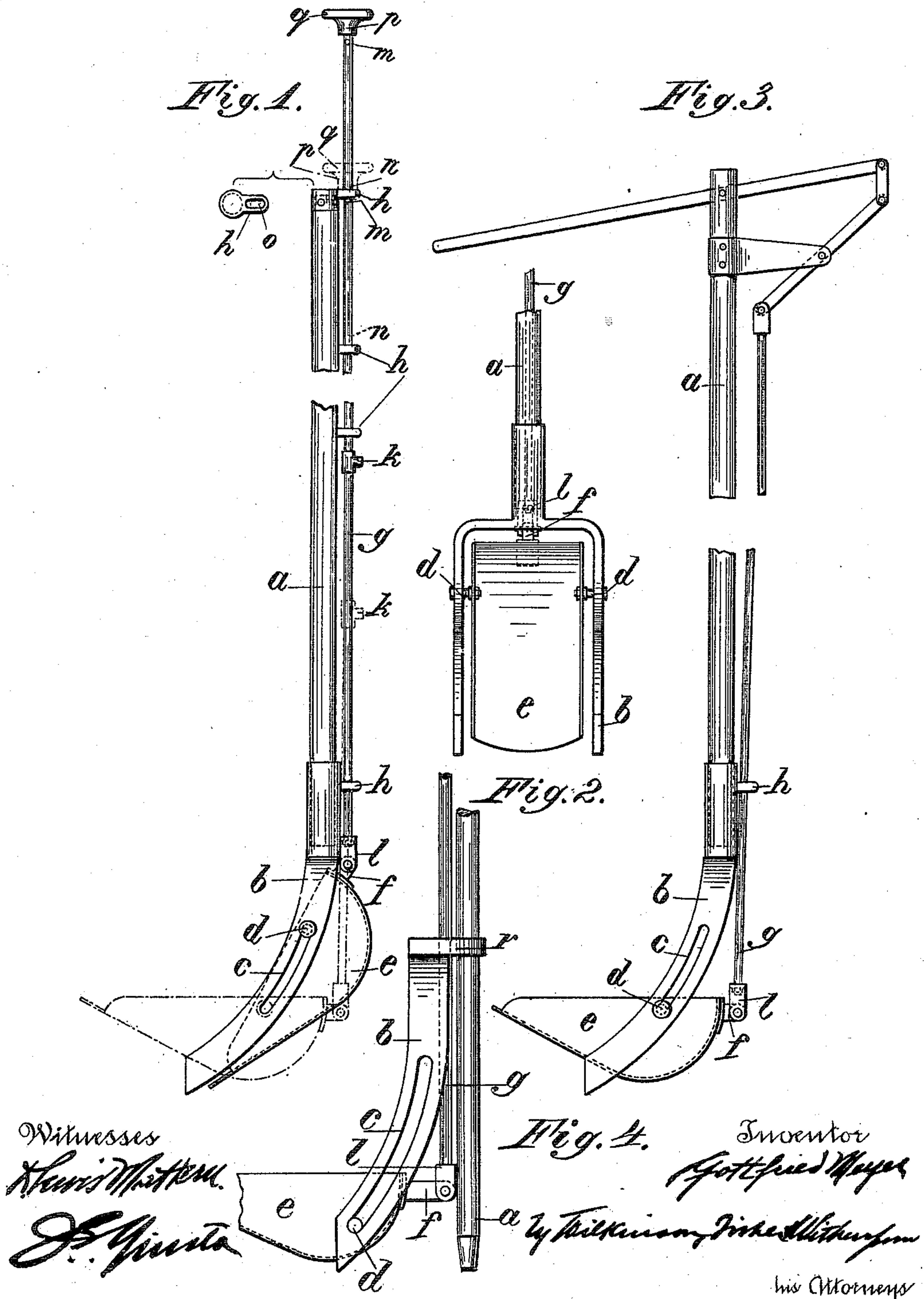


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SCOOP FOR BALING NARROW SHAFTS.
APPLICATION FILED NOV. 14, 1910.

983,077.

Patented Jan. 31, 1911.



UNITED STATES PATENT OFFICE.

GOTTFRIED MEYER, OF ZURICH, SWITZERLAND.

SCOOP FOR BALING NARROW SHAFTS.

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Specification of Letters Patent.

Patented Jan. 31, 1911.

Application filed November 14, 1910. Serial No. 592,319.

To all whom it may concern:

Be it known that I, GOTTFRIED MEYER, a citizen of the Republic of Switzerland, residing at Zurich, in the Canton of Zurich, Republic of Switzerland, (whose post-office address is Grüngasse 11, Zurich,) have invented certain new and useful Improvements in Scoops, Principally for Baling Narrow Shafts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of the present invention is a scoop which principally serves for baling narrow shafts.

The accompanying drawing shows as examples three forms of the object of the invention.

Figure 1 is a side-elevation and Fig. 2 a partial front-elevation of the first form, the baling-element being represented in different positions. Fig. 3 is a side-elevation of the second form, and Fig. 4 a partial side-view of the third form.

Referring to Figs. 1 and 2, *b* is a U-shaped piece of metal fastened to the lower end of the stick *a*. The legs of said piece are curved so that their lower ends project. Each of them is provided with a curved slot *c* in which is a sliding pivot *d* of a baling-element scoop *e*. The latter possesses an arm *f* extending backward. To this arm is linked a bar *g* guided in eyes *h* fixed to the stick *a*.

When proceeding to the baling of a shaft, the device is let down in the shaft while the baling-element or scoop occupies the position shown in full lines and then the bar *g* is pressed down by hand whereby the baling-element being pushed forward in a gentle curve, turns on the pivot *d*, and passes to the horizontal position shown in dotted lines, grasping by this movement the material which gets entirely into the baling-element. The scoop having then been lifted out of the shaft and emptied, the baling may be repeated.

In order to enable the baling-element to be held fast in one of the two positions shown in full and in dotted lines, the bar *g* is provided at the upper part with two pins *m* and *n* and may rotate in a fork *l* by means of which it is connected to the arm *f*. A slot *o*

in the uppermost guide *h* allows the pins to pass when the bar is raised or let down. In order to fix the baling-element in any of the two positions, one need only raise the bar *g* to the respective height and turn it afterward, so as to bring the pin *m* or *n* in a transversal position with regard to the slot *o*. A handle *k* mounted on the bar *g* enables the latter to be turned even when the scoop is lifted out of the shaft and the handle *g* may not be within reach. The nave *p* of the handle *g* striking against the uppermost guide *h* limits the downward movement of the bar *g*.

With the form shown in Fig. 3 the bar *g* is acted upon by means of levers, but another mechanical contrivance could be employed.

The U-shaped piece could be made of a round-bar and the baling-element guided along the legs of the said piece by means of eyes fastened on the baling-element.

Fig. 4 shows a form of the device having the bar *g* adapted in front of the stick *a*, the latter being lengthened at its lower end. By this arrangement the bar *g* is stiffened and prevented from bending backward. In this case the stick is connected to the U-shaped piece *b* by means of a small plate in which the bar *g* moves freely. The stick may rest with its lower end on the bottom of the shaft.

What I claim is:—

1. The combination of a stick, a scoop carried at the bottom thereof and bodily movable relative thereto, and means for forcing downwardly the inner end and upwardly the outer end of said scoop and returning said scoop to its normal position, substantially as described.

2. The combination of a stick, having a guiding member at its lower end, means securing a bodily movable scoop to said guiding member, and means for imparting a progressive and swinging movement to said scoop, substantially as described.

3. The combination with a stick provided at its lower end with a forwardly and downwardly curved guiding member, a scoop slidably connected to said guiding member, and means for imparting motion to said scoop, substantially as described.

4. The combination of a stick provided at its lower end with a pair of forwardly and downwardly curved arms, a scoop slidably connected at its rear sides with said curved

arms, and means for bodily moving said scoop.

5 5. The combination of a stick provided at its lower end with a guiding member having downwardly and forwardly curved slots, pins carried by said scoop and engaging within said slots, and means for imparting motion to said scoop, substantially as described.

10 6. The combination of a stick, a bodily movable scoop carried at the lower end thereof and capable of progressive and swinging movement, and means for operating said scoop comprising a bar slidably
15 mounted on said stick and pivotally connected at its lower end to said scoop, substantially as described.

7. The combination of a stick, a bodily movable scoop carried at the lower end thereof and capable of progressive and swinging movement, means for operating said scoop comprising a bar slidably and rotatably mounted on said stick and swiveled at its lower end to said scoop, and means for locking said bar in different positions, substantially as described. 20 25

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

GOTTFRIED MEYER.

Witnesses:

HERMANN HUBER,
ARTHUR J. BUNDY.