

No. 840,414.

PATENTED JAN. 1, 1907.

E. ANCHEL.
BRAIDING MACHINE.
APPLICATION FILED JULY 28, 1906.

Fig: 1.

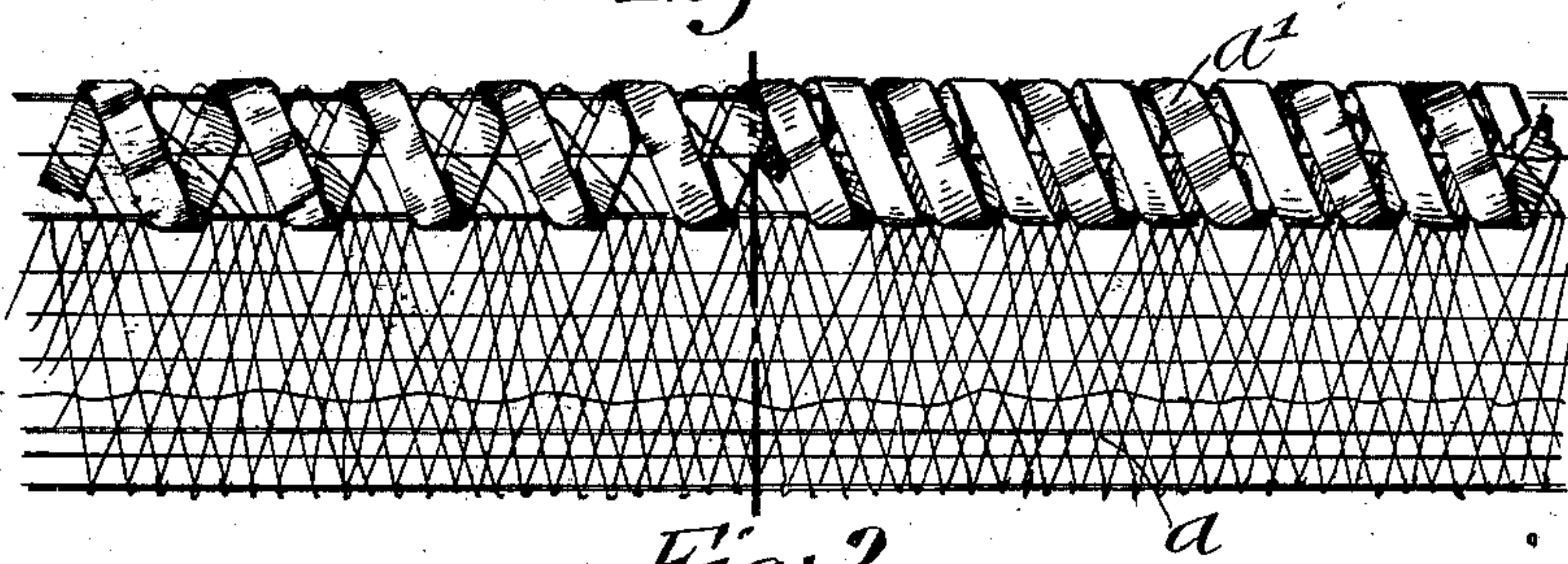


Fig: 2.

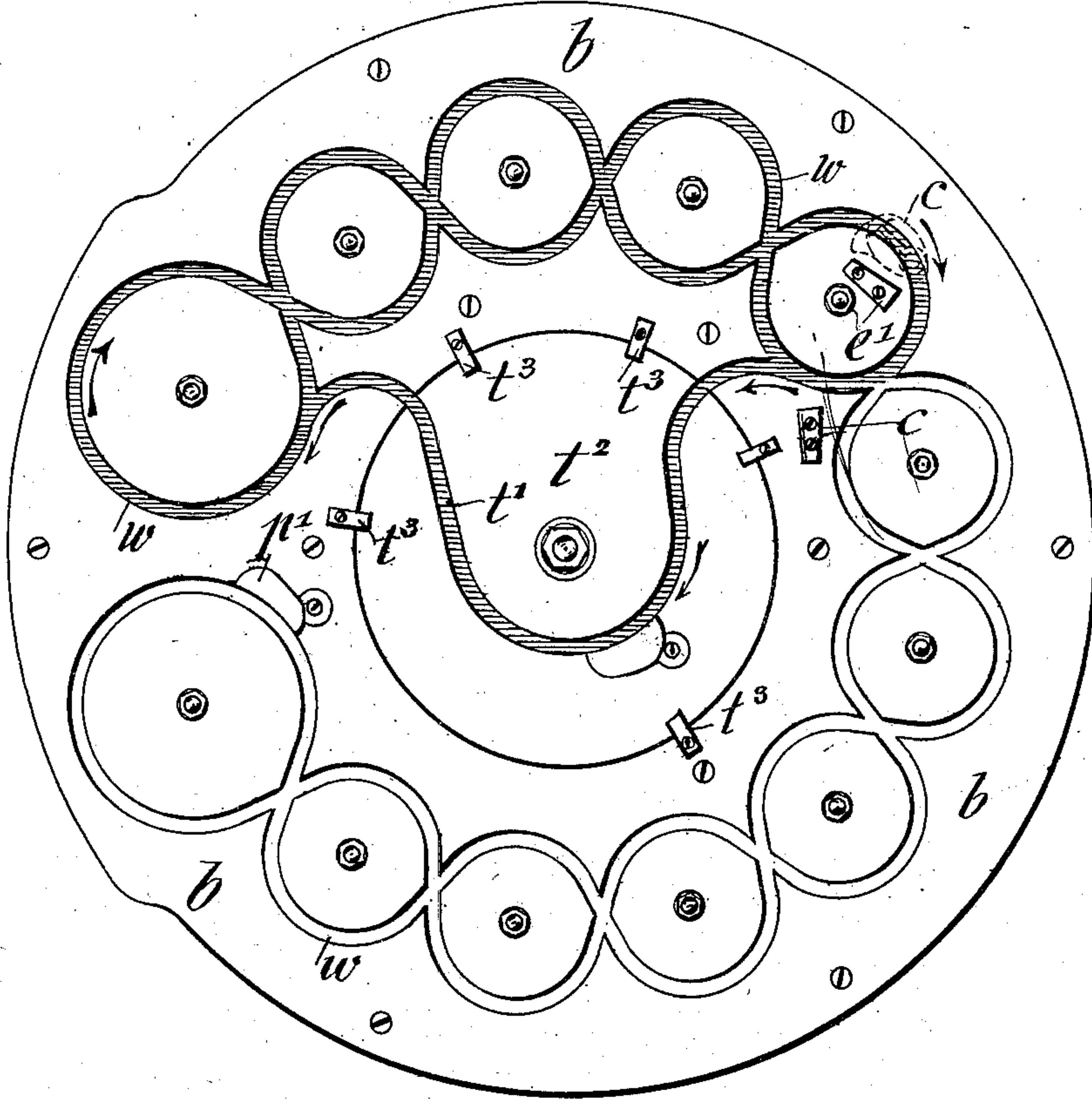
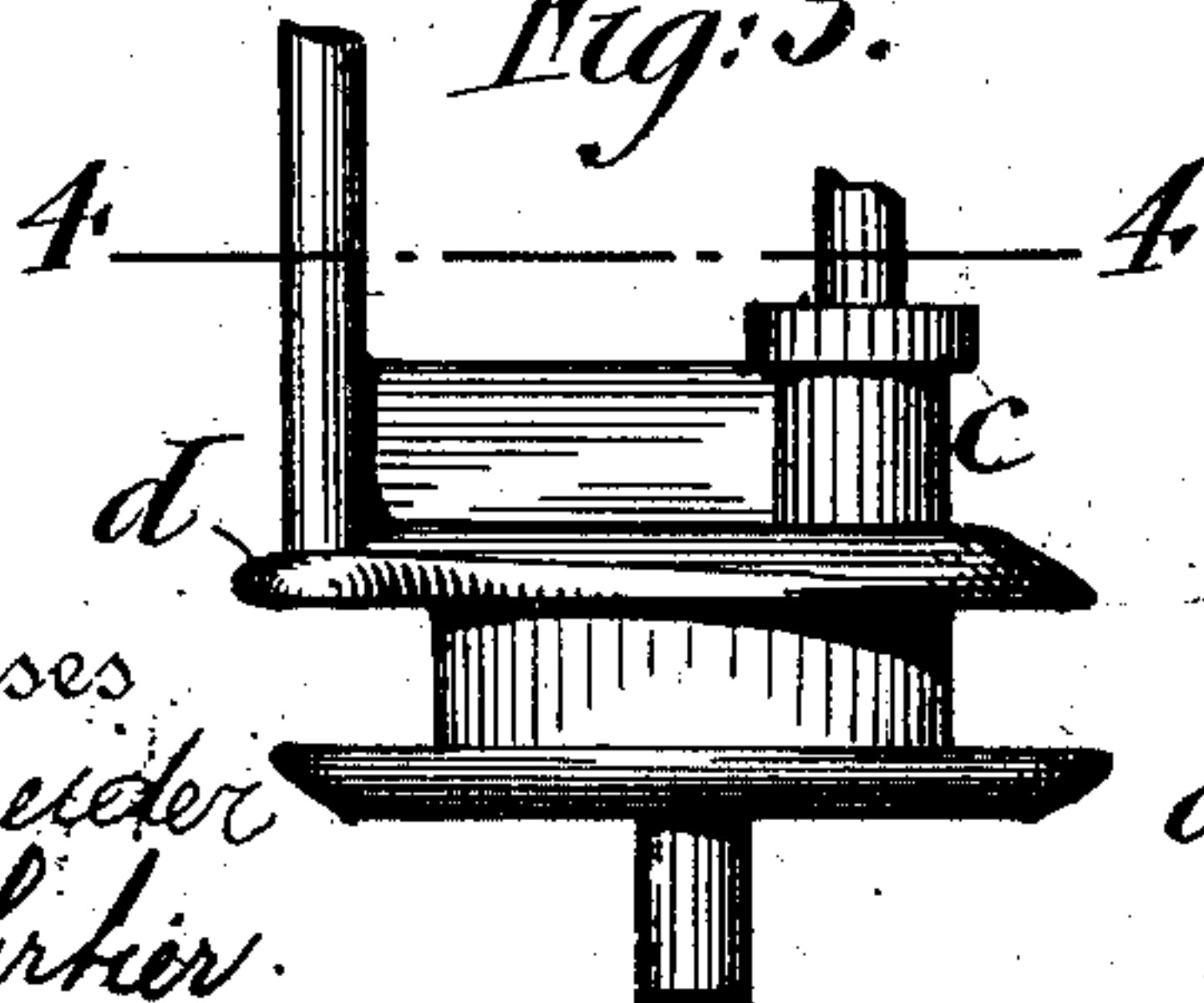
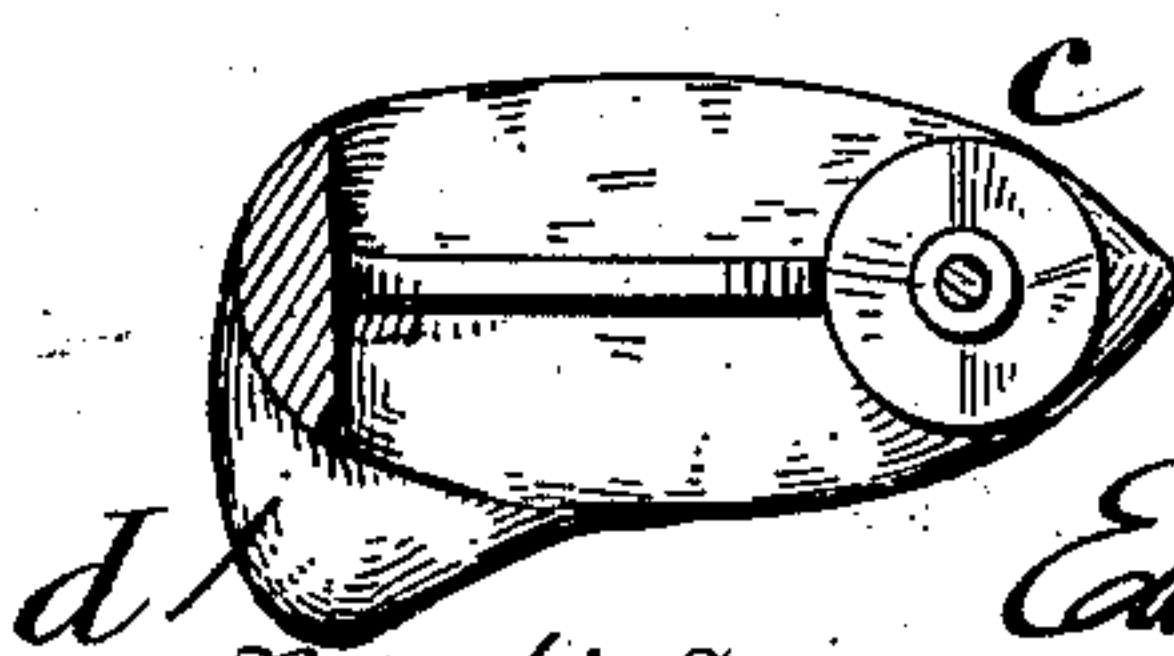


Fig: 3.



Witnesses
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Fig: 4.



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BRAIDING-MACHINE.

No. 840,414.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed July 28, 1906. Serial No. 328,152.

To all whom it may concern:

Be it known that I, EDWARD ANCHEL, a subject of the Czar of Russia, residing in New York, in the borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Braiding-Machines, of which the following is a specification.

This invention relates to improvements in braiding-machines by which a specific type of braid with ornamental purl edge can be made; and for this purpose the invention consists of a braiding-machine which comprises a top plate having a serpentine track or way for the traveling bobbin-carriers, a projection or nose at the base of one or more of the bobbin-carriers which carry the purl-ribbon, a curved approximately U-shaped track or way connecting the end of the main track or way with an intermediate portion of the main track or way, a stop for directing the course of the purl-ribbon carrier or carriers into the curved U-shaped track, and a stop for preventing the ordinary bobbin-carriers from entering into the U-shaped track and compelling them to follow their regular path through the main track or way.

In the accompanying drawings, Figure 1 represents a top view of my improved braid, one half showing one and the other half two purl-ribbons braided into the same. Fig. 2 is a plan view of the top plate of a braiding-machine arranged with my improvement and adapted for making my improved braid. Fig. 3 is a side view of the lower part of a carrier for the purl-ribbon; and Fig. 4 is a horizontal section on line 4 4, Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, *a* represents my improved braid, the body of which is made in the usual manner by the intertwisting movement of the two sets of bobbin-carriers moving in the serpentine track or way *w* of the well-known braiding-machine. Intertwisted with one edge of the braid is a purl-ribbon *a'*, which is wound on a bobbin-carrier *c*, the base of which above the top plate *b* of the braiding-machine is provided with a projection or nose *d*, which serves to come in contact with a stop *e'*, that is attached to the top plate of the braiding-machine within one of the intermediate intersections of the serpentine main track or way, as shown clearly

in Fig. 2. The nose *d* while passing along the stop *e'* imparts a turning motion to the spindle on its axis, so as to compel it to leave the main serpentine track or way and be moved into a U-shaped track *t'*, that connects the intermediate portion of the main track with one end of said track, as shown clearly in Fig. 2. The U-shaped track *t'* is formed of three arcs of a circle, the middle portion being formed of the larger arc and the end ones of smaller arcs, said arcs being concentric with the ordinary driving horn-gears arranged below the top plate, so that said horn-gears take up the bobbin-carrier *c* for the purl-ribbon and move it away from the main track, through the U-shaped track, back to the end portion of the main track. For preventing the ordinary braid-forming bobbin-carriers from passing into the U-shaped track a second stop *e* is arranged adjacent to the point where the U-shaped track leaves the main serpentine track, said stop serving for the purpose of directing the ordinary bobbin-carriers so as to keep them in the main serpentine track and compel them to complete their ordinary course over the serpentine track and around the end of the same to the opposite end of the track. The greater or lesser width of the purl portion of the braid is controlled by the larger or smaller number of bent portions of the main track being connected by the U-shaped track. If a greater width is required, the U-shaped track is connected with the main track, so as to take in a larger number of bends, while when a lesser width is required a lesser number of bends are connected by the U-shaped track *t'*. If closely-interbraided purl-ribbons are required, two or more purl-ribbon carriers may be arranged on that portion of the main track which is used for intertwisting the purl-ribbons, thereby a plurality of closely-wound purl-ribbons being interbraided with the ordinary threads, as shown at right-hand side of the drawings, where two purl-ribbons are shown as being interbraided with the braid, while the left-hand side shows only one purl-ribbon interbraided therewith.

The U-shaped connecting-track *t'* is arranged in a disk-shaped plate *t''*, which is supported at the center of the top plate *b* of the braiding-machine and which is held in position by suitable keepers *t'''*. At one end of the main track and along the larger curve

of the U-shaped track is arranged a recess covered by a detachable plate p' , so as to permit the insertion of the ordinary bobbin-carriers and the purl-ribbon carrier in the well-known manner in braiding-machines.

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

1. In a braiding-machine, the combination, with a top plate having a serpentine track or way, of a curved approximately U-shaped track connecting the end of the main track with the intermediate portion of the same, ordinary bobbin-carriers, means at the point of connection of the main track with the U-shaped track for directing the ordinary bobbin-carriers into the main track, a bobbin-carrier for the purl-ribbon provided at its base with a projection, and means on the top plate for directing the bobbin-carrier into the U-shaped connecting-track.

2. In a braiding-machine, the combination, with a top plate having a serpentine main track or way, of a center plate within

said serpentine track, a curved approximately U-shaped track connecting the end portion of the main track with an intermediate portion of the same extending across said center plate, a number of ordinary bobbin-carriers traveling in the main track, means at the connection of the U-shaped track with the main track for keeping the ordinary bobbin-carriers in the main track, one or more bobbin-carriers for the purl-ribbon provided each with a projection or nose at their lower part, and means adjacent to the connection of the main track or way with the U-shaped track for directing the purl-ribbon carriers into the U-shaped track and preventing them from traveling in the main serpentine track.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

EDWARD ANCHEL.

Witnesses:

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HENRY J. SUHRBIER.