(No Model.)

H. SINTZEL.

GAS HEATING SAD IRON.

No. 436,384. Patented Sept. 16, 1890.

Fig.1.

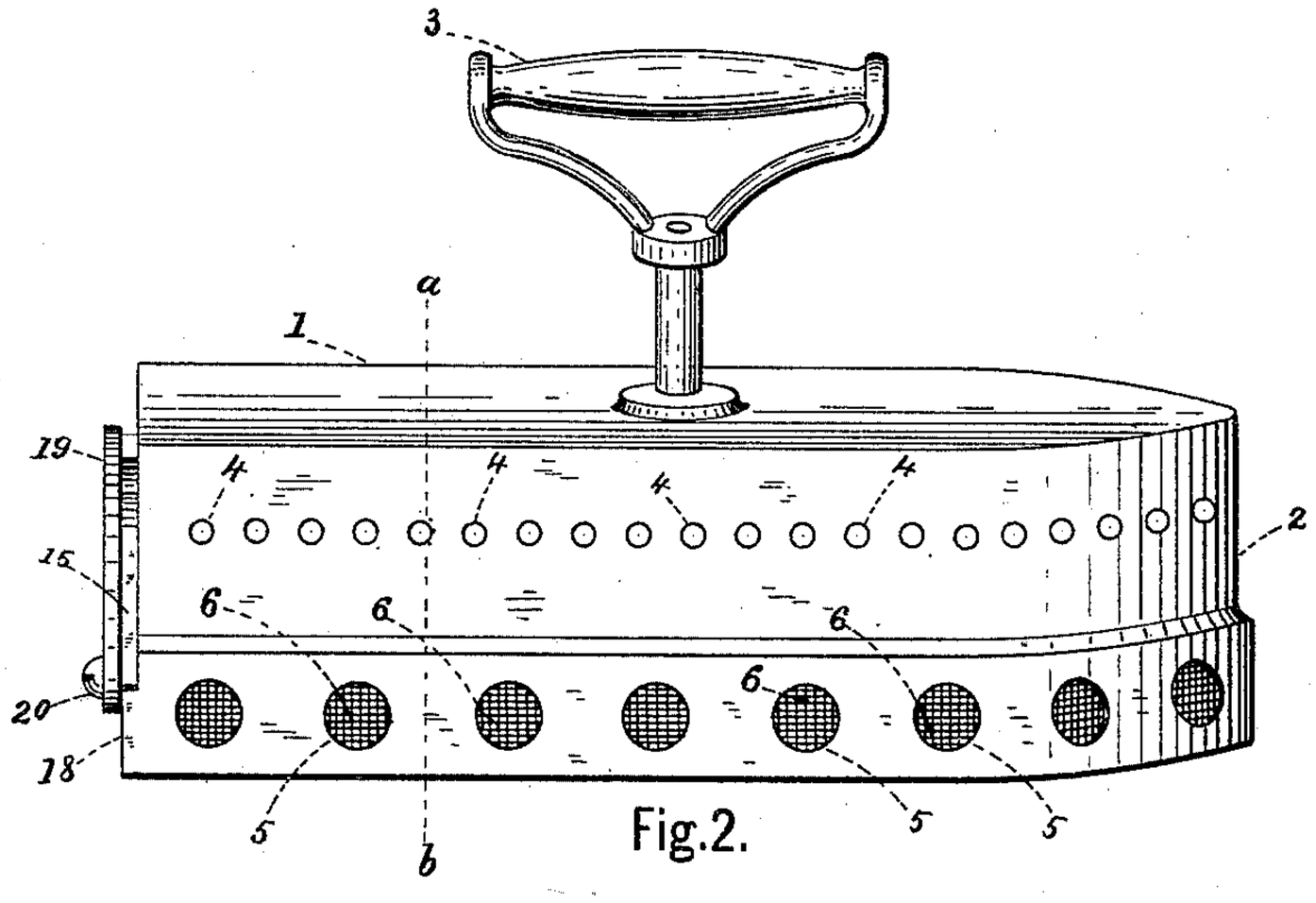


Fig.2.

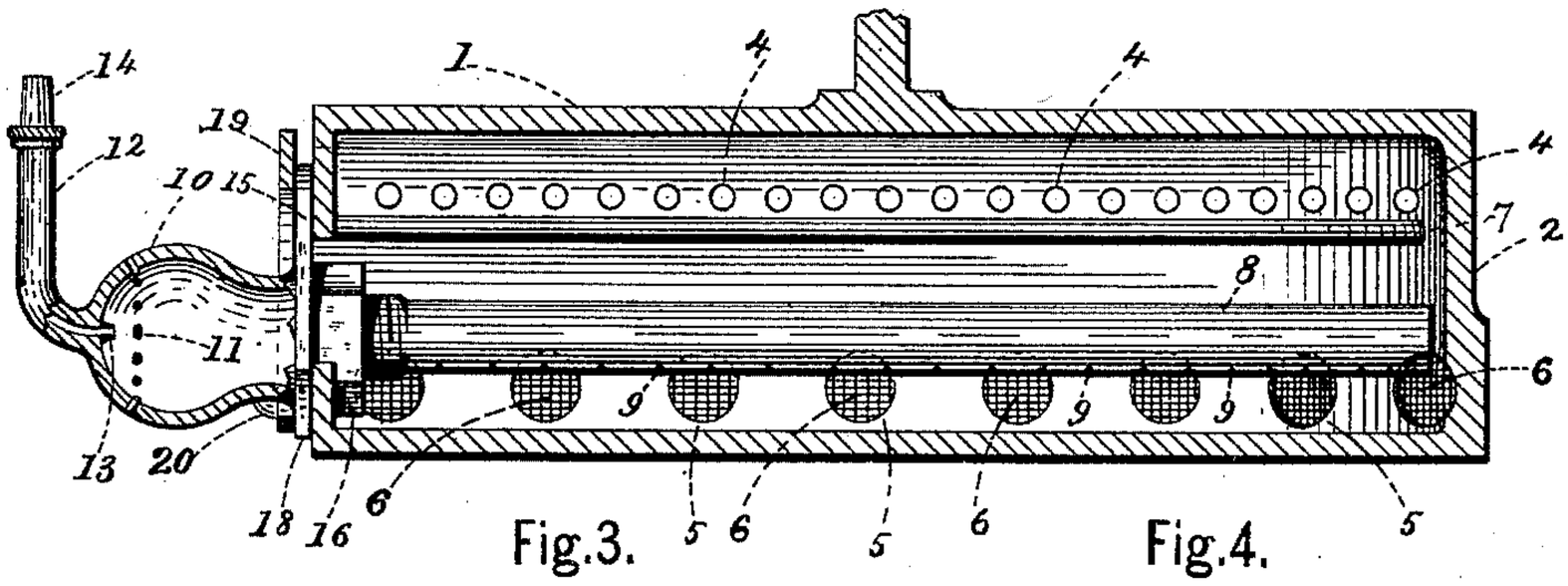
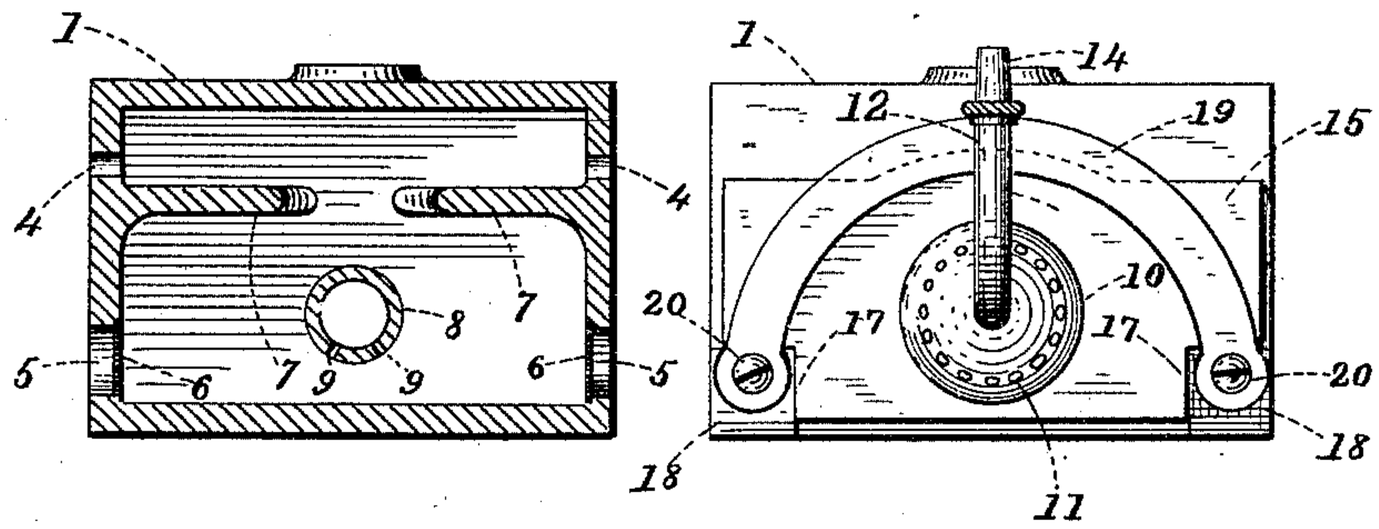


Fig.3.

Fig.4.



Witnesses.
Cora J. Blakely.
Harriet Johnson

Henry Sintzel, Inventor.
By James Sangster.
Attorney.

UNITED STATES PATENT OFFICE.

HENRY SINTZEL, OF TORONTO, CANADA.

GAS-HEATING SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 436,384, dated September 16, 1890.

Application filed June 25, 1890. Serial No. 356,676. (No model.)

To all whom it may concern:

Be it known that I, HENRY SINTZEL, a citizen of the United States, and a resident of Toronto, in the county of York, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Gas-Heating Sad-Irons, of which the following is a specification.

My invention relates to certain improvements in gas-heating sad-irons, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view; Fig. 2, a sectional elevation; Fig. 3, a transverse section in line *a b;* and Fig. 4 is a rear end elevation, the handle of the iron being omitted in Figs. 2, 3, and 4.

In said drawings, 1 represents the body of the iron. It is constructed, preferably, of cast-iron, in the usual form of a hollow case pointed at the end 2 and provided with a handle 3, of any well-known construction, and with a series of small perforations 4 in the upper portion of the body 1, and with a series of larger perforations 5 near the bottom of the iron. Over each of the perforations 5 is a fine woven-wire screen 6 to prevent the flame from passing through when the iron is in operation.

On the interior sides of the iron are two inwardly-projecting flanges 7, located just below the small perforations 4 and projecting inward toward each other. Their object is to extend the interior heating-surface and cause a circulation of the heated air within the iron and to deflect the heat downward. These flanges or ledges 7 are important, because they absorb a large portion of the heat that would otherwise pass out through the small perforations 4.

The gas-burner consists of a long tubular portion 8, having its forward end closed, and a series of small perforations 9, arranged near the under side of the same, so that the gas as it issues through them throws the flame against the bottom of the iron.

The outer end of the perforated gas-tube 8 is rigidly secured to an air and gas mixer 10 in any well-known way, which is provided with a series of air-inlet holes 11, and at the end of the air and gas mixer 10 is a small pipe 12, having a small inner nozzle 13, through which the gas passes into the mixer and then, combined with air, to the gas-tube.

The gas and air mixer 10 is shown in Figs. 2 and 4, being omitted in Fig. 1.

At the top of the gas-inlet pipe 12 is the usual end piece 14, over which a piece of elastic gas-pipe is slipped in the usual way for conducting gas to the burner.

Between the mixer 10 and the gas-burner 8 is secured a plate 15 by means of the nut 16. (See Fig. 2.) This plate 15 is cut out at the lower corners at 17, (shown more plainly in Fig. 4,) so that when the burner is slipped in place, as shown in Figs. 2 and 4, those portions will rest on two small square outwardly-projecting portions 18, and is then rigidly secured in place by the curved bar 19 and screws 20, which can be taken out easily and the burner removed when required.

I claim as my invention—

A gas-heating sad-iron consisting of a hollow case having a handle and a series of small holes or perforations around its upper sides located above the upper edge of two inwardly-projecting interior ribs, a series of larger holes protected by fine woven-wire screens, an air and gas mixing burner having a series of gas-jet perforations in its lower sides, and means for holding the gas-burner to the iron, substantially as described.

HENRY SINTZEL.

Witnesses:
JAMES SANGSTER,
CORA J. BLAKELEY.