

No. 728,870.

PATENTED MAY 26, 1903.

B. C. COWDEN.
VEHICLE TONGUE SUPPORT.

APPLICATION FILED JAN. 30, 1903.

NO MODEL.

Fig. 1.

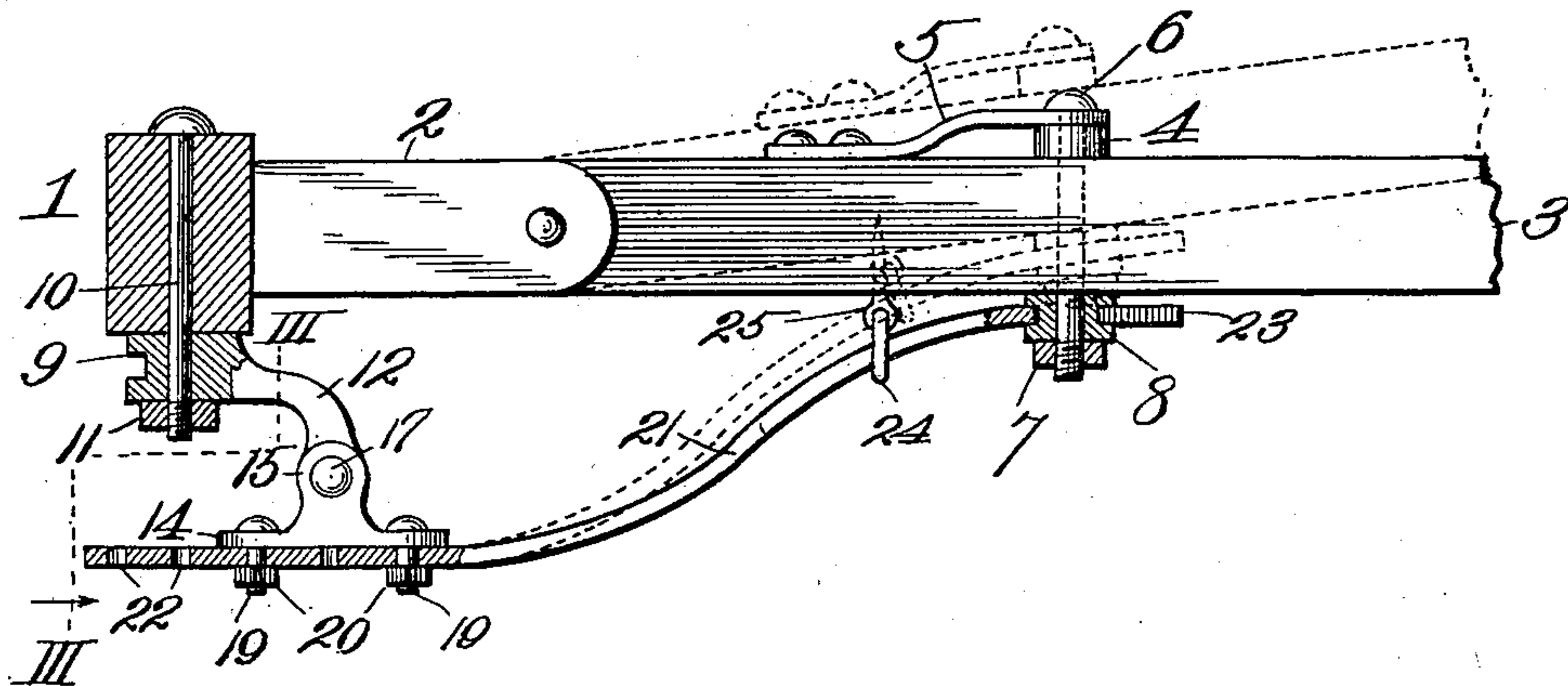


Fig. 2.

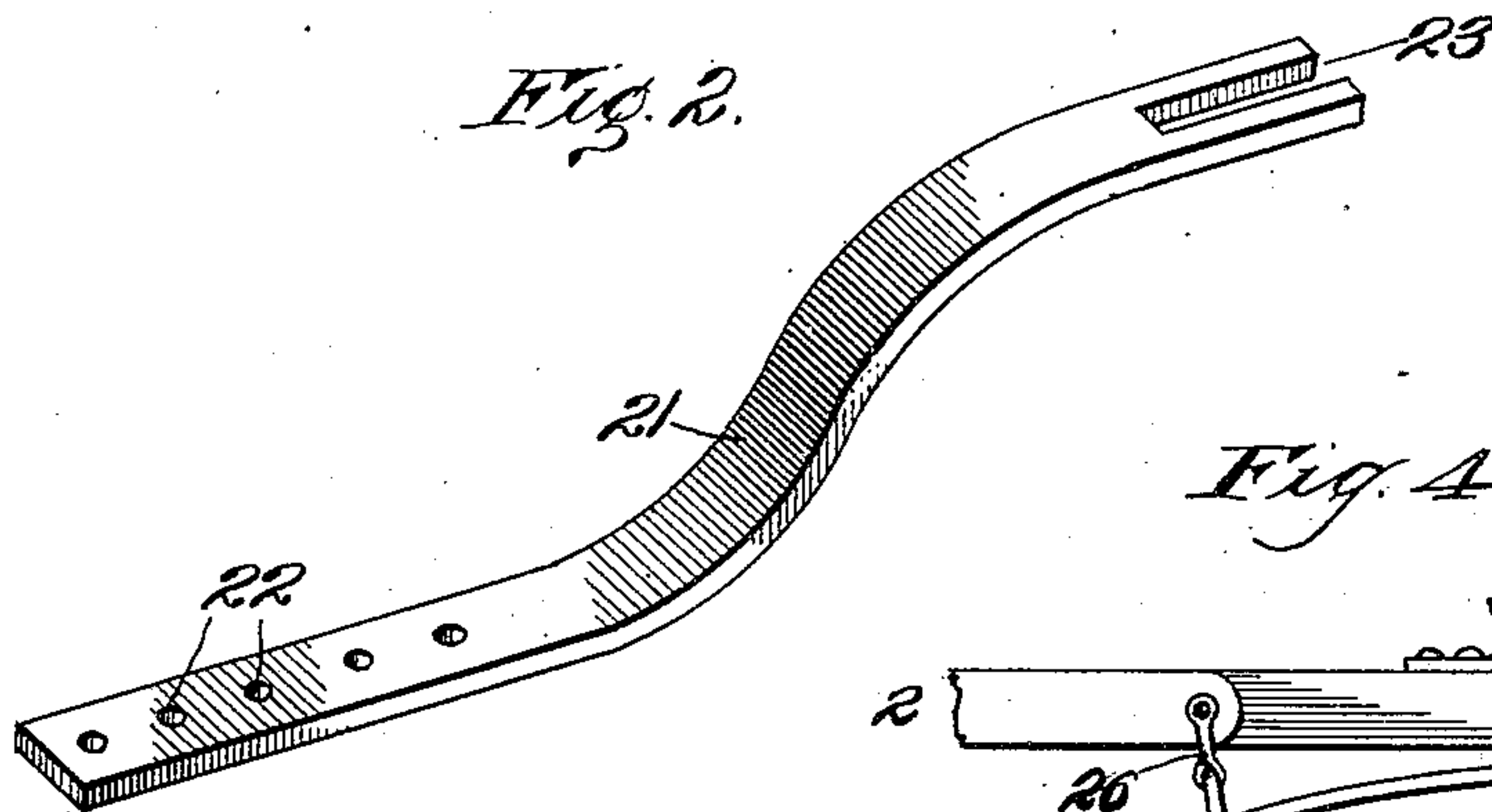


Fig. 4.

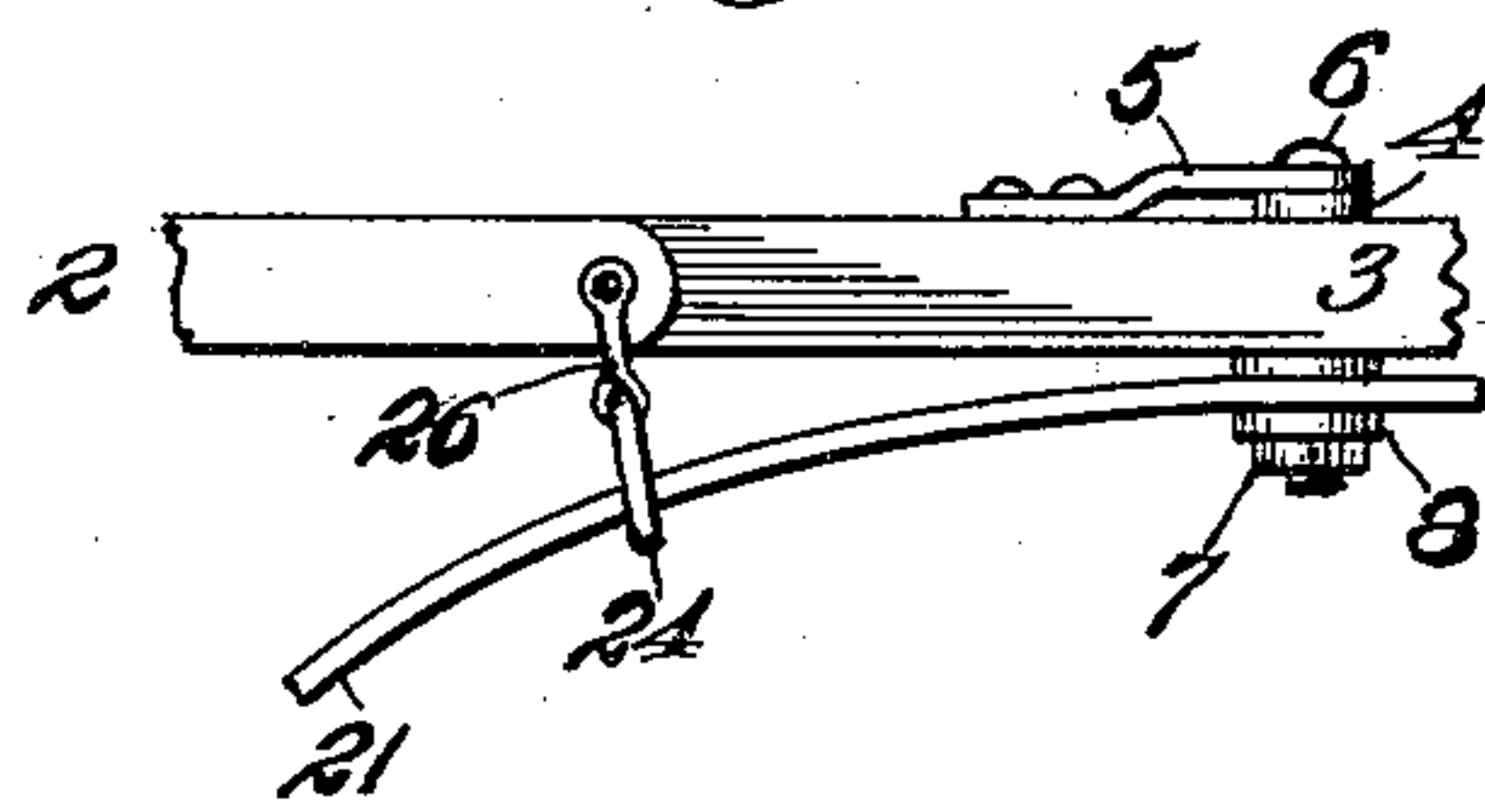
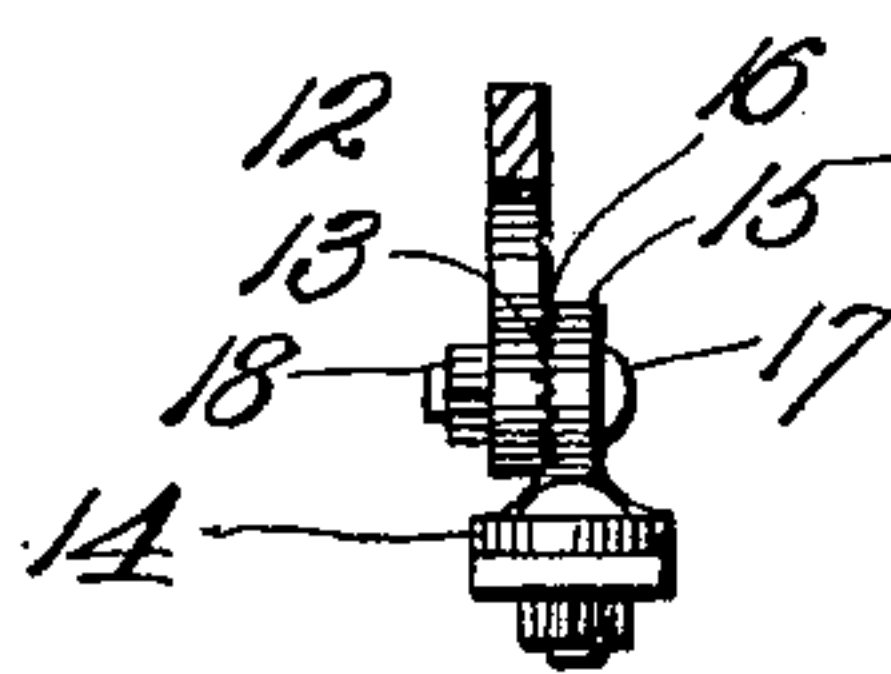


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

BERTUS C. COWDEN, OF HILLSDALE, OKLAHOMA TERRITORY.

VEHICLE-TONGUE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 728,870, dated May 26, 1903.

Application filed January 30, 1903. Serial No. 141,087. (No model.)

To all whom it may concern:

Be it known that I, BERTUS C. COWDEN, a citizen of the United States, residing at Hillsdale, in the county of Garfield and Territory of Oklahoma, have invented certain new and useful Improvements in Vehicle-Tongue Supports, of which the following is a specification.

This invention relates to vehicle-tongue supports, and has for its object the provision of a yielding support which performs its function properly and can be tensioned to accommodate tongues of varying weight and adjusted to raise or lower the front end of the tongues.

A further object is to provide a support of simple, strong, and cheap construction and which can be easily and quickly attached to any tongue-vehicle of standard pattern or type.

The invention consists in certain novel and peculiar features of construction and arrangement, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a vertical section taken through the front part of the running-gear of a vehicle and also shows, partly in side elevation and partly in section, the tongue-support. Fig. 2 is a perspective view of the spring element of the support. Fig. 3 is a section taken on the line III III of Fig. 1. Fig. 4 is a side view showing the stirrup suspended from the tongue in a slightly-different way from that disclosed by Fig. 1.

In the said drawings, 1 designates the axle of a vehicle, from which projects forward the usual tongue-carrying arms 2, the tongue 3 being capable of vertical play, as usual.

4 is the doubletree, arranged to operate between the tongue and its superposed bracket 5 on the vertical bolt 6, extending through said bracket and tongue and engaged at its lower end by a nut 7, a flanged sleeve or spool 8 being mounted on said bolt between the tongue and nut.

9 designates a bracket fitting upon the lower end of king-bolt 10 and clamped against the axle by nut 11, engaging the king-bolt. Said bracket is provided with a forwardly-projecting and depending arm 12, having a rough-

ened or rosette face 13 at one side. A plate 14 is provided with an upwardly-projecting lug 15, fitting against the roughened face of arm 12, and in order that such connection may be rigid lug 15 has its engaging face roughened, as at 16, the bracket and plate being interlocked at the desired point of adjustment by means of a pivot-bolt 17, passing centrally through their roughened or rosette portions, and a nut 18, engaging the threaded end of said bolt. The plate 14 is secured by two bolts 19 and nuts 20 to a curved spring 21, said spring being provided with a plurality of holes 22 to permit of its longitudinal adjustment with respect to the plate, this adjustment resulting in the tensioning or the relaxation of the tongue, because it shortens or lengthens the distance between the plate and the sleeve or spool 8. The longitudinal adjustment is effected after withdrawing bolts 19 from and then fitting them through a different pair of holes 22 of the spring and resecuring the nuts in position. The slot or bifurcation 23 in the front end of the spring permits of such adjustment and also permits the tongue to play freely up and down when the vehicle is drawn along by draft-animals.

It will be apparent from the foregoing that the spring provides a yielding support which will prevent the tongue from dropping below a predetermined point, so that in case of a runaway and the escape of the horses the tongue cannot drop to the ground and by contact with an obstruction bring the vehicle to a sudden stop, with a possibility of injury to the occupants and the invariable destruction of the tongue. During the progress of the vehicle and incidental vertical vibrations of the tongue the spring performs no function other than that of confining the vibration within reasonable limits.

With work-vehicles having large and heavy tongues it is sometimes desirable to greatly increase the tension between the spring and the tongue, and the preferred method of accomplishing such result is to slip the stirrup or loop 24 upon the spring rearward of the sleeve or spool 8, this stirrup being pivotally suspended from an eyebolt 25 or its equivalent, pendent from the tongue. With this

arrangement the bending portion of the spring is materially shortened and its resistance to tongue movement proportionately increased.

- 5 The tongue may be adjusted to and held at a certain height by loosening nut 18 to permit plate 14 to be turned on bolt 17 and be then reclamped in such position by said nut. It will be seen that the different adjustments incidental to the relaxation of spring resistance to tongue movement, the increase of such
10 resistance, or to varying the normal position of the tongue may be made singly or together, and thus adapt the support to a vehicle of any style, and while I have described and illustrated the preferred embodiment of the invention it will be understood that it is susceptible of change in various particulars without departing from its spirit and scope or sacrificing any of its advantages.
- 15 Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a vehicle having a tongue, of a bracket upon the king-bolt, a plate secured to said bracket, a spring secured
25 to said plate and having at its front end a pin-and-slot connection with the tongue, and a stirrup engaging the spring, and pivotally suspended from the tongue.

2. The combination with a vehicle having
30 a tongue, a bracket upon the king-bolt, a plate secured to the bracket, a spring secured to the plate and having its front end slotted, a bolt depending from the tongue, a nut engaging the lower end of the bolt, and a flanged
35 sleeve or spool, interposed between the nut and tongue, upon the bolt and engaged by the slot of the spring.

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

BERTUS C. COWDEN.

Witnesses:

JOHN C. MYERS,
EDGAR E. BARNETT.