No Printed Specification Available

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S. Lane,

Horse Power.

Patented May 17, 1830.

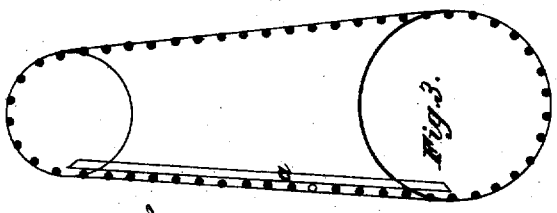


Fig. 3.

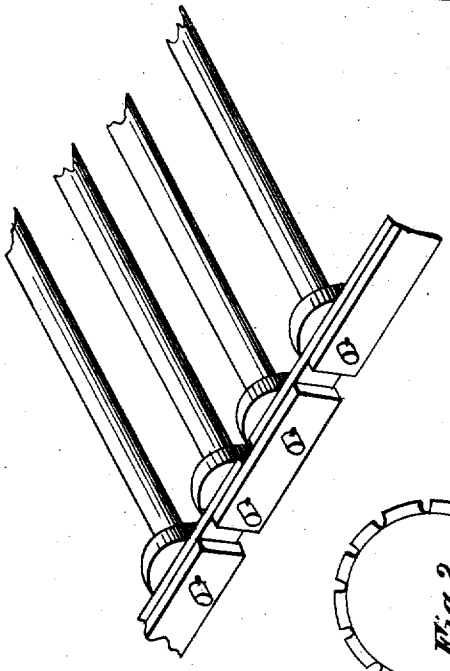


Fig. 1

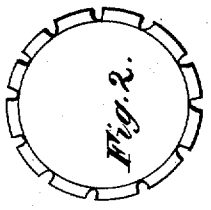


Fig. 2.

A.M. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

May 17. 1832

Samuel Lane

Letters Patent

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The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Samuel Lane himself of his improvement in the manner of using Horse Power called the Endless chain & Rail-way.

To all persons to whom these presents shall come. Samuel Lane of Hallowell in the County of Kennebec & State of Maine Gentleman sends Greeting. Be it known that I the said Samuel Lane have invented certain & applied to use a new mode of using Horse power by means of an endless chain & rail way. called the Endless chain & Rail way Horse Power. Illustrated by the accompanying plates & specified in the words following to wit. Plate round rods of iron of any convenient size & length, those which I find best are 7/8 of an inch in diameter & twenty inches in length. at space of an inch and three quarters on each end is turned down to 5/8 of an inch making a smooth axle or gudgeon. I put cast iron rollers one inch & three quarters diameter & 3/4 of an inch thick & turned round & smooth. Each roller is bored 3/4 of an inch of the gudgeon: on the part projecting three sheathes. I put a clasp of iron 3/8 of an inch thick, for rods to a clasp: on the outside of these clasps. I put another set in such a manner that they break joints. see fig 1 & fasten them on by means of a pin thro' the gudgeon. This connects the rods together & forms a chain, by connecting the two extremities the chain becomes endless. Two drums or wheels are then prepared of any diameter required & flutes used to receive the rods as fig 2. Rods are hung to a frame & the endless chain put on them. It is best to have one of these drums a little smaller than the other, so as to make a slight ascent. Between the drums on each side is an iron plate resting on a wooden joist or beam which forms a rail way upon which the axle gudgeons rolls. see fig 3. a is the railway. The edge of the rails is thus rounding

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be varied to suit the wishes of those who use them. I have generally found the size above described convenient for all purposes to which I have put them. I place the rods 7/8 of an inch apart this leaves sufficient space for the cords of the bands that go between them and prevent their slipping. For the size of the wheel 12 inches diameter has been found very convenient for quick motion. I do not claim the endless chain, or the rotary horse power as it is sometimes called as my invention. But I claim the invention of making this chain of round rods of iron. & I claim the mode of fixing the anti-friction rollers in the manner described, viz by attaching them to the ends of the rods & placing a railway beneath them. I also claim the mode of connecting the rods together by clasps as above described. In testimony that the above is a true specification of my said improvement as above described. I have hereto set my hand and seal this 16th day of April in the year of our Lord 1831.

Witnesses
Ezekiel Holmes.
Jno. Otis.

Samuel Lane