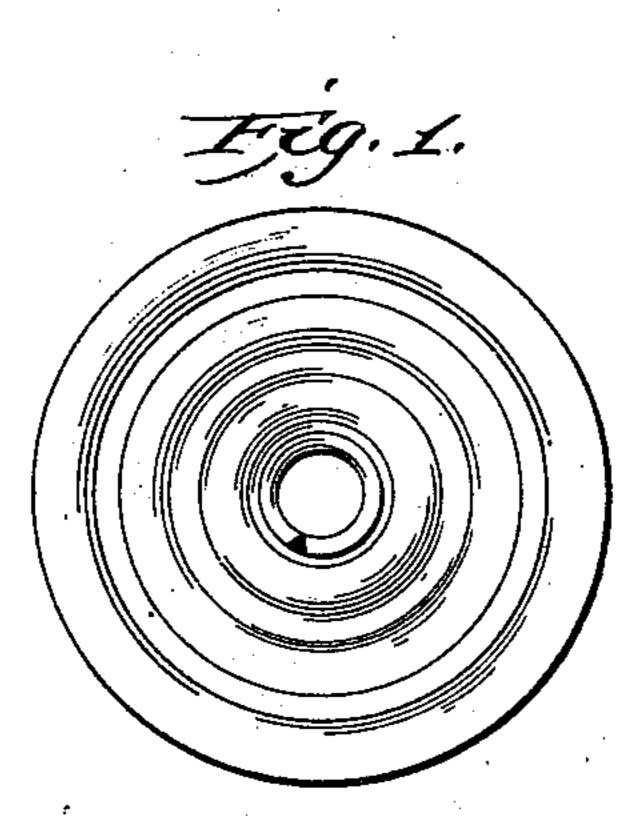
No. 614,166.

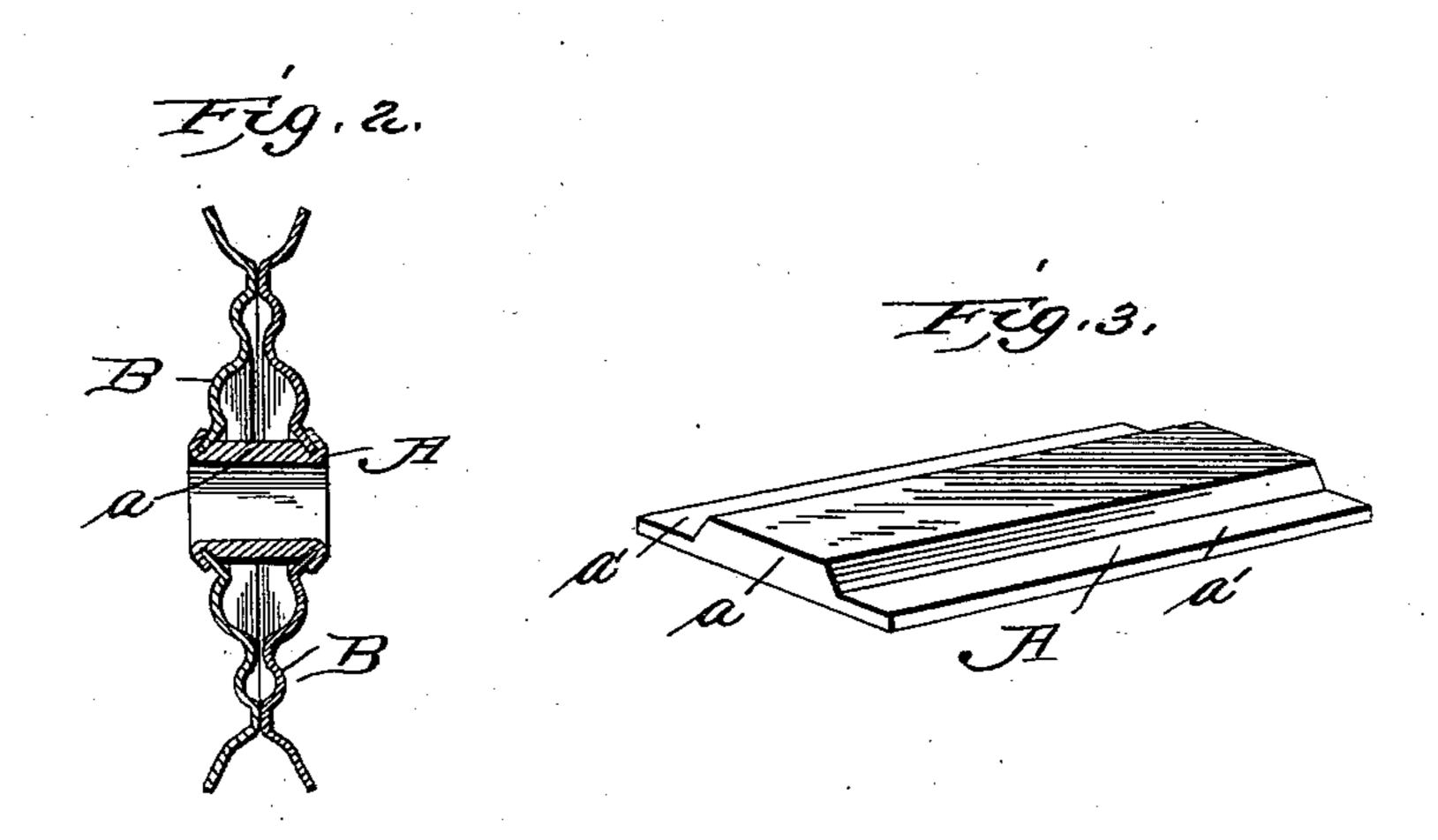
Patented Nov. 15, 1898.

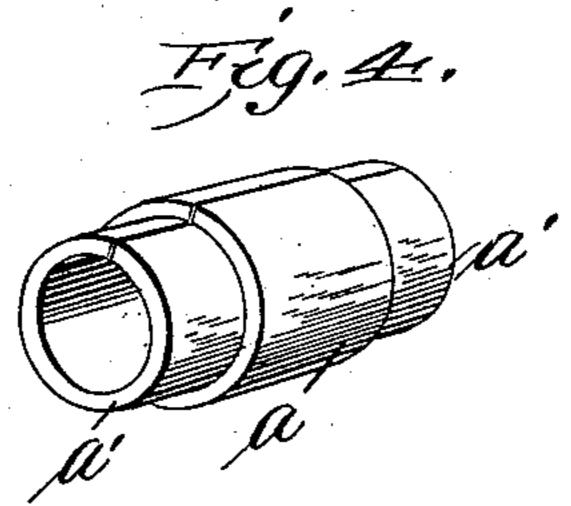
W. R. FOX. PULLEY BUSHING.

(Application filed Feb. 23, 1898.)

(No Model.)







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United States Patent Office.

WILLIAM R. FOX, OF GRAND RAPIDS, MICHIGAN.

PULLEY-BUSHING.

SPECIFICATION forming part of Letters Patent No. 614,166, dated November 15, 1898.

Application filed February 23, 1898. Serial No. 671,323. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. Fox, a citizen of the United States, residing at Grand Rapids, county of Kent, and State of Michigan, have invented certain new and useful Improvements in Pulley-Bushings, of which the following is a specification.

My invention relates to improvements in sash-pulleys of that class in which the parts are 10 made of sheet metal and secured together by | a tubular hub having shoulders against which the sheet-metal cheeks or sides abut, the ends of the tubular head being turned over or burred to clamp the edges of the cheeks 15 against the shoulders. Heretofore such tubular centers or hubs have been made by turning or boring them from a solid piece of metal or by turning down a metal tube. This method of making the tubular hubs is | 20 comparatively expensive, and it is therefore the object of the present invention to devise a hub or center which may be produced at a greatly-decreased cost.

The invention is illustrated in the accom-

25 panying drawings, in which—

Figure 1 is a side elevation of a pulley embodying my invention. Fig. 2 is a sectional view of the same, and Fig. 3 is an enlarged perspective view of the blank from which the tubular center is made.

According to this invention I provide a blank A of the form shown in Fig. 3, which may be produced by rolling or in any desired manner. This blank comprises the thicker 35 central portion a and the edges or flanges a', of less thickness. This blank is then bent up until the ends come in contact, as shown in Fig. 1, to form a tube, the plain face of the blank being on the inside, so that a tubu-lar hub or center is provided having shoulders to receive the cheeks and reduced ends

adapted to be burred over. The sides B B are then applied and the reduced ends of the hub burred or turned over to hold the cheeks firmly against the shoulders.

It will be observed that the sides or cheeks are inclined at a point where they abut against the shoulders and that the shoulders are correspondingly beveled or inclined, thus affording a firm bearing.

From the above description the advantages of the invention will be apparent, as it provides a pulley which may be made complete from sheet-steel and placed upon the market at such a reduced cost as to admit of its being 55

extensively used. When the hub is turned from a steel tube, however, the expense involved in making the hub so increases the cost of the completed article as to greatly reduce the demand therefor

duce the demand therefor.

Having thus described my invention, who

Having thus described my invention, what I claim is—

1. In combination, the pulley sides and the hub, or bushing connecting the game, said

hub or bushing connecting the same, said hub comprising the bent sheet-metal blank 65 having abutting ends and having annular shoulders to receive the sides and annular flanges adapted to clamp the sides against the shoulders, substantially as described.

2. In combination, the pulley sides having 70 central openings and flaring or inclined portions adjoining said openings, and the hub rolled from a metal blank and having inclined or beveled shoulders adapted to abut against the sides and ends headed over to clamp the 75 sides in place, substantially as described.

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

WILLIAM R. FOX.

Witnesses:

GEORGE S. MILLER, JNO. G. LINDNER.