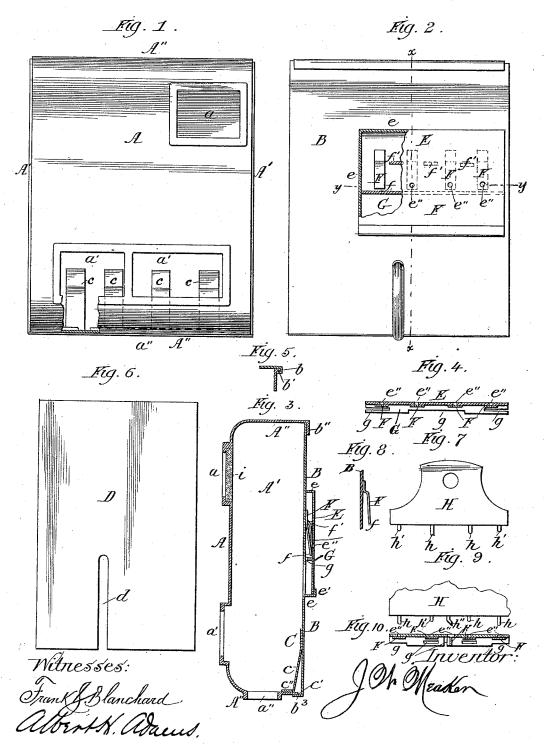
J. W. MEAKER.

LOCK FOR SLIDES OR COVERS.

No. 344,126.

Patented June 22, 1886.



UNITED STATES PATENT OFFICE.

JOHN W. MEAKER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE RAILWAY REGISTER COMPANY, OF SAME PLACE.

LOCK FOR SLIDES OR COVERS.

SPECIFICATION forming part of Letters Patent No. 344,126, dated June 22, 1886.

Application filed January 18, 1886. Serial No. 189,012. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. MEAKER, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Locks for Slides or Covers, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation with the case partly broken out to show the locking-springs; Fig. 2, a rear elevation showing a secondary slide partly broken away to show the locking-springs; Fig. 3, a longitudinal section on the line x x of Fig. 2; Fig. 4, a cross section of the secondary slide on the line y y of Fig. 2; Fig. 5, a detail showing the connection between the side edges of the cover and casing; Fig. 6, a detail showing the key for unlocking the slide or back of Fig. 1; Fig. 7, a detail of the key for unlocking the secondary slide; Fig. 8, a detail of the locking-spring; Fig. 9, a modification of the secondary slide-key; Fig. 10, a cross-section of the lock for the key of Fig. 9.

The invention is primarily designed for a shell or case to receive a registering mechanism, but as a lock it can be used for other purposes where it is desired to have a safeguard against tampering with or removing the indevices hereinafter described, and pointed out in the claims as new.

In the drawings, A represents the front of a shell or case having sides A' and ends A". 35 The front, sides, and ends can be stamped from a single piece, or otherwise formed so as to be strong and firm. The shell or case shown is of an oblong form adapted to receive a registering mechanism, (not shown,) and for this 40 purpose the front Δ is provided with a sightopening, a, for displaying the numbers of a trip-register, which opening is to be closed by a glass or other transparent medium, i. As shown, the lower end of the front A is pro-45 vided with an opening, a', divided by a crossbar, in which opening is to be placed a seal, one end having a number thereon and the other a signature, as usual. The lower end A" has therein, as shown, a hole, a'', for the pas-50 sage of a stem by which the registering mechanism is operated.

B is the slide cover or back to complete the inclosing of the shell or case. This slide corresponds in size and shape to that of the shell or case, and, as shown, is attached at the sides 55 to the shell or case by having its edges b turned to form a groove to receive a flange, b', on the edge of the sides. The inner end of this slide passes beneath a turned in flange, b'', on the end of the case or shell, and the outer end has 60 a turned portion, b^3 , to abut against the end of the shell or case in the form of construction shown.

C is a plate attached to the inner face of the slide B, near its lower end, and provided with a series of springs or spring-fingers, c, which spring inward when the cover or slide B is in place, and are of such length as to have their free ends project and strike the inner face of the end wall, A", as shown in Fig. 3, and, as 70 shown, the limit of inward flow of the free ends of the fingers c is limited by a stop, c", on the inner face of the end wall. A passage for the fingers c is provided by leaving a space or slot, c', between the edge of the end wall A" and the face of the slide or cover B in proximity to said stop.

D is a plate forming a key by which the fingers c can be pushed to bring them in line with the slot c', to remove the slide or cover. 80 As shown, this key is inserted through the seal-opening a', beneath which the fingers c are located in the arrangement shown, and to enter the key a slot, d, is formed therein to pass the cross-bar of the opening a'.

E is a secondary slide or cover to close an opening in the main slide or cover B. This slide E is supported on an inclosing-wall, e, and can be attached by grooves and flanges, similar to b b' of the main cover, so as to be free to slide, and, as shown, one side of the wall e is turned to form a protection, e', for the edge of the slide E. The slide E is provided with a series of holes, e''.

Fare springs or spring-fingers secured firmly 95 at one end to the face of the slide or cover B, so that the fingers will come in line with the holes e", and the free end f of each finger tends to spring out, and the degree of outward throw can be varied, so that the fingers ico do not occupy the same plane or come in line one with the other. As shown, the limit of

withdrawal of the slide E is stopped by a cross bar or projection, f', which strikes the inner face of one of the walls e and prevents

the removal of the slide.

G is a stop attached to the inner face of the slide E at a point to lie just beyond the free ends f of the fingers F, when the slide or cover is closed and arranged for the ends f to engage with the bar and lock the slide E against withdrawal until the engagement is released. As shown, the stop G is provided with slots g, which are not in line one with the other, but when the fingers are pushed down to come in line with the slots. The slide or cover E can

H is a plate forming a key to unlock the slide or cover E, for which purpose it is provided with a series of pins, h h', to enter the holes e'' and engage the fingers F and throw the free ends f down to enter the slots g and leave the cover or slide free. The pins are of a length to depress the spring fingers the exact distance for entering the slots with which they coact, and as the slots g are not in line the pins h h' must be arranged accordingly to press down the springs only the required distance,

no more and no less.

The end slots, g, in the form shown, are between the front and rear edges of the stop G, 3C as shown in Fig. 4, and in order to allow the forward solid portion of the stop in front of the slot to pass, the springs or spring-fingers are thrown up to leave a space in front of them, forward of the attached end, for said 35 stop to pass, as shown in Fig. 8. The stop G and the end wall of the shell or case perform the same office in connection with the springfingers, as in both instances a lock is formed to coact with the springs or spring-fingers and 40 prevent withdrawal of the slide until the engagement is released, and it is evident that the slot c' in the end wall could be made up of a series of slots the same as the slots in the stop

G, and such slots could be arranged in a variety of ways in their relation one to the other. 45

The operation is as follows: The slide or cover is slid home to have the springs or spring-arms engage with the retaining guard or stop, thereby locking the slide or cover firmly against withdrawal until the springs or 50 spring-fingers are released by the use of the

The lock thus formed is very simple in its construction, and at the same time forms an effectual preventive against the withdrawal of 55

the slide or cover.

The arrangement of the springs or springplates can be varied, and Fig. 10 shows a spring or spring-plate, F, standing edgewise in its relation to the other springs or spring- 6c plates, and the slot g for this spring or plate also stands edgewise. With this form of construction a pin, h', is used to carry the free end of the spring in line with its slot g.

It is evident that the springs or spring- 65 plates F and slots g can be arranged in a variety of ways, producing varying combina-

tions for locking purposes.

What I claim as new, and desire to secure

by Letters Patent, is-

1. The combination, with a casing and a sliding cover, of a spring finger and a slotted stop, said finger being adapted to engage the stop to fasten the cover in place, and to pass through the slot to permit the removal of the 75 cover, substantially as described.

2. The combination, with a casing, of a main sliding cover having a secondary slide, slotted stops, and spring-fingers adapted to be engaged with and disengaged from said stops, 80

substantially as described.

JOHN W. MEAKER.

Witnesses:

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