June 7, 1932. O. R. BARKDOLL 1,861,948

COMPRESSION CASE FOR PLAYING BALLS

Filed Oct. 30, 1930

Fig. 1

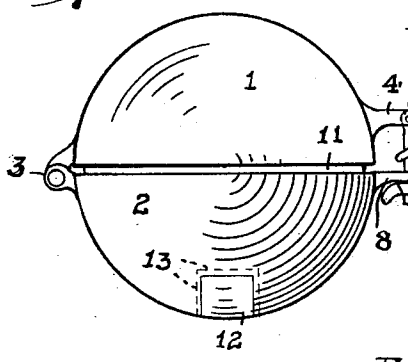


Fig. 2

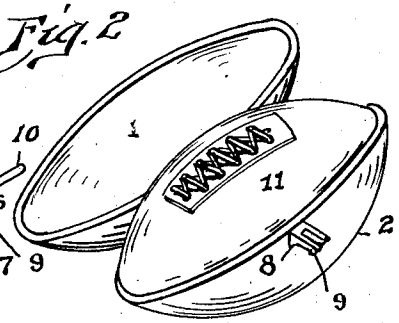


Fig. 3

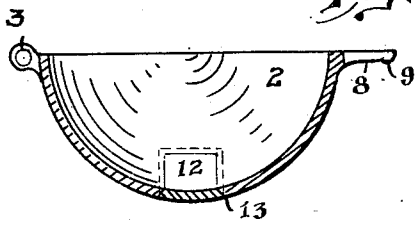


Fig. 4

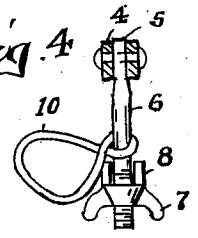


Fig. 5

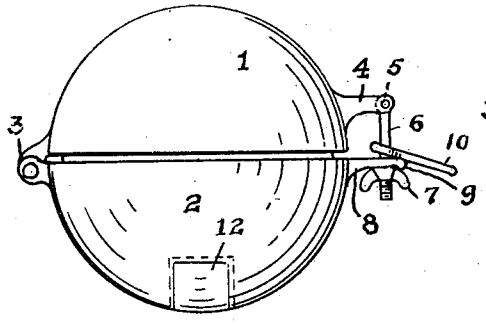
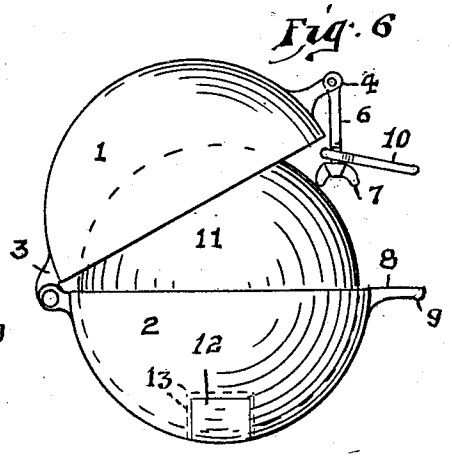


Fig. 6



INVENTOR

Orman R. Barkdoll.

by Edward A. Laurence

his Attorney.

Patented June 7, 1932

1,861,948

UNITED STATES PATENT OFFICE

ORMAN R. BARKDOLL, OF BEN AVON, PENNSYLVANIA

COMPRESSION CASE FOR PLAYING BALLS

Application filed October 30, 1930. Serial No. 492,164.

Playing balls, such for instance as footballs, basketballs and polo balls comprise an elastic bladder of rubber or other suitable material enclosed in an outer casing or covering which is usually of leather and which is hereinafter referred to as the "leather casing". The bladder is inflated to the proper playing pressure.

If such balls remain inflated to playing pressure between uses, the ball eventually becomes impaired losing its original and proper contour owing to distortion because of strains on the leather casing and the casing itself eventually deteriorates. Such distortion renders the efficient playing life of the ball exceedingly short because play cannot proceed with an ill-shaped ball.

One way to avoid this is to deflate the ball after each use and reinflate it when it is to be used again for playing, but such a course involves a tremendous expenditure of time and labor, especially where the old style neck bladder is used. If the new type valve ball is used its deflation and inflation also requires time and labor and tends to ruin the valve cores.

Again the change of air every time the ball is inflated with different degrees of humidity causes a rapid deterioration of the rubber bladder.

Therefore one of the objects which I have in view is the provision of a suitable compression case in which an inflated playing ball may be placed after use for storage until it is to be used again, the compression case being of substantially rigid material and having an internal contour corresponding to that of the ball but of sufficiently less size so that when the ball is encased in the compression case the strain of inflation will be taken off the leather casing of the ball and therefore the distortion of the ball and its deterioration will be prevented. By the use of my compression case but one or two inflations are required during a playing season, thus guarding the rubber bladder against deterioration.

Again where the ball bladder is of the neck type difficulty is experienced in tucking the neck inside of the leather casing and lacing up the opening of the latter after the ball has been inflated. This difficulty is due to the crowding of the inflated bladder against the interior of the leather casing.

The neck type of bladder is preferable, as it is better balanced than one provided with a metal valve.

Therefore a second object which I have in view is the provision of a convenient means for facilitating the inflation of a playing ball having a neck bladder and the lacing up of the leather cover.

I accomplish this purpose by providing my improved compression case with a removable wall section which when removed exposes the portion of the leather casing which is to be laced so that the bladder neck may protrude therethrough.

The deflated or partially inflated ball is placed in the compression case and the latter closed, and the ball is then inflated to the proper pressure, the neck is then tied and slipped under one edge of the laced opening of the leather cover and the opening is then laced. The opening is laced easily and quickly because the pressure has been relieved from the lacing edges when the ball is in the case. The ball is then removed from the case and is ready for use.

In the embodiment of my invention hereinafter described the compression case is made of substantially rigid material, such as metal, and in two complementary parts which are in hinged relation with each other. The parts are also provided with a latch by means of which they are held together to form a closure while containing the playing ball. The case being made of substantial but light material makes a convenient container for carrying the ball. I therefore provide the case with a convenient handle.

In the accompanying drawing wherein I have illustrated a practical embodiment of the principles of my invention, Fig. 1 is an end view of my improved compression case designed for storing a football, the case being shown closed and latched.

Fig. 2 is a perspective on smaller scale showing the case open and a football placed in one part of the case.

Fig. 3 is a sectional view of the lower part of the case as shown in Fig. 1, the section being taken at right angles to the plane of Fig. 1.

Fig. 4 is a detail on enlarged scale and partially in section showing a convenient form of latch and handle.

Fig. 5 is a view similar to Fig. 1 but showing a spherical case adapted for storing a basketball.

Fig. 6 is a similar view showing the case partly open and the basket ball contained therein.

Referring first to Figs. 1 to 4 inclusive of the drawing the case is formed of two complementary parts indicated at 1 and 2. Where the case is to be used for storing a football, as in the figures now under discussion, the case is of prolate spheroidal form. At the center of one side the two parts are hinged together in any convenient means as at 3 and at a directly opposite point they are provided with means for holding the parts in their closed position. Thus as a convenient means for this purpose I provide one of the parts, such as 1, with an outwardly extending bracket 4 having a bifurcated outer end and between the forks is pivotally mounted the eye 5 formed on the upper portion of a bolt 6 on which is screwed a wing nut 7.

The part 2 of the case is also provided with a bifurcated bracket 8 between which the bolt 6 is swung when the case is closed. The wing nut 7 is then screwed up tightly against the bracket 8 drawing the parts 1 and 2 toward each other and into closed relation, thus compressing the ball and relieving the pressure from the leather casing. The outer ends of the bracket 8 are provided with rounded knobs 9 to prevent the bolt and nut from accidentally disengaging themselves from the bracket.

10 represents a wire handle formed of wire and having a portion wound about the bolt 6. The handle is for carrying the case.

The interior size of the case is slightly less than that of the football which is placed therein, and after the football indicated at 11 is placed in one part of the case, such as 2, the part 1 is closed down over the football and the parts closed together and the bolt engaged and the nut tightened, thus locking the football under compression in the case.

Owing to the fact that the internal capacity of the case is somewhat less than the size of the football the latter is compressed, thus increasing slightly the pressure on the bladder of the football and thereby taking the strain off the leather cover.

The football may now be carried in its case by means of the handle 10 and may be stored in the case for any desired period without any strain being exerted on the leather cover.

I provide one part of the case with a removable wall section or plate. Thus 12 represents a removable plate forming a closure for the aperture in part 2, the edges of the plate 12 being bevelled as at 13 and the edges of the aperture in the part 2 being bevelled in an opposite manner so as to hold the plate 12 in place against outward movement in the normal use of the case.

When it is desired to inflate the ball, the deflated or partially inflated ball is placed in the case with the aperture in the leather casing through which the neck of the bladder protrudes coinciding with the aperture in the part 2, the plate 12 having been removed. The ball is then inflated to the proper pressure, the neck tied and tucked under one edge of the opening in the leather casing and the latter is then laced. The ball is then removed from the case and is ready for use. This can be done quite easily as the closing of the compression case over the ball removes the pressure from the leather casing.

In Figs. 5 and 6 I have shown the compression case formed in the spherical shape so as to contain a basketball.

The case of course may be made of any desired size and/or shape to enable it to be used with any size or form of inflated playing ball.

What I claim is:—

1. A play ball case forming an inclosure for the ball and said case being provided with an aperture in its wall through which the ball may be inflated and its outer casing laced.

2. A play ball case formed of substantially rigid material and having an internal contour corresponding to the contour of the ball but of slightly less internal dimensions than the dimensions of the ball when inflated and the wall of the case being provided with an aperture through which the ball may be inflated and its outer covering laced.

3. A compression case for inflated play balls comprising two halves formed of substantially rigid material and hinged together, said halves forming when closed together a container having an internal contour corresponding to the contour of the ball but of less dimensions whereby the ball is compressed when the container is closed, one of the halves having a wall aperture through which the ball may be inflated and its outer covering laced.

Signed at Ben Avon, Pennsylvania this 23rd day of Oct., 1930.

ORMAN R. BARKDOLL.