

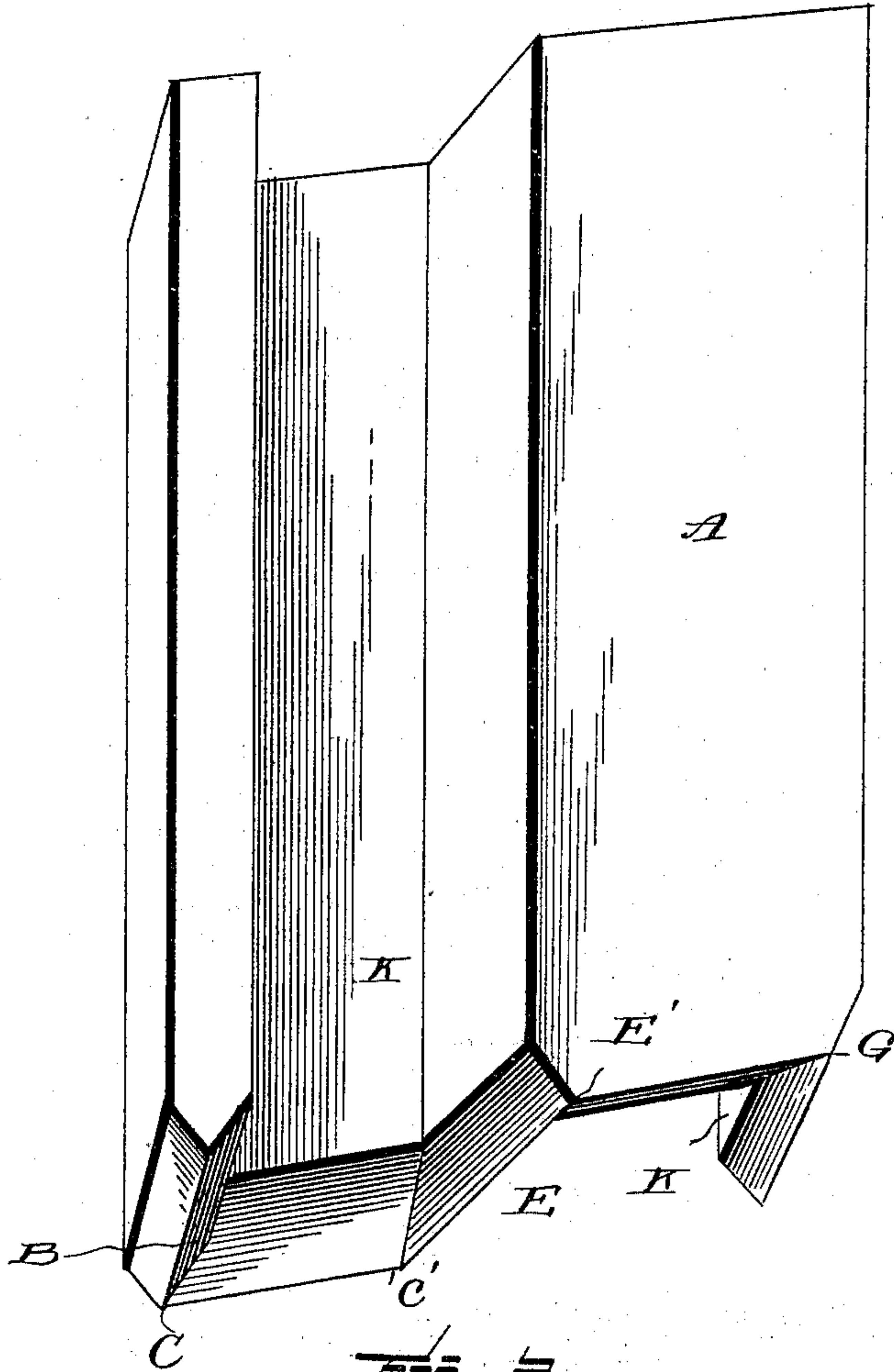
(No Model.)

A. E. BLAIR.  
STONE CHANNELING TOOL.

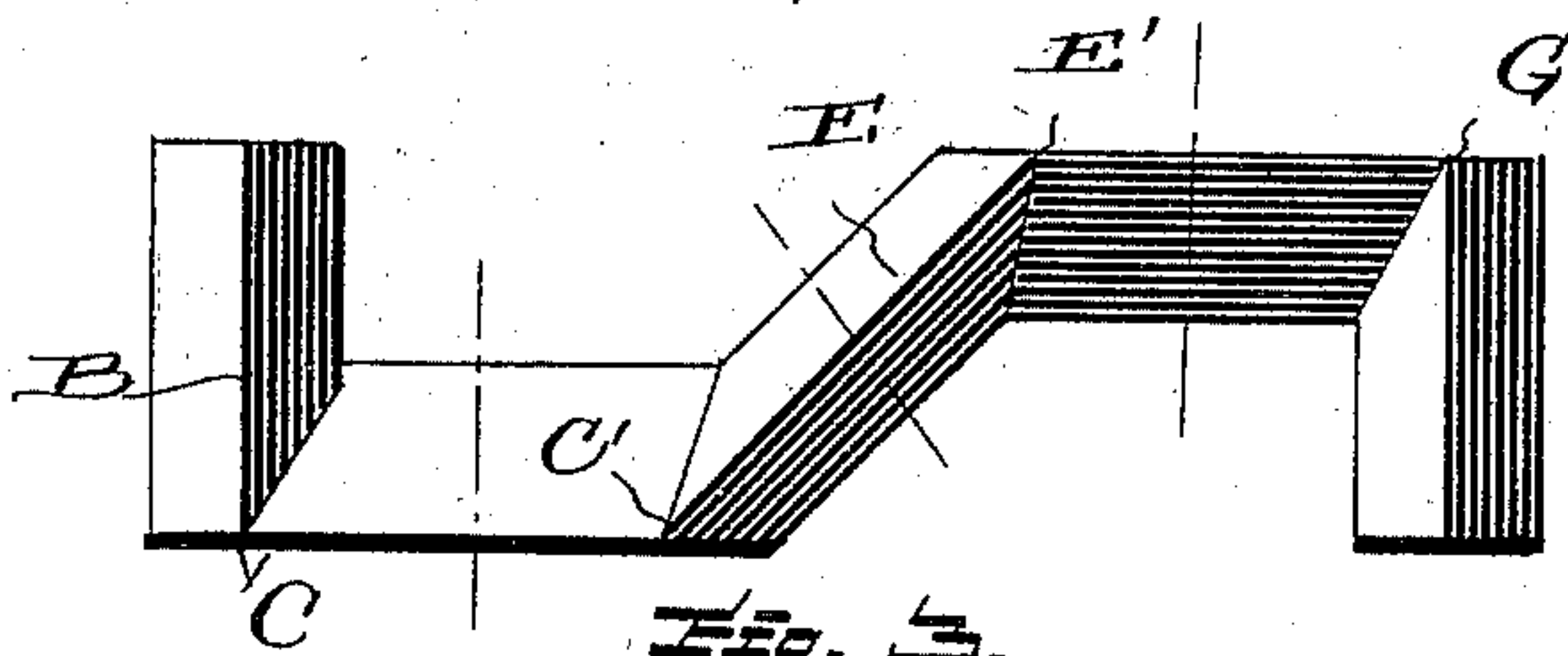
No. 584,845.

Patented June 22, 1897.

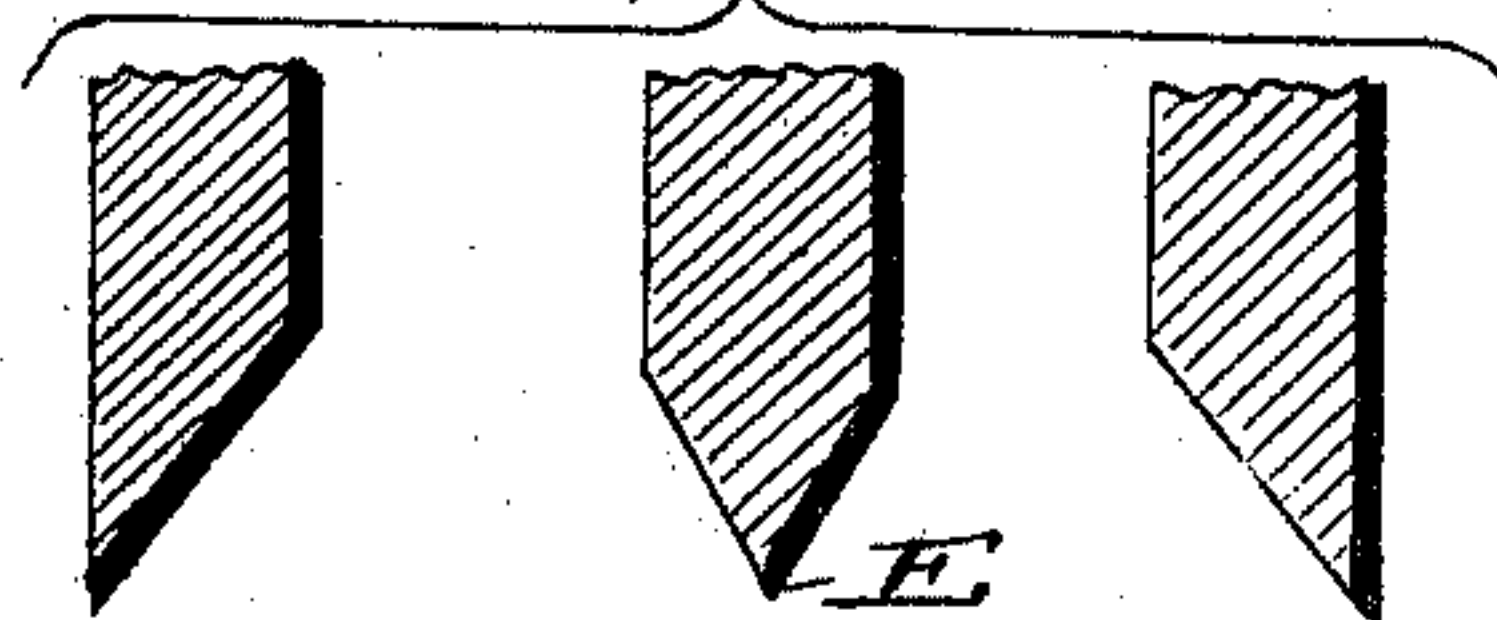
~~Fig. 1.~~ Fig. 2.



~~Fig. 2.~~ Fig. 3.



~~Fig. 3.~~ Fig. 4.



Witnesses:

L. C. Mills  
A. L. Hough

Inventor:

Amos E. Blair  
By  
Grove & Co.  
Atlys



# UNITED STATES PATENT OFFICE.

AMOS E. BLAIR, OF BATAVIA, ILLINOIS.

## STONE-CHANNELING TOOL.

SPECIFICATION forming part of Letters Patent No. 584,845, dated June 22, 1897.

Application filed March 16, 1897. Serial No. 627,866. (No model.)

*To all whom it may concern.*

Be it known that I, AMOS E. BLAIR, a citizen of the United States, residing at Batavia, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Stone-Channeling Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in stone-channeling devices, and especially to a tool having a peculiarly-arranged cutting edge, by which great advantages are obtained over other bits for channeling-machines. Heretofore it has been common to construct tools for this purpose having a Z-shaped edge, in which there are acute angles at the ends of the tool, which are likely to be broken off in drilling rock, and to obviate this difficulty it is my purpose to construct a channeling-tool having a solid metallic shank portion which has at one end a cutting edge having right-angled portions at the end, whereby the edges are strengthened and less liable to break off than with other channeling-tools, and even though the cutting edge formed by the right-angled end portion should become broken the tool will be effective by the adjacent portion of the cutting edge, which is formed with the end piece at right angles thereto.

A further part of my invention resides in the peculiar construction of the shank portion, which is solid, which has two cutting edges formed in parallel planes which are brought to an edge, such edge being coincident with both faces of the shank portion of the tool, said cutting edges being suitably connected by right-angled and oblique portions.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction of a channeling-tool, which will be hereinafter more fully described, and then specifically defined in the appended claim.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings—

Figure 1 is a perspective view of my improved channeling-tool. Fig. 2 is an end elevation. Fig. 3 are transverse sections on lines of Fig. 2.

Reference now being had to the details of the drawings by letter, A designates the shank portion of the tool, which is made of a solid piece of metal, substantially S-shaped, having angled corners. The sides of the shank portion are bent at right angles to the body portion and in opposite directions, and each said portion is brought to a sharp edge B, which terminates at its base portion in a cutting edge C, which extends to a point C', thence takes a diagonal course, as indicated at E, and at the point E' the cutting edge is extended in a plane parallel to the cutting edge C, and at the point G is extended in a direction at right angles thereto, thus forming at the end of the tool five sections of cutting edges at right angles to each other, the central sections being connected by the oblique section.

Opposite the two cutting edges, which are formed by a portion of the broad side of the shank portion, are recesses K, as shown. This tool may be held in any suitable manner to a reciprocating mechanism, (not shown,) which does not form any part of the present application, as this invention is confined entirely to the particular form of channeling-tool whereby it is possible to drill rocks in straight lines without crumbling the same, thus enabling regular blocks of stone to be quarried.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

A stone-channeling tool consisting of the solid shank portion having its walls parallel their entire length, the longitudinal cutting edges bent at right angles to the shank portion, cutting edges at right angles to the said longitudinal edges and in parallel planes, and an oblique cutting edge connecting the latter, all substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

AMOS E. BLAIR.

Witnesses:

O. E. CONLEY,

N. P. GUSTAFSON.