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PROCESS FOR FORMING BODIES OF ARTIFICIAL  
RESIN AND FIBROUS MATERIAL  
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AGENTS

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## PROCESS FOR FORMING BODIES OF ARTIFICIAL RESIN AND FIBROUS MATERIAL

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1 Claim. (Cl. 18—59)

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The invention relates to a process for pressing bodies of artificial resins. When pressing artificial resin bodies and in particular such as are composed of fibrous material impregnated with phenol resins, the pressing of which is carried out in the hot state, it has been found practically impossible to prevent the adhesion of the artificial resin bodies to the parts of the form or the dies of the press.

For this purpose fatty substances, waxes, and the like have been added to the artificial resins, already during the pressing stage, but this measure has not eliminated the disadvantages mentioned above, apart from the fact that these additions alter the entire artificial resin mass. Furthermore, it has been proposed to lubricate the parts of the form with paraffin, or the like without, however, attaining the result desired. Besides, this treatment with paraffin was found to be disadvantageous since the hardening of the plastic masses is impaired, in particular retarded, considering that an accurate dosage of the quantity of fat just sufficient to detach the die from the form is impossible. The same negative result was obtained for the same reason when spraying a lubricating or greasing means on the form. Also the application of a cover of cadmium on the pressing faces was not successful. Finally experiments have been made with non-impregnated absorbing papers inserted between the body of artificial masses proper and the respective part of the form. But this measure, too, was incapable of preventing the artificial resin body from sticking to the form.

The invention has for its object to eliminate these drawbacks, and substantially consists in incorporating a form lubricating means in the surface of the body to be pressed which contacts the form. Tests made have shown that the die does not stick or adhere to the form if the process according to the invention is applied.

The incorporation of the lubricating means in the surface zone of the stamped body, contacting the form parts, may be carried out in such a manner that at least one fibrous layer containing a lubricating means for the form is provided in the contacting zones. In case of bodies composed of fibrous layers, impregnated with artificial resins, the stamping of which according to the invention is of particular interest, the invention may be realized in a simple manner by adding the lubricating means required at least to one of the layers adjacent to the form.

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The drawing shows an artificial resin body in side elevation by way of example, said body being composed of various fibrous layers which are impregnated with artificial resins.

The layers of the fibrous substance bodies containing artificial resins are designated by the numerals 1 and 2, whereas the fibrous layers containing the lubricating means for the form are designated by the numerals 3 and 4. During the pressing operation the layers 3 and 4 will prevent the artificial resin body from sticking to the form parts. The fibrous substance bodies containing artificial resins and the fibrous layers containing the lubricating means may either be united in advance of the pressing operation and thus introduced into the press as a unit, or the individual layers may be inserted into the press separately, whereupon the press is closed, and the layers are heated.

While the invention has been shown in the particular embodiment described it is not limited thereto, as modifications thereof may be made without departing from the scope of the appended claim.

I claim:

In a process for forming bodies of artificial resins having a sheet of fibrous material welded to a surface thereof, the steps of inserting a layer of artificial resin and at least one sheet of fibrous substance impregnated with a lubricating material between press members, and pressing said layer and sheet together to form said body.

FRIEDRICH JOSEF TRÖZMÜLLER.

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