

D. CUMMINGS, Jr.

Devices for Wetting Grindstones.

No. 144,891.

Patented Nov. 25, 1873.

Fig. 1.

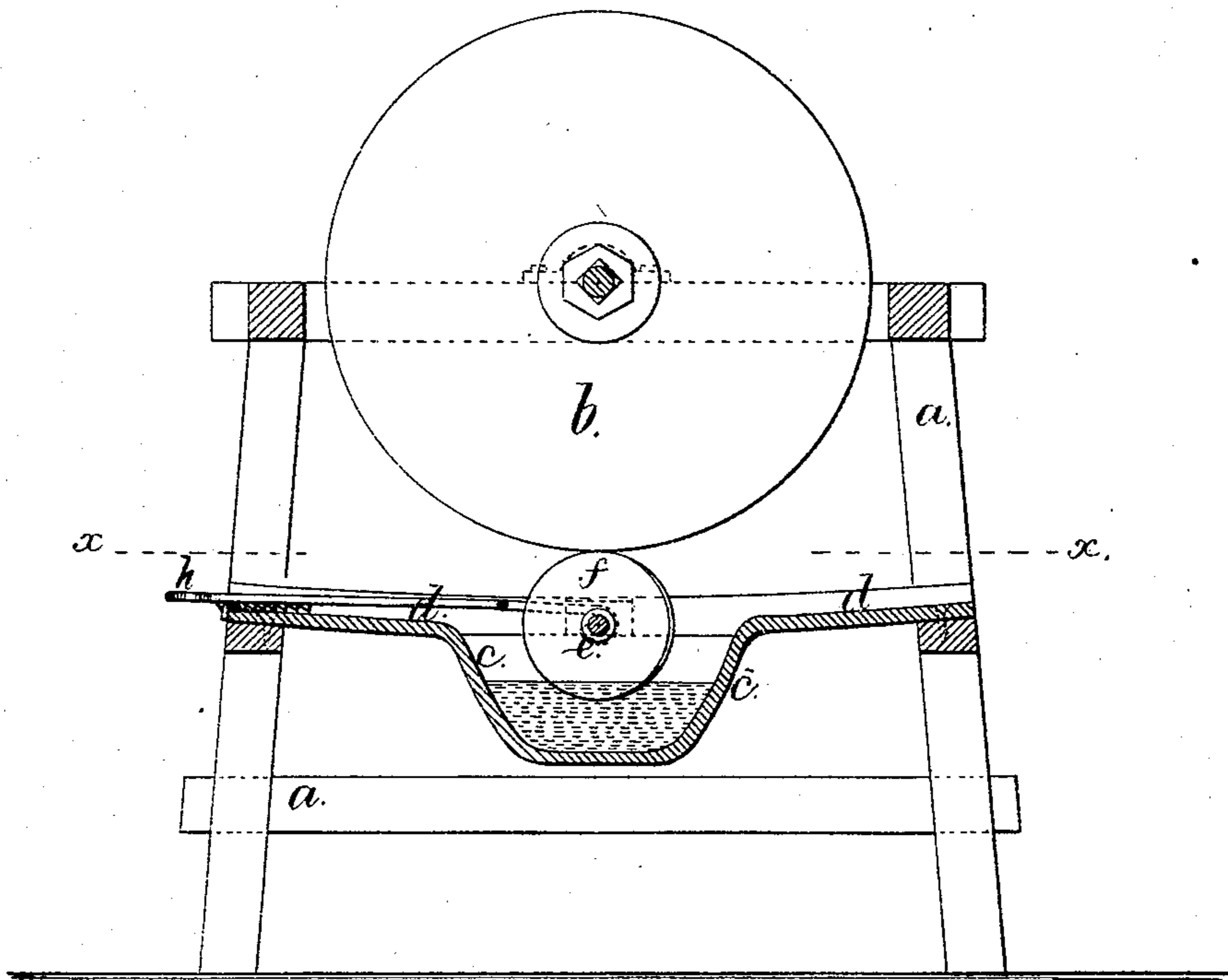
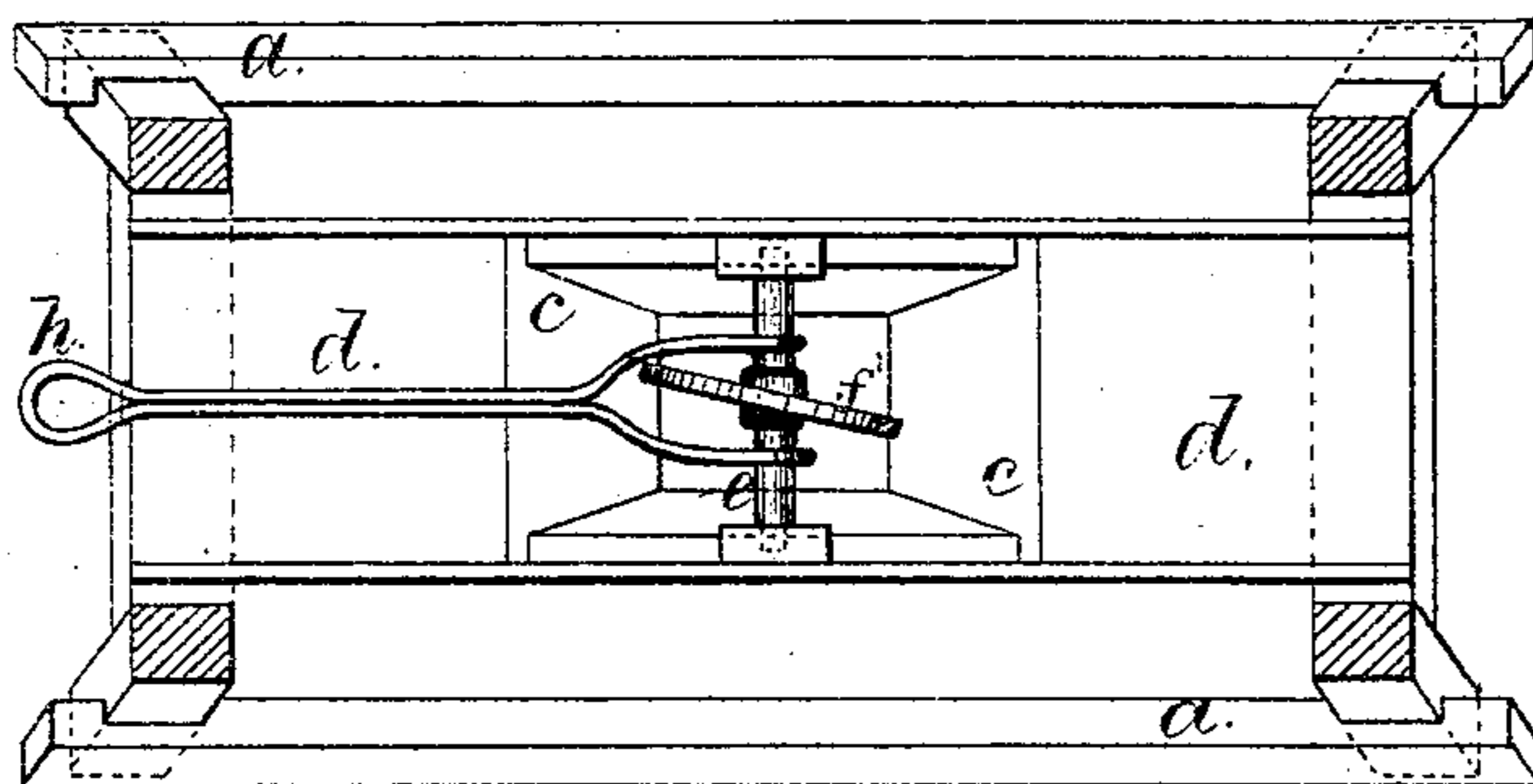


Fig. 2.



Witnesses.

Chas. H. Smith
Harold Perrell

Inventor.

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UNITED STATES PATENT OFFICE.

DAVID CUMMING, JR., OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN DEVICES FOR WETTING GRINDSTONES.

Specification forming part of Letters Patent No. **144,891**, dated November 25, 1873; application filed September 8, 1873.

To all whom it may concern:

Be it known that I, DAVID CUMMING, Jr., of Jersey City, in the county of Hudson and State of New Jersey, have invented an Improvement in Means for Wetting Grindstones, of which the following is a specification:

Difficulty arises in applying the proper quantity of water to a grindstone. If it is allowed to drip from a can the action is not uniform, the stone being moistened principally where the water drips. If the stone runs in contact with water in a trough below, then the water accumulates upon the periphery of the stone, runs off upon the article that is being ground, and otherwise interfering with a perfect operation of the stone. My improvement is made for applying more or less water to the surface of the grindstone; and the same consists in a wheel of felt, or similar material, running in a trough of water, and movable, so as to be brought into contact with the edge of the grindstone, and be revolved thereby; and, in order to spread the water, the said wheel is made to receive the disk of felt, or similar material, in a position diagonal to the axis, so that it wabbles as it revolves, and wets the surface in a zigzag or wavy line.

In the drawing, Figure 1 is an elevation of the grindstone and wetting-wheel, the trough and frame being in section; and Fig. 2 is a plan below the line *x x*.

The frame *a* of the grindstone *b* is to be of any desired character, and the grindstone may be turned by hand, or otherwise. The water-trough *c* is of suitable size, and the upper surface *d* of the trough is provided with ledges or sides, and slopes toward the trough *c* to return to the trough any water that may drip from the grindstone or article being ground.

The wetting-wheel *f* is upon an axis, *e*, and free to rotate in boxes or bearings at the ends, and these rest upon the trough *d*, and can be drawn along by the handle *h* to retain the wheel *f* in contact with the grindstone at one side, the other portion of such wheel *f* being in the water in the trough *c*. If desired, the wheel *f* may be of a width sufficient to moisten the entire surface of the grindstone as the parts revolve in contact; but I prefer to employ a disk of felt, wood, or similar material, set at an angle to the axis, so that it wabbles as it revolves, describing an undulating line upon the stone *a*, as the parts revolve in contact, so as to wet the stone from one edge to the other; and this line of moisture will usually be sufficient, as the same will be spread by the article that is being ground. When the grindstone becomes too wet, the wheel or roller can be moved back out of contact with such grindstone. India-rubber answers very well for the wetting-wheel *f*, the water that adheres to the surface being sufficient.

I claim as my invention—

1. The roller or wheel *f*, applied in the water-trough of a grindstone, and movable so as to be brought into contact with such grindstone, substantially as set forth.

2. A wheel or roller of felt, or other material, set diagonally to the axis, and applied to and combined with a grindstone and its water-trough, as and for the purposes specified.

Signed by me this 1st day of September, 1873.

DAVID CUMMING, JR.

Witnesses:

GEO. D. WALKER,
CHAS. H. SMITH.