

J. F. GREEN & S. H. GREEN.
Grindstones.

No. 140,823.

Patented July 15, 1873.

Fig. 1

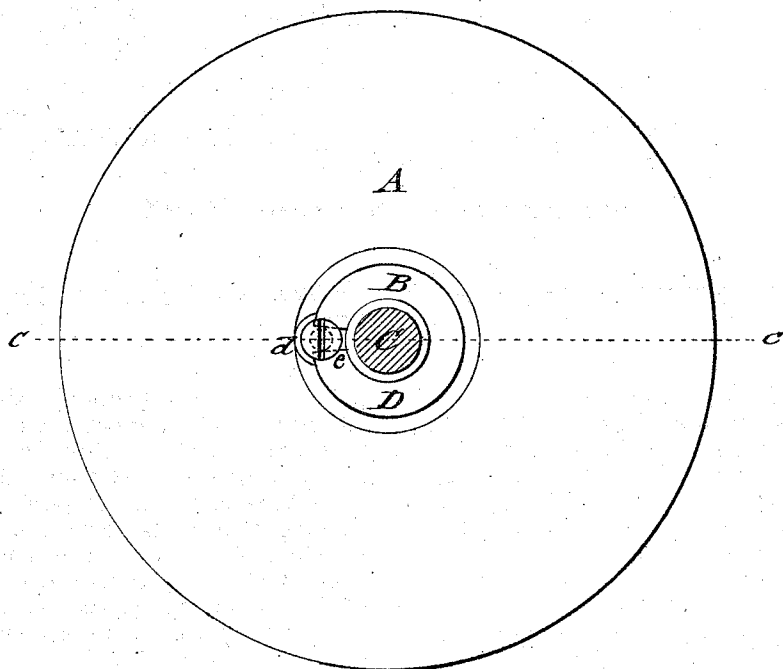
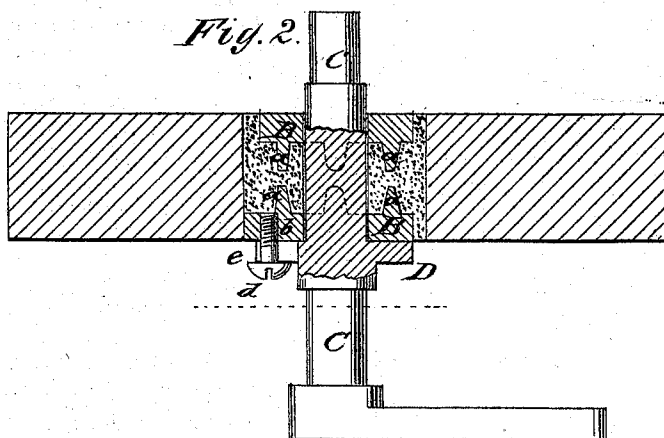


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES F. GREEN AND SIDNEY H. GREEN, OF HAVERSTRAW, NEW YORK.

IMPROVEMENT IN GRINDSTONES.

Specification forming part of Letters Patent No. **140,823**, dated July 15, 1873; application filed May 5, 1873.

To all whom it may concern:

Be it known that we, JAMES F. GREEN and SIDNEY H. GREEN, of Haverstraw, in the county of Rockland and State of New York, have invented a new and Improved Crank-Fastening for Grindstones, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of our grindstone-crank fastening, partly in section; and Fig. 2, a horizontal section of the same on the line *c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of our invention is to produce a simple, but perfectly true and central, fastening for the cranks of grindstones, for the purpose of permitting their placing on and detaching at pleasure, economizing thereby in space and freight in shipping. At present the grindstones are put up and shipped with their cases and bottom pieces, their cranks being correctly centered, requiring therefore a great deal of space. Our method provides a bushing cemented centrally to the grindstone, with a detachable crank, which may without difficulty be attached and run perfectly true. The different pieces may, therefore, be separately packed, resulting in less damage to the goods and reduced expenses for freight.

In the drawing, A represents the grindstone, to the central part of which are connected, in suitable manner, two side bushings, B, which

are provided with teeth *a* at their inner side, offering thereby a greater surface to the connecting material, and forming a rigid connection therewith. The bushings B are centered, so that the stone will run perfectly true. One bushing, B, has a threaded aperture, *b*, for the insertion of the screw *d*, which connects the crank-flange to it. Crank C is provided at its shaft with a flange projection, D, having a recess or aperture, *e*, corresponding to that of the bushing B.

By placing the crank-shaft through the bushings and inserting the screw *d*, the crank is firmly connected to the stone A, and all the conditions of a good grindstone retained. The stones, cranks, cases, &c., may therefore be shipped separately, as their connection in this manner will always secure a true and perfect stone.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The side bushings B, having projecting teeth *a* and aperture *b*, for the purpose described.

2. The crank C, having flange D with recess *e*, to insert screws *d* and connect the crank with the bushings, as described.

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Witnesses:

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