United States Patent [19]

Barr

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[54]	COLLAP	SIBLE SCISSORS
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[52]	U.S. Cl	
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[50]	Ticle of Bi	30/266, 268
[56]		References Cited
	UNI	TED STATES PATENTS
2,588,	939 3/19	52 Selander 30/255
F	OREIGN I	PATENTS OR APPLICATIONS
:	208 1/18	77 Great Britain 30/255

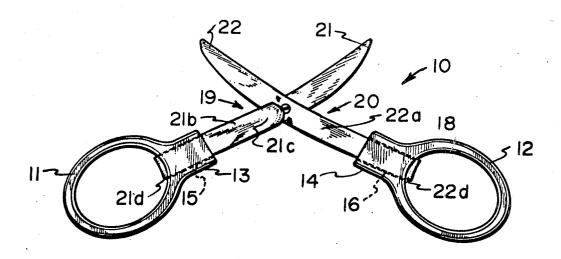
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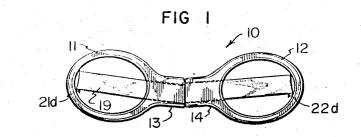
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[57] ABSTRACT

A scissors that can be collapsed to present a small, safely handled unit. Reversely turned blades each provide a cutting portion and a spring loaded handle engaging portion, the spring loaded handle engaging portion being arranged to prevent inadvertent collapsing of the scissors.

1 Claim, 4 Drawing Figures





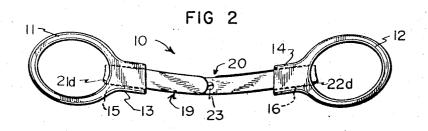


FIG 3

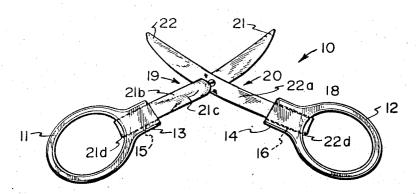
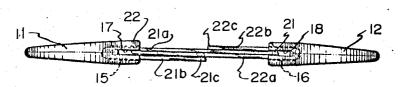


FIG 4



COLLAPSIBLE SCISSORS

BRIEF DESCRIPTION OF THE INVENTION

1. Field of the Invention

This invention relates to collapsible scissors that can 5 be compacted into a small, safely handled unit.

2. Prior Art

Collapsible scissors intended to be compacted into a safely handled package have been known in the past. One such scissors is shown, for example, in U.S. Pat. 10 No. 2,588,939. In this patent, the disclosed scissors have pivotally connected blades, each with a cutting edge portion and with handle engaging portions on which shanks of oval handles are telescoped. Spring tongues have outwardly projecting tips that engage sockets in the handles when the scissors is collapsed and the spring tongues must be compressed simultaneously with sliding of the handle shanks along the handle engaging portions to expand the scissors. While the scissors shown by U.S. Pat. No. 2,588,939 is effective for the purposes intended and is safe to carry and handle, when compacted, it has been found to be cumbersome to have to simultaneously compress the spring tongues while sliding the handles. This generally requires use of two hands to expand each handle. In addition, it has been found that the screw used to pivotally connect the blades tends to work loose and no means have been provided to hold it in place.

SUMMARY OF THE INVENTION

It is a principal object of the present invention to provide a collapsible scissors that can be compacted to a small state wherein the blades thereof are safely covered and that can be more easily manipulated than can 35 scissors of this type previously known.

Other objects are to provide such a scissors with means to frictionally secure handles thereto to blades and with positive means to secure a pivot screw pivotally interconnecting the blades thereof together in 40 place.

Principal features of the invention include reversely turned blades each having a cutting edge portion and a reversely turned, spring formed handle engaging portion, one of which preferably extends to a position 45 slightly overlapping the head of a screw used as a pivot connection between the blades. The spring formed handle engaging portions are normally expanded.

Additional objects and features of the invention will become apparent from the following detailed description, taken together with the accompanying drawing.

THE DRAWING

FIG. 1 is a side elevation view of the scissors of the invention in a collapsed condition;

FIG. 2, a similar view, with the scissors extended;

FIG. 3, a view like that of FIG. 2, but with the scissors biades separated; and

FIG. 4, a top plan view of the scissors of the invention, extended as shown in FIG. 2.

DETAILED DESCRIPTION

Referring now to the drawing:

In the illustrated preferred embodiment, the scissors, shown generally at 10, includes a pair of handles 11 and 12 of generally oval configuration and having shanks 13 and 14 respectively formed thereon.

Rectangular slots 15 and 16 are respectively formed through the shanks and intercept slots 17 and 18 respectively extend from the tops of the shanks downwardly into the slots 15 and 16.

A pair of blades 19 and 20 are respectively arranged to be inserted into the slots 15 and 16. Each blade includes a cutting portion 21, 22 and a handle engaging portion made up of a continuation 21a, 22a of the cutting edge portion and a reversely turned portion 21b, 22b made of spring steel. The resiliency of the reversely turned portions 21b, 22b, normally spreads the tips 21c, 22c thereof such that the distance from the outer edge of the tips to the outer edge of the continuation portions 21a, 22a is greater than the distance across the rectangular slots 15 and 16. Thus, the reversely turned portions must be compressed against the continuation portions before the handle engaging portions can be inserted through slots 15 and 16.

After the blades have been inserted through the slots 15 and 16 a portion 21d, 22d of the metal at the bends interconnecting the continuation and reversely turned portions is upset to prevent full withdrawal of the blades from the handles.

A screw 23 is inserted through one blade here shown as blade 20, and is threaded into a tapped hole provided in the other to pivotally interconnect the blades. The head of screw 23 is countersunk in blade 20 and the tip 21c of reversely turned portion 21b extends until it just slightly overlaps the head 23. With this construction the bevelled edge of the screw head will allow it to 30 be inserted past the tip 21c, but the tip 21c will keep the screw from working loose and falling out.

In operation, the blades are brought parallel with the tips thereof moving downwardly through intercept slots 17 and 18 and into slots 15 and 16 and the handles are telescoped towards one another when the scissors is being collapsed. The reversely turned portions press together during movement of the handles, but their natural tendency to expand forces the tips 21c and 22c against walls of slots 15 and 16 to frictionally hold the handles in any set position on the blades. To extend and use the scissors, a reverse procedure is followed.

Although a preferred form of my invention has been herein disclosed, it is to be understood that the present invention is by way of example and that variations are possible without departing from the scope of the hereinafter claimed subject matter, which subject matter I regard as my invention.

I claim:

1. A collapsible scissors comprising

a pair of oval handles;

a shank formed on each handle and a rectangular slot therethrough and an intercept slot extending into the rectangular slot;

- a pair of blades each having a cutting portion and a continuation portion and a spring mounted reversely turned portion connected to said continuation portion such that the distance between the outside of the continuation portion and the reversely turned portion is greater than the distance across the rectangular slot, said blades each being inserted through a rectangular slot such that the tip of the reversely turned portion frictionally engages the wall of said rectangular slot;
- a screw pivotally interconnecting the blades, said screw having a head recessed into one of said blades; and

said reversely turned portion of the other blade extending slightly over said recessed head.