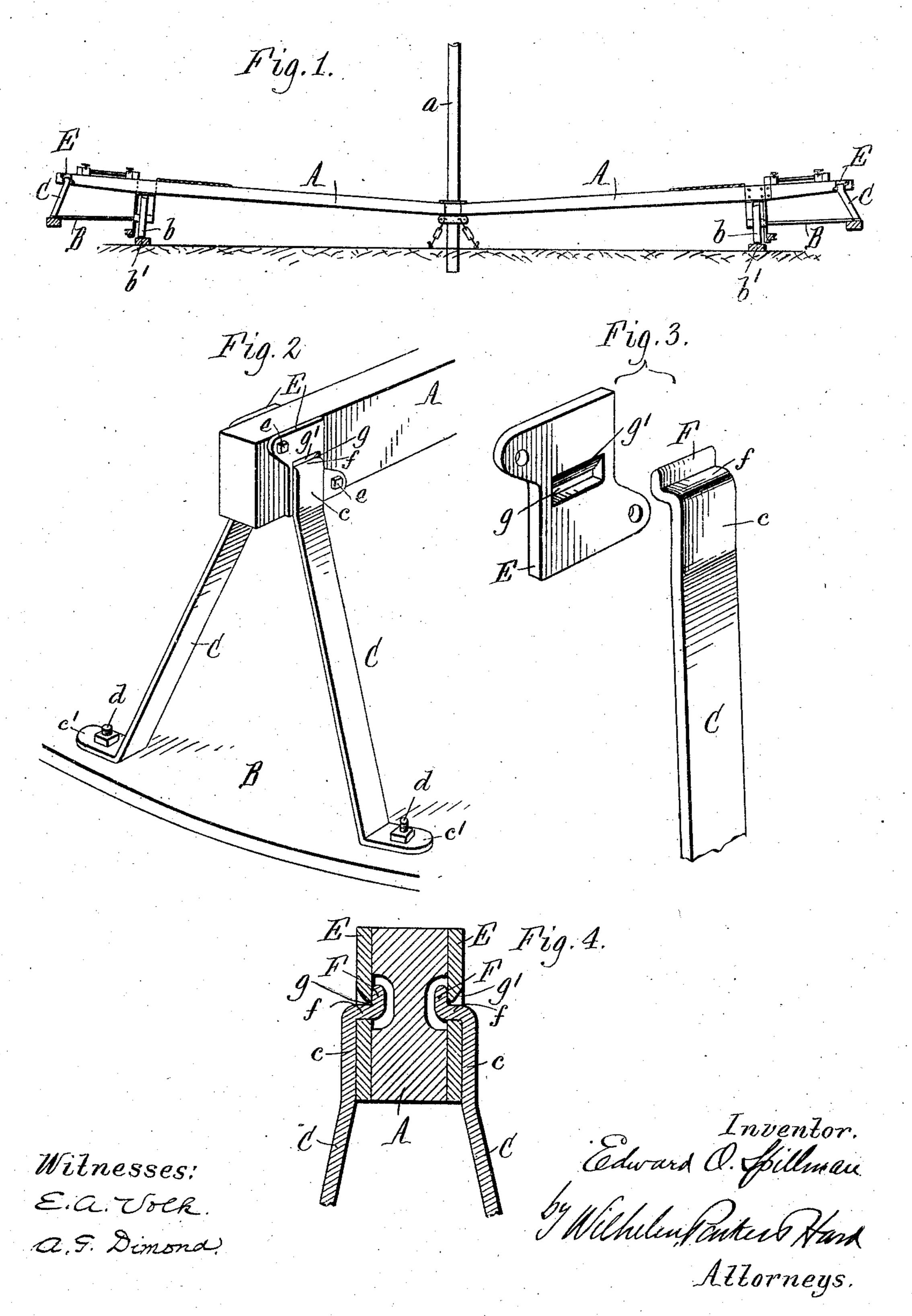
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BRACE FOR ROUNDABOUTS AND ANALOGOUS STRUCTURES.

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UNITED STATES PATENT OFFICE.

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BRACE FOR ROUNDABOUTS AND ANALOGOUS STRUCTURES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Edward O. Spillman, a citizen of the United States, residing at North Tonawanda, in the county of Niagara and State of New York, have invented a new and useful Improvement in Braces for Roundabouts and Analogous Structures, of which the following is a specification.

This invention relates more particularly to 10 brace constructions of the kind employed in roundabouts, merry-go-rounds, and analogous structures for securing the platform or floor upon which persons walk in entering and leaving the machine to the supporting-15 arms, sweeps, or members of the machineframe. Structures of this character are frequently moved from place to place, being set up for a time at one place and then taken apart, moved, and set up in a new location. 20 While the machines must be strongly built to guard against possible accident to the populace, it is desirable that the parts thereof be capable of ready detachment and attachment, so as to enable the machine to be quickly 25 and easily dismantled and again set up.

The object of this invention is to provide an absolutely secure and rigid brace or hanger connection between the platform and frame arms or sweeps in which the braces can so be very quickly and easily attached and detached.

In the accompanying drawings, Figure 1 is a fragmentary sectional elevation of a roundabout in which the platform is connected to the sweeps by braces embodying the invention. Fig. 2 is a perspective view, enlarged, of a portion of the platform and one sweep and the connecting-braces. Fig. 3 is a perspective view, on an enlarged scale, of one end of one brace and the attaching-plate therefor, the two being detached. Fig. 4 is an enlarged section through the sweep and braces.

Like letters of reference refer to like parts in the several figures.

A represents the supporting arms or sweeps of a roundabout, merry-go-round, or analogous structure, B the circular platform, floor, or rim upon which persons step in entering and leaving the machine, and C the braces connecting the platform and sweeps. In the apparatus illustrated the sweeps ra-

diate from a hub rotatably supported on a center-pole a and are supported near their outer ends by wheels b, which are journaled 55 in brackets depending from the sweeps and travel upon a circular track b' on the ground, and the platform B is supported below the sweeps by the braces C and the bearing-brackets for the wheels b; but this construc- 60 tion is not essential to the invention.

Two of the braces C are provided at the outer end of each sweep, and they diverge or spread laterally downwardly and also incline outwardly from their connections with the 65 sweep to their connections with the platform, each brace having a substantially upright upper end c for attachment to the sweep and a substantially horizontal foot c' for attachment to the platform similar to the braces 70 heretofore used. In the old constructions the lower ends of the braces are bolted to the platform, and the upper ends of each pair are secured to the sweep by two bolts passing through the sweep and braces. 75 Considerable time is required to remove and replace the bolts for the upper ends of the braces, and the bolts are frequently lost, thus causing much inconvenience.

In the construction forming the subject of 80 this invention the feet c' of the braces are fastened to the platform by bolts d, as usual; but instead of bolting the upper ends of the braces to the sweeps they are detachably connected therewith in the following man- 85 ner: Brace-plates or brackets E are fastened to opposite sides of the sweep in any suitable manner, conveniently by connecting bolts e, passing through the sweep, and the braces are provided with hooks or parts at their up- 90 per ends adapted to detachably interlock in holes in the brace-plates. Preferably the upper end of the brace, which is wide and flat, is bent to form an upwardly-projecting hook F, extending the entire width of the brace, to 95 which it is joined by a shoulder portion f, and the brace-plate is provided with a narrow horizontal slot G of a size to receive and hold said hook. The upper edge of the slot g is preferably beveled, as shown at g', to enable 100 the hook F to be easily inserted therein when the brace is raised to a substantially horizontal position. Where a flat brace-plate is used and secured directly against the side of the

sweep, as shown in the drawings, the sweep is recessed opposite to the slot of the plate sufficiently to receive the brace-hook and allow the necessary movements of the hook in in-5 serting it in and removing it from the slot. After the hook is inserted in the slot and the brace turned down to the position shown in the drawings and bolted to the platform it will be securely and rigidly held from movement.

The shoulder f, bearing against the edges of the slot, will prevent any swinging or swaying of the brace in the direction of the length of the sweep as well as any vertical movement thereof. The bearing of the upright 15 upper portion of the brace against the face of

the plate will prevent movement of the lower end of the brace toward the sweep, and the opposite movement of each brace will be prevented by its companion brace at the op-20 posite side of the sweep. The detachable interlocking connection thus holds the brace with all the security and rigidity of a permanent connection, and yet to detach the brace from the sweep it is only necessary to unbolt 25 its lower end from the platform and swing it

upward far enough to allow the withdrawal

of the hook F from the slot g.

I claim as my invention— 1. The combination with a frame member 30 and a platform, of a connecting-brace for the same, and a brace-plate secured to said frame member, one of said parts having a slot, and a hook on the other part shaped to engage in said slot, said hook being held from 35 withdrawal from said slot in the normal position of the brace and being removable from the slot when the brace is moved to a position

at an angle to said normal position, substantially as set forth.

2. The combination with a frame member 4c and a platform, of a connecting-brace for the same, and a brace-plate secured to said frame member, said plate having a slot, and a hook on said brace shaped to engage in said slot and interlock with said plate in one position 45 and to be removed from said slot when turned to another position, substantially as set forth.

3. The combination with a sweep and a platform, of a connecting-brace for the same 50 secured to said platform and having an offset hook at its upper end, and a plate secured to said sweep and having a slot in which said hook interlocks, said hook being removable from said slot by turning the brace to a sub- 55 stantially horizontal position, substantially as set forth.

4. The combination with a sweep and a platform, of a brace-plate secured to said sweep and having a slot, a brace secured to 60 said platform and having at its upper end an upwardly-projecting hook which is joined to the brace by a horizontal shoulder portion, said hook being shaped to enter said slot and bear against the inner side of said brace- 6; plate, and said shoulder portion being shaped to bear against the edges of said slot, substantially as set forth.

Witness my hand this 3d day of March,

EDWARD O. SPILLMAN.

Witnesses: F. W. FRITSCHE, W. W. KLINGENSCHMITT.