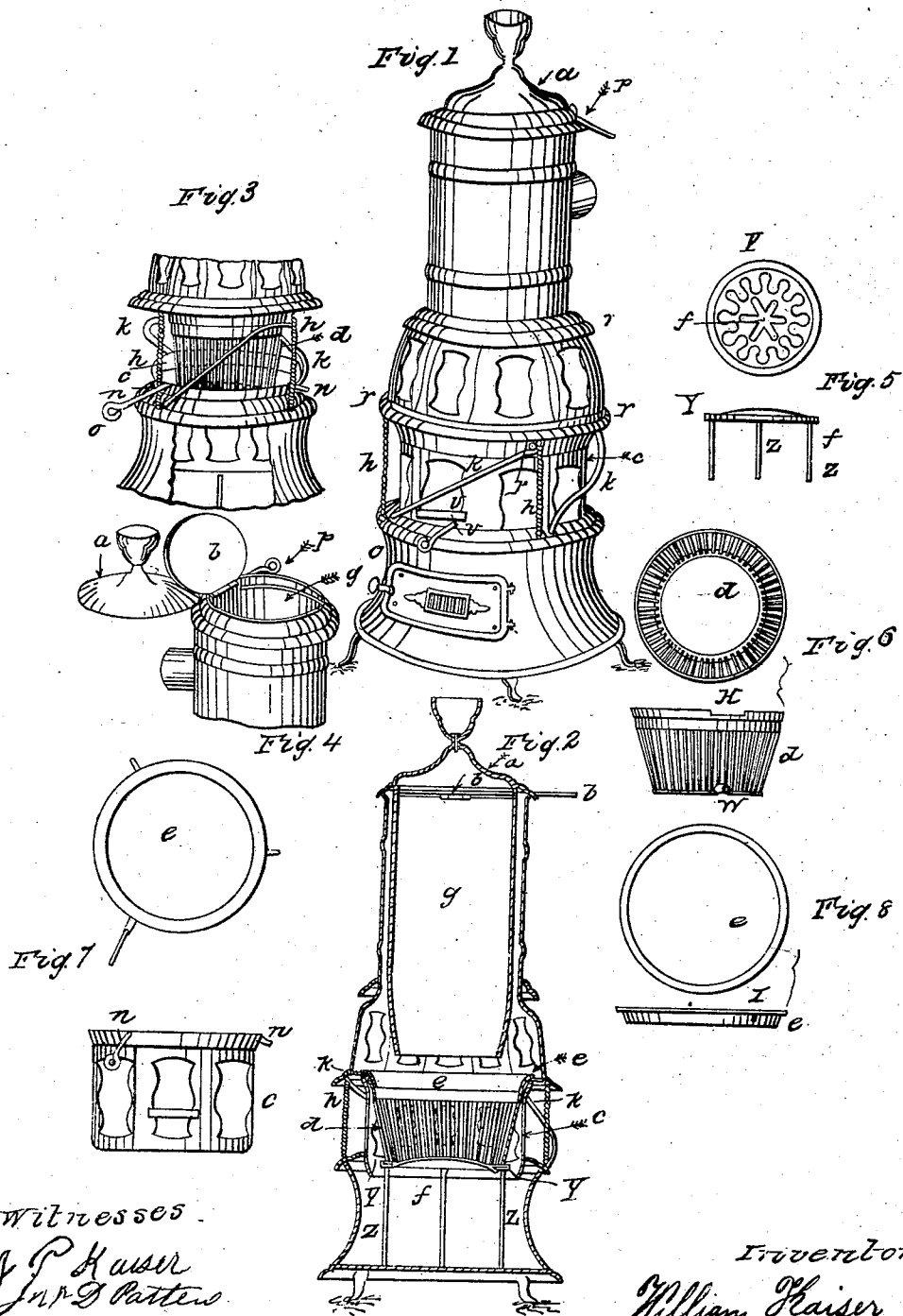


W. KAISER.
Magazine Stove.

No. 110,472.

Patented Dec. 27, 1870.



Witnesses.

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IMPROVEMENT IN BASE-BURNING STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

I, WILLIAM KAISER, of Wilkesbarre, in the county of Luzerne and State of Pennsylvania, have invented certain Improvements in Base-burning Heating-Stoves, of which the following is a specification.

The object of this invention is to construct an open fire-grate stove, whereby the heat of the fuel during combustion may be utilized through radiation without first passing through an outer casing of iron or mica, and the same can be thoroughly cleansed of slag and ashes without dust by the use of a revolving depressible ring or outer casing.

The invention consists in the arrangement of making an open cylinder grate revolve on its base, and in combination with a perforated depressible ring or outer casing, as hereinafter described.

Figure 1 is a perspective front view of a stove embodying my invention.

Figure 2 is a sectional view.

Figure 3 is a plan view of cylinder grate with revolving ring depressed.

Figure 4 is a top perspective view of magazine and cover.

Figure 5 is a top and side view of stationary grate and ring on which slides cylinder grate as shown.

Figure 6 is a top and side plan view of cylinder revolving grate.

Figure 7 is a top and side view of revolving depressible ring or outer casing.

Figure 8 is a top and side view of the stationary ring.

a is the urn which covers the magazine-cover *b*.

P is the rod by which the cover *b* is turned up after swinging off the urn *a* for the purpose of filling the magazine with fuel, when one is used.

h h are upright columns, which may be in such number and strength as are required to sustain all of the stove above them, external and internal.

k k are inclined rods, bolted or otherwise fastened to upright columns *h h*.

Inclined rods *k k*, on which slide projections *n n* on perforated ring or outer casing *c*, one of which is made to receive lever *O*, as shown in fig. 3, which, if turned to the right, elevates ring *c* up to and under ring *r r*, as shown in fig. 1.

By then withdrawing lever *O* and inserting it at *V* in puncture *W*, as shown in fig. 6, on cylinder grate *d*, and moved right and left, revolves grate *d* around stationary grate *f*, which cleans itself of slag and ashes, reference being had to the peculiar shape of stationary grate *f*, as shown at fig. 5.

Depressible ring or outer casing *c* must be raised in order to shake cylinder grate *d*, and thereby prevents any dust or ashes escaping while shaking, as shown at fig. 1.

Perforations on depressible outer ring or outer casing *c* show the condition of the fire while in the act of shaking cylinder grate *d*, as shown at fig. 1.

Ring *e*, as shown at fig. 2, is stationary, around which the top of cylinder grate *d* moves as far as a slot, *x*, as shown at fig. 6, being held by lug *l*, on stationary fire-ring *e*, as shown at fig. 8.

Cylinder grate *d* rests and slides on circular frame *Y Y*, which also supports stationary grate *f*, as shown at fig. 5. The whole is supported by studs or otherwise, as shown at fig. 2.

The outward-projecting flange on depressible ring or outer casing *c*, on which are attached lugs *n n*, as shown at fig. 3, conducts any fire or ashes that may fall out of cylinder grate *d*, while in use, into ash-pit or pan under stationary grate *f*, as shown at fig. 3.

For ordinary heating-stoves the magazine may be dispensed with, together with its necessary attachments.

I claim as my invention—

1. The arrangement and combination of the revolving depressible outer casing or ring *c* and the inclined rods *k k* and columns *h h*, as and for the purpose hereinbefore set forth.

2. The combination, with the revolving depressible ring or outer casing *c* and inclined rods *k k*, of the cylinder grate *d* and stationary grate *f*, substantially as and for the purpose hereinbefore set forth.

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Witnesses:

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