

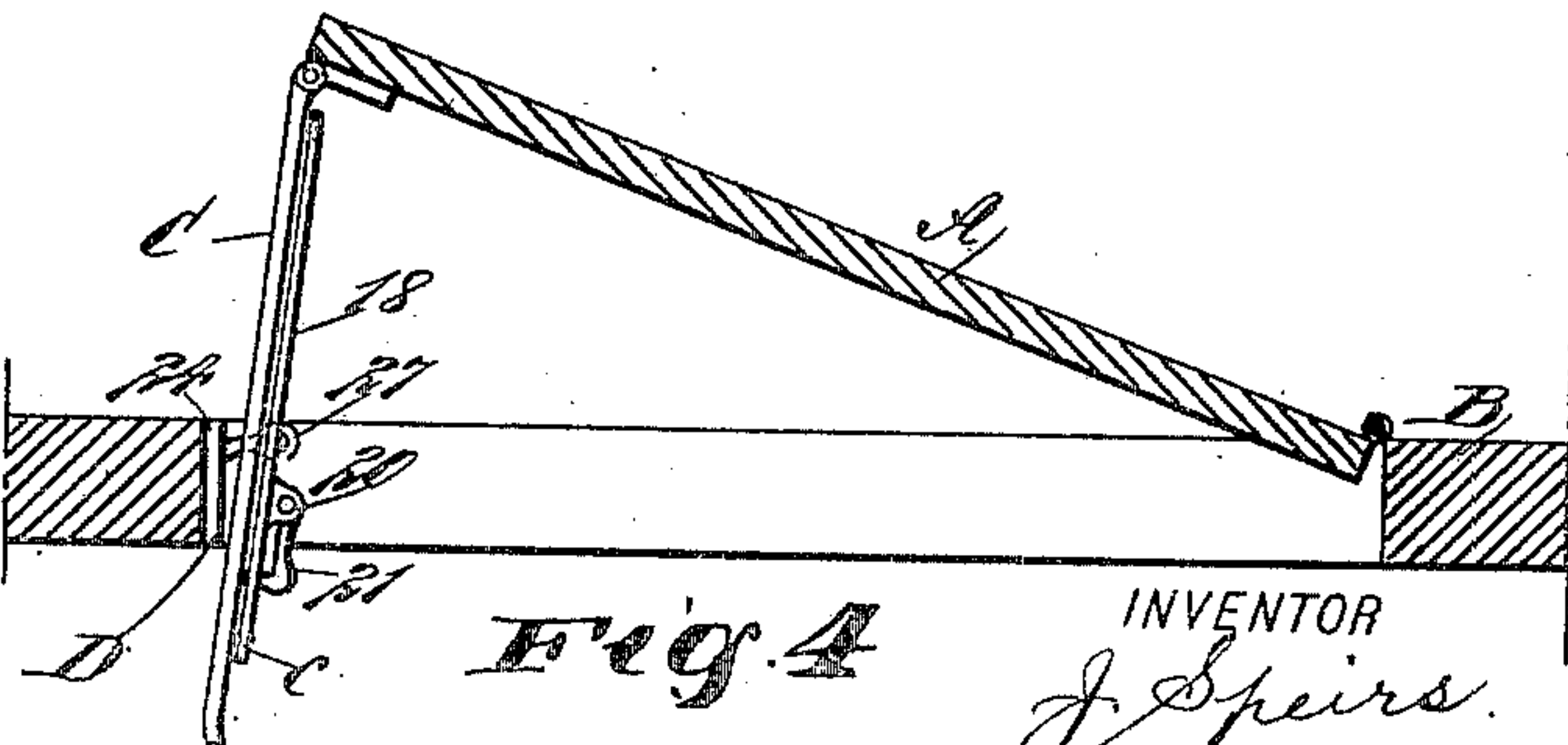
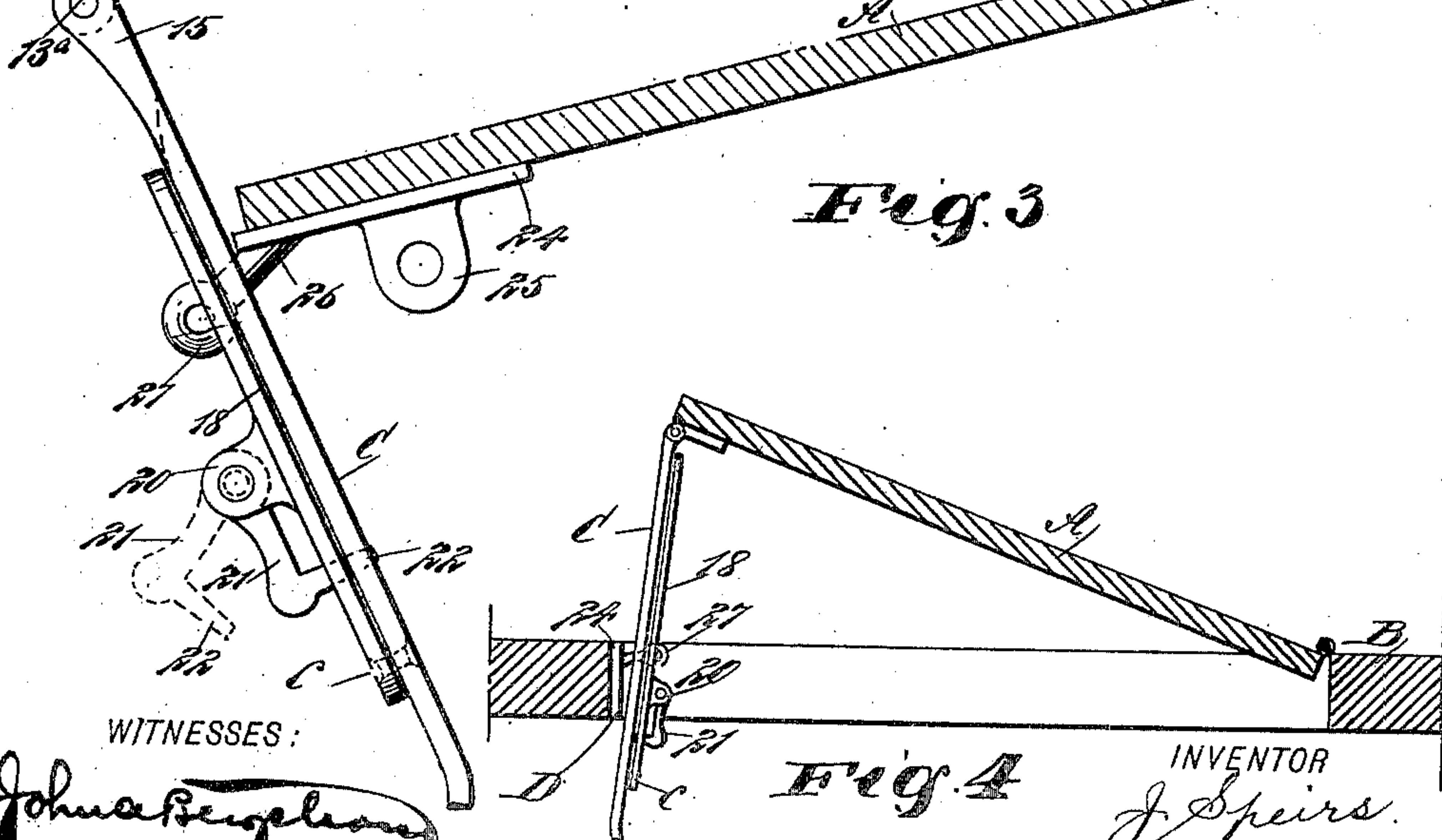
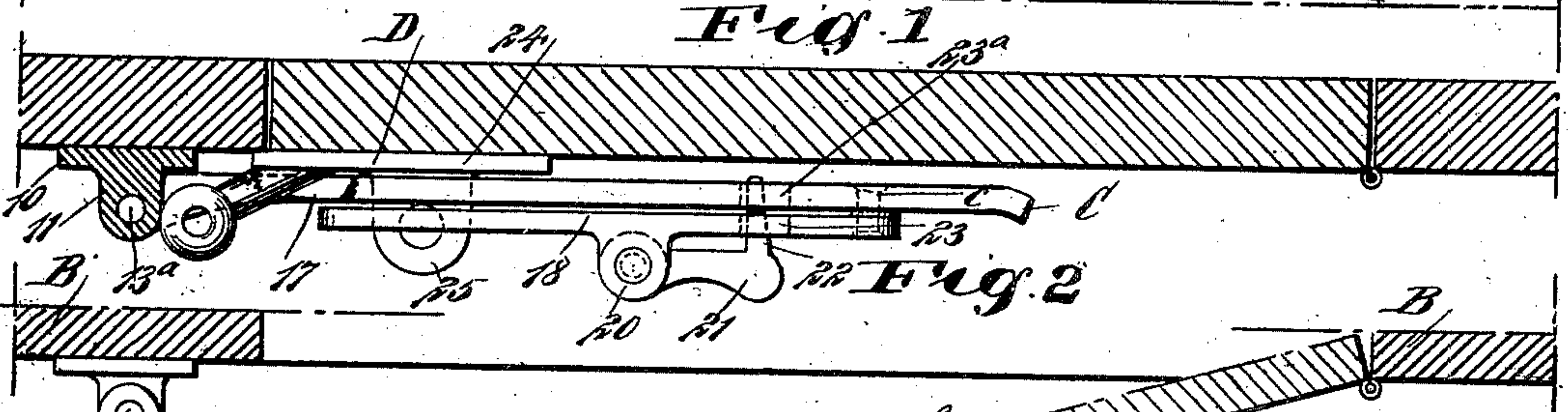
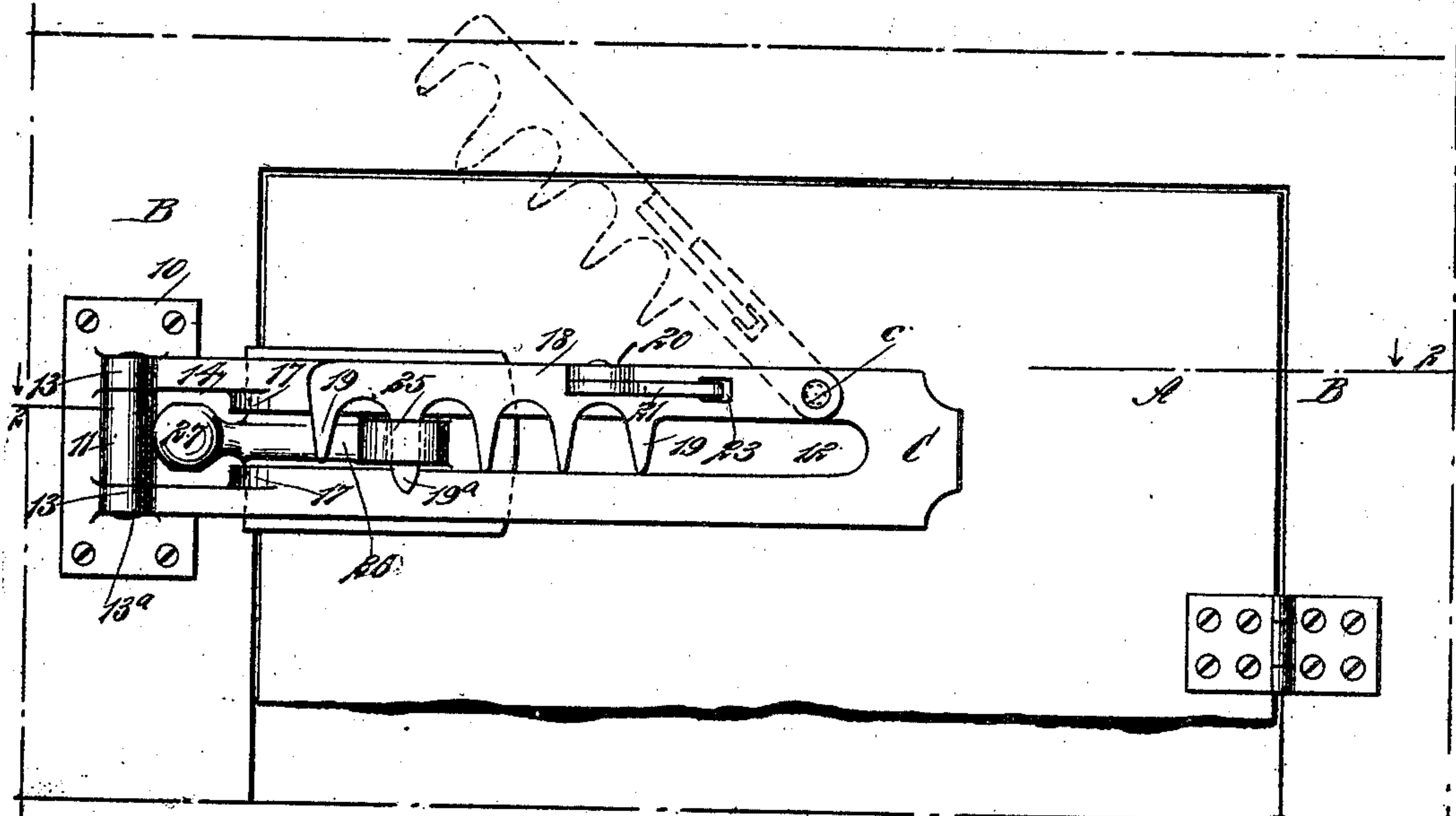
No. 622,556.

Patented Apr. 4, 1899.

J. SPEIRS.
DOOR CHECK.

(Application filed July 12, 1898.)

(No Model.)



WITNESSES:

John A. Bengtson
Adolph K.

INVENTOR

J. Speirs.

BY

Wm. L.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN SPEIRS, OF JERSEY CITY, NEW JERSEY.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 622,556, dated April 4, 1899.

Application filed July 12, 1898. Serial No. 685,779. (No model.)

To all whom it may concern:

Be it known that I, JOHN SPEIRS, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Door-Check, of which the following is a full, clear, and exact description.

The object of my invention is to provide a lock for a door so constructed that the door may be held partially open or to a limited extent for the purpose of ventilation or in order that persons within a room may safely view a person demanding entrance before according such entrance, the device being especially adapted for state-room doors.

A further object of the invention is to so construct the lock that it can be operated entirely from within a room, and whereby the door may be held open only to such an extent as to provide ventilation, and whereby, further, when the lock is set it will be impossible to force the door open sufficiently to effect an entrance, and whereby also the lock cannot be tampered with from the outside.

Another object of the invention is to construct a lock of the character above set forth which will be simple, durable, economic, and easily manufactured, the operation of the lock being within the understanding of any person of ordinary intelligence.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is an inner face view of a door and casing therefor, showing the invention applied to said door and casing and the door as being locked closed. Fig. 2 is a horizontal section through the door and casing, the said section being taken practically on the line 2 2 of Fig. 1. Fig. 3 is a horizontal section through the door and casing and a plan view of the locking device, the door being shown as partially open and as opening inward; and Fig. 4 is a view similar to Fig. 3, drawn on a small scale, the door being partially open and arranged to open outward.

A represents a door, and B the frame in which the door is mounted, the door being

hinged to the frame in the usual manner.

When the door is to open inward, the device is applied as shown in Figs. 1, 2, and 3, as mentioned, and under such an arrangement a plate 10 is secured to the inner face of the vertical member of the frame, against which the door closes, the said plate 10 being provided with a knuckle 11. This plate 10 is adapted to carry a hasp C, which hasp is provided with a longitudinal slot 12, extending from a point near its free end to a point through the end that is to be hinged, and at the latter end of the hasp two knuckles 13 are formed, adapted to engage with the top and bottom portions of the knuckle 11 on the plate 10, and the knuckles of the hasp are pivotally connected with the knuckle on the plate by means of a suitable pivot-pin 13^a.

That portion of the slot 12 which is adjacent to the hinged portion of the hasp is wider than the other portion of the slot, as shown particularly at 14 in Fig. 1, and where the wider portion 14 of the slot connects with the narrower portion thereof shoulders 17 are formed, which are beveled or inclined, the shoulders being located one immediately above the other, and the inclination of the shoulders is in direction of the outer face of the hasp, as shown in Fig. 1.

A latch 18 is pivoted upon the upper member or bar of the hasp C, the pivot-pin *c* of the said latch being near the free end of the said hasp, and the latch is located upon the inner face of the hasp. The latch is provided with a series of teeth 19, one of the teeth, usually the tooth near the end of the latch facing the hinge of the hasp, being longer than the other teeth, and this tooth is designated as 19^a and is specially shown in Fig. 1.

A longitudinal lug 20 is projected from the inner face of the latch 18, and to this lug a keeper 21 for the latch is pivoted. This keeper is provided with a latch-pin 22, and the said latch-pin when the device is in locking position is arranged to enter alining openings 23 and 23^a, the opening 23 being made in the latch and the opening 23^a in the hasp, as shown in Fig. 2.

It may be here remarked that preferably the hasp is slightly curved at its hinged end, as shown at 15 in Fig. 3, in order that the hasp may conveniently receive a keeper which

is to be attached to the door, and, furthermore, that the hasp may lie close to the door when the door is closed, since the lock is adapted to hold the door closed as well as partially open.

The main keeper D, that acts directly in connection with the latch, consists of a plate 24, and when the door opens inward this plate is secured to the door adjacent to its free edge, the plate 24 being provided with a horizontally-projecting eye 25 and with a stem 26, which extends at an angle from the plate beyond the free edge of the door, the stem 26 terminating in an eye 27, which is preferably given the shape of a ball.

In the operation of the device when the door is closed the stem of the main keeper 26 and its eye will lie snugly within the end of the slot 12 adjacent to the pivoted portion of the hasp, as shown in positive lines in Fig. 1, and the latch 18 is carried downward until the long tooth 19^a enters the eye 25, and when such entrance is effected the keeper 21 for the latch is carried outwardly until its latch-pin 22 shall have passed through the openings 23 and 23^a, made, respectively, in the latch and in the hasp, as is also shown in Fig. 1. The door when so secured cannot be forced open, since the lock will effectually hold it closed. If, however, it be desired to open the door for ventilation or for the purpose of observing any person indicating a desire to enter, it is simply necessary to withdraw the latch-keeper from the latch and hasp and raise the latch to the dotted position shown in Fig. 1, whereupon as the door is opened the eyehead 27 of the main keeper will travel along the slot in the hasp, being guided from the wider portion of the slot to the narrower portion by the inclined shoulders 19, upon which the said eyehead will ride, and the door may be held open to a greater or less extent by causing the forward, the rearward, or any one of the intermediate teeth of the latch to enter the opening in the eyehead connected with the keeper. It will then be impossible for any person from the outside to open the door farther or to force the door closed unless sufficient pressure be brought to bear to break said device.

When the door is closed and the latch has not been carried to a locking position, it will still be impossible to push open the door sufficiently to permit a person to enter, because the door can be opened a distance only corresponding to the length of the slot in the hasp, and when this distance is reached the eyehead 27 will engage with the end of the slot in the hasp.

Thus it will be observed that the door may be locked in such position as to furnish a means of ventilation and of observation. When it is desired to open the door to its full extent, the latch is disengaged from the keeper and the hasp is carried out of the path of said keeper.

I desire it to be understood that a peep-hole may be placed in the door, if desired, nor-

mally closed by a gravity-cover; but as such a device forms no portion of my invention it is not illustrated or further described.

In Fig. 4 I have illustrated the application of the device to a door that is to open outward, in which it will be observed that the locking device is also manipulated from the inside of the apartment. When the door is to open outward, the hasp C is attached to the inner face of the door near its free end and the main keeper D is secured to the jamb, against which the door will strike in closing, and the stem 26, carrying the eyehead 27, will be given a slightly-different angle. With the above exceptions the device is identical whether it be used on a door opening inward or on one opening outward. When the door is partially open and is to be held in its partially open position, the teeth of the latch are made to enter the opening in the head of the main keeper; but when the door is closed the long tooth 19^a of the latch is made to enter the eye 25 of the main keeper.

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

1. In a door-check, a hasp having a slot, a keeper adapted to travel in the slot of the hasp, said keeper being provided with an apertured head, a latch carried by the hasp and provided with members adapted to enter the aperture in the head of said keeper, and a device arranged to lock the said hasp, for the purpose specified.

2. In door-checks, the combination, with a pivoted hasp having a longitudinal slot therein, the slot being widest at the pivoted end of the hasp, and the said hasp being provided at its widest portion with inclined shoulders leading to the narrower portion of the slot, a toothed latch pivoted on the said hasp, and a locking device for the said latch, of a keeper consisting of a body-plate, a stem projected from the body-plate, adapted to enter the slot in the hasp, the said stem terminating in an apertured head, which head is adapted to receive the teeth of the said latch, for the purpose set forth.

3. In door-checks, the combination, with a pivoted hasp provided with a longitudinal slot widest at the pivoted end of the said hasp, inclined shoulders leading from the wider portion of the slot in the hasp to the narrower portion thereof, a toothed latch pivoted on the said hasp, a locking device carried by the said latch, being provided with a head arranged to pass through the latch and the hasp, of a keeper consisting of a plate, an eye projected from the plate, adapted to receive a tooth of the latch, a stem projected likewise from the plate, said stem being adapted to enter the slot in the hasp, and a head for the stem, provided with an opening, which opening is adapted to receive a tooth of the said latch, for the purpose set forth.

4. In door-checks, the combination, with a plate, a hasp pivoted on the said plate, pro-

vided with a longitudinal slot widest at its pivot-point, inclined shoulders located within the said slot at a point where the wider and narrower portions meet, a latch pivoted on the hasp, the latch being provided with a series of teeth, one of the teeth being longer than the others, and a locking device pivotally carried by the said latch, the locking device being provided with a head adapted to pass through registering openings in the latch and the hasp, of a keeper consisting of a plate, an eye projected from the plate, adapted to

receive the longer tooth of the latch, a stem projected from the eye in direction of the hasp, being arranged to enter the slot in the hasp, and an apertured head for the said stem, the aperture in the head being adapted to receive the teeth of the said latch, for the purpose specified. 15

JOHN SPEIRS.

Witnesses:

J. FRED. ACKER,
JNO. M. RITTER.