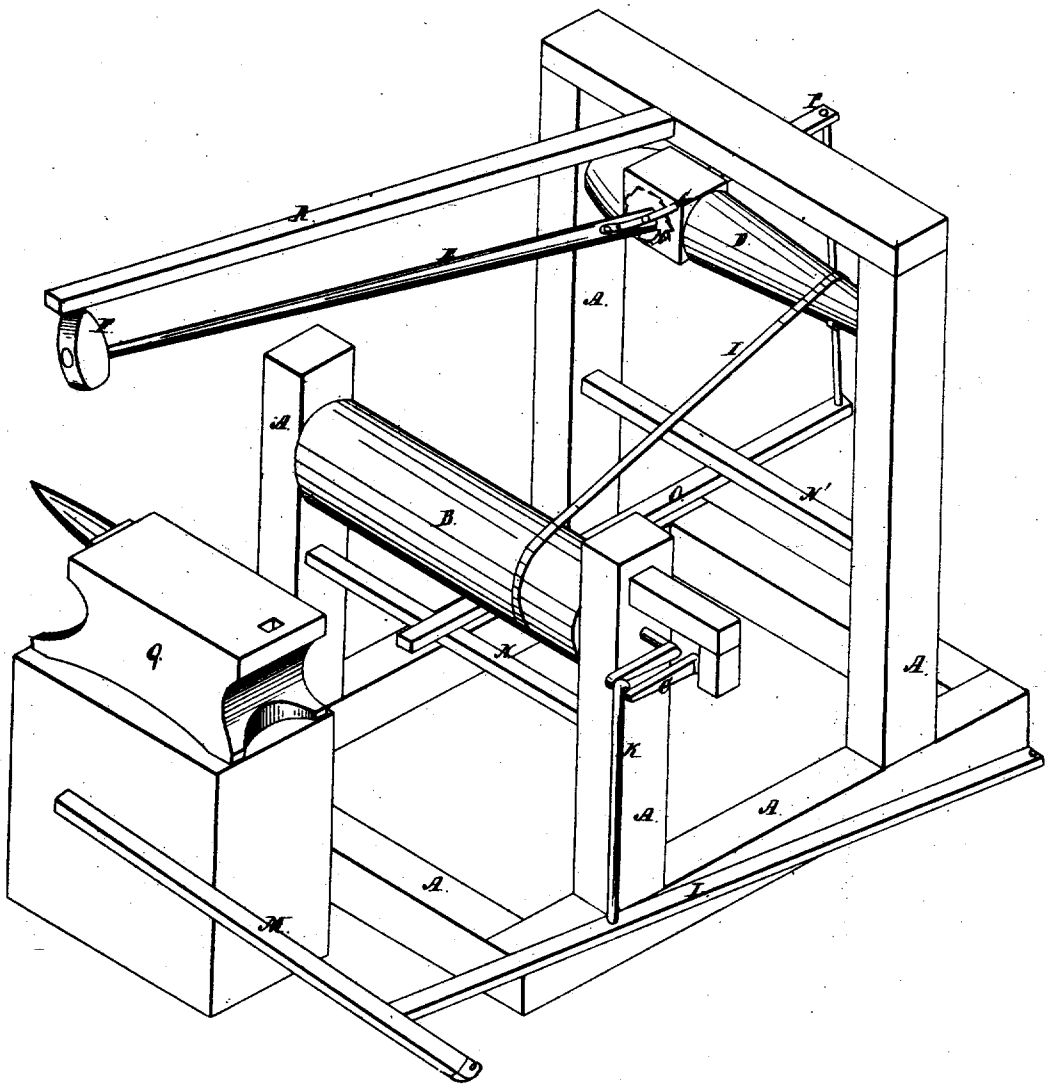
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J. WOODEL.

Oliver.

Patented Aug. 6, 1834.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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Jos. C. Woodel. Jackson Tennessee.

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Letters Patent August 6. 1834.

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Joel Woodel himself of his improvement in hammering iron by a machine constructed to supply the place of a common hand as a striker.

To all to whom these presents shall come. Know ye that I Joel Woodel of Jackson in the County of Madison and State of Tennessee Blacksmith have invented and constructed a new and useful improvement in the art of hammering iron on the anvil by a machine to supply the place of a striker with a common Sledge hammer called by the inventor the improved Blacksmiths Striker. and the following is a full and perfect description of the plan & construction and operation of said machine

1st A ground frame composed of four sills tenanted and mortised to connect them in nearly a square. the longest or side sills about three feet and an half in length. the shortest or cross sills about two feet six inches. all of them from five to nine inches square so as to give strength and weight

2nd Four upright posts tenanted into the sills flush with the outside but so far from the ends as to occupy a station about one foot six inches apart the projecting ends of the sills will keep the frame steady. The post and the ends next the anvil about 3 inches square and 2 feet 6 inches high The remote or two back ones about the same size but 3 feet four inches in height. braces and arms can be placed on the hindermost upright braces also to those in front. these braces can be placed according to the fancy of the builder. 3d A cylinder about 4 inches diameter to occupy a horizontal position between the upright posts next the anvil the right hand end of which is supported by a gudgeon passing through the post and turned into a crank which rotates in the bend to the arm of the gudgeon where it forms another plain or gudgeon supported by a frame fixed on the upright post. the length of the crank

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from its centre is about six inches. The other end of the cylinder is supported by a gudgeon in the left hand post. A 4th another cylinder resting on gudgeons also placed horizontally but between the back upright posts. This cylinder is about 5 or 6 inches diameter swelled at the part of it where the hammer helve passes through it.

5th A Sledge Hammer on a helve about four feet long set into the last described cylinder near the left hand end of it. This helve is made to move round upon a journal so as to move the face of the hammer to the anvil a small iron lever set into the helve at the cylinder moves it round and by notches in the metallic plate placed on the cylinder holds the hammer to its position a small spring holds the lever in the notch it is wanted to occupy.

6th A chain connected to the last mentioned cylinder at the under side by a staple as thence brought up over it and carried forward to the next or front cylinder over it also and by a hook fastened at the bottom or under side. by the hook the chain can be tightened so as to keep the working gear connect and prevent slicking.

7th a rod or chain connecting with the crank and extending down to near the ground as fastened to a lever. This lever is of wood and is placed parallel with the longest side it is about four feet long fastened by a joint at the end remote from the anvil the other end to move up and down as a fulcrum of a treadle which crosses at right angles & lying in front of the anvil block has the left hand end of it in a position to receive the foot of the smith the right hand end is fastened by a joint like the lever. 8th & 9th Springs & Cropping between the upright posts. The ends let into them one of each is placed under each cylinder. The 8th is a transverse spring the end next the anvil block rest upon the spring between the front posts passes under the spring between back posts and its remote end is connected by a short chain to the 9th spring which is let into the cylinder which holds the hammer. The springs are adjusted so as to keep the hammer at its elevation from which the stroke is directed. A spiral spring or metal may be used instead of the three first springs by fastening

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by fastening its lower end to [illegible] of the frame and the upper end to the end of the spring which is set into the hammer cylinder if the [illegible] springs are used all of them may be of wood or metal tho' wood is esteemed the best and cheapest much depends upon the springs their strength and proper adjustment over the lever and treadle spoken above described should in some degree be flexible

9th A spring or small rabbit is placed over the hammer helve & is set into the ends or case bar on the back posts. This rabbit keeps the hammer from being thrown too high. The motion in the whole is given by the treadle which operating upon the lever the rod and cylinder by means of the connecting chain brings down the Hammer with a force governed by the motion of the foot. the spring assisting the hammer. The whole forming a very striking Blacksmiths aid.

In testimony that the foregoing are my specifications of my invention as above set forth Illustrated and described I have hereunto set my hand this day of May 1834

Witnesses
Stephen Pepit
R C Hodge.

Joel Woodel

Drawing

&c
Clerk

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