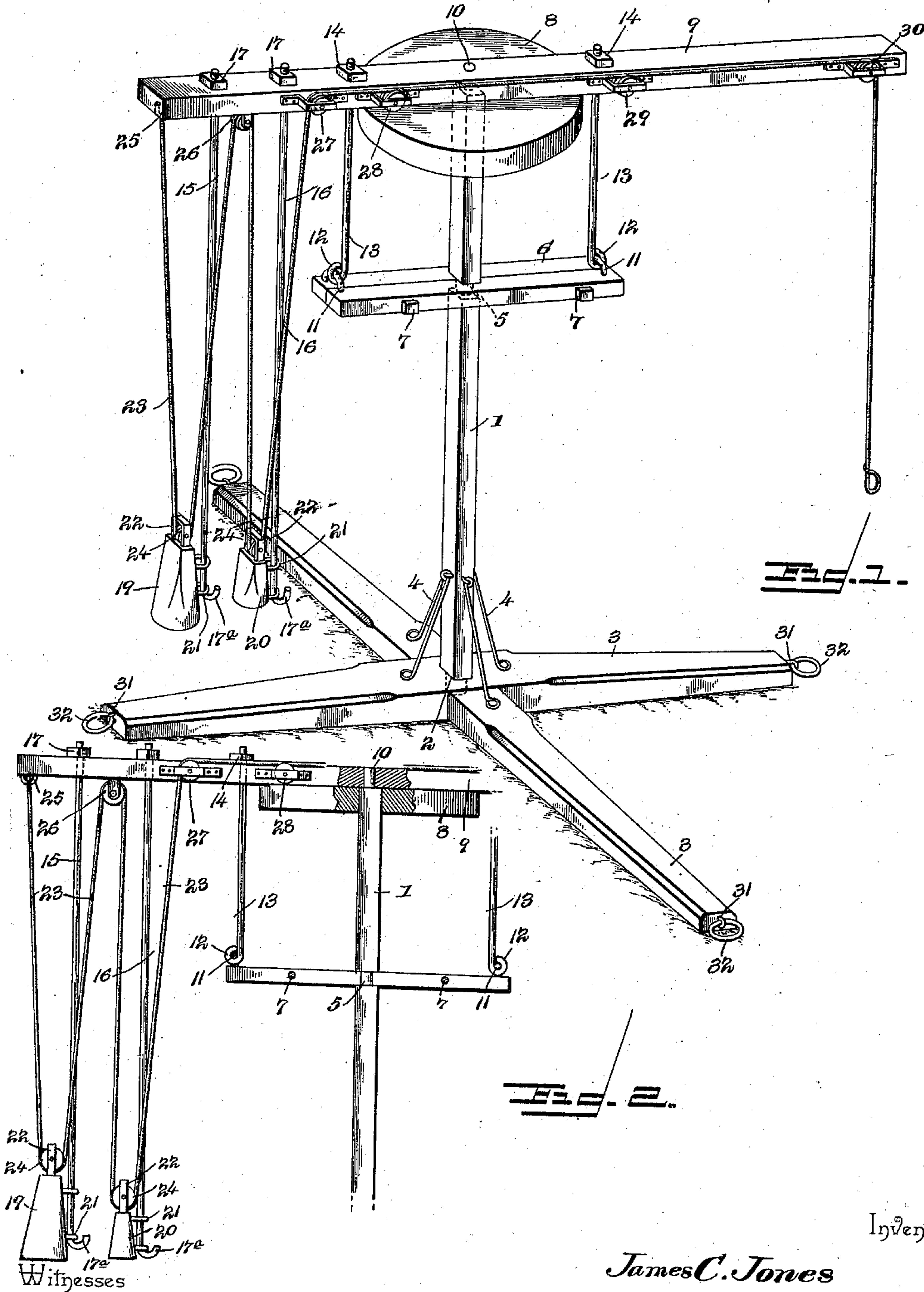


(No Model.)

J. C. JONES.  
TETHER.

No. 550,620.

Patented Dec. 3, 1895.





# UNITED STATES PATENT OFFICE.

JAMES C. JONES, OF NIXON, TENNESSEE.

## TETHER.

SPECIFICATION forming part of Letters Patent No. 550,620, dated December 3, 1895.

Application filed October 5, 1894. Serial No. 525,028. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. JONES, a citizen of the United States, residing at Nixon, in the county of Hardin and State of Tennessee, have invented a new and useful Tether, of which the following is a specification.

My invention relates to tethers, and has for its object to provide a stock-tether having simple means for taking up the slack in the tether-rope and so arranged as to take up the slack in a rope of considerable length, thus allowing the tethered animal an extended range for grazing, and, furthermore, to provide simple and improved means for mounting the rotary member of the frame, securing the same from accidental displacement, and taking up looseness due to wear.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a tether constructed in accordance with my invention. Fig. 2 is a partial vertical section of the same.

Similar numerals of reference indicate corresponding parts in both the figures of the drawings.

1 designates a fixed vertical standard, the lower extremity of which is fitted in an opening 2 of the intersecting base-beams 3, brace-rods 4 being employed to prevent vibration of the standard. The standard is provided at its upper end with a bearing-disk 8, secured against rotary movement, with its upper surface flush with a shoulder formed by the reduction of the projecting extremity of the standard to provide a bearing spindle or journal 10. Upon this bearing spindle or journal is loosely fitted a rotary beam 9, which projects at its extremities beyond the periphery of the disk and carries a series of guide-rollers 27, 28, 29, and 30 to guide the tether-rope 23. The extremity of the tether-rope is secured at 25 to one extremity of the beam, after which said rope extends around a pulley 24, mounted in a loop 22 at the upper extremity of a counterbalancing-weight 19. The tether-rope then passes over a pulley 26, mounted upon the beam between the point

of attachment 25 of the tether-rope and the first guide-pulley 26, and then passes around a second pulley 24, also mounted in a loop 22 upon the upper extremity of a weight 20. Thus a plurality of counterbalancing-weights is employed, said weights being graded in size or specific gravity, whereby the weight first effected by the tension of the tether-rope is the one adjacent to the central standard or adjacent to the free end of the tether-rope. The weights are reduced in size from the one located at the extremity of the beam toward the free end of the rope.

In order to prevent vibration of the weights during the rotation of the beam, they are provided with guide-eyes 21, fitted to slide upon guide-rods 15 and 16, located, respectively, contiguous to the paths of the weights 19 and 20 and secured at their upper extremities to the beam by means of nuts 17. The guide-rods are provided at their lower ends with stops 17<sup>a</sup>, which in the construction illustrated are formed as hooks, to prevent the guide-eyes on the weights from being disengaged from the guide-rods by the slackening or breaking of the tether-rope.

In order to prevent accidental displacement of the rotary beam from the standard and also provide for taking up looseness due to wear, I employ a rotary head 6, arranged below the plane of the bearing-disk 8 and provided with a bearing which is fitted upon a reduced portion or journal 5 of the standard. Said head is constructed of twin bars provided in their contiguous edges with halved bearings, which combine to form a bearing to receive the journal 5, said parts or members of the head being secured together by means of bolts 7. The extremities of this rotary head are connected, respectively, with the arms of the rotary beam 9 by means of tension-rods 13, provided at their lower ends with eyes 12, engaging keepers 11 on the head, and extending at their upper ends through the arms of the beam and engaged by nuts 14. By tightening the nuts 14 upon the upper extremities of the tension-rods the tension of said rods may be increased to cause the under surface of the beam 9 to bear upon the shoulder formed by the reduction of the upper extremity of the standard, and also upon



the upper surface of the disk, and at the same time cause the upper surface of the head 6 to bear against the upper shoulder formed by the journal 5. In this way the parts may be so adjusted as to prevent rocking of the beam 9 and cause it to operate positively in a horizontal plane.

By the employment of a plurality of counterbalancing weights graded in size from the outermost member of the series inward or toward the free end of the tether-rope said weights are adapted to be operated successively to correspond with the tension upon the tether-rope, and a rope of great length may be employed without danger of entanglement. Furthermore, the means for mounting the rotary beam provide for taking up lost motion due to wear and changes of temperature, shrinkage, &c., and at the same time provide for the removal of the beam by disengaging the nuts 14 at the upper ends of the tension-rods. The loose connection between the lower extremities of the tension-rods and the arms of the rotary cross-head 6 allows a slight independent movement of the parts to prevent binding, and at the same time facilitates the adjustment of the rods to take up looseness at the journal 10.

Any suitable means for securing the base-beams may be employed, such as rings 32, secured to the ends of the base-beams by means of staples 31.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

In a stock tether, the combination of a fixed vertical standard provided at its upper extremity with a reduced upper journal and at an intermediate point below the plane of said upper journal with a second or lower journal, the reduction of the standard to form said journals providing a shoulder at the lower limit of the upper journal and a similar shoulder at the upper limit of the lower journal, a horizontal bearing-disk fixed to the standard with its upper surface flush with the shoulder at the lower limit of the upper journal, a rotary beam having an opening fitted upon the upper journal and adapted to bear upon the upper surface of the bearing-disk and said flush shoulder, a tether rope and counterbalancing devices carried by said beam, a rotary cross-head having a central opening fitted upon the lower journal and bearing at its upper surface against the shoulder at the upper limit of said lower journal, vertical tension rods connecting the extremities of said cross-head with the beam upon opposite sides of its bearing, and means for adjusting the tension of said rods to compensate for wear caused by the frictional contact of the surfaces of the beam and cross-head with said shoulders, substantially as specified.

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

JAMES C. JONES.

Witnesses:

FRANK P. SMITH,  
WILL J. WATSON.