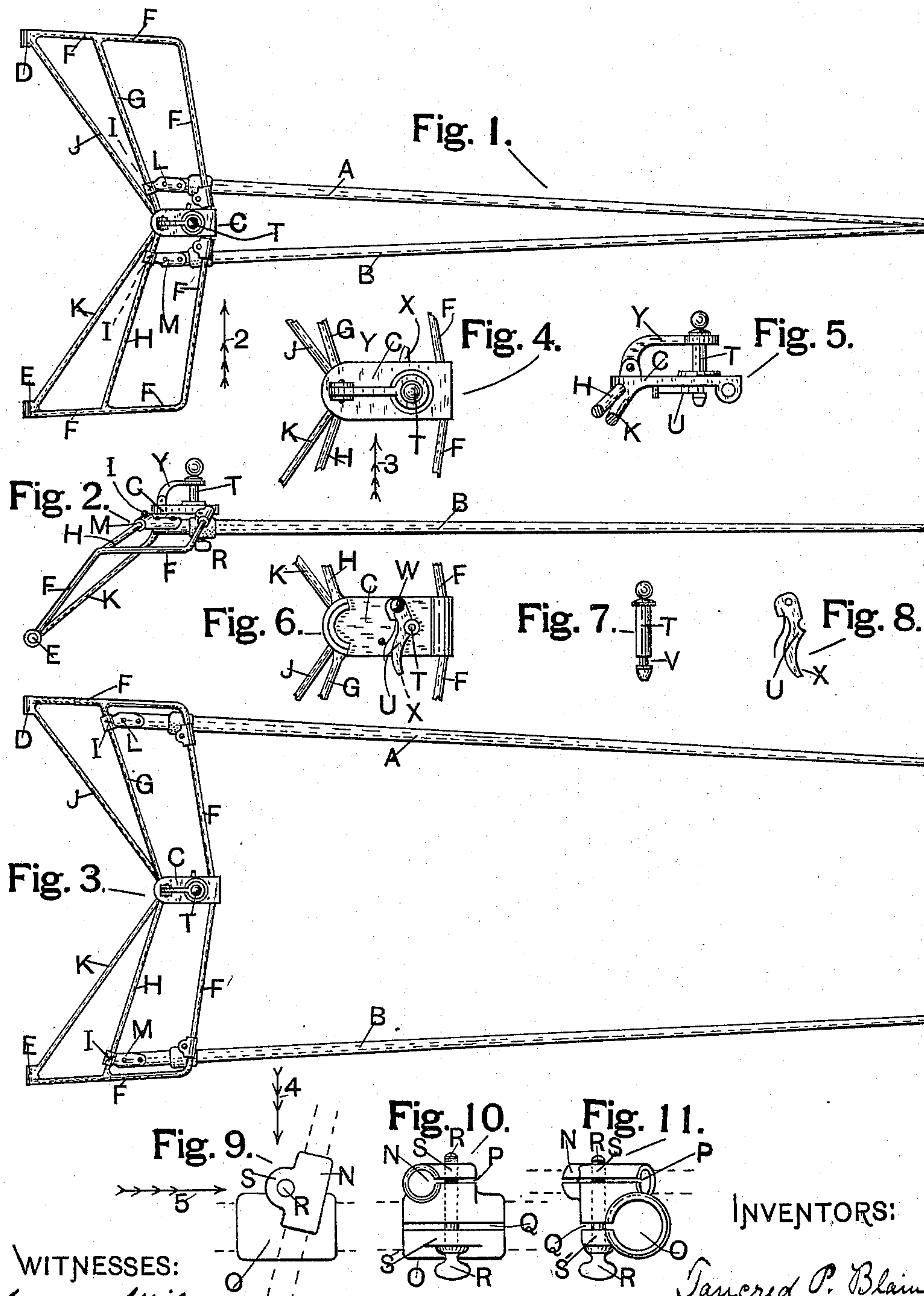


(No Model.)

T. P. BLAIN & P. A. FORTIN.  
COMBINED TONGUE AND THILLS FOR VEHICLES.

No. 540,229.

Patented June 4, 1895.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

TANCRED P. BLAIN, OF REDFIELD, AND PETER A. FORTIN, OF TURTON,  
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## COMBINED TONGUE AND THILLS FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 540,229, dated June 4, 1895.

Application filed December 22, 1893. Serial No. 494,397. (No model.)

*To all whom it may concern:*

Be it known that we, TANCRED P. BLAIN, residing at Redfield, and PETER A. FORTIN, residing at Turton, in the county of Spink and State of South Dakota, citizens of the United States, have invented a new and useful Combined Tongue and Thills for Vehicles, of which the following is a specification.

Our invention relates to a combined tongue and thills for wheeled vehicles, and our object is to provide a construction whereby two forwardly projecting poles may be secured in such a position as to form a strong and light tongue for a vehicle where two animals are used for traction, or these poles be moved laterally outward and secured in a position to form thills for a single animal, as hereinafter described and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the parts arranged to serve as a tongue; and Fig. 2 is a side elevation of Fig. 1, looking in the direction indicated by arrow 2. Fig. 3 is a plan view of the parts arranged as a pair of thills. Fig. 4 is a plan view, on an enlarged scale, of a center plate to which the single or double tree is pivotally mounted and to which the inner ends of several braces are attached. Fig. 5 is a side elevation of Fig. 4, looking in the direction indicated by arrow 3. Fig. 6 is a view of the lower side of Fig. 4, showing bolt-latch; and Figs. 7 and 8, respectively, elevations of the bolt and latch for attaching the single or double trees to the center plate. Fig. 9 is an elevation, on an enlarged scale from what is shown in Figs. 1, 2, and 3, of a double clamp for securing the poles in position. Fig. 10 is a side elevation of Fig. 9 looking in the direction indicated by arrow 4, and Fig. 11 an elevation of Fig. 9 looking in the direction indicated by arrow 5.

Similar letters indicate like parts throughout the several views.

A and B are poles which are laterally movable, to form either a tongue or a pair of thills, and the frame to which the rear end portion of the poles is attached comprises a series of braces connecting a central piece C with bosses D and E which, as usual, form the means for receiving the pivotal bolts which connect the structure to a vehicle.

The frame to which the poles A and B are attached, in this instance, may be assumed to be solid metal brace rods F and F' which have one end attached to central piece C, and project laterally and rearwardly to form the sides of the frame, the other ends of the rods being attached to bosses D and E. Then brace G, at one side, connects central piece C with the side portion of brace F, and brace H connects at the opposite side central piece C with the side portion of brace F'. The rear braces J and K connect the bosses D and E or the lower ends of side braces F and F' with the rear end of central piece C each pair of braces forming an acute angle at the central piece, for the purpose as will be hereinafter fully shown and described, but it must be understood that we do not confine ourselves strictly to this exact construction, since the frame portion of this structure may be made of hollow metal rods, which may be secured together in the same manner as is common in the frame of an ordinary bicycle.

The rear ends of poles A and B are attached, respectively, to braces G and H by means of eyes L and M, as shown in Figs. 1 and 3, the eyes being capable of sliding longitudinally on these braces. Each one of the eyes is provided with thumb screws I for securing it in proper position. The poles are also attached to the front brace rods F, F' by means of double clamps, which are plainly shown in Figs. 9, 10 and 11, and consist of two sleeves N and O, one above the other, integral, and provided with lugs on one side, and slitted longitudinally through the lugs at P and Q.

At R is a thumbscrew bolt which passes up loosely through a hole through the lower lugs and is screwed into the upper lug S, the shoulder of the bolt contacting the lower lug S' so that, in screwing up the bolt the lugs S and S' are drawn together, which action draws in the upper wall of sleeve N and the lower wall of sleeve O, and thus forms a very efficient clamp which is not liable to work loose by the action of the severe vibrations incident to use on rough roads.

It is well known that, a greater length is required for the tongue of a vehicle from the single or double tree pivotal bolt T to the front end of the tongue, than is required for the



length of the poles of a pair of thills, and in order that the same poles A and B may serve the double purpose required, we have disposed the brace rods G and H (to which the rear ends of the poles are attached) so that, the ends next the central piece C are farther forward than the side ends next the brace rods F, F'. Plainly shown in Figs. 1 and 3.

Since no particular construction of single or double trees is necessary for use with our combined tongue and thills none are shown in the drawings, but since it is necessary to change these parts whenever a change is made from thills to tongue, or vice versa, we have provided a latch U for engagement with the single or double tree pivotal bolt T, which latch is provided with a spring for holding it in contact with a notch V in the bolt, Fig. 7, the latch being pivoted at W at the bottom of the central piece C, and is operated by pressure rearwardly against the projecting handle X, to release the bolt which may be pulled upward and out to release the single or double tree.

At Y is the usual brace whose front end rests upon the top of the single or double tree, the rear end of the brace being pivotally secured to the rear top portion of central piece C so that it may be swung backwardly out of the way, as is done with other braces of similar construction for holding the upper end of pivotal bolt T.

It will be understood that, as the poles A and B are moved from the position to form a tongue, as shown in Fig. 1, to the position shown in Fig. 3 to form a pair of thills, as the eyes L and M, and the sleeves N are being slid upon the braces G, H and F, F', sleeves O also slide upon the poles, longitudinally thereof, to allow for the amount the braces G and H are out of parallel with the two front sections of braces F and F', but these braces could, under some circumstances, be disposed relatively parallel, in which event the sleeves O, which inclose the poles, could be firmly attached to the poles, as is obvious.

We claim as our invention—

1. In a combined tongue and pair of thills for vehicles, the combination, with a frame comprising laterally and rearwardly extending braces, and side pieces at the outer end thereof, the rear portion of the frame being provided with bosses, a central piece secured to the frame and provided with a removable pin for securing a double or single tree thereto, and two poles, the rear end of each of which

is provided with two sleeves for moving upon two of the braces upon each side of the central piece, and means for rigidly securing each of the sleeves to its respective frame, substantially as set forth.

2. In a combined tongue and pair of thills for vehicles, the combination, with a transversely perforated central piece provided with a removable pin, of laterally and rearwardly projecting braces in the perforations of the central piece, said braces upon each side projecting at a different angle from the other, side pieces engaging the outer ends of the braces, the rear ends of which side pieces are provided with bosses, two poles, the rear end of each of which is provided with two sleeves, one of which sleeves is provided with two perforations, one of the perforations receiving one of the braces and the other one receiving the pole, and means for rigidly securing the sleeves upon their respective braces and to the pole, substantially as set forth.

3. In a combined tongue and pair of thills for wheeled vehicles, the double clamp for connecting the poles A and B to the frame thereof, comprising two sleeves N and O, one above the other, integral and disposed so that the axis of one subtends an angle to the axis of the other, each of said sleeves slitted longitudinally through the walls thereof at one side, and means for drawing together the said walls for the purpose substantially as shown and described.

4. In a combined tongue and pair of thills for vehicles, a double clamp for engaging the poles A and B to the frame thereof, comprising two sleeves M and O, one above the other, and each provided with a longitudinally slotted and transversely perforated lug, the perforation in the outer portion of one of the lugs being screw threaded, a bolt through the perforations, one end of which is screw threaded to engage with the screw threaded portion of one of the lugs and the opposite end is provided with a shoulder to engage with the outer portion of the other lug, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, this 22d day of November, 1893, in the presence of witnesses.

TANCRED P. BLAIN.  
PETER A. FORTIN.

Witnesses:

A. F. LABRIE,  
R. W. LABRIE.