

(No Model.)

2 Sheets—Sheet 1.

T. C. EDWARDS.  
SAD IRON.

No. 535,576.

Patented Mar. 12, 1895.

Fig. I.

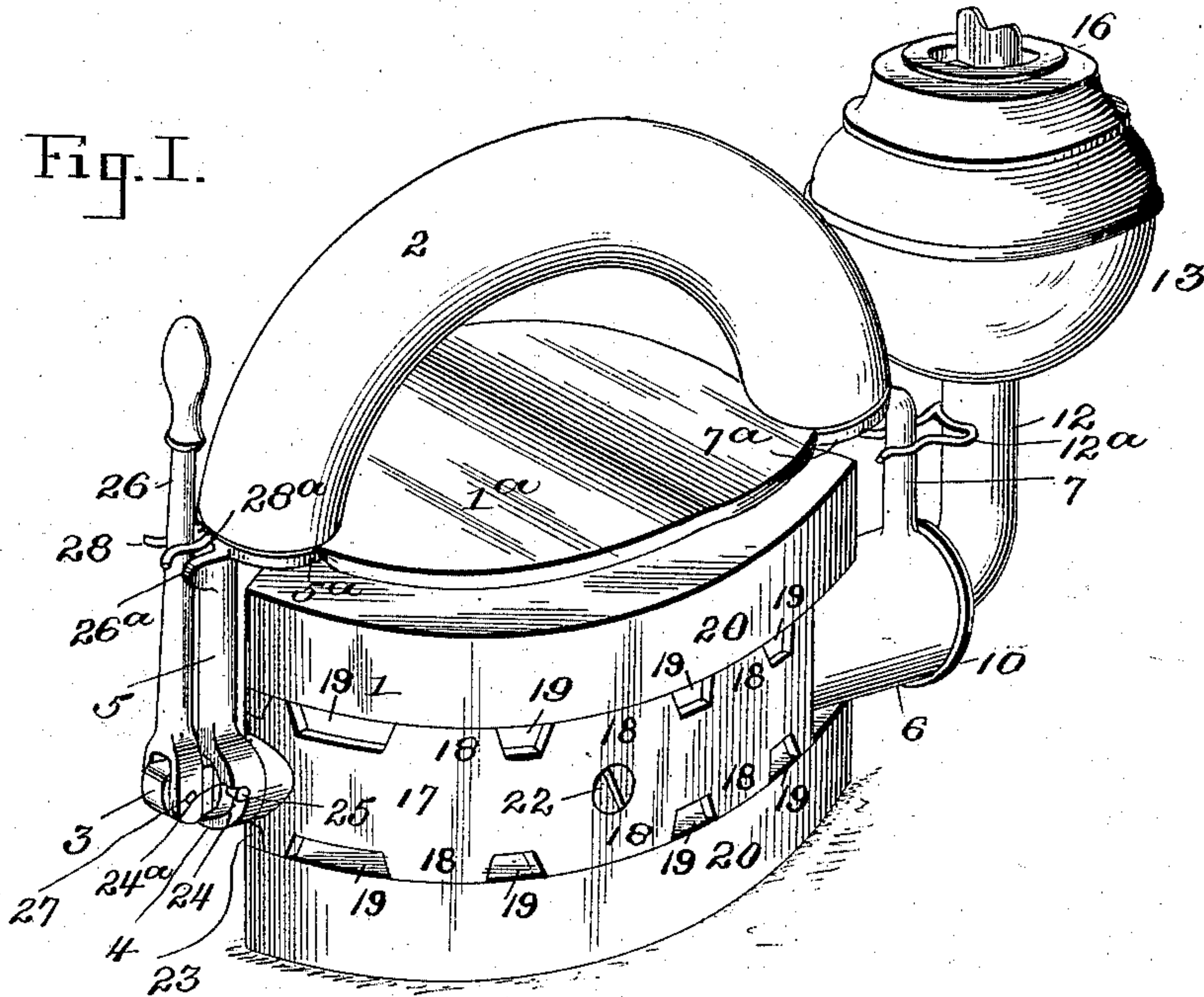


Fig. VII.

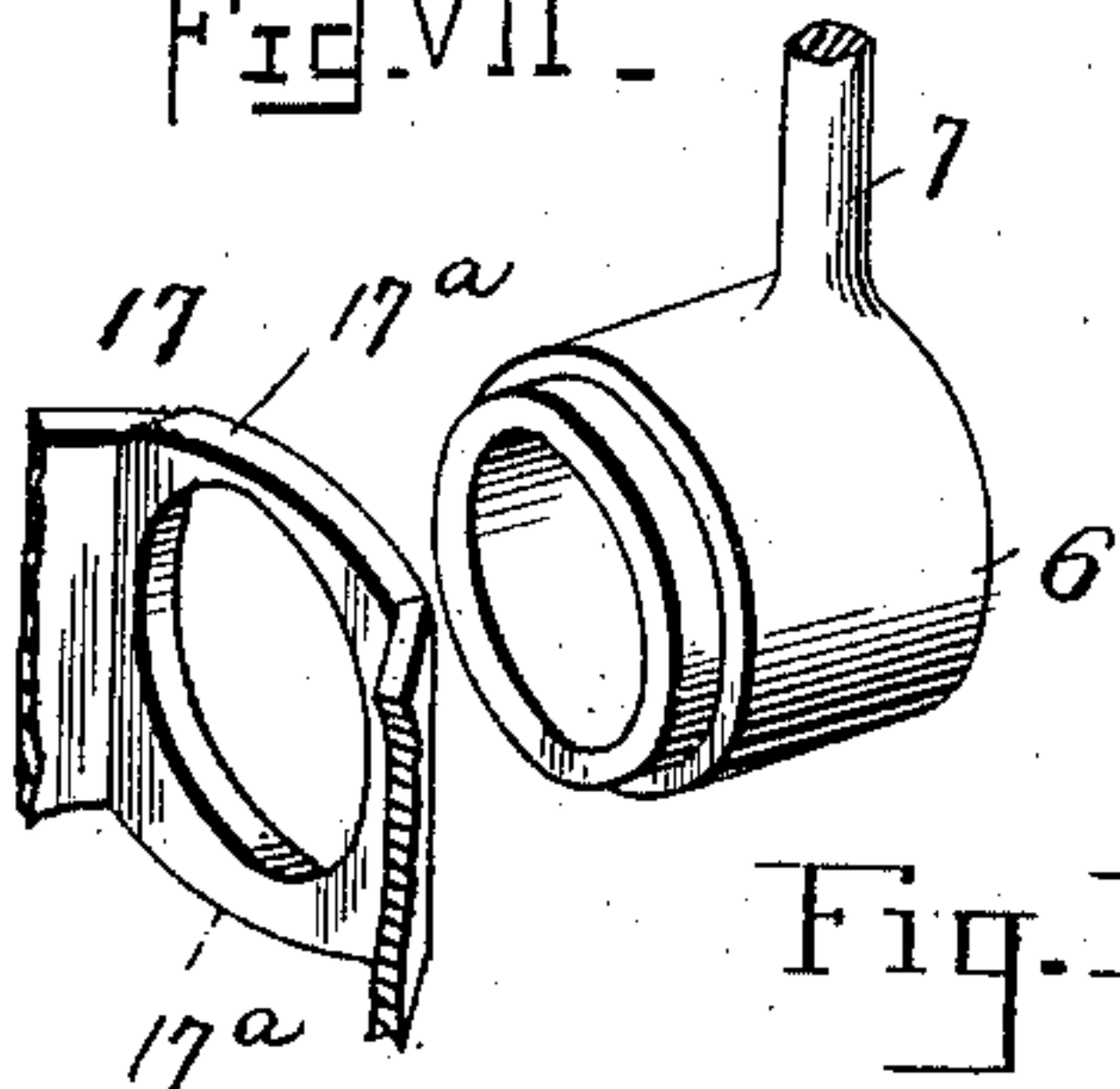


Fig. II.

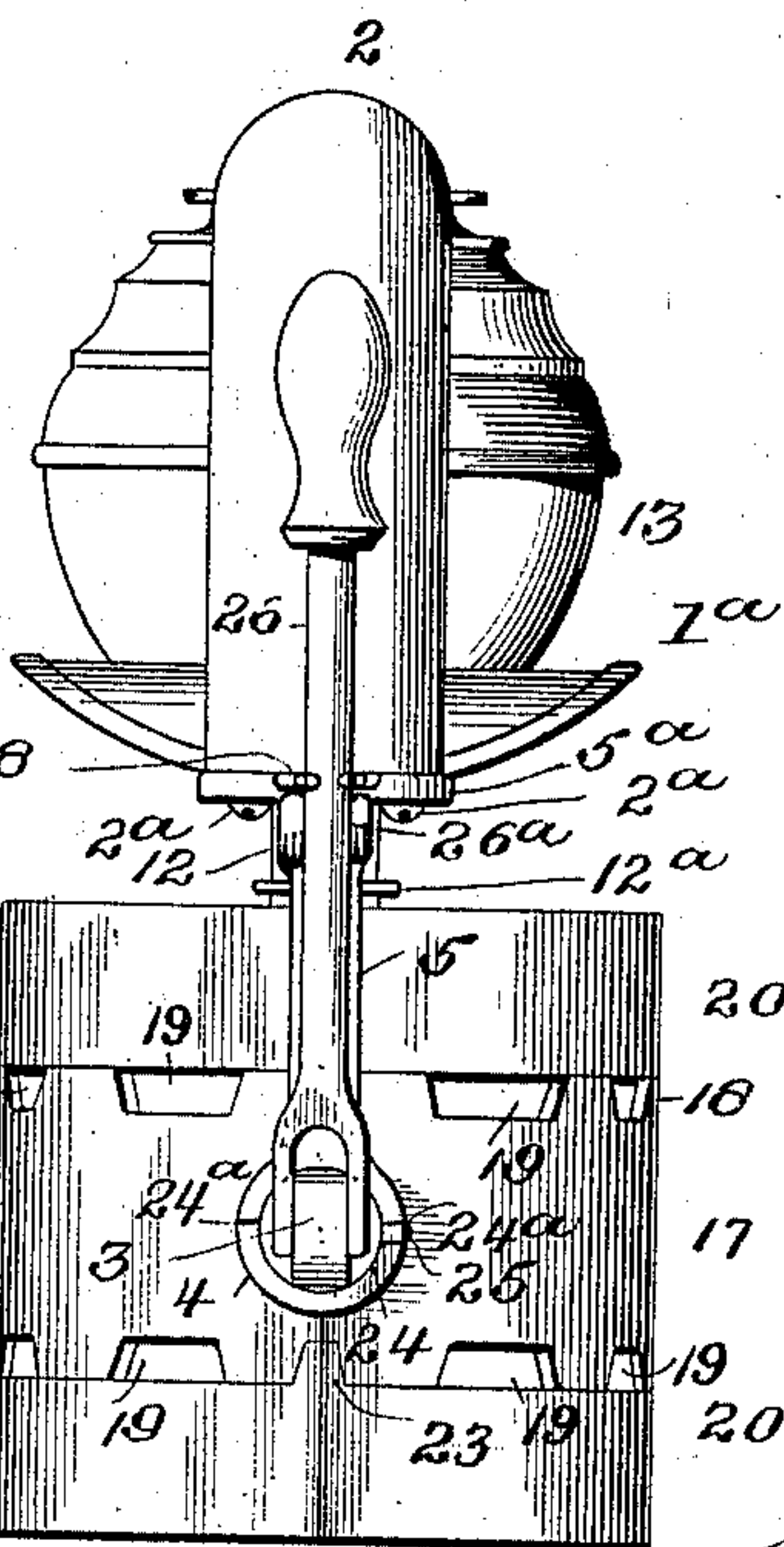
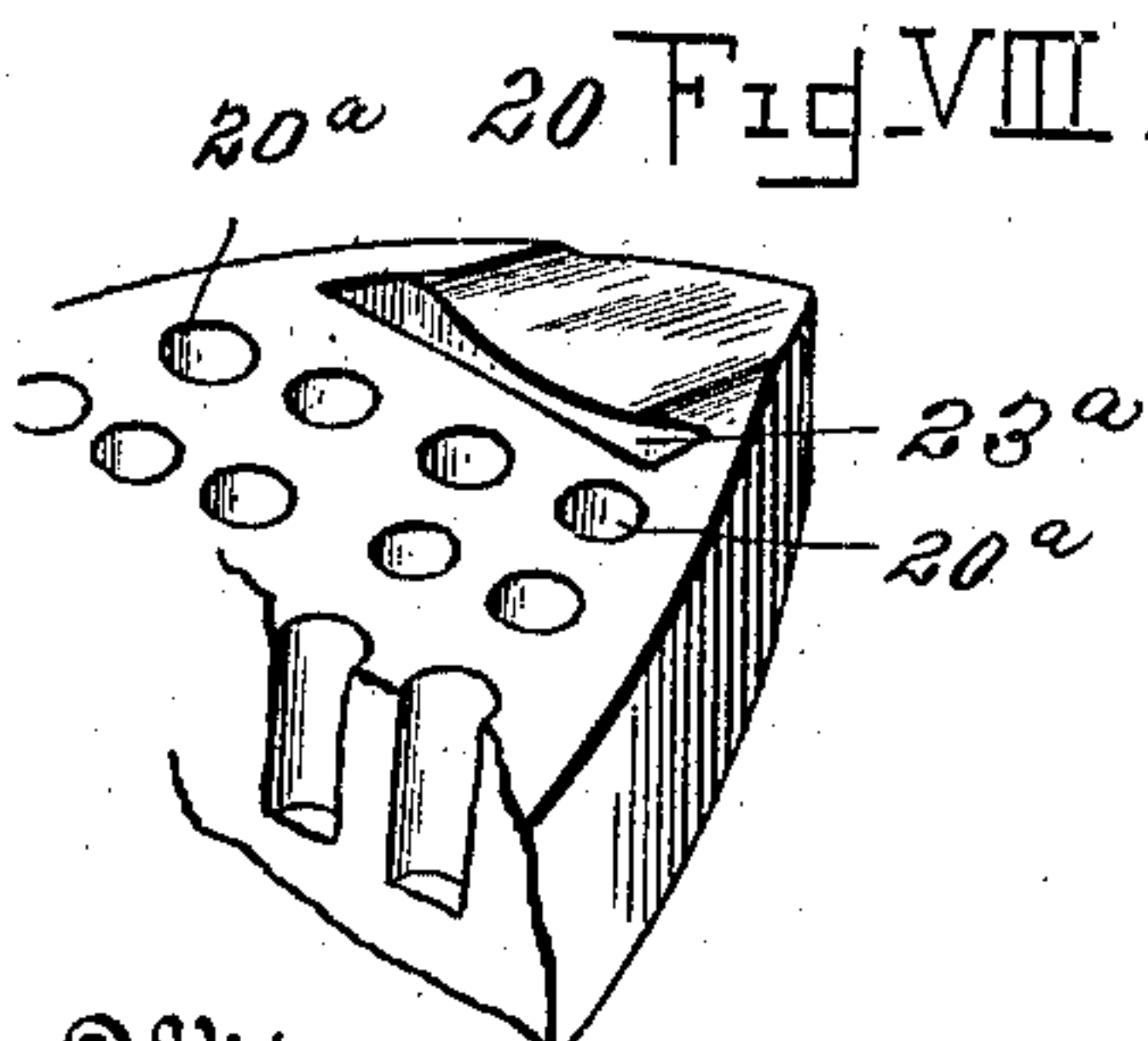


Fig. VIII.



Witnesses

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Fig. III.

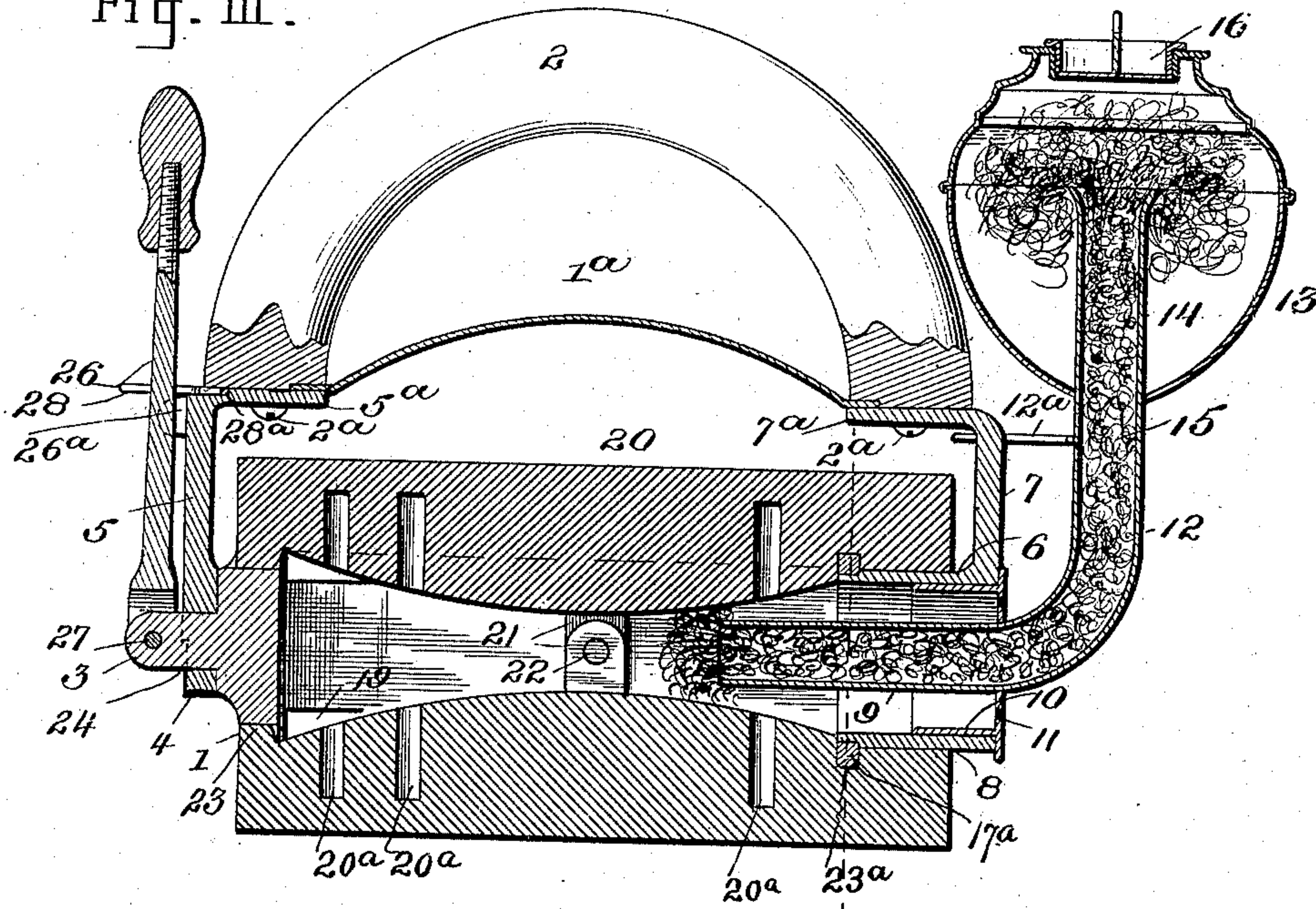


Fig. IV.

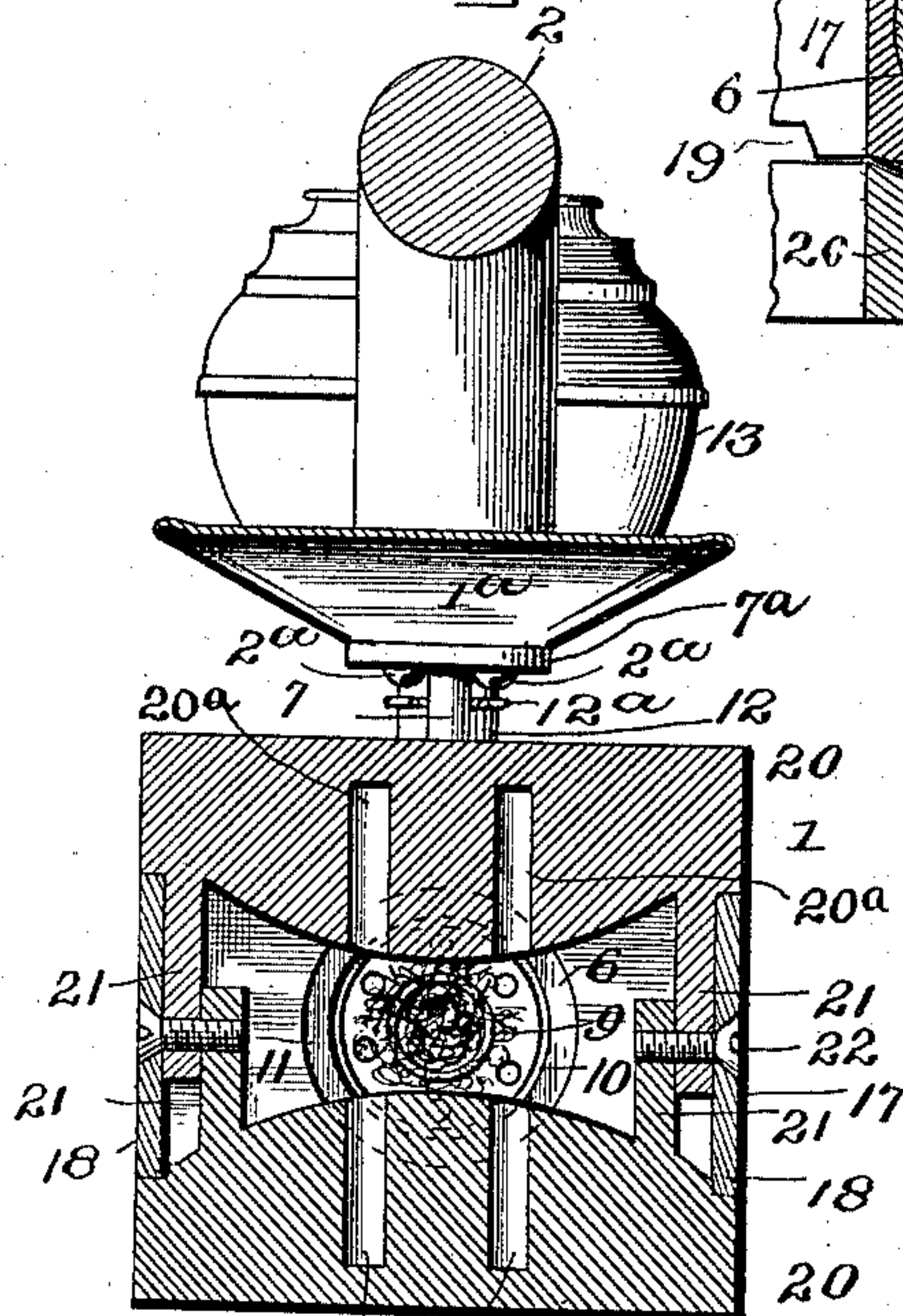


Fig. VI.

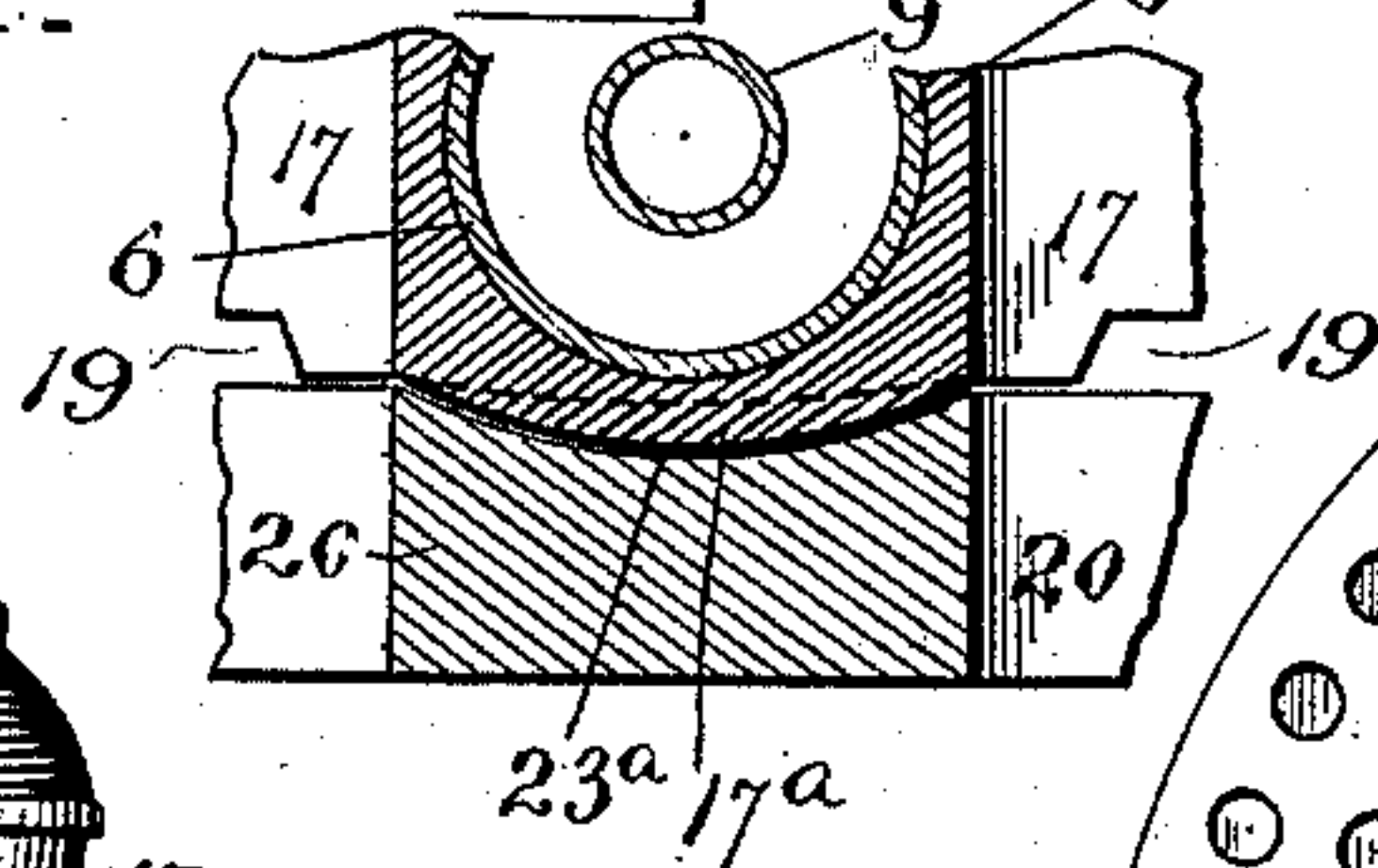
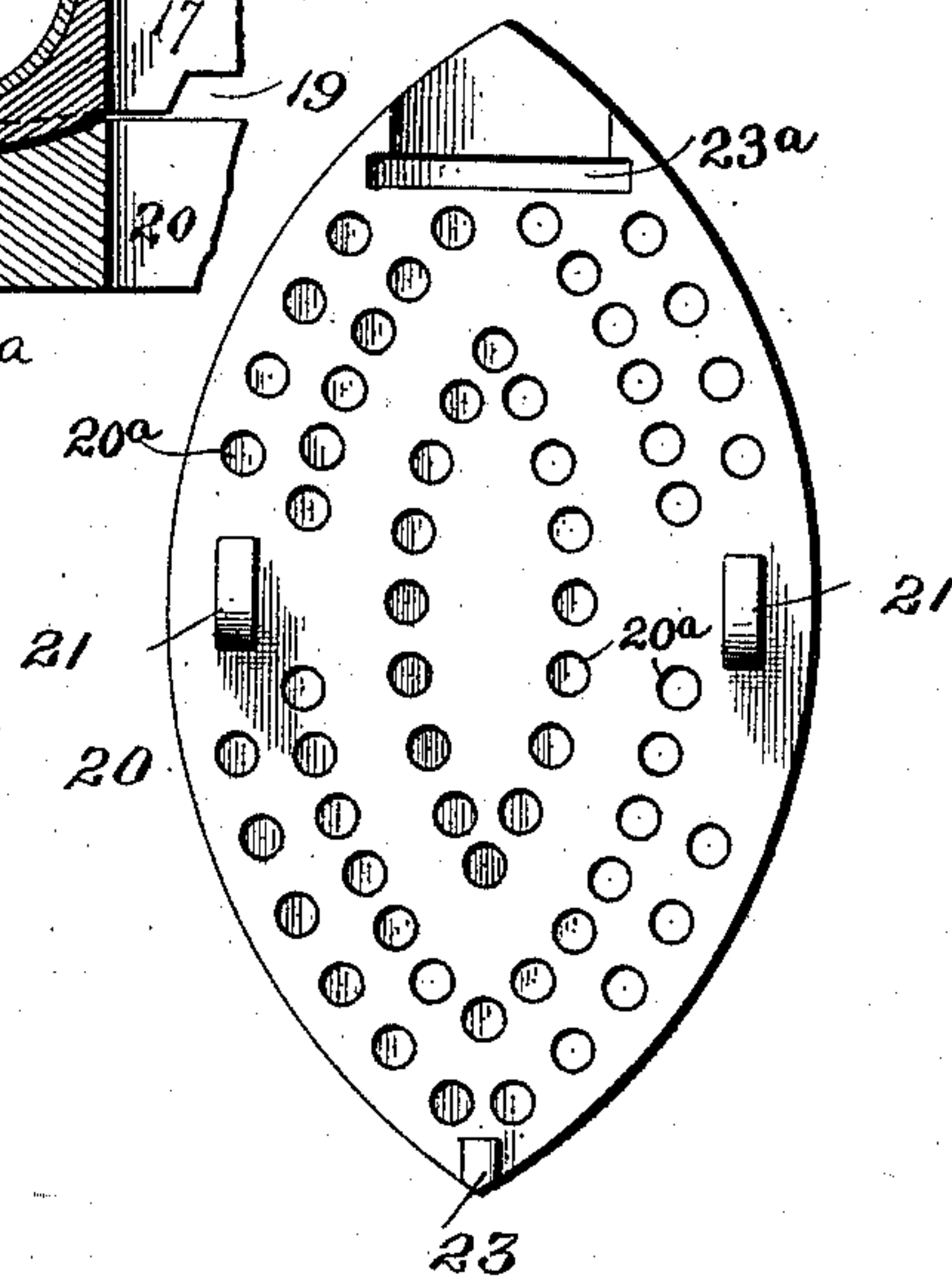


Fig. V.



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# UNITED STATES PATENT OFFICE.

THOMAS CROSS EDWARDS, OF CHATHAM, CANADA.

## SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 535,576, dated March 12, 1895.

Application filed May 11, 1894. Serial No. 510,870. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS CROSS EDWARDS, a subject of the Queen of Great Britain, and a resident of Chatham, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Self-Heating Sad-Irons, of which the following is a specification.

My invention relates to self-heating sad-irons which carry a suitable burner and reservoir and which are trunnioned in the handle to permit them to be readily reversed as soon as one face becomes cool and the other is heated.

My invention consists in certain novel features of construction to be hereinafter pointed out in the claims, the same being first fully described with reference to the accompanying drawings, in which—

Figure I is a perspective view of a sad-iron embodying my improvements, and Figs. II, III and IV are respectively an end view, a vertical longitudinal section, and a vertical transverse section of the same. Fig. V is a plan of one of the two similar irons which form the body of the sad-iron. Fig. VI is a detail sectional view of a portion of the shell and iron, showing the flange on the shell fitting in the groove formed for it in one of the irons. Fig. VII is a detail perspective view of a portion of the shell, and the trunnion which has its bearing therein. Fig. VIII is a detail view of a part of one of the irons, showing the groove formed therein for the reception of the flange on the shell.

The device consists of a body 1, a non-heat conducting handle 2, and an interposed shield 1<sup>a</sup>, the body being provided at one end with a trunnion 3 which enters a bearing ring 4, on an arm 5, while at the other end a cylindrical trunnion 6 cast integral with the arm 7, has bearing in the body at 8. The arms 5 and 7 have, at their upper ends, steps 5<sup>a</sup> and 7<sup>a</sup> and upon which the ends of handle 2 are secured by means of screws 2<sup>a</sup>. The shield 1<sup>a</sup> has its opposite ends inserted between the ends of handle 2 and the steps 5<sup>a</sup> and 7<sup>a</sup>.

Referring to Fig. III, 9 represents a burner, which projects into the iron and is supported in proper relation to heat the same, by means of a thimble 10, which fits snugly into the cylindrical trunnion 6, and is provided with

perforations 11, for the purpose of admitting air to support combustion and also to prevent the undue heating of the parts beyond said trunnion. The burner 9 has an upwardly extending tube 12 surmounted by a reservoir 13 and tube 12 has integral extension 14 within the reservoir for the purpose of preventing the escape of the fuel, otherwise than by absorption through the wick 15. The reservoir is closed by a screw cap 16, and is held in upright position by means of a pair of spring jaws 12<sup>a</sup> attached to the tube 12 below the reservoir and engaging the arm 7 in such a way as to prevent the turning of the thimble 10 in the trunnion 6.

The body consists in a central shell 17 having formed on its edges projections 18 with intervening air spaces 19, and two similarly formed irons 20 with plane smoothing faces, and convex inner surfaces having recesses 20<sup>a</sup> the convexity adding weight and bulk and increasing the heat retaining qualities and the recesses increasing the facility for heating the irons by the burner. The irons have oppositely projecting and overlapped ears 21 through the medium of which they are secured to the central shell 17 by screws 22. In order to prevent displacement of the irons 20 at their ends they have formed upon them at one end lugs 23, which enter recesses at one end of the shell 17 in the lugs 18, while at the opposite end, the irons have seats 23<sup>a</sup> to receive flanges 17<sup>a</sup> on the shell. It is preferable to form in the bearing ring 4 a semi-circumferential recess 24 which leaves shoulders 24<sup>a</sup> in such position as to engage a pin 25 radiating from the trunnion 3, and arrest the turning of the body in either direction when the irons are brought into the proper plane. In order to facilitate turning the body to interchange the irons, a reversing lever 26 is hinged on a normally horizontal pin 27, which passes transversely through the trunnion 3 and permits said lever to project approximately at right angles to the trunnion whereby it is adapted to control the movement of said iron, and also to permit said lever, after the iron has reached its limit of movement in either direction, to turn upward against the arm 5 and enter a socket 26<sup>a</sup>, formed upon said arm, for the purpose of preventing the lever from moving laterally. The lever is se-



cured in this socket 26<sup>a</sup> by means of a pair of  
spring jaws 28 between which it may be  
forced in the act of entering the socket, and  
these spring jaws are held in the proper po-  
5 sition by a depression 28<sup>a</sup> in the step 5<sup>a</sup>, and  
in which said jaws are held by the handle 2.

I am aware that the general principles of  
my sad-iron are not broadly new, but it will  
be observed that the device embraces novel  
10 details in construction, which better adapt it  
to serve the purposes intended and which  
also make it more economical to manufacture  
and more durable in use.

Having thus described my invention, the  
15 following is what I claim as new therein and  
desire to secure by Letters Patent:

1. In a self-heating sad-iron the body con-  
sisting of the central shell having the burner  
opening and the two similar plano-convex  
20 irons having recessed inner faces and secured  
to said shell by the ears and screws at the

sides and by the lugs and recesses at one end,  
and the seats and flanges at the other around  
the burner opening, as explained.

2. In a self-heating sad iron, the combina- 25  
tion of a handle 2, a body 1 trunnioned in  
said handle and having a burner, said body  
consisting of a central hollow shell into which  
the burner projects and having on its edges  
projections 18 forming intervening air spaces 30  
19, and the two similarly formed irons 20  
resting upon the projections 18, secured by  
oppositely projecting overlapping ears 21 and  
screws 22, and prevented from displacement  
at the ends by lugs 23 which enter recesses in 35  
two projections 18, all substantially as and  
for the purposes set forth.

THOMAS CROSS EDWARDS.

Witnesses:

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ARTHUR ROSE.