J. P. LOCKE. DENTAL FLOSS HOLDER. APPLICATION FILED JULY 13, 1908.

911,664.

Patented Feb. 9, 1909.

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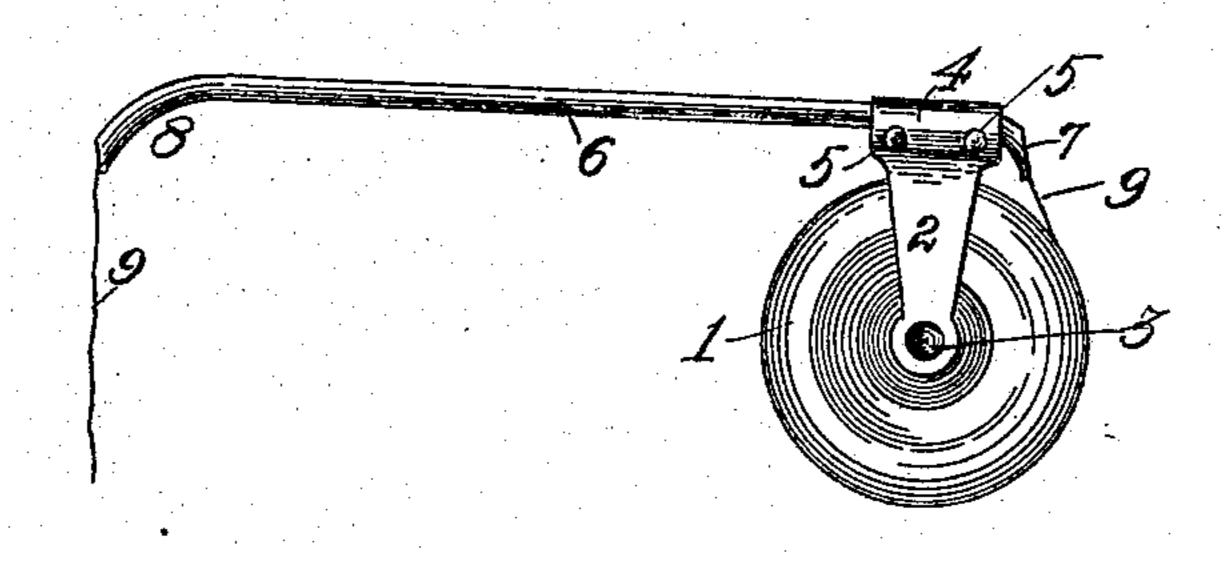


Fig.2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES P. LOCKE, OF TOLEDO, OHIO.

DENTAL FLOSS-HOLDER.

No. 911,664.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, James P. Locke, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, 5 have invented certain new and useful Improvements in Dental Floss-Holders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to 10 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

The practice of using dentist's floss for the purpose of removing foreign substances from between the teeth is, as is well understood, highly beneficial. A familiar difficulty encountered in such use of this floss and one 20 which prevents its more general employment for this purpose is that when the two extremities of the piece of floss are held in the user's two hands one of the hands or a large portion thereof, must be placed in the user's 25 mouth, usually to his no little discomfort.

My invention relates to and its object is to provide means for overcoming the difficulty and objection here pointed out. I attain this object by means of the devices, 30 construction and arrangement of parts hereinafter described and shown, and illustrated in the accompanying drawing, in which—

Figure 1 is a side-elevation of my device, and Fig. 2, a sectional end-elevation of the 35 same taken on a vertical line through the axis of the spool hereinafter referred to.

Like parts are indicated by corresponding

numerals in both views.

In the drawings, 1 is a spool of the usual 40 construction for dentists' floss, consisting of two thin sheet metal disks secured together at their center and spaced slightly apart to receive the windings of the thread. At the axis of the spool is an opening or opposed 45 depressions in the outer sides of the two metal disks. A spring-fork or clip bestrides the spool, and its converging arms 2-2 engage the central opening or depressions at the center of the spool by means of indenta-50 tions 3—3 in the arms 2 which indentations engage the corresponding indentations or

opening at the center of the spool and form a pivot or journal upon which the spool may be revolved. At their central or meeting point the two arms of the clip are bent to 55 form a cylindrical opening parallel with the plane of the spool, as at 4. In this opening is secured by means of rivets 5, or otherwise, a tube 6 one end of which is disposed, as at 7, in alinement with the annular space between 60 the two disks forming the spool, the other end being curved, as at 3. A thread of floss 9 is wound in the usual manner upon the spool and is threaded from the spool in through the end 7 of the tube 6 and out 65

through the end 8.

The operation of my device is as follows: The desired amount of thread being drawn through the tube from the spool, the spool and the clip and the tube together now form 70 a holder which is held in one hand so that the spool cannot revolve, and the outer end of the thread is held in the other hand. Now the curved extremity 8 of the tube 6 is placed in the mouth, inside the rows of teeth, at ex- 75 actly the proper place, and with the hand and the tube the thread is pressed and drawn between the teeth as may be desired. The tube and the spring clip are sufficiently heavy and rigid to withstand a considerable 80 strain and the thread may by the means here described be forced laterally through extremely narrow spaces.

While I have shown a tube as a means for guiding the thread, it will be obvious that 85 other means may be employed for this purpose, as,—for instance,—a flat or round bar grooved and having overlapping fingers or flanges. Or,—instead of a tube,—a sheet metal blank may be rolled spirally to form an 90

open tube spiral in cross-section.

Various ways will suggest themselves to those skilled in the art for securing the tube and the fork together and for journaling the spool upon the fork. I do not, therefore, 95 limit my construction to the specific forms here, by way of illustration, described.

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

In a device of the described character, a spool, a holder for the spool comprising a pair

of opposed spring-arms adapted to clasp and to revolubly support the spool therebetween, and a tube having its inner end mounted upon the spool-support and having a curved outer extremity, the arrangement being such that a thread may be guided from the spool through the tube to its outer extremity.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES P. LOCKE.

Witnesses:

ADA E. CAMERON, PHILIP M. CRAGO.