

R. W. McCLELLAND.

Wheel Hub.

No. 113,682.

Patented April 11, 1871.

Fig: 1.

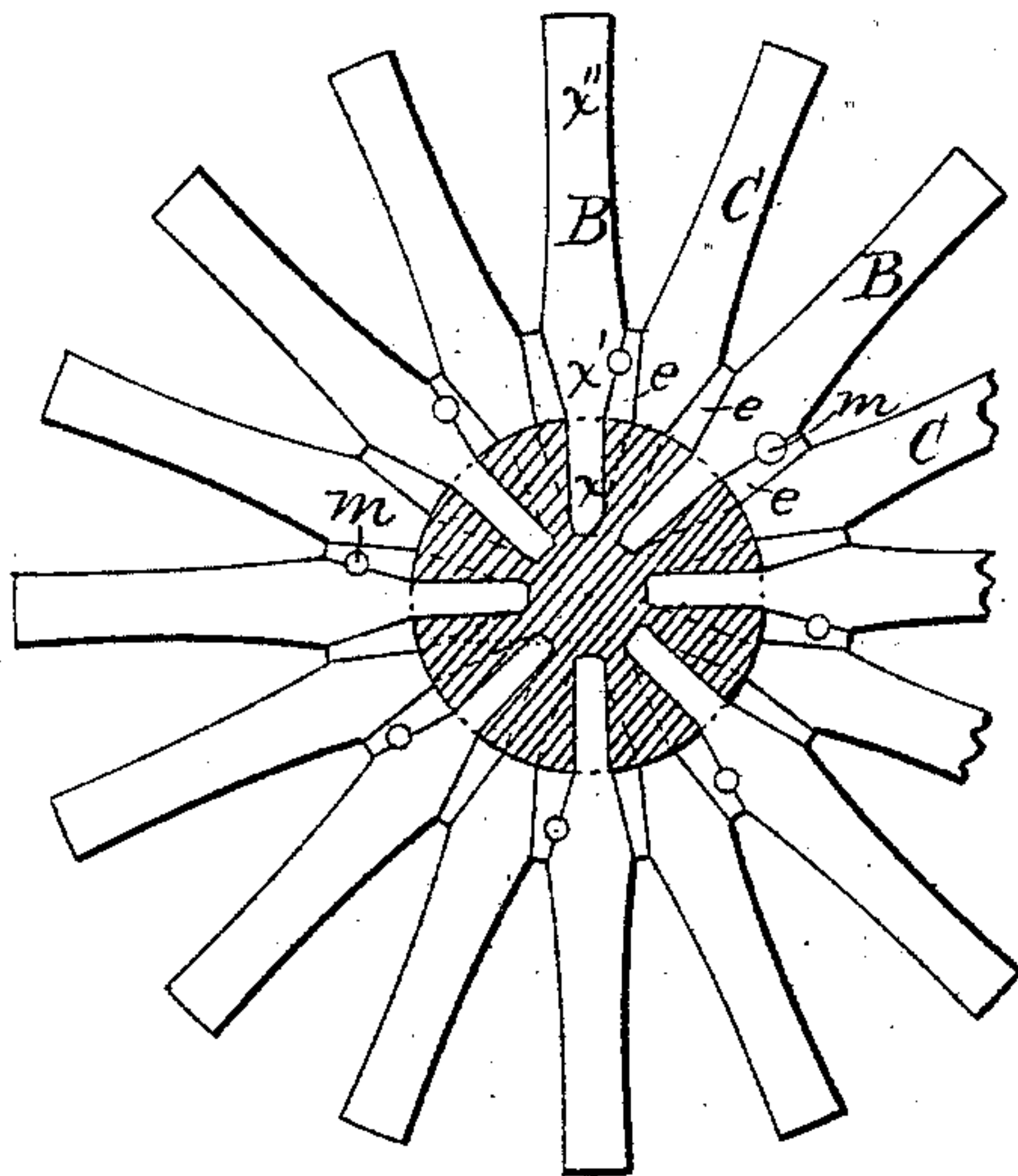


Fig: 2.

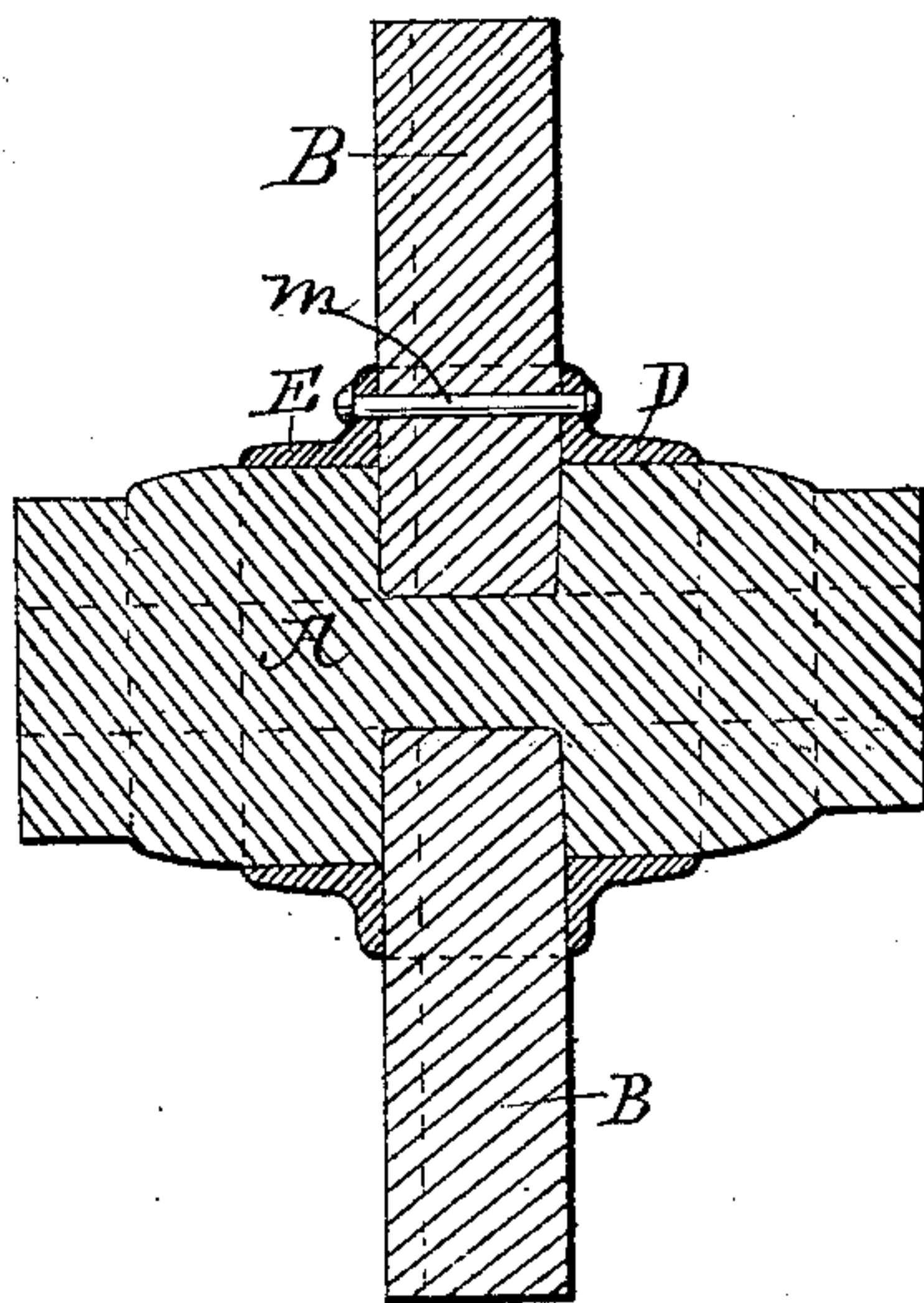


Fig: 3.

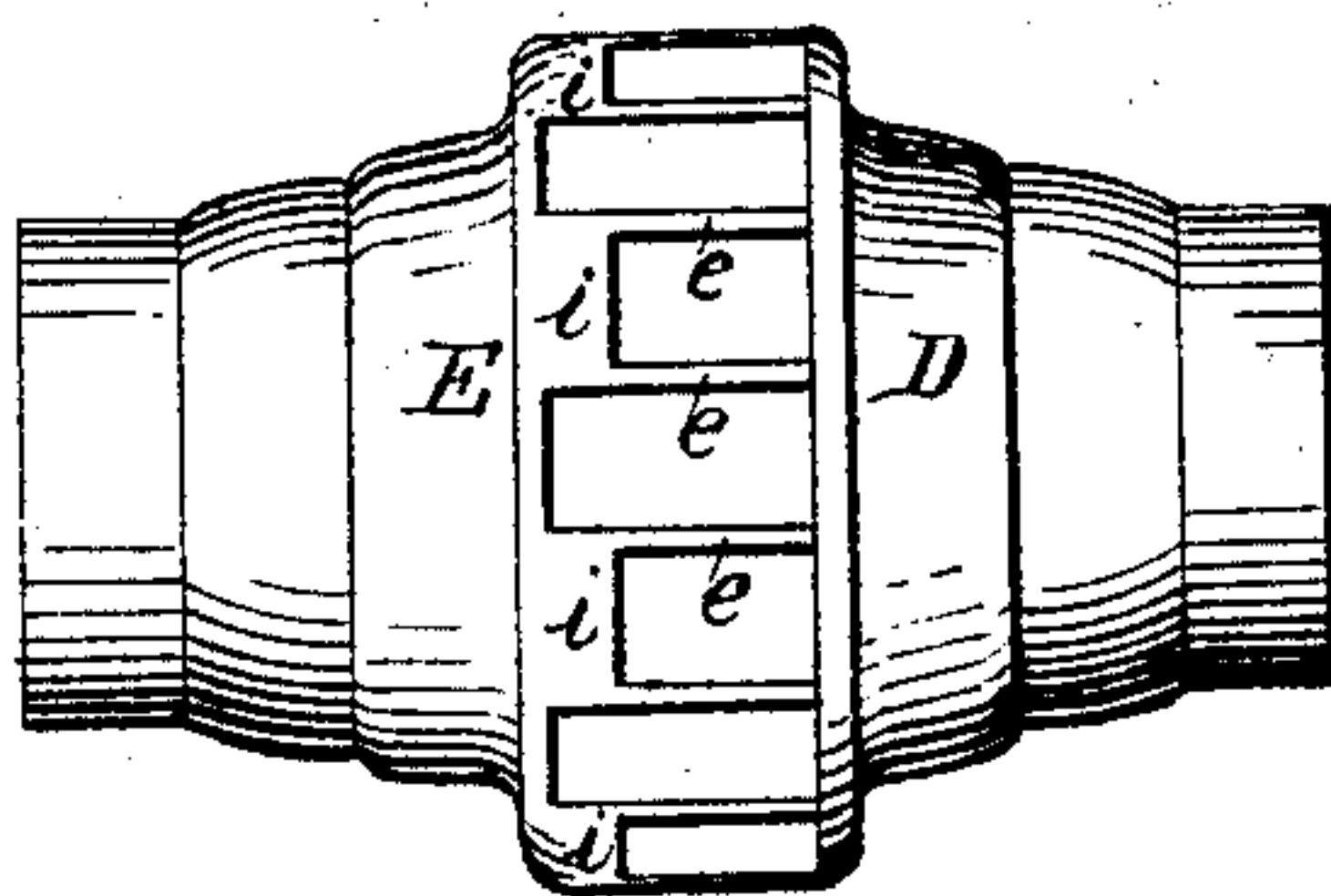
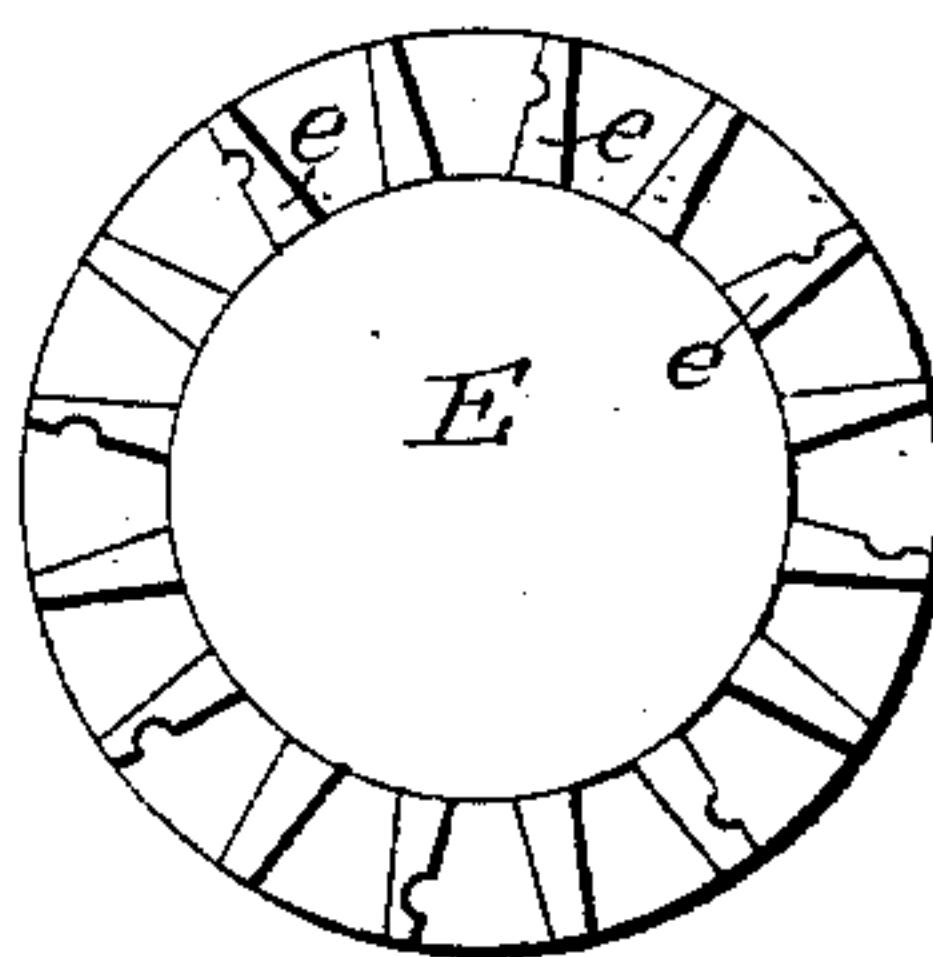


Fig: 4.



Witnesses.
T. G. Brecht
A. C. Rawhigs

Inventor.
Robert W. McClelland
By Hill & Hillworth
attys

UNITED STATES PATENT OFFICE.

ROBERT W. McCLELLAND, OF SPRINGFIELD, ILLINOIS, ASSIGNOR TO HIMSELF
AND JOHN McCREERY, OF SAME PLACE.

IMPROVEMENT IN WHEELS FOR VEHICLES.

Specification forming part of Letters Patent No. **113,682**, dated April 11, 1871.

To all whom it may concern:

Be it known that I, ROBERT W. McCLELLAND, of Springfield, in the county of Sangamon and State of Illinois, have made certain Improvements in Wheel-Hubs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a cross-section; Fig. 2, a longitudinal section; Fig. 3, a side view without the spokes; and Fig. 4, a side elevation, showing the inner side of ring E.

Similar letters of reference in the drawing indicate corresponding parts.

This invention relates to that class of wheels in which a wooden hub is employed, having around it two straps or rings that prevent it from splitting, and at the same time support the spokes; and my improvement consists in a novel construction of said rings or bands to enable them to support the spokes and fastening-bolts more effectually than heretofore, and also in the employment of large and small spokes, alternating with each other around the hub.

In the drawing, A is the wooden center of the hub, properly bored out, of course, to receive the pipe-box. B C are alternate large and small spokes, arranged so as to be flush on the front of the wheel, and dodged or staggered on the reverse side, each spoke being constructed with a straight tenon, *x*, that enters the wood A, a properly-molded part, *x''*, between the hub and the felly, and a beveled or tapering portion, *x'*, in the iron rings between the portions *x x''*, as shown in Fig. 1.

D E are two metal rings encompassing the wooden center, for the purpose of supporting and giving additional bearing-surface to the spokes. One of these rings, D, is narrow, with a plane vertical inner face, the other being wide, and provided with tapering sockets or

mortises, large and small alternately, adapted to the shape of the part *x'* of the spokes. These several parts are applied as shown in Figs. 1 and 2, and the rings are fastened together by rivets or bolts *m m*, as shown in Fig. 3, said rivets being partly embedded in the metal *e* of the rings between the spokes, and partly in the side of the spoke, as shown in Figs. 1 and 4, for the purpose of supporting and strengthening the rivets, and at the same time locking the spokes to the hub.

The wheel constructed as above set forth is stronger, less liable to "dish," and more ornamental than those heretofore in use.

The spokes on the front or outer side of the wheel being flush with each other make a very handsome wheel, while on the rear side, being dodged or staggered, they prevent it from dishing when the tires are put on. The bolts prevent the spokes from working longitudinally, and yet do not weaken them laterally. The smaller spokes require smaller mortises in the hub and smaller sockets in the metal rings, having a solid portion of the metal *i* and a solid portion of wood under the point *i*, to strengthen the hub between the large spokes.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

The combination of the large and small spokes B C, alternating with each other and flush on the front side, with the two rings D E, each constructed and applied as shown, and the bolts *m m*, embedded on one side in the metal *e*, and on the other in the beveled shoulder of the spokes, substantially as shown, and for the purposes set forth.

ROBERT W. McCLELLAND.

Witnesses:

T. C. MATHER,
G. B. BRISCO.