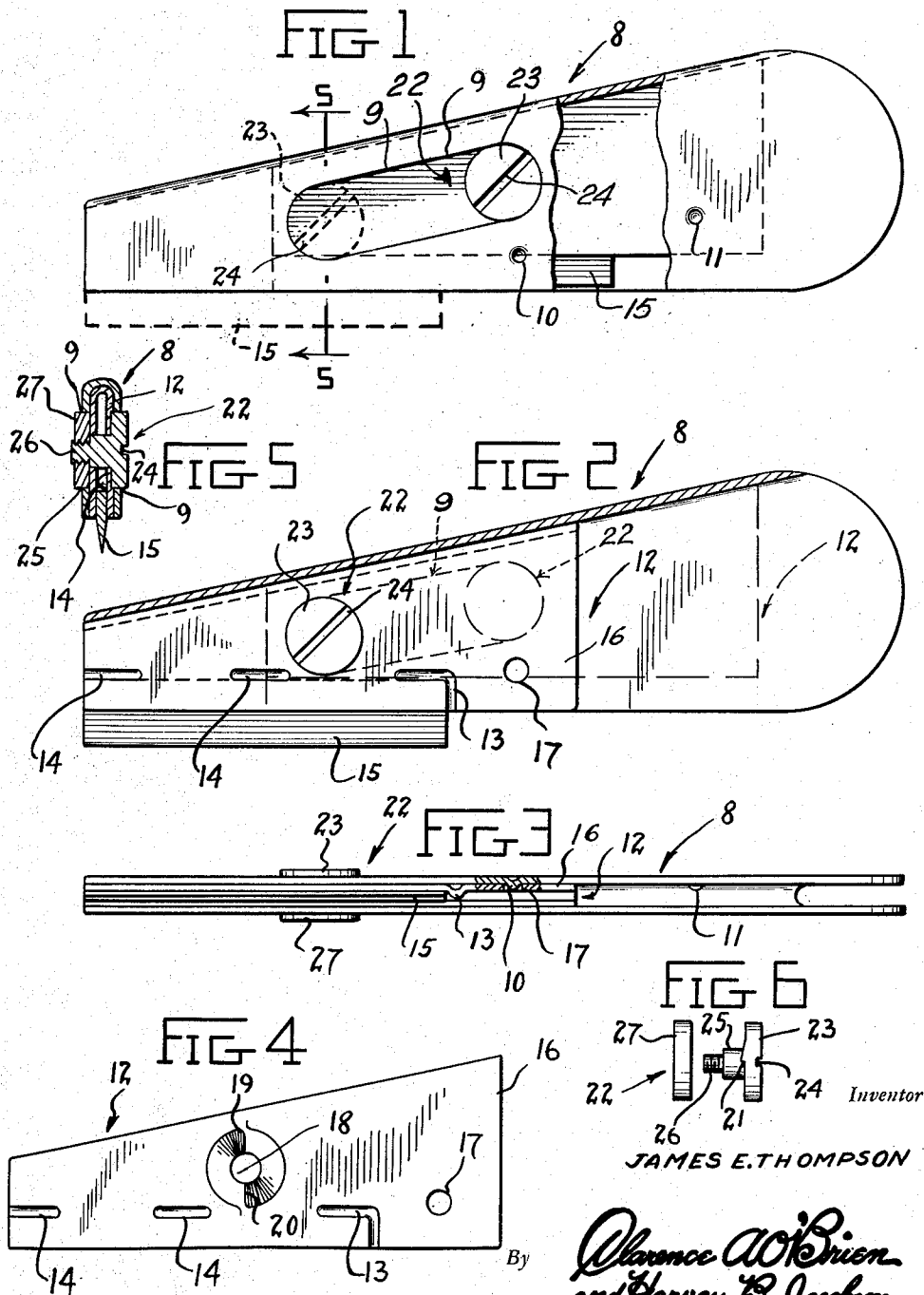


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J. E. THOMPSON
AMPOULE FILE AND BLADE HOLDER

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Inventor
JAMES E. THOMPSON

By *Clarence A. O'Brien*
and Harvey B. Jacobson
Attorneys

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AMPOULE FILE AND BLADE HOLDER

James E. Thompson, San Jose, Calif., assignor
of fifty per cent to Walter S. McNear, San Jose,
Calif.

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The present invention relates to a pocket type multiple purpose utility implement which is expressly, but not necessarily, adapted to be utilized as a holder and operating device for a toothed file, such as lends itself for scoring and subsequently decapping ampul tips to expedite use of the contents of such ampul.

As the introductory statement of the invention implies, I have evolved and produced a simple and expedient tool or implement which serves to accommodate, on the one hand, an ampul scoring file and which is equally well adapted for use as a holder for rigid imperforate single edge razor blades, whereby to provide a handy device for sharpening pencils, cutting string, and for any other purposes for which a device of this type may satisfactorily be used.

More specifically, in carrying out the preferred embodiment and principles of the invention, I employ inner and outer sheath-like members, the outer one constituting an adapter and handle and scabbard, and the inner one constituting a file and blade holder, said members being fitted together in telescoping relation and the inner member being longitudinally shiftable in a manner to permit the usable edge of the blade to be projected and retracted according to the needs of the user.

Another object of the invention has to do with the aforementioned assemblage of coating, sheath-like members, the inner one being provided with a novel blade clamping and actuating means having heads which are keyed and slidable in diagonal cam slots formed in the side walls of the outer sheath to thus provide the desired shifting action which serves to either extend or retract the usable edge of said blade.

By way of introduction to the detailed description, reference being had to my drawings, it will be seen that the implement is characterized by an outer sheath having inclined cam slots in its opposed parallel walls, an inner and smaller sheath fitting telescopically between said walls, the side walls of the inner sheath serving to grip and frictionally clamp the flat, imperforate blade between themselves, and being bound into clamping positions by a headed fastener, preferably a bolt and nut, which does not pierce the blade, but accomplishes the desired remote clamping action and serves, in addition, to assemble the two sheaths and rides back and forth in said camming slots.

Other objects, features and advantages of the invention will become more readily apparent

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from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a side elevational view of a hand scoring and cutting implement constructed in accordance with the principles of the present invention, the cutting blade being shown in its retracted safety position, readied for use.

Figure 2 is a central longitudinal sectional view through the outer sheath, the inner sheath being shown in elevation with the blade extended for use.

Figure 3 is a bottom plan or edge view of the structure seen in Figures 1 and 2 with portions broken away and shown in section to bring out certain of the details of construction.

Figure 4 is a side elevational view of the blade-holding sheath per se, the blade being omitted.

Figure 5 is a section taken on the plane of the line 5-5 of Figure 2.

Figure 6 is a detail view of the two-part assembling and blade clamping means.

Referring now to the various figures of the drawing, and particularly to the elements or parts thereof, it will be seen that the outer sheath or adapter is denoted by the numeral 8. This is of general wedge-shaped configuration in side elevation. The opposite, intermediate, side wall portions are formed with elongated slots 9 and one wall is provided with indentations 10 and 11 functioning as holder retaining detents, in a manner to be hereinafter described.

The tool or blade-holding sheath is differentiated and denoted by the numeral 12 and is of approximately the same general shape as the outer sheath 8. As shown in the drawings, it is considerably shorter than the outer sheath so that it may be shifted back and forth to full and dotted-line positions, as shown in Figures 1 and 2, for adjustment purposes. This blade accommodation and holding sheath 12 is shaped and proportioned to permit same to occupy the shiftable "in" and "out" positions seen in full lines in Figures 1 and 2, respectively. One side wall, at one end of said holder sheath, is provided with L-shaped indentations 13 coating with rectilinearly straight supplementary indentations 14, said indentations functioning as abutments or stops for the blade. The respective abutments on said side wall are so positioned and arranged in relation to each other as to provide a "pocket" for accommodation of the blade or file 15, as the case may be. As before stated, part 15 may be

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broadly referred to as a "tool" and may be either a razor blade or a toothed ampul scoring file. One side wall, that is, the side wall 16 of the blade holder sheath, is provided with a keeper hole 17 for selective reception of the detents 10 and 11. When the detent 10 is inserted and fitted into the keeper hole 17, as shown in Figure 3, the tool or blade 15 is positioned in a projected manner for use. When the sheath 12 is slid from left to right, as shown in Figure 2 in dotted lines, the keeper hole 17 is then registered with the detent 11, whereby to assist in maintaining the respective parts 8 and 12 in predetermined relationship. The material used, which may be of any suitable character, is sufficiently resilient to permit the desired snap action to be attained. The side walls of the sheath 12 are also provided with aligned bolt holes 18 and the outer surfaces are fashioned into circumferentially spaced stop shoulders 19 and 20, these for frictional coaction with a cam-retaining element 21 on the two-part clamping unit 22. This comprises a bolt having a head 23 with a screw-driver kerf 24, the shank of the bolt being smooth and fashioned into a shoulder, as indicated at 25, and then reduced and screw-threaded, as at 26, to accommodate the ring-nut 27. The parts 23 and 27 may be referred to as heads, and they are of such diameter as to fit nicely in the slots 9, whereby to permit same to be shifted back and forth to attain the desired projectable and retractable results.

This holder lends itself to practical accommodation of single edge safety razor blades of the rigid imperforate type. However, it is possible to take any double edged flexible blade and to break it into halves and to use the halves in the holder. It is so designed that the blade can be extended for use in cutting anything the user might want to cut with a sharp razor blade. The blade can be retracted within the holder where it cannot cut the fingers or have the cutting edge dulled or ruined, so that it may be safely carried in pocket or purse. It is provided with means to clamp the blade in its holder, so blades can be easily removed and new ones inserted.

It is also designed as a holder for a glass ampul toothed file blade for scoring the necks or tips of ampuls, so they can be tapped off and the contents removed. The ampul file is the same shape and approximate size as the razor blade shown, except for the cutting edge which is a series of fine teeth, such as a steel cutting file. The ampul file is made of cemented carbide compound to insure long wear, and is approximately twice as hard as the ampul glass.

The clamping unit is fastened to the blade holder and is positioned within the slots and holds the blade holder within the outer sheath, and with the aid of the ends of the slots acts as a stop for forward position and reverse. The heads of the clamping unit protrude past the surface of the outside of the sheath, making it possible when holding the holder with two fingers of the left hand to use the thumb of the right hand against the head of the clamping unit on one side and the forefinger on the other side, and sliding the blade holder into position.

Reference being had again to the "tool" 15, the one shown is a safety razor blade which is a rigid, imperforate plate with a single cutting edge.

In view of the foregoing description taken in conjunction with the accompanying drawings, it is believed that a clear understanding of the con-

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struction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though I have herein shown and described a preferred embodiment of my invention that the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and within the scope of the appended claims.

I claim:

1. A pocket-type tool of the class described comprising a sheath, U-shaped in cross-section, the free longitudinal edges of the opposed side walls being straight from end to end, said side walls having opposed cam slots disposed at oblique angles to said free edges, a progressively extensible and retractable tool holder slidable in said sheath, and headed fastener means carried by said holder and keyed and slidable back and forth in said cam slots.

2. A pocket-type tool of the class described comprising a sheath, U-shaped in cross-section, the free longitudinal edges of the opposed side walls being straight from end to end, said side walls having opposed cam slots disposed at oblique angles to said free edges, a progressively extensible and retractable tool holder slidable in said sheath, and fastener means carried by said holder and keyed and slidable back and forth in said cam slots, said fastener means being a double headed fastener, the heads of which operate in said cam slots.

3. A pocket-type tool of the class described comprising a sheath, U-shaped in cross-section, the free longitudinal edges of the opposed side walls being straight from end to end, said side walls having opposed cam slots disposed at oblique angles to said free edges, an extensible and retractable tool holder slidable in said sheath, and fastener means carried by said holder and keyed and slidable back and forth in said cam slots, said fastener means being a double headed fastener, the heads of which operate in said cam slots, the diameter of said heads being equal to the widths of said slots and said heads riding almost wholly within the confines of said slots.

4. A pocket-type ampul file and safety razor blade holder of the class described comprising an outer sheath, U-shaped in cross-section, the free longitudinal edges of the opposed side walls of said sheath being straight from end to end and parallel to the longitudinal axis of said sheath, said side walls having opposed duplicate-linearly straight cam slots, said slots being obliquely angled in respect to said free edges, an inner sheath slidably mounted between the side walls of the outer sheath, said inner sheath being U-shaped in cross-section and smaller in proportion than the outer sheath, a headed bolt piercing the side walls of said inner sheath and having a clamping nut on its shank corresponding to the head on the opposite end of the shank, said nut and head being slidable in adjacent slots and coacting with the longitudinal edges of the slots to actuate the inner sheath from "in" to "out" position, and a blade, independent of said bolt, held frictionally between predetermined edge portions of the side walls of said inner sheath.

5. A pocket-type ampul file and safety razor blade holder of the class described comprising an outer sheath, U-shaped in cross-section, the free longitudinal edges of the opposed side walls of

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said sheath being straight from end to end and parallel to the longitudinal axis of said sheath, said side walls having opposed duplicate linearly straight cam slots, said slots being obliquely angled in respect to said free edges, an inner sheath slidably mounted between the side walls of the outer sheath, said inner sheath being U-shaped in cross-section and smaller in proportion than the outer sheath, a headed bolt piercing the side walls of said inner sheath and having a clamping nut on its shank corresponding to the head on the opposite end of the shank, and nut and head being slidable in adjacent slots and coacting with the longitudinal edges of the slots to actuate the inner sheath from "in" to "out" position, and a blade, independent of said bolt, held frictionally between predetermined edge portions of the side walls of said inner sheath, one of said last-named side walls having orderly arranged indentations forming stops and adapted to limit the degree of insertion of the blade between said side walls.

6. As a new article of manufacture and as a component part of a device of the class described, a sheath adapted to serve as holder and clamp for an insertable and removable flat tool, at least one wall of said sheath having tool locating detents, a tool fitted and held solely by friction between said walls and abutting said detents, and a tool clamping fastener piercing said walls, independently and remote from said tool, and serving to frictionally bind said walls against said tool.

7. As a new article of manufacture and a component part of a tool of the class described, a sheath adapted to function as combined handle

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and scabbard, said sheath being U-shaped in cross-section and the free edges of the opposed parallel side walls being elongated, opposite to one another and linearly straight from end to end and said side walls having duplicate oppositely aligned slots, and said slots being oblique to said free edges, whereby to function as inclined cams for a headed fastener which is adapted to be slidably mounted in said slots.

8. As a new article of manufacture and a component part of a tool and holder of the class described, an elongated substantially wedge-shaped sheath adapted to serve as a handle as well as a blade-encasing scabbard, said sheath being U-shaped in cross-section, the free longitudinal edges being straight from end to end and opposite one another, one transverse end being straight from end to end and at right angles to said free edges, and the bight portion being straight from one end to the other and slanting obliquely in respect to said free edges, and said side walls being provided with duplicate opposed cam slots running parallel to said bight portion and obliquely to said free edges.

JAMES E. THOMPSON.

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