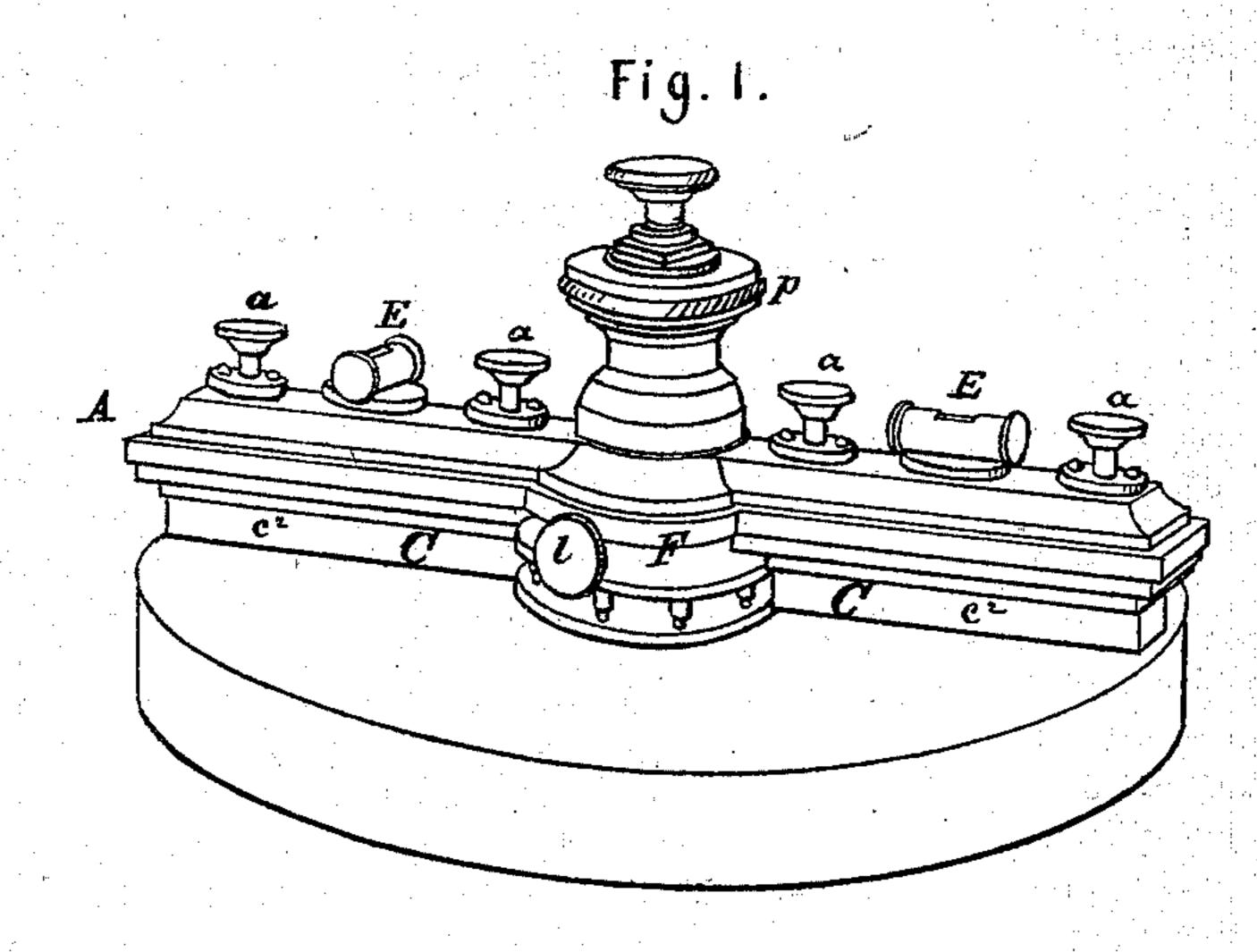
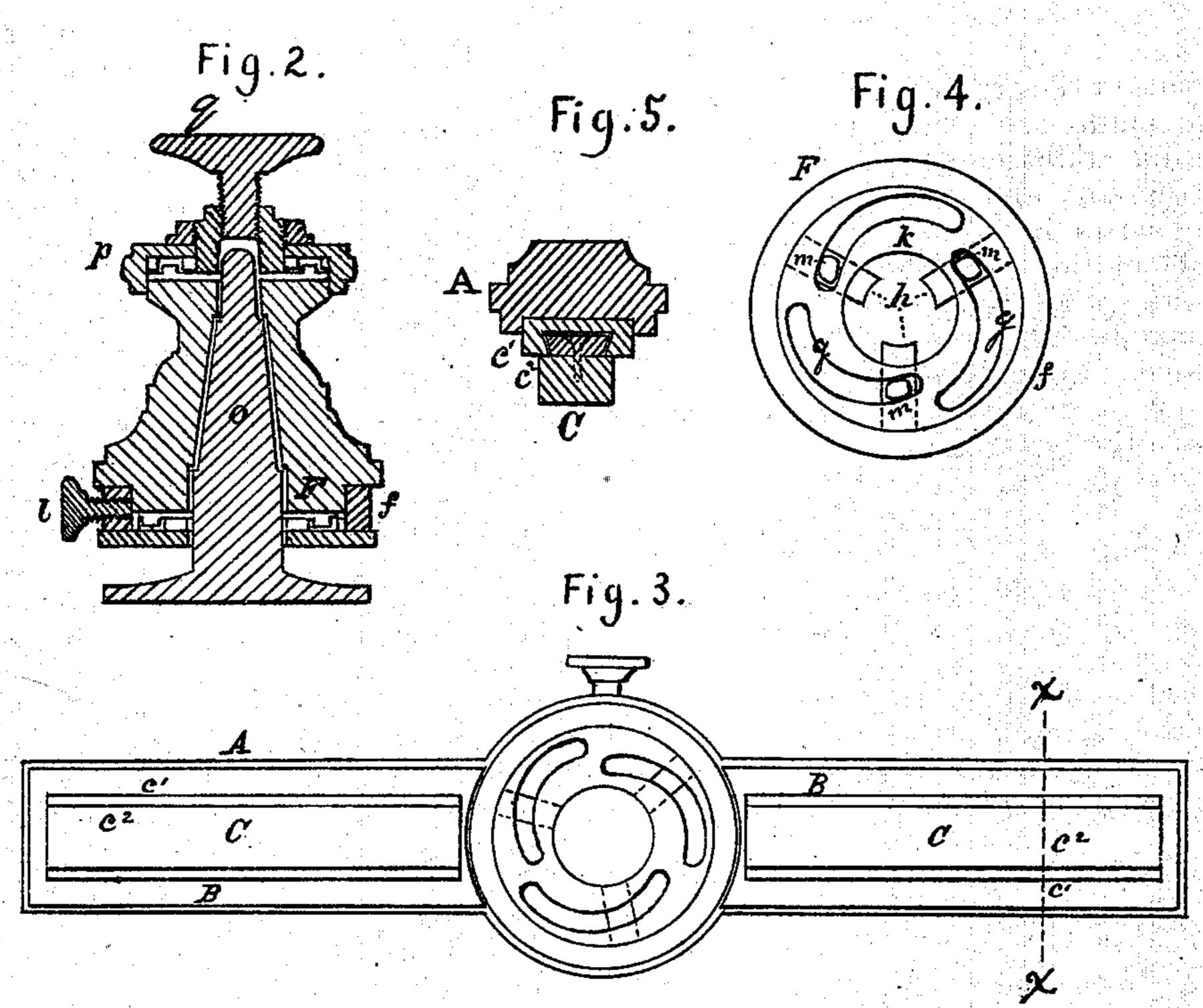
## W. RING.

## Devices for Leveling Mill-Stones.

No. 139,479.

Patented June 3, 1873.





Witnesses:

A. Lacey
1. M. a. Daniels

Walter Ring, Inventor, Charle I. Whitman. Attorney.

## UNITED STATES PATENT OFFICE.

WALTER RING, OF OWEN COUNTY, INDIANA.

## IMPROVEMENT IN DEVICES FOR LEVELING MILLSTONES.

Specification forming part of Letters Patent No. 139,479, dated June 3, 1873; application filed September 9, 1872.

To all whom it may concern:

Be it known that I, WALTER RING, of the county of Owen and State of Indiana, have invented an Improved Millstone Gage.

The following description, taken in connection with the accompanying plate of drawings hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts there-of as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of devices which are made use of for gaging, staffing, and leveling millstones and plumbing the spindles thereof; and the nature of said invention consists in certain modifications in the details of the construction of the same, whereby the spindle may be set perfectly true and the burrstone be made level.

In the accompanying plate of drawings which illustrate my invention and form a part of the specification thereof, Figure 1 is a view, in perspective, representing the staff applied to the burr. Fig. 2 is a transverse vertical section. Fig. 3 is a plan of the bottom of the staff. Fig. 4 illustrates the parts composing the lower chuck. Fig. 5 is a transverse section on line x x in Fig. 3.

My invention is an improvement upon the tram-staff for grinding-mills patented by me on the 29th day of October, 1867, and the construction and operation of the same are as follows:

A slotted plate, B, is secured by means of screws to the bottom of the staff A, and for the reception of the staff-blocks C. The said staff-blocks C consist of the metallic part  $c^1$ 

and wooden part  $c^2$ . The wooden part, being so arranged as to be moved longitudinally, is, in connection with the part  $c^1$ , rendered capable of accurate vertical adjustment by means of the set-screws a on either side of the spiritlevels E. The chuck-box F consists of the annular collar f, eccentric g, chucks h, eccentric plate k, and set-screw l. The chucks h are provided with lugs m, which work in the eccentric apertures of the plate k, so that when the annular collar is rotated the said chucks are made to approach and clasp the spindle o. The annular collar may be clamped firmly in any desired position by means of the set-screw l.

The upper chuck-box p is of substantially the same construction and operation as the lower one, except that instead of a set-screw the nut q is made use of to clamp the annular collar f at any desired point.

Having thus described the essential improvements of my present invention upon my former patent, I claim—

1. In combination with the staff, the staff-block, consisting of two parts,  $c^1$  and  $c^2$ , having a vertical and longitudinal adjustment, as herein shown and described.

2. The clutch-box F, provided with the annular collar f, eccentric g, chuck h, eccentric plate k, set-screw l, lugs m, working in the eccentric apertures of the plate k, the spindle o, the upper clutch-box p, and the staff, all constructed and operating as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 9th day of August, 1872.

WALTER RING. [L. s.]

Witnesses:

JAMES HUTCHINGS,

HENRY W. LEAS.