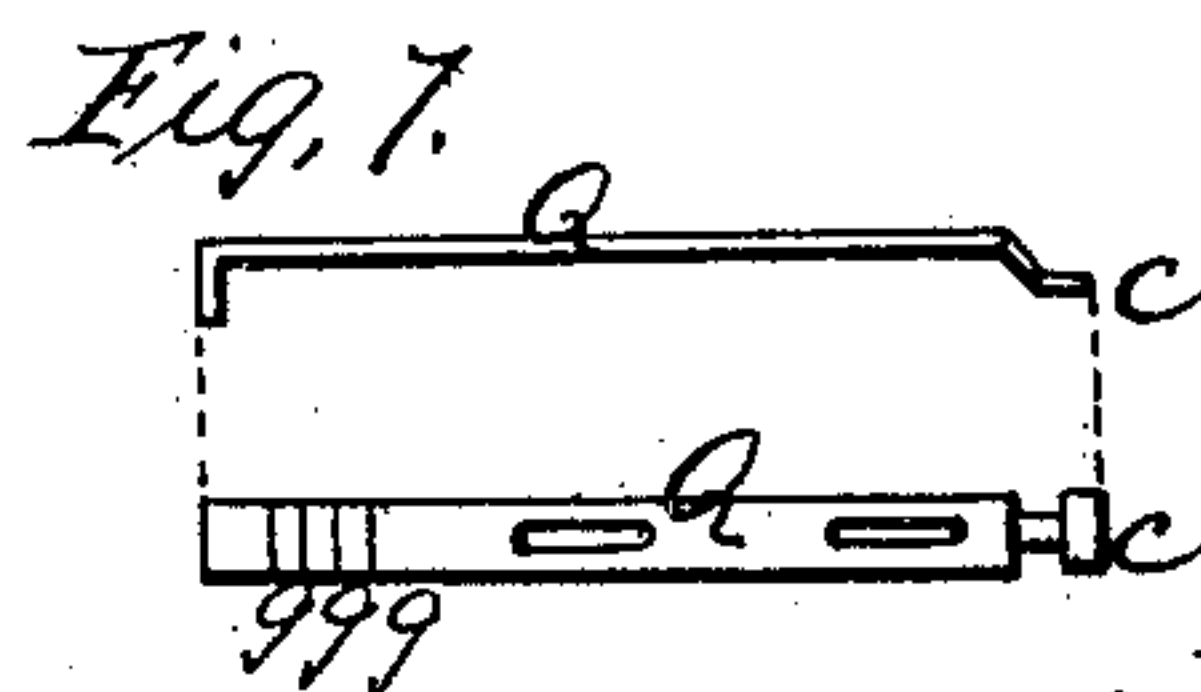
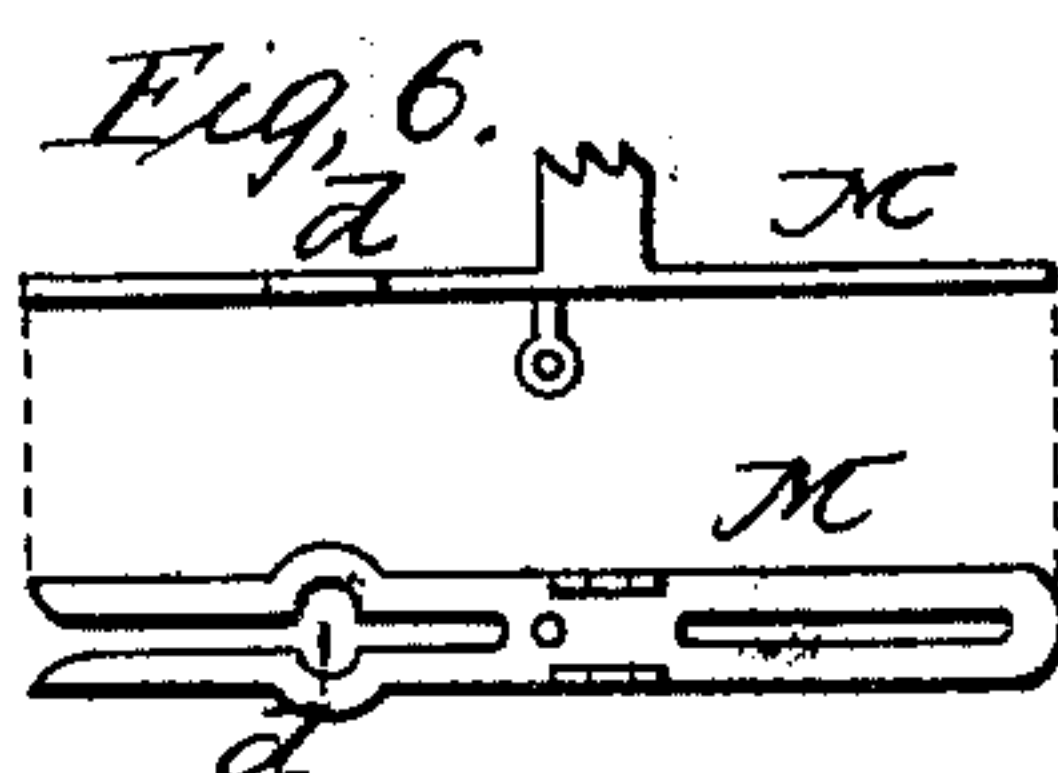
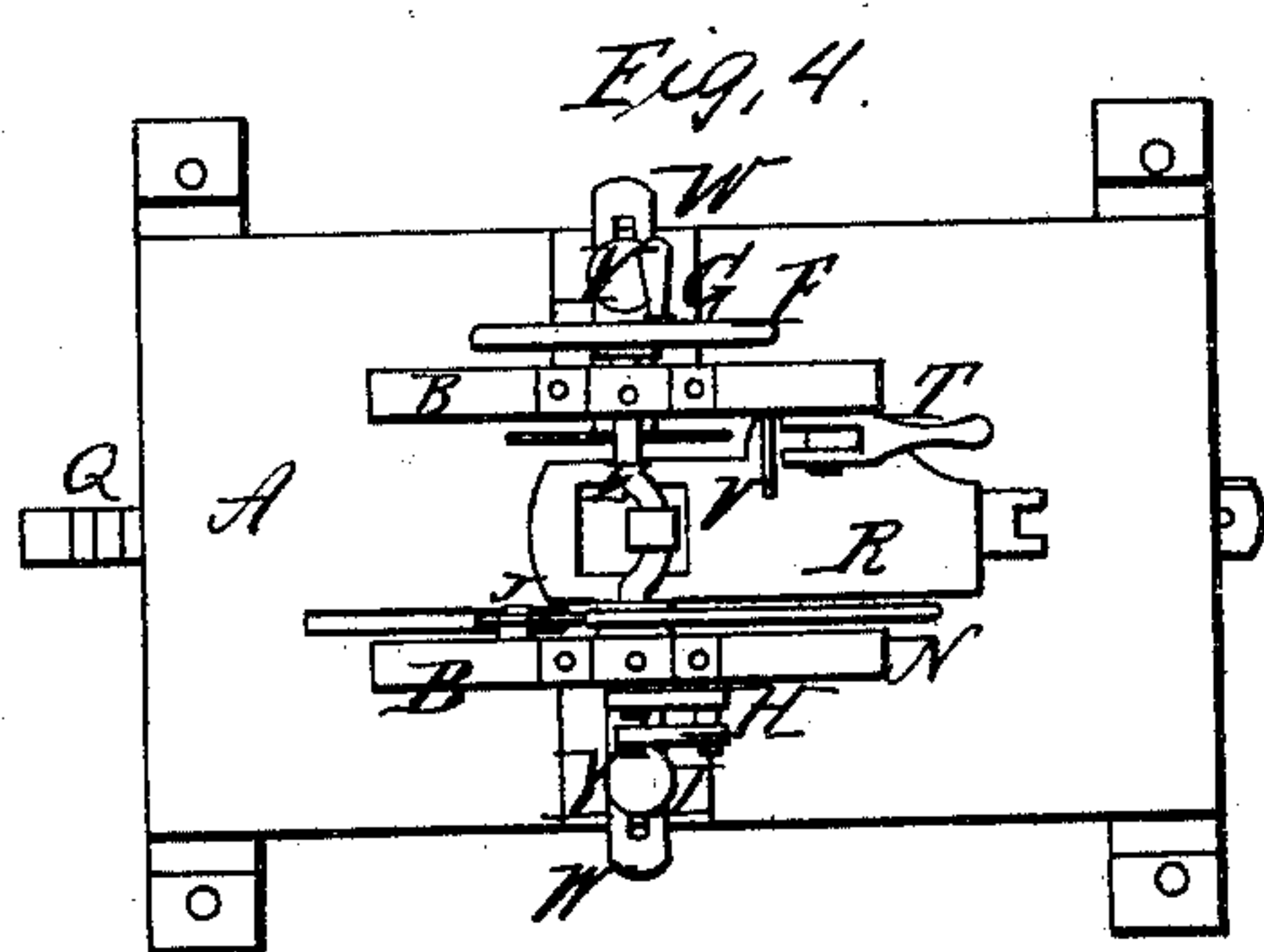
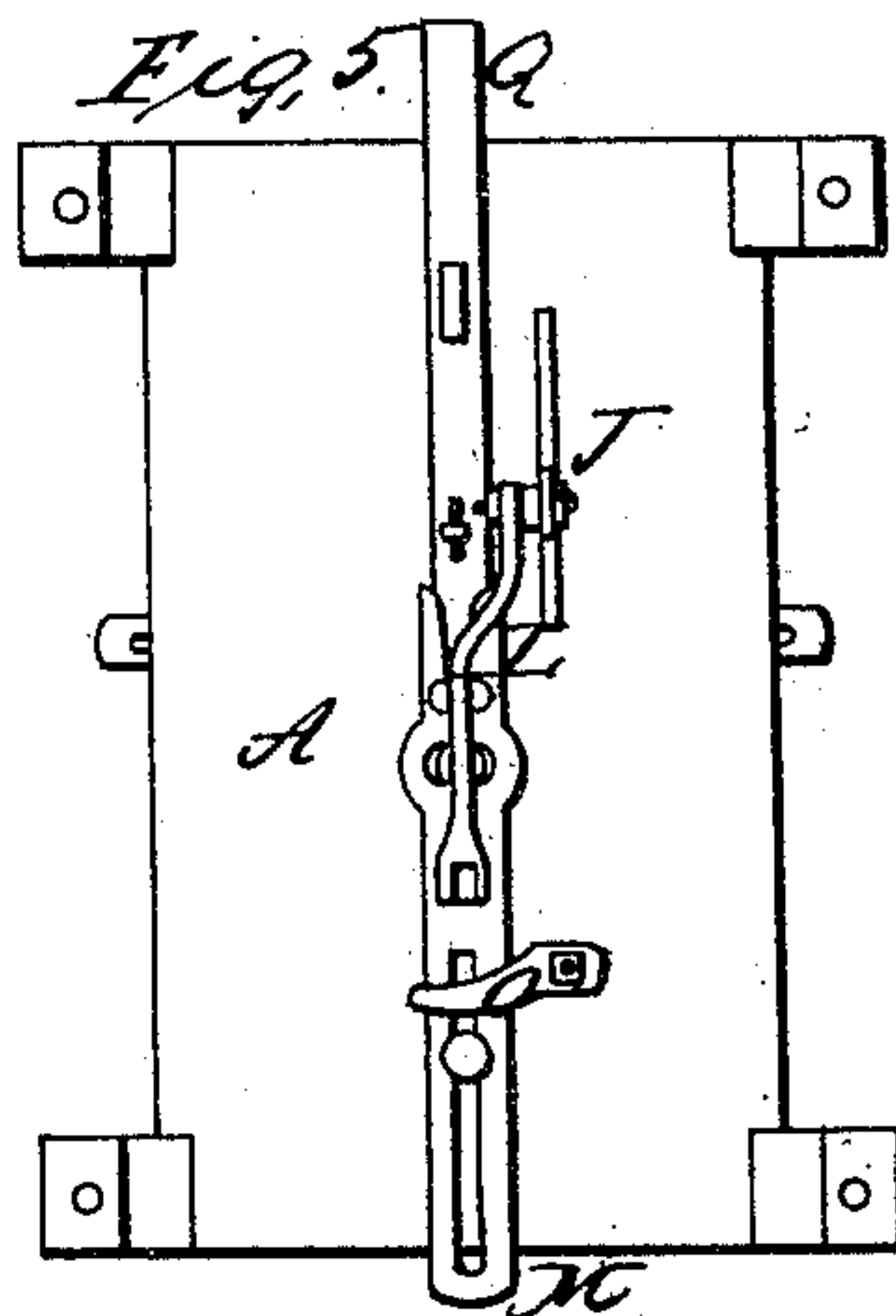
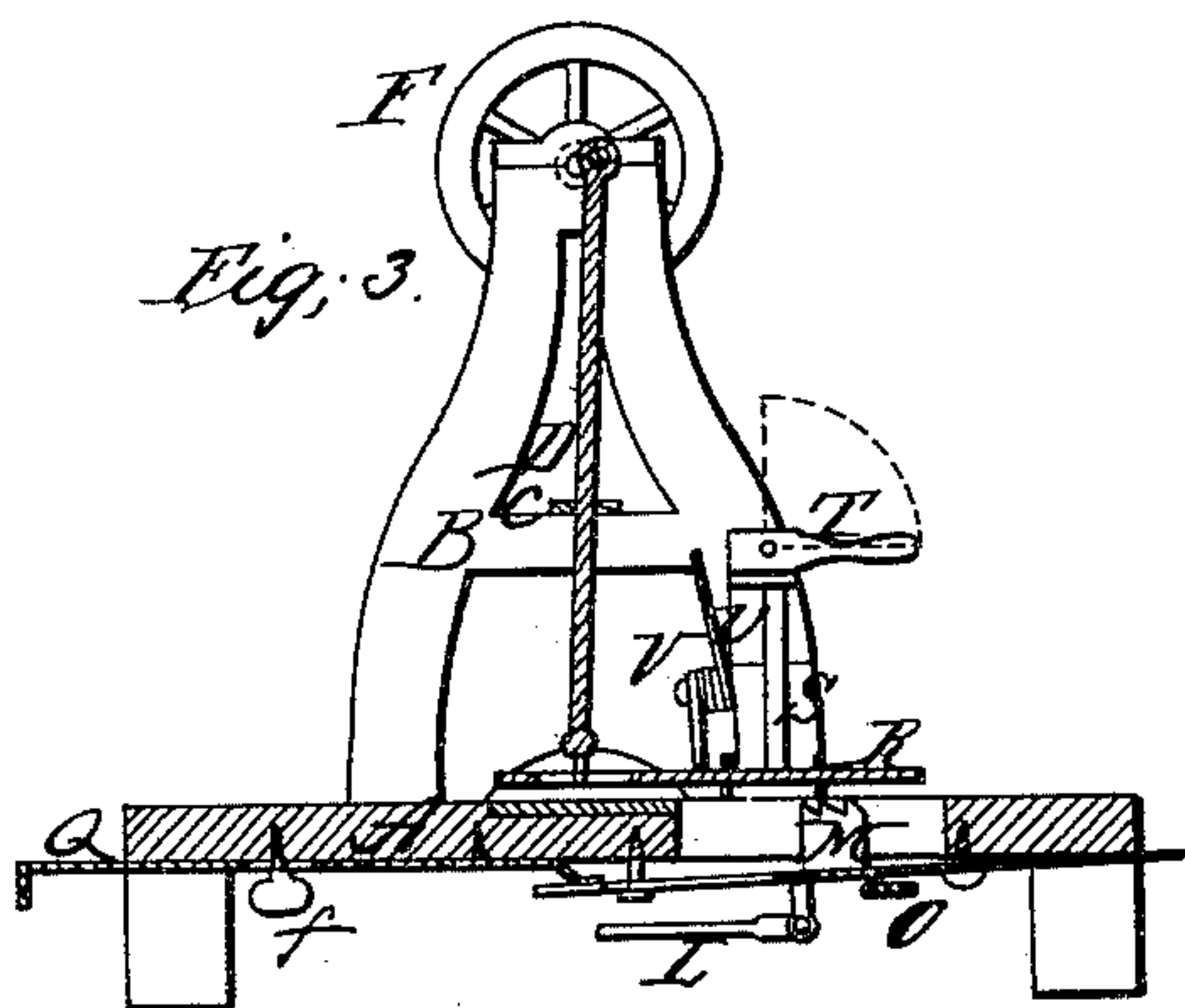
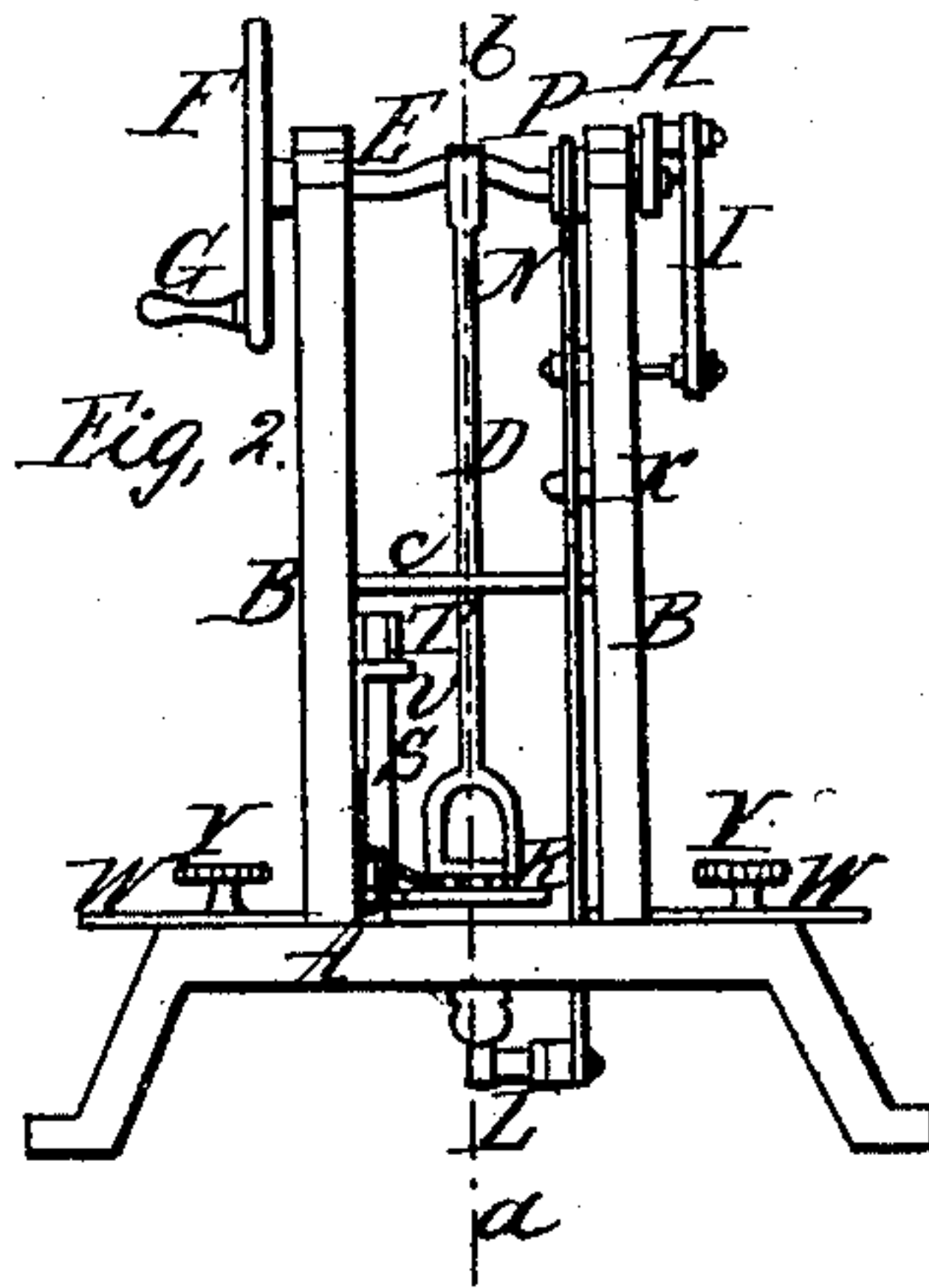
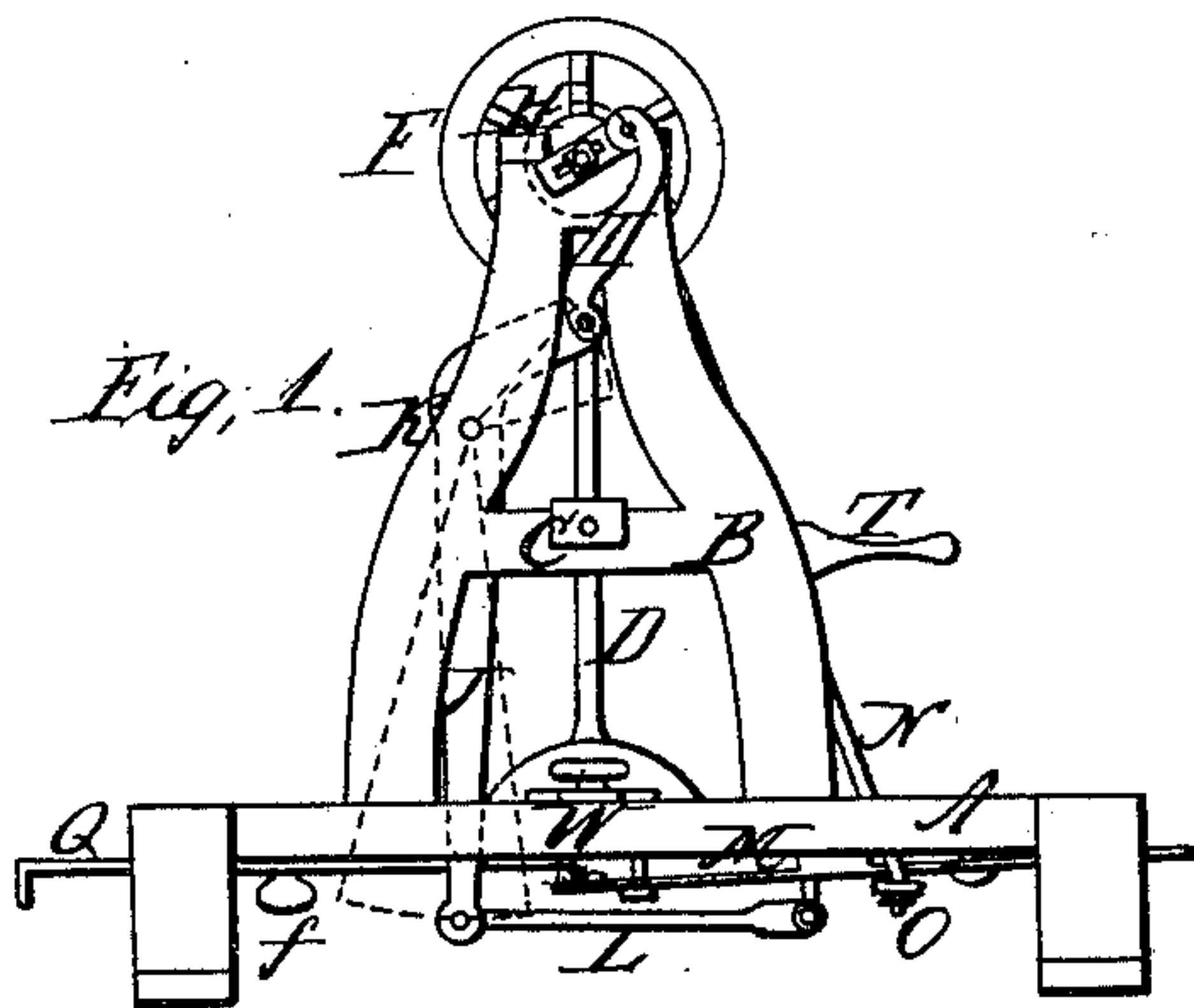


J. MATHEIS.

MACHINE FOR PUNCHING LEATHER STRAPS FOR FLY NETS.

No. 90,281.

Patented May 18, 1869.



Witnesses,
R. S. C. Brown
John Gill

Inventor,
John Mathis

United States Patent Office.

JOHN MATHEIS, OF OTTAWA, ILLINOIS.

Letters Patent No. 90,281, dated May 18, 1869.

IMPROVED MACHINE FOR PUNCHING LEATHER STRAPS FOR FLY-NETS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN MATHEIS, of Ottawa, in the county of La Salle, in the State of Illinois, have invented a new and useful Improvement in a Machine for Punching Leather Straps for Fly-Nets; 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 accompanying drawings, making part of this specification, in which—

Figures 1 and 2 are vertical plans;

Figure 3, a section through *a b*, fig. 2;

Figure 4, a horizontal plan;

Figure 5, a view of the under side of the machine; and

Figures 6 and 7 are detached pieces.

My invention consists in an improved feeding-device, whereby the machine, as heretofore built by me, and secured by a patent of the United States, is reduced in bulk and weight and cheapened in its construction.

It becomes thus more especially adapted to the purpose of small manufacturers whose limited trade does not permit them the outlay of the heavier and more expensive machine.

My invention also consists in an improved pressure-foot to hold down the work on to the bed-plate.

I construct, of cast-iron, a bed-plate, *A*, having four legs, and to which are bolted the two frame-pieces *B B*.

These frame-pieces are also connected by the bar *C*, through which passes the punching-bar *D*, driven by the crank on the shaft *E*.

On one end of the shaft *E* is the fly-wheel *F*, with a handle *G*.

On the other end of the same shaft is an adjustable crank, *H*, to which is attached the pitman *I*.

This pitman, *I*, is attached to one end of the lever *J*, having its fulcrum at *K*, while the other end projects through and under the bed-plate *A*, and is there connected with the pitman *L*, thus communicating motion to the feed-bar *M*, fig. 6.

This feed-bar, *M*, has, besides this longitudinal motion, also a vertical motion, which it receives from the rod *N*, having at its lower end a cross-head, *O*, with a nut, while the upper end runs on the eccentric *P*, which

is so set on the shaft *E* that the rod *N* and the feed-bar *M* are raised up at the end of the stroke.

The feed-bar *M* then engages the nipple *c* of the gauge-bar *Q*, fig. 7, and slides forward thereon, being held up against the work until the enlarged place *d*, on the feed-bar *M*, fig. 6, meets the nipple *c*, fig. 7, when said feed-bar falls down and ceases to feed, although it may not then have arrived at the end of the stroke.

As the gauge-bar *Q* is movable in slots *e e*, fig. 7, and can be fastened by the set-screw *f*, it will be seen that by moving said bar, *Q*, in or out, the length of the feed (that is, the distance between the holes to be punched) can be regulated at will, and for this purpose there is on it a series of marks, *g g g*, fig. 7, by which the workman is governed in adjusting the machine.

A pressure-foot, in some respects similar to those used for sewing-machines, is adapted to the bed-plate *A*.

It consists of the plate *R*, the rod *S*, and the lever *T*, which lever is so shaped, that by raising it up in a vertical position, its short end rests on the support *U*, thereby holding up the plate *R* off from the work.

When the lever *T* is turned down, the spring *V*, pressing on the plate *R*, presses down the same on to the work.

Gauges, *W W*, sliding in ways, and fastened by set screws, *Y Y*, are adapted on each side.

I claim as my improvement, and desire to secure by Letters Patent the following parts, disclaiming all other parts—

1. The feeding-device, composed of the combination of the adjustable crank *H*, the pitman *I*, the lever *J*, the pitman *L*, the feed-bar *M*, the rod *N*, with eccentric *P*, and the gauge-bar *Q*, the same only when applied to a machine for punching leather straps, substantially as described.

2. The pressure-foot, consisting of the plate *R*, the rod *S*, the support *U*, the lever *T*, and the spring *V*, the same only when applied to a machine for punching leather straps, substantially as described.

Witnesses:

C. S. O. CRANE,
JOHN HILL.

JOHN MATHEIS.