

(No Model.)

2 Sheets—Sheet 1.

G. W. CUMMINGS.
PRESSER FOR BOBBINS.

No. 467,535.

Patented Jan. 26, 1892.

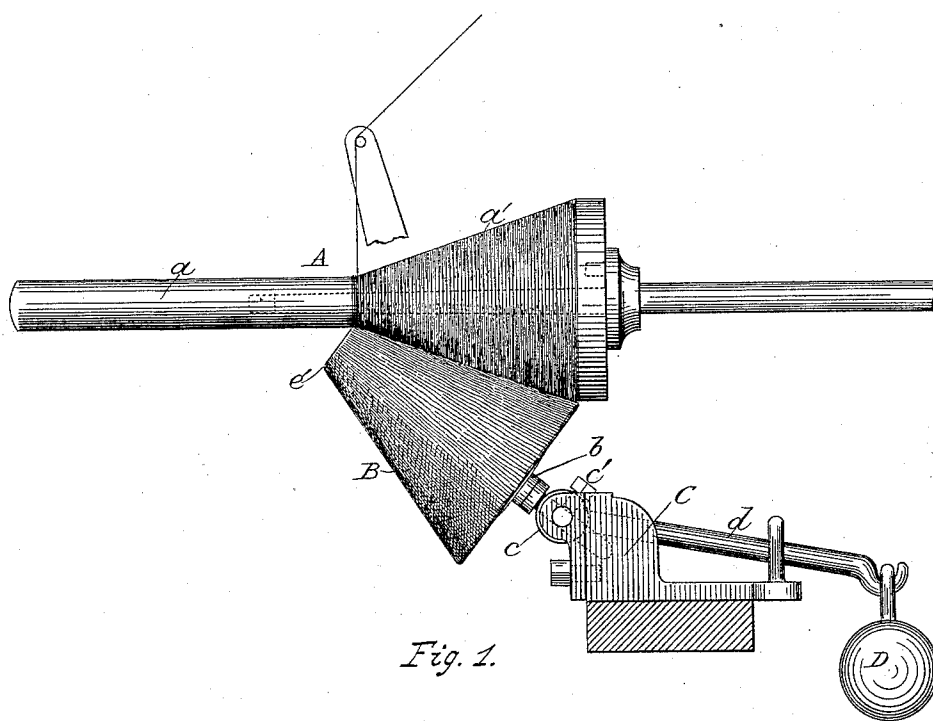


Fig. 1.

Witnesses:

Charles Seckuk.
Alex. Kirk.

George W. Cummings,
Inventor.

by his Attorney.

Alex. Kirk

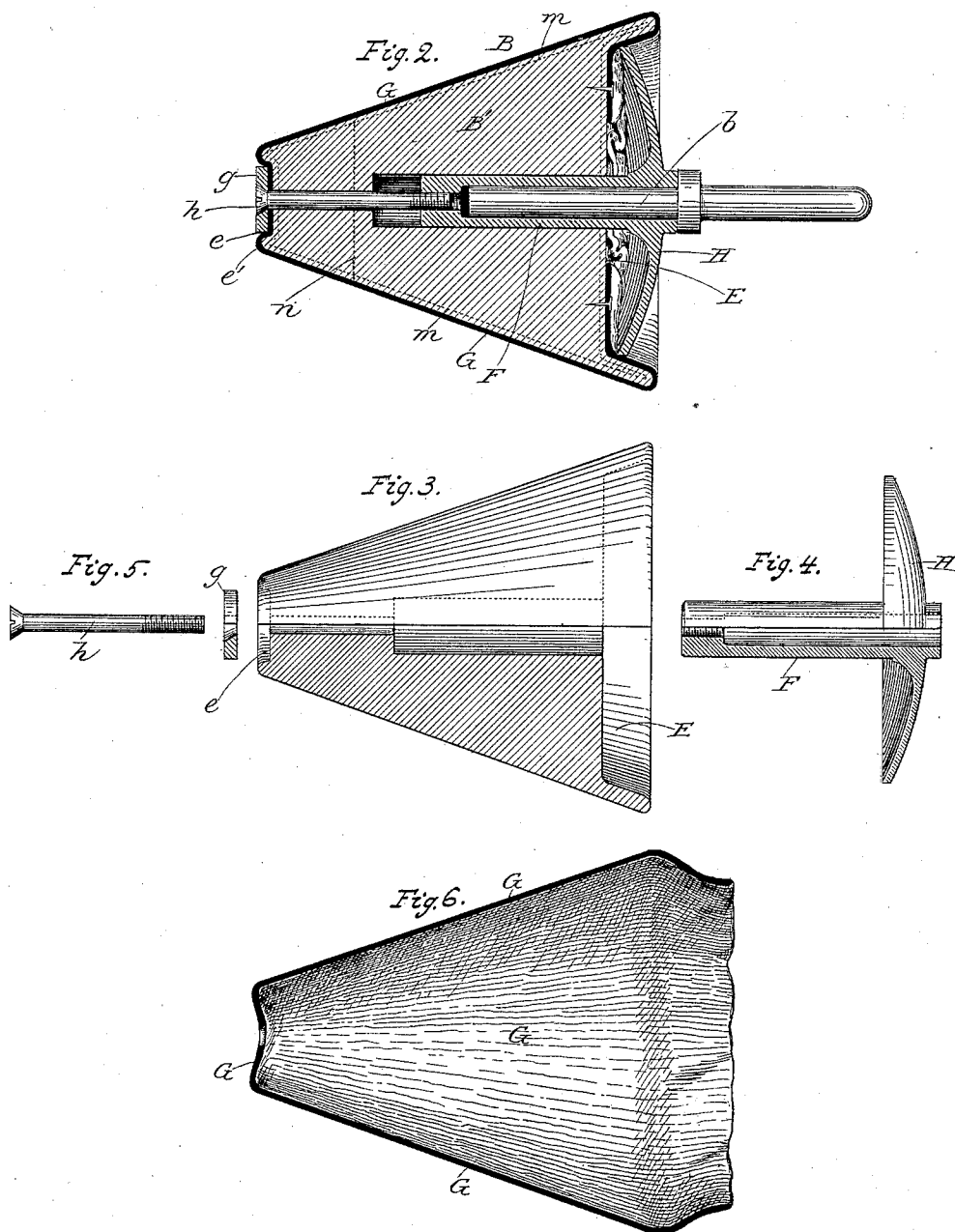
(No Model.)

2 Sheets—Sheet 2.

G. W. CUMMINGS.
PRESSER FOR BOBBINS.

No. 467,535.

Patented Jan. 26, 1892.



Witnesses.

Charles Lewis
A. L. Kirk

George W. Cummings.

Inventor
by his Attorney
Alex. L. Kirk

UNITED STATES PATENT OFFICE.

GEORGE W. CUMMINGS, OF COHOES, NEW YORK.

PRESSER FOR BOBBINS.

SPECIFICATION forming part of Letters Patent No. 467,535, dated January 26, 1892.

Application filed May 7, 1891. Serial No. 391,865. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. CUMMINGS, a citizen of the United States, residing at Cohoes, in the county of Albany and State of New York, have invented certain new and useful Improvements in Pressers for Bobbins; 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.

My invention relates to improvements in pressers for bobbins; and it consists in the combinations of devices and elements hereinafter described, and particularly set forth in the claims.

The objects of my invention are, first, to provide with the body of the presser a nose end portion which will be yielding or flexible in its peripheral surface and its end corner, so as to be in a degree capable of receiving impressions of the thread or yarn being wound on the bobbin and be free from liability of said nose portion and corner marring the surface of the bobbin and cutting or chafing the thread or yarn being wound thereon; second, to combine with the body of a presser a yielding or flexible outer jacket or covering for contact with the thread or yarn while being wound on the bobbin for retaining the same in place on the bobbin; third, to combine with a bobbin a presser having a hard or solid body covered in whole or in its nose portion with a yielding or flexible jacket, and, further, to provide specific combinations of devices or elements by which the peripheral jacket or covering of the hard body of the presser may be readily secured in place and held secure from shifting and be readily removable at will. I attain these objects by the means illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improved presser arranged for coaction with a bobbin. Fig. 2 is a sectional view of a presser embodying the improvements in this invention. Fig. 3 is a view, partly in section, of a form of the body part of my improved presser when made in my preferred form. Fig. 4 is a view, partly in section, of a device for holding the butt margin of the jacket clamped in

place with the body part of the presser. Fig. 5 is a view of the draw-bolt and end washer applied to the nose end portion of the presser for coaction with the butt-end-clamping device, and Fig. 6 is a sectional view of a seamless flexible or yielding jacket or covering of a presser when made for covering the entire body of the latter.

The same letters of reference refer to similar parts throughout the several views.

In the drawings, A represents a bobbin, of which *a* is the spool portion, and *a'* the head. This bobbin in its parts may be made of wood, metal, composition, or any suitable material, and is mounted on a suitable spindle and revolved as usual.

B is a presser having the common cone-shaped form of body B', and is loosely mounted on its spindle *b*, preferably secured in the transverse head *c* by set-screw *c'*, which head *c* is pivoted to bracket C and carries lever *d*, suitably weighted by weight D for holding the presser in contact with the bobbin or material wound on the same, all of which parts are so well known to the trade as to require no particular description. The presser B has its body B' made of any hard substance which will retain its form, and may be made of metal, wood, composition, or any suitable material. When constructed of metal, I prefer to make it with a shell-like form, as heretofore, in its essential features and with a form of nose and butt ends as indicated by dotted lines *m m* in Fig. 2, (the said dotted lines *m m* indicating the line of inner side surface of the shell-form body when made of metal.) When constructed of wood, I prefer to make the body B' solid, as represented by full lines in Figs. 2 and 3. The nose end of the body B' is made with a recess *e*, and the nose-corner *e'* is preferably made with a convex line of surface. The butt of this body B' is provided with the recess E, sunken about one-half of an inch, more or less, from a line drawn with the plane of the outer end of the body. This body B' is mounted on spindle *b*, having a suitable bearing in a central bore provided in it from its butt-end. This bore may be made in a tube-form bush F, Figs. 2 and 3, set centrally within the said body, as may be preferred.

G is a jacket made of any suitable yielding

or flexible material or substance which will in a degree be impressed by the thread or yarn when having a bearing against the same while being wound on the bobbin, as will felt cloth and rubber. Yet I prefer to use felt as the material for this jacket, as it can be made seamless and with a form corresponding with that of the body B' and be more cheaply made than soft rubber, which may also be made seamless and to correspond with the said body. In some cases this yielding jacket is extended only on the nose portion of the body to a distance of from, say, one or two inches, more or less, as to dotted line *n*, Fig. 2, while in other cases this jacket is made to cover the entire peripheral surface of the body of the presser, as shown by full lines in Fig. 2. This flexible or yielding jacket or covering may be secured in place on the peripheral surface of the body B' by means of any suitable cement, or otherwise, so that the jacket will be held from shifting on said body. Yet I prefer to hold this jacket securely in place and from shifting by mechanical means, so that an old or worn-out jacket may be readily replaced by a new one without any inconvenience or delay which might attend the removal of a cement-secured jacket and a replacement by cementing process. As before stated, I prefer to form this jacket of felt, made seamless and with a cone-shaped form of body after the manner the bodies of felt hats are formed. This preferred cone-shaped felt jacket is shown in section in Fig. 6 and has a correspondence in proportions of size and form with those of the parts of the body B' it is to cover. When this jacket G is to cover the entire peripheral surface of the body B' of the presser, I extend the butt margin of this jacket all around from one to two inches longer than the length of the same required as a covering for the peripheral surface of the body, and when this jacket is drawn in place on the body B' this extended butt portion or margin is turned into the end recess E, where it is suitably secured by any suitable means, as by cement, tacks, lacings, or other known means for confining and securing the said marginal end portion. Yet preference is given to the use of a clamping-disk H, made, preferably, integral with the tube-form bush F for receiving the spindle *b* and a draw-bolt *h*, entering the nose end of the presser and screwing into a screw-threaded hole *f*, made in the end of bush F, as shown in Fig. 2, with

washer *g* applied between the head of said bolt and the end of the felt or its equivalent material at the nose end recess *e*.

The before-described improvements obviate all liability of the surface of the bobbin being cut or marred by its sliding contact with the corner of the nose of the presser and a cutting and chafing of the thread or yarn being wound on the bobbin, as heretofore has been the case to a greater or less degree. The yielding nature of the jacket causes the latter to be to a sufficient degree calculated to receive impressions of the thread or yarn in contact with it and thereby hold the same from sliding or slipping on the surface of the bobbin, while the means for holding the jacket in place with the body of the presser obviates the use of cements and facilitates the placement and removal of the jacket.

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

1. In a presser for use with bobbins, the combination, with the body B', having the corner *e'*, of convex form at its nose end, of a jacket of yielding material covering the said convex form of corner and extended toward the butt of the said body, substantially as and for the purposes set forth.

2. In a presser for use with bobbins, the combination, with the body B', having the recess E in its butt-end and recess *e* in its nose end, and jacket G, of yielding material, of clamping devices applied to said jacket at said recesses and holding the same tight against the ends of the said body, substantially as and for the purposes set forth.

3. In a presser for use with bobbins, the combination, with the body B', having recess E in its butt-end and recess *e* in its nose end, and the yielding jacket G, of the butt-end-clamping piece H, provided with a pierced screw-threaded stem, nose-end-clamping device, and a screw-threaded draw-bolt working in the said stem of the butt-end-clamping device, substantially as and for the purposes set forth.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

GEORGE W. CUMMINGS.

Witnesses:

CHARLES SELKIRK,
A. SELKIRK, Jr.