M. Davenport,

Horse Power.

No. 1,229. Patented July 10, 1839.

Fig: 1

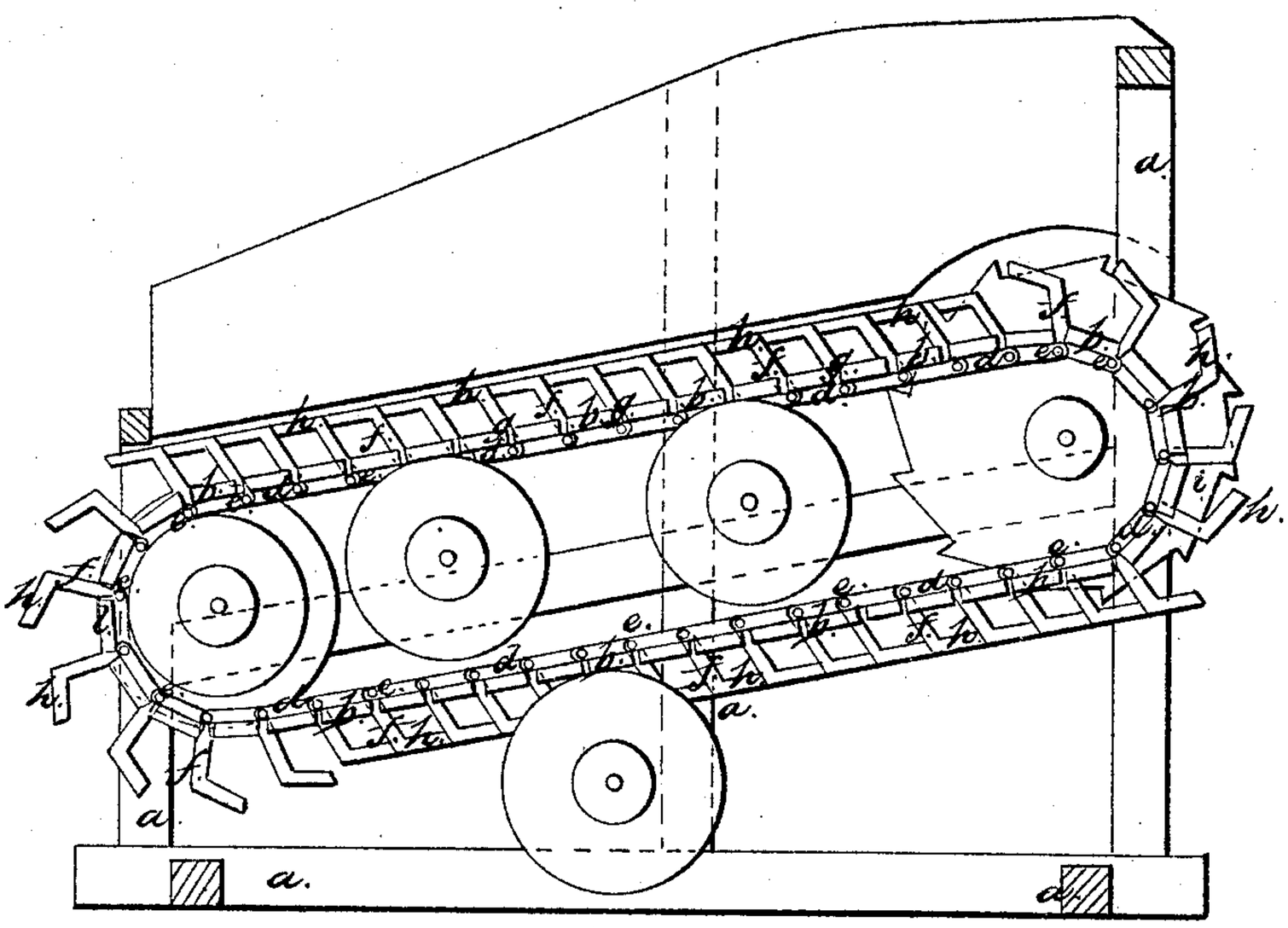
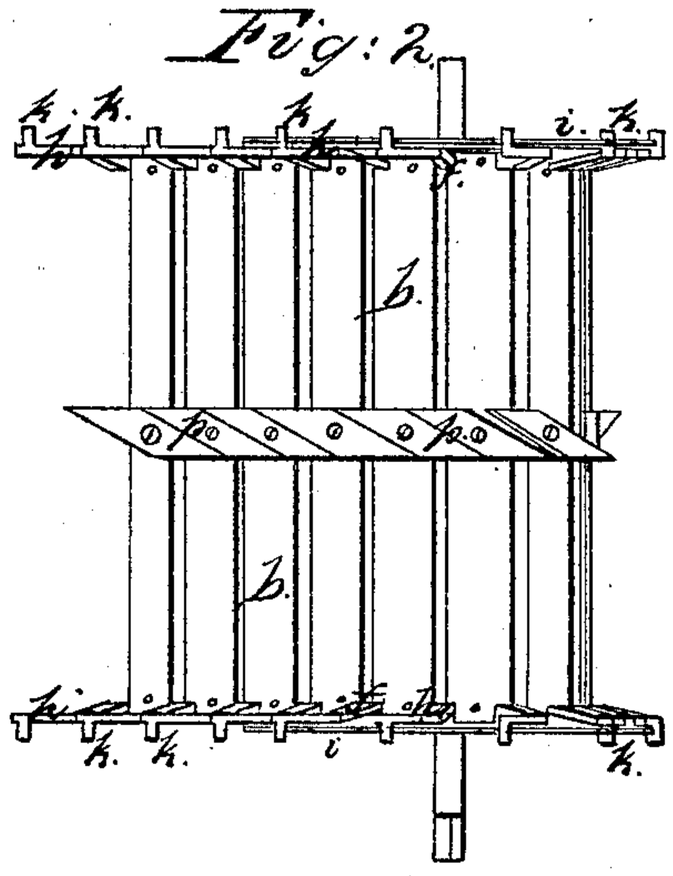


Fig: 2.



UNITED STATES PATENT OFFICE.

MOSES DAVENPORT, OF PHILLIPS, MAINE.

ENDLESS-CHAIN HORSE-POWER FOR DRIVING MACHINERY.

Specification of Letters Patent No. 1,229, dated July 10, 1839.

To all whom it may concern:

Be it known that I, MOSES DAVENPORT, of Phillips, in the county of Somerset and State of Maine, have invented a new and useful Improvement in Horse-Powers for Driving Machinery; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

As my invention only consists in the method of connecting the slats of the endless chain horse power, or in the peculiar form given to the connecting links that they may extend up any required distance beyond the surface of such revolving endless chain, to work as cogs into a ratchet-wheel of any required diameter, it will be useless to describe minutely the other parts which are common to all endless-chain horse-powers.

Figure 1 of the drawing is a longitudinal section through the machine. Fig. 2 is a horizontal projection, showing the surface of the endless apron, together with the arms.

The frame *a*, Fig. 1, is constructed and arranged in a manner similar to others well known and the apron *b*, Figs. 1 and 2, revolves on friction rollers in the usual way.

d, Fig. 1, represents that part of the link which is attached to the slats on the under side, being in length equal to the desired width of the slats, the different pieces which when joined compose the connection being connected to each other by rule joints at *e*. These joints *e*, are formed by a tenon on the front end of one link, fitting into a mortise in the end of the adjoining link, and confined by a pin or bolt passing through them and forming the center on which the joint turns.

From the front end of each link, and making a part of the link, at the point of connection, or joint, an arm *f*, Figs. 1 and 2, projects upward or outward in length to correspond with the teeth of the ratchet wheel *i*, and incline forward about twenty degrees. From the outer end of this arm another arm *h*, Figs. 1 and 2, of about the same length projects forward and parallel with the link, or under part of the chain to which the slats are attached. These links or chains, with their projecting arms, are placed within the ratchet-wheels *i*, and are nearly in contact with their inner faces, as shown at Fig. 2. From the ends of the last named arms *h*, side projections or clicks *k*, are formed on the outer side of the arms, of sufficient length to connect with the teeth on the periphery of the ratchet wheel *i*. These side projecting clicks of the arms of the chain, being thus brought in contact with the teeth of the ratchet-wheel, will when put in motion cause the ratchet-wheel *i*, to revolve and by attaching suitable gearing to the axle of this wheel motion may be communicated to any machine desired. The endless apron at ratchet wheel does not rest upon a cylinder, but is supported by the outer points or clicks *k* that project laterally from the outer horizontal arm *h*, of the endless chain, to which the slats are attached, with their ends cut out to allow room for the arms *f*, *f*, Figs. 1 and 2.

Attached to the upper side of the slats *b*, at the middle, between the ends, is a cleat *p*, that extends across the slat to which it is attached and overlaps the greater part of the adjoining slats, by which the pressure of the horse upon one is transferred to the adjoining slats by the aid of the cleats. These cleats are placed obliquely to the slats, so that the cleats on the adjoining slats may also overlap those contiguous to it, and their ends are cut parallel to the sides of the machine, consequently obliquely to the cleats, as at Fig. 2.

What I claim as my invention and desire to be secured to me by Letters Patent is—

The employment of the arm *h*, in combination with the endless chain and ratchet wheels for the purpose and in the manner described.

MOSES DAVENPORT.

Witnesses:

THOS. A. AMERY.

LUCIAN OSGOOD.