

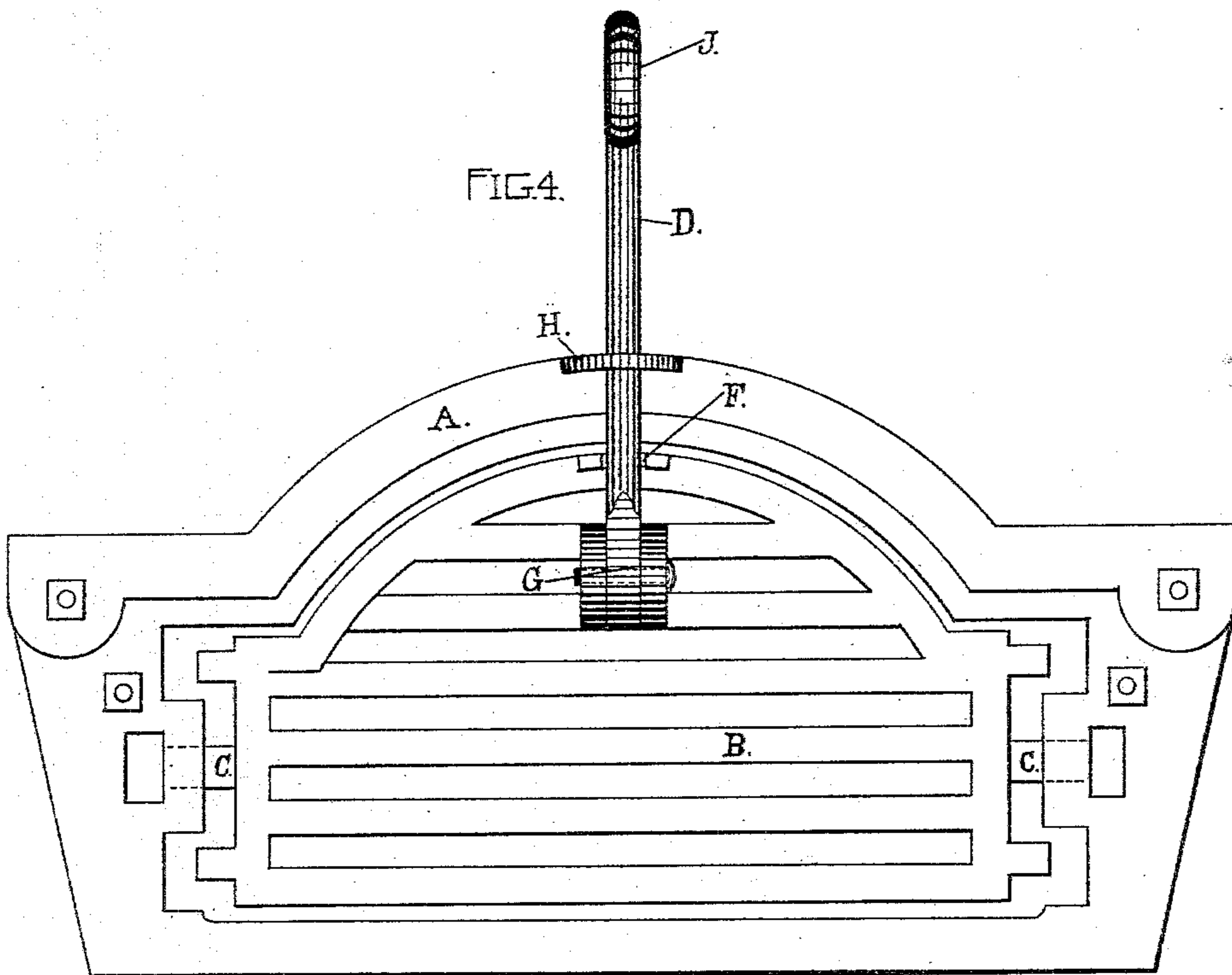
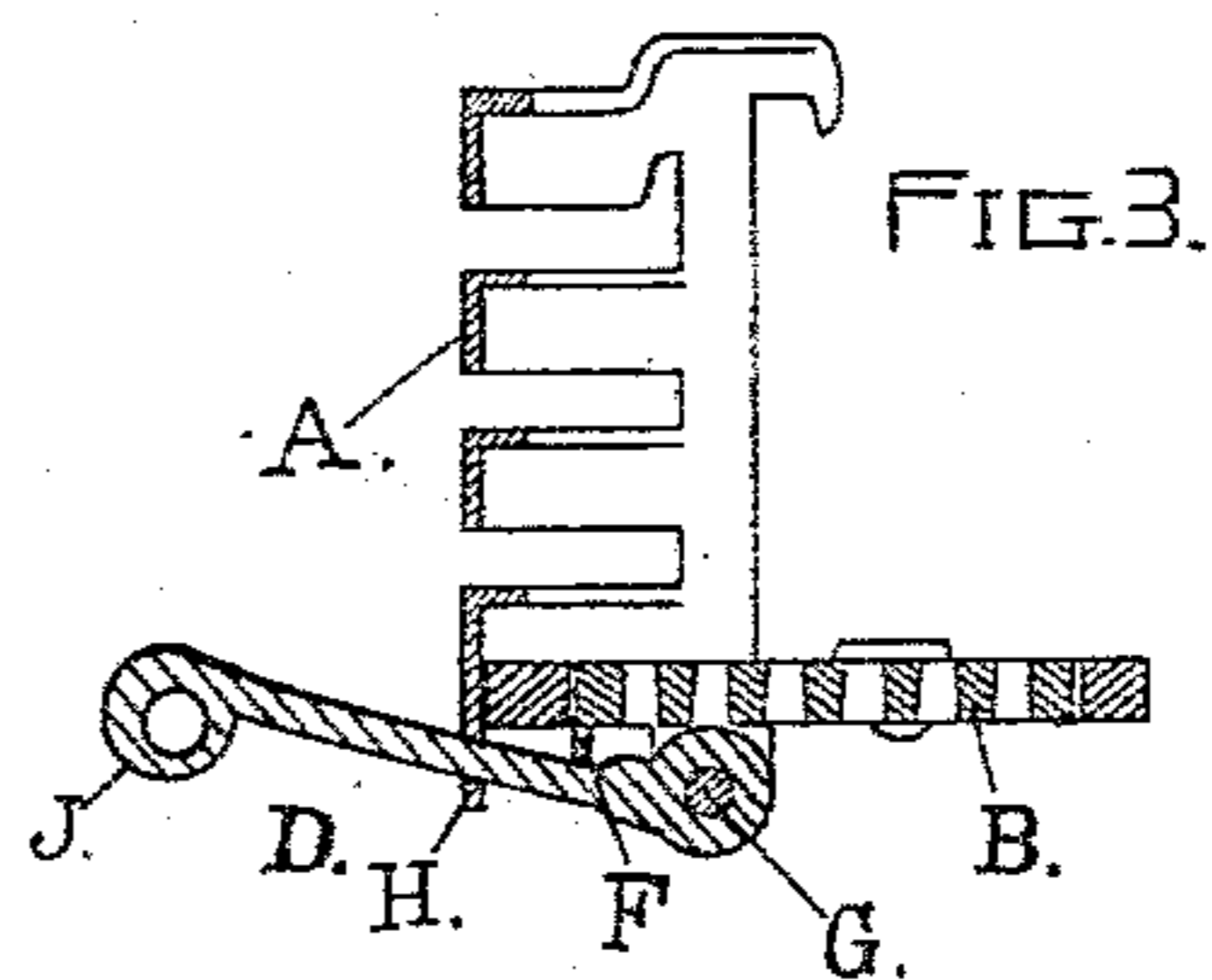
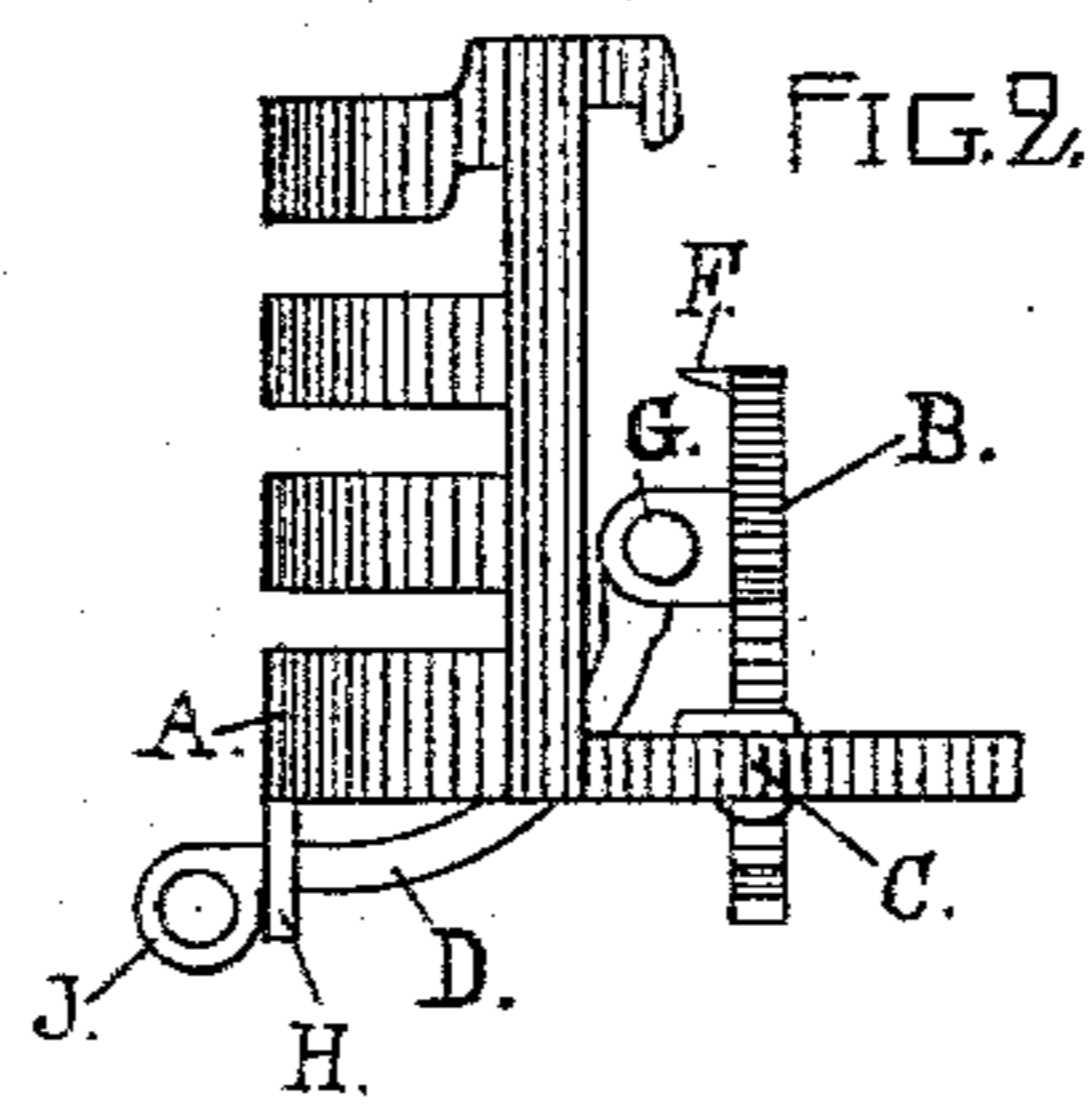
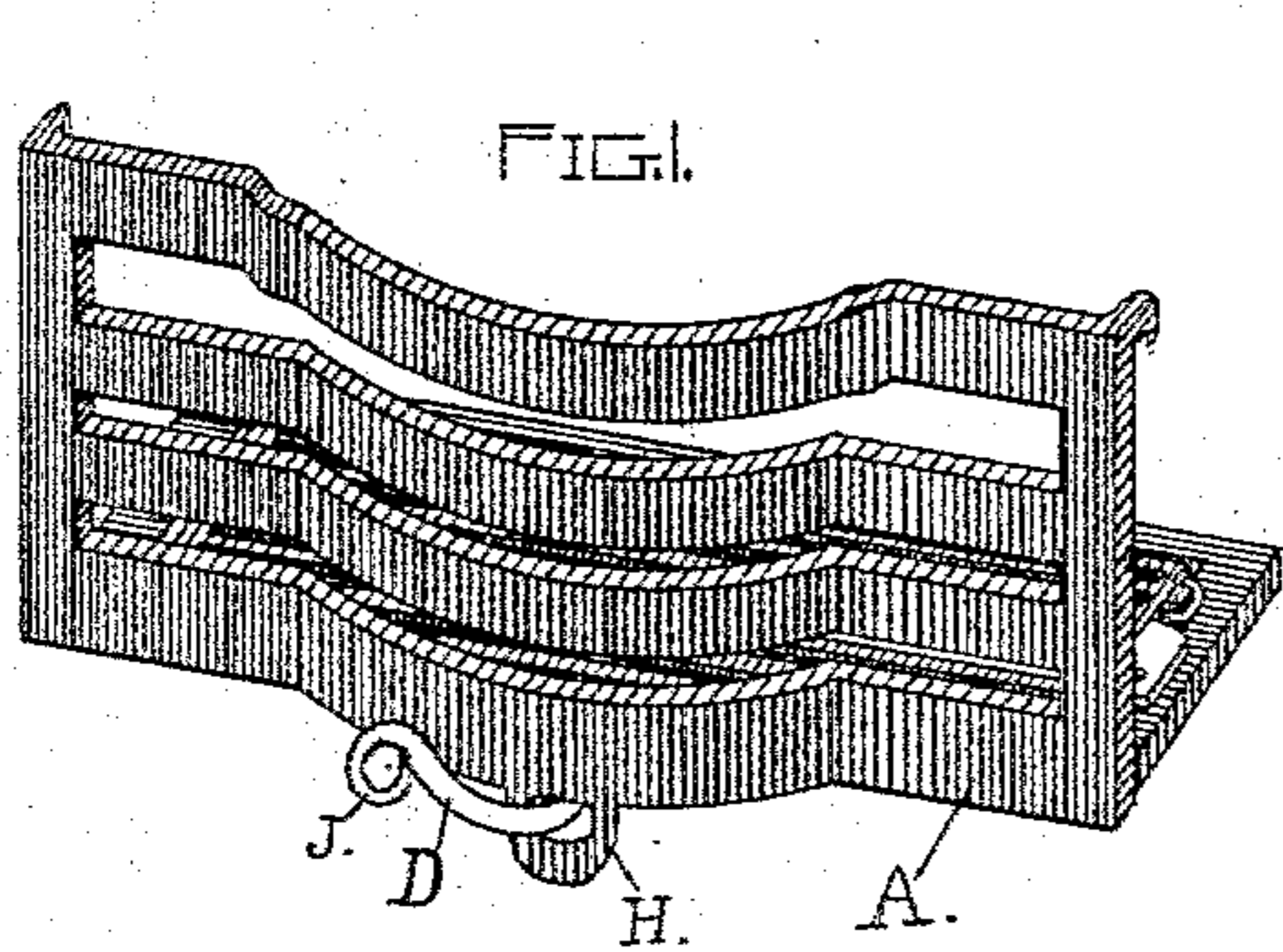
(No Model.)

F. H. DE GUERRE & W. W. DE LANO.

GRATE.

No. 356,824.

Patented Feb. 1, 1887.



ATTEST,
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INVENTOR,
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Atty. in Fact

UNITED STATES PATENT OFFICE.

FRANK H. DE GUERRE AND WILLIE W. DE LANO, OF SAN FRANCISCO, CAL.

GRATE.

SPECIFICATION forming part of Letters Patent No. 356,824, dated February 1, 1887.

Application filed February 4, 1886. Serial No. 190,749. (No model.)

To all whom it may concern:

Be it known that we, FRANK H. DE GUERRE and WILLIE W. DE LANO, both citizens of the United States, residing in the city and county of San Francisco, and State of California, have invented a new and useful Grate, of which the following is a specification.

Our invention relates to improvements in mantel and other grates, and will be understood by reference to the accompanying drawings and the letters marked thereon.

Figure 1 is a perspective view; Fig. 2, a side elevation; Fig. 3, a transverse section, and Fig. 4 an under plan view.

The following is the construction of the invention:

We form the grate of any design to suit the requirements of the trade.

A represents the grate-front; B, the grate; C, the grate pivots or journals; D, the dumping-lever; F, the rest-notch for the bearing of the grate upon the dumping-lever D. G represents the lever-connecting joint; H, the guide-eye, and J the dumping-lever eye.

The following is the operation: When the grate is to be dumped to free it from cinders and clean it, a hook or other instrument is inserted in the lever-eye J, and the lever D is operated by tilting and pulling down the back part of the grate and placing the same in the position shown in Fig. 2. When the grate is to be simply shaken for the purpose of discharging the ashes, the elongated or oval form of the opening in the guide-eye H allows the grate B to be moved sufficiently (longitudi-

nally) to sift out the ashes in the usual way. We prefer this motion, as we are thereby allowed to make a firm broad lateral bearing for the joint G, that connects the lever D with the grate B.

The ring or eye J forms the stop to prevent the grate from tilting higher than required, and in consequence forms an important feature of our combination forming the dumping apparatus. When the lever D forces the grate down to a horizontal position, the front of the grate rests firmly upon the dumping-lever D, thus dispensing with the casting of all stops upon the grate-frame, as the ring J and the lever D regulate the same perfectly.

The lever D may be constructed either straight or curved, as may be required; but we generally employ a lever more or less curved.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination, with the grate-front having the depending eye H, of the grate B, journaled in the grate-front and having on its under face the rest-notch F, and the lever D, pivoted to the under side of the grate, near the forward end thereof, and extending through the notch F and eye H, substantially as set forth.

FRANK H. DE GUERRE.
WILLIE W. DE LANO.

Witnesses:

JOHN H. REDSTONE,
L. E. REDSTONE.