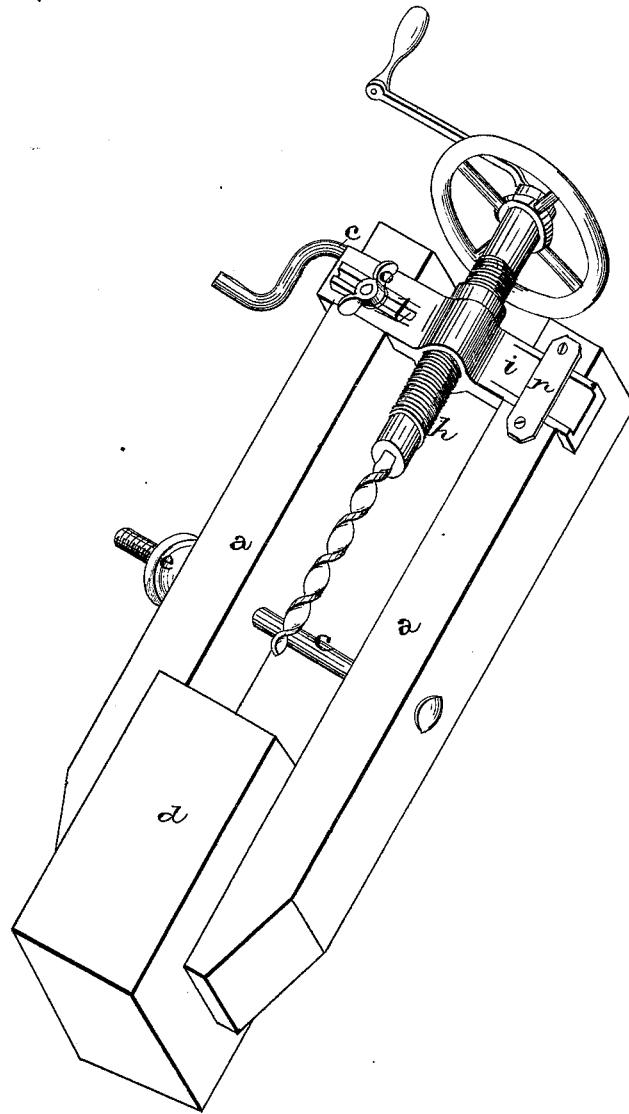


S. PALMER.
STONE-DRILLING MACHINES.

No. 195,841.

Patented Oct. 2, 1877



WITNESSES.

J. W. Garner
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UNITED STATES PATENT OFFICE.

SOLOMON PALMER, OF SIPES' MILL, PENNSYLVANIA.

IMPROVEMENT IN STONE-DRILLING MACHINES.

Specification forming part of Letters Patent No. **195,841**, dated October 2, 1877; application filed September 12, 1877.

To all whom it may concern:

Be it known that I, SOLOMON PALMER, of Sipes' Mill, in the county of Fulton and State of Pennsylvania, have invented certain new and useful Improvements in Drilling-Machines; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in drilling-machines; and it consists in the combination of the drilling-machine with clamps, for securing it to the block of marble, wood, or other substance in which a hole is to be bored, and by means of which the hole can be bored at any angle desired, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents two jaws, which are connected together by means of the two screws *c*, so as to form a powerful clamp, the lower or inner end of which is passed down over the top or edge of the block of marble, or other substance, *d*, in which a hole is to be bored, and then rigidly secured thereto by tightening the thumb-nut *e* upon the lower screw, and tightening the upper one by means of the handle *g* upon its end.

In the front side of the upper or outer end of this clamp are formed suitable recesses, so as to receive the frame *i* of the drilling-machine *h*. One end of this frame has a slot, *l*, made through it, so as to receive the clamp

o, by means of which the frame is rigidly secured in any position desired. The other end of this frame is held in position by means of the strap *n*, which passes down over its front side, but leaves the end perfectly free to move back and forth.

By means of the slot and clamp the frame can be adjusted back and forth across the face of the clamp, so as to drill any number of holes side by side.

This machine is intended especially for the use of marble-cutters, in boring holes in the marble wherever a dowel-pin is to be used; but it will be readily seen that it is applicable to other uses. By means of the clamp, as here shown, the drill can be carried about and applied to any kind of work, and thus save the trouble of bringing the work to the machine. By having the lower or inner end of the clamp adjustable laterally the machine can be readily clamped to work of all kinds, and the machine can be adjusted back and forth over its top or side with the greatest ease.

Having thus described my invention, I claim—

The combination of the two jaws *a*, clamping-screws *c*, drill *h*, and laterally-adjustable frame *i*, the parts being arranged to operate substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of September, 1877.

SOLOMON PALMER.

Witnesses:

W. SCOTT PALMER,
ALBERT R. PALMER.