(No Model.)

F. G. POWERS.

DIE OR MOLD FOR FORMING ELASTIC CORN AND BUNION PADS.

No. 265,434. Patented Oct. 3, 1882.

Fig. 1.

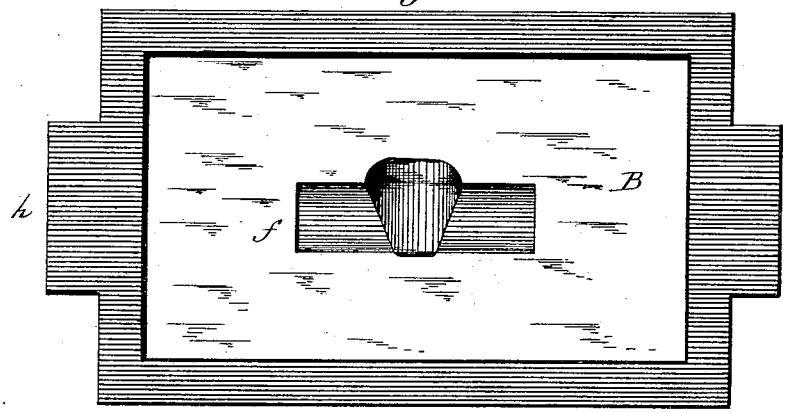


Fig. 2.

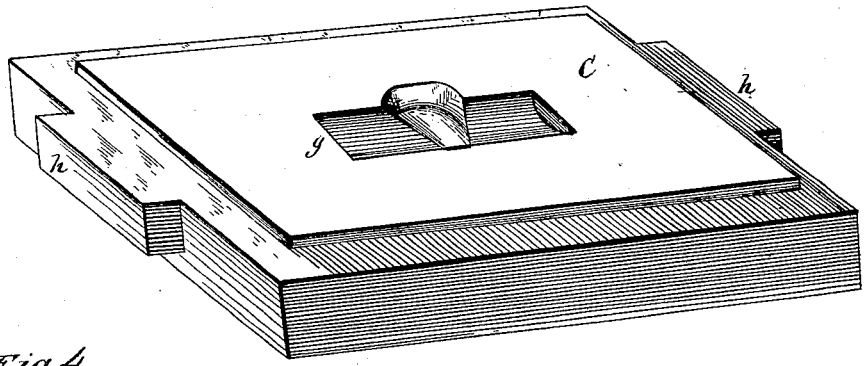


Fig. 4.

Fig. 5.

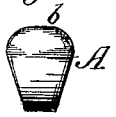


Fig. 3.

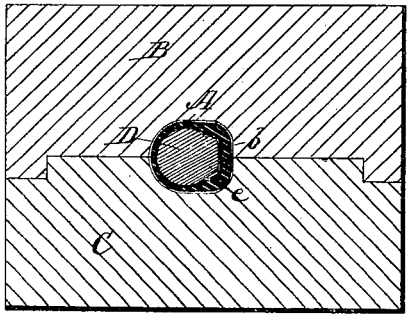
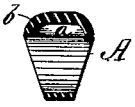


Fig. 6.



WITNESSES:

H. B. Brown

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UNITED STATES PATENT OFFICE.

FRANCIS G. POWERS, OF CHAMPAIGN, ILLINOIS.

DIE OR MOLD FOR FORMING ELASTIC CORN AND BUNION PADS.

SPECIFICATION forming part of Letters Patent No. 265,434, dated October 3, 1882.

Application filed June 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS G. POWERS, of Champaign, in the county of Champaign and State of Illinois, have invented new and Improved Dies or Molds for Forming an Elastic Corn and Bunion Pad; and I do hereby declare that the following is a full, clear, and exact description of the same.

My improvement consists in the construction and combination of parts, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view of the inner side of one of the parts of the die or mold, and Fig. 2 is a perspective view of the other part of said die or mold. Fig. 3 is a central transverse section of the dies and core placed together and the latter surrounded by the plastic gum forming the aforesaid device. Fig. 4 is a side view of the core. Fig. 5 is a side view; and Fig. 6 a section of the product of the dies—to wit, a rubber ring or device designed to be applied to a corn.

As shown, said device has the form of a ring, with a circular cavity, *a*, in the inner side of its head or enlarged portion *b*, which is made flat, or nearly so, on its outer side. Instead of being constructed in the form of a complete ring, the head alone may be made, in which case I term it a "pad" and employ a separate strip of any suitable material to attach it to the toe of the wearer. To form such ring or pad I employ molds or dies B C and a core, D. (Shown in Fig. 4.) The core D has a cylindrical body and a lateral projection, *e*. The respective dies B C are provided with corresponding cavities *f g*, which, when the faces of the dies are placed in contact, as in Fig. 3, exactly coincide as to their edges and conform to the shape of core D, and also closely fit the same, save its central portion, where a space is left surrounding the core to receive the plastic material composing the ring A. In forming the latter a sufficient quantity of soft gum is placed upon the central portion of the core D, so as to completely surround it and cover or inclose the projection *e*. The core, with the gum attached, is pressed into the cavity in die C and the die B placed thereon, and the two parts B C then secured together by any suitable clamp applied to the ears *h h*. The dies are next subjected to a degree of heat—about 212° Fahrenheit—sufficient to cause the gum to take the exact form of the die-cavity and destroy its adhesive quality. The dies B C are then opened, the core D removed, and the ring A detached from the latter, ready for use.

It is apparent that different sizes of rings A will be required for use, according to different conditions. The proportions of the ring and its cavity may also be varied to meet different requirements, and I may attach a band to the portion of the rubber ring containing the cavity *a* for receiving the corn—that is to say, the thinner and narrower portion of the ring may be dispensed with, thus leaving the top or pad portion, *b*, alone, and to the latter a separate strip or band of suitable material will be attached for securing it in place over a corn.

I am aware that molds of various kinds have been made in two parts, and that a core having a lateral projection is not broadly new. Such invention I disclaim.

What I claim is—

The metal core D, having the circular rounded lateral projection formed solid therewith, in combination with the metal dies B C, having a central cavity adapted to receive such projection, but fitting closely to the end portions of the core, as shown and described.

The above specification of my invention signed by me in the presence of two subscribing witnesses.

F. G. POWERS.

Witnesses:

AMOS W. HART,

SOLON C. KEMON.