

No. 746,291.

PATENTED DEC. 8, 1903.

M. A. CLAPP & G. SAGUE.

MOLDER'S FLASK.

APPLICATION FILED MAY 2, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

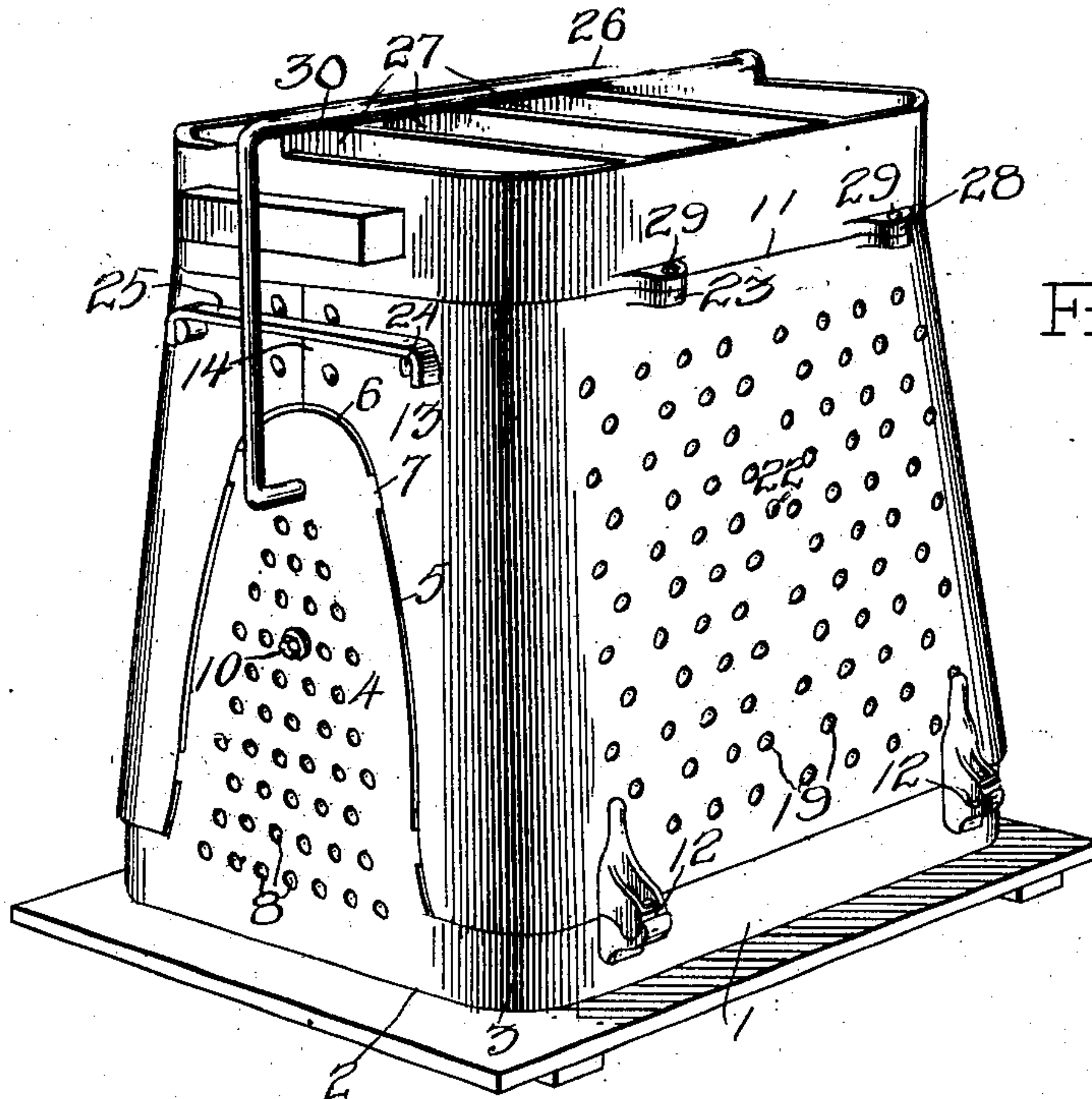


Fig. 1.

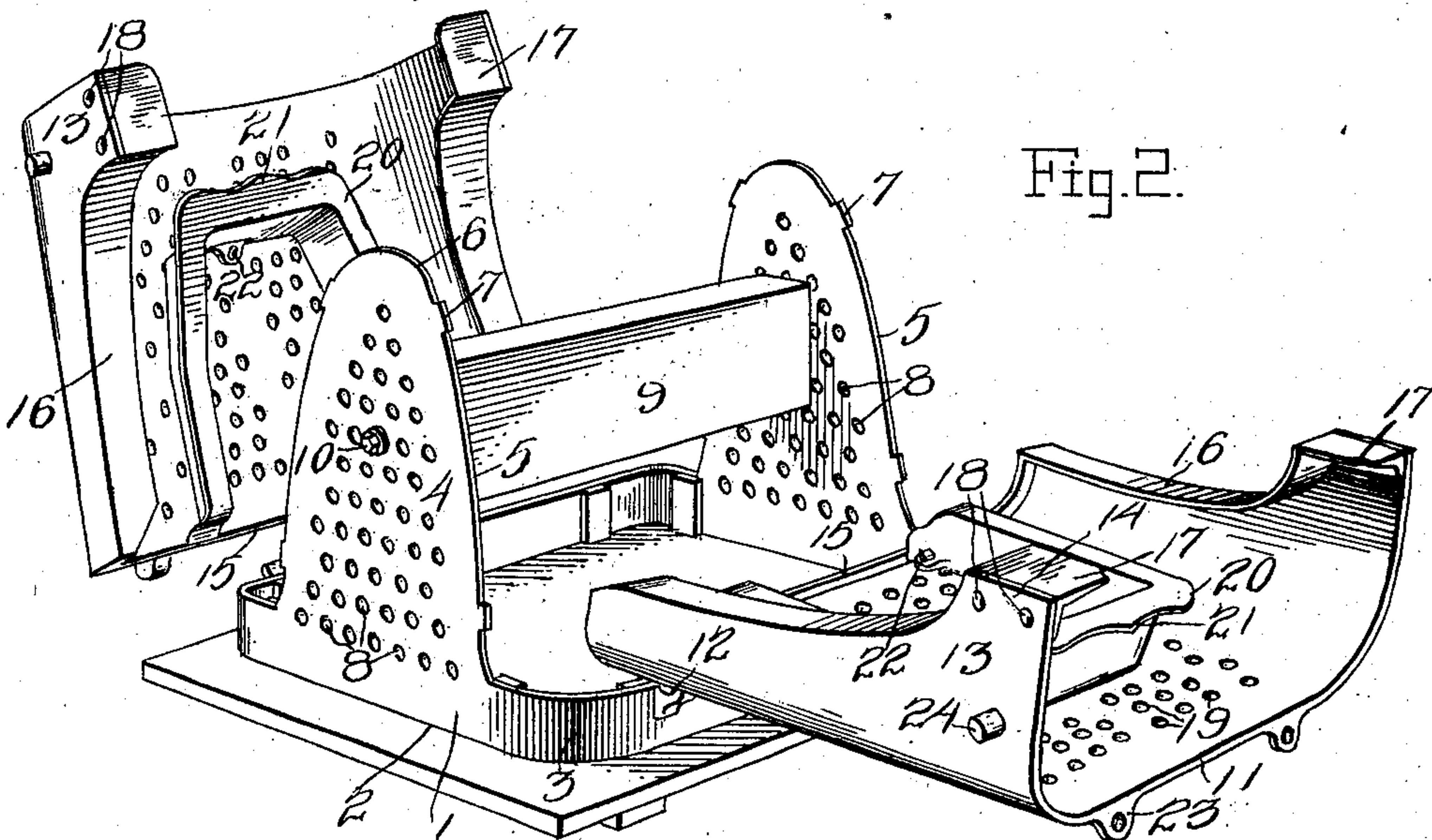


Fig. 2.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

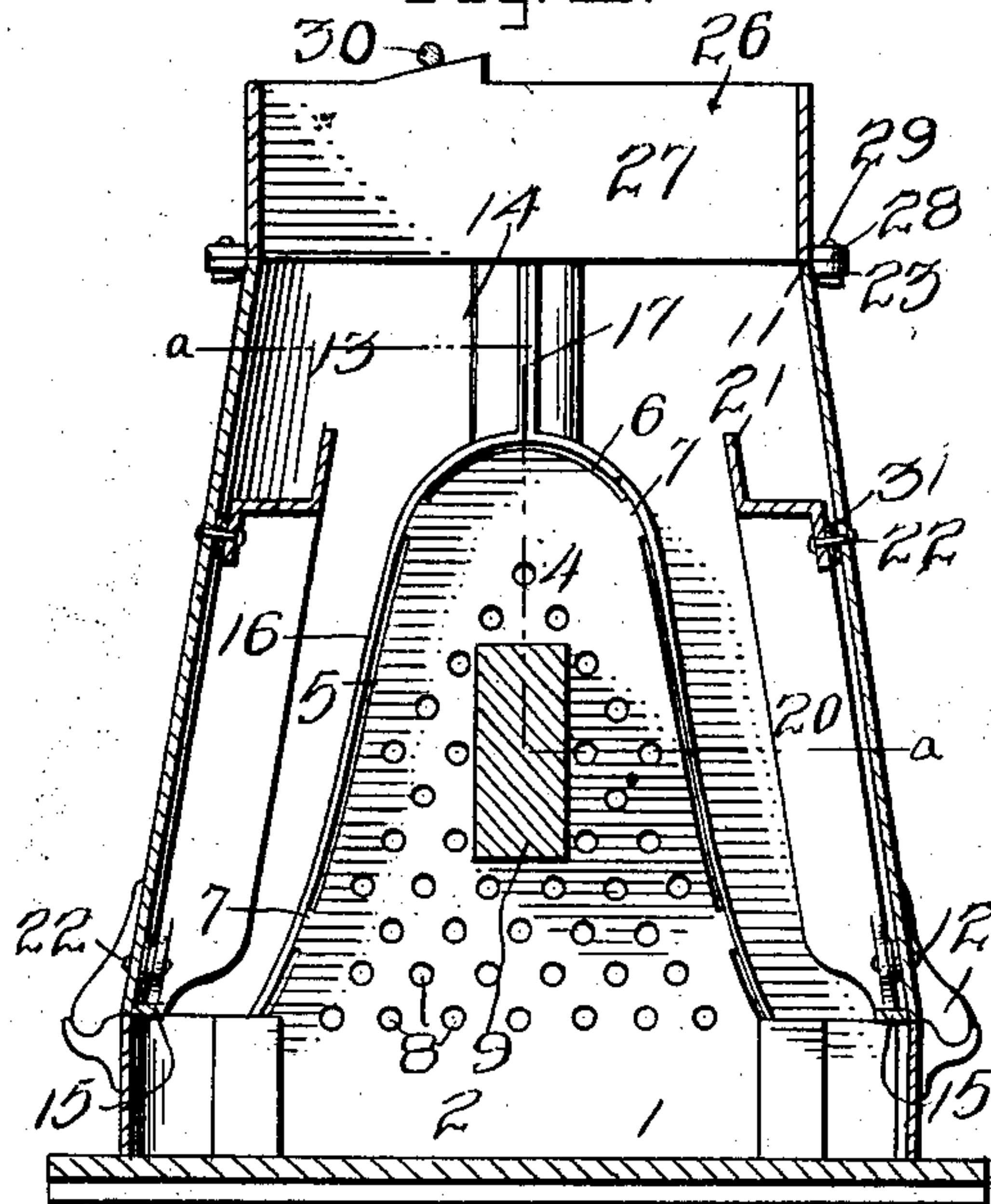


Fig. 4.

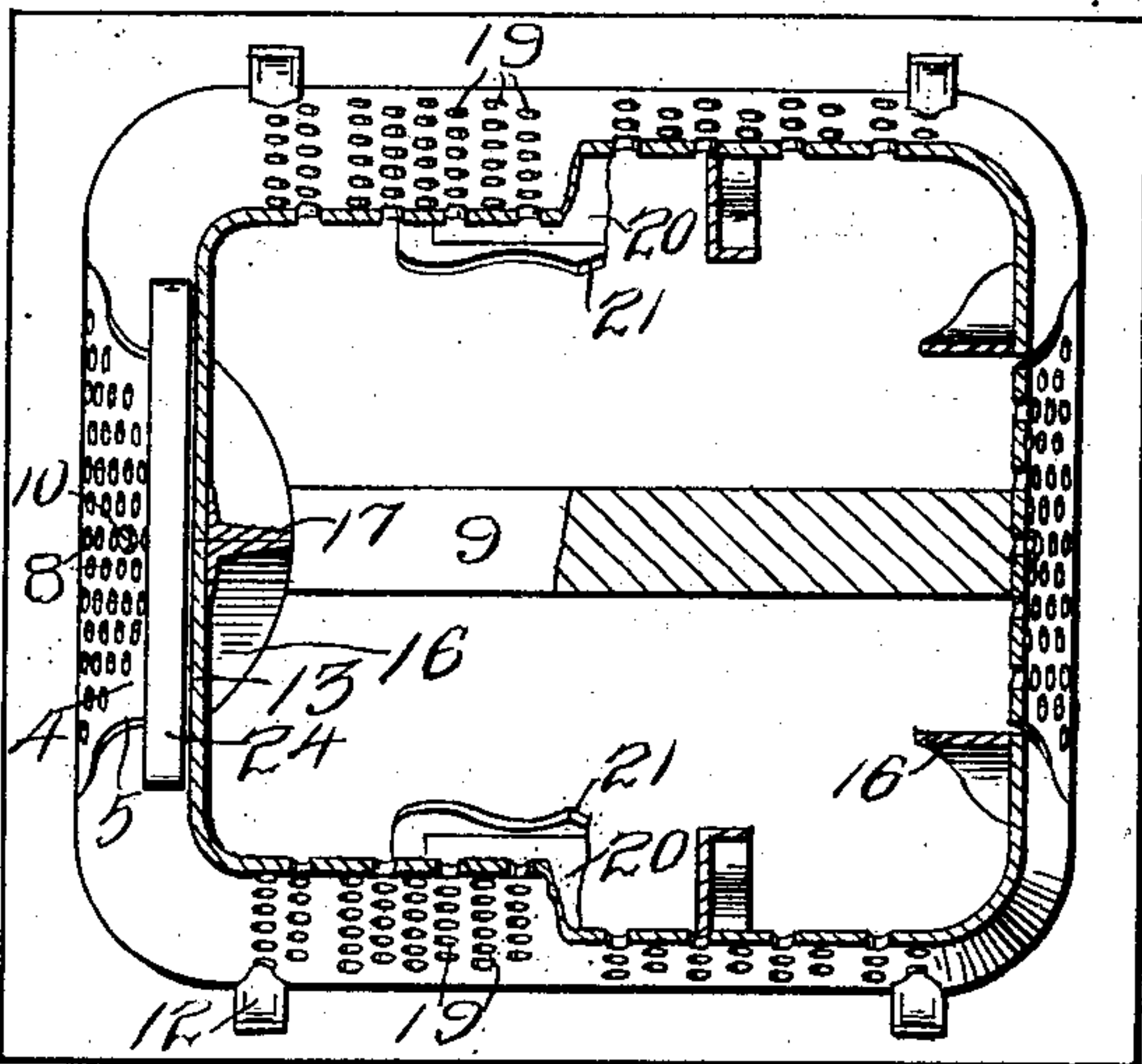
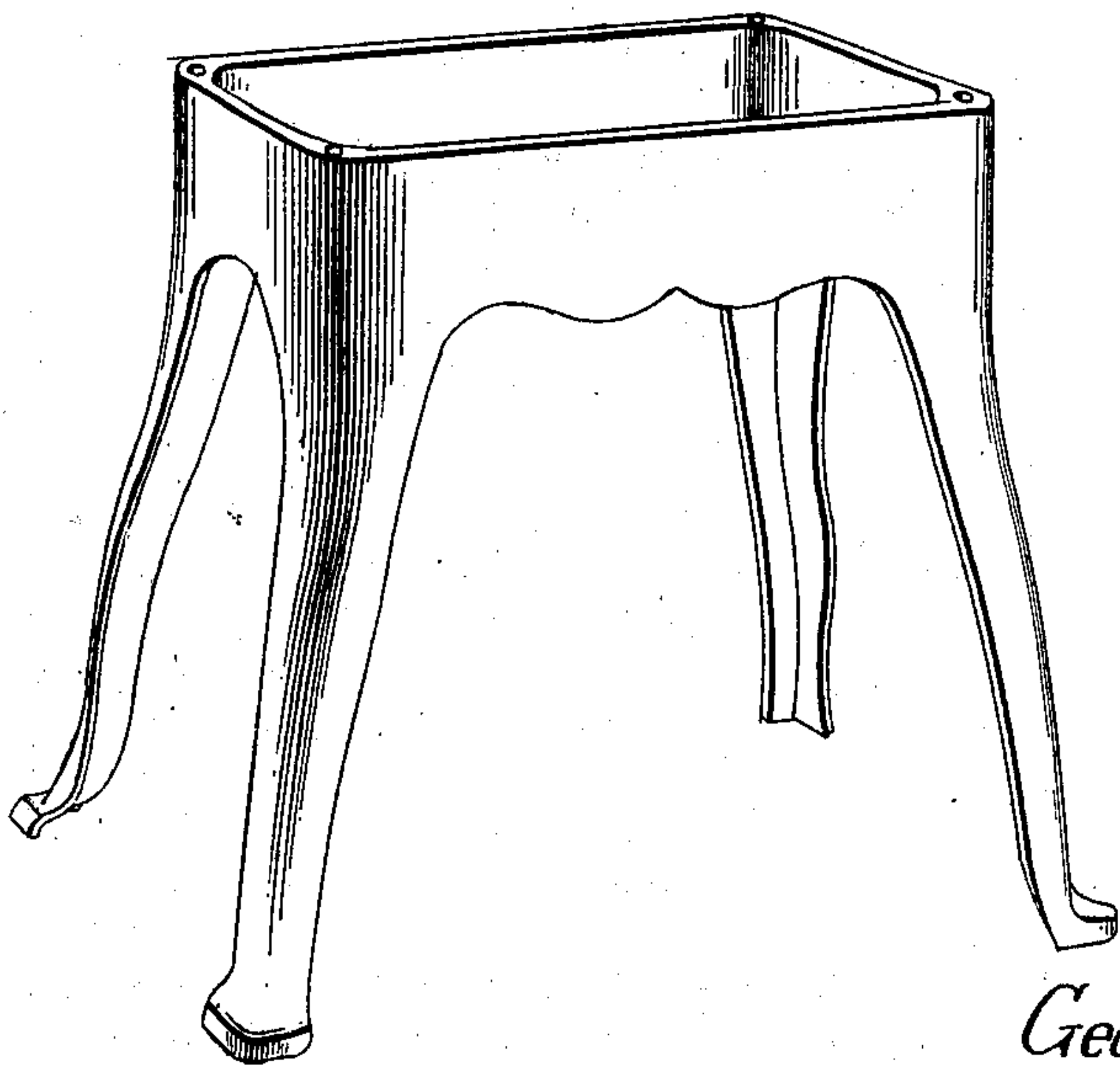


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

MORTIMER A. CLAPP AND GEORGE SAGUE, OF POUGHKEEPSIE, NEW YORK,
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MOLDER'S FLASK.

SPECIFICATION forming part of Letters Patent No. 746,291, dated December 8, 1903.

Application filed May 2, 1903. Serial No. 155,437. (No model.)

To all whom it may concern:

Be it known that we, MORTIMER A. CLAPP and GEORGE SAGUE, citizens of the United States, residing at Poughkeepsie, in the county of Dutchess, State of New York, have invented Improvements in Molders' Flasks, of which the following is a specification.

Our invention is an improved molder's flask especially designed for use in molding four-legged stools used for the basis of cream-separators and other like purposes; and it consists in the construction and combination of devices hereinafter described and claimed.

The object of our invention is to effect improvements in the construction of the flask so that the article molded therein may be cast in a single piece.

In the accompanying drawings, Figure 1 is a perspective view of a flask embodying our improvements, showing the same closed. Fig. 2 is a similar view with the cope removed and the cheek-pieces opened from the nowel. Fig. 3 is a transverse sectional view of the same. Fig. 4 is a horizontal sectional view of the same, taken on two planes indicated by the line *a a* of Fig. 3. Fig. 5 is a perspective view of the pattern.

The nowel 1 of our improved molder's flask comprises a rectangular frame 2, having rounded corners 3 and provided with end walls 4, formed integrally with its ends and disposed centrally with relation thereto, the said end walls tapering upwardly, having their side edges curved, as at 5, and their upper ends rounded, as at 6. Bosses 7 are formed on the side edges of the said end walls and project outwardly a slight distance therefrom. The end walls 4 are provided each with a plurality of openings 8, which serve as vents for the gases. A brace-bar 9, which is preferably made of wood, is disposed endwise between the end walls 4 and connects them together. The ends of the said brace-bars are detachably secured to the said end walls by means of bolts 10. Said bolts are disposed in certain of the openings 8.

The cheek-pieces 11 are detachably hingedly connected to the sides of the frame 2 of the nowel by means of separable knuckle-joints 12, with which said cheek-pieces and the frame of the nowel are provided.

The cheek-pieces form the sides of the flask, and they are formed with end sections 13, which close against the opposite side edges of the end walls 4 of the nowel and coact therewith to form the end walls of the flask, the said end sections 13 of the cheek-pieces being provided at their upper inner corners with extensions 14, the ends of which engage each other above the end walls 4 of the nowel when the flask is closed, as shown in Fig. 1. The lower edges of the cheek-pieces are provided with inwardly-extending flanges 15, and the edges of the end sections 13 thereof are formed with similar inwardly-extending flanges 16. Angular flange-pieces 17 are detachably secured to the inner sides of the extensions 14 of the cheek-pieces by screws 18 or other suitable devices, and the opposing sides of the respective flange-pieces 17 are in contact when the cheek-pieces are closed, so that no sand will get between the said flange-pieces when the mold is formed, thus facilitating the opening of the cheek-pieces after the casting has been formed in the mold. The inner edges of the sections 13 of the cheek-pieces are curved to conform with the curved side edges of the end walls 4 of the nowel, but are kept slightly spaced therefrom by the bosses 7, the latter thereby serving to prevent the cheek-pieces from becoming united to the end walls of the nowel by metal which may find its way through interstices in the mold when the casting is made. The cheek-pieces are each provided with a plurality of openings 19, which serve to vent the gases.

On the inner sides of the cheek-pieces are detachable and adjustable sand-retainers 20. The same coact with the end sections of the cheek-pieces and with the upper edges of the latter to form spaces for those portions of the mold in which the legs and the frame of the pattern are placed when forming the mold, and the said sand-retainers are provided at their inner edges with outwardly-projecting flanges 21, which coact with the flanges 15 16 of the cheek-pieces to support these portions of the mold in which the pattern is disposed and to confine the sand therein and increase the stability of the mold at such points. These sand-retainers are secured to the in-

ner sides of the cheek-pieces by means of bolts 22, and the said bolts extend through certain of the openings 19 in the cheek-pieces, are of less diameter than said openings, and
 5 are hence movable therein to enable the sand-retainers to be adjusted as may be required in the cheek-pieces.

Washers 31 are employed in connection with the bolts 22 to secure the sand-retainers
 10 to the cheek-pieces and between the said retainers and said cheek-pieces. By varying the thickness or the number of the washers thus employed the said retainers may be adjust-
 15 ably secured to the cheek-pieces to vary the width of the spaces between the latter and the flanges of the cheek-pieces as may be desired.

The cheek-pieces are formed with outstanding lugs 23 at their upper edges and at their
 20 ends with bosses 24. Suitable clamps 25 coact with the said bosses to secure the cheek-pieces when closed, as shown in Fig. 1.

The cope 26 is of the form shown, is provided with a plurality of cross-braces 27, and is
 25 formed with outstanding lugs 28, which coact with the lugs 23 and with removable pins 29 in registering openings in said lugs to detachably secure the cope to the cheek-pieces. Suitable clamps 30 are employed to secure
 30 the cope on the cheek-pieces.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without re-
 35 quiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of
 40 this invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A molder's flask having a nowel provided
 45 with end walls; cheek-pieces comprising side walls having flanges 15, and angularly-disposed end walls to close against the end walls of the nowel, and having inwardly-extending flanges 16; and sand-retainers on the inner
 50 sides of the side walls of the cheek-pieces, and having outwardly-extending flanges 21, substantially as described.

2. A molder's flask having a nowel provided with end walls; cheek-pieces comprising side
 55 walls having flanges 15, and angularly-disposed end walls to close against the end walls of the nowel, and having inwardly-extending flanges 16; and sand-retainers detachably secured to the inner sides of the side walls of
 60 the cheek-pieces and having outwardly-extending flanges 21, substantially as described.

3. A molder's flask having a cheek-piece with angularly-disposed walls and inwardly-converging flange-pieces in the respective

walls, one of said flange-pieces being detach- 65
 able and adjustable, substantially as described.

4. A molder's flask having a nowel provided with end walls and a bar connecting said end
 70 walls, and cheek-pieces to close against the end walls of the nowel, said cheek-pieces having angularly-disposed walls and inwardly-converging flange-pieces on the inner sides thereof respectively, substantially as
 75 described.

5. A flask comprising a nowel, having end walls provided with projections 7 at their
 80 outer edges, and cheek-pieces detachably connected to the nowel, having end sections to coact with the end walls of the nowel, and conforming in shape thereto, said projections
 85 7 forming spaces between the end walls of the nowel and the end extensions of the cheek-pieces, for the purpose set forth.

6. A molder's flask, having a nowel provided with end walls, cheek-pieces, comprising
 90 side walls having flanges 15 and angularly-disposed end walls to close against the end walls of the nowel and having inwardly-extending flanges 16, and sand-retainers detachably and adjustably secured to the inner
 95 sides of the side walls of the cheek-pieces and having outwardly-extending flanges 21, substantially as described.

7. A molder's flask having a nowel provided with end walls, cheek-pieces to close
 100 against the said walls and having coengaging extensions to close above the said end walls, and inwardly-extending flanges spaced from the meeting edges of said extensions, substantially as described.

8. A molder's flask having a nowel provided with end walls, cheek-pieces to close
 105 against the said walls and having coengaging extensions to close above the said end walls, and inwardly-extending flange-pieces on the inner sides of said extensions, adjustable toward and from the meeting edges thereof, substantially as described. 110

9. A molder's flask comprising a nowel provided with end walls, cheek-pieces to close
 115 against the said end walls and having extensions to close above the said end walls, and a cope to fit on the cheek-pieces when closed, substantially as described.

In testimony whereof we have hereunto set our hands in the presence of subscribing witnesses.

MORTIMER A. CLAPP.
 GEORGE SAGUE.

Witnesses to the signature of Mortimer A. Clapp:

JOHN J. THOMPSON,
 JOHN O'NEILL.

Witnesses to the signature of George Sague:
 CHARLES A. STURTEVANT,
 JOSEPH RAFFERTY.