No. 877,281. PATENTED JAN. 21, 1908.

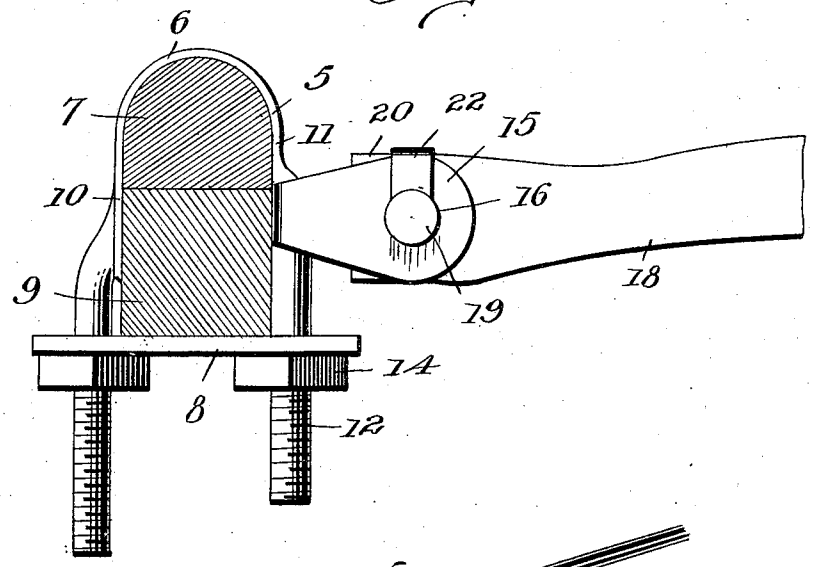
D. W. ALLEN.

THILL COUPLING.

APPLICATION FILED JUNE 6, 1907.

2 SHEETS—SHEET 1.

Fig. 1.



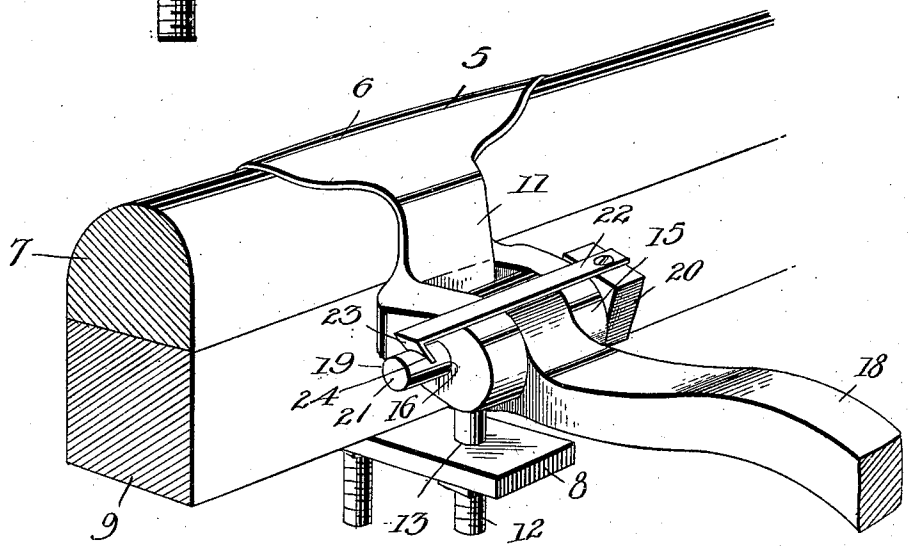


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

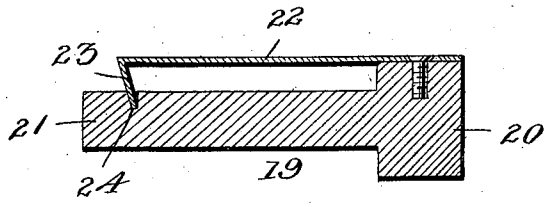
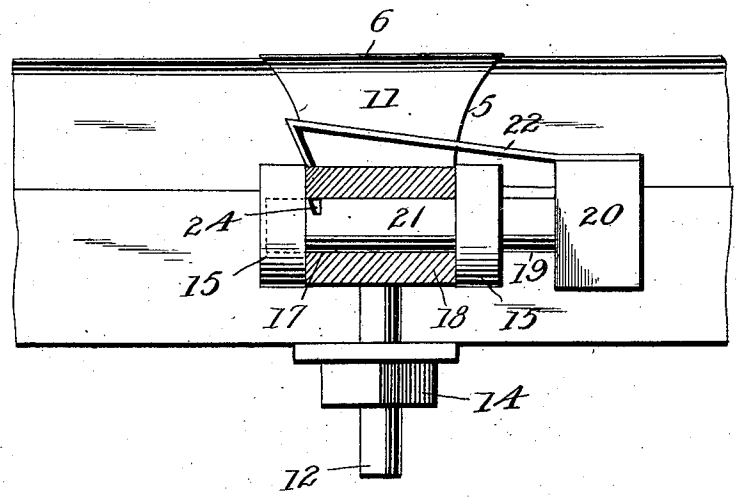


Fig. 4.



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DAVID W. ALLEN, OF OSAKIS, MINNESOTA.

THILL-COUPLING.

No. 877,281. Specification of Letters Patent. Patented Jan. 21, 1908.

Application filed June 6, 1907. Serial No. 377,527.

To all whom it may concern:

Be it known that DAVID W. ALLEN, citizen of the United States, residing at Osakis, in the county of Douglas and State of Minnesota, has invented certain new and useful Improvements in Thill-Couplings, of which the following is a specification.

This invention relates to couplings, and more particularly to thill couplings and has for its object to provide a thill coupling by means of which shafts may be quickly and easily connected with the axle.

Another object is to provide a coupling including a bolt equipped with means for holding it in position, which will be extremely cheap and simple.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation showing an axle and a pair of shafts connected by the present invention; Fig. 2 is a perspective view of the present connection; Fig. 3 is a sectional view of the bolt and tongue; Fig. 4 is a front elevation, the thill being shown in section to illustrate the manner of applying the bolt.

Referring now to the drawings, there is shown a bracket 5, of the usual type, including a top portion 6 resting upon the axletree 7, and a lower portion 8 extending beneath the axle 9. These portions are connected by a rearward portion 10, as shown, and the top portion 6 carries a downwardly extending member 11 which in turn carries a threaded stem 12 projecting through an opening 13 in the portion 8 and having a nut 14 engaged therewith to hold the parts in position.

The member 11 carries a pair of forwardly extending parallel ears 15, provided with alining perforations 16, for registration with an opening 17 in a thill 18. Engaged in the alining openings, there is a bolt 19 including a head 20 and a stem 21 and secured at one end against a face of the head 20, there is a longitudinally extending strap spring 22, having its opposite end portion turned to extend inwardly and diagonally toward the head, as shown at 23. A transverse notch 24 is sawed in the stem 21 of the bolt and receives the free end of the portion 23. As shown, when the bolt 19 is in position, the portion 23 of the spring lies at the opposite side of the ears 15 from the head 20, and thus the bolt is held against disengagement. When the bolt is to be placed in position, its free end portion beyond the notch 24 is engaged in the opening 16 of one of the ears and the bolt is then moved inwardly to bring the portion 23 of the spring into engagement with the ear, when further movement will result in outward movement of the spring to allow free passage of the stem of the bolt into the several openings, until the portion 23 has passed beyond the ears. This portion will then be free to return to its normal position.

What is claimed is:

1. In a coupling of the class described, the combination with separate portions having alining openings therein, of a bolt engaged in said openings and having a head at one end, and a strap spring secured to said head and extending longitudinally of the bolt beyond said separate portions, said spring having an end portion turned laterally and toward the head, said bolt being notched to receive the last named portion of the spring.

2. A coupling bolt comprising a stem having a head at one end and having a notch therein adjacent to its other end, said notch being cut at an angle toward the head, and a spring removably secured at one end to a face of the head and extending longitudinally of the stem and having its outer end turned laterally and toward the head and engaged in the notch in the stem.

In testimony whereof I affix my signature, in presence of two witnesses.

DAVID W. ALLEN.

Witnesses:
S. J. LYONS,
S. M. DONALDSON.