

W. H. PERRIN.
SHOCKING ATTACHMENT FOR BINDERS.
APPLICATION FILED APR. 12, 1907.

908,695.

Patented Jan. 5, 1909.

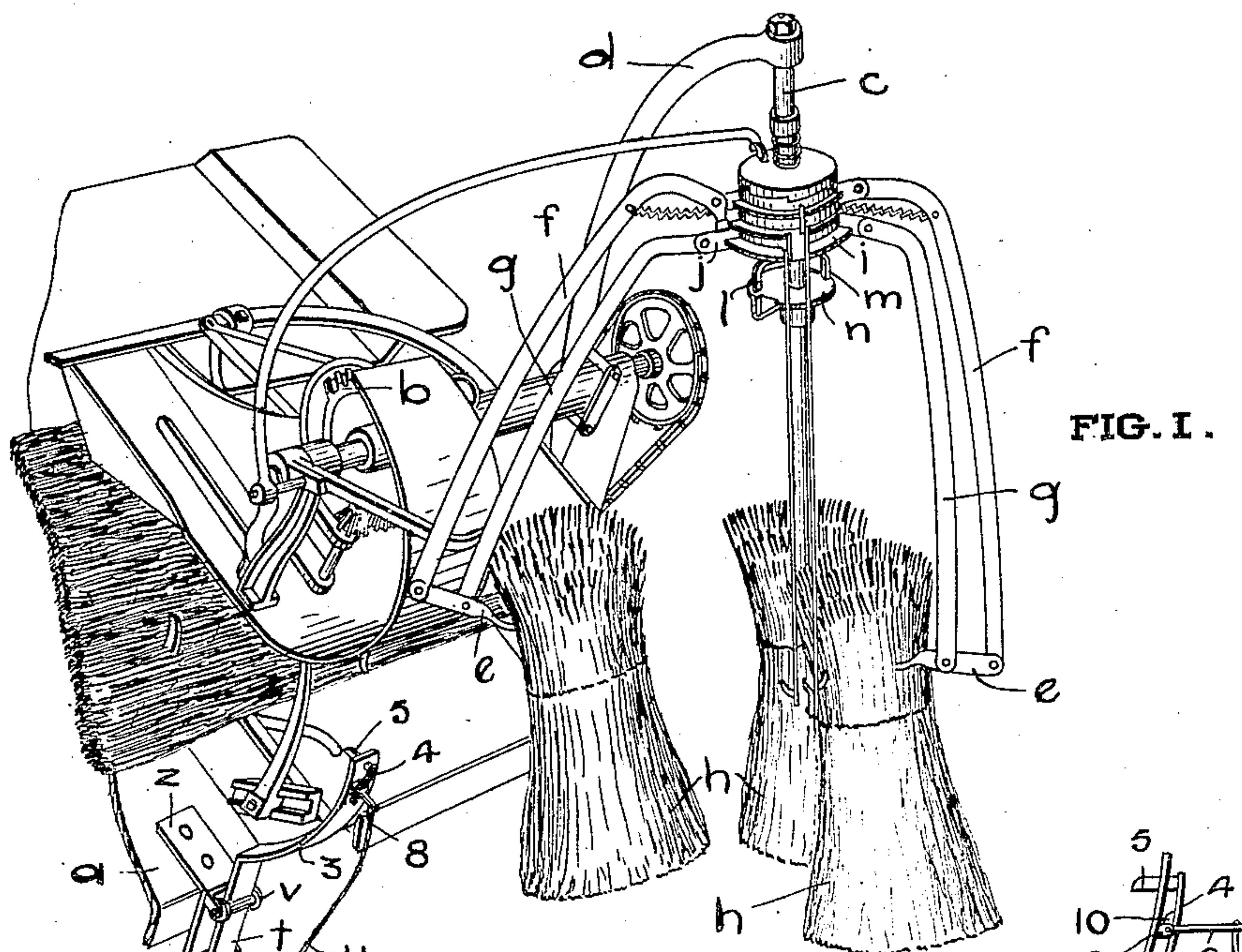


FIG. 1.

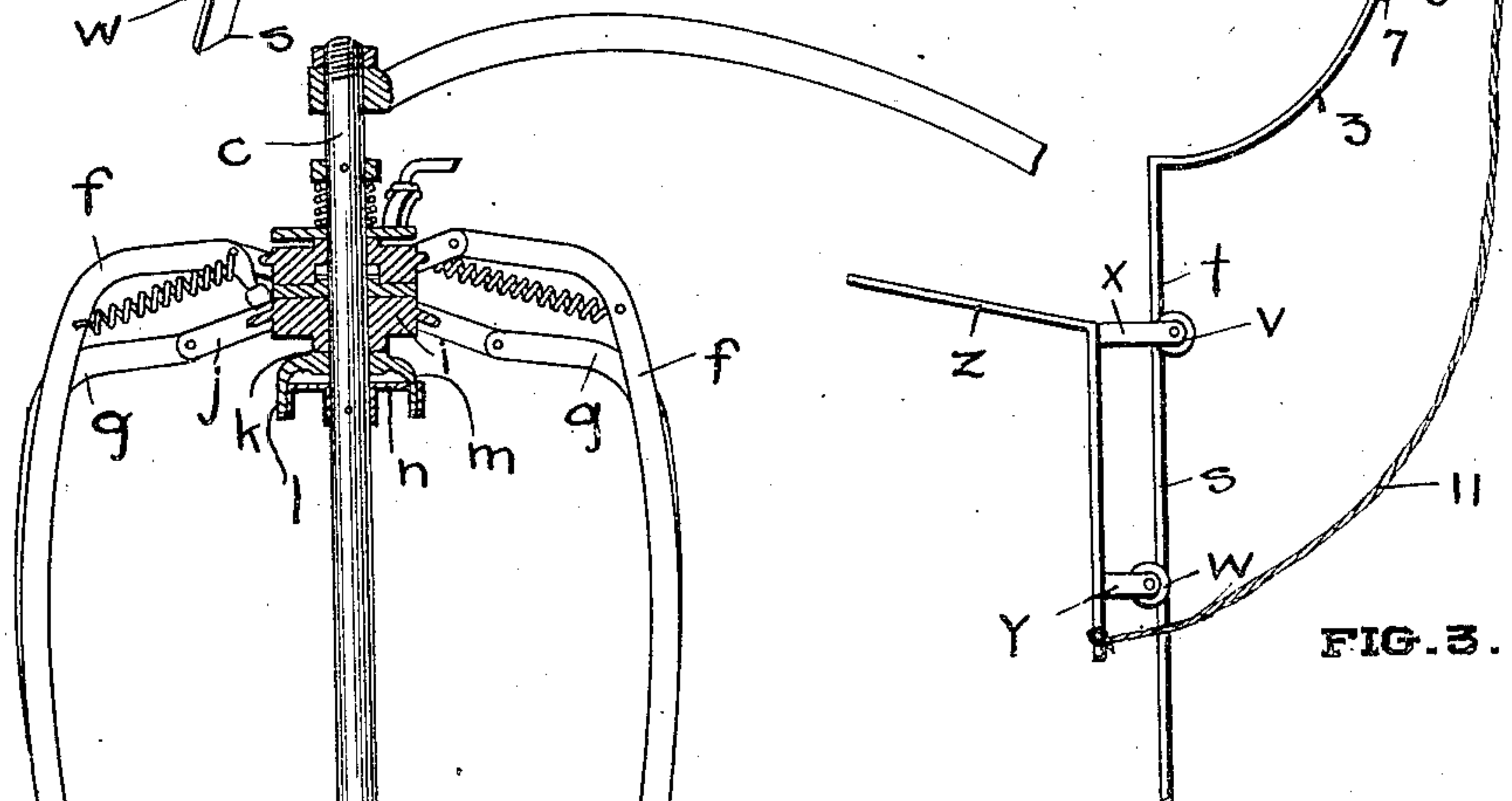


FIG. 2.

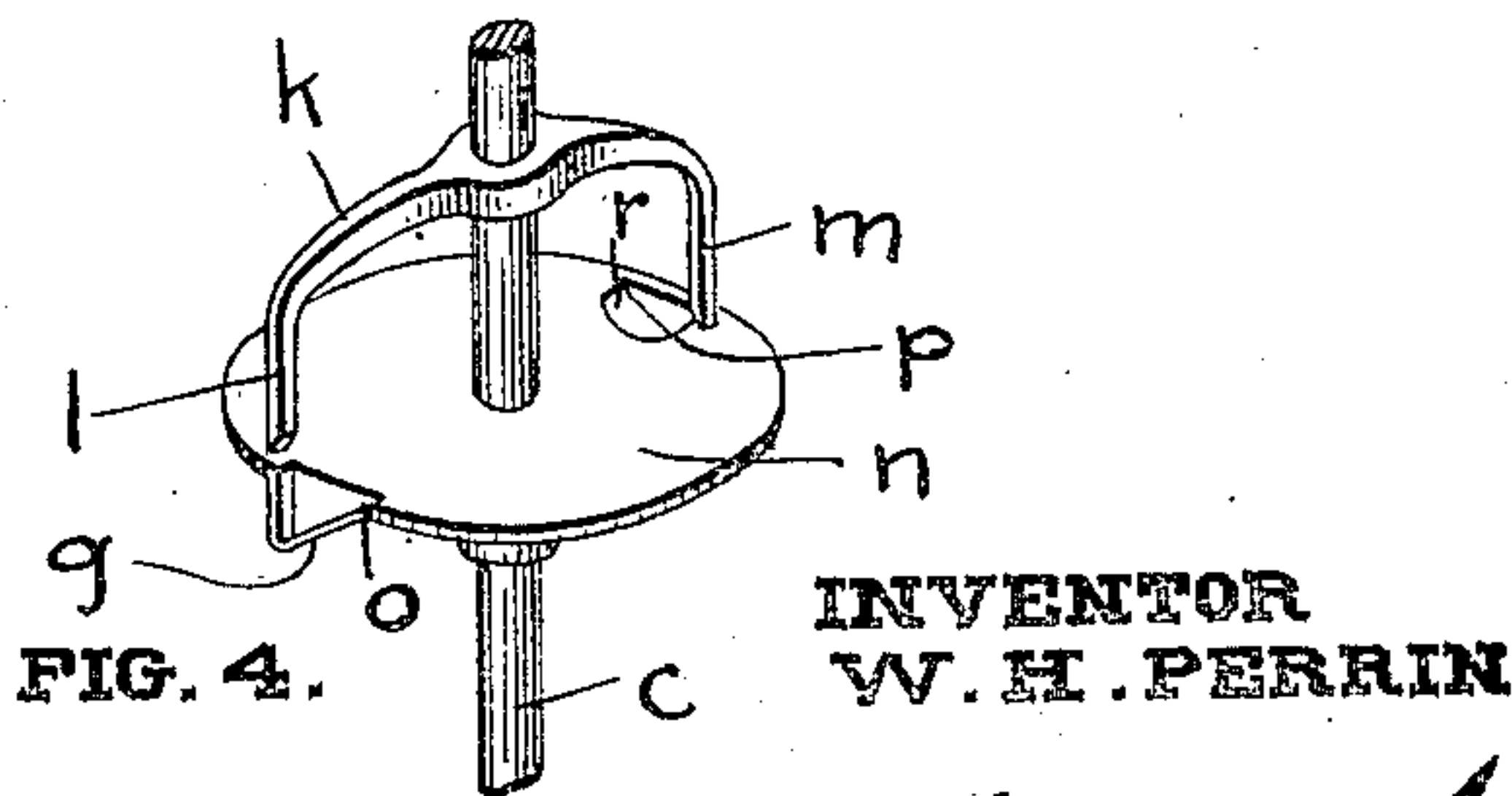


FIG. 3.

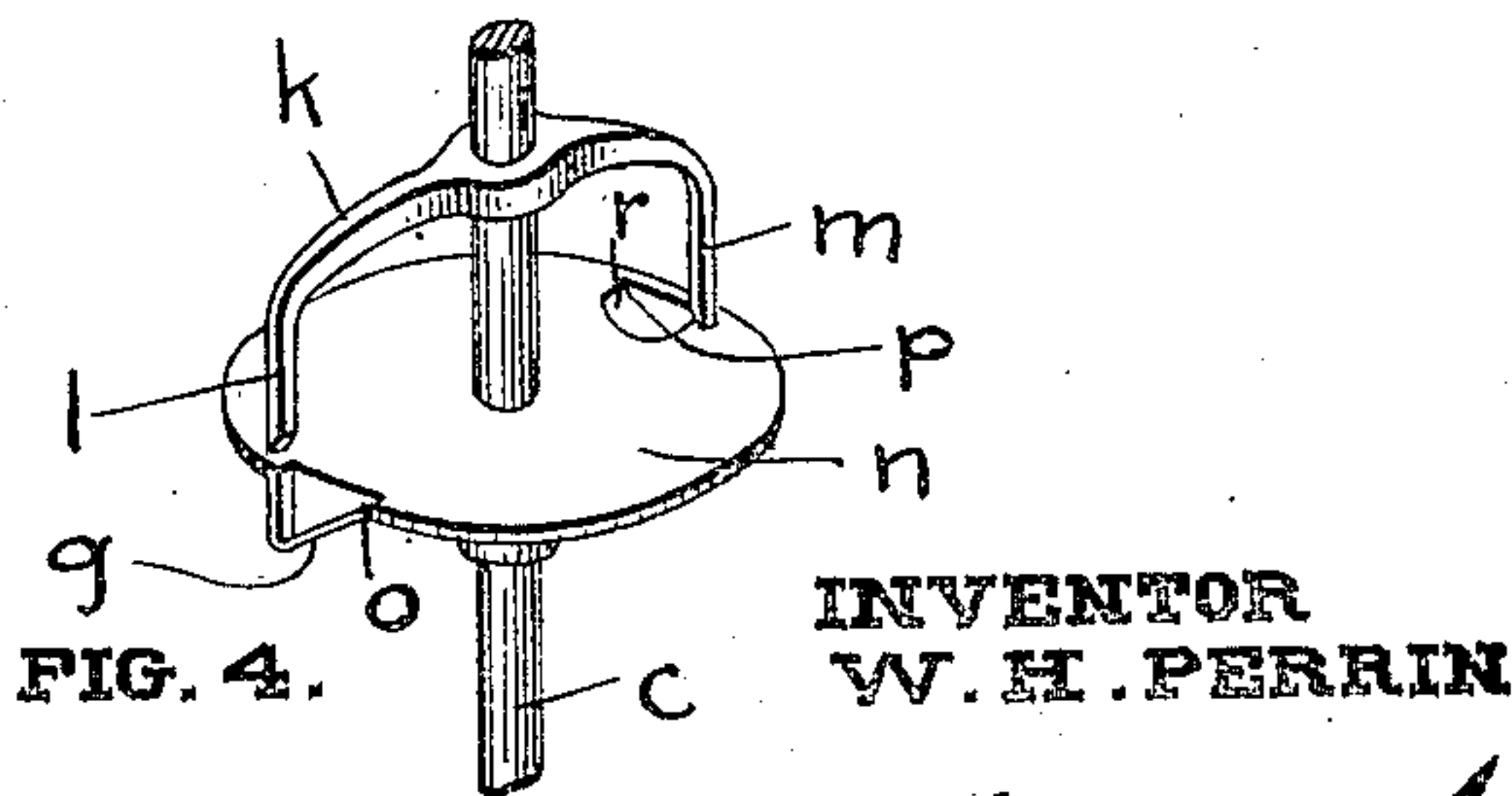


FIG. 4.

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WILLIAM HUMPHRY PERRIN, OF NEW LISKEARD, ONTARIO, CANADA.

SHOCKING ATTACHMENT FOR BINDERS.

No. 908,695.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed April 12, 1907. Serial No. 367,896.

To all whom it may concern:

Be it known that I, WILLIAM HUMPHRY PERRIN, of New Liskeard, in the district of Nipissing, Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Shocking Attachments for Binders, of which the following is a specification.

My invention relates to improvements in shocking attachments for binders and the objects of my invention are to devise certain improvements in the shocking attachments invented by me and for which I have obtained United States Patent No. 806,283, dated December 5th, 1905, whereby the operation of the device may be rendered more simple and efficient, and it consists essentially of the improvements hereinafter specifically described in detail and set forth in the accompanying specification and claims.

In the drawings, Figure 1 is a perspective view of the side portion of a grain binder of any ordinary construction, showing my attachment in place. Fig. 2 is a sectional view of the revolving part of the mechanism of the shaft upon which they revolve. Fig. 3 shows an enlarged side view of the means for following the sheaf after it leaves the table binder. Fig. 4 shows a perspective detail of the means for raising and lowering the forks.

In the drawings, like letters and figures of reference indicate corresponding parts in each figure.

Referring to the drawings, *a* is the table of the binder down which the grain passes while it is being formed into sheaves and tied by the knotting mechanism partially shown at *b*.

c is the shaft supported by the standard *d* from the binder and which supports a plurality of forks *e* by means of double arms *f* and *g*. The upper arms of each pair are fixed from vertical movement while the lower arms are adapted to be intermittently lowered, thus causing the forks *e* to swing from a substantially horizontal position to a vertical position, dropping the sheaf *h* at the same time. The mechanism for operating these double arms in the present application has been improved on, the mechanism I now employ to intermittently lower these arms consisting of a plate *i* vertically movable on the shaft and having projecting arms *j* on which the arms *g* are pivoted. The plate *i* rests on the bracket *k* having two arms *l* and *m* thereon, which are turned downwardly and bear on the face of the plate *m* which is

fixedly secured to the shaft *c*. This plate has two slots *o* and *p* placed diametrically opposite to each other therein and into which the arms *l* and *m* are adapted to drop at a certain part of the revolution. The said arms are raised out of these slots by means of cam plates *q* and *r* formed integral with the side of the slots and on which the arms *l* and *m* run. The remaining part of the mechanism for operating these arms is described in detail in my said earlier patent.

I have found in operating my sheaf shocker that it is necessary to prevent the end of the sheaf dropping off the end of the platform prior to its being caught on one of the forks *e*. To accomplish this, I provide a follower *s* which consists of a vertically movable standard *t* supported by rollers *v* and *w* which are journaled in brackets *x* and *y* secured to the plate *z* attached to the platform *a*. The top of the standard *t* is curved outwardly at 3, as shown, and adapted to fit around the end of the sheaf as it comes from the discharging mechanism. Secured to the top of the standard is a latch 4, having a tooth 5 protruding through the slot in the standard and adapted to normally engage the sheaf and prevent it from slipping off the edge. The back portion 6 of this latch is preferably made of spring metal and secured to the standard at 7; means are provided for withdrawing the tooth 5, the means I show comprising a crank 8, pivoted to lugs 9 on the standard and have projecting portions 10 fitting beneath the spring back 6 and adapted to move the same outwardly when the lever 8 is tilted. The end of the lever 8 is connected by the cord 11 to the plate *z*, whereby when the follower has been raised a given amount, the cord will become taut and operate the latch to withdraw the tooth 5.

The operation of the device is substantially described in my earlier patent, the forks *e* successively catching the sheaves as they are discharged. In place, however, of relying on the weight of the sheaves in their central position to discharge them, the discharge is made positive by the mechanism described and when the arms *l* and *m* sink into the slots *o* and *p* the forks *e* are all moved into a substantially vertical position as shown in Fig. 2, dropping the sheaves in a single shock. The follower *s* slides upwardly with the end of the sheaf as it leaves the binder platform until it reaches its uppermost position when the latch 4 is auto-

atically released, leaving the shock free when it is caught and carried away by one of the forks *e*. The slots in the plate end are so designed that when all the forks have received their sheaf the arms *l* and *m* will come opposite the slots and drop, releasing the sheaves which will fall together.

It will be readily understood that while my invention has been described herein with great particularity of detail, yet in carrying out the construction of the invention certain changes may be made in the details without departing from the spirit of my invention.

What I claim as my invention is:—

1. In a sheaf shocker, the combination with the discharging mechanism, of a slidable member adapted to follow the sheaf, a tooth on said sliding member adapted to engage the sheaf, and means for withdrawing the tooth at a determined point.

2. In a sheaf shocker, the combination with the discharging mechanism and the binder platform, of an upwardly slidable member adapted to engage and follow the sheaf.

3. In a sheaf shocker the combination with the binder platform, of a member slidably supported on the edge of the same, a detent device at the upper end of the member and means for releasing the detent device, as and for the purpose specified.

4. In a sheaf shocker, the combination with the binder platform, of a vertically slidable member at the end of the platform, a detent device at the upper end of the mem-

ber and means at the upper end of the member for releasing the detent device, operated by the vertical movement of the member, as and for the purpose specified.

5. In a sheaf shocker, the combination with the binder platform, of a plate on the end of the same, a plurality of rollers supported from said plate, a standard slidably supported by the rollers and having a curved upper end, a latch on the upper end of the standard and having a tooth protruding on the inner side of the same and means operated by the vertical movement of the standard for releasing the latch, as and for the purpose specified.

6. In a sheaf shocker, the combination with the binder platform, of a plate secured to the edge of the same, a plurality of brackets secured to the plate, rollers in the brackets, a vertically extending standard supported on the rollers and having a curved upper end, a tooth projecting over the inner side of the top of the standard, a spring secured at one end to the same and connected at its opposite end to the standard, a crank pivoted to the standard for moving the spring outwardly, a fixed support and a cord extending from the crank to the said fixed support, as and for the purpose specified.

Signed at New Liskeard, Province of Ontario, this 6th day of March, 1907.

WILLIAM HUMPHRY PERRIN.

Witnesses:

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A. N. MORGAN.