

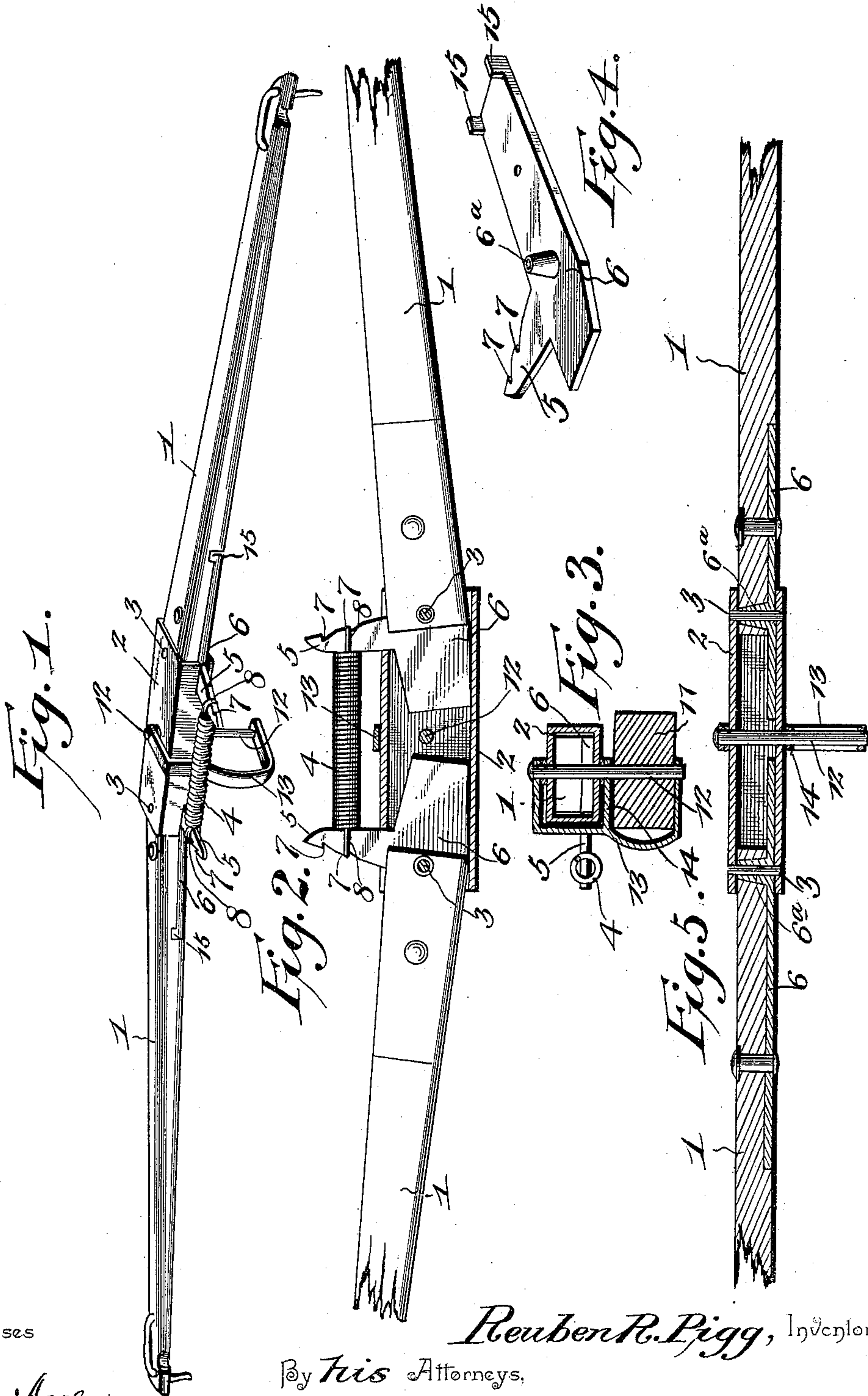
No. 621,503.

Patented Mar. 21, 1899.

R. R. PIGG.
SINGLETREE.

(Application filed Oct. 8, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

REUBEN ROSS PIGG, OF McCOY, OREGON.

SINGLETREE.

SPECIFICATION forming part of Letters Patent No. 621,503, dated March 21, 1899.

Application filed October 8, 1898. Serial No. 693,028. (No model.)

To all whom it may concern:

Be it known that I, REUBEN ROSS PIGG, a citizen of the United States, residing at McCoy, in the county of Polk and State of Oregon, have invented a new and useful Singletree, of which the following is a specification.

The invention relates to improvements in singletrees.

The object of the present invention is to improve the construction of singletrees and to provide a simple and comparatively inexpensive one adapted to yield to the forward movement or pull of a draft-animal and compensate for the jerking motion of a horse, and thereby overcome the irregular and jarring motion of a vehicle.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a singletree constructed in accordance with this invention. Fig. 2 is a reverse plan view of the same, partly in section. Fig. 3 is a sectional view taken transversely of the singletree and showing the same applied to the cross-bar of a pair of thills. Fig. 4 is a detail perspective view of one of the plates of the sections of the singletree. Fig. 5 is a sectional view taken longitudinally of the singletree.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 1 designate sections of a singletree provided at their outer ends with means for attaching a pair of traces to them and pivoted at their inner ends within a central sleeve or casing 2, which forms a central section, by means of vertical rivets or bolts 3. These sections 1 of the singletree have a limited pivotal movement independent of the sleeve or casing to yield to the irregular motion of a draft-animal and are maintained in the position illustrated in Fig. 3 of the accompanying drawings, when the singletree is not subjected to strain, by a coiled spring 4, located in rear of the sleeve or casing and connected with a pair of arms 5, extending rearward from the inner ends of the sections 1. When the sections are subjected to a forward strain,

the spring yields and prevents horse motion from being communicated to a vehicle. The arms 5, which are preferably formed integral with plates 6, are provided at their outer edges with shoulders 7, adapted to be engaged by loops 8 of the ends of the spring, whereby the latter is adapted to be adjusted to and from the outer ends of the arms to regulate its tension.

The plates 6, which are secured to the lower faces of the sections of the singletree, extend beyond the inner ends of the same and project into the sleeve or casing, being adapted to engage the front and rear walls thereof to limit the independent movement of the sections 1. The rear wall of the sleeve or casing is provided at its terminals with slots or recesses, through which project the arms 5 of the plates 6, and the latter are provided with integral spacing-sleeves 6^a, receiving the bolts 3, to prevent the same from wearing and to keep the sections 1 of the singletree from becoming loose. The singletree is mounted on the cross-bar 11 of a pair of thills by a pivot 12 and is supported by a yoke or bracket 13, composed of upper and lower loops, embracing, respectively, the singletree and the cross-bar. The intermediate arm 14 of the bracket or yoke is interposed between the upper face of the cross-bar and the lower face of the sleeve or casing.

The outer ends of the sections 1 may be provided with devices other than those shown for retaining the traces on the singletree, and the plates 6 are preferably provided at their inner ends with lugs 15, located at the opposite edges of the sections.

The invention has the following advantages: The singletree, which is simple and comparatively inexpensive in construction, possesses the strength and durability of an ordinary whiffletree, and it is adapted to cushion a draft-animal and prevent the irregular or jerking motion of the same from being communicated to a vehicle. The tension of the spring may be readily regulated, and the improvements are applicable to doubletrees as well as singletrees.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. A device of the class described comprising a central section, the whiffletree-sections pivoted near their inner ends to the central
5 section and arranged to engage the front and back of the same to limit their pivotal movement, and a spring for cushioning the whiffletree-sections, substantially as described.

2. A device of the class described comprising
10 a central sleeve, the sections pivoted within the sleeve and having their inner ends arranged to engage the walls thereof, whereby their pivotal movement is limited, arms extending from the sections through the rear
15 wall of the sleeve, and a spring connecting the arms, substantially as described.

3. A device of the class described comprising a sleeve or casing, a pair of sections pivotally mounted on the sleeve or casing and
20 having a limited movement independent of the same, arms extending rearward from the

sections and provided with series of shoulders, and a coiled spring engaging the shoulders of the arms and adapted to be adjusted thereon, substantially as described. 25

4. A device of the class described comprising a sleeve or casing, the pivotally-mounted sections arranged at the ends of the sleeve or casing, plates secured to the inner ends of the sections and having arms projecting rear- 30 ward therefrom, and a coiled spring connecting the sections and engaging the arms, whereby the sections are cushioned, substantially as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses. 35

REUBEN ROSS PIGG.

Witnesses:

E. E. HOLCOMB,
VALLET MACKEN.