No. 835,015. PATENTED NOV. 6, 1906.

F. S. EDINGER.

TRANSFER TABLE.

APPLICATION FILED DEC. 19, 1904.

4 SHEETS—SHEET 1.

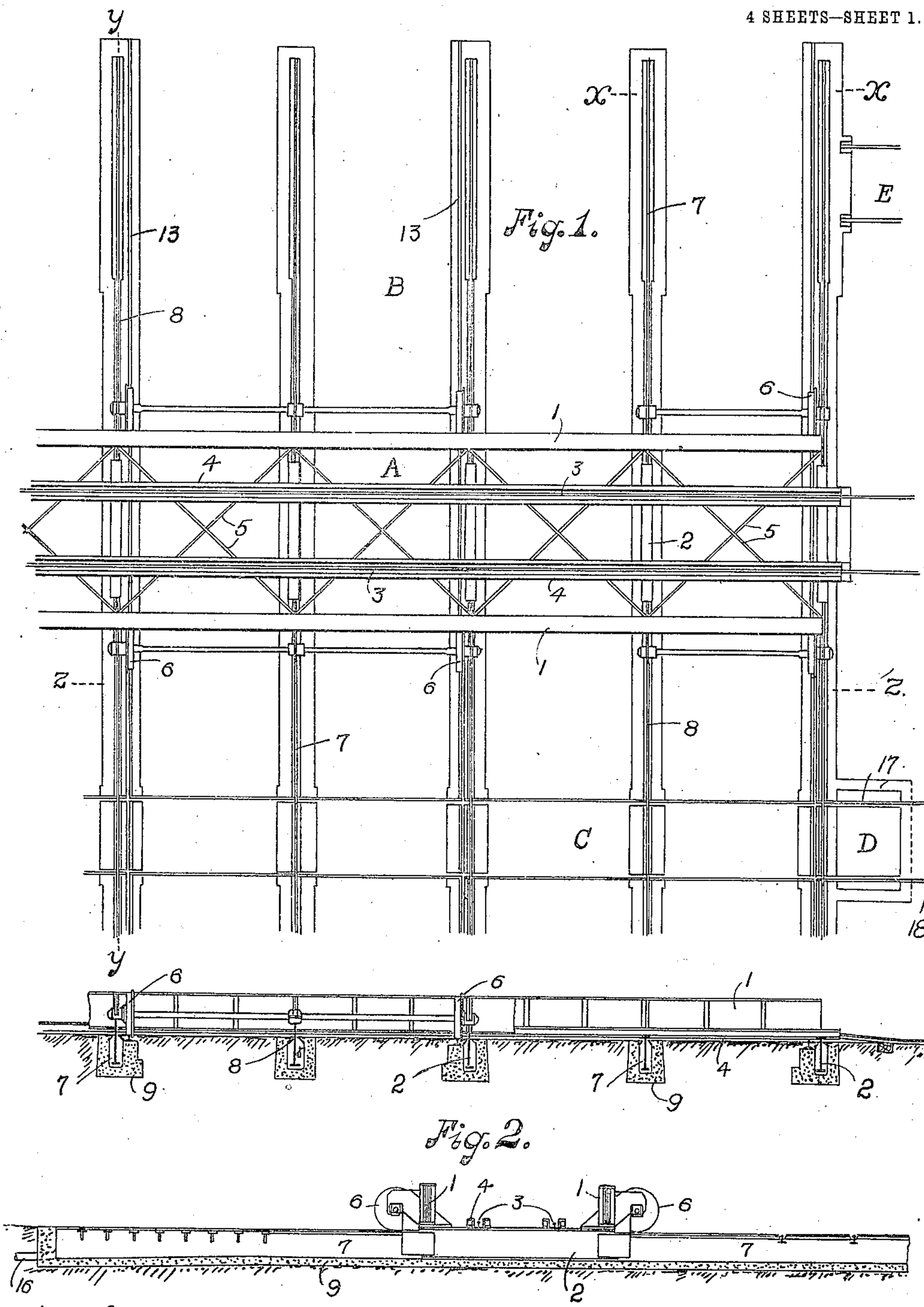


Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:

Jesse P. Eff.

Wm. F. White

Inventor:

Fred S. Edinger

By W. H. Smyth

Atty.

No. 835,015. PATENTED NOV. 6, 1906.

F. S. EDINGER.

TRANSFER TABLE.

APPLICATION FILED DEC. 19, 1904.

4 SHEETS—SHEET 2.

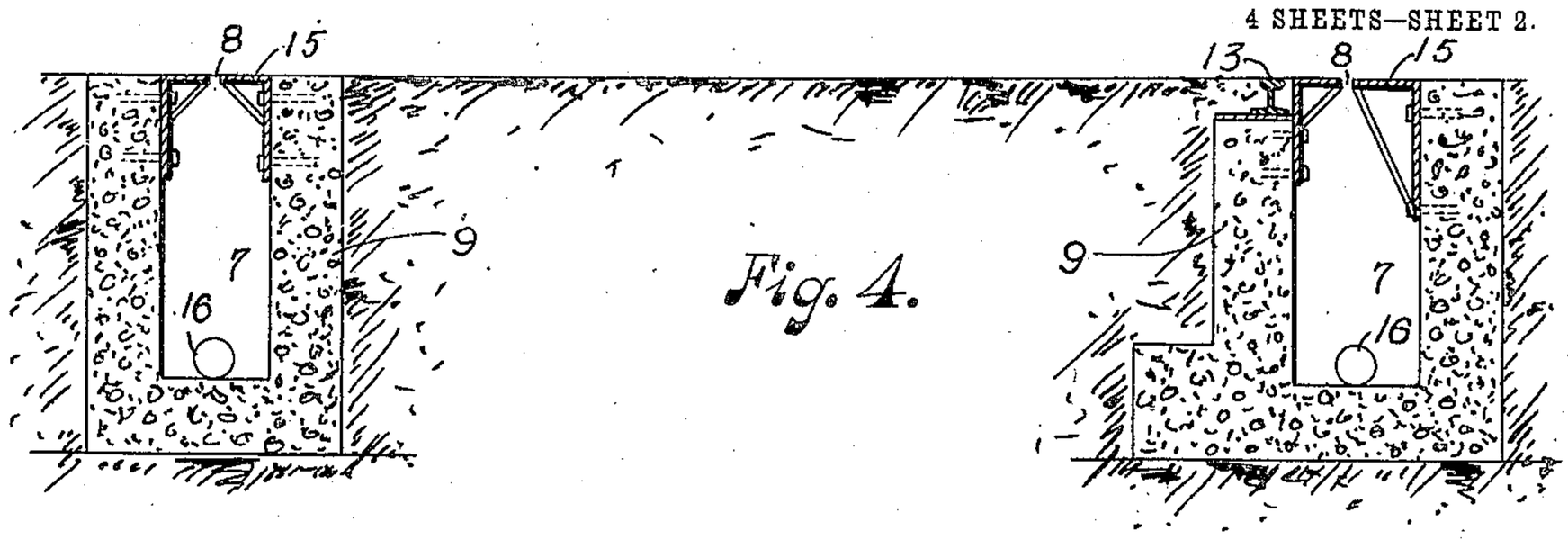


Fig. 4.

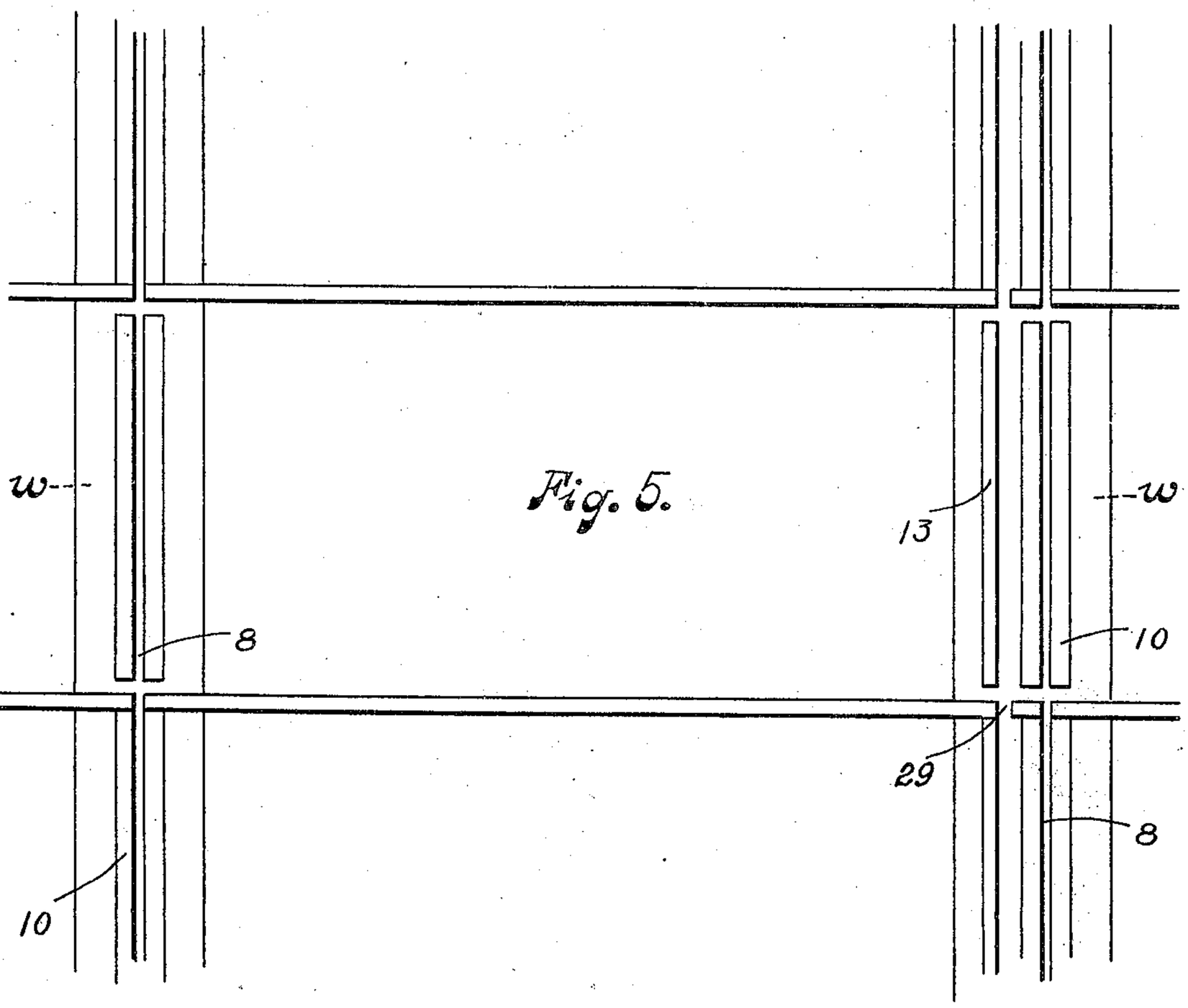


Fig. 5.

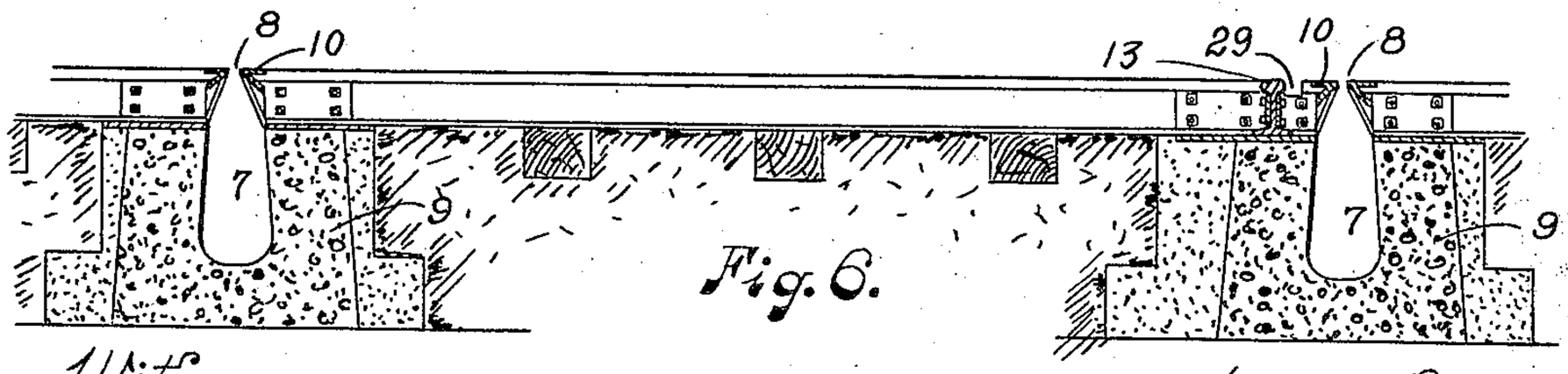


Fig. 6.

Witnesses:

Jesse P. Coff.

Wm. R. White

Inventor:

Fred S. Edinger.

By W. S. Smyth

Atty

No. 835,015. PATENTED NOV. 6, 1906.

F. S. EDINGER.

TRANSFER TABLE.

APPLICATION FILED DEC. 19, 1904.

4 SHEETS—SHEET 3.

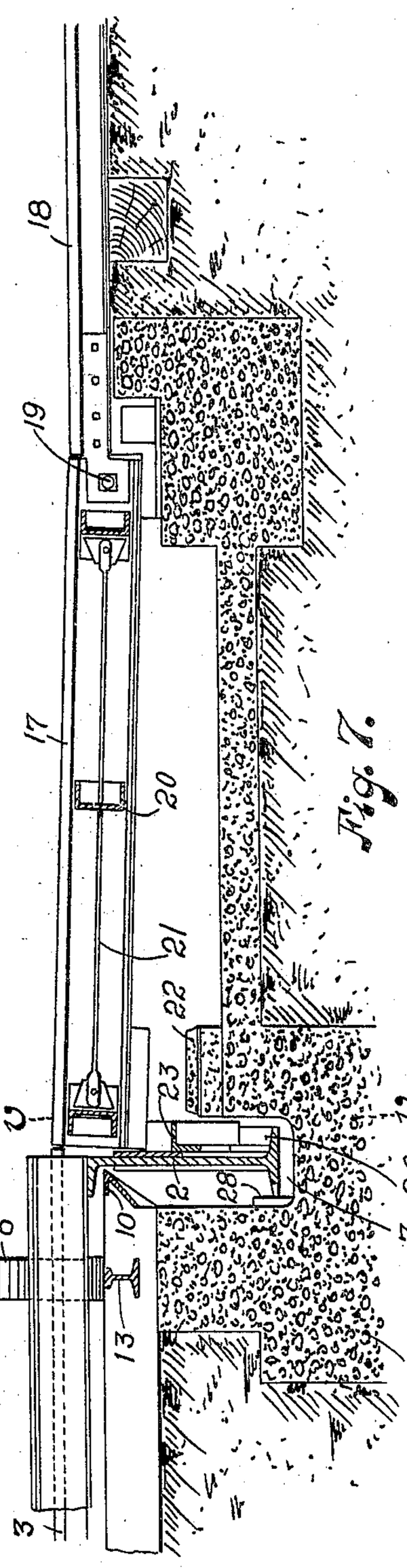


Fig. 7.

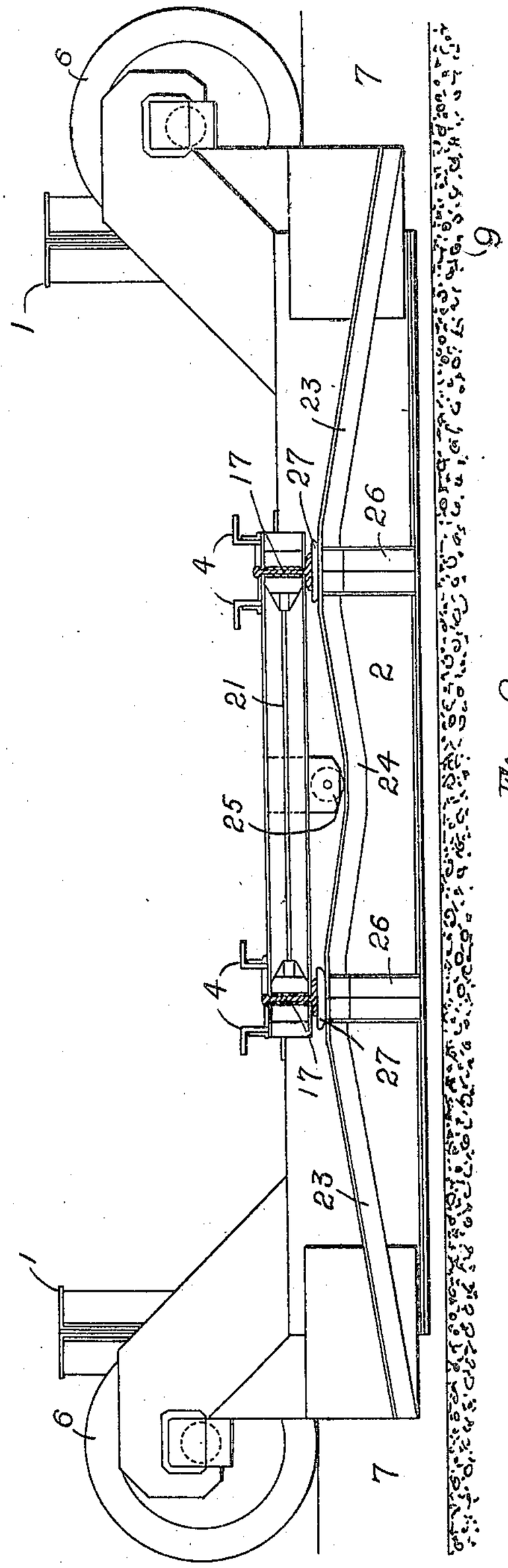


Fig. 8.

Witnesses:

Jesse P. Coffo.

Thos. White

Inventor:

Fred S. Edinger

By W. S. Smyth.

Atty.

No. 835,015. PATENTED NOV. 6, 1906.

F. S. EDINGER.

TRANSFER TABLE.

APPLICATION FILED DEC. 19, 1904.

4 SHEETS—SHEET 4.

Fig. 10.

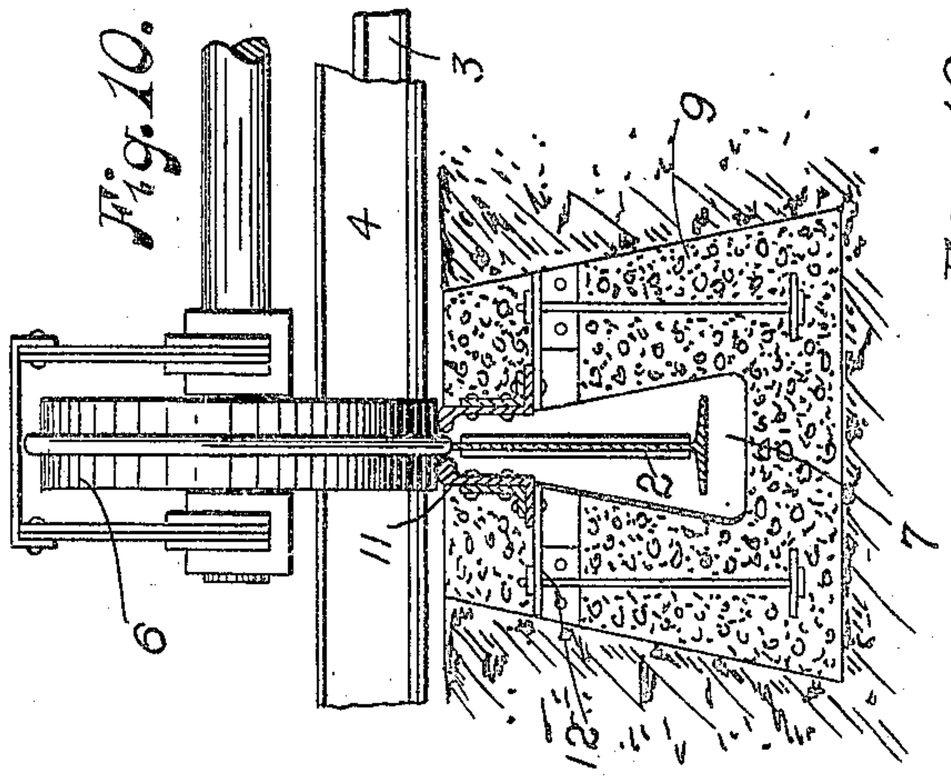


Fig. 12.

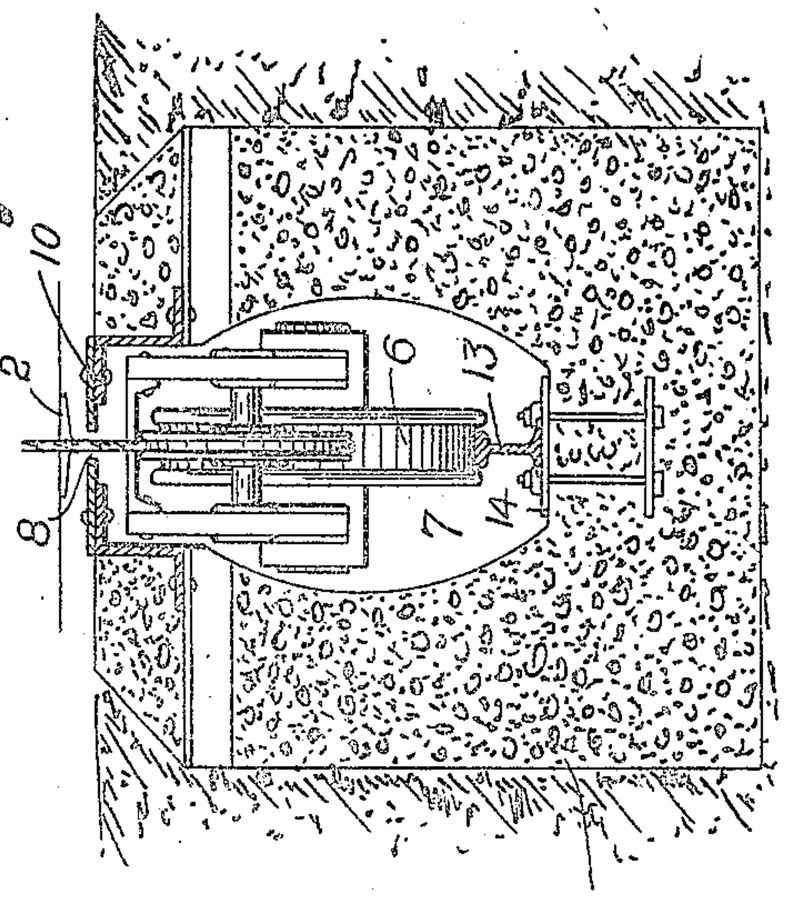


Fig. 9.

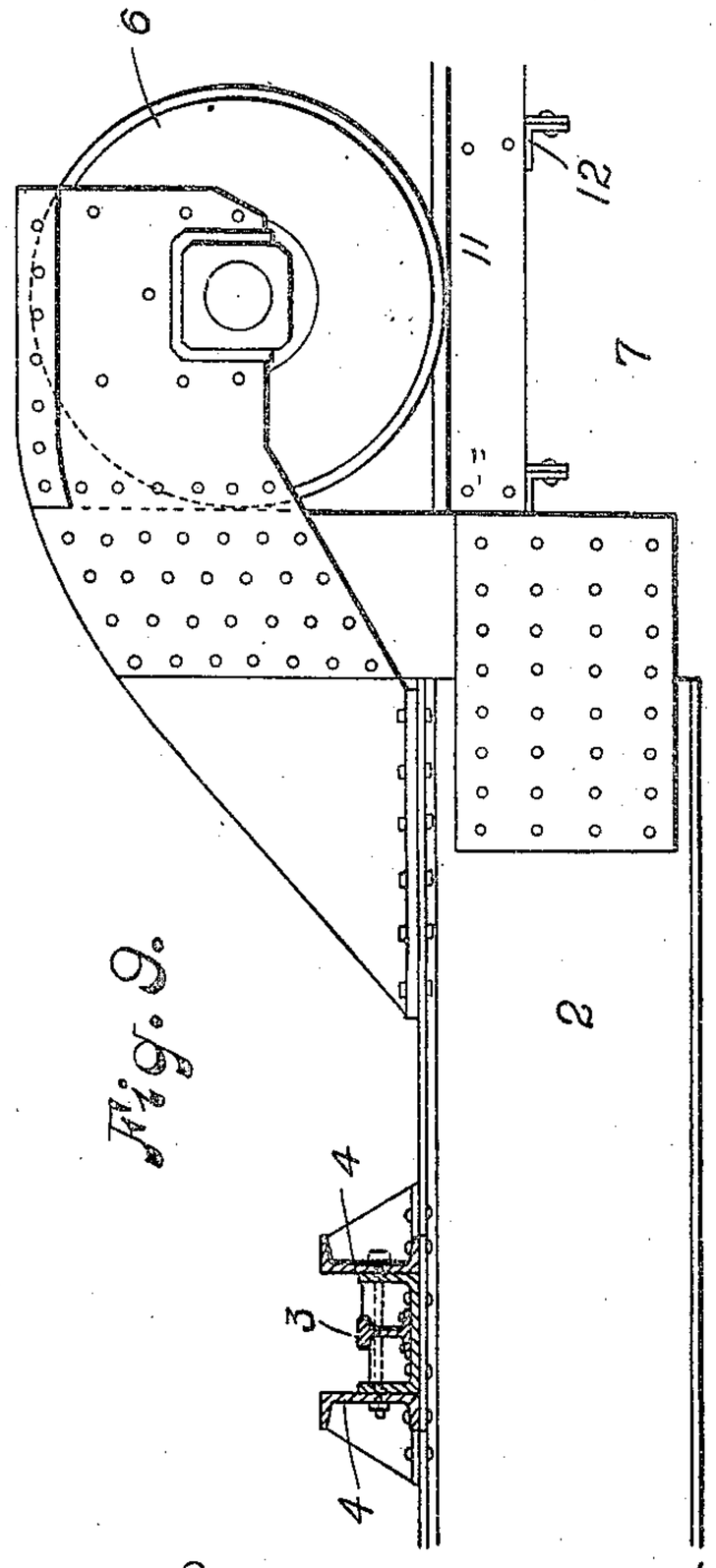
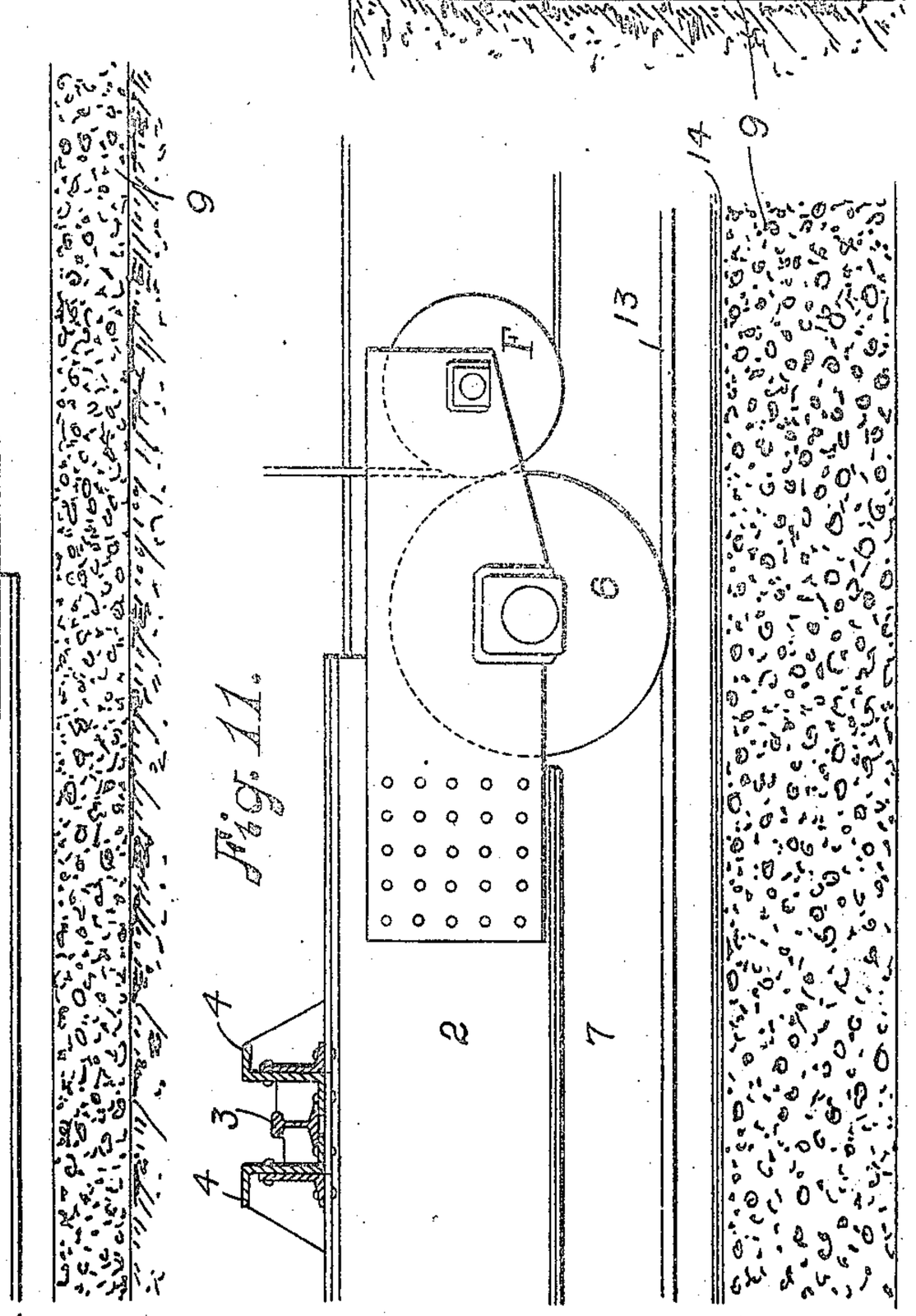


Fig. 11.



Witnesses:

Jesse P. Coff

Geo. H. White

Inventor:

Fred S. Edinger

By W. H. Smyth

Atty.

UNITED STATES PATENT OFFICE.

FRED S. EDINGER, OF BERKELEY, CALIFORNIA.

TRANSFER-TABLE.

No. 835,015. Specification of Letters Patent. Patented Nov. 6, 1906.

Application filed December 19, 1904. Serial No. 237,593.

To all whom it may concern:

Be it known that I, FRED S. EDINGER, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Transfer-Tables; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to a transfer device for rolling-stock.

As transfer-tables are now constructed they consist of a suitable length of track at normal level up to a hundred feet in length supported upon wheels. The wheels of this track travel upon other tracks on the floor of a pit of equal width to the length of the traveling track and usually of considerable length, in some instances as much as fifteen hundred feet. Owing to their construction, these transfer-tables are obliged to perform unnecessary and costly services in addition to their legitimate functions, which services are wholly foreign and made necessary only by reason of the faulty adaptation to the end or object intended to be accomplished thereby. Though its only proper function is to transfer rolling-stock from a track to one parallel thereto, the transfer-table must serve as a bridge to all of the tracks severed by the transfer-pit.

The object of the present invention may be briefly stated to be to provide means for crossing the path of the transfer-table at substantially normal track-level of such character as will not interfere with the proper functions of the transfer-table and to provide a transfer-table adapted to perform its functions under these conditions.

As the tracks of the transfer-table should be level with the tracks which it serves, the construction heretofore involves an abrupt-sided pit as long as the distance between and including the farthermost tracks to or from which it is necessary to transfer rolling-stock.

For convenience the usual custom is to arrange the various repair or construction shops along each side of the path of the transfer-table. The presence of the heretofore necessary pit therefore constitutes an extremely inconvenient barrier between the shops located on opposite sides thereof. The presence of the pit makes it practically impossible to carry or truck material across this space except at the point at which the transfer-table happens to be located or around the ends of the pit.

Another serious difficulty and source of inconvenience and loss incident to the usual construction is that all tracks must terminate at the pit edge. Thus the main or traffic lines must avoid the pit and pass around its ends. The same is practically the case with yard-lines. In other words, the pit of the transfer-table, and consequently the shops served thereby, must be so placed as to avoid the necessity of being crossed. This brings about conditions which frequently render it impossible to locate shops at many otherwise desirable situations and renders it frequently necessary to locate them in situations not wholly desirable.

Another object of my invention is to avoid these undesirable conditions and to so construct a transfer device that it will not interfere with traffic of any description at any point in the path of the transfer-table. Besides these inconveniences the presence of this abrupt-edged depression is a constant menace and ever present source of danger, necessitating continual precautions and a fruitful cause of accidents to pedestrians, teams, and rolling-stock.

One of the most unsatisfactory conditions inherent in the present form of transfer device and the one which may be considered as the most important object of this invention to avoid is the necessity of employing the transfer-table in all cases where it is desired to move rolling-stock or other heavy objects across the path of the transfer-table, even though transverse movement is not required—that is, in those cases where it is only desired to pass directly across the pit or path of the transfer-table to the continuation of the track on the other side of the pit or path of the transfer-table. In other words, as at present constructed in order to cross the area served by the transfer-table at normal level it is necessary to employ the transfer-table. The loss of time, expense, and inconvenience of this state of affairs is obvious.

The combined objects, therefore, of the present invention are to avoid each and all of the stated difficulties and also to render the area affected by the transfer-table substantially as available as any other area or as available as though no transfer device occupied or

utilized the area; further, to limit the necessity for the employment of a movable transfer device to cases in which it is desired to transfer rolling-stock from a track to one other than a continuation.

Still another difficulty and cause of delay and inconvenience with the present form of transfer-table is the liability to obstruction from snow, which drifts into and is caught by the pit depression, rendering it practically impossible to operate the table till the snow is cleared away from the whole course.

Another object of the present invention is therefore to provide such a construction as will reduce the difficulty just referred to to a minimum by eliminating the catchment-basin formed by the open pit.

Stated generally, this invention consists in providing a suitable surface at substantially normal level either at intervals or over substantially the whole of the area included within the way, course, or path of the transfer-table, this surface being of such character as to permit of ordinary surface, pedestrian, wheel, or track traffic using the area occupied by the transfer-table path.

In the invention, as illustrated by the accompanying drawings, both transfer-table and the transfer-table pit have a form and construction differing quite widely from those at present in use. The pit instead of being a large depressed open area is shown as a series of parallel troughs, beamways, or channels each inclosed with the exception of a narrow slot at the top. Thus the term "pit," commonly and appropriately applied to the depressed area occupied by the ordinary transfer-table, will be used to convey the more generic idea of the way, course, or path provided for the travel of the transfer-table, whether this be somewhat above or below or practically at the normal level of the surrounding surface.

The transfer-table as illustrated for the purpose of the present disclosure, showing a preferred form of construction, is suggestive of an ordinary transfer-table. The main beams, which are longitudinal of the transfer-tracks, are, however, located above instead of below the normal surface of the ground. They rest upon the transverse tie or track beams. Supporting-wheels are provided for the transfer-table, which may rest on tracks above or below the normal surface of the ground. Any ordinary form of motor may be employed, such as is at present used for transfer-tables, and as this does not come particularly within the scope of the present invention motor means have only been indicated in a general manner.

A more detailed description will now be given of my preferred form of construction and certain modifications thereto, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of one end of the transfer-table path, showing transfer-table. Fig. 2 is a section through Z Z of Fig. 1. Fig. 3 is a section through Y Y of Fig. 1. Fig. 4 is a section through X X of Fig. 1 on a larger scale. Fig. 5 is a plan view of a track crossing the transfer-table way or path on an enlarged scale. Fig. 6 is a section through W W of Fig. 5. Fig. 7 is a detail, on enlarged scale, of hinged section of track or apron raised into position to coöperate with the transfer-table. Fig. 8 is a section through V V of Fig. 7. Fig. 9 is a detail, on enlarged scale, of a modified form of transfer-table-supporting wheels. Fig. 10 is an end view of Fig. 9, showing section of a portion of road-bed and beamway. Fig. 11 is a detail, on enlarged scale, of a portion of a modified form of transfer-table with motor connections. Fig. 12 is an end view of Fig. 11, showing section of a portion of road-bed and beamway.

Referring to the drawings, A is a portion of a traveling transfer-table.

B is a portion of a transfer-table pit, way, course, or path for the traveling transfer-table.

C is a yard or other track crossing the path of the transfer-table.

D is an apron or movable or hinged section of track.

E is a stationary transfer-track.

F indicates a motor of any suitable form.

The transfer-table A preferably consists of longitudinal main beams 1, suitably braced. They rest upon transverse beams 2 (shown in the drawings as **I**-beams) of considerable depth, which are partly above and partly below the normal surface of the transfer area. Tracks 3 are provided, preferably intermediate of the beams 1, secured to and upon the transverse beams 2.

As the transfer-table and transfer-tracks thereon have frequently to support very heavy weights, supplementary longitudinal beams 4 may be provided parallel and adjacent to each of the tracks 3 to form stiffening and supporting members for the tracks. This is shown clearly in the various views, but particularly in Figs. 9 and 11. In these views I have shown an ordinary form of railroad-track, though in some instances it may be desirable to employ a special form having less height, as by this means several inches may be taken from the height of the track-tread, an advantage which will later be made clear. Any appropriate form of lateral bracing may be employed to insure lateral stiffness to the transfer-table. For this purpose I have shown cross-rods 5, which may be of any suitable section and may be secured permanently in place as lattice-work or be provided with means for applying tension, such as turnbuckles, &c.

To support the table A and to facilitate its travel along its path, wheels 6 may be pro-

vided at suitable intervals in the length of the transfer-table and on each side thereof. These wheels may be of the ordinary flanged type, such as are used on other railroad rolling-stock, (shown in Figs. 1, 2, and 3,) or they may be centrally flanged, as shown in Fig. 10, or double-flanged, as shown in Fig. 12, all of which forms have advantages under certain conditions. Plain or flangeless supporting-wheels may also be employed, as shown in Fig. 7. The advantage under certain circumstances of this character of wheel will be more apparent when the coöperating constructions have been more fully described.

The transfer-table pit or course consists, preferably, of a multiplicity of narrow parallel troughs, passage-ways, channels, or beamways 7, suitably spaced apart and preferably closed on top to a narrow opening or slot, as shown in the various views at 8. Various forms of channels or beamways are shown, also of slot construction, to meet varying requirements of situation and adaptations to the other coöperating devices.

Figs. 2, 6, 10, and 12 show a simple and desirable form, in which the channel or beamway is shown as composed of concrete 9, its opening or slot 8 being reinforced and protected by suitable angle slot-irons 10. Fig. 10 shows a concrete and metal form of channel construction, the slot-irons being of suitable form to serve as rails for the supporting-wheels of the table. These rail slot-irons 11 may be secured to suitable metallic supports 12, embedded in or anchored to the concrete of the channel. In Fig. 12 the channel is shown, as in Fig. 10, as of concrete and metal construction. In this case, however, it is provided with a suitable metallic table-supporting rail 13, shown as resting upon a plate 14, partly embedded in the concrete.

Fig. 4 shows a special form of channel provided with substantially vertical inside walls which maintain this character to the surface of the ground. In this form the slot is formed by removable pieces 15. This form of channel is particularly adapted to be used at one or both ends or at such a location in the path of the transfer-table at which it is desirable to remove it from the pit for the purpose of repairs. Substantially this form of construction is indicated in Fig. 1 at the upper end of the sheet.

It is advisable that the bottom of the channel be given a slight downward incline, preferably to that part having section shown in Fig. 4, which can then act as a drainage-sump from which accumulated water can be removed by any suitable means or carried off by pipes if the lay of the ground permits their use. This is indicated in Figs. 3 and 4 at 16.

The rails 13 for the transfer-table wheels are usually placed on the normal level of the ground, as shown in the views.

Though in the various views the channels or beamways are shown of concrete and metal constructions, they may be made of other materials—as, for example, wholly of metal, or of wood, or of a combination of these or any other material suitable for the purpose.

The number of channels and their length is a matter which is to be determined by the requirements, the constructions which I have illustrated being of such character that the width and length either of the transfer-table or the transfer-table pit, way, course, or path is not limited thereby.

The track C may be a yard or through track crossing the path of the transfer-table and of which there may be any desired number having practically any direction with reference to the path of the transfer-table. The transfer-table may coöperate to transfer rolling-stock to or from any of these tracks. As, however, the tracks on the transfer-table, inasmuch as they pass over such crossing tracks, must be a few inches above them, means must be provided to admit the wheels of such rolling-stock to readily roll from the tracks abutting on the transfer-table path to the rails 3 of the table. Of course for such rails as are indicated at E, whose function is solely to serve the transfer-table, all that is necessary is to give a slight incline upward to such rails sufficient to bring their ends level with the ends of the transfer-table tracks. This is shown in Fig. 2 at E. It is desirable, however, that many of the tracks should be available for other purposes than simply coöperating with the transfer-table and should perform the ordinary functions of yard and main tracks. When such is the case, the construction shown in Figs. 7 and 8 is preferable. In this form the level of the transfer-table path and the transverse tracks is preferably lowered a couple of inches below the ends of the tracks abutting on the path—that is to say, the continuations of the crossing tracks and a simple device D is provided, which enables the ends of such rails 17 to be raised or lowered automatically and by this means to coincide either with the tracks C or the tracks 3 when the latter are brought into endwise alinement. To permit the member D to perform the double function just referred to of serving as a continuation of the tracks C or the tracks 3, it is constructed as follows, reference being had particularly to Figs. 7 and 8.

A short length of track 17 is hinged to the ends of the permanent track 18 at 19. These hinged ends forming continuation of the ordinary track are suitably braced and stiffened to form a hinged apron of the two lengths of track 17. They are preferably formed of railroad-iron with an unusually deep web for the sake of strength and rigidity, with lateral braces 20 and tension-ties 21. A supporting-pier 22 is provided upon which they normally rest. Any suitable means, either hand or

power, may be provided to raise the apron D into engagement with the tracks of the transfer-table. For this purpose I have shown a simple and convenient device consisting of a double-ended track 23. (Shown in Fig. 8 as a length of angle-iron bolted to the side of the outermost I-beam 2 of the transfer-table.) This track 23 is preferably made with a depressed central portion 24. The track 23 is so placed as to engage in passing with the under side of the apron D, and thus raise it to the required level when the tracks 3 are in longitudinal alinement with the tracks 17 and 18. At the point of engagement of the cam-track 23 with the apron a friction-roller 25 may be provided, preferably located midway of the tracks 17. At the highest point of the cam-track, which points are situated directly beneath the tracks 3, and consequently beneath the tracks 17 when these are in alinement therewith, may be placed strong supporting-brackets 26, securely fastened to the I-beams 2 to reinforce the cam-track at this point. The depression 24 is preferably made sufficiently deep to permit the roller 25 to disengage therewith, and consequently permit the ends of the track or a shoe 27, attached thereto for this purpose, to rest upon the brackets 26 when the tracks are in alinement.

A shoe or abutment 28 is provided to engage with the lower inside flange of beam 2 to sustain it against lateral distortion due to the load brought upon it by supporting the apron and its load. Notches 29 are provided in the transverse rails to allow for the passage of the wheels 6.

As the operation of this device is practically the same in its general features as that of an ordinary transfer-table, it is not necessary to lengthly describe its operation, as this will be obvious to those skilled in the art or familiar with the mode of operation of the ordinary transfer-table.

As in the construction shown in Figs. 7 and 8 the tracks on the transfer-table are a few inches above the tracks abutting upon the transfer area, a short description of the operation of the device which connects these tracks is desirable.

Motion is given to the transfer-table by any of the ordinary means at present in use. As the transfer-table approaches the tracks supplied with the apron D the cam-track 23 engages with the roller 25 of the apron, and continued motion of the transfer-table raises this roller and apron till the highest point of the cam is beneath the roller. Continued motion of the transfer-table permits the roller to descend into the depression of the cam-track, thus lowering the apron again until the tracks of the table are in alinement with the tracks of the apron. The roller disengages from the incline of the depression, and thereby deposits the end of the apron-tracks upon the brackets 26. At this point the forward motion of the transfer-table ceases and it is in position to receive rolling-stock from the track 18. It is carried in the usual manner to its desired location and removed from the transfer-table either by a similar apron or onto a permanent track having a suitable incline, as is described with reference to the construction shown at E.

As will be seen from Fig. 6, it is not necessary that the area of the transfer-table path should be below the normal level, as the apron in its lowermost position may be horizontal and the track crossing the transfer-table path at the same level as the tracks which abut thereon. In this case, however, the movement of the apron will be all above the normal level of the track to which it is hinged and that crossing the transfer-table path. Again, the level of the transfer-table track may be the same as that of the tracks abutting the transfer-table path, in which case the apron in its normal position will have a downward incline from the tracks 18 to the tracks crossing the transfer-table path. As indicated in Figs. 7 and 8, I prefer to give a slight depression to the tracks crossing the transfer-table path, so that the apron in its normal position has a slight downward incline. In other words, the incline of the apron is divided between its position of rest and its position when serving the transfer-table.

In the description heretofore of the transfer-table I have described as a portion of its construction longitudinal beams 1. These are not essential to its construction, for if each of the transverse beams 2 is supplied with supporting-rollers instead, as is shown in Fig. 1, alternate ones being so supplied, the beams 1 may be dispensed with.

As will be seen by comparing Fig. 6 and Fig. 7 at the table-supporting rail 13, there is a notch 29 in transverse rail of Fig. 6 which is absent in Fig. 7. This is to accommodate the flange of the table-supporting wheels. The employment of a plain supporting-wheel, as is shown in Fig. 7, obviates the necessity for this notch and is in consequence a stronger construction so far as concerns the transverse rail where it overhangs the beamway. The flanges to these wheels are not necessary ordinarily, as the slot-irons in coöperation with the beams 2 serve the same function as the flange and rail in preventing endwise displacement of the table.

The central flanged wheel likewise avoids the notching of the crossing rails and, further, dispenses with surface table-rails other than the slot-irons. The central flanged wheel when employed in the slot also performs the valuable function of preventing tendency of the slots to close by reason of the load thereon. These desirable qualities inhere also in the construction shown in Fig. 12, in which

the table-track is placed in the beamway or channel. In this case the pressure is removed entirely from the slot-irons, while the necessity for a notch in the crossing rails is also obviated. The disadvantage, however, of this latter construction is that the running-gear is less easy of access and the beamway is necessarily larger and more expensive.

As this invention relates to constructions of large size involving great weights of material and also a great range of size, variations in construction will naturally suggest themselves to meet the varying circumstances and conditions of operation. For example, if the distance between the end tracks to be served by the table is extreme the cost of the rails which support the table would be a factor in determining its construction, as the beams 1 would weigh and cost less than the extra rails necessary when the beams 1 are omitted. Again, in case of transforming a transfer-table as ordinarily constructed into one in accordance with the present invention and under circumstances where but few transverse tracks are needed it might be desirable that the slotted channels extend only through the foundations or roadway of the crossing tracks.

Many other changes and modifications will readily suggest themselves to mechanics to meet these and other local conditions without departing from the essential nature of the invention. I therefore do not desire to be confined to the form, proportion, or details of constructions herein.

What I claim is—

1. A transfer device for railroad rolling-stock comprising railroad-tracks, a transfer-table coöperating therewith, a longitudinal way, course or pit transverse to the tracks along which the transfer-table travels, said way, course or pit being provided with a surface, other than the transfer-table, at substantially normal track-level adapted to permit of and sustain ordinary traffic crossing the area embraced within the path of the transfer-table, and means for automatically connecting the railroad-tracks with the transfer-table.

2. A transfer device comprising a transfer-table supported upon wheels and provided with tracks, a longitudinal way, course or pit along which the transfer-table travels, said way, course or pit being provided with a surface, other than the transfer-table, at substantially normal track-level, adapted to permit of and sustain ordinary traffic crossing the area embraced within the path of the transfer-table and a track automatically adjustable with the table-tracks.

3. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels consisting of a multiplicity of longitudinal channels, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic transversely crossing the area embraced within the path of the transfer-table.

4. A transfer device comprising a transfer-table supported upon wheels and provided with tracks, a way, course or pit along which the transfer-table travels consisting of a multiplicity of longitudinal channels, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic transversely crossing the area embraced within the path of the transfer-table.

5. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels consisting of a multiplicity of longitudinal slotted beamways, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic transversely crossing the area embraced within the path of the transfer-table.

6. A transfer device comprising a transfer-table supported upon wheels and provided with tracks, a way, course or pit along which the transfer-table travels consisting of a multiplicity of longitudinal slotted beamways, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic transversely crossing the area embraced within the path of the transfer-table.

7. A transfer device comprising a transfer-table supported upon wheels and provided with tracks, said tracks being supported upon transverse beams, a way, course or pit along which the transfer-table travels consisting of a multiplicity of slotted beamways into which the transverse beams downwardly project for a portion of their depth, said beamways being contracted at the top to form a slot narrower than the beamway, and a surface at substantially normal level unbroken except by the narrow slot and adapted to permit and sustain ordinary traffic transversely crossing the way embraced within the path of the transfer-table.

8. A transfer device comprising a transfer-table supported upon wheels and provided with tracks, said tracks being supported upon transverse beams, a way, course or pit along which the transfer-table travels consisting of a multiplicity of slotted beamways into which the transverse beams downwardly project for a portion of their depth, said way, course or pit being provided with a surface at substantially normal level between said beamways, adapted to permit of and sustain ordinary traffic transversely crossing the area embraced within the path of the transfer-table.

9. A transfer device for vehicles comprising a transfer-table having tracks, a way, course or pit along which the transfer-table

travels, tracks transversely crossing the way, course or pit provided with an apron or other movable device where said transverse tracks abut the path of the transfer-table adapted by its automatic movement to alternately connect the table and the crossing tracks.

10. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks transversely crossing the way, course or pit provided with an apron or the like where said transverse tracks abut the path of the transfer-table adapted by its movement to alternately connect the table and crossing tracks and means upon said table adapted to effect the movement of said apron whereby it is brought into operative engagement with the table.

11. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks transversely crossing the way, course or pit and an apron or the like adapted automatically to alternately connect said transverse tracks and the transfer-table.

12. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks abutting the way, course or pit provided with an apron or the like adapted to automatically connect the table and the abutting tracks.

13. A transfer device for vehicles comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks abutting the way, course or pit provided with an apron or the like adapted by its movement to connect the table and the abutting tracks and means upon said table to effect the movement of said apron whereby it is brought into operative engagement with the transfer-table.

14. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks abutting the way, course or pit and an apron or the like adapted to automatically connect said abutting tracks and transfer-table.

15. A transfer device comprising a transfer-table supported upon wheels provided with tracks, a way, course or pit along which the transfer-table travels consisting of a multiplicity of longitudinal beamways provided with tracks for the wheels of the transfer-table, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic transversely crossing the area embraced within the path of the transfer-table.

16. A transfer device comprising a transfer-table provided with tracks, a way, course or pit along which the transfer-table travels consisting of a multiplicity of longitudinal beamways having a slot provided with slot-irons, supporting-wheels for the transfer-table traveling upon the slot-irons, the way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic crossing the area embraced within the path of the transfer-table.

17. A transfer device for railroad rolling-stock comprising a transfer-table, a way, course or pit along which the transfer-table travels and means other than the transfer-table adapted to permit of and sustain traffic crossing said way, course or pit at substantially normal level at all points and a track automatically adjustable with the table.

18. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels transversely to the table's length, said way, course or pit being provided with a stationary surface at substantially normal level adapted to permit of and sustain ordinary traffic crossing the area embraced within the path of the transfer-table and a track automatically adjustable with the table.

19. A transfer device comprising a transfer-table supported upon wheels, a way, course or pit along which said transfer-table travels, said way, course or pit being provided with tracks, portions of which cross its area transversely for the accommodation of rolling-stock and longitudinally for the accommodation of the transfer-table, said various tracks being at substantially normal ground-level and automatic means adapted to connect the transverse tracks with the table.

20. A transfer device comprising a transfer-table supported upon wheels and provided with tracks longitudinal of its length, a way, course or pit along which said transfer-table travels, said way, course or pit being provided with tracks, portions of which cross its area transversely for the accommodation of rolling-stock and longitudinally for the accommodation of the transfer-table, said various tracks being at substantially normal ground-level and automatic means adapted to connect the transverse tracks with the table.

21. A transfer device comprising a transfer-table, tracks upon which the transfer-table travels, stationary tracks at normal level transversely crossing the first-mentioned tracks adapted to support rolling-stock and permit it to transversely cross the path of the transfer-table and slotted channels beneath and transverse to the transverse tracks to receive, and permit the passage of, portions of the transfer-table structure.

22. A transfer device comprising a transfer-table supported upon wheels resting on tracks on the normal surface of the ground, a way, course or pit along which the transfer-table travels, slotted channels to permit the passage of portions of the transfer-table

structure, tracks abutting the way, course or pit and inclines from the abutting tracks to the transfer-table.

23. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks transversely crossing the way, course or pit and an apron or the like adapted to alternately connect said transverse tracks and the transfer-table, said apron normally inclining downward from its pivot when not coacting with the transfer-table.

24. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks transversely crossing the way, course or pit and an apron or the like adapted to alternately connect said transverse tracks and the transfer-table, said apron normally inclining downward from its pivot when not coacting with the transfer-table, and means for effecting the engagement of the apron with the table-tracks.

25. A transfer device comprising a transfer-table having tracks, a way, course or pit along which the transfer-table travels, tracks transversely crossing the way, course or pit and an apron or the like adapted to alternately connect said transverse tracks and the transfer-table, said apron normally inclining downward from its pivot when not coacting with the transfer-table and automatic means for effecting the engagement of the apron with the table-tracks.

26. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels, tracks transversely crossing the way, course or pit, an apron or the like adapted to alternately connect the transfer-table and the transverse tracks and mechanical motor means to operate the apron.

27. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels, tracks abutting the way, course or pit, an apron or the like adapted to alternately connect the transfer-table and the abutting tracks and mechanical motor means to operate the apron.

28. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels, consisting of a multiplicity of longitudinal channels, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic crossing the area embraced within the path of the transfer-table, tracks transversely crossing the way, course or pit, an apron or the like adapted to alternately connect the transfer-table and the transversely-crossing tracks and mechanical motor means to operate the apron.

29. A transfer device comprising a transfer-table, a way, course or pit along which the transfer-table travels, consisting of a multiplicity of longitudinal channels, said way, course or pit being provided with a surface at substantially normal level adapted to permit of and sustain ordinary traffic crossing the area embraced within the path of the transfer-table, tracks transversely abutting the way, course or pit, an apron or the like adapted to alternately connect the transfer-table and the abutting tracks and mechanical motor means to operate the apron.

FRED S. EDINGER.

Witnesses:
W. H. SMYTH,
JESSE R. EOFF.