

(No Model.)

F. M. GATES & E. D. SARGENT.

COLLAR OR CUFF.

No. 341,742.

Patented May 11, 1886.

Fig. 1.

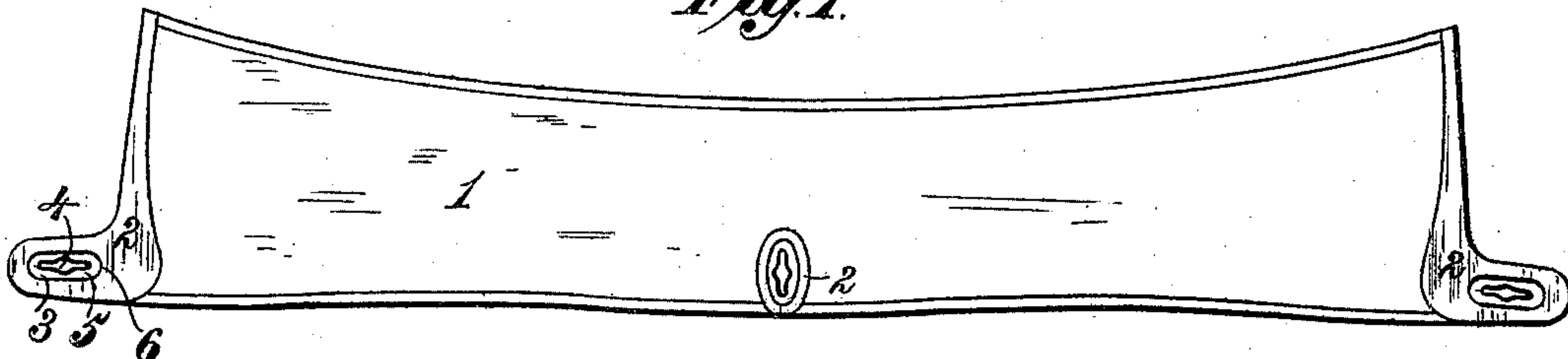


Fig. 2.

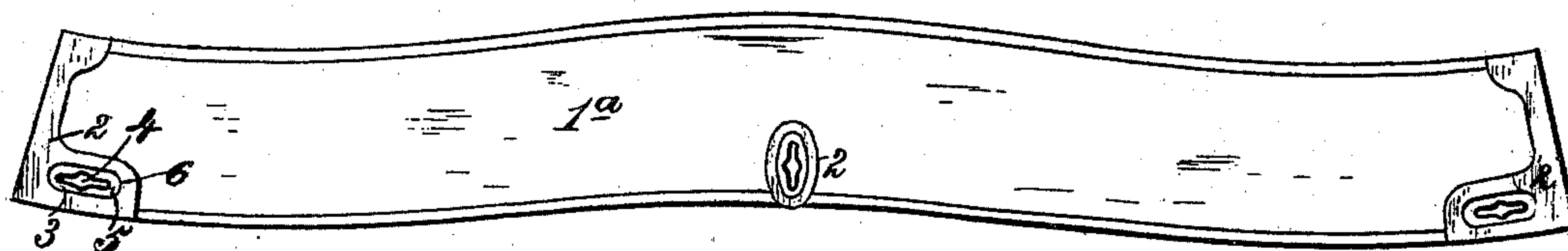


Fig. 3.

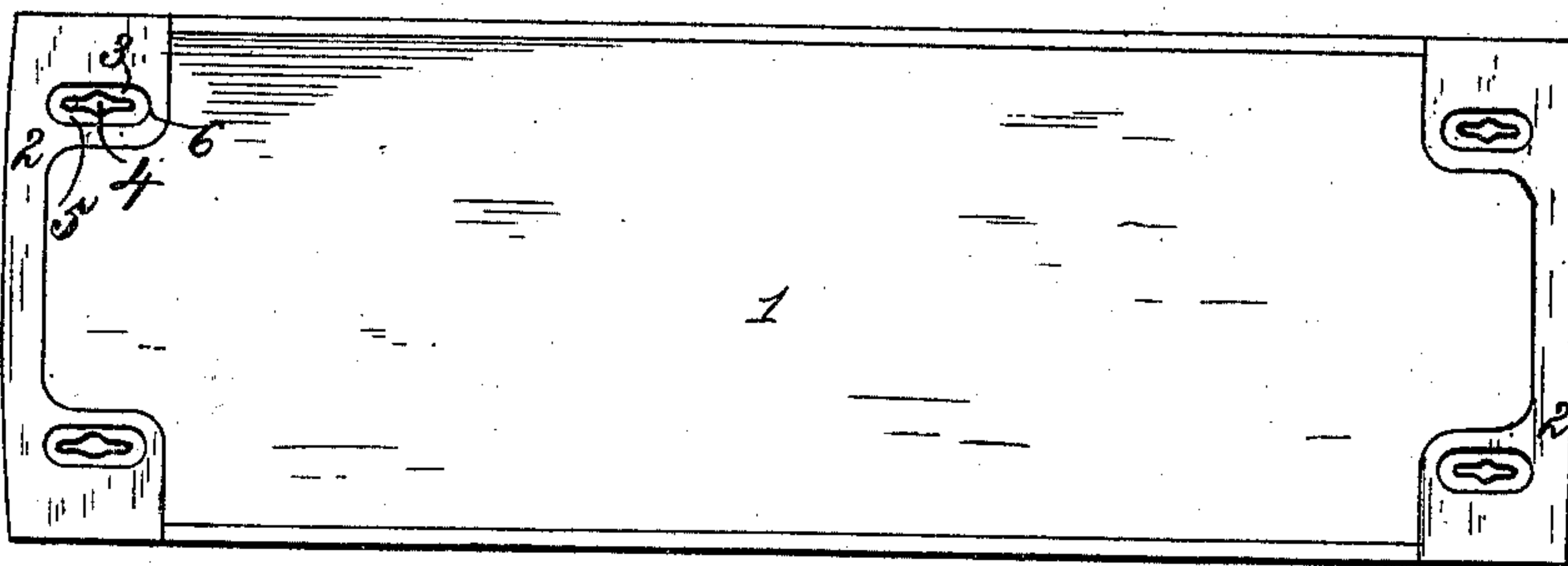


Fig. 5.

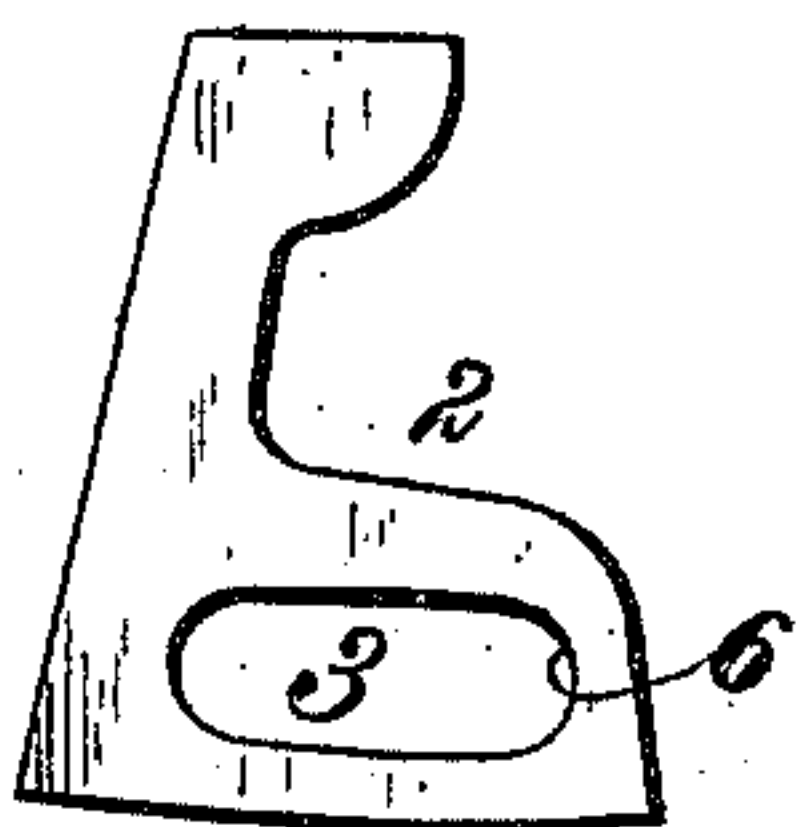
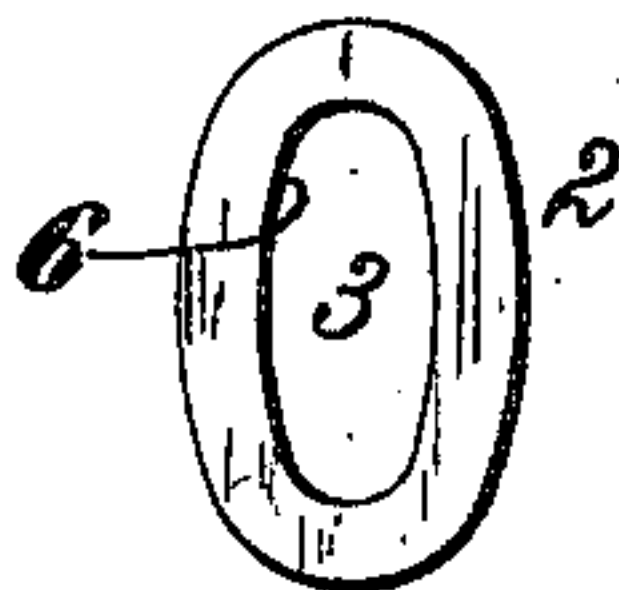


Fig. 4.



Witnesses,

Robert Smith.

J. A. Matherford

Inventors

Frank M. Gates.

Elbridge D. Sargent.

By *James L. Norris*

Atty.

UNITED STATES PATENT OFFICE.

FRANK M. GATES AND ELBRIDGE D. SARGENT, OF NEWBURYPORT, ASSIGNORS TO THE AMERICAN ZYLONITE COMPANY, OF ADAMS, MASS.

COLLAR OR CUFF.

SPECIFICATION forming part of Letters Patent No. 341,742, dated May 11, 1886.

Application filed August 20, 1885. Serial No. 174,898. (No model.)

To all whom it may concern:

Be it known that we, FRANK M. GATES and ELBRIDGE D. SARGENT, citizens of the United States, residing at Newburyport, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Collars and Cuffs, of which the following is a specification.

In the manufacture of collars and cuffs from zylonite or other pyroxyline compounds, with re-enforced button-holes, it has heretofore been customary to attach pieces of fabric to the article at the places where the button-holes are desired, and to then cut the slits through such attached pieces and through the sheet or piece comprising the collar or cuff. This method of producing re-enforced button-holes is objectionable, in that they are thereby rendered stiff, and therefore difficult to button. The object of our invention is to avoid such objection, and to provide a collar or cuff of a pyroxyline compound with re-enforced button-holes in which the slits are formed in the thin sheet or piece comprising the article, and the re-enforcements are in the form of attached pieces having enlarged openings, the inner edges of which are remote or isolated from the slits in the article, in such manner that the thin slitted part of the collar or cuff projects within and beyond the inner edges of the openings formed in the attached re-enforcements, thereby making a perfectly pliable button-hole which can be conveniently buttoned, while it is prevented from tearing out by the thickened part or re-enforcement.

The object of our invention we accomplish in the manner and by the means hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of a collar made in accordance with our invention; Fig. 2, a similar view of a modified form of collar; Fig. 3, a plan view of a cuff; Fig. 4, a detached view of one form of re-enforcement, and Fig. 5 a similar view of another form of re-enforcement.

In order to enable those skilled in the art to make and use our invention, we will now describe the same in detail, reference being made to Fig. 1 of the accompanying drawings, where the number 1 indicates a collar made from a

thin sheet of zylonite or other pyroxyline compound, and 2 is the re-enforcement, consisting of a piece of zylonite or other like material, having an opening, 3, formed therein of a size greatly larger than the slit 4, which constitutes the button-hole. The re-enforcing pieces 2 are cemented by heat and pressure to the sheet or piece of pyroxyline material comprising the collar at the places where the button-holes are to be formed, and the slits 4 are then cut so that the thin parts 5 of the button-holes project within and beyond the inner edges 6 of the openings in the re-enforcements. By this means the button-hole is formed in the thin sheet of pyroxyline material, while the inner edge of the re-enforcing piece is remote or isolated therefrom, so that a thin and pliable button-hole is produced which can be conveniently buttoned, while it is prevented from unduly tearing out by reason of the surrounding re-enforcement.

The re-enforcing piece may be made of any fabric suitable for the purpose.

In Fig. 2 is shown a cuff, 1^a, having re-enforced button-holes made in the same manner as those described with reference to Fig. 1.

The re-enforcing pieces at the ends of the collar or cuff may be made, as shown, to extend entirely across the article, or they can be made in the form of a ring, as in Fig. 4, to surround the button-hole; but, in either event, the slit forming the button-hole proper is in the thin part of the article, and such thin part projects within and beyond the inner edge of the opening in the re-enforcement, thereby producing a perfectly-pliable button-hole, which is substantially re-enforced to prevent it from unduly tearing out.

Having thus described our invention, what we claim is—

1. A collar or cuff made of zylonite or other pyroxyline compound, with the button-hole slit formed in the thin body of the article and provided with a re-enforcement or thickened part remote from such slit, said thin part of the article extending within and beyond the inner edge of the re-enforcement, substantially as and for the purpose described.

2. A collar or cuff composed of zylonite or other pyroxyline compound, having a button-hole slit and an attached re-enforcing strip of

a pyroxyline compound provided with an enlarged opening, said button-hole slit being formed in the thin body of the article, and such thin slitted part extending within and beyond the inner edge of the opening in the re-enforcing strip, substantially as and for the purpose described.

3. The method herein described of making pyroxyline collars or cuffs with re-enforced button-holes, which consists in cutting out the collar or cuff with a button-hole from a sheet of pyroxyline compound, cutting out a separate strip of pyroxyline material with an ap-

erture larger than the aforesaid button-hole, and then cementing the strip by heat and pressure about the button-hole, with the inner edge of the opening in the strip remote or isolated from the edges of the button-hole, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK M. GATES.

ELBRIDGE D. SARGENT.

Witnesses:

CALEB P. DAVIS, Jr.,

JAS. H. MOYLAN.