(No Model.)

A. D. NEFF.

GATE FOR WIRE FENCES.

No. 443,146. Patented Dec. 23, 1890.

Fig. 1.

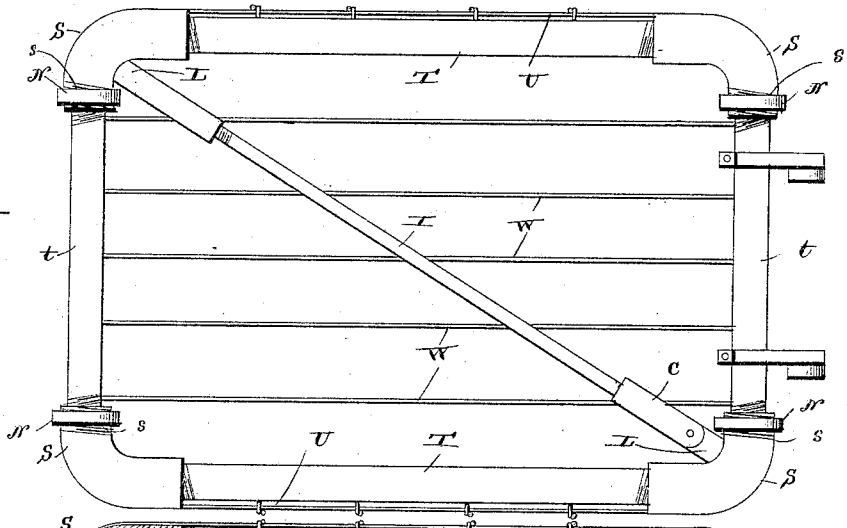


Fig. 2.

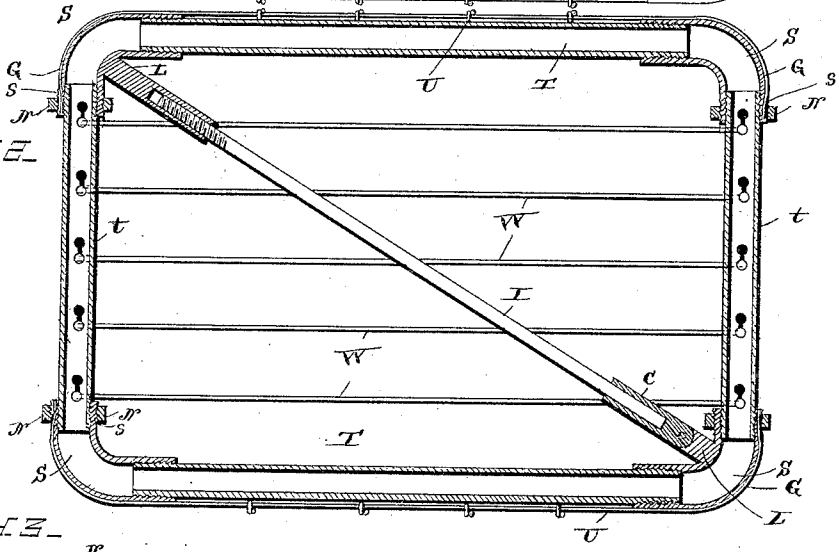


Fig. 3.

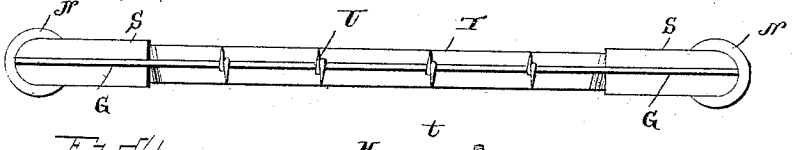
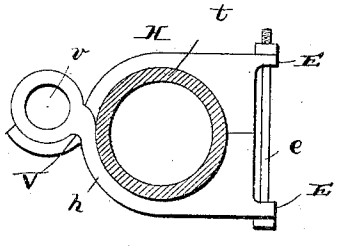


Fig. 4.



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GATE FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 443,146, dated December 23, 1890.

Application filed March 28, 1890. Serial No. 345,731. (No model.)

To all whom it may concern:

Be it known that I, ARD DRAYTON NEFF, a citizen of the United States, residing at Petersburg, in the county of Huntingdon and State of Pennsylvania, have invented a new and useful Wire Fence, of which the following is a specification.

This invention relates to wire fences, and more particularly to the gates adapted to be used in connection therewith.

The object of the invention is to provide a durable and cheap gate for the purpose, which shall be neat in appearance and durable in use and which can be constructed of materials near at hand and of any size and shape desirable, according to the requirements of the case. This object I accomplish by my improved gate, which consists, essentially, of four tubes seated in metallic sockets at the corners of the gate, wires stretched from end to end of the gate and wound upon the end tubes, a barbed wire along the top and bottom of the gate, passing around the outer face of each socket, nuts upon the vertical portions of the sockets for holding said barbed wire in place, and a diagonal brace to prevent the sagging of the gate, together with an improved construction of hinge-leaf, especially adapted for use in connection herewith, and certain specific and adjunctive details of construction of parts, all as more fully described hereinafter, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the gate complete. Fig. 2 is a central vertical section thereof. Fig. 3 is a top edge view, and Fig. 4 is a top view, of one of the end bars in section and the hinges in plan.

Referring to the accompanying drawings, the letters T T and *t t* designate, respectively, the two horizontal and the two vertical bars forming the frame or outline of this gate, said bars being each composed of pieces of tube or pipe of the necessary length to make a complete gate of the desired size. These tubes are seated at their meeting ends in sockets S, preferably of metal, as shown, the outer upper and the inner lower sockets having cast thereon integral lugs L, one having a slotted inner face and the other a threaded opening. Within this opening is screwed the end of the inclined brace I, which is preferably composed of a stiff rod of metal whose opposite end is seated in a cup-shaped piece C, the latter being pivoted within said slot in the other lug. The end of the socket C opposite the end in which the diagonal brace I is seated may be slotted and then opened sufficiently to allow it to rest like shoulders directly on the corner S without the use of integral lugs without departing from the spirit of the present invention.

The horizontal bars T T have each a right-hand thread on the one end and a left-hand thread on the other, so that by turning them the ends of the bars can be partially withdrawn from the sockets S and the wires be given the desired tension. The vertical bars *t t* are also screwed into the corners S, but the thread on both ends is alike—*i. e.*, both are either right-hand or else both are left-hand threads.

A barbed wire U is provided, which extends along the top and bottom of the gate, and the corner sockets are each provided with a groove G, for the reception of this wire. The barbs prevent animals from pushing under the gate or rubbing on the top thereof, which would soon cause it to sag and its parts to become loose.

The vertically-facing ends of the sockets S are provided with external screw-threads, and on these are screwed nuts N. The grooves G grow gradually deeper as they near these screw-threaded extremities, and when the nuts N are turned the ends of the barbed wires U are clamped in the grooves.

The letter W designates horizontal wires, the same as are used in the fence of which this gate forms a part, and these may be barbed or plain, as preferred. At their ends these wires are fastened to the end tubes *t t* in any suitable manner. It will be understood that by turning one or both of these tubes in the proper direction a considerable degree of tension can be imparted to these wires, and in this manner the latter are kept tight.

In constructing a gate of this description the four tubes are first cut to the desired length and inserted in the sockets at the corners of the gate. The barbed wires U are then applied and passed through the four nuts where they occur, and these wires are

drawn tight and held so by the nuts N. The inclined brace I is then applied, or if the cup-shaped piece C is used this brace is applied when the parts are first assembled. The wires W are then put in place and secured at their ends to the two end tubes *t*, after which the tubes *t* are turned so as to tighten the wires, and the gate is completed. All the wires are now drawn very tight by turning the top and bottom tubes in a direction partially to unscrew their ends from the sockets S, and this can be done from time to time as the wires stretch and need tightening. If the barbed wires are much looser, the nuts N are unscrewed, the barbed wires tightened by hand, and then all the wires drawn very tight, as above.

The improved hinge-leaf which I preferably use in connection with this gate is composed of two entirely independent members H *h*, the former having a vertical notch V in its body near its outer end, through which the body of the latter member passes, and the member *h* having an eye *r* at its tip adapted to form part of the hinge proper—that is to say, to engage over the pintle of the hinge-leaf, which is secured to the gate-post. The bodies of these members are curved throughout their length, whereby they are adapted to fit around one of the vertical tubes *t*, and their inner ends are provided with ears E, which are perforated, as shown. Passing through the perforations in these ears is a bolt *e*, whereby the two members are securely clamped around said tube *t*, all as clearly shown in Fig. 4 of the drawings.

I claim as the salient features of my invention—

1. The herein-described gate, the same composed of tubes seated in sockets at their meeting ends, the vertical arms of said sockets being externally screw-threaded, barbed wires seated in grooves around the outer faces of said sockets and extending along the top and bottom of the gate, and nuts upon said screw-threaded arms embracing said barbed wires, as and for the purpose set forth.

2. The herein-described gate, the same composed of tubes seated in sockets at their meeting ends, the diagonally-opposite sockets having inwardly-projecting lugs, a cup-shaped piece C, pivoted in a slot in one of said lugs, and a diagonal brace-rod seated at one end in said cup-shaped piece and screwed at its other end into the other lug, as and for the purpose set forth.

3. The combination, with the gate having the vertical tube *t*, of the two-part hinge-connection comprising members H *h*, detachably connected at their outer ends and one of them carrying an eye *r*, for the purpose set forth, the inner ends of said members having the perforated ears E, and the bolt *e*, passing therethrough, substantially as described.

4. The combination, with the gate having the vertical tube *t*, of the two-part hinge-connection, the same comprising a curved member H, having a vertical notch V near its outer end and a perforated ear E at its inner end, an oppositely-curved member *h*, having an eye *r* at its outer end and a perforated ear E at its inner end, the body thereof passing through said notch, and a bolt *e*, passing through said perforated ears, the whole constructed and operating substantially as and for the purpose set forth.

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

ARD DRAYTON NEFF.

Witnesses:
JNO. M. BAILEY,
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