(No Model.)

H. T. STOCK.

RAILROAD PILE DRIVER.

No. 248,622. Patented Oct. 25, 1881.

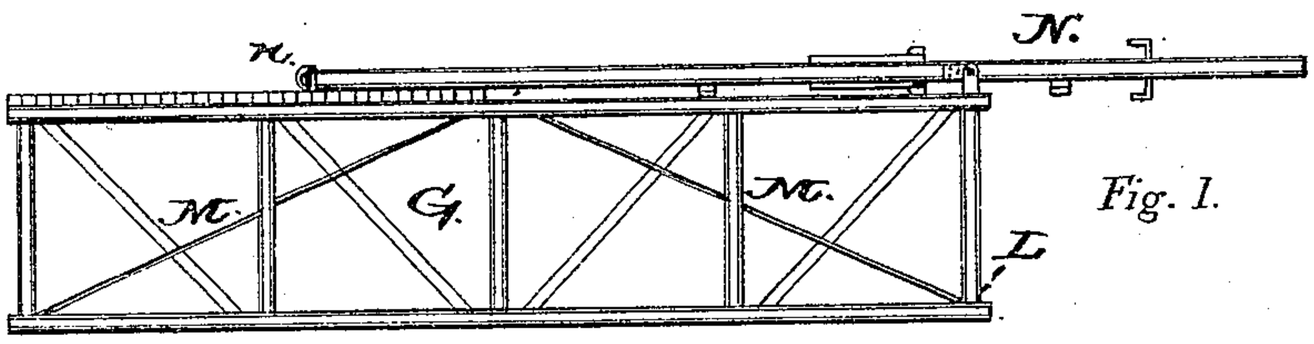


Fig. 1.

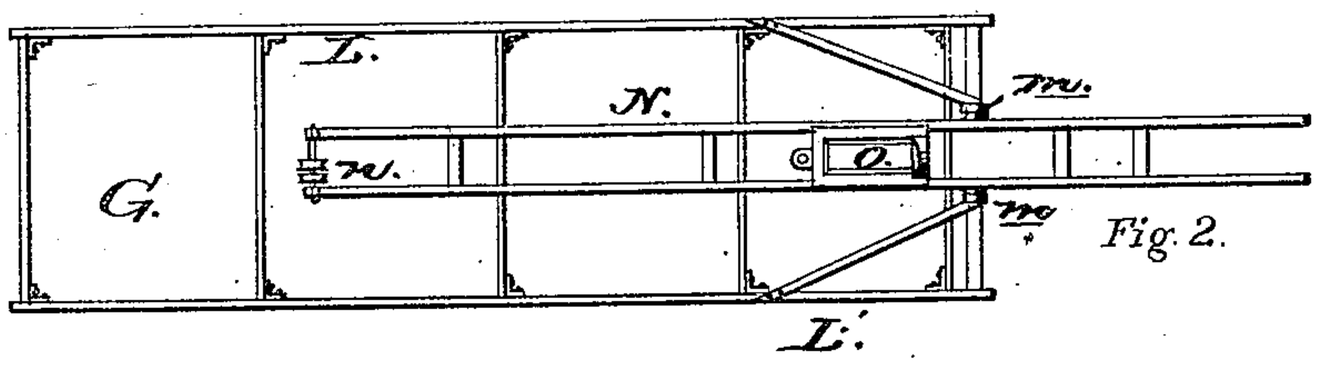
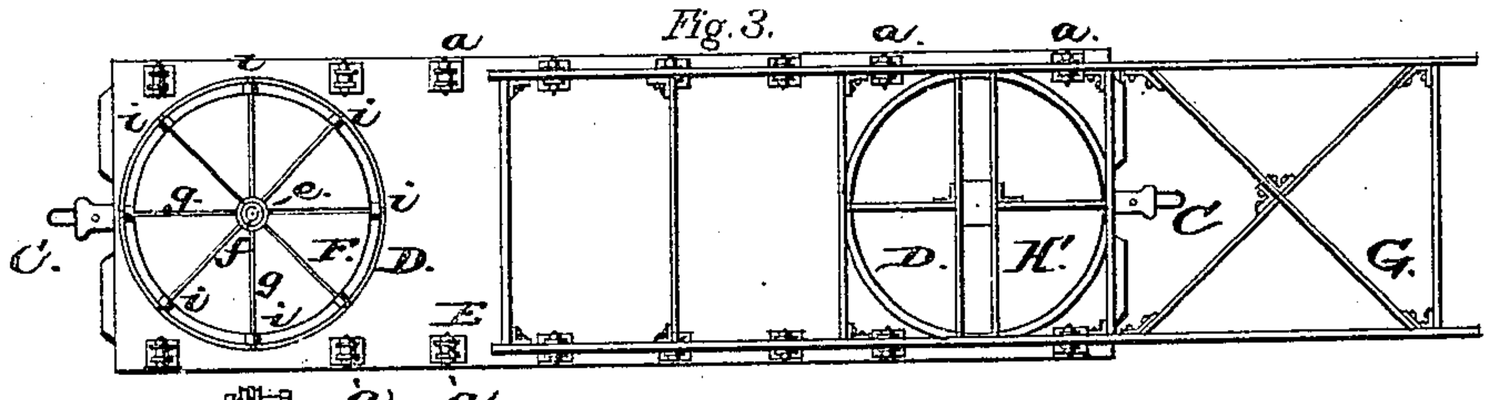


Fig. 2.

Fig. 3.



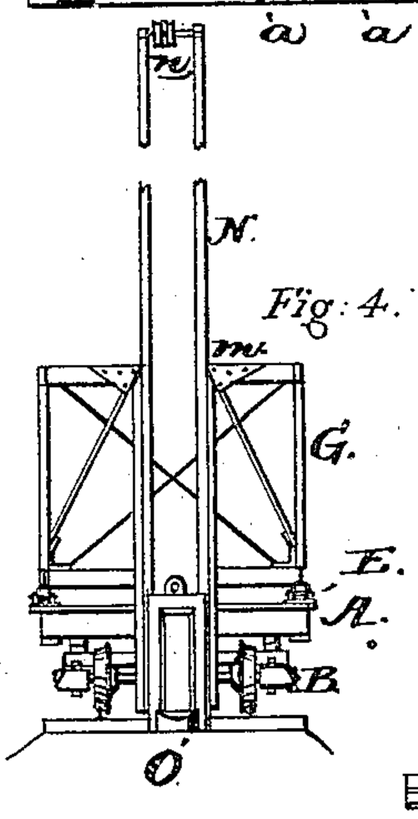


Fig. 4.

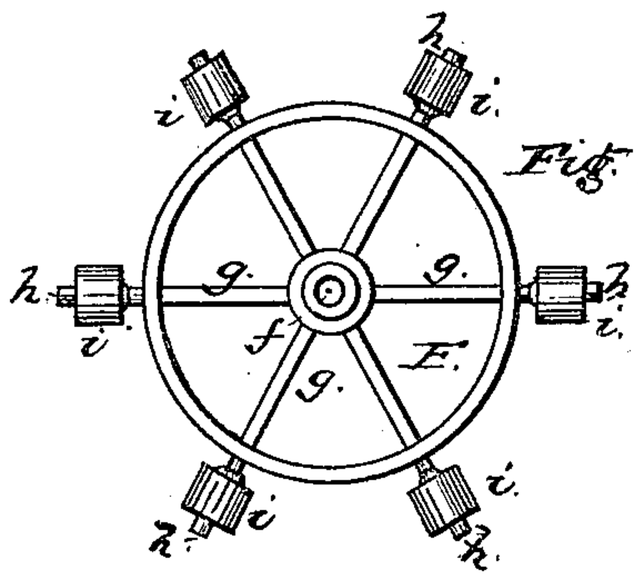
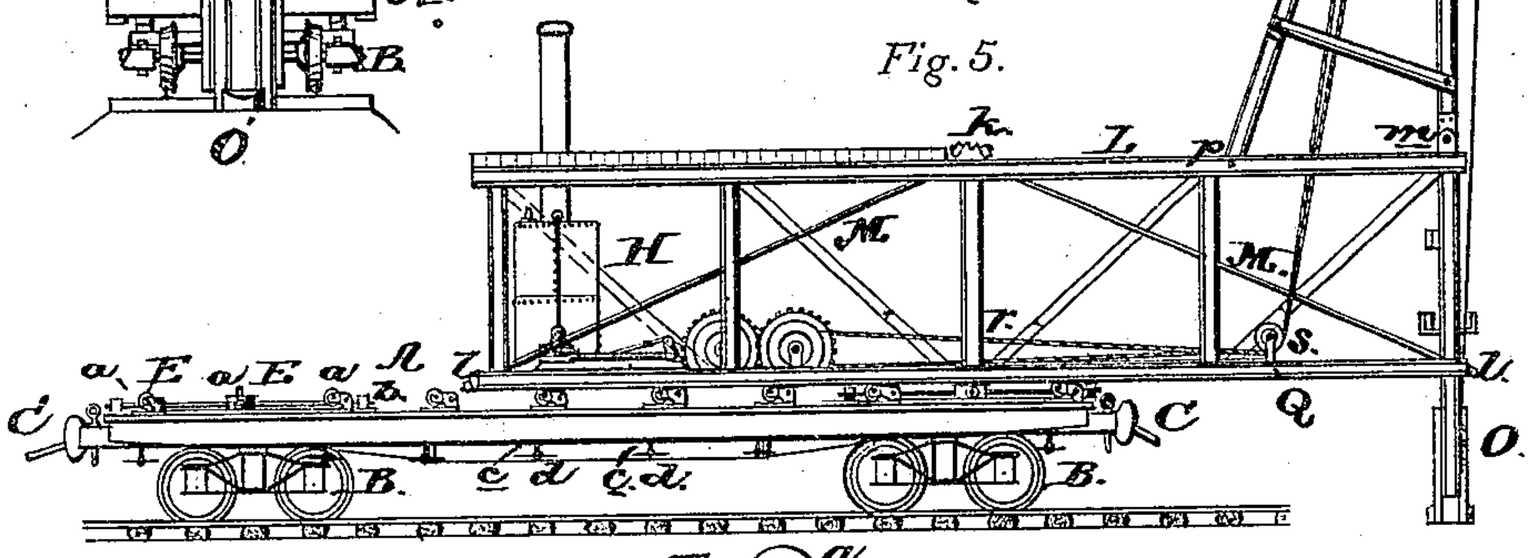


Fig. 7.

Fig. 5.



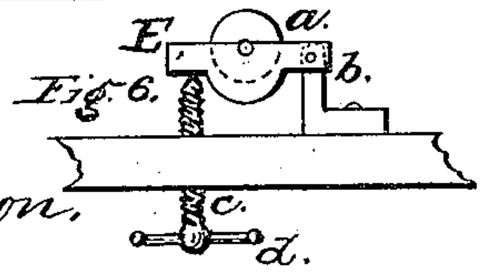


Fig. 6.

WITNESSES:

Alexander Gleason.

Eugene A Jefferson

INVENTOR:

Hosea T. Stock.

UNITED STATES PATENT OFFICE.

HOSEA T. STOCK, OF TOLEDO, OHIO.

RAILROAD PILE-DRIVER.

SPECIFICATION forming part of Letters Patent No. 248,622, dated October 25, 1881.

Application filed November 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, HOSEA T. STOCK, of the city of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Railroad Pile-Drivers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form part of this specification.

My invention relates to an improved railroad pile-driver; and it consists of a platform-car provided with a frame carrying the engine and boiler or other motive power at one end, and the leader and driving-hammer at the opposite end, said frame being adapted to revolve upon a circular track arranged at either end of the platform of the car, so as to enable the frame to be swung at any desired angle from the car or track for driving the piles.

It also consists of adjustable rollers arranged in hinged or pivoted bed-plates which are provided with jack-screws for elevating said frame upon the platform of the car, or changing it from one end to the other, all as will be hereinafter more fully described, and pointed out in the claims.

In the drawings, Figure 1 represents a side view of the frame detached from the car, with the leader turned down upon the top. Fig. 2 represents a top-plan view of the same. Fig. 3 represents a top-plan view of the car and frame, with the leader and driving-hammer removed. Fig. 4 represents a detail front view. Fig. 5 represents a side elevation of the complete apparatus. Fig. 6 is a detail view of the adjustable rollers, and Fig. 7 is a detail plan view of the circular frame.

Similar letters of reference occurring on the several figures indicate corresponding parts.

Referring to the drawings, A represents an ordinary platform-car provided with the trucks B and couplings C in a manner well known. Upon the top or platform of the car are arranged circular tracks D, one at each end, while upon the sides of the car and at regular intervals apart are provided roller-boxes E, adapted to receive the adjustable rollers *a*, said boxes E being hinged at one end to the upright lugs *b*, and the opposite ends being supported upon the tops of the jack-screws *c*, which project up through the frame of the car, and which are provided with handles *d* for working the same, as shown in Fig. 5.

Upon the circular track D is arranged a frame, F, which is composed of the central hub, *f*, for receiving the coupling-pin *e*, and which is provided with the radiating arms or spokes *g*, the ends of which terminate in axles *h*, which are provided with rollers *i*, arranged to revolve upon the circular track D, and upon which rests the circular plate H′ at the bottom of the frame G of the pile-driver, in such a manner that the frame of the pile-driver can be turned round from side to side, or at different angles from the body of the car, for the purpose of driving the piles at the desired points.

H represents the engine and boiler arranged upon the inner end of the frame G, the weight of the same being sufficient to overbalance the driving-hammer O and leader N arranged upon the outer or opposite end, as shown. The frame G of the pile-driver is preferably formed of light I-shaped beams L, which are connected by proper chords and trusses, so as to render the whole construction of great strength, yet without being heavy or cumbersome. Brace-rods M are provided on each side of said frame, being connected at the center of the top beam, as shown at *k*, and secured at each end of the lower beam by nuts *l*, as shown in Fig. 5, thereby equalizing and distributing the strain throughout the entire frame.

The leader-frame N is constructed in the usual manner, and provided with the driving-hammer O, arranged to slide up and down between the uprights composing the frame of said leader, which is pivoted at *m* to the top of the front part of the frame G, and is provided at the top with rollers *n* journaled thereon, as shown.

Near the top of the leader N, and upon each side thereof, are arranged brace-rods *o*, which, when the pile-driver is in operation, are secured to the upper side beams of the frame G by bolts *p*, but when it is desired to lower the leaders N down upon the top of the frame G, to enable the apparatus to pass under bridges or culverts, these bolts *p* are withdrawn and the brace-rods removed, thereby allowing the

leader to turn upon its pivot *m* and fold down upon the top of the frame G, as shown in Figs. 1 and 2. When it is desired to change the frame G from one end of the car to the other the jack-screws *c* are operated by the handles *d* until the frame is elevated above the circular track D, when the circular frame F is removed and changed to the opposite track D, and the frame G then pushed over the adjustable rollers *a* until it rests in place again over the circular frame F, upon which it is lowered by operating the jack-screws in an opposite direction.

The driving-hammer O is provided with the usual chains, *r*, which pass upward and over the rollers *n* at the top of the leader N, thence downward and under the rollers *s* in the upright Q at the bottom of the frame G, and from thence to the motive power of driving-engine H, as fully shown in Fig. 5.

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

1. In a railroad pile-driver, the frame G, provided with the engine H at one end, and the leader N and driving-hammer O at the opposite end, in combination with the platform-car A, having circular tracks D, revolving frame F, and adjustable side rollers, *a*, substantially as and for the purpose specified.

2. In a railroad pile driver, the car A, provided with the circular tracks D, one at each end, and with adjustable roller-boxes E, rollers *a*, a frame adapted to be adjusted thereon, and jack-screws *c*, having handles *d*, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HOSEA T. STOCK.

Witnesses:
EDWARD T. LEWIS,
ARION E. WILSON.