

R. R. ROBERTSON & I. J. SHIFLEY.

EAVES TROUGH CAP.

APPLICATION FILED OCT. 17, 1907.

906,661.

Patented Dec. 15, 1908.

Fig. 1.

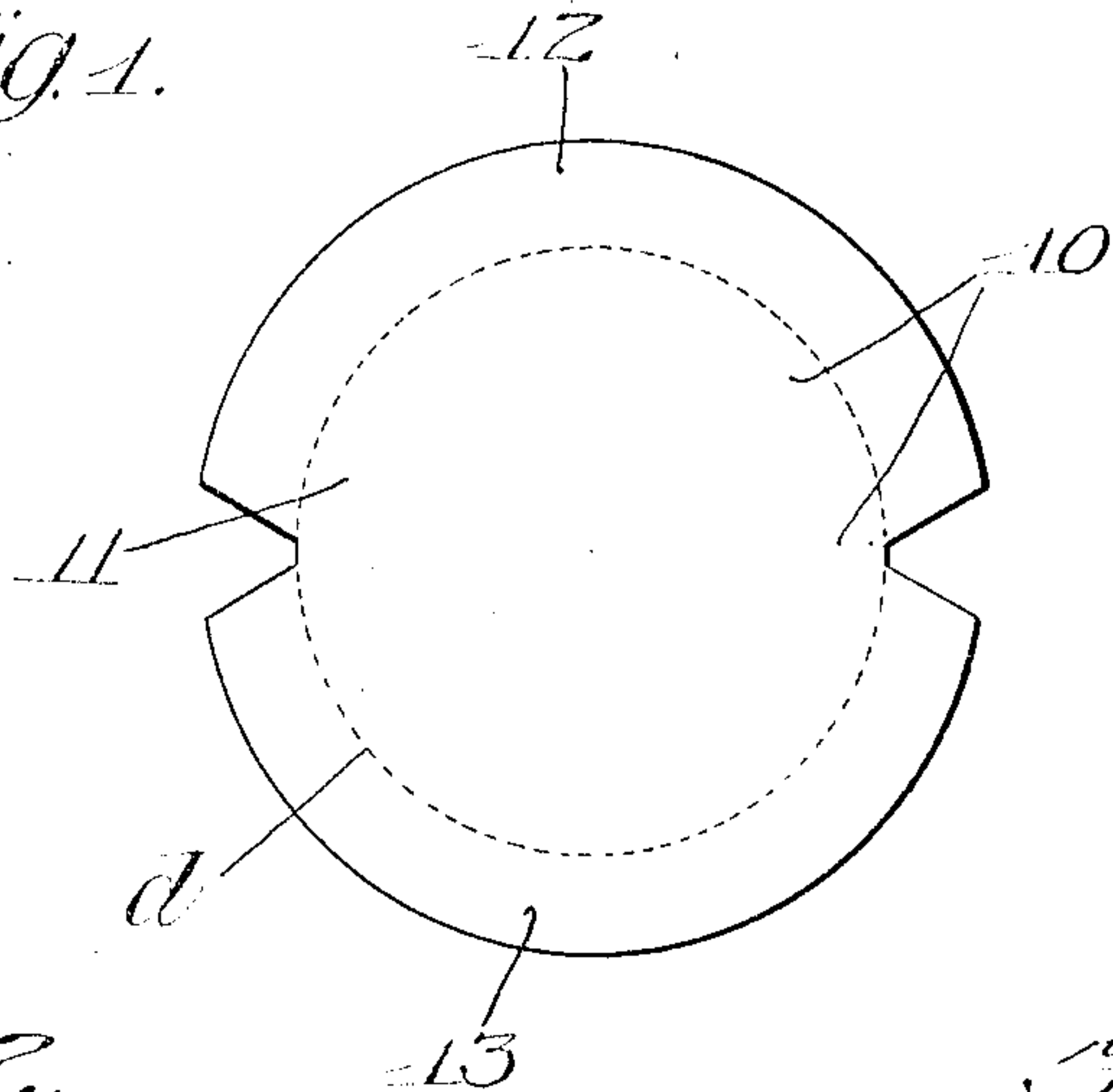


Fig. 2.

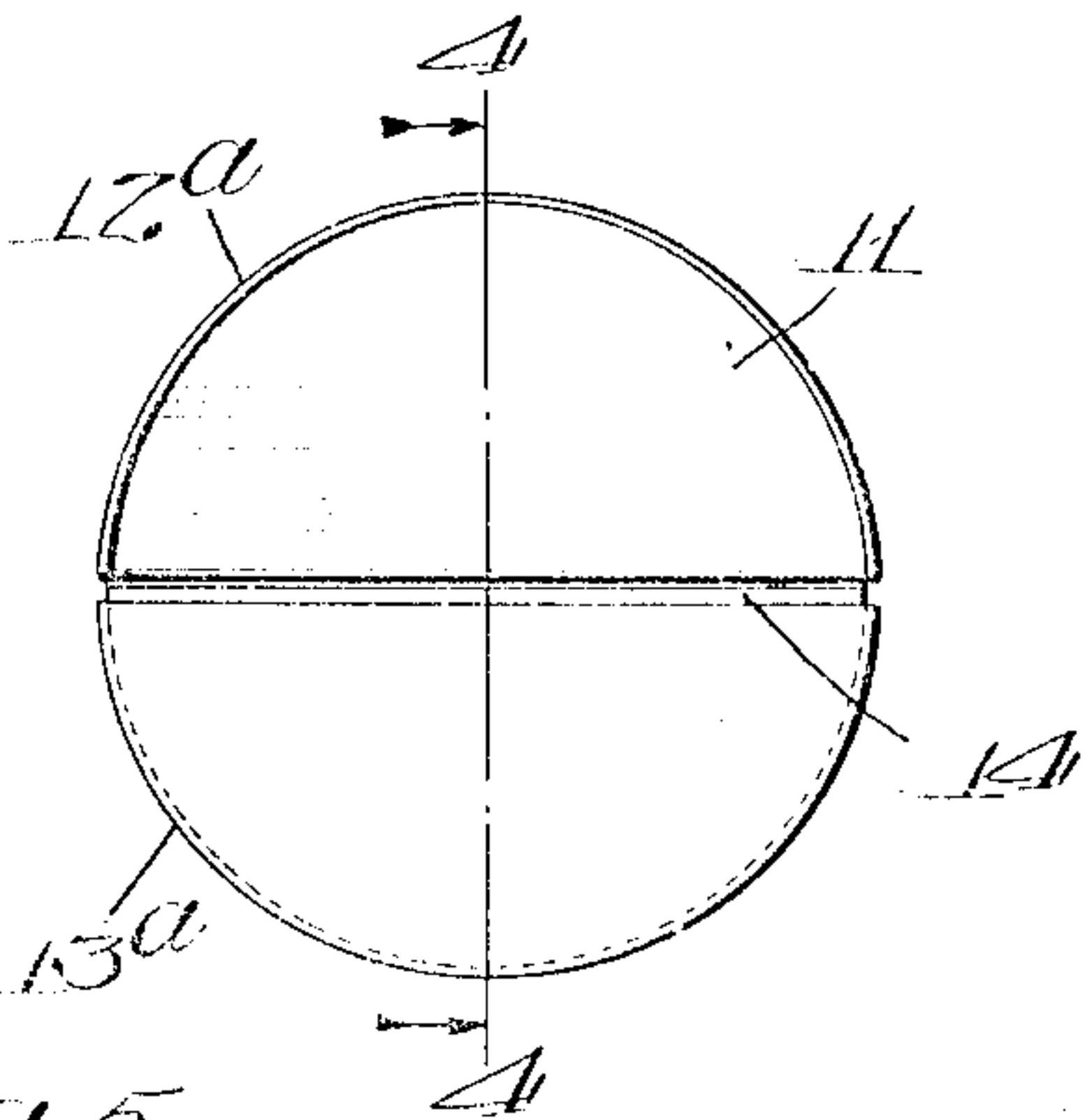


Fig. 3.

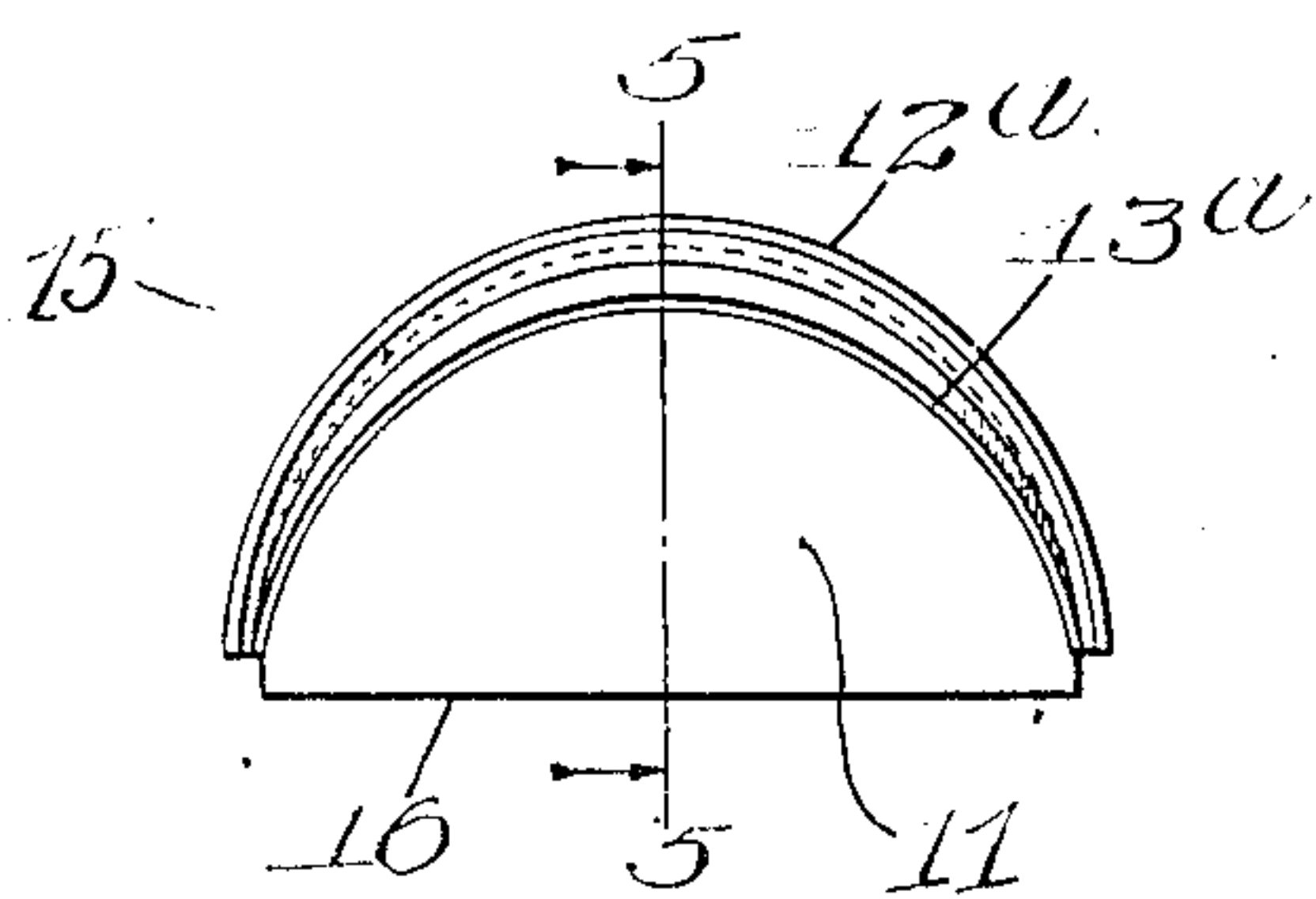


Fig. 5.

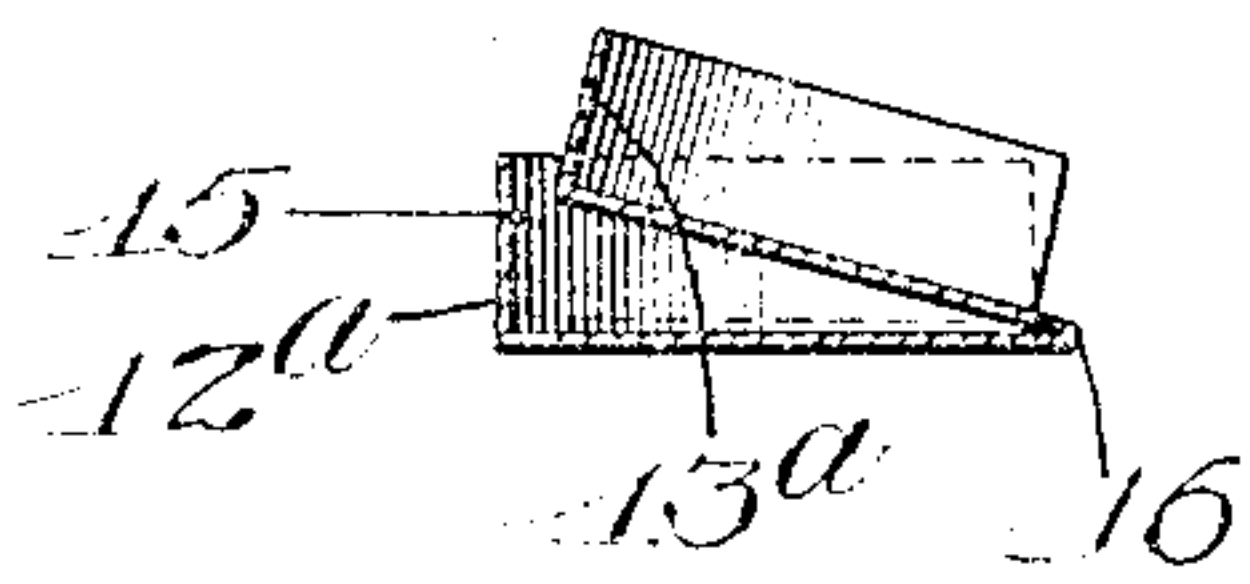


Fig. 4.

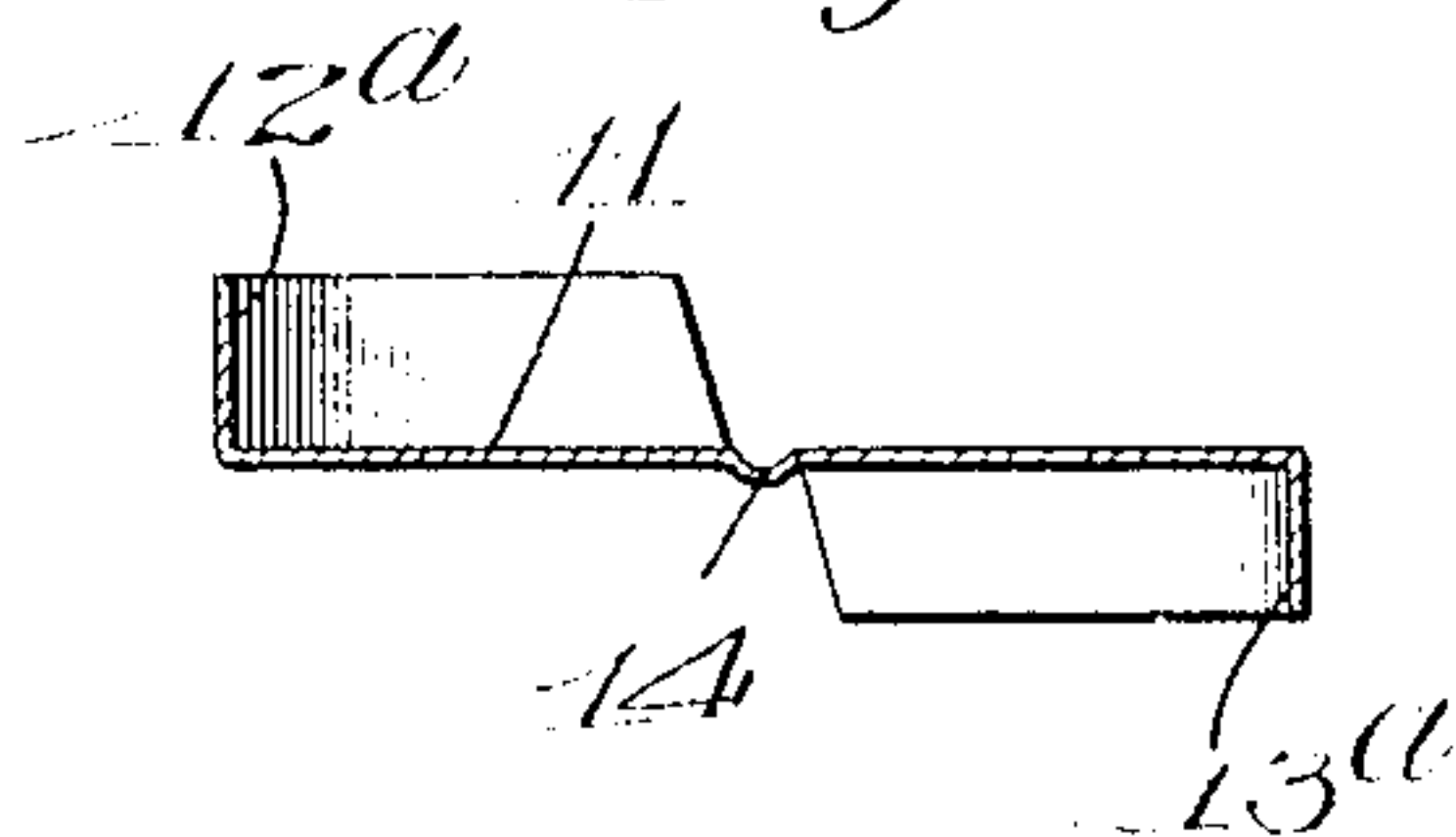
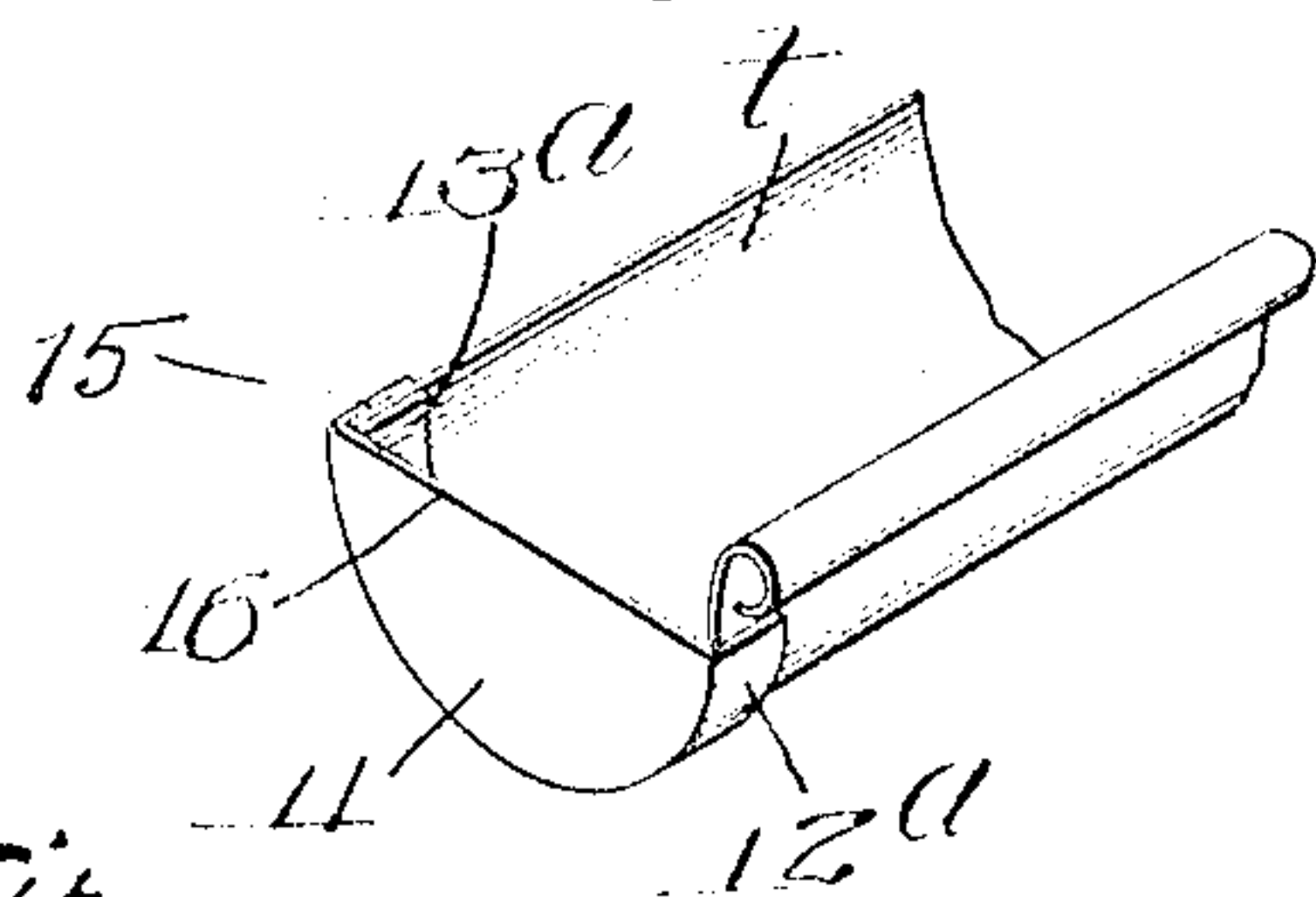


Fig. 6.



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# UNITED STATES PATENT OFFICE.

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## EAVES-TROUGH CAP.

No. 906,681.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed October 17, 1907. Serial No. 397,317.

*To all whom it may concern:*

Be it known that we, ROBERT R. ROBERTSON and ISAAC J. SHIFLEY, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Eaves-Trough Caps, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

Our invention relates to eaves troughs, such as are employed at the eaves of building roofs for carrying off water as is well known in the art, and pertains more particularly to end caps therefor. In structures of the prior art, such end caps were constructed of two or more pieces of metal previously formed for their application to the trough and soldered together to form a unitary structure. Not only did such end caps require a great amount of time, labor and expense in construction, but their application to the eaves trough was necessarily complicated and required a great amount of time. The end cap of our invention is constructed entirely of one piece of metal and is formed into its ultimate shape upon the application thereof to the eaves trough. Not only does the one-piece construction eliminate the disadvantages in the construction of the prior art devices, but the feature of its being fashioned upon the trough instead of being previously formed and applied thereto, secures in a convenient manner, as will hereinafter be made evident, extremely rigid and permanent attachment.

In the accompanying drawings we have illustrated the end cap in its successive stages of development and also in its application to an eaves trough, as it will be practically employed.

In these drawings, in which like reference characters are applied to like parts throughout the various figures, Figure 1 shows the blank from which the cap is formed; Figs. 2 and 3 illustrate succeeding stages in the formation of the cap; Fig. 4 is a sectional view on the line 4—4 of Fig. 2; Fig. 5 is a sectional view on the line 5—5 of Fig. 3; and Fig. 6 shows a portion of an eaves trough with the end cap of our invention applied thereto.

The blank from which the end cap is formed is indicated at 10 and consists of the circular body portion 11, as indicated by dotted

lines in Fig. 1, and the extended portions 12 and 13 which in the formation of the cap, are fashioned into oppositely turned flanges. The blank is placed in suitable dies and is stamped or drawn to assume the form shown in Fig. 2. The extended portion 12 is turned upwardly outside the dotted line *d* to form the semi-circumferential flange 12<sup>a</sup>. The extended portion 13 of the blank is turned downwardly inside the dotted line *d* to form the semi-circumferential flange 13<sup>a</sup>. The circular body portion 11 has stamped therein, simultaneously, the diametrical crimp 14 as clearly shown in Figs. 2 and 4. After the structure has been thus fashioned the body portion is folded upon itself over the crimp 14 and assumes the form shown in Figs. 3 and 5. When in this form it is ready for its application to the eaves trough and when so applied is further folded and thus assumes the form shown in Fig. 6 and in dotted lines in Figs. 3 and 5. When the body portion is folded completely upon itself, that is, when it assumes the position shown in Fig. 6 and in dotted lines in Figs. 3 and 5, a semi-circular slot 15 remains between the respective semi-circumferential flanges and the end of the trough is adapted to take into this slot. In order to secure rigid attachment and waterproof connection, it is advisable to place a small amount of cement or similar material in the slot before the cap is clamped down into place.

When the cap is first properly placed in position upon the trough it is in the form shown in Figs. 3 and 5 and a small amount of cement may then be applied. The portion of the body 11 carrying the inner flange 13<sup>a</sup> is then folded down to assume the position shown in dotted lines in Figs. 3 and 5, thus securely clamping the cap to the eaves trough as shown in Fig. 6. The crimp 14 prevents cracking when the structure is folded over and produces a nicely rounded edge 16.

It is apparent that the end cap of our invention may be constructed at minimum expense and is an advantageous device in its practical application.

We claim as new and desire to secure by Letters Patent:

1. An end cap for eaves troughs, consisting of a substantially circular body portion having integral rim flanges and bent upon itself.

2. An end cap for eaves troughs, consisting

ing of a substantially circular body portion having oppositely disposed semi-circumferential flanges and bent upon itself substantially at a diameter.

5 3. An end cap for eaves troughs, formed, by bending, from a metal blank, said blank consisting of a substantially circular body portion having a diametrical crimp and oppositely extending semi-circumferential flanges.

10 4. An end cap for eaves troughs, formed from a body portion having oppositely ex-

tending rim flanges, said body portion being bent upon itself to dispose said flanges in proximity.

In witness whereof we have hereunto subscribed our names in the presence of two witnesses. 15

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Witnesses:

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