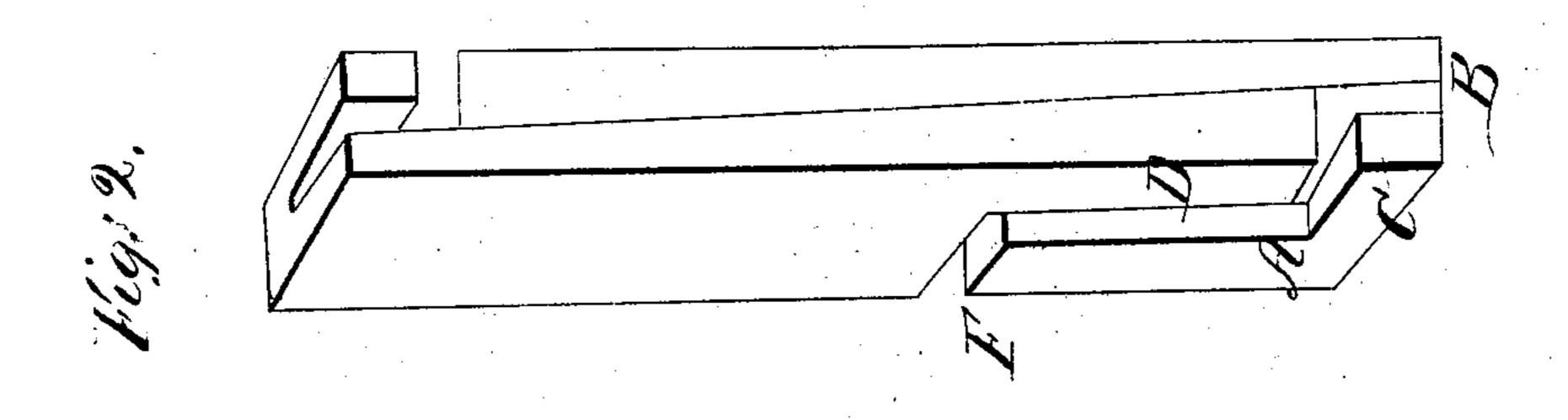
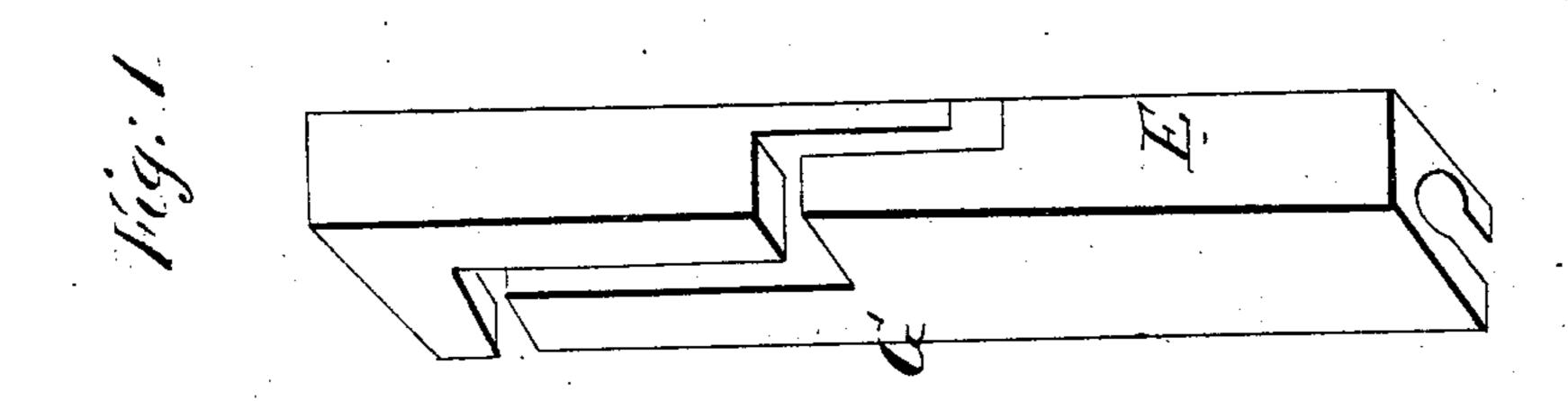
S. Holyris, Sash Balance. Nº 68,192. Patented Ang 27,1867.





Witnesses; A Harris La Alexander Inventor, Sandy Harris

Anited States Patent Effice.

SANDY HARRIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIM-SELF AND DAVID BEVAN, OF THE SAME PLACE.

Letters Patent No. 68,192, aated August 27, 1867.

IMPROVED SASH-WEIGHT.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Sandy Harris, of Philadelphia, in the country of Philadelphia, in the State of Pennsylvania, have invented a new and improved Spiral Sash-Weight; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompaning drawings and to the letters of reference marked thereon.

The sash-weight in common use has an eye or hole for the cord at the upper end, and as this eye is out of practical reach when the weight is in its box, it is necessary to make the cord fast before putting the weight in. It is also necessary, for the same reason, to do this before attaching the cord to the sash. It being obvious that if the cord could be brought down to the bottom of the weight to be attached, this thing could be done as well after as before making it fast to the sash, and thereby a great saving in time and labor effected, has caused me to make the invention which I will now proceed to explain.

I take a weight of the usual form, except the neck and eye, Figure I, on the drawing, say an inch by an inch and a half and eight inches long. From one end to the other I sink a groove, A, Figure II, wide enough to take in the cord and deep enough to allow it to hang through the centre of the weight. To prevent this groove from destroying the balance of the weight or allowing the weight to fall from the cord, I give it a spiral direction, using, however, abrupt or angular turns instead of the regular curve. Beginning at the centre of the edge at one end, B, Fig. II, I extend the groove a half inch. I then take it directly across the corner C, Fig. II, to the middle of the side D, Fig. II, along which I extend it three inches. I now cross the next corner as before, F, Fig. II, to the middle of the second edge E, Fig. I. From this point I extend it one inch, and then cross to the middle of the second side, G, Fig. I, where I extend it three inches. I now cross to the middle of the first edge again, and with a half an inch there complete the groove. Making it in this way, it will be seen, leaves the same length of groove on one edge that there is on the other, and the same on one side that there is on the other, so that the balance of the weight is preserved, and its liability to fall from the cord prevented.

Where an even balance in the weight is not essential, the whole groove, except the two end angles, can be sunk in one side. In this case the beginning and ending half inches will fall on different edges. They might still fall both on one edge, but that would be an unnecessary interruption of the balance.

With a weight made in this way the cord can be made fast to the sash at convenience, the sash put in its place, and the cord over the rollers. The business of running-up the sash, tying a knot at the lower end of the cord, and putting on the weight, would be scarcely an item in either time or labor.

This weight, especially where but one side is grooved, can be easily cast, and of iron or other suitable material.

What I claim as my invention, and desire to secure by Letters Patent, is the mode or modes, substantially as herein described, of attaching the sash-cord to the weight.

Witnesses:

A. HARRIS,

L. ALEXANDER.

SANDY HARRIS.