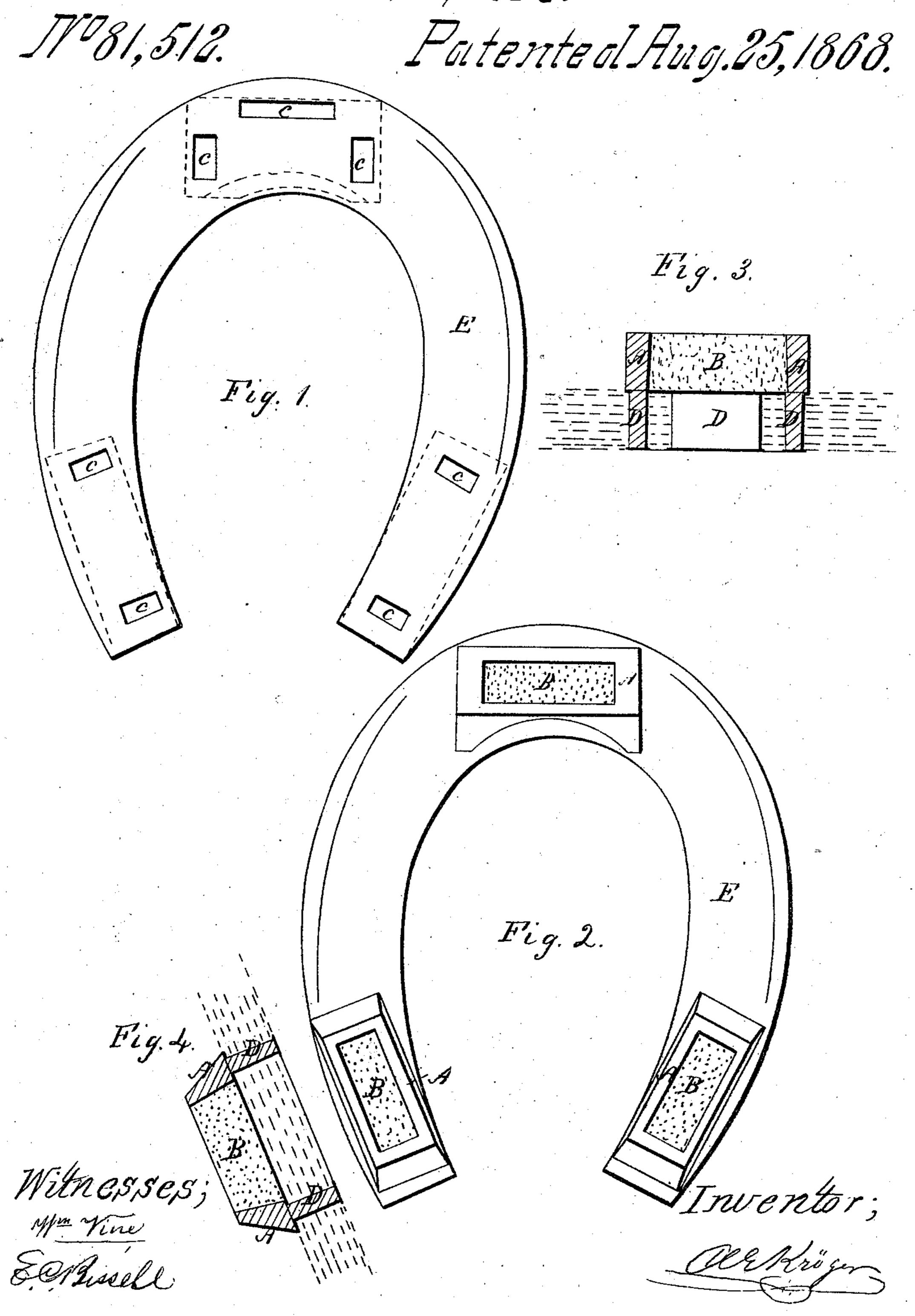
A. H. Kroger,

Horseshoe.



UNITED STATES PATENT OFFICE.

ALBERT E. KRÖGER, OF NORWALK, CONNECTICUT.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. 81,512, dated August 25, 1868.

To all whom it may concern:

Be it known that I, Albert E. Kröger, of the town of Norwalk, county of Fairfield, and State of Connecticut, have invented new useful Improvements in the Mode of Constructing Horseshoes; and I do hereby declare that the following is a full and correct description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and attachment to the ordinary horseshoe of hollow calks, stuffed with felt, to prevent slipping.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same.

In the drawing, Figure 1 is a face view of the shoe when prepared to receive the stuffed calks. Fig. 2 is a face view when the calks are attached; Fig. 3, a section of the toecalk; Fig. 4, a section of the heel-calk.

The object of my improvement is to make a shoe that a horse can travel with on ice or slippery pavement, or any smooth surface, without the danger of constantly slipping while traveling.

I make no alteration in the usual form or construction of the commonly-used horseshoe, except in the calks.

The drawing represents the calks, the form of which will in all cases be nearly and substantially the same, made suitable for the toe or heel, constructed of malleable iron, or wrought-iron, or steel, according to fancy and circumstances.

The outer part or rim A, to inclose the felt stuffing B, forms an oblong space or mortise

vertically through the calk, and slightly beveled to retain the stuffing firmly, and extending from the base or bottom of the calk.

I make two, three, or more studs or tenons, D, of the necessary and required size and shape, to pass through properly-made corresponding mortises or holes C in the shoe. (See Fig. 1.) These studs are made of the proper length to allow them to be riveted on the ends, which will make a strong, firm, solid, and substantial fastening for the same, and which can be easily replaced or renewed, when worn down, or injured, or broken.

The felt stuffing B is composed of woolen fiber, made as firm and solid as possible, and driven into the oblong hollow space of the calk before the same is attached to the shoe, forming a level space on the top of the calk, and which will always remain level with the surrounding metal rim A, and wearing away as fast as the same and no faster, and consequently always presenting a non-slipping surface to the pavement or ice.

The form and size of the calks will be various, to conform to the different sizes of the shoe, and fancy.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement and attachment of the hollow calks to the shoe, by means of the studs D and mortises C, or their equivalent, in the manner substantially as and for the purpose described.

A. E. KRÖGER.

Witnesses:

WM. VINE, E. C. BISSELL.