(No Model.)

# H. H. SMITH.

## MAUL AND FENCE POST DRIVER.

No. 335,544. Patented Feb. 2, 1886.

Fig. 1.

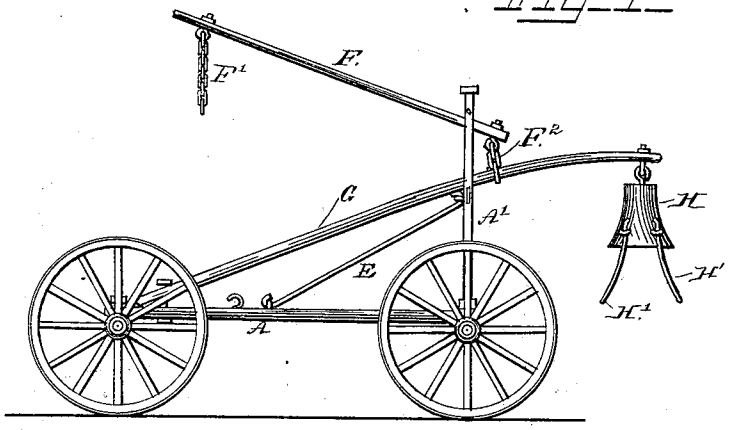



Fig. 2.

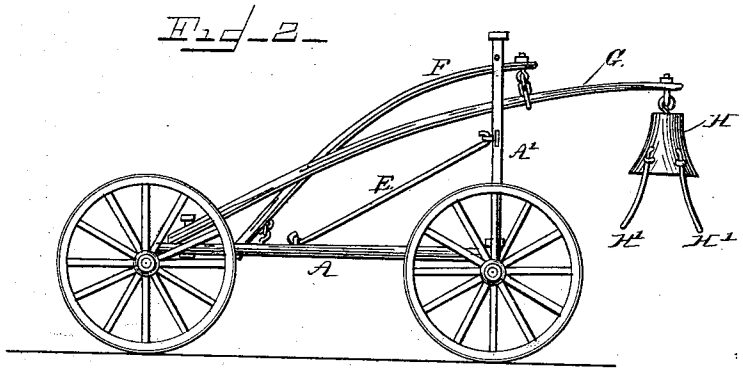



Fig. 3.

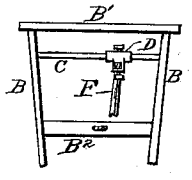
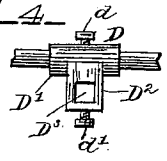



Fig. 4.




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# UNITED STATES PATENT OFFICE.

HARMAN H. SMITH, OF NAVARRE, ASSIGNOR OF ONE-HALF TO DAVID P. PARKS, OF BOLIVAR, OHIO.

## MAUL AND FENCE-POST DRIVER.

SPECIFICATION forming part of Letters Patent No. 335,544, dated February 2, 1886.

Application filed November 24, 1885. Serial No. 183,889. (No model.)

*To all whom it may concern:*

Be it known that I, HARMAN H. SMITH, a citizen of the United States, residing at Navarre, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Mauls and Fence-Post Drivers; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention is a device for driving fence-posts, and is intended to supply a cheap, simple, and effective machine, by means of which the fence-posts can be set up much more quickly, cobblestones tamped, and other things pounded more readily than by the common method, and with less labor than is now required.

To these ends it consists in the construction and combination of the several parts, as hereinafter more fully described, and specifically pointed out in the claims.

In the drawings hereto annexed, Figures 1 and 2 are side elevations of my post-driver, Fig. 1 showing the shifting-pole detached from the running-gear, and Fig. 2 showing it applied thereto in operative position. Fig. 3 is a detail side view of a portion of the pole-supporting frame, and Fig. 4 is a detail view of the carrier which supports the shifting-lever.

Referring to the drawings by letter, A represents a wagon-frame of suitable construction, having erected at its rear end a frame, A′, which consists of the two side bars, B B, top cross-bar, B′, lower cross-bar, $B^2$, and the rod C. The side bars, B, are secured in the running-gear, and the cross-bars B′ $B^2$ are secured to the side bars. The rod C is secured to the side bars a short distance below the top cross-bar, B′, and the carrier D, which supports the shifting-pole, is mounted on the said rod.

To prevent the shaking of the end frame, A′, in the operation of the device, I secure a brace, E, to the running-gear and the lower cross-bar, $B^2$, of the end frame.

The carrier D consists of a sleeve, D′, having an enlargement, $D^2$, which is provided with an opening, $D^3$, through which the end of the shifting-pole is inserted. Set-screws *d d′* are inserted through the upper side of the sleeve D and the lower side of the enlargement $D^2$, respectively.

F is the shifting pole, made of any suitable material which possesses the necessary strength and elasticity. Its rear end is inserted through the opening $D^3$ in the carrier D, and it is then secured by turning up the set-screw *d′*, as will be understood. It is provided at or near its opposite ends with chains F′ $F^2$, as shown. It is secured to the running-gear, when so desired, by the chain F′, as shown in Fig. 2, and the spring-pole G is connected to it by the chain $F^2$. The spring-pole G is secured to the running-gear, near the front end of the same, by a bolt or pin inserted through a slot in the end of the pole. The walls of the slot are so beveled as to allow the pole a limited vertical oscillatory movement. A maul, H, is secured on the rear end of this spring-pole, and is provided with four handles, H′, by which it is operated. The spring-pole extends up from the front end of the running-gear above the cross-bar $B^2$, and is held up by being connected to the shifting-pole F, as shown.

In operation the device is hauled to near where the post is to be driven, and if the maul does not come exactly over the post it is adjusted to the correct position by moving the carrier D along the rod C by means of the shifting-lever F and securing it by turning the set-screw *d* up against the rod C. The handles H′ are grasped by two operators—two handles by each operator—and the maul brought down forcibly on the post. The force of the blow will drive the post some distance into the ground, and the maul will be brought back to its original position by reason of the elasticity of the spring-pole. This operation is repeated until the post is driven to the desired depth, when the machine is hauled to the position of the next post and the operation repeated.

It will be noticed that by securing the shifting-lever as shown and described additional elasticity is given the spring-pole, as the free end of the pole being shortened the force required to bring the maul down on the post will be increased, and the reaction of the pole will

be correspondingly greater. The strength of the shifting-lever is preserved by releasing its lower end and allowing it to assume the position shown in Fig. 1.

From the foregoing it will be seen that I have provided a cheap, simple, and effective machine, the advantages of which are obvious.

In order to tamp cobblestones, it is necessary only to lengthen the chain $F^2$, so as to lower the spring-pole G, and to change the handles H′ from the vertical position shown in the drawings to a horizontal position, as will be understood. The machine is then operated in precisely the same manner as before described.

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

1. In a maul and driving-machine, the combination of a maul, a spring-pole carrying the maul, and a suitable frame or running-gear supporting the spring-pole, substantially as described and shown.

2. The combination of the frame or running-gear, the spring-pole supported on and carried thereby, the maul secured upon the free end of the spring-pole, and the shifting-lever, substantially as and for the purposes set forth.

3. The herein-described maul, consisting of a running-gear having a frame erected at its rear end and suitably braced, a spring-pole supported on and carried by the running-gear and projecting through the frame at the rear end thereof, a maul secured upon the free end of the spring-pole, and a shifting-lever having its end connected with the spring-pole and carried by a collar mounted on a cross-rod of the frame erected at the end of the running-gear, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HARMAN H. SMITH.

Witnesses:
STANLEY W. TWABY,
JOHN S. GRAHAM.