

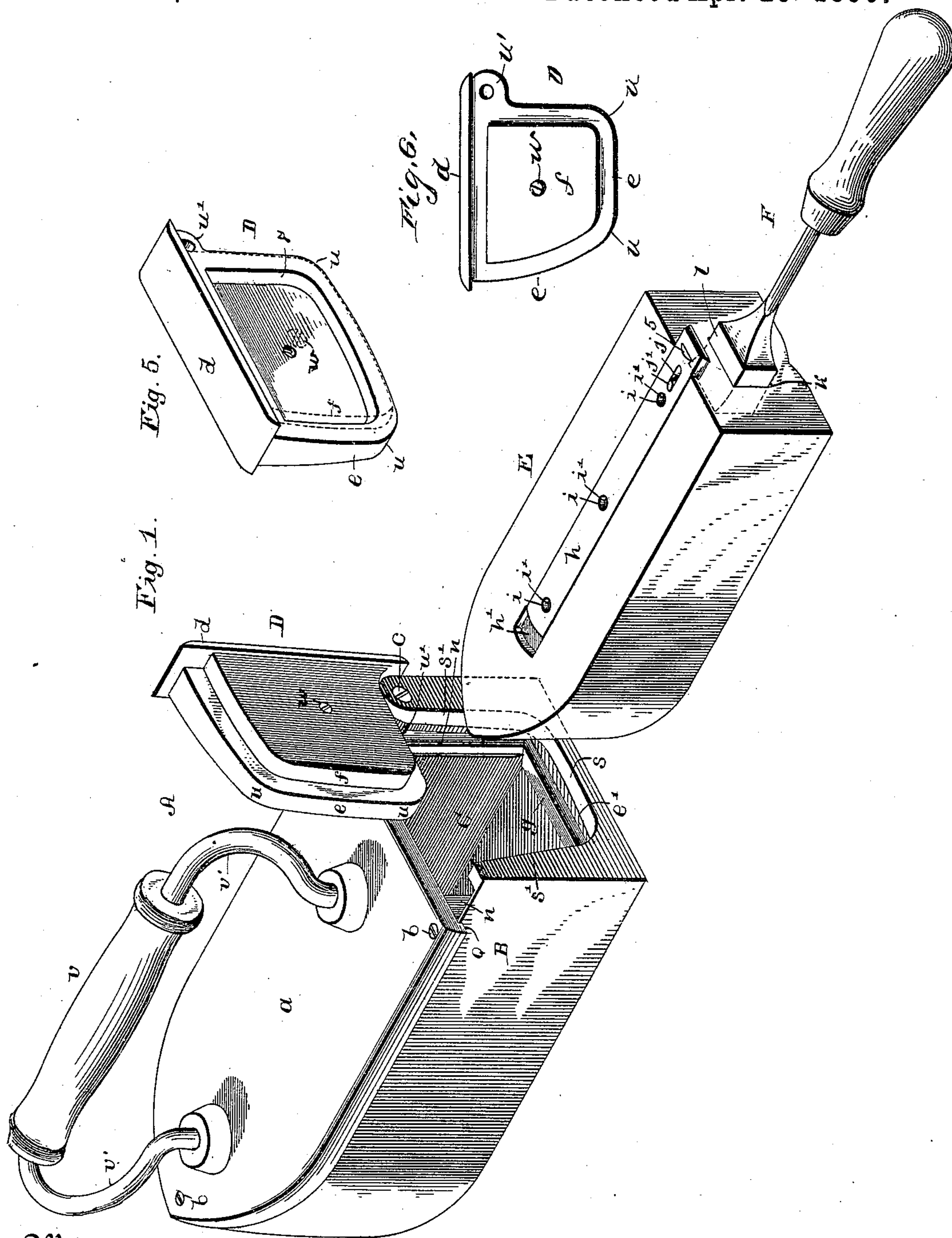
(No Model.)

2 Sheets—Sheet 1.

H. B. STAFFORD.
SAD IRON.

No. 426,968.

Patented Apr. 29. 1890.



Witnesses:

P. G. Fischer

R. A. Balderson

Inventor:
H. B. Stafford,

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(No Model.)

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Fig. 2.

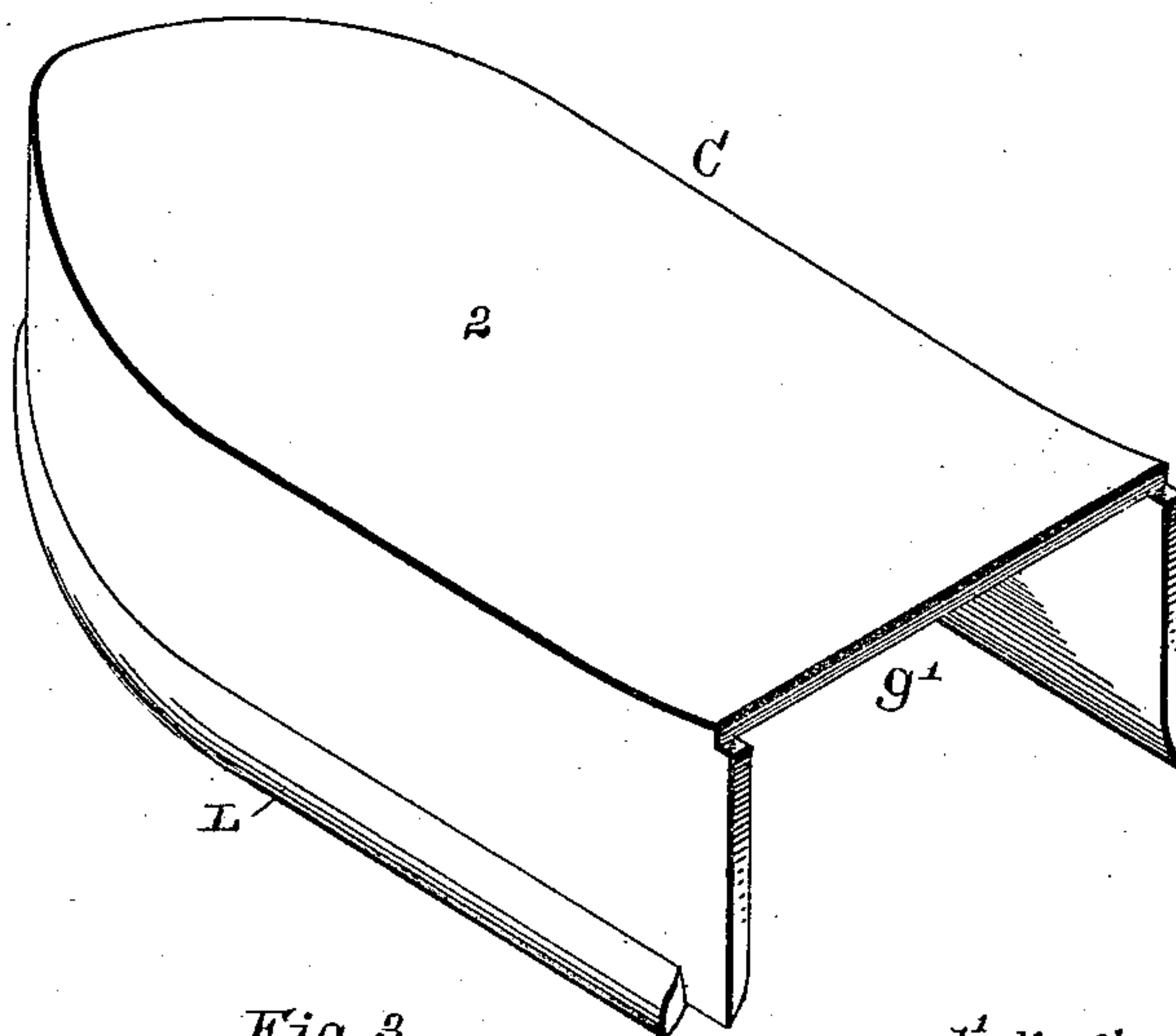


Fig. 3.

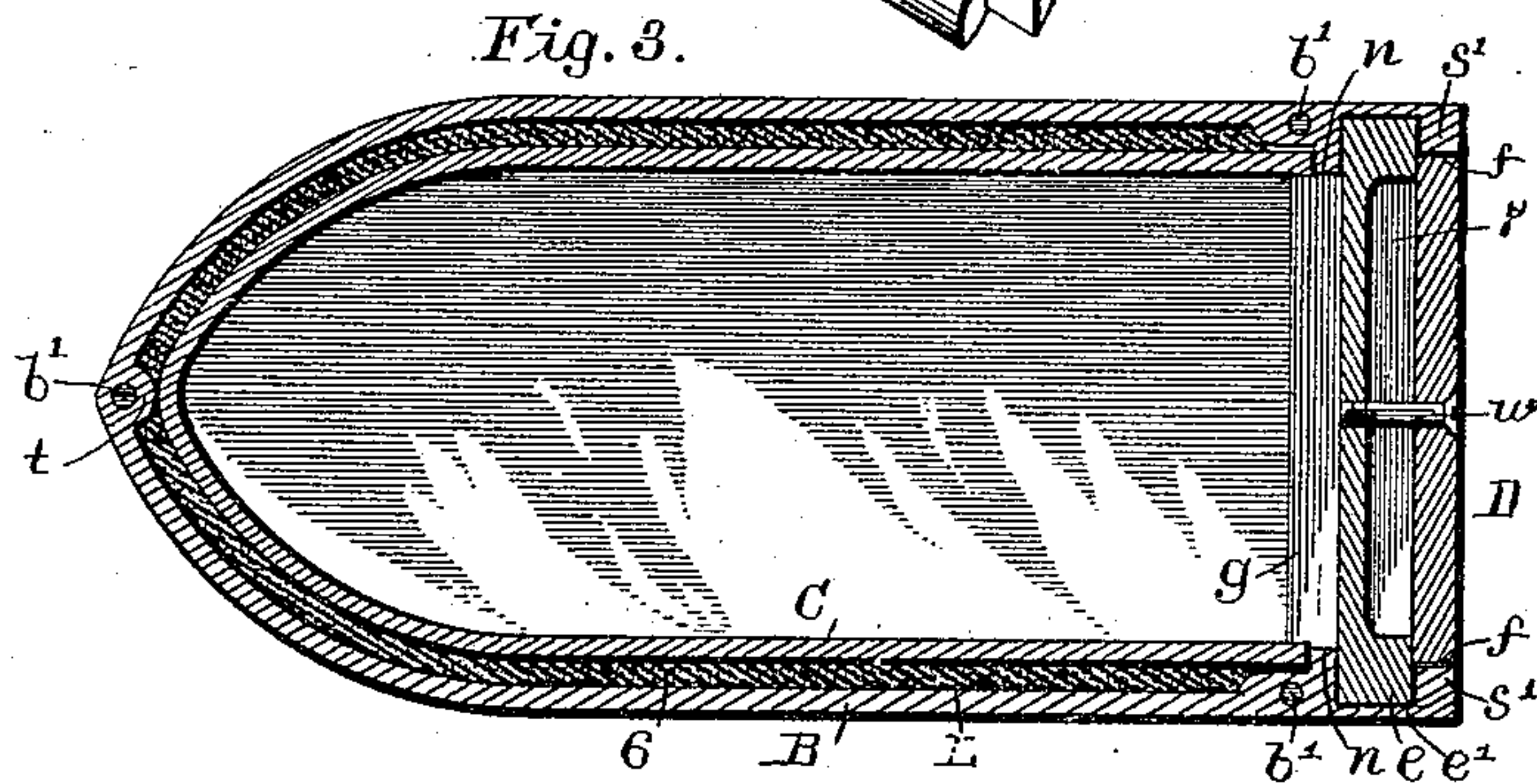
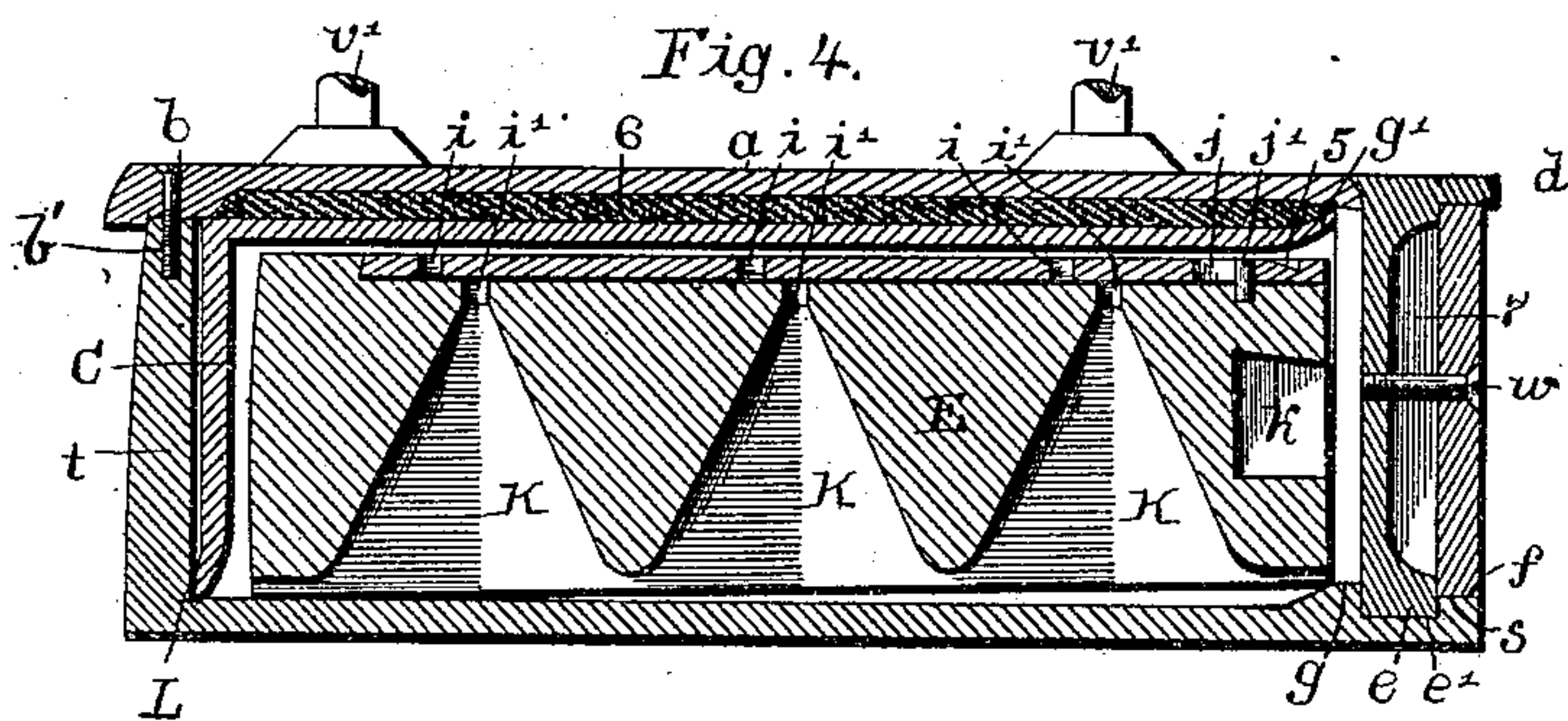


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY B. STAFFORD, OF KANSAS CITY, MISSOURI.

SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 426,968, dated April 29, 1890.

Application filed July 29, 1889. Serial No. 319,044. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. STAFFORD, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Sad-Irons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to an improvement in sad-irons; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a sad-iron embodying my improvements, showing the heating-core removed therefrom. Fig. 2 is a detail perspective view of the inner shell. Fig. 3 is a longitudinal horizontal sectional view of my improved sad-iron. Fig. 4 is a vertical longitudinal sectional view of the same. Fig. 5 is a detail perspective view of the door. Fig. 6 is a plan view of the door.

The outer shell or body B of the iron is hollow and has its rear end open. In the front end of the said shell is a vertical post *t*, having a threaded opening *b'* in its upper end. Near the rear corners of the said shell on its inner side are two vertical posts *n*. A transverse flange *g* is formed on the bottom of the outer shell in line with the posts *n*, and at the rear end of the outer shell is a transverse flange *s*, at the ends of which are vertical side flanges *s'*, the inner sides of which are inclined in opposite directions. The upper end of one of the flanges *s'* is rounded, and a groove *e'* is formed between the flanges *g* *s* and the posts *n* and flanges *s'*. The top plate *a* is removable, and has depending side flanges *Q* that fit over the sides of the outer shell. The top plate is somewhat shorter than the outer shell, so that the groove *e'* is uncovered, and the said top plate is secured in place on the outer shell by screws *b* at its corners, which engage the threaded openings in the upper ends of the posts. The handle *V* is attached to the top plate by the yoke *V'*. The inner shell C, which is preferably made of a single piece of iron, is somewhat smaller than the interior of the outer shell, and has flanges *L* formed at the lower edges of its sides, which engage the sides of the outer shell and serve

to hold the inner shell firmly therein and to form spaces between the sides of the inner and outer shells. These spaces are filled with plaster - of - paris or other non - conductor of heat, as at 6. The rear edges of the vertical side walls of the inner shell fit in rabbets in the front sides of the posts *n*. The top 2 of the inner shell has its rear edge curved upward, as at *g'*, to come in contact with the top plate *a* and to admit the ready insertion of the heating-core, to be presently described. The under side of the top plate *a* is concaved to form a space, which is also filled with non-conducting material.

The door D, which is arranged to close the rear end of the iron, comprises the integral portion *e*, having the flange *u* adapted to fit in the groove *e'*, and the top flange *d* adapted to close the upper ends of the said groove, and to bear on the top edges of the outer shell. The outer side of this door is provided with a recess 7, and on the outer side of the door fits a plate *f*, that is adapted to fit snugly between the flanges *s* *s'*. This plate is secured in position by a screw *w*, and the recess 7 thereby forms a non-conducting dead-air space. That portion of the plate *f* which fits over the rounded upper end of one of the flanges *s'* has a curved portion, as shown, and at the adjacent corner of the door D is a lug *u'*, which enters the groove *e'*. A pivot - screw *c* engages aligned openings in the lug and in the rounded end of the flange *s'* and forms a hinge, whereby the door may be swung open or closed. The hinged side of the door is straight and the free edge thereof is slightly curved, as shown, thereby adapting the door to be readily opened and closed.

The heating-core E is made of a single piece of iron or other suitable metal, and is of such size that it may be readily inserted in the inner shell. This core has a number of conical openings K, made vertically therein throughout its entire length, the said openings terminating at their upper ends in apertures *i'*. A longitudinal dovetailed groove *h'* is made in the upper side of the core and extending to the rear end thereof, and in the said groove fits a slide *h*, which has a number of apertures *i* adapted to register with the apertures *i'*, and has a notch 5 at its rear end, whereby it may be operated. A longitudinal slot *j* is

made in the slide, and a pin j' projects from the upper side of the core into said slot and serves as a stop to limit the movement of the slide. In the rear end of the core is a recess k , adapted to receive the head l of a detachable handle F . When the core is placed in the fire or over a flame to be heated, the slide is moved to the position shown in Fig. 1, so as to cause the apertures i' to register with the apertures i at the upper ends of the openings K , and thereby allow the flames to pass freely through the said openings; hence heating the core to a maximum degree in a short time. Before placing the core in the iron the slide is moved so as to close the apertures i , and thereby prevent the heat from escaping rapidly upward from the openings K , and thereby so retarding the cooling of the core that the efficiency of the same is very materially enhanced. The heated core imparts heat to the iron by radiation and renders the latter extremely useful, and obviates the necessity of placing the same on a stove to be heated. By employing two or more cores, so that one may be heated while the other is in use, the iron may be used for ironing purposes almost continually.

Having thus described my invention, I claim—

30 1. In a sad-iron provided with a removable core, the combination of the outer shell, the inner shell having the flanges L at its lower edges, the rear upper edge of said inner shell being curved up, as at g' , and the removable

top plate a on the outer shell and having the concavity on its lower side, its rear end bearing on the portion g' of the inner shell, substantially as described. 35

2. The heating-core for a sad-iron, having the openings K communicating at their upper ends with apertures i' and the slide adapted to open and close the said apertures, substantially as described. 40

3. The heating-core for sad-irons, having conical openings K extending therethrough from the lower to the upper surface, the slide h , fitting in a dovetailed slot in the upper surface of the core and provided with perforations to register with the upper ends of the conical openings, and the stop-pin j' engaging a slot j in said slide to limit its movement, substantially as specified. 50

4. The hollow sad-iron provided with an open rear end having side flanges s' , in combination with a pivoted door comprising a part e , the edges of which fit in a groove e' adjacent to said flanges, said part e being provided with a recess 7 , and the plate f , secured by a central screw w to the outer surface of the part e over the recess therein, and adapted to fit at its edges between the flanges s' , substantially as specified. 55 60

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

HENRY B. STAFFORD.

Witnesses:

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F. G. FISCHER.