J. H. KLENCK.

DEVICE FOR RIPPING SEAMS.

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1,315,312.

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Fig. 1.

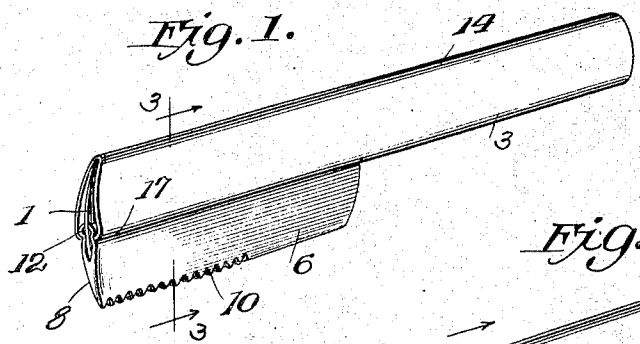


Fig. 2.

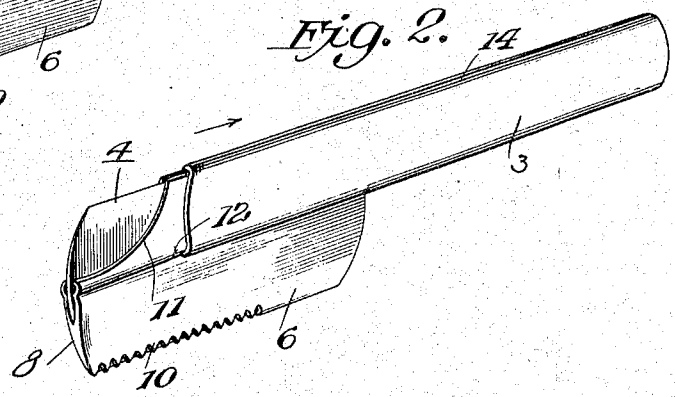
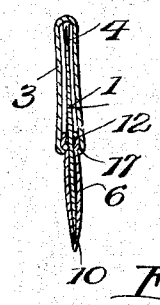


Fig. 4.

Fig. 3.



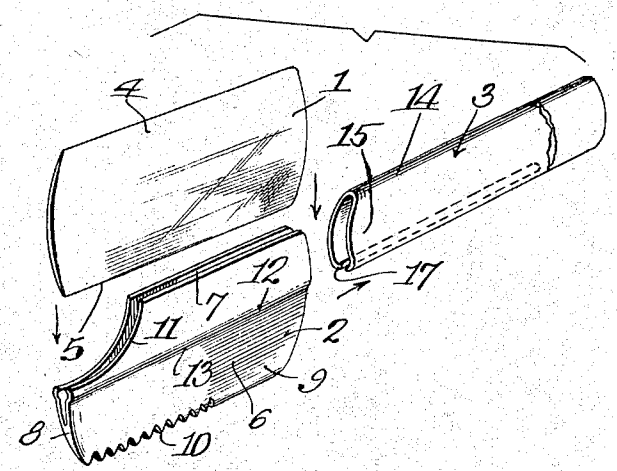
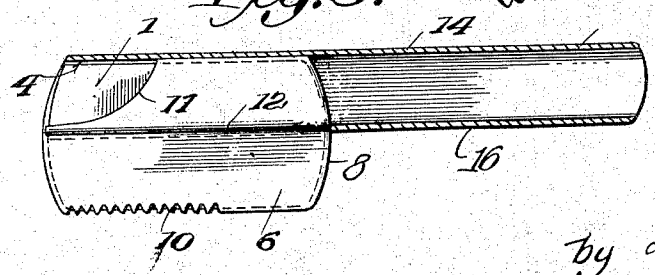


Fig. 5.



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DEVICE FOR RIPPING SEAMS.

1,315,312. Specification of Letters Patent. Patented Sept. 9, 1919.

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To all whom it may concern:

Be it known that I, JOHN H. KLENCK, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Ripping Seams, of which the following is a specification.

The present invention is a device designed for use by tailors, dressmakers, and individuals, in ripping the seams of garments in the making of repairs and alterations and in recovering material, and one of the primary objects of the present invention is to provide a device for this purpose the use of which will not be likely to result in cutting or slashing of the cloth and which will require no especial care or accuracy in its use, thus enabling the work to be more expeditiously and effectually performed than where scissors or some other implement is employed having an exposed cutting edge.

Another object of the invention is to so construct the device that the same may be adjusted so as to adapt it to be initially employed for the purpose of starting the seam after which an adjustment may be effected for the purpose of entirely housing the blade of the device so that the same cannot cause injury to the cloth or to the hands in the subsequent use of the device in the further performance of the ripping operation. Incidentally it is an object of the invention to so construct the device that when adjusted in the first mentioned manner, it may be employed in the expeditious removal of buttons, hooks, and eyes, and in fact all kinds of fastening devices employed upon garments, and may also be used in removing braid or other trimming.

A further object of the invention is to provide a device for the purpose stated so constructed that the stitches will be pulled by the device as well as being cut thereby so as to leave the cloth as nearly free from stitches as is possible, after the ripping operation has beeen performed.

A still further object of the invention is to provide a device for the purpose stated so constructed that the blade thereof may be readily removed for resharpening or for the substitution of a new blade.

The invention also contemplates so constructing the device that normally the blade will be completely housed so that the device, when not in use, may be safely kept in a work-basket or drawer without likelihood of cutting one's hands in removing it or other articles from the said basket or drawer.

In the accompanying drawings:

Figure 1 is a perspective view of the device embodying the present invention in its normal adjustment;

Fig. 2 is a similar view illustrating the blade holder of the device adjusted to position to adapt the device to be initially employed in starting a seam to be ripped;

Fig. 3 is a vertical transverse sectional view on the line 3—3 of Fig. 1;

Fig. 4 is a perspective view illustrating the several parts of the device disassembled;

Fig. 5 is a vertical longitudinal sectional view through the device.

As clearly illustrated in Fig. 4 of the drawings, the device consists essentially of a blade, indicated in general by the numeral 1, a blade holder indicated in general by the numeral 2, and a handle indicated in general by the numeral 3. The blade 1 greatly resembles and in fact may be a safety razor blade of that type provided with two parallel cutting edges being indicated in the drawings one by the numeral 4 and the other by the numeral 5 and while they are separately designated for convenience in describing the invention, it will be understood that there is no preference as to the manner in which the blade is to be inserted within the holder 2.

The blade holder 2 is preferably of sheet metal stamped or otherwise formed and folded to the required shape, and comprises two leaves 6 spaced slightly to form between them a pocket 7 having the same general contour as the leaves 6 and of dimensions to more or less exactly receive the blade 1. The pocket 7 opens through what may be termed the upper edge of the holder 2 as clearly shown in Fig. 4 of the drawings, but the ends of this pocket are closed as indicated by the numeral 8 so that when the blade 1 is fitted into the pocket it will be held against longitudinal movement. The pocket 7 is closed at its bottom by an integral fold 9 along the inner end or heel of the holder but its outer end or toe is notched along the folded edge to produce a series of teeth 10 extending from the front end to a point about midway of the ends of the said edge. This edge of the holder is formed relatively thin or sharp so that the teeth may serve to a certain extent to cut through and pull out

the stitches without, however, injuring the cloth at the opposite sides of the seam being ripped. It will be evident and particularly from inspection of Figs. 1, 2, 3 and 5 of the drawings that when the blade 1 is fitted into place within the holder, one of its cutting edges as for example its edge 5 will lie within the bottom of the pocket 7, this edge throughout substantially the forward half of its length extending along the series of teeth 10 and intersecting the said teeth so that as the toothed edge of the holder is drawn along the seam, the stitches will enter between the teeth and be severed by the portions of the cutting edge 5 of the blade which extend between adjacent teeth, the severed stitches being more or less completely withdrawn from the cloth through the rasping action of the said teeth 10. However, it will be evident that this edge of the blade 1 lies inwardly of the extremities of the teeth 10 and consequently no injury can be occasioned when the hand is brought into engagement with this edge of the holder. The inner end or heel of the blade is entirely covered as at 9. The holder 2 has the upper forward corners of its leaves 6 cut-away as indicated by the numeral 11 so that when the blade 1 is in place within the holder the forward portion of its upper cutting edge 4 will be exposed as clearly shown in Fig. 2 of the drawings although the remainder of its said edge 4 is effectually protected as it lies within the bounds of the upper edges of the said leaves 6 of the holder. For a purpose to be presently explained the sides 6 are laterally offset in opposite directions as at 12 along parallel lines substantially midway between the upper and lower edges of the holder so that shoulders 13 are formed extending longitudinally of the outer faces of the said leaves 6. The handle 3 of the device is also preferably formed from sheet metal and comprises spaced sides 15, a connecting back portion 14, and a connecting bottom portion 16. The bottom portion 16 terminates inwardly of the forward end of the handle 3 at a distance substantially equal to the length of the blade holder 2, and the lower edges of the sides between the forward end of the said bottom portion 16 and the extreme forward end of the handle are formed with inwardly directed flanges 17. Thus the forward portion of the handle is of channel formation, constituting a sheath adapted to slidably receive the upper portion of the said blade holder 2, the flanges 17 fitting beneath the shoulders 13 so that the holder will be rigidly held in place when slid into the sheath; while the rearward portion of the handle constitutes a tubular hand-grip.

In the initial use of the device and for the purpose of starting a seam, or if desired for the purpose of removing buttons, fastenings or trimmings, the blade holder 2 may be slid forwardly within the sheath from the position shown in Fig. 1 to the position shown in Fig. 2 in which latter position the forward portion of the cutting edge 4 of the blade 1 will be exposed due to the cut-away portions 11 of the leaves 6 of the holder and thus this exposed cutting edge portion may be freely employed for the purposes stated. After the seam has been started, however, the holder may be slid rearwardly in the sheath to again assume the position shown in Fig. 1 of the drawings whereupon the back 14 of the handle will effectually house the entire cutting edge 4 of the blade so that no portion of this cutting edge will be exposed to cause injury to the hands. The toothed portion 10 of the holder may then be drawn along the seam without special care or attention being paid to the rapidity with which the device is moved along the seam, and the stitches will be severed by the portions of the cutting edge 5 of the blade which extend across the notches between the teeth 10 and will be more or less completely drawn from the cloth through the rasping or pulling action of the teeth.

It will, of course, be understood that various modifications of the precise structure illustrated in the drawings and herein described may be made without departing from the spirit of the invention as expressed in the appended claims. The arrangement illustrated, however, is an efficient one and will ordinarily be preferred. Thus while a greater portion of the leaves 6 of the blade holder might be cut away than indicated by the numeral 11 in the drawings, and the teeth 10 might be made to extend substantially the entire length of the edge 9 of the holder, there is an advantage in the relative arrangement and extent of the cut-away portions 11 and the series of teeth 10, namely, that after the blade has once been inserted, substantially only one half of each cutting edge 4 and 5 thereof is subjected to wear and when these halves have become dulled, the blade may be removed from the holder and reversed end for end thus bringing the other and yet sharp halves of the said edges into use.

Having thus described the invention, what is claimed as new is:

1. A ripping device comprising a channeled member, a blade holder slidably fitted within said member and having at one edge a series of pulling teeth shaped to remove the severed threads, and a double edge blade disposed within the holder and having its front edge intersecting the teeth of the series, the holder being cut-away to expose a portion of the rear edge of the blade, said member in one position of adjustment of the holder therein constituting a sheath for covering the portion of said rear edge exposed by the holder.

2. In a ripping device, the combination with a double-edge blade, and a holder folded into two leaves to embrace the blade, the folded lower edge having pulling teeth shaped to remove the severed threads and to expose the lower edge of the blade, the leaves of the holder being cut away at their upper forward corners to expose part of the upper edge of the blade and said leaves having exterior longitudinal shoulders; of a channeled handle having flanges along its edges slidably engaging beneath said shoulders whereby it may be adjusted to cover or expose that part of the upper edge of the blade exposed by the holder.

3. In a ripping device, the combination with a double-edged blade, and a holder folded into two leaves to embrace the blade, the folded lower edge having thread-pulling teeth along one-half of its length exposing a part of the blade between them, the leaves being cut away at their upper corners above the teeth to expose a part of the upper edge of the blade between them, and said leaves having exterior longitudinal shoulders; of a channeled handle having flanges with which said shoulders may be engaged with either end of the holder forward whereby the parts may be adjusted to cover or to expose those portions of the blade exposed by the holder.

4. In a device of the character described, the combination with a blade holder of V-shaped section notched along its angular edge to produce teeth, cut away at one end along its other edge, and having shoulders along its sides, and a double-edged blade removably inclosed within the holder with its cutting edges exposed at said cut away portion and between said teeth; of a hollow member tubular at one end to form a handle and channeled at the other end to receive the back of the holder with either end of the latter forward, the channeled portion having flanges slidably engaging said shoulders and the bottom of the tubular handle adapted to abut the contiguous end of the holder.

5. In a device of the character described, the combination with a sheet metal blade-holder folded into leaves and notched along its fold to produce teeth, the ends of the holder being closed and its back open and its leaves having longitudinal shoulders, and a blade removably inclosed within the holder with its cutting edge intersecting said teeth; of a hollow handle tubular at one end to form a hand-grip and channeled at the other end to inclose the back of the holder, the channeled portion having flanges slidably engaging said shoulders and the bottom of the hand-grip adapted to abut the inner closed end of the holder.

In testimony whereof I affix my signature.

JOHN H. KLENCK. [L. S.]