

(No Model.)

J. SHARKEY.

CAR DOOR LOCK.

No. 294,513.

Patented Mar. 4, 1884.

Fig. 1.

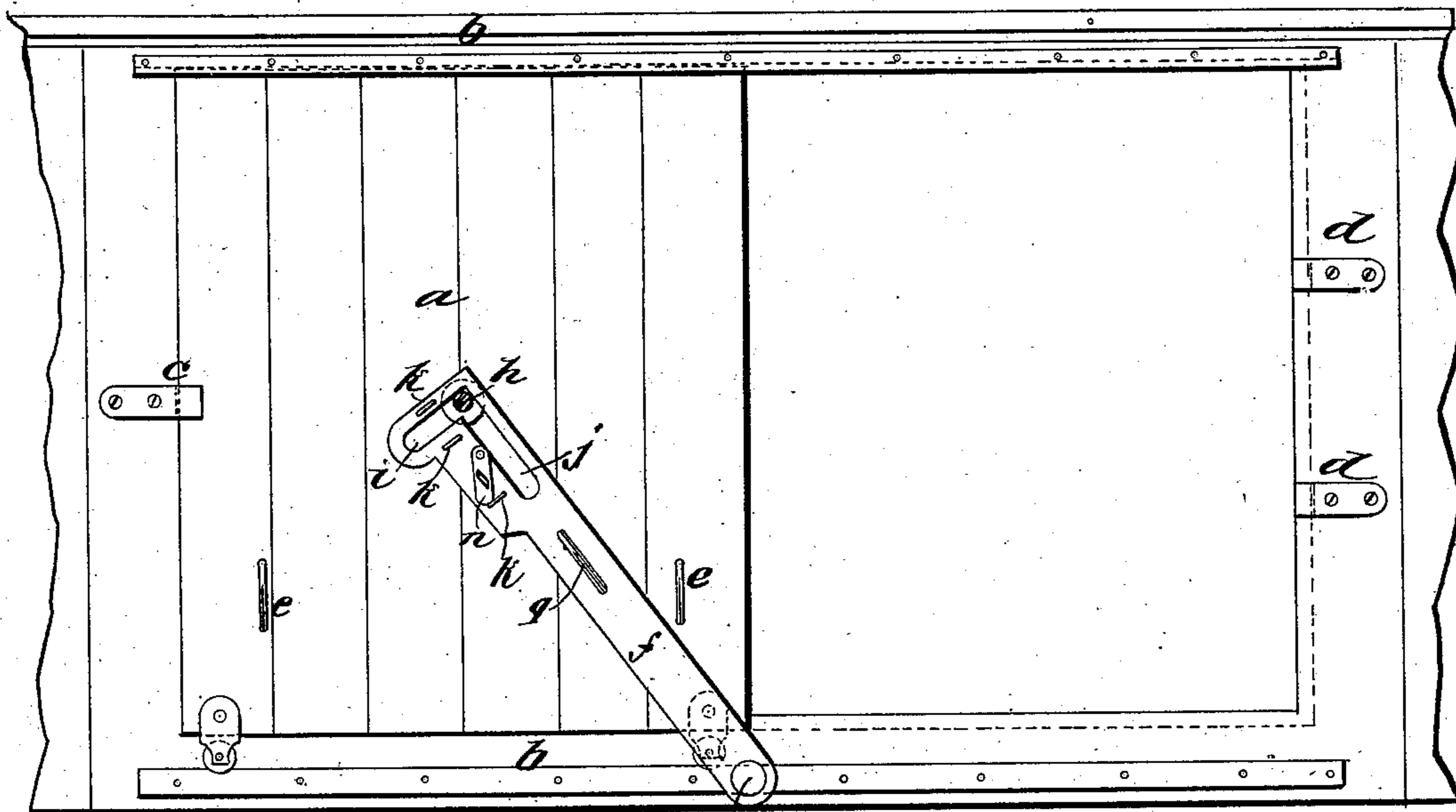


Fig. 3.

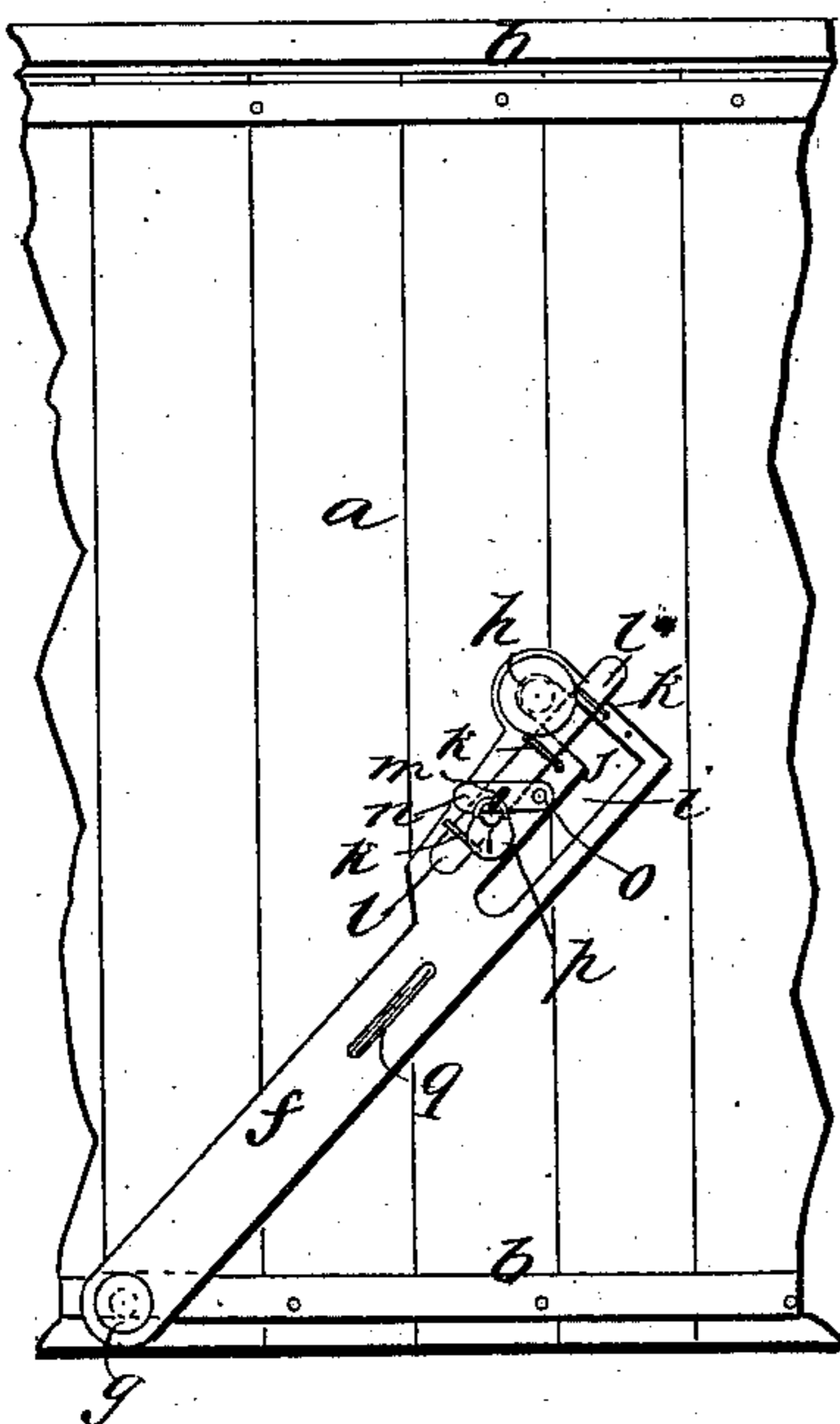
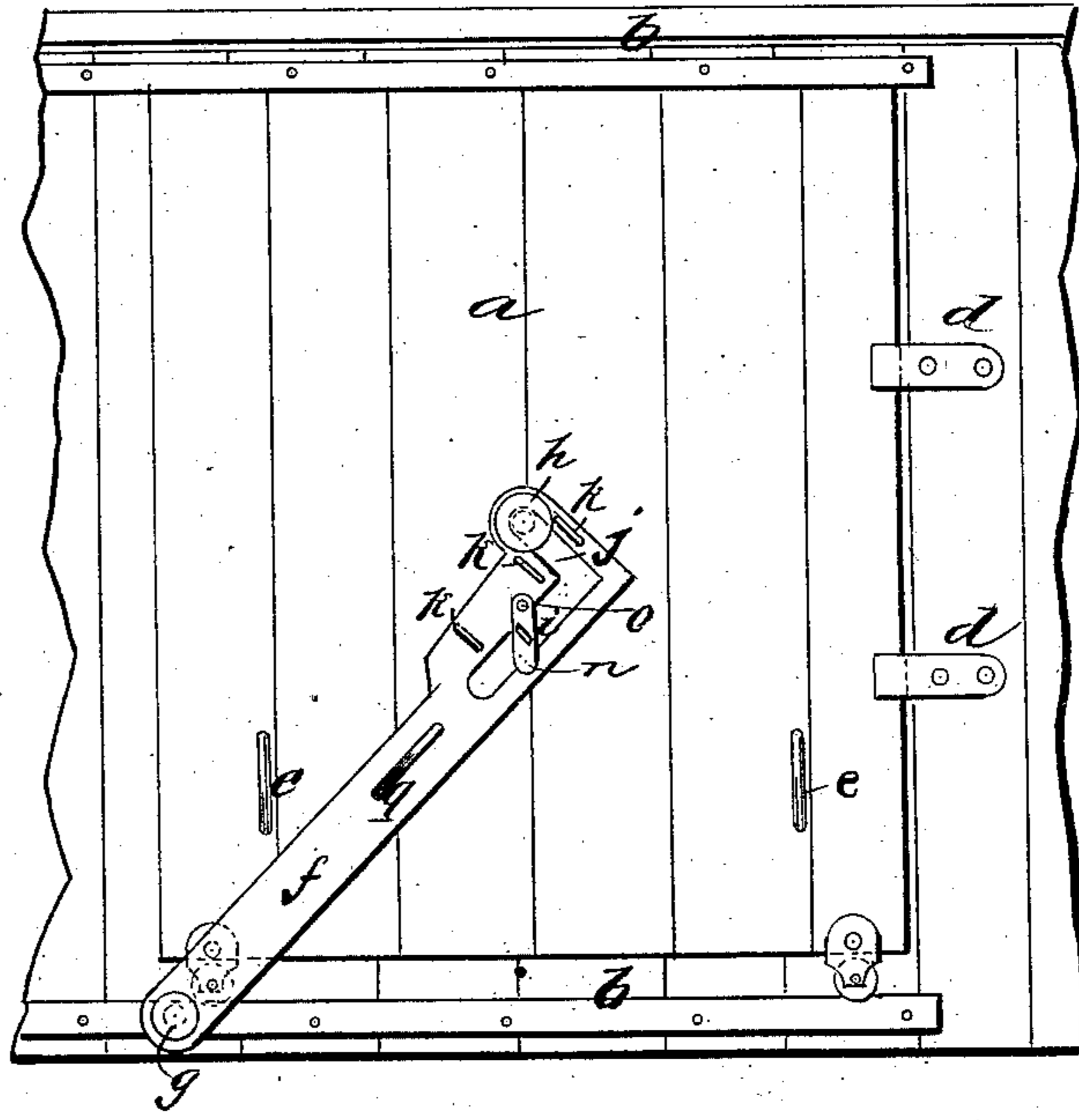


Fig. 2.



WITNESSES:

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JAMES SHARKEY, OF HONEY CREEK, INDIANA.

CAR-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 294,513, dated March 4, 1884.

Application filed August 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES SHARKEY, of Honey Creek, in the county of Henry and State of Indiana, have invented a new and Improved Car-Door Lock, of which the following is a full, clear, and exact description.

My invention consists of a latch-bar pivoted to the car-body below the lower back corner of the car-door, and reaching up at an inclination of about forty-five degrees to a point about midway between the two vertical edges of the door, where it is connected to the door by an angular slot in it and a stud-pin attached to the door, so that the bar forms a latch for fastening the door shut without being locked, and a slide-bolt and lock are contrived with said latch-bar to lock the door also, the arrangement of the latch-bar being such that a pull on it in the direction for opening the door will so disconnect said bar from the locking-stud as to free the bar from the stud and allow the force of the pull to be expended in opening the door, with which the said bar will then swing freely to allow the door to open, making a very simple and substantial locking device, which will effectually prevent the door from shaking or jarring open when unlocked, 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 side elevation of part of a car with a door provided with my improved latching and locking device, the door being open. Fig. 2 is a side elevation of the same with the door closed and secured in that position by the latch-bar without being locked; and Fig. 3 is a side elevation of the same with the door closed, latched, and also locked.

The door *a* is arranged in the slideways *b* and between the stop-cleats *c* and *d*, in the usual or any approved manner, and is provided with hand-holds *e*, to facilitate the sliding of it forward and backward. Under the lower back corner of the door I connect a latch-bar, *f*, to the body of the car by a strong pivot, *g*, said latch-bar *f* being long enough to reach to the middle of the door between the vertical edges on an inclination of about forty-five degrees, and being connected to the door thereat by the stud-pin *h* and the angle-slot *i j*, the stud-pin being attached to the

door and the slot being in the bar. Parallel to the part *i* of the slot and crossing the part *j* between slot *i* and the head of pivot-stud *h* is a range of staples, *k*, in which a locking-bolt, *l*, is to be placed when the door is to be locked, the bolt having a small staple, *m*, that will slide under staples *k*, over which staple *m* a link, *n*, pivoted to bar *f* at *o*, drops, to prevent the bolt from sliding when the hasp of a padlock, *p*, is inserted in staple *m*. The latch-bar *f*, being thus prevented from rising up on the stud-pin *h*, so that the door may slide by the stud running along slot *i*, forms a substantial locking-bar to the door; and it will be seen that when not locked the bar serves the purpose of a latch to hold the door shut, and the gravity of the bar will prevent the door from working loose by the shaking and jarring of the car.

The improved fastening device is applicable to any sliding door or gate as well as to car-doors, and I propose to employ it for any such sliding door.

The latch-bar *f* has a handle, *q*, for a convenient means of lifting it to unfasten the door, and at the same time to slide the door back.

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

1. The combination, with a sliding door, of a latch-bar, *f*, pivoted to a permanent support at the lower back corner of the door and connected to the door at the middle, or thereabout, by a stud-pin, *h*, in the door and the angle-slot *i j* in the bar, said bar being inclined, so that it gravitates to a rest at the upper end of slot *j* on the stud *h*, and thereby forms a latch to fasten the door shut, substantially as described.

2. The combination of a slide-bolt, *l*, having staple *m* for a lock, *p*, with the latch-bar *f*, having staples *k* and link *n*, pivoted to a support and connected to the door, as shown and described, the said staples *k* and bolt *l* being located between the part *i* of the slot and the stud *h*, to lock said stud in the upper end of part *j* of the slot, substantially as described.

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Witnesses:

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