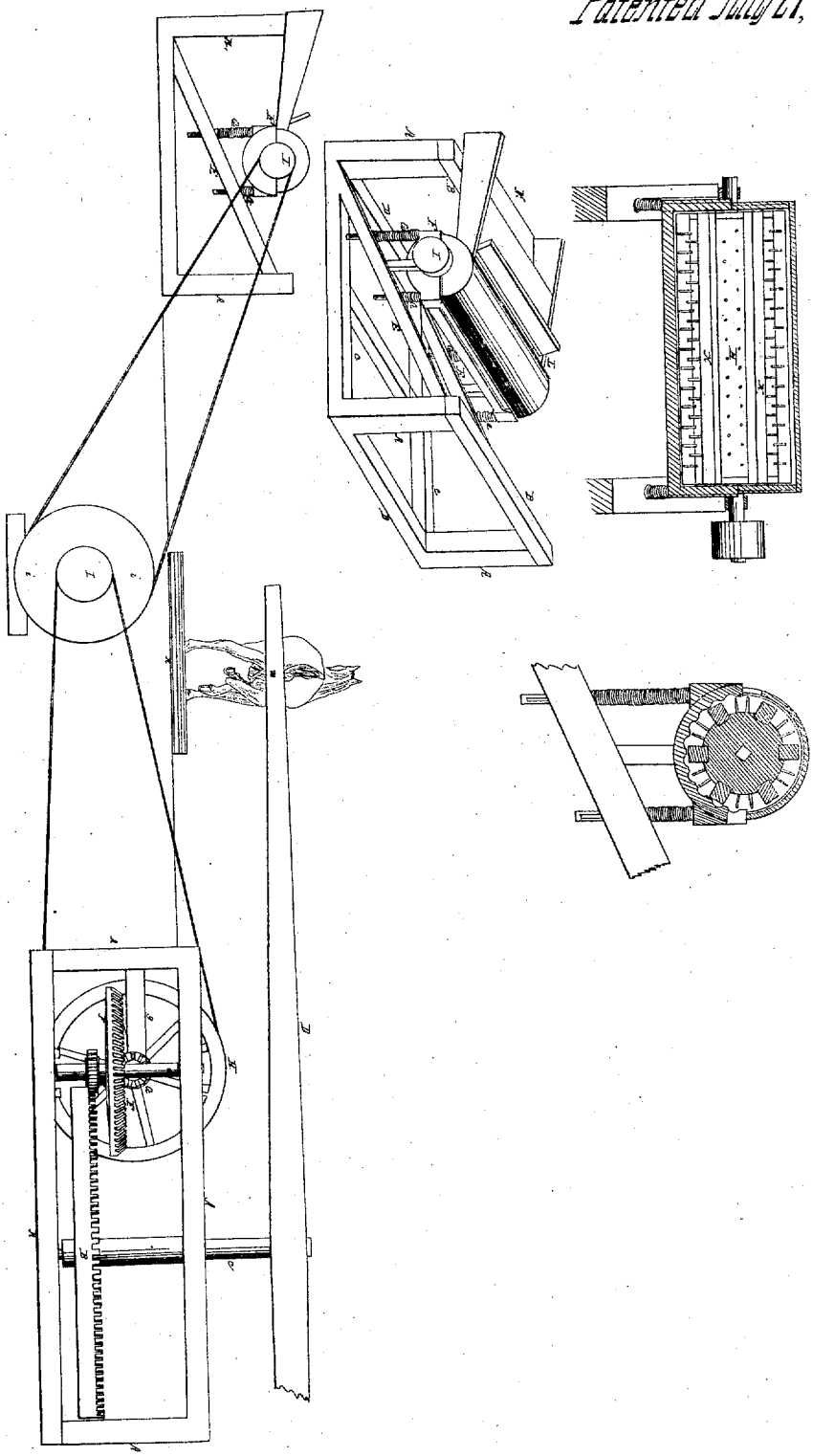
6659X

H. P. Stanton,

Horse Power.

Patented July 21, 1831.



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

6659X Nov 19

July 21, 1831 2nd

Nehemiah P. Stanton

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Nehemiah P. Stanton himself of his improvement in the Threshing Machine together with the application of Horse Power for operating said machine

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To all to whom these presents shall come. Be it known that I Nehemiah P. Stanton of the village of Syracuse in the County of Onondaga & State of New York have invented a new and useful improvement in a machine for threshing grain & the Horse Power to operate said Machine which Horse power may be applied to all the uses and purposes to which Horse power may be applied and that the following is a full and exact description of the construction & operation of the said machine & Horse Power as invented or improved by me. Said machine is constructed with a frame five feet long three feet two inches wide & two feet four inches high made with four posts, two plates, two sills, three girts & cross timbers, with a brace from the foot of each forward post to the top of each back post calculated to receive the cylinder & concave box which is to be made of hard wood planks & faced with wrought iron three fourths of an inch wide & three sixteenths of an inch thick to be fastened on with screws & said box may be lined with a cast iron concave plate fluted as aforesaid. The box stands on four spiral springs placed between the said braces & the box for the purpose of suffering hard substances to escape between the box & cylinder without injuring either. The length of the box may be about two feet six inches & the width may be twelve inches faced with iron as above the grain on which the machine. The box is to be gauged by legs passing thro' mortises which extend from the box through the spring & braces. The cylinder is to be the same length of the box made round of solid hard wood nine inches diameter with an iron shaft running through it one inch and a half square with a tenon at each end of the cylinder one end of the shaft runs far enough out to receive a wheel of about say six inches diameter. Around say wooden bars one inch & three quarters thick & two inches wide running lengthways of the cylinder

cylinder & ground in such a proportion with a half of platform with spikes & fixed on the side towards the hopper with wrought iron plates two inches wide & three sixteenths of an inch thick secured by screws or rivets. There are twenty five spikes in each beater made of wrought iron half an inch square with a screw cut on one end & drawn to a square point at the other which are to be screwed into the cylinder so as to project two inches. They are to be set in five rows in a space forming a cylinder with six beaters & one hundred and fifty spikes. The ends of the cylinder are secured by iron bands. The cylinder plays into the concave or circular box before described & is covered with a circular case of sheet iron. There is a feeding table with a throat to receive the grain & directly over it a throat to discharge the dust. The principal part which I claim in the above Threshing machine is the combining & uniting of spikes & beaters on the same cylinder with the concave box, the sheet iron case & the construction of the dust discharger. The description & specification of the three powers above mentioned is as follows. The frame is to be nine feet long & eight feet wide & three feet high with three sills, three plates, six posts and two girts. The frame contains the following gearing. One crown wheel six feet diameter with spur gearing of cast iron with wooden shafts, arms and rim. The shaft is two feet eight inches long & stands perpendicular with a step gudgeon at the lower end which steps into a box in the middle sill with a bearing gudgeon at the top with a neck passing thro the middle plate, on the top of the neck is a diamond head upon which the lever is taken to by means of a mortise in the centre. The whole length of the lever is nearly four feet: it is made eight inches square in the middle & tapers to three inches square at each end. Said crown wheel meshes into a ten inch pinion on another eight shaft which passes into the lower sill at the bottom & running in a box on the same plate at the top with the crown wheel shafts. The shaft of the pinion wheel is regulated by boxes at the top & bottom so as to mesh in & out with the crown wheel as may be necessary. On the shaft of the pinion wheel is also a bevel wheel about four inches in diameter & four inches face which meshes into an eight bevel pinion wheel on another shaft lying longitudinal & receiving its bearings in boxes which is secured into a shank at the [illegible] end

with keys on which said mentioned shaft is attached a three foot four inch band wheel from which a band or strap is taken to a similar inch pulley having thereon a shaft the gudgeons of which are in boxes fixed eighteen inches below the path of the horses and between the machine & horse power frame on the side of and adjoining which pulley is a thirty inch pulley from which a band is taken to the where on pulley on the thrashing machine. A bridge is built over the pulleys & shafts which are situated under the horses path. Second as my invention or improvement the combination of the gearing of the horse power to run beneath the lever by which the horses draw, also the placing said horse power firmly & substantially on the ground & the communicating between the thrashing machine and horse power or the walk of the horses by means of bands straps, ropes, chains, & shafts. Third claim as my invention or improvement the lever fastening around on the top of the frame of the horse power and the diamond gudgeon projecting above the centre plate of the horse power to which said lever is attached. June 25 1831.

Witnesses
B. D. Noxon
Robt. Voyn

Nehemiah P. Stanton. L.S.
Ch. of W.