

W. J. BAILEY.

SIGN.

APPLICATION FILED NOV. 21, 1905.

3 SHEETS—SHEET 1.

Fig. 1.

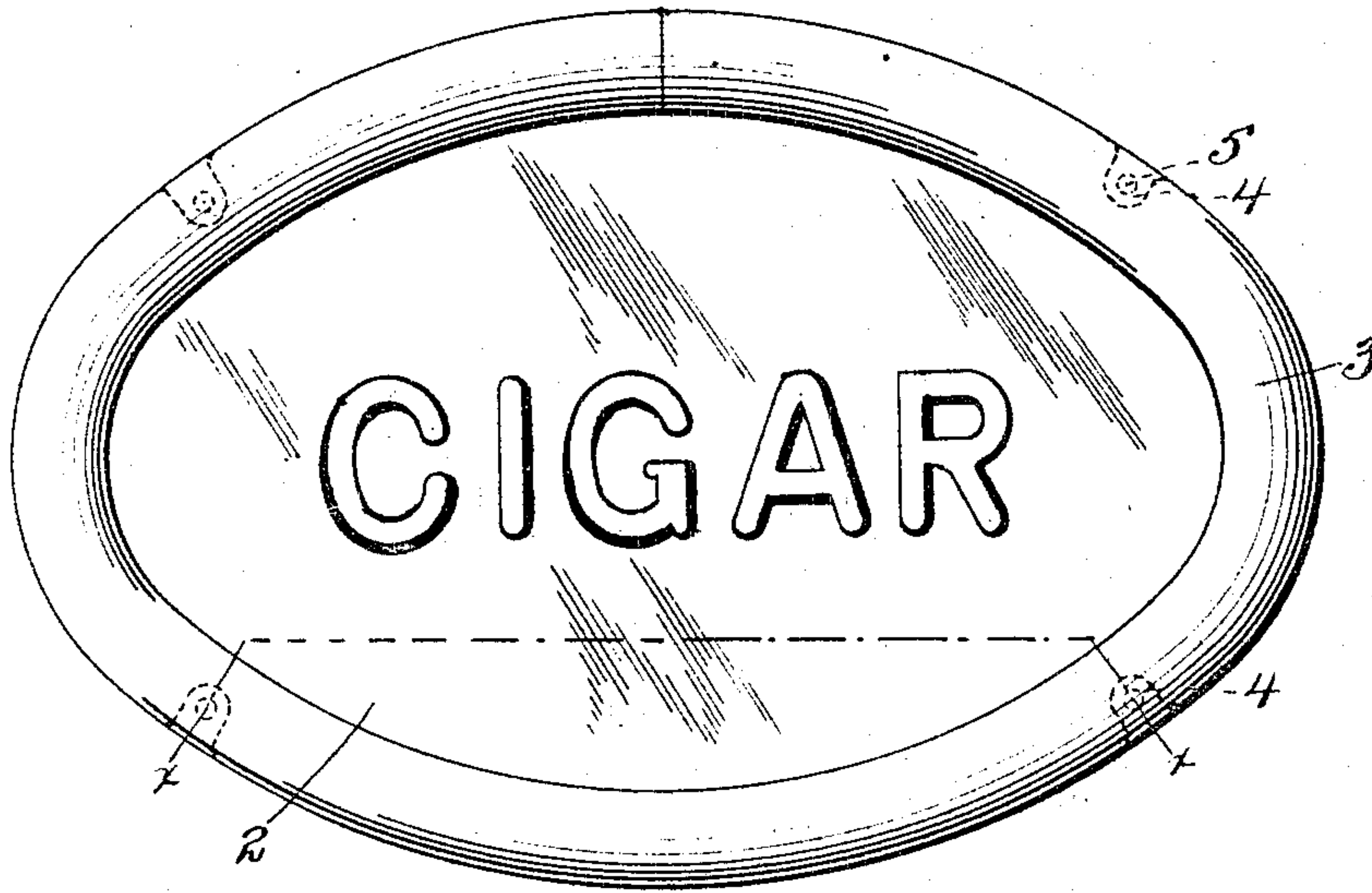


Fig. 2.

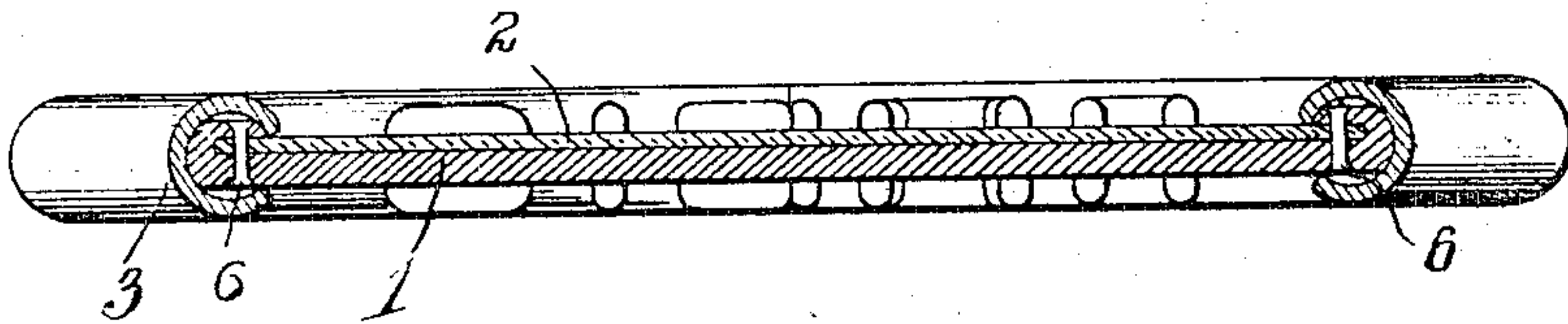


Fig. 3.



Fig. 4.

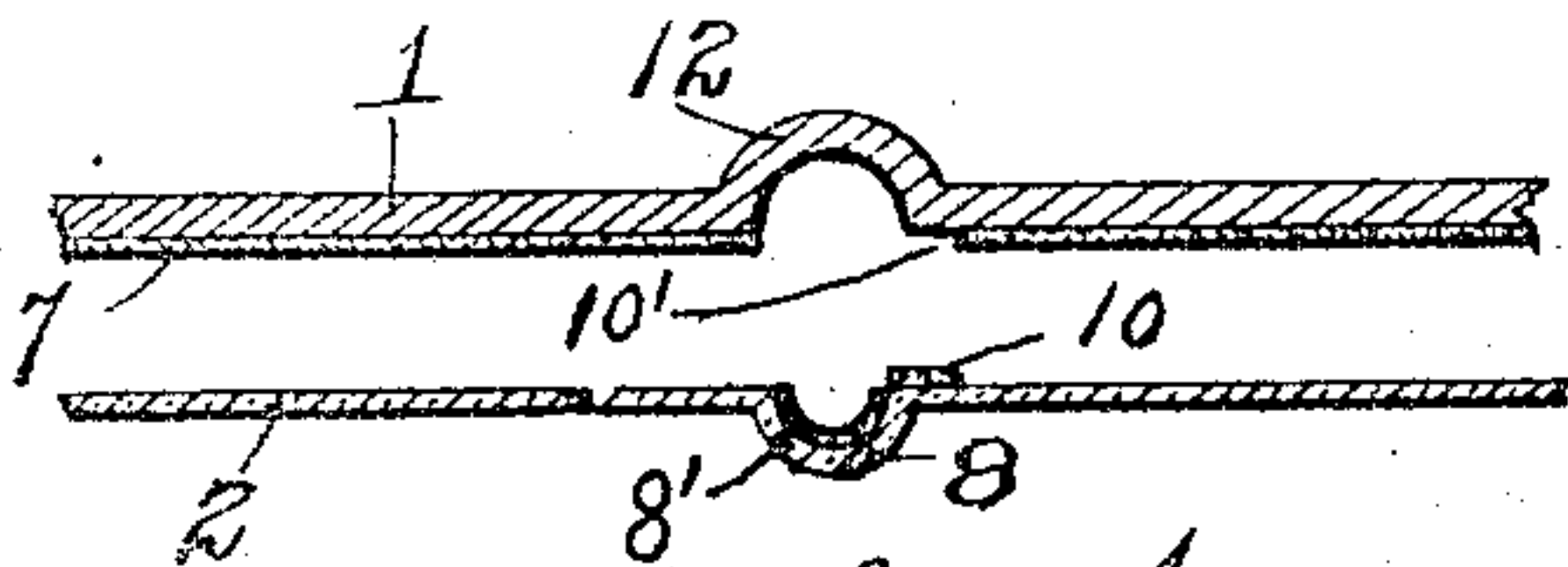


Fig. 5.

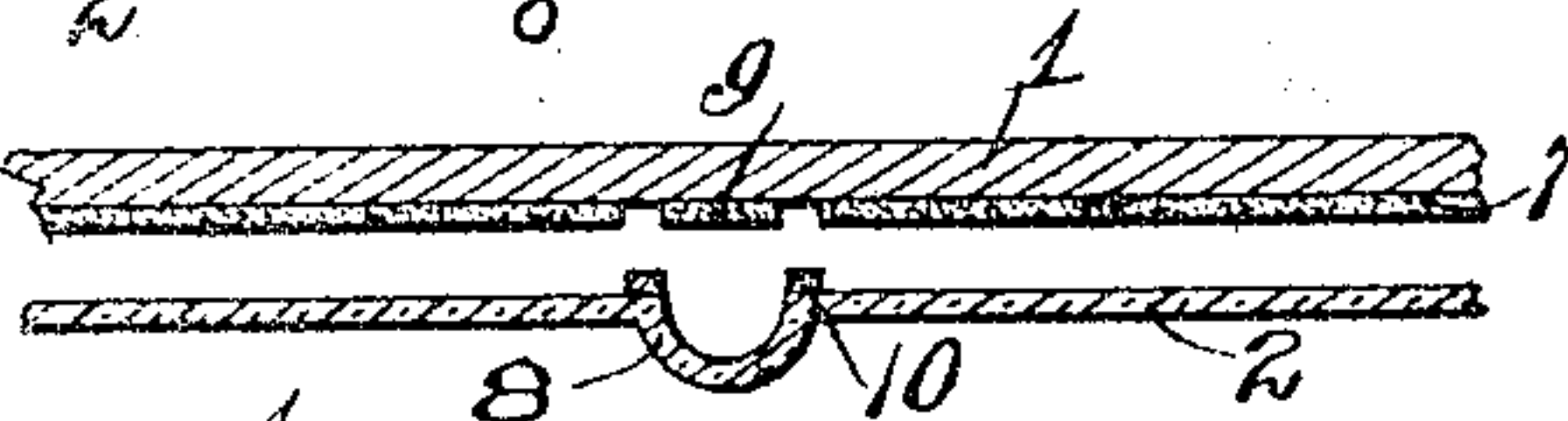
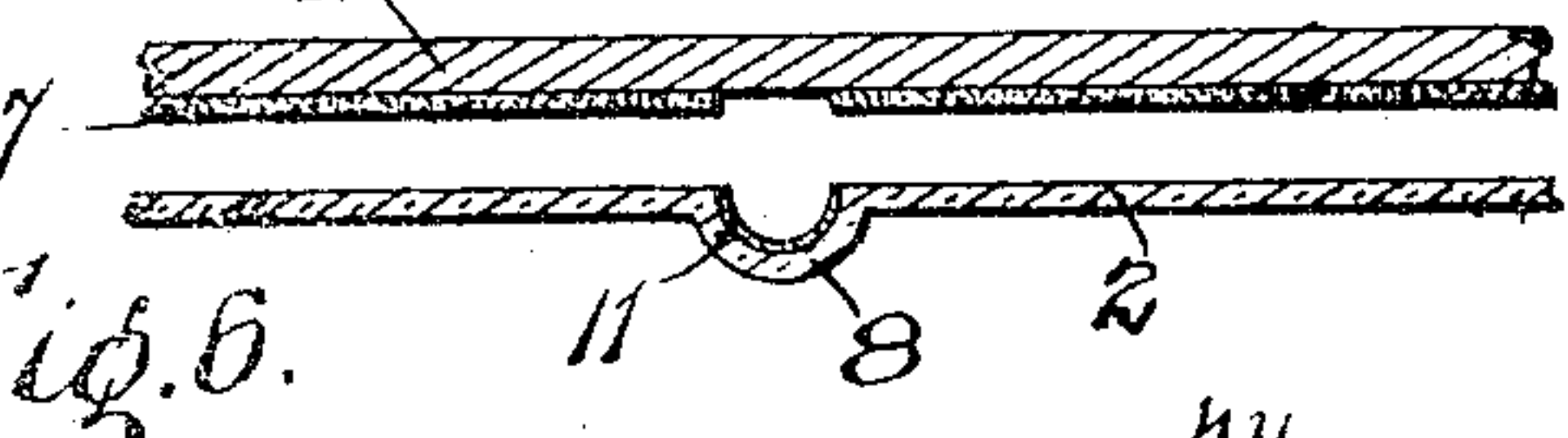


Fig. 6.



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3 SHEETS—SHEET 2.

Fig. 7.

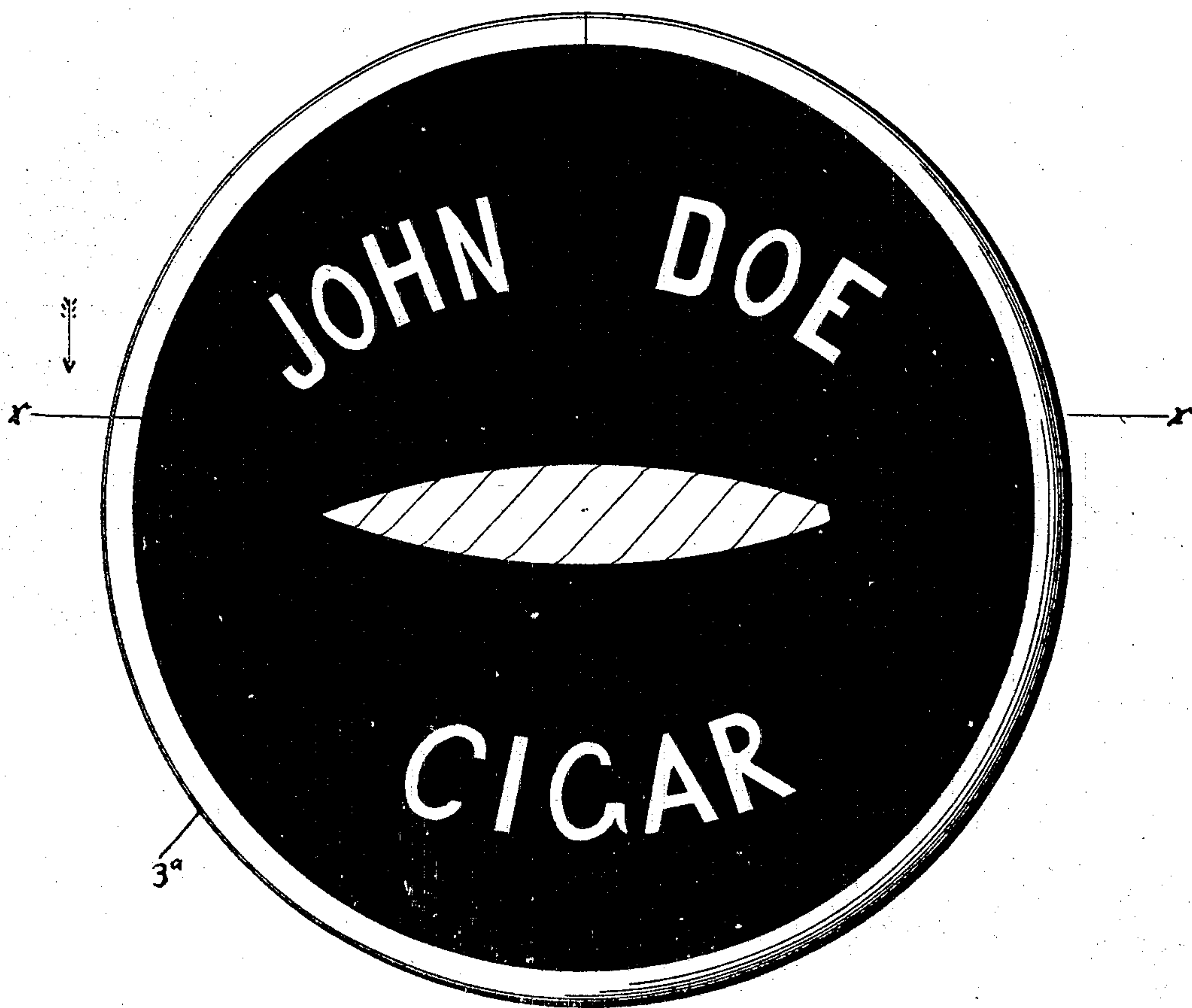
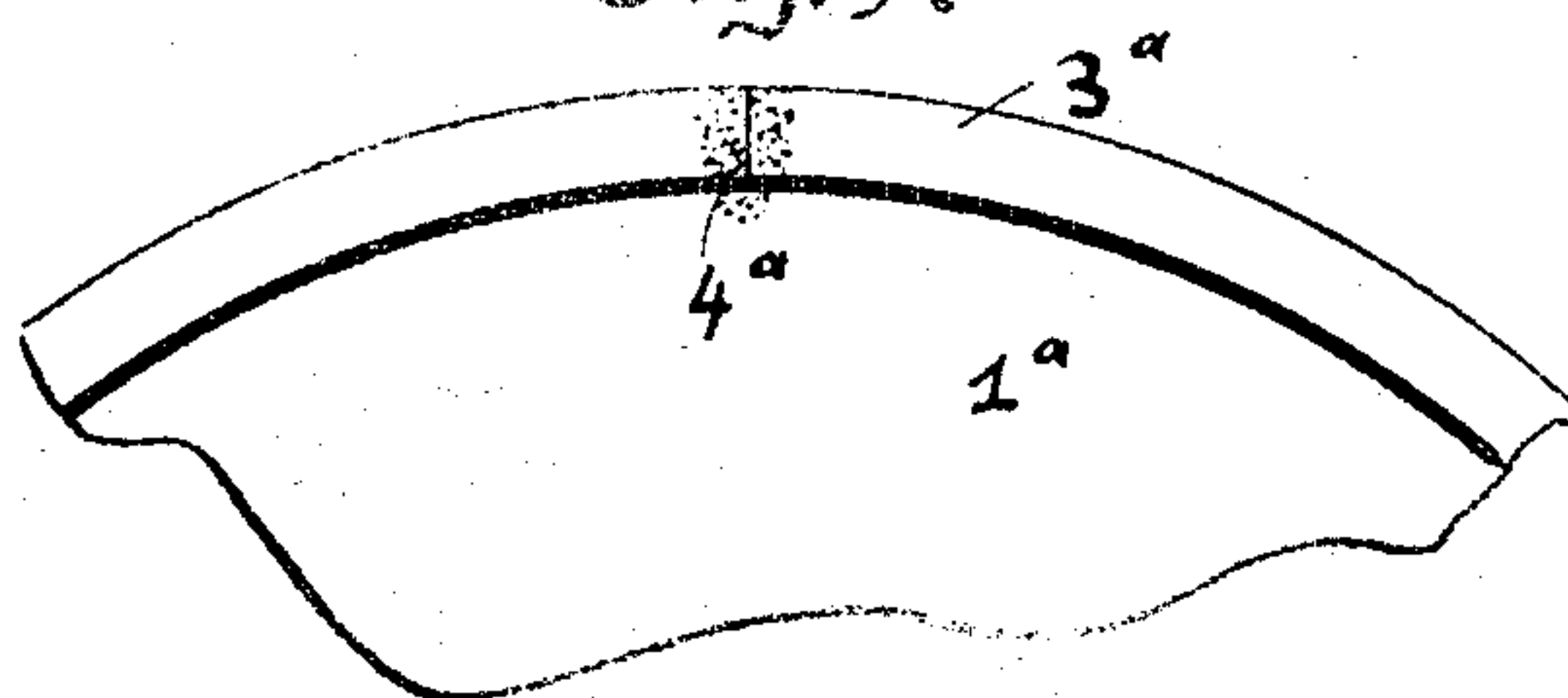


Fig. 8.



Fig. 9.



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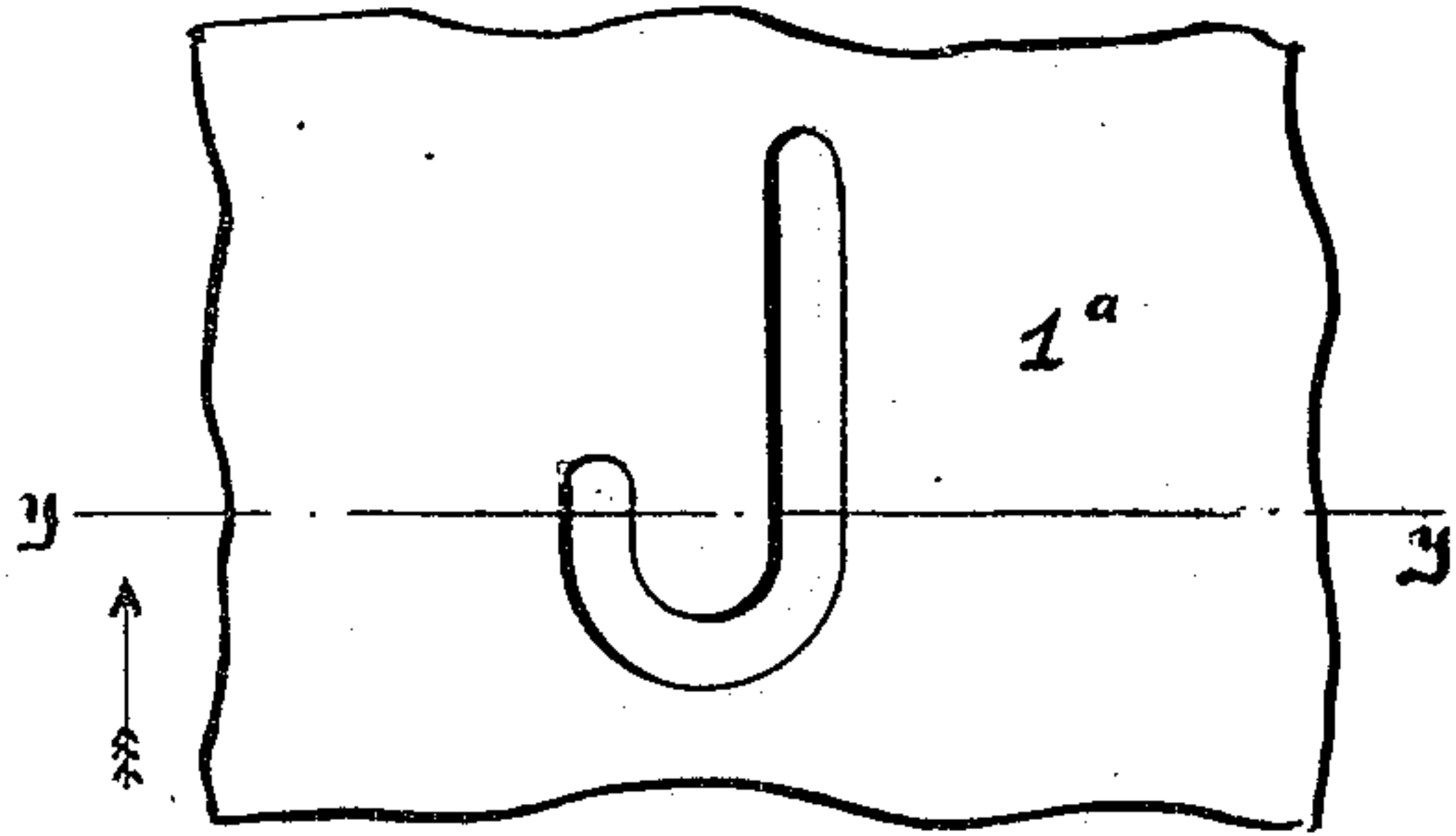
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3 SHEETS—SHEET 3.

Fig. 10.



1^a

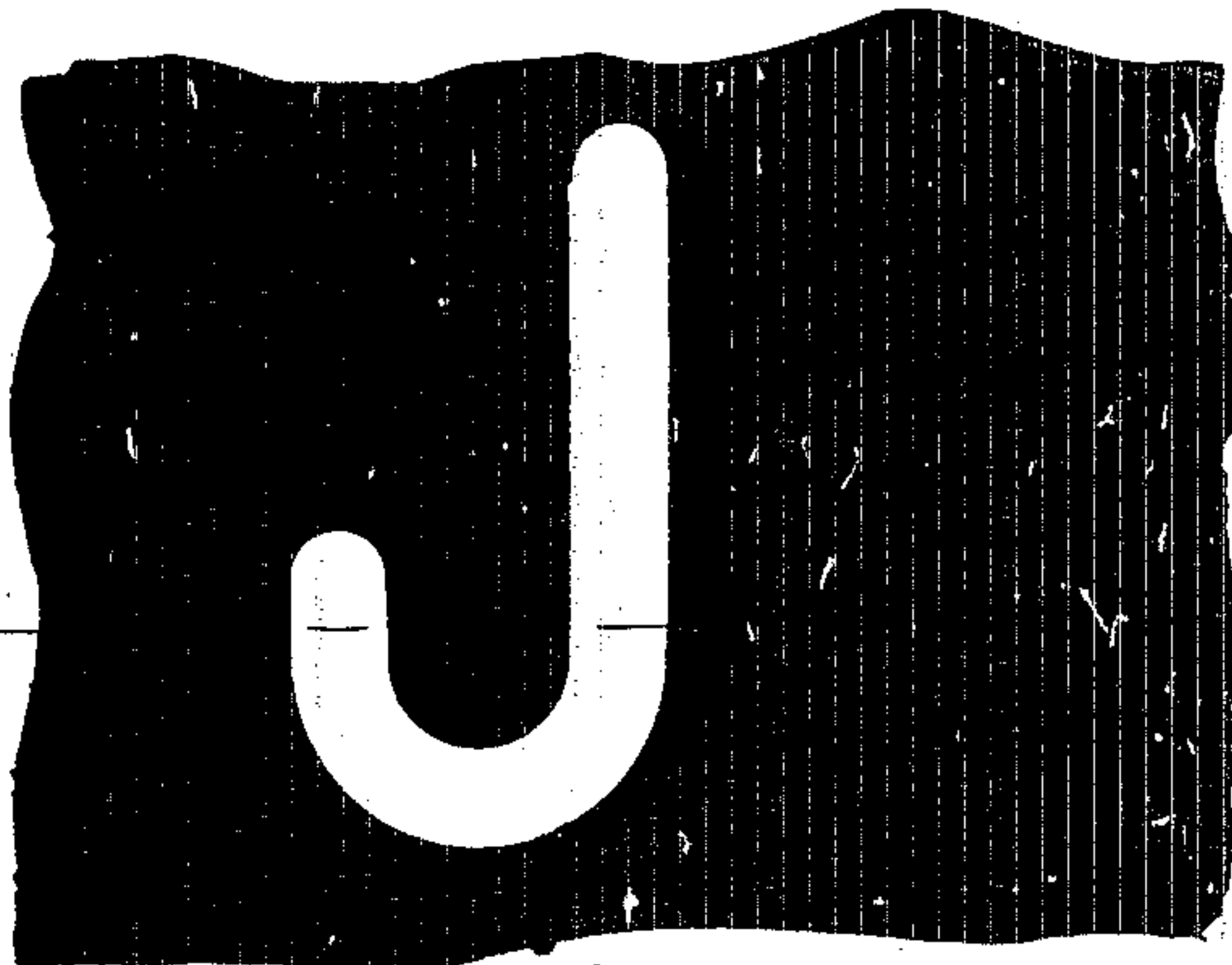


Fig. 12



Fig. 11.

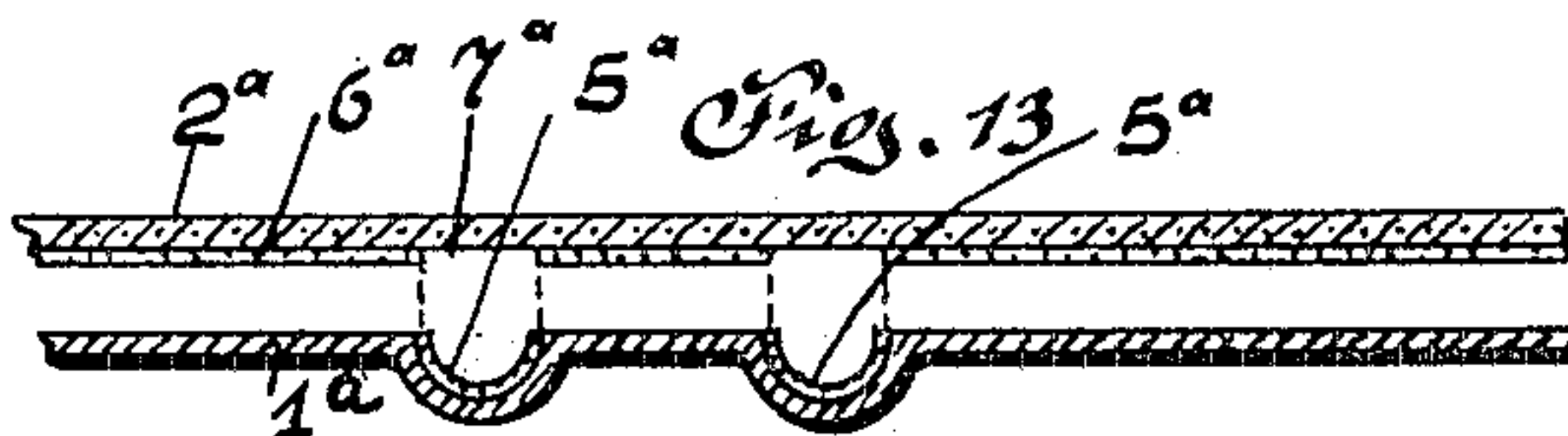


Fig. 13

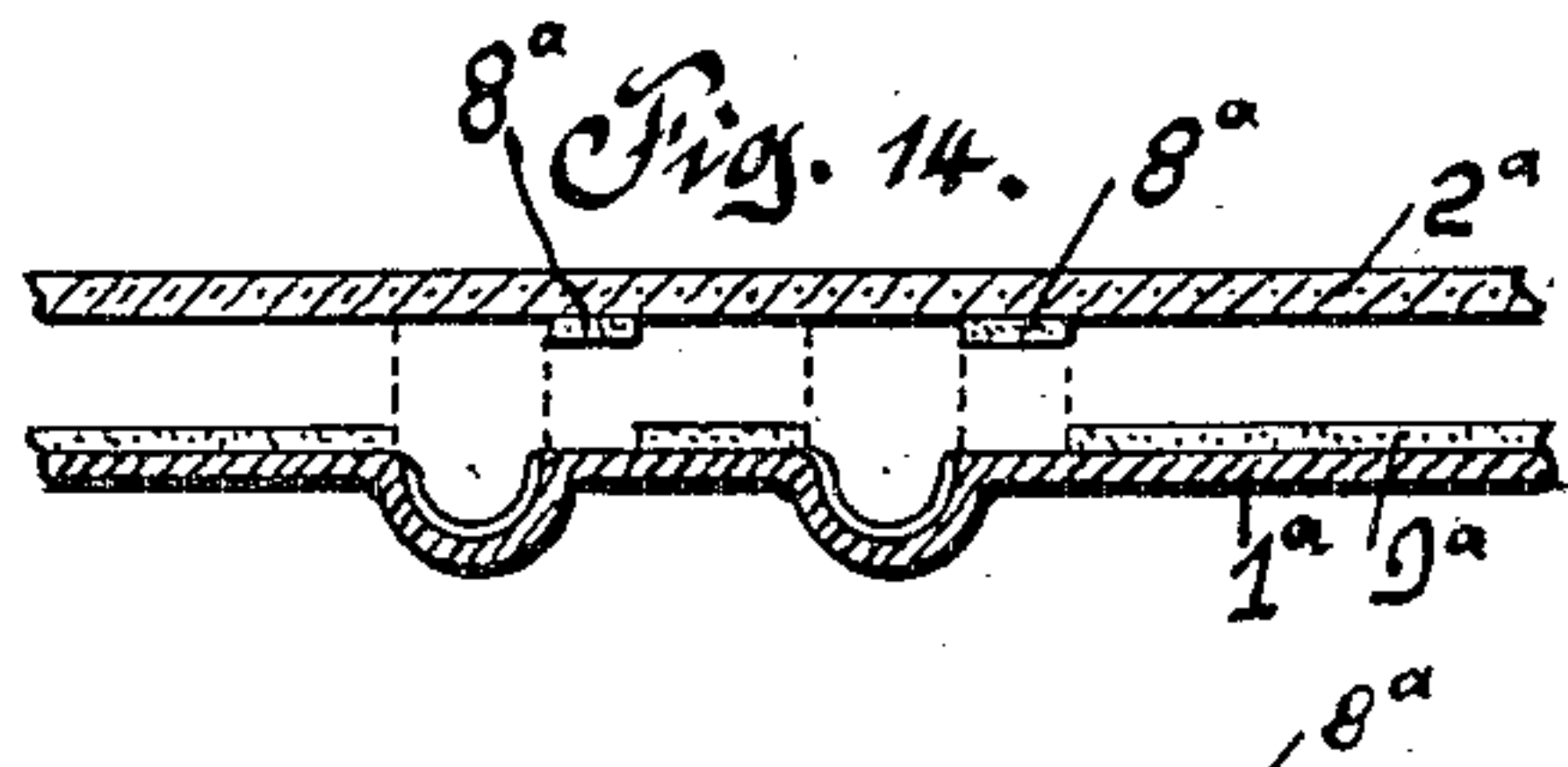


Fig. 14.

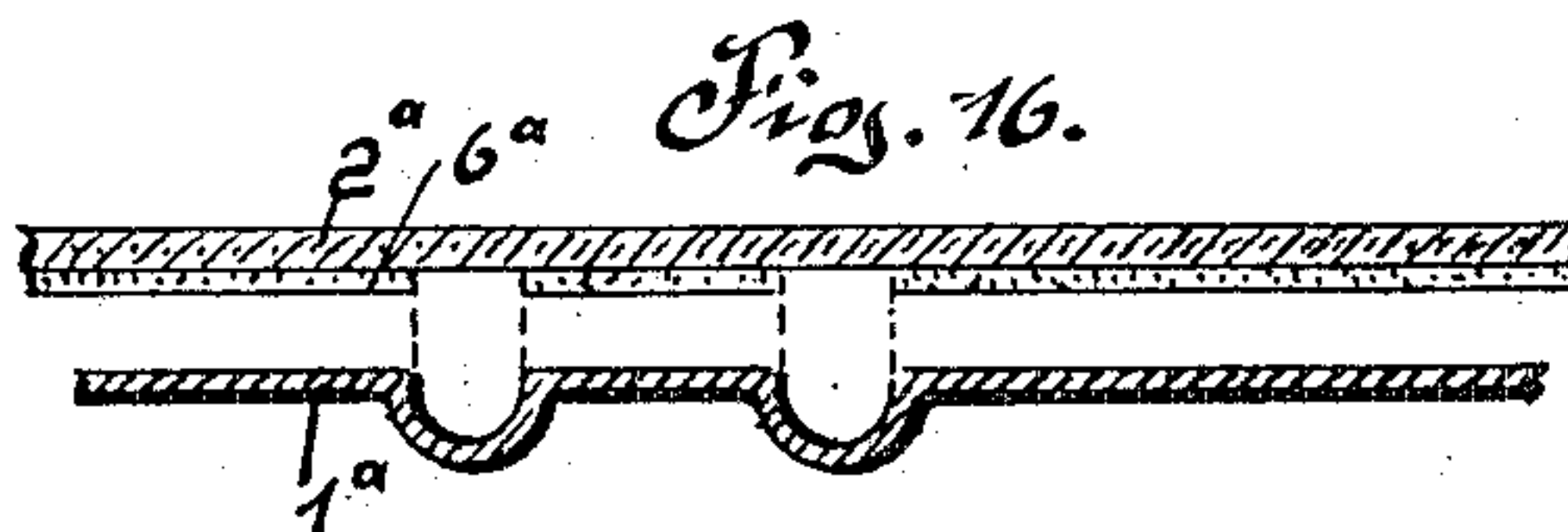


Fig. 16.

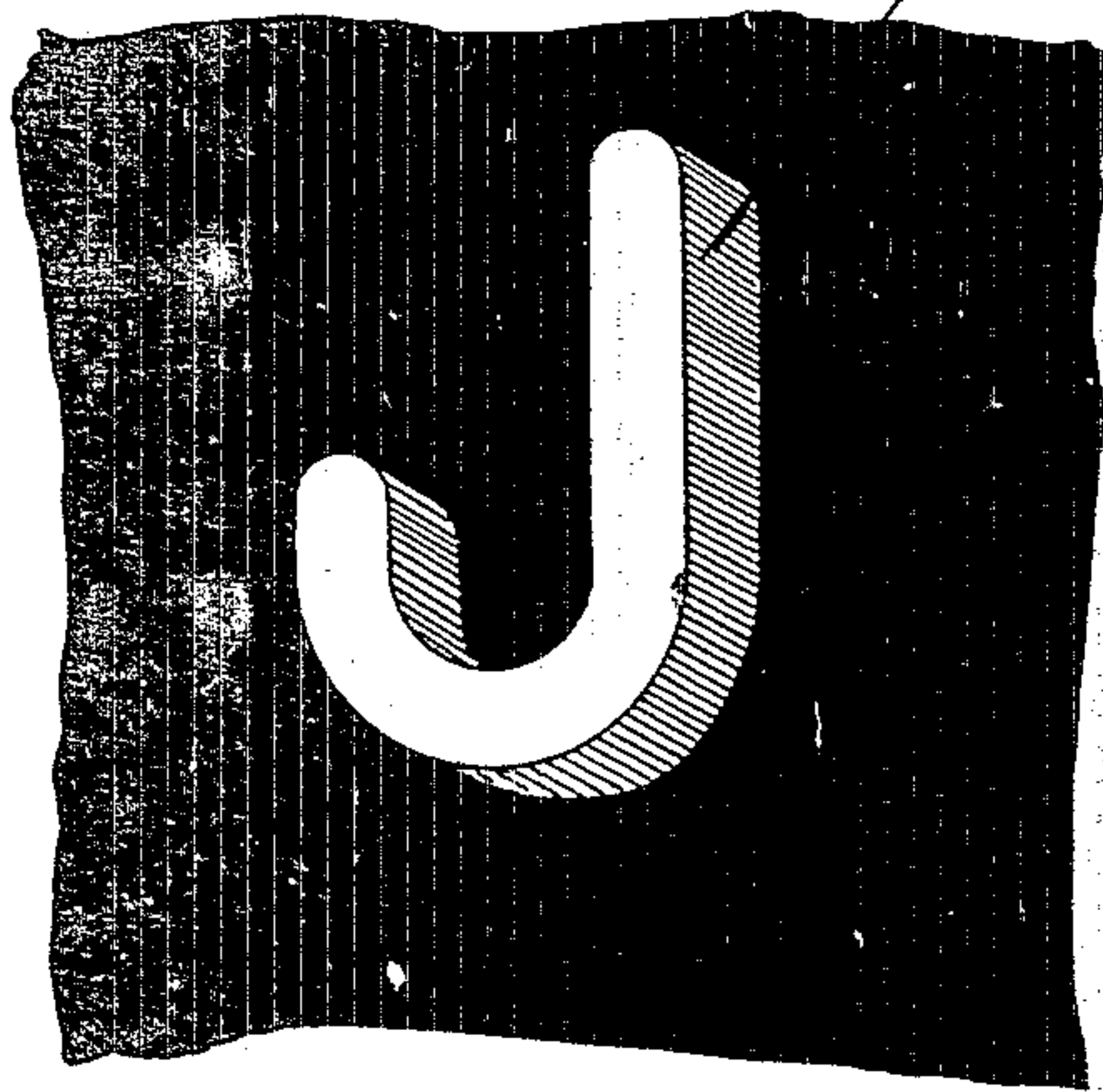


Fig. 15

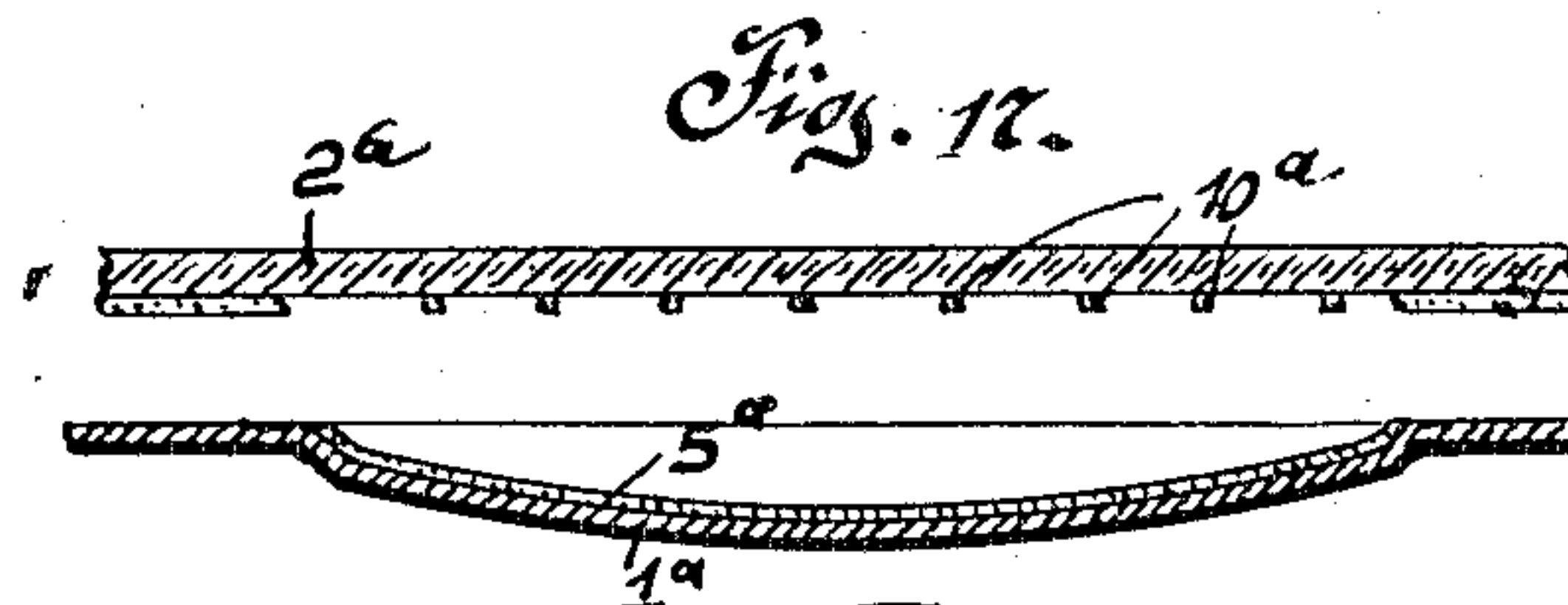


Fig. 17.

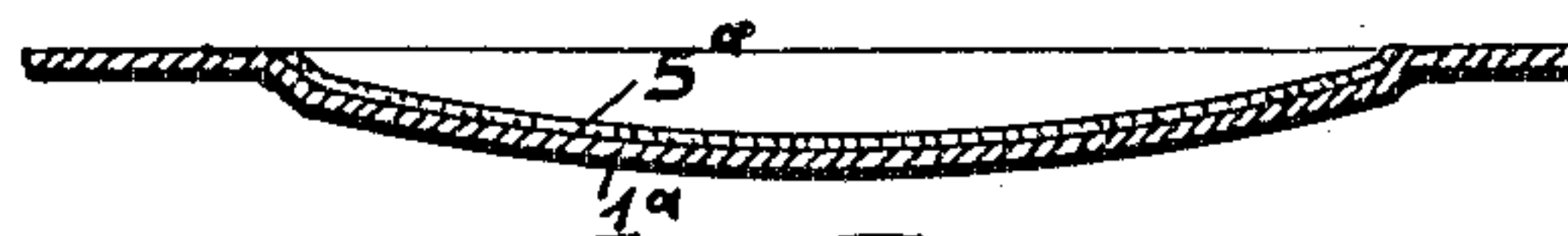
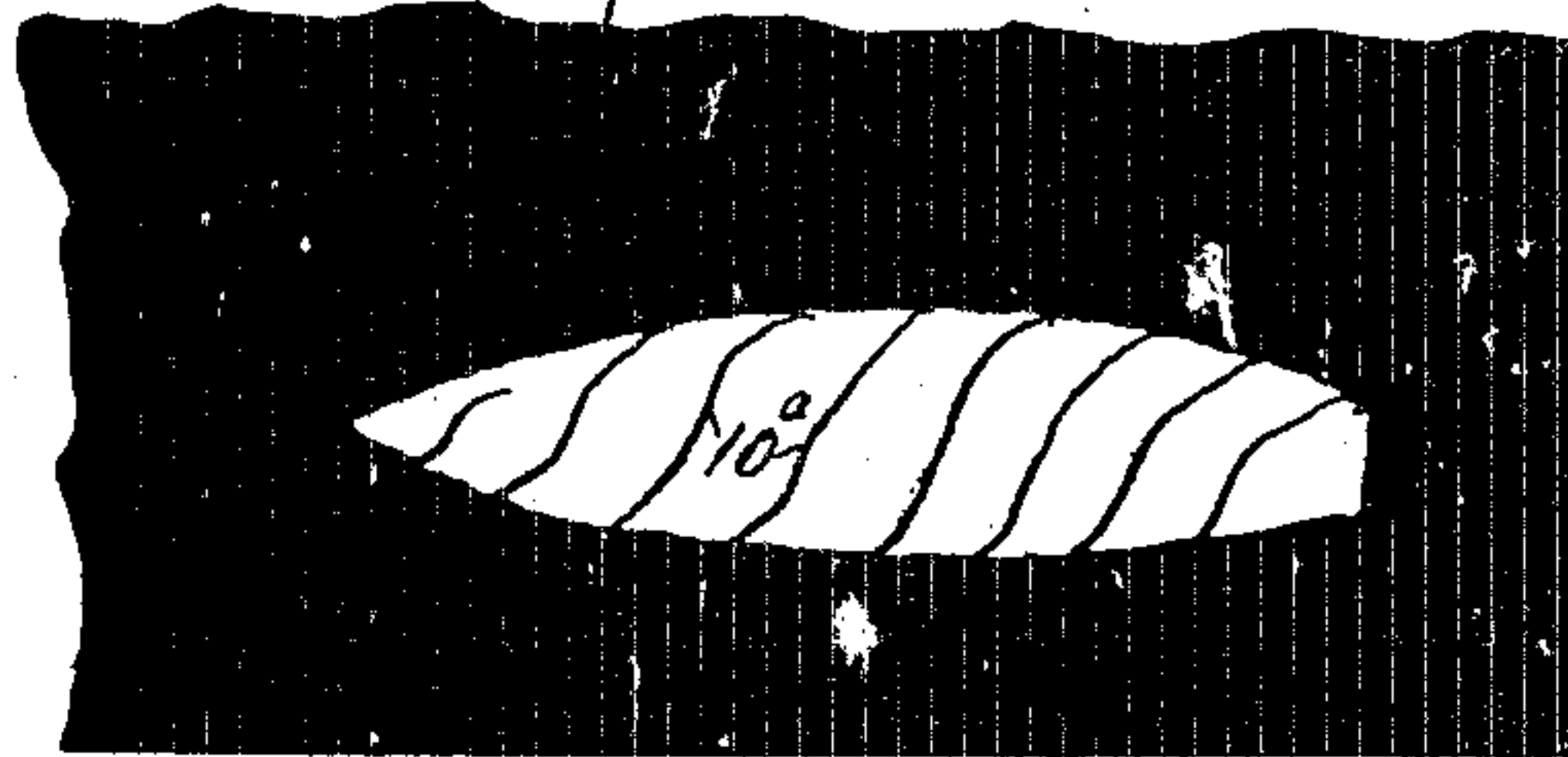


Fig. 18.



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UNITED STATES PATENT OFFICE.

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No. 837,028.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed November 21, 1905. Serial No. 288,432.

To all whom it may concern:

Be it known that I, WILLIAM J. BAILEY, a citizen of the United States of America, residing at Aspinwall, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Signs, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in signs, and the invention relates more particularly to signs generally known in the trade as "hangers"—that is, signs which are adapted to be hung in conspicuous places for advertising purposes.

15 The primary object of the invention is to provide a sign having a striking and attractive appearance, means being provided for imparting to the letters, symbols, or ornamentations of the sign a luminous countersunk or relief effect.

20 A further object of the invention is to provide a sign which can be easily, quickly, and cheaply manufactured and which will at the same time be comparatively free from danger of being easily injured or damaged.

25 Another object of the invention is to provide a sign in which novel different-appearing effects may be obtained, and the invention in its broadest aspect tends to provide a luminous sign having the effect of illuminated letters, symbols, ornamentations, or other characters, being surrounded or provided with a field that will harmonize with and tend to
30 give to such characters a raised or countersunk effect.

35 The invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed, and in the description reference will be had to the accompanying drawings, forming a part of this application, and wherein like numerals of reference will indicate like parts throughout the different views, in
40 which—

45 Figure 1 is a plan view of a sign constructed in accordance with a preferred form of the invention. Fig. 2 is a cross-sectional view thereof, taken on the line xx of Fig. 1 looking
50 in the direction of the arrow. Fig. 3 is a plan view of the metallic plate or backing employed in connection with this form of sign. Fig. 4 is a fragmentary sectional view of the plates of the sign, showing the method of

forming the characters in the construction of 55 the sign illustrated in Figs. 1, 2, and 3. Fig. 5 is a similar view showing a modified form of construction for producing the characters of the sign. Fig. 6 is another view of like character, showing a still different form of construction for producing the characters of the sign. Fig. 7 is a plan view of a sign, illustrating another modification and the construction thereof. Fig. 8 is a horizontal sectional view taken on the line xx of Fig. 7 looking in the 60 direction of the arrow. Fig. 9 is a fragmentary plan of a part of the sign illustrated in Figs. 7 and 8. Fig. 10 is a fragmentary plan view of a part of the sign embodying the construction shown in Figs. 7 and 8. Fig. 11 is 65 a sectional view taken on the line yy of Fig. 10 looking in the direction of the arrow. Fig. 12 is a fragmentary plan view of a sign of the species of construction shown in Fig. 7, but illustrating a modified form of construction in producing the characters. Fig. 13 is 70 a sectional view taken on the line ww of Fig. 12 looking in the direction of the arrow. Fig. 14 is a fragmentary sectional view of the general species of sign shown in Fig. 7, but 75 illustrating still another form of construction for producing the characters. Fig. 15 is a plan view of a part of a sign in which the characters are produced by the manner of construction shown in Fig. 14. Fig. 16 is a 80 fragmentary sectional view of a part of the sign of the general species shown in Fig. 7, but illustrating still another modification in the construction employed for producing the characters. Fig. 17 is also a fragmentary 85 sectional view of a sign of the general species shown in Fig. 7, but illustrating still another modification in the construction employed for producing the characters of the sign. Fig. 18 is a plan view of a part of a sign in 90 which the characters are formed in accordance with the modified construction shown in Fig. 17.

The sign embodies a metallic plate 1, a transparent plate 2, and a retaining rim or 100 frame 3 for holding the plates together. The plate 1 is of a suitable metal, as tin, and is cut to the desired configuration of the sign to be formed. This plate is formed on its edge or periphery with lugs 4, provided with open- 105 ings 5, which lugs are adapted to be bent over and clenched with the periphery of the transparent plate 2 and secured thereto, as

by rivets 6, as shown in Fig. 2. This fastening of the two plates together is done to prevent the transparent plate from becoming detached or separated from the metallic plate in case the transparent plate should shrink or buckle, due to atmospheric effects, so as to withdraw it from the rim 3. The rim 3 fits around the edges of the plates 1 and 2, and the abutting ends of the rim may be soldered together, as shown at 4^a in Fig. 9—that is, where the retaining rim or frame is made of metal which will permit of soldering. The transparent plate 2 may be of any transparent or translucent material, such as celluloid, glass, or the like. This transparent plate is shaped to conform to the shape of the metallic plate 1.

In the construction shown in Figs. 1 to 4, inclusive, the characters of the sign are impressed in the transparent plate and also in the metallic plate. The characters in this instance are shown as letters forming the word "cigar." These letters are formed in this instance by impressing the metallic plate 1 and the transparent plate 2, as by a matrix or die, so as to produce the raised portions 8 and 12 on the transparent plate and the metallic plate, respectively. In this instance the raised portions are on the outer face of the metallic plate and the outer face of the transparent plate. These letters are thrown into relief and the general appearance of the sign thereby enhanced by printing on the inner face of the metallic plate, as shown at 7, to form a background or field for the raised letter 8 of the transparent plate 2. The raised letter (designated 8) of the transparent plate 2 is coated on its inner or concave face, as with transparent paint, as shown at 8', while the said transparent plate is coated at points adjacent the concave face of the raised letter, as at 10, uncoated portions 10' being left at points on the plate 1 opposite said coated portions 10, thereby forming a shadow for said letter.

In Fig. 5 of the drawings the same form of raised letter 8 is shown on the transparent plate, while the metallic plate is left in its flat form, being, however, treated on its inner face by painting, as with a transparent ink or paint, as shown at 9, which tends to illuminate the letter 8 by permitting light to be reflected upon the metallic plate through such transparent ink or paint and through the letter. In this instance the letter is outlined by printing upon the transparent plate at the sides of the letter, as shown at 10 in Fig. 5.

In Fig. 6 the same form of letter 8 is shown raised on the outer face of the transparent plate, the metallic plate 1 in this instance being left flat, as in Fig. 5, and painted, as at 7, to form a background or field for the let-

ter. The concave inner face of the letter in this instance is painted upon with transparent or translucent ink, as shown at 11.

In the construction shown in Figs. 7 to 11, inclusive, of the drawings the letters, symbols, or other characters are impressed on the metallic plate 1^a, whereas in Figs. 1 to 4 they are impressed in both plates and in Figs. 5 and 6 in the transparent plate 2. In this construction, Figs. 7 to 11, the metallic plate 1^a is shaped to the desired configuration of the sign to be formed and the symbols are impressed by a die or matrix into the metallic plate 1^a. The cross-sectional form of the letters shown in each plate of the sign seen in plan in Fig. 7 is similar to the cross-sectional form of the letters heretofore described—that is, they are semicircular in cross-sectional outline, the letters being countersunk relative to the front face of the metallic plate 1^a. The rear face of the letter is therefore raised relatively to the back of the metallic plate. Transparent plate 2^a in this form of construction is held in engagement with the metallic plate 1^a by a rim 3^a in the same manner as heretofore described for the preferred form of construction. (Shown in Figs. 1 to 4.) It will be understood that it will depend somewhat on the nature of the materials being used as to whether it will be always necessary to employ the retaining-lugs in order to prevent the two plates separating. Certain materials which will not readily be affected by atmospheric conditions can readily be held by the retaining-rim alone.

In Figs. 12 and 13 is shown a modified form of construction, which, however, is of the same general species as that shown in Figs. 7 to 11, since the impressing performed to produce the letter or other character is upon the metallic plate alone. In the construction shown in said Figs. 12 and 13 the metallic plate 1^a has the letter or other character formed by impressing one face of the plate, and the countersunk or concave face of the letter or character is coated with a transparent or translucent paint, ink, or other like substance, as indicated at 5^a, tending to impart an illuminated effect to the letter. In order to give the letter the countersunk effect and fully bring out the qualities of the letter, the printing-face of the transparent plate 2^a is coated or printed to form a field or background 6^a, uncoated portion 7^a being left at points opposite the letters or other characters, so that the coating 6^a substantially surrounds the concave face of the letters or other characters, the said letters appearing through the uncoated portions of the transparent plate, thus imparting to the letters or other characters a countersunk effect. In this instance the field or back-

ground being printed on the transparent plate, the body portion of the metallic plate will be invisible and nothing but the letters or characters of the sign will be exposed.

5 In Figs. 14 and 15 I have illustrated a still further modification, the same, however, belonging to the same general species shown in Figs. 7 to 13, in that the impressing is done in the metallic plate only. In this construction (shown in Figs. 14 and 15) the metallic plate 1^a is impressed to produce the main body of the letter, and a shaded effect is given to the letter or other character by printing a shadow, as at 8^a, upon the transparent plate 15 2^a. With this construction, however, instead of printing the field or background upon the transparent plate, as shown in Figs. 12 and 13, this field or background is printed on the metallic plate 1^a, as at 9^a. This has the effect of producing the shadow on the letter J, as clearly illustrated in Fig. 15 of the drawings.

In Fig. 16 of the drawings is shown still another slightly-modified form of construction, 25 being, however, of the same general species as Figs. 7 to 15, the metallic plate 1^a being impressed, but instead of coating the countersunk or concave face of the letters or other characters, as shown in Fig. 13, the coating 30 6^a is applied only to the transparent plate 2^a, uncoated portions being left at points opposite to the letters or other characters.

In Figs. 17 and 18 I show still another form for producing the characters, this form 35 being, however, also of the same general species involved in Figs. 7 to 16 in that the metallic plate 1^a only is impressed. In this construction I show the plate 1^a impressed with the representation of a cigar, the countersunk or concave face of the plate being 40 printed upon, as at 5^a, with transparent ink or the like, and in order to impart the true cigar effect to the representation thereof I print lines 10^a upon the transparent plate, so as to give the resemblance of a natural cigar 45 to the representation.

The plate 1^a heretofore described in the various forms of construction is preferably nickel-plated, so as to obtain the desired 50 brilliancy when contrasted with a dark field or background without the use of coatings, such as aluminium, gold, bronze, silver-leaf, or the like.

It will of course be understood that the 55 fields or backgrounds heretofore referred to may be of various colors or tints, made so as to blend and conform to and harmonize with the color of the letter being used.

I claim—

60 1. A sign embodying a metallic plate, a transparent plate, lugs carried by said metallic plate and adapted to engage said transparent plate, a retaining-rim holding said

plates together, one of said plates being embossed, the other of said plates being printed 65 to form a background for said embossed plate, substantially as described.

2. A sign embodying a metallic plate, a transparent plate, a retaining-rim holding said plates together, said plates having im- 70 pressions formed therein, the impressions in the two plates respectively being opposed to each other, and said plates being tinted to give said impressions a desired effect, substantially as described. 75

3. A sign embodying a metallic plate, a transparent plate, a retaining-rim holding said plates together, said plates having im- pressions formed therein, the impressions of the two plates respectively being opposed to 80 each other, substantially as described.

4. A sign embodying plates coinciding with one another, a retaining-rim holding said plates together, said plates having im- pressions formed therein, the impressions in 85 the two plates respectively being opposed to each other, one of said plates being printed upon to form a background, the other having the letters covered with translucent paint.

5. A sign embodying plates, a rim sur- 90 rounding said plates, said plates having impressions formed therein, the impressions in the two plates respectively being opposed to each other, one of said plates being printed to form a background, the characters on the 95 other plate being translucent and means to hold said plates together, substantially as described.

6. A sign embodying plates, a rim sur- rounding said plates, said plates having im- 100 pressions formed therein, the impressions in the two plates respectively being opposed to each other, substantially as described.

7. A sign embodying a celluloid plate, a metallic plate clamped to the celluloid plate, 105 said plates having impressions formed therein, the impressions in the two plates respectively being opposed to each other, and one of said plates being printed upon to produce a background surrounding the impressions, 110 substantially as described.

8. A sign embodying a celluloid plate, a metallic plate clamped to the celluloid plate, said plates having impressions formed there- 115 in, the impressions in the two plates respectively being opposed to each other, substantially as described.

9. A sign embodying a transparent plate, a backing clamped to said plate, said trans- parent plate having impressions formed 120 therein, said plate being printed upon to give said impressions the desired effect, substantially as described.

10. A sign embodying a celluloid plate, a backing clamped to said plate, a rim sur- 125 rounding said backing and said plate, said

plate having impressions formed therein, substantially as described.

11. A sign embodying a metallic plate and a transparent plate, means for connecting
5 said plates together, one of said plates being provided with an embossed character and one of said plates being printed upon to form a background for said letter, and one of

said plates being printed upon to form a shadow for said letter.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM J. BAILEY.

Witnesses:

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E. E. POTTER.