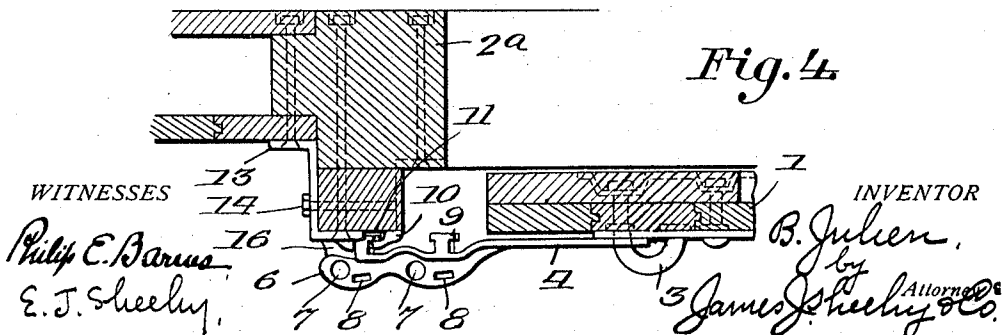
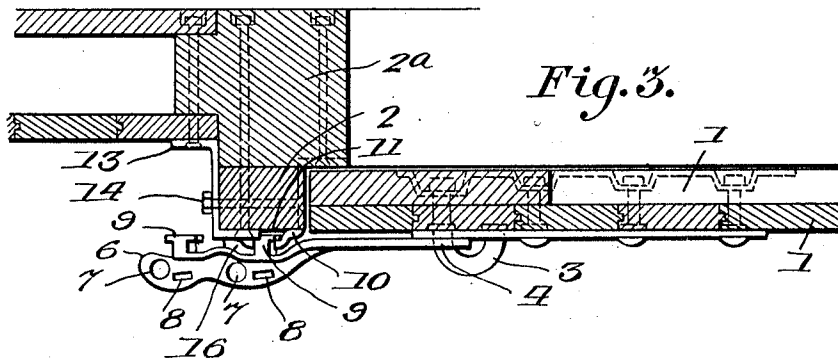
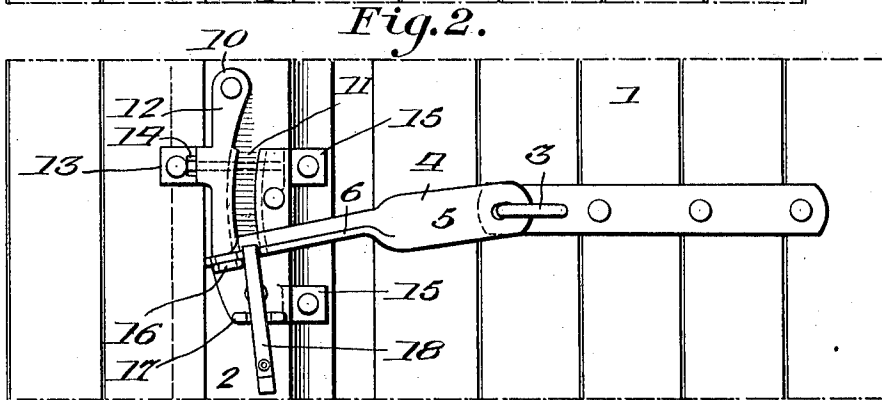
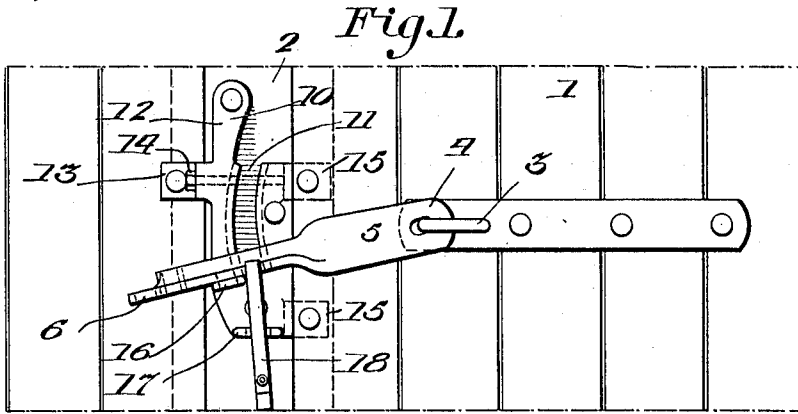


B. JULIEN.
SLIDING DOOR FASTENER.
APPLICATION FILED SEPT. 26, 1912.

1,053,826.

Patented Feb. 18, 1913.



UNITED STATES PATENT OFFICE.

BARTHOLOMEW JULIEN, OF OMAHA, NEBRASKA, ASSIGNOR TO GRIP NUT COMPANY,
OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SLIDING-DOOR FASTENER.

1,053,826.

Specification of Letters Patent.

Patented Feb. 18, 1913.

Application filed September 26, 1912. Serial No. 722,489.

To all whom it may concern:

Be it known that I, BARTHOLOMEW JULIEN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented new and useful Improvements in Sliding-Door Fasteners, of which the following is a specification.

My present invention pertains to sliding door fasteners; and it consists in the peculiar and advantageous construction, herein after described and claimed, through the medium of which the sliding door of a freight car can be fastened and locked and sealed either in an entirely closed position or in a partially open position, as occasion demands.

In the drawings accompanying and forming part of this specification: Figure 1 is an elevation showing my novel fastener as securing a car door in a fully closed position. Fig. 2 is a similar view showing the fastener as securing the door in a partly open position so as to allow the circulation of air between the forward edge of the door and the opposed portion of the side stile of the door frame. Fig. 3 is a horizontal section with the parts positioned as in Fig. 1, and: Fig. 4 is a horizontal section with the parts positioned in the same manner as in Fig. 2.

Similar reference numerals designate corresponding parts in all of the views of the drawings.

The car door 1, of the sliding type, and the door frame portion 2, may be of the construction shown, or of any other construction compatible with the purpose of my invention without involving departure from the scope of the same as claimed.

Connected in approved manner to the door 1 is a staple 3, and connected to said staple in a pivotal manner is the latch 4 comprised in my fastener; the said latch 4 being so disposed and mounted as to be adapted to swing vertically. The said latch 4 comprises a main vertically-disposed portion 5, and a flange 6 integral with the main portion 5 and extending laterally outward and at right angles thereto, and having two apertures 7, preferably of circular form in plan, and two apertures 8, preferably of rectangular form in plan. The latch also comprises two inwardly extending lateral tongues 9, of T-form, the said tongues being spaced apart and arranged

adjacent the free end of the latch, as clearly shown in Figs. 3 and 4.

Fixed on the face of the door frame portion 2 is the keeper 10 of the fastener. The said keeper 10 is of channel form in cross-section throughout its upper portion and is provided in the forward wall of its channel portion 10 with a slot 11, both the channel portion and the slot describing an arc of a circle, as shown. Below and at opposite sides of the channel portion 10 the keeper is provided with flanges which bear against and are bolted to the frame portion 2; and it will also be observed by reference to the drawings that one of the side flanges of the keeper is provided with an upwardly reaching arm 12 bolted to the frame portion 2, and that both side flanges are provided with arms which extend inward at opposite sides of the frame portion 2, and are bolted or otherwise connected to the main portion 2^a of the door frame. By virtue of this construction the keeper is connected with the frame in such manner that it is well adapted to withstand strain, particularly strain exerted in the direction that the door is designed to be moved in.

It will be understood that the arm that reaches inward from one side flange and is numbered 13, is connected by a bolt 14 that extends through the frame portion 2 with the upper of the arms 15 that reach inward from the other side flange, whereby the connection of the keeper to the door frame is materially strengthened. At one side of the lower end of the slot 11, the keeper is provided with an apertured lug 16, and at or adjacent its lower end the keeper is provided with another apertured lug 17; the lug 16 being designed when one of the apertures 7 of the latch is registered therewith to receive the shackle of a lock, which bow extends through the registered apertures and the apertured lug 17 being designed to receive a seal 18 that depends from the particular apertured portion 8 of the latch that happens to be above it.

By reference to Figs. 1 and 3, it will be seen that when the door 1 is fully closed, the inner aperture 7 of the latch will be registered with the apertured lug 16 of the keeper, and the inner aperture 8 of the latch will be disposed above the apertured lug 17 of the keeper, while, when the door is partly open, as shown in Figs. 2 and 4, the outer

or forward aperture 7 will be registered with the apertured lug 16, and the outer or forward apertured portion 8 will be above the lug 17.

5 In the practical use of my fastener, the door is arranged in fully closed position, or in partly open position, as desired, and then the latch is swung downward so that the particular tongue 9 that is presented to the
10 channelled portion of the keeper is moved downward in the keeper until the latch portion 6 brings up against the keeper lug 16, when the fastener may be locked and sealed in the manner described. When it is de-
15 sired to open the door, the lock is opened and the seal broken, after which the latch is swung upward to carry its tongue out of the keeper, when the door and latch may be freely moved toward the right.

20 By reason of the provision of the flange 6 on the vertically disposed portion 5 of the latch 4, and the provision of the apertured lug 16 on the keeper 10, it will be observed that when the door is latched in closed po-
25 sition, the flange 6 rests on the lug 16 with the result that when a pad lock is employed to connect the latch and the lug, the shackle of the lock is not subjected to any strain whatever. It will also be observed that the
30 provision of the flange 6 on the latch 4 enables the seal 18 to extend directly down from the latch to the apertured lug 17 on the keeper, which is advantageous inasmuch as it facilitates the sealing of the latch.

35 Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. The combination of a door frame, a sliding door, a keeper fixed on one of the
40 upright portions of the door frame and having a channel portion and an open slot in the forward wall of the channel portion, both channel portion and slot describing an arc of a circle, an apertured lug carried by
45 the keeper and extending outward therefrom at one side of the lower portion of the slot, an apertured lug carried by the keeper

and extending outward therefrom at a point below the slot, and a vertically swinging latch pivoted to the door and having a ver- 50
tically disposed portion and tongues of T-form extending inward from the vertically disposed portion at intervals in the length thereof and also having an angularly-dis- 55
posed flange extending outward from the vertically disposed portion and constructed and arranged to rest on the first named lug of the keeper and above the second named lug thereof and having apertures at inter- 60
vals in its length adapted to be registered with the first named apertured lug and also having apertures arranged to rest above the second named lug.

2. The combination of a door frame, a sliding door, a keeper fixed on one of the 65
upright portions of the door frame and having a channel portion and an open slot in the forward wall of the channel portion, both channel portion and slot describing an arc of a circle, an apertured lug carried by 70
the keeper and extending outward therefrom at one side of the lower portion of the slot, an apertured lug carried by the keeper and extending outward therefrom at a point below the slot, and a vertically swinging 75
latch pivoted to the door and having a vertically disposed portion and a tongue movable in the slot and having an enlargement at its inner end; said latch also having an angularly-disposed flange extending out- 80
ward from the vertically-disposed portion and constructed and arranged to rest on the first named lug of the keeper and also having in said flange an aperture adapted to be registered with the first named lug and an- 85
other aperture adapted to rest above the second named lug.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

BARTHOLOMEW JULIEN.

Witnesses:

EMANUEL E. HOFFER,
JAMES T. BARRETT.