

P. P. PEAKES & P. M. HAMLIN.

CAR DOOR FASTENING.

APPLICATION FILED OCT. 5, 1909.

947,931.

Patented Feb. 1, 1910.

FIG. 1.

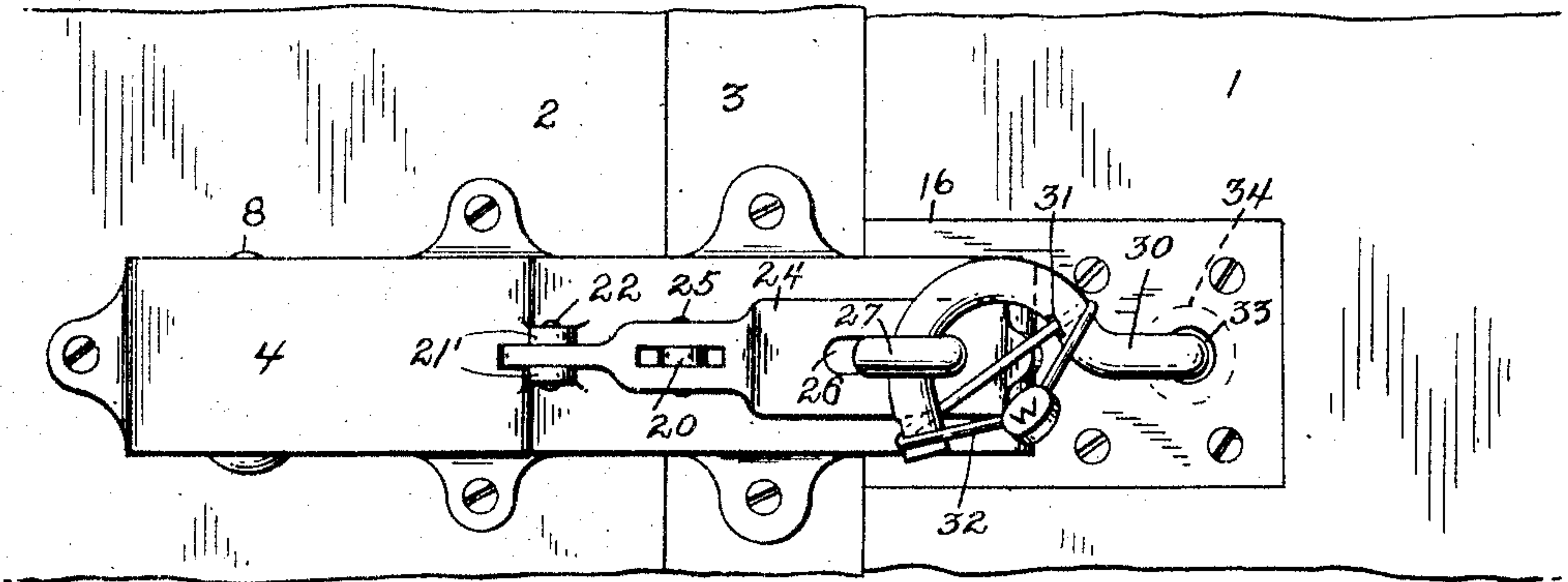


FIG. 2.

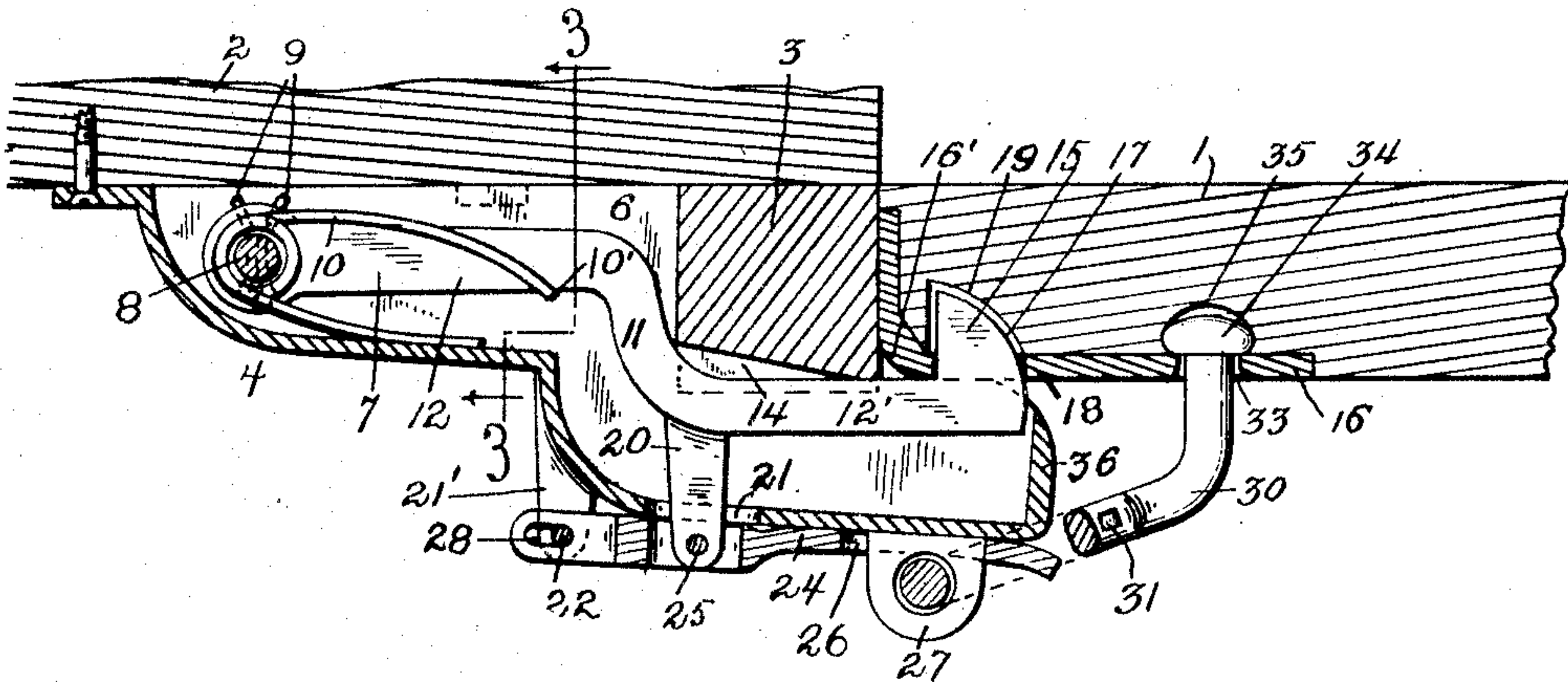


FIG. 3.

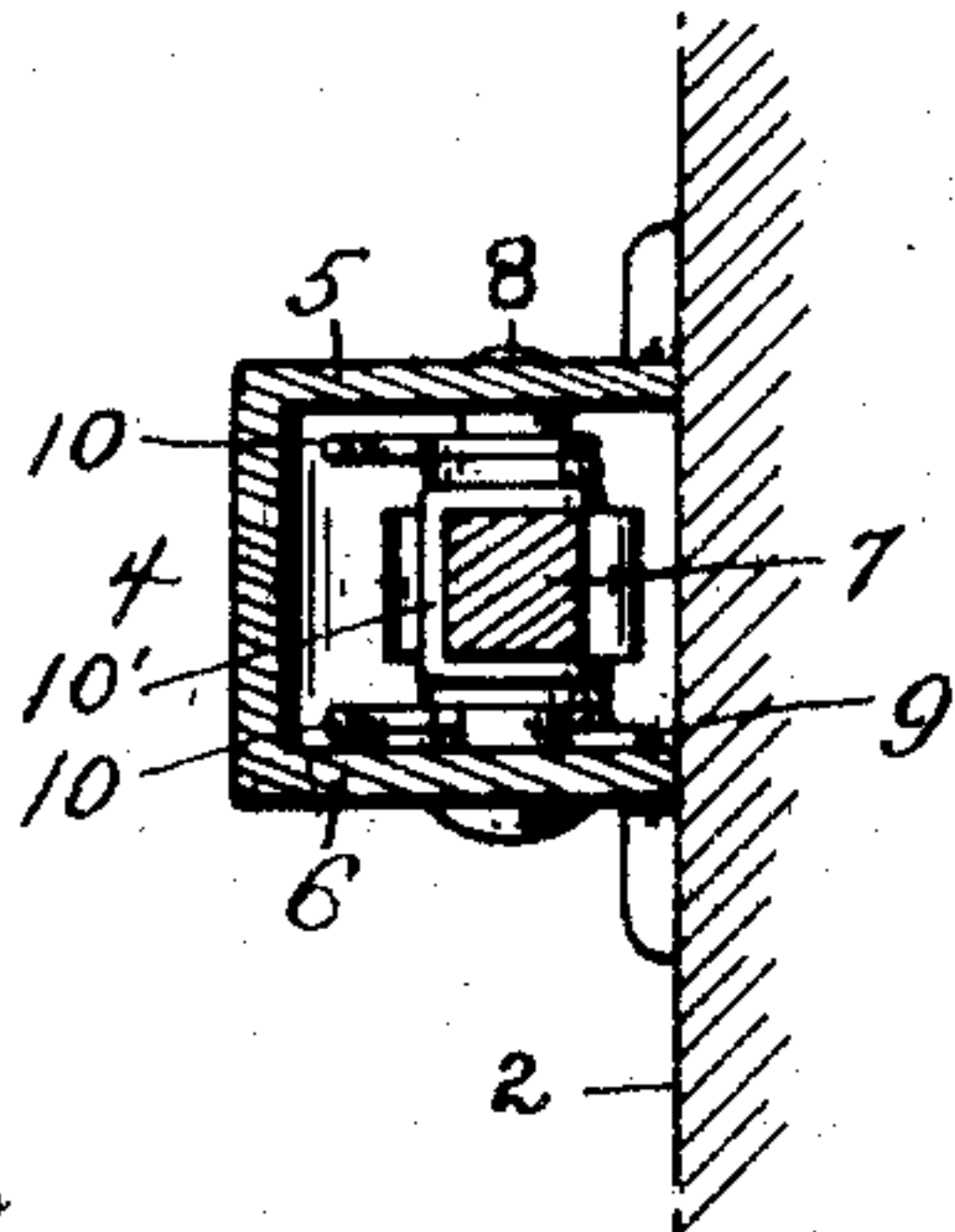
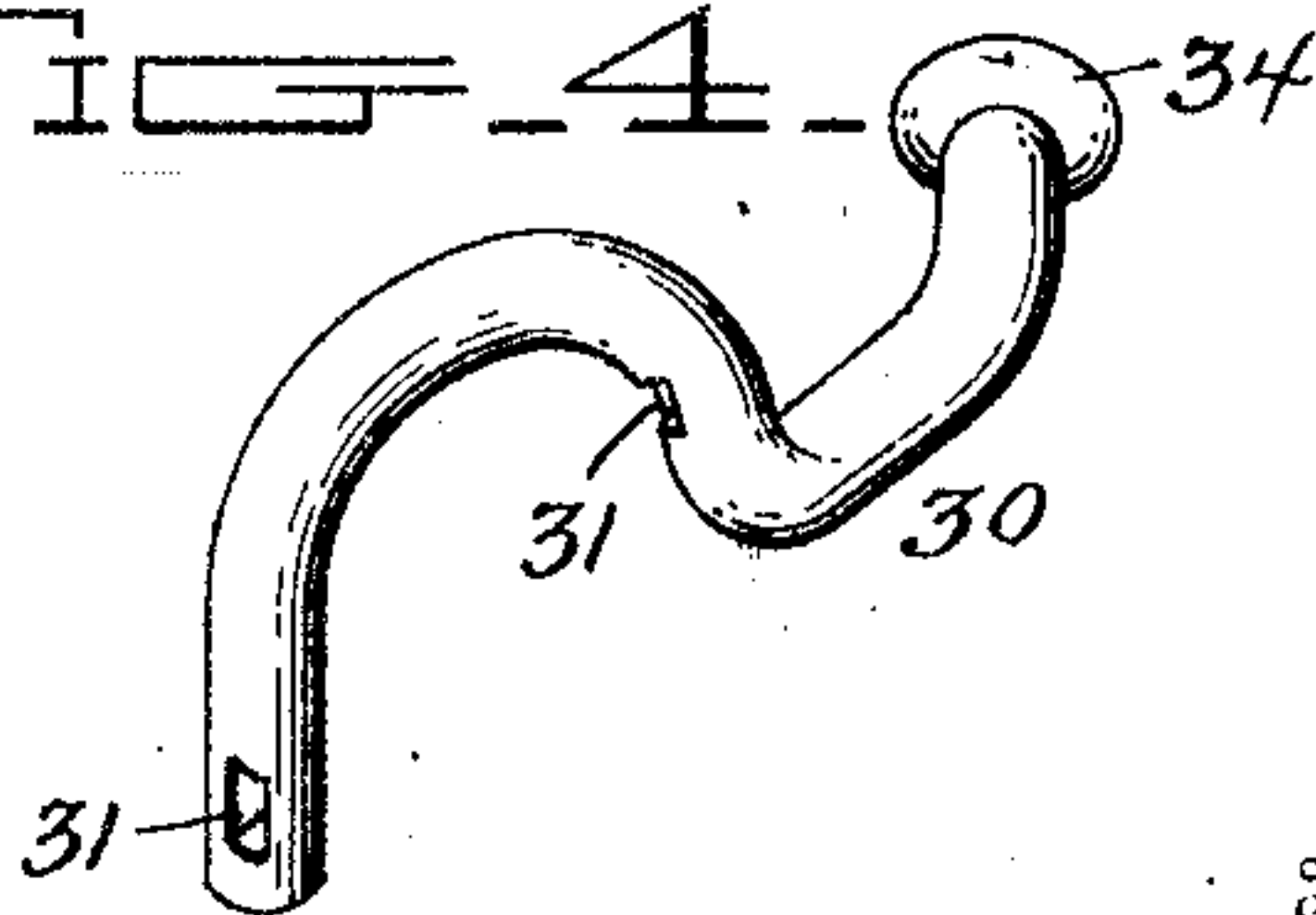


FIG. 4.



Witnesses

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PAUL P. PEAKES AND PERCY M. HAMLIN, OF MILO, MAINE.

CAR-DOOR FASTENING.

947,931.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed October 5, 1909. Serial No. 521,127.

To all whom it may concern:

Be it known that we, PAUL P. PEAKES and PERCY M. HAMLIN, citizens of the United States, residing at Milo, in the county of Piscataquis and State of Maine, have invented certain new and useful Improvements in Car-Door Fastenings, of which the following is a specification.

This invention relates to certain new and useful improvements in car door fastenings.

The invention has particular reference to that class of seal fastenings or locks employed on sliding freight-car doors.

Reference will be had to the accompanying drawing forming a part of this specification and wherein like numerals of reference designate corresponding parts throughout the several views in which:

Figure 1 is a front elevation, Fig. 2 is a horizontal sectional view thereof, Fig. 3 is a vertical sectional view taken on line 3—3 of Fig. 2, and Fig. 4 is a perspective view of the locking pin.

Reference numeral 1 indicates the car-door, 2 the car-side, and 3 the door-stop. Secured to the car side is a metal casing 4, the top and bottom walls of which are designated respectively by numerals 5 and 6. These walls are shaped to closely fit the car-side 2 and the door stop 3 as illustrated in Fig. 2. Within the casing 4 is pivoted a latch 7, by means of a vertical pin 8 passing through the top and bottom walls 5 and 6 of the casing, the pin being secured by its head and by a cotter pin 9 concealed within the casing.

The latch is normally pressed toward the car door and side by means of a spring 10, the free end thereof engaging the front wall of the casing and the intermediate portion 10' bearing against and straddling the latch, the portions of the spring above and below the latch coiling around the pivot pin 9.

Midway of its length, the latch is bent outwardly thereby providing a substantially right angular portion 11 which offsets the pivoted and free ends 12 and 12' respectively of the latch so that the latch will straddle the door stop 3, said stop being slightly cut away as at 14 to accommodate the latch. The extreme free end of the latch, on the side or edge adjacent the car, is provided with a lug or hook 15, which serves to secure the car door closed.

The car door 1, is equipped with a strike-plate 16, the forward corner of which is

rounded to present a beveled face 16' for the purpose of engaging the rounded nose 17 of the latch to raise the latter upon closure of the door. The strike-plate 16 is provided with an aperture 18 for the reception of the hooked end of the latch, said hooked end also extending into a recess 19 formed in the car door.

Extending outwardly from the portion 12 of the latch and substantially midway at a point adjacent the intermediate portion 10 is an integral arm 20 which projects through an opening 21 in the front wall of the casing, and extending outwardly from the central portion of the front wall of the casing are a pair of ears 21', integral with the said casing. Pivoted to the said ears 21 by means of a pin 22 is a hasp 24, said hasp being also pivotally connected midway of its length and by means of a pin 25 to the extreme free end of the said latch arm 20. The free end of the hasp is provided with the usual slot 26 for the reception of the staple or other member 27 which is integral with the front wall of the casing 4.

It will be noted that the latch and hasp swing in arcs of different radii, and inasmuch as the said latch and hasp are connected together by arm 20 for simultaneous movement and coöperation, it is necessary to compensate for such difference in movement, hence the pivoted end of the hasp is slotted as at 28 and it is through this slot that the said pivot pin 22 passes.

To secure the hasp in its locking position, a hook-shaped locking pin 30 is provided, the free end of which passes through the eye of the staple member 27. The hooked portion of the locking pin is provided with apertures 31 through which the seal wire 32 passes to close the open end of said hooked portion. The opposite end of the locking pin 30 passes through an opening 33 in the said strike-plate 15 and is provided with a ball 34 of greater diameter than that of the opening 33, said ball being received in a socket 35 formed in the car door. By means of this ball and socket mounting for the locking pin, a free swiveling movement of the latter is permitted to facilitate its being properly and easily inserted through the eye of the staple member 27.

It will be observed that ample space is provided within the casing for proper operation of the latch, and that the end of the casing adjacent the door opening projects

slightly therebeyond to conceal the securing end of the latch and the cooperating portion of the strike-plate. To prevent access into the casing at this end, it is closed by an end wall 36.

The operation of the device is as follows: Upon closing the door the rounded corner 16' of the strike-plate will engage the rounded nose 17 of the latch and elevate the latch. When the door has been completely closed, the hooked end 15 of the latch will enter the aperture 18 in the strike-plate due to the pressure of the spring and thereby secure the door closed. As the latch is lifted, the hasp 24 is correspondingly lifted and when the latch returns to its locking position, the hasp also returns to its position against the casing as illustrated in Fig. 2. The locking pin 30 is then passed through the eye of the staple member 27 and sealed, thereby securing the hasp against the casing and likewise the latch in locking engagement with the door. By this construction it will be impossible for the latch to be disengaged from the door without movement of the hasp, and such movement will be impossible without detection, owing to the sealed locking pin. To unlock the door, it is only necessary to remove the locking pin and to then pull on the hasp, which latter movement will disengage the latch.

Having fully described the invention, what is claimed as new and useful and desired to be secured by Letters Patent, is:

1. In a device of the character described, a mount, a latch pivoted thereto for locking engagement with a door, a lever pivoted to said mount, said lever being pivotally connected with the latch, and means for securing the lever to the mount against movement.

2. In a device of the character described, a mount, a latch pivoted thereto for locking engagement with a door, a hasp member pivoted to said mount, said latch having a pivotal connection with the hasp member, and a staple member provided on the mount for the hasp member.

3. In a device of the character described, a mount, a latch pivoted thereto for locking engagement with a door, a hasp member pivoted to said mount, said latch having pivotal connection with the hasp member, a staple member provided on the mount, and a spring for normally holding the hasp member in locking relation with the staple member.

4. In combination with the side and door

of a car, a casing secured to the car side, a spring pressed latch pivoted within the casing, an extension on the latch extending through the casing, a lever pivoted to the casing exteriorly thereof and to the projecting end of the said extension, a staple member on the casing, a plate secured to the door for locking engagement with the latch, and a locking pin swiveled to the plate for securing the lever to the staple member, said casing when the door is closed overlapping the portion of the plate engaged by the latch and completely concealing the said portion and latch.

5. In combination with the side, door and door stop of a car, of a casing secured upon the car side and door stop and projecting beyond the latter, of a latch pivoted within said casing and being spring pressed, the free end of the latch being off-set to bridge the door stop and also extending therebeyond, an integral extension of said off-set portion projecting through the casing, a hasp-member pivoted to the casing at one end and centrally to the free projecting end of the latch extension, and having its free end slotted, a staple member on the projecting end of the casing adapted to be received in the said slotted end of the hasp-member, a strike plate secured to the door and being provided with an opening for the reception of the latch end, the projecting end of the casing concealing said opening and latch end, and a hook swiveled in the plate for securing the hasp-member and staple member together.

6. In a device of the character described, a latch member adapted to be secured to the car side, a plate adapted to be secured to the car door, said plate being apertured, a hook member passing through said aperture and having a ball end to permit universal movement of the hook member and to prevent removal thereof from the plate, said ball end being located between the plate and door, the end of said hooked member serving to secure the latch in locked position and being provided with apertures to receive a seal wire whereby the hooked portion thereof may be closed.

In witness whereof we affix our signatures in presence of two witnesses.

PAUL P. PEAKES.

PERCY M. HAMLIN.

Witnesses:

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CHARLES W. LEONARD.