

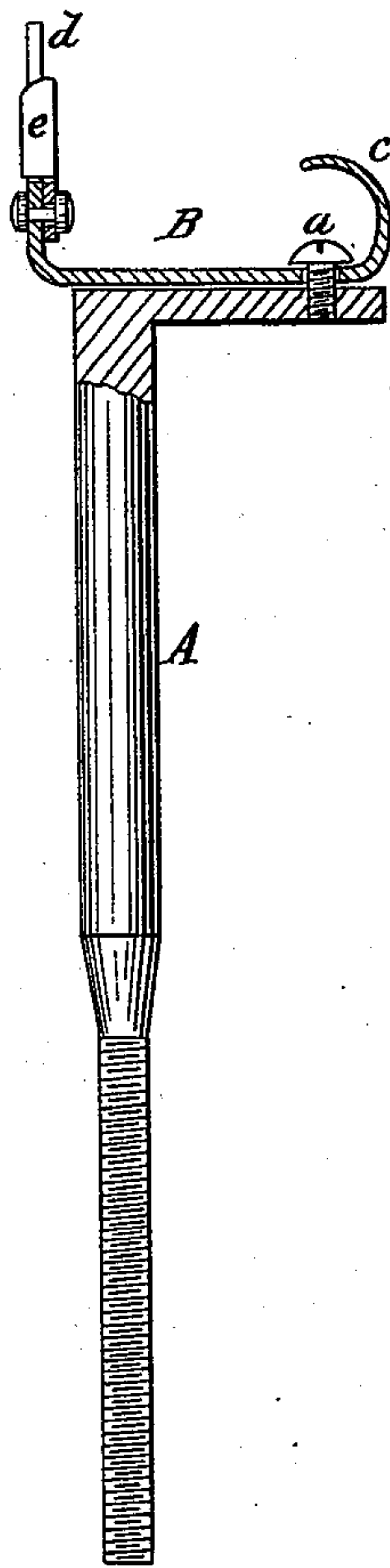
(Model.)

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

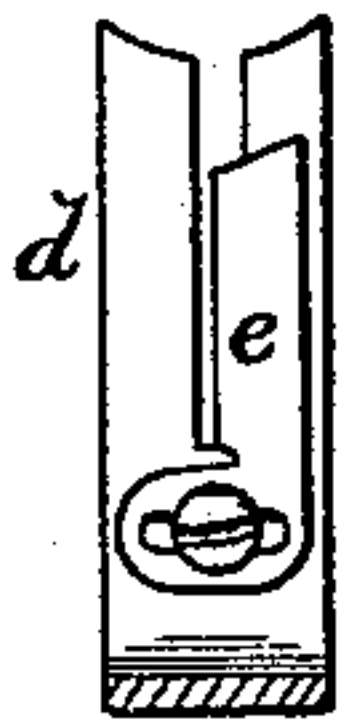
No. 230,509.

Patented July 27, 1880.

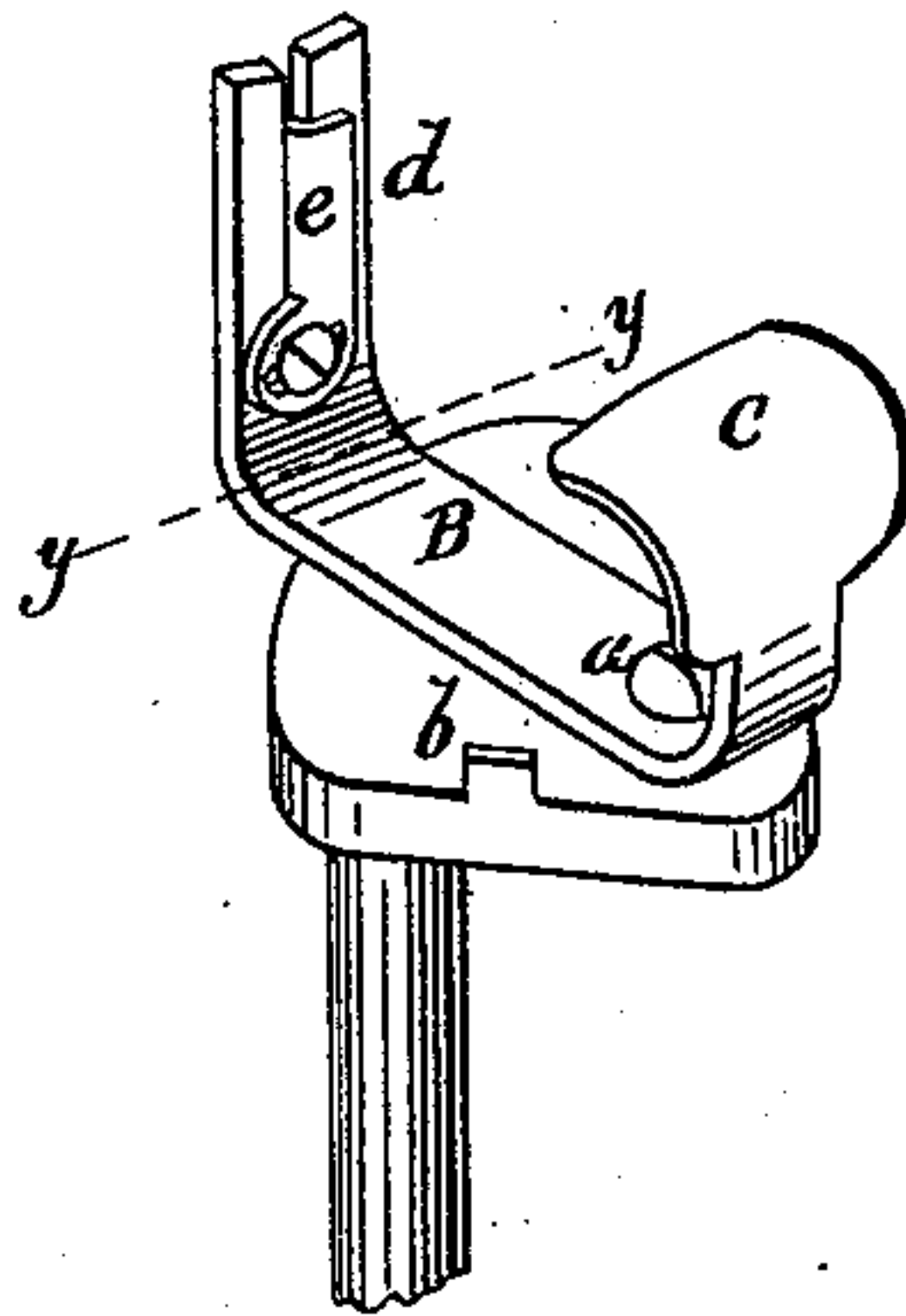
*Fig. 1.*



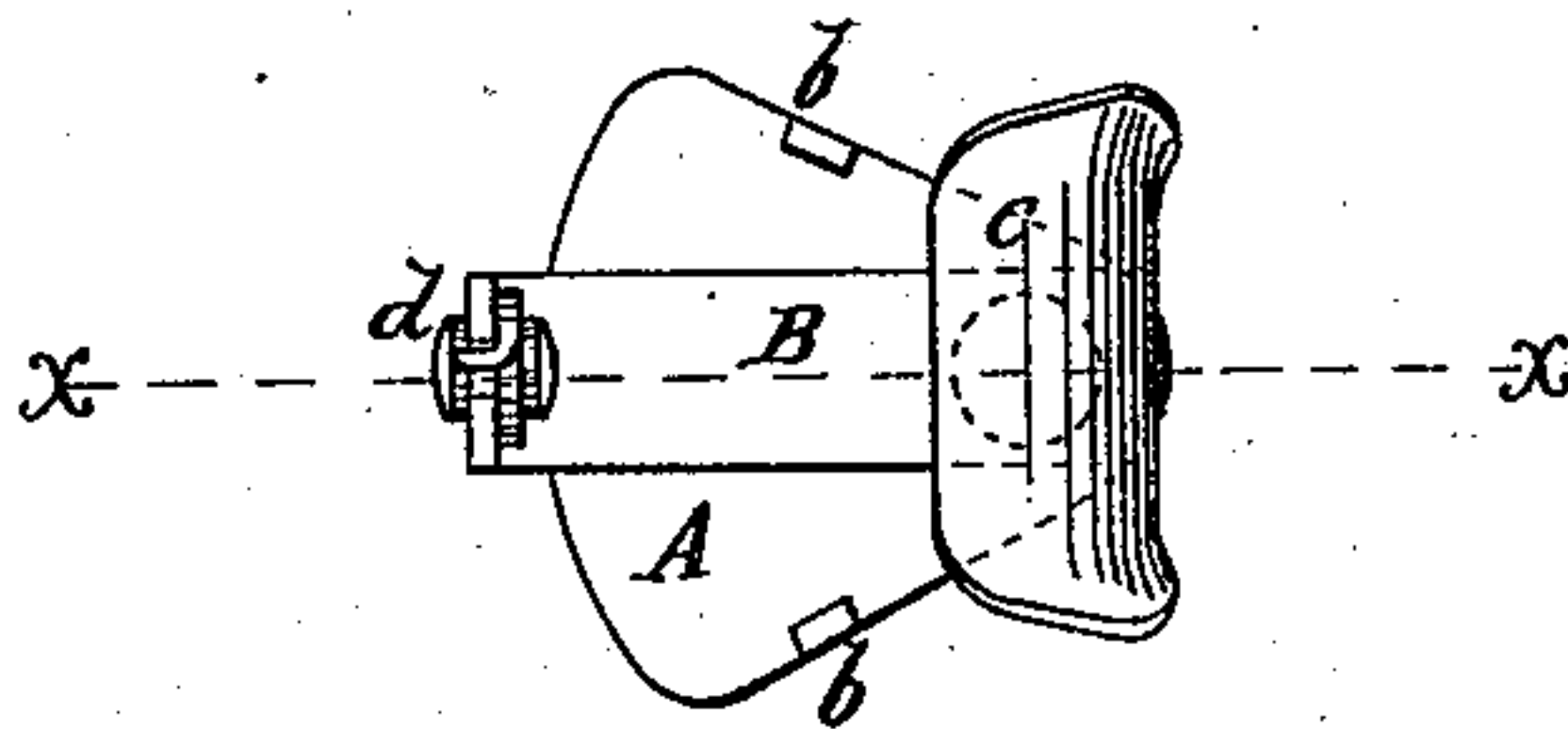
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



WITNESSES:

Henry N. Miller  
C. Sedgwick

INVENTOR:

C. G. Trafton

BY

Mum & 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. 230,509, dated July 27, 1880.

Application filed April 3, 1880. (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.

The object of my invention is to furnish a thread-guide that shall be self-adjusting to the yarn as the latter runs from the bobbin to the larger spool, so as to avoid friction.

The invention consists in a guide-plate provided at one end with a curved friction-surface and at the other with a slotted flange and a plate, in combination with a rod having projections at its top to limit the movements of said plate sidewise and a screw which serves as a pivot for said plate, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a sectional side elevation of my improved thread-guide. Fig. 2 is a perspective top view of the same. Fig. 3 is a cross-section of the swinging guide-piece on line *y y* of Fig. 2, and Fig. 4 is a plan view.

Similar letters of reference indicate corresponding parts.

The guide consists of the supporting-rod A, fitted for being screwed into the rail of the spooling-machine, and the swinging guide-piece B, that is attached upon the flanged head of rod A by a screw, *a*, so that it may swing on the screw in a horizontal plane, such movement being limited by projections *b* on the head of rod A.

The guide-piece B is preferably made of sheet-steel stamped to shape, and is formed at one end with the curved portion *c*, which is the friction-surface over which the yarn runs. At the opposite end—the end farthest from pivot *a*—the piece B is formed with a vertical flange, *d*, that is slotted for the yarn to pass through.

Upon one side of flange *d* a plate, *e*, is attached, and this plate is formed with an angle portion that extends through the yarn-slot. The plate *e* is attached by a screw or rivet passing through a slot in *e*, so that the plate may be moved to close the yarn-slot more or

less, according to the size of the yarn. The plate *e* may, however, be dispensed with when no adjustment is needed, and the friction-surface *c* may consist of a tube attached to the piece B.

In use the yarn from the bobbin passes over the surface *c* and through the slot of the flange *d* to the spool on which it is to be wound. The guide-piece B, being light and easily moved on its pivot, is moved by the yarn, so that the latter may pass in a straight line from the bobbin to the spool. This movement becomes greater and more essential as the spool increases in size, and the guide is self-adjusting, as required. By this swinging movement the draft on the yarn is equal at all times as it passes freely through the slot, and there is no tendency to wear a groove at the side of the slot. The guides are thus rendered durable, and do not become useless by wear after a short time, as is the case with fixed guides.

I am aware that it is not new to secure a slotted guide-plate to an arm pivoted to its support, or to provide a sliding slotted plate with arms, one of which is adjustably secured in a slotted head, or to provide a slotted guide-plate with an adjustable plate for increasing or diminishing the width of said slot.

The advantages of my device over these are as follows: The guide rests upon a smooth surface, and as the spool fills the thread crosses the friction-surface at different angles, preventing wear, and the plate *e* has a right-angled bend that projects through the slot of flange *d*, so as to greatly increase the bearing-surface for the thread.

What I claim as new and of my invention is—

The combination of the plate B, provided at one end with the curved friction-surface *c* and at the other with the slotted flange *d*, and the plate *e*, with the rod A, having projections *b* and screw *a*, substantially as and for the purpose described.

CHARLES G. TRAFTON.

Witnesses:

ERNEST B. WOOD,  
ISAAC T. HOLMAN.