G. H. DU BOIS.

WHEEL HUB.

APPLICATION FILED MAY 9, 1908.

931,283. Patented Aug. 17, 1909.

Fig. 1.

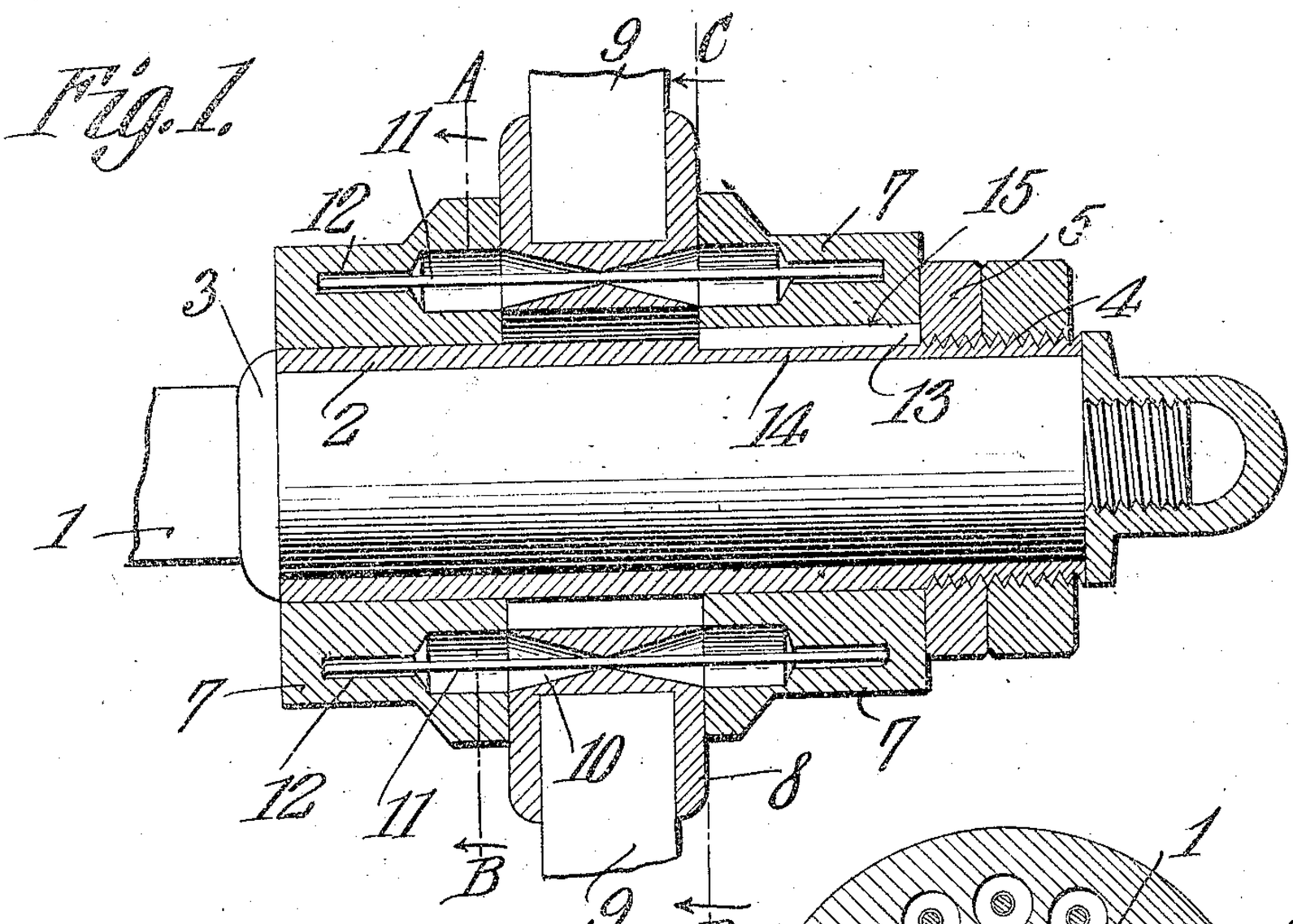


Fig. 3.

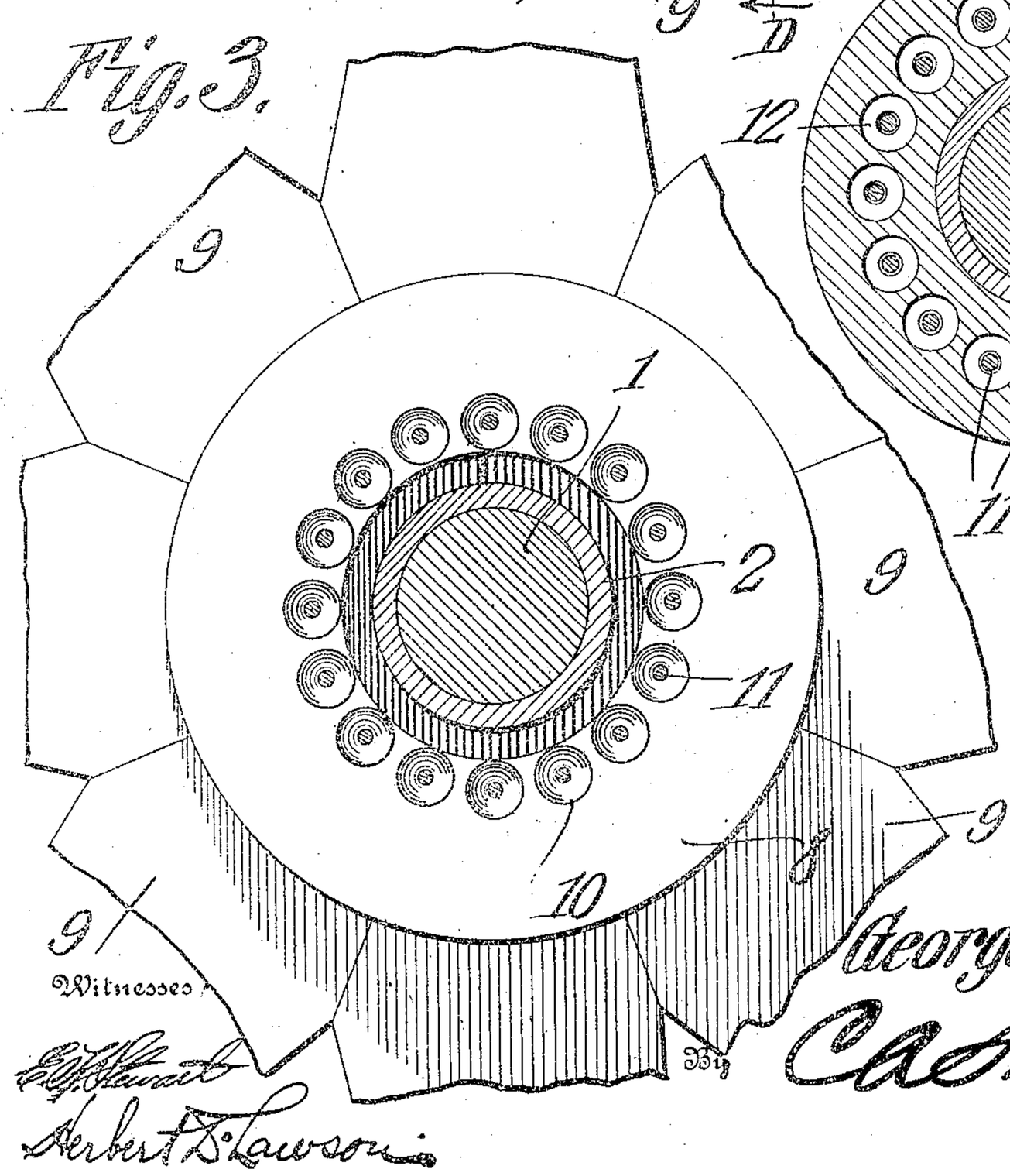
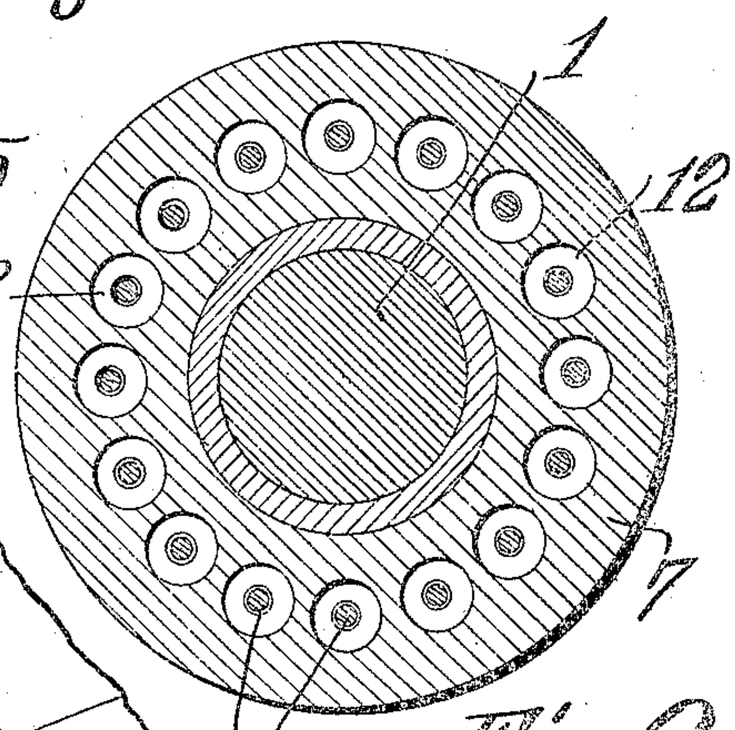


Fig. 2.



Witnesses:

E. F. Hamilt

Herbert P. Lawson

Inventor

George H. DuBois.

By Cachow & Co

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE HENRY DU BOIS, OF SAN MARTIN, CALIFORNIA.

WHEEL-HUB.

No. 931,283. Specification of Letters Patent. Patented Aug. 17, 1909.

Application filed May 9, 1908. Serial No. 431,924.

To all whom it may concern:

Be it known that I, GEORGE HENRY DU BOIS, a citizen of the United States, residing at San Martin, in the county of Santa Clara and State of California, have invented a new and useful Wheel-Hub, of which the following is a specification.

This invention relates to wheel hubs and its object is to provide a device of this character having a novel arrangement of springs whereby the spokes of the wheel may be cushioned so as to take up any jolting which may occur without the necessity of utilizing pneumatic tires or other similar cushioning means.

Another object is to provide cushioning devices which are entirely concealed within the hub and are therefore protected from dirt and moisture so that their operation will not be impaired.

With these and other objects in view, the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings—Figure 1 is a longitudinal section through a hub embodying the present improvements. Fig. 2 is a section on line A—B, Fig. 1. Fig. 3 is a section on line C—D, Fig. 1.

Referring to the figures by characters of reference, 1 designates an axle having a box 2 fitted thereon and preferably abutting against a flange 3 upon the axle. The opposite end of the box may be screw-threaded, as shown at 4, so as to be engaged by a retaining nut 5. Oppositely disposed substantially cylindrical hub members 7 are arranged upon the box 2, one of the members being fixed relative to the box, while the other member is preferably shiftable relative thereto. Two of these members are provided and interposed between them is a flanged ring 8 from which the spokes 9 radiate. Extending through this ring close to its inner edge are openings 10 which are preferably enlarged toward their outer ends, and within each of these openings is located a spring rod 11, the ends of which are seated in sockets 12 formed in the inner faces of the members 7. The nut 5 serves to hold the members 7 in proper position close to the ring 8. One of the members 7 is preferably immovably connected to the box 2 by shrinking it thereon or by providing suitable fastening means, not shown. The other member, however, is preferably removably mounted upon the box but is held against rotation relatively thereto by means of a key 13 seated in registering grooves 14 and 15 in the box and the member 7, respectively.

It will be obvious that when any one of the spokes is subjected to longitudinal pressure, as when supporting a load, the ring 8 will be shifted between the members 7 and the springs 11 will be placed under stress and therefore cushion the spokes. It will be seen that all portions of the cushion are closed by the members 7 and it is practically impossible for dirt or moisture to interfere with the operation thereof. Even should any dust get into the members 7 there is sufficient space therein to permit the free operation of the parts. The cushion is designed for use in connection with wheels for various purposes, and will be found to be neat, durable, and efficient.

What is claimed is:—

A wheel hub comprising a box, oppositely disposed solid, substantially cylindrical hub members upon the box, one of said members being adjustable relative to the other member and both members having series of sockets in their inner or adjoining faces, a spoke-carrying ring interposed between and movable relative to the hub members, said members constituting means for preventing lateral tilting of the ring, and a series of elongated resilient members seated at their ends within the sockets of the hub members and disposed at their middle portions within the ring, said ring having a series of apertures therethrough for the reception of the resilient devices, each aperture being tapered from its end toward the center thereof.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE HENRY DU BOIS.

Witnesses:

H. T. HERSMAN,

R. L. COOK.