

(No Model.)

2 Sheets—Sheet 1.

R. W. DIXON.

KNOTTER MECHANISM FOR SELF BINDERS.

No. 324,988.

Patented Aug. 25, 1885.

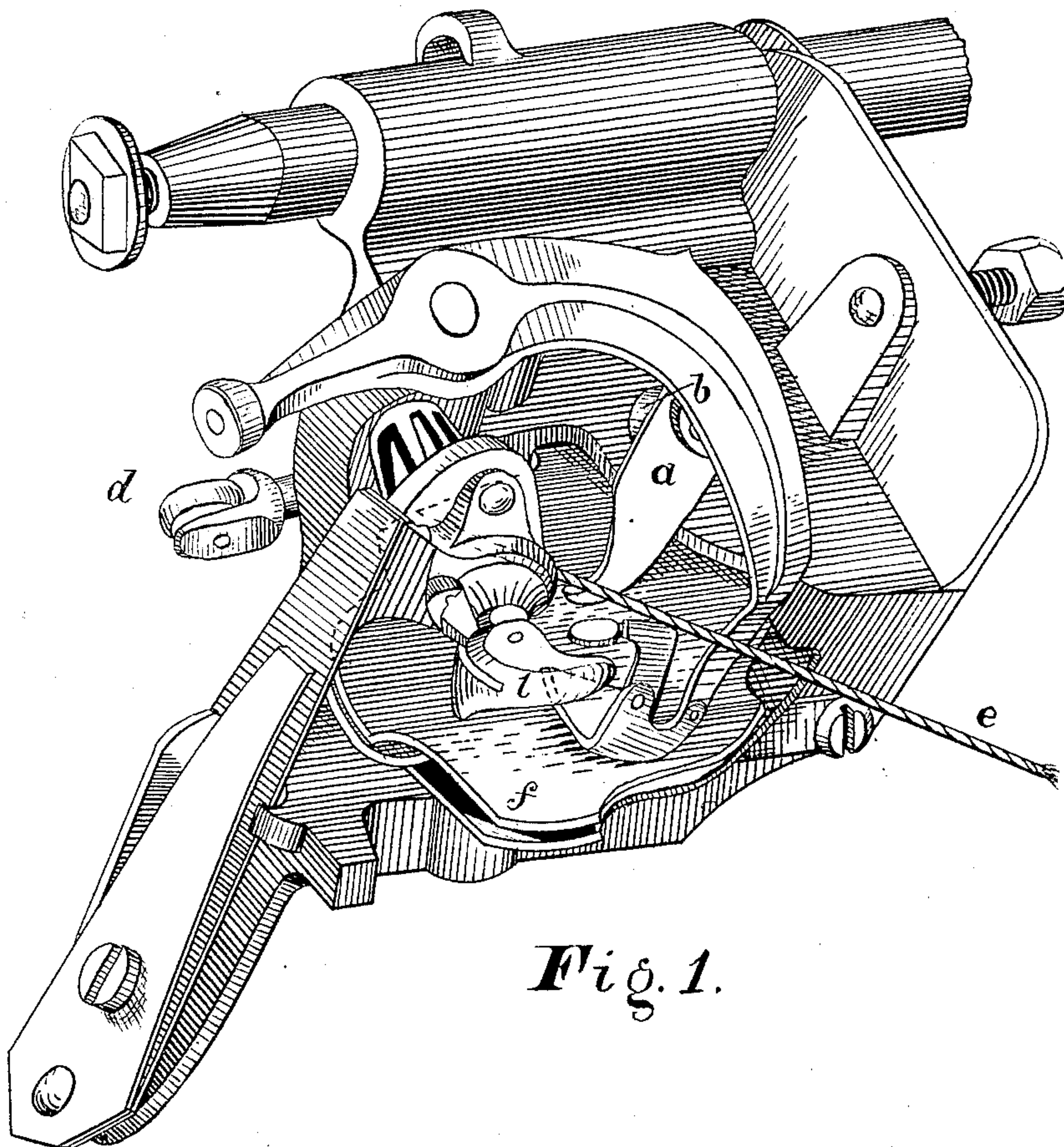


Fig. 1.

Attest.
W. A. Applegate.
J. Staley

Robert W. Dixon
Inventor.
by H. Crase Stewart
his attorney

(No Model.)

2. Sheets—Sheet 2.

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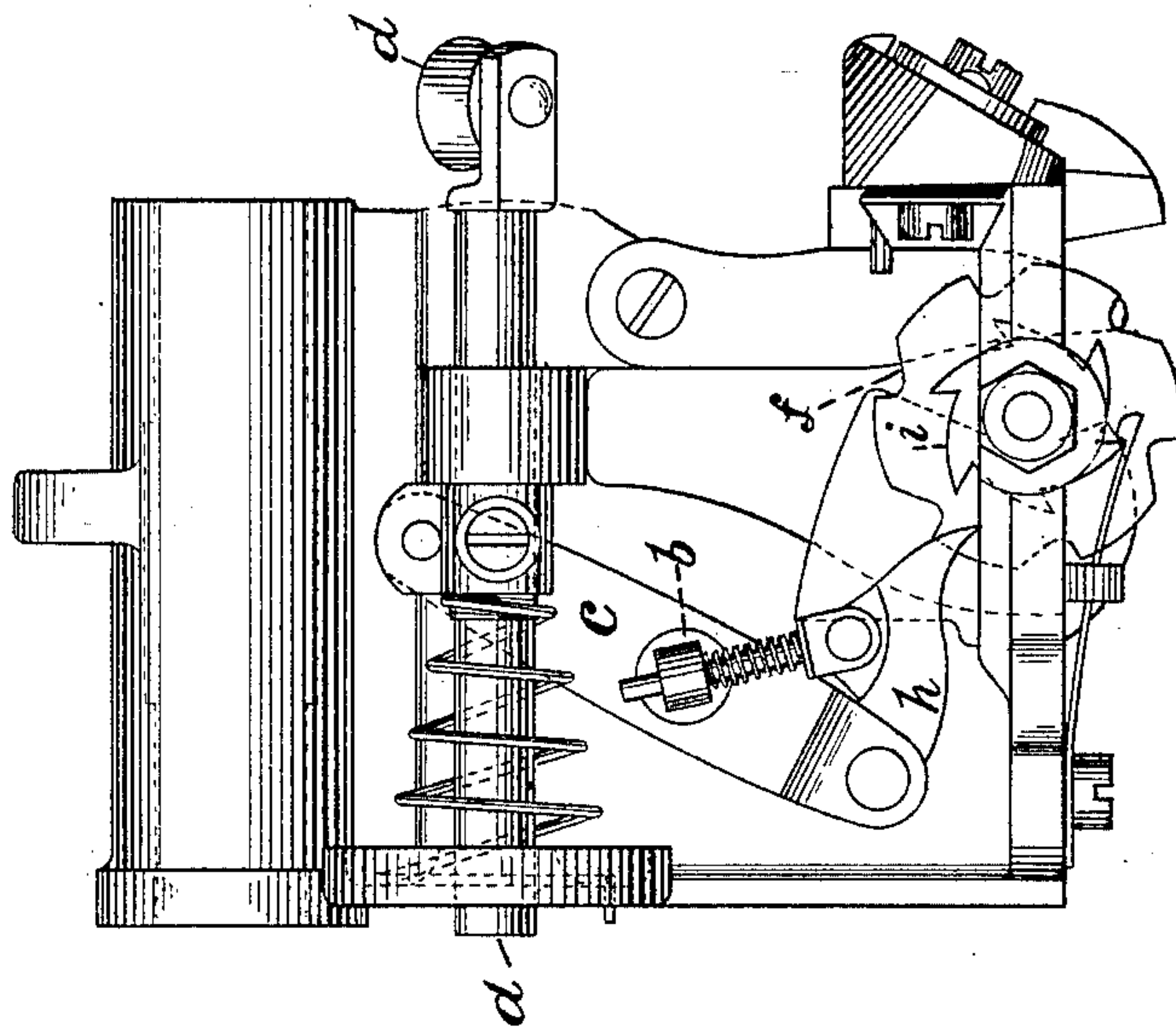


Fig. 3

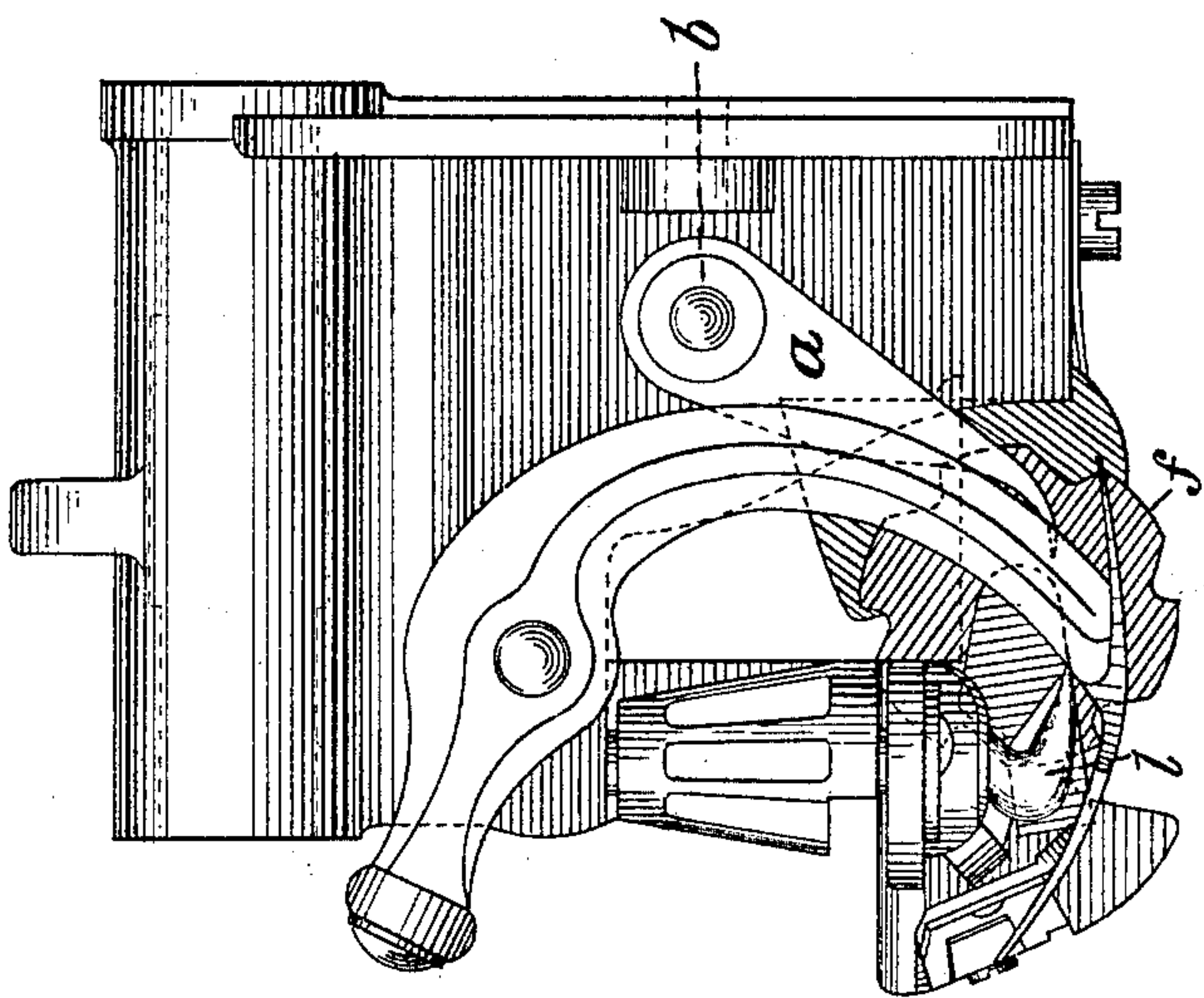


Fig. 2

Attest
J. Richards
Law's Clerk

Robert W. Dixon
Inventor
by *Chase Stewart*
his Attorney

UNITED STATES PATENT OFFICE.

ROBERT W. DIXON, OF SPRINGFIELD, OHIO, ASSIGNOR OF TWO-THIRDS TO
CHASE STEWART, OF SAME PLACE.

KNOTTER MECHANISM FOR SELF-BINDERS.

SPECIFICATION forming part of Letters Patent No. 324,988, dated August 25, 1885.

Application filed December 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. DIXON, of Springfield, county of Clark, State of Ohio, have invented a new and useful Improvement in Knotter Mechanisms for Self-Binders, of which the following is a specification.

In the accompanying drawings, Figure 1 is a perspective view of a knotter, with my improved cord-supporting finger attached thereto, illustrated in the position suitable for supporting or holding up the cord above the knotting-hook. Fig. 2 is an elevation of the same, looking from the inside of the machine, and illustrating the cord-supporting finger in a position suitable for permitting the cord to lie across the knotter; and Fig. 3 is an elevation looking from the outside of the machine.

In each of these figures letters of like character indicate corresponding parts.

The object of this invention is to make the knotter mechanism more reliable in its movements, so far as the delivery of the cord to the knotter is concerned.

The invention consists in a cord holding or supporting finger that works in harmony with the knotter mechanism and holds the supply-strand of the cord above the tying-hook until the ends of the band that encircles the sheaf have been tied into a knot and the knot stripped from the tying-hook and the stripper has returned to its place of rest, and then moves from under the cord, so as to permit it to fall across the tying-hook ready for the next succeeding sheaf.

In order that others skilled in the art to which my invention belongs may be able to make and use the same, I will proceed to describe its construction and operation.

I have illustrated my improvements as applied to an "Appleby knotter," and as this type of knotter is so well understood by persons skilled in the art, I shall confine myself to a description of my invention and its application to the above-mentioned knotter.

The cord holding or supporting finger *a* is secured to the pintle *b* of the ratchet-lever *c*, and moves with it and the pawl *h* as the latter is moved to operate the gripper *f*. The lever *c* is attached to the plunger *d*, and is actuated by it in the same manner as the Appleby knotter.

The cord supporting or holding finger *a*, being attached to the pintle *b*, moves with the said lever *c*, so that as the gripper *f* is moved to grasp the supply-cord, (the binder-arm being at this time above the gripper *f*,) the cord lifting and holding finger *a* is moved into position under the supply-strand of the cord, and remains in this position until the band that encircles the sheaf is tied into a knot and the knot discharged from the tying-hook. The tying-hook having come to a rest, the movement of the lever *c* back to its normal position causes the lifting and holding finger *a* to retreat, and the band is thus laid properly across the tying hook in readiness for another sheaf, the binder-arm having in the mean time moved downward, leaving the end of the supply-cord in the gripper. The great utility and importance of this cord supporting or holding finger is obvious, since by its use the supply-strand of the cord is held above the tying-hook until the knot is tied and discharged and the said tying-hook has come to a state of rest. It is impossible, therefore, for the supply-strand to get out of the range of the tying-hook during the operation of the tying or discharging the knot of the previous band. This was of frequent occurrence by the old way, and as a consequence a knot was tied in one end only of the succeeding band, and the sheaf therefore discharged without being bound.

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

1. In combination with a tying-bill, a cord supporting or holding finger and means whereby it is moved in harmony with the knotting mechanism into a position between the supply-cord and tying-bill and adapted to support the supply-cord until the previous knot is tied and discharged.

2. The combination, with a knotter, of an oscillating cord supporting or holding finger actuated by and in harmony with the knotter mechanism, substantially as and for the purpose specified.

3. The combination, with the tying-bill and the cord-gripping device, of an oscillating cord-supporting finger adapted to be moved under the supply-cord by the same means

which causes the gripping device to grasp the ends of the cord and to be held in said position until the previous knot is tied and discharged from the tying-bill, substantially as
5 set forth.

4. The combination with the tying-bill and gripping device, of the plunger *d*, the lever *e*, attached thereto and adapted to move the gripper *f*, the pintle *b*, secured to said lever

and provided with the cord-supporting finger *g*, substantially for the purpose set forth.

In testimony whereof I have hereunto set my hand this 16th day of August, 1883.

ROBERT W. DIXON.

Witnesses:

HENRY MILLWARD,
CHASE STEWART.