

No. 672,606.

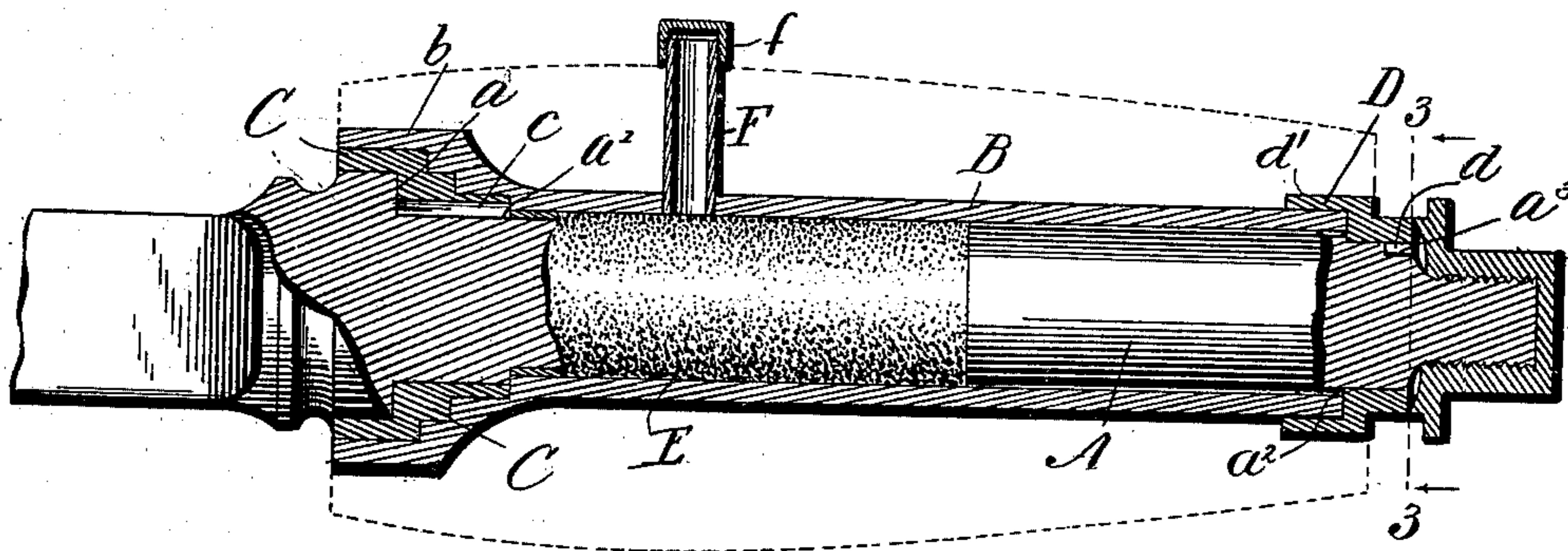
Patented Apr. 23, 1901.

H. STOCKMAN.  
WAGON AXLE SPINDLE.

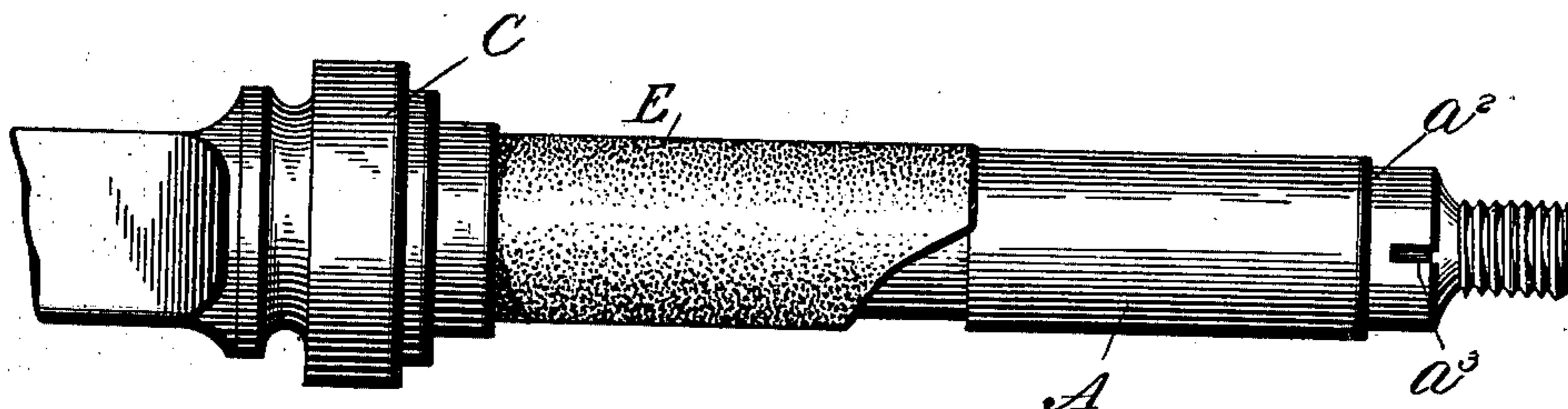
(Application filed Feb. 5, 1901.)

(No Model.)

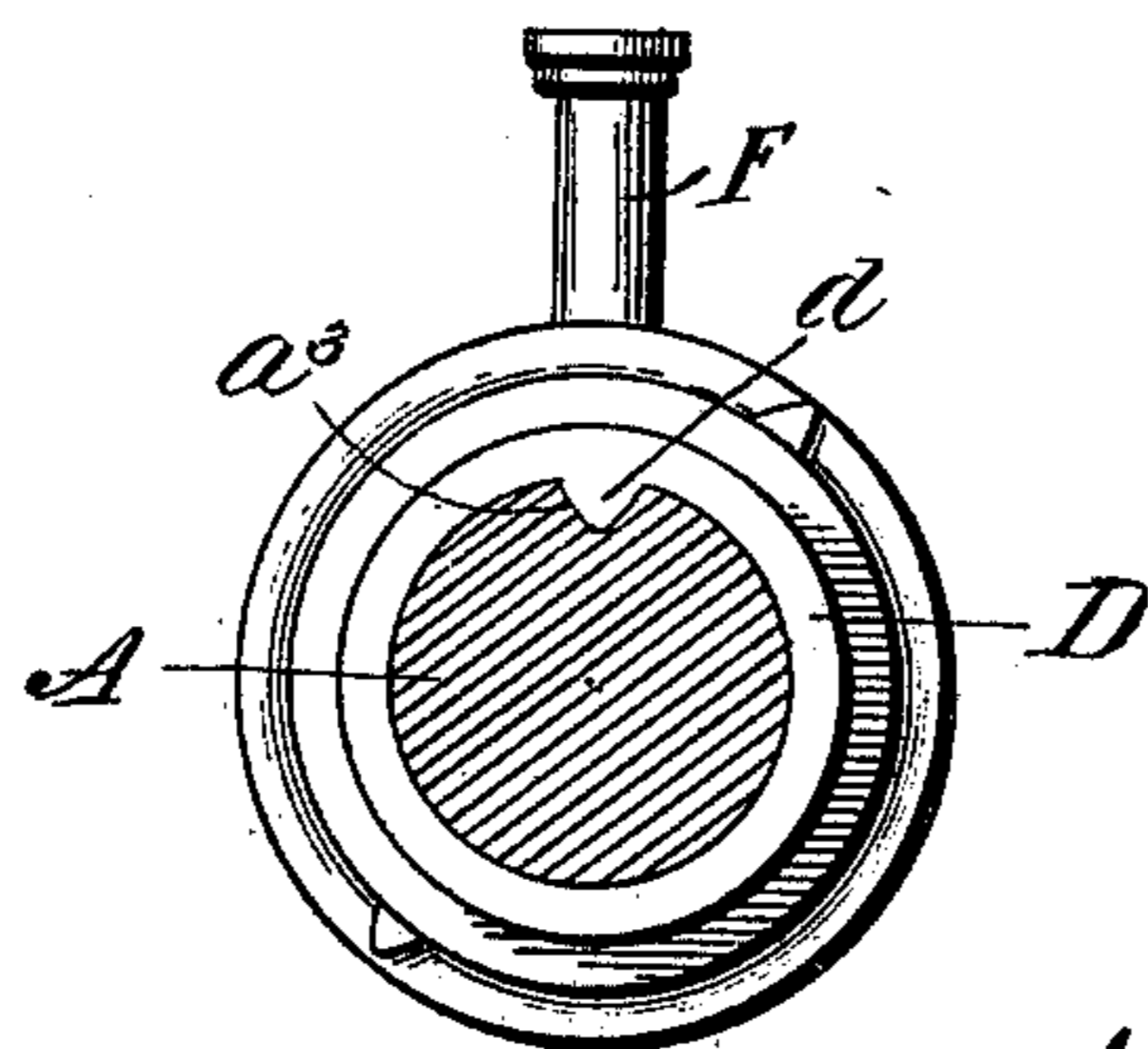
~~FIG. 1.~~



~~FIG. 2.~~



~~FIG. 3.~~



WITNESSES:

*Wm. F. Day & Co.*

*E. R. Ruffert.*

INVENTOR

*Henry Stockman*

BY

*W. W. Dudley & Co.*  
Attorneys

# UNITED STATES PATENT OFFICE.

HENRY STOCKMAN, OF MARION, INDIANA.

## WAGON-AXLE SPINDLE.

SPECIFICATION forming part of Letters Patent No. 672,606, dated April 23, 1901.

Application filed February 5, 1901. Serial No. 46,113. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY STOCKMAN, a citizen of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in Wagon-Axle Spindles; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to wagon-axle spindles, and has for its object the production of an improved appliance of this character possessing advantages in point of efficiency and simplicity and durability of construction.

The nature of my invention will be readily comprehended, reference being had to the following detail description, and to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of a spindle embodying my invention. Fig. 2 is an elevation of the spindle, the box or skein being removed. Fig. 3 is a cross-sectional view on line 3 3 of Fig. 1.

Referring to the drawings by letter, A denotes the spindle, and B is the axle box or skein. The inner end of the spindle is provided with a shoulder *a*, against which abuts a bushing C, stepped to conform to the inner side of the box or skein, and said bushing is held from rotation by the engagement of a lug *c* thereon with a corresponding recess *a'* in the spindle. Near the outer end of the spindle is a shoulder *a''*, formed by reducing the spindle, and against this shoulder abuts a bushing D, which is non-rotatable, a lug *d* thereon engaging a corresponding recess *a'''* in the spindle. The box or skein has at its inner end an enlargement *b*, which rotatably engages the inner bushing; but the outer end of the box or skein rotates in an enlargement *d'* of the outer bushing. The bushings C D

support the box or skein out of contact with the spindle, so that the latter receives no wear and may be used indefinitely, the bushings being renewed from time to time.

At E is shown a lubricating-band of textile material which entirely encircles the spindle and extends from the inner end thereof to near the outer end. This band fits a reduced part of the spindle and is of a thickness to bring it into contact with the inner surface of the box or skein. Oil is supplied to the band through an oil-tube F, which is screwed at its inner end into a threaded aperture in the box or skein and extends beyond the hub, where it is provided with a screw-cap *f*. In practice oil is introduced into the tube and passes between all of the bearing-surfaces, any excess being taken up by the band, which thus acts as a reservoir to keep the parts thoroughly lubricated. The band may be renewed from time to time.

By my invention every provision is made for securing a long period of usefulness of the axle and the box or skein. The bushings may be readily applied to existing as well as new spindles and without the necessity of truing the worn parts, so that skilled labor is unnecessary. The bushings and lubricating-bands may be inexpensively produced and quickly applied and are very efficient in operation.

I claim as my invention—

A wagon-axle spindle having near each end a shoulder and a recess, bushings encircling the spindle and each abutting against a shoulder and provided with a lug engaging its respective recess, a lubricating-band of textile material encircling a reduced part of the axle, and an oil-tube extending through the hub and box or skein and terminating adjacent to the band.

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

HENRY STOCKMAN.

Witnesses:

SAMUEL T. MASKEY,

BRADFORD S. AMMORY.