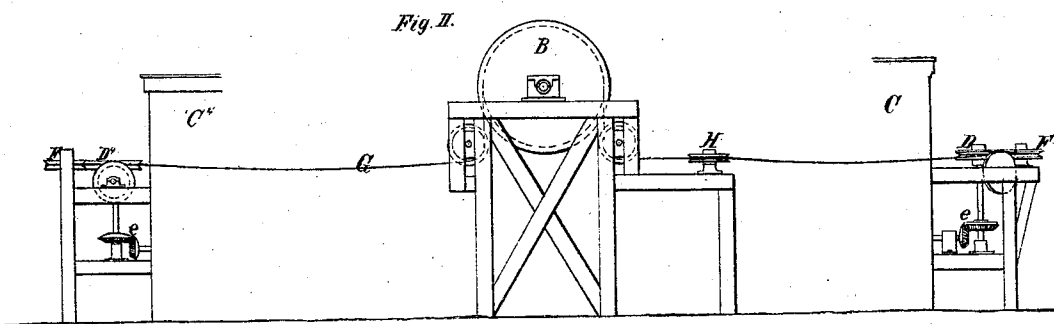
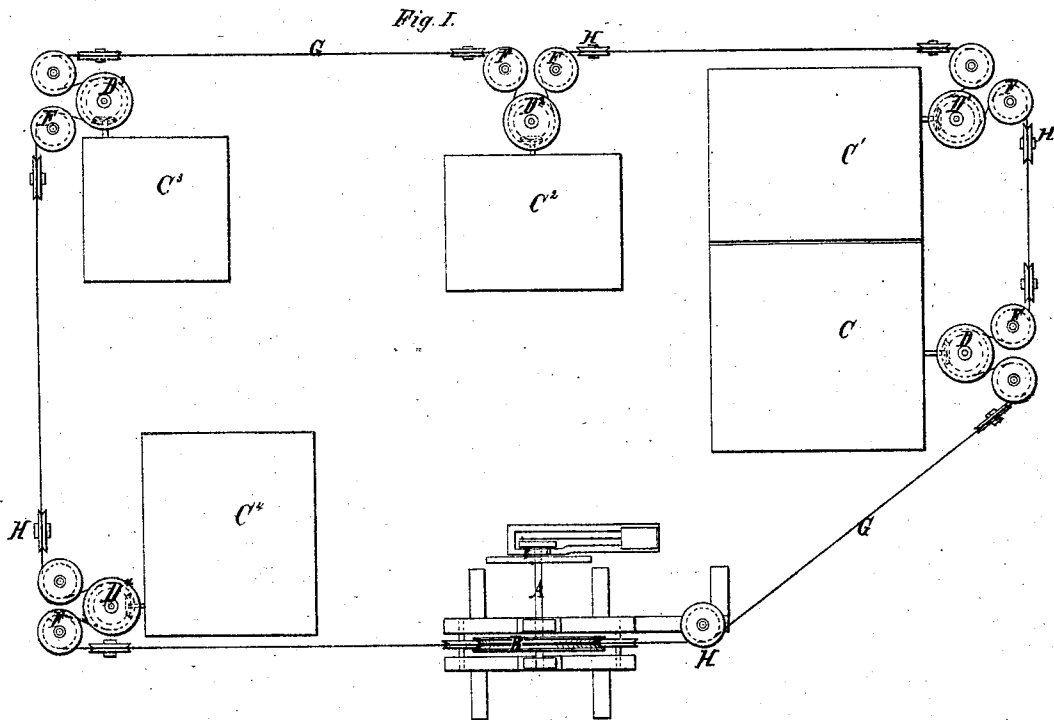


JAMES RICHMOND.

Improvement in Means of Transmitting Motive Power.

No. 116,221.

Patented June 20, 1871.



Samuel Smith
Geo. J. Benson } Witnesses.

James Richmond Inventor
by Jay Hyatt
Atty.

UNITED STATES PATENT OFFICE.

JAMES RICHMOND, OF LOCKPORT, NEW YORK.

IMPROVEMENT IN MEANS FOR TRANSMITTING MOTIVE POWER.

Specification forming part of Letters Patent No. 116,221, dated June 20, 1871.

To all whom it may concern:

Be it known that I, JAMES RICHMOND, of the city of Lockport, in the county of Niagara and State of New York, have invented certain Improvements in Means for Transmitting Motive Power, of which the following is a specification:

On the 24th day of January, 1871, Letters Patent of the United States were granted to me for certain improvements in machinery for transmitting and distributing motive power, which invention consisted in the employment of an endless-wire cable, in connection with suitable guide and branch-distributing pulleys and belts, for transmitting power from a prime mover for a considerable distance, and distributing power to various other shops along or near the line of the said cable by means described in said Letters Patent, to which reference is here made for a full description thereof. In this invention, the two lines of the wire cable being arranged or lying in the same direction, branch distributing-lines were required in order to transmit power to the workshops or points situated along the main line.

The object of my present improvement is to avoid the necessity of using so many of these distributing-lines. My invention consists in the arrangement, with several workshops or places where the motive power is required, of a single wire cable, which connects one workshop with another, in succession, until it forms a complete circle and endless belt, in connection with a main driving-pulley and suitable driving-pulleys at the various workshops, whereby power is transmitted from the prime mover to the different shops without the aid of branch distributing-lines, as hereinafter shown and described.

In the accompanying drawing, Figure 1 is a plan view of my improvement, and Fig. 2 an elevation of a portion thereof.

Like letters of reference designate like parts in each of the figures.

A represents the main driving-shaft, and B the main driving-pulley of any suitable prime mover or motive power, such as a steam-engine or water-wheel. C C¹ C² C³ C⁴ represent several places or workshops to which power is required to be communicated. D D¹ D² D³ D⁴ are the driving-pulleys of these several workshops, from which motion may be communicated to the machinery therein by any suitable gearing, beveled gear *ee* being that represented in the drawing for that purpose. F F are auxiliary pulleys arranged in nests or sets with the driving-pulleys B D¹ D² D³ D⁴ so as to increase the adhesion of the wire belt to the driving-pulleys. G is the wire cable passing from the main driving-pulley around these various pulleys, as represented, being directed in its course from one to the other by suitable guide-pulleys H H.

By this arrangement just described it is obvious that any number of workshops, irregularly situated, may be connected by a single wire belt, forming a circuit, and power thereby communicated to the different shops without the expense of branch lines and without the use of a double line of cable, as is required when the latter is arranged as shown in my patent hereinbefore referred to.

It is manifest that branch distributing-lines may be used with the main cable G, and connect therewith, at any point required, in the same manner as that shown and described in my previous patent.

What I claim is—

The arrangement, with a series of workshops, C C¹ C², &c., of the wire cable G, main driving-pulley B, driving-pulleys D D¹ D², &c., auxiliary pulleys F F, and guide-pulleys H H, for transmitting power from the prime mover to the various workshops, substantially as hereinbefore set forth.

Witnesses: JAMES RICHMOND.

WM. S. FARNELL,
JAY HYATT.