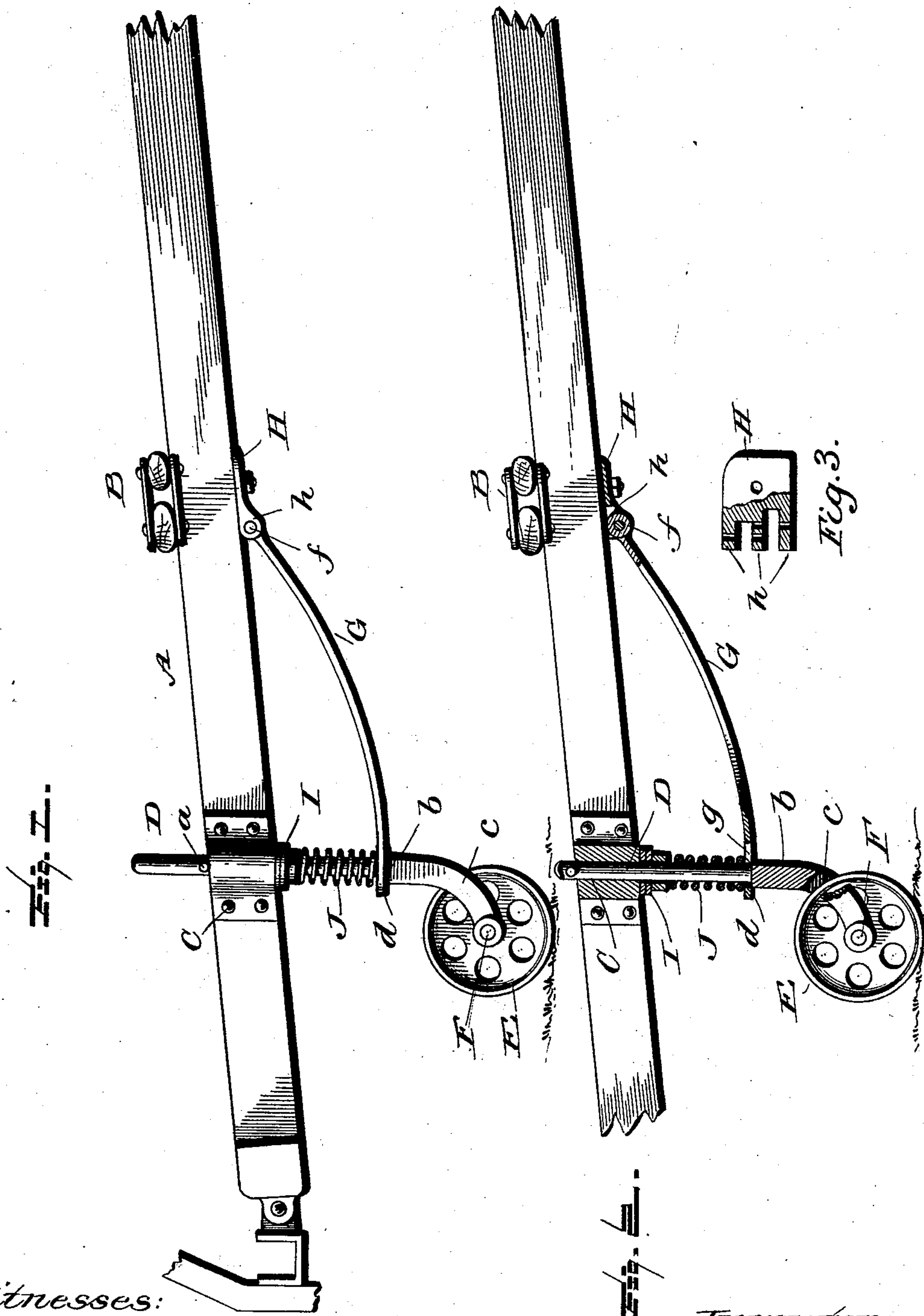


(No Model.)

W. H. WATTS, Jr.
TONGUE SUPPORT.

No. 509,060.

Patented Nov. 21, 1893.



Witnesses:

L. C. Mills
A. D. Hough

Inventor:

William H. Watts Jr.,
by Franklin H. Hough atty.

UNITED STATES PATENT OFFICE.

WILLIAM H. WATTS, JR., OF SWOOPE, VIRGINIA, ASSIGNOR OF ONE-HALF TO
W. E. MAYS, OF SAME PLACE.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 509,060, dated November 21, 1893.

Application filed April 1, 1893. Serial No. 468,664. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WATTS, Jr., a citizen of the United States, residing at Swoope, in the county of Augusta and State of Virginia, have invented certain new and useful Improvements in Tongue-Supports for Harvesters, Self-Binders, Drills, &c.; 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.

This invention relates to certain new and useful improvements in tongue rests or carriers for supporting the tongue of a harvester, self-binder, drill, mower, or other implement, to relieve the horses from the weight of the machine upon their necks, and it has for its objects among others to provide a simple and cheap attachment which can be readily applied and which can be easily and quickly lengthened or shortened to adapt it to any machine.

It has for a further object to provide means for readily taking up the shock occasioned by sudden starts or stopping of the horses, or by passing over stones or other obstructions. I provide an arm which serves as a guide for the vertical shaft carrying the guide wheel, the said arm being pivotally held to the tongue and the shaft carrying the wheel being swiveled to turn and actuated by a spring. The attachment consists of few parts, those readily assembled and not liable to get out of order or to be easily damaged.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claim.

The invention in this instance resides in the peculiar combinations, and the construction, arrangement and adaptation of parts, all as more fully hereinafter described, shown in the drawings and then particularly pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation illustrating my improvements. Fig. 2 is a vertical longitudinal section through the same. Fig. 3, is a plan view of the plate H.

Like letters of reference indicate like parts in all of the views.

Referring now to the details of the drawings by letter, A designates the tongue which is designed to be attached to the binder, drill, or other machine in any suitable manner.

B is the double-tree of any suitable construction and attached in the usual way.

C is a socket on the side of the tongue near its rear end and is secured thereto in any suitable manner. D is a vertical rod or shaft working loosely through the opening in this socket and through the shaft or rod above the socket is passed a pin *a* which serves to limit the downward movement of said shaft or rod by engagement with the upper face of the socket. The lower end of this shaft or rod is broadened as seen at *b* and curved, the curved part being bifurcated as shown at *c* to receive the wheel E which is journaled on a pin or shaft F held in the lower and outer ends of the bifurcated curved portion as clearly shown. The shaft or rod is formed at the upper end of the flattened and bifurcated portion with shoulders *d* against which the slotted end of the draft rod is designed to bear. This draft rod G is of metal, its rear end being bifurcated or formed with an elongated and enlarged slot *g* which is loosely sleeved upon the vertical shaft or rod above the shoulders thereof, its other end being pivoted on a horizontal rod or pin *f* held between and in the ears *h* of the plate or casting H which is secured to the under side of the tongue as shown. This slotted connection is important, as otherwise, when the spindle rises in its bearing the plate G would force the spindle against the forward upper edge of the bearing C and tend to lock the spindle from rising freely.

Upon the vertical shaft or rod carrying the wheel there are loosely sleeved a plurality of washers I; they are arranged under the tongue and between the lower one and the upper face of the rear end of the draft rod or bar which extends in an inclined direction downward from its point of attachment to the

tongue rearward, there is arranged a coiled spring J which is coiled around the rod.

The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings, and a further detailed description thereof is not deemed necessary.

What is claimed as new is—

10 The combination with the tongue and the plate thereon, of the casting on the tongue, the vertical shaft loosely mounted therein, and provided with a transverse pin above the same, and a shoulder below the same the draft rod pivoted at one end in said plate

and at the other end resting loosely upon 15 said shoulder and having an elongated slot, through which the said shaft loosely passes the washer on the shaft below the tongue and the spring around the shaft between said washer and the slotted end of the draft rod, 20 all substantially as shown and described.

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

WILLIAM H. WATTS, JR.

Witnesses:

E. A. FULCHER,

CHAS. M. PATRICK.