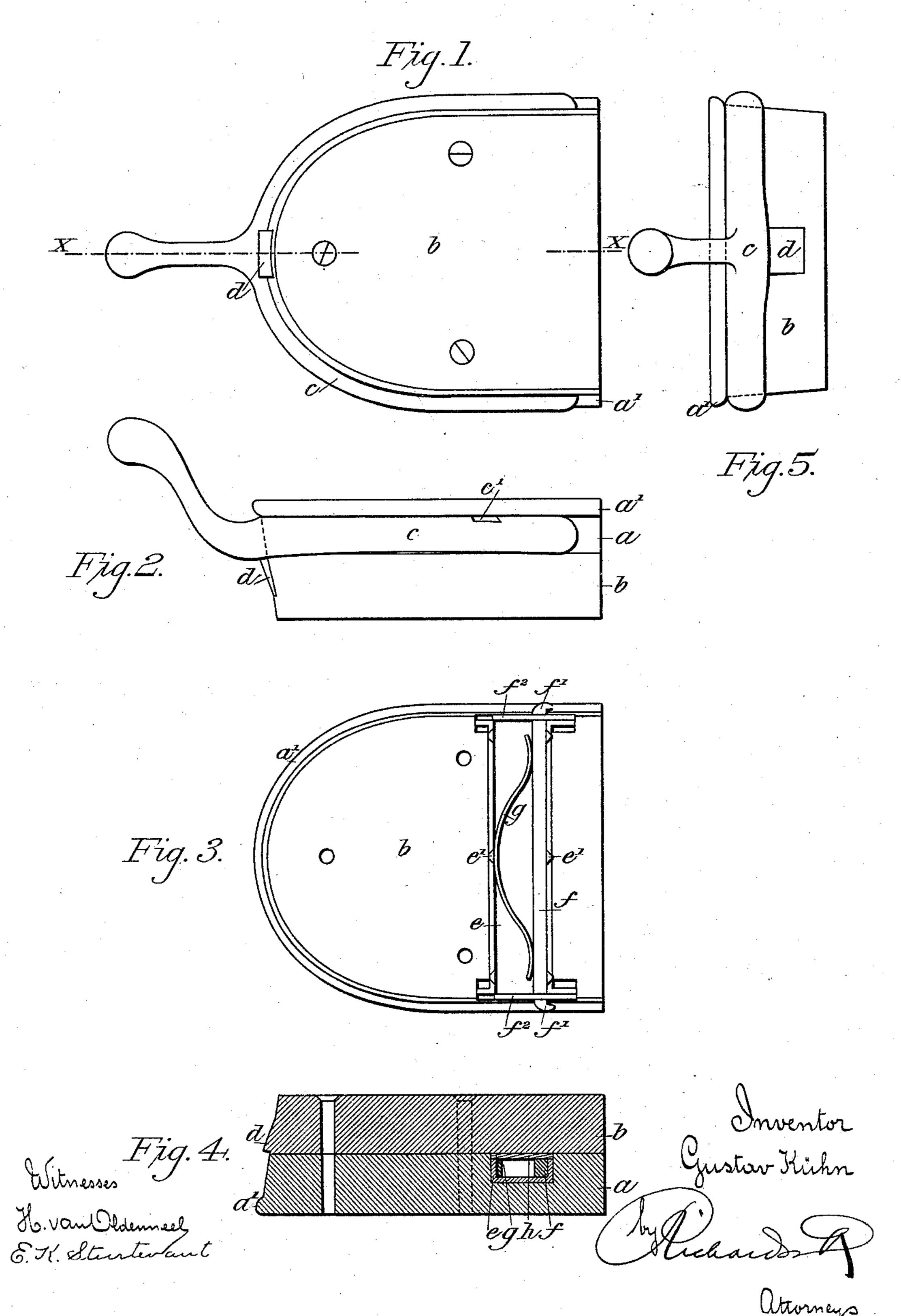
G. KÜHN. SPUR.

No. 550,890.

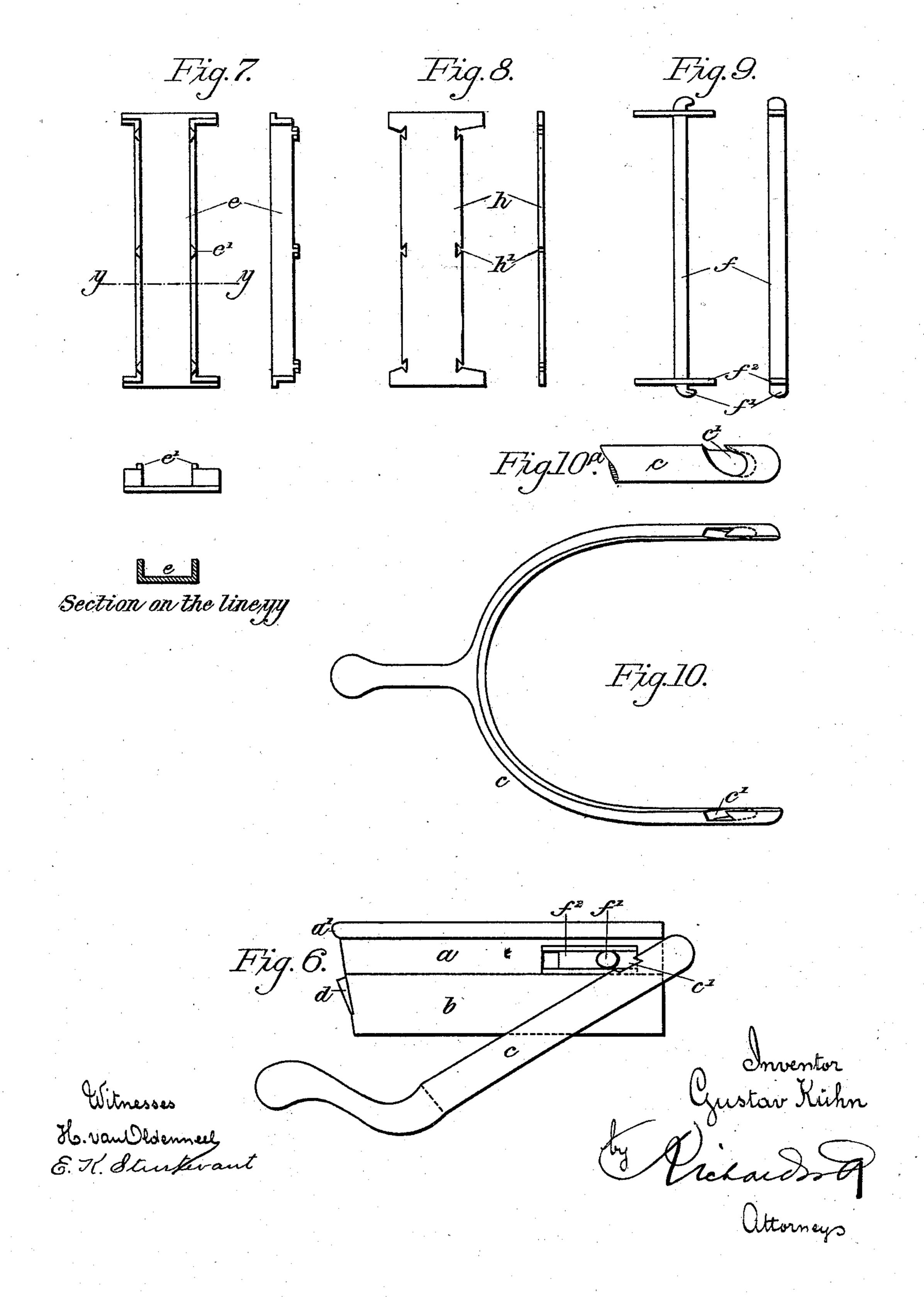
Patented Dec. 3, 1895.



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UNITED STATES PATENT OFFICE.

GUSTAV KÜHN, OF GMÜND, GERMANY.

SPUR.

SPECIFICATION forming part of Letters Patent No. 550,890, dated December 3, 1895.

Application filed June 17, 1895. Serial No. 553,088. (No model.)

To all whom it may concern:

Be it known that I, Gustav Kühn, a subject of the King of Würtemberg, residing at Gmünd, Kingdom of Würtemberg, Germany, 5 have invented a certain new and useful Spur with Spring-Holding Device, of which the fol-

lowing is a specification.

The removable spurs hitherto known have the drawback that they are too complicated in 10 construction and consequently are too costly, so that in practical use they have found little or no success. A great want is still felt for spurs of simple construction, easily affixed, and equally easily detachable from the heel. This requirement is supplied by the spur-adjustment which I have invented and which is constructed on the most simple method possible and in such a manner that it can be fixed in place without any special apparatus and 20 without any great exertion. For this purpose slots in the sides of the arms of the spur are brought into connection with catches forming part of a spring-holder placed in the heel of the boot in such a manner that the spur when in 25 use presses firmly against the end part of the heel.

The accompanying drawings show my im-

proved arrangement as follows:

Figure 1 illustrates a view from below of a 30 heel with the spur in position. Fig. 2 is a side elevation of the same. Fig. 3 shows a plan after the removal of the heel-plate, the projecting plate, and the spur itself. Fig. 4 shows a section on the lines x x of Fig. 1 af-35 ter removal of the spur. Fig. 5 shows a view from behind; and Fig. 6 shows the method of securing the spur, while Figs. 7 to 10^a show details of the mechanism.

The heel consists of two parts a b secured 40 together, of which the upper part, a, serves for the reception of the locking apparatus for the spur c and is provided with a rim a', which prevents any movement of the spur in an upward direction, while the end part 45 bears behind a projection d, which prevents

any movement of the spur downward.

The locking device, which is clearly shown in Fig. 4, is located in an aperture formed in the upper part a, and consists, essentially, of a 50 rectangular box e, Fig. 7, in which the bar f, provided with projections f^2 , is placed. The

of a spring g, Fig. 3, and is provided with two points f', with which the arms of the spur engage. For this purpose the said points f' are 55 formed somewhat hook-shaped, as shown in Figs. 3 and 9, while the arms of the spur possess recessed grooves c', Figs. 10 to 10^{a} .

In order to prevent dust or dirt from entering the box e, the same is protected and in- 60 closed by means of a shutter h, Figs. 4 and 8. In order to secure a correct adjustment of the latter upon the box e, the same is provided with guides e', which engage in the grooves h'of the shutter.

The above-described parts having been secured into the heel of the boot in the proper manner, the bar f is pressed against the box to the right by means of the spring q, Fig. 3.

When it is required to affix the spur, this is 70 effected in the manner specially shown in Fig. 6—that is to say, the points f' are pushed into the recesses c' of the arms of the spur, after which the spur is turned upward and at the same time pressed to the left, Fig. 6, and 75 drawn forward, so that it comes to rest above the projection d. This having been accomplished, the spur is drawn to the right by means of the pressure of the spring g, and consequently is pressed firmly against the hind 80 part of the heel, whereby the slipping or working loose of the same is entirely prevented. It would be clear from the above that the insertion of the spur can be accomplished easily and simply, while the removal thereof can take 85 place equally easily.

The spur of my invention has the great advantage that while being so easily adjusted to the heel it can, in consequence of its simplicity, be quite as cheaply manufactured as 90

the spurs commonly in use.

What I claim is—

1. In combination, the heel having the spring bar extending transversely thereof and having the projections f' at the opposite sides 95 of the heel and the spur having arms embracing the heel with the ends adapted to said projections and means for holding the spur at the rear of the heel against vertical displacement, substantially as described.

2. In combination, the heel, the bar extending laterally thereof having the projections |f'| at opposite sides of the heel the spur havlatter is normally pressed forward by means | ing the arms embracing the heel with ends

provided with notches c' and the projection d at the rear of the heel, substantially as described.

3. In combination, the heel having the pro-5 jections at opposite sides thereof, the spur having arms embracing the heel with its ends engaging the projections and the projection on the heel at the rear thereof for supporting

the central portion of the spur, substantially as described.

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

GUSTAV KÜHN.

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Witnesses:

KARL FRIEDRICH BUSH, WM. HAHN.