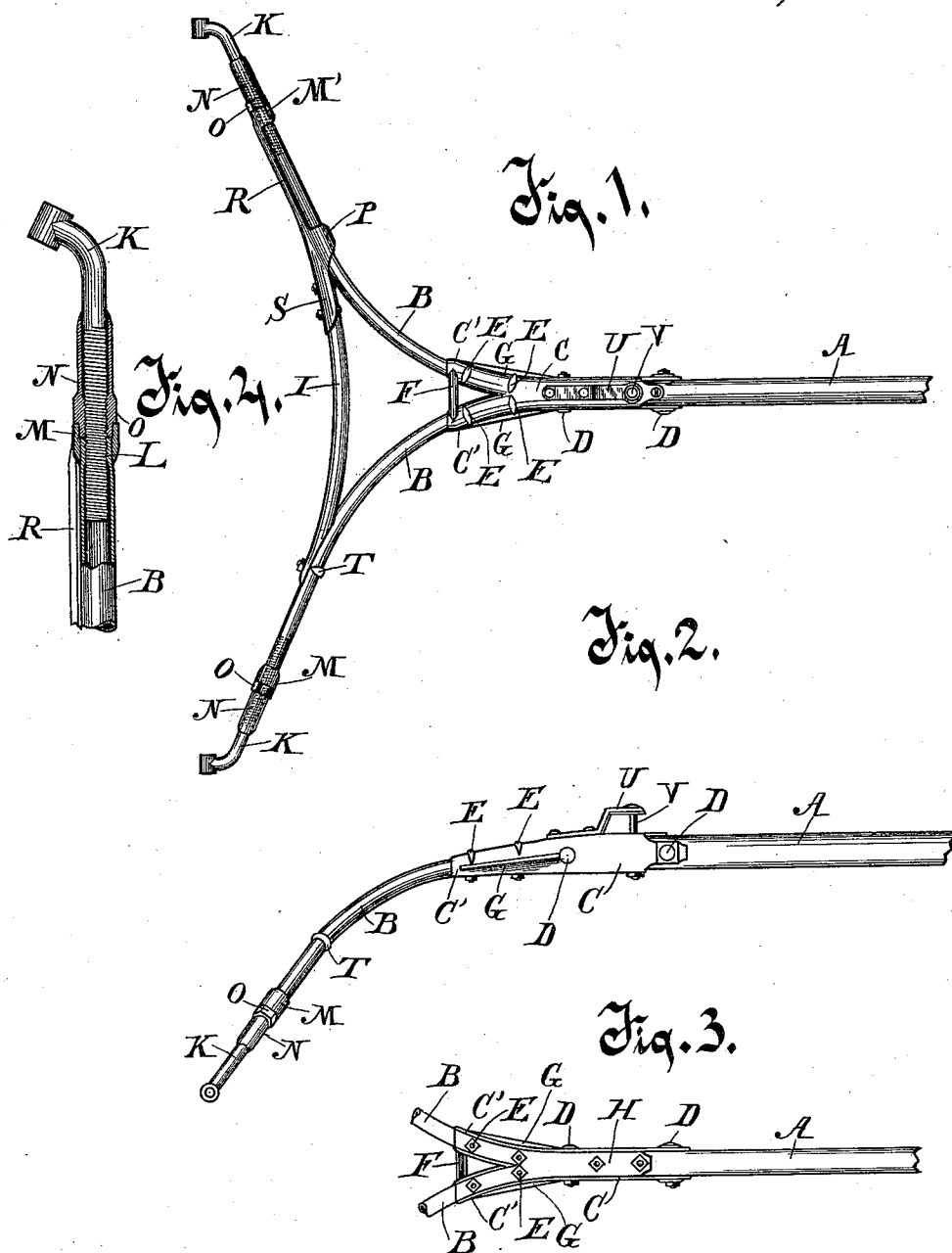


(No Model.)

E. M. VAN VALKENBURG.
VEHICLE TONGUE.

No. 466,387.

Patented Jan. 5, 1892.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELLIS M. VAN VALKENBURG, OF RACINE, WISCONSIN, ASSIGNOR TO THE
ACME ADJUSTABLE POLE COMPANY, OF SAME PLACE.

VEHICLE-TONGUE.

SPECIFICATION forming part of Letters Patent No. 466,387, dated January 5, 1892.

Application filed July 9, 1891. Serial No. 398,883. (No model.)

To all whom it may concern:

Be it known that I, ELLIS M. VAN VALKENBURG, of Racine, in the county of Racine and State of Wisconsin, have invented a new and useful Improvement in Vehicle-Tongues, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention consists in novel features whereby a vehicle-tongue is made light in weight, but strong and durable, and is made capable of adjustment to adapt it to be readily attached to vehicles through couplings fixed on the axle at different distances apart, the adjusting devices on the tongue being constructed and arranged to secure strength and obviate their liability to become loose under the jar to which they are subjected in use.

In the drawings, Figure 1 is a top plan view of my improved vehicle-tongue, the pole being broken away for convenience of illustration. Fig. 2 is a side view of the same device shown in Fig. 1. Fig. 3 is an under side view of a portion of the same device. Fig. 4 is a fragment of one arm of the hounds, parts being shown in section to exhibit interior construction.

A is a fragment of the pole forming a portion of the tongue and usually constructed of wood. Branching pole-hounds B, constructed of metal tubing, usually of gas-pipe, are secured rigidly to the rear extremity of the pole A. A metal tubing or gas-pipe is very satisfactory for the construction of the hounds, as it is light in weight and very strong and durable and may be made neat in appearance.

A metal cap-plate C is fitted to the top and sides of the pole A and is secured rigidly thereto conveniently by bolts D, which cap-plate is divided at its rear end into two parts C' C' or bifurcate extremity, each of which in cross-section is of inverted-U shape, being thereby adapted to receive therein the extremities of the hounds B, which are secured permanently thereto by the bolts E preferably. A brace F, constructed integrally with the parts C' C', unites and strengthens them at their rear extremities. Laterally-projecting ribs G, integral with the side walls of the cap-plate C, are adapted to strengthen the plate and the tongue at the point of the junction

of the hounds to the pole. A metal plate H, fitted to the under side of the pole A and bifurcate at its rear extremity and fitted in its bifurcate parts against the hounds B B, receives the bolts D and E therethrough and strengthens the construction of the tongue.

A metal brace I, secured at its extremities to the hounds B, is adapted to strengthen them. This brace I may be constructed of gas-pipe or of other suitable material.

Suitable coupling-irons K are connected adjustably to and form the extremities of the hounds B. These coupling-irons are each provided with a proper head adapting them to be connected by a bolt to the shaft-couplings fixed on the front axle of a vehicle. These coupling-irons are screw-threaded, and are thereby adapted to be received and adjusted in a corresponding interior screw-thread L on the interior surfaces of the outer extremities of the hounds. These screw-threads are reversed or made right and left handed, respectively, on the two coupling-irons and are so disposed with reference to the hounds that when the pole is coupled to the vehicle the weight of the pole tends to turn the coupling-irons into the screw-thread in the extremities of the hounds. A collar M is fixed on the extremity of each arm of the hounds and is secured rigidly thereto conveniently by shrinking it thereon. A sleeve-locking nut N turns on the screw-thread on the coupling-iron, and when the coupling-iron is properly adjusted in the hounds the nut is turned tightly against the collar M or the extremity of the hound, and the coupling-iron is thereby locked in position. The nut N is provided with a faced part O for applying a wrench thereto.

It will be understood that by reason of the construction hereinbefore described the weight of the tongue acts constantly to bind the nuts N more tightly against the collars M and thereby to secure the coupling-irons K firmly in position and to obviate the loosening of the irons in their seats.

As a means for connecting the brace I with the hounds B in a neat and substantial manner I have shown in Fig. 1 a sleeve P, fitted about one of the hounds B and connected integrally with the collar at the extremity of the hounds (which in this instance I have

marked M') by a stem R. This sleeve P is located at the junction of the brace I with the hound B and is held in position by being connected by the stem R integrally with the collar M'. The sleeve P is provided with a grooved projection or arm S, adapted to receive therein the extremity of the brace I, which is secured thereto by suitable screws or bolts. This form of construction obviates the weakening of the hounds by inserting a bolt, as T, therethrough for the purpose of securing the brace to the hounds, as shown at the other extremity of the brace.

The hammer-strap U and bolt V are such as are in common use in the attachment of a doubletree to the tongue.

What I claim as new, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture, a metal cap-plate for connecting the rear end of a pole with its hounds, said plate being of an inverted-U shape in cross-section and bifurcated at its rear extremity, the arms of said bifurcated extremity being connected by a transverse integral brace and the sides of the cap strengthened by laterally-projecting ribs, substantially as set forth.

2. In a vehicle tongue, the combination of a pole, a cap-plate fitted to the top and sides of the single terminal part of the pole at its rear extremity, said cap plate being of an in-

verted-U shape in cross-section and having its rear extremity bifurcated, the arms of said bifurcated portion being connected by a transverse brace, hounds inserted in and secured rigidly to the furcate extremity of the cap, and a plate fitted to the under side of the pole and bifurcate at its rear extremity to fit against the hounds, substantially as set forth.

3. In a vehicle-tongue, the combination, with hounds formed of metal tubing, of coupling-irons turning by screw-thread in reverse directions into the extremities of the hounds, and lock-nuts turning on the coupling-irons against the extremities of the hounds, the screw-threads being so arranged that the weight of the tongue tends to tighten the lock-nuts on their seats, substantially as described.

4. In a vehicle-tongue, the combination, with hounds formed of metal tubing, of a brace uniting and strengthening the two parts of the hounds, and sleeves about the hounds and connected permanently thereto, which sleeves are provided with arms to which the brace is rigidly secured, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ELLIS M. VAN VALKENBURG.

Witnesses:

GEO. R. WEST, Jr.

E. GERTENBACH.