

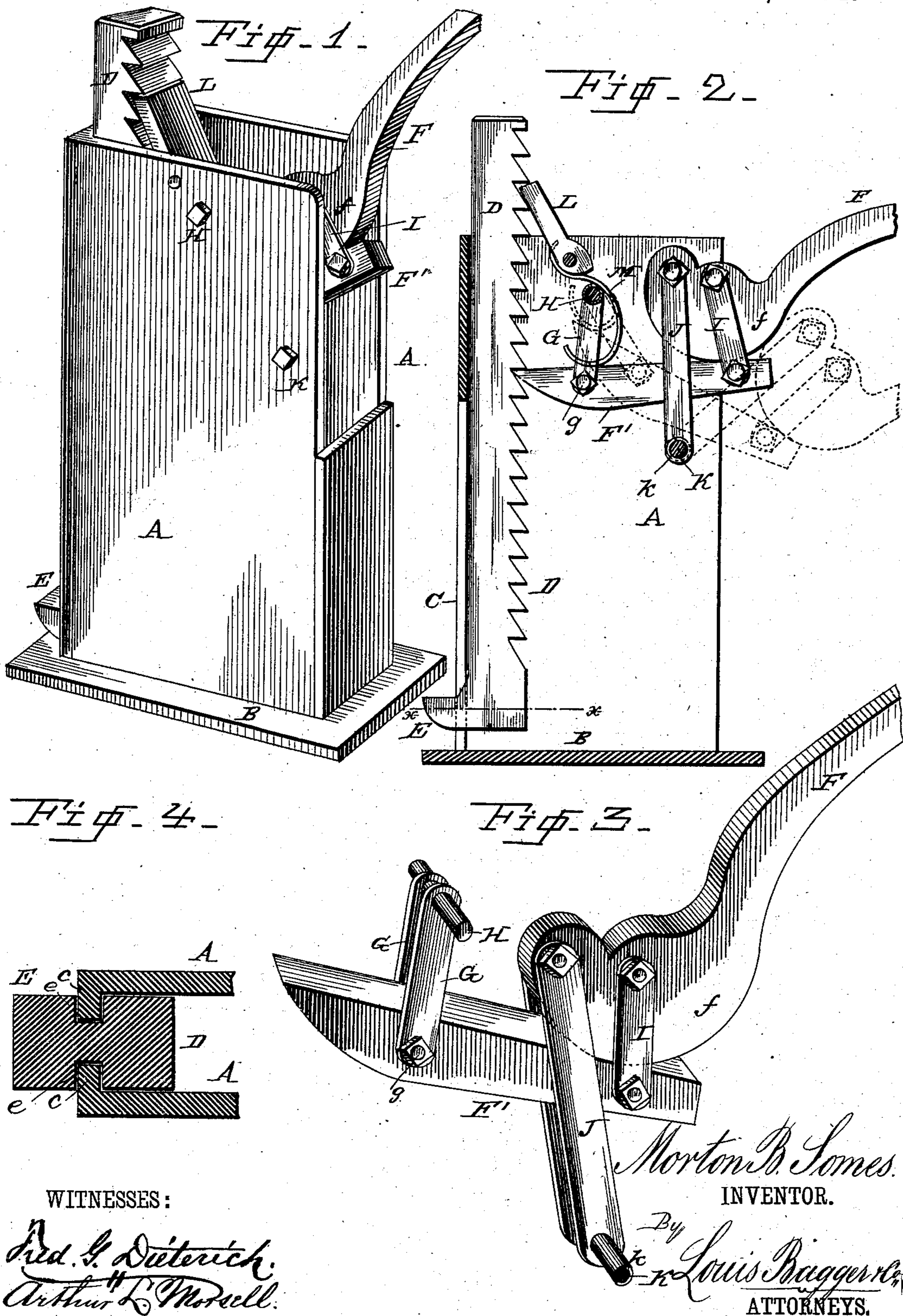
(No Model.)

M. B. SOMES.

RAILWAY JACK.

No. 292,702.

Patented Jan. 29, 1884.



WITNESSES:

Fred. G. Dieterich.
Arthur L. Morrell.

INVENTOR.

Morton B. Somes.
By *Louis Priggen*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

MORTON B. SOMES, OF FENNVILLE, MICHIGAN.

RAILWAY-JACK.

SPECIFICATION forming part of Letters Patent No. 292,702, dated January 29, 1884.

Application filed December 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, MORTON B. SOMES, a citizen of the United States, and a resident of Fennville, in the county of Allegan and State of Michigan, have invented certain new and useful Improvements in Railway-Jacks; 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, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved railway-jack. Fig. 2 is a side elevation of the same with one side of the frame or casing removed, to show the construction and arrangement of the operating mechanism. Fig. 3 is a perspective view of the compound lever and its attachments, and Fig. 4 is a horizontal sectional view through line *xx* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to railway-jacks; and it consists in the improved construction and combination of parts of the same, which will be hereinafter more fully described and claimed.

In the accompanying drawings, the letters *A A* denote the sides of the frame or casing, which are fixed upon the bed or base-plate *B*. In the front end of the frame is a vertical slot, *C*, forming ways *c c* for the foot or step *E* of the sliding rack-bar *D*, the shoulders *e e* of which impinge upon the ways *c*, as will appear more clearly by reference to Fig. 4 of the drawings. The rack-bar *D* is operated by a compound lever, the outer end, *F*, of which forms the handle for operating the machine, having a head or cam, *f*, which bears against the outer end of the inner lever, *F'*. The latter is provided with a bolt or bearing, *g*, which is connected by the yoke or hangers *G* to a fixed bolt or cross-bar, *H*, inserted through the sides in the upper part of the casing. The head *f* of the outer lever, *F*, is connected by a yoke or straps, *I*, with the outer end of lever *F'*, and also by swinging arms *J* with the fixed

bolt *K*, which is provided with a sleeve or collar, *k*. In the upper part of the machine is a pawl, *L*, bearing with its free end against the rack-bar, and actuated by a spring, *M*.

From the foregoing description, taken in connection with the drawings, the operation of the machine will readily be understood without requiring extended explanation. By pressing lever *F* downward, as indicated in dotted lines, so as to release the inner end of lever *F'* from the rack-bar, and also disengaging the spring-pawl from the same, the bar will drop down to the lower end of slot *C* by its own weight, in proper position for being inserted under the rail which is to be lifted. By then replacing and operating the compound lever the rack-bar will be lifted notch by notch, and held in position, as it is gradually lifted with its load, by the pawl *L*. By the combination of the inner lever, *F'*, and outer lever, *F*, with its head or cam *f* engaging lever *F'*, a heavy load or strain may be overcome by comparatively small power applied to the outer end of the lever, so that one or two men may, with the aid of my machine, do the work of more than a dozen without it.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a railway-jack, the combination of the rack-bar having a shoe or projection at its lower end adapted to support the rail to be lifted, the retaining-pawl, lever *F'*, having bolt *g*, yoke or hangers *G*, lever *F*, having head or cam *f*, yoke or hangers *I*, connecting the head of lever *F* to the outer end of lever *F'*, and swinging arms *J*, having their fulcrum upon the bolt *K*, the whole constructed and combined substantially as and for the purpose shown and set forth.

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

MORTON B. SOMES.

Witnesses:

P. C. WHITBECK,
CHARLIE WHITBECK.