

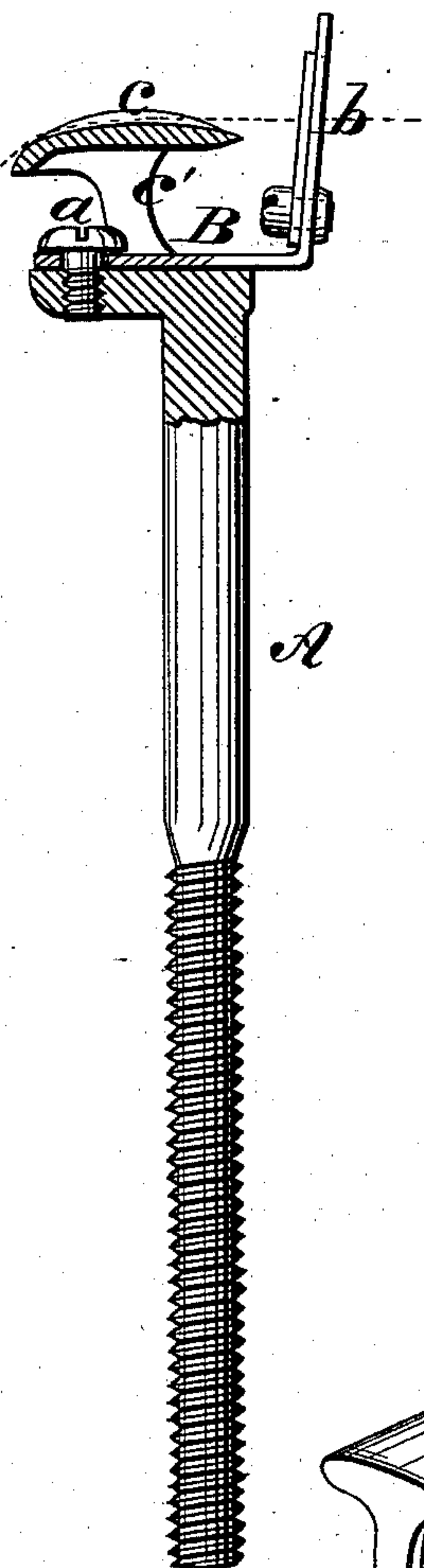
(No Model.)

C. G. TRAFTON.  
Thread Guide for Spooling Machines.

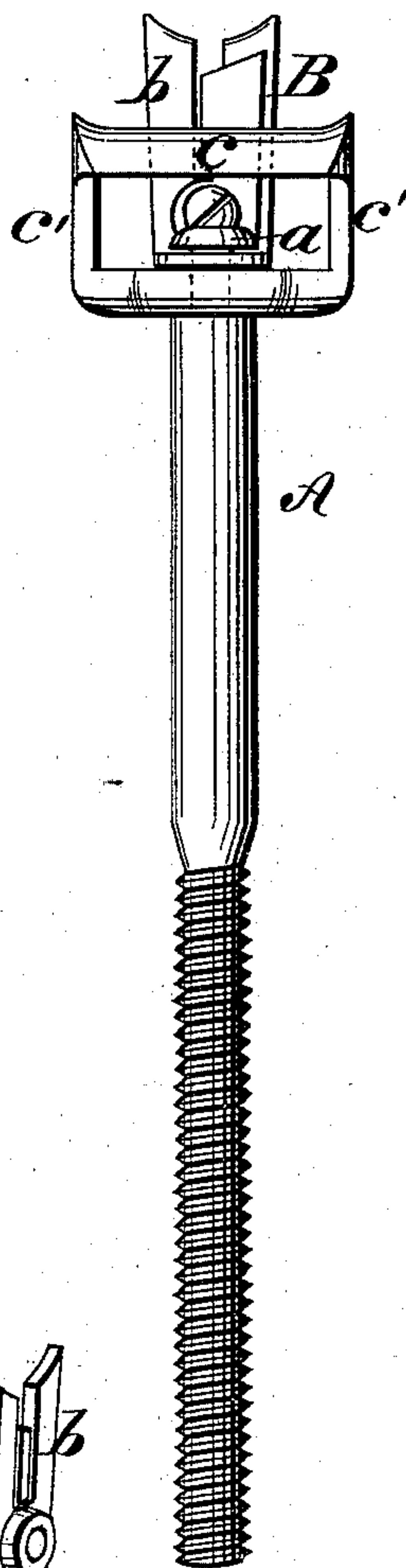
No. 238,992.

Patented March 15, 1881.

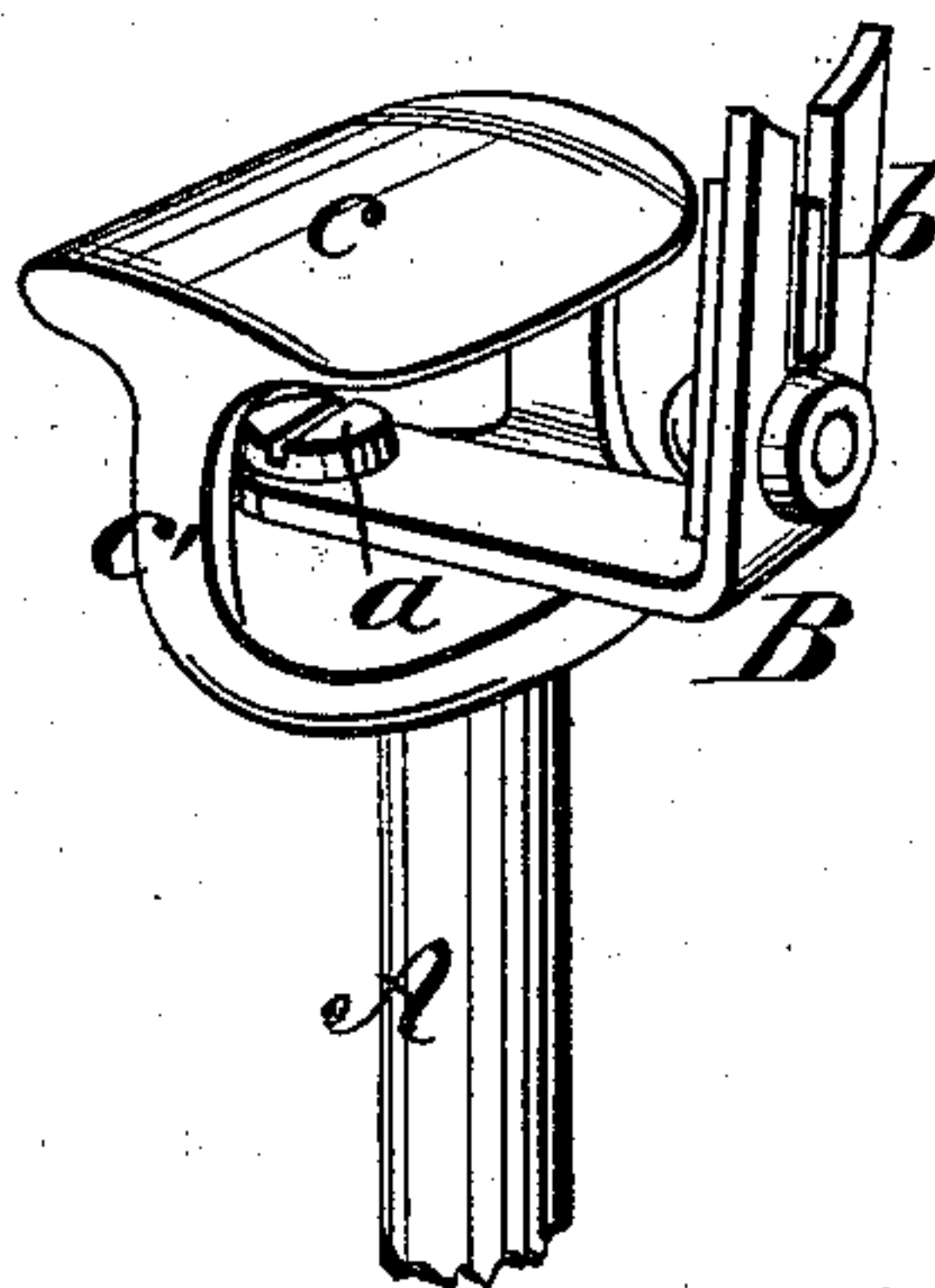
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Donn J. Twitchell.*  
*C. Seagwick*

INVENTOR:

*C. G. Trafton*  
BY *Munn & Co*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES G. TRAFTON, OF SLATERSVILLE, RHODE ISLAND.

## THREAD-GUIDE FOR SPOOLING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 238,992, dated March 15, 1881.

Application filed November 11, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES G. TRAFTON, of Slatersville, in the county of Providence and State of Rhode Island, have invented a new and Improved Thread-Guide for Spooling-Machines, of which the following is a specification.

My improvements relate to thread-guides for use in spooling-machines, to guide the thread as it runs from the bobbin to the larger spool. A self-adjusting guide for that purpose is shown in the Letters Patent granted to me July 27, 1880.

The object of my present invention is to relieve the self-adjusting guide of all pressure tending to increase the friction of its movement, so that the action shall be most delicate; and the invention consists in a guide-plate pivoted to a supporting-rod that is formed with the friction-surface over which the yarn runs, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a sectional side elevation of my improved thread-guide. Fig. 2 is an elevation of the same at right angles to Fig. 1, and Fig. 3 is a top perspective view.

Similar letters of reference indicate corresponding parts.

A is the supporting-rod, fitted for being screwed into the rail of the spooling-machine, and formed with a flanged head.

B is the guide-plate, attached upon the head of rod A by screw *a*, so that the plate may swing freely in a horizontal plane. The guide-plate is preferably made of sheet-steel stamped to shape, and is formed at its outer end with a flange, *b*, that is slotted for the yarn to pass through.

The rod A is formed or fitted with a curved cap-piece, *c*, supported on the head of the rod and above the plate B by side arms, *c'*, which also limit the swinging movement of the guide-piece. The cap *c* is the friction-surface over which the yarn runs, and, if desired, may be made in tubular or other form.

In use the yarn from the bobbin passes over the cap *c*, and through the slot of flange *b*, to the spool on which it is to be wound. The guide-plate readily adapts itself to the direction of the yarn as the spool increases in size, so that the yarn passes in a direct line from bobbin to spool. The downward pressure of the yarn is taken on the surface of cap *c*, so that the guide-piece is relieved of such pressure. Its action is therefore most delicate, the draft on the yarn is equal at all times, and there is no tendency to wear a groove in the side of the yarn-slot.

This construction furnishes a guide that is durable and perfectly self-adjusting when used with any size of yarn.

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

The combination, with the rod A, having a flanged head and a cap-piece, *c*, supported by arms *c'*, of the guide-plate B, secured to head by screw *a*, and provided with the slotted flange *b*, arranged with respect to the cap-piece as shown and described.

CHARLES G. TRAFTON.

Witnesses:

ERNEST B. WOOD,  
ISAAC T. HOLMAN.