(Model.)

J. JORDAN & A. P. POWERS.

SEAL LOCK.

No. 291,354. Patented Jan. 1, 1884.

Fig. 1.

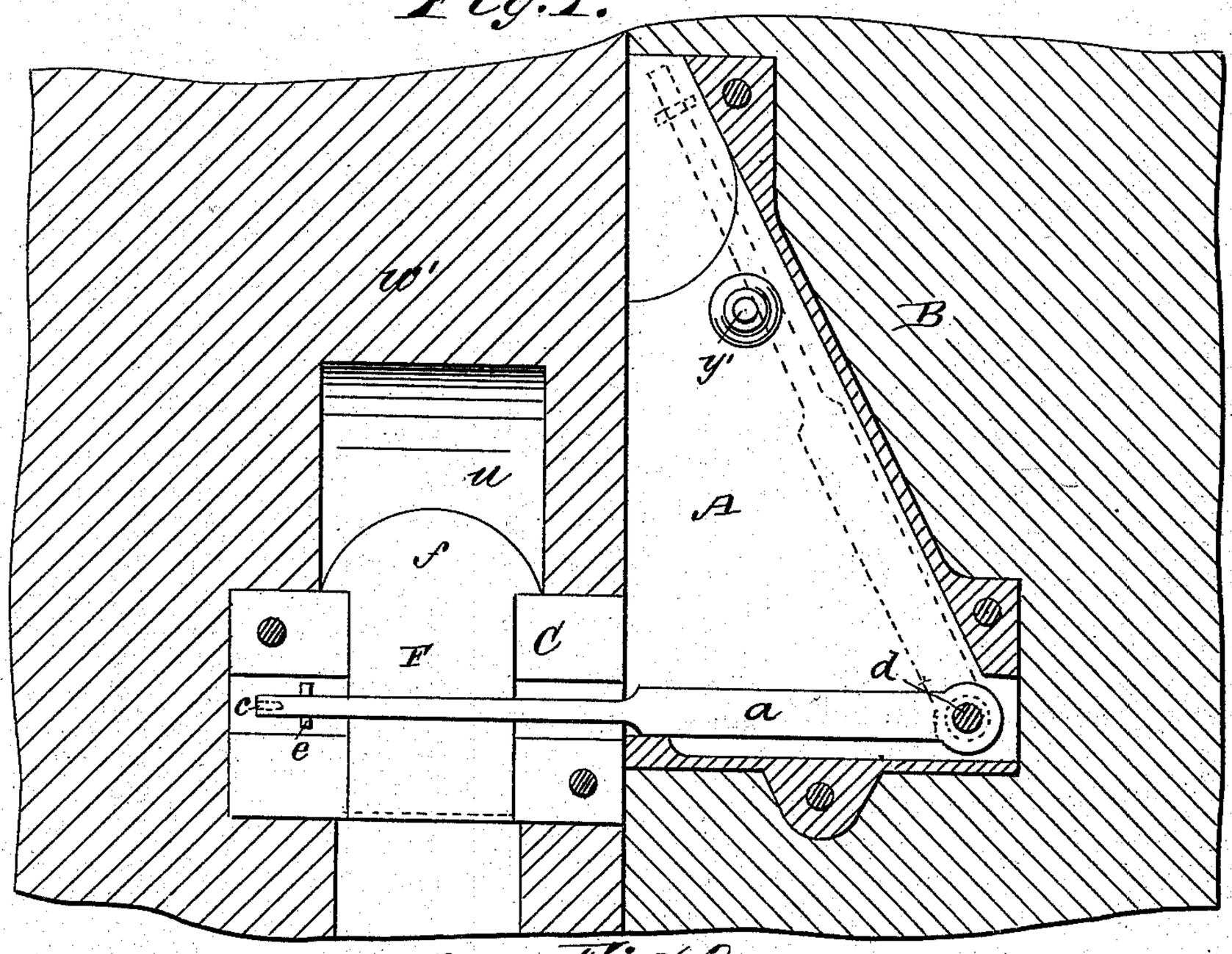


Fig. 2.

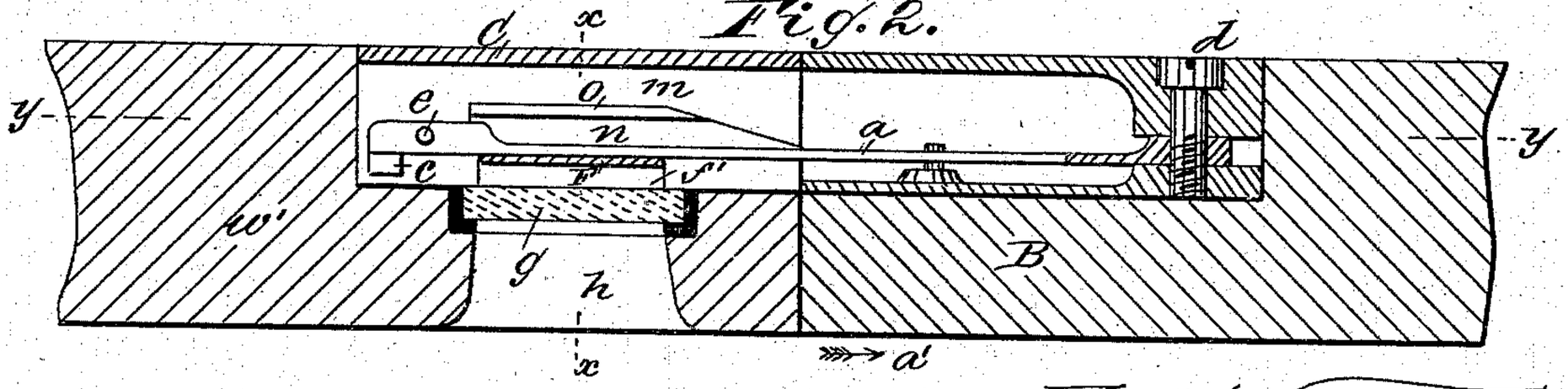


Fig. 5.

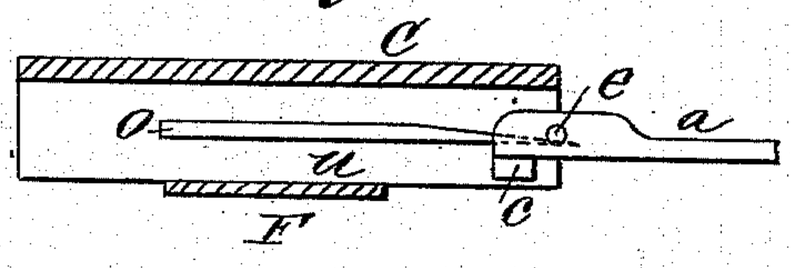


Fig. 3.

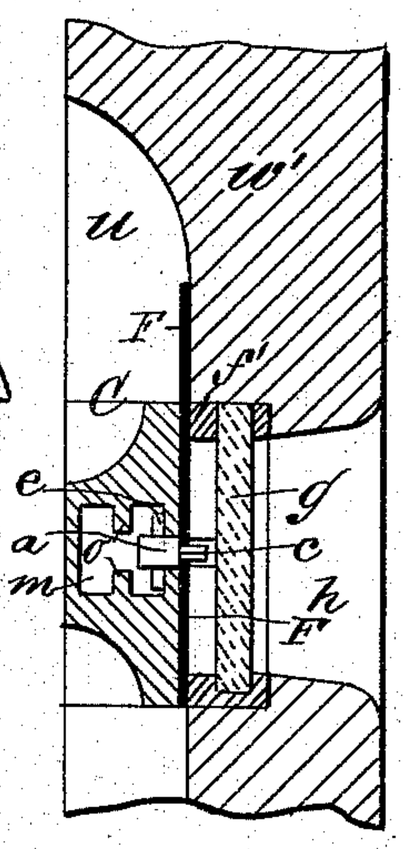


Fig. 4.

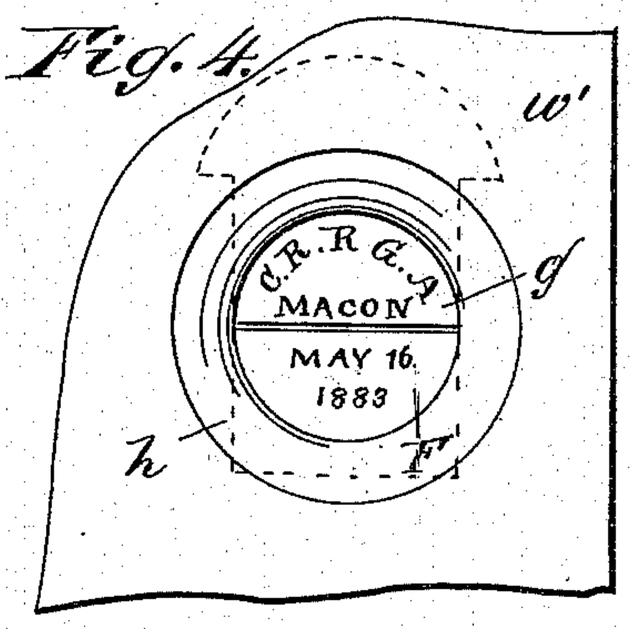
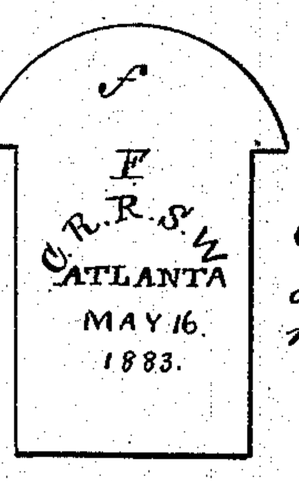


Fig. 6.



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UNITED STATES PATENT OFFICE.

JESSE JORDAN AND ABNER P. POWERS, OF MACON, GA., ASSIGNORS OF ONE-FOURTH TO SMITH MURRAY HILLARD, OF SAME PLACE.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 291,354, dated January 1, 1884.

Application filed July 5, 1883. (Model.)

To all whom it may concern:

Be it known that we, JESSE JORDAN and ABNER P. POWERS, of Macon, in the county of Bibb and State of Georgia, have invented a new and Improved Car-Door Seal, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved car-door seal which will show if any attempts have been made to open the door or tamper with the same.

The invention consists of a spring-bolt pivoted in a casing in one door, and provided at its outer end with a knife, which knife end is adapted to be passed into a casing in the other door or in the car-body, in which latter casing a seal-card is held, which is cut by the knife when the spring-bolt is withdrawn from the said casing. The lower part of the seal-card then drops, thus showing that the door has been opened, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved car-door seal on the line *y y*, Fig. 2. Fig. 2 is a horizontal sectional view of the same, showing the knife-bolt in the position it has when the door is closed. Fig. 3 is a cross-sectional view of the casing on the line *x x*, Fig. 2. Fig. 4 is a face view of the seal-opening. Fig. 5 is a longitudinal sectional view of the lock-casing and the knife-bolt, the latter being shown in the position it has while entering the casing. Fig. 6 is a face view of the seal-card.

A triangular casing, A, is countersunk on the inner surface of a door, B, of a car. In the corner of the frame a spring-bolt, *a*, is pivoted by means of a pintle, *d*, which bolt is of such length that when it is not in use and is swung up it is entirely within the casing, and projects beyond the edge of the casing when it is swung down for use. A pin, *y'*, projects from the back wall of the casing A in such a manner that the spring-bolt *a* can be passed between it and the inclined side of the casing, whereby the spring-bolt will be held up against the said inclined side. In the other door, *w'*, (or in the edge of the car-frame, if only one door is provided,) a casing, C, is fastened on the inner side, which casing is provided with two horizontal channels, *m n*, separated by two inwardly-projecting ridges, *o*, on the sides of the interior of the casing C. The ends toward the edge of the door are beveled, as shown in Figs. 2 and 5. A piece of glass, *g*, is held a short distance in front of the ridges *o*, and at the inner end of a bell-shaped or other aperture, *h*, in the front of the car or the door. In the inner surface of the car or door a recess, *u*, is formed, and in the top and bottom of the casing C slots *f'* are formed, through which a seal-card, F, can be passed, which is provided at one end with a head, enlargement, or wings, *f*. A short blade, *c*, is fastened on the free end of the outer surface of the pivoted spring-bolt *a*, parallel with the same, and a short distance above the inner end of the blade or knife *c* a transverse pin, *e*, is provided in the spring-bolt. On the seal-card F the name of the railroad or the initials of the same, the name of the place at which the car is to be opened, and the date on which the car was sealed are stamped, printed, or otherwise produced. The ridges *o* are so arranged that they extend transversely across the inner end of the opening *h*.

The operation is as follows: A seal-card, F, is passed through the slots *f'* from the top to the bottom, so that the head or wings *f* rest upon the top of the casing C, and thus hold the card in place. The matter printed or otherwise marked on the card will show behind the glass pane *g*. The thickness of the card F is much less than the width of the slots *f'*, so that the card is held loosely in the slots. The spring-bolt *a* is dropped to a horizontal position—that is, it is allowed to rest upon the bottom of the casing A—and it then projects from the edge of the door B. If the door which is arranged to slide is closed, the end of the spring-bolt passes into the casing C, the pin *e* strikes the end of the bevel of the ridges *o* and slides along the inner edges of the ridges, the end of the bolt *a* passing through

the groove *m*, and the knife or blade *c* passing through the slot between the ridges. The ridges *o* hold the knife such a distance from the card F that it cannot cut the said card. After the cross-pin *e* has passed the inner ends of the ridges *o*—that is, the end farthest from the edge of the door—the spring of the bolt *a* snaps the knife end of the bolt toward the outer side of the door, so that the cross-pin *e* will be in front of the ridges *o*. The car-door is then sealed. If the car-door be opened, the bolt *a* will be drawn out of the casing C in the direction of the arrow *a'*, the cross-piece *e* being in front of the ridges *o*, which press the knife or blade *c* against the card F, so that the knife or cutter will sever the same in passing. As the card F is thinner than the width of the slots *f'*, the lower part of the card, which has been severed from the upper part of the card, drops, and thus a person looking at the opening *h* can immediately see if the car-door has been opened and the seal broken. The head or wings *f* of the card F hold the upper part in place and prevent it from dropping.

The above-described seal cannot be broken without opening the door, and the door cannot be opened without breaking it, hence is very effective and sure, cannot be tampered with in any way or manner without detection, and can be applied to any door independent of the locking device of the same. If a car is not to be sealed, the spring-bolt *a* is pushed up against the inclined side of the casing, and is held there by the pin *y'*.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a car-door seal, the combination, with a spring-bolt carrying a knife on its free end, and pivoted to a car-door, of a card-carrying casing secured to another door or car frame, and provided with guide-ridges for guiding the bolt into the casing away from the card and permitting it to drop down behind the said card, whereby the card will be cut on the withdrawal of the bolt, as set forth.

2. The combination, with the casing A, of the spring-bolt *a*, pivoted at its lower end in said casing, and the stud *y'*, projecting from the wall of the casing, substantially as herein shown and described, whereby provision is made for retaining the bolt in the casing when not in use, as set forth.

3. In a car-door seal, the combination, with the casing A, containing the pivoted spring-bolt *a*, carrying a knife, *c*, and a cross-pintle, *e*, of the casing C, provided with two grooves, *m n*, for guiding the spring-bolt, and with a device for holding a seal-card, substantially as herein shown and described.

4. In a car-door seal, the combination, with the casing A, containing a pivoted spring-bolt, *a*, carrying a knife, *c*, and a cross-pintle, *e*, of the casing C, provided with grooves *m* and *n*, separated by ridges *o*, having beveled ends, which casing C is provided with slots for receiving a seal-card, substantially as herein shown and described.

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