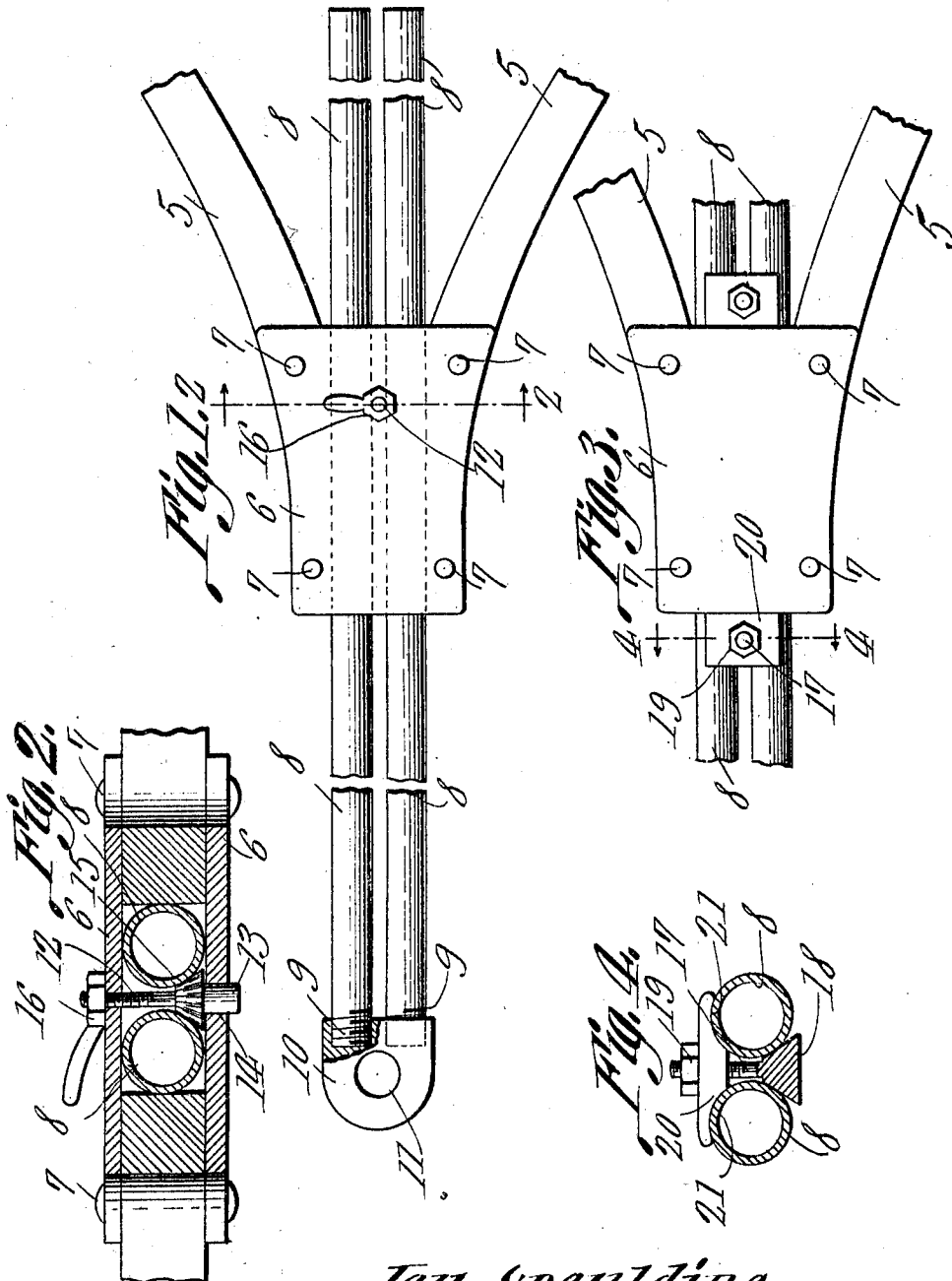


J. SPAULDING.
WAGON REACH.
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988,393.

Patented Apr. 4, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

JAY SPAULDING, OF YUMA, ARIZONA TERRITORY.

WAGON-REACH.

988,393.

Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

Be it known that I, JAY SPAULDING, a citizen of the United States, residing at Yuma, in the county of Yuma and Territory of Arizona, have invented a new and useful Wagon-Reach, of which the following is a specification.

It is the object of the present invention to provide an improved construction of reach for wagons, one aim of the invention being to provide an improved reach which may be employed in connection with the front and rear hounds and axles and associated parts of an ordinary wagon and will permit of adjustment of the rear hounds with respect to the front hounds so as to be positioned at any desired distance therefrom.

A further aim of the invention is to provide a novel form of reach and novel means for connecting the same with the ordinary rear hounds whereby any desired adjustment may be secured and the reach will be firmly held against rattling.

A further aim of the invention is to provide a reach so constructed and assembled with the hounds and axles of the wagon as to positively prevent torsional movement of the hounds.

With the above and other objects in view, the invention consists in the general construction and arrangement of parts shown in the accompanying drawings, in which,

Figure 1 is a top plan view of one form of reach embodying the present invention, the same being shown as applied to the rear hounds of a wagon. Fig. 2 is a vertical transverse sectional view on the line 2-2' of Fig. 1. Fig. 3 is a view similar to Fig. 1 illustrating a slight modification of the invention. Fig. 4 is a view similar to Fig. 2 taken on the line 4-4 of Fig. 3.

In the drawings, the rear hounds are indicated by the numeral 5 and at their forward ends are secured together in spaced relation by the usual plates 6 through which plates and the hounds are passed the usual securing bolts 7. This is the usual manner of securing the forward ends of the hounds together and the space afforded between the upper and lower ones of the plates 6 and the said forward ends of the hounds 5 is designed to receive the reach which ordinarily is of wood. In the present instance however the reach embodies a pair of tubular beams indicated by the numeral 8 and

at their forward ends threaded as at 9 into a cap 10 which is preferably flat on top and bottom and is formed with a vertically aligned opening 11 through which the usual king bolt is to be passed for securing the reach to the front axle of the wagon. As illustrated in the drawings, there are two of the tubular beams 8 and these beams extend in parallelism and are slightly spaced apart and at their rear ends are not connected. In the form of the invention shown in Fig. 1 of the drawings, a bolt 12 is formed at its lower end with an enlarged cylindrical head 13 which fits in an opening 14 in the lower one of the plates 6. Directly above this head 13, the bolt 12 is formed with a frusto-conical head 15 which bears between the two tubular beams 8, these beams being inserted through the space between the plates 6 and the front ends of the hounds 5, heretofore referred to. Upon the upper end of the bolt 12 there is threaded a hand nut 16 which may be tightened to bear against the upper face of the upper plate 6 and thereby draw upwardly upon the bolt 12 wedging the frusto-conical portion 15 of the bolt between the tubular beams 8 and causing them to bind against the forward ends of the said hounds 5 and against the under side of the upper plate 6. It will thus be understood that by tightening the hand nut 16, the reach comprising the tubular beams 8 will be firmly held connected to the rear hounds 5 although the rear hounds may be adjusted upon the beams in the direction of their length by loosening this hand nut and securing in the usual manner the desired adjustment.

Where the plates 6 are not formed with openings corresponding to the openings through which the bolt 12 engages in the form of the invention shown in Figs. 1 and 2 of the drawings, clamps such as illustrated in Figs. 3 and 4 of the drawings may be equally as well employed and each of these clamps embodies a bolt 17 having a conical head 18 and having threaded thereon a nut 19. The threaded shank of the bolt 17 is inserted through a clamp plate 20 having its under side at its ends recessed as at 21 to engage with the upper sides of the tubular beams 8, it being understood that by tightening the nuts 19, the bolts will be drawn up and their conical heads 18 will wedge between the tubular beams thereby

spreading them in the same manner as they are spread by the conical portion 15 of the bolt 12 heretofore referred to. It is preferable, when employing this latter form of the invention, to position one of the clamps directly in advance of the plates 6 and a second one directly in rear of the plates so that the hounds will be held against both forward and backward movement upon the reach.

It will be observed from an inspection of Fig. 2 of the drawings that the conical portion 15 of the bolt 12 is formed with corrugations or ribs which frictionally engage the tubular beams and serve to hold the bolt against rotation while the hand nut 16 is being tightened and the conical heads 17 of the bolts 18 may be thus formed or may be plain as they are illustrated in the drawings.

What is claimed is:—

1. In running gear, hounds, a reach comprising spaced beams extending between the

hounds, and wedge means between the beams for spreading the same between the hounds.

2. In running gear, hounds, a reach comprising spaced beams extending between the hounds, a plate bearing upon the beams, and a wedge bolt extending between the beams and through the said plate.

3. In running gear, hounds, a reach comprising spaced beams extending between the hounds, a plate bearing upon the beams, a bolt having a threaded shank extending between the beams and a corrugated conical head bearing between the beams, the shank of the bolt extending through the plate and a nut threaded upon the bolt.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAY SPAULDING.

Witnesses:

T. R. SPAULDING,

J. S. WARDEN.