(No Model.) 2 Sheets—Sheet 1.

G. T. CHAPMAN.

HORSESHOE.

No. 454,851. Patented June 30, 1891.

Fig. 1.

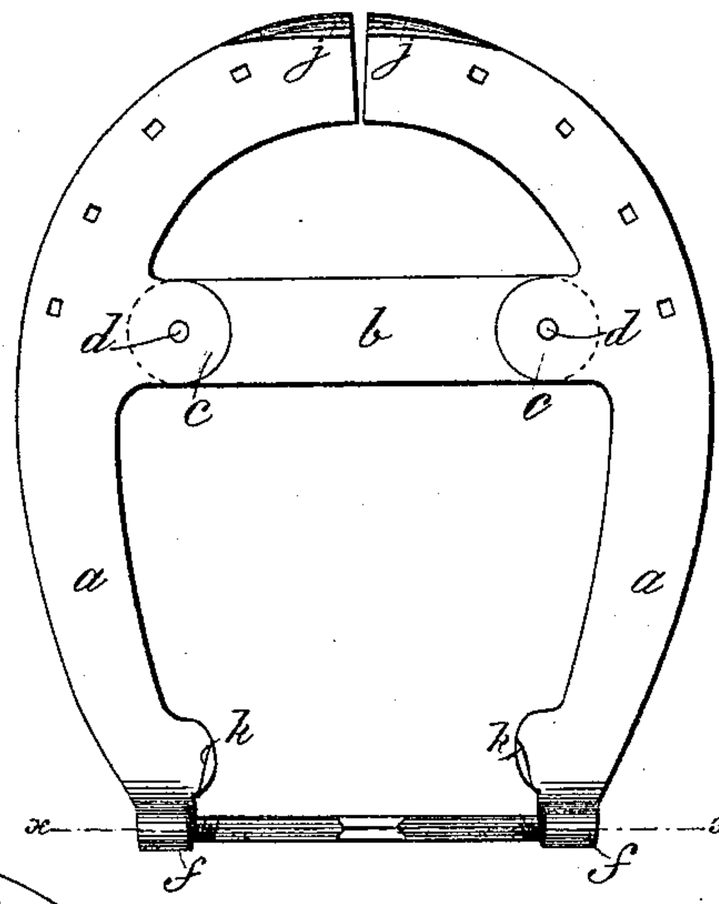


Fig. 6.

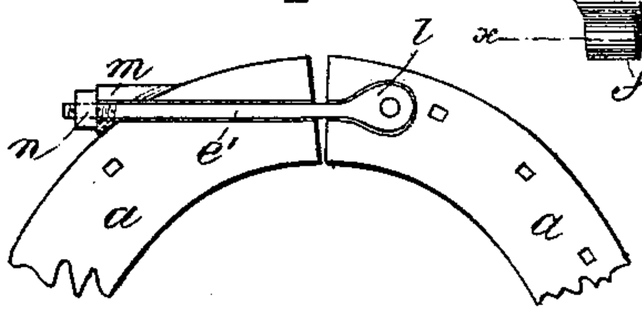


Fig. 5.

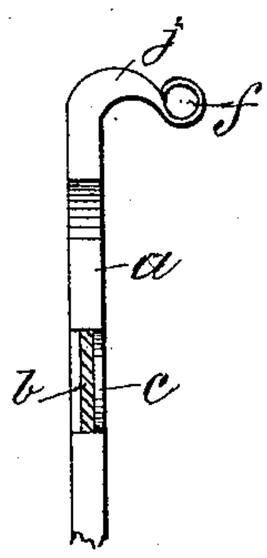


Fig. 2.

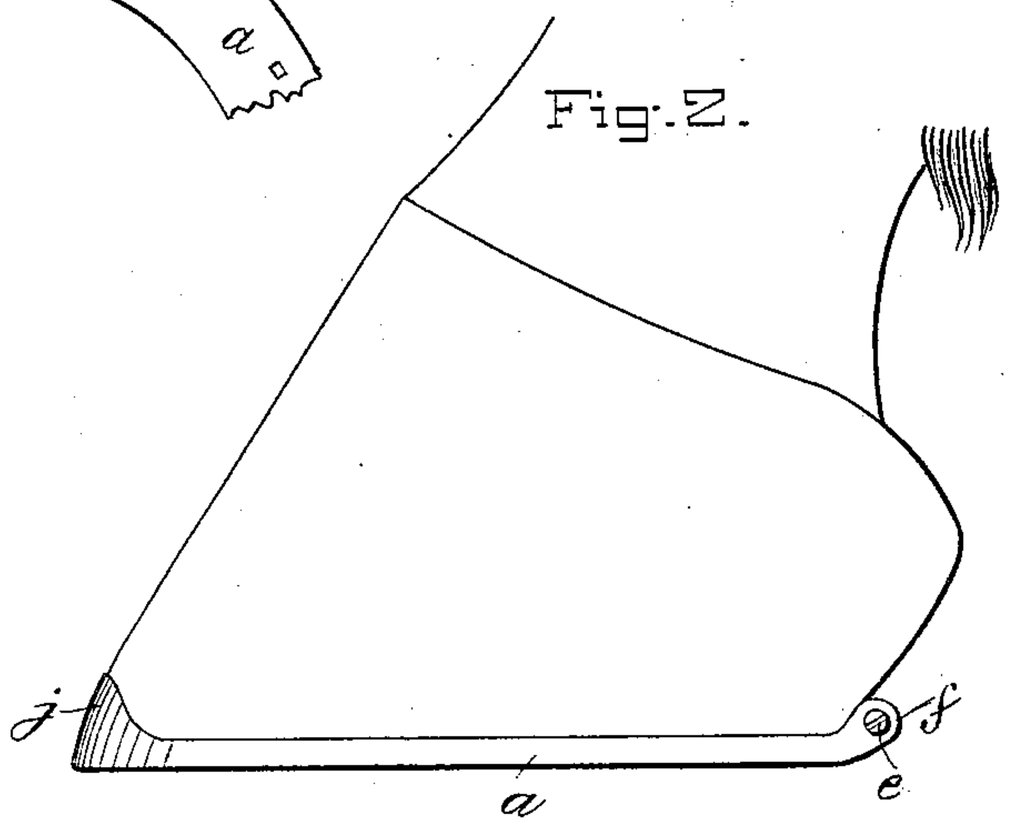


Fig. 3.

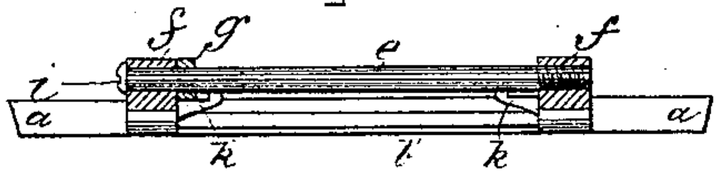
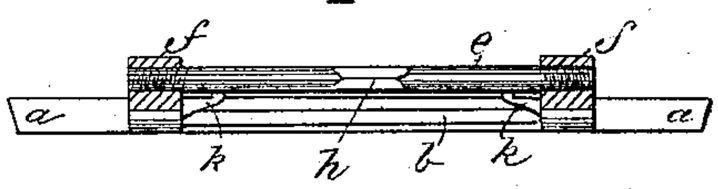


Fig. 4.



WITNESSES.

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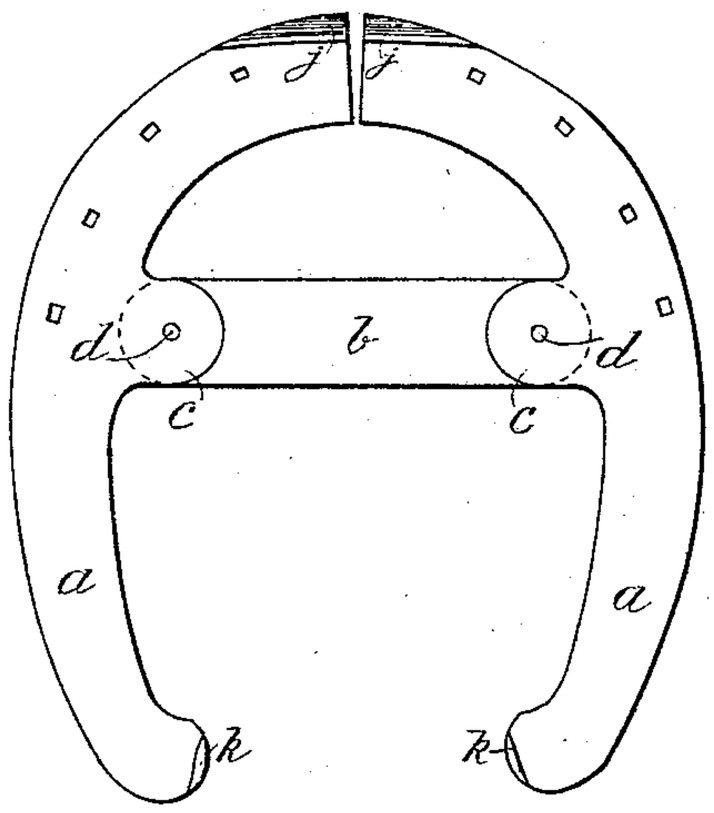
(No Model.) 2 Sheets—Sheet 2.

G. T. CHAPMAN.

HORSESHOE.

No. 454,851. Patented June 30, 1891.

Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE T. CHAPMAN, OF WHITE PLAINS, NEW YORK, ASSIGNOR OF ONE-HALF TO WILLIAM HARVEY MERRITT, OF NEW YORK, N. Y.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 454,851, dated June 30, 1891.

Application filed August 8, 1889. Serial No. 320,169. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. CHAPMAN, a citizen of the United States, and a resident of White Plains, in the county of Westchester and State of New York, have invented new and useful Improvements in Horseshoes, of which the following is a specification.

My invention consists of an improved construction of jointed adjustable horseshoes for expanding contracted heels and for preventing and to some extent reducing elongated toes, all as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of my improved horseshoe. Fig. 2 is a side elevation of the same and a hoof to which it is supposed to be attached. Figs. 3 and 4 are transverse sections of the shoe on line *x x*, these figures showing my improved jointed adjusting-shoe with the adjusting-screw arranged at the heel, as in hind shoes. Fig. 5 represents provision for the adjusting-screw at the toe, as it may be used on fore feet. Fig. 6 is a plan view showing a modified form of adjusting-screw that may be employed. Fig. 7 is a plan view of the shoe without the adjusting-screw, as it may be used.

I make the shoe in two parts *a*, divided longitudinally at the toe and jointed together between the toe and heel, and preferably nearer the toe than the heel, by the bar *b*, and a joint-lug *c* on the inside of each part pivoted together at *d*, and when an adjusting-screw is to be used at the heel in the case of hind shoes I provide an adjusting-screw-rod heel-expander *e*, adapted for forcing the two parts of the heel farther apart from each other from time to time by turning the screw with a wrench, screw-driver, or other suitable means, said expander being fitted in eye-terminals *f* of the shoe, preferably bent upward in rear of the hoof, as shown, to hold said rod a suitable distance above the ground, and the heel of the shoe is provided with the upwardly-projecting clips *k*, projecting into the clefts of the frog to engage the hoof, so as to effectually apply the expanding force.

The expanding-rod may be fitted by right and left screw-threads in the respective parts of the heel, as in Fig. 4, or it may be screwed in one part and have a collar *g*, bearing against the other part, as in Fig. 3, or in any other approved way, and to be turned by a wrench, as at *h*, or by a screw-driver, as at *i*.

Together with the heel-expanding device I provide the toe-clips *j* on the upper side of the parts *a*, respectively, which extend upward of the toe of the hoof, so that they prevent too much elongation of the said toe by pushing outward, which is the common tendency of hoofs contracted at the heel, and they force the toe back to some extent, as they swing on the pivots *d* by the expansion of the heel, and thus facilitate restoration of normal shape in cases of abnormally-elongated toes.

It is to be understood that for fore feet where the heel-adjusting screw is not feasible, owing to interference by the hind feet, the adjusting-screw may be applied at the toe in this improved form of adjusting-shoe, the same as with the differently-constructed expanding-shoe, which is the subject of a prior pending application filed by me May 1, 1889, Serial No. 309,144, the clips *j* being then made in the form of strong lugs, or as represented in Fig. 5, in which the eye *f* is formed on the top of a clip *j*, practically the same as Figs. 1 and 2, with the addition of eyes for the screw at the upper end.

In Fig. 6 I have shown another form of expanding-screw that may be used, the same being a flat-headed rod *e'*, attached by its head *l* to the upper side, preferably, of one of the parts of the shoe, either flush with the surface or rising slightly above and extending along the surface of the other part and projecting beyond the edge and a notched or perforated lug *m*, formed on the shoe thereat for an abutment, against which the adjusting-nut *n* of the screw draws to adjust the parts of the shoe. A groove may be made in the surface of the shoe for receiving part or all of the rod, or the hoof may be recessed for said screw.

While the adjusting-screw will generally be used, I propose to dispense with it in some cases, but will use the jointed shoe, so as to expand the heel all the same by closing the toe ends together, or nearly so, and thereby adjusting the heel apart and nailing the toe to the hoof and then springing the heel closer together and engaging the clips *h* in

the clefts of the heel or nailing the heel to the hoof in case said clips are not used, so that the heel of the shoe has an expanding effect on the hoof due to the stress of the toe of the hoof, to which the jointed parts of the shoe are thus subjected.

I claim as my invention—

1. In a heel-expanding shoe consisting of two parts divided longitudinally and unconnected at the toe, said parts each having a joint-lug on the inner edge about midway between the toe and heel, and separately pivoted thereby to the respective extremities of the connecting-bar, coupling the two parts at pivotal points located at the inner edges, or thereabout, of the said parts, respectively, substantially as described.

2. The improved heel-expanding horseshoe, consisting of two parts divided longitudinally at the toe, each part having a joint-lug on the inner edge about midway between the toe and the heel, and said parts connected together by the cross-bar pivoted at the ends to the joint-lugs of the respective parts of the shoe, and by an expanding-screw at one end, substantially as described.

3. The improved expanding horseshoe, consisting of two parts divided longitudinally and unconnected at the toe, each part having the joint-lug on the inner edge about midway between the toe and the heel, and said parts connected together by the cross-bar pivoted at the ends to the joint-lugs of the respective parts of the shoe, and by the heel-expanding screw, substantially as described.

4. The improved heel-expanding horseshoe, consisting of two parts divided longitudinally at the toe and having the heel-expanding clips, and being jointed together between the toe and the heel by the bar pivoted at the ends to the joint-lugs of the respective parts and coupled at one end by an expanding-screw, substantially as described.

5. The improved heel-expanding horseshoe, consisting of two parts divided longitudinally at the toe, jointed together between the toe and the heel by the bar and joint-lugs, and having the heel-expanding rod fitted in eye-terminals of the heel extended upward above the level of the shoe, substantially as described.

6. The improved heel-expanding horseshoe, consisting of two parts divided longitudinally at the toe, jointed together between the toe and heel by the bar and joint-lugs, and having the heel-expanding rod and the toe-clips, all substantially as described.

7. The improved heel-expanding horseshoe, consisting of two parts divided longitudinally at the toe, jointed together between the toe and the heel by the bar and joint-lugs, and having the heel-expanding rod and heel-expanding clips, substantially as described.

8. The improved heel-expanding horseshoe, consisting of two parts divided longitudinally at the toe, jointed together between the toe and heel by the bar and joint-lugs and having the heel-expanding rod, and the toe-clips and heel-expanding clips, all substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 26th day of July, 1889.

GEO. T. CHAPMAN.

Witnesses:
W. B. EARLL,
W. J. MORGAN.