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MOLD FOR FENCE POSTS.

APPLICATION FILED MAY 6, 1905.

Fig. 6.



Fig. 3.

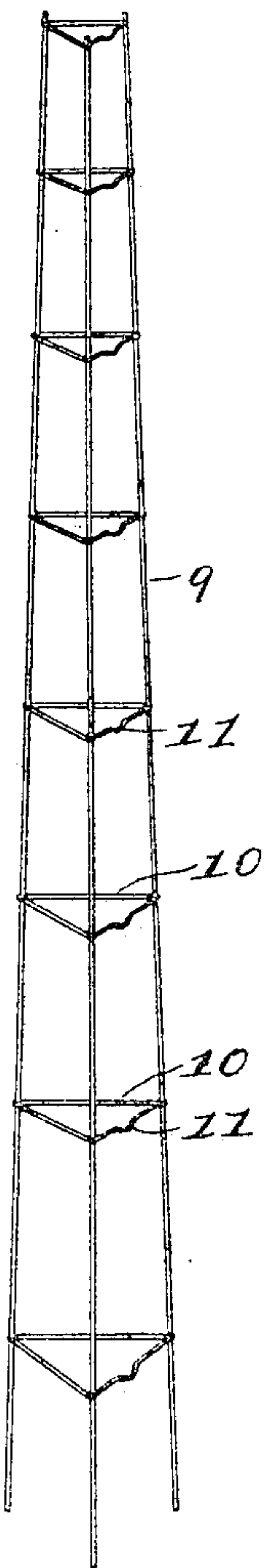


Fig. 1.

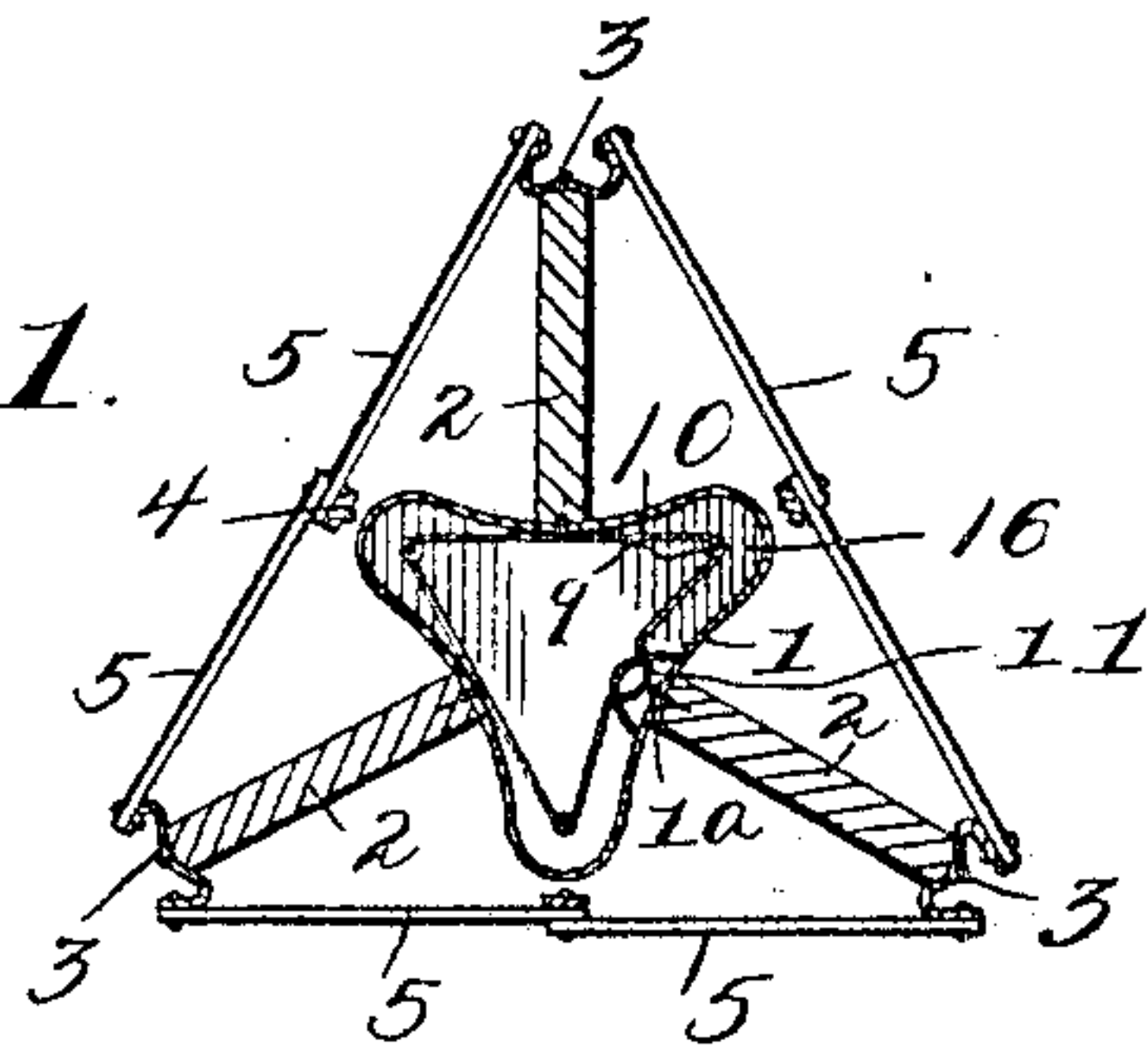


Fig. 5.

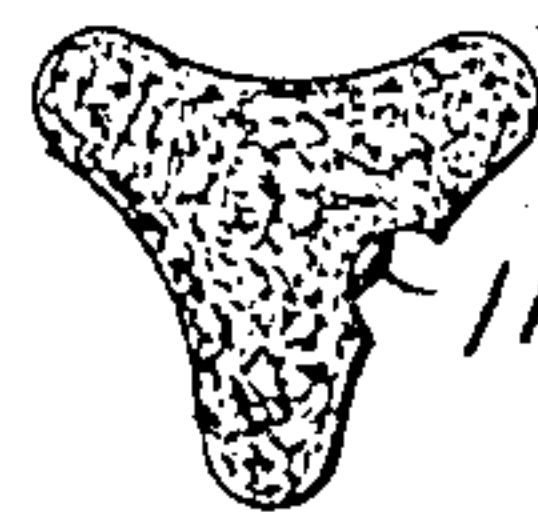


Fig. 2.

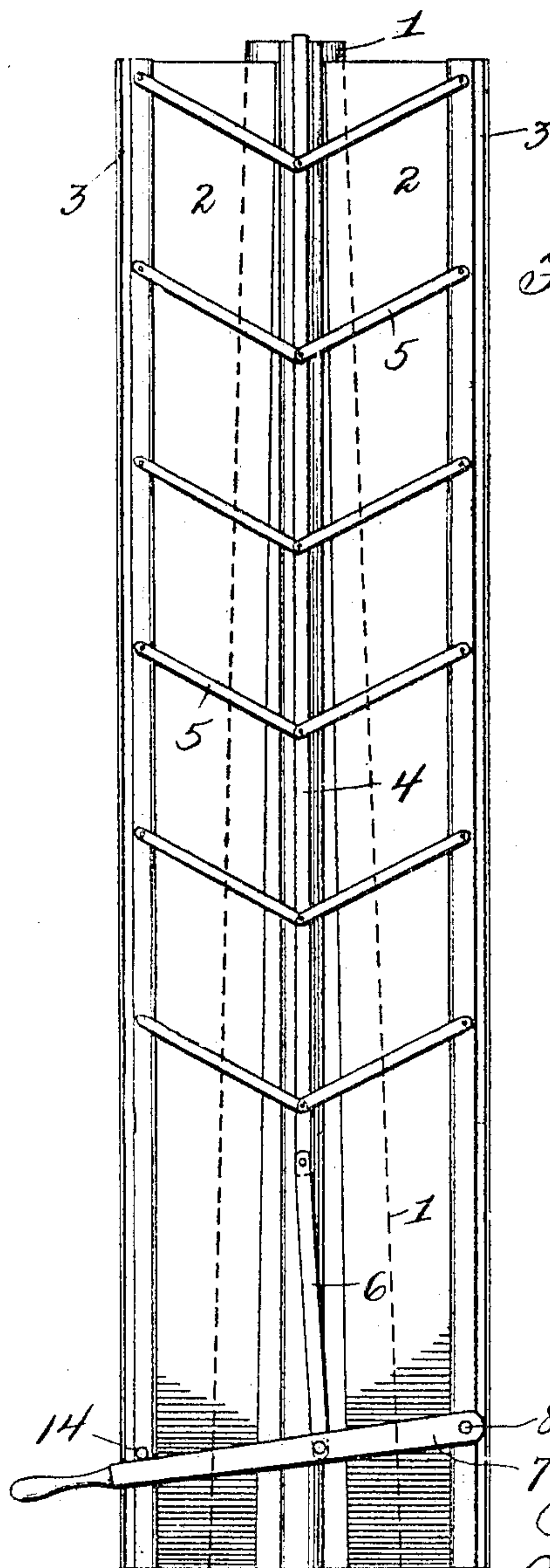
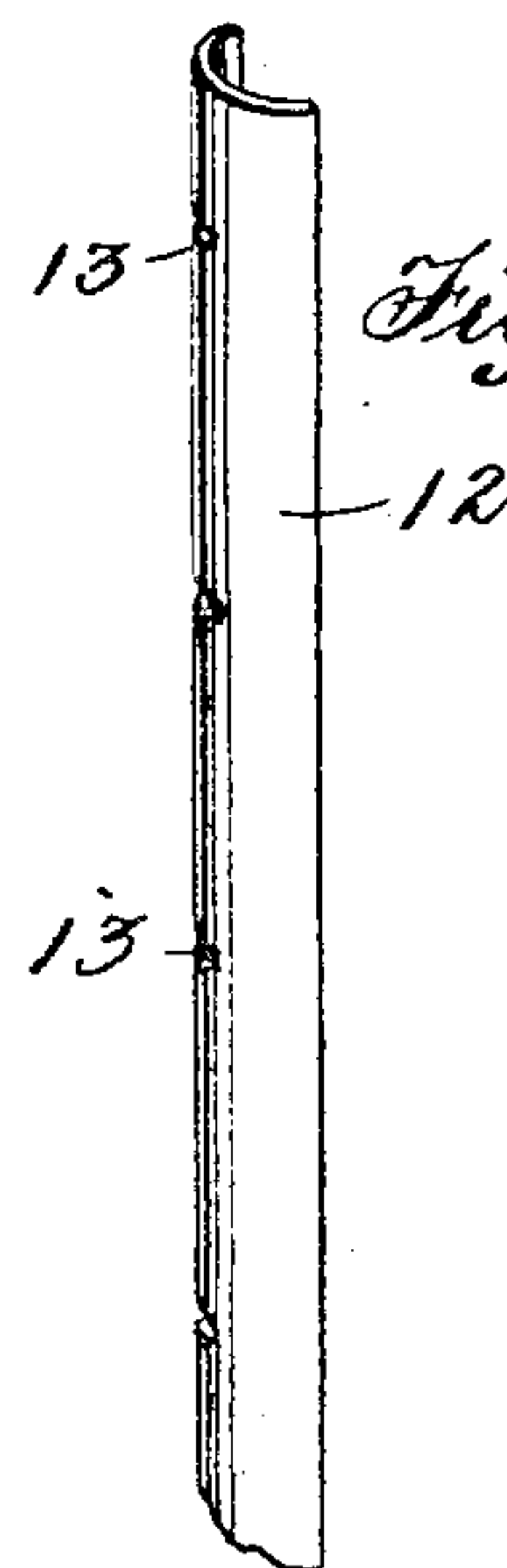


Fig. 4.



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UNITED STATES PATENT OFFICE.

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MOLD FOR FENCE-POSTS.

No. 795,777.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOSEPH C. FULKERSON, residing at Marion, and JOHN F. McELROY, residing at Cedar Rapids, in the county of Linn and State of Iowa, citizens of the United States of America, have invented certain new and useful Improvements in Molds for Fence-Posts, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to certain new and useful improvements in molds for fence-posts, and more particularly to that type in which the mold-body is capable of being expanded when the same is to be separated from the plastic material molded therein.

The particular construction comprises a mold-body formed of resilient material which readily adapts itself to expansion or contraction, and extraneous means is carried by the said mold-body for contracting the same, the resiliency of the mold-body itself forming the expanding means therefor.

The specific construction will appear as the description proceeds, reference being had therein to the accompanying drawings, forming a part of this specification, like numerals designating like parts throughout the several views, in which—

Figure 1 is a transverse section. Fig. 2 is a front elevation. Fig. 3 is a detail perspective of a peculiar form of wire strengthening-frame molded in the body of the fence-post. Fig. 4 is a detail detached fragmentary perspective of an element of the mold to be hereinafter specifically referred to. Fig. 5 is a transverse section of a fence-post which is the product of our invention, and Fig. 6 is a top plan view of an element to be hereinafter specifically referred to which is used in limiting the depth of the plastic material within the mold-body.

Referring specifically to the accompanying drawings, 1 designates the mold-body, which possesses a trefoil cross-sectional contour, the sides of the mold-body being concaved slightly, as at 1^a. The body tapers from its base to the upper portion in order to form a fence-post of tapering shape, such as is commonly employed. Of course this is not an essential feature of the invention, since the body may possess the same dimensions throughout in molding fence-posts which do not have a tapered configuration.

A plurality of vertical rods 2 are mounted upon the mold-body 1, these rods being disposed centrally upon the concave portion 1^a thereof. The rods 2 are of sufficient width to have their edges extend beyond the plane of the rounded corners of the mold-body. A plurality of members 3 of U-shaped cross-sectional contour are connected to the rods 2 at their outer edges. A series of vertical bars 4 are centrally disposed between the rods 2 and are connected by pivoted toggle-links 5 with the sides of the adjacent U-shaped members 3.

In the present instance we have arbitrarily chosen for the sake of simplicity of illustration and description a mold of trefoil cross-sectional contour, as intimated above, and hence the various elements secured thereto correspond therewith in arrangement, so that there are three of the rods 2, three of the U-shaped members 3, three of the bars 4, and three series of connected toggle-links 5. It is readily apparent that in a mold possessing a greater number of sides, such as one of pentagonal or hexagonal shape, the various elements correspond to the number of sides employed.

The intermediately-disposed bars 4 are shorter than the bars 2 and are connected at their lower ends by pivoted links 6 to the central portion of the lever 7, the said lever being pivoted at its end, as at 8, to one of the adjacent U-shaped clips 3.

Referring now to Figs. 3, 4, and 5, it will be observed that in Fig. 3 is shown a wire strengthening-frame of substantially triangular contour embodying three approximately vertically disposed members 9, connected at regular intervals by triangular members 10, each of these triangular members being formed on one of their legs, which have the same disposition in all of the members, with a centrally-disposed outwardly-bulging portion 11, these portions 11 being in vertical alignment so as to register with one another throughout the length of the frame.

In Fig. 4 we have illustrated a cross-sectional U-shaped bar 12, provided with a plurality of transverse slots 13, disposed in vertical alignment with one another and arranged at regular intervals, the intervals between these slots being the same as the intervals between the triangular members 10 of the wire strengthening-frame above referred to. The purpose

of the bar 12 is to form a U-shaped depression in the mold-body, through which the bulging portions 11 of the members 10 project, as is shown in the transverse sectional view of the fence-post in Fig. 5, thereby enabling the transverse wires forming the fence to be engaged in said bulging portions 11 of the post.

In operation the mold is placed in a vertical position with the wire strengthening-frame and the bar 12 located therein, the bulging portions 11 of the triangular members 10 of said frame being in registry with the transverse slots 13 of said bar 12 for the purpose above set forth. The mold-body is then filled with plastic material. Each of the levers 7 is then pushed down upon its pivot 8, thus drawing down the bars 4 and the toggles 5 and forcing inwardly the rods 2 and the concave sides 1^a of the mold. The levers are locked in their downward position by means of a stop-pin 14, carried upon the U-shaped member 3, adjacent the member 3 to which the levers are pivoted.

A member 16 (illustrated in Fig. 6 and corresponding in contour to the shape of the mold) is employed in connection with the mold-body and serves as the bottom thereof, possessing the additional function of limiting the height of the post. This member 16, preferably formed of sole-leather, although the exact material is unimportant, is inserted into the bottom of the mold-body above the plastic material and can be moved up or down therein, being held in any desired position by frictional contact with the sides of the mold-body when the same are contracted, as above explained. Of course the use of this member is optional.

When the plastic material is hardened or become set, the lever 7 is moved to one side to disengage the pin 14, and the resiliency of the mold-body will force the bars 2 outwardly, thereby raising the toggle-links, the bars 4 connected thereto, and the lever 7. It should be here stated that lever 7 will have sufficient play upon its pivot 8 to allow it to be moved a very slight distance to one side in engaging and disengaging the pin 14. When the lever is depressed, it will be held in engagement with the pin 14 by the resiliency of the mold-body, which always exerts the tendency to draw the lever upwardly through the various elements above described and by the force of the plastic material within the mold-body. When the mold-body has been expanded by its own resiliency, as above set forth, the bar 12 is then withdrawn from the side of the mold,

the bulging portions 11 of the wire frame being disengaged from the transverse slots 13 of the said bar. In the preferable embodiment of our invention the bar 12 is loose within the interior of the mold-body, so as to in no wise interfere or retard the resilient action thereof.

It is obvious that various minor changes may be made without departing from the spirit of our invention. For instance, instead of forming a mold-body from a single piece of resilient material we may employ several overlapping sections of resilient material or several sections resiliently connected.

Various other changes, such as may be found expedient in practical use and experience, may be made in the invention without departing from the spirit and scope thereof as defined in the appended claims.

Having fully described our invention, we claim—

1. A device of the type described embodying a mold-body of resilient nature, a series of bars carried by the sides thereof, a series of rods intermediately disposed between said bars and connected thereto by pivoted toggle-links, devices for depressing said rods to draw together said bars to contract the sides of the mold-body, and means for locking said bars in position when drawn together.

2. In combination with a mold and a wire strengthening-frame for the molded product disposed on the interior thereof, said frame being formed with transversely-arranged portions, an element coacting with certain of said transverse portions to form a depression in the mold as above set forth.

3. A mold-body having resilient walls, presser-bars connected along their inner edge to said walls, a series of pivotal toggle-links connected to said bars and adapted when actuated to depress the mold sides, and means for operating said toggle-links.

4. A mold having resilient side walls, and means for depressing said side walls combined with a strengthening-frame adapted to be placed within the mold to be embedded in the molded product, and an element disposed within the mold adapted when one side of the mold is depressed to form a depression in one side of the molded product.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOSEPH C. FULKERSON.

JOHN F. McELROY.

Witnesses:

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JOSEPH SADOWSKY, Jr.