No. 725,633. PATENTED APR. 14, 1903.

M. STIMPSON.

SELF BINDING HARVESTING MACHINE.

APPLICATION FILED JAN. 7, 1902.

NO MODEL.

Fig. 1.

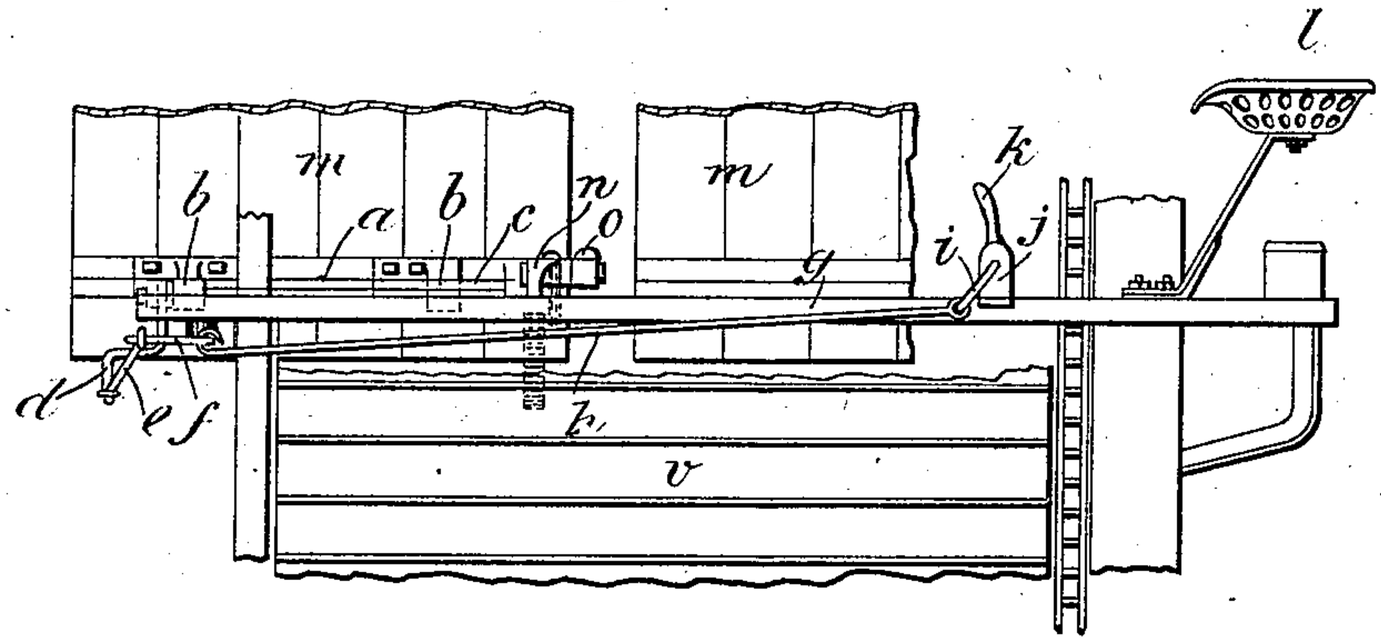


Fig. 2.

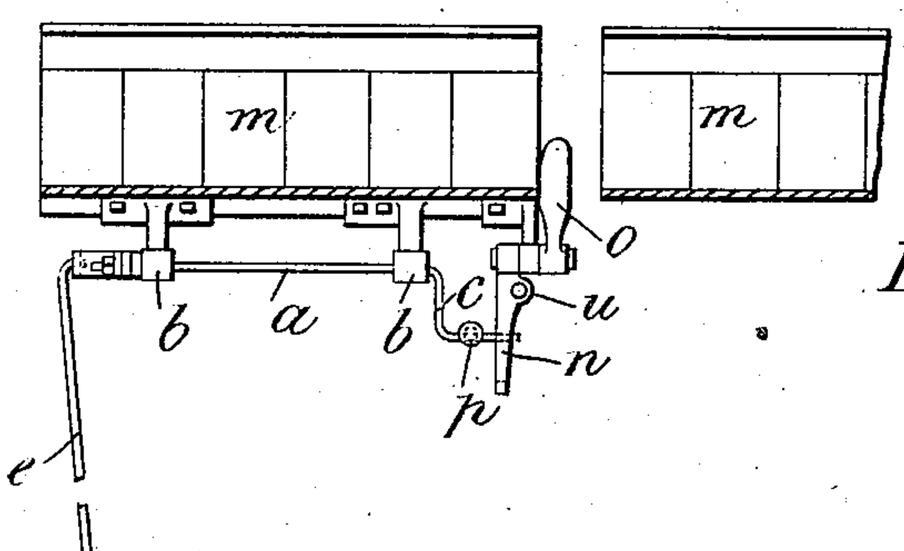
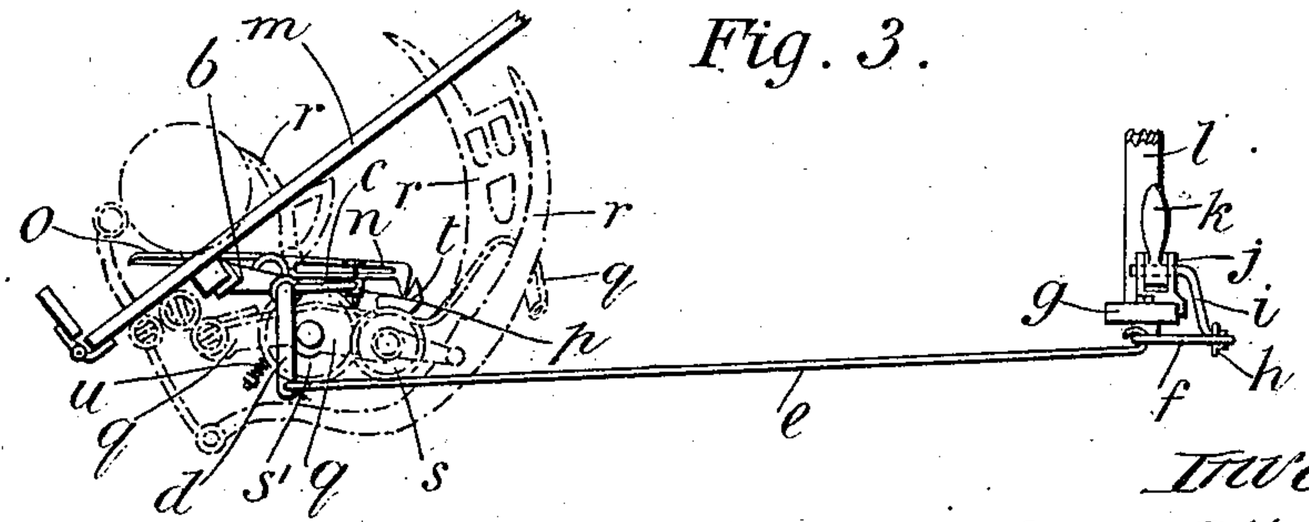


Fig. 3.



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UNITED STATES PATENT OFFICE.

MOSES STIMPSON, OF STOWUPLAND, ENGLAND, ASSIGNOR OF ONE-HALF TO JOHN ROBERT TURNER, OF STOWMARKET, ENGLAND.

SELF-BINDING HARVESTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 725,633, dated April 14, 1903.

Application filed January 7, 1902. Serial No. 88,795. (No model.)

To all whom it may concern:

Be it known that I, MOSES STIMPSON, a subject of the King of Great Britain and Ireland, residing at Stowupland, county of Suffolk, England, have invented new and useful Improvements in Self-Binding Harvesting-Machines, of which the following is a specification.

This invention relates to self-binding harvesting-machines, and more particularly to an attachment for such machines whereby the driver without stopping the horses or leaving his seat is enabled to control the stop-arm of the shipping or trip lever of the delivery mechanism, and thus release at will a sheaf or any corn from the delivery-table or binder-deck.

With the self-binding harvesting-machines as at present constructed many annoying stoppages are occasioned owing to the delivery mechanism becoming choked or blocked by twisted, laid, or damp corn, which necessitates the driver stopping his team, descending from his seat, and releasing the sheaf or corn, as the case may be, by hand, and thus much time is lost.

Now the object of this invention is to obviate this annoyance and waste of time, and to this end the machine is provided with a simple attachment which can be worked by the driver's foot while on his seat and which disengages the stop-arm of the shipping or trip lever from the shipping-pinion of the delivery mechanism, and thus releases the sheaf or any corn that may have got choked from the delivery-table or binder-deck.

Referring to the accompanying drawings, Figure 1 shows in side elevation the improved attachment applied to a self-binding harvesting-machine, only so much, however, of the machine being illustrated as concerns the attachment. Fig. 2 is a plan, and Fig. 3 is a front elevation, partly in section, of the same.

The attachment or device (which can be easily adapted to all existing machines) consists of a system of rods and levers and comprises a rod *a*, suitably supported in bearings *b b* and formed at its free end into a cranked part *c* and having at its other end a crank *d*. To this crank *d* is connected one end of a rod or link *e*, the other end of which is connected to a bell-crank *f*, supported beneath the seat-board *g*. This crank *f* is also connected, by means of a rod *h*, to another cranked rod *i*, supported in bearings *j* on top of the seat-board. Fast on this latter rod is a foot-lever *k* within easy reach of the driver's foot, his seat being represented at *l* in its usual position. The bearing-brackets *b b* are secured to the under side of the delivery-table or deck *m*. The cranked end *c* of the rod *a* is so adjusted as regards height as to rest immediately beneath the stop-arm *n* of the shipping or trip lever *o*, the adjustment being effected by means of a set-screw *p*, secured in a screw-threaded boss on the part *c* and bearing with its lower end on the bracket *q*, (of ordinary construction,) supporting the packers *r* and the shipping-pinions *s s'*.

The operation of the attachment is as follows: When the delivery-table of the machine becomes choked or blocked, the driver instead of dismounting and depressing the shipping or trip lever *o* by hand, as is now usual, and thereby raising the stop-arm *n* to release the dog *t* of the clutch-pinion *s*, simply depresses the lever *k* with his foot, and thereby causes, through the intervention of the rods *e* and *h* and cranks *d* and *f*, the cranked end *c* of the rod *a* to rise and lift the stop-arm *n* out of engagement with the tooth or dog *t* of the shipping-pinion *s*, and thus effect the release of the sheaf or corn, as desired, and permitting the harvesting to proceed without loss of time. On pressure being removed from the foot-lever *k* the trip-lever *o* is returned to its normal position in the usual manner by means of the tension-spring *u*, attached by its upper end to the stop-arm *n* and by its lower end to the stationary bracket *q*. The ordinary elevator is shown at *v*.

When the driver operates the foot-lever *k* and so raises the stop-arm *n* out of engagement with the dog *t*, the needle and the packers are actuated and then bind the corn (even if only a few straws) into a small bundle or sheaf.

Although the attachment is more particularly designed to be operated by the foot, yet it is obvious that it might be operated by hand if the foot-lever were extended to a position within reach of the driver's hand.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In self-binding harvesting-machines, the combination with the stop-arm of the trip-lever, of adjustable mechanism for operating the stop-arm and comprising a foot-lever, intermediate links and levers, and a cranked rod formed with a screw-threaded boss in the cranked portion thereof and a set-screw fitted in said boss, said set-screw being provided with a head and resting with its point upon the stationary bracket of the packers and shipping-pinions, as set forth.

2. In self-binding harvesting-machines, the combination with the stop-arm of the trip-lever, of the adjustable operating-rod, bearings for said rod, a crank at one end of said rod fitted with a set-screw, a crank fixed to the other end of said rod, a link connected with the latter crank, a bell-crank connected by one arm with said link, a rod connected to the other arm of said bell-crank, and a cranked rod and foot-lever connected with such rod, and a bearing for said foot-lever, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

MOSES STIMPSON.

Witnesses:
GEORGE E. MINTERN,
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