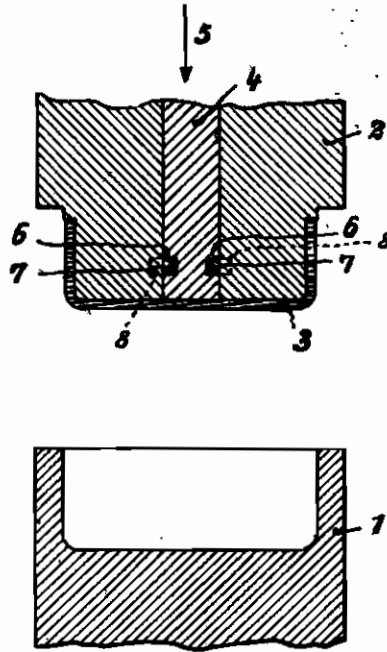


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ALIEN PROPERTY CUSTODIAN

EJECTING DEVICE FOR POWDER PRESSES, PREFERABLY ARTIFICIAL RESIN PRESSES

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It has previously been proposed to equip artificial resin moulding presses, in similar manner to tablet presses, with ejectors the front surface of which forms a part of the mould during the pressing operation and which after the completion of the pressing operation is pressed into the mould in order to expel the pressed article from the mould. These ejectors must be fitted very accurately into the mould, so that the press material cannot penetrate into or escape through any crevices between mould and ejector.

It is a known experience that ejectors of this kind are relatively easily jammed and rapidly wear out. This appears to be due or largely due to the fact that wastes from press material penetrate into the guide of the ejector. This can only be avoided by careful blowing out of the mould after each pressing, and on account of this a completely automatic operation of powder presses of this kind has been rendered very difficult.

It is an object of the present invention to remove or reduce the above mentioned difficulties. According to the invention a groove is provided in the ejecting device directly behind the end face of the ejector, this end face co-acting as part of the mould, the groove being perpendicular or almost perpendicular to the direction of movement of the ejector. In this groove collect then all waste particles which penetrate into the guide of the ejector, so that they can no longer abrade the guiding surfaces. Moreover, in the course of time the waste particles collected in the annular groove stick together to form a packing which lies round the ejector like a piston-ring and so packs the ejector tightly within its guide.

In order that the invention may be well understood an embodiment thereof will now be described by way of example only as applied to a moulding press for artificial resin moulding powder, with reference to the accompanying drawing in which the single figure is a cross-section through the separable mould parts.

Referring to the drawing the mould of an ar-

tificial resin press comprises a matrix 1 and a plunger 2, which may be so proportioned that the prepared pressed article 3 after the completion of the pressing operation remains adhering to the plunger 2 and, when the latter is raised, is lifted up with the plunger into the position shown. A ram-like ejector 4 is mounted in the plunger 2 and the front surface of the ejector 4 is flush with the surface of the plunger 2 during the pressing operation and accordingly forms a part of the plunger wall. The ejector 4 is carefully ground to correspond with the bore of the plunger 2 and is moved downwards relatively to the plunger 2 in the direction of the arrow 5 to eject the prepared pressed article 3. The dropping off pressed article is caught on a slide, conveyor or the like adapted to receive it.

All this is known.

According to the invention a groove 6 is provided within the guiding zone of the ejector 4 which groove lies about 2-3 mm. behind the front surface of the ejector 4 and is about 1-3 mm. deep and also approximately the same in breadth. All particles that may accidentally penetrate into the guide track collect in this groove and form in the course of time a packing 7 as indicated in black.

Instead of constructing the groove 6 ring-shaped in the manner illustrated, it may also be given the form of a preferably steeply pitched spiral, or one or more steeply pitched spiral grooves may be joined to an annular groove, so that the particles which penetrate later into this groove may gradually push out upwardly the already collected particles. The groove then requires only occasional cleaning. If desired, the groove may be provided in the wall of the bore in the plunger 2 as indicated by dash line 8. In the practice it is, however, preferable to provide the groove on the ejector 4 because the groove may then be more easily cleaned, since the ejector 4 can naturally be withdrawn from the plunger.

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