(No Model.)

W. W. HOLLEY.

PILE DRIVER.

No. 342,096. Patented May 18, 1886.

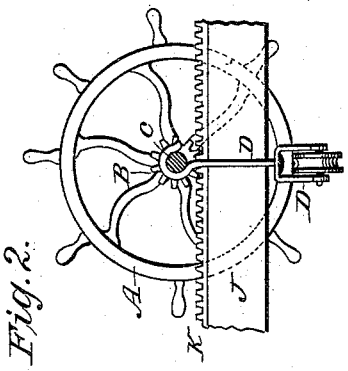

Fig. 2.

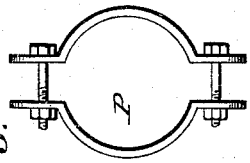

Fig. 3.

Fig. 1.

WITNESSES:

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WILLIAM W. HOLLEY, OF TCHULA, MISSISSIPPI.

PILE-DRIVER.

SPECIFICATION forming part of Letters Patent No. 342,096, dated May 18, 1886.

Application filed February 24, 1886. Serial No. 193,061. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. HOLLEY, of Tchula, in the county of Holmes and State of Mississippi, have invented a new and useful Improvement in Pile-Drivers, of which the following is a specification.

Figure 1 is a perspective view of the pile-driver. Fig. 2 is a detail view of the racks, hand-wheel, and traveling pinion; and Fig. 3 is a detail view of the pile-guide.

My invention relates to pile-drivers of that class in which the hammer is capable of being shifted laterally to drive a number of piles in succession without shifting the position of the pile-driver.

It consists, chiefly, in combining the sheave (over which the rope passes that is attached to the hammer) with a short rolling axis provided with a hand-wheel and two pinions, which latter rest and roll upon parallel toothed rails or racks, whereby the revolution of the hand-wheel is made to adjust the hammer laterally to different positions, as hereinafter described.

In the drawings, E represents the hammer, which is made to fit between the guide-bars *a a* of the lead-frame, and to be adjusted laterally to any one of the leads of said frame. To this hammer is attached the lift-rope *b*, which passes thence around a pulley in frame D above, and thence down between the sheaves F′ on the top plate, M, of the stanchion-frame, and thence to the winding-drum of the steam-engine. The pulley-frame D, which sustains the hammer, is hung upon the short shaft *c*, to which is rigidly attached the hand-wheel A and two pinions or small gear-wheels, B B. These pinions are a short distance apart, and between them the hooked pulley-frame D is hung. These pinions rest upon toothed rails or racks K K, which are fastened upon the top of the horizontal top plates, J J, of the lead-frame, so that by turning the hand-wheel A the pulley-frame D, which sustains the weight of the hammer, may be adjusted laterally the full length of the toothed racks, which run from end to end of the top plates J J, thus adapting the hammer to reciprocate in any one of the several leads of the lead-frame.

To the under side of the top plates J J are fastened hooks L, one above each lead, upon any one of which may be hung the pulley K for the rope *d*, that is use for raising the piles into position to be driven.

P is a sectional pile-guide, made in two semicircular flanged parts, which are clamped by bolts around the pile and slide between the bars forming the leads, and by which the pile is guided as it is driven, and the sectional character of which guide permits it to be readily removed from the pile when its end is battered or mashed to a larger diameter. The lift-rope runs from pulley K, thence down to the sheaves F on the top of the stanchion-frame M, and thence proceeds to the winding-drum.

For holding the stanchion-frame in place, it is provided with braces *e*, and the lead-frame is also provided with braces *f*.

Having thus described my invention, what I claim as new is—

1. The combination, with the supporting-frame and the hammer of a pile-driver, of horizontal toothed rails or racks, a rolling shaft provided with hand-wheel and pinions, and a supporting-pulley for the hammer-rope hung upon said rolling shaft, substantially as and for the purpose described.

2. The combination of the lead-frame having guide-bars *a a* and top plates, J J, with hooks L, the racks K K, shaft *c*, with hand-wheel A and pinions B B, pulley-frame D, hammer E, and stanchion-frame M, with sheaves F′, substantially as shown and described.

WILLIAM W. HOLLEY.

Witnesses:
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