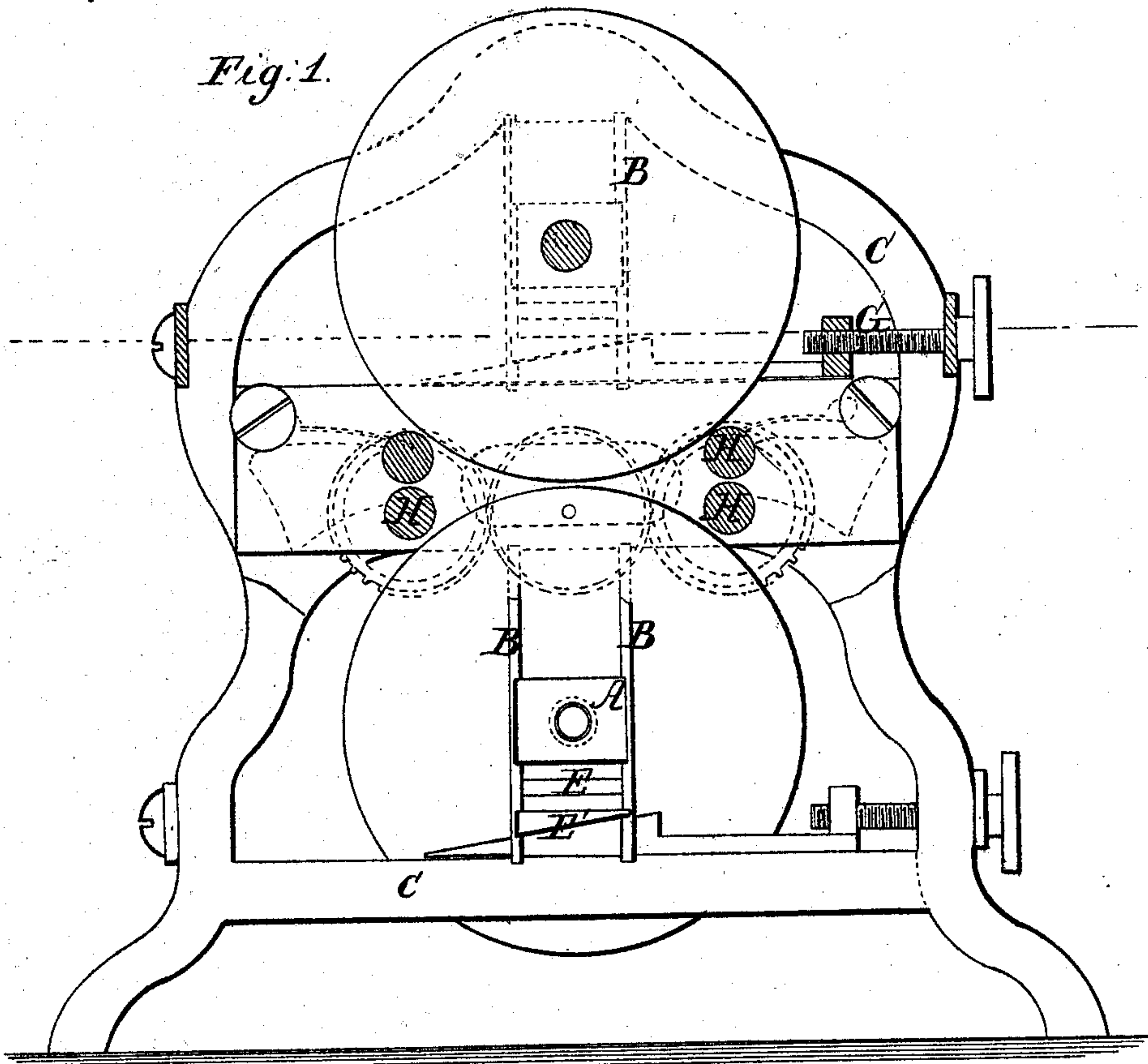
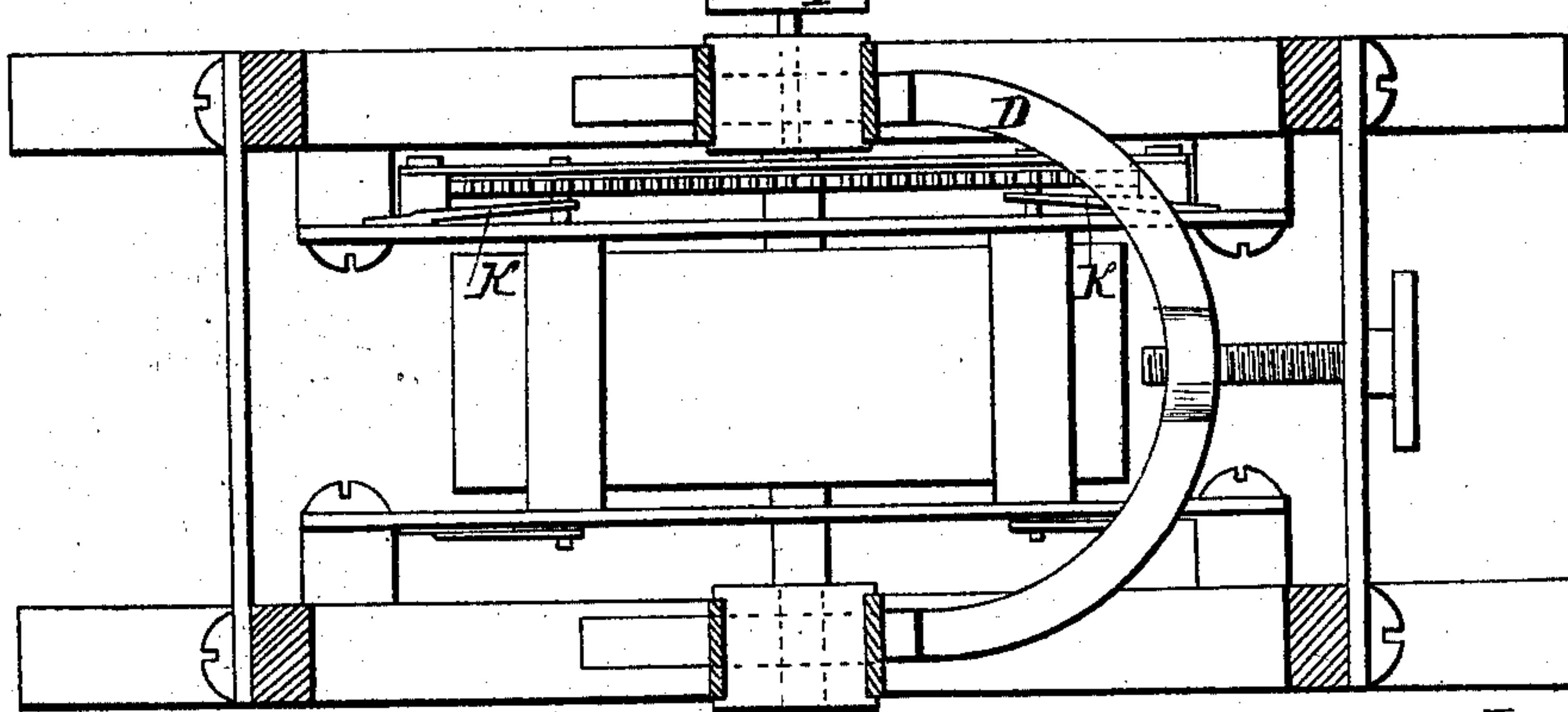


*T. Gamble.*  
*Saw Grinding Mach.*  
*Nº 90,163. Patented May 18, 1869.*

*Fig. 1.*



*Fig. 2.*



*Witnesses;*  
*Anna Morgan*  
*Philip Dieterich*

*Inventor;*  
*T. Gamble*  
*Merrill & Co*



# United States Patent Office.

THOMAS GAMBLE, OF RICHMOND, VIRGINIA.

*Letters Patent No. 90,163, dated May 18, 1869.*

## IMPROVEMENT IN SAW-GRINDING MACHINES.

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, THOMAS GAMBLE, of Richmond, in the county of Henrico, and State of Virginia, have invented a new and useful Improvement in Saw-Grinding Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in machines for grinding saws, the object of which is to provide a more convenient method of adjusting the stones as they wear away.

It consists in an improved method of arranging the bearings of the journals for adjustment, as will be more fully hereinafter described.

Figure 1 represents an elevation, partly longitudinal and partly sectional, of my improved machine, and

Figure 2 represents a plan view, with a part of the framing removed.

Similar letters of reference indicate like parts.

The journal-boxes A, of the stones, are arranged to be capable of vertical movement between housings B, both for the upper and lower stones, arranged in detachable connection with the side framings C, and to some extent maintained in their position by the yoke-connections D of the wedges used for adjusting the bearings, which latter rest upon blocks which may be readily introduced under the said bearings, or taken therefrom as the stones change in diameter.

The blocks E, next above the wedges, are provided with one inclined face, in order to preserve the upper face in which the other blocks rest in a horizontal plane.

As the lower stone wears away, the blocks are added under the bearings, while they are removed from the upper boxes.

The wedges E' are connected to the yokes D, which are provided with the screws G, for moving them one way or the other under the boxes, or the blocks on which the boxes rest.

H represents feeding-rollers for conveying the saws, or other articles to be ground, back and forth under the stone, of which the lower ones are connected together by a system of gearing, to cause each set to move uniformly together. They may be operated by power applied to the wheel I, or otherwise; and the upper rollers are borne down against the lower ones by springs bearing on their journals.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination of the housings B, boxes A, blocks E and wedges, connected by the adjustable yokes D, when arranged substantially as and for the purpose described.

THOMAS GAMBLE.

Witnesses:

H. P. CLINTON,  
WM. T. ALLEN.