

No. 746,143.

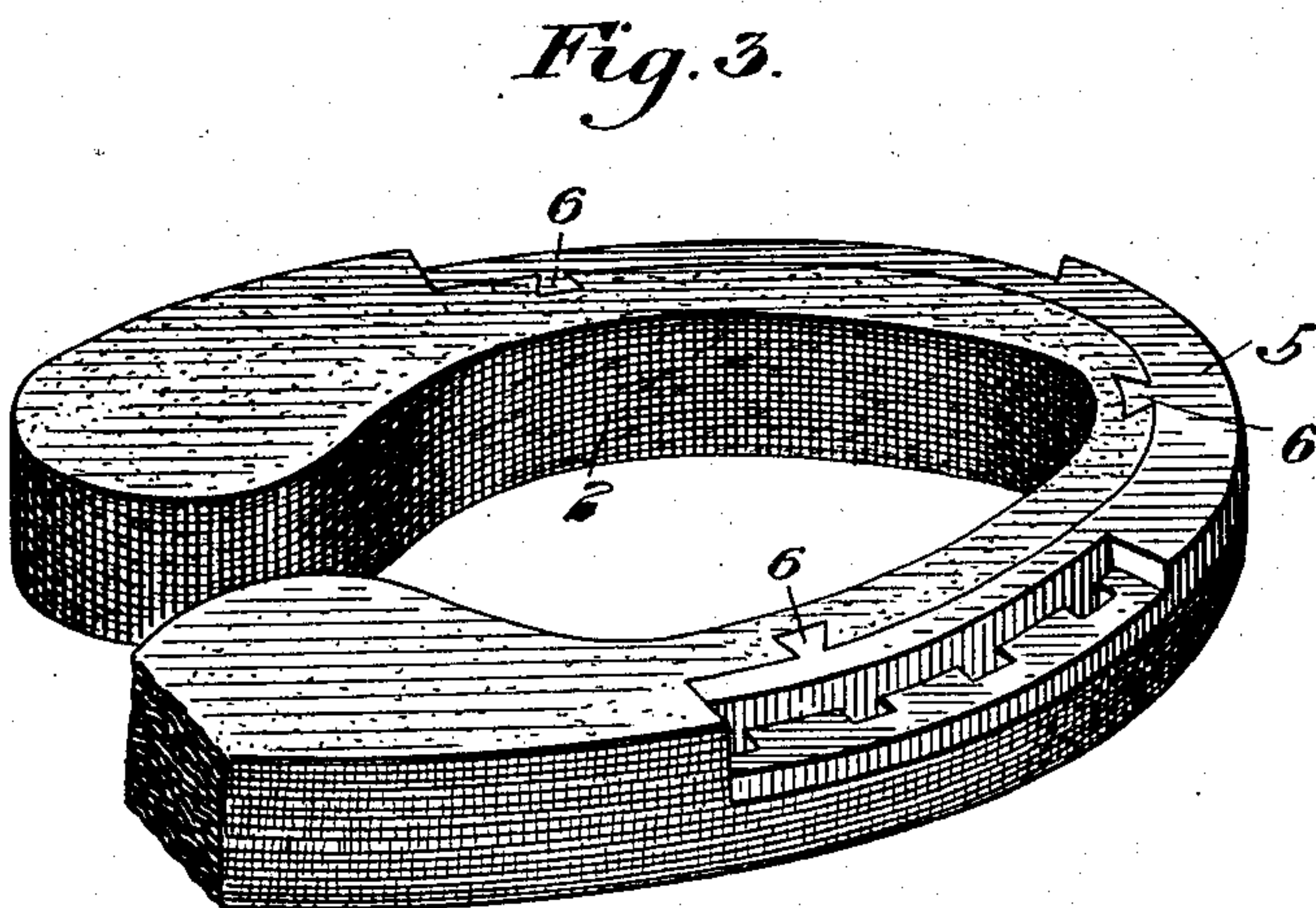
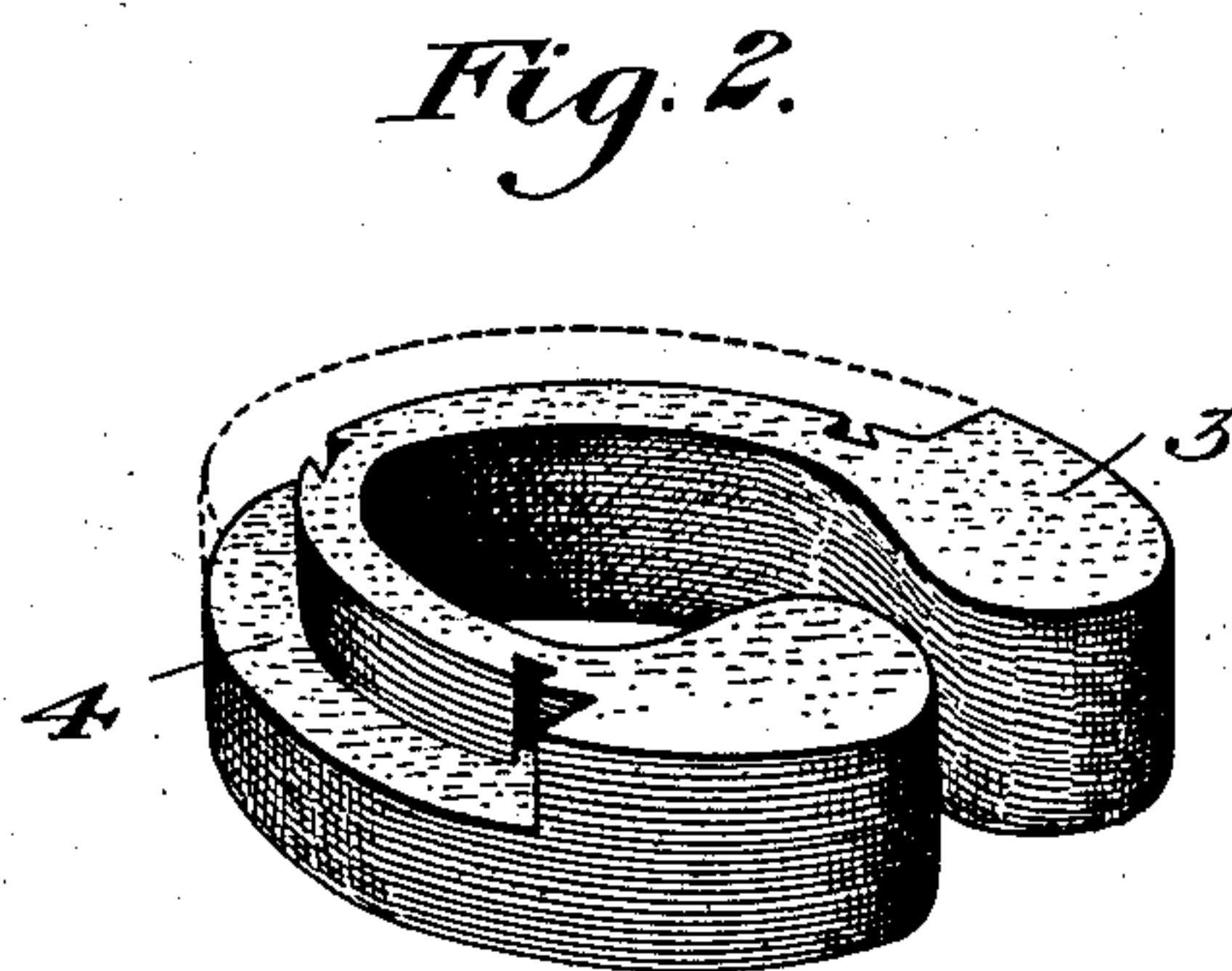
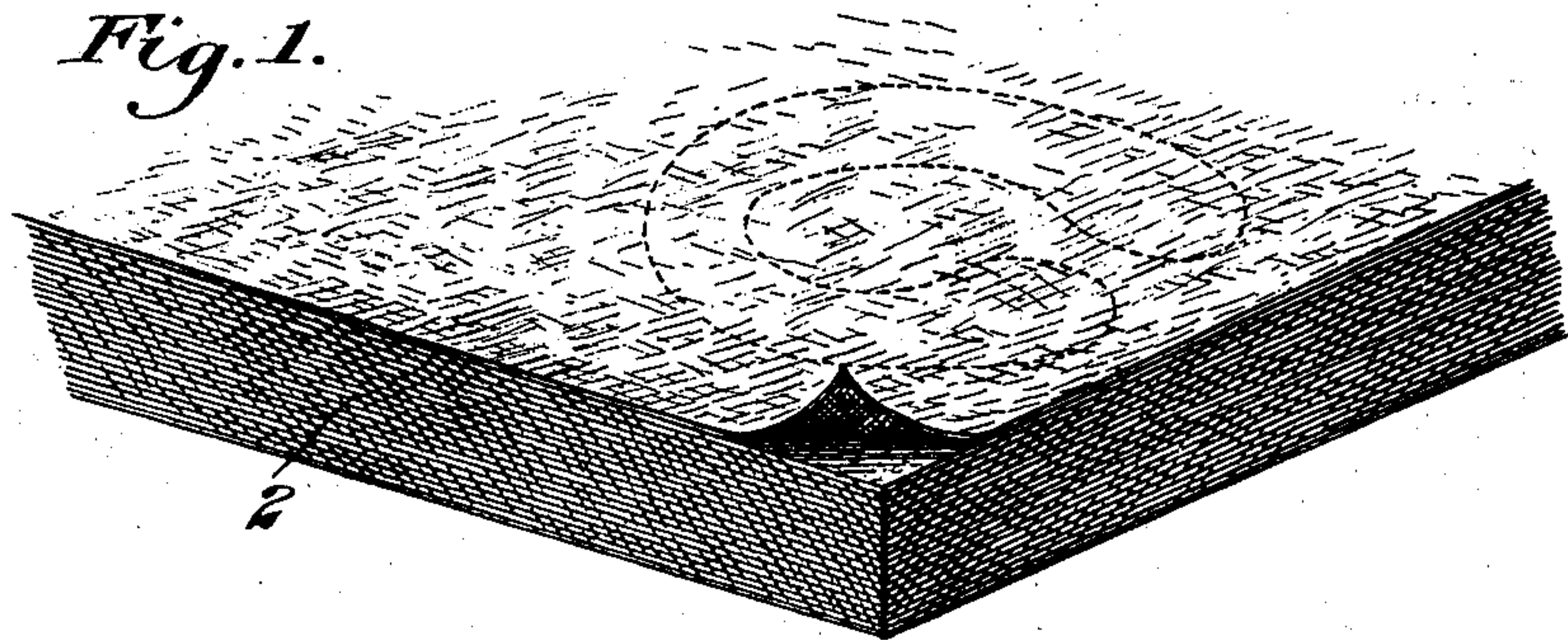
PATENTED DEC. 8, 1903.

G. J. PEACOCK.

METHOD OF MAKING COMPOSITION HORSESHOES.

APPLICATION FILED MAY 21, 1902.

NO MODEL.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE J. PEACOCK, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH TO HENRY V. POTTER, OF PITTSBURG, PENNSYLVANIA.

METHOD OF MAKING COMPOSITION HORSESHOES.

SPECIFICATION forming part of Letters Patent No. 746,143, dated December 8, 1903.

Application filed May 21, 1902. Serial No. 108,369. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. PEACOCK, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Method of Making Composition Horseshoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view showing the pile of fabric layers from which the blank is cut. Fig. 2 is a perspective view showing the cut blanks, and Fig. 3 is a perspective view of the finished shoe with one end partly broken away to show the structure.

My invention relates to the manufacture of horseshoes formed of fabric layers, and is designed to provide an improved method whereby a durable, strong, and simple shoe, composed mainly of fabric may be obtained.

In carrying out my process I coat layers of fabric, preferably heavy duck or canvas, on one or both sides with a thin layer of gummy material, preferably composed of a mixture of ground duck or fabric and rubber. This thin layer may be applied by passing the fabric through a calendering-machine, which will apply a thin coating of the mixed rubber and ground duck or fabric. After a suitable number of layers of duck are thus treated they are piled up over each other, making a pile of, say, one and one-fourth inches in thickness. I show such a pile of layers at 2 in Fig. 1. This pile is then placed under a press having suitable cutting-dies, and a horseshoe-blank of the desired form, such as shown at 3 in Fig. 2, is cut by the dies passing through the pile of layers. I prefer to provide the shoe with a metallic piece or toe-iron, and if this is done a recess is cut in the blank, preferably at the same time that the blank is formed, as indicated at 4 in Fig. 2. In Fig. 3 I show such a toe-iron 5, which is thinner than the shoe and is secured in a recess having smaller undercut recesses which receive dovetailed lugs 6 on the iron. The blank, which is of substantially the outline of but is much thicker than the finished shoe, is then placed in a socket-mold, together with the metal toe-iron or part, if such is used. A heavy pressure is then applied to the mold,

preferably by means of a hydraulic cylinder or cylinders, to strongly compress the blank. The blank is vulcanized while retained under this pressure in the mold by heating the dies. The mold is then opened and the finished shoe, such as shown in Fig. 3, is removed. The shoe thus formed is composed principally of the duck or other woven fabric. The binding layers serve to unite the fabric layers together, and as the layers are united by the binder and compacted and vulcanized under heavy pressure they are not liable to separate or pull apart in service. The shoe is ordinarily formed of from twenty to twenty-five layers of heavy duck, the layers being parallel with the wearing-face, enough rubber being used to give proper vulcanizing.

The advantages of my process will be apparent to those skilled in the art. The steps are few in number and easily carried out at a low cost. The shoe may be easily adapted to different-shape hoofs and owing to its consisting mainly of fabric is found to wear longer than an iron shoe. The pieces or scraps resulting from cutting the blanks from the pile are utilized by grinding them up and mixing with the rubber or other binder to form the thin layers between the fabrics.

Metallic parts may be applied to the shoe either by placing them in the mold and compressing the shoe in contact with them to firmly embed the metal or by applying them to the shoe after the compression of vulcanizing, and many variations may be made in the particular fabric used, the composition of the binder, the shape of the shoe, &c., without departing from my invention.

I claim—

1. The method of making composition horseshoes, consisting in coating layers of fabric with a gummy composition, making a pile of said layers, cutting a blank from said pile of approximately the shape of the finished article, confining the blank in a mold under heavy pressure, and then vulcanizing the blank while thus confined and under pressure, substantially as described.

2. The method of making composition horseshoes, consisting in coating layers of fabric with a gummy composition, making a pile of said layers, cutting a blank from said pile of

approximately the shape of the finished article, confining the blank in a mold under heavy pressure in contact with a metallic piece, and then vulcanizing the same while thus confined and under pressure, substantially as described.

5 3. The method of making composition horse-shoes, consisting in spreading a composition containing rubber and ground fabric on a
10 layer of fabric, forming a pile of said layers, cutting a blank from the pile of approxi-

mately the shape of the finished article, and then compressing and vulcanizing the blank while under heavy pressure; substantially as described. 15

In testimony whereof I have hereunto set my hand.

GEO. J. PEACOCK.

Witnesses:

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