

(No Model.)

M. McINTOSH.
GRANITE CUTTER'S STRAIGHT EDGE.

No. 531,851.

Patented Jan. 1, 1895.

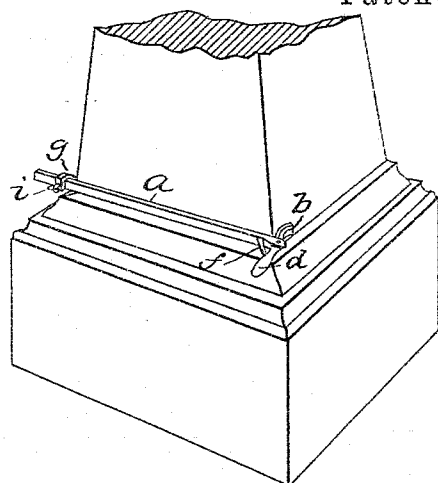


FIG. 1.

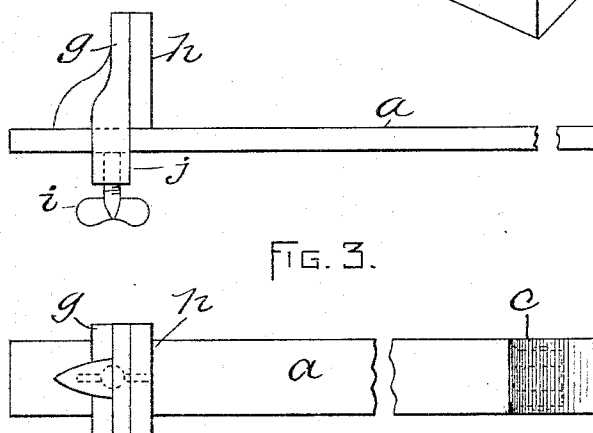


FIG. 3.

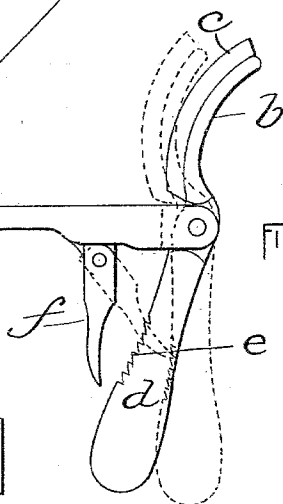


FIG. 2.

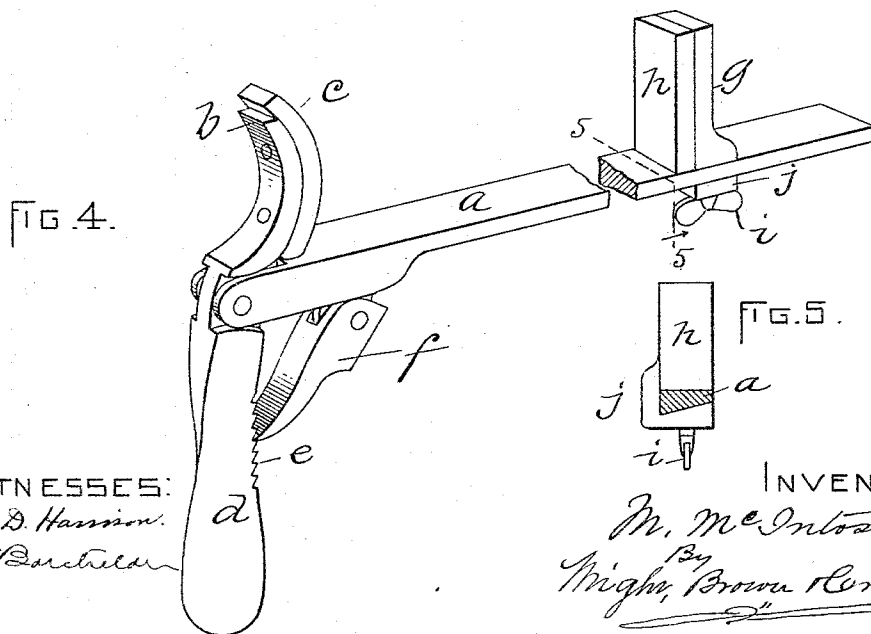


FIG. 4.

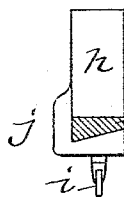


FIG. 5.

WITNESSES:
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UNITED STATES PATENT OFFICE.

MAXWELL MCINTOSH, OF QUINCY, MASSACHUSETTS.

GRANITE-CUTTER'S STRAIGHT-EDGE.

SPECIFICATION forming part of Letters Patent No. 531,851, dated January 1, 1895.

Application filed April 10, 1894. Serial No. 507,019. (No model.)

To all whom it may concern:

Be it known that I, MAXWELL MCINTOSH, of Quincy, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Granite-Cutters' Straight-Edges, of which the following is a specification.

This invention has relation generally to those contrivances of proved rectitude employed by artisans to test or secure the straightness of lines and edges, and the evenness or flatness of surfaces; and it has reference particularly to straight-edges adapted to the use of granite cutting.

It is the object of the invention to provide a straight-edge which may be readily and quickly applied to substantially any part of a stone or block under treatment which may be held securely in place, and which will not abrade, chip, or otherwise mar the material to which it is applied.

It is common in the granite or stone cutting art when a straight-edge is to be employed, for the workman to call one or two of his fellow workmen to hold it in place while he operates along the line of the same. This mode of work not only consumes a great deal of time but frequently fails in exactness for the reason that it is difficult to hold the bar perfectly steady. By my invention the said difficulties in, and the objections consequent upon, the employment of ordinarily-used straight edges are entirely overcome.

The invention consists of a granite-cutter's straight edge embodying in its construction a bar constituting the straight-edge proper, having on one end a clamping jaw that is adapted to slide on the bar and to be fixed thereon by a set-screw or equivalent device, and provided at the other end with a pivoted clamping jaw, adapted to be operated so as to tighten the clamping force of the jaws on the material and to be locked or secured in its tightened position.

Reference is to be had to the annexed drawings and to the letters of reference marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings—Figure 1 is a perspective view of the base of a monument, assisting in

the explanation of some of the ways of using the invention. Fig. 2 is a side view of the invention showing the pivoted tightening clamp as in both its locked and released positions. Fig. 3 is a plan and Fig. 4 a perspective view of my improvement. Fig. 5 is a sectional detail view taken on the line 5—5 of Fig. 4. In Figs. 2 to 5, inclusive, the device is shown as in inverted or upside-down position in order to the better illustrate its construction and mode of operation.

In the drawings—*a* designates a bar forming the straight-edge proper, on one end of which is pivoted a jaw, *b*, provided on its inner face with a lag or pad, *c*, of rubber, leather, rawhide or other suitable material.

d is a handle forming an integral part of the jaw, *b*, and constructed and arranged so as to rock the said jaw upon its pivot.

e designates rack-teeth formed on the inner side of the handle, *d*, with which the free end of a pawl, *f*, is adapted to engage, the said pawl being pivoted to the upper or outer face of the bar, *a*.

g designates a jaw constructed and arranged to slide on the bar, *a*, and padded or lagged on its inner face, as at *h*, similar to the jaw, *b*. A set-screw, *i*, is tapped through the base, *j*, of the jaw, *g*, so as that when turned home its inner end will bear against the bar, *a*, and fix it in position thereon.

For some uses it is desirable that one side of the device should be free from obstructions of all kinds, so that the straight-edge can be clamped against the side of the material, and work performed thereabove. In such instances the parts may be formed as is clearly represented in Fig. 4. For other purposes the base of the sliding jaw may, if desired, be formed to extend around the bar, *a*, as shown in Fig. 3. The bar, *a*, may be beveled on its upper side or on its edges, or otherwise shaped to suit circumstances.

In use the straight-edge may be placed in position on the material to be operated upon, as shown in Fig. 1, and the jaw, *g*, set up as closely as is convenient, and fixed in place by the set-screw, *i*, after which the handle, *h*, may be moved so as to cause the clamps to firmly grasp the stock and hold the straight-edge securely in position. The jaw, *b*, will be locked in place by the engagement of the

pawl, *f*, with the rack-teeth, *e*, as is shown in Fig. 5, and by dotted lines in Fig. 3.

The pads provide means for frictionally holding the device securely in position, and for preventing the jaws from marring the material.

It will be noted by reference to the drawings and the varying curvatures in the surface of the material to be operated upon, as indicated in Fig. 1, that by making one face of the device straight the invention is adapted for use in any place or position desired.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A straight-edge implement comprising a

bar, an adjustable sliding-jaw thereon, a co-acting jaw pivoted to the bar and having a handle by which to clamp the implement, and means for locking said pivoted jaw to the bar.

2. A straight-edge implement comprising a bar, an adjustable sliding jaw thereon, a co-acting jaw pivoted to the bar and having a handle with ratchet-teeth in one side, and a pawl pivoted to the bar and adapted to engage the ratchet-teeth for the purpose described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 31st day of March, A. D. 1894.

MAXWELL MCINTOSH.

Witnesses:

ARTHUR W. CROSSLEY,
A. D. HARRISON.