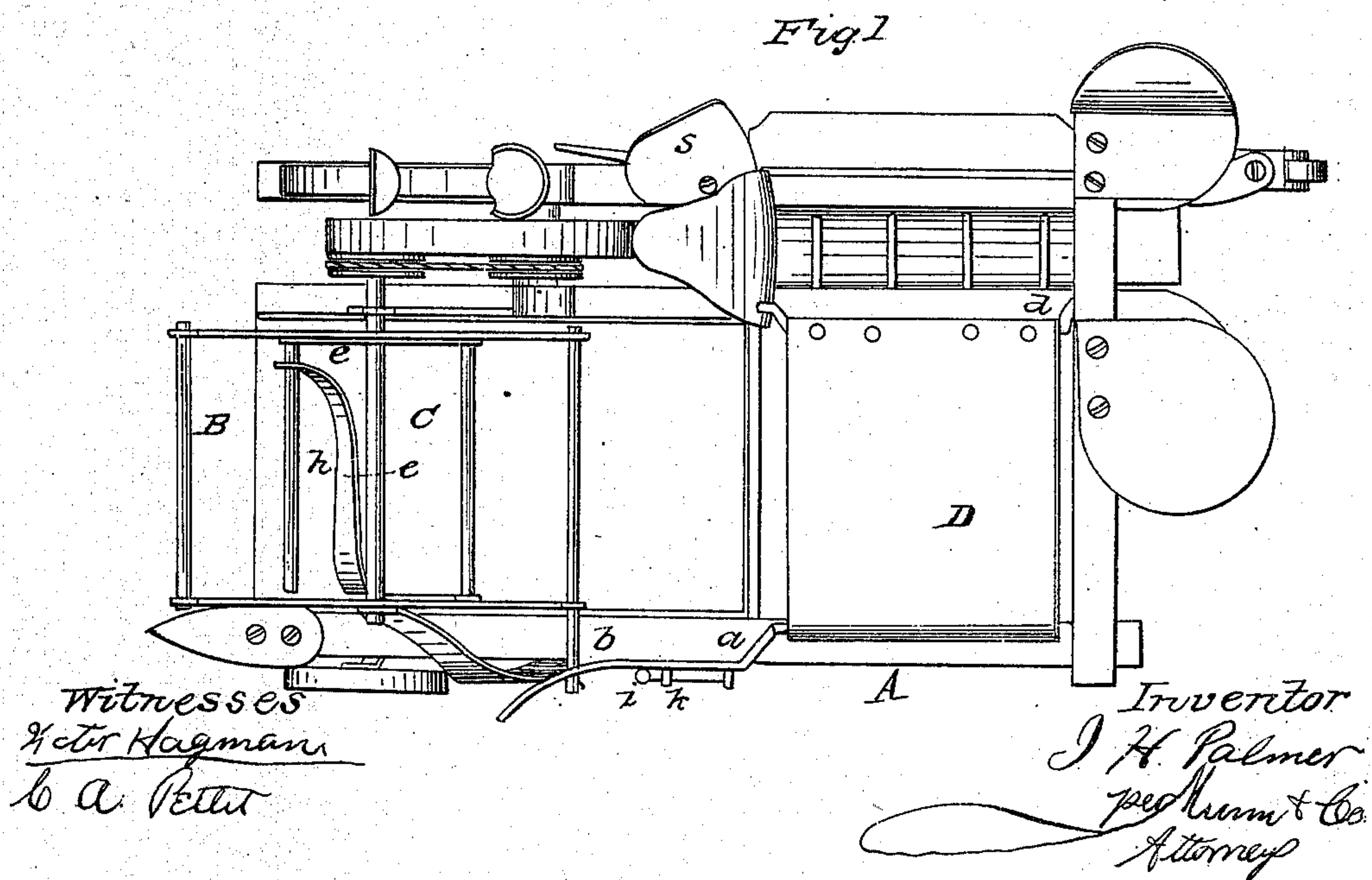
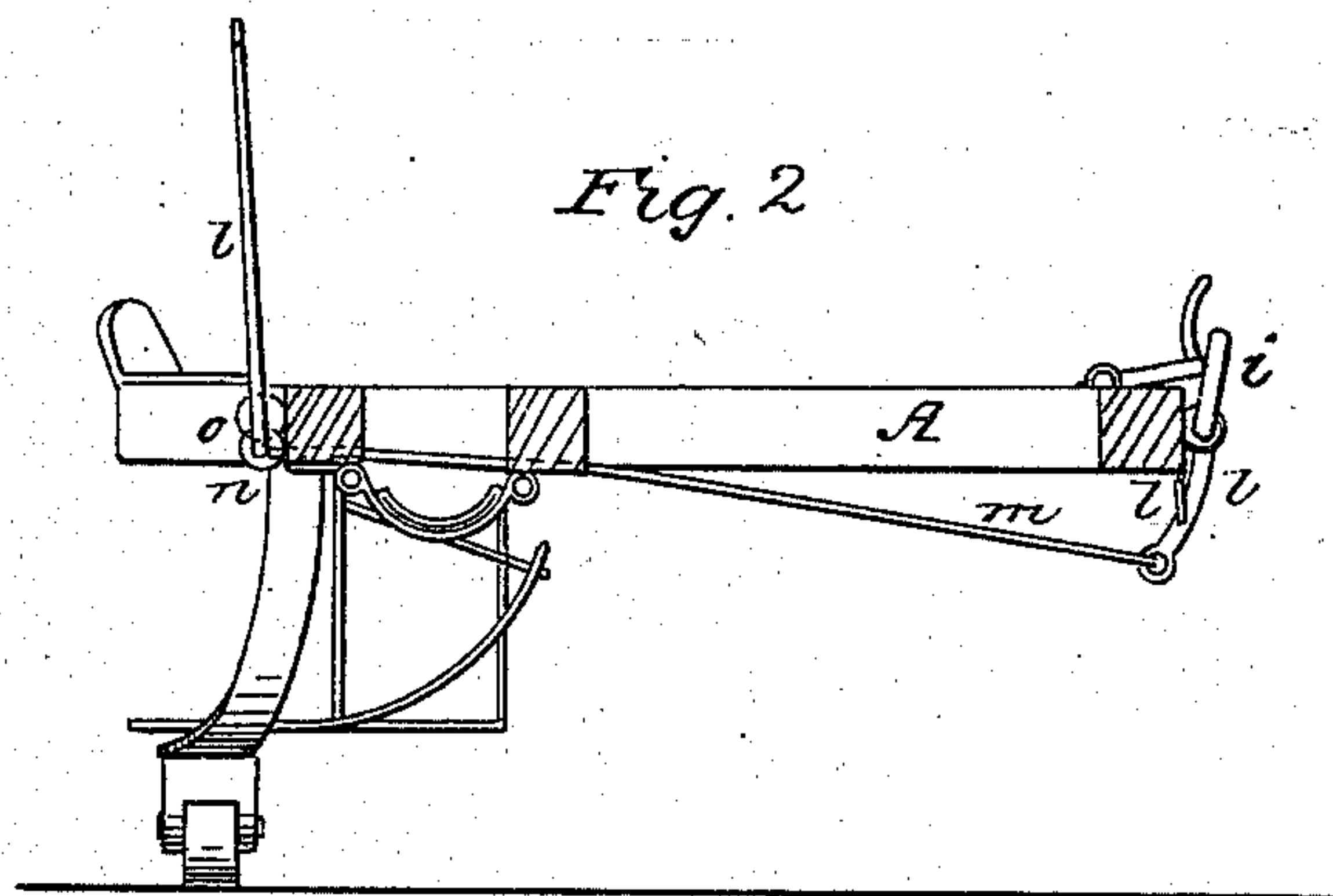


I. H. PALMER.

Harvester.

No. 105,973.

Patented Aug. 2, 1870.



UNITED STATES PATENT OFFICE.

ISAAC H. PALMER, OF LODI, WISCONSIN.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **105,973**, dated August 2, 1870.

To all whom it may concern:

Be it known that I, ISAAC H. PALMER, of Lodi, in the county of Columbia and State of Wisconsin, have invented a new and useful Improvement in Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a plan view, and Fig. 2 is a transverse vertical section in the line *x x*, Fig. 1.

The invention consists in bending back the arm of the reel next following the arm that bears the said projection in such manner that when the dropper falls, after dumping the gavel into the receiver, its arm passes clear of the reel.

The invention also consists in an arrangement for removing at pleasure the arm of the dropper out of the path of the projection of the reel, so as to render the dropper inoperative when the machine is not cutting grain.

In the drawing, A is the harvester-frame; B, the reel; C, an inclined platform, up which the reel-rake draws the gavel; D, the dropper, hinged at *d*; *a*, the arm projecting from the side of the dropper opposite the hinge; *b*, the pin projecting horizontally from one of the arms of the reel B.

As the latter revolves, the pin *b* strikes the arm *a* and lifts the dropper, which thereupon dumps the gavel.

The pin *b* is on that arm of the reel next following the rake. E is the arm of the reel next following that which bears the pin *b*. *e* is the one of the two branches which make up the arm E, which is bent back, as shown in Fig. 1.

When the dropper falls after dumping the gavel its arm *a* passes clear of the reel, owing to the springing of the branch *l* and cross-bar *h*.

A cross-bar, *h*, passes horizontally through the ends of the branches of the arm E, and acts as a branch of the reel, in the same manner as the bars which connect the ends of the branches of the other arms of the reel, toward drawing the standing grain upon the sickle-bar.

When the dropper is down, its arm *a* lies outside of an arm, *i*, projecting upward from a shaft, *k*, which is supported in bearings at one side of the frame A, and is provided with a second arm, *l*, projecting downward, borne against by a spring-plate, *l'*, and connected by a rod, *m*, passing under the frame, with an arm, *n*, projecting downward from a shaft, *o*, supported in bearings on the opposite side of the frame A, and provided with a handle-lever, *r*, extending upward near the driver's seat *s*. By throwing the lever *r* toward the wheel the driver is enabled to move the arm *a* out of the path of the pin *b*, and thus render the dropper inoperative when the machine is not cutting grain.

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

1. The reel B, provided with the spring-branch *e*, bent backward as described, in combination with the cross-bar *h*, constructed and operating as described.

2. The combination of the arm *a* with the shaft *k*, provided with the arms *i l*, shaft *o*, provided with the arm *n*, and handle-lever *r*, and connecting-rod *m*, all constructed and arranged to operate as described.

ISAAC H. PALMER.

Witnesses:

J. H. RAY,
H. M. AYER.