

H. H. WITT & B. L. SMITH.

GRINDING-MILL.

No. 176,393.

Patented April 18, 1876.

Fig. 1.

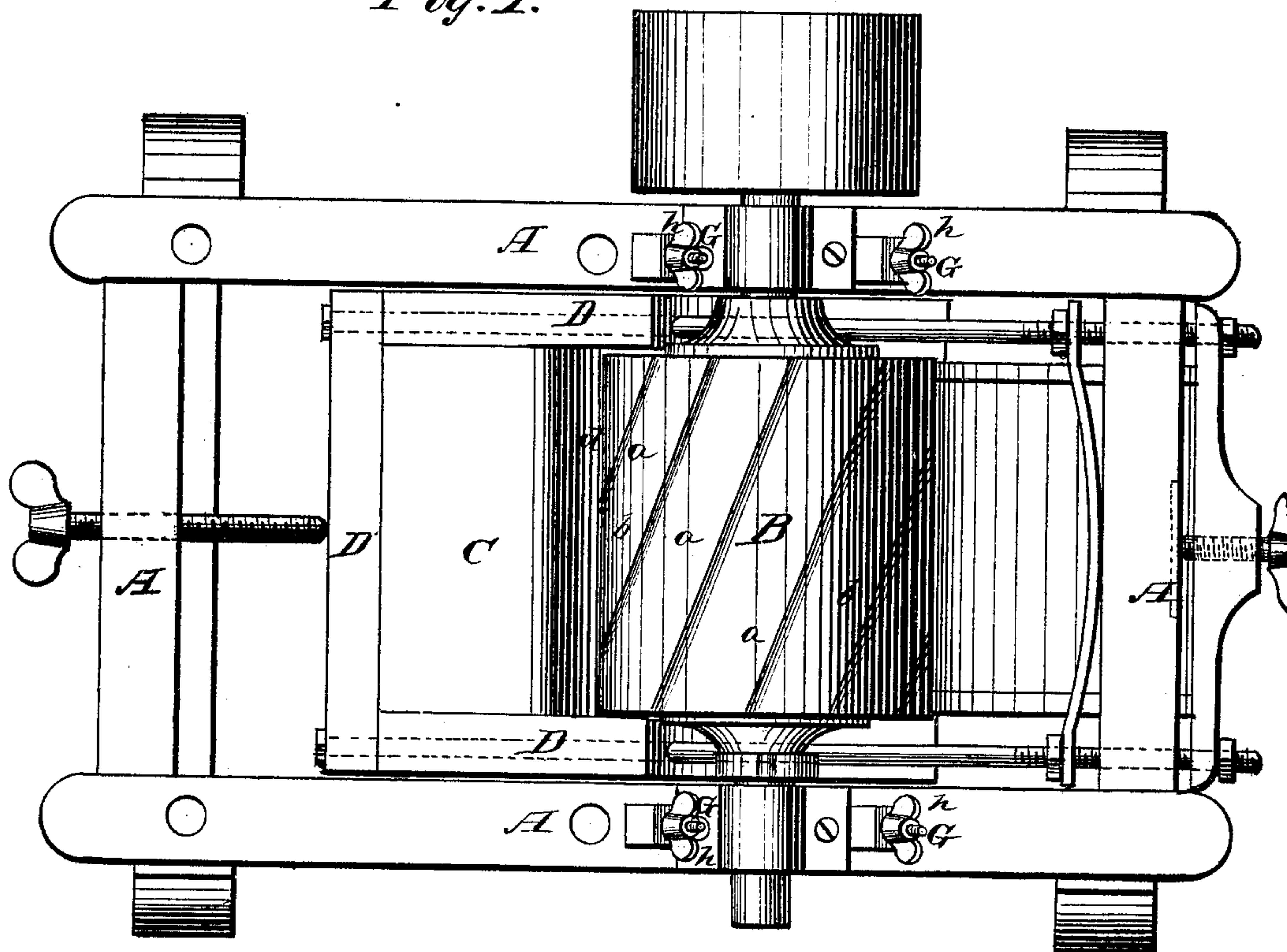
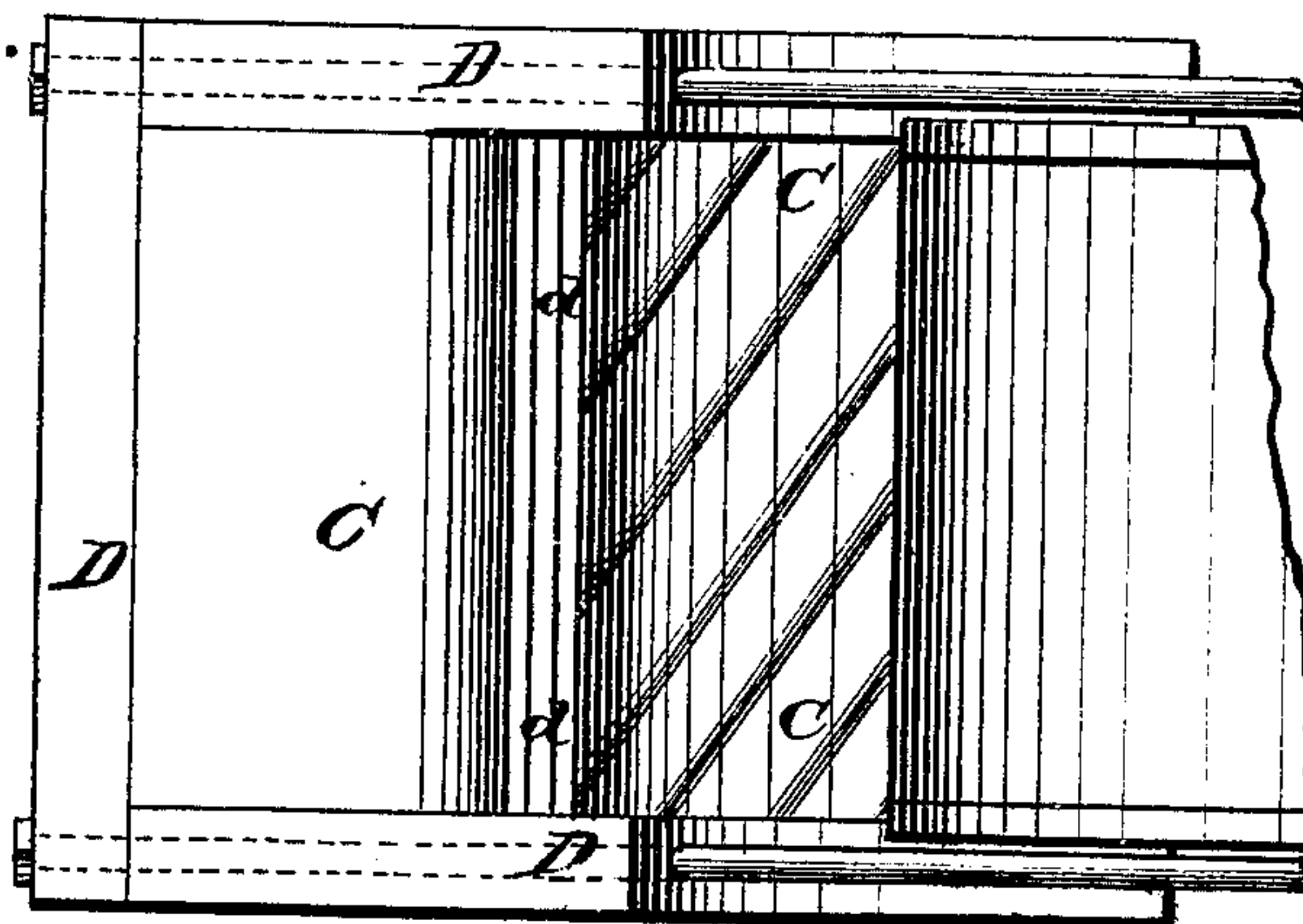


Fig. 3.



Witnesses:
F. C. Dieterich
J. H. Duffy

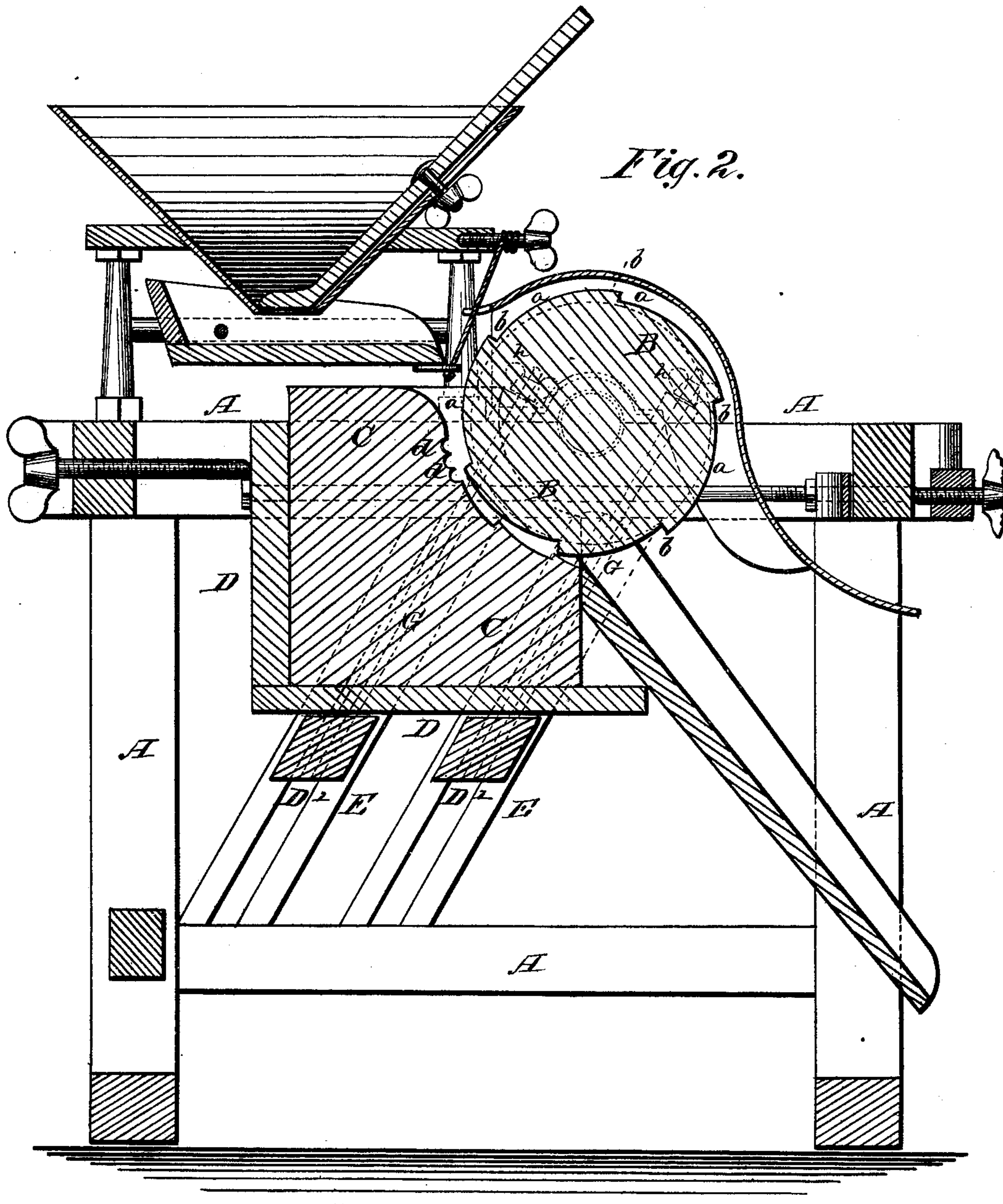
Inventors:
Horace H. Witt,
Benjamin L. Smith

Per: C. H. Watson & Co. Attorneys.

H. H. WITT & B. L. SMITH.
GRINDING-MILL.

No. 176,393.

Patented April 18, 1876.



Witnesses:
F. B. Dieterich
F. H. Duffy

Inventors:
Horace H. Witt
Benjamin L. Smith

Per: C. H. Watson & Co. Attorneys.

UNITED STATES PATENT OFFICE.

HORACE H. WITT AND BENJAMIN L. SMITH, OF GADSDEN, ALABAMA.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. **176,393**, dated April 18, 1876; application filed March 30, 1876.

To all whom it may concern:

Be it known that we, HORACE H. WITT and BENJAMIN L. SMITH, of Gadsden, in the county of Etowah and State of Alabama, have invented certain new and useful Improvements in Grinding-Mills; and we do hereby declare that the following is a full, clear, and exact description thereof, which 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 of reference marked thereon, which form a part of this specification.

Our invention relates to that class of grinding-mills having a cylindrical burr or runner and a segmental adjustable bed-stone; and the nature of our invention consists in the devices for adjusting the bed-stone to the runner, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a plan view, Fig. 2 is a central vertical section, and Fig. 3 is a detail view, of our invention.

A represents the frame or husk of the mill. B is the cylindrical runner, secured upon a horizontal shaft, having its bearings in boxes on top of the side pieces of the frame. The face or periphery of the runner B is formed with a series of spiral or diagonal curved shoulders, *a a*, which are formed by cutting down portions of the surface, as is seen in the sectional view. From the top of each shoulder *a* the surface is on a circle, with the shaft as its center, to a point, *b*, and from this point the surface is cut down to the bottom of the next shoulder.

C represents the concave or bed stone fixed

in a casing, D. This stone is provided with similar shoulders, as described, for the runner-stone; but running in the opposite direction, and near the top of said bed-stone, are two or more horizontal corrugations, forming ribs *d d*, as shown.

The bed-stone casing D has two cross-bars, D' D', secured to its under side, the ends of which project into inclined guides E E formed in the sides of the frame. In the ends of the cross-bars D' are attached rods G G, which extend up through the top side-beams of the frame, and have thumb-nuts *h h* screwed upon their upper ends, by which means the bed-stone is easily adjusted to the runner, so as to grind finer or coarser, as desired.

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

In combination with the bed-stone C and its casing D, the projecting cross-bars D' D', inclined guides E E, rods G G, and thumb-nuts *h h*, substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

HORACE H. WITT.
BENJAMIN L. SMITH.

Witnesses as to H. H. WITT:

C. H. WATSON,
WILLIAM L. BRAMHALL,

Witnesses as to B. L. SMITH:

THOMAS B. SMITH,
JOHN C. LATHAM.