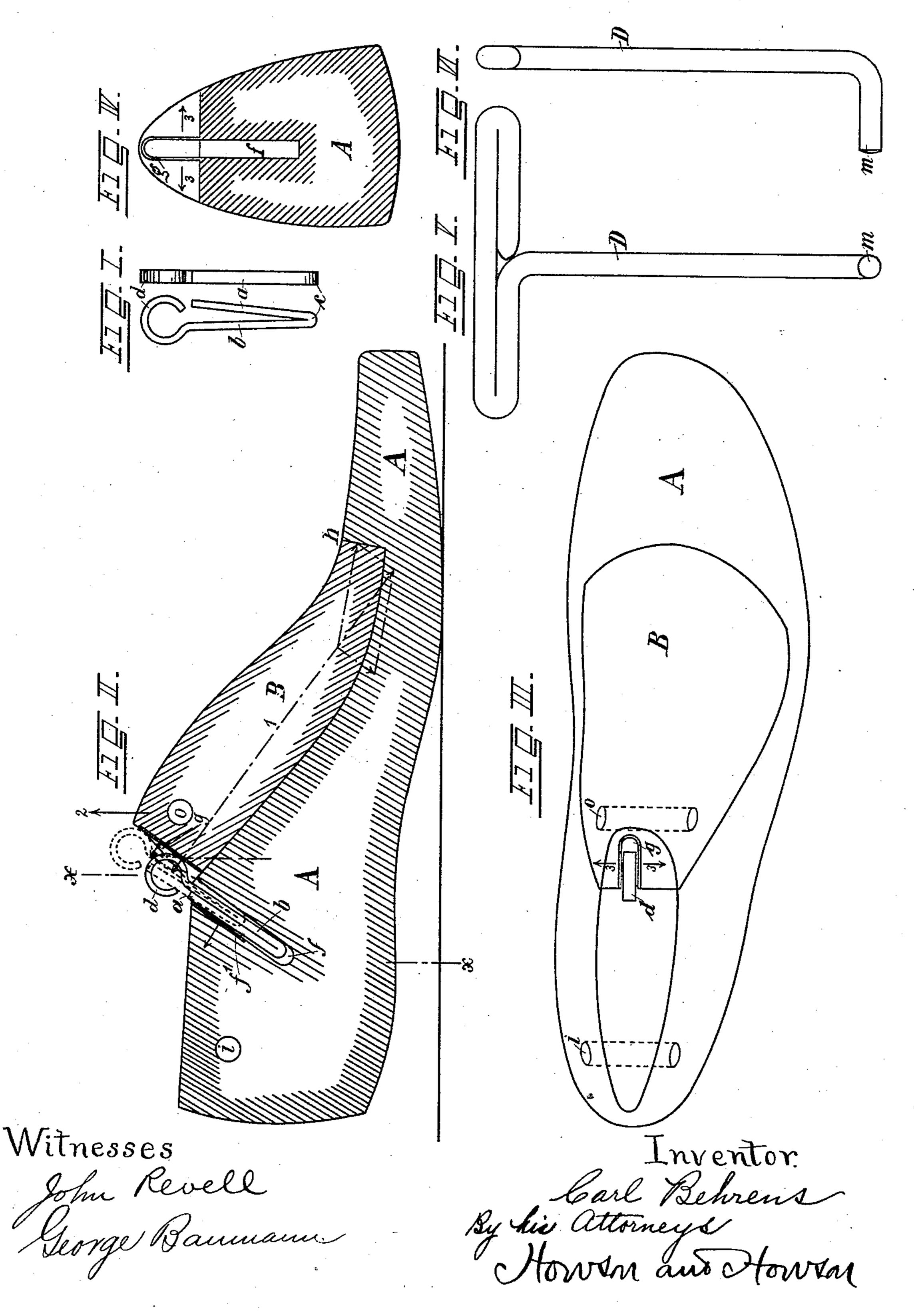
## C. BEHRENS. LAST.

No. 429,992.

Patented June 10, 1890.



## United States Patent Office.

CARL BEHRENS, OF ALFELD, PRUSSIA, GERMANY.

## LAST.

SPECIFICATION forming part of Letters Patent No. 429,992, dated June 10, 1890.

Application filed December 31, 1889. Serial No. 335,504. (No model.) Patented in Germany June 5, 1889, No. 50,695; in Belgium November 25, 1889, No. 88,596, and in England November 25, 1889, No. 18.914.

To all whom it may concern:

Be it known that I, CARL BEHRENS, a subject of the King of Prussia and Emperor of Germany, and residing at Alfeld, (on the Leine,) Germany, have invented certain new and useful Improvements in and Applicable to Lasts, (for which I have obtained British Patent No. 18,914, dated November 25, 1889, German Patent dated June 5, 1889, No. 50,695, and Belgian Patent dated November 25, 1889, No. 88,596,) of which the following is a specification.

My invention relates to lasts for boots or shoes; and the object of my invention is to 15 make a solid or firm connection between the two parts of the last, which connection can easily be loosened by means of the hook used to withdraw the last from within the boot. For this purpose I make use of a wedge-20 shaped spring-peg having one leg longer than the other and formed into an eye. The springpeg, when locking the parts together, is passed into a hole in the lower part of the last, and the eye of the peg fits in a groove in the rear 25 end of the upper part. The said eye presses against the rear end of the upper part of the last longitudinally thereof, and this pressure is transferred through the spring-legs of the peg to the rear side of the hole in the lower 30 part.

In the accompanying drawings, Figure I represents side and edge views of the springpeg. Fig. II is a longitudinal section of the last, showing the two portions of the same locked together according to my invention. Fig. III is a plan of the same. Fig. IV is a cross-section on the line x x, Fig. II. Figs. V and VI are elevations of the hook usually employed for withdrawing lasts from boots or shoes.

As illustrated in Fig. I, the two legs a and b of the peg are connected at their lower ends at c and form a spring, and the leg b is made longer than the leg a and is formed at its up-

45 per free end into an eye d.

The lower part A, Figs. II, III, and IV, of the last has the hole f made therein in a forwardly-inclined position, and the groove g in the rear end of the upper part is in the same plane as the hole in the lower part of the last and forms, so to speak, a prolongation of the said hole. To secure the upper part of the last, the peg is introduced into the hole f, so that the eye d slides against the groove g,

and it is then pushed from the dotted posi- 55. tion in Fig. II into the position shown in full lines. The hole f is inclined toward the groove g in such a manner that when pushing the peg downward the free end of the leg ais pressed by the upper part f' of the hole f 60 against the other leg b, and the peg, with the eye d, presses on the rear of the part B of the last longitudinally in the direction of the arrow 1. To prevent the edge f' from wearing out it is fitted with a metal plate. The line 65 of the groove g is at such an angle to the surface h of the part B of the last as to prevent the latter from becoming loose or lifting in the direction of the arrow 2, Fig. II, when held down by the longitudinal pressure of 70 the spring-peg. The backward pressure of the upper part B of the last on the peg is transmitted to the edge f' of the hole, the two legs a and b of the peg when pushed down coming into contact, as shown in Fig. II. As 75 the eye d is located in the groove q, Fig. III, it prevents any lateral movement in the direction of the arrows 3, Figs. III and IV, between the two parts A and B. The part B is thus secured in all directions and completely 80 and firmly locked to the part A.

The hook D, Figs. V and VI, commonly used for withdrawing the last from within the boot, serves for taking the peg out of the hole f of the lower part A, and then the legs a and b resume their former positions in relation to each other.

I claim as my invention—

A boot or shoe last having a lower part and an upper detachable part, the lower part being provided with a forwardly-inclined hole, and the upper part having at its rear end a groove forming a continuation of said hole, in combination with a spring-peg having two legs united at their lower ends and adapted to enter and bear against the rear of said hole in the lower part of the last, the said peg also having an eye at its upper end to bear longitudinally of the last against the rear of the upper part, all substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CARL BEHRENS.

Witnesses:

CARL FELDHEIM, C. WEISS.