

(No Model.)

J. RAPP.

HUB CAP.

No. 353,709.

Patented Dec. 7, 1886.

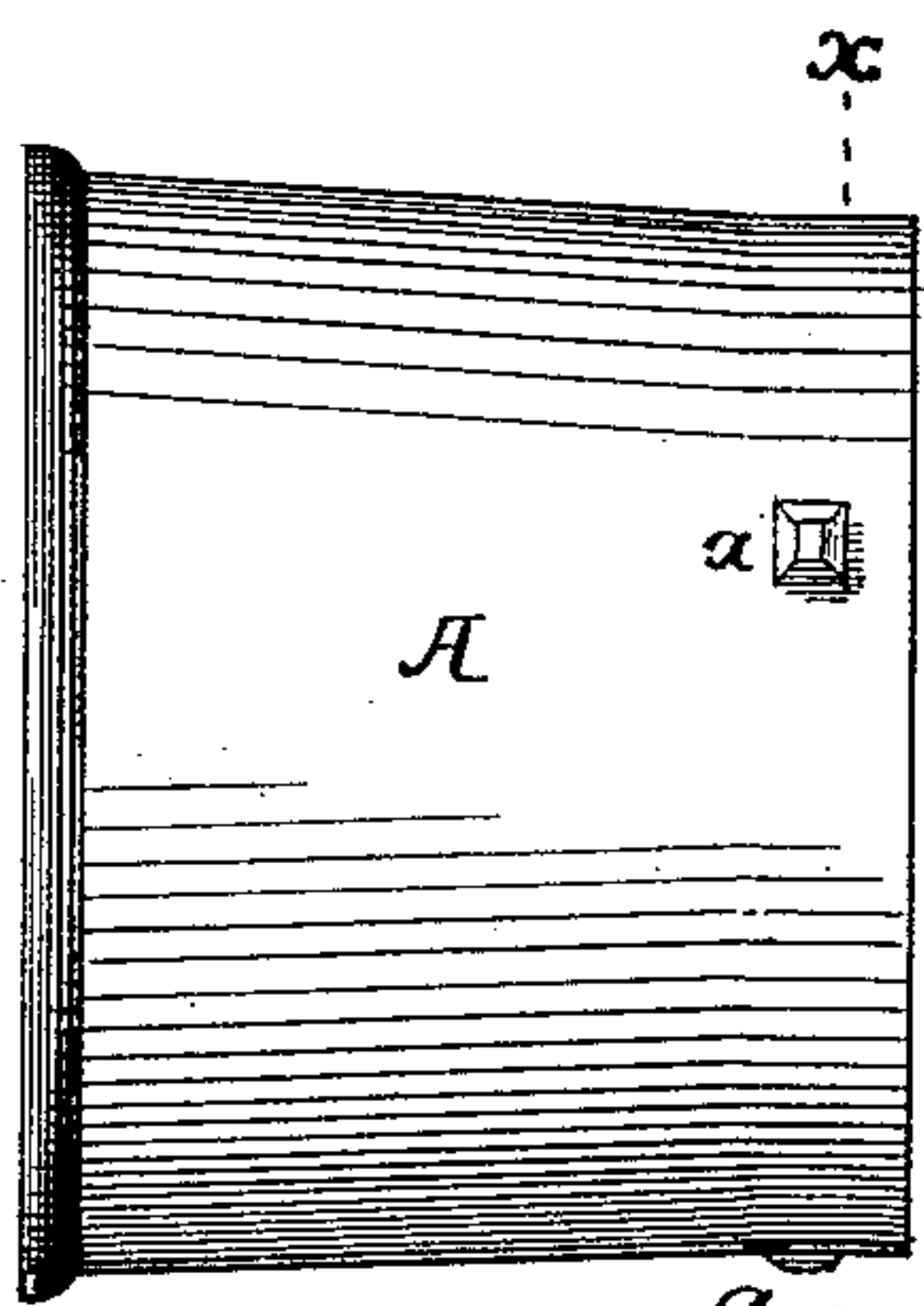


Fig. 1. x

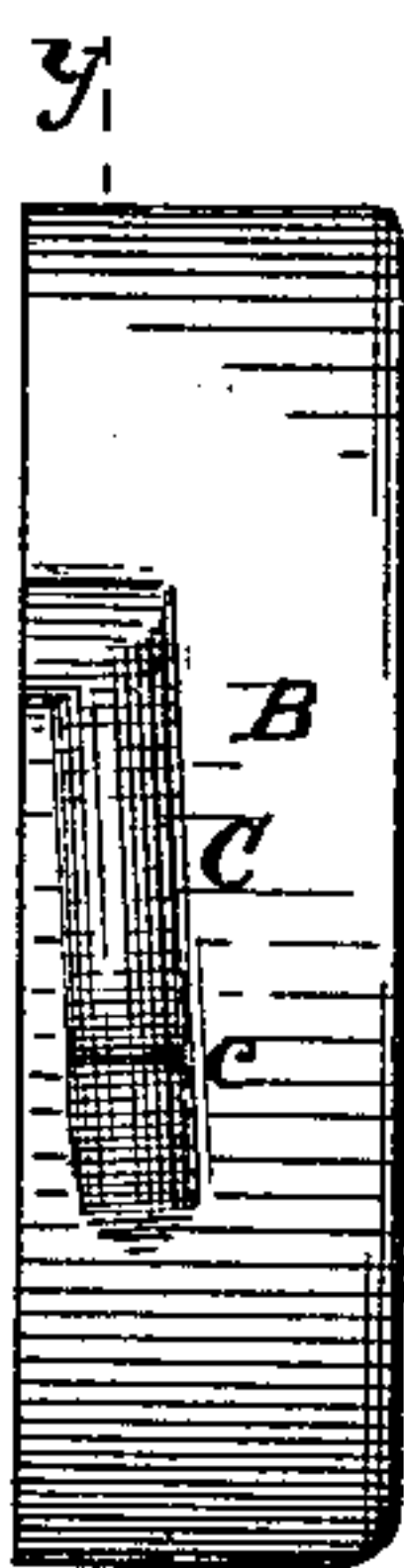


Fig. 2. y

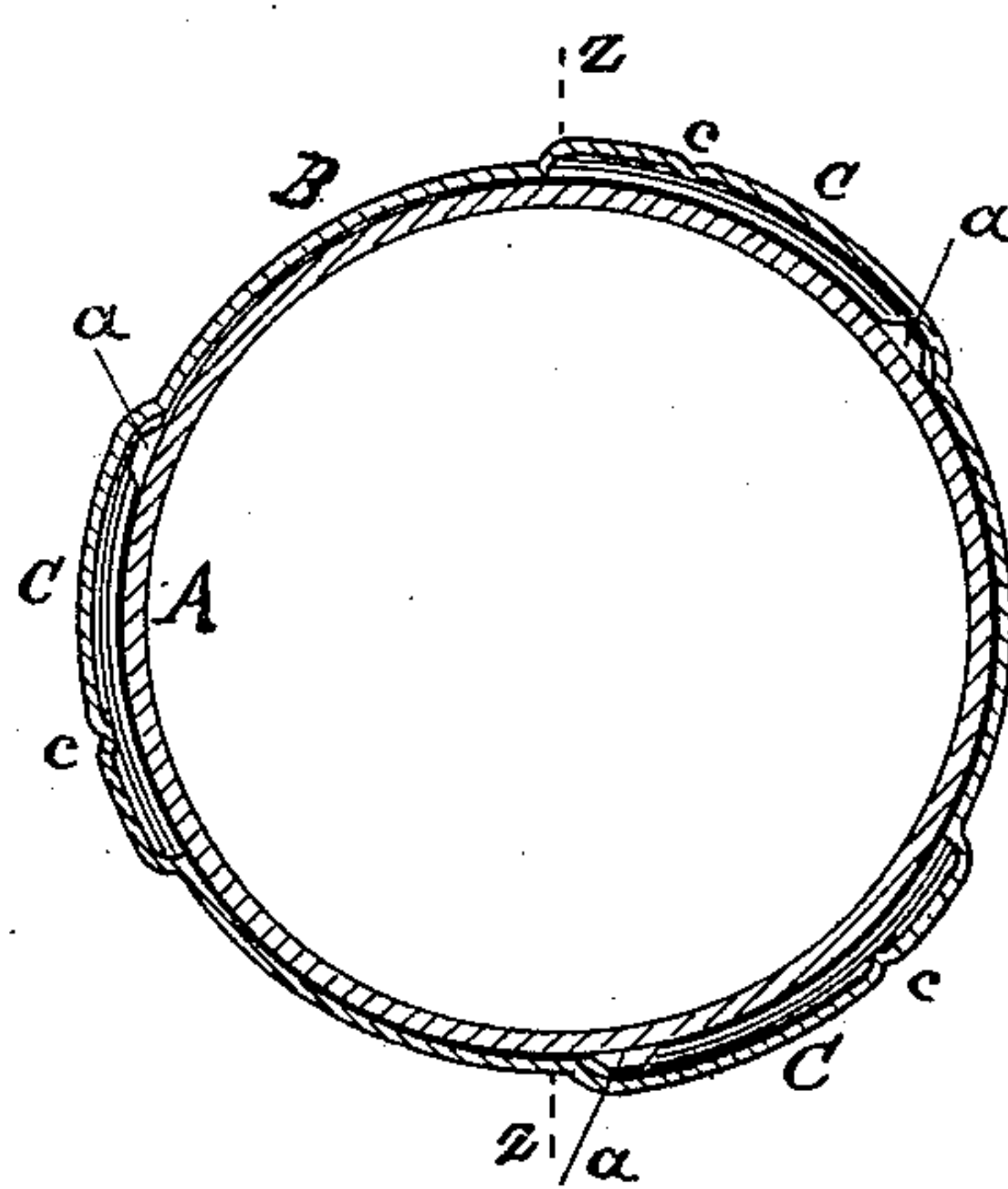


Fig. 3. z/a

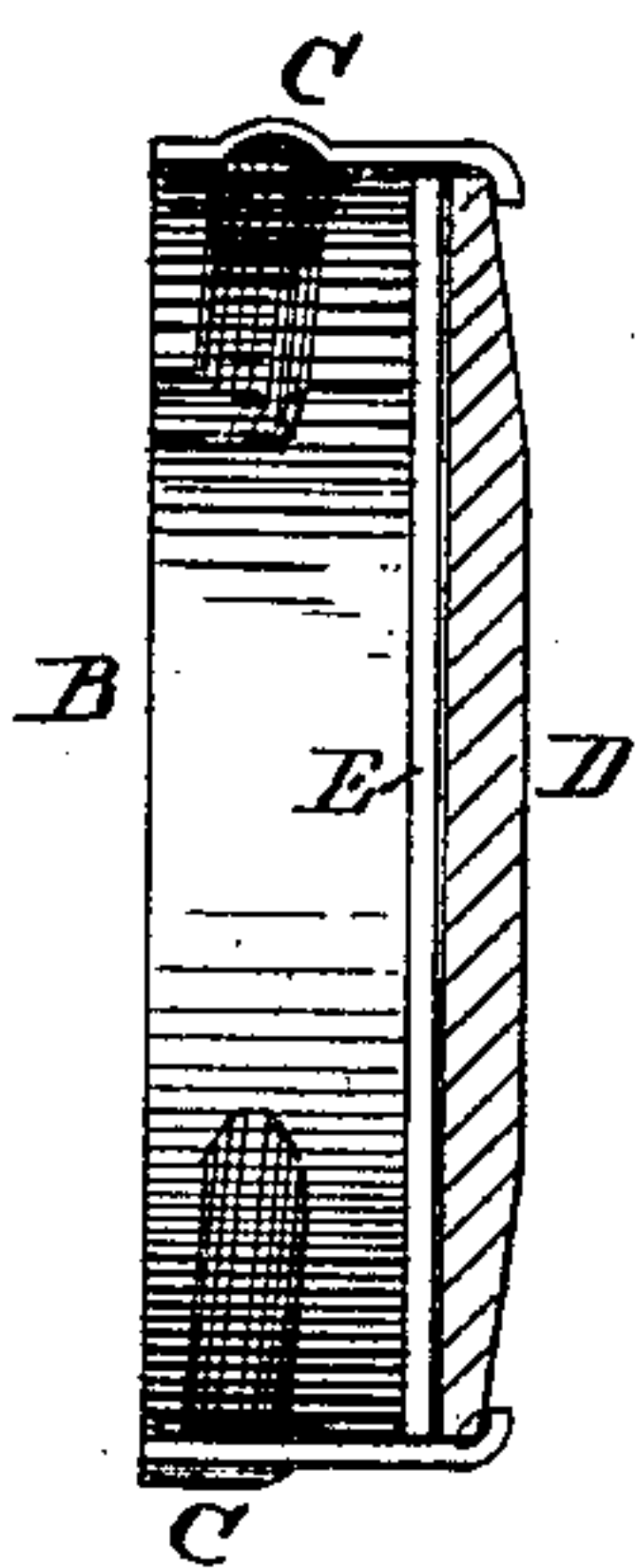


Fig. 4.

Witnesses:

E. W. Stuart

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Inventor:

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his Atty.

UNITED STATES PATENT OFFICE.

JOSEPH RAPP, OF AKRON, OHIO.

HUB-CAP.

SPECIFICATION forming part of Letters Patent No. 353,709, dated December 7, 1886.

Application filed September 13, 1886. Serial No. 213,398. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH RAPP, a citizen of Eissenharin, in Alsace, who has declared his intention of becoming a citizen of the
5 United States, and who is now a resident of the city of Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Hub-Caps, of which the following is a specification.

10 My invention has relation to improvements in that class of hub-caps which fit upon the outer hub-band, close the same against the entrance of dust and the escape of grease, and are retained by a series of studs upon one part
15 entering grooves in the other. Heretofore these grooves have been annular in the part where located, and the cap has been retained by friction only. This construction is objectionable, because the cap is not thereby drawn
20 firmly against the hub-band, and also because there is no provision made for preventing the cap becoming loose by jarring.

The objects of my invention are to overcome these objections by a construction which shall
25 draw the cap closely against the end of the hub-band and prevent its becoming loose by jarring.

30 My invention consists in the devices illustrated in the accompanying drawings, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a hub-band, and Fig. 2 a similar view of a hub-cap, said parts embodying one form of my invention; Fig. 3, a section of Figs. 1 and 2 at the lines *x x* and *y y*,
35 respectively; and Fig. 4, a section of the cap at the line *z z* of Fig. 3.

40 The band A, adapted to fit on the outer end of the hub, and be retained by any suitable device, has near its outer end a number of ex-

ternal studs, *a*. The cap B, which loosely fits the end of the band A, has a like number of internal spiral grooves, C, one end of each of which opens toward the band A, and registers with and receives one of the studs *a*. Near
45 the inner end of and across the inside of each of said grooves is a narrow ledge or rib, *c*, arranged to encounter and arrest the passage of one of the studs *a* until, the cap being forced forward, its elasticity permits them to pass, and
50 when so passed requires like force for their return. The outer end of the cap B is closed by a glass disk, D, and an elastic lining, E.

In operation the cap B is placed on the band A, the studs *a* entering the grooves C, and is
55 then revolved enough to compress the lining E against the end of the band A, and carry the studs *a* over the ribs *c*, which retain them.

It is obvious that the cap B may enter instead of envelop the band A, and that the
60 studs and grooves may be placed in either the band or cap, as circumstances may require, without departing from my invention, which is, and which I claim—

The combination, with a hub band and cap, 65 one of which fits upon the other, of a number of studs upon one of said parts, and a corresponding number of spiral grooves in the other, which register with and receive said studs, each being provided with a cross-rib, 70 which arrests the return of said studs, substantially as shown, and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of August, A. D. 1886.

JOSEPH RAPP.

Witnesses:

WILLIAM SCHWARZ,
C. P. HUMPHREY.