O. Diver,

Lifting Jack.

No. 62,616. Patented Mar. 5, 1867.

Fig. 1.

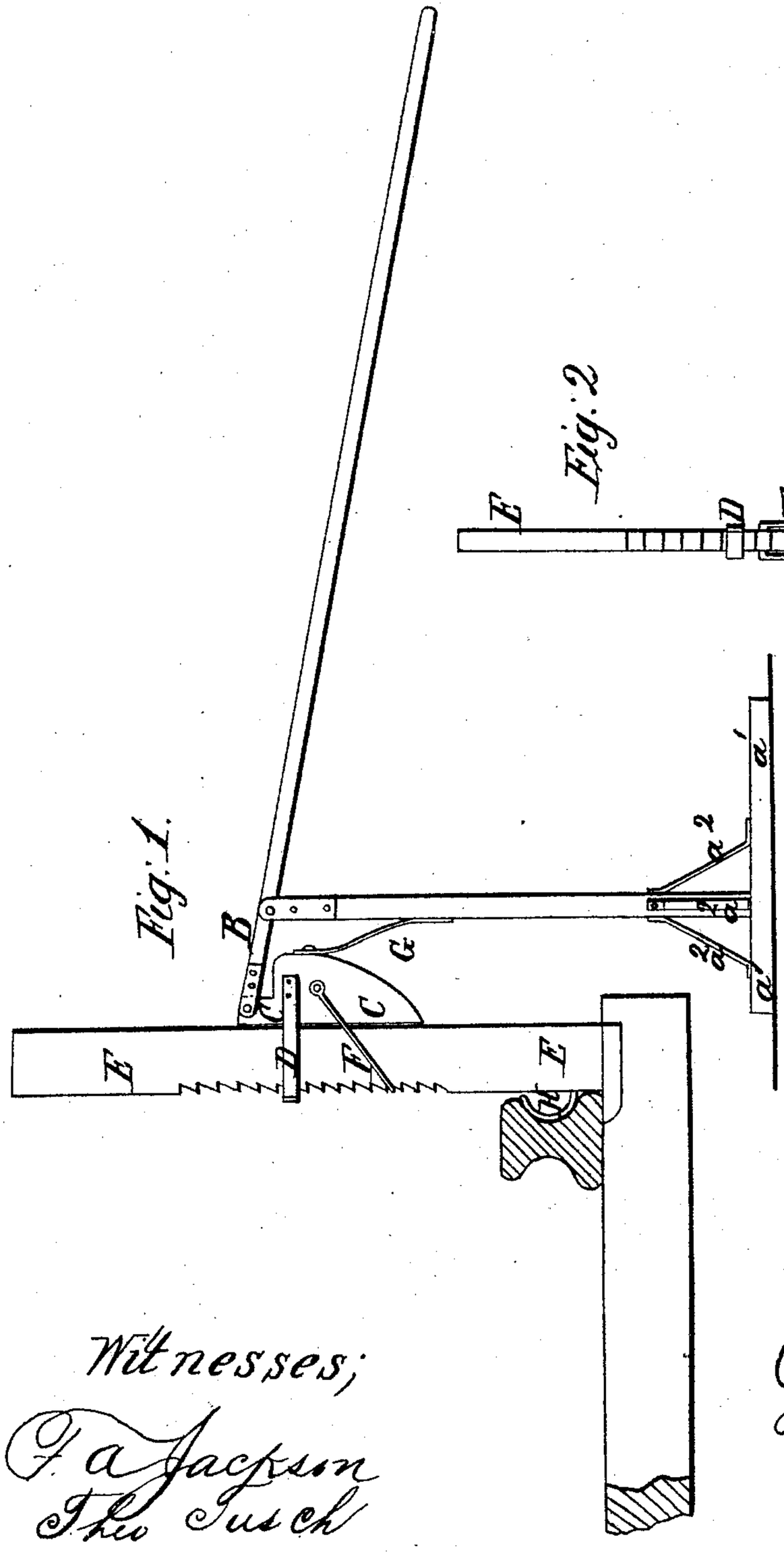
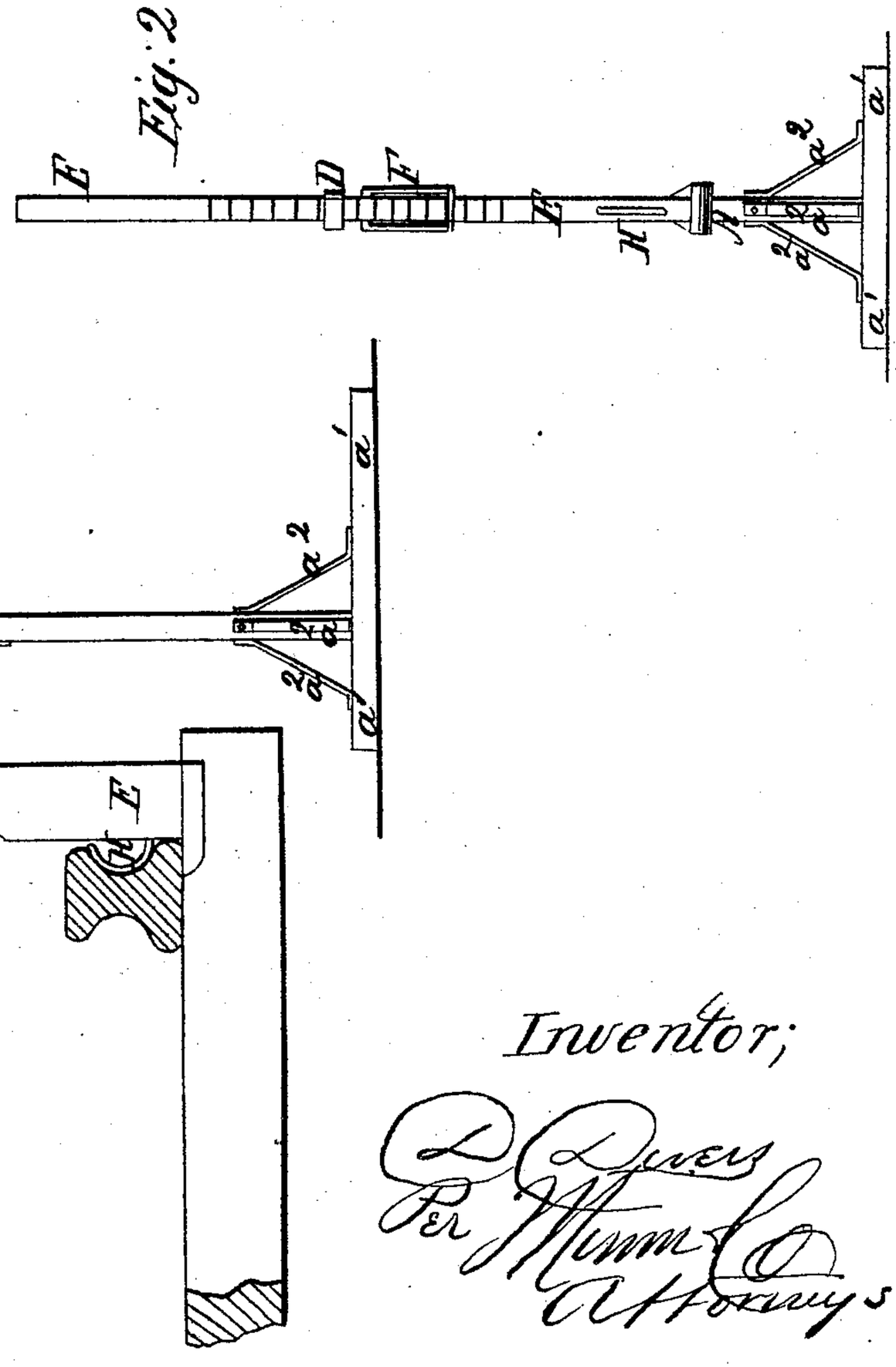


Fig. 2.



Witnesses;

F. A. Jackson

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United States Patent Office.

DANIEL DIVER, OF BOONE, IOWA.

Letters Patent No. 62,616, *dated March* 5, 1867.

IMPROVEMENT IN LIFTING-JACK.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DANIEL DIVER, of Boone, in the county of Boone, and State of Iowa, have invented a new and useful Improvement in Lifting-Jack; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my improved lifting-jack.

Figure 2 is a front view of the same.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved lifting-jack, designed especially for raising or levelling railroad tracks, but equally adapted to other uses; and it consists of an improved lifting-jack, formed by the combination of the ratchet-hook, clevis, pivoted block, and spring with each other and with the lever and fulcrum post, as hereinafter more fully described.

A is the fulcrum post, the lower end of which is securely attached to the foot-plate a^1, and the connection is further strengthened by the braces a^2, as shown in figs. 1 and 2. The fulcrum post A is usually made about two feet four inches in length, and to its upper end is pivoted a lever, B, which is usually made about ten feet six inches long, but the length of which may vary according to the particular use to which the jack is intended to be applied. To the forward end of the lever B is pivoted a block, C, as shown in fig. 1. To the upper part of the block C is attached the ends of the strap D, which forms a guide-loop for the ratchet-hook E to slide in, and which keeps the said ratchet-hook in the proper position while being used. F is a clevis or loop, the ends of which are pivoted to the block C at or about its middle part. The loop of the clevis F is a little longer than the loop of the strap D, so that it may drop down into an inclined position upon the ratchet-hook E, as shown in figs. 1 and 2, so as to take hold of the ratchet teeth of the said hook, and raise it when the lever B is operated. Upon the forward edge of the bar of the ratchet-hook E are formed teeth for the clevis F to take hold of in raising the said hook; and upon its lower end is formed a hook, which is placed under the object to be raised; then by raising the free end of the lever B the loop F drops down, and by again depressing the free end of the lever the object is raised and held till secured in place. G is a spring, the upper end of which is secured to the rear edge of the block C, and its lower end rests against and slides upon the forward edge of the fulcrum post A, as shown in fig. 1. This spring G holds the ratchet-hook E forward, so that when lowered its lower end will not strike against the foot-plate a^1 of the fulcrum post A. H is a small guide-pin or hook, attached to the forward edge of the ratchet-hook E, just above its lower end, when the jack is used for raising up and levelling railroad tracks. In this case the hook is placed beneath the lower edge of the rail in such a position that the hook or pin H may rest upon the flange at its base, so that the ratchet-hook E may not slip away from the rail while lowering the loop or clevis F. The free end of the lever B is then lowered, raising the rail and ties to the required height, and holding them until the earth has been rammed beneath them in the ordinary manner.

I claim as new, and desire to secure by Letters Patent—

1. An improved lifting-jack, formed by the combination of the ratchet-hook E, clevis or loop F, and pivoted block C, with each other and with the lever B and fulcrum post A, substantially as herein shown and described.

2. The combination of the spring G with the pivoted block C and fulcrum post A, substantially as herein shown and described and for the purpose set forth.

DANIEL DIVER.

Witnesses:

L. D. COOK,

A. L. SEEPR.