R. BASS.

BINDING HOLDER.

APPLICATION FILED FEB. 17, 1916.

1,291,368.

Patented Jan. 14, 1919.

Fig. 1.

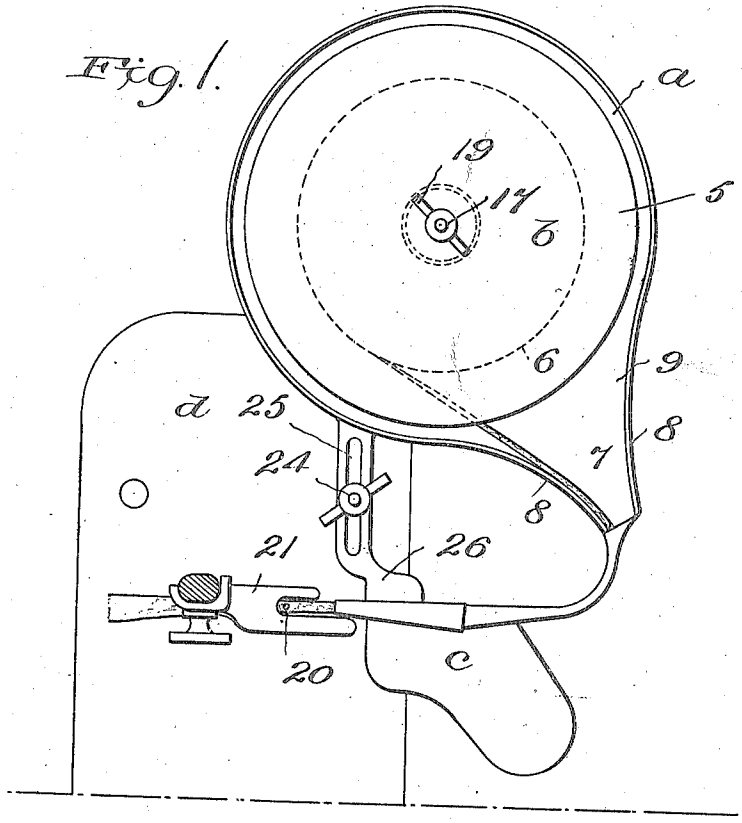


Fig. 3.

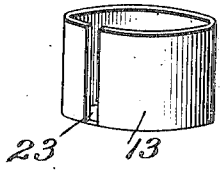


Fig. 4.

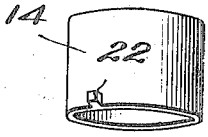
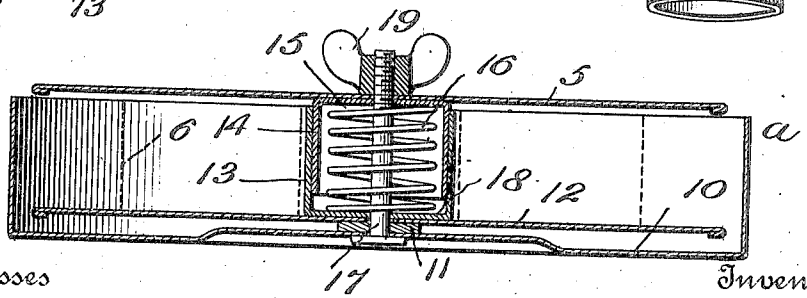


Fig. 2.



Witnesses

Inventor

Rubin Bass,

by John A. Donegan, his Attorney

UNITED STATES PATENT OFFICE.

RUBIN BASS, OF NEW YORK, N. Y.

BINDING-HOLDER.

1,291,368. Specification of Letters Patent. Patented Jan. 14, 1919.

Application filed February 17, 1916. Serial No. 78,936.

To all whom it may concern:

Be it known that I, RUBIN BASS, a citizen of the United States, residing at New York, county and State of New York, have invented certain new and useful Improvements in Binding-Holders, of which the following is a specification.

The general object of the present invention is to provide a neat and effective holder for binding and to adapt the holder for connection to the binder tool of a sewing machine; and further to adapt the holder to tension the binding to a degree corresponding to that at which the material is tensioned in the operation of sewing the binding thereunto. And to these ends the invention resides in a reel adapted to be readily connected to the roll of binding and provided with adjustable means for frictionally contacting with the roll of binding and further in providing a casing for the reel and adapting this casing for connection to the binder tool and for directing the binding thereinto.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming part hereof, and in which:

Figure 1, is a plan view of the invention in use.

Fig. 2, is a vertical cross sectional detail taken through the reel and the casing.

Fig. 3, is a detail perspective of one section of the reel hub.

Fig. 4, is a view similar to Fig. 3, of another section of the reel hub.

The casing which is indicated generally by "*a*" may be formed of any material found suitable for the purpose as for instance metal. The reel which is indicated generally by "*b*" is preferably formed of the same material as the casing. The binder tool which is indicated generally by "*c*" is of well known construction. The reel "*b*" is disposed in casing "*a*" and the head 5, of the said reel is removable so as to facilitate the arrangement of the roll of binding 6, thereon. From the roll 6, the binding passes through a contracted throat or passage 7, into the throat or passage of the binder tool "*c*." The throat or passage 7, is disposed as a radial extension of casing "*a*" and is suitably adapted to be connected to the binding tool "*c*." In the present instance I have shown the curved end portions of the side walls 8—8, of casing "*a*" and the tapered extension 9, of the bottom 10, of said casing permanently attached to the edge of the binding tool "*c*," but it will of course be understood that this construction is simply illustrative.

The bushing 11, disposed centrally of the bottom 10, serves as a support for the reel "*b*" and provides the bearing on which the reel turns. The central opening in the roll of binding 6, receives the outer tubular section 13, of the hub, which section is so proportioned as to nicely fit in the central opening of the roll and thus prevent the latter from moving bodily while being unwound. The tubular section 14, of the hub telescopes into section 13, and the closed upper end 15 of the section 14 forms a support for the head 5 of the reel "*b*." A compression spring 16, forms a support for the section 14, of the hub and is adapted to maintain section 14 slightly projected beyond section 13, so that the intervening space between head 5 and bottom 12 will correspond approximately to the thickness of the roll of binding 6. A screw threaded pin 17, passes through alining openings in the bottom 10, bushing 11, bottom 12, end 18 of section 13, top 15 of section 14, and the head 5 of reel "*b*." A winged nut 19 or its equivalent, is screwed onto the pin 17, and when turned in one direction operates to telescope sections 13 and 14 of the hub and thereby move the head 5 nearer to bottom 12 and into closer contact with the roll 6 of the binding. This feature of adjustability on the part of reel "*b*" is of importance in that it admits of placing a tension on the roll 6, by the act of moving head 5 nearer to bottom 12. In the operation of binding an edge which extends parallel with or at right angles to the warp of the material there will be little or no tendency on the part of the material to stretch under the pull which is invariably exerted by the action of the feed bar and the hand of the operator in guiding the material to the sewing needle 20 and under the presser foot 21. But in binding an edge which extends obliquely to the warp of the material the same is invariably stretched by the pull exerted by the feed bar and the hand of the operator, with the result that the operator is required to stretch the binding to the same extent as the material in order to avoid buckling of the binding.

Heretofore the operator has been required to proceed cautiously in order to obtain uniformity of stretch in the material and in the binding with the result that the time required for binding what is commonly known as a bias edge exceeds that required for an edge disposed at right angles or parallel with the warp of the material.

It will now be obvious that, since the present invention admits of automatically stretching the binding by effecting compression of the roll thereof to the required extent between the head 5 and bottom 12, there is not required in binding bias edge material any greater degree of caution than in binding an edge extending parallel or at right angles to the warp.

One of the sections of the hub has a tooth or projection 22 which is received by a recess 23 in the other section. In the present instance I have shown the tooth forming part on section 14 and the recess arranged in section 13. With this construction it is obvious that the sections of the hub may be interlocked and the parts of reel "*b*" made to rotate as a unit when finger pressure exerted in the required direction is applied to head 5. This feature of rotatability in the reel will be found desirable in retracting the free end portion of the binding which may be found extending beyond the binding tool "*c*" after the device is detached from the machine "*d*". The device of this invention may be attached to any conventional type of sewing machine by the clamp screw 24, which extends through the slot 25 of rib 26, which is so connected to casing "*a*" and binding tool "*c*" as to form a brace and give stability to the device.

What is claimed as new is:

1. A reel for holding binding and adapted for use on sewing machines, embodying a casing provided with a tape-feeding outlet, a disk, forming one of the sides of the reel mounted within the casing, a coöperating disk, forming the other side of the reel, positioned in spaced relation thereto, a tubular section extending inwardly from one of said members, a coöperating tubular section extending inwardly from the other of said members in telescopic relation to each other, a spring housed within one of said tubular sections and tending to force the side members apart and means for securing the several elements together and adjusting the tension on the spring.

2. A reel for holding binding and adapted for use on sewing machines, embodying a casing provided with a tape-feeding outlet, a side member of the reel positioned within said casing, a tubular member extending at right angles therefrom forming one of the elements of the hub of the reel, a second side member positioned in spaced relation to the specified side member, a tubular section coöperating with said second side member and telescopically arranged with reference to the tubular section of the first side member, whereby the distance between the members may be regulated, means, embodying a bolt and nut, for securing said specified elements together, and a tension spring, the tension of which is controlled by the bolt and nut, tending to force the side members of the reel apart.

3. A reel for holding binding and adapted for use on sewing machines, embodying a casing provided with a tape-feeding outlet, a side member of the reel positioned within said casing, a tubular member extending at right angles therefrom forming one of the elements of the hub of the reel, a second side member positioned in spaced relation to the specified side member, a tubular section coöperating with said second side member and telescopically arranged with reference to the tubular section of the first side member, whereby the distance between the members may be regulated, means for locking the tubular sections together so that, if desired, they may be rotated as a unit, means embodying a bolt and nut for securing said specified elements together, and a tension spring, the tension of which is controlled by the bolt and nut, tending to force the side members of the reel apart.

4. A reel for holding binding and adapted for use on sewing machines, embodying a casing provided with a substantially radially extending contracted opening through which the tape may be fed, a reel mounted on the casing embodying spaced side members, a tubular section extending inwardly from each of said side members and forming the hub of the reel, said sections being telescopically arranged with relation to each other, a tension spring housed within one of said tubular sections and tending to force the side members of the reel apart and unitary means for securing the side members and tubular sections together and for regulating the tension on the spring.

In testimony whereof I have signed my name to this specification this 16th day of February 1916.

RUBIN BASS.