

(No Model.)

H. McKINNON.
BAG LOCK.

No. 477,331.

Patented June 21, 1892.

Fig. 1.

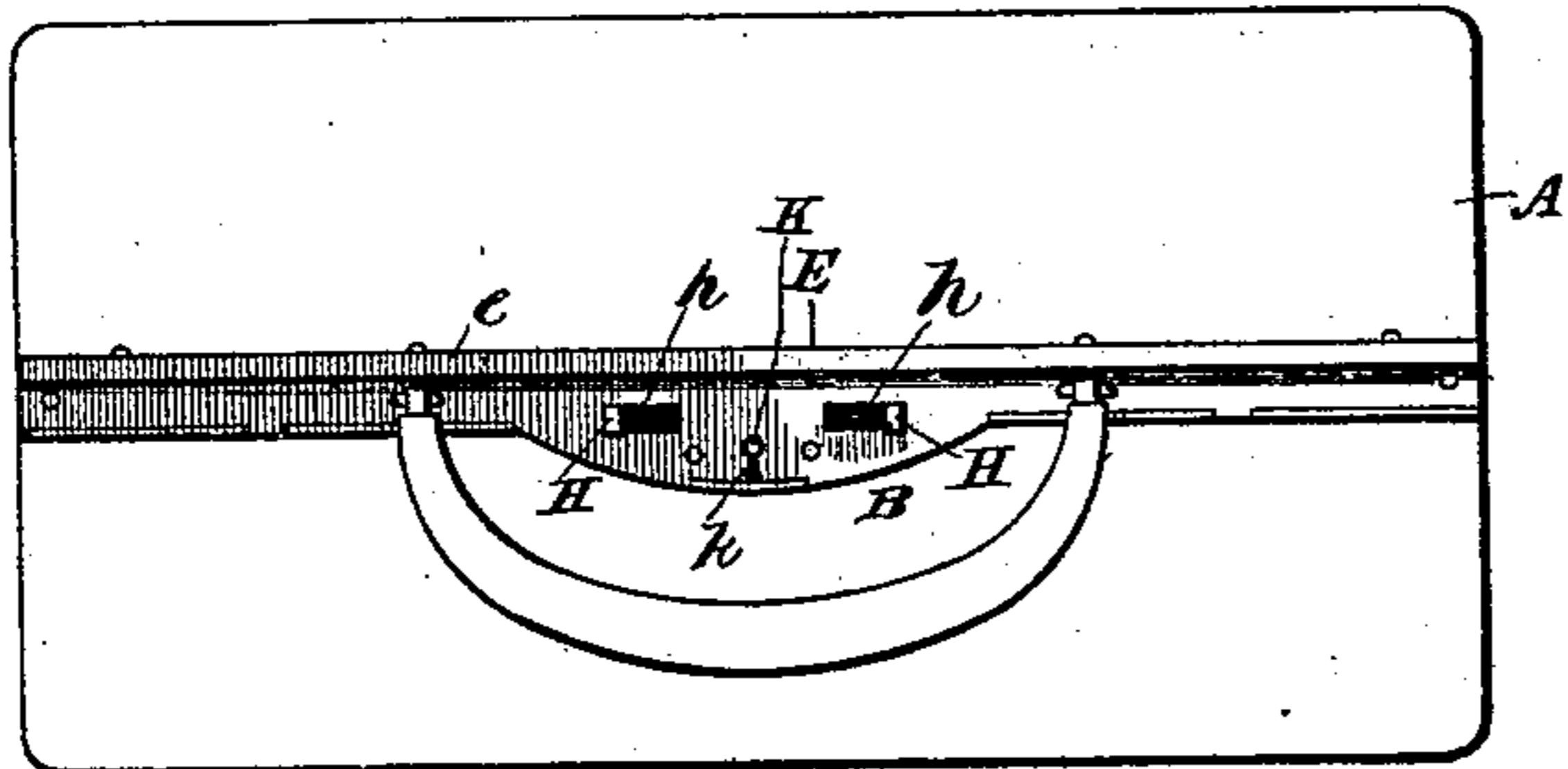


Fig. 4.

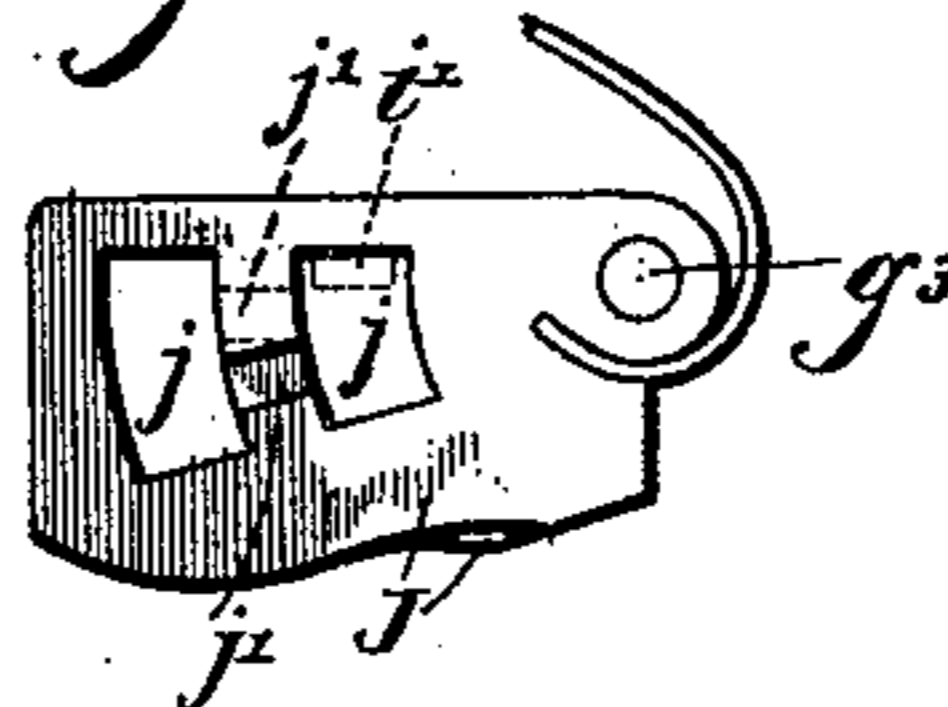


Fig. 2.

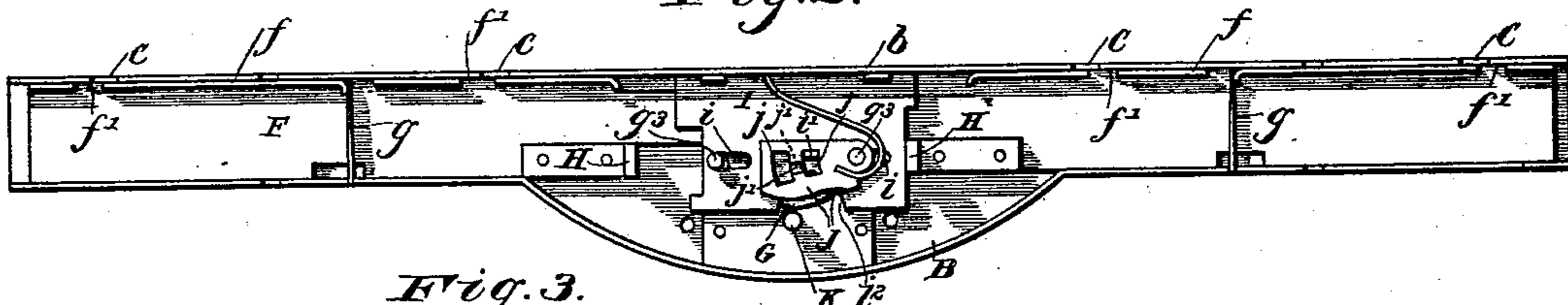


Fig. 3.

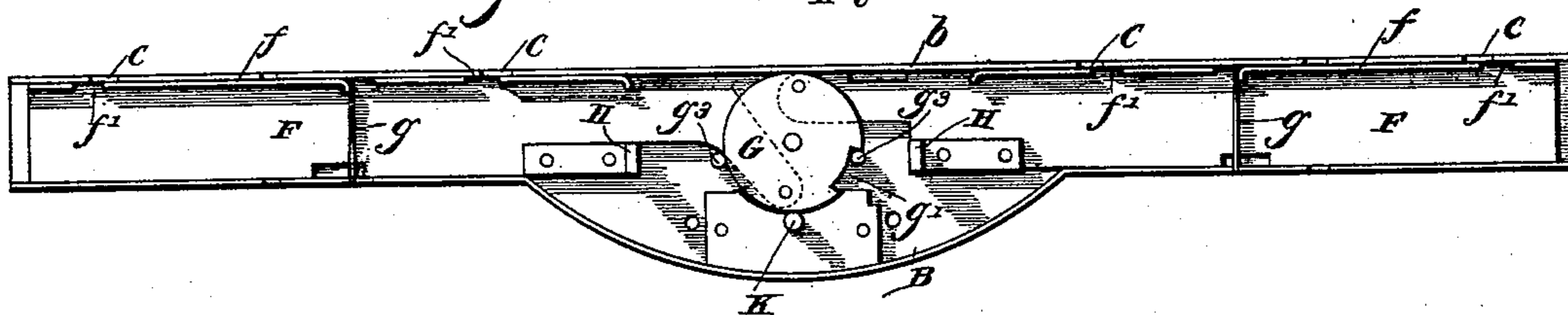


Fig. 5.

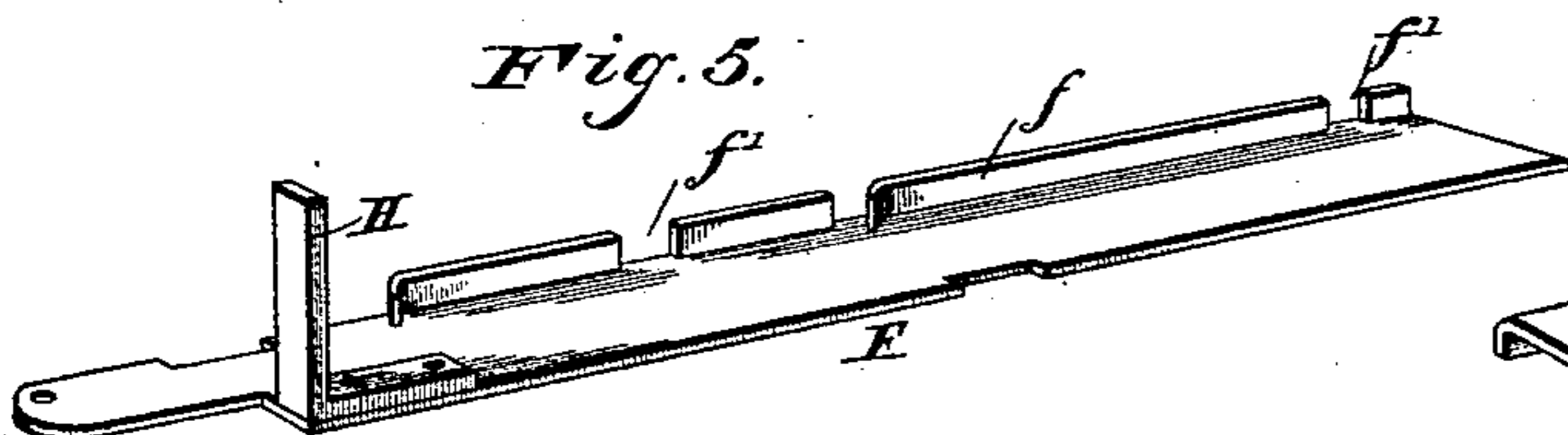


Fig. 6.

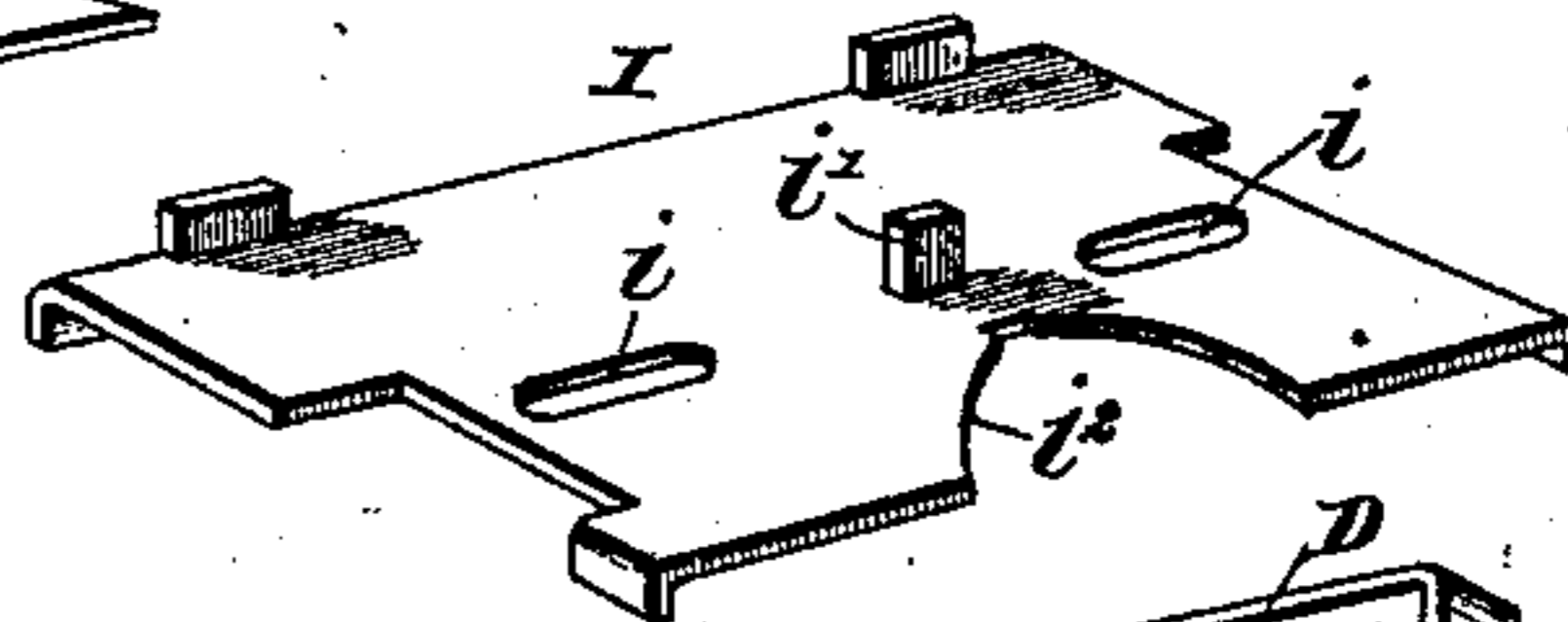


Fig. 7.

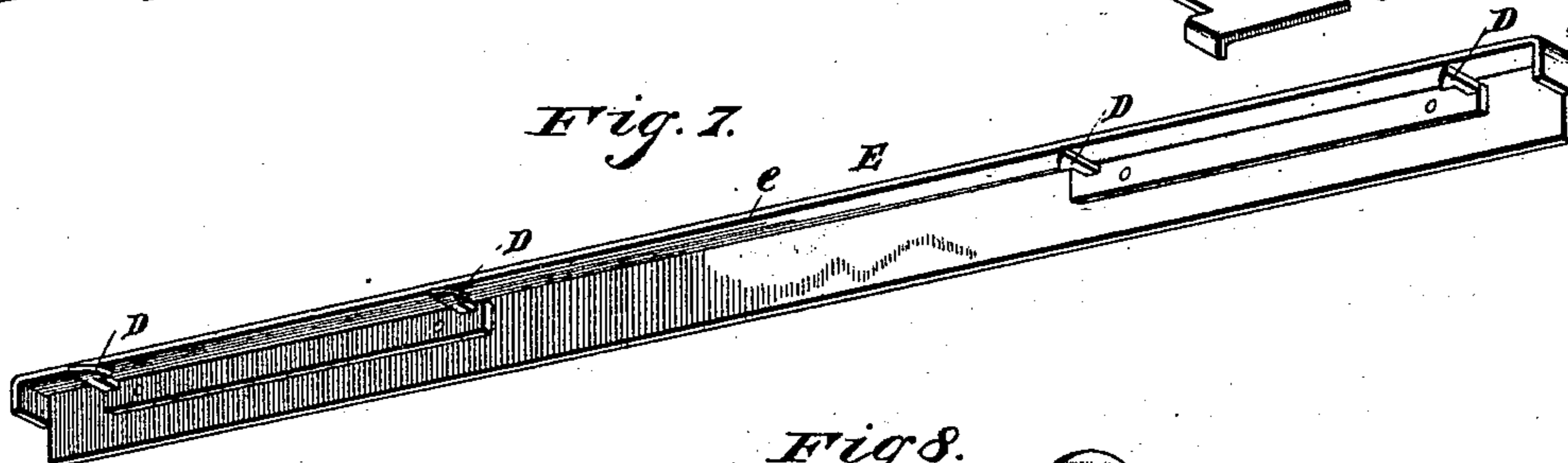


Fig. 8.



Witnesses;

J. M. Withers
D. P. Holchamper

By *his* Attorneys,

C. A. Snow & Co.

Inventor

Hector McKinnon,

UNITED STATES PATENT OFFICE.

HECTOR MCKINNON, OF EUREKA, CALIFORNIA.

BAG-LOCK.

SPECIFICATION forming part of Letters Patent No. 477,331, dated June 21, 1892.

Application filed January 22, 1892. Serial No. 418,917. (No model.)

To all whom it may concern:

Be it known that I, HECTOR MCKINNON, a citizen of the United States, residing at Eureka, in the county of Humboldt and State of California, have invented a new and useful Lock, of which the following is a specification.

This invention relates to locks; and it has for its object to provide a lock of the character which is particularly adapted for use in connection with valises, mail-bags, and traveling-bags and to this end to provide a device of this character which, while at the same time providing for an efficient lock for securely fastening the mail-bag or other article together, will also provide a lock which acts as a latch and can be readily manipulated and controlled by the fingers for opening and closing the article without using the key.

With these and many other objects in view, which will readily appear as the nature of the invention is fully understood, the same consists in the novel construction, combination, and arrangement of parts, which will be hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a top plan view of a valise provided with a lock constructed in accordance with my invention. Fig. 2 is a plan view of the lock, the top of the casing thereof being removed. Fig. 3 is a similar view with the sliding locking-plate and tumblers removed. Fig. 4 is a detail in plan of the tumblers one above the other. Fig. 5 is a similar view of one of the latch locking or bolt plates. Fig. 6 is a similar view of the sliding locking-plate. Fig. 7 is a detail in perspective of the catch-plate. Fig. 8 is a detail in perspective of the key.

Referring to the accompanying drawings, A represents a traveling-bag or valise provided with a lock constructed and arranged in accordance with my invention. To the top and along one of the meeting edges of the valise A is secured the elongated lock-casing B, the locking side *b* of which, extending the full length of the satchel, is provided with a series of squared catch-receiving openings C, that are adapted to receive the shouldered arrow-head hooks D, secured to the opposite catch-bar E, which is fastened to the top and along the edge of the opposite edge of the opening of the satchel or valise to that to which the

lock-casing B is secured. The catch-bar E is further provided with a top overlapping flange *e*, which when the arrow-head catch-hooks D have been locked within the openings C in the opposite lock-casing is designed to overlap the top edge of said lock-casing, and thus effectually prevent the lock being spread apart and access had to the interior of the receptacle in this manner, as is the case in most valise and mail-bag locks.

Sliding within the elongated casing B are the oppositely-working bolt-plates F, each of which is provided with the side flanges *f*, working upon the inside of the locking sides *b* of said casing, and said flanges are provided with squared locking-openings *f'*, which are designed to be thrown into alignment with the casing-receiving openings C to receive the arrow-head catches B. The inner ends of the opposite bolt-plates F are connected pivotally to opposite sides of the under face of a centrally-located oscillating disk plate G, which will oscillate to allow the said bolt-plates to be drawn to the center of the lock-casing to receive the hooks D or to spread apart to lock said hooks by having the edge of the flange *f* at each of the openings *f'* engage behind the shoulders of said hooks when the bolt-plates are spread apart to throw the locking-openings therein out of alignment with the casing-receiving openings. Each of the bolt-plates F is normally held in a locked position—that is, having the openings *f'* out of alignment with the openings C—by means of the transverse leaf-springs *g*, secured in one side of the casing B and having the free ends thereof engaging the flange *f* of each bolt-plate. The oscillating disk G is provided with a notch *g'* in the periphery thereof, that is adapted to work over one of the upwardly-extending pins or studs *g*³, extending up from the base of the lock-casing B on either side of said disk, and means are thus provided for limiting the inward and outward movements of said bolt-plates F. Adjacent to the disk G and near the inner end of the bolt-plates F are secured the upwardly-extending operating-stems H, projecting through the slots *h* in the top of the casing B, and, being grasped by the fingers, the same unlock the bolt-plates by drawing them toward the center of the lock-casing, and by releasing the same under

the tension of the spring *g* the said bolt-plates are thrown back into their locked position. Working over the oscillating disk *G* is the locking-plate *I*, provided with the opposite slots *i*, that are adapted to take and work over the upwardly-extending pins or studs *g*³ on either side of said oscillating disk, and said plates are thus free to be moved in one direction, so that one end thereof abuts against one of the upwardly-extending operating-stems within the lock-casing, and thus prevents the two operating-stems from being drawn together to unlock the bolt-plates. On the other hand, by sliding the locking-plate *I* away from the stem *H*, against which it abuts, the said plate is moved out of the path of the operating-stems sufficient to allow the same to be drawn together to operate the lock, as already described. The plate *I* is further provided with a central locking-pin *i'*, that is designed to be engaged by the spring-actuated locking tumbler-plates *J*, working over the sliding locking-plate *I*. The said tumbler-plates, which may be arranged one upon the other in any number desired, according to the complication of the lock desired, are each pivotally mounted over one of the upwardly-projecting pins or studs *g*³ and are normally pressed toward the outer side of the lock-casing and the key-pintle *K*, located within the casing and projecting through the key-hole *k* in the top thereof. The said tumbler-plates *J* are flat and are provided with the opposite locking-openings *j*, which are joined with each other by the connecting and joining slot *j'*, formed in said plates between the opposite locking-openings therein. The said communicating slots *j'* in each of the tumblers *J* do not normally register with each other, but are only thrown into alignment to allow the locking-pin *i'* to pass therethrough by the shape of the key, which is adapted and shaped according to the number of tumblers used. Directly under the outer key-engaging edges of the tumblers *J* the locking-plate *I* is provided with an operating-notch *i*², that is designed to be engaged by the wing of the key to slide the said locking-plate in either direction to lock the bolt-plates or allow the same to be free to be moved by the fingers, as already described. The key *L* is provided with an ordinary wing *l*, in the outer end of which is formed the notch *l'*. When the key is inserted in the lock, the end of the wing below the notch engages the edges of the operating-notch *i*² of the locking-plate to throw the same in either direction, as desired, while the notch and the end of the wing above said notch engage the key-engaging edges of the lower and upper tumblers *J*, respectively. The said tumblers are thus pressed inward by the wing of the key and the communicating slots *j'* are thrown into alignment with each other, so that the locking-plate is thrown in either direction. The locking-pin thereof is carried through said slots from one set of locking-openings to the opposite, so that after

the locking-plate has been thrown to its limit in either direction and the key withdrawn the said tumblers resume their normal spring-pressed positions, with the communicating slots not in alignment and the locking-pin *i'* consequently locked within either of the opposite sets of locking-openings.

The construction and operation of the herein-described lock is now thought to be apparent, and it will be readily seen that the same is quite as well adapted for many other purposes besides its adaptation to a valise, as herein described.

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

1. In a lock, an elongated casing having a series of receiving-openings in one edge or side thereof, oppositely-working spring-actuated bolt-plates working within said casing and having a series of corresponding locking-openings, operating-stems secured to the inner ends of said bolt-plates and projecting through the top of the casing, and an intermediate locking device between the inner ends of said plates, substantially as set forth.

2. In a lock, the casing having a series of catch-receiving openings in one side thereof, an oscillating disk pivotally secured within the casing, oppositely-working spring-actuated bolt-plates secured at their inner ends to said disk and provided with a series of locking-openings corresponding to the casing-openings, and a catch-bar, substantially as set forth.

3. In a lock, the casing having a series of catch-receiving openings in one side, an oscillating disk pivotally secured within the casing and provided with a limit-notch working over a projecting stop, oppositely-working spring-actuated bolt-plates secured at their inner ends to said disk and provided with a locking-flange having a series of locking-openings corresponding to the casing-openings, operating-stems secured to said bolt-plates, and a catch-bar, substantially as set forth.

4. In a lock, the combination of a casing having a series of catch-receiving openings in one side, oppositely-working spring-actuated bolt-plates having locking-openings corresponding to the casing-openings, a catch-bar, an oscillating disk connected to the inner ends of said bolt-plates, and a locking device arranged above said disk between said inner ends of the plates, substantially as set forth.

5. In a lock, the combination of a casing having a series of catch-openings, oppositely-working spring-actuated bolt-plates having locking-openings, a catch-bar, and a bolt-plate locking and unlocking plate centrally located within the lock-casing between the inner ends of said bolt-plates and adapted to be locked against the same or locked out of the path of the movement of said plates, substantially as set forth.

6. In a lock, a casing having a series of catch-receiving openings, oppositely-working

bolt-plates having locking-openings, a catch-bar, a locking-plate working between the inner ends of said bolt-plates and provided with a locking stud or pin, and a series of spring-actuated locking-tumblers working over said locking-plate and engaging said locking stud or pin, substantially as set forth.

7. In a lock, a casing having a series of catch-receiving openings, oppositely-working bolt-plates having locking-openings, a flanged catch-bar, a locking-plate having slots working over pins projecting within the casing between the inner ends of said bolt-plates, a centrally-disposed locking stud or pin and an operating-notch in one edge thereof, and a se-

ries of spring-actuated tumblers pivotally mounted upon one of said casing-pins and provided with opposite locking-openings adapted to receive said locking stud or pin, and communicating slots between said openings to allow said locking stud or pin to pass from one locking-opening to another, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HECTOR MCKINNON.

Witnesses:

JOHN L. MCALEER,
FRED FILLMAR.