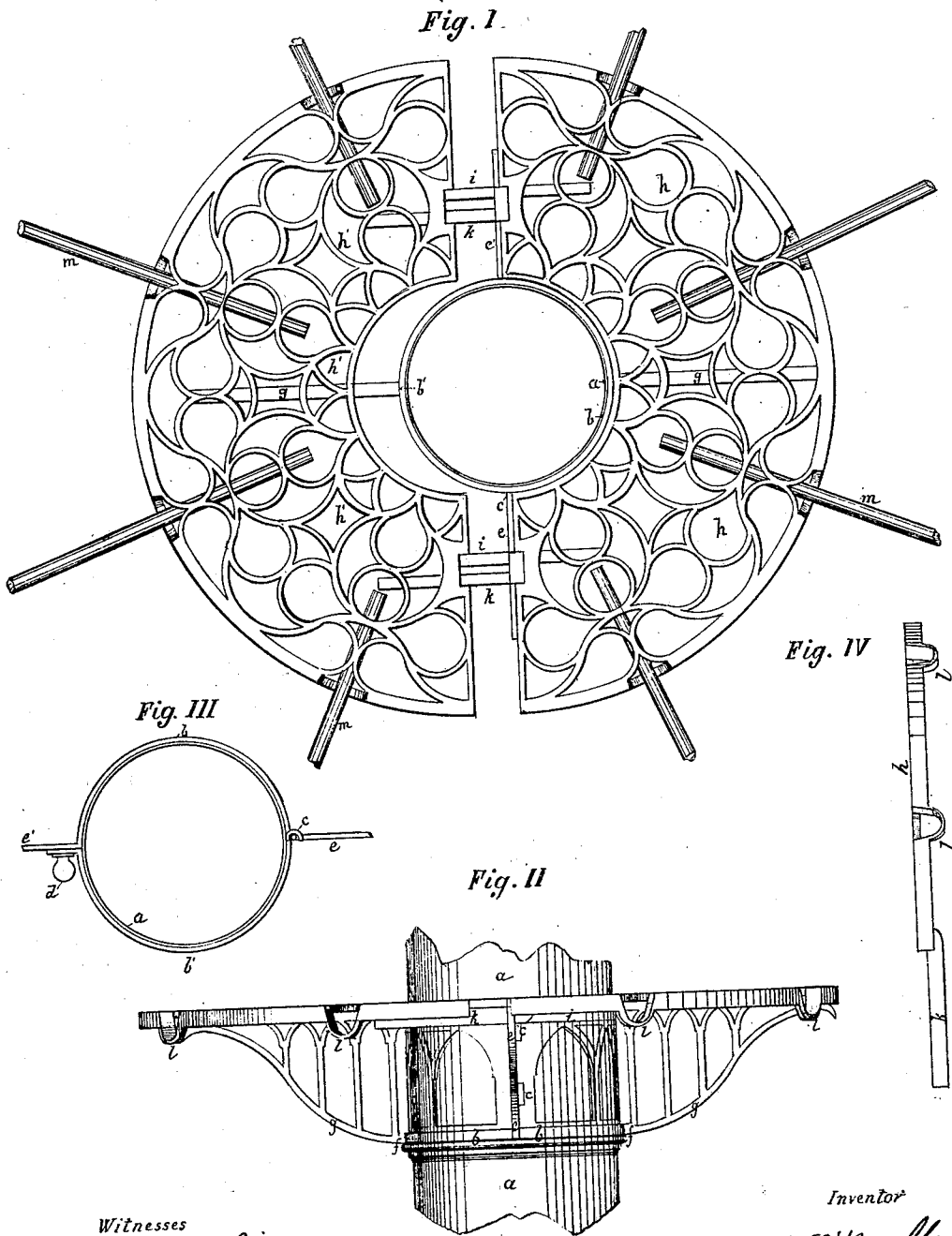


J. O. Malley,

Shoe Fite Steels.

No. 109043.

Patented Nov. 8. 1870.



Witnesses
Charles H. Simpson,
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JOSEPH O'MALLEY, OF MONTREAL, CANADA.

Letters Patent No. 109,043, dated November 8, 1870.

IMPROVEMENT IN STOVE-PIPE GRATES.

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

To all whom it may concern:

Be it known that I, JOSEPH O'MALLEY, of the city of Montreal, in the District of Montreal in the Province of Quebec, gentleman, have invented new and useful "Improvements on Warming and Drying Stove-Pipe Grate," 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 drawing, where—

Figure I represents a plan of the grate.

Figure II, an elevation of the grate.

Figure III, a detail of the grate.

Figure IV, a detail of the grate.

This invention relates to improvements on grates attached to stove-pipes, by which they may be made adjustable, and portable in case of removal, and at the same time better adapted to general convenience.

The objects in view by the use of these grates are:

First, by attaching them to the stove-pipe in the manner indicated, dishes, food, &c., may be kept warm in a very convenient manner.

Second, by suitable attachments, as hereinafter described, clothes, &c., may be hung around the warm stove-pipe for the purpose of drying.

In the drawing, similar letters of reference indicate like parts.

Letter *a* is the stove-pipe, of ordinary or suitable construction, clasped by a broad band, *b b'*, made in two parts, and attached together by means of two hinges *c*, on one side, made in the open hook form, more clearly shown in Fig. III, and on the other side by a thumb-screw, *d*, suitably provided and arranged for that purpose. The diameter of the band *b b'* is such that when the thumb-screw is screwed up the band securely grips the pipe. It is an open, fancy-worked one, as shown in Fig. II.

At the ends of the part *b*, two arms or brackets *e e'*, are formed, made in one piece with it.

In that marked *e*, the pins are formed for the hooks of the hinges attached at the end of the other half of the band *b'*, while the other arm, *e'*, is provided with a screwed hole for the purpose of receiving the end of the thumb-screw *d*.

At right angles to the two arms *e e'*, dovetailed or

other suitable catches *f*, are formed, one on each of the parts *b b'* of the band.

To these catches the brackets *g g*, by a suitable configuration of their ends for that purpose, are attached, and arranged to slip and unship at pleasure.

After these are in place, the circular grate, made in two halves, *h* and *h'*, is put in place.

The part *h'* is provided with two arms *i i* and *h*, with two arms *k k*, more clearly shown in Fig. IV, all of which enter into suitable openings formed in the arms *e e'*, and in this manner held in one direction, with the center of each half-grate resting upon the brackets *g*. They are securely held in place.

The arms *g* are provided with suitable notches, and on the lower side of the half-grates *h* and *h'*, corresponding catches are formed by which the grate may be moved out and set at given distances, as shown in the one-half *h'*, or they may be moved up and placed close by the band, as shown in the other half *h*.

In the outer ring of the halves of the grate a suitable number of "lugs" *l*, are formed to receive the rods *m*, of any suitable length and form. These are for suspending articles for the purpose of warming or drying. Others may be placed on the grate for a similar purpose.

Having now described the construction and operation of my invention, to which I have given the name of "Excelsior Warming and Drying Stove-Pipe Grate," I beg to state that I disclaim all other forms of stove-pipe grates now in use.

What I claim as my invention, and wish secured by Letters Patent, is the new and useful improvements on warming and drying stove-pipe grate, as follows:

The combination of the band in two halves *b b'*, hinges *c*, thumb-screw *d*, arms *e e'*, catches *f*, brackets *g*, halves of grate *h* and *h'*, arms *i i* and *k k*, lugs *l*, and rods *m*, all working together and in combination with the stove-pipe *a*, substantially in the manner and for the purpose described.

Montreal, 16th day of September, A. D. 1870.

Witnesses: JOSEPH O'MALLEY.

CHARLES G. C. SIMPSON,
PIO GIOBBE.