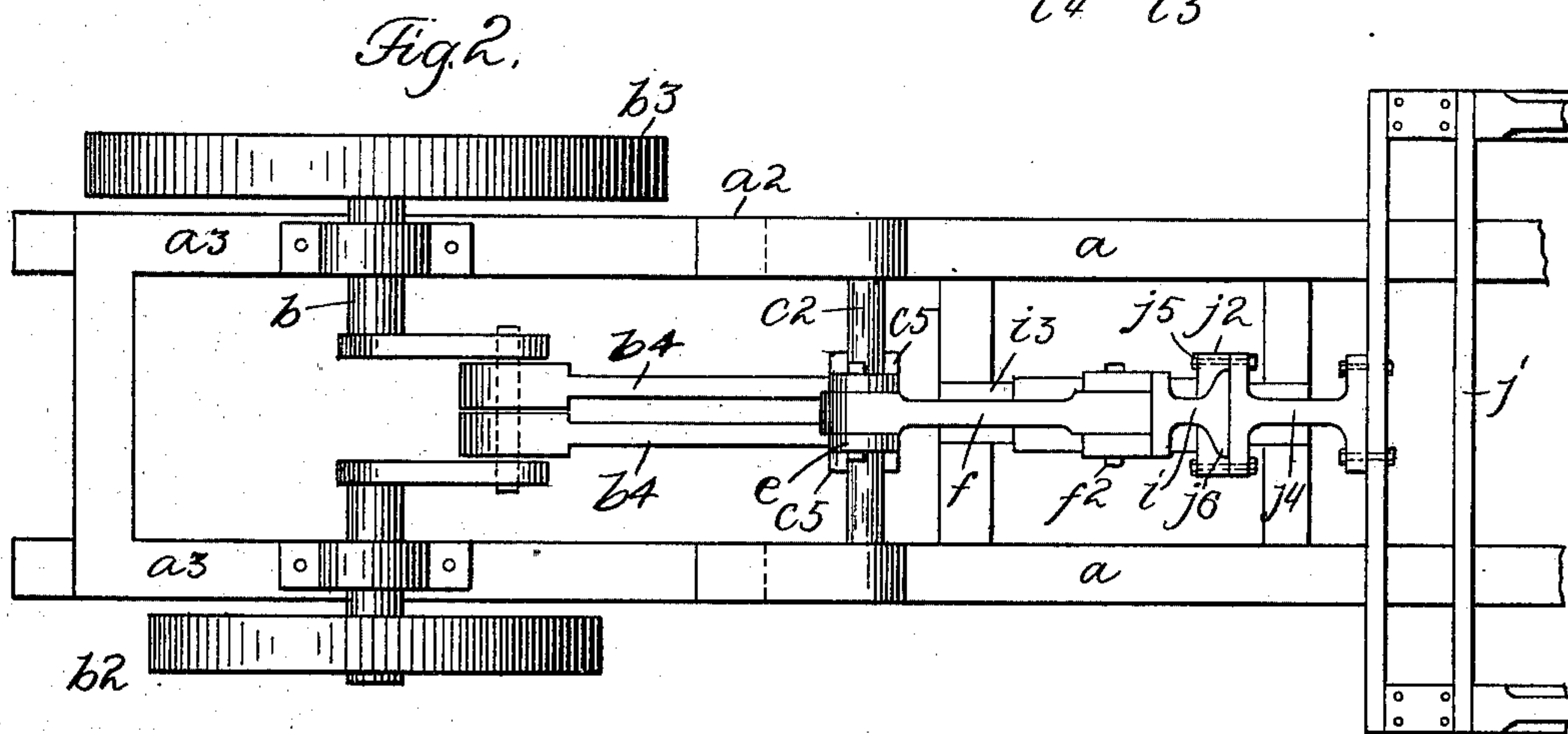
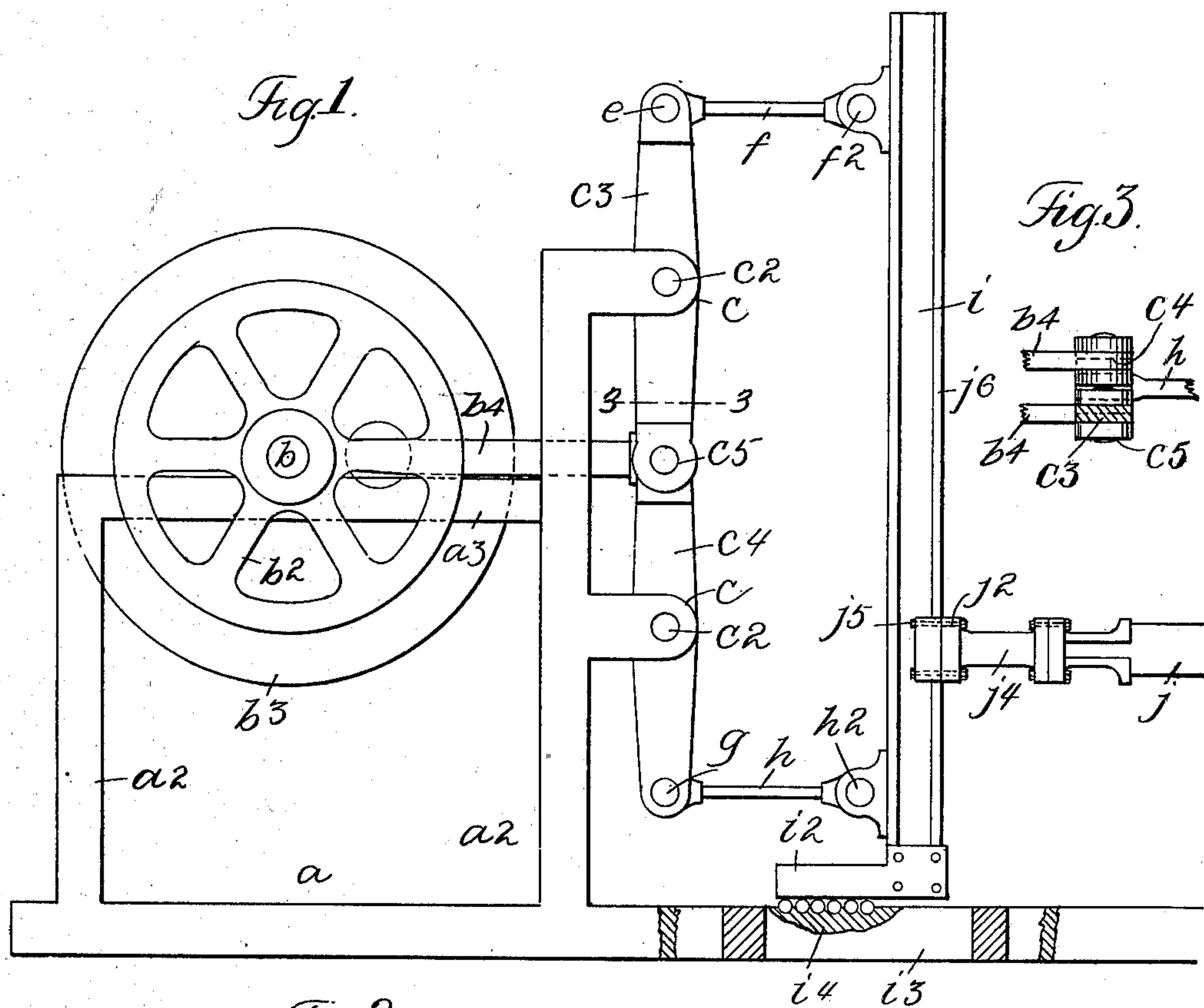


No. 732,986.

PATENTED JULY 7, 1903.

J. P. WINTER.
STONE SAWING MACHINE.
APPLICATION FILED MAY 10, 1902.

NO MODEL.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN P. WINTER, OF CITY ISLAND, NEW YORK, ASSIGNOR TO HENRY C. CUMMINGS, OF NEW YORK, N. Y.

STONE-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 732,986, dated July 7, 1903.

Application filed May 10, 1902. Serial No. 106,749. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. WINTER, a citizen of the United States, residing at City Island, in the city and county of New York and State of New York, have invented certain new and useful Improvements in Stone-Sawing Machines, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide improved means for operating the saw-sash of a stone-sawing machine of the kind and class described and claimed in United States Letters Patent No. 601,789, granted to H. H. Cummings, April 5, 1898; and the invention consists in the simple and effective means for operating the saw-sash shown and described in said patent and is an improvement on the means employed in said patent for such purpose.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same reference characters in each of the views, and in which—

Figure 1 is a side view of a part of the frame of a stone-sawing machine and showing my improved means for operating the saw-sash, part of the construction being shown in section; Fig. 2, a plan view thereof, and Fig. 3 section on the line 3 3 of Fig. 1.

In the drawings forming part of this specification I have shown a part of the main frame of a stone-sawing machine, such as is described and claimed in the United States patent hereinbefore referred to, and this frame, as shown, comprises bed-sills a , upright members a^2 , and horizontal members a^3 , and in the practice of my invention I mount in or on the horizontal members a^3 a crank-shaft b , one end of which is provided with a power-wheel b^2 and the other with a fly-wheel b^3 . Connected with the upright members a^2 of the main frame or support in any desired manner or supported in connection with said main frame are bearings c , through which are passed transversely-arranged and parallel shafts c^2 , and the upper shaft c^2 supports a

lever c^3 , and the lower shaft c^2 supports a lever c^4 , and the adjacent ends of these levers are connected at c^5 with crank-rods or pitmen b^4 , which are connected with the crank-shaft b , as clearly shown.

The upper end of the lever c^3 is pivotally connected at e with a rod f , and the lower end of the lever c^4 is pivotally connected at g with a rod h , and the rods f and h are pivotally connected at f^2 and h^2 with a vertically-arranged bar i , which is preferably composed of angle-iron and the lower end of which is preferably provided with a shoe or support i^2 , which rests upon a support i^3 in the bottom of the main frame of the apparatus, and between the shoe or support i^2 and the support i^3 are preferably placed ball-bearings i^4 . By means of this construction the bar i will be given a forward-and-backward movement when the crank-shaft b is turned, and the saw-sash j is connected with this bar, as shown at j^2 , and this connection at j^2 is vertically movable on the bar i , and a connecting member j^4 is coupled to the bar i by means of bearing-plates j^5 , which grasp the flanges j^6 on the bar i and are vertically movable thereon, and in practice the saw-sash j is made vertically movable in the usual manner by means of gang-screws or in any preferred way. The oscillatory or backward-and-forward movement of the bar i occasioned by the crank-shaft b and intermediate connections operates the saw-sash j in the usual manner, and it will be understood that this saw-sash is mounted in a suitable frame, such as is shown and described in the patent referred to, and the bar i may also have suitable guides, if necessary.

My invention is not limited to the construction of the saw-sash nor to the method of raising and lowering the same; but said invention is limited to the means herein described for operating said saw-sash, and said means may be applied to the construction shown in the patent hereinbefore referred to or to any other form of a stone-sawing machine.

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

In a stone-sawing machine, a frame, a crank-shaft mounted therein, a vertically-arranged saw-sash-operating bar unconnected with the frame, a support between said bar and said
5 shaft, vertically-arranged levers connected with said support and arranged one above another, the upper end of the upper lever and the lower end of the lower lever being connected with said bar by means of links, and
10 rods connected with said crank-shaft and with

the adjacent ends of said levers, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 8th 15 day of May, 1902.

JOHN P. WINTER.

Witnesses:

F. A. STEWART,
C. E. MULREANY.