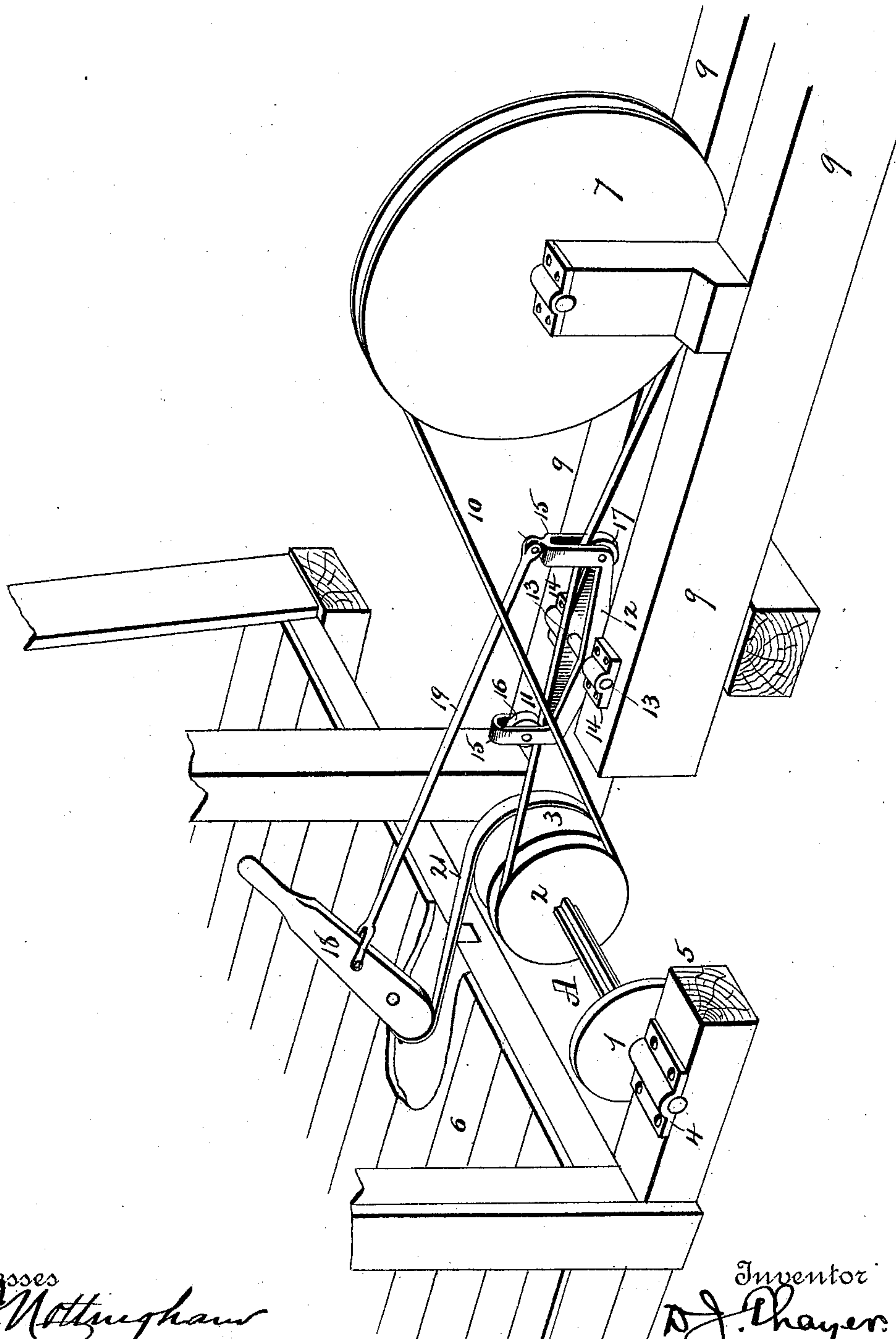


(No Model.)

D. J. THAYER.
SAND REEL.

No. 420,476.

Patented Feb. 4, 1890.



Witnesses

E. J. Nottingham
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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
5 new and useful Improvements in Sand-Reels;
and I do hereby declare the following to be a
full, clear, and exact description of the in-
vention, such as will enable others skilled in
the art to which it appertains to make and
10 use the same.

My invention relates to an improvement in
sand-reel apparatus, the object being to pro-
vide mechanism for the easy and quick con-
15 trol of the sand-reel, for increasing or de-
creasing the speed or stopping the reel alto-
gether.

With this end in view my invention con-
sists in certain novel features of construc-
tion and combinations of parts, as will be
20 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
25 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 driv-
ing belt-wheel 7 is journaled in boxes on
30 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
35 located midway or about midway between
these belt-wheels, and it consists of a rock-
ing yoke 12, which is supported on the trun-
nions 13 13 in the boxes 14 14 on beams 9 9.
This yoke is provided at its ends with up-
40 wardly-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
45 from the belt, and when in the opposite di-
rection they are forced against the belt.
The yoke is operated by means of a lever 18,
pivoted to the floor of the derrick. A pit-
man 19 connects the lever with one of the
50 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, regu-
lates the tension of the belt to increase or
55 diminish the speed of the reel, a brake-band

21, secured at one end to the derrick, is se-
cured at its opposite end to the lower or short
arm of the lever 18. The result of this ar-
rangement is that the belt is tightened and
the brake removed simultaneously, and on 60
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 65
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 depart- 70
ing from the spirit and scope of my inven-
tion, and hence I do not wish to limit my-
self to the particular construction herein set
forth; but,

Having fully described my invention, what
I claim as new, and desire to secure by Let- 75
ters Patent, is—

1. The combination, with a sand-reel hav-
ing a belt-wheel thereon, a main belt-wheel,
and an endless belt passing over said wheels,
of a rocking belt-tightener pivoted between 80
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-tight-
ener, and a brake connected to said lever on 85
the opposite side of its fulcrum and engag-
ing 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 pass- 90
ing 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- 95
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 100
brake removed simultaneously, and vice
versa, substantially as set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

DEXTER J. THAYER.

Witnesses:

FRANK R. LIGGETT,
JNO. LIGGETT, Jr.