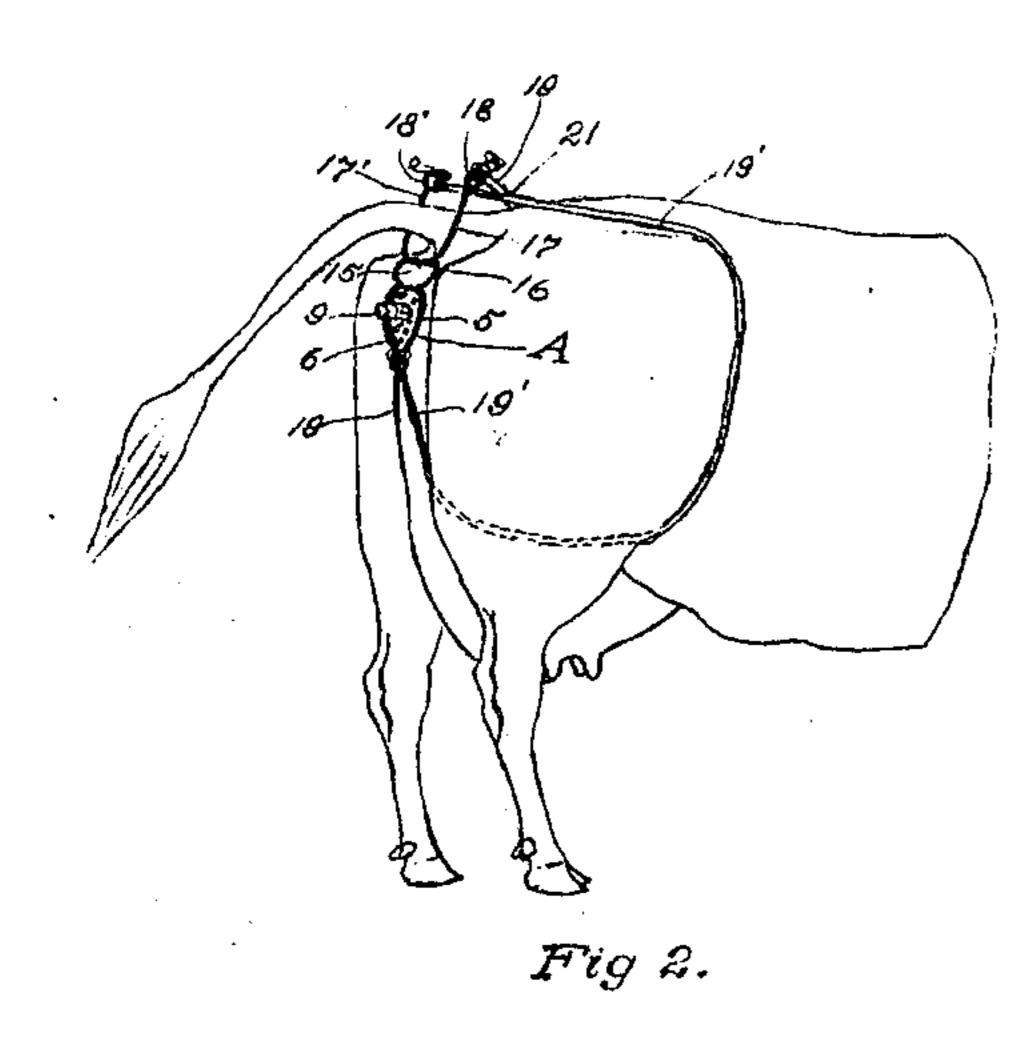
L. G. SPRAGUE. SUPPORT FOR PROLAPSED UTERUS. APPLICATION FILED AUG. 20, 1904.



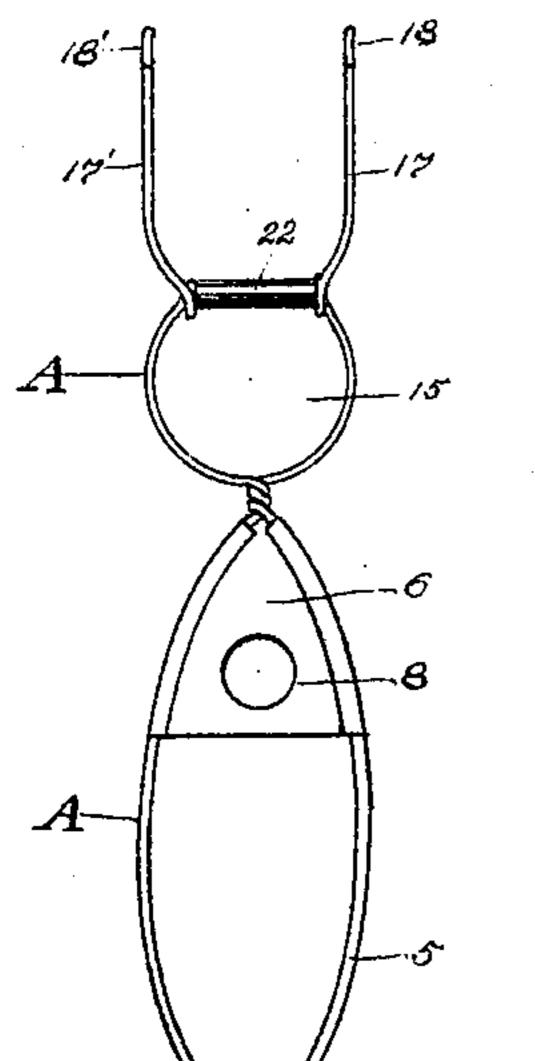


Fig 3.

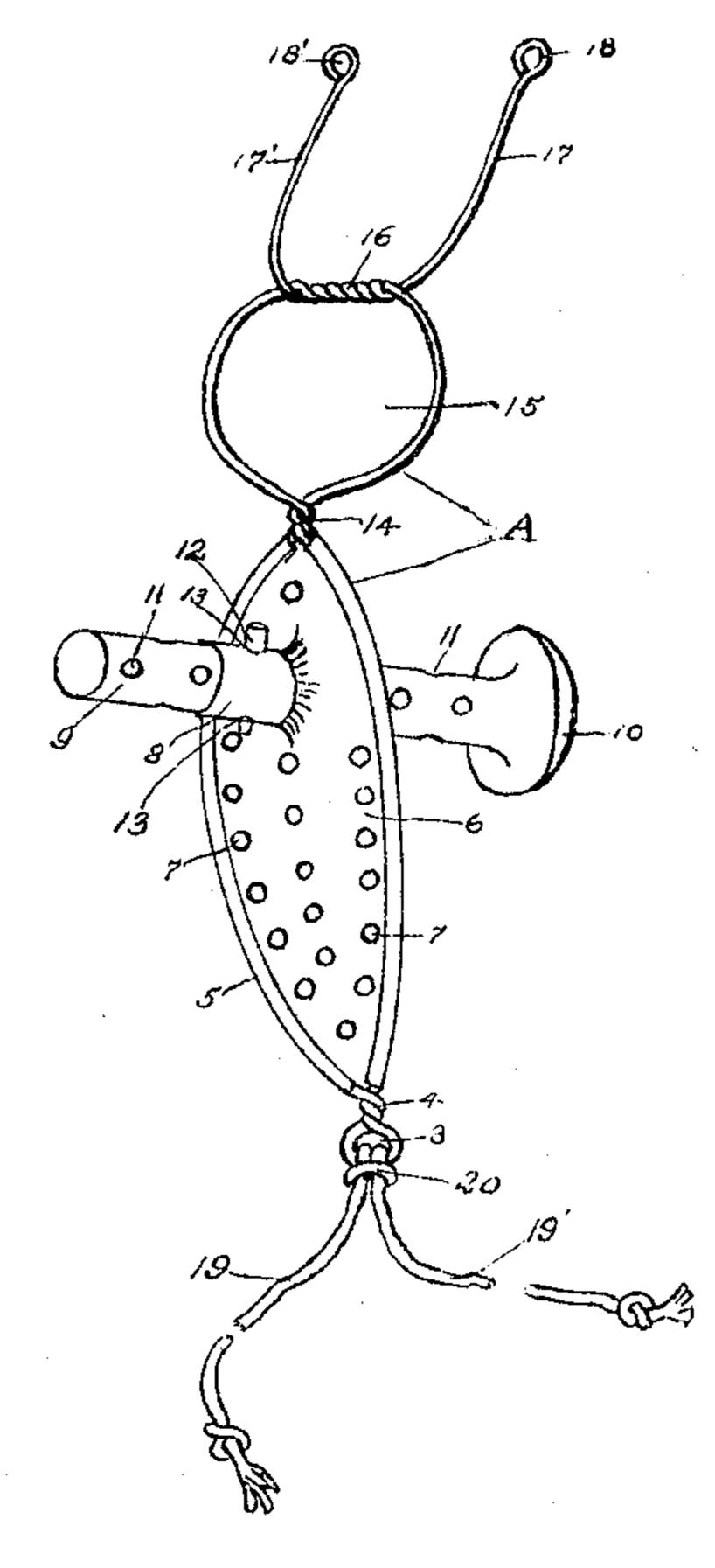


Fig 1.

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UNITED STATES PATENT OFFICE.

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SUPPORT FOR PROLAPSED UTERUS.

No. 798,464.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed August 20, 1904. Serial No. 221,496.

To all whom it may concern:

Be it known that I, Lewis G. Sprague, a citizen of the United States, residing at Henderson, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Supports for Prolapsed Uterus, of which the following is a specification.

This invention relates to improvements in supports for prolapsed uterus, designed for use by live-stock breeders, farmers, and dairymen in connection with cows, mares, or other young-bearing animals suffering from eversion of the womb, by the use of which "casting of the withers," (so called,) which frequently occurs immediately after parturition or calving, is prevented and the resulting weakness or death of such animals is thereby averted.

A prominent feature of the invention consists in providing a crupper-like truss or supporting device, which is preferably constructed of galvanized wire of a suitable gage and strength formed and woven in a peculiar manner, adapting it for the purposes intended, and being made of wire it is flexible and readily conforms to and serviceably fits the parts of the animal's body to which it is applied.

A particular feature of the invention con-30 sists of a perforated metal shield or plate oval in shape and suitably secured to the central loop of the wire frame, the object of this part of the device being to provide a supporting-shield which conforms in size and 35 shape to and completely covers the vulva or pudendum, and when applied to an animal by means of the attaching straps or cords said shield exerts an even support and pressure upon the whole external surface, thereby 40 preventing the casting or protrusion of the womb, and at the same time the said sheetmetal plate or shield being perforated permits of the free discharge of the urine without requiring its removal or special adjust-

Another important feature of the device consists in providing a plug or plunger, constructed either of wood or metal, with a head or knob of suitable size formed on one end and a sleeve or thimble guide for the same formed upon and through said perforated sheet-metal plate or shield, this plunger or plug being for use in extremely severe cases of prolapsed uterus, in the treatment of which

the head or knob of said plug is inserted into 55 the vagina, and it is held in position by means of a pin or cotter-key, which may be inserted into one of the several holes in the body of the plug and through the holes in said sleeve or thimble. The enlarged head or knob of 60 the plug is intended to practically fill the passage through the vagina, and the walls of the latter being soft and spongy will envelop. said knob or head and have a tendency to hold the plug in the desired position. A 65 further object of the said plug is to hold the metallic plate or shield in its proper position directly over the vaginal fissure. In cases where only mild treatment is required the use of the plug may be dispensed with en- 7° tirely, and in that event the perforated metallic portion of the device will prevent any slight protrusion of the womb or uterus.

The invention further consists in the constructions and in combinations hereinafter de-75 scribed, and particularly pointed out in the claims.

I may prefer to employ wire woven with coarse meshes or openings in place of the perforated sheet-metal plate or shield described 80 and not depart from the principles of my invention.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which 85 similar characters of reference indicate corresponding parts in all of the views, and in which—

Figure 1 is a perspective view of the supporting device, showing the plug or plunger 90 attached. Fig. 2 is a view of the hind parts of a cow and showing the manner of applying and securing my invention. Fig. 3 is a view of a modified form of the invention shown in Figs. 1 and 2.

In the drawings, A represents the frame of the support, preferably woven and formed from a single piece of galvanized iron or steel wire which will neither rust nor corrode. In bending and twisting the wire into the shape as shown suitable forms will be employed, so as to make the various loops or sections of the supports of uniform size and contour.

3 represents a small loop or eye formed on the lower end of the support, to which the 105 attaching or binding cords are secured.

4 is the twisted-wire portion connecting loop 3 with the oval supporting-section 5.

6 is a sheet-metal plate or shield which is secured to the oval loop 5, and 7 7 represent a series of perforations in plate 6, through which urine or other thin discharges may 5 escape.

8 is a thimble or sleeve guide for plug 9 and is formed by drawing out a portion of the metal of plate 6.

8' represents the oppositely-facing pin-

10 holes through sleeve 8.

The plug or plunger 9 is preferably made of hard wood, but may be constructed of any suitable metal and produce the same results.

10 represents the head or knob of plug 9 15 and may be made considerably larger than the body or stem of the plug. The form of the head as shown in the drawings has been found to answer the purposes intended; but any other suitable design or form may be em-20 ployed with equal effect.

11 represents a series of holes which pass through the body of plug 9 and are intended for gaging the depth or distance which said plug may be inserted into the vaginal cavity

25 and held in such position by means of a pin 12, which passes through said plug and the oppositely-facing holes 13 in the sleeve 8. The holes 11 in plug 9 are preferably staggered, so as to prevent the splitting of the 3° body of the plug in case the same is made of

wood.

14 is the twisted portion of the wire, which connects the oval loop 5 with the circular loop 15. The latter loop is simply an open 35 circular section intended to facilitate the attaching and fitting of the supporting device to the animal, and the wire at this point is formed into a circle large enough to permit of the free discharge of excrement and at the 4° same time allows the device to be extended on upward to a point about on a level with the animal's back. 16 is another twistedwire portion forming the upper side of loop 15, from the ends of which the arms 17 and 45 17' extend upward on each side of the animal's tail, thereby forming a sort of cruppersurcingle to assist in holding the support in place. On the free ends of said arms 17 and 17' the small loops or rings 18 and 18' are 5° formed.

19 and 19' are the binding cords or straps and preferably consist of a single piece of stout heavy cord or leather strip, which is secured to the ring or loop 3 by means of a 55 slip-knot 20, tied at its center. By this means two binding straps or cords are provided, both of them being long enough to pass through between the hind legs of the animal on each side of the udder and thence upward 60 just in front of the hip-joints on either side. The straps or cords are then crossed upon the animal's back at 21, and the ends are secured to the loops 18 and 18', thus completing the attaching of the support.

Fig. 3 of the drawings shows a modified

form of my invention, in which the lower portion of the oval loop 5 is left open to permit of the discharge of urine, &c. The metallic plate 6 is reduced in size and is only made large enough to afford a support and bearing 70 for the plug or plunger 9, which in this form of the device is intended to be employed in the same manner as described above. In this form of support instead of the twisted portion 16 of Figs. 1 and 2 I have shown a short 75 section of tubing 22, through which the strands of the wire are passed, and the wires are given a single twist at each end of the tube 22 to prevent the distorting of loop 15. The reduced plate 6 is provided with a sleeve the 80 same as in Fig. 1.

It will be obvious to any one skilled in the art that various modifications may be made in the device that I have shown and described without departing from the spirit of my in- 85 vention, and I therefore do not restrict myself to the precise construction herein shown and

described.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 90 ent, is—

1. In a support for prolapsed uterus, the combination with the wire frame woven and bent in the manner described, of a metallic shield or plate secured to a portion of said wire 95 frame, a series of perforations in said shield or plate, a sleeve-bearing formed upon said shield or plate, a plunger or plug provided with an enlarged head or knob at one end, and adapted to operably fit into said sleeve-bear- 100 ing, and means for adjusting and holding said plunger or plug in a number of different positions, substantially as shown and described.

2. In a support of the class described, the combination with the integral wire frame, of 105 a loop or loops formed on each end of said frame for use in securing the binding straps or cords, of a perforated metal plate mounted upon said wire frame, a sleeve integrally formed upon, and at right angles to the plane 110 of said plate, a wooden or metallic plug adapted to slidably fit said sleeve, means comprising a pin and a series of pin-holes for adjusting said plug to different positions, for the purpose of preventing the protrusion of the uterus, sub- 115 stantially as shown and described.

3. In a support for prolapsed uterus, the combination with the truss or frame formed from a single piece of wire, of a metallic plate mounted upon said truss or frame, a plurality 120 of perforations in said plate for the emission or discharge of urine, a sleeve or thimble formed on said plate, a plug or plunger having a knob formed on one end adapted for insertion into the vagina to prevent the pro- 125 trusion of the womb, substantially as shown and described.

4. In a support of the class described, the combination with the wire frame comprising a series of integrally-formed circular and oval 130

loops, of a sheet-metal plate or shield rigidly secured to, and covering one of said loops, a plurality of perforations through said plate or shield, a sleeve on said plate, a plug slid-5 ably fitting said sleeve, substantially as shown

and described.

5. A support of the class described consisting of a truss or frame comprising an upper and a lower loop separated from each other 10 by an intervening closed portion, the lowermost loop being provided with means to prevent the casting of the womb, and means for attaching the support to the body of the animal, substantially as described.

6. The herein-described preventive appli-

ance for cattle consisting of the metal-wire retainer provided with the upper rings, a loop below said rings, a larger loop below the firstmentioned loop, and a bottom ring, the wire being twisted together between the loops and 20 the rings, a surcingle and cords or bands connecting the upper and lower rings with the said surcingle, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

LEWIS G. SPRAGUE.

Witnesses:

Edgar O. Bloodough, MARY SHINNERS.