

UNITED STATES PATENT OFFICE.

D'ESTAING S. COVERT, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SAFE-DOORS.

Specification forming part of Letters Patent No. 116,686, dated July 4, 1871.

To all whom it may concern:

Be it known that I, D'ESTAING S. COVERT, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Operating Safe-Doors; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to make and use my invention, reference being had to the accompanying drawing which makes part of this specification, and in which—

Figure 1 is a front elevation of part of a safe and door with my improvement attached; and Figs. 2 and 3 are sectional plan views, the line of section being in a a, Fig. 1, and the door being shown in different positions.

Like letters of reference indicate like parts in

the several figures.

My invention relates to that class of safes that is provided on its inner ends with projections fitting into grooves in the bed of the door, and which must be moved out of its bed at right angles to the front of the safe before being swung on its hinges; and it consists in making the pivot of that leaf of the hinge which is attached to the door movable at right angles to the line of the leaf by sliding on a square piece projecting at right angles from that leaf of the hinge which is attached to the safe, as hereinafter more fully described.

A in the drawing may represent that part of the front of a safe to which the door B is hinged. This door is provided at its inner ends with projections b b, which fit into corresponding recesses a a formed in the bed of the door in the safe. C is the leaf of the hinge attached to the door of the safe, and is provided with a head or projection, c, which fits over the pintle d, which slides on a projection, e, formed on the leaf E of the hinge, which is secured to the safe, and which projection extends out from the leaf at right angles to the face of the same. The limit of the motion of the pintle d sliding on the projection eis formed by a pin, f, passing through the projection e at its outer end. The shape of the projection is immaterial. It may be round, square, or of any other shape. In the drawing I have shown it square, the lower enlarged part of the pintle seizing over the projection so as to freely

slide on the same. On the upper portion of the enlarged part of the pintle d I secure a plate or disk, g, having at one point of its circumference. a portion cut out, into which cut-out space fits the end of a lever, D, pivoted at h on a suitable projection, i, secured on the safe in such a manner that when the lever D is moved inwardly or toward the safe the plates or disks g on the pintles d are forced outwardly or away from the face, causing the pintle d carrying the leaf C of the hinge to slide outwardly on projection e, thus removing the door B out of its bed at right angles to the front of the safe. As soon as the outward face of the enlarged part of the pintle abuts against pin f, the projections b have been moved out of their respective recesses, and the door is now free to be swung, its pivots being the pintles d, now situated on the outward end of projection e. By moving the lever D outwardly the disks g and leaf C of the hinge attached to the door are forced inward in a straight line. The lever D operate both the upper and lower hinges, and where more than two hinges are used they all can be operated by the same lever D, as will readily be understood. The two positions of lever D are clearly shown in Figs. 2 and 3 of the drawing.

It will, of course, be seen that the disks g might be provided with cog-teeth on a certain portion of their circumferences, into which the teeth of a cog-segment on the inner end of lever D seizes, and that the operation of the lever would then be precisely the same. I therefore do not confine myself to the exact construction of the parts by which this lever operation is performed, as

they may be varied.

Having thus described my invention, I claim— The safe-hinge, consisting of the leaf C provided with head c, which fits over pintle d, which latter slides on a projection, e, formed on leaf E, and lever D, all arranged to operate substantially as described.

The above specification of my improved mode of operating safe-doors signed this 18th day of February, 1871.

D'ESTAING S. COVERT.

Witnesses:

ALEXR. A. C. KLAUCKE, A. E. SWIFT.