

J. S. TRUXELL.  
Harvester-Droppers.

No. 143,391.

Patented September 30, 1873.

Fig. 1.

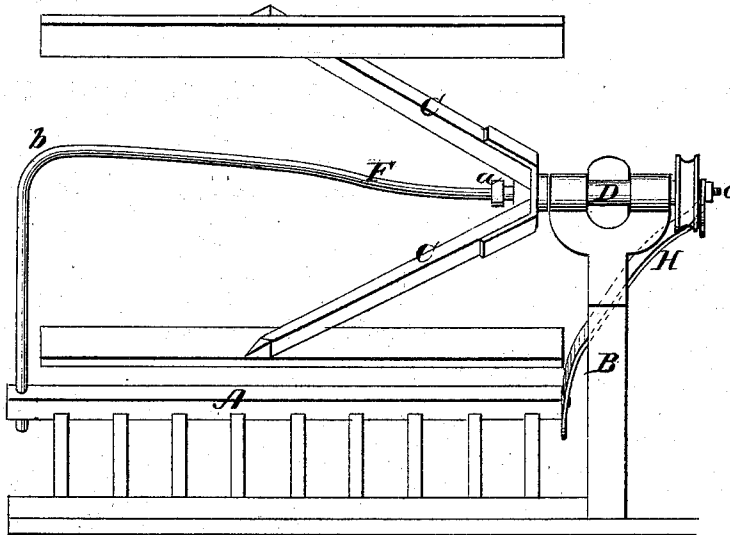


Fig. 2.

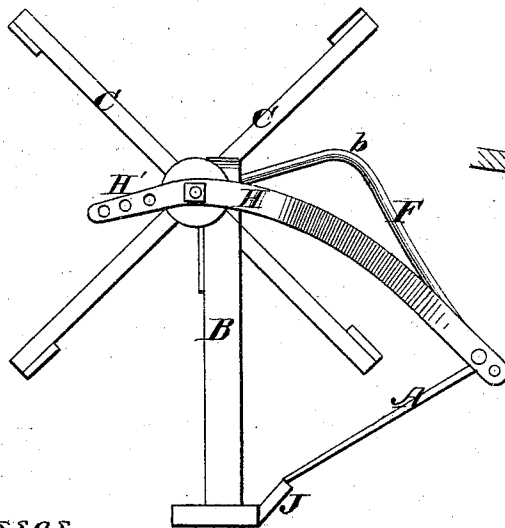
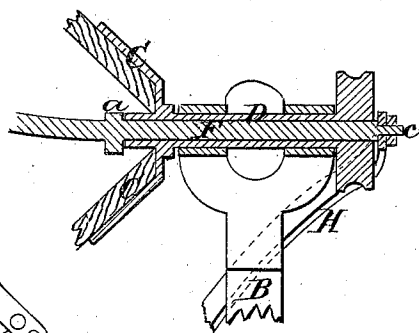


Fig. 3.



Witnesses.  
C. F. Brown.  
M. Church

Inventor  
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# UNITED STATES PATENT OFFICE

JOHN S. TRUXELL, OF GREENSBURG, PENNSYLVANIA.

## IMPROVEMENT IN HARVESTER-DROPPERS.

Specification forming part of Letters Patent No. **143,391**, dated September 30, 1873; application filed February 27, 1873.

*To all whom it may concern:*

Be it known that I, JOHN S. TRUXELL, of Greensburg, Westmoreland county, Pennsylvania, have invented an Improvement in Harvester-Droppers, of which the following is a specification:

Figure 1 is a side elevation; Fig. 2, an end view; and Fig. 3, a section through the reel-shaft.

This invention has for its object to improve the construction of that class of harvester-droppers which swing upward and outward from the cutter-bar, and are hung upon the same shaft as the reel, in such a manner as to give the dropper a firm support at both ends and enable it to swing clear over without in any manner interfering with the reel. To this end my invention consists in the construction and combination of parts which I will now proceed to describe.

In the accompanying drawing, A is a harvester-dropper of ordinary construction. C is the overhung reel, which is of the short shaft variety; and D is the reel-shaft, which is hollow, and is mounted in boxes attached to the reel-post B. Through the hollow shaft D passes a bar, F, which terminates just outside one extremity of the hollow shaft. At the other extremity of said shaft is a flange, *a*, on the bar F, and from this flange the bar proceeds in a bent shape to the point *b*, which is beyond the end of the reel, the bar F between the points *a* *b* being in a position such that it in no respect interferes with the revolution of the reel. At the point *b* the bar F forms an elbow, and thence proceeds straight to and through the back of the dropper. The other end of the dropper is connected by a bent bar, H, with the projecting end *c* of the bar F, and

is kept thereon by a nut. The bar H extends beyond the end *c* far enough to form a lever, H', for operating the dropper, which is to be done by means of a rod connecting the rod with a treadle-lever below. When this treadle is operated the dropper is raised from both ends alike, by means of the bars F H, thus avoiding that straining of the dropper which cannot but occur when it is raised from one end only. On the back edge of the cutter-bar is fastened an inclined strip, J, on which rests the dropper, and whose office is to keep the butts of the grain compact while the sheaf is forming, and also while the dropper is clearing the sheaf, thus preventing the butts of the grain from being disturbed till the dropper passes their heads, and thereby forming a gavel with an even base.

An advantage resulting from the hollowness of the shaft D is its greater lightness. The rod F can also be made hollow, as of gas-pipe, increasing thereby its lightness and stiffness.

The dropper is adjustable with reference to the bars F H, the bar F passing through the back of the dropper, as above stated, and the bar H having two or more holes, in either of which the screw may be put that connects the bar and dropper; hence, when the grain is heavy, the dropper can be set nearer the ends of the bars, so as to give more room.

I claim as my invention—

The combination of the hollow reel-shaft D, bars F H, and dropper A, substantially as and for the purpose specified.

JOHN S. TRUXELL.

Witnesses:

GEO. E. BROWN,  
MELVILLE CHURCH.