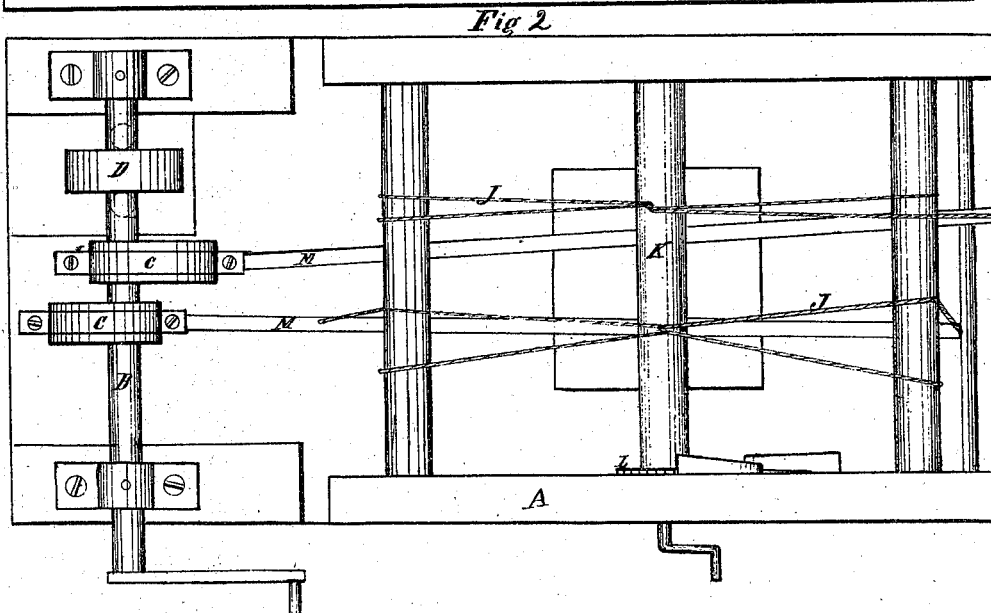
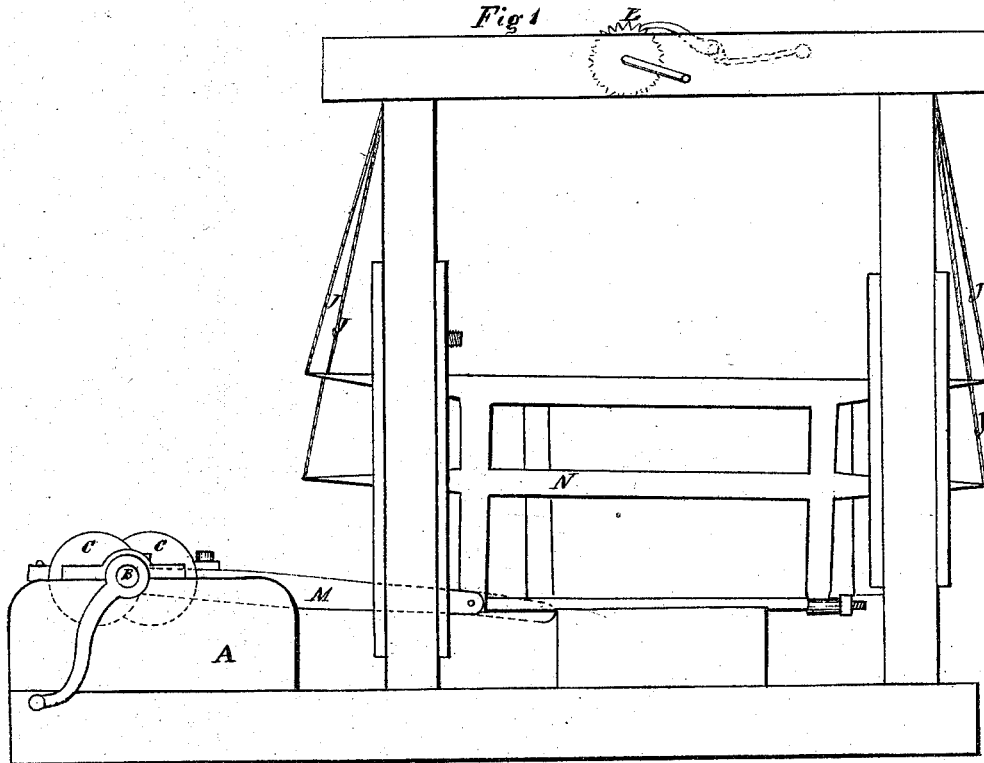


French & Stephenson,

Sawing Stone.

No. 107,675.

Patented Sept. 27, 1870.



Witnesses
Wm. H. Laman
Wm. H. Starr

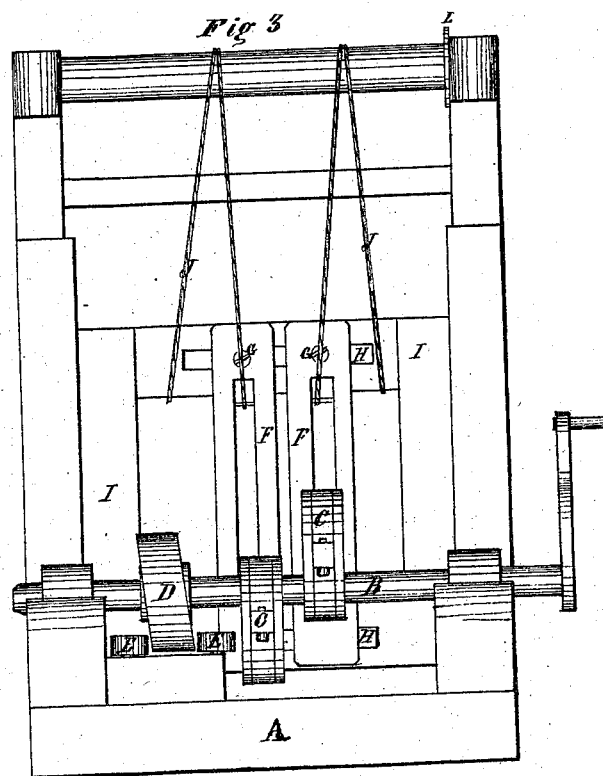
Inventor
French & Stephenson
Daniel Breed Atty.

French & Stephenson,^{2, Sheets, Sheet, 2.}

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Wm. H. Haman
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Inventor
French & Stephenson
Daniel Breed Atty

United States Patent Office.

JAMES E. FRENCH AND JAMES M. STEPHENSON, OF PENDLETON, INDIANA.

Letters Patent No. 107,675, dated September 27, 1870.

IMPROVEMENT IN MACHINES FOR SAWING MARBLE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, JAMES E. FRENCH and JAMES M. STEPHENSON, of Pendleton, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Marble-Saws; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

In the accompanying drawing—

Figure 1 is a side view of our improved machine for sawing marble.

Figure 2 is a plan of the same.

Figure 3 is an end view.

Our invention or improvement in machines for sawing marble in taper or obelisk-form, by the use of two or more saws, consists—

First, in a peculiar arrangement and construction for applying the power or moving the pitmen in the line of the different saws; and

Second, in adjustable saw-guides on sliding frames.

Upon any suitable frame, A, is placed a horizontal shaft, B, carrying two or more eccentrics, C, which are adjustable upon the shaft B, in order to set the saws at different angles, as desired, for sawing different tapers.

The same shaft carries a cam, D, working against two rollers, E, by which means the shaft B, as it revolves, is moved endwise with a reciprocating motion, so as always to bring the draft of each pitman, M, on a line with its saw, N.

The distance which the shaft is moved by this cam must be varied according to the different angles at which the two saws are set for sawing different tapers,

and this variation may be produced by different cams, or by making the cam adjustable.

Both ends of the saws are directed by adjustable saw-guides F, which are held in place, by screws G, in the slots H, and may be moved to the right or left, at pleasure.

These guides are attached to the adjustable frames I, which may be raised or lowered by means of cords J, windlass K, and ratchet L, or by other suitable means.

In place of the above eccentrics cranks may be employed, and other small changes may be made, without departing from our invention, so long as the machine is substantially the same.

Our machine may be used for an ordinary gang-saw, if desired.

Having described our invention,

We claim—

1. The shaft B, when provided with a reciprocating end-play, in combination with two or more saws, substantially in the manner and for the purposes set forth.

2. The combination of the cam D, shaft B, and pulleys E, substantially in the manner and for the purposes set forth.

3. The adjustable saw-guides F, in combination with the frames I and saws, substantially as set forth.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses.

JAMES E. FRENCH.

JAMES M. STEPHENSON.

Witnesses:

ANDREW K. ROCHENFIELD,
CHARLES H. McCARTY.