

Feb. 10, 1948.

C. F. BEHRINGER ET AL

2,435,668

PLAY SHOE OR THE LIKE

Filed Nov. 13, 1945

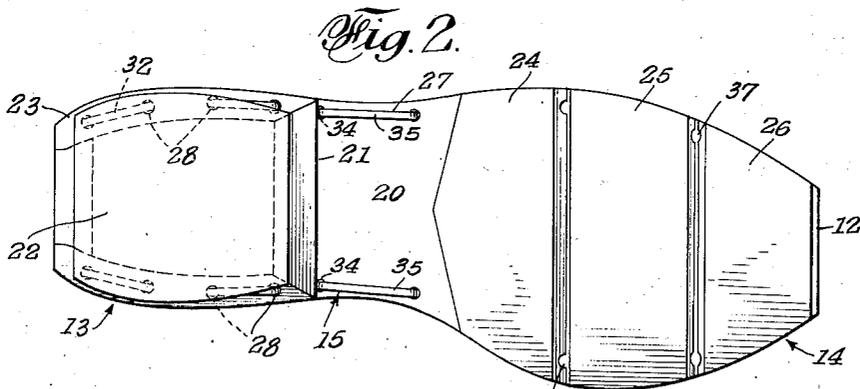
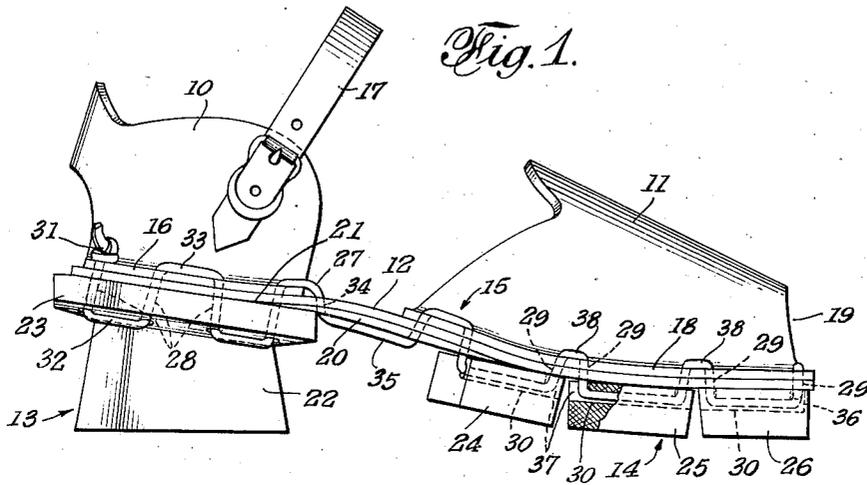


Fig. 3

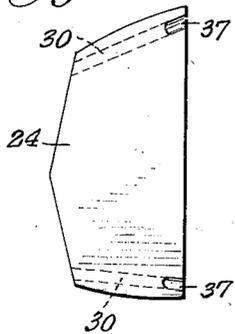


Fig. 4

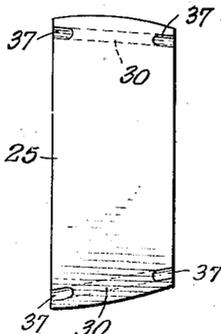
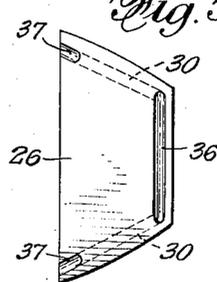


Fig. 5



INVENTORS
LLOYD ROGERS
CHARLES F. BEHRINGER
BY
Munroe & Libbe

ATTORNEYS

UNITED STATES PATENT OFFICE

2,435,668

PLAY SHOE OR THE LIKE

Charles F. Behringer, Los Angeles, and
Lloyd Rogers, Wilmington, Calif.

Application November 13, 1945, Serial No. 628,176

7 Claims. (Cl. 36—11.5)

1

This invention relates to footwear and deals more particularly with a shoe of the play or sport type.

An object of the present invention is to provide a shoe involving a novel structure in which the structural features and arrangement also lend novelty to the appearance of the shoe.

Another object of the invention is to provide a shoe of the play or sport type in which the heel and sole are secured to the upper elements of the shoe in a novel and effective manner.

Another object of the invention is to provide a shoe having a sectional sole comprising a plurality of rigid related elements and embodying novel means for securing the sole in place and yet affording suitable articulation of said sole.

Another object of the invention is to provide a shoe structure in which a single continuous cord or thong is used to connect the heel and sole of the shoe to the upper thereof and embodying novel structural means facilitating the proper application of tension to said cord or thong.

More specifically, the invention seeks to provide a shoe having an articulated sole comprising a plurality of rigid related blocks and a heel of novel form and design, and incorporating means for lacing the sole and heel to the shoe upper so as to provide a strong and durable structure affording suitable articulation of the sole despite firm take-up tension on the lacing means.

The invention also has for its objects to provide such means that are positive in operation, convenient to use, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, this disclosure merely deals with one embodiment of the present invention which is given by way of example only.

In the drawing:

Fig. 1 is a side elevational view, partly in cross-section, of a shoe embodying this invention.

Fig. 2 is a bottom plan view thereof.

Figs. 3, 4 and 5 are top views of the rear, middle and front sole elements, respectively, of the shoe shown in Figs. 1 and 2.

In that form of the invention which is illustrated, the shoe may be said to comprise, generally, an upper formed as a counter 10 and a separate vamp 11; an insole 12 connecting the counter and the vamp; a heel 13, a sole 14; and

2

lacing means 15 for connecting the elements of the shoe.

The counter 10 is shown as comprising a simple piece of leather, fabric or like pliable material formed to accommodate the heel of a wearer and having its lower portion anteriorly bent to provide marginal flanges 16. The counter may be artistically contoured as indicated and may carry means such as a strap 17 whereby the shoe may be secured to the foot of a wearer.

The vamp 11 also may comprise a suitable simple piece of pliable material formed to engage the forward part of the foot of a wearer in a conventional manner and having its lower portion outwardly bent to provide flanges 18 similar to the mentioned flanges 16. The vamp shown is open at the front at 19 and the contour lines of said vamp may be variously artistically formed.

The insole 12 is of conventional form, generally, and is preferably provided with a stiffening piece 20 at the shank of the shoe. The insole 12 and the piece 20 are preferably made of suitable leather, although the latter may be made of more rigid material such as moulded fibre or metal.

The heel 13, as shown, comprises a wood or plastic element in which the platform 21 is generally larger than the shank 22 of the heel; accordingly the heel is formed to have a T-shaped cross-section in any cutting plane to provide the platform 21 with a peripheral flange 23 from which the shank 22 extends with a downward and outward flare.

The sole 14, in this instance, comprises three related blocks 24, 25, 26, which are the rear, middle and front elements of the sole, respectively. These blocks, also, may be made of wood or suitable plastic material.

The shoe structure contemplated entails the use of the lacing means 15 to fasten the heel 13, through the insole 12, to the counter 10, and to fasten the sole blocks 24, 25 and 26 through said insole to the vamp 11. The lacing, which is shown as comprising a leather thong 27, has a substantially circumambient arrangement around the shoe, starting at one rear corner of the heel of the shoe, progressing along the side, across the front or toe of the shoe, along the other side, and terminating at the other rear corner of the heel.

The thong 27 connects the heel 13 and counter 11 by portions thereof passing through holes 28 provided in the heel flange 23 and in corresponding aligned portions of the insole 12 and the flange 16 of the counter 10.

The thong 27 connects the sole blocks 24, 25

3

and 26 and the vamp 11 by portions thereof passing through holes 29 provided in aligned portions of the insole 12 and through channels 30 formed in the sole blocks near their lateral edges.

It will be evident that the lacing is simply accomplished by forming a knot 31 in one end of the thong 27, then passing the thong down through the first hole 28, bringing it across at 32 to the next hole 28, across the top of the counter flange 16 at 33, and so on until one side of the heel portion of the shoe is secured. The thong is then passed down through a hole 34, so as not to interfere with the arch of the user of the shoe, and passed along the bottom of the instep at 35 to be brought up through the first hole 29. One side of the blocks 24, 25 and 26 are then laced into place by passing the thong through one channel 30 of the rear block 24 and then upwardly through the other holes 29 and the other aligned channels 30, alternately as shown. When the front of the sole is reached, the thong is passed down through the end hole 29 and trained along the under face of the insole, said thong residing in a groove 36 formed in the front block 26. The other side of the shoe is laced in the same manner, but from front to rear until the thong is finally knotted similar to the knot 31.

Laced in the above manner, the elements of the shoe are firmly fastened together but afford little room for articulation of the sole. Accordingly, to provide for increased flexibility of the sole, the channels 30, which comprise simple longitudinal bores in the sole blocks, are cut back as at 37 at the portions of said blocks which have adjacency. In this manner, each channel 30 becomes shorter in length than the block in which it is formed so that the thong may pass upwardly through the cuts 37 rather than upwardly beyond the edges of said blocks. Also, in this manner, the holes 29 which receive adjacent portions of the thong, may be spaced further apart so that the bends in the thong are least sharp, facilitating the application of suitable tension on the thong to obtain firm lacing of the shoe elements. Further, by means of the present arrangement, the thong is positioned so as not to be subjected to the friction and attrition to which the shoe sole is exposed. More specifically, however, the cuts or grooves 37 afford complete flexibility of the sole without undue tension on the thong, since the bights 38 can merely spread at their bottoms without unduly forcing the walls of the holes 29 through which said bights pass.

The foregoing description of a preferred embodiment of the invention which, it should be understood, is subject to modifications within the concepts of this invention. Accordingly, the appended claims are intended to cover such variations and modifications of the invention as may fall within the spirit and scope thereof.

We claim:

1. A shoe having a counter and a separate vamp, each having marginal flanges, a heel having a platform larger than the shank thereof to provide a peripheral flange, a sole comprising a plurality of blocks arranged transversely of the shoe, an insole between the counter and the heel and between the vamp and the sole, and a thong in interlacing engagement with the marginal flanges of the counter and vamp, the peripheral flange of the heel and the lateral edge portions of the sole blocks.

2. A shoe having a counter and a separate

4

vamp, each having marginal flanges, a heel having a platform larger than the shank thereof to provide a peripheral flange, a sole comprising a plurality of blocks arranged transversely of the sole, an insole between the counter and the heel and between the vamp and the sole, and a thong in interlacing engagement with the marginal flanges of the counter and vamp, the peripheral flange of the heel and the lateral edge portions of the sole blocks, said thong being substantially circumambient with regard to the counter of the shoe, extending from one rear corner of the heel, along one side of the shoe, across the front thereof, along the other side of the shoe, and terminating at the other rear corner of the heel.

3. A shoe having a counter and a separate vamp, each having marginal flanges, a heel having a platform larger than the shank thereof to provide a peripheral flange, a sole comprising a plurality of blocks arranged transversely of the shoe and each formed with a longitudinal channel adjacent the edge thereof, and a thong in interlacing engagement with the marginal flanges of the counter and vamp, the peripheral flange of the heel, and engaged in the mentioned channels in the sole blocks.

4. A shoe having a counter and a separate vamp, each having marginal flanges, a heel having a platform larger than the shank thereof to provide a peripheral flange, a sole comprising a plurality of blocks arranged transversely of the shoe and each formed with a longitudinal channel adjacent an insole between the counter and the heel and between the vamp and the sole, and a thong in interlacing engagement with the marginal flanges of the counter and vamp and the peripheral flange of the heel and engaged in the mentioned channels in the sole blocks, said thong being substantially circumambient with regard to the counter of the shoe, extending from one rear corner of the heel, along one side of the shoe, across the front thereof, along the other side of the shoe, and terminating at the other rear corner of the heel.

5. In a shoe structure, a sole comprising a plurality of blocks arranged transversely of the shoe, each block being formed with a channel adjacent each lateral edge thereof, and an open cut made in at least one end of each channel whereby each channel is shorter in length than the width of the block in which it is formed, and a lace for securing the blocks to the shoe and extending through said channels and at an angle through said cuts.

6. In a shoe structure, an upper having outwardly turned marginal flanges, an insole having one side engaged with said flanges, a shoe sole engaged with the other side of said insole, said shoe sole comprising transversely extending adjacent blocks each having longitudinal marginal channels, and a thong arranged to alternately engage the flanges of the upper and a channel of one of the blocks, whereby said upper insole and shoe sole are secured together.

7. In a shoe structure, an upper having outwardly turned marginal flanges, an insole having one side engaged with said flanges, a shoe sole engaged with the other side of said insole, said shoe sole comprising transversely extending adjacent blocks each having longitudinal marginal channels, and a thong arranged to alternately engage the flanges of the upper and a channel of one of the blocks, whereby said upper insole and shoe sole are secured together, the mentioned channels in the blocks being shorter than the

2,435,668

5

width of the blocks in which said channels are formed.

CHARLES F. BEHRINGER.
LLOYD ROGERS.

5

REFERENCES CITED

The following references are of record in the file of this patent:

Number
1,228,720
2,075,905
297,864
308,745

6

UNITED STATES PATENTS

Name	Date
Troutt -----	June 5, 1917
Larsen -----	Apr. 6, 1937

FOREIGN PATENTS

Country	Date
Germany -----	May 30, 1917
Germany -----	Nov. 6, 1917