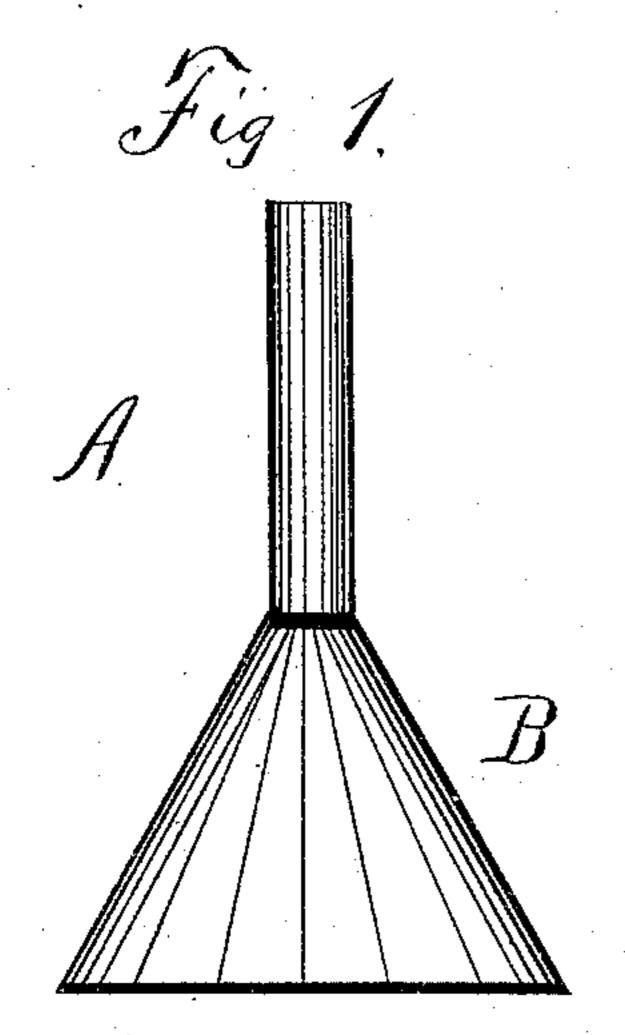
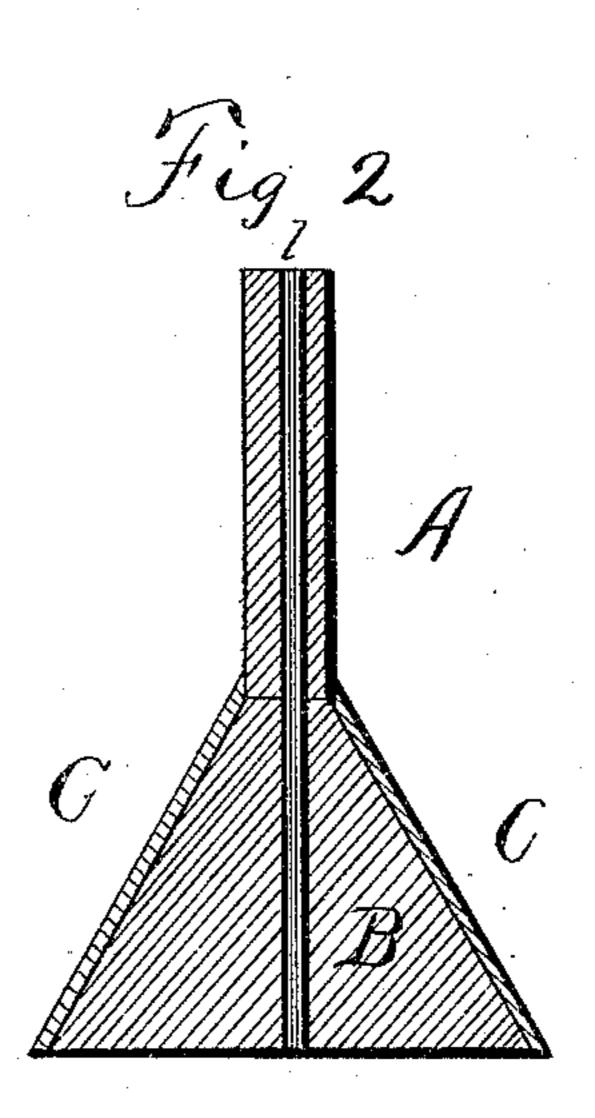
(No Model.)

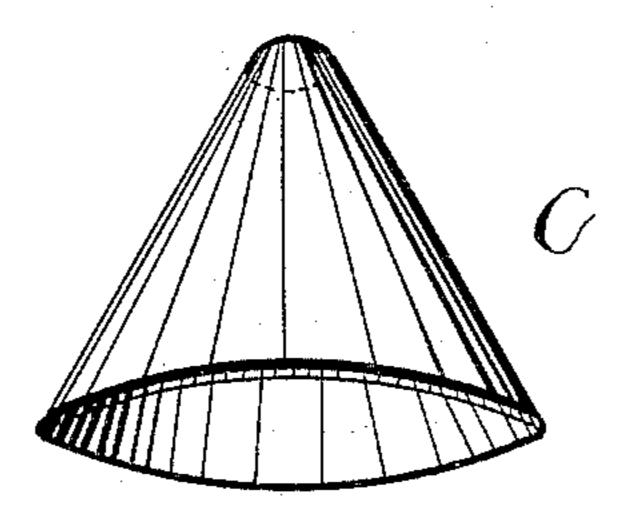
J. HEGEMAN. COVER FOR BOBBIN HEADS.

No. 431,227.

Patented July 1, 1890.







By his Attorneys Smith Denison

United States Patent Office.

JOHN HEGEMAN, OF AMSTERDAM, NEW YORK.

COVER FOR BOBBIN-HEADS.

SPECIFICATION forming part of Letters Patent No. 431,227, dated July 1, 1890.

Application filed December 12, 1889. Serial No. 333,500. (No model.)

To all whom it may concern:

Be it known that I, John Hegeman, of Amsterdam, in the county of Montgomery, in the State of New York, have invented new and useful Improvements in Covers for Bobbin-Heads, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to the construction of

10 covers for bobbin-heads.

My object is to produce a seamless cover | for bobbin-heads of cheap construction and great utility, one upon which the thread may be wound or unwound without slipping or 15 "caving down," and at all times furnishing a surface free from obstructions and puckerings or upturned edges, which are liable to catch a knot or enlargement in the thread and break when unwinding.

My invention consists in the several novel features of construction and operation hereinafter described, and specifically set forth in

the claims annexed.

It is constructed as follows, reference being 25 had to the accompanying drawings, in which—

Figure 1 is a side elevation of a bobbinhead provided with a seamless cover. Fig. 2 is a vertical section through the center of the stem, bobbin-head, and cover. Fig. 3 is an |

isometrical view of the cover detached, look- 30 ing at it at a point below the plane of the base.

A is the stem, and B is the head, of the bobbin provided with a spindle-opening l passing through them centrally and vertically.

C is the cover, constructed of felt or analogous material, seamless, and of conical or frusto-conical form, and scarfed off inside at the small end, so that it will fit closely to the stem and not create a shoulder, as shown 40 in Fig. 2.

What I claim is—

1. A seamless bobbin-cover constructed of felt or analogous material.

2. The combination, with a bobbin, of a 45 seamless cover constructed of felt or analogous material secured thereon, as set forth.

3. The combination, with a bobbin, of a seamless cover of conical form constructed from felt or analogous material and scarfed 50 off within the smaller end to fit close upon the bobbin-stem, as set forth.

In witness whereof I have hereunto set my hand this 7th day of November, 1889.

JOHN HEGEMAN.

In presence of— H. P. DENISON, F. T. DENISON.