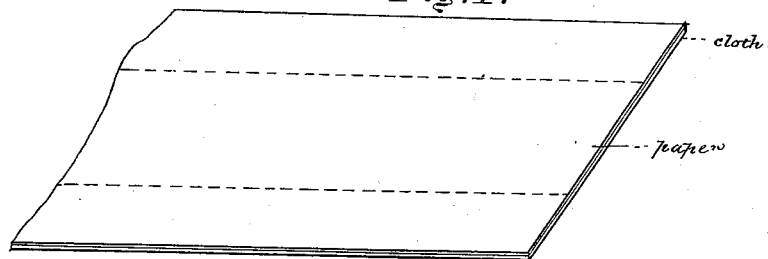


G. A. GOLDSMITH.  
Collar.

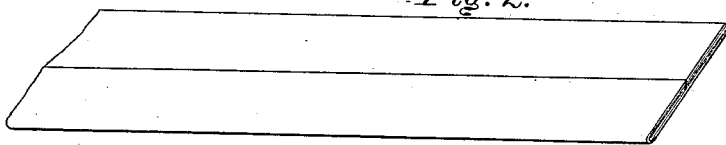
No. 217,937.

Patented July 29, 1879.

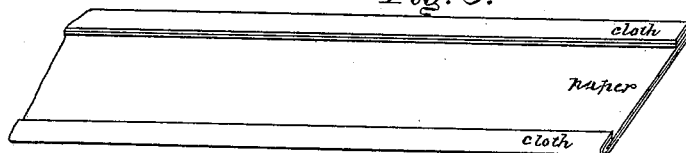
*Fig. 1.*



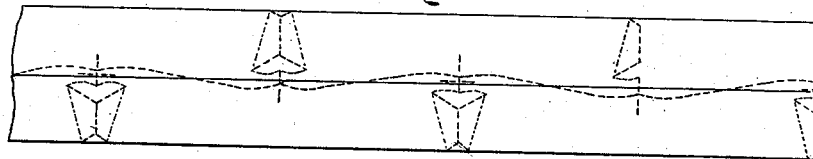
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
*A. Lurgie*  
*D. P. Low*

*Gustavus A. Goldsmith*  
Inventor:  
by his attorney  
*W. Deitz*

# UNITED STATES PATENT OFFICE.

GUSTAVUS A. GOLDSMITH, OF NEW YORK, N. Y.

## IMPROVEMENT IN COLLARS.

Specification forming part of Letters Patent No. **217,937**, dated July 29, 1879; application filed August 21, 1878.

*To all whom it may concern:*

Be it known that I, GUSTAVUS A. GOLDSMITH, of the city, county, and State of New York, have invented certain new and useful Improvements in the Manufacture of Collars, of which the following is a specification.

My invention relates to the manufacture of shirt-collars made of paper and textile fabric combined, which are cut out and shaped by dies or knives. The tendency of collars of this kind to fray and become rough at the edges is well known, and has long been one of the main impediments to their being more extensively introduced and used. Efforts have heretofore been made to remedy the difficulty by turning over the edge after the collar or collar-blank is cut, thus giving the collar a folded longer edge; but so far the methods employed have required too much stock, the principle of cutting on the interlocking plan not being applicable when the longer edge is afterward folded in, and these methods have also been, to a greater or less degree, slow and expensive, involving, as they do, increased manipulation of the collar-blank after it is cut from the sheet.

It is my object to give the collar, whether turn-over or standing, an outer edge of cloth or textile fabric, but to do this in such a way that the collars can be cut, as heretofore, on the interlocking plan, and with the same ease and expedition that ordinary collars are now made on that plan, as exemplified, for instance, in Letters Patent No. 198,424, dated December 18, 1877.

To accomplish this result I take a strip of prepared material, which we will suppose to be cloth and paper combined. This strip is of a width equal to that required to cut out from it two collars side by side on the interlocking plan, plus that required for the fold along the longer edges. I apply to the paper face of the strip paste or other proper adhesive substance. This adhesive substance being moistened, the longer edges of the strip are folded inward toward the center line of the strip to the desired extent and are pressed, so that the folds, by reason of the adhesive substance, will, in effect, become one with the body of the strip. I now have a strip of the requisite width to cut therefrom two collars on the interlocking

plan, and with longer edges, which are covered by cloth. The strip is then passed to machinery for cutting, embossing, &c., the interlocking being by the band of the collar, and in this way collars are turned out with the same ease and expedition as heretofore; but with longer edges, which are cloth-covered and absolutely incapable of fraying out or becoming rough, and consequently are more durable, and, in the case of standing collars, smoother to the neck than heretofore. I also effect quite a saving in the cost of material, as paper of much less weight and lighter body can be used, which, when doubled over, becomes stiffer than paper of more than double the weight used in the single sheet.

To more fully explain the nature of my invention, and the manner in which it is or may be carried into effect, I refer to the accompanying drawings, in which—

Figure 1 represents a portion of a strip of material before it is folded at the longer edges. The dotted lines indicate the lines of fold. Paste or other adhesive substance is applied to the inner face of this strip. I usually thus prepare the material while it is in the long roll, and generally full width—*i. e.*, one yard wide—and then cut it into strips of the required width.

Fig. 2 represents the strip after it is folded and pressed. This is done by moistening the strip on its prepared side, and then folding inwardly the two longer edges of the strip and pressing them down by suitable means or machinery, as will be well understood without further explanation. The strip is now of the width to cut therefrom two collars side by side on the interlocking plan.

The strip shown in Fig. 2 has folds of such width that they meet at the center line, so that collars cut therefrom will have all-cloth surfaces; but the strip may originally be of a less width, so that the folds will not extend so far inward toward the center line as indicated in Fig. 3; but in either the outer longer edges will be cloth-covered.

From the strip thus prepared collars, whether standing or turn-down, are cut on the interlocking plan, in the usual way, and by any of the machinery now in use for the purpose, as

indicated by dotted lines in Fig. 4, the interlocking being by the band, and the outer longer edges of the collars being coincident with the folded cloth-covered edges of the strip.

Cuffs, and collars as well, have heretofore been made of combined paper and cloth folded so as to present cloth-covered longer edges; but I am not aware that the method of manufacture in which my invention resides has ever before been employed.

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

The manufacture of combined paper and cloth collars in the manner described—that is to say, first folding over the longer edges of the material upon the body of the strip and

securing them thereto by an adhesive substance, so as to produce a strip with cloth-covered edges, and of a width adapted for the cutting of two collars on the interlocking plan, and then cutting from the strip thus prepared the collars on the interlocking plan, the interlocking being by the band, and the outer longer edges of the collars being coincident with the cloth-covered folded edges of the strip, substantially as and for the purposes set forth.

In testimony whereof I have hereunto affixed my signature this 19th day of August, 1878.

GUSTAVUS A. GOLDSMITH.

Witnesses:

JAS. H. HOFFMAN,

JEAN WERNER.