GEORGE SWEET.

Improvement in Horse Hay-Rakes.

No. 119,669. Patented Oct. 3, 1871.

Fig. 1.

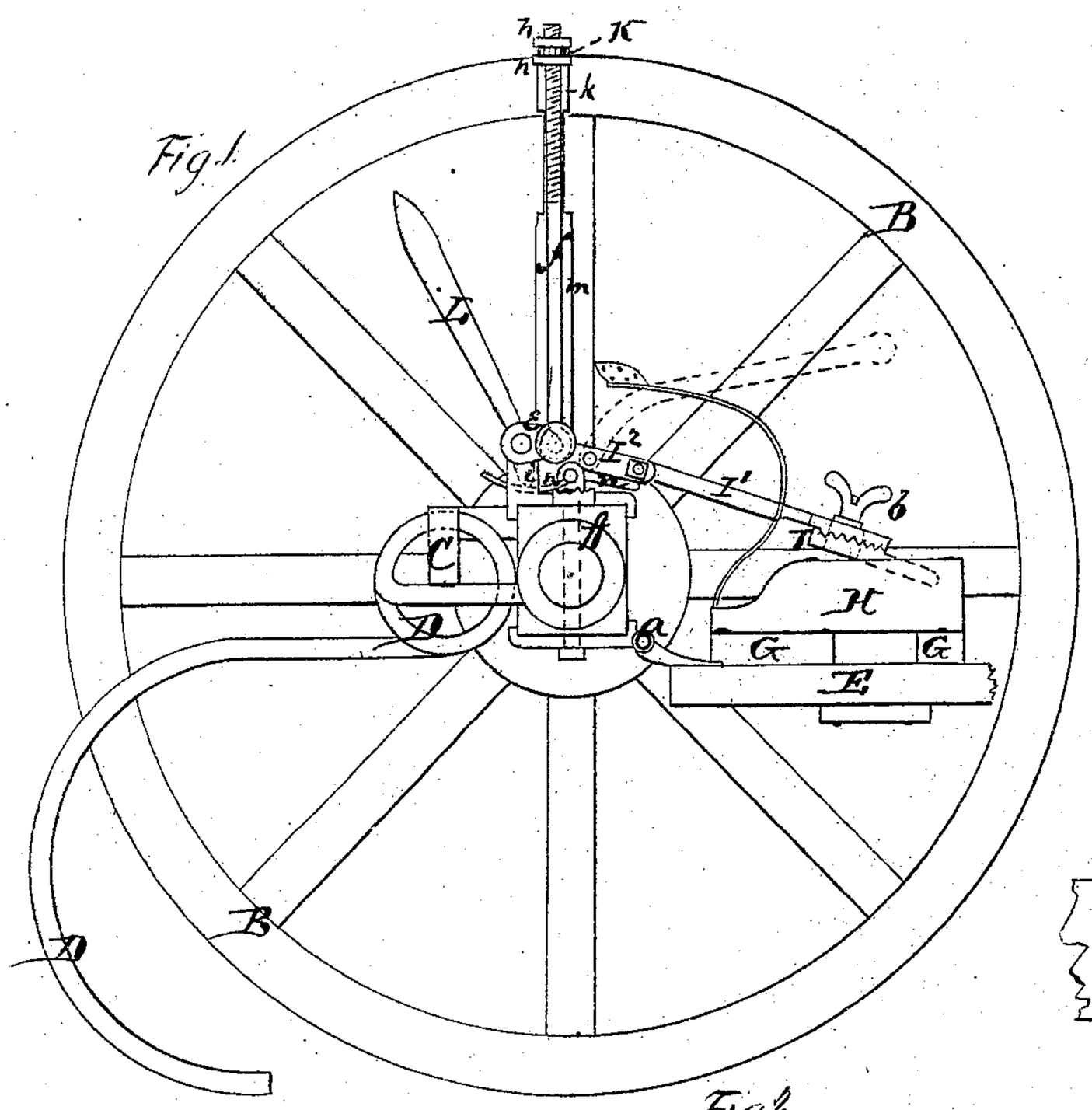


Fig. B.

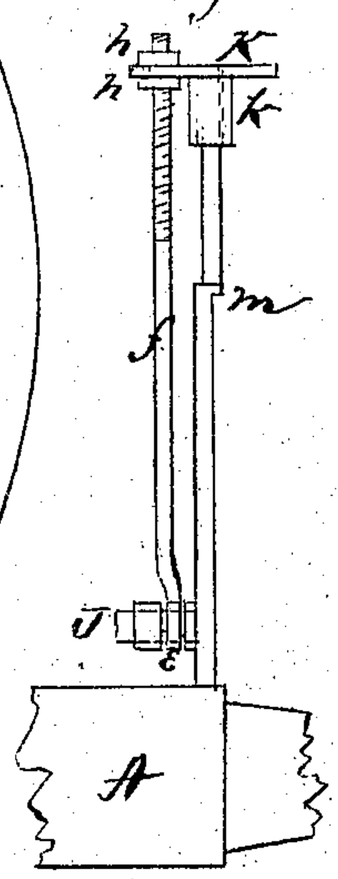
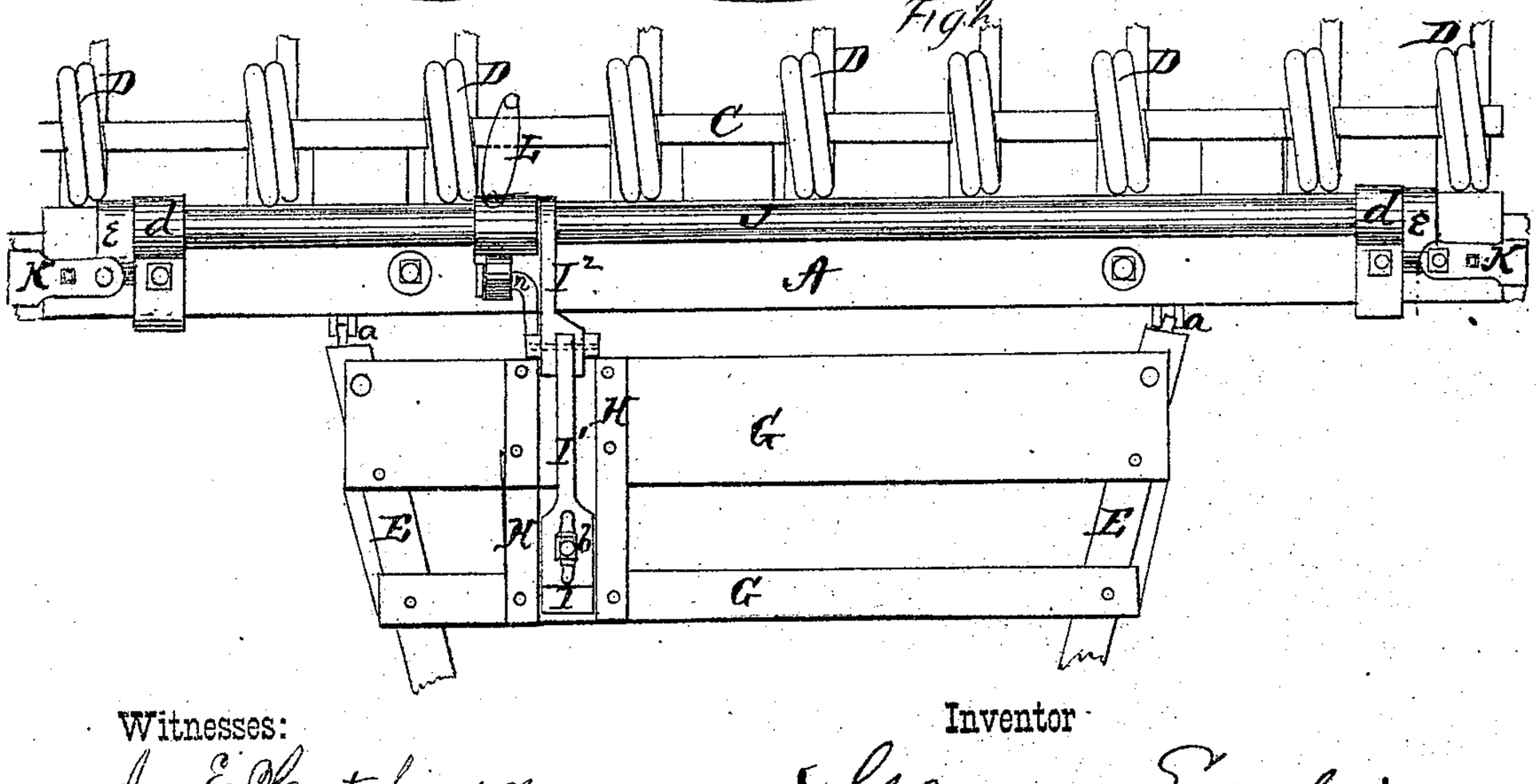


Fig. h.



Witnesses:

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119,669

UNITED STATES PATENT OFFICE.

GEORGE SWEET, OF DANSVILLE, NEW YORK.

IMPROVEMENT IN HORSE HAY-RAKES.

Specification forming part of Letters Patent No. 119,669, dated October 3, 1871.

To all whom it may concern:

Be it known that I, GEORGE SWEET, of Dansville, in the county of Livingston and in the State of New York, have invented certain new and useful Improvements in Hay-Rakes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a horse hay-rake, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my rake with one of the driving-wheels removed. Fig. 2 is a plan view of the axle with the rake and its attachments. Fig. 3 is a front view of one of the brakes.

A represents the axle, having the driving-wheels B B mounted upon its ends. In rear of the axle A, and parallel with it, runs a bar, C, notched on its upper side at regular intervals. This bar is connected with the axle by suitable blocks or other supports, and the rake-teeth D D are coiled around the same, one in each notch, and the inner or upper ends of the teeth are inserted in the rear side of the axle. E E represent the thills or shafts, attached to the axle by means of joints or hinges *a a*, and upon said thills, near the rear ends, are secured bars or boards G G. On these bars, near one end, are secured two bars, H H, which run at right angles with the axle, and between which the front end of the lock-lever is pivoted. This lock-lever consists of three parts, I, I^1, and I^2. The part I is pivoted at its front end between the bars H H, and its rear end is provided with a longitudinal slot, and also with teeth or corrugations on its upper side. The front end of the part I^1 is made of the same width as the part I, and provided with teeth or corrugations on its under side as well as with a longitudinal slot. By means of a bolt and thumb-nut, *b*, passing through said slots, these two parts may be firmly joined together, and lengthened or shortened at will, according to circumstances. The rear end of the part I^1 is pivoted in the forked front end of the part I^2, through the rear end of which a shaft, J, passes. This shaft runs above and parallel with the axle A, and has its bearings in suitable boxes *d d* attached to the axle A. Upon each end of the shaft J is a small crank, *e*, to which a pitman or rod, *f*, is attached. The upper end of this rod or pitman is provided with screw-threads, and a brake-block, K, is adjusted upon the same by means of nuts *h h*. This brake-block extends above the wheel, and is, on its under side, near the inner end, provided with a socket, *k*, fitting over the upper end of a standard, *m*, attached to the upper side of the axle A. Upon the shaft J is further secured a lever, L, having a cam, *i*, upon its lower end below the shaft, which cam, when the lever is thrown forward, presses down upon the rear end of a pivoted bar, *n*. The front end of this bar then presses upward upon the lock-bar, immediately under or near the joint between the parts I^1 and I^2.

It will thus be seen that by throwing the lever L forward the brake-blocks K K are pressed downward upon the periphery of the driving-wheels, and, at the same time, the joint of the lock-bar or lock-lever is broken, the former causing and the latter allowing the axle to turn, and thereby unload the rake. By throwing the lever L backward again the brake-blocks are released from the wheels and the teeth fall back into position for raking. This movement locks the lever or lock-bar, which holds the teeth firmly to their work until again released by a forward movement of the lever L, as before described.

I am aware that the application of brakes to the wheels of a horse hay-rake for unloading the rake is not new; hence I do not wish to be understood as broadly claiming such to be my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a horse-rake having wheels B B and axle A, of a series of rake-teeth, D, attached to a cross-bar, C, rigidly connected parallel with and in rear of the axle, shaft J with cranks *e e* and lever L, rods *f f*, guide-standards *m m*, and brake-blocks K acting on the periphery of the driving-wheel for unloading the rake, all substantially as herein set forth.

2. The lock-lever, composed of the three parts

I, I[1], and I[2], when said parts are construced and arranged substantially as and for the purposes herein set forth.

3. The combination of the lever L with cam *i* and pivoted bar *n* for breaking the joint of the lock-lever, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 17th day of August, 1871.

GEORGE SWEET. [L. S.]

Witnesses:
T. B. GRANT,
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