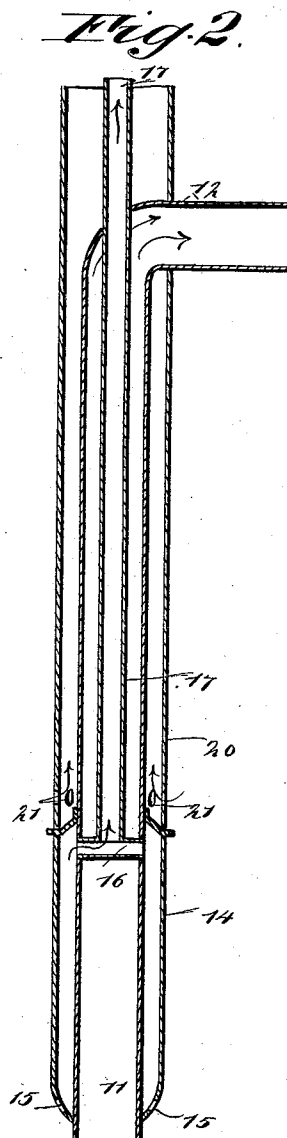
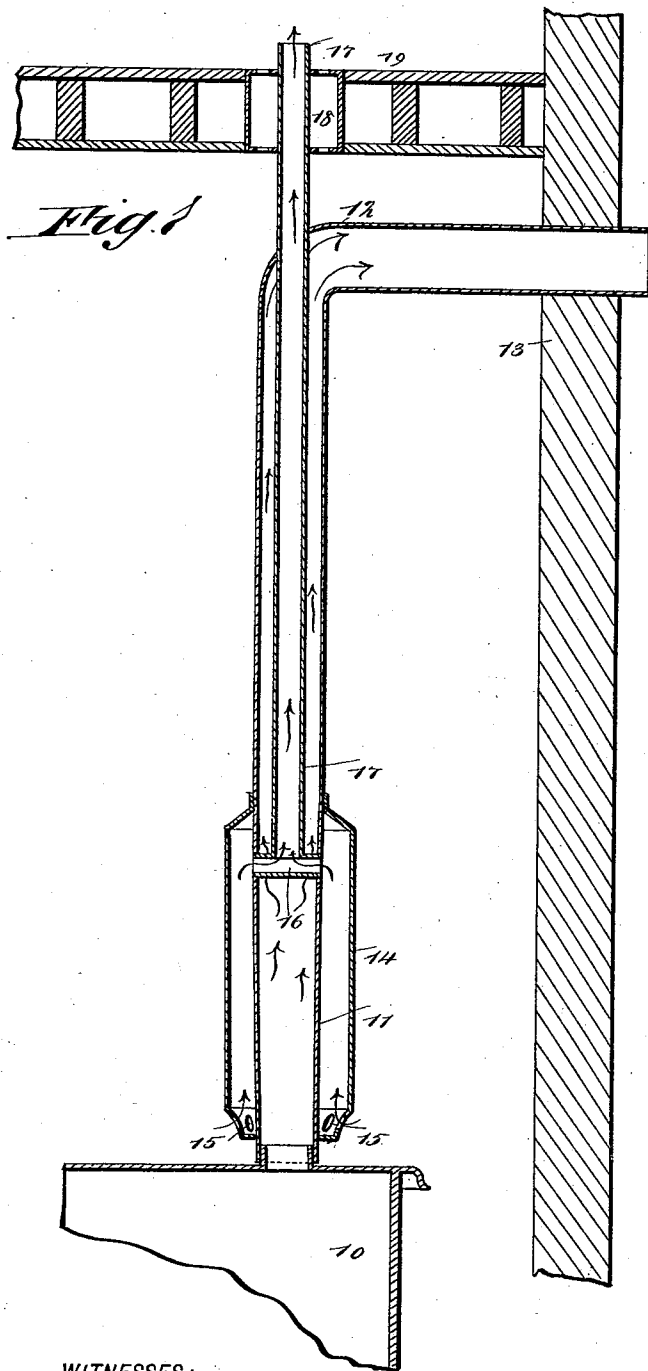


(No Model.)

B. M. DUNSON.
HEATING APPARATUS.

No. 508,820.

Patented Nov. 14, 1893.



WITNESSES:

J. M. Ardle,
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INVENTOR

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

BENIAH M. DUNSON, OF KENTON, OHIO.

HEATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 508,820, dated November 14, 1893.

Application filed June 14, 1893. Serial No. 477,561. (No model.)

To all whom it may concern:

Be it known that I, BENIAH M. DUNSON, of Kenton, in the county of Hardin and State of Ohio, have invented a new and Improved Heating Apparatus, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of heating drums which are adapted to be applied to stove pipes so as to utilize the heat, which is sometimes wasted, and conduct it to an adjoining room to heat the same.

The object of my invention is to provide a very simple funnel and drum attachment for an ordinary heating stove, which will in no wise interfere with the draft of the stove or with its heating capacity, and which will collect the heat radiated by the stove pipe and conduct it to the room above so as to heat the latter.

To this end my invention consists of certain features of construction and combinations of parts, as will be hereinafter described and claimed.

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

Figure 1 is a detail sectional view of my improved apparatus; and Fig. 2 is a detail longitudinal section of a modified form of the apparatus.

The stove 10 may be of any usual kind whatever, and the funnel 11, which is fitted to it, is provided with the usual elbow 12 and passes through the wall 13 so as to connect with the chimney in the usual way. Around the lower portion of the funnel is secured a drum 14, which collects the heat radiated from the hottest part of the funnel and causes it to be carried upward to a room above. The drum 14 is fitted tightly to the funnel and it is provided near the bottom with air holes 15, adapted to admit atmospheric air, and the cooler air rushes through these holes and causes a draft so that as the air within the drum is heated it passes upward through the cross pipe 16 and the hot air pipe 17 to the room above.

The cross pipe 16, is fitted air tight in the smoke pipe or funnel 11, and opening from the middle portion of the cross pipe is the

hot air pipe 17, which is preferably arranged in the center of the funnel, as shown in Fig. 1, and which projects upward through an ordinary register 18 in the floor 19 so as to deliver the hot air into the room above the floor 19. The register 18 permits the hot air to rise from the top of the funnel into the upper room, and it will be seen that the arrangement of the funnel, the air pipe, and the heating drum is such that a constant stream of warm air is injected into said room, so that the room is easily heated.

It will be seen from the above description that the heat radiated by the hottest part of the funnel will be caught by the drum 14, while the heat passing directly upward through the funnel, will serve to heat the air in the pipe 17, and in this way practically the entire heat of the funnel, which is usually wasted, is utilized for heating the air which is directed into the upper room.

If desired a section 20 of pipe may be applied to the top of the drum 14, so as to increase the funnel, and this section may be extended through the floor above. The section 20 has air holes 21 near the bottom to promote a draft, and it will be seen that this section will carry upward the heat radiated by the upper portion of the funnel. This arrangement is shown clearly in Fig. 2.

It will be understood from the foregoing description that my improved funnel attachments may be used with any kind of a stove, and it will be seen that the attachments utilize the waste heat so as to make the heating of the upper room cost practically nothing.

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

The combination with a stove pipe provided with a pipe extending transversely across the same, of a hot-air pipe within the stove pipe and extending from the transverse pipe out through the stove pipe, and a perforated drum surrounding the stove pipe, substantially as described.

BENIAH M. DUNSON.

Witnesses:

WILBERT E. MCCOY,
CLEM D. MCCOY.