

(No Model.)

G. W. GRIMES.
OIL OR WATER WELL OPERATING POWER.

No. 586,027.

Patented July 6, 1897.

Fig. 1,

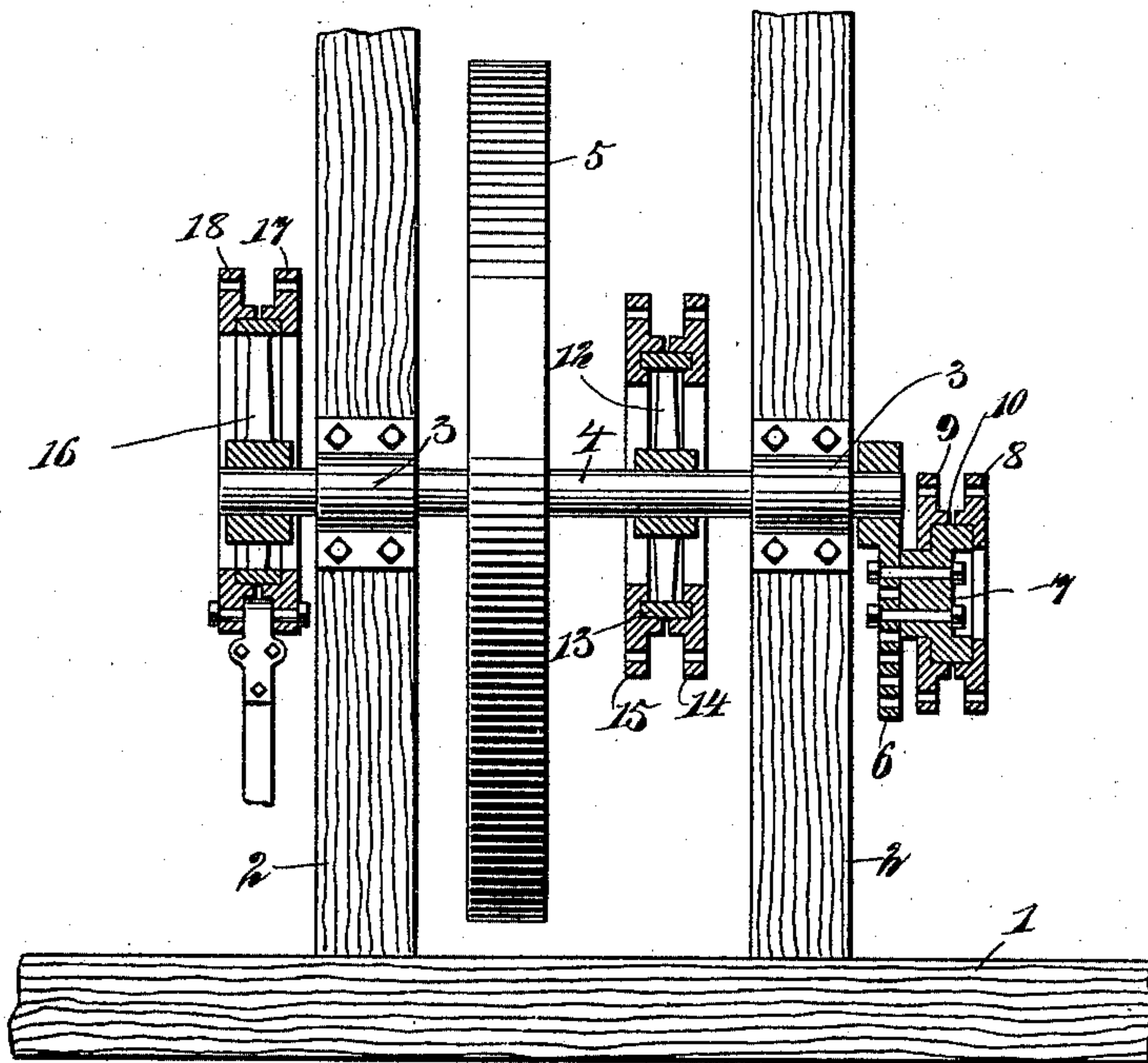


Fig. 2,

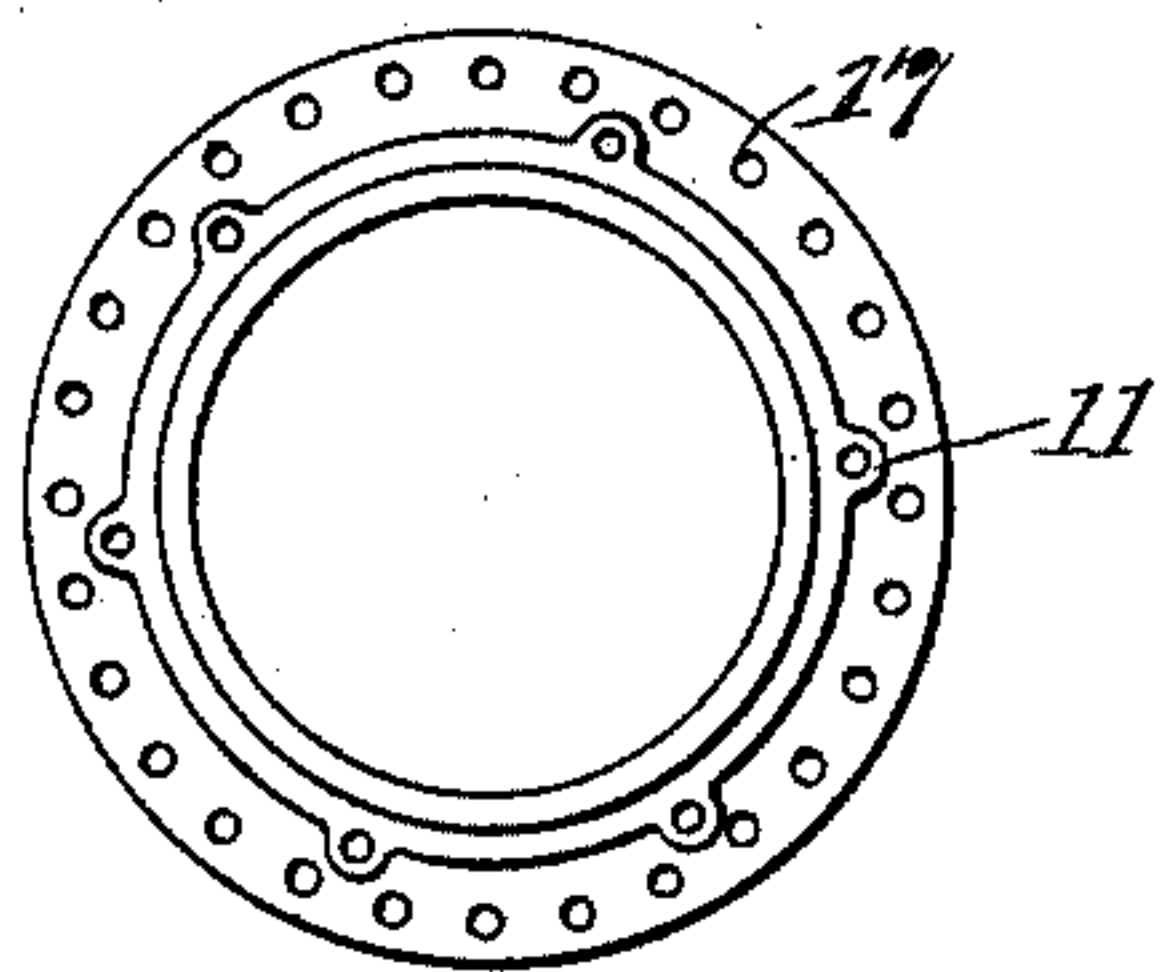


Fig. 3,

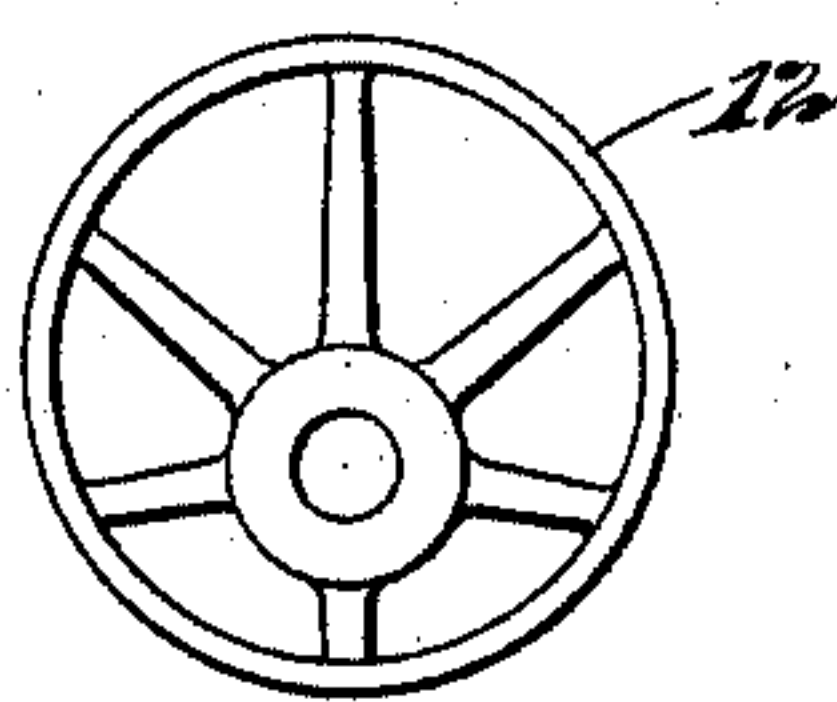


Fig. 4,

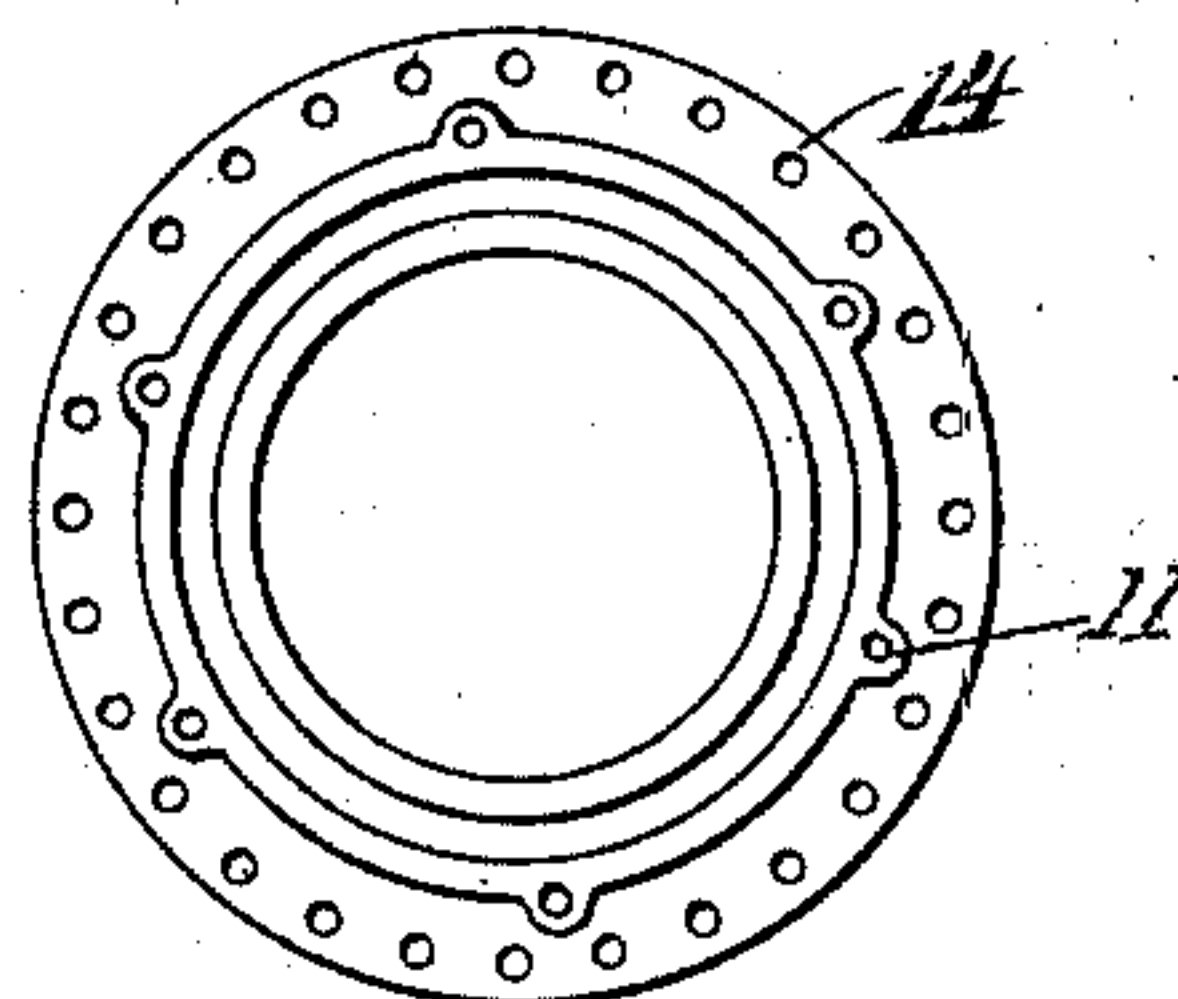
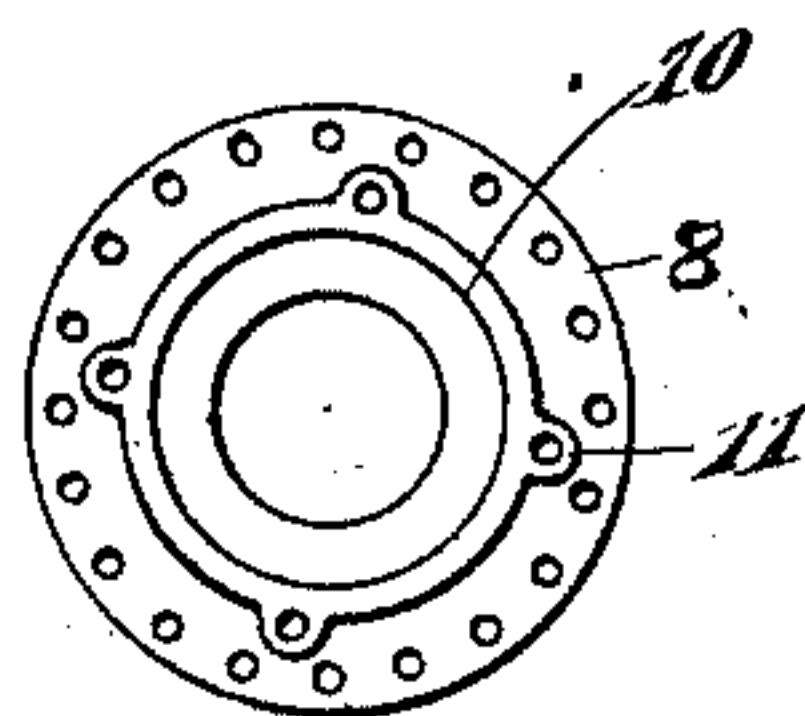


Fig. 5,



WITNESSES:

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GEORGE W. GRIMES, OF BLUFFTON, INDIANA.

OIL OR WATER WELL OPERATING POWER.

SPECIFICATION forming part of Letters Patent No. 586,027, dated July 6, 1897.

Application filed June 1, 1896. Serial No. 593,849. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GRIMES, of Bluffton, in the county of Wells and State of Indiana, have invented new and useful Improvements in Oil or Water Well Operating Powers, of which the following is a full, clear, and exact description.

This invention relates more particularly to crank and eccentric mechanisms for operating oil-well drills or for actuating oil-pump rods, and the object is to provide a simple and cheaply-constructed form of power, but which will have sufficient strength and rigidity to operate several pumps from a central station or point.

I will describe a power embodying my invention, and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation and partial section showing my invention as adapted for use for well drilling and pumping purposes. Fig. 2 is a plan view of a rod-actuating plate or ring. Fig. 3 is a plan view of an eccentric or crank therefor. Fig. 4 is a plan view of another form of rod-actuating plate or ring, and Fig. 5 is a plan view of still another form of rod-actuating plate or ring.

Referring to the device illustrated, 1 designates a base-sill, and 2 shows vertical posts extended therefrom. On the vertical posts 2 are secured bearings 3 for a horizontally-disposed shaft 4, upon which is mounted a power-wheel 5, here shown in the form of a band-wheel. On one of the outer ends of the shaft 4 is secured a crank-arm 6, and adjustably secured to this crank-arm 6 is the crank attachment 7. As here shown, this crank attachment is secured to the crank-arm 6 by means of bolts passing through said attachment and passing through two of the series of holes formed in said crank-arm. This crank attachment 7 has an outwardly-extended annular flange, and the opposite sides of this flange are engaged by pump-rod plates 8 and 9. These pump-rod plates 8 and 9 have in-

wardly-extended flanges 10, adapted to engage the periphery of the attachment.

Extended radially outward from the flanges 10 are perforated lugs 11, through which bolts may pass to secure the two plates 8 and 9 together, but in such manner that the crank attachment 7 may rotate within the plates. The plates 8 and 9 have outwardly-extended flanges, each provided with an annular row of perforations, through which clip-bolts may pass to secure a pump-actuating rod or drill-rod therewith.

Rigidly mounted on the shaft 4, between the uprights or posts 2, is an eccentric or crank-wheel 12, having at its periphery laterally-extended flanges 13, engaging in channels formed in the pump-rod plates 14 and 15. It will be seen that these plates 14 and 15 engage both the outer and inner sides of the flanges 13, and the plates have outwardly-extended perforated flanges for the engagement of the pump-actuating rod.

On the end of the shaft 4 opposite to that engaged by the crank 6 is an eccentric or crank-wheel 16, similar to the crank-wheel 12. In this construction, however, the pump-rod plates 17 and 18 have inwardly-extended annular flanges which engage only the outer periphery of the eccentric or crank-wheel. In both examples the pump-rod plates mounted on the eccentric or crank-wheel will be securely bolted together.

It is obvious that the devices shown in Fig. 1 may be used on a vertically-disposed shaft.

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

1. The combination, with a rotary shaft and a power-wheel thereon, of a crank-arm having a series of perforations, a crank attachment adjustably mounted on said crank-arm and having an outwardly-extending flange, and rod-actuating plates engaging the opposite sides of said flange and having inwardly-extending annular flanges to engage the periphery of the flange on the attachment, the said plates being bolted together, substantially as specified.

2. The combination with a rotary shaft, of

a crank-wheel mounted rigidly thereon and
having laterally-extended peripheral flanges,
rod plates or rings engaging the outer edges
of said flanges and having inwardly-extended
5 flanges to engage the periphery of the crank-
flange, the said plates or rings also having
outwardly - extended perforated flanges for

the engagement of rod-clips, substantially as
specified.

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Witnesses:

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