

(Model.)

H. J. MOORE.

HASP LOCK.

No. 362,458.

Patented May 3, 1887.

Fig. 1.

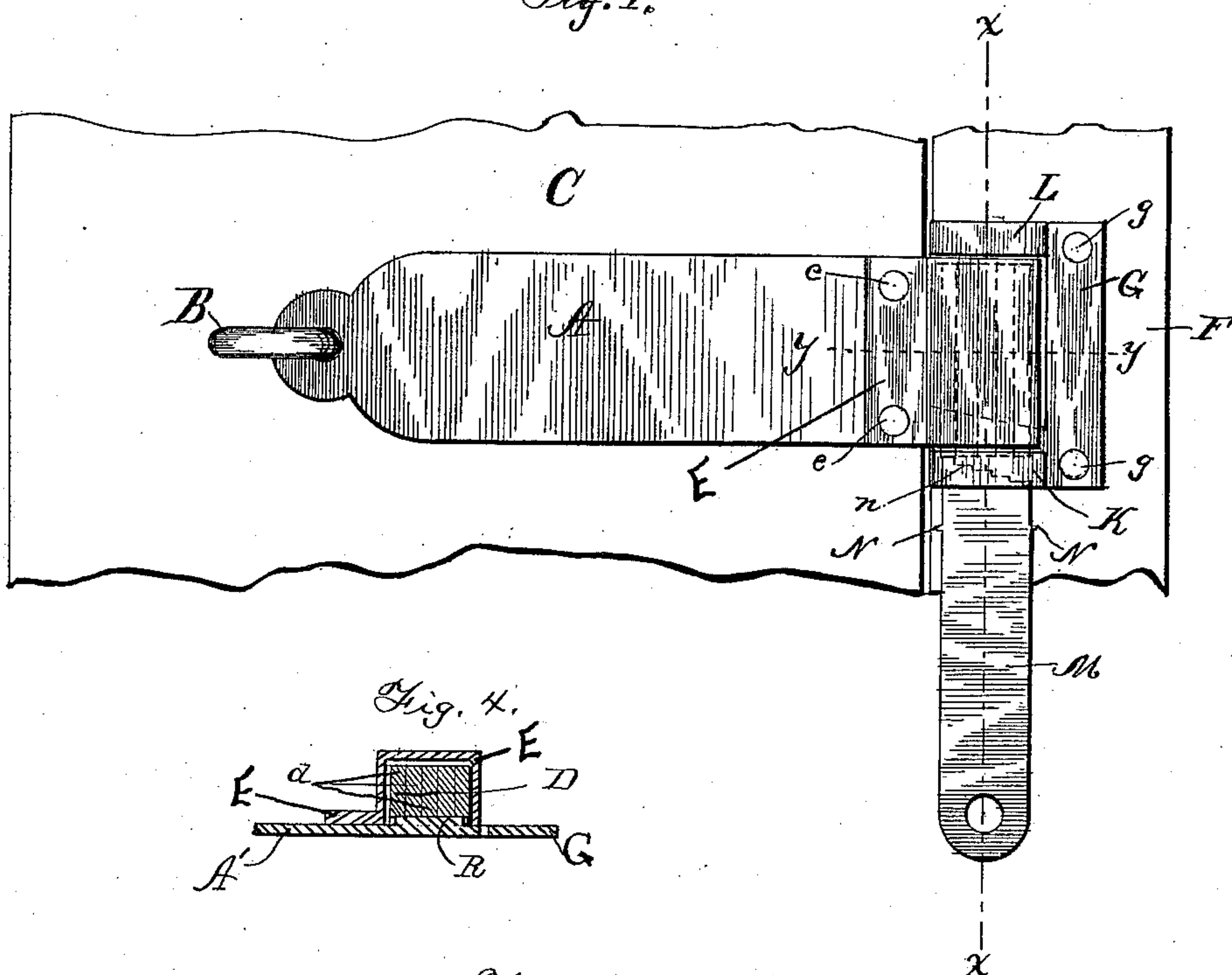
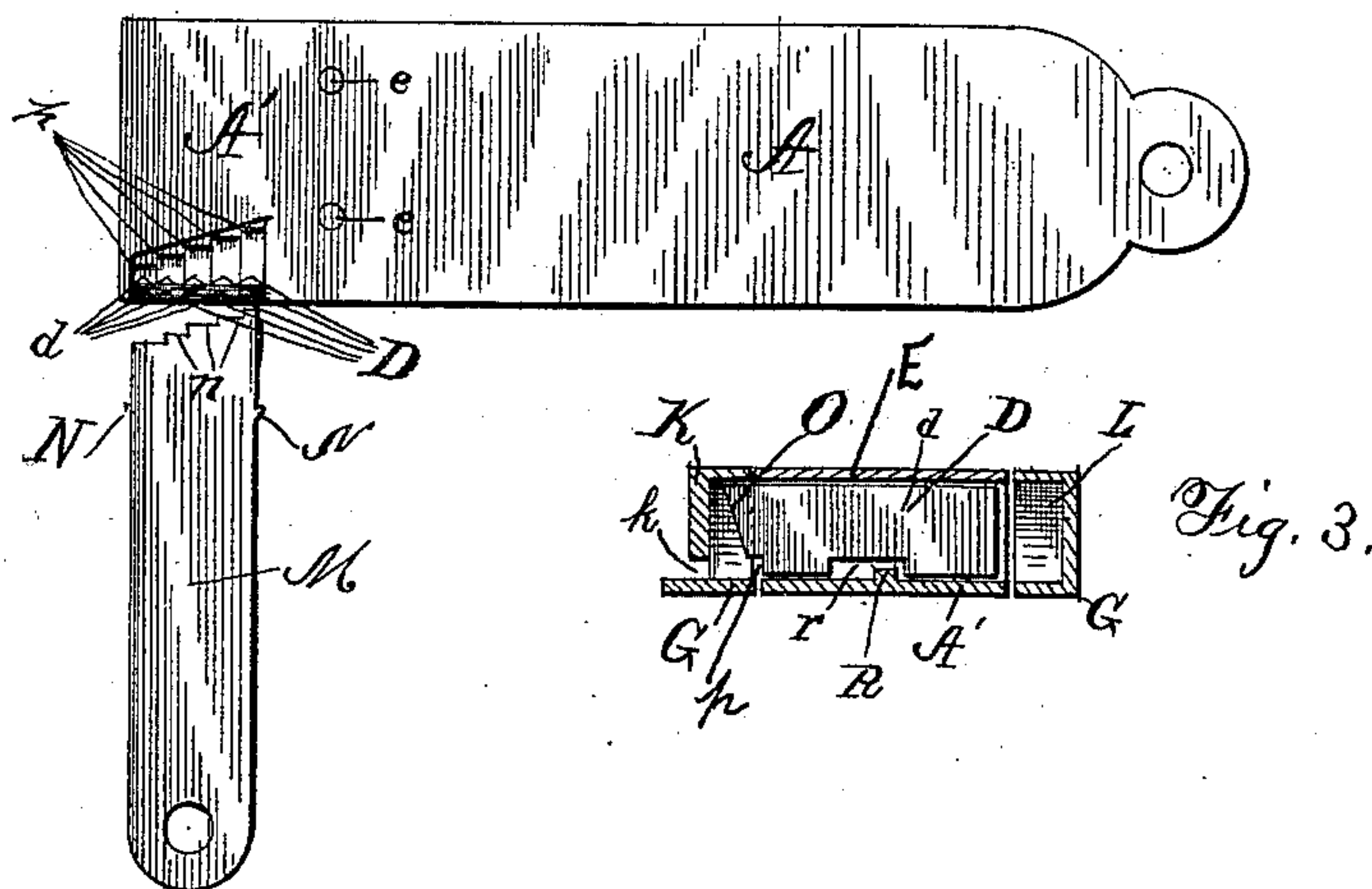


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

HOMER J. MOORE, OF CHICAGO, ILLINOIS, ASSIGNOR TO SAMUEL BAXTER FOSTER.

HASP-LOCK.

SPECIFICATION forming part of Letters Patent No. 362,458, dated May 3, 1887.

Application filed January 21, 1887. Serial No. 225,008. (Model.)

To all whom it may concern:

Be it known that I, HOMER J. MOORE, a citizen of the United States, residing at No. 338 Washington boulevard, in the city of Chicago, county of Cook, and State of Illinois, have invented a new and useful Hasp-Lock, of which the following is a specification.

My invention relates to improvements in hasps and locks, and has for its object the convenience of a hasp and lock combined; and it consists, essentially, of a confined bolt composed of separate layers or pieces of metal carried in a bolt-socket, which layers are provided with recesses over a projecting rib of metal rising from the socket, so that the layers of the bolt have a limited play; also, of two receptacles, one above and the other below this sliding bolt, into which the bolt falls or rises, thus affording the lock, and of a key provided with stops in such a manner that when the key is inserted in the lower receptacle through a slot contained in it the bolt is raised until it lies in neither receptacle, thus unlocking the device.

Referring to the accompanying drawings, in which similar letters refer to similar parts throughout the several figures, Figure 1 is a top view of the hasp-lock showing the key partially inserted. Fig. 2 is a bottom view of the hasp and confined bolt, also showing the key in position to enter the lock. Fig. 3 is a sectional view of the bolt and bolt-socket on the line *x x* of Fig. 1. Fig. 4 is a cross-section on the line *y y* of Fig. 1.

Referring to the drawings, A represents the hasp; B, the staple passing through one extremity of the same and attaching the hasp A to the door or movable piece of wood or other substance, C, which it is desirable to lock or fasten in place.

D is the sliding bolt, composed of the separate layers or pieces *d*.

E is a shelf-like cap riveted by the rivets *e e* to the hasp A, this cap E forming, with the extremity A' of the hasp A, the socket holding the bolt D. This lower plate, A', (the extremity, as just noted, of the hasp A,) carries the rib R, while each separate layer or piece *d* of the bolt D has a recess, *r*, immediately over the rib R of the extremity A' of the hasp A. Hence, when the lock is attached to a door,

each separate layer or piece *d* of the bolt D has a limited vertical movement the length of the recess *r*, this motion being stopped by the rib R of the extremity A' of the hasp A.

F is the jamb of the door, upon which is fastened the piece G by the nails *g g*. This piece G contains the raised receptacles L and K, the latter of which contains the narrow slot *k* to admit of the insertion of the key M. This key M has notches *n* at its extremity, which notches *n* are arranged to exactly correspond with the arrangement of the notches or recesses *p* at the lower extremity of the separate layers or pieces *d* of the bolt D. Hence, when the key M is inserted into the lock through the slot *k* of the raised receptacle K, as shown in Figs. 1 and 2, the key M raises all of the separate pieces *d* of the bolt D precisely equally—i. e., the same distances vertically.

As indicated, the lower extremity of the various separate pieces *d* of the bolt D each contains a second recess *p*, more or less deep, the notches *n* of the key M being made to correspond therewith. The key M is also provided with two projections, N N, which prevent said key from going too far into the lock, as such projections strike against the lower sides of the raised receptacle K of the piece G at either extremity of the slot *k*. The lower extremity of each separate layer or piece *d* of the bolt D is also beveled on its edge, O representing such beveled edge.

In operation, upon the shutting of the door C, the hasp A is lifted, turning upon the staple B, and the extremity A' is placed between the lower slotted receptacle, K, and the upper receptacle, L, of the piece G. In the process of effecting this the separate layers *d* of the bolt D essentially assume a vertical position and fall by their weight until the rib R stops their motion by striking against the angle of the recess *r* in each. In this position the lower extremity of each layer *d* (before the hasp A is inserted between the receptacles L and K of the piece G) projects beyond its socket E, this socket E being open at both extremities. When the extremity A' of the hasp A is inserted between the receptacles L and K of the piece G, these projecting lower extremities of the separate layers *d* of the bolt D strike on their beveled edge O, and are thus all forced

upward. As the extremity A' of the hasp A is forced into its place between the receptacles L and K, these lower extremities of the layers *d* slide past the top of the lower receptacle, K, and being thus released, immediately fall by their own weight, dropping into the receptacle K, thus locking the door, as the upper piece of this lower receptacle, K, prevents the outward motion of the layers *d* of the bolt D, as indicated in Fig. 3. To unlock the door, the key M is inserted from below, as shown in Fig. 1, through the slot *k* of the receptacle K, and as its notches *n* exactly correspond to the recesses *p* of the layers *d*, all of the latter are raised or pushed up exactly equally as the key M is forced upward. This upward motion is continued until the projections NN of the key M come in contact with the sides of the receptacle K, which stops all upward motion. At this point the upper extremity of each piece or separate layer *d* of the bolt D is exactly in the same plane with the upper edge of the extremity A' of the hasp A, thus allowing the bolt D, socket E, and hasp extremity A' to be lifted out of contact with the piece G and its receptacles K and L. Should any key other than M be inserted, one or more of the layers *d* of the bolt D would be pushed too far upward, thus entering the upper receptacle, L, of the piece G, and thus as effectually locking the door as though the extremities projected downward into the receptacle K. In other words, no matter what the arrangement of the pieces or separate layers *d* of the bolt D, whether such arrangement is regular or irregular, beveled or notched, a key corresponding to such arrangement must be used, which will lift these layers *d* only as far as the upper edge of the hasp A, these layers *d* being in length exactly equal to the length of their socket E or width of the hasp A.

I am aware that many modifications in the construction of my invention may be made by

those skilled in the art of constructing machines, as the lower extremity of the pieces *d* may be made in one beveled plane, so as to require a key without notches, or the upper receptacle, L, may be entirely dispensed with, allowing the rib R to stop the layers *d* of the bolt D in such a position as to allow the removal of the bolt D and socket E from the piece G, with its receptacles L and K; but the above-described construction is the best known to me.

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

1. In a lock, a bolt formed in separate recessed layers of different lengths placed together and confined in the bolt-socket, and a rib within the said socket to engage with the recessed portion of the bolt, in combination with a slotted receptacle, K, and a receptacle, L, for the respective ends of the bolt, and with a key corresponding at one extremity with the lower surface of the end of the bolt and provided with projections for a stop, substantially as and for the uses and purposes set forth.

2. The combination of a hasp, A, having a socket, E, which is provided with a rib, R, a sliding bolt, D, contained in said socket and composed of separate layers *d*, said layers being recessed in two places, *r* and *p*, and having the bevel O on their lower extremity, with the receptacles L and K, the latter containing the slot *k*, the piece G, and a key, M, having its upper extremity provided with notches *n* to correspond with the recesses *p* of the layers *d*, and provided with the projections NN, substantially as set forth.

In testimony whereof I have affixed my hand this 18th day of January, A. D. 1887.

HOMER J. MOORE.

In presence of—

FRANK L. FRY,
JESSE E. COOK.