

W. B. Deuel.

Sharpening Mach.

N<sup>o</sup> 96,402.

Patented Nov. 2, 1869.

Fig. 1.

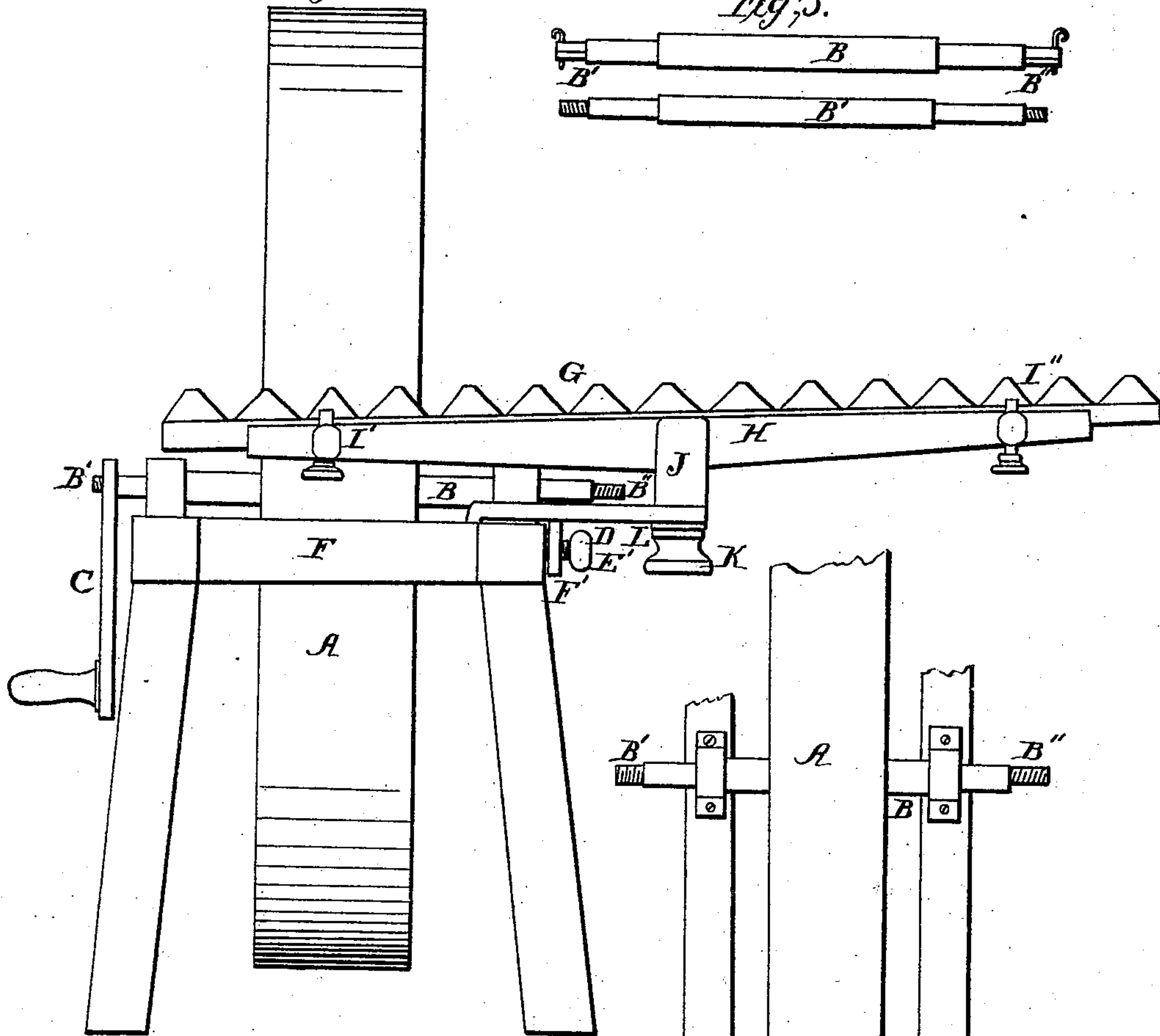


Fig. 3.

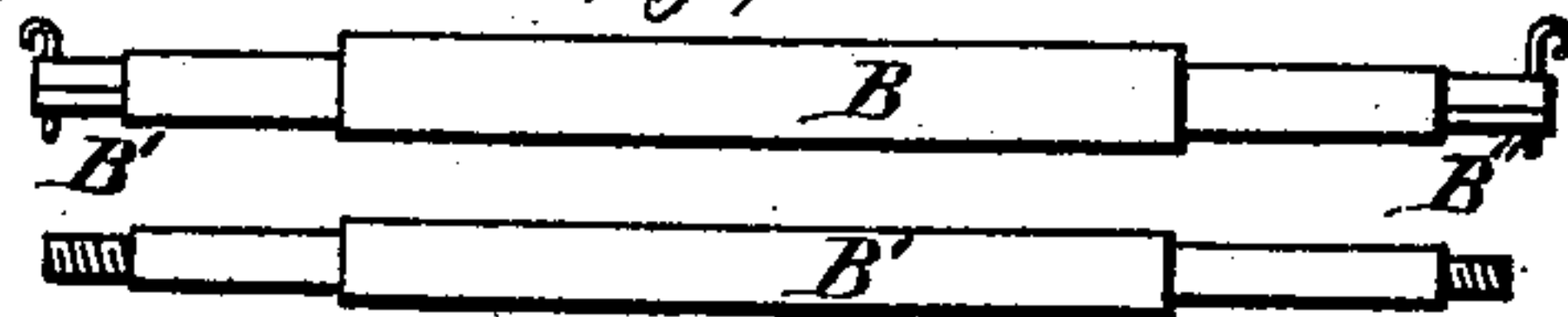
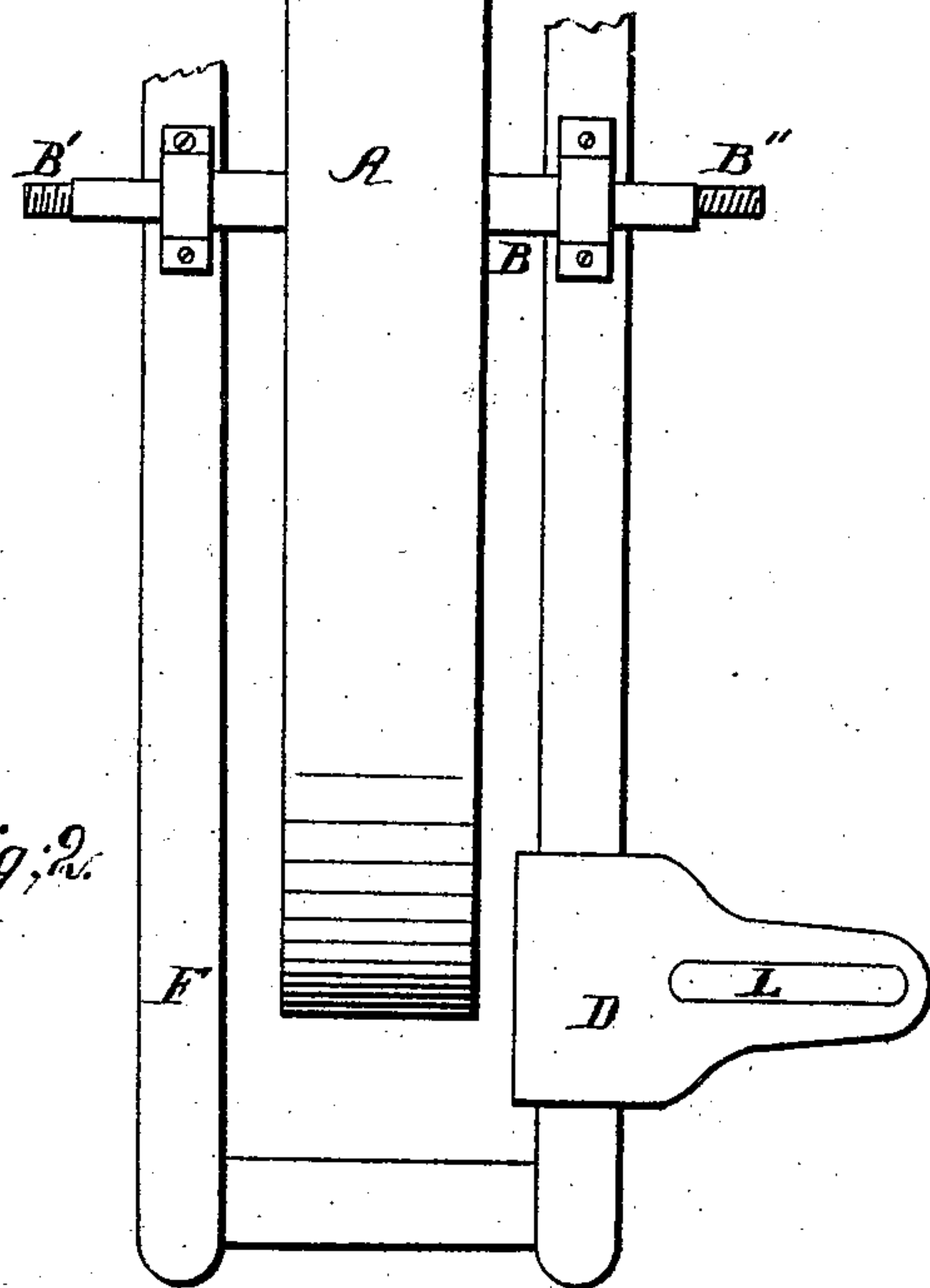
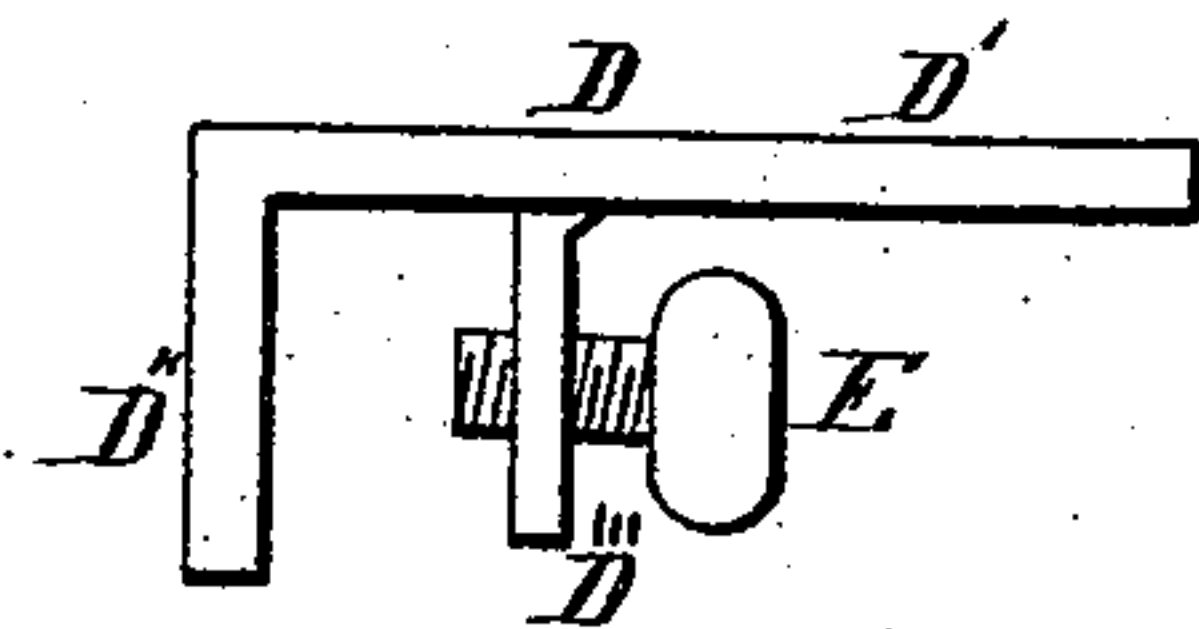


Fig. 2.



Witnesses:

Samuel J. Parker.  
Chas. F. Stinson.

Inventor;

William B. Deuel

# United States Patent Office.

WILLIAM B. DEUEL, OF ITHACA, NEW YORK.

Letters Patent No. 96,402, dated November 2, 1869.

## IMPROVEMENT IN GRINDERS FOR HARVESTER-CUTTERS.

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, WILLIAM B. DEUEL, of Ithaca, Tompkins county, New York, have invented an Improved Hay-Harvester Knife-Grinding Machine or Sharpener; and I do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters thereon.

Figure 1 is an end view of a common grindstone, to which my device is attached by its arm or table.

Figures 2 are views of my arm or plate, which holds the knives to the stone, at the four corners of the frame.

Figure 3 is a view of my axis to the stone, detached to show its structure.

My object in this, as it was in a similar device, patented to me on the 3d day of November, 1868, and numbered 83,767, is to make an attachment that can be readily adjusted to any ordinary grindstone in common use, and in such a manner that the ordinary flat face of the stone shall be kept and used. This requires a means of attachment to the common frame of the stone, and that the knife-holder be adjustable to any one or all of the four corners of the stone, in the corners of the frame.

My means of doing this will be seen as I describe them.

In fig. 1, A is the grindstone, such as is in common use;

B is its axis, made by me to have screw-threads or other equivalent means, so that the crank C can be attached to either end, at B' or B"; and

D is the arm or plate, by the set-screw E, attached to the sides F' or F", and is thus adjustable to any one of the four corners of the frame F, and thus

brings the knives G in reach of the right angles which the stone presents to the corners of the frame.

The knives are on the usual rod, and held in the holder H by the hooks I' and I", and the holder is adjustable in a slot, L, in the plate D, and turns on a bolt through the knob J, which is set by the burr K.

In figs. 2 are seen both a side detached view of the plate D, and a top view of the same, on the stone frame.

In figs. 3, the axis B, with ends to attach the crank, is seen.

The uses of my invention are apparent to those skilled in the art to which it appertains.

I claim—

1. The arrangement of the arm D, formed of the horizontal part D, provided with slot L, and the two clamping perpendicular parts D' and D", and set-screw E, in combination with the sides F' and F" of a common grindstone, for the purpose of holding a harvester-knife holder to any one one of the corners of the stone, for the grinding of the said knives, substantially as set forth.

2. The combination of the holder H and its hooks I' and I", stud J, and its bolt, with its set-screw K on the lower end thereof, with the slotted arm D, substantially as set forth.

3. The combination of the holder H and hooks I' I", stud J, bolt and set-screw K, adjustable by the slot L in the arm D, the arm D clamping, by the set-screw E, the sides F' F", arranged substantially as and for the purposes set forth.

WM. B. DEUEL.

Witnesses:

SAMUEL J. PARKER,  
CHAS. S. WIXOM.