C. NOBLE.

Heating-Stove.

No. 160,222 Patented Feb. 23, 1875.

FIG. 1.

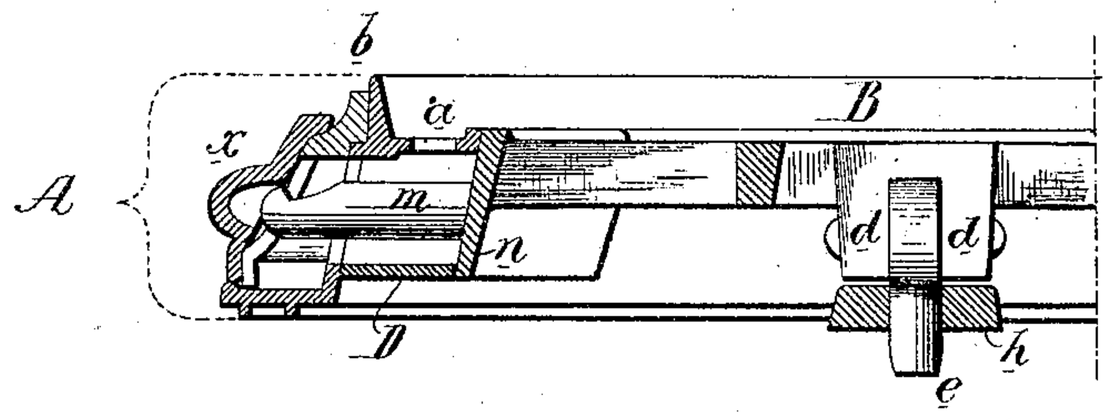
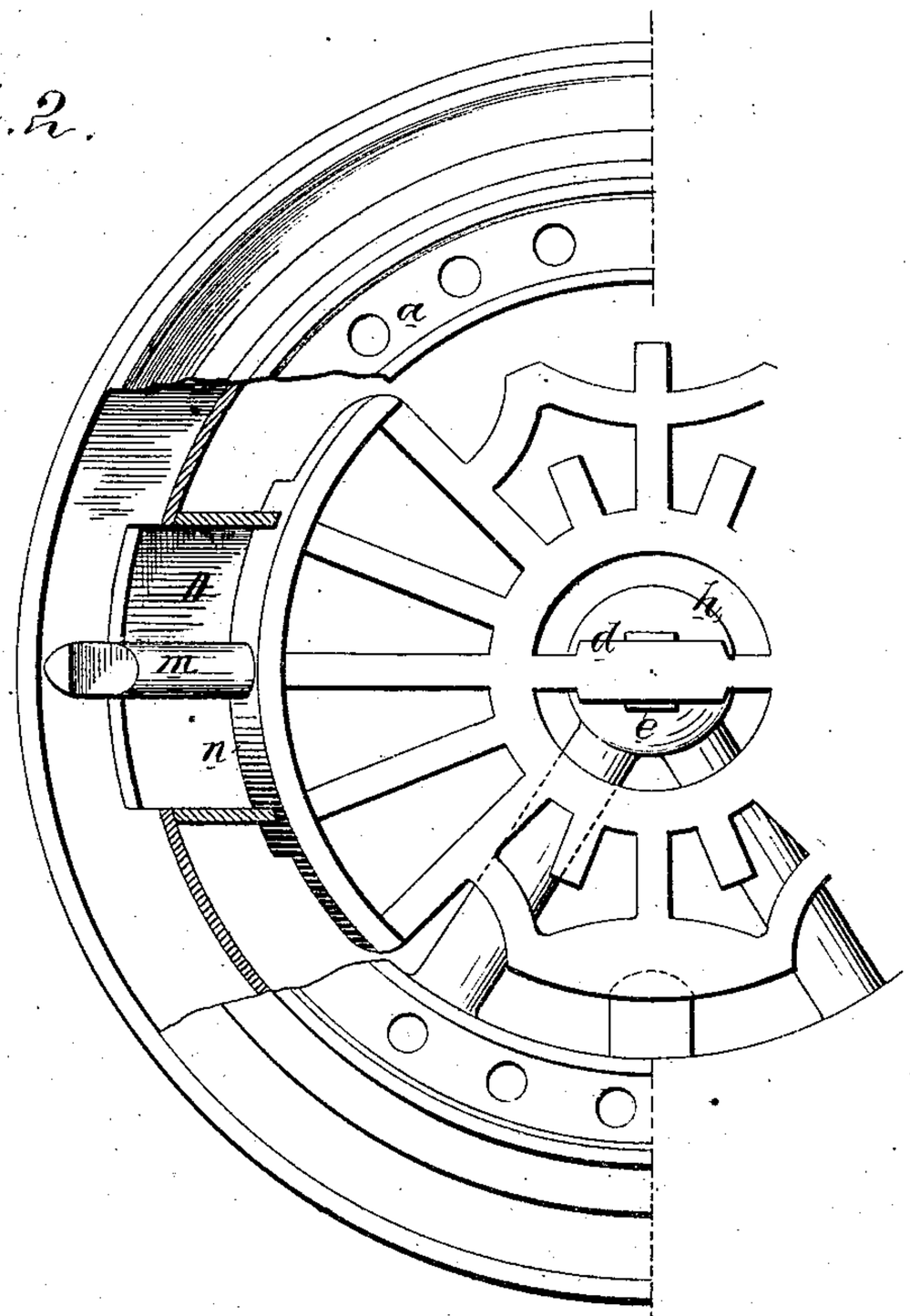


FIG. 2.



Witnesses, Hybert Howson
Thomas McIlvain

Charles Noble
by his Attys
Howson and Son

UNITED STATES PATENT OFFICE.

CHARLES NOBLE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CHARLES NOBLE, M. D., CHARLES NOBLE, AND FRANCIS P. NICHOLSON, OF SAME PLACE.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **160,222**, dated February 23, 1875; application filed October 7, 1874.

To all whom it may concern:

Be it known that I, CHARLES NOBLE, of Philadelphia, Pennsylvania, have invented an Improvement in Heating-Stoves, of which the following is a specification:

The object of my invention is to prevent the escape from a stove, during the agitation of the grate, of fine ashes through the opening into which the instrument for vibrating the grate is introduced; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section of sufficient of my improved grate to illustrate my invention; and Fig. 2, a plan view of Fig. 1, partly in section.

A represents a cast-iron ring, forming that portion of a stove which rests on the casing of the ash-chamber, and which supports the fire-pot and casing of the combustion-chamber, the said fire-pot resting on the flange *a*, and the casing surrounding the same being contained within the flange *b*. B is the grate, having central pendent lugs *d d*, to which is hinged a pivot, *e*, passing through and arranged to turn in a fixed projection, *h*, on the ring A, so that the grate can be either tilted or vibrated, in a manner more fully described in a separate application for a patent, bearing even date herewith, by Charles G. Marshall, assignor to Charles Noble & Co. On the edge of the grate is a projecting pin, *m*, for receiving a suitable instrument, by which the grate can be agitated. This projection usually passes through an opening in the ring A of such dimensions that a proper vibrating movement may be imparted to the grate, and through this opening must pass more or less of the fine dust or ashes when the grate is agitated. In order to prevent this, I cast on the inside of the ring A a hollow projection, D, which extends very nearly to a segmental flange, *n*, on the grate. This flange, with the hollow projection D on the ring A, forms a recess or pocket, containing the projection *m* of the grate, a small door, *x*, being hinged to the said ring A, so as to close or expose the said pocket. The segmental flange *n* is of such a length that the grate can be vibrated to a sufficient extent without uncovering the pocket, to which no ashes can consequently gain access.

It will be seen that in the grate above described there are no loose parts, that the closing-flange *n* may be cast with the grate, and that the hollow projection D may be cast with or riveted to the ring A, the difficulty or expense of constructing these parts adding but little to the cost of the stove.

I claim as my invention—

The combination of the ring A, its hollow projection D, and the grate B, having a pin, *m*, extending into the said projection, and provided with a segmental curved flange, *n*, adapted to the curved edge of the projection D, all as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES NOBLE.

Witnesses:

HUBERT HOWSON,

HARRY SMITH.