P. H. GAFNEY.

TOOL FOR SAWING AND JOINTING SOAPSTONE SLABS.

No. 177,496. Patented May 16, 1876.

Fig. 1.

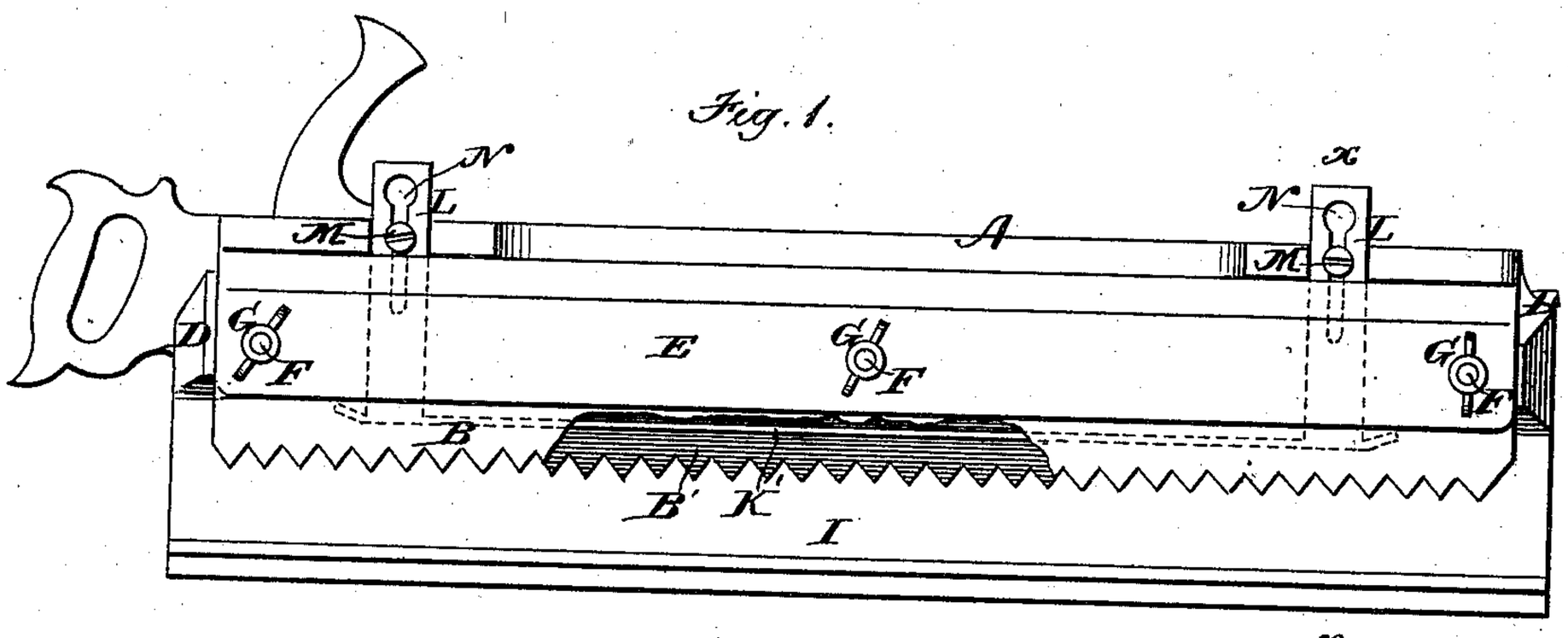


Fig. 2.

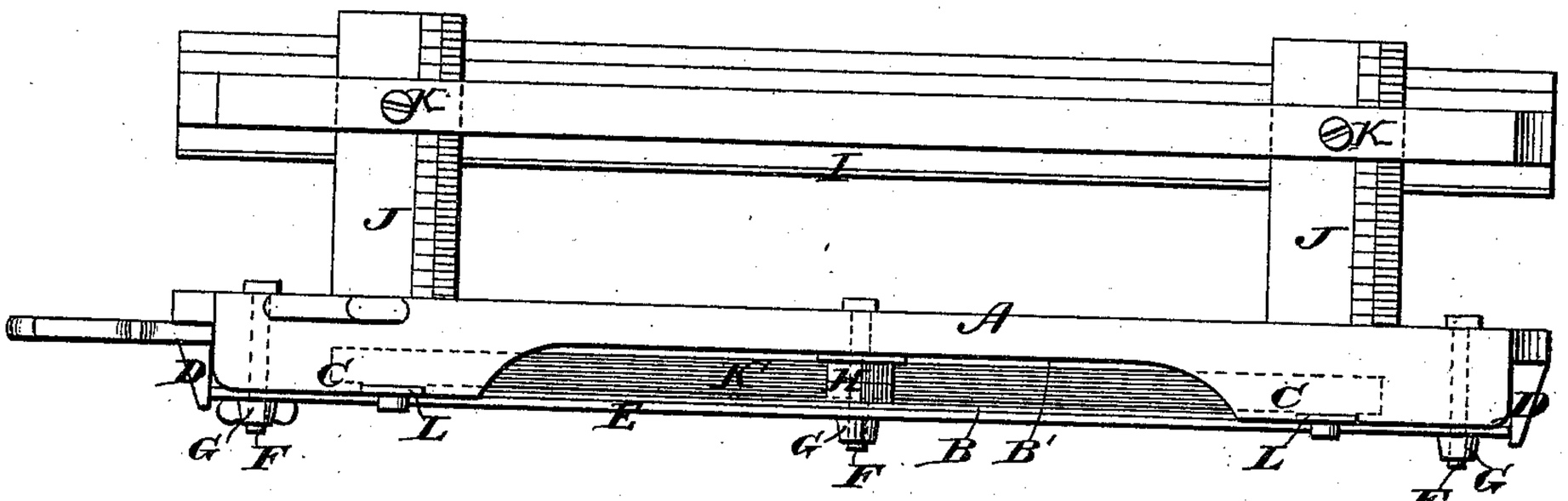


Fig. 3.

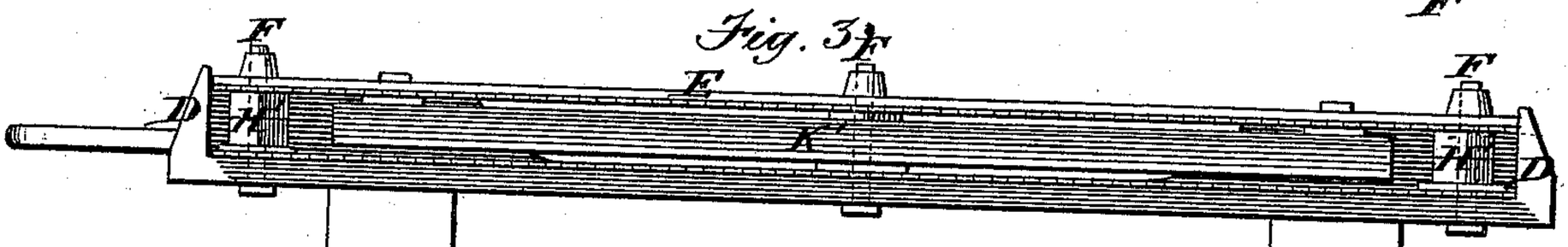


Fig. 6.

Fig. 4.

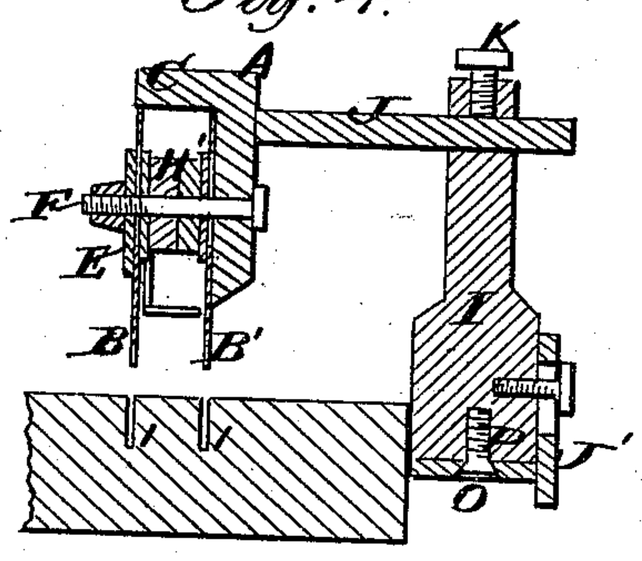


Fig. 5.

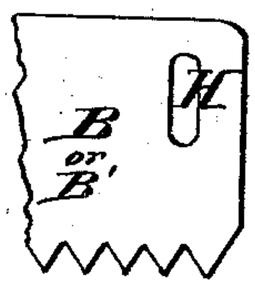
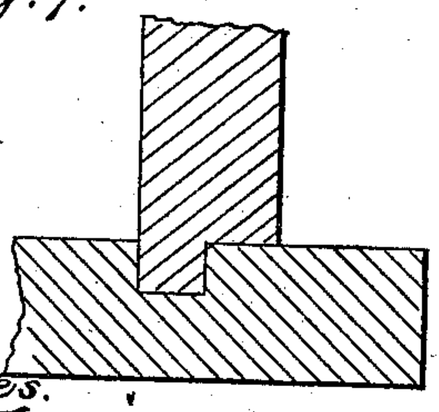


Fig. 7.



Witnesses.
C. E. Dimion
Sam'l M. Burton

Inventor
P. H. Gafney.
by his Attys.
Carroll D. Wright & Brown.

UNITED STATES PATENT OFFICE.

PATRICK H. GAFNEY, OF SOUTH BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND JULIA F. MARLIARE, OF SAME PLACE.

IMPROVEMENT IN TOOLS FOR SAWING AND JOINTING SOAP-STONE SLABS.

Specification forming part of Letters Patent No. **177,496**, dated May 16, 1876; application filed April 12, 1876.

To all whom it may concern:

Be it known that I, PATRICK H. GAFNEY, of South Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Tool for Sawing and Jointing Soap-Stone, of which the following is a specification:

In the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of my invention. Fig. 2 represents a top plan view of the same. Fig. 3 represents a bottom plan view. Fig. 4 represents a section on plane of line *x x*, Figs. 1 and 2. Figs. 5 and 6 are detached views of parts; and Fig. 7 is a view showing two slabs fitted together by my improved tool.

This invention has for its object to provide a tool adapted to make one or two cuts of any desired depth in a soap-stone or other slab parallel with and at any desired distance from the edge, and also adapted to smoothen or joint the edges of soap-stone or other slabs, and remove the saw-marks therefrom, the tool being intended particularly to prepare soap-stone slabs for stoves, sinks, &c., by cutting mortises or grooves near the edges of certain slabs and tenons, adapted to fit the mortises on the edges of other slabs, and by jointing the edges of the slabs, and thus adapting them to fit snugly together.

To these ends, my invention consists, first, in a tool having two saws, which are held parallel with each other at variable distances apart, and are adapted to cut to any desired depth into a slab, either simultaneously or singly, and at any desired distance from the edge of the slab. It also consists in a peculiarly-constructed reversible jointer adapted to dress the edges of soap-stone slabs, all of which I will now proceed to describe.

In the drawings, A represents a frame, preferably of wood, adapted to receive and hold two saws, B B′, whose cutting-edges project below the frame, the latter being provided at its upper edge with a lip or flange, C, and at each end with an ear, D, the flange and ears projecting in the same direction, and serving to partially confine the saws B. The saws are also confined to the frame A by a clamping-plate, E, and bolts F, which latter are provided with thumb-nuts G. The bolts E pass through vertical slots H in the saws, and are provided between the saws with two or more washers, H′, these washers regulating the space between the saws; hence, by taking away or adding a washer, the space is diminished or increased. The thumb-nuts hold the clamping-plate E tightly against the outer saw when screwed up, the saws being thus rigidly held. When the nuts are loosened, the slots H of the saws enable them to be raised or lowered so as to increase or diminish the space between their teeth and the lower edge of the frame A, and consequently the depth of their cut. I represents an adjustable gage to regulate the distance between the saws and the adjacent edge of the slab. This gage is composed of a bar of suitable shape connected to the frame A by two parallel arms, J, which are rigidly attached to the frame, and are adapted to slide in slots in the gage I, set-screws K K being employed to hold them when properly adjusted. The arms J J are graduated on their upper surfaces. K′ represents an adjustable guard for regulating the depth of the cut of the saws when shallow cuts are to be made. This guard consists of a horizontal plate located between the saws, and provided with slotted vertical plates L L, which are attached to the frame A by set-screws M, the screws passing through the slots N, and holding the guard K at any desired height.

The tool thus constructed can be operated in such manner as to make two parallel cuts simultaneously in the side of a slab, as at 1 1, Fig. 4, or two single cuts, so made as to take out the corner of the slab, the parallel cuts enabling a mortise to be formed by taking out the stone between the cuts with a chisel, and the single cuts forming a tenon on the edge of the slab adapted to fit into the mortise, as shown in Fig. 7, only the outer saw B being used in this latter operation.

O represents a jointer, which is composed of a flat metal plate attached to the under side of the gage-bar I, or to any suitable bar or backing, by screws or bolts P, the heads of which are countersunk. Both sides of the plate O are serrated, the serrations being of

any form adapted to file or smoothen soapstone surfaces, and, when one side is worn smooth, the plate may be turned over so as to expose the other side. The bar I is provided with a gage-plate, J′, on one side, which is adapted to be raised or lowered. The jointer is used either with or without the sawing mechanism by rubbing the edge of a slab with the serrated surface of the plate O.

I claim—

1. The slotted saws B B, combined with the frame A, bolts F, and washers H′, substantially as described.

2. The combination of the frame A, adjustable saws B B′, and adjustable guard K′, substantially as described.

3. The combination of the frame A, having the adjustable saws B B′, with the gage I, substantially as described.

4. The jointer, composed of the plate O, serrated on both sides, the bar I, and the adjustable gage J′.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PATRICK H. GAFNEY.

Witnesses:

RUDOLPH SKOOG,

C. F. BROWN.