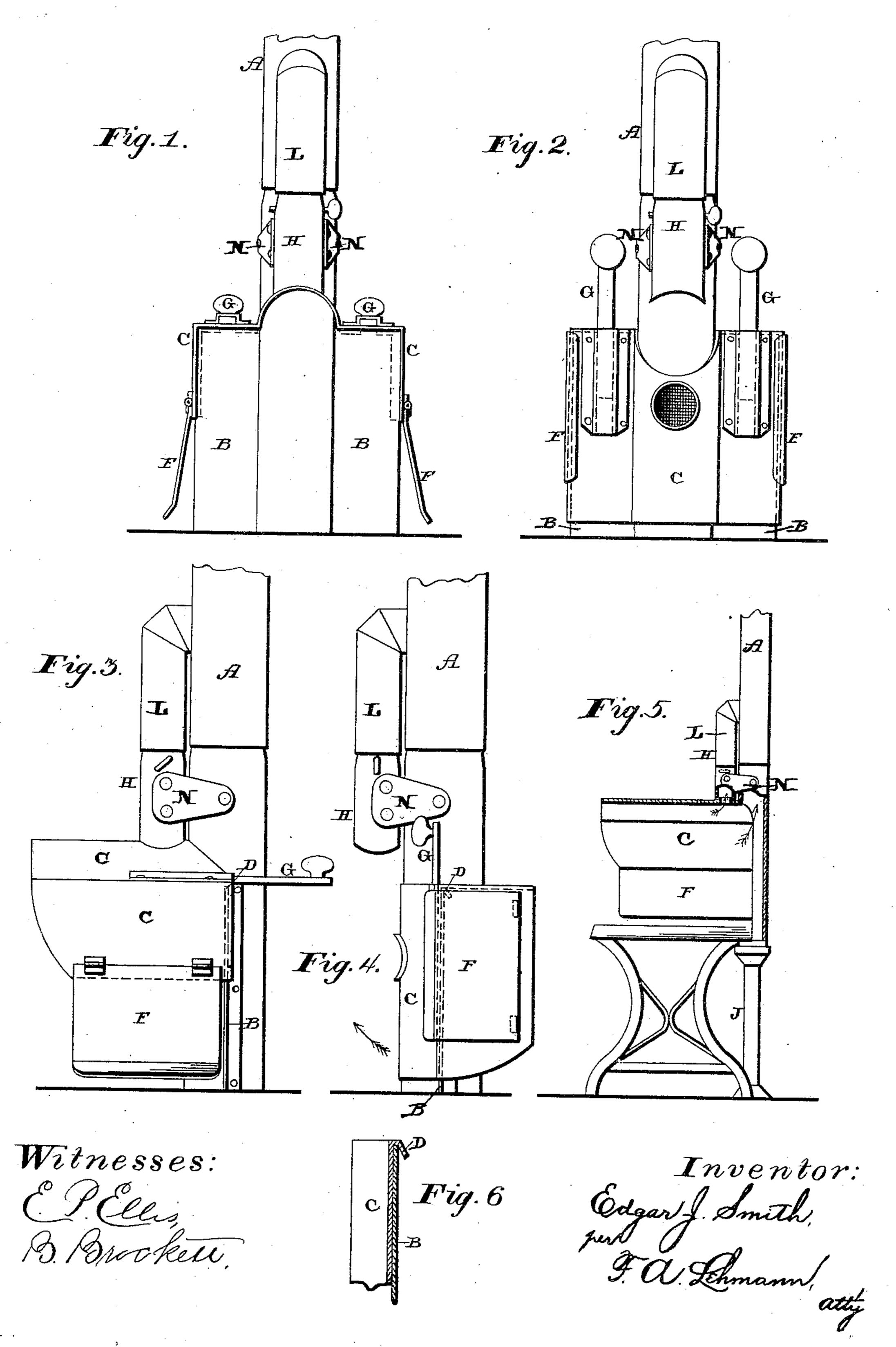
## E. J. SMITH. HOOD FOR STOVES.

No. 437,052.

Patented Sept. 23, 1890.



## United States Patent Office.

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## HOOD FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 437,052, dated September 23, 1890.

Application filed March 29, 1890. Serial No. 345,832. (No model.)

To all whom it may concern:

Be it known that I, EDGAR JAMISON SMITH, of Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Hoods for Coal, Wood, and Gasoline Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in hoods for coal, wood, and gasoline stoves; and it consists in the combination and arrangement of parts which will be fully described

hereinafter.

The object of my invention is to provide a hood for cooking-stoves of all kinds to catch and carry away the vapors which arise either from the stove or the articles being cooked, and which is adapted to be folded down against the front of the stove-pipe, so as to be entirely out of the way when not in use.

Figure 1 is a front view of a hood embodying my invention and showing the parts in position. Fig. 2 is a similar view showing the hood folded against the stove-pipe. Fig. 3 is a side elevation of the hood, showing it extended. Fig. 4 is a similar view showing the hood folded against the stove-pipe. Fig. 5 is a side elevation, partly in section, showing the hood applied to a vapor-stove. Fig. 6 is an enlarged detail sectional view showing the construction of the hooks by means of which the hood is hinged to the wings.

A represents an ordinary stove-pipe, to the opposite sides of the lower ends of which are rigidly secured in any suitable manner two supporting-strips B, which form the rear end of the hood. These strips project outward just far enough from the pipe to fit snugly inside of the hood C, which is supported loosely

thereon.

The hood C is made of light sheet metal or any other suitable material, and is preferably given the shape here shown. Its top portion extends outward just far enough to fit over the tops of the two supporting-strips B, and which has its rear edges bent downward, so as to form suitable hooks D, upon which the hood turns as upon a hinge. The two oppo-

site sides of the hood extend downward any desired distance, and to their lower edges are hinged the folding wings F, which can be 55 turned up out of the way when no longer needed. When these wings are turned downward, they nearly reach to the top of the stove, and thus serve to catch all of the vapors escaping from the article being cooked, or the 60 gases from the fuel being used in the stove, to prevent them from escaping into the air of the compartment in which the cooking is being done. The rear edges of the sides of the hood are bent backward, so as to catch against 65 the vertical edges of the supporting-strips, and thus form joints at this point and prevent the hood from being raised at its front edge above a horizontal position by the adjustable counter-weights G, which are applied 70 to the rear of the hood, as shown. These weights consist of weighted rods, which are inserted into suitable pockets formed upon the top of the hood, and which weights are made adjustable back and forth in the pockets, so as 75 to just counterbalance the hood, and these weights extend above the pivotal point D when in a horizontal position, so that when the hood is in a vertical position they will be in front of the pivotal point, as shown in Fig. 80 4, and not only cause it to move smoothly, but to hold it in position when turned down against the front of the stove-pipe.

Through the top of the hood is formed an opening, and to this opening is connected the 85 vertical pipe H, which carries away the vapors and gases, and which may either be connected at its upper end to the stove-pipe or extend directly to the flue without being connected to the pipe. This pipe H may be rig- 90 idly attached at its upper end to the lower end of the pipe L, or it may be supported and held in its proper position by means of the plates N, as here shown, which are secured to the said pipe and to the main pipe A. In 95 this pipe is preferably placed a damper, so as to prevent the draft of the stove from being interfered with when the fire is first started. This pipe will always be used in connection with the hood where the hood is applied to a 100 wood or coal cooking-stove; but if the hood is to be applied to a vapor-stove this pipe may be dispensed with as not necessary, as shown in Fig. 5. When the hood is turned

down, the connection between the hood and this vapor-pipe is destroyed; but when the hood is returned to position the lower end of the vapor-pipe catches over the flange formed upon the top of the hood, so as to make a

joint at this point.

When this hood is to be applied to a vaporstove, a pipe of any suitable construction is
employed, and is supported upon a pipe or
tube J, which is made conical at both of its
ends, and which is placed beside the vaporstove, as shown in Fig. 5. No extra vaporpipe is needed in this case, for then an opening is made through the front of the stovepipe A, as shown, and all of the gases and
vapors then rise into this opening, which extends as high as the under side of the hood
itself.

Having thus described my invention, I co claim—

1. The combination of the stove-pipe, a separate vapor-pipe extending from the top of the hood, and supporting-strips secured to opposite sides of the stove-pipe, the hood placed upon the supporting-strips and having an opening through its top to make connection with the vapor-pipe, substantially as shown and described.

2. The combination of a pipe, the vertical 30 plates which extend laterally from the pipe, a hood hinged at its upper and inner end upon the plates, and an opening in the smoke-

pipe for conveying away the vapors, substantially as described.

3. The combination of a pipe, vertical plates 35 which extend laterally therefrom, a hood having an open rear end which is hinged upon the plates, whereby when the hood is raised the plates close the rear end of the hood, and a connection between the hood and smoke- 40 pipe for conveying away the vapors, sub-

stantially as specified.

4. The combination, with a stove-pipe, of a hood loosely connected at its rear end to be turned up or down, and weights connected to 45 the hood in rear of the said point of connection, and a connection between the hood and smoke-pipe for conveying away the vapors, substantially as shown.

5. The combination, with a stove-pipe, of a 50 hood loosely connected at its rear end to be turned up or down, and weights connected to the hood in front of and above the said point of connection when it is raised, for the purpose described, and a connection between the 55 hood and smoke-pipe for conveying away the vapors, substantially as shown.

In testimony whereof I affix my signature in

presence of two witnesses.

EDGAR JAMISON SMITH.

Witnesses:
F. J. Kale,
Thos. Hickerson.