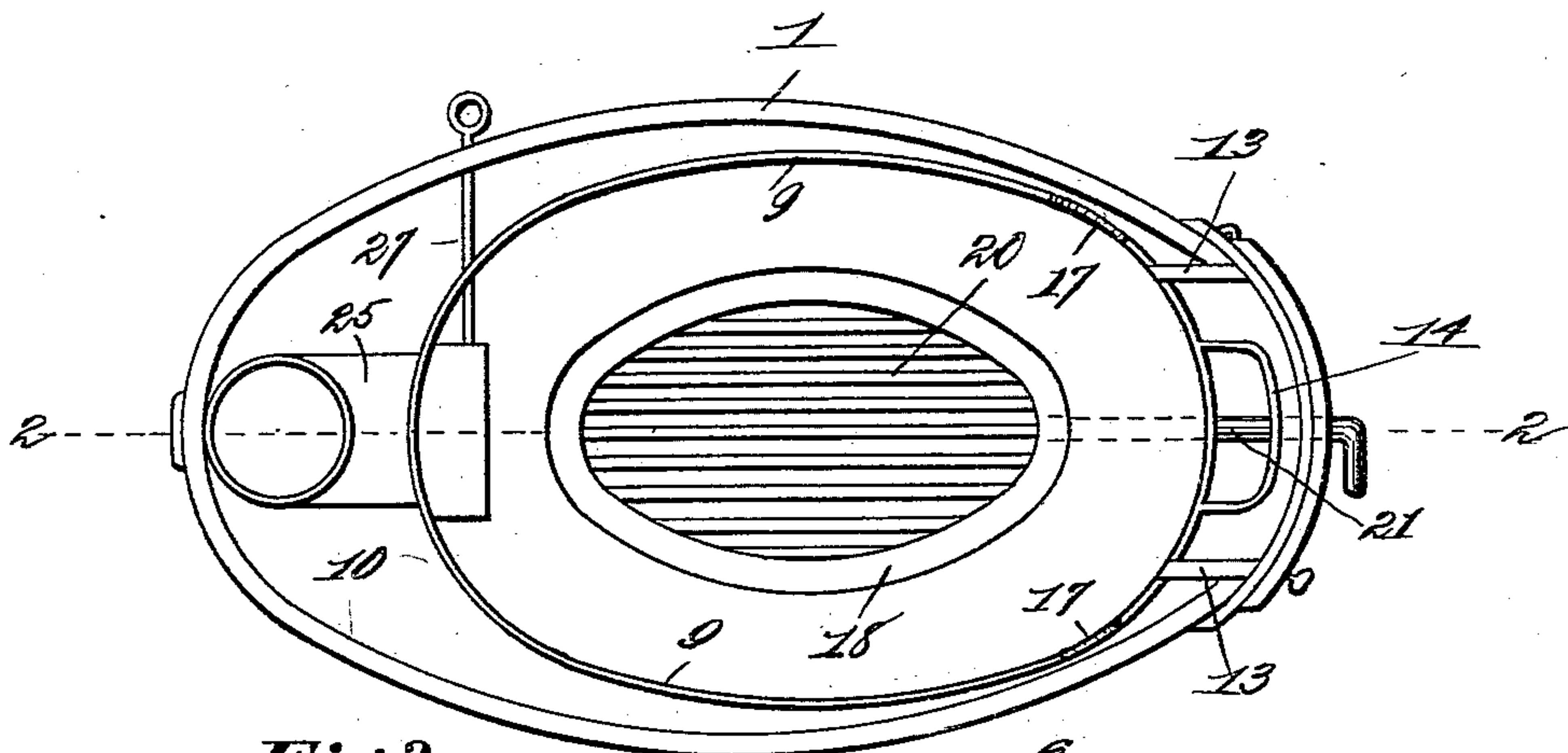


J. WILSON.  
HEATING STOVE.

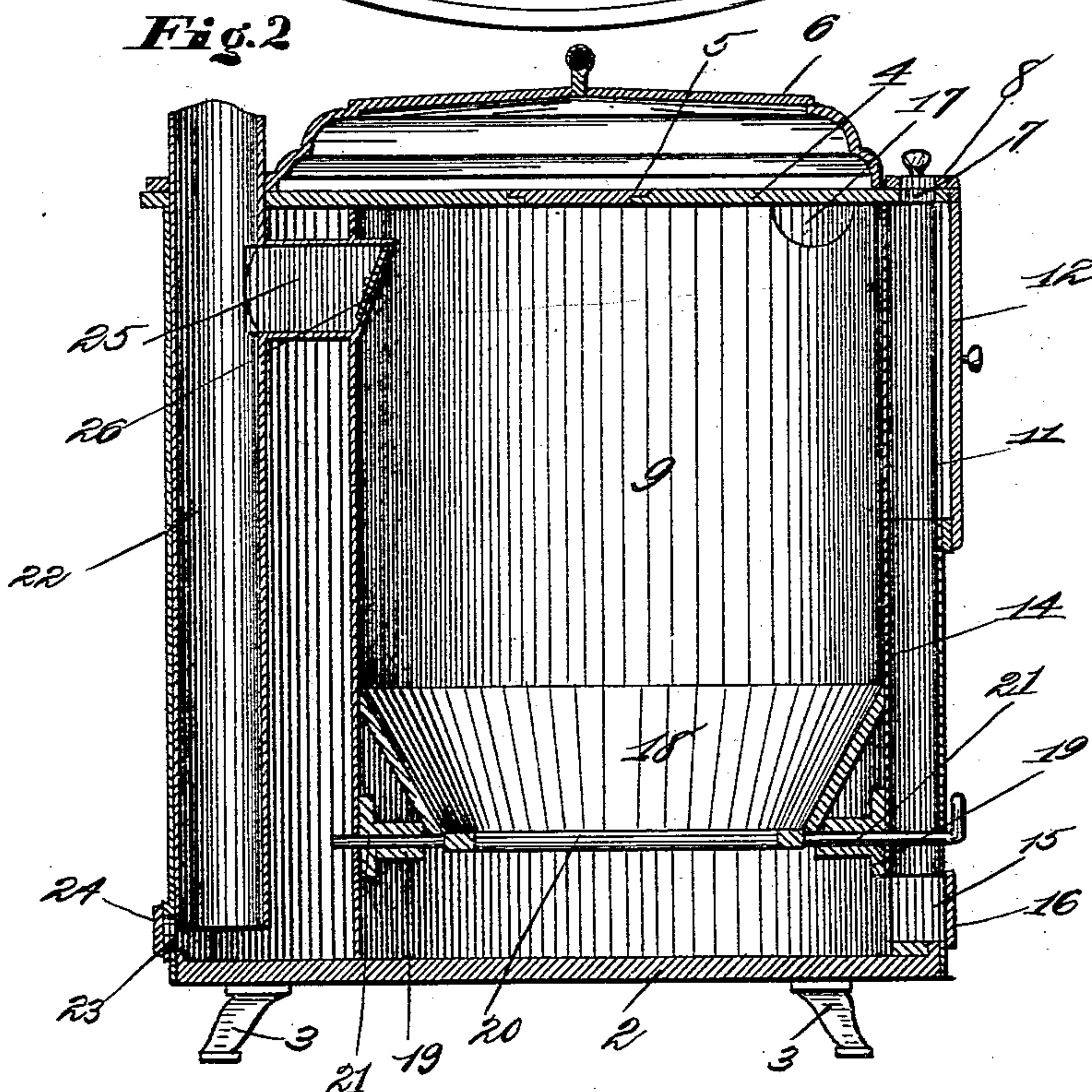
No. 555,353.

Patented Feb. 25, 1896.

**Fig. 1**



**Fig. 2**



**Attest:**

Edw. L. Diller  
M. J. Drion.

**Inventor**

James Wilson

by Higdon & Higdon & Lorgan

Attys

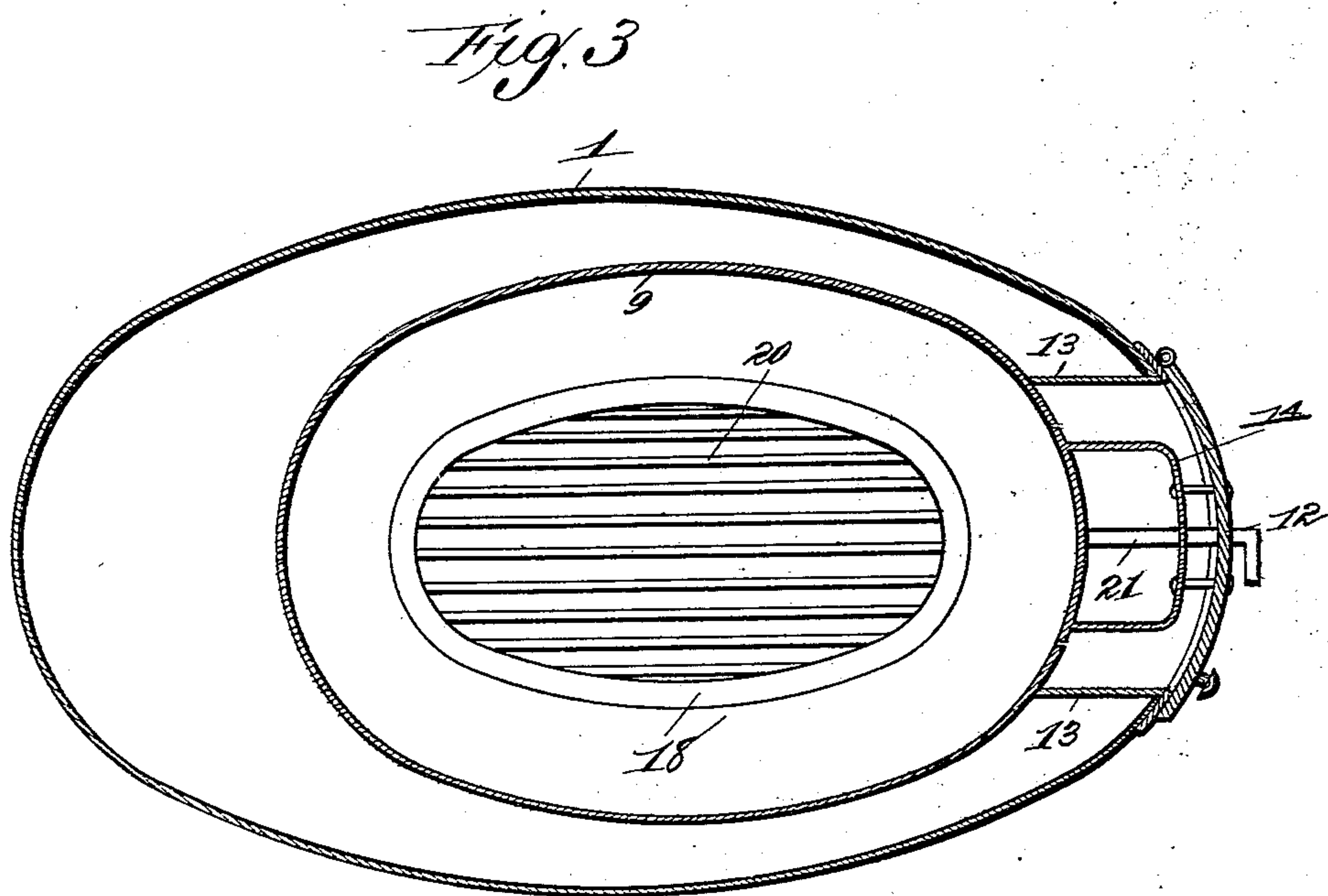
(No Model.)

2 Sheets—Sheet 2.

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*Attest*  
*M. Smith,*  
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*Inventor:-*  
*James Wilson:-*  
*by Higdon & Higdon & Longan*  
*Attys.*



# UNITED STATES PATENT OFFICE.

JAMES WILSON, OF ST. LOUIS, MISSOURI.

## HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 555,353, dated February 25, 1896.

Application filed April 1, 1895. Serial No. 544,021. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WILSON, of the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Heating-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved heating-stove; and it consists in the novel construction, combination and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of my improved heating-stove, the cover or top thereof being removed. Fig. 2 is a vertical sectional view taken approximately on the indicated line 2 2 of Fig. 1. Fig. 3 is a horizontal section taken on a line just below the rear horizontal smoke-outlet flue of the stove.

Referring by numerals to the accompanying drawings, 1 indicates the casing or body of my improved stove, said casing being constructed of sheet metal or of any suitable material and of any form and size. A suitable plate, such as 2, forms a bottom for the body 1, said plate 2 being sustained on suitable legs or feet 3.

Located on top of the body or casing 1 is a plate 4, which performs the function of the top of the stove, and in said plate 4 may be located one or a series of ordinary stove-holes, such as 5. This top or plate 4 is surmounted by a cover 6 that may be swung laterally in either direction off from the plate 4.

Located in the front edge of the plate 4 is an aperture 7, the same being closed by an ordinary draft-damper 8.

Located within the body of the stove 1 and extending from the plate 2 to the plate 4 is a casing 9, the same being of the same general contour as is the outer casing, but said inner casing is somewhat smaller in diameter, thereby leaving an annular space or chamber 10 between the two casings.

Formed in the front of the outer casing, 1, of the stove and near the upper end thereof is an aperture or opening 11, that is covered by an ordinary hinged stove-door 12, and vertically-arranged walls 13 connect this opening with the front of the inner casing, 9.

Secured to or formed integral with the front side of the inner casing, 9, and extending

from the draft-opening 7 in the top plate, 4, to a point adjacent the bottom plate, 2, is a draft-flue 14; but said flue 14 does not extend continuously, it being cut transversely at a point a little above the lower edge of the door 12, and a corresponding portion of said inner casing is cut thereat (see Fig. 2) and is cut vertically adjacent each of the vertical walls 13, (see Fig. 1,) so that a section of said inner casing can swing outwardly with said door, so that free access may be had to the interior of the inner casing by way of said door. Located in the casing 1 of the stove adjacent the lower end of this flue 14 is an aperture 15, that is normally closed by a hinged door 16 of any common construction.

Formed in the upper edges of the inner casing, 9, adjacent the top plate, 4, is a series of apertures 17 that allows free communication from the interior of the casing 9 to the chamber 10 between the two casings.

Located near the lower end and within the casing 9 is a fire-box 18, the same having inclined side walls, and said fire-box 18 rests upon a pair of oppositely-arranged lugs or projections 19, that are riveted or fixed to the inner faces of the casing 9.

A grate 20 is located at the lower end of the fire-box 18, and said grate 20 is constructed with integral bearings 21 that project from the ends thereof and extend through the lugs or projections 19. The front one of these bearings 21 extends through the lower end of the draft-flue 14, through the front of the casing 1, and the protruding end of said projection is turned at right angles to the main body portion thereof in order to form a handle for use in tilting the grate.

Located within the chamber 10 in the opposite end of the stove from where the draft-flue 14 is located is a vertically-arranged pipe 22, the lower end of which is slightly above the bottom plate, 2. Said pipe 22 passes upwardly through the top plate, 4, and is connected by ordinary stovepipe to the chimney-flue.

Located in the wall or casing 1 directly opposite the lower end of this pipe 22 is an aperture 23, which performs the function of a draft-opening, said draft-opening being covered by an ordinary draft-damper 24. Connecting the pipe 22 with the interior of the casing 9 adjacent the top plate, 4, is a horizon-



tally-arranged pipe 25, the end of which that projects into the casing 9 being covered by an ordinary slide-damper 26, the operating-handle 27 of which extends through the casings 9 and 1 to the exterior of the stove.

The operation is as follows: After a fire has been lighted within the fire-box 18 of the stove, the draft-dampers 8, 24, and 26 are opened, and when so done the smoke and products of combustion and greater portion of the heat from said fire will pass directly upward through the casing 9, through the open damper 26, through the horizontal pipe 25 and into the vertical pipe 22 that leads to the chimney-flue. The combustion of the fire so started will be quite rapid, as draft to and through said fire is obtained through the open draft-opening 7. When the fire has reached the proper point (and it is desired to economize the heat from said fire) the damper 26 is closed; then the smoke, products of combustion and heat from said fire will now pass upwardly through the inner casing, 9, through the apertures 17 in the top thereof, downwardly through the chamber 10 between the two casings, and into the pipe 22 through the open lower end thereof. By properly regulating and manipulating the various draft-openings the combustion in said stove and the amount of heat thrown off therefrom may be very easily regulated.

A stove of this description is very efficient for heating purposes, and it may be at any time easily cleaned, as all of the soot and like matter that might remain in said stove will fall

and gravitate onto the bottom plate, 2, within the chamber 10, and access into the lower end of said chamber 10 may be easily had by removing the draft-damper 24.

The ashes from said stove are removed through the aperture 15 covered by the door 16.

What I claim is—

The improved heating-stove, comprising a pair of casings, 1 and 9, located one within the other and forming a chamber between them, bottom and top plates 2 and 4, the top plate 4 having in its front edge a draft-aperture 7, a draft-damper 8 for closing said aperture, the portion of said top plate having said aperture 7 projecting forward a distance beyond the line of the inner casing, a door 12 in the front of the stove, beneath said projecting portion of said top plate, vertical walls 13 at the sides of said door, and a draft-flue 14 cut transversely at a point a little above the lower edge of said door, and the corresponding portion of said inner casing being cut thereat, and cut vertically adjacent each of said vertical walls 13, whereby a section of said inner casing can swing outwardly with said door, and the door may swing from beneath said projecting portion of said top plate, substantially as herein specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES WILSON.

Witnesses:

EDWARD EVERETT LONGAN,  
JOHN C. HIGDON.