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Throckmorton

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(54) **PLANING MACHINE**

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Reid R Throckmorton City & State N.Y.

Letters Patent

The Schedule referred to in these Letters Patent and part of the same Containing a description in the words of the said Reid R Throckmorton himself of his improvement in the Machine for planing Boards and other Material —

To all to whom these presents shall come Be it known that I Reid R Throckmorton of the City and state of New-York have invented a new and useful improvement in the mode of planing boards and plank and other Material by Machinery and that the following is a full and exact description thereof.

In the first place the improvement consists of a frame of Wood or Iron of about fourteen feet in length and about three feet in breadth standing on six legs about three feet high, said frame to have about two or six cross pieces or girths and other necessary braces to make it firm and strong.

2d Acop the frame are placed two or more rollers of about five Inches diameter of hard wood, one turned the two or more beneath and the same above the plank. The under rollers having pullies of about seven inches diameter keyed attached to the ends and are worked by means of leather intermediate cogg wheels from a small pulley about six inches diameter on cogg wheel on the shaft underneath the frame. The upper rollers are held down by weights and levers and the gudgeons of which work in movable boxes so as to admit of different thickness of boards or plank said frame has in the center immediately underneath the plane a cast plate of iron or Rollers to support the plank during the operation of the plane

On the feed shaft there is a drum or Ratchet wheel with its inner edge a drum of about eight inches diameter of a Ratchet wheel about ten feet diameter the drum to receive a belt from the

first Mover a drum of about twenty inches diameter placed beneath the frame and on the shaft on which said drum is fixed there is a pully of about twelve inches diameter. The Mover to this is attached which can be attached to the Crank Shaft or to the Plane Stock which ever may may be most Convenient to give the forward and back ward Motion

The improvement in the plane of this machine Consists in placing upon the bed plate or sides of the frame six small pillars or posts upon which are placed the guides or parallel Motion upon these Slides or parallel Motion is fixed a Cross head with Gibb or Brasses to slide on the guides so as to cause the Cross head to move in a Straight line.

The plane is attached to the Cross head by means of a strap and permitted freely to revolve if desired the Shaft in said Cross head to be attached thereto behind the Cutters or Irons of the plane and to have Continued out in length sufficient to receive a Crank which is fixed on one side on one end of the machine said Strap, pin Main or Shackle bar as it is variously denominated serves as a handle to the plane. The part of the plane in which the Irons or Cutters are fixed is Circular as made so as the Circle of the Crank will allow the horizontal Connecting the plane to the Crank may be Straight or otherwise as Convenience may require The plane should be made of sufficient length to receive about Six Cutters or Irons. The Crank should be about Six Inches which will move the plane in a rectilineal Course twelve inches at each revolution of said Crank and at the same time by the rise and fall of the plane handle give a Circular motion to the Cutters during the reciprocating motion of the plane that is to say the forward motion of the Crank urging the plane ahead the Irons being on a periphery of a Circle rise out of the wood each as their individual cut is finished and so on until all of the Irons have performed their Seperate parts and at which time they are all raised off the wood and carried back by said Crank and by the next half revolution of said Crank said plane moves its cut and

it or alternately, without the aid of any thing else except the handle of plane handle and the body of the plane being attached to the Cap Iron and permitted partly to revolve on it.

The side Cutters for tongueing and grooving may be arranged upon similar principles as the aforesaid described plane except that the Crank Shaft should be perpendicular instead of horizontal. The motion may be given by Rack and Pinion by Bevil and pinion wheel, by Eccentrics and in various other ways. but the Crank is the simplest and best. What I claim as my Invention in the above described Machine is simply the peculiar Construction of the plane & side Cutters moved by Bevil or gearing and Cranks and resulting in a Compound motion reciprocating, rectilineal, and in part Circular in one operation by Connecting the end of the plane by means of its handle to a Crank or any other Circular Motion

In testimony whereof I have hereunto subscribed my name A.D. 1865

Witnesses

W. H. Pike Salem

John J. Pike Salem

Reid R. Mackintosh—

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