

D. Evans,
Key-Hole Guard.
N^o 2,166. Patented July 10, 1841.

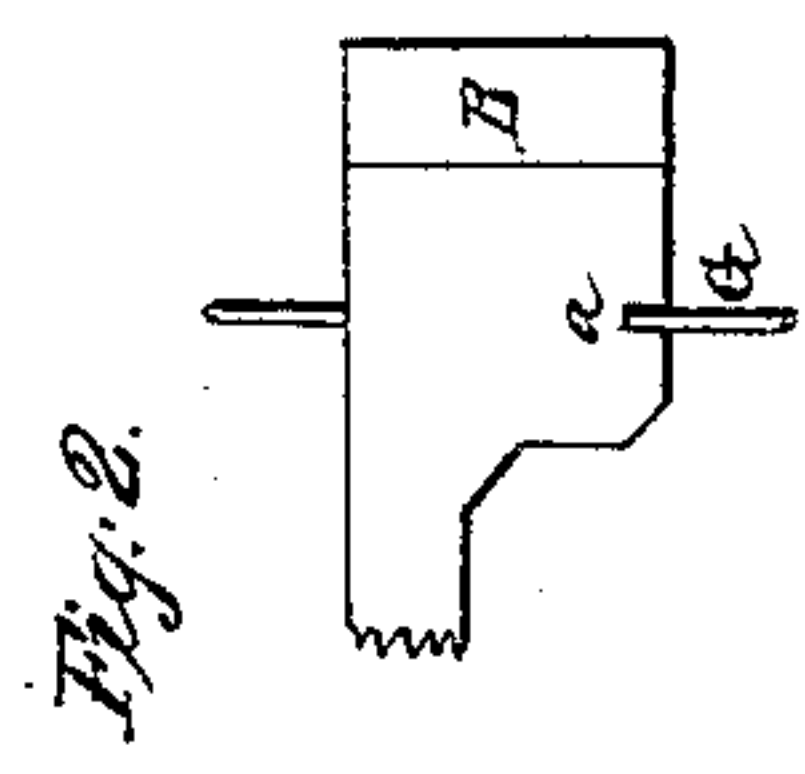
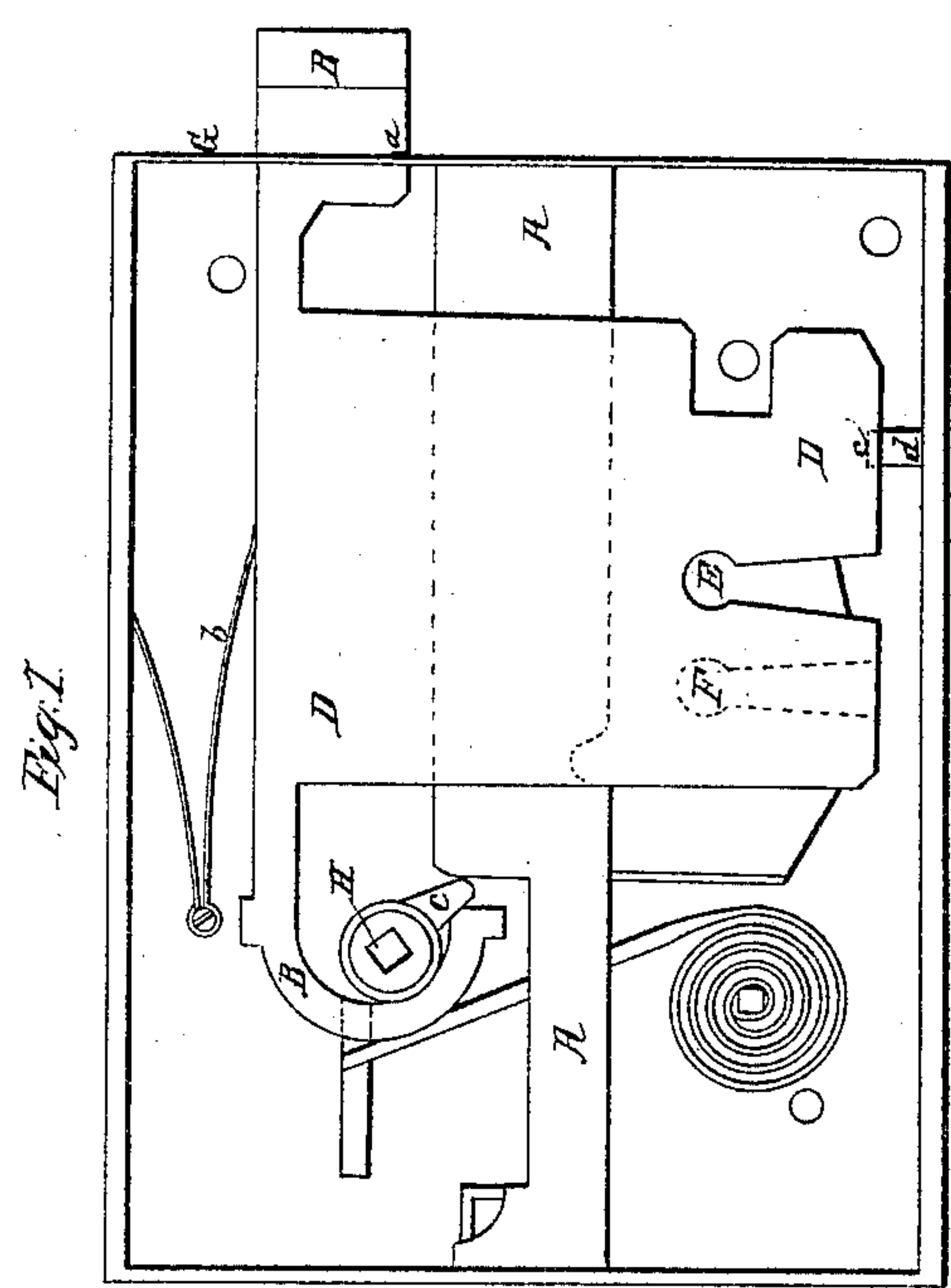
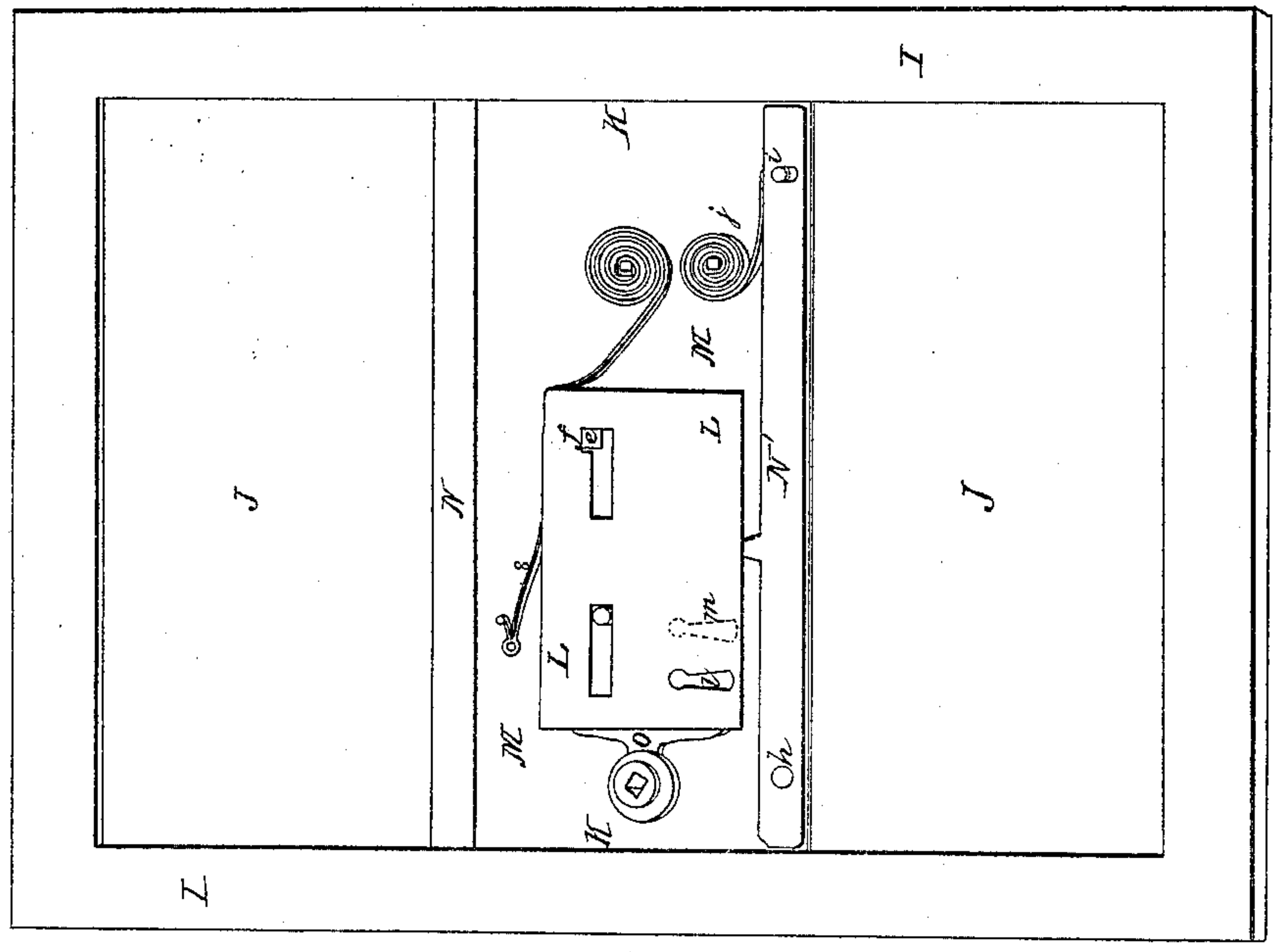


Fig. 3.



UNITED STATES PATENT OFFICE.

DAVID EVANS, OF PHILADELPHIA, PENNSYLVANIA.

MANNER OF CLOSING AND OPENING THE KEYHOLE OF DOOR AND OTHER LOCKS.

Specification of Letters Patent No. 2,166, dated July 10, 1841.

To all whom it may concern:

Be it known that I, DAVID EVANS, of the city of Philadelphia, in the State of Pennsylvania, have invented an Improvement in the Manner of Constructing Locks for Doors, Chests, Safes, Drawers, and other Articles on which Locks are Used; and I do hereby declare that the following is a full and exact description thereof.

10 The main feature of this invention consists in the providing of a sliding plate, or cover, by which the key hole is to be closed spontaneously on withdrawing the key, and that in such manner as that the key cannot
15 be made to enter the lock until a catch is raised, and a shaft, or handle, turned, by which the plate is slid back to the required distance, when the key may be readily inserted. The part by which the catch is
20 raised, and the handle or shaft by the revolution of which the covering plate may be made to slide back, may be varied in numerous ways, and must, in fact, be so varied in order to adapt the invention to the kind of
25 lock employed, and the article to which it is appended. The sliding plate I caseharden, where it covers the key hole, so that it cannot be drilled or cut by any tool.

30 In the accompanying drawing, I have given two examples of the manner in which I apply and operate the sliding plate; one example being in the ordinary lock for room doors, and the other in a lock applied to an iron chest, or safe.

35 Figure 1, represents a door lock with the inner plate removed for the purpose of showing the sliding plate, and its appendages. A, is the main bolt which is to be moved back and forth by the key, and which
40 has not anything peculiar in its construction; in this lock, the bolt and key are supposed to be of the common kind, but bolts provided with a number of tumblers, webs, or plates, to be lifted by the key, and of any
45 known construction or arrangement of parts may be used, my improvement being entirely independent of this part of the lock. B, is the spring bolt, which is to be turned back by means of a knob and shaft, acting on the
50 turnbuckle or cam, C, in the usual way. To this bolt is firmly attached the metallic plate D, D, which is the sliding plate by which the key-hole is to be covered. This plate is furnished with a hole at E, through which the
55 key must pass, and which, as represented in the drawing, is in advance of the key hole on

the plate of the lock, and therefore presents a part of its dead surface to this hole, and effectually prevents the entrance of the key. The dotted lines at F, show the position of the key-hole proper, and to this position the hole E, in the plate D, must be brought before the key can be made to enter the lock; and this is effected in the following way. On the under side of the outer end of the spring bolt there is a notch cut which causes it, when shot forward, to latch on to the end plate G.

Fig. 2, shows the outer end of this bolt separately, having a notch at *a*, on its lower side by which it is latched on to the plate G, the spring *b*, serving to press it down. The mortise in the plate G, through which the bolt passes must be of such length as to allow the bolt to be lifted up so as to free it from its hold on G, and then by turning the knob, the shaft of which passes through H, and retracting the spring bolt, the hole E, in the sliding plate will be brought to coincide with the key-hole of the lock, and the key may be inserted. Instead of making a notch on the lower side of the plate D, as shown by the dotted lines at *c*, by which the plate may be made to latch on the stud *d*, which will produce the same effect as that produced by the notch on the under side of the bolt B, and the operation of raising the plate and retracting the bolt, so as to cause the hole E, to coincide with the key-hole will be the same as before described.

Fig. 3, shows the manner in which the sliding plate may be applied to an iron chest, or safe, and be made to operate upon the same principle with that above described. I, I, is the frame of the door, and J, J its panels. K, K, is the middle, or lock, rail, which is composed of three, or more, thicknesses of sheet metal, the uppermost of which is removed for the purpose of showing the sliding plate by which the key-hole is to be closed. L, L, is the sliding plate, which rests upon a flat plate M, M, beneath it, there being a space of an eighth of an inch, or more, between the upper plate, which has been removed, and the plate M, M; said upper plate resting upon strips, or ledges, N, N', of a suitable thickness. The movable plate has two guide pins *d*, *e*, which enter slots made through it; the pin *e*, is made square, and catches into a notch in the sliding plate at *f*, being borne down by the spring *g*. The strip N', is made capable of

being raised, and has a fulcrum pin at *h*,
 and a check pin at *i*, a spring *j*, serving to
 press it down; *k*, is a projecting piece rising
 from *N'*, and which serves to lift the sliding
 5 plate, and relieve it from the notch *f*, when
 the strip *N'*, is raised up, which may be done
 by making pressure upon its edge toward
 its right hand end. If thought proper, a
 small portion only of the edge of the strip
 10 *N'*, may be exposed on the lower edge of the
 rail of which it makes a part. *O*, is a turn-
 buckle, or cam, to be moved by a shaft and
 knob when the plate *L*, is to be forced back
 for the purpose of bringing the hole *l*, to
 15 correspond with the place *m*, of the key-hole,
 represented by dotted lines. From what
 has been said, the use and operation of the
 respective parts above described, will be ob-
 vious.

20 I have spoken of, and represented, the
 sliding plate as being moved by the turning
 of a knob and shaft, such as are ordinarily
 used for latches and spring bolts; but it is
 not intended to produce the sliding motion
 25 by their aid, in all cases, nor is it probable
 that they will be most generally preferred.
 A ring which forms the handle of a safe, or
 chest; a piece projecting from any part of
 the article to be locked, or a hole, or recess,
 30 into which a piece of metal may be inserted,

so as to operate upon a turnbuckle, cam, or
 other analogous device, will answer the in-
 tended purpose, and it will require but little
 skill in the workman to produce the sliding
 and the lifting motions, in modes which may 35
 be varied without end.

Having thus fully described the nature of
 my invention, and given exemplifications of
 the manner in which the same may be car-
 ried into operation, what I claim therein 40
 and desire to secure by Letters Patent, is—

The causing of a metallic plate to slide
 over and to close the key-hole of a lock, in
 such manner as not to require any care on
 the part of the person withdrawing the key, 45
 so that a key cannot be inserted until said
 plate is removed; which removal is to be
 effected by the aid of two concurring mo-
 tions, by one of which the plate is unlatched,
 or released from a catch, and by the other of 50
 which it is made to slide so as to cause a
 hole in said sliding plate to coincide with
 the key-hole; the respective parts by which
 these effects are produced, being construct-
 ed, arranged, and operating substantially as 55
 herein set forth.

DAVID EVANS.

Witnesses:

PETER HAY,

ROBERT BERRIMAN.