

G. R. MOORE.
STOVE-GRATE.

No. 171,483.

Patented Dec. 28, 1875.

Fig. 1. x

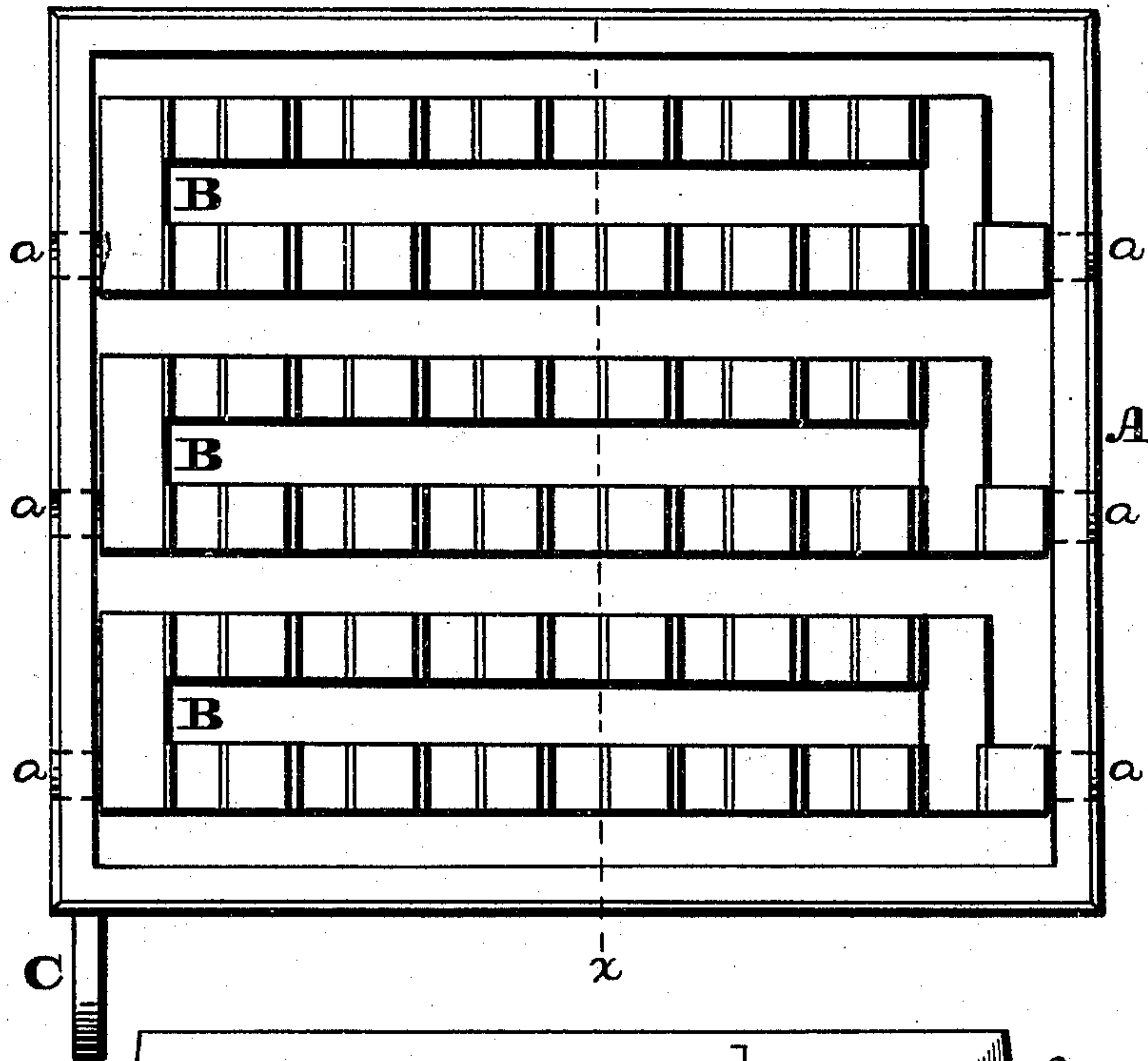


Fig. 5.

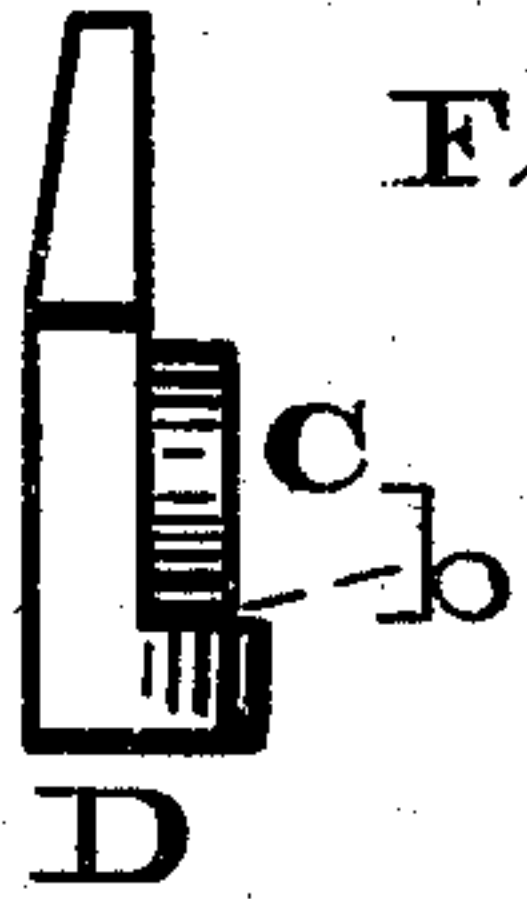


Fig. 2.

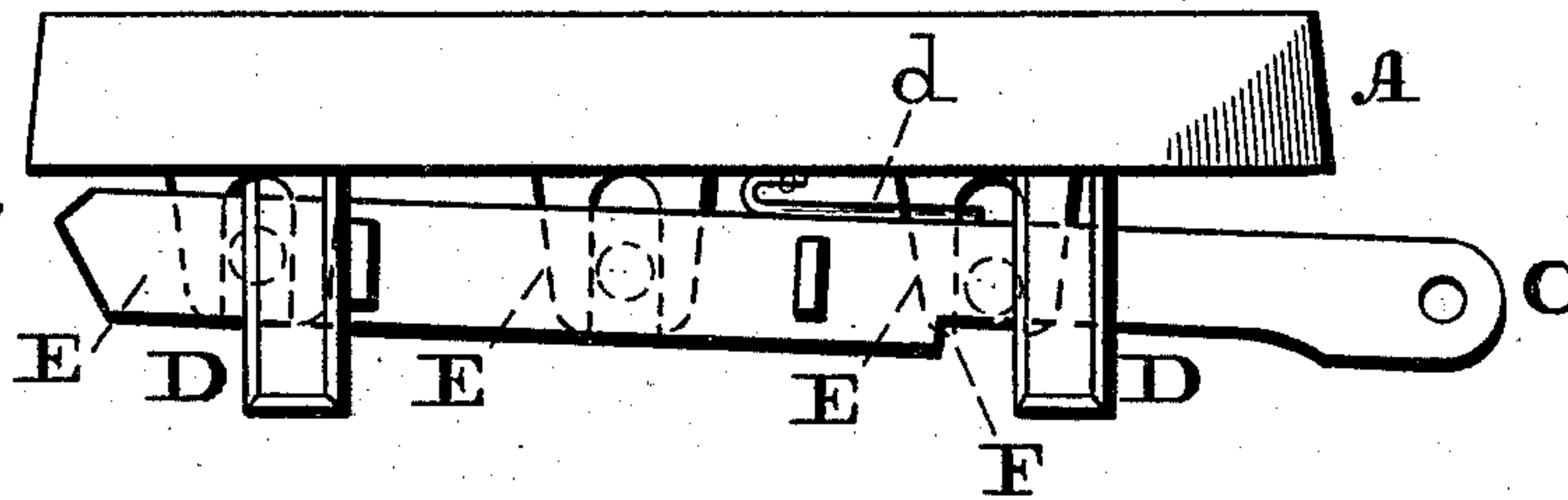


Fig. 3.

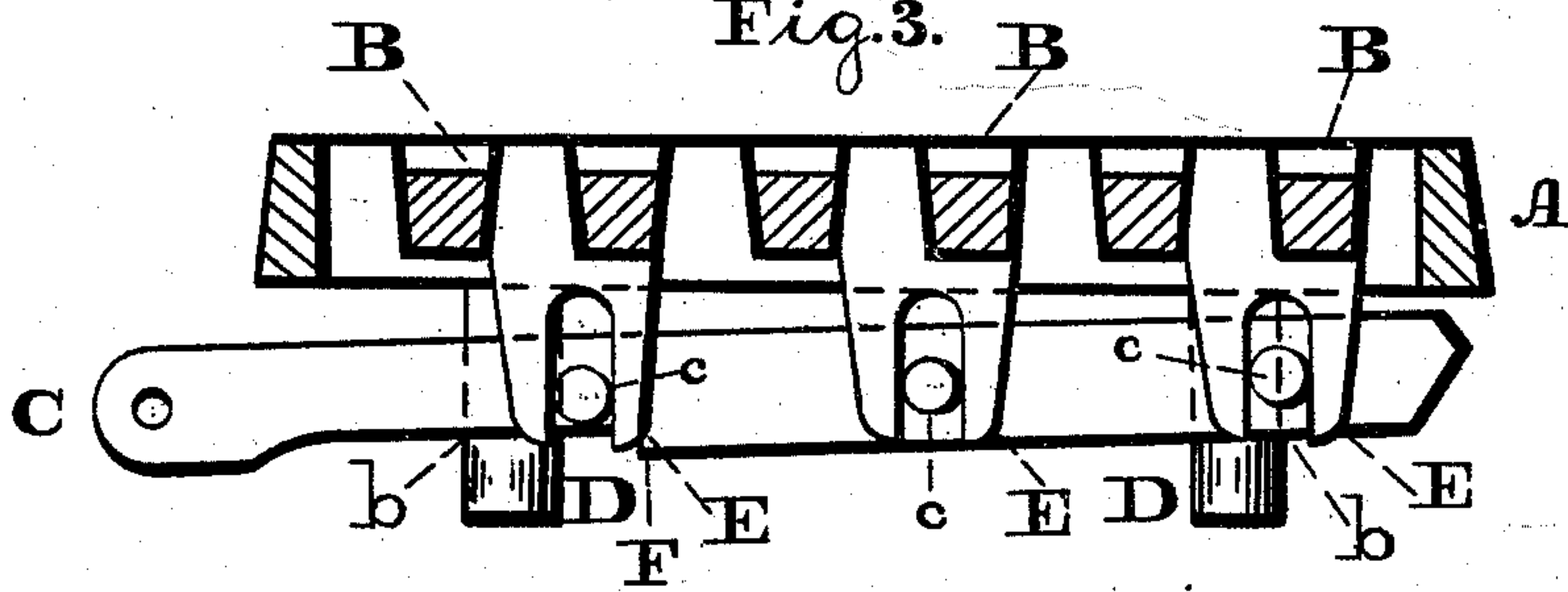
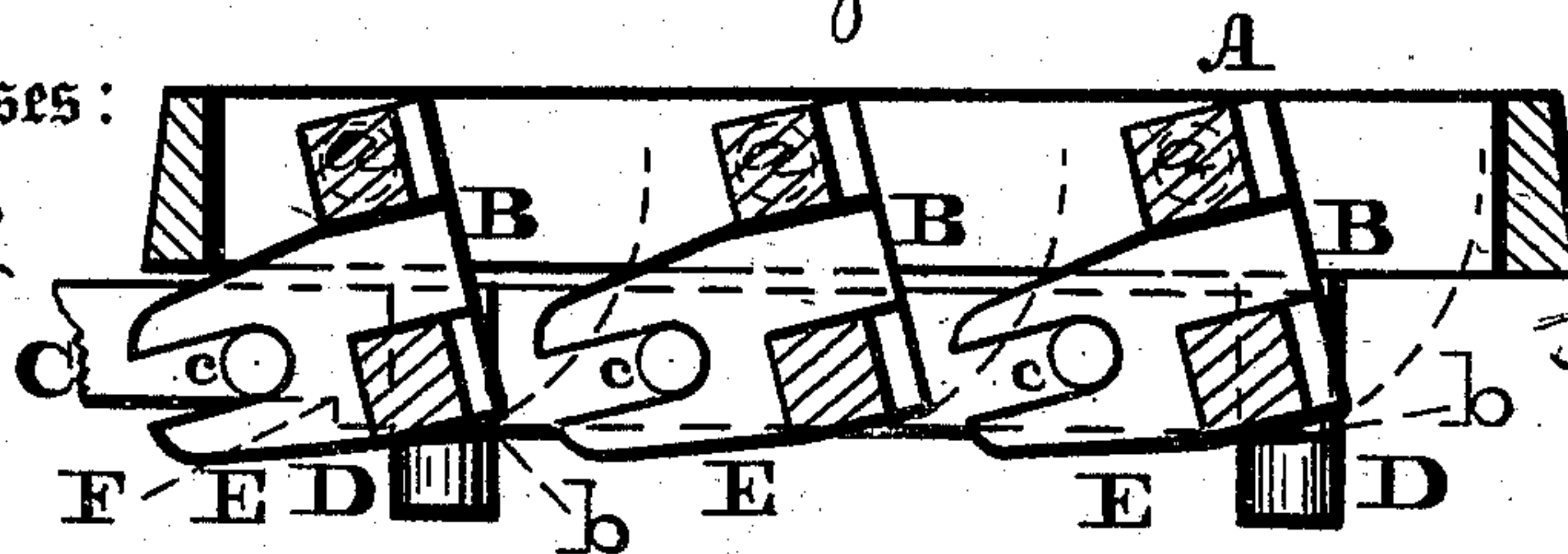


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE R. MOORE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN STOVE-GRATES.

Specification forming part of Letters Patent No. **171,483**, dated December 28, 1875; application filed December 6, 1875.

To all whom it may concern:

Be it known that I, GEORGE R. MOORE, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Stove-Grates, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to provide new facilities in fire-grates for stoves and heaters for use in keeping clean fires and perpetuating them.

Figure 1 is a top view of a fire-grate containing my improvements.

There are six bars shown and seven spaces. The six bars are made and hung in pairs or sections, each section upon ordinary journals in the frame inclosing them. The faces of the bars are checked with alternating elevations and depressions.

Fig. 2 is an end elevation. Fig. 3 is a transverse vertical section taken in the line *xx* of Fig. 1. It shows the grate-bars in their normal condition, as seen in Fig. 1. Fig. 4 is a transverse vertical section taken in the same line as Fig. 3, and showing the three sections of the fire-bed turned down, in which position the refuse products of combustion may be discharged very rapidly. Fig. 5 is a front view of the hanger D, and shows how the bar C is held up by its short arm.

A is the frame; *a a a*, journal-bearings; B, grate-bars in sections; *b*, the supporting-arm from D; C, the manual bar for operating the grate; *c c c*, stems from the operating-bar; D, hangers from the frame A; *d*, a spring, used in this case as a substitute for more weight required in the bar C to keep it more firmly in place; E, bifurcated pendants from the grate-bars; F, a shoulder upon the operating-bar C, placed at such a point from its stop *b* as to

allow considerable movement, by which the fire-bed can be thoroughly agitated without any danger of dumping it. If, however, it is desired to discharge the refuse product of combustion faster than it can be done with this limited motion, by lifting the manual end of the operating-bar a little it will pass over the stop, and the largest possible freedom of motion will then be obtained.

It is thus seen that I do not depend upon the shoulder F to keep the grate level, though another shoulder or stop similar to this might be used for that purpose, if desired.

Whenever the bar C is of sufficient weight it will hold the grate at any point desired at rest. The stop is to guide the operator in agitating the grate, so that he will not open the spaces enough to dump the grate unintentionally.

I claim as my invention—

1. The frame A, provided with journal-bearings for grate-bars, and with hangers D, in combination with an operating lever or bar, C, substantially as shown.

2. The grate-bars B, pivoted at *a*, and provided with pendants E, in combination with an operating-bar, C, substantially as shown.

3. The operating-bar C, provided with stems *c*, in combination with grate-bars B, substantially as shown.

4. The shoulder F, placed upon the operating-bar C, and adjusted to check its motion, substantially as and for the purpose herein set forth.

5. In combination, the frame A, bars B, pivoted as shown, operating-bar C, arranged to operate substantially as shown.

GEO. R. MOORE.

Witnesses:

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