No. 871,261. PATENTED NOV. 19, 1907.

H. ENDEMANN.

PRESS FOR MOLDING SUPPOSITORIES, &c.

APPLICATION FILED APR. 22, 1907.

Fig. 1.

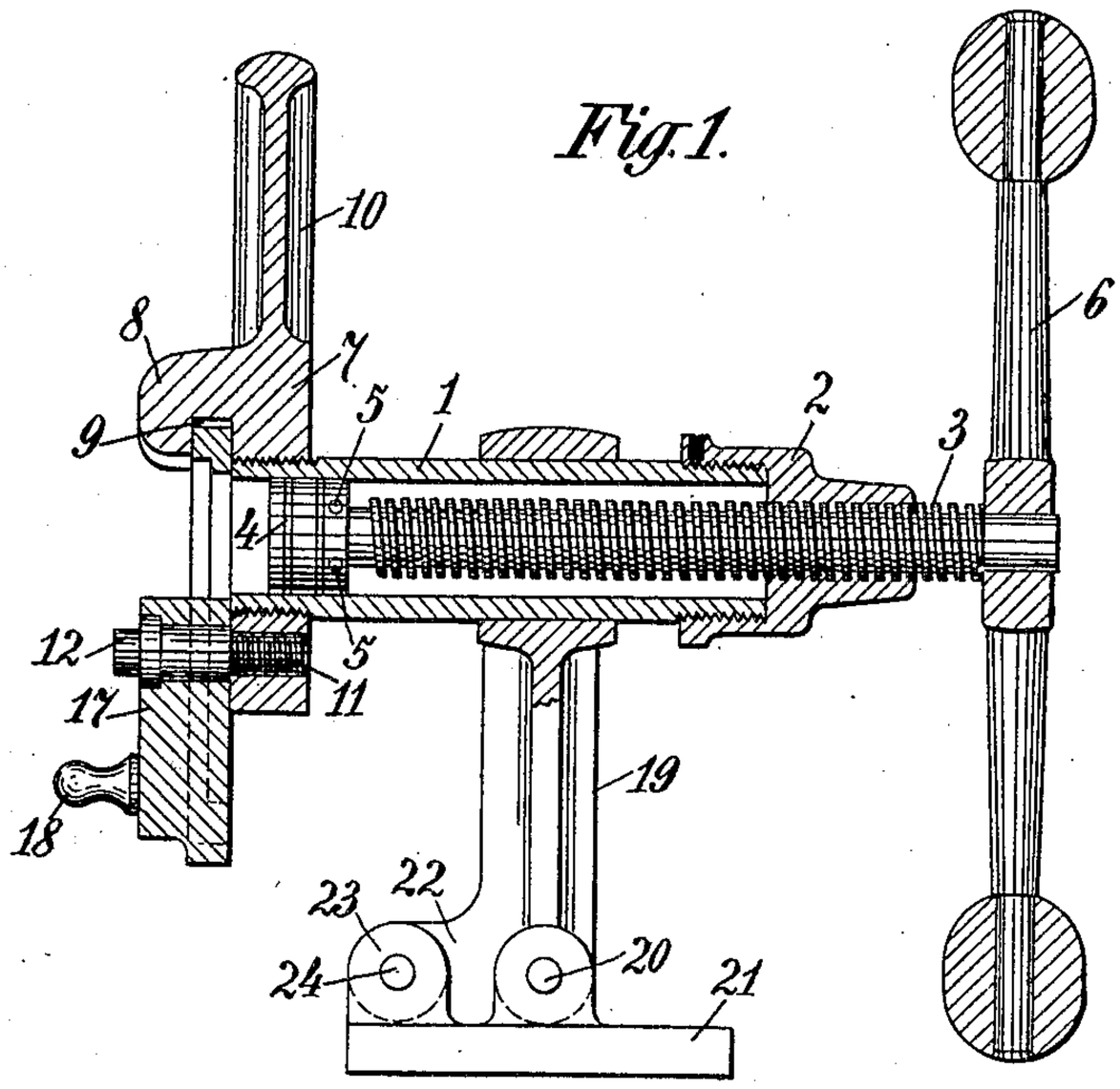


Fig. 3.

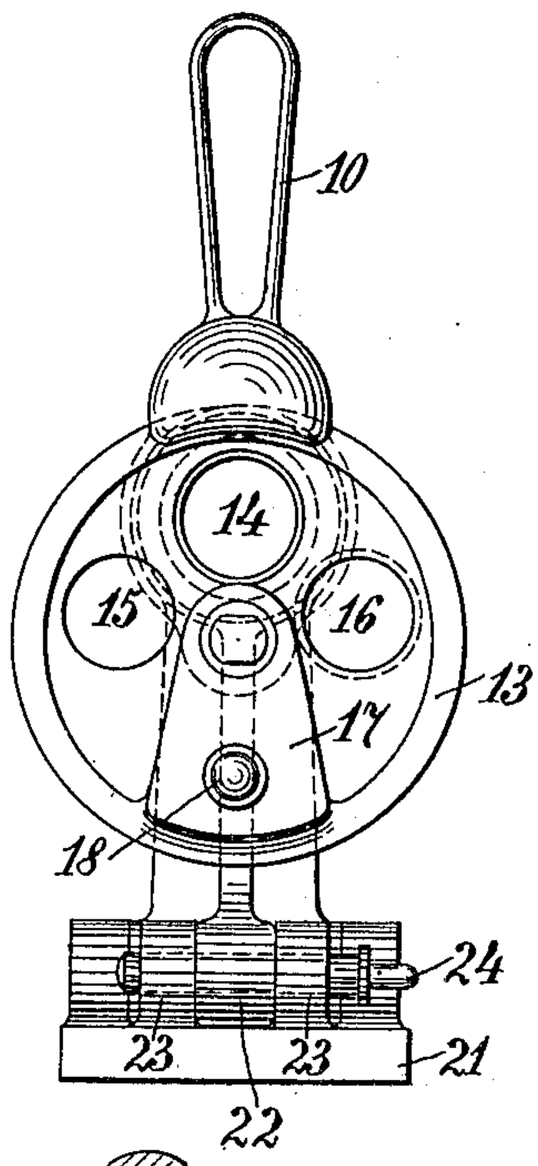


Fig. 2.

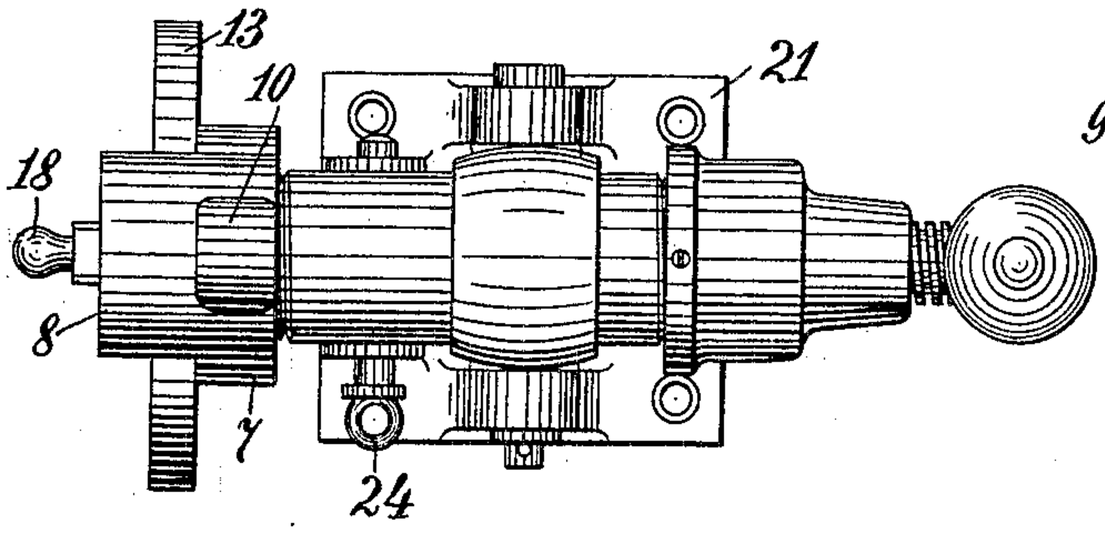
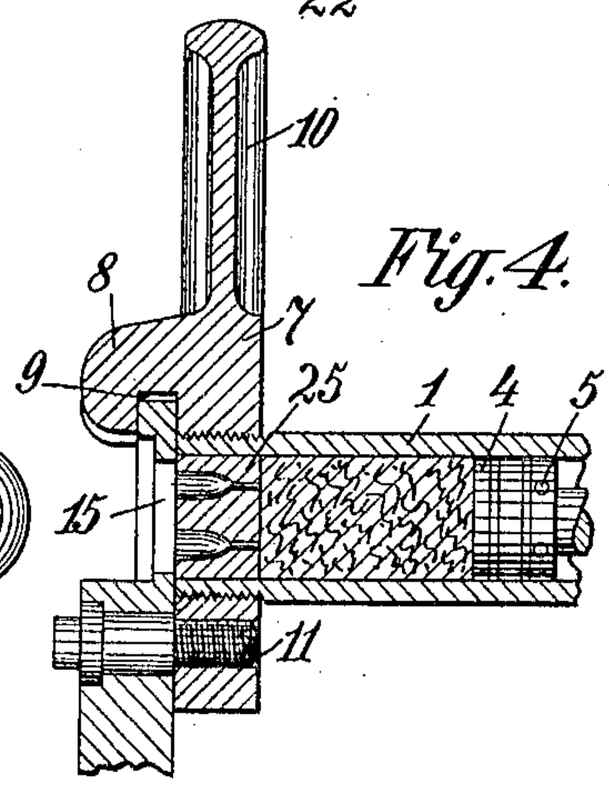


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

HUBERT ENDEMANN, OF VIENNA, AUSTRIA-HUNGARY.

PRESS FOR MOLDING SUPPOSITORIES, &c.

No. 871,261. Specification of Letters Patent. Patented Nov. 19, 1907.

Application filed April 22, 1907. Serial No. 369,681.

To all whom it may concern:

Be it known that I, HUBERT ENDEMANN, a subject of the Emperor of Austria, residing at Vienna, in the Province of Lower Austria and Empire of Austria-Hungary, have invented a new and useful Press for Molding Suppositories, Bougies, and the Like and for Filling Tubes, of which the following is a specification.

My invention relates to presses, by means of which pasty substances are molded into given shapes, as required in pharmacy, and it has for its object to provide for the tight closing of the press-cylinder during the molding and for the easy insertion and removal of the molds.

According to my invention, the press-cylinder has a movable collar screwed to its front end, and a disk, the diameter of which is about twice that of the cylinder, is pivoted to the said collar. This disk has a solid sector, and also other sectors provided with holes of different diameters, in such positions that by turning the disk the one or the other of them may be brought in front of the mouth of the press-cylinder. The said screw-collar has a lateral projection with a groove, into which the edge of the disk projects, whereby the operator is enabled, by turning the said screw-collar, to press the disk tightly against the mouth of the press-cylinder.

In the accompanying drawing: Figure 1 is a sectional side elevation of my improved press. Fig. 2 is a top view, and Fig. 3 a front elevation of the press. Fig. 4 is a sectional side elevation of the front end of the press-cylinder, containing pasty substance and a suppository mold.

1 is the press-cylinder, the rear end of which is closed by a screw-cap 2, into which is screwed the screw-threaded piston rod 3, having the piston 4 loosely secured to it, by means of the pins 5. The rear end of the piston rod carries the cross-bar 6. To the front end of the press-cylinder 1 is screwed the collar 7 having a forwardly extending projection 8 provided with a groove 9 and a handle 10. The lower part of the collar 7 has, at a point 180° distant from the projection 8, a screw-threaded hole 11, into which screws the stud 12, serving as a pivot to the disk 13, the edge of which projects into the groove 9. The disk 13 is provided with three circular holes 14, 15 and 16. The diameter of the hole 14 is somewhat larger than that of the press-cylinder in order to allow the molds, which fit into the cylinder, to be easily inserted and pushed out. The hole 15 is somewhat smaller, so as to retain the mold, while the molded bodies such as suppositories, boluses and the like, are ejected. The third hole 16 has its sides screw-threaded for enabling correspondingly shaped attachments to be secured in the same. The disk 13 also has a solid thickened sector 17, provided with a handle 18 and intended to be placed in front of the mouth of the cylinder 1, while the molding is carried on. There is a locking dog, not shown in the drawing, arranged in a recess of the collar 7, and the disk 13 has corresponding notches so that it may be stopped in the required positions.

The cylinder 1 is held in the eye of a standard 19, which is pivoted, by means of a pivot pin 20, to a base plate 21. A lug 22 on the bottom end of the standard 19 extends between the eyes 23 formed on the base plate, and a pin 24, passed through the eyes 23 and the hole of the lug 22, rigidly secures the standard in position. After having withdrawn the pin 24, the standard 19 can be turned through 90° in order to bring the cylinder 1 into a vertical position, in which position it can easily be filled with the pasty material from which the shaped articles are to be molded.

The operation of the press is as follows: By means of the handle 18, the disk 13 is so turned that its circular aperture 14 is brought in front of the mouth of the cylinder 1 containing the pasty material, and the mold 25 is then inserted. The disk 13 is then turned so that the solid sector 17 is brought in front of the mouth, whereupon the movable screw-collar 7 is, by means of the handle 10, turned slightly to the right and consequently partly screwed home. The disk 13 is thus tightly pressed against the mouth of the cylinder and the escape of any pasty material during the molding is prevented. By turning the cross-bar 6, the pasty material is caused to enter the molds under pressure, and the handle 10 is then slightly turned to the left, and the disk 13, which is thereby loosened, partly rotated so that its aperture 15 of less diameter than the cylinder, is brought in front of the mouth. By slightly turning the cross-bar 6 again, the molded bodies are ejected, the mold being retained in the cylinder. For ejecting the mold, the aperture

14 is caused to register with the bore of the cylinder, and the piston 4 is afterwards caused to advance.

The molds for boluses are made in halves, which are inserted into the cylinder one after the other through the large aperture 14 of the disk 13. The cylinder is then closed by means of the disk 13 and by turning the cross-bar 6 the pasty material is caused to fill the mold. The cross-bar 6 is then slightly turned in the opposite direction in order to release the pressure, and the aperture 14 is again brought in front of the cylinder 1. By means of the piston and piston-rod, the front half of the mold is then ejected, and the narrow aperture 15 again brought in front of the mouth of the cylinder. The molded bolus can then be ejected by means of the piston. Finally the second half of the mold is pushed out through the aperture 14. For making bougies, the molds are replaced by disks having holes therein.

When tubes are to be filled, the collar and its attachments are screwed off the cylinder 1, a flanged tube-filling nozzle is inserted into the aperture 15, and the collar with its attachments is screwed on again. Or the aperture 16, provided the tube-filling nozzle is screw-threaded, can be used for this purpose.

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a press for molding suppositories and the like, the combination with the cylinder of a disk pivoted to a point on the front end of its side or wall, and means for stopping the disk in the positions given it, the said disk, of somewhat more than twice the diameter of the cylinder, having a circular orifice of somewhat larger diameter than the bore of the cylinder, other circular orifices of smaller diameter, and a solid portion of such extent as to be adapted to cover the mouth of the cylinder, substantially as and for the purpose described.

2. In a press for molding suppositories and the like, the combination with the cylinder of a collar movably screwed to the front end of the cylinder, and a disk pivoted to the collar, the said disk, of somewhat more than twice the diameter of the cylinder, having a circular orifice of somewhat larger diameter than the bore of the cylinder, other circular orifices of smaller diameter, and a solid portion of such extent as to be adapted to cover the mouth of the cylinder, and the collar having at a point 180° distant from the pivot a grooved projection, and the edge of the disk projecting into the groove, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HUBERT ENDEMANN.

Witnesses:

JOS. LOHARCHE,

ALVESTO S. HOGUE.