Aug. 21, 1962 A. W. DAVIS 3,049,815

FLEXIBLE COUNTER

Filed April 22, 1957

Fig. 1.

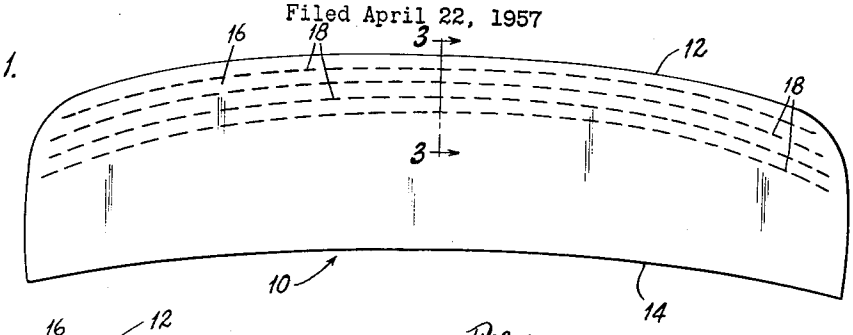


Fig. 2.

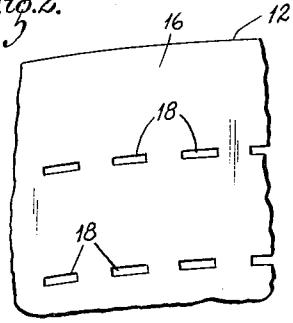


Fig. 3.

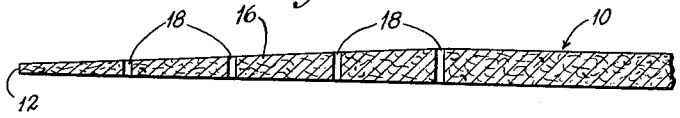


Fig. 4.

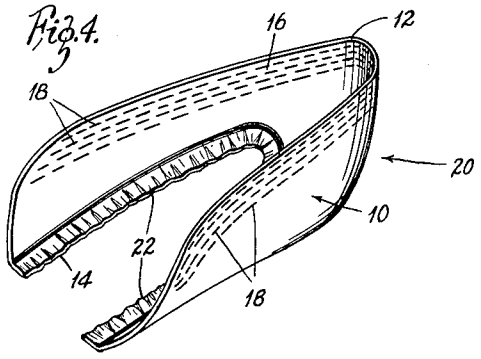


Fig. 5.

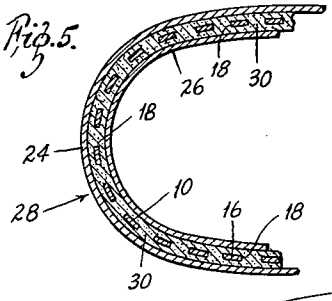


Fig. 6.

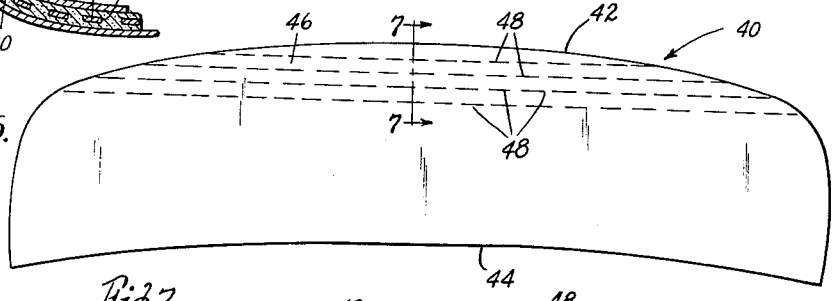


Fig. 7.

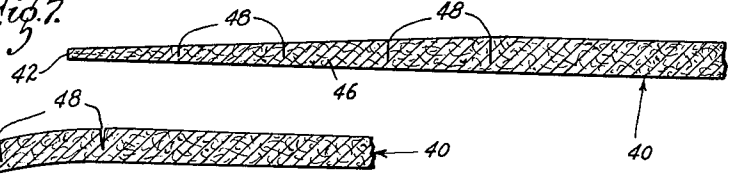
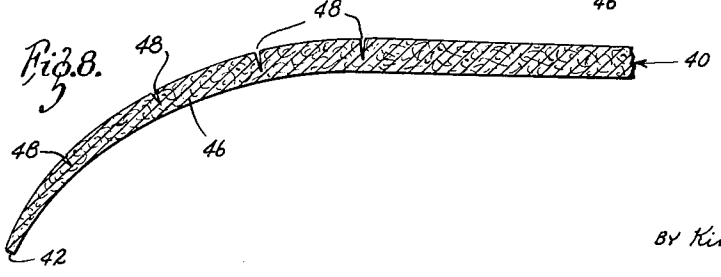


Fig. 8.



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FLEXIBLE COUNTER

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3 Claims. (Cl. 36—68)

The present invention relates generally to the shoe art, and more particularly to a novel shoe counter having a flexible upper portion. This application is a continuation-in-part of my application Serial No. 615,139, filed October 10, 1956, now Patent No. 2,877,571 granted March 17, 1959.

In brief, the present novel counter incorporates an upper edge portion in which are flexibility giving openings which may be rows of or randomly disposed spaced apertures, perforations, slits which extend part way through the material from one or both sides or wholly through the material, wells, and the like, preferably extending substantially the full length of the counter, determining, in effect, lines or areas of weakness along which the upper edge of the counter may be readily flexed or bent. The present invention is particularly adapted to fiber counters, or the like, which are normally quite stiff even in the skived area. When the upper portion of a fiber counter, or the like, is formed to incorporate the present invention, it is quite suitable for use in a shoe. In addition, the apertures, perforations, slits, wells, or the like, afford passage of or receive adhesive to more firmly secure together the rear quarter, the counter, and the lining.

Leather counters are inherently soft, but they are too expensive for quantity-produced shoes manufactured for sale to the public at relatively low prices. The fiber counter, or counters of similar material, are inexpensive, but they are inherently stiff, even in the skived areas along the upper edge. Numerous efforts have been made to render the upper edge of the fiber counter flexible enough to provide a comfortable heel area for shoes. The present invention is a practical solution to the long standing problem.

Therefore, an object of the present invention is to provide a shoe counter of fiber or similar material having a flexible upper portion which will be comfortable in the heel of a shoe.

Another object is to provide a novel counter of fiber or similar material which incorporates a plurality of spaced openings in or through the upper portion thereof, rendering such upper portion flexible.

Another object is to provide a novel counter of fiber or similar material including a flexible upper edge in which apertures are formed in a predetermined pattern.

Another object is to provide a novel counter of fiber, or the like, having slits, or the like, in the material along the upper portion in a random, parallel line, or other selected pattern which renders the affected area flexible.

Another object is to provide a novel counter of fiber or similar material having a flexible upper edge portion incorporating a plurality of parallel lines of spaced apertures which follow the upper edge of the counter and which render the apertured area flexible so that a comfortable fit obtains in the heel of a shoe in which the counter is placed.

Another object is to provide a novel counter of fiber or similar material which is inexpensive, yet which incorporates flexibility in the upper portion thereof.

Another object is to provide a novel flexible counter incorporating apertures in the upper area affording passage therethrough of adhesive.

The foregoing and other objects and advantages are apparent from the following description taken with the accompanying drawing, in which:

FIGURE 1 is a plan view of a counter blank incorporating one form of the present invention;

FIGURE 2 is an enlarged fragment of the upper portion of the counter blank shown in FIGURE 1 illustrating one form of aperture which may be employed in carrying out the present invention;

FIGURE 3 is an enlarged transverse cross-sectional view taken substantially on the line 3—3 of FIGURE 1;

FIGURE 4 is an isometric view of a formed fiber counter incorporating the present invention;

FIGURE 5 is a fragmentary transverse cross-sectional view through the heel of a shoe showing the passage of adhesive, the adhesive being exaggerated as to thickness for clarity of illustration;

FIGURE 6 is a plan view of a counter blank incorporating a second form of the present invention;

FIGURE 7 is an enlarged cross-sectional view taken substantially on the line 7—7 of FIGURE 6; and

FIGURE 8 is a view similar to FIGURE 7, illustrating the effectiveness of the slits when the upper portion of the counter is flexed.

Referring to the drawing more particularly by reference numerals and considering FIGURES 1–5, **10** indicates generally a fiber shoe counter blank having an upper edge **12** and a lower edge **14**. As is clear from FIGURE 3, the upper edge portion **16** is skived or feathered in the usual manner of making counters. Apertures **18** are formed in the skived portion **16**, being presently illustrated as four rows of substantially equally spaced lines of apertures **18**. It is to be understood that the aperture **18** may take any desired configuration and that it may be formed by removal of material, as illustrated, or by a piercing action which compresses the material around the edges of the aperture.

A formed counter **20** is shown in FIGURE 4. The material adjacent the lower edge **14** is crimped at **22**, as is well known in the art. The upper skived portion **16** incorporating the apertures **18** is quite flexible and pliable so that when the counter **20** is incorporated in a shoe, the heel will be comfortable on the wearer.

In FIGURE 5, the counter **10** is shown between an outer rear quarter **24** and a lining **26** of the rear portion **28** of a shoe. Adhesive **30** applied to both sides of the counter **10** also passes through the apertures **18**, thereby more firmly securing the three parts together.

In FIGURES 6–8 is shown a second form of the present invention. A fiber counter blank **40** has an upper edge **42** and a lower edge **44**. An upper edge portion **46** is skived or feathered. Short slits or gashes **48** are made in the upper portion **46**, which, as shown, preferably do not pass wholly through the material, although, for some uses, complete penetration may be desirable and is contemplated as within the present invention. The slits **48** are illustrated in straight parallel rows, but such slits may be disposed in random patterns, or in rows such as are shown in FIGURE 1, or otherwise as desired, to obtain flexibility of the upper portion **46**.

The illustrated slits **48** may be formed by piercing the material with knife blades. When the material is deformed, the slits **48** open up as shown in FIGURE 8, hence, the upper portion **46** is flexible and the counter formed from the blank **40** is quite comfortable in a shoe. The slits **48** may be made in both sides of the blank **40**, as may other forms of openings which do not go all the way through the counter material.

The invention also includes the use of wells of any desired cross section in lieu of the apertures **18** or the slits **48**, which may be formed by removal or by compression of material in the upper portion of the counter. One suitable well would have a transverse cross section like the spread slits **48** in FIGURE 8. The invention also includes the apertures, slits, and the like, extending trans-

versely of the counter, as well as longitudinally, as shown.

The apertures **18**, the slits **48**, the wells, and the like, are all considered broadly to be included in the scope of the term openings, whether the penetration is into or through the upper portion of the counter to provide flexibility thereof.

The present invention is illustrated as applied to a fiber counter. However, it is to be understood that counters of other material, including leather, leather boards, plastic, etc., may incorporate the present invention.

It is to be understood that the foregoing description and the accompanying drawing have been given only by way of illustration and example. It is further to be understood that changes in the form of the elements, rearrangement of parts, or the substitution of equivalent elements, all of which will be apparent to those skilled in the art, are considered within the scope of the present invention which is limited only by the claims which follow.

What is claimed is:

1. A shoe counter comprising a main body, and a flexible upper portion, said upper portion incorporating a plurality of spaced short slits distributed thereover extending into the counter from the outer side thereof providing flexibility, said slits being substantially closed when the counter material adjacent thereto is in a flat position, said short slits being disposed in spaced rows longitudinally of said counter, said slits comprising substantially clean cuts having substantially no loss of material thereby reducing gaping of said slits to a minimum when said counter is used in shoe making.

2. A shoe counter comprising a main body, and a flexible upper portion, said upper portion including a plurality of spaced longitudinal rows of longitudinally spaced slits which penetrate the shoe counter material for a depth less than the thickness thereof at the point of penetration, opposed slits in spaced rows being offset, said slits extending into the counter from the outer side thereof, said slits being substantially closed when the counter material adjacent thereto is in a flat position, said slits comprising substantially clean cuts having substantially no loss of material thereby reducing gaping of said slits to a minimum when said counter is used in shoe making.

3. A shoe counter comprising a relatively stiff main body having a generally U-shaped configuration and inturned bottom edges, and a relatively flexible upper portion, said upper portion having a plurality of rows of spaced elongated slits disposed in end to end relationship, said rows being spaced from each other and said slits providing weakened areas in said upper portion and rendering it flexible, said slits extending into the counter from the outer side thereof, said slits being substantially closed when the counter material adjacent thereto is in a flat position, said slits comprising substantially clean cuts having substantially no loss of material thereby reducing gaping of said slits to a minimum when said counter is used in shoe making.

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