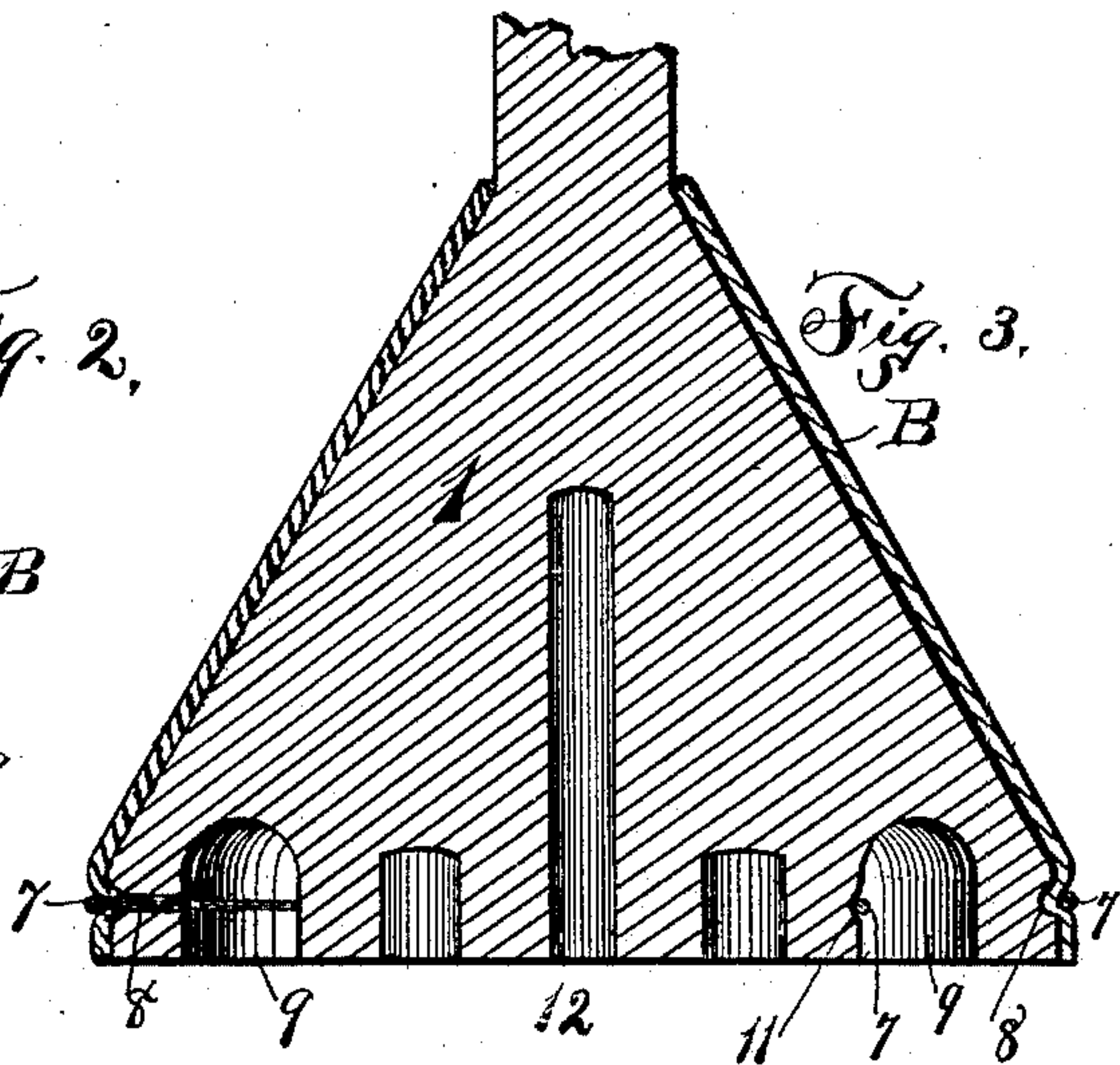
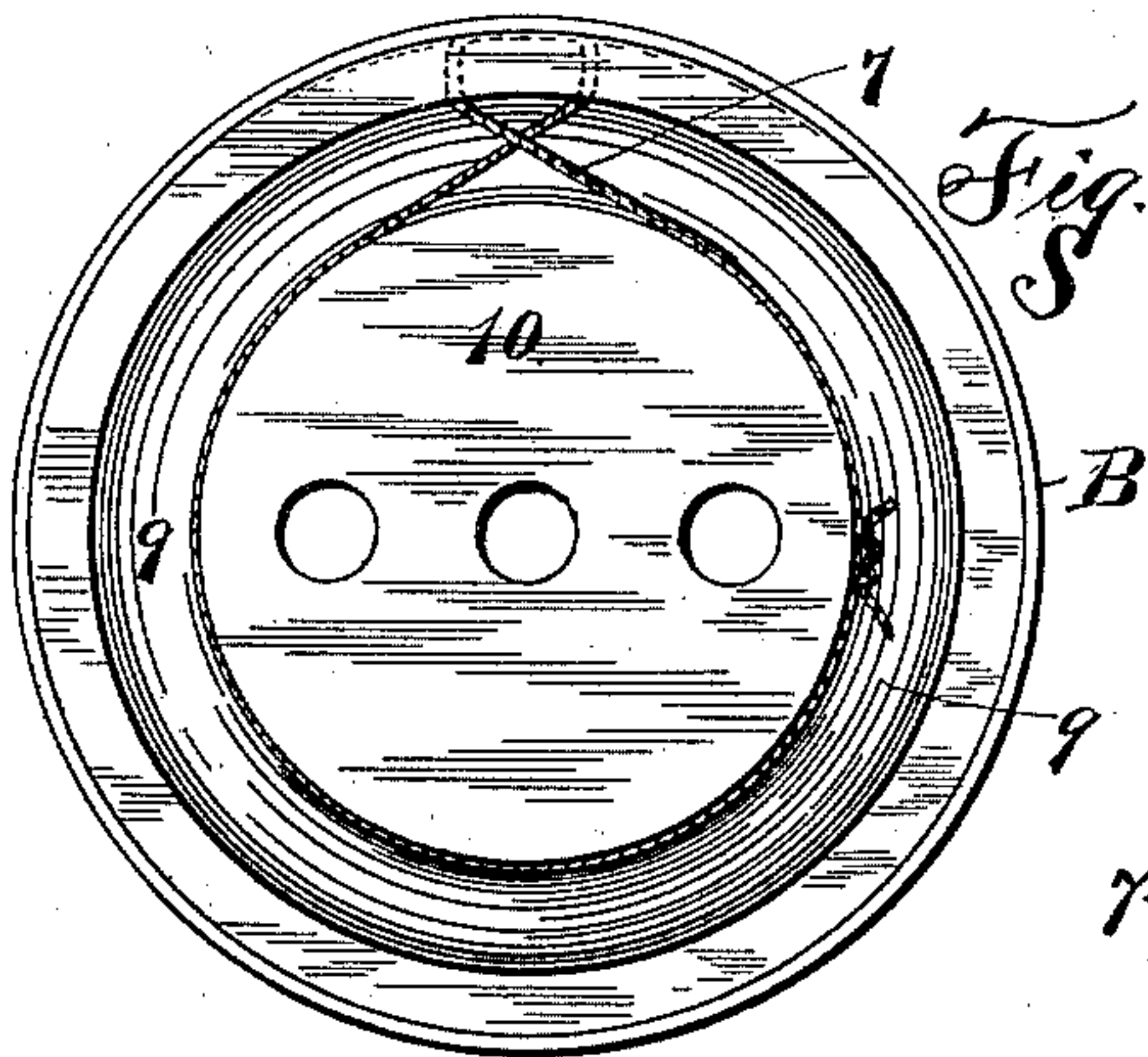
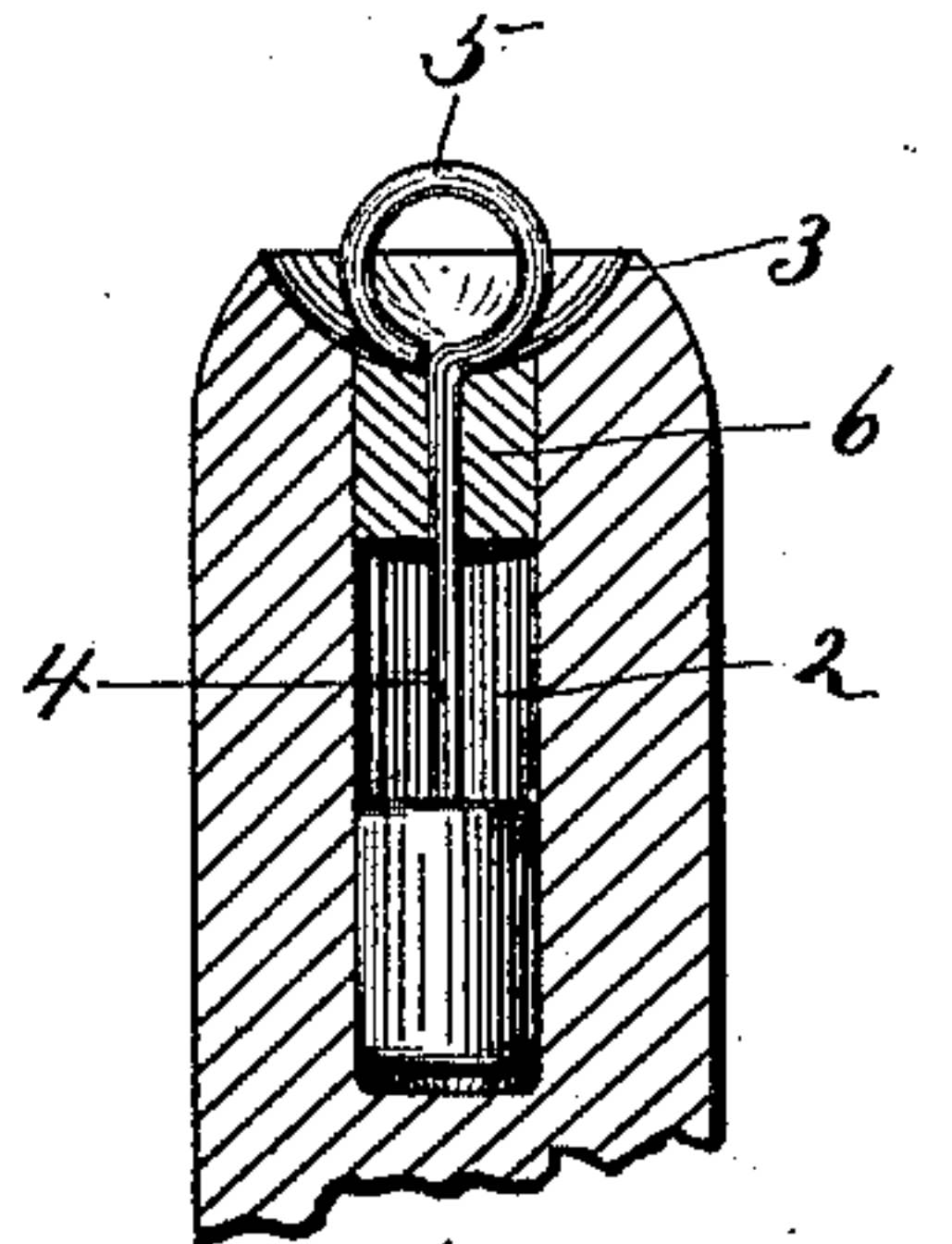
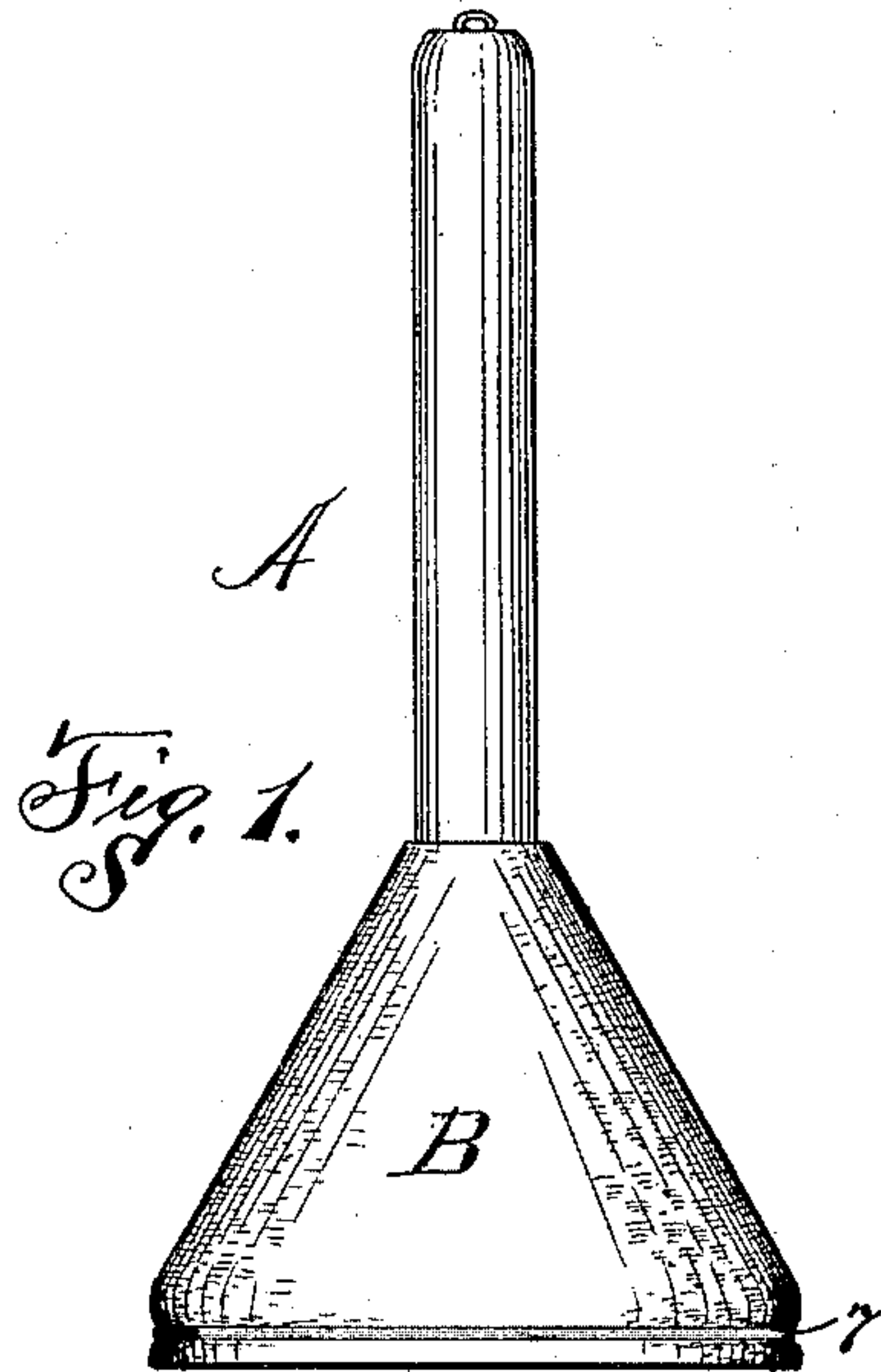


(No Model.)

J. HEGEMAN.  
BOBBIN.

No. 465,852.

Patented Dec. 29, 1891.



Witnesses  
H. A. Carhart  
C. B. Kime.

John Hegeman Inventor  
By his Attorneys  
Smith & Demissou



# UNITED STATES PATENT OFFICE.

JOHN HEGEMAN, OF AMSTERDAM, NEW YORK.

## BOBBIN.

SPECIFICATION forming part of Letters Patent No. 465,852, dated December 29, 1891.

Application filed March 21, 1891. Serial No. 385,936. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HEGEMAN, of Amsterdam, in the county of Montgomery and State of New York, have invented new and  
5 useful Improvements in Bobbins, 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 bobbins, and to the means for lifting or handling them.

My object is to produce as a new article of manufacture a bobbin constructed from paper-pulp or analogous material, compressed  
15 to form and commingled with cement, which holds the particles together, and also in providing the bobbin with means for lifting it, which are normally depressed so that the thread will not catch thereon as it is being  
20 unwound, but which can be raised when desired to give a better hold, and also in providing it with improved mechanism for holding on the cover.

My invention consists in the several novel  
25 features of construction and operation hereinafter described, and which are specifically set forth in the claims hereunto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in which—  
30 Figure 1 is a side elevation of the bobbin. Fig. 2 is a bottom plan thereof, showing in full and dotted lines the means for detachably securing the lower edge of the cover thereon. Fig. 3 is a vertical section of the  
35 base and cover, showing also the groove in the base. Fig. 4 is a vertical sectional elevation of the upper end of the barrel, showing the means for handling the bobbin.

A is the barrel of the bobbin, having a base  
40 1 of any form desired. The top of the barrel is recessed vertically, as at 2, and is concaved, as at 3. A plug 6 is secured in the recess, through which a rod 4 passes loosely, having a weight upon its lower end, loose in the recess, and an eye 5 upon its upper end, which  
45 normally lies in said concavity, substantially as shown in Fig. 4, all being so constructed that the operator can insert his finger into the concavity and into the eye, raise the ring and rod until the weight comes up against  
50 the plug, and carry the bobbin, without hand-

ling or soiling the yarn or thread wound thereon, and when the bobbin is set down the weight will cause the eye to drop down into the concavity, so that it will not interfere with the thread while it is being wound  
55 onto or unwound from the bobbin.

B is the bobbin-cover, stretched onto the base 1 and secured thereon at its lower edge by a cord 7, which passes around the cover close to  
60 its lower edge, then through two holes therein and through coinciding holes 8 in the base, and into the circular groove 9. The ends are then tied, forming a bight, which is drawn over and around the center 10 and into the  
65 notch 11 on the side of the center opposite to the holes 8, thus drawing the cord tight, and drawing it and the cover down into a groove cut around the skirt of the base. The notch,  
70 receiving the bight of the cord, holds it so that it cannot accidentally slip off from the center.

When I wish to remove the cover, I raise the cord out of the notch, untie the ends, and draw it out through the holes.

At 12 I show the ordinary opening in the  
75 base to receive the spindle.

The bobbin itself, barrel and base, I construct from paper-pulp or analogous material, mixing it with suitable cement, and compressing it in suitable dies to the degree of  
80 hardness desired. This gives me a barrel which will not crease or sliver to catch and break the yarn, and will not polish so that the yarn will slip off from it, but will always  
85 hold the yarn frictionally upon its always-fibrous surface, so that its tension is uniform.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A bobbin consisting of a base, and a barrel  
90 concaved and recessed in its upper end, and a weighted rod having an eye upon its outer end, fitting and adapted to slide in said recess and concavity, in combination.

2. The combination, with the bobbin and  
95 its cover, the groove around the skirt of the base, and the groove in the bottom of the base, of a cord passed around the cover and through it and the skirt of the base, its ends tied together, and the bight of said cord  
100 passed around the center piece within the groove in the base.

3. A bobbin consisting of a base and a barrel and means for carrying it, consisting of a rod inserted in the barrel and movable vertically therein and having an eye upon its  
5 upper end.

4. A bobbin consisting of a base and a barrel concaved in its outer end, and a vertically-movable eye normally lying in said concavity.

10 5. A bobbin consisting of a base, a barrel concaved in its upper end, and an eye in said concavity, in combination, as set forth.

6. A bobbin consisting of a base and a barrel having a recess in its outer end, and a weighted rod provided with an eye upon its outer end, mounted and adapted to slide in  
15 said recess.

In witness whereof I have hereunto set my hand this 2d day of March, 1891.

JOHN HEGEMAN.

In presence of—

HOWARD P. DENISON,

C. W. SMITH.