

No. 867,115.

PATENTED SEPT. 24, 1907.

L. ENK.

DEVICE FOR MAKING HORSESHOE CALKS.

APPLICATION FILED FEB. 24, 1903.

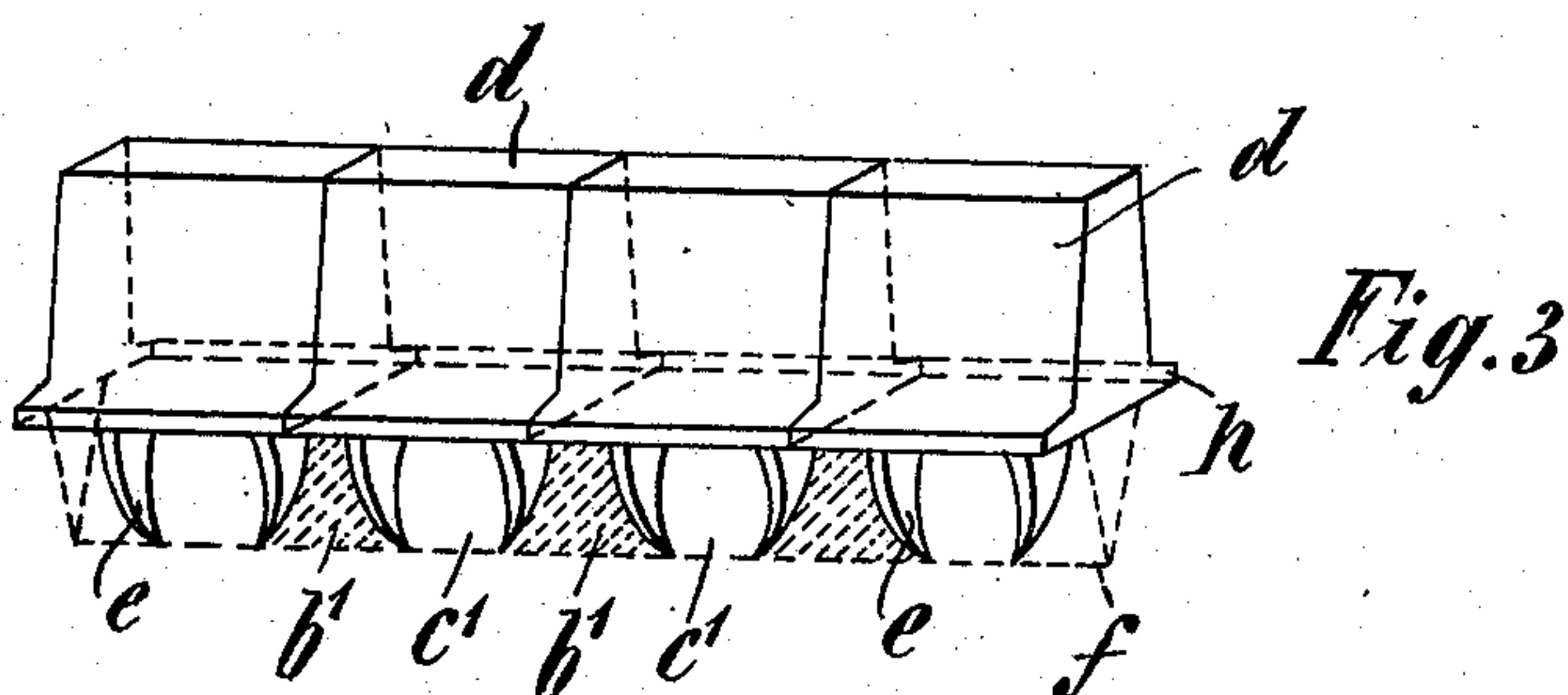
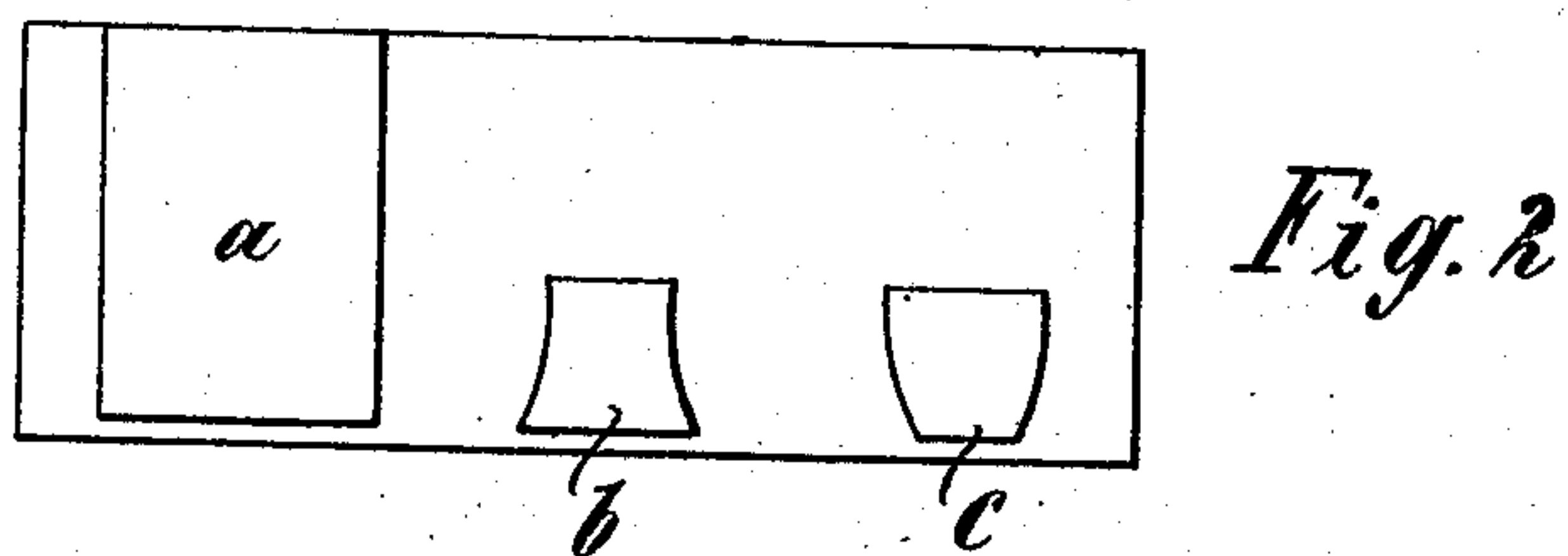
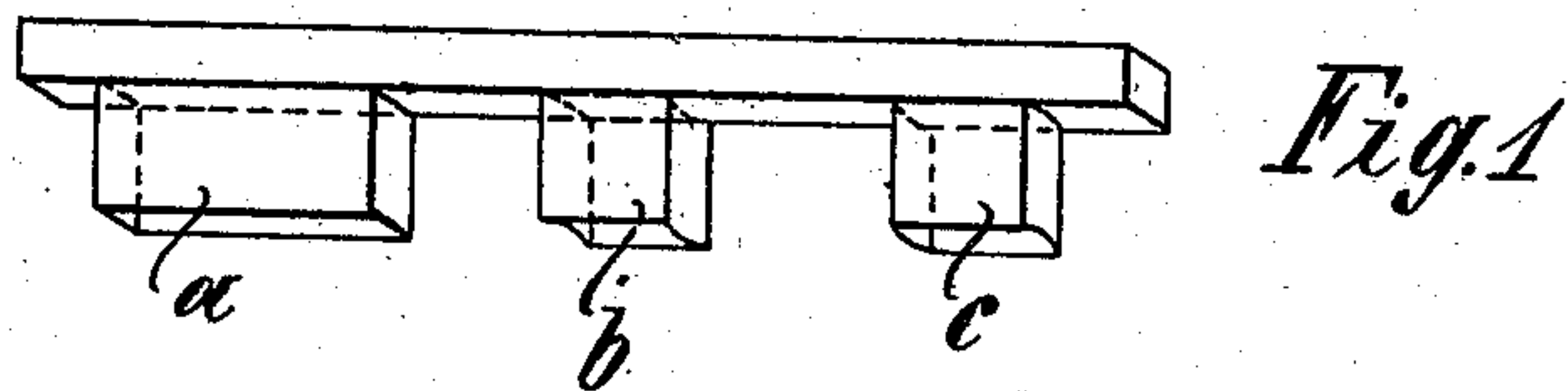
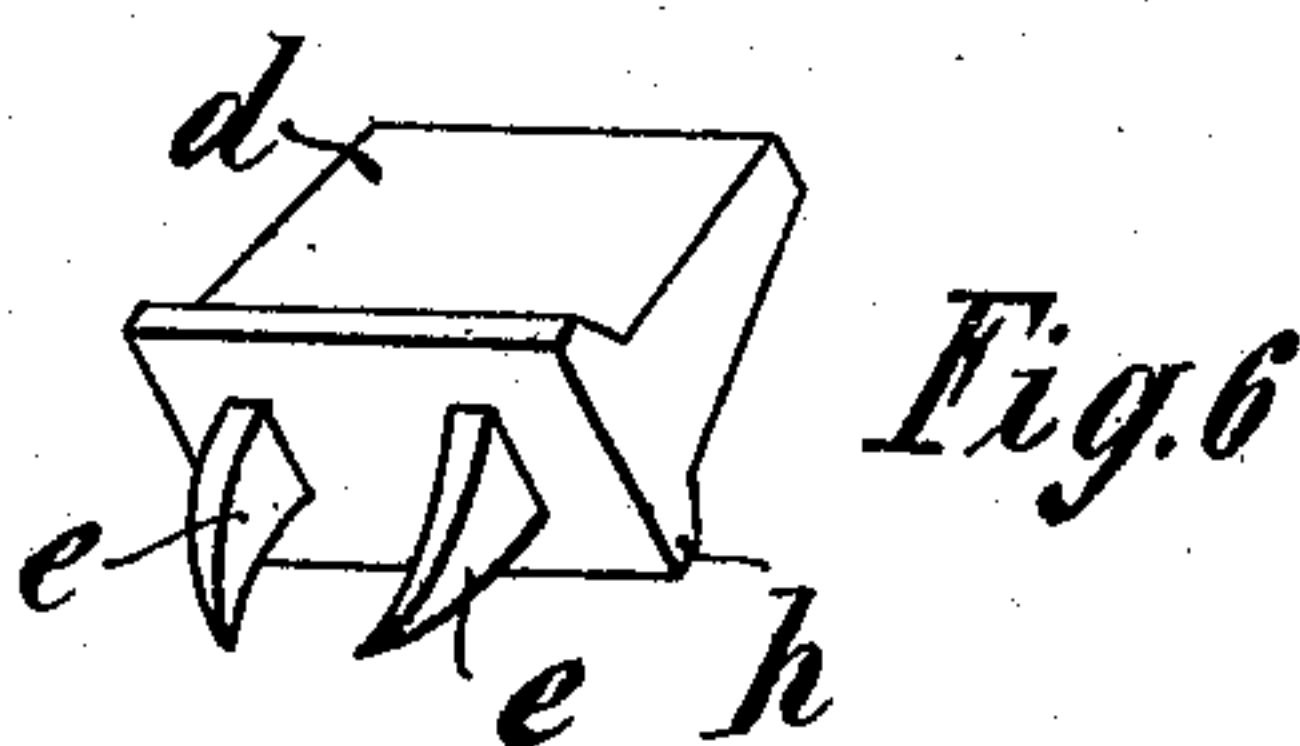
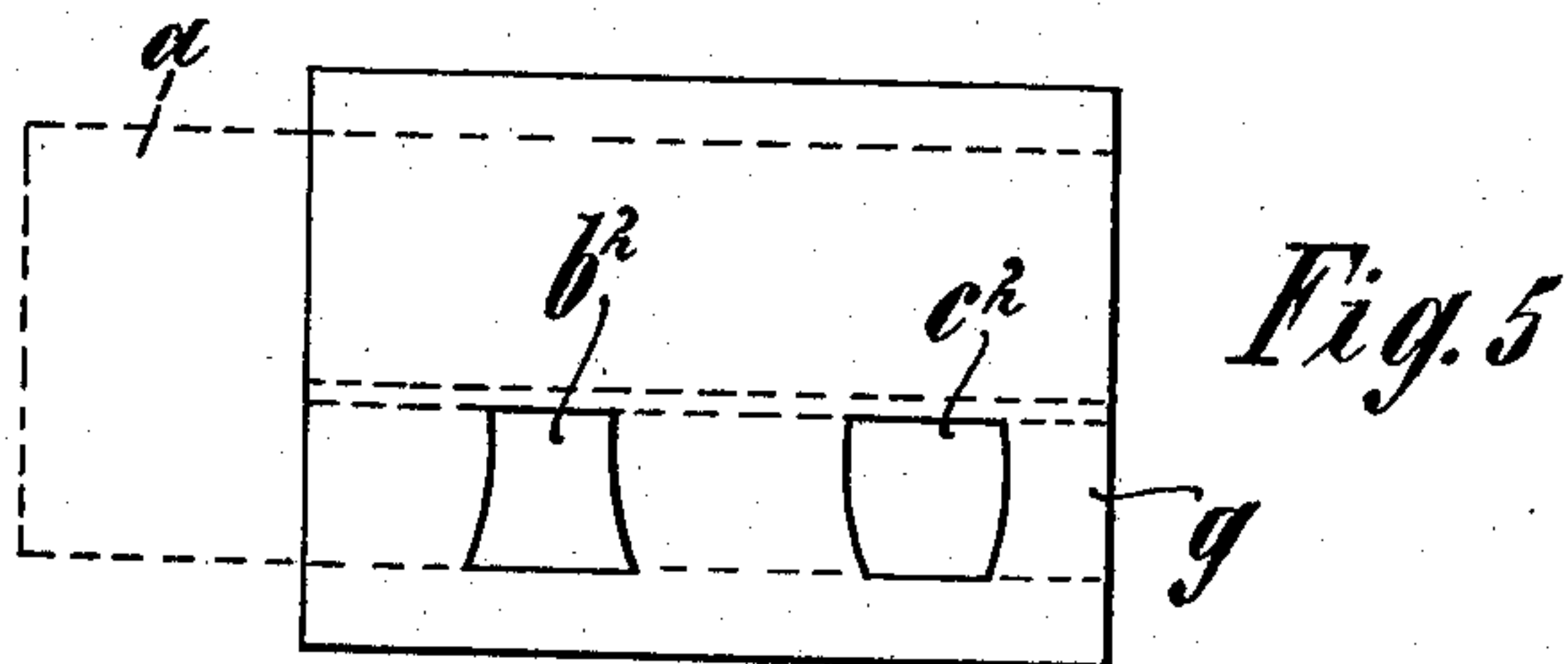
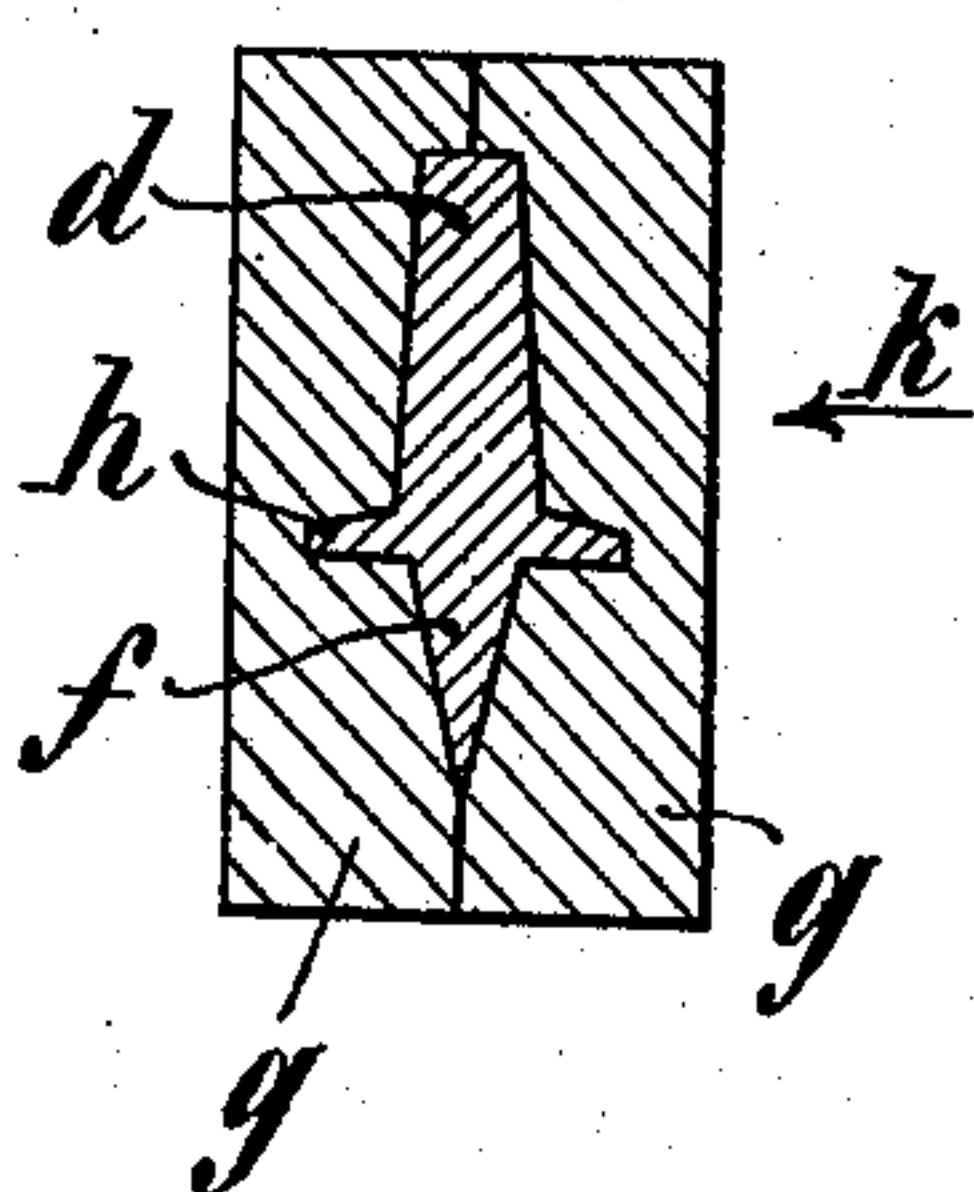


Fig. 4



Witnesses:

*Max Firlbel*

Inventor:  
Louis Enk

by *Emace W. Kespreniz*  
Attorney

# UNITED STATES PATENT OFFICE.

LOUIS ENK, OF ASCHERSLEBEN, GERMANY.

## DEVICE FOR MAKING HORSESHOE-CALKS.

No. 867,115.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed February 24, 1903. Serial No. 144,854.

*To all whom it may concern:*

Be it known that I, LOUIS ENK, a subject of the Emperor of Germany, residing at Aschersleben, Germany, have invented certain new and useful Devices for  
5 Making Horseshoe-Calks on a Large Scale, of which the following is a description.

The present invention consists of certain improvements in the manufacture of horse shoe toe calks from fashioned metal bars as hereinafter set forth and particularly pointed out in the claims.  
10

In order to render the present specification easily intelligible reference is had to the accompanying drawing in which similar letters of reference denote similar parts throughout the several views.

15 Figure 1 is a perspective elevation of the die for forming the calk, Fig. 2 is a plan of the same seen from underneath, Fig. 3 is a perspective elevation of the fashioned metal bar showing the calks lying next each other in full lines and the shape of the unpunched bar in dotted lines, Fig. 4 is a cross section through the bar  
20 in its guide bed, Fig. 5 is a plan view of the guide bed showing the orifices through which the dies or punches pass and Fig. 6 is a perspective view of one of the calks in a finished state.

25 As will be seen from Figs. 3 and 4 the fashioned metal bar consists of a tapered upper body *d* having flanges *h* extending laterally at each side and a pointed web *f* extending downwardly from the base of the bar.

The die Fig. 1 is a triple one consisting of the punch  
30 *b* for punching out the part of the web shown at *b'* in Fig. 3 in broken section lines, the punch *c* for punching out the part of the web shown at *c'* in Fig. 3 and the stamp *a* for stamping or cutting off the finished calk as it emerges from the end of the guide plates *g* (Fig. 5).

35 When the web has been operated on by the punches *b* and *c* the spikes *e* will have been formed on the upper side, (formerly base) of the calk, by means of which the

said calk may be attached to the shoe. The guide plate *g* for the fashioned bar, is provided with the guide orifices *b<sup>2</sup>* for the punch *b* and *c<sup>2</sup>* for the punch *c* 40 while the die *a* operates directly against the edge or end of the guide plate as indicated in dotted lines in Fig. 5.

The operation of the die will be readily understood, when the bar is passed into the guide block, at the first 45 descent of the die the punch *c* will cut away the first part *c'* of the web, the bar is then shifted further along the punch *b* cuts away the part *b'* of the web, it is then again shifted and the die *a* cuts off the end of the bar. Further movement now enables all three punches to 50 operate simultaneously and as will be readily understood at each descent of the die the cutter or die *a* will knock or cut off a finished calk. The fashioned bar might be doubled, the web *f* joining the end of the web of the double part of the bar and the dies might easily 55 be doubled whereby double the number of calks could be manufactured in the same time, or a die having double punches might be employed so that in this way also double the number of calks could be manufactured.  
60

I claim as my invention:—

In a device for making horse shoe toe calks, the combination of a matrix guide shaped to receive a metal bar having an upper rectangular body, a flange at one end 65 forming a foot to the said body and a web extending downwardly from the center of said flange and tapered at its free end, recesses in the said matrix to form a pair of inwardly turned fangs on each calk from the said web, said recesses being perpendicular to the direction of movement of the said bar and dies to fit said recesses and form 70 a plurality of calks at each succeeding reciprocation.

In witness whereof I have hereunto set my hand in presence of two witnesses.

LOUIS ENK.

Witnesses:

SARAH C. MCKELLIP,  
JAMES L. A. BURRELL.