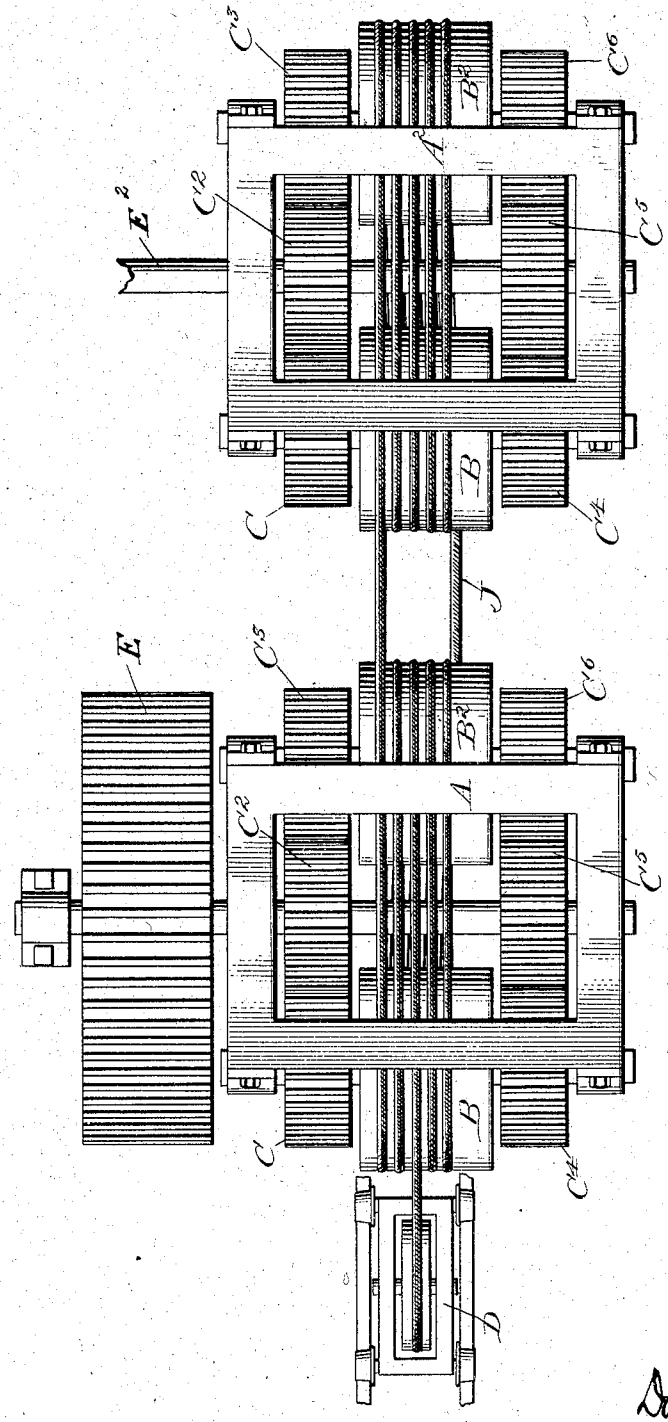
No. 791,667. PATENTED JUNE 6, 1905.

D. ABREY.

POWER TRANSMITTER.

APPLICATION FILED FEB. 25, 1905.



Witnesses

W. E. Brudine

Chas. E. Gordon.

Inventor

Daniel Abrey

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No. 791,667. Patented June 6, 1905.

UNITED STATES PATENT OFFICE.

DANIEL ABREY, OF PHILADELPHIA, PENNSYLVANIA.

POWER-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 791,667, dated June 6, 1905.

Application filed February 25, 1905. Serial No. 247,372.

To all whom it may concern:

Be it known that I, DANIEL ABREY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Power-Transmitters, of which the following is a full, clear, and exact specification.

This invention relates to that class of devices for transmitting power wherein an endless rope or cable or its equivalent is rove or wound upon drums located one at the source of power and the other at a distant point where power is to be used. Such mechanism is specially applicable in transmitting power in water-powers where the stream is between high banks or cliffs, or in grain-elevators or mines, and in situations where the laying and maintenance of a long line of shafting must be prohibitively expensive.

My invention resides in the employment of double drums at the power transmitting and receiving stations, over which the cable is rove or wound, to the end of maintaining evenness of tension on the cable and avoidance of slack.

In the accompanying drawing I have shown a plan view of a device embodying my invention.

At the power transmitting and distributing stations of my system are provided stout frames A and A^2, having bearings within which are mounted shafts carrying drums B and B^2, about or upon which the rope or cable J is rove or wound, said cable at power-station A being wound spirally from the drum B around the drum B^2 by multiple coils and passing thence to the drum B^2 of the receiving or distributing station, where it is similarly wound on the two drums, as shown.

In the form of apparatus shown the drum-shafts carry gears C, C^4, C^3, and C^6, which mesh with gears C^2 and C^5, keyed to the shaft of the prime mover or power-shaft, which is journaled in bearings between the drums B and B^2 at the power-station A. From this construction it will be seen that power is imparted directly to each of the drums B and B^2 from the prime mover E and thence to the station A^2 through the cable J, said cable operating the drums of frame A^2 and through the gears of said frame A^2 operating and transmitting power to the shaft E^2.

It will be understood, of course, that while the arrangement of gearing shown is the preferred form I do not limit myself to such arrangement, but that the gearing may be arranged on one side only of the drums.

In this form of apparatus I have shown a tension device D applied to the cable, which will be of advantage in some instances to compensate for expansion and contraction of the cable due to moisture of the atmosphere or changes of temperature according as a fiber or wire cable is used.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

An apparatus for transmitting power comprising a shaft, a pair of drums geared thereto, a second pair of drums, a shaft geared thereto, and an endless cable extending between the pairs of drums and having a plurality of coils about each pair of drums.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL ABREY.

Witnesses:

C. M. FORREST,

HERBERT WAMALING.