No. 623,294. Patented Apr. 18, 1899.

J. J. SULLIVAN.

THREAD CUTTER.

(Application filed Sept. 23, 1898.)

(No Model.)

Fig. 1.

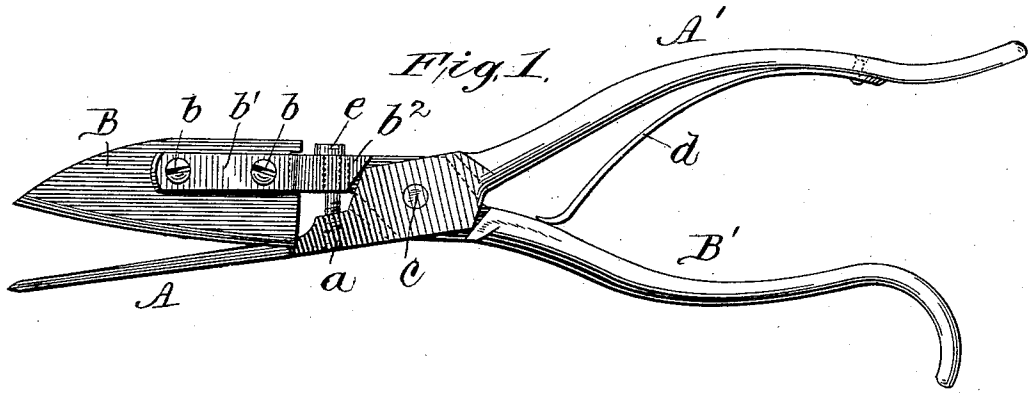


Fig. 2.

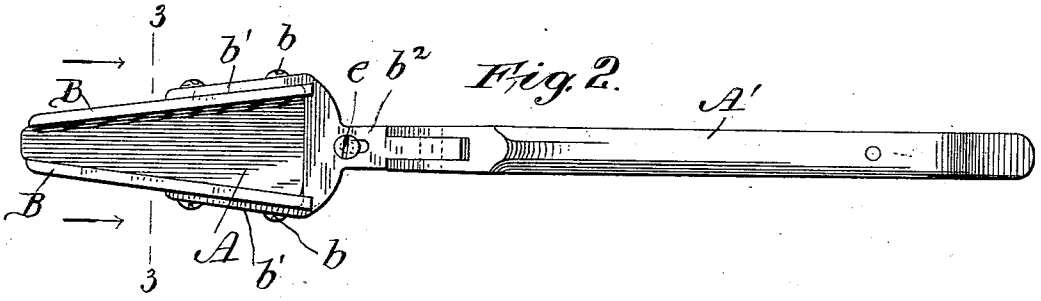
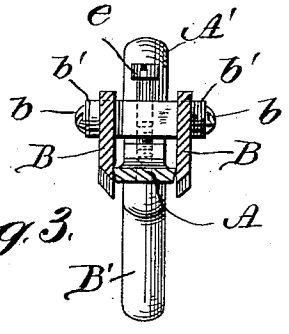


Fig. 3.



WITNESSES

C. W. Benjamin

A. D. Robinson

INVENTOR:

John J. Sullivan

BY

Thum & Calver

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN J. SULLIVAN, OF IPSWICH, MASSACHUSETTS.

THREAD-CUTTER.

SPECIFICATION forming part of Letters Patent No. 623,294, dated April 18, 1899.

Application filed September 23, 1898. Serial No. 691,681. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. SULLIVAN, a citizen of the United States, residing at Ipswich, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Thread-Cutters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to provide a thread-cutting implement adapted to cut out at a single operation the surplus loose thread extending between groups of stitches formed in sewing on buttons, stitching buttonholes, forming bars or stays, or doing other analogous work on sewing-machines. To this end the improved cutting implement is formed with double shear cutters or cutting parts separated from each other laterally or transverse to their cutting edges, so as to cut out a piece of thread of any predetermined length by one closing operation of the tool or implement, the cutting members being preferably pivotally connected and provided with suitable handles, so as to be operated similarly to ordinary shears. One cutting member is preferably formed as a flat tapering tongue or blade with shear edges at its sides, said tongue working between two shear-blades on the other member of the cutter and placed contiguous to the inclined sides or edges of said tongue or blade. In cutting out the loose thread or threads to be removed from between groups of stitches in the work the tapering tongue member of the cutter is slipped beneath the said thread or threads until the latter are drawn taut over said tongue at that part thereof the width of which is equal to the length of thread or threads to be cut out, and the jaws or members of the cutter are then closed like ordinary shears to sever the thread or threads in two places up close to the groups of stitches between which the thread or threads extend. The tapering tongue thus serves as a gage to insure the close severing of the thread or threads up close to the groups of stitches.

In the accompanying drawings, Figure 1 is a side view of the improved thread-cutting implement. Fig. 2 is a plan view of the same, and Fig. 3 a section on line 3 3 of Fig. 2.

A denotes the lower blade or tongue member of the cutter, the sides of which are formed as shear edges, said tongue member being preferably integral with a handle A′ and tapering, as shown in Fig. 2. The upper cutting member comprises the blades B, attached by screws *b* to arms *b′*, preferably formed integral with the handle B′, the two members of the cutter being pivotally secured together by the pin or rivet *c*. The blades B are arranged in inclined positions contiguous to the sides of tongue A, which works between said blades.

In the form of the invention herein illustrated the handles of the implement are forced apart to open the cutter by a spring *d*, and a stop to limit the opening movement by said spring is preferably employed, said stop consisting of the screw *e*, tapped in the shank *a* of the tongue A and extending through a slot in the shank b^2, on which the arms *b′* are formed. When in the opening movement of the implement the upper side of the shank b^2 strikes the under side of the head of the screw *e*, said movement will be arrested, the said screw being so adjusted that this will occur before the tongue A entirely leaves (or gets out from between) the blades B. Instead of using the spring *d* to open the cutters the handles A′ B′ might be furnished with loops or "bows" like ordinary shears or scissors, as will be understood.

From the foregoing it will be apparent that the surplus threads extending between groups of stitches formed for the purpose of attaching buttons or other purposes may be quickly severed in two places up close to the work simply by inserting the tapering tongue or blade A between the loose thread or threads and the work and then closing the implement, the said tapering tongue or blade serving, as heretofore stated, as a gage to draw the thread or threads taut over the cutting edges at the sides of said tongue and determine the points of cutting, and as the said tongue or blade is of different widths at different points in its length the implement is adapted to cut out

different lengths of the thread between differently-spaced groups of stitches, thus always trimming the threads up close to the work without any special care on the part of the user of the implement.

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

1. A thread-cutting implement comprising two members joined by a transverse pivot and provided with operating-handles, each of said members having two separated cutting edges or parts, one of said members consisting of a flat tongue or blade arranged between and working at right angles to the cutting parts of the other member and adapted to be inserted beneath threads lying close to a yielding flat surface.

2. A thread-cutting implement comprising two members provided with handles, and joined by a transverse pivot, one of said members having a tapering tongue or blade with cutting edges at its sides, and the other of said members having two shear-blades arranged to work contiguous and at right angles to the sides of said flat tongue or blade.

3. A thread-cutting implement consisting of two pivotally-connected members one of which comprises the flat tongue or blade A having the handle A′, and the other of which comprises the two separated blades B embracing and working against the edges of the said tongue or blade A and at right angles to the wider sides thereof, said blades being connected with the handle B′, combined with the spring *d* for forcing said handles apart to open the cutters.

4. The herein-described thread-cutting implement consisting of the tapering flat tongue or blade A provided with the handle A′, the handle B′, the arms *b*′ rigid with said handle B′, the blades B attached to the said arms and arranged to embrace the edges of the flat tongue or blade A and to work at right angles to the wider faces of the said tongue or blade, the transverse pivot *c* connecting the two members of the cutting implement, and the spring *d* for separating the said handles to open the cutters.

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

JOHN J. SULLIVAN.

Witnesses:
HENRY J. MILLER,
HAROLD W. BROWN.