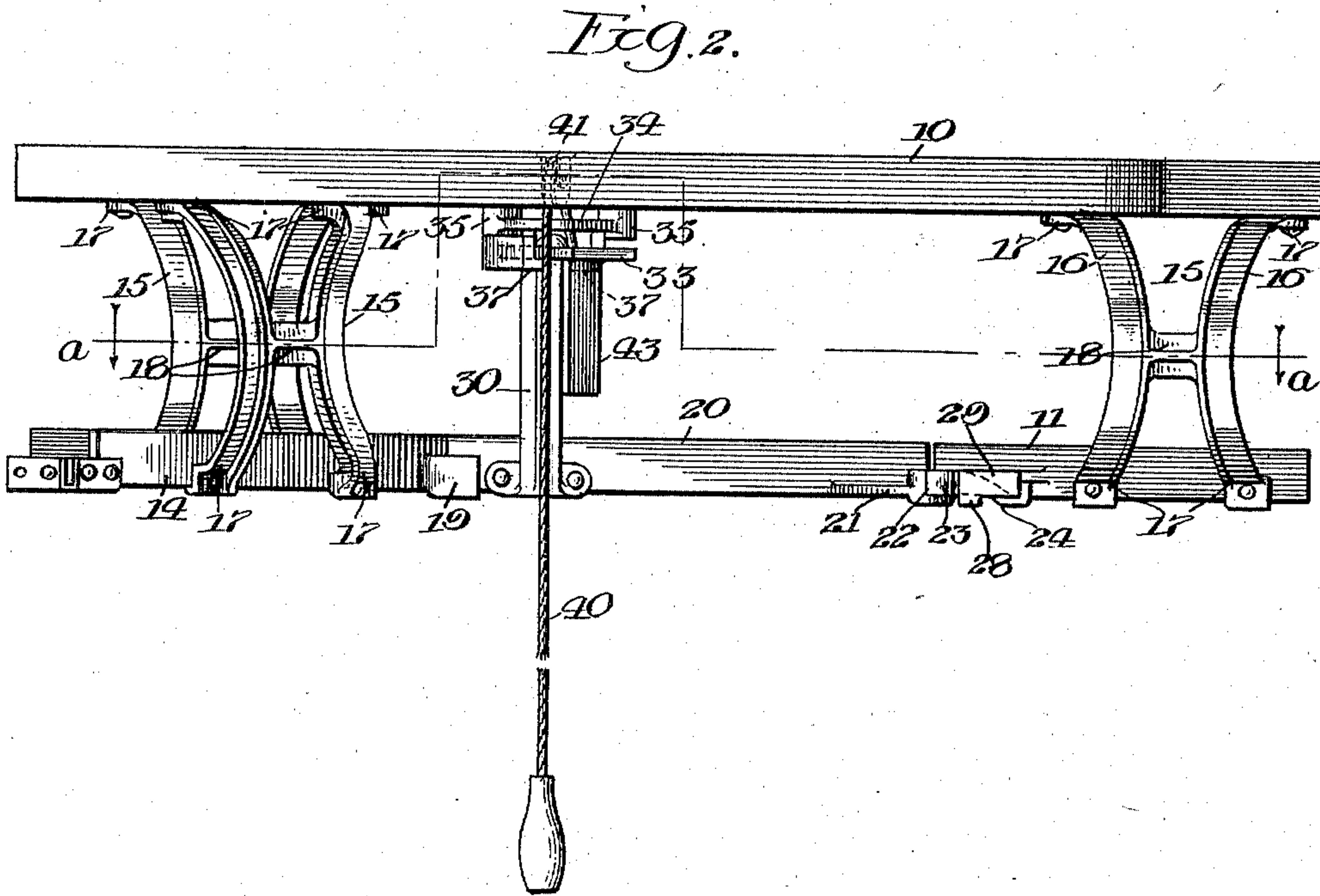
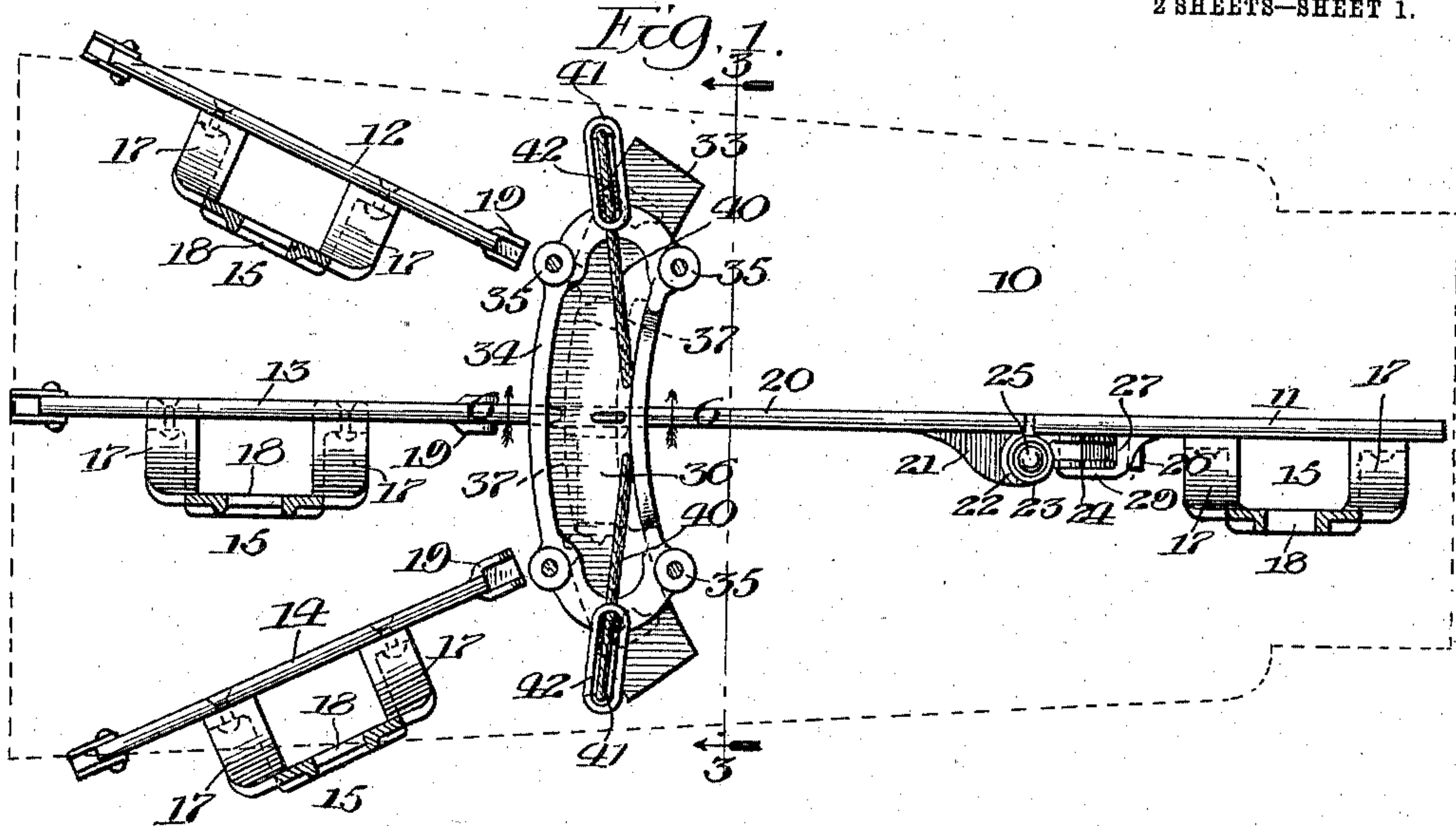


J. C. FITZGERALD.
PORTABLE OVERHEAD SWITCH.
APPLICATION FILED JAN. 10, 1910.

965,701.

Patented July 26, 1910.

2 SHEETS—SHEET 1.



Witnesses
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Chas. E. Gorton

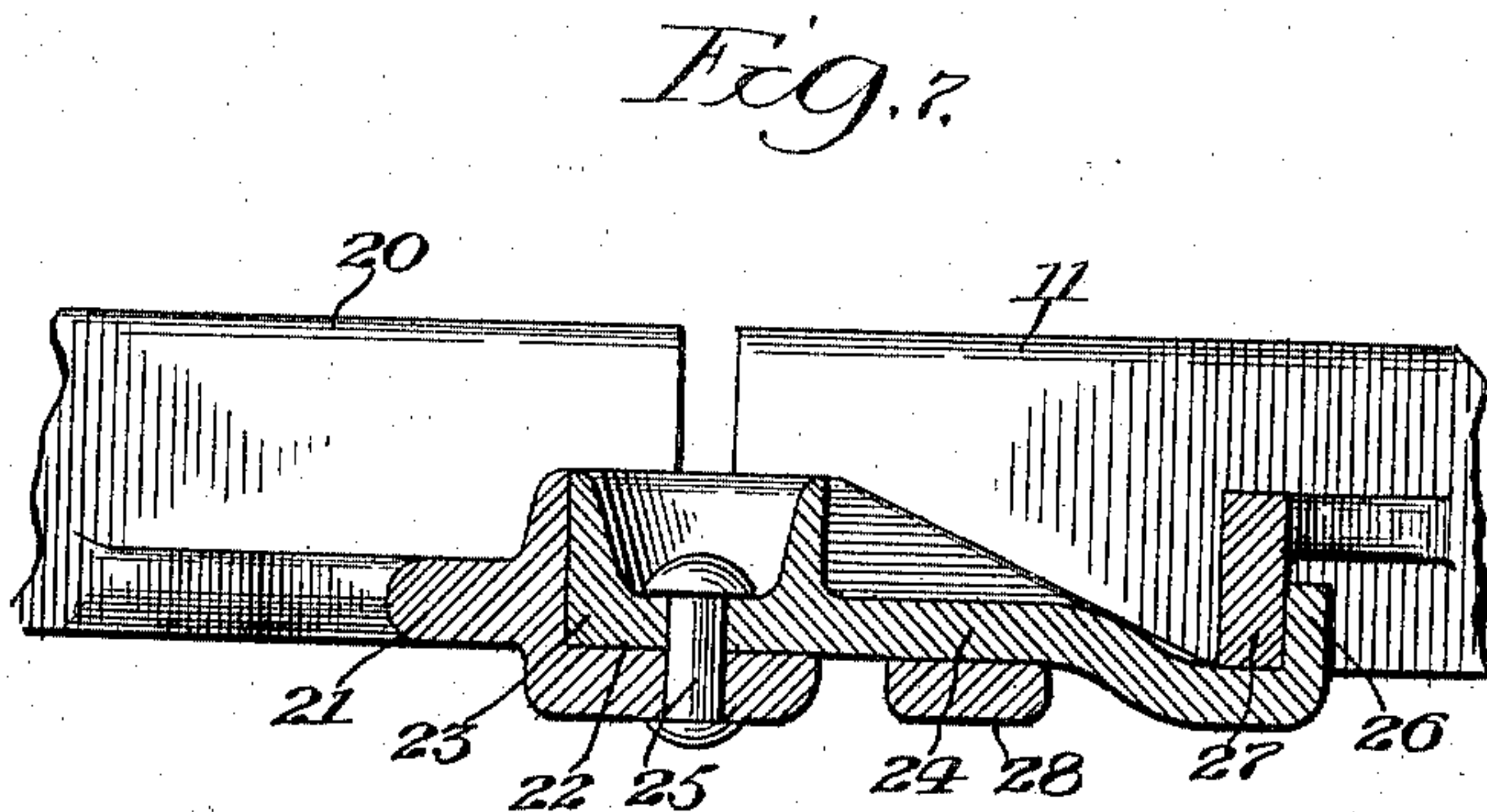
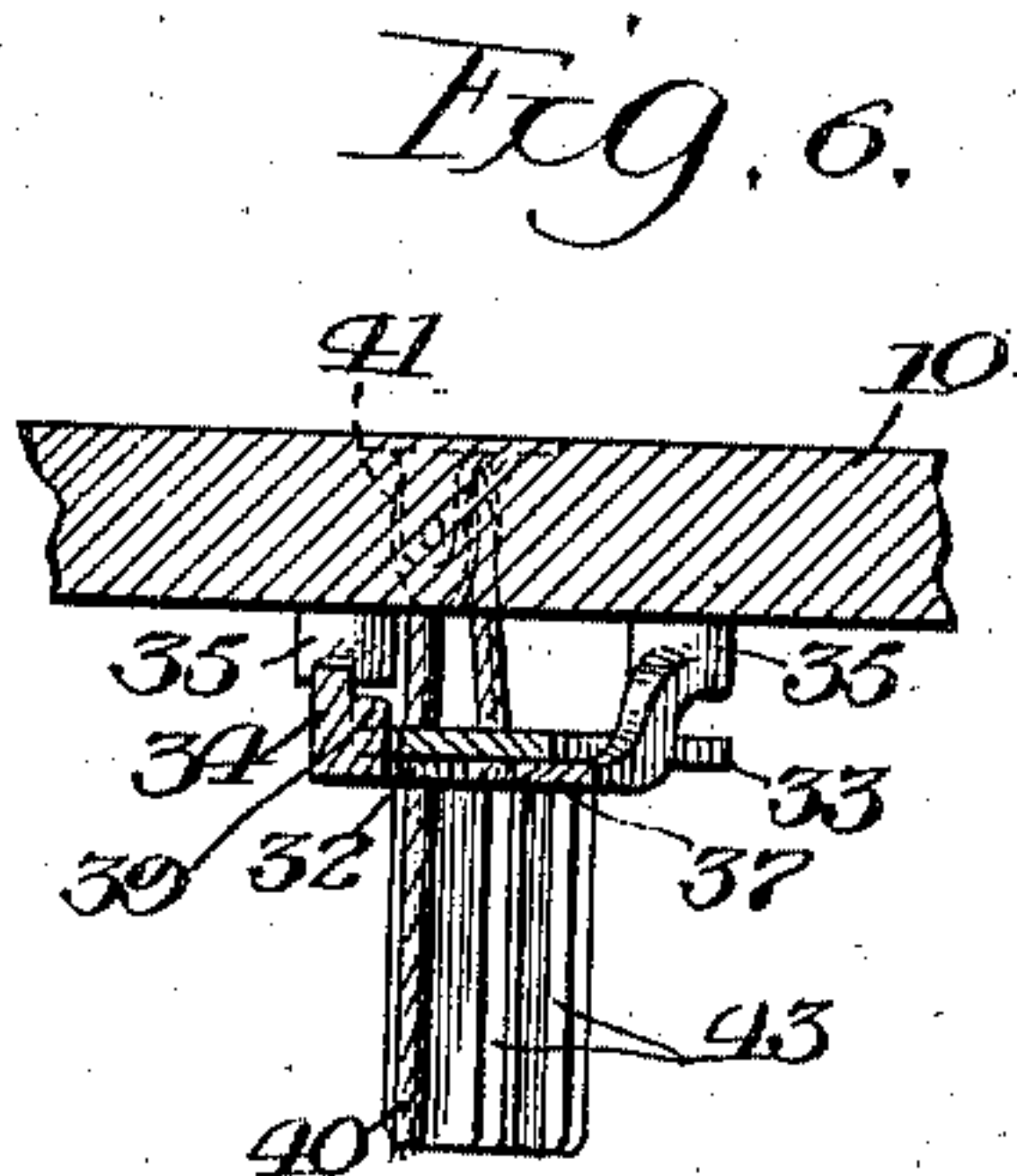
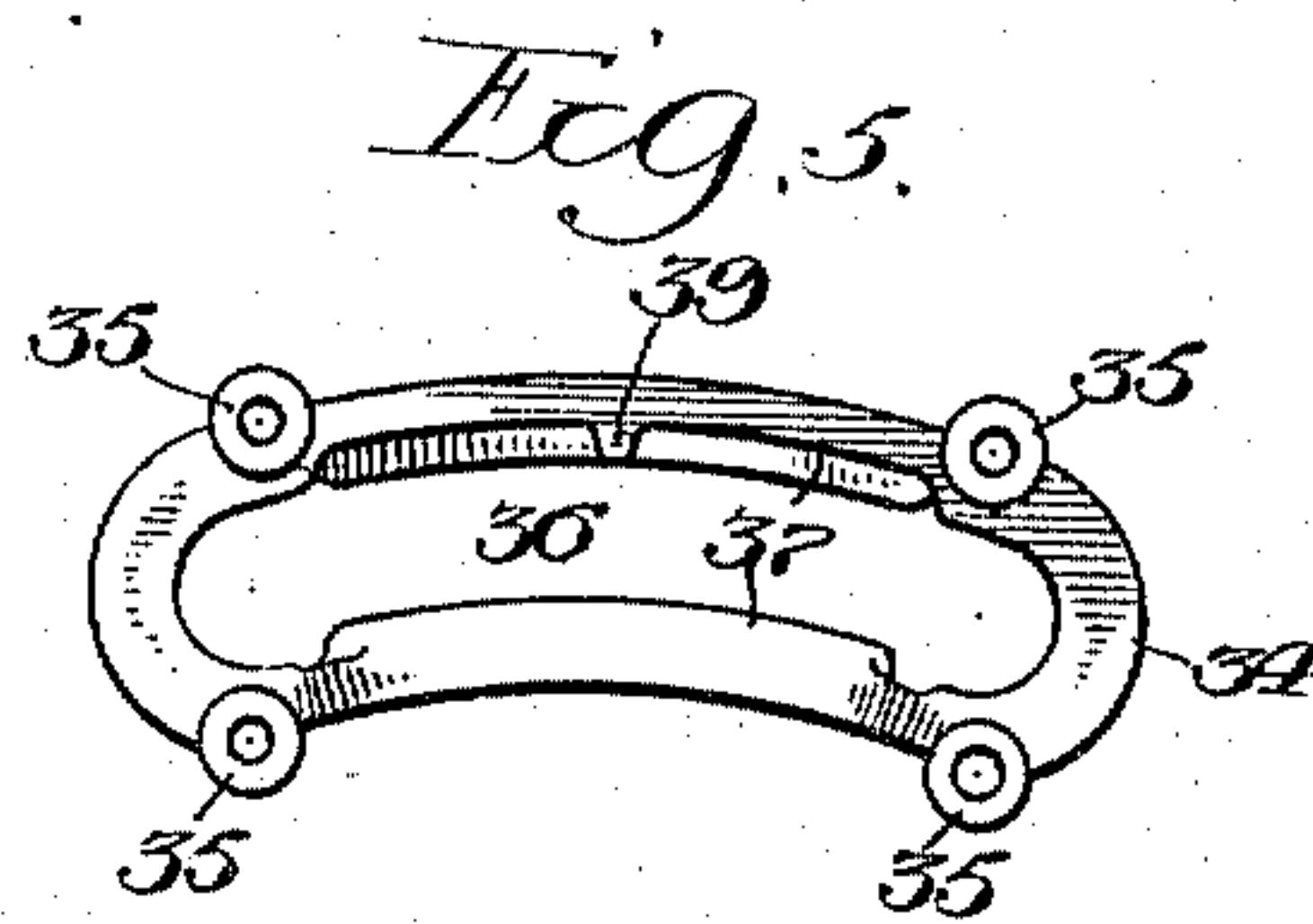
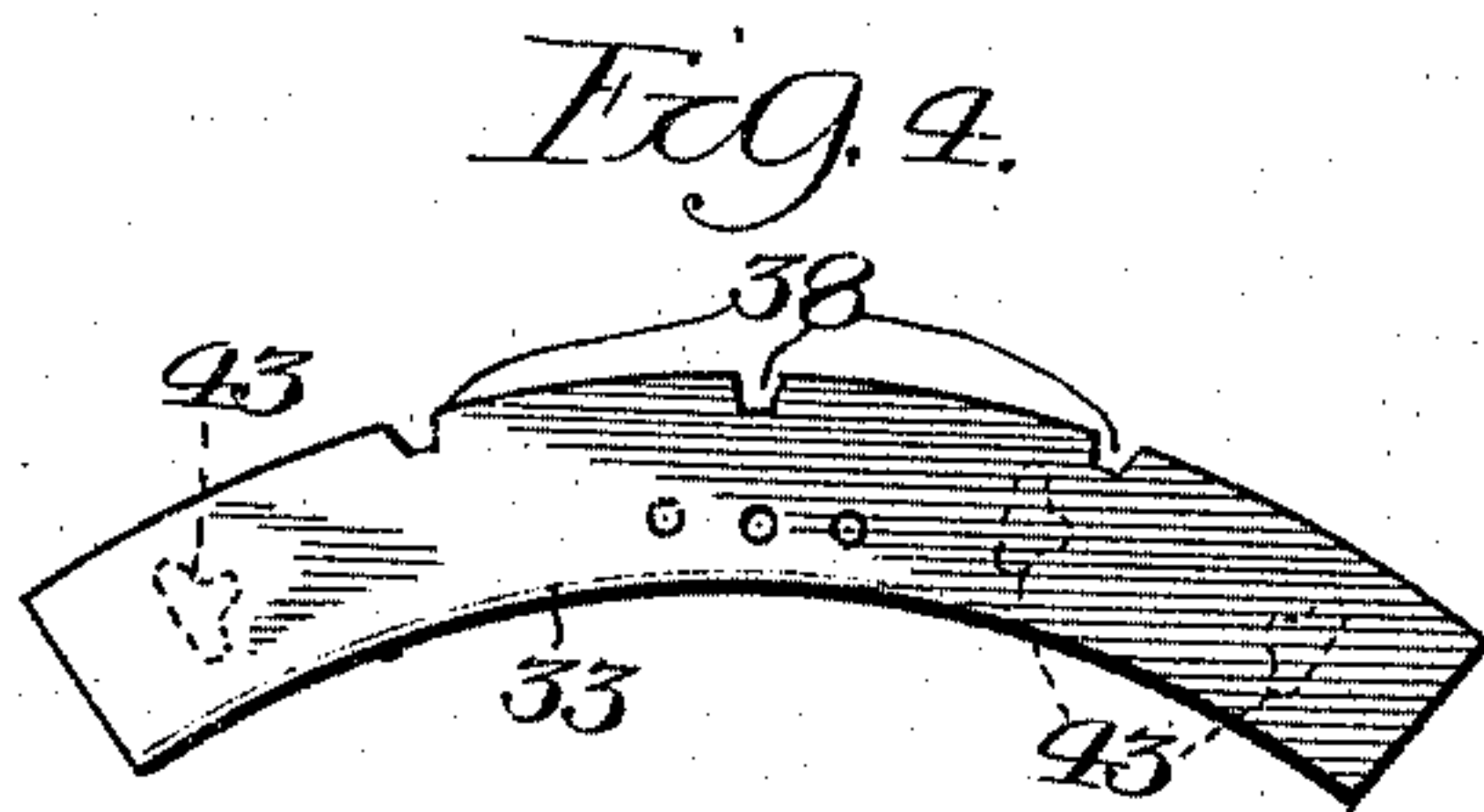
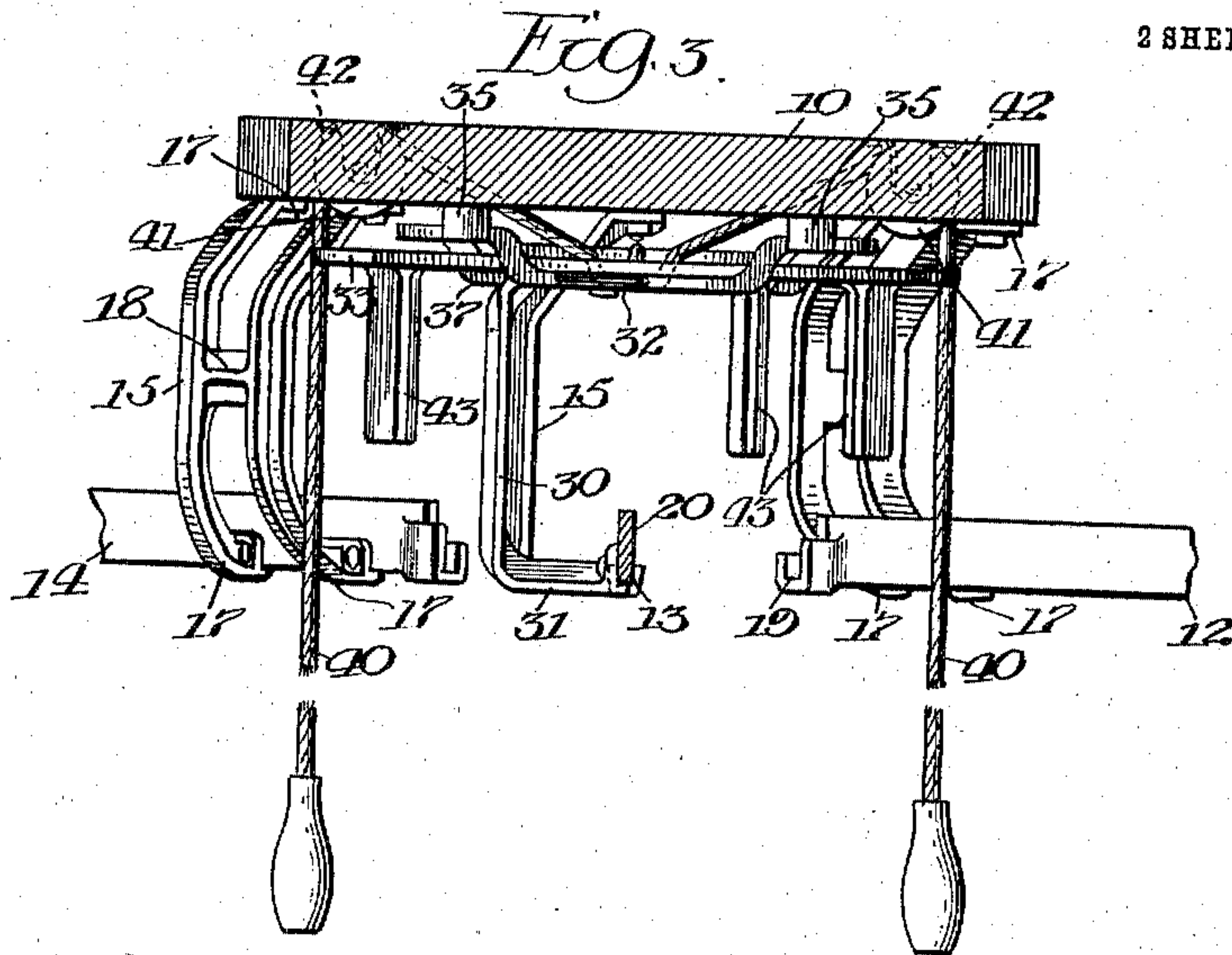
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 PORTABLE OVERHEAD SWITCH.
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JEREMIAH C. FITZGERALD, OF DE KALB, ILLINOIS, ASSIGNOR TO SMITH MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

PORTABLE OVERHEAD SWITCH.

965,701.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed January 10, 1910. Serial No. 537,239.

To all whom it may concern:

Be it known that I, JEREMIAH C. FITZGERALD, a citizen of the United States, residing at De Kalb, in the county of Dekalb and State of Illinois, have invented certain new and useful Improvements in a Portable Overhead Switch, of which the following is a specification.

This invention has relation to improvements in portable switches for overhead tracks, such as are used for the travel thereon of wheeled carriers employed for conveying manure, hay, grain, silage, litter, ore, coal, and the like from one point to another and pertains more especially to portable switches for that type of elevated tracks for carriers disclosed in an application for patent, Serial Number 502,637, filed by me on the 17th day of June, 1909, in which application I have shown, described and claimed in combination with an elevated track structure, a switch similar in most of its features to the switch herein below described, but have not claimed therein said switch *per se*.

The present invention consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically pointed out in the claims drawn to the portable switch *per se*.

The principal object of the invention is to provide a portable switch for transferring the carrier from the main track to the branch tracks of an elevated track structure or vice versa, which shall be strong, durable and efficient in operation, and so made that it may be carried in stock, and shipped with its parts in position ready for use, and adapted to be bodily secured to a suitable overhead support in any desired manner, thus obviating the necessity of separately securing the parts of the switch in the proper positions, which would require considerable skill and accuracy of adjustment.

A further object of the invention is to provide means whereby the carrier will be prevented running off anyone of the branch tracks when it is open or not in connection with the switch section of the track, the said means being such that the operation of moving the switch section of track from one branch track to another, will place a stop in the path of the carrier when on an open branch track.

Another object of the invention is to provide means for firmly securing and supporting the branch sections of track, as well as a portion or section of the main track, to a portable plank or support in such a manner that the hangers for said sections will offer no obstruction to the carrier as it travels along the rails or tracks.

A still further object is to provide means for hinging the switch section of the portable switch to one side of the section of main track, to the end that the depending portion of the carrier will be free to pass alongside the track rails without hindrance.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it referring to the accompanying drawings which serve to illustrate a convenient form of the invention and in which:

Figure 1, is a plan sectional view taken on line *a-a* of Fig. 2, showing the plank support by dotted lines and illustrating the hinged or switch section of the switch in alinement with the middle branch track section; Fig. 2, is a side view of Fig. 1; Fig. 3, is a cross-sectional view taken on line 3-3 of Fig. 1, looking in the direction indicated by the arrows. Fig. 4, is a detached plan view of the locking bar for the switch section which carries the safety stops. Fig. 5, is a detached plan view of the keeper therefor. Fig. 6, is a sectional view taken on line 6-6 of Fig. 1, and Fig. 7, is a view partly in side elevation and partly in section showing the means for connecting one end of the switch member or section to one side of the main track section.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawings.

The reference numeral 10, designates a plank which may be of any suitable size and shape and is adapted to be secured to an elevated support such as the joists of a barn or the like. Secured to the lower surface of the plank 10, near one of its ends, by means of a bracket, is a rail section 11, which is adapted to be connected at its outer end to one end of the main track, and which will herein be termed the main track section or main track. Secured by means of brackets

to the lower surface of the plank or support 10, near its other end, are a number of rail sections 12, 13, and 14, which will be hereinafter designated as branch track sections 5 and are adapted to have their outer ends connected to the rails of the branch tracks, which may be supported in any suitable manner. The hangers which unite the main track section and the branch track sections 10 are similar in construction and each is designated as a whole by the reference numeral 15. Each of these hangers consists of two upwardly disposed members 16, which have their lower ends secured to the corresponding sides of the track sections and at the lower portion of each of the same, and are bent outwardly from the track sections as at 17, and then extend upwardly so as to be out of the way of the carrier as it travels along 20 the track. The upper portion of each of the members 16, is bent inwardly to a point directly above the track section which the hanger supports, and is there secured to the lower surface of the plank.

25 As shown, the members 16, of each of the brackets are united together about midway between their ends, by means of a cross-piece or portion 18, which serves to strengthen and brace said members. Each of the 30 branch track sections 12, 13, and 14, is provided at its inner end and on its lower portion with a channeled extension 19, to receive the adjacent end of the switch member or section 20, which is provided at its other 35 end with a laterally disposed lug or projection 21, having a segmental socket 22, in its upper portion to receive and furnish a bearing for the circular end portion 23, of an arm 24, which is pivotally connected to the 40 lug 21, by means of a pivot 25, extending through suitable openings in said lug and the circular portion 23, of the arm.

As is clearly shown in Figs. 1, and 7, of the drawings the arm 24, is provided at its 45 end opposite the circular portion 23, with an upward hook or extension 26, to engage a laterally disposed lug 27, on the main track section 11, and near the end thereof adjacent to the switch member 20, which lug is connected to another laterally disposed lug 28, 50 on the section 11, near the end thereof by means of a longitudinally disposed portion 29, located at the outer ends of said lugs, thus leaving an opening through which the 55 hooked portion 26, of the arm 24, may be passed. By this arrangement, it will be seen and understood that a detachable hinge for uniting the switch member 20, and the main track section 11, is provided which will permit of 60 the lateral as well as the vertical movement of the switch member, but will prevent the latter dropping down any farther than on a level with the track. It is evident that by the use of the hinge, the switch member 20, 65 can be attached or removed from the rail

section 11, without the employment of bolts, rivets, or screws, and that as all of the parts of the hinge are on one of the sides only of the hinged member 20, and main track section 11, which sides are those opposite that 70 on which the depending bracket of the carrier will pass, that said hinge will be out of the way of the carrier and will offer no obstruction to its progress.

Transversely secured on the switch member 75 ber 20, and near its end adjacent to the branch sections 12, 13, and 14, is a combination hanger and lock for the switch member and safety stops for the carrier, which consists of an upright portion 30, having at its 80 lower end a horizontally disposed portion 31, secured to the member 20, and at its upper end a similarly disposed part 32, which is secured to the segmental locking bar 33, which is loosely and movably supported a slight 85 distance below the plank 10, by means of a skeleton keeper 34, having on its upper surface a number of apertured bosses 35, through which openings are passed bolts to secure the keeper to the plank. 90

As shown in Figs. 1 and 5, the keeper has an opening 36, and is provided on each side of said opening with a downwardly and inwardly extended ledge or lip 37, on which the locking bar 33, will rest and be supported 95 thereby, yet at a sufficient distance to allow of some vertical movement of said bar, so that when it is slightly raised one of the locking notches or recesses 38, therein, will be disengaged from the projection 39, on 100 one of the ledges 37, of the keeper and thus allow said bar to be moved cross-wise of the plank 10, or support, which is done by means of a rope or cable 40, connected at about its 105 middle to the bar 33, and extended up through the openings 36, of the keeper 34, and then over pulleys 41, journaled preferably in suitable openings 42, in the plank 10, on each side of the switch-member. The locking bar 33, is provided with a number of 110 downward extensions or arms 43, which project to near the inner ends of the branch track sections, and are so arranged that one of said arms will occupy a position in the path of the carrier at the inner end of each 115 of the open branch track sections, thus providing stops to prevent the carrier running off, should the switch member be misplaced.

From the foregoing and by reference to the drawings, it will be readily understood 120 and clearly seen that when the parts are in the positions shown in Fig. 1, the main track section 11, will be connected to the branch track section 13, by means of the hinged or switch member 20, so that the carrier 125 will have free and unobstructed passage on the rails 11, 20, and 13, and that the stops or arms 43, on each side of the member 20, and the nearest ones thereto, will be located near the ends of the branch track sections 130

12, and 14, thus providing stops at said ends so that if a carrier were located on either of the sections 12, or 14, it could not run off. By pulling downwardly on the ends of the rope 40, it is apparent that the locking bar 33, will be raised so as to disengage one of the recesses 38, from the projection 39, on the keeper 34, when by pulling on one end of the rope only, the bar 33, will be slid transversally of the plank 10, until the free end of the switch member 20, is brought into alinement with one of the branch track sections 12 or 14, at which time the bar 33, may be allowed to move downwardly until it rests on the ledges 37, of the keeper 34, when the lug or projection 39, will engage another one of the recesses 38, of the locking bar. When the bar 33, is thus shifted from place to place, it is evident that the switch member or hinged section 20, which is carried at one of its ends by said bar, will be moved from one of the branch track sections to the other and its free end will be engaged by the channeled projection 19, on the branch track section to which the switch member is connected. It is obvious that by using the channeled extensions 19, to receive and retain the lower portion of the free end of the switch member 20, and by employing the locking bar 33, provided with recesses 38, to engage the lug or projection 39, on the keeper, that the switch member will be very firmly held in connection with the desired branch track section and against any wobbling or lateral movement.

When only two branch track sections are used, it is apparent that one only of the arms or extensions 43, will be necessary, for when the switch member 20, is connected to the branch track section 13, it is manifest that the arm 43, will be located near the open end of the branch section 12, and that when the switch section is thrown from the branch track section 13, to the section 12, the upright 30, will act as a stop for the open section 13, from which the switch section has been removed.

Having thus fully described my invention what I claim as new and desire to secure by Letters-Patent is—

1. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section, a plurality of branch track sections, a switch member, a hinge located on one side only of the switch member and the main track section to directly connect the same together, said switch member adapted to aline with either of the branch track sections, and a double hanger to connect each of the various track sections to the portable support.

2. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a

main track section, a switch member, a hinge located on one side only of the main track section a switch member to hingedly and movably connect their adjacent ends together, the said switch member adapted to aline with either of the branch track sections, a double hanger to connect each of the various track sections to the portable support, and means to raise and shift the position of the free end of the switch member from one of the branch track sections to another.

3. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said portable support, a switch member hinged for lateral movement at one of its ends directly to one end of the main track section and extended at its other end to connect one at a time with the ends of the branch track sections, an upright mounted on and near the free end of the switch member, a transversally disposed bar on the upper portion of said upright and provided with a depending arm on one side of the upright, said arm adapted to be placed in the path of the carrier near the end of the open branch track section, means on the portable support to loosely hold the transverse bar and to engage the same and means to shift the free end of the switch member from one branch track section to another.

4. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said portable support, a switch member hinged for lateral movement at one of its ends directly to one end of the main track section and extended at its other end to connect one at a time with the ends of the branch track sections, an upright mounted on and near the free end of the switch member, a transversally disposed bar on the upper portion of said upright and provided with a depending arm on each side of the upright, said arms adapted to be placed in the path of the carrier near the open ends of the branch track sections, means carried by the portable support to loosely hold the transverse bar and to engage the same and means to shift the free end of the switch member from one branch track section to another.

5. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said portable support, a switch member hinged for lateral movement at one of its ends directly to one end of the main track section and extended at its other end to connect one at a time

with the ends of the branch track sections, an upright mounted on and near the free end of the switch member, a transversally disposed part on the upper portion of said upright and provided with depending means located near the end or ends of the open branch track section or sections to prevent the carrier running off the same, means on the portable support to loosely hold the transversally disposed part and to engage the same and means to shift the free end of the switch member from one branch track section to another.

6. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said portable support, a switch member hinged for lateral movement at one of its ends to one end of the main track section and extended at its other end to connect one at a time with the ends of the branch track sections, an upright mounted on and near the free end of the switch member, a transversally disposed part on the upper portion of said upright provided with depending means located at the open end or ends of the branch track section or sections to prevent the carrier running off the same, the said transversally disposed part having one or more recesses, a keeper secured to the portable support to loosely hold the transverse part and provided with a lug or projection to engage the same, and means connected to the transverse part to shift the free end of the switch member from one branch track section to another.

7. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said portable support, a switch member hinged for vertical and lateral movement at one of its ends to one end of the main track section and extended at its other end to connect one at a time with the ends of the branch track sections, an upright mounted on and near the free end of the switch member, a transversally disposed bar on the upper portion of said upright provided with depending means located at the open end or ends of the branch track section or sections to prevent the carrier running off the same, the said transversally disposed bar having one or more recesses, a keeper secured to the portable support to loosely hold the trans-

verse bar and provided with a lug or projection to engage the same, and means connected to the transverse bar to shift and raise the free end of the switch member from one branch track section to another.

8. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said portable support, a switch member hinged for vertical and lateral movement at one of its ends to one end of the main track section and extended at its other end to connect one at a time with the ends of the branch track sections, an upright mounted on and near the free end of the switch member, a transversally disposed bar on the upper portion of said upright provided with one or more depending arms located near the open end or ends of the branch track section or sections to prevent the carrier running off the same, the said bar having one or more recesses, a keeper secured to the portable support to loosely hold the transverse bar and provided with a lug or projection to engage said bar, a pulley journaled on the portable support on each side of the switch member, and a rope or cable extended over said pulleys and connected to the transverse bar for the purpose of raising and shifting the position of the bar as well as the switch member.

9. In a portable overhead switch, the combination with a portable support adapted to be secured to an elevated support, of a main track section and a plurality of branch track sections suspended from said support, each of the branch track sections having a channeled portion at its inner end, the main track section having on one of its sides laterally disposed and spaced apart lugs connected together at their outer ends, a switch member having at one of its ends and on one side thereof a lateral extension provided with an apertured socket, an arm having at one of its ends an apertured portion to fit in said socket and at its other end an upturned projection to engage one of the lugs on the main track section, a pivot located in the openings of the said arm and socket, and means to raise the switch member and to shift it from one of the branch track sections to another.

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