

*B. H. Hussey,
Mast Hoop.*

N^o 93,303.

Patented Aug. 3, 1869.

Fig: 1.

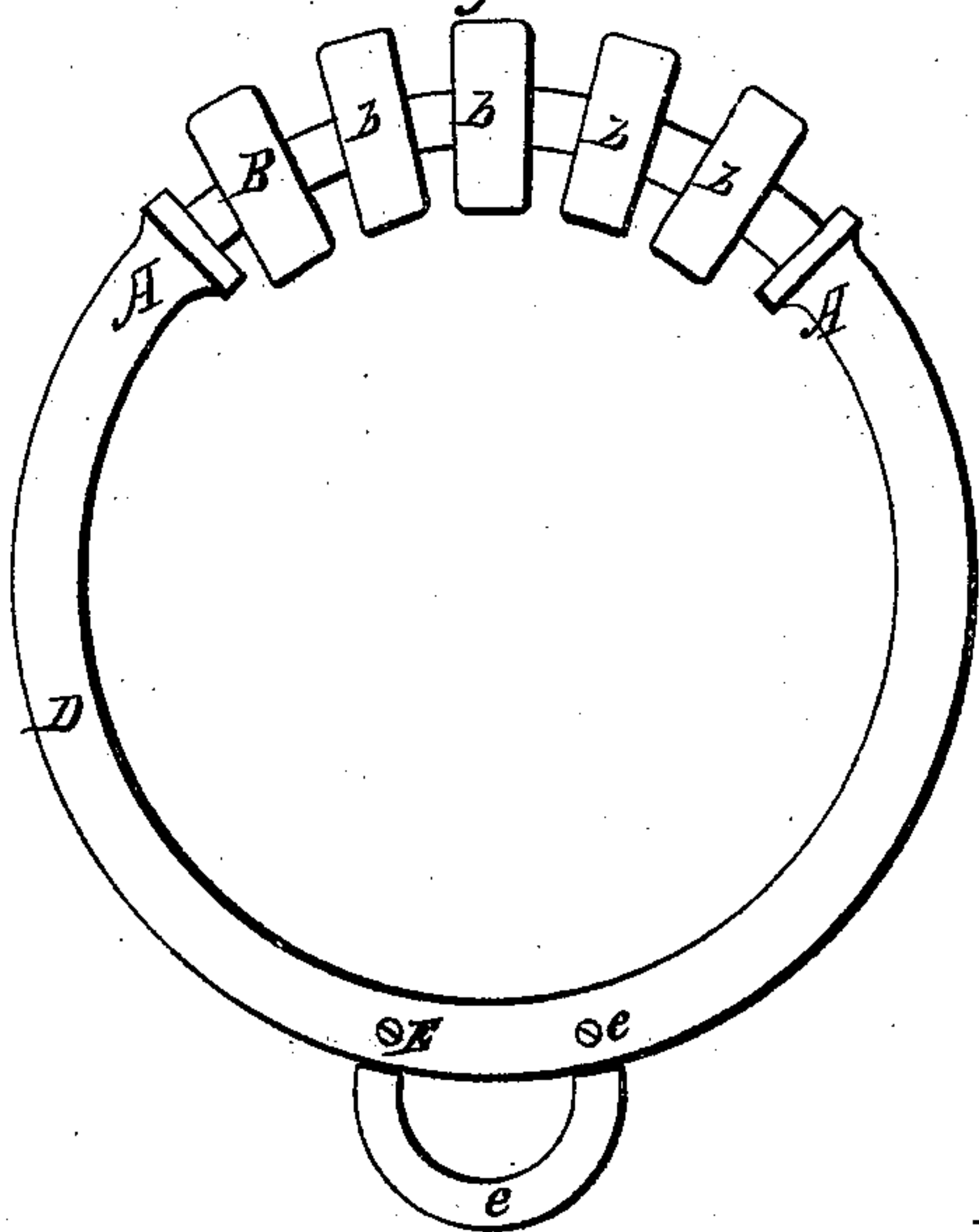


Fig: 2.

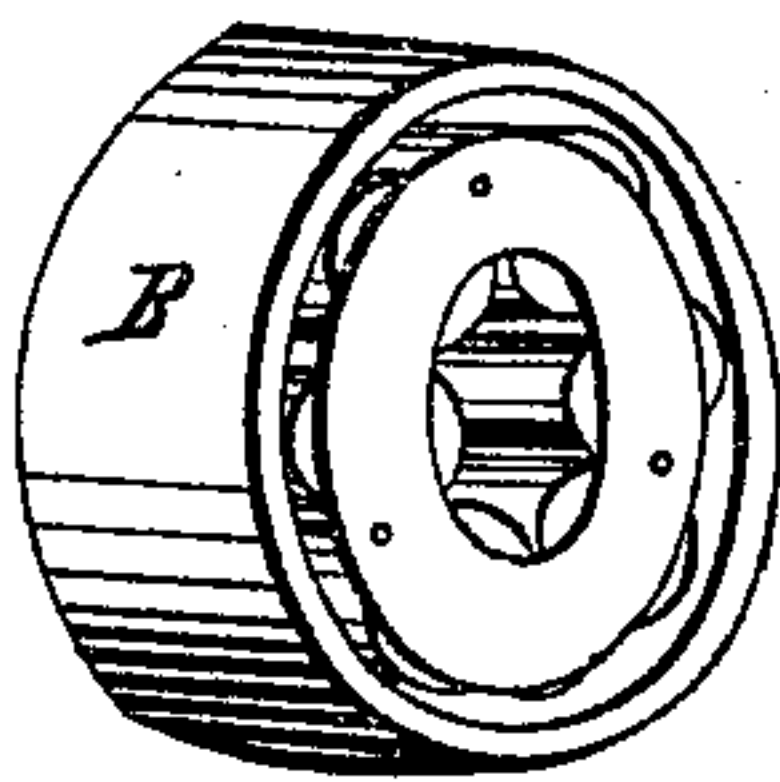


Fig: 3.

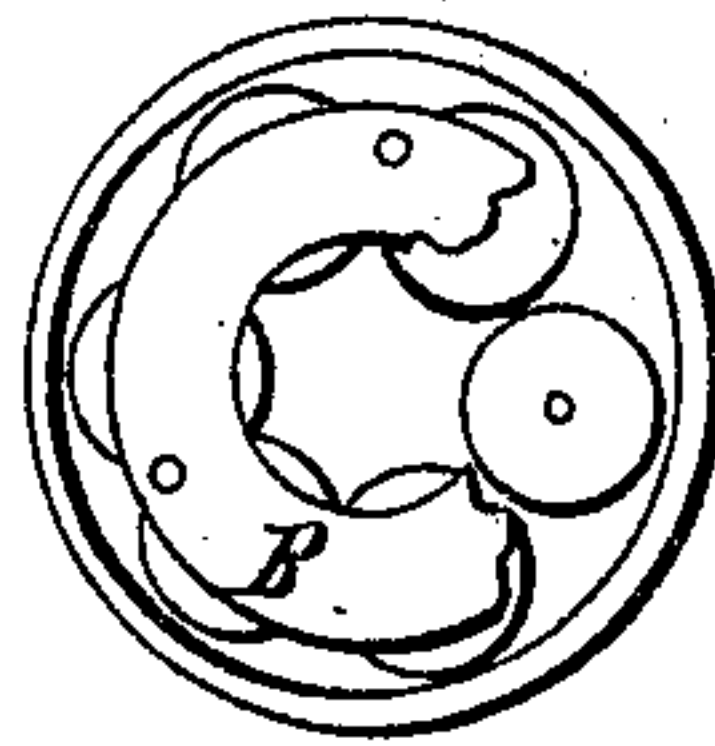
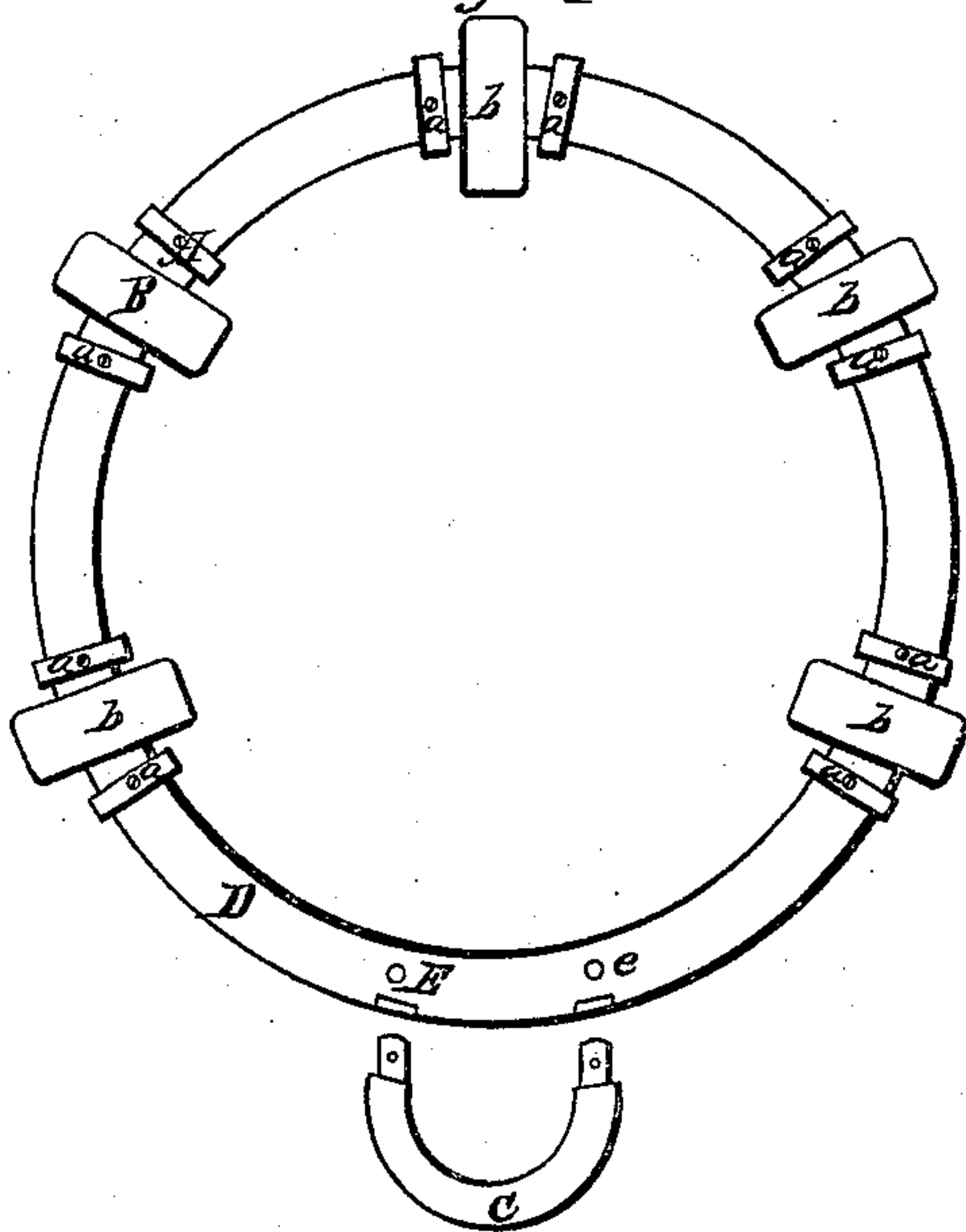


Fig: 4.



Witnesses:

*Henry C. Hutchins
Daniel F. Fitch,*

Inventor:

Benjamin H. Hussey

United States Patent Office.

BENJAMIN H. HUSSEY, OF PORTSMOUTH, NEW HAMPSHIRE.

Letters Patent No. 93,303, dated August 3, 1869.

IMPROVED ANTI-FRICTION MAST-HOOP.

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, BENJAMIN H. HUSSEY, of Portsmouth, in the county of Rockingham, in the State of New Hampshire, have invented a new and useful Improvement in Mast-Hoops, called "Hussey's Anti-Friction Mast-Hoop," it being a new and improved mode of making mast-hoops with shoulders, combined with rollers; and I do hereby declare that the following is a full and exact description thereof, and of the operation and construction of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which drawing—

Figure 1 is a view of the simplest form of my mast-hoop, made with shoulders, rollers, and staple combined.

Figure 2 is a view of a roller detached.

Figure 3 is a view of a roller in sections.

Figure 4 is a view of my mast-hoop, with several shoulders, roller, and staple combined, the staple being detached, to show its form and operation.

The nature of my invention consists in making a mast-hoop with two or more shoulders on the mast-hoop, as shown at A in the accompanying drawings, Nos. 1 and 4, said shoulders to be about one-third of the circumference of the hoop distant from each other, in case the rollers, as shown in said Fig. No. 1, at B, are all put in one place.

Between the shoulders I put one or more rollers on the mast-hoop, as shown at B, in the said drawings, Nos. 1 and 4, made so as to revolve on the mast-hoop, between the shoulders, so that the rollers strike the mast before the mast-hoop, wherever they are placed thereon, and thereby prevent the catching of the mast-hoop on the mast, and the friction occasioned by other forms of mast-hoops.

In case the rollers are to be placed at different points on the mast-hoop, to avoid all contact and friction between the mast-hoop and mast, I make extra shoulders, more or less, on different sides of the mast-hoop, as shown in the accompanying drawing, No. 4, at A A, and place one or more rollers between each pair of shoulders, as shown in said drawing No. 4, at B B, so that the mast-hoop can, in no place, touch the mast, but the rollers alone come in contact with, and run up and down the same.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, as follows:

I construct my mast-hoop of wood or iron, or any suitable metal or material.

If I intend to have rollers only in one place on the

mast-hoop, I place them opposite the place where the staple, as shown in the accompanying drawings, at C, is fastened to the mast-hoop, which staple is intended to be used to fasten the sail to the mast-hoop. The relative places of the staple and rollers are shown in the accompanying drawing, at C and B, No. 1.

I make a mast-hoop of the size necessary, and construct two shoulders thereon, as aforesaid, which shoulders are to be about one-third of the circumference of the mast-hoop apart, as shown in said drawing No. 1, at A.

Between these two shoulders I place two or more rollers, as shown in the said drawing No. 1, at B.

I use outside rollers with revolving wheels inside, made so as to revolve both on the mast and mast-hoop, (or any common roller will do, but is not so good.)

The rollers are made in diameter sufficient to keep the hoop and shoulders from touching the mast.

The rollers I use are shown in the accompanying drawing, Nos. 2 and 3.

I make a staple with shoulders, and a tenon on each end, as shown in said drawing, fig. 4, at C.

I fasten the staple in its place by means of a pin or screw passing through the mast-hoop and staple, as shown at E, in fig. 1, in said drawing, which pin or screw is to be made so that it can be taken out with ease, and replaced, so that the thimble or casing of the sail can be fastened thereby to the mast-hoop or unfastened.

If I wish to avoid all friction and contact between the mast-hoop and mast, I make shoulders on as many points as are necessary, on the mast-hoop, as shown in the said drawing No. 4, at A A, and place rollers between each pair of shoulders, as shown in said fig. 4, at B B, and thereby prevent all such contact and friction between the mast and mast-hoop as is occasioned by the mast-hoops heretofore used.

What I claim as my invention, and desire to secure by Letters Patent, is—

I do not claim the rollers to be new, nor the mast-hoop, made of metal or wood, to be new.

The combination of rollers placed on the mast-hoop, between shoulders, as aforesaid, and the mast-hoop, made with shoulders, to keep the rollers in place, and a movable staple, made as herein described, or substantially the same, which will produce substantially the same effect.

BENJAMIN H. HUSSEY.

Witnesses:

HENRY C. HUTCHINS,

DANIEL F. FITZ.