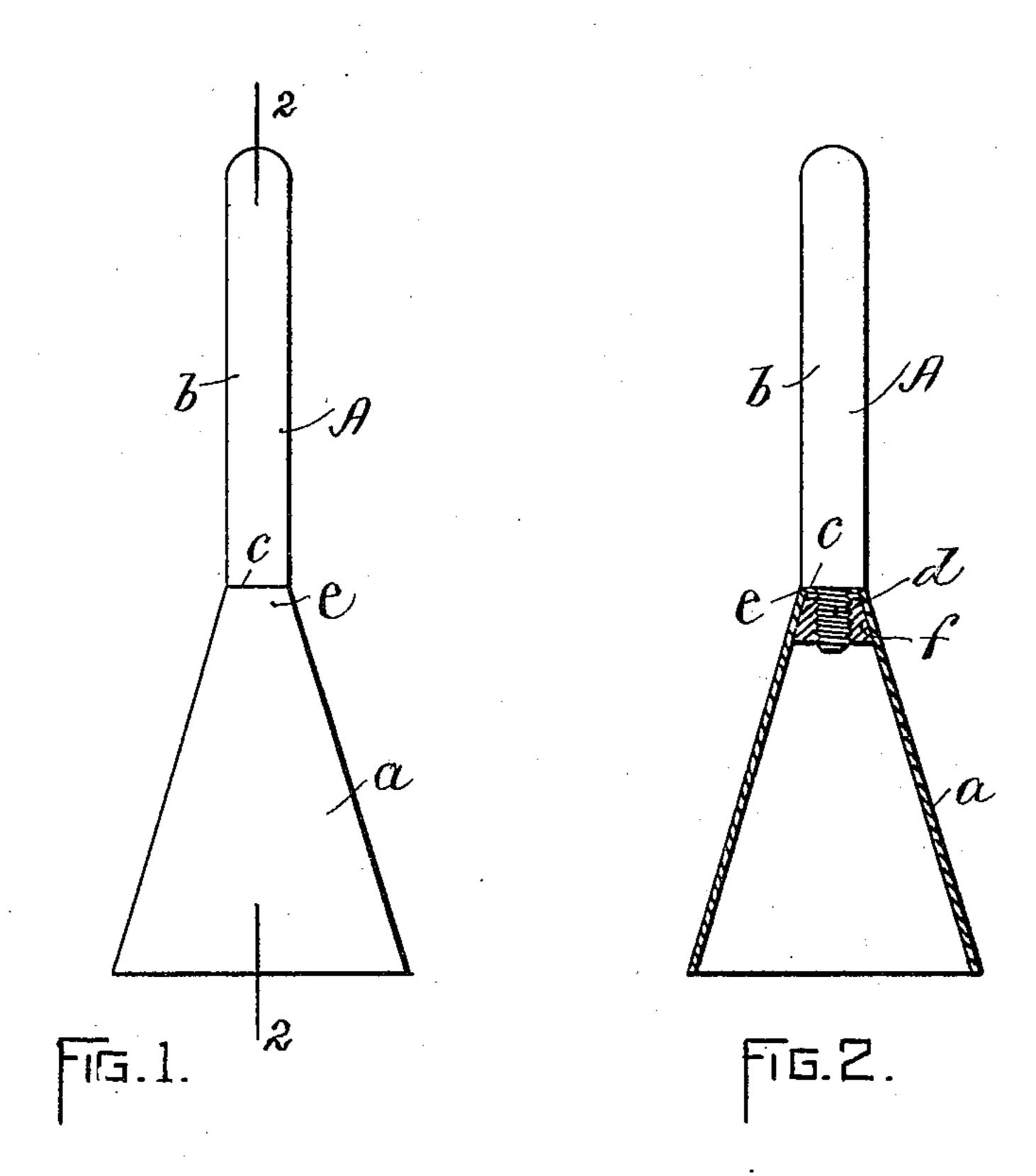
No. 659,597.

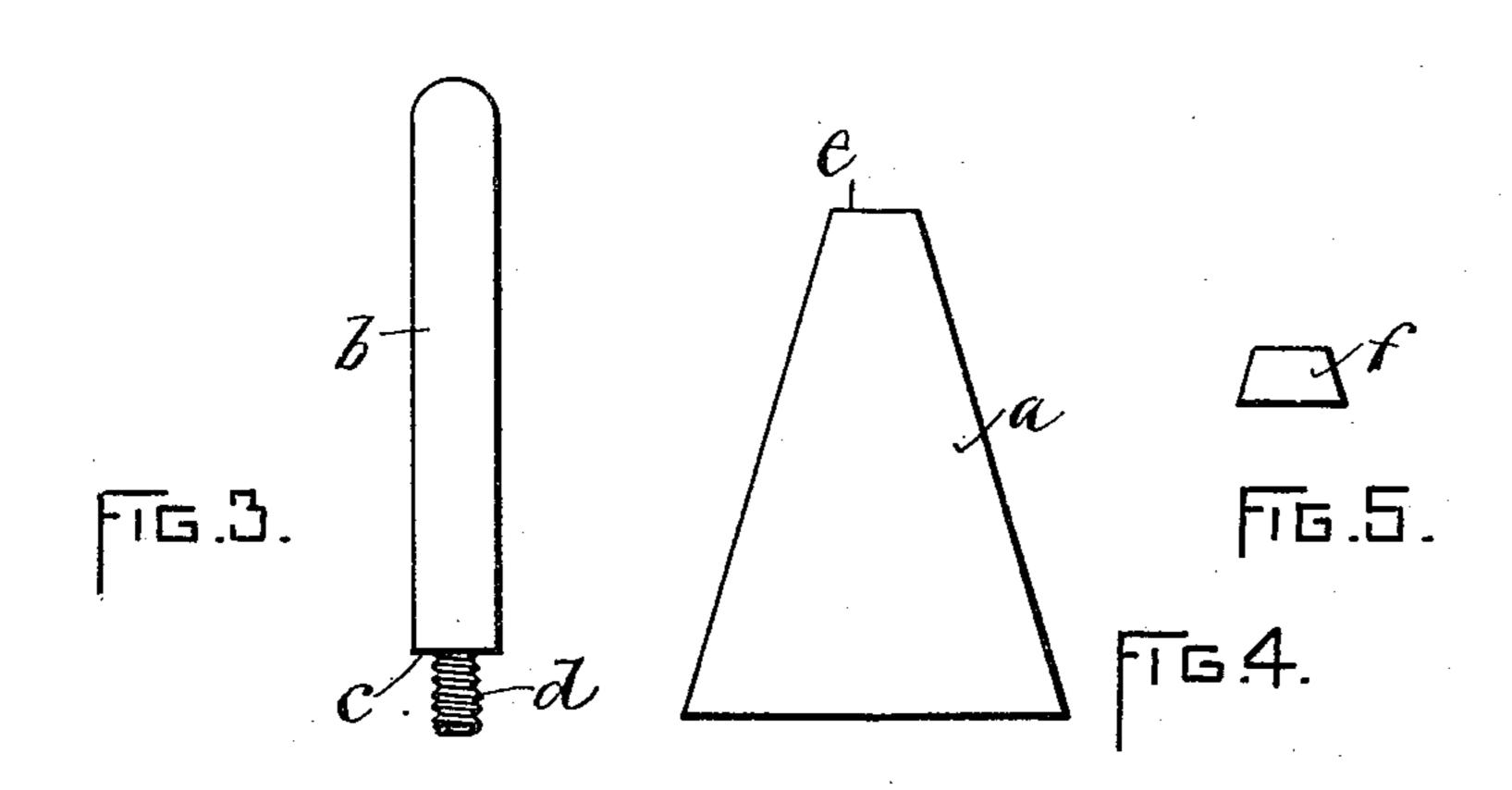
Patented Oct. 9, 1900.

W. P. WOOD & W. E. EMERY. SEPARABLE CONE BOBBIN.

(Application filed July 30, 1900.)

(No Model.)





WITNESSES: Harry J. Garcian. Anchen & Stehn INVENTORS,

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United States Patent Office.

WILLIAM P. WOOD AND WILLIAM E. EMERY, OF PAWTUCKET, RHODE ISLAND.

SEPARABLE CONE-BOBBIN.

SPECIFICATION forming part of Letters Patent No. 659,597, dated October 9, 1900.

Application filed July 30, 1900. Serial No. 25,348. (No model.)

To all whom it muy concern:

Be it known that we, WILLIAM P. WOOD and WILLIAM E. EMERY, citizens of the United States, and residents of Pawtucket, in the State of Rhode Island, have invented a new and useful Improvement in Separable Cone-Bobbins, of which the following is a specification.

The object of our invention is to produce a 10 cone-bobbin that shall be simple in its construction and cheap in cost and be separable into parts for return transportation to the factory for refilling after the yarn has been unwound from the bobbin at the place of its 15 utilization; and our invention consists in a cone-bobbin having the barrel and the hollow cone separable from each other, whereby the separated barrels may be packed together in small compass and the cones inserted one 20 within the other to occupy but little space in transportation, so that the return of the conebobbin to the factory may be effected at a minimum of cost, their return when made as heretofore, integral, having been expensive, 25 owing to the comparatively-great bulk of the return package.

In the accompanying drawings, Figure 1 represents a side elevation of our separable cone-bobbin. Fig. 2 represents a partial longitudinal section showing the side view of the cylindrical barrel and a section of the cone. Fig. 3 represents a side view of the barrel of the bobbin, showing the screw-thread. Fig. 4 represents a side view of the truncated hollow cone of the bobbin. Fig. 5 represents a side view of the nut which serves to hold the parts together.

In the drawings, Figs. 1 and 2, A represents the separable cone-bobbin, the barrel b of which is preferably made of wood and provided with the shoulder c and the screwthread d. The removable hollow cone a is preferably made of paper and truncated at its upper end e, so that the small end e of the truncated cone will bear against the said

shoulder c of the barrel. The nut f, made of wood or other light material, serves to hold the barrel b and cone a tightly together, so that in this case the yarn can be deposited upon the bobbin and transported thereon to 50 a distance for use, and when the yarn has been unwound from the bobbin then by unscrewing the nut f from the barrel the parts may be separated from each other and the cones of a great number of bobbins be placed 55 the one inside of the other, so as to occupy but little space in reshipment. The barrels b may also be packed closely together and also the nuts f, so that by the employment of our improved bobbins an important saving 60 may be made in the cost of transportation, and instead of having the nut f a separate piece it may be either secured within or be made integral with the cone.

We do not restrict our invention to the precise construction shown, but include, broadly, the combination, in a cone-bobbin, of a barrel and a hollow cone separable from each other.

We claim as our invention—

1. As a new article of manufacture, a cone- 70 bobbin having its barrel and the hollow cone made separable from each other, whereby the bobbin is made adapted for return transportation.

2. In a separable cone-bobbin, the combination of the barrel, and the hollow cone, by screw-threaded means, whereby the parts are made separable for reshipment, substantially as described.

3. In a separable cone-bobbin, the combination of the screw-threaded barrel, and the hollow cone, with the nut, for separably securing the barrel and cone together, substantially as described.

WILLIAM P. WOOD. WILLIAM E. EMERY.

Witnesses:

SOCRATES SCHOLFIELD, HARRY J. GARCEAU.