E. E. MACK.

PAPER-COLLAR.

No. 176,186. Patented April 18, 1876.

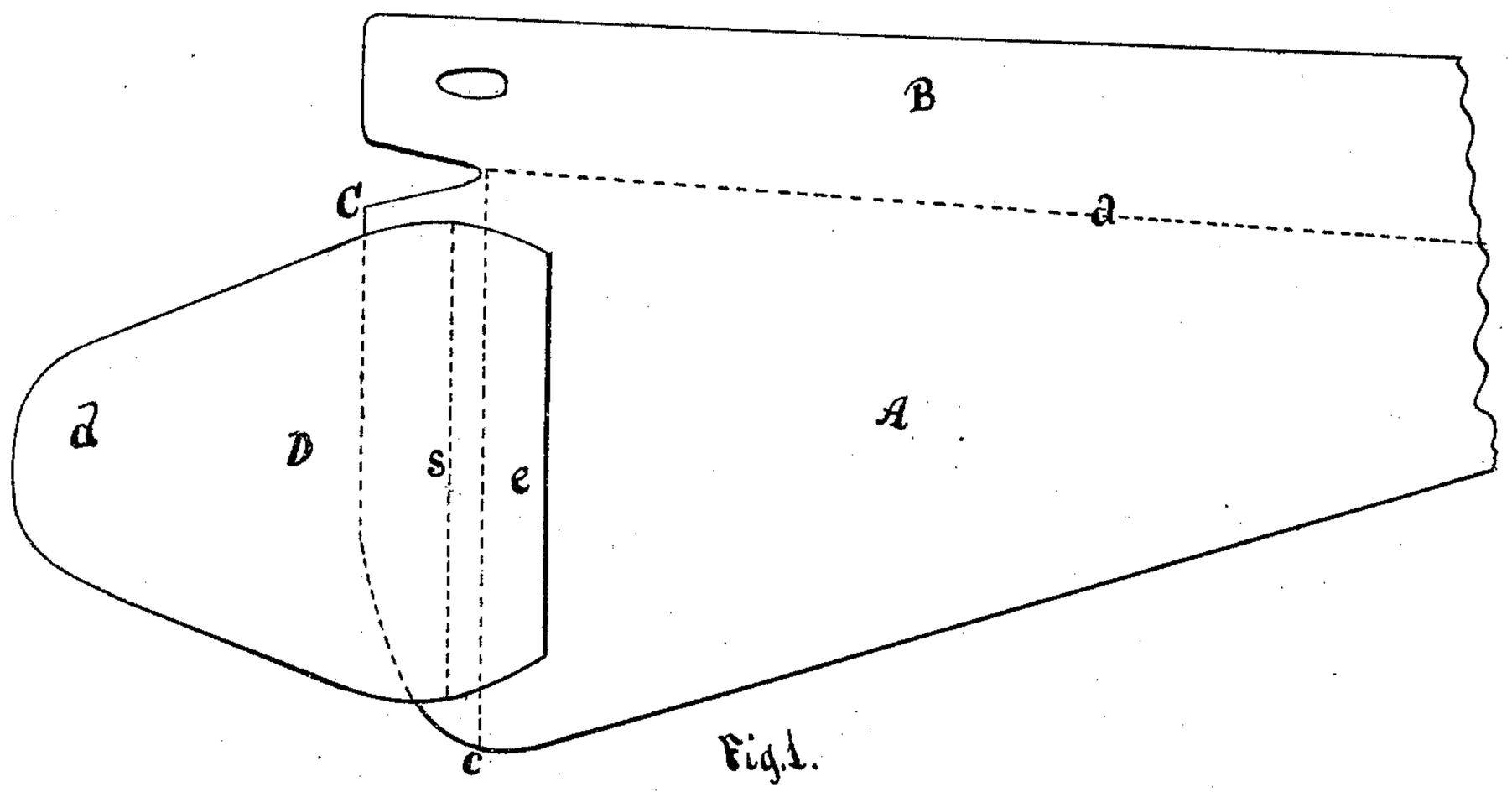

Fig. 1.

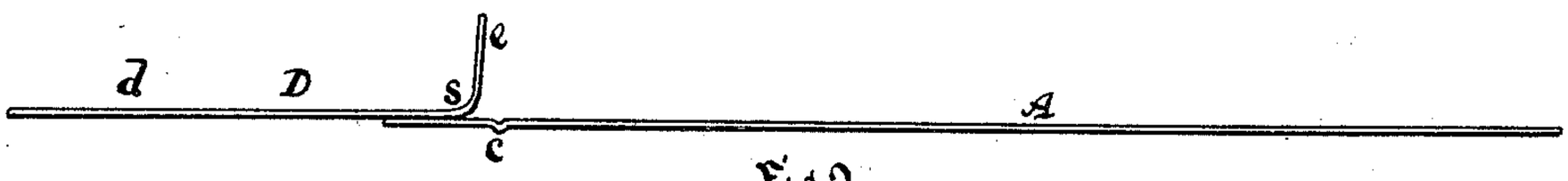

Fig. 2.

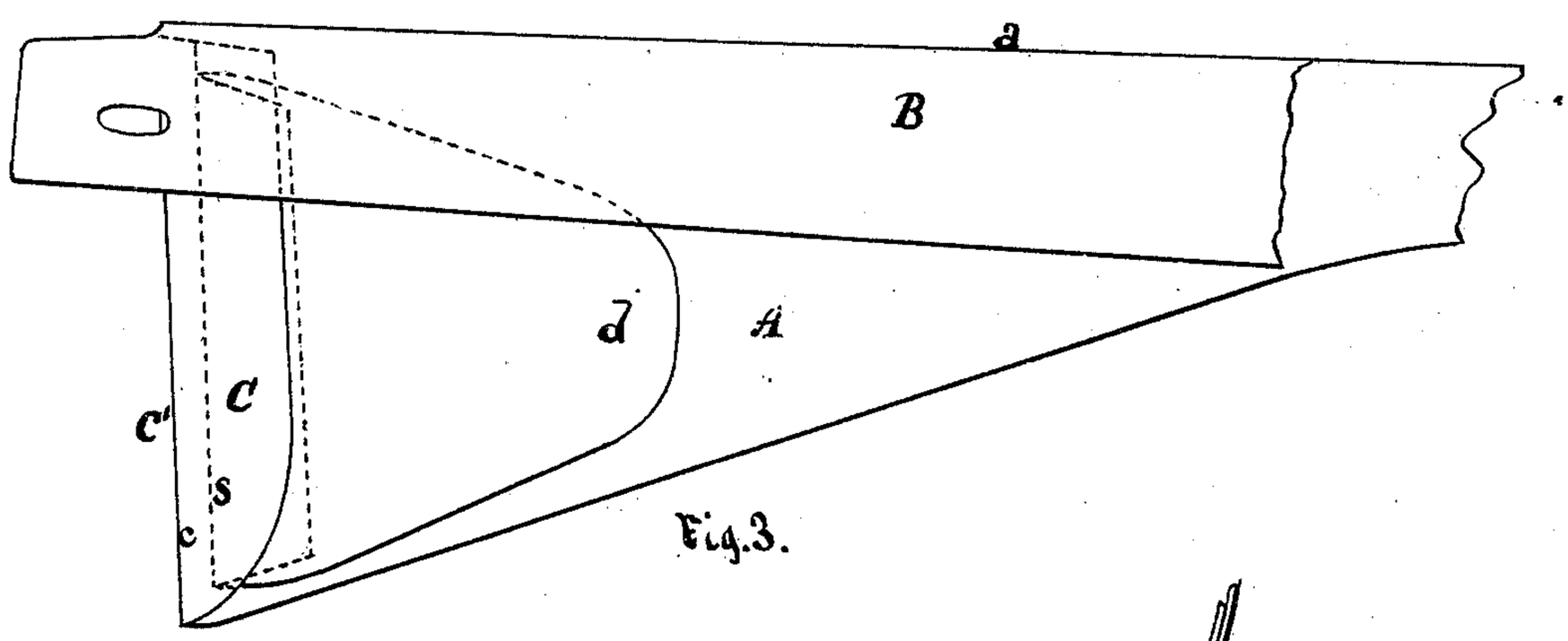

Fig. 3.

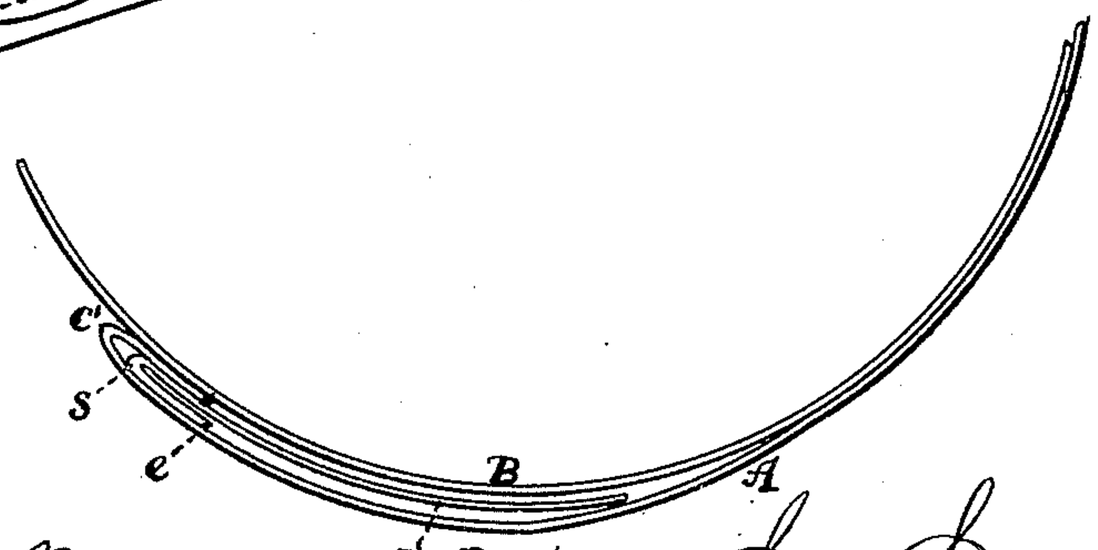

Fig. 4.

Witnesses:
Cornelius Vanderpoel
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UNITED STATES PATENT OFFICE.

ED ELISHA MACK, OF ALBANY, NEW YORK.

IMPROVEMENT IN PAPER COLLARS.

Specification forming part of Letters Patent No. **176,186**, dated April 18, 1876; application filed March 3, 1876.

To all whom it may concern:

Be it known that I, ED ELISHA MACK, of the city and county of Albany, State of New York, have invented certain Improvements in Paper Collars; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a view of the (section) collar from its inner side surface, illustrating the several parts thereof before folding. Fig. 2 is an edge view of the same. Fig. 3 is a view of the collar (section) when the several parts are folded. Fig. 4 is an edge view of the same when bent to encircle the neck of the wearer.

My invention relates to collars having a folded end edge; and consists in the combination, with the fold and end flap, of a supplementary duplex folding piece attached to the end flap, in which one portion of the said duplex piece may be free and have an elastic bearing against the fold of the collar, and the other part, having an attachment to the end flap, may extend forward of the same to a considerable distance, that, when turned down in place over the inner surface of the fold, and the band of the collar is turned down over the extended part of said duplex folding piece, the said piece may be held down, and with it the usual end flap, in a secure manner, while the crease of the fold of the duplex folding piece will be back from the crease of the folding of the end flap, that the latter may cause a thin edge to be given to the folded edge of the collar.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawings, and the letters of reference marked thereon, the same letters indicating like parts.

In the drawings, A represents the fold of a collar. B is the band intended to be turned over the fold from the creased folding line *a*, Fig. 1, to substantially that shown in Fig. 3. C is the usual end flap made continuous with the fold A, and folded from the creased line *c* to form the end edge *c'*, all of which parts are well known. D is a supplementary piece, which I denominate the elastic duplex folding piece, which piece is comprised by the parts *d* and *e*, separated by the creased line *s*, from which the part *d* may be folded over the part *e*. The duplex folding-piece D is secured to the end flap C by being pasted, or otherwise cemented or attached, from the base of the part *d* of said duplex folding piece forward of the crease-line *s*, as shown. To secure a thin edge to the end of the collar or fold when the end flap is turned back and down, the creased line *s*, from which the part *d* of the piece D is folded over the part *e* of the said piece, is made forward of the creased line *c*, from which the end flap is folded back, and runs parallel with the same. This placing the one creased folding line forward of the other, as above described, brings the line of the conjunction of the parts *d* and *e* of the piece D at a distance back from the line of the conjunction of the end flap C with the fold A.

When the several parts have been formed and manipulated in the manner above described, the extension part *d* is turned back over the inner surface of the fold, and the band B is turned down over the upper portion of the said part of the fold, as shown in Figs. 3 and 4, when the end flap will be securely held down and be prevented from turning up or out, as heretofore.

It is readily seen that several advantages may be secured by the improvements in my invention, which are these: The end of the fold or collar will be greatly stiffened and supported against bending or breaking outward by reason of the four thicknesses of material employed, three of which will be hidden from view from the outside. The attachment of the supplementary piece to the end flap from the base of the extended part *d* forms a substantial extension of said end flap without necessitating any loss of good and valuable material, as is had in the use of end flaps having a series or succession of folding pieces made continuous with said end flap, and by a doubling under resulting in a short flap comprised by two or more thicknesses, as heretofore, in folded edge collars. The long part *d* of the duplex folding piece operates as an elastic lever to hold down the end flap it is attached to, when the band is turned down over the same and the fold, the creased folding line of the duplex folding piece being at

a distance from the creased folding line of the end flap produces between the folding lines of both pieces a substantial tube-like form of edge, as may be seen in Fig. 4, which imparts greater strength to the edge than would be had were the folding line of the piece D set in and contiguous with the folding line of the end flap. The extension part *d* of the duplex folding piece when encircling the neck of the wearer will be pinched between the fold A and the band of the shirt of the wearer to retain the same from slipping, while the short part *e* of the said piece will be pressed down on the fold to stiffen the same at a considerable distance back from the edge.

I am aware that collars have been made with end flaps having one or more parts doubled over with one or more folds at a distance from the edge-creased line of the collar. Such end flaps form no part of my invention, and are readily seen to possess different features, and are attended with different modes of operation than are shown and had with my improvements, and they also necessitated the use of a larger per cent. of stock to form collars with such folded ends, while by my improvements no more stock is used than in the ordinary collar, the duplex folding piece being made from waste material and attached.

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

1. The combination, with the end flap of a folded end collar, of the supplementary piece D having parts *d* and *e* separated by a creased folding line, and attached to the said end flap from the base of the part *d* of said supplemental piece, substantially as and for the purpose set forth.

2. The supplemental piece D, in combination with the end flap C, with the creased folding line *s* separating the parts *d* and *e* at a distance from the creased folding line *c* of the said end flap, whereby the line of the conjunction of the parts *d* and *e* may be at a distance back from the line of the conjunction of the end flap with the fold, when all the parts are folded, substantially as and for the purpose set forth.

ED ELISHA MACK.

Witnesses:
CORNELIUS VAN DERZEN,
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