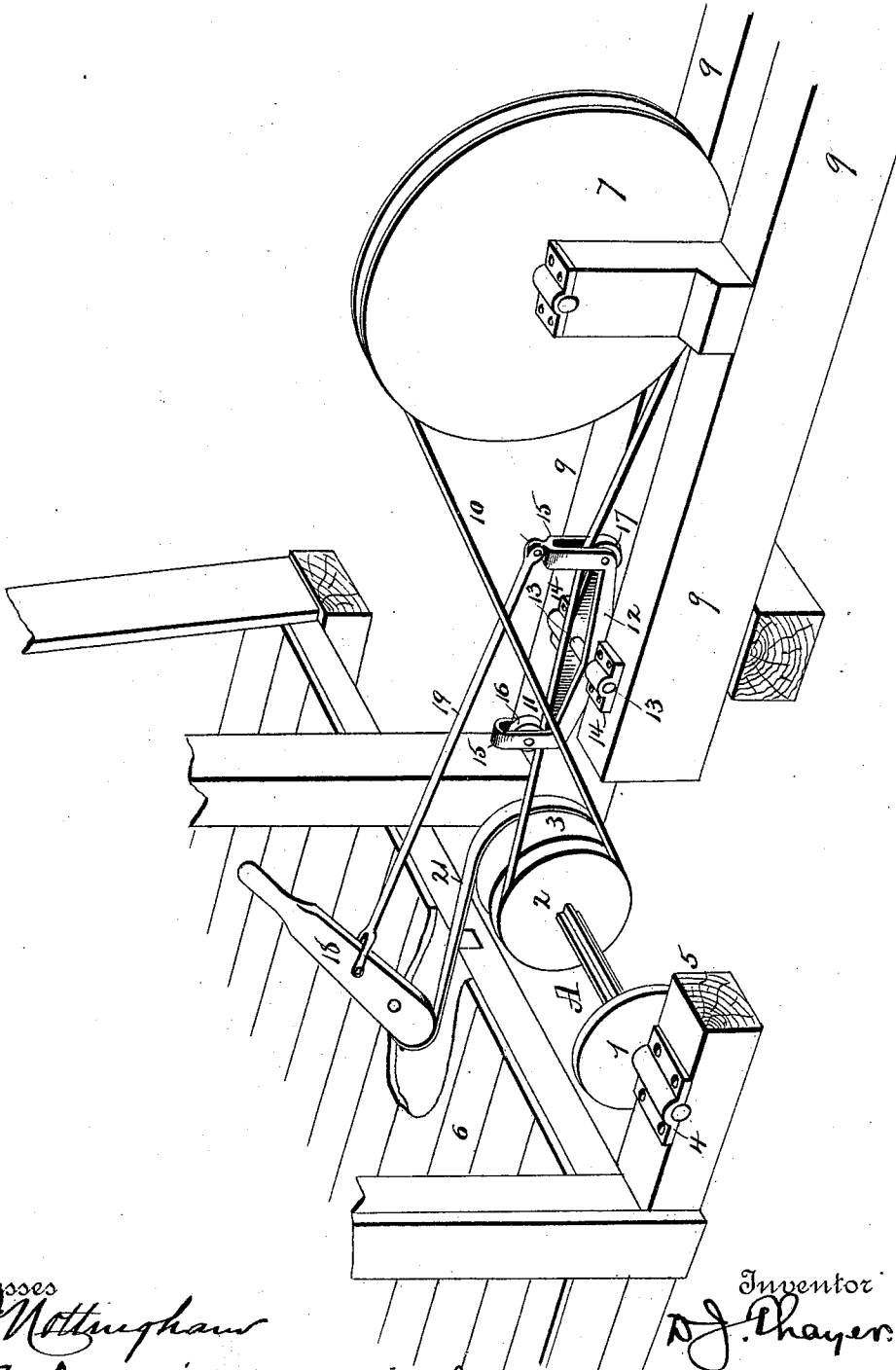


(No Model.)

D. J. THAYER.
SAND REEL.

No. 420,476.

Patented Feb. 4, 1890.



Witnesses
E. J. Mott
G. F. Downing

By his

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UNITED STATES PATENT OFFICE.

DEXTER J. THAYER, OF PITTSBURG, PENNSYLVANIA.

SAND-REEL.

SPECIFICATION forming part of Letters Patent No. 420,476, dated February 4, 1890.

Application filed November 2, 1889. Serial No. 328,984. (No model.)

To all whom it may concern:

Be it known that I, DEXTER J. THAYER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sand-Reels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in sand-reel apparatus, the object being to provide mechanism for the easy and quick control of the sand-reel, for increasing or decreasing the speed or stopping the reel altogether.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

The accompanying drawing is a view in perspective of my improved apparatus.

A represents the sand-reel, having drum 1 on one end and belt-wheel 2 on the other end, as well as brake-wheel 3. The reel is journaled in boxes 4 4, located on the sills 5 5, in proximity to the derrick 6. The driving belt-wheel 7 is journaled in boxes on blocks stationed on the beams 9 9. This wheel 7 is propelled by an engine or similar means, and a belt or band 10 passing over this wheel is crossed at point 11, and also passes around wheel 2. A belt-tightener is located midway or about midway between these belt-wheels, and it consists of a rocking yoke 12, which is supported on the trunnions 13 13 in the boxes 14 14 on beams 9 9. This yoke is provided at its ends with upwardly-projecting arms 15 15. The latter are split and provided with rollers 16 17. The belt 10 passes beneath the roller 16 and over roller 17, so that when the yoke is rocked in one direction the rollers are both removed from the belt, and when in the opposite direction they are forced against the belt. The yoke is operated by means of a lever 18, pivoted to the floor of the derrick. A pitman 19 connects the lever with one of the arms 15 of the yoke, and as the lever is swung back and forth the yoke is rocked, as above stated. In addition to this feature of my invention, which, it will be seen, regulates the tension of the belt to increase or diminish the speed of the reel, a brake-band

21, secured at one end to the derrick, is secured at its opposite end to the lower or short arm of the lever 18. The result of this arrangement is that the belt is tightened and the brake removed simultaneously, and on the other hand the brake is applied and the belt loosened simultaneously, thus placing the apparatus entirely within the control of the operator, who can increase or diminish the speed of the reel at a moment's notice or entirely stop the reel.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the particular construction herein set forth; but,

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

1. The combination, with a sand-reel having a belt-wheel thereon, a main belt-wheel, and an endless belt passing over said wheels, of a rocking belt-tightener pivoted between the belt-wheels and having rollers on its ends, over and beneath which one strand of the belt passes, a lever having connection on one side of its fulcrum with the belt-tightener, and a brake connected to said lever on the opposite side of its fulcrum and engaging a brake-drum, substantially as set forth.

2. The combination, with a derrick, a sand-reel having a belt-wheel and a brake-wheel thereon, a main belt-wheel, and a belt passing over the latter and the belt-wheel on the reel, of a belt-tightener consisting of a yoke supported on trunnions between the belt-wheel and the reel and having rollers on its ends between which the belt passes, a hand-lever fulcrumed on the derrick with its longer arm connected with the yoke, and a brake-band extending from the short arm of said lever around the brake-drum, whereby, when the lever is swung, the belt is tightened and brake removed simultaneously, and vice versa, substantially as set forth.

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

DEXTER J. THAYER.

Witnesses:

FRANK R. LIGGETT,
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