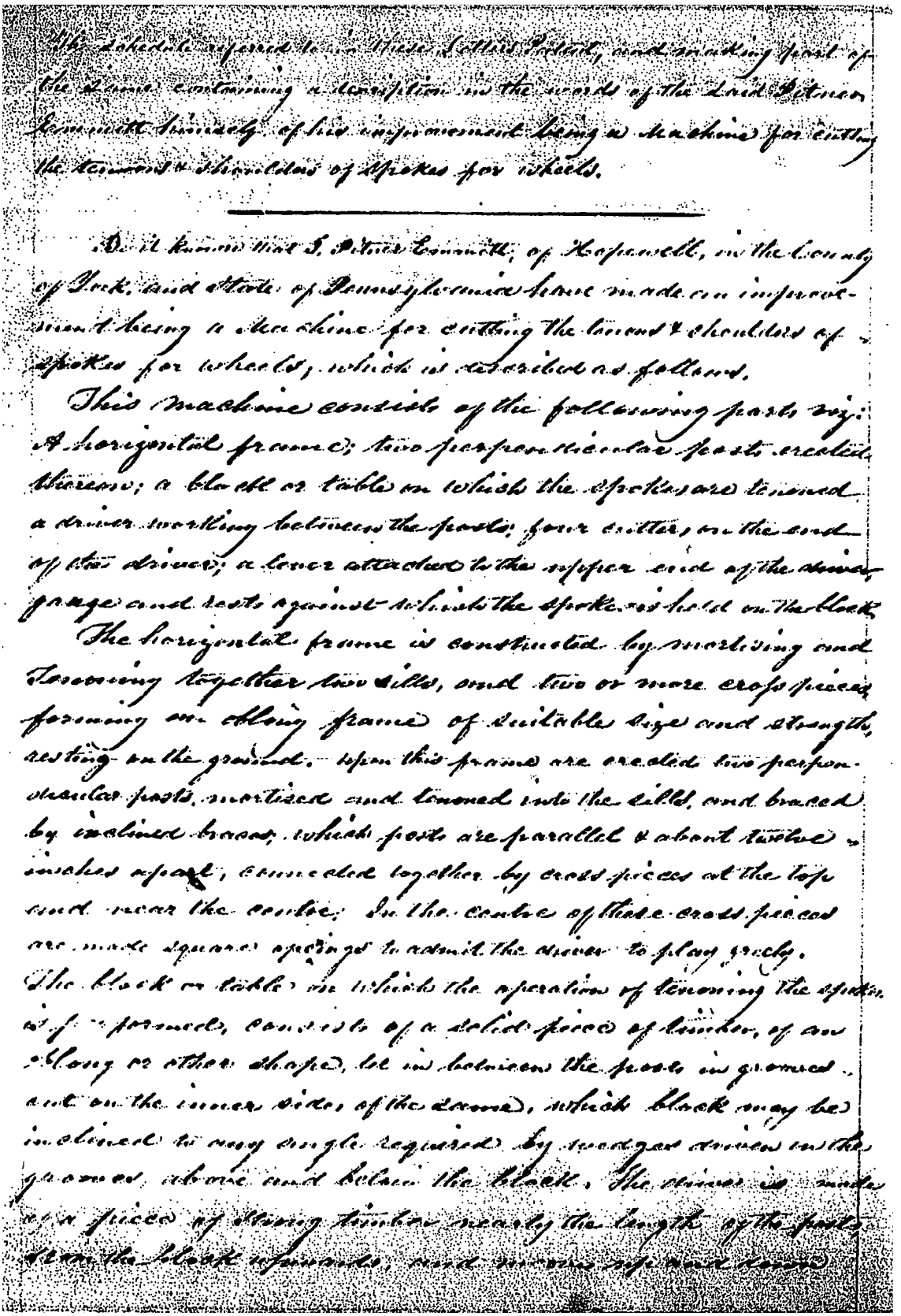
(12) **United States Patent**
Emmitt

(10) **Patent No.: X7624**
(45) **Date of Patent: Jun. 29, 1833**

(54) **WHEELS, SPOKED, CUTTING TENONS & SHOULDERS**

(76) Inventor: **Pitner Emmitt**

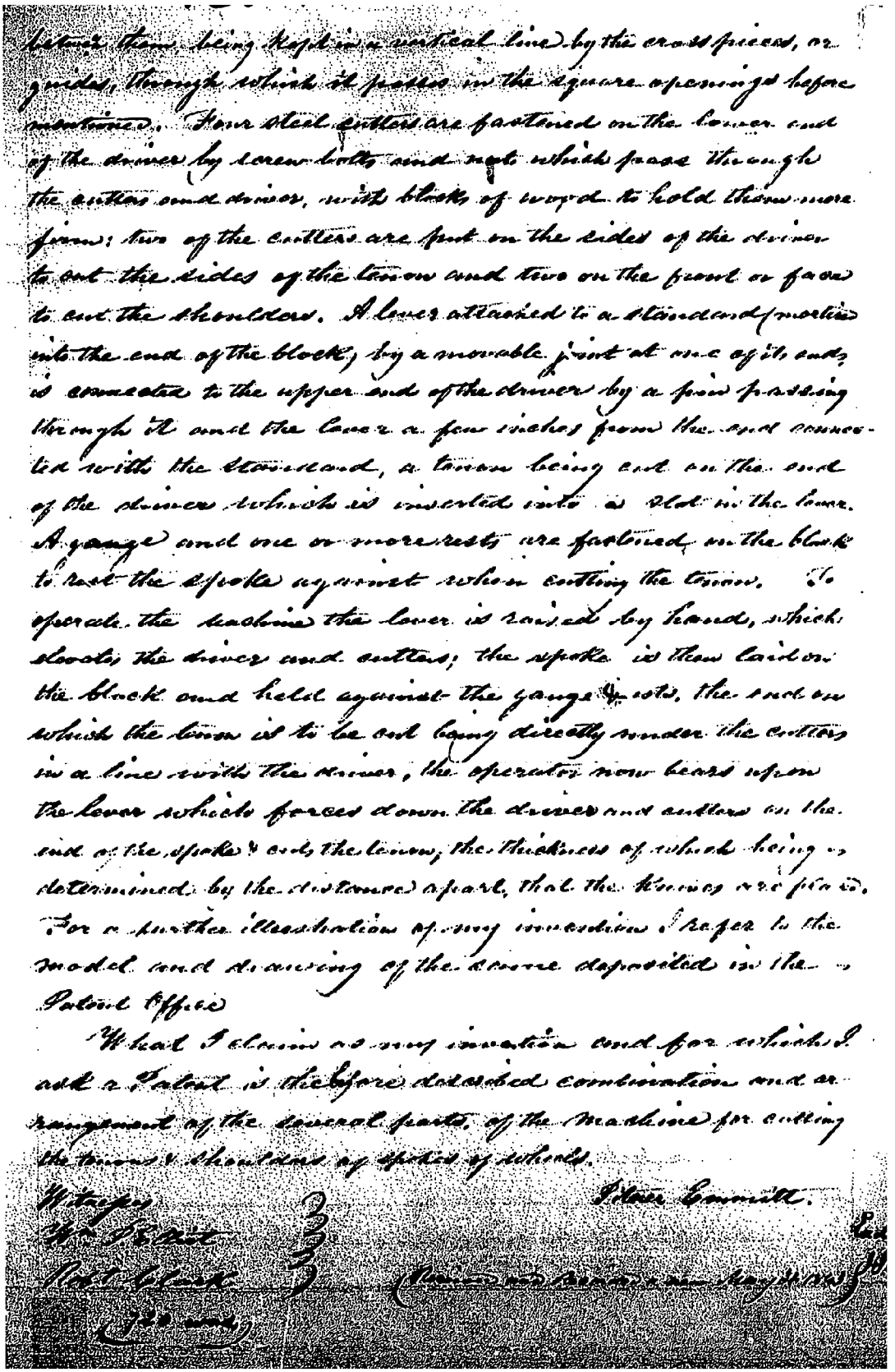


Specification of Letters Patent, and making part of the same containing a description in the words of the said Patentee Emmett Swisher of his improvement being a Machine for cutting the tenons & shoulders of spokes for wheels.

Be it known that S. Swisher Emmett, of Kapsaville, in the County of York, and State of Pennsylvania have made an improvement being a Machine for cutting the tenons & shoulders of spokes for wheels, which is described as follows.

This machine consists of the following parts viz: A horizontal frame; two perpendicular posts erected thereon; a block or table on which the spokes are tenoned a driver working between the posts, four cutters, on the end of the driver; a lever attached to the upper end of the driver, & rests against which the spoke is held on the block.

The horizontal frame is constructed by morticing and tenoning together two sills, and two or more cross pieces forming an oblong frame of suitable size and strength, resting on the ground. Upon this frame are erected two perpendicular posts, mortised and tenoned into the sills, and braced by inclined braces, which posts are parallel & about twelve inches apart, connected together by cross pieces at the top and near the centre. In the centre of these cross pieces are made square openings to admit the driver to play freely. The block or table on which the operation of tenoning the spokes is performed, consists of a solid piece of timber, of an oblong or other shape, let in between the posts in grooves and on the inner sides of the frame, which block may be inclined to any angle required by wedges driven in the grooves above and below the block. The driver is made of a piece of strong timber nearly the length of the posts from the block upwards, and working up and down



between them being kept in a vertical line by the cross pieces, or guides, through which it passes in the square openings before mentioned. Four steel cutters are fastened on the lower end of the driver by screw bolts and nuts which pass through the cutters and driver, with blocks of wood to hold them more firm; two of the cutters are set on the sides of the driver to cut the sides of the timber and two on the front or face to cut the shoulders. A lever attached to a standard mortised into the end of the block, by a movable joint at one of its ends is connected to the upper end of the driver by a pin passing through it and the lever a few inches from the end connected with the standard, a timber being cut on the end of the driver which is inserted into a slot in the lever. A gauge and one or more rests are fastened on the block to rest the spoke against when cutting the timber. To operate the machine the lever is raised by hand, which elevates the driver and cutters; the spoke is then laid on the block and held against the gauge & rests. the end on which the timber is to be cut being directly under the cutters in a line with the driver, the operator now hears upon the lever which forces down the driver and cutters on the end of the spoke & cuts the timber, the thickness of which being determined by the distance apart, that the knives are fixed. For a further illustration of my invention I refer to the model and drawing of the same deposited in the Patent Office

What I claim as my invention and for which I ask a Patent is the before described combination and arrangement of the several parts of the Machine for cutting the tenons & shoulders of spokes of wheels.

Witness
Wm. S. Hart
Chas. Black
[illegible]

Peter Gemmill.

(Name and Residence illegible)