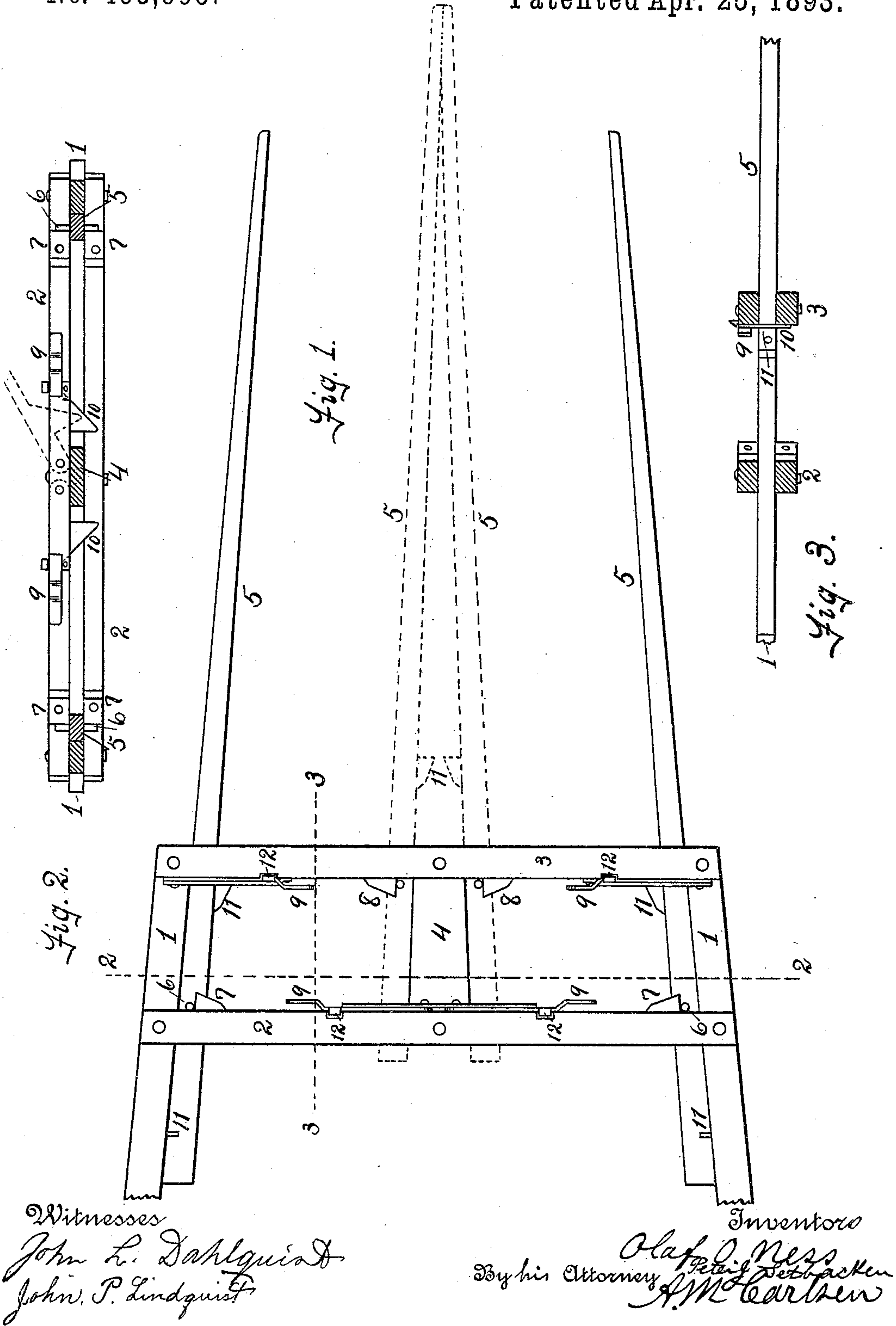


(No Model.)

O. O. NESS & P. J. SETBACKEN.
COMBINED POLE AND SHAFTS.

No. 495,995.

Patented Apr. 25, 1893.



UNITED STATES PATENT OFFICE.

OLAF O. NESS AND PETER J. SETBACKEN, OF LAKE PRESTON, SOUTH DAKOTA.

COMBINED POLE AND SHAFT.

SPECIFICATION forming part of Letters Patent No. 495,995, dated April 25, 1893.

Application filed April 10, 1891. Serial No. 388,437. (No model.)

To all whom it may concern:

Be it known that we, OLAF O. NESS and PETER J. SETBACKEN, citizens of the United States, residing at Lake Preston, in the county of Kingsbury and State of South Dakota, have invented certain new and useful Improvements in a Combined Thill and Pole or Tongue for Vehicles; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to the construction of vehicles and consists particularly in the means employed for enabling the use of the same, with one or two horses without the addition or removal of any part, or any change except in position.

The object of the invention is to produce a combined pole or tongue and thills or more specifically, to so construct the coupling and guiding devices of a vehicle that the same may be used interchangeably as thills or pole, as when desired for use with two horses or one.

The invention is illustrated in the accompanying drawings, in which

Figure 1, is a plan view of our combined tongue and thills; Fig. 2, a cross sectional view showing an elevation of the fastening devices or latches; and Fig. 3, a cross sectional view of the frame in which the movable devices are supported, showing also the means employed for locking the latches in place.

The frame supporting the tongue or thills consists of the two hounds 1, 1, one upon each side, which are attached to the vehicle in any ordinary or approved manner. To the hounds are secured two sets of parallel cross bars, 2, 2, and 3, 3, at a little distance apart, one of each set being attached to the upper and the other to the under side of the hounds. At the middle of the cross bars and parallel to the general position of the hounds is secured between the two bars forming each set a block 4, which not only forms a supporting strut for the two sets of bars, 2, 2, and 3, 3, and for the two bars of each set, but has a further object hereinafter set forth. The hounds pref-

erably incline toward each other from their attached ends, and the sides of the block 4, are preferably similarly inclined in wedge shape, the narrower part being toward the front, or away from the vehicle.

Between the two bars of both sets of cross bars and between the hounds and the middle block 4, are mounted the two shafts 5, 5, which when separated and lying with their inner ends alongside the hounds, one upon each side, form thills, and which when brought together with their inner ends against the opposite sides of the block 4, form a pole or tongue, adapted for use with two horses. The inclination of the sides or the taper of the block 4, is such with relation to the lengths of the two shafts that when the inner ends are brought close up to the block the outer extremities will be brought closely together. The two shafts usually have sufficient flexibility so that when the inner ends are brought together, the outer ends will lie along side of each other for some distance forming practically a single pole. The two shafts 5, 5, are held in place in either position by means of a pin 6, inserted in or secured to each shaft in the part lying between the two sets of cross bars, and which is adapted to enter behind the lugs or projections 7, upon the inside of the inner pair of cross bars to hold the shafts close against the inner side of the hounds, and similar lugs or projections 8, 8, upon the inside of the outer pair of cross bars. The change of position of the lugs from front to rear cross bars in the two cases is for the reason that a pole or tongue is ordinarily required to be of greater length than thills, or as in the present instance, to have a greater proportion of length in front of the front or outer cross bars. The lugs 7, 8, and the pin 6 thus serve in each position to clamp the shafts tightly against the hounds or the block 4, as one set of cross bars. At points upon the other bars respectively, opposite the position of the lugs 7, 8, are provided latches 9, each pivotally secured to the upper cross bar, and having a downwardly extending tooth or point 10, adapted to enter or engage with a shoulder or notch 11, formed in the shaft or in an attachment thereto. The position of each notch or shoulder 11, is such that it is in position to be entered or engaged by the

tooth or point 10, when the pin 6, upon the shaft is brought closely into the corner or shoulder formed by the lugs 7, 8, and the bars to which they are secured and when the latch 5 is engaged with the aperture or notch in the shaft, the latter is held firmly against either the hound or the block 4, and prevented from movement either sidewise or longitudinally. Both fastenings of each shaft being against 10 the inner or adjacent sides of the two sets of bars and each fastening tending to press and hold the shaft against the solid bed formed by the block or hound, the shaft is as securely held in place as if bolted thereto or 15 to the cross bars.

To prevent the possible jarring out of place of the latches when in use, each is preferably provided with a spring catch, 12, which engages over the top of the latch when in its 20 lowest or locked position.

To change from thills to tongue, it is only necessary to lift the latches, draw each shaft forward to disengage the pin 6, and lug 7, slide the shafts up against the block 4, pulling them forward until the pins enter behind 25 the lugs 8, and then drop the corresponding latches. The reverse change is made in the same manner except that the shafts are pushed back until the pin 6, engages behind 30 the lug 7. Two sets of notches or shoulders 11, are necessary upon each shaft, owing to the change in longitudinal position of the shafts.

The advantages of being able to so change 35 a vehicle in a moment's time as to adapt it for one or more than one horse, without the addition or removal of any part, or the use of any tool whatsoever, will be at once apparent and need not be herein set forth. At the same 40 time the parts are so rigidly secured in place as to prevent the possibility of play or movement in any direction.

We claim as our invention—

1. In an attaching device for vehicles, a 45 pair of hounds adapted for attachment to a vehicle, two parallel sets of cross bars above and below connecting said hounds, a block or strut lying between the two bars of each set

connecting the same and the two sets and substantially parallel to said hounds, shafts 50 having their inner extremities lying and movable sidewise in the space between the hound and block and between the opposite bars of the two sets, one upon each side of the block, vertical pins in said shafts between 55 the two sets of bars, lugs or shoulders formed upon one set of cross bars near the hounds or block and behind which said pin is adapted to be engaged when the shaft lies against said hound or block, a latch upon the other cross 60 bars opposite said lugs or shoulders, and notches, or shoulders upon each shaft in position to be engaged by said latch when said pin is engaged behind said lug substantially as and for the purpose herein specified. 65

2. In an attaching device for vehicles, a pair of hounds adapted for attachment to a vehicle, two parallel sets of cross bars above and below connecting said hounds, a block or 70 strut lying between the two bars of each set connecting the same and the two sets and substantially parallel to said hounds, shafts having their inner extremities lying and moving sidewise in the space between the hound and 75 block and between the opposite bars of the two sets, one upon each side of the block, vertical pins in said shafts between the two sets of bars, lugs or shoulders, formed upon one set of cross bars near the hounds or block and behind which said pin is adapted 80 to be engaged when the shaft lies against said hound or block, a latch upon the other cross bars opposite said lugs or shoulders, and notches, or shoulders upon each shaft in position to be engaged by said latch when 85 said pin is engaged behind said lug and a spring catch for holding said latch in its locked position, substantially as and for the purpose herein specified.

In testimony whereof we affix our signatures in presence of two witnesses. 90

OLAF O. NESS.

PETER J. SETBACKEN.

Witnesses:

H. I. OLSTON,

J. B. SULLIVAN.