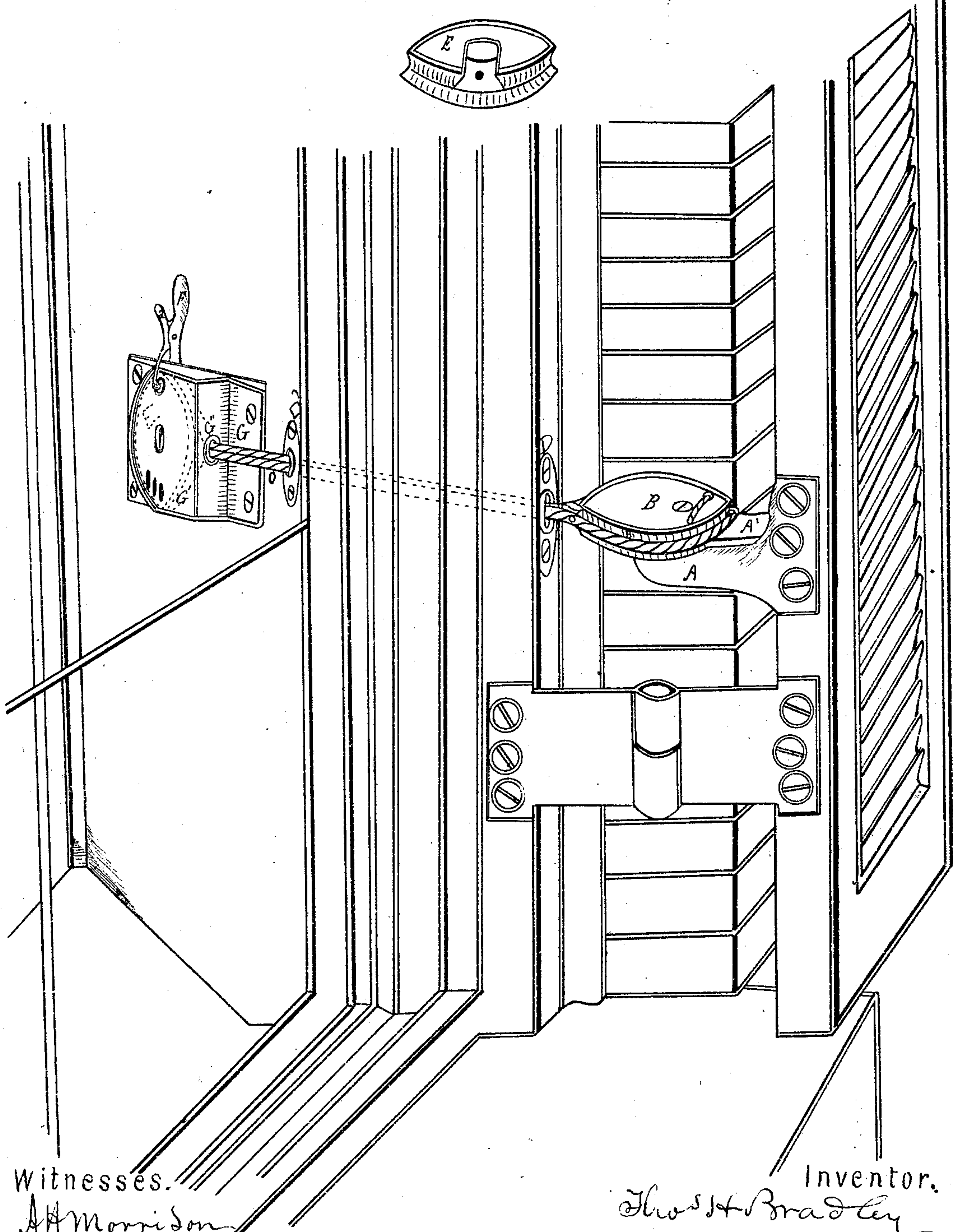


T. H. Bradley

Shutter Worker

Nº 94691.

Patented Sept. 7. 1869.



Witnesses.

A. H. Morrison

Saml. W. Laker

Inventor.

Thos H Bradley
Bot. Captain U. S. Army

United States Patent Office.

THOMAS H. BRADLEY, OF ST. LOUIS, MISSOURI.

Letters Patent No. 94,691, dated September 7, 1869.

IMPROVED SHUTTER-WORKER.

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, THOMAS H. BRADLEY, of St. Louis, in the county of St. Louis, in the State of Missouri, have invented new and useful improvements in the mode of opening, closing, regulating, and fastening outside window-shutters with windows either closed or opened.

My improvements consist in a grooved disk, placed upon a flange or base, and secured at a right angle to the plane of the shutter, and independent of the hinges of the blind, and also in furnishing the lever to operate the cord with a spring-catch, which secures it in any position on the interior disk.

The adjustable grooved disk, with the accompanying arm, may be readily applied to any shutter without removing the old hinges, and be worked with satisfaction by means of the operating-lever.

To enable others to make and use my invention, I will proceed to describe the construction and operation.

To obtain strength and durability, every part must be made of iron or other very hard material.

I cast a flange, or what may be termed an arm, A, make the top or bottom part of it straight, with notches or screw-holes therein, and make each side of the said part with a swell, and fasten the flange to the edge of the shutter, the same as a hinge.

I cast a wheel or disk, B, groove its circular edge B', and cut a groove in one side, diametrically across its centre, the groove to fit closely on the swelled part of the flange A. I bore three small holes, one on each side of the diametrical groove, so as to pass from the circular groove to the plain part of the wheel B, and one through the centre of the diametrical groove.

Pass the flange A into the diametrical groove until the centre of the wheel B is in a line with the centre of the pivot to the blind-hinge; then, by inserting a screw into the last hole, above mentioned, securely fasten the disk B and flange A together.

I pass the ends of a cord, C, through the holes in the wheel B, from the upper part to the circular groove, make the ends even in drawing them tightly through, fasten the cord at the holes, pass the ends nearly around the wheel B, the one on the right side to the left, the other to the right.

Put the cord ends C C through a hole, D D', in the window-frame, and on the inside of the house attach them to a wheel, E, nearly similar to the one, B, on the flange A, excepting that the inside wheel is to have a lever or handle passed into its diametrical groove, and is made to turn upon an axle; or the han-

dle may be cast as an attachment on the wheel, both in one piece.

Cast a case, G G', enclosed only on the sides and at one end, with a hole through the latter for the cord to operate the case to contain the wheel E, and so constructed as to allow it to be easily moved upon its axle, by means of an extended handle, F.

Cast a handle, F, to fit in the diametrical groove of the wheel E, make a mortise in the top part of the handle, near the edge of the wheel E, bore a small hole from side to side through the mortise-part.

Cast an elbow-shaped piece, nearly as long as the handle, insert the elbow-part into the mortise, bore a hole through it, then insert a rivet, to fasten it to the handle.

Fasten a miniature hammer-head on the elbow-end, over the case, so it will be at a right angle with the top of the case G', and whenever it is desired to fasten the shutter, make holes through the case and wheel for this hammer-head to enter.

Place a spring between the outside end of this handle-piece and the other, so as to force the hammer-head down when the opposite end is not pressed by the hand.

Open or close the shutter entirely, fasten the inside lever to one side of its case, and draw the two ends of the cord tight, and fasten them.

Fasten the wheel-case G G' to the window-frame, so that the open side will be furthest from the window.

It will be observed that the shutter will now answer the movement of the lever, may be closed, opened, or bowed, and thus fastened or unfastened from the inside of a house with windows closed; also, that if the shutter is left open in such a position as to endanger its hinges, in case of wind, that, by not having holes to fasten the shutter there, the wind will open or close it, and it will then become securely fastened.

I claim as my invention—

1. The grooved disk, furnished with a flange or base for fastening it at a right angle to the plane of the shutter, and independent of the hinges, as and for the purpose described.

2. In combination with the above, the operating-lever, furnished with the spring-catch, that fastens in the holes in the interior plate, all as and for the purpose described.

THOS. H. BRADLEY.

Witnesses:

A. H. MORRISON,
SAML. M. LAKE.