

J. Buser *Covering Cord.*

N^o 49,825.

Patented Sept. 5, 1865.

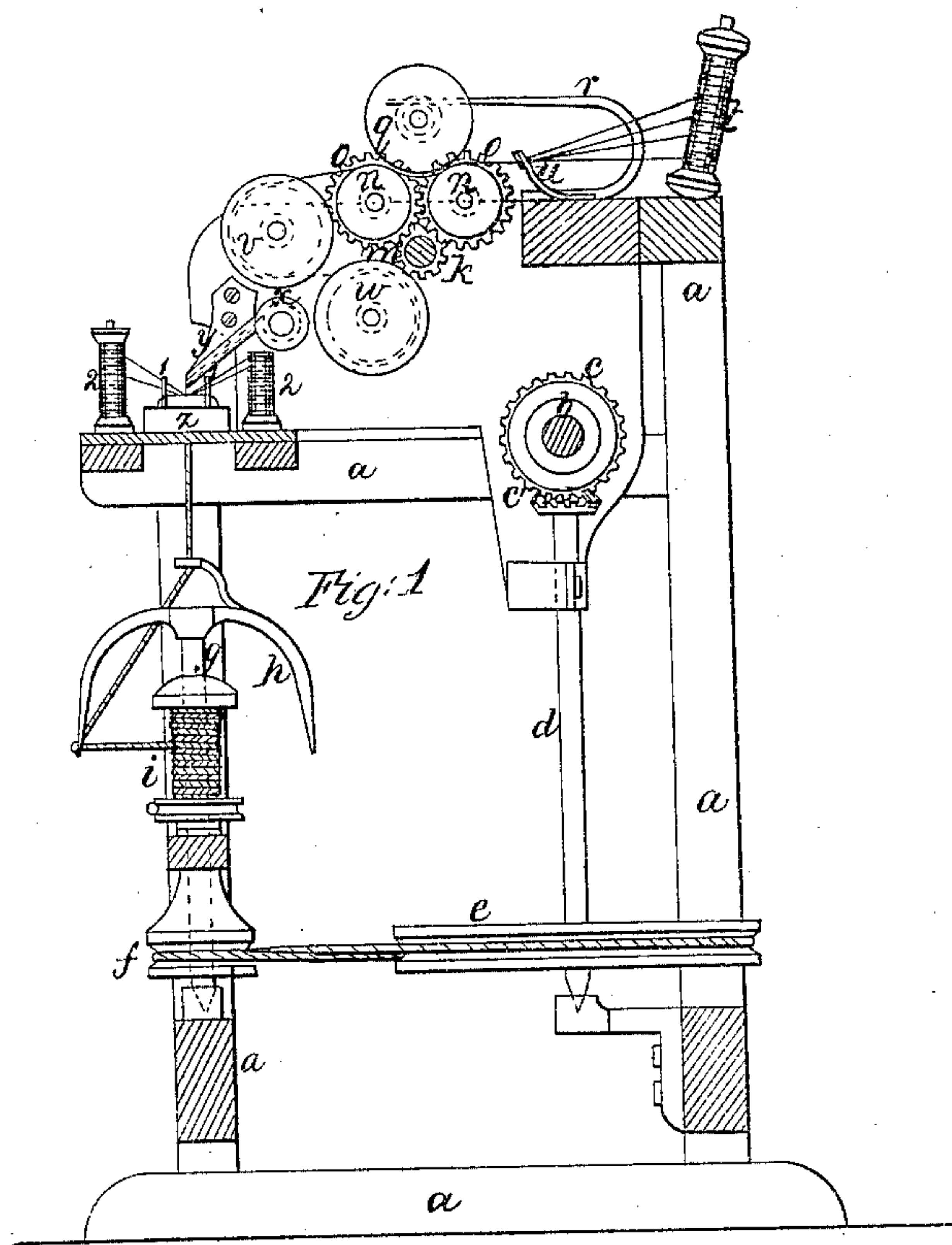
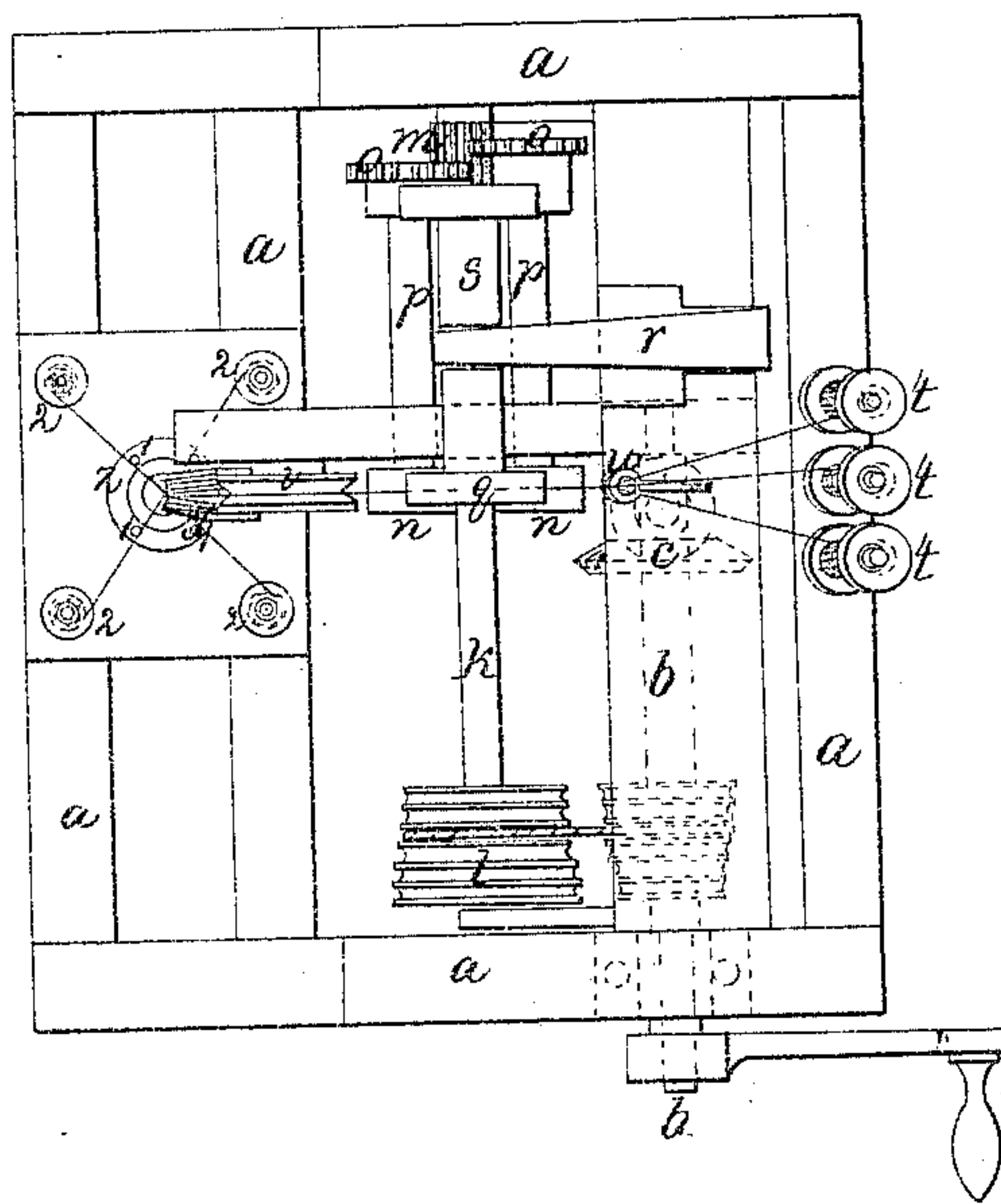


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN BUSER, OF NEW YORK, N. Y., ASSIGNOR TO HEINEMANN & SILBERMANN, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR COVERING CORDS.

Specification forming part of Letters Patent No. 49,825, dated September 5, 1865.

To all whom it may concern:

Be it known that I, JOHN BUSER, of the city and State of New York, have invented, made, and applied to use an Improved Machine for Making Bullion for Tassels, Cords, &c.; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of said machine, and Fig. 2 is an elevation of the operative parts, a portion of the frame being removed.

Similar marks of reference denote the same parts.

The fringe or bullion of tassels is often made of cotton threads twisted together, with a covering of silk or woolen threads, and cords are in some cases made in a similar manner, the two or more strands receiving a counter-twist as laid together.

In manufactures of this class it is important that the foundation-threads should be twisted together with great uniformity and smoothness, or else the covering of silk or other more costly material will have to be much thicker to entirely cover the foundation-threads.

My invention consists in a trough, through which the foundation-threads pass and in which they are twisted, in combination with a series of rollers or other tension apparatus that regulates the delivery with uniformity of the foundation-threads; and I also combine with said trough a spool-carrier and ring-covering head that regulates the covering material as it passes onto the surface of the bullion.

In the drawings, *a* is a frame of suitable size and shape.

b is the driving-shaft, with gear *c*, which meshes into the gear *c'* on the vertical shaft *d*.

e is a pulley on *d*, with a belt to the pulley *f*, that is on the spindle *g*, carrying the fly *h*, spool *i*, and a friction-spring to the spool, as usual.

k is the shaft that drives the thread-regulating rollers, which shaft receives motion from *b* by cone-pulleys *l* and a belt. The shaft *k* has on it a pinion, *m*, that rotates the rollers *n n* through the gears *o o* and shafts *p p*; and *q* is a friction-roller on a shaft, *s*, pressed down by the spring *r*, to hold the threads passing from the spools *t t*, through the eye *u*, and between the rollers *n, n*, and *q*, to prevent the said

threads drawing through the machine too fast in consequence of the friction applied to the spool *i*. From the rollers *n* the threads pass around the grooved pulleys *v, w*, and *x* to the trough *y*, the end of which is over the center of the spindle *g*. The threads pass through the ring-covering head *z* to the fly of the spindle *g*, and around this ring *z* are guide-pins *1 1*, against which the silk or covering threads draw as they pass from the spools *2 2* to the bullion or covered threads,

The spools *2* are placed on stationary wires or spindles.

It is to be understood that as the fly and spindle *g* twist the threads forming the foundation that twist extends up into the trough *y*, and hence said trough insures the proper laying together of the foundation-threads, and makes that foundation smooth and uniform in consequence of the twist taking place in the V-shaped bottom of the trough by the rotation of the mass of threads by the fly, and the threads being under tension insures great uniformity, so that when the foundation reaches the ring-covering head *z* it is smooth and firmly consolidated, and hence the covering can be applied much more uniformly than before, and less covering material is required.

I do not herein claim twisting the strands together previous to their reception of the covering material, as that is effected in the machine patented December 18, 1860, to H. Heinemann and myself.

What I claim, and desire to secure by Letters Patent, is—

1. The trough *y*, in combination with a series of rollers or equivalent apparatus to present the foundation-threads to said trough and apply to them the required tension while being drawn along said trough and twisted, substantially as specified.

2. In combination with the trough *y*, the ring-covering head, with its pins, for guiding the covering-threads as they are twisted upon the foundation as the latter passes from the trough to the fly or spool, as specified.

In witness whereof I have hereunto set my signature this 23d day of June, A. D. 1865.

JOHN BUSER.

Witnesses:

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