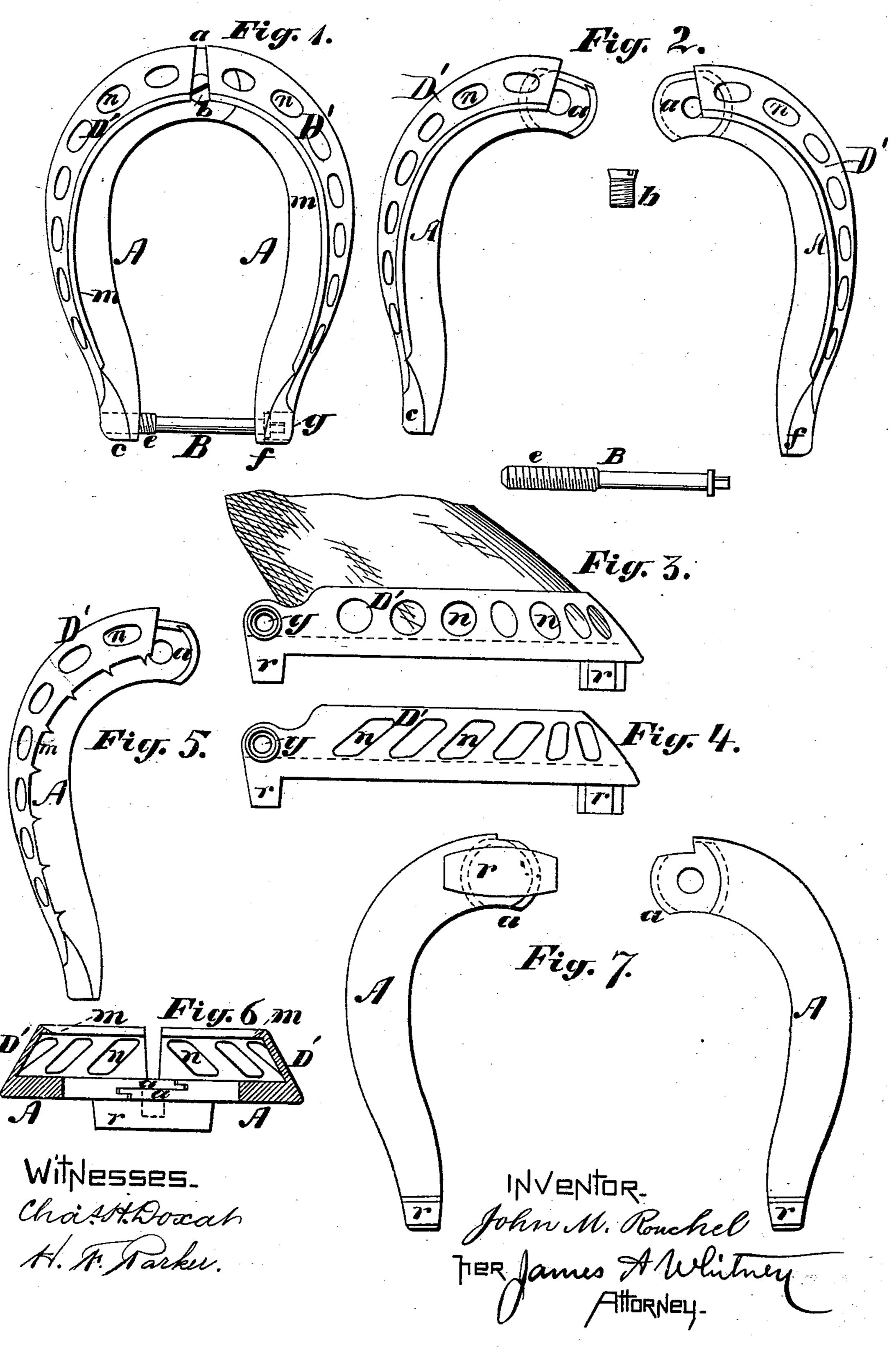
J. M. ROUCHEL. Horseshoe.

No. 226,422.

Patented April 13, 1880.



United States Patent Office.

JOHN M. ROUCHEL, OF NEW YORK, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO WILLIAM DALY, OF BROOKLYN, E. D., N. Y.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 226,422, dated April 13, 1880.

Application filed October 18, 1879.

To all whom it may concern:

Be it known that I, John M. Rouchel, of the city, county, and State of New York, have invented certain Improvements in Horseshoes, 5 of which the following is a specification.

This invention relates to that variety of horseshoes which have their parts jointed together, so as to be laterally expanded or contracted to fit upon the hoof of the horse, and which are designed to dispense with the use of the ordinary fastening-nails.

Many different horseshoes of this variety have been made or proposed; but most or all of them have been adopted for merely temporary purposes, and not for continuous use during a considerable period of time—as, for example, a few weeks or months.

The object of my invention is to produce a shoe of the class specified which will be capable of use in lieu of an ordinary horseshoe, for any desirable length of time, and which may not only be readily applied to or removed from the hoof when required, but will permit the normal growth and development of the hoof to substantially the same extent as such growth and development are permitted by the

To this end my invention comprises a sectional horseshoe composed of two sections pivoted together at their forward ends, and connected at their heel or rear ends by a suitable

ordinary shoe.

tightening-screw, and each provided with a flange having holes or openings to permit the growth or expansion of the hoof, notwith-standing the clamping action of the said

flanges in holding the shoe upon the hoof.

Figure 1 is a plan view of a shoe embracing the several features of my said invention. Fig. 2 is also a plan view, but representing the parts of the shoe detached from each other. Fig. 3 is a side view, showing the shoe attached to the hoof, and Fig. 4 a similar view of the shoe detached from the hoof. Fig. 5 is a plan view of one of the sections of the shoe of a modified construction. Fig. 6 is a transverse sectional view of the shoe, more particularly displaying the construction of the joint at the front of the shoe; and Fig. 7 is an inverted plan of the sections of the shoe, and indicating the position of the calks.

A A are the sections. The front end of each of these sections is constructed with a tongue, a, as more fully shown in Fig. 2. The inner edge of each of these tongues is rabbeted, so that when the tongues are made to overlap 55 the rabbeted edge of each tongue fits into a corresponding recess formed at the inner part of the other tongue, as more clearly represented in Fig. 6. A small set-screw or pivot, b, connects these overlapping tongues, as il- 60 lustrated in Fig. 1, in such a manner that within certain limits the sections may be moved or adjusted, when desired, at their rear ends as, for example, in placing the shoe upon the hoof preliminary to tightening it thereon. By 65 this means, moreover, the shoe is made readily adjustable for use upon hoofs of different sizes.

The rearend, c, of one of the sections A is bored transversely, and is provided within the said 70 bore with a screw-thread which receives the threaded end e of the screw B. The corresponding end f of the other section A is bored in like manner to permit the screw B to pass through it, and is countersunk, as shown by dotted lines 75 g in Fig. 1, that the squared head (also shown by dotted line) of the screw B may not project beyond the lateral surface of the section.

Each section A has at its outer edge a flange, D', which projects upward and inward at a 80 slope corresponding to the usual slope of a horse's hoof. This flange, at its upper edge, is turned inward, and is more or less sharp, as more fully shown at m in Fig. 6. The flange of each section is, moreover, provided with 85 numerous openings n, which may be round, square, or of any other desired or suitable contour. The position of the calks r on the sections is more fully indicated in Fig. 7.

In order to apply the shoe to the hoof, the 90 screw B is turned to detach it from one or both of the sections A. The latter are then applied upon the hoof and brought close around the same. The screw B is then put in place, as hereinbefore explained, and turned to draw the 95 rear ends of the sections toward each other, thereby causing the shoe to clasp firmly round the lower portion of the hoof, with the acute upper edges of the flanges embedded in the surface of the hoof and with the slightly elas-

tic material of the hoof protruding slightly

into the openings n.

For convenience of manipulation it will ordinarily be found in practice desirable to have the threaded end of the screw B somewhat longer than is absolutely required to connect the rear end with the sections. In such cases the projecting end of the screw B will need to be cut off by suitable cutting pliers flush with the adjacent lateral surface of the shoe.

It will be observed that when the shoe is thus applied to the hoof the screw B passes just behind the heel, and so close thereto as

to be practically out of the way.

What I claim as my invention is—

A sectional horseshoe composed of two sections, pivoted together at their forward ends, connected at their heel or rear ends by a suitable tightening-screw, and each provided with a flange having holes or openings to permit 20 the growth or expansion of the hoof, notwithstanding the clamping action of said flanges, substantially as and for the purpose herein set forth.

JOHN M. ROUCHEL.

Witnesses:

THOS. J. FARRELL,
HENRY F. PARKER.