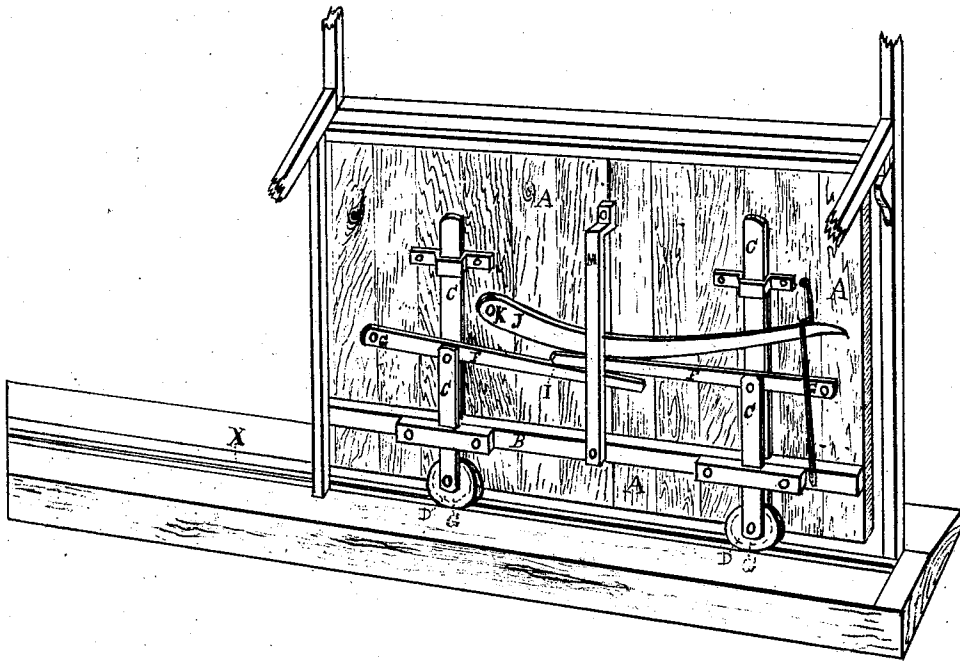


W. R. Waterhouse,

Sliding Door.

No. 101,194.

Patented Mar. 22. 1870.



Wm. R. Waterhouse

Witnesses { *R. F. Stevens*
E. L. Walrath

United States Patent Office.

WILLIAM R. WATERHOUSE, OF LIVERPOOL, NEW YORK.

Letters Patent No. 101,194, dated March 22, 1870.

IMPROVEMENT IN SLIDING DOORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM R. WATERHOUSE, of Liverpool, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Devices for Opening and Closing Barn-Doors; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making part of this specification.

The nature of my invention consists in operating barn-doors by combining therewith a system of levers, perpendicular slides, and rollers, working to raise and drop the door, as hereinafter stated.

To construct my invention, erect the frame and beams of the barn in the usual manner for sliding doors. Make a single door, A, and near the bottom of the same attach the cross-bar B, to which connect the perpendicular slides C, carrying the grooved rollers D at their lower ends. A raised track is laid upon the door-sill, on which the rollers are made to run.

Attach levers F to the door, pivoted at G and resting upon the upper ends of the slides at H, their long arms overlapping, as shown at I. Attach a third lever,

J, above the others, pivoted to the door at K, and working within the guard M.

N is a spring latch, acting to hold the long end of the lever J, when depressed.

The rollers D run upon the raised track X.

The operation is as follows:

By drawing down the lever J it acts upon and depresses the levers F, which, acting together, raise the whole door upon the slides at H and rollers D. The door may then be rolled to one side.

When the door is closed, by disengaging the lever J from the latch N the door falls upon the sill, and closes tightly the opening under it, effectually shutting out wind, snow, and dust.

What I claim as my invention, and desire to secure by Letters Patent, is—

The levers F and J, perpendicular slides C, and grooved rollers D, arranged and operating in connection with sliding doors, substantially in the manner and for the purpose set forth.

Witnesses: WM. R. WATERHOUSE.

E. L. WALRATH,
R. F. STEVENS.