

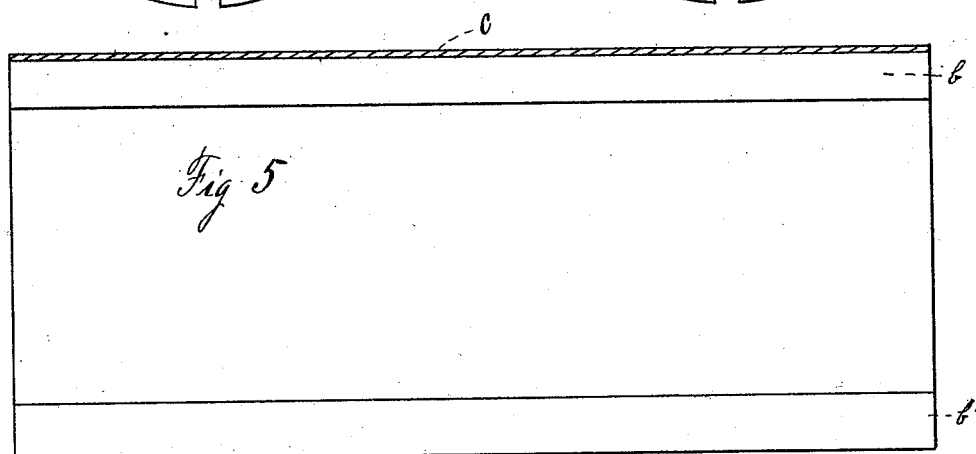
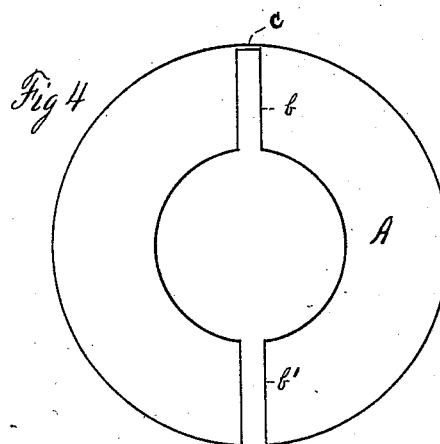
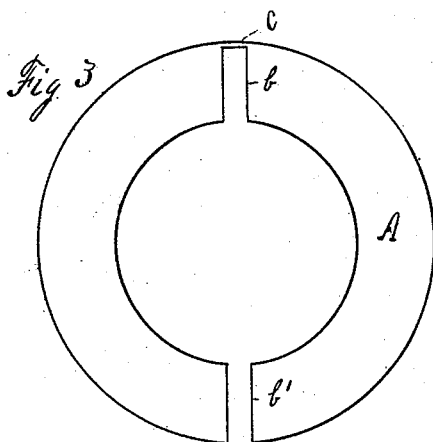
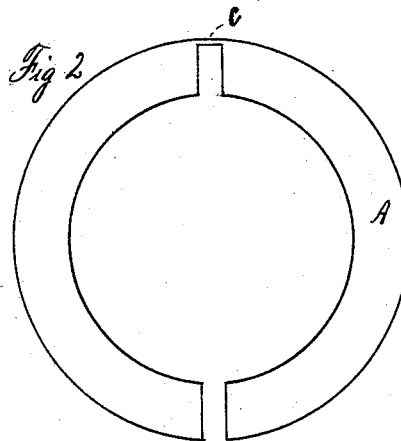
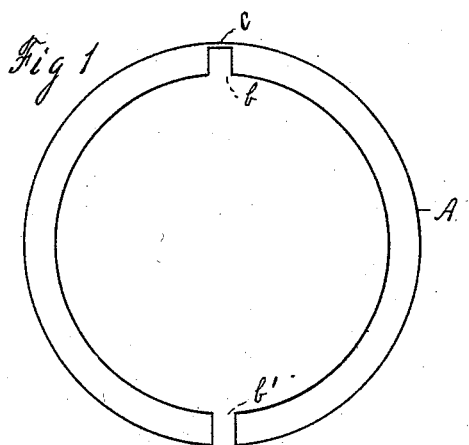
(No Model.)

2 Sheets—Sheet 1.

C. P. WIGGINS.  
BUSHING FOR SPLIT PULLEYS.

No. 418,632.

Patented Dec. 31, 1889.



Witnesses  
*D. A. Rice*  
*T. D. Jodquard*

Inventor  
*Charles P. Wiggins*  
By *J. M. Pollard* Atty

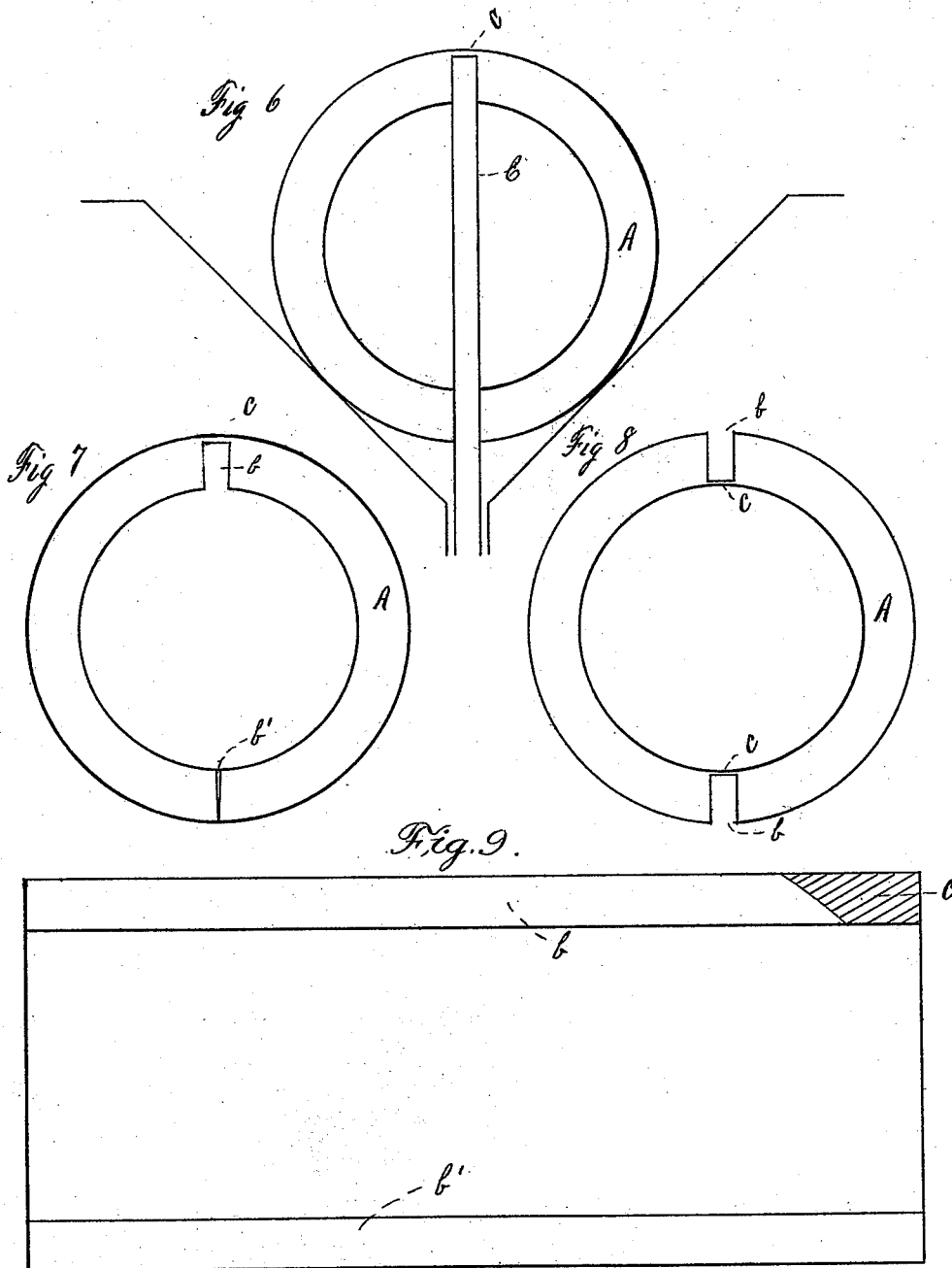
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By J. M. Pollard, atty

# UNITED STATES PATENT OFFICE.

CHARLES P. WIGGINS, OF MEMPHIS, TENNESSEE.

## BUSHING FOR SPLIT PULLEYS.

SPECIFICATION forming part of Letters Patent No. 418,632, dated December 31, 1889.

Application filed June 27, 1889. Serial No. 315,746. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. WIGGINS, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Bushings for Split Pulleys; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in manufacturing the bushings for split pulleys, and has for its object the retention of the two halves of the bushing together until they are to be used, all as will be particularly shown and described hereinafter. Pulleys of this nature, as now manufactured for carrying in stock and for sale as an article of merchandise, are all bored to some fixed standard—say three or three and one-half inches—and are adapted and made to fit all the ordinary diameters of shafting by adding to the shaft a split wood or other bushing bored to fit the shaft and of an exterior diameter to fit the bore of the pulley—that is to say, all standard shafting is by means of these bushings brought to a single standard diameter to fit any pulley that may be carried in stock.

These bushings are usually of hickory or maple, and are first bored lengthwise of the grain to the requisite diameter of the bore, then placed upon a mandrel and turned to the standard outside diameter, and are then split lengthwise by means of a thick saw, which removes a considerable portion of material, leaving two portions, each less than a half-circle, so that when placed upon a shaft and subjected to compression by tightening the pulley upon them their edges cannot come in contact so as to resist the compression. It results from this splitting of the bushings as has heretofore been practiced that the two halves when separated and mixed with others are very frequently mismatched when wanted for use. This becomes almost impossible to prevent, because the sizes vary only by sixteenths of an inch. Thus there

are, as shown in the drawings, Figs. 1 to 4, four sizes shown—viz., two and nine-sixteenths, two and three-sixteenths, one and nine-sixteenths, and one and three-sixteenths inch bore, and these are readily distinguished from each other; but there are between each of these six intervening sizes differing from each other when the shells are measured by only the thirty-second of an inch and very difficult to separate from each other when the pasters giving the diameters are, as frequently happens, lost by accident.

My invention consists in only partially dividing the bushing, leaving sufficient material uniting the two parts to retain them together until they are to be used. They are then to be broken apart, the edges trimmed, if necessary, and used in pairs together as made.

In the drawings, Figures 1 to 4 are end views of bushings of various sizes of bore partially divided in accordance with the preferred plan of carrying out my invention. Fig. 5 is a section of Fig. 2 through the line of partial division, and showing in section the portion left to unite the two halves. Fig. 6 shows the angle-box and saw used in partially dividing the bushings, as shown in Sheet 1 of the drawings. Fig. 7 shows the bushing illustrated in Figs. 2 and 6 with its edges pressed together. These edges are secured in this position by means of a paster overlapping the edges and containing upon its surface a description of the bushing as to diameter of shafting it is intended to fit. Figs. 8 and 9 show modified methods of partially splitting the bushing. In the former the wood is cut through from the outside nearly to the bore, and the latter is split nearly entirely through on one or both sides, leaving, however, a corner or end united by material of full thickness, as shown in Fig. 9.

A in all the figures designates the bushing; *b*, the cut of the saw partially through one of the sides; *b'*, the cut entirely through the remaining side, and *c* the portion uniting the two parts.

C represents the saw.

It should be stated that these bushings are made and shipped to dealers or agents in very large numbers, and that the question of

keeping them in pairs in readiness for proper application is a very important one to all parties.

Having thus described my invention, I  
5 claim—

A wood bushing for shafting bored to the requisite diameter and partially divided, so that the two parts are retained together by

some portion of the bushing intentionally left unsevered for that purpose. 10

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

CHARLES P. WIGGINS.

Witnesses:

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WARREN S. BELLOWES.