

E.F. Steele, Furnace Grate.

PATENTED JUL 11 1871

117009

Fig: 1.

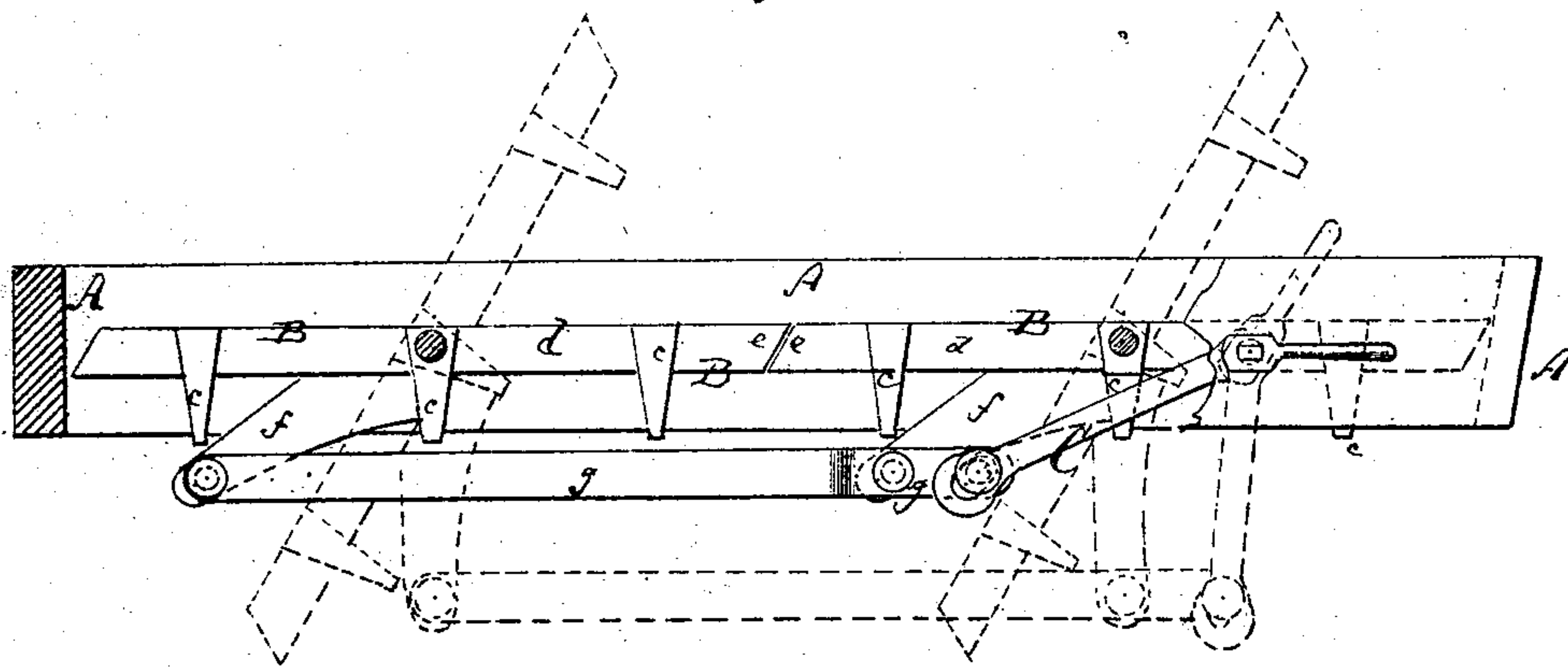
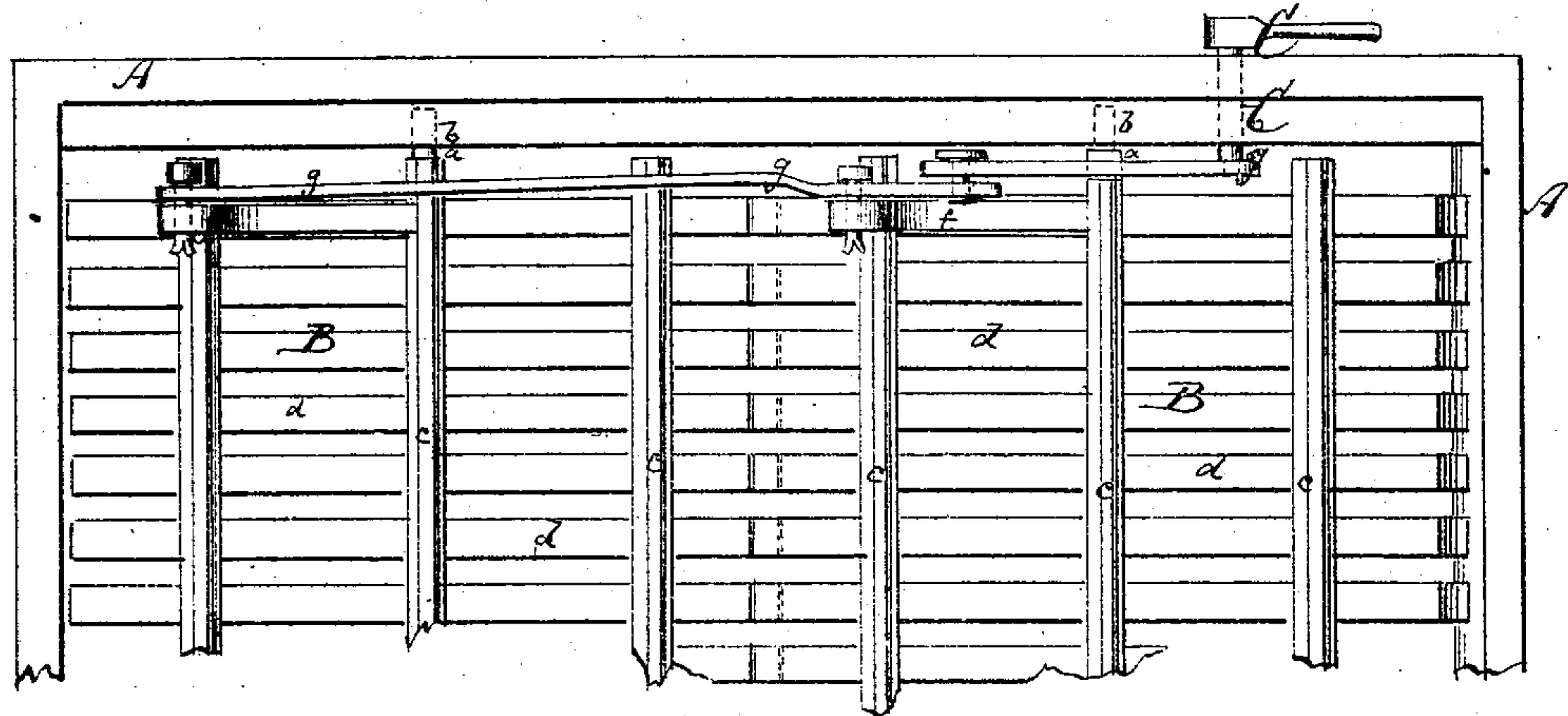


Fig: 2.



Witnesses:

C. Raettig.
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ELIJAH F. STEELE, OF WALLINGFORD, CONNECTICUT.

IMPROVEMENT IN FURNACE-GRATES.

Specification forming part of Letters Patent No. 117,009, dated July 11, 1871.

To all whom it may concern:

Be it known that I, ELIJAH F. STEELE, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Furnace-Grates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a side view of my improved furnace-grate. Fig. 2 is a detail inverted plan view of the same.

Similar letters of reference indicate corresponding parts.

My invention consists in improving grates, as hereinafter fully described and subsequently pointed out in the claim.

A in the drawing represents the outer frame of the grate. It is made of metal, of rectangular or other suitable form, and built into the brick-work or body of the furnace in suitable manner. B is the grate, made in two or more sections, each section extending from the back of the frame A

to the front end of the same. Each section has projecting trunnions *a a* at the ends, and is thereby hung in boxes *b*, provided for their reception in front and back of frame A. The sections can swing on their pivots or trunnions *a* to be dumped. Each section of grate is composed of longitudinal ribs *c c* and transverse grate-bars *d d*, the ends of the latter being beveled, so that they will overlap each other, as is clearly shown at *e* in Fig. 1. Cranks *f f* project from the front ends of the sections, and are connected by a rod, *g*, whose one end is pivoted to a lever, C. This lever is attached to the frame A and can be used to dump the sections simultaneously, as indicated by dotted lines in Fig. 1.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The ribs *c*, pivoted in boxes *b*, combined with transverse and two-part bars *d d*, which are end-beveled, and overlap each other to enable the grate to hold itself in position without jamming.

ELIJAH F. STEELE.

Witnesses:

AUGUSTUS F. RICH,
ISAAC H. FROST.