(No Model.)

G. E. FOSSICK.

STONE SAWING MACHINE.

No. 507,357. Patented Oct. 24, 1893.

Fig. 1.

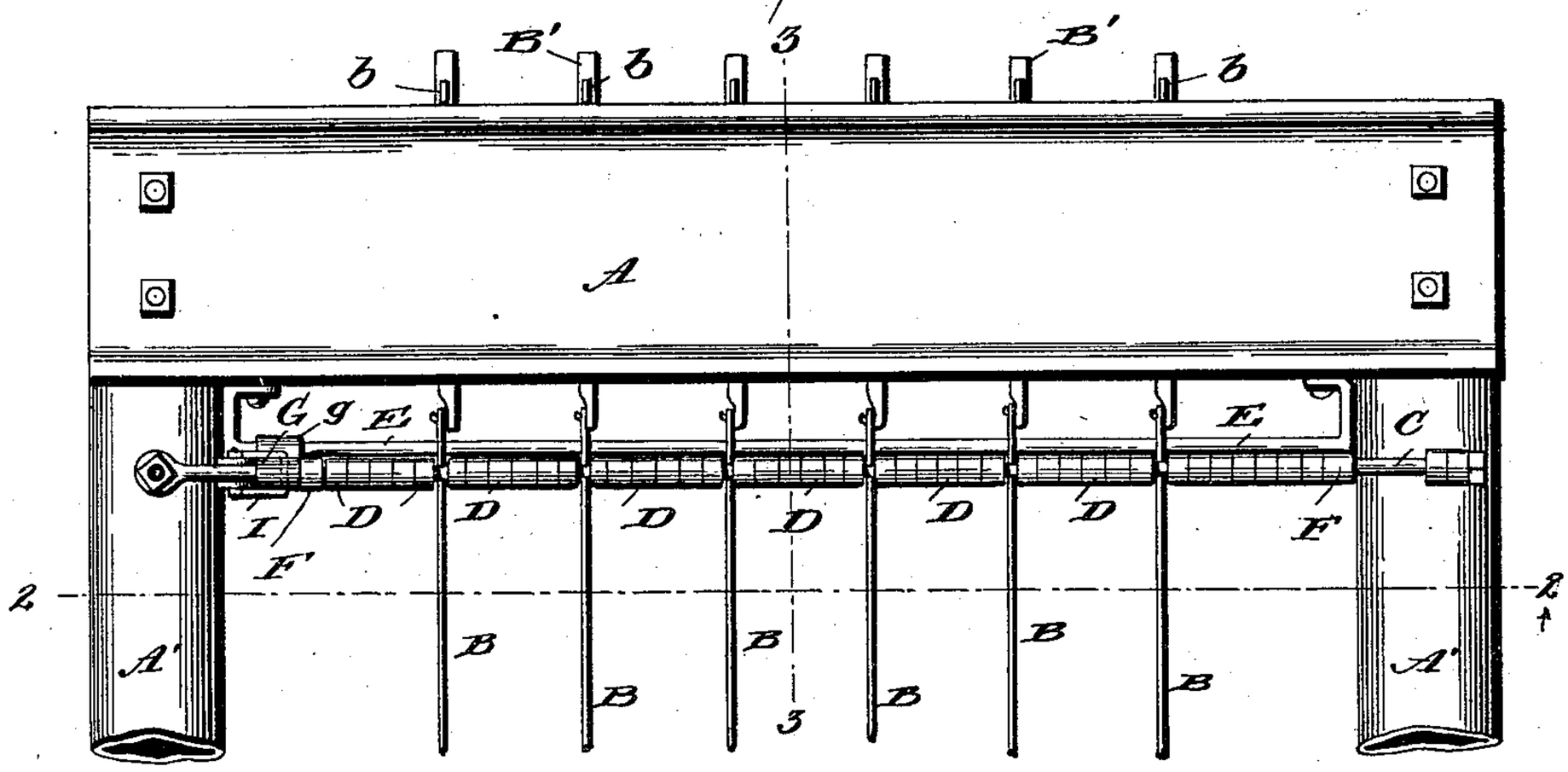


Fig. 2.

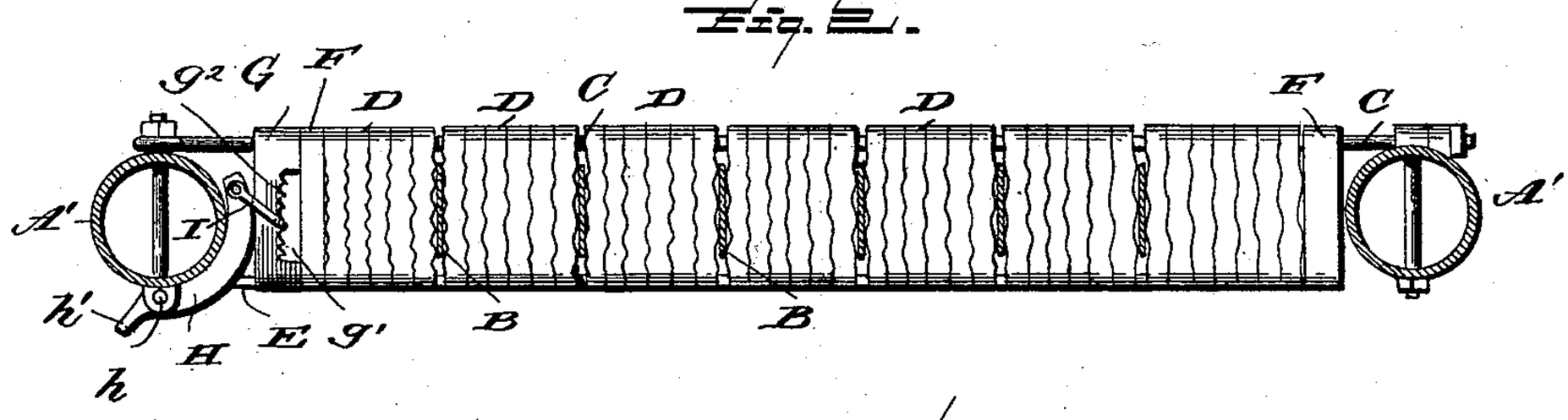
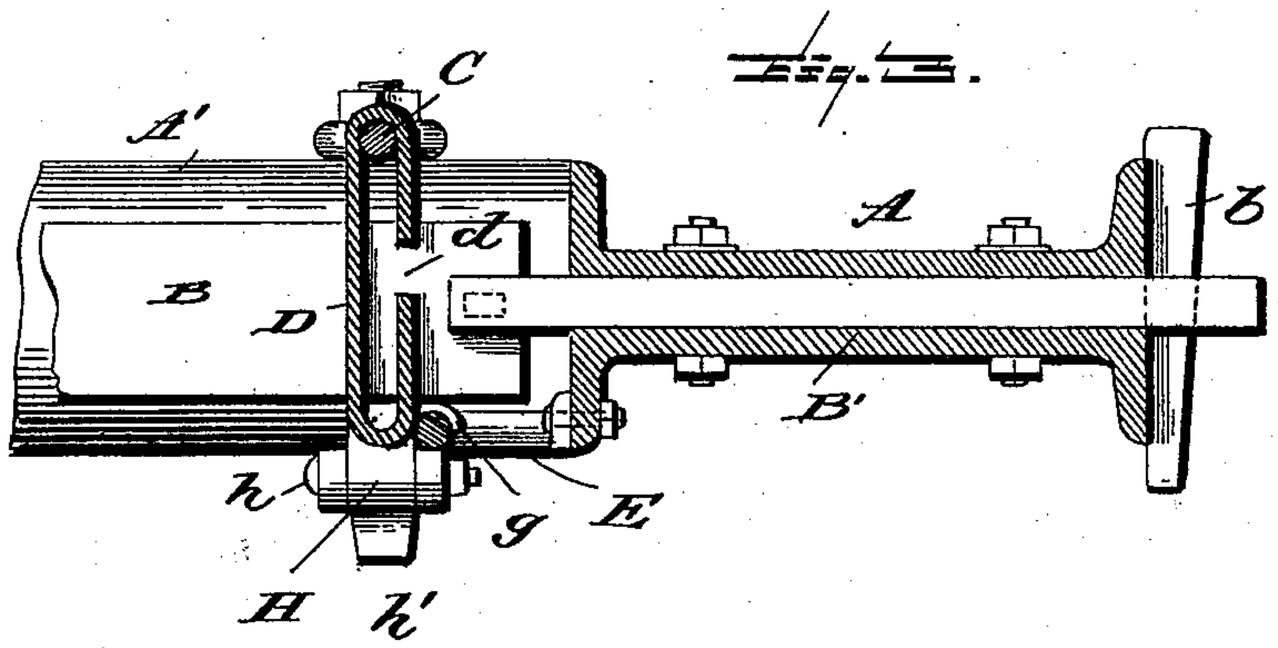


Fig. 3.



Witnesses
L. C. Hills.
E. A. Bond

Inventor:
Geo. E. Fossick.
By E. B. Stocking
Attorney

UNITED STATES PATENT OFFICE.

GEORGE E. FOSSICK, OF SHEFFIELD, ALABAMA.

STONE-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 507,357, dated October 24, 1893.

Application filed March 30, 1893. Serial No. 468,295. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. FOSSICK, a citizen of the United States, residing at Sheffield, in the county of Colbert and State of Alabama, have invented certain new and useful Improvements in Stone-Sawing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in stone sawing machines or devices, and it has for its objects among others to provide an improved gage whereby the stone may be sawed of any desired thickness and the gage readily regulated to saw any desired width. I employ spacing blocks with corrugated faces and all of the blocks are interchangeable and removable from their support. Suitable means are provided for clamping or binding the spacing blocks in their adjusted position. The spacers are in the form of loops open upon one side so that they may be readily removed from their support when desired and are normally so hung as to be thrown up on their support to change their position thereon.

The device is simple, cheap of manufacture, readily adjusted, not liable to injury or breakage, and in practice has proven most efficient for the purposes for which it is intended.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification and in which—

Figure 1 is a top plan illustrating my invention, parts being broken away. Fig. 2 is a vertical cross section on the line 2—2 of Fig. 1, looking in the direction of the arrow. Fig. 3 is an enlarged sectional detail on the line 3—3 of Fig. 1.

Like letters of reference indicate like parts throughout the several views in which they appear.

Referring now to the details of the drawings by letter, A designates the head block, and A′ the side pieces suitably connected thereto in any desirable manner, and which, with a suitable connection between the other ends of the side pieces, constitute the frame or sash of the gang; as this sash or frame forms no part of the present invention the details thereof have not been shown. The side pieces however are preferably tubular as shown.

B are the saws of known construction and held at the proper tension in any suitable manner, as for instance by the dogs B′ and the keys *b* as shown in Figs. 1 and 3. The matter of holding the saws under proper tension does not however form any part of the present invention which resides in the gage, which will now be described. This gage consists essentially of the rod C which is supported in any suitable manner upon the side pieces A′ parallel with the head block as seen best in Fig. 1, and upon which are hung the gages or spacing blocks D, which are of elongated contour as seen in Fig. 3, being open upon one side as seen at *d* to allow of their being placed upon the rod or removed therefrom when desired. The gages or spacers all have corrugated edges as seen in Fig. 2, the corrugations being arranged to fit each other as seen, but near the top and bottom there are no corrugations but the faces are plain so as to form a straight joint at these points as seen in Figs. 1 and 2. The gages or spacers may be of any desired thickness, but for ordinary work I propose to make them one inch each across their top and bottom ends, but the extreme thickness or width of each gage or spacer to the outer extremity of the corrugations will be one and one-eighth inches, the corrugations all being a uniform depth of one-sixteenth of an inch. It will thus be seen that when these gages or spacers come close together, with no saw between them, they will gage but one inch, but whenever a gage comes in contact with a saw it will measure one and one-sixteenth inches. Each saw makes a cut in the stone one-eighth of an inch greater than its own thickness, and the corrugations in the gages are to allow for this extra width of cut over the thickness of the saw.

As above stated the gages or spacers are hung upon the rod C, and their lower ends are adapted to swing against a rod or stop E secured to the head block or any other desired place parallel with but out of vertical line with

the rod C as seen best in Fig. 1; this rod E acts as a guide to keep the gages or spacers all in line, but does not interfere in the least with their being lifted up, or swung forward when it becomes necessary to shift the position of the saws when changing the gage.

F are liners, one at each end outside the gages or spacers as seen best in Fig. 2, they being preferably made solid with plain or straight edges where they come against the gages as seen in Fig. 2, each having a hole near the top by which it is sleeved on the rod C, so as to allow them to be moved freely thereon in the direction of the length of the rod.

G is a follower; it is sleeved upon the rod C to slide thereon and is provided with a hook or lug *g* fitted over the lower rod E as seen in Figs. 1 and 3 to aid in holding it in its proper position. This follower has an opening *g'* upon its inner face as seen in Fig. 2, the outer wall of which is notched or toothed as seen at g^2 in the same view.

H is a segmental lever pivoted at *h*, and having a shank *h'* adapted to receive a socket lever, not shown, by which it may be actuated; its other end has pivotally connected therewith a link or shackle I which embraces the follower G as seen in Fig. 2 and engages the toothed or notched portion thereof as shown in Fig. 2.

In practice, the gage of the saws is changed by lifting or swinging the gages or spacers and changing the number and position of the saws and placing as many of the gages between the saws as is required. The gages and saws are then all pressed closely and firmly together and held rigidly by the segmental lever and shackle or link, the lever being engaged with the socket lever, which latter is not shown, and pulled upward allowing the shackle or link to fall into the teeth or notches of the follower as will be readily understood from Fig. 2. To loosen the gages the same socket lever is used, pulling upward until the shackle or link is loosened when it is raised in the opening *g'*, allowing the follower to slide outward.

In regular practice no stone is sawed less than one inch and fractional parts of inches are seldom used, but to provide for this gages may be provided say one inch and a quarter, an inch and a half and so on and kept separate ready to be hung upon the rod C when such are required, all of the gages being interchangeable and removable from the rod.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

The spacers may be placed upon the market by themselves, as extras, to be sold to replace others and as above stated they may be made in different sizes to suit the character of work to be performed.

What I claim as new is—

1. In a stone-sawing gage, a corrugated spacer, as set forth.

2. The combination with a support, of spacers in the form of an open loop supported thereon for adjustment, as set forth.

3. The combination with the sash or frame and a transverse rod thereon, of the independent corrugated spacers mounted thereon to swing, as set forth.

4. The combination with the sash or frame and the rod thereon, of the open loop spacers mounted on said rod to swing, and a stop for said spacers, as set forth.

5. The combination with the sash or frame and the rod, of the spacers mounted on said rod, the liners movable on the rod, and means for binding all together, as set forth.

6. The combination with the sash or frame and the rod supported thereon, of the spacers mounted to swing on said rod, the stop rod, the liners on the first-mentioned rod, and the means for clamping the parts together, as set forth.

7. The combination with the rod and the spacers mounted thereon to swing independent of each other, of the stop rod, and the liners, and the follower having a lug engaged over the stop rod, substantially as specified.

8. The combination with the sash or frame, and the spacers mounted to swing, of the liners, the follower having an opening and teeth and the pivoted lever carrying a link engaging the said teeth substantially as specified.

9. The combination with the sash or frame and the rod, of the independent spacers mounted to swing on said rod and having each an opening to permit of its removal, the liners, the follower having an opening and teeth, the stop rod, and the lever carrying a shackle or link to engage said teeth, substantially as and for the purpose specified.

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

GEORGE E. FOSSICK.

Witnesses:

E. T. DUNKERLEY,

W. B. KING.