

(No Model.)

D. COOK.
SAD IRON.

No. 442,513.

Patented Dec. 9, 1890.

Fig. 1.

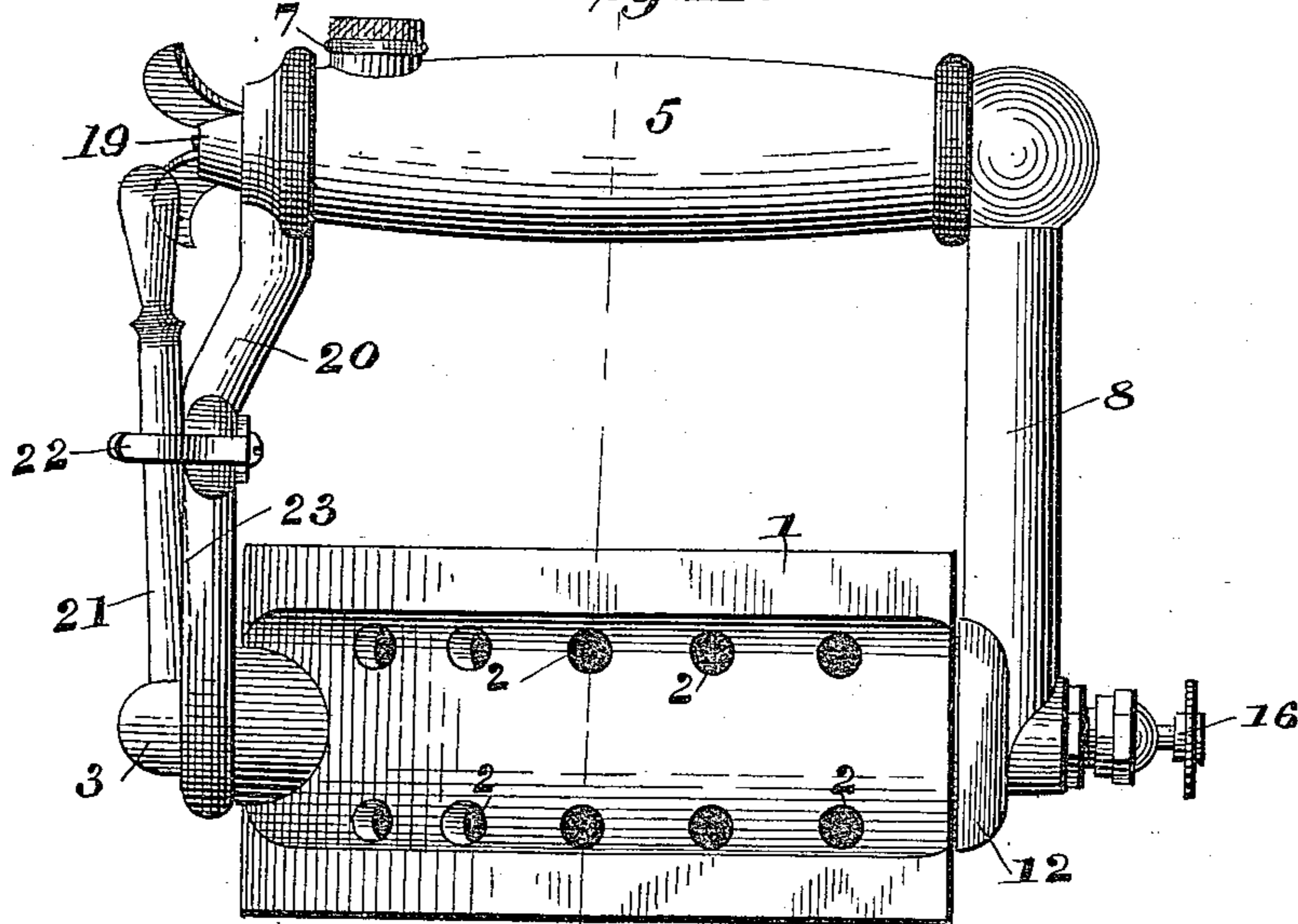


Fig. 2.

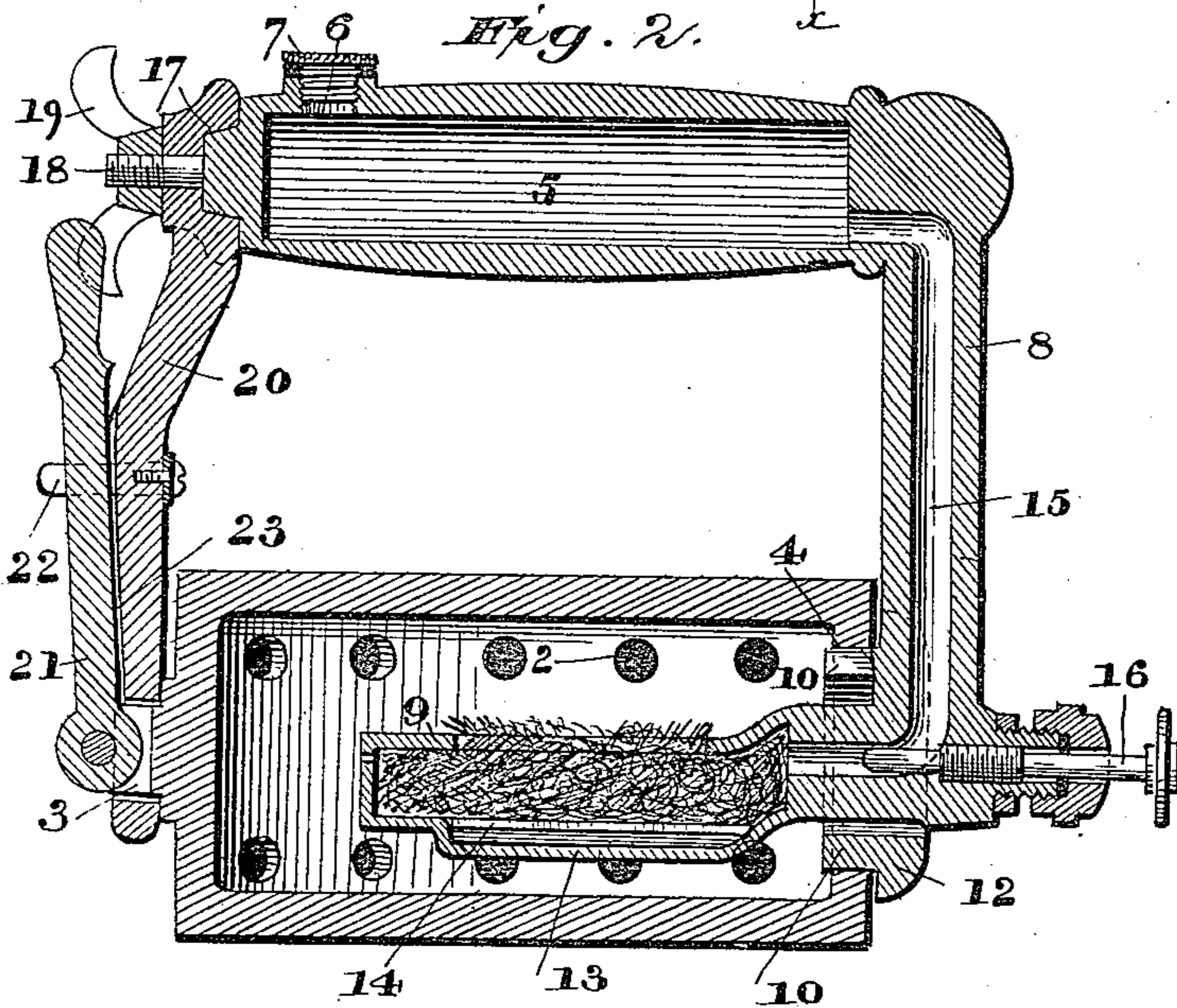
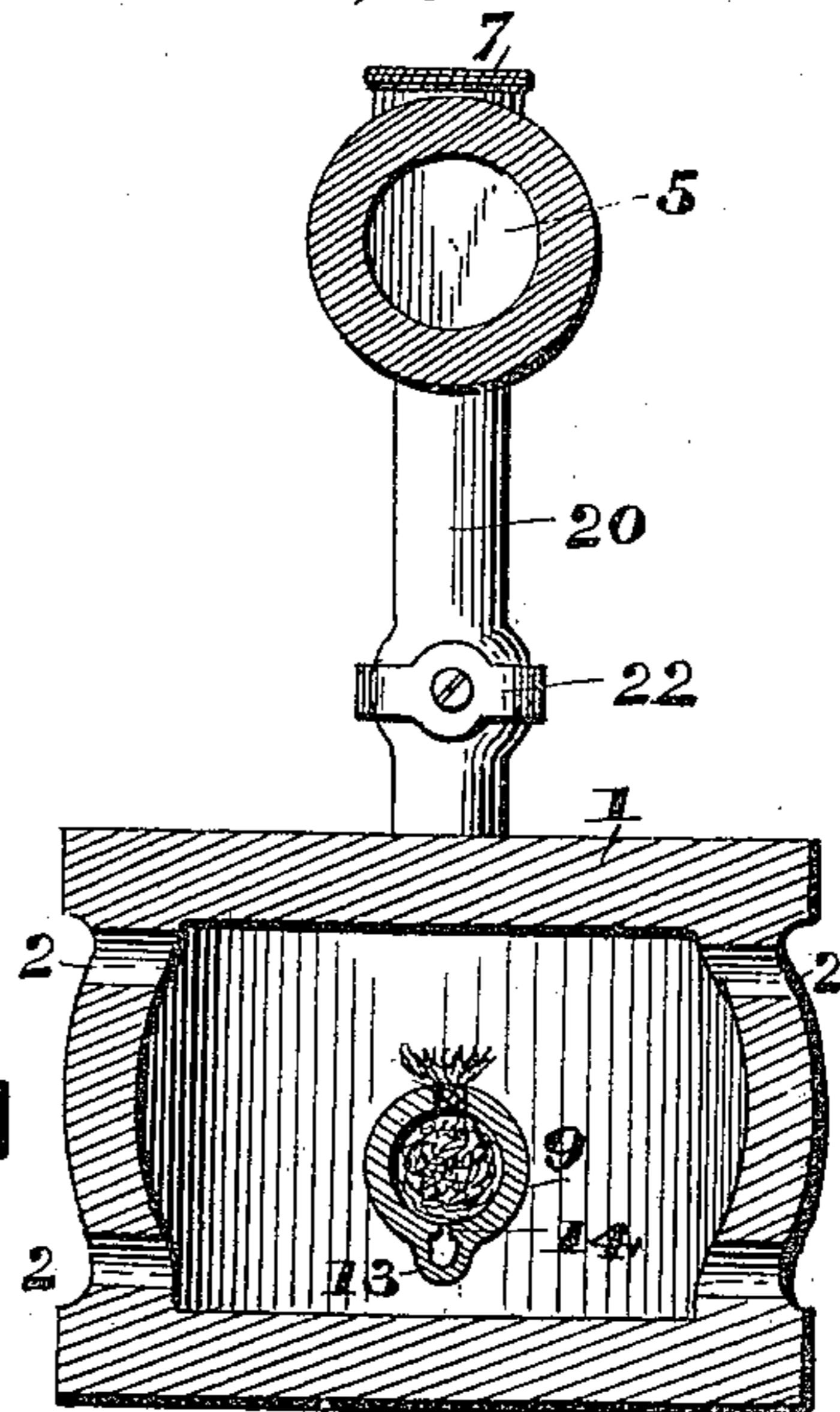


Fig. 3.



WITNESSES:

F. L. Curand
J. L. Clemons

INVENTOR:

David Cook
by Davis & Rogers Co.
Attorneys

UNITED STATES PATENT OFFICE.

DAVID COOK, OF BELPRE, OHIO.

SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 442,513, dated December 9, 1890.

Application filed September 6, 1890. Serial No. 364,149. (No model.)

To all whom it may concern:

Be it known that I, DAVID COOK, a citizen of the United States, and a resident of Belpre, in the county of Washington and State of Ohio, have invented certain new and useful Improvements in Sad-Irons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in reversible self-heating sad-irons.

The object of the invention is to provide an implement of the above character which shall be simple and economical in construction and efficient in use.

The invention consists in the novel construction and combination of parts, hereinafter fully described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of a sad-iron constructed in accordance with my invention. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a cross-section of the same on the line x , Fig. 1.

In the said drawings, the reference-numeral 1 designates the body portion or iron proper, which is made hollow, and both top and bottom are polishing-surfaces. This is made similar in form to an ordinary sad-iron, and its sides are provided with two rows of holes 2 near the top and bottom. The point of the iron is provided with a projecting lug 3, for a purpose hereinafter explained. At the rear the iron is provided with a circular opening 4, through which passes the heating-tube.

The numeral 5 designates the handle, consisting of a hollow tube forming a reservoir for the burning-fluid, and is provided with an opening 6 for the insertion of the fluid, and a stopper 7. The rear end of the handle is provided with a downwardly-extending arm 8, which is bent into or provided with a horizontal arm 9, having a slot in its upper side. This arm 9 forms the wick-tube, and is smaller in diameter than the opening in the rear of the iron, and at its junction with arm 8 is provided with an annular ring 10, having flange 12. This ring fits snugly in the said

opening and forms one of the pivots for the iron to turn upon. Upon the under side of arm 9 is a horizontal fluid-chamber 13, which communicates with the wick-tube by means of a narrow slot 14 in its upper side, which will allow the fluid to escape thereinto, but which will prevent the entrance of the wick-ing into the fluid-chamber and thus avoid clogging. A fluid-passage 15 is formed in the arms 8 and 9, which communicates with the fluid-reservoir and conveys the fluid therein to the fluid-chamber and wick-tubes. A screw-valve 16 is provided in the rear end of arm 9 to regulate the flow of fluid to the wick-tube.

It will be seen that the ring 10 is of larger diameter than arm 9, whereby an air-space is left therebetween.

At the forward end of the handle is a lug 17 and a screw-threaded rod 18, provided with a thumb-nut 19.

The numeral 20 designates a bent supporting-bar having an opening in its upper end which corresponds with the said lug which fits therein. The lower end of this bar is provided with a circular opening, through which passes the lug 3, which forms the other pivot for the iron. In the front end of this lug 3 is pivoted a locking-bar 21, which is adapted to engage with a spring-clasp 22. The front lower half of the bar 20 is provided with a groove 23, within which the locking-bar rests when it is turned up to engage with clasp 22 to lock the iron and prevent it from turning on its pivots.

The operation is as follows: The fluid-reservoir is filled with alcohol or other burning-fluid, which will escape by means of the passage 15 to the fluid-chamber 13, and from thence to the wick-tube, which is filled with suitable wicking which projects through the slot in said tube. The wick is then lighted, and the heat thereof will heat the top or upper side of the iron. The amount of fluid supplied to the wick-tube can be regulated or cut off entirely by means of the valve 16. When it is desired to reverse the iron, the bar 21 is disengaged from the catch or clasp 22 and turned downward. Being thus withdrawn from the groove in the supporting-bar, the iron can be turned upon its pivots and thus be reversed. The locking-bar is again engaged with the supporting-bar and its clasp,

when the iron will be locked and prevented from turning. The openings in the sides and end of the iron-body supply the necessary air to support combustion.

5 Having thus described my invention, what I claim is—

10 The combination, with the reversible iron-body having air-inlets in its sides and an air-opening in its rear, of the hollow handle forming the fluid-reservoir, the depending arm, and the hollow horizontal arm having a slot on its upper side and a horizontal fluid-chamber on its under side provided with a narrow

slit, an oil-passage in said arms, a regulating-valve, an annular ring forming one of the 15 pivots of the iron secured to said arms, with an air-space therebetween, and a supporting-bar connecting said iron-body and handle at the forward end, substantially as described.

In testimony that I claim the foregoing as 20 my own I have hereunto affixed my signature in presence of two witnesses.

DAVID COOK.

Witnesses:

AUGUST PETERSON,
EMMA M. GILLET.