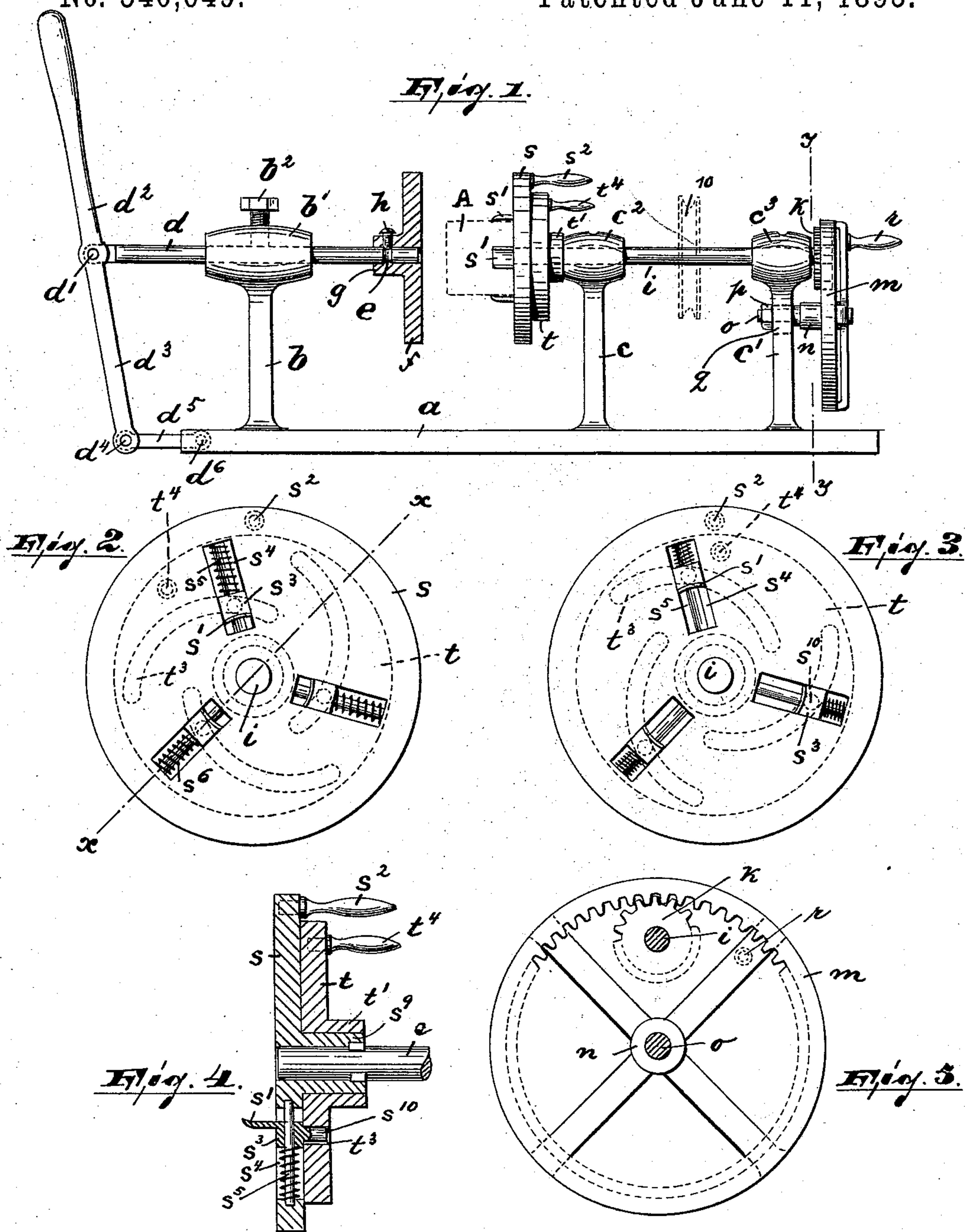


(No Model.)

B. EASTWOOD.  
RIBBON BLOCKING MACHINE.

No. 540,649.

Patented June 11, 1895.



WITNESSES:

INVENTOR :

WITNESSES:  
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# UNITED STATES PATENT OFFICE.

BENJAMIN EASTWOOD, OF PATERSON, NEW JERSEY.

## RIBBON-BLOCKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 540,649, dated June 11, 1895.

Application filed November 15, 1894. Serial No. 528,850. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN EASTWOOD, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Ribbon-Blocking Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a ribbon blocking machine of simple and durable construction, easily handled and operated.

The invention consists in the improved ribbon blocking machine, in its ribbon block clasp device, and in the combination and arrangements of the various parts thereof, substantially as will be hereinafter more fully described and finally embodied in the claims.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a side elevation of my improved blocking-machine, certain portions being shown in section. Figs. 2 and 3 are enlarged front elevations of the ribbon-block-clasp device in closed and open position, respectively. Fig. 4 is a sectional view on the line  $x x$  of Fig. 2, and Fig. 5 an enlarged sectional view on the line  $y y$  of Fig. 1.

In said drawings  $a$  represents a bed plate provided with standards  $b c$  and  $c'$ , the top portions of which are preferably enlarged and thus form bearings  $b'$ ,  $c^2$  and  $c^3$  for the shafts  $d$  and  $i$  respectively.

On the inner end of the shaft  $d$  is arranged a disk  $f$  having collar  $g$  and setscrew  $h$ , which latter is adapted to engage loosely the annular groove  $e$ , and thus allow said disk  $f$  to freely revolve on the said shaft. The other end of the shaft or spindle  $d$  is pivoted as at  $d'$  to the lever  $d^2$ , the lower arm  $d^3$  of which is pivoted as at  $d^4$  to one end of link  $d^5$ , fulcrumed with its other end as at  $d^6$  to the bed plate  $a$  (or to a bracket thereon as will be

manifest). By means of the thumbscrew  $b^2$  the shaft  $d$  is secured or held in the required position.

To the outer end of shaft  $i$ , (which latter is in a line with the shaft or spindle  $d$ ) is secured a pinion  $k$  meshing with the internally arranged teeth of the hand wheel  $m$ , adapted to revolve with its collar  $n$  on stub shaft  $o$ , adjustably arranged by means of nut  $p$  in the elongated slot  $q$  of bracket  $c'$ . A handle  $r$  is secured on said hand wheel in any well known manner. If desired the hand driving mechanism is replaced by a driving pulley 10 and the shaft  $i$  can thus be operated by power.

To the inner end of the shaft  $i$  is firmly secured a disk  $s$  having collar  $s^9$  which latter is keyed to said shaft. The disk  $s$  is provided with a series (preferably three) of radially arranged slots  $s^4$ , which are penetrated in a longitudinal direction by pins  $s^5$  on each of which is arranged a sliding block  $s^3$  controlled by spiral spring  $s^6$ . Said sliding block is provided at its inner face with a flange or finger  $s'$ , projecting beyond the inner surface of the disk  $s$ , and at its opposite face—with a pin  $s^{10}$  resting in the concentrically arranged curved slots  $t^3$  of disk  $t$ . The latter is provided with a collar  $t'$  adapted to freely revolve (a limited distance) on the collar  $s^9$  of disk  $s$ . The disk  $s$  is also provided at or near its outer periphery with a pin or handle  $s^2$  and the disk  $t$ —with a pin or handle  $t^4$ , the latter being arranged a certain distance away from the radial line of the pin  $s^2$ , as clearly shown in Fig. 2 of the drawings.

The operation is as follows: By drawing the handles  $s^2$  and  $t^4$  of the disks  $s$  and  $t$  respectively—together (as shown in Fig. 3) the pins  $s^{10}$  of the sliding blocks  $s^3$  carrying the projecting fingers  $s'$  are forced outward by means of their engaging curved slots  $t^3$  and thus the ribbon block clasp device is fully opened. The ribbon block  $A$  is then placed between said fingers  $s'$  and the handles  $s^2$  and  $t^4$  are released. The said fingers  $s'$  and their sliding blocks  $s^3$  are thus returned by action of the spiral springs  $s^6$  and the ribbon block clamped firmly between the said fingers. The disk  $f$  is now brought to bear against the face



of the ribbon block—by means of the lever *d* and the winding of the ribbon is performed in the usual well known manner.

I do not intend to limit myself to the precise construction shown and described as various alterations can be made without changing the scope of my invention.

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

1. The combination with the shaft of a ribbon blocking machine, of an outer disk secured to said shaft and provided with a series of radial slots, a disk loosely mounted on said shaft and provided with a series of curved slots, sliding blocks arranged in said radial slots and provided on one side with fingers projecting beyond the face of the outer disk, on its other side with pins engaging the curved slots of the inner disk, a spring in each radial slot controlling its respective block, and means for turning said inner disk on its shaft independent of the outer disk, all said parts, substantially as and for the purposes described.

2. A ribbon block clasp device consisting of an outer disk provided with a series of radial slots, an inner disk provided with a series of curved slots and arranged concentrically with said outer disk, a sliding block in each of said radial slots provided with a fin-

ger projecting beyond the face of said outer disk, said blocks being also provided with pins adapted to engage the curved slots of the inner disk, and a spiral spring in each slot controlling its respective block and tending to automatically return the disks to their normal positions, substantially as described.

3. The combination with the shaft of a ribbon blocking machine, of an outer disk secured to said shaft and provided with a series of radial slots, a disk loosely mounted on said shaft and provided with a series of curved slots, a guide pin in each radial slot, sliding blocks loosely arranged on said guide pins, each block being provided on one side with a finger projecting beyond the face of the outer disk and on its other side with a pin engaging the curved slot of the inner disk, and a spiral spring around each guide pin and controlling its respective block, and means for turning said inner disk on its shaft independent of the outer disk, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of November, 1894.

BENJN. EASTWOOD.

Witnesses:

ALFRED GARTNER,  
JAMES EASTWOOD.