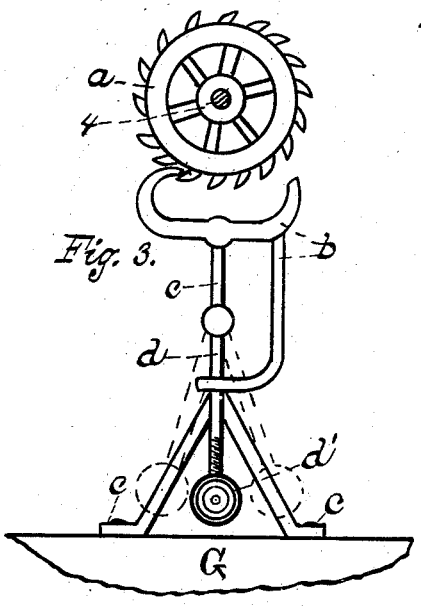
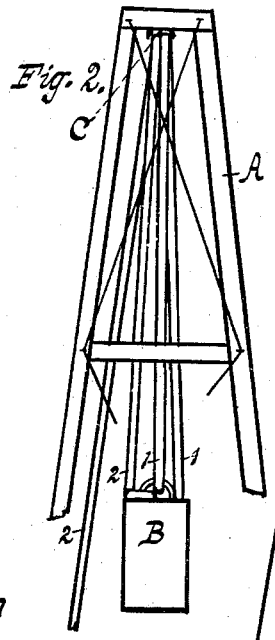
(No Model.) 2 Sheets—Sheet 1.

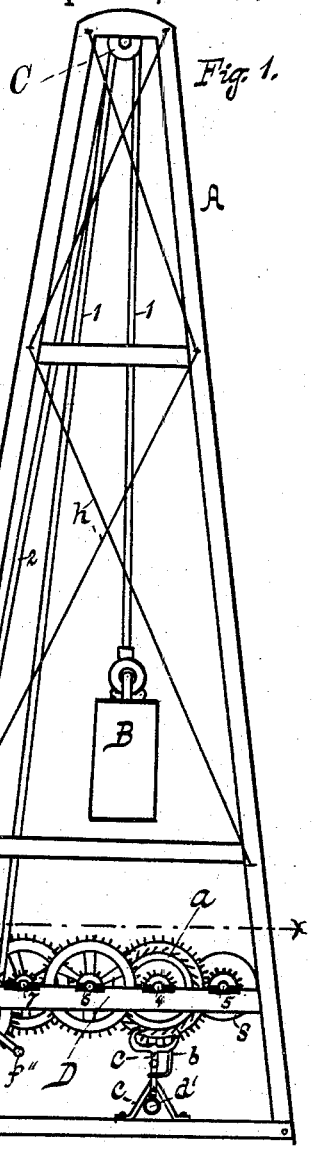
E. J. TOMLINSON.

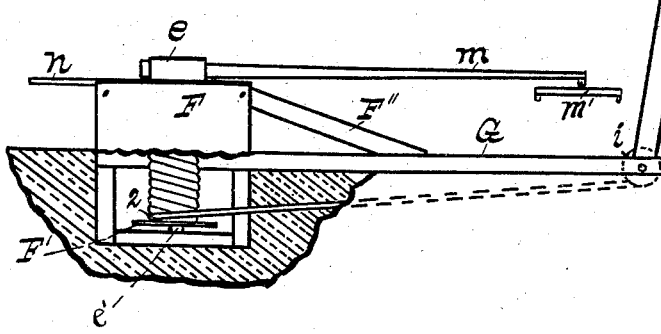
MOTOR.

No. 265,186. Patented Sept. 26, 1882.









WITNESSES
L. A. Adamson
G. G. Adamson.

E. J. Tomlinson
INVENTOR:
Chas. E. Adamson
HIS ATTY.

(No Model.)

2 Sheets—Sheet 2.

E. J. TOMLINSON.

MOTOR.

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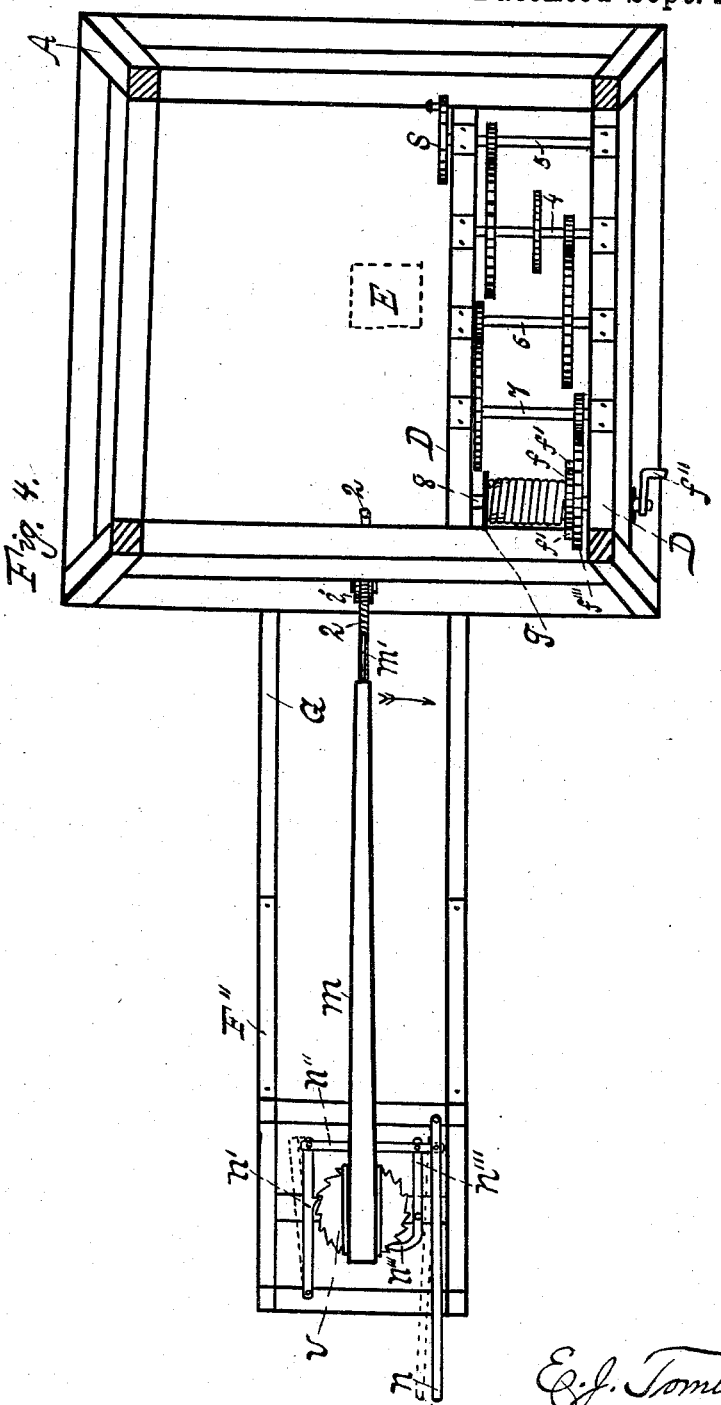
Fig. 4.



WITNESSES
L. A. Adamson
G. G. Adamson,

E. J. Tomlinson,
INVENTOR.
Chas. E. Adamson,
HIS ATTY.

UNITED STATES PATENT OFFICE.

ELI J. TOMLINSON, OF DE SOTO, INDIANA.

MOTOR.

SPECIFICATION forming part of Letters Patent No. 265,186, dated September 26, 1882.

Application filed April 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELI J. TOMLINSON, of De Soto, in the county of Delaware and State of Indiana, have invented a new and useful Motor-Power for Operating Machinery, of which the following is a specification.

My invention relates to improvements in motors for operating machinery; and the objects of my improvements are, first, to construct a substantial tower for suspending a weight elevated by means of horse-power for operating a train of gearing; second, to arrange a pendulum speed-governor on the gearing and to stop the motion of the machine by compound levers working against a ratchet-wheel. I attain these objects by the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of my invention. Figs. 2 and 3 are detail views, and Fig. 4 is a view looking down on the lower part of my invention.

Similar letters refer to similar parts throughout the several views.

The tower A consists of four upright posts, and is braced by wooden cross-bars and with iron braces *h* it is secured to the bottom frame G, which prevents it from blowing down. The bottom of said frame is provided with longitudinal rails D, in which the gearing of my machine is secured, as shown in Figs. 1 and 4. Axles 4, 5, 6, 7, and 8 are arranged on the said rails D, on which are secured cog-wheels, as shown. Axle 4 is provided with a pendulum-wheel, *a*, under which is secured a standard, *c*, to the bar G. On this standard the pallet *b* and pendulum *d d'* are pivoted. (Most clearly shown in Fig. 3.) A pitman or belt-wheel, *s*, is secured on the shaft 5, for connecting the power to machinery, pumps, &c. At the top of the tower is secured a double pulley, C, over which the ropes 1 and 2 work. One end of the rope 1 is attached to a ring in the weight B and the other end around the drum *g*. One end of rope 2 is also attached to the ring in the weight B and the other end around the drum F' in the winding-box F, as shown in Fig. 1. The winding-box F is secured to the bottom rails, G, of the tower, and it is placed partly below the surface, as shown in Fig. 1. In this box the drum F is secured in a vertical position, being firmly secured in the said box by a shaft, *e'*, extending through it. The upper end of said shaft is provided with a slotted head, *e*, for securing one end of the lever *m*. Under the said head *e* is secured a large ratchet-wheel, *v*, as shown in Fig. 4. The lever *n* is connected to the catch-bars *n' n'''* by the bar *n''*. The bars *n'* and *n'''* can be thrown away from the ratchet-wheel *v* by pressing the lever *n*, as indicated by the dotted lines in Fig. 4, or stand against the wheel, as shown, and prevent in from turning backward or unwinding.

To operate my machine a horse is attached to the single-tree *m'*, and turning the lever around, as indicated by the arrow in Fig. 4, the rope 2 winds around the drum F and elevates the weight B to the top of the tower. Then by moving the lever *n* so as to bring the catches *n'* and *n'''* in contact with the ratchet-wheel they prevent the weight from running down. In winding up this rope, the rope 1 (the lower end of which is attached to the drum *g*) falls down slacked on account of the drum *g* not being turned simultaneously with the drum F'. Then by taking hold of the crank *f'''* and winding the slack rope 1 around the drum as tight as it can be done by hand the ratchet *f* and pawls *f'* prevent it from unwinding. The lever *n* is then thrown, as indicated by the dotted lines in Fig. 4, which allows the rope 2 to slack and throws all the weight on rope 1. The lever *m* is then taken out of the shaft-head *e*, which allows the drum F' to turn at will. As thus described the power is ready for operation, and can be attached to by the pitman or belt-wheel *s*, and by giving the pendulum-ball *d'* a slight swing the gearing will start in motion, weight B descending in space E, which is regulated by running the ball up or down on the pendulum *d*.

I do not claim the parts of my machine separately; but

What I do claim is—

1. The combination of box F F'', drum F', rope 2, pulley *i*, levers *n n' n'' n'''*, tower A, lever *m*, series of wheels, and pendulum *b c d d'*, as set forth.

2. The combination of the weight B, ropes 1 2, pulley *e i*, box F, drum F', wheel *v*, and levers *n n' n'' n'''* with tower A, as set forth.

ELI J. TOMLINSON.

Witnesses:

L. A. ADAMSON,

G. G. ADAMSON.