

A. H. LE FEVER.
TRANSMISSION DEVICE.
APPLICATION FILED AUG. 20, 1910.

1,048,184.

Patented Dec. 24, 1912.

Fig 1

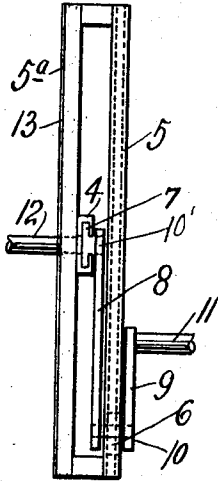


Fig 2

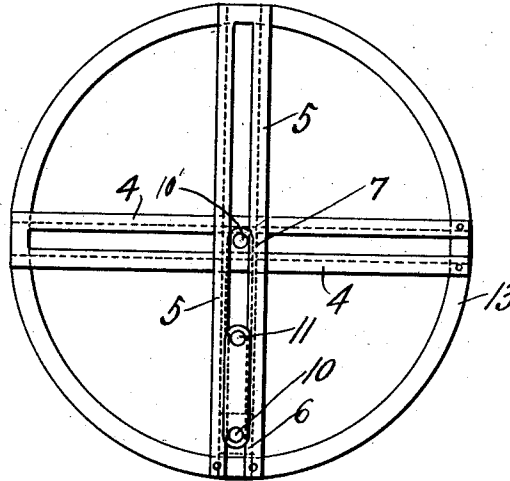
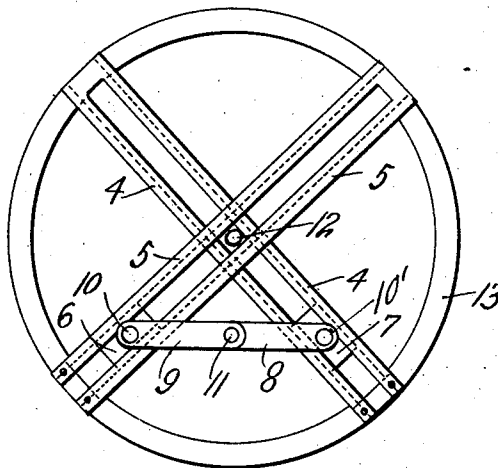


Fig 3



Witnesses:
Louise Enderle.
Aug. P. Jurgensen

Albert H. Le Fever, Inventor
By his Attorney
Shoup & Co.

UNITED STATES PATENT OFFICE.

ALBERT H. LE FEVER, OF NEW YORK, N. Y.

TRANSMISSION DEVICE.

1,048,184.

Specification of Letters Patent.

Patented Dec. 24, 1912.

Application filed August 20, 1910. Serial No. 578,165.

To all whom it may concern:

Be it known that I, ALBERT H. LE FEVER, a citizen of the United States, residing at Hotel Belleclair, New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Transmission Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in transmission devices and has particular reference to means for transmitting power more efficiently and without the use of gears, belt-

ing, friction devices, or similar apparatus. In the accompanying drawings I have illustrated in side elevation in Figure 1 an apparatus illustrating an application of my invention. Fig. 2 is a plan view of the same looking from right to left at Fig. 1, and Fig. 3 is another plan view showing the operating parts of the device in a different position.

The form of device illustrated in the accompanying drawings is adapted to transmit power at a two to one ratio.

4 and 5 are guide-ways mounted in the position shown by any suitable means such as the ring 13, so as to provide slide bearings for the blocks 6 and 7 pivotally secured at opposite ends of the lever 8 as shown at 10-10'. The lever 9 is preferably keyed or otherwise secured to the axis 10 and the same applies to the lever 8, and is provided with a shaft 11 which is also secured thereto. The block 7 is axially mounted on the opposite end of the lever 8. The shaft 12 is also keyed or otherwise secured to the frame piece 5^a of the guide 5. From this arrangement it will be seen by looking at Fig. 3 that as the shaft 11 is rotated rightwardly, the block 6 travels upwardly as the block 7 travels downwardly thereby imparting a rightward movement

to the frame structure as a whole secured to the shaft 12. It will also be observed that the shaft 12 only rotates about half as fast as the shaft 11 thus reducing the speed of rotation in transmission and of course it naturally follows that by applying the power to the shaft 12, the speed at the shaft 11 will be doubled. It will also be understood that by connecting the shaft 12 of one device to the shaft 11 of a similar device that the ratio of increased or reduced speed can be enlarged. It will also be understood that a greater number of guideways may be provided for for varying the increase or reduction of speed and that the general design and mechanical construction of the device can be elaborated and modified according to the special requirements for which the device is to be used. In fact various modifications can be made without departing from the spirit of the invention as set forth in the claim.

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

A transmission device comprising a frame secured to a shaft, said frame having superimposed slide bearings at right angles, a crank having one leg longer than the other, a block at the free extremity of the long leg of said crank adapted to engage and slide within one of said bearings, another block at the opposite extremity and between the legs of said crank adapted to engage and slide within the other of said bearings, the free extremity of the short leg of said crank secured to another shaft.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT H. LE FEVER.

Witnesses:

LOUISE ENDERLE,
THOMAS A. HILL.