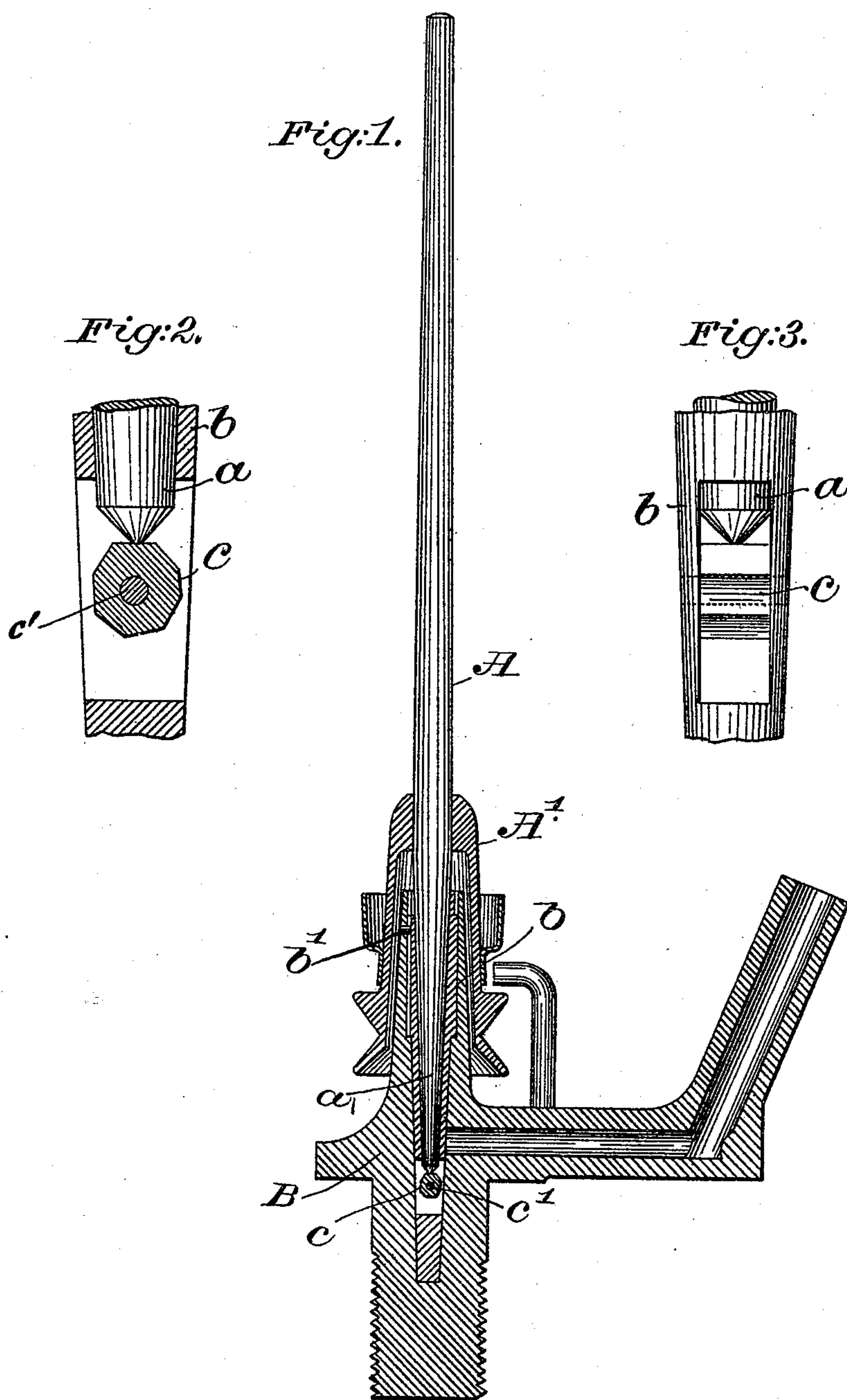


(No Model.)

W. E. ALLEN.  
SPINDLE AND ITS SUPPORT.

No. 494,453.

Patented Mar. 28, 1893.



Witnesses.

Louis N. Gouell

John F. C. Printz

Inventor.

William E. Allen.

by Crosby & Gregory  
Attys.

# UNITED STATES PATENT OFFICE,

WILLIAM E. ALLEN, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE  
SAWYER SPINDLE COMPANY, OF HOPEDALE, MASSACHUSETTS.

## SPINDLE AND ITS SUPPORT.

SPECIFICATION forming part of Letters Patent No. 494,453, dated March 28, 1893.

Application filed May 20, 1892. Serial No. 433,694. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. ALLEN, of Providence, county of Providence, State of Rhode Island, have invented an Improvement in Spindles and their Supports, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 In that class of spindles wherein the pintle below the sleeve whirl is a taper and fits a tapering bearing, means have to be provided for adjusting the foot step so as to compensate for wear or to insure proper contact  
15 between the pintle and bearing. To effect this result, I have combined with the spindle and its bearing a many sided rotatable eccentrically mounted step, any side of which may be put uppermost as desired to support the  
20 end of and constitute a step for the spindle.

Figure 1, in section shows a spindle support embodying this invention, the spindle therein being shown in elevation; and Figs. 2 and 3, are enlarged details to be referred to.

25 The spindle A, having a tapering pintle *a*; the sleeve whirl A'; the supporting case B, having the bolster or lateral bearing *b* tapered internally to fit the taper of the spindle, and the pin or projection *b'* to restrain the  
30 rotation of the bolster bearing, are and may be all as usual.

In accordance with my invention I have combined with the lower end of the bolster *b* a many sided rotatable step *c*, said step be-

ing herein represented as an octagonal block, 35 rotatable about an eccentrically located center at *c'*.

When the spindle is new and first started the face most distant from the center of rotation of the step block, as in Fig. 2, can be 40 put uppermost for the reception of the foot of the pintle, and as required, one after the other of said faces may be put uppermost.

Having described my invention, what I claim, and desire to secure by Letters Patent, 45 is—

1. The combination with the bolster and spindle, of a many-faced rotatable step-block eccentrically pivoted in the bolster, to operate, substantially as described. 50

2. The supporting case, a bolster bearing therein tapered internally to receive the tapered lowered end of a spindle, combined with an irregularly faced polygonal step-block contained within the supporting case, where- 55 by by the rotation of the said step block, the position of the spindle vertically with relation to its bolster may be regulated to compensate for wear between the spindle and bolster, substantially as described. 60

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM E. ALLEN.

Witnesses:

HENRY J. MILLER,  
M. F. BLIGH.