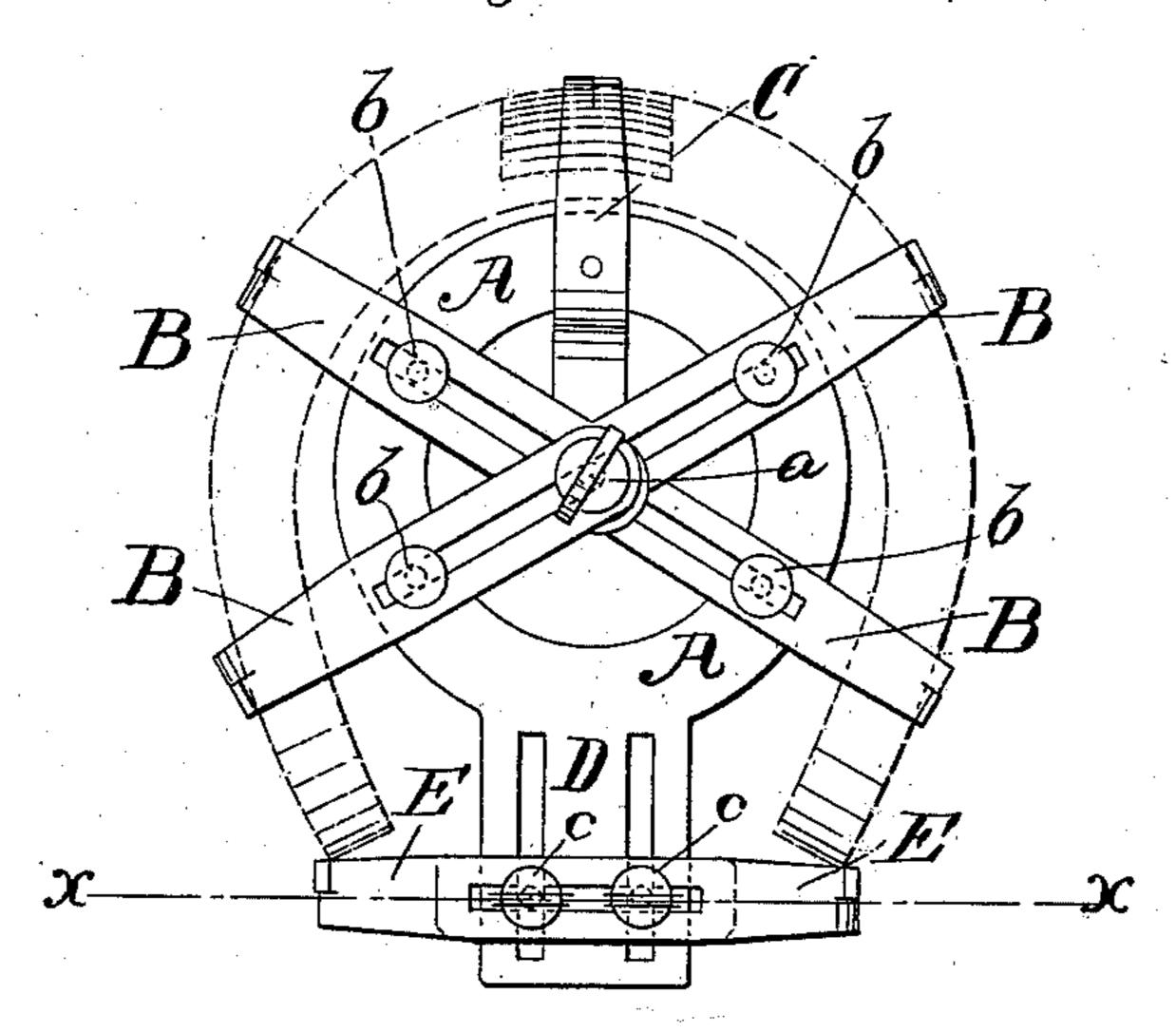
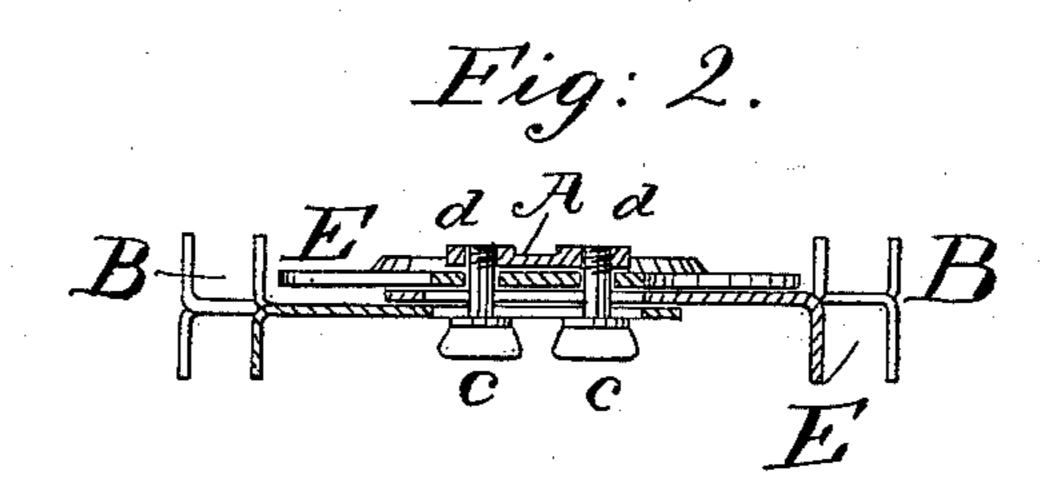
M.S. Moodward,

Hoof Expander. Nº 70,307. Patented Oct. 29,1867.

Fig: 1.





Witnesses; Theo Insehe Inventor; In. I. Hoodward Per. Mungleg Attys.

## Anited States Patent Office.

## MOSES S. WOODWARD, OF MARSHALTON, PENNSYLVANIA.

Letters Patent No. 70,307, dated October 29, 1867.

## IMPROVEMENT IN DEVICE FOR MEASURING HORSES' FEET.

The Schedule referred to in these Tetters Patent and making part of the same.

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, Moses S. Woodward, of Marshalton, in the county of Chester, and State of Pennsylvania, have invented a new and improved Device for Measuring Herses' Feet; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an inverted plan view of my improved device for measuring horses' feet.

Figure 2 is a vertical sectional view of the same taken on the line x x, fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a device by which the exact measurement of horses' feet can be taken, and which can be used for fitting horse-shoes to the feet, so that the same may be very accurately adjusted without burning or cutting the feet. Heretofore the hoofs of horses were frequently ruined and destroyed by the repeated burning and cutting of the same preparatory to putting on the shoes. By my invention this difficulty is com-

pletely overcome, as the shoe can be fitted to my device, when it will accurately fit the hoof.

A represents a circular or other metal plate, in or near the centre of which a set-screw, a, is arranged, by which four (more or less) slotted plates B B are secured to the plate A. b b are headed bolts fitting through the slots in the plates B, and, in connection with the screw a, determining the direction of each one of the plates B. From the front of the plate A projects a stationary plate, C, which is on the same level as the plates B, while from the rear of the plate A an arm, D, projects, which is provided with two slots, which are parallel with the plate C, as shown. Through these slots pass two set-screws c c, which hold two slotted plates E E, as shown, a plate, d on the upper side of the arm D, being the nut for these screws. Thus the plates E E can be moved either toward the centre of the plate E in the slots in D, or the screws moving in a direction with their length, they moving on the screws. The outer ends of the plates B, C, and E are split and are bent up and down as shown.

The operation of the device is simple and as follows: The arms B and E are drawn out as far as possible, and the device is then applied to the hoof, the heads of the screws being on the under side. The end of the plate C is applied to the front of the shoe, and fitted well against the same, the plates B B, or rather their bent-up ends, fitting around the sides of the foot. The plates B B are then drawn in as much as possible until their ends strike the side of the hoof. Then the plates E are adjusted so that their ends strike the quarters of the hoof, whereby the ends or length of the shoe are determined. The plates are then all secured in their respective positions by means of the set-screws, and the device is then ready to be removed from the hoof, when the shoe can be fitted into it without difficulty and with accuracy.

What I claim as new, and desire to secure by Letters Patent, is-

1. As an improved article of manufacture, a device for measuring horses' feet for fitting the shoes thereto, made substantially as herein shown and described.

2. The expansion and contraction-bars B B, when arranged on the centre-plate A, substantially as and for the purpose herein shown and described.

3. The manner of arranging the "quarter" measures, so that they can be moved in either longitudinal or transverse direction, as specified.

4. The set-screws, in combination with the bars B and E, substantially as set forth, so as to hold the same in any desired position.

The above specification of my invention signed by me this 1st day of May, 1867.

MOSES S. WOODWARD.

Witnesses:

WM. F. McNamara, ALEX. F. ROEERTS.