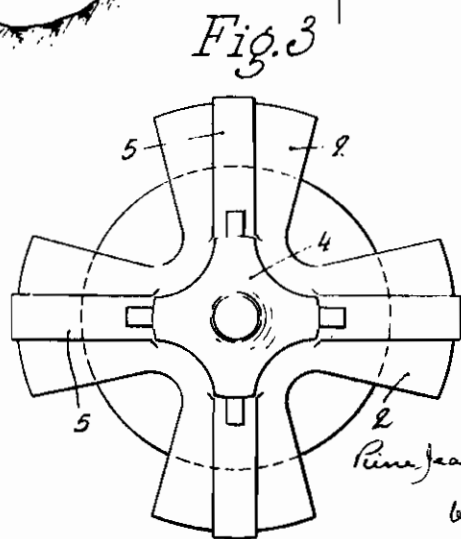
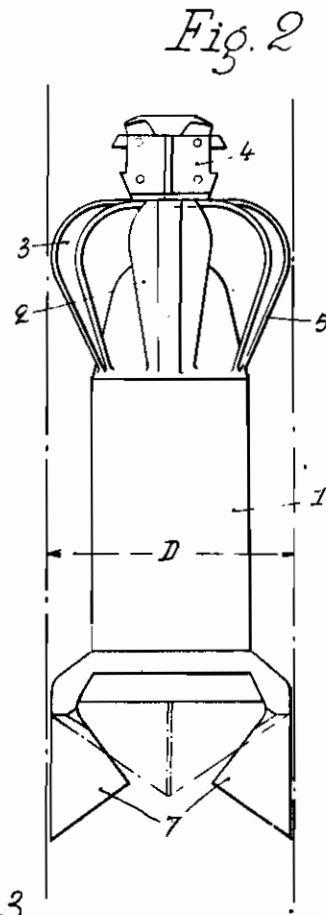
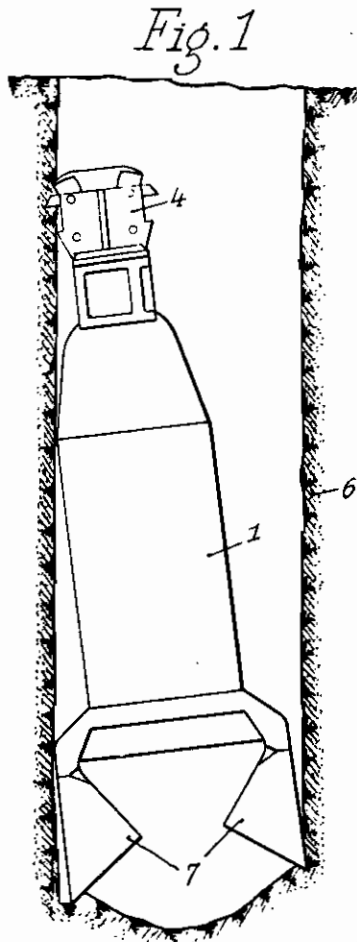


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GRABS USED FOR BORING
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ALIEN PROPERTY CUSTODIAN

GRABS USED FOR BORING

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The present invention relates to improvements in grabs used for boring in order to improve the operation thereof.

In the use of such grabs of known type, it frequently happens that they become placed askew in the hole, resulting in risks of wedging and deviation of the bore-hole. Moreover, when such a grab operates with a single cable, its engaging and disengaging device becomes frequently clogged, either owing to the fact that the grab is placed askew, or because when moving up or down its upper part scrapes the hole.

According to the present invention, the above inconveniences and difficulties are avoided and the operation is appreciably improved by the fact that the grab comprises, at its upper part, a guiding device constituted by radial projections of rounded shape inscribed in a diameter corresponding to that of the scoops of the grab, and arranged to guide the upper part of the grab substantially coaxially inside the bore-hole.

The other features and advantages of the invention are set forth in the following description with reference to the accompanying drawing which diagrammatically illustrates by way of example and not in a limiting sense, an embodiment of the invention. In said drawing:

Fig. 1 indicates the faulty position of a grab unprovided with the means according to the invention;

Fig. 2 illustrates an improved grab;

Fig. 3 is a plan view of the grab of Fig. 2, on an enlarged scale.

In Fig. 1 will be seen a grab 1 comprising a suitable automatic engaging and disengaging device 4 and scoops 7, operating in the bore-hole 6. Said grab being placed askew, it may become wedged or cause the bore-hole to deviate. On the other hand, as its part 4 is in contact with the walls of the bore-hole which may be constituted of loose material, the latter clog up

the head of the grab and hinder the satisfactory operation thereof.

According to Figs. 2 and 3, the grab is provided with a guiding device constituted by shaped sheet metal plates 2 of rounded profile which are inscribed in the diameter D corresponding to the diameter of the scoops of the grab, so as to make up for the difference existing between the latter and the reduced width of the body of the grab proper.

The ribs 5 provided on the sheet metal plates 2 can be obtained by any means; they can be constituted by plates secured thereto which offer the advantage that they can be replaced when they are worn by the nearly continual friction thereof against the walls of the bore-hole.

Owing to this device, it will be seen that the head of the grab can no longer come in contact with said walls. On the other hand, the form of construction illustrated leaves, as shown in Fig. 3, very large passages between the grab and the walls of the bore-hole, so that the device according to the invention does not brake the downward movement of the grab, even if the latter is to be lowered into a bore-hole full of water, which frequently happens. Preferably as shown the radial projections are separated from each other by wide intervals forming vertical passages. Finally, it is to be noted that during the rising or lowering of the grab, the latter can no longer become wedged nor rock, so that the head can in no case come in contact with the walls of the bore-hole and that the engaging and disengaging device 4 is consequently protected against shocks.

It is to be understood that the embodiment illustrated is not limiting and that it can be modified without departing thereby from the scope of the present invention.

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