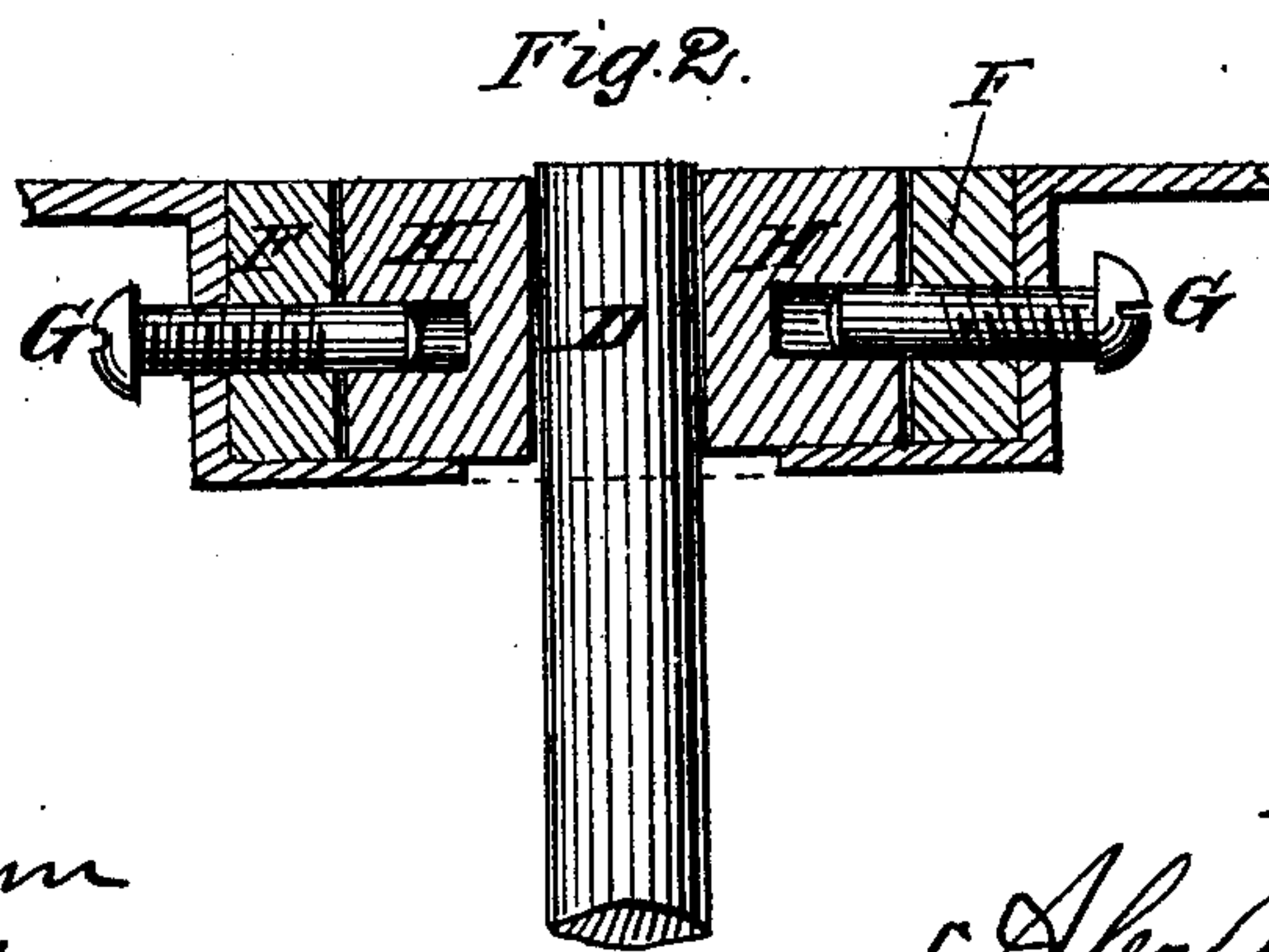
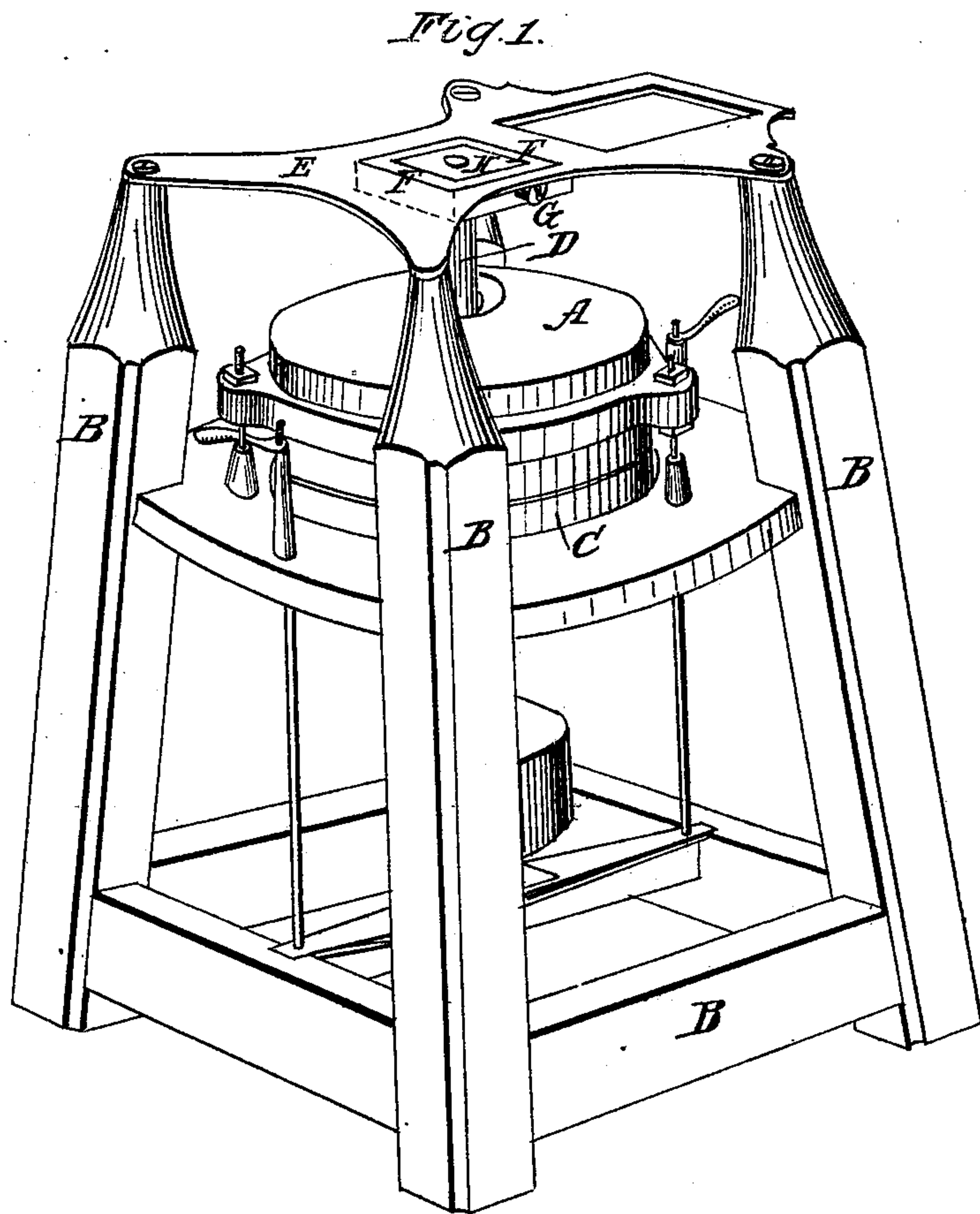


A. W. WINALL.
Grist-Mill Spindle.

No. 91,295.

Patented June 15, 1869.



Witnesses.
Chas Graham
Geo L Gault

Inventor.
Alex W. Winall.

United States Patent Office.

ALEXANDER W. WINALL, OF CINCINNATI, OHIO.

Letters Patent No. 91,295, dated June 15, 1869.

IMPROVEMENT IN HANGING MILLSTONES.

The Schedule referred to in these Letters Patent and making part of the same.

To all-whom it may concern:

Be it known that I, ALEXANDER W. WINALL, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and useful Mode of Rendering a Stiff-Hung Millstone Yielding and Elastic; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The nature of my invention has for its object, to obviate the injury of one side of a stiff-hung millstone, when not in exact, or perfectly true train with its mate A, which is held firm and immovable in the mill-frame B B B B.

The running stone C is made immovably fast on the spindle D.

The hopper-stool E is provided with a square hole, to admit of the device shown in Figure 2, which is drawn on a larger scale, to admit of explanation.

India-rubber packing F F of suitable thickness is placed, as shown at F F, on all sides of the movable

wooden blocking H H, which supports the upper end of the spindle D.

The India rubber, together with the movable wooden blocking, is held in place by the set-screws G G, which also limit the lateral movement of the blocks.

The office of the rubber-packing is to hold the blocking firmly to the spindle-journal but the yielding elasticity in the rubber will obviate the otherwise rigidity of the stiff-hung stone, which will cause the faces of the cutting-edges to shave the delicate sides of wheat-bran without cutting it up into fine specks.

What I claim as my invention, and desire to secure by Letters Patent, is—

Laterally-adjusting journal-blocks H, enclosed by elastic blocks F, and fitted into a cavity in the hopper-stool, and limited in their movement, substantially in the manner and for the purposes described.

ALEX. W. WINALL.

Witnesses:

HENRY HEBLER,
D. E. ADAMS.