

A. M. SHURTLEFF.

Thread-Holders.

No. 147,987.

Patented Feb. 24, 1874.

Fig 1

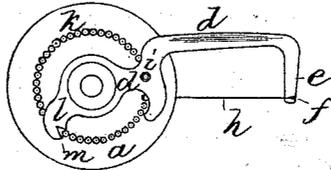


Fig 2.



Fig 4.

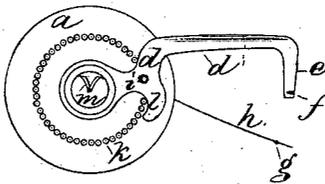
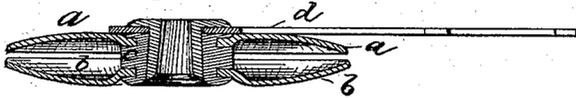


Fig 3.



Witnesses,
M. W. Frothingham,
L. H. Latimer.

Inventor,
Asahel M. Shurtleff,
per Crosby & Gould
attys.

UNITED STATES PATENT OFFICE.

ASAHEL M. SHURTLEFF, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN THREAD-HOLDERS.

Specification forming part of Letters Patent No. 147,987, dated February 24, 1874; application filed January 28, 1874.

To all whom it may concern:

Be it known that I, ASAHEL M. SHURTLEFF, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Pocket Thread Carrier and Cutter; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

For removing foreign matters lodged between the teeth, dentists recommend the use of thread in place of tooth-picks, floss-silk being considered the best material for the purpose. My invention relates to the construction of a pocket device for carrying and protecting a thread wound upon a suitable spool or bobbin, and for enabling such thread to be distended and held distended, the device being also preferably made with provision for cutting the thread and for securing its end.

In my invention I use, or prefer to use, two concave, lenticular-shaped disks, between and axially connecting which is a stem or spool, upon which the thread is wound, the outer edges of the disks coming together, or nearly together, and thus forming a box or case to protect the thread, and the case having combined with it a knife or cutting-edge, by which the thread may be readily severed. The invention consists primarily in the thread case and carrier thus made, and having combined with it a cutter, and in the combination, with such carrier and cutter, of an arm for holding the end of the thread for its distension, of a spring for retaining the thread end, and of other details of construction to be hereafter described.

The drawing represents an instrument or device embodying my invention.

Figure 1 shows the same in side view. Fig. 2 is an edge view of it. Fig. 3 is a central section of it. Fig. 4 shows a modification of the severing device.

a b denote the two concave disks, joined by a hub, *c*, which constitutes the cylinder or stem upon which the thread is to be wound, the form of the disks and their union causing them to constitute a case, in which, around the

hub or spool *c*, the thread is wound. At one end of the hub *c* is pivoted an arm, *d*, said arm extending beyond the case, and having a bend, *e*, by which the arm is formed into a bow for holding the thread extending from the case, the bend having a slit, *f*, which, by making a knot, *g*, in the thread *h*, holds the end of the thread securely when the thread is tautened, the tautening being effected by turning the arm on the hub, a spur, *i*, projecting from the arm entering either one of a circular series of recesses or notches, *k*, sunk in the outer surface of the disk *a*. Another arm, *l*, extending from the hub, is shown as made with a cutting-edge, *m*; or such cutting-edge may be applied as seen in Fig. 4, at *m*, or in any other convenient manner. The arm *l* is made as a spring, the stress of which bears it toward the disk, and by drawing the thread end under this spring it is retained in accessible position for future use.

In using the instrument, the thread is unwound until enough projects from the case to enable its end to be easily knotted. Then the thread adjacent to the knot is slipped into the slit *f* and drawn up until the knot strikes the arm. Then the arm is turned in a direction to wind the thread until the latter is drawn taut, the spur *i*, by entering one of the notches *k*, holding the arm in position. Then the instrument is used by thrusting the arm or bow into the mouth and entering the taut thread between adjacent teeth, using the case as a handle. After use, the arm is turned to slacken the thread, the thread is drawn from the slit, and the used portion is severed by the knife, for which purpose it may be drawn under the spring. Then the end left, being already under the spring, or being drawn under it, is retained by the pressure of the spring.

The instrument thus made furnishes a convenient and ever-ready device for removing particles of foreign matter from between the teeth, and by probably the least harmful agent that can be used for such purpose.

The instrument may be carried in the pocket, either with or without a special sheath for its immediate protection.

The retaining-spring may be used with any

thread-spool, but is more particularly intended for this special instrument.

I claim—

1. In combination with a thread - holding spool or case, a thread-severing cutter, when applied thereto substantially as described.

2. In combination with a thread - holding spool or case, a spring for retaining the thread end, when applied thereto substantially as described.

3. In combination with a thread - holding spool or case, an arm or bow for holding the

distended thread across the bow, substantially as described.

4. In combination with a thread - holding spool or case, the movable thread-distending arm, having provision, substantially as described, for securing it in any desired position, substantially as described.

A. M. SHURTLEFF.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.