

(No Model.)

G. ALLEN.

DEVICE FOR CONVERTING MOTION IN OIL PUMPING APPARATUS.

No. 328,099.

Patented Oct. 13, 1885.

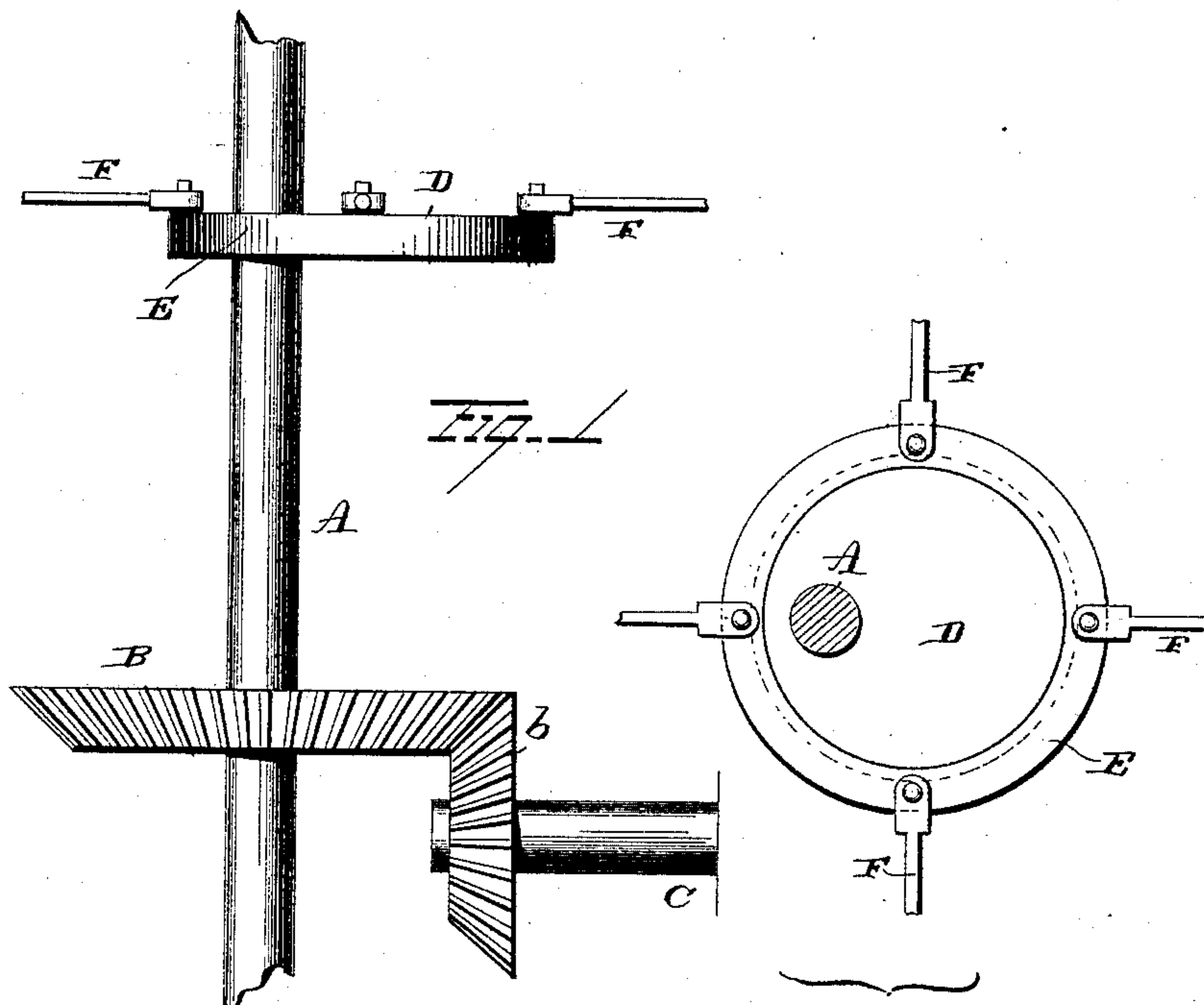
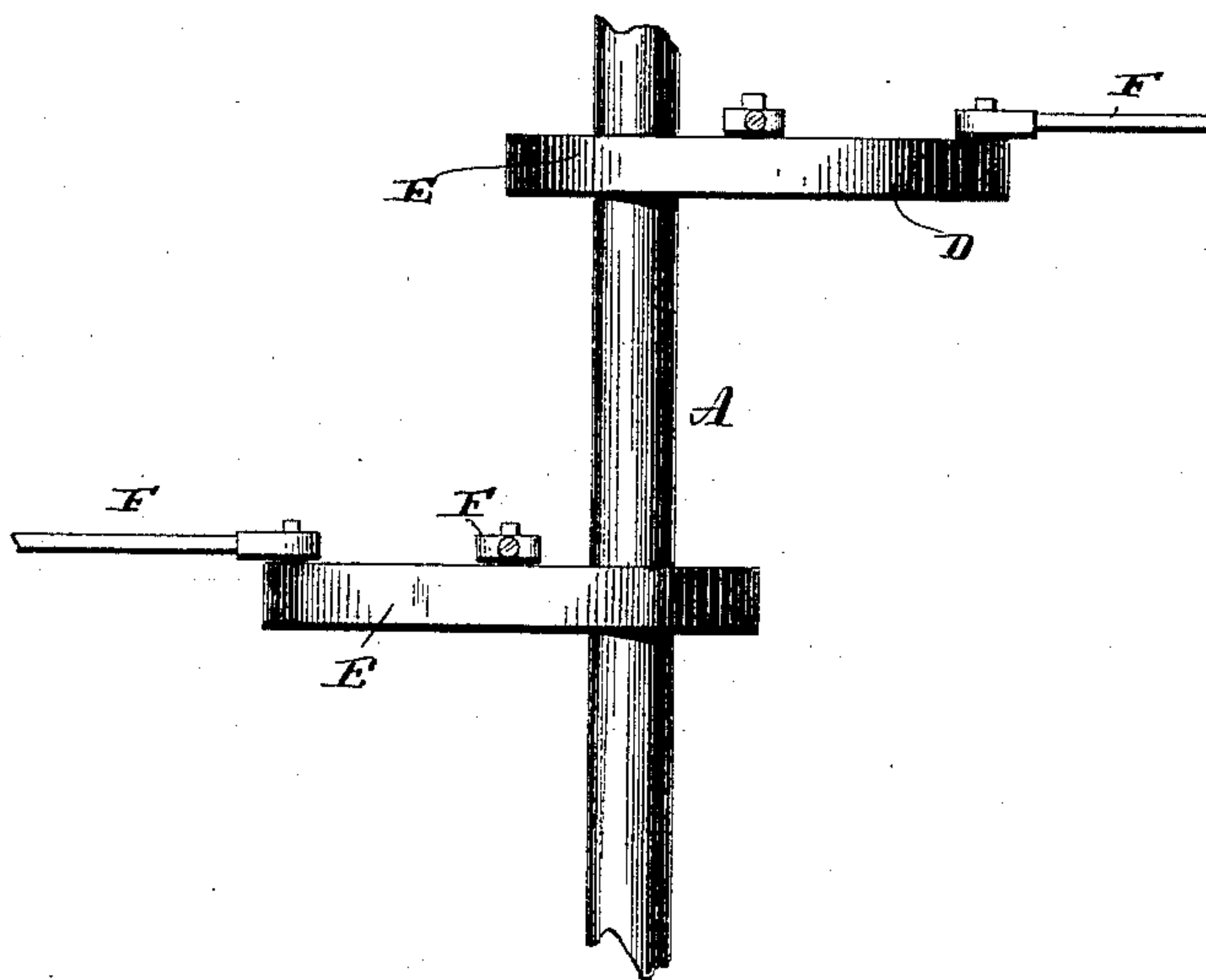


FIG. 2



WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE ALLEN, OF FRANKLIN, PENNSYLVANIA.

DEVICE FOR CONVERTING MOTION IN OIL-PUMPING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 328,099, dated October 13, 1885.

Application filed September 9, 1885. Serial No. 176,584. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ALLEN, of Franklin, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Converting Motion in Oil-Pumping Apparatus; and I do hereby 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.

My invention relates to an improvement in converting motion in oil-pumping apparatus. In Letters Patent No. 313,907, granted me on March 17, 1885, I showed and described an upright rotary shaft provided with a crank and a disk loosely mounted on the wrist-pin of the crank, said disk being adapted to the attachment of pump-actuating rods leading in any desired direction therefrom. In a second application for Letters Patent allowed me on August 10, 1885, I showed and described a modified form of the construction shown in my former patent, in which the pump-actuating rods were loosely secured directly on the wrist-pins of the crank.

While the above constructions have proved eminently practicable in use, and well adapted to satisfy the needs of a great majority of the cases where a greater or lesser number of wells are to be pumped by a single-actuating shaft, yet there are instances in which it might be desirable to modify the means for attaching the pump-actuating rods to the driving-shaft.

The object of my present invention is to provide means for attaching the pump-actuating rods to the driving-shaft at one or several points of elevation and in groups, leading in opposite general directions from each of two points of elevation, or in any desired direction from the same point of elevation, as may be found most expedient.

With these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a portion of the pumping apparatus embodying my invention, showing rods leading in any direction from the same point on the driving-shaft, and Fig. 2 is a similar view showing two groups of rods, the groups lead-

ing from different points of elevation on the drive-shaft and in generally opposite directions therefrom.

A represents an upright shaft journaled in suitable bearings in a supporting-frame, and driven by bevel-gear B b, connecting it with the engine-shaft C.

To the shaft A are rigidly secured one or more eccentric disks or wheels, D, provided with the eccentric straps or rings E, loosely mounted thereon. To the straps or rings E the ends of the pump-actuating rods F are secured, the rods leading in any direction therefrom, as shown in Fig. 1, or one group of rods, F, leading to the right from one of the eccentric disks, and another leading to the left from another of the eccentric disks or wheels, as shown in Fig. 2. The latter construction admits of a more perfect balancing of the pumps, as those on the right will be all descending while those on the left are lifting, or vice versa. This may be quite satisfactorily accomplished, however, when but a single eccentric is employed by using a little care in distributing the rods about the ring E.

Instead of one or two eccentrics, three or more may be used, and the capabilities of the pump be thereby increased in respect to the number of pump-actuating rods having the same or different lengths of stroke.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an upright shaft and means for rotating it, of an eccentric rigidly secured on the shaft, a strap or ring mounted on the eccentric, and pump-actuating rods attached to the strap or ring, substantially as set forth.

2. The combination, with an upright shaft and means for rotating it, of one or more eccentric disks or wheels secured on the shaft, straps or rings loosely mounted on the eccentrics, and pump-actuating rods secured to the straps or rings, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE ALLEN.

Witnesses:

WM. H. BIRGE,  
E. D. ALLEN.