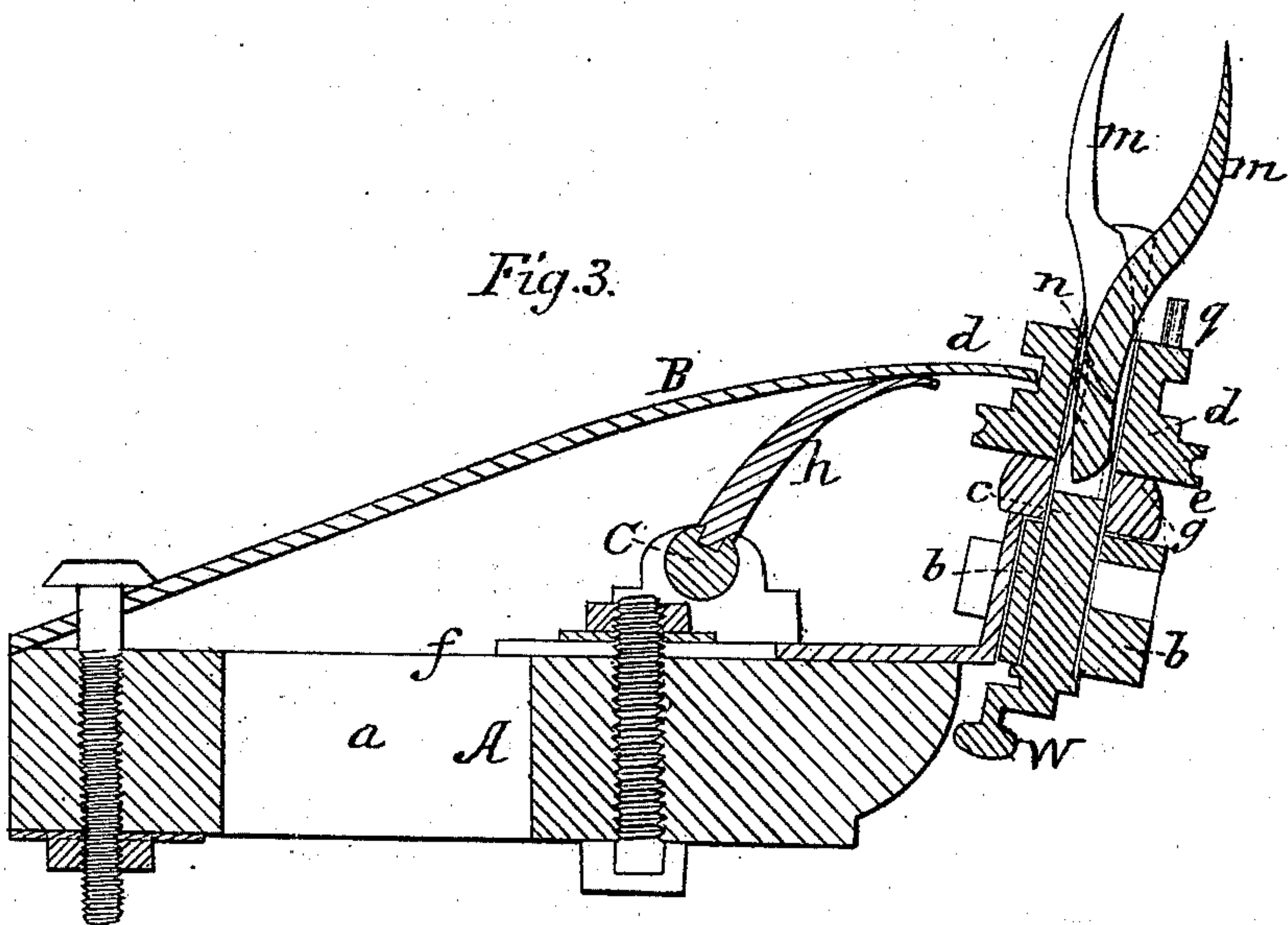
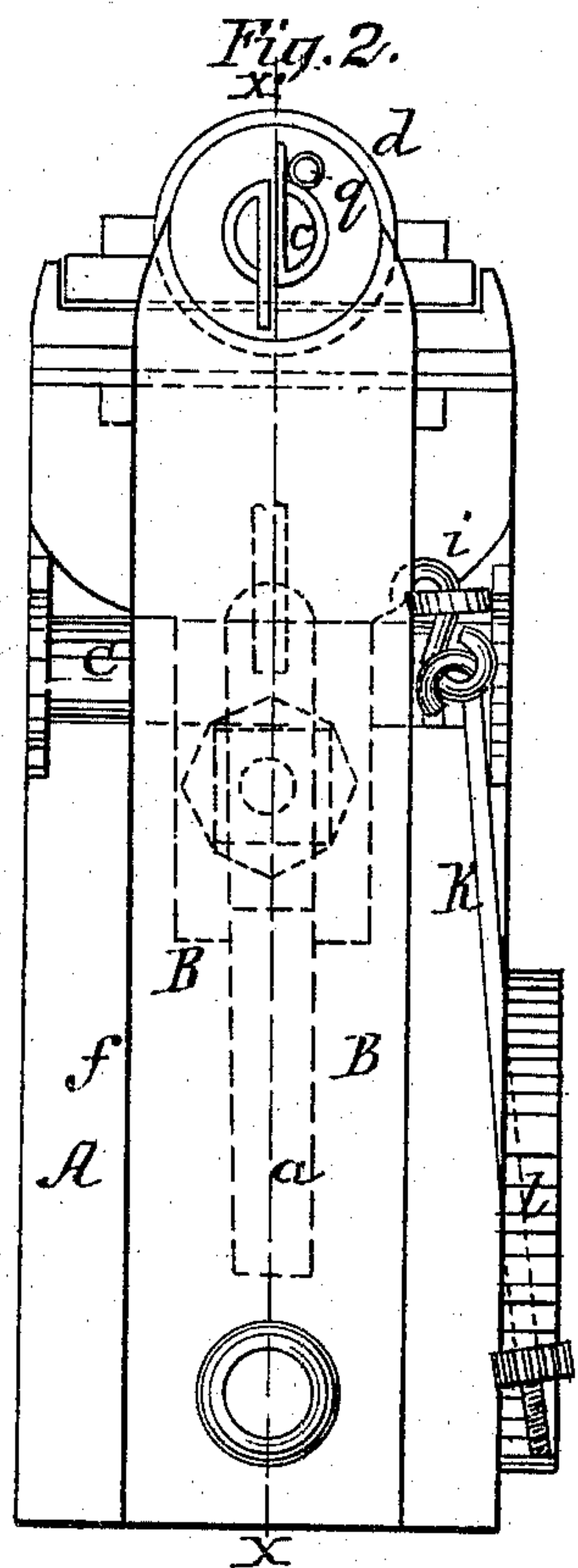
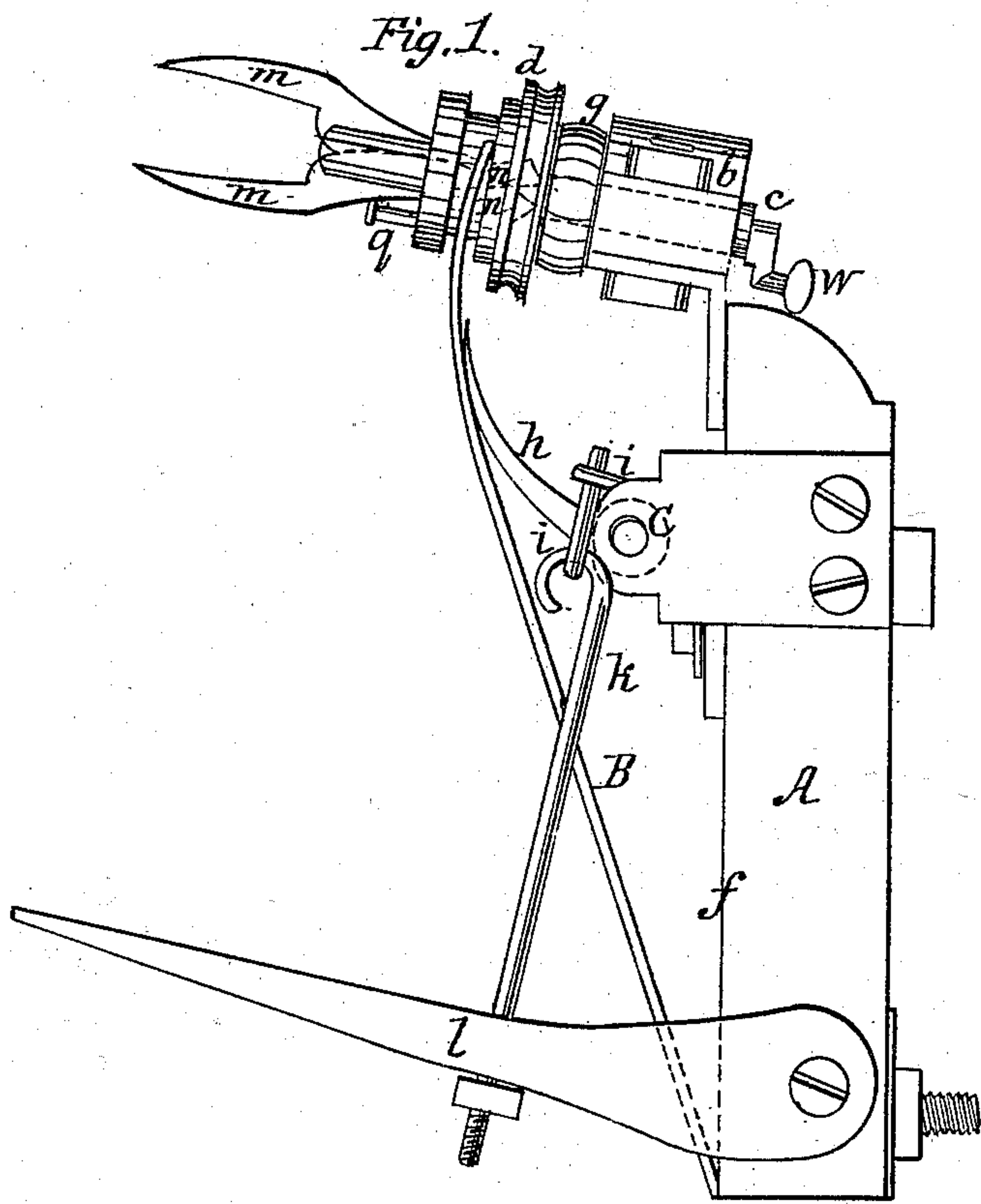


J. F. BARRETT.
Grain Binder.

No. 17,135.

Patented April 28, 1857.



UNITED STATES PATENT OFFICE.

J. F. BARRETT, OF NORTH GRANVILLE, NEW YORK.

IMPROVED APPARATUS FOR BINDING GRAIN.

Specification forming part of Letters Patent No. 17,135, dated April 28, 1857.

To all whom it may concern :

Be it known that I, J. F. BARRETT, of North Granville, in the county of Washington and State of New York, have invented a new and useful Improvement in Mechanism for Binding Grain; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a side view of the binder. Fig. 2 is a front view of same. Fig. 3 is a section on line *xx*, perpendicular to the plane of face *f*.

Similar characters of reference in the several figures denote the same part.

The object of this invention is to facilitate the binding of grain by manual agency.

The nature of the invention consists in facilitating the twisting of the band by jaws closed at the will of the operator, and made to revolve simultaneously with their grasping, the details of construction and operation being as follows:

In the drawing, A *a* is the stock holding the binding mechanism, which is to be secured to any convenient portion of the harvester by a bolt passed through slot *a*.

Upon the upper portion of this stock is the shaft *c*, held in the casing *b*. On this shaft is a loose pulley, *d*, driven by a band connected with some of the driving mechanism of the harvester. The pulley is embraced by a fork in the end of a spring, B, whose tendency being toward face *f* of the stock, causes the face *e* of the pulley to keep in contact with its seat *g*, as shown in the drawing, except some extraneous force be applied to drive said pulley toward the end of its shaft *c*. This force is applied through the arm *h* of the rock-shaft C, said shaft being connected with the lever *l* by chain *i* and rod *k*, so that a depression of the lever will force the pulley along the shaft.

The shaft *c* is slotted, as shown in Figs. 2 and 3, and has within the slot the shanks of the jaws *m*, curved, as shown in the drawing. When the pulley is upon its seat it forces the shanks *n* within the slot, and the jaws open; and when the pulley moves toward the end of the shaft it forces the jaws to close, the shanks rising from the slot in rear of the pulley. On the face of the pulley is a stud, *q*, which comes in contact with one of the jaws as the pulley is forced out, and causes the shaft *c* to revolve.

In operation, the attendant holds the straw for the band in both hands, and receives the cut grain upon it as the grain falls. When sufficient for a sheaf has been received, he crosses the band, placing it between the jaws *m*; then, with his foot depressing lever *l*, the jaws are made to revolve, and by twisting the band tighten it upon the sheaf. The removal of the foot from the lever stops the twisting operation. The twisted end has then only to be tucked under the band by the operator, and the binding is completed. A weight, *w*, keeps the shaft *c* in such a position that the jaws will open vertically, that being the position they must assume to receive the succeeding band.

What I claim as my invention in devices for facilitating the binding of grain, and desire to secure by Letters Patent, is—

Twisting or tightening the band after it has been crossed upon the sheaf by the operator, by means of jaws *m m*, working in balanced shaft *c*, in combination with the devices above described, for simultaneously closing and rotating said jaws, substantially in the manner set forth.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

J. F. BARRETT.

Witnesses:

GEO. PATTEN,
JAS. D. CLARY.