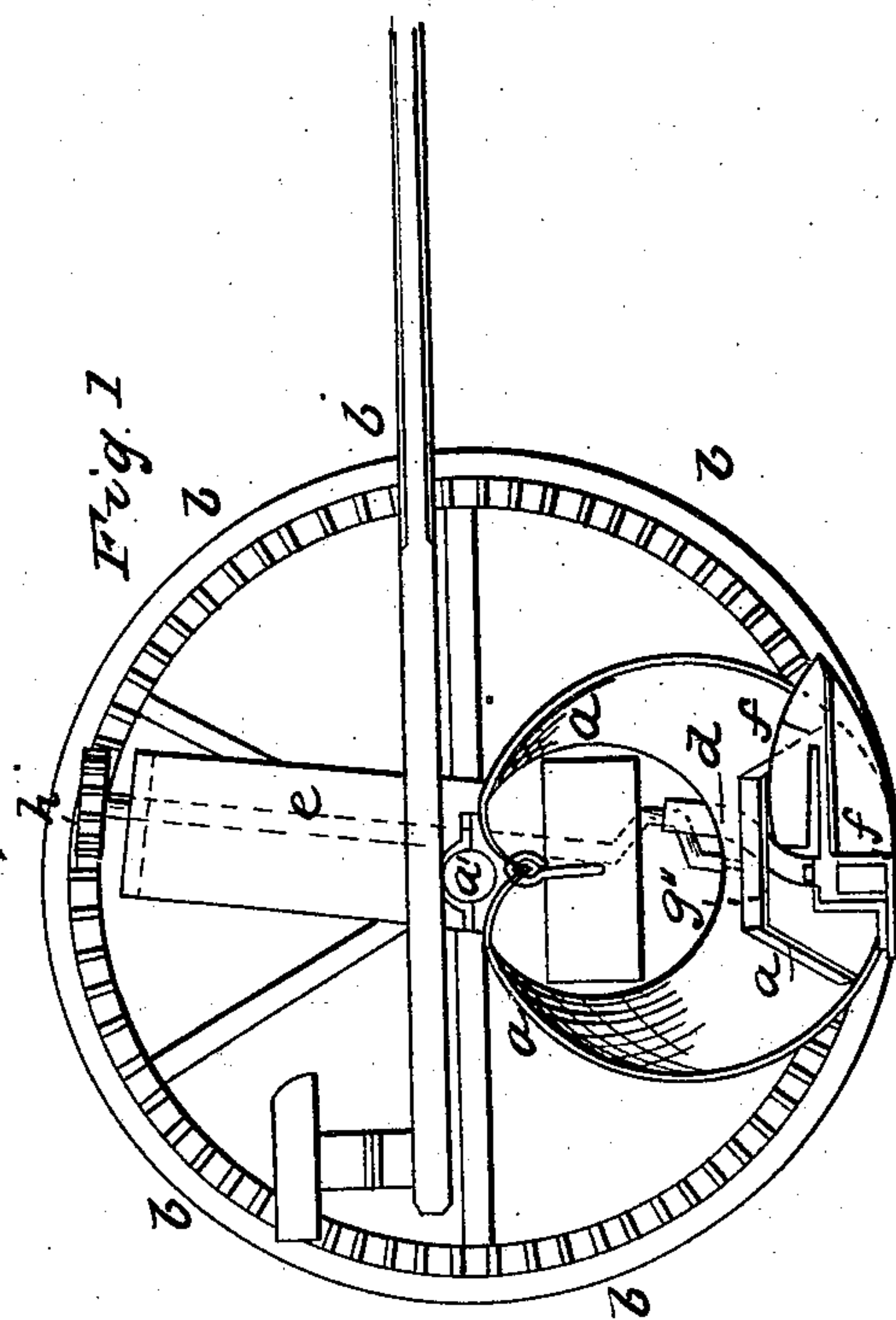
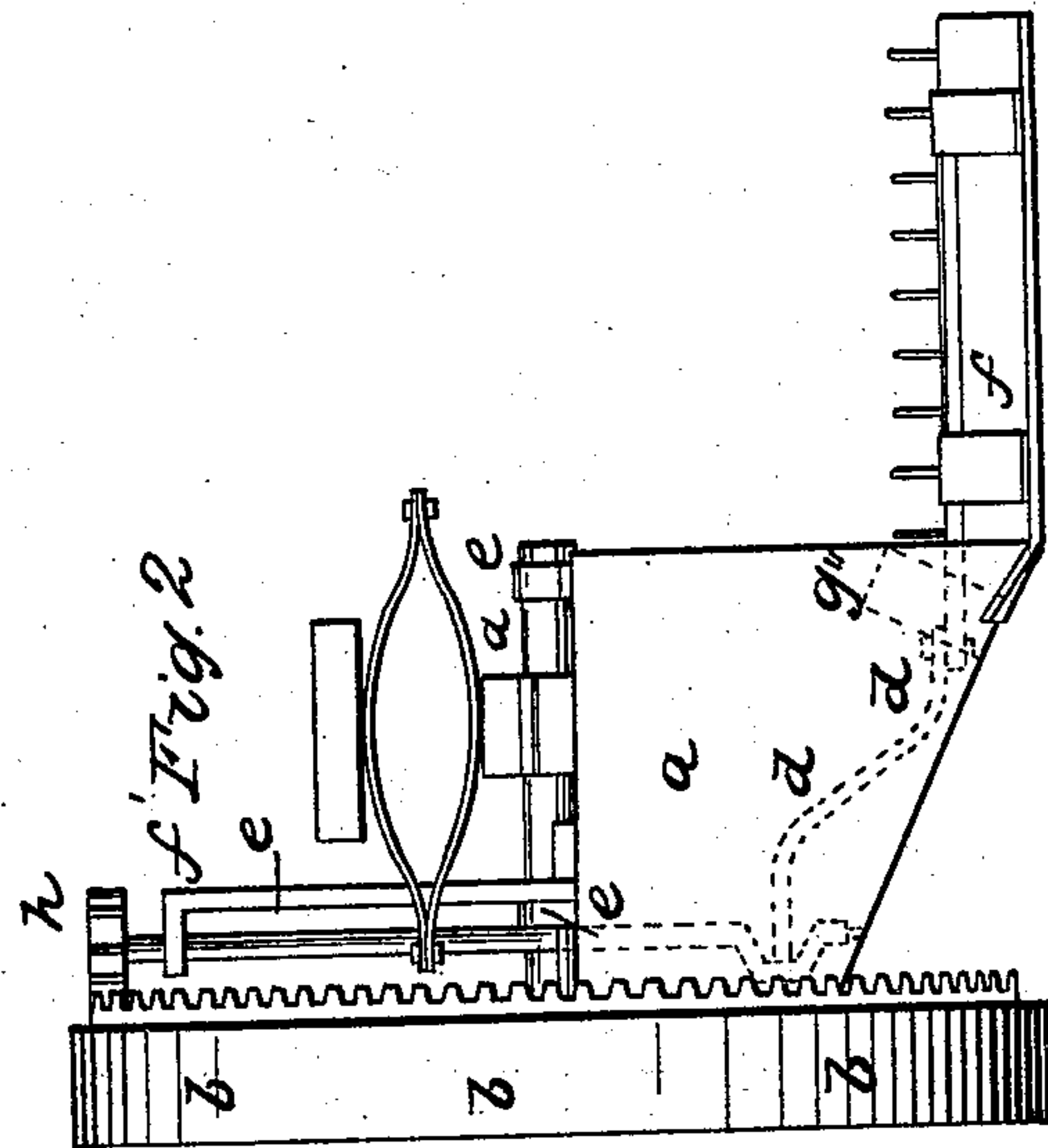


M. G. HUBBARD.
Mowing Machine.

No. 15,338.

Patented July 15, 1856.



UNITED STATES PATENT OFFICE.

MOSES G. HUBBARD, OF PENN YAN, NEW YORK.

IMPROVEMENT IN THE FRAMES OF MOWING AND REAPING MACHINES.

Specification forming part of Letters Patent No. 15,338, dated July 15, 1856.

To all whom it may concern:

Be it known that I, MOSES G. HUBBARD, of the town of Penn Yan, in the county of Yates and State of New York, have invented certain new and useful Improvements in the Frames of Machines for Mowing and Reaping Grass and Grain; and I do hereby declare the following to be a full, clear, and exact description of its mode of operation and construction in detail, reference being had to the accompanying drawings, in which—

Figure 1 is a general view of the machine that clearly illustrates the form of the parts and their combination. Fig. 2 is an elevation, rear view.

My invention consists in the mode of constructing the parts connecting the driving-wheel with the cutting parts.

Heretofore a frame-work of some description has been made which was apt to clog with the grass, &c., catching in it and becoming entangled in the moving parts. I obviate these difficulties and form a more substantial connection with the moving parts than has ever heretofore been effected.

The construction is as follows: I form a cylinder or somewhat cone-formed tube of metal, *a*, having a depression on its upper side, along which the axle *a'* of the main driving-wheel *b* lies, and to which it is attached by proper bearings or boxes, *c*. In this way when the wheel is upright the cylinder will be suspended under the axle and project downward nearly to the ground. On the lower side of the cylinder *a*, at the end opposite the wheel *b*, the finger-bar *f* is securely affixed, running out in a line perpendicular to the face of the wheel, as represented in the drawings, the pitman or connecting-rod *d*, that is jointed to the cutter-bar and connects with the crank that vibrates it within the cylinder, which thus surrounds and protects it. Near the wheel there is an upright shaft, *e*, that extends up above the cylinder to the top of the wheel *b*. This bears a pinion, *h*, on its upper end, which gears into crown-teeth on the inside of the rim of the wheel *b*, by which it is driven. On the lower

end of the shaft *e* is the sunk crank, connecting with pitman *d*, above named, by which the cutters are moved. To support the upper end of shaft *e*, a brace, *f'*, rises from the top of the cylinder.

It will be seen from an inspection of the drawings that those portions of the running-gear most likely to become clogged with grass will be entirely protected, while I effect a simple and cheap support for them, easily put together, not liable to injury or wear, and without joints to work loose, as the other machines in use are liable to. The structure is light and will pass over all obstructions with facility, which is an important feature. Within the cylinder there is a tool box or draw-placed out of the way, and covered from the weather, &c., and, if found desirable, the end of the cylinder next the grass can be closed. I form an iron step or brace (marked *g*) in the end of the cylinder, which enables me to detach the bar from the cylinder and attach it to said step or brace, and thus change or elevate it with great facility. But this is not the only important advantage resulting from the brace. Without the brace the frame, unless constructed of very thick metal, might be liable to spring or give way from the combined weight of the running-gear and driver, which is easily obviated by the brace *g''*, combined as set forth.

Having thus fully described my improved frame above, what I claim therein, and desire to secure by Letters Patent, is—

1. The cylindrical or conical formed metallic frame as a support for the running-gear and finger-bar, when constructed, arranged, and combined therewith in the manner and for the purposes set forth.

2. In combination with said cylindrical or conical metallic frame *a*, the step or brace frame *g''*, in the manner and for the purposes set forth.

M. G. HUBBARD.

Witnesses:

J. J. GREENOUGH,
A. A. CARPENTER.