

T. P. LALLANCE.
DOOR OPERATING DEVICE.
APPLICATION FILED DEC. 7, 1910.

992,781.

Patented May 23, 1911.

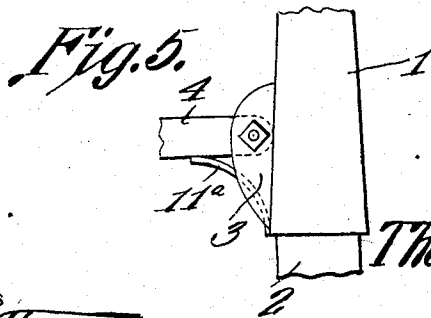
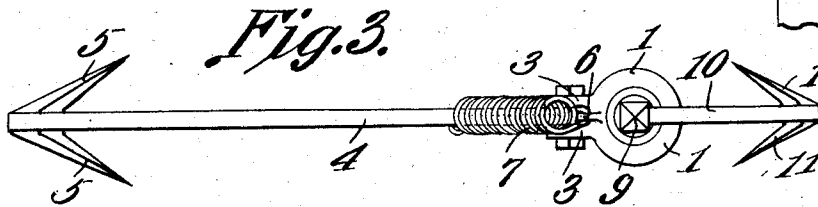
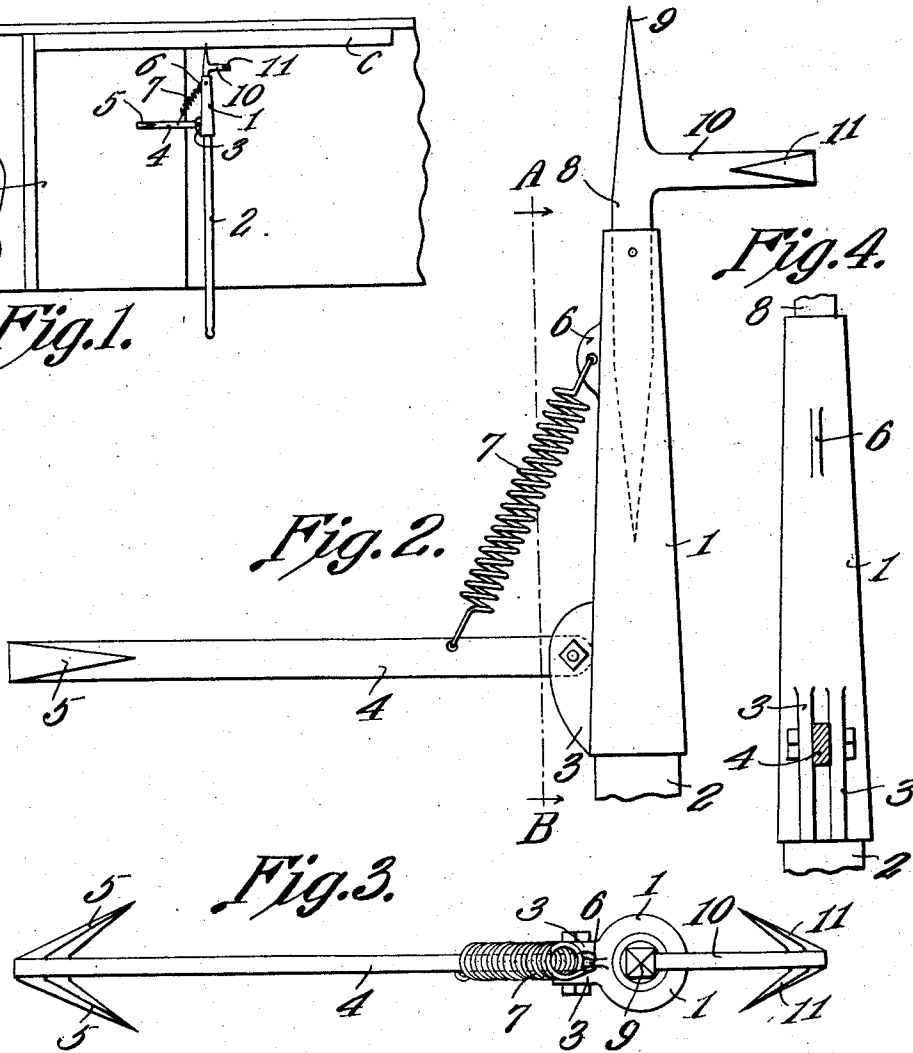
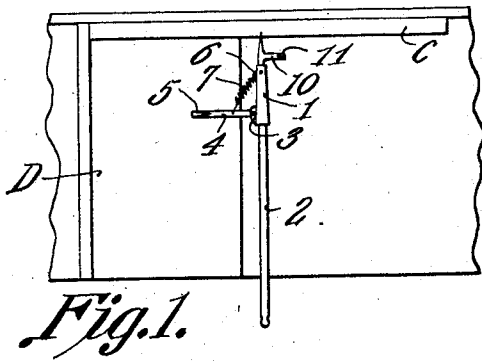
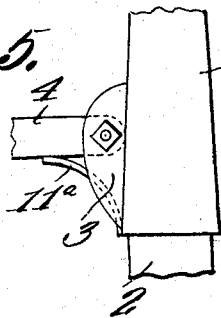


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

THEODORE P. LALLANCE, OF HUNTINGTON, WEST VIRGINIA.

DOOR-OPERATING DEVICE.

992,781.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed December 7, 1910. Serial No. 596,078.

To all whom it may concern:

Be it known that I, THEODORE P. LALLANCE, a citizen of the United States, residing at Huntington, in the county of Cabell and State of West Virginia, have invented a new and useful Door-Operating Device, of which the following is a specification.

This invention relates to door operating devices and is more particularly designed for use in opening and closing the doors of freight cars.

One of the objects of the invention is to provide a device of this character in the form of a tool adapted to be held and adjusted by the operator and placed in engagement both with the car structure and with the door so that, when shifted by the operator, the door will be moved into either open or closed position.

A further object is to provide a device of this character which is simple in construction, is easy to manipulate, and which will operate effectually to perform the work intended.

With these and other objects in view, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings,—Figure 1 is a side elevation of a portion of a car and showing the device in position for use in opening the car door. Fig. 2 is an enlarged side elevation of the device, only a small portion of the handle being shown. Fig. 3 is an end view of the parts shown in Fig. 2. Fig. 4 is a section on line A—B Fig. 2, the spring being removed and only a portion of the bit being shown. Fig. 5 is a side elevation of a portion of a modified form of device.

Referring to the figures by characters of reference 1 designates a tapered ferrule into which a handle 2 of wood or the like is inserted, this ferrule being provided, adjacent its large end, with outstanding ears 3 between which is pivoted an arm 4. Said arm is provided, at its free end, with oppositely disposed prongs 5 diverging in the direction of the ferrule 1, said prongs cooperating to form an arrow head at the free end of the

arm. An ear 6 extends from the ferrule adjacent its small end and is connected to arm 4 by means of a spring 7, this spring serving to hold the arm normally at a predetermined angle to the ferrule. A bit 8 is driven into that portion of the handle 2 located within the small end portion of the ferrule, the outer end of this bit being pointed, as indicated at 9, and there being an arm 10 extended from the bit and provided, at its free end, with prongs 11, these prongs diverging in the direction of the bit and cooperating to form an arrow head upon the arm 10. The two arms 4 and 10 extend in opposite directions.

In using the tool for the purpose of opening the car door, the point 9 of the bit is forced upwardly into the door guide C and one of the prongs 5 is forced into engagement with the door D. By then using the point of the bit as a fulcrum and swinging the handle 2 away from the door, the door will be drawn by the arm 4 and the prong thereon engaging the door. This arrangement of the parts has been illustrated in Fig. 1. To close the door, it is merely necessary to reverse the device so that, when the handle 2 is swung, the arm 4 and the door-engaging prong 5 thereon, will pull the door to closed position. If preferred, one of the prongs 11 may be employed as the fulcrum of the device when it is impossible to utilize the point 9.

By utilizing spring 7, arm 4 is held yieldingly at a predetermined angle to the ferrule of the device and will not drop downwardly out of operative position. Said spring will, however, permit any necessary movement of the arm away from the ferrule during the actuation of the door.

Instead of employing a spring such as indicated at 7, a leaf spring, shown at 11 in Fig. 5, may be provided, this spring being secured between the ears 3 and bearing upwardly against the arm 4.

What is claimed is:—

1. A device of the class described including a ferrule, a bit extending therebeyond, an arm integral with the bit, an arm pivotally connected to the ferrule, and prongs upon the arms and extended in the direction of the ferrule said arms extending in opposite directions.

2. A device of the class described including a ferrule, a bit extending therebeyond, an arm integral with the bit, an arm piv-

otally connected to the ferrule, and prongs upon each of said arms, all of said prongs diverging in the direction of the ferrule.

3. A device of the class described including a ferrule, a handle, a bit extending beyond the ferrule, an arm integral with the bit, prongs upon the free end of the arm and diverging in the direction of the bit, an arm pivotally connected to the ferrule, prongs thereon and diverging in the direction of the

ferrule, and a spring for controlling the movement of the pivoted arm.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THEODORE P. LALLANCE.

Witnesses:

IRA P. WOODWORTH,
JOHN C. GEIGER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
