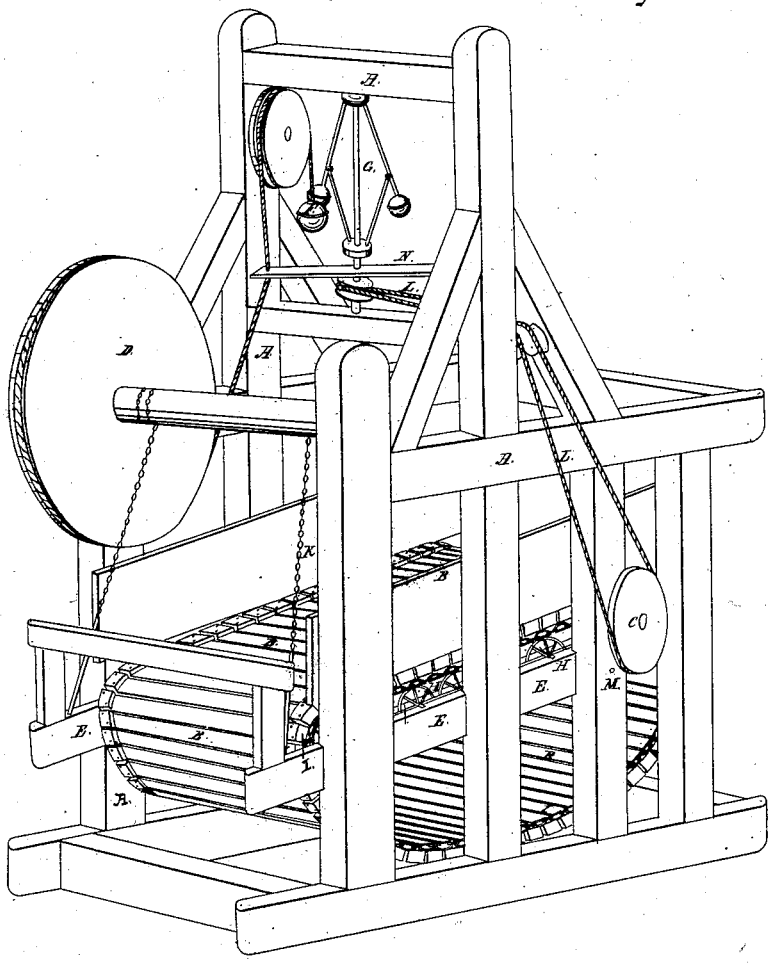
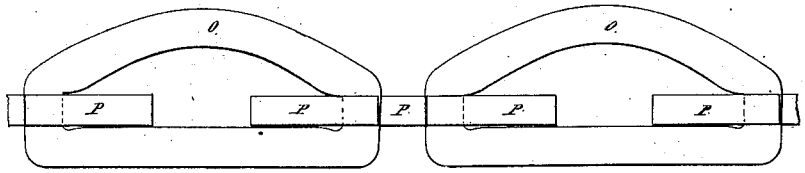
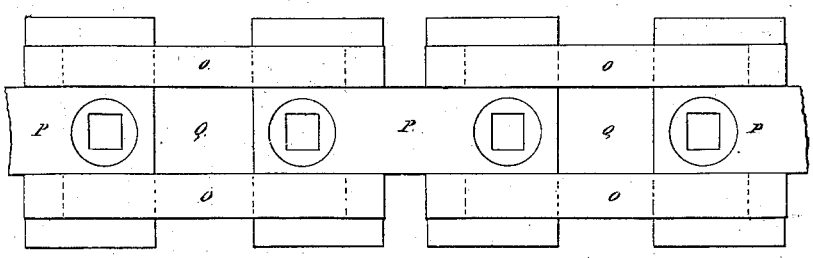
J. Secor,

Horse Power.

No. 714. Patented Apr. 28, 1838.







UNITED STATES PATENT OFFICE.

JAMES SECOR, OF NEW YORK, N. Y.

HORSE-POWER FOR DRIVING MACHINERY.

Specification of Letters Patent No. 714, dated April 28, 1838.

To all whom it may concern:

Be it known that I, JAMES SECOR, of the city, county, and State of New York, have invented a new and Improved Mode of Propelling Machinery by Means of Animal-Power; and I do declare that the following is a full and exact description.

The nature of my invention consists in the construction of a machine by which means uniform motion for machinery may be obtained by the use of animal power.

A revolving floor is formed on endless chains which is elevated as the motion of the machine changes by means of the ordinary mill governor or regulator or the hand windlass.

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

This machine is made a square frame A ten feet long five feet wide and six feet high, having at one end of said frame a shaft C extending across the frame two feet and a half from the bottom of the frame. On said shaft is placed projections or cogs which support endless chains I which chains extend to the farther part or end of the frame. Rollers or wheels H are placed in a line over which those chains revolve said wheels support the chains which have cog pieces secured across them by means of belting or otherwise which forms a floor B on which the animals work. Those chains are formed of plates P and links O as is seen in the drawing, by putting the links through the plates at each side of the plates. These links are straight on one side and circular on the other side to allow the chains to render or yield in passing a circle. The open space Q for the links in the plates is one and a half inches long. The extreme length of the plates is four inches. The links on the inside are three inches and seven eighths long. This plan of chain forms a groove for the wheels to revolve in as the chains pass over them. The wheels having projections on the sides of them one half inch or the thickness of the links from the extreme surface of the wheels for the purpose of supporting the chains as they pass over the wheels. The form of the chains is more fully explained in the drawing. The timbers E which support the wheels are placed in an inclined position secured at one end on a pivot or hinge M and at the other end is made movable to raise and lower as occasion may require by means of a windlass D across the top of the frame and counterbalanced by weight F as is seen in the drawing.

The mill governor or regulator G is applied for the purpose of changing the position of the floor as the speed of the machine may vary. The manner of applying the regulator is explained in the drawing. Or the regulator may be placed at the side or end of the machine or the floor may be elevated by means of a hand windlass. The floor may be elevated by means of levers under the floor timbers or by means of a rack and pinion. Those cogs or floor pieces are secured to the chains at the ends of the lags. Those wheels may vary in number as occasion requires these may be six on each side of one foot diameter except those at the turn of the chain which are one and a half feet diameter. On increasing the size of the machine more of those wheels and chains may be used in the middle part of the floor. These may be pieces secured on the inside of the lags or floor pieces projecting each way for the purpose of supporting the floor between basings. These may be bands underneath the floor passing over pulleys for the purpose of supporting the floor when found too heavy for the chains. Friction rollers may be used under the main shaft. Gearing or belting may be used to attach to different kinds of machinery from the main shaft such as saw and flouring mill cotton and wool manufactory, cotton gins, threshing machines and for various other purposes. The size of those wheels and chains may vary as occasion requires.

What I claim as my invention and desire to secure by Letters Patent in the animal power is—

The construction of the endless chain as described in the specification and drawing and the described plan of elevating the movable floor by the application of the governor to animal power in the manner above described.

JAMES SECOR.

Witnesses:

WILLIAM MONTGOMERY,

THOS. B. HUDSON.