No. 768,244. PATENTED AUG. 23, 1904.

F. J. STOKES.

SUPPOSITORY MACHINE.

APPLICATION FILED NOV. 30, 1903.

NO MODEL.

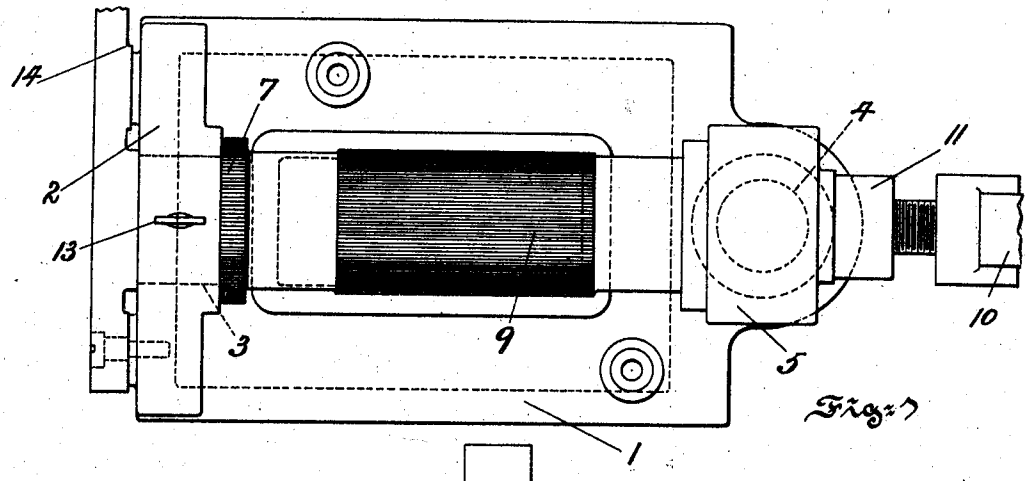


Fig. 1

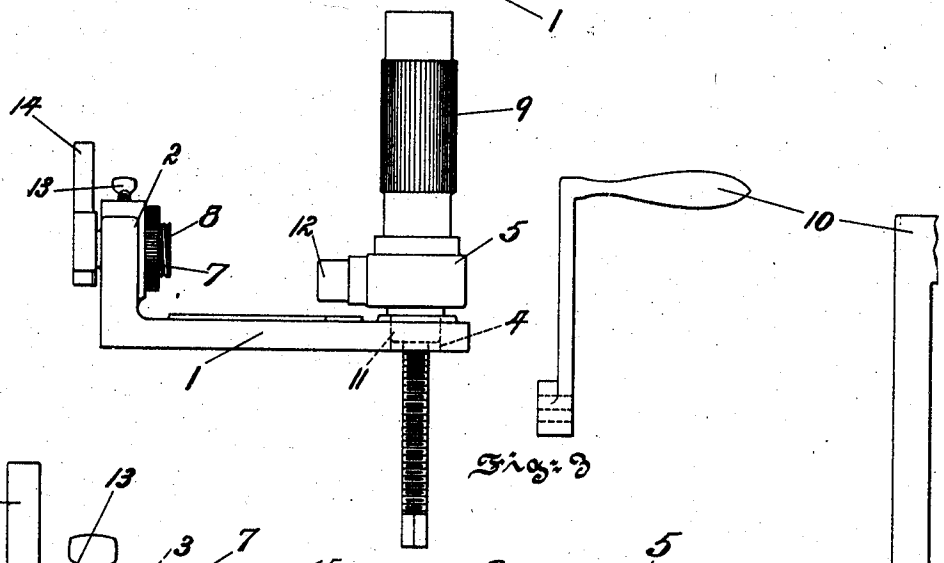


Fig. 3

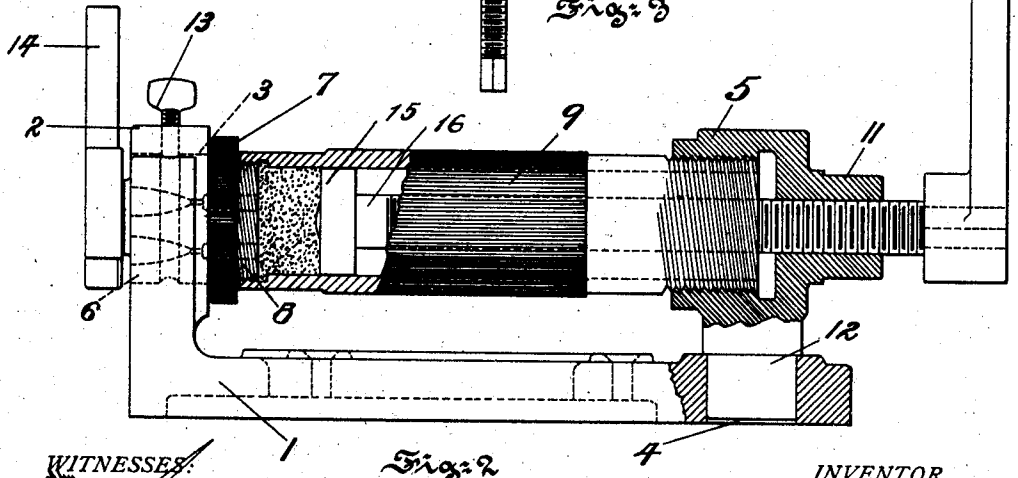


Fig. 2

WITNESSES:

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No. 768,244. Patented August 23, 1904.

UNITED STATES PATENT OFFICE.

FRANCIS J. STOKES, OF PHILADELPHIA, PENNSYLVANIA.

SUPPOSITORY-MACHINE.

SPECIFICATION forming part of Letters Patent No. 768,244, dated August 23, 1904.

Application filed November 30, 1903. Serial No. 183,242. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS J. STOKES, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Suppository-Machines, of which the following is a specification.

One object of the present invention is to provide a machine consisting of comparatively few parts and being of comparatively inexpensive construction and cost.

Another object of the invention is to provide a machine which can be rapidly and conveniently filled or recharged.

Another object of the invention is to improve the construction and operation of not only the die, but also of the machine as a whole.

To these and other ends hereinafter set forth the invention comprises the improvements to be presently described and finally claimed.

The nature, characteristic features, and scope of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a top or plan view of a machine embodying features of the invention, showing the machine arranged to make suppositories. Fig. 2 is a side view of the same partly in section; and Fig. 3 is a side view of the machine arranged for receiving a charge or being refilled.

In the drawings, 1 is a base shown as provided with openings through which screws or other devices may be passed in order to attach it to a table or bench in such a way that its right-hand end may extend slightly beyond the same, although these are not essential. The base is provided at one end with a bracket 2, having a die-receiving opening 3, and at the other end it is provided with an opening 4 for the reception of a journal or post. So far as the operation of the machine is concerned, the openings 3 and 4 may be either round or rectangular; but economy in machine-shop practice dictates their being round, as such parts may be finished more cheaply than rectangular parts.

5 is a head detachably pinned to the base, as will be presently described.

The die 6 is detachably fitted to the opening 3 and extends through the bracket 2 to the outer face thereof, and it is provided with a collar 7, which by abutting upon the inner face of the bracket serves to properly position the die. The die is also provided with a threaded extension 8.

The cylinder 9 is externally threaded for engagement with the corresponding tapped portion of the head 5 and is tapped for engagement with the threaded extension 8. Within the cylinder is arranged a piston-head 15, whose rod 16 has screw-and-thread connection with the head and is squared or otherwise fitted for detachably receiving the operating-handle 10. The head 5 is provided with a journal or post 11, through which the piston-rod passes and which may be said to be a counterpart of the journal or post 12, also connected with the head 5, in that both of these journals or posts are adapted for insertion in and withdrawal from the opening 4 in the base for a purpose to be presently described. The journals or posts 11 or 12 are arranged in the same plane, but at an angle with each other.

13 is a thumb-screw which may be provided and of which the point may take into a groove on the die and serve to hold it against accidental displacement.

14 is a swinging arm pivoted to the outside of the bracket 2 and arranged to abut upon the outer face of the die and in that way properly retain the material in the molds of the die, and since the die and the arm are constructed and arranged in the manner described it follows that they must always occupy proper positions in relation to each other.

In use the handle 10 is detached and the journal or post 11 is placed in the opening 4, and it serves to rigidly support the cylinder 9 in an upright position, Fig. 3, so that the operator can readily fill it through its upper end, and since it is rigidly held he may employ both hands for the performance of the filling operation without fear of the cylinder's overturning. Upon the completion of the filling operation the journal or post 11 and the

cylinder are lifted clear of the base and the journal or post 12 is inserted in the opening 4. This brings the tapped end of the cylinder opposite the threaded extension 8 of the die, whereupon the cylinder is screwed onto that extension, and the machine is ready to be operated in the well-known manner for the production of suppositories as soon as the handle 10 has been applied This operation consists in rotating the spindle or piston-rod 16, whereby the piston-head 15 compresses the material and forces the same through the molds of the die, thus forming the suppositories, which may be removed by swinging the handle 14 clear of the molds. To refill the cylinder, it is detached or unscrewed from the threaded extension 8, the journal or post 12 is withdrawn from the opening 4, the handle is removed, and the cylinder is again supported by means of the journal or post 11 in the manner described.

It will be obvious to those skilled in the art to which my invention appertains that modifications may be made in detail without departing from the spirit thereof. Hence I do not limit myself to the precise mode of construction; but,

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A suppository-machine comprising a base provided with a die and with an opening for the reception of a journal, and a head provided with two journals arranged at an angle in respect to each other and with a piston and cylinder adapted to coöperate with the die whereby either journal may be inserted in the opening so as to hold the cylinder in operative and in filling positions, substantially as described.

2. In a suppository-machine the combination of a base provided with a die, a head detachably journaled to said base so as to be held in operative and in filling positions, a cylinder carried by the head and adapted for detachable connection with the die, and a piston for said cylinder, substantially as described.

3. In a suppository-machine the combination of a bracket having an opening through it and provided with a swinging arm, and a die detachably adapted to said opening and extending through the bracket into abutment with the swinging arm and provided with a collar for abutment upon the inner face of the bracket, substantially as described.

4. In a suppository-machine the combination of a base having an opening therein, and a cylinder provided with journals detachably adapted to said opening and arranged at an angle in respect to each other whereby the cylinder may be applied in two positions, substantially as described.

5. A suppository-machine comprising a base provided with a journal-receiving opening and with a bracket having a die-receiving opening, a die provided with a collar and with a threaded extension and fitted in the die-receiving opening so that its outer face extends through the same, a swinging arm which works upon the outer face of the die, a head provided with two journals arranged at an angle with each other and both adapted to the journal-receiving opening in the base, a cylinder having screw-and-thread connection with the die extension and with the head, a piston and piston-rod having screw-and-thread connection with the head, and a handle detachably applied to the piston-rod, substantially as described.

In testimony whereof I have hereunto set my hand this 18th day of November, 1903.

FRANCIS J. STOKES.

In presence of—
W. J. JACKSON,
FRANK E. FRENCH.