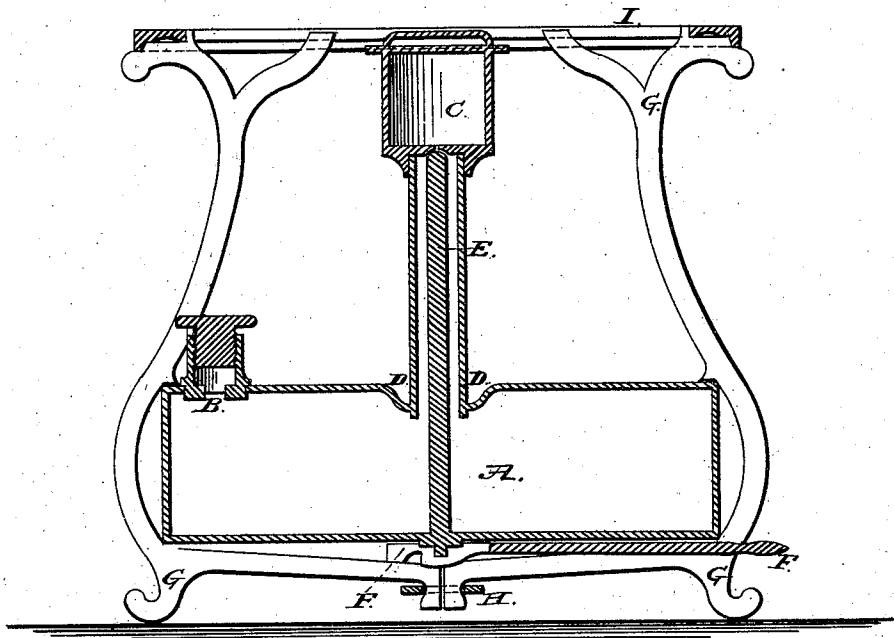


T. B. JEFFERY & F. ROSENGREN:

VAPOR-BURNING STOVE.

No. 174,366.

Patented March 7, 1876.



Witnesses:
G. B. Durkee.
C. W. Willard.

Inventor:
Frank Rosengren
Thos. B. Jeffery

UNITED STATES PATENT OFFICE.

THOMAS B. JEFFERY AND FRANK ROSENGREN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN VAPOR-BURNING STOVES.

Specification forming part of Letters Patent No. **174,366**, dated March 7, 1876; application filed August 4, 1875.

To all whom it may concern :

Be it known that we, THOMAS B. JEFFERY and FRANK ROSENGREN, of Chicago, Illinois, have invented Improvements in Vapor-Burning Stoves, of which the following is a specification:

The improvements consist in the construction of a receptacle for fluid to heat the stove for the purpose of producing vapor; in the means employed for regulating the escape of vapor for combustion, and in the frame for supporting the stove and regulating device, all which is more fully set forth in the accompanying drawing, Figure 1, which is a sectional view of the apparatus.

The reservoir A of the stove is filled with fibrous packing. An orifice for saturating the packing with gasoline, benzine, or other suitable fluid is placed at B, and an outlet for the escape of vapor to be consumed is placed at C. A hollow or depression in the top of reservoir at D is to receive alcohol, benzine, or gasoline, the purpose of which, when lighted, is to heat the stove, and produce vapor to be consumed at the outlet C. To regulate the escape of vapor at C, a stopper, E, is employed, one end of which is attached to the bottom of the reservoir. The other end is adjusted near the outlet C, so that any movement that will bring the bottom of the reservoir and the outlet nearer together will bring the stopper in contact with the outlet, and lessen or entirely stop the escape of vapor. Releasing the pressure will remove the stopper and allow the vapor to escape, the top and bottom of the stove-reservoir being made of thin elastic metal, and either or both may be compressed for this purpose.

We prefer to press upward the bottom, and for that purpose use a cam, F. This cam is capable of being turned on its axis about one-third of a revolution to the right or left, and

is essentially a portion of a three-threaded screw, each thread of which is supported by one of three legs, G G, which have extensions that reach under and to the center of the stove. The legs are held together under the cam by a small ring, H, and above the reservoir by another and larger ring, I, being prevented themselves from coming together, and are pressed lightly against the rings, by the stove-reservoir, which is thereby held in place to be operated by the cam F.

It is evident that the stove-reservoir may be pressed (for operating the stopper) on the top with the same result as on the bottom, and a lever, wedge, or other equivalent may be used; but we prefer the cam to press upward the bottom.

Instead of the recess at D, a cup has been attached onto and above the top of the reservoir; but this device forms another piece, and is not so effective in heating the apparatus. We do not claim a cup.

What we claim, and desire to secure by Letters Patent, is—

1. A recess formed in the top of the reservoir of a vapor-burning stove, for the purpose set forth.

2. A stopper, E, attached to and in combination with an elastic metal reservoir of a vapor-burning stove, substantially as described, and for the purpose set forth.

3. A cam, F, in combination with the stove bottom and legs, as set forth.

4. The combination of the rings H and I, legs G, and reservoir A, substantially as set forth.

THOS. B. JEFFERY.
FRANK ROSENGREN.

Witnesses:

G. B. DURKEE,
A. M. WILLARD.