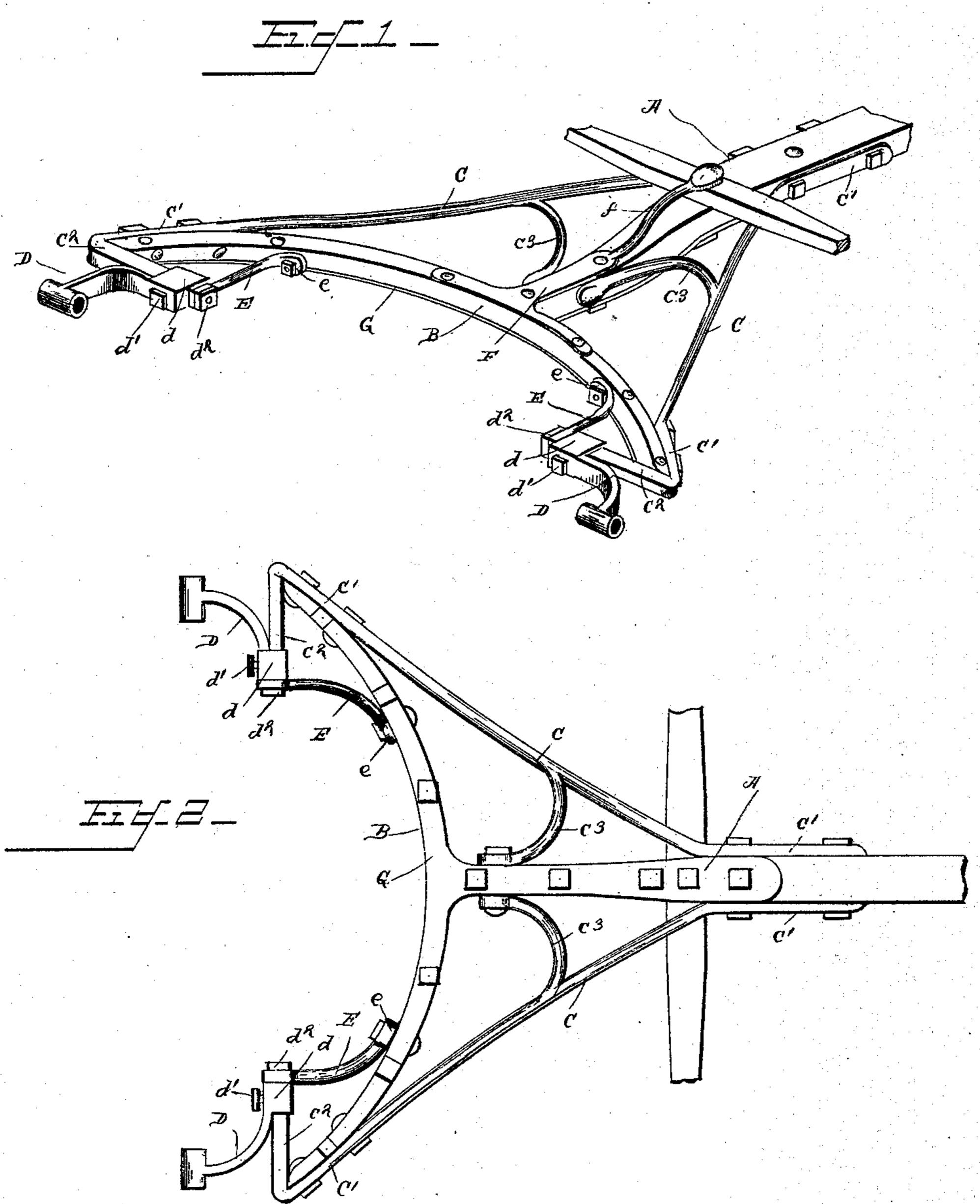
(No Model.)

J. T. KETCHLEDGE.

WAGON TONGUE.

No. 413,256.

Patented Oct. 22, 1889.



Witnesses

Inventor

Ho. Auch

James Z. Ketch ledge

By his Attorneys,

achow to

United States Patent Office.

JAMES T. KETCHLEDGE, OF TUNKHANNOCK, PENNSYLVANIA.

WAGON-TONGUE.

SPECIFICATION forming part of Letters Patent No. 413,256, dated October 22, 1889.

Application filed July 22, 1889. Serial No. 318,238. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. KETCHLEDGE, a citizen of the United States, residing at Tunkhannock, in the county of Wyoming and 5 State of Pennsylvania, have invented a new and useful Wagon-Tongue, of which the following is a specification.

The invention relates to improvements in

wagon-tongues.

The object of the present invention is to provide a wagon-tongue of simple and inexpensive construction capable of having its thill-irons readily adjusted to suit any vehicle.

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

20 In the drawings, Figure 1 is a perspective view of a tongue constructed in accordance with this invention. Fig. 2 is a reverse plan

view. Referring to the accompanying drawings 25 by letter, A designates the tongue, of ordinary construction, having secured to its rear end a curved cross-bar B. Secured to the sides of the tongue and the cross-bar are the bracerods C, which are provided with the flattened 30 portion c', through which are passed bolts, by means of which the brace-rods are secured in place. The rear ends of the brace-rods are bent around the cross-bar B approximately at right angles to the tongue, to provide bars 35 c^2 , upon which the thill-irons are adjusted. The thill-irons are curved, and provided at their forward ends with sleeves d, which slide upon the bars c^2 , whereby the thill-irons D may be adjusted to adapt the tongue to any vehi-40 cle. In order to secure the thill-irons at any desired position along the bars c^2 , the sleeves are provided in their rear faces, which are somewhat slightly thickened, with set-screws d', which engage the bars c'. The bars c'45 may be of any desired configuration; but they are preferably rectangular in cross-section, or some similar form which will present a good surface for the set-screws to engage. The thill-irons are curved in order to give them 50 a greater sweep, and are reversible, whereby they are adapted for a thill-coupling which is located a considerable distance from either end of the bars c^2 . The ends of the bars c^2 are shouldered and screw-threaded,

and are provided with nuts d^2 , which secure 55 in place stay-rods E, which have eyes or openings e formed at their ends, the forward ones of which are bolted to the cross-bars B. The stays E securely brace the bars c^2 and prevent them being bent away from their nor- 60 mal position. The brace-rods C are provided intermediate of their ends with curved arms c^3 , which are bolted to the tongue A just forward of its connection to the cross-bar. The upper face of the tongue and cross-bar is 65 provided with the T-shaped plate F, which is bolted to the tongue and the cross-bar, and is provided at its forward end with a curved bar f, which extends upward and is provided with an eye, through which passes the bolt 70 that secures the whiffletree to the tongue. The lower face of the cross-bar and tongue is provided with a re-enforcing base-plate G, which conforms to the configuration of the part and extends along the entire lower sur- 75 face of the cross-bar and is bolted at intervals thereto, the bolts of the re-enforcing base-plate passing through the bar and tongue and serving to secure the plate F.

From the foregoing description and the ac- 8c companying drawings it will readily be seen that tongues constructed in accordance with this invention are simple, strong, durable, and comparatively inexpensive, and are capable of having their thill-irons adjusted to 85

suit any vehicle.

Having described my invention, what I

claim is—

The combination, with the curved thill-irons provided with sleeves, of the tongue, the 90 cross-bar, the brace-rods secured to the tongue and the cross-bar and having their ends extending around the rear of the cross-bar and threaded, the curved stay-irons having perforated ends, each of said stay-irons having 95 one of its ends bolted to the cross-bar and its other end receiving the threaded end of the brace-rod, and nuts for securing the stayirons to the brace-rods, substantially as described.

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

JAMES T. KETCHLEDGE.

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Witnesses: NELSON LEE, CHARLS SAMUELSON.