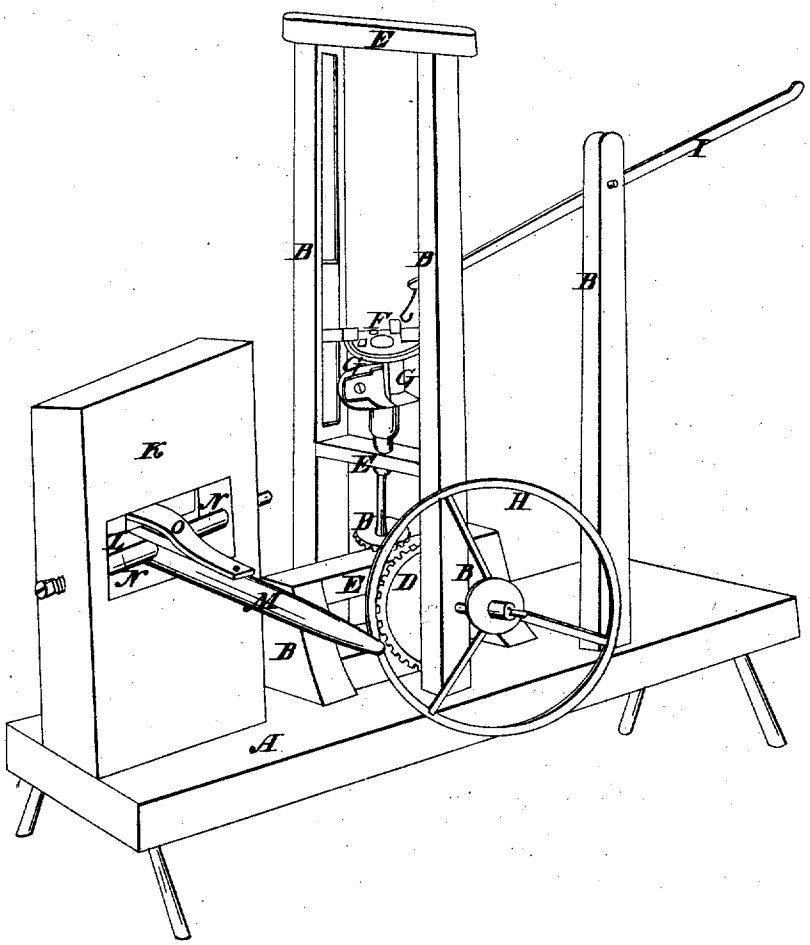
7673X

J. Reed,

Making Wooden Pins.

Patented July 22, 1833.



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

X7673 July 22 1833 159.

Sepe Reed
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 Sepe Reed himself of his improvement called a fling & lenonal geared Machine for Ships Building. — — To all whom these presents shall come, Be it known that I Sepe Reed of Marshfield in the County of Plymouth & commonwealth of Massachusetts have invented a fling & lenonal geared Machine for Ship building & the following is a full and exact description of the construction and operation of said machine as invented by me. In the first mode. The principle parts of said machine consist of a suitable bench or frame, posts, axles, spur wheels. balance wheel, crank screws & springs. The bench or frame is four feet in length one foot in width & about two feet in height. The height of the posts on which the axles are placed is about fourteen inches above the bench.....

The diameter of the balance wheel is about twenty inches & weighs about forty pounds. The length of the springs or arms is sixteen inches. The length of the axle on which said springs or arms are placed is twelve inches, the diameter is one & a quarter inch made of round iron...

The length of the other axle is about eighteen inches. on one end said axle is a crank on the other end a spur wheel about twelve inches in diameter which drives a small wheel about four or six inches in diameter which is attached to the axle on which the balance wheel is placed — — Attached to the end of said springs or arms are two circular boxes about three inches in length the diameter of the inner circle of said boxes is an inch & a half at one end & about an inch from the other end is an inch & three

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eighths & thence to the end the diameter increases to two inches
Attached to one end of said boxes is a chissel or cutter one
side of which is turned up like a gouge by which the
tunnel is reduced from two inches to any size required
said boxes being regulated by a screw that passes thro a
clasp. A Slide is placed on the upper side of said
frame or bench & is made to slide in a direct line with
the axle on which the cutter and balance wheel are plac-
ed. At one end of the Slide is a perpendicular post
having a hole thro the top, about two inches in diam-
eter into which in the operation one end of the tun-
nel is put & held fast by a lever or screw. The
post may be made in two parts fastened together at the
bottom & brought together with said lever by which
means the tunnel is held. Two hands are necessary
to put this machine in operation. In the second mode.
Said machine consists in a frame or bench axles & gear
similar to the above described, near the centre of the frame
are two perpendicular posts about four feet in height the
space between them is about seven or eight inches.
The upper part of said posts have a groove about three
quarters & an inch square at the lower end of said ground
is a cross bar & at the top there is another to keep them
firm & steady In said frame there are two other posts
about eight or ten inches in height & about one foot dis-
tant from each other a cross bar is attached to the top of
them. The main axle is about eighteen inches in length
having a crank at one end and a balance wheel at the
other about three feet in diameter & weighing from eighty
to a hundred weight. This axle passes thro the first
mentioned posts about six inches above the bench on
said axle & just within the post next the balance wheel
is placed a bevel gear wheel about eight or ten inches

in diameter which drives a small wheel about half said diameter which is placed upon a perpendicular axle about eight or ten inches in length. the upper end having a square socket of suitable dimensions to receive the end of the trammel. the foot of this axle rests in the cross bar attached to the short posts. the upper end turns in the cross bar first mentioned attached to the long posts.

A wheel about seven or eight inches in diameter is attached to the lower end of two guides one on each side about six or eight inches in length. which slide perpendicularly in said grooves. said wheel being at right angle with said guides. there is a hole thro the centre of this wheel in which are placed the end of two circular boxes. to one of which the cutter is fixed as in the first mode. These boxes have a flange at right angle which is connected to said wheel with screws in such a manner as to make them easily graduated to any size required. the upper end of said boxes passes thro the hole in the centre of the wheel. This wheel being raised up by the lever a button attached to one end of the long posts. is turned which holds it. A piece of cast iron having a square of the same size of the socket in said perpendicular spindle. the top end being inverted with a small knife placed to correspond. is inserted in said socket and used for the purpose of pointing, the trammels.

In this mode but one person is required to put the machine in operation. Attached to said frame is another perpendicular post from eighteen to twenty inches in length. twelve inches in width from one to two inches in thickness. a little above the centre of this post is a mortise nine inches in width & two inches in height. A lever is placed in this mortise having trunnions on each side. the length of the trunnions is about equal to a

half

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half inches the end of them being counter sunk to receive
pieces of the screws on which the lever is hung. its length
being about two & a half feet, the short end being about
six inches from the pivots & made to correspond with the
shape of the plug required, the end of said lever being
turned up to keep the plug from slipping. On the
front of said perpendicular post are elevations sufficient
to affix two knives or chisels. two inches in width, hav-
ing their inner edges half an inch the longest. These
knives are placed on said elevations, the flat or straight
sides inward at the same distance & angles that the
plug requires. On the top of said lever is a stout
spring made fast. when the lever is raised one end of
said spring hits upon a stop. The lever being further
raised, it opens the spring sufficient to receive one end
of the plug, then the lever is brought back & the plug is
driven by the short end of the lever between the knives
which takes off a shaven from each side. then being
brought back by raising the lever it is turned over &
the same operation repeated completes the plug.—
Your petitioner claims the general construction of said ma-
chine above described & its application to the making of plugs &
bungs for ship building and others and rounds for
ploughs excepting a tool now in use for rounding bung-
mens. In testimony that the above is a true specification of
my said machine as above described. I do hereunto set
my hand this twelfth day of May Anno Domini 1833.
Witnesses
Wm Ford Jr
William Ford

Sylv Ford
(Dr in part Sales)

6 yd
Mk

1136 wds