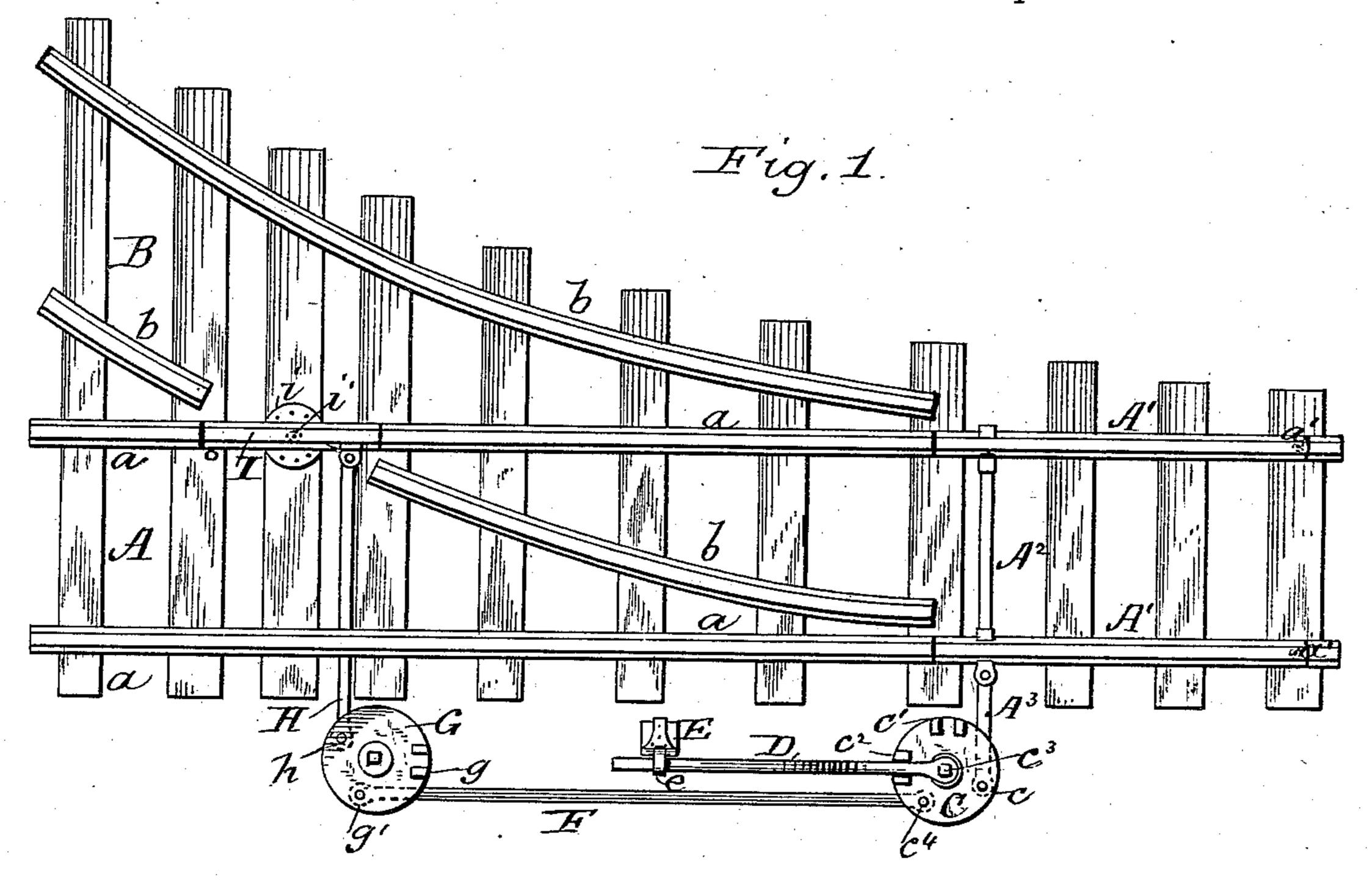
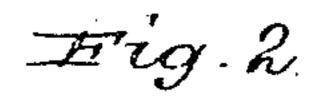
(No Model.)

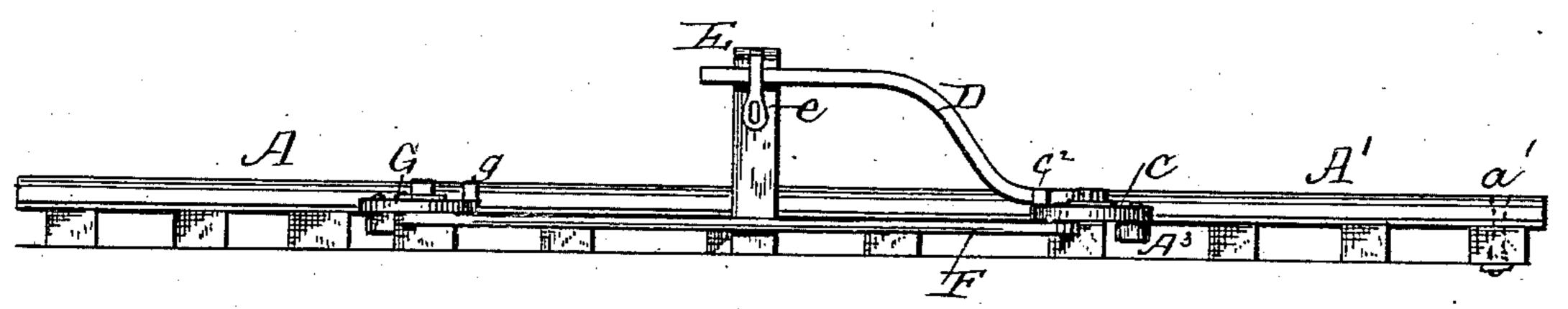
J. C. WEST. RAILWAY SWITCH.

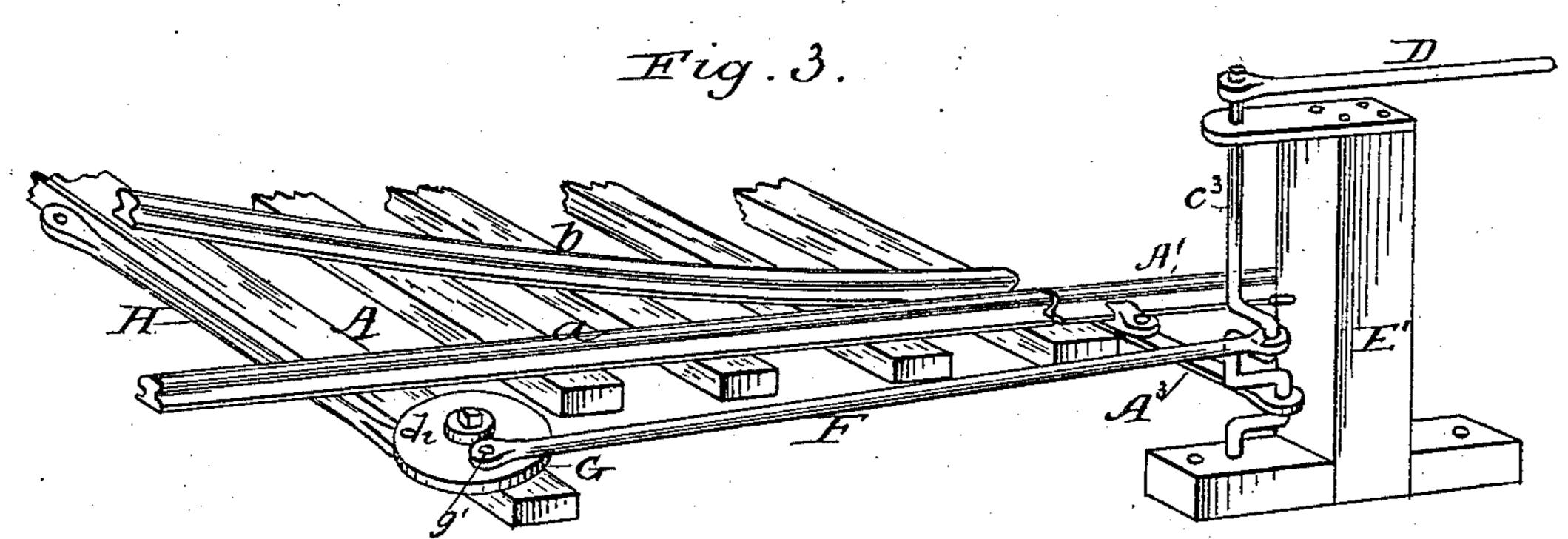
No. 285,190.

Patented Sept. 18. 1883.









Witnesses

W.BMasson

Inventor: John O. West,

by E.E. Masson atty.

## United States Patent Office.

JOHN C. WEST, OF CLARKSVILLE, MISSOURI, ASSIGNOR OF TWO-THIRDS TO OTIS N. BALDWIN, OF SAME PLACE.

## RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 285,190, dated September 18, 1883.

Application filed May 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, John C. West, a citizen of the United States, residing at Clarksville, in the county of Pike and State of Missouri, have 5 invented certain new and useful Improvements in Railway-Switches, of which the following is

a specification.

My invention relates to switches for railroadtracks and to the means employed for operatro ing them; and its objects are to dispense with the usual frogs and guard-rails and substitute simpler and less costly devices, adapted, also, to accommodate wheels provided with a double flange; and my invention consists in certain 15 features hereinafter described, and specifically set forth in the claims.

Referring to the accompanying drawings, forming a part hereof, Figure 1 is a plan, and Fig. 2 a side elevation, of a track sufficient in 20 extent to illustrate my invention, which is therein embodied. Fig. 3 is a modification shown in perspective.

Like letters indicate like parts in all the figures.

25 A represents what may be considered the main track; B, a branch track or siding; b b, the stationary rails of the siding, and a the stationary rails of the main track; A', the swingrails of the main track, adapted, also, to form a 30 continuous track with the rails of the siding, and I the single swinging rail pivoted about the middle of its length and common to both tracks. The swinging rails of the main track are pivoted at a', and are jointly operated at 35 their free ends by a tie-bar, A<sup>2</sup>, as usual. From the tie-bar a link, A³, extends to a crank-disk, C, being pivotally secured thereto at c. Said disk may be supported upon a post or tie on a common horizontal plane with the base of the 40 rails, so that a parallel track or tracks may be laid without interfering with the switch-operating mechanism—an advantage of value in large track-yards. The disk C is provided with a central pivot,  $c^3$ , which is preferably 45 square in cross-section at its upper end, and with lugs c'  $c^2$ , between which the operatinglever D may be placed, while its inner end may be adapted to fit the pivot, so that, when desired, the disk and its connecting mechanism

50 may be locked by securing the lever against a

post, E, provided with a hasp, e, or other suitable device.

From the disk C a connecting-rod, F, pivotally secured at  $c^4$ , extends to a second similar disk, G, to which it is pivotally secured at g'. 55 The disk G is provided with lugs g, as shown, to adapt it to receive an operating-arm, as D.

To the disk G is pivoted, at the point h thereon, a rod, H, extending to the single swing-rail I, which is pivoted at its center by means of a 60 headed bolt, i', to a circular, i, spiked to a tie or other suitable foundation. The operation

is as follows:

When it is desired to switch a car from the main track to the siding, the lever D is swung 65 outwardly less than a quarter of a circle, (according to the distance of the connecting-pin c from the center of the disk C.) This throws the swing-rails A'over in line with the curved fixed rail b and turns the disk G nearly a quar- 70 ter-circle, which in turning draws out the rod H, thus throwing the single swing-rail I in line with the inner fixed rail, b. Now, to lock the rails in position the lever is either unshipped and again placed upon the pivot  $c^3$ , in a posi- 75 tion parallel with the track, within the lugs c', and secured to the post E in yards where the tracks are close together, or it may be used to operate all the swinging rails from the disk G, and may lock the main track in line from that 80 disk by being secured to the same post, E, as before; or a second set of lugs (like g) may be provided upon disk G. Then the lever may lock the switch in the siding also; or another post, as E, may be used, but set in a suitable 85 location to lock the lever D, while the track is connected with the siding without unshipping the lever D. Said lever D need not necessarily extend to the center of the disk; but the lugs upon said disks may be beveled inwardly to 90 form a dovetailed recess, in which the end of said lever will be securely retained.

Instead of having the crank-disk Cprovided with crank-pivots c and  $c^{4}$  (for the links  $A^{3}$  and connecting-rod F) in the same horizontal plane, 95 said crank-pivots may be one above the other, as shown in Fig. 3, said figure representing in perspective a portion of the track and the switch-stand E'. Upon the upper end of the central pivot or crank-shaft,  $c^3$ , thus construct- 100 ed, is mounted the handle D, that can be easily secured either to the switch-stand or to a post set at a short distance therefrom, and in any direction to suit the location adjoining the track where the switch is to be placed.

Having described my invention and its op-

eration, what I claim as new is-

1. The combination of the swing-rails A', rod A², link A³, disk C, provided with lugs c' c², to lever D, and post E, substantially as shown and described.

2. The combination of the disks C and G, provided with lugs  $c', c^2$ , and g, respectively, the lever D, and post E, substantially as shown

15 and described.

3. The combination of the fixed rails b b a a, single swinging rail I, rod H, and disk G, provided with the lugs g, the lever D, and post E, substantially as shown and described.

4. The combination of the swinging rails A', 20 fixed rails ab, rods H A², link A³, disks CG, lugs c',  $c^2$ , and g thereon, rod F, lever D, and post E, substantially as shown and described.

In testimony whereof I affix my signature in

presence of two witnesses.

JOHN C. WEST.

Witnesses:

I. C. Dempsey, Daniel Douglass.