April 23, 1940. C. H. DANIELS 2,197,996

FOOT SUPPORT

Filed May 27, 1938

Fig. 1

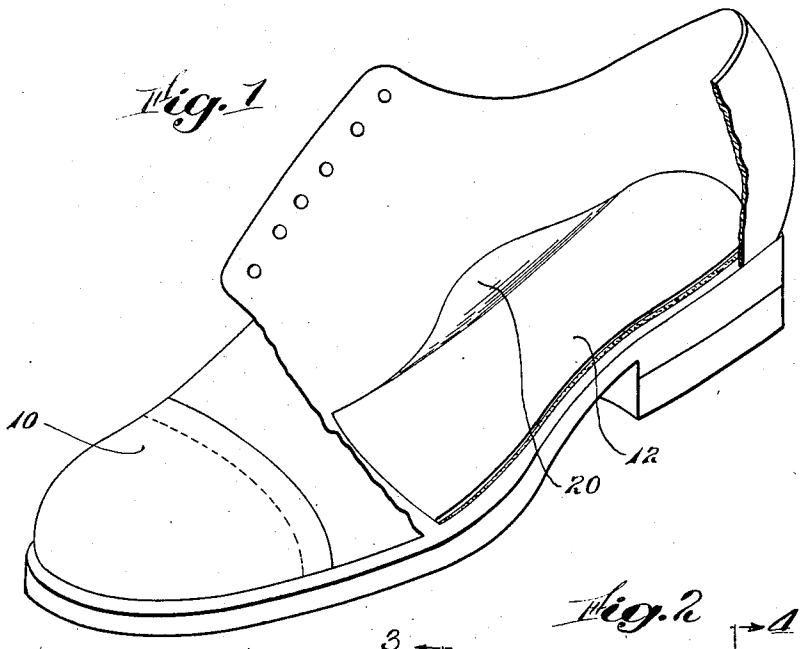


Fig. 2

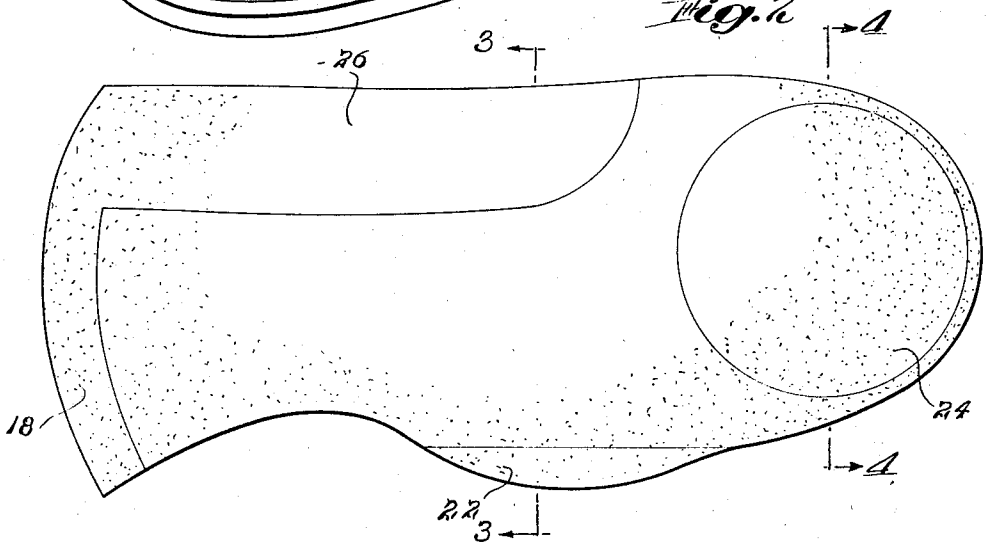


Fig. 3

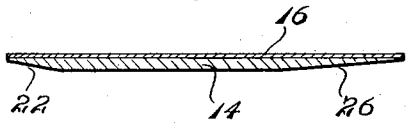
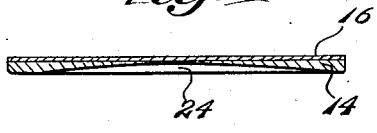


Fig. 4



Inventor:
Claude H. Daniels
by Thomson & Thomson
his Attys.

Patented Apr. 23, 1940

2,197,996

UNITED STATES PATENT OFFICE

2,197,996

FOOT SUPPORT

Claude H. Daniels, Greenwich, Conn.

Application May 27, 1938, Serial No. 210,399

3 Claims. (Cl. 36—71)

This invention relates to improvements in foot supports or cushion pads for shoes.

In my application, Ser. No. 128,649, filed March 2, 1937, for Rubber product and method of making same, I have disclosed a rubber-cork composition that can be produced in thin sheets. The product in its final form is deformable or moldable under pressure so as to receive an impression from another body in contact therewith. The product is particularly suitable for use in shoes in the form of foot supports or foot cushions, and I have disclosed in my application Ser. No. 167,401, filed October 5, 1937, for Foot supports, one embodiment of the product in a foot support.

It is an object of my present invention to provide an improved form of foot support in which a thin sheet of the deformable rubber-cork compound is used cut to fit the shoe and skived or otherwise reduced in thickness at certain portions thereof to provide a better fit by allowing the foot to drop at the weight bearing areas.

Fig. 1 is a perspective view of a shoe having the cushion pad therein;

Fig. 2 is a bottom view of the cushion pad;

Fig. 3 is a section taken on the plane indicated 3—3 in Fig. 2; and,

Fig. 4 is a section taken on the plane indicated 4—4 in Fig. 2.

My foot support may be shaped to fit any type of shoe such as 10 in Fig. 1, in which the foot support 12 is placed in position over the heel seat and shank portion of the insole. The foot support comprises a layer of the rubber-cork compound 14 and a suitable cover 16.

The rubber-cork compound may be prepared as disclosed in my application Ser. No. 128,649, filed March 2, 1937, in the form of thin sheets from which the pieces to form the foot support may be cut. This product is of a cellular nature but differs from ordinary sponge rubber in that an impression received under pressure will remain after removal of the pressure. On the other hand, the product is generally shape-retaining and is not a soft, flowable or moldable mass which must be retained in an envelope. The product in the form of a foot support will not spread under pressure of a foot, but will be compressed and compacted under the weight of the body.

It is found to be desirable to have a foot support or a foot cushion which will take up the least possible space when inserted in a shoe, and will add as little weight as possible to the shoe. The layer of rubber-cork compound is therefore cut from relatively thin sheets, for example, one-eighth of an inch in thickness although thicker or thinner sheets may be used if desired.

It is desirable to reduce the forward edge of the pad to a thin edge which may be carried out by skiving the edge as indicated at 18. The inside edge which includes a portion 20 shaped to lap over the upper of the shoe may also be skived as at 22.

The thickness and weight of the foot support may be further reduced without sacrificing the advantages of my foot support by skiving or grinding out the compound at those portions of the pad which bear the major portion of the weight of the body. Fig. 2 shows the bottom of the pad in which the heel portion has a hollow 24 ground therein to accommodate the heel of the foot. The outer edge of the pad is also reduced by skiving or grinding out the area 26 to allow the cuboid side of the foot to drop.

The pad 14 is or may be cemented in place over the insole of the shoe. The cover 16 may be adhesively secured to the outer face of the pad. In a preferred method of manufacture the covering material or lining is adhesively secured to the large sheets of the rubber-cork compound so that the foot supports may be cut out as units and finished by skiving and grinding.

I claim:

1. A pad adapted to be inserted in a boot or shoe comprising a thin sheet of deformable rubber-cork compound having a flat top side shaped to fit the heel and shank portions of the shoe, a cover cemented to the flat top side, the underside of the pad having a hollowed out heel seat and skived portions on the side edges and forward edge thereof, the skived portion on the outer side of the instep being substantially greater in area than that on the inner side thereof.

2. A pad adapted to be inserted in a boot or shoe comprising a thin sheet of deformable rubber-cork compound having a flat top side and shaped to fit the heel and shank portions only of the shoe, said pad having portions of reduced thickness in the region of the principal weight-bearing areas, said pad having a thin skived edge at its forward end and a thin covering of flexible material cemented to the flat top side of said pad.

3. A pad adapted to be inserted in a boot or shoe comprising a thin sheet of rubber-cork compound having a flat top side shaped to fit the heel and shank portions only of the shoe, the underside of the pad having a hollowed out heel seat and skived portions on the side edges and forward edge thereof, the skived portion on the outer side of the instep being greater than that on the inner side thereof.

CLAUDE H. DANIELS.