

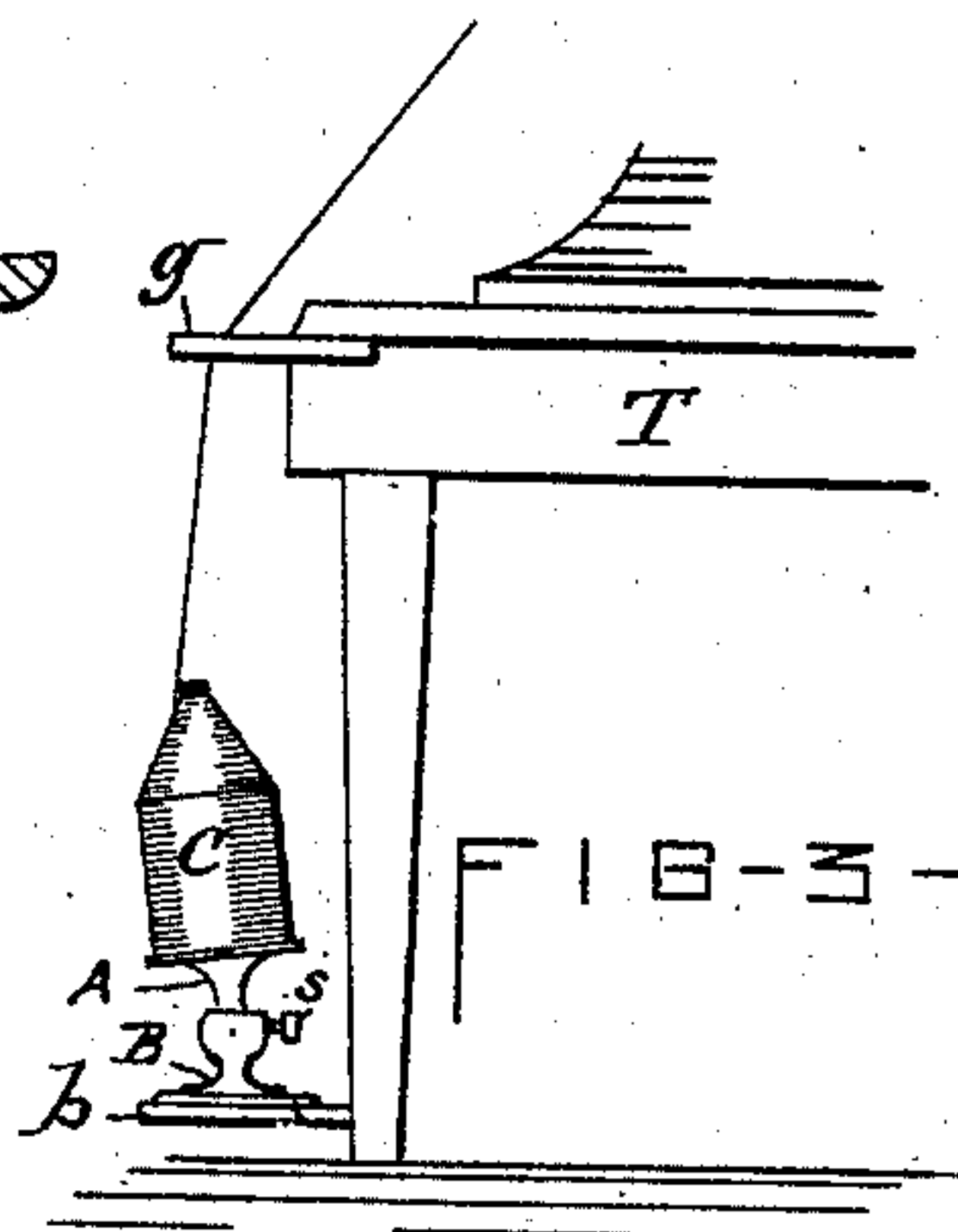
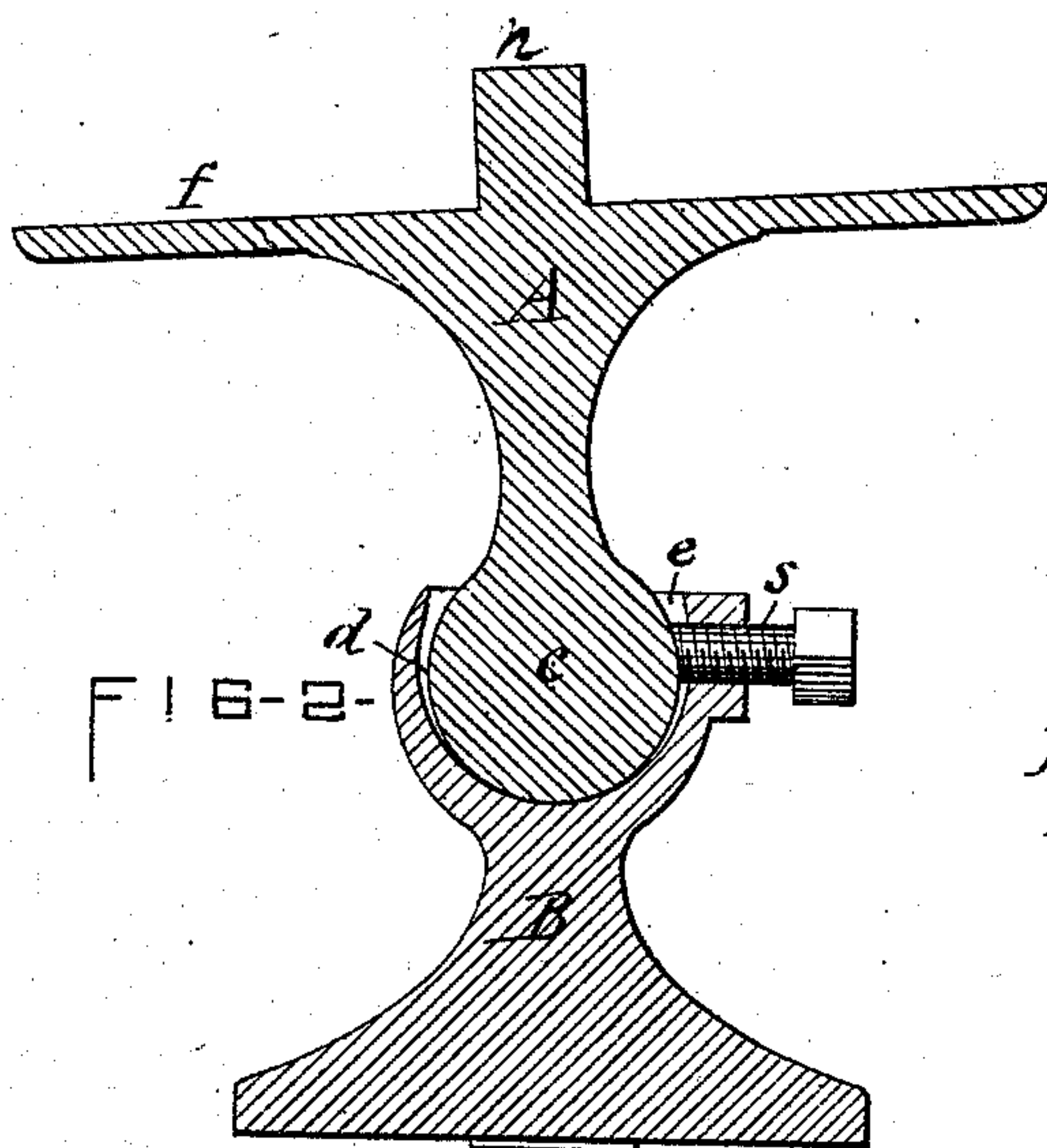
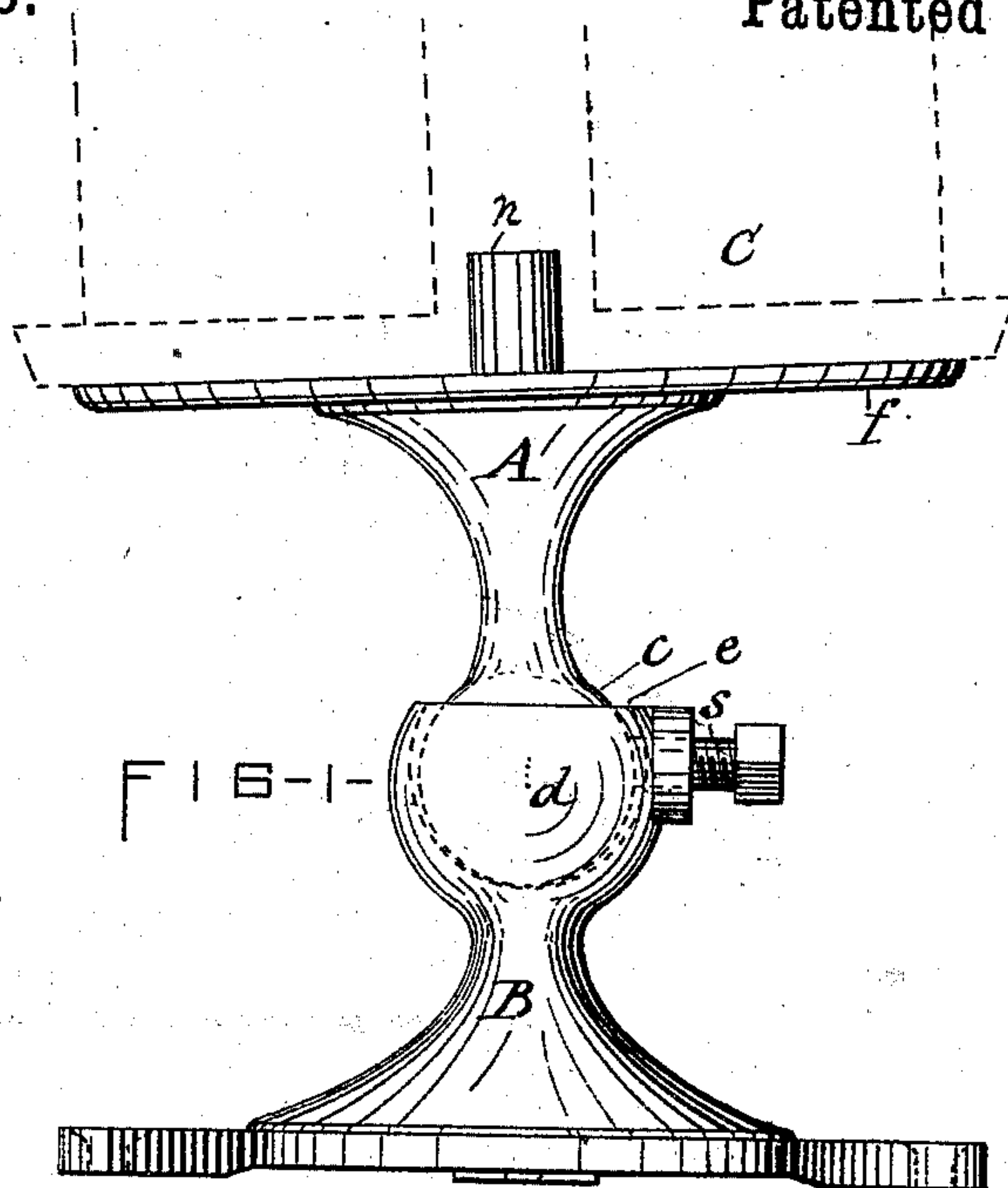
(No Model.)

W. DENTON.

BOBBIN HOLDER FOR KNITTING MACHINES.

No. 270,208.

Patented Jan. 9, 1883.



WITNESSES—  
C. W. E. Raymond  
F. H. Gibbs

INVENTOR—  
Whitley Denton  
per Paul, Laas & Co.  
his Attorneys



# UNITED STATES PATENT OFFICE.

WHITLEY DENTON, OF LITTLE FALLS, NEW YORK.

## BOBBIN-HOLDER FOR KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 270,208, dated January 9, 1883.

Application filed September 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WHITLEY DENTON, of Little Falls, in the county of Herkimer, in the State of New York, have invented new and useful Improvements in Bobbin-Holders for Knitting-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists in a novel construction of a stand or holder designed to carry the bobbins on knitting-machines, the object of the invention being to render the said holder adjustable, so as to admit of changing the axis of the bobbin mounted on said holder from a vertical to an inclined position, and thereby carry the yarn or thread from the bobbin either in a direct or deflected direction to the usual thread-guide, which is attached to the table of the machine above the bobbin, the aforesaid variations in the directions of the yarn or thread varying the tension on the latter.

The invention is fully illustrated in the annexed drawings, wherein Figure 1 is an elevation of my invention. Fig. 2 is a vertical transverse section of the same; and Fig. 3 is a view, on a reduced scale, illustrating the application of my invention to a knitting-machine.

Similar letters of reference indicate corresponding parts.

B denotes the base of the bobbin stand or holder, adapted to be secured to the usual bracket, *b*, attached to the foot of the table on which the knitting-machine is mounted. (See Fig. 3 of the drawings.) Said base is provided on its top with a socket, *d*, in which is stepped the upper section, A, of the holder, consisting of a horizontal disk, *f*, having in the center of its top an upward-projecting pin or gudgeon, *n*, on which to pivot the bobbin seated on said disk. From the center of the under side of the disk *f* projects a shank, which terminates with a ball, *c*, by which said upper section, A, rests in the socket *d*. The open end *e* of said socket is of a diameter to allow the ball *c* to be inserted through it. The aforesaid ball and socket joint affords a universal movement to the upper section, A, and thus allows the bobbin C, mounted on the disk *f*, to be tilted and

thrown from a vertical into an inclined position. The yarn or thread, passing from the bobbin through the usual thread-guide, *g*, attached to the edge of the table T, on which the knitting-machine is mounted, becomes deflected in its direction to the thread-guide *g* by the aforesaid tilting of the bobbin, as illustrated in Fig. 3 of the drawings. This deflection increases the tension of the thread or yarn as may be desired. By means of a set-screw, *s*, inserted through the side of the socket *d* and bearing on the ball *c*, the upper section, A, is clamped in the desired position.

In order to obtain the proper hold of the set-screw *s* on the ball *c*, I arrange the former above the center of the latter, as best shown in Fig. 2 of the drawings.

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

1. A bobbin-holder composed of an upper and lower section connected by a universal joint, and a clamping device for securing the upper section in its desired position, as and for the purpose set forth.

2. The within-described bobbin-holder, consisting of the upper section, A, composed of the disk *f*, provided with the gudgeon *n* and ball *c*, and the base B, provided with the socket *d* and set-screw *s*, as described and shown.

3. In combination with the upper section, A, provided with the ball *c*, the base B, formed with the socket *d*, having the opening *e* of a size to receive through it the ball *c*, and the set-screw *s*, inserted through the side of the socket and bearing on the ball *c*, above the center thereof, substantially in the manner and for the purpose shown and set forth.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Little Falls, in the county of Herkimer, in the State of New York, this 26th day of August, 1882.

WHITLEY DENTON. [L. S.]

Witnesses:

WATTS T. LOOMIS,  
SYLVANIS HOLMES.