

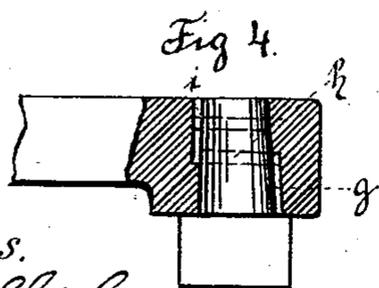
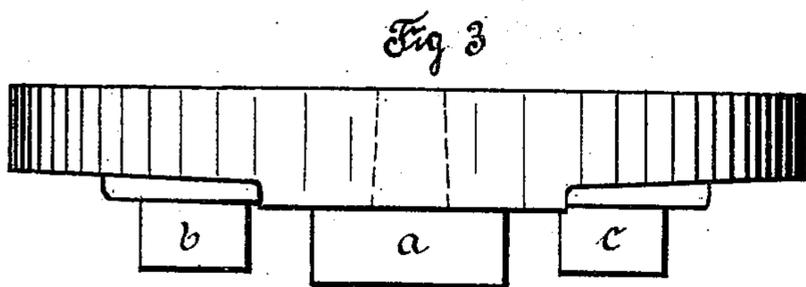
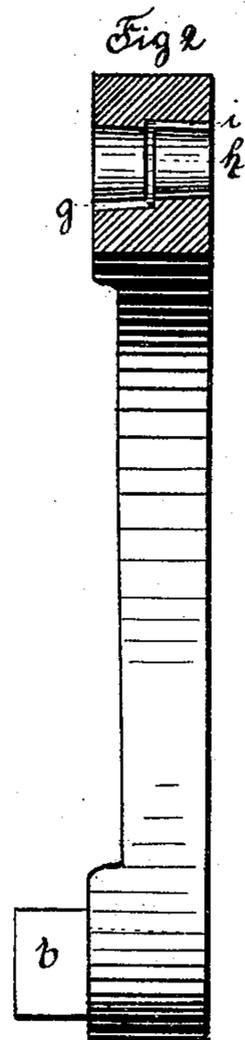
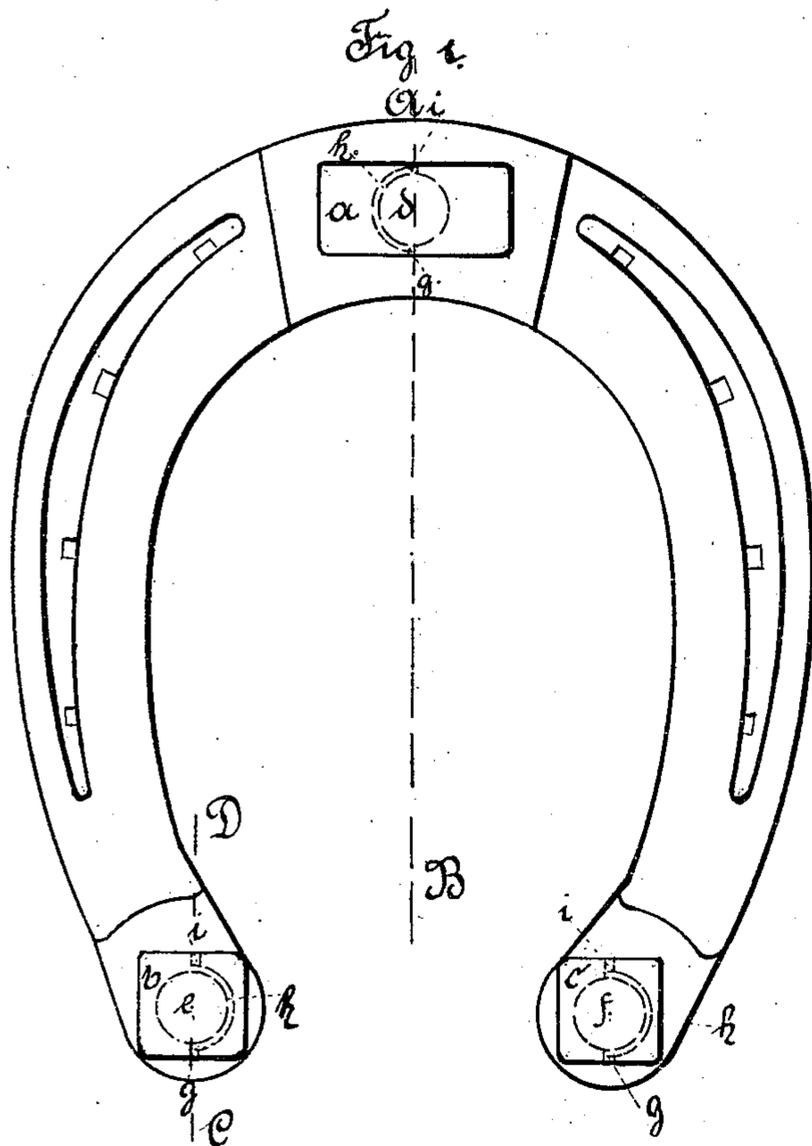
(No Model.)

F. A. GAUER.

HORSESHOE.

No. 270,784.

Patented Jan. 16, 1883.



Witnesses.
J. E. Melhuish
J. A. Rae

Fig 5

Inventor.
Friedrich Albert Gauer
per *J. Weller*
Atty.

UNITED STATES PATENT OFFICE.

FRIEDRICH A. GAUER, OF HAMBURG, GERMANY.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 270,784, dated January 16, 1883.

Application filed November 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH ALBERT GAUER, of Hamburg, Germany, have invented a new and useful Improvement in Horseshoes, of which the following is a specification.

My invention relates to horseshoes which are provided with movable calks, and has for its object to render such horseshoes cheaper as regards first cost, easy of application and renewal, while avoiding as much as possible injury to the hoof.

In describing the invention reference will be had to the accompanying drawings, in which Figure 1 is a plan of the shoe with improved calks; Fig. 2, a section through the shoe along line A B; Fig. 3, a front view of the shoe; Fig. 4, a section along line C D of Fig. 1, and Fig. 5 a side view of a calk.

My invention consists in a horseshoe provided with a socket having a groove which is arranged longitudinally in the socket, at the ends thereof, and transversely at a point between its said longitudinal portions, in combination with a heel or toe calk provided with a shank having a pin which is received in said groove, as more fully hereinafter set forth.

Conical holes *d*, *e*, and *f* are drilled into the shoe, and the circumference of each of these holes is provided with a groove commencing at the lower face, with a longitudinal or rising portion, *g*, continuing with a semicircular or circumferential portion, *h*, and ending again in a longitudinal or rising portion, *i*, which reaches to the upper face of the shoe. Into the conical holes *d*, *e*, and *f* fit exactly the corresponding calks, the conical upper part of which is provided with a pin, *k*, Fig. 5. This pin, which serves to secure the calk in its conical socket, is introduced into the groove from the lower

face of the shoe, subsequently turned round with the pin until it arrives at the bottom of the guide or groove *i*, and introduced into the latter by striking the calk with the hammer. The guides or grooves *g h i* are clearly shown by Fig. 2. Compared with similar descriptions of calks, the present construction has the great advantage of preventing the calk from falling out of the socket.

For exchanging the calks it is sufficient to drive the pin *k* down to the level of the guide *h* by a stroke of the hammer on the upper end of the calk, after which the latter can be easily removed by hand. The calks may have any suitable shape; but in the winter it is advantageous to replace them by sharp-pointed calks.

As will be seen from the drawings, the parts of the horseshoe which surround the calk sockets are suitably strengthened.

It is evident that the shape of the groove and of the pin may be altered without departing from the nature of my invention.

What I claim is—

A horseshoe provided with a socket having a groove which is arranged longitudinally in the socket, at the ends thereof, and transversely at a point between its said longitudinal portions, in combination with a heel or toe calk provided with a shank having a pin which is received in said groove, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRIEDRICH ALBERT GAUER.

Witnesses:

FRIEDRICH HAAS,
CARL F. A. ZINCKE.