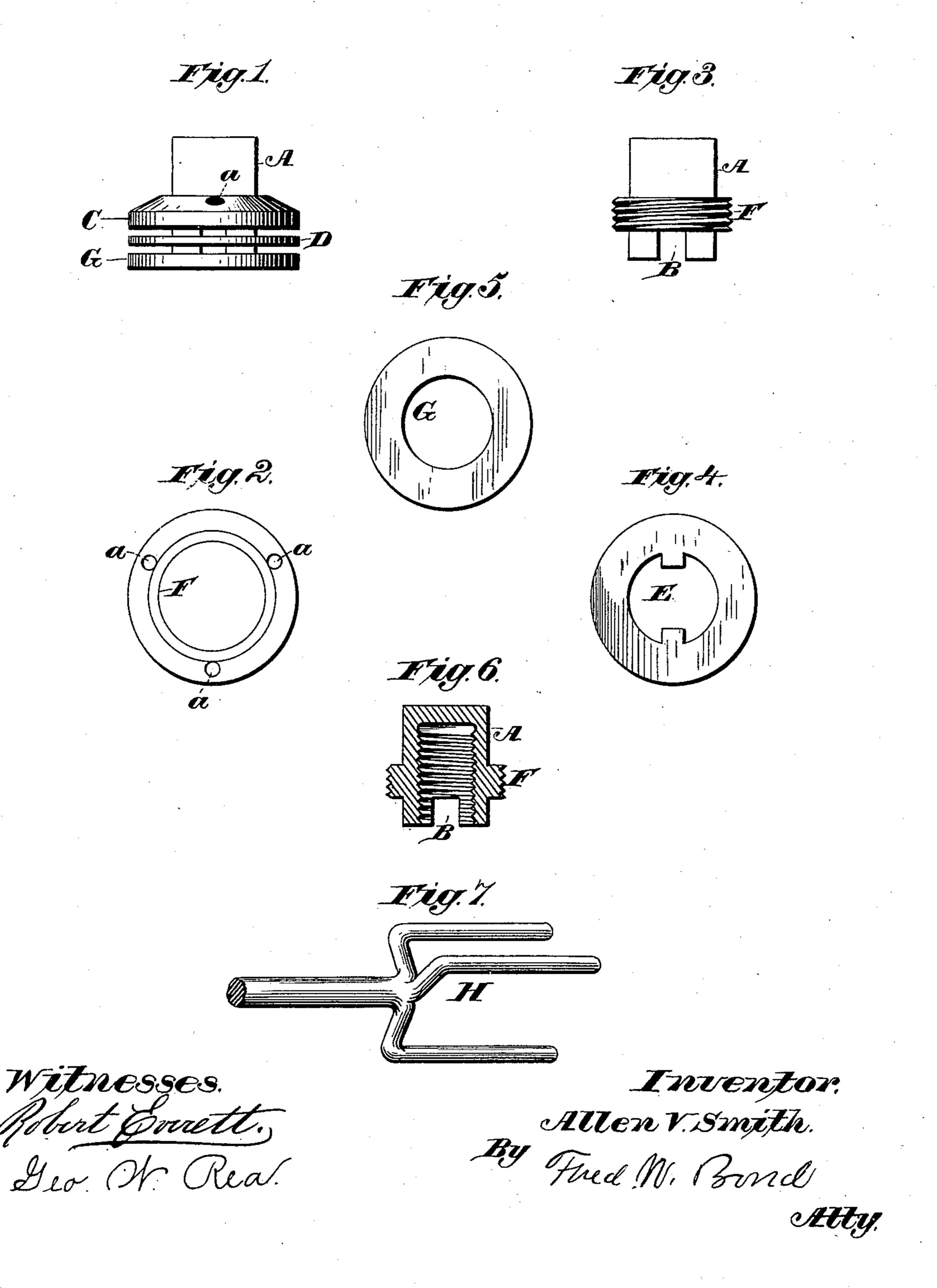
(No Model.)

## A. V. SMITH.

## VEHICLE AXLE NUT.

No. 321,255.

Patented June 30, 1885.



## United States Patent Office.

ALLEN V. SMITH, OF CANTON, OHIO.

## VEHICLE-AXLE NUT.

SPECIFICATION forming part of Letters Patent No. 321,255, dated June 30, 1885.

Application filed January 22, 1885. (No model.)

To all whom it may concern:

Be it known that I, ALLEN V. SMITH, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Adjustable Washers and Nuts for Vehicle-Wheels; 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 a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a side elevation. Fig. 2 is an end view. Fig. 3 is a side elevation showing the different parts removed from the nut. Fig. 4 is a detached view of an anti-friction plate or washer. Fig. 5 is a detached view of washer. Fig. 6 is a longitudinal section of the nut, showing different parts removed. Fig. 7 is a view of part of wrench for adjusting the collar on nut.

The present invention has relation to adjustable washers for nuts; and its nature consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claim.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the outer end of the nut, which is of the ordinary style and form. The inner end of said nut is provided with the ordinary screwthreaded opening to receive the end of the spindle. The inner end of said nut is provided with the recesses B, which are formed opposite to each other, but may be differently located, if desired, and are for the purpose hereinafter described. Upon the outside of the nut is located the adjustable collar C, which is substantially of the form shown in the drawings, and is held in the desired position by the threaded band F.

The anti-friction plate D is substantially of 45 the form shown in the drawings, and is pro-

vided with the lugs or extensions E, which fit into the recesses B, and are for the purpose of preventing said anti-friction plate D from turning. The anti-friction plate D may be made of iron or any other suitable material. 50

The washer G may be made of leather or any other suitable material, and is of the ordinary style and form, and rests against the anti-friction plate D when the nut proper is placed in proper position on the spindle or 55 other place.

It will be seen that by my peculiar arrangement I am enabled to keep the wheel at all times perfectly tight by adjusting the collar D as the washer G becomes worn by use.

To adjust the collar C, I provide the wrench H, which is provided with prongs, said prongs fitting in the holes a in said collar.

The screw-thread on the band F should run the same way as the thread upon the inside of 65 the nut A.

I do not desire to confine my invention to vehicle-wheels alone, but to apply it to all kinds of machinery where it can be successfully used.

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

The combination of the nut A, provided with the exteriorly-threaded raised flange F, and 75 formed with slots B, extending through its sides and open at their lower ends, the sliding collar D, fitting around the lower portion of nut A, and provided with interior projections E, entering the slots in said nut, and the adjustable collar C, fitting on flange F and bearing against collar D, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALLEN V. SMITH.

Witnesses:

THEODORE R. BALLARD, FRED W. BOND.