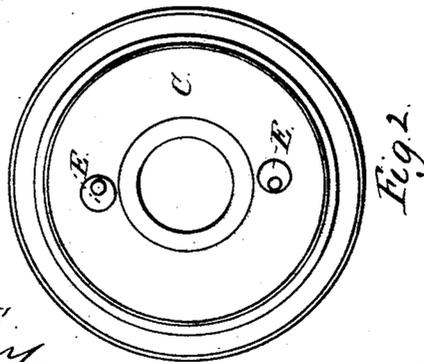
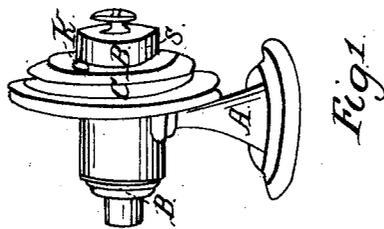
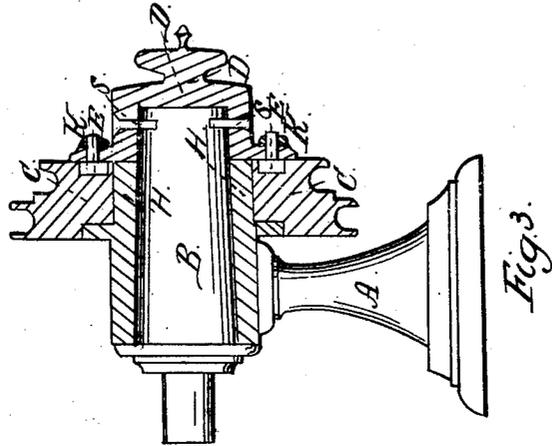


*F. W. Coy.*

*Turning Lathe.*

*N<sup>o</sup> 69,544.*

*Patented Oct. 8, 186,*



*Witnesses.*  
*A. Hun Berry*  
*Frank G. Parker*

*Inventor*  
*F. W. Coy*

# United States Patent Office.

F. W. COY, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 69,544, dated October 8, 1867.

## IMPROVEMENT IN TURNING-LATHES.

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, F. W. Coy, of Boston, in the county of Suffolk, and State of Massachusetts, have made new and useful Improvements in Lathe-Spindles; and I do hereby declare that the following is a full and exact description thereof; reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in so hanging the belt-wheel of a turning-lathe that it shall have a bearing independent of the spindle, so that the wear caused by the tension of the belt shall not affect the spindle of the lathe.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and use. In the drawings—

Figure 1 is a perspective view.

Figure 2 is an end elevation of the belt-wheel.

Figure 3 is a longitudinal vertical section of my improved spindle.

I construct the head-block A in substantially the form shown in figs. 1 and 3. B is a spindle, made slightly conical, and fitting snugly into the head-block A. D is a flanged cap, which is securely fastened to the end of the spindle B by means of the set-screw S. C C is the belt-wheel, which has for its journal the part H H of the head-block A, turned and fitted for that purpose, as shown in fig. 3. Two round recesses, E E, are made in the rear face of this belt-wheel, into which set the heads of the bolts E E, fig. 3. Now, the heads of these bolts E E are perfectly circular, but eccentric in relation to their shanks. The shanks of the bolts E E pass through the flange of the cap D, and are secured in position by means of nuts K K, as shown in figs. 1 and 3. The object of the eccentric-headed bolts E E are to so connect the belt-wheel C with the spindle that they must revolve together and yet allow of considerable wear of the belt-wheel C upon its journal H H without causing any strain upon the spindle B. The eccentric-heads of the bolts E E will turn so as to adapt themselves to the eccentricity caused by the wear of the belt-wheel C. The belt-wheel C becomes so worn as to revolve considerably "out of true," and yet the spindle be perfectly true to its centre.

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

The combination and arrangement of the belt-wheel C, the bearing H H, the cap D, and the spindle B, substantially as described and for the purpose set forth.

F. W. COY.

Witnesses:

A. HUN BERRY,  
FRANK G. PARKER.