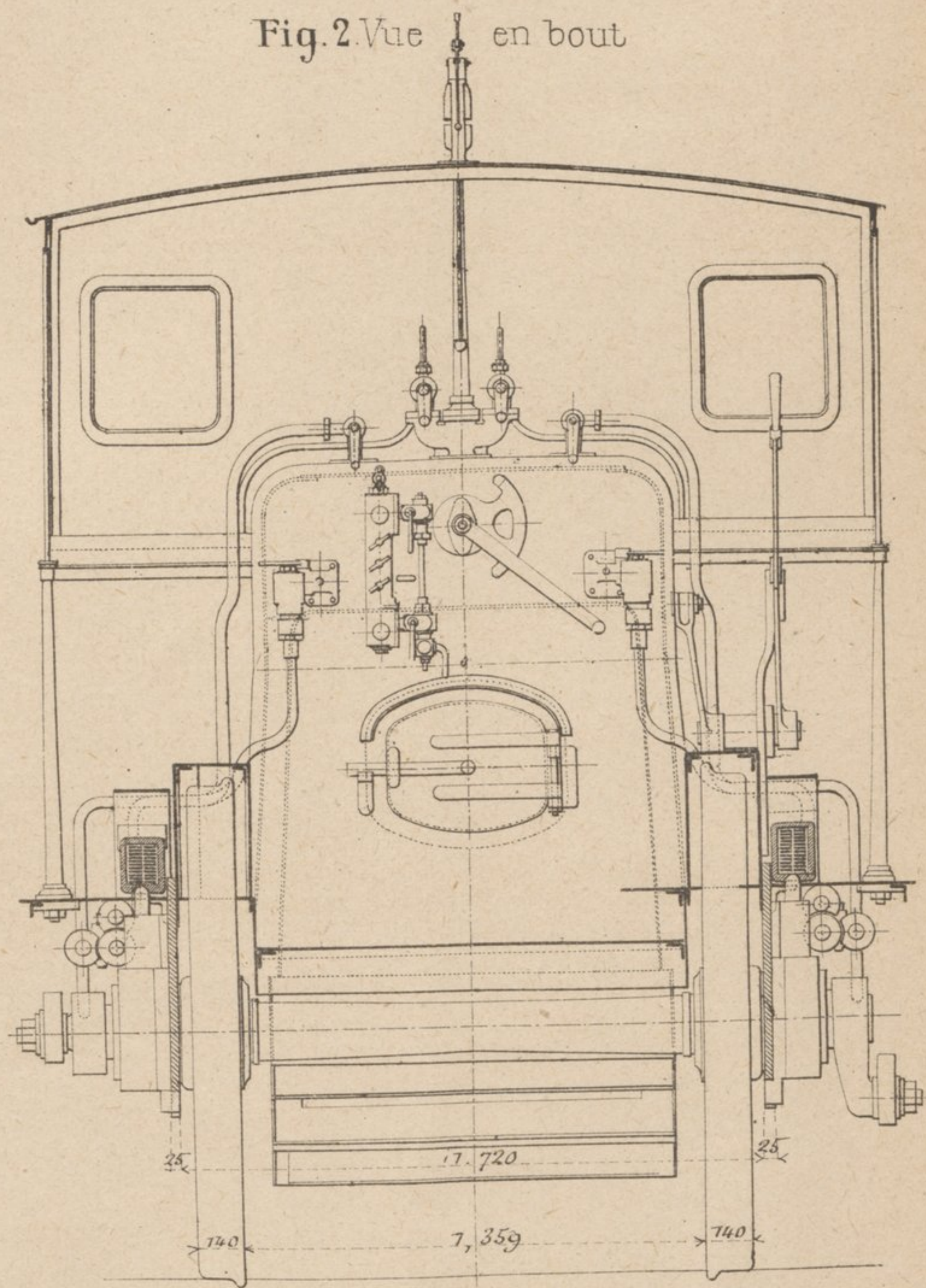


Fig.2.Vue en bout



Dimensions principales

Cylindres à vapeur	Nombre	2
	Diamètre	m/m 350
	Course	m/m 460
Diamètre des roues motrices	m.	1,450
Diamètre des roues porteuses	m.	1,060
Ecartement des roues accouplées	m.	2,320
Ecartement total	m.	4,270
Pression effective de la vapeur	atm.	8
Nombre de tubes		136
Diamètre extérieur des tubes	m/m	45
Diamètre intérieur des tubes	m/m	40
Longueur libre des tubes	m.	2,707
Surface de grille	m.q.	1,50
Surface de chauffe	de la boîte à feu	m.q. 6,58
	des tubes	m.q. 52,10
	totale	m.q. 58,68
Poids à vide	K ^{os}	26.000
Poids adhérent	K ^{os}	22.300
Poids en service	K ^{os}	32.000
Eau dans les soutes	lit.	3.600
Charbon dans les soutes	K ^{os}	1.200

Fig. 1. — Coupe longitudinale

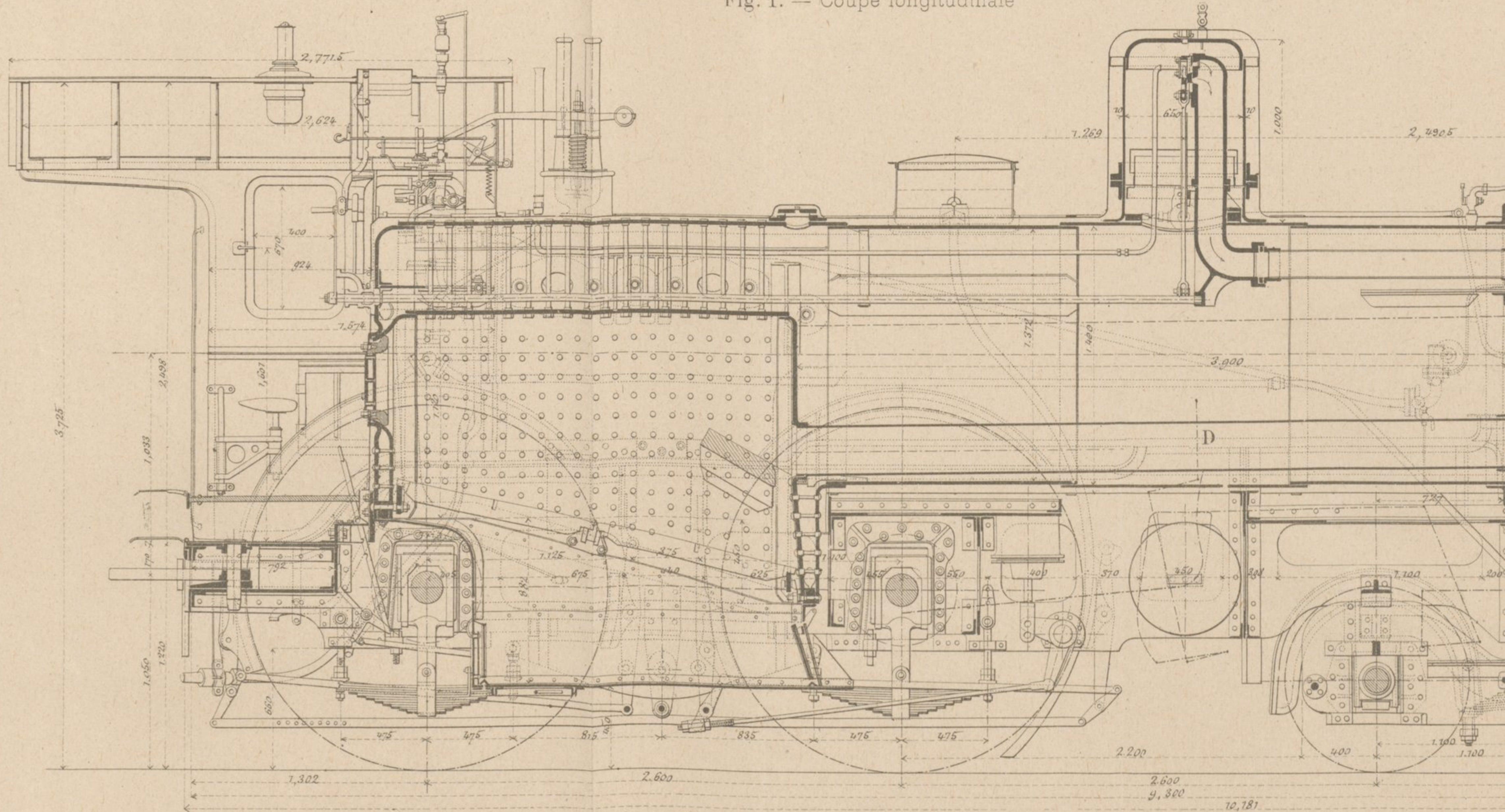
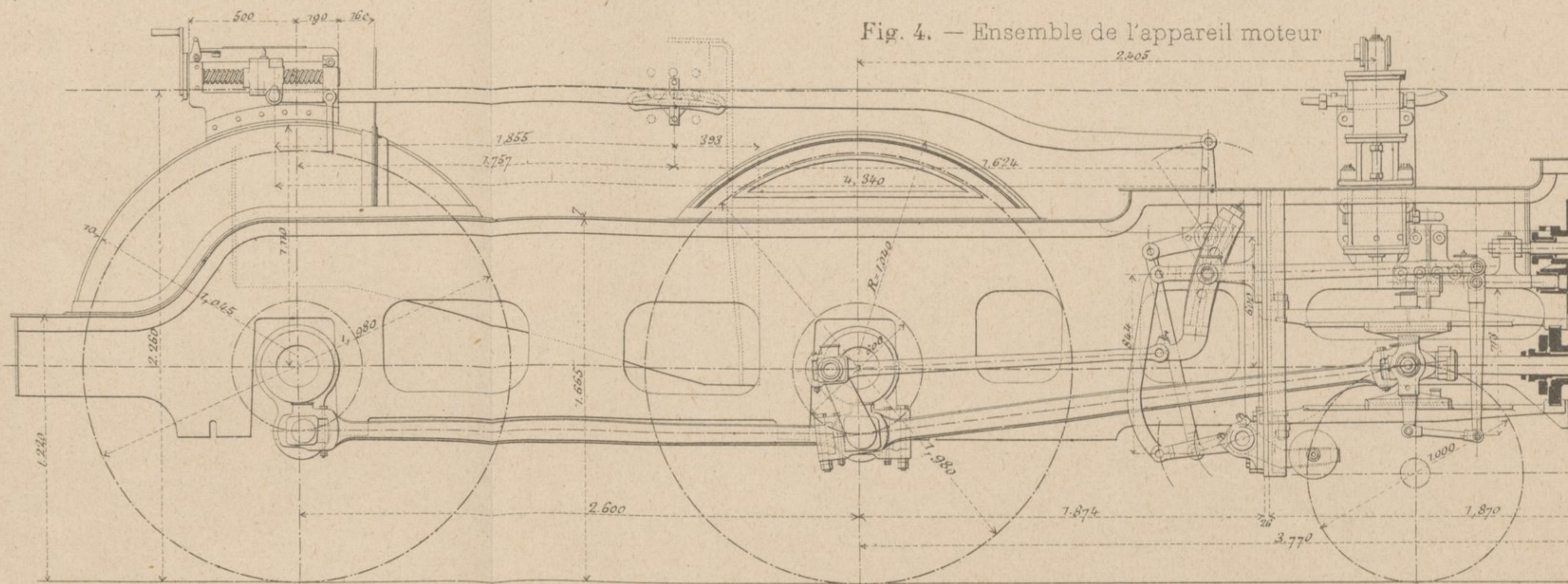


Fig. 4. — Ensemble de l'appareil moteur



SURCHAUFFEUR DES ATELIERS BORSIG A BERLIN

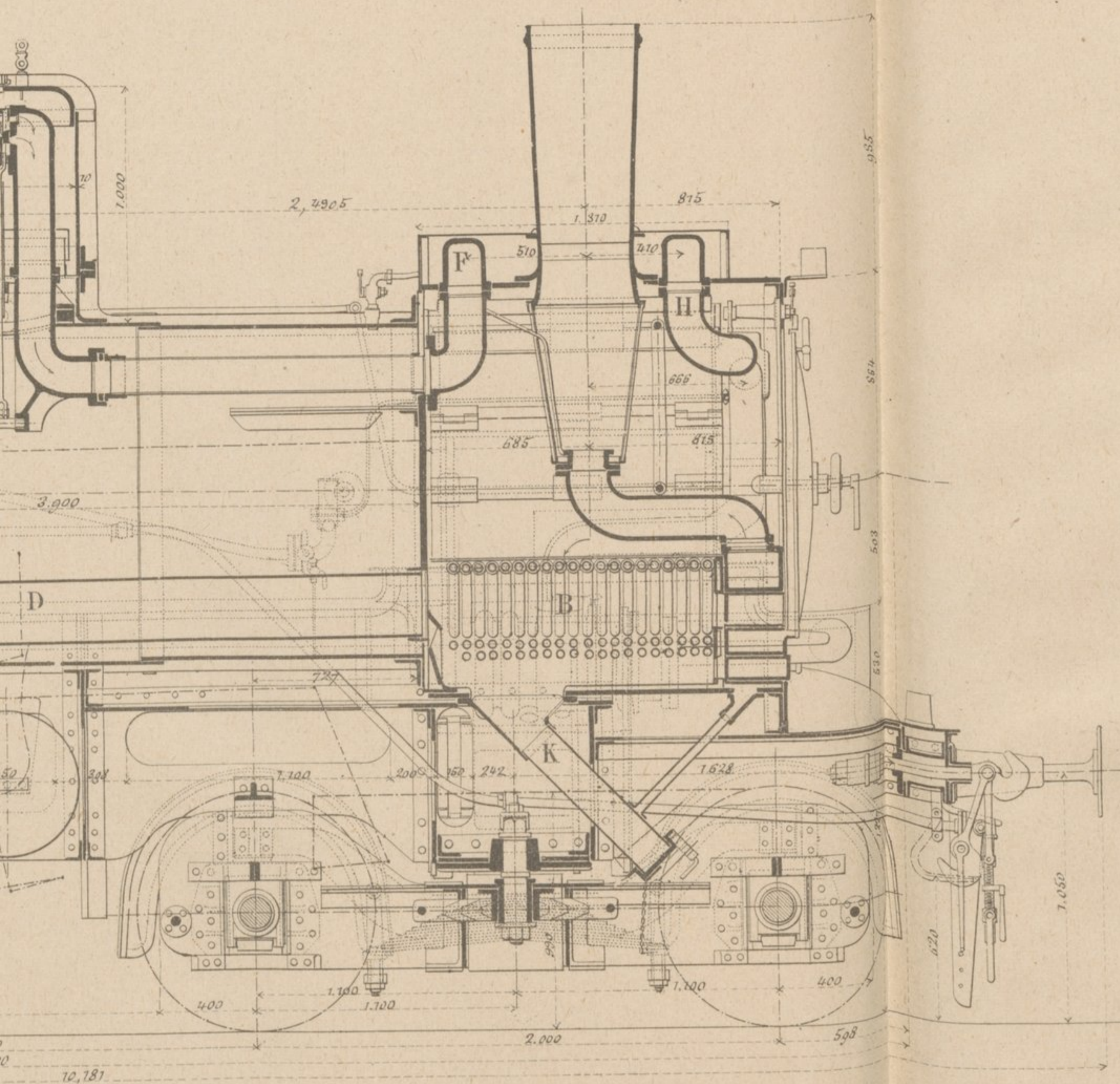


Fig. 2. — Coupe transversale par le surchauffeur

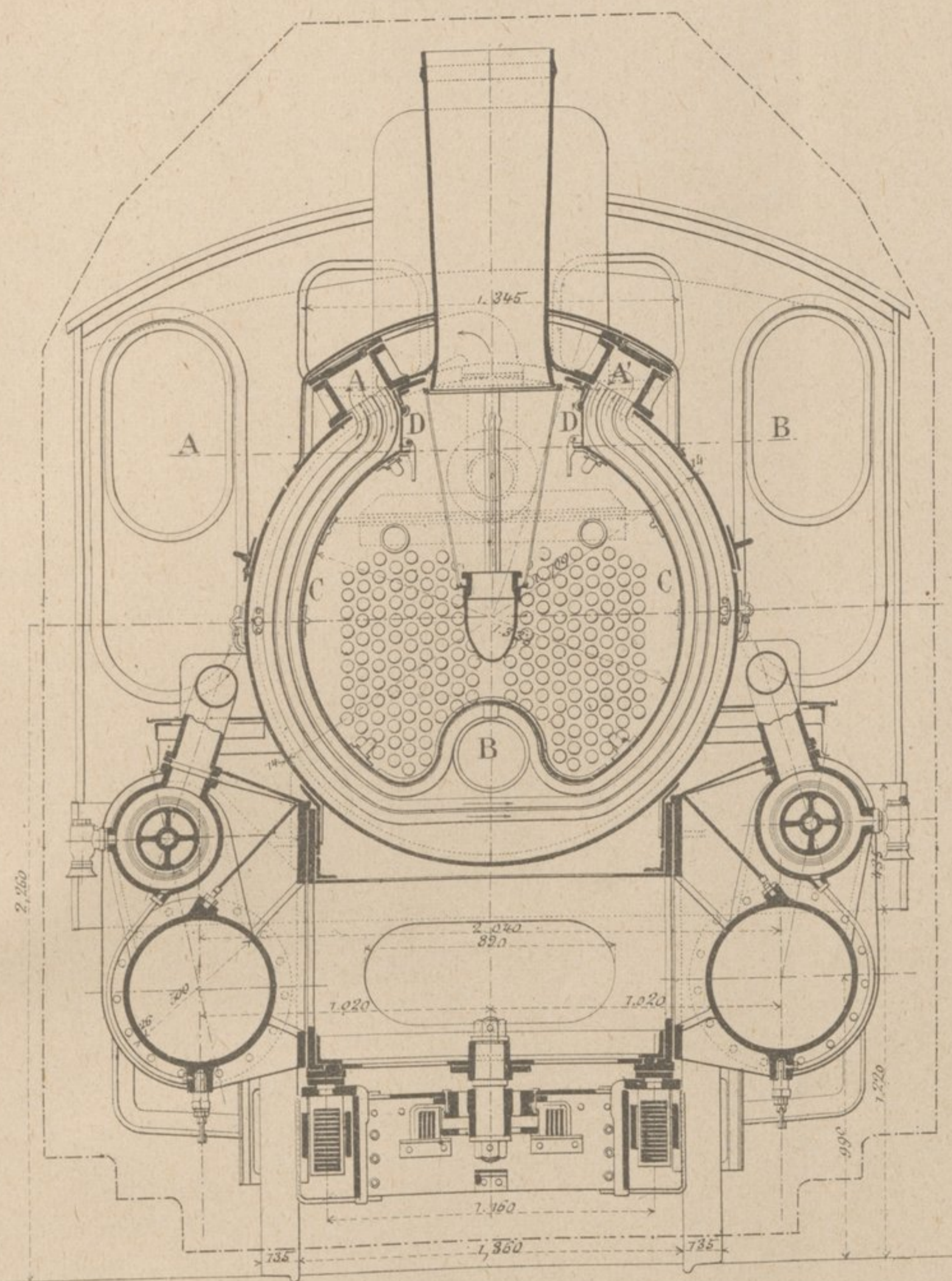
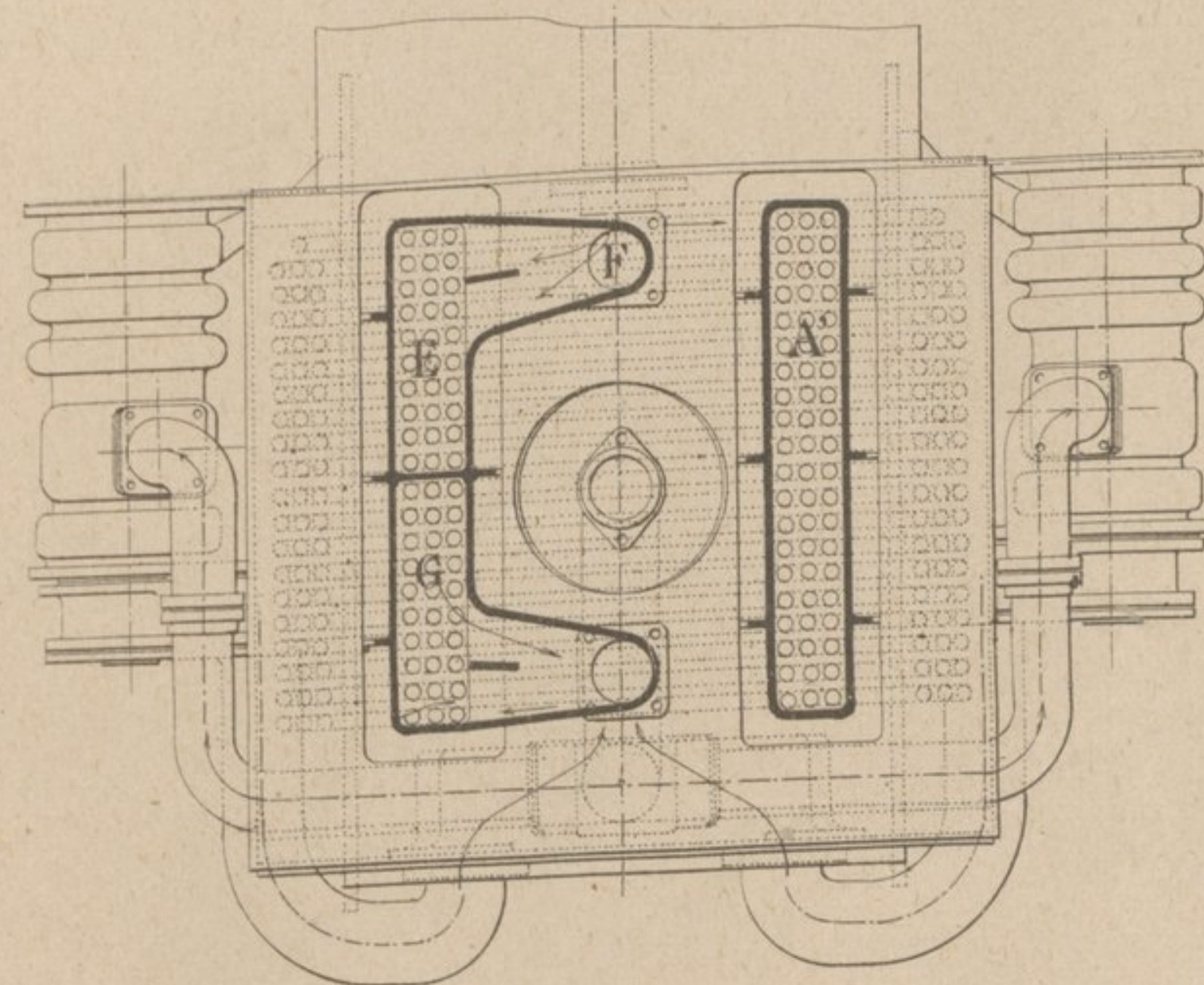
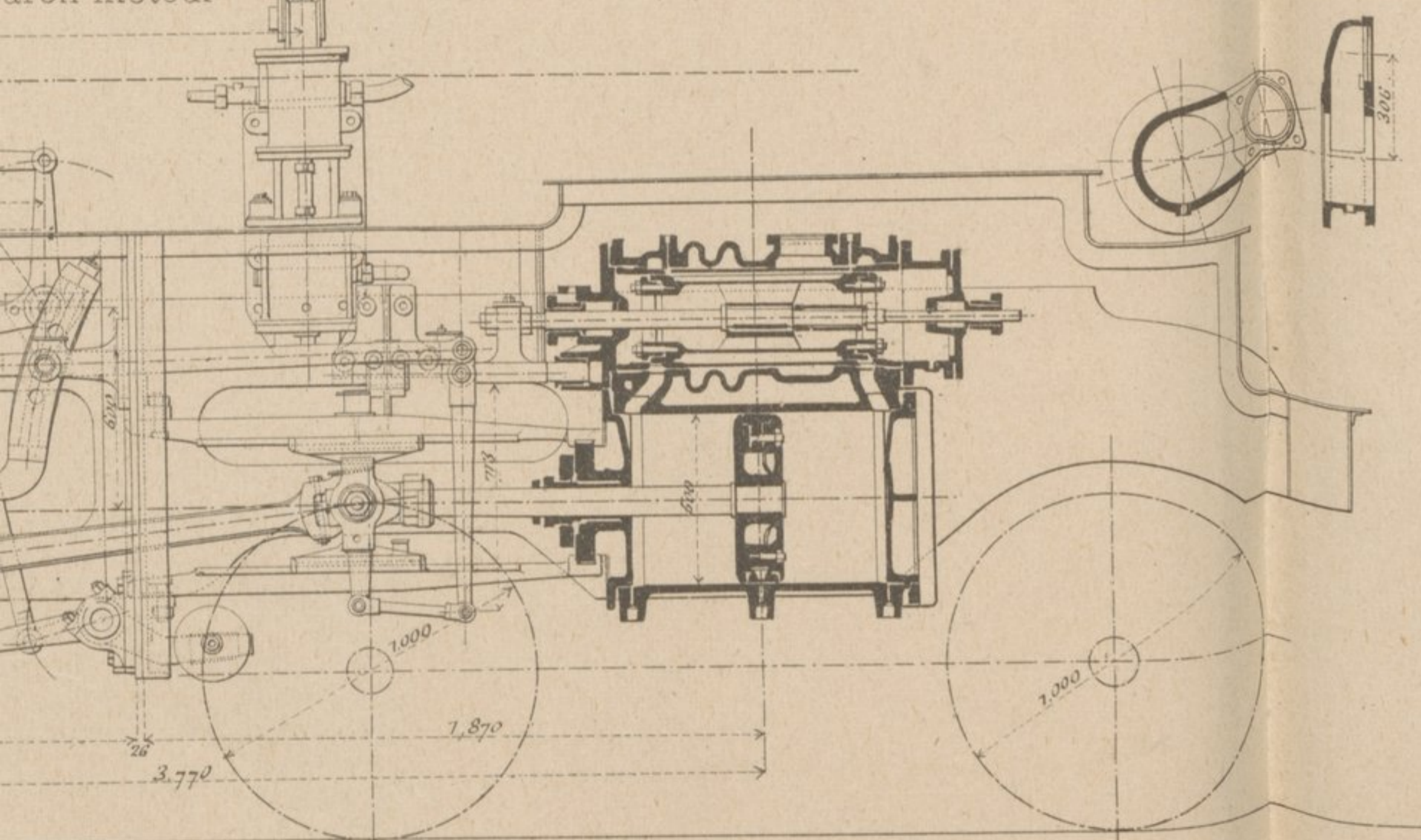
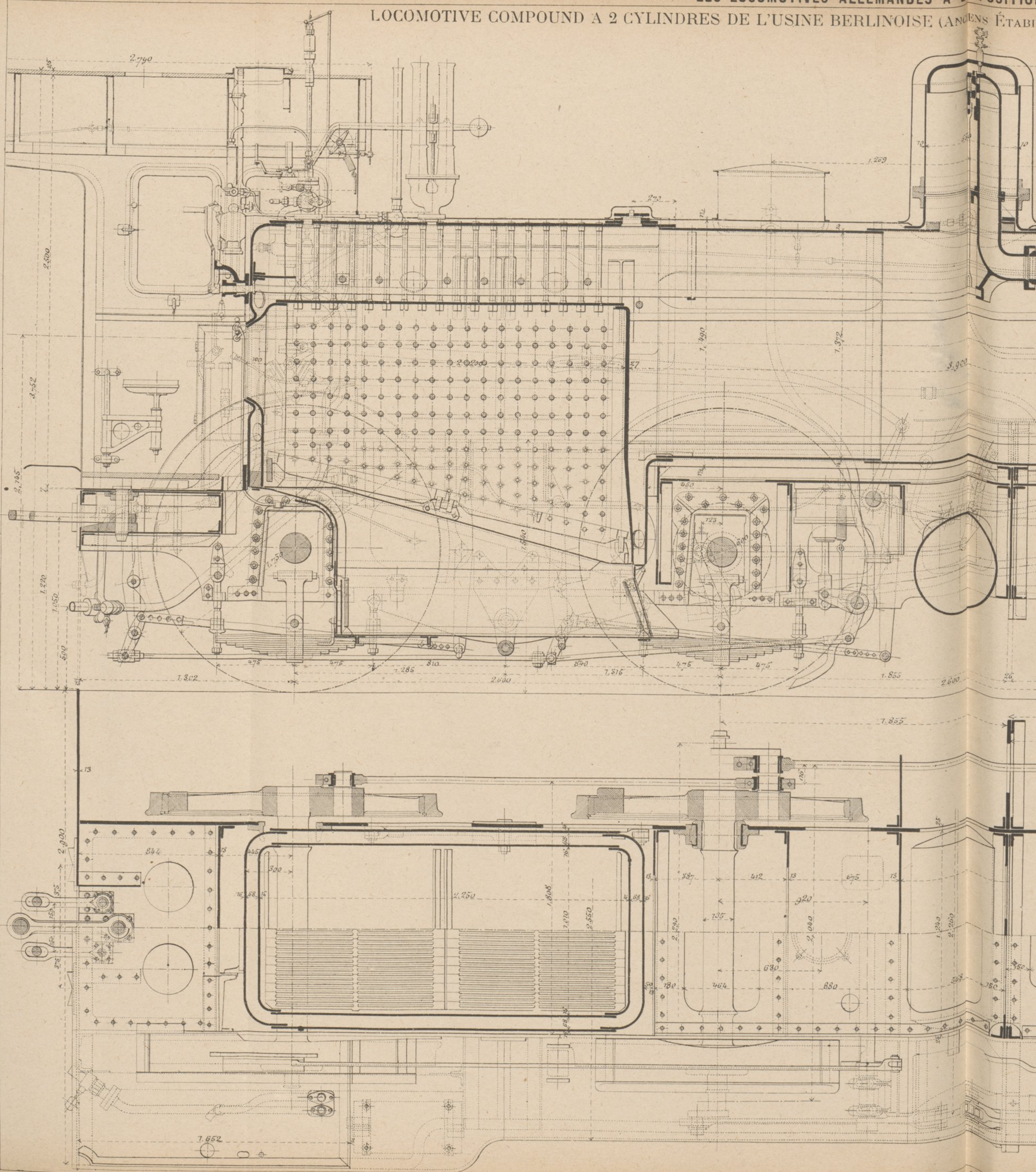


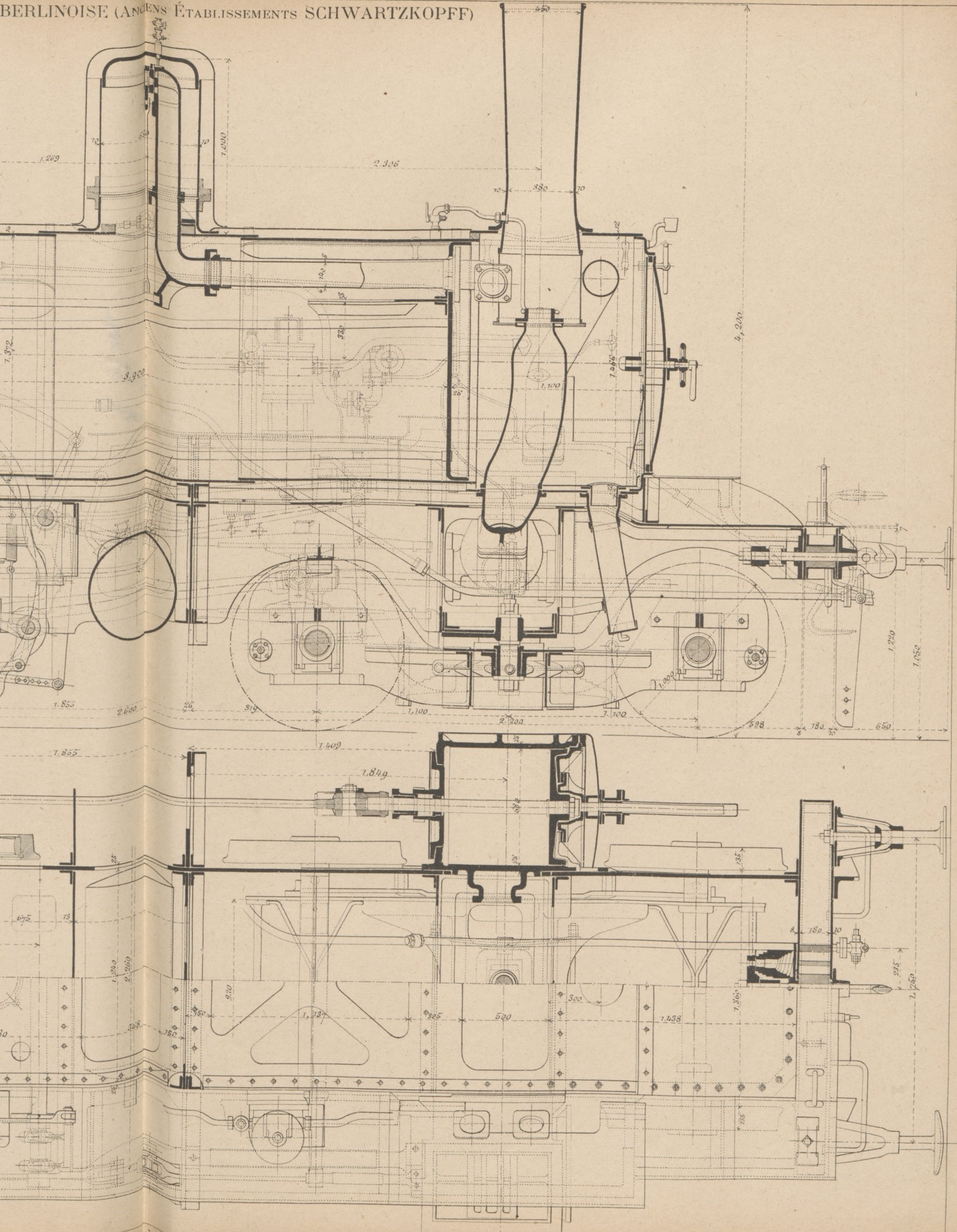
Fig. 3. — Coupe horizontale suivant A B

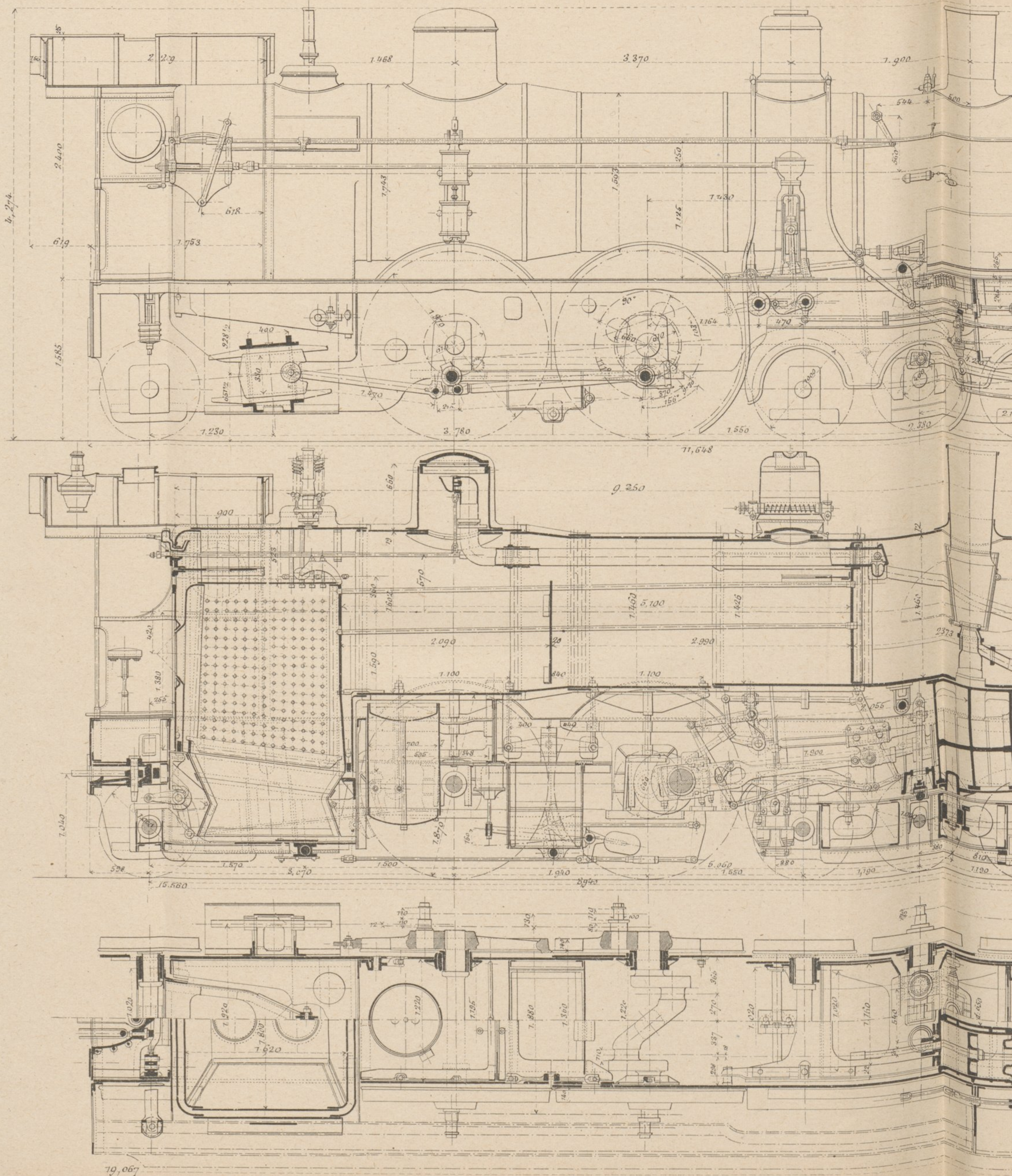
areil moteur



LOCOMOTIVE COMPOUND A 2 CYLINDRES DE L'USINE BERLINOISE (ANCIENS ÉTABLISSEMENTS BERLINOISES)



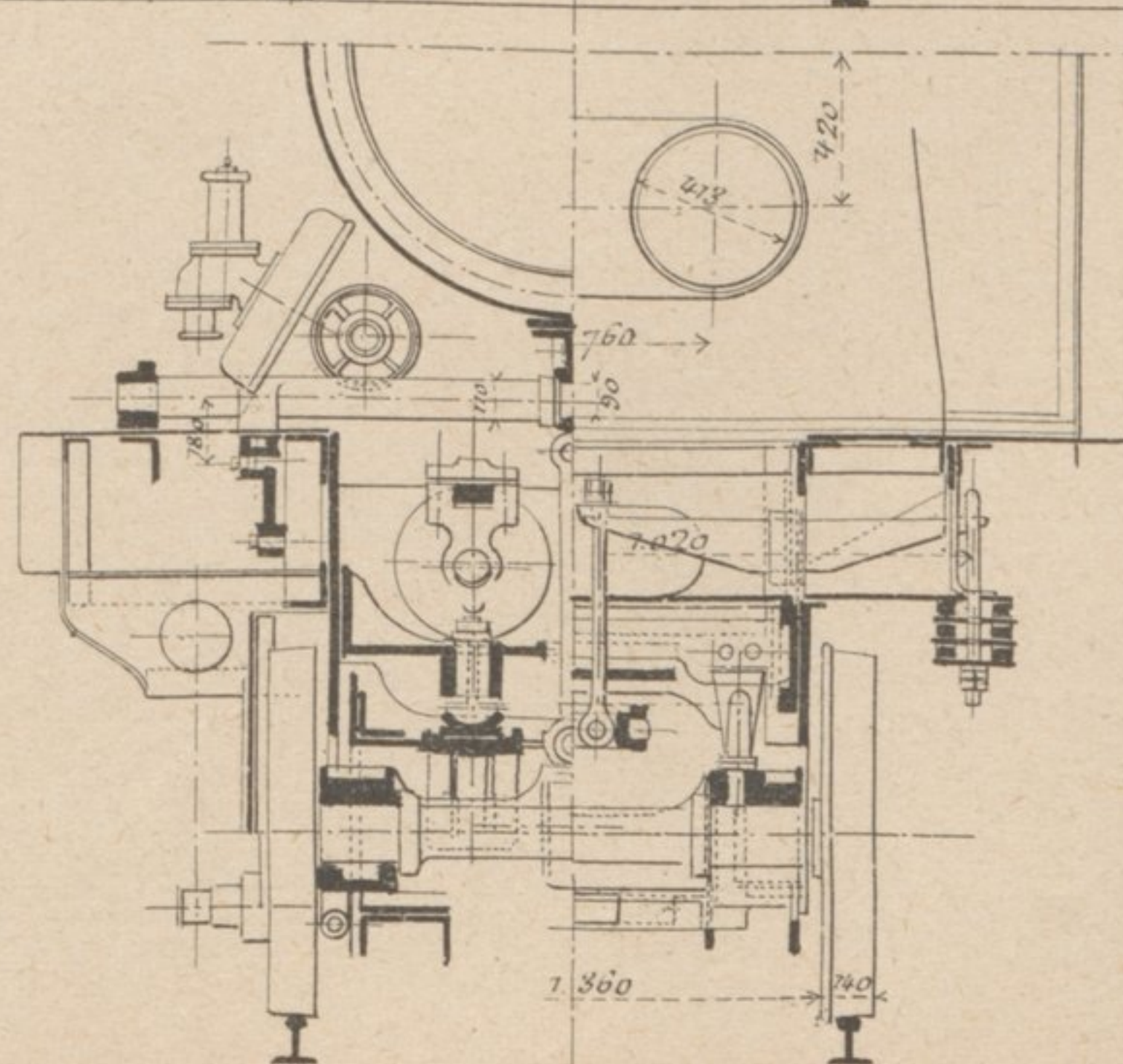
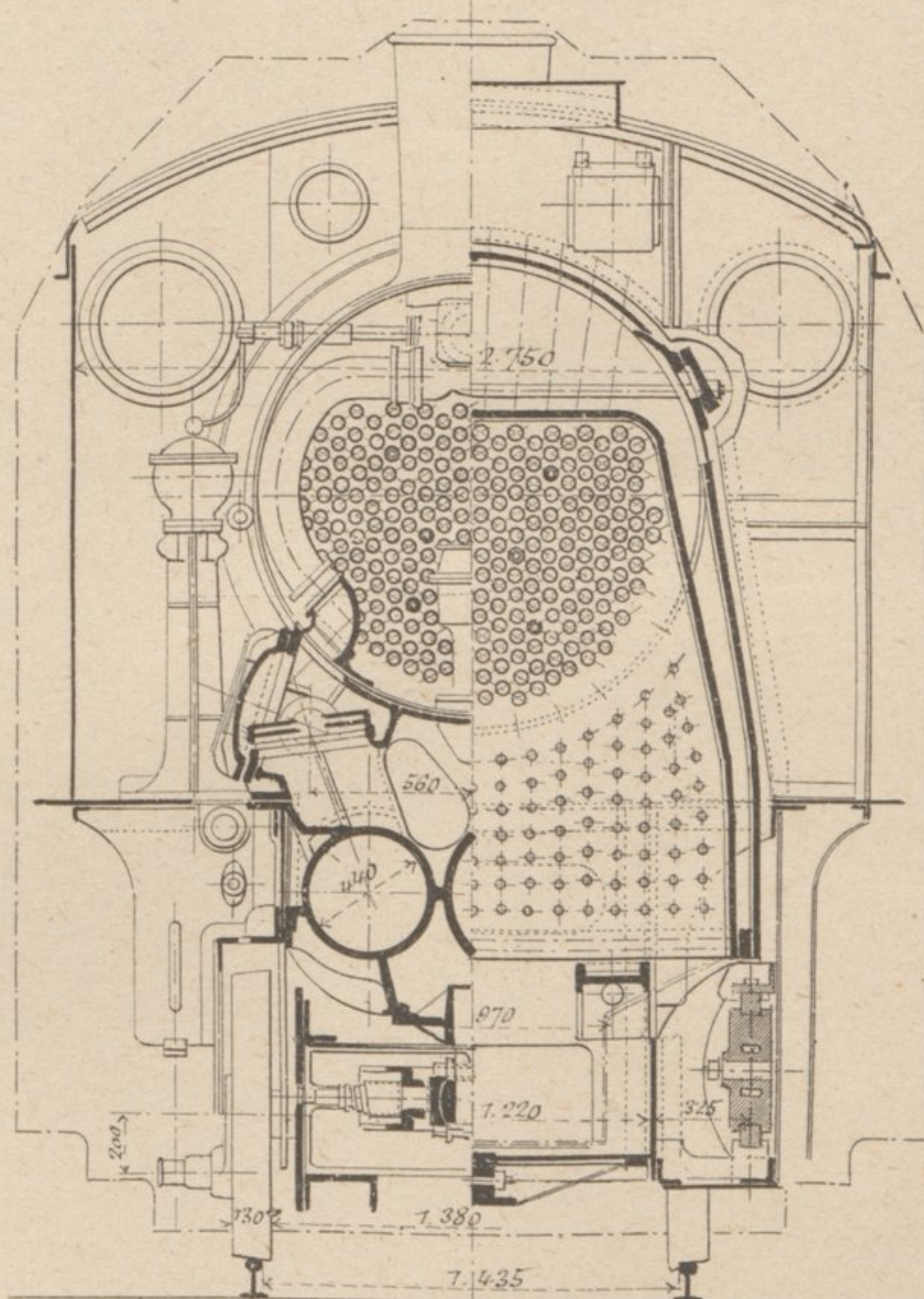
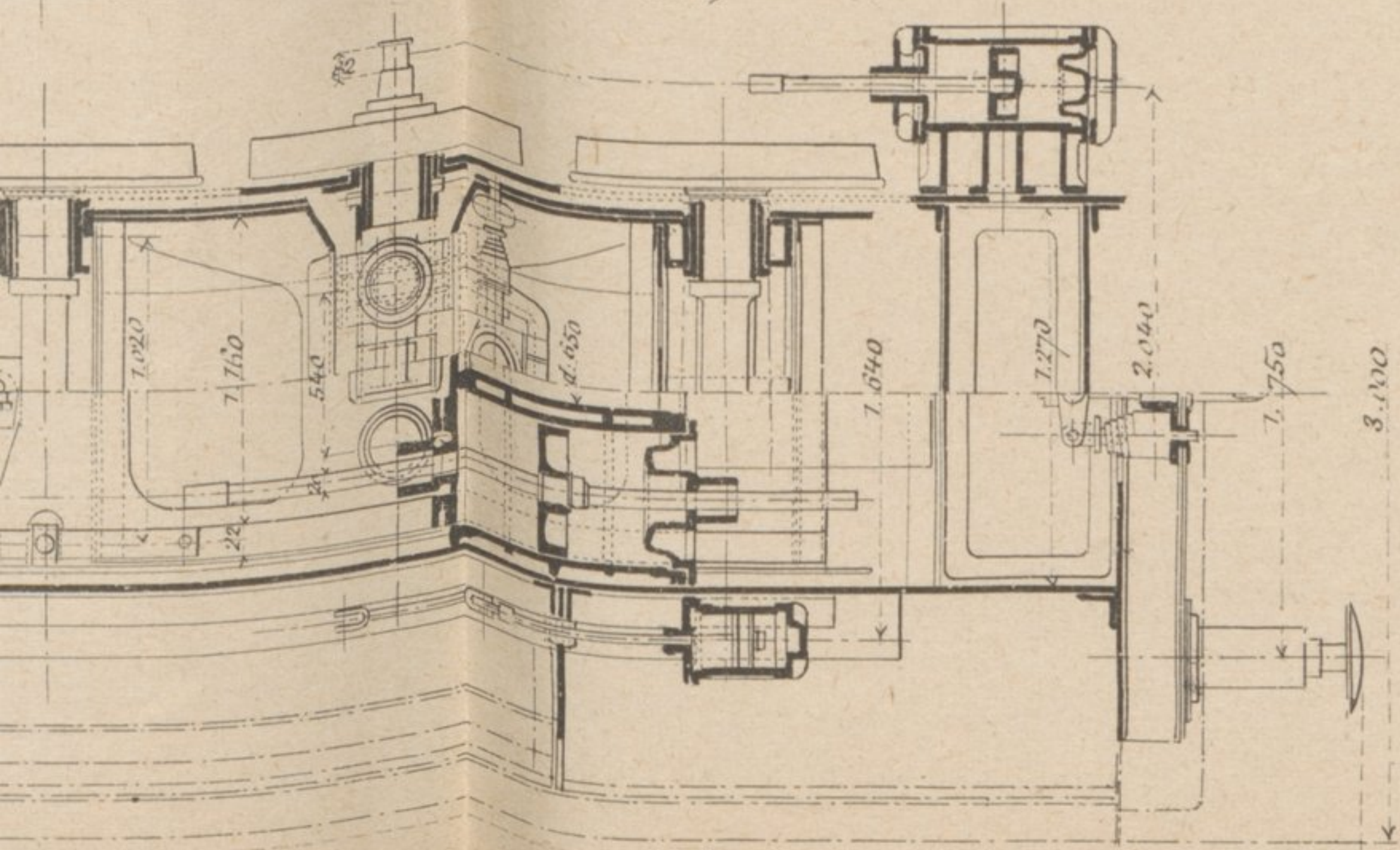
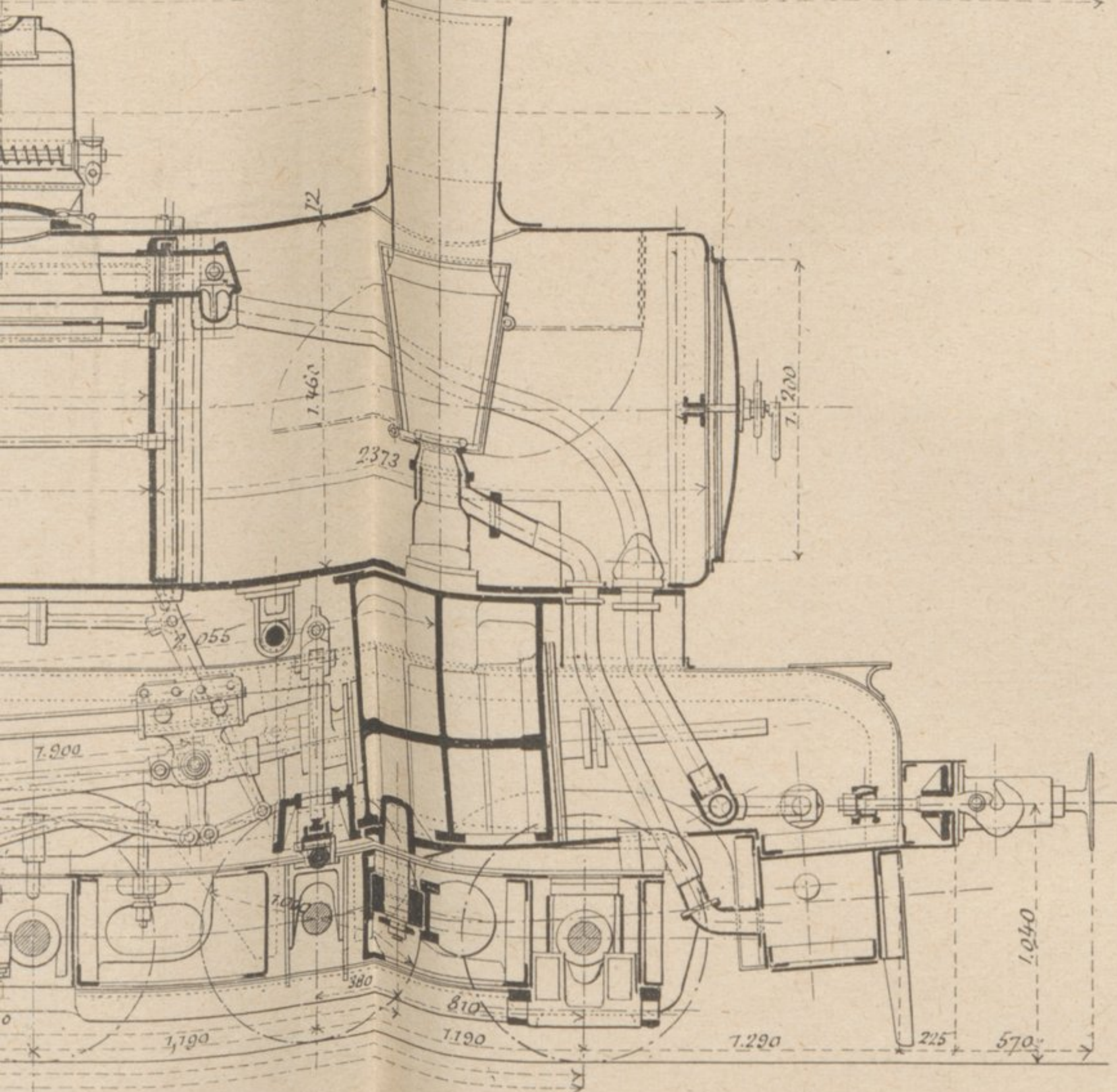
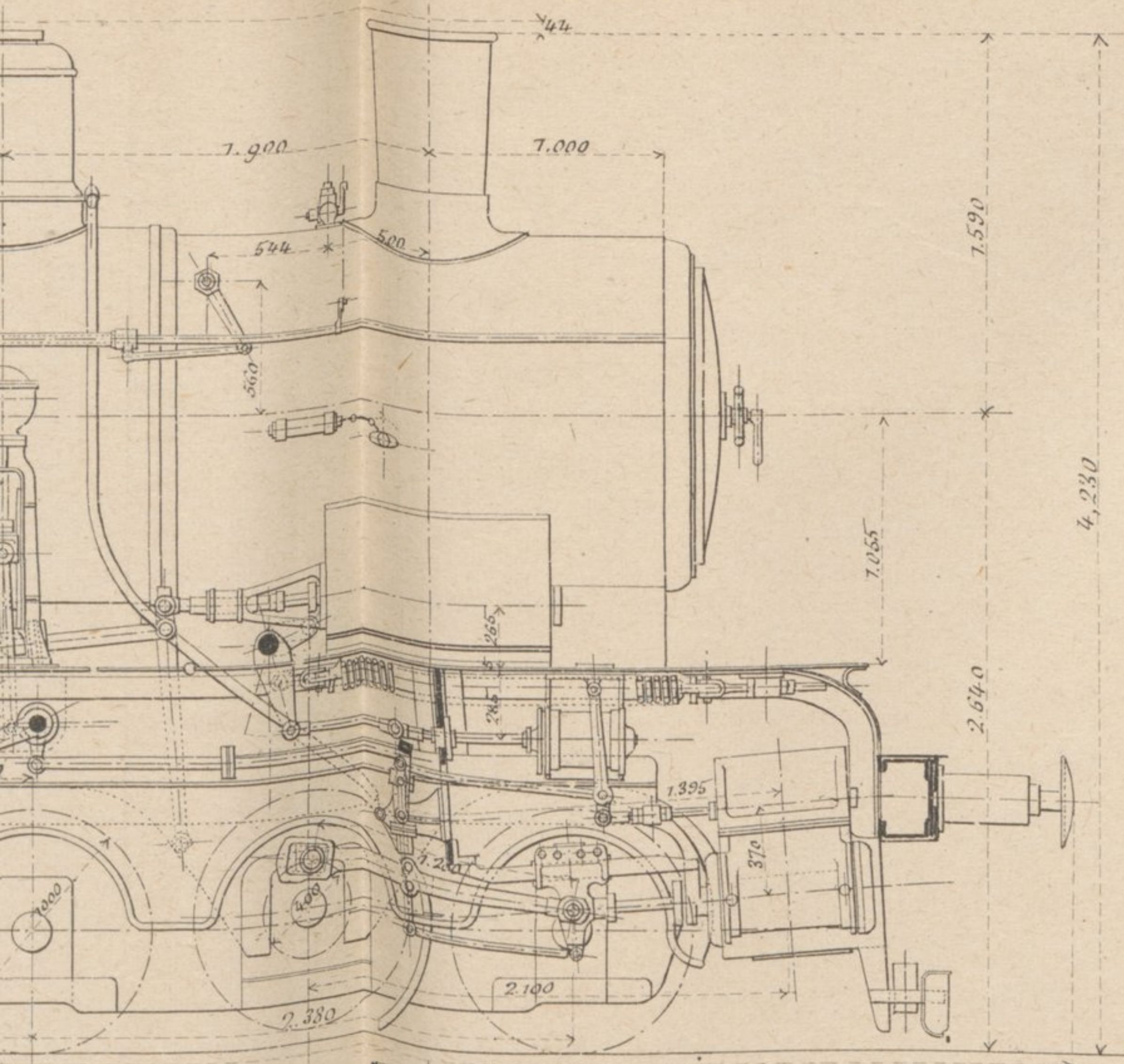




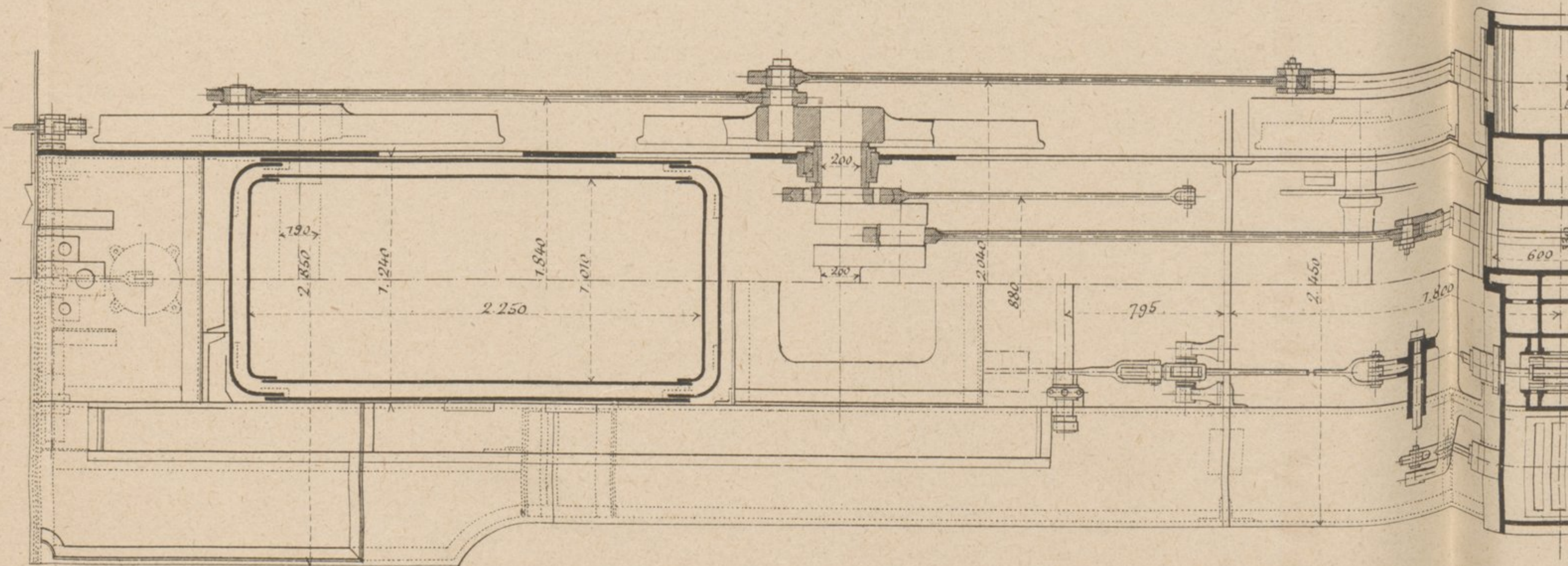
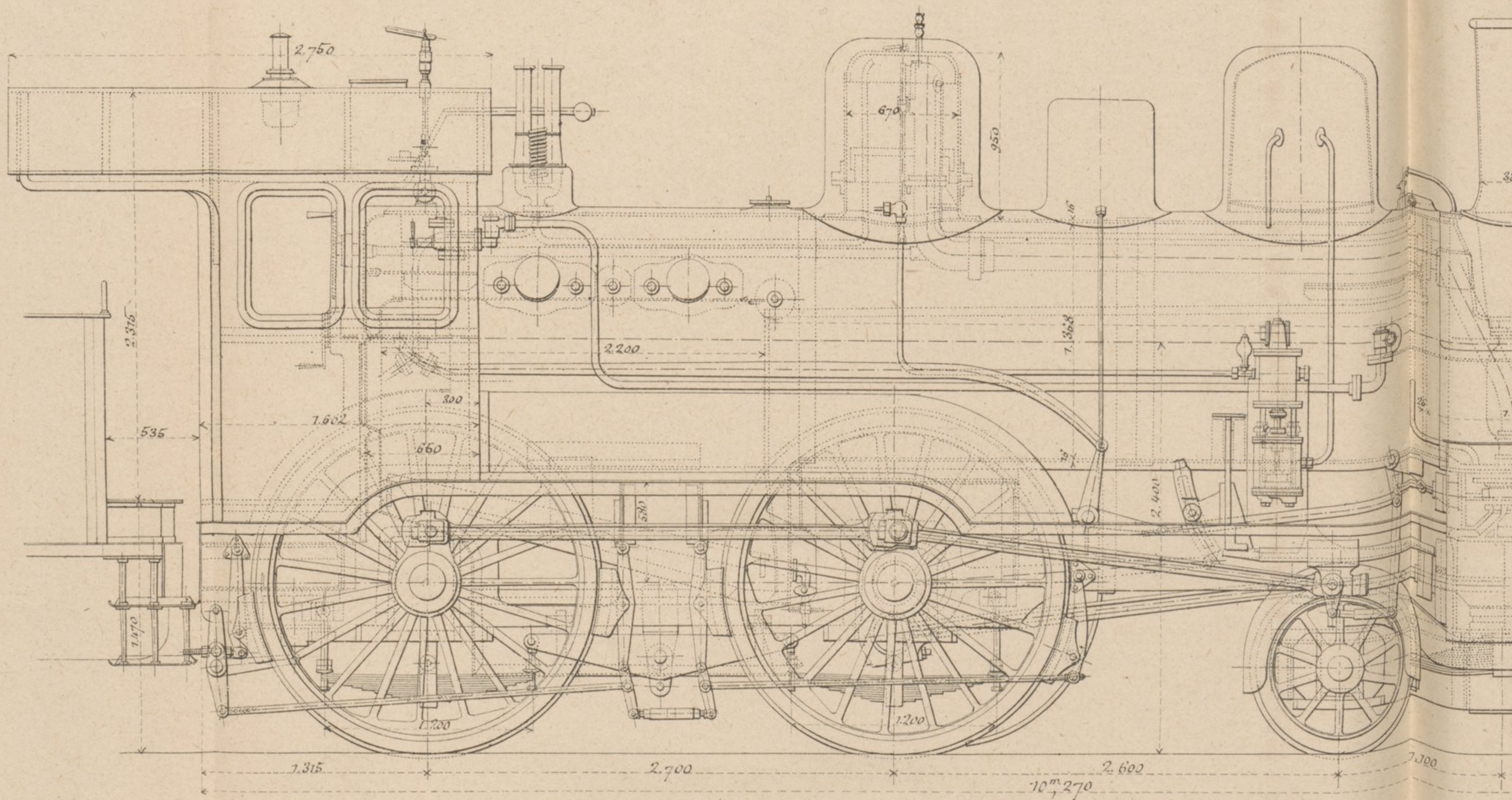
LOCOMOTIVE COMPOUND A 2 CYLINDRES
 AVEC ESSIEU MOTEUR AUXILIAIRE
 de l'Usine KRAUSS à Munich.

Légende

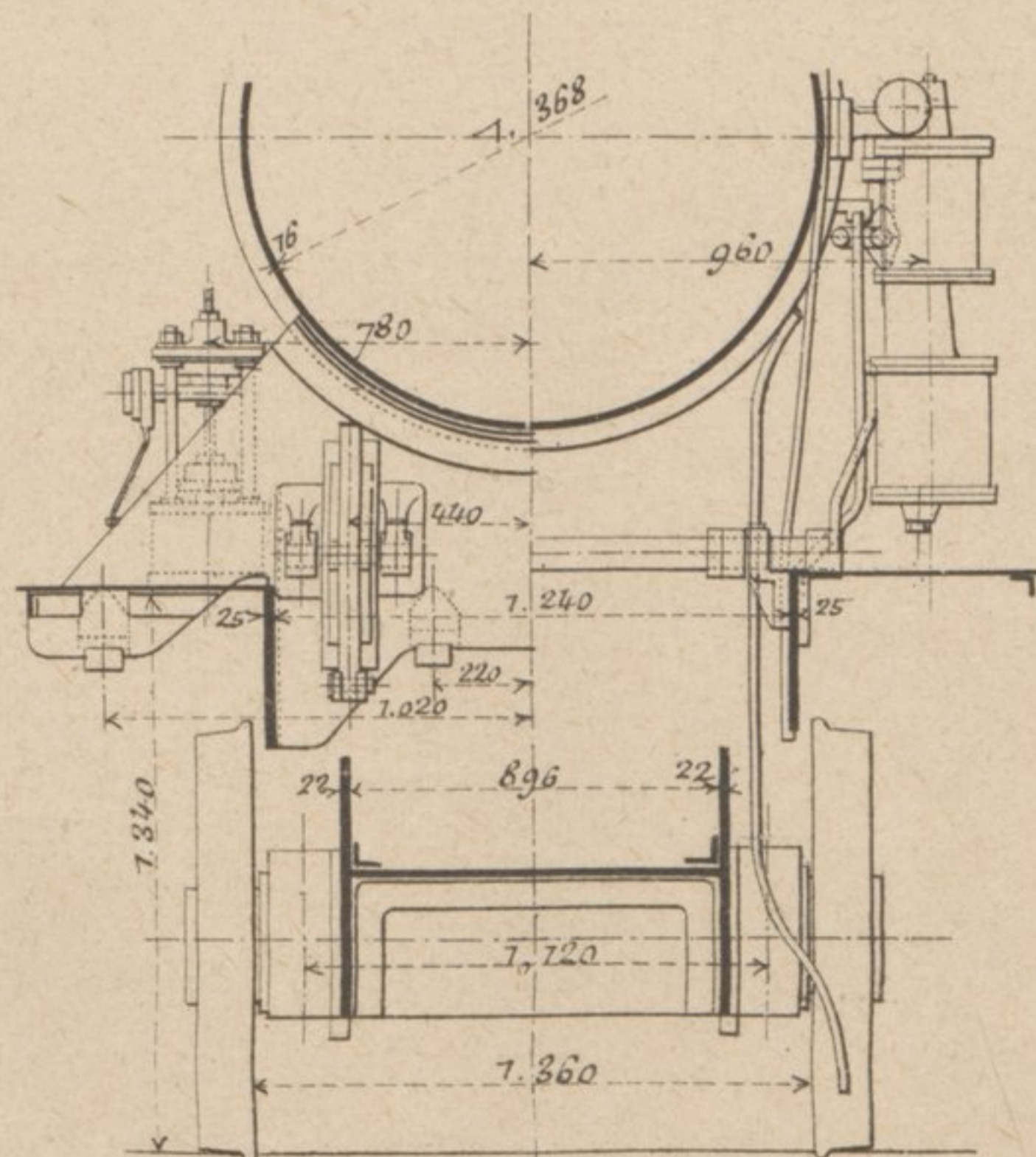
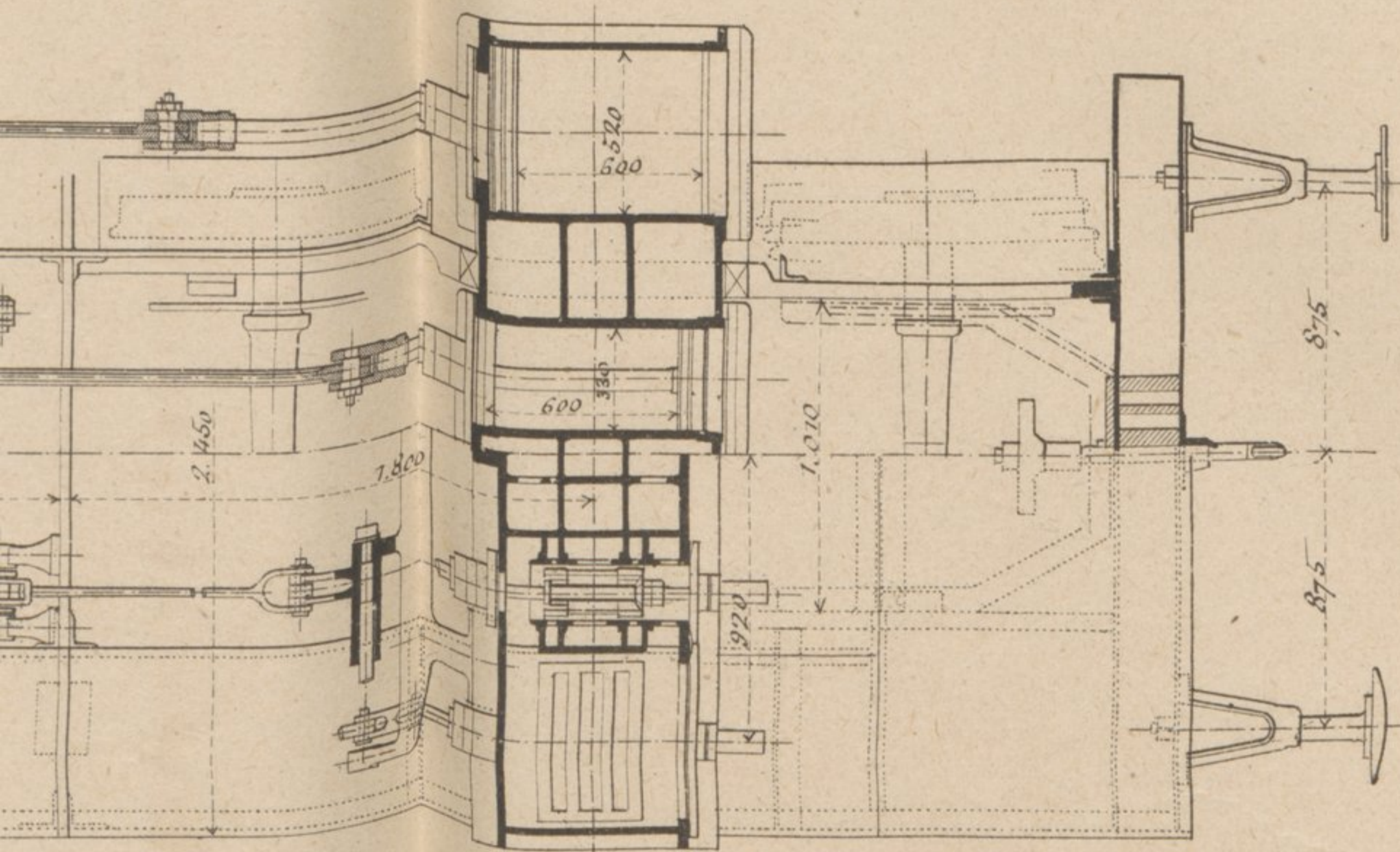
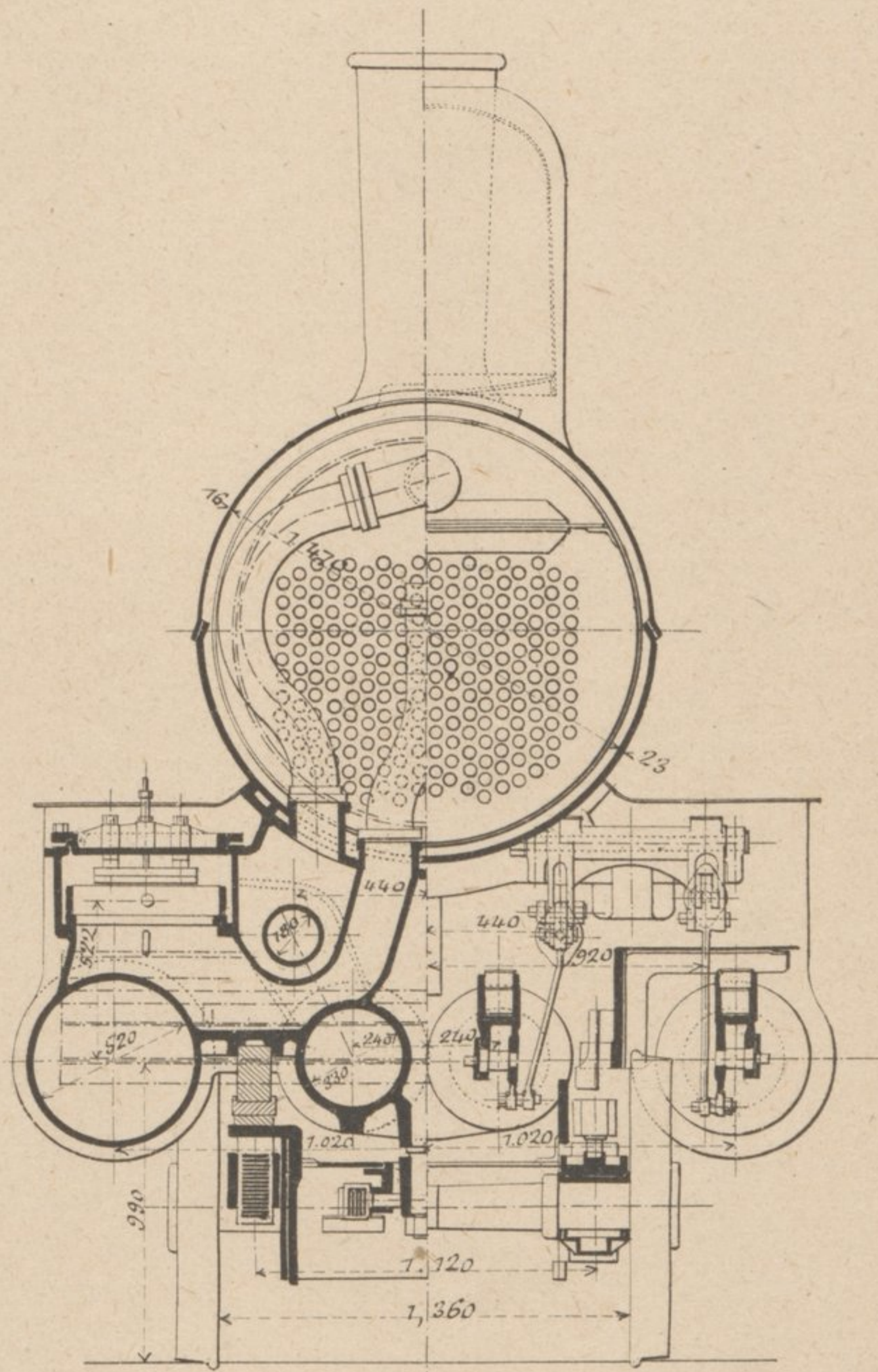
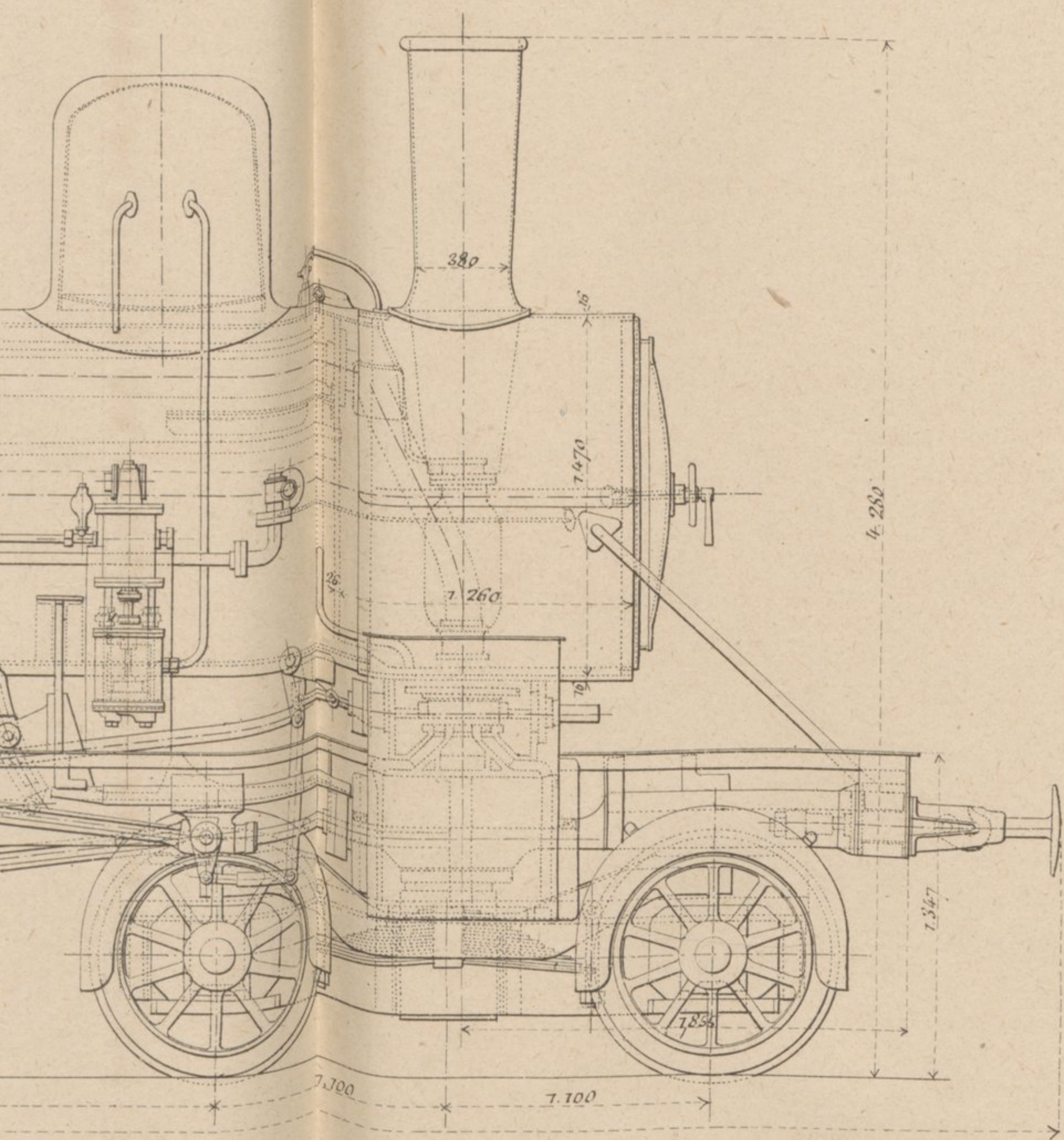
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Diamètre des roues couplées	1m870
Timbre de la chaudière	14 kil.
Surface de chauffe	190m98
Poids en service	68t00
Poids adhérent normal	28t20
Poids adhérent maximum	43t90



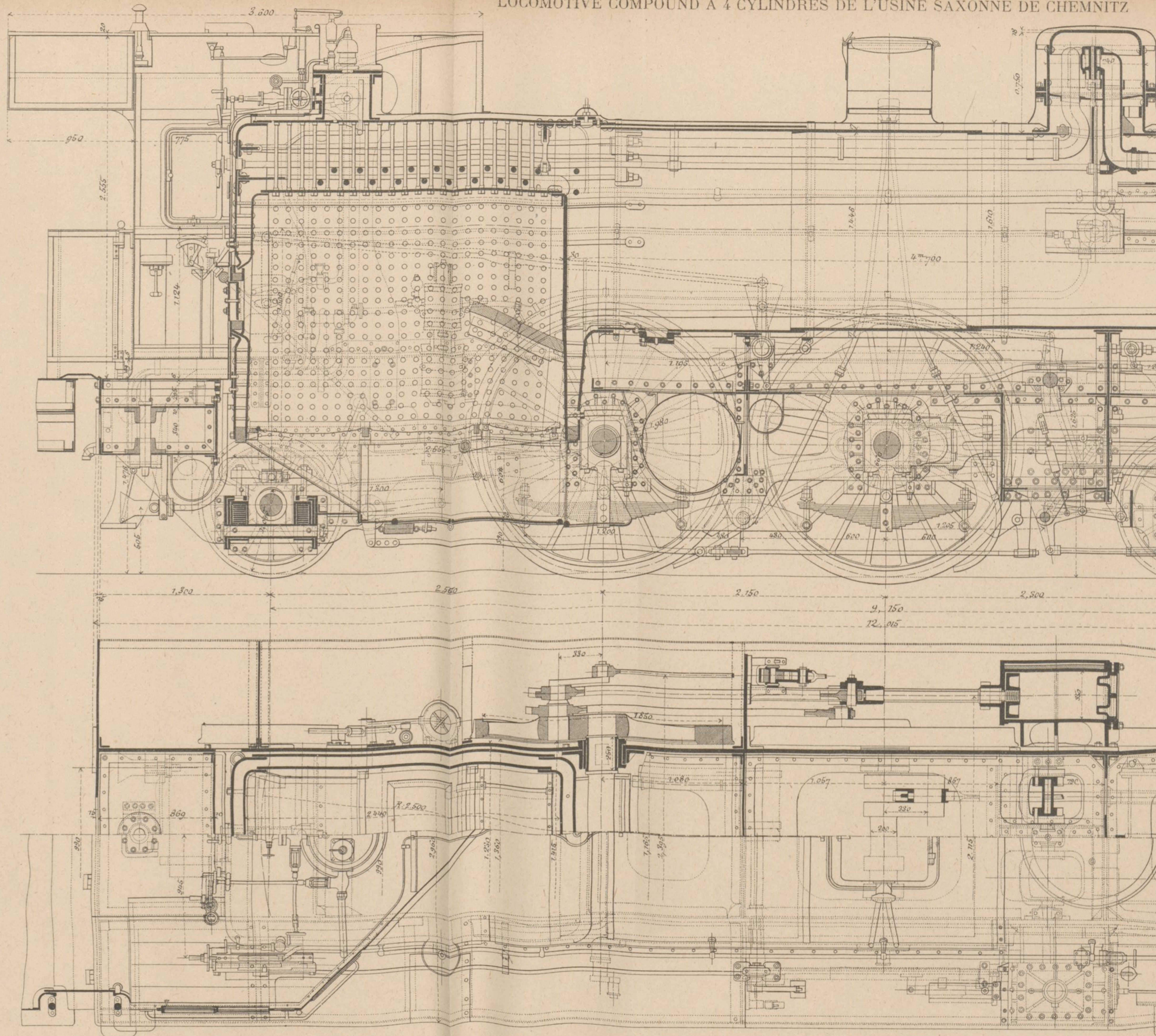
LOCOMOTIVE COMPOUND A 4 CYLINDRES D



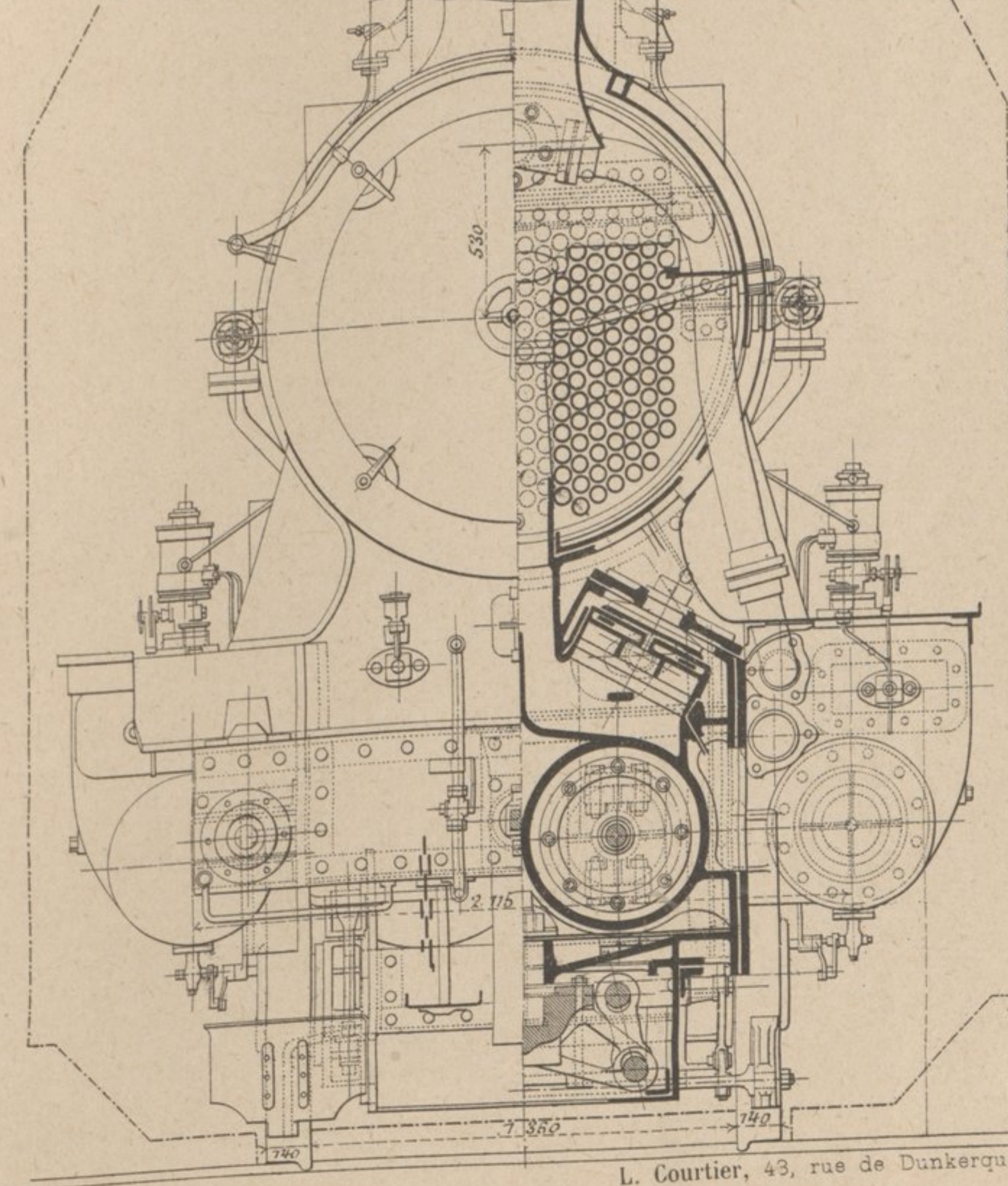
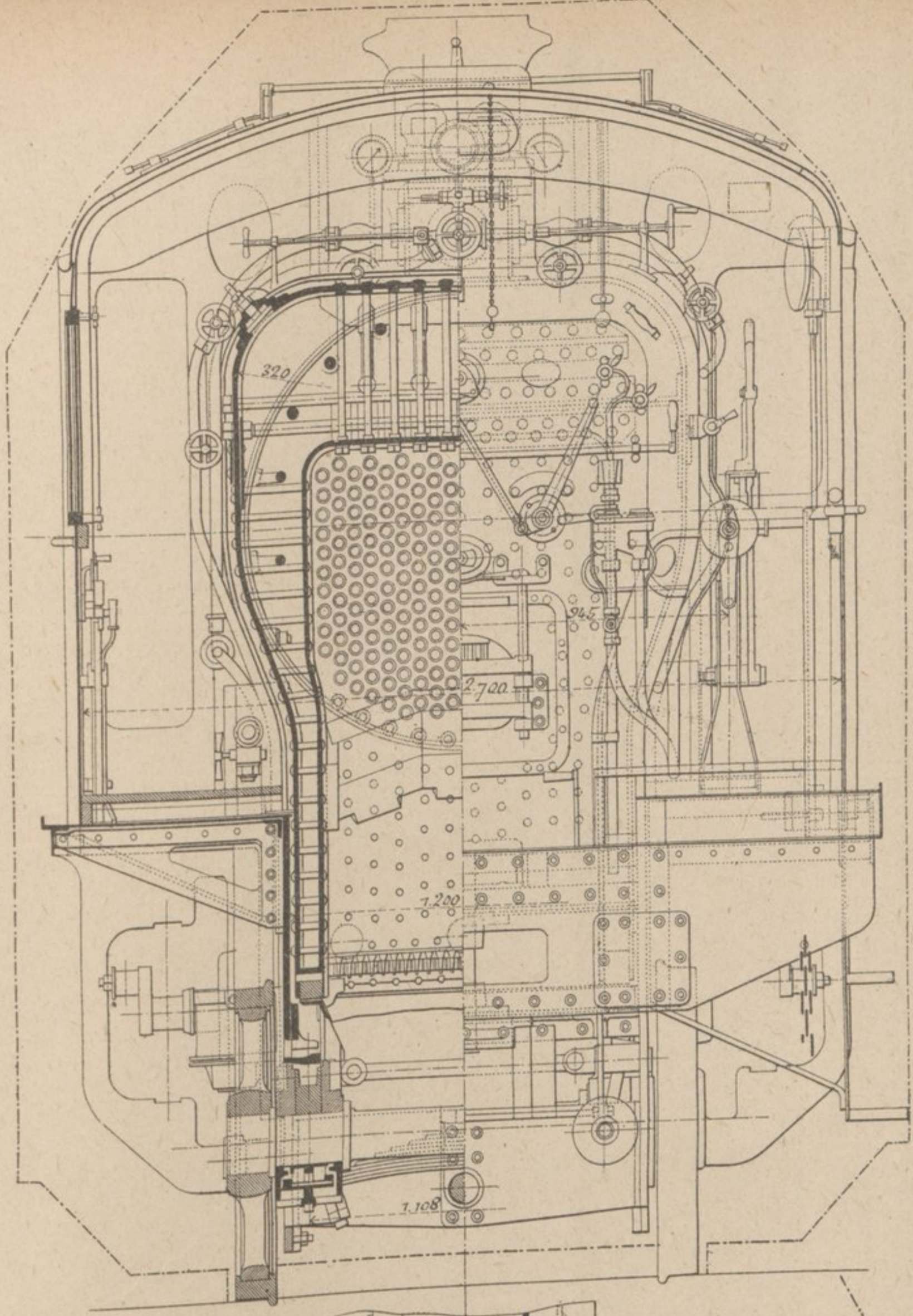
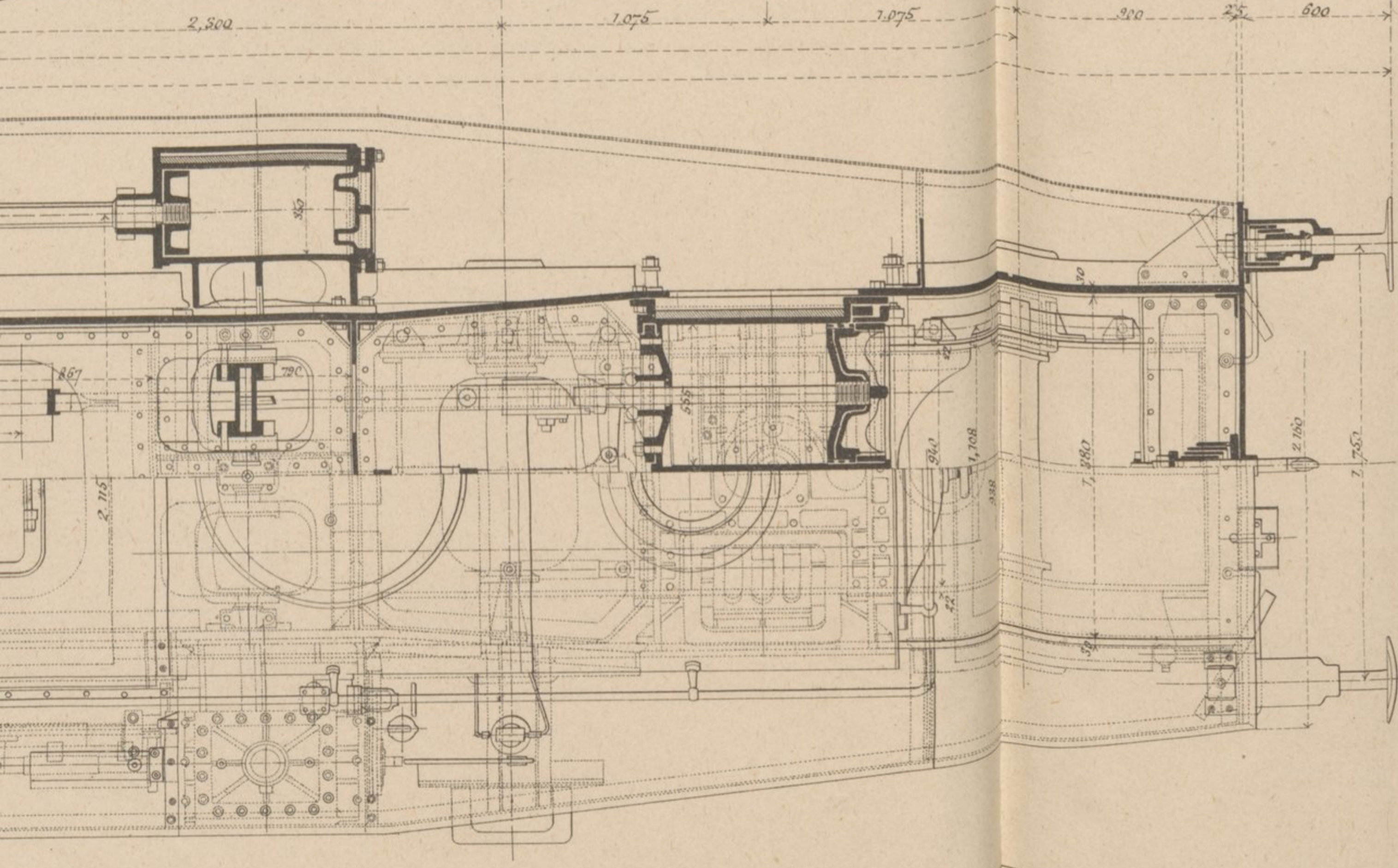
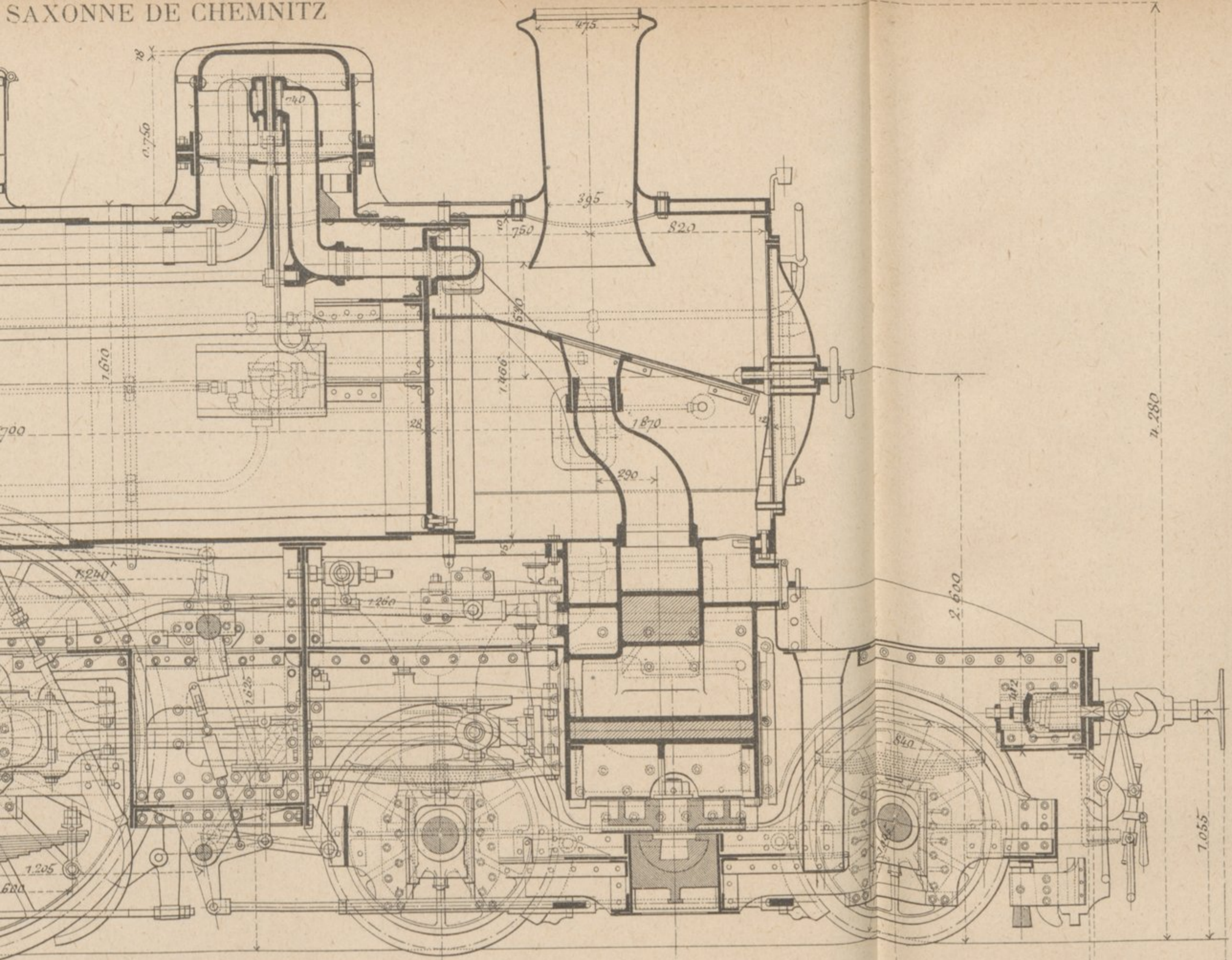
COMPOUND A 4 CYLINDRES DE LA SOCIÉTÉ HANOVRIENNE DE LINDEN

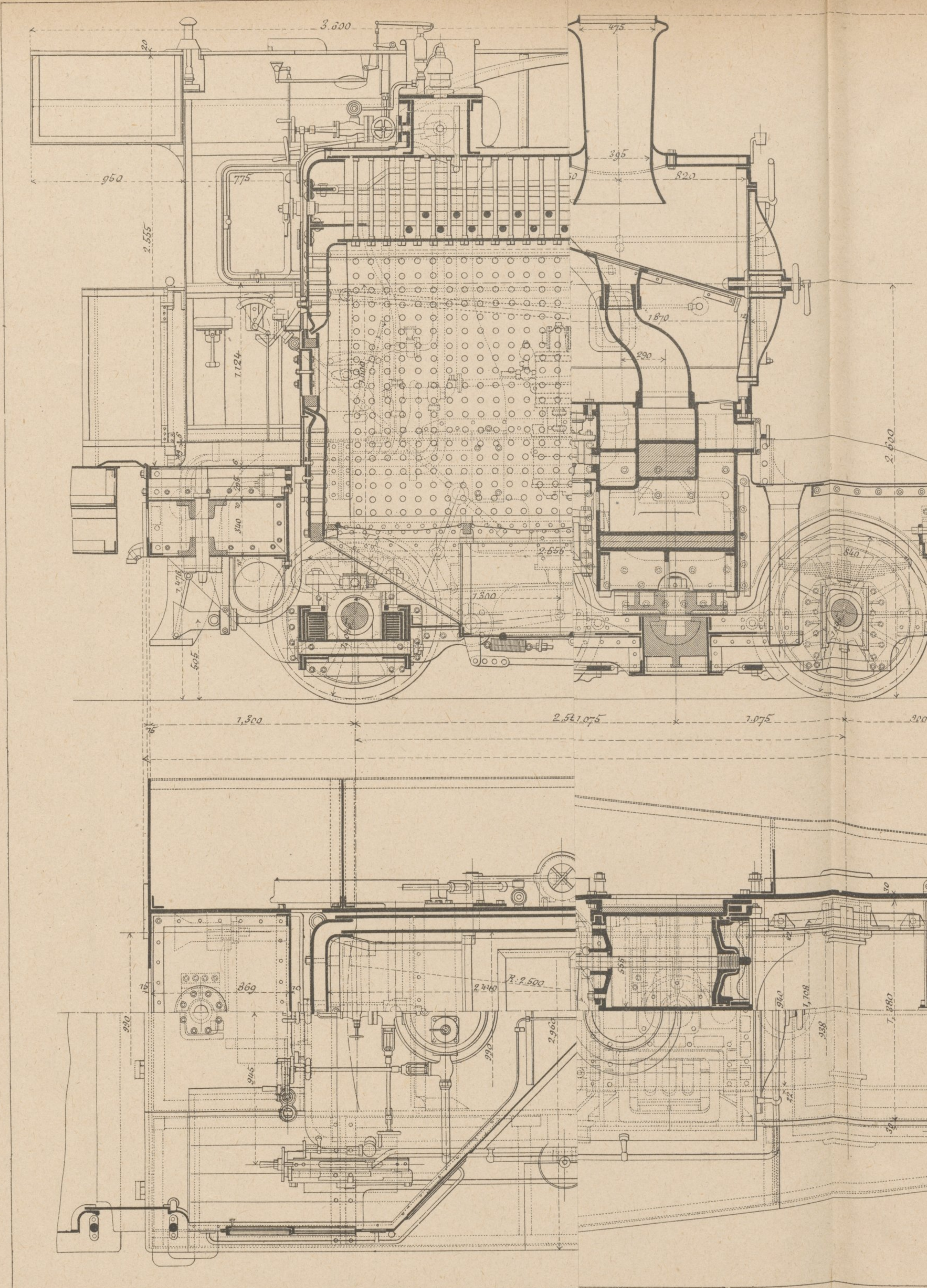


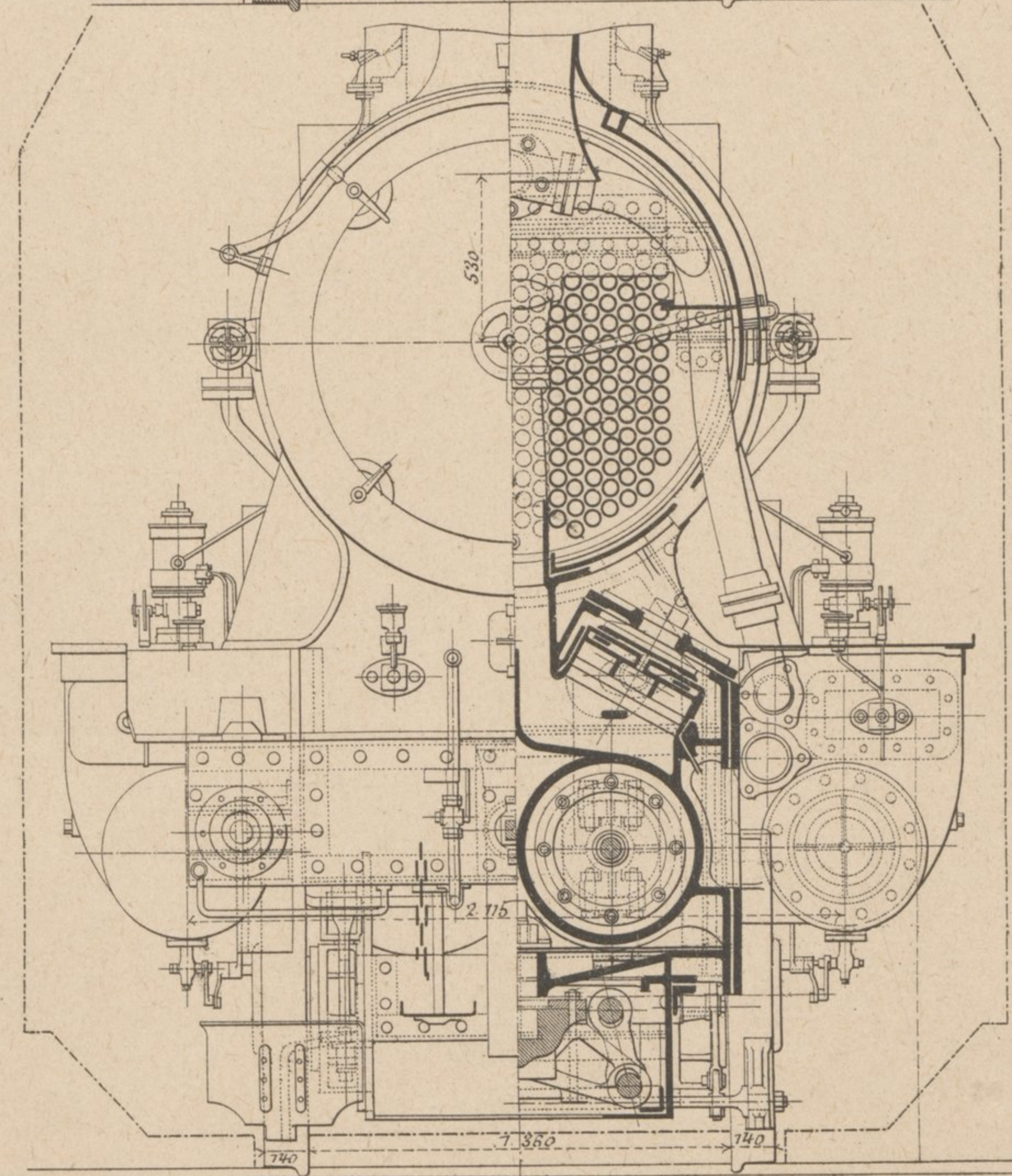
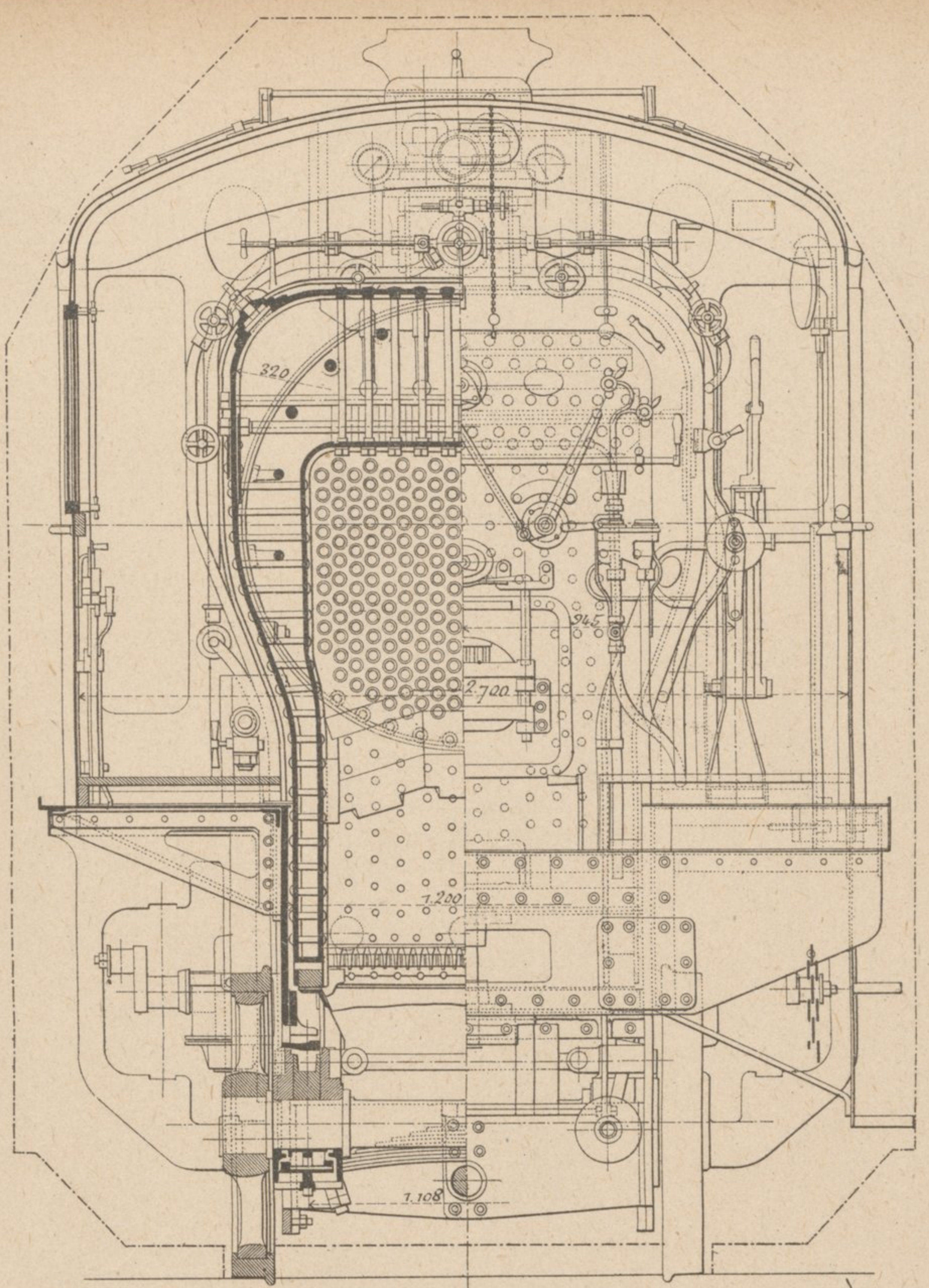
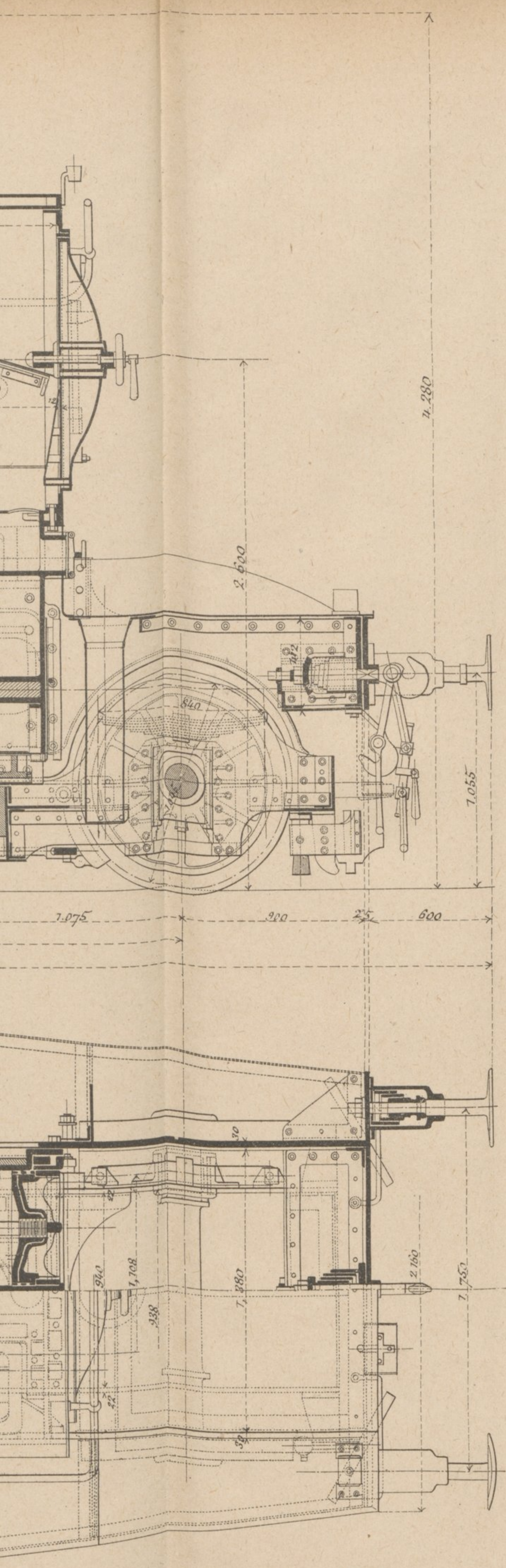
LOCOMOTIVE COMPOUND A 4 CYLINDRES DE L'USINE SAXONNE DE CHEMNITZ



SAXONNE DE CHEMNITZ

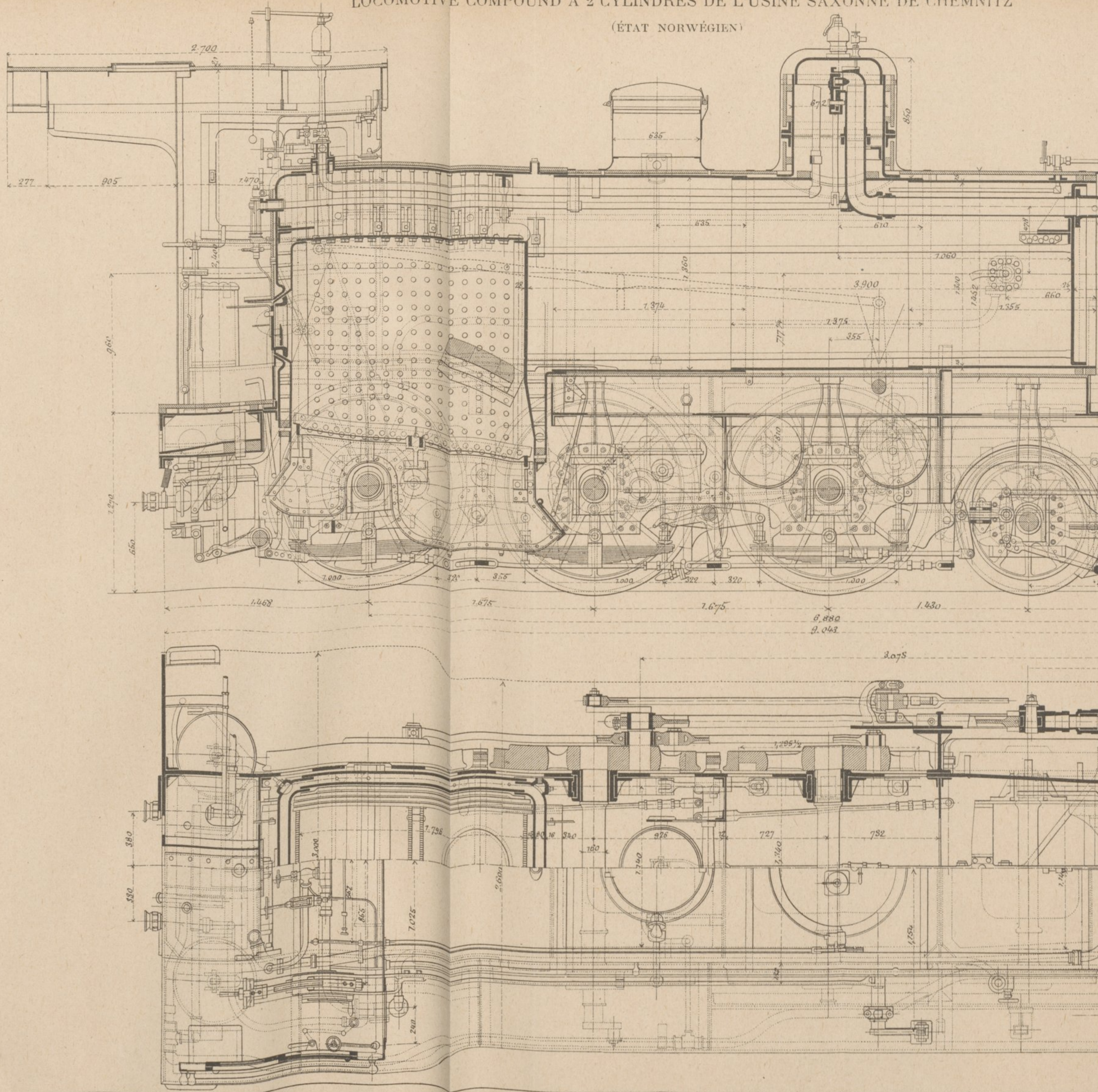




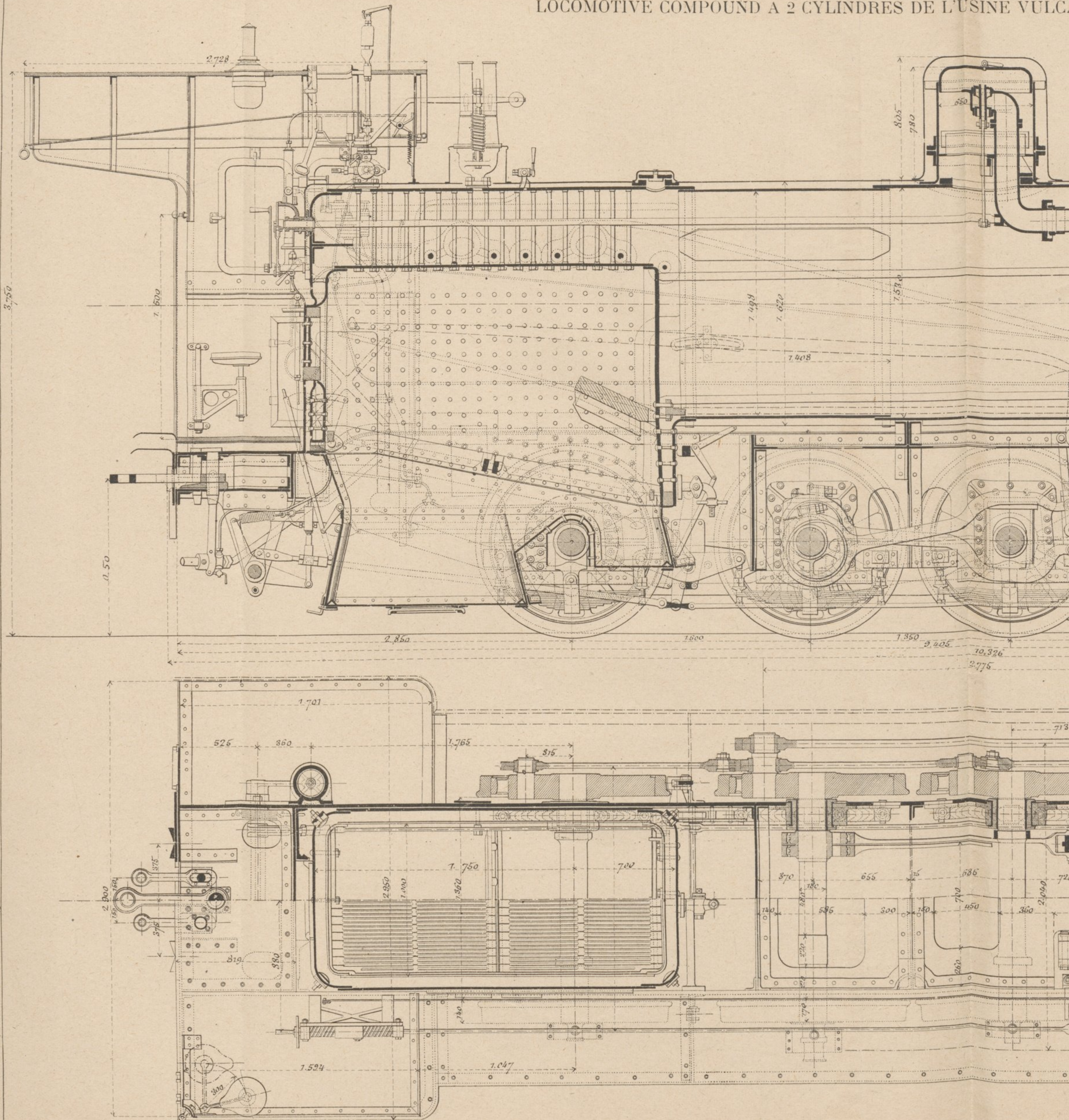


LOCOMOTIVE COMPOUND A 2 CYLINDRES DE L'USINE SAXONNE DE CHEMNITZ

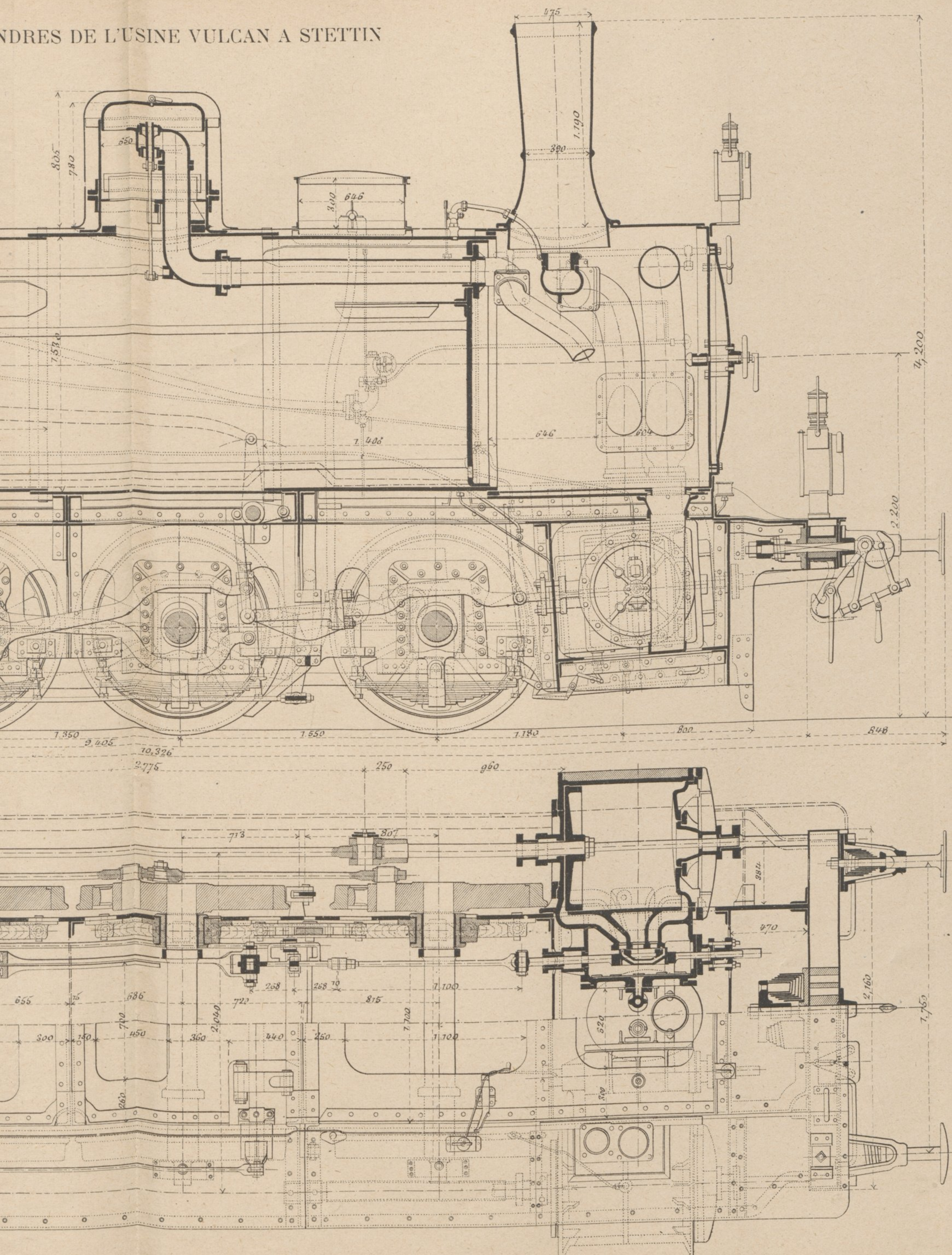
(ÉTAT NORWÉGIEN)

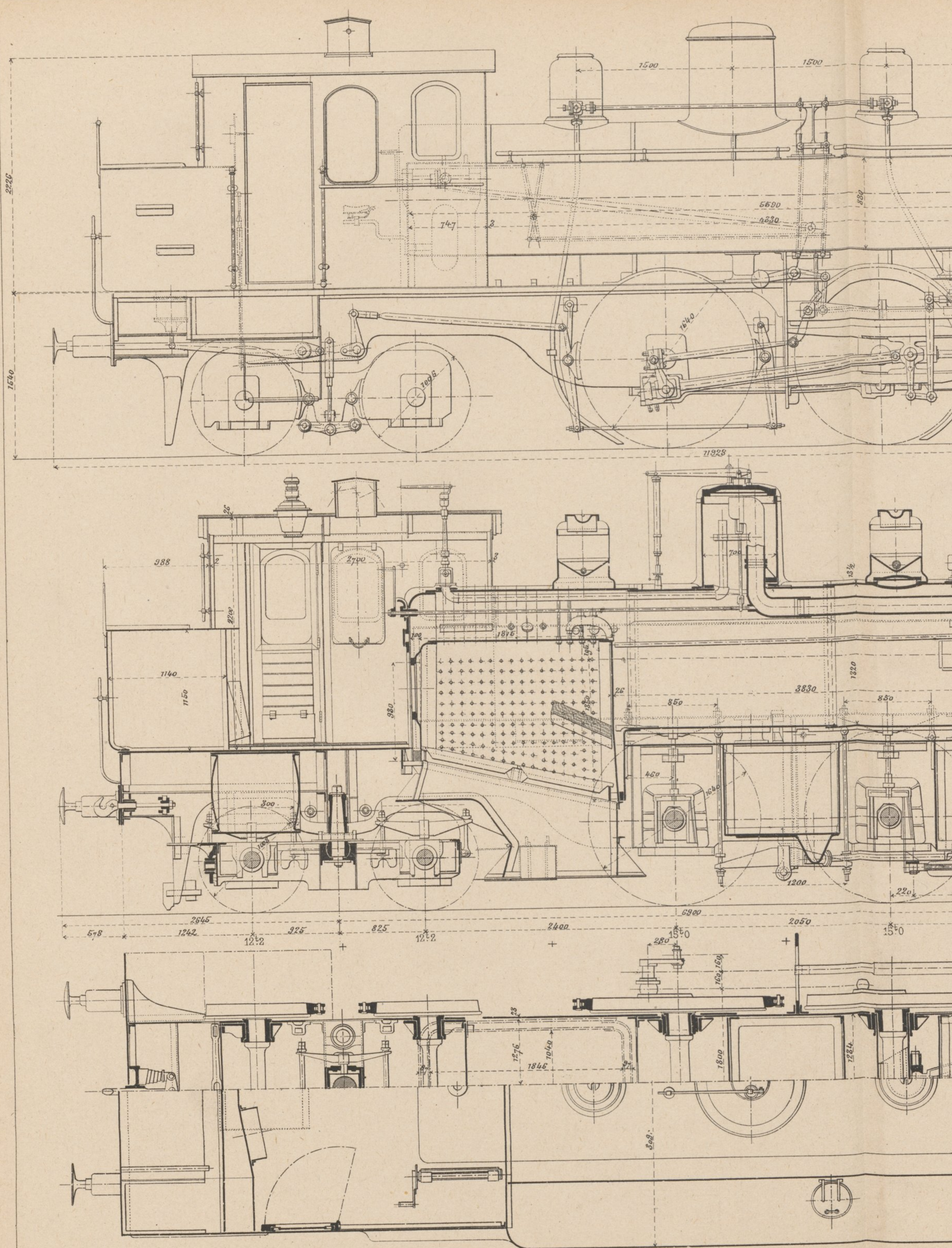


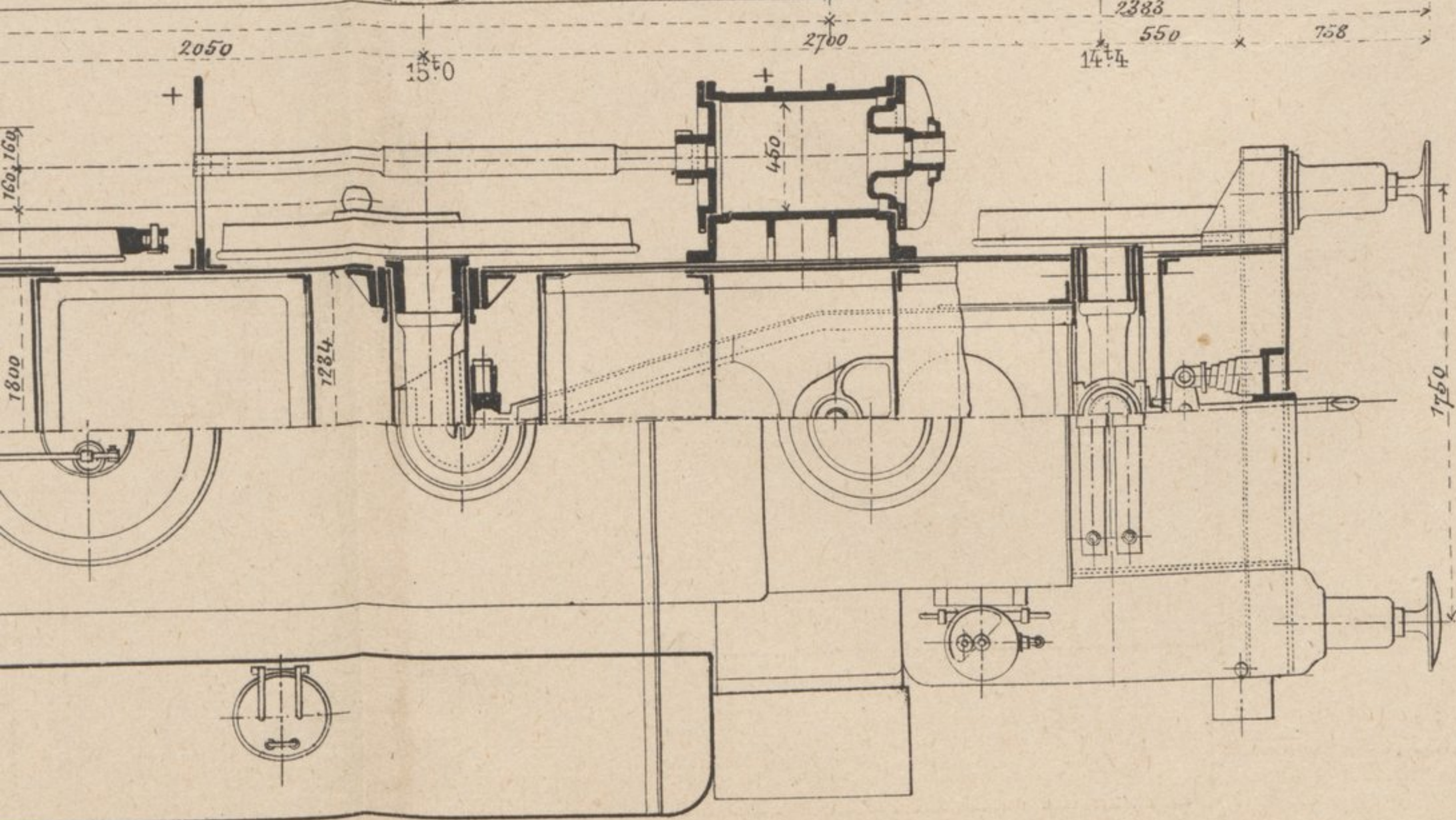
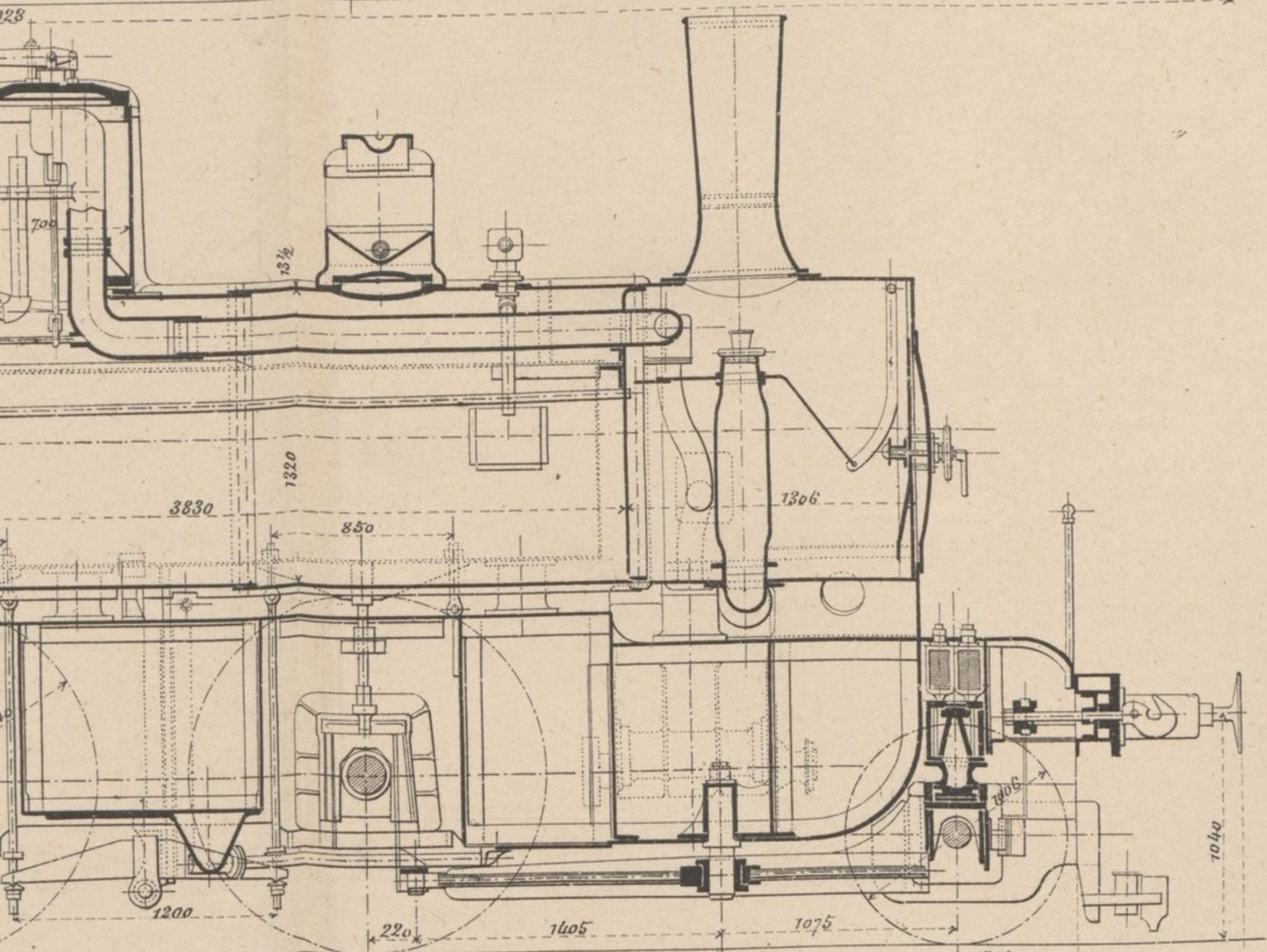
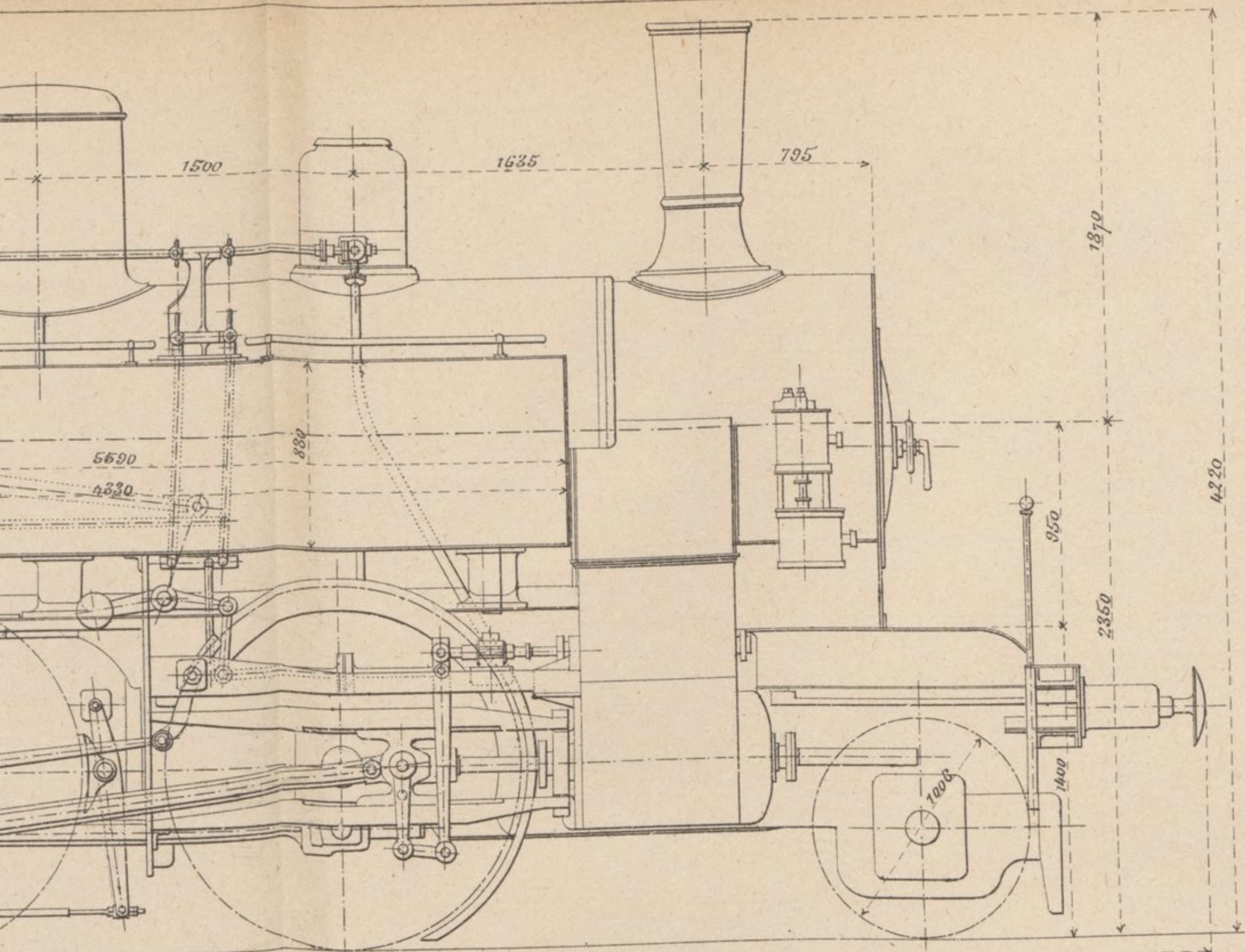
LOCOMOTIVE COMPOUND A 2 CYLINDRES DE L'USINE VULC.



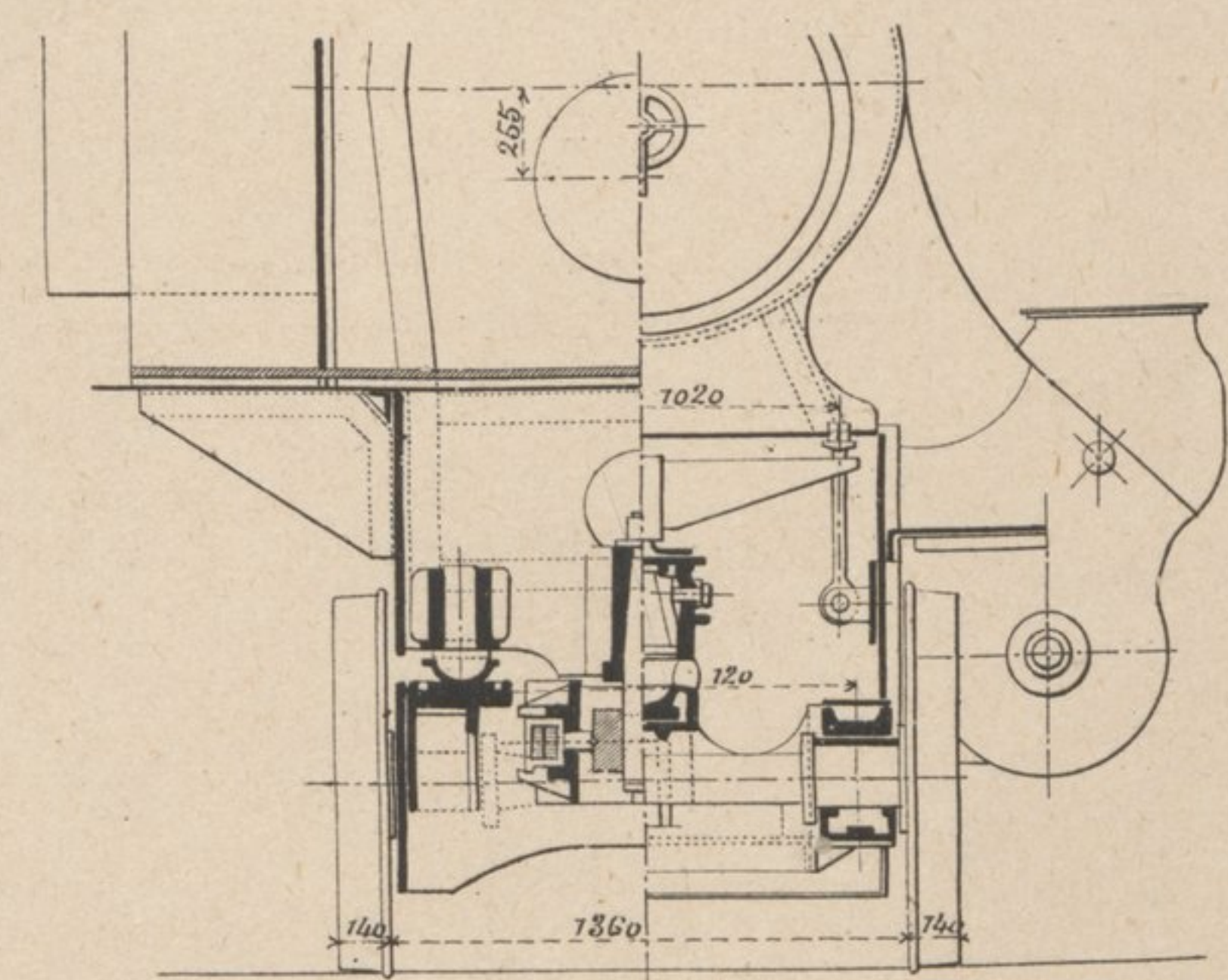
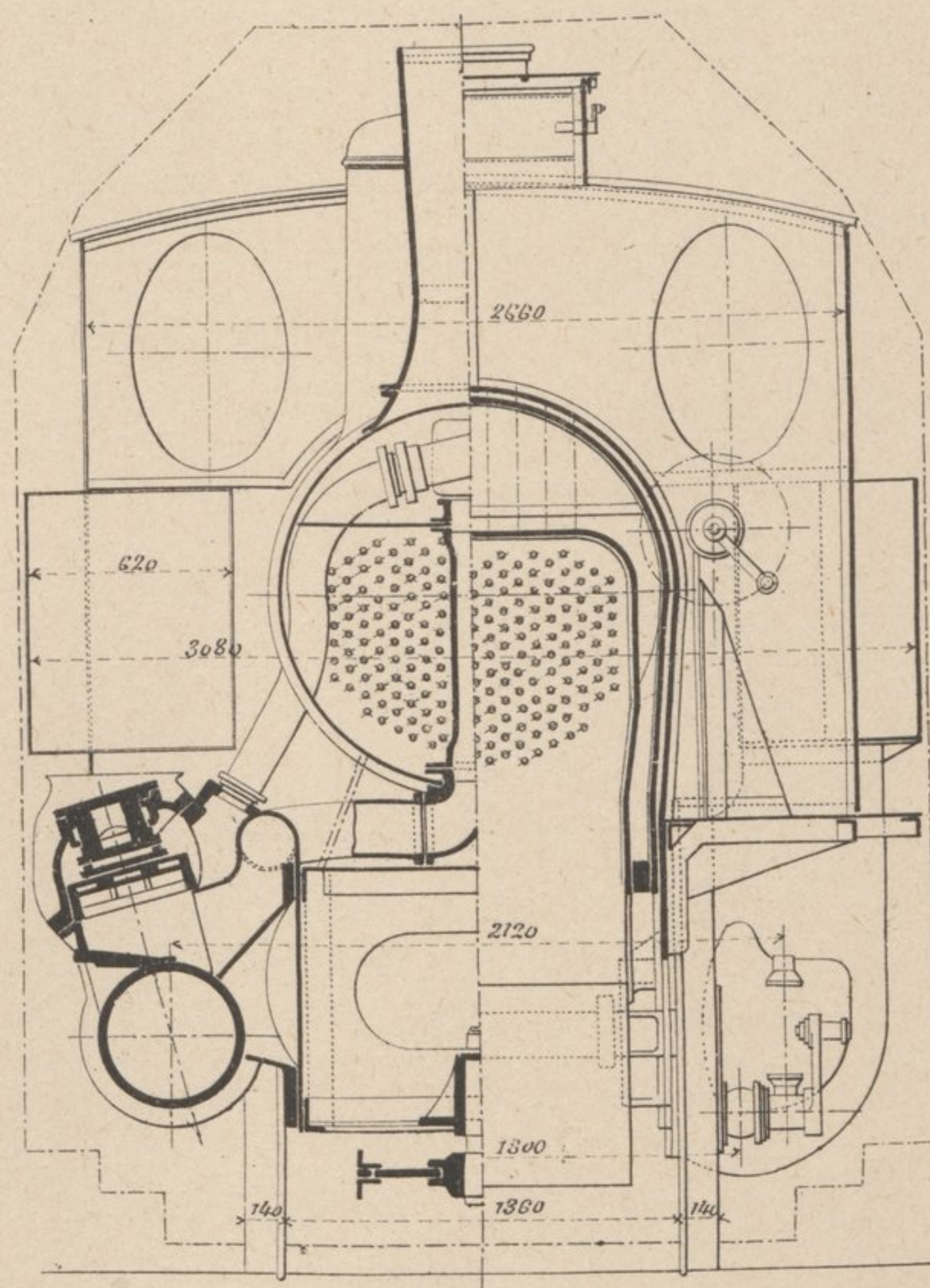
ANDRES DE L'USINE VULCAN A STETTIN





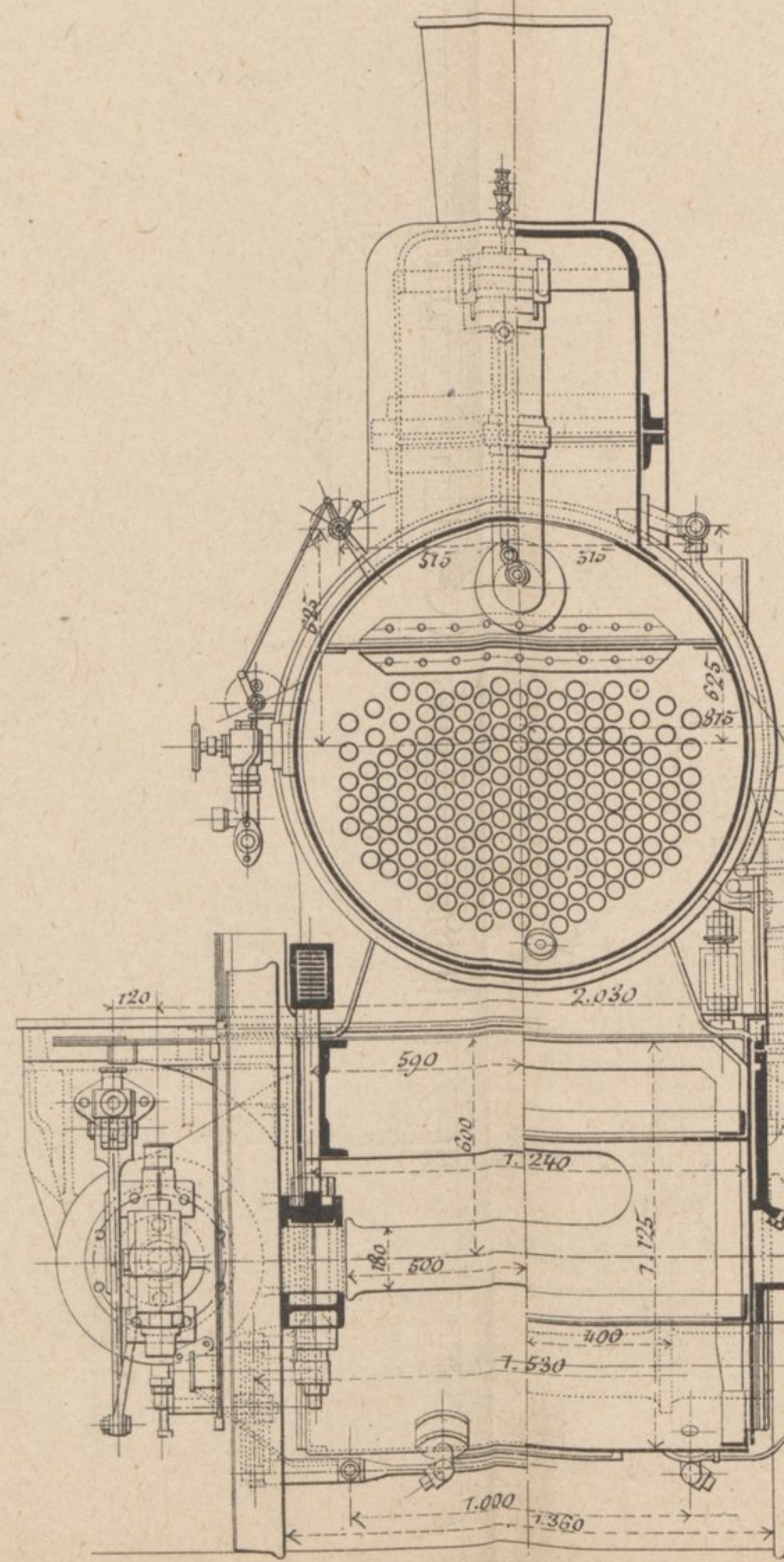
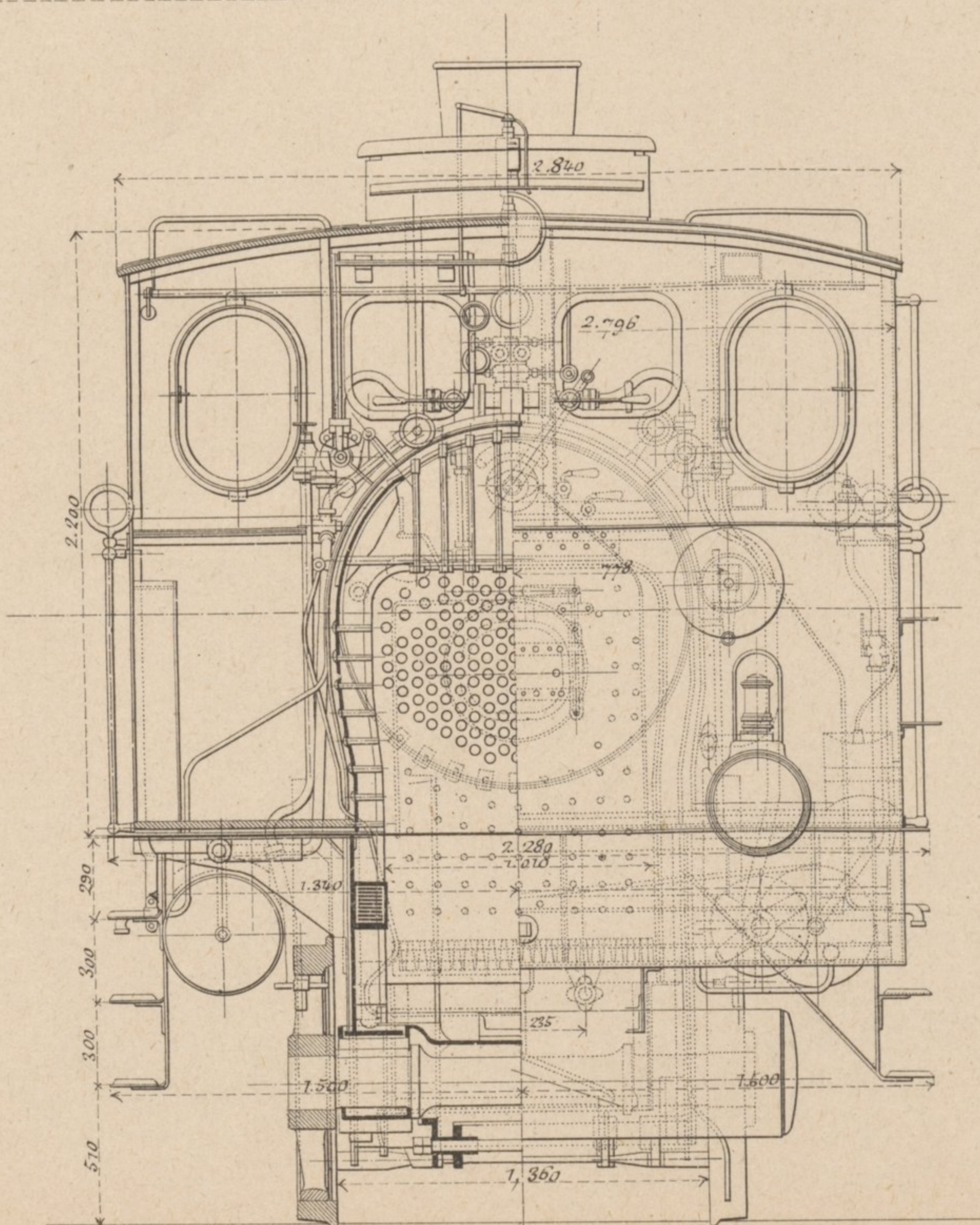
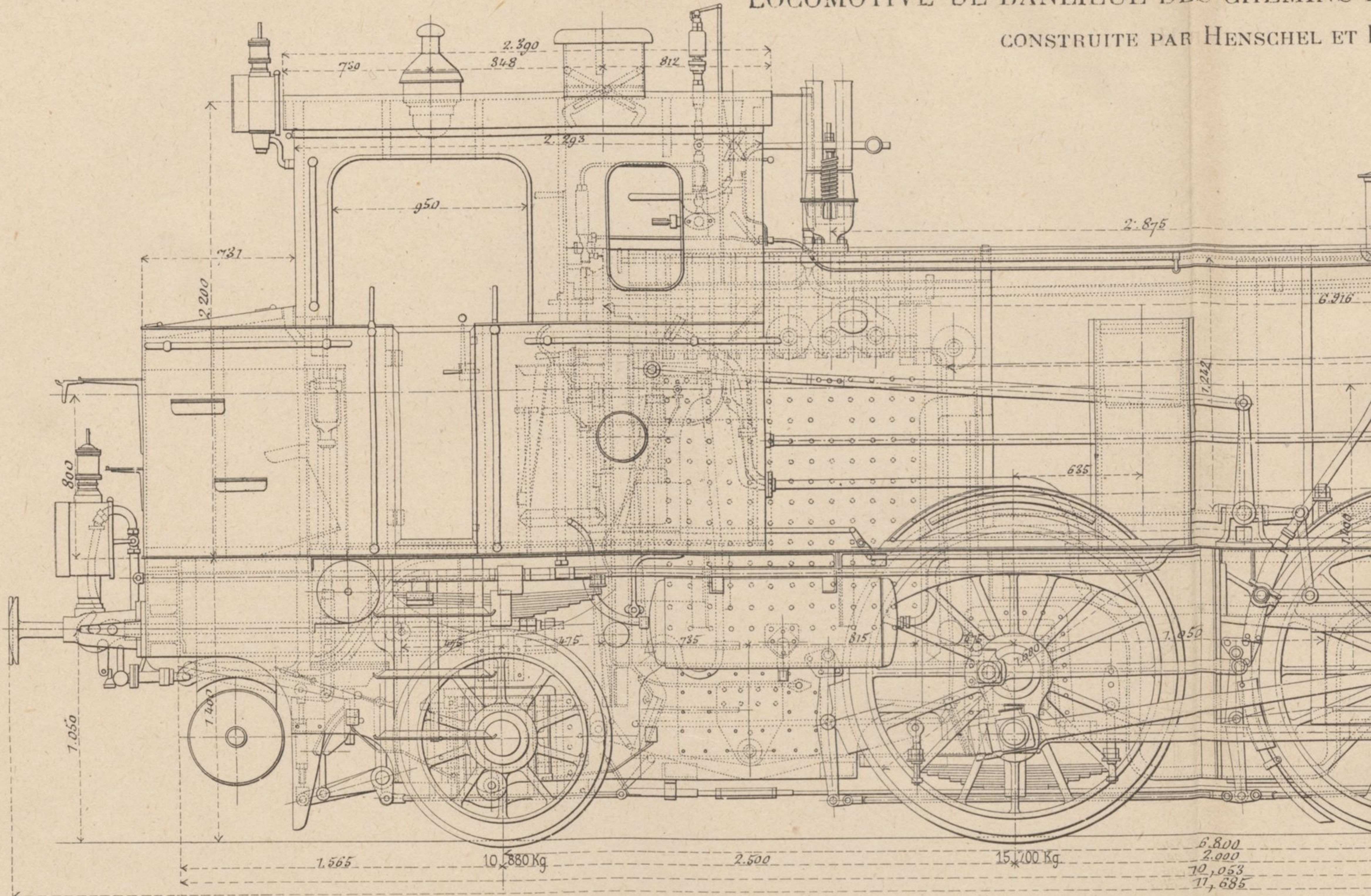


LOCOMOTIVE DE BANLIEUE
DES CHEMINS DE FER DE L'ÉTAT BAVAROIS
Construite par l'Usine Krauss
de Munich.



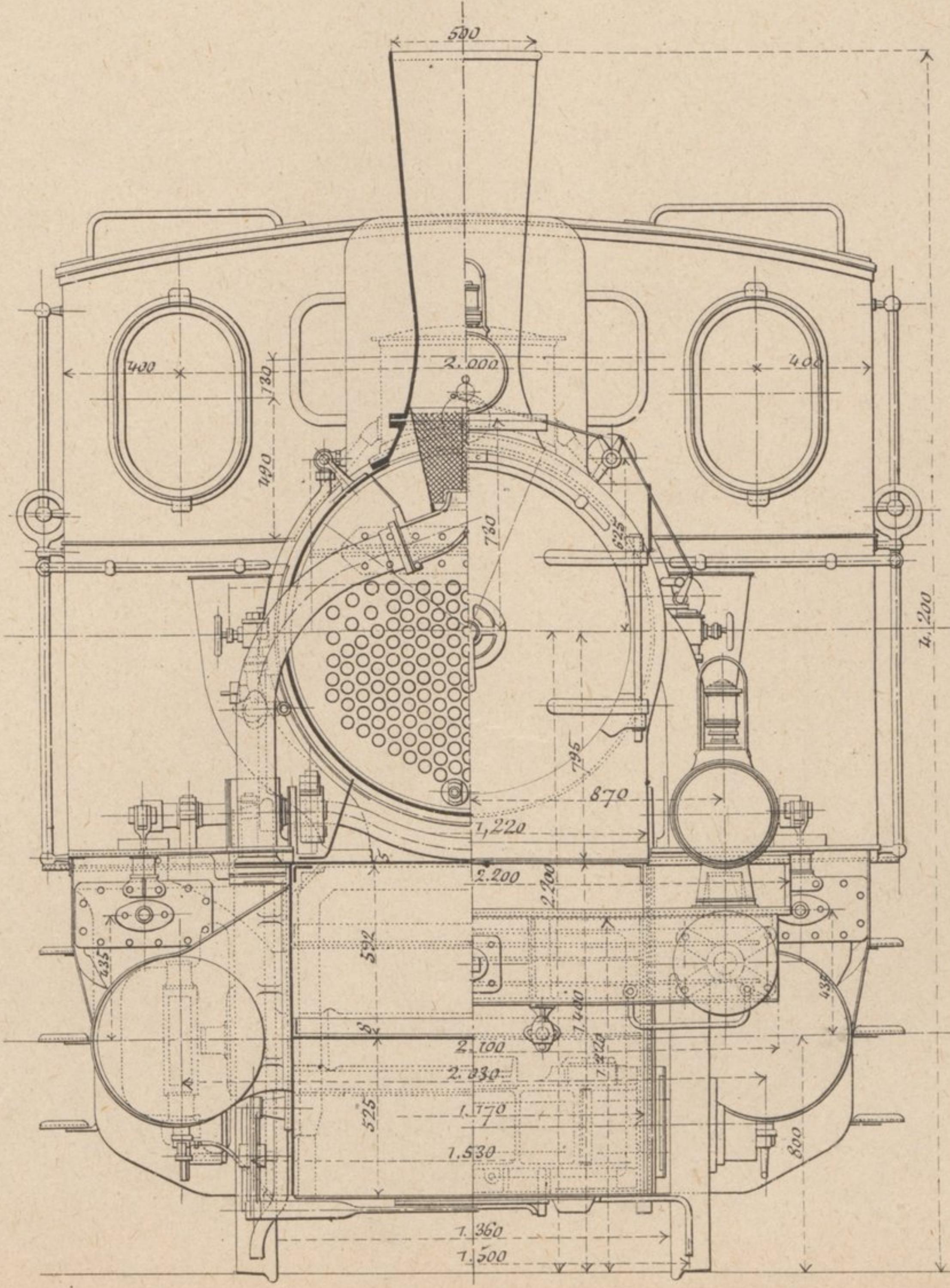
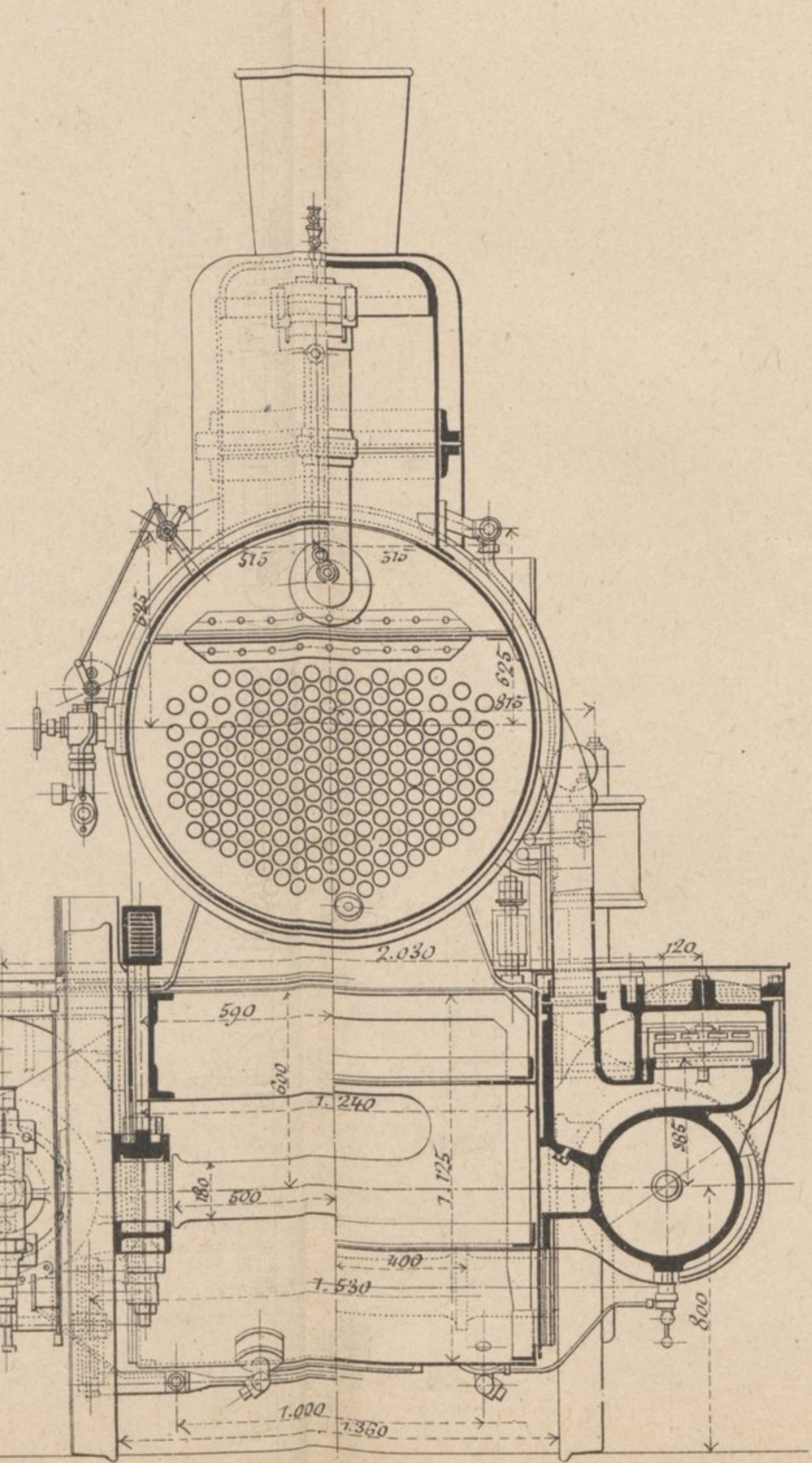
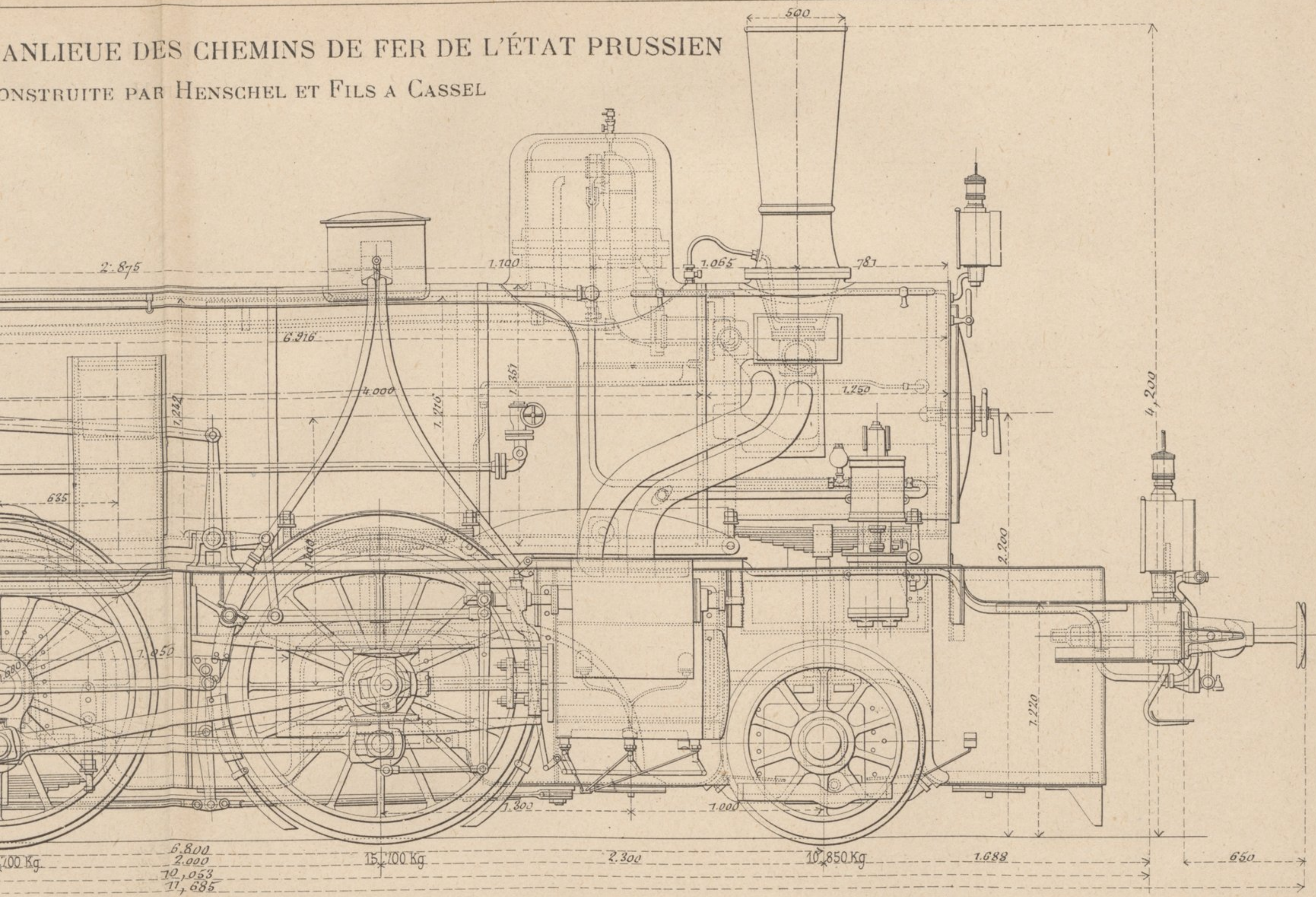
LOCOMOTIVE DE BANLIEUE DES CHEMINS DE FER

CONSTRUITE PAR HENSCHEL ET

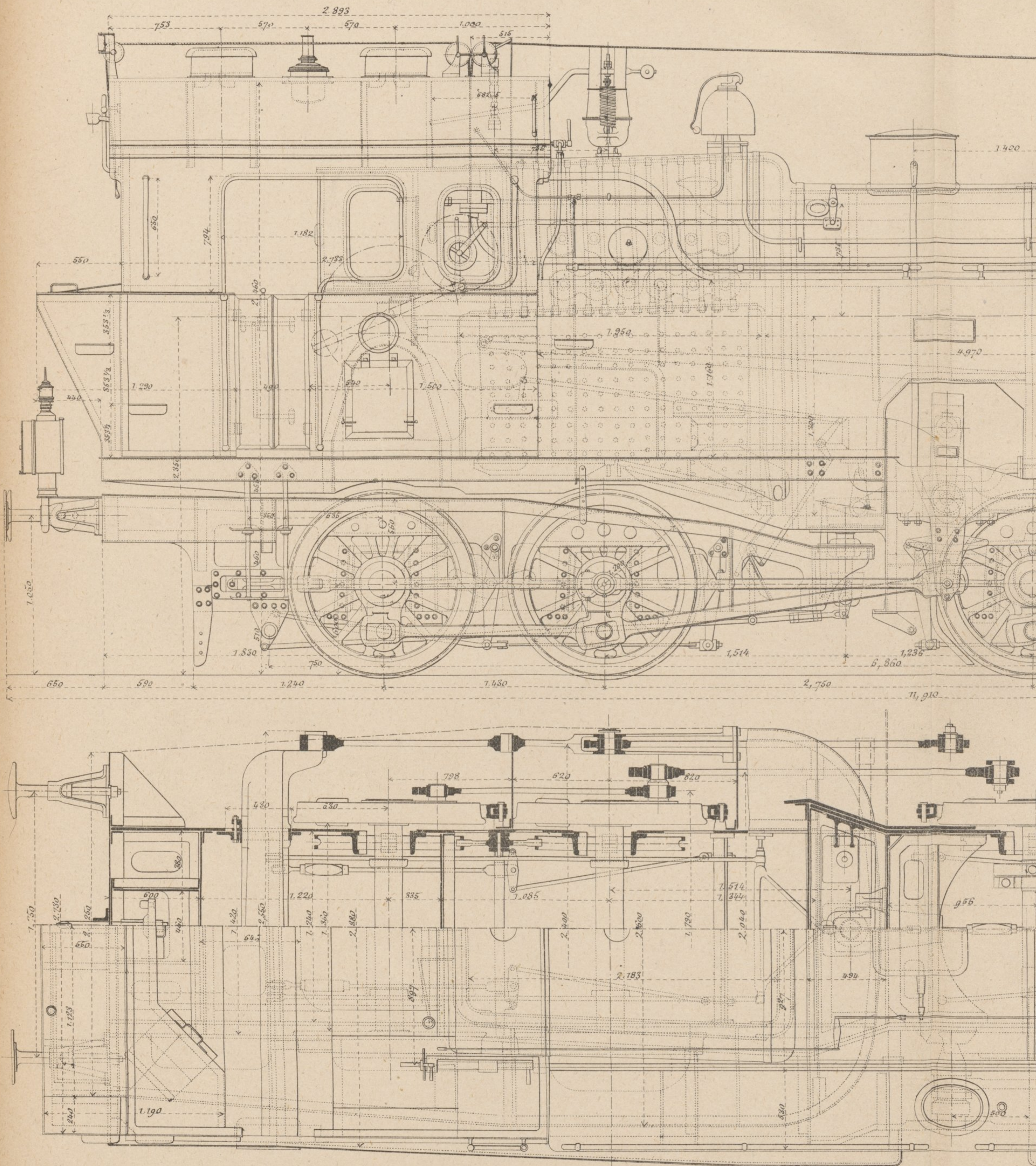


ANLIEUE DES CHEMINS DE FER DE L'ÉTAT PRUSSIEN

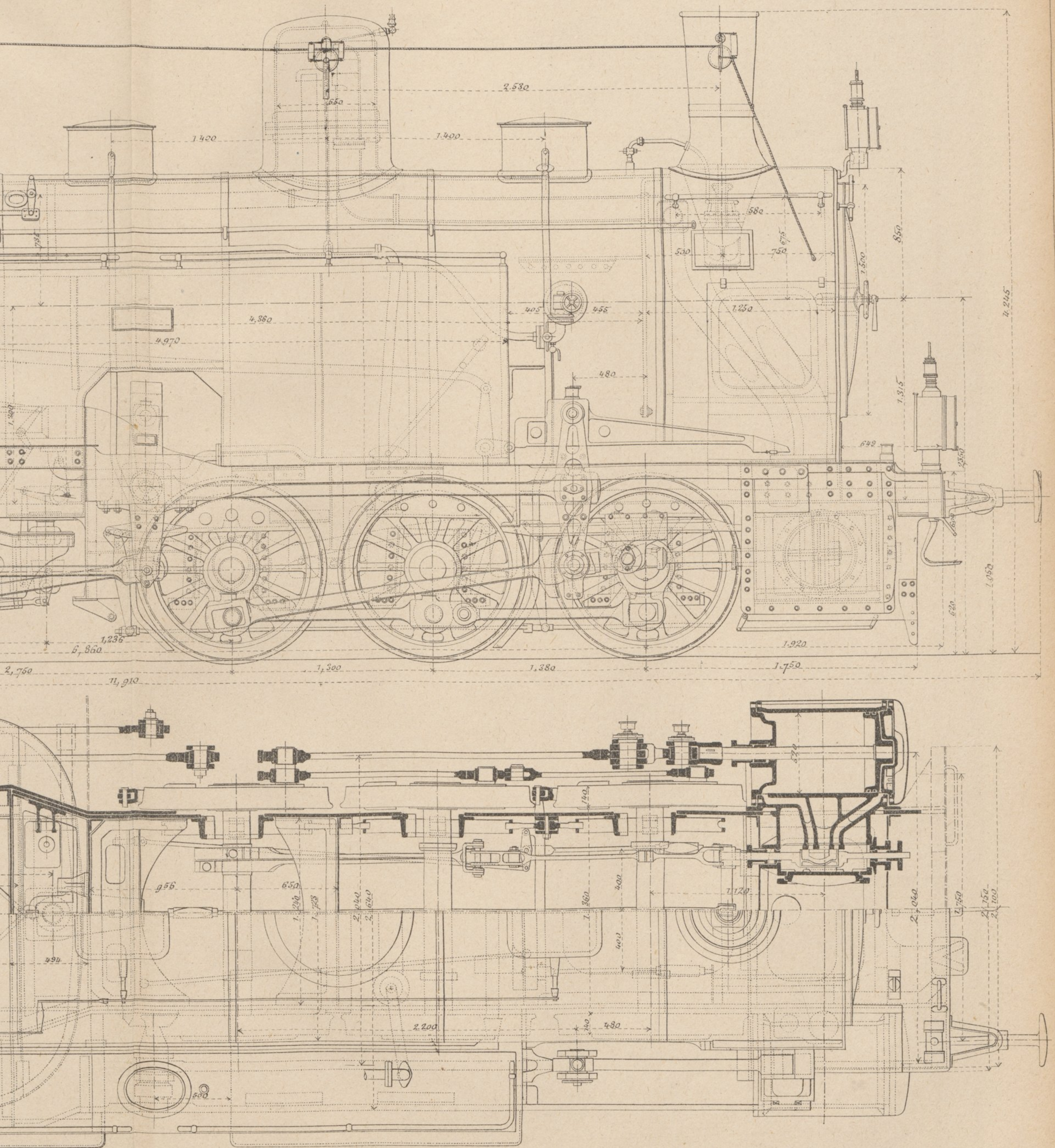
ONSTRUITE PAR HENSCHEL ET FILS A CASSEL



LOCOMOTIVE ARTICULÉE, SYSTÈME

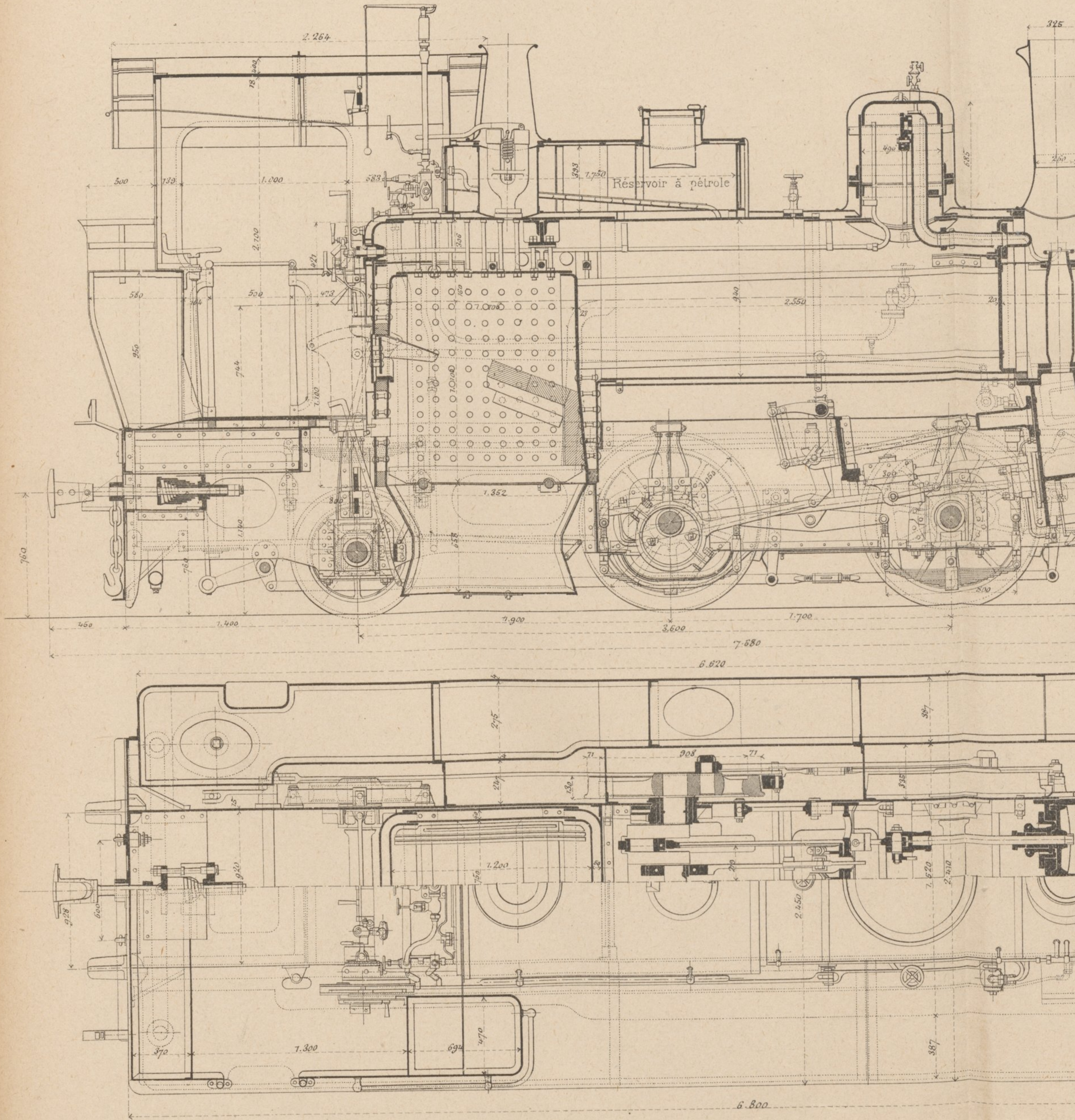


VE ARTICULÉE, SYSTÈME HAGANS



LOCOMOTIVE A VOIE ÉTROITE, CONSTRUITE PAR I

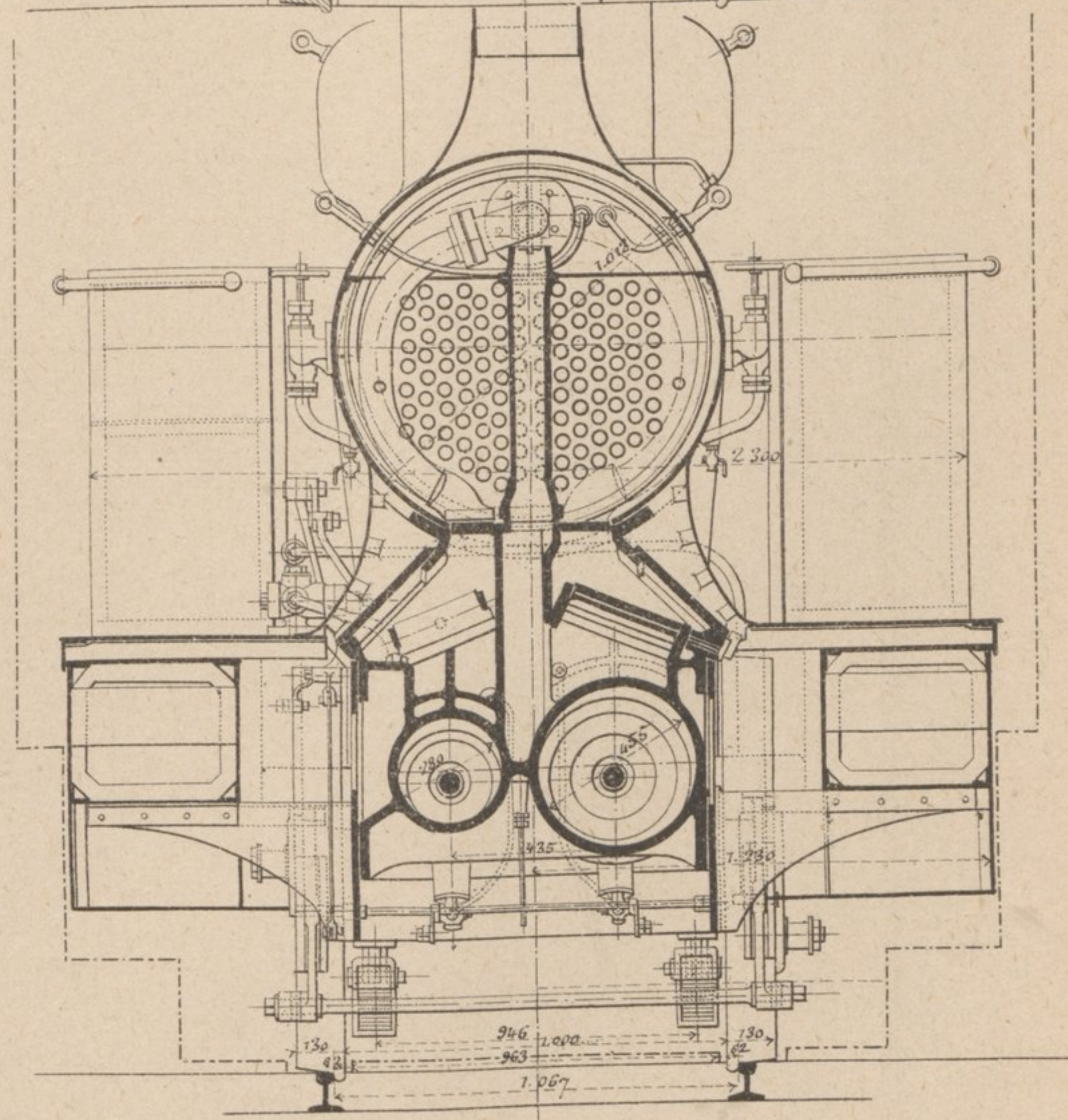
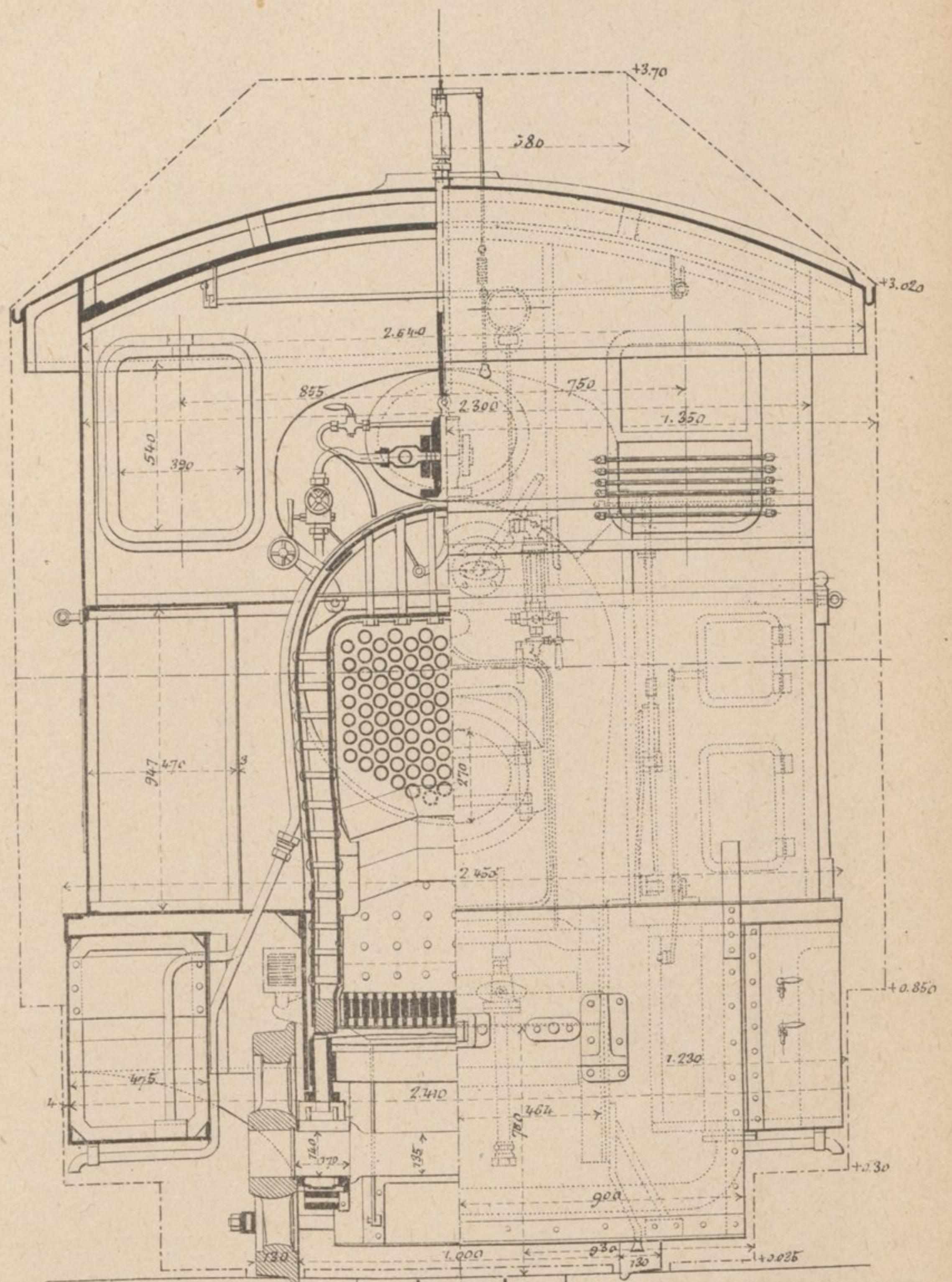
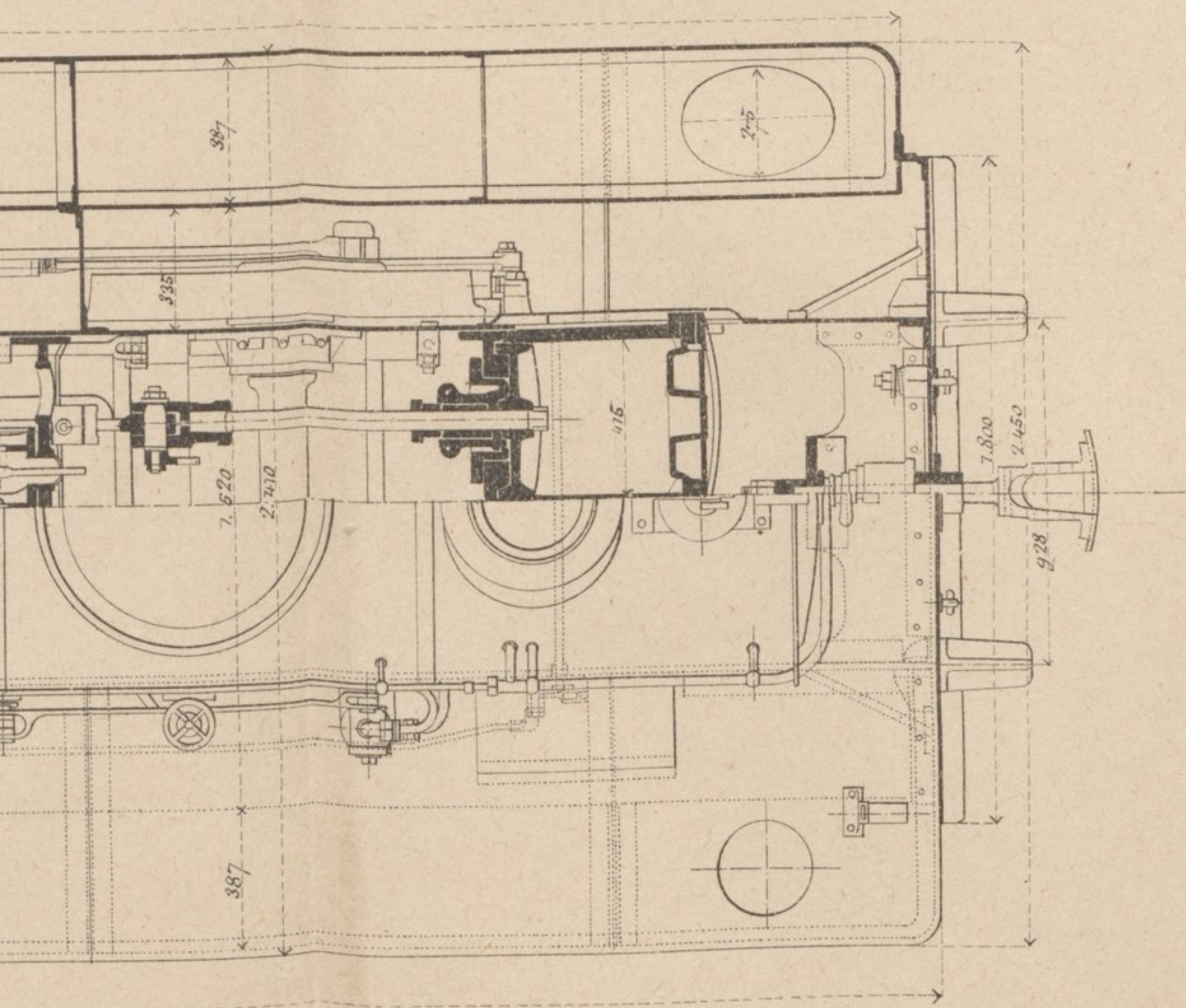
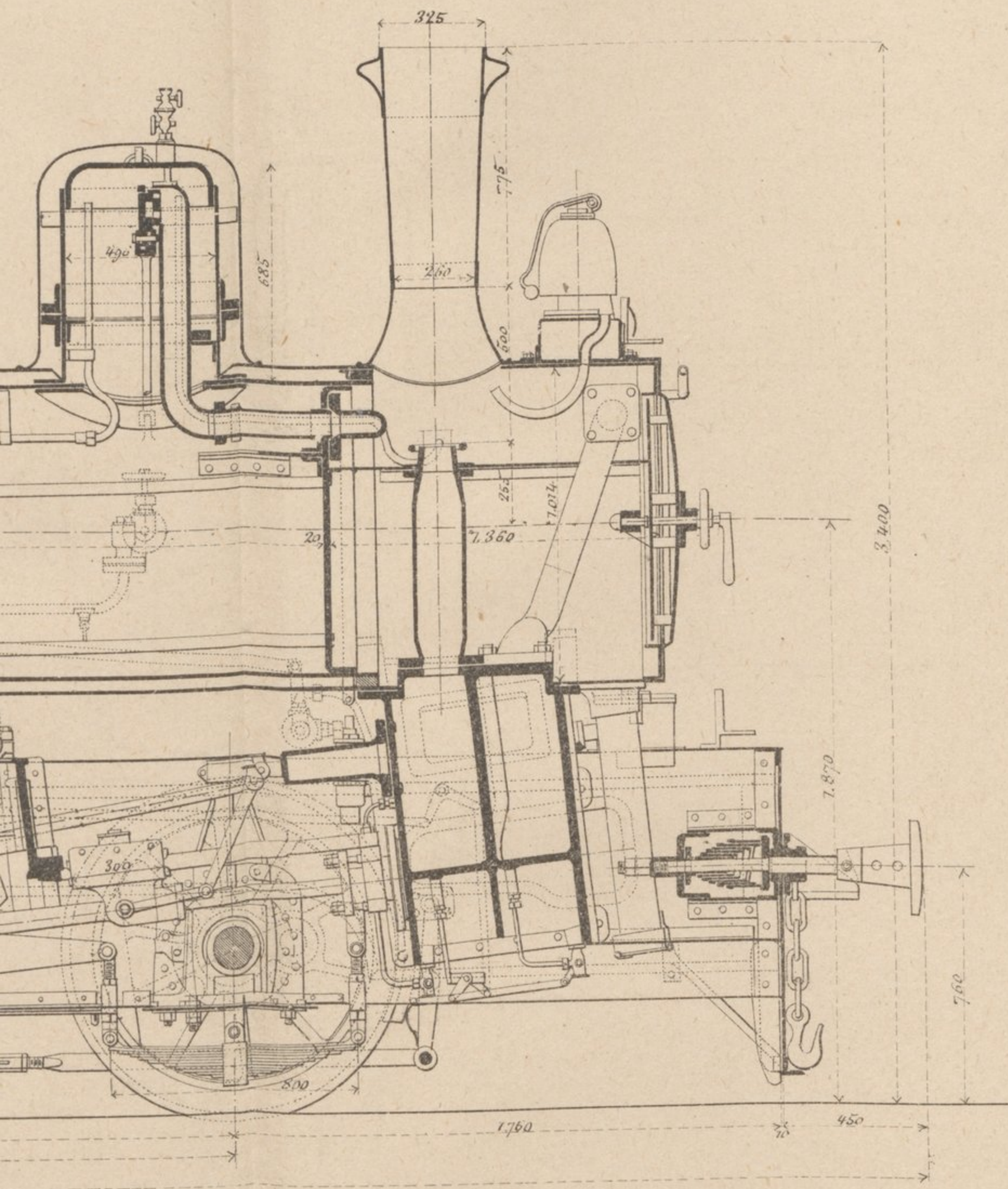
POUR LE CHEMIN DE FER DES INDES HOLLA



A L'EXPOSITION DE 1900 (Note par M. Raymond GODFERNAUX)

BOITE, CONSTRUITE PAR L'USINE DE CHEMNITZ

MINIER DE FER DES INDES HOLLANDAISES



LOCOMOTIVE EXPRESS COMPOUND A 2 CYLINDRES

Fig.1. Coupe longitudinale

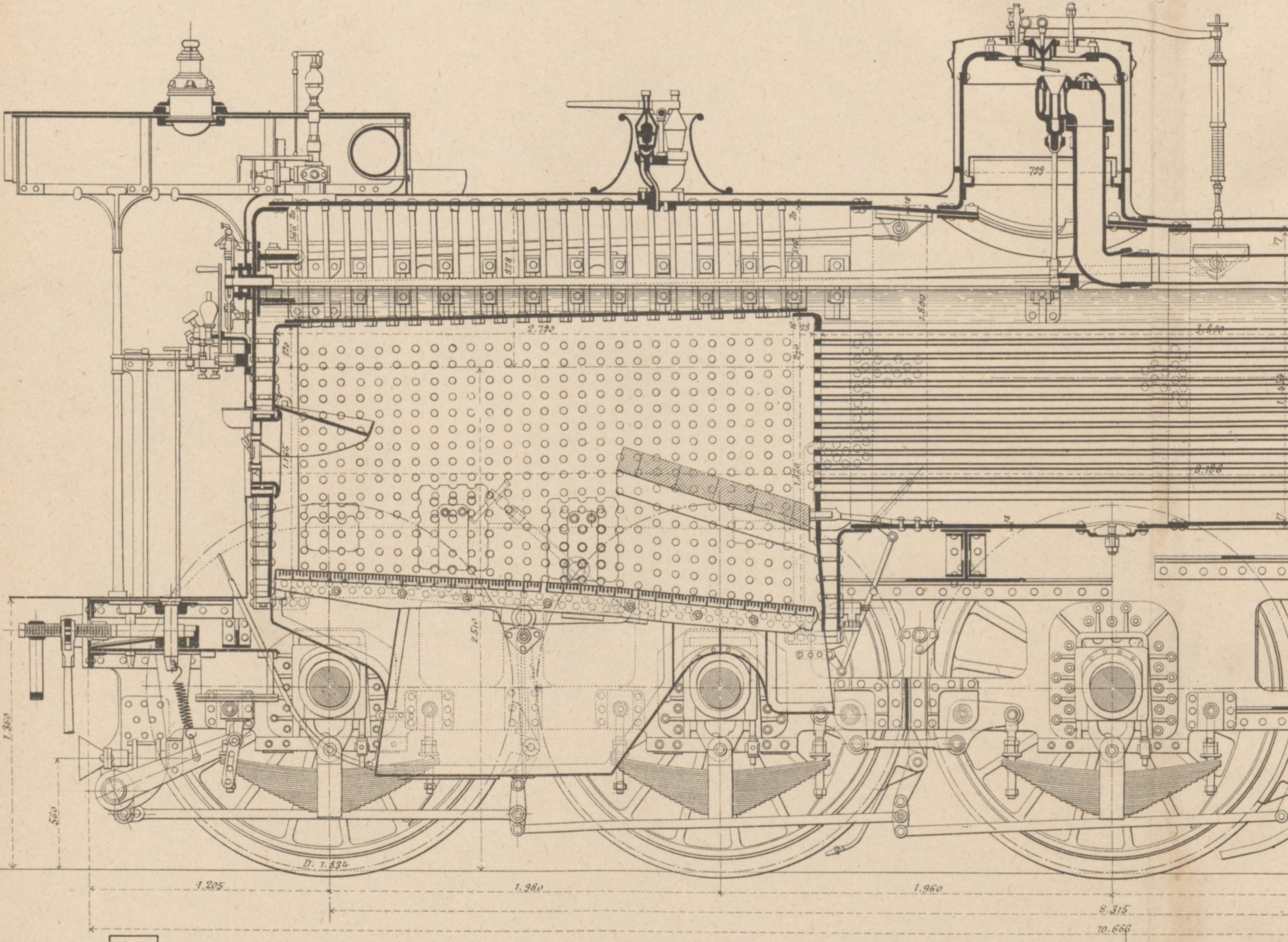
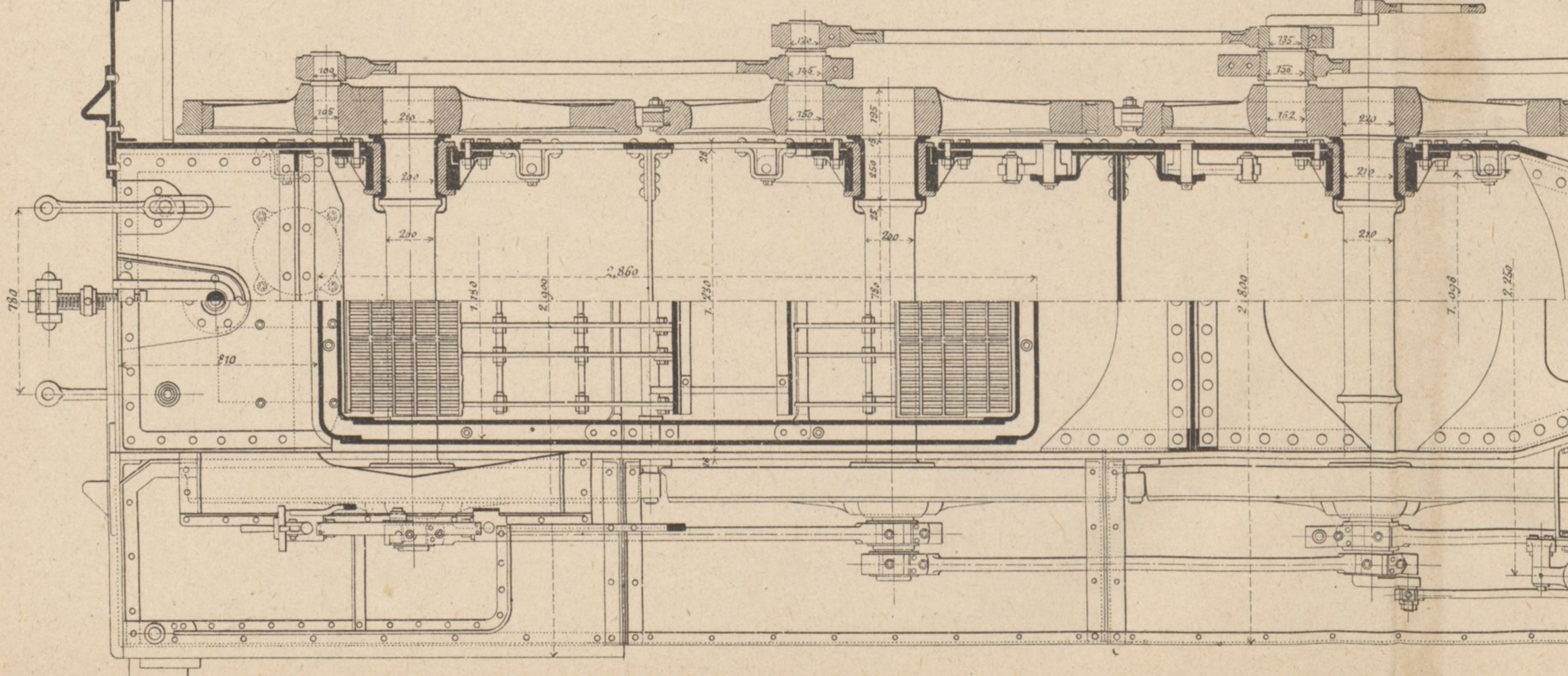
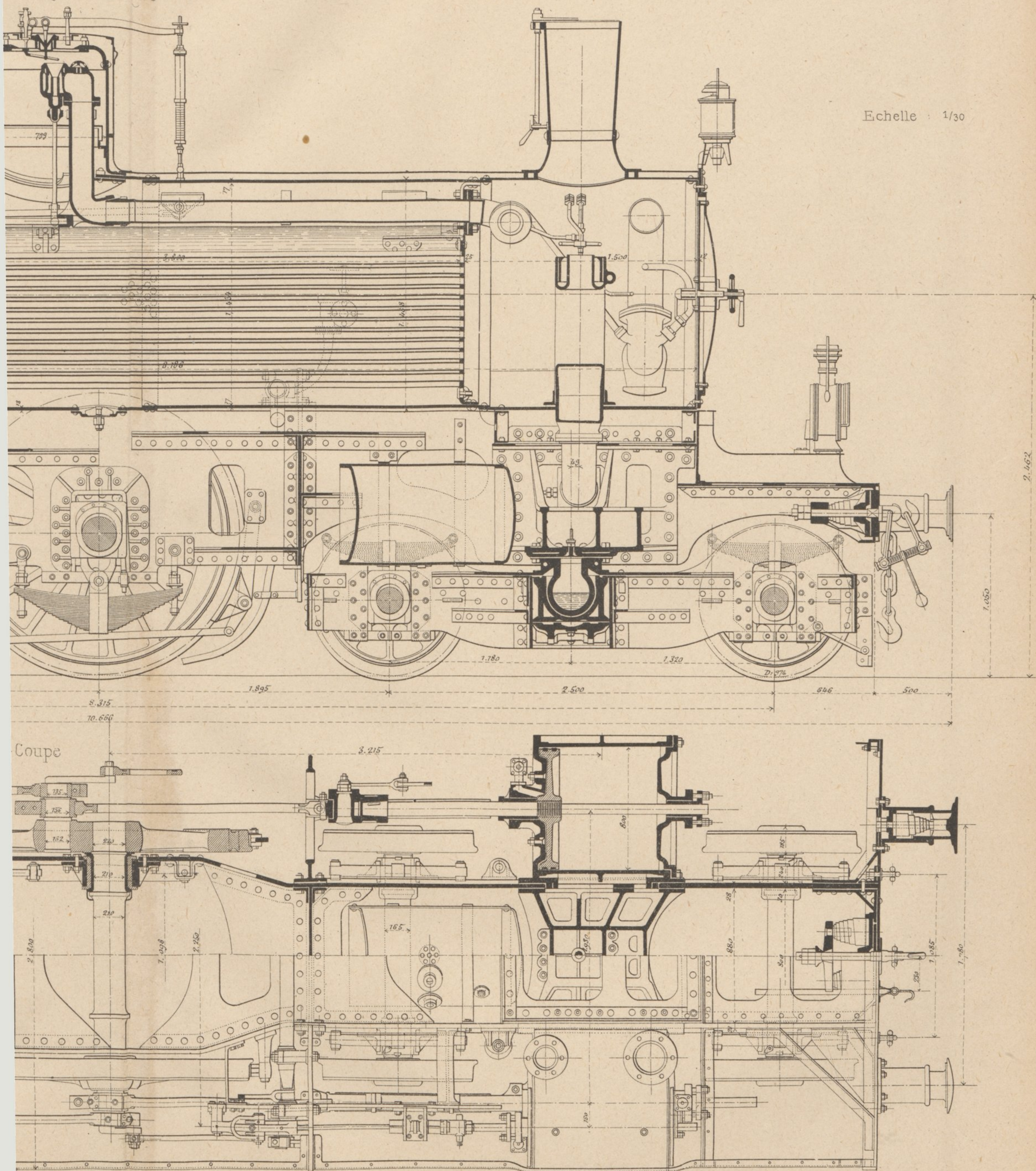


Fig.2. Plan-Coupe



MUND A 2 CYLINDRES DE LA MAISON GIO-ANSALDO ET C^{ie}

Fig.1. Coupe longitudinale



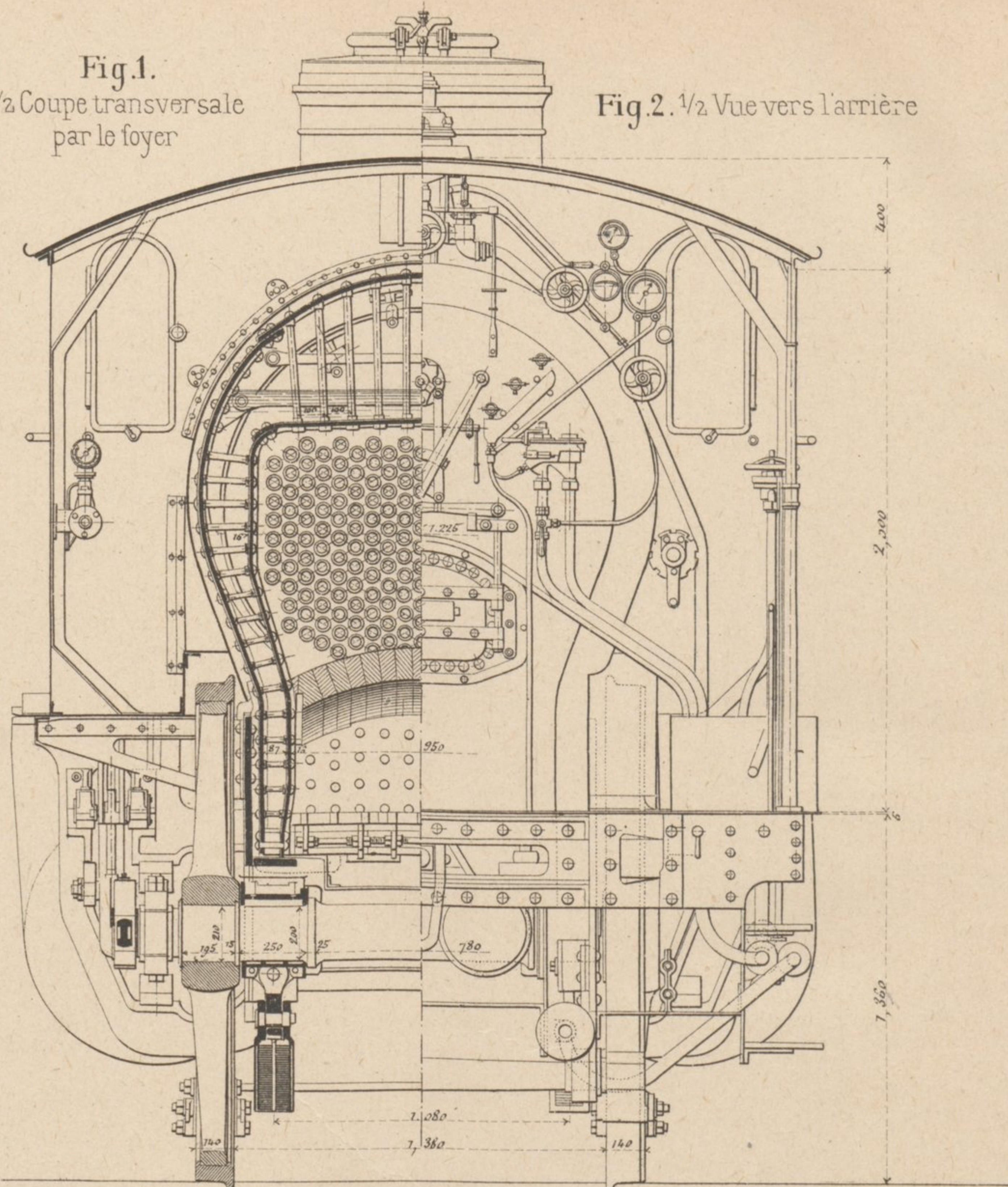
Echelle : 1/30

Coupe

LOCOMOTIVE EXPRESS COMPOUND A 2 CYLINDRES DE L

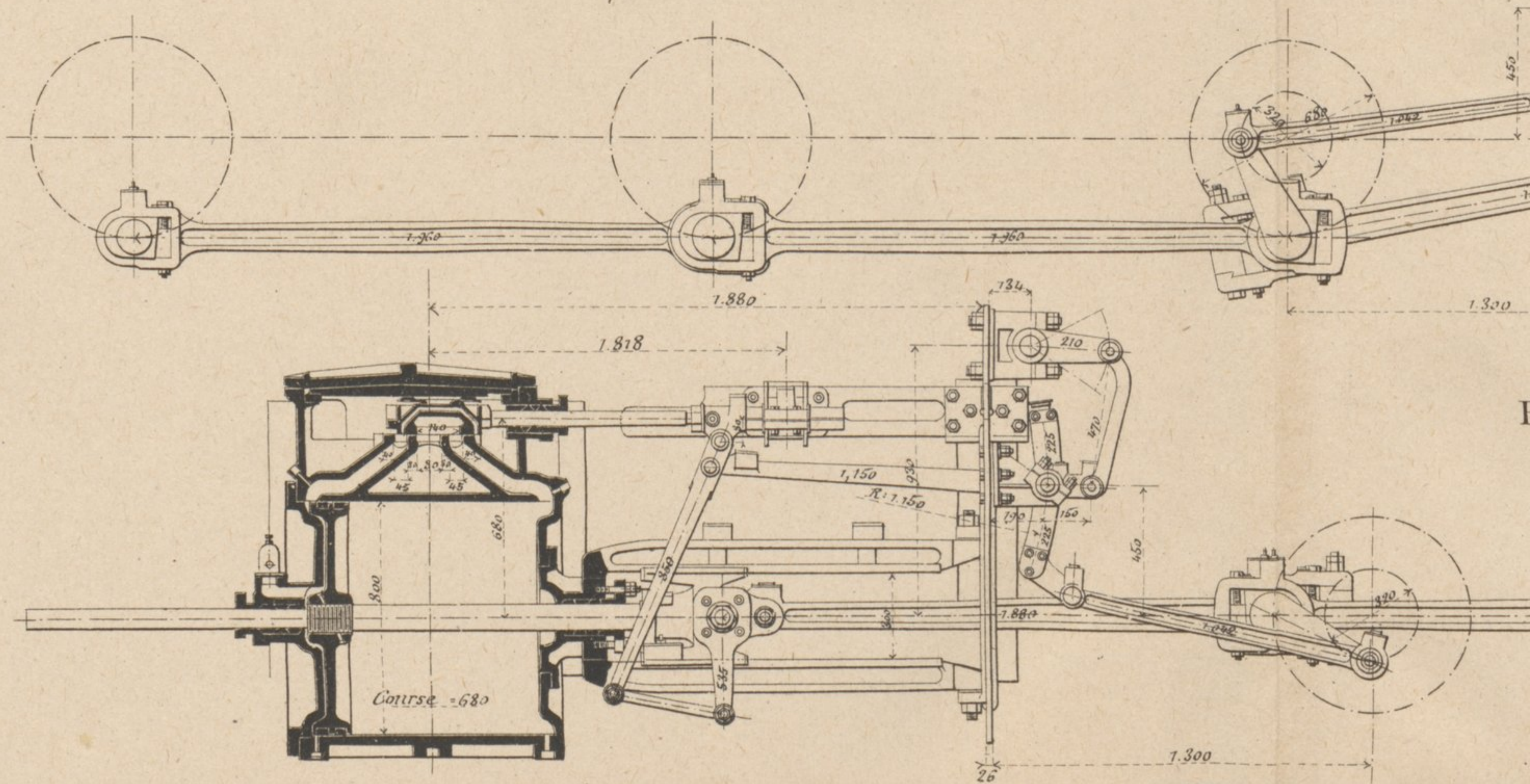
Fig. 1.
1/2 Coupe transversale
par le foyer

Fig. 2. 1/2 Vue vers l'arrière



Echelle : 1/30

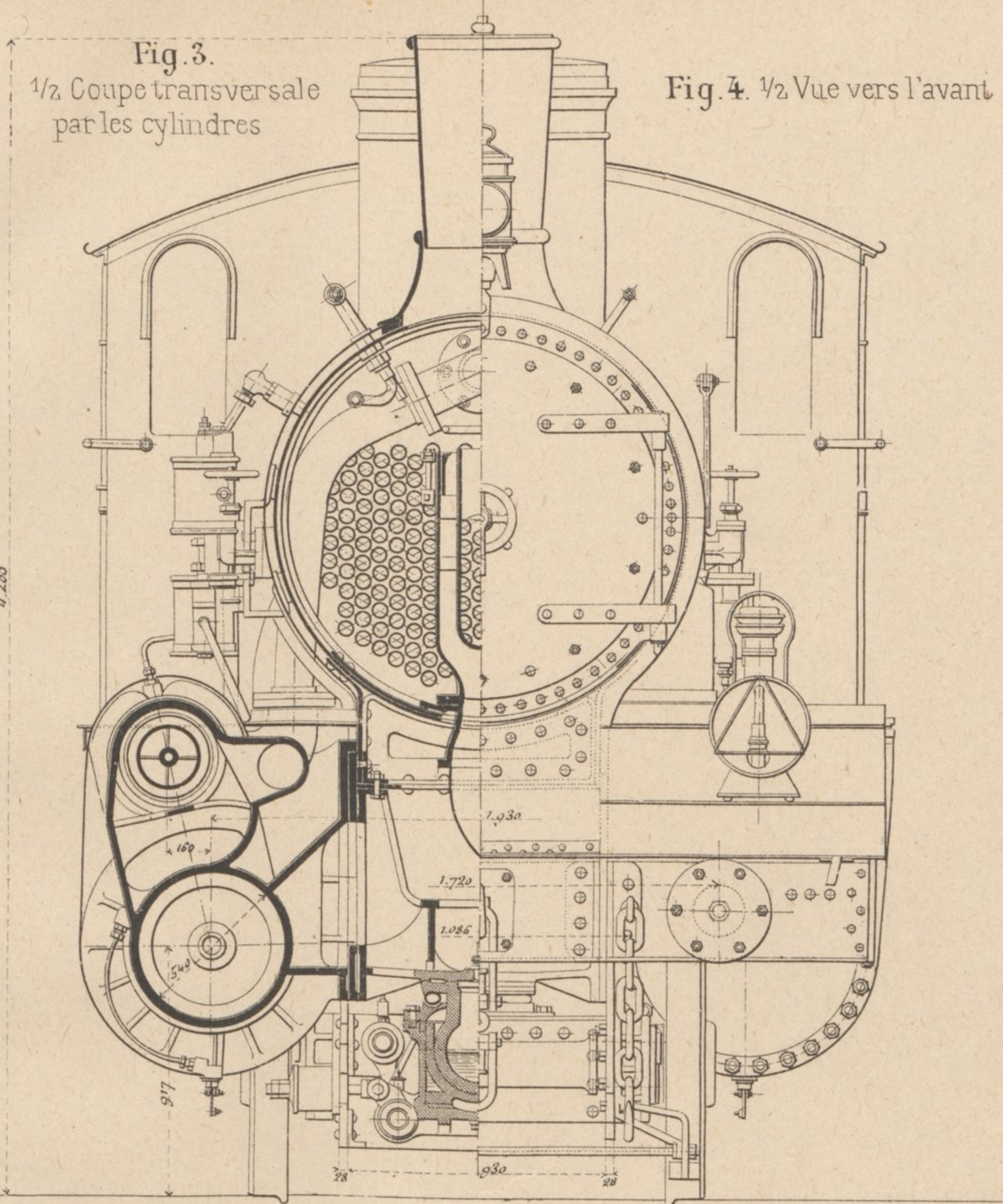
Fig. 5. Mécanisme du cylindre à haute pression



MACHINE A 2 CYLINDRES DE LA MAISON GIO-ANSALDO ET C^{ie}

Fig. 3.
1/2 Coupe transversale
par les cylindres

Fig. 4. 1/2 Vue vers l'avant



Echelle : 1/30

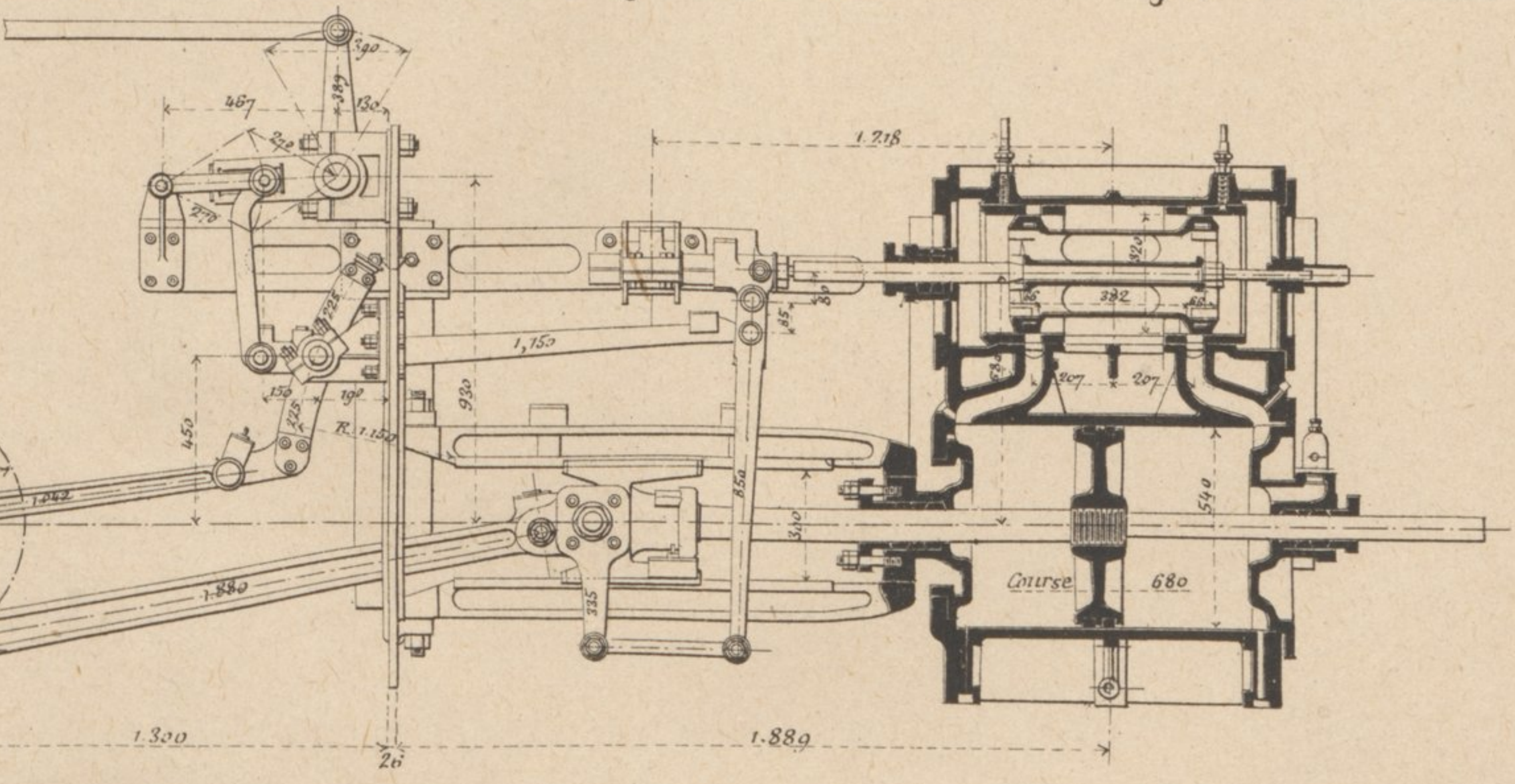
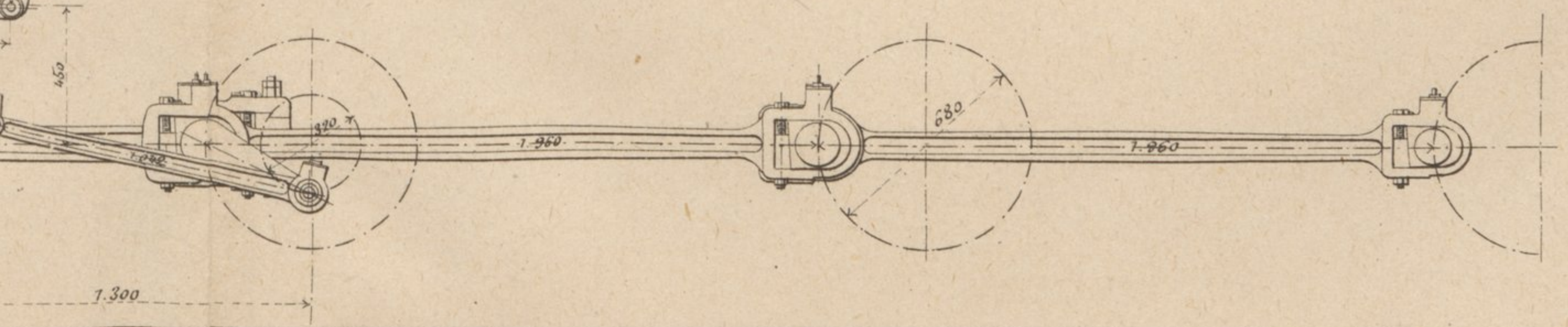


Fig. 6. Mécanisme du cylindre à basse pression



LOCOMOTIVE COMPOUND EXPRESS POUR FORTES RAMPES D

Fig. 1. Vue en élév

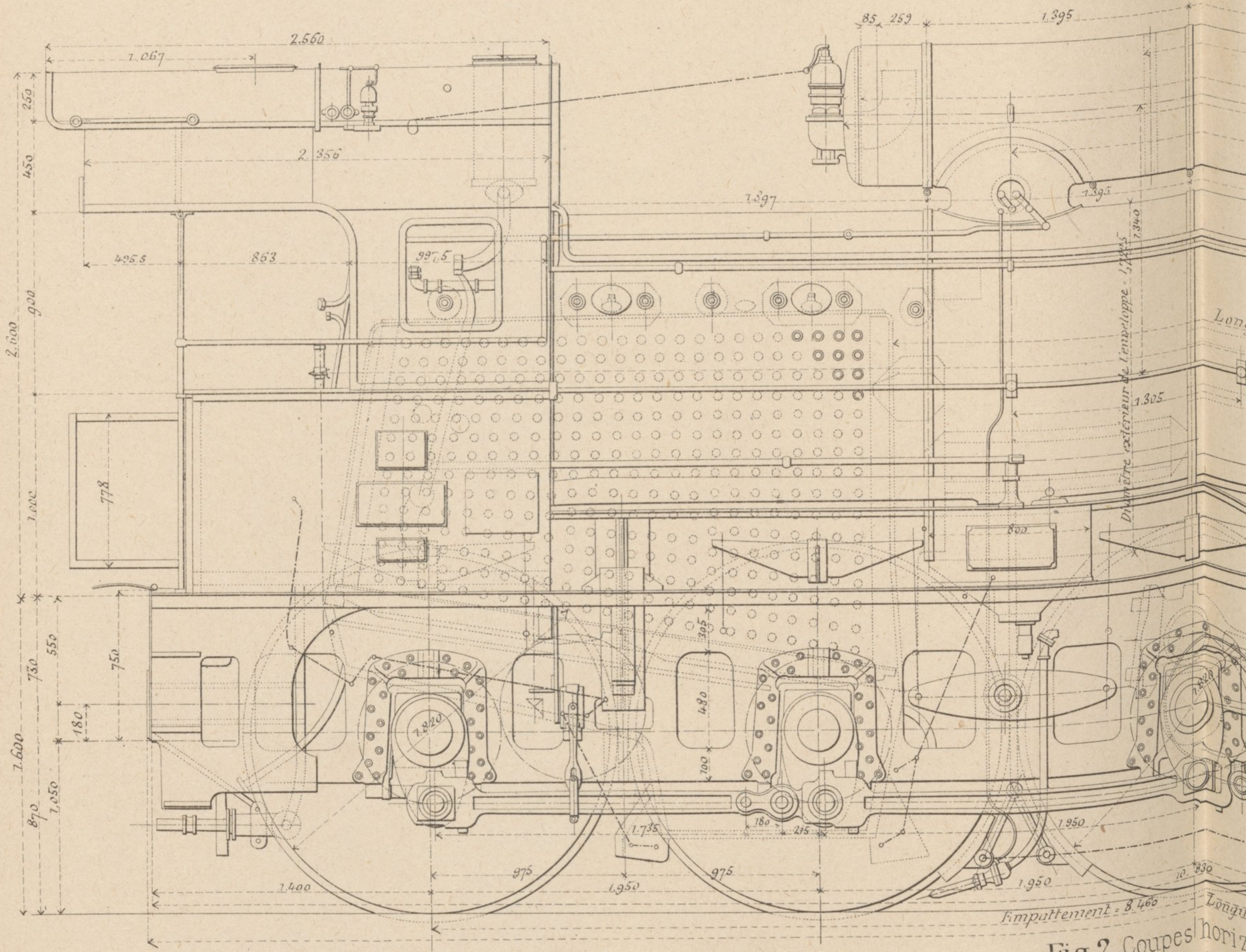
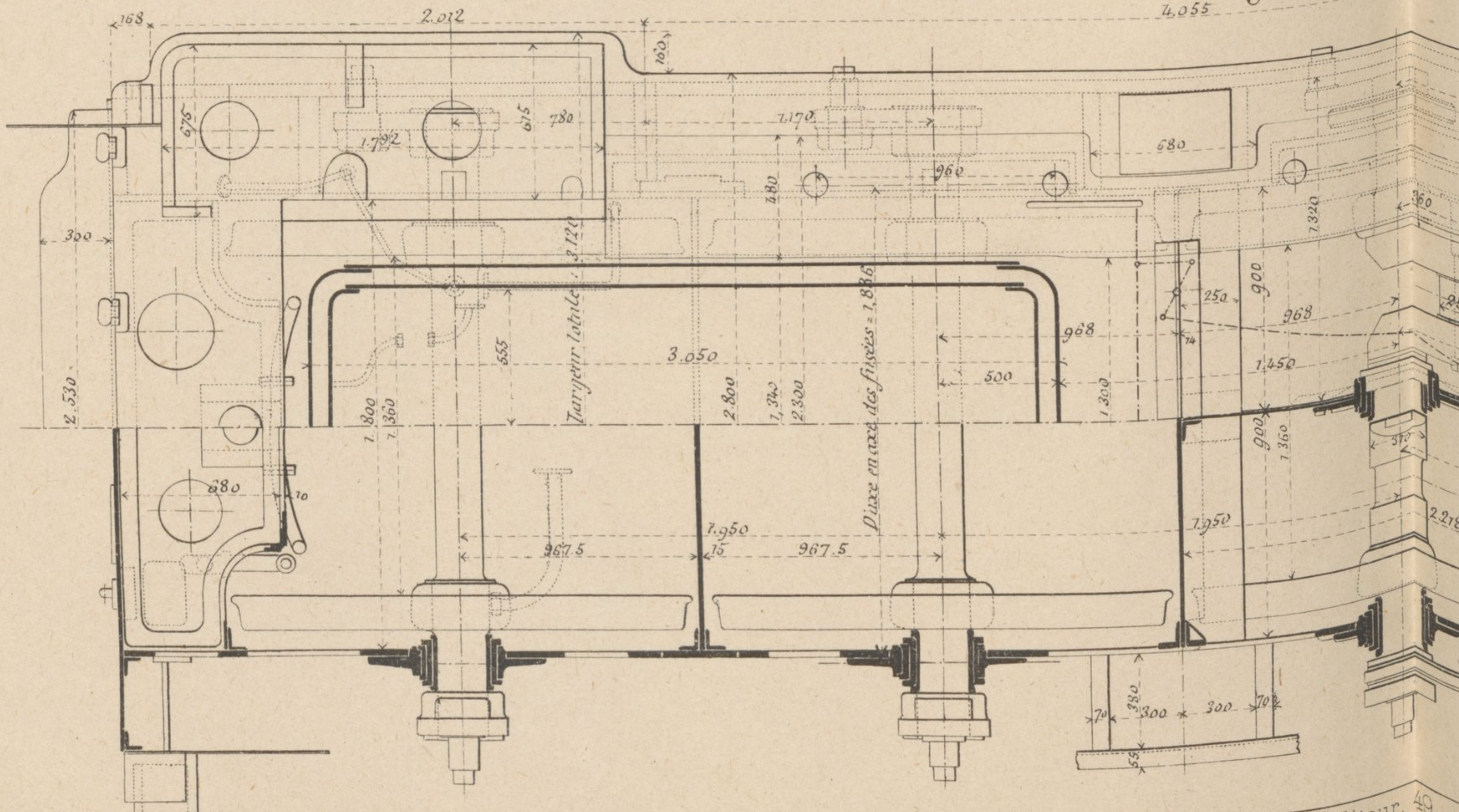
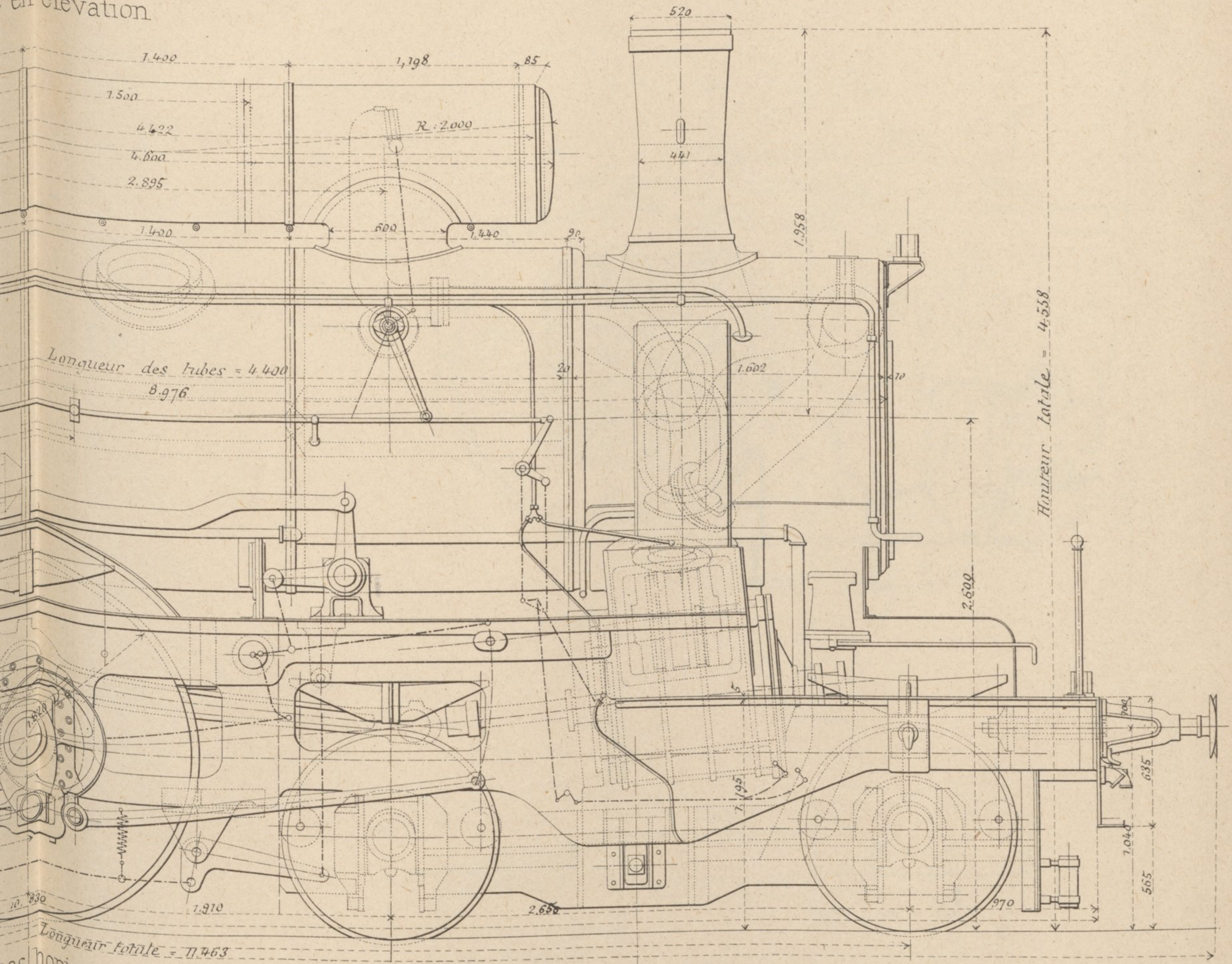


Fig. 2. Coupes horizont

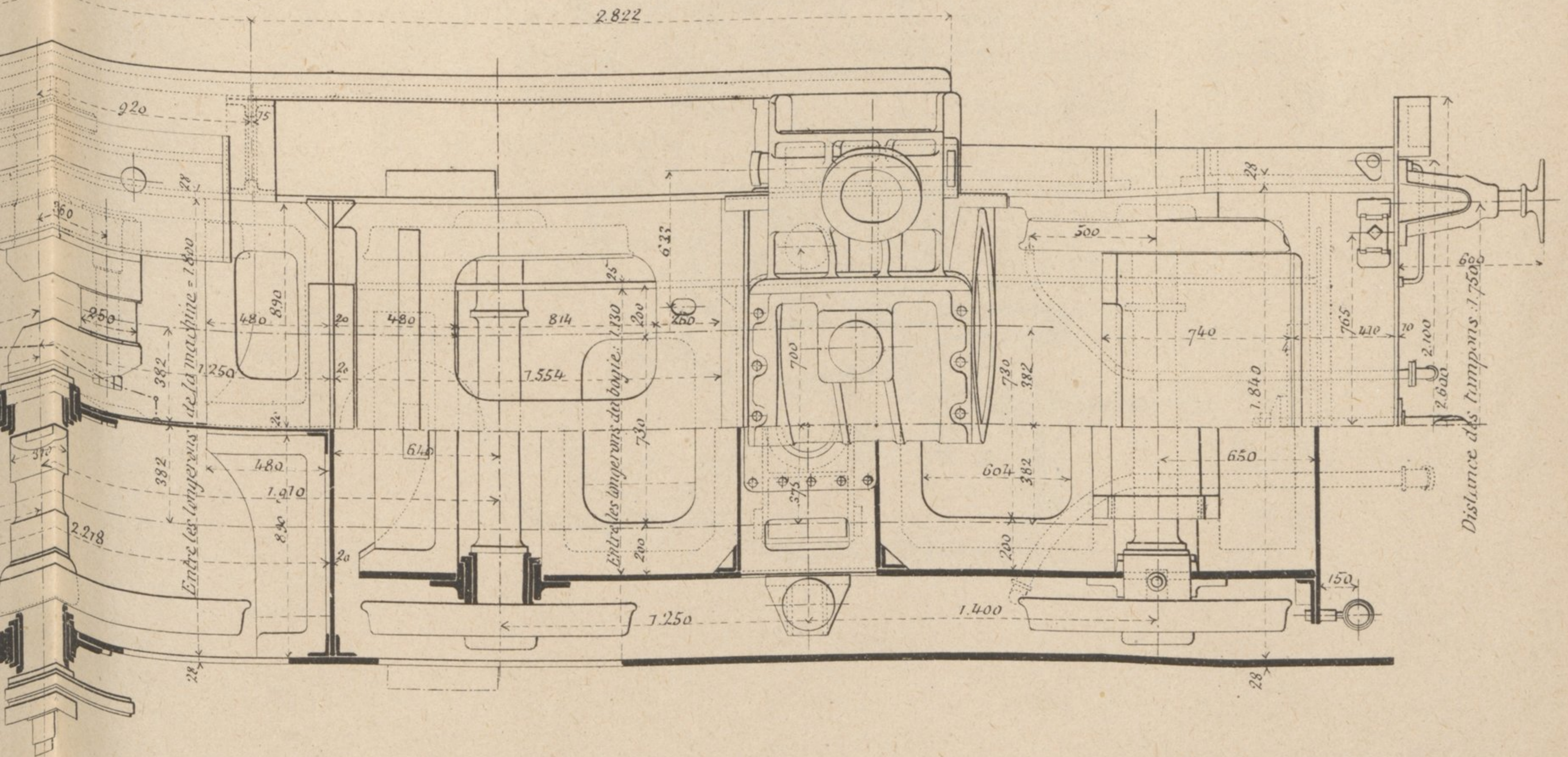


MACHINES DES CHEMINS DE FER DE L'ETAT AUTRICHIEN (Série 9)

en élévation



des horizontales



Echelle de 0^m03 par mètre

39811 | L. Courrier, 43, rue de Dunkerque, Paris

LOCOMOTIVE COMPOUND EXPRESS POUR FORTES RAMPES DES CHEMINS DE FER DE L'ÉTAT AUTRICHIEN (Série 9)

Fig. 1.

Coupe par le foyer et vue d'arrière

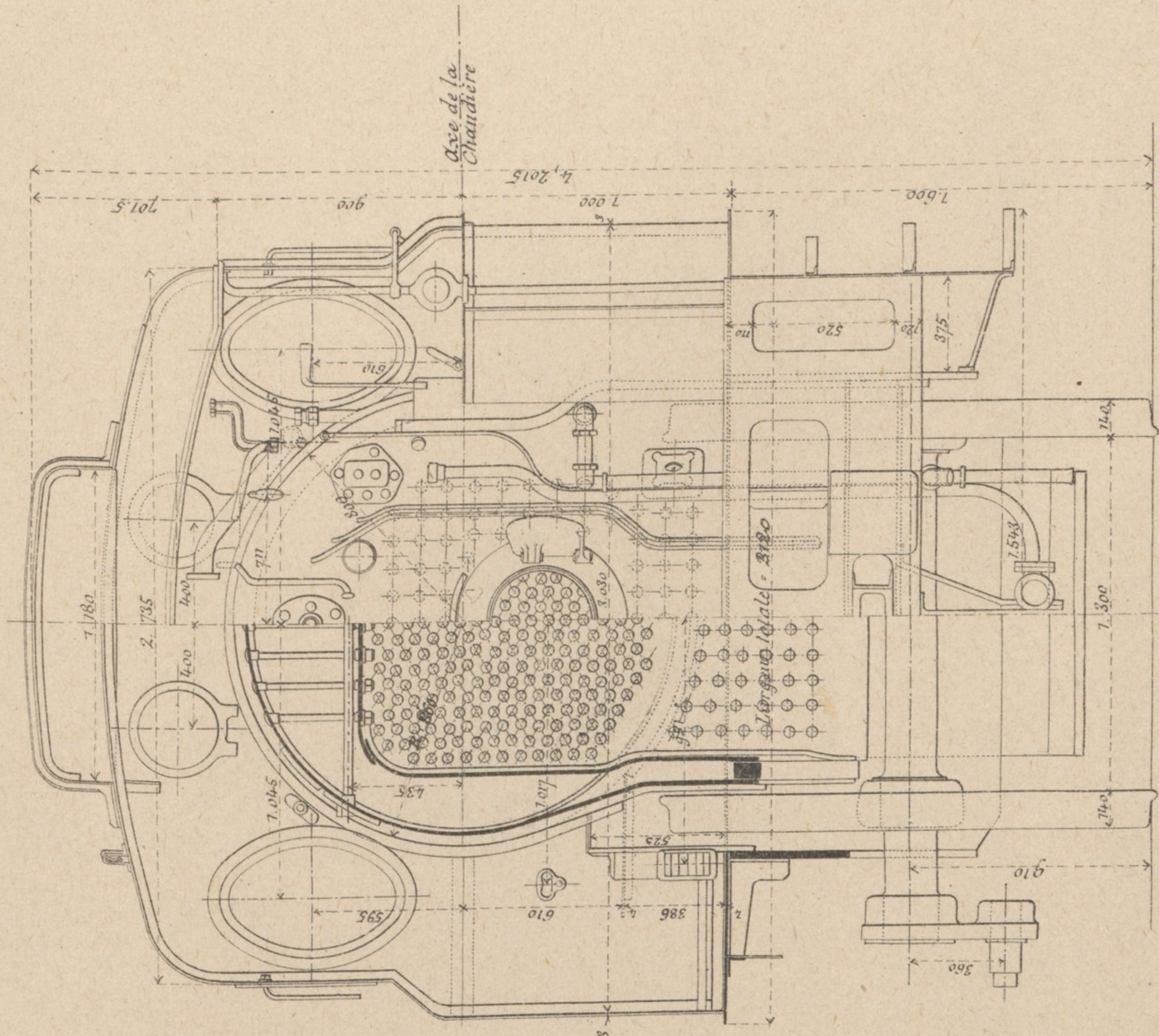
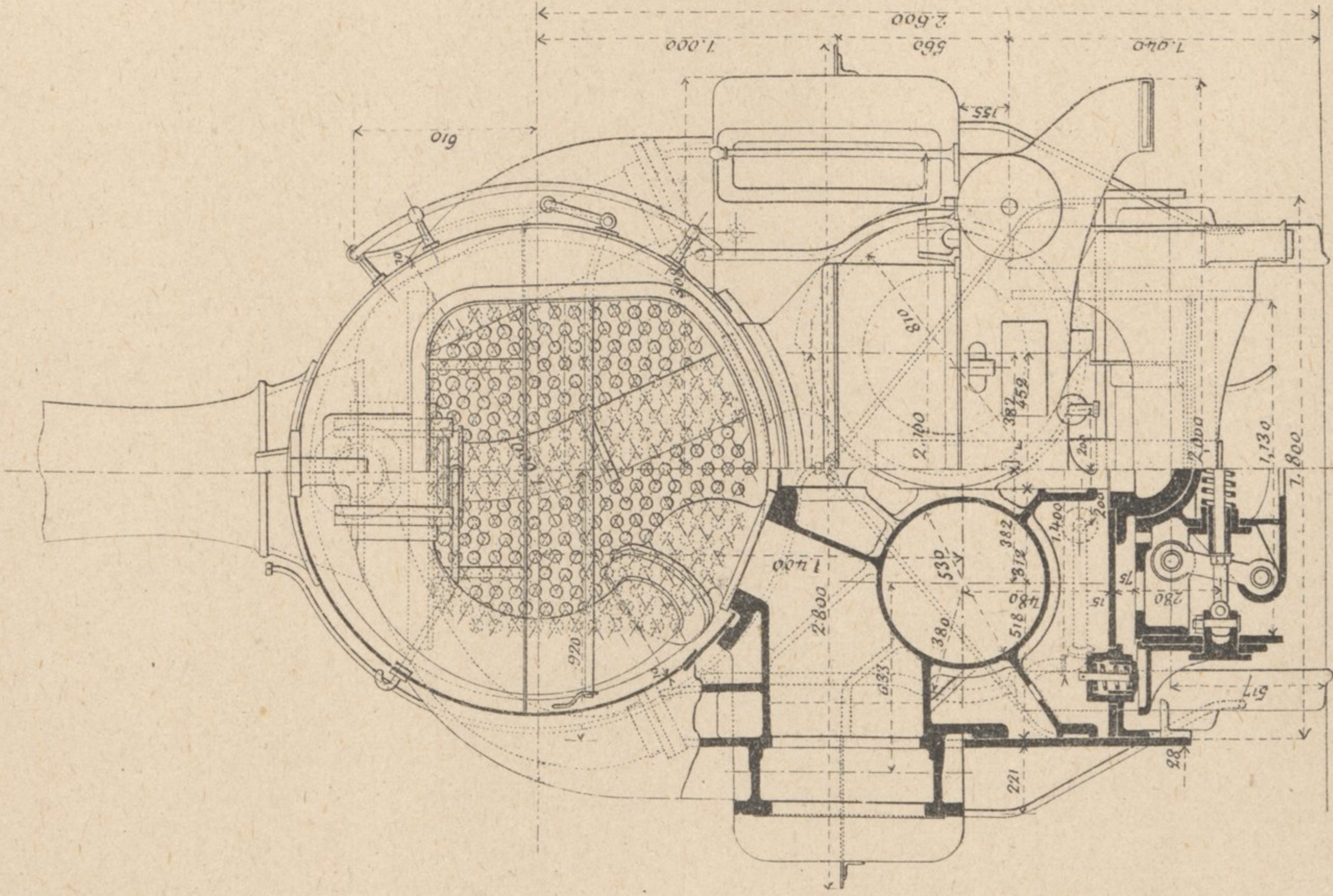


Fig. 2.

Coupe par le bogie et vue d'avant



Légende

Surface de grille	3 ^m 410	Diamètre du cylindre B.P.	0 ^m 810	Poids à vide	63T20
Surface totale de chauffe	211 ^m 470	Course des pistons	0 ^m 730	Poids adhérent	43T05
Timbre	14atm.	Diamètre des roues accouplées	1 ^m 820	Poids en charge	69T80
Diamètre du cylindre H.P.	0 ^m 530	du bogie	1 ^m 034		

Fig.1. Vue en élévation

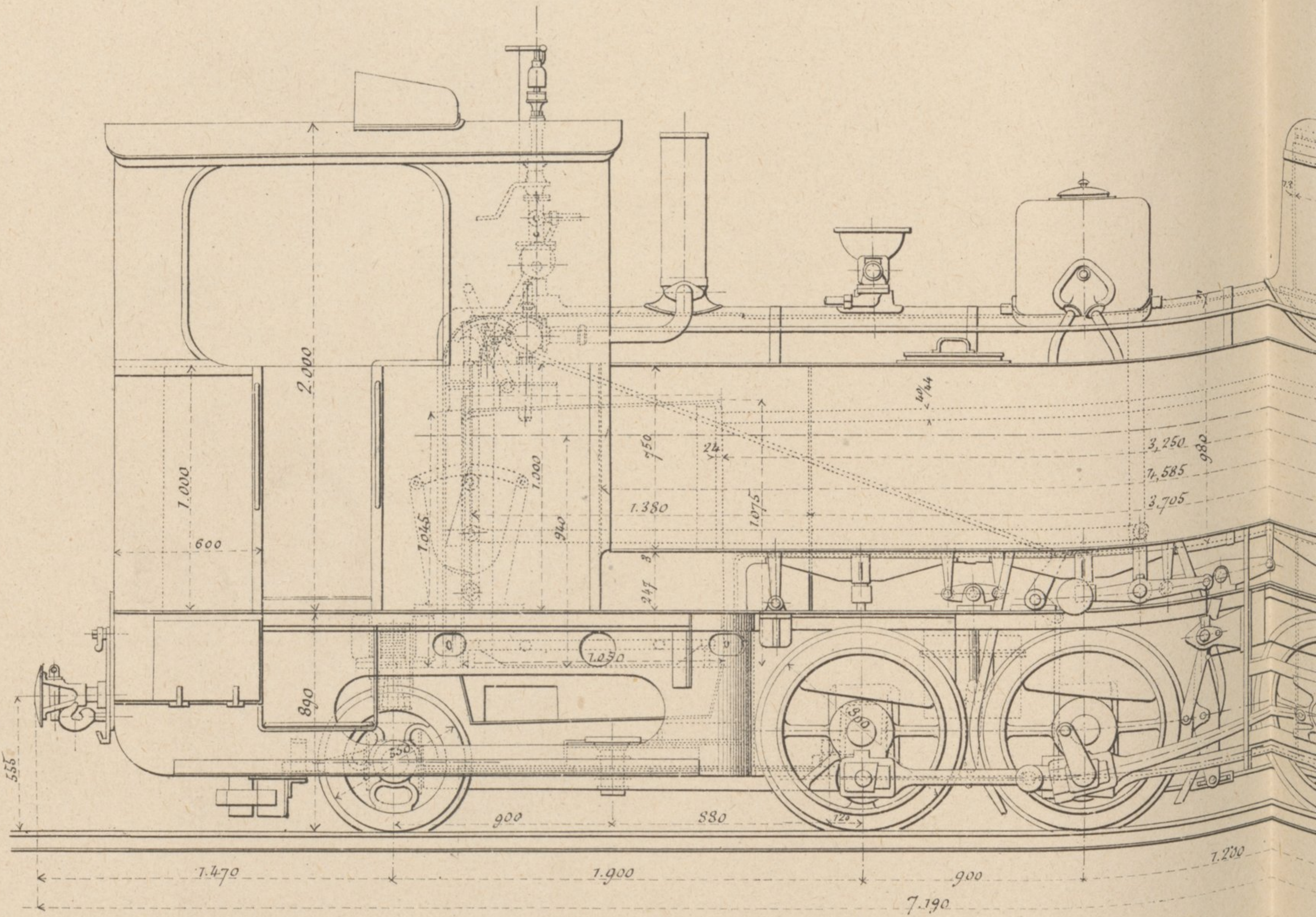
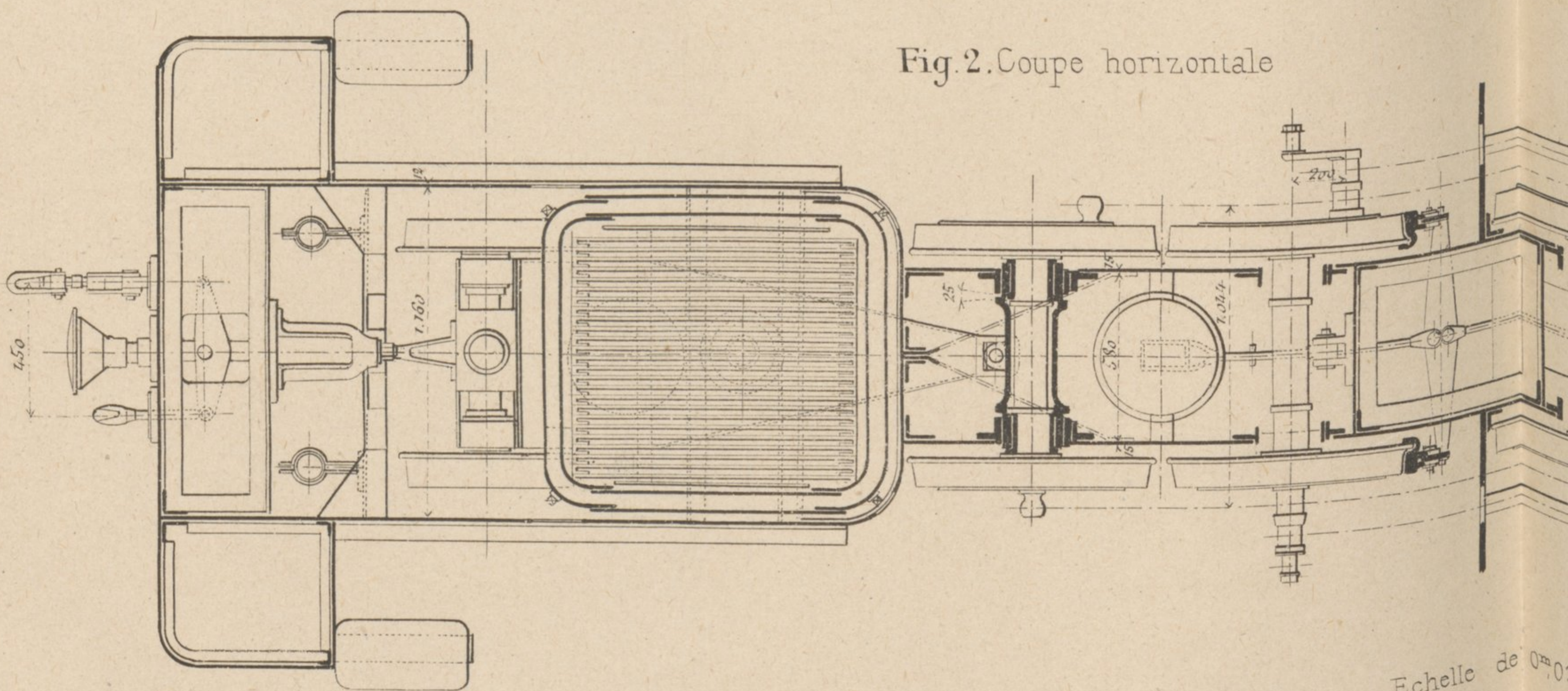
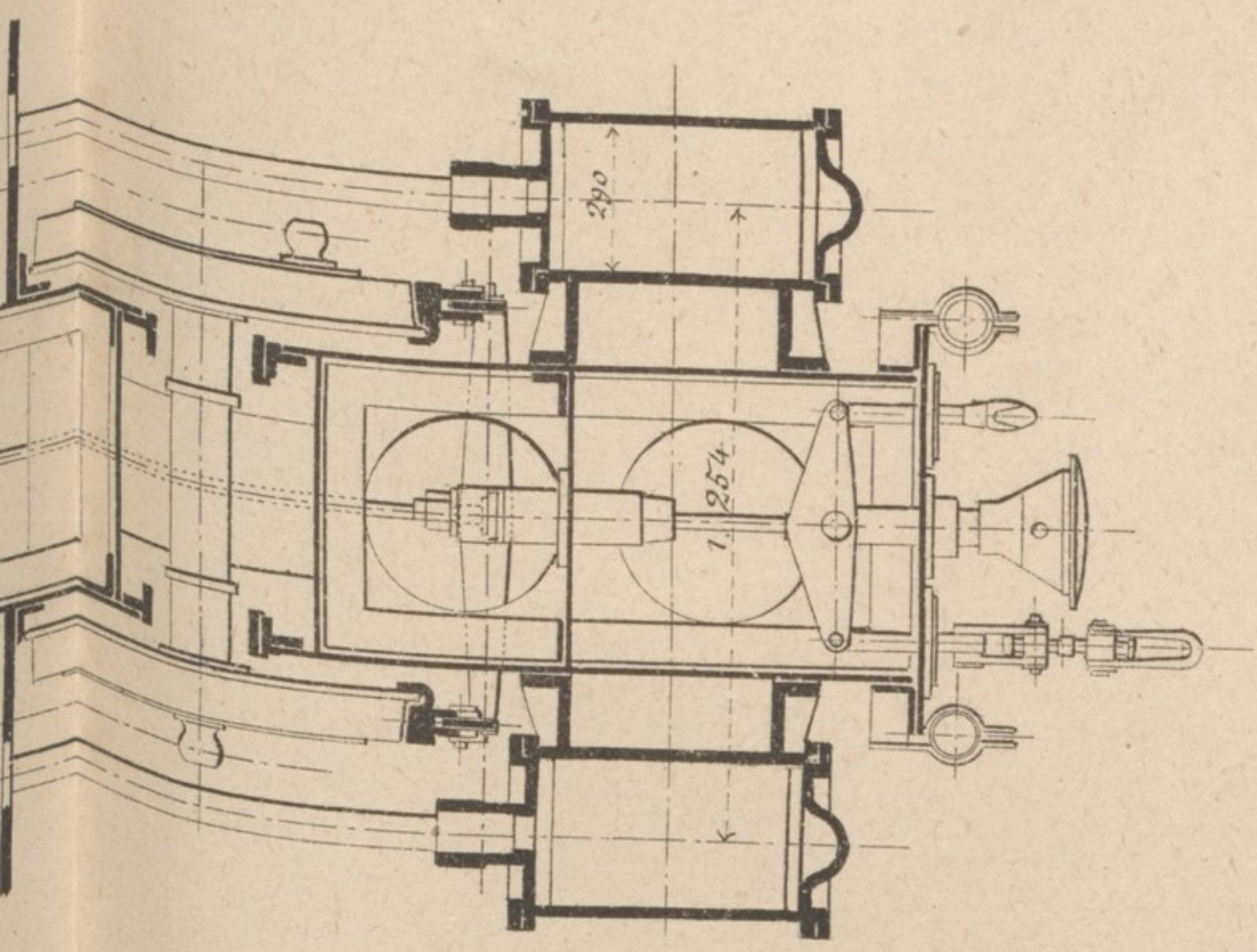
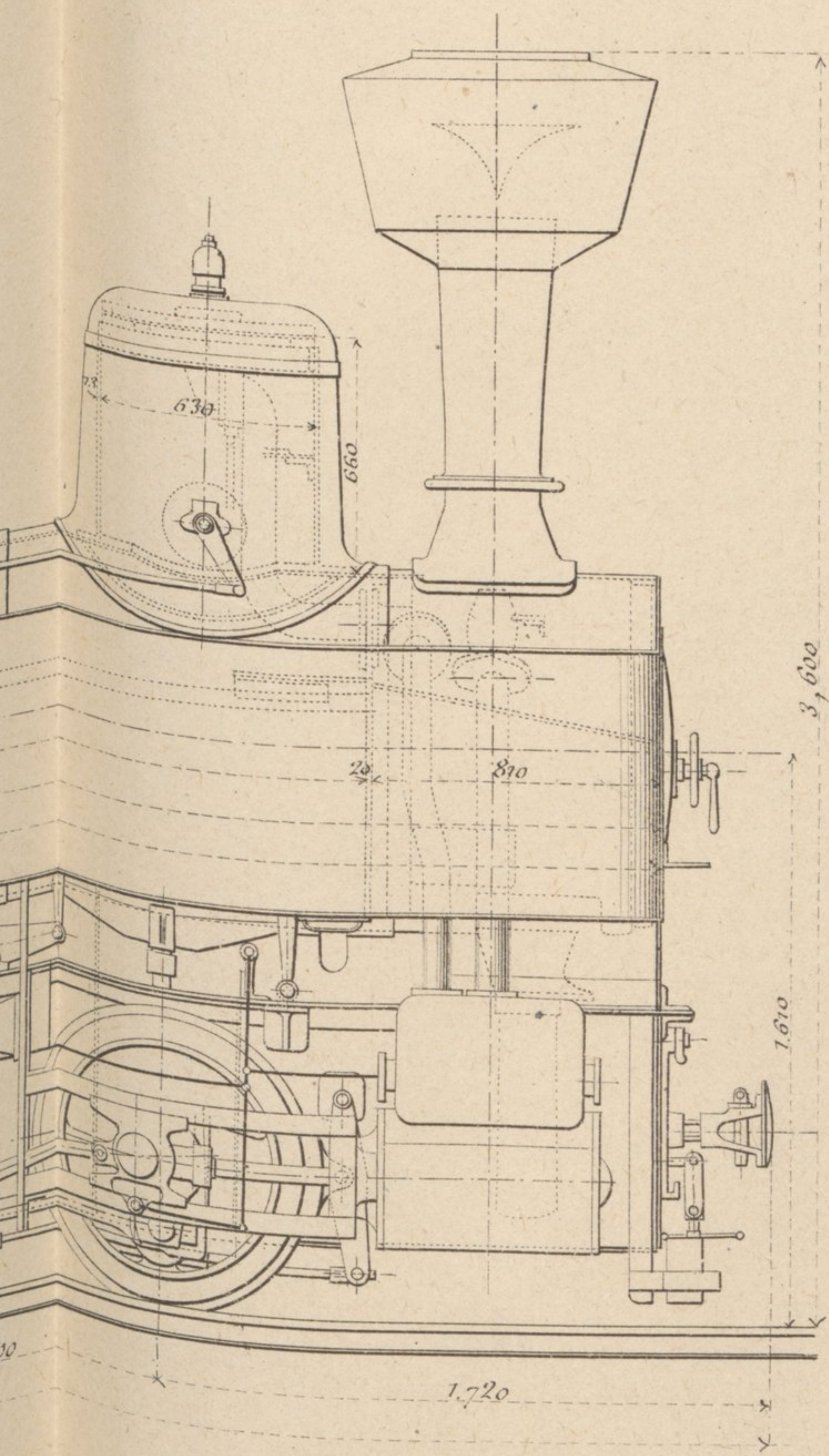


Fig.2. Coupe horizontale



Echelle de 0^m.0

VOIE ÉTROITE DE L'ÉTAT AUTRICHIEN



de 0^m033 par mètre

r, 49, quai des Grands-Augustins, Paris.

Fig. 3.
Vue d'avant et Coupe par le foyer

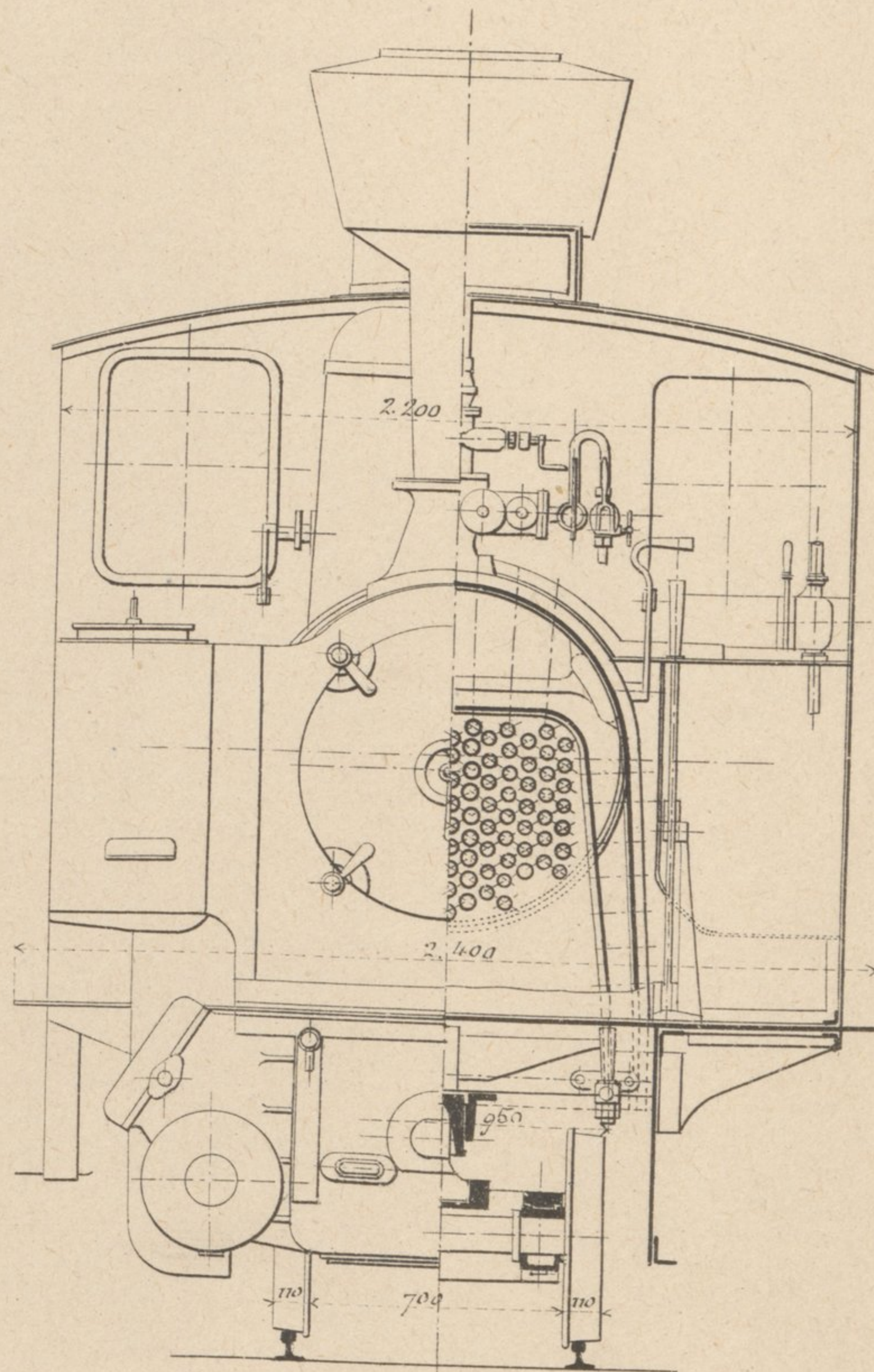
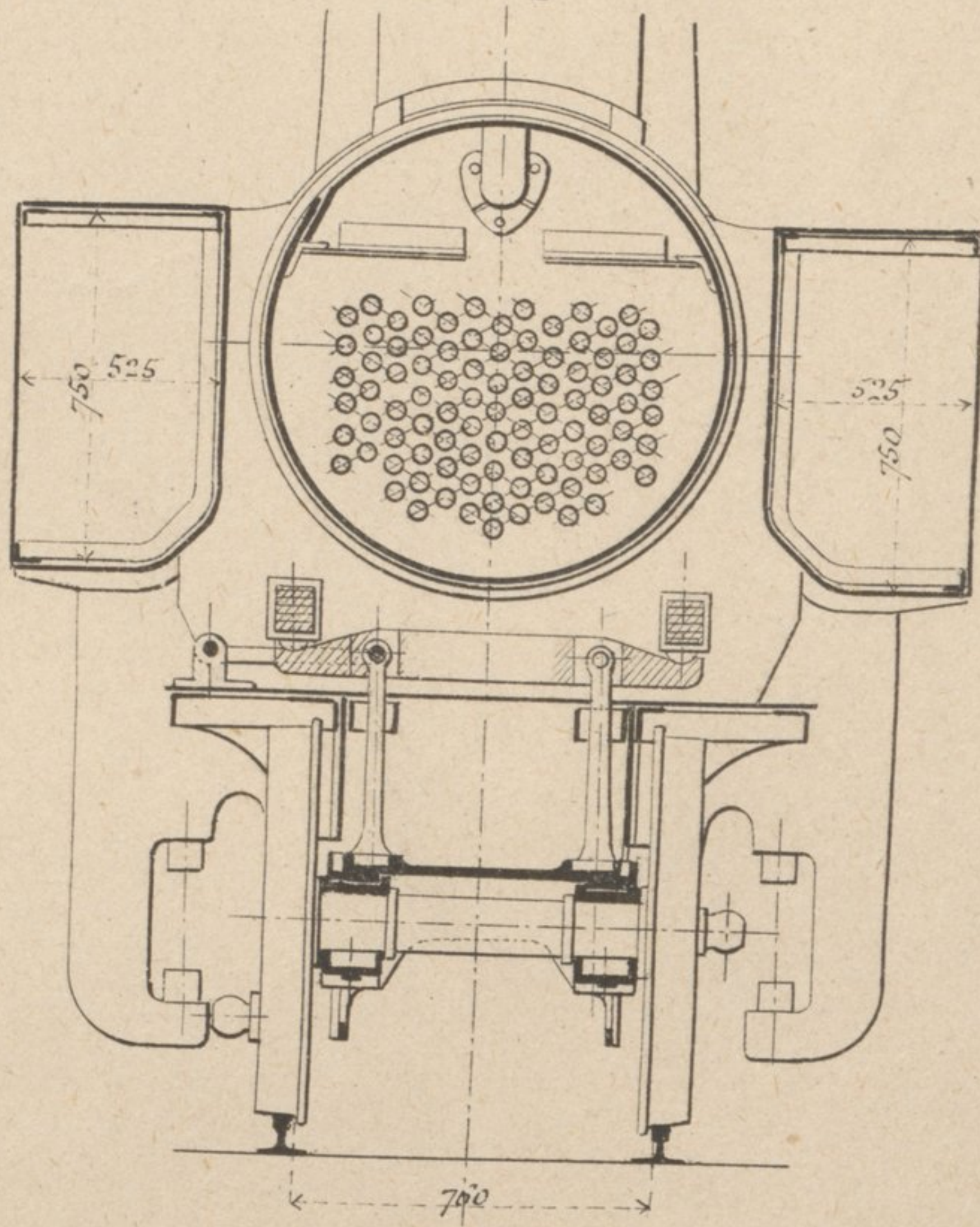


Fig 4.
Coupe transversale par le 3^e essieu



LOCOMOTIVE A GRANDE VITESSE COMPOUND-TANDE

Fig.1.Coupe longitudinal

Echelle 1/20

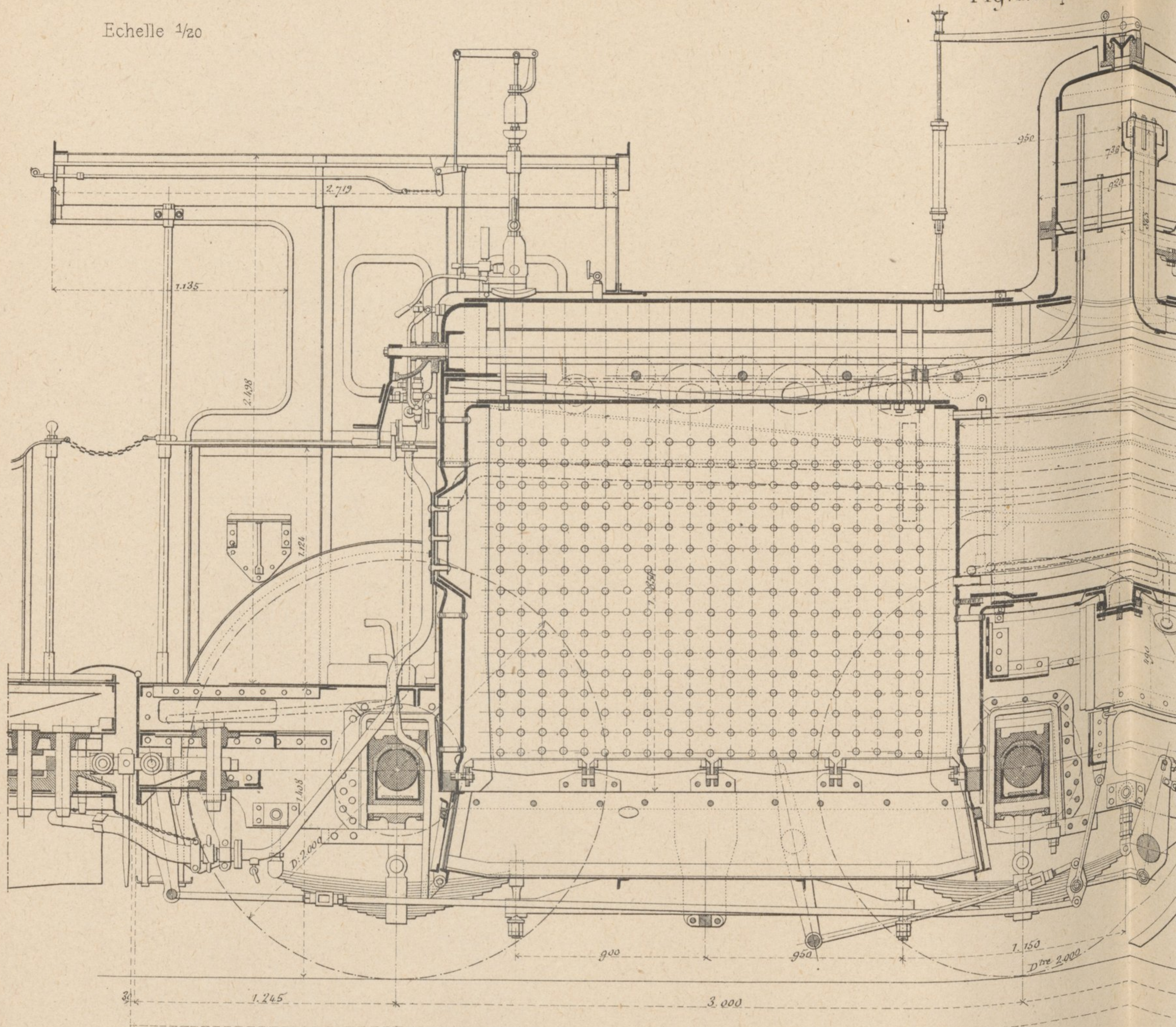
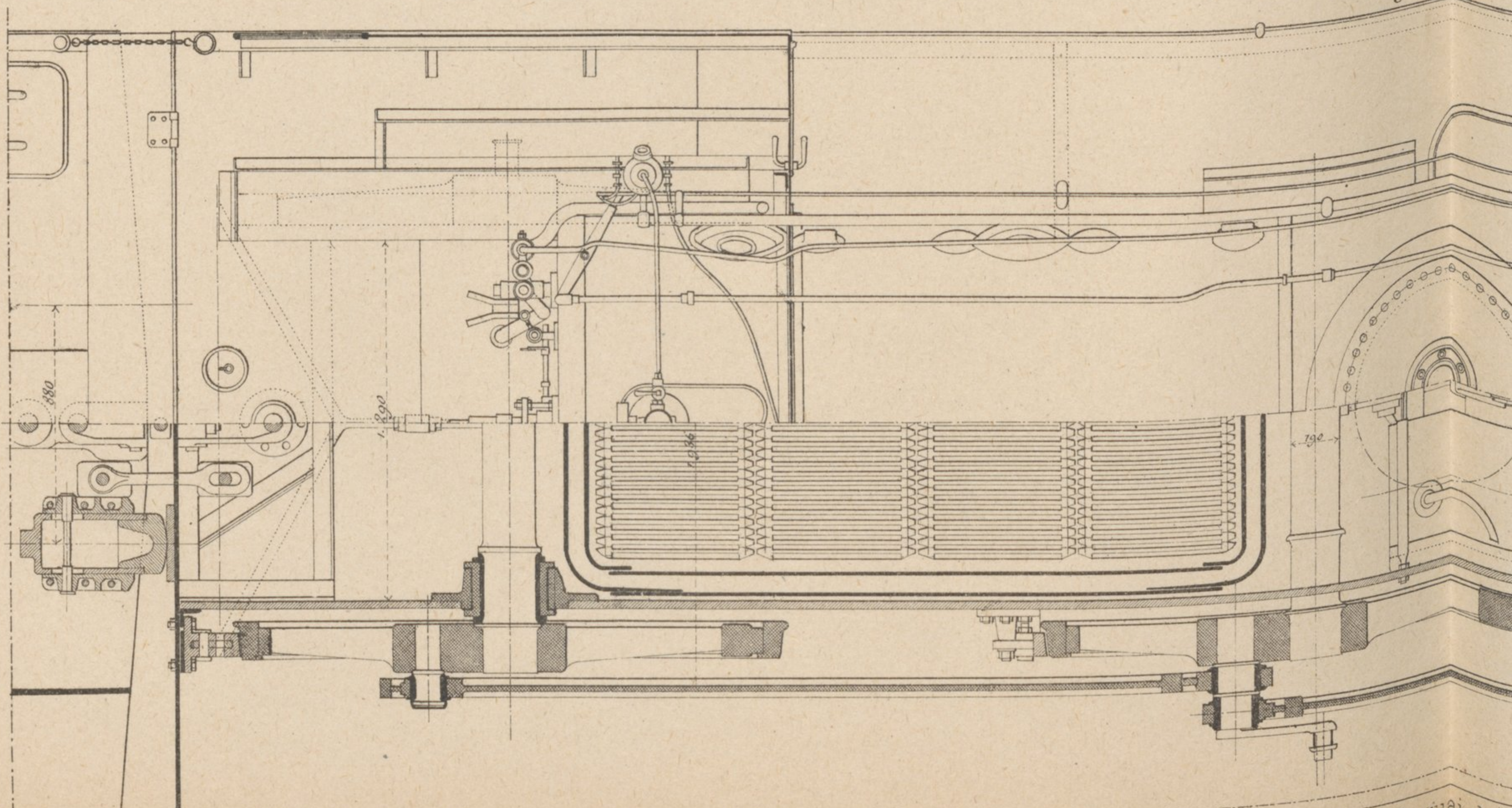
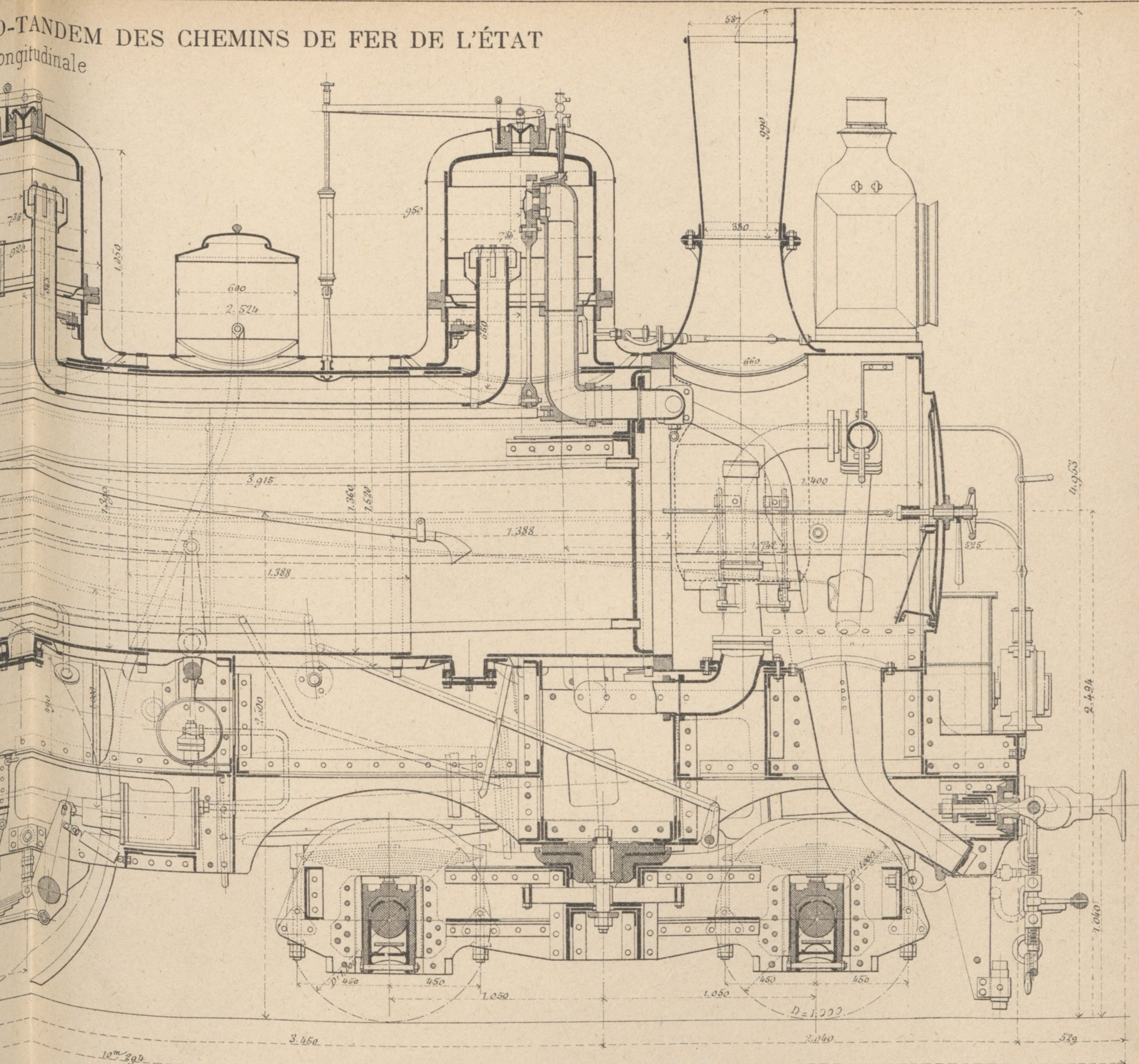


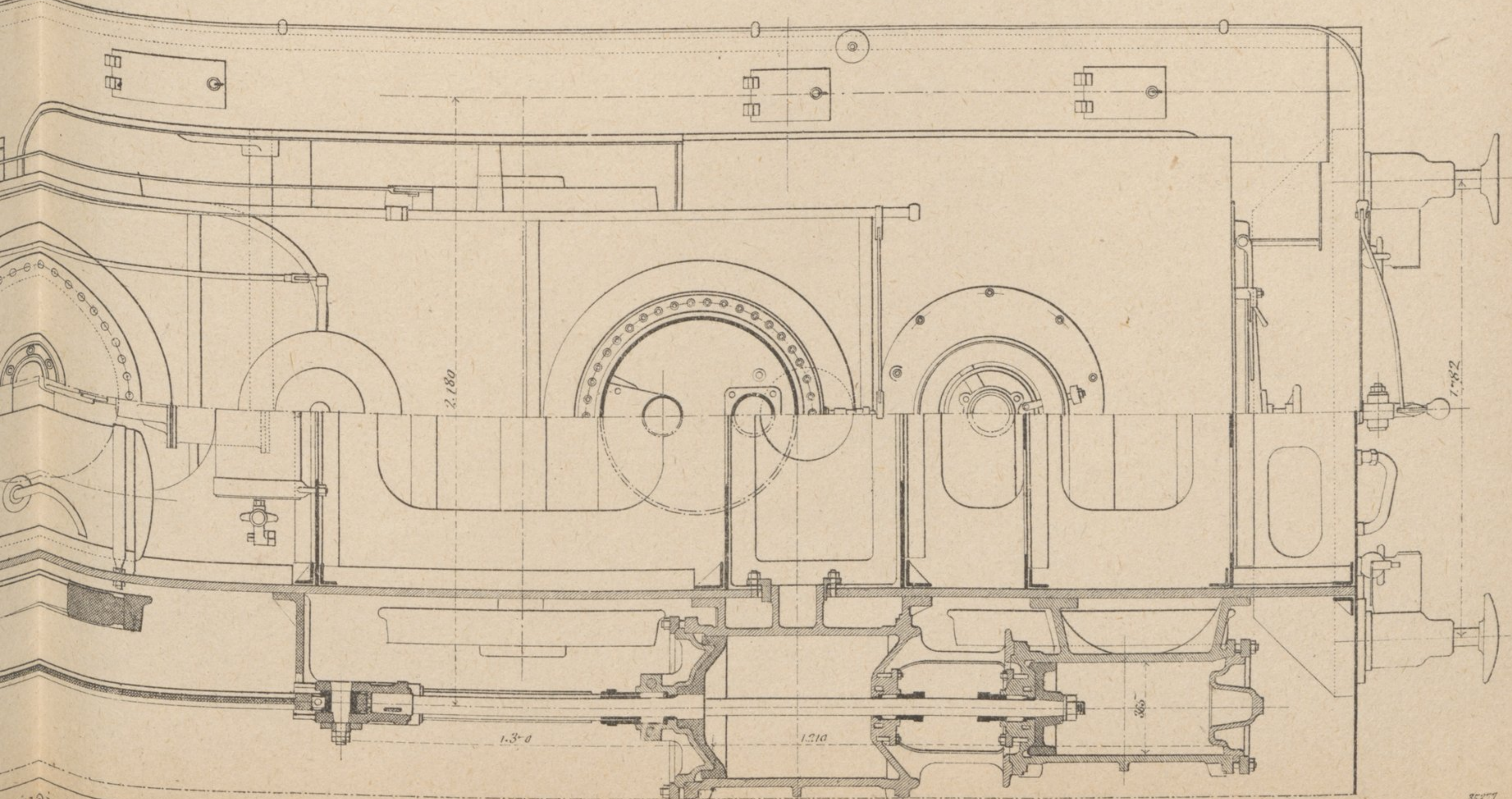
Fig.2 Plan



LOCOMOTIVE-TANDEM DES CHEMINS DE FER DE L'ÉTAT
vue longitudinale



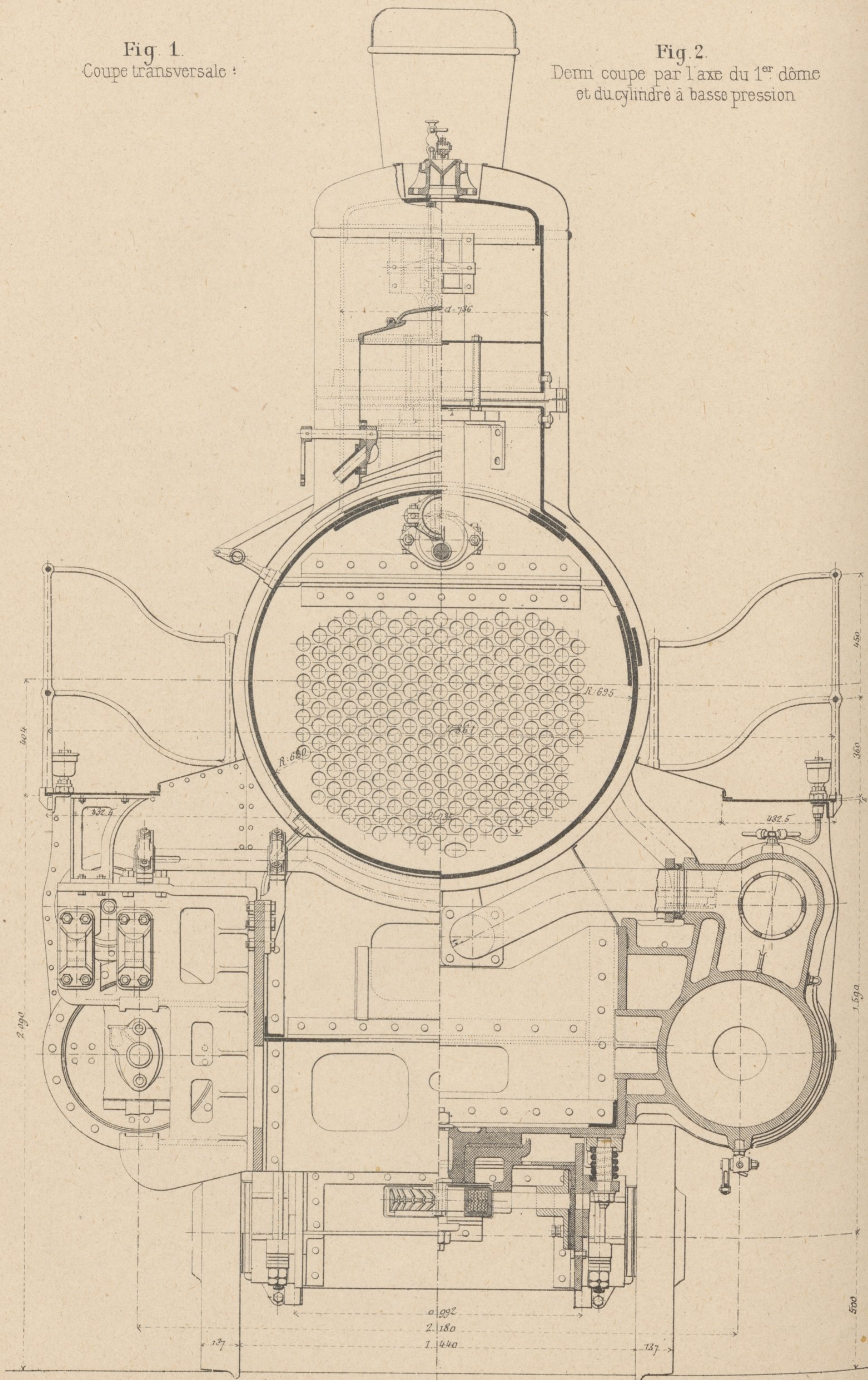
2. Plan



LOCOMOTIVE A GRANDE VITESSE COMPOUND-TAND

Fig. 1.
Coupe transversale :

Fig. 2.
Demi coupe par l'axe du 1^{er} dôme
et du cylindre à basse pression

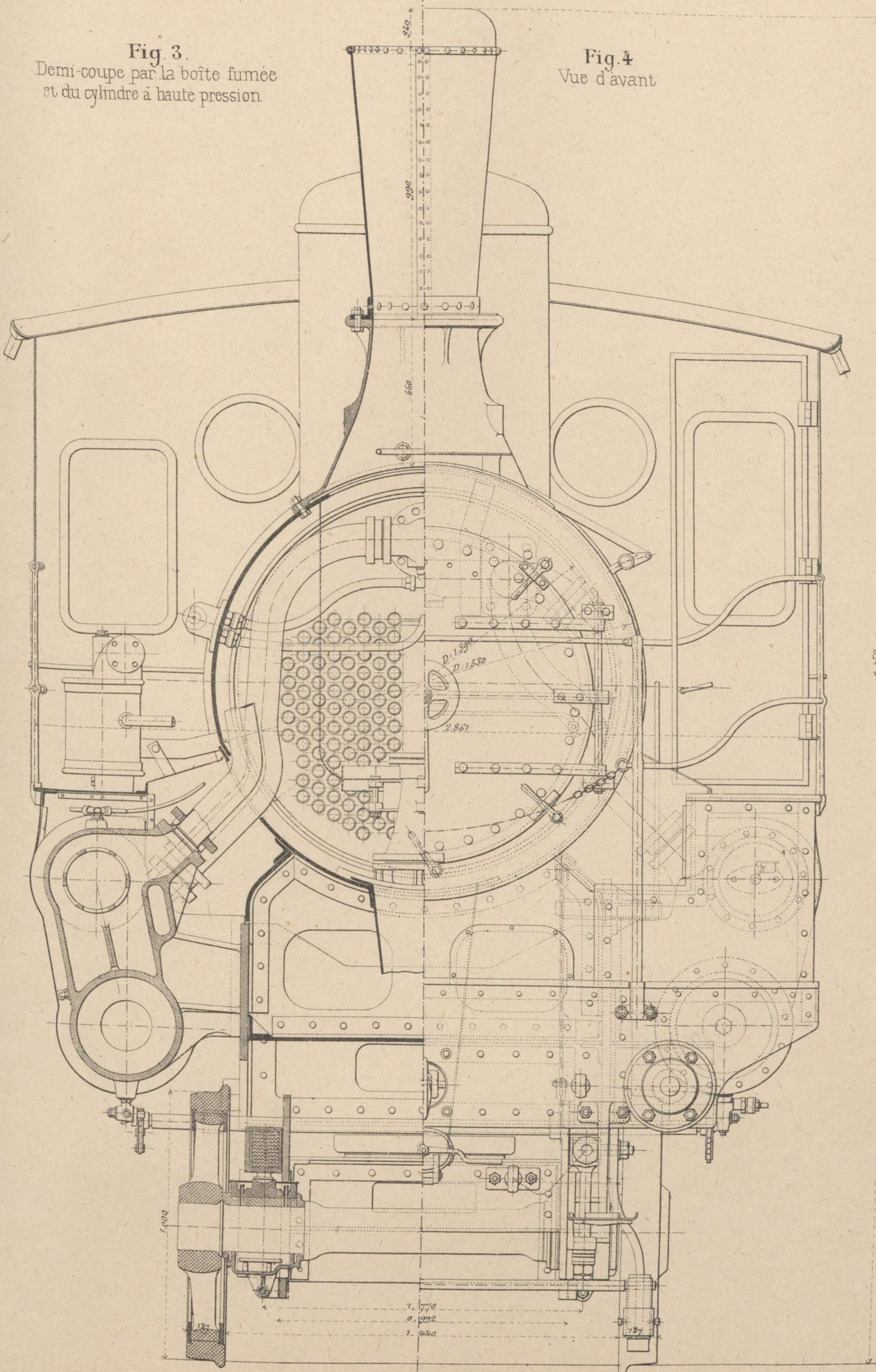


Echelle 1/20

D-TANDEM DES CHEMINS DE FER DE L'ÉTAT

Fig. 3.
Demi-coupe par la boîte fumée
et du cylindre à haute pression.

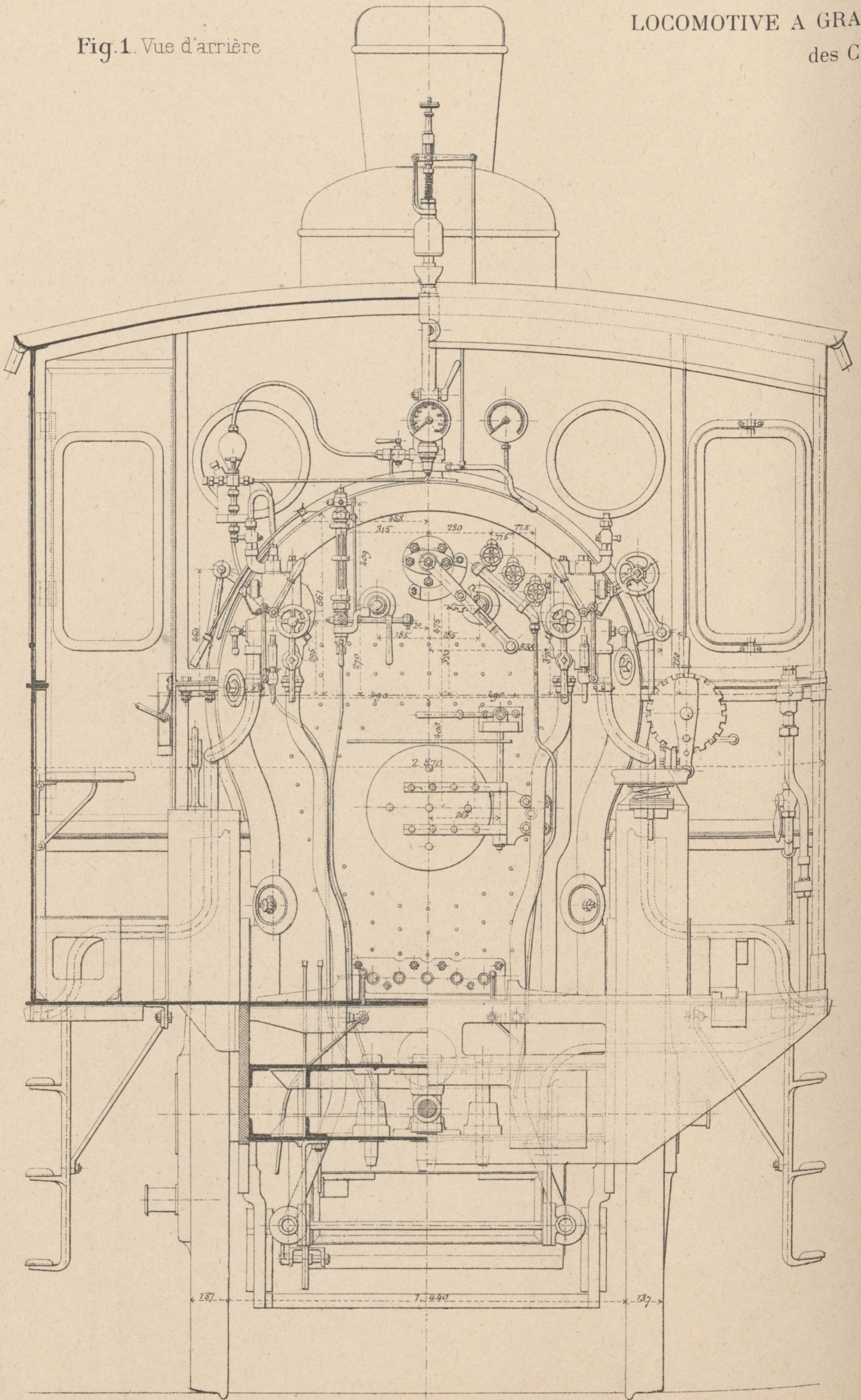
Fig. 4
Vue d'avant



elle 1/30

1.953

Fig.1. Vue d'arrière

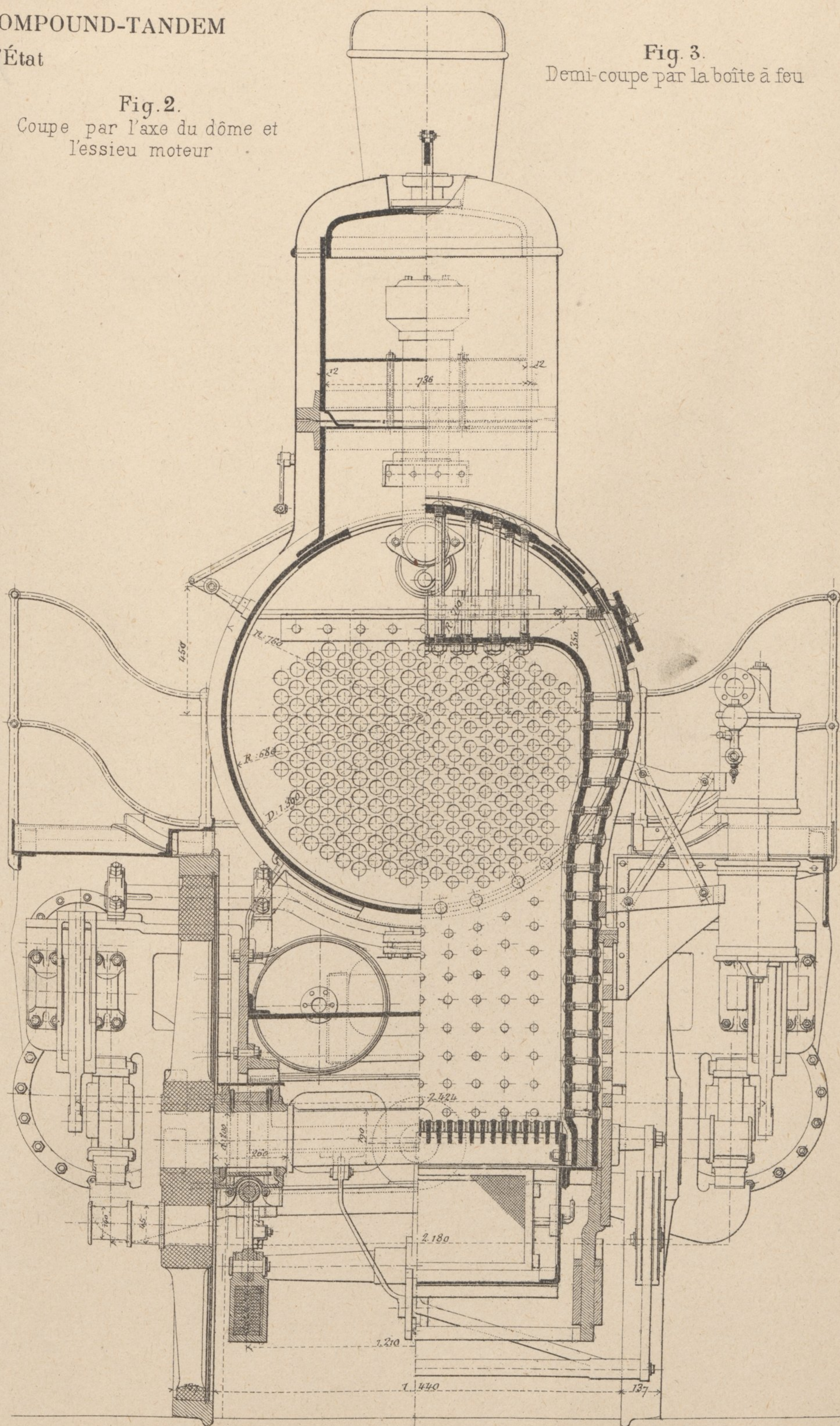


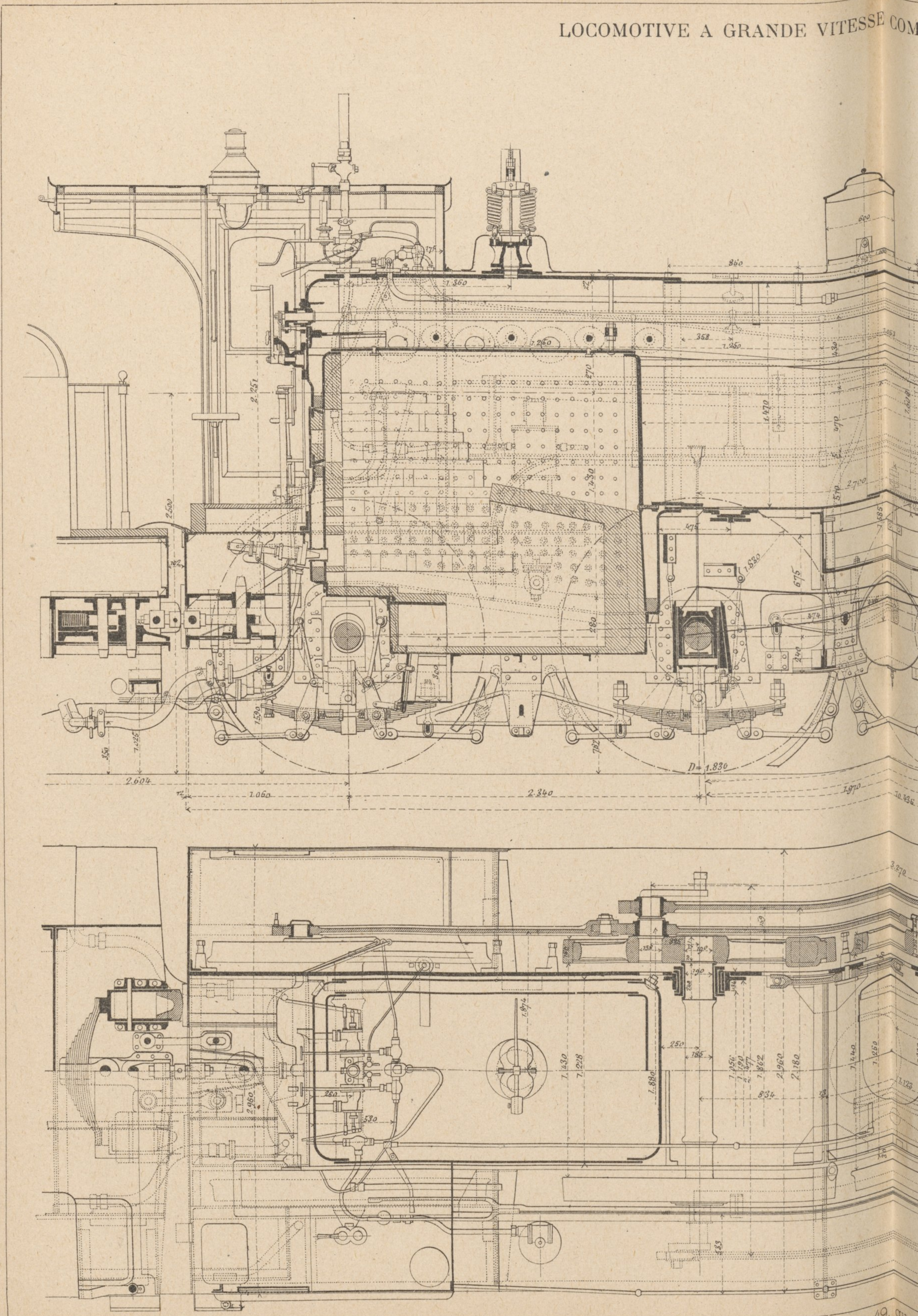
LE VITESSE COMPOUND-TANDEM

usines de fer de l'État

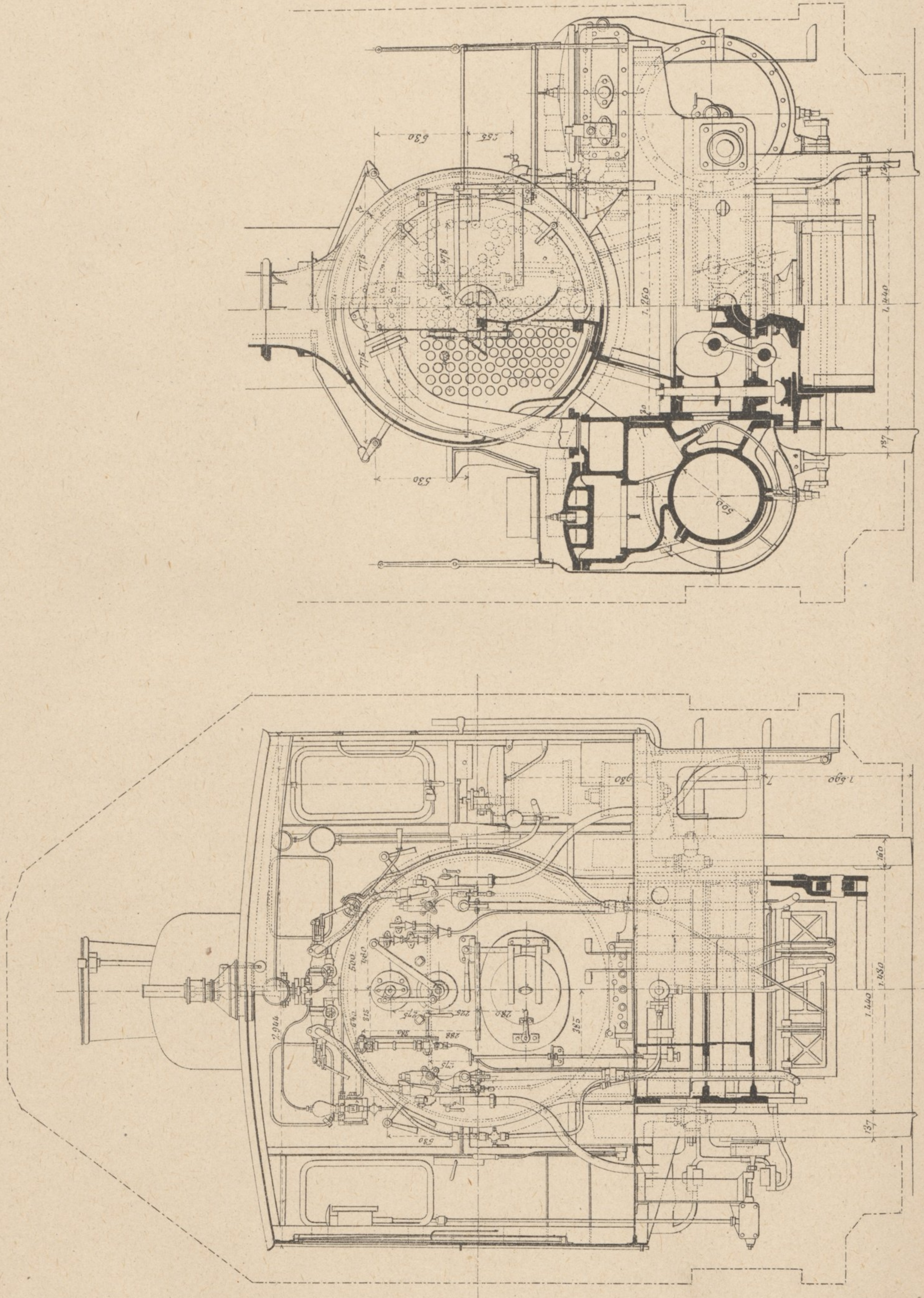
Fig. 2.
Coupe par l'axe du dôme et
l'essieu moteur

Fig. 3.
Demi-coupe par la boîte à feu





LOCOMOTIVE A GRANDE VITESSE COMPOUND DU SUD-EST RUSSE



LOCOMOTIVE A MARCHANDISES COMPOUN

Echelle : 1/20

Fig.1. Coupe longitudinale

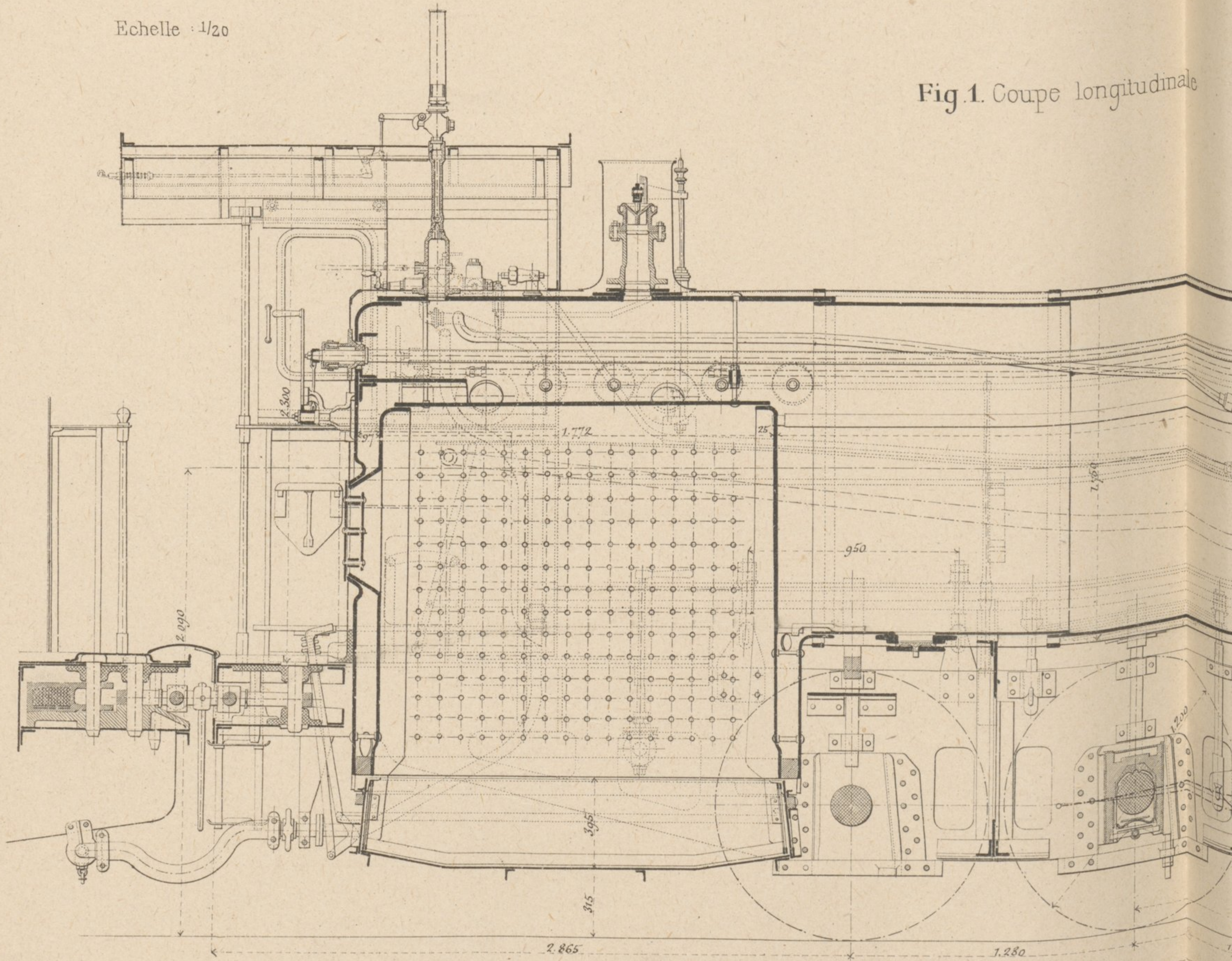
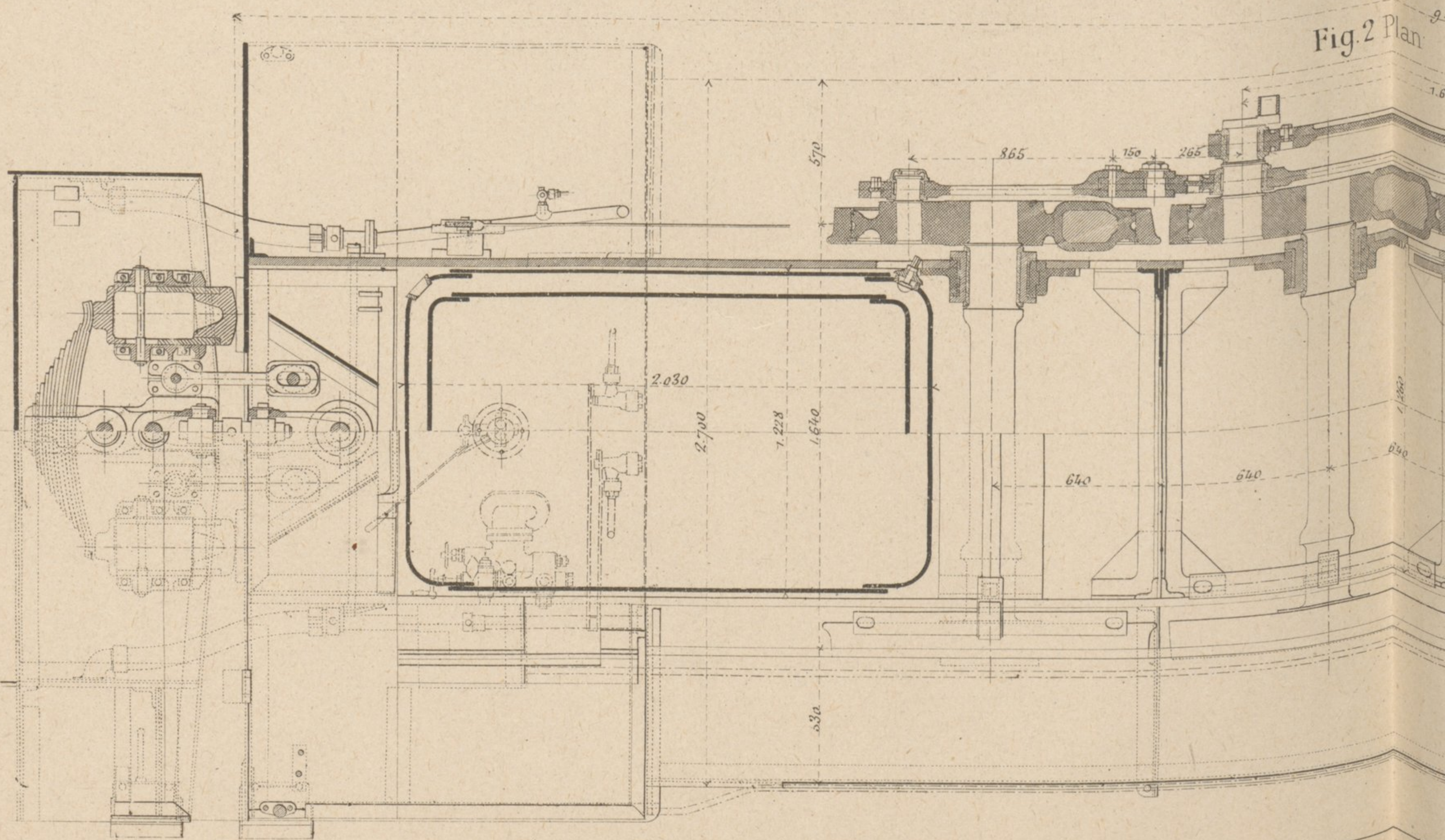
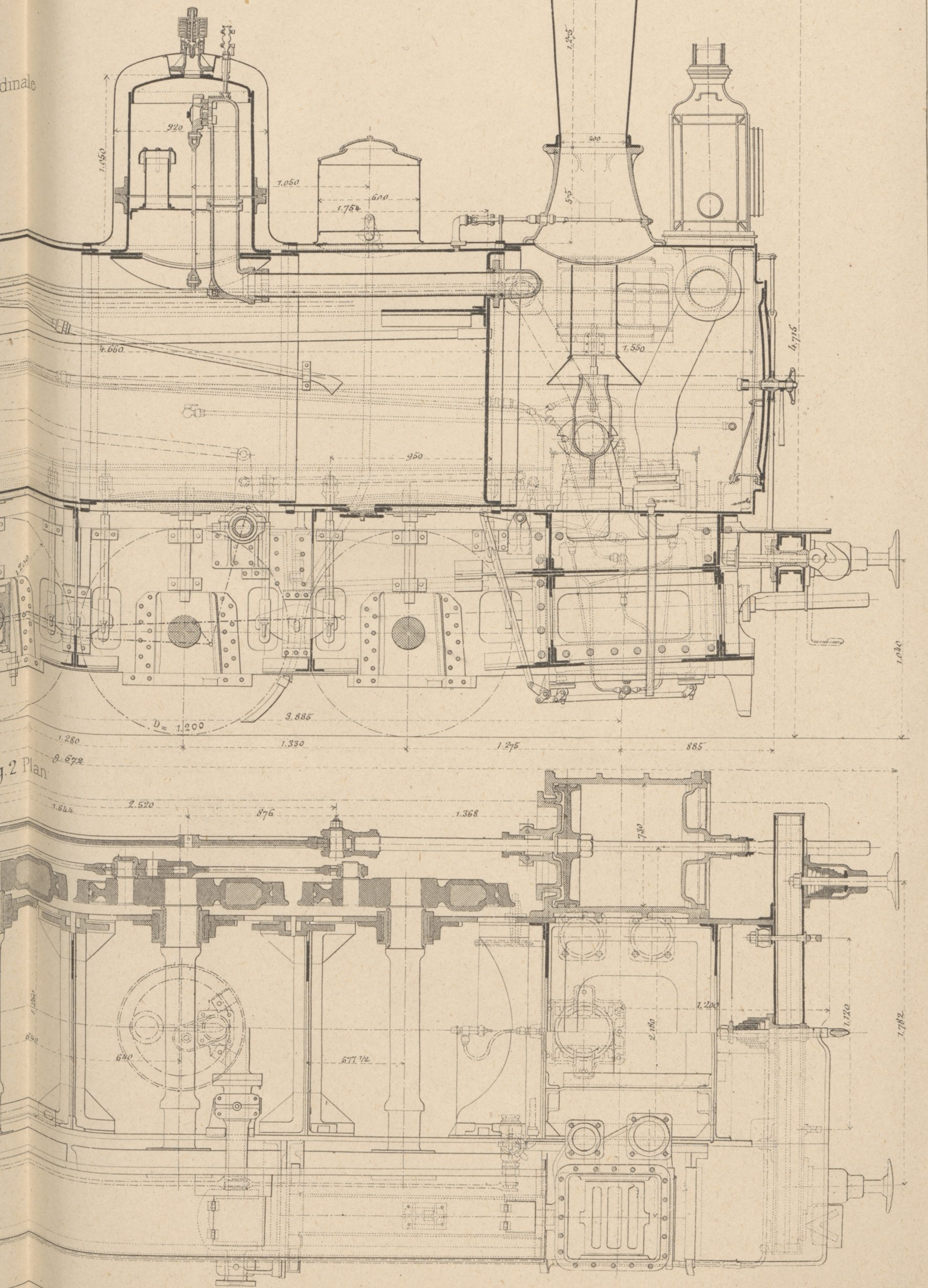


Fig.2 Plan



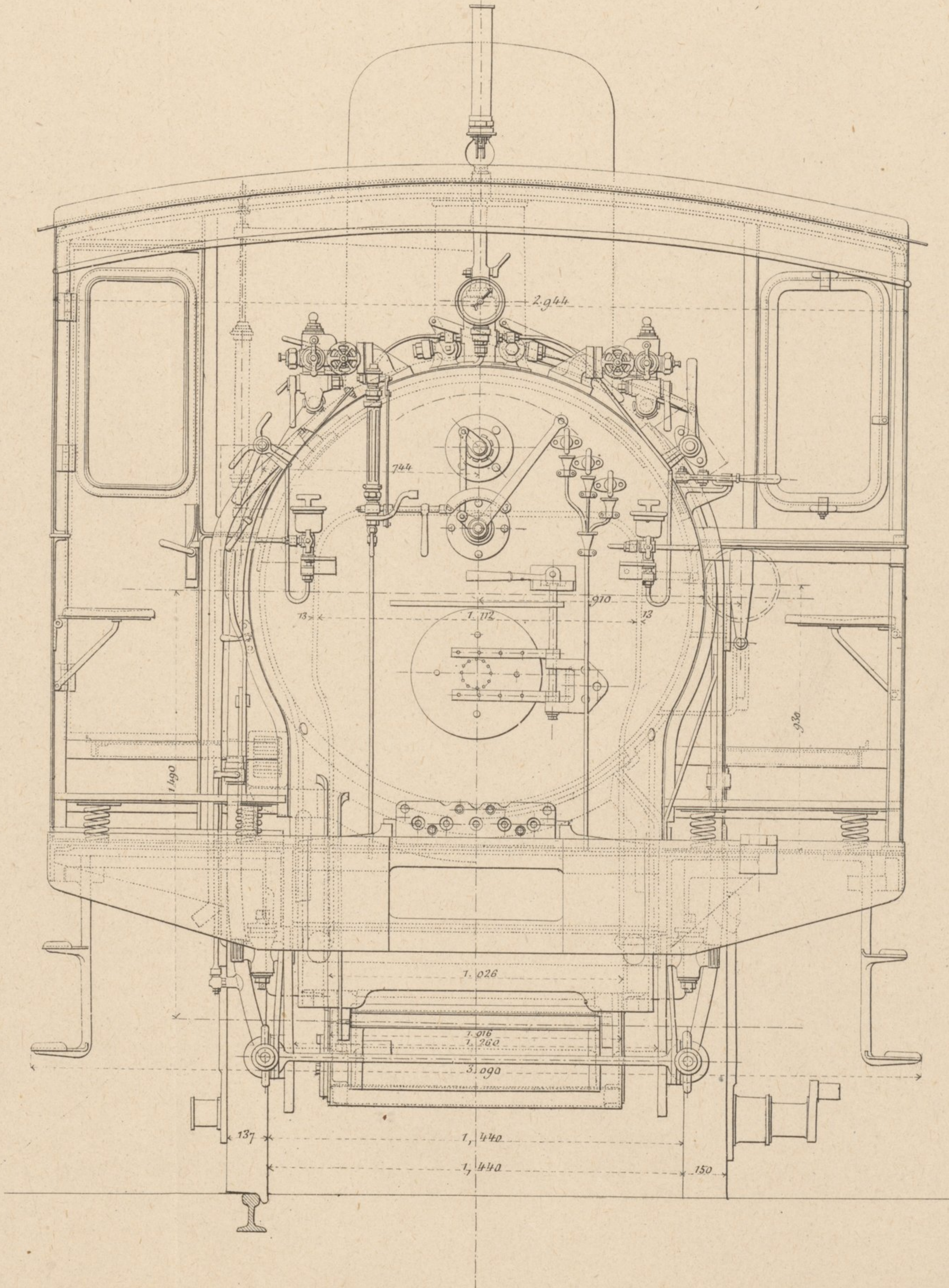
COMPOUND DES CHEMINS DE FER DE L'ÉTAT



LOCOMOTIVE A MARCHANDISES COMPOUND DES

Fig. 1.
Vue d'arrière

Echelle 1/20



DES CHEMINS DE FER DE L'ÉTAT

Fig. 2.

Coupe transversale
par le petit cylindre

Fig. 3.

Coupe transversale
par la boîte à fumée
en avant des grands cylindres

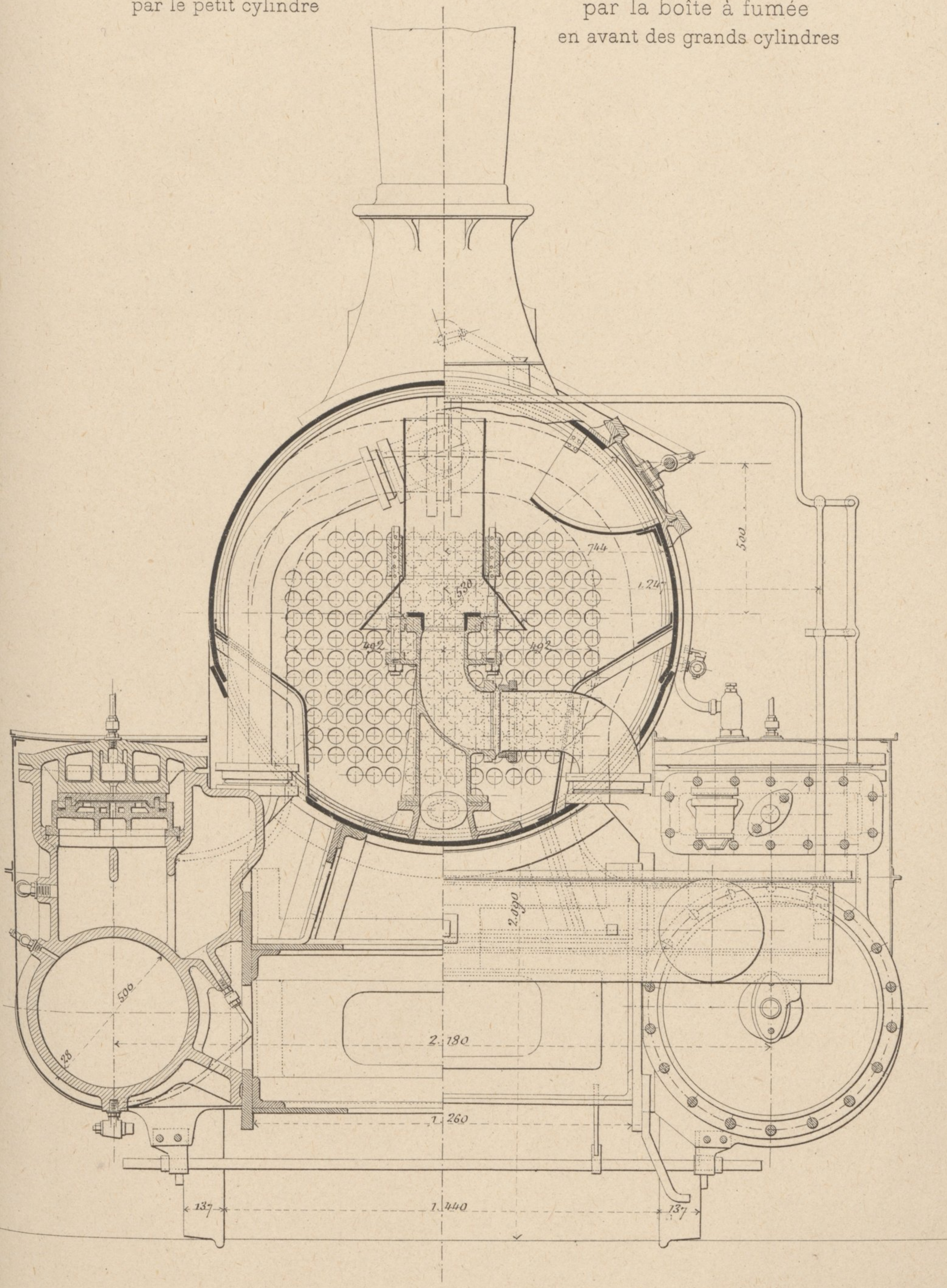


Fig. 1. Coupe longitudinale

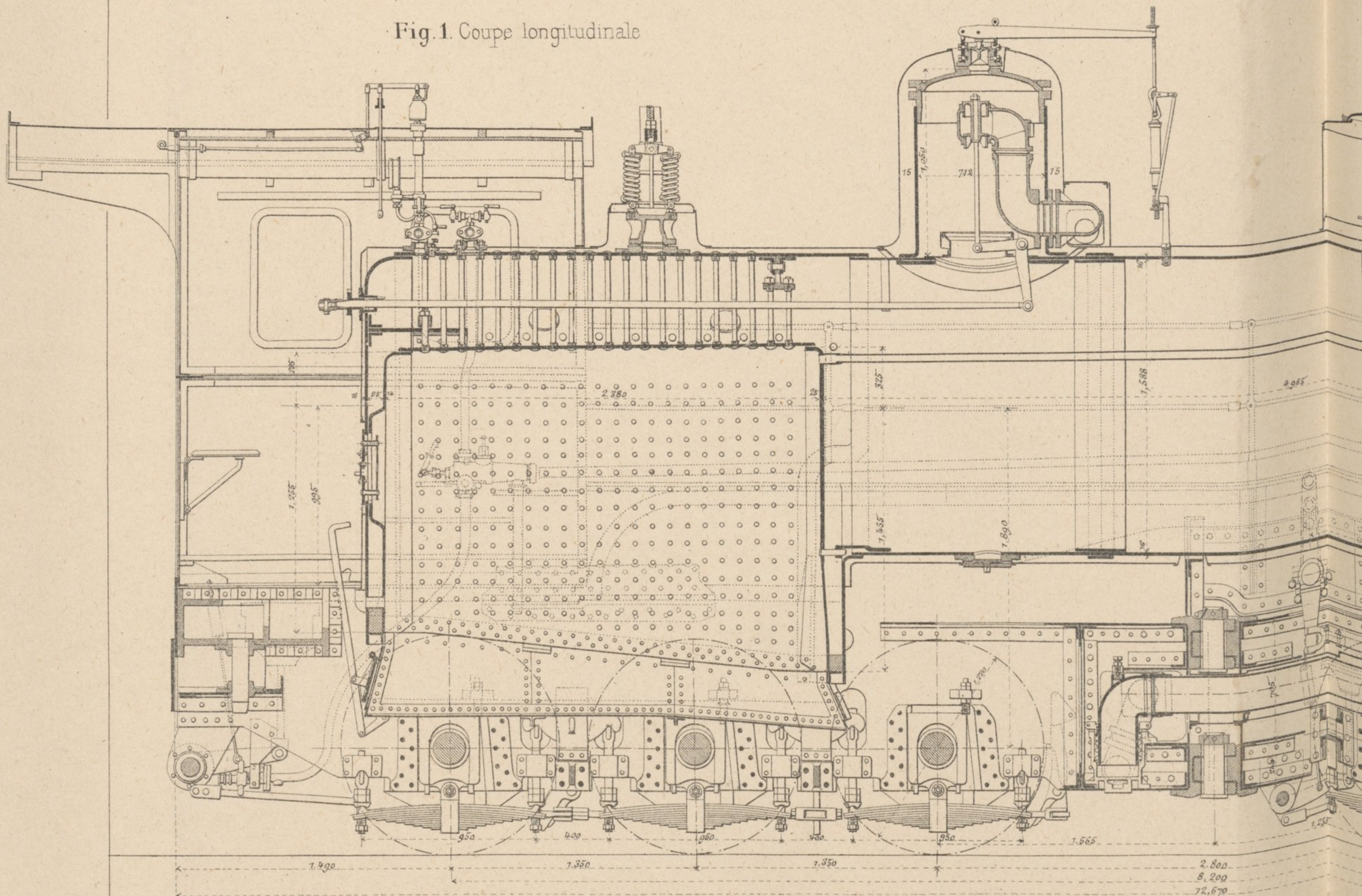
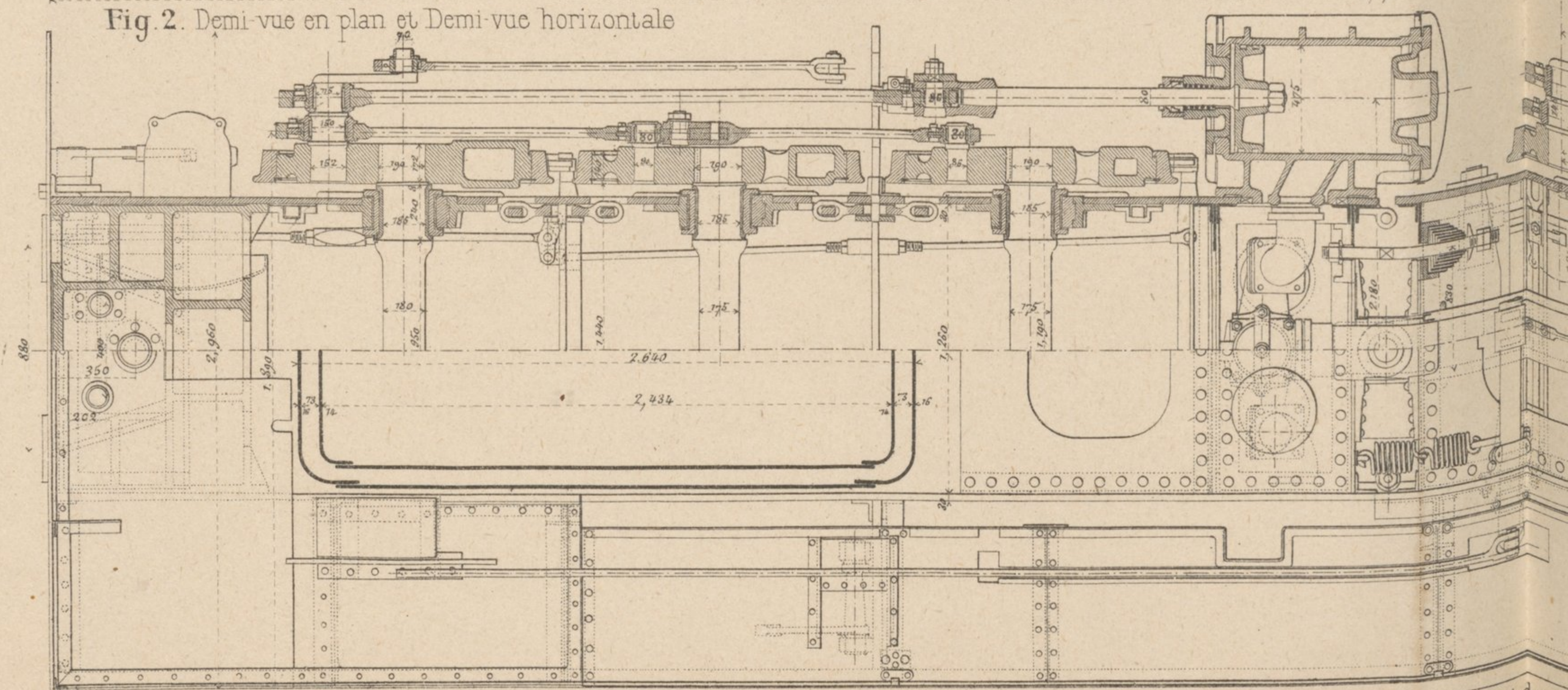
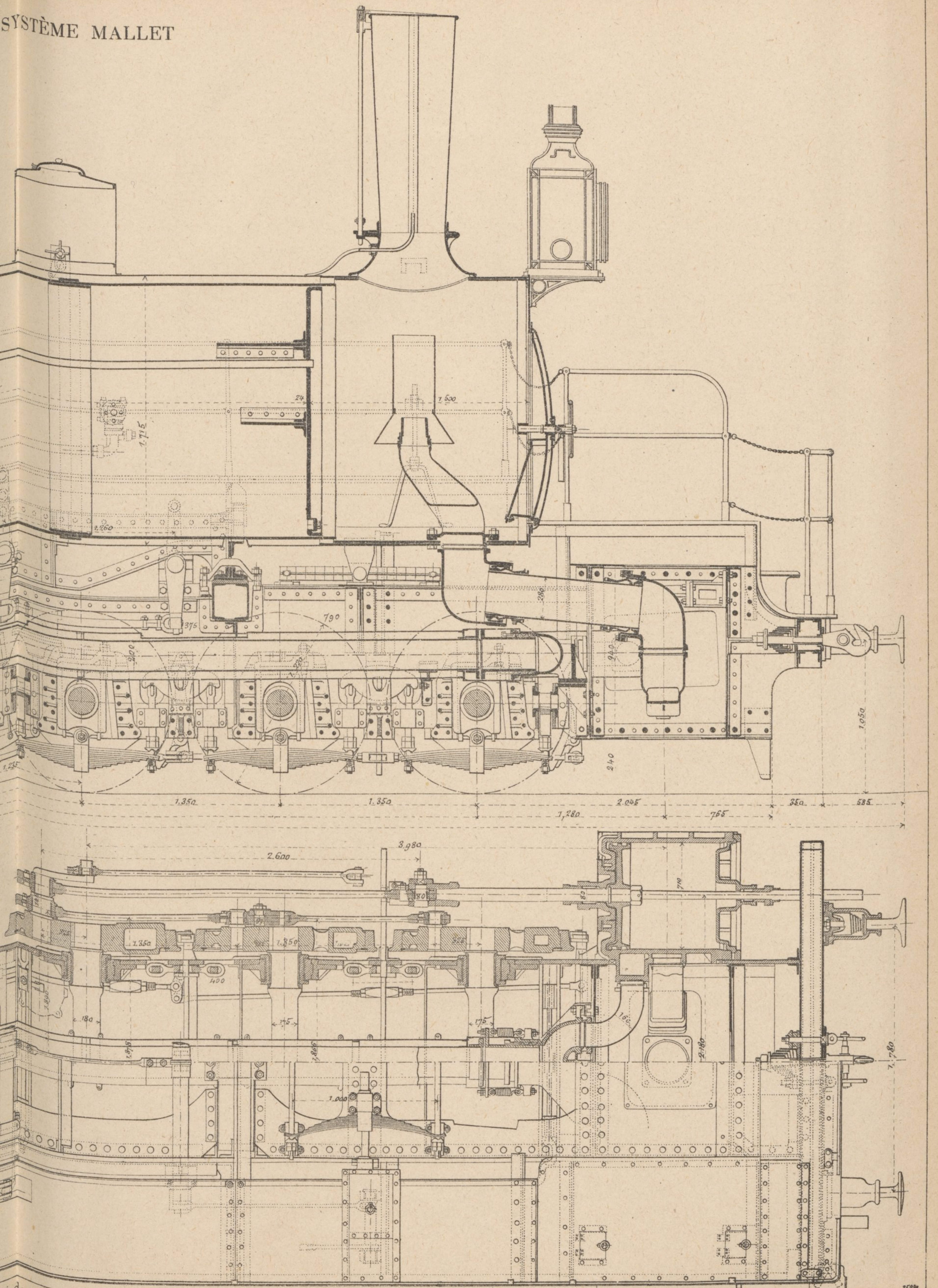


Fig. 2. Demi-vue en plan et Demi-vue horizontale



SYSTÈME MALLET

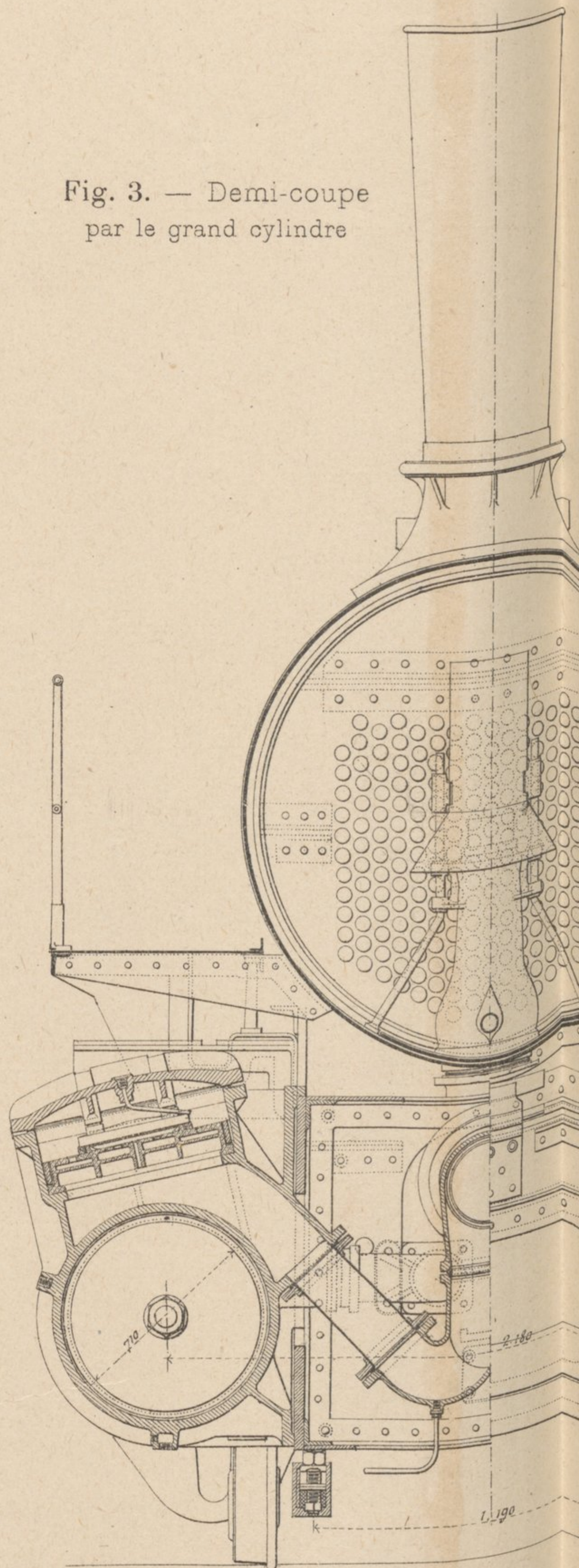
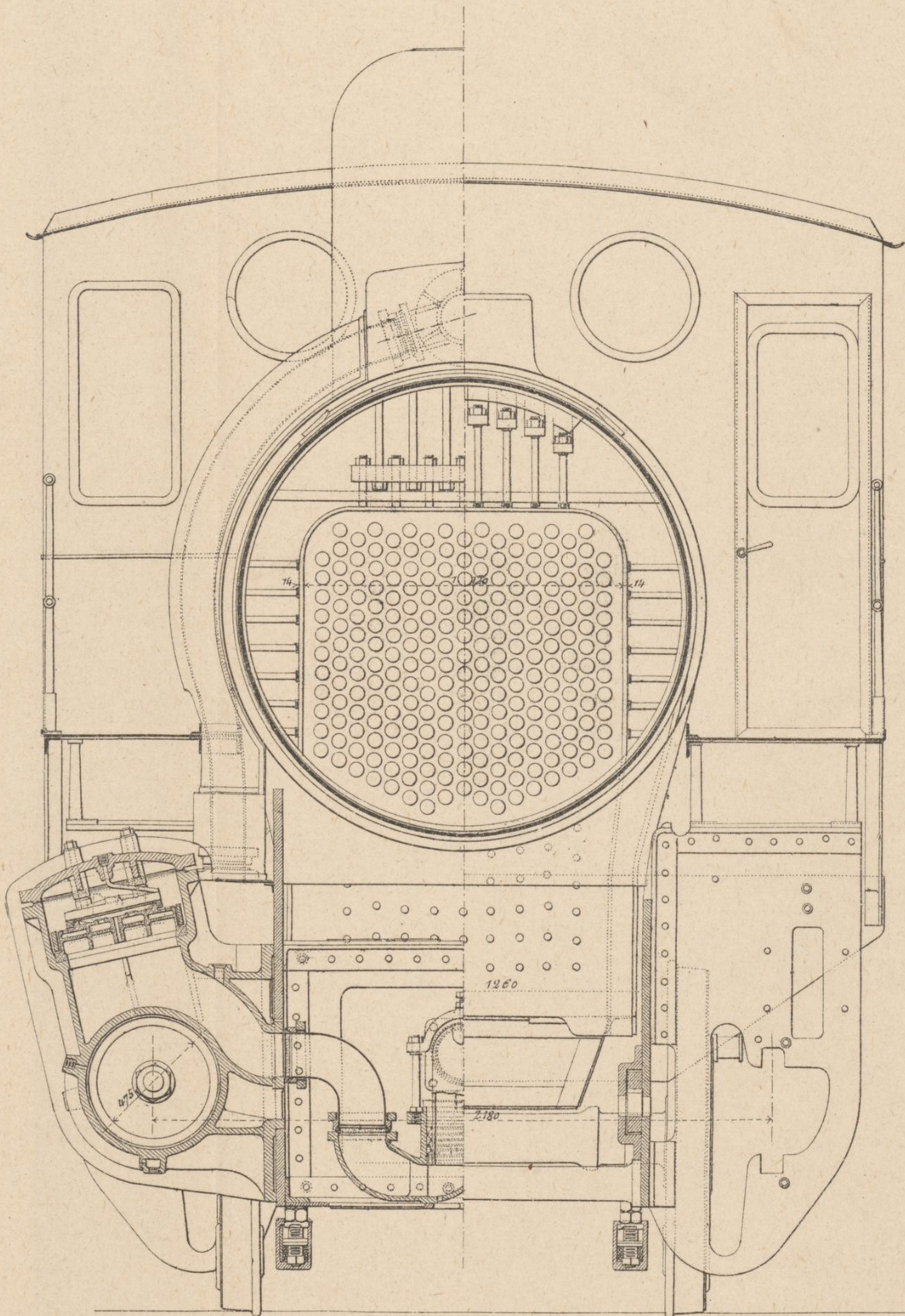


LOCOMOTIVE ARTICULÉE, SYSTÈME

Fig. 1. — Demi-coupe par le petit cylindre

Fig. 2. — Demi-coupe en avant de la boîte à feu

Fig. 3. — Demi-coupe par le grand cylindre



SYSTÈME MALLET

Fig. 5. — Vue d'arrière

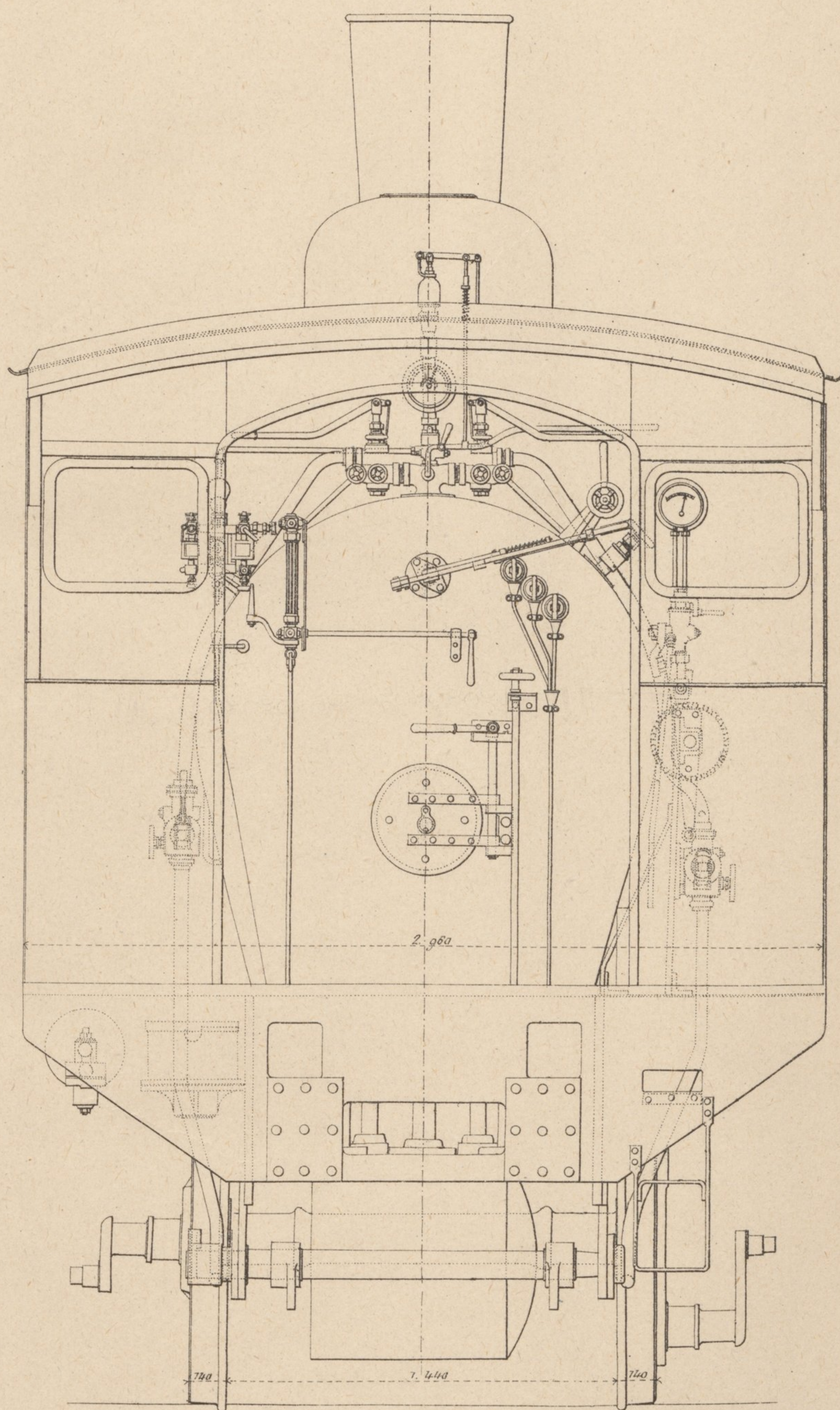


Fig. 4. — Demi-coupe en arrière du grand cylindre

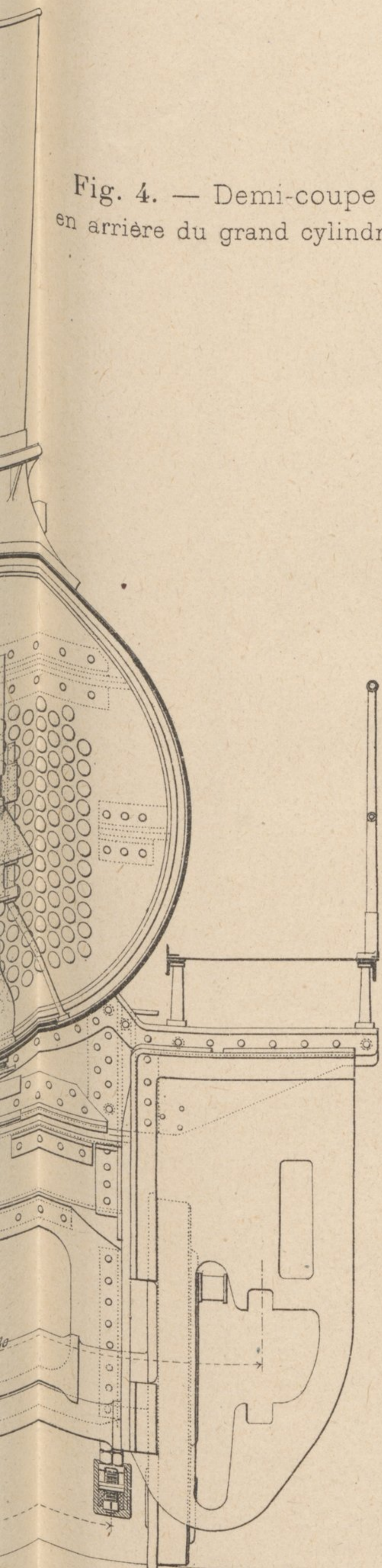


Fig.1
Coupe longitudinale

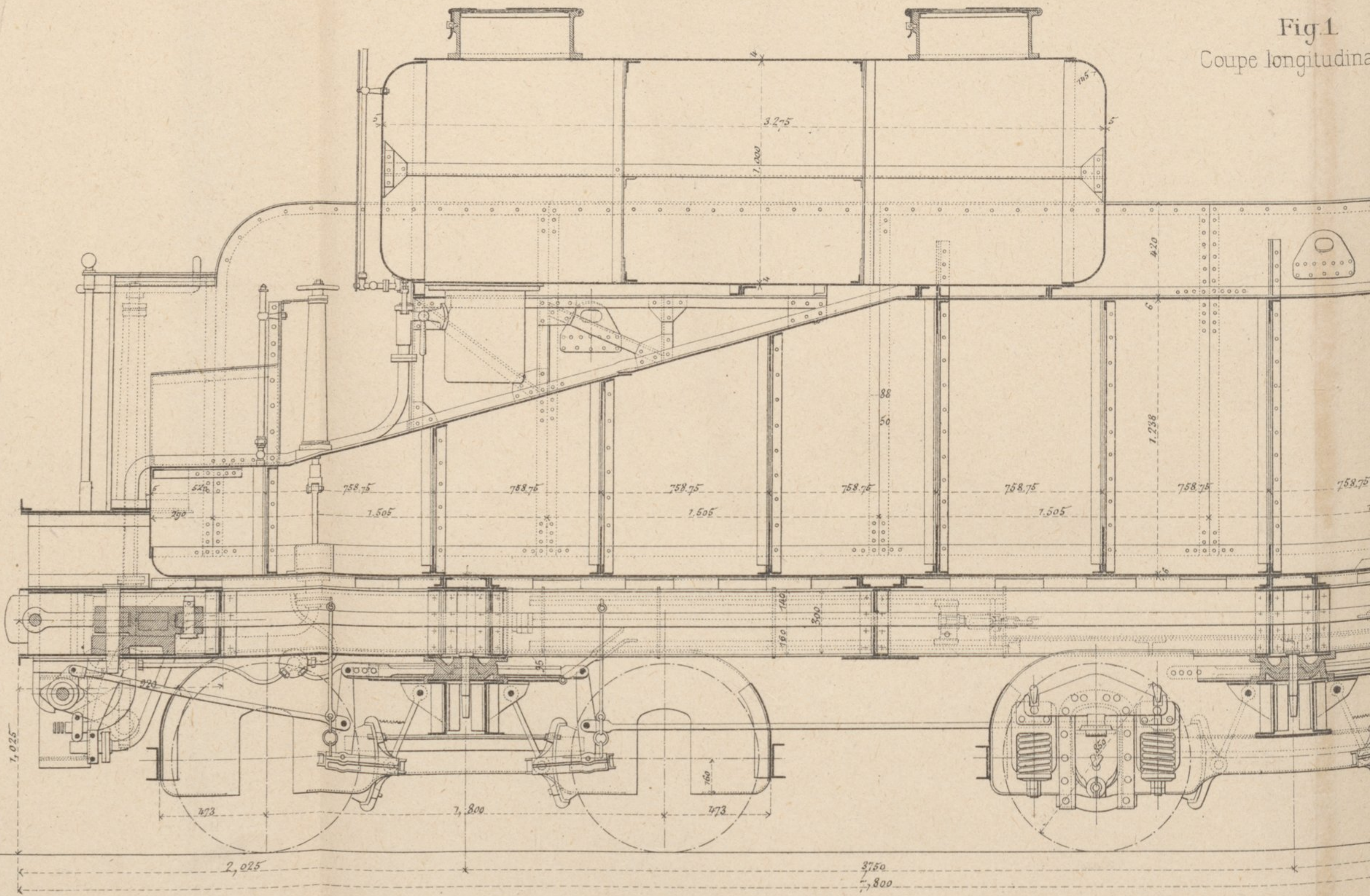


Fig. 2. Demi-vue en plan et demi-vue horizontale

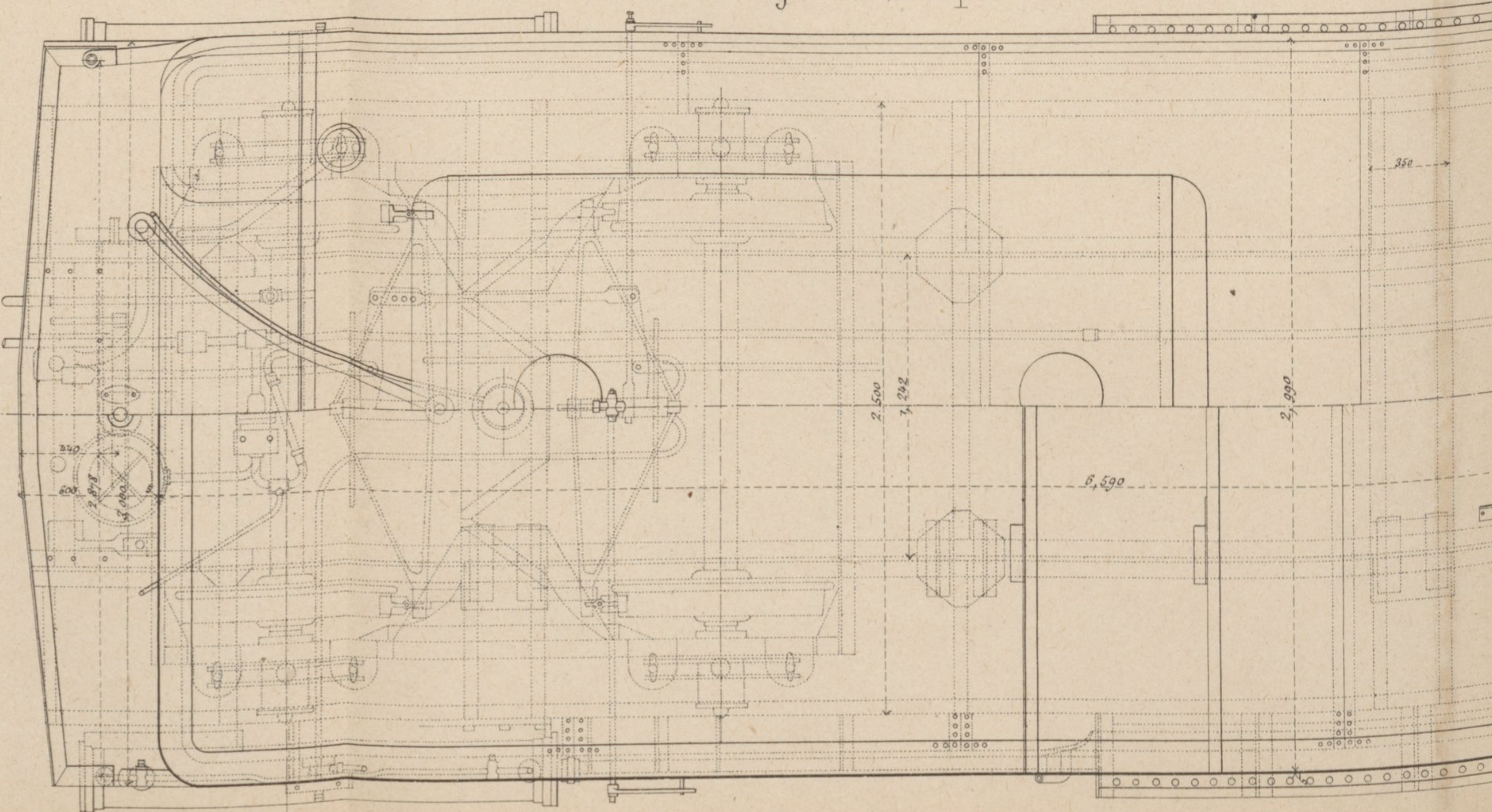
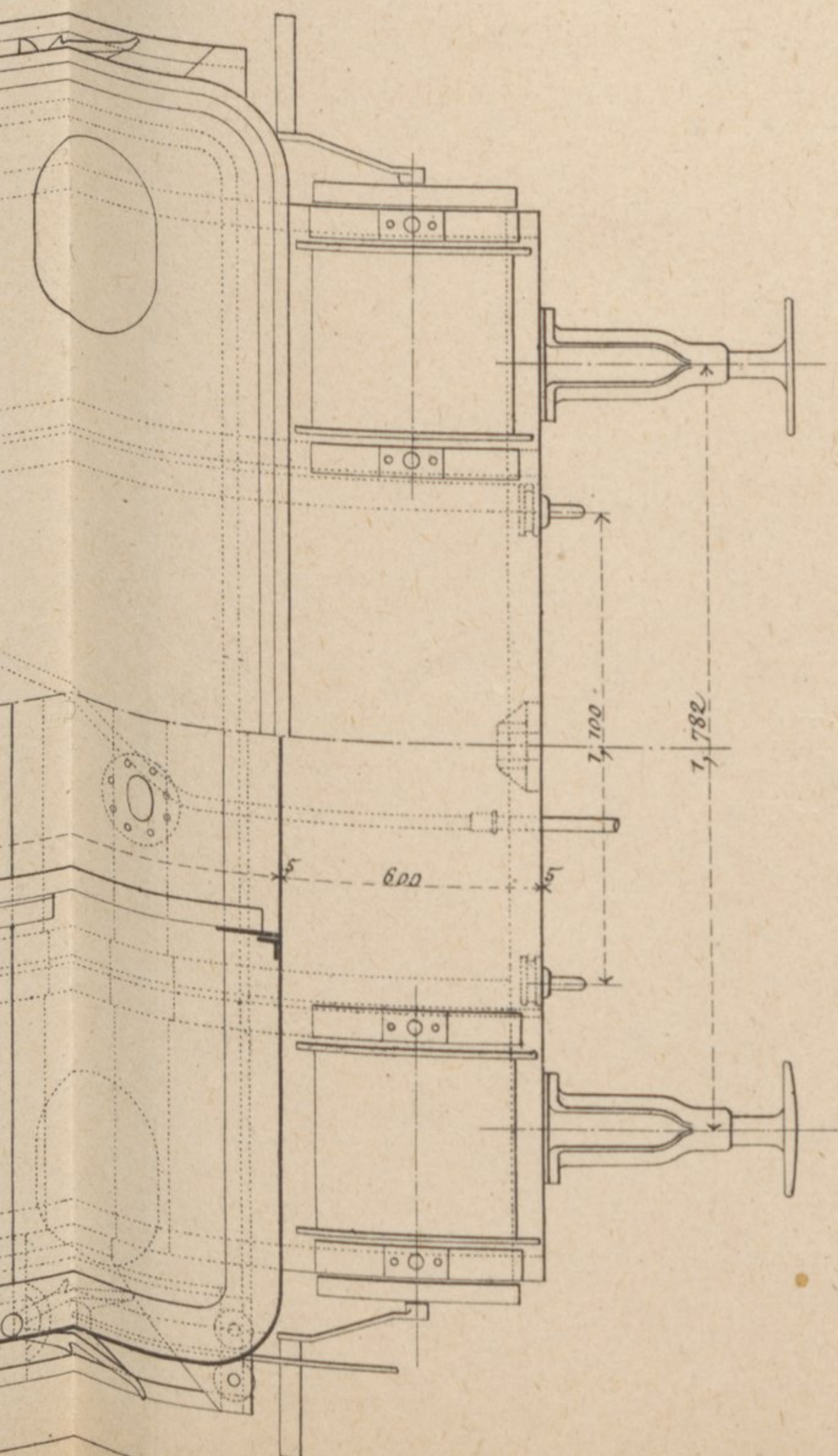
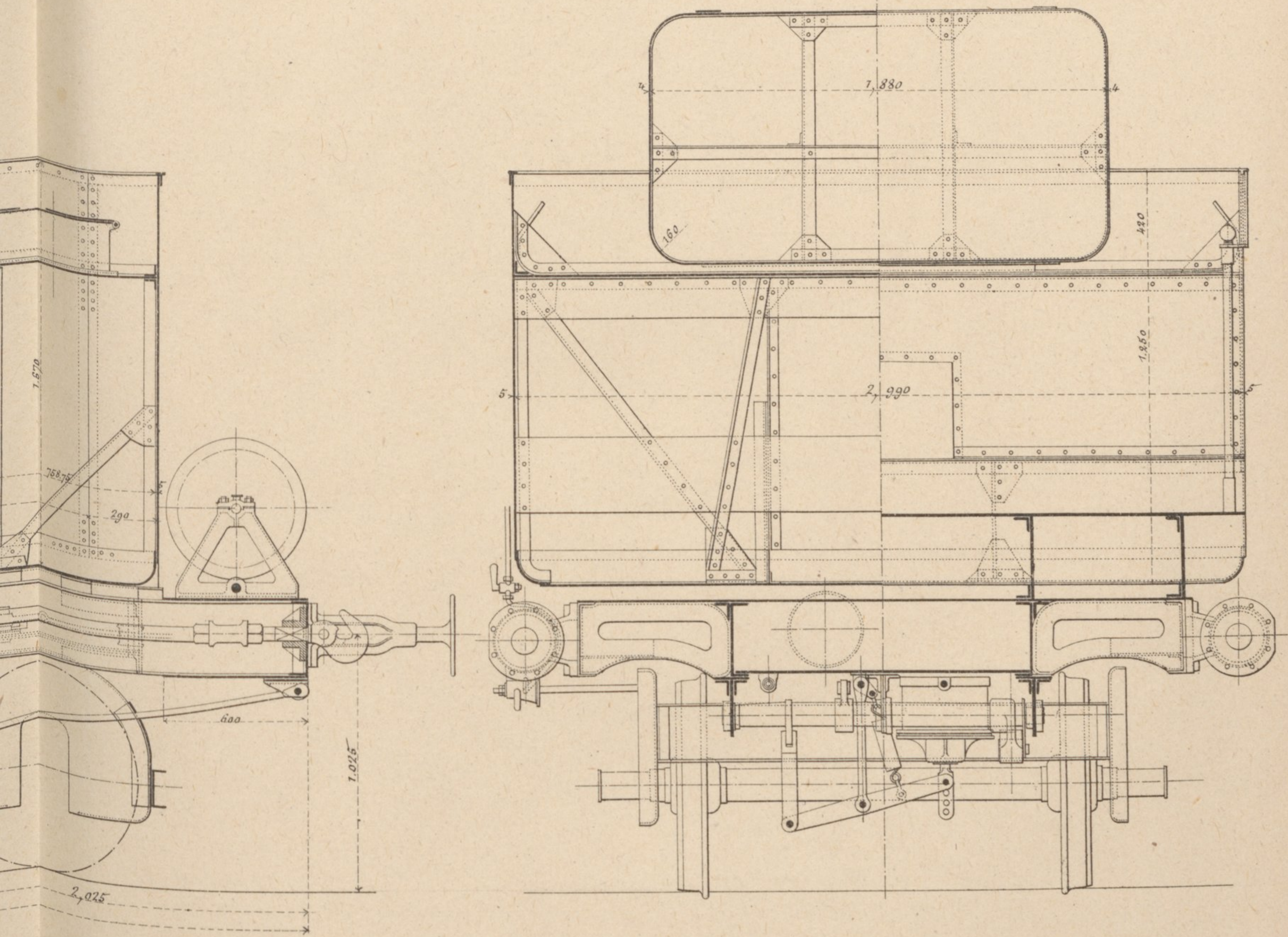


Fig. 3
Demi-coupe en travers et Demi-vue de côté

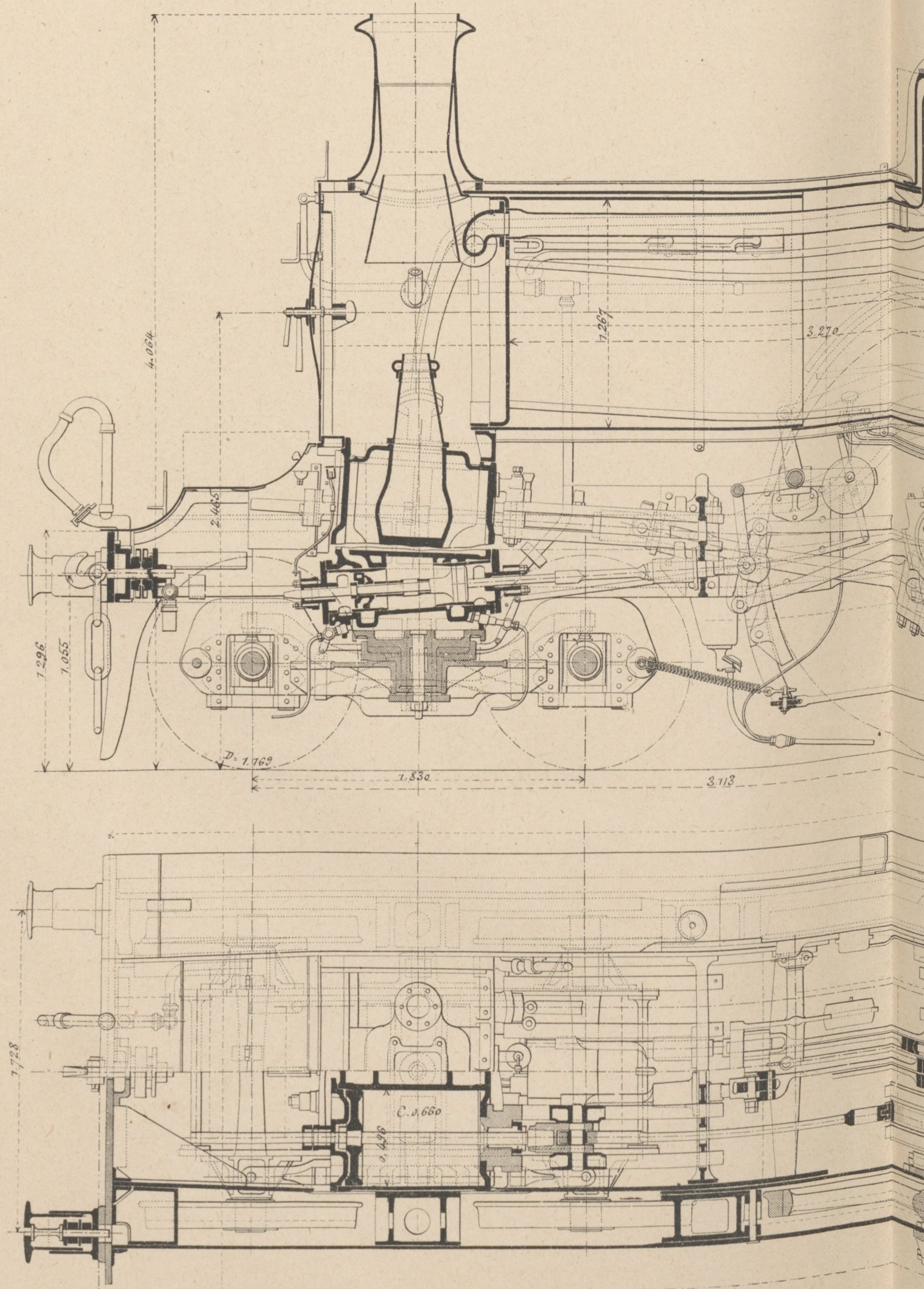


TENDER A BOGIE DE LA LOCOMOTIVE ARTICULÉE
Système MALLET

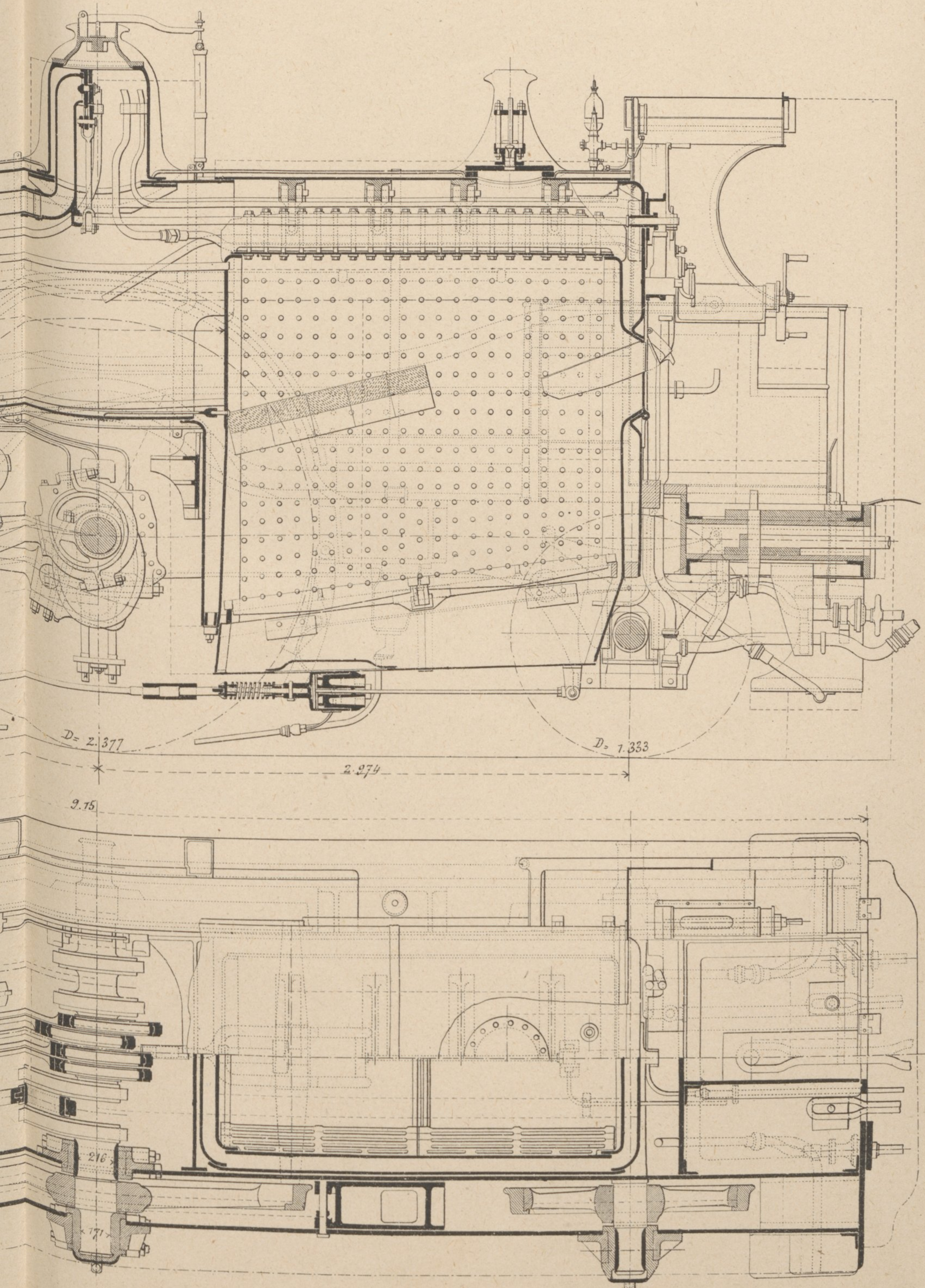
Poids du Tender à vide 23'400

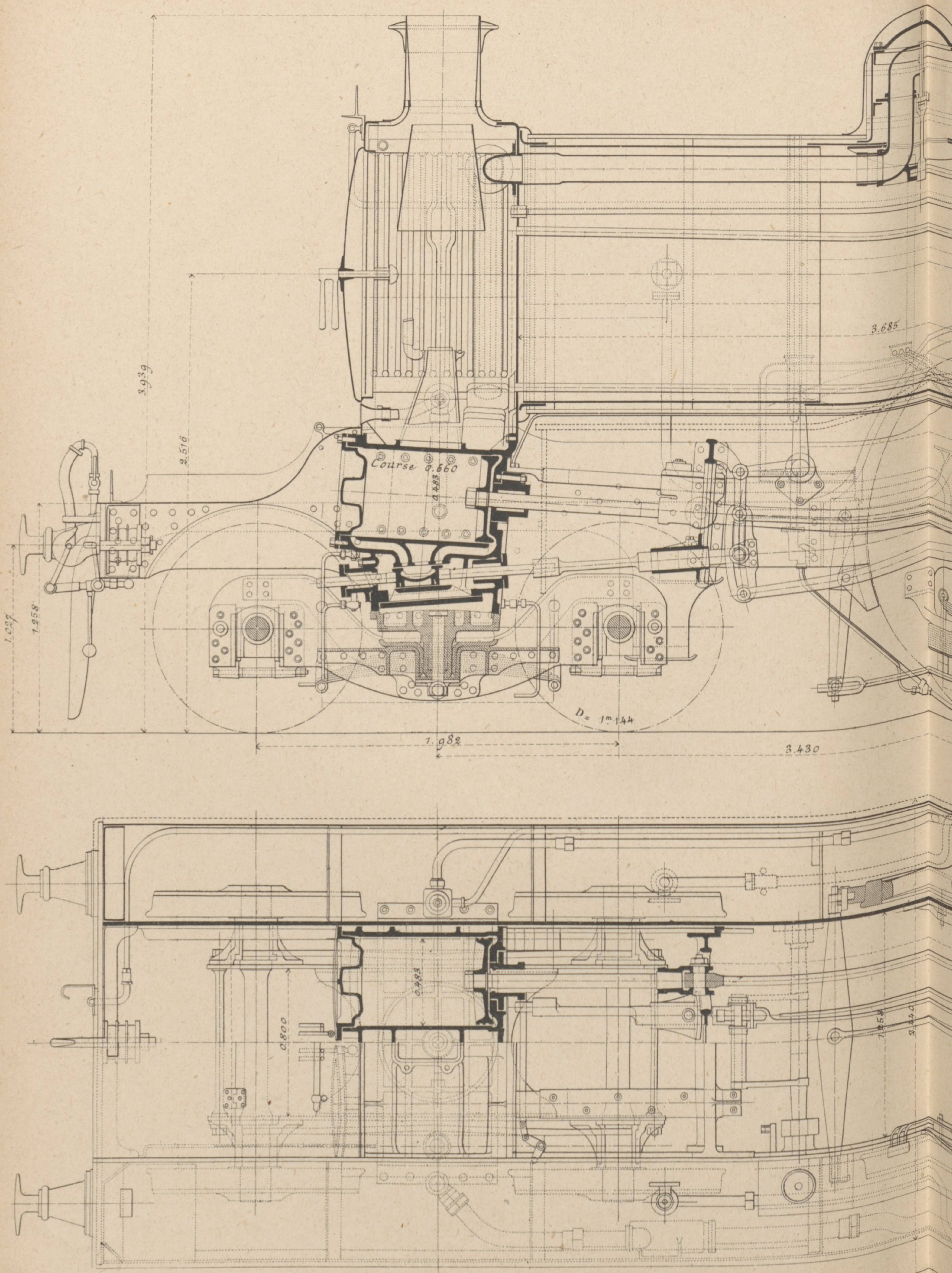
Poids du Tender en service 46'300

LOCOMOTIVE A GRANDE VITES

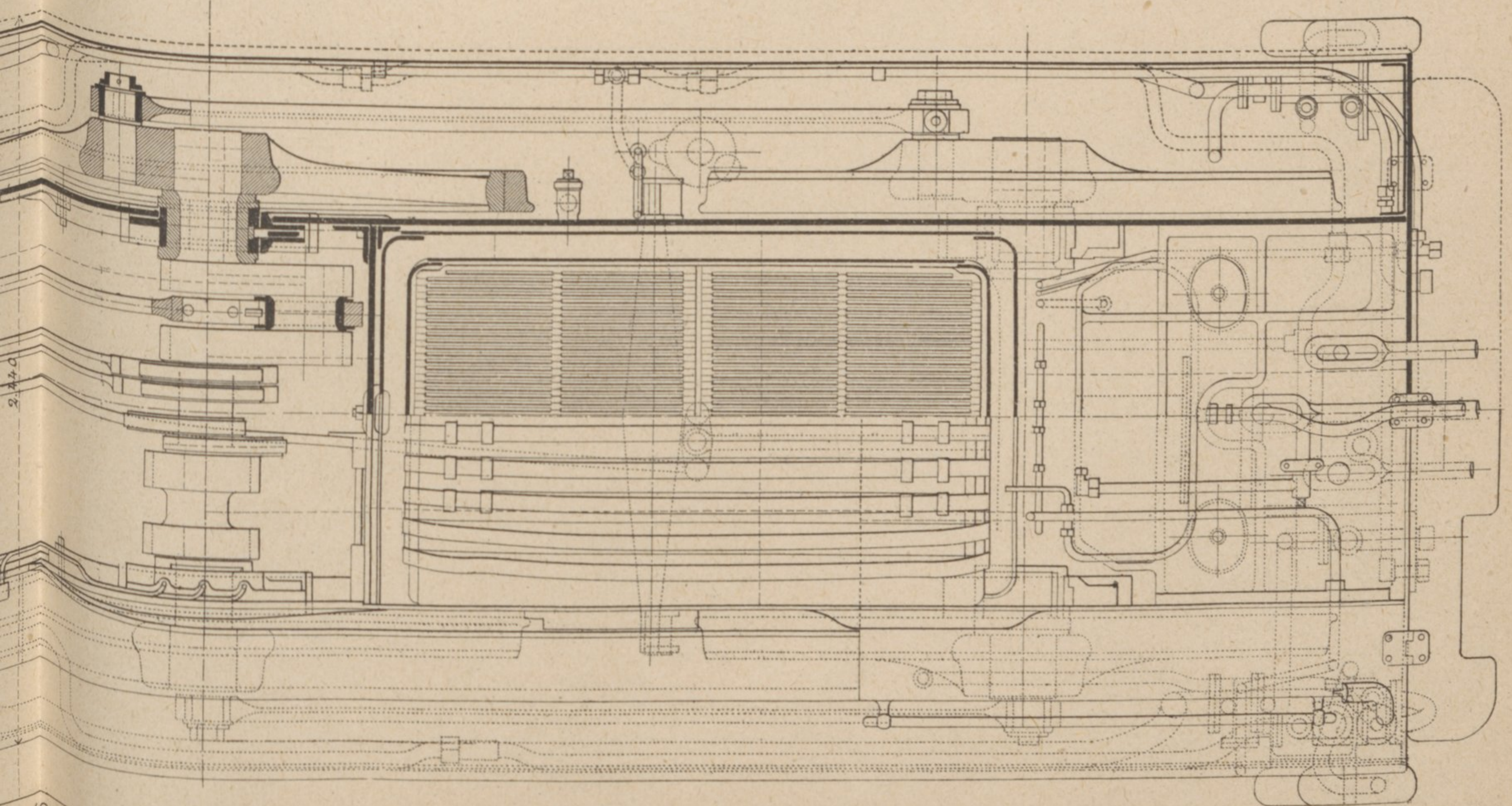
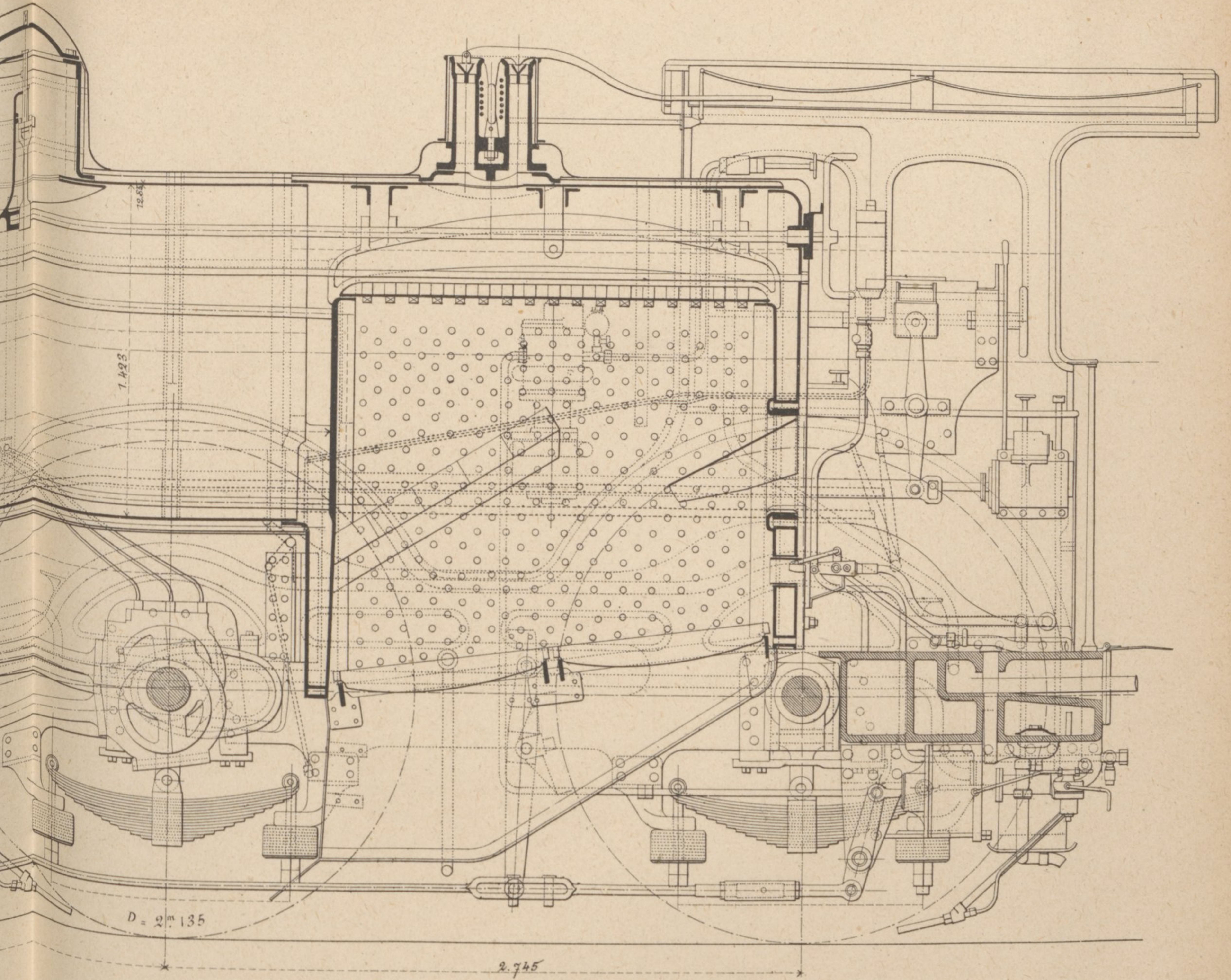


VITESSE DU MIDLAND RAILWAY



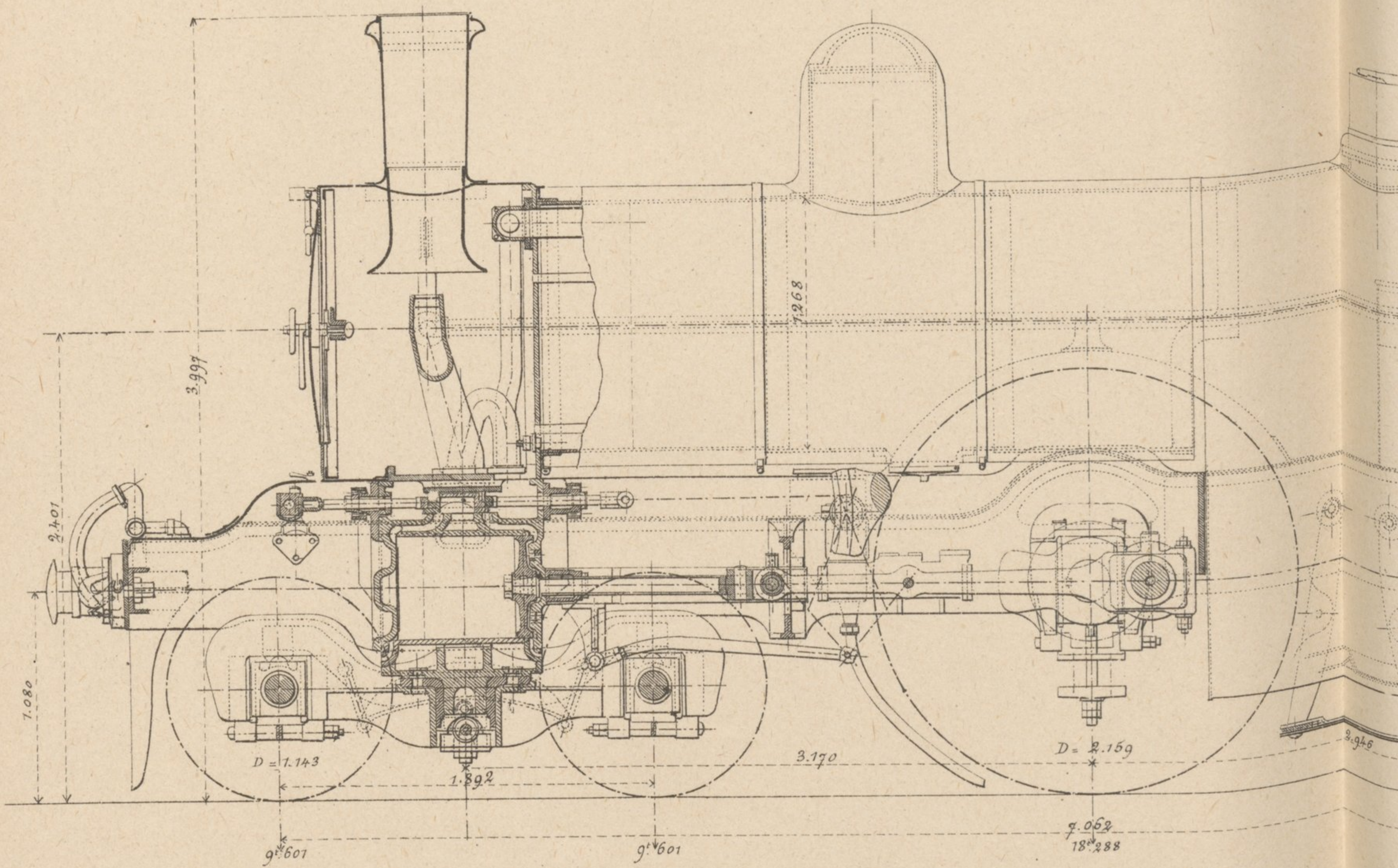


MAISONNEUSE DU GREAT EASTERN RAILWAY



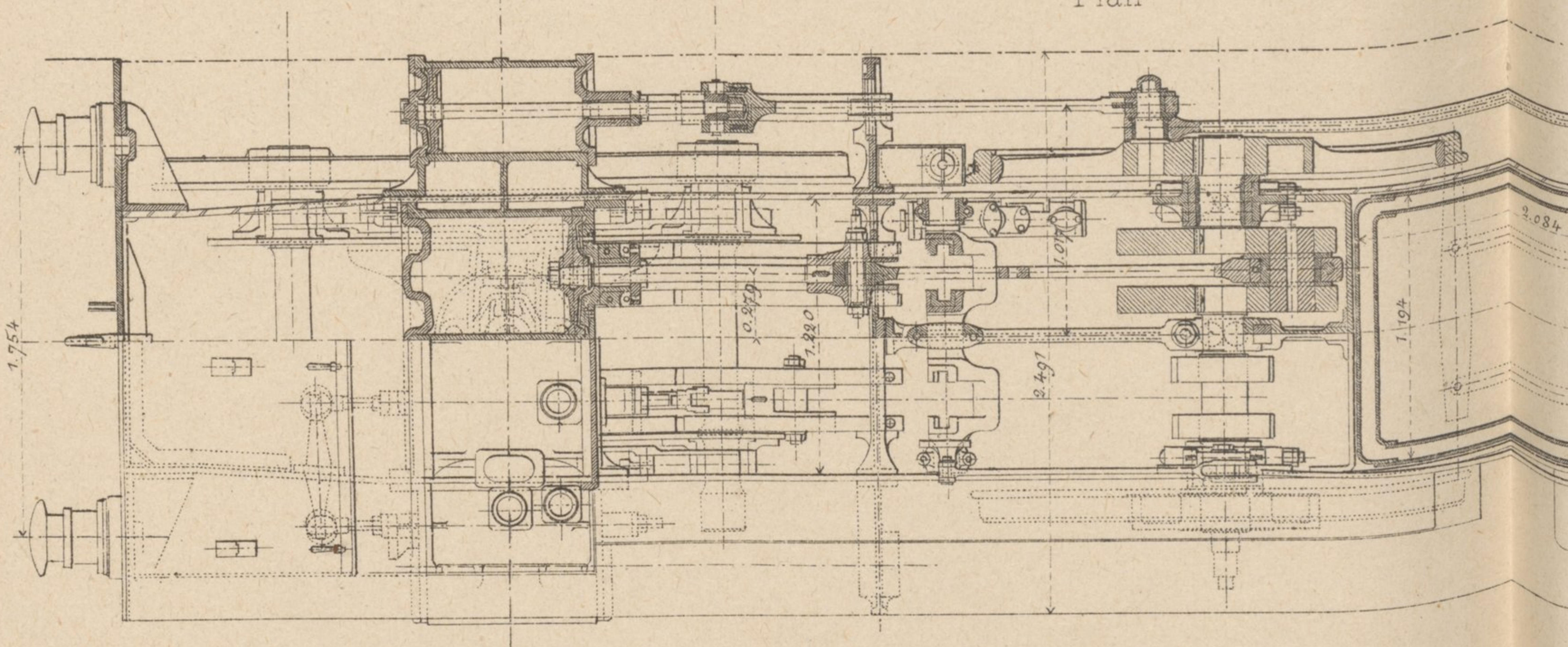
LOCOMOTIVE A GRANDE VITESSE COMPOUND A QUATRE CYL.

Élévation



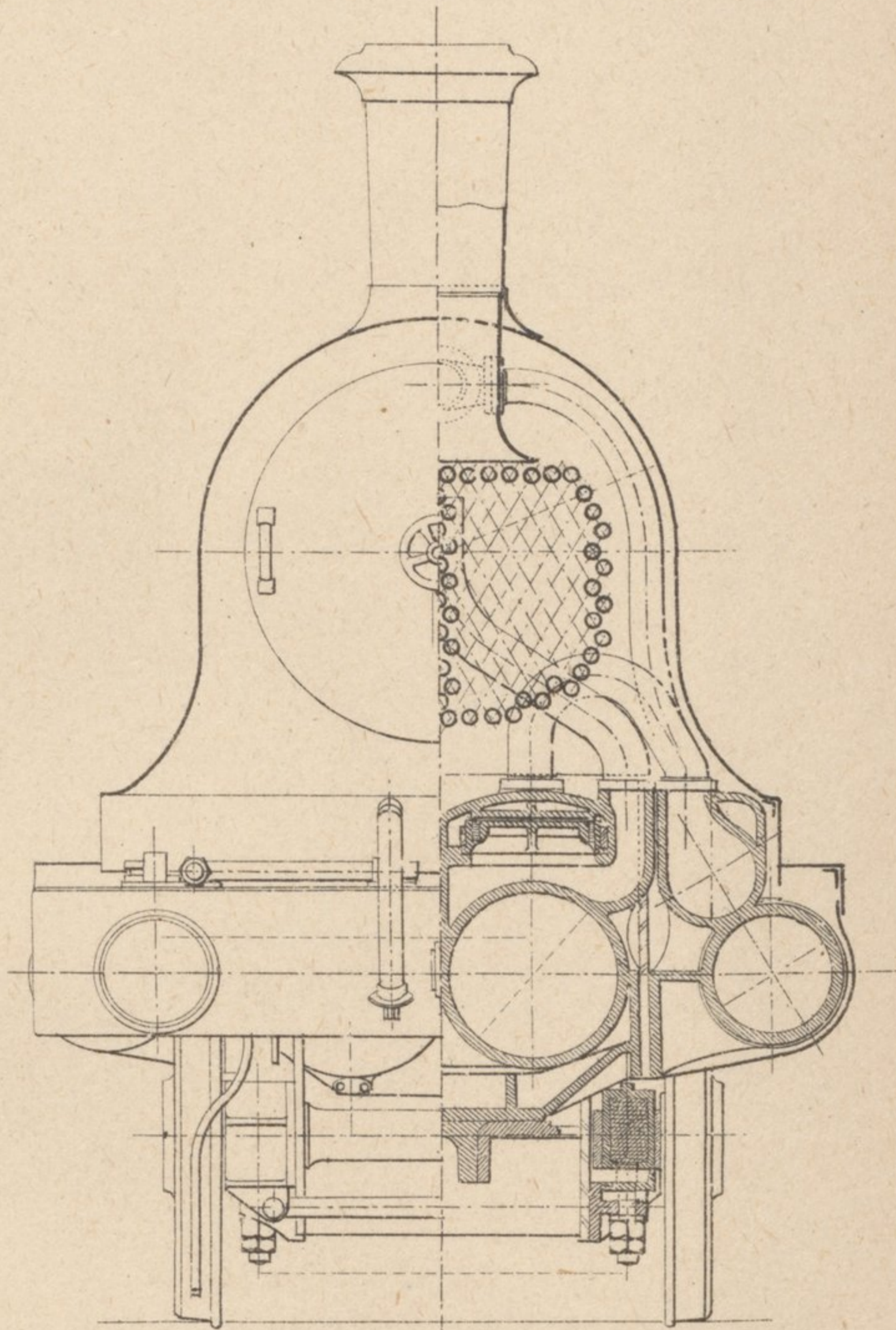
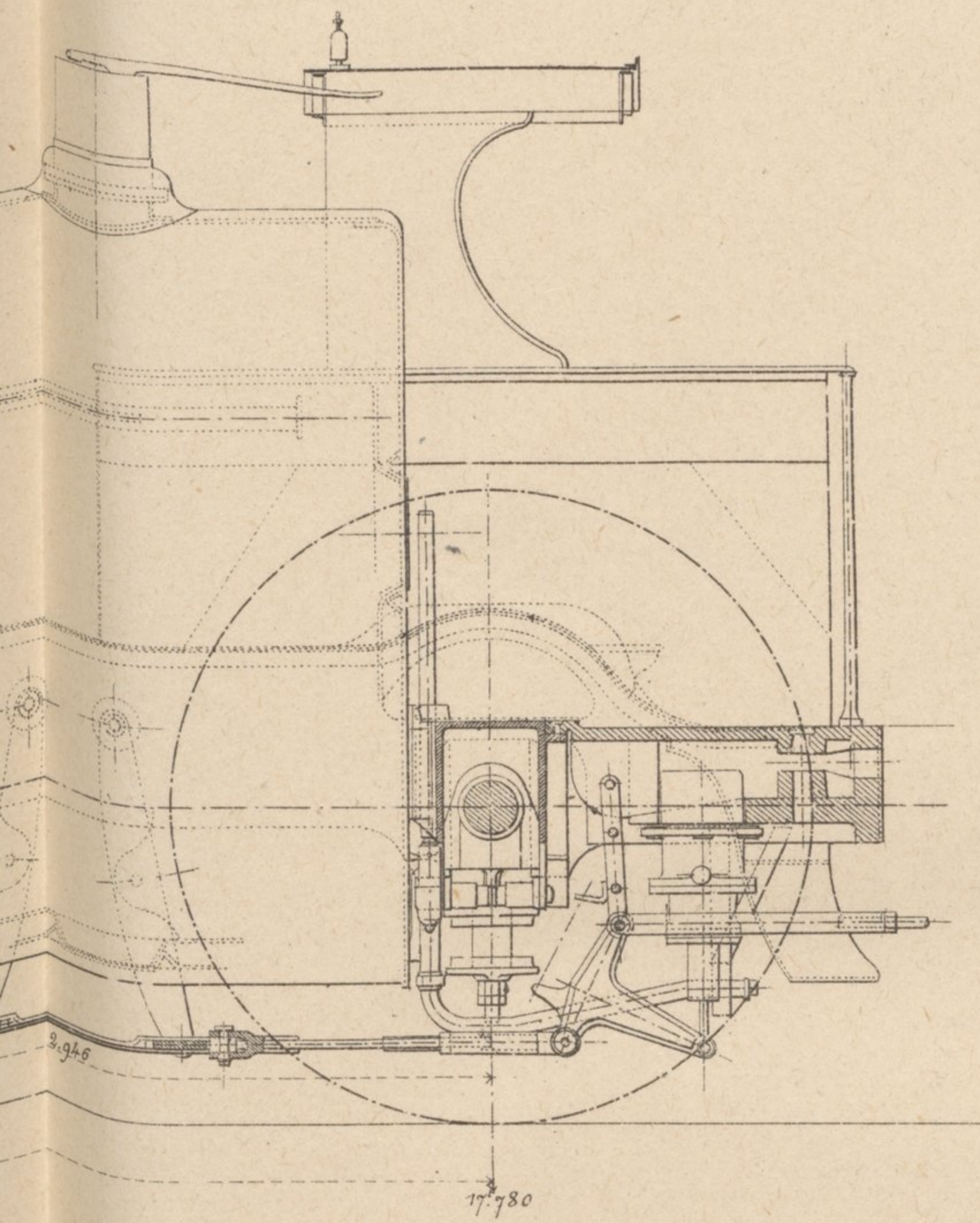
Poids total en charge = 55³ 370

Plan

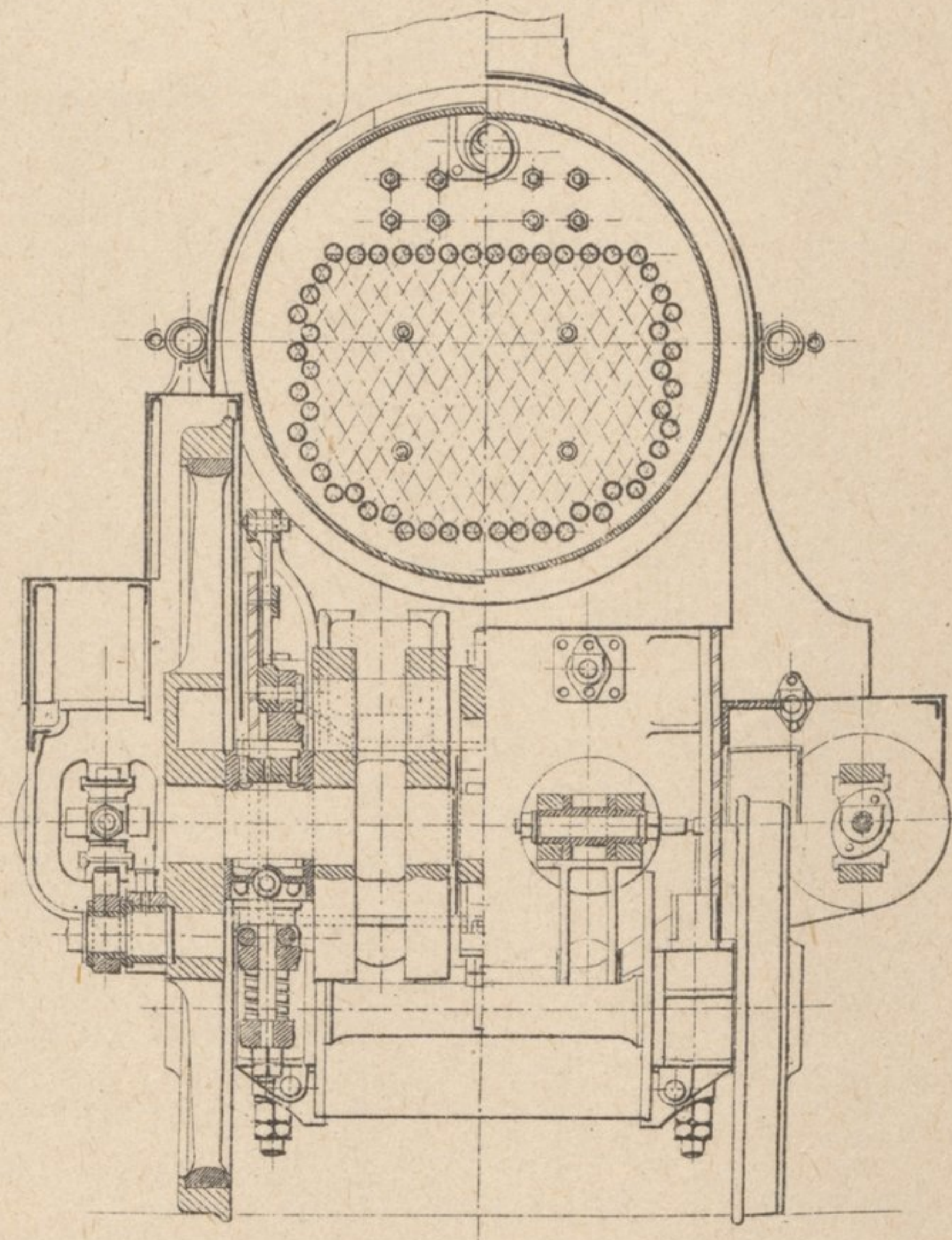
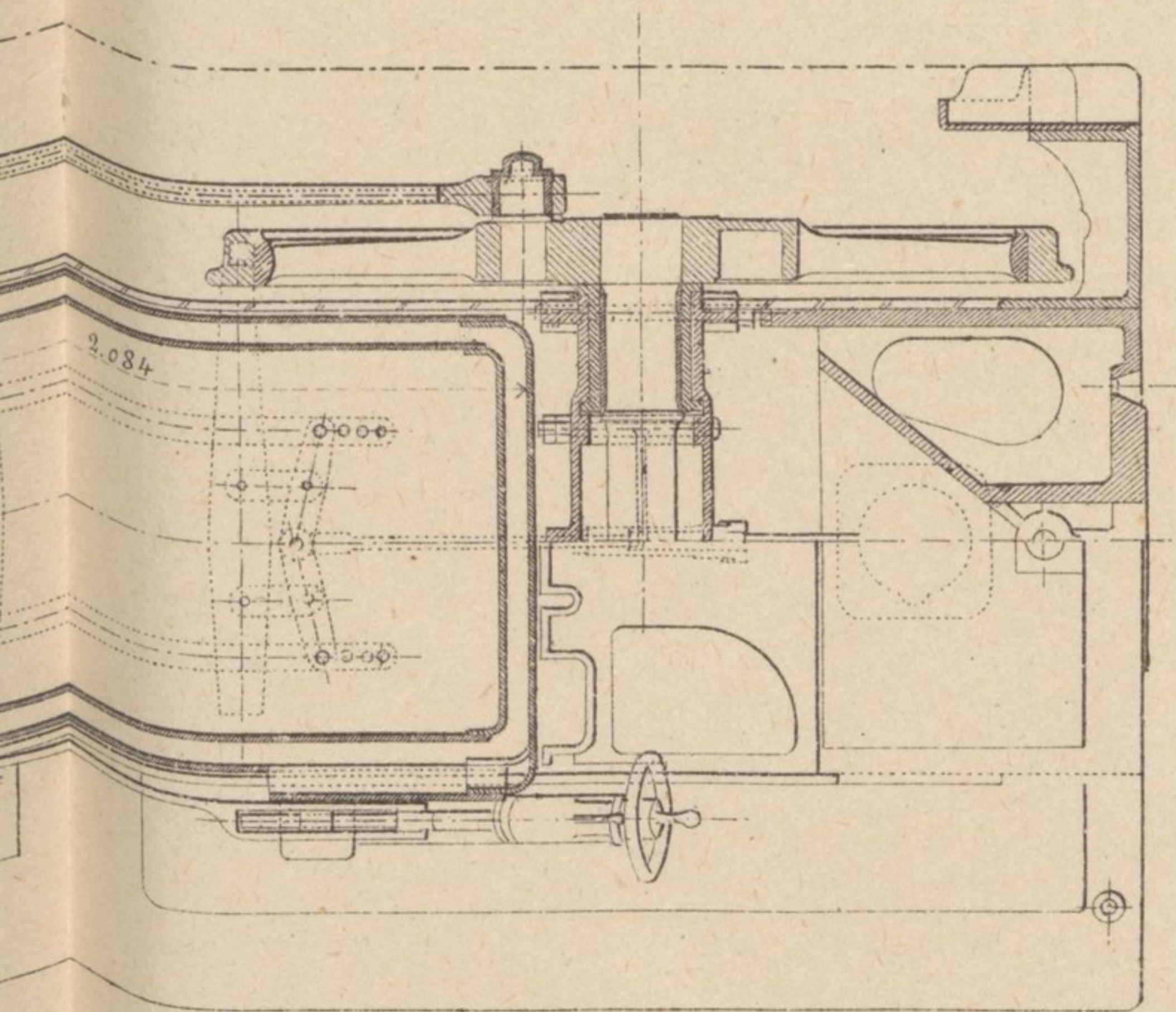


LES CYLINDRES DU LONDON AND NORTH WESTERN RAILWAY

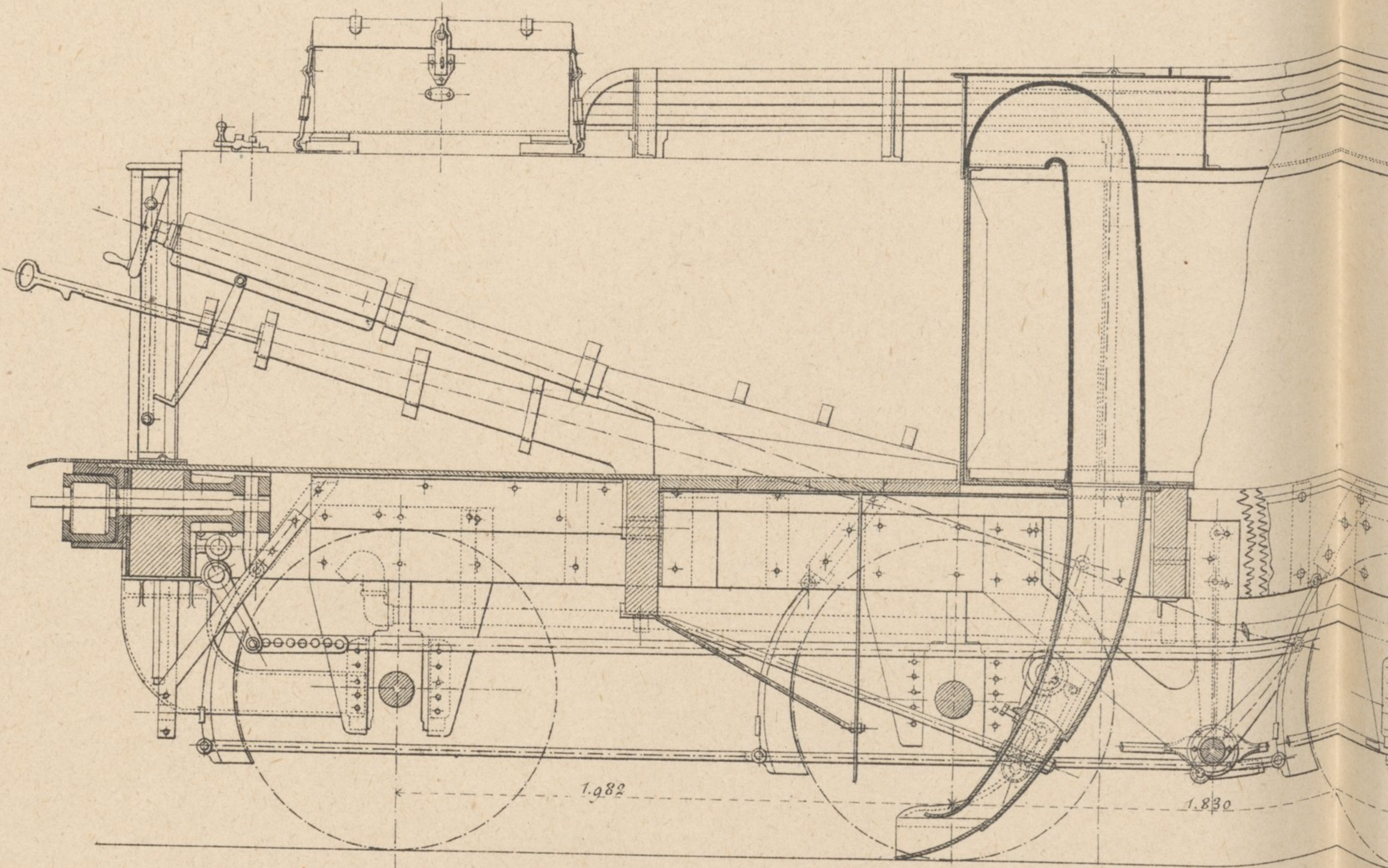
Vue de bout et coupe transversale



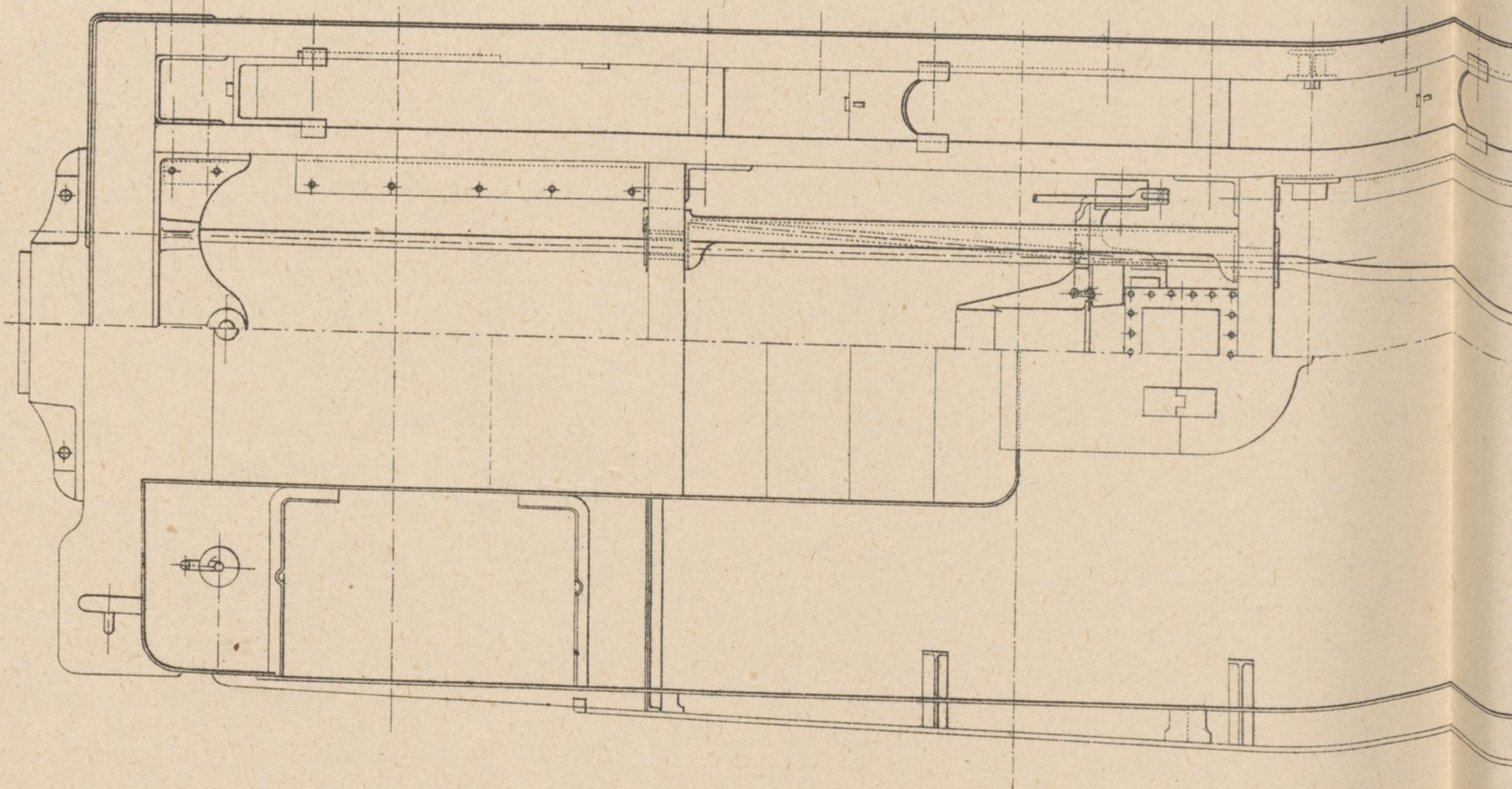
Coupe transversale par l'essieu moteur

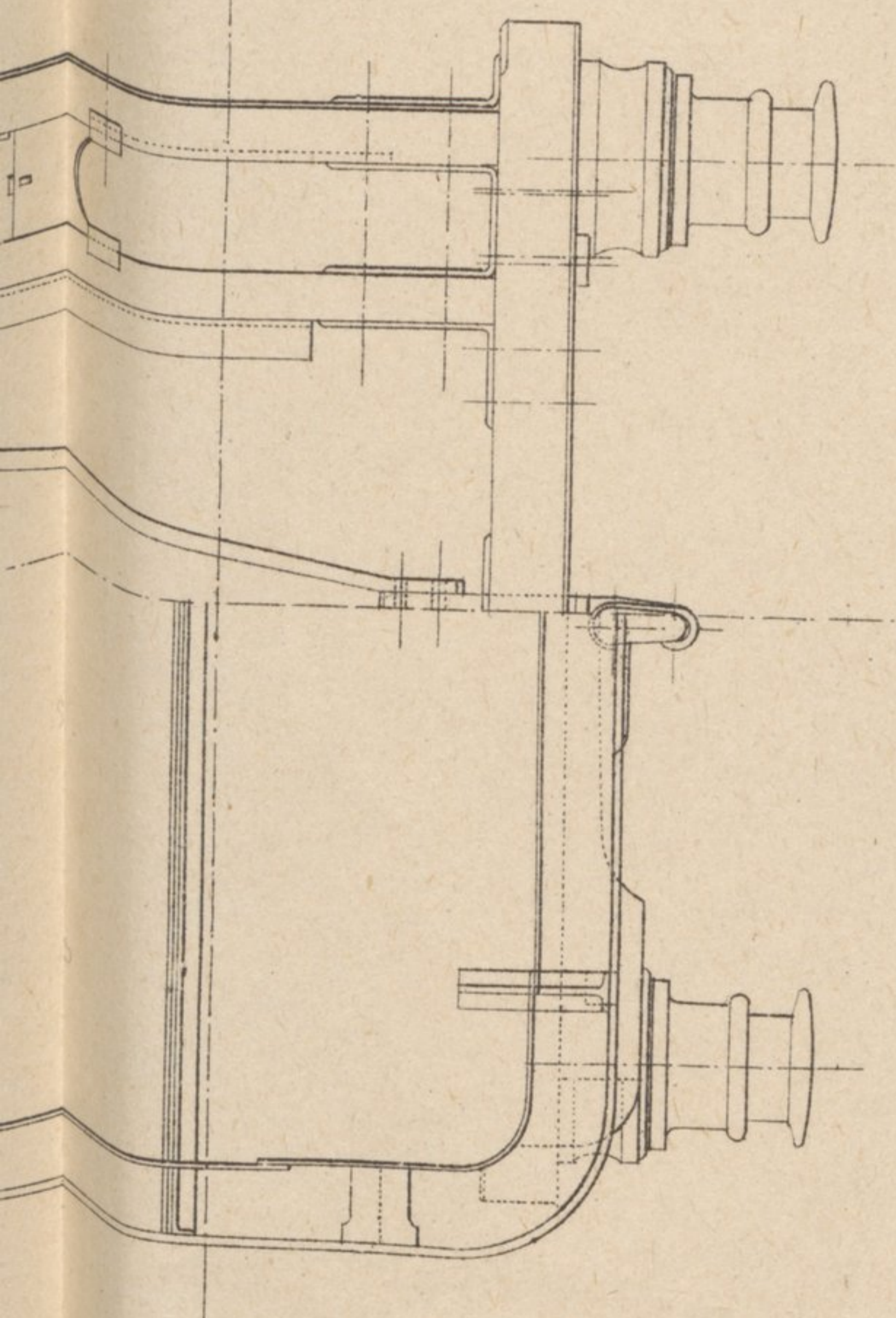
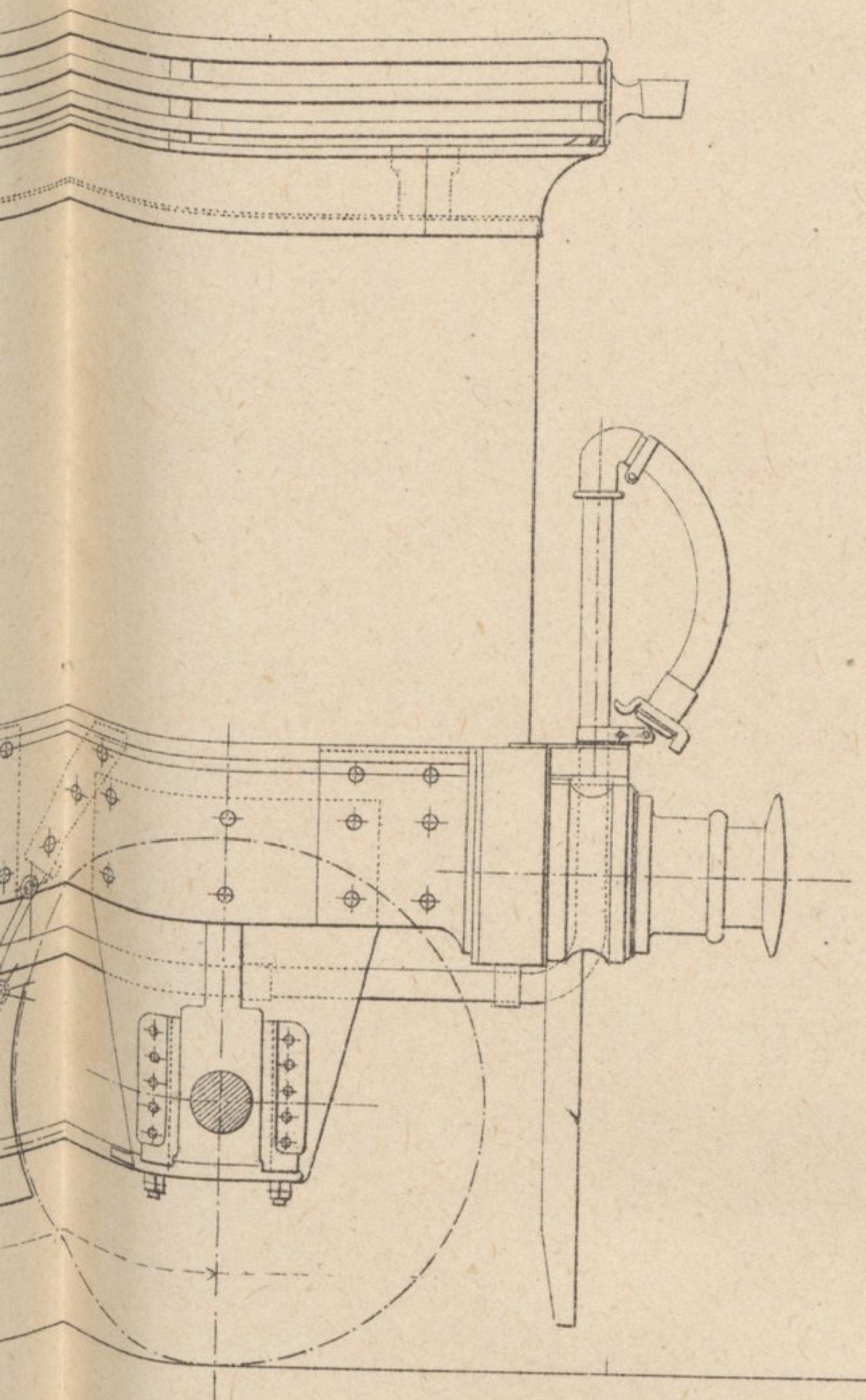


Coupe longitudinale

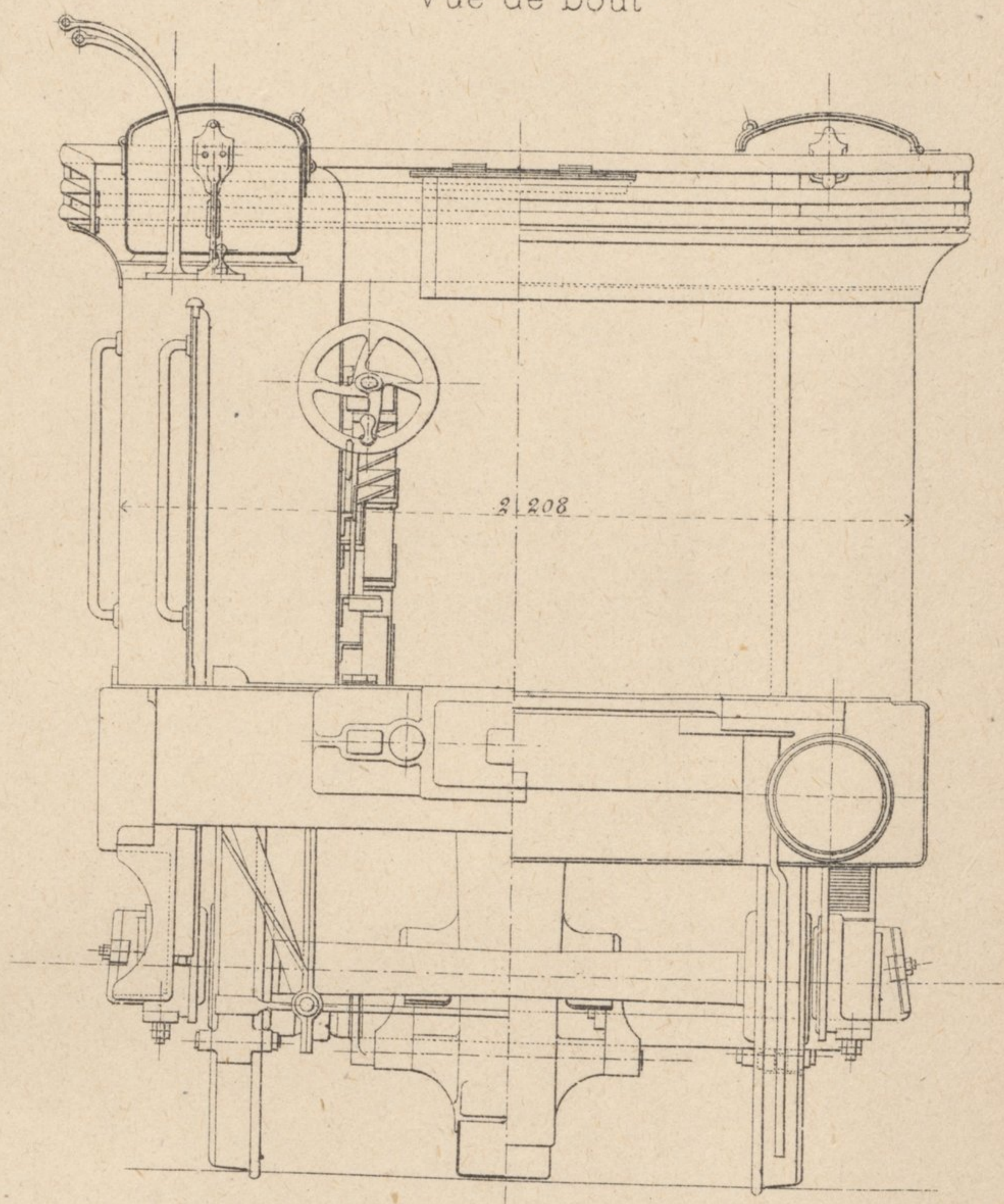


Plan





Vue de bout



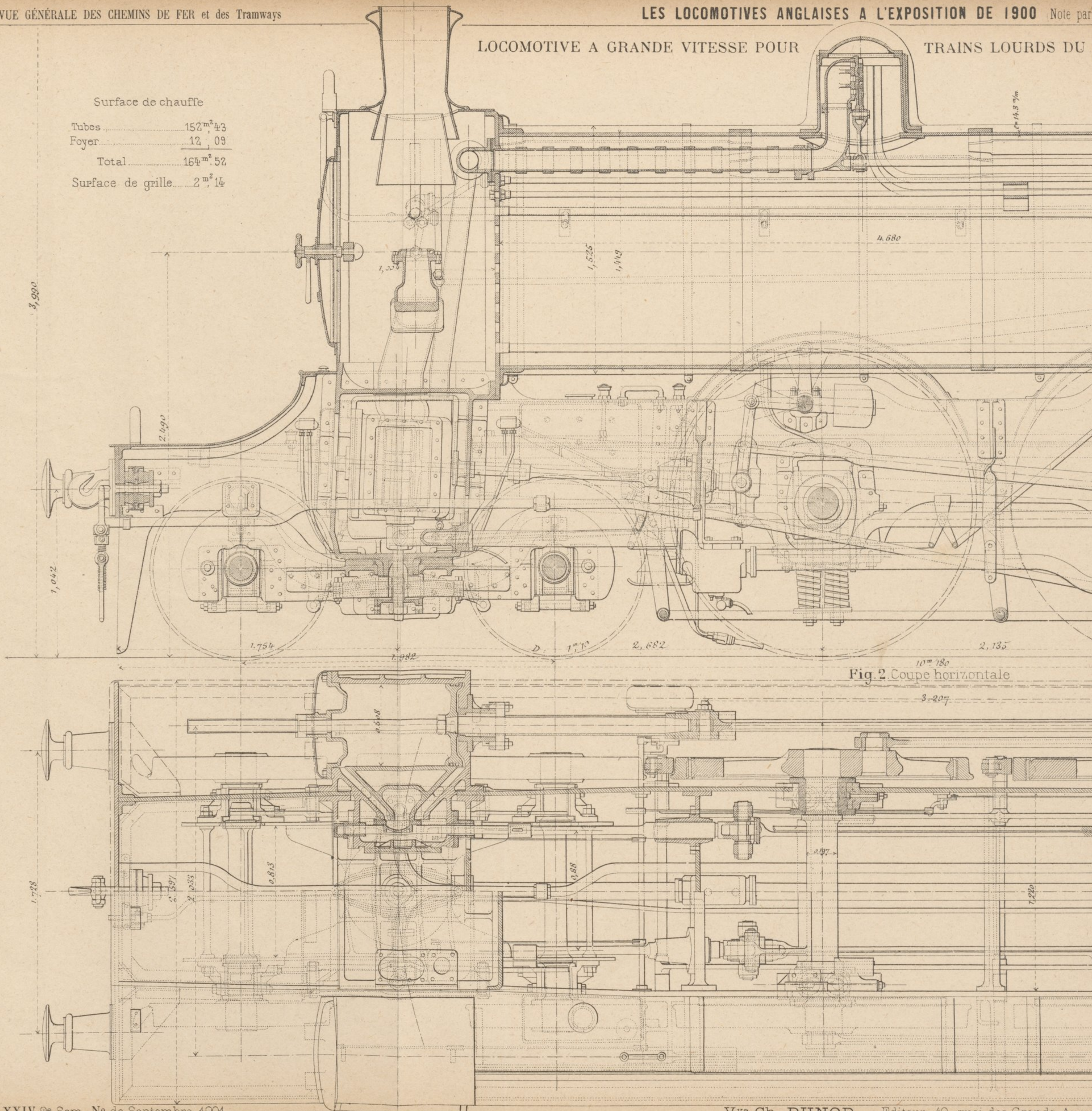
TENDER AVEC ÉCOPE DE PRISE D'EAU EN MARCHÉ
de la Compagnie
DU LONDON AND NORTH WESTERN RAILWAY

LOCOMOTIVE A GRANDE VITESSE POUR

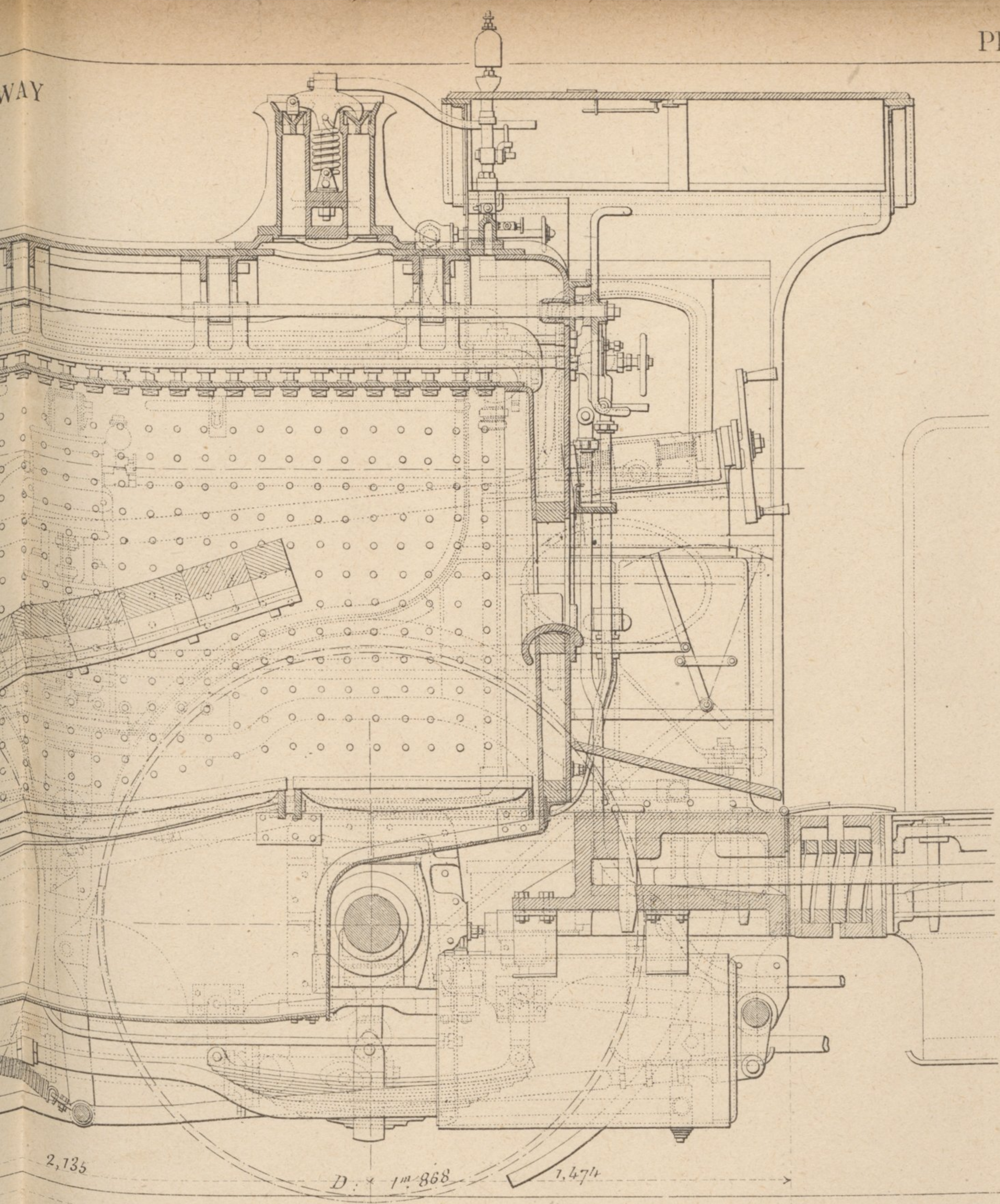
TRAINS LOURDS DU

Surface de chauffe

Tubes	152 ^{m²} ,43
Foyer	12,09
Total	164 ^{m²} ,52
Surface de grille	2 ^{m²} ,14



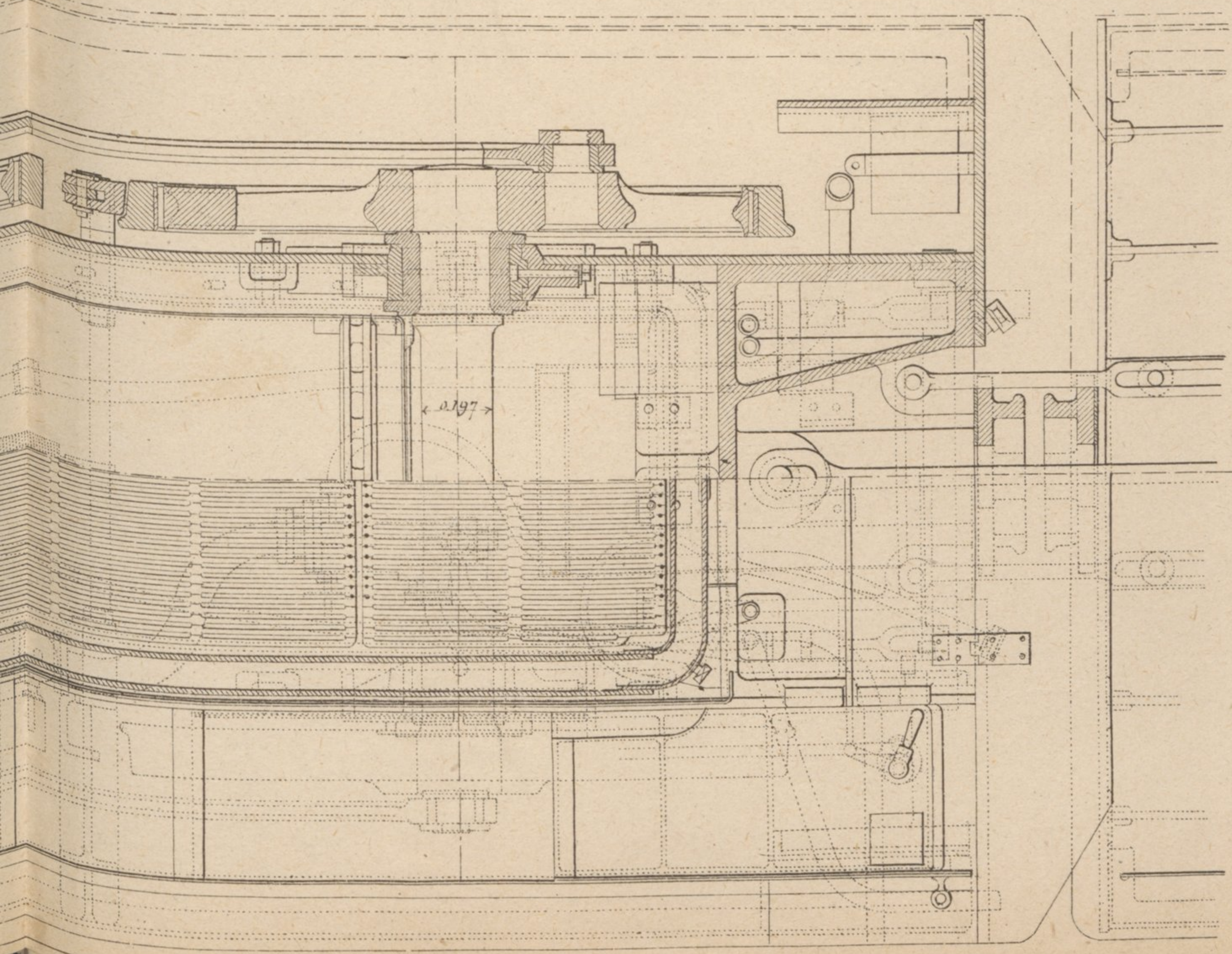
WAY



2,135

D : 1^m.868

1,474



2,197

Fig. 1 à 3. — LOCOMOTIVE A MARCHANDISES TYPE "MOG"

Fig. 1. Vue en élévation

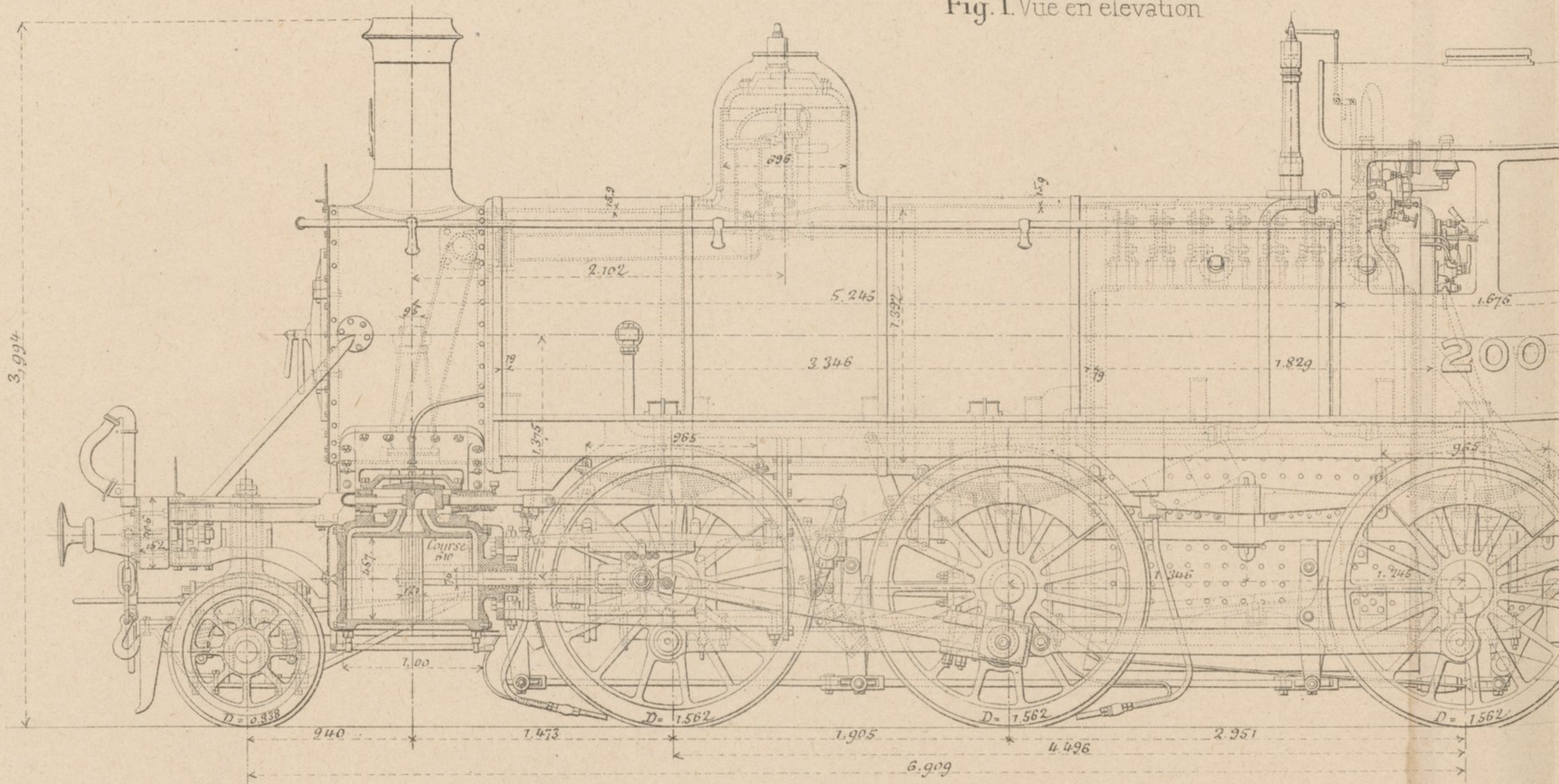
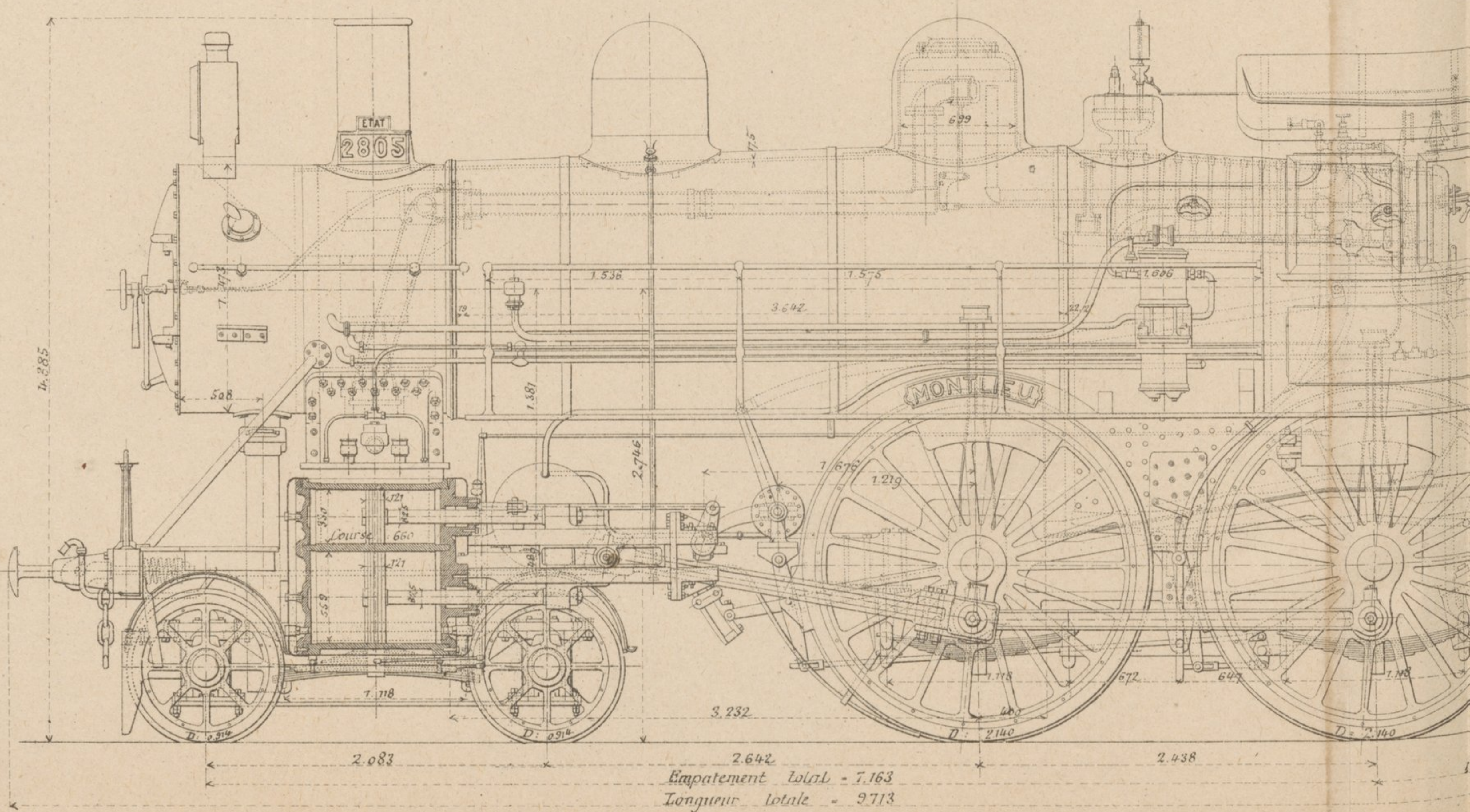


Fig. 4 à 6. — LOCOMOTIVE COMPOUND A GRANDE VITESSE DE

Fig 4. Vue en élévation



OGUL " DU GREAT NORTHERN RAILWAY

Fig.2
Demi-coupe par la boîte à fumée Demi-coupe par le dôme

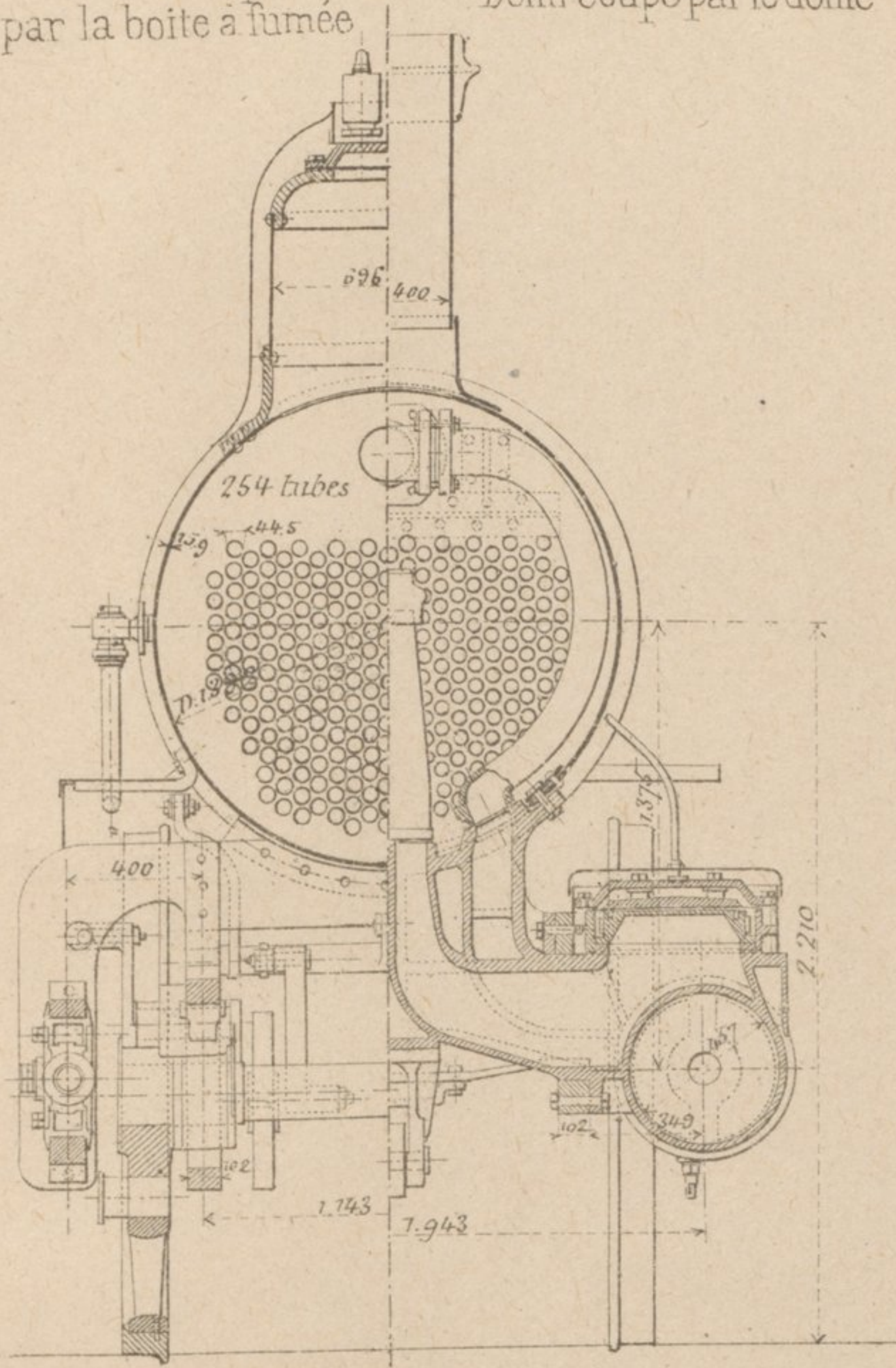
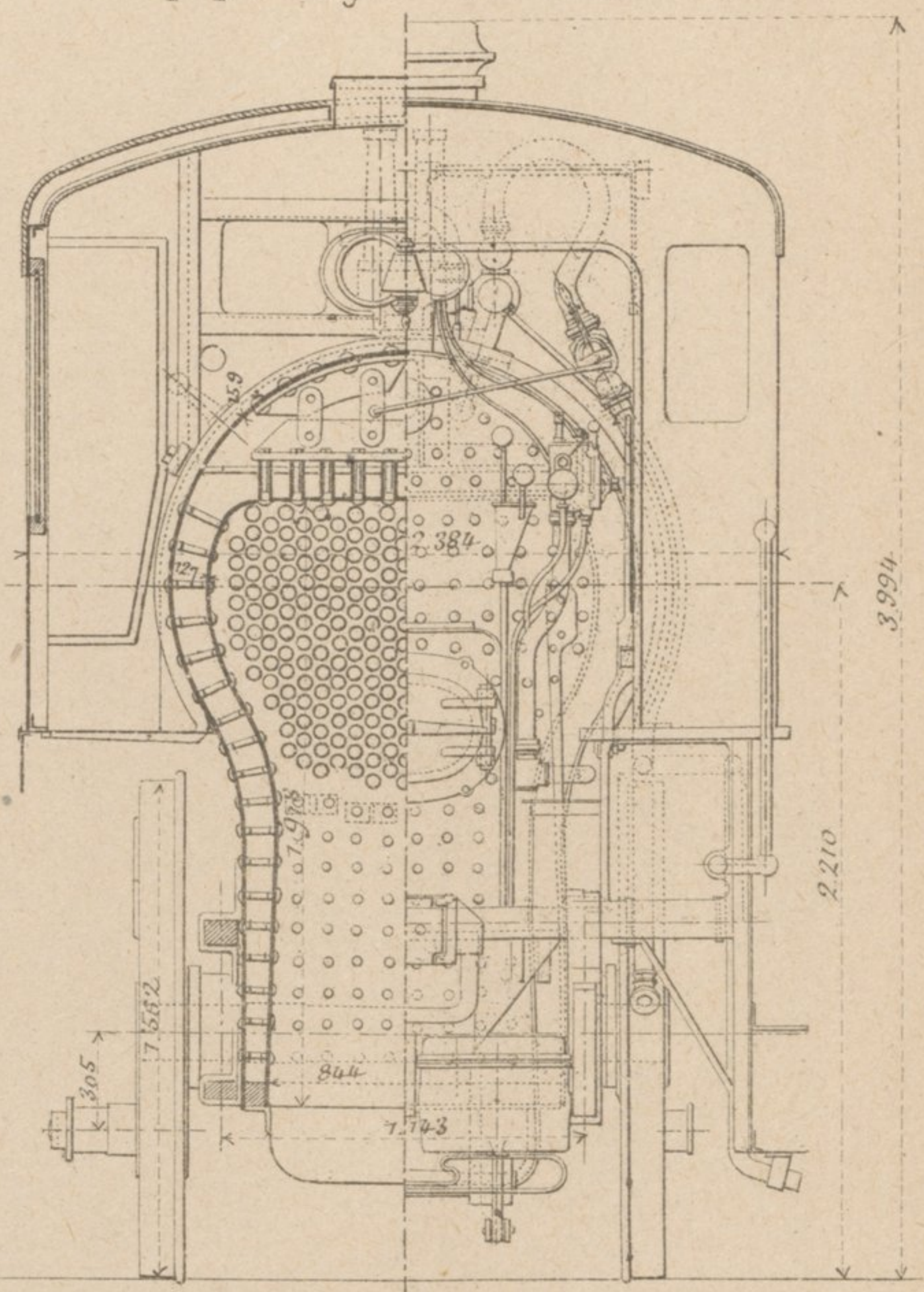


Fig.3.
Demi-coupe par le foyer Vue d'arrière



DES CHEMINS DE FER DE L'ÉTAT FRANÇAIS

Fig.5.
Demi-coupe transversale par les cylindres Demi-coupe transversale par la virole d'avant

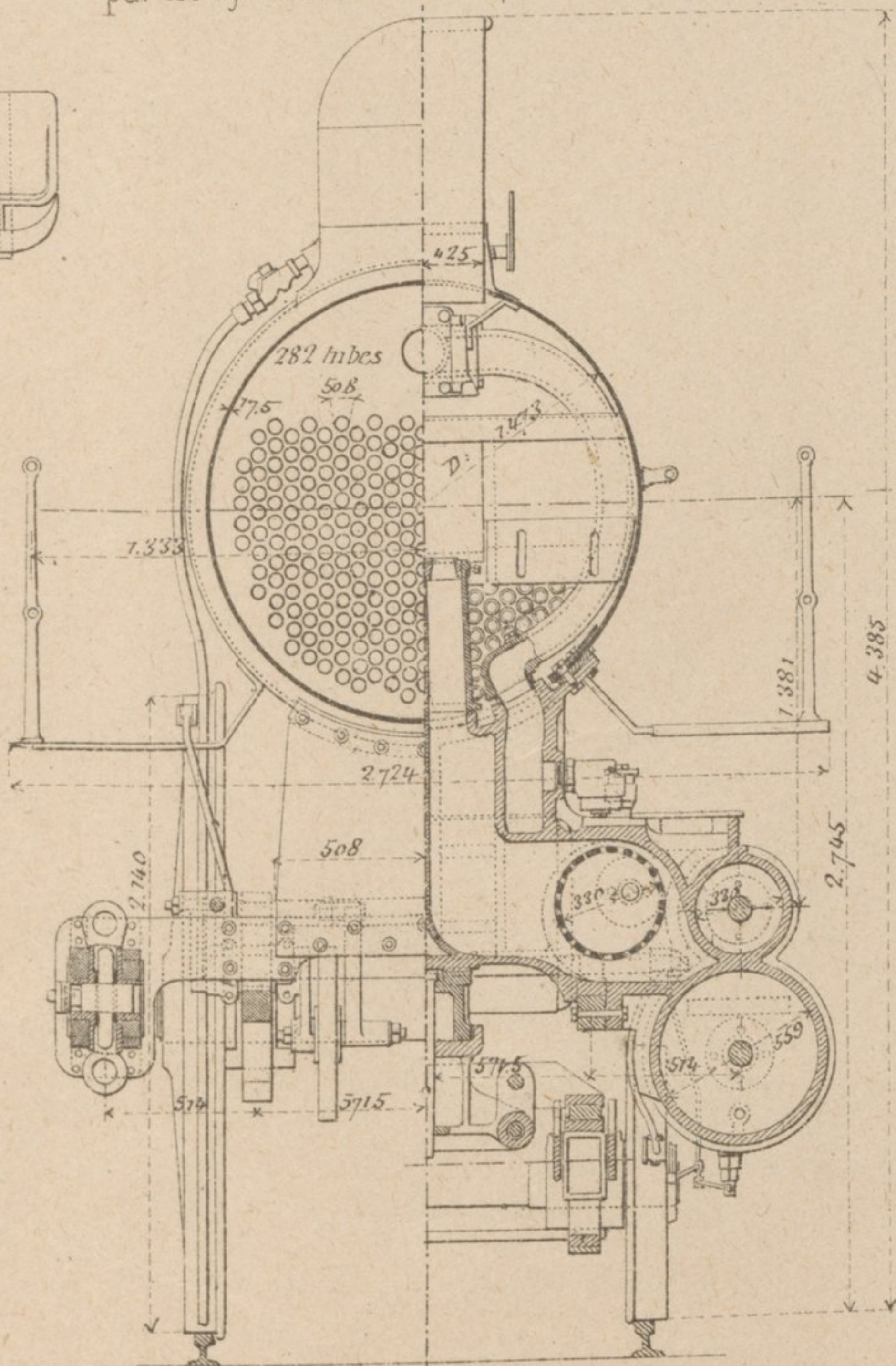


Fig.6.
Demi-coupe par le foyer Vue d'arrière

