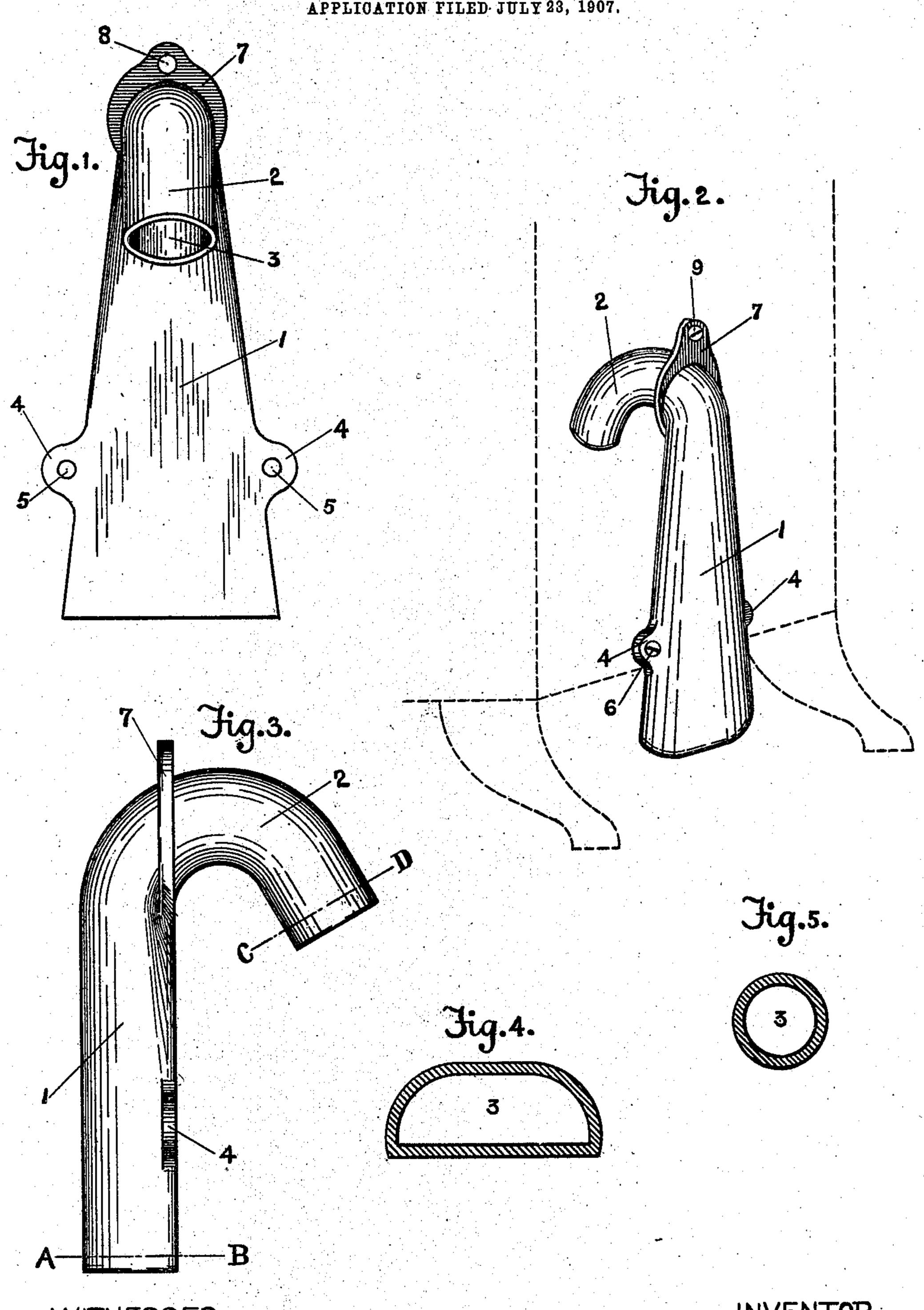
## E. M. HITCHCOCK.

### SUPPLEMENTAL DOWNDRAFT FOR STOVES.

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# UNITED STATES PATENT OFFICE.

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#### SUPPLEMENTAL DOWNDRAFT FOR STOVES.

No. 894,777.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Edward M. Hitchcock, a citizen of the United States, residing at Portland, in the county of Multnomah and 5 State of Oregon, have invented a new and useful Improvement in Supplemental Downdrafts for Stoves, of which the following is a

specification.

My invention relates to the method of con-10 struction and applying a supplemental or additional draft to the ordinary heat stove, cooking stove, furnace, etc., merely by attaching my appliance, as will hereinafter be described and set forth. By adding this sup-15 plemental draft, the cold and vitiated air will be taken from the surface of the floor, more complete combustion will take place in the stove, and thereby causing a great saving of fuel. I attain these objects by the 20 device illustrated in the accompanying drawings in which

Figure 1 is a front view of the part which fits next to the stove. Fig. 2 is a perspective view of the device showing method of at-25 taching it to the stove. Fig. 3 is a side view of the device. Fig. 4 is a cross section on the line A B of Fig. 3. Fig. 5 is a cross section

on the line C D of Fig. 3.

Similar numbers refer to similar parts

30 throughout the several views.

1 is the main body of the device which will be made substantially in the shape shown in

the accompanying drawings.

2 is a bent neck which is curved at the 35 proper angle so the draft will be thrown directly down on top of the fire in the stove, instead of coming from the side or underneath, as is usually the case at the present time.

Throughout the whole length of 1 and 2 is 40 an opening 3 starting on the bottom end of 1 with the shape as is shown in Fig. 4 and terminating in a circular area at the end of 2 as shown in Fig. 5. It will then be seen that the device is merely a cast or sheet metal 45 shell, through which the draft passes when the device is properly fastened to the stove or furnace.

4, 4, are two flat lugs each containing a hole 5 through which passes bolts 6 which 50 are used to fasten the lower end of the device on the stove.

7 is a flange containing in the upper part a hole 8, through which passes a bolt 9 and by this means the top of the device is fastened to the stove.

To attach my device to any stove or furnace, it is first necessary to make a round opening of sufficient size to admit the neck 2. After inserting this neck, drill three holes in the stove to match the holes 5, 5, and 8 of the 60 device. Into the holes then fasten bolts 6, 6, and 9. It will readily be seen as is best shown in Fig. 2 that these bolts firmly fasten the device against the stove.

The method of operation of the device is as 65 follows: After being fastened on the stove as is hereinbefore described, the air is drawn in from near the surface of the floor through the opening 3 and precipitated downward on top of the fire by means of the bent neck 2. 70 This causes a down draft to take place which tends to make more complete combustion to consume the smoke, save fuel, and take the cold air from near the floor surface.

I am aware that prior to my invention 75 down draft arrangements have been made and attached to stoves. I, therefore, do not claim such a combination broadly, but

1 claim

As a new article of manufacture, a supple-80 mental draft attachment for stoves comprising an integral hollow body a side of which is flat so as to fit against the front portion of a stove, said body tapering toward its upper end which extends laterally and downwardly 85 to form a neck adapted to project into a stove, the upper portion of the device being formed with a flange arranged in substantially a vertical plane and with its outer face in alinement with the flat side of the body 90 aforesaid, said flange also having its upper portion extended upwardly and formed with an opening for a fastening, apertured fastening lugs being integrally formed with and projecting from the opposite side edges of the 95 attachment at the flat side of the same.

### EDWARD M. HITCHCOCK.

Witnesses:

EARL A. MARSHALL, H. VIOHL.