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P. C. WILSON ET AL

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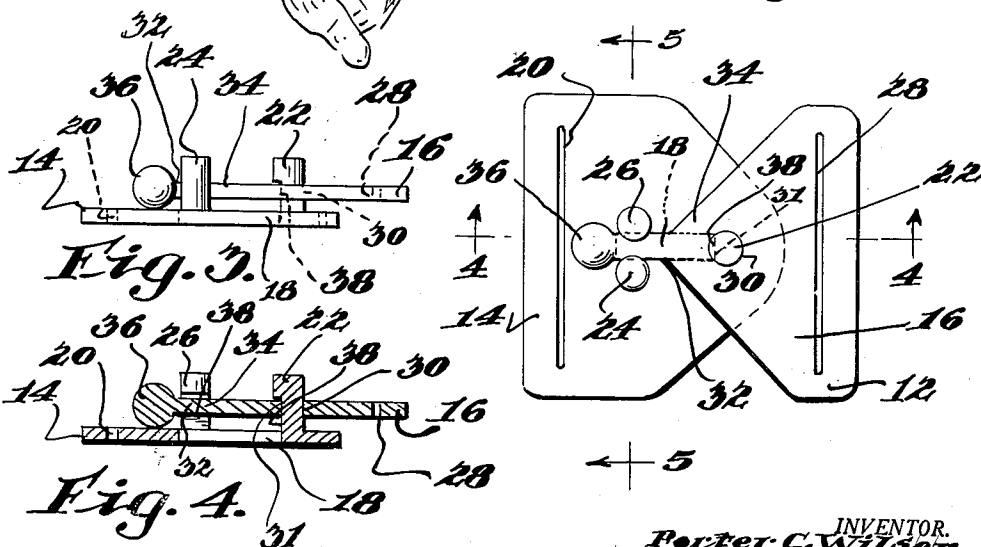
FLEXIBLE SEPARABLE FLAG BELT DEVICE

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2 Sheets-Sheet 1



Fig. 1.



INVENTOR.
Porter C. Wilson
Norman Adams

BY
Robert Lickler
ATTORNEY

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P. C. WILSON ET AL

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2 Sheets-Sheet 2

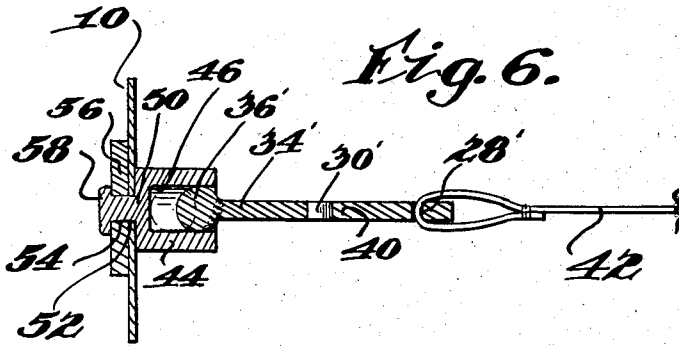


Fig. 6.

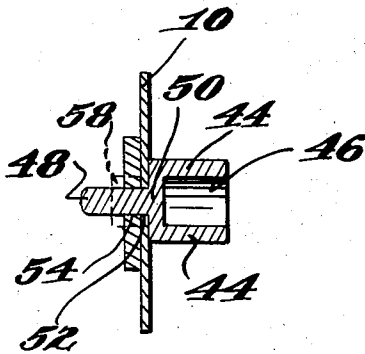


Fig. 7.

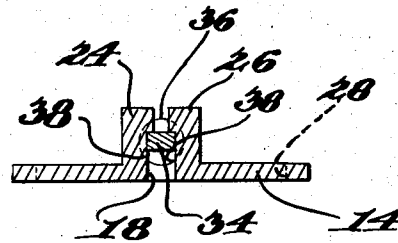


Fig. 5.

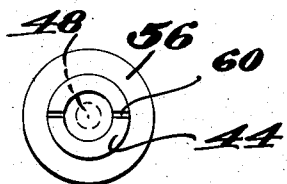


Fig. 8.

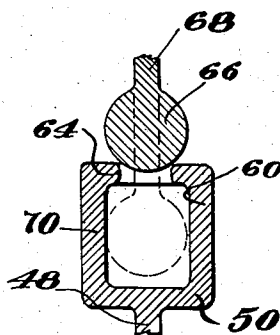


Fig. 9.

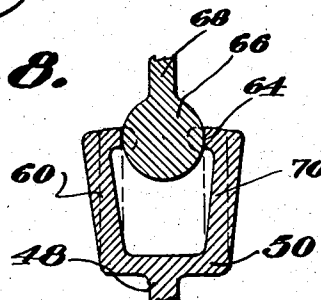


Fig. 10.

INVENTOR.
Porter C. Wilson
Norman Adams
BY
R. H. Siskler
ATTORNEY

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2,966,356

FLEXIBLE SEPARABLE FLAG BELT DEVICE

Porter Carol Wilson, 320 E. Elvira Road, Amado, Ariz.,
and Norman Carlyle Adams, Tucson, Ariz.

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6 Claims. (Cl. 273—1)

This invention relates to a flexible elastic belt and plastic attachments for use in connection with flag games and flag football and is particularly directed to the separable attachments for the component parts of the apparatus.

In the playing of flag football by children, as well as by older persons throughout the armed services and other governmental educational and recreational centers, the equipment that has previously been provided and used has proven quite inadequate with the accompanying disadvantages. These conventional equipments have been very limited, requiring the mere tucking of a flag or a handkerchief in outer pockets or under the belts of the opposing players which, when removed, would indicate the accomplishment of the obvious objective of the game.

In the present invention, it has been contemplated to provide an elastic belt having attachments made of tough but flexible plastic. The front buckle members are separable as are the snap ball and socket connections. The latter, supporting the player identifying objects, are easily separated enabling the ready removal of the flags from a player thereby eliminating any questions as to the completion of a particular effort on the part of an opposing player.

Previously it has been found rather difficult to adequately display the flags on a player and at the same time maintain them in the trouser pockets or under the belt of the wearer. In the subject invention this may be accomplished without any thought as to the apparatus being worn and still effect the objectives of the game.

Further, lack of appropriate equipment has made it very difficult for officials of the games to accurately determine if the flags have been fairly displayed due to players drawing their belts tighter than necessary or to have the larger portion of the flag stuffed into the trouser pockets to minimize the possibility of easy removal. Another disadvantage has been that the players' clothing is always subject to ripping or tearing caused by grabbing at the belt or pocket areas. When a player has been deflagged when using the present equipment, the chances of torn clothes are considerably reduced as the separation of the flag at the belt connection is the main objective, the flag having been arranged to hang or depend from the trousers.

Obviously, the elimination of these former objectional features tends to speed up the game and also eliminates the usual and unnecessary purchase of identifying jerseys for colored flags and belts adequately serve to distinguish the opposing players and teams. In addition, the amount of pull requisite to deflag an opponent becomes relatively constant and also serves to standardize and equalize this phase of the games.

Further, the use of the subject equipment will eliminate the frequent arguments as to whether a player has been tagged or deflagged with the resultant reduction of supervision. Previously, when a referee's back had been turned there had been no positive way in which to settle a discussion between two or more players but the use

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of the present apparatus rectifies these situations and completely eliminates arguments in this respect.

It is an object of this invention to provide equipment for flag football and comparable games that enables easy separation of the flags from a player.

Another object is to provide a safe plastic flexible belt buckle or fastener that is completely effective although most economical in cost.

A further objective is the reduction in the use of unnecessary equipment by the provision of identifying objects of varying colors.

An additional objective is to standardize the location of the flags on the body of the players as well as to insure the flags clinging to the player's body.

A still further object is the provision of one component part of the apparatus that is interchangeable.

With these and other objects in view the invention may consist in the details of construction and combination of parts, as will be more fully understood from the following description, when read in conjunction with the accompanying drawing in which:

Figure 1 is a perspective view showing the apparatus applied to the body of a player.

Figure 2 is a plan view of the assembled belt buckle.

Figure 3 is an end elevation of the same.

Figure 4 is a sectional view taken on the line 4—4 of Figure 2.

Figure 5 is a sectional view taken on the line 5—5 of Figure 2.

Figure 6 is a sectional view through the plastic separable ball and socket construction mounted on an elastic flexible belt having a flag mounted on one end thereof.

Figure 7 is a sectional view taken through the socket portion of the flag connection.

Figure 8 is a modification of the socket construction.

Figure 9 is a fragmentary sectional diagrammatic view showing an inwardly protruding socket rim, while

Figure 10 is a similar view showing the walls of the socket extended due to the pressure exerted by the entrance of the ball member therein.

In the drawings wherein like reference characters denote like parts, the numeral 10 refers to an elastic flexible belt to which a plastic buckle or fastener is secured. As particularly shown in Figures 1 through 4, the buckle comprises two main plate elements shown at 14 and 16, with the member 14 being provided with a central slot 18 and a longitudinal slot 20, the latter being for purposes of attachment to one end of the flexible belt 10.

Two posts 24 and 26 are formed from the central portion of the male member 14 on opposite sides of one end of the slot 18. Another post 22 is formed from the material on the opposite end of the slot 18 for a purpose to be subsequently described. The female portion 16 of the plastic buckle is also provided with a longitudinal slot 28 near its outer end for attachment to the other end of the belt 10.

An opening 30, having a flat surface 31, is formed centrally of member 16 for cooperative engagement with the post 22 of the companion portion of the buckle. The inner end 34 of the member 16 is provided with a slender neck or extension 32 having a ball or sphere on its outer end.

It is to be noticed that each end of the posts 22, 24 and 26 are provided with flat sides 38 extending vertically about half the height of the post immediately adjacent to the surface to be engaged and where frictional contact occurs. For example, these flat surfaces 38, of the posts 24 and 26, are located where they will be contacted by the slender extension 34 of the female member 16 while the flat side of the post 22 will frictionally engage the flat surface 31 of the opening to further insure complete engagement of the two members at this location.

In securing the two companion buckle members 14 and 16 the slender neck 32 is inserted between the two posts 24 and 26 with the ball 36 extending past the posts which will serve to limit further movement in the opposite direction. The other end of the buckle member is then forced down into flat position parallel to the opposite buckle member 14. This positioning has located the opening 30 directly over the post 22 and the downward force on this member 16 will cause the flat portion 31 of the opening 30 to be frictionally engaged by the flat side 38 of the post whereby a tight engagement is effected.

Similar frictional engagement will occur where the sides of the slender extension 32 contacts the flat surfaces 38 of the posts 24 and 26, these connections accomplishing effective engagement of the two buckle members. Separation of the buckle fasteners is easily accomplished by lifting the ball or sphere 36 and the extension from between the posts 24 and 26, and then turning the buckle member 16 about the post 22, followed by the separation of the post 22 from the opening 30 in the member 16.

The separable ball and socket construction includes a member 40, identical to the main male portion 16 of the buckle, although it is to be noticed that the aperture 30', indicated in Figure 6, has no particular function with respect to the ball and socket construction. A flag or player identifying member 42 has been shown secured in the slot 28'. The other half of socket member 44 is also formed of plastic having an enlarged opening 46 to frictionally receive the ball 36' formed on the outer end of the slender neck or extension 34'.

In the formation of the plastic member 44, as shown in Figure 7, a stem 48 has been shown protruding outwardly from the center of the closed end 50. In this construction the stem 48 is inserted in an opening 52 of the belt 10 and then forced into a central aperture 54 in a disk or button 56 wherein heat is then applied to integrally form the end of the stem and disk into a button or knob 58.

With specific reference to Figures 9 and 10, a diagrammatic view has been shown of the ball and socket connection with the ball indicated by dotted lines in its location within the socket. A similar sectional view to that shown in Figure 9 has been indicated in Figure 10 locating the ball as it begins to be forced into the socket 44 resulting in the spreading of the side walls. Due to the elasticity of the material the walls will spring back into normal position when the ball passes the restricted diameter of the rim of the socket.

It will be apparent from Figures 9 and 10 that the frictional engagement of the ball is always effective to maintain the ball member within the socket due to the elastic flexibility of the material insuring snug engagement, whether it be at the socket rim or after the ball has passed this restricted opening where it would then be frictionally engaged by the socket walls. It is to be observed that there will be a minimum of wear due to the material herein used, permitting of unlimited separations and engagements.

As shown in the modification in Figure 8 it is also contemplated that the socket 44, adapted to receive the ball 36', is split as at 60 which will somewhat reduce the friction upon engagement of the ball and socket in the event a looser contact is required although still maintaining the ball within the socket.

When the ball or sphere 66, mounted on the stem 68, is forced into the socket member the wall 70 is pressed outwardly, expanding the diameter of the rim but after the ball has passed this location and forced well into the socket the wall and rim will spring back into normal position with the ball frictionally engaged by the cylindrical walls until manually pulled from the socket.

The elastic and flexible belt plays a very important part in the use of the apparatus in that it is capable of ready adjustment, conforming to the waist of the particular player but regardless, is always maintained in rela-

tively flat position with respect to the player's body, this clinging feature be rather important in the playing of games of this nature.

While some of the features of the invention have been described in detail, it is apparent that modifications and variations may be resorted to without departing from the scope of the invention; and that accordingly, the appended claims are to afford a range of equivalents and scope fairly in keeping with our contribution to the art.

We claim:

1. In a flag game apparatus, a flexible elastic belt having a plurality of flags separably attached thereto, a plastic buckle comprising two separable members, a plurality of integrally formed posts located centrally of one of said members, the other of said members having an opening formed centrally thereof, an extension formed on one side of said second named member having a ball formed on the end of said extension, said ball and opening adapted to have cooperative flexible engagement with said posts of the other of said buckle members, and means for separably attaching said flags to said belt including a resiliently expansible socket member secured to said belt and a separable ball element having a flag attached thereto adapted to have cooperative engagement with said socket whereby upon exertion said ball will be separated from said socket.

2. In a flag game apparatus, a flexible elastic belt having a plurality of flags separably attached thereto, a plastic buckle comprising two separable flexible members, means for separably attaching said flags to said belt including a resiliently expansible socket member secured to said belt and a separable ball element having a flag attached thereto adapted to have cooperative engagement with said socket whereby upon exertion of tension on said flag said ball will be separated from said socket, said socket comprising a cylinder open at one end, a stem extending from the closed end for insertion in an opening in said belt, a disk integrally formed on the outer end of said stem, whereby said socket is secured on said belt.

3. In a flexible elastic belt and flag carrying device, means for fastening the belt ends and means for separably carrying said flags, said belt fastening means comprising a male and a female member attached to opposite ends of said belt, said female member having an opening centrally thereof and an elongation on one end edge provided with a sphere at its outer end, said male member being provided with two opposed posts near one end and a third post located near the opposite end, said elongation being pressed between said opposed posts on the female member and the third post being received in the associated opening whereby said belt ends may be secured, said separable flag carrying means comprising a resiliently expansible ball and socket device, said socket portion being of cylindrical formation and provided with a closed end attached to said belt with the opposite end open, said ball member comprising an elongation extending from the main portion having a sphere formed on its outer end, said sphere being releasably secured in said socket whereby said flag may be removed from said flexible elastic belt, and said female belt fastener member being identical to the flag carrying member and being interchangeably used.

4. In a flag game apparatus, a flexible elastic belt having a plurality of flags separably attached thereto, a plastic buckle comprising two separable flexible members, means for separably attaching said flags to said belt including a resiliently expansible socket member secured thereto and a separable ball element having a flag attached thereto which has cooperative engagement with said socket whereby upon exertion of tension on said flag said ball will be separated from said socket, said socket comprising a cylinder open at one end having a circular rim of reduced diameter whereby said ball may be frictionally contained therein, a stem extending from the closed end of said cylinder for insertion in an opening in said belt, a disk

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integrally formed on the outer end of said stem, whereby said socket will be secured on said belt.

5. In a flexible elastic belt and flag supporting device, means for fastening the belt ends and means for separably supporting said flags, said belt fastening means comprising male and female members attached to opposite belt ends, said female member having an opening centrally thereof and an elongation on one end edge provided with a sphere at its outer end, said male member provided with two opposed posts near one end and a third post located near the opposite end, said elongation being pressed between said opposed posts on the female member and the third post being received in the associated opening whereby said belt ends may be secured, said separable flag supporting means comprising a resiliently expansible ball and socket device, said socket portion being secured to said belt, said socket portion being of cylindrical formation, closed at one end, and having a circular rim of reduced diameter on its open end whereby said ball may be frictionally contained therein.

6. In a flag game apparatus, a flexible elastic belt having flags attached thereto, a plastic buckle comprising two separable members, a plurality of integrally formed posts centrally of one of said members, the other of said members having an opening formed centrally thereof, an ex-

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tension formed on one side of said second named member having a ball element formed on the end of said extension, said ball element and opening having cooperative engagement with said posts on the opposite buckle member, means for separably attaching said flags to said belt including a resiliently expansible cylindrical socket member secured to said belt, and a separable ball element having a flag attached thereto having cooperative frictional engagement within said socket, said socket having its open end provided with a rim of reduced diameter whereby said ball element will be restrictively contained therein but readily removed upon a pull from without.

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