R. L. HAYTON.

HUB.

APPLICATION FILED MAR. 15, 1915.

1,166,985. Patented Jan. 4, 1916.

Fig. 1

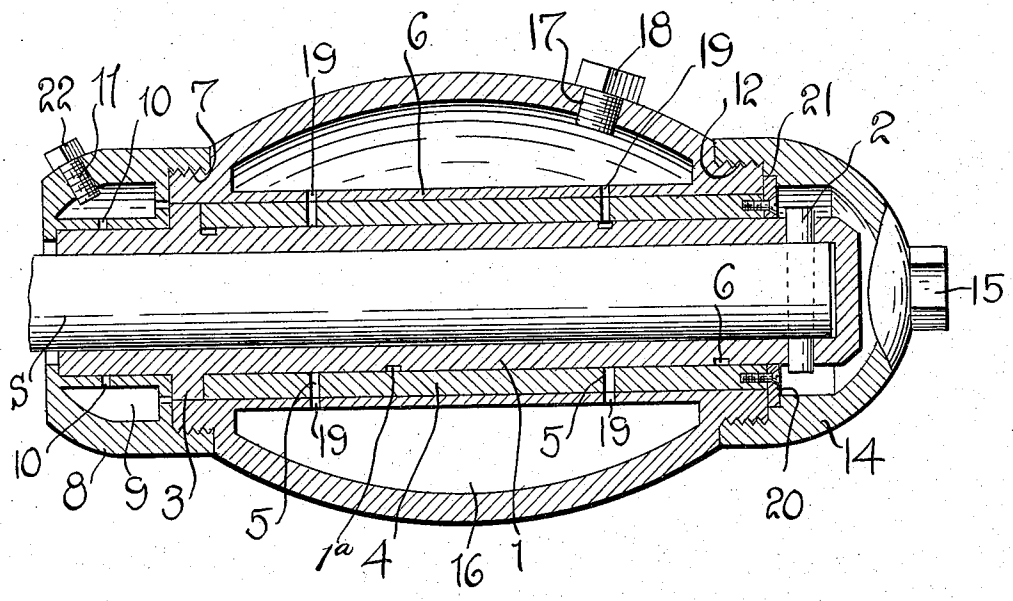
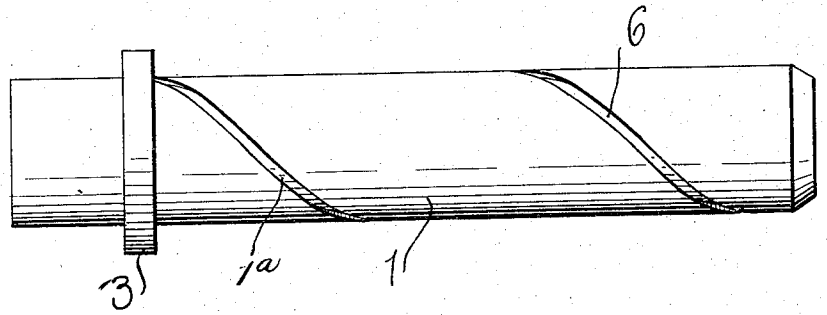


Fig. 2



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HUB.

1,166,985. Specification of Letters Patent. Patented Jan. 4, 1916.

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To all whom it may concern:

Be it known that I, ROSCOE L. HAYTON, a citizen of the United States, residing at Milton, in the county of Umatilla and State of Oregon, have invented certain new and useful Improvements in Hubs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in hubs and it is an object of the invention to provide a device of this general character having novel and improved means whereby the same when in applied position may be effectively lubricated in order to facilitate the rotation thereof.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved hub whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

The novel features of the invention will be carefully defined in the appended claims.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein—

Figure 1 is a longitudinal sectional view taken through a hub constructed in accordance with an embodiment of my invention, the coacting spindle and a portion of the outer cap being shown in elevation; and Fig. 2 is an elevational view of the sleeve as herein included.

As disclosed in the accompanying drawings S denotes a spindle of an axle on which is mounted the sleeve 1, said sleeve being fixed to the spindle S through the medium of the key 2 disposed transversely through the sleeve and spindle adjacent the outer extremities thereof.

The inner end portion of the sleeve 1 at a predetermined point removed from its inner extremity is provided with the annular flange 3 against which is adapted to abut the adjacent extremity of the cylindrical boxing 4 having produced therethrough the opening 5 adapted to register with the spiral groove 1^a produced in the periphery of the sleeve 1 whereby the lubricant delivered through said openings 5 may be properly spread.

Surrounding the boxing 4 is the hub shell 6 having its inner extremity provided with the annular exteriorly threaded portion 7 adapted to be detachably engaged by the inner cap 8 provided with the interior annular chamber 9 concentric to the axis of said cap and adapted to contain a suitable lubricant to be delivered upon the inner extremity of the sleeve 1 through the ports 10. It is preferred that the chamber 9 be filled with suitable waste to be saturated by a lubricant delivered therein through the opening 11 produced in said cap and normally closed by the removable plug 22.

The forward extremity of the hub shell is also provided with an annular exteriorly threaded portion 12 adapted to be engaged by the outer cap 14 for incasing the outer end portion of the hub structure, said shell at its axial center being provided with an outwardly directed polygonal extension or lug 15 to be engaged by suitable implement whereby said cap 14 may be readily applied or removed from operative position.

The intermediate portion of the hub shell 6 is provided with the interior annular chamber 16 adapted to receive a suitable lubricant insertible therein through the opening 17 normally closed by the detachable plug 18 and the inner wall of said compartment is provided with ports 19 adapted to register with the ports or openings 5 of the sleeve 2 so that the lubricant within the chamber 16 may be properly delivered upon the periphery of the sleeve 1. I also find it of advantage to have secured to the forward extremity of the boxing 4 the annular member 20 projecting beyond the periphery of said boxing 4 and adapted to overlie the adjacent or outer extremity of the hub shell 6 whereby said boxing is maintained against longitudinal movement independently of the hub shell. It is also to be observed that the outer cap 14 is provided with an annular recess 21 to permit the proper coaction between the annular member 20 of the boxing 4 and the adjacent extremity of the hub shell 6.

From the foregoing description, it is thought to be obvious that a hub constructed in accordance with my invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled, and it will also be obvious that my

invention is susceptible of some change and modification without material departure from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice.

What is claimed is:

1. A hub structure of the character described comprising a sleeve adapted to be fixed to the spindle of an axle and provided adjacent one extremity with an annular flange, a boxing surrounding the sleeve and provided with ports, a hub shell surrounding the boxing, an inner cap detachably engageable with the adjacent extremity of the hub shell, an annular member carried by the outer extremity of the boxing and overlapping the adjacent extremity of the hub shell, said hub shell being provided with an annular chamber adapted to contain lubricant, said shell being provided with ports in communication with the ports of the boxing.

2. A hub structure of the character described comprising a sleeve adapted to be fixed to the spindle of an axle and provided adjacent one extremity with an annular flange, a boxing surrounding the sleeve and provided with ports, a hub shell surrounding the boxing, an inner cap detachably engageable with the adjacent extremity of the hub shell, an annular member carried by the outer extremity of the boxing and overlapping the adjacent extremity of the hub shell, said hub shell being provided with an annular chamber adapted to contain lubricant, said shell being provided with ports in communication with the ports of the boxing, and an outer cap engageable with the outer extremity of the hub shell and inclosing the outer end of the hub structure.

3. A hub structure of the character described comprising a sleeve adapted to be fixed to the spindle of an axle and provided adjacent one extremity with an annular flange, a boxing surrounding the sleeve and provided with ports, a hub shell surrounding the boxing, an inner cap detachably engageable with the adjacent extremity of the hub shell, an annular member carried by the outer extremity of the boxing and overlapping the adjacent extremity of the hub shell, said hub shell being provided with an annular chamber adapted to contain lubricant, said shell being provided with ports in communication with the ports of the boxing, the inner cap member being also provided with an annular chamber adapted to contain lubricant and having ports in communication with the adjacent periphery of the boxing.

4. A hub structure of the character described comprising a sleeve adapted to be fixed to the spindle of an axle and provided adjacent one extremity with an annular flange, a boxing surrounding the sleeve and provided with ports, a hub shell surrounding the boxing, an inner cap detachably engageable with the adjacent extremity of the hub shell, an annular member carried by the outer extremity of the boxing and overlapping the adjacent extremity of the hub shell, said hub shell being provided with an annular chamber adapted to contain lubricant, said shell being provided with ports in communication with the ports of the boxing, said boxing being provided with a spiral groove disposed longitudinally thereof.

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

ROSCOE L. HAYTON.

Witnesses:
C. P. COLLINS,
ARTHUR JOHNSON.