

W. C. NORMAN.

CAR DOOR.

APPLICATION FILED OCT. 18, 1903.

Fig. 1.

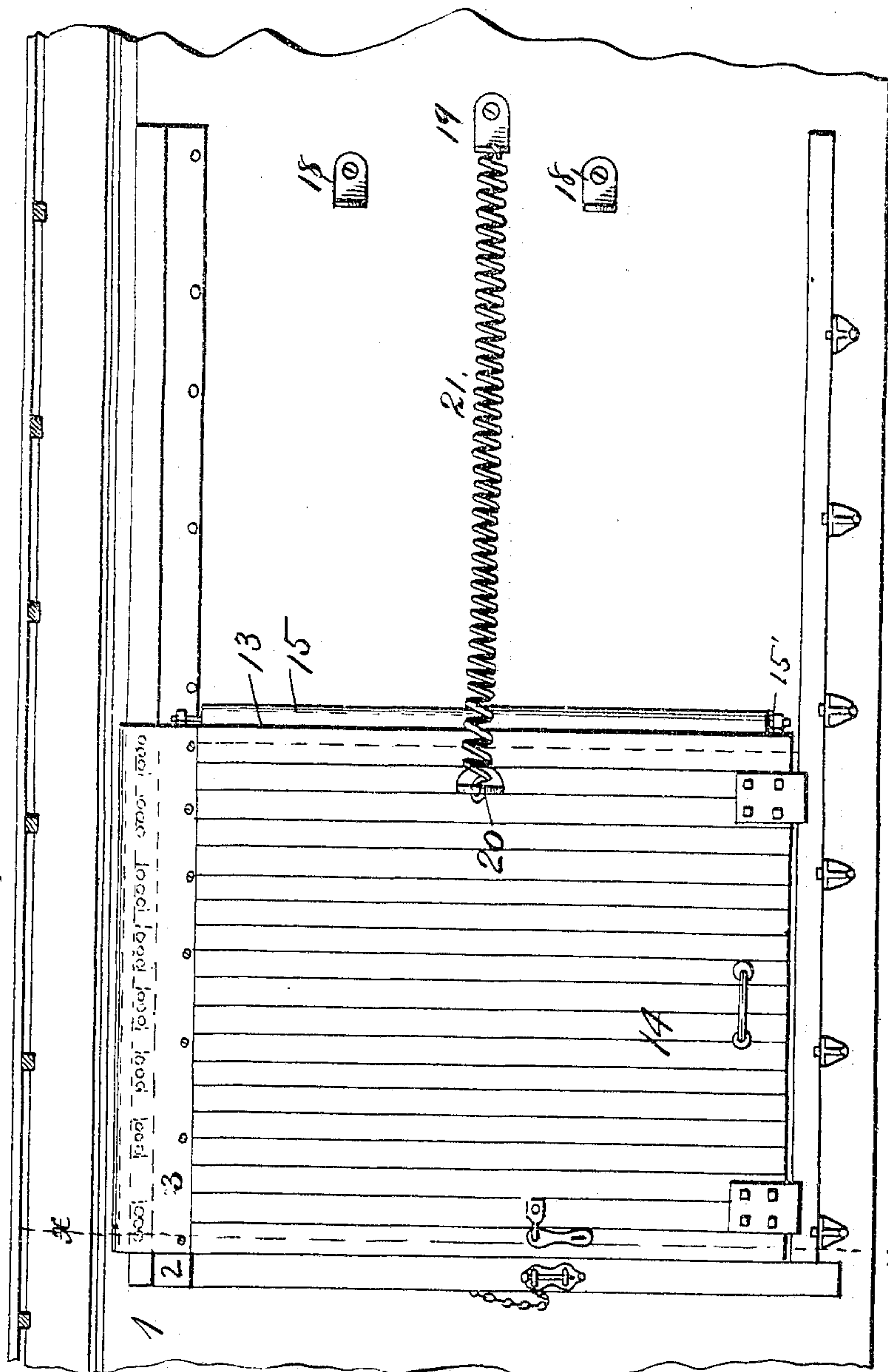
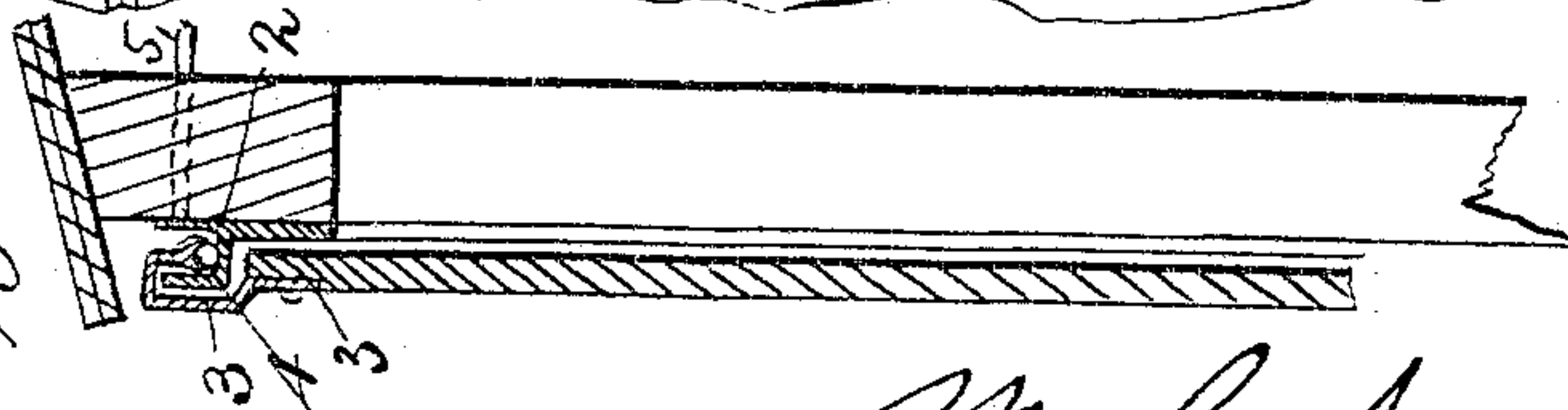


Fig. 2.



Witnesses:

F. L. Orvand.
Belle S. Troth.

W. C. Norman Inventor

By his Attorney John C. Duggie

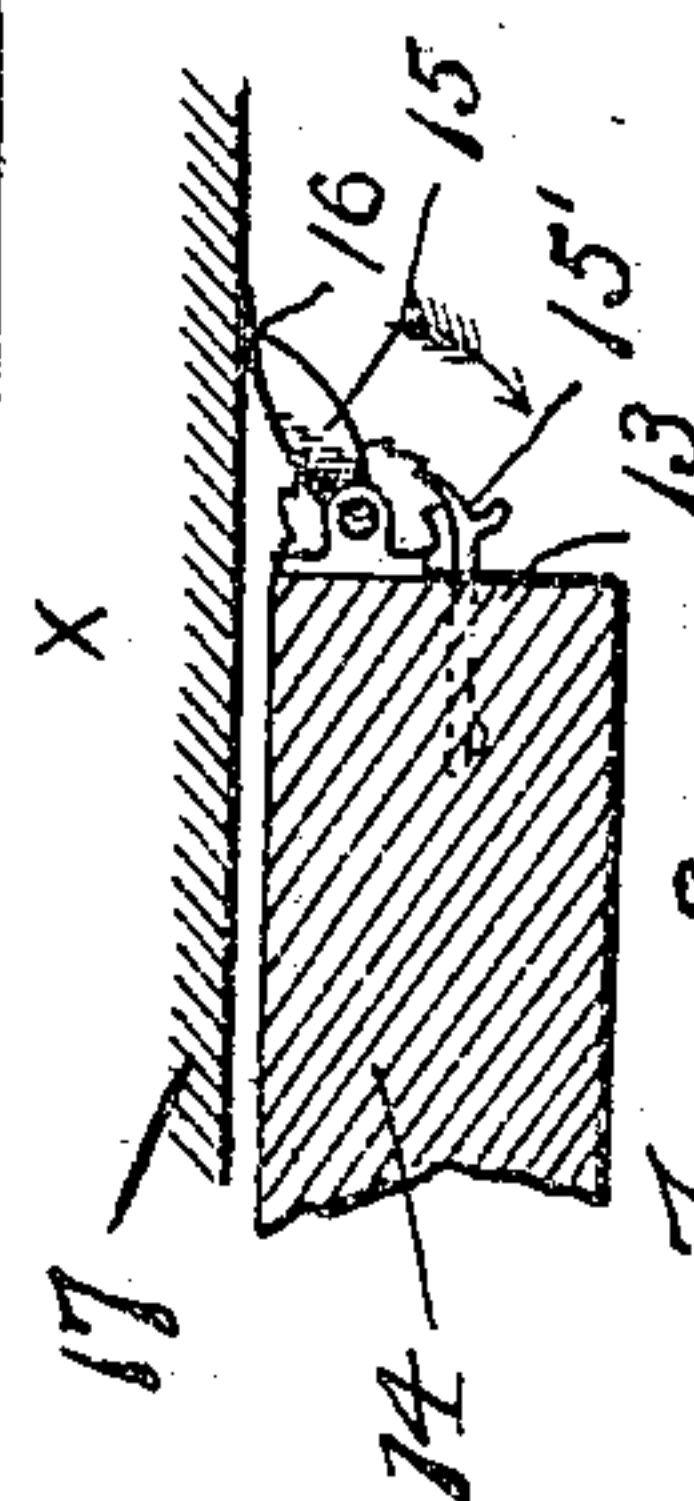


Fig. 3.

UNITED STATES PATENT OFFICE.

WILLIAM C. NORMAN, OF SMITHTON, ARKANSAS.

CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 782,265, dated February 14, 1905.

Application filed October 16, 1903. Serial No. 177,339.

To all whom it may concern:

Be it known that I, WILLIAM C. NORMAN, a citizen of the United States, residing at Smithton, in the county of Clark and State of Arkansas, have invented certain new and useful Improvements in Car-Doors, of which the following is a specification.

My invention relates to a sliding door, and has relation to new and novel attachments tending to make it more easily moved or operated and also air and water tight when shut.

My invention is primarily intended to be used on freight-cars, but may be used to close all door-openings where the door may be moved back and forth in a plane parallel with the side of the car, and in addition to being used on freight-cars it is especially adapted to barns, storing and ware houses.

In the accompanying drawings, Figure 1 is an elevation side view of a section of a railway freight-car with my invention attached thereto. Fig. 2 is a cross-sectional view on the line X X, Fig. 1. Fig. 3 is a detail view in section, showing one edge of the door carrying a strip 15, having its free edge resting against the wall of the car.

My invention is described as follows:

The numeral 1 represents in side elevation a portion of a railroad-car, the door being closed.

2 represents the track, 3 the hanger, and 4 the balls. The track is preferably secured to the walls of the car on a line a little above the upper wall of the door-opening by bolts 5, which may be extended across the car and have their ends united by a turnbuckle, or the track may be fastened to the car in any usual manner.

The hanger 3 is secured at its lower end to the upper end of the door. It turns out a little, then rises upwardly in a vertical line, and then turns inwardly at a right angle and then downwardly on a line parallel with the vertical line and terminates in a foot which embraces the balls.

In order to secure the door-opening against wind or rain or from leaking small grain or other material being shipped, I secure to the outer edge 13 of the door 14 a strip 15, having secured to its inner face a rubber lining 16. This strip is so hinged to the edge of the door that when turned in the rubber facing

16 will impinge against the wall 17 of the car, and when thrown out and back in the direction of the arrow it will rest against the edge of the door, and thus be practically out of the way and out of the way of danger; but it may be protected by a flange or other contrivance, if deemed necessary. This strip 15 is held in position by a ratchet and dog 15'. It will be understood that said ratchet and dog act as a friction device to prevent the strip 15 from moving too freely upon its end bearings, the dog pressing upon the ratchet to hold the strip against the side of the car.

To the right of the door and a distance therefrom to allow the door to be fully opened are two stops 18, and between these two stops and some distance farther to the right is a perforated holder 19, and on the door and on a line with said holder is a hanger 20, and extending from said hanger to said holder is a spiral spring 21, its ends being secured to said hanger and holder, respectively. Said spring is a tension-spring and tends to open the door when unlocked.

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

1. A car-door mounted to slide back and forth on a track, a weather-strip hinged to one end of the door and adapted to bear against the side of the car, a ratchet device at one end of the strip, and a holding-pawl adapted to maintain the strip in close contact with the car and permitting adjustment for wear, substantially as shown and described and for the purposes set forth.

2. A car-door running on a track, a spring secured to the door and to the side of the car for opening the door, a weather-strip hinged to one end of the door, and a ratchet and dog for maintaining the strip in close contact with the car while permitting adjustment for wear, substantially as shown and described and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. NORMAN.

Witnesses:

C. E. STELL,
M. WRIGHT.