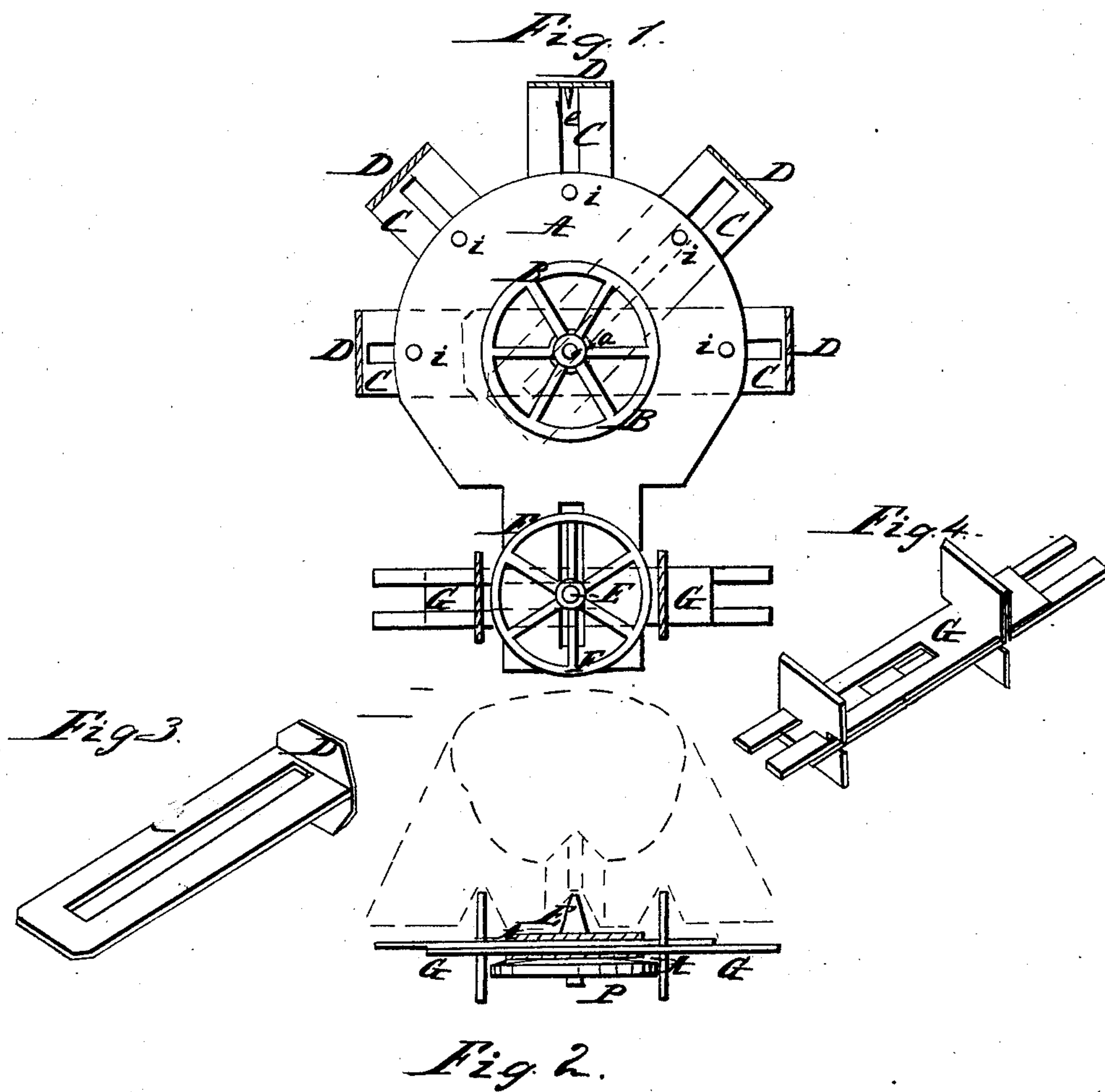


H. B. Ferren,
Measuring Horses' Feet.
N^o 82,213 *Patented Sep. 15, 1868.*



Witnesses:
Leopold Buch
W. A. Hathorn

Inventors
Horace B. Ferren

United States Patent Office.

HORACE B. FERREN, OF BATAVIA, NEW YORK.

Letters Patent No. 82,218, dated September 15, 1868.

IMPROVEMENT IN DEVICE FOR MEASURING THE FEET OF HORSES.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HORACE B. FERREN, of Batavia, in the county of Genesee, and in the State of New York, have invented certain new and useful Improvements in Conformation for Measuring Horses' Feet; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a device for measuring horses' hoofs for making the shoes.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a plan view,

Figure 2 an end view,

Figure 3 a perspective of the slide in the body of the machine, and

Figure 4 a perspective of the slide in the end or heel of the machine.

A A represent two metal plates of nearly circular shape, with a tongue of suitable dimensions extending from one side, and forming the heel or rear part of the device. These plates are laid together, with a screw, *a*, passing through the centre of the same, which screw is firmly bolted to the lower plate, and, passing through the upper, the plates are fastened by a wheel, B, having a female screw in its hub, which fits on the screw *a*.

Between the plates A A are placed five slotted slides, C C, which all radiate from the centre, the screw *a* passing through the slots, and all of them before passing up through the upper plate.

One of these slides is placed exactly at the toe or front side, one at each side, giving the distance across the foot, and one half way between the side and the front slides. Bolts or pins, *i i*, passing through the plates in the slots on the slides at these points, keep the slides always in their proper places, and allow them to be drawn out or pushed in, as may be desired.

The slides C C are provided with plates D D on their outer ends, which plates extend above and below the slides, as shown in fig. 3.

The tongues of the plates A A are slotted through their centre, lengthwise, as shown in fig. 1, and a headed screw, E, is inserted from the lower side in these slots, being held from above by a wheel, F, having also a female screw in its hub.

The head of the screw E forms an edge, being tapering, which, when the machine is properly made, is on a line with the centre-bolt *a*, and a pin, *e*, in the centre of the slot of the centre-slide C. The headed screw, E, and bolt *a*, form centre-points from which to operate when the machine is to be used.

A double slide, G, is placed between the tongues of the plates A A. This slide consists of plates placed perpendicularly, one on each side of the tongues, said plates being provided with horizontal slotted plates or bars, which are placed, one on top of the other, and work each in slots on the opposite perpendicular plate, thus allowing the two perpendicular plates to be moved out or in, as may be desired. The headed screw E passes through the slots on the horizontal plates, and when the wheel F is screwed down it of course holds the double slide G firmly in whatever position it has been placed.

The operation of my device, which I call a conformation for measuring horses' feet, is as follows:

After the blacksmith has prepared the foot for the new shoe, he marks the toe of the hoof, which is easily done, by sighting a straight line from the cleft of the frog and the point of the same, the latter being the centre of the foot. The points where the wall of the hoof joins the frog are thus cut out. My device is then placed on the hoof, so that the screw *a* is at the centre, the headed screw E in the cleft of the frog, and the pin *e* at the mark made in the toe of the hoof. The double slide G is then moved so as to fit into the grooves cut on each side of the frog, and fastened by the wheel F. The slides C C are then moved so that the plates D D all touch the edges of the hoof, when they are fastened by means of the wheel B. From the measure thus obtained, the blacksmith can easily make a shoe to fit the horse.

It will be observed that the two slides on the sides give the measure of the widest part of the foot, which is not obtained by any device of similar character now in use.

The object of the double slide G, placed in the grooves made as above described, is mainly to get the exact measure for placing the flanges on a "Tyrrell" horse-shoe.

I am aware of the patent of Moses S. Woodward, dated October 29, 1867, and I do not wish to be understood as claiming the device therein described: but

What I do claim as an improvement thereon, is—

1. In combination with a device, as above described, for taking an accurate measure of the form of a horse's hoof, the arrangement of the index-headed screw E, centre-screw *a*, and point *e*, in a straight line, so as to certainly adjust the measure to the centre of the foot, as described.

2. In combination with a device for measuring the hoof of a horse, the slides G, constructed as described, the index-headed bolt E and wheel F, arranged and operating as described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 25th day of August, 1868.

HORACE B. FERREN.

Witnesses:

LEOPOLD EVERT,

A. A. YEATMAN.