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MEANS FOR MOUNTING THE CONTAINER OF AN EXTRUSION
PRESS IN THE CONTAINER-HOLDER
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3,070,391

FIG. 2

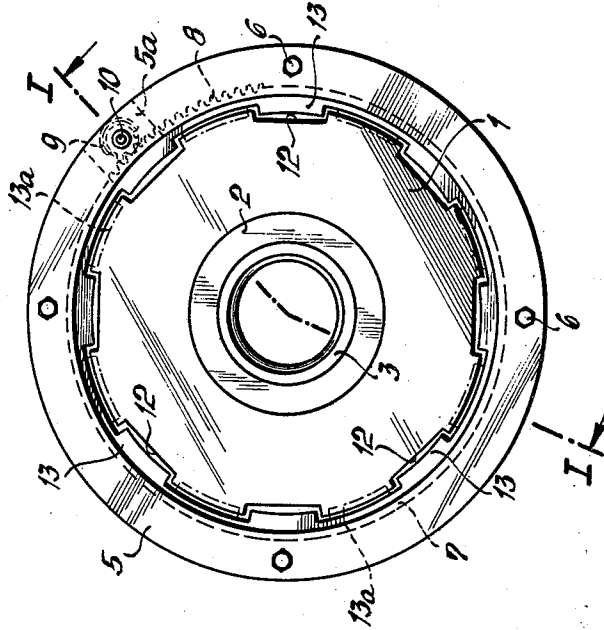
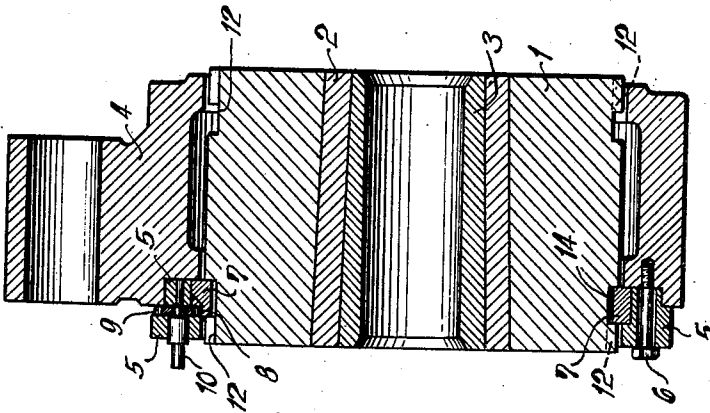


FIG. 1



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MEANS FOR MOUNTING THE CONTAINER OF AN EXTRUSION PRESS IN THE CONTAINER-HOLDER

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5 Claims. (Cl. 287-119)

The changing of the container of an extrusion press always involves such a great expenditure of time that it forms a serious inconvenience, particularly when there are frequent changes in the working programme of the press. The object of this invention is to facilitate and thereby accelerate the exchanging of the container, without any risk of disturbing the exact alignment of the container in its holder in relation to the axis of the press.

With this end in view the invention is characterized by a bayonet-joint ring, which is rotatable relatively to the container and the container-holder, and which locks these two members together.

The invention is illustrated by way of example in the accompanying drawings, in which:

FIGURE 1 shows an axial section through the container, with the container-holder, on the line I—I in FIGURE 2, the bayonet-joint ring being here shown in the closed position in the dotted outline, and in the open position in the solid outline; and

FIGURE 2 shows an end view of the container, with flange, with the bayonet-joint ring in the unlocked position.

The container, which is denoted by 1, has the usual bushes 2 and 3. It is mounted in a container-holder 4. A flange 5 is screwed on to the latter by means of screws 6. The flange 5, together with the container-holder, forms an annular groove for a bayonet-joint ring 7, which is provided on part of its periphery with teeth 8, with which there meshes a pinion 9, which is mounted, in a slot 5a of the flange 5, upon a shaft 10, which is journaled in the flange 5. The shaft 10 may be driven by hand or by means of a motor for the purpose of rotating the bayonet-joint ring 7. The container 1 has at both ends longitudinal grooves 12, in which ribs or ledges 13 on the bayonet-joint ring 7 can engage. Behind the longitudinal grooves 12 of the container 1 there are annular grooves 14, into which the ribs 13 enter when the bayonet-joint ring 7 revolves into the position 13a. The provision of the longitudinal grooves 12 at both ends of the container 1 is merely for the purpose of enabling the container to be inserted either in the position shown or in the reverse position at will. In the latter case the end of the container now facing the ram will be turned towards the bolster.

For the removal of the container 1, the latter is clamped between the die, not shown, which is supported on the bolster, and the ram of the press. Then by rotating the shaft 10 the bayonet-joint ring 7 is turned so far that its ribs 13 are in alignment with the longitudinal grooves 12 of the container, as shown in FIGURE 2. The container-holder 4 can now be drawn off towards the left. If the bayonet-joint ring 7 is to be exchanged, the flange 5 must

first be taken off, after releasing the screws 6. The mounting is effected in the reverse sequence.

I claim:

1. A bayonet joint for axially locking the container of an extrusion press to its container-holder, comprising: a bayonet-joint ring so mounted as to be rotatable about the axis of the container, the said bayonet-joint ring having end faces substantially perpendicular to the said axis, one of the two members to be locked together bearing against one of these end faces and the other member bearing against both these end faces, an interrupted circular ledge consisting of ribs projecting radially from one of the peripheral surfaces of the bayonet-joint ring, and an interrupted circular ledge consisting of ribs projecting radially from a peripheral surface on one of the members to be locked together, the ribs of one set being adapted in one angular position of the bayonet-joint ring to pass between the ribs of the other set but to enter into locking engagement with them when the bayonet-joint ring is turned through an angle into a different angular position.

2. A bayonet joint for axially locking the container of an extrusion press to its container-holder, comprising: a bayonet-joint ring so mounted as to be rotatable about the axis of the container, the said bayonet-joint ring having end faces substantially perpendicular to the said axis, the container bearing against one of these end faces, and the container-holder bearing against both end faces, an interrupted circular ledge consisting of ribs projecting radially inwards from the internal peripheral surface of the bayonet-joint ring, and an interrupted circular ledge consisting of ribs projecting radially outwards from the external peripheral surface of the container, the ribs of one set being adapted, in one position of the bayonet-joint ring, to pass between the ribs of the other set, but to enter into locking engagement with them when the bayonet-joint ring is turned through an angle into a different angular position.

3. A bayonet joint for axially locking the container of an extrusion press to its container-holder as claimed in claim 1, the container-holder comprising a releasably secured flange, so located as to provide an annular groove between the flange and the main body of the container-holder, and the bayonet-joint ring being rotatably mounted in this groove.

4. A bayonet joint for axially locking the container of an extrusion press to its container-holder, as claimed in claim 3, further comprising: gear teeth on the bayonet-joint ring, a driving pinion journaled in the releasably secured flange of the container-holder and meshing with the said gear teeth, and means for rotating the driving pinion.

5. A bayonet joint for axially locking the container of an extrusion press to its container-holder as claimed in claim 2, the container being reversible, and having an interrupted ledge of radial ribs at each end.

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