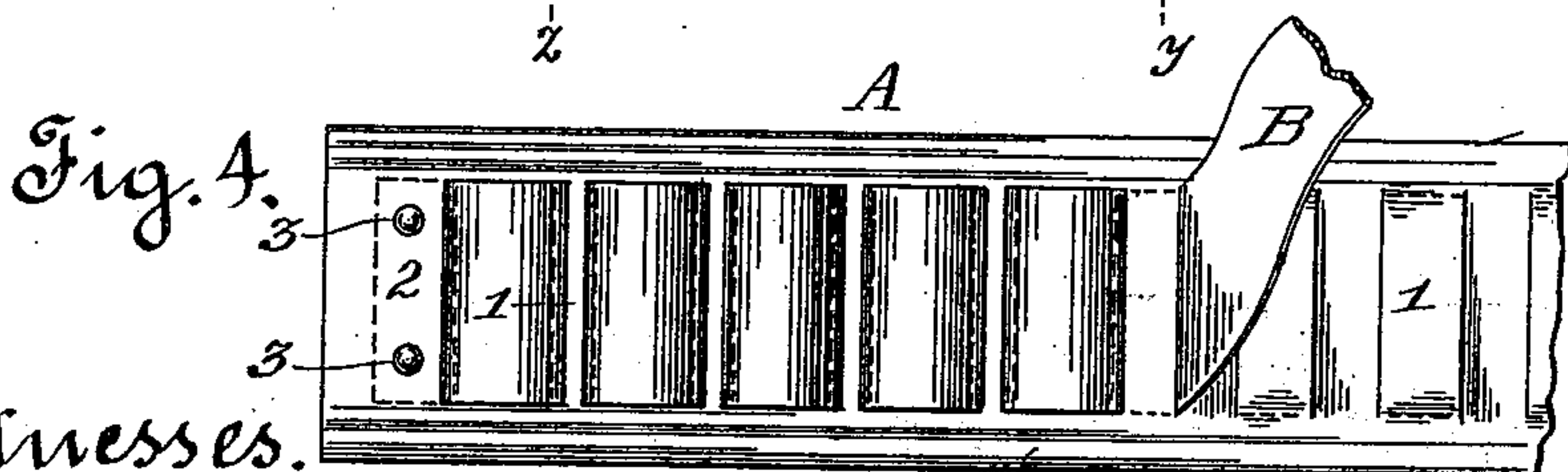
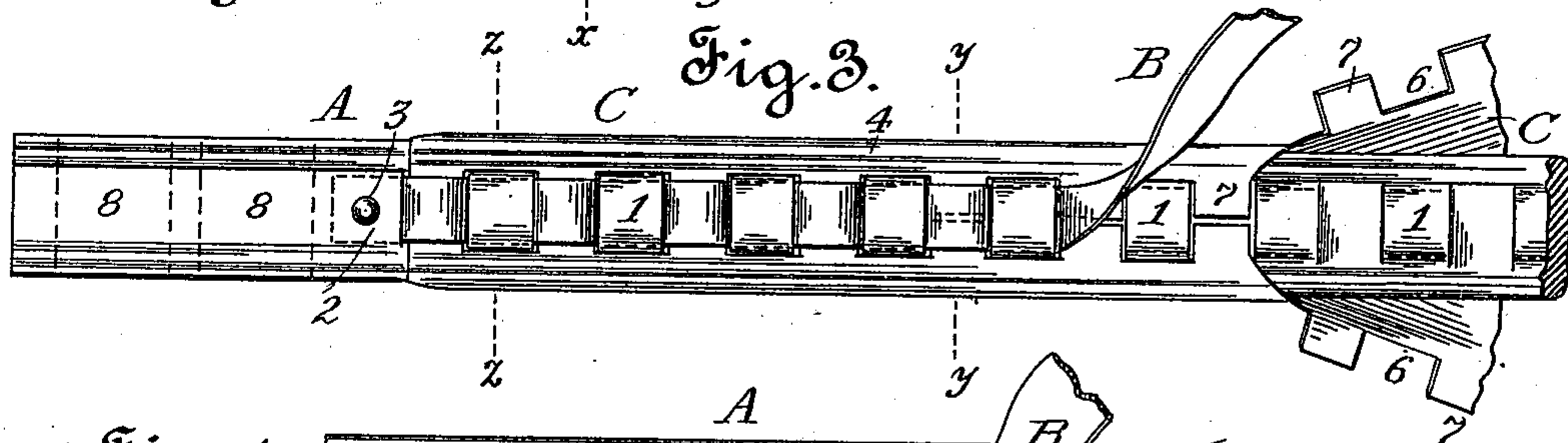
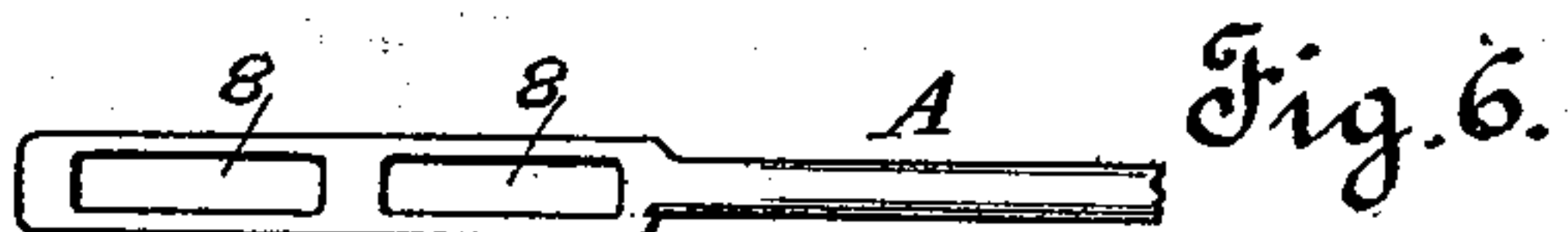
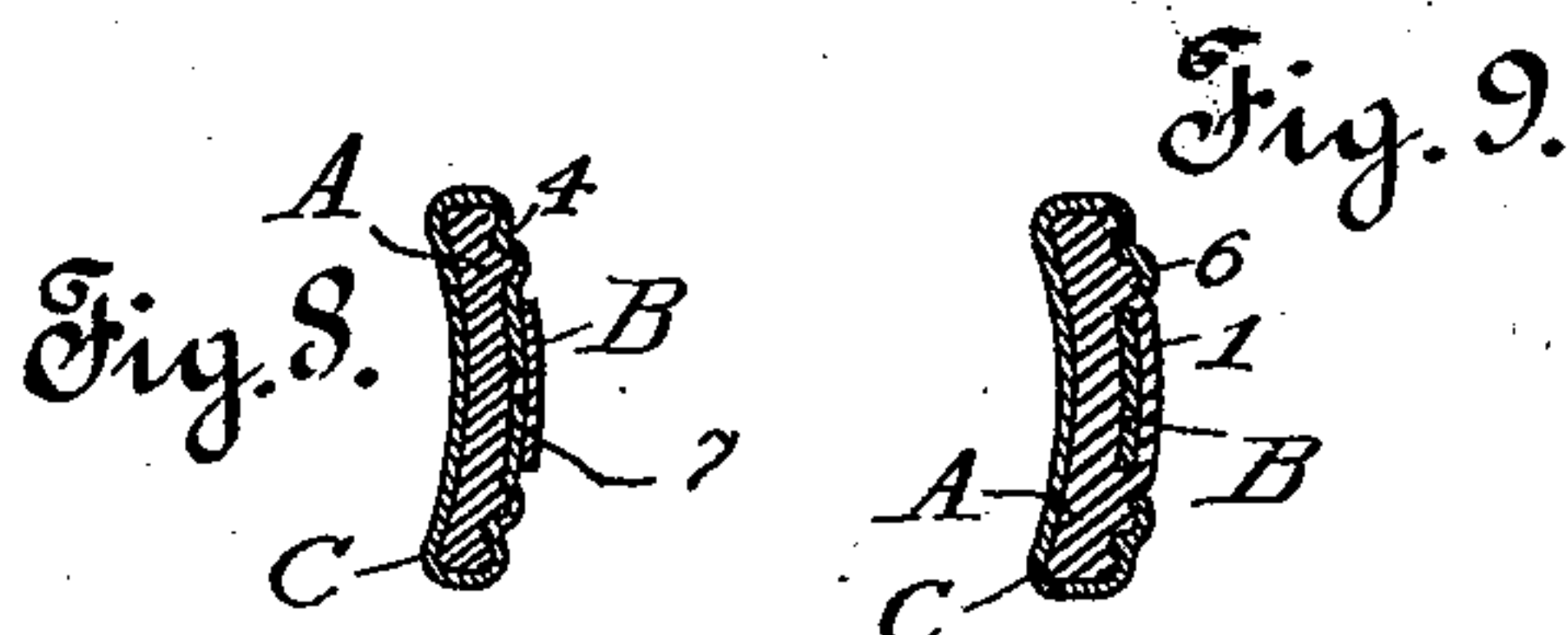
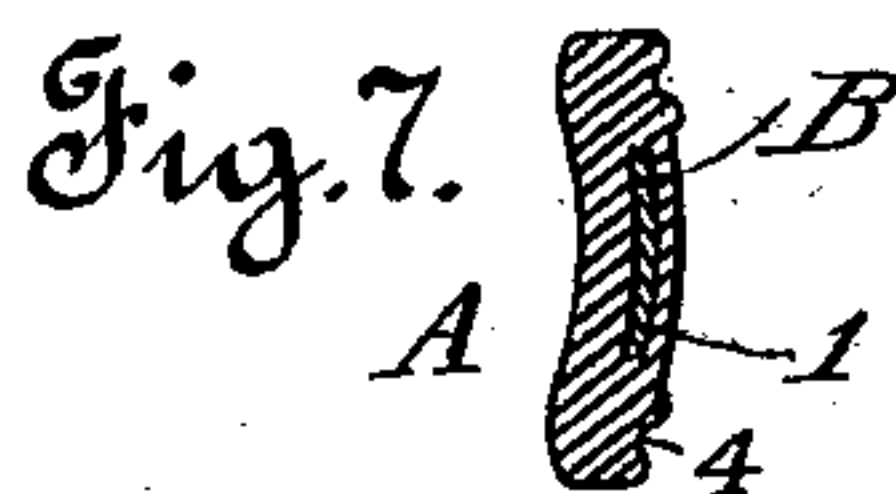
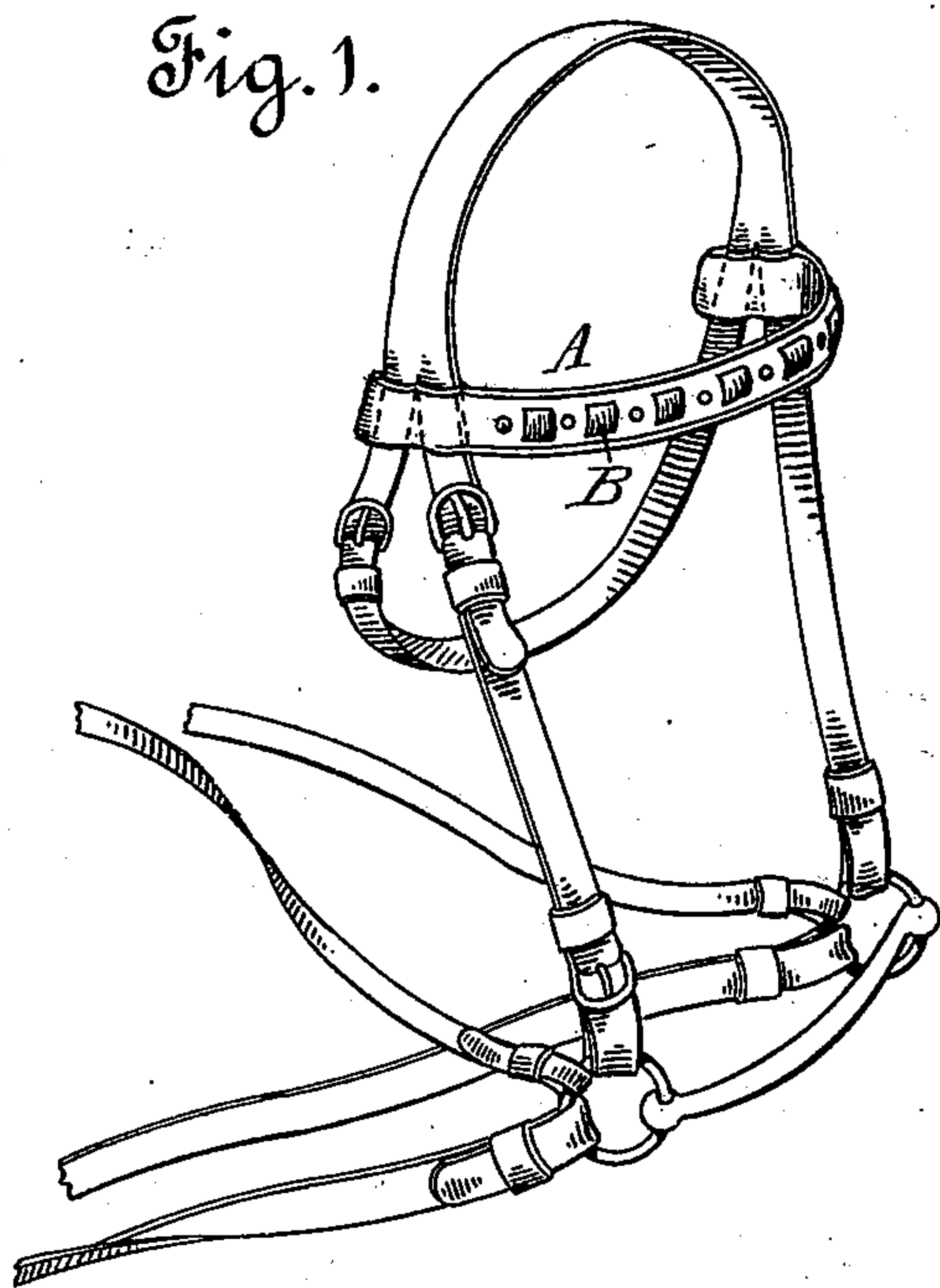


(No Model.)

F. J. BRINGHAM.  
SEAMLESS LEATHER ARTICLE.

No. 545,577.

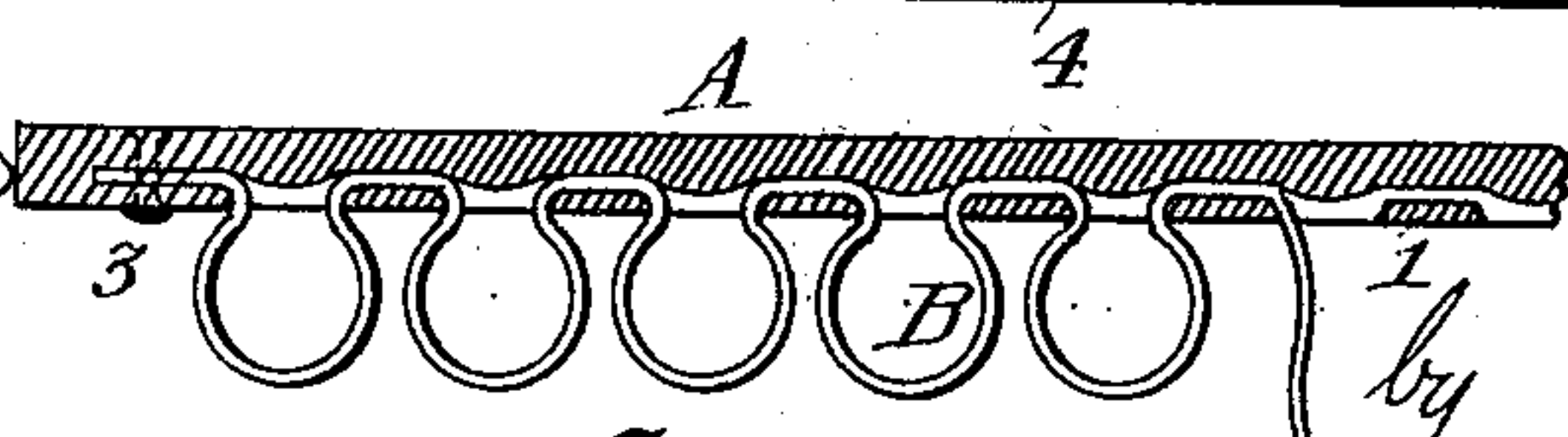
Patented Sept. 3, 1895.



Witnesses.

*H. Monteverde*

*M. R. Bryan*



Inventor.

*Friedrich J. Bringham*

*by Spear & Seely*

*Attorneys*



# UNITED STATES PATENT OFFICE.

FRIEND J. BRINGHAM, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE SEAMLESS LEATHER COMPANY, OF SAME PLACE.

## SEAMLESS LEATHER ARTICLE.

SPECIFICATION forming part of Letters Patent No. 545,577, dated September 3, 1895.

Application filed December 4, 1893. Renewed April 27, 1895. Serial No. 547,400. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEND J. BRINGHAM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in the Manufacture of Seamless Leather Articles; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to improvements in the manufacture and construction of such leather articles as bridle-fronts, housings, and other parts of a harness, ornamental leather belts, leather collars, such as dog-collars, cartridge-belts, &c.

The following specification describes my invention as applied to bridle-fronts, and also to cartridge-belts, these two articles being selected as types of the general classes of manufactured leather articles to which my invention is particularly adapted. Such bridle-fronts are usually made by doubling or folding a strip of leather lengthwise so that its edges meet, and then stitching or riveting to its face another piece or strip of leather, or cloth, or metal. The operation of stitching requires much time and labor, and makes the completed article more expensive than is necessary. Cartridge-belts are usually made by attaching to the front of a leather belt pockets formed by bending or doubling a strip of leather into a series of tubes. The outer piece thus formed into tubes is secured by stitches or rivets between the tubes. The necessity for this plurality of fastening devices has hitherto tended to make these articles very expensive in manufacture, and for the same reason they can only be produced comparatively slow. By my method of construction I dispense with all this stitching and riveting, and thus produce such articles more rapidly and more cheaply, as well as of superior quality.

Reference is made to the accompanying drawings, in connection with this specification, for a full comprehension of my invention.

Figure 1 is a perspective view of such portions of a bridle as will give a clear view of the bridle-front forming a part of it. Fig. 2 is a front view of a bridle-front. Fig. 3 is a

similar view of a modified construction of bridle-front. Fig. 4 is a front view of part of a cartridge-belt. Fig. 5 is a horizontal section of the same. Fig. 6 is an edge view of one end of the strap shown in Fig. 3. Fig. 7 is a cross-section upon line  $x x$  of Fig. 2. Fig. 8 is a cross-section upon line  $y y$  of Fig. 3. Fig. 9 is a cross-section upon line  $z z$  of Fig. 3.

A represents a piece or strap of leather, which forms the base or main portion of a part of a harness, such as a bridle-front, or of a collar or of a belt, as the case may be. In the front portion of this strap is formed a series of loops 1, produced by slitting the leather at intervals edgewise and lengthwise with a proper tool. The number of these loops varies according to the length of the strap and of the loops themselves and the space between the loops, and is entirely a matter of taste and expediency. The right-hand end of Fig. 2 shows very clearly the appearance of the strap as thus formed. Near each end of the strap, instead of a loop, is formed a pocket 2, which is merely a loop with a closed end.

In making the style of bridle-front, collar, or other article shown in Figs. 2 and 7 a facing-strip B, of leather, thin metal, or other material, is threaded through the loops 1, as shown, being partly concealed by them, its ends entering the pockets 2 and being secured there, if desired, by an eyelet or rivet, such as 3. If made of leather, this strip would be white or red, or of some other color contrasting with that of the main strap, and a very handsome effect is produced by the alternating colors of the respective parts. I can also form openwork designs of various kinds by stamping or cutting out a part of the loops 1, through which the strip B shows, as illustrated by the holes 9 in Fig. 2. Equally effective as an ornamental device is a strip of thin sheet metal burnished or nickel-plated or otherwise surfaced so as to produce the contrast in color. When the two parts are in place, they are subjected to pressure between rollers, which finish the edges of strap A, as shown, by forming one or more beads or creases 4, at the same time preferably giving it the slightly concavo-convex form shown in the sectional views. It is not necessary that the



strip B should be pulled up tightly from one end to the other so as to lie flat. Between the loops 1 the strip B may be allowed to project a little, if desired. In this way I am able to  
 5 produce the exceedingly cheap and simple cartridge-belt shown in Figs. 4 and 5. This is practically the same structure as shown in Fig. 2, the only difference being that the interlaced strip is pulled out between the loops  
 10 1 beyond their vertical plane and formed into tubes of proper size to receive the cartridges. The strip is secured in pockets at the ends in the manner before described.

The modified form of bridle-front shown  
 15 in Figs. 3, 8, and 9 is more elaborately ornamented than that already described and requires three pieces of material to complete it. The main strap is slitted into loops and end pockets in the manner before described. I  
 20 will suppose this strap to be of black leather. Partly surrounding and inclosing the strap A is a binding-strip C, of, say, red leather, the edges of which are formed with alternate recesses 6 and projections 7. The projections  
 25 meet or nearly meet each other between the loops 1, and the recesses leave the loops exposed. Now, the facing-strip B, which I will suppose to be of white leather in this instance, is threaded through the loops 1 in the  
 30 manner before described, so as to cover the meeting edges of the red leather and alternate with the black-leather loops. Thus I have a middle checkered design of black and white with continuous red borders or edges.  
 35 The creasing and shaping of the edges, as before described, and the overlaid strip B will hold the free edges of the part C in position.

The right end of Fig. 3 represents very clearly the successive steps in putting the different parts together.  
 40

In connection with the bridle-front shown in the drawings it should be stated that a great saving in material, time, and labor is secured by forming in the ends of the strap  
 45 slitted loops, which are integral parts of the

strap, without stitching or riveting. In the present practice the strap must be made long enough to permit it to be bent upon itself at both ends for a sufficient distance to form either one or two loops, according to the construction of the bridle, these loops being made  
 50 by one or two rows of transverse stitching or by their equivalents in rivets. I save on the average about eight inches of leather in each bridle-front by forming these loops as represented in Figs. 2, 3, and 6, and as also described in my Letters Patent No. 500,111,  
 55 granted June 27, 1893, and in my application for Letters Patent, Serial No. 472,730, filed May 2, 1893. Such loops 8 are made by slitting the leather edgewise and then expanding the slitted portion into proper shape, and as they are endless and seamless and require  
 60 no stitching or other fastening can be made much more cheaply and rapidly than is now possible, while the saving in material is evidently very considerable.

What I claim is—

1. In a bridle front, collar, belt or the like, the combination with a strap having integral  
 70 loops in its surface formed out of a part of the thickness of the leather, of a strip drawn through said loops lengthwise of said article, substantially as described.

2. In a bridle front, belt or like leather articles, the combination with a strap having integrally formed loops on its surface in the thickness of the leather, of a binding strip having recessed edges and partly inclosing  
 75 said strap, and a facing strip passing through said loops and partially concealed by them, and concealing the edges of the binding strip, substantially as described.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 23d  
 85 day of November, 1893.

FRIEND J. BRINGHAM.

Witnesses:

L. W. SEELY,  
 M. R. BRYAN.