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SPECTACLE CASE

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2,498,202

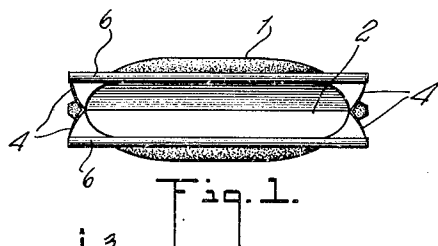
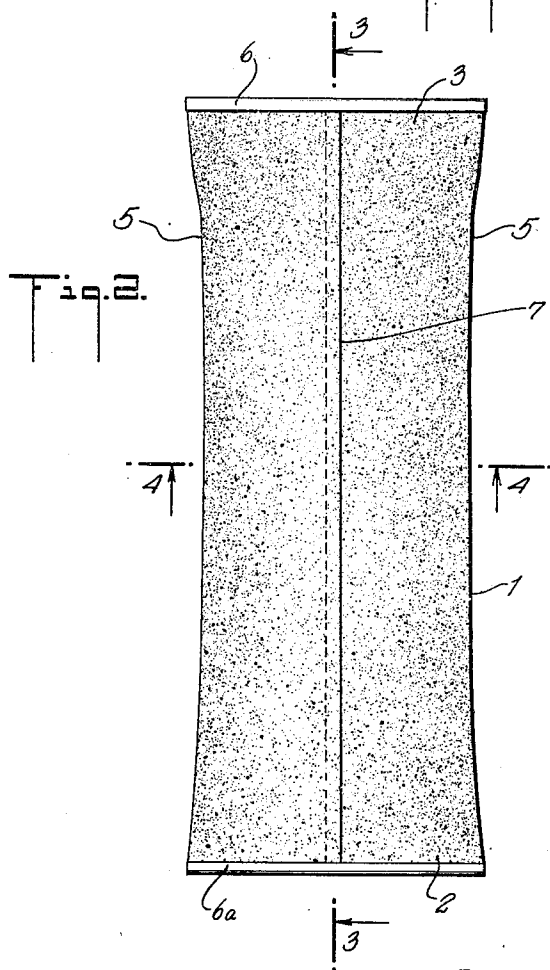


Fig. 1.



Tip 2.

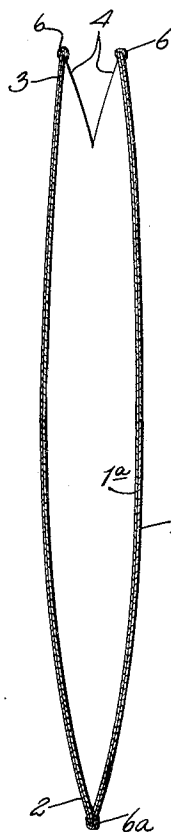


Fig. 3.

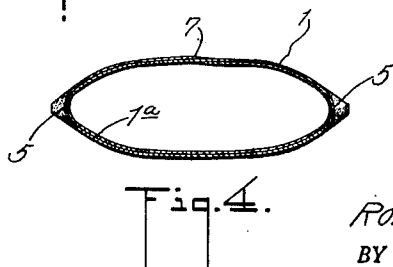


Fig. 4.

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SPECTACLE CASE

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2 Claims. (Cl. 150-5)

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This invention in its specific form is a spectacle case in which spectacles may be placed and retained with reasonable security but from which the spectacles may be removed simply by inverting and squeezing the case with one hand, this act releasing the spectacles sufficiently so that they fall from the case by gravity into the spectacle user's other hand. In this respect the invention has unusual advantages over prior art spectacle cases requiring the prying open of a lid against heavy spring pressure or fumbling with various fastening devices. However, there is the possibility of incorporating the principles of the invention into cases intended for other purposes.

The accompanying drawing illustrates the principles of the invention in the specific form mentioned above, in which the various figures are as follows:

Fig. 1 is an end view showing the mouth through which the spectacles are inserted;

Fig. 2 is a side view;

Fig. 3 is a longitudinal section taken from the line 3-3 in Fig. 2; and

Fig. 4 is a cross-section taken from the line 4-4 in Fig. 2.

More specifically, these drawings illustrate an elongated, flattened, tubular case 1 having one end 2 closed and the other end 3 and respectively adjacent side edge portions 4 open to provide a mouth. The case is made of elastic material so that pressure on its side edge portions 5, adjacent the open side edge portions 4, causes the mouth to open wider, by elastic strain, and so that release of this pressure causes the mouth to at least partially close, by elastic recovery. The open end edges 3 have rigid struts 6 extending therealong to prevent them from straining also upon application of the pressure at the portions 5.

The material from which the case is made should have the physical properties of leather, particularly respecting leather's elastic properties, and should have its thickness correlated to its modulus of elasticity to provide the elasticity necessary to permit the pressure, at the portions 5, to cause the mouth to open wider without causing permanent strain of the material together with sufficient elasticity so that when strained, by the pressure, the material provides the resilience necessary to cause the mouth to close, at least partially, when the pressure is released. Preferably, a good grade of genuine leather is used but the artificial or synthetic products currently available may be substituted

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providing they have the requisite physical properties.

The case is made from a single sheet of such elastic material bent into the described tubular form and so as to provide this form with an elongated and at least approximately oval cross-section, with the necessary seam 7 extending longitudinally of the case along a central zone of one side face of the case and between its edge portions so as not to interfere with the described elastic strain when pressure is applied at the portions 5. Preferably the seam is carefully made by beveling the adjacent edges of the material and adhesively adhering these edges together so that there is no increase in the thickness of the material at the seam, this particular seam cooperating with the other structural features of the case, and with the elastic properties of the material from which it is made, so as to cooperatively contribute to the effect described. However, in spite of this, even such a carefully made seam alters the inherent elastic properties of leather, or any of the materials possessing its physical properties, but this alteration is rendered harmless, to the results described, by placing the seam centrally along one side of the case, as described, because this location prevents the seam from interfering with the elastic strain.

The rigid struts 6 are preferably formed by longitudinally slit metal tubes, the edge 3 of the material being placed in the slits and the tubes plastically deformed so that their longitudinal edges bounding the longitudinal slits grip the material tightly and permanently. The same type of tube is used to close the closed end of the case, it being indicated at 6a.

Now it becomes apparent that a spectacle user is provided with an extremely handy case through the medium of the principles of the present invention. Many spectacle wearers use their spectacles only occasionally, and the case is of particular advantage to them. For example, such a person may remove his spectacles, fold the temples and carelessly thrust the spectacles into the open mouth 4, without regard for fastenings, catches, or other complications, because there are none. The passage of the spectacles into the case thrusts the elastic sides outwardly so that the spectacles glide smoothly into the case where they are snugly retained even though the case be inverted.

The side edges of the case are not folded sharply at the case edges but represent smooth flexure curves, and the rigid struts 6 and the rigid

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end fastening 6a cause the case to automatically flatten more decidedly at its ends and to thereby provide the whole with a torpedo-like or streamlined exterior. This is not only attractive but possesses great utility, the latter following from the fact that the user can carelessly thrust the case into any pocket without the case becoming caught on its way in. When spectacles are required the user of the case can flip the case from his pocket without trouble, invert the case, and with his thumb and forefinger, press the case at its edge portions 5, the mouth then opening just a little so that his spectacles glide out smoothly into the user's other hand. All of these motions are quite natural and efficient and thoroughly in keeping with modern times. No longer is it necessary to pry open the lid of a rigid spectacle case against strong spring pressure, break finger nails prying open glove fastenings, such as have been necessarily used heretofore on flexible spectacle cases, or to go through any of the time-consuming and annoying antics made necessary by the best of the spectacle cases which the art has heretofore provided.

Although it has been said before it is important enough to repeat: the spectacle case should be made of elastic material such as leather with an elongated substantially oval cross-section and with edges that are not sharply creased or folded but which represent smoothly flexed material. The ends, particularly at the mouth, should be strutted against strain such as would otherwise result when the portions 5 receive pressure to open the mouth, this being important because such strain would result in deformation of the mouth so that the spectacles could not glide out of the case as they should when the case is inverted. The open side edge portions 4 should extend just far enough to provide a mouth, the remainder of the edge portions from there, clear down to the closed end of the case, being formed by integral flexed flexible material.

The case may be made simply by forming a seamed tube of leather or the like by flexing a sheet of the leather into a tube and seaming its adjacent edges, followed by the application of the rigid parts 6 and 6a, whereby the desired contour is automatically obtained, due care being taken to make certain that the seam 7, necessary unless extruded forms are used, is at about the center of one side of the case. This method of manufacture automatically provides the smooth, streamlined, torpedo-like, flattened shape illustrated in the drawings. It is to be understood that the mouth of the case need not completely close providing it closes enough to prevent the spectacle from falling out when the case is inverted without the application of pressure intended to open the mouth.

It is appropriate to remark that like many of the real advances in the various arts and sciences, the present invention owes its great merit to its simplicity. It represents a spectacle case that has been reduced to its simplest form, the very elasticity of the material, which normally interferes with the use of a flexible spectacle case, being put to use in such a fashion that the need for fastenings, clips or other annoying expedients has been eliminated. And like most simple things, a spectacle case made as described is remarkable for its chaste attractiveness.

As shown in Fig. 4, the necessary thickness of the leather, or other material, is provided by cementing together two layers of material which

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are individually too thin for the purpose. Particularly in the case of genuine leather, this provides better elastic properties than if an adequately thick single layer is used. The adhesive used may be any of those used in the related art to cement thin leather layers together. Although the reason is not thoroughly understood, the use of such cemented layers or sheets of thin leather, to provide an adequately thick sheet of material for meeting the previously described elastic requirements, provides a critical improvement in the elastic properties, of the material, over those obtained with a comparably thick single layer of leather.

In the drawings the inner layer is marked 1a. The sheet material is also shown by Fig. 3 as comprising the inner layer 1a and the outer layer 1, the two being cemented together, as described, to form a unitary sheet of material which may be handled like a homogenous sheet. I claim:

1. An elongated flattened tubular case having one end closed and the other end and adjacent side edge portions open to provide a mouth and made of elastic material so that pressure on its side edge portions adjacent said open side edge portions causes said mouth to open wider by elastical strain of said material and release of said pressure causes said mouth to at least partially close by elastic recovery, the end edges of said open end having rigid struts extending therealong to prevent them straining upon application of said pressure.

2. An elongated flattened tubular case having one end closed and the other end and adjacent side edge portions open to provide a mouth and made of elastic material so that pressure on its side edge portions adjacent said open side edge portions causes said mouth to open wider by elastical strain of said material and release of said pressure causes said mouth to at least partially close by elastic recovery, the end edges of said open end having rigid struts extending therealong to prevent them straining upon application of said pressure, said material having the physical properties of leather and said case being made from a single sheet thereof flexed into tubular form having an elongated at least approximately oval cross section and with the necessary seam extending longitudinally of said case along a central zone of one side face between its side edge portions so as not to interfere with said elastic strain, said sheet being made of a plurality of layers of said material with said layers adhesively cemented together.

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