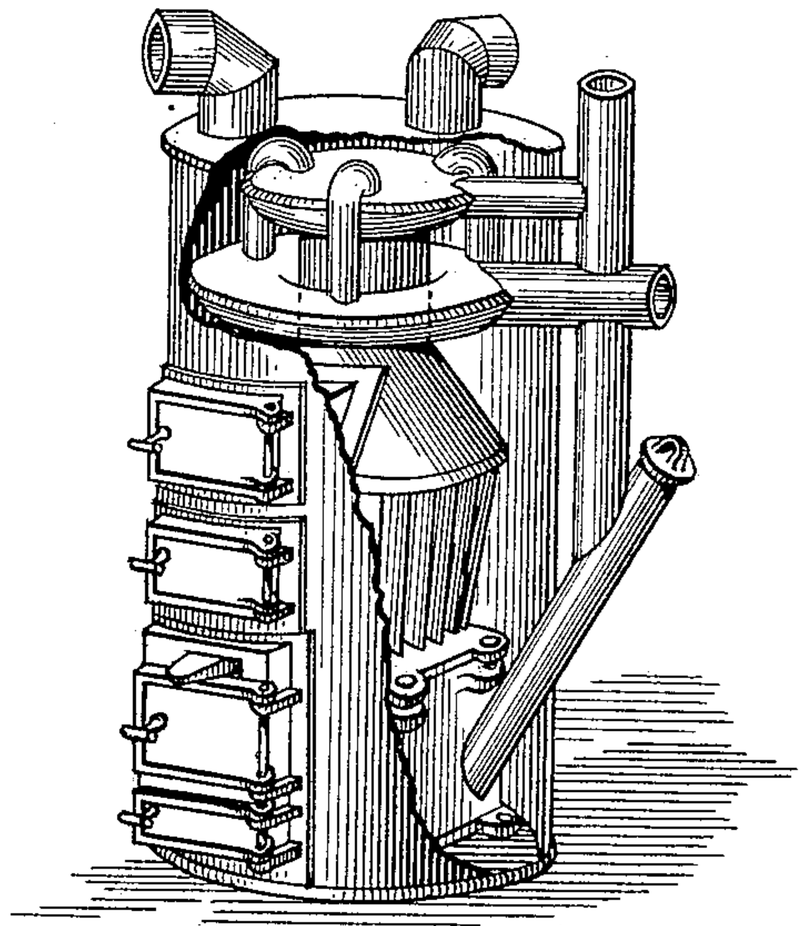
(No Model.)

C. H. WHITE.

HOT AIR FURNACE.

No. 390,107. Patented Sept. 25, 1888.

FIG. 1.



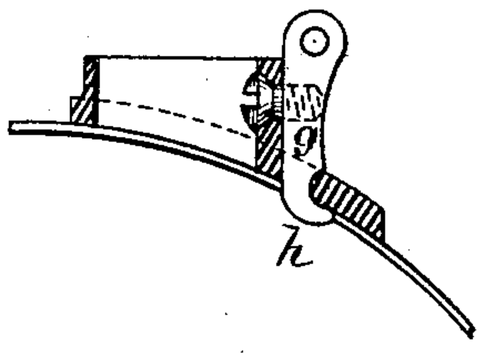


FIG. 3.

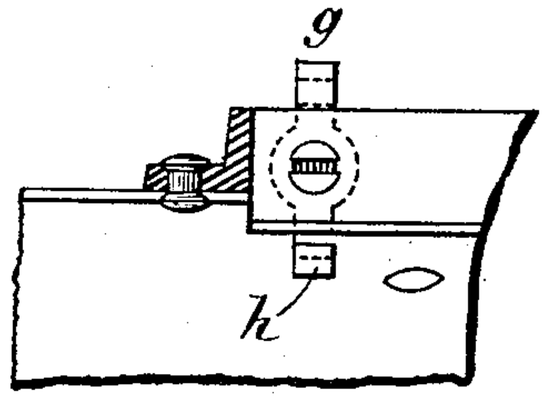


FIG. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES H. WHITE, OF BOSTON, MASSACHUSETTS.

HOT-AIR FURNACE.

SPECIFICATION forming part of Letters Patent No. 390,107, dated September 25, 1888.

Application filed November 8, 1886. Serial No. 218.351. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. WHITE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Hot-Air Furnaces, of which the following is a full and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention relates to the construction of the door-hinges, substantially as hereinafter more fully set forth, the object being to procure simplicity and economy in construction and repairs, effectiveness in the economical heating of air, convenience, and durability.

With reference to the drawings, Figure 1 is a general perspective view showing a part of the outer shell or case broken away to expose and illustrate the internal construction. Fig. 2 is a sectional elevation; and Fig. 3 is a sectional plan illustrating the improved removable door-hinge—the part thereof attached to the door-frame.

Like letters refer to the same or corresponding parts in all the figures.

It is the universal custom, so far as I know, in hot-air furnaces to cast the hinge-fixed part for the doors upon the frame. In consequence of this, when the hinge part is broken, the door-frame has to not only be thrown away, but great trouble and expense come from the removing of it and replacing it with a new one. In Figs. 2 and 3 is shown the stationary part of the hinge removably attached to the frame of the door, which, if broken, can easily be replaced, the frame still being utilized. Its construction and application are as follows, viz: A hole is provided in the frame. Then the stationary part of the hinge *g* is constructed to fit the hole or socket at its inner end with a hook form or catch, as *h*. (See Fig. 3.) The catch or hook *h* is entered in the hole, and then the part tipped back against the projecting rim of the door-frame and secured with a screw to it, as will be plainly seen in Figs. 3 and 2. The parts are simple and easy to supply for repairs and easily taken apart and easily put together.

Having illustrated and described my invention, what I claim as my invention is as follows:

The door-frame formed with a perforated side flange, in combination with the stationary removable part of the hinge formed to hook into the perforations, and a screw securing said stationary removable part against the frame, substantially as described.

CHAS. H. WHITE.

Witnesses:
WM. T. ACRES,
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