

No. 635,020.

Patented Oct. 17, 1899.

J. L. KORNICK.

TOP AND MECHANISM FOR SPINNING SAME.

(Application filed Jan. 16, 1899.)

(No Model.)

Fig. 1

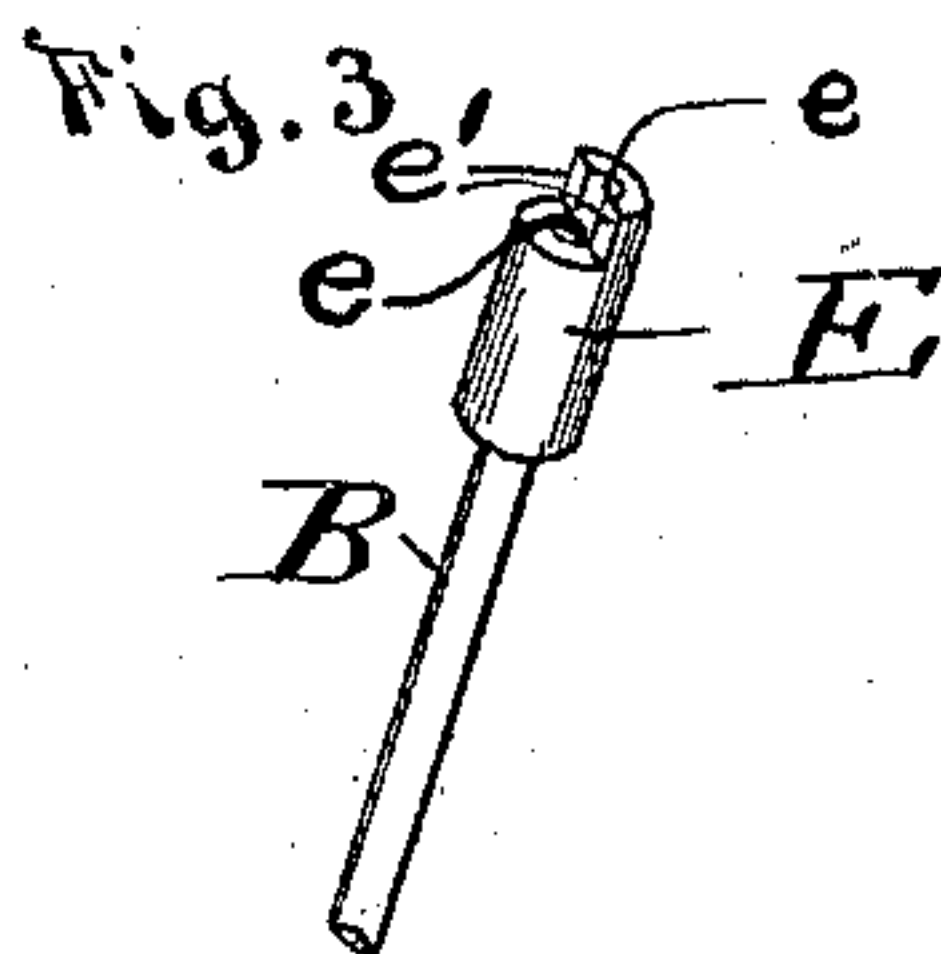
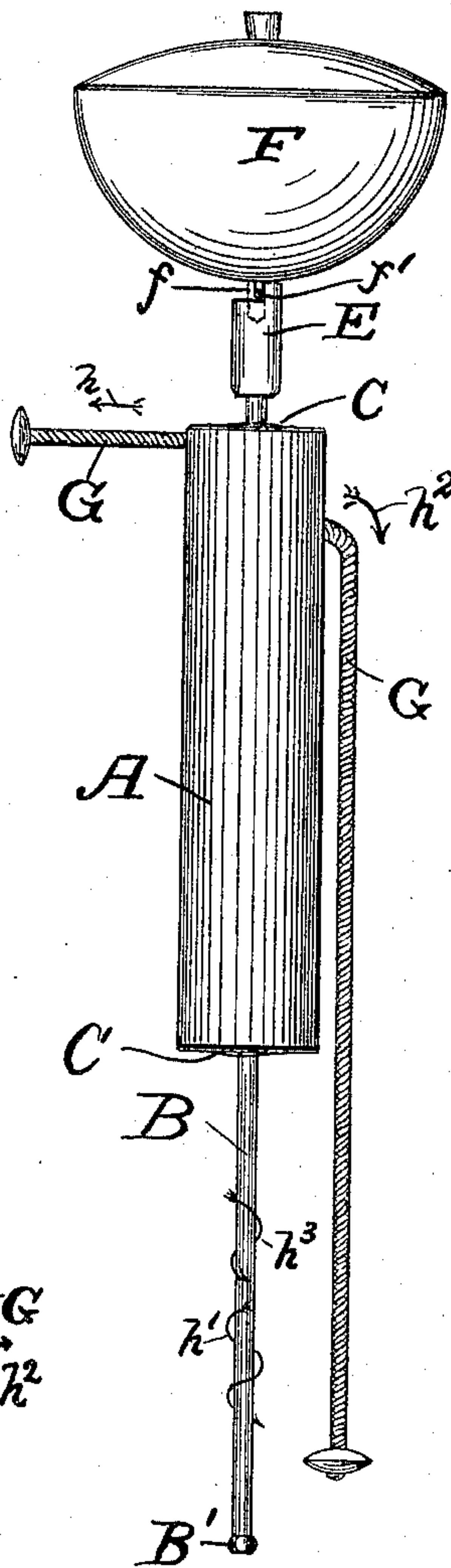


Fig. 2.

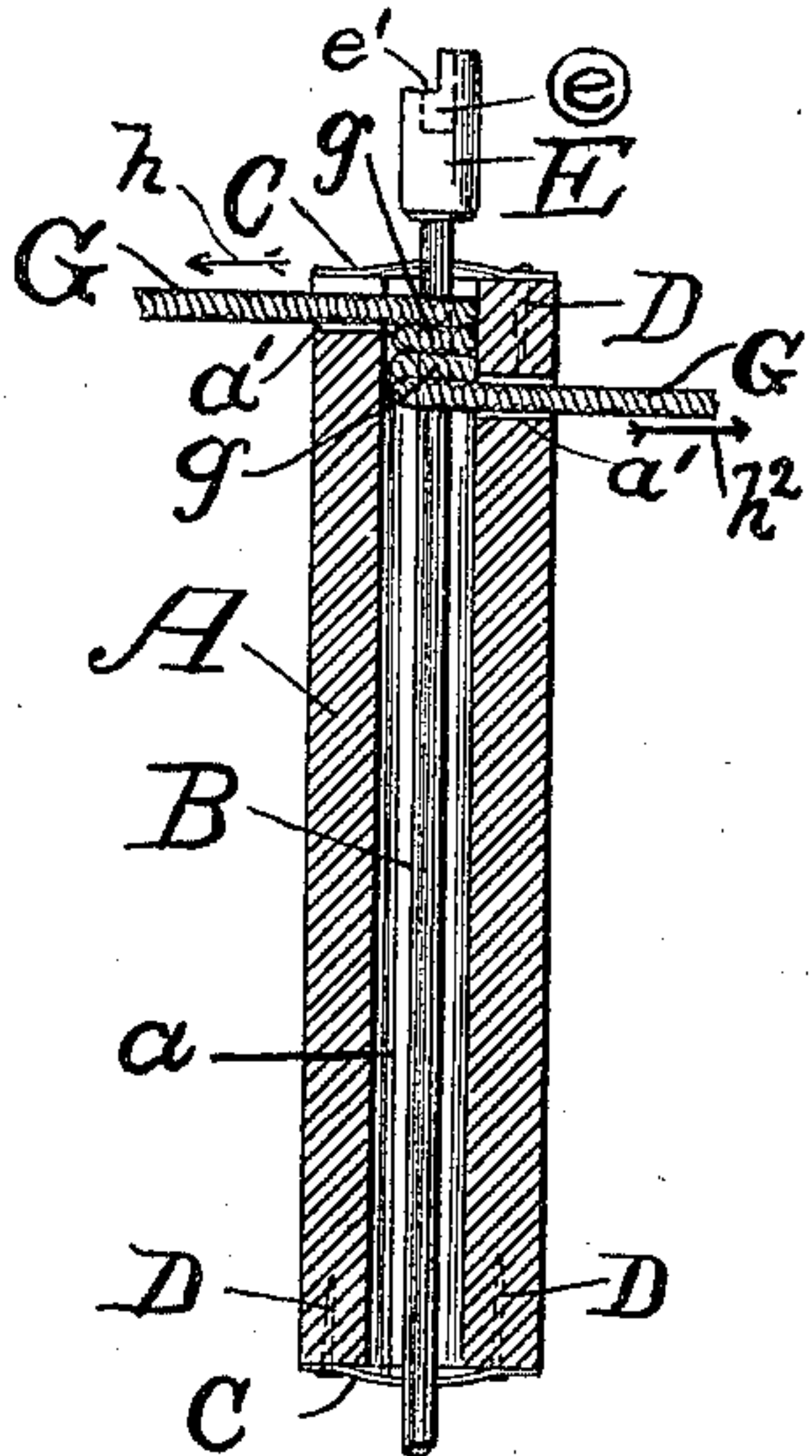


Fig. 5.

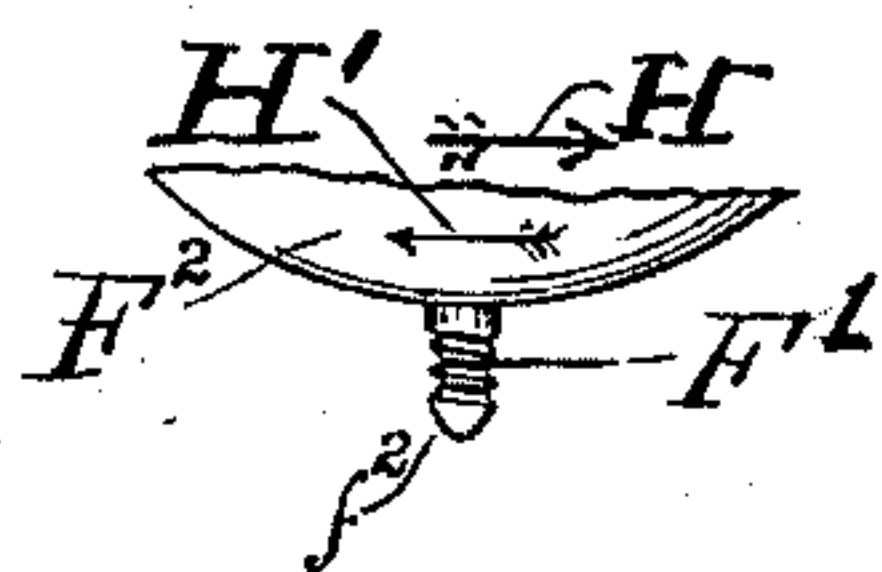
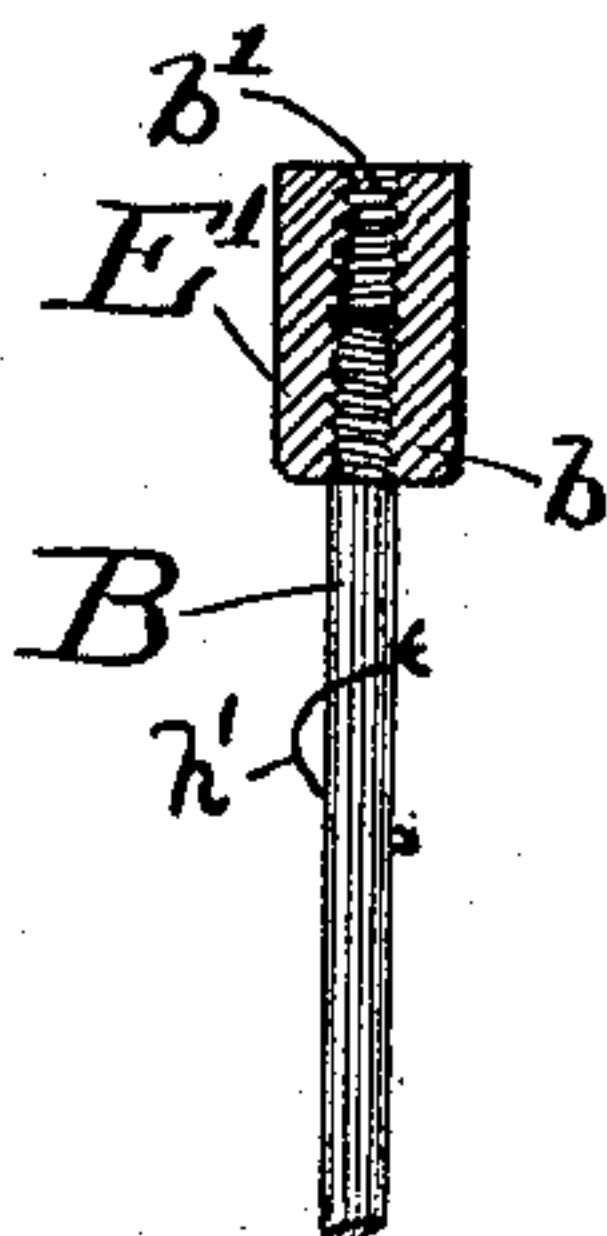


Fig. 4



Witnesses:

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Att'y.

UNITED STATES PATENT OFFICE.

JOE L. KORNICK, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
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TOP AND MECHANISM FOR SPINNING SAME.

SPECIFICATION forming part of Letters Patent No. 635,020, dated October 17, 1899.

Application filed January 16, 1899. Serial No. 702,253. (No model.)

To all whom it may concern:

Be it known that I, JOE L. KORNICK, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tops and Mechanism for Spinning the Same, of which the following, when taken in connection with the drawings accompanying and forming a part hereof, is a full and complete specification, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

This invention relates to that class or kind of tops and mechanism for spinning them wherein a top is connected to the spinning mechanism, such spinning mechanism is actuated and the top set in motion, and then the rotating top is released from the spinning mechanism and permitted to rotate or spin independently of the spinning mechanism until the impetus imparted to the top is exhausted.

The object of this invention is to obtain mechanism by means of which great impetus may be imparted to a top and to obtain a top to which such impetus may be imparted.

A further object of the invention is to obtain a top and a mechanism for actuating the same which may be rotated or spun in either direction at the will of the operator—that is, to the right or to the left.

A further object of the invention is to obtain a top and means for actuating it simple in construction, not liable to get out of order, slightly in appearance, and easy to manipulate.

In the drawings referred to and accompanying this specification, Figure 1 is an elevation of the spinning mechanism embodying my invention and of a top mounted thereon in position to be actuated thereby. Fig. 2 is a vertical sectional view of the spinning mechanism illustrated in Fig. 1, but with the head with which the peg of the top is made to engage shown in elevation; Fig. 3, a perspective view of the head engaging with the top and illustrated in Figs. 1 and 2. Fig. 4 is a vertical sectional view of a modified form of the head illustrated in Figs. 1, 2, and 3; and Fig. 5 is an elevation of a portion of a top

having a peg therein arranged to engage with the head illustrated in Fig. 4.

It will be observed that by means of the head illustrated in Fig. 4 the top having the peg illustrated in Fig. 5 can be made to spin with greater certainty and can be given greater impetus than can the top illustrated in Fig. 1 by means of the mechanism and head illustrated in Figs. 1, 2, and 3, while the top illustrated in Fig. 1 can be made to spin in either direction (to the right or to the left) by the mechanism and head illustrated in Figs. 1, 2, and 3, and the top illustrated in Fig. 5 can be made to spin in one direction only by means of the mechanism illustrated in Figs. 1 and 2 and the head illustrated in Fig. 5.

A reference-letter applied to designate a given part is used to indicate such part throughout the several figures of the drawings wherever the same appears.

A is the main body part of the spinning mechanism and is grasped in the hand by a person operating the same.

B is a rod or wire extending longitudinally in opening *a* through the body part A and rotatively mounted in the end pieces C C. End pieces C C are secured in position on the ends of body part A by the brads or nails D D, Fig. 2.

E is a head rigidly secured to rod or wire B on one end thereof.

B' is a head or headed end of rod or wire B, limiting the upward movement of such rod or wire when the mechanism is operated, such head B' coming in contact with the adjacent end piece C. Downward movement of the rod or wire B is limited by the head E. Head E has therein, at the upper end thereof, a hole *e*, into which hole the peg *f* of top F is inserted when the top is to be attached to the spinning mechanism to be operated, and such head E is also cut away to obtain the shoulders *e' e'*, with which the lug or pin *f'* comes in contact when such peg is inserted along with peg *f* in the head.

In the modification illustrated in Fig. 4, and which is the form of head preferred by me, E' is the head substituted for head E and rigidly secured to the rod or wire B, as by the screw-threads *b* on the rod or wire B fit-

ting into corresponding but internal screw-threads in such head E'. $b' b'$ are the internal screw-threads in head E'. F' are external screw-threads on peg f^2 of top F^2 , Fig. 5, fitting into the screw-threads b' in head E'.

G is a cord or other flexible connection extending through the transverse holes $a' a^2$ in body part A and around the rod or wire B, as at $g g$, Fig. 2.

The operation of the spinning mechanism is as follows: Peg f of top F is inserted in hole e of head E so that the projection or lug f' is against shoulder e' , as is well illustrated in Fig. 1, (in the construction shown in Figs. 1, 2, and 3,) and the cord G is pulled in the direction illustrated or indicated by the arrows $h h^2$, as preferred. If the cord G is pulled in the direction indicated by the arrow lettered h , the rod or wire B will be rotated in the direction indicated by the arrow h' and the top will be turned in such direction, and if the cord is pulled in the direction indicated by the arrow h^2 the rod or wire B will be turned in the direction indicated by the arrow h^2 and the top will be rotated or spun in such direction. When the rod or wire B is to be turned in the direction indicated by the arrow h' , it should first be pushed down through the body part A until the head E comes in contact, or nearly so, with the top end piece C, as in its rotation it will be gradually raised by the cord G until the head B' is brought to contact with the end piece C on the lower end of the body part A, and when the rod or wire is to be turned in the direction indicated by the arrow h^2 care should first be exercised to see that the head B' is in contact, or nearly so, with the lower end piece C, as in such turning of the rod it will gradually move down in body part A until the head E is in contact with the upper end piece C.

In the use of the top illustrated in Fig. 5 with the head illustrated in Fig. 4 the screw-threads F' on peg f^2 are brought into engagement with the internal screw-threads b' in head E' by turning the top in the contrary direction to that in which it is to be spun—as, say, in the direction indicated by arrow h . The rod or wire B is then turned rapidly in the direction indicated by the arrow h' by pulling cord G rapidly in the direction indicated by arrow h and the top turned thereby in such direction. When the rod or wire B has been so rapidly turned and at the same time raised in body part A, as hereinbefore described, until the head B' is in contact with the lower end piece C, rotation thereof will be thereby stopped; but the top F' will con-

tinue to turn in the direction indicated by the arrow H' , Fig. 5, and in such further turning will automatically disengage itself from head E', and in addition thereto will by the rapidity of such disengagement be thrown upward and off of the head to drop and spin on the floor or other determined horizontal surface.

As is well shown in Fig. 2 of the drawings, when the cord G is wrapped around the rod B, so that rotation of the rod is assured when the cord is drawn or pulled longitudinally, such cord forms a spiral on such rod, and as the rod rotates either it must move longitudinally or the cord must slip longitudinally relatively to the rod (transversely relatively to the spirals of the cord)—that is, the cord will tend to wind upon itself, with the several turns in the same plane instead of forming a spiral. The friction resulting from the last-described tendency (in case of no longitudinal movement of the rod) demands much greater force to obtain a given speed of rotation in the rod and in the top spun thereby, and hence great advantage is obtained in giving the longitudinal movement to the rod. The advantage thus gained is not, however, the principal benefit secured, for in case of no longitudinal movement of the rod from the constant tendency to climb or wind upon itself, as described, the cord soon becomes frayed and worn and breaks, while by making the rod of sufficient length and so mounting it as to permit the longitudinal movement thereof all the difficulties named are obviated and a uniform-acting winding apparatus of great durability is obtained.

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

The combination of a handle provided with an opening or hole extending longitudinally therethrough and transversely-extending holes opening thereinto from the periphery, a rod extending through the longitudinally-extending opening or hole and rotatively mounted in end pieces secured to the handle, to travel longitudinally as rotated, a cord extending through the transversely-extending holes and around the rod, a head secured on one end of the rod, such head provided with a hole therein, and a top having a peg thereto, such peg arranged to fit in the hole in the head and engaging with the head to be rotated thereby; substantially as described.

JOE L. KORNICK.

In presence of—

EUGENE I. MUNZER,
FLORA L. BROWN.