(No Model.) 2 Sheets—Sheet 1.

W. F. TURNBULL & J. C. COUNCILL.

WHEEL GUIDE FOR RAILROAD CARS.

No. 493,666. Patented Mar. 21, 1893.

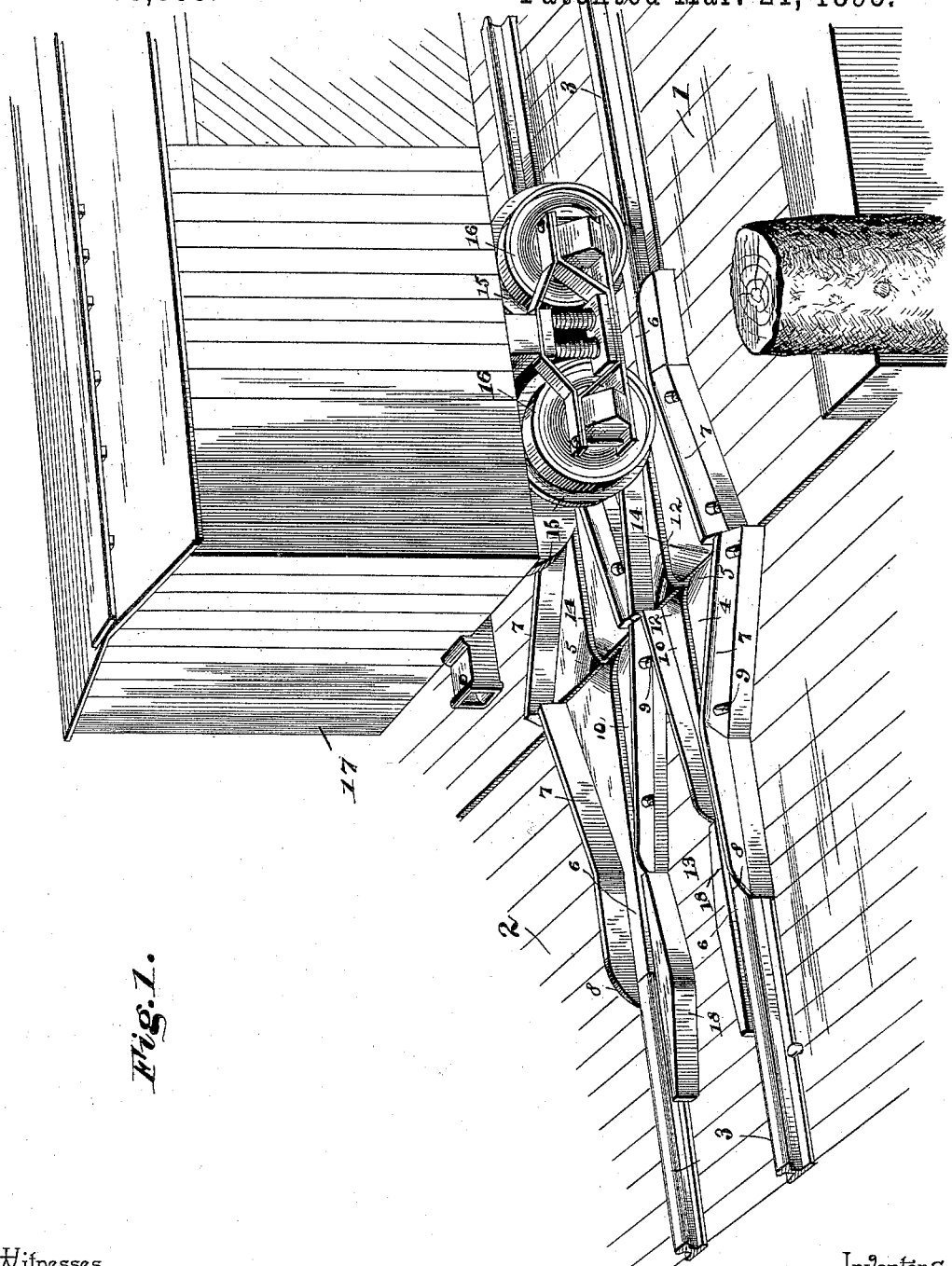

Fig. 1.

Witnesses
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(No Model.) 2 Sheets—Sheet 2.

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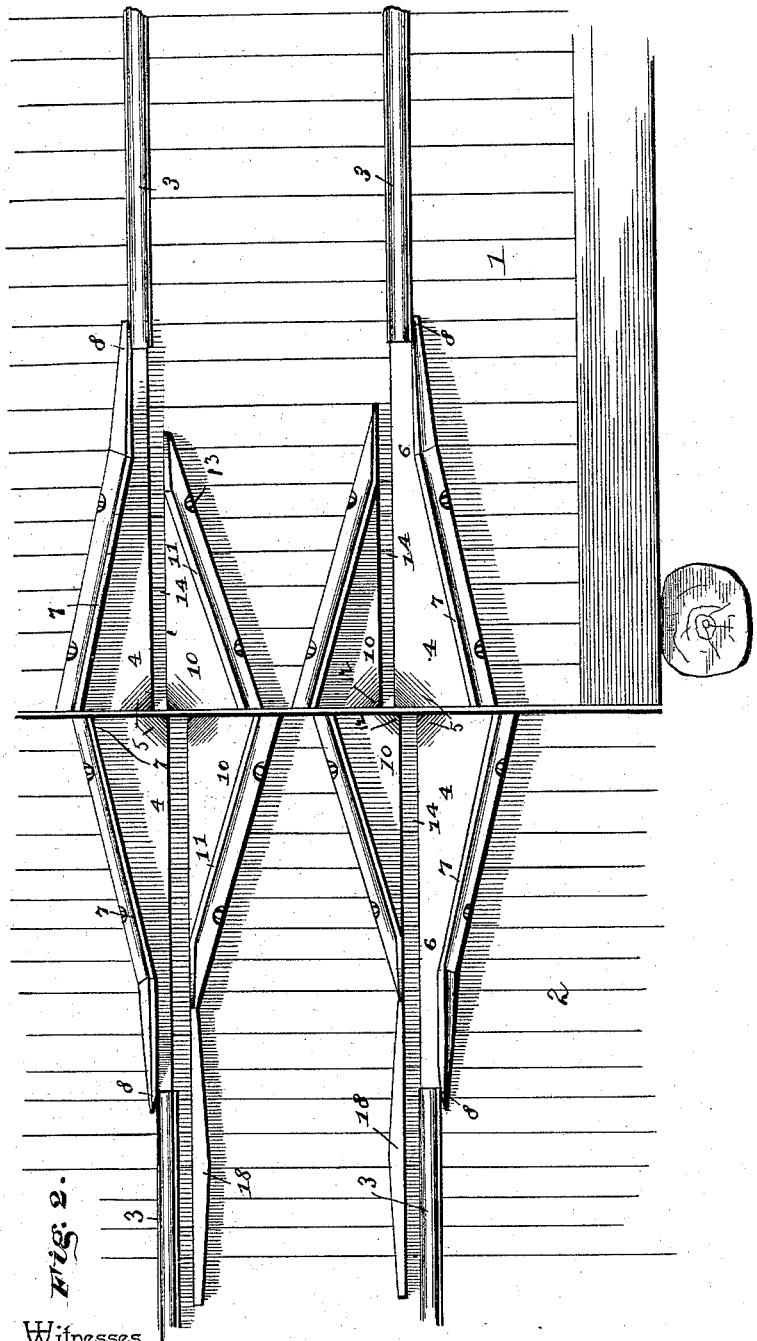

Fig. 2.

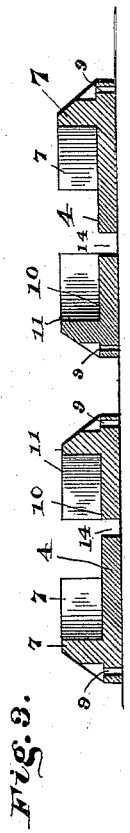

Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM F. TURNBULL AND JULIUS C. COUNCILL, OF NEWPORT NEWS, VIRGINIA.

WHEEL-GUIDE FOR RAILROAD-CARS.

SPECIFICATION forming part of Letters Patent No. 493,666, dated March 21, 1893.

Application filed June 21, 1892. Serial No. 437,475. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM F. TURNBULL and JULIUS C. COUNCILL, citizens of the United States, residing at Newport News, in the county of Warwick and State of Virginia, have invented a new and useful Wheel-Guide for Railroad-Cars, of which the following is a specification.

Our invention relates to wheel-guides for railway cars, the objects in view being to provide guides to be employed at the intersecting or adjacent ends of track-rails located upon floaters, turn-tables, docks, &c.; to so construct the same as to avoid a derailment of a car passing thereover, regardless of the fact of the said rails perfectly aligning.

Heretofore considerable trouble has been experienced in transferring railway cars from docks to ferry-boats and reverse, or upon or from turn-tables, by reason of the fact that the rail-sections did not align.

By our invention, however, we avoid this difficulty, and even though the rail-sections be out of alignment to a considerable extent the car-wheels will be guided from the rail-sections of a ferry-boat or floater to the rail-sections upon the dock, &c.

Referring to the drawings: Figure 1 is a perspective view of a portion of a dock and floater, the rail-sections of which are provided with guides in accordance with our invention, a car being mounted in position. Fig. 2 is a plan view of the same. Fig. 3 is a transverse section.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a dock, and 2 the deck of a floater, ferry-boat, or turn-table, as the case may be, and 3 the pairs of rails upon the dock and the ferry-boat, floater, or turn-table. These rails terminate some distance from the point of meeting between the dock and ferry-boat, and between them are located our guides. The guides are formed of metal, either railroad iron or steel, as may be desired, and we will now proceed to describe them particularly.

The outer guides each consist of a triangular plate 4, whose base, toward its right angle, is preferably cut away slightly, reduced or beveled at 5. From the apex of the triangle extends a rail-portion 6, which, when the guide is in position, forms a continuation of one of the track-rails. The outer or inclined edges of the guides are provided with flanges 7, and extend from their bases to points slightly beyond the beginning of their rail-portions, where their inner faces are slightly cut away or flared, as at 8. The plates 4 are extended slightly beyond the flanges 7 and provided with spike-holes 9, by which they may, through the ordinary railroad spikes passed therethrough, be secured in position upon the ties. These sections, it will be understood, are located so that their inner edges are in alignment with the treads of the rails, and each pair abuts, as will be seen. The inner guide-sections each consist also of a triangular plate 10, which is provided at its outer edge, or near the same, with a flange 11, tapered at its end. At its right-angular portion the plate 10 is slightly reduced at 12, corresponding to the reduced portion 5 with which the base-plates of each of the outer guide-sections are provided. Beyond the flanges 11 the plates 10 are provided with extended portions having spike-holes 13. A guide-section of this description is spiked to the ties a slight distance from the inner edge and opposite each of the outer guide-sections. When in position, the flanges 7 of the outer sections project beyond the outer ends of the flanges 11 of the inner sections. By locating the inner sections a short distance from and parallel with said outer sections intermediate recesses 14 are formed. These recesses are slightly greater than the width of the flanges 15 of the wheels 16 of the car 17. The inner sections employed upon the floater, ferry-boat, or turn-table may be continued by a pair of opposite guard-rails 18, and similar rails may be employed upon the dock.

From the foregoing description, in connection with the accompanying drawings, it will be seen that when the pairs of inner and outer guide-sections are brought together, they will, if they align, form an unbroken continuation of the track-rails, and if they do not align, the wheels will be guided by the flanges 11 and 7 to the narrowest points between said flanges, to which points they are gradually brought, and will be continued along the rail-portions 6, and from thence to the track. By our in-

vention we avoid all possibility of derailment of the cars by reason of non-aligning rails, and also the necessity of such nicety and carefulness of landing at the dock so as to bring the rails in alignment, thus saving both time and labor, as will be obvious.

Having described our invention, what we claim is—

1. The combination with a dock and floater, or their equivalents, and rail-sections upon each terminating short of the meeting points of the sections, of pairs of inner and pairs of outer guide-sections, said inner and outer sections arranged adjacent to each other at the end of each rail and combining to form an intermediate space, each section consisting of a triangular base-plate and provided at their outer edges with flanges which converge toward their outer extremities, substantially as specified.

2. The combination with a dock and floater, or their equivalents, and the rail-sections upon each terminating short of the ends of the dock and floater, of the pair of outer guide-sections each consisting of the triangular plate 4, provided at its outer edge with the flange 7, outside of the same provided with spike-holes and continued at the inner side of the flange to form a rail-portion, and the pairs of inner sections, each of which consists of a triangular base-plate having its edge arranged a slight distance from and parallel with the adjacent edge of the outer section and provided at its outer edge with a vertical flange converging toward the flange of the outer section and outside the same provided with spike-holes, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM F. TURNBULL.
JULIUS C. COUNCILL.

Witnesses:
R. B. CHAPPELLE,
GEO. B. WEST.