

G. FOWLER.

CARD GRINDING MACHINE.

No. 175,961.

Patented April 11, 1876.

Fig. 1.

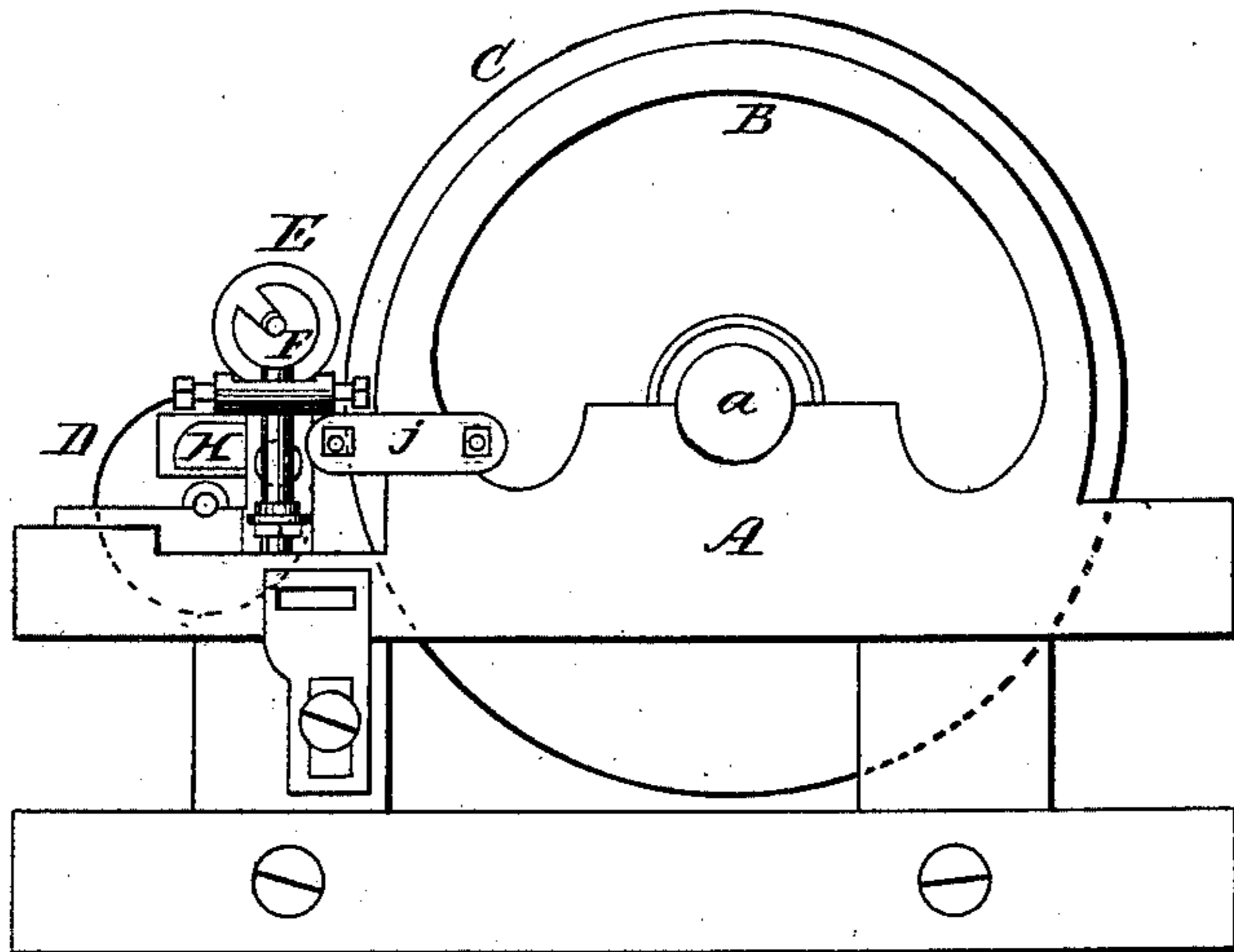


Fig. 3.

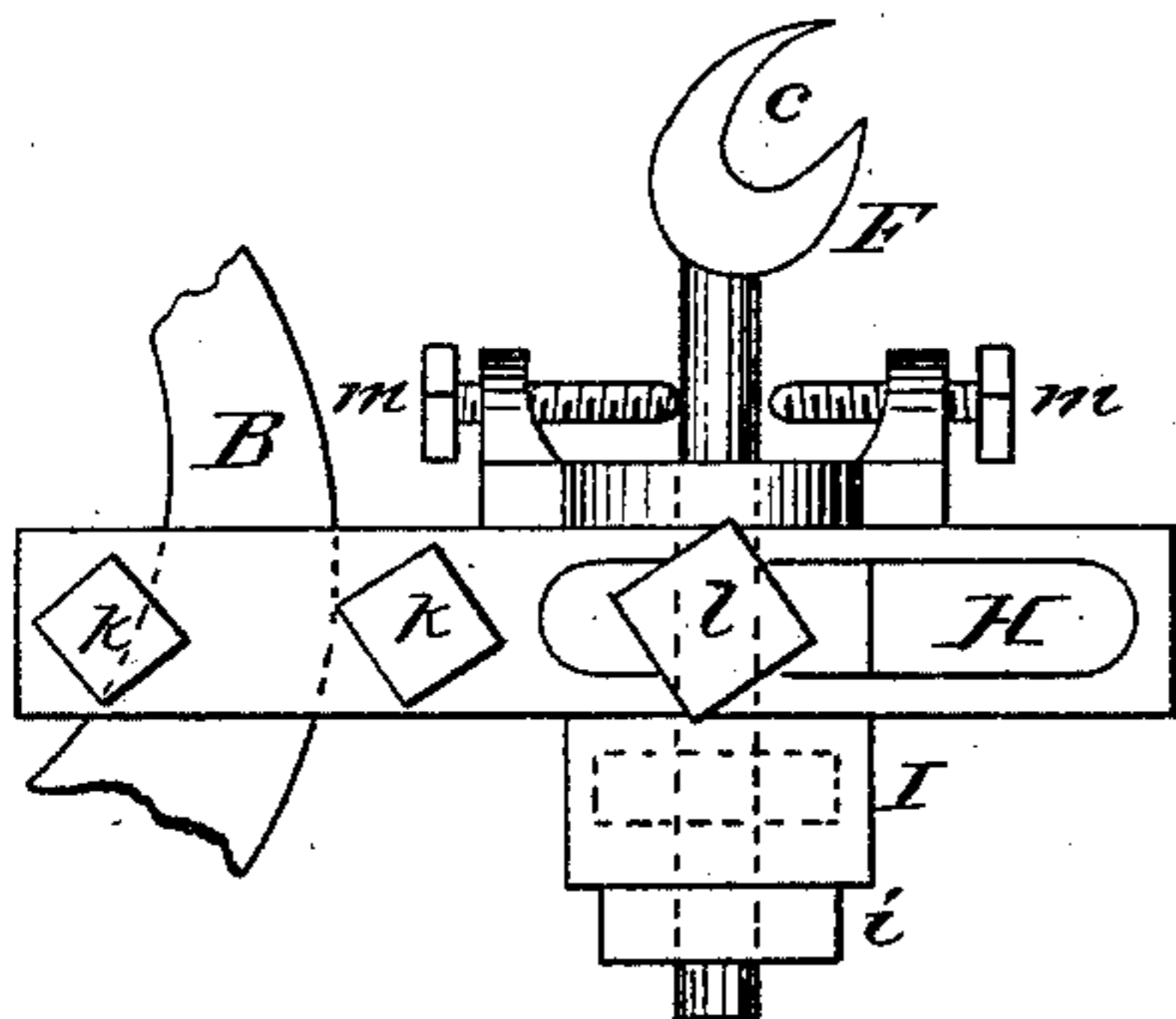


Fig. 2.

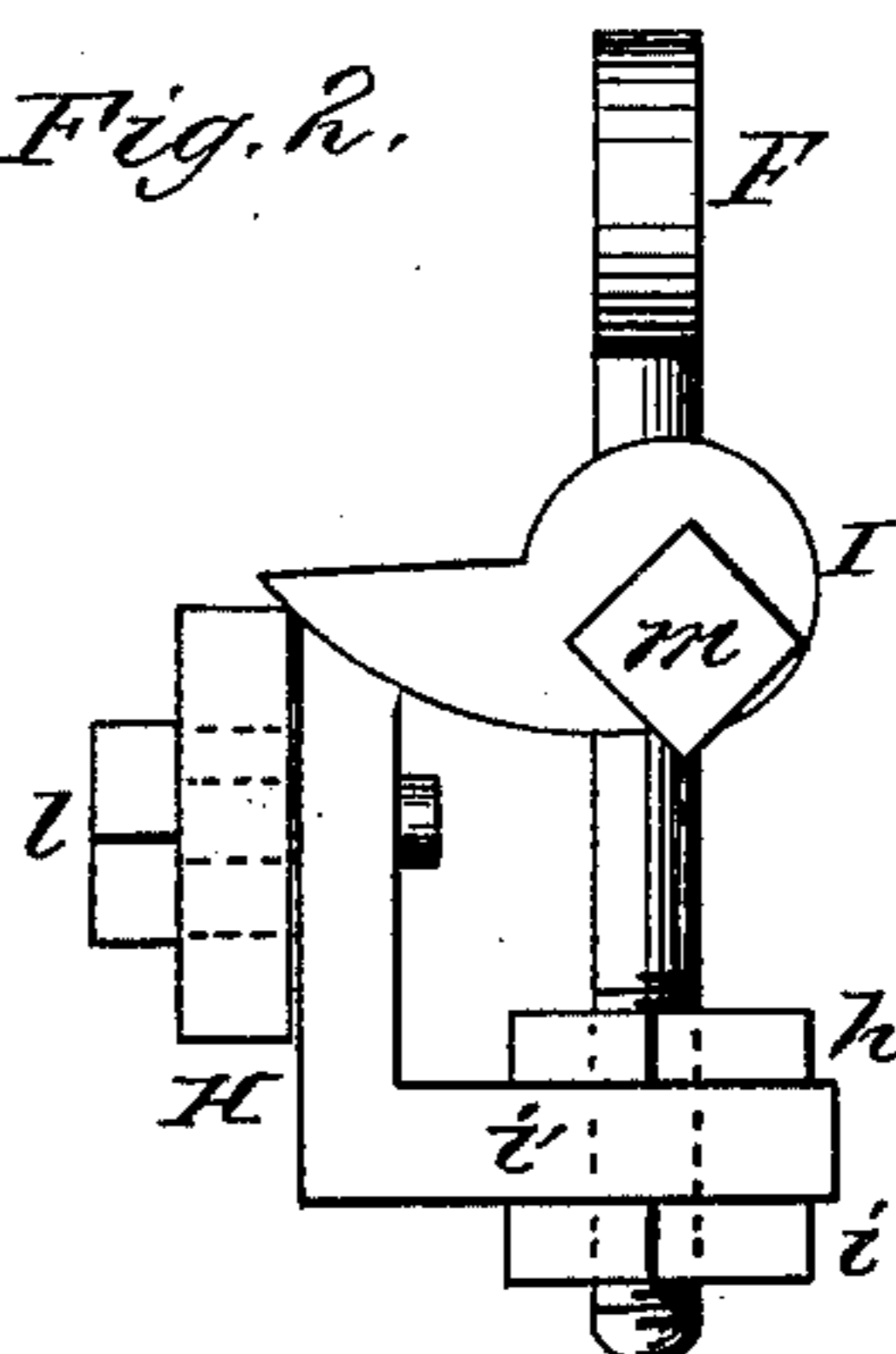
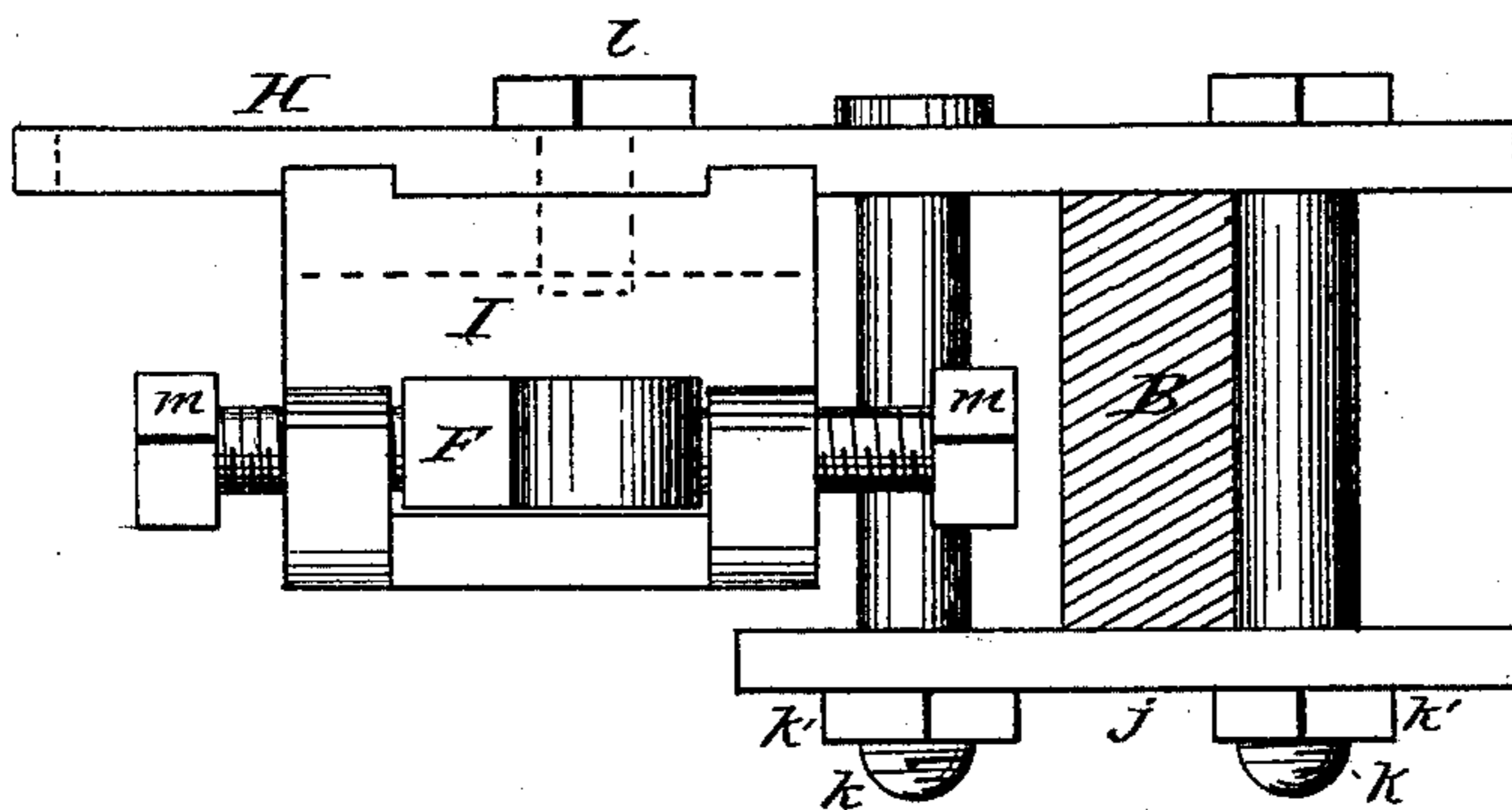


Fig. 4.



WITNESSES

Wm. E. Oliphant,
N. S. Greenaway.

INVENTOR

George Fowler,
per Chas. H. Fowler,
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE FOWLER, OF PHILMONT, NEW YORK.

IMPROVEMENT IN CARD-GRINDING MACHINES.

Specification forming part of Letters Patent No. **175,961**, dated April 11, 1876; application filed January 17, 1876.

To all whom it may concern :

Be it known that I, GEORGE FOWLER, of Philmont, in the county of Columbia and State of New York, have invented a new and valuable Improvement in Card-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of an elevation of my invention; Fig. 2, a detached end view of the horizontal slotted arm, poppet, and their connections; Fig. 3, an inner side view of the same; Fig. 4, a plan or top view.

This invention relates to card-grinding machines, and its object is to provide a ready means whereby the main cylinder and doffer may be ground at one and the same operation; and the invention consists in a horizontally slotted arm, vertical bracket, and vertical poppet, with their several adjusting and clamping connections, as will be hereinafter described, and subsequently pointed out in the claim.

In the accompanying drawings, A represents the frame of the machine, formed with the arches B B', between which is supported the main cylinder C upon the shaft *a*. The large doffer D has its bearings in the frame A, on a line below the axis of the main cylinder C. The emery-wheel, as represented at E, revolves upon a shaft, *b*, the same having its bearings in vertical poppets F F. These poppets, by means of their connections, admit of either a vertical or longitudinal adjustment, for the purpose of regulating the position of the emery-wheel in relation to the main cylinder C and large doffer D, and are formed with opened slotted ends *c*, for the purpose of allowing the ready insertion or withdrawal of

the shaft *b*. The poppet F has screw-threads formed thereon for the reception of clamping-nuts *h i*, which hold the poppet after being adjusted vertically to the lower arm *i'* of the bracket I. The bracket I, as will be seen, has an opening, through which the poppet passes, said poppet, by means of the set-screws *m*, being adjusted longitudinally, to set the emery-wheel E to or from the main cylinder B, while the clamping-nuts *h i*, as before described, allow the poppet to be adjusted vertically, and thereby set the emery-wheel to the doffer D, so as to grind the two at the same time. The bracket I may be adjusted longitudinally within the slotted plate or arm H, and held in the desired position by a set-screw, *l*, passing through the slot and into the side of the bracket. This horizontally-slotted arm H is secured to the arch B by a clamping-plate, *j*, and screw-bolts and nuts *k k'*.

It will be seen that by using the plate *j*, slotted arm H, and the bracket I, the poppet may be connected to any form or size of arch without the necessity of drilling holes, and can be readily connected to any of the arches upon old machines, and by the poppets, with their several adjusting devices, a perfect adjustment is obtained of the emery-wheel in relation to the main cylinder and doffer.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The vertical poppet F, bracket I, clamping-nuts *h i*, and set-screws *m*, in combination with the slotted arm H and clamping-plate *j*, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE FOWLER.

Witnesses:

THOMAS CARROLL,
JOHN BRUSNAHAN.