G. E. BURT.

Hay Spreader.

No. 69,761. Patented Oct. 15, 1867.

Fig. 2.

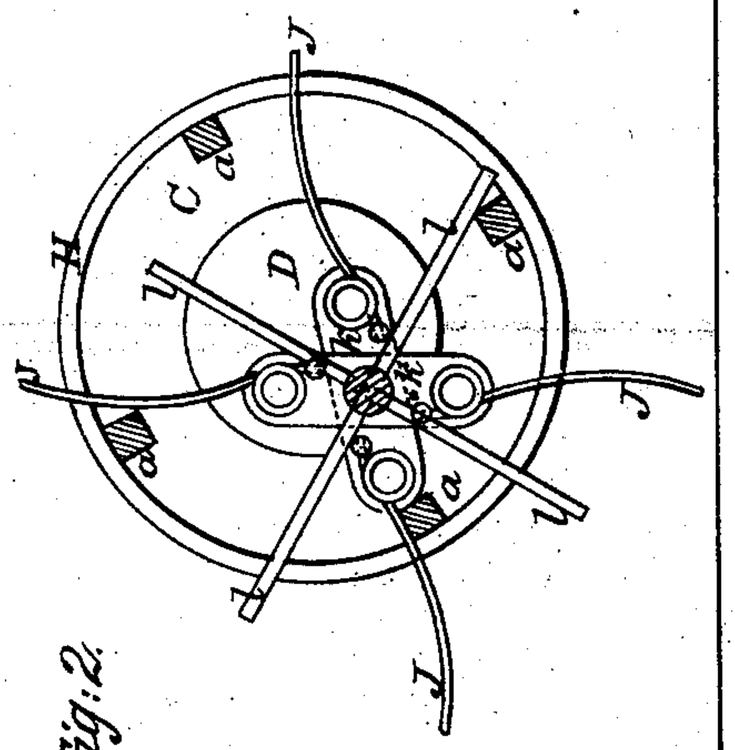


Fig. 4.

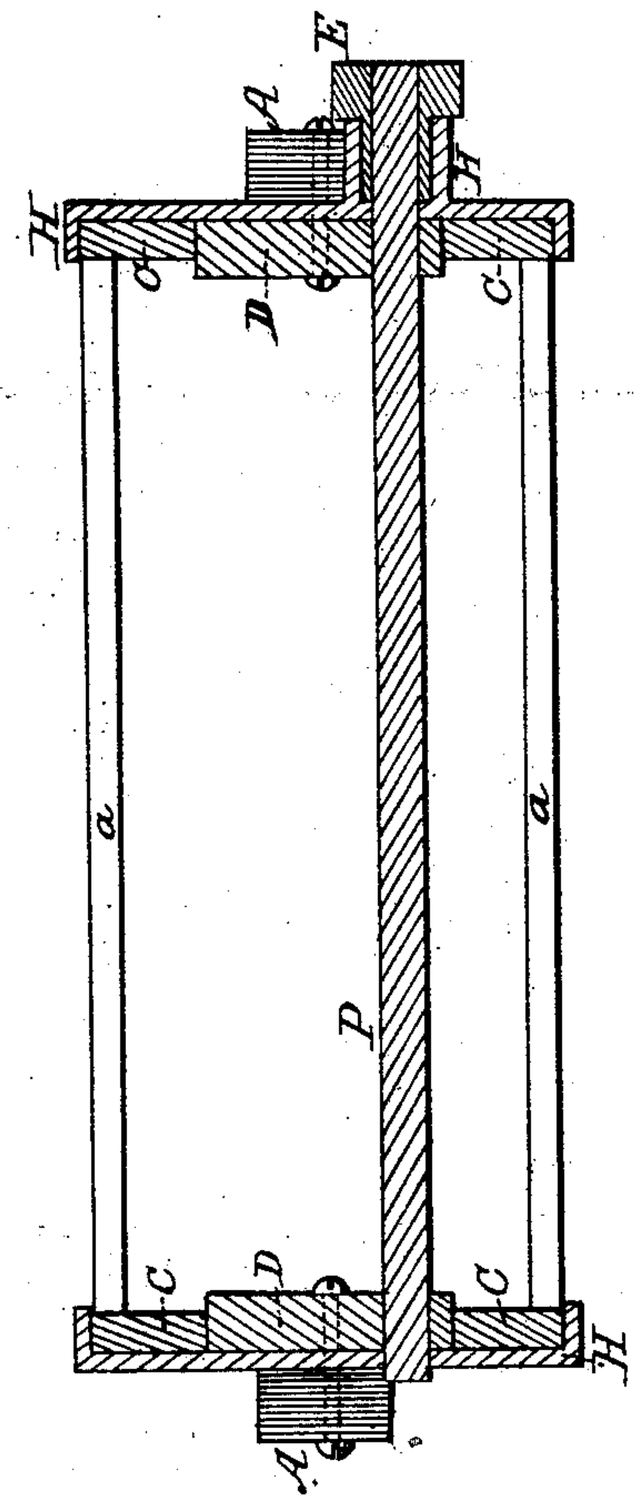


Fig. 1.

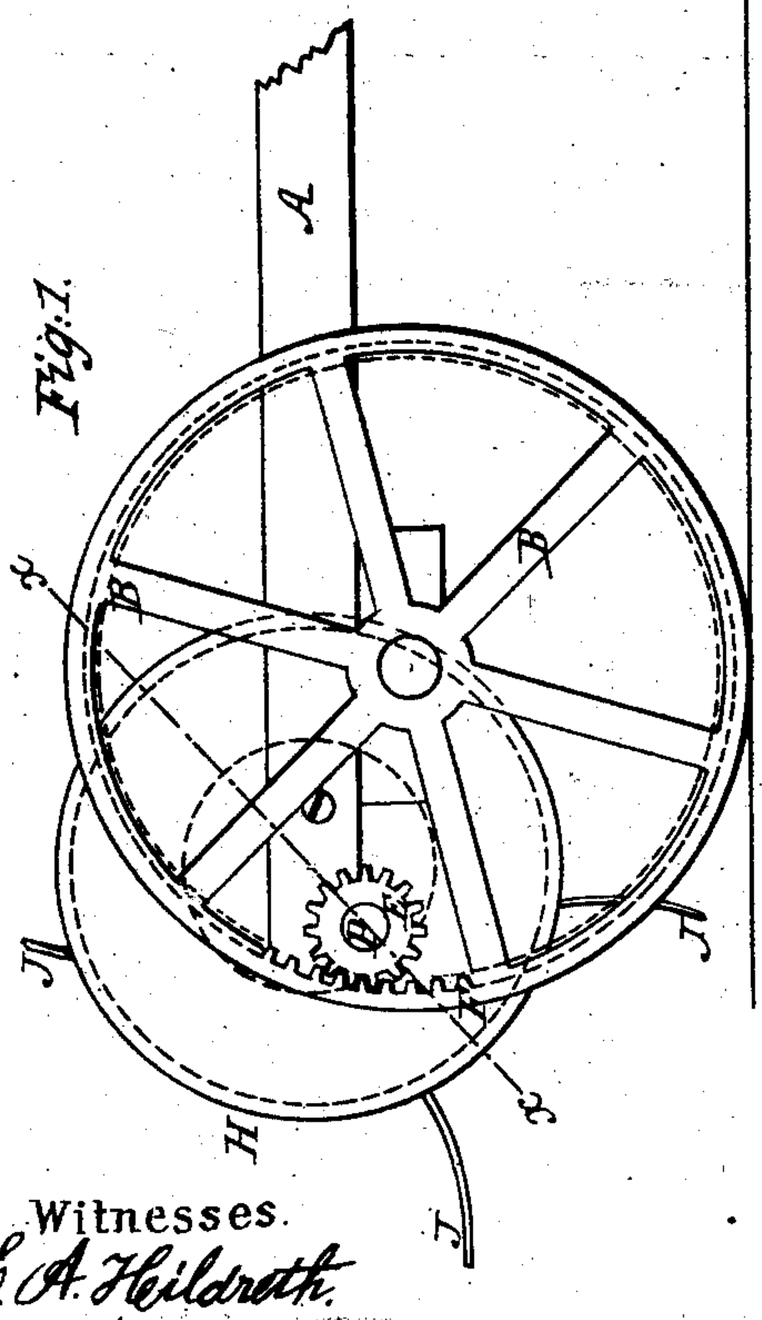
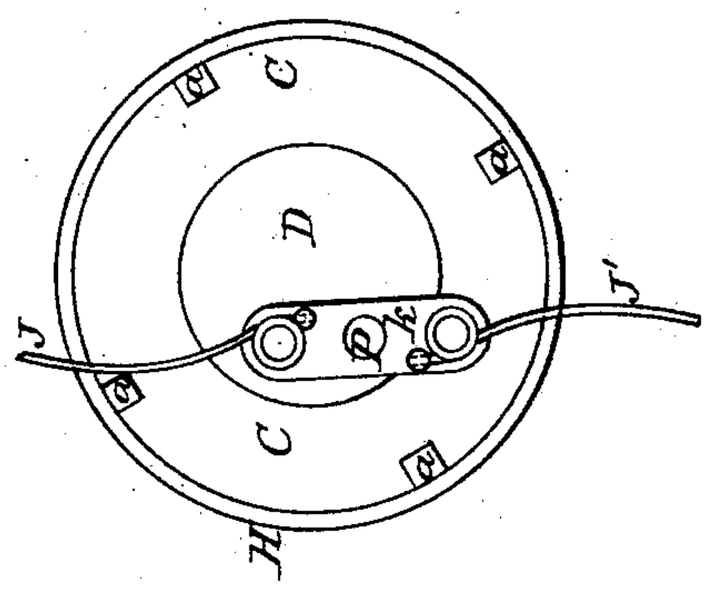


Fig. 3.



Witnesses.

E. A. Heildreth.

S. B. Heildreth.

Inventor.

George, E. Burt.

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GEORGE E. BURT, OF HARVARD, MASSACHUSETTS.

Letters Patent No. 69,761, *dated October* 15, 1867.

IMPROVEMENT IN HAY-SPREADERS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE E. BURT, of Harvard, county of Worcester, State of Massachusetts, have invented new and useful Improvements in Hay-Spreaders; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the accompanying drawings, making a part of this specification, wherein—

Figure 1 is a side elevation of the spreader.

Figure 2 is a vertical section, taken midway between the heads C C.

Figure 3 is a diagram, showing the position of the forks when they operate on the hay.

Figure 4 is a longitudinal section, taken through the line *x x*.

Similar marks of reference denote like parts in all the figures.

It has been found in operating hay-spreaders that they are liable to get clogged by the hay winding between the revolving parts and the supporting frame and boxes; also, that the forks are injured by their coming in contact with obstacles when in operation, not being sufficiently elastic.

The nature of my invention consists in covering the ends of the cylinders or revolving heads, and their connections, with a stationary shield, constructed and arranged to protect the parts from clogging; also in constructing and arranging two forks together in such a manner that when one fork is operating on the hay it will have all the elasticity of both forks, thus rendering the forks less liable to injury. These improvements may be attached to most of the revolving hay-tedders.

In the drawings, A is a frame for supporting the mechanism; B B are the wheels; P is a shaft placed eccentrically with the centre of the rotating heads C C; E is a pinion that cogs into the internal gear F; D is a dead-centre on which the heads C C revolve; H is a stationary shield, constructed with flanches to cover the rotating heads C C, and the revolving tube on the pinion gear E, (see fig. 4.) The shield H is attached to the frame A, see fig. 4, and may be constructed in two or more parts, or with arms to facilitate lubricating the journals. The forks J J are connected together by the arm *k*, which is placed loosely on the shaft P. *l l* are arms fixed to the shaft P, standing at right angles to each other, (see fig. 2.) The heads C C are connected by the shafts *a a a a*, (see fig. 4.)

Operation.

When the machine is moved forward the wheels B B roll on the ground, the internal gear F revolves the pinion E, which gives motion to the shaft P, and the cross-arms *l l* come in contact with the shafts *a a a a*. This causes the revolving heads C C to revolve around the dead-centre D, and as the shafts *a a a a* revolve they come in contact with the forks J J, causing them also to revolve around the shaft P, seen in fig. 2. The shaft P being placed eccentrically with the rotating heads, the fork J, fig. 3, rests against the shaft *a* near the point of the fork, and the fork J′, at the bottom of the revolving heads, (which is in position to operate on the hay,) is left free to spring back, and being propelled by the fork J resting against the shaft *a* at the top of the rotating heads. The fork J′ at the operating point, at the bottom, has the advantage of all the elasticity of both forks should it come in contact with any obstacle, (as the arm *k* turns freely on the shaft E,) and thus avoiding the liability of being injured, (see fig. 3.) The shield H covers the revolving heads, and all the revolving parts, where they connect with the supporting frame and boxes, presenting a stationary shield for all such parts, and keeping them from coming in contact with the hay, and thus protects the revolving parts from any liability of clogging.

What I claim, and desire to secure by Letters Patent, is—

1. The shield H, constructed and arranged substantially as described for the purposes set forth.

2. The arrangement of the forks J J′, the arm *k*, the shafts *a a* and P, substantially as described and for the purposes set forth.

GEORGE E. BURT.

Witnesses:

E. E. BURT,

S. B. HILDRETH.