

No. 775,957.

PATENTED NOV. 29, 1904.

C. A. WILSON.  
LOCKING DEVICE.

APPLICATION FILED MAY 2, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

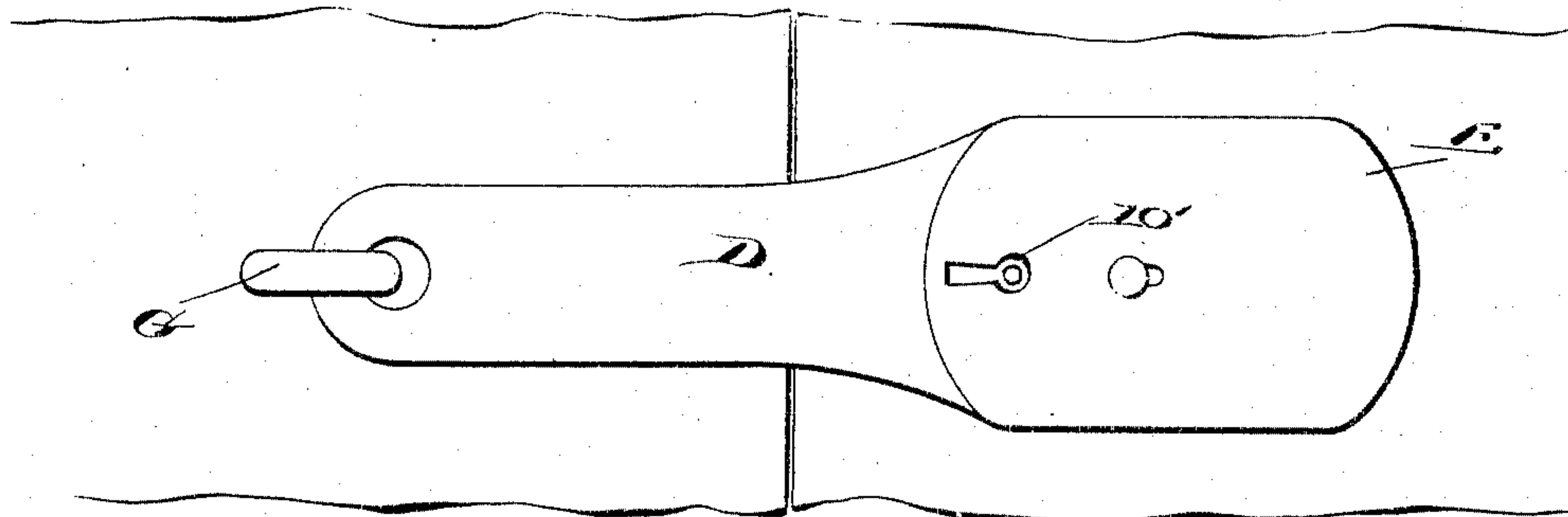


Fig. 2.

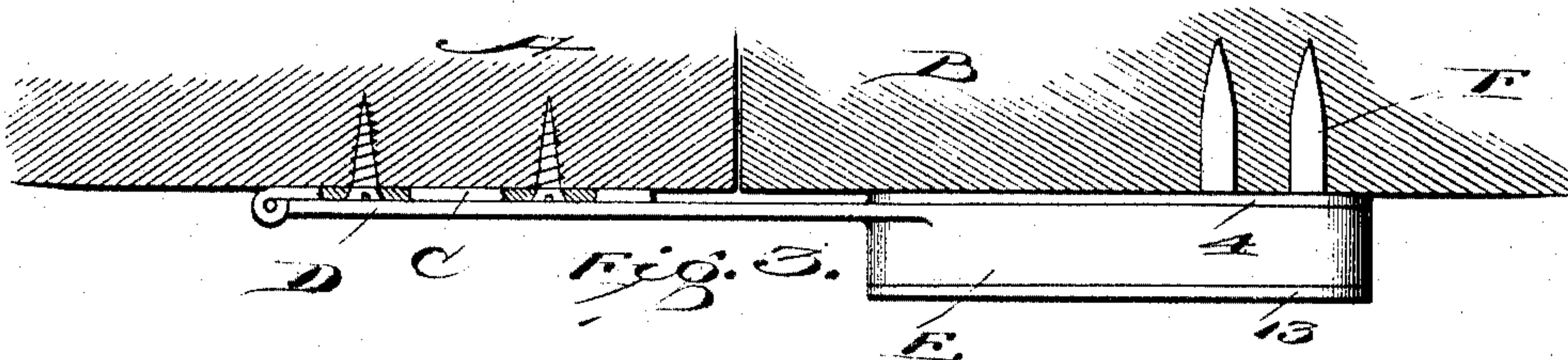
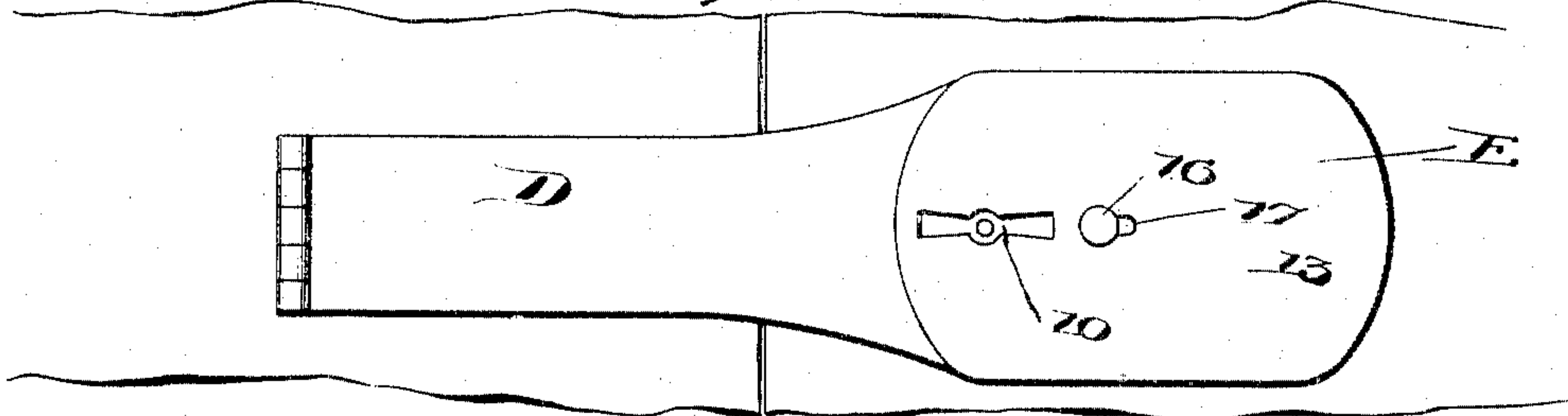


Fig. 4.

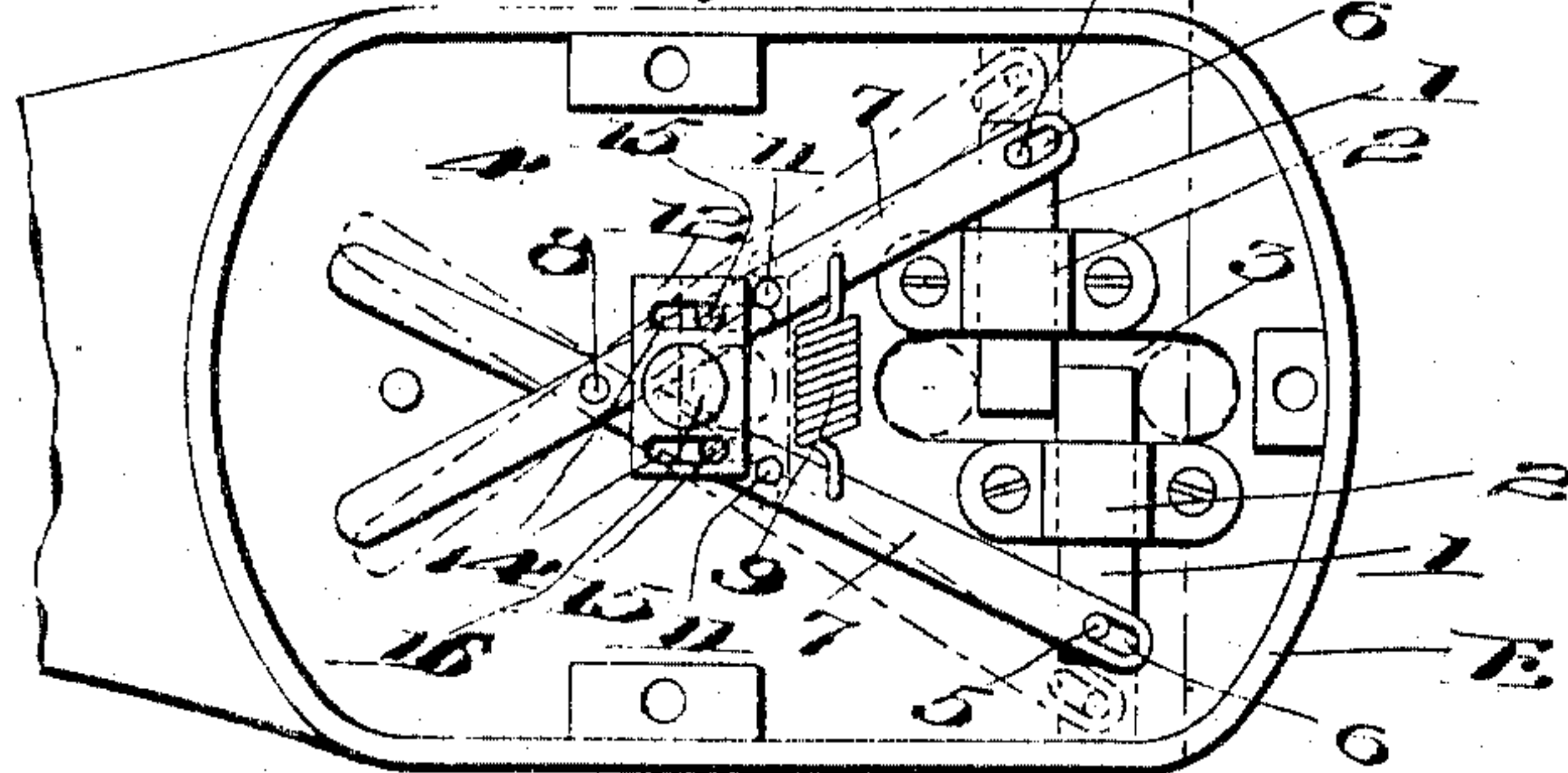
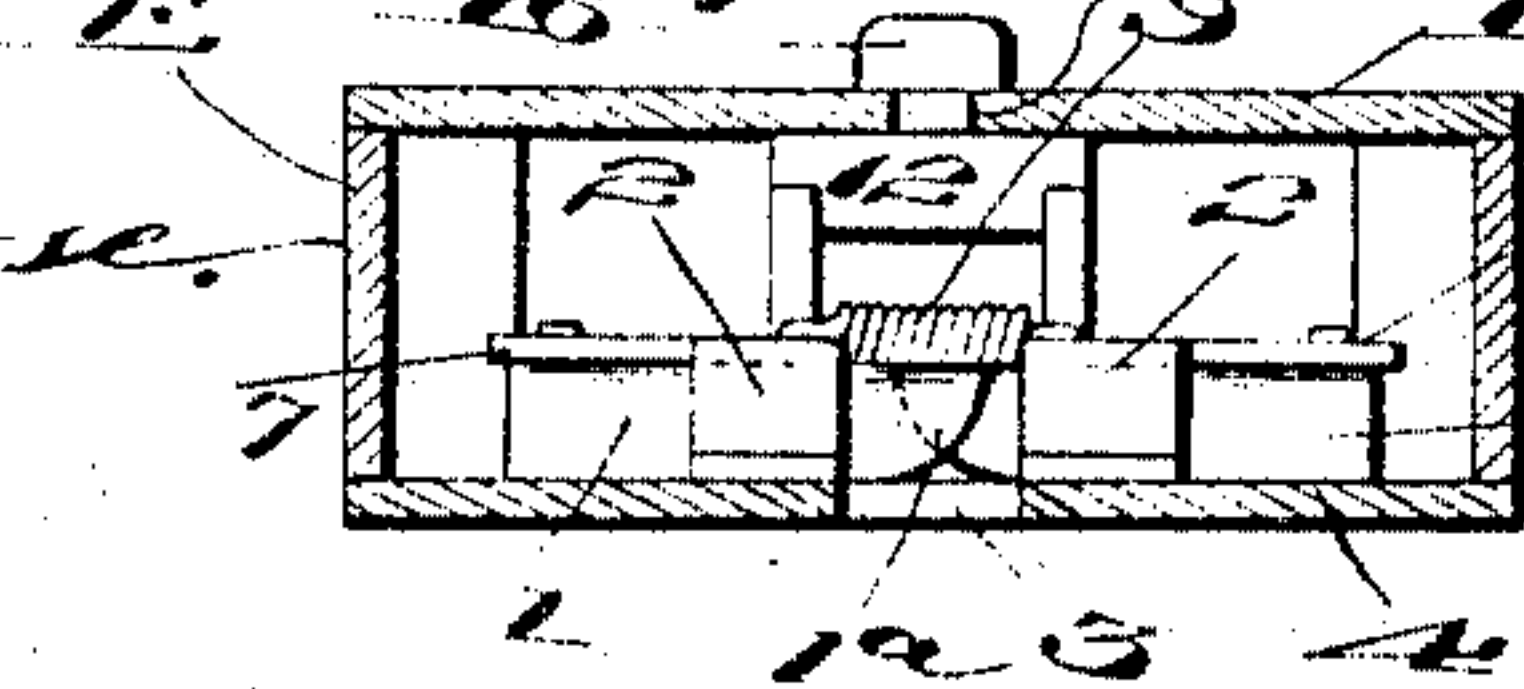


Fig. 5.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CLARENCE ACTON WILSON, OF HOBOKEN, NEW JERSEY.

## LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 775,957, dated November 29, 1904.

Application filed May 2, 1904. Serial No. 205,870. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE ACTON WILSON, residing at Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Locking Devices, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to locking devices.

One of the objects thereof is to provide a simple and efficient form of spring-lock.

Another object is to provide a device of the above type which is adapted to be secured to or made integral with a pivoted member in the nature of a hasp.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts, which will be hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings, which illustrate two of the various possible embodiments of my invention, Figure 1 is an elevation of a lock embodying my invention attached to a hasp. Fig. 2 is a similar view showing a slightly-different form of lock and hasp. Fig. 3 is a plan of the same, showing associated parts. Fig. 4 is an elevation of the lock shown in Fig. 2, the upper portion of the casing being removed in order to show the mechanism thereof. Fig. 5 is a cross-section of the same, taken on the line *x x* of Fig. 4. Fig. 6 is a view similar to Fig. 4 of a slightly-different embodiment. Fig. 7 is a cross-section on the line *y y* of Fig. 6. Fig. 8 is a cross-section on the line *z z* of Fig. 6.

Similar reference characters refer to similar parts throughout the several views.

Referring now to Fig. 3, A represents a door or window, and B a frame, or, if desired, these parts may be reversed. Attached to member A is the lower plate C of a hasp having hinged thereto an upper plate D. Secured to plate D or formed integral therewith is a casing E, which contains locking mechanism adapted to coact with a staple F upon member B. Plate D may be secured to

member A by means of eyebolt G, as shown in Fig. 1, if desired.

The preferred form of locking mechanism within the casing E is shown in Fig. 4, and it is to be understood that this mechanism may be used in other relations without the use of a hasp, if desired. Bolts 1 1 are adapted to travel in parallel paths, guided by straps 2 2, and in normal position the ends thereof overlap one another. The advantage of this overlapping feature in decreasing the possibility of the "picking" of the lock will be obvious. Immediately below the inner ends of these bolts when in normal or "operative" position, as shown in Fig. 5, with the adjacent ends overlapping, is an opening 3 in the lower plate 4 of casing E. This opening is adapted to admit staple F or other coacting locking means in such position as to adapt it to be engaged by bolts 1. The lower corners of bolts 1 are beveled, as shown at 1<sup>a</sup>, in order to render the above action more easy. The outer ends of bolts 1 are provided with pins 5, each pin being adapted to pass through a slot 6 in levers 7. These levers are crossed and at the point of intersection are pivotally mounted upon post 8, projecting from plate 4. Connecting the arms of levers 7, which engage pins 5, is a spring 9, tending to draw the same together, and thus hold bolts 1 1 in their innermost position, as shown in Fig. 5. The free arms of levers 7 are adapted to be engaged and moved by the bits of a key, which may be inserted in a keyhole 10. (Shown in Fig. 2.) Obviously a plurality of levers could be used in place of those shown, and thus require a key-bit peculiarly adapted to fit the same in order to withdraw the bolts, or other devices could be used to limit the requisite shape of the key; but these constructions are not shown, as they form no part of the present invention. Projecting from the bolt-engaging arms of levers 7 are pins 11, adapted to be engaged and held apart by slide 12. This slide is secured to top plate 13 of casing E by means of slots 14 and headed pins 15 and is provided with a post 16, adapted to project through slot 17 in the same. By means of this post slide 12 may be reciprocated upon



the under surface of plate 13 into and out of the path of travel of pins 11.

The operation of this embodiment of my invention is as follows: With the parts in normal position, let it be assumed that it is desired to lock staple F within casing E. Opening 3 is placed over staple F and with the beveled surfaces of bolts 1 in engagement therewith. The casing is then pressed against the staple, and the beveled surfaces of the bolts 1 cause the same to be retracted against the tendency of spring 9. When the upper portion of the staple has passed the bolts, spring 9 forces them inwardly through the opening in the same, as indicated in Fig. 4. It will be noted that in this position the staple and surrounding portion of member B are covered and protected by the casing of the lock. When it is desired to release the staple, it is necessary to insert the proper key in keyhole 10 and turn the same until the bits thereof engage levers 7 and move the same to their outermost positions. This movement retracts bolts 1 and permits the withdrawal of the staple. If it is desired to maintain the device in an inoperative position—as, for example, to prevent accidental locking thereof—the levers are retracted by means of a key, and slide 12 is inserted between pins 11. The locking mechanism is thus rendered inoperative until the slide is withdrawn, as levers 7 are held apart by the same.

In the embodiment of my invention shown in Figs. 1 and 6 bolts 18 are in alinement and abut against instead of overlapping one another. The lower surfaces of the bolts are beveled, as shown at 18<sup>a</sup>, in substantially the same manner and for the same purpose as bolts 1 are beveled at 1<sup>a</sup> in the previously-described embodiment. Bolts 18 have sockets 19 at their outer ends, and fitted within and adapted to reciprocate within the same are posts 20, projecting from the side walls of casing E'. Spiral springs 21 encircle posts 20 and abutting against bolts 18 and the side walls of casing E' tend to keep the former in their innermost position. Rigidly secured to the tops of bolts 18 are arms 22, connected by toggle-links 23 and 24, the pin 25, pivotally connecting the toggle-links, being adapted to reciprocate in a guide 26. Link 24 extends beyond pin 25 in a position adjacent keyhole 10', Fig. 1, and forms a cam-surface adapted to coact with the bit of a key inserted therein. The remaining parts of this embodiment are substantially the same as that previously described. The operation of this embodiment of my invention differs from that previously described in that bolts 18 are retracted by the action of the toggle-links 23 and 24, which are in turn actuated by the bit of the key coacting with the cam-surface on link 24.

It will thus be seen that I have provided a strong, simple, and reliable locking device, the several parts of which are few and easily dupli-

cated and may be assembled by unskilled labor. Although shown in the accompanying drawings as positioned upon a hasp, the value of the lock alone to perform the functions of an ordinary lock will be obvious. It will also be noted that when used in connection with a hasp, as shown in Fig. 2 of the drawings, the screws securing the hasp are covered when the lock is in operative position, and it will be understood that any means whereby the case of the lock may be opened are also upon the side toward the member on which it is adapted to be secured.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention could be made without departing from the scope thereof, I intend that all matter contained in the above description and shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. I desire it also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention, which, as a matter of language, might be said to fall therebetween.

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

1. In a device of the class described, in combination, a plurality of bolts adapted to move in parallel paths, retaining means and means adapted to limit such movement with one end of one bolt engaging said retaining means and overlapping the adjacent end of the other.

2. In a device of the class described, in combination, a plurality of spring-pressed bolts adapted to move in parallel paths, and means adapted to limit such movement with the end of one bolt overlapping the adjacent end of the other.

3. In a device of the class described, in combination, a plurality of bolts adapted to move in parallel paths and having their adjacent ends beveled, and means adapted to limit such movement in a position with the end of one bolt overlapping the adjacent end of the other.

4. In a device of the class described, in combination, a plurality of spring-pressed bolts adapted to move in parallel paths and having their adjacent ends beveled, means adapted to limit such movement in a position with the end of one bolt overlapping the adjacent end of the other, and key-actuated means adapted to retract the same.

5. In a device of the class described, in combination, a plurality of spring-pressed bolts adapted to move in substantially parallel paths, means adapted to limit such movement in a position with one end of one bolt overlapping the adjacent end of the other, and key-actuated means adapted to retract the same.

6. In combination, a locking-bolt, key-actu-



ated means adapted to actuate the same, and a slide adapted to be inserted between parts of said actuating means and retain said bolt in inoperative position.

5 7. In combination, a plurality of locking-bolts, key-actuated means adapted to actuate the same, and a slide adapted to be inserted between parts of said actuating means and retain said bolts in inoperative position.

10 8. In combination, a plurality of locking-bolts, levers having a slotted connection with said bolts adapted to actuate the same, and a slide adapted to engage said actuating-levers and retain said bolts in inoperative position.

15 9. In combination, a plurality of bolts, spring-pressed levers having a pivotal connection with said bolts and adapted to actuate the same, and a slide adapted to engage said actuating-levers and retain said bolts in inoperative position.

20 10. In combination, a hasp, a plurality of bolts adapted to move in substantially parallel paths upon said hasp, and means adapted to limit such movement with one end of one bolt overlapping the adjacent end of the other.

25 11. In combination, a hasp, a plurality of spring-pressed bolts mounted upon said hasp and adapted to move in parallel paths thereupon and having their adjacent ends beveled, and means adapted to limit such movement, with one end of one bolt overlapping the adjacent end of the other.

30 12. In combination, a hasp, a plurality of spring-pressed bolts mounted thereupon adapted to move in parallel paths and having their adjacent ends beveled, means adapted to limit such movement, with the end of one bolt overlapping the adjacent end of the other, and key-actuated means adapted to retract the same.

35 13. In combination, a plurality of bolts adapted to travel in parallel paths and lie with their adjacent ends overlapping when in operative position, means adapted to actuate the same, and a slide adapted to engage said actuating means and retain said bolts in inoperative position.

40 14. In combination, a plurality of bolts adapted to travel in parallel paths and lie with their adjacent ends overlapping when in operative position, and crossed levers connecting said bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of their intersection remote from said bolts.

45 15. In combination, a plurality of bolts, crossed levers connecting said bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of their intersection remote from said bolts, and means adapted to retain said bolts in inoperative position.

50 16. In combination, a plurality of bolts, spring-pressed crossed levers connecting said

bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of their intersection remote from said bolts, and a slide adapted to retain said bolts in inoperative position. 70

17. In combination, a pivotally-mounted member, a plurality of bolts adapted to travel in parallel paths upon said member, means adapted to stop such movement, in a position with one end of one bolt overlapping the adjacent end of the other, and means adapted to retain said bolts in inoperative position. 75

18. In combination, a hasp, a plurality of bolts adapted to travel in parallel paths upon said hasp and lie with their adjacent ends overlapping when in operative position, and crossed levers connecting said bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of their intersection remote from said bolts. 80

19. In combination, a hasp, a plurality of bolts mounted upon said hasp, crossed levers connecting said bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of their intersection remote from said bolts, and means adapted to retain said bolts in inoperative position. 85

20. In combination, a plurality of bolts adapted to travel in parallel paths and lie with their adjacent ends overlapping when in operative position, crossed levers connecting said bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of their intersection remote from said bolts, and means adapted to retain said bolts in inoperative position. 90

21. In combination, a pivotally-mounted member, a plurality of bolts adapted to travel in parallel paths upon said member and lie with their adjacent ends overlapping when in operative position, spring-pressed crossed levers connecting said bolts and adapted to actuate the same, said levers being adapted to be engaged and actuated by a key upon the side of the intersection remote from said bolts, and means adapted to retain said bolts in inoperative position. 100

22. In a device of the class described, in combination, a plurality of bolts adapted to move in parallel paths, retaining means and means adapted to limit such movement with one end of one bolt overlapping the adjacent of the other and each of said ends in engagement with said retaining means. 105

23. In combination, a hasp, a lock-containing casing upon the free end thereof, retaining means, a part within said casing adapted to pass through and hold said retaining means, a key-actuated pivotally-mounted lever adapted to actuate said part, a spring acting upon said lever in such a direction as to tend to force said part through said retaining means, and means whereby said part may be maintained 110

130



in retracted or inoperative position against the force of said spring.

24. In combination, a hasp, a lock-containing casing upon the free end thereof, retaining means, a part within said casing adapted to pass through and hold said retaining means, a key-actuated pivotally-mounted lever adapted to actuate said part, a spring acting upon said lever in such direction as to tend to force said lock through said retaining means, means whereby said lock may be maintained in retracted or inoperative position against the force of said spring, and a pin projecting through said casing adapted to release said last-mentioned means.

25. In combination, a hasp, a lock-containing casing upon the free end thereof, retain-

ing means adapted to be thrust within said casing, a part within said casing adapted to engage said retaining means, a spring-pressed key-actuated pivotally-mounted lever controlling the position of said part, means adapted to hold said part in inoperative position, and means projecting through said casing having an operative connection with said last-mentioned means and adapted upon its movement in a certain direction to release the same.

In testimony whereof I affix my signature in the presence of two witnesses.

C. ACTON WILSON.

Witnesses:

H. M. SEAMANS,  
J. B. KNOX.