

No. 748,034.

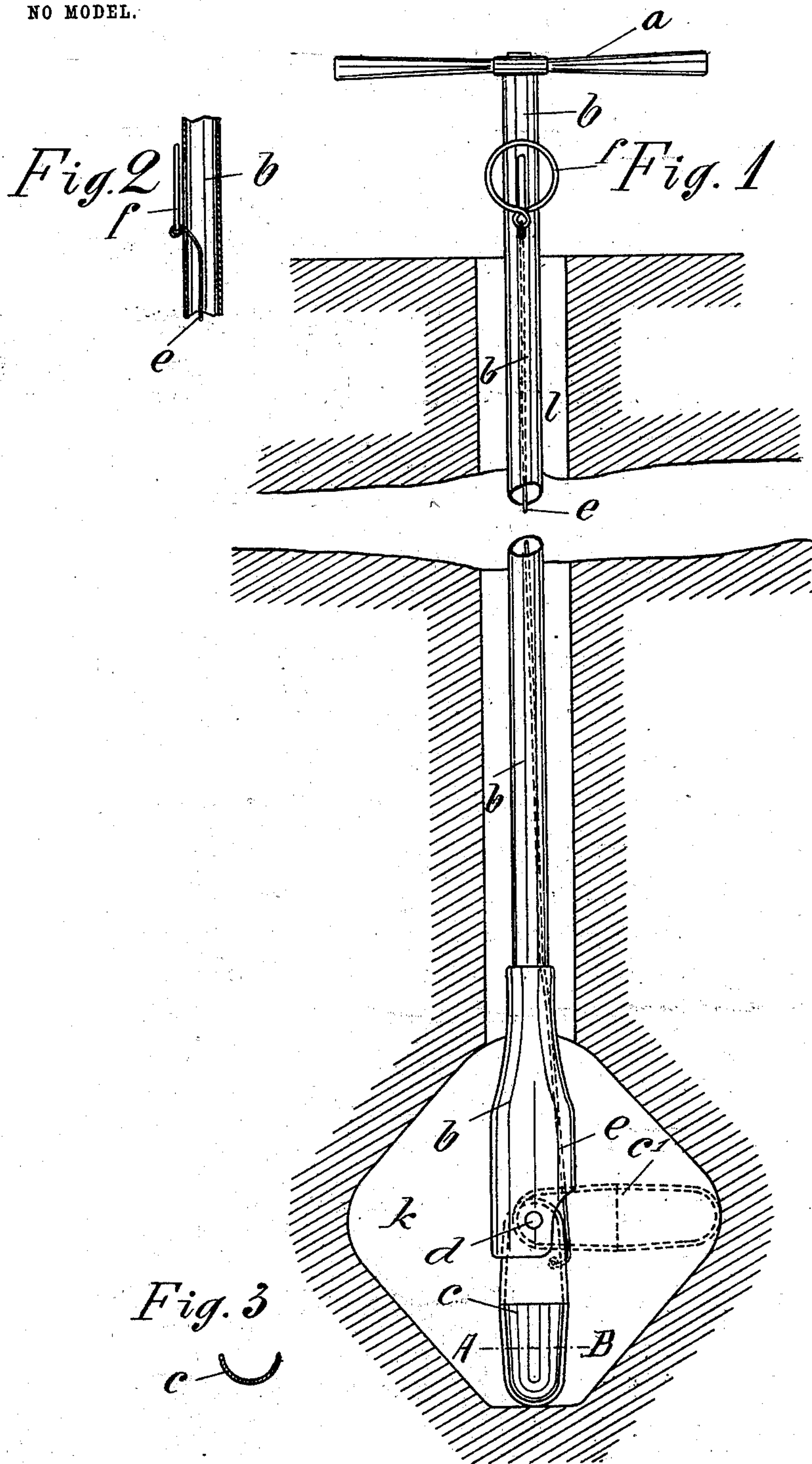
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F. ANSCHÜTZ.

DEVICE FOR THE CLEANING OF EXPLOSION CHAMBERS.

APPLICATION FILED APR. 6, 1903.

NO MODEL.



Witnesses:  
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# 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.