

J. W. PEDIE.

GEARING.

APPLICATION FILED APR. 15, 1911.

1,015,507.

Patented Jan. 23, 1912.

Fig. 1.

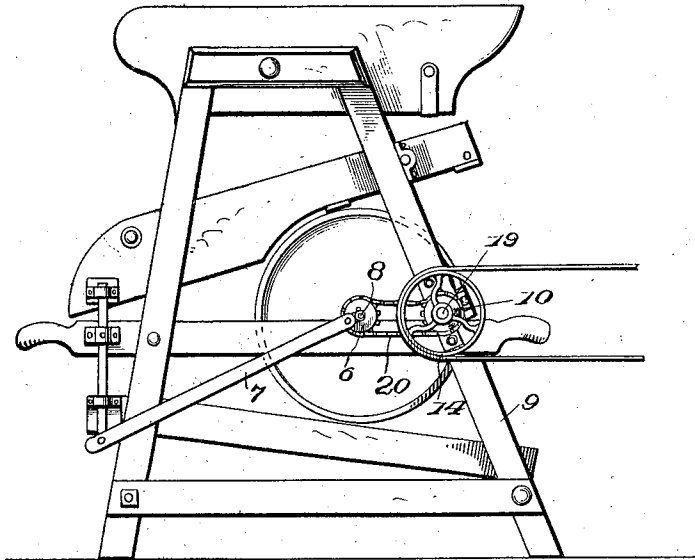


Fig. 2.

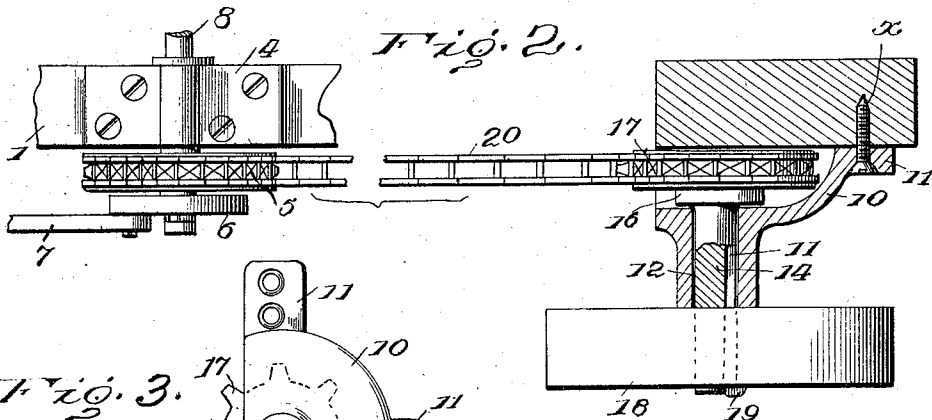
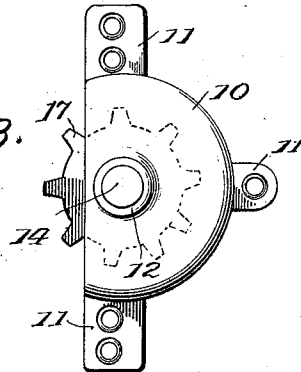


Fig. 3.



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GEARING.

1,015,507.

Specification of Letters Patent.

Patented Jan. 23, 1912.

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To all whom it may concern:

Be it known that I, JOHN W. PEDIE, a citizen of the United States, and a resident of Souris, in the county of Bottineau and State of North Dakota, have invented certain new and useful Improvements in Gearing, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in convertible gearing, or one which is adapted to be applied to a manually operated machine to adapt the same to be operated by power, and it has for its object the provision of such a gearing which is adapted for attachment to the driving shaft of such a machine, so that the same may be changed from manually operated to power operated.

To the above end I provide a light simply constructed device which, for the purposes of illustration, I have shown as attached to a fanning mill of the usual form, in order that the hand operated crank by which such mill is ordinarily driven may be removed and the same replaced by a readily attachable power operated gear.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described and particularly pointed out in the appended claim, it being understood that changes in the specific structure shown and described may be made within the scope of the claim, without departing from the spirit of the invention.

In the accompanying drawings forming a part of this specification, and in which like numerals of reference indicate similar parts in the several views—Figure 1 shows a side elevational view of a fanning mill of usual construction, provided with my attachment; Fig. 2 shows a sectional detail of the attachment; Fig. 3 shows a detached detail of the dished housing as used in my invention.

In Fig. 1 of the drawing is shown a fanning mill of conventional form, including a set of rear standards, a set of cross braces and a driving shaft, the latter being provided with an eccentric engaged by a pitman having at its outer end a rocking bar, the upper end of which is connected with the sieve to agitate the same, all as is usual in fanning mill constructions.

The fanning mill of the form shown is, as a rule, operated by means of a crank by

which the shaft is rotated. My present invention is directed to providing the shaft of a fanning mill or other hand driven machine with a readily attachable power-driven mechanism. To this end the eccentric and crank are removed from the shaft, and in place of the former, next to the bearing 4, I secure a chain gear 5 by means of a key. Next to the chain gear 5 is secured the eccentric 6 in order that the rock bar 7 may be upon the outside. The shaft 8, in certain constructions of fanning mills, is located near the rear standards 9, and to one of these standards I secure a peculiarly constructed dished housing 10 having the apertured securing ears 11 and the outstanding bearing sleeve 12. By means of suitable screws X, the housing 10 is secured to the standard 9.

Revolubly held within the outstanding bearing sleeve 12 is a stub shaft 14. The shaft 14 is provided with a stop collar 16 working against the inner surface or end of the sleeve 12, and forming a part of this stop collar 16 is the chain gear 17. The thickness of the chain gear and stop collar, as shown in Fig. 3, is such that the outer face of the chain gear 17 rotates and is held immediately adjacent to the standard 9. A drive pulley 18 of a size somewhat greater than the chain gears, which are of like sizes, is secured to the outer end of the stub shaft by means of the key 19 as shown.

The gears 5 and 17 having been properly secured in alinement, a suitable drive chain 20 is connected and passed over the same. A suitably driven driving belt 21 is then brought into connection with the pulley 18. The forward chain gear and the housing 10 can be readily placed in position on a fanning mill or other hand operated mechanism, so that the same can be quickly changed to a power-driven machine, and the attachment is simple and comparatively inexpensive in construction.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

In a mechanism for converting a machine driven by a hand crank into a machine driven by power, the combination with a gear adapted to be keyed to the driven shaft of the machine, of a housing comprising a dished portion having ears extending therefrom by which the housing is adapted to be secured in position on the machine, a bear-

ing sleeve extending outwardly from the
dished portion, a short shaft rotatably
mounted in said sleeve, a pulley fast to the
outer end of the short shaft adapted to bear
5 against the outer end of the sleeve, a col-
lar mounted on the short shaft within the
dished portion, and adapted to bear against
the inner face of the dished portion, a gear
mounted on the inner end of said short shaft,

and a chain adapted to connect the gear on 10
said short shaft to the gear on the driving
shaft.

In testimony whereof, I affix my signa-
ture, in presence of two witnesses.

JOHN W. PEDIE.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
