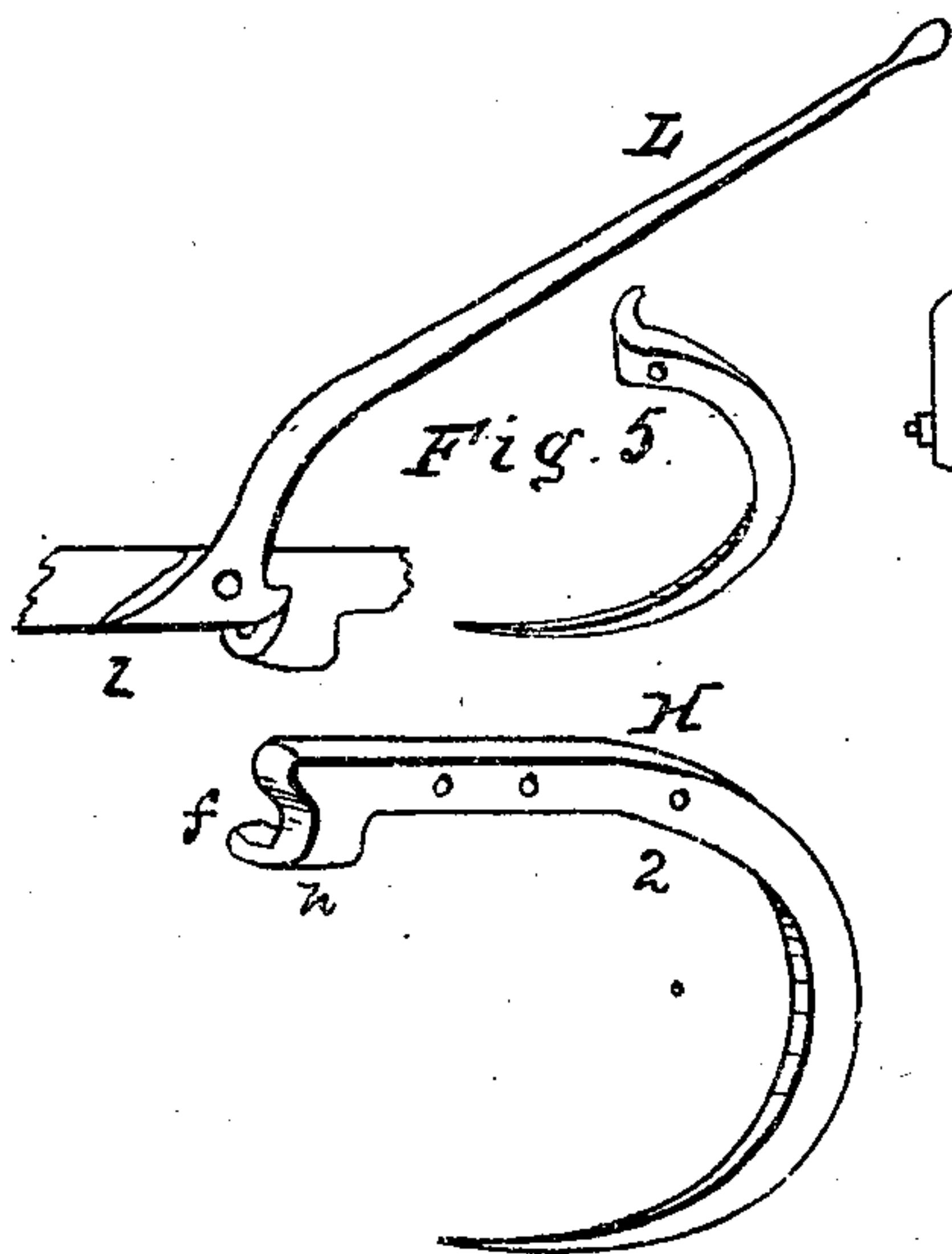
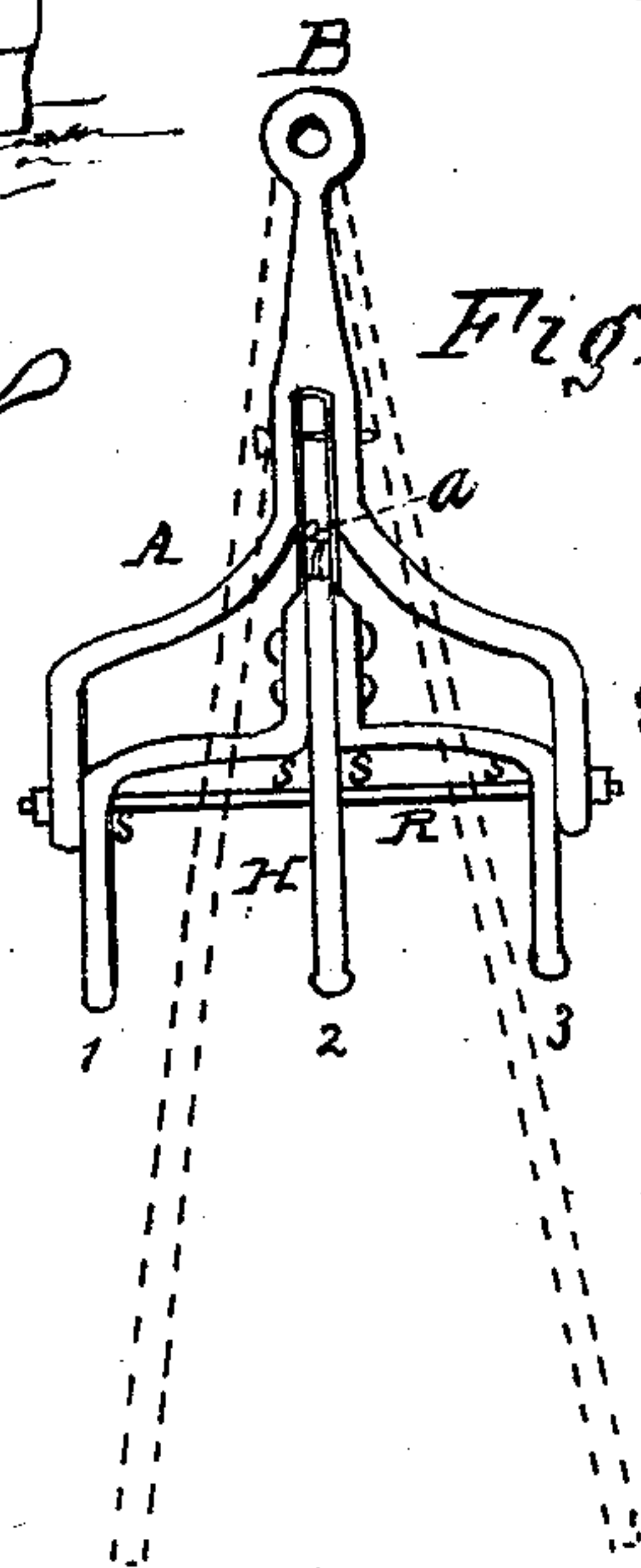
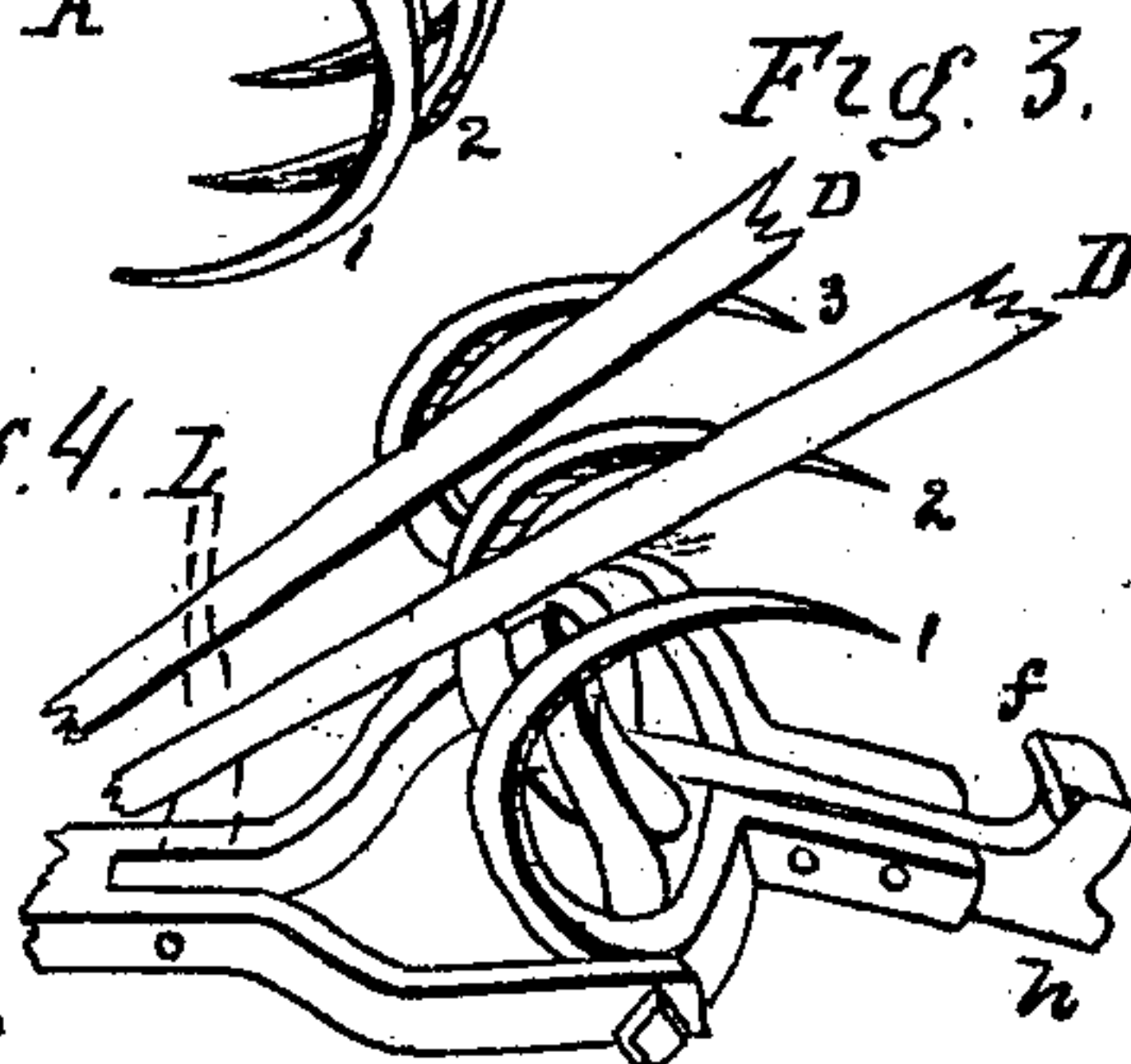
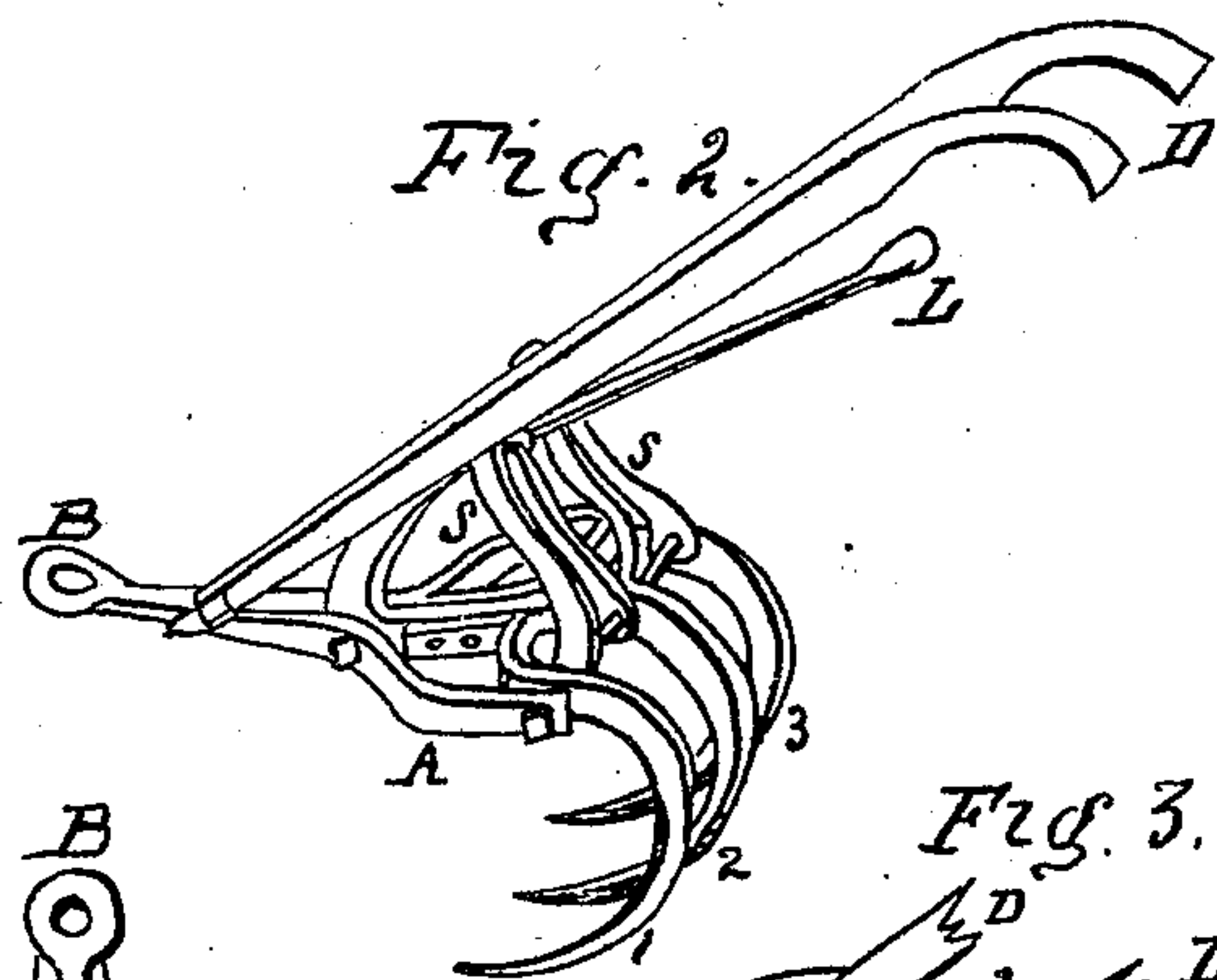


Shock & Shirk.

Manure Fork.

Nº 95523

Patented Oct. 5, 1869.



Witnesses
Wm. B. Miles
Jacob Stauffer

Inventors.
H. Shock
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United States Patent Office.

ABRAHAM H. SHOCK AND HARRISON ROCK SHIRK, OF LANCASTER, PENNSYLVANIA.

Letters Patent No. 95,523, dated October 5, 1869.

IMPROVEMENT IN MANURE-DRAGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, ABRAHAM H. SHOCK and HARRISON ROCK SHIRK, of the county of Lancaster, and State of Pennsylvania, have invented new and useful Improvements on Manure-Drags; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figures 1 and 2 are perspective views of the machine, with the hooks ready for use.

Figure 3, portion of the same, to show the hook when turned over, to disengage the load.

Figure 4 is a plan view.

Figure 5, detached portions.

The nature of our invention consists in the construction of the hooks, their arrangement, and the central combination with the lever, greatly simplifying and improving the hook patented July 9, 1867, (No. 66,525,) now jointly held by us.

To enable others skilled in the art to make and use our invention, it is only necessary to refer to the drawings.

Fig. 4 shows a central hook, H^2 , with a projecting head, h , round above, and hollowed out, with a side flange, f , fig. 5, beneath, which rests against the under side of the parted centre beam A , and prevents the end from turning up.

This centre beam shows an open slot, a , with parallel sides, for the reception of the end of the lever L , the wedge-point, l , of which locks against the under side of said beam, and is held firmly, while on the rear end it (the lever L) is provided with a rounded heel, fitting the rounded portion f of the head h of the central hook H^2 .

The side hooks 1 and 3 are each forged out of a single piece of iron, bent inward, and then forward, at right angles, so as to fit up centrally against the sides of the prolongation of the central hook H^2 , to which the hooks 1 3, so formed, are fastened, by rivets or headed screw-bolts, as shown by fig. 4.

The centre beam A with its hitching-ring B in front, is parted, and forms the two side bearings.

A headed rod, R , and screw-end for a burr, pass through the said bearings, hooks 1, 2, and 3, and also the supporting-straps S , which are connected with the handles D as shown.

These handles are also fastened, by a headed bolt, to the centre beam, in front.

The operation is easily understood. The three hooks 1 2 3, or tines, are curved, so that they maintain or support the machine in a proper position for

entering the manure, and, by elevating or depressing the handles, they will slide over the ground, and yet effectually grasp the manure, and retain it, much better than when not curved in such a way.

When but slightly curved, we find them apt to catch at every inequality, such as a door-sill, or to scratch up the bottom or floor, and otherwise defective in actual operation, as experienced in our former hook, and others made on the same principle. The deep oval curves we deem a great improvement on manure-drags.

To dislodge the load, it is only necessary to throw the handle or lever L back. The foot on its pivot, within the slot of the centre beam, will turn so as to throw the wedge or toe l down, and the heel upward, and disengage itself from the curve in the head h of the central hook H^2 , which can only turn downward, and revolve the three united hooks 1, 2, and 3 on the rod R , until their position is reversed, as shown by fig. 3, and it will readily discharge itself, and in that position can be drawn back for a fresh load, and easily put into position for grasping.

The compact form adapts it peculiarly for entering stalls, or into the corners, and in various respects facilitates the various uses.

The peculiar form of the flange f , to lock against the under side of the centre beam, and the wedge-shaped toe l of the lever, bracing also against said central beam, constitute peculiar functions in the mode of supporting the pressure and strain upon the hook, relieving that on the fulcrum of the united tines, while the rounded heel of the footed lever performs its office beautifully, in combination with the rounded terminus of the head.

We are perfectly aware that a diversity of combinations are employed, and that at first sight our present arrangement has much the appearance of our patent of July 9, 1867; but it changes its entire character when duly considered, and can be made much cheaper, more durable, and efficient in its operation, and is a decided improvement. We do not claim a central runner, with a revolving hook-shaft; nor do we use a spring-bolt, operated by a lever, as in the former. We are not aware that separate tines for each side, fastened to the centre one by bolts or rivets, and revolving on a rod passing through the several bearings, hooks, and handle-supports, which latter are also side bearings to prevent lateral action.

In short the arrangement and construction forms a machine differing substantially from all others that have come to our notice.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The construction and arrangement of the hooks 1, 2, and 3, in combination with the central beam A and brace or fulcrum R, operating substantially in the manner and for the purpose described.

2. In combination with the central hook H², with its head *h* and flange *f*, also the lever L, with its foot or toe *l*, and rounded heel, when constructed and operating in the manner jointly and for the purpose set forth.

3. The mode of constructing the handle-supports

s s, so that their lower ends come in contact with the sides of the hooks 1, 2, and 3, as side bearings, in combination with the brace or fulcrum-rod R, made and applied in the manner and for the purpose shown and described.

A. H. SHOCK.
H. ROCK SHIRK.

Witnesses:

WM. B. WILEY,
JACOB STAUFFER.