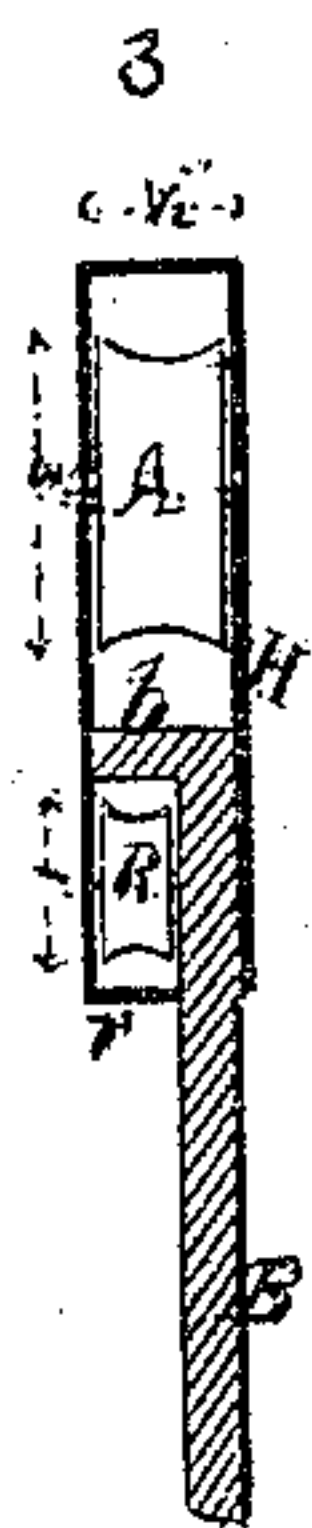


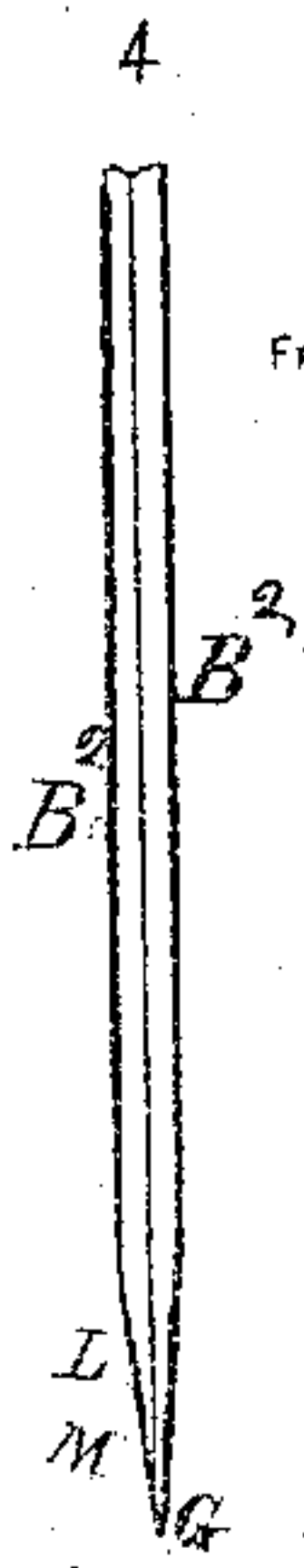
Patterson. & Dewey,
Hay Fork.

No. 66621

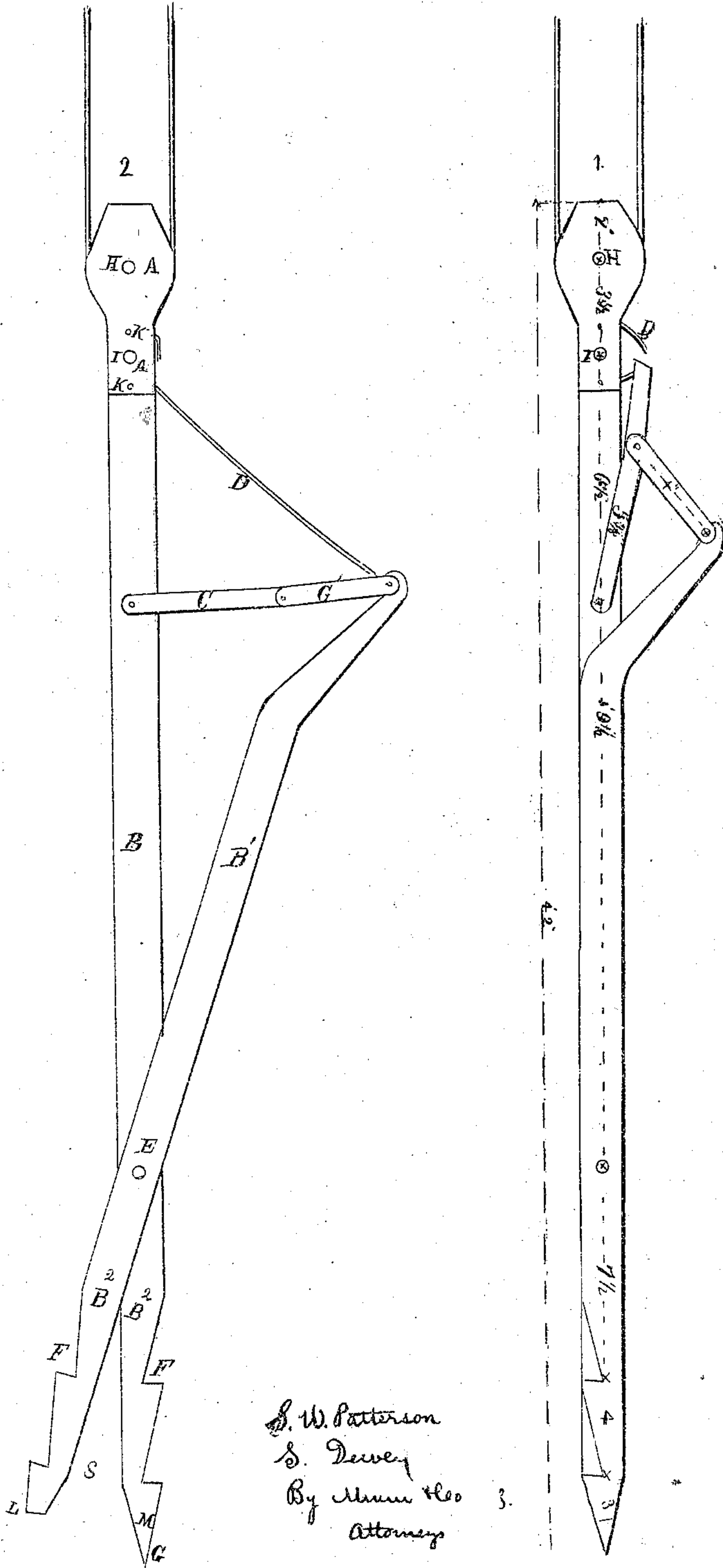
Patented July 9. 1867.



CROSS SECTION OF PULLEYS - A.A.



FRONT VIEW OF PRONG'S B.B.



Witnesses:
B. J. Smith
J. J. Coleman

S. W. Patterson
S. Dewey
By Miner & Co 3.
Attorneys

United States Patent Office.

S. W. PATTERSON AND SANFORD DEWEY, OF MAINESBURG, PENNSYLVANIA.

Letters Patent No. 66,621, dated July 9, 1867.

IMPROVEMENT IN HORSE HAY-FORKS.

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, S. W. PATTERSON and SANFORD DEWEY, of Mainesburg, in the county of Tioga, and State of Pennsylvania, have invented a new and useful Improvement in Hay-Elevating Forks; and we do hereby declare the following to be a full and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a side elevation of a hay-fork, illustrating our invention, the same being represented in its closed condition, and as it appears when ready to be inserted into the hay.

Figure 2 is a similar view, representing the fork in its closed condition, ready to elevate the hay suspended upon the notched prongs.

Figure 3 is a sectional view of the head or upper portion of the rake, representing more clearly the pulleys over which work the elevating and discharging-ropes.

Figure 4 is a detached edge view of the elevating-prongs.

Similar letters of reference indicate corresponding parts in the several figures.

The objects of our said invention are to enable the fork, with its load of hay, to be elevated with less power than that which is requisite in using forks of the ordinary construction, to increase the capacity of the elevating-prongs for holding the hay in suspension, and to prevent the elevating-prongs from becoming locked together in the event of the penetrating point being inserted into any hard substance, such as the wagon-rigging or floor.

The following description will enable others skilled in the art to which our invention appertains to fully understand and use the same.

In the accompanying drawings, B B¹ represent a pair of iron levers, pivoted together at E, and elevated and lowered by means of a rope, S. This rope S passes around the pulley A, which is journaled in the head H of the hay-fork, and thence passes upward and over the pulley, which is suspended from the roof of the barn in customary manner. The head H is made of band iron, say three inches in width, and long enough to form, when bent in the manner represented, an enclosure and bearing for the pulley A. At one side the head H is bent at its lower end, as shown at *r*, fig. 3, and the upper end of the larger lever B is bent in the opposite direction, as shown at *b*, thus forming a receptacle for the accommodation of the small pulley R, over which plays the rope D, which is attached to the outer extremity of the toggle-lever C, and which enables the levers to be closed and the hay discharged when elevated to the proper point. I, in figs. 1 and 2, represents the axis of the pulley R. K represents the rivets by which the head H is secured to the upper end of the lever B. By means of the large pulley A we are enabled to gain power, and thus elevate a given weight of hay with a degree of facility which has not been heretofore attained in implements of this character. The toggle-levers C C' serve to hold the levers B B¹ in their open position while the hay is being elevated upon the prongs B² B²; and said toggle-levers also enable the fork to be closed by means of the rope D, as before stated. The lever B, which is somewhat longer than the lever B¹, is pointed at its lower extremity, to adapt the fork to readily penetrate the hay when closed. At a suitable distance from the extreme point of the lever B is formed a shoulder, M, (see figs. 2 and 4,) which protects or shields the blunt end L of the lever B¹ when the fork is closed and being inserted into the hay. By referring to fig. 4, it will be seen that the fork might be driven some distance into the floor, rigging, or other hard substance, without interfering with the opening of the levers B B¹ after such penetration, because the point G of the lever B may be imbedded to a certain extent, and still leave the lower extremity of the other lever free. We construct the levers B B¹ with two elevating-shoulders each, each lever having been heretofore constructed with but one shoulder. The additional shoulders which we propose, and which double the elevating capacity of the fork, are designated by F F.

Having thus described our invention, the following is what we claim as new herein, and desire to secure by Letters Patent:

We claim the metallic head or box H, constructed and applied to the lever B as described, and affording a bearing for the pulleys A and R, as and for the purpose set forth.

Witnesses:

J. H. GODDARD.

D. HARBAUGH.

S. W. PATTERSON,
SANFORD DEWEY.