No. 775,979. PATENTED NOV. 29, 1904.

M. LACHMAN.

HUB FOR WHEELS.

APPLICATION FILED APR. 2, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

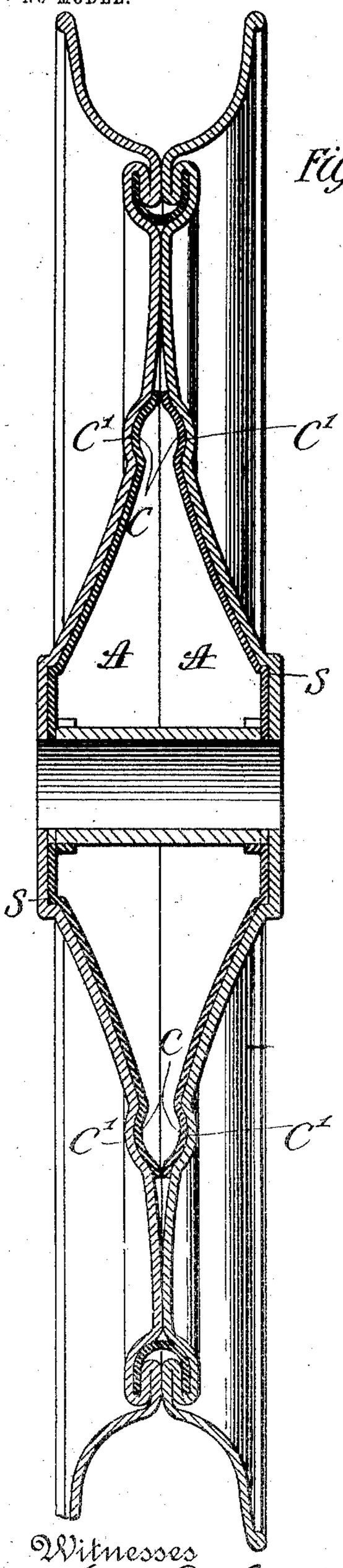


Fig. 2.

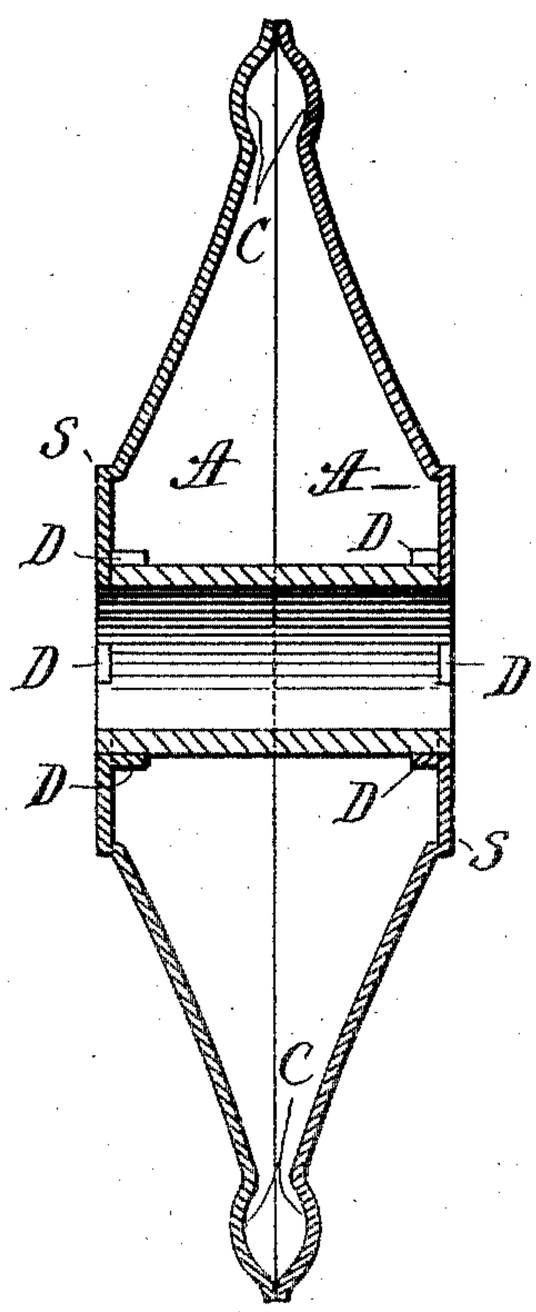
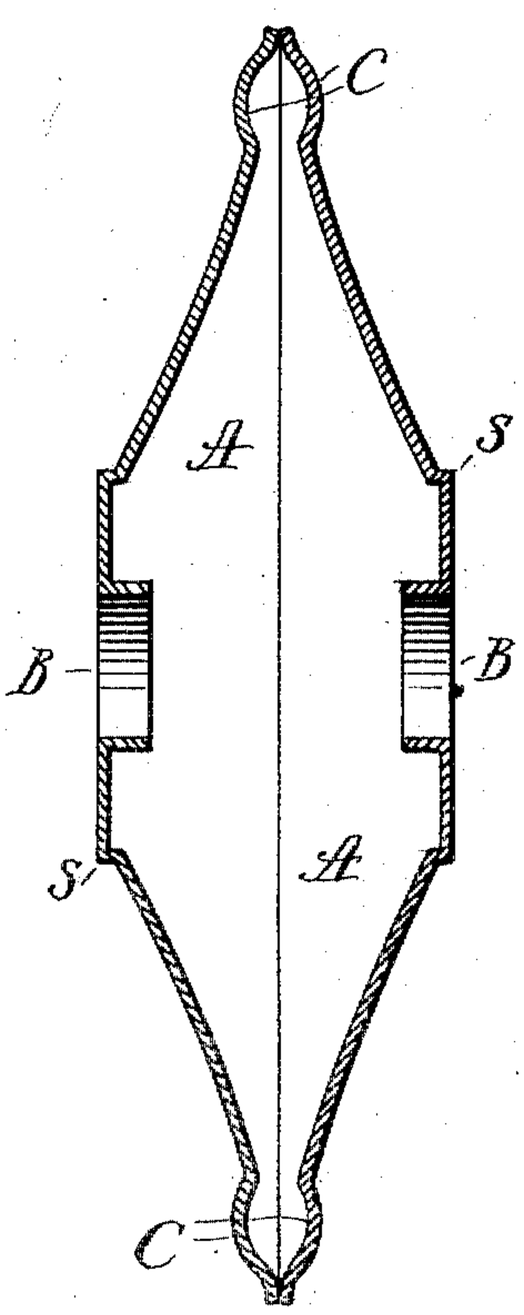


Fig. 7.



Witnesses
Henry Rowland.
Thomas Dine

Maurice Lachman
Inventor
By his Attorneys Bird & Taylor

No. 775,979. PATENTED NOV. 29, 1904.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

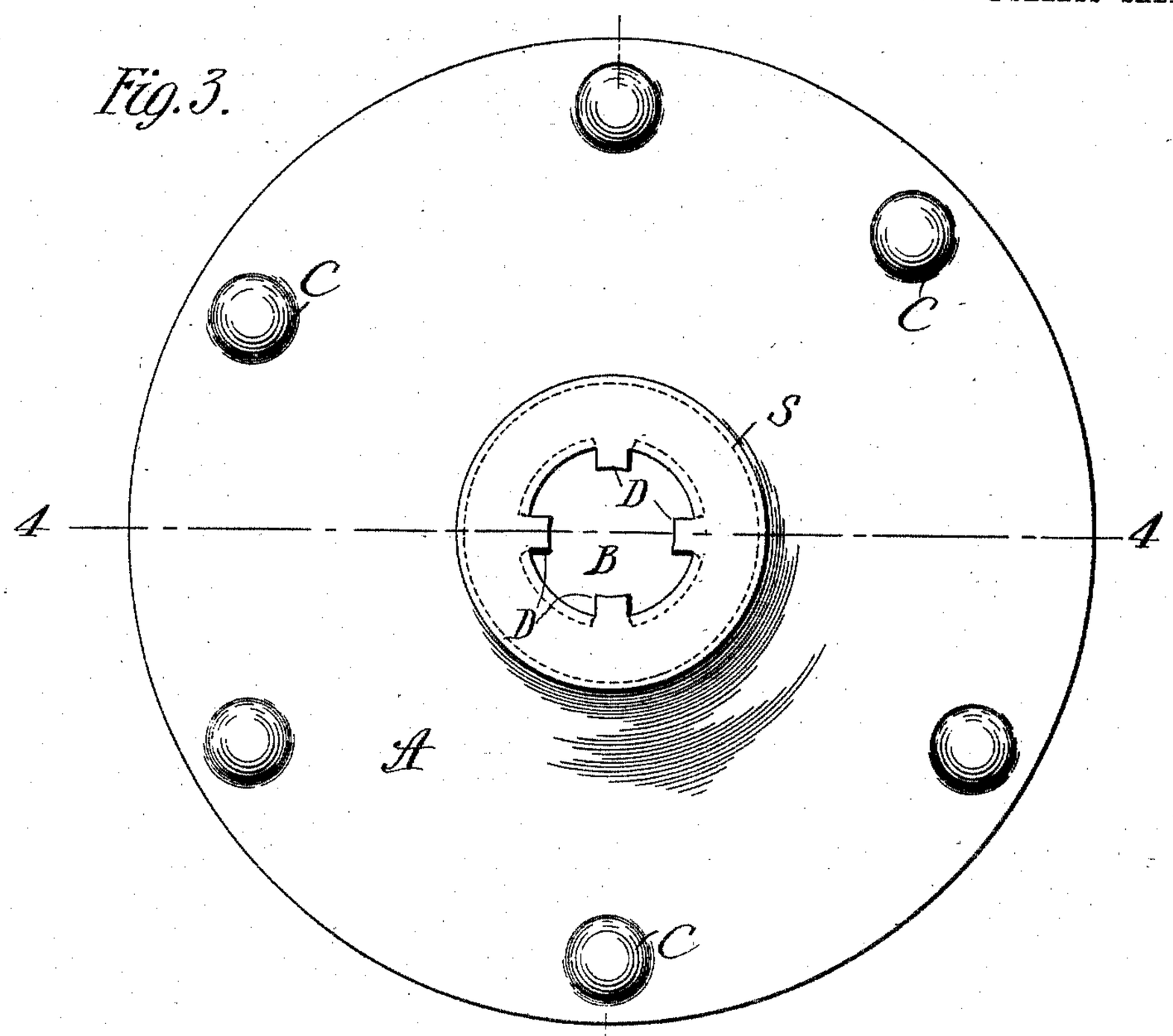


Fig. 4

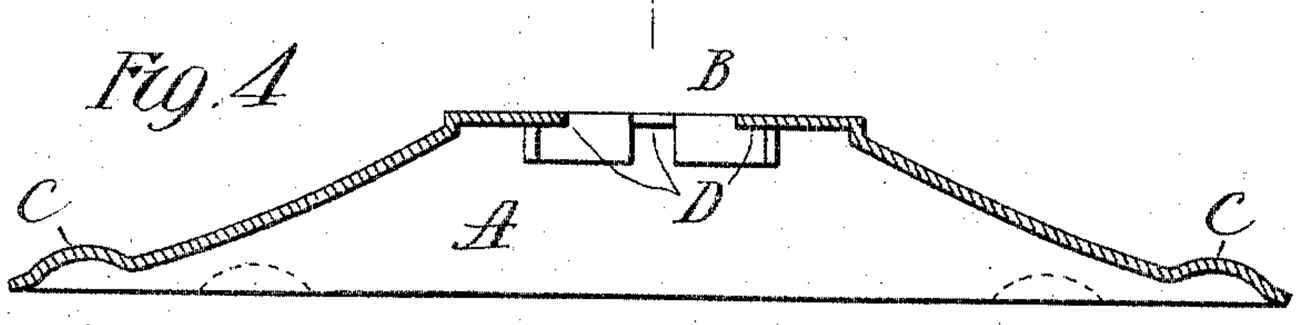


Fig. 5.

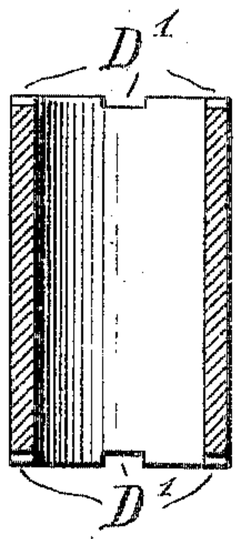
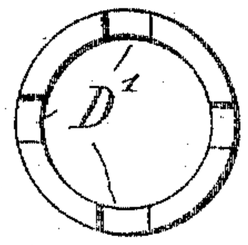


Fig. 6.



Witnesses
Henry Rowland
Warren Bird

Maurice Lachman
Inventor
By his Attorneys Bird & Harvey

No. 775,979. Patented November 29, 1904.

UNITED STATES PATENT OFFICE.

MAURICE LACHMAN, OF LONDON, ENGLAND, ASSIGNOR TO PRESSED METAL MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

HUB FOR WHEELS.

SPECIFICATION forming part of Letters Patent No. 775,979, dated November 29, 1904.

Application filed April 2, 1904. Serial No. 201,253. (No model.)

To all whom it may concern:

Be it known that I, MAURICE LACHMAN, a citizen of the United States, and a resident of London, England, have invented certain new and useful Improvements in Hubs for Wheels, of which the following is a specification.

This invention relates to wheels, and particularly those made from sheet metal; and its objects are to provide a hub which can be readily and rigidly secured to the wheel so that it will not turn or loosen, which will materially increase the strength of the wheel, and which will attain these ends without unduly increasing the weight or cost; and to accomplish these objects it consists in the construction and arrangement of the component parts, substantially as hereinafter more fully described and claimed, and shown on the drawings accompanying this specification, in which—

Figure 1 is a sectional view of a complete wheel. Fig. 2 is a sectional view of hub part detached. Fig. 3 is an elevation of one of disks with bushing removed. Fig. 4 is a section on line 4 4 of Fig. 3. Fig. 5 and Fig. 6 are details of bushing. Fig. 7 is a sectional view illustrating an alternative construction.

Referring to the drawings, in which similar letters refer to similar parts throughout the several views, A represents a hub plate or disk, two of which taken together form the hub. This disk is preferably constructed from sheet metal, though it is obvious that it may be cast or molded. It is in form a frustum of a hollow cone, having at its top a centrally-located circular opening B for a bush or axle and annular shoulder S, and provided about the periphery of its base with bosses C C, which acting as lugs snugly engage pockets C′ C′ of similar shape in the web of the wheel. Inwardly-projecting lugs D D are provided about the peripheries of the circular opening B by cutting the metal and bending in the portions thereof between the parts which form the lugs D D. Figs. 5 and 6 show a bushing provided with slots D′ D′, which are engaged by the inwardly-projecting lugs D D, which fit snugly therein, so that said bushing is rigid in the hub. In the completed wheel the peripheries of the disks A A abut each other and are held in close and constant abutment by the pressure of the two side plates, as is clearly shown in Fig. 1, thus securing the lugs C C in position in the pockets C′ C′, so that the hub is prevented from turning in the wheel and at the same time forming a strong reinforcing arch. In the construction of wheels where a heavy bushing is not required the metal about the opening B may be bent in to form bearings, as shown in Fig. 7, and the separate bushing above described may be omitted.

One of the most important features of my invention is the form of construction by which I obtain such substantial reinforcement to the wheel as well as a greatly-improved hub therefor, gaining the additional strength where needed without sacrifice to cost, weight, or complexity of construction.

Obviously the hub-plates may be square or polygonal, and other features may be varied without materially departing from my invention; but,

Without naming all such modifications or equivalents, what I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a wheel of the class described two plates having conoidal-shaped formations with central openings therein, said plates having means for engaging the side plates of the wheel for the purposes specified.

2. In a wheel of the class described, two conoidal-shaped disks having central openings therein, and means for engaging the side plates of the wheel, said disks being adapted to abut each other about their peripheries, for the purposes specified.

3. A hub for wheels, comprising two conoidal-shaped disks having central openings and a plurality of lugs between said openings and the peripheries of said disks for engaging the side plates of the wheel, said disks being adapted to abut each other, substantially as described.

4. A hub for wheels comprising two conoidal-shaped disks having central openings therein, a plurality of lugs for engaging the side plates of the wheel and a plurality of lugs

about the peripheries of said central openings, substantially as described.

5. A hub for wheels comprising two conoidal-shaped disks having central openings supplied with inwardly-projecting lugs, an annular shoulder, and a plurality of bosses near their peripheries; said disks being adapted to be held in constant abutment by the side plates of the wheel, substantially as described.

6. In a wheel of the class described, the combination with the side plates thereof, of two hub-plates having conoidal-shaped formations with central openings therein, and a bushing; said hub-plates having means by which they are rigidly secured to said side plates and means by which said bushing is secured in said openings, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MAURICE LACHMAN.

Witnesses:

E. PIERREPONT ROWLAND,

HENRY ROWLAND.