I. WHITCOMB.

STONE-DRESSING MACHINE.

No. 182,501. Patented Sept. 19, 1876.

Fig. 1

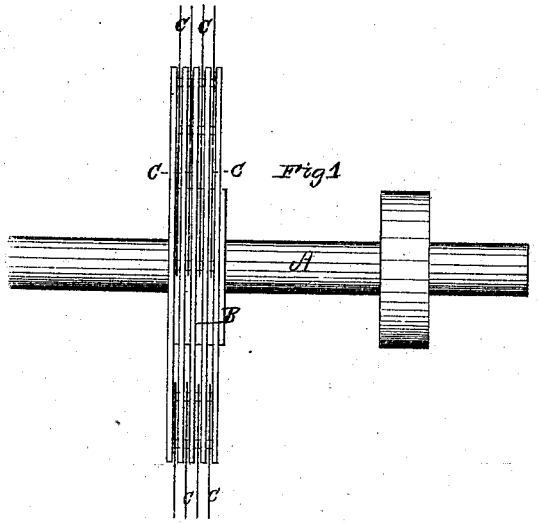


Fig. 2.

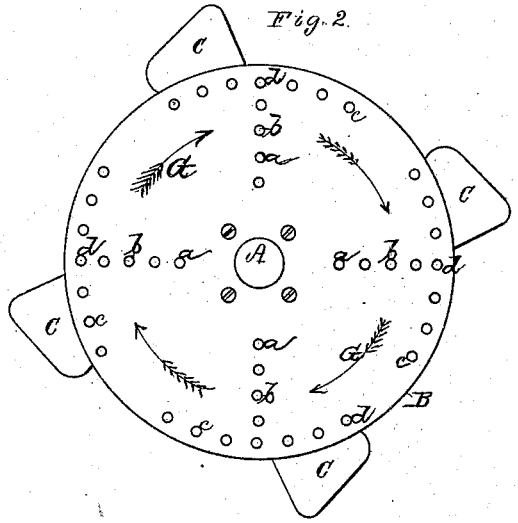


Fig. 4

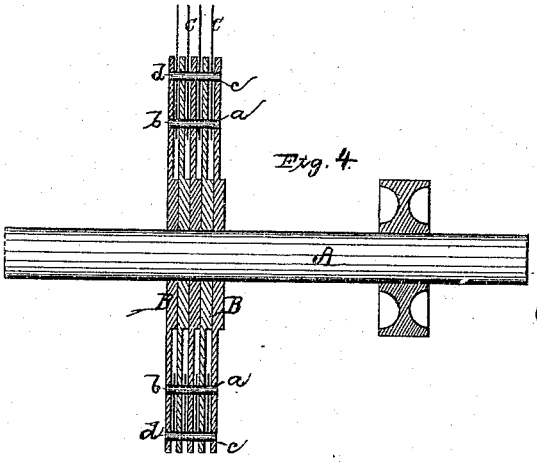
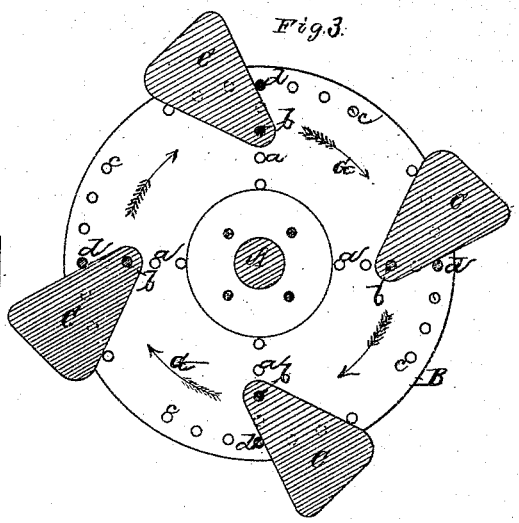


Fig. 3.



Witnesses.

S. W. Piper

L. W. Miller

Israel Whitcomb

by his attorney

R. H. Eddy

UNITED STATES PATENT OFFICE.

ISRAEL WHITCOMB, OF HINGHAM, MASSACHUSETTS.

IMPROVEMENT IN STONE-DRESSING MACHINES.

Specification forming part of Letters Patent No. **182,501**, dated September 19, 1876; application filed February 21, 1876.

To all whom it may concern:

Be it known that I, ISRAEL WHITCOMB, of Hingham, of the county of Plymouth, and State of Massachusetts, have invented a new and useful Machine for Cutting or Dressing Stone; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 a side view, Fig. 3, a transverse section, and Fig. 4 a longitudinal section, of the said machine.

It is composed not only of a rotary shaft, and a series of disks arranged concentrically on said shaft at equal distances apart, and fixed to it, and provided with radial and arcal ranges of holes, as set forth, but of one or more series of hammers, or their plates, of steel or other suitable material, arranged between the disks, and pivoted to them, all being substantially as represented in the drawings, in which A denotes the said shaft; B B B, &c., the series of disks, and C C C C—C C C C the sets or series of hammers or strikers.

The drawings show four sets of such hammers or strikers, and they also represent the series of disks provided with radial ranges *a a* of holes going through them transversely to receive the pivot-pins *b* of the strikers. They also exhibit such disks as provided with arcal ranges *c* of holes arranged as shown, such being for the reception and adjustment of the stop-pieces *d* of the strikers. The radial ranges admit of the pivots of the strikers being set nearer to or farther from the axis of the shaft, as circumstances may require, according to the size of the strikers, or as they may become worn. The arcal ranges admit of the strikers, just prior to their being thrown into contact with a stone, being adjusted to meet it at a desirable angle to its surface for them to cut or abrade it to advantage.

In applying the disks to the shaft I prefer to have them inclined a little to its axis, rather than in planes at right angles therewith, as in such case each set of strikers, while the machine is in operation, will touch the stone a little aside of the places where it was struck by the set next preceding.

The strikers are plates of steel, triangular in form, and truncated or rounded more or less at the angles, as shown.

On the machine being put in rapid revolution in the direction of the arrow G, and over a stone in movement rectilinearly under such machine, the several series of strikers will be successively thrown violently in contact with the stone, and drawn more or less along its surface, whereby such surface will become rapidly abraded or cut down, the dust or chips made being more or less discharged in the meantime. Each hammer or striker in approaching the stone will first fall upon the rest-pin of such hammer, whereby the hammer will be set for action, and caused to strike the stone in the proper place, the hammer afterward and during the revolution of the machine falling back wholly within the space between the next contiguous disks.

I do not claim a cylinder composed of disks, divided into pairs by blocks, and held together upon a shaft by such, and provided with cutters, all as shown in the United States Patent 118,323. In my stone-cutting machine each of the disks has a series of arcal and radial holes, whereby the strikers are rendered capable of adjustment, especially as they may become worn, all as hereinbefore explained; therefore

I claim—

The improved stone-dressing machine, substantially as described, consisting of the series or sets of hammers or strikers C, and the set of disks B, provided with the pivot and stop-pins *b d*, and the radial and arcal ranges of holes *a c*, all ranged with a shaft, A, and to operate essentially as specified.

ISRAEL WHITCOMB.

Witnesses:
R. H. EDDY,
J. R. SNOW.