

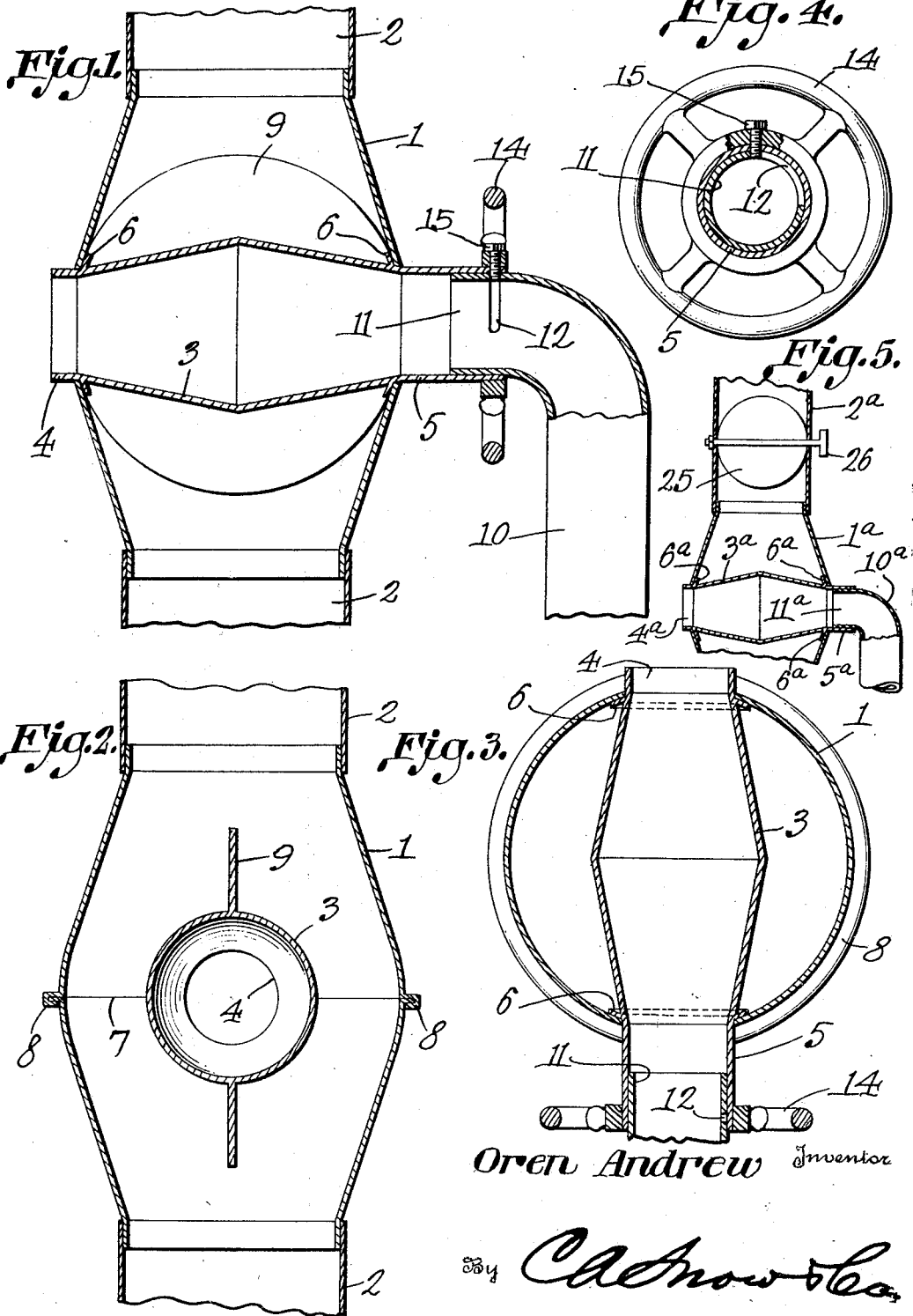
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STOVEPIPE HEATER

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UNITED STATES PATENT OFFICE

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STOVEPIPE HEATER

Application filed October 8, 1927. Serial No. 224,941.

This invention aims to provide novel means whereby cold air may be drawn from a point adjacent to the floor of a room, and be heated, the construction being such that the heating is brought about through the instrumentality of the products of combustion passing up a stove pipe, and no additional expenditure of fuel being necessary, in order to heat the air as aforesaid.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the drawings:—

Figure 1 shows in longitudinal section, a device constructed in accordance with the invention, parts being broken away;

Figure 2 is a longitudinal section taken in a plane at right angles to the cutting plane in Figure 1;

Figure 3 is a horizontal section; and

Figure 4 is a sectional elevation showing the means whereby rotation is imparted to the damper.

Figure 5 is a central vertical sectional view of a modified form of the invention.

In the accompanying drawings, the numeral 1 indicates a barrel-shaped body, adapted to be connected at its ends with a stove pipe 2 or other member through which the products of combustion pass, from a stove or furnace. Located within the body 1 and extended transversely of the same, is a flue 3 which, preferably, is of greatest diameter from a point intermediate its ends, the flue 3 tapering to its ends 4 and 5, the ends 4 and 5 being of cylindrical form, and being mounted to turn in the body 1. In order that the flue 3 may be held against moving endwise, as it turns, the ends 4 and 5 of the flue are sup-

plied with flanges 6 which engage the inner surface of the body 1 as clearly shown in the drawings. The body 1 preferably is made of separable parts, as indicated at 7 in Figure 2, the parts 7 being joined together in any suitable way, as shown at 8. The body 1 is made in separable parts, as aforesaid, so that the flue 3 may be mounted in place readily within the body 1, as shown in Figure 1 of the drawings. A damper 9 is connected to the flue 3 and is of such size as to control the passage through the body 1.

The numeral 10 marks a vertical conduit of such length as to extend down to a point adjacent to the floor of the room in which the device is mounted. The conduit 10 has a horizontal end 11 which is received in the end 5 of the flue 3. There is a transverse slot 12 in the end 11 of the conduit. On the end 5 of the flue 3 is mounted an operating member 14 of any desired sort, such as a wheel 14. A securing element 15 connects the wheel 14 with the end 5 of the flue 3. The securing element 15 extends into the slot 12 that is formed in the end 11 of the conduit 10.

In practical operation, cold air taken from a point near to the floor, moves upwardly through the conduit 10 and is heated in the flue 3, the heated air passing out through the end 4 of the flue and creating an up-draft of cold air through the conduit 10. The products of combustion from a stove, furnace, fire-place or the like, pass upwardly through the pipe 2 and the body 1, and, consequently, the air that passes through the flue 3 is heated without any additional expenditure of fuel. The draft through the body 1 may be regulated by rotating the flue 3, so that the damper 9 stands either open or closed with regard to the body 1. The slot 12 is 90° in length. When the securing element or screw 15 is at one end of the slot 12, the damper 9 is closed, and when the screw or securing element is at the opposite end of the slot 12, the damper is open. The operator simply turns the hand wheel 14 as far as possible, in one direction or in an opposite direction, and he is assured that the damper is either open or closed, depending upon the position he may wish it to be.

The securing element 15 has a number of functions. First, it connects the wheel 14 to the flue 3, so that when the wheel is turned, the flue will be turned also, to open or close the damper 9. Second, because the securing
5 element 15 is received in the slot 12, the end 11 of the conduit 10 is held in the end 5 of the flue 3. Third, because the securing element or screw 15 engages the part 11 at the ends of the slot 12, the operator can deter-
10 mine definitely the position of the damper 9; as hereinbefore explained.

In Figure 5 of the drawings, parts herein-
before described have been designated by num-
15 erals previously used, with the suffix "a". In this form of the invention, the damper 9 and attendant parts are omitted, and a dam-
per 25 is placed in the pipe 2a, above the flue 3a, the numeral 26 designating any suitable
20 means for manipulating the damper.

What is claimed is:—

1. In a device of the class described, a body
of greatest diameter intermediate its ends
and tapered toward its ends, and a flue ex-
25 tended through the body transversely and lo-
cated at the place where the body is of great-
est diameter, the flue being of greatest diam-
eter at a point intermediate its ends and at
the longitudinal axis of the body, the flue
30 tapering toward its ends within the body.

2. In a device of the class described, a body
of greatest diameter intermediate its ends
and tapered toward its ends, and a flue ex-
tended through the body transversely and
35 located at the place where the body is of
greatest diameter, the flue being of greatest
diameter at a point intermediate its ends and
tapering toward its ends within the body, the
flue being provided with circumferential
40 flanges which cooperate with oppositely dis-
posed portions of the body.

In testimony that I claim the foregoing as
my own, I have hereto affixed my signature.

OREN ANDREW.

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