10.64,415. Patented May 1.1867. Witnesses: William Thay

Anited States Patent Office.

WILLIAM T. GRAY, OF GALESBURG, ILLINOIS

Letters Patent No. 64,415, dated May 7, 1867.

STOVE-PIPE DAMPER.

The Schedule referred to in these Netters Patent und making part of the same.

Be it known that I, WILLIAM T. GRAY, of Galesburg, in the county of Knox, and State of Illinois, have invented a new and useful Apparatus for Regulating the Draught and Heat of Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a top view.

Figure 2, a bottom view; and

Figure 3, a side view.

The nature of my invention consists in providing a revolving or reversible register attached to the stove pipe on the inside by means of an axle running through the pipe, to which axle is attached a circular metal plate over a fan-wheel, which is surrounded by a metal ring of sufficient width to fill the space between the edge of the fan-wheel and the inside of the pipe, in such a manner that when the circular metal plate is above the wheel, the heat and ordinary draught in the chimney revolve the fan-wheel, causing an increased draught in the stove, and when the metal plate is turned under it operates as an ordinary damper.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

I first construct the axle D D in fig. 3, to which is attached the ring or circular strip F F in fig. 2. Then, by means of the pivot C, fig. 3, I attach the fan-wheel a a a in such a manner that it will revolve on the pivot. Then, on top of the pivot C is securely fastened the circular plate B B, as shown in fig. 1. The whole is then placed inside the pipe, by resting the axle or cross-bar D D in notches cut in the top of a joint of pipe. Then, if a strong draught is desired, the axle is revolved until the circular plate B B is above and at right angles with the pipe, as in fig. 1, A A showing the stove pipe, and F F the ring. When in this position the fan-wheel will revolve, causing an increased draught. If it is desired to cut off the draught the whole apparatus is reversed, turning the circular plate below, as in fig. 2, the circular plate preventing the draught or heat from revolving the fan-wheel. By turning the apparatus to a vertical position, as in fig. 3, the passage is opened, and about the ordinary draught of the chimney is permitted. The whole apparatus is held in any desired position by means of the coiled wire spring E on the end of the axle pressing against the stove pipe.

What I claim as my invention, and desire to secure by Letters Patent, is-

The combination and arrangement of the fan-wheel with the circular plate and ring, the parts being arranged and operating in the manner and for the purposes specified.

Witnesses:

O. F. PRICE,

THOS. P. STEWART.

WILLIAM T. GRAY.