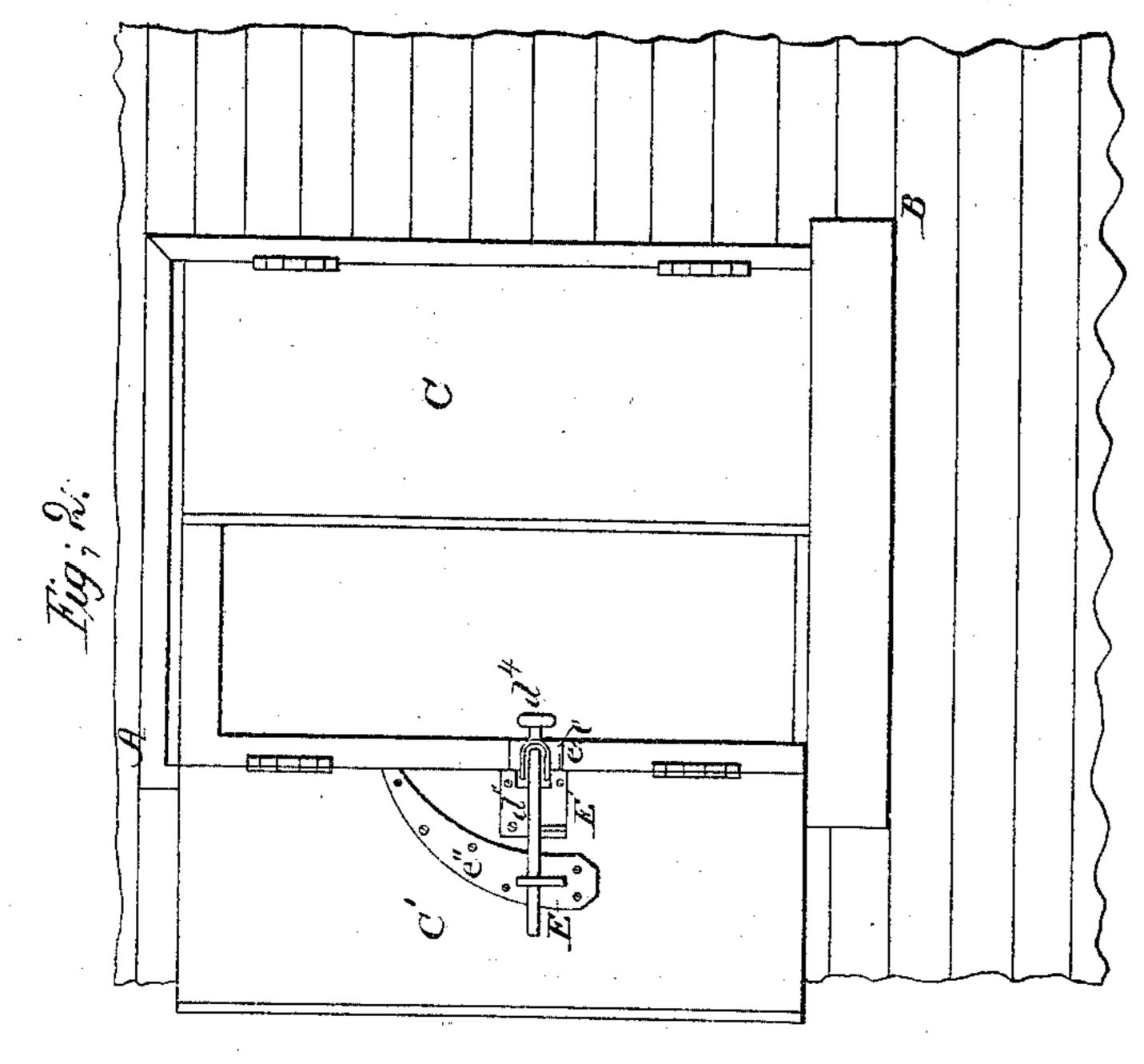
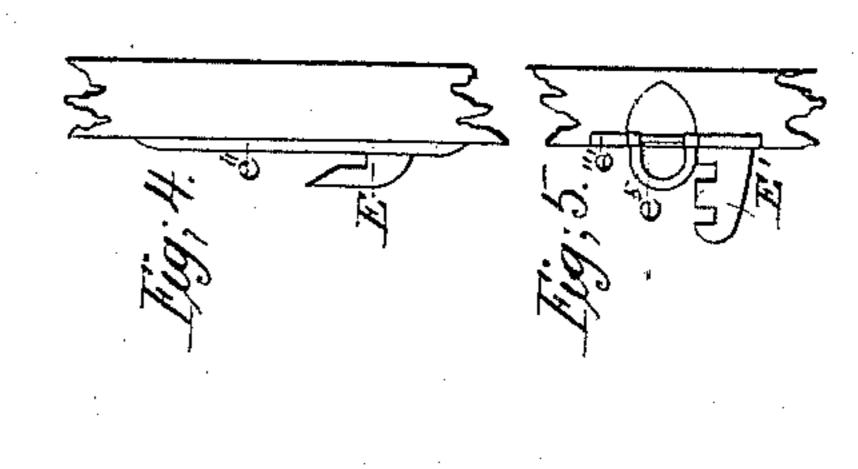
G. A. S. B. Harris.

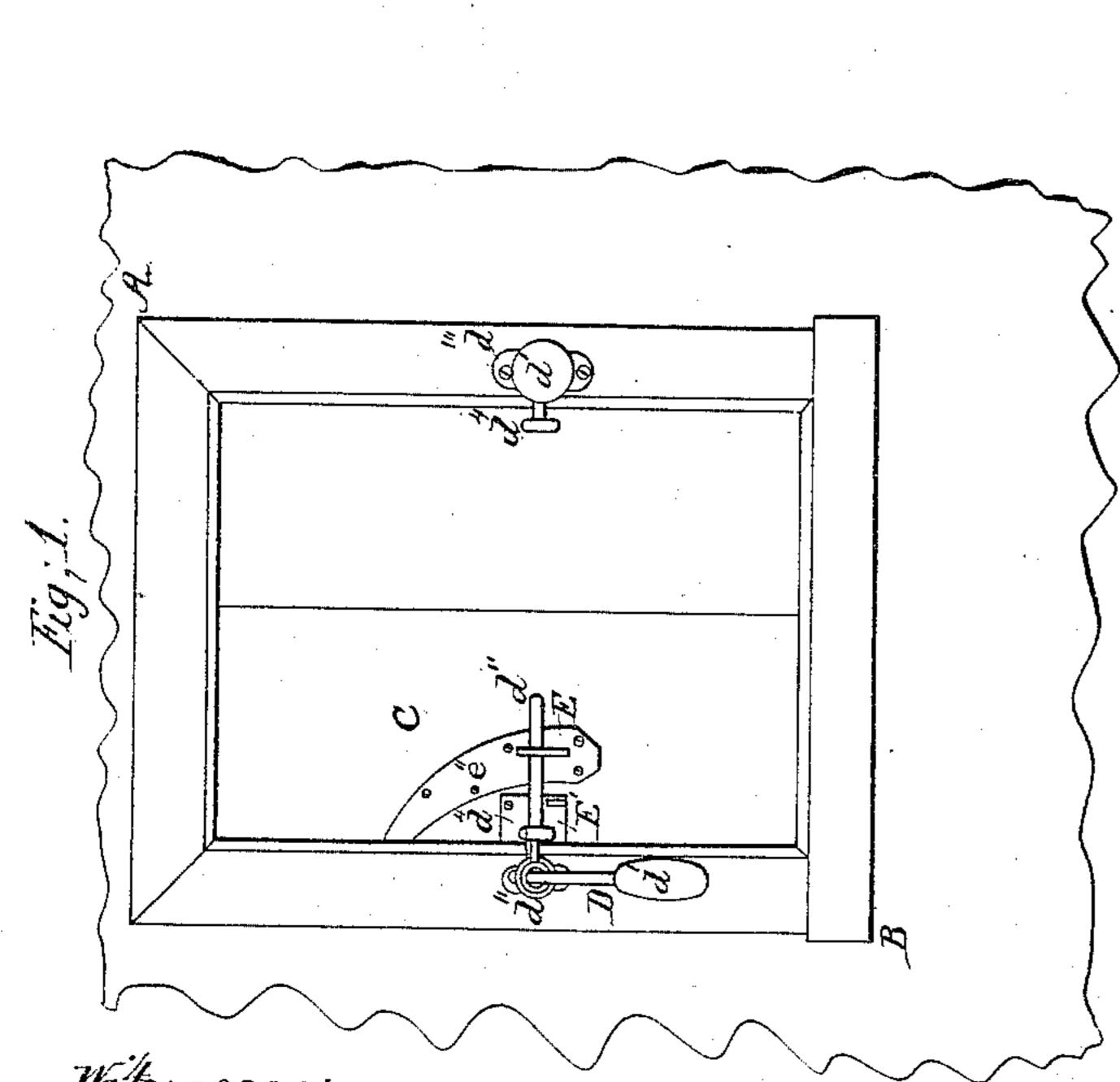
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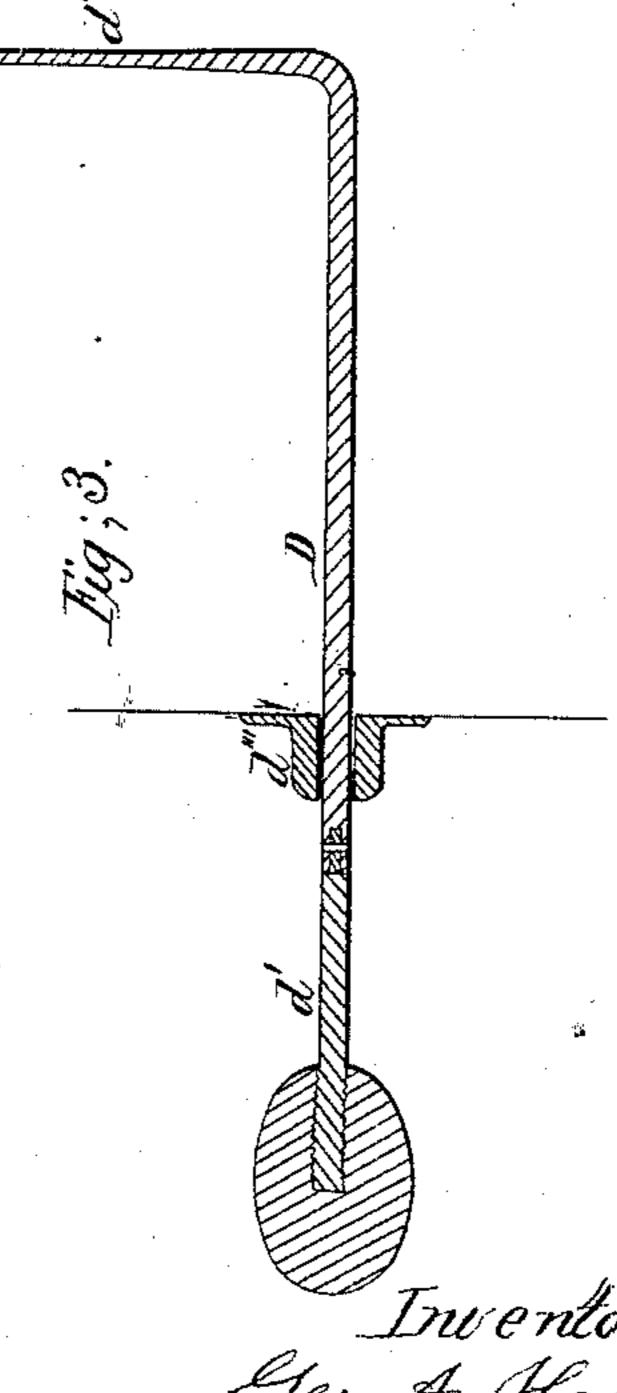
Patented Apr. 6, 1869.







Witnesses; Um H. Provison. Thillip Bartonice.



Inventor; Ges. A. Haarris John B. Harris. By Buj Morison as alty



GEORGE A. HARRIS AND JOHN B. HARRIS, OF SALEM COUNTY, NEW JERSEY.

Letters Patent No. 88,565, dated April 6, 1869.

IMPROVEMENT IN SHUTTER-OPERATOR AND FASTENER.

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

To all whom it may concern:

Be it known that we, George A. Harris and John B. Harris, of the county of Salem, in the State of New Jersey, have invented a new and useful Improvement in Shutter-Operators and Fasteners; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an inside view, and

Figure 2, an outside view of a window-frame and its shutters having our improvement applied thereto.

Figure 3, a longitudinal section of the shutter-operating lever;

Figure 4, a side view of the lever-catch, for holding the shutter either entirely open or closed; and

Figure 5, a like view of the lever-catch, for holding the shutter partly open.

Like letters of reference indicate the same parts

when in the different figures.

The object of our improvement is to afford a simple and more reliable device, whereby the outside shutters of a window can with greater facility be either opened, bowed, or closed, and also fastened in either of said positions, in a more simple, ready, and reliable manner than heretofore, from the inside of the house, without requiring that the sash be raised or opened for the purpose.

Our invention consists in the construction and arrangement of an operating-lever and catches, in combination with the window-frame and its outside shutters, substantially as hereinafter described and speci-

fied.

Referring to the drawings, A B is the window-frame, C C', the window-shutters, D, the operating-lever, and

E E', the catches.

The operating-lever D is a cylindrical rod of iron or steel, which has a stem-handle, d', jointed to its inner end, so that the stem of the handle, together with the rod, can be moved horizontally backward and forward, and also rotated half-way around, in an appropriate hole bored through the side of the frame of the window, and has also its outer end flattened, and bent around, so as to form an arm, d'', at a right angle to the straight cylindrical portion of the rod, as shown in fig. 3.

Over the inner end of the hole in the frame which receives the said operating-lever D, there is fixed a metallic boss, d''', and, in a hole in the said boss, the cylindrical portion of the lever D fits loosely, or so that

the same can be readily moved accurately, and also so that it can be fixed immovably by a thumb-screw, d^4 , in the side of the boss, as occasion may require.

The arm d'', of the operating-lever D, when the latter is pushed outward, and then turned partly around in the boss d''', passes down in close contact with the outside face of the open shutter, until stopped by the open catch E, which it enters. (See fig. 2.)

This stop E is an upright stud, which projects, by a perpendicular stem, from a curved friction-plate, e'',

fixed permanently on the shutter.

The rounded bend between the arm d'' and the cylindrical, straight portion of the operating-lever D, is retained in place in contact with the inner corner of the inner edge of the shutter, C or C', by means of a hinged loop, e^5 , through which the lever D passes loosely, and controls its position on its turning-pin. (See figs. 2 and 5.)

When the operating-lever D is turned around in its boss, so as to bring its arm d'' upright, and then pulled inward, the shutter will be caused thereby to be closed, because of the connecting-loop e^5 , and, consequently, if the operating-lever D be now turned around in the opposite direction, the arm d'' will be again caused to enter the catch E, as shown in fig. 1.

Now, if, in either of these positions of the shutter, the thumb-screw d^4 be screwed hard up against the operating-lever D, the arm d'' of the latter will be held firmly in its catch E, and therefore the shutter will be held fast and firmly, the stem-handle d' dropping down into a vertical, or pendent position when the shutter is fully closed, and supported horizontally in close contact with the boss d''' when the shutter is opened.

The catch E' is a notched vertical plate, projecting perpendicularly from a flat friction-plate, e''', which is fixed permanently to the shutter at a point between the plate e'' and the inside edge of the shutter.

There are two or three square notches in the upper edge of the projection, and into either of which the arm d'', of the operating-lever D, can be readily turned, so as to enable the person to bring the said shutter to any suitable bowed or oblique position, and cause it to be held firmly in such position by means of the thumbscrew d', screwed up against the operating-lever, as before described.

It will be seen, that by means of the apparatus described, the shutters C C' can be adjusted with perfect facility to either of the different positions described, and then fastened securely and permanently in either of those positions, without requiring the sash to be raised, or opened for the purpose; that the apparatus is simple, and inexpensive of construction and opera-

tion, and can be readily applied to any of the outside shutters in general use, so as to be entirely effective

for the purpose.

We are aware that certain other devices for operating the outside shutters of windows, without opening the sash for the purpose, have been applied. We, therefore, do not desire to claim, broadly, such device; but, having fully described our improved shutter-operator and fastener,

What we claim as our invention, and desire to secure by Letters Patent, is confined to the following, viz:

We claim the operating-lever D, boss d''', thumb-screw d^4 , and the catches E and E', the said devices being constructed and arranged to operate in combination with the frame A B and shutter C or C' of a window, substantially as and for the purposes described.

GEORGE A. HARRIS. JOHN B. HARRIS.

Witnesses:
HENRY HILYARD,
BENJ. F. BURT.