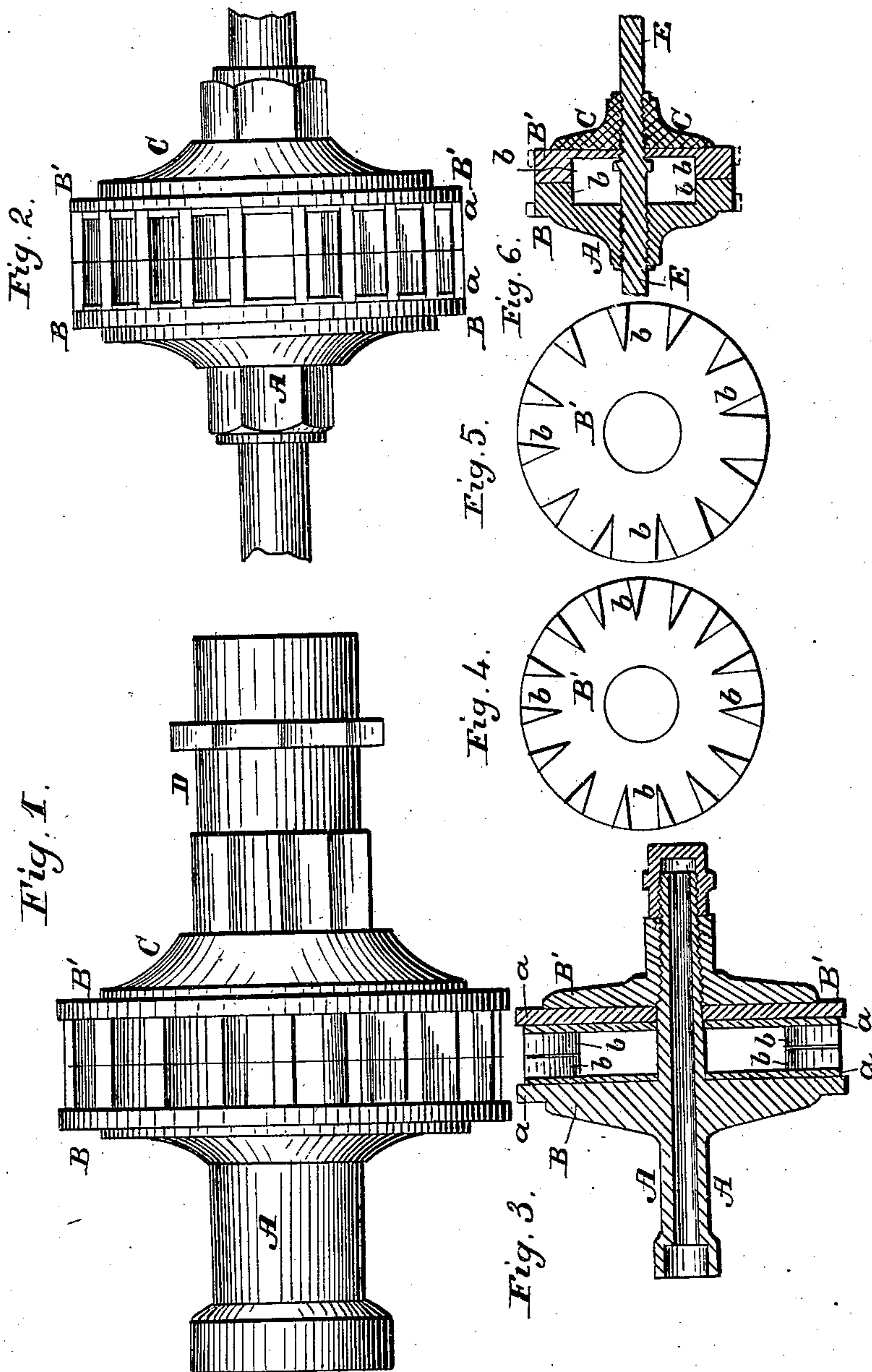


S. T. F. STERRICK.

Wheel Hub.

No. 92,121.

Patented June 29, 1869.



Witnesses:
Robert E. Eile
A. Ruppert

Inventor:
S. T. F. Sterrick
D. P. Holloway & Co
Atty

United States Patent Office.

S. T. F. STERICK, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 92,121, dated June 29, 1869.

IMPROVED HUB FOR CARRIAGE-WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, S. T. F. STERICK, of Washington, District of Columbia, have invented a new and useful Improvement in Hubs for Wagons and other Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is an elevation of my improved hub, as it appears when ready to receive the spokes of the wheel.

Figure 2 is a modified form of the hub, showing its adaptation to a velocipede.

Figure 3 is a longitudinal sectional section through the centre of fig. 1, showing the elastic washers which are to be placed upon either side of the spokes.

Figure 4 is an inside view of the loose disk which is moved by the nut, showing the projections thereon, which form the sockets for the spokes.

Figure 5 is a similar view of the disk, to be used in the modified form of hub.

Figure 6 is a longitudinal central section of the modified form.

Corresponding letters in the several figures refer to corresponding parts.

This invention relates to an improvement in metallic hubs for wagons and other vehicles, and is designed as an improvement upon the one for which Letters Patent were granted to Joseph Abbott, on the 30th day of January, A. D. 1866; and

It consists in the combination and arrangement of its parts, as will be more fully described hereinafter.

A, in the drawings, represents a pipe having an aperture through it for the outer end of the axle to pass through, as shown in fig. 3, that portion of the pipe which is outside of the disk B' being provided with a screw-thread, to receive the disk or flanged nut C, and the cap-nut D.

Upon the inner end of this pipe or hub there is formed a recess, which is larger in diameter than the aperture through which the arm of the axle passes, which recess or chamber is for the reception of the collar which is usually formed upon the axle.

At a suitable distance from the inner end of the hub or flange a disk, B, is affixed, which I have shown as being cast with the pipe-portion of the hub, which form of construction is the one I prefer; but, as is apparent, this flange or disk may be screwed upon such pipe, and thus be made to perform all the functions which it will if cast or made a part of the same by being immovably connected therewith.

Upon the inner face of this flange or disk, or that face which is nearest to the centre of the hubs, a series of projecting flanges is to be placed, as shown at *b* in fig. 4. They are to project from such flange or disk for a distance equal to one-half of the width of the spoke, or thereabouts, and be so arranged that the spaces between them shall correspond in number with

the spokes of the wheel, which may be more or less, according to the views of the constructor.

B' represents a disk of metal, which is to be supplied upon its inner face with projecting flanges, in all respects like those above described, and for a similar purpose, and it is to be provided with an aperture through its centre, of sufficient diameter to permit it to pass upon the pipe-portion of the hub, just within that portion upon which the screw is cut.

The construction and arrangement of the flange or disk B and disk B' are such that, when the disk B' is put upon the pipe or portion A of the hub, and the projections upon its inner face are brought in contact with the projections upon flange or disk B, a chamber or recess will be formed for the reception of the spokes, as clearly shown in figs. 1 and 2.

C represents a nut, upon the inner end of which a flange is formed, the diameter of which is somewhat less than that of the disk B'; while the outer and smaller portion is to be prepared for the reception of a wrench, by being made sexagonal upon its outer surface, or of any other suitable form. The interior surface of this nut is to be faced off true, so that it may bear firmly against the outer surface of the disk B', so that as this nut is turned upon the thread after the spokes have been inserted into the recesses formed for them, as above described, they may be pressed between disks B' and B, which should be left at some little distance from each other when the spokes are fitted into them, in order that the pressure caused by turning the nut may be received upon their edges when the wheel is new, and so that at any time thereafter such pressure may be further applied in the event of their becoming loose from shrinkage or other causes.

D represents a nut, which is cylindrical in form for the greater portion of its length, but which has, near its central portion, a sexagonal formation upon its periphery, for the reception of a wrench, with which to turn the same when it becomes necessary to screw it upon the inner nut C, in which case it serves the purpose of a jam-nut, and prevents the unscrewing of either. The cavity in this nut does not extend entirely through it, but bears upon its outer end a cap, as shown in fig. 3, which serves the purpose of excluding the dust from the axle, as well as of making an improved appearance in the hub, and preventing the escape of the lubricating-material at that point.

a a represent disks of rubber or other elastic material, which may be placed next to the disks B B', by having apertures formed in them, through which the projections *b b* of said disks pass. The object of these elastic disks is to furnish an elastic bearing-surface for the edges of the spokes where they enter the hubs, so that as the disk B' is forced upon the same by means of the nut C, the spoke shall not be injured by contact with the metal of the disks.

b b represent the projections, which are to be formed

upon the disks B and B', for the purpose of furnishing sockets for the spokes, as above described.

In figs. 2, 5, and 6, I have shown a modification of the hub, which is designed to adapt it for use as a hub for velocipedes. The general construction of the hub is the same as the one above described, the only difference being, that the axle passes entirely through the hub, which is rigidly secured thereto, so as to cause it to revolve therewith, instead of permitting such axle to revolve within such hub, as in the one shown in figs. 1, 3, and 4.

It will be seen, by reference to the drawings, that the edges of the disks B B' extend beyond the outer ends of the projections b, the object of which arrangement is to furnish additional bearing-surface for the spokes to rest upon.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. A hub for wagons and other vehicles, combining in its construction a pipe, or socket A, for the axle of the carriage to pass through, having upon it a fixed disk, or flange B, a loose sliding disk, B', provided with inwardly-projecting flanges and a tightening nut or nuts C D, all constructed and arranged as and for the purpose set forth.

2. The projecting rim upon the disks B B', such rims projecting beyond the sockets for the spokes, substantially as and for the purpose set forth.

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

S. T. F. STERICK.

Witnesses:

H. L. SHERWOOD,
J. H. GODDARD.