

J. M. Reed,
Horse Power.

N^o 1963.

Patented Jan. 30, 1841.

Fig. 2.

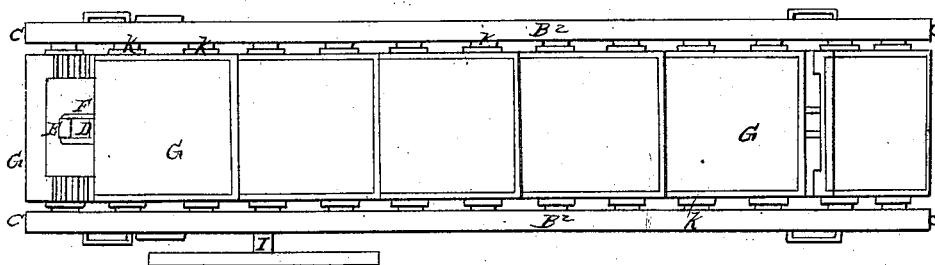


Fig. 1.

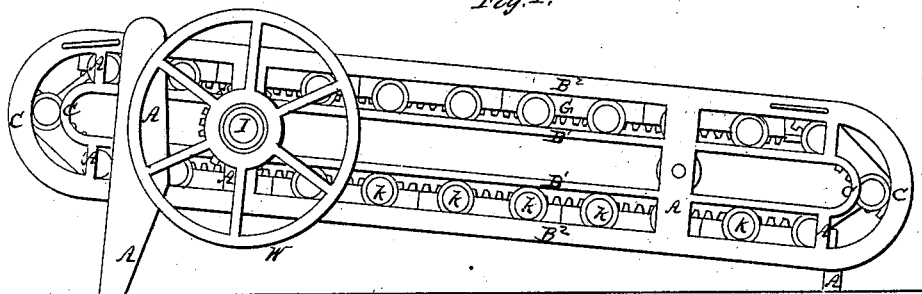
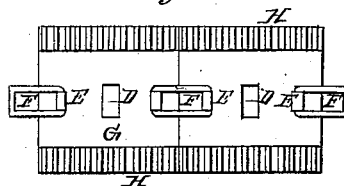


Fig. 3.



UNITED STATES PATENT OFFICE.

JEREMIAH M. REED, OF MIDDLEFIELD, NEW YORK.

ENDLESS-FLOOR HORSE-POWER FOR DRIVING MACHINERY.

Specification of Letters Patent No. 1,963, dated January 30, 1841.

To all whom it may concern:

Be it known that I, JEREMIAH M. REED, of Middlefield, in the county of Otsego and State of New York, have invented a new and useful Improvement on Inclined Endless Flexible Animal Tread-Powers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a side elevation of the machine. Fig. 2 is a view of the top of the machine. Fig. 3 is a view of the under side of two of the cars to which the links are attached.

Similar letters refer to similar parts in the figures.

The nature of my invention consists in connecting together by means of hooks and links or links and eyes a train of four wheel cars into an endless train, which is placed in an endless space a little wider than the diameter of the car wheels inclosed by four endless tracks which I shall designate as the quadruple endless vertical railway, and endless train of rail road cars to be propelled by animals or any other required power to propel the same—placed upon said endless train.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

I construct a frame A of suitable size and strength, of wood or iron containing four parallel endless tracks B about eight feet eight inches in length, the two inner ones being placed about eight inches apart, the ends of which tracks are connected by semi-circles C. The two outer tracks B² are placed four and an eighth of an inch distant from the inner tracks B' connected at each end in the same manner as the inner tracks. The frame being composed of like parts on each side leaves an oblong groove or space within the tracks B of an inch in depth by four and an eighth of an inch wide that admits of the wheels of the cars passing around in said grooves or space—the bodies of the cars being fourteen inches wide and sixteen inches long with a cavity D in the middle six by eight inches with an eye E at each end of the square to receive a link F that couples the cars together; the eye must be on a line transversely with the axis of the car wheels which will admit the cars dropping to a level on the planes of

the tracks and possessing a pliability that will allow the cars to be propelled around the curved ends of the railway or tracks B. On the under side of the cars G and at each side thereof I affix a rack H fitted to the pinions of the band wheel shaft I which pinions are placed on a shaft lying across the frame between the planes of the inner tracks or rails; these pinions are six inches in diameter which give a band wheel W of four feet a quick and powerful motion. The wheels K of these cars are four inches in diameter, one inch thick on their tread with a ledge or flange projecting three fourths of an inch above the tread of the wheels. These wheels are placed on axles one fourth of the length of the cars from each corner and in a straight line and level with the eyes of the connecting links. I raise the upper surface of the cars on their sides one inch sloping the said projection inward so as to form a groove to receive the wood floor, the side left open being for the purpose of inserting the said wood floor. I proceed to connect the cars together passing them into the spaces between the endless tracks by means of an opening at one end or in any other convenient way—the wheels of the cars keeping their places in every position on and in the tracks by means of the aforesaid quadruple rail road. The cars are composed wholly of cast and wrought iron except the floor. The whole to be governed in its dimensions as shall best suit the wishes of the builder, and answer the purpose for which it is intended. The rack together with the frame and legs to give the power a proper inclination I build in any of the usual modes of constructing them.

The operation of this horse power is as follows: The machine being placed at a proper angle of inclination with the horizon, and the propelling animal placed thereon is caused to move his limbs and his feet being in contact with the woodwork or floor of the cars, his shoes are not so liable to be injured, nor is the work near so hard to perform, nor so distressing to the animal as in the use of the common cast iron floor. The cars are caused to travel around in the endless way between the outer and inner track and upon the inner surface of the lower part of the outer track and the rack of the cars being in gear with the pinions on the axle

of the band wheel W to turn from which the power may be conveyed to any machinery required to be propelled.

What I claim as my invention and which
5 I desire to secure by Letters Patent is—

The making the endless chain upon which the horse, &c., walks by uniting together in the manner described a sufficient number of

four wheeled cars, as described, and also 10 running the wheels in the space between the two endless rails on each side in manner substantially as herein described.

J. M. REED.

Witnesses:

S. T. BOWEN,
ASAHEL TODD.