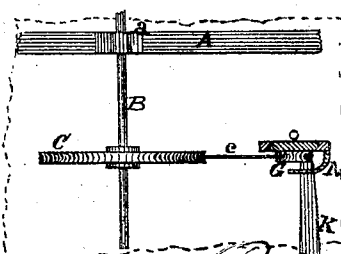
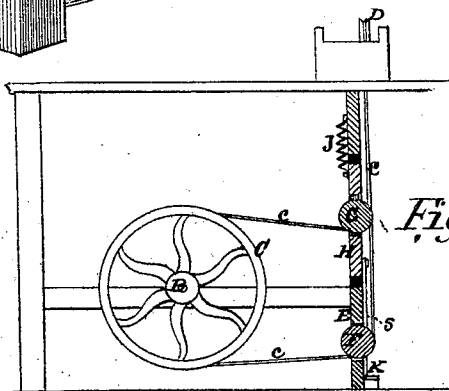
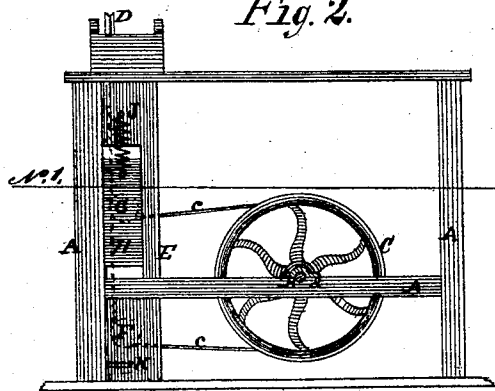
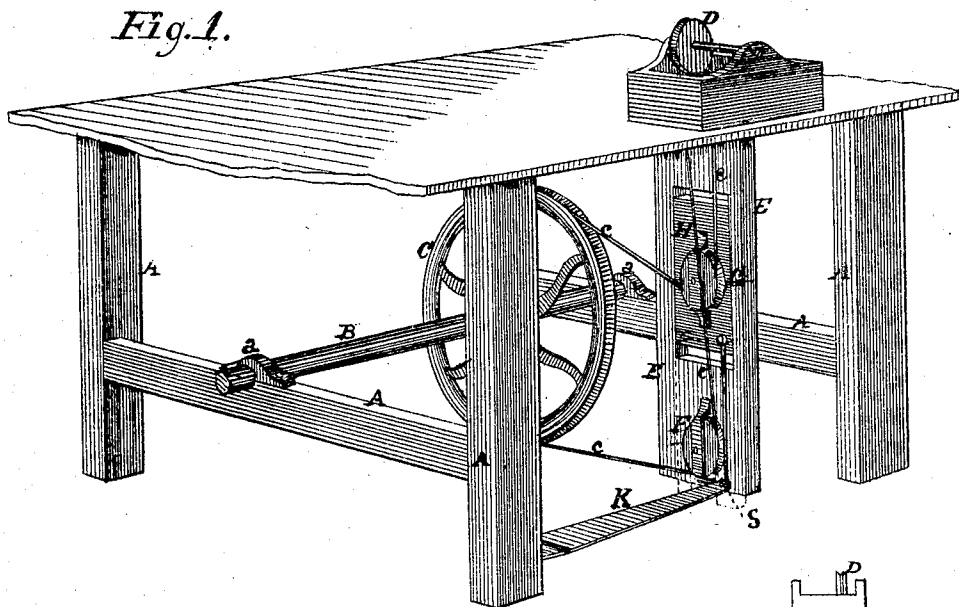


Apparatus for Transferring Power.

Patented Dec. 23, 1873.



{ Geo. A. Thompson.
Chas. J. Erskine

E. D. Clark,
Inventor.

UNITED STATES PATENT OFFICE.

ELIJAH B. CLARK, OF COHOES, NEW YORK, ASSIGNOR OF ONE-HALF HIS
RIGHT TO MICHAEL ANDRAE, OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR TRANSFERRING POWER.

Specification forming part of Letters Patent No. **145,721**, dated December 23, 1873; application filed
April 20, 1872.

To all whom it may concern:

Be it known that I, ELIJAH B. CLARK, of Cohoes, county of Albany, State of New York, have invented certain new and useful Improvements in Apparatus for Transferring Power; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 represents a perspective view of the apparatus embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a side elevation of the same, illustrating the several parts in a modified form of arrangement. Fig. 4 is a vertical view taken at line No. 1 in Fig. 2.

My invention relates to certain improvements in apparatus for transferring power from a continuous revolving driving-shaft to another shaft, intended to be temporarily, or intermittently driven; and consists in the arrangement and combination of a spring, a pulley having a movable bearing, and a fixed pulley, lever, and cord, in such a manner that the said lever will operate the movable bearing and its pulley in one direction, while the spring will operate the same in the opposite direction, and the band from the continuous driving-wheel will be tighter in its communication with the pulley to be driven intermittently.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawings and the letters of reference marked thereon, the same letters indicating like parts.

In the drawings, A represents any suitable frame-work of a table, or bench, or stand, to which the bearings *a a* of the driving-shaft B are secured. C is the driving-pulley, which is intended to be driven continuously by steam, or other equivalent power. D is the pulley intended to drive the machine to be operated, which may be a sewing-machine, a boring-machine, or any other, the operation of which is required to be stopped occasionally, and the said pulley may constitute a part of the machine to be operated, as is found in sewing-machines.

Heretofore, the power has been transferred from the driving-pulley C to the pulley D by

means of friction-clutches placed intermediate between the said pulleys, and arranged with intermediate pulleys or gears which have considerable complication of parts, and are, consequently, quite expensive.

In my invention I use any suitable frame-work, E, which may be constructed of either wood or metal in whole or part, and of any form to adapt it to the place or circumstances of position of the driving-pulley C and the driven pulley D, as may be required. To the lower portion of the said frame-work E I secure the pulley F, in such a manner that it will range with the face of the driving-pulley C and the driven pulley D, as shown. G is a second pulley, placed above the pulley F, and in range with same and the driving-pulley C, and is rendered capable of being moved vertically toward or from the fixed pulley F by means of the sliding piece H, to which the spindle or axle of the said pulley G is attached. J is any suitable spring, attached to the frame E or other equivalent fixed piece, and connected with the sliding piece H carrying the pulley G, in such a manner that it will tend to raise the said sliding piece and its pulley G. The said spring can be variously located and connected with the said sliding piece and the frame-work, or a weighted lever or cord and weight would operate substantially the same. *c c c c* is an endless band or cord, which connects with the driving-pulley C and the driven pulley D, after passing over the fixed pulley F and movable pulley G. K is a lever, placed at any convenient place at or near the floor, on which the operator may plant his foot. *s* is a cord or rod, attached to the sliding piece H and the end of the foot-lever K, as shown.

When the operator presses the lever K down it will operate to draw the sliding piece H down by means of the cord or rod *s*, when the band or belt *c c c c* will be tightened on the several pulleys, so that when the driving-pulley C is made to revolve with its shaft, the power or motion will be communicated to the pulley D, which is to actuate the working mechanism of the machine to be operated. When the operator removes his foot from the lever K, the spring J will draw or throw up the sliding piece H and its associate pulley G,

so as to slacken and render the cords *c c* loose, when the pulley C will be rendered incapable of transferring its motion or power to the pulley D.

M is a dress-guard, arranged at the front of the frame E, and made to pass the pulleys F and G, as in Fig. 4, and is intended to protect the dress of the operator from contact with the said device.

This invention is simple and quite inexpensive, and thoroughly efficient to effect the desired results, and can be used with advantage with sewing-machines, boring-machines, or

any other machinery where its motion is to be occasionally stopped.

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

The combination of the fixed pulley F and band or cord *c c c* with the pulley G, rendered capable of being moved toward or from the fixed pulley, and the spring J or its equivalent, substantially as and for the purpose set forth.

Witnesses:

E. B. CLARK.

GEO. A. THOMPSON,

CHAS. J. SELKIRK.