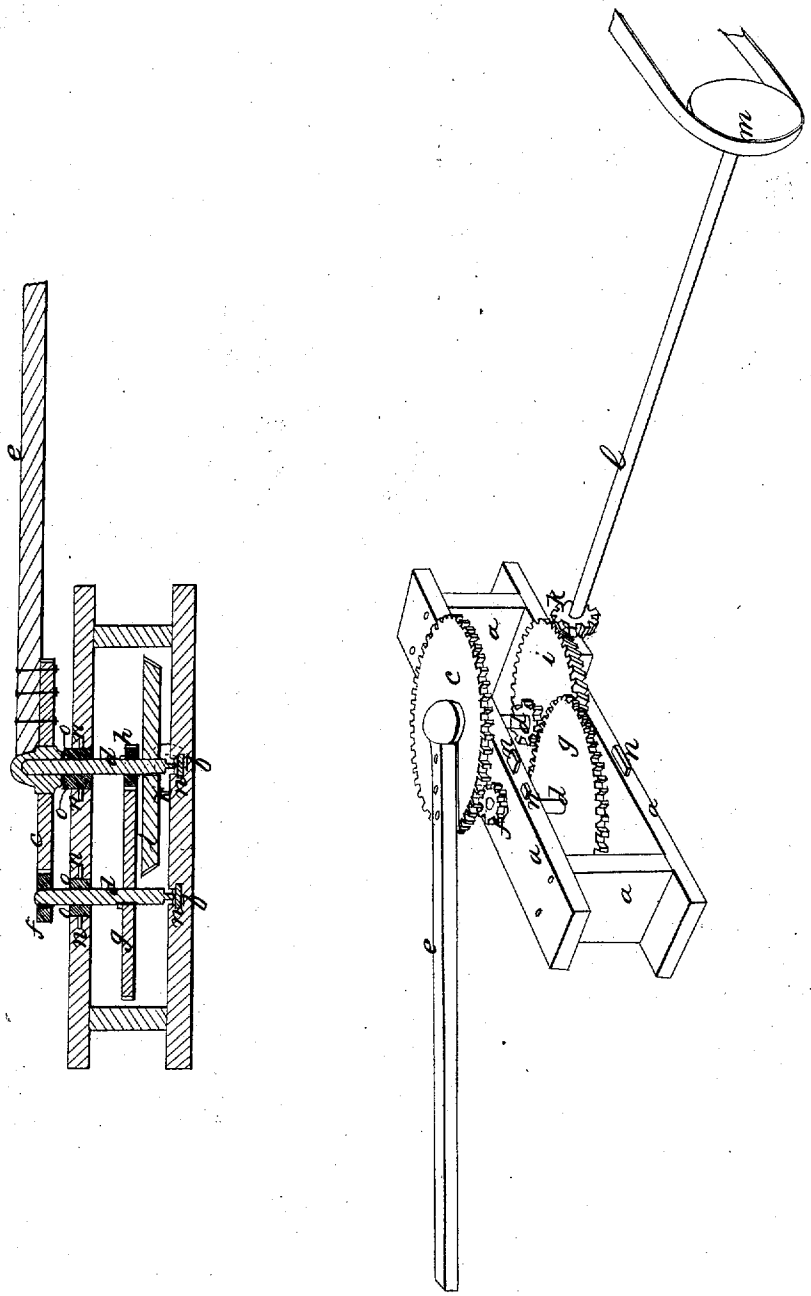
8746X

J. Brandon,

Horse Power,

Patented Apr. 8, 1835.



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

8746X

M.L.S. 1835

John Brandon, Williamsport Pa.

Sellers Patent

Apr. 18, 18

The Schedule referred to in the Sellers Patent and making part of the same containing a description in the words of the said John Brandon himself, of his improvement in the Portable Horse Power.

To all whom it may concern: Be it known that I John Brandon of Williamsport in the County of Lycoming and State of Pennsylvania have invented certain improvements in the portable horse power and I do hereby declare that the following is a full and exact description thereof. To sustain the shafts which carry the wheels I make a frame of wood consisting of two sleeper planks one of which is to stand in the ground, or in any convenient foundation, they may be each about five or six feet long one foot wide and four inches thick. In them to be raised to suitable height above it, say one foot six inches for which purpose there are two end pieces into which the before named planks are framed and mortised by tenons, below or otherwise, the bottom plank containing the steps in which the lower ends of the shafts are to run and in the upper plank there are to be braces to sustain them upon ends. The shafts pinions and the parts employed may vary in their dimensions in describing them hereon it will be convenient to designate certain sizes, but still such it is to be distinctly understood that I do not intend to limit or confine myself in these particulars nor indeed to the exact mode of framing designated by me. The diameter of the main driving wheel may be about ten feet, this stands on the upper side of the frame immediately over and upon the vertical shaft of which there are two. The upper end of this shaft passes through the top plank and there is a hole in the lower side of the driving wheel at its center or bed which fits on the end of the shaft, to the upper side of this driving wheel the lower shaft to which the horse is geared is b

8 1460

be fastened by any suitable contrivance. The driving wheel gears
a pinion on the upper end of the second shaft, which pinion may b
about eight inches in diameter. Upon this second shaft there is
be a second driving wheel which may be of the same diameter
with the first in which case it will mesh into a pinion on
first named shaft of the same size with that on the second sha
Upon the first shaft below the pinion there is a bevel wheel whi
may be of the same size with the driving wheel, this gears w
a bevel pinion upon a horizontal shaft running suitable bea
below it. This pinion may be of the size of the other pinions but
vary according to the speed with which it is required that the
horizontal shaft shall revolve. The extremity of the horizontal may
carry a thirty to receive a strap or band or be connected with an
other convenient way with the machinery to be driven. All the
wheels and pinions may be of cast iron and the shafts of case
wrought iron. For the purpose of perfect adjustment so that the teeth may
be made to mesh into each other correctly and that the degree
in which they do so may be regulated, I adopt regulating keys
or wedges to the step boxes of the shafts and also to the boxes in the
upper plank in which the upper ends of the shafts run. For the pur
of adjusting the step boxes a mortice is made through the lower
plank from side to side immediately under each shaft and into
these a wedge shaped key is fitted by driving this key one way or
other the step which rests upon it is raised or lowered. The upper e
of the shafts run in divided boxes to each of which there is a key
fitted in like manner. Mortices running through the upper timbe
ence by means of these the shafts may be moved nearer together o
further apart, and the meshing of the teeth nicely adjusted.

The divided boxes in which the first shaft runs, rise above t
upper plank so as to form a coaming upon which the butt of the m
driving wheel rests, and by this means it is prevented from pressi
upon the shafts or wheels below. I extend the first driving wheel a
pinion in which it gears, may be below the plate. Suitable arrange

No 1467

long, shall be attached the Stock[illegible] or bars to a rack or Cedar Stand
up through the plate, or Stock the upper plank in two pieces jointed toge
so as to admit the Cube of the Shaft as by the means the Shaft C
may be removed without the necessity of disturbing the Wheel and
pinions fixed upon them. The two halves of the plank are to be secured
together by screw bolts.

What I claim as my invention is the general mode or
plan of supporting the Shaft and gearing in a portable horse
power by wedges or keys, operating as herein before set forth.
Also claim the adapting of the key in which the first Shaft runs
to the supporting of the weight of the first driving wheel, as above
described.

John Brandon

Witness
D. Wm Clark
C. Riley

(Specification) Filed in Office of Secretary of Rhode Island June 2. 1837.