

No. 712,377.

Patented Oct. 28, 1902.

H. B. HEMPHILL.

VENTILATING ATTACHMENT FOR STOVEPIPES.

(Application filed Nov. 20, 1901.)

(No Model.)

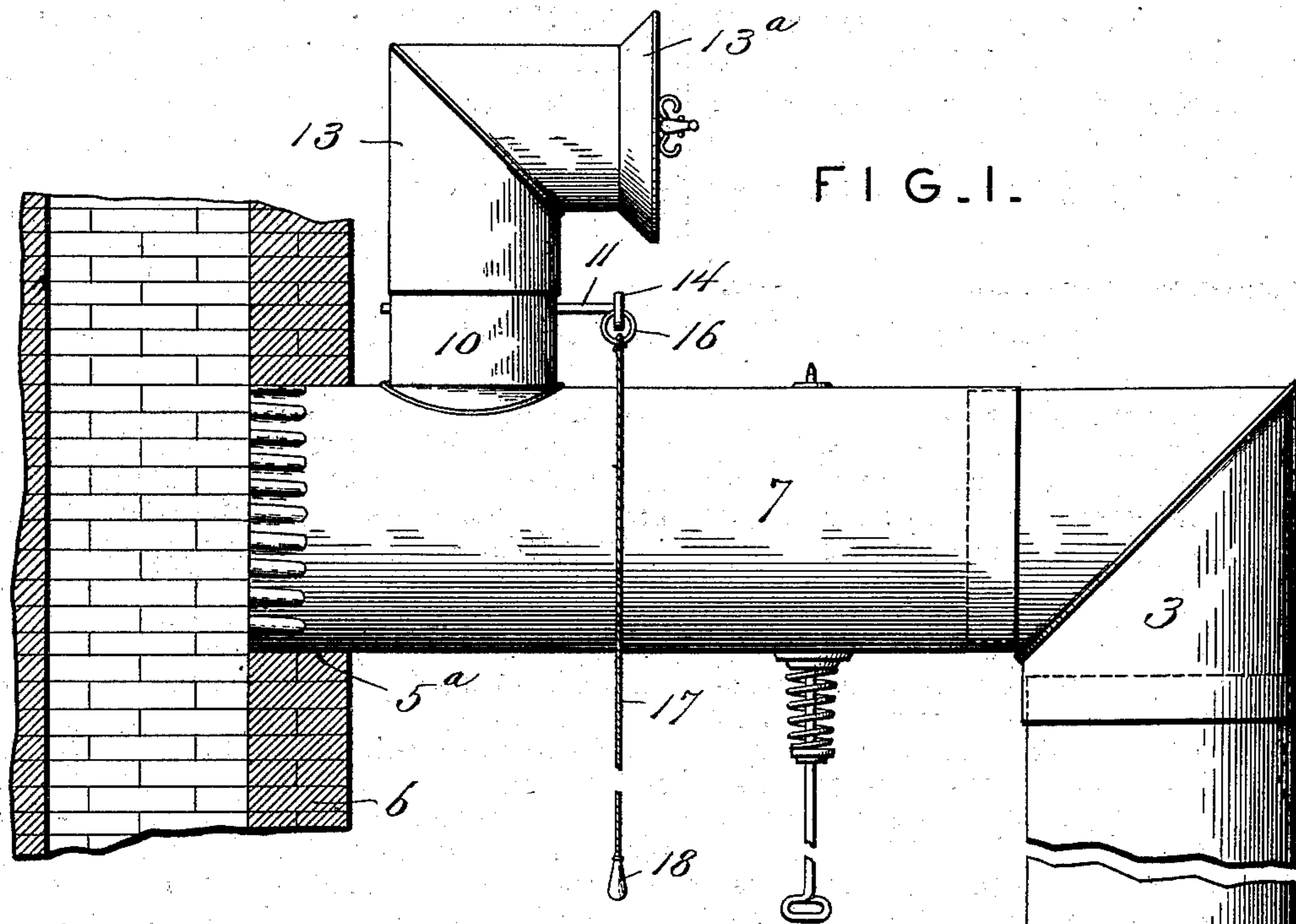


FIG. 1.

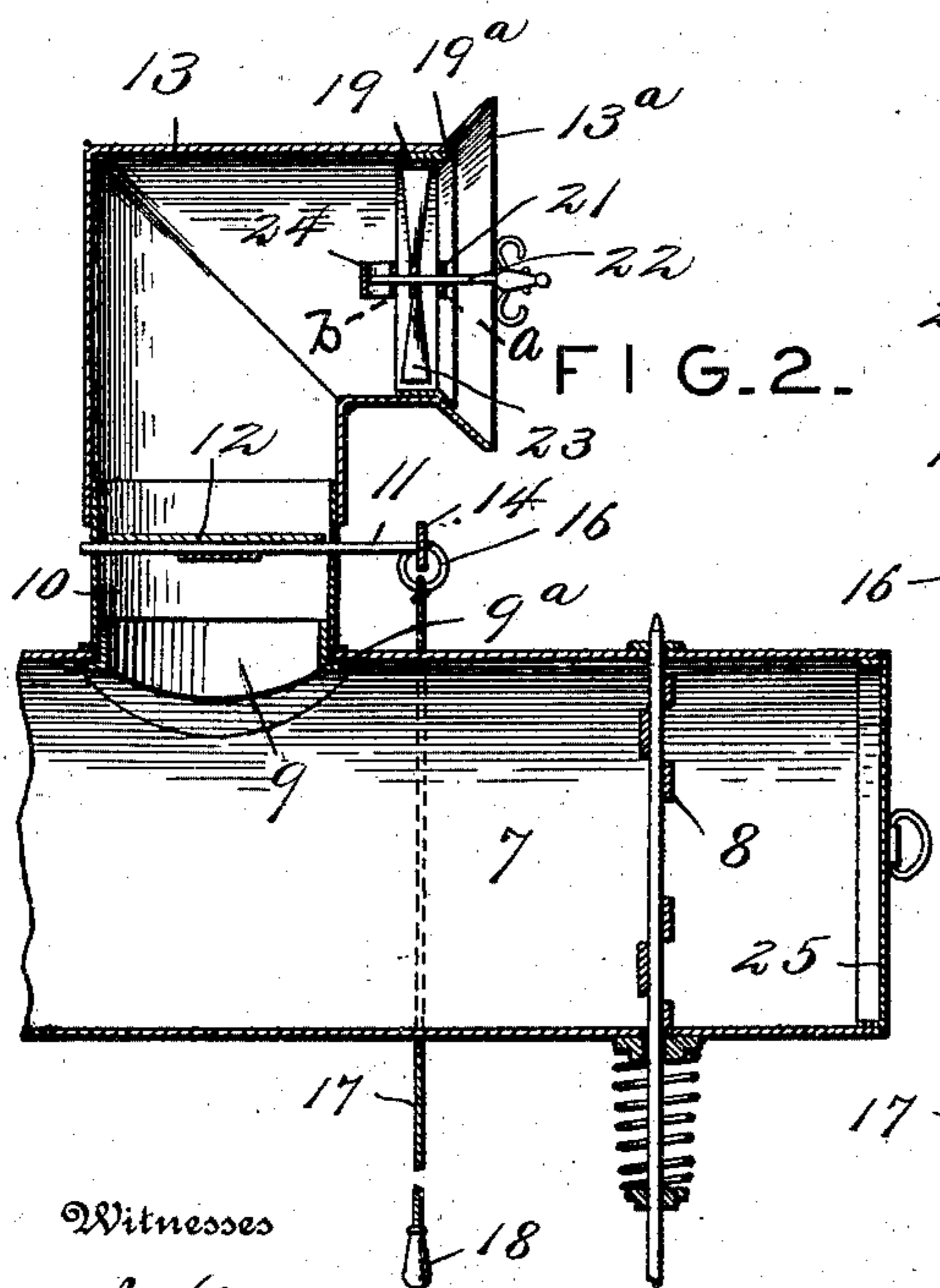


FIG. 2.

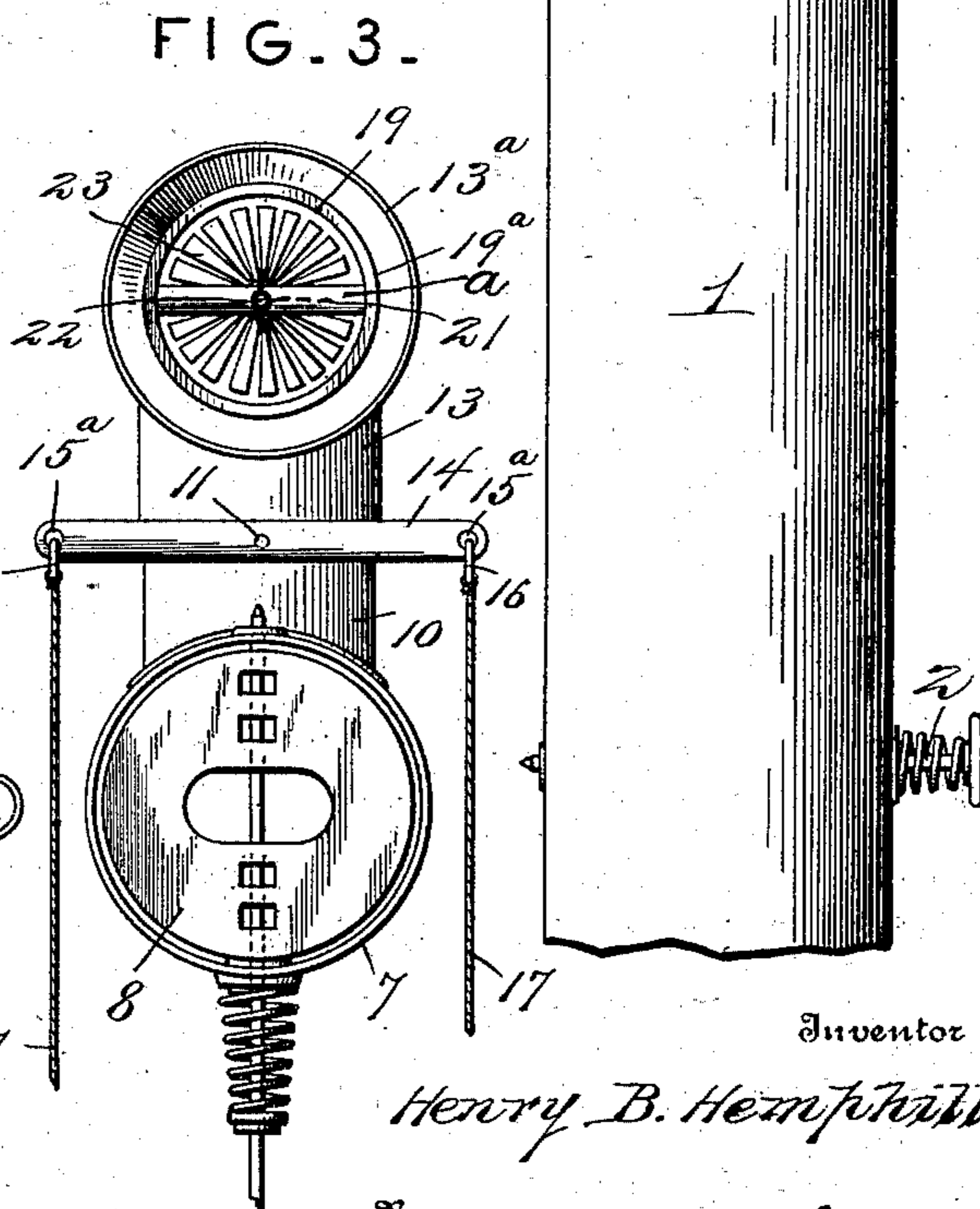


FIG. 3.

Witnesses

H. L. Amer.
Walter Allen

Inventor

Henry B. Hemphill.

By

Victor J. Evans.
Attorney

UNITED STATES PATENT OFFICE.

HENRY B. HEMPHILL, OF STONEFORT, ILLINOIS, ASSIGNOR OF THREE-
FOURTHS TO WILLIAM A. GAUNT, MONROE DOTY, AND GEORGE A.
BARTLESON, OF NEW GRAND CHAIN, ILLINOIS.

VENTILATING ATTACHMENT FOR STOVEPIPES.

SPECIFICATION forming part of Letters Patent No. 712,377, dated October 28, 1902.

Application filed November 20, 1901. Serial No. 83,030. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. HEMPHILL, a citizen of the United States, residing at Stonefort, in the county of Saline and State of Illinois, have invented new and useful Improvements in Ventilating Attachments for Stovepipes, of which the following is a specification.

This invention relates to that class of ventilators which comprises a pipe connected with a stovepipe between the stove and the chimney, whereby the draft of the chimney is utilized for the purpose of creating a suction through the ventilating-pipe.

The object of my invention is to increase the efficiency of such ventilators of the above general character and to secure a perfect ventilation at all times without interfering with the draft of the stove.

Another object of my invention is to provide a ventilating attachment which can be readily connected with the outer end of the stovepipe and the opening in the chimney.

The invention consists in certain novel features and in the arrangement and construction of parts hereinafter described by which the increased efficiency referred to is obtained in view of the well-known limitations in the use of the chimney-draft for such purposes.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved ventilating attachment, showing it connecting a stovepipe with a chimney. Fig. 2 is a vertical longitudinal section of the ventilating attachment, and Fig. 3 is a front elevation thereof.

Referring to the drawings, 1 is a vertical stovepipe provided with a damper 2 and having connected to its upper end an elbow 3, which is ordinarily connected with a horizontal pipe-section inserted in the opening 5^a of a chimney 6. In the place of this horizontal pipe-section I locate my ventilating attachment. This attachment is constructed with a horizontal pipe-section 7, having a damper 8 adjacent to its outer end and a thim-

ble 9 adjacent to its inner end, having a flange 9^a, whereby it is secured to the horizontal pipe-section. This thimble is of approximately one-half the diameter of the horizontal pipe-section. Connected with this thimble so as to extend at a right angle to the horizontal pipe-section is a coupling pipe-section 10. This coupling pipe-section extends vertically from the upper side of the horizontal pipe-section, so as to be located between the latter and a point adjacent to the ceiling of the room.

11 is a damper-shaft pivotally arranged across the coupling-section and having suitably mounted and secured thereon a damper 12, whereby the draft through the ventilator may be regulated. To the projecting end of the shaft is fixed a cross-bar or damper-lever 14, having perforations 15^a at its respective ends, wherein are loosely secured rings 16, to which are dependingly secured chains, cords, or rods 17, provided with handles 18, whereby the damper may be operated as desired.

Detachably secured to the upper end of the coupling pipe-section is an elbow 13, formed at its free end with a flaring flange 13^a and mounted on the coupling-section, so as to be turned thereon and having one portion parallel with the ceiling to take in air from different directions from the room as may be convenient and desired. Within the entrance to the elbow is fitted a circular frame 19, provided with a flaring annular flange 19^a at its outer end adapted to lodge and seat against the base portion of the flaring flange of the ventilator-elbow. Diametrically across the circular frame are secured parallel bars *a b*, provided at their middles with bearing-apertures 21, in which is journaled a shaft 22, on which is mounted a fan-wheel 23, whereby the force of the draft through the ventilator may be indicated. On the inner bar *b* may be provided a lug 24 to prevent the shaft extending too far inward in its bearings.

It is well known that ventilators of this type have employed a pipe attached to the stovepipe and extending to within a short distance of the ceiling for the purpose of drawing off

the air of the room at that point where it is the most vitiated; but such ventilators, opening as they do to the ceiling and directly above the stove, take the air from that section and in such a gradual manner as not to bring about immediate results and often no substantial result at all, owing to the draft which can be utilized for this purpose being very slight and its force being dissipated on the air immediately surrounding the ventilator-entrance without causing an effective circulation of the air in the room. From the foregoing description it will be seen that not only has the choking effect of the ceiling been removed by the employment of an extension paralleling the ceiling and opening to the wall opposite to the chimney-wall, thus giving direction and movement to the air in the farthest portions of the room, but also making immediate the ventilation of certain portions of the room most needing ventilation by turning the horizontal pipe to assume the desired direction. By the direction or control of the draft in the above manner in the upper air of the room the results have been found to be effective even when the draft is slight on account of the requirements of the stove for its utilization.

A great advantage in the construction of the ventilating attachment is the fact that it can be readily fitted in the place of and substituted for the ordinary elevated pipe-section, which extends horizontally from the stovepipe to the chimney, and is entirely out

of the way, while in the best location possible for ventilating. 35

25 is a cap for the outer end of the horizontal pipe-section for closing the same when the stovepipe is removed for any reason.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent: 40

In a ventilator for stovepipes, the combination with a horizontal pipe-section, a thimble with a flange secured thereto, an intermediate coupling mounted on the thimble, a damper pivoted in said coupling having a lever centrally pivoted therewith, and means at the opposite ends of the lever for operating the damper, of a movable elbow mounted on the coupling and having one portion parallel with the ceiling and at the open free end a flaring flange, a circular frame provided with a flaring flange which is adapted to be connected to the flaring flange on the free end of the elbow, and spaced-apart parallel bars located diametrically across the circular frame having central bearing-apertures in which is journaled a shaft having a fan mounted thereon between said spaced-apart parallel bars, substantially as specified. 50 55 60

In testimony whereof I affix my signature in presence of two witnesses.

HENRY B. HEMPHILL.

Witnesses:

W. J. RIDGEWAY,
LON BEGGS.