M. A. MARQUETTE.

MOLD.

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1,325,898.

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Fig. 2.

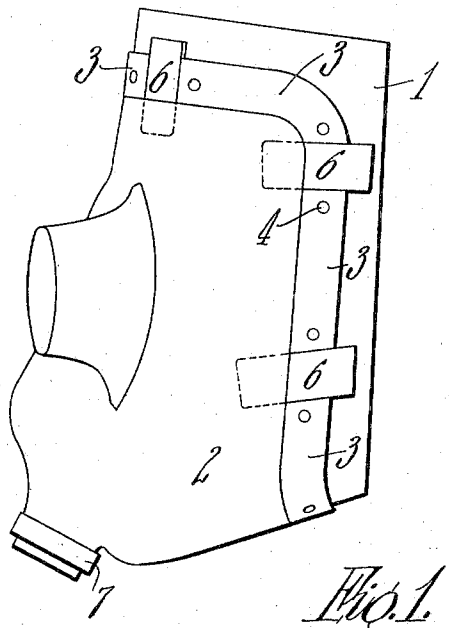
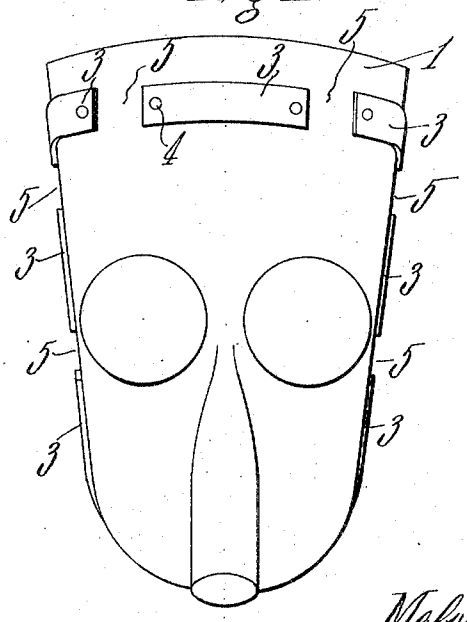


Fig. 1.



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MOLD.

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To all whom it may concern:

Be it known that I, MELVON A. MARQUETTE, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Molds, of which the following is a specification.

This invention relates to molds.

In the manufacture of vulcanized rubber articles, it is frequently desirable, in order to save material, for simplicity in exactly shaping article, and for various other reasons, to make the article in several originally separate portions and to unite these portions during the vulcanization in a mold. But in attempting this, trouble is often caused by the difficulty in originally locating the separate portions and by the relative shifting of the portions from their proper positions while in the mold, with the result that the article comes from the mold with its portions vulcanized in incorrect position with respect to each other. I have devised a mold by which this difficulty is overcome. Without restricting my invention thereto, I describe it with more particular relation to the manufacture of gas masks.

In making a gas mask, the rubber is first cut to shape, and then spread over a form, given the desired configuration and provided with such other plies of material as desired. Then the mask is carefully removed from the form, placed upon a very smooth configured mold, wrapped in cloth, and vulcanized. Of course, a finished mask has strips to encircle the head of the wearer and hold the mask in place. These strips are attached to the mask proper by tabs on the mask. In order to save material, and for various other reasons, the mask material is not cut to include these tabs; instead the tabs are vulcanized to the mask material while in the mold. Later, the straps are attached to the tabs. Now, it is of the utmost importance that these tabs be located exactly properly with respect to the mask proper, so that the tabs and their attached straps will be in such a location that they will not discomfort the wearer. Should they be incorrectly placed, they will press against the temple, say, causing severe headache and consequent impairment of fighting efficiency. The mold, by reference to, and illustration of, which, I, in the present instance, describe my invention, insures the exact positioning of these tabs.

One object of my invention is to provide a mold having provision for locating and holding originally separate portions of an article in position to be vulcanized together.

Another object is to provide a gas mask mold having provisions for locating and holding in position, with respect to the mask proper, the strap tabs of the mask.

To these ends and also to improve generally upon devices of the character indicated, my invention consists in the following matters hereinafter described and claimed.

In the accompanying drawings—

Figure 1 is a front elevation of a mold embodying my invention; and

Fig. 2 is a side elevation of said mold with a mask thereon and showing the strap tabs held located by the locating abutments.

The mold element 1, suitably shaped to form the mask material 2, is intended to receive the material and then be wrapped in cloth (not shown), the cloth in effect being a coöperating mold element. The mold is then placed in a suitable chamber and vulcanization carried on.

Upstanding from the face of the element 1, I provide a series of positioning abutments 3, 3, 3, etc., forming them integrally with the element 1, or attaching them to the element 1, as by rivets 4, as desired. These abutments have their ends separated to provide spaces 5, 5, etc. The spaces are designed to receive and positively locate the tabs 6, 6, etc., the abutments closely receiving the tabs therebetween and the abutments, and spaces, being so located with respect to the facial forms of the element 1 that the tabs will be located in just the proper and desired positions with respect to the facial forms of the mask. Again, the longitudinal edges of the abutments are in the proper location to be contacted by the peripheral edges of the mask, the edges being fitted up to the abutments.

Thus, the elements 3 positively assure the accurate locating of the tabs 6 in just the proper positions with respect to the material of the mask proper so that, when the tabs are vulcanized to the mask, as at the abutting edges of the tabs and mask, or at extended portions of the tabs lying against

the mask material (dotted lines Fig. 2), as desired, the tabs, and ultimately the straps, will be located in just the positions contemplated by the mask designer, *i. e.*, such positions as not to cause discomfort to the wearer.

It will be understood, of course, that the exact positions in which the abutments 3 are located upon the molds proper will depend upon the particular type or size of mask to be manufactured.

When the mask has been placed on the mold, a ring 7 is desirably slipped over the snout to supplement the action of the facial forms of the mold in holding the mask in place upon the mold.

It will be seen that I have provided a mold by which parts to be joined together in vulcanization are held fixed and located with respect to each other, prior to and during the vulcanization.

What I claim is—

1. A mold for vulcanizing a mask, such mold comprising a body configured to said mask, and also comprising spaced abutments upstanding from the configured face of said body to receive between them the strap tabs of said mask and locate such tabs with respect to the mask proper, substantially as described.

2. A mold for vulcanizing a mask, such mold comprising a body configured to said mask, and also comprising spaced abutments in the character of upstanding strips upon the configured face of said body, with their longitudinal edges located for contact with the edges of said mask, when the mask is received upon said face, and with their ends spaced to provide locating recesses for the strap tabs of the mask, substantially as described.

MELVON A. MARQUETTE.