

(No Model.)

2 Sheets—Sheet 1.

G. K. SNOW

COLLAR.

No. 336,957.

Patented Mar. 2, 1886.

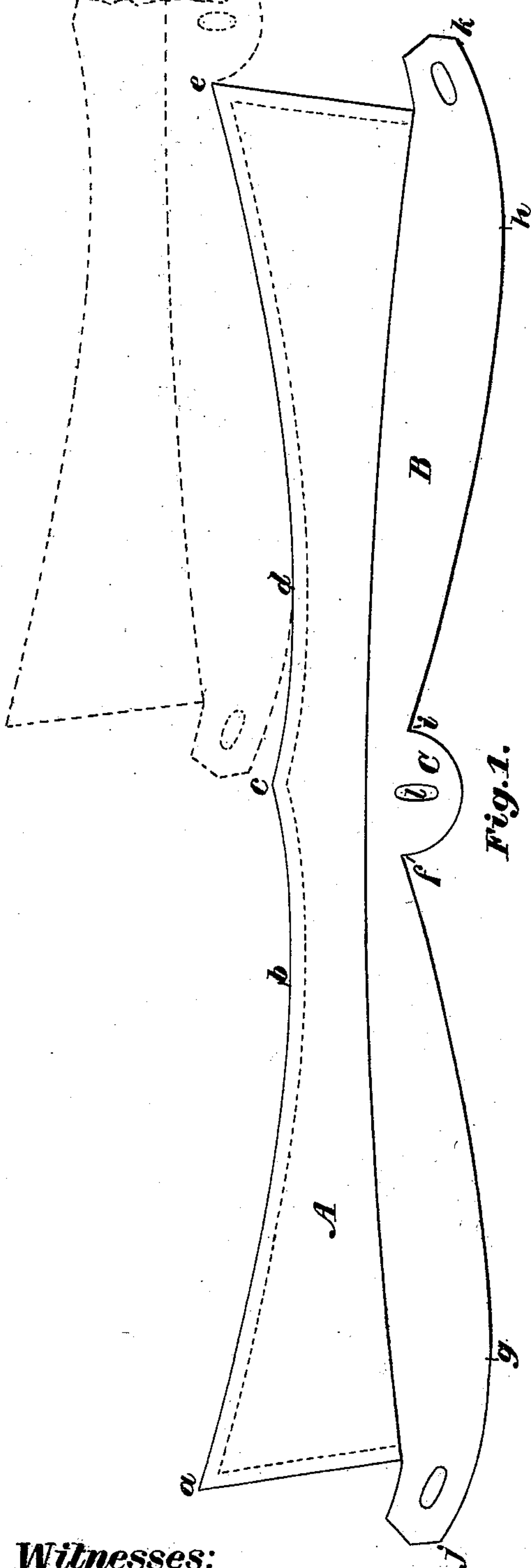


Fig. 1.

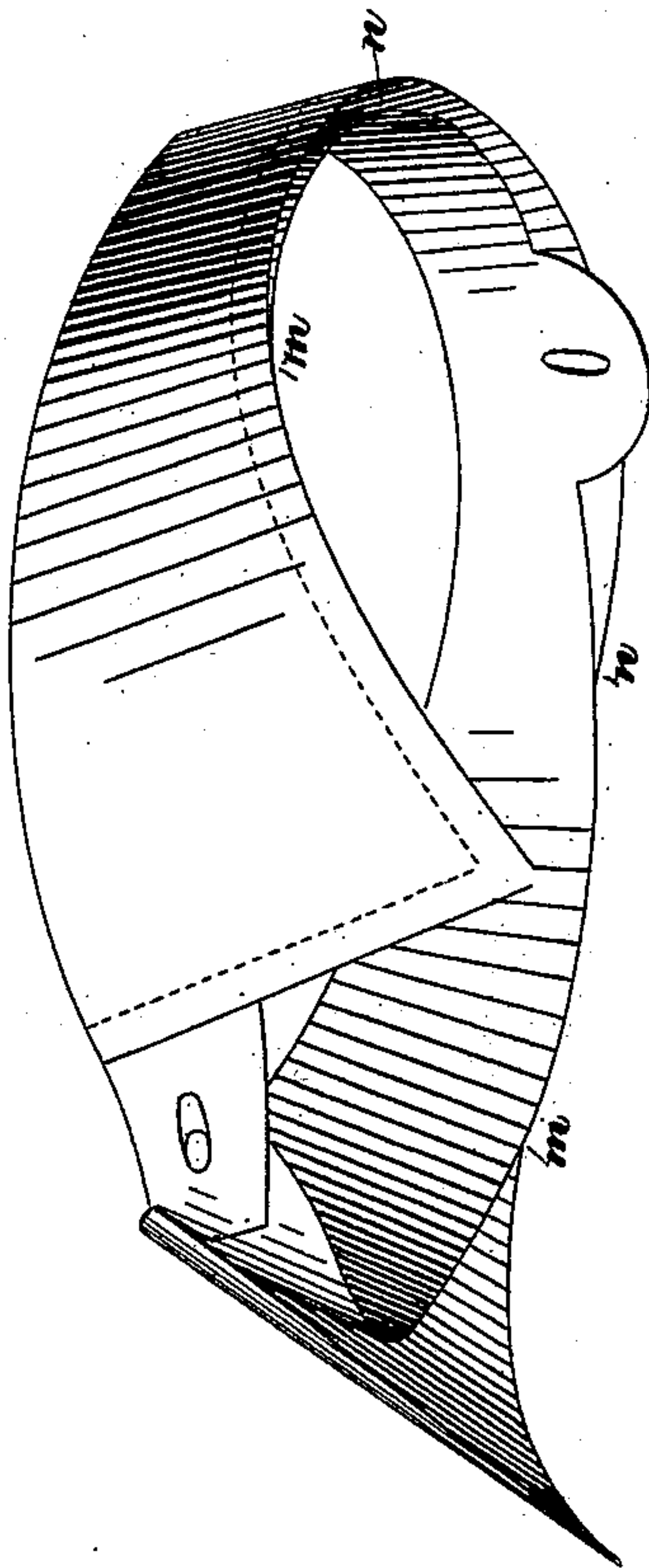


Fig. 2.

Witnesses:

C. A. Hemmenway
E. E. Chandler.

Inventor:

Geo. K. Snow
by N. C. Lombard
Attorney.

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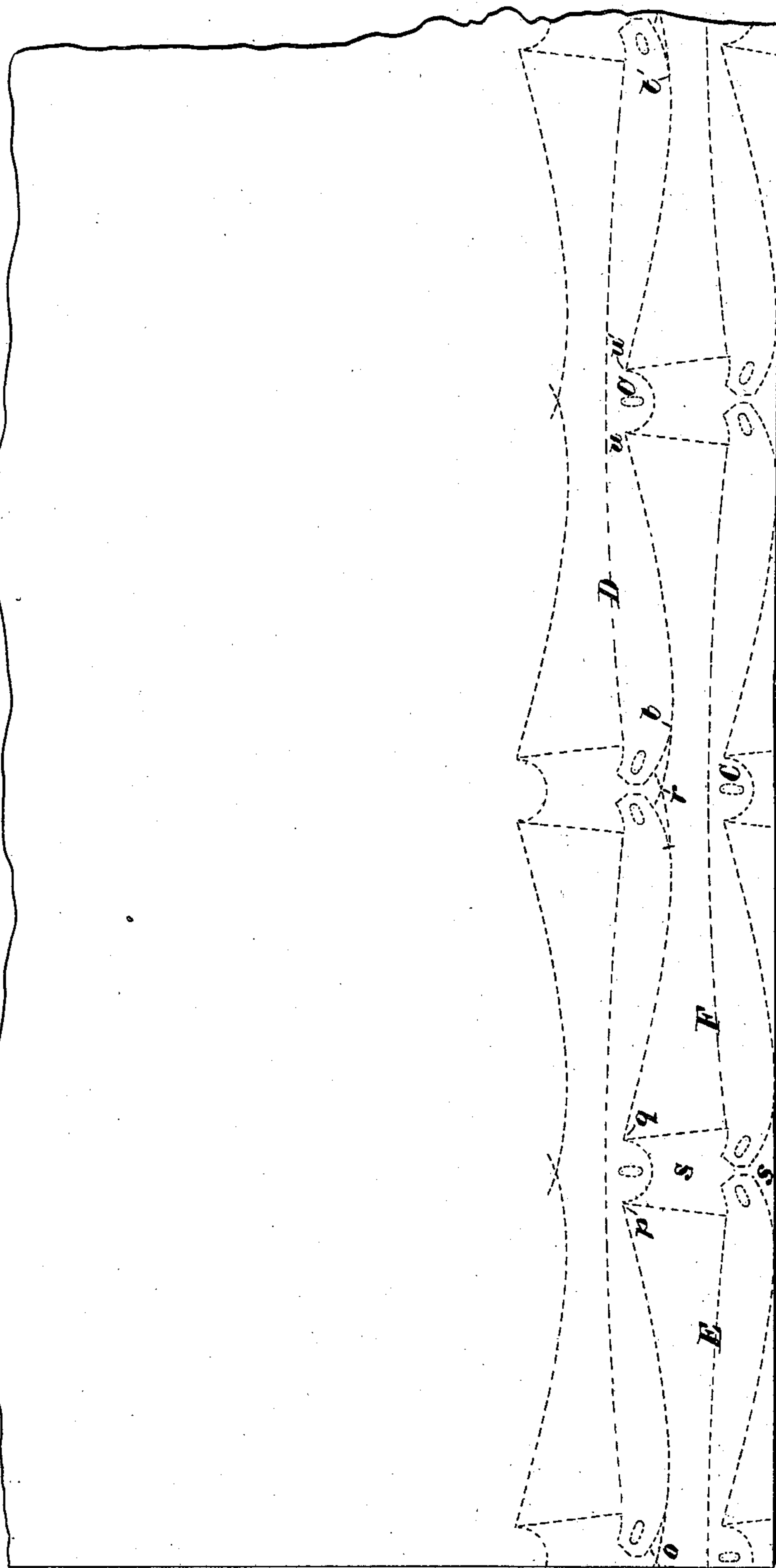


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE K. SNOW, OF WATERTOWN, MASSACHUSETTS.

COLLAR.

SPECIFICATION forming part of Letters Patent No. 336,957, dated March 2, 1886.

Application filed August 11, 1880. Serial No. 15,214. (No model.)

To all whom it may concern:

Be it known that I, GEORGE K. SNOW, of Watertown, in the county of Middlesex and State of Massachusetts, have invented certain
5 new and useful Improvements in Paper and Paper and Cloth Collars and in the Method of Cutting the Same, of which the following, taken in connection with the accompanying drawings, is a specification.

10 My invention relates to the manufacture of what are known as "turn-over" collars from paper or paper and cloth combined, and has for its object the production of a better fitting collar than those made by separating a strip
15 of material having straight parallel edges into two or more series of collars of the shapes and in the manner illustrated and described in Letters Patent Nos. 132,544 and 132,547, granted to me October 29, 1872. In these
20 patents one method shown and described is for cutting two series of collars from a narrow strip of material having parallel edges by dividing it by a series of curved cuts and shaping the ends of the several collars, the
25 product of which operations is a series of collars having either their top or bottom edges straight and the other edge composed of a combination of straight and curved lines. Another method shown and described is for
30 cutting several series of collars side by side from a web or sheet of material, said collars having both of their edges made up of a combination of curved and straight lines; but in both of the methods shown the tops of two
35 collars adjoin each other, or else the bottoms of two collars adjoin each other, according as the top or bottom of the collar is curved, and in the case of the collar having both edges curved the bottom and top edges are shaped
40 exactly alike, except the extension of the lower portion to form the lap of the band. A serious objection to the collars so formed is that the neckband is too narrow and the turn-over portion too wide at the point where the
45 collar rests on the shoulder of the wearer, particularly if the collar is wide at its front ends, so that the turn-over portion of the collar bears hard upon the shoulder, and being unsupported by the band portion because of its
50 narrow width, the outer or turn-over portion is very liable to be jammed out of shape, and

as a consequence the usefulness of the collar is very much lessened.

By my present invention this objection is overcome; and it consists, first, of a collar 55 formed by stamping it from a sheet or web of prepared material—such as paper, paper and cloth united, or two or more thicknesses of cloth united and sized or starched and calendered—before cutting into collars, said collar 60 having its top edge or the edge of its turn-over portion composed of two concave lines, which meet each other at an angle at the center of the length of the collar, and the greater portion of the bottom edge of each half of the 65 band portion convex to the extent of the concavity of the line which forms the edge of one-half of the turn-over portion; or, in other words, the lower edge of the band portion of the collar is made of such a shape that the 70 single concave line of cut which forms the concave edge of the turn-over portion of the collar will also form the convex edge of the larger part of one-half of two other collars.

It further consists of a collar having its top 75 edge formed of two concave lines meeting each other at an angle in the center of the length of the collar, and its bottom edge formed of two convex lines, the greater part of each of which is the counterpart of one of the concave lines 80 of the top edge, and provided at the center of the length of its lower edge with a downwardly-projecting tongue to receive the center button-hole.

Figure 1 of the drawings is an elevation of 85 my improved collar before it is folded, with a portion of another collar shown in dotted lines, illustrating their relation before being cut. Fig. 2 is a perspective view of my improved collar in the position it occupies on the wear- 90 er's neck as viewed from below, and Fig. 3 illustrates the method of cutting a web or roll of material into collars.

A is the turn-over portion of the collar, the upper edge of which is formed by two concave 95 lines, *a b c* and *c d e*; and B is the band portion, the bottom edge of which, from *f* to *g*, is the exact counterpart or reverse of the line *e* to *d* of the upper edge, and from *h* to *i* is the exact counterpart or reverse of the line *a* to *b* 100 of said upper edge, both of the lines *f g* and *h i* being convex, as shown. The bottom edge

of the band portion B, near its ends, or from *g* to *j* and from *h* to *k*, is made of a quicker curve, in order to give to the lap portion of the band a more desirable shape.

5 C is a downwardly-projecting tongue, preferably semicircular in outline, the purpose of which is to obtain sufficient width of band at that point to contain the center button-hole, *l*, and at the same time permit the band upon
10 either side thereof and immediately contiguous thereto to be quite narrow, whereby a considerable saving is made in stock.

It will be seen upon examination of Fig. 2 that that portion of the band B between *m* and
15 *n* extends downward as low, or a little lower, than the turn-over portion of the collar, and rests upon the shoulder of the wearer and supports the collar in the proper position, and thus prevents the outer or turn-over portion
20 of the collar from being jammed out of shape.

Another advantage of this form of collar is that the band of the collar will not ride upon or climb over the neckband of the shirt, as is very likely to be the case when the collar-
25 band at this point is much narrower than the turn-over portion, and at the same time the concave line, extending from the end of the collar to the center of its length and forming the outline of the edge of each half of the turn-
30 over portion of the collar, is just what is wanted to adapt the collar to fit nicely over the shoulder of the wearer without subjecting said turn-over portion to undue pressure at any one point.

35 In Fig. 3 the method of cutting a series of collars from a sheet or web of prepared material by means of dies is illustrated, in which the single line of cut which forms the concave upper edge of one-half of each of two collars,
40 forms or shapes the greater part of the length of the lower edge of another collar, and forms a collar-band on said collar that is wider at a point between its ends and center than at said ends or center, each half of said band having
45 a convex lower edge, as shown.

It will be seen that the points of the front ends of the turn-over portion of the collar project into the band portion of the adjacent collar on either side of the central button-hole,
50 thereby making the band at such points quite narrow and enabling me to make quite a saving in stock as compared with my patents of 1872, before referred to. This I am enabled to do without injury to the collar by virtue of
55 the convex shape of each half of the lower edge of the band, as the narrow parts of the band are so near the central button-hole that that

part of the band cannot ride upon the shirt-band, and at the points where it is most likely to do this the band is wide enough to prevent it. 6c

In carrying out this method of cutting collars I use dies adapted to make a single line of cut from *o* to *p* and from *q* to *r*, and to sever the contiguous ends of two collars from the
65 waste *s s*, which lies between them, and also to shape the tongue C on one of said collars, a repetition of these cuts producing a collar at each operation of the dies.

Another form of die which may be used
70 with success is one that will cut a single line of separation around both ends and the top edge of a single collar from *t* on the lower edge of the band near the left-hand end thereof around that end of the collar, along its top
75 edge, and around its opposite end to *t'* on the lower edge of the band, and make a semicircular cut around the tongue C from *u* to *u'*. (See collar D, Fig. 3.) This latter die may be in the form of a male and female die, and cut
80 a single collar at each operation, or it may be in the form of a cutting-punch and be made to cut through a pile of sheets at each movement, thus producing several collars at each operation of said die. 85

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A collar cut or stamped from a sheet or web of prepared material, and having the edge of its turn-over portion composed of two concave lines meeting each other at an angle in the center of the length of the collar, and the greater part of the lower edge of each half of the band portion convex to the extent of the concavity of the outline of one-half of the top
95 edge of the turn-over portion, substantially as and for the purpose described.

2. A collar cut or stamped from a sheet or web of sized and calendered material having its top edge formed of two concave lines meeting each other at an angle, and its bottom edge formed of two convex lines, the major portion of each of which is the exact counterpart of one of the concave lines, which give shape to the upper edge of the collar, and provided at
105 the center of its length with the downwardly-projecting tongue C, to contain the center button-hole, substantially as described.

Executed at Boston, Massachusetts, this 9th day of August, 1880.

GEO. K. SNOW.

Witnesses:

E. A. HEMMENWAY,
E. E. CHANDLER.