No. 803,985.

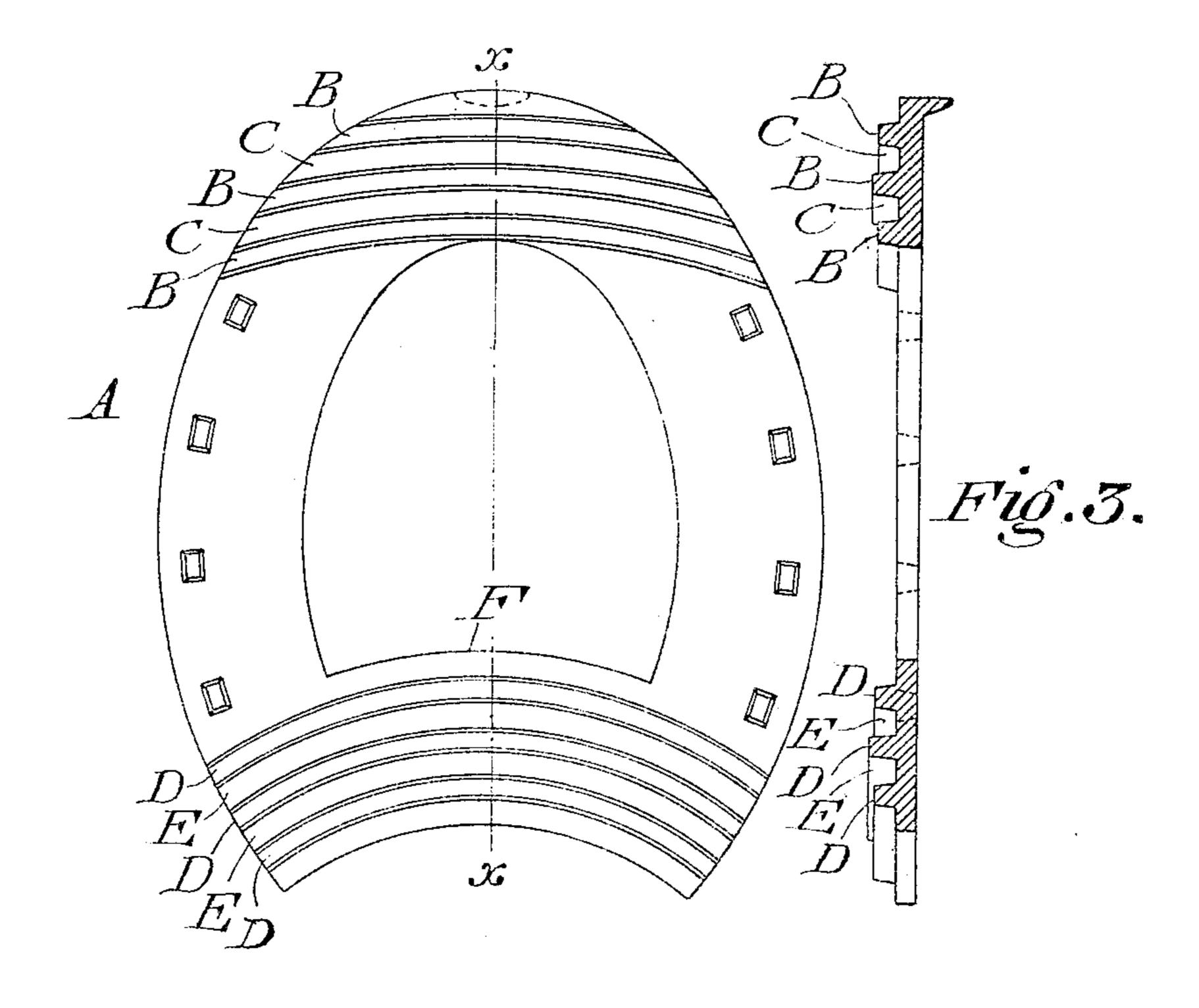
PATENTED NOV. 7, 1905.

### C. A. CAMPBELL. HORSESHOE.

APPLICATION FILED JULY 7, 1903.

2 SHEETS-SHEET 1.

# Fig. Z.



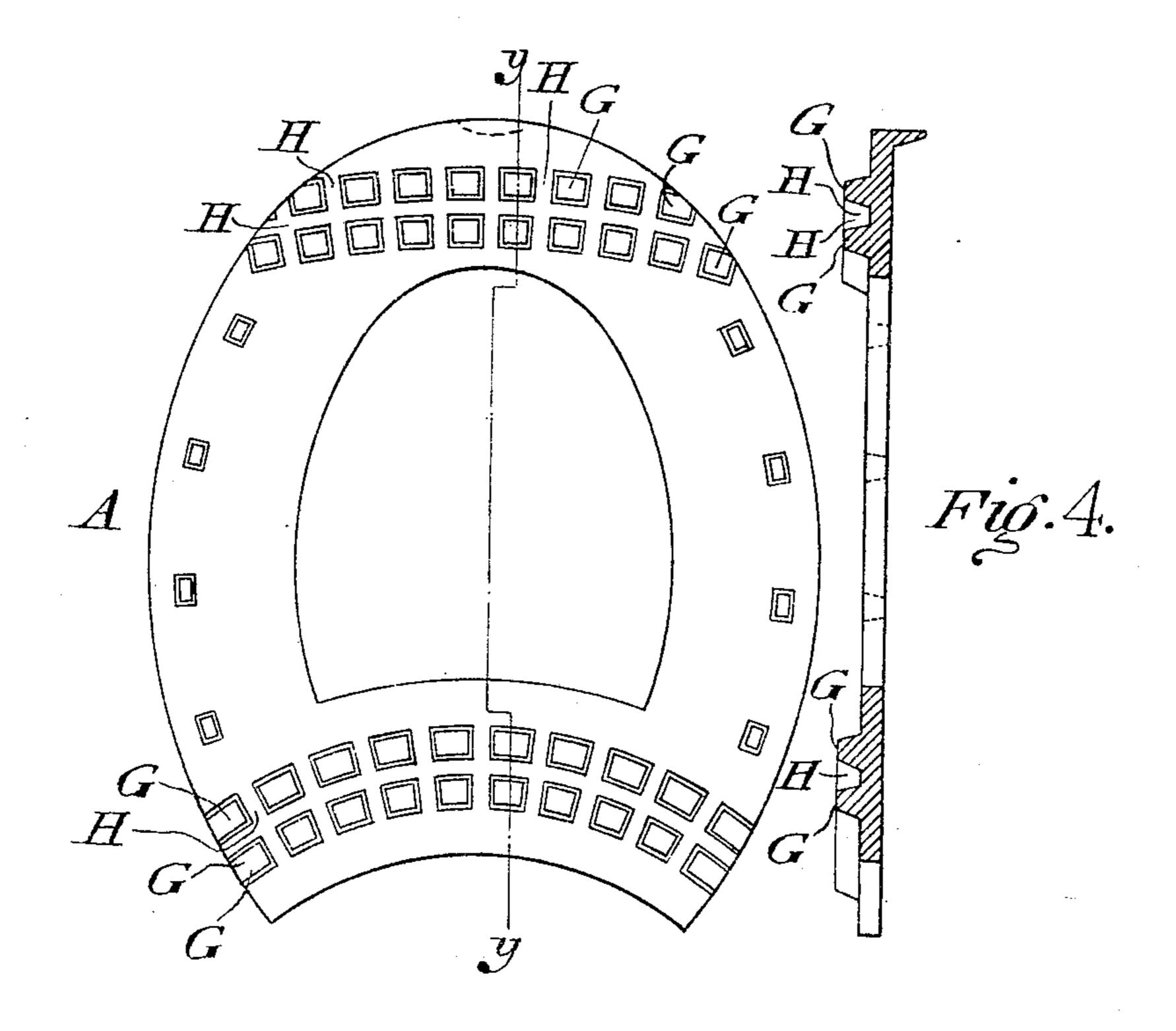
MITNESSES: Mullibersheim. P. F. Lagle.

Charles V. Ceanfebrell

## C. A. CAMPBELL. HORSESHOE.

APPLICATION FILED JULY 7, 1903.

2 SHEETS-SHEET 2.



WITNESSES: P. D. Angle

INVENTOR Charles A. leampbell

## UNITED STATES PATENT OFFICE.

CHARLES A. CAMPBELL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JAMES REAGAN, OF PHILADELPHIA, PENNSYLVANIA.

### HORSESHOE.

No. 803,985.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed July 7, 1903. Serial No. 164,626.

To all whom it may concern:

Be it known that I, Charles A. Campbell, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented new and useful Improvements in Horseshoes, of which the following is a specification.

My invention consists of a shoe for a horse or other animal, provided with means whereby the animal will be prevented from slipping, more particularly on asphalt or cement pavements.

Figure 1 represents a bottom plan view of a horseshoe embodying my invention. Fig. 2 represents a bottom plan view of a modification. Fig. 3 represents a longitudinal section on line x x of Fig. 1. Fig. 4 represents a longitudinal section on line y y of Fig. 2.

Similar letters of reference indicate corre-

20 sponding parts in the figures.

Referring to the drawings, A designates a horseshoe which, excepting the feature of my invention applied thereto, is of ordinary construction.

B designates cleats which extend unbroken transversely across the toe portion and the forward portions of the sides or side webs of the shoe, the same being separated, forming between them the pockets C.

D designates cleats which extend transversely across the heel portions of the shoe, the same being separated in transverse direction, forming between them the pockets E.

F designates a web which joins the heel portions of the shoe and has on its under side a series of cleats and pockets which are continuous of those on said heel portions, whereby the cleats and pockets extend from side to side of the shoe at the heel thereof.

In Fig. 2 the cleats are of the form of separated calks G, which are arranged in rows transversely across the shoe and having between adjacent rows the pockets H.

It will be seen that owing to the pockets formed by the cleats dust and dirt may gather therein, thus forming frictional surfaces alternate with the cleats, which serve to prevent the animal from slipping on asphalt, cement, or other smooth pavements. It will also be seen that as the weight of the shoe is increased and the shoe more heavily planted on the

pavement, street, or road any tendency of the shoe to spread at the heel portion thereof is prevented, owing to the connecting nature of the web F, the latter also acting as a guard 55 against injuring the frog between the side bars of the shoe. Then, again, the cleats on the web serve as a reinforce and prevent any upward fracture or deflection of the web. In order to cause the shoe to rock or roll on the 60 pavement, road, or ground when it touches the same, the cleats are made of different depths, the central cleat, as seen in Fig. 3, being of greater depth than the cleats in the front and rear of the same. The front cleats 65 extend transversely across the toe and the adjacent portions of the side bar of the shoe virtually from edge to edge of the shoe at the front. The rear cleats extend continuously transversely across the web and adjacent por- 70 tion of the side bars of the shoe virtually from edge to edge of the shoe at the heel, the resultant pockets being preferably curved in the transverse direction, whereby the material gathered therein will be effectively retained 75 for the purpose intended.

In winter the bottoms of the cleats may be sharpened and the studded calks pointed to

prevent slipping on ice and snow.

Various changes may be made in the details 80 of construction shown without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in each case to the same. For instance, in some cases the pockets may extend in longitudinal directions 85 or in both transverse and longitudinal directions, as in Fig. 2.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A horseshoe having cleats on the under side, in front, forming pockets, open below and extending transversely continuously across the toe and adjacent portions of the side bars, and at the heel having a web and cleats form- 95 ing pockets, open below, the same extending transversely continuously across said web and adjacent portions of said side bars.

CHARLES A. CAMPBELL.

Witnesses:

JOHN A. WIEDERSHEIM, S. R. CARR.