J. G. & J. G. RANKIN.

Manure-Forks.

No. 154,417. Patented Aug. 25, 1874.

Fig. 1

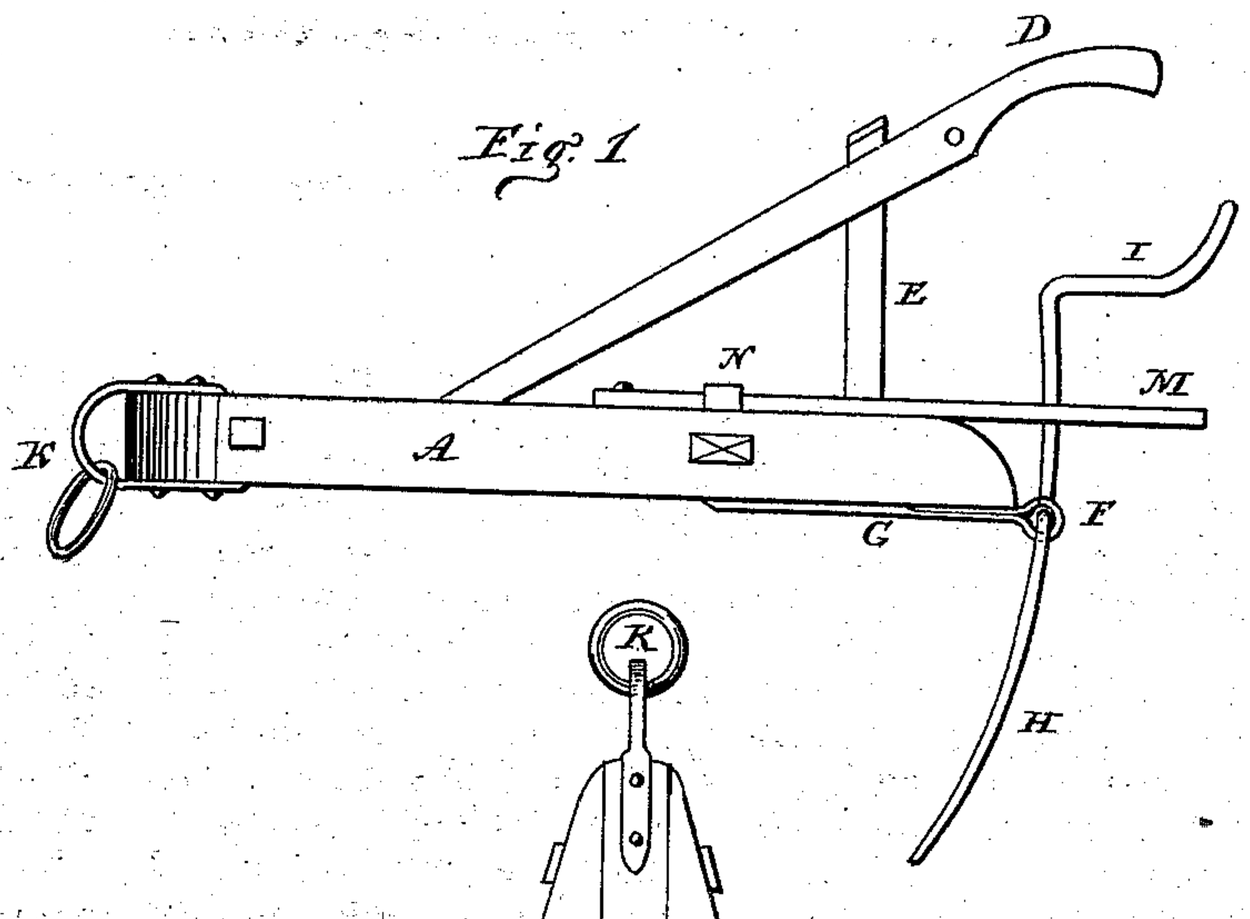
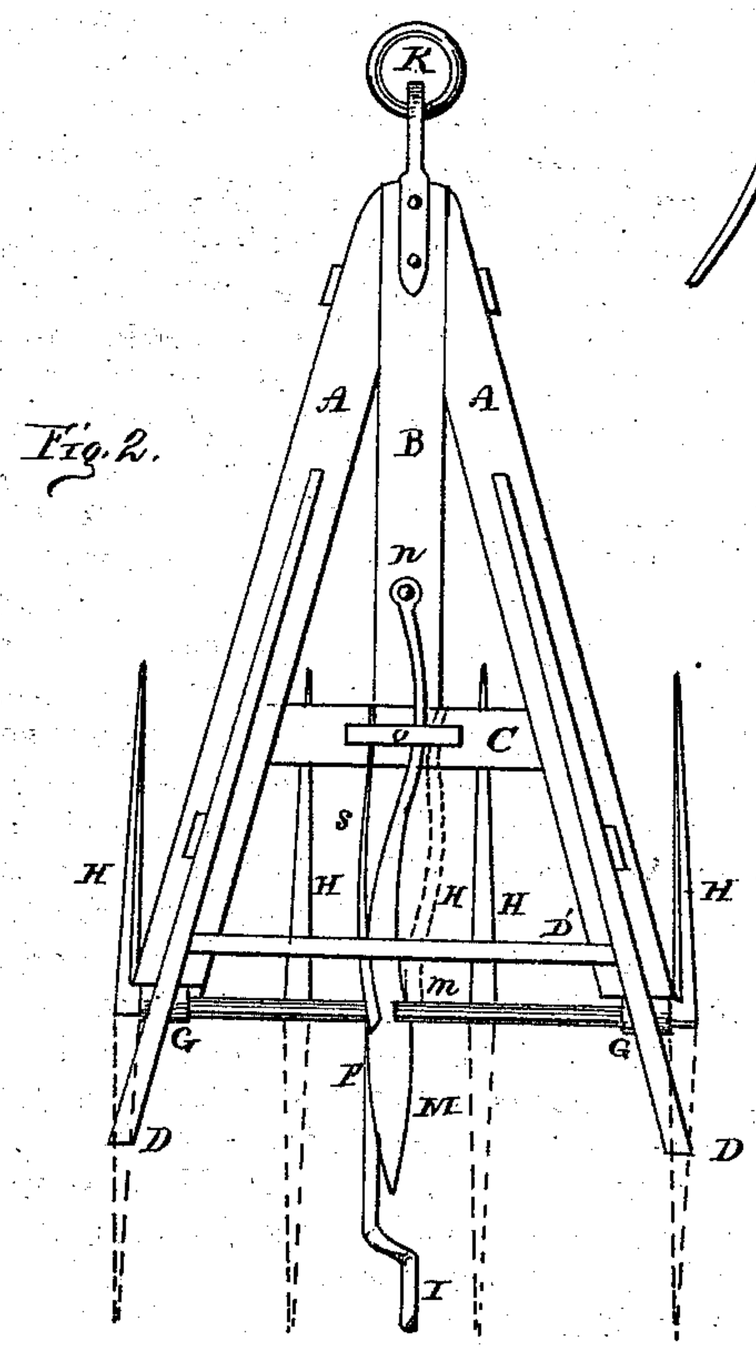


Fig. 2.



WITNESSES.

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JOSEPH G. RANKIN AND JACOB G. RANKIN, OF CONESTOGA CENTRE, PA.

IMPROVEMENT IN MANURE-FORKS.

Specification forming part of Letters Patent No. **154,417**, dated August 25, 1874; application filed July 3, 1874.

To all whom it may concern:

Be it known that we, JOSEPH G. RANKIN and JACOB G. RANKIN, residing at Conestoga Centre, in the county of Lancaster, in the State of Pennsylvania, have invented certain Improvements in Manure-Forks, of which the following is a specification:

This invention relates to a class of manure-forks which have diverging side beams, with a central and a cross beam and handles. The novelty consists in the construction of a notched bar held by a pivot at one end, spring and lever connection, with the four-pronged fork.

The accompanying drawings illustrate this hook, in which—

Figure 1 is a side elevation with the fork in position; Fig. 2, a top view with the hinged pronged hook turned under.

The dotted lines indicate the prongs thrown back to dislodge the load.

A brief explanation will enable any one skilled in the art to make and use the same.

The triangular frame-work of the side beams A A, central draft-beam B, and cross-beam C, with the handles D and supports E, have much the appearance of a small cultivator. On the under side of the ends of the diverging side beams A there is a plate, G, with an eye forming a hinge for the four-pronged hook F H. These prongs are united to the cross-head F, which is centrally provided with a bent lever, I, standing up and turned back, as shown in Fig. 1. There is a vibrating latch-plate, M, secured at one end by a pivot-bolt at *n*, and passes under a keeper, O, on the cross-piece C, and extends back beyond the top of the hook. This vibrating latch M has a notch in the widened head, which receives the vertical arm of the lever I, and holds it in a vertical position firmly, to prevent it from shifting by accident. There is a spring, S, attached to the head of spring-latch M, carried back and so bent as to have its bearing under the keeper O on the cross-piece C. Thus the pronged fork will grasp and hold or drag out a large load of manure by means of a horse hitched to the clevis K on the end of the center beam. When it is desirable to dislodge the load a push of the foot or jerk of the hand will dislodge the notched latch-plate M, and allow the hook to turn back or straighten out behind, but it is easily turned under for dragging the implement to the barn or a distance, in that position performing the function of runners, as shown in Fig. 2.

We are aware that various devices are employed—such as spring-bolts, levers, and complications—with the same object in view; but we are not aware that a vibrating latch and spring in connection with this class of manure-hooks was ever used or known, constructed and operated substantially in the manner specified, and for strength, cheapness, and simplicity, as well as utility, it is a highly desirable improvement. Therefore,

We claim—

The laterally-vibrating spring-latch M, pivoted to the central beam B, and held down by the keeper O, in combination with the lever I, tines H, and frame A C, arranged as and for the purpose set forth.

JOSEPH G. RANKIN.
JACOB G. RANKIN.

Witnesses:
ADAM BORTZFIELD,
JOHN PRIES.