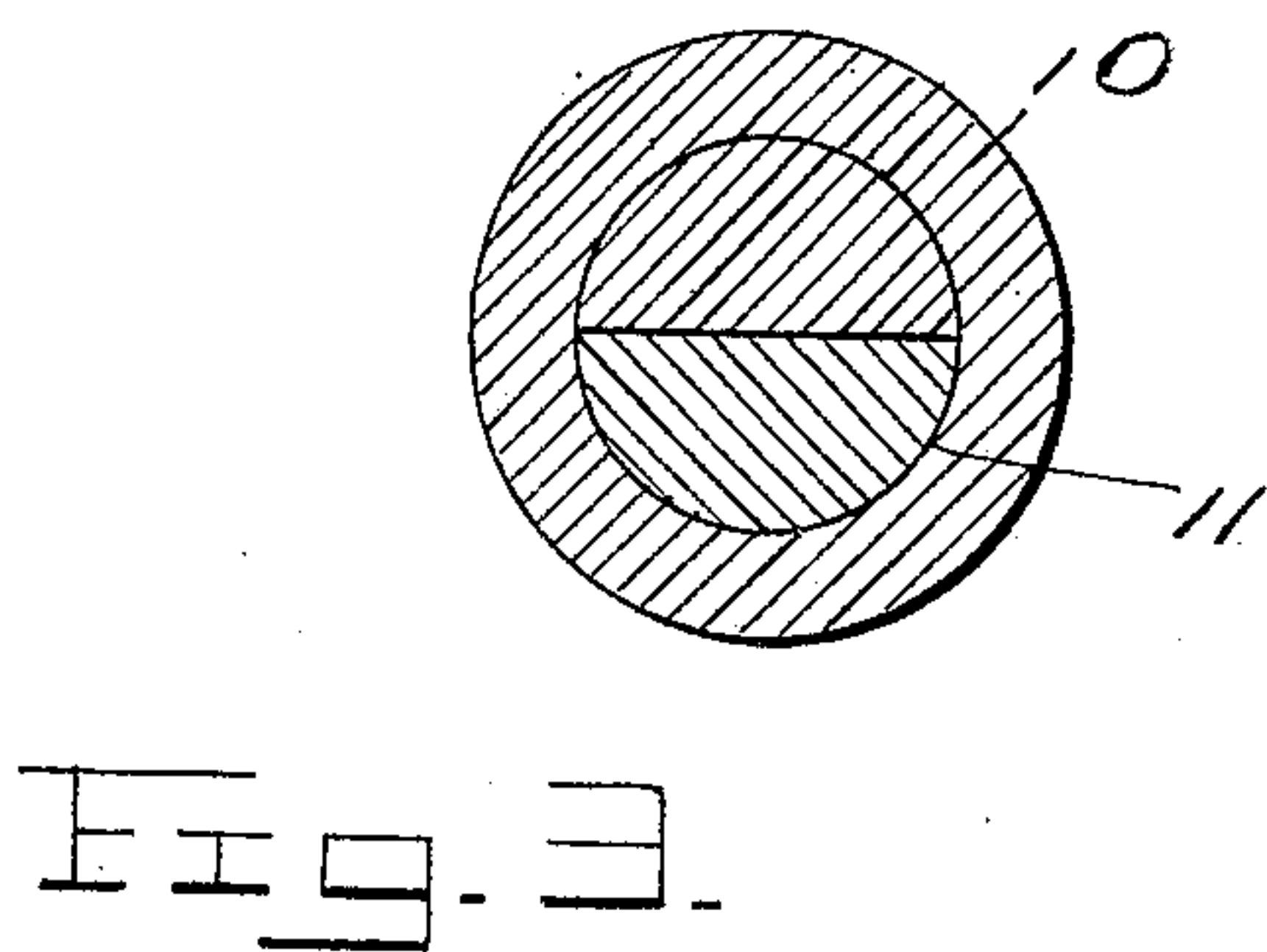
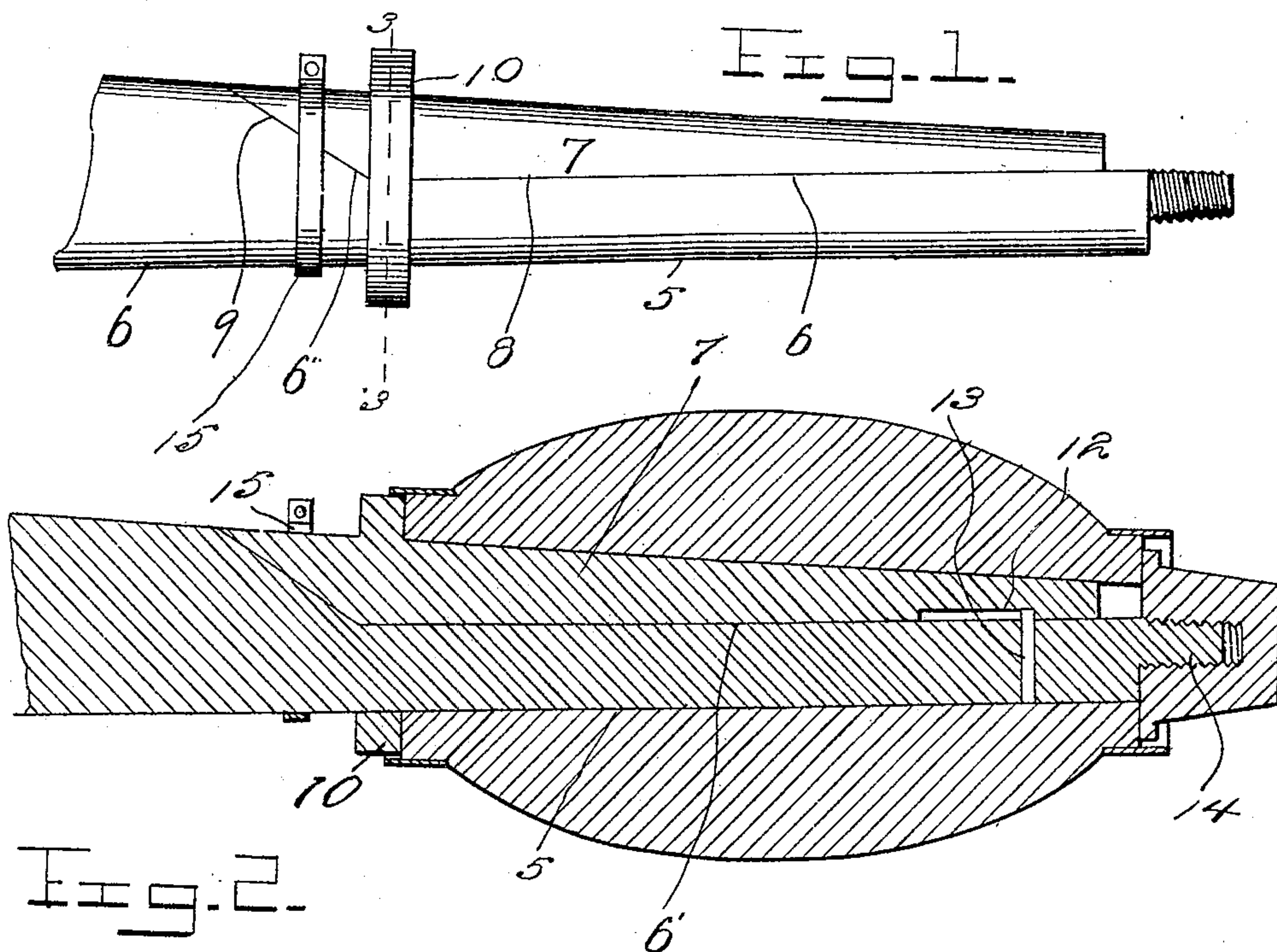


No. 809,166.

PATENTED JAN. 2, 1906.

A. J. BELIEL.
WAGON SPINDLE.
APPLICATION FILED JUNE 16, 1905.



Witnesses
W. M. Gifford
E. M. Gifford

Inventor
A. J. Beliel
By *Charles Chanley*
Attorneys

UNITED STATES PATENT OFFICE.

ALBERT J. BELIEL, OF MULHALL, OKLAHOMA TERRITORY.

WAGON-SPINDLE.

No. 809,166.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed June 16, 1905. Serial No. 265,560.

To all whom it may concern:

Be it known that I, ALBERT J. BELIEL, a citizen of the United States, residing at Mulhall, in the county of Logan, Territory of Oklahoma, have invented certain new and useful Improvements in Wagon-Spindles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to wagons, and more particularly to spindles therefor, and has for its object to provide a spindle which may be adjusted to compensate for wear and which will be extremely simple, it being thus possible to manufacture the spindles at a low figure.

Other objects and advantages will be apparent from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the present spindle. Fig. 2 is a longitudinal section of Fig. 1, a wheel-hub being shown engaged with the spindle. Fig. 3 is a vertical section on line 3 3 of Fig. 1, taken through the collar.

Referring now to the drawings, the present spindle comprises a lower portion 5, which is carried by the end of an axle 6. The upper surface 6' of the portion 5 is flat, as shown, and the axle 6 extends above this flat surface, the end portion 6'' of the axle being beveled downwardly toward the spindle, as shown.

A transversely-semicircular member 7 is disposed with its flat face 8 against the face 6' and has a beveled end 9, which rests against the beveled face 6'' of the axle, and adjacent to its beveled end this member 7 has a surrounding collar 10, which is circular and which has an opening 11 in its portion extending beyond the face 8 of the member, this opening receiving the lower portion 5 of the spindle snugly therewithin for sliding movement of the collar and the member 7 upon the portion 5. The face 8 of the member 7 has a longitudinal groove 12 therein, which receives a pin 13, extending upwardly from the face 6 of the portion 5, the two parts of the spindle being thus held against lateral movement with respect to each other. The member 7 terminates short of the outer end

of the portion 5, and the latter carries a reduced nut-receiving stem 14 at its free end. The upper face 6' of the portion 5 has a slight upward slant from its inner to its outer end, and the curve surfaces of the two portions of the spindle are tapered toward their outer ends.

A retaining-clamp 15 is engaged with the inner portion of the member 7, which rests against the beveled face of an axle to hold the portions together, and this clamp may be loosened to permit movement of the member 7 toward the free end of the spindle, which movement will compensate for wear of the spindle by increasing the size thereof and at the same time will bring the collar 10 nearer to the outer end of the spindle to compensate for wear of the wheel-hub. The clamp 15 may be that clamp which is ordinarily used to retain the shafts in position.

What is claimed is—

1. A wagon-spindle comprising upper and lower portions arranged for longitudinal movement with respect to each other, a collar carried by one portion and slidably engaged with the other portion, means for holding the two portions at different points of their movement with respect to each other, and means for holding the portions against lateral movement with respect to each other.

2. A spindle comprising a portion having a flat face and a tapered curved face, said flat face extending at an angle to the central longitudinal axis of the spindle, a member having a flat and a curved face disposed with its flat face against that of the first-named portion for longitudinal movement thereupon, a surrounding collar carried by the member and extending beyond the flat face thereof, said collar having an opening therein in which the first-named portion of the spindle is slidably engaged, said member having a longitudinal groove in its flat face, a pin carried by the first-named portion and slidably engaged in the groove and means for holding the member at different points of its movement.

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

ALBERT J. BELIEL.

Witnesses:

N. J. BARINGER,
ADDIE BELIEL.