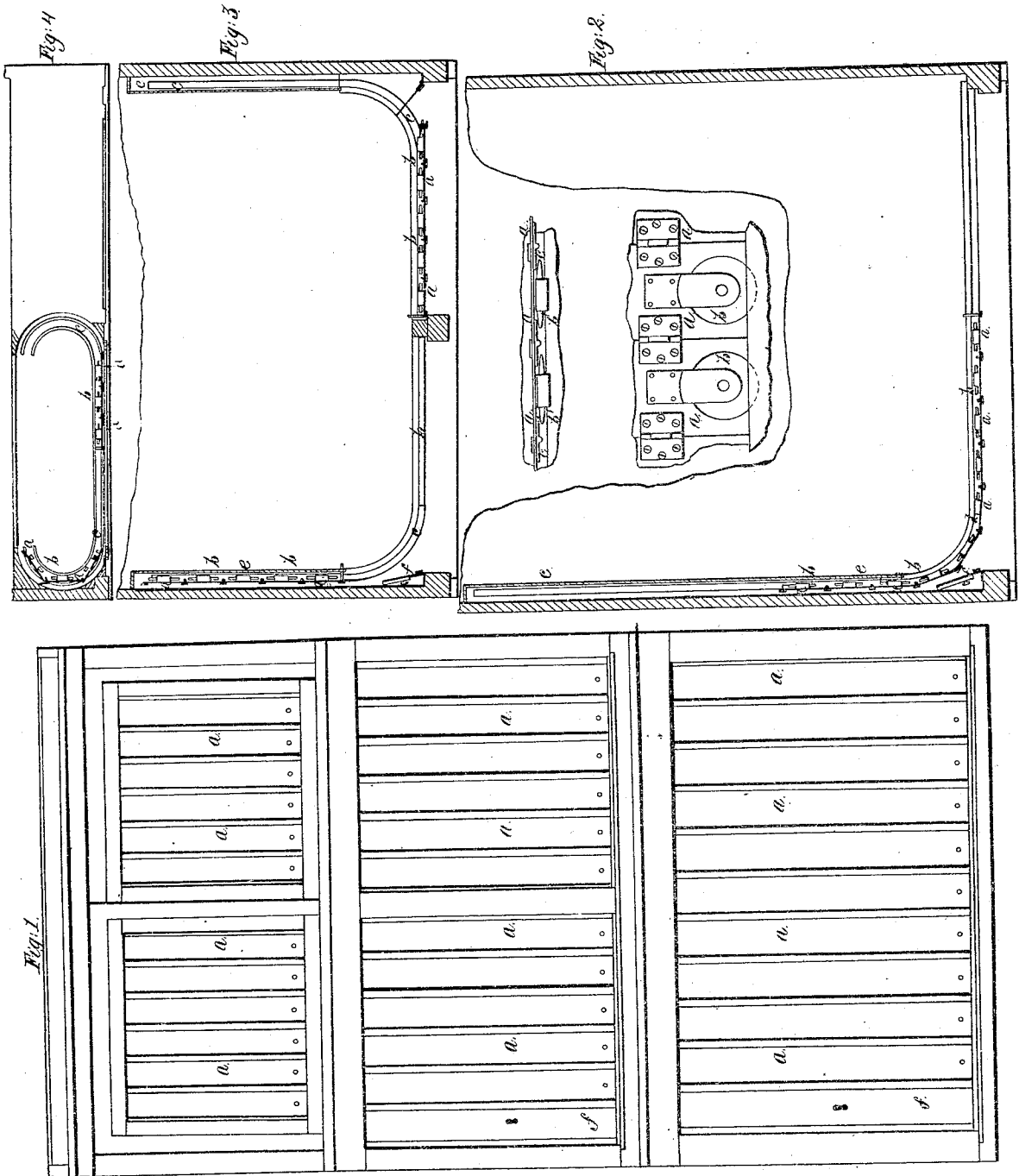


J. Root.

Window Shutter.

N^o 8,274.

Patented Aug. 5, 1861.



UNITED STATES PATENT OFFICE.

JAMES ROOT, OF CINCINNATI, OHIO.

IMPROVEMENT IN SHUTTERS FOR SHOP-FRONTS.

Specification forming part of Letters Patent No. 8,274, dated August 5, 1851.

To all whom it may concern:

Be it known that I, JAMES ROOT, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Shutters for Shop-Fronts, Windows, &c.; and I do hereby declare that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known, and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation.

The nature of my improvement in shutters consists in the mode of constructing and arranging the parts to adapt them to the purpose of closing the fronts of stores and windows. The device of a screen and wooden-reeded door for furniture that can be drawn back into a recess is quite old; but this alone would not answer the purpose to which I apply my invention, and it is the especial modification of parts hereinafter described that I desire to secure by Letters Patent.

The shutters are made in panels *a a*, one foot, more or less, in width, and properly jointed together. Each panel extends from the bottom to the top of the opening it is intended to close, and in the large openings of store-fronts and windows must necessarily be large and heavy. At the bottom of each panel there is a small wheel or roller *b*, (see Fig. 2,) on which the panel is supported. This wheel runs in a railway-groove *c* along the lower edge of the opening or sill and acts not only to cause the section to traverse light, but as a pivot, on which it turns, to run into the recess in the wall, as hereinafter described. An upper groove, similar to that below, is also employed as a guide, and rollers may there be

added, if found necessary. The railway-groove extends in a straight line along the front of the shop or window from one side to within a short distance of the other—say eighteen inches, more or less—when it curves around in a true segment of a circle to the wall *e*, at right angles, and enters the recess *d*. The sliding shutter is just the length of the straight part of the groove, there being the proper number of panels for that purpose. When these panels are drawn out and their portion of the opening closed, a hinged door *f* closes up the rest and locks into the end panel, thus securing the whole.

To open the front, the door is unlocked and opened back first, which gives room for the rest of the shutter to move back, as before described. A shutter of great weight can by this device be readily made to slide in or out easily and speedily. The construction in iron would be cheap and durable and a greater protection against burglars afforded.

To close smaller windows, recesses can be made in the jambs sufficient to retire the shutters into, as seen in Fig. 4, and no door is required at the end. The groove in the sill when the shutter is open is fitted by a bar *h*, that fits into it and prevents the ice or other obstacle from entering to clog the working of the shutter.

Having thus fully described my improved shutter, what I claim therein is—

In combination with the sliding shutter, substantially as above described, the door by which it is fastened and which permits it to slide back.

JAMES ROOT.

Witnesses:

EBENEZER HARRISON,
DAVID ROOT.