

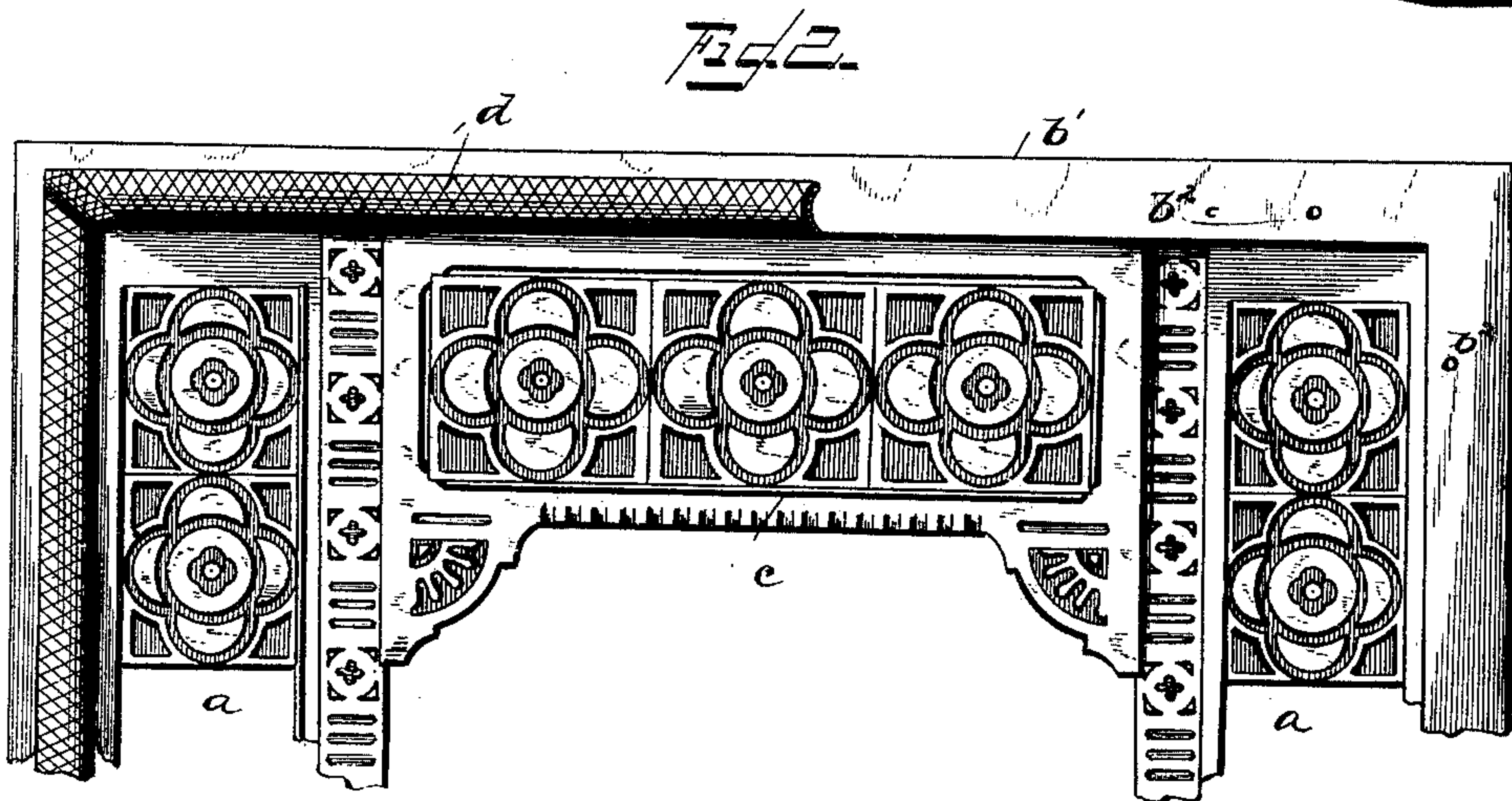
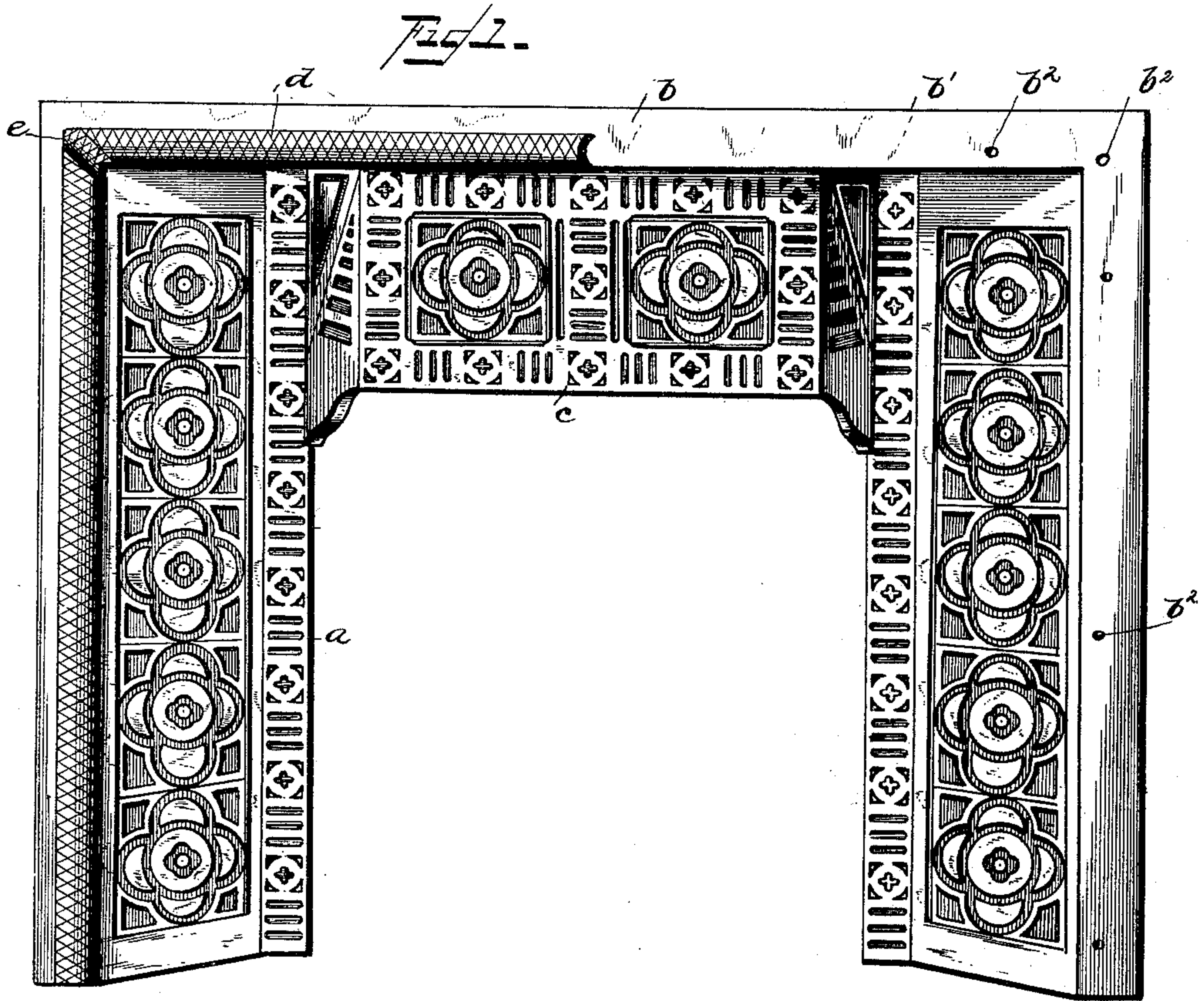
(No Model.)

3 Sheets—Sheet 1.

W. E. FITCH.  
GRATE FRONT.

No. 414,202.

Patented Nov. 5, 1889.



WITNESSES

*F. L. Ourand.*  
*E. A. Finckel.*

INVENTOR

*William E. Fitch*  
*by Wm. H. Finckel*  
his Attorney.

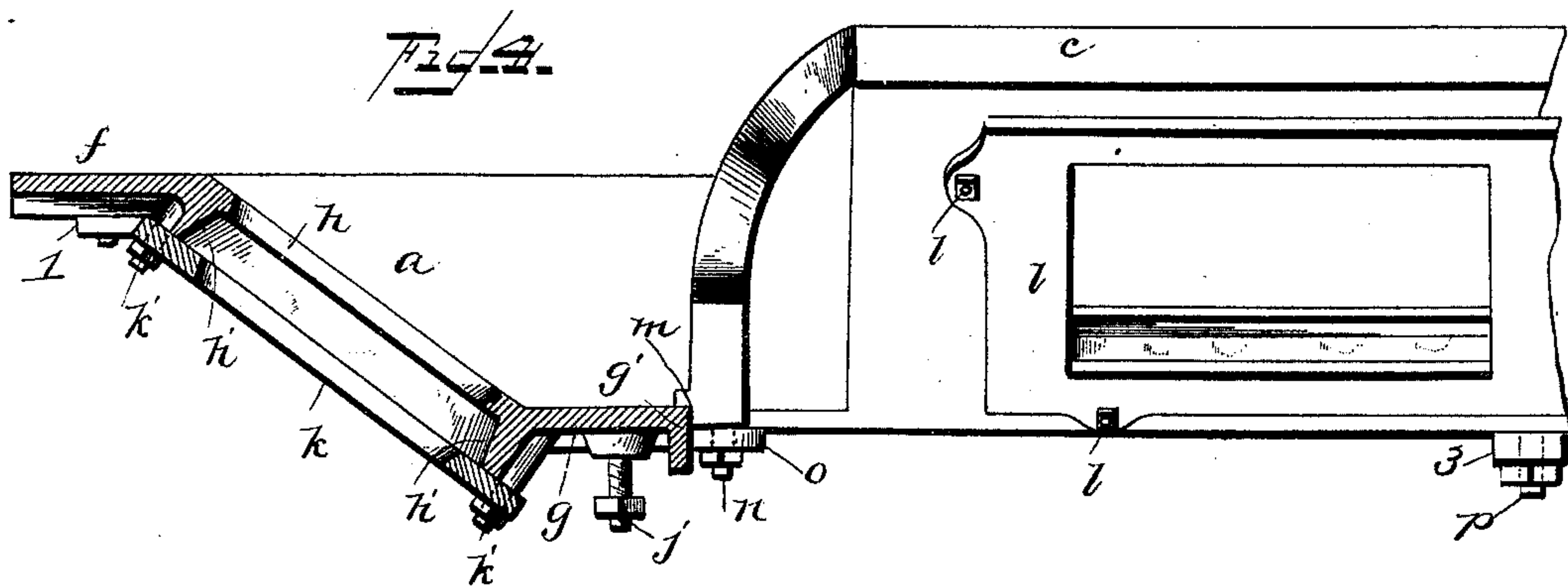
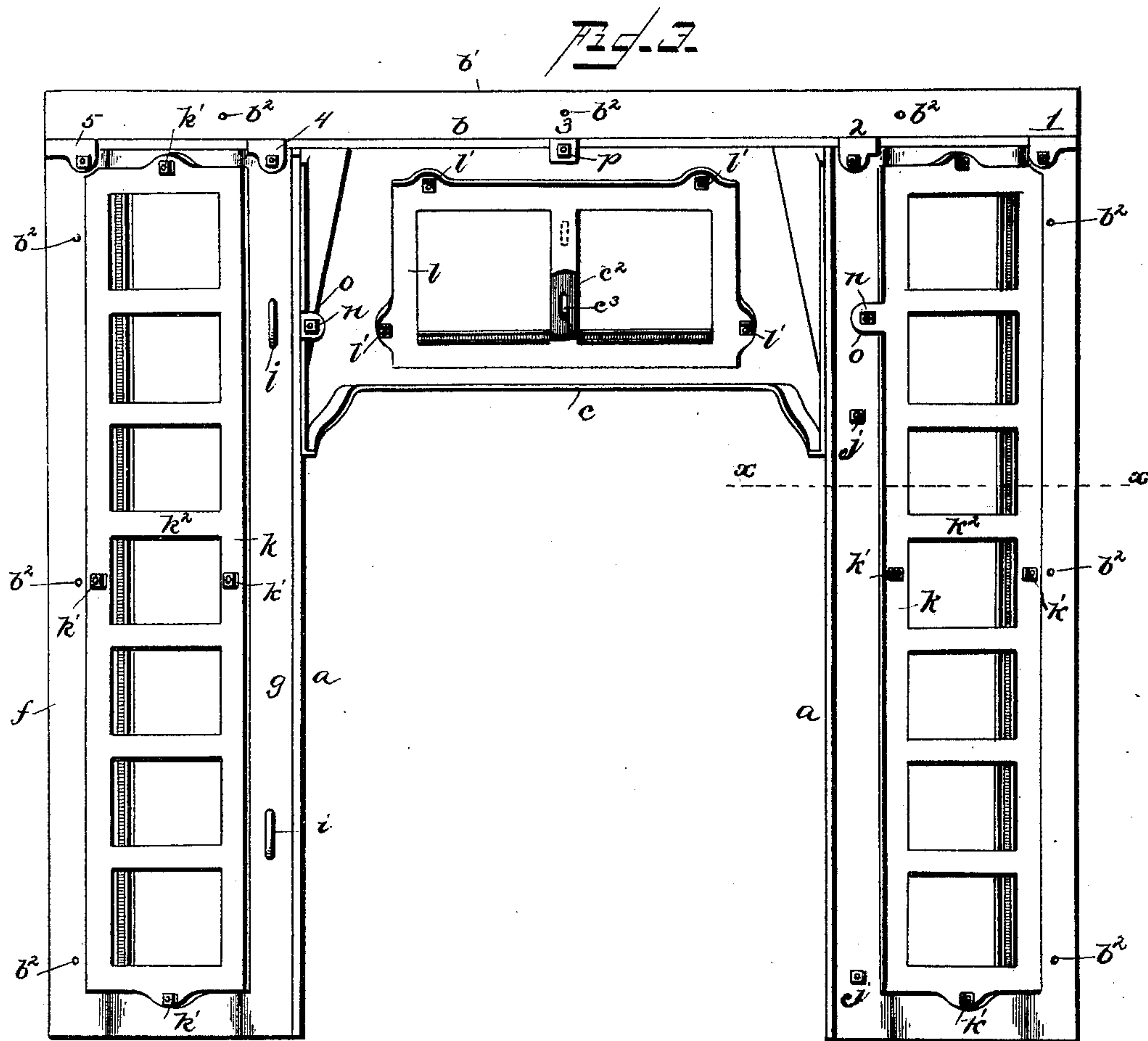
(No Model.)

8 Sheets—Sheet 2.

W. E. FITCH.  
GRATE FRONT.

No. 414,202.

Patented Nov. 5, 1889.



WITNESSES  
P. L. Ourand.  
E. A. Lincoln.

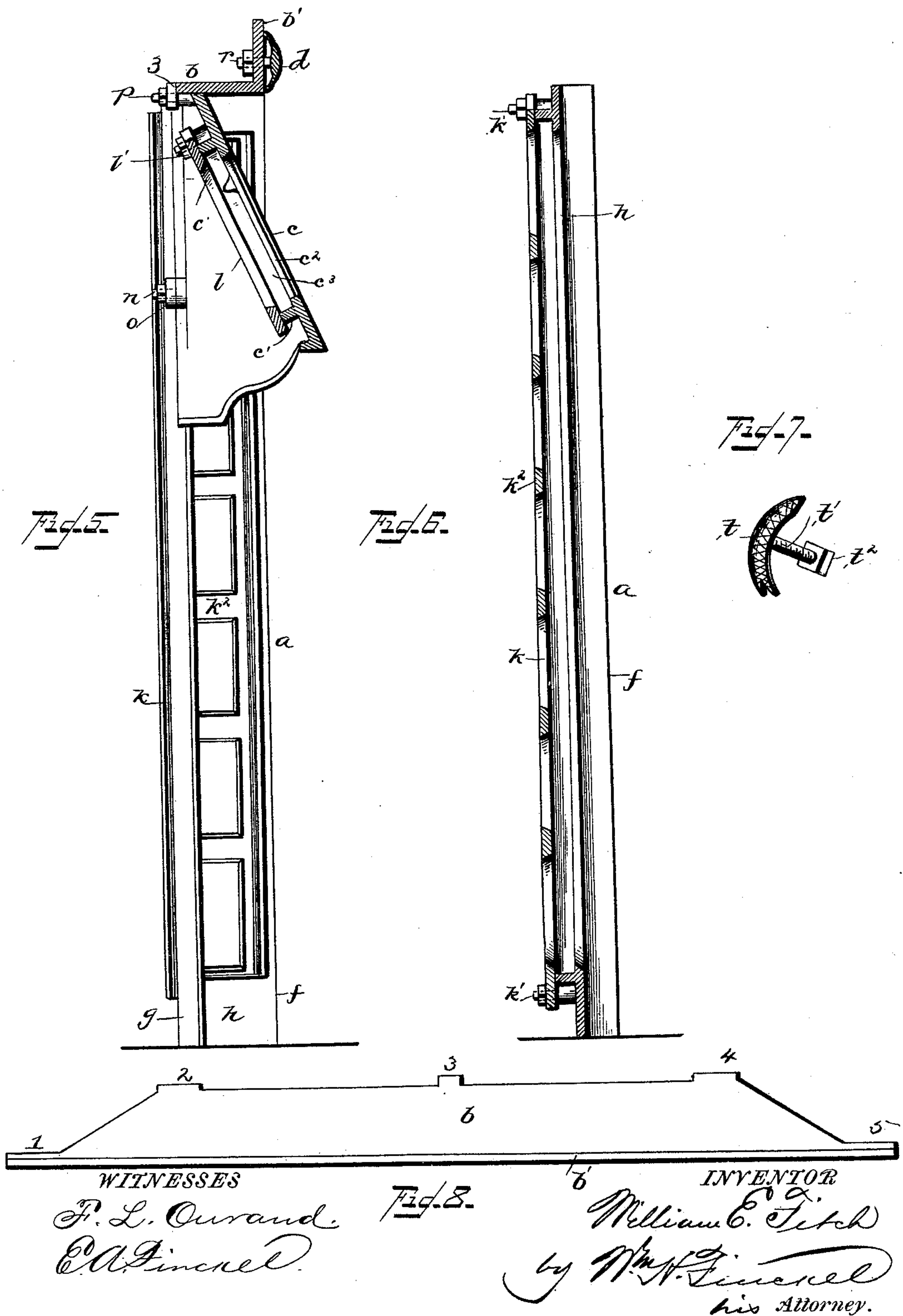
INVENTOR  
William E. Fitch  
by Wm. F. Lincoln  
his Attorney.



3 Sheets—Sheet 3.

No. 414,202.

Patented Nov. 5, 1889.



# UNITED STATES PATENT OFFICE.

WILLIAM E. FITCH, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO THE PEER-  
LESS MANUFACTURING COMPANY, OF SAME PLACE.

## GRATE-FRONT.

SPECIFICATION forming part of Letters Patent No. 414,202, dated November 5, 1889.

Application filed May 7, 1889. Serial No. 309,889. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. FITCH, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a certain new and useful Improvement in Grate-Fronts, of which the following is a full, clear, and exact description.

This invention relates to what are known on the market as "English grates," or "English open fire-places;" and the invention has special reference to the fronts for such grates or fire-places.

The most common way of making fronts for grates heretofore practiced has been casting them in one piece, and in so doing the possibilities of ornamentation are quite limited—indeed, commonly limited to japanning or enameling; but the demands of trade require highly-ornamental fronts, finished with various bright metals, either by plating or otherwise, and it is very difficult to prepare a continuous one-piece front to receive such plating. Again, it is somewhat difficult to fit up a chimney nicely and neatly with the one-piece casting, and, again, the transportation and other handling of these one-piece fronts is a source of considerable expense.

Now my invention is designed to overcome the difficulties above noted and to furnish a grate exceedingly well adapted to any kind of finish or plating and for the reception of encaustic tiles and ornamental moldings.

The invention consists of a grate-front composed of pilasters, an arch-bar, and a projecting or flat hood made in separate pieces and bolted together, the pilasters and hood being constructed to receive encaustic tiles, all as I will proceed now more particularly to set forth and claim.

In the accompanying drawings, in the several figures of which like parts are similarly designated, Figure 1 is a front elevation showing a projecting hood and half of the molding broken away. Fig. 2 is a similar view showing a flat hood, parts of the pilasters, and parts of the molding. Fig. 3 is a rear elevation. Fig. 4 is a section taken in the plane of line *x x*, Fig. 3, and looking up, the scale being enlarged. Fig. 5 is a vertical section. Fig. 6 is a vertical section of the

pilaster. Fig. 7 is a perspective view of one form of corner-clamp for the molding, and Fig. 8 is a plan view of the arch-bar.

*a a* represent the pilasters, *b* the arch-bar, *c* the hood, *d* the molding, and *e* the corner-piece for the molding.

The two pilasters being made alike, a description of one will suffice for both.

Referring now to Figs. 3, 4, 5, and 6, the pilaster is made with a flange *f*, adapted to fit against the brick facing of the chimney or fire-place, and is made with a second flange *g*, adapted to enter the fire-place, and provided with eyes *i* and bolts *j*, either or both, or other equivalent means for securing the front in position in the fire-place. The flanges *f* and *g* are in parallel planes, and are connected by an oblique web *h*, which is open for the greater part of the width and length of the pilaster in order to receive and expose the faces of encaustic tiles or other ornamentation. The front is shown as adapted to receive tiles. The web *h*, to this end, is provided with flanges *h'*, extending rearwardly to form a recess in which the tiles may be placed, and a back plate *k* is secured upon these flanges *h' h'* by means of bolts and nuts *k'*. The tiles are placed in the pilaster from the rear, and the back plate *k* is then bolted over them and in place. The bolts may be cast with the pilasters. The back plate may be provided with cross-pieces *k<sup>2</sup>*, (see Fig. 6,) and these cross-pieces may be shaped to fit the shape of the back of the tile. The hood *c* is likewise provided with flanges *c'*, extending rearwardly to form a recess to receive tiles, and a back plate *l* is fitted to the said flanges *c' c'* and held in place thereon by means of bolts and nuts *l'*. If desired, the hood may be provided with a central transverse rib *c<sup>2</sup>*, or as many of such transverse ribs as there are tiles to be placed in the said hood, and, if desired, these ribs may be provided with lugs *c<sup>3</sup>* to separate the tiles. These ribs *c<sup>2</sup>* may extend to the face of the hood and form an ornamental portion thereof. The bolts *l'* of the hood are preferably cast therewith or attached thereto in the casting. The projecting hood shown in Figs. 1, 3, 4, and 5 may be replaced by a flat hood, as shown in Fig. 2, the said flat hood being in



the plane of the flanges *g* of the pilasters. In either case the hood may have an L-shaped groove or surface *m*, which is adapted to fit against a corresponding flange *g'* of the flange of the pilaster, so as to make a close joint of the hood with the pilaster, and the said hood is secured to the pilaster by means of bolts *n* on the hood engaging ears *o* on the pilasters. I prefer to attach the bolts to the hood in the casting. The pilasters are united by means of the arch-bar *b*, the said arch-bar being L-shaped, as shown in Fig. 5, and provided with depending lugs 1, 2, 3, 4, and 5, the lugs 1 2 and 4 5 being used to receive bolts from the pilasters, and the lug 3 being used to receive a bolt *p* on the hood.

The vertical flange *b'* of the arch-bar and the faces of the flanges *f* of the pilasters are provided with a suitable number of bolt-holes *b<sup>2</sup>*, to receive bolts, such as *r*, on the attachable molding *d*, the said bolts by preference being united to the said moldings in their formation by casting or otherwise. The miters of the moldings may be formed in any suitable manner; but I prefer to cover such joints by means of ornamental clamps *t*, (shown in detail in Fig. 7,) such clamps being provided with bolts *t'* and nuts *t<sup>2</sup>*, whereby the said clamps may be secured to the arch-bar over the molding. By this construction a great variety of ornamental moldings may be employed, and the finish of the grate may be thus made in a great variety of styles, and such moldings may be made of the same metal as the fronts, or of a different metal, and by preference such moldings will be made of a bright metal adapted to harmonize with the finish of the fronts.

By constructing the fronts thus in sections

or parts they may be compactly arranged for transportation and storage, they may be adapted for great variety of finish, and they may be assembled very readily and very neatly.

What I claim is—

1. A front for grates or open fire-places, composed of two pilasters, a hood, and an arch-bar separably united, substantially as set forth.

2. A front for grates or open fire-places, composed of pilasters provided with bolts and with bolt-holes, and moldings provided with bolts and adapted to be applied to the pilasters through the bolt-holes therein, an arch-bar provided with lugs adapted to engage the bolts of the pilasters to connect the arch-bar and pilasters, and also provided with bolt-holes, a molding provided with bolts and adapted to be applied to the arch-bar through the bolt-holes therein, and the hood provided with bolts to engage other lugs on the pilasters and arch-bar to secure it in place, substantially as and for the purpose described.

3. As an improved article of manufacture, a front for grates or open fire-places, composed of pilasters provided with bolts, an arch-bar provided with lugs adapted to engage the said bolts to connect the arch-bar and pilasters, and the hood provided with bolts to engage other lugs on the pilasters and arch-bar to secure it in place, substantially as described.

In testimony whereof I have hereunto set my hand this 27th day of April, A. D. 1889.

WILLIAM E. FITCH.

Witnesses:

C. H. GIBSON,  
CHAS. VON DUSEN.