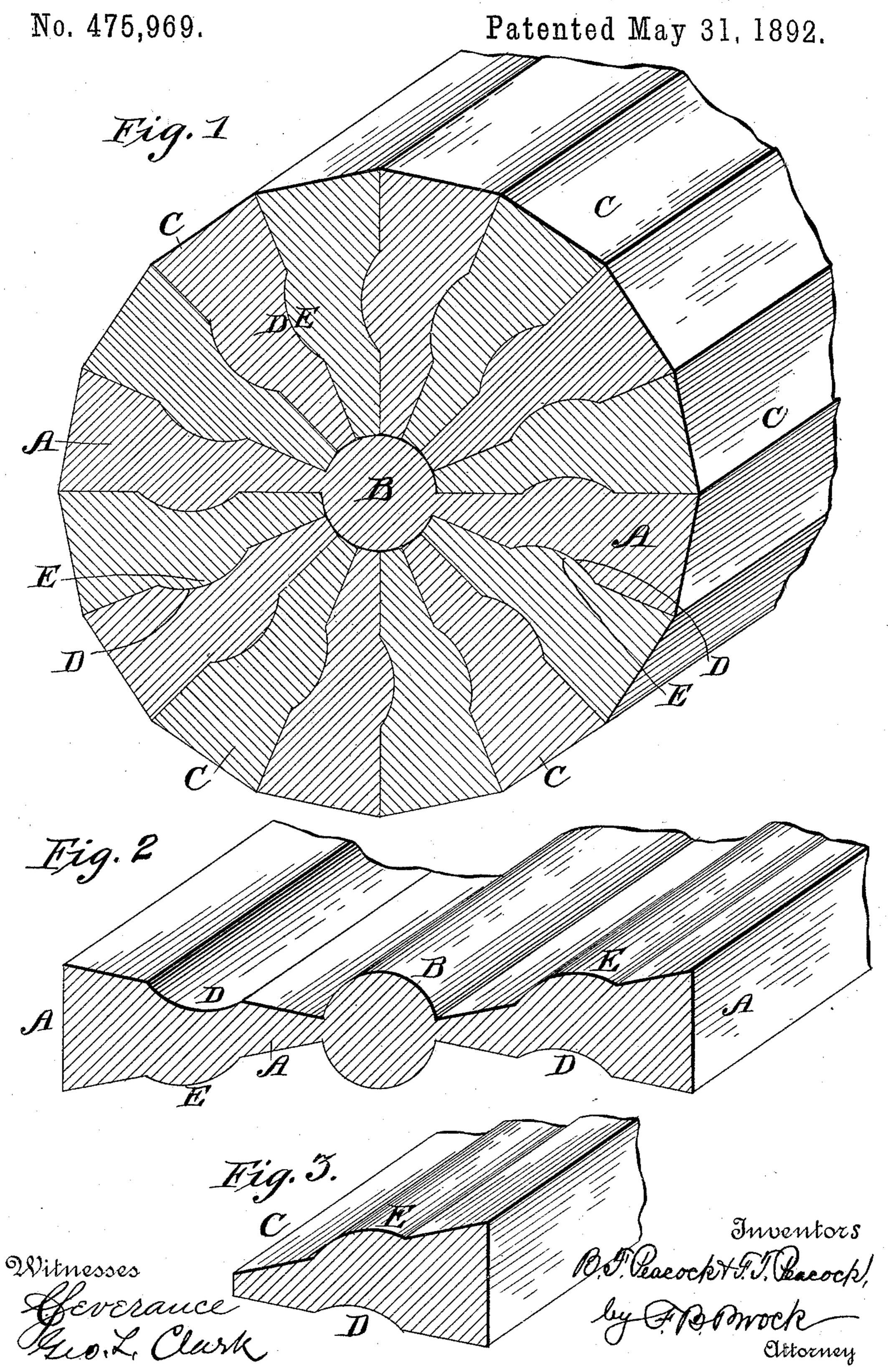
B. F. & F. T. PEACOCK.

MANUFACTURE OF AXLES, SHAFTS, &c.



United States Patent Office.

BENJAMIN FRANCIS PEACOCK, OF ANNISTON, ALABAMA, AND FRANCIS T. PEACOCK, OF SPARROW'S POINT, MARYLAND.

MANUFACTURE OF AXLES, SHAFTS, &c.

SPECIFICATION forming part of Letters Patent No. 475,969, dated May 31, 1892.

Application filed February 11, 1892. Serial No. 421,204. (No model.)

To all whom it may concern:

Be it known that we, Benjamin Francis Peacock, of Anniston, Calhoun county, Alabama, and Francis T. Peacock, of Sparrow's Point, Baltimore county, Maryland, citizens of the United States, have invented certain new and useful Improvements in the Manufacture of Axles, Shafts, and the Like; and we 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.

Our invention relates to the manufacture of car-axles. We may, however, employ our improved pile for the manufacture of any style of shafting, and for any purpose for which our invention may be found suitable.

Heretofore in the construction and manufacture of car-axles, where extra tensile strength has been an object, it has been customary, among other methods, to form a pile or fagot made from scrap-iron, muck-bars, or steel billets. Such piles or fagots are then rolled or forged out in the usual manner.

To provide against the inherent weaknesses frequently found to exist in piles forged into car-axles and the like in the usual way, we have devised the within-described improvements in the art, by means of which we are able to produce shafting of a uniform strength, fiber, and toughness hitherto unknown in the art.

Figure 1 shows a transverse sectional view of a shaft made up of a series of substantially radial longitudinal sections, which are preferably formed from the best selected scrap or muck iron. These sections are forged or rolled in a machine which we have devised and for which we intend to apply for Letters Patent thereon. Fig. 2 is a transverse section of one form of section composing the axle, and Fig.

3 is a similar view of another form of section 45 which we may use in the manufacture of our invention. Both the section shown in Fig. 2 and the section shown in Fig. 3 are used in the manufacture of a single axle or shaft.

In the drawings, A represents a section 50 composed of a central circular part B and diametrically-opposite wings of the form shown.

C represents the other form of the section, which is similar to A, except that the cylindrical part B is absent and the sections C 55 extend radially from the central core to the outer edge or periphery of the pile.

D and E represent oppositely concave and convex formations, fashioned in the sections A and C, which are adapted to interlock in 60 the making up of the pile preparatory to forging the same. We do not confine ourselves to the shapes of these concavities or convexities, nor, as heretofore stated, to the precise shape or conformation of the sections of which 65 the axle is made up. In a sectional pile produced in this way it will be found that when the axle is being turned up and finished there will be no sand or foreign matter in the seams or journals, such as is frequently found to 70 exist in the axles made from piles in the usual way. The strains upon this sectional pile, as we produce it, are so uniformly taken up and distributed, owing to the peculiar relations of the parts, that it will be next to impossible for 75 it to give way other than by slight bending.

We claim—
A sectional pile for shafting, provided with a diametrically-arranged bar having a central portion and radial wings, and a series of radial So sections with interlocking surfaces therefor.

In testimony whereof we affix our signatures in presence of two witnesses.

BENJAMIN FRANCIS PEACOCK.
FRANCIS T. PEACOCK.
Witnesses:

J. F. CREEN, S. G. LAWRENCE,