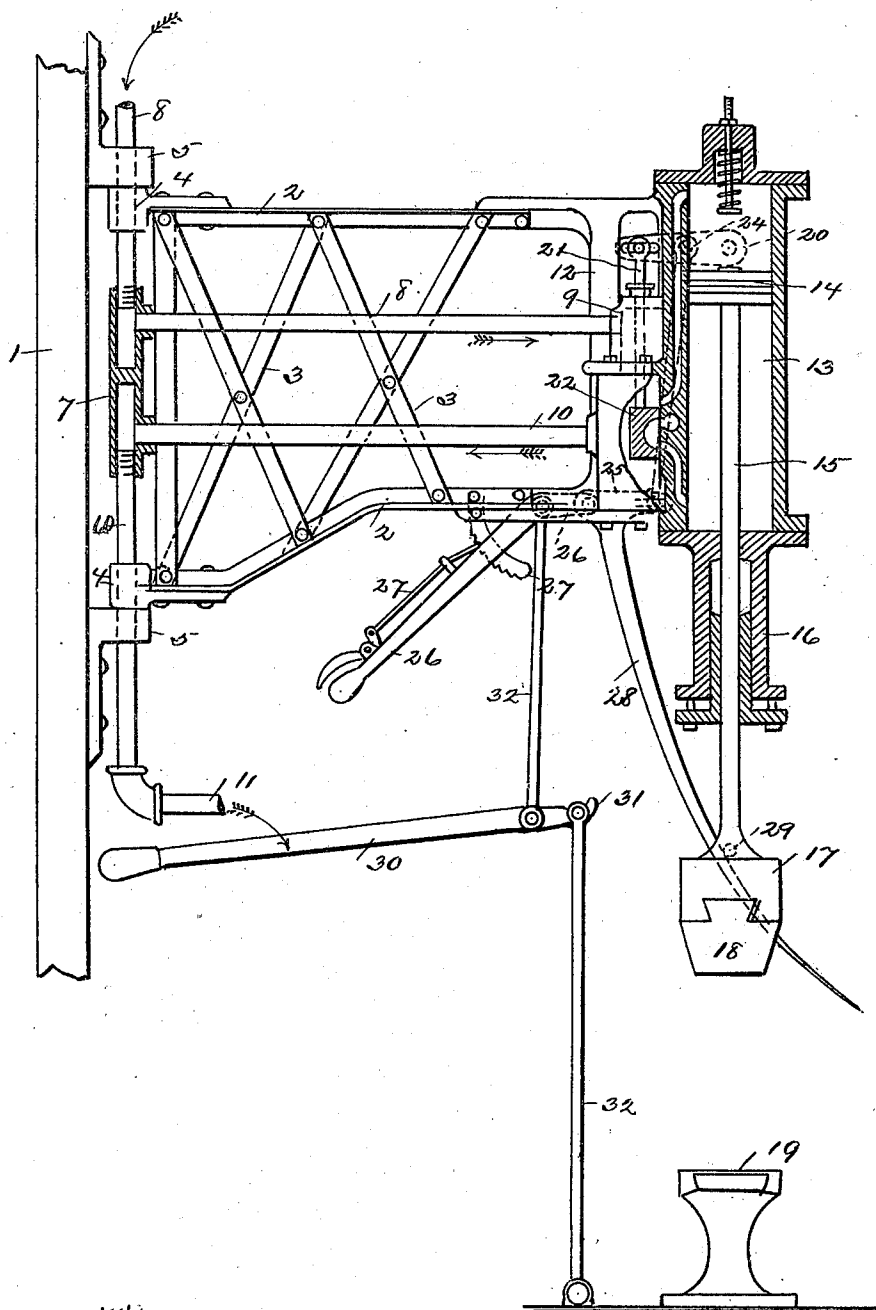


(No Model.)

F. J. FOX.
POWER HAMMER.

No. 513,637.

Patented Jan. 30, 1894.



Witnesses:
A. E. Harrison
J. A. Harron

Inventor:
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Att'y.

UNITED STATES PATENT OFFICE.

FRANKLIN JOHN FOX, OF CORAOPOLIS, PENNSYLVANIA.

POWER-HAMMER.

SPECIFICATION forming part of Letters Patent No. 513,637, dated January 30, 1894.

Application filed April 21, 1893. Serial No. 471,327. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN JOHN FOX, a citizen of the United States, residing at Coraopolis, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Power-Hammers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved power hammer, and consists in a steam hammer capable of being moved about the arc of a circle, together with certain details of construction, and combination of parts as will be fully described hereinafter.

In the accompanying drawings, I have shown a side elevation of my improved swinging-hammer, partly in section, and constructed in accordance with my invention.

To put my invention into practice I provide a bracket 2 constructed of angle iron, and suitably braced at 3 through the center, and provided with castings 4 to form hinges at the rear end. These hinges 4 are arranged between two others 5 permanently attached to a stationary object 1. These hinges are connected together by means of pipes 8—10 coupled together by a connection 7, by means of which the steam is conducted to and from the cylinder 13. Attached to the forward end of this bracket 2 is a casting 12 to which is attached a cylinder 13 fitted with a steam chest 9, a piston 14, piston rod 15, and a long stuffing box 16, which also serves as a guide for the rod 15. This cylinder 13 is arranged in a vertical position, and the lower end of the rod 15 formed with a hammer head 17 fitted with a removable die 18. To operate the slide valve within the steam-chest 9 I employ a link 20 pivoted to the cylinder, and to the valve stem 21. Connected to this link 20 is a bar 24, which extends downward and is pivoted to a rock arm 25, having a downward extension 28, adapted to be moved and operated by a

pin 29 secured in the hammer head 17. Attached to this rock arm 25 is a pivoted hand lever 26, having a means 27 for holding the same rigid or set at any desired point. An anvil 19 of any suitable construction is arranged beneath the hammer. Connected to the frame of the device is a link 32, which is pivoted to a lever 30 provided with a hook 31, adapted to connect with another link 32' attached to the floor. This device as described serves as a means for holding the hammer stationary, and is disengaged at the hook 31, when the same is revolved about its pivotal point. This hammer is operated and used the same as any of the ordinary steam hammers and may be revolved about its pivotal point to occupy but little room in the shop. The steam is admitted to the cylinder 13 through the pipe 8, and after being used exhausted through the pipes 10—11.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a power-hammer, a cylinder, a piston operating therein and carrying a hammer-head, a bracket secured to and supporting said cylinder, a fixed support, a series of hollow hinges, and a steam-inlet and an exhaust-pipe extending through and forming a part of said hinges, substantially as described.

2. The herein described power hammer, consisting of the cylinder 13 arranged in a vertical position, a piston operating therein, the piston rod 15 and its attached hammer head 17, the bracket 2 attached to and supporting the said cylinder, the hinges 4—5 connecting said bracket to a stationary object, the steam inlet pipe 8, and exhaust pipe 10 forming a part of the said hinges, all arranged and combined for service, substantially as and for the purpose described.

In testimony that I claim the foregoing I hereunto affix my signature this 30th day of January, A. D. 1893.

FRANKLIN JOHN FOX. [L. S.]

In presence of—

M. E. HARRISON,
ALBERT J. WALKER.