No. 799,333. PATENTED SEPT. 12, 1905.

J. G. HEASLET.

CRANK.

APPLICATION FILED MAY 16, 1904.

Fig. 1.

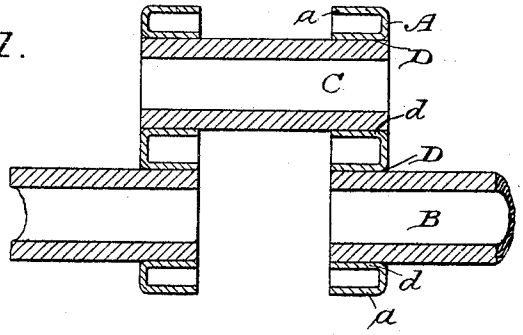


Fig. 3.

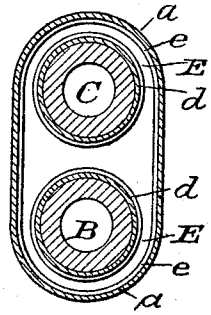


Fig. 2.

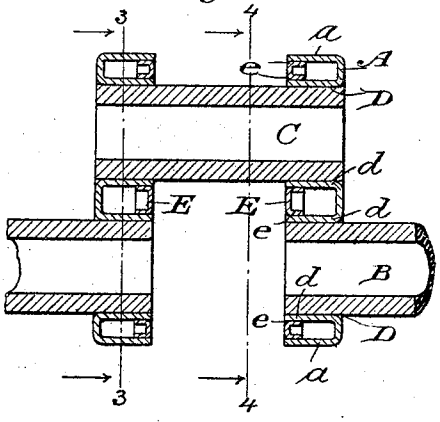


Fig. 4.

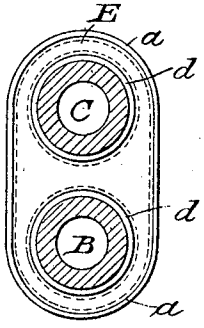
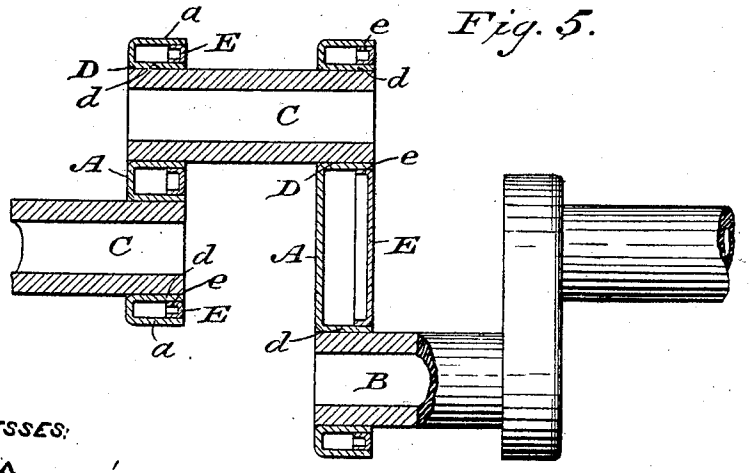


Fig. 5.



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CRANK.

No. 799,333. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed May 16, 1904. Serial No. 208,173.

To all whom it may concern:

Be it known that I, JAMES G. HEASLET, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Cranks, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to cranks, and particularly to improved structures which shall enhance the simplicity and strength of the same.

Said invention consists of means hereinafter fully described, and specifically set forth in the claims.

The annexed drawings and the following description set forth in detail certain means embodying the invention, such disclosed means constituting but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings, Figure 1 represents a central longitudinal section of a crank-shaft provided with my improved crank. Fig. 2 represents a modified form of the same. Figs. 3 and 4 represent central transverse sections taken upon the planes indicated by the lines 3 3, 4 4, respectively, Fig. 2; and Fig. 5 represents such modified construction applied to a two-throw crank structure.

In my improved crank structure I provide webs A, preferably made entirely of struck-up sheet metal of substantially uniform thickness, and sheet metal surrounding the crank-shaft B and the crank-pin C, and I stamp out openings D D in this web A of a diameter sufficient to snugly accommodate the crank-shaft B and the crank-pin C. These stamped-out portions *d* I turn back at right angles to the web proper, thereby forming flanges for the openings D. By turning in the edge of the web A also at right angles a peripheral flange *a* is provided.

In the construction shown in Fig. 2 a filling member E is interposed between the flanges *a* and *d*, such filling member being provided with peripheral flanges *e* and forming one face of the web A. A much stronger structure is thereby obtained.

As shown in Fig. 5, my improved crank structure may be applied to a crank of two or more throws, the portions *d* being stamped out and arranged and the filling members E provided, as is found suitable and necessary.

In securing the crank-shaft B and the crank-pin C in the openings D D, I find it preferable to braze said shaft and pin in said openings.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention—

1. In a crank structure, the combination of a shaft, a crank-pin, a web of sheet metal formed with a peripheral flange and intermediate flanged openings, said shaft and pin secured in the latter, and a filling member interposed between the flanges of said web.

2. In a crank structure, the combination of a shaft, a crank-pin, a web of sheet metal formed with a peripheral flange and intermediate flanged openings, said shaft and pin secured in the latter, and a flanged filling member interposed in the space between said web-flanges.

3. In a crank structure, the combination of a shaft, a crank-pin, a web of sheet metal formed with a peripheral flange and intermediate flanged openings, said shaft and pin secured in the latter, and a flanged filling member interposed in the space between said web-flanges, such filling member forming one face of said web.

Signed by me this 30th day of April, 1904.

JAMES G. HEASLET.

Attest:
G. W. SAYWELL,
A. E. MERKEL.