

No. 688,219.

Patented Dec. 3, 1901.

E. A. WILCOX.
COMBINED METAL HORSESHOE AND PAD.

(Application filed Oct. 13, 1900.)

(No Model.)

FIG. 1.

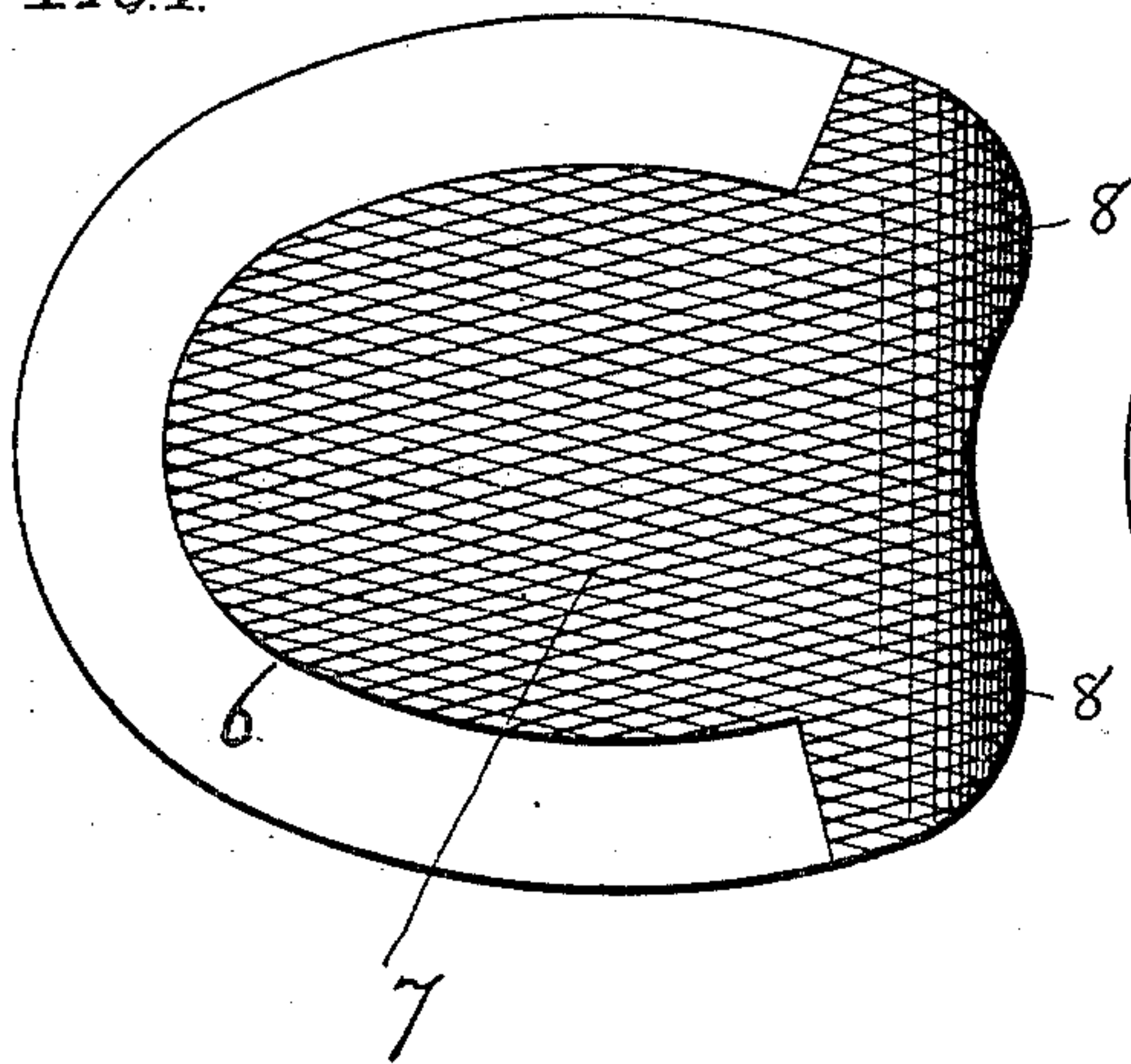


FIG. 2.

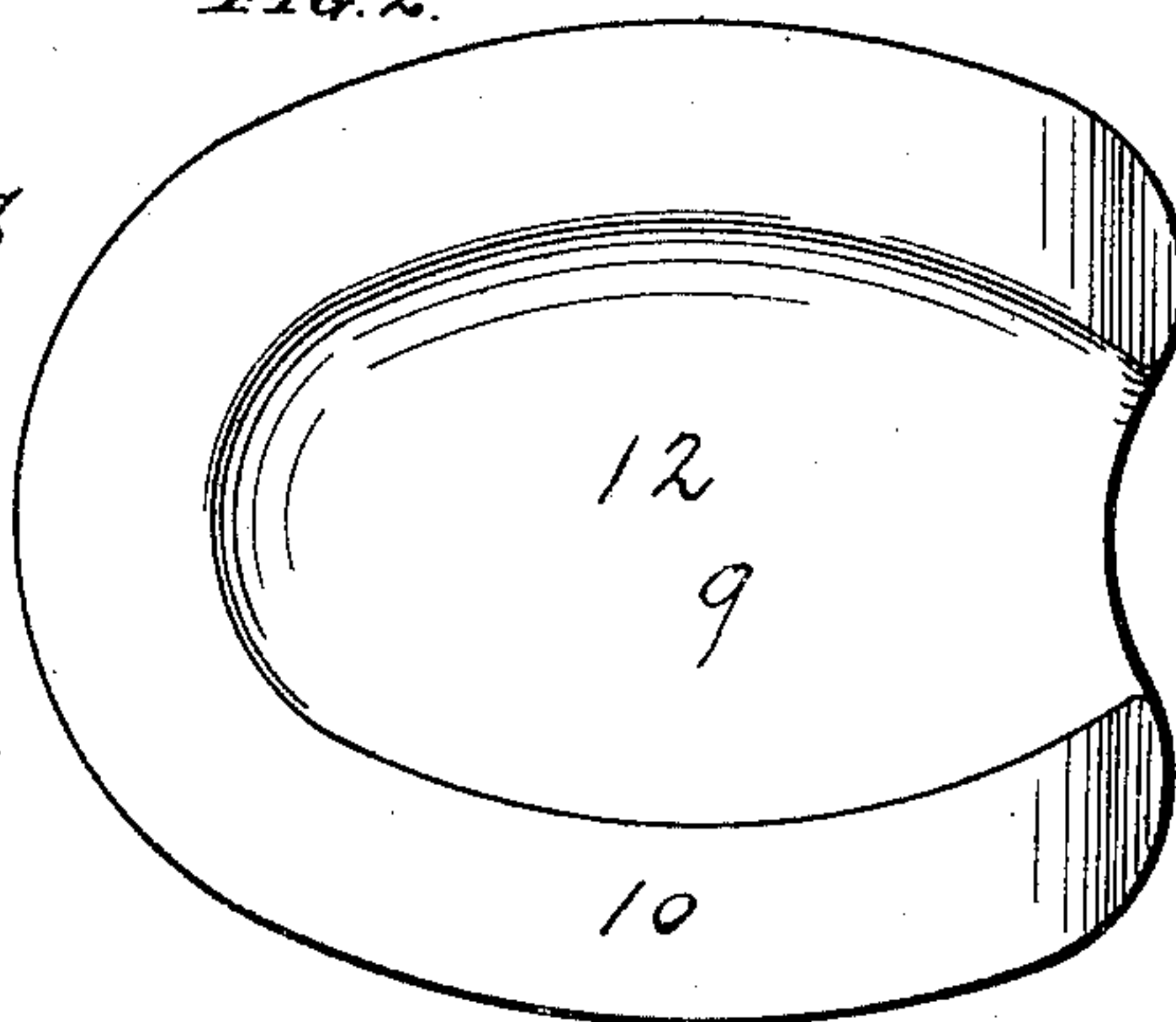


FIG. 3.

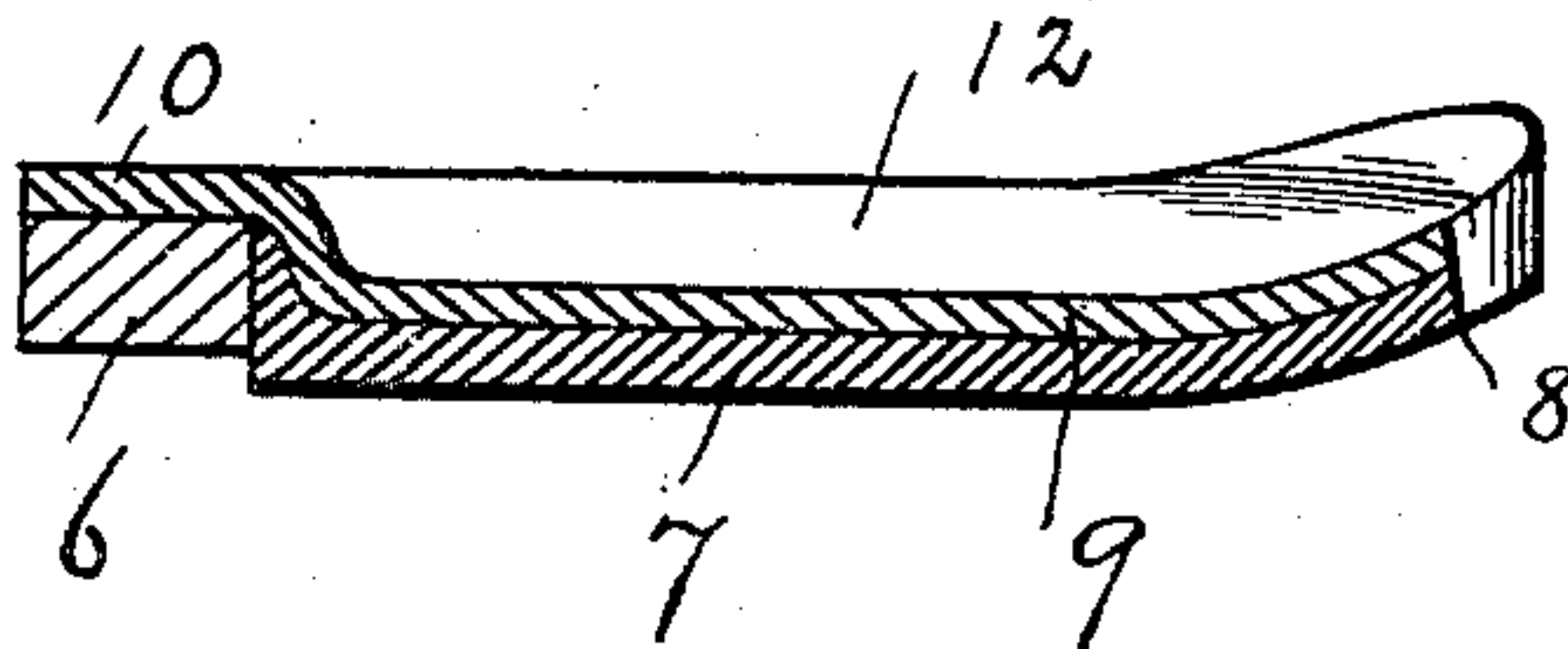


FIG. 4.

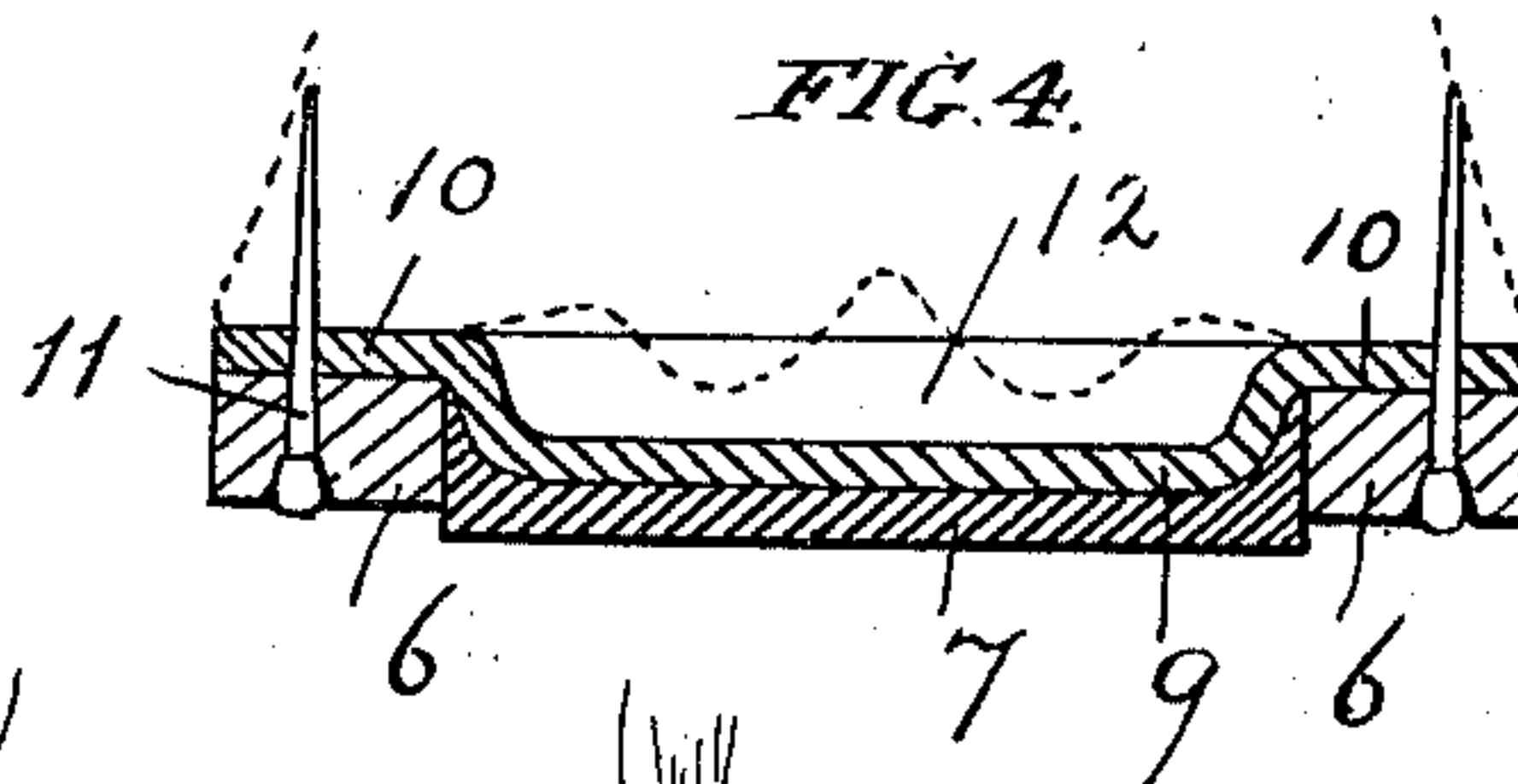
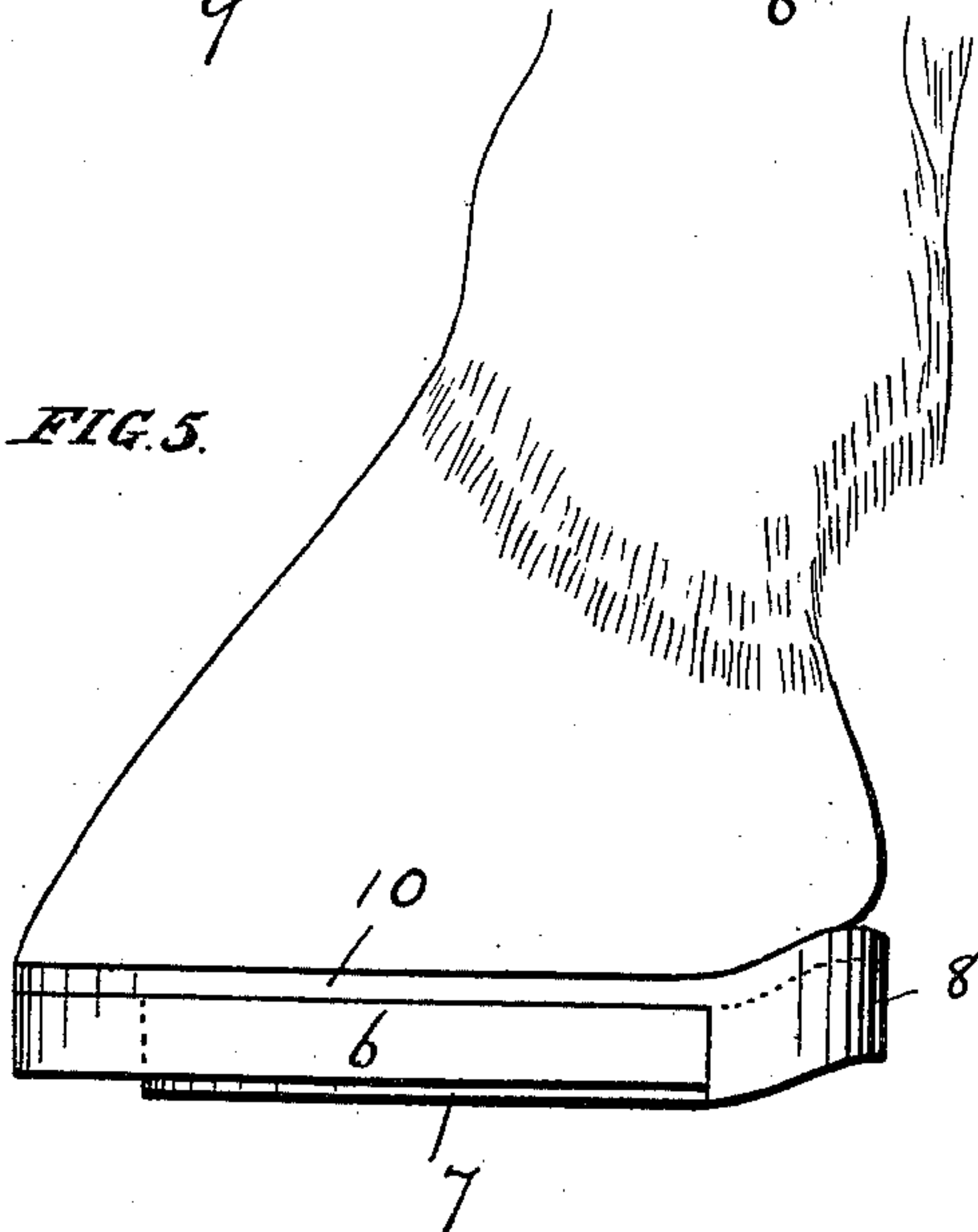


FIG. 5.



WITNESSES:
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ELMER A. WILCOX, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CHICAGO RUBBER HORSE-SHOE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

COMBINED METAL HORSESHOE AND PAD.

SPECIFICATION forming part of Letters Patent No. 688,219, dated December 3, 1901.

Application filed October 13, 1900. Serial No. 32,933. (No model.)

To all whom it may concern:

Be it known that I, ELMER A. WILCOX, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in a Combined Metal Horseshoe and Pad, of which the following is a specification.

This invention relates to certain improvements in pads adapted to be used with metal horseshoes, and is an adaptation of my horseshoe shown in Patent No. 657,718, granted September 11, 1900, to use as a pad in connection with a metal shoe. It is designed to afford a more practical form of pad than has been made heretofore, and its nature will be understood from the accompanying drawings, in which—

Figure 1 shows a bottom view of the pad and shoe; Fig. 2, a top view of the pad. Fig. 3 is a central longitudinal section of the shoe and pad. Fig. 4 is a transverse section, and Fig. 5 shows the shoe and pad as applied to a horse's foot.

In the drawings, 6 represents a metal horseshoe of the ordinary construction, except that the usual heel portions are shortened.

The pad consists of a central body portion 7 of rubber, covering the interior space between the limbs of the shoe, a sprung-up heel portion 8, setting close up against the horse's heel, as seen at Fig. 5, and a covering of canvas 9, forming a top to the entire pad, and especially forming non-compressible ledges 10, which are interposed between the metal shoe and the horse's foot and through which the nails 11 are passed.

A large recess 12 is formed in the top of the pad, as seen at Figs. 2, 3, and 4, and this is done by subjecting the pad to very heavy pressure, whereby the canvas is permanently forced down into the form illustrated, and the ledges 10 are so thoroughly compacted at the same time as to render them non-compressible under the horse's weight. The recess 12 gives room to the frog of the horse's hoof and extends to the rear of the foot.

The tread or rubber bottom of the pad extends somewhat below the metal shoe and

is united to the ledges mainly by the canvas, and consequently when the horse puts his foot down the bottom 7 is adapted to yield upward to a slight extent, though not enough ordinarily to create any pressure upon the frog. As the recess is open to the rear to a slight extent at least the cushion of air therein will then be forced out of the recess, but only to return when the horse raises his foot, so that a constant inflow and outflow of air will be maintained while the horse is traveling. This air acts to cushion the impact when the horse steps down.

By making the ledges 10 non-compressible I obviate a serious objection to previous constructions, because if any yield is left in the ledges the shoe will move up and down at each step and gradually loosen the nails.

The pad is rendered much more practical than previous constructions of this class of pads by use of the sprung-up heel having its under surface rounded upward, as shown at Figs. 3 and 5. Such heel acts to prevent the catching of the pad when the horse drags his feet backward over the ground or pavement and obviates a very serious difficulty in the use of the pad. It also partially closes the rear opening of recess 12, prevents the entrance of dirt, and renders the emission of the air from the recess sufficiently slow to enable it to cushion the impact of the shoe upon the pavement.

I claim—

The combination with a metal horseshoe having its heel portions shortened or removed, of a pad having a canvas top extended in front of and at the sides to form a ledge whereby the pad is held to the hoof by the shoe, said pad being depressed at the center to form the recess 12, and being flexible so as to act on the air between the pad and the horse's foot, and having its heel rounded off and sprung up so as to partially close the rear opening to said recess, substantially as specified.

ELMER A. WILCOX.

Witnesses:

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EDW. S. EVARTS.