J. GREGG.

PILE-DRIVER.

No. 186,831. Patented Jan. 30, 1877.

Fig. 1

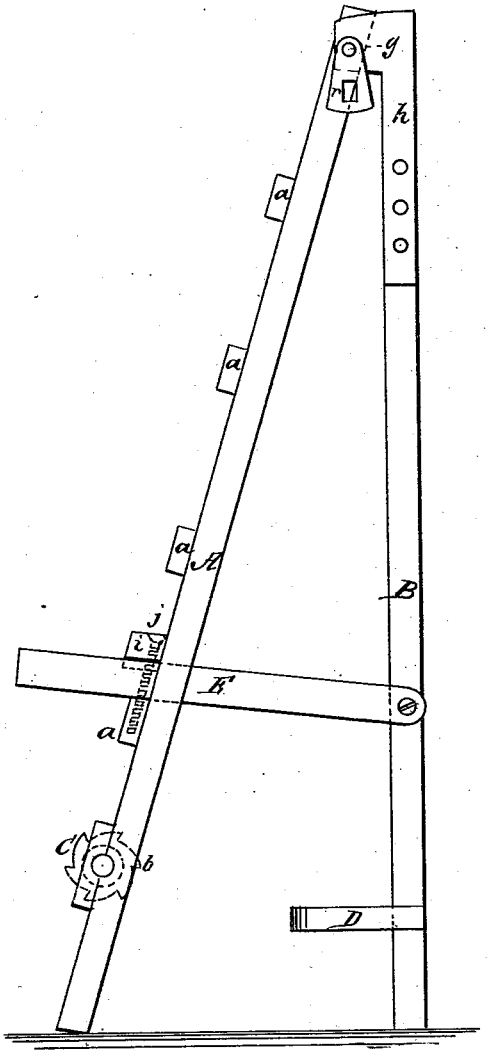


Fig. 2

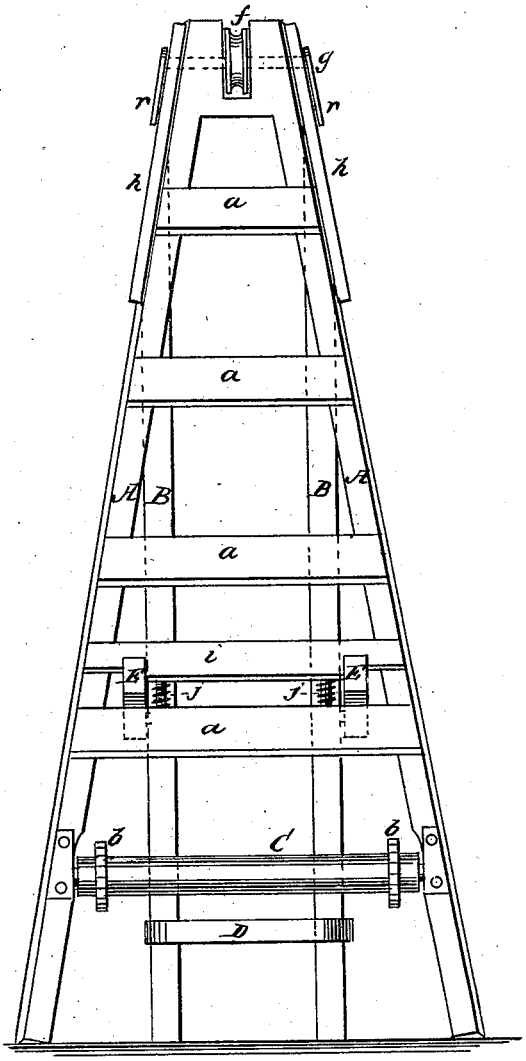
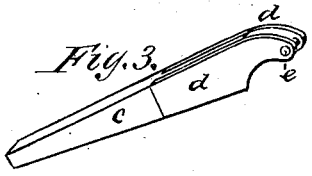


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN GREGG, OF RIVERTON, IOWA, ASSIGNOR TO HIMSELF AND JAMES MILLER, OF SAME PLACE.

IMPROVEMENT IN PILE-DRIVERS.

Specification forming part of Letters Patent No. **186,831**, dated January 30, 1877; application filed August 14, 1876.

To all whom it may concern:

Be it known that I, JOHN GREGG, of Riverton, in the county of Fremont and State of Iowa, have invented a new and Improved Pile-Driver, of which the following is a specification:

Figure 1 is a side elevation. Fig. 2 is a front elevation. Fig. 3 is a detail view of a lever for operating the windlass.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A A are inclined side pieces of a derrick, having the cross-bars *a* connecting them at intervals. C is a windlass or winding-drum, journaled in the side pieces A A, and having ratchet-wheels *b* at each end, which are provided with hooked teeth. Fig. 3 represents a lever for working the windlass, that consists of the handle *c* and the side plates *d*. A pin, *e*, connects these plates at their outer extremity, and when the lever is placed so that the plates embrace the sides of the ratchet-wheels, the pin *e* engages with one of the hooked teeth of the ratchet. A sheave, *f*, is placed between the side pieces A, at the top, on the pin or bolt *g*, that projects beyond the side pieces sufficiently to receive the hinge-plates *h*. The guides B are secured to these plates, and are provided with a yoke, D, which holds them parallel. E E are braces that are pivoted to the guides B, and are clamped between the lower cross-bar *a* and a bar, *i*, that is drawn down on the braces E, by screws *j*.

When the device is used as a pile-driver, guy-ropes are fixed in eyes *r*, attached to the ends of the bolt *g*, and the derrick is inclined, so that its top is directly over the place when the pile is to be driven. The clamp *i* is loosened, and the guides B are allowed to swing into a vertical position, where they are secured by the clamp *i* engaging the braces E. The weight or hammer is raised by turning the windlass by means of the lever *c*, a rope being attached to it, and running over the sheave *f*, and attached to the hammer moving in the guides B.

When the apparatus is used as a derrick, the guides B are folded close to the pieces A A.

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

1. In combination with the guides B, side pieces A, and lower cross-bar *a*, the braces E, clamping-bar *i*, and screws *j*, substantially as specified.

2. The combination of the lever, consisting of the handle *c*, plates *d*, and pin *e*, with the ratchet-wheels *b*, substantially as shown and described.

JOHN GREGG.

Witnesses:
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