

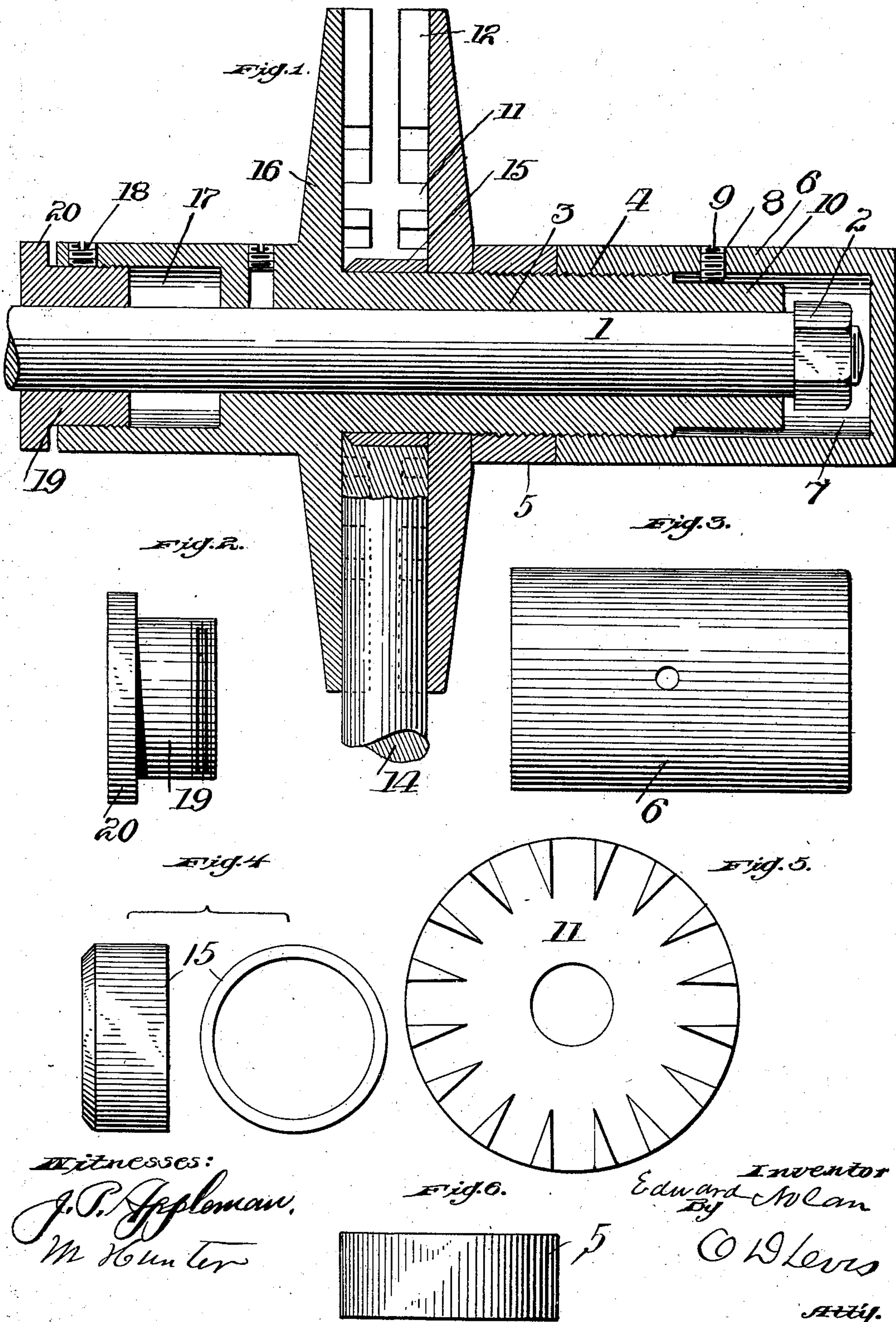
No. 710,002.

Patented Sept. 30, 1902.

E. NOLAN.
WHEEL HUB.

(Application filed Oct. 21, 1901.)

(No Model.)



Witnesses:
J. P. Appleman,
M. Hunter

Inventor
Edward Nolan
By
C. H. Lewis
att'y.

UNITED STATES PATENT OFFICE.

EDWARD NOLAN, OF WOLF SUMMIT, WEST VIRGINIA.

WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 710,002, dated September 30, 1902.

Application filed October 21, 1901. Serial No. 79,429. (No model.)

To all whom it may concern:

Be it known that I, EDWARD NOLAN, a citizen of the United States of America, residing at Wolf Summit, in the county of Harrison and State of West Virginia, have invented certain new and useful Improvements in Wheel-Hubs, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention has for its object the provision of novel means whereby the spokes may be easily replaced without the necessity of removing the tire; furthermore, to provide novel means whereby loose spokes may be easily tightened.

The invention further aims to provide a wheel of the above-described character that will be extremely simple, strong, durable, comparatively inexpensive to manufacture, and one that will prevent the lateral movement of the wheel on the spindle, thereby reducing the lateral strain of a heavily-loaded vehicle upon the wheel.

The present invention still further aims to provide a dust-proof and waterproof lubricating-bearing wherein the use of the lubricant will be greatly economized.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a longitudinal vertical sectional view of my improved wheel-hub. Fig. 2 is a side elevation of the collar which serves to close the end of the lubricating-chamber. Fig. 3 is a side elevation of the interiorly-screw-threaded cap forming the lubricant-chamber. Fig. 4 is a side and end view of the wedge-shaped sleeve for the purpose of forcing the spokes outwardly. Fig. 5 is a side elevation of the movable flange for securing the spokes. Fig. 6 is a side elevation of the screw-threaded sleeve.

In the drawings the reference-numeral 1 represents the spindle carrying the nut 2, said spindle passing through the hub 3, which

is exteriorly screw-threaded, as at 4, to receive the screw-threaded collar 5 and the interiorly-screw-threaded cap 6, forming the chamber 7. The said cap 6 has formed therein a screw-threaded opening 8 to receive the screw-threaded plug 9, which extends through the reduced portion 10 of the hub-casing. A securing-flange 11 is sleeved upon the hub-casing and has formed on its inner engaging face openings 12, in which the spokes 14 are secured. These spokes rest upon the wedge-shaped sleeve 15, which is also sleeved upon the hub.

The reference-numeral 16 represents an integral flange to receive the spokes, and this flange is also formed integral with the hub, the hub portion extending inwardly, forming the lubricant-receptacle 17, and has secured therein a screw-threaded plug 18. An exteriorly-screw-threaded cap 19, carrying an annular flange 20, serves to close the lubricant-receptacle.

The operation and adjustment of my improved wheel-hub, as well as the many advantages obtained by the use of the same, will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

The hub comprising the exteriorly-threaded portion 3, the integral spoke-flange 16 having openings in its inner face, and the hollow extension 17, in combination with the spoke-flange 11 sleeved on the hub and provided on its inner face with openings, a collar sleeved on the hub between the spoke-flanges and receiving the ends of the wheel-spokes, a cap threaded on the outer end of the hub, and means for securing the cap to the hub, substantially as described.

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

EDWARD NOLAN.

Witnesses:

J. K. ELDER,
THEO. T. LANSBURY.