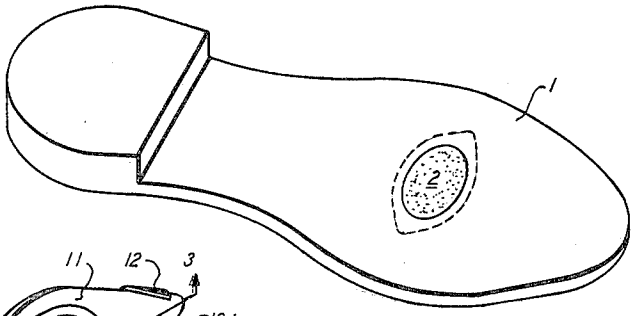
March 19, 1963 J. OAKLEY 3,081,562

PIVOTAL INSERT FOR SHOE SOLE

Filed Feb. 9, 1962

Fig 1



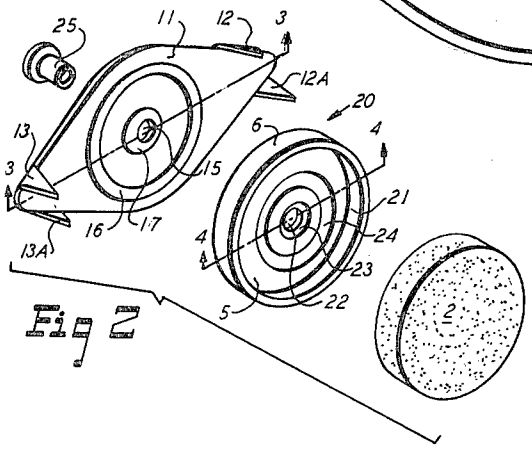


Fig 2

Fig 3

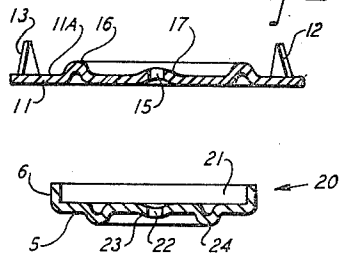


Fig 4

Fig 5

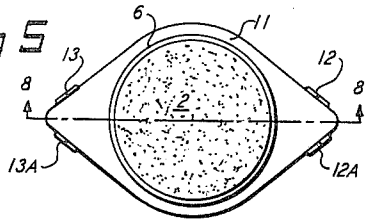


Fig 6

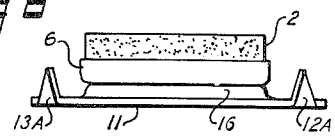


Fig 7

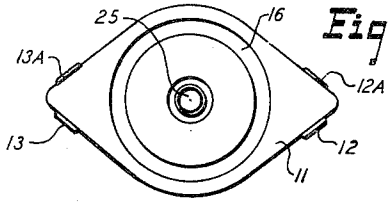


Fig 8

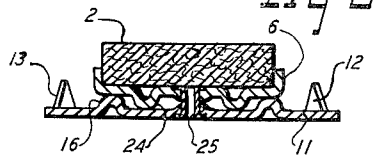
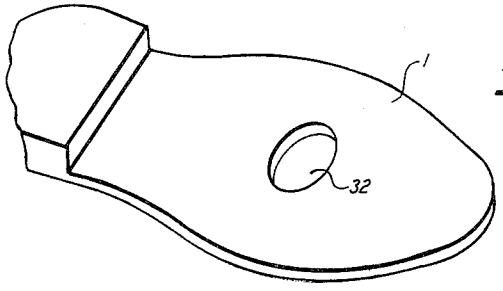


Fig 9



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United States Patent Office 3,081,562 Patented Mar. 19, 1963

3,081,562

PIVOTAL INSERT FOR SHOE SOLE

John Oakley, 30 Spring St., Providence, R.I.

Filed Feb. 9, 1962, Ser. No. 172,146
3 Claims. (Cl. 36—8.3)

The present invention relates to a pivotal insert for a shoe sole and more particularly to an insert for the sole of a shoe at the ball of the foot to permit pivotal foot action especially when dancing.

An object of the present invention is to provide a pivotal insert for the sole of a shoe to enable adults and children when dancing to easily do various fancy turns and spins.

Another object of the present invention is to provide a shoe spinner attachment which is of simple and sturdy construction requiring very few inexpensive parts.

Other objects of the present invention will be pointed out in part and become apparent in part in the following specification and claims.

Referring to the drawing where similar characters of reference refer to like parts:

FIGURE 1 is a perspective view of the sole of a shoe showing the new and improved pivotal insert for a shoe sole.

FIGURE 2 is an exploded perspective view of the pivotal insert which is attached to the sole of a shoe.

FIGURE 3 is a cross sectional view taken along line 3—3 of one of the elements illustrated in FIGURE 2.

FIGURE 4 is a cross sectional view taken along line 4—4 of one of the elements illustrated in FIGURE 2.

FIGURE 5 is a plan view of the pivotal insert for a shoe sole.

FIGURE 6 is a side elevational view of FIGURE 5.

FIGURE 7 is a plan view of the pivotal insert for a shoe sole minus the leather plug.

FIGURE 8 is a cross sectional view taken on line 8—8 of FIGURE 5.

FIGURE 9 is a bottom plan view of a shoe sole prepared to receive the pivotal insert.

In proceeding with this invention, a shoe sole **1** is prepared to receive a pivotal insert by having a plug **2** of shoe leather removed from the shoe sole **1** at approximately the area in the shoe sole which supports the ball of the foot. Plug **2** is a floor plate which supports the wearer upon the floor surface while turning or spinning. The removal of plug **2** provides an orifice **32** in shoe sole **1**.

The shoe spinner or pivotal insert consists of a substantially flat body member **11** having an enlarged medial area and tapered opposite end provided with prongs **12**, **12A** and **13**, **13A**, respectively. Body member **11** is also provided with an axial orifice **15** having a raised cylindrical area **17**, and a cylindrical bead **16**.

A second member is provided consisting of a cup shaped housing generally indicated by reference numeral **20** formed with a flat base **5** and an upturned cylindrical side **6** which forms a cavity **21**. Flat base **5** is provided with an axial bore **22**, having a raised area **23** and a circular ridge **24** concentric with said axial bore **22**.

A rivet **25** located in said axial orifice **15** and in said axial bore **22** is swedged into position to secure flat body member **11** to said cup shaped housing **20** with said raised cylindrical area **17** rotatively engaging said raised area **23** and with said cylindrical bead **16** rotatively engaging flat base **5**. Circular ridge **24** rotatively engages surface **11A** of flat body member **11**.

Round plug **2** is secured in cavity **21** by means of an adhesive.

The assembled pivotal insert is placed between the insole and the outsole of the shoe with plug **2** located in

the orifice **32** made in the sole **1** at the time plug **2** was originally removed. Prongs **12**, **12A**, **13**, **13A** will be driven and secured in the insole and shoe sole **1** whereby plug **2** is rotatively held in orifice **32**.

Cylindrical bead **16** engaging flat base **5** of cup shaped housing **20** and circular ridge **24** engaging surface **11A** of body member **11** maintains friction at a minimum. Body member **11** may be fabricated from a ferrous metal and cup shaped housing **20** may be fabricated from a non-ferrous metal. In which case the two parts would be self lubricating. That is, it is totally undesirable to have body member **11** and cup shaped housing **20** fabricated from the same metal. However, body member **11** and cup shaped member **20** could be fabricated from a plastic material.

Having shown and described a preferred embodiment of the present invention by way of example, it should be realized that structural changes could be made and other examples given without departing from either the spirit or scope of this invention.

What I claim is:

1. A pivotal insert for a shoe sole comprising a body member having prongs on opposite ends thereof, and provided with an axial orifice, a cylindrical bead having a raised cylindrical area provided in said body member, a rotating member comprising a cup shaped member provided with a cavity and an axial bore, a raised area surrounding said axial bore, a circular ridge surrounding said axial bore, a rivet located in said axial orifice and said axial bore rotatively securing said cup shaped member to said body member and a plug secured in said cavity.

2. A pivotal insert for a shoe sole comprising a body member having an enlarged medial area, tapered opposite ends provided with prongs, an axial orifice having a raised cylindrical area, and a cylindrical bead, a rotating member comprising a cup shaped member provided with a cavity and an axial bore, a raised area surrounding said axial bore, a concentric circular ridge surrounding said axial bore a rivet located in said axial orifice and said axial bore rotatively securing said cup shaped member to said body member, and a plug secured in said cavity whereby a shoe sole provided with an orifice under the ball of a foot may receive said plug in said orifice with said prongs securing said body member to the shoe sole.

3. A pivotal insert for a shoe sole comprising a shoe sole having a plug receiving orifice, a flat body member having an enlarged medial area, tapered opposite ends provided with prongs, an axial orifice having a raised cylindrical area, and a cylindrical bead, a cup shaped housing formed with a flat base and an upturned cylindrical side forming a cavity, said flat base having an axial bore provided with a raised area, a circular ridge concentric with said axial bore, a rivet located in said axial orifice and in said axial bore rotatively secures said flat body member to said cup shaped housing with said raised cylindrical area rotatively engaging said raised area, said cylindrical bead rotatively engaging said flat base, said circular ridge rotatively engaging said flat body member, a round plug secured in said cavity, said round plug located in said plug receiving orifice and said prongs engaging said shoe sole thereby securing said flat body member to said shoe sole.

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