

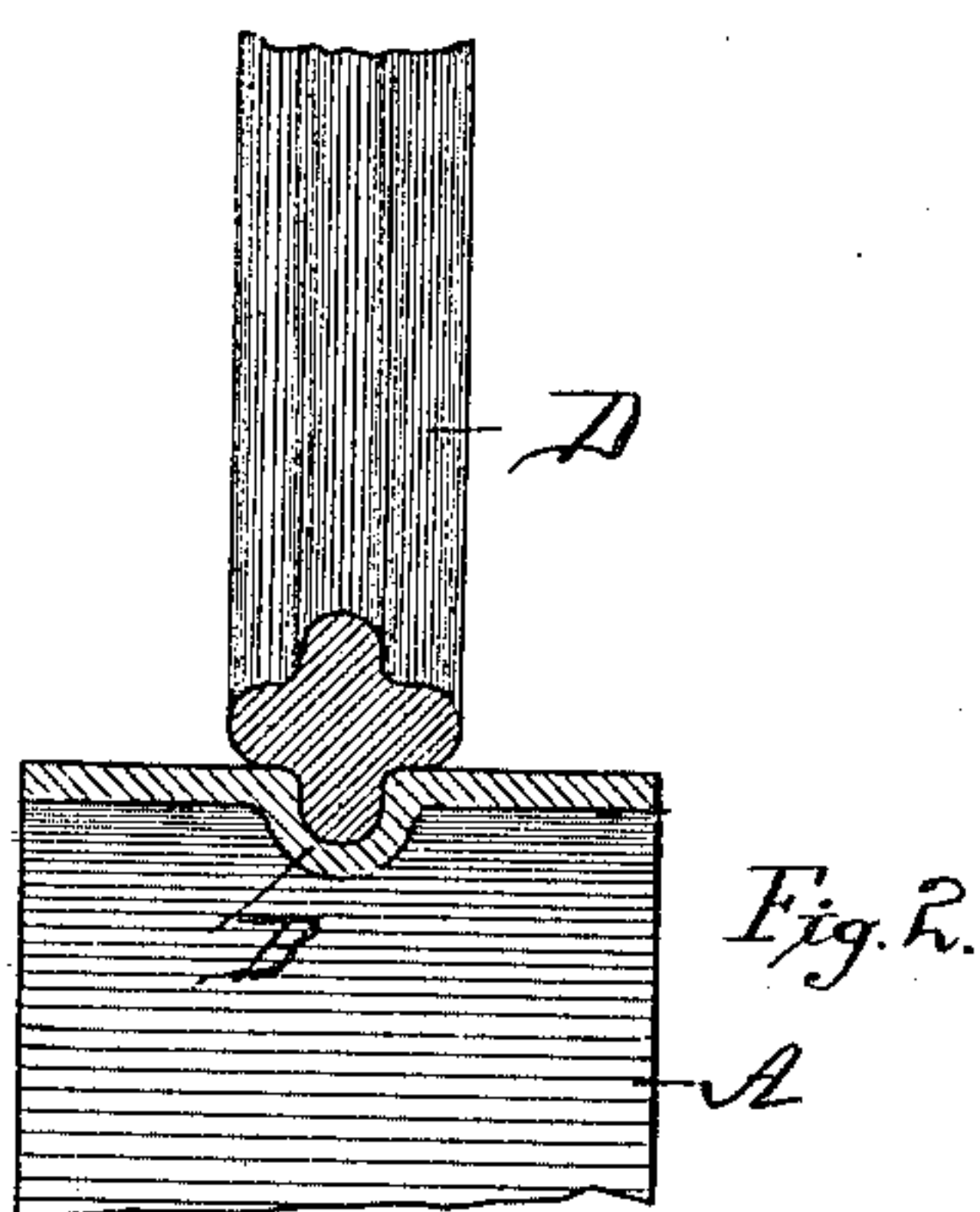
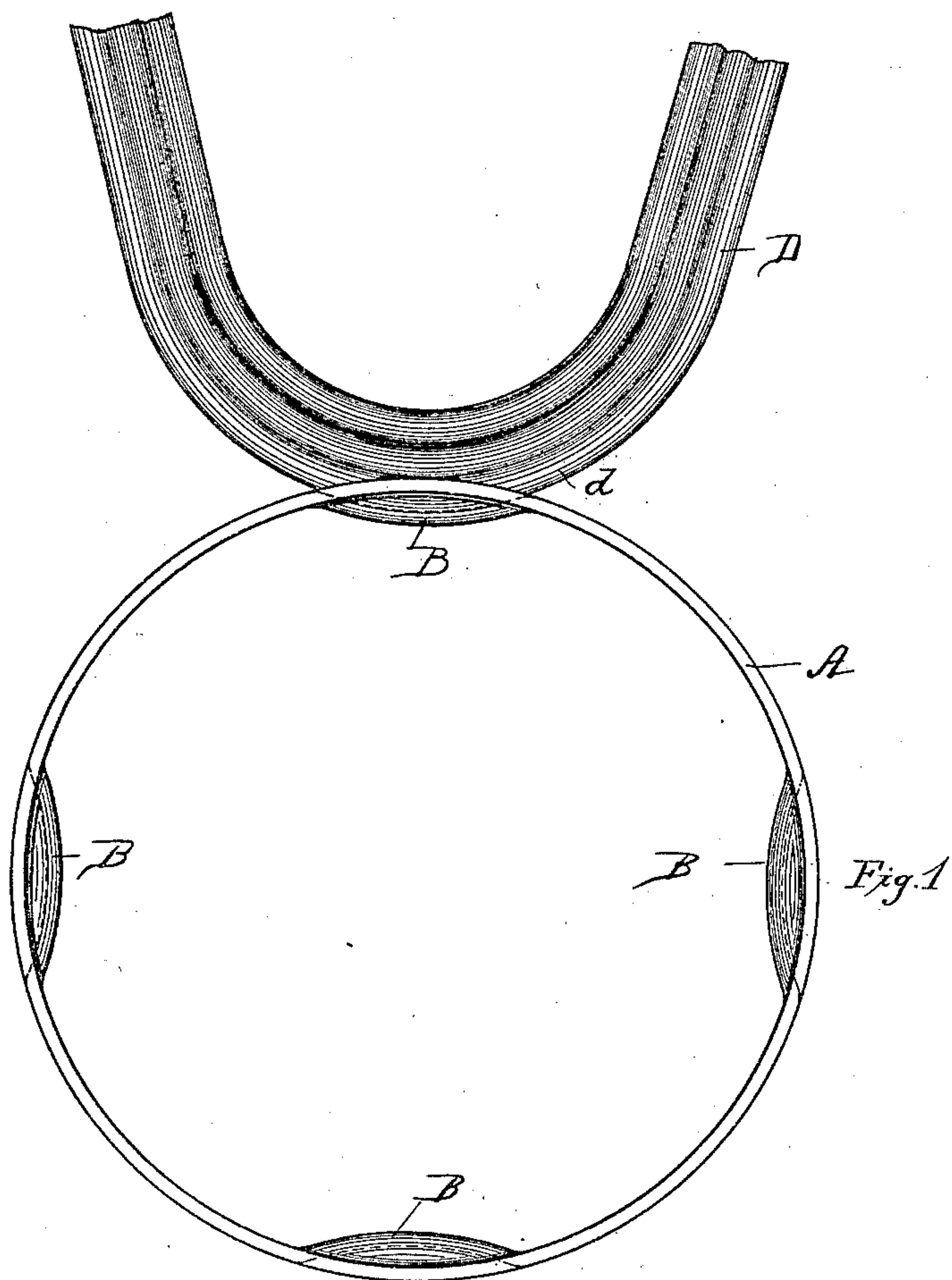
No. 697,950.

Patented Apr. 15, 1902.

W. H. SCHOFIELD.  
METAL WHEEL.

(Application filed July 22, 1901.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. SCHOFIELD, OF CHICAGO, ILLINOIS.

## METAL WHEEL.

SPECIFICATION forming part of Letters Patent No. 697,950, dated April 15, 1902.

Application filed July 22, 1901. Serial No. 69,327. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. SCHOFIELD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metal Wheels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in metal wheels, and embodies new and useful improvements in an element of the invention shown in Letters Patent of the United States No. 659,861, issued to me on the 6th day of October, 1900. In said patent is described a ring or collar which is arranged within the hub and formed with an annular groove in which the spokes have their bearing. It has been found in practice that an annular groove is not essential for the purpose of giving a bearing for the spokes and that a better bearing and a stronger ring are secured by making depressions in the ring at points requisite to receive the bent portions of the spoke. I have therefore designed the ring shown in the accompanying drawings, which form a part of this application, and in which—

Figure 1 shows my improved bearing-ring in elevation with a spoke applied thereto, and Fig. 2 is a cross-section taken through one of the depressed spoke-seats in the ring.

Referring to the drawings in detail, A represents a thin steel ring which forms an element of the metal-hub construction shown in the patent above referred to. At four equidistant points the ring has depressed or countersunk portions B, each occupying in length about one-sixteenth of the circumference of the ring and having a maximum depth at its center of approximately one-fourth of its length. These depressions gradually de-

crease in depth from the center toward their ends, thus conforming to the contour of the bend *d* in the spoke D and furnishing a bearing for the latter, which prevents longitudinal as well as lateral movement or displacement.

By substituting the depressions for the annular groove in the bearing-ring I not only provide better seats for the spokes, but secure a less compressible ring, permitting the employment of thinner material in its manufacture.

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

1. In a wheel, a metal hub-ring of the resilient character described, having a series of depressions in its face adapted to form individual seats or bearings for spokes, the portions between said depressions being plane or unbroken.

2. In a wheel, a metal hub-ring of the resilient character described, having inwardly curved depressions in its face said depressions adapted to fit the bent portion of U-shape spokes.

3. In a wheel, a metal hub-ring of the compressible or resilient character described, having a series of curved depressions in its face; said depressions being of maximum depth at their centers and gradually diminishing toward each end, for the purpose described.

4. In a wheel, a resilient metal hub-ring having curved spoke-seats formed therein by stamping inwardly portions of the ring substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. SCHOFIELD.

Witnesses:

O. K. TREGO,  
FREDERICK BENJAMIN.