

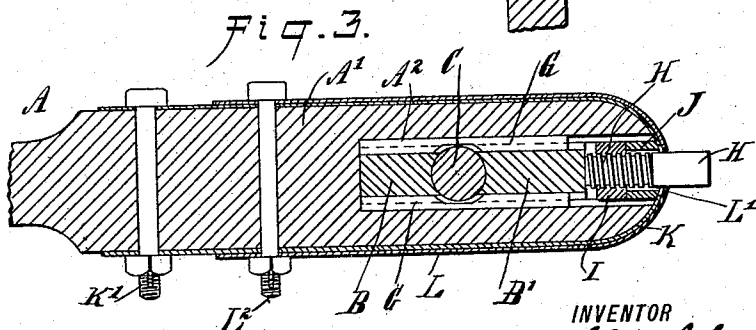
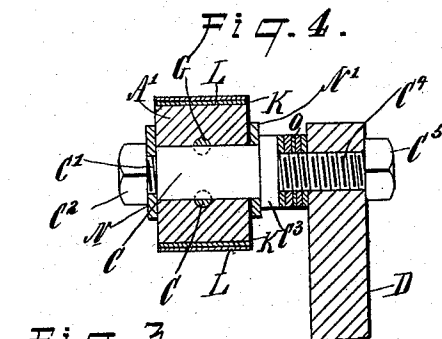
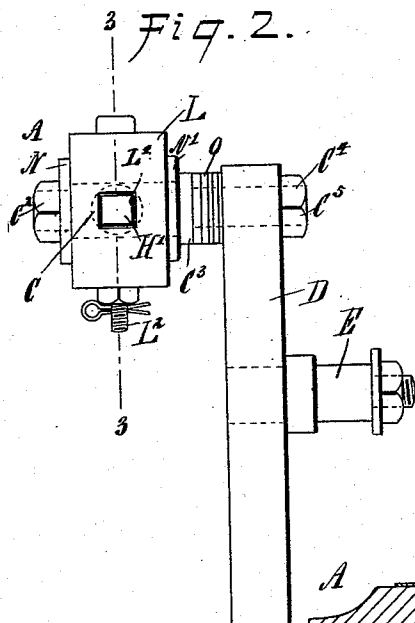
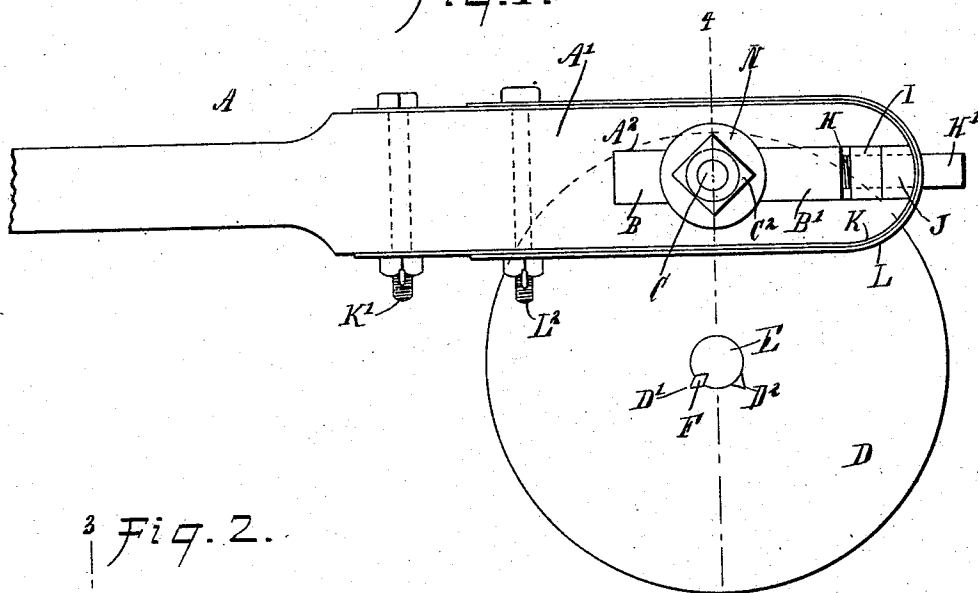
(No Model.)

J. S. NICHOLS.
POWER TRANSMITTING DEVICE.

No. 572,816.

Patented Dec. 8, 1896.

Fig. 1.



WITNESSES:

Henry A. C. Kelley.
Geo. F. Hostetler.

INVENTOR
J. S. Nichols.
BY *[Signature]*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN S. NICHOLS, OF EDGERTON, MINNESOTA.

POWER-TRANSMITTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 572,816, dated December 8, 1896.

Application filed April 28, 1896. Serial No. 589,406. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. NICHOLS, of Edgerton, in the county of Pipestone and State of Minnesota, have invented a new and Improved Power-Transmitting Device, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved power-transmitting device, such as a crank-disk and pitman, and which is simple and durable in construction and arranged to prevent lost motion in transmitting the power.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

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 figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is an end view of the same. Fig. 3 is a longitudinal section of the pitman on the line 3 3 of Fig. 2, and Fig. 4 is a transverse section of the improvement on the line 4 4 of Fig. 1.

The pitman A is provided with a head A', containing a longitudinally-extending slot A², terminating at the outer end of the head, as plainly indicated in Figs. 1 and 3. In the slot A² is arranged a pitman-box, preferably made in two sections B B', engaging a crank-pin C, held on the crank-disk D, secured on the shaft E by means of a key F, secured in the shaft E and engaging one of several keyways D' or D², formed in the crank-disk D. The pitman-box is made of compressed wood, so as to withstand considerable wear, and at the same time permitting an easy fitting of the box-sections in the head A'.

The box-sections B B' are held in place transversely by longitudinally-extending keys G, fitted in recesses in the head A' and engaging corresponding recesses in the top and bottom of the sections B B'. The outer end of the section B' is engaged by a screw H for preventing the box-sections from longitudinal movement, said screw screwing in a nut I, fitted to slide longitudinally in the slot A², it being prevented from turning in the head by its sides fitting against the sides of the slot in

the head A'. The screw H also passes loosely through a washer J, against which abuts the outer face of the nut I, and the outer face of the washer J abuts against the inner surface of a strap K, extending over the top, bottom, and end of the head, to be secured thereto by a bolt K', as plainly shown in Figs. 1 and 3.

The square head H' of the screw H passes loosely through the strap K, but this square head is adapted to be engaged by a correspondingly-shaped aperture L', formed in a locking-strap L, fitted over the strap K and secured in place by a bolt L², passing through the head A' and the strap K, as shown in Figs. 1 and 3. It will be seen that by this arrangement the screw H has to be adjusted before the locking-strap L is put in place, and when this has been done, then the screw H is prevented from turning, and consequently the several parts of the box cannot be loosened.

When it is desired to take up wear in the box-sections B B', the operator has to remove the bolt L² and strap L to permit of turning the screw H a quarter or half turn to take up the wear of the box-sections on the crank-pin C. The strap L is then replaced and fastened in position by the bolt L², as before explained. The crank-pin C is formed on its outer end with a reduced threaded portion C', carrying a washer N, fitted against the front face of the head A' and held in place by a nut C². The rear face of the head H' is engaged by a washer N', held on the crank-pin and abutting against a collar C³ on the crank-pin, as plainly indicated in Figs. 2 and 4. From the collar C³ extends rearwardly the threaded shank C⁴, engaging the crank-disk D and engaged by a nut C⁵, abutting against the rear face of the said crank-disk. A series of washers O are placed on the shank C⁴ between the front face of the disk D and the collar C³, so as to permit of adjusting the crank-pin C longitudinally either by adding some of the washers or removing the same from the shank, as the case may be. Thus it will be seen that by the arrangement described all wear and lost motion can be readily taken up, so as to insure at all times a proper transmission of the motive power, thus permitting the machinery to run easier and do better work with less danger of the parts breaking. Furthermore, the machinery will run noiselessly.

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

5 A power-transmitting device comprising a pitman having a slot formed in the end thereof, two box-sections arranged within the slot, keys running longitudinally with the box-sections and holding such sections from lateral displacement within the slot, a mounted
10 crank-disk, a wrist-pin fixed to the crank-disk and mounted in the box-sections, a strap passing around the end of the pitman, a nut-bearing confined by the inner side of the strap

and located within the slot, a screw having a squared portion, the screw coöperating with the nut and engaging the outer box-section, and a second strap passed over the first strap and held by means independent of the means which hold the first strap, the second strap having a squared orifice receiving the squared portion of the screw so as to lock the same, substantially as described. 15 20

JOHN S. NICHOLS.

Witnesses:

IVER. I. PETERSON,
WALTER N. BEMIS.