(No Model.)

B. E. SERGEANT.

TETHER.

No. 422,642. Patented Mar. 4, 1890.

Fig. 1.

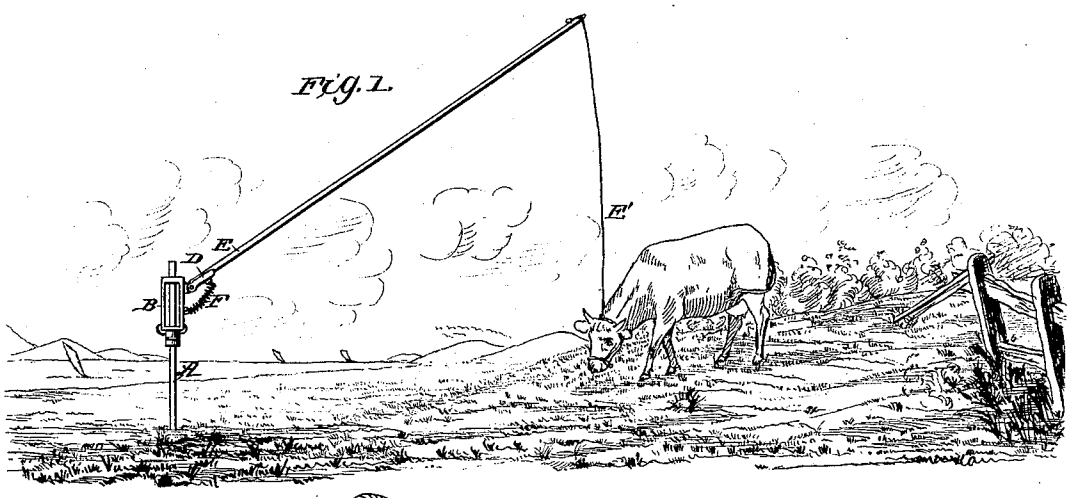


Fig. 2.

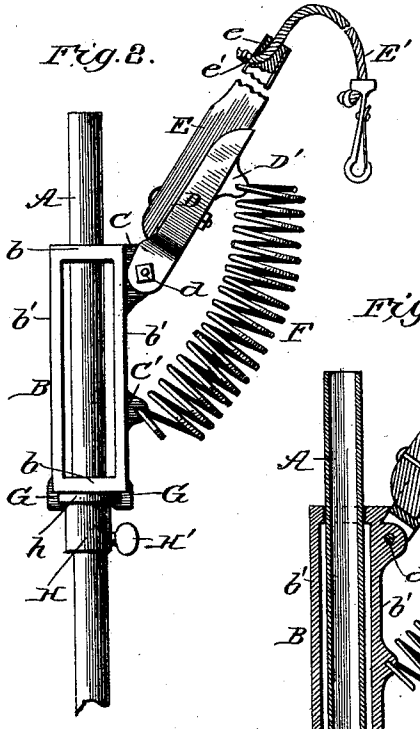


Fig. 3.

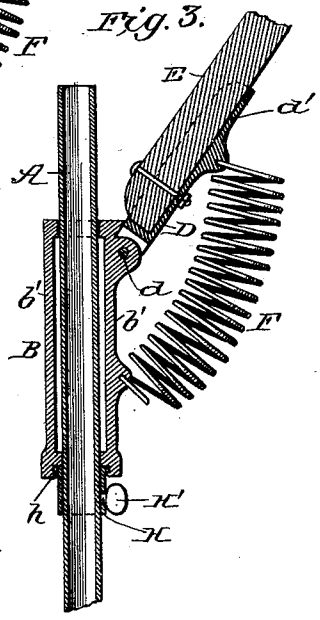
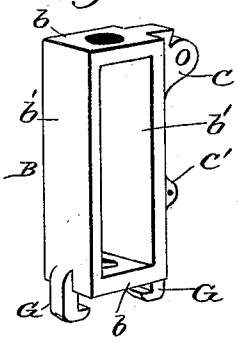


Fig. 4.



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BENJAMIN E. SERGEANT, OF GREENSBOROUGH, NORTH CAROLINA.

TETHER.

SPECIFICATION forming part of Letters Patent No. 422,642, dated March 4, 1890.

Application filed June 8, 1889. Serial No. 313,590. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN E. SERGEANT, of Greensborough, in the county of Guilford and State of North Carolina, have invented a new and useful Improvement in Tethers, of which the following is a specification.

My invention is an improvement in tethers, and has for an object, together with other improvements, to provide a novel combination and arrangement of parts, whereby the coil-spring will operate with a double tension to hold the tethering-pole elevated—that is to say, with a tension resulting from the tendency of such spring to retain its normal straight axial position and that to resume its normal expanded condition.

The invention has for further objects certain other improvements; and it consists in the improved constructions and combinations of parts, as will be hereinafter more fully described, and pointed out in the claims.

In the drawings, Figure 1 shows the invention as in use. Fig. 2 is a side elevation of a part of same, parts being broken away and others shown in section. Fig. 3 is a longitudinal section of a part of the tether, and Fig. 4 is a detail view of the bracket.

The stake A may be of suitable length, and is preferably made tubular or of gas-pipe, as shown, such construction enabling the stake to be made sufficiently large in diameter to prevent its being easily drawn over by strain on the tether-pole, and at the same time providing for such stake to be light and of the necessary strength. Such construction of the stake also permits a stake to be of the desired cross-sectional size and to be made of less metal, and consequently cheaper than if it were solid.

The bracket B is made in the shape of a rectangular frame, having base and top plates *b b*, perforated to fit on the stake A, and suitable side plates *b' b'*, one of which has lugs C and C', arranged one above the other and perforated, as shown. The upper lug C is to facilitate the hinging or pivoting to the bracket of the arm D, which, as shown, is hinged or pivoted at *d* to the bracket, preferably through the aid of lug C, and extends upward and outward from said bracket, and is grooved at *d'* to form a seat for the tether-pole E, which is secured to said arm, as shown. On its under side the arm D has a perforated lug D', preferably in a common vertical plane with the lug C'.

The spring F is arranged to bear between the arm D and the bracket and is arranged and adapted when compressed by the depression of said arm to be deflected laterally out of its straight axial line, so that the said spring operates with a double tension to support the arm and its attached pole. This tension results from the tendency of the spring to resume its straight axial position and also its tendency to resume its normal expanded condition, so that, as will be seen, a quick ready action of the spring is secured. In connecting the spring with the bracket B and arm D it is preferred to insert the free ends of its wire or rod through the perforated lugs C' D', and in reverse directions—that is to say, in one lug from the right and in the other from the left—so that when the ends are so placed, as shown, there is no danger of their becoming accidentally detached, for the reason that the movement of the spring to detach one of the ends is resisted by the coils of the spring at the opposite end preventing the said end from moving farther through the opposite lug, as will be understood from the drawings.

At one end, usually the lower, as shown, the bracket has jaws G, which embrace a rib or flange *h* on a sleeve H, which is fitted to and movable longitudinally on the stake and is secured in any suitable adjustment by a clamping-screw H'. By this construction the bracket may be secured in any suitable vertical adjustment on the stake.

The pole E is secured at its inner end to the arm, and the cord or rope E' is secured at one end to the outer end of the said pole. This connection is preferably effected by forming an opening *e*, extending longitudinally from the outer end of the pole E a short distance and opening out laterally at *e'*, and inserting the rope through such opening and knotting it at its end.

Having thus described my invention, what I claim as new is—

1. The bracket having a perforated lug and the arm hinged or pivoted at one end to the bracket and having a perforated lug, combined with the coil-spring having the wire or

rod forming such spring inserted at one end through the perforated lug of the bracket and at its opposite end through the perforated lug of the arm, and in reverse directions—that is to say, in one lug from the right and the other from the left—substantially as set forth.

2. The combination of the bracket having a lug C′, the arm hinged to said bracket above the lug and having a lug D′, and the coil-spring having the free ends of the wire or rod forming it inserted through said lugs in reverse directions, and the said spring being arranged to be deflected out of its straight axial position when compressed longitudinally, substantially as set forth.

3. The improved tether herein described, comprising the bracket having vertical openings for the stake and provided with jaws G, the sleeve H, having a rib or flange *h* for engagement by the jaws G, a clamping-screw whereby to secure the sleeve at any suitable point on the stake, the arm pivoted or hinged at one end to the bracket, and the spring bearing between said arm and bracket, substantially as set forth.

4. The improved tether herein described, consisting of the bracket having lug C′ and jaws G, the sleeve having a rib or flange for engagement by said jaws and provided with a clamping-screw whereby it may be secured in any suitable position on the stake, the arm hinged to the bracket and having a lug D′, and the coil-spring having the free ends of its wire or rod inserted in opposite directions through lugs C′ and D′, all substantially as and for the purposes set forth.

BENJAMIN E. SERGEANT.

Witnesses:
A. H. ALDERMAN,
W. E. ALLEN.