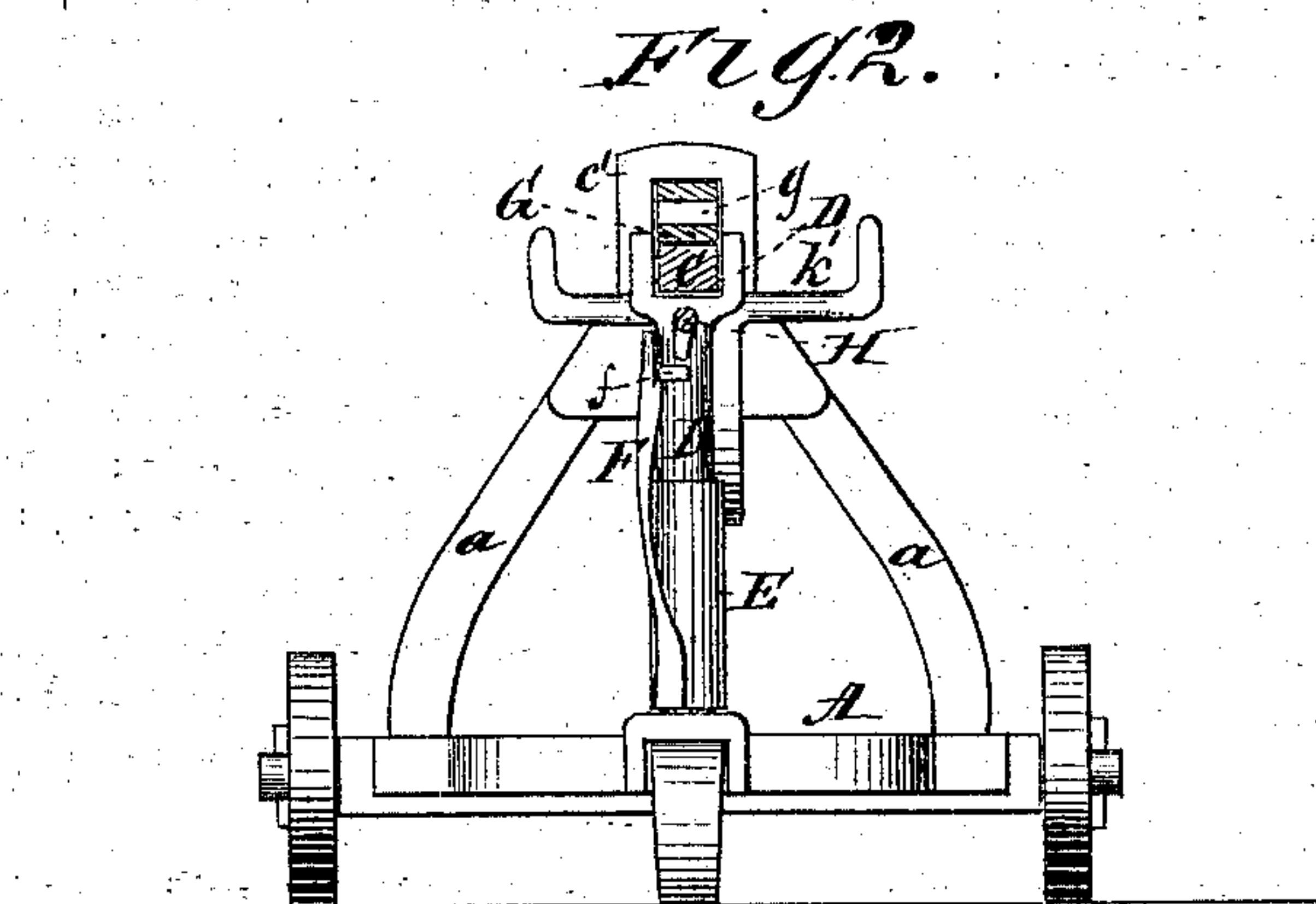
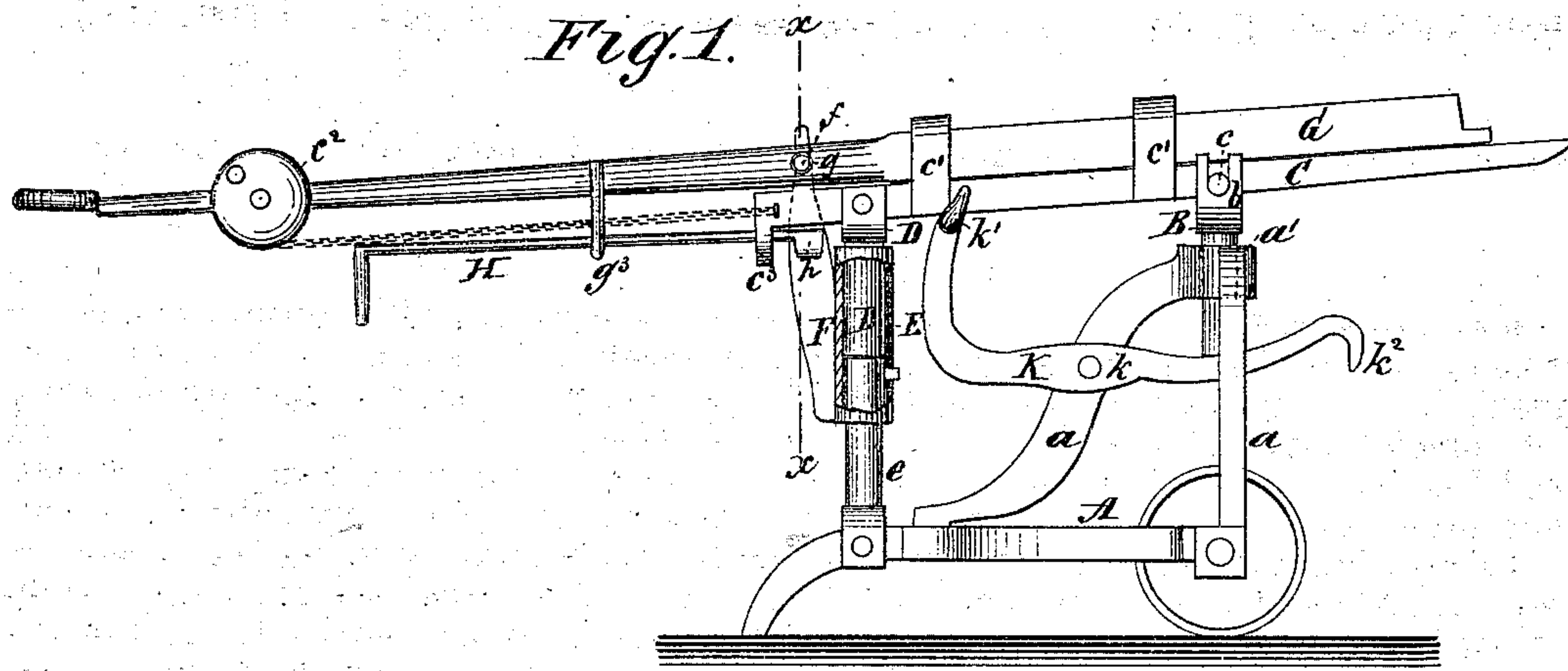


S. W. KIMBLE.
Devices for Delivering Piles into Furnaces.

No. 154,492.

Patented Aug. 25, 1874.



WITNESSES:
G. Mathys.
John C. Kemm

INVENTOR:
S. W. Kimble
BY *Robert L.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SMITH W. KIMBLE, OF SPRINGFIELD, ILLINOIS, ASSIGNOR OF ONE-FOURTH
HIS RIGHT TO GEORGE CARPENTER, OF SAME PLACE.

IMPROVEMENT IN DEVICES FOR DELIVERING PILES INTO FURNACES.

Specification forming part of Letters Patent No. **154,492**, dated August 25, 1874; application filed
July 22, 1874.

To all whom it may concern:

Be it known that I, SMITH W. KIMBLE, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and Improved Tool for Charging Piles or Railroad Rails and other Iron in Furnaces; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, a vertical transverse section.

The invention relates to and consists in means for charging railroad-rail piles into heating-furnaces with convenience, facility, and economy of human labor, all as herein-after fully described, and pointed out in the claim.

A represents a tripod, having standards *a a* conjoined at the top, where is made a vertical hole, *a*¹. In the latter is pivoted a pin or bolt, B, having arms *b b*, open slotted at the upper ends; and in these slots or bearings are journaled the trunnions *c c* of the "peel" C. The latter is also provided with a pendant pin or bolt, D, that is held at times in a socket, E, sliding on guide-pin *e*, and having a spring lever-catch, F, whose side pin *f* catches in one of the holes *g* of an adjustable and end-notched pile-pusher, G. This is moved through keepers *c*¹ *c*¹ on the peel by means of a chain passing over a hand-cranked pulley or drum, *c*². H is a laterally-movable rod that turns in eyes *c*³ *g*³, and has arm *h* that unlatches lever-catch F. K is a lever pivoted at *k* on standard *a*, and having a cross-bar, *k*¹, with upward projections, the former to support and the latter to limit the lateral movement of the peel. The short arm of lever K supports the pin or bearing-bolt B.

The operation is as follows: The piles being arranged on the "pile-buggy," the pusher

G of my wheeled tripod or furnace-charger is drawn back and secured by lever-catch F. The peel is now lowered in front by elevating the cross-bar *k*¹ of lever K at the rear end and depressing it in front, being thus suffered to pass under the pile sufficiently far to balance it. By bearing down on the pusher G the pile is raised from the pile-buggy while the charger is turned round with its front to the mouth of furnace. By depressing cross-bar *k*¹ and raising the bolt B the pile is caused to enter furnace-mouths of different height. The pile is now run into the furnace, when the hook *k*² on lever K locks the charger to the furnace, while the former is turned into a proper position on the cross-bar *k*¹ as soon as the pusher G is released from the spring-latch, which latter drops out of the way. By now turning the crank-drum or pulley the chain is wound up and the pusher G carried forward on the peel, thereby forcing the pile into the furnace as far as desired, but not entirely off the peel. The pile being now straight, the pusher is withdrawn, latched, and the charger ready to receive another pile.

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

1. The combination of the swiveled and vertically-movable bearing-bolt B, with a peel and pusher, substantially as and for the purposes specified.
2. The pivoted peel C, combined with bearing-bolt B and lever K, as and for the purpose set forth.
3. The described combination, with pile-pusher G, of a sliding and dropping spring-latch, F, to fasten it at different points of adjustment, and yet be always out of the way when not in use.

SMITH W. KIMBLE.

Witnesses:

WM. P. GRIMSLEY,
GEORGE CARPENTER.