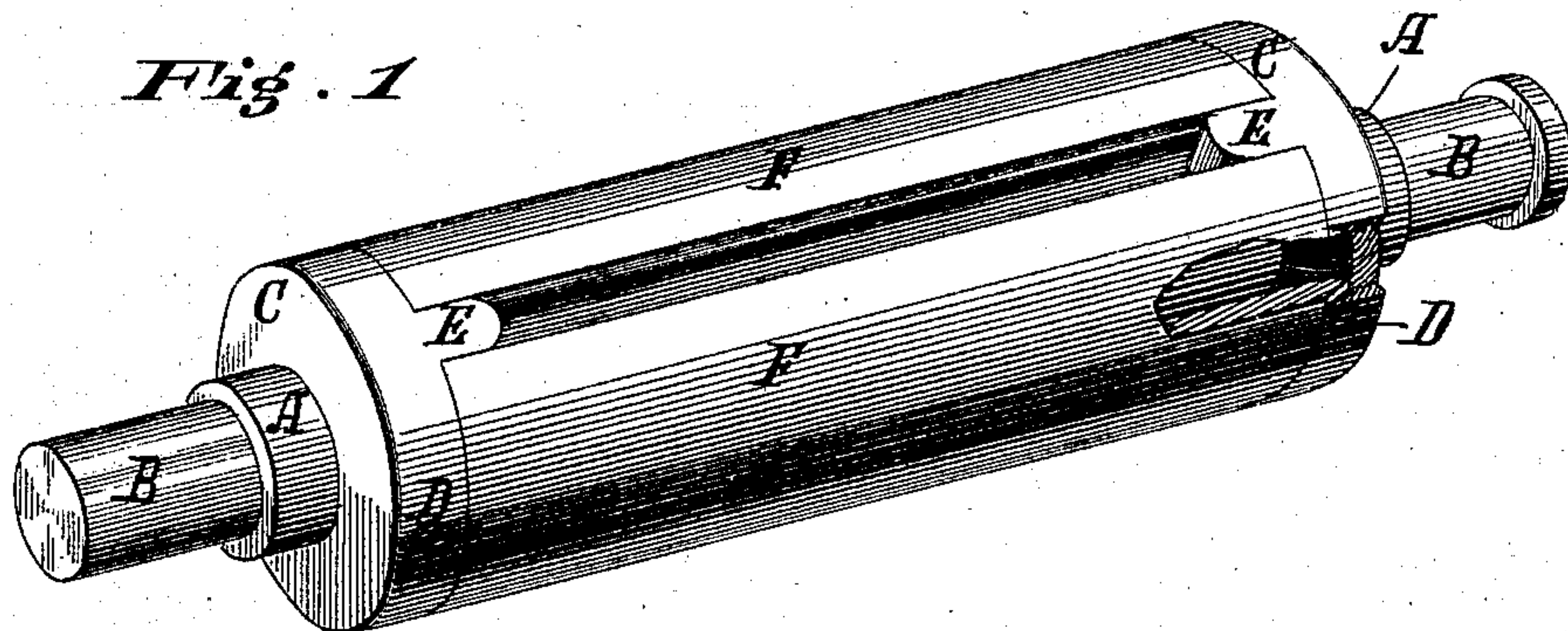


T. S. SCOTT.  
Paper-Winding Shaft.

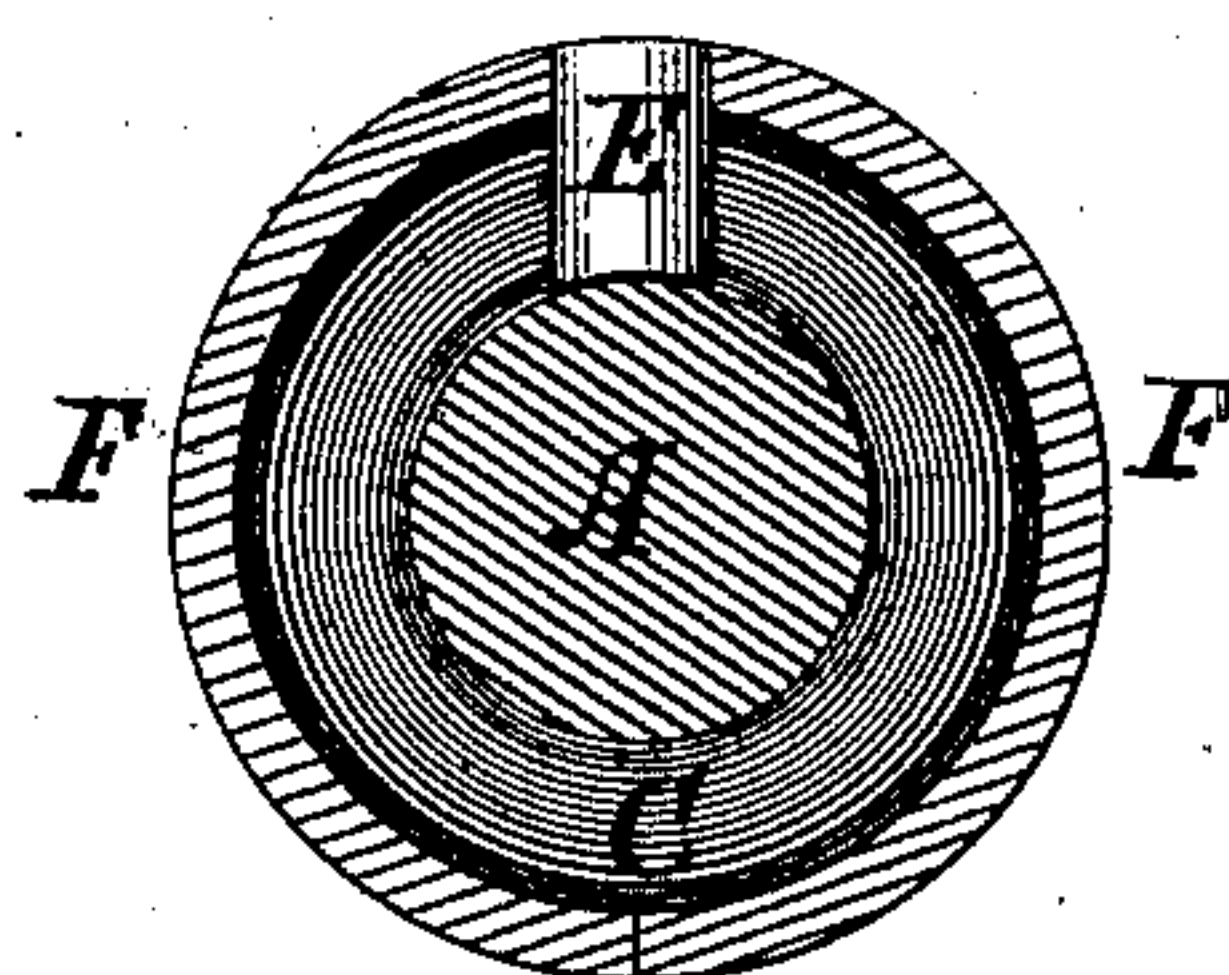
No. 211,059.

Patented Dec. 17, 1878.

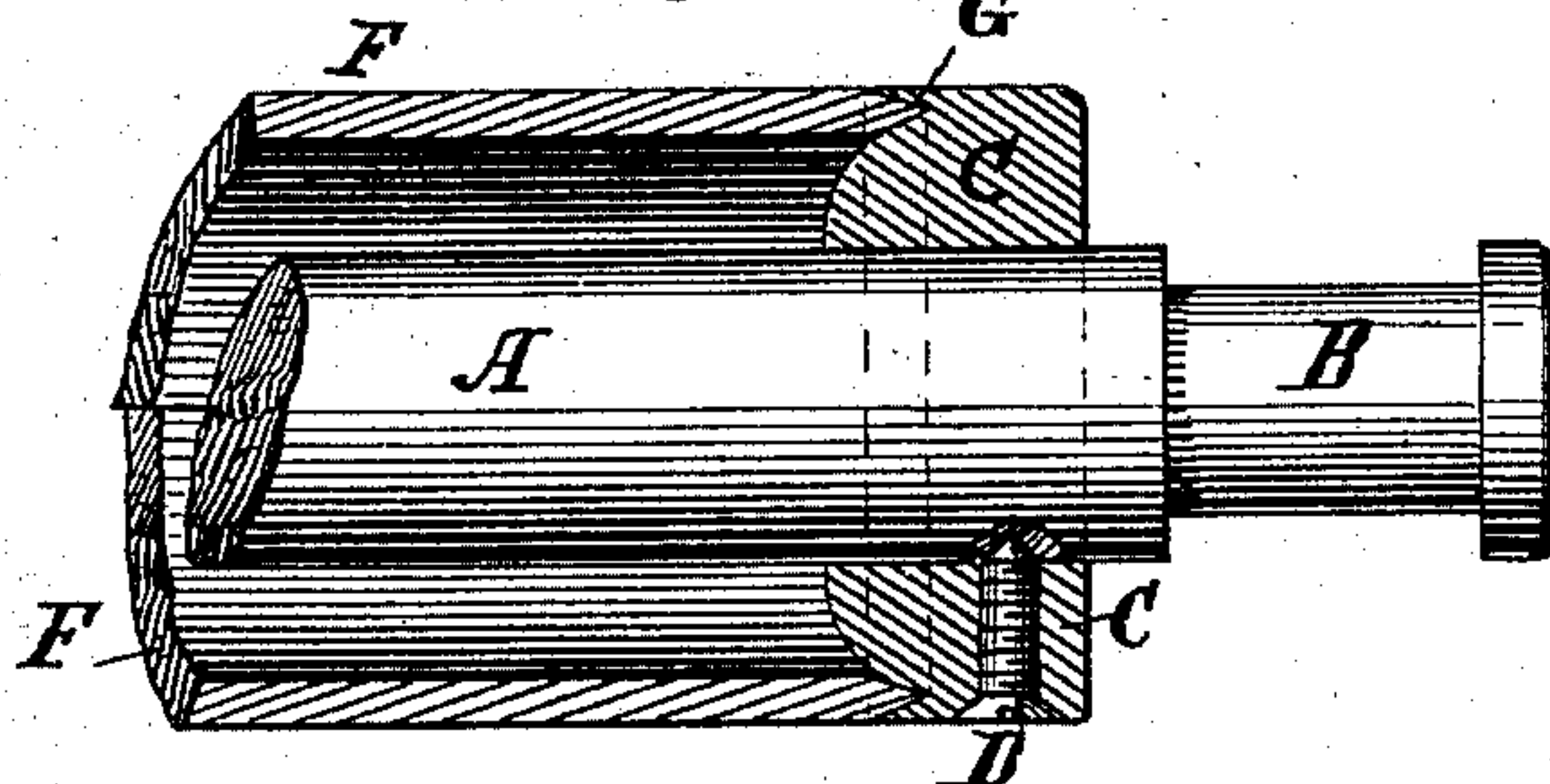
*Fig. 1*



*Fig. 2*



*Fig. 3*



*Attests*

*John Dolley Jr*

*Inventor*

*T Seymour Scott*  
*By his Attorneys*  
*W. C. Shawbridge,*  
*Bonsall Taylor.*

# UNITED STATES PATENT OFFICE.

T. SEYMOUR SCOTT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF HIS RIGHT TO JOHN P. ONDERDONK, OF SAME PLACE.

## IMPROVEMENT IN PAPER-WINDING SHAFTS.

Specification forming part of Letters Patent No. **211,059**, dated December 17, 1878; application filed  
June 10, 1878.

*To all whom it may concern:*

Be it known that I, T. SEYMOUR SCOTT, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Paper-Winding Shafts, of which I do hereby declare the following to be a full, clear, and precise description, reference being had to the accompanying drawing, of which—

Figure 1 is a perspective of my improved shaft; Fig. 2, a central transverse section, and Fig. 3 a partial longitudinal section, of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to shafts for winding paper or other fabrics; and has for its object the construction of a winding-shaft, from which the wound roll can be easily removed; to which end it consists substantially in a collapsing shaft, or one which, being of a given diameter during the winding process, can subsequently be made of less diameter—that is to say, be collapsed—so as to render easy the removal of the wound roll.

The following is the construction of a shaft embodying such idea:

A is the central shaft, provided with journal ends B B, adapted to be placed in bearings. C C are sliding collars, secured to the central shaft by means of screws D, or the like, the arrangement being such that when the screws are loosened and the device lifted from its bearings the collars can be slid off the central shaft.

E E are separating-studs upon the inside faces of the collars, to keep apart the sections

of the winding-shell; and F F, sections of the winding-shell, the latter being tapered at their ends, as represented in Fig. 3, and fitting within correspondingly-tapered circumferential recesses G upon the inside peripheral faces of the collars.

Such being the construction of the device, it will be understood that, while the sections of the shell are of the same curvature as the collars, they do not completely surround the latter, but fall short of doing so by the width of the separating-studs E, so that while when the collars are secured in place and are supporting the shell, as shown in Fig. 1, the diameter of the winding-face of the shell-sections is as great as that of the collars, yet when the collars, or one of them, are withdrawn sideways from the central shaft, so that the collars and their separating-studs no longer keep the shell-sections apart, the latter fall together or collapse, and form a winding-face of less diameter, from which the wound roll of fabric is easily removed.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

A collapsing shaft for winding paper or other fabrics, consisting of the central shaft, A, the collars C C, the shells F F, and the separating-studs E E, in combination, substantially as and for the purposes set forth.

In testimony whereof I have hereunto signed my name this 29th day of May, 1878.

T. SEYMOUR SCOTT.

In presence of—

J. BONSALE TAYLOR,  
W. C. STRAWBRIDGE.