

(No Model.)

G. D. ERNST.

REVERSING GEAR FOR PRINTING PRESS CYLINDERS.

No. 381,991.

Patented May 1, 1888.

Fig. 1.

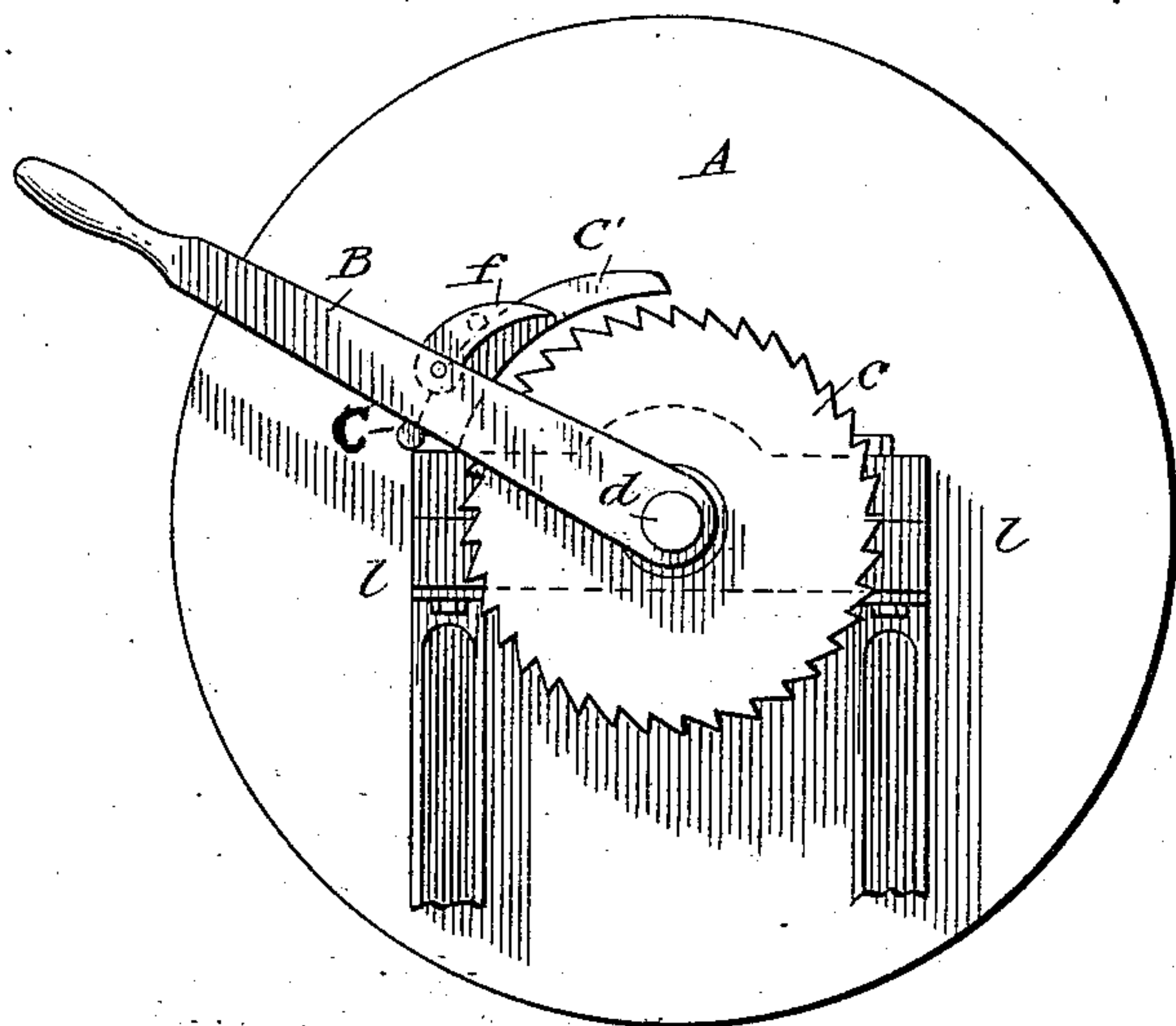


Fig. 2.

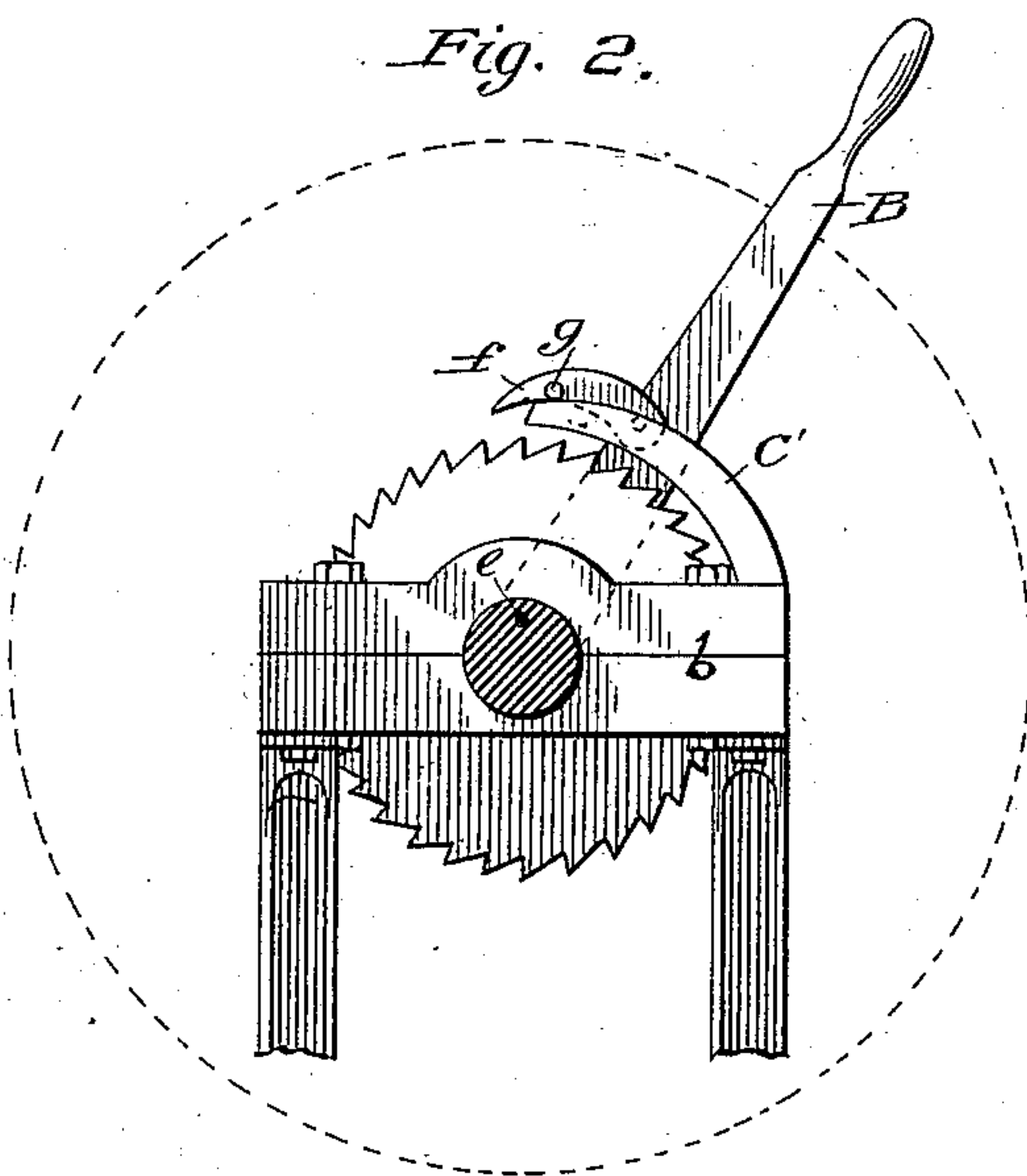
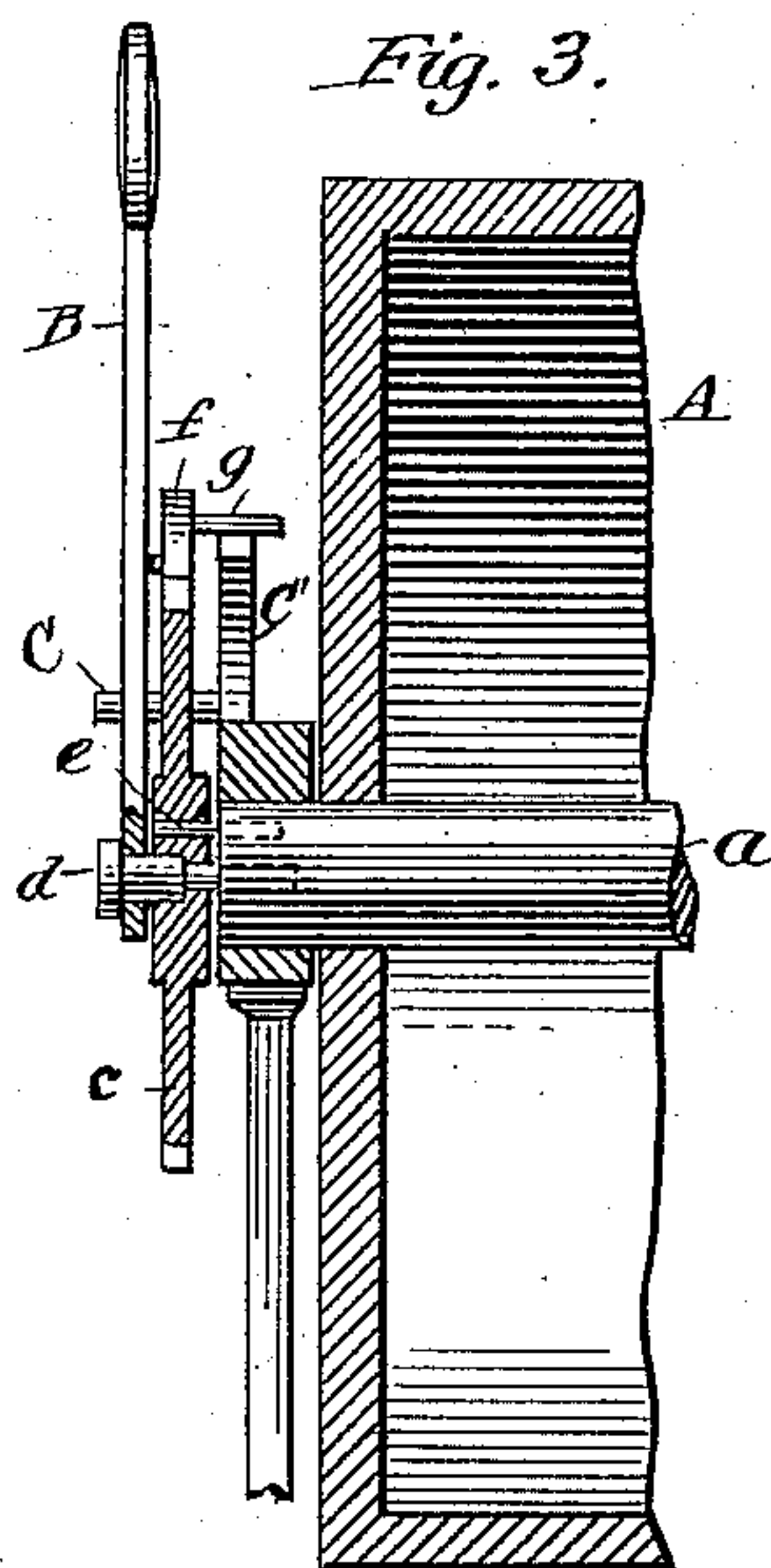


Fig. 3.



Witnesses.

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GEORGE D. ERNST, OF BUFFALO, NEW YORK.

REVERSING-GEAR FOR PRINTING-PRESS CYLINDERS.

SPECIFICATION forming part of Letters Patent No. 381,991, dated May 1, 1888.

Application filed June 28, 1886. Serial No. 206,559. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. ERNST, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Reversing-Gear for Printing-Press Cylinders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention is intended to be applied to the cylinder of a Campbell printing-press on the side at which the press is started and worked and which is opposite to the ordinary reversing hand-wheel, the object of the invention being to have the reversing gear at hand to turn the cylinder backward without having to get down from the press and walk to the opposite side to do the reversing, thereby saving a great many steps and much valuable time.

The invention as constructed and applied will be understood by reference to the following specification and claim.

In the drawings, Figure 1 is a front side elevation of my device as attached to the cylinder-journal; Fig. 2, also a side elevation, but the reverse side of my device; Fig. 3, an end view, the cylinder in cross-section.

A represents the usual cylinder, *a* its journal, and *b* the box or bearing in which it runs. On the working side the ordinary cap is removed from the end of the journal and my device attached instead, and which consists, first, in a disk, *c*, with projecting ratchet-teeth on its entire periphery pointed in the direction of the running of the cylinder. This ratchet-disk is fastened to the journal by a headed pin, *d*, screwed firmly into the center of the end of the journal, as also by another screw, *e*, passing through the side of the disk and into the journal. The manner of attach-

ment is not, however, important as long as it is securely fastened to said journal and cylinder.

Loose on the pin *d*, between its head and the disk, is the operating-lever B, which, when the press is running, lies on a rest, C, that is firmly screwed to the left end of the cap or journal-box *b*, as shown. This rest has projecting up therefrom and curved forward a cam, C', (see Fig. 2,) forming part of the rest, its use being to hold up a pawl, *f*, pivoted to the inside of lever B, said pawl having a projecting pin or cam, *g*, formed or attached to the inside thereof and standing out at right angles. (See Figs. 2 and 3.) This pin *g* slides on the curved cam C', raising and keeping up the pawl from the ratchet-teeth while the cylinder is turning forward.

When the pressman desires to reverse the cylinder, he pulls up the lever from its rest C, and the pawl slides at once off the cam C' and catches into the ratchet-teeth, and by pushing the lever the cylinder is turned back as much or little as desired. These teeth and this method of reversing the cylinder are of great advantage, as the cylinder can be turned to a half inch, and thus bring the bed and forms just where wanted.

I disclaim any application of this reversing-gear except for the Campbell printing-press, as set forth.

I claim—

In a reversing-gear for printing-press cylinders, the combination, with the cylinder A, provided with the cam-rests C C', of pivoted lever B, having the pawl *f* pivoted thereto, said pawl supported upon cam C' by means of pin *g*, and the ratchet-disk *c*, all arranged and operating in the manner and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE D. ERNST.

Witnesses:

J. R. DRAKE,
T. H. PARSONS.