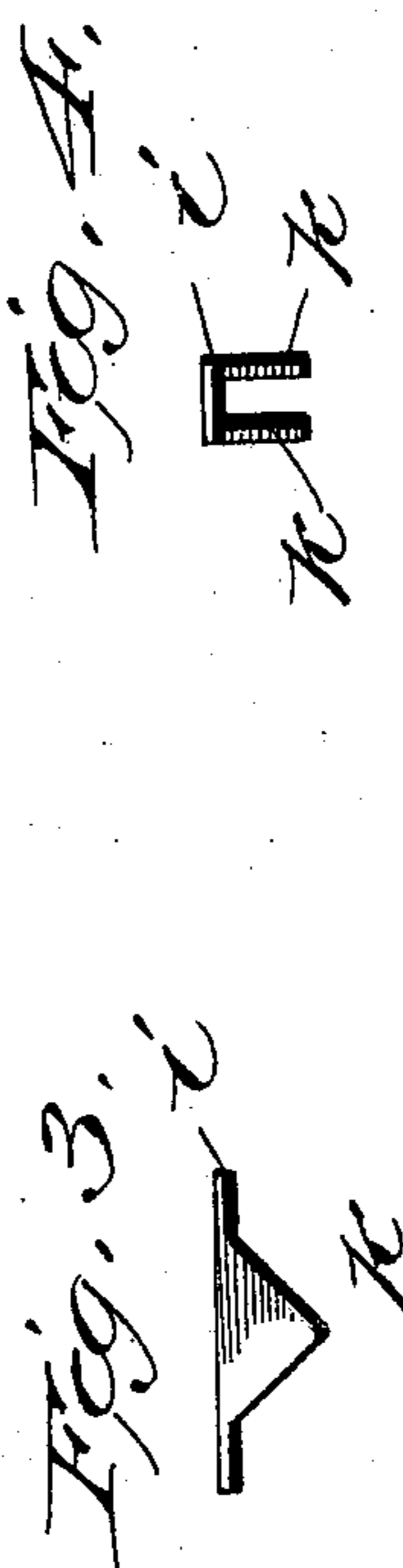
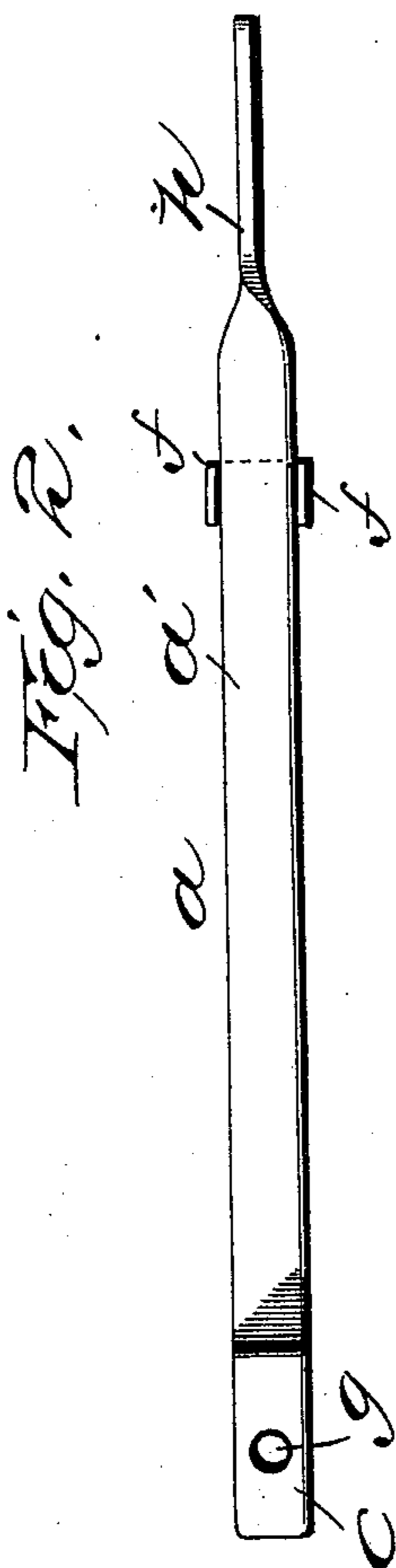
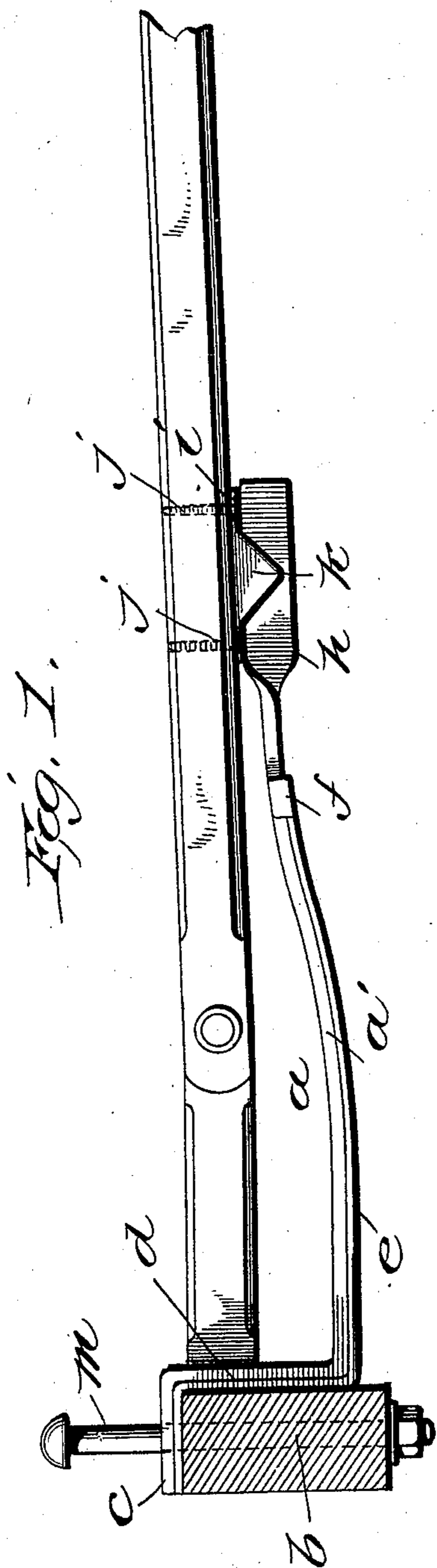


(No Model.)

G. THOMAS.  
TONGUE SUPPORT.

No. 574,587.

Patented Jan. 5, 1897.



Witnesses  
"J. S. Warfield,"  
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per R. S. Warfield  
Attorney

# UNITED STATES PATENT OFFICE.

GEORGE THOMAS, OF EFFINGHAM, ILLINOIS.

## TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 574,587, dated January 5, 1897.

Application filed June 2, 1896. Serial No. 593,974. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE THOMAS, a citizen of the United States, residing at Effingham, in the county of Effingham and State of Illinois, have invented certain new and useful Improvements in Tongue-Supports; and I 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to those tongue-supports for vehicles in which the free end of a leaf-spring projects under and supports the tongue. Heretofore it has been common to attach such a spring to the fore axle of a vehicle so that its front end will project forward beyond the pole-pivot and beneath the tongue in such a manner as to sustain the weight of the tongue and prevent it from falling upon the necks of the horses, and a loop or hanger has been employed to strengthen the spring. It is the purpose of my invention to dispense with such supporting-loop and to provide a spring which can be applied to any ordinary wagon with greater facility and which will at the same time be more simple, cheap, strong, and durable than those heretofore devised.

To this end my invention consists in the peculiar features and parts more fully described hereinafter and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my complete device as applied to an ordinary farm-wagon; Fig. 2, a bottom view thereof, and Figs. 3 and 4 detailed views of a retaining-plate attachable to the under side of the tongue.

The body portion of the spring *a*, which supports the tongue, is denoted by the reference-letter *a'*, and it consists of a flat leaf of spring-steel, which in side elevation has the general outline of a gradual reverse curve. This body portion is attached to and braced against the fore axle *b* of a wagon by means of a rectangular clip composed of a horizontal end *c*, which laps over the top of the axle, and a vertical part *d*, which bears snugly

against the front face thereof. Both of these parts are made integral with and struck up out of the same strip of spring-steel which forms the body portion *a*. In order to reinforce and thereby stiffen and strengthen the aforesaid parts, an additional leaf *e* of the same size and shape is applied to the under side thereof. This reinforcing-spring extends within a short distance of the forward end of the main spring *a*, at which point it is provided with a pair of lugs *f*, which embrace the latter and hold the two securely against lateral displacement. A hole *g* is made through the horizontal lip *c* of the clip and reinforcing-spring beneath for the reception of a king-bolt *m*.

I will now proceed to describe the free end of the spring, which I have constructed in such a way that it can be applied to slender tongues to much greater advantage. To accomplish this, the free end *h* of the tongue is twisted or bent around into a vertical position, whereby the pole will rest upon the edge thereof instead of the side. By this means I greatly reduce the amount of frictional surface on the under side of the tongue in addition to the other advantage before mentioned. This end *h* is held in place on the under side of the tongue by means of a narrow plate *i*, adapted to be fixed thereto by screws *j*. Projecting downward from this plate are a pair of guide-lugs *k*, which loosely embrace the sides of the end *h* and allow it to move back and forth on the plate during the vertical vibrations of the tongue. These guide-lugs are made triangular for the purpose of projecting down far enough to prevent the end of the spring from jumping out. The entire plate *i* and its lugs are preferably made of one integral casting.

From the foregoing construction it will be observed that a device of great practical utility is provided, because it can be very readily attached to any ordinary wagon by passing the king-bolt through the hole in the clip *c*, and as the spring is wide and has a large bearing-surface upon the top and front of the axle it will be held snugly and securely thereon. The edgewise disposition of the front end *h*, whereby a narrow, small, and compact bearing-plate may be employed, is also a great advantage. The reinforcing-

spring is applied in such a manner that it will always be kept exactly in place beneath the main spring, so that the whole structure constitutes a tongue-support of exceeding simplicity, compactness, durability and strength.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a tongue-support consisting of a flat spring having its rear end provided with a clip adapted to embrace the top and front faces of an ordinary vehicle-axle, and its front end bent at right angles to its body portion whereby the pole is supported on the edge of the spring, substantially as described.

2. In a tongue-support, a flat supporting-

spring having its free end bent at right angles to the body portion and adapted to bear on the tongue, in combination with a clip portion, substantially as described.

3. In a tongue-support, the combination with a spring having its free end bent at right angles to its body portion, of a bearing-plate adapted to be applied to the under side of the tongue and provided with guide-lugs, substantially as described.

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

GEORGE THOMAS.

Witnesses:

W. K. TINNAPPLE,  
WALLACE SNOOK.