

(Model.)

A. CLIMIE.
Bolts.

No. 235,741.

Patented Dec. 21, 1880.

Fig: 1.

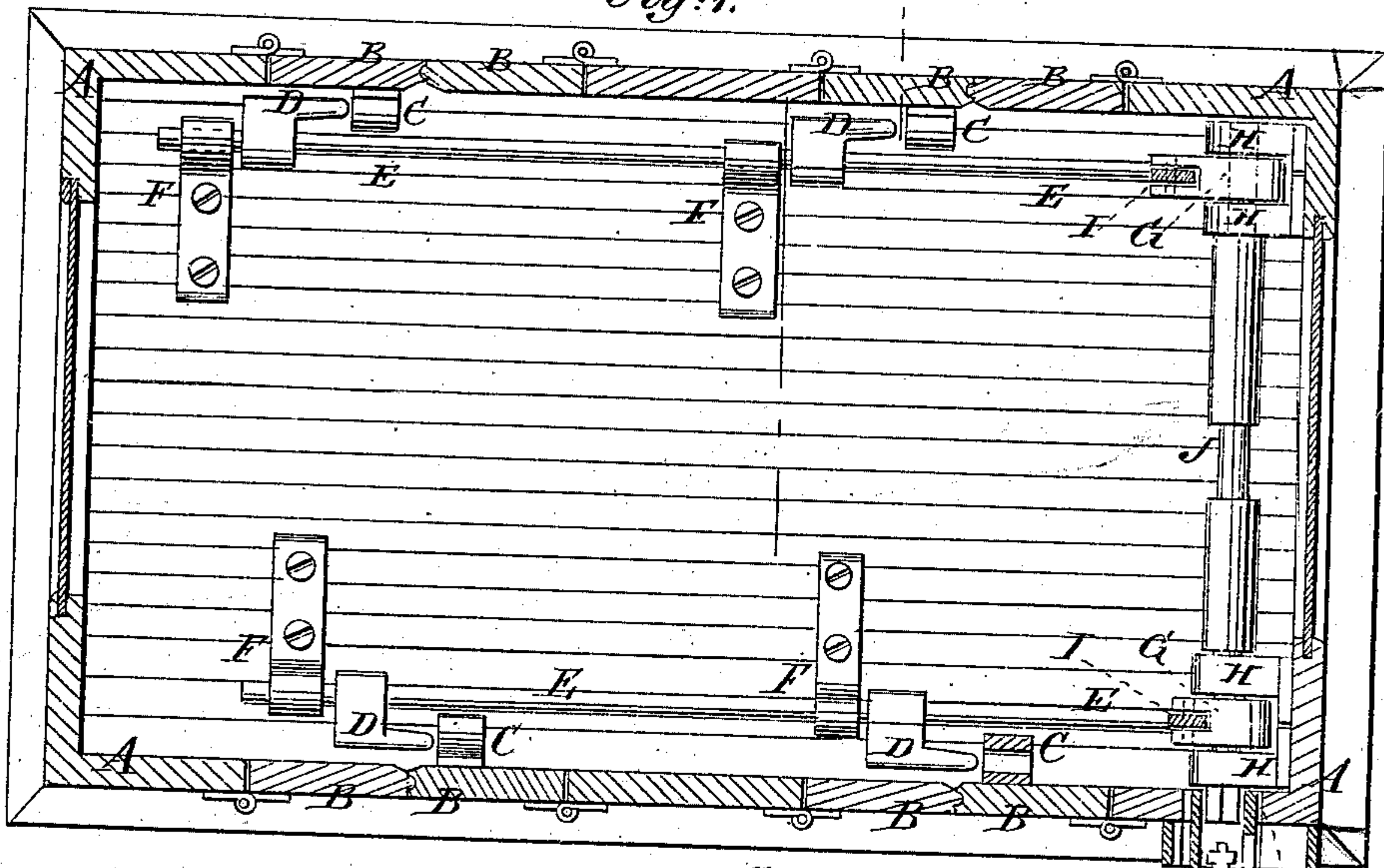


Fig: 2.

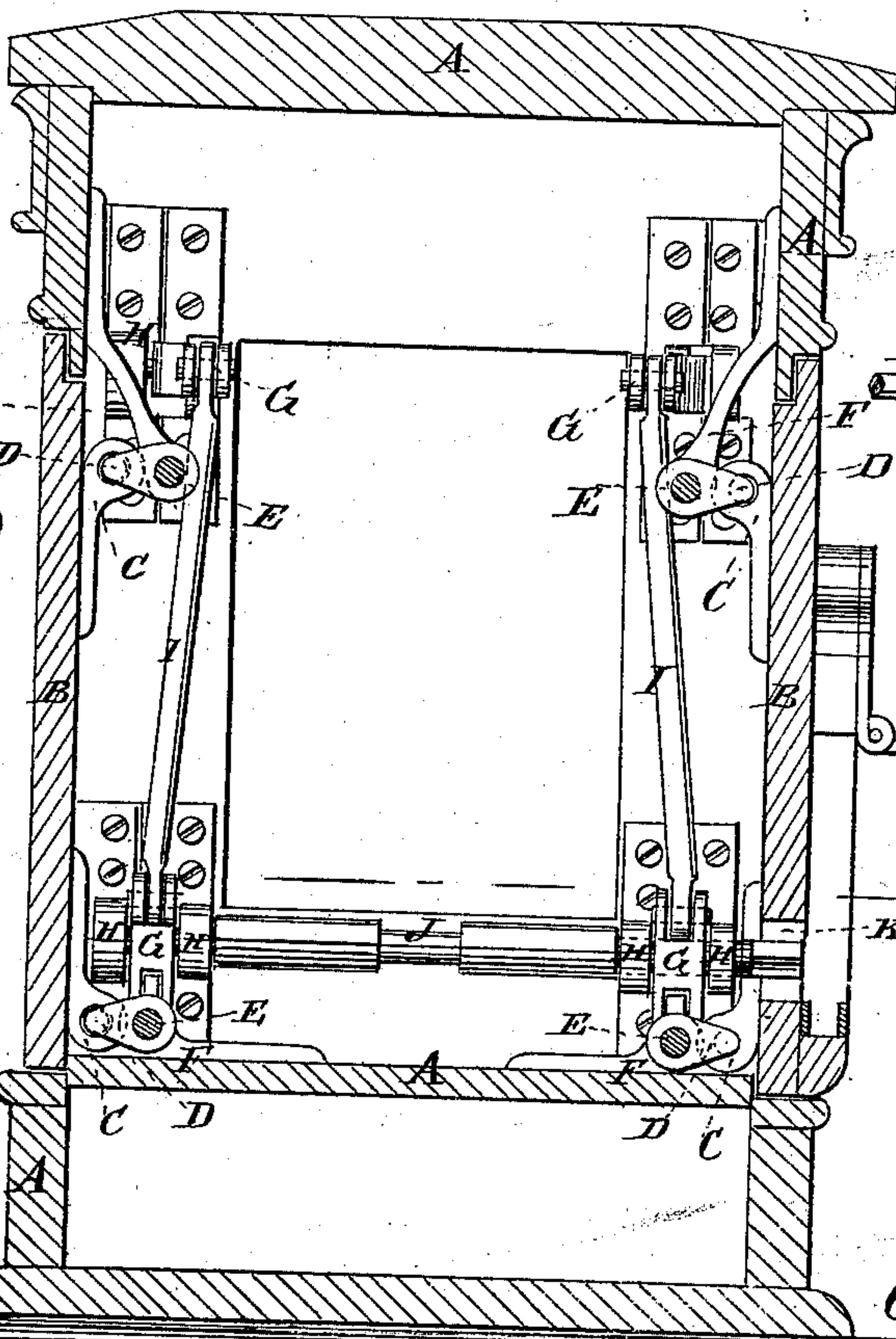


Fig: 3.

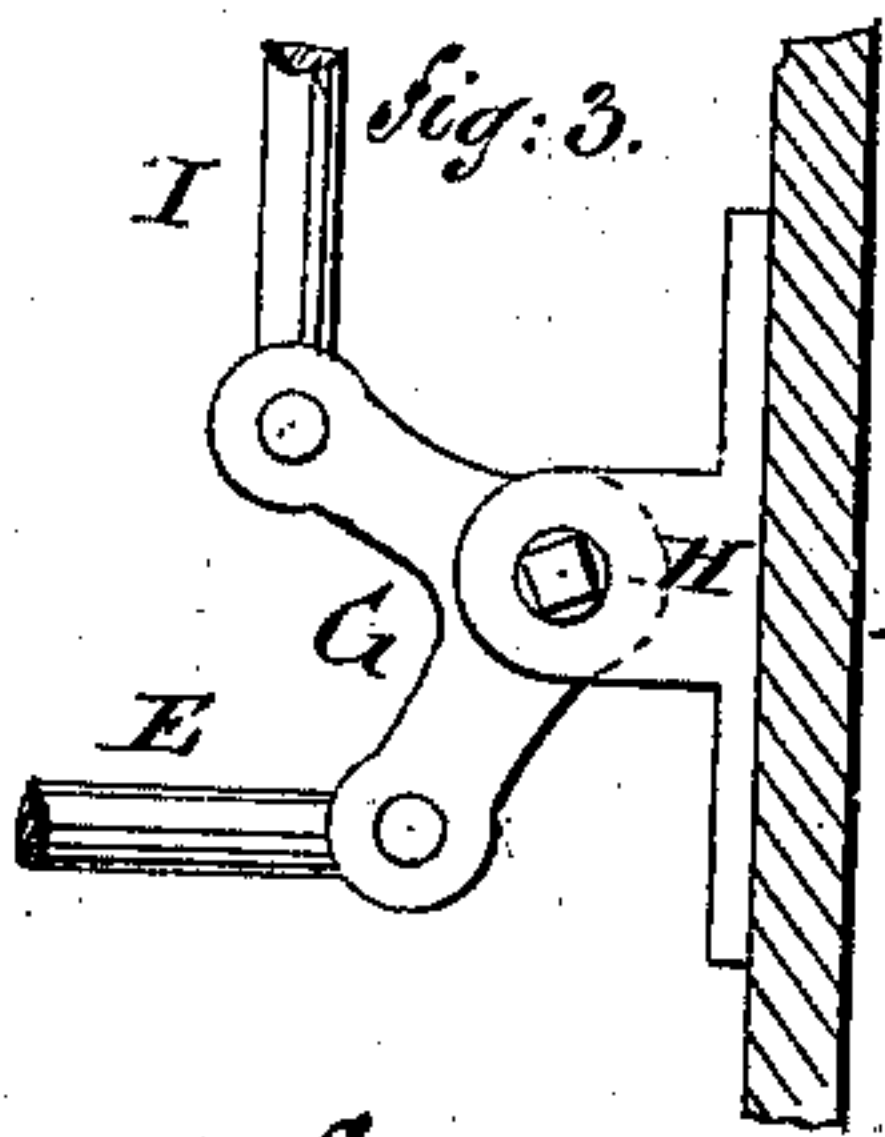
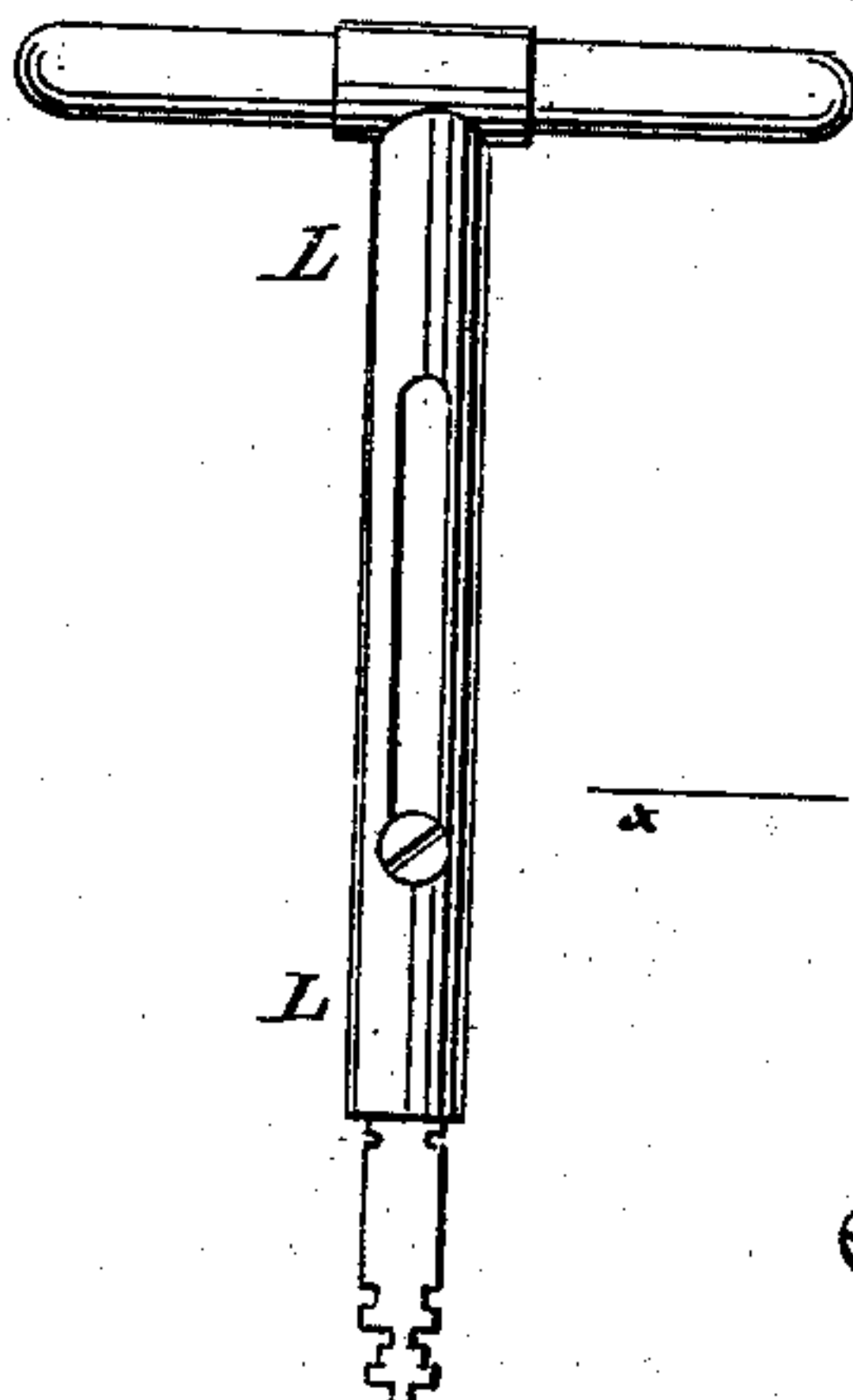


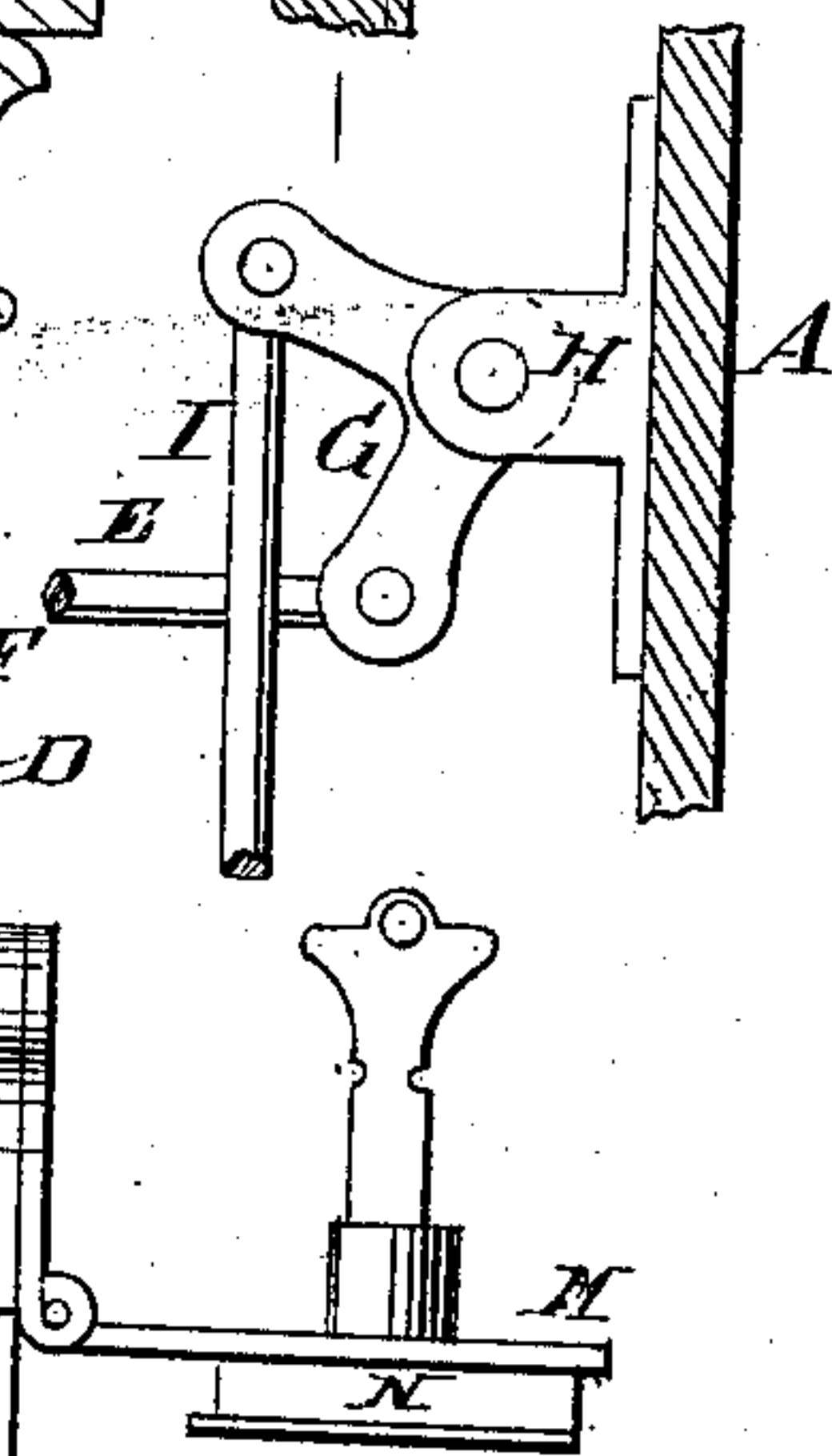
Fig: 5.



WITNESSES:

Chas. Nida.
C. Dugwick

Fig: 4.



INVENTOR:

A. Climie
Munn & Co

BY

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UNITED STATES PATENT OFFICE.

ANDREW CLIMIE, OF ANN ARBOR, MICHIGAN.

BOLT.

SPECIFICATION forming part of Letters Patent No. 235,741, dated December 21, 1880.

Application filed July 16, 1880. (Model.)

To all whom it may concern:

Be it known that I, ANDREW CLIMIE, of Ann Arbor, in the county of Washtenaw and State of Michigan, have invented a new and useful Improvement in Locks, of which the following is a specification.

Figure 1 is a sectional plan view of the improvement, taken through the line *xx*, Fig. 2. Fig. 2 is a sectional end elevation taken through the line *yy*, Fig. 1. Figs. 3 and 4 represent angle-levers for changing the direction of motion. Fig. 5 represents the key.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish locks for cases and drawers in museums and in other places, and for other uses where a number of doors or drawers are to be locked at the same time.

The invention consists in constructing a lock of series of sockets, series of bolts having sockets upon the sides of their bases, series of bearings, one or more sliding rods carrying the bolts, one or more bent levers, and one or more connecting-rods, whereby one or more series of bolts can be operated at the same time, as will be hereinafter fully described.

A represents a case, with a number of double doors, B, on each side. To the upper and lower parts of each door, or of one door of each pair of doors, when double doors having interlocking or overlapping inner edges are used, are attached keepers or sockets C, to receive the bolts D. The bolts D have sockets formed upon the sides of their rear ends to receive the rods E, to which they are secured by set-screws, rivets, or other suitable means. The inner sides of the bolts D are slightly inclined or beveled, so that the said bolts will draw the doors tight as the said bolts are forced into place.

Two sets of sockets, C, bolts D, and rods E are used for each set of doors, so that both ends of the said doors will be held firmly.

The rods E slide in bearings F, attached to the case A, so that they will always move in the same line. Each rod E at one end is pivoted to an arm of an equal-armed bent lever, G, which is pivoted at its angle to and between a pair of lugs, H, formed upon plates

attached to the case A. To the other arm of the bent lever G is pivoted the end of a vertical rod, I, the other end of which is pivoted to the arm of another bent lever, G, connected with another rod, E, and set of bolts D.

When sets of doors upon two sides of a case are to be locked the pivot of one of the bent levers G upon one side of the case is connected with the pivot of a bent lever, G, upon the other side of the case by a rod, J, so that the rods and bolts upon both sides of the case can be moved at the same time and by the same operation. The outer end of the pivot of one of the bent levers G is squared and projects into an opening, K, in the side of the case A, so that it can be turned to throw the bolts into and out of their sockets by means of a key, L, applied to the said pivot through the said opening K. The opening K also serves as a flue to allow the air to escape as the doors are closed, which in the case of tight cases is very essential. The opening K is closed at the outer side of the case A by a plate, M, closing tightly to keep out dust, which plate is provided with a lock, N, to fasten it shut.

The supplementary lock N may be of simple or complicated construction, as desired.

With this construction a single rod, E, with its bearings F, bolts D, sockets C, and bent lever G, can be used, or one or more rods, E, and their attachments, as circumstances may require.

I am aware that it is not broadly new to work a series of bolts by one operating device.

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

1. A lock constructed substantially as herein shown and described, consisting of the sockets C, the bolts D, made with sockets upon the side of their bases, the sliding rods E, the bearings F, the bent levers G, and the connecting-rods I and J, as set forth.

2. In a lock, the combination, with the series of sockets C, attached to a series of doors or drawers, of the series of bolts D, having sockets upon their sides, a sliding rod, E, a series of bearings, F, and a bent lever, G, having the end of its pivot squared to receive a

key, substantially as herein shown and described, whereby all the doors of the series will be locked and unlocked at the same time, as set forth.

- 5 3. In a lock, the combination, with the bent levers G, that operate the rods E, carrying series of bolts D, of the rods I and J, substan-

tially as herein shown and described, whereby two or more series of bolts can be operated at the same time, as set forth.

ANDREW CLIMIE.

Witnesses:

E. FRED. WOOD,
W. A. TOLCHARD.