

(No Model.)

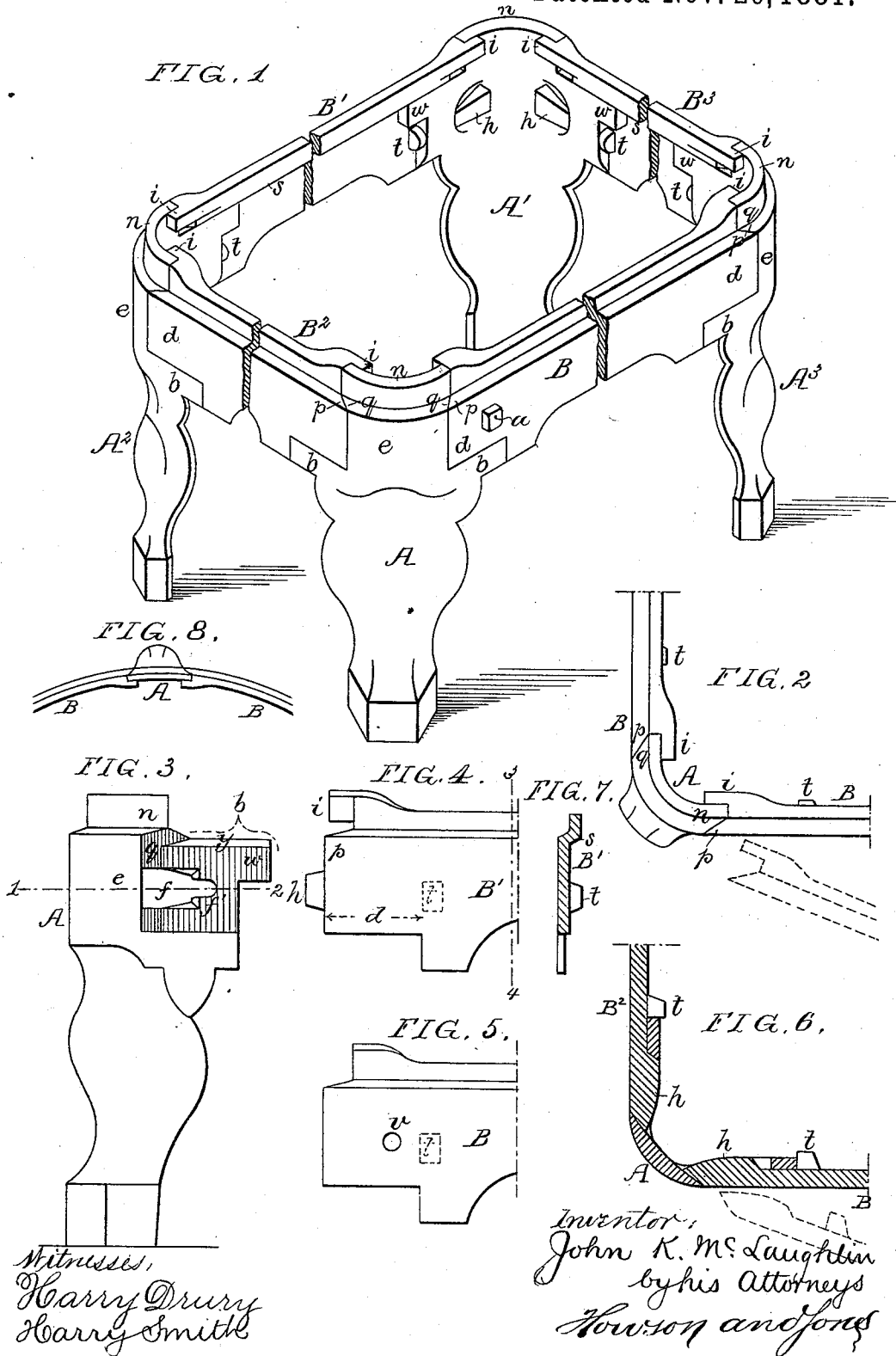
2 Sheets—Sheet 1.

J. K. McLAUGHLIN.

BASE FOR STOVES.

No. 250,274.

Patented Nov. 29, 1881.



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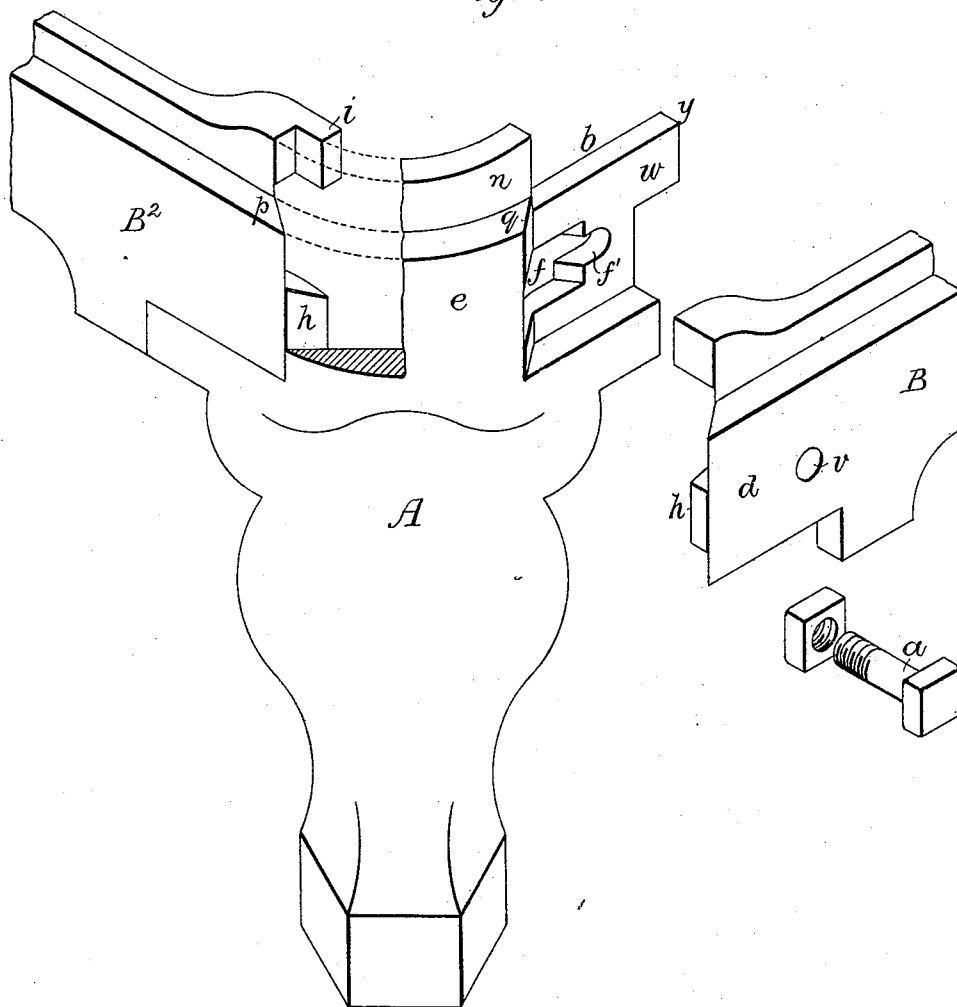
2 Sheets—Sheet 2.

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Fig. 9.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN K. McLAUGHLIN, OF PHILADELPHIA, PENNSYLVANIA.

BASE FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 250,274, dated November 29, 1881.

Application filed August 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN K. McLAUGHLIN, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Bases for Stoves, of which the following is a specification.

My invention relates to endless structures of cast-iron, which are composed of a number of plates—such, for instance, as the quadrangular, annular, or other shaped base of a stove, my invention consisting of an economical mode, described hereinafter, of putting the plates of such structures together.

In the accompanying drawings, Figure 1 represents, in perspective, the quadrangular base of a stove composed of pieces put together according to my invention; Fig. 2, a plan view, showing a corner of the structure; Figs. 3, 4, and 5, views showing the details of the fastening; Fig. 6, a section on the line 1 2, Fig. 3, but with the parts fitted together; Fig. 7, a section on the line 3 4; Fig. 8, a diagram showing the application of my invention to an annular structure of cast-iron; and Fig. 9, Sheet 2, a detached perspective view of one of the corner-fastenings, partly in section, and drawn to an enlarged scale.

The structure shown in the drawings is composed of eight castings—namely, the four corner-pieces A, A', A², and A³, which in the present instance are continued downward to form legs, and the four plates B, B', B², and B³. There are eight fastenings of the plates to the corner-pieces, and all excepting one are made in the manner which can be best explained by reference to Figs. 2, 3, 4, and 6. Each corner-piece has two flanges, *b*, necessarily arranged at right angles to each other in the present structure, one of these corner-pieces being shown in Fig. 3; and the portion of the flange *b* which is shaded in that figure is recessed for receiving the end portion, *d*, of the plate B, so that when it is fitted into the recess the face of the plate will be flush with the portion *e* of the corner-piece. (See Fig. 2.) There is an opening, *f*, in the recessed portion of the corner-piece, for receiving a lug, *h*, on the end of the plate, and another lug, *i*, on the plate is arranged to pass behind the upper portion, *n*, of the corner-piece, as shown in Fig. 2. The end *p* of the portion *d* of the plate is

beveled, as shown in Fig. 2, to fit against the beveled termination *q* of the recess in the flange *b* of the corner-piece, and the lug *h* is also beveled to fit against the back of the corner-piece, as shown in Fig. 6.

To secure the plate to the corner-piece the former must first be held in the inclined position shown by dotted lines in Figs. 2 and 6 in respect to the said corner-piece, and while the plate is in this inclined position it is pushed endwise, so that the beveled lug *h* shall pass through the opening *f*, and the lug *i* shall pass to the back of the upper portion, *n*, of the corner-piece, after which the plate is turned until it occupies the position shown by plain lines, when the fastening is completed, and the plate cannot be detached without first moving it to the inclined position indicated by dotted lines.

In order to render the fastening more secure and steady, I prefer to cast a rib, *s*, Fig. 7, at the back of the plate B for the upper edge, *y*, of the recessed portion *b* of the corner-piece to bear against, the said recessed portion having an extension, *w*, which fits between the said rib *s* and a projection, *t*, cast on the back of the plate B.

Of the eight junctions of the plates with the corner-pieces seven can be completed in the manner described and without any other fastenings; but the eighth junction cannot be made in this manner, because the plate cannot be held in the inclined position described; hence, prior to making the last junction, the lugs *i* and *h* are removed by filing or otherwise, so that the end of the plate will be in the condition shown in Fig. 5, and can be pushed directly into the recess without inclining it as described above, after which a bolt, *a*, is passed through a hole, *v*, in the end portion, *d*, of the plate, and through an extension, *f'*, of the opening *f*, and the nut of the bolt is tightened. This is the only bolt used in the structure, and serves to maintain all of the eight castings in such a position in relation to each other that they cannot be detached. Although there is but one bolt, there is an extension, *f'*, of the opening *f* in each of the two flanges of each corner-piece, so that any one of the four corner-pieces or either flange of the same may be selected for making the last junction.

It should be remarked that in molding and

casting the different parts of the structure no cores are used, and consequently no prints are required on the patterns, and that the castings require nothing but simple cleansing to insure an accurate fit.

Although I have illustrated my invention as applied to the quadrangular base of a stove, it may be adopted in connection with endless structures of a different shape. The leg pieces and intervening plates of a round base for a stove may, for instance, be constructed to fit together in the manner described. (See Fig. 8.) Or, in constructing parts of stoves where no legs are required, such connecting plates may take the place of the leg pieces, as the character of the endless structure may suggest.

I claim as my invention—

1. The combination, in a cast-iron structure, of a leg or connecting piece, A, having a recessed flange and opening, *f*, with a plate, B, adapted to the said recess, and having a lug, *h*, beveled for introduction into and fitting in the said opening *f*, substantially as described.

2. The combination of the leg or connecting piece having a flange, an opening, *f*, in the same, and a plate, B, having a beveled lug, *h*, adapted to the opening, and a lug, *i*, for fitting

against the back of the connecting-piece, all substantially as specified.

3. The combination of the casting A, opening *f* in the same, and extension *w* with the plate B, its lug *h*, rib *s*, and projection *t*, all substantially as described.

4. The within-described corner or leg piece A, having two flanges and an opening, *f*, in each flange, and otherwise constructed for attachment to two plates, substantially in the manner specified.

5. An endless structure of cast-iron composed of a number of cast-iron plates and connecting-pieces, all the joints of which, except one, are made by interlocking, substantially in the manner described, the remaining joint being made by bolting one of the plates to one of the connecting-pieces, and the whole being adapted to support a stove or like superstructure, as set forth.

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

JOHN K. McLAUGHLIN.

Witnesses:

HARRY DRURY,
HARRY SMITH.