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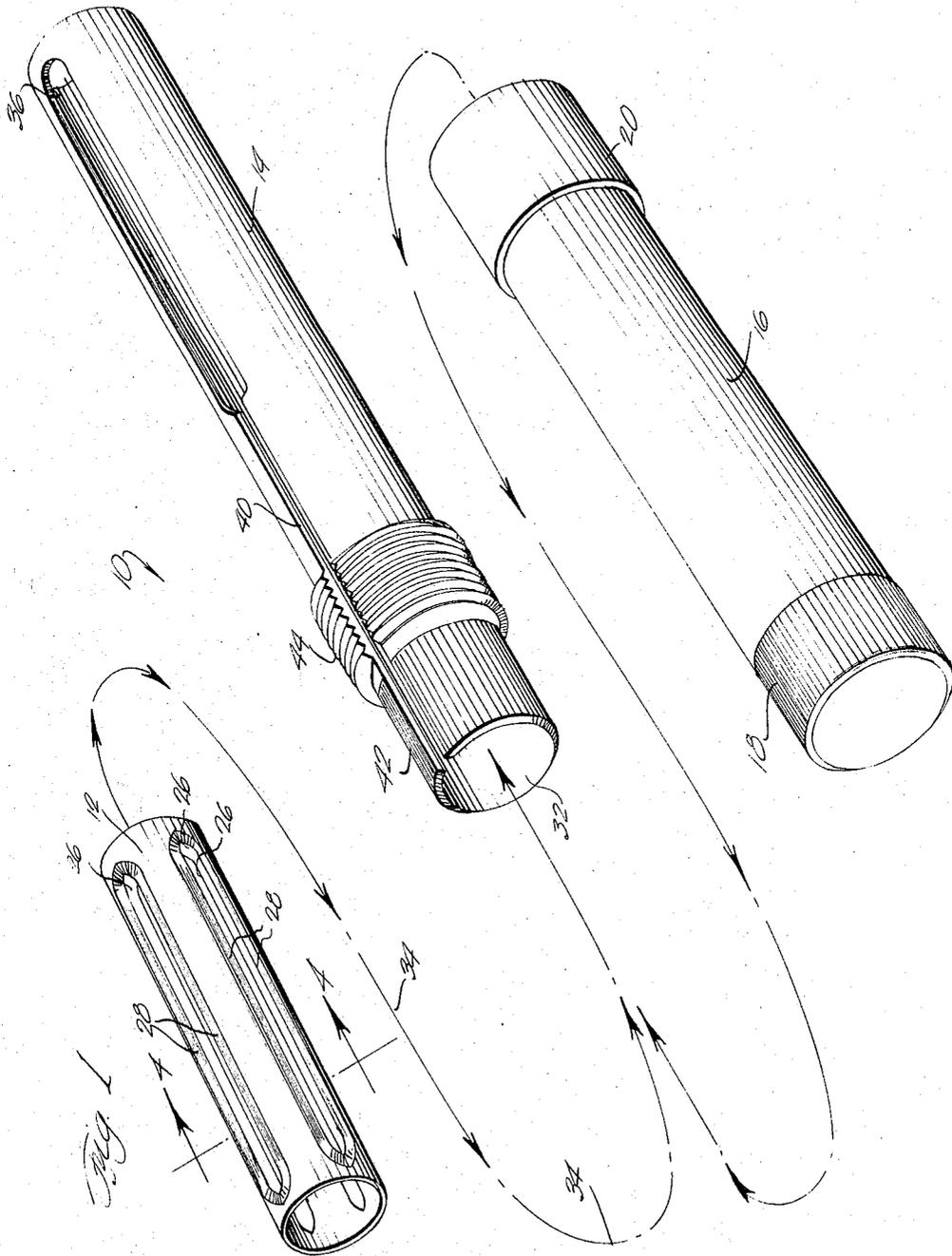
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DISPOSABLE CYLINDRICAL RAZOR APPARATUS

Filed Sept. 23, 1964

2 Sheets-Sheet 1



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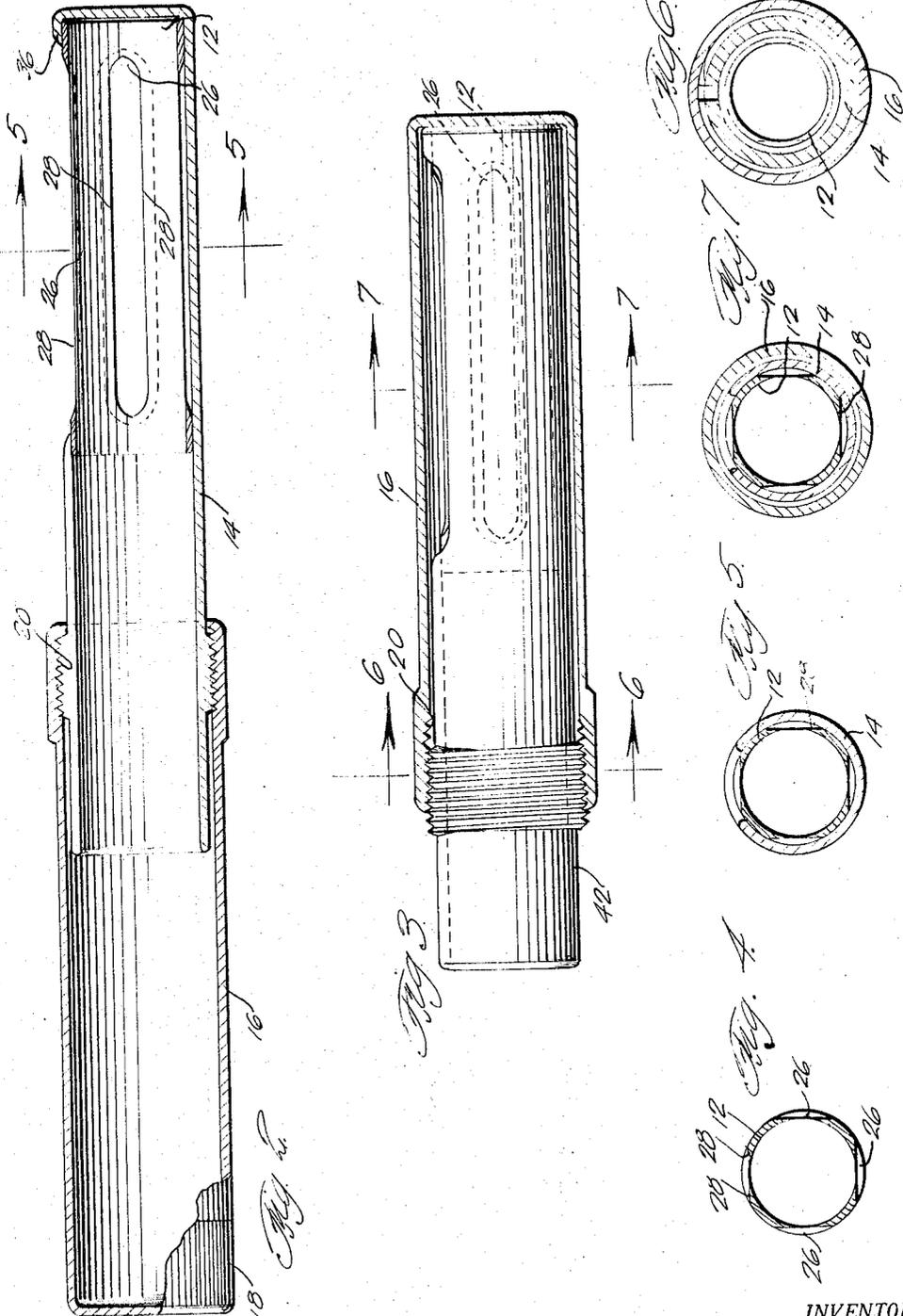
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DISPOSABLE CYLINDRICAL RAZOR APPARATUS

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1 Claim. (Cl. 30-49)

The present invention relates to an improved razor apparatus in which the blade is of cylindrical construction having a plurality of razor blade cutting surfaces, and has particular reference to an improved disposable cylindrical razor apparatus in which there are provided many safety features as well as a plurality of sharpened cutting surfaces that are of the double edged character.

The present invention seeks to provide an assembled arrangement in which there is provided a disposable shaver blade together with two other parts including a blade holder that may be of plastic material and a handle and cover that may also be of plastic material, while the cylindrical blade may be constructed of conventional stainless steel as presently used in razor blades.

There are twin cutting edges that are positioned facing each other throughout the surface of the cylindrical blade, and they may be spaced every quarter or 90° in rotation about the cylindrical blade, or may be even spaced more frequently around the surface of the cylindrical blade. For each aperture provided on the cylindrical blade, such aperture forming the blade being along an element of the cylinder, the aperture provides a pair of cutting surfaces so that where there are four apertures, there are eight cutting surfaces provided on the entire cylindrical blade. Another feature of the present invention is that because the shape of the blade is cylindrical, there are no cutting edges protruding or extending from the blade and therefore it is quite evident there is safety in use of the blade. The twin edges are facing each other about each aperture, and one side may be used alone or the twin edges may be used in a push-pull fashion so that, as is common in the electric shaver, one may go up and down the face in performing the cutting operation.

Another object of the invention is to provide a handle which is adjustable in providing pressure in holding the cylindrical blade in place as it is used, and also providing a device that is readily cleaned.

A further object of the invention is to provide a cylindrical blade and holder arrangement which is readily cleaned by a flow of water through the cylindrical portions of the razor in either a tightened or loosened relation, and also to provide a device that is readily and safely used in assembling and shaving.

A further object of the invention is to provide a razor that does not need a blade dispenser, but at the same time provides a blade that has a significant number of cutting edges that would otherwise be required in the use of a plurality of blades where a blade dispenser is used.

Another object of the invention is to provide a cylindrical blade for use in a razor that may be readily discarded as a complete unit in itself, or may even be discarded with the blade in the razor.

An additional object of the invention is to provide a substantially compact razor blade unit as well as a cover for the blade.

A further object of the invention is to provide a blade handle that prevents the razor blade from damaging other surfaces as well as from being damaged itself when in use, and also to provide a razor blade that may be adjusted so that the cutting edges are hidden from contact when slightly rotated and the handle tightened.

Another object of the invention is to provide a device requiring substantially less material and cost in the manufacture and construction of the razor blade when compared with conventional razor blades.

A further object of the invention is to provide a cylindrical blade in which all the cutting edges may be formed simultaneously and thus eliminate the number of operations in forming a number of cutting surfaces for razor blades.

A further object of the invention is to provide a package for retaining cylindrical razor blades as well as a holding device for razor blades while in use.

These as well as additional advantages which are inherent in the invention will become apparent from the following description and drawings wherein:

FIGURE 1 shows an exploded perspective view of the disposable cylindrical razor apparatus of the present invention;

FIGURE 2 shows a cross-sectional elevational view taken along the axis of the disposable cylindrical razor apparatus in its assembled form;

FIGURE 3 shows a cross-sectional elevational view in which the razor blade and the blade holder are packaged in a razor handle, in accordance with a preferred embodiment of the present invention;

FIGURE 4 shows a cross-sectional view taken along lines 4-4 of FIGURE 1;

FIGURE 5 shows a cross-sectional view taken along lines 5-5 of FIGURE 2;

FIGURE 6 shows a cross-sectional view taken along lines 6-6 of FIGURE 3; and

FIGURE 7 shows a cross-sectional view taken along lines 7-7 of FIGURE 3.

Referring now to the drawings, there is shown a cylindrical razor 10 having a cylindrical razor blade 12 that may be readily disposable, a cylindrical razor holder 14, and a razor handle 16 having at one end thereof a knurled edge 18 at one end thereof and a threaded receiving means 20 at the other end thereof.

The cylindrical blade 12 is constructed of conventional stainless steel, as are many razor blades, and is sufficiently thin as is the average stainless steel razor blade. It is shown as being constructed in cylindrical configuration, and the ends of the cylinder are intact while along several elements, each element being disposed one-quarter length around the surface of the cylinder, there are disposed apertures 26, 26, 26.

The apertures 26, 26, 26 are formed to provide twin cutting edges 28, 28 that face each other and are disposed thus every quarter length about the cylindrical blade 12. The twin cutting edges may be formed by grinding all of the apertures simultaneously so that where there are four apertures, eight cutting edges are formed at one time, thus eliminating duplicate labor operations and costs.

The apertures 26 are seen to terminate proximate the ends of the cylinder blade 12, and are disposed substantially along elements of the cylinder so that they are clearly longitudinally disposed along the length of the cylindrical blade 12.

The cylindrical blade 12 may be inserted in a cylindrical opening 32 of the razor holder 14, as suggested by arrow 34 in FIGURE 1. The cylindrical holder 14 is slightly larger than the cylindrical blade 12 so that it is engaged in coaxial and contact arrangement within the interior of the razor holder 14. The razor holder 14 is generally cylindrical in form, and there is provided at least one aperture 36 that is formed along an element of the cylindrical holder 14 so that it clearly encompasses the twin cutting edges 28, 28 of one of the apertures 26 of the cylindrical blade 12 when it is positioned and located within the razor holder 14. This is shown in FIGURE 2 so that the alignment of the aperture 26 coalesces with the aperture 36, and the twin edges 28, 28 are disposed to be observed through the aperture 36.

The holder 14 has a slot 40 which extends from the

aperture 36 to the end thereof which had received the cylindrical blade 12. The slit end of the holder 14 has a holding portion 42 and a threaded portion 44, and as the threaded receiving portion 20 of the handle 16 is applied to the holder 14, whether from one end or the other thereof, the threaded receiving portion 20 engages the threaded portion 44 of the holder 14 so that there is mutual engagement thereof. FIGURES 3 and 7 show the arrangement wherein the handle 16 is applied over the aperture end 36 of the holder 14; whereas FIGURES 2 and 5 show that the handle 16 may be threadedly engaged through the other end of the holder 14. FIGURES 3 and 6 also show that the threaded portion of the converging members provide for the cylindrical blade 12 to be disposed within the holder 14 and the handle 16. The arrangement of FIGURE 3 shows that the razor and its components may be stored easily by the finger gripping the holder at end 42, and applying the threaded portions to each other. As the threaded portions engage each other, it is provided that a tapered contour to the threaded portion provides that the engagement of the threaded portions 44, 20 provides that the slits are tightened together for squeezing the cylindrical blade 12 into a secured position so that the relationship shown in FIGURES 2 and 3 are securely maintained. Thus the twin cutting edges 28, 28 are securely positioned within the aperture 36, and the razor operation in cutting beards is readily maintained.

Because of the construction of the cylindrical razor blade having a plurality of twin cutting edges and the blade holder being constructed of plastic material or the like, and the handle and cover being constructed of plastic material also, it is possible to discard the complete unit. The disposable shaver and razor is of simple and economical construction so the entire unit may be discarded as desired.

Additional embodiments of the invention will occur to others and therefore it is intended that the scope of the invention be limited only by the appended claim and not by the embodiments described hereinabove. Accord-

ingly, reference should be made to the following claim in determining the full scope of the invention.

What is claimed is:

A disposable cylindrical razor blade and apparatus comprising a cylindrical blade of stainless steel constructed of substantially thin material and having apertures extending along the length of an element of said cylinder forming a blade cutting surface on each side of said aperture, said apertures extending along the element of said cylinder and terminating proximate to the longitudinal ends of said cylinder, a holder of cylindrical configuration comprising a case and being slit from one end thereof, said slit extending almost to the other end, a substantial portion of said slit being enlarged in form to comprise an opening for allowing the cutting surface of said blade to perform the shaving function when a cylindrical blade is in said holder, a threaded portion at said one end of said holder, and a handle having a threaded receiving means for engaging the threaded portion of said holder.

References Cited by the Examiner

UNITED STATES PATENTS

1,262,536	4/1918	Martin	30—29.5 X
1,790,546	1/1931	Kittle	39—29.5
2,127,881	8/1938	Morris	30—32
2,146,783	2/1939	Whalen	30—346.51 X
2,307,471	1/1943	Schaffer et al.	30—346.51 X
2,501,987	3/1950	Brown	30—32
2,565,062	8/1951	Blanchard	30—32
3,109,237	11/1963	Girouard	30—354

FOREIGN PATENTS

924,166	7/1947	France.
641,901	2/1937	Germany.
526,677	9/1940	Great Britain.

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