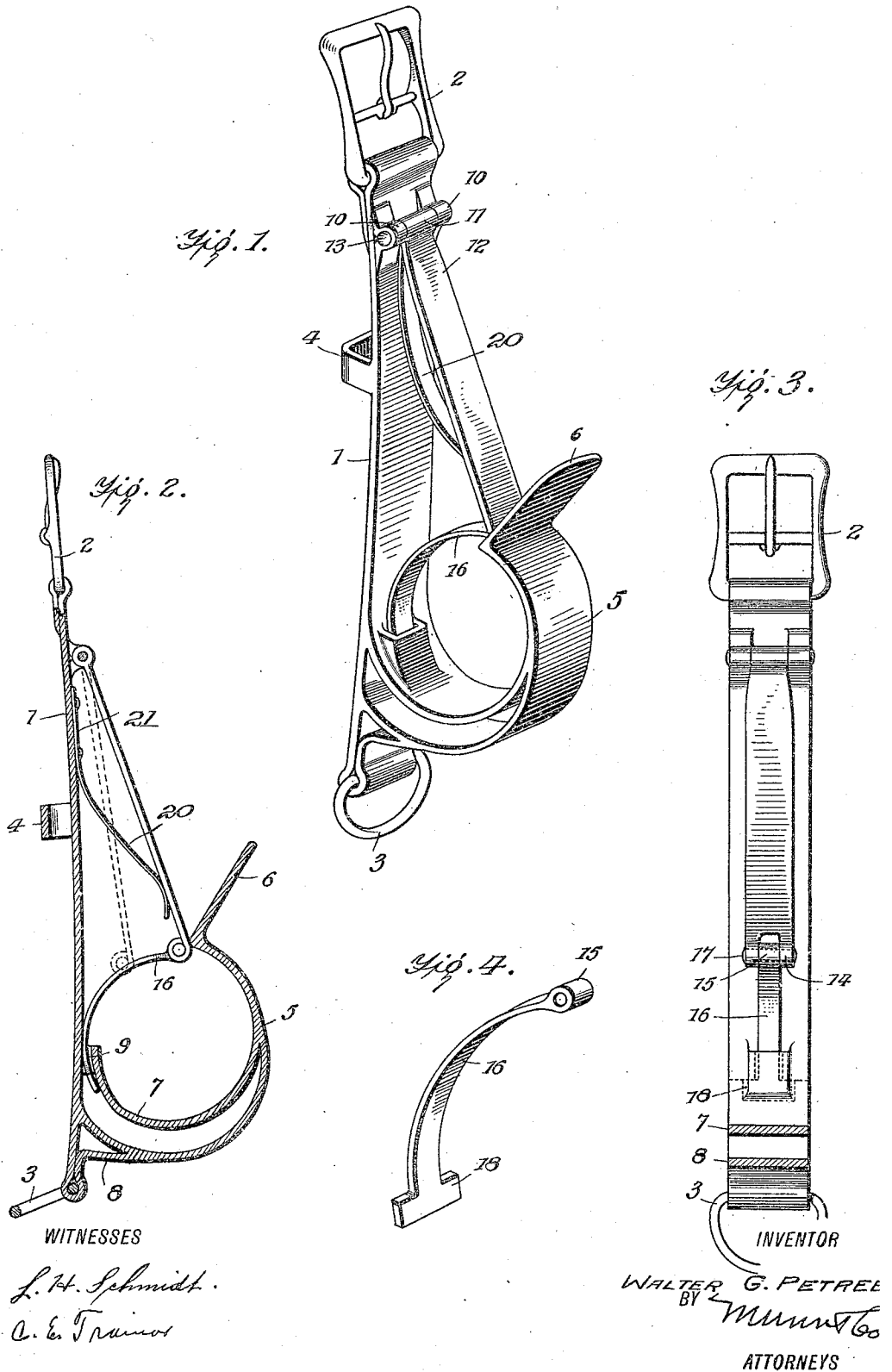


W. G. PETREE.
BUGGY SHAFT TUG.
APPLICATION FILED AUG. 19, 1909.

959,254.

Patented May 24, 1910.



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WALTER, GARFIELD PETREE, OF DANBURY, NORTH CAROLINA.

BUGGY-SHAFT TUG.

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Specification of Letters Patent.

Patented May 24, 1910.

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To all whom it may concern:

Be it known that I, WALTER G. PETREE, a citizen of the United States, and a resident of Danbury, in the county of Stokes and State of North Carolina, have made certain new and useful Improvements in Buggy-Shaft Tugs, of which the following is a specification.

My invention is an improvement in buggy shaft tugs and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of the invention is to provide a device of the character specified, which will obviate the necessity of slipping the tug over the end of the shaft, and wherein the shaft will automatically enter and lock the tug when it is lowered into place.

Referring to the drawing forming a part hereof—Figure 1 is a perspective view of the tug; Fig. 2 is a longitudinal section. Fig. 3 is a side view partly in section, and Fig. 4 is a perspective view of the latch bar.

The embodiment of the invention shown in the drawing, consists of strap or plate 1 of suitable material, to one of whose ends is secured a buckle 2, in any suitable manner and to the other end a ring 3, while intermediate its ends a box loop 4 is provided. Near its lower end, and on the opposite side from the loop, the strap is provided with a keeper 5, which is curved and provided at its free end with an inclined lug 6 forming a guide, for engagement by the shaft. As shown in Figs. 1 and 2 the keeper is braced by upper and lower braces 7 and 8, and the upper one 7 is provided with an opening 9 therethrough. Adjacent to the buckle, the strap is provided with spaced bearings 10, between which is received a bearing 11 on the one end of a bar 12, and the aligned bearings are traversed by a pin or rivet 13 for securing the parts in pivoted relation. The bar, as will be evident from an inspection of Fig. 2 is inclined, so that when the shaft is directed thereagainst by the lug 6, the weight of the shaft will move the bar inwardly against the plate. The lower end of the bar is provided with spaced bearings 14, between which is received a bearing 15 on the end of a curved latch 16, and a pin or rivet 17 traverses the aligned bearings. The opposite end of the latch is engaged with the opening 9 of the brace, as shown in Figs. 1, 2 and 3 and is slidable therethrough. The latch is limited in its upward movement by a cross head 18,

on the end thereof, the said cross head being of greater length than the length of the opening and engaging the sides thereof, when the opposite end of the latch is in engagement with the keeper as shown in Fig. 2.

A plate spring 20 is secured by one end as at 21 to the plate 1, and the free end thereof engages the rear face of the bar to normally retain the latch in the position shown in Fig. 2, that is to close the loop or ring formed by the keeper, and latch, in which the shaft is adapted to rest.

The keeper 5 and the latch 16 form a sectional ring, one of whose sections, the latch, is slidable on the other to form the ring for receiving the shaft, and the movable section is normally retained closed by the spring. The plate forms a support or mounting for the ring, and the lug 6 a guide for directing the shaft against the bar and into the ring, while the bar 12 is a means for moving the movable section of the ring.

In use the tugs are buckled to the billets of the pad by means of the buckle 2, one on each side of the horse, and the loop 4 is for receiving the surplus of the strap or billet after buckling, the said loop being next to the body of the horse.

When hitching, the shafts are raised and the horse is backed thereunder after which they are lowered. The shafts engage the lugs and are guided inwardly against the bars and the weight thereof presses the said bars inwardly against the resistance of the springs, thus sliding the latch or movable portion of the ring open, to permit the shaft to enter the ring.

I claim:

1. A device of the character specified, comprising a plate provided at one end with a buckle and at the other with a ring, a curved keeper on one side of the plate the free end of the keeper being inclined outwardly and upwardly, and spaced apart from the plate, said keeper having an opening at the junction of the plate therewith, a curved latch slidable in the opening and closing the space between the end of the keeper and the plate, said latch having a cross head below the opening, a bar pivoted by one end to the plate and by the other to the latch and a spring between the bar and the plate for retaining the latch in closed position.

2. A device of the character specified, comprising a supporting plate, a curved

- keeper on one side thereof, the free end of the keeper being spaced apart from the plate, and inclined outwardly and upwardly for the purpose specified, a latch slidable on the keeper for closing the space between the end thereof and the plate, a bar pivoted to the plate and to the outer end of the latch, and a spring engaging the bar for retaining the latch in closed position.
3. A device of the character specified comprising a support, a keeper on the support, a latch cooperating with the keeper to form a ring for receiving the shaft, a spring normally retaining the latch in closed position, and a bar pivoted by one end to the support and by the other to the latch, said bar being inclined for the purpose specified,

and a guide on the keeper for directing the shaft against the bar.

4. A device of the character specified, comprising a support, a ring comprising a section fixed to the support, and a section slidable on the fixed section, a bar pivoted by one end to the support and by the other to the movable section of the ring, said bar being inclined for the purpose specified, means for directing the shaft against the bar, and a spring for retaining the movable section in closed position.

WALTER GARFIELD PETREE.

Witnesses:

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