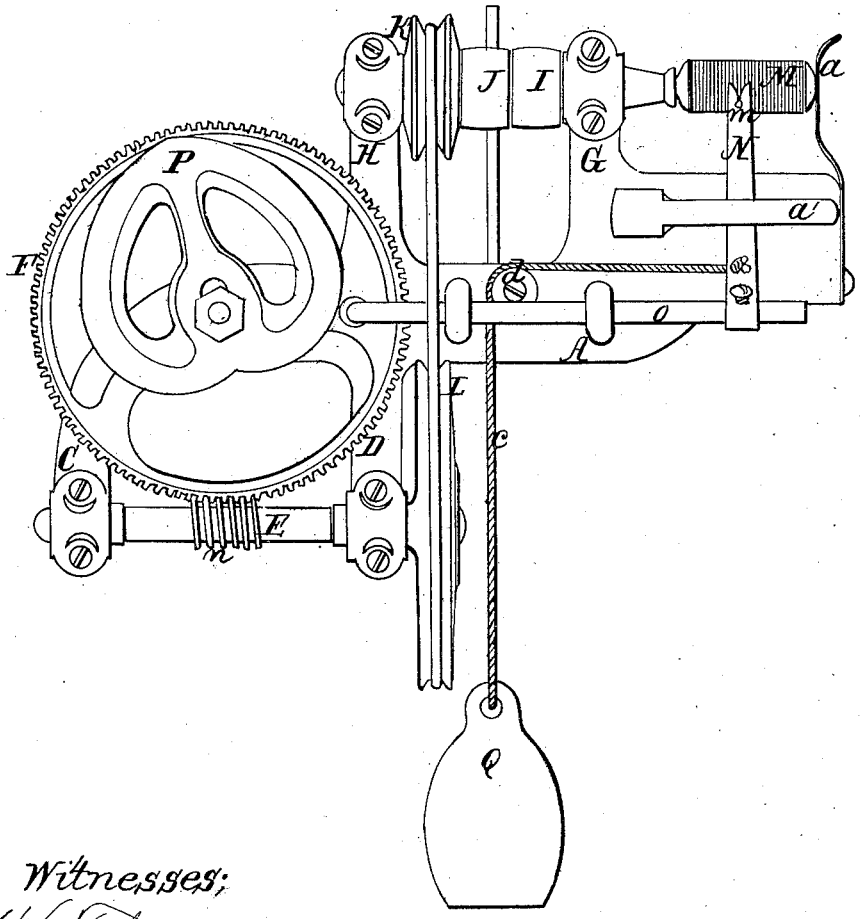
Sheet 1- 2 Sheets.

I. Gibbs.

Spooling Machine for Tape Looms.

No. 51,038. Patented Nov. 21, 1865.

Fig: 1.



Witnesses;

N. L. Fuller

J. Henry Hill Jr

Inventor;

I. Gibbs

Sheet 2 - 2 Sheets.

I. Gibbs.

Spooling Machine for Tape Looms.

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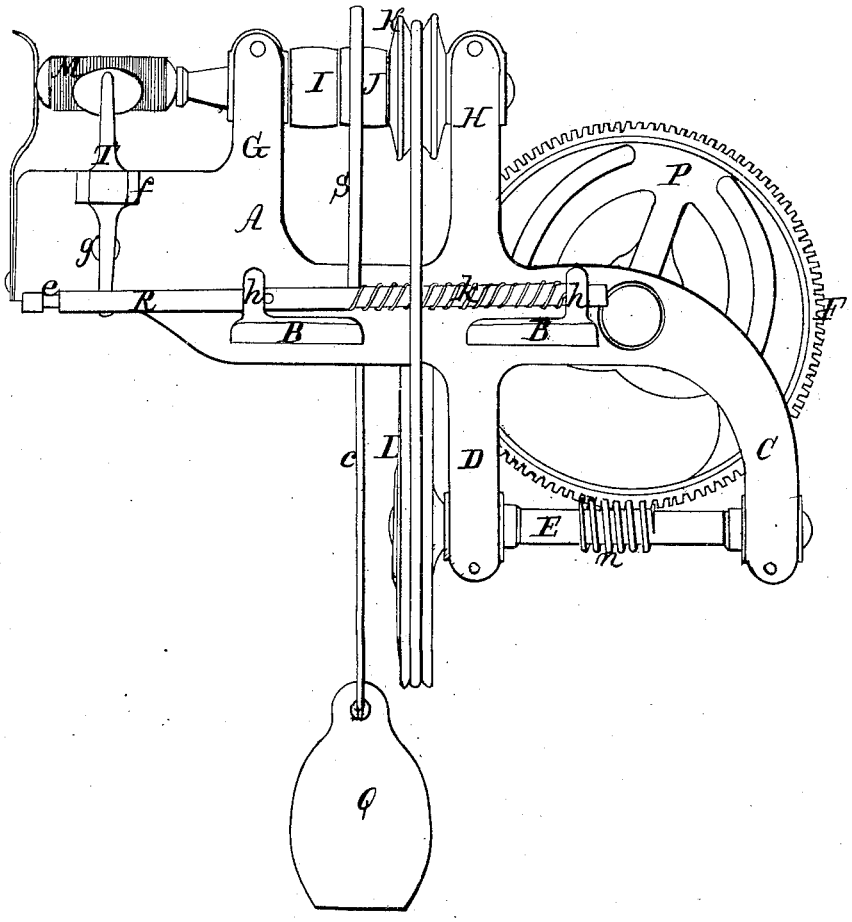
Fig. 2



Witnesses;

H. L. Spiller

J. Henry Hill

Inventor;

I. Gibbs

UNITED STATES PATENT OFFICE.

I. GIBBS, OF WARREN, MASSACHUSETTS.

IMPROVEMENT IN SPOOLING-MACHINES FOR TAPE-LOOMS.

Specification forming part of Letters Patent No. **51,038**, dated November 21, 1865.

To all whom it may concern:

Be it known that I, I. GIBBS, of Warren, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Machines for Spooling Yarn for Tape-Looms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a front view of my improved spooling-machine for tape-looms, and Fig. 2 represents a back view of Fig. 1.

In the drawings, A represents the cast-iron frame, having two projecting ears, B B, by which the machine is fastened to the loom by screws or bolts passing through said ears into the plate of the loom. The rear end of frame A terminates with two projections, C and D, in which shaft E and journal of main gear-wheel F are supported. In the upright projections G H is supported the spooling-spindle with its tight and loose pulleys I J and the pulley K, from which power is communicated to the pulley L on screw-shaft E.

M is the spool, which is represented as filled with yarn. The spool is held in place upon the spindle by a spring, *a*, which is provided with a projection to enter a hole in the end of the spool.

N is a yarn-guide, the lower end of which is fastened to guide-rod O, the former being retained in position by reason of its working between the guide-piece *a'* and frame A. The rear end of guide-rod O is provided with a friction-roll, *b*, which is caused to press against the cam P by the weight Q, attached to cord *c*, which, passing over the roll *d*, is fastened to the guide N, as clearly indicated in the drawings.

R is a spring-shipper, provided with a shipping-rod, S, which passes up by the loose and fast pulleys I and J. The front of shipper R is provided with a groove, *e*, to receive the lower end of the shipping-pad T, which has its fulcrum at *f*, its lower end being held out by the spiral spring *g*, which is retained in a recess in frame A. Shipper R slides and is supported in ears *h h*, and is forced forward into the position shown in Fig. 2 by the spiral spring *k*.

The operation is as follows: The empty spool or bobbin being placed in position, shipper R is forced back and the lower end of the shipper-pad T slipped into the notch or groove *e*. The thread is then passed through the slit *m* in guide N, and power being applied by means of a band or belt to the tight-pulley J, the spooling commences. As the spool or bobbin revolves pulley L and shaft E are caused to revolve by means of a band passing over pulley K on the spooling-spindle. As the shaft E revolves its screw causes the large gear F and cam P to revolve, they being fastened together, thereby giving a reciprocating motion to the guide N, which causes the yarn to be wound evenly upon the spool or bobbin M. The winding continues until the spool or bobbin is full, when the upper end of the shipping-pad T, being pressed out, causes the lower end to slip from the slot or groove *e* in the shipper R, and the latter, being liberated, springs forward into the position shown in Fig. 2, thus bringing rod S against the driving band or belt, which is thereby guided upon the loose pulley I and the working of the machine stopped.

By this machine the operative can spool or wind her own bobbins without interfering materially with a proper attention to the tape-looms.

The machine is compact and not liable to get out of order, and can be readily attached to the loom.

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

1. The combination, with the frame A, of the supporting-brackets B B, projections or arms C D and G H, as and for the purposes stated.

2. The combination with the shipper R, of the spring *k*, groove *e*, shipper-pad T, and shipper-rod S, substantially as set forth.

3. The combination of cam P, gear F, screw-shaft E, with guide-rod O and guide N, constructed and arranged substantially as and for the purposes set forth.

I. GIBBS.

Witnesses:
H. L. FULLER,
J. HENRY HILL.