

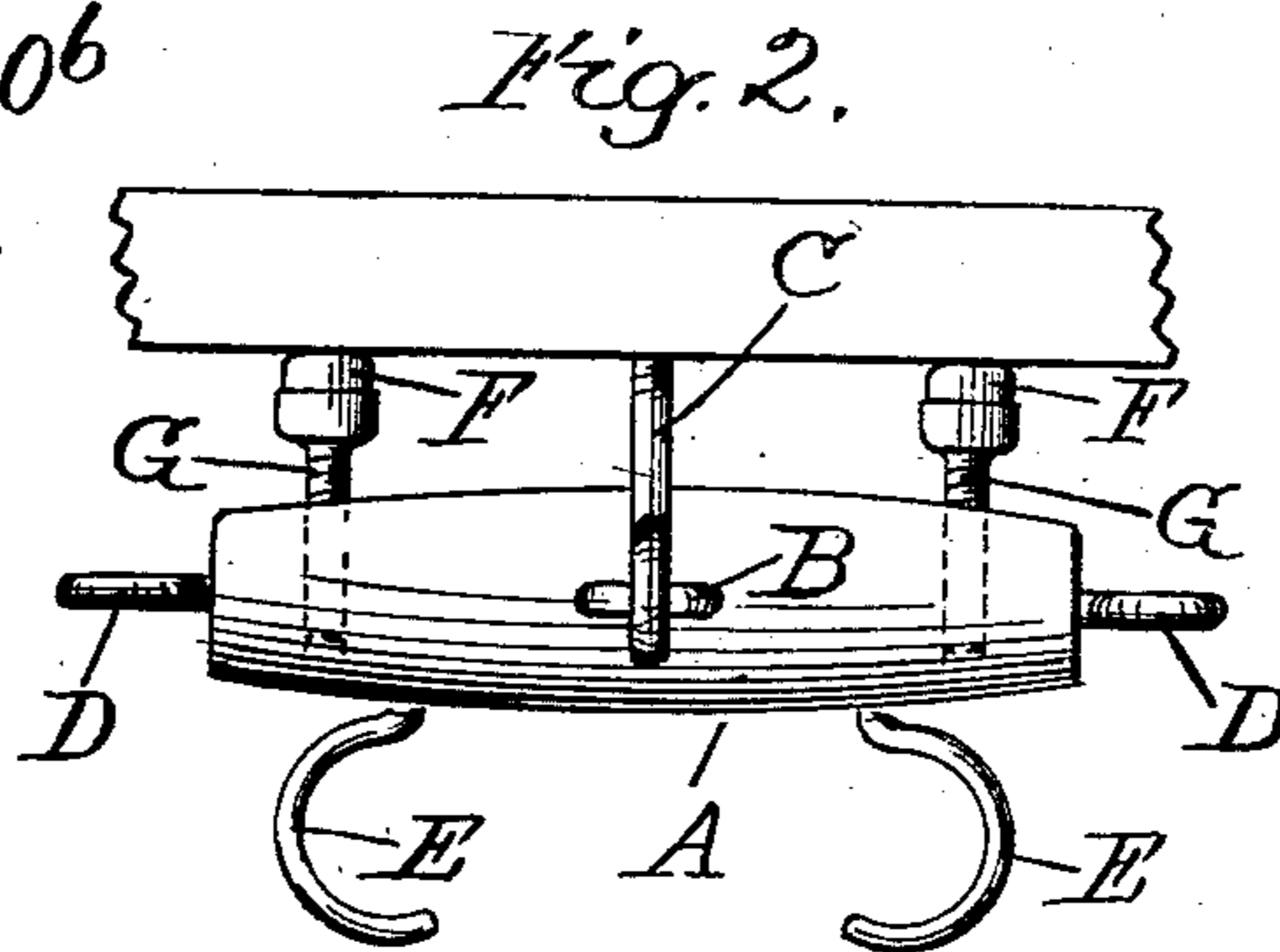
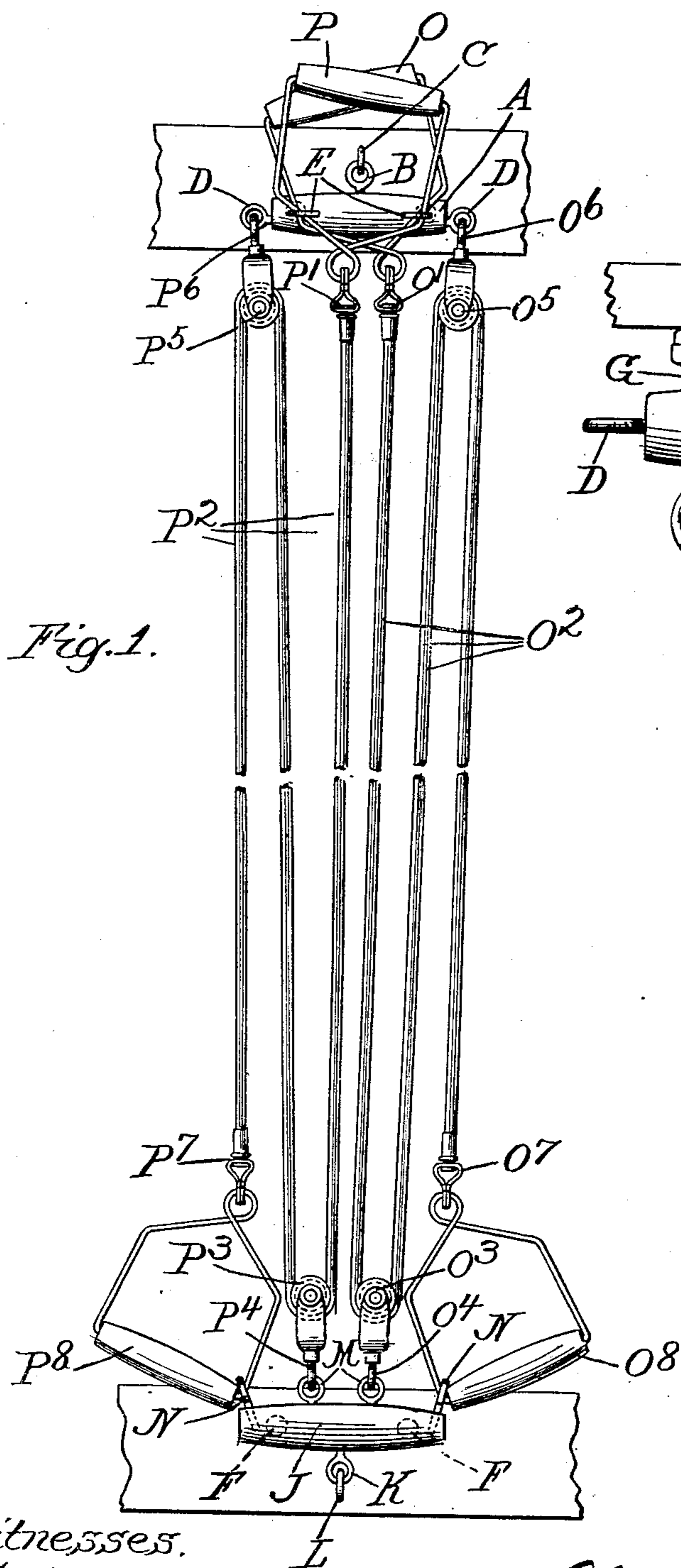
No. 677,050.

Patented June 25, 1901.

A. A. WHITELY.  
EXERCISING MACHINE.

(Application filed Nov. 20, 1896.)

(No Model.)



Witnesses.

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# UNITED STATES PATENT OFFICE.

ALEXANDER A. WHITELY, OF CHICAGO, ILLINOIS.

## EXERCISING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 677,050, dated June 25, 1901.

Application filed November 20, 1896. Serial No. 612,891. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER A. WHITE-  
LY, a citizen of the United States, residing at  
Chicago, in the county of Cook and State of  
5 Illinois, have invented certain Improvements  
in Exercising-Machines, of which the follow-  
ing is a specification.

My invention relates to exercising-ma-  
chines, and has for its object to provide cer-  
tain new and useful improvements in exer-  
cising-machines, and particularly to provide  
what I would describe as a "double-acting"  
machine, or a machine capable of being used  
from the top or bottom. It is illustrated in  
15 the accompanying drawings, wherein—

Figure 1 is a plan view of the machine at-  
tached in readiness for use. Fig. 2 is a view  
looking down on the upper support.

Like parts are indicated by the same letter  
20 in both figures.

A is the top support, preferably made in  
substantially the shape shown, with the hook  
B at its upper middle part, whereby it may  
be attached to the fixed eye C. At each end  
25 it is provided with a hook D, and it is also  
provided with the two opposed curved bear-  
ings E E, set as indicated.

F F are preferably elastic or flexible stops  
adjustable on the screws G G, which project  
30 from the support A. The bottom support J  
is of similar form, with the hook K to engage  
the eye L. It is provided with the two hooks  
M M, placed near the middle, and the two  
hooks N N, placed near the ends. It also has  
35 the adjustable stops F G, the same as in the  
case of the top support. I have used the term  
"top and bottom support" with reference to  
the machine as shown in Fig. 1; but of course  
it will be evident that the machine is inter-  
changeable or reversible, so that either sup-  
40 port can be the top or bottom support.

O is a handle secured by the swivel O' to  
the elastic cord O<sup>2</sup>, which passes over the pul-  
ley O<sup>3</sup>, adapted to be hooked into the hook M  
45 by the swivel-eye O<sup>4</sup>. This cord also passes  
over a like pulley O<sup>5</sup>, adapted by the swivel  
O<sup>6</sup> to be secured on the hook D, and is pro-  
vided with the swivel O<sup>7</sup>, whereby the handle  
O<sup>8</sup> is secured to it. P is a like handle, with  
50 the swivel P' securing it to the cord P<sup>2</sup>, which  
passes over the pulley P<sup>3</sup>, attached by the  
swivel P<sup>4</sup> to the other hook M. P<sup>5</sup> is another

pulley over which the cord P<sup>2</sup> passes and  
which is secured by the swivel P<sup>6</sup> to the  
other hook D. At the end of this cord is the  
55 swivel P<sup>7</sup>, whereby the handle P<sup>8</sup> is secured  
thereto. These cords are of course elastic,  
and preferably elastic substantially through-  
out their length, as indicated.

Obviously there may be considerable 60  
change in the form and shape of the several  
parts and in their various relations and yet  
the spirit of my invention be made use of.

I will now describe the use and operation  
of my invention. 65

It is my wish to produce an exercising-  
machine in which there will be no occasion  
to adjust, remove, or vary the connection of  
the several parts when it is desired to change  
the angle of operation—that is to say, I wish 70  
a machine which may be used in pulling from  
the top or downwardly or from the bottom or  
upwardly without the necessity of removing  
or changing the relation of any of the parts.  
Now I accomplish this in the manner indi- 75  
cated in the drawings. In such a machine  
several features are important, if not neces-  
sary to be present. For example, in a ma-  
chine of this kind, if entirely satisfactory,  
there must be no engagement at any time of 80  
the handles or any of them with the wood-  
work or frame on which the machine is sup-  
ported, for if there is such engagement it will  
interfere with the action of the machine in  
various ways and, among other things, will 85  
make noise and disfigure the wood. It is  
therefore important to have the handles kept  
at all times parallel or substantially parallel  
with the flat surface upon which the machine  
is secured. Moreover, in the use of such a 90  
machine it is highly desirable that the various  
lengths or strands of the elastic cord will not  
at any time cross, overlap, or interfere with  
each other. Hence it is necessary that the  
handles on one support shall be placed outside 95  
the pulleys associated with said support,  
while the handles at the other support are  
placed, when out of use, inside or between  
the pulleys of such support. These are the  
features and advantages obtained in the con- 100  
struction described. If the operator desires  
to pull from above or from the top of the  
machine, he takes the handles O<sup>8</sup> and P<sup>8</sup>, dis-  
engages them from their supporting-hooks at

the bottom, and begins to operate the machine. Thus it is evident that he will pull from the top, and also it is evident that the elastic cords, being put under pressure by this operation from end to end, will tend to hold all the parts in fixed relation. The two handles O and P being supported in the opposed parts E E are tightly clamped in that position and kept parallel with the hook, so that there is no tendency on their part to engage the wall or to make any noise. The entire cord is utilized in the action. Now when the operator desires to work from the other end of the machine he will hang the two handles O<sup>s</sup> and P<sup>s</sup> on the lower hooks, as indicated, and will take down the handles O and P from their supports, whereupon the action is the same as before, in effect, the squared ends of the hand portions of the handles O<sup>s</sup> P<sup>s</sup> engaging the hooks N N, and the pressure being applied to said handles through the elastic cord they tend, naturally, to remain in a parallel position with the hook. This action is also aided by the line of draft of the handles, which is through one side thereof, as indicated in Fig. 1. Both of the supports are preferably held midway and are kept out from the wall by the adjustable stops. These stops are made adjustable, so as to vary the position of the machine to accommodate it to inequalities of the wall-surface. Of course these supports might be secured in other ways.

I claim—

1. In an exercising-machine, a support provided midway with means for its attachment to the wall and toward its ends with bearings to hold it out from the wall, said bearings being adjustable so as to accommodate for inequalities in the surface of the wall.

2. In an exercising-machine, the combination of a support provided midway between its ends with means for its attachment to the wall, a bearing part located near each end of the support and projecting therefrom, so as to engage the wall, said bearings adjustably connected with the support so that they may be adjusted for inequalities in the surface of the wall.

3. An exercising-machine, comprising two supports, each provided midway between its ends with means for attaching it to the wall, each support being provided with two bearing parts located one near each end thereof, said bearing parts being adjustably connected to the supports and adapted to engage the wall and hold the supports in position, four pulleys, two connected with each of said supports, two cords running over said pulleys, one end of each cord passing over the lower pulleys and one end of each cord passing over the upper pulleys, the four ends of said cords being provided with handles, holding devices associated with each support for holding the handles when not in use, whereby the lower or upper handles may be used at will without changing the position of the cord.

4. In an exercising-machine, the combination of two elastic cords, each having a handle at each end, with four pulleys, two on each cord, and two supporting-pieces, one having one of said pulleys at each end and the other having two of said pulleys midway, and handle attachments secured to each support, substantially as shown and described.

October 10, 1896.

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Witnesses:

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