J. YOCOM, Jr.

DIVIDED COLLARS FOR SHAFT-COUPLING.

No. 180,304. Patented July 25, 1876.

Fig. 1.

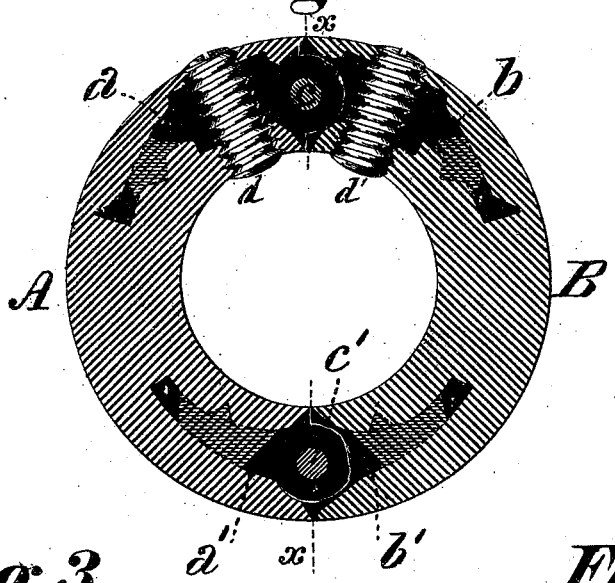



Fig. 3.

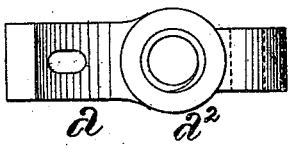



Fig. 4.

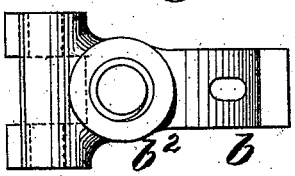
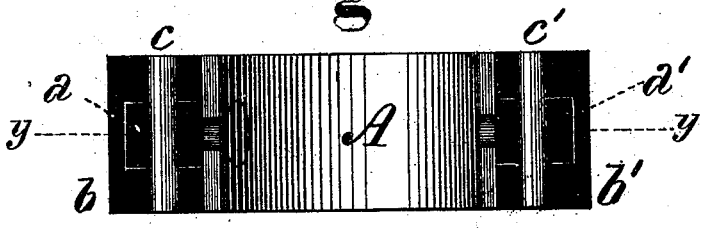



Fig. 2.




Witnesses

~~John Gwarding~~

F. E. Harding.

Inventor

James Yocom, Jr.

by J. Snowden Bell,

Attorney.

# UNITED STATES PATENT OFFICE.

JAMES YOCOM, JR., OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN DIVIDED COLLARS FOR SHAFT-COUPLINGS.

Specification forming part of Letters Patent No. **180,304**, dated July 25, 1876; application filed July 12, 1876.

*To all whom it may concern:*

Be it known that I, JAMES YOCOM, Jr., of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Divided Collars for Shafting, &c., of which the following is a specification:

My present invention is an improvement upon that for which Letters Patent of the United States, No. 116,134, were granted and issued to me under date of June 20, 1871; and its object is to provide, in a collar which can be divided to be placed on or removed from a shaft, a secure and substantial connection for its two sections. To this end my improvements consist in the combination of a collar, cast in two sections, and hinges or joint-pieces, formed of a metal of greater strength than the sections of the collar, and united thereto in the operation of casting them; and, further, in combining with the sections and hinge-pieces set-screws passing through both, and serving to hold them together, as well as to retain the collar in position upon its shaft, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a central section of a collar embodying my improvements, at the line *y y* of Fig. 2; Fig. 2, a section at right angles thereto, at the line *x x* of Fig. 1; Fig. 3, a plan or top view of one of the male hinge-pieces, and Fig. 4 a similar view of a female hinge-piece.

To carry out the object of my invention I form a collar of two separate sections, A B, usually composed of cast-iron, which are connected by means of two pair of interlocking hinge or joint pieces, *a b* $a^1$ $b^1$, and pins *c* $c'$. The hinge-pieces are inserted and adjusted in the mold in which the sections A B are cast, and the metal which forms the latter is poured therein, and adheres, when cold, to such portions of the hinge-pieces as are not to be exposed when the collar is finished, the exposed portions being clay-washed to prevent such adhesion. The hinge-pieces are perforated and provided with dovetail projections to perfect their connection with the sections A B.

A divided casting, formed substantially as hereinabove stated, is described and claimed in my Letters Patent No. 116,134 aforesaid; but in my present improvement I form the hinge-pieces of a metal possessing greater strength than that of which the sections A B are composed—as, for example, malleable or wrought iron, or steel, thus affording a secure and solid connection, with a reduction in size of said hinge-pieces.

In order to attach the hinge-pieces and sections more firmly together, hubs or bosses $a^2$ $b^2$ may be formed upon the hinge-pieces, through which and through the adjacent metal of the sections A B set-screws *d* $d'$ pass, said set-screws serving the double purpose of effecting a stronger connection of the hinge-pieces and sections, and of securing the finished collar in position upon its shaft.

My improvements are shown as applied in a collar; but it is obvious that they may be used in pulley, eccentric, or crank hubs with equal facility, and without departing from the spirit of my invention.

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

1. The combination, in a divided collar for shafting, &c., of two sections connected by interlocking hinge-pieces, united to the sections in the operation of casting the latter, and formed of a metal of greater strength than that of which the sections are composed, substantially as set forth.

2. The combination, in a divided collar for shafting, &c., of two sections, interlocking hinge-pieces, and a set screw or screws passing through the hinge-pieces and sections, substantially as set forth.

JAMES YOCOM, JR.

Witnesses:

J. SNOWDEN BELL,

PETER PARET.