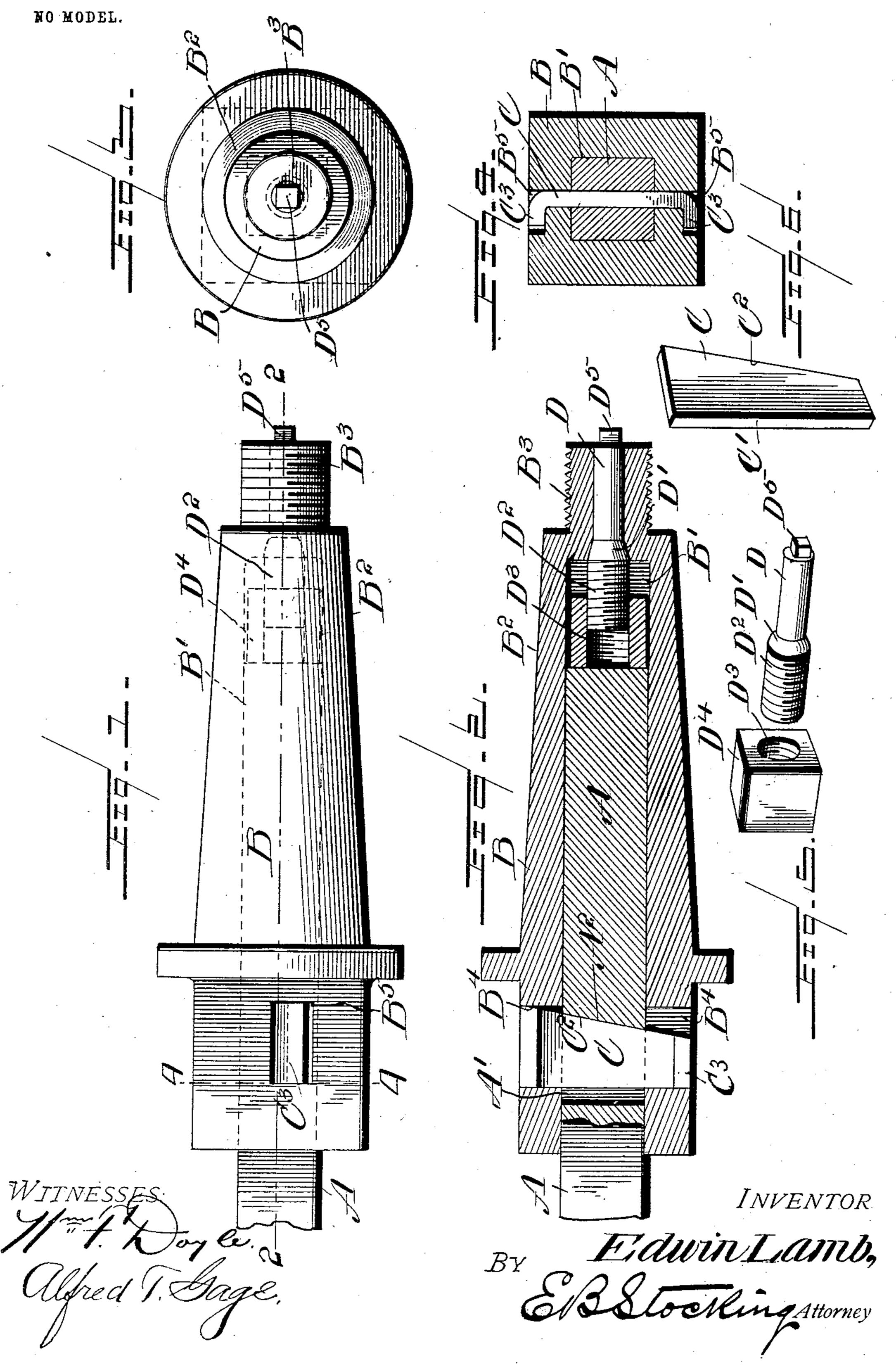
E. LAMB.

AXLE SKEIN.

APPLICATION FILED MAR. 24, 1903.



THE NORRIS PETERS CO., PHOTO-LITHOL, WASHINGTON, O. C.

## United States Patent Office.

EDWIN LAMB, OF YOUNGSTOWN, OHIO.

## AXLE-SKEIN.

SPECIFICATION forming part of Letters Patent No. 738,044, dated September 1, 1903.

Application filed March 24, 1903. Serial No. 149,283. (No model.)

To all whom it may concern:

Be it known that I, EDWIN LAMB, a citizen of the United States, residing at Youngstown, in the county of Mahoning, State of Ohio, have invented certain new and useful Improvements in Axle-Skeins, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an axle-skein, and particularly to the means for securing and adjusting the same upon the free end of the

axle.

The invention has for an object to provide an improved construction of skein and securing-key therefor by which the same will be rigidly held upon the axle and may be detached therefrom for the purpose of reversing the skein whenever one face becomes worn.

A further object of the invention is to provide means for adjusting the skein longitudinally of the axle in order that the wheels of the vehicle may track with each other.

Other and further objects and advantages of this invention will be hereinafter set forth and the novel features thereof defined by the

appended claims.

In the drawings, Figure 1 is a top plan of the invention. Fig. 2 is a vertical longitudinal section on the line 2 2 of Fig. 1. Fig. 3 is an elevation of the free end of the skein. Fig. 4 is a vertical cross-section on the line 4 4 of Fig. 1. Fig. 5 is a detail perspective of the adjusting nut and screw, and Fig. 6 is a similar view of the securing wedge-key.

Like letters of reference refer to like parts in the several figures in the drawings.

The letter A designates an axle of any desired construction or configuration, preferably rectangular in form at its free ends and 40 provided with a vertical slot or opening A', extending therethrough. Upon this axle the skein B is placed by longitudinal movement and has an interior chamber B', having rectangular walls to conform to those of the axle 45 A. The outer periphery B2 of the skein is suitably curved to receive any construction of wheel-hub at its free end, and an externallythreaded projection B<sup>3</sup> is provided to receive the hub-securing nut. At the opposite end 50 of the skein an opening B4 is provided in each wall thereof, through which the wedge-key C is adapted to pass. This key, as well as I

the openings in the axle and skein, may be of any desired configuration; but, as showing a convenient form, the key is illustrated as 55 having a straight wall C' and an opposite tapering wall C2, the latter of which is adapted to engage the inclined wall A2, formed in the slot A' through the axle, while the key is secured in position by bending or turning 60 downward the opposite ends C3 thereof, so that they lie within the recesses B5, formed upon the faces of the skein. When it is desired to adjust the skein longitudinally upon the axle for the purpose of causing the wheels 65 to track with each other, the adjusting-screw D is provided at the outer end of the skein and has a shoulder D' resting in a suitable recess in the end, so as to rotate therein. Beyond this shoulder the exteriorly-threaded 70 portion D<sup>2</sup> is provided, which engages with the interior threads D<sup>3</sup> of the rectangular nut D4, so as to cause the same to travel longitudinally within the chamber B' of the skein and contact with the end of the axle to lon- 75 gitudinally adjust the skein thereon. The rotation of this screw may be effected by any desired means—for instance, by a wrench adapted to engage the wrench-hold D<sup>5</sup> at the projecting end of the screw, and such adjust-80 ment should be made before the wedge-key is placed and secured in position.

The operation of assembling the parts will be clearly apparent from the foregoing construction, from which it will be seen that the 85 securing-key will effectually hold the skein against longitudinal movement from the axle, while the angular formation of the latter prevents rotation thereon. This key is readily secured by bending the free ends thereof into 90 the recesses of the skein and will be likewise easily removed when it is desired to reverse the position of the worn faces of the skein. This skein also avoids the necessity of welding stubs upon axles and is adapted for use 95 upon any class of vehicles. It will furthermore be seen that the use of the screw and adjusting-nut permits the longitudinal adjustment of the skein while the wheel is in position for the purpose of causing the wheels 100 to track with each other, and after such adjustment is made the wedge-key is inserted to firmly secure the parts in position.

It will be obvious that changes may be

made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In an axle-skein, an axle provided with a slot therein, a skein having a chamber to ro fit said axle and slotted walls, a securing-key extended through the slot of the skein and axle, and an adjusting device carried by the outer end of the skein to bear upon the endof the axle.

2. In an axle-skein, an axle provided with a slot therein, a skein adapted to fit said axle and having slotted walls with recesses at the outer ends of the slots, and a key passing through the slots in the skein and axle and 20 having its opposite ends bent into said recesses.

3. In an axle-skein, an axle, a skein having an interior chamber to fit said axle, a rotatable shaft mounted in the closed end of said 25 skein and provided with a threaded stem, a nut mounted upon said stem to bear against the free end of the axle and means connect-

ing the axle and skein to prevent longitudinal movement thereof upon each other.

4. In an axle-skein, an axle, a skein having 30 an interior chamber to fit said axle, a rotatable shaft mounted in the closed end of said skein and provided with a threaded stem, and a nut mounted upon said stem to bear against the free end of the axle, a shoulder 35 upon said shaft to hold the same against reciprocation in one direction, a projecting operating end upon said shaft, and a key extending through said skein and axle to lock the parts at their adjustment.

5. In an axle-skein, a rectangular axle having a slot therein, a skein having an interior chamber to fit said axle and slotted walls, a key passing through the slots in the skein and axle, an angular adjusting-nut located 45 within the skein-chamber, and an adjustingscrew engaging said nut and extended beyond the end of the skein.

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

EDWIN LAMB.

40

Witnesses:

J. R. JOHNSTON, ANTHONY B. CALVIN.