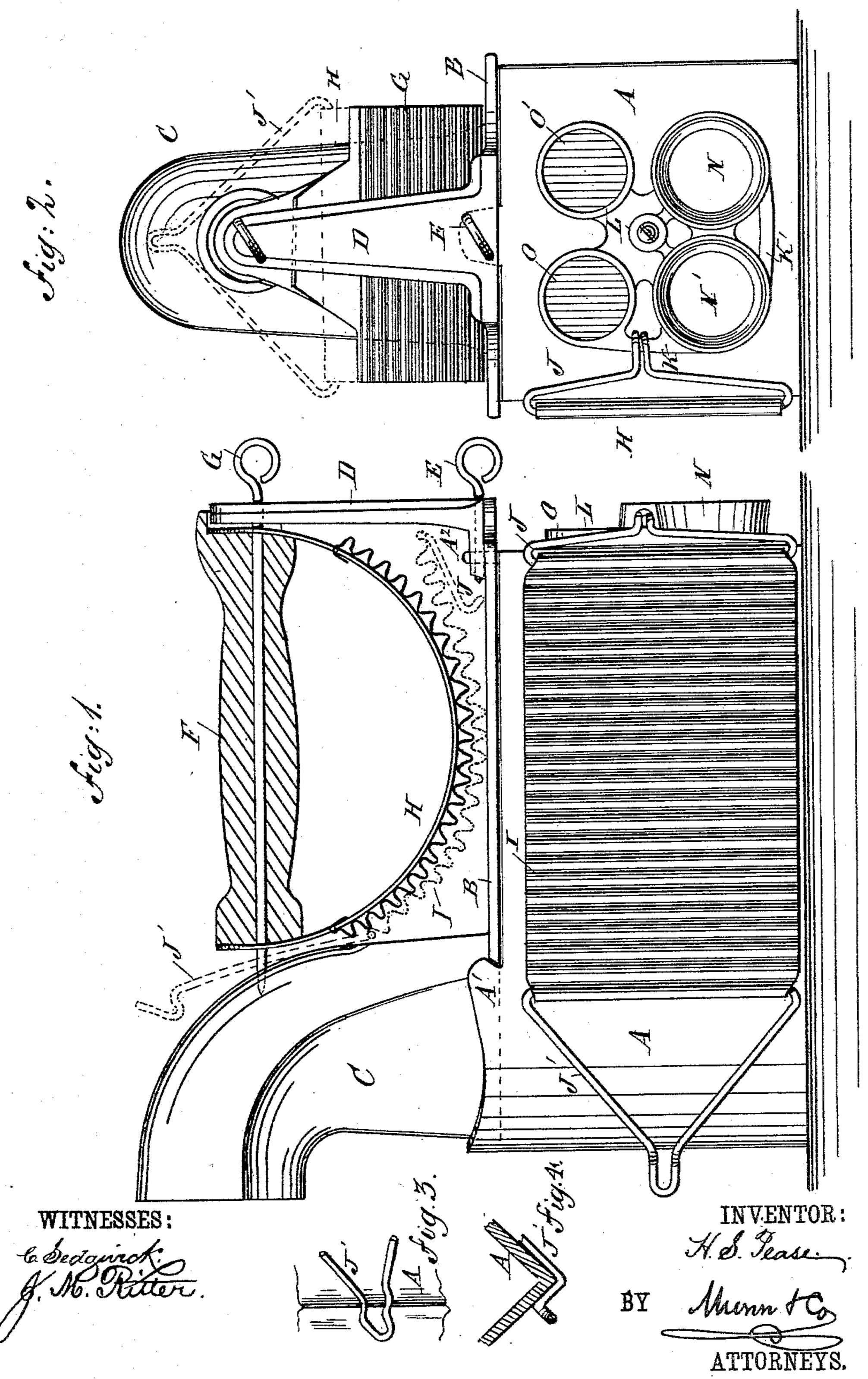
## H. S. PEASE.

SAD IRON.

No. 387,905.

Patented Aug. 14, 1888.



## United States Patent Office.

## HORACE S. PEASE, OF CINCINNATI, OHIO.

## SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 387,905, dated August 14, 1888.

Application filed October 4, 1887. Serial No. 251,422. (No model.)

To all whom it may concern:

Be it known that I, HORACE S. PEASE, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Sad-Iron, of which the following is a full, clear, and exact description.

My invention relates to a sad-iron for which United States Letters Patent No. 334,585 were

granted to me August 18, 1885.

The object of my present invention is to provide a new and improved smoothing-iron which can be easily adjusted for use in polishing, fluting, and pressing, and in which the heat can be conveniently regulated.

The invention consists in the construction and arrangement of certain parts and details, and combinations of the same, as will be fully described hereinafter, and then pointed out

in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement with the handle in section. Fig. 2 is a rear end elevation of the same. Figs. 3 and 4 are detail views showing the hook J' engag-

ing the front end of the sad-iron.

In the patent above referred to the flutingplate was a fixed part of the smoothing-iron;
but in my present invention said fluting-plate
is made attachable and detachable, and is not
only used for fluting, but also serves as a shield
for protecting the operator's hand from coming in contact with the hot chimney, and also
serves to shield the hand from the heat aris-

The smoothing-iron A is made hollow, and is provided on top with a removable plate, B, 40 carrying in its front end the upwardly-projecting curved neck or flue C, through which the gases and smoke arising from the fire in the smoothing-iron pass into the open air. The front end of the plate B fits on each side against shoulders A', formed on top of the smoothing-iron A, and the rear end of the plate B is provided with a standard, D, having a central aperture, through which projects a lug, A², formed on the upper rear end of the smoothing-iron A. A pin, E, passes through the lower part of the said standard

D and through the projection  $A^2$ , thus fastening the plate B to the smoothing-iron A.

A handle, F, is held between the standard D and the neck or chimney C by means of a 55 pin, G, which passes through the upper end of the standard D, longitudinally through the handle F, and into an aperture formed in the upper part of the neck C. The curved fluting-iron H is secured to the ends of the handle, 60 and is located between the plate B and said handle. The fluting-plate I is a corrugated piece of sheet-iron provided at its ends with hooks J and J', of which the latter fits over the front pointed end of the smoothing-iron 65 A, while the other hook, J, is adapted to fit over the bar K or K', formed on the draft-gate L, pivoted at the rear square end of the smoothing-iron A.

The draft-gate L is provided with two fun- 70 nels, N and N', and with two disks, O and O', all arranged in a square and adapted to fit over two openings in the rear end of the smoothing-iron A, so that both funnels N and N' when placed over said openings establish 75 communication of the interior of the smoothing-iron with the outside, and when the two disks O and O' are placed over said openings by turning the draft-gate L no air is admitted to the interior of the smoothing-iron. I may 80 also turn the draft-gate L in such a manner that one disk, O or O', is over one opening, while one of the funnels, N or N', is over the other opening, thus diminishing the draft to one-half, as the air is only permitted to enter 85 the smoothing-iron through one opening. These funnels catch the air as the iron is shoved backward and direct it upon the fuel

and heating action.

The smoothing-iron A is preferably heated by charcoal, which is placed in it by removing the plate B, and the draft is regulated by the draft-gate L, as above described.

and add materially to the proper combustion

When the iron is to be used in fluting, the 95 handle F and the plate I are detached and the iron is placed upon its side. The hook J is hooked over out of the bars K, and the hook J' is snapped over the pointed end of the iron. The plate I, being of sheet metal transversely 100 corrugated, will of course act as a spring and contract after the hook J' has been snapped

over the point of the iron, and thus the plate will be firmly held in place by said spring action. The bars K and K' are so located in relation to the funnels N and N' and the disks 5 O and O' that the operator can have either two openings in the end of the smoothing-iron open or he can close the lower opening by the disk O' and have the other opening open by the funnel N. In this case the hook J is held 10 on the bar K', while in the former case it is hooked over the bar K, as illustrated in Fig. 2. When the fluting-plate I is adjusted as described, then the article to be fluted is placed on it and the curved fluter H, which is de-15 tached with its handle F from the pin G, is placed on the article and rocked over it until the article is fluted. The fluting-plate I is heated by coming in contact with the side of the smoothing-iron A. When the fluting-plate 20 I is not used for fluting articles, I place the plate on the top of the plate B, as shown in dotted lines in Figs. 1 and 2, so that the hook J rests at the rear end of the plate B, while the other hook, J', extends upward and over the 25 pin G and part of the handle F, so that the extreme upper end of the said hook J' is above the handle F, thus preventing the operator's hand from coming in contact with the heated neck or flue C. The plate I thus rests between 30 the fluting iron H and the top of the plate B, thereby serving as an additional shield to prevent the heat rising from the smoothing-iron A from passing to the operator's hand on the handle F.

Owing to the flexibility of plate I there will be no chance for its becoming displaced when placed between plate B and the curved flutingiron, as it will be flexed, as shown in dotted lines, and its corrugations interlocked with 40 those of the curved fluting-iron.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the smoothingiron A, having the detachable handle F, pro- 45 vided with a fluter, of the detachable transversely-corrugated elastic sheet-metal plate I, having hooks at its ends, one hook to engage the smoothing-iron at its heel, and the other hook adapted to snap around the wedge-shaped 50 toe of the iron, the elasticity of the plate when in use drawing the two hooks toward each other and holding it in place, substantially as set forth.

2. In a smoothing-iron, the removable trans- 55 versely-corrugated sheet-metal plate I, having pivoted hooks J J' at its ends, the elasticity of the plate serving when in use to draw the hooks toward each other, substantially as set forth.

3. The combination, with the sad-iron of the character described, having a pivoted draftplate at its rear end provided with cross-bars, of the sheet-metal fluting-plate having hooks at its opposite ends to engage one of said cross- 65 bars and the front end of the iron, substantially as set forth.

4. A smoothing-iron and a top plate fastened to said smoothing-iron, in combination with a handle carrying a curved fluter, a pin for se-70 curing said handle to said plate, and a flutingplate provided with hooks at each end, of which one extends over the front end of the handle, substantially as shown and described.

HORACE S. PEASE.

Witnesses:

HENRY V. MOORE, R. P. HARKNESS.