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O. C. ECKEL

2,427,393

METHOD OF MAKING CLIPS

Original Filed Feb. 15, 1943

Fig. 1.

Fig. 2.

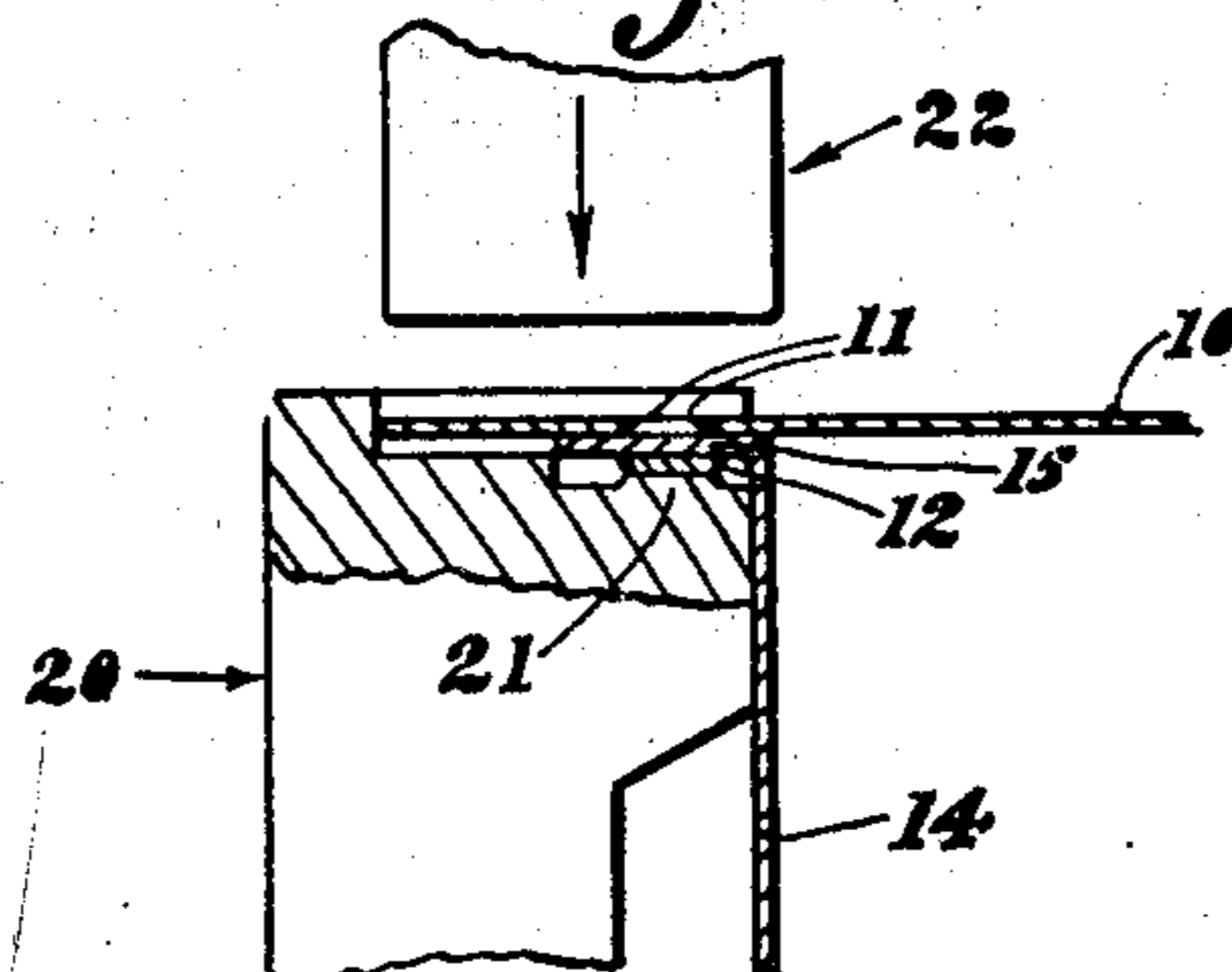
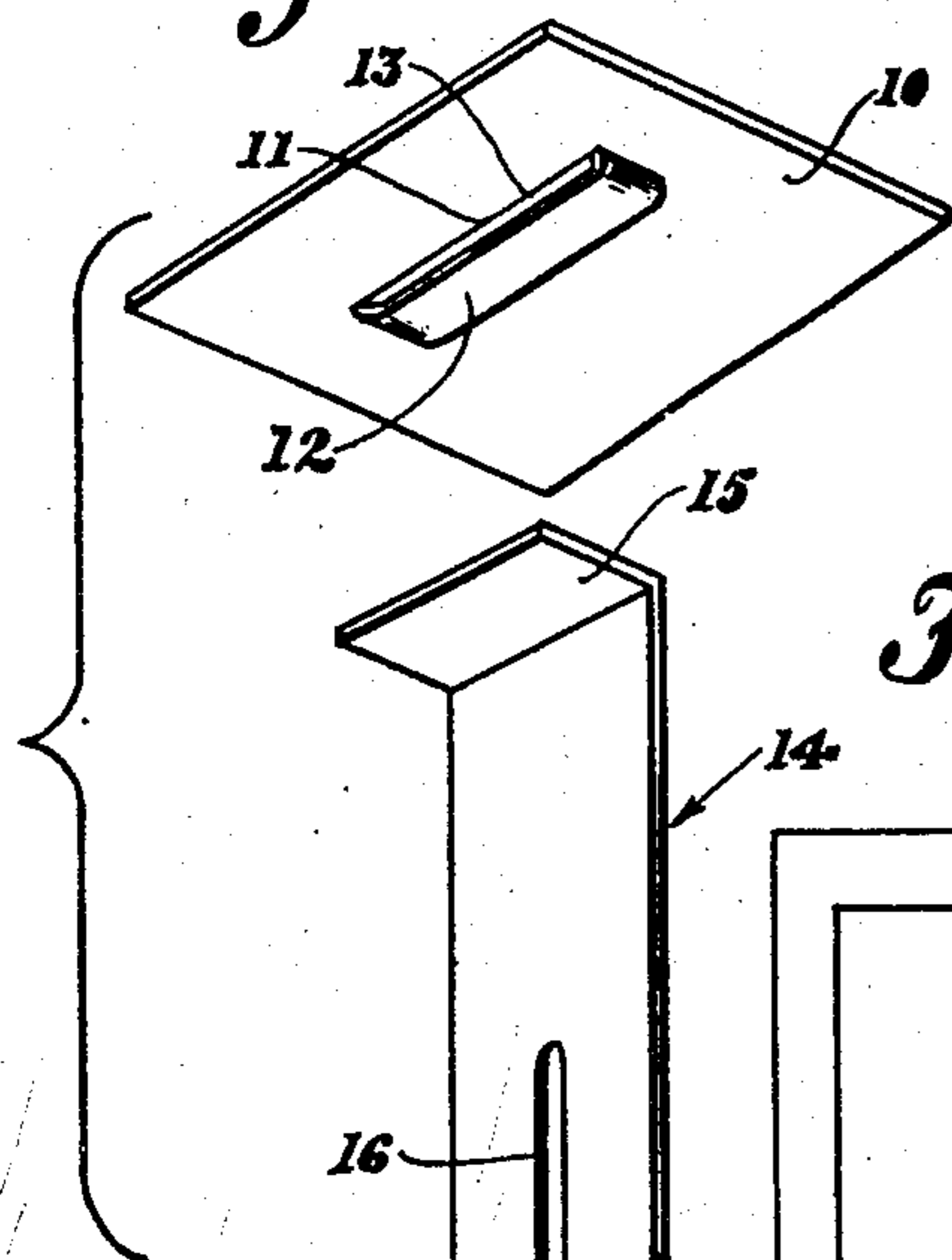


Fig. 5.

Fig. 3.

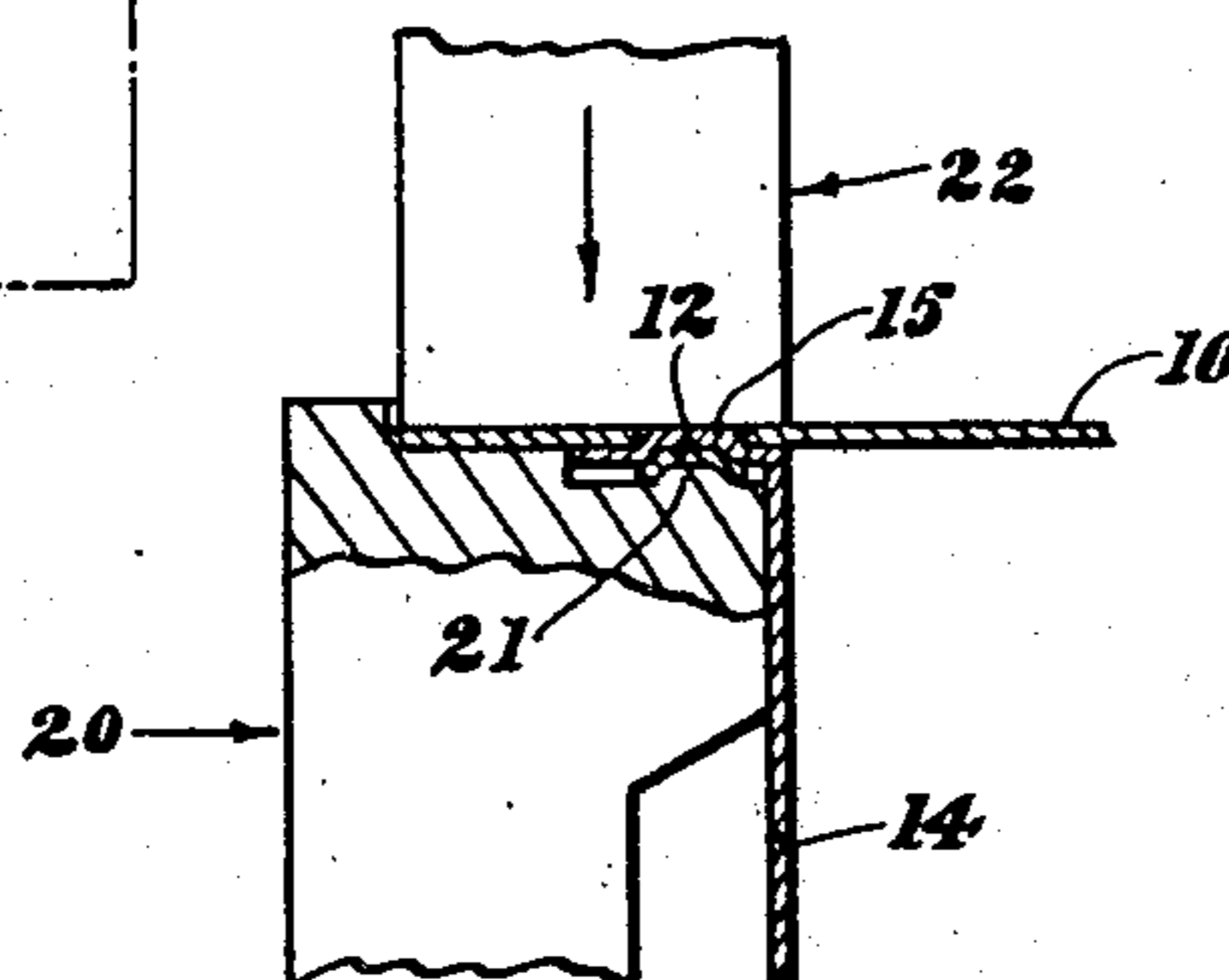
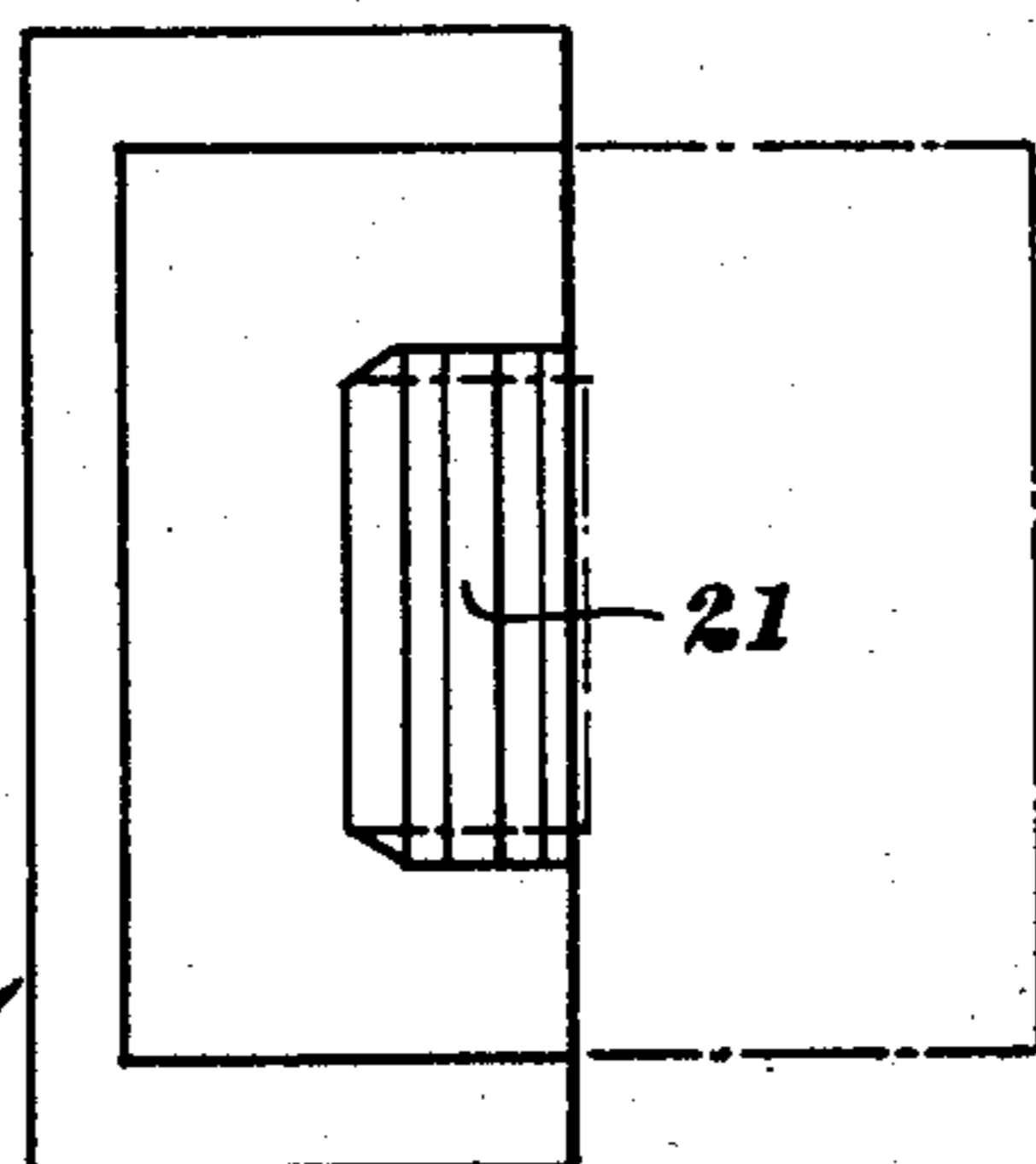
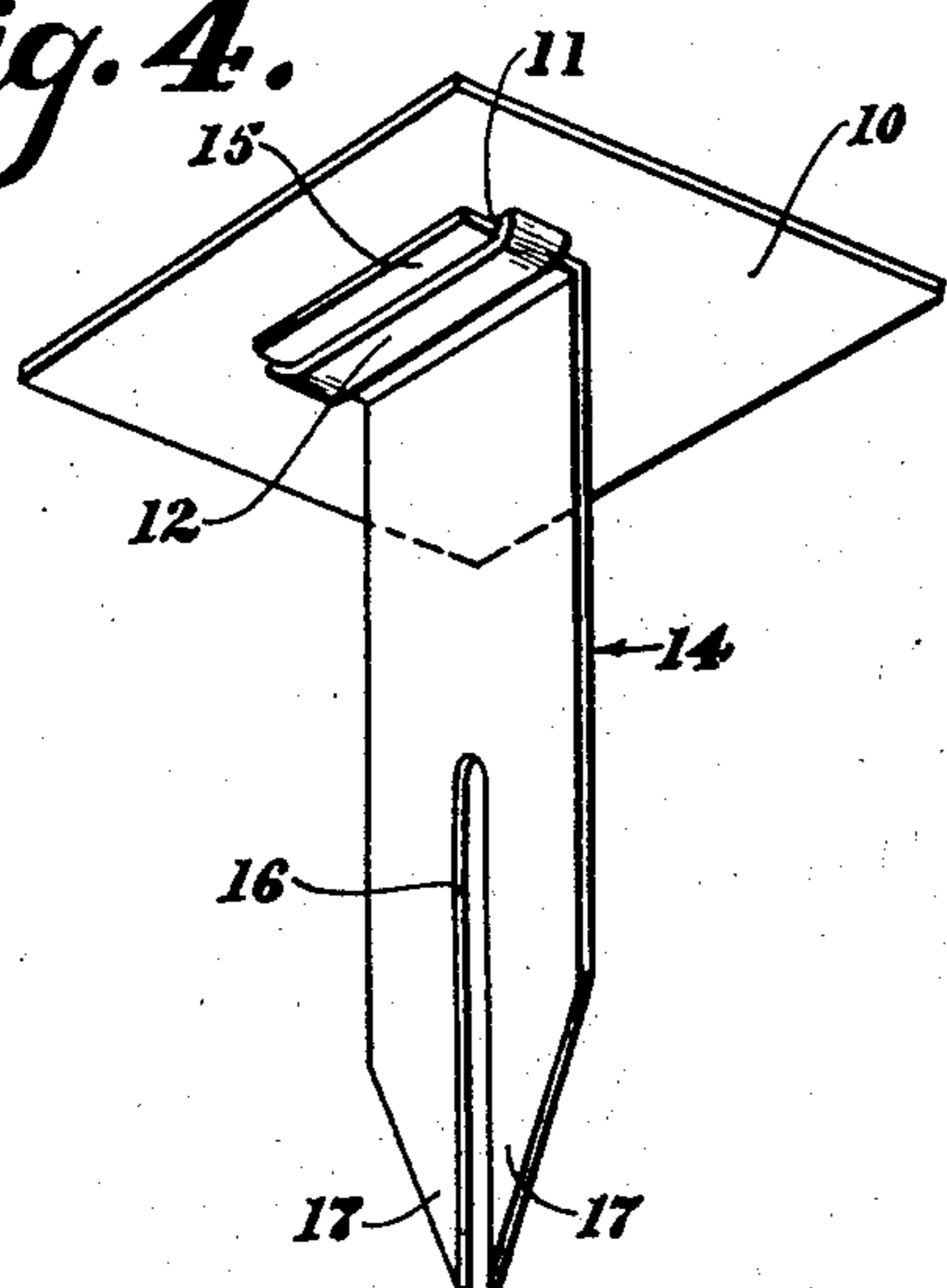


Fig. 4.



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UNITED STATES PATENT OFFICE

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METHOD OF MAKING CLIPS

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Original application February 15, 1943, Serial No. 475,929. Divided and this application April 6, 1945, Serial No. 586,936

2 Claims. (Cl. 29—148)

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This patent application is a division of my patent application Serial No. 475,929, filed February 15, 1943, now Patent No. 2,389,965.

This invention relates to a method of making clips that are used to hold suspended articles in position.

The principal object is to provide an improved method of assembling and fastening the base and shank of a said clip together, that is simple, economical to accomplish and most durable.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be accomplished by a method such as is disclosed by the specification. The nature of the invention is such as to render it susceptible to various changes and modifications, and, therefore, I am not to be limited to said disclosure; but am entitled to all such changes therefrom as fall within the scope of my claims.

In the drawings:

Figure 1 is a perspective view of the base and shank of my clip before they are assembled and interlocked.

Figure 2 is a front elevational view, partly in section, showing the shank tongue in position ready to be forced into locking engagement with the base of my clip by two dies.

Figure 3 is a front elevational view, partly in section, showing the shank tongue interlocked with the clip base, upon completion of the final step in my method.

Figure 4 is a perspective view of my completed clip.

Figure 5 is a plan view of the female die used in the aforesaid method.

First I will describe the parts of my clip, which, as illustrated, has a flat base 10. Two slits 11 spaced apart are cut therein between which a portion of said base is thereby forced outwardly to provide what I call an offset portion 12. This leaves a space 13 directly opposite said offset which space is laterally opposite adjoining portions of said base. When used to hold insulating material in place next to a ceiling or wall said base usually has cement applied to it thus adhesively holding it to said wall or ceiling. The base has relatively large surface area to provide a strong adhesive joint between said base and said ceiling wall.

Attached to said base 10 is a shank 14 having at one end extremity a tongue portion 15 extending at a right angle. The other end extremity has a slot 16 which extends about half the length of said shank. On each side of said slot 16 fingers 17 are thereby formed. When my clip is in posi-

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tion of use, said fingers 17 extending through the insulation and are bent over at a right angle to lie approximately flat against said insulation.

In practicing my method said locking tongue 15 is inserted into said space 13 opposite said offset portion 12, and extends beyond said space 13 and overlaps a portion of said base 10. To interlock said tongue 15 with said base 10 I provide a female die 20 especially shaped for the purpose, having a bulge 21 narrower than, but which fits against said offset portion 12 for the length thereof. A flat male or hammer die 22 strikes against a portion of said base 10 with such force that the part of said offset portion 12 in contact with said female die bulge 21 is deformed and driven inwardly against said base tongue 15 which deforms and forces part of said tongue to enter said space 13 thereby interlocking said tongue and base. It will be noted in Figure 3 of the drawings that an intermediate portion of said offset portion 12 is sunk inwardly as a result of the force of the hammerlike blow to thereby form a longitudinally extending channel therein and this is likewise true of said tongue.

What I claim is:

1. The method of making a clip having a shank embodying a flat tongue at one extremity extending at substantially a right angle to the adjoining portion, and having a base having two slits in an intermediate portion therein spaced apart, said base having an offset portion between said two slits thereby leaving an adjoining space between said offset and adjacent portions of said base, inserting said shank tongue into said space and holding a female die having a bulge therein that is of less width than said offset portion with said bulge bearing against a laterally intermediate part of said offset portion while forcibly striking a surface of said base towards said offset portion and tongue to thereby distort said offset portion and said tongue and interlock them and cause a portion of said tongue to enter that part of said space that is laterally opposite adjoining portions of said base and force a portion of said tongue substantially level with the surface of said base that was struck.

2. The method of making a clip having a shank embodying a tongue at one extremity and a base having two slits therein spaced apart, said base having an offset portion between said two slits thereby leaving an adjoining space between said offset and adjoining portions of said base, inserting said shank tongue into said space and stationarily holding a female die against said offset portion while striking a portion of said base forc-

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ibly to thereby distort said offset portion into engagement with said tongue and simultaneously substantially filling that said space with a portion of said tongue.

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