C. T. WESTLAKE.

PILOT FOR LOCOMOTIVES AND THE LIKE.

APPLICATION FILED JAN. 20, 1909.

924,709. Patented June 15, 1909.

Fig. 1.

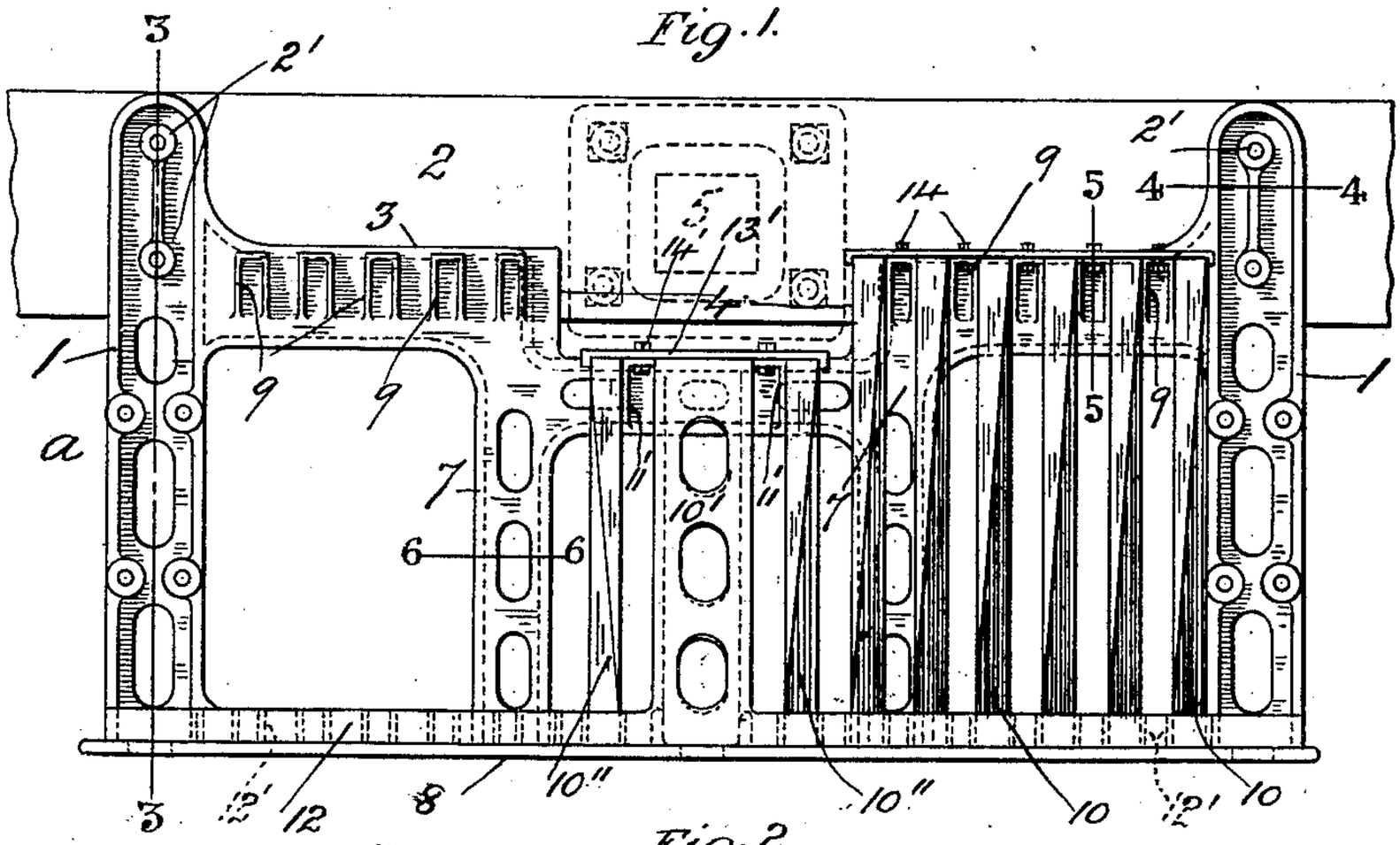


Fig. 2.

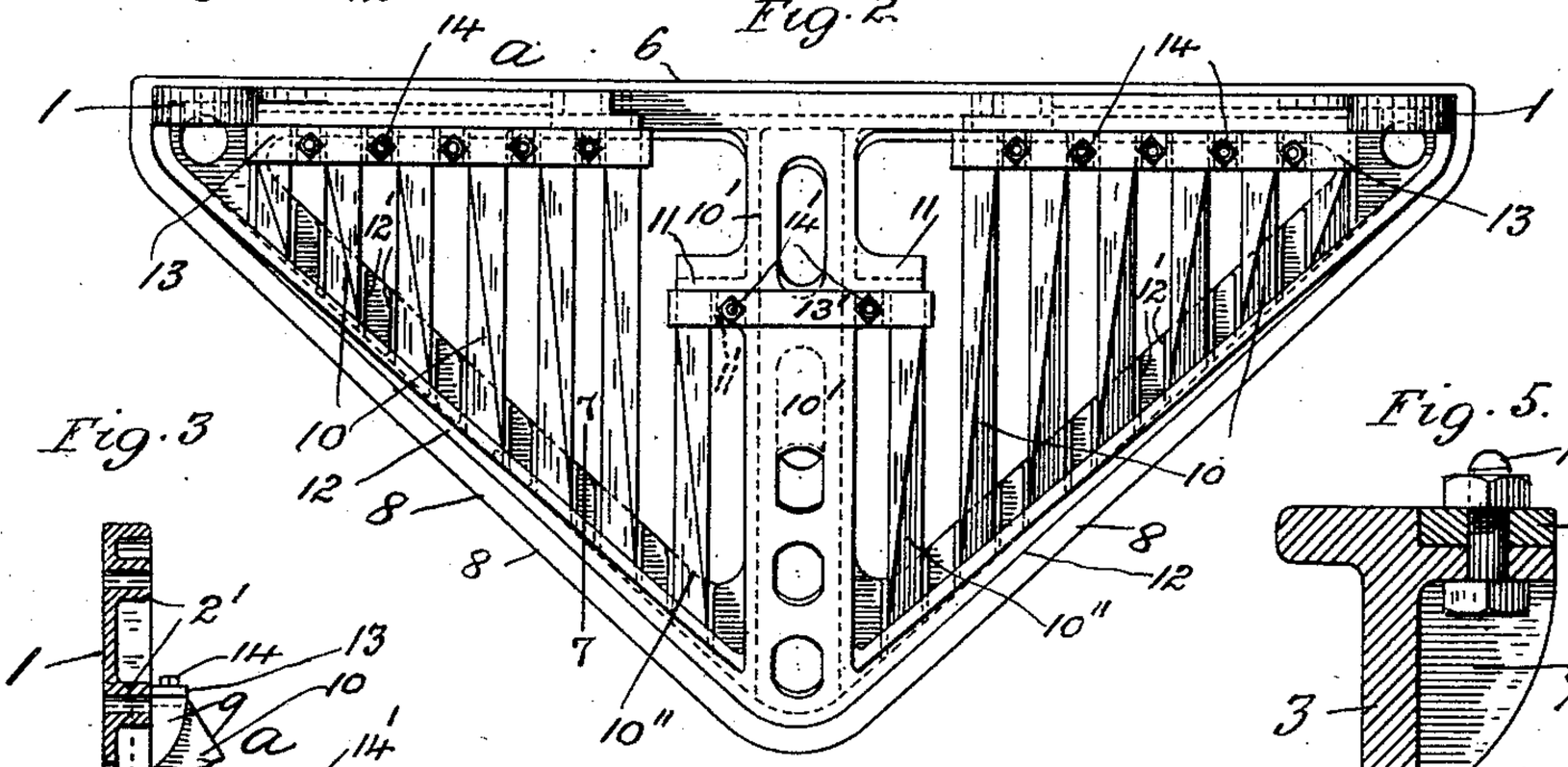


Fig. 3.

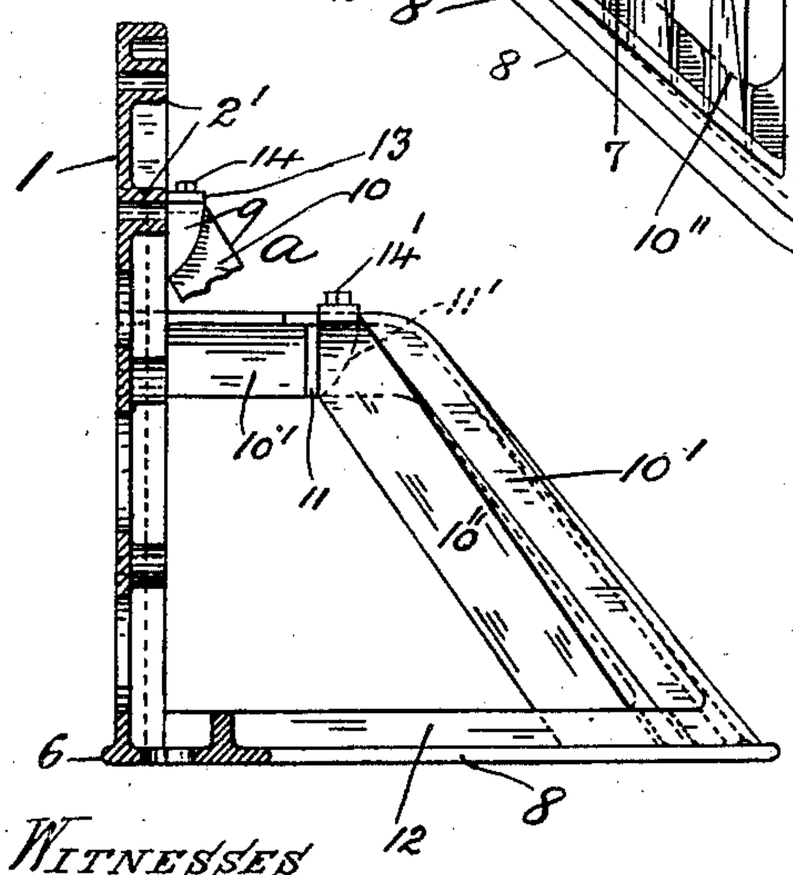


Fig. 4.

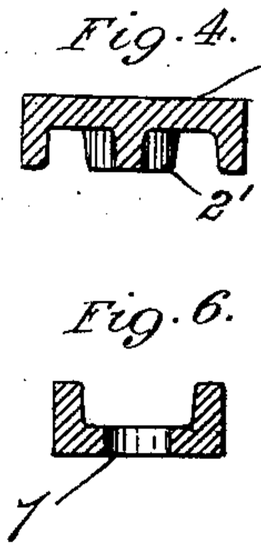
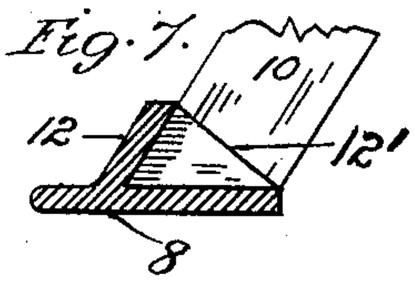


Fig. 5.

Fig. 6.

Fig. 7.



WITNESSES

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PILOT FOR LOCOMOTIVES AND THE LIKE.

No. 924,709. Specification of Letters Patent. Patented June 15, 1909.

Application filed January 20, 1909. Serial No. 473,329.

To all whom it may concern:

Be it known that I, CHARLES T. WESTLAKE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Pilots for Locomotives and the Like, of which the following is a specification.

My invention relates to the pilot of a locomotive, electric car, or other motor vehicle, which ordinarily consists of a triangular wedge-shaped wooden framework having a top and bottom bar connected together by a series of inclined bars or slats, and the whole secured to the pilot-beam or end sill by bolts, and my invention has for its object to provide a strong, rigid, and durable composite metallic and wood pilot.

It consist in features of novelty as hereinafter described and claimed, reference being had to the accompanying drawing forming part of this specification, whereon,

Figure 1, is a front elevation of my improved pilot as applied to a locomotive buffer-beam or end sill (broken away) having the coupler draw-bar pocket (indicated by dotted lines in Fig. 1) attached thereto, and omitting the inclined bars or slats of the pilot to the left of its middle portion; Fig. 2, a top plan view of the pilot detached from the beam; Fig. 3, a vertical longitudinal section through the pilot on line 3, 3, in Fig. 1, showing the middle metallic, and succeeding wood inclined bars or slats thereof, and omitting the remaining slats of the pilot to the left of its longitudinal center for clearness of illustration; Fig. 4, a horizontal section to enlarged scale through one of the side upright members of the pilot on line 4, 4, in Fig. 1; Fig. 5, a vertical transverse section to enlarged scale through the upper horizontal member thereof on line 5, 5, in Fig. 1; Fig. 6, a similar view to Fig. 4, through one of the middle upright members of the pilot on line 6, 6, in Fig. 1, and Fig. 7, a cross section to enlarged scale through the base of the pilot on line 7, 7, in Fig. 1.

Like letters and numerals of reference denote like parts in all the figures.

a represents my improved composite metallic and wood pilot having its metallic portion or framework composed preferably of cast steel, integral throughout, and consisting preferably of two opposite upright channel-shaped posts or members 1 arranged in the same plane and parallel to each other at a suitable distance apart according to the width of the pilot, with their flanges outward or toward the front of the pilot *a* and united archwise together at the top, the web of each member 1 being adapted on its rear face for a suitable distance from the top, to bear against the front side of the pilot-beam or end sill 2, and having suitable bosses 2′ on its front face, which with the web are perforated for the passage therethrough and through the beam 2 of bolts (not shown), whereby the pilot *a* is firmly secured to the beam 2.

The posts or members 1 are connected together at a suitable distance from the top by a horizontal preferably, channel-shaped cross bar or member 3 having its web vertically arranged and its flanges projecting rearwardly therefrom, the cross bar 3 for a suitable distance on each side of the longitudinal center of the pilot *a* being formed with a pocket or depressed portion 4 which is adapted to straddle from below the bottom portion of the coupler draw-bar pocket 5 (indicated by dotted lines in Fig. 1) for allowing clearance thereto, and for permitting free movement of the coupler draw-bar (not shown) connected therewith. Furthermore, the posts or members 1 are united to each other at the bottom by a preferably flat horizontal cross bar 6, which is connected to the upper cross bar 3, preferably at and adjacent to the depressed portion thereof, by two upright preferably channel-shaped members 7, one on each side of the longitudinal center of the pilot *a*, which are in the plane of the cross bar 3, and from the bottom cross bar 6, preferably beneath the upright members 1, project horizontally forward two converging bars 8 which unite with each other at a suitable distance from the bottom cross bar 6 and form therewith the base of the pilot *a*.

On the front side of the upper cross bar 3 and integral therewith, except along its depressed portion 4, are formed a series of brackets 9, having upright lateral faces and suitably spaced apart for the close insertion between them of the inclined wood bars or slats 10 of the pilot *a* as hereinafter more particularly referred to; while extending be-

tween and uniting the depressed portion 4 of the upper cross bar 3 to the bottom converging bars or base 8 of the pilot *a* is a longitudinal member 10′ which is adapted to form the middle slat of the pilot *a*, the middle member 10′ being horizontally arranged for a suitable distance from the upper cross bar 3, and thence inclined downward and forward to its junction with the base 8.

The horizontal portion of the middle metallic member or slat 10′ is formed on each side at a suitable distance from the cross bar 3 with an upright flange 11 having a forwardly projecting bracket 11′ at right angles thereto and forming therewith a bearing for the upper end portion of the wood slat 10″ adjacent to the middle slat 10′, as hereinafter more particularly referred to.

The base 8 of the pilot *a* is formed along the top preferably, for its entire length and at a suitable distance from its inner edge, with a rib 12 which is inclined inward and connected with the inner portion of the base 8 by a series of upright triangular-shaped brackets 12′ adapted to form pockets or bearings for the lower end portions of the inclined wood slats 10 and 10″.

In assembling the wood slats 10 on each side of the middle metallic slat 10′, they are first properly adjusted with their upper and lower ends inserted between the brackets 9 of the upper cross bar 3 and the brackets 12′ of the base 8 respectively. A cover bar or cap 13 is then placed across the upper ends of the slats 10 and across the tops of the intermediate brackets 9 to which it is secured by bolts 14 (screws or otherwise) and the slats 10 thereby firmly held in place, the cover bar 13 at each end overhanging and holding the end and inner slat 10 as shown. In like manner the slats 10″ are held in place by a cover bar 13′ secured to the brackets 11′ by the bolts 14′, and by the overhanging ends of the bar 13′.

By the above construction a strong, rigid, and durable metallic framework or body for the pilot is obtained, and by disconnecting the cover bars 13, 13′, the slats 10 and 10″ are readily removed and replaced when necessary without interference with the body of the pilot *a;* moreover, by connecting the upper cross bar 3 to the base 8 by the longitudinal metallic member or middle slat 10′ along the longitudinal center of the pilot *a*, the framework or body of the latter is braced thereat and the stability of the entire structure maintained.

What I claim as my invention and desire to secure by Letters Patent is:—

1. The combination with a locomotive end sill having a coupler draw-bar pocket attachment, of a pilot having a cast metal framework integral throughout adapted to be fixed to the said sill, and having a depressed portion adapted to straddle from below, but clear of the bottom portion of the said pocket and its appendages, a series of wood slats, and means for removably holding the slats to the said framework, substantially as described.

2. The combination with a locomotive end sill having a coupler draw-bar pocket attachment, of a pilot having a cast metal framework integral throughout adapted to be fixed to the said sill, and having a depressed portion adapted to straddle from below, but clear of the bottom portion of the said pocket and its appendages, pockets formed in the said framework, a series of wood slats adapted to be inserted endwise in the last-named pockets, and means for removably holding the said slats to the said framework, substantially as described.

3. The combination with a locomotive end sill having a coupler draw-bar pocket attachment, of a pilot having a cast metal framework integral throughout and comprising two parallel upright side members adapted to be fixed to the said sill, an upper transverse member uniting the upright members together and having a depressed portion adapted to straddle from below, but clear of the bottom portion of the said pocket, a bottom transverse member uniting the upright members together, two horizontal members converging from the bottom member and adapted to form the base of the pilot, a suitably shaped longitudinal member projecting forward partway horizontally from the said depressed portion, and thence inclined forward and downward to its junction with the base, and adapted to form the middle slat of the pilot, pockets formed on the said upper member and base respectively, a series of wood slats adapted to be inserted endwise in the last-named pockets, and means for removably holding the slats to the said framework, substantially as described.

4. The combination with a locomotive end sill having a coupler draw-bar pocket attachment, of a pilot having a cast metal framework integral throughout and comprising two parallel upright side members adapted to be fixed to the said sill, an upper transverse member uniting the upright members together and having a depressed portion adapted to straddle from below, but clear of the bottom portion of the said pocket, a bottom transverse member uniting the upright members together, two horizontal members converging forward from the bottom member and adapted to form the base of the pilot, a suitably shaped longitudinal member projecting forward partway horizontally from the said depressed portion and thence

inclined forward and downward to its junction with the base, and adapted to form the middle slat of the pilot, pockets formed laterally on the said longitudinal member and in the base respectively, a series of wood slats adapted to be inserted endwise in the last-named pockets, and means for removably holding the slats to the said framework, substantially as described.

CHARLES T. WESTLAKE.

Witnesses:
HAL C. BELLVILLE,
EDWARD W. FURRELL.