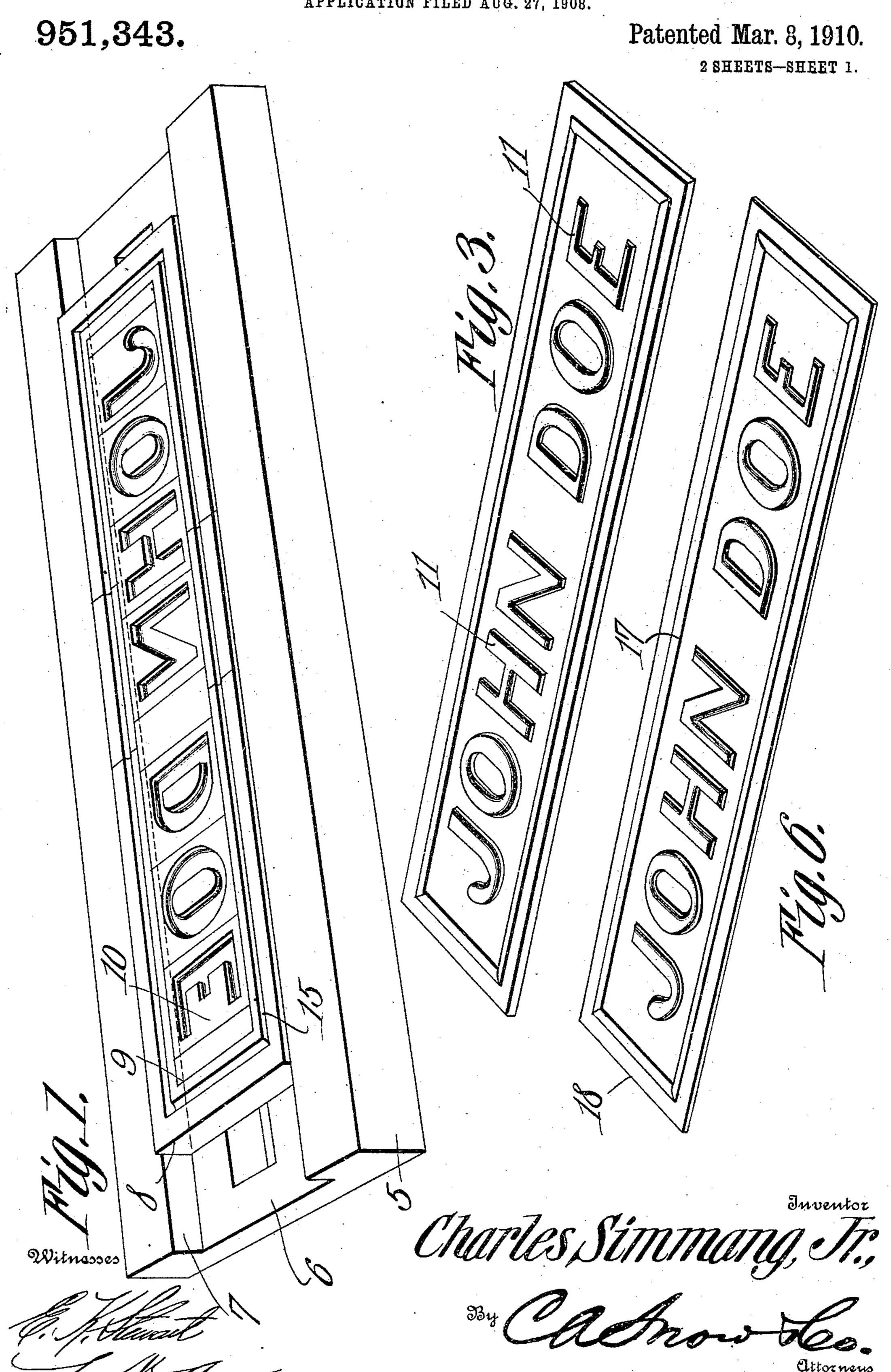
C. SIMMANG, JR.

APPLICATION FILED AUG. 27, 1908.



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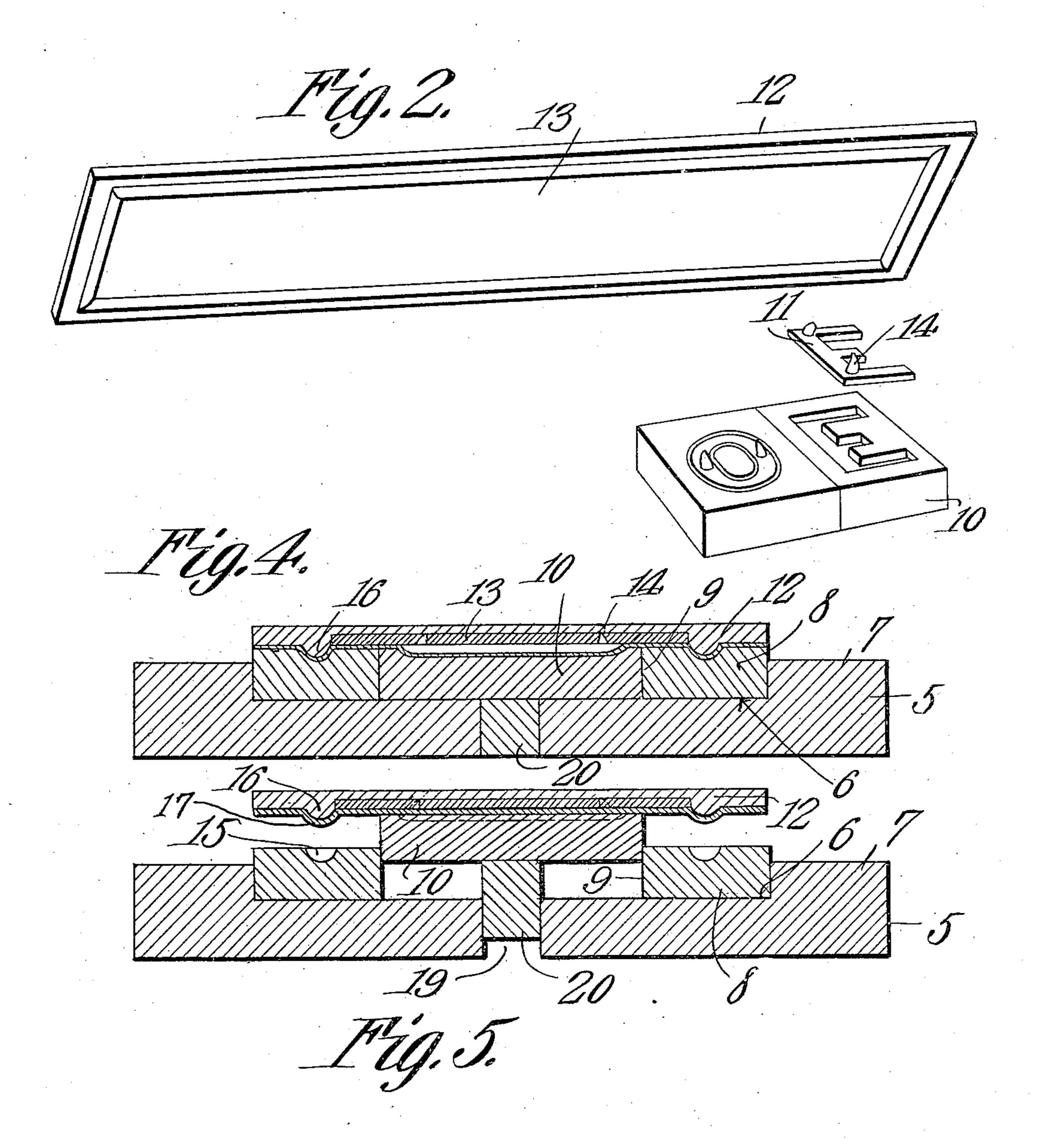
## APPARATUS FOR MANUFACTURING DOOR PLATES OR SIGNS.

APPLICATION FILED AUG. 27, 1908.

951,343.

Patented Mar. 8, 1910.

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## UNITED STATES PATENT OFFICE.

CHARLES SIMMANG, JR., OF SAN ANTONIO, TEXAS.

APPARATUS FOR MANUFACTURING DOOR PLATES OR SIGNS.

951,343.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed August 27, 1903. Serial No. 450,597.

To all whom it may concern:

Be it known that I, CHARLES SIMMANG, State of Texas, have invented a new and useful Apparatus for Manufacturing Door Plates or Signs, of which the following is a specification.

This invention relates to apparatus for making hollow back street signs, door plates and the like and has for its object to provide a comparatively simple and inexpensive device of this character by means of which metallic signs or identification plates may 15 be quickly and economically manufactured.

A further object of the invention is to provide a die including co-acting members, one of which supports the female type and the other the male type, the male type car-<sup>20</sup> rying member being provided with a soft metal surface arranged to receive and support said male type.

A still further object of the invention is generally to improve this class of devices so 25 as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, 30 proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a 35 perspective view of the lower type carrying member showing the same in position on the holder. Fig. 2 is a perspective view of the upper member showing two of the female type sections arranged beneath the same and 40 a male type in position to engage the soft metal surface of the upper member. Fig. 3 is a perspective view of the upper member with the male type in position thereon. Fig. 4 is a transverse sectional view showing the 45 manner of forming the plate or sign. Fig. | 5 is a similar view with the type raiser in elevated position. Fig. 6 is a perspective view of the completed door plate or sign.

Similar numerals of reference indicate 50 corresponding parts in all of the figures of the drawings.

The improved device forming the subject \ matter of the present invention includes a holder 5 having a longitudinal recess 6 formed therein defining oppositely disposed guides 7, said recess being extended the en-

tire length of the holder and arranged to receive the lower member, indicated at 8. Jr., a citizen of the United States, residing | The lower member 8 is substantially recat San Antonio, in the county of Bexar and | tangular in shape, as shown, and is pro- 60 vided with a chamber or compartment 9 for the reception of the female type carrying sections or blocks 10. Each block or section 10 is stamped or otherwise formed with a letter or numeral which co-acts with the 65 corresponding male type 11 of the upper member 12, when said members are forced together. The upper member 12 is also preferably rectangular in shape and is provided with a relatively soft face 13 in which 70 may be metal, fiber, or its equivalent, in which the attaching spurs or pins 14 of the male type 11 are embedded. The lower die member 8 is preferably formed in one or more sections so that the same may be 75 lengthened or shortened to accommodate different numbers of type blocks, said lower member being provided with a marginal groove or border 15 which receives a correspondingly shaped rib 16 formed on the 80 upper member 12 thereby to produce a raised marginal border 17 on the completed sign or door plate, indicated at 18. The holder 5 is provided with an elongated slot 19 communicating with the recess 6 and in 85 which is mounted a longitudinal bar or strip 20 constituting a type raiser.

In making a street sign or door plate, the lower member 8 is placed within the recess 6 and the several type forming the name to 90 appear upon said plate inserted in the chamber 9 of said lower member. The male type 11 are then fitted within the female type and the upper member 12 is placed down on the projecting pins or spurs 14 of the male type 95 11 thus causing the male type to adhere to the soft metal surface 13 of the upper member 12. The upper member 12 with the male type 11 in position thereon is then withdrawn from engagement with the lower 100 member 8 and a strip of thin metal placed in position on the upper surface of the lower member 8, after which the upper member 12 is placed upon the metal plate, type side down, and the two members thus assembled 105 are inserted in a suitable press and subjected to pressure. After the parts are thus pressed together a pressure is exerted on the bar 20 which elevates the male and female type to the position shown in Fig. 5 of the draw- 110 ings, thus detaching the lower face of the plate or sign from the grooved face of the

member 8 and permitting the upper member 12 and type 11 to be removed from said plate, thereby producing a hollow back metallic sign with the letters constituting the 5 name raised or embossed on one side thereof and surrounded by a correspondingly raised border, as best shown in Fig. 6 of the drawings. After the plate is thus formed the type 11 are detached from the soft metal 10 face of the upper member 12 when they may be again used for making a sign in which

the letters or numerals are arranged in the same or in a different order.

From the foregoing description, it is 15 thought that the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what

20 is claimed is:

1. In a device of the class described, coacting members, one of which is provided with a soft metal surface, female type in the form of blocks of greater superficial area 25 than the active portions of the type, and male type of less area than the active portions of the like female type and adapted to be received and positioned by the latter, said male type having spurs on their inactive

30 faces adapted to enter the soft metal surface of the corresponding one of the said co-acting members and to be locked thereto by the spurs entering said surface while the male type are seated in the female type.

2. A device of the class described includ-

ing a holder, a lower member mounted on the holder, female type carried by the lower member, an upper member, male type coacting with the upper member and provided with attaching spurs for engagement with 40 said upper member, and a type raiser arranged to bear against the female type.

3. A device of the class described including a holder having a longitudinal slot formed therein, a lower member mounted on 45 the holder, female type carried by the lower member, an upper member, male type carried by the upper member and co-acting with the female type, and a bar slidably mounted in the slot and arranged to engage and ele- 50

vate the female type.

4. A device of the class described including a holder, a lower member mounted on the holder and provided with a marginal groove, female type carried by the lower 55 member, an upper member having a corresponding marginal bead arranged to enter the groove of the lower member and provided with a soft metal surface, and male type having attaching spurs adapted to be 60 embedded by pressure in the soft metal surface of the upper member while seated in the female type.

In testimony that I claim the foregoing as my own, I have hereunto affixed my signa- 65

ture in the presence of two witnesses.

CHAS. SIMMANG, JR.

Witnesses: James C. Talcott, Jr., F. H. FLANNERY.