

May 9, 1933.

V. BEPLATE

1,907,715

REEL

Filed April 27, 1932

2 Sheets-Sheet 1

Fig. 1.

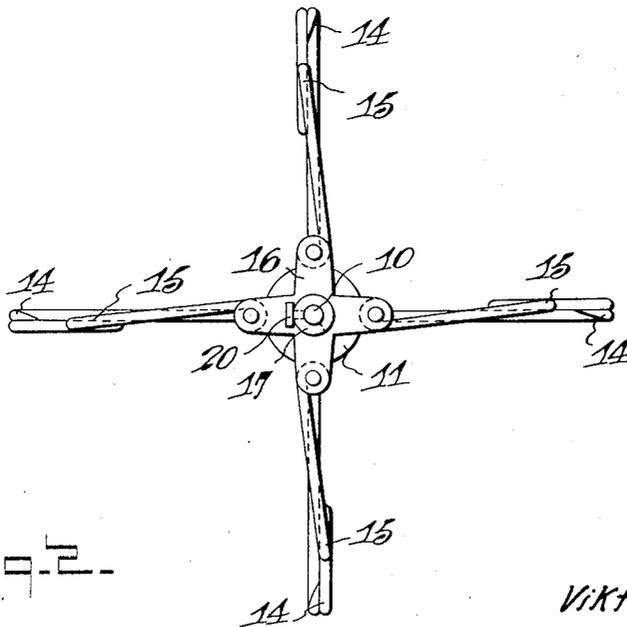
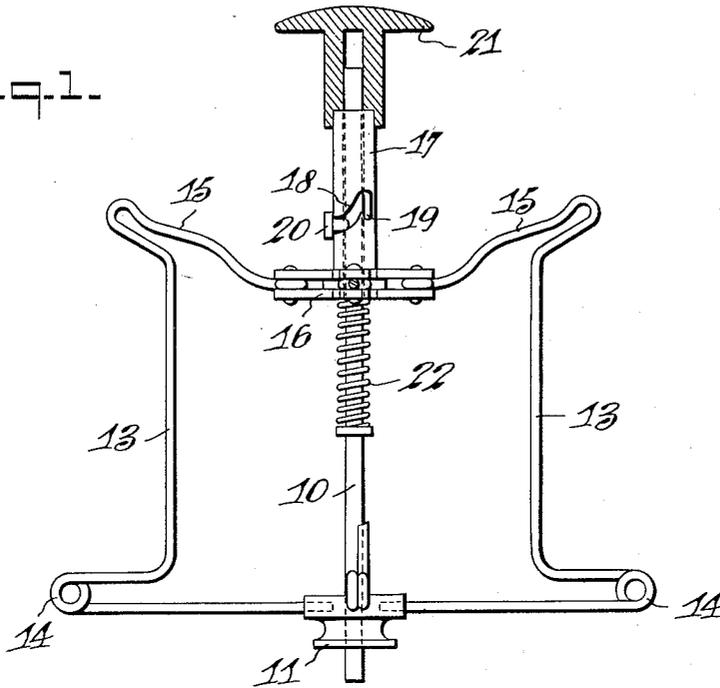


Fig. 2.

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Fig. 3.

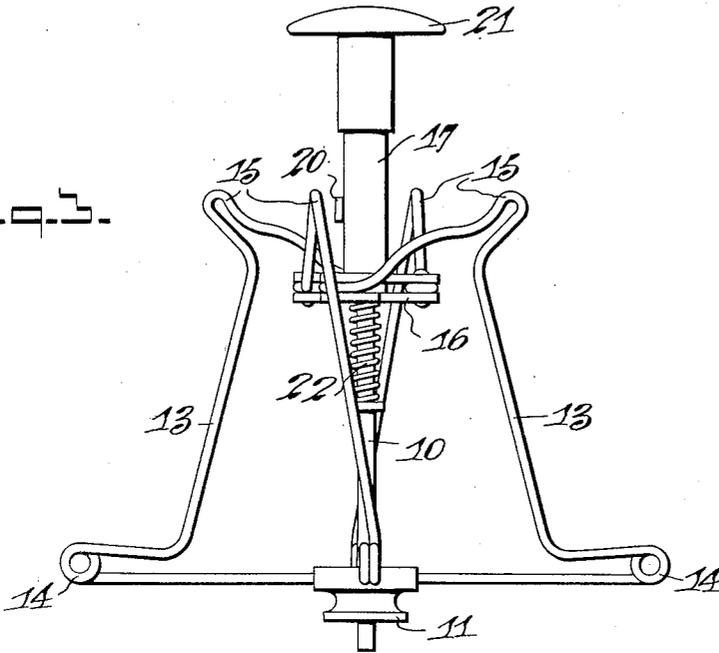
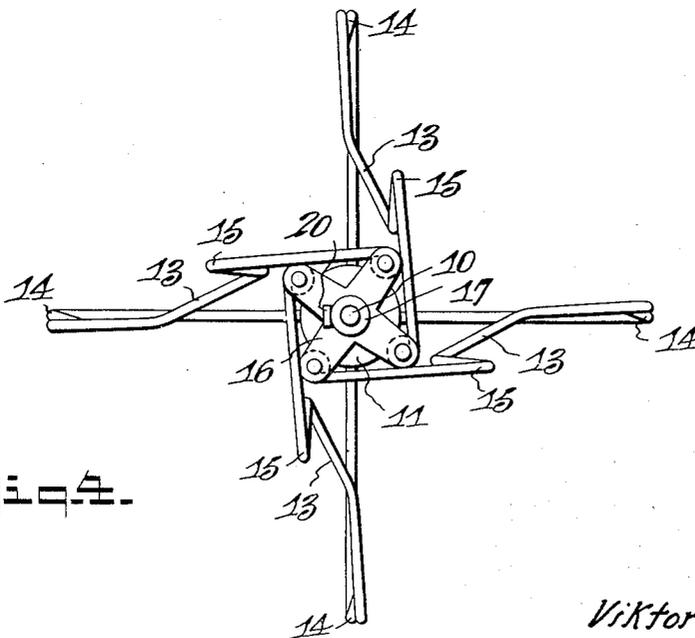


Fig. 4.



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UNITED STATES PATENT OFFICE

VIKTOR BEPLATE, OF SYDOWSAUE NEAR STETTIN, GERMANY, ASSIGNOR TO AMERICAN GLANZSTOFF CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE

REEL

Application filed April 27, 1932, Serial No. 607,873, and in Germany May 11, 1931.

This invention relates to an improved reel for use in the handling of skeins and/or cakes of artificial silk and the like, and the primary object of the invention is to provide a novel form of reel of the collapsible type.

Another object of this invention is to provide a new form of reel comprising a plurality of wire skeins or cake supporting means so arranged and constructed as to permit of the collapsing of one end of said reel whereby the said skeins or cakes may be readily placed thereon or removed therefrom.

A further object of this invention is to provide a reel of the collapsible type so arranged and constructed as to be held in collapsed position to permit skeins or cakes to be easily placed thereon or removed therefrom.

These and other objects of this invention will become more apparent from a study of the following description and by reference to the attached drawings in which:

Figure 1 is a view in side elevation of the reel, certain parts thereof being broken away;

Figure 2 is a top plan view thereof;

Figure 3 is a view in side elevation of the reel showing the same collapsed; and

Figure 4 is a top plan view of Figure 3.

Referring now to the drawings in which like numerals indicate like parts, there is shown a reel which comprises a central shaft or axle —10— having fixedly secured thereto adjacent one end thereof a hub —11—. As is clearly shown in the drawings the skein and/or cake carrying means consist of a plurality of wire members. Each wire consists of a central skein and/or cake receiving portion —13— extending parallel with the shaft or cake of the reel, and to prevent a cake and/or skein positioned thereon from sliding or shifting, one end of each wire is bent radially outward, and coiled at —14— to provide a spring section, the free end thereof extending inwardly to the hub —11— to which it is fixedly secured in any suitable manner. The other end of each wire is bent outwardly in a transverse direction and then inwardly to form a spring loop —15—, the free end of each wire being pivotally secured

to the hub —16—, movably mounted on the shaft or axle —10—.

A sleeve —17— is formed integrally with the hub —16—. If desired, however, the sleeve may be connected to said hub in any suitable manner. This sleeve is provided with a diagonal slot —18— terminating at its upper end in a locking slot —19— and in which the lug or key —20— secured to the shaft or axle is adapted to ride. The end of the sleeve has secured thereto the handle or actuating knob —21— provided with a recess for the reception of the end of the shaft or axle. A spring —22— is positioned so as to bear against the hub —16—.

In operation the actuating knob is moved inwardly forcing the hub —16— against the spring and at the same time the hub is rotated, in this instance counter-clockwise, by the key or lug riding in the diagonally disposed slot. As is clearly shown in Figures 3 and 4, the rotation and axial displacement of the hub will twist the wires and shorten the radial distance thereof with respect to said hub, and collapsing the other end thereof to permit a skein or cake to be readily placed in or removed from the reel. The pressure of the spring and the tension set up on the wires will cause the key or lug to engage in the slot and hold the reel in its collapsed position.

The invention now having been described in accordance with the patent statutes, what is claimed as new is:

1. A reel comprising a central shaft, a hub fixedly secured thereto adjacent one end thereof, a second hub movably mounted thereon adjacent the other end thereof, spring means bearing against said movable hub, skein carrying means secured to said hubs, and means to rotate said movable hub and press the same against said spring means, whereby the skein carrying means may be collapsed, and means for holding said carrying means in collapsed position.

2. A reel comprising a central shaft, a hub fixedly secured thereto at one end thereof, a second hub movably mounted thereon and spaced from said fixed hub, skein carrying means secured to said hubs, a sleeve associated

with said movable hub and having a transverse slot formed therein, a key secured to said shaft and positioned in said slot whereby upon rotation of said sleeve said hub may be rotated and moved inwardly, collapsing that end of the reel secured thereto.

of said sleeve said hub is rotated and moved inwardly collapsing said reel, said key being held in said locking slot by the resiliency of said wires.

In witness whereof I affix my signature. 70
VIKTOR BEPLATE.

3. A reel comprising a central shaft, a hub fixedly secured thereto at one end thereof, a second hub movably mounted thereon and spaced from said fixed hub, skein carrying means secured to said hubs, a sleeve associated with said movable hub and having a transverse slot formed therein, a key secured to said shaft and positioned in said slot and a spring bearing against said movable hub, whereby upon rotation of said sleeve said hub may be rotated and moved inwardly, collapsing that end of the reel secured thereto, said transverse slot communicating with a locking slot for the reception of said key whereby said reel may be held in collapsed position by the pressure of said spring.

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4. A reel comprising a central shaft, a hub fixedly secured thereto at one end thereof, a second hub movably mounted thereon and spaced from said fixed hub, skein carrying means secured to said hubs, comprising a plurality of resilient wires, a sleeve associated with said movable hub and having a transverse slot formed therein, a key secured to said shaft and positioned in said slot and a spring bearing against said movable hub, whereby upon rotation of said sleeve said hub may be rotated and moved inwardly, collapsing that end of the reel secured thereto.

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5. A reel comprising a central shaft, a hub fixedly secured thereto at one end thereof, a second hub movably mounted thereon and spaced from said fixed hub, skein carrying means secured to said hubs, comprising a plurality of resilient wires, a sleeve associated with said movable hub and having a transverse slot formed therein, a key secured to said shaft and positioned in said slot and a spring bearing against said movable hub, whereby upon rotation of said sleeve said hub may be rotated and moved inwardly, collapsing that end of the reel secured thereto, said transverse slot communicating with a locking slot for the reception of said key whereby said reel is held in collapsed position.

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6. A reel comprising a central shaft, a hub fixedly secured thereto, a second hub movably mounted thereon and spaced from said fixed hub, skein carrying means secured to and connecting said hubs consisting of a plurality of resilient wires, each wire comprising a skein carrying section extending parallel to said shaft and a pair of outwardly extending sections to prevent displacement of said skein, a sleeve associated with said movable hub having a transverse slot formed therein and a locking slot communicating therewith, a key secured to said shaft and positioned on said transverse slot, whereby, upon rotation

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