

No. 678,540.

Patented July 16, 1901.

H. E. CHASE.
SPOOL OR BOBBIN.

(Application filed May 24, 1899.)

(No Model.)

Fig 1.

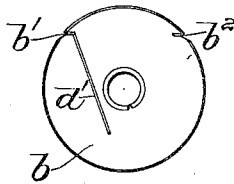


Fig 2.

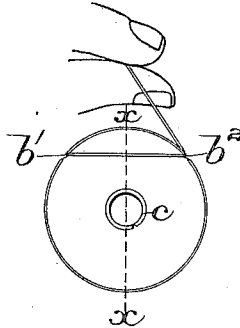


Fig 3.

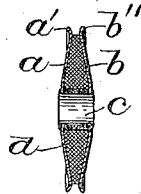
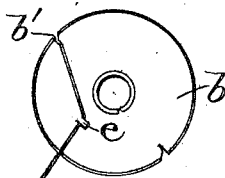


Fig 3^a.



Fig 4.



Witnesses.
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SPOOL OR BOBBIN.

SPECIFICATION forming part of Letters Patent No. 678,540, dated July 16, 1901.

Application filed May 24, 1899. Serial No. 718,111. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. CHASE, of Cambridge, county of Middlesex, State of Massachusetts, have invented an Improvement in Spools or Bobbins, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a novel bobbin or holder for dental floss-silk, the construction being such that a length of the silk floss can be drawn from the bobbin or holder and clamped to prevent further unwinding, and while in this condition the bobbin or holder may serve as a convenient handle for moving the silk floss back and forth between the teeth. The construction is, further, such that when a length of floss-silk has been thus used it may be cut at a point in its length a distance from the point of clamping, thus leaving the silk held firmly by the clamp, with its end hanging conveniently accessible when it is again desired to pull off another length of silk.

The invention to be hereinafter described is especially valuable for use in the removal of obstructions between the teeth and also by dental and other surgeons; but the invention is not limited to its particular use for holding waxed floss or the purpose to which the floss or thread is put.

Figure 1, in side elevation, represents a spool or bobbin having the floss or thread held in one of its notches, the end hanging down readily accessible to the user. Fig. 2 shows another view of the spool or bobbin with the floss or thread in position to be strained and cut. Fig. 3 is a cross-section of Fig. 2 in the dotted line *x*. Fig. 3^a shows the barrel detached, and Fig. 4 shows a modified form of spool or bobbin.

As herein represented, my improved spool or bobbin is composed of two metallic disks *a* *b*, concavo-convex in shape for nearly their entire diameter, the edges of the disks being curved outwardly, as at *a'* *b''*, to afford ready entrance into the larger space of the bobbin.

These disks are united, as herein represented, by a barrel or eyelet, as *c*, (shown detached in Fig. 3^a.) said barrel having two shoulders which receive against them the inner sides of the disks *a* *b*, the outer end

of the barrel being thereafter expanded or flanged outwardly to firmly seat the disks upon the barrel. The silk, floss, or other thread *d* is shown wound upon the barrel between the disks in Fig. 3. In the use of these disks the end *d'* of the waxed floss or thread (see Fig. 1) hangs normally at the side of the disk *b*, and a part of the floss or thread back of said free end is confined in the notch *b'*, made, as represented, in the periphery of said disk *b*. The user of this spool or bobbin being desirous of drawing off from the same a certain quantity of floss or thread will engage the free end *d'* thereof and pull the floss or thread out of the notch *b'* and then pull off from the bobbin the necessary or desired amount of floss or thread. This done the user will draw the floss or thread again into the notch *b'* and while yet holding the floss or thread under strain in one hand and the spool or bobbin in the other hand will insert the silk between the teeth and move it back and forth in a manner well understood, after which he will further draw a part of the thread against a cutting member of the spool or bobbin. This cutting member in Figs. 1 and 2 is represented as a notch *b''*, and the floss or thread having been drawn into said cutting-notch *b''* will thereafter be pulled at a tangent, as represented in Fig. 2, and sufficient strain will be exerted on said floss or thread to part or cut it at the cutting portion *b''*, leaving, it may be, the end of the thread at that point, or by a slight movement of the finger the end of the thread extending from one to the other notch referred to may be detached from the cutting member and allowed to drop, as represented in Fig. 1. The notch *b''* forms a very efficient cutting member; but this invention is not in all cases limited to the particular construction shown for the said cutting member, and instead the disk *b* might be subjected to the action of a punch to throw out from one side of it a cutting projection *e*, and the thread to be cut might be drawn as represented in Fig. 4, said figure showing the notch *b'*, fully described in Figs. 1 and 2.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A spool consisting of two disks outwardly bulged at their central portions to afford a

space for thread or floss between them, and each having outwardly-curved peripheral edges, an eyelet uniting said disks, one of said disks having a thread-holding notch in the
5 outwardly-curved edge and a thread-cutter.

2. A spool consisting of two disks, each disk having its central portion and peripheral edges bulged outwardly, means to unite the disks centrally thereof, one of said disks hav-
10 ing a thread-cutting lip turned outwardly

from its side and integral therewith, and a thread-holding notch in the outwardly-curved edge of said disk.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

HENRY E. CHASE.

Witnesses:

GEO. W. GREGORY,

AUGUSTA E. DEAN.