

T. ROGERS.

Dressing Mill Stones.

No. 125,760.

Patented April 16, 1872.

Fig. 1.

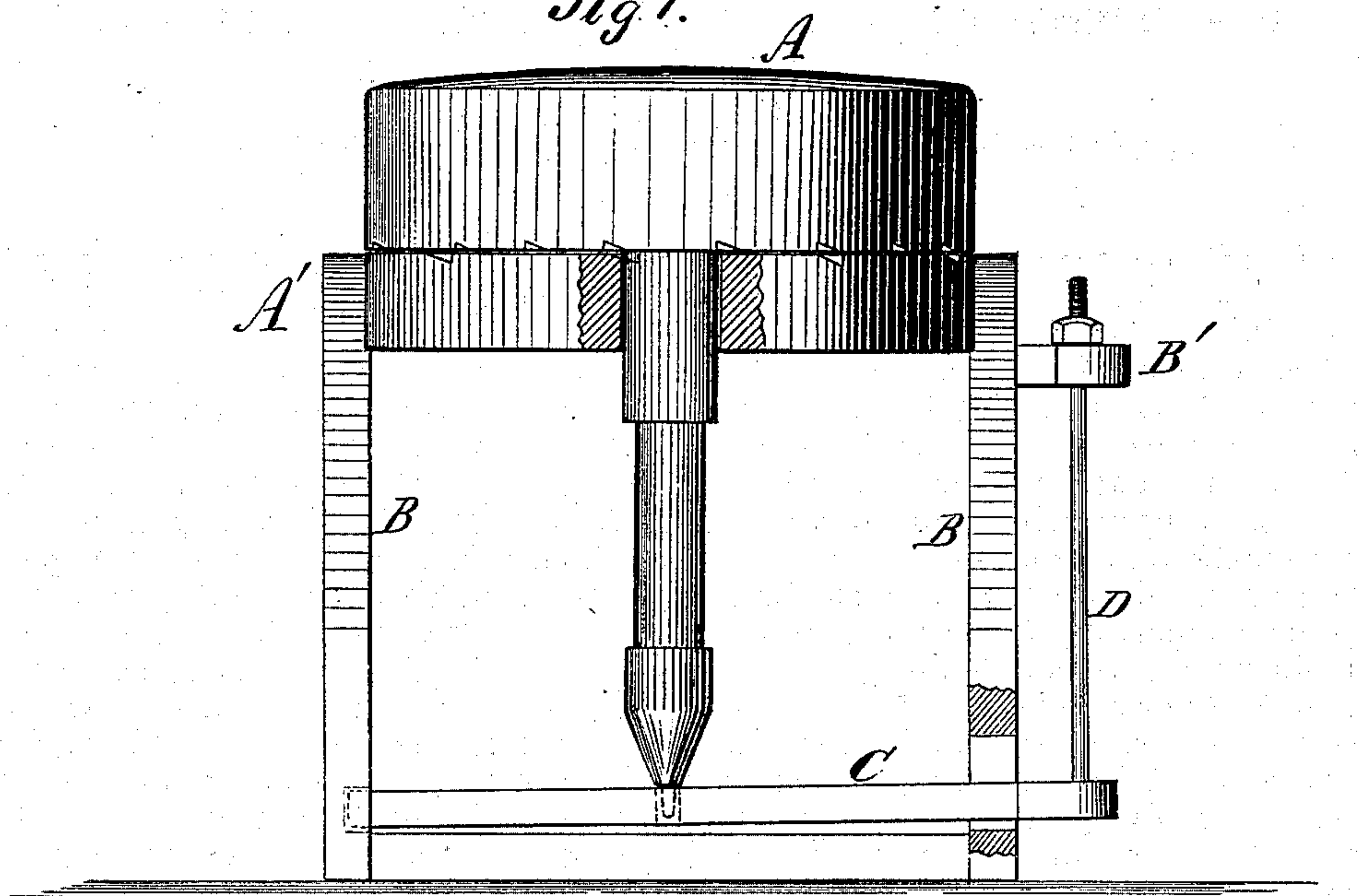


Fig. 2.

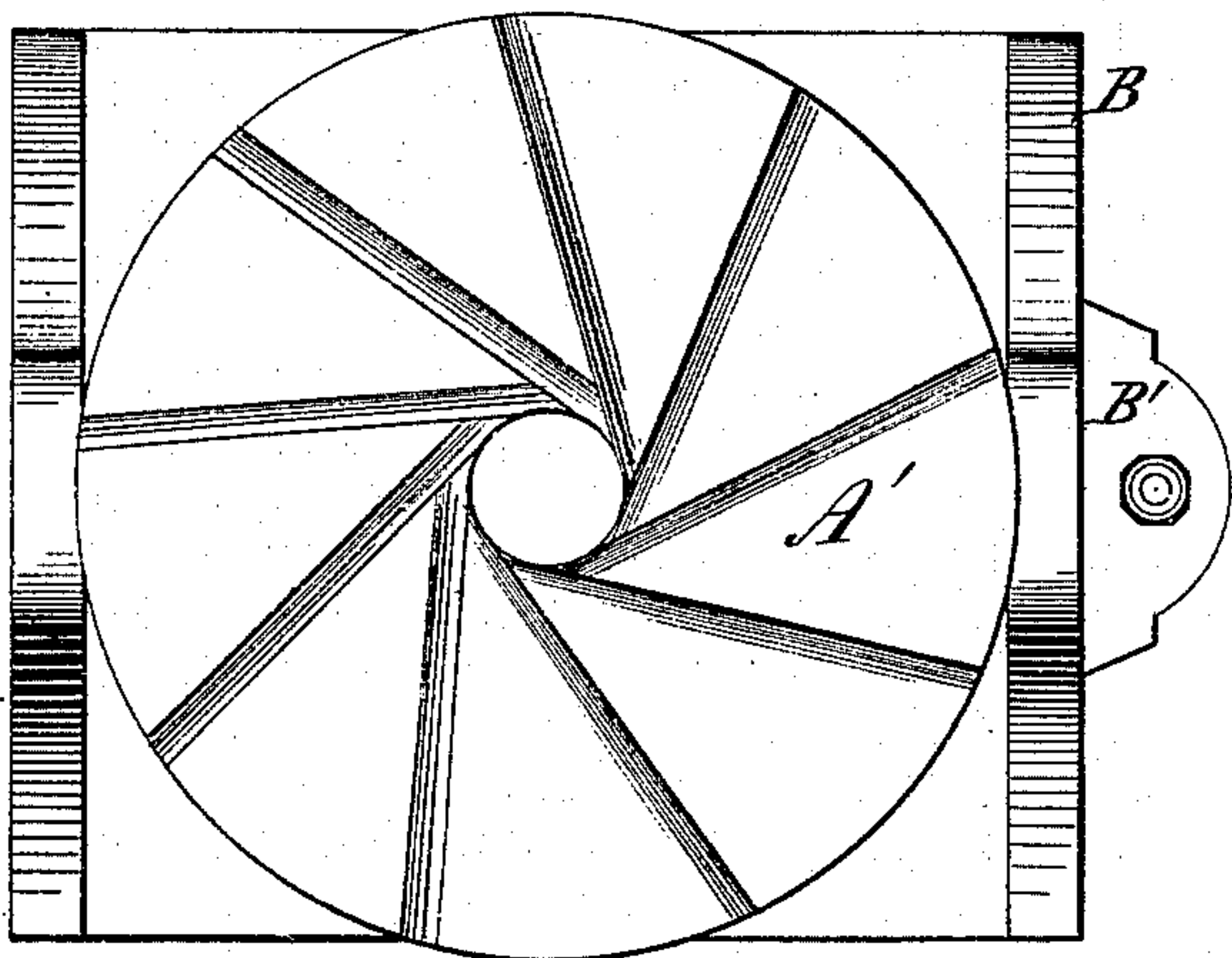
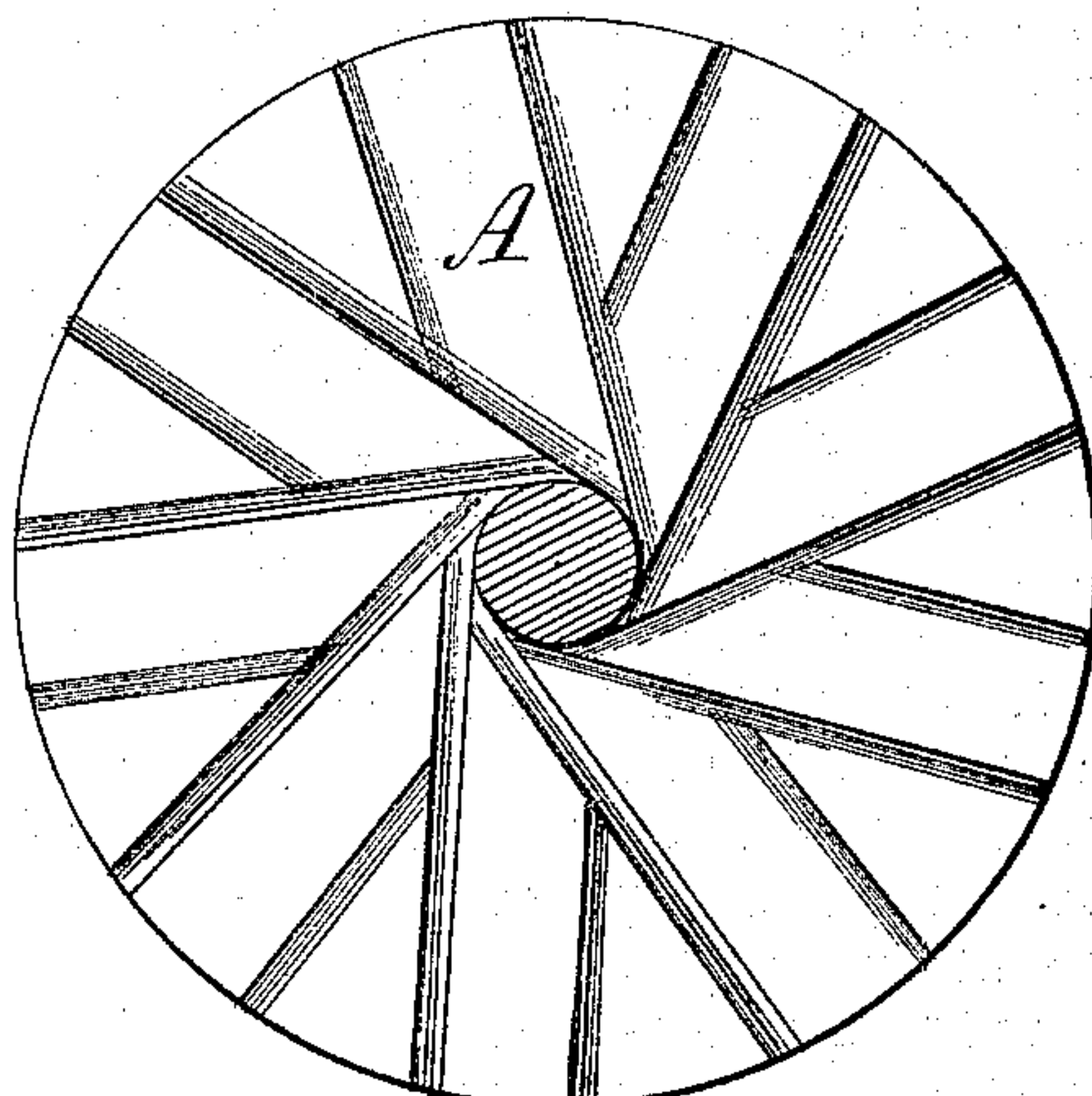


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

THOMAS ROGERS, OF LEESVILLE, OHIO, ASSIGNOR TO HIMSELF AND J. C. PRICE, OF SAME PLACE.

IMPROVEMENT IN THE MODE OF DRESSING MILLSTONES.

Specification forming part of Letters Patent No. 125,760, dated April 16, 1872.

To all whom it may concern:

Be it known that I, THOMAS ROGERS, of Leesville, in the county of Carroll and State of Ohio, have discovered an Improved Method of Dressing Millstones; and hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure I is an elevation of a simple form of a frame for supporting the grinding-stones of a mill, showing also the stones, the spindle which carries the revolving one, the steps and bridge-tree upon which the spindle rests, and the screw and nut for regulating the distance between the revolving stone and the stationary one. Fig. II is a plan view of the bed or stationary stone and of the frame; and Fig. III is a bottom view of the runner or revolving stone.

Corresponding letters refer to corresponding parts.

This invention or discovery relates to an improvement in the art of sharpening millstones, or in dressing them when they have become dulled by use; and it consists in having discovered that when thus dulled they may be readily sharpened and rendered fit for use without removing them or either of them from the position in which they are placed for grinding, the sharpening or dressing being effected by so adjusting the revolving stone with reference to the stationary one, by means of screws or other suitable means, that their inner or grinding surfaces shall come in contact with each other, and while in such relation causing the upper or revolving stone to rotate upon its axis, and thus sharpen itself as well as the stationary one.

The drawing shows a simple form of frame for the stones to rest in while grinding; but as my invention or discovery does not relate to the particular kind of mechanism employed, no detailed description of such mechanism is deemed necessary; but in order that others skilled in the art may be enabled to practice it in accordance with my plan, I will proceed to describe how it may be done.

This method of or process for sharpening millstones is applicable to all kinds of such stones, but is particularly applicable to the

sharpening of burr-stones, owing to the fact that they are very open or porous, and present a great many cutting or grinding surfaces. It is also applicable to stones the faces of which are in a vertical position, as well as to those whose faces are in a horizontal position. In practicing my newly-discovered method the stones A and A' are arranged in any of the ordinary frames B B usually employed for holding them, the one A being the revolving one, while the one A' is the stationary one. The spindle of the revolving stone rests in a step secured in the bridge-tree C, one of its ends being pivoted to one side or portion of the frame, while the other end rests upon an adjusting-screw, D, or some other suitable adjusting device, so that the revolving stone may be raised or lowered, or so moved as to be brought into contact with the face of the stationary stone. In these respects the parts described do not differ from those in use in nearly or quite all mills of the present time; neither is it necessary that they should, as my method or process may be practiced with any of the adjusting devices now in use, it consisting in lowering or moving the runner or revolving stone to such an extent that its grinding-face shall come in contact with the grinding-face of the stationary one, at which time, supposing the runner to be in motion, its speed should be so regulated as to be about twenty revolutions per minute, more or less; and as the faces of the stones are worn away the nut upon the adjusting-screw is turned so as to renew the contact of the faces, and the speed of the stone which revolves is gradually increased until, at the end of the operation, it reaches sixty revolutions per minute, or thereabouts. By the use of this method the stones, which now require the expenditure of several days of the time of an expert in sharpening them, may be sharpened or dressed in from thirty to fifty minutes, and in such a manner as to cause them to do better work than when dressed by hand. In dressing stones in this manner it will be found best to remove the curb which surrounds them while grinding, in order that the grit and dust caused may escape from the stones and be deposited where it will not become mixed with the flour. After the stones have been properly dressed, and the curb has

been placed in its proper position, a small quantity of coarse or waste grain should be run through the stones in order that any dust which may remain between the stones may be expelled.

It is apparent that, as a consequence of the difference in time required in dressing stones by this method and the one now in use, a great economy of time is gained by my method, and that, instead of losing from three to six days of the use of each pair of stones whenever it becomes necessary to dress them, not more than from one to two hours will be required for the whole operation.

Having thus described my invention or dis-

covery, what I claim, and desire to secure by Letters Patent, is—

Claim.

The within-described method of sharpening the stones of grinding-mills, it being done substantially in the manner and for the purpose set forth.

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

THOMAS ROGERS.

Witnesses:

J. C. PRICE,

WM. ADAIR.