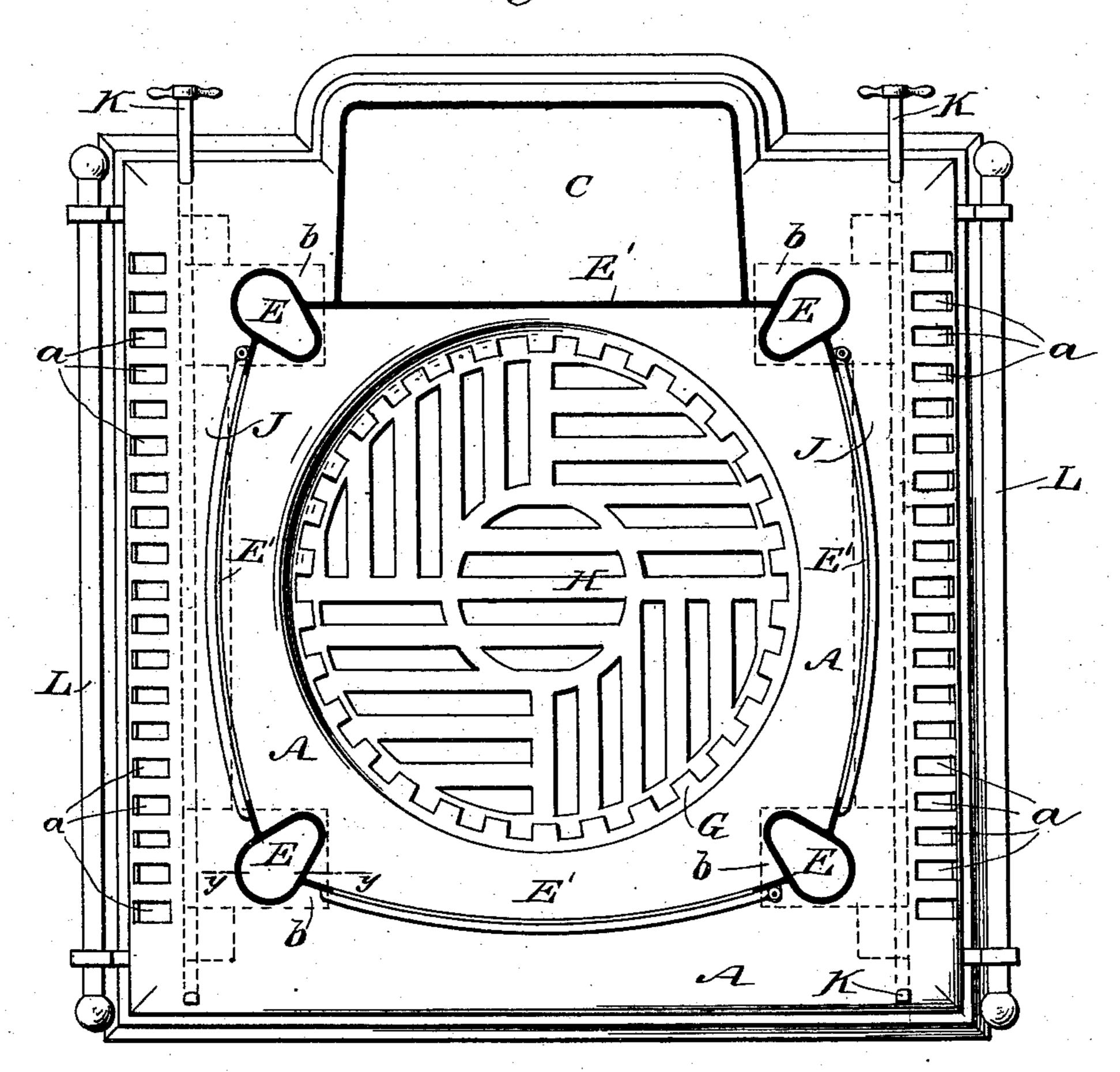


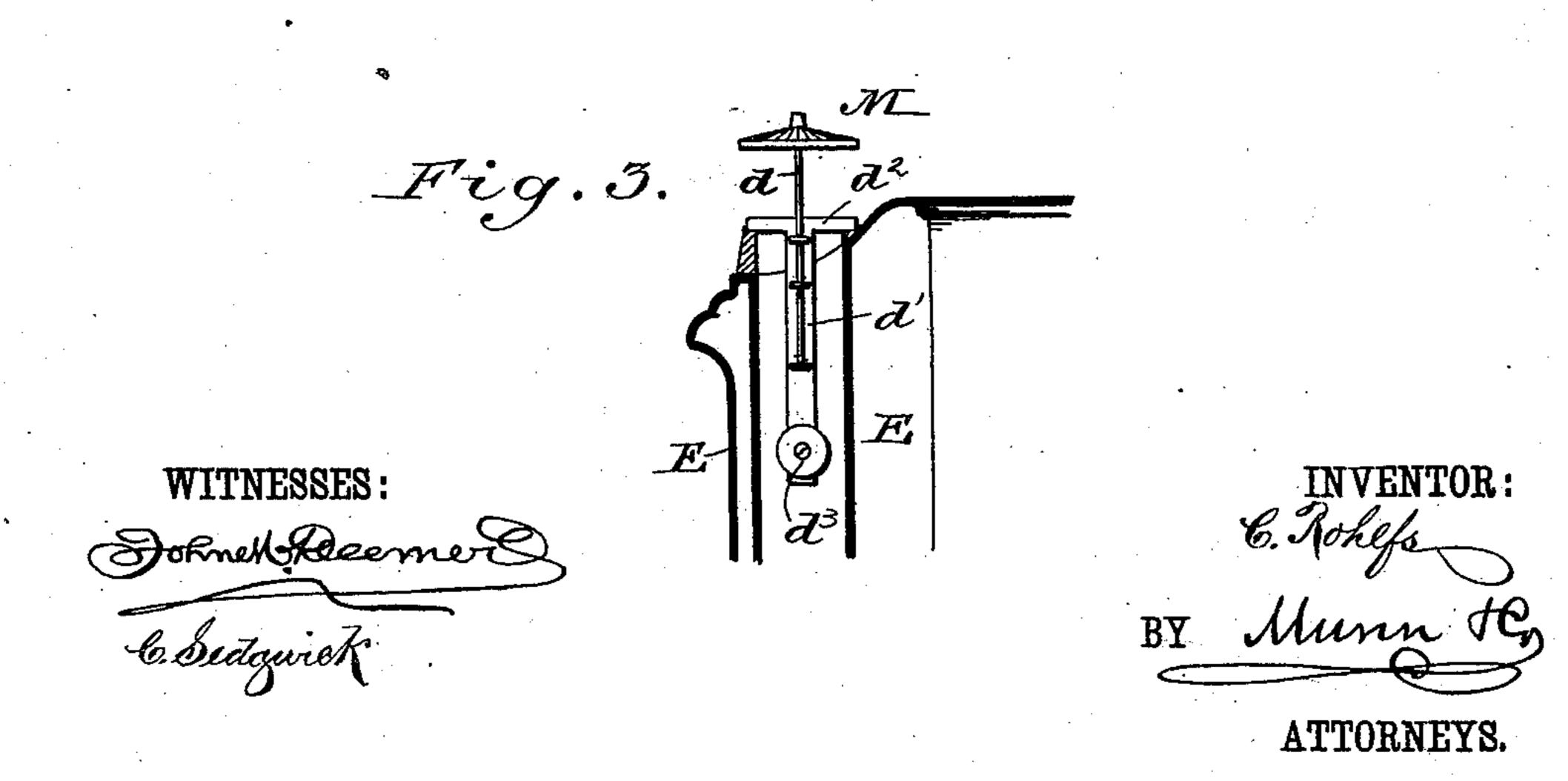
C. ROHLFS. STOVE.

No. 360,784.

Patented Apr. 5, 1887.

Fig. 2.





United States Patent Office.

CHARLES ROHLFS, OF BROOKLYN, ASSIGNOR TO JOSIAH JEWETT, OF BUFFALO, NEW YORK.

STOVE.

SPECIFICATION forming part of Letters Patent No. 360,784, dated April 5, 1887.

Application filed August 12, 1886. Serial No. 210,754. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ROHLES, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Stove, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical sectional elevation of my new and improved stove. Fig. 2 is a sectional plan view of the same, taken on the line x x of Fig. 1; and Fig. 3 is a detailed view taken at the top of the stove on the line y y of Fig. 2.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

A represents the base of the stove, which in this instance is made substantially square in form. Within the base A are placed the ash-pit B and flue-space C, each made of considerably less area than the base A to form the air-space D D'. At the side edges of the base A are formed numerous slots, a, which communicate with the air-space D D', for the escape of heated air from the said space.

Rising from the base A is the main body of 30 the stove, composed of the hollow corner-posts or columns E and the inclosing panels or walls E'. The lower ends of the columns E communicate with the air-space D D', and they are open at the upper ends to conduct the heated 35 air from the space D D' through the top of the stove. The edges of the inclosing panels or walls E' of the body of the stove join the sides of the columns E, so that the latter constitute a part of the body of the stove, so that while 40 they serve as conduits for heating the air ascending from the floor they at the same time give an ornamental outline to the body of the stove, and all without increasing the cost of the stove and without the necessity of fitting the 45 interior of the body of the stove with pipes or tubes, which are expensive, liable to burn out, and liable to get out of order.

Within the main body of the stove is placed the feeder F and fire-pot G, below which latter so is placed, at the top of the upper ash-pit, B, the fire-grate H. Along each side of the stove,

parallel with the series of openings a, is placed a damper, J, attached to a rod, K, by which the damper may be turned to open or close the slots a. Each damper-rod K is provided with 55 two plates, b, of considerable width, and these are arranged on the damper-rod in line with the lower ends of the hollow columns E in such a manner relatively to the long narrow dampers J that when the latter are turned to open 60 the slots a the plates b will close the lower ends of the said columns E, and thus direct all the heated air in the air-space D D' to the slots a. When the damper K is turned to close the slots a, the plates b fall to a vertical position 65 and open the lower ends of the columns E.

The object of the air-space D D' and the slots a a is primarily for warming the feet, and for this purpose I secure a foot-rail, L, at the sides of the base A, as shown clearly in 70 Fig. 1. Another object of the space D D' is to create a current of air from the floor up through the said space and up through the hollow columns E, where it becomes highly heated and enters the room at the top of the stove.

To ornament the stove and to show the force of the current of air passing up through the columns, I arrange at the upper end of each hollow post a wind-wheel, M, attached to a rod, d, stepped within the columns, so that 80 the upward current of air will cause the wheel to rotate. The rod d is held to a plate, d', of sheet-iron, formed with a cross-bar, d^2 , that rests on the upper end of the hollow column, and the lower end of the plate d' is weighted, 85 as shown at d^3 , to keep the plate and the wind-wheel in upright position.

By forming the stove with the open heatingspaces at the base, and by forming the body with the hollow columns E' as a part of the 90 body of the stove, I seek to gain the greatest possible heating effect at the lowest cost, while at the same time the stove is made attractive in appearance and practical by the parts which accomplish the increased utilization of 95 heat.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the stove-body, formed 100 with an open air-heating space at the bottom and the slots a, opening outside of the stove at

the top of said space, the upright hollow columns communicating with the said air-heating space and open at the top, and suitable dampers arranged to close the said slots and 5 the hollow columns, substantially as and for the purposes set forth.

2. The combination of the stove-body, formed with an enlarged air-heating space at the base and the slots a, opening outside of the stove at

the top of the said space, the upright hollow columns communicating with the air-heating space, and the dampers Jb, mounted at an angle to each other upon the same shaft, arranged substantially as and for the purposes set forth. CHARLES ROHLFS.

Witnesses:

H. A. WEST, C. SEDGWICK.