

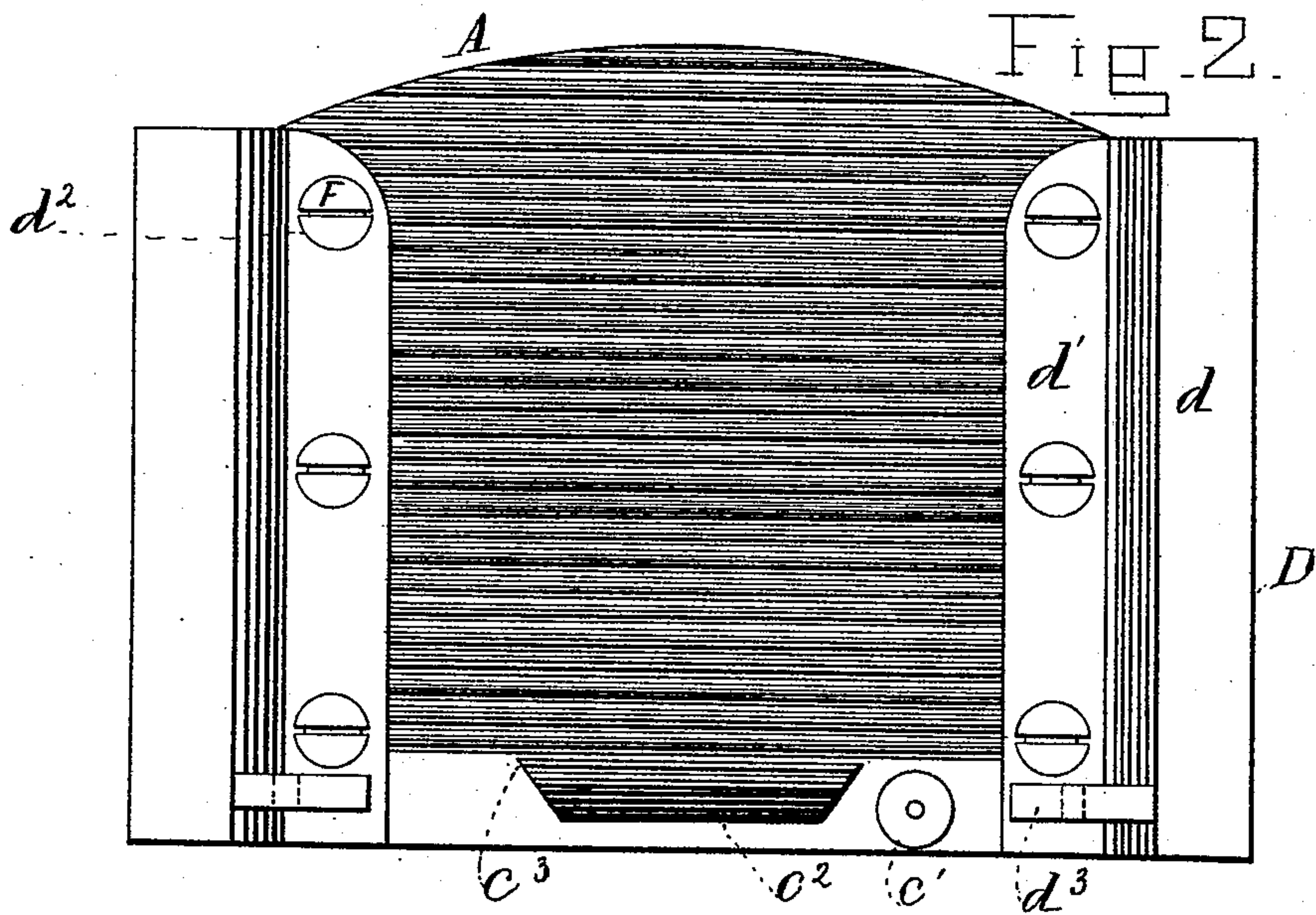
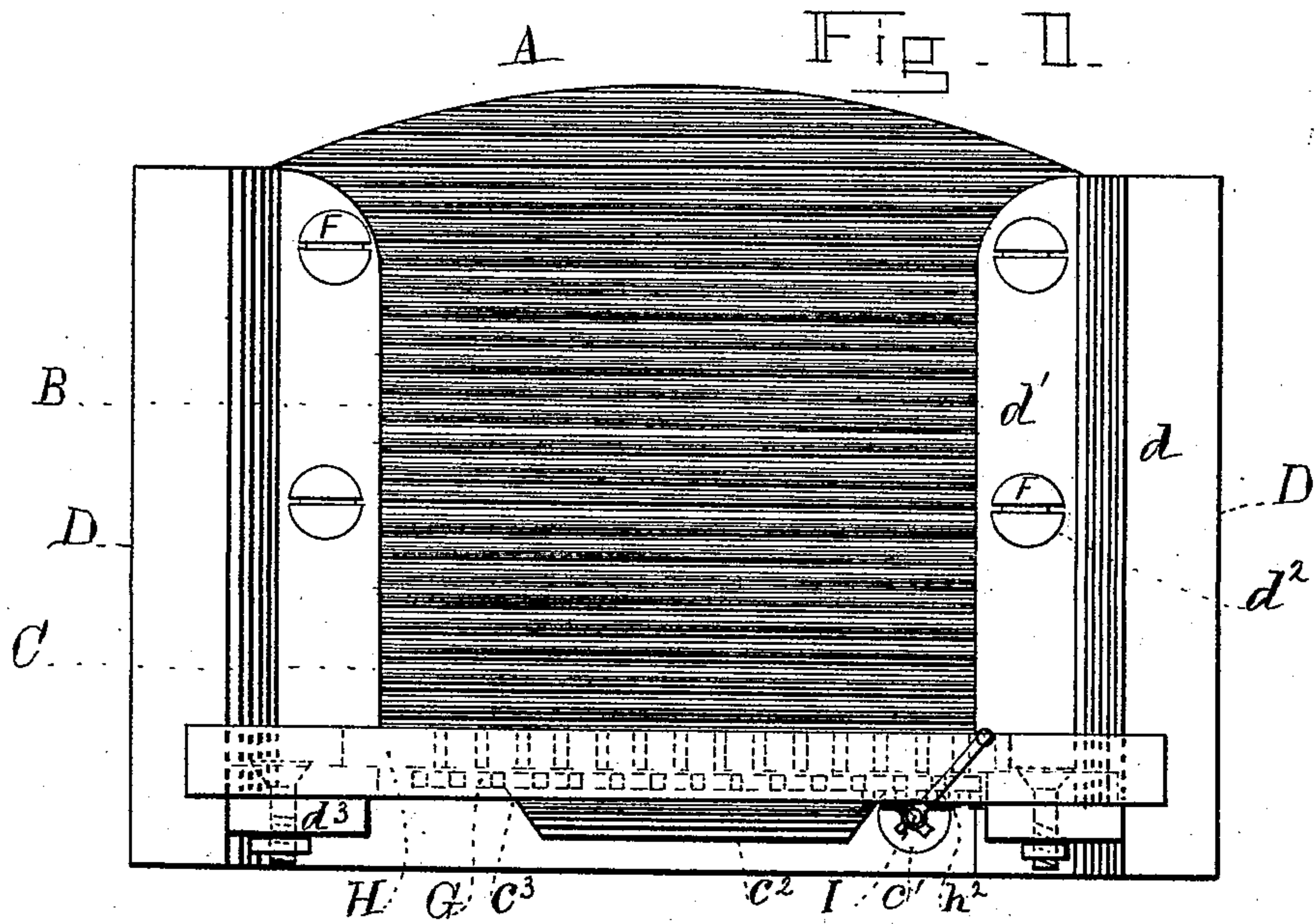
(No Model.)

2 Sheets—Sheet 1.

J. A. CORNISH.
FIRE PLACE BACKING AND GRATE.

No. 437,575.

Patented Sept. 30, 1890.



WITNESSES:
J. K. Newman,
Albert Spidew.

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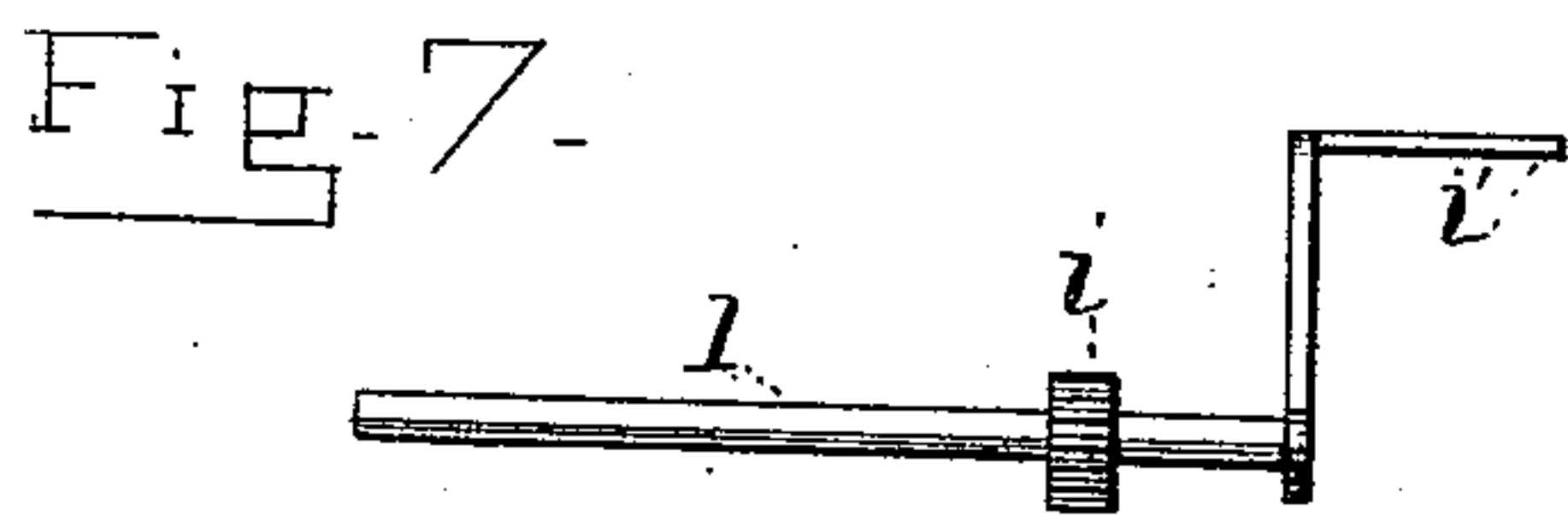
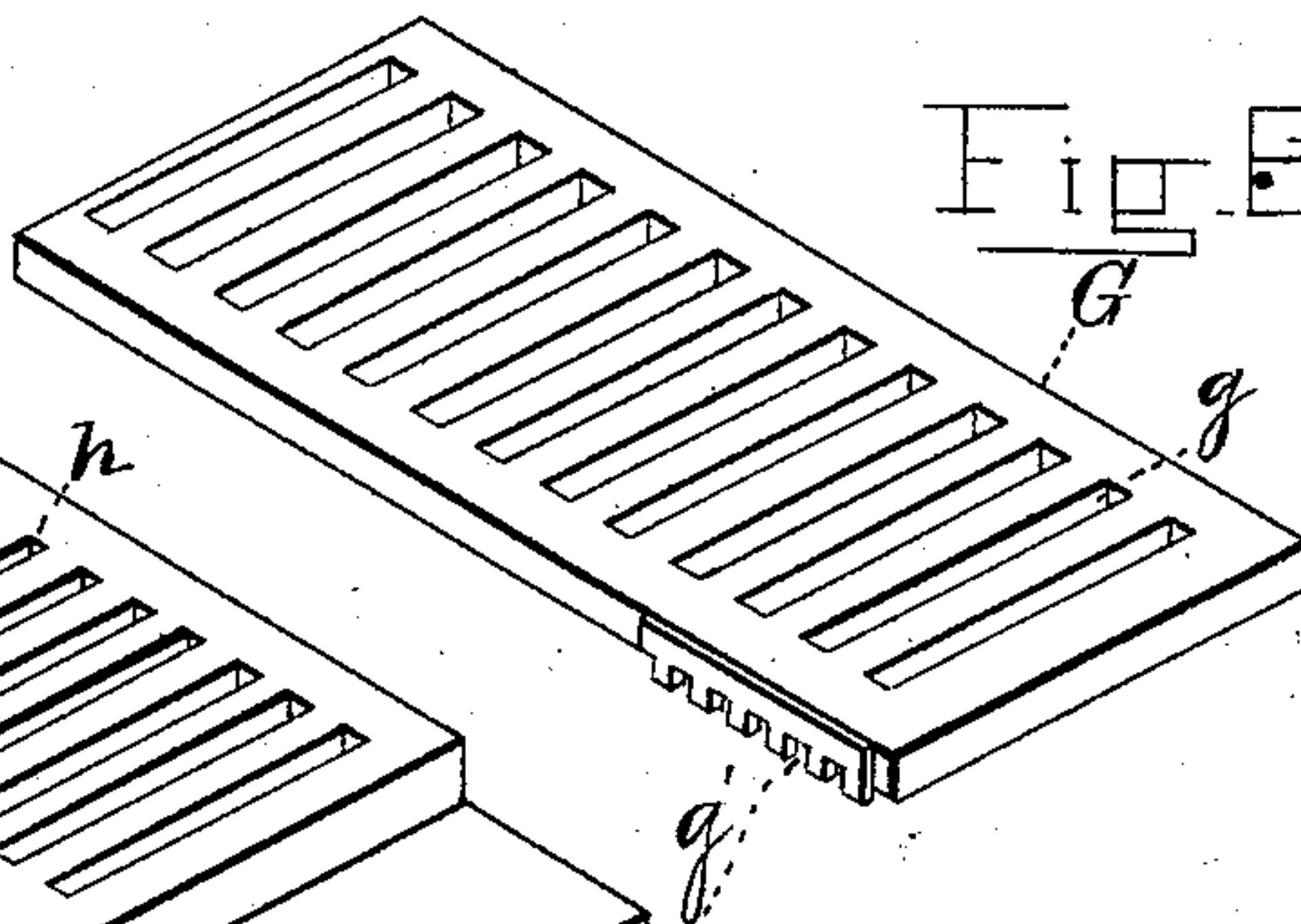
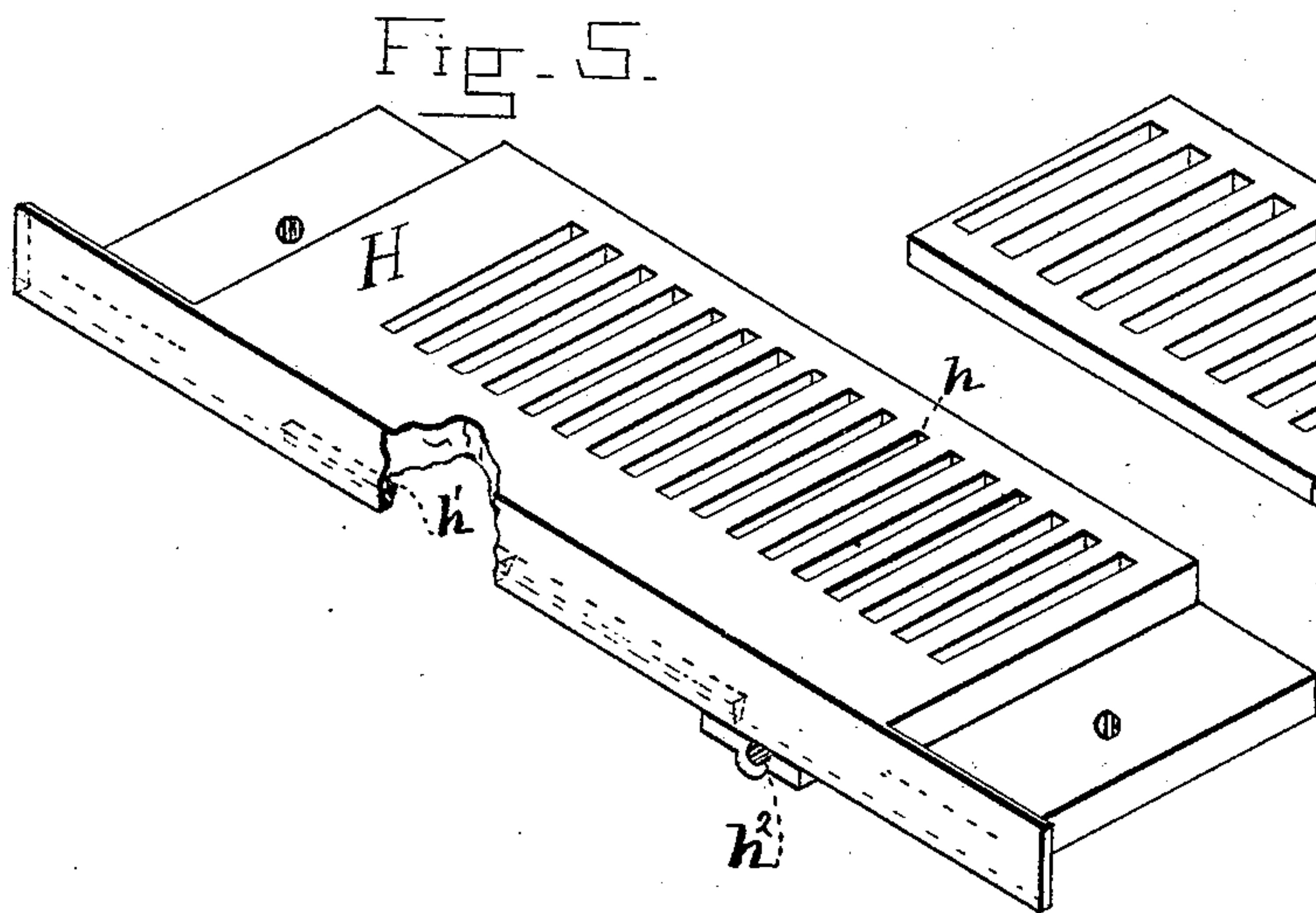
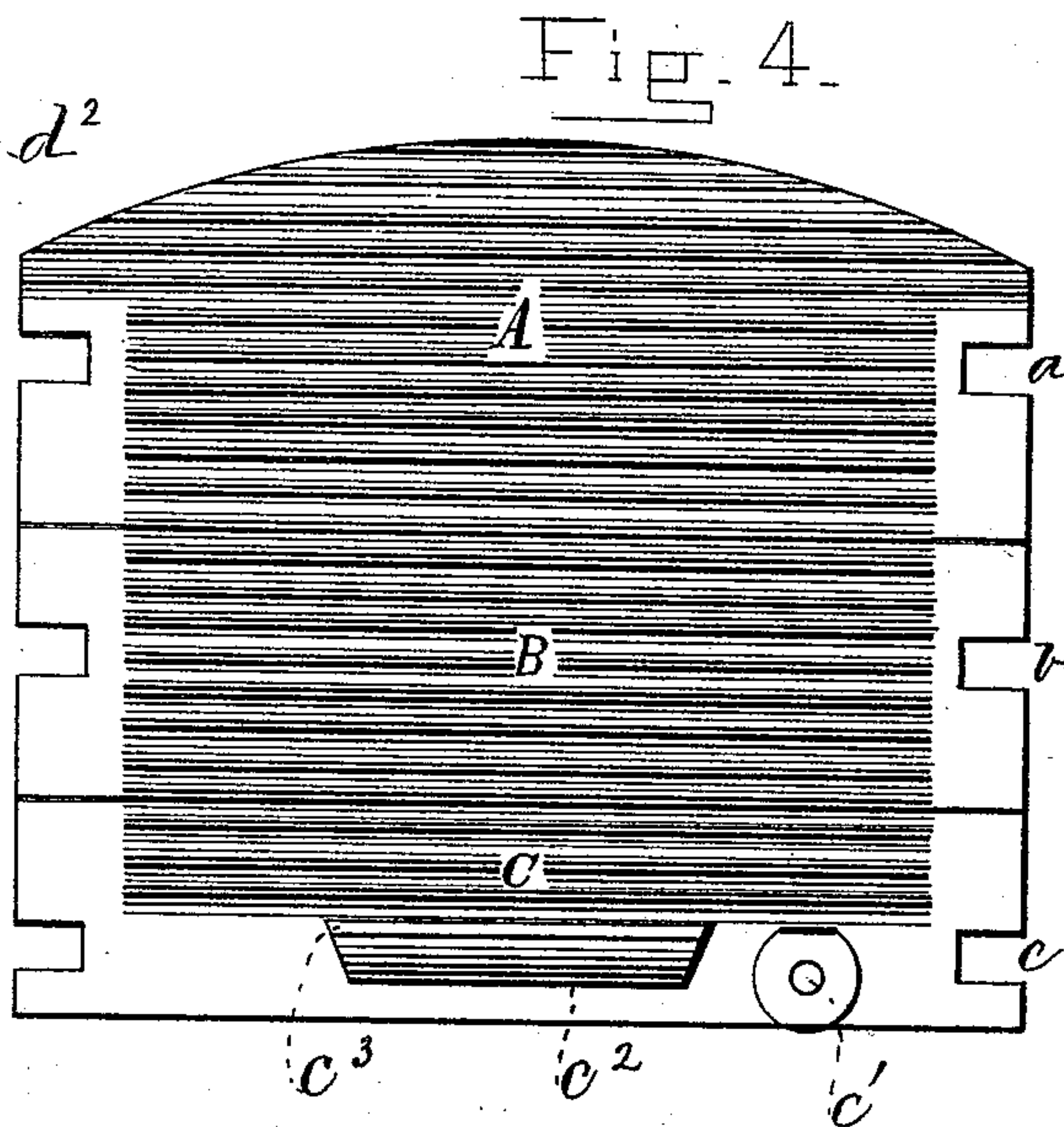
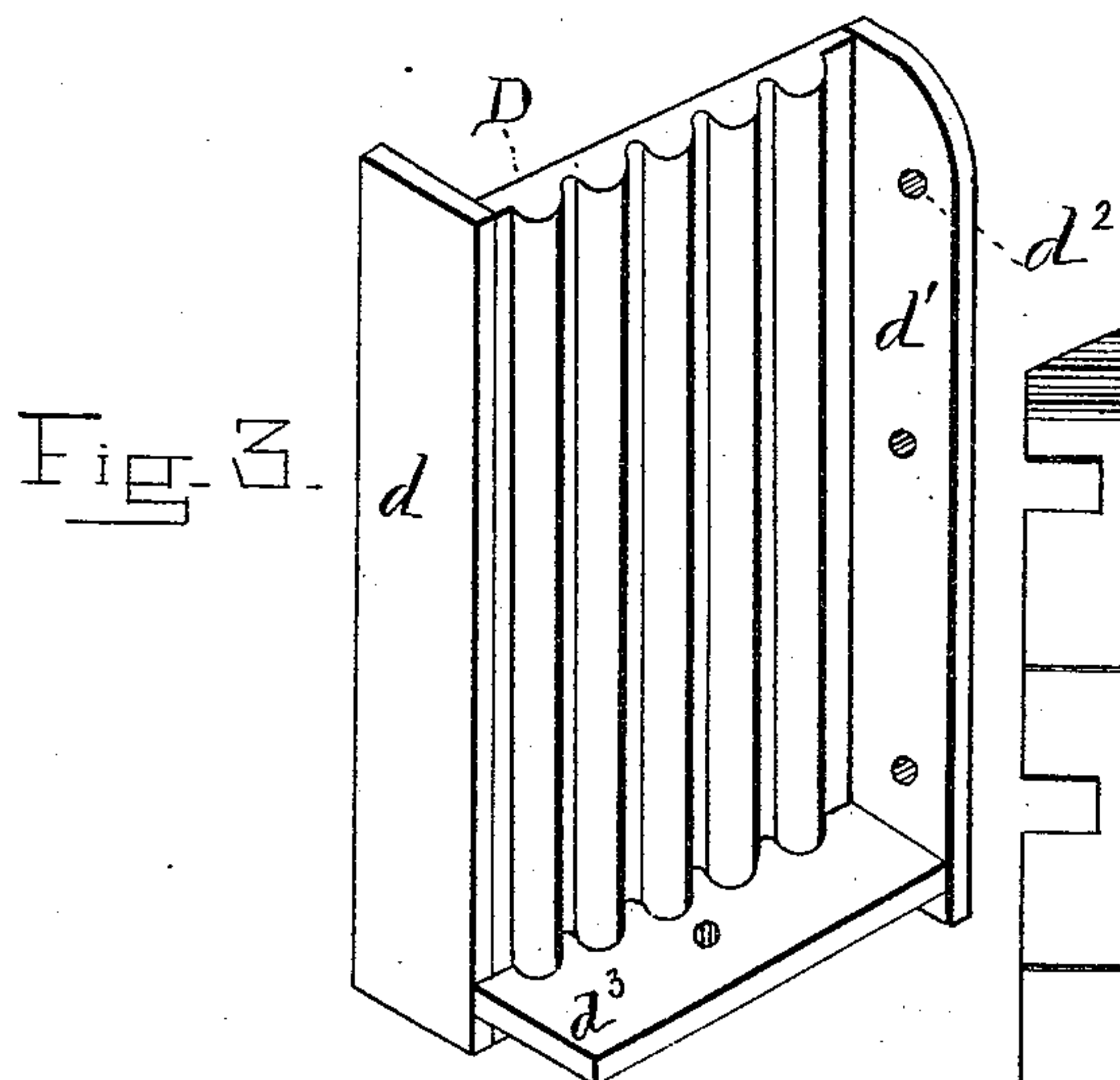
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Albert Spinden.

INVENTOR.
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UNITED STATES PATENT OFFICE.

JOHN A. CORNISH, OF HOPE, ARKANSAS.

FIRE-PLACE BACKING AND GRATE.

SPECIFICATION forming part of Letters Patent No. 437,575, dated September 30, 1890.

Application filed June 6, 1890. Serial No. 364,370. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. CORNISH, a citizen of the United States, residing at Hope, in the county of Hempstead and State of Arkansas, have invented certain new and useful Improvements in Fire-Place Backings and Grates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a fire-place lining and grate; and the object of my invention is to construct a sectional metallic fire-place lining, in combination with a grate, so that in the event any section of same becomes burned out or destroyed it can readily be removed and replaced without the expense of a new one. I attain this object by a certain construction and arrangement of parts, fully described in this specification, and illustrated in the accompanying drawings, in which—

Figure 1 is a front view of the invention complete. Fig. 2 is a similar view with the grate detached. Fig. 3 is a detail view of one of the side sections of the lining. Fig. 4 is a front view of the back lining detached. Fig. 5 is a detail view of the stationary grate. Fig. 6 is a similar view of the shut-off or sliding grate. Fig. 7 is a view of the rod used in operating the shut-off.

The back lining of my invention comprises three or more sections A, B, and C. Said sections are highly polished upon their front sides and corrugated with a view of freely reflecting the heat. They are also constructed with the slots *a*, *b*, and *c*, respectively, in each end of same, through which the bolts *F* pass, that secure them to the inner flange *d'* of the sections *D* of the side lining. The bottom section *C* is provided with the bearing *c'*, in which the rear end of the rod *I* is located, and also with the projection *c²*, upon which the rear side of the stationary grate *H* rests. This projection *c²* is provided with an offset or groove *c³*, in which the sliding grate or shut-off *G* works.

The side sections *D D* of the lining are similarly constructed and provided with the outward flange *d* and the inward flange *d'*. In the latter there are the orifices *d²*, through which the bolts *F* pass that rigidly secure the side

sections *D D* to the back sections *A*, *B*, and *C*, respectively. Near the bottom and upon the inner side of the sections *D D* there are the projections or rests *d³*, upon which the stationary grate *H* rests and slides in and out. Said grate is held in its normal position by means of bolts passing through the same and down through the projections *d³*.

The stationary grate *H* is constructed, as shown in Fig. 5, with the slots *h* and a groove *h'* upon the inner front side. In said groove *h'* the front side of the sliding grate or shut-off *G* works. The grate *H* also is provided with a bearing *h²* upon its under front side, in which the rod *I* works.

The sliding grate or shut-off *G* is constructed, as shown in Fig. 6, with the slots *g* corresponding to the slots *h* of the stationary grate *H*. Said sliding grate *G* is located and works in the grooves *c³* and *h'*, as heretofore described. It is provided upon its under front side with the notches *g'*, which are adapted to the pinion *i* of the rod *I*.

The rod *I* is provided with the handle *i'* and the pinion *i*, and has bearings, as heretofore described, by means of which the sliding grate *G* is operated.

What I claim is—

1. In a fire-place lining and grate, the combination of the back sections *A*, *B*, and *C*, bolted to the flanges *d'* of the side sections *D*, the side sections *D* having the flanges *d d'* and the projections *d³*, the stationary grate *H*, having each end located upon and secured to the projections *d³* of the sections *D* and its inner rear side resting upon the projection *c²* of the back section *C*, the sliding grate *G*, provided upon its under side with the notches *g'* and working in the grooves *c³ h'* of the sections *C* and *H*, respectively, and the rod *I*, having bearings *c'* in the back section *C* and upon the under side of the stationary grate *H*, and provided with a suitable handle and pinion, whereby the sliding grate is operated, substantially as described, and for the purpose set forth.

2. In a fire-place lining and grate, the sections *A*, *B*, and *C*, bolted to the inner flanges *d'* of the side sections *D*, in combination with the stationary grate *H*, having each end resting upon and secured to the projections *d³* of the sections *D*, the shut-off *G*, provided upon

its under side with the notches g' and working in the grooves $c^3 h'$ of the sections C and H, respectively, and the rod I, having bearings c' in the back section C and upon the under side
5 of the stationary grate H, said rod being provided with a suitable handle and pinion, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN A. CORNISH.

Witnesses:

W. R. BARDEN,
J. H. BLACK.