

No. 666,201.

Patented Jan. 15, 1901.

J. F. B. LITCHFIELD.

CUSHION HEEL.

(Application filed Dec. 9, 1899.)

(No Model.)

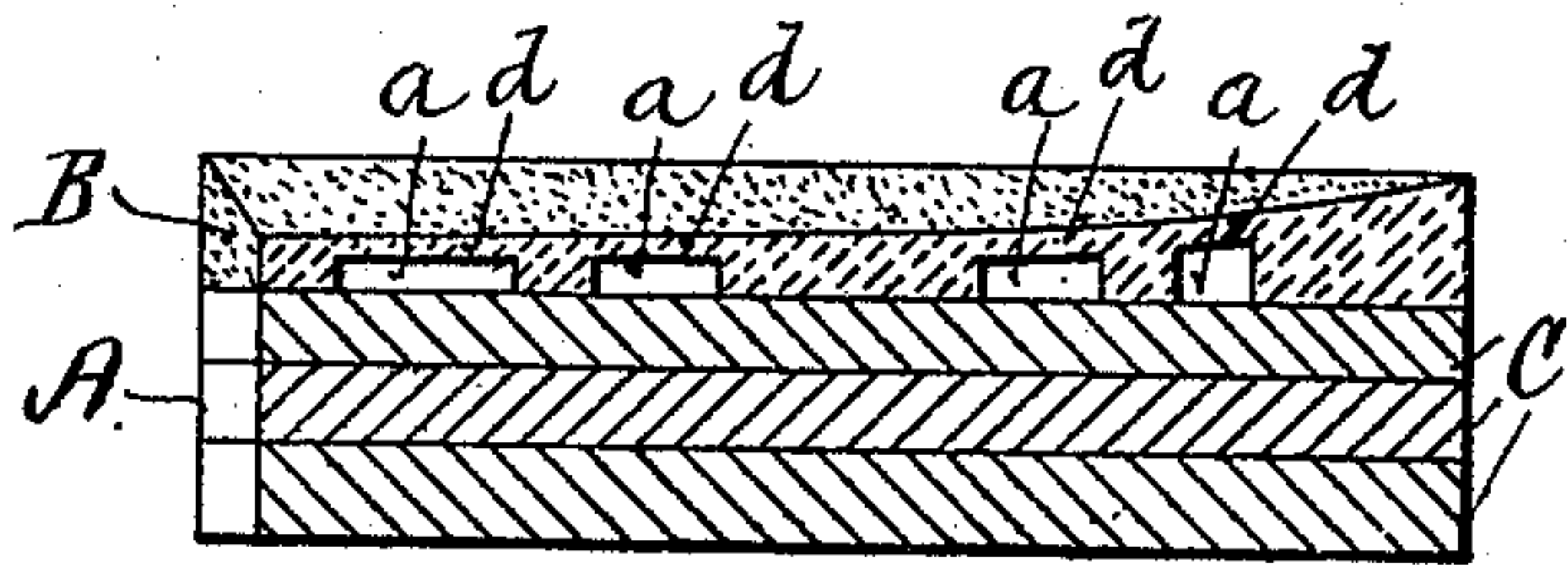


FIG. 1.

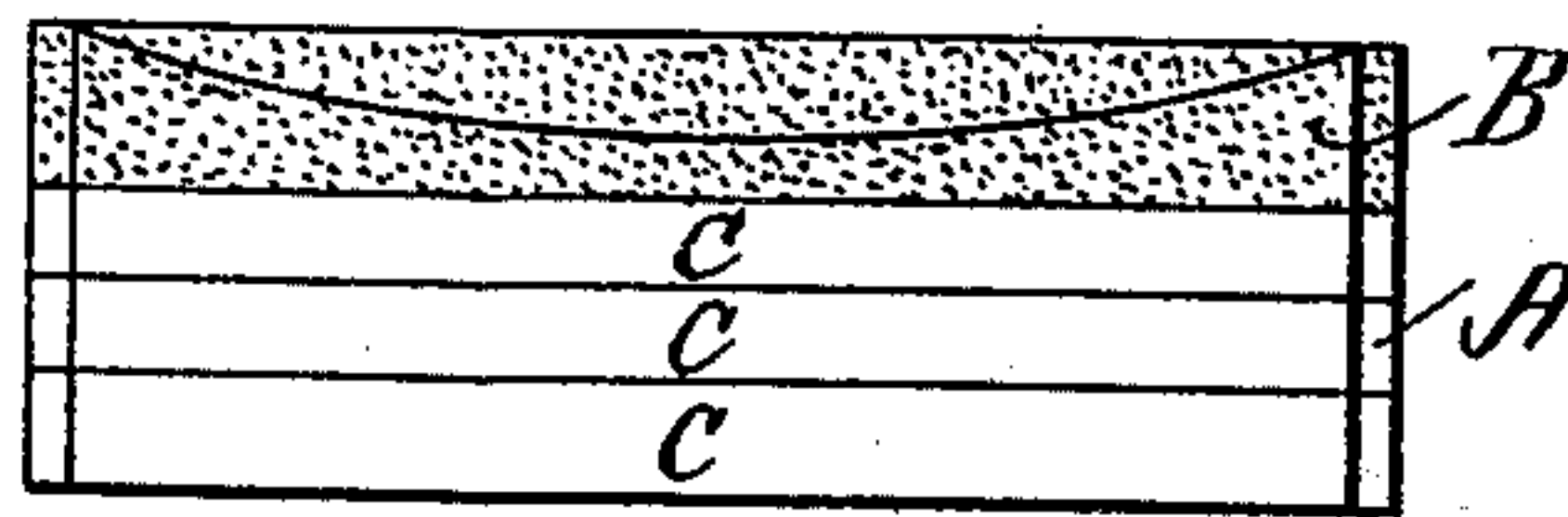


FIG. 2.

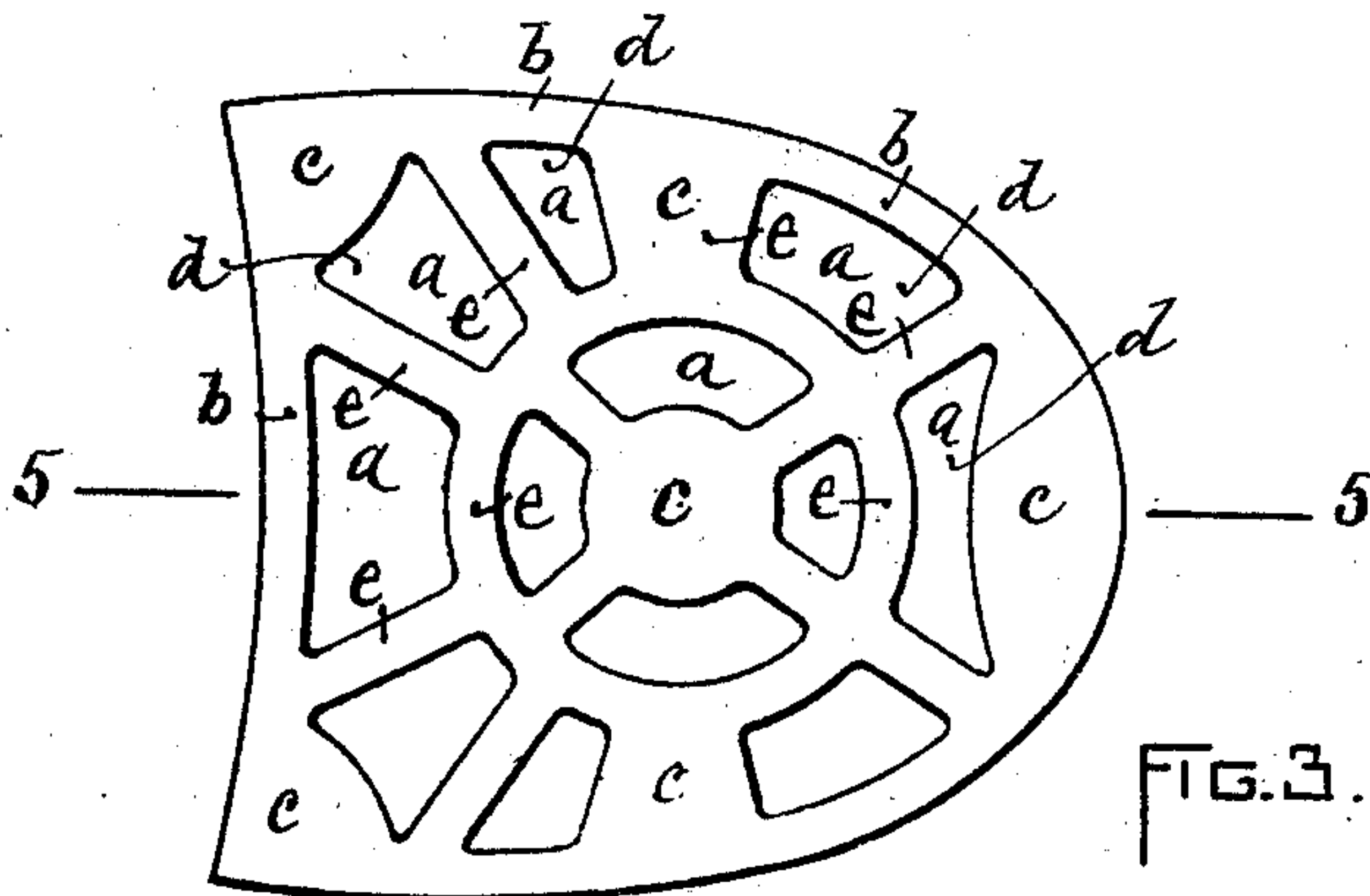


FIG. 3.

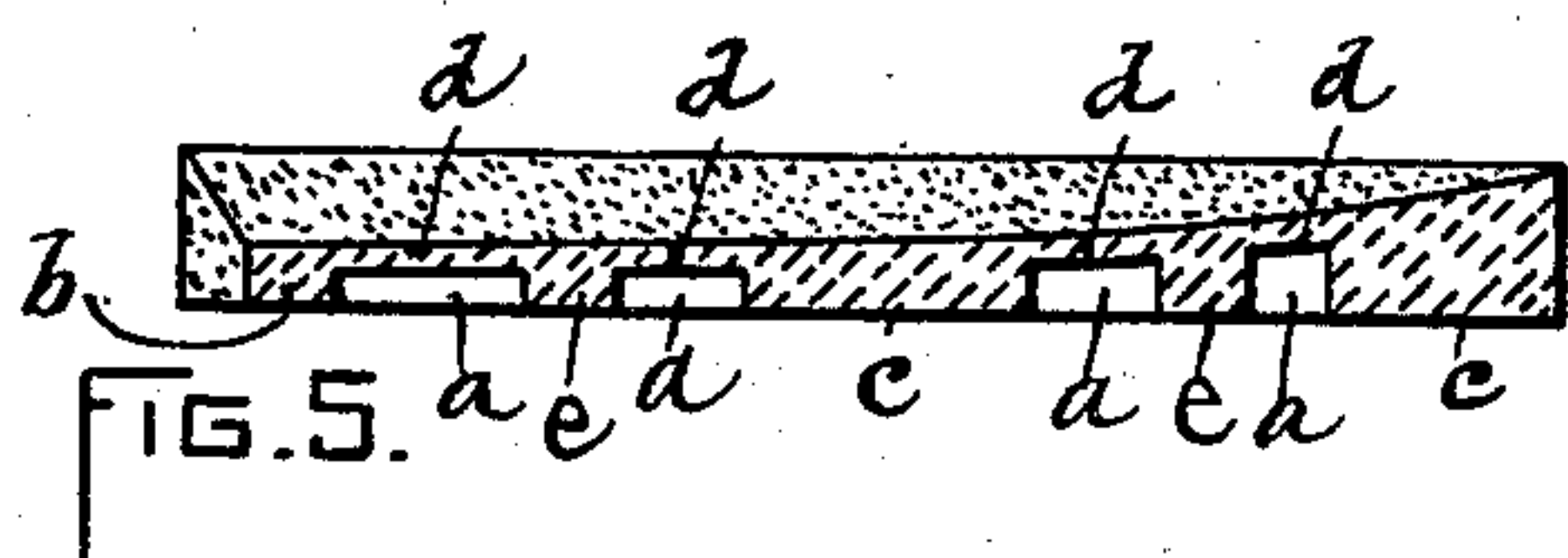


FIG. 5.

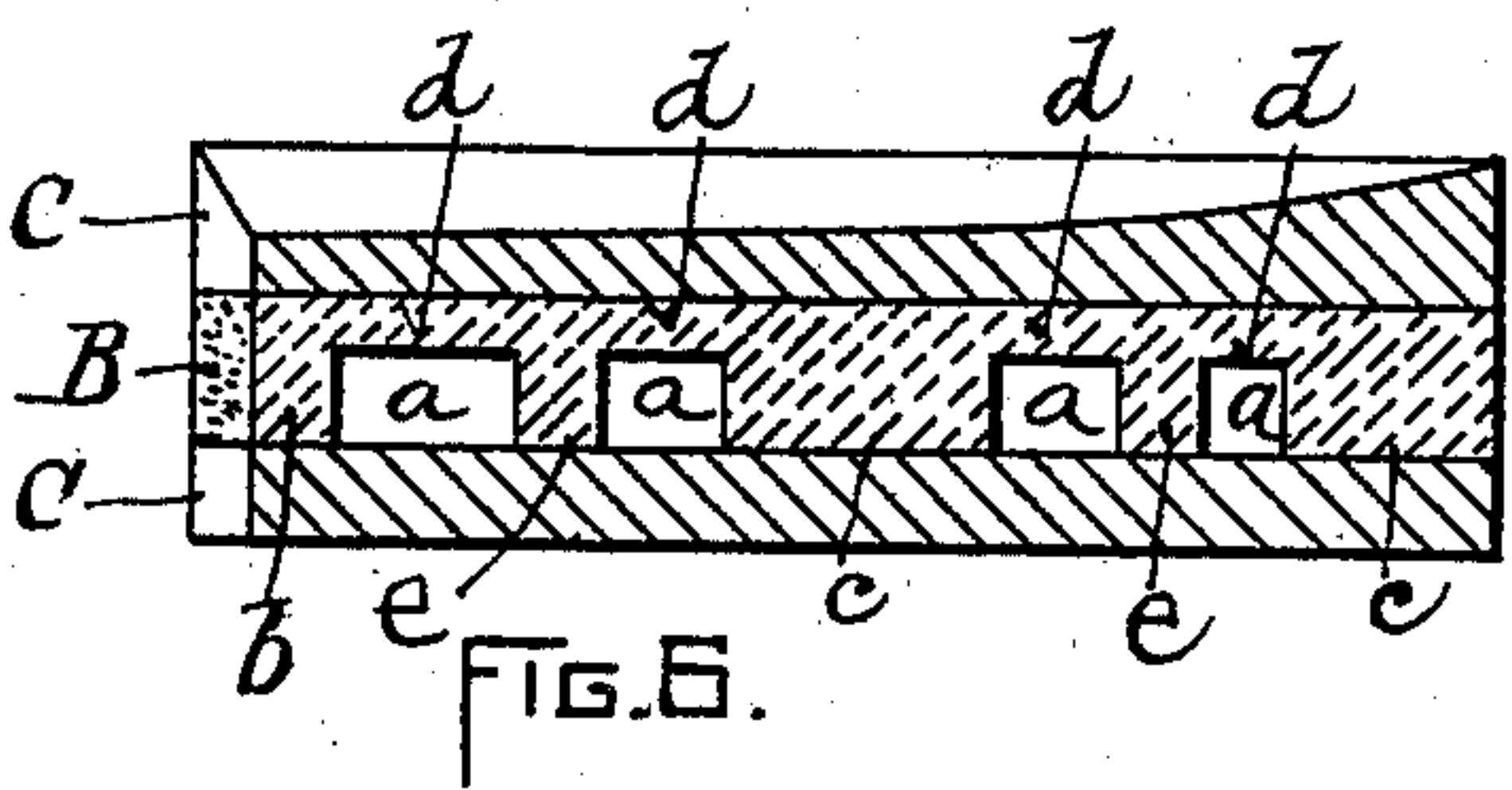


FIG. 6.

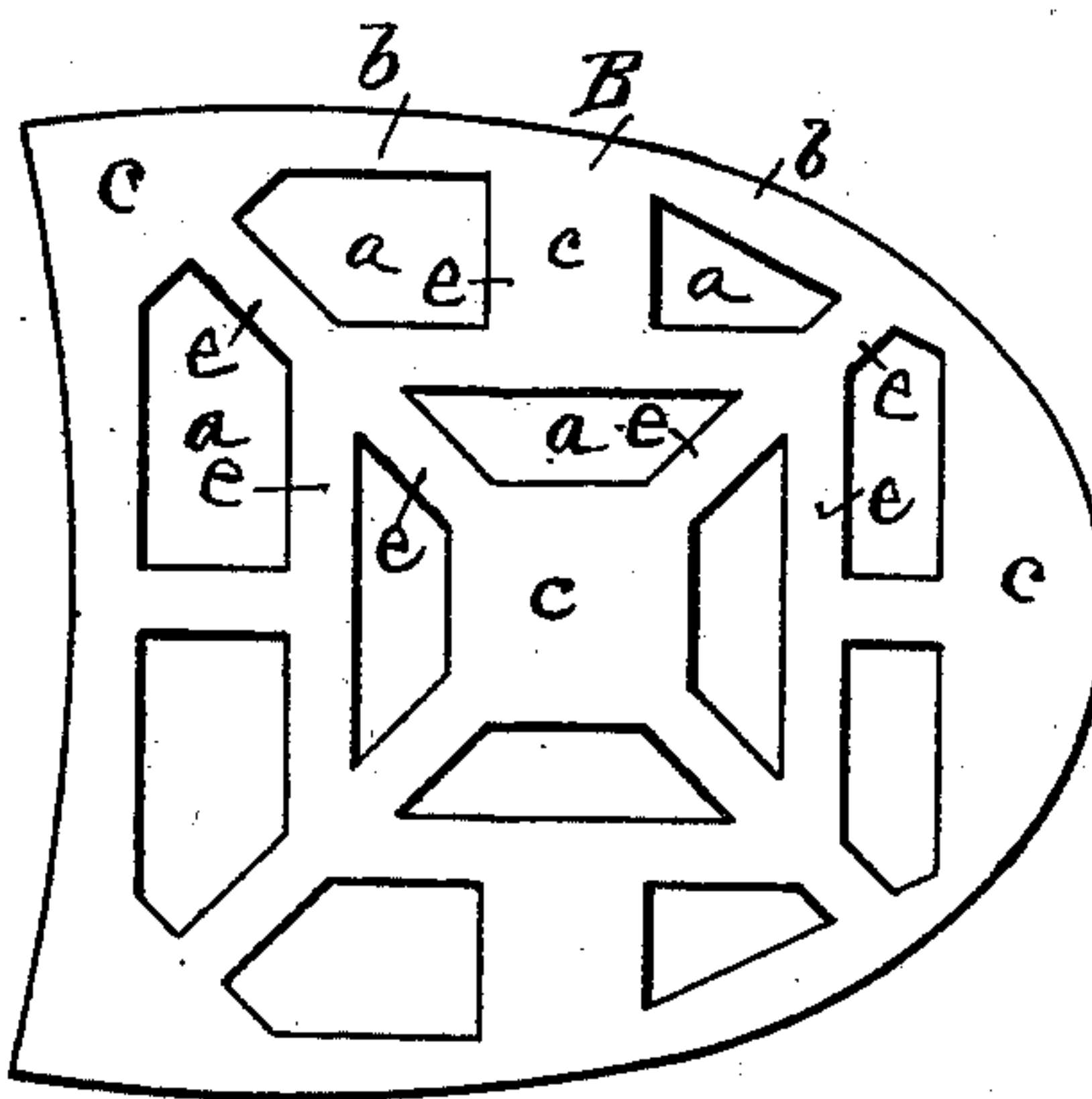


FIG. 4.

WITNESSES.

Harry J. Garceau  
Frank J. Hillborn

INVENTOR:

John F. B. Litchfield.

# UNITED STATES PATENT OFFICE.

JOHN F. B. LITCHFIELD, OF WORCESTER, MASSACHUSETTS.

## CUSHION-HEEL.

SPECIFICATION forming part of Letters Patent No. 666,201, dated January 15, 1901.

Application filed December 9, 1899. Serial No. 739,846. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. B. LITCHFIELD, a citizen of the United States, residing at Worcester, in the State of Massachusetts, have invented a new and useful Improvement in Cushion-Heels, of which the following is a specification.

My invention relates to rubber heel-lifts; and it comprises the structure of such a lift as will be hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 represents a central section showing a cushion-heel embodying my improvement. Fig. 2 represents a front edge view of the heel. Fig. 3 represents the outer face view of the recessed elastic rubber lift in which my improvement consists. Fig. 4 represents the same, showing a modification in the form of the recesses made in the rubber lift to provide the desired yielding elasticity. Fig. 5 represents a section taken in the line 5 5 of Fig. 3. Fig. 6 represents a central section of a cushion-heel having an interposed recessed rubber lift between the leather lifts, also embodying my invention.

In the drawings, Figs. 1 and 2, A represents the heel for a boot or shoe, in which the initial lift B, made of molded rubber or other similar elastic material, is provided at its outer side with the series of recesses *a a a*, having a peripheral rim *b*, as shown in Fig. 3, the thickened portions *c c c* being left for the insertion therein of the attaching-nails whereby the heel may be secured to the sole, a continuous web *d* being also left at the back of the rubber lift to form a proper backing-support for the elastic ribs *e e* and the rim *b*. To the recessed side of the rubber lift B are secured the leather lifts C C, to form a complete heel, the whole to be secured to the sole of the boot or shoe by the employment of nails passing through the several lifts or by means of cement.

The rubber lift B may be recessed in various forms, a modification being shown in Fig. 4, and the rubber lift, provided with the recesses having an outer peripheral rim, may be placed between lifts of leather, as shown in Fig. 6, and by my improvement a cushion-heel will be constructed having the desired yielding elastic quality, the width of rim *b* and number and width of the ribs *e* being made to suit the proper requirements.

I make no claim to air-chambers in a cushion spring-heel and no dependence whatever is placed on the air confined in the recesses *a a* in the development of resilient action, as the air therein could not become sufficiently compressed to impart the required resilience to the inelastic leather lift C. The normal compression of the ribs *e e* in walking will be very slight, yet the shock which accompanies the ordinary leather heel will be prevented by my improvement.

It will be noted that the recesses *a* are formed by a series of ribs integral with the edge border and that the under faces of these ribs are in the same plane with the edge border, so that the rubber lift is not only supported at its edge on the lift attached thereto, but also throughout the central or body portion of the same.

I claim as my invention—

A heel for boots or shoes comprising a plurality of lifts, the uppermost lift having an unbroken concave upper face, and having within an edge border a recess in its under face, crossed by a series of ribs integral with the upper face and edge border, with their under edges in the same plane as the under face of the border, substantially as described.

JOHN F. B. LITCHFIELD.

Witnesses:

SOCRATES SCHOLFIELD,  
HARRY J. GARCEAU.