

J. P. HANDSHAW.
 DEVICE FOR OPERATING SWINGING DOORS.
 APPLICATION FILED MAR. 13, 1918.

1,284,665.

Patented Nov. 12, 1918.

Fig. 1. II

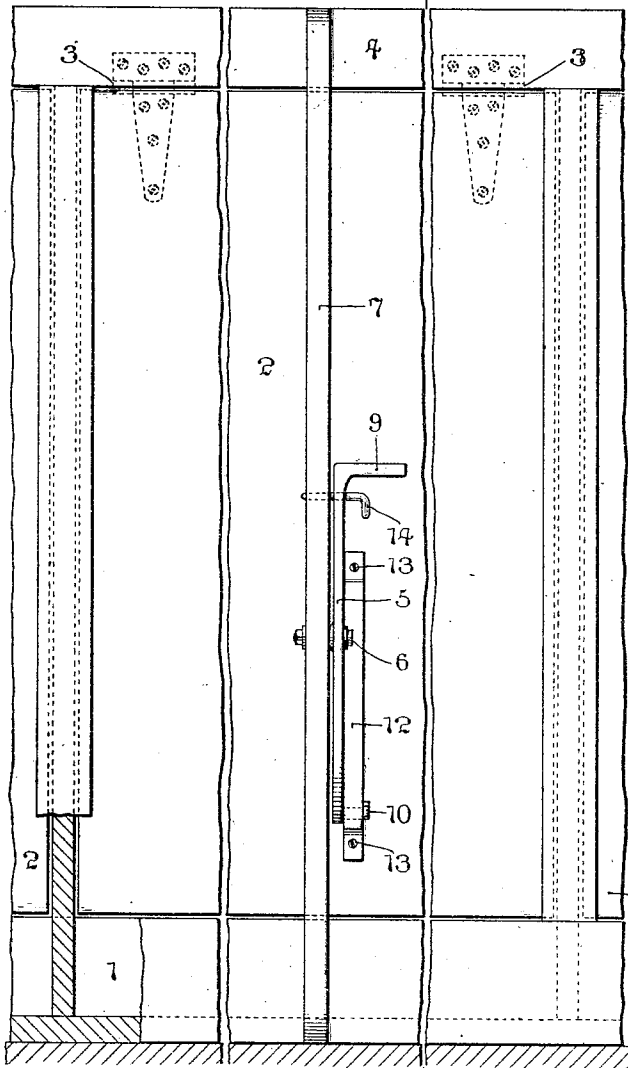


Fig. 2.

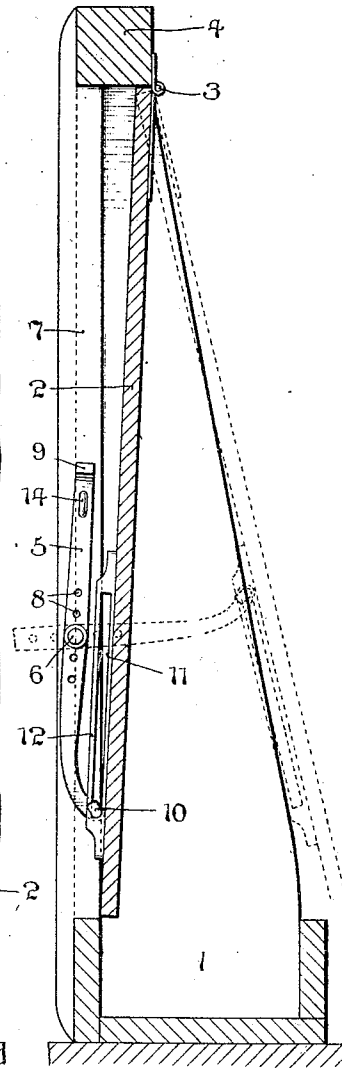


Fig. 3.

II

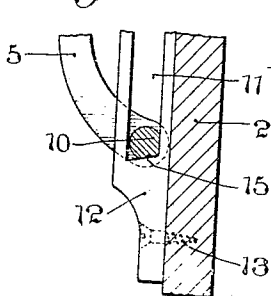
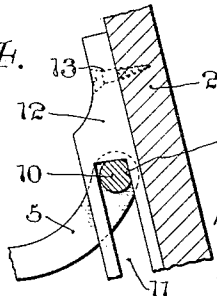


Fig. 4.



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DEVICE FOR OPERATING SWINGING DOORS.

1,284,665.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN P. HANDSHAW, a citizen of the United States, and resident of Smithtown Branch, in the county of Suffolk and State of New York, have invented a new and useful Improvement in Devices for Operating Swinging Doors, of which the following is a specification.

The object of my invention is to provide a novel device for operating swinging doors, such, for instance, as that type which is hung in the front wall of a pigpen over the feed trough and which may be swung inwardly to permit the ready filling of the trough from outside the pen.

A further object is to provide a swinging door operating device which will automatically hold the door open without additional fastening means, said device including a hand lever having its inner end slidably engaging the door and fitted to be swung into substantially horizontal and vertical positions to open and close the door.

A practical embodiment of my invention is shown in the accompanying drawings in which,

Figure 1 represents in detail a front elevation, partly in section, of a pig-pen with my improved door operating device applied thereto.

Fig. 2 represents a section taken in the plane of the line II—II of Fig. 1, the position of the parts, when the door is open, being shown in dotted lines.

Fig. 3 represents an enlarged detail section of the parts adjacent the inner end of the hand lever in the positions which they assume when the door is closed, and

Fig. 4 is a similar view with the parts in the positions which they assume when the door is open.

The feed trough at the base of the front wall of the pig pen is denoted by 1. A door 2 is hinged at 3 to the longitudinal beam 4, with the bottom of the door adjacent to the top of the feed trough. The device for operating the swinging door comprises a hand lever 5 pivoted at 6 to a suitable upright 7, which lever is provided with a series of holes 8 for adjusting the pivotal point of the lever. This lever is provided at its outer end with a suitable handle 9. The inner end of the lever which slidably engages the door, is herein shown as provided with a lateral pin 10 which is fitted to travel in an elongated transverse slot 11 formed in

a bracket 12 secured to the front of the door 2, by suitable fastening means, such as screws 13. The relative positions of the parts are such that the hand lever is swung into substantially horizontal and vertical positions to open and close the door. The door may be held in its closed position by providing a removable locking pin 14 for engaging the hand lever and upright when the hand lever is in its substantially vertical position.

The disposition of the parts is such that the door will be automatically held by friction in its open position. To insure the proper amount of frictional contact between the inner end of the lever and the door, I preferably provide the lateral pin 10 with a flattened surface 15 which provides an extended contact with the wall of the slot 11, when the door is open, as shown very clearly in Fig. 4.

From the above description it will be seen that the door may be very readily and quickly swung into its open position to permit the filling of the feed trough and as quickly and easily closed after the trough has been supplied with feed.

It is evident that various changes may be resorted to in the form, construction and arrangement of the several parts without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the construction herein shown and described, but

What I claim is:

1. A swinging door operating device including a hand lever pivoted to swing from a substantially vertical to a substantially horizontal position approximately at right angles to the plane of the door and having its inner end fitted to slide along the door as the door is opened and closed, the connection between the lever and door being such that the lever will automatically maintain the door in its open position when the lever is swung to its substantially horizontal position.

2. A swinging door operating device including a hand lever pivoted to swing from a substantially vertical to a substantially horizontal position approximately at right angles to the plane of the door, and having its inner end fitted to travel along said door as the door is opened and closed, said end having a flattened surface arranged to frictionally engage the door to assist in auto-

matically maintaining the door in its open position when the lever is swung to its substantially horizontal position.

3. A swinging door operating device including a bracket fixed to the door having an elongated transverse slot and a hand lever pivoted to swing from a substantially vertical to a substantially horizontal position and having a lateral pin at its inner end fitted to travel along said slot as the lever is swung to

open and close the door, said pin having a flattened surface engaging the wall of the slot when the door is open to assist by its frictional contact to maintain the door in its open position.

In testimony that I claim the foregoing as my invention, I have signed my name this sixth day of March, 1918.

JOHN P. HANDSHAW.

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