United States Patent

Phillips et al.

3,673,687 [15]

July 4, 1972 [45]

[54]	TAPE AND BANDAGE CUTTER						
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[22]	Filed:	Dec. 31, 1970					
[21]	Appl. No.: 103,197						
[51]	52] U.S. Cl. 30/294 51] Int. Cl. B26b 29/02 58] Field of Search 30/287, 289, 293, 294, 317						
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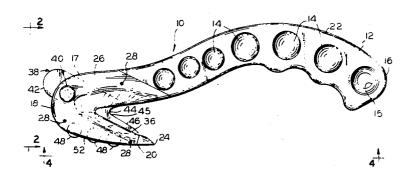
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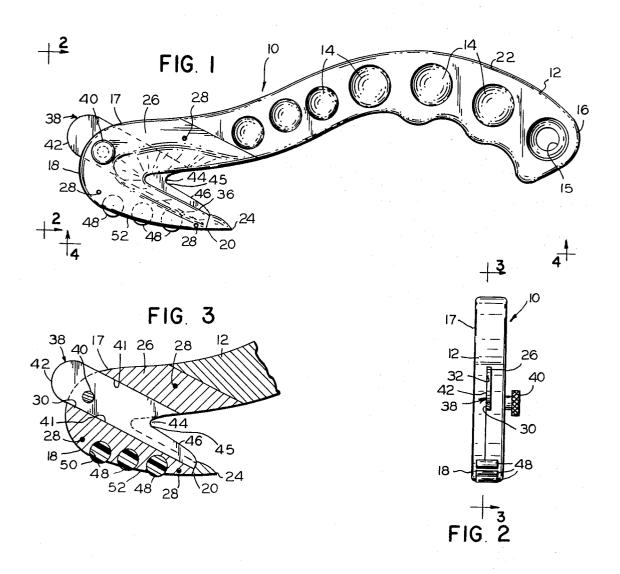
ABSTRACT

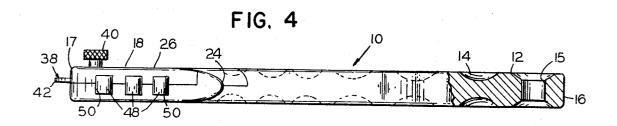
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A tape and bandage cutter has a reversely curved toe portion formed at one end of a handle and a curved cutting blade removably mounted in a slot in such portion. Part of the blade extends generally parallel to the tape contacting surface of the toe portion. The handle is formed generally parallel to the toe portion such that a force applied to the handle in the direction of the toe portion draws the latter underneath the tape to be cut. Rollers mounted beneath the toe portion facilitate movement over the skin.

2 Claims, 4 Drawing Figures







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TAPE AND BANDAGE CUTTER

BACKGROUND OF THE INVENTION

This invention relates to tape and bandage cutters and, more particularly, to a cutter for removing the tape that is routinely applied to the wrists and ankles of athletes.

The taping of athletes' wrists and ankles is a routine practice engaged in by athletic trainers on behalf of athletes of all types and especially those who compete in contact sports. Such taping is generally preceded by applying a protective coating of benzoin, or elastic paper, gauze or stockinette to the limb which is thereafter wrapped with tape in the manner well known to those who work with athletes

The removing of the tape at the end of the athletic contest is 15 generally a time consuming operation. Furthermore, if there has been an injury to the joint or limb, it is essential to remove the tape without applying any appreciable pressure to the limb. Since the tape itself is adhered tightly to the skin and consists of several layers in addition to the underlying gauze or 20 generally parallel to the tape contacting surface 36 thereof. stockinette, the various layers necessarily exert pressure on bone and flesh. If there has been an injury, it is essential that additional pressure be eliminated to avoid further injury.

Accordingly, it is the primary object of the present invention to provide a tape and bandage cutter that will quickly and 25 efficiently remove protective layers of tape from the joints and limbs of athletes.

It is a further object of the present invention to provide such a cutter that will be effective in removing such tape without exerting any additional pressure against the skin.

It is a still further object of the present invention to provide such a cutter that will move smoothly and without pressure to sever tape over an injury such as a broken bone, skin laceration or severely bruised flesh.

It is a still further object of the present invention to provide 35 such a cutter having a removable blade that can be easily sharpened or replaced and that will not clog with the material being cut.

SUMMARY OF THE INVENTION

The tape and bandage cutter of the present invention comprises an elongated handle member and a depending reversely curved toe portion formed at one end thereof, the distal end of the toe portion being generally parallel to at least one portion 45 of the handle member. Such toe portion is adapted to be drawn underneath tape and like material wrapped around a joint or limb by a force applied to the handle member.

A cutting blade is removably mounted in a slot in the toe portion, the blade being provided with a curved cutting edge 50 which extends outwardly of the toe portion in the direction of the distal end thereof. At least one portion of the edge of the blade extends generally parallel to the tape contacting surface of the toe portion.

At least one roller is mounted in the toe portion extending 55 outwardly from the lower surface thereof to contact the skin during the severing of the tape. Inserting the toe portion of the cutter underneath the tape and drawing the handle in the direction of the distal end of the toe portion causes the rollers at the base thereof smoothly to move over the limb. The tape 60 is thus severed quickly and easily without any additional pressure to the limb.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side view of our tape and bandage cutter.

FIG. 2 is an end view taken on line 2-2 of FIG. 1.

FIG. 3 is a sectional view taken on line 3—3 of FIG. 2.

FIG. 4 is a bottom view of the cutter illustrated in FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, there is shown a tape and bandage cutter 10 comprising an elongated handle member 12 of aluminum, brass, steel, plastic or other similar strong material extending, as illustrated, in a generally horizontal direction 75 edge comprising a curved portion at the rear thereof, said

and having a plurality of finger grip indentations 14 on each side thereof. A hole 15 is formed in the end 16 for attachment to a cord or lanyard (not shown).

Integrally formed with the lower or forward end 17 of handle member 12 is a depending reversely curved toe portion 18, the distal end 20 of which extends in a direction generally parallel to at least one portion of handle member 12 and, preferably, to the portion 22 thereof. End 20 of toe portion 18 is pointed as at 24 and is thus adapted to be drawn underneath tape applied to a wrist or ankle by a force applied to handle

Toe portion 18 is formed with a cap member or side plate 26 which is attached thereto by three stainless steel flush head screws 28. Plate 26 is formed with a recess 30 therein so that when attached to toe portion 18, a slot 32 is provided therethrough extending from the extreme forward end 17 of the cutter through toe portion 18 emerging at the distal end 20 thereof. Slot 32 extends along the distal end of toe portion 18

A stainless steel cutting blade 38 is removably mounted in slot 32 being retained therein by a knurled head shoulder bolt 40 which extends through blade 38 and is threadedly received into toe portion 18. Blade 38 has parallel edges 41, a blunt curved forward portion 42 joining edges 41, and a curved cutting edge 44 at the rear. Edge 44 is formed generally parallel to forward portion 42 and is honed razor sharp.

The curved portion 45 of edge 44 merges into a generally straight portion 46 which extends generally parallel to tape 30 contacting surface 36 of toe portion 18. Curved portion 45 of edge 44 is thus seen to extend outwardly of toe portion 18 in the direction of the distal end 20 thereof, thereby to be able to cut through tape or bandage-like material when toe portion 18 is drawn thereunder by a force applied to handle member 12.

Blade 38 is easily removed for sharpening or replacement by unscrewing bolt 40. Curved cutting edge 44 prevents cut tape or bandage material from clogging against handle member 12 during the cutting operation.

Three nylon rollers 48 are journaled in recesses 50 provided 40 in plate 26 and toe portion 18. Rollers 48 extend outwardly from the lower surface 52 of the toe portion 18 to contact the skin and move easily therealong during severing of the tape. Since the presence of the rollers facilitates movement by relieving normal pressure, cutter 10 is enabled to move smoothly and without pressure even over an injured joint or limb without aggravating the injury. Rollers 48 also facilitate movement without undue pressure of cutter 10 over bony sections of the body, as for example, over the instep. This is especially helpful in the case of a fracture of the foot during playing periods. Rollers 48 provide similar action over muscular parts of arms and legs in case such sustain a fracture, and they also facilitate removing tape from limbs taped after a fracture has occurred.

In the foregoing description the invention has been described with reference to certain particular preferred embodiments, although it is to be understood that the specific details shown are merely illustrative and that the invention may be carried out in other ways without departing from the true spirit and scope of the following appended claims.

We claim:

1. A tape and bandage cutter for severing adhesive tape and like material applied to a person's limbs, comprising an elongated curved handle member;

65 a depending reversely curved toe portion formed at one end of said handle member, the distal end of said toe portion being generally parallel to the other end of said handle member, said distal end of said toe portion being adapted to be drawn underneath said tape by a force applied to said handle member; 70 said toe portion being provided with a slot therethrough, said slot extending along said distal end of said toe portion

generally parallel to the tape contacting surface thereof; a single cutting blade removably mounted in said slot, said blade being provided with a sharp cutting edge, said cutting

curved portion of said cutting edge extending outwardly of said toe portion in the direction of said distal end thereof; said cutting edge of said blade further comprising a generally straight portion, said curved portion being tangential to said straight portion, said straight portion extending generally 5 movement of said cutter therealong. parallel to said tape contacting surface of said distal end of said toe portion;

a plurality of recesses longitudinally disposed in the lower por-

tion of said toe portion; and a roller journaled in each of said recesses, said rollers extending outwardly from said lower portion of said toe portion to contact the skin during severing of said tape and facilitate

2. A tape and bandage cutter as in claim 1 in which said rol-

lers comprise nylon rollers.

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