The Transicleat relates generally to an athletic shoe and more particularly to an athletic shoe that converts from an ordinary running shoe to an athletic shoe with removable cleats. It is an athletic shoe comprising a sole that is convertible and may be applied to a variety of athletic shoe configurations and uses including, but not limited to, basketball, tennis, running, and walking. Then by installing the removable cleats into the soles of the shoes, they may be applied to other sports such as baseball, soccer, golf, and football that require the increased traction of cleats. The Transicleat also describes an upper part of the shoe that is secured to the wearer's foot by a closure system which typically includes a lacing means, buckles, or hook and loop-type fasteners. In addition to conventional shoelaces, the Transicleat has one or more straps having sticky cloth surfaces including two component fabrics of different composition adapted to stick together in the nature of the material sold under the trademark VELCRO. Finally, the shoelaces are covered with a VELCRO-type flap that serves the dual purposes of hiding the shoelaces from view and, when fastened, secures the shoe on the foot of the wearer whether or not the shoelaces are tied.
TRANSCLEAT - CONVERTIBLE ATHLETIC SHOE

BACKGROUND OF THE INVENTION

0004 1. Field of the Invention

0005 The present invention relates generally to an athletic shoe and more particularly to an athletic shoe that converts from an ordinary running shoe to an athletic shoe with removable cleats.

0006 2. Description of the Related Art

0007 Increased attention has been given to the development of athletic footwear because of people’s renewed interest in physical activity and celebrity endorsement of athletic footwear products. Many of the recent developments in athletic footwear relate to the fit, function, or weight of the shoe. It is well known that modern shoes of the athletic type are made in many designs and shapes. There are tennis shoes, golf shoes, running shoes, jogging shoes, walking shoes, basketball shoes, soccer shoes, football shoes, and baseball shoes, among many other types.

0008 Typically, an athletic shoe includes an upper and a sole. The upper is that part of the shoe that covers and protects the heel, instep, toe, top, and side portions of the foot. The upper is secured to the wearer’s foot by a closure system which typically includes a lacing means, buckles, or hook and loop-type fasteners. The closure system of the upper is conventionally positioned above the instep portion of the foot to allow easy donning and doffing of the shoe.

0009 The sole of an athletic shoe includes an insole, a midsole, and an outsole. The insole (or insole board) lies next to the foot under a sock liner. The insole is the foundation of the shoe to which the upper is attached and the sole is attached. The midsole lies between the insole and the outsole. The primary function of the midsole is to provide cushioning to the wearer’s foot, specifically in the heel and forefoot regions. The midsole may be formed in one or more pieces and often includes a wedge or cushioning insert disposed beneath the heel of the wearer to effectively increase the amount of cushioning. A mechanism for stabilizing the heel of the foot may also be incorporated into the midsole. The outsole is that part of the shoe which comes into direct contact with the ground. The outsole is commonly molded from an abrasive resistant material such as rubber.

0010 The upper and sole components of the athletic shoe of the Transcileat are doubly efficient in that they may be applied to a variety of athletic shoe configurations and uses including, but not limited to, basketball shoes, tennis shoes, running shoes, and walking shoes. Then by installing the removable cleats into the soles of the shoes, they may be applied to other sports such as baseball, soccer, golf, and football that require the increased traction of cleats.

0011 The following prior art patents were reviewed, extracted, and benchmarked in the preparation of the present patent application:


BRIEF SUMMARY OF THE INVENTION

0015 In accordance with the objectives and purposes of the present invention as embodied and described herein, the Transcileat is a supportive, lightweight athletic shoe for use in sports that includes a sole into which removable cleats can be installed. In addition to conventional shoe-laces, the Transcileat has one or more straps having sticky cloth surfaces including two components fabrics of different composition adapted to stick together in the nature of the material sold under the trademark VELCRO. The strap is passed through an eyelet connected to one side of the shoe, folded back upon itself, pulled tight, and held together by means of the sticky cloth surfaces. The shoe-laces are covered with a VELCRO-type flap that serves the dual purposes of hiding the shoe-laces from view and, when fastened, secures the shoe on the foot of the wearer whether or not the shoe-laces are tied.

0016 In one aspect, the Transcileat is an athletic shoe that includes an upper with three components. All three components of the upper include the closure system that typically includes a lacing means, buckles, or hook and loop-type fasteners. The closure system of the upper is conventionally positioned above the instep portion of the foot to allow easy donning and doffing of the shoe. The first component would be comprised of laces exactly as are typical of conventional athletic shoes. The second component of the present invention would be comprised of one or more straps having sticky cloth surfaces including two component fabrics of different composition adapted to stick together in the nature of the material sold under the trademark VELCRO. The third component of the upper shoe is a flap that covers the laces and is comprised of VELCRO-type material that serves the dual purposes of hiding the shoe-laces from view and, when closed and fastened, secures the shoe on the foot of the wearer whether or not the shoe-laces are tied.

0017 In another aspect, the present invention is an athletic shoe comprising a sole that is convertible and may be applied to a variety of athletic shoe configurations and uses including, but not limited to, basketball shoes, tennis shoes, running shoes, and walking shoes. Then by installing the removable cleats into the soles of the shoes, they may be applied to other sports such as baseball, soccer, golf, and football that require the increased traction of cleats.

0018 In still another aspect of the invention, the sole includes a forefoot component that includes a cushioning material and an abrasive resistant material and a heel component that includes a cushioning material and an abrasive
resistant material. The sole also includes an arch region that includes a rigid arch support positioned beneath the arch of the wearer and extending from the lateral edge of the shoe to the medial edge of the shoe. The arch is positioned between the forefoot component and the heel component such that the arch region is devoid of either the cushioning material or the abrasive resistant material of the sole. The arch support may have a variety of thicknesses and may be formed from a number of materials such as a composite formed from carbon and glass that is then coated with an epoxy resin.

**BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS**

[0019] Various objects, features, and attendant advantages of the present invention will be more fully appreciated as the same becomes better understood from the following detailed description of the present invention when considered in conjunction with the accompanying drawings, in which:

[0020] FIG. 1 is an angled view of the side and front of the athletic shoe of the present invention; and,

[0021] FIG. 2 is an angled view of the bottom and sole of the shoe.

**DETAILED DESCRIPTION OF THE INVENTION**

[0022] In accordance with the objectives and purposes of the present invention as embodied and described herein, the Transcilect is a supportive, lightweight athletic shoe for use in sports that includes a sole into which removable cleats can be installed. In addition to conventional shoelaces, the Transcilect has one or more straps having sticky cloth surfaces including two component fabrics of different composition adapted to stick together in the nature of the material sold under the trademark VELCRO. The strap is passed through an eyelet connected to one side of the shoe, folded back upon itself, pulled tight, and held together by means of the sticky cloth surfaces. The shoelaces are covered with a VELCRO-type flap that serves the dual purposes of hiding the shoelaces from view and, when fastened, secures the shoe on the foot of the wearer whether or not the shoelaces are tied.

[0023] In one aspect, the Transcilect is an athletic shoe that includes an upper with three components. All three components of the upper involve the closure system that typically includes a lacing means, buckles, or hook and loop-type fasteners. The closure system of the upper is conventionally positioned above the instep portion of the foot to allow easy donning and doffing of the shoe. The first component would be comprised of laces exactly as are typical of conventional athletic shoes. The second component of the present invention would be comprised of one or more straps having sticky cloth surfaces including two component fabrics of different composition adapted to stick together in the nature of the material sold under the trademark VELCRO. The third component of the upper shoe is a flap that covers the laces and is comprised of VELCRO-type material that serves the dual purposes of hiding the shoelaces from view and, when closed and fastened, secures the shoe on the foot of the wearer whether or not the shoelaces are tied.

[0024] In another aspect, the present invention is an athletic shoe comprising a sole that is convertible and may be applied to a variety of athletic shoe configurations and uses including, but not limited to, basketball shoes, tennis shoes, running shoes, and walking shoes. Then by installing the removable cleats into the soles of the shoes, they may be applied to other sports such as baseball, soccer, golf, and football that require the increased traction of cleats.

[0025] In still another aspect of the invention, the sole includes a forefoot component that includes a cushioning material and an abrasive resistant material and a heel component that includes a cushioning material and an abrasive resistant material. The sole also includes an arch region that includes a rigid arch support positioned beneath the arch of the wearer and extending from the lateral edge of the shoe to the medial edge of the shoe. The arch is positioned between the forefoot component and the heel component such that the arch region is devoid of either the cushioning material or the abrasive resistant material of the sole. The arch support may have a variety of thicknesses and may be formed from a number of materials such as a composite formed from carbon and glass that is then coated with an epoxy resin.

[0026] A variety of different devices have been previously employed for fastening shoes securely to the foot. The laces that are used normally take a good deal of time to tie and frequently the ends of the laces hang down where they can get in the way or be stepped on. Moreover, tying conventional shoelaces is difficult or impossible for certain minors or handicapped individuals. There are a number of other problems with laces that are apparent. For example, they often tend to come undone. In other cases, they are too tight at the top where they are tied and too loose near the bottom of the shoe. And, they often become frayed and broken.

[0027] Sticky cloth of the type commonly sold under the trademark VELCRO has come into common use in holding together various parts of clothing articles. An improved shoe design is described including a provision for fastening the shoe to the foot using one or more bands of sticky cloth in addition to using shoelaces. Also, providing an additional sticky cloth flap that covers the shoelaces serves two purposes. First, it protects the shoelaces from wear and tear. Second, the flap fastens the shoe securely to the foot whether or not the shoelaces are tied.

[0028] A pair of athletic shoes is provided with an extended opening of the usual construction at the top to facilitate entry of the foot. Beneath the extended opening is the tongue of the shoe that is also in its usual place. On either side of the opening are provided circular eyelets. For example, six eyelets may be provided on the right side of the opening and six on the left, the latter being positioned in lateral alignment with those on the right so that six pairs of eyelets are provided. These pairs of lace receiving means or eyelets are distributed longitudinally along the length of the opening.

[0029] Besides these shoelace receiving eyelets, the Transcilect will have one or more elongated eyelets. For each pair of elongated eyelets is provided at least one strap having one or both surfaces at least partially covered with a sticky cloth material composed of two component fabrics of different compositions adapted to stick together. For example, on one surface can be provided a multiplicity of fiber loops
extending up from the surface while on the other can be provided a multiplicity of hooks adapted to stick in the loops when pressure is applied. The eyelets are characterized by having elongated openings wide enough to accommodate the strap. The strap, or if several are used, each strap passes through one of the eyelets on the opposite side of the shoe from the opening and one end of each strap is secured to the shoe either by being looped through an opening in the shoe or by being firmly secured at its end to the shoe. Typically, when more than one strap is used, one end thereof is attached securely to the shoe, for example, by sewing while the other end extends across the opening through the elongated eyelet, is folded back upon itself and its ends are bonded together. Thus, the strap extends in this situation from one side of the shoe where it is firmly secured across the opening through the eyelet and thence back to its beginning where its overlapping ends are pressed together and secured in place by the sticky fabric layers between them. This will hold the shoe tightly to the foot if the strap is pulled tight since the sticky fabric components together hold the strap under tension across the opening. The eyelets can be rings mounted within holes in the shoe so that the strap, in effect, passes through the eyelets and at the same time in the opening of the shoe within which each eyelet is mounted. Alternatively, the eyelets can comprise rings that extend upwardly from the surface of the shoe and include securing lugs at the lower end thereof to facilitate attachment of the rings to the surface of the shoe. If desired, the strap can comprise a single elongated strap having a center section that is passed back and forth across the opening through eyelets on either side of the opening and includes sticky cloth surfaces at one or both ends thereof. The invention can be applied to a variety of shoes or boots but is particularly well suited for shoes used in baseball, running, tennis, golf, football, and the like.

What is claimed:

1. An athletic shoe for use in sports that is comprised of two components: an outer ground engaging sole and a supportive upper.
2. An athletic shoe for use in sports, as recited in claim 1, in which the outer ground engaging sole is made from a material selected from rigid and semi-rigid synthetic resins, rubbers, and metals as are common and standard to the athletic shoe industry.
3. An athletic shoe for use in sports, as recited in claim 1, in which the outer ground engaging sole has several female receptor openings that function to receive the male extensions of the removable cleats.
4. Removable cleats, as recited in claim 3, comprised of several different sets of cleats in styles for use in a variety of sports that require increased shoe traction such as soccer, golf, baseball, and football.
5. An athletic shoe for use in sports, as recited in claim 1, that includes an upper with three components, all of which involve the closure system.
6. The first component of the upper of claim 5 is comprised of laces exactly as are typical of conventional athletic shoes.
7. The second component of the upper of claim 5 is comprised of one or more straps having sticky cloth surfaces including two component fabrics of different composition adapted to stick together in the nature of the material sold under the trademark VELCRO.
8. The third component of the upper of claim 5 is comprised of a flap that covers the laces and is comprised of VELCRO-type material that serves the dual purposes of hiding the shoelaces from view and, when closed and fastened, secures the shoe on the foot of the wearer whether or not the shoelaces are tied.