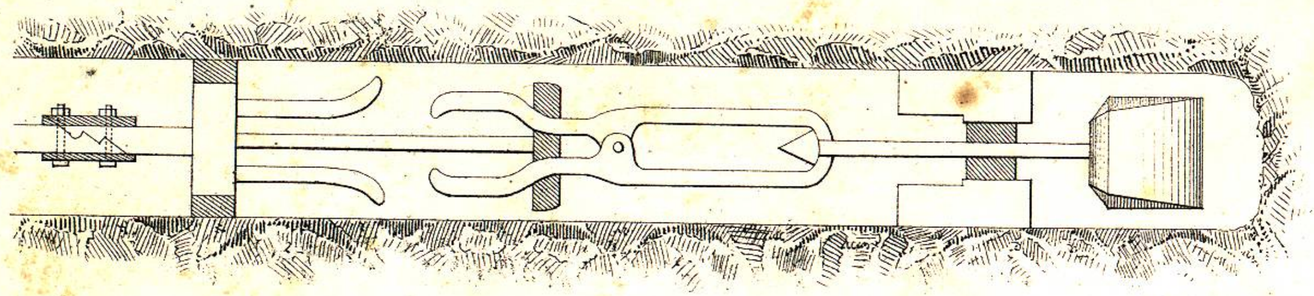
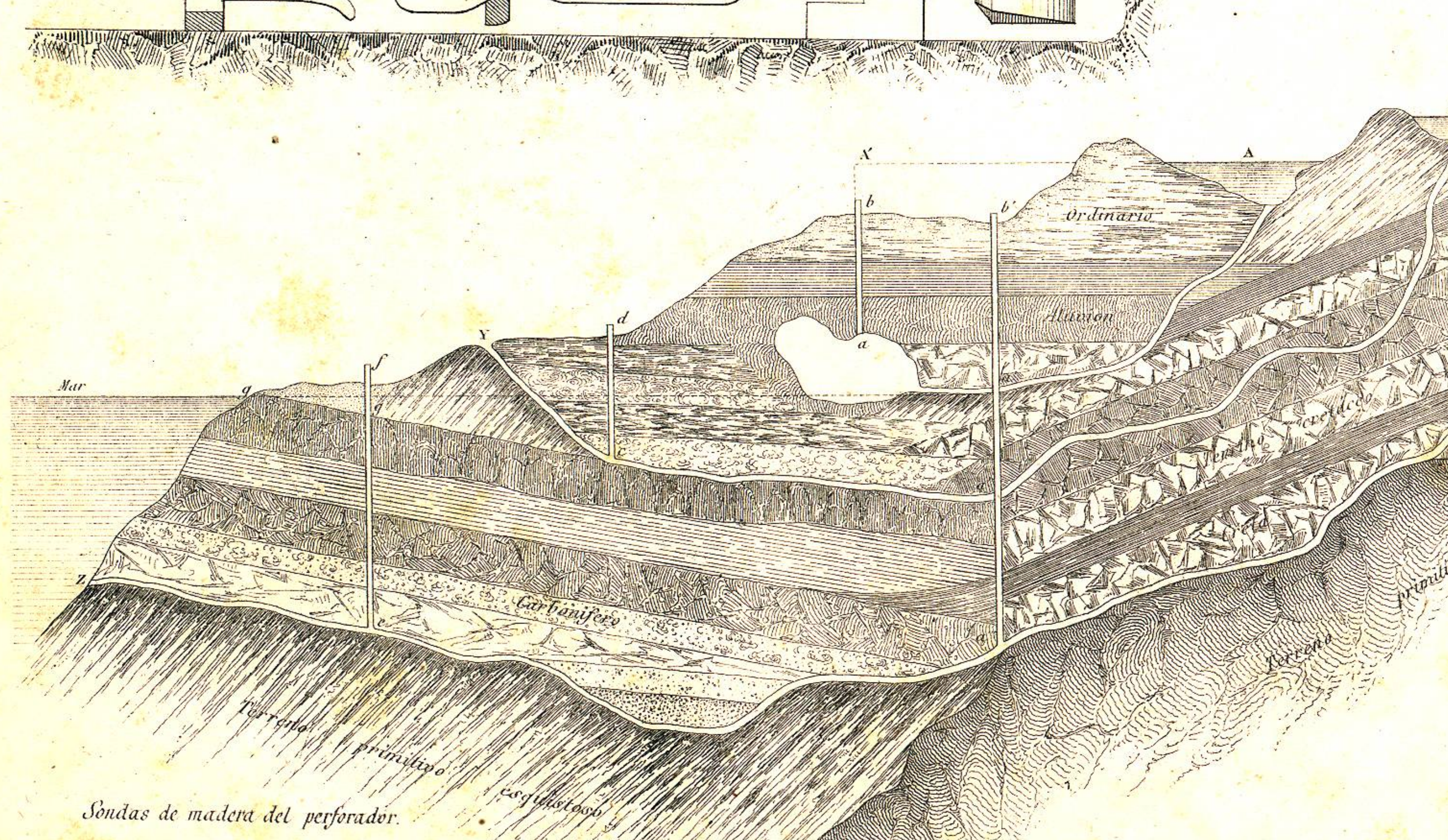
Perforador de Kind.





Sondas de madera del perforador.

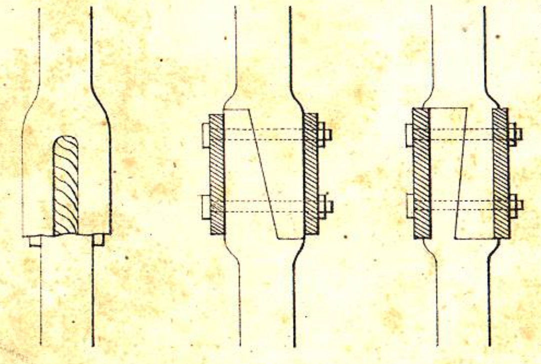
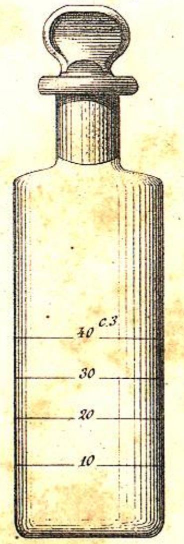
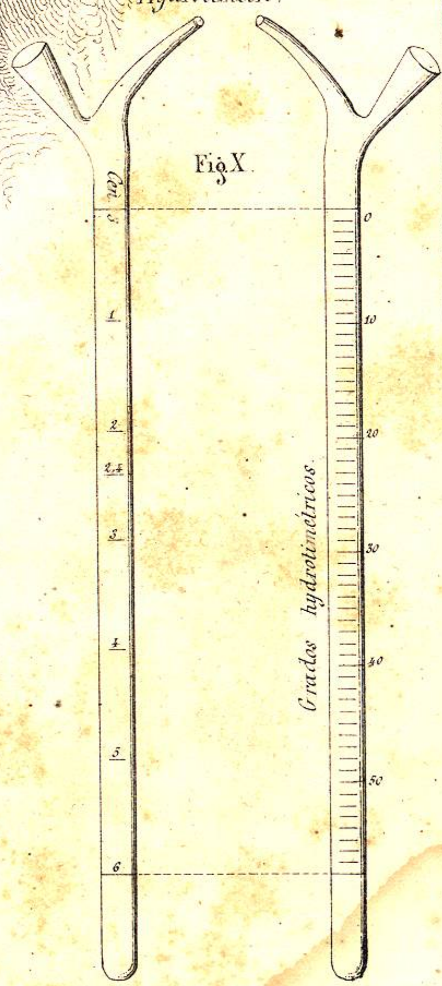


Fig. Z.



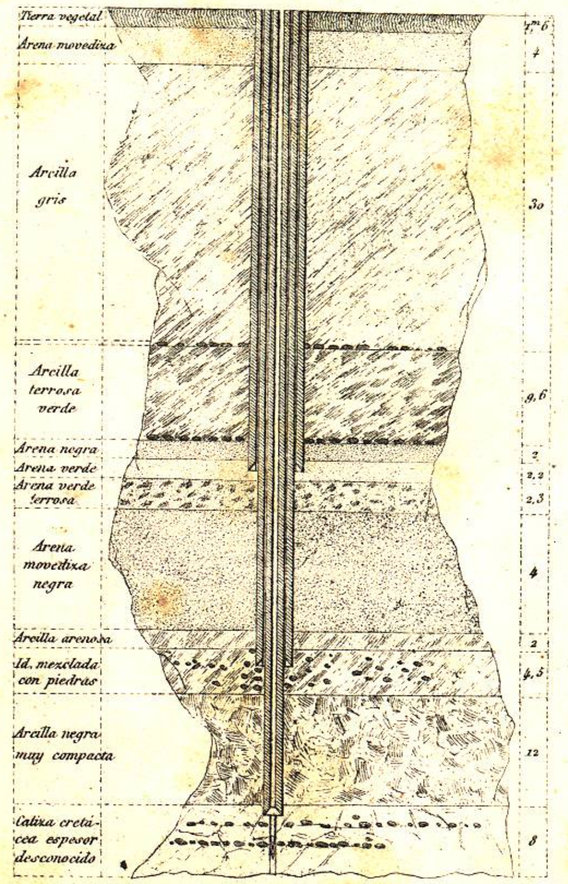
Hydrotimetro.

Fig. X



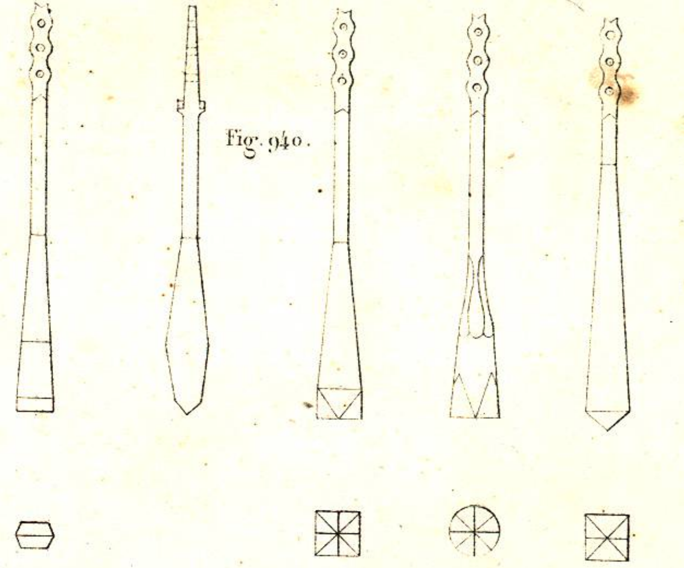
Valdes del.

Fig. 921.



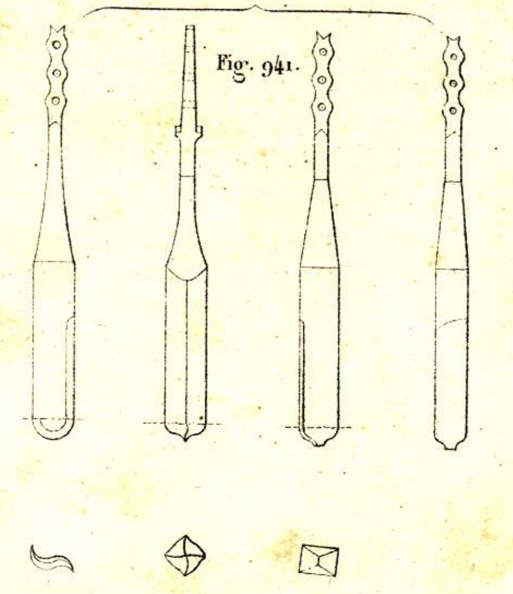
Cinceles para taladrar las areniscas y otras rocas duras. Trabajan á percusion.

Fig. 940.



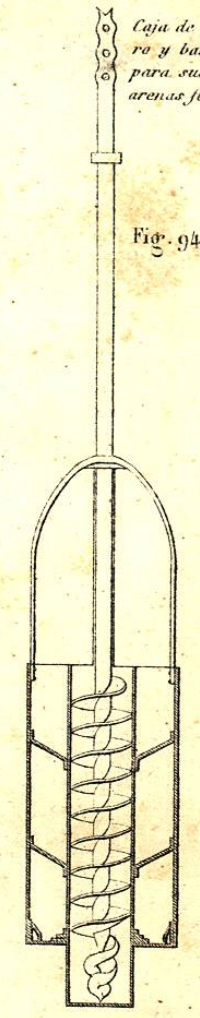
Trépanos para cuando es dificil agujerear la arcilla y creta.

Fig. 941.



Caja de hierro y barrena para subir las arenas fluidas.

Fig. 945.



Barrena estrellada para redondear el agugero

Fig. 922.

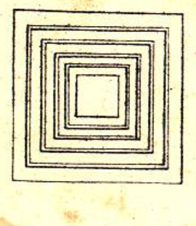


Fig. 942.

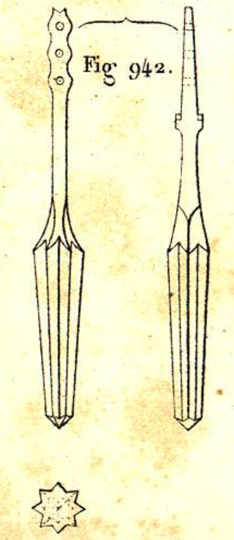
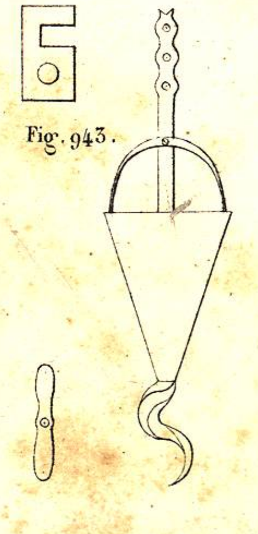
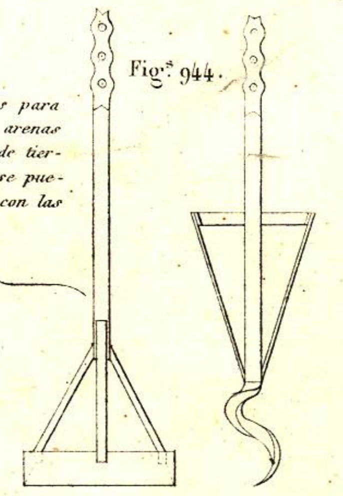


Fig. 943.



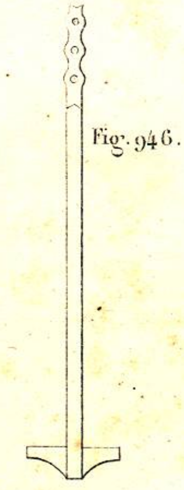
Instrumentos para estraer las arenas mezcladas de tierra que no se pueden sacar con las barrenas.

Figs. 944.



Saca-tubos ó busas.

Fig. 946.



Arranca-sondas, para cuando alguna barra se rompe ó escapa dentro del agugero.

Figs. 947.

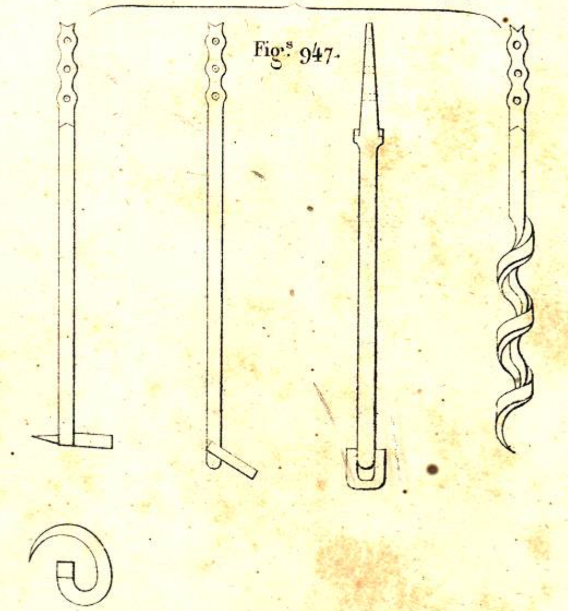
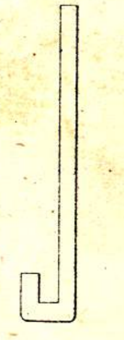
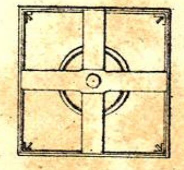


Fig. 948.

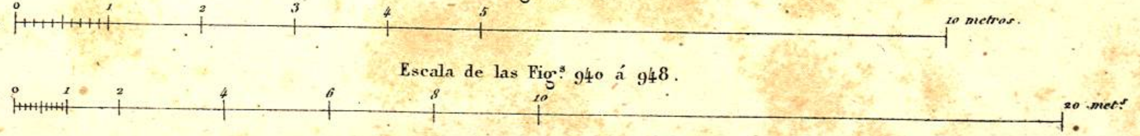


Mano giratoria que puede sustituir al manubrio.



Escala de la Figª. 921.

Escala de las Figs. 940 á 948.



Valdés del.

Fig. 925.

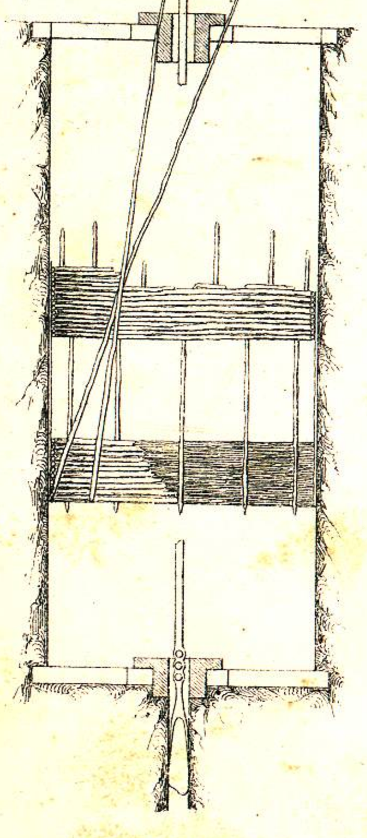
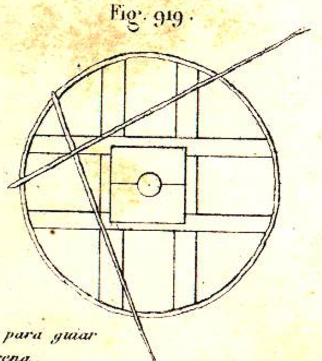


Fig. 919.



Marcos para guiar la barrena.

Fig. 920.

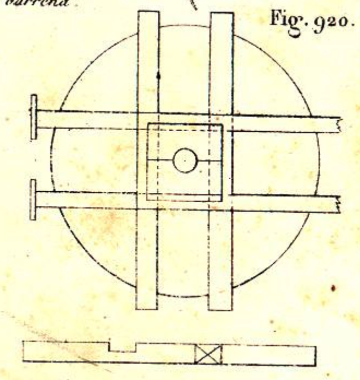


Fig. 924

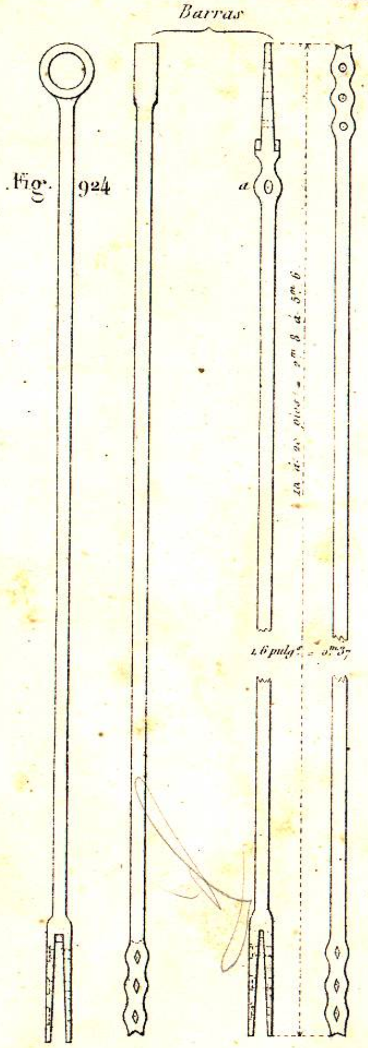
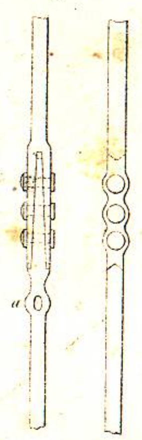


Fig. 925.

Fig. 926.



Agugero para introducir una barra que descansa en la boca del pozo interin se desarma la barra superior.

Fig. 927.

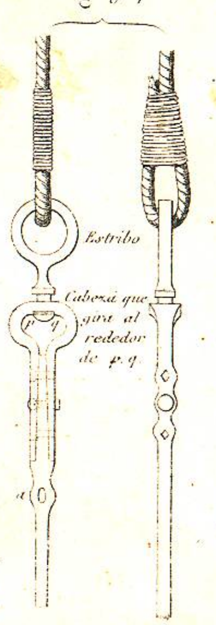
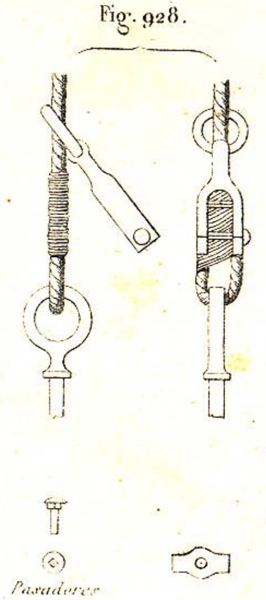


Fig. 928.



Barrena para taladrar tierra vegetal y arcilla poco pegajosa.

Fig. 929.

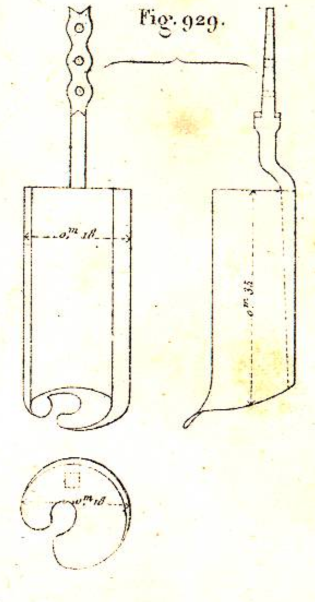


Fig. 930.

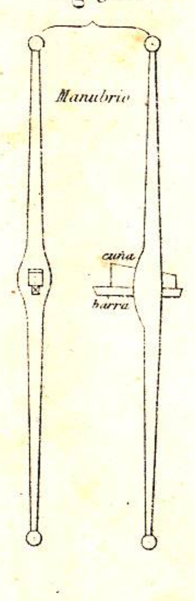


Fig. 939.

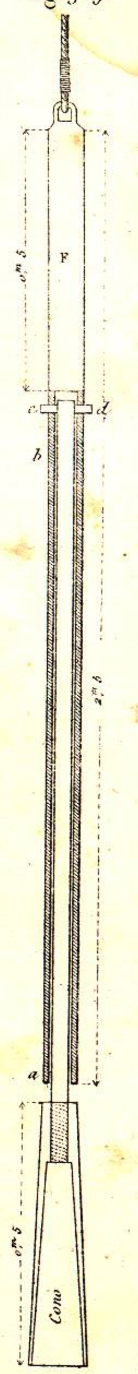


Fig. 931.

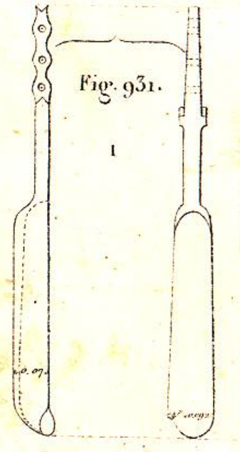
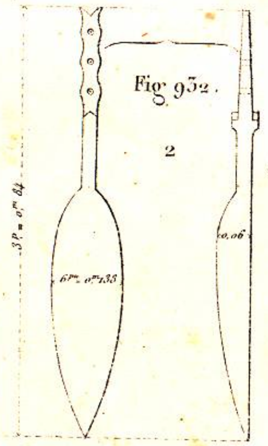


Fig. 932.



Barrenas para arcillas plasticas y caliza cretácea. Trabajan en el orden de sus números.

Fig. 933.

Fig. 934.

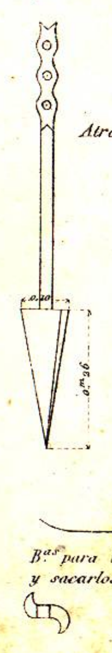
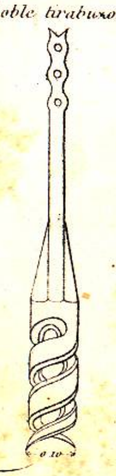


Fig. 935.

Fig. 936.

Doble tirabuzon



B.as para taladrar los cantos rodados y sacarlos con el tirabuzon.

Fig. 937.

B.a para arcillas plásticas

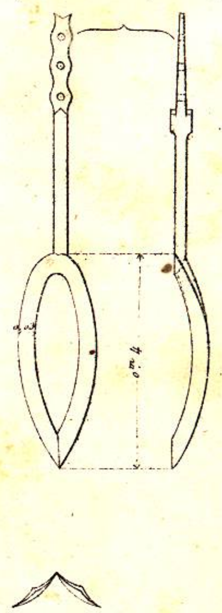
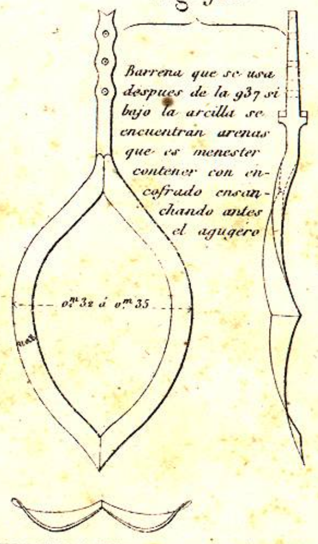


Fig. 938.



Barrena que se usa despues de la 937 si bajo la arcilla se encuentran arenas que es menester contener con encofrado ensanchando antes el agugero.

Fig.s 919, 920 y 923.

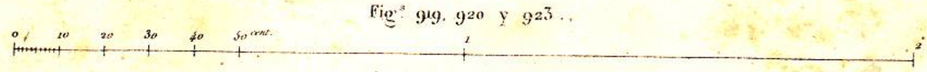


Fig. 939. Cono para perforar las arcillas plasticas inventado por Bordiu.
a b = Cilindro de hierro con dos ranuras ó hendiduras por donde corre el brazo o guia c. d.
Este cilindro esta unido al macizo F. que sirve de martillo.

Valdés del.

Fig. 949. Reloj Equinocial

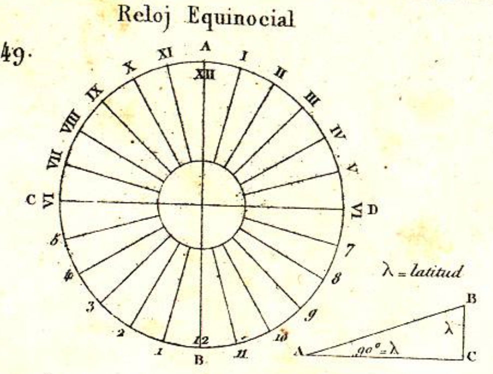


Fig. 950. Polar

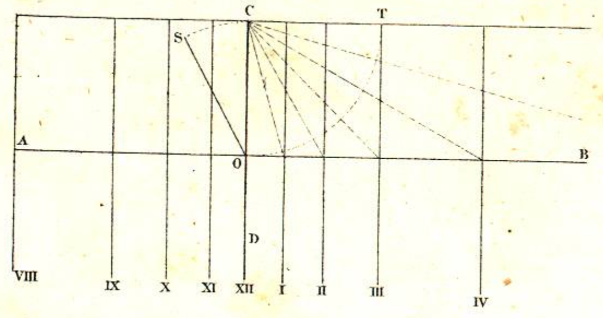
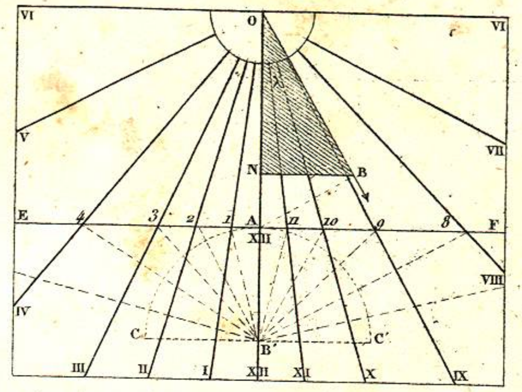


Fig. 951. Horizontal.



Horizontal
Construido con una sola abertura de compas.
Fig. 952

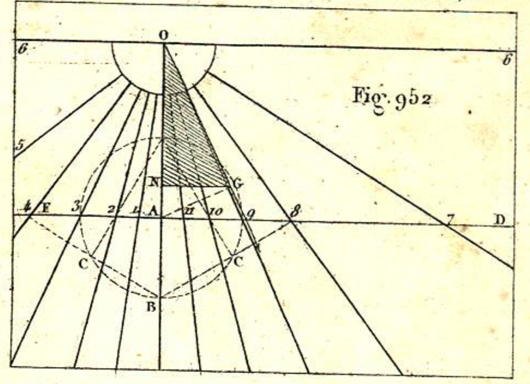


Fig. 953.
Vertical septentrional.

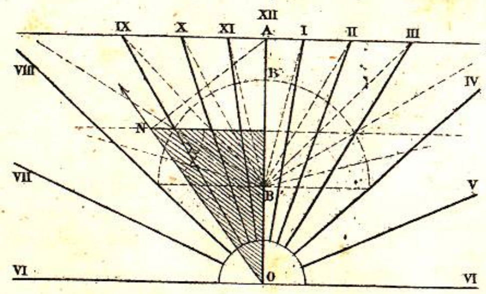


Fig. 954.

Vertical oriental.

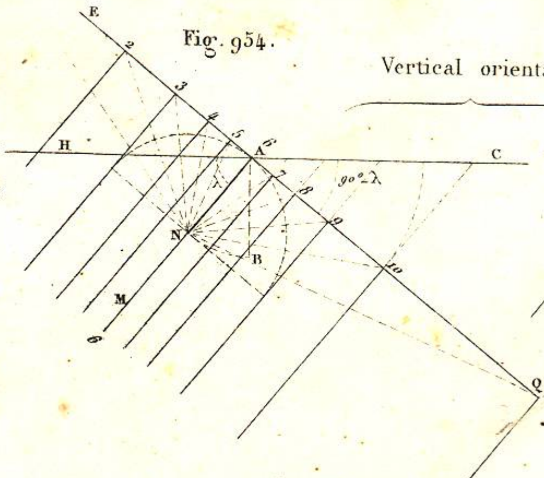


Fig. 955

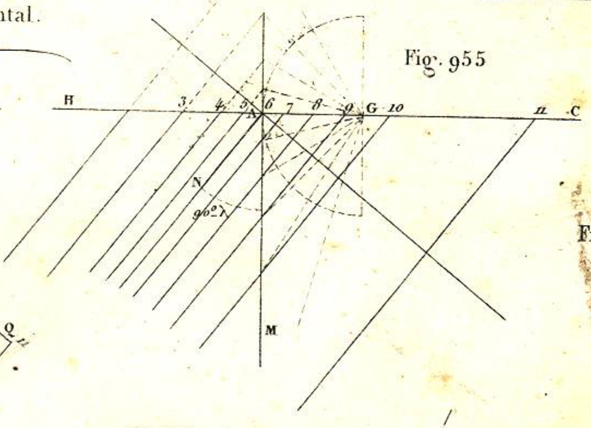


Fig. 956.

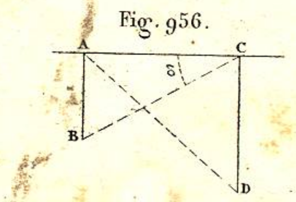


Fig. 957.

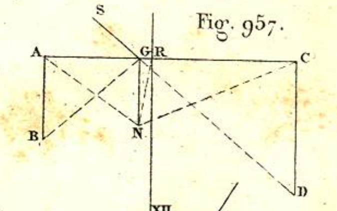


Fig. 960.

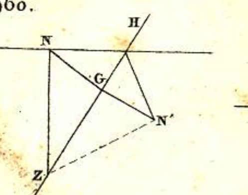


Fig. 961.

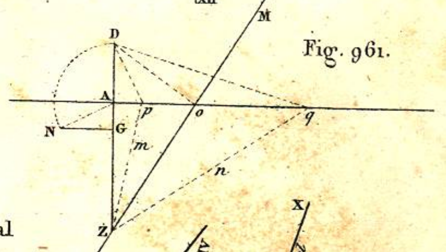


Fig. 958.
Meridional declinante

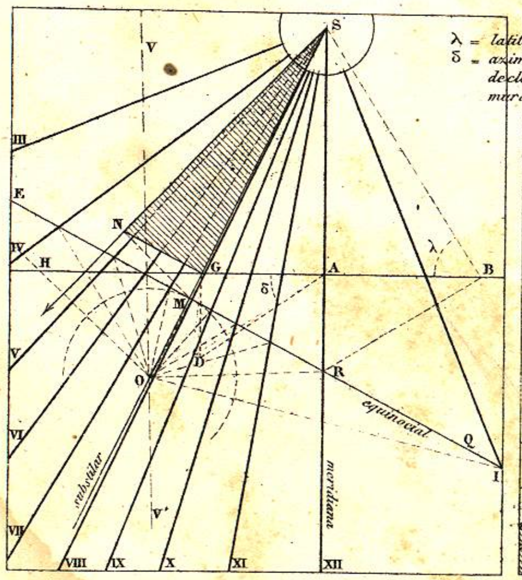
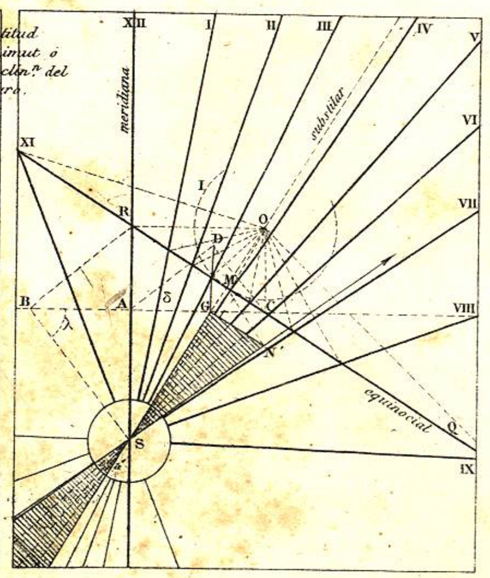
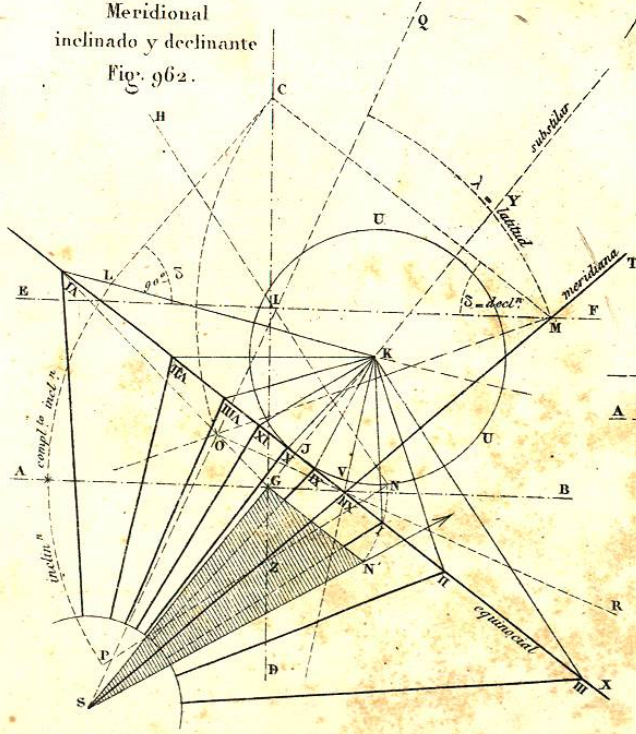


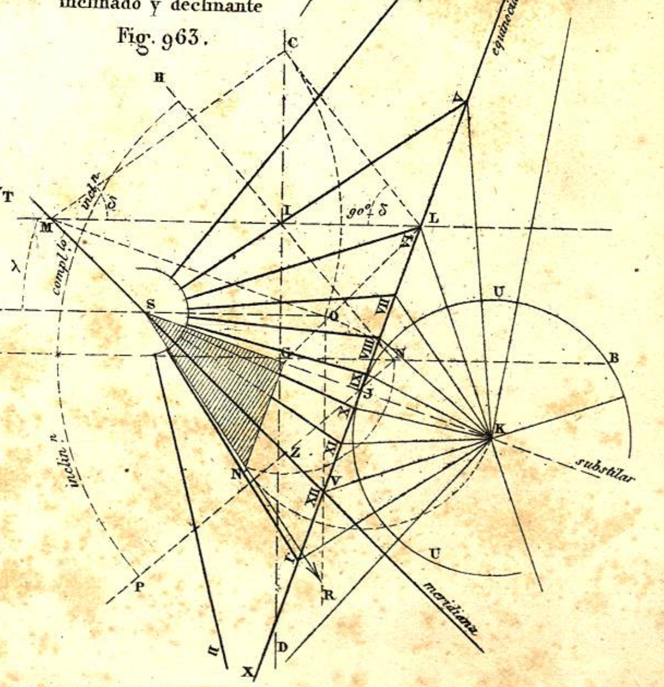
Fig. 959.
Septentrional declinante.



Meridional
inclinado y declinante
Fig. 962.



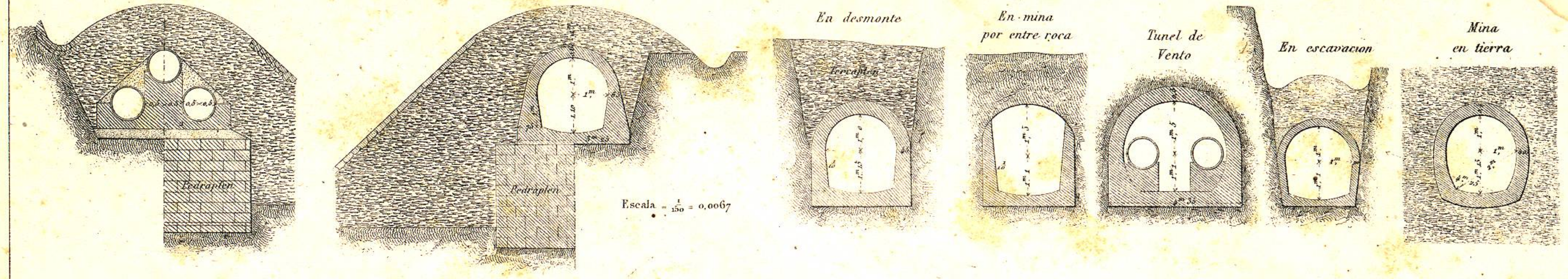
Septentrional
inclinado y declinante
Fig. 963.

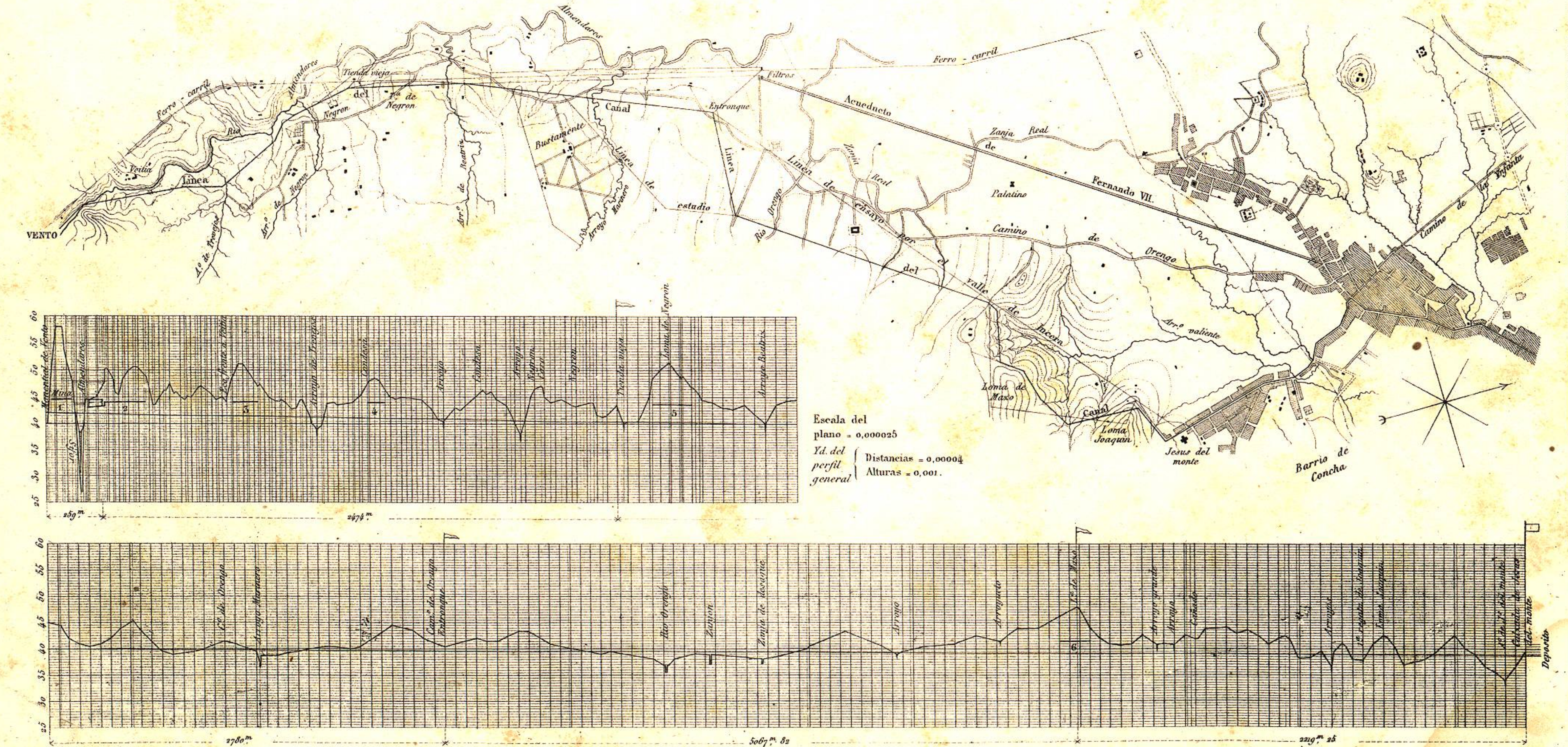


Valdés del.

Conduccion de aguas á la Habana

Seccion del canal.



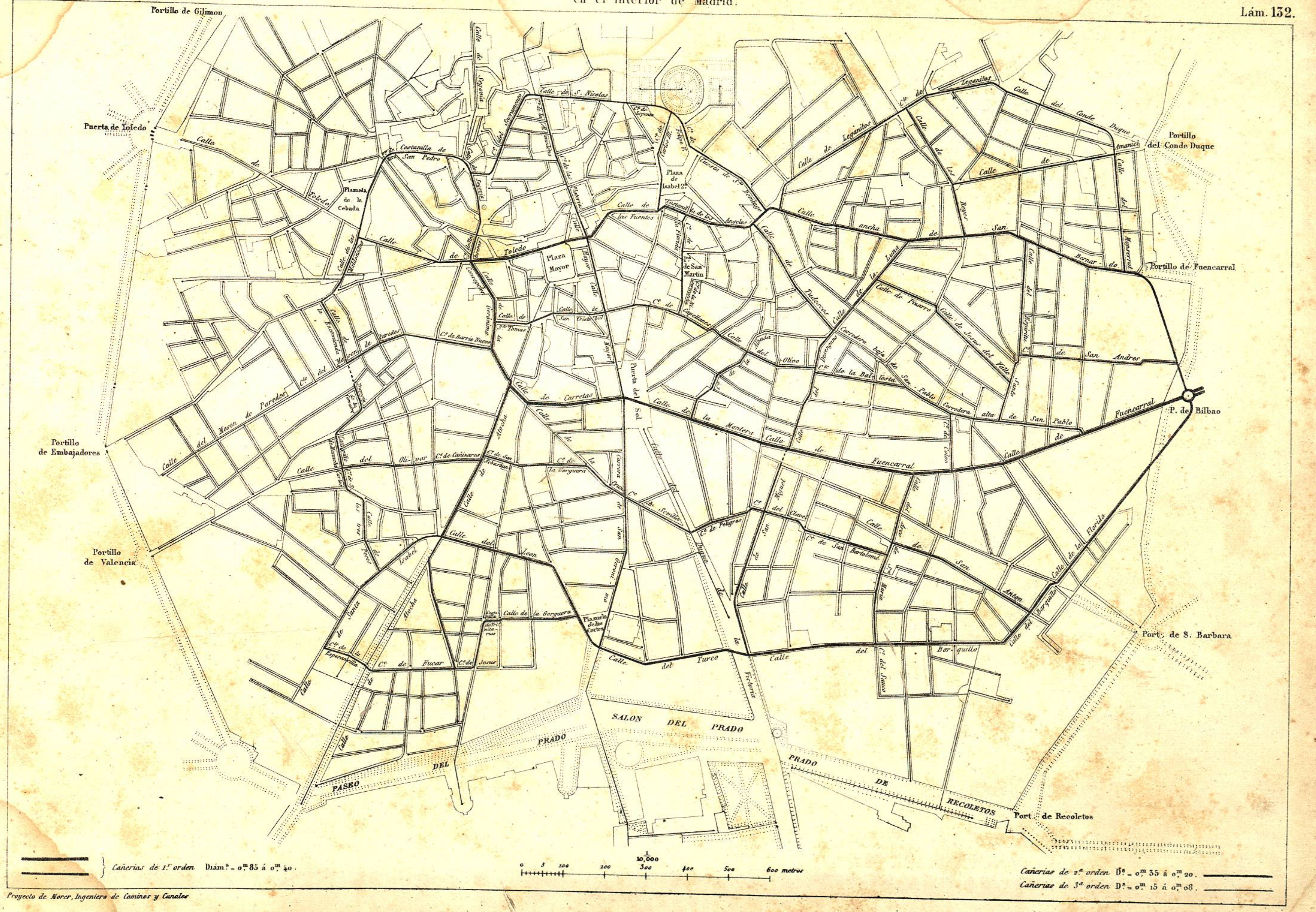


Escala del plano = 0,000025

Yd. del perfil general { Distancias = 0,00004 / Alturas = 0,001.

Proyecto de Albear, Coronel de Ingenieros.

PLANO DEL ANTE PROYECTO DE DISTRIBUCION DE LAS AGUAS DEL CANAL DE ISABEL 2.ª en el interior de Madrid.



Cañerías de 1.r orden Diám.s = 0.m 85 á 0.m 40.

Cañerias de 2.a orden D.s = 0.m 35 á 0.m 20.

Cañerias de 3.a orden D.s = 0.m 15 á 0.m 08.

Proyecto de Morer, Ingeniero de Caminos y Canales