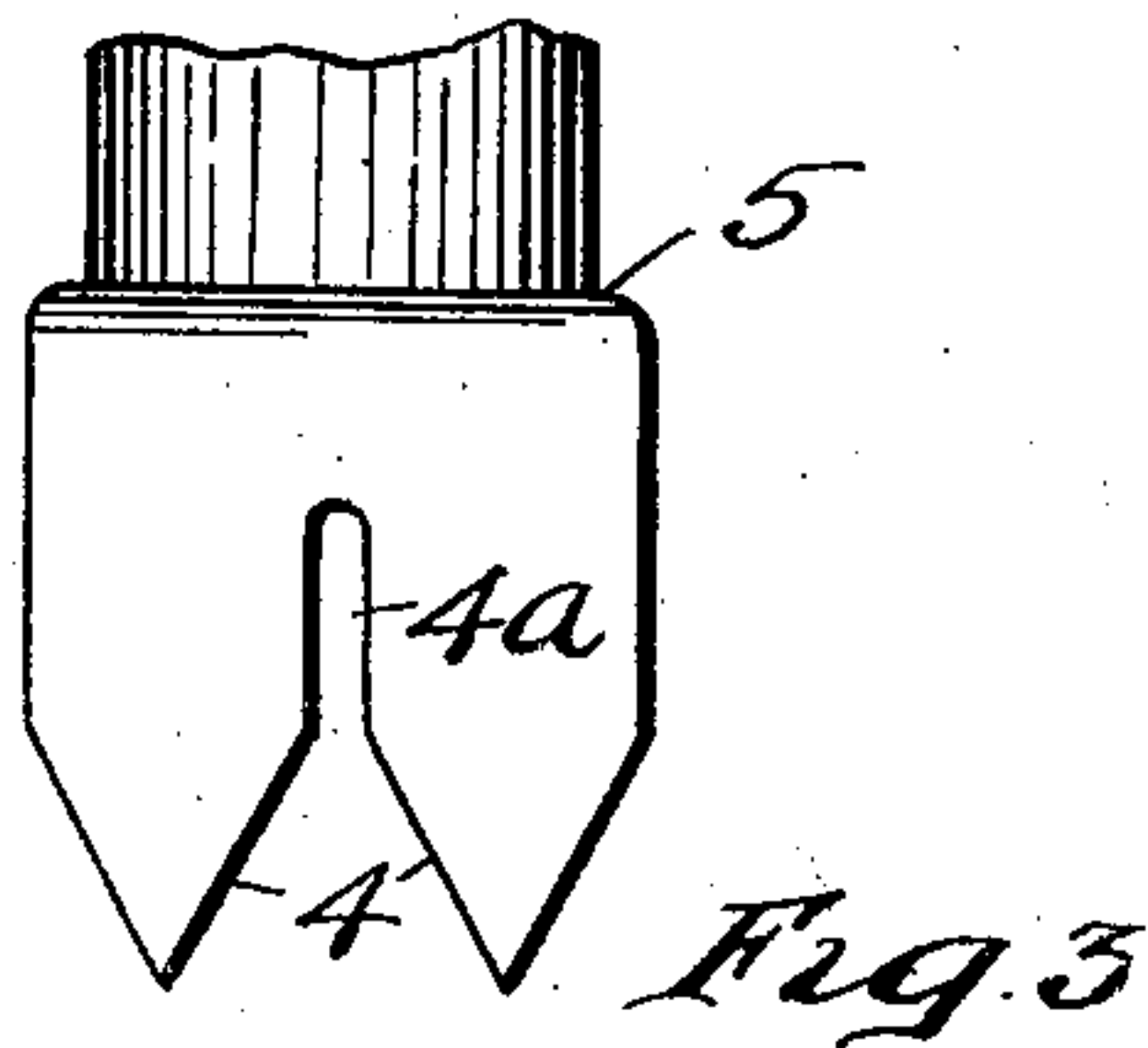
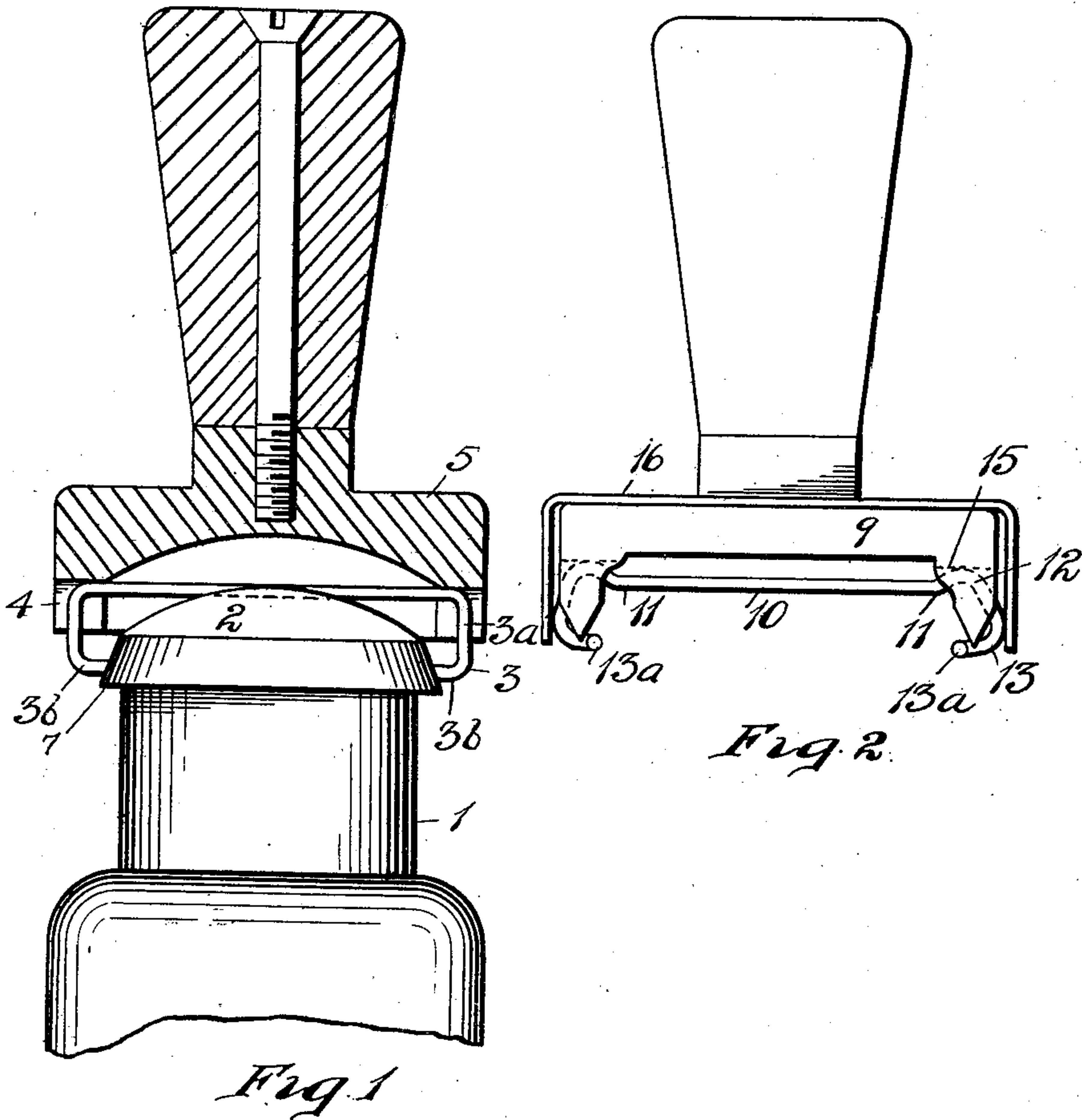


J. P. LYON.
CLAMP ATTACHING DEVICE.
APPLICATION FILED DEC. 28, 1908.

925,118

Patented June 15, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

JULIAN P. LYON, OF DETROIT, MICHIGAN.

CLAMP-ATTACHING DEVICE.

No. 925,118.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed December 28, 1908. Serial No. 469,624.

To all whom it may concern:

Be it known that I, JULIAN P. LYON, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Clamp-Attaching Devices, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to devices for attaching wire-holding clips in place over a jar top, and the complementary collar portion of the top of a jar, and has for its object an improved device of this type, adapted to firmly force the clip in place otherwise than by the slow process of handling the same manually, and for firmly clamping the depending hook portions of the clamp under the lower edge of the jar collar.

In the drawings:—Figure 1, is an elevation, partly in section, showing the clamping tool, the wire clamp, and the jar top just as the clamp is being placed thereover, and before pressure has been placed thereupon. Fig. 2, is an elevation of a slightly varied form, adapted especially for the use with clamps having terminal humps or shoulder portions, this type being also provided with an outer guard member. Fig. 3, is an elevation of the wire-engaging teeth at one end of the tool, these, however, being taken at right angles to what is shown in Figs. 1 and 2.

1 represents a jar, whose top is adapted to be closed by a cover 2, which is to be held in place by a wire or other metal clamp 3, which is first inserted between the teeth 4 at each end of the holding tool 5, so that its upright end portions 3^a are held within the guide slot 4^a between the teeth 4.

When the tool is forced down upon the clamp, it is, in the case of the type of clamp and cover shown in Fig. 1, first bowed at its center, because of the dome or curved shape of the jar top and the corresponding concavity in the under face of the body of the clamp, which, in either of the types of device illustrated, leaves a space above the center portion of the clamp wire, before it is bent. This results in depressing the terminals 3^b of the clamp, until they engage under the lower edge of the collar 7. The tool 5 is then lifted from its engagement over the clamp, and the jar top, and as the clamp is held from rising

by the engagement of its ends 3^b under the collar, its withdrawal from the slots 4^a (at each end) is easily effected.

In the type shown in Fig. 2, the main reliance as to the clamping effect of the clip 10 is placed upon the presence of the hump or shoulder 12 at each end of the clip from which the vertical portion 13 of the clip 10 extends downwardly. In this case the points 11 serve as the outermost points of contact with the jar top, as the tool is forced down, and the presence of the shoulders 15, near each end of the receiving slot for the clip ends in the body of the tool, causes the hump portions 12 to be forced downwardly, so that the hook ends 13^a engage under the jar collar. The tool is then similarly lifted off from the clamp and jar collar. In this type is shown a guard piece 16 which extends over the top and the side of the body portion of the tool; while not indispensable, it is desirable, its function being to protect the fingers of the operator from the projecting lower ends of the vertical portion of the clamp. It also serves, by its resilient engagement against them, to hold the clamp in place in the tool, sufficiently strongly so that after the clip has been inserted in place and ready for use, it may be held in the position shown without danger of the clip falling out, but the clip may be easily withdrawn from its position therein after it has been clamped in place.

What I claim is:—

1. A wire clip fastener, comprising a body member having a pair of integral tooth members slightly spaced from one another depending therefrom at each end, and a guard member extending thereover and having depending end portions spaced from said tooth members, adapted to frictionally and resiliently engage against the terminal portions of a wire clip inserted between said tooth members, substantially as described.

2. A tool for fastening a wire clip over a jar top, comprising a spanning body portion having each end thereof grooved along its under face and the central portion concaved above the level of the terminal grooved portions, and fixed tooth members depending from each end of the body portion, adapted to engage on each side of the ends of a clip member inserted therebetween and to cooperate with said grooved portions of the spanning body, within which the shoulder portions of an inserted clip member engage,

in holding the parts of the same from unintended bending while the clip is being forced into position by downward pressure upon the body of the tool, the concaved central portion of the spanning body member permitting the rise thereinto of the curved upper surface of a jar top over which the clip is being forced, substantially as described.

3. In combination with a rigid spanner member having a bifurcated depending portion at each end thereof, a guard member fixed to the body portion of the spanner, and having its depending end portions in posi-

tion of constant engagement over and substantially parallel with said bifurcated depending portions, adapted to prevent the terminal portions of a wire clip inserted between the depending parts of said spanner member from being engaged by the hand of the operator, substantially as described. 15 20

In testimony whereof, I sign this specification in the presence of two witnesses.

JULIAN P. LYON.

Witnesses:

WILLIAM M. SWAN,
CLARENCE E. DAY.