W. C. KNEALE.

FREIGHT CAR DOOR LOCK.

APPLICATION FILED JULY 1, 1909.

935,526.

Patented Sept. 28, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

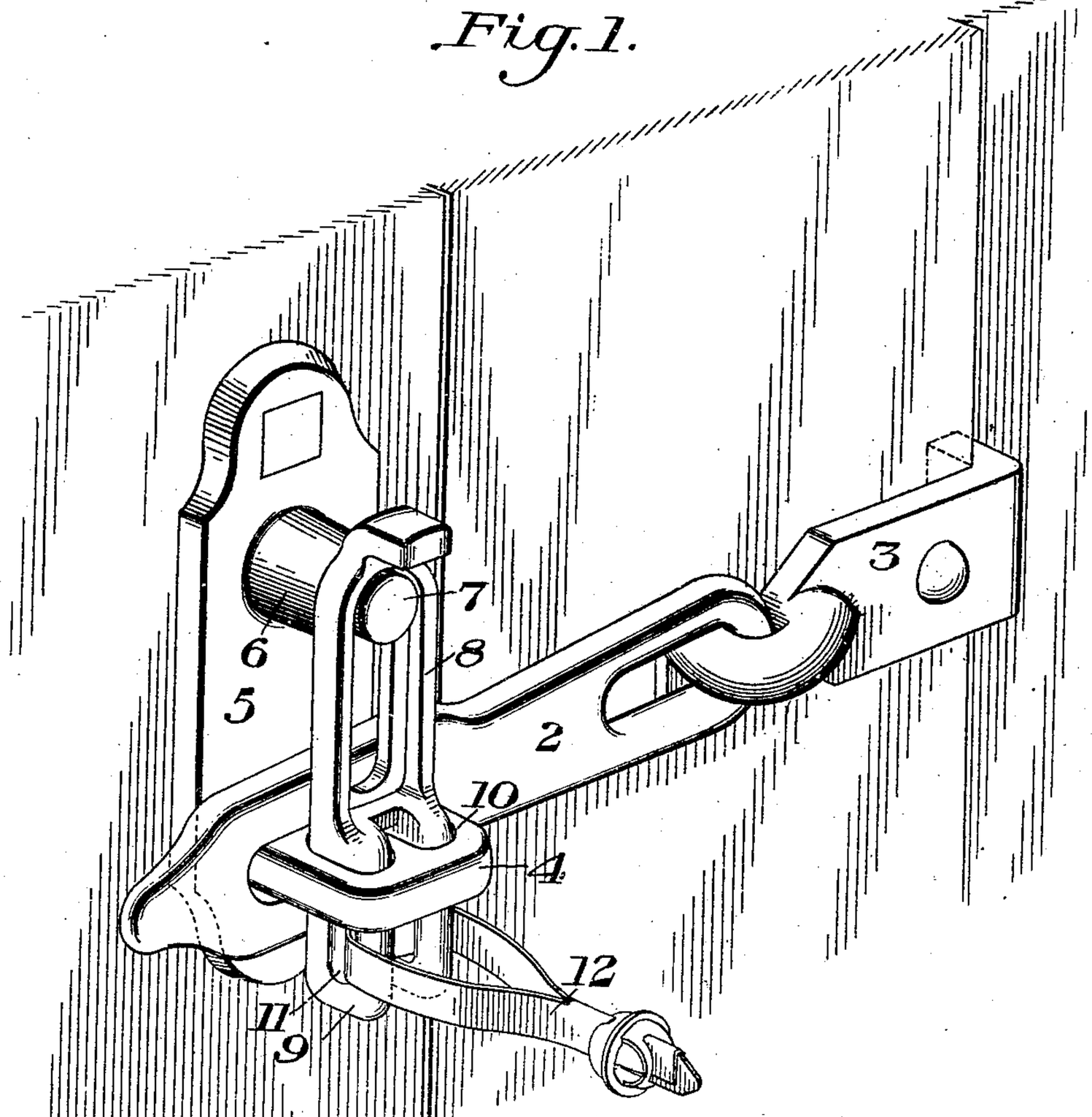


Fig. 2.

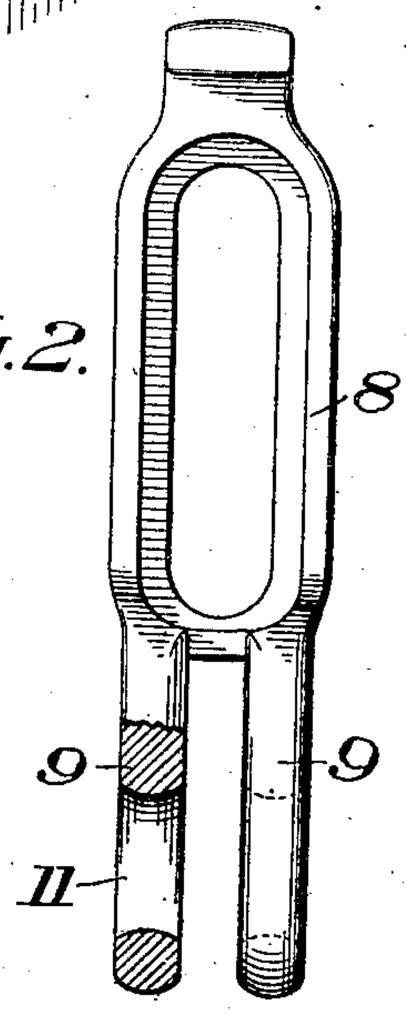
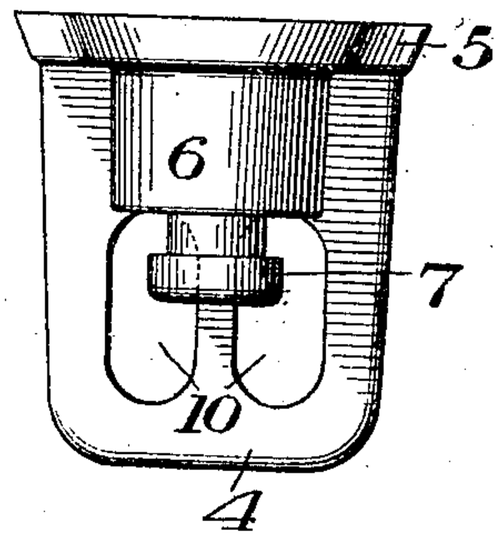


Fig. 3.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 4.

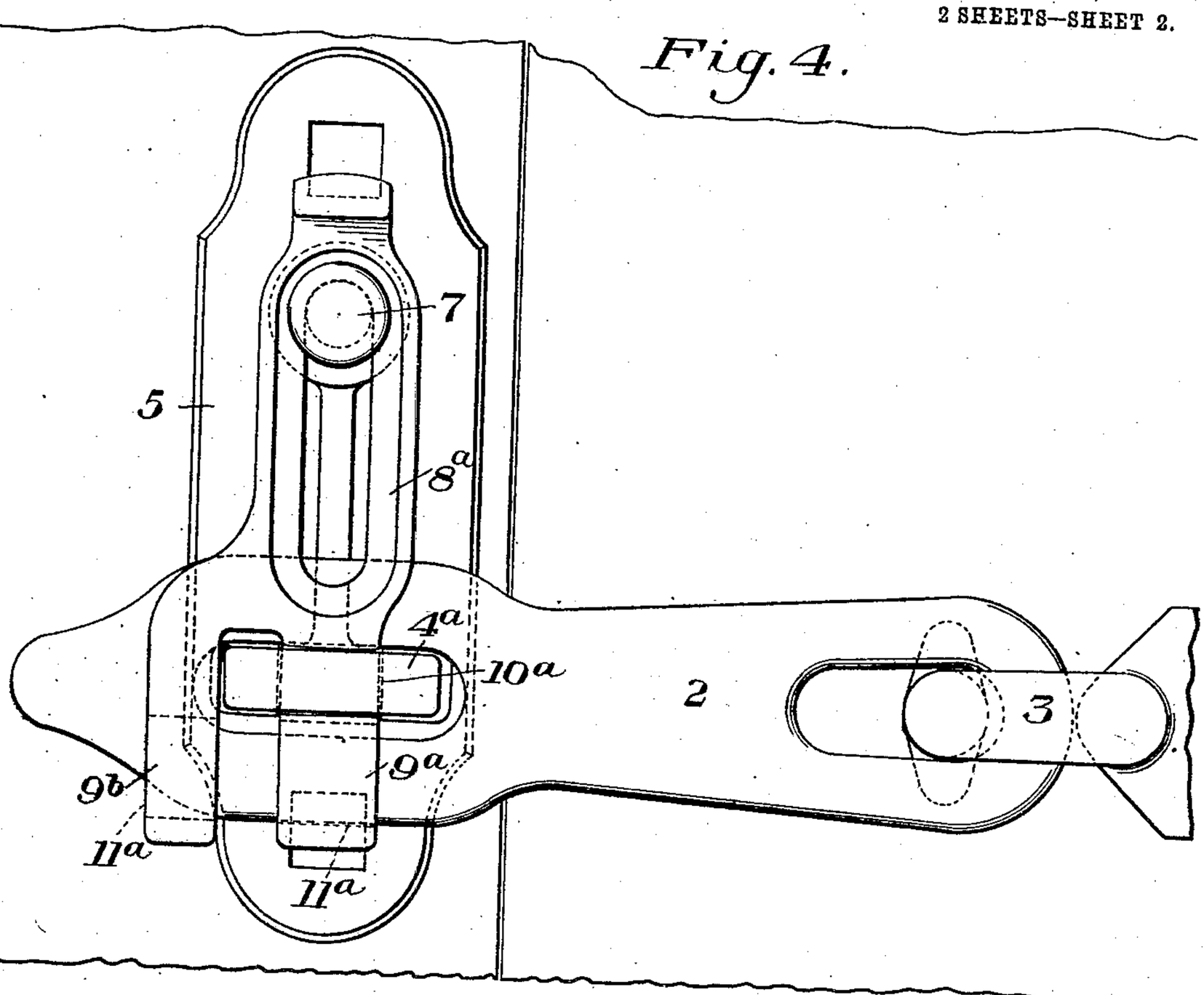


Fig. 5.

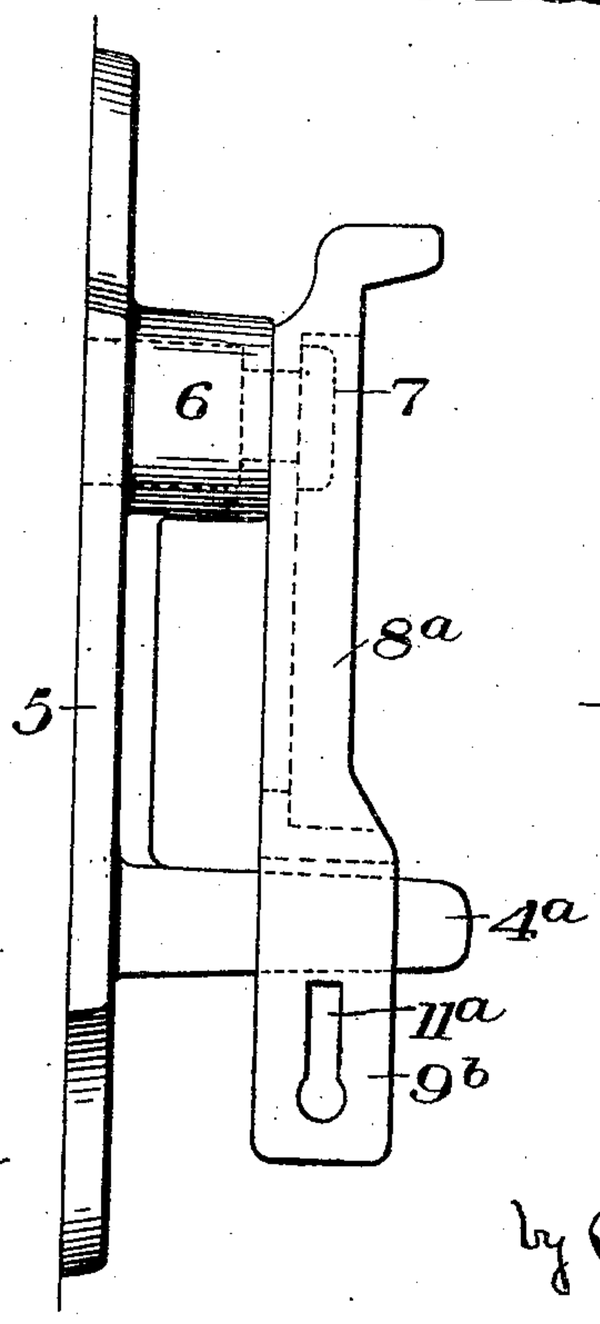
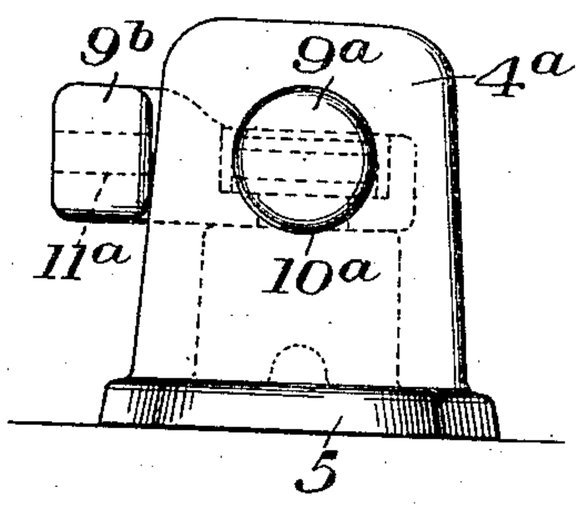


Fig. 6.



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UNITED STATES PATENT OFFICE.

WILLIAM C. KNEALE, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

FREIGHT-CAR-DOOR LOCK.

935,526. Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed July 1, 1909. Serial No. 505,368.

To all whom it may concern:

Be it known that I, WILLIAM C. KNEALE, of Indianapolis, Marion county, Indiana, have invented a new and useful Improvement in Freight-Car-Door Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved lock applied to a car door; Fig. 2 is a detail view of the sliding and swinging pin; Fig. 3 is a plan view of the slotted lock to receive the pin; Fig. 4 is a face view of a modified form of lock, applied to a car door; Fig. 5 is a side view of the lock shown in Fig. 4; and Fig. 6 is an end view thereof.

My invention relates to locks for freight car doors. In many car door fasteners, when the fastener is locked with a seal extending through the slot in the pin, the pin can be raised sufficiently to permit the hasp to be raised and slid back far enough to open the door slightly. This may be accomplished by wrapping the seal, consisting of a strip of tin, around the pin and sliding it up through the staple. If of wire, the pin may also be raised to a considerable extent. In such case, the door may be opened sufficiently to separate the interlocking strips sometimes placed on the back of the door. This allows the lower right-hand corner of the door to be sprung out so that the car may be robbed.

My invention is designed to prevent this unlawful opening of the door, and consists in providing a split or divided pin having a plurality of depending prongs, at least one of which extends through a corresponding opening in the lug or staple. When the seal is slipped through the holes in these depending prongs, the pin cannot be raised beyond the staple to permit the hasp to be moved over the staple and allow the illicit opening of the door.

In the drawings, 2 represents the hasp which is loosely connected to the bracket 3 on the car door. 4 is the staple which, as shown, is integral with a base plate 5, which is bolted or screwed to the car near the margin of the door opening and adjacent to the position of the hasp. The base plate is provided near its upper end with a projecting boss 6, having a headed pin and shank portion 7, receiving the locking pin 8. This locking pin 8 is slotted and engages the headed pin, so that it may slide and swing thereon.

The lower portion of the locking pin is provided with depending projections or prongs 9, 9, which project through corresponding slots 10, 10, in the staple. Each of these prongs is transversely slotted, as shown at 11, these slots being beneath the staple when the door is in its locked position. Through these transverse slots is passed the seal 12, which is shown in the usual form of tin, though a wire seal or any other suitable form of seal may be employed.

In Figs. 4, 5 and 6, the staple 4^a is of the usual type, provided with a single orifice 10^a, for the locking pin. The locking pin 8^a in this construction is also of the usual type and is provided with the usual end member 9^a, which passes through the orifice 10^a in the staple. Formed integrally with this pin 8^a and projecting outwardly and downwardly therefrom, from a point slightly above the staple when the locking pin is in engagement therewith, is a member 9^b, the downwardly extending portion thereof being parallel with the portion 9^a. The ends of the members 9^a and 9^b are each provided with a slot 11^a, to receive the seal 12.

Owing to the use of a plurality of prongs forming a fork on the pin, which straddle a bar of the staple, it is evidently impossible to raise the pin by pulling the seal up through the hole. If wire is used, the slack in the wire is taken up so rapidly that the pin cannot be swung around far enough to permit the hasp to be raised to any extent sufficient to open the door.

The advantages of my invention will be obvious to those skilled in the art. No special form of hasp is required, the only difference over the usual fastening device being in the dividing of the pin or providing it with prongs which straddle a bar of the staple.

I have shown my invention as applied to a special form, as well as a regular form, of staple and hasp, but it may be easily applied to other forms without departing from my invention.

I claim:

1. In a door lock, a hasp, a staple, and a pin having a plurality of projections arranged to straddle a bar of the staple, substantially as described.

2. In a door lock, a hasp, a staple, and a

pin having prongs arranged to straddle a portion of the staple and provided with slots to receive a seal, substantially as described.

3. In a door lock, a hasp, a staple having a plurality of holes, and a pin having a plurality of projections arranged to pass through the holes, substantially as described.

4. In a door lock, a hasp, a staple having separated holes, and a pin having prongs projecting through the holes and provided with slots to receive a seal, substantially as described.

5. In a door lock, a swinging hasp, a staple, and a sliding and swinging pin having a split lower end, the split portions or prongs being arranged to enter corresponding holes in the staple and having their lower portions provided with holes to receive the seal, substantially as described.

In testimony whereof, I have hereunto set my hand.

WILLIAM C. KNEALE.

Witnesses:
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WM. J. BLACKMORE.