

No. 748,034.

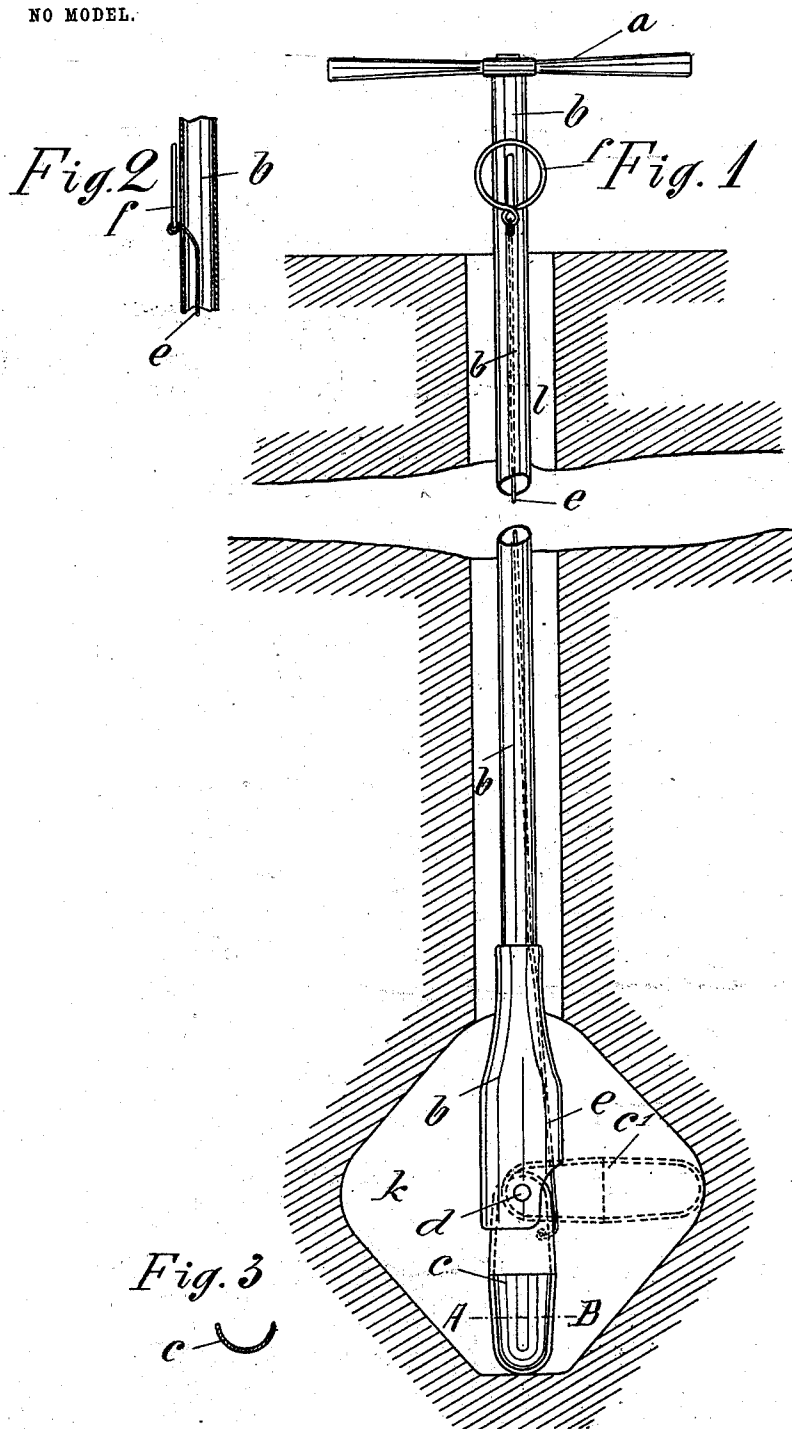
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F. ANSCHÜTZ.

DEVICE FOR THE CLEANING OF EXPLOSION CHAMBERS.

APPLICATION FILED APR. 6, 1903.

NO MODEL.



Witnesses:
F. A. V. S.
G. A. S.

Inventor:
F. A. S.
G. A. S.
Attorney

UNITED STATES PATENT OFFICE.

FRIEDRICH ANSCHÜTZ, OF NEUNKIRCHEN, NEAR TRIER, GERMANY.

DEVICE FOR THE CLEANING OF EXPLOSION-CHAMBERS.

SPECIFICATION forming part of Letters Patent No. 748,034, dated December 29, 1903.

Application filed April 6, 1903. Serial No. 151,331. (No model.)

To all whom it may concern.

Be it known that I, FRIEDRICH ANSCHÜTZ, mechanical engineer, a subject of the German Emperor, and a resident of Neunkirchen, near Trier, Germany, have invented new and useful Improvements in Devices for the Cleaning of Explosion-Chambers at the End of Bore-Holes, of which the following is a specification.

10 This invention relates to a device for the cleaning of explosion-chambers at the ends of horizontal bore-holes. Such explosion-chambers are used at present for blasting purposes in coal-mines, ore-mines, quarries, and the like. In these explosion-chambers, which are made by means of particular boring instruments, there remains always some powdery residue which has to be removed before the explosion-chamber is loaded, which is of essential importance in coal-mines, as the coal-dust is very noxious for blasting.

The device forming the object of the present invention allows a thorough and easy cleansing of the explosion-chambers.

25 In the accompanying drawings the device is shown, in—

Figure 1, in a side view in operation. Fig. 2 shows in section how the upper end of the traction-wire for the spoon is arranged, and Fig. 3 is a section through the spoon on line A B of Fig. 2.

30 The apparatus consists of a tube *b*, with a handle *a*, which tube is somewhat longer than the bore-hole. At the enlarged end of the tube *b* a spoon *c* is pivoted at *d*, which is adapted to be turned through an angle of ninety degrees by means of a traction-wire *e*, one end of which is fixed to spoon *c* somewhat before and beside the pivot *d*. The other end of the traction-wire *e* is passed through a longitudinal slot of the tube, which longitudinal slot is arranged at the upper end of the tube near the handle *a*. To the upper end of the traction-wire *e* a ring *f* is fixed which serves as a handle.

The device is used as follows: After the instrument has been inserted into the explosion-chamber *k* through the horizontal bore-hole *l* ring *f* is pulled, so that the traction-wire *e* turns the spoon *c* around its pivot *d*, so that it stands at right angles to the tube *b*, as shown in the drawings in dotted lines at *c'*. If now the handle *a* of tube *b* is rotated, the spoon *c* scoops up the dust and residue which have collected at the lowest point of the explosion-chamber. If the instrument is withdrawn from the bore-hole, the spoon *c* is automatically brought into the horizontal position as soon as it abuts against the edge of the explosion-chamber.

By means of this instrument the explosion-chamber can be thoroughly cleaned.

It is advisable to arrange the pivot *d* of the spoon so that the spoon can be easily removed and replaced by a brush for brushing the dust off the walls of the explosion-chamber previously to cleaning the same.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

Device for the cleaning of explosion-chambers at the ends of horizontal bore-holes, comprising in combination a tube with a handle at the upper end, a spoon pivoted to the enlarged bottom end of said tube, a traction-wire fixed at one end to the spoon before and beside the pivot of the same, a longitudinal slot at the upper end of the tube near the handle for the passage of the upper end of the traction-wire and a ring fixed to the upper end of the traction-wire, substantially as described and shown and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRIEDRICH ANSCHÜTZ.

Witnesses:

JACOB ADRIAN,
H. W. HARRIS.