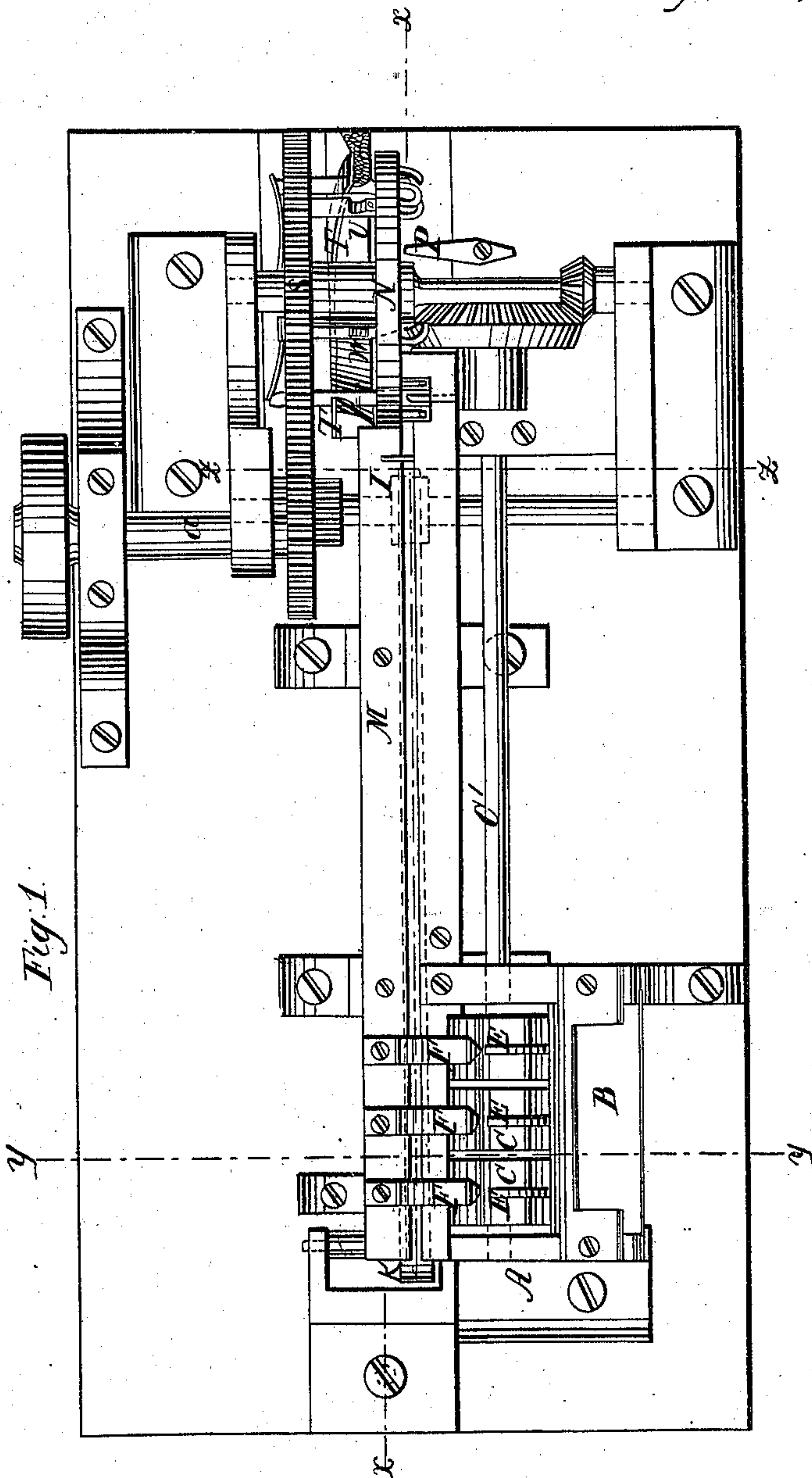


A. J. Ockington. Sheet 1, 2 Sheets.
Clothes Pin Mach.
N^o 94,838. Patented Sept. 14, 1869.



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A. J. Ockington *Sheet 2, 2 Sheets.*
Clothes Pin Mach.

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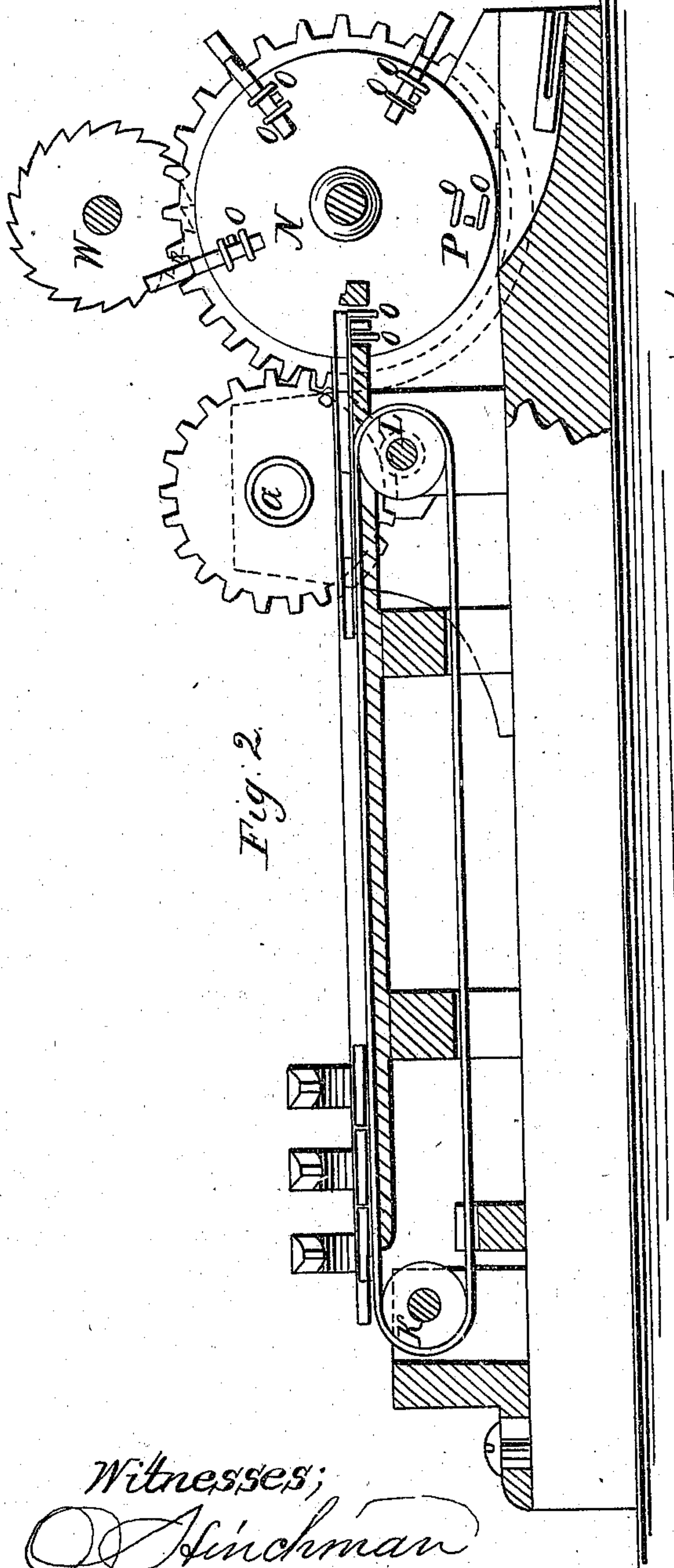


Fig. 2.

Fig. 4.

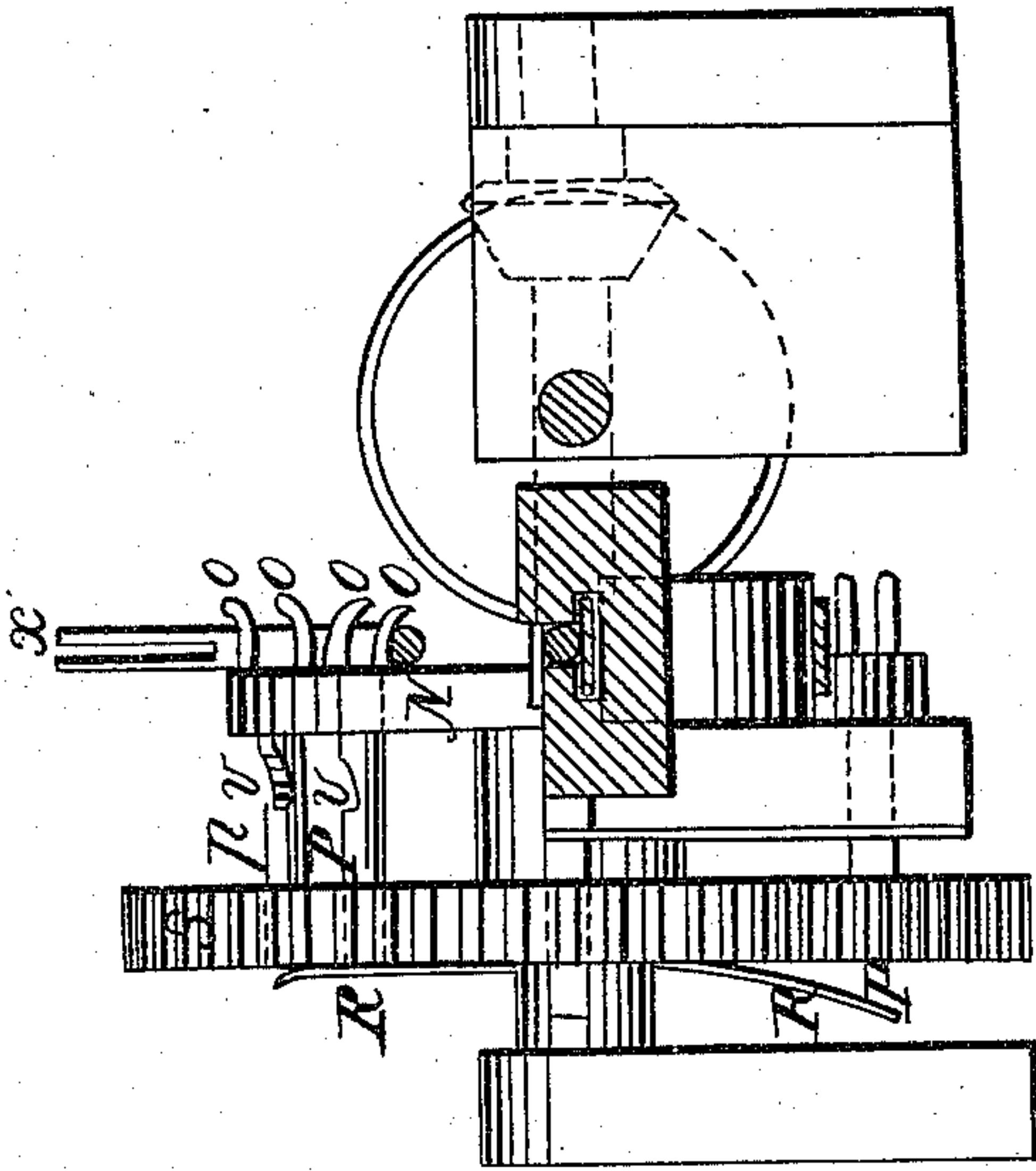
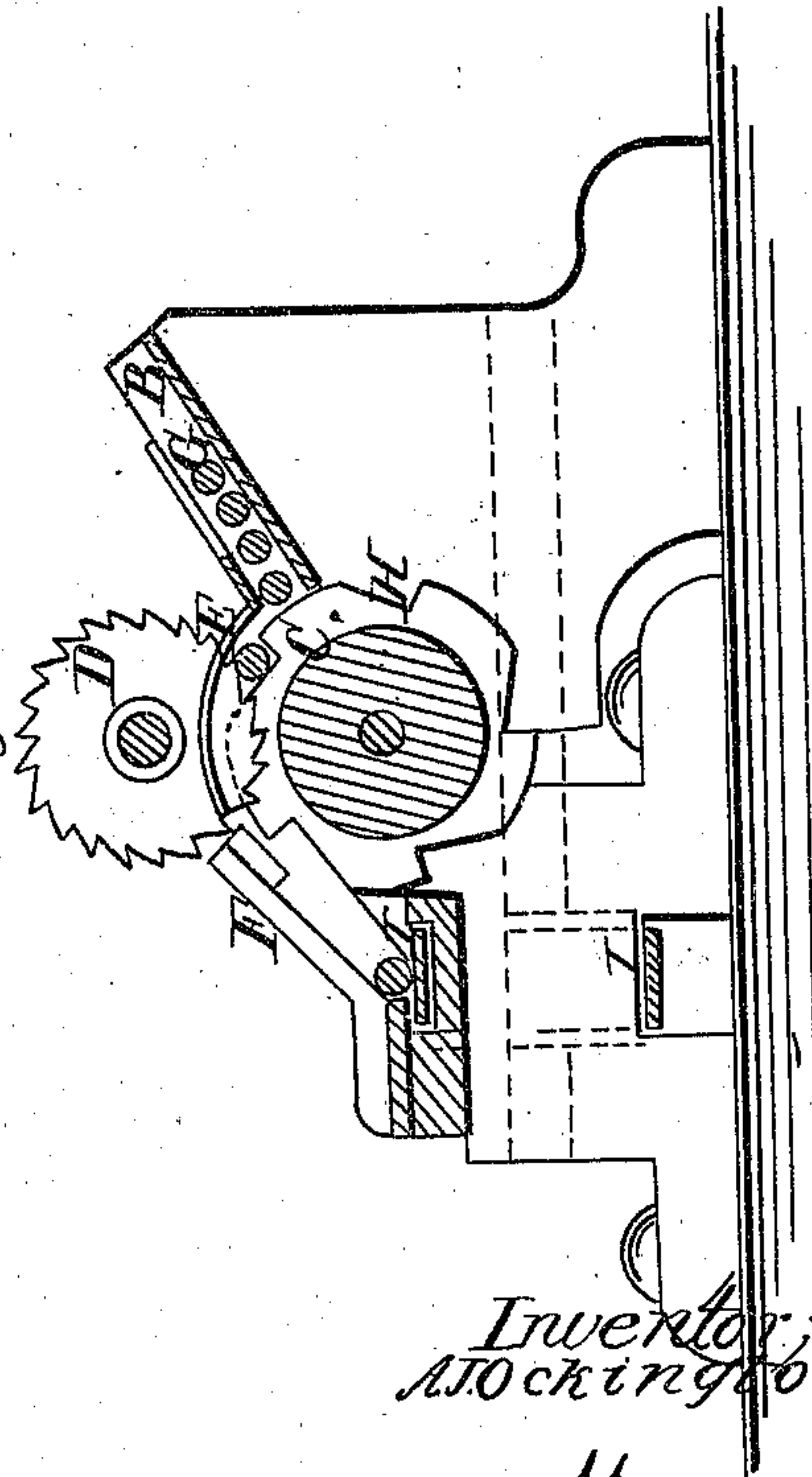


Fig. 3.



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United States Patent Office.

A. J. OCKINGTON, OF STRATFORD HOLLOW, NEW HAMPSHIRE.

Letters Patent No. 94,838, dated September 14, 1869.

IMPROVEMENT IN MACHINERY FOR MAKING CLOTHES-PINS.

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, A. J. OCKINGTON, of Stratford Hollow, in the county of Coos, and State of New Hampshire, have invented a new and improved Machine for Making Clothes-Pins; and I do hereby declare that the following in a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide a simple and efficient automatic machine for receiving the turned blanks from one or more lathes, sawing the said blanks, which are long enough for three or more pins, and slotting and delivering them, all as hereinafter specified.

Figure 1 represents a plan view of my improved machine;

Figure 2 represents a longitudinal section, taken on the line *x x* of fig. 1;

Figure 3 represents a transverse section, taken on the line *y y* of fig. 1; and

Figure 4 represents a transverse section, taken on the line *z z* of fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the frame of a receiving and sawing-apparatus, consisting of a hopper, B, or inclined chute, a series of grooved carrying-cylinders, saws D, and guides E and F.

This apparatus is designed to be so placed relatively to a turning-lathe, wherein the blanks G are turned in lengths for three or more pins, so that as the said blanks are dropped from the lathe they will fall into the chute B, and roll down against the faces of the cylinders C, revolving on the shaft C'.

These cylinders have longitudinal grooves, H, so shaped that as each groove passes the mouth of the chute, one of the blanks will fall in and be carried over the said cylinders, which brings the blanks against the saws D, on a mandrel parallel with the cylinders.

For sawing the blanks into three pieces, four saws will be used, one at each outer end of the outer cylinders, and one in each of the spaces between the cylinders. By these saws the blanks are cut into the proper lengths for the pins as they are carried over by the cylinder from the hopper to the carrier I, the said blanks being held in the grooves by the guides E and F.

The said carrier I consists of an endless belt, working over wheels K and L, and along a trough, M.

It conveys the blank pins from the sawing-apparatus, delivering them to a carrying-wheel, N, which takes them up, one at a time, by means of two hooked fingers, O, projecting from one side of the said wheel, near the face, over which fingers the ends of the blanks are presented, and a spring-actuated wedging-finger, P, working laterally through the wheel, and arranged to

spring forward over the blank at the moment the hooked fingers arrive under the said blank.

These spring-fingers slide in suitable supports in the gear-wheel S, which operates the wheel N, and are forced forward by the springs R, after being disengaged from a curved spiral guide, T, which engages with notches V, to draw the said spring-fingers back to discharge the pins, and hold them in the retracted position until the proper time for securing the blanks.

The blanks, so engaged, are carried up by the wheel N and presented to a saw, W, which slots them, as shown at *x*, fig. 4, after which they are discharged by the withdrawal of the spring-finger P, as above stated, and a discharger, P'.

Any number of these sets of hooked and spring-fingers may be arranged on the wheel N, according to its size and speed relatively to that of the carrier I.

A stop, Y, is provided inside of the fingers, to arrest the blanks at the right point.

The carrier is designed to be run at such a speed that all the blanks delivered at once from the carrying-cylinder C will be moved out of the way before a succeeding delivery.

It may also be so arranged as to receive similar deliveries from another receiving and cutting-apparatus, arranged on the opposite side, and receiving the blanks from another lathe.

The operating motion may be imparted to these devices in any preferred way.

In this instance I have represented a driving-shaft, *a*, from which the wheel N is operated by gear-wheels *b* and *c*, the shaft of the latter driving also the shaft C'. The belt is operated by a shaft, *d*, deriving motion through a pinion from the wheel on the shaft *a*.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The combination of the inclined hopper B, recessed blank-holder and transferrer C, and guide E, arranged as described, so that the first will feed the blanks by gravity to the second, which shall transfer and hold them to the saw, as set forth.

2. The carrier-wheel N, provided with the hooked fingers O and sliding spring-fingers P, combined with the carrier I, and arranged to present the blanks to a saw, W, all substantially as specified.

3. The combination of rotating-wheel N, provided with spring-holding fingers P, as shown, with the perforated gear S, spring R, and spiral guide T, all arranged and operating together, as described.

A. J. OCKINGTON.

Witnesses:

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