

W. N. SPRAGUE.

MACHINES FOR CUTTING SHANK STIFFENERS.

No. 184,051.

Patented Nov. 7, 1876.

Fig. 1.

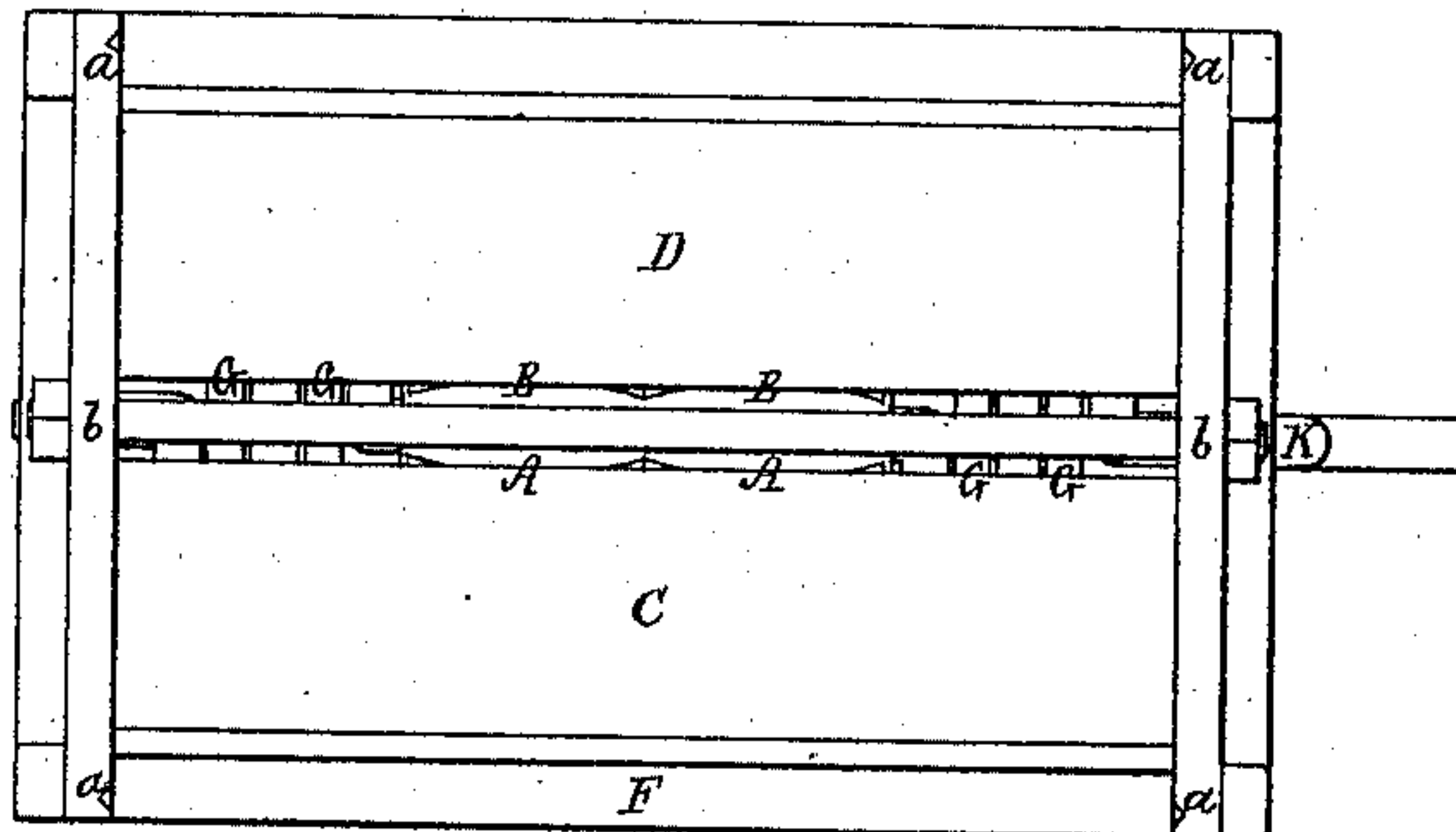


Fig. 2.

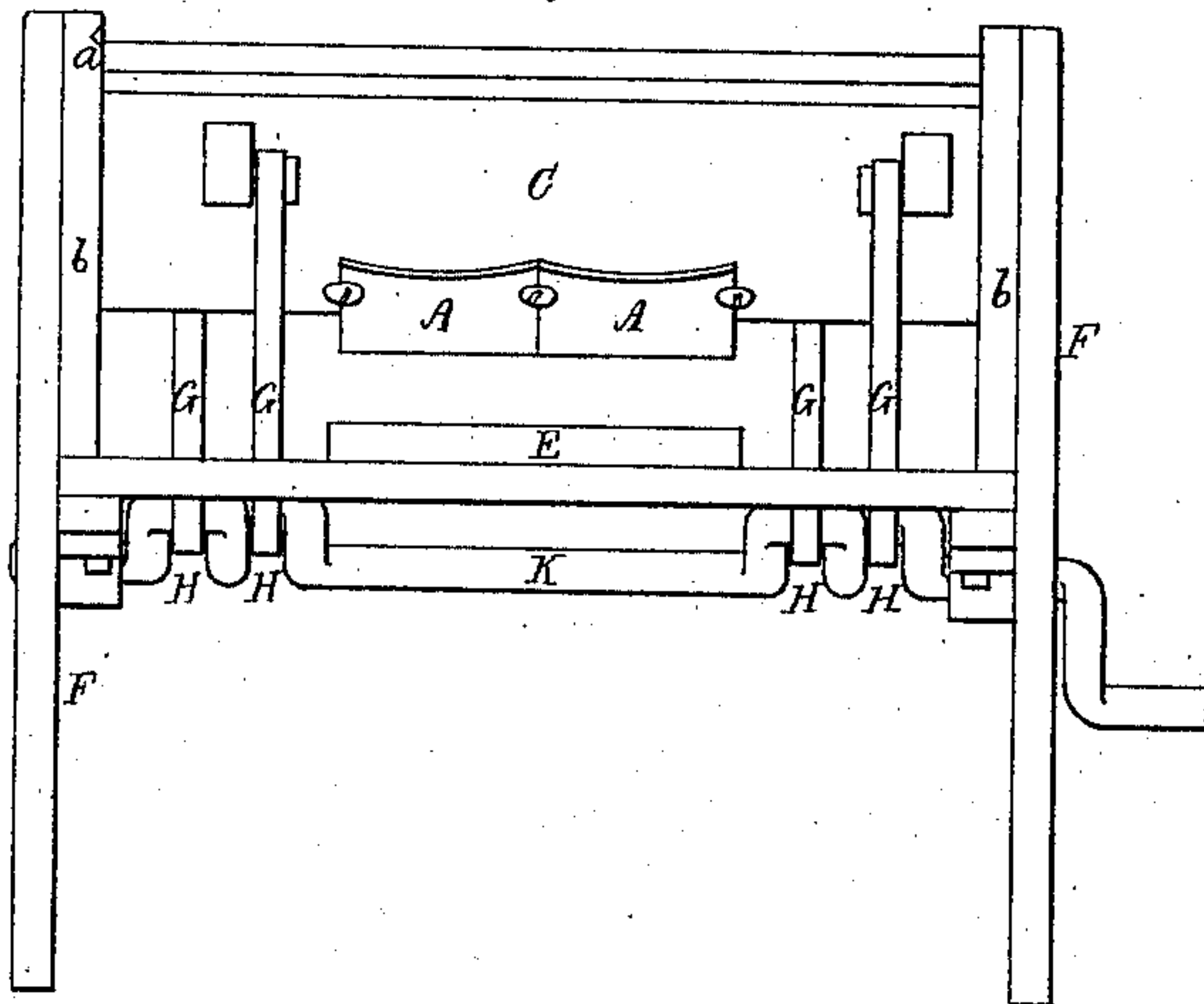


Fig. 3.

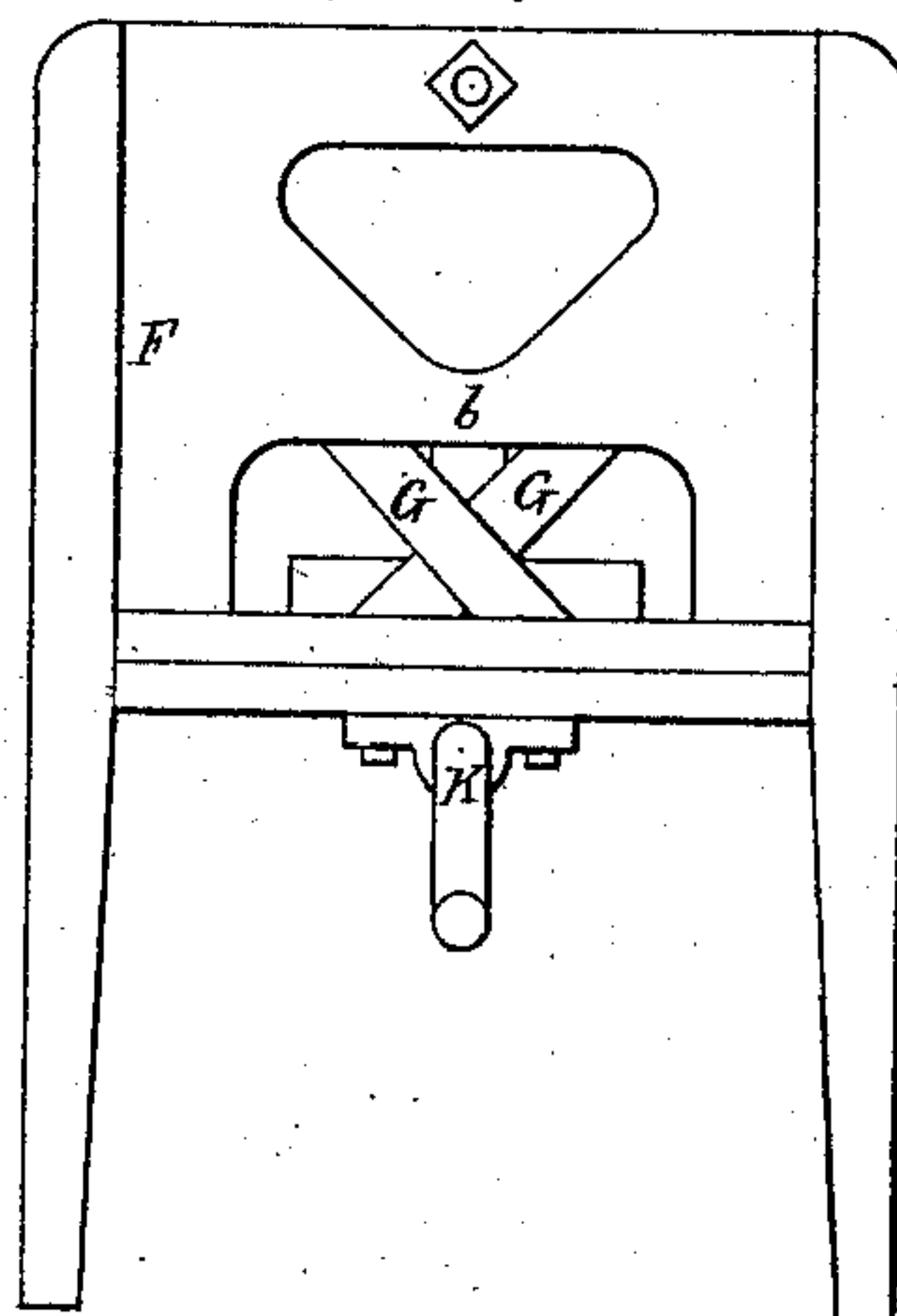


Fig. 5.

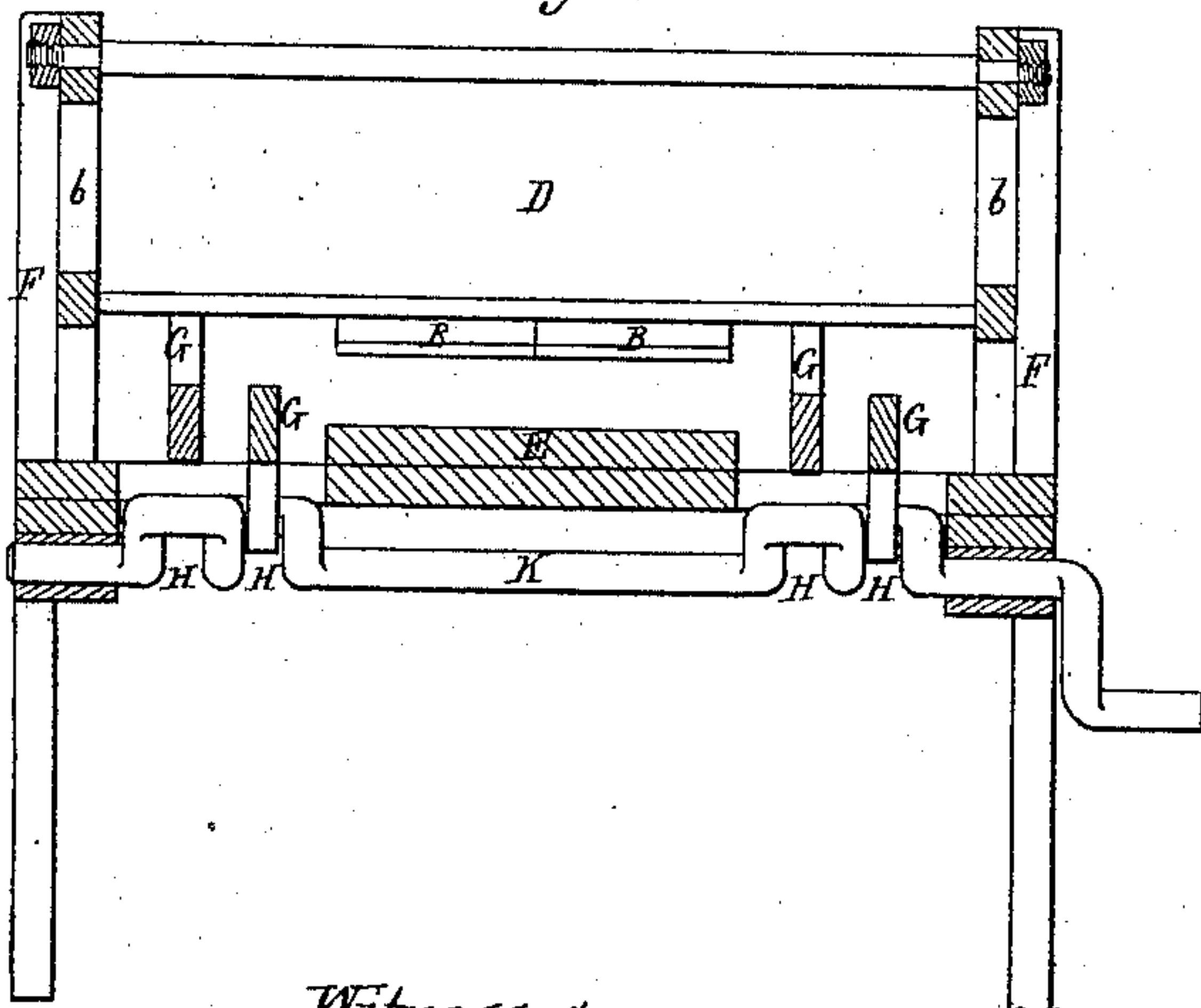
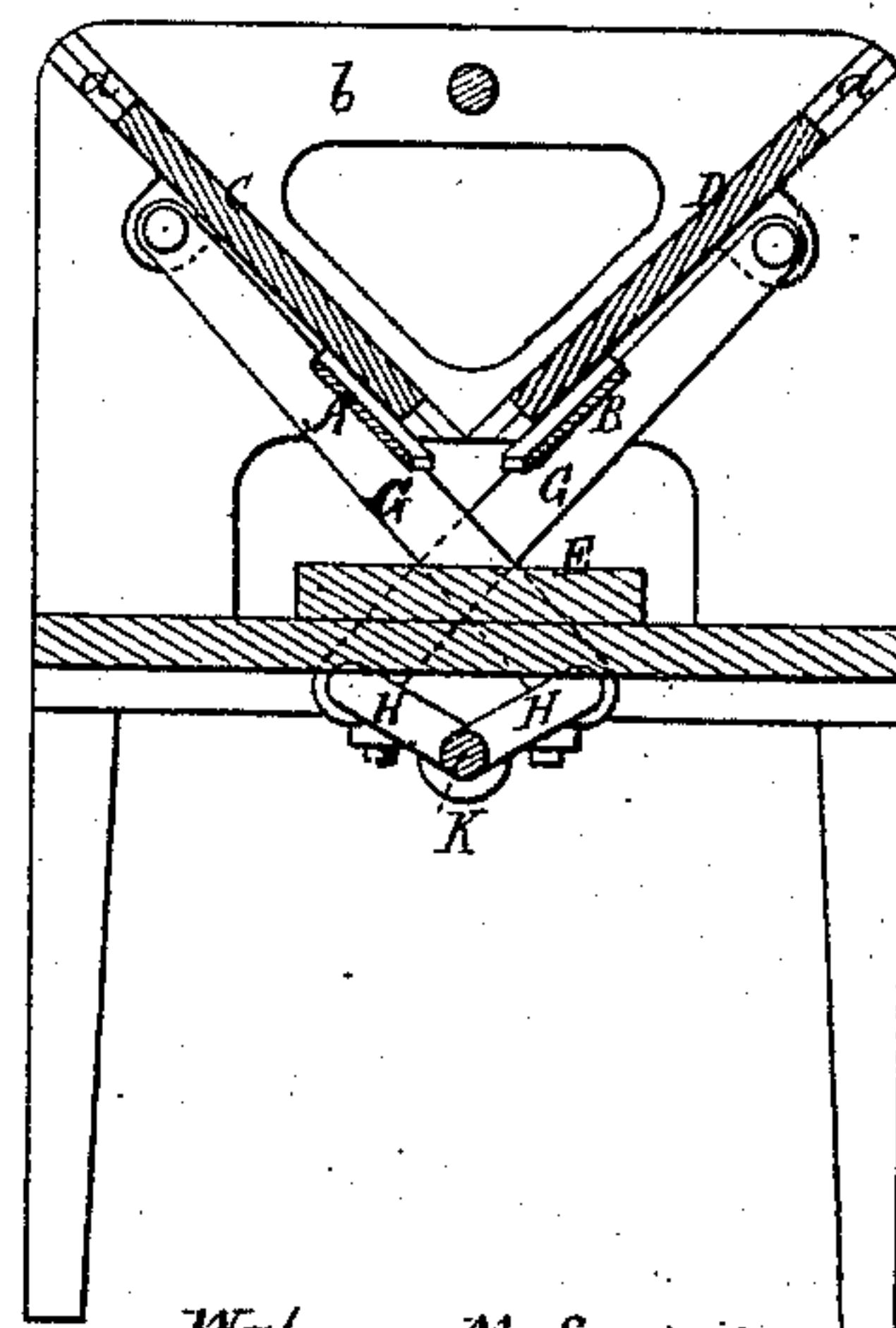


Fig. 4.



Witnesses:  
S. W. Piper.  
S. W. Miller.

Watson N. Sprague.  
by his attorney.  
R. H. Edg.

# UNITED STATES PATENT OFFICE

WATSON N. SPRAGUE, OF SOUTH FRAMINGHAM, ASSIGNOR TO HIMSELF  
AND WILLIAM W. POTTER, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN MACHINES FOR CUTTING SHANK-STIFFENERS.

Specification forming part of Letters Patent No. **184,051**, dated November 7, 1876; application filed  
November 17, 1875.

*To all whom it may concern:*

Be it known that I, WATSON N. SPRAGUE, of South Framingham, of the county of Middlesex and State of Massachusetts, have invented a new and useful Machine for Cutting, from a sheet of leather or other suitable material, Shank-Stiffeners for the soles of boots or shoes; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a top view, Fig. 2 a side elevation, Fig. 3 a front end view, Fig. 4 a transverse section, and Fig. 5 a longitudinal section, of such machine.

In this machine there is employed with a bed, for the support of the material to be cut, two reciprocating knives, which are inclined to the bed, each of them while in movement being made to cross the path of the other, whereby they are caused to cut from the sheet a shank-stiffener, beveled in opposite directions on its opposite edges.

In the drawings, A and B represent the said knives, which are fixed to carriers C D, inclined to each other and the bed E in manner as shown. These carriers are supported in inclined grooves *a a a a*, made in the two opposite side portions *b b* of the frame F for supporting the bed E.

To each of the carriers two connecting-rods, G G, are hinged, they at their lower parts being secured to bell-cranks H H of a horizontal shaft, K, all being arranged as represented.

On revolving the shaft each knife will not only be moved toward and away from the bed, but in doing so will cross the path of the other knife, whereby the sheet of material supported on the bed and cut through, first by one knife and next by the other, will be in the form of a shank-stiffener and be beveled in opposite ways at its edges.

The sheet may be advanced on the bed, as occasion may require, by hand or by a suitable feeding mechanism applied to it or the bed.

I claim—

In a machine for making shank-stiffeners, the combination of the bed E, the knives A B, and means for operating such knives, substantially as set forth, whereby such knives are alternately reciprocated each across the pathway of the other, so that the material, after being cut by them, is beveled at opposite edges, as and for the purpose described.

WATSON N. SPRAGUE.

Witnesses:

R. H. EDDY,  
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