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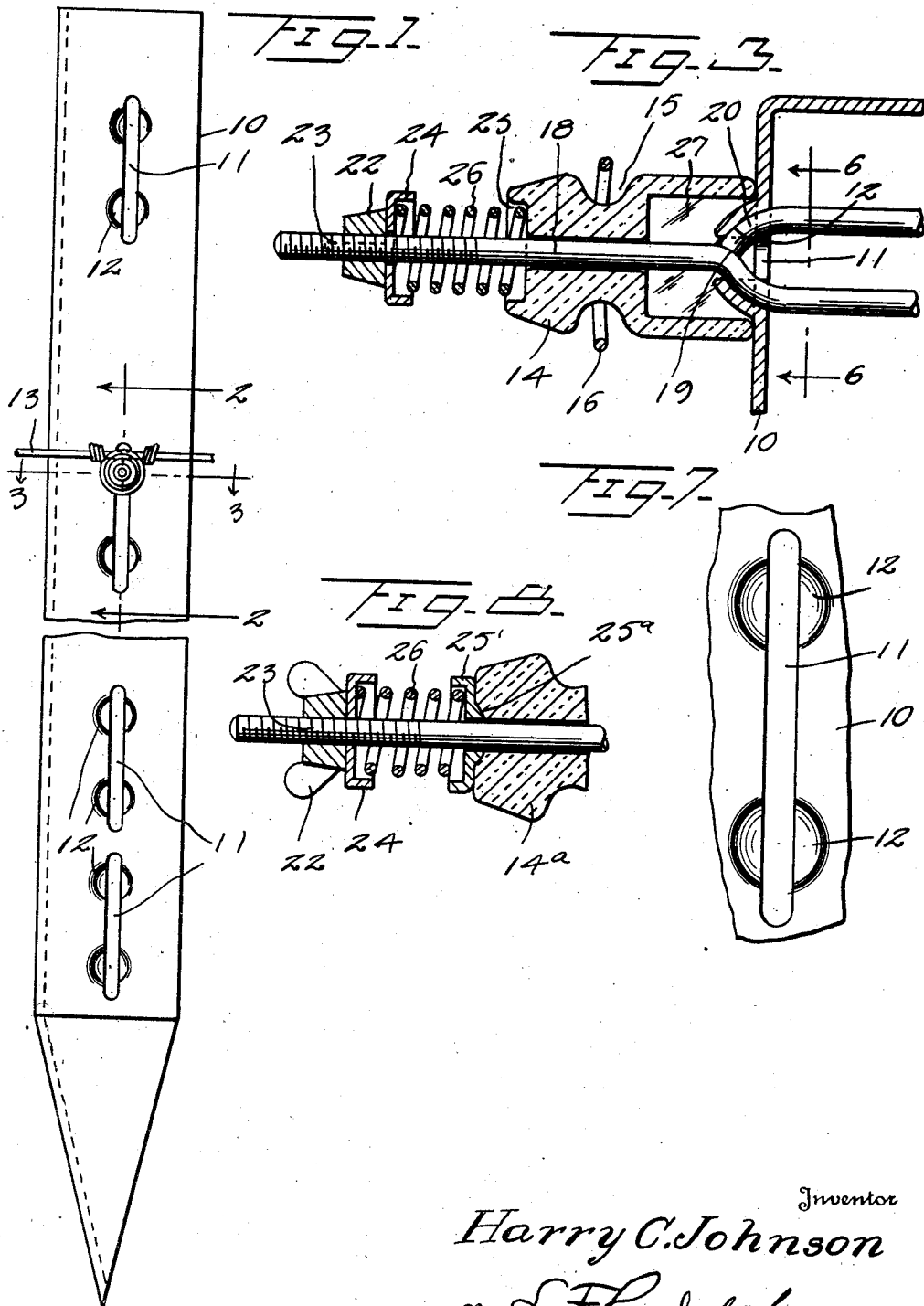
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2,409,491

ADJUSTABLE FASTENER FOR ELECTRIC FENCE INSULATORS

Filed Jan. 15, 1944

2 Sheets-Sheet 1



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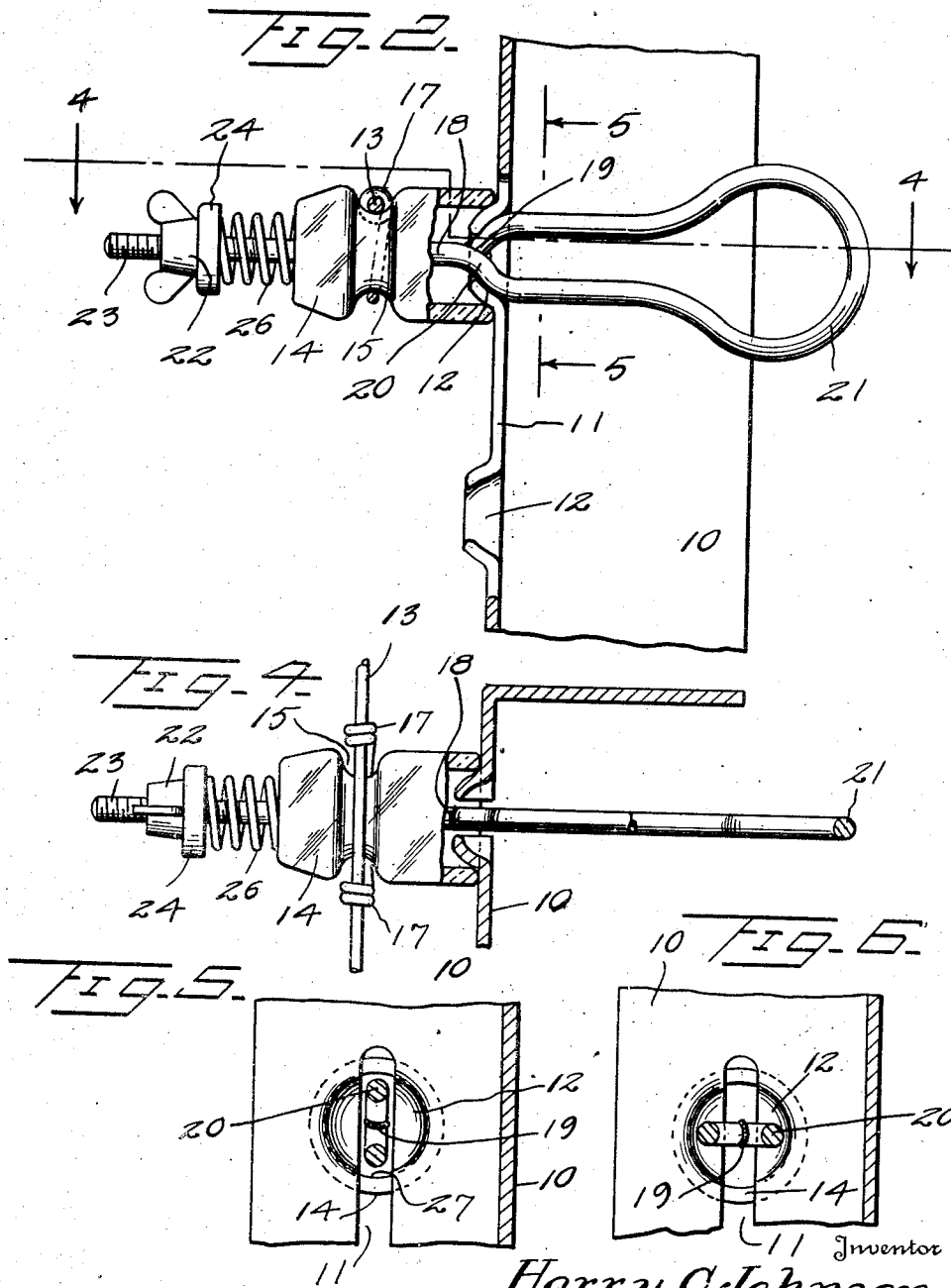
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## UNITED STATES PATENT OFFICE

2,409,491

ADJUSTABLE FASTENER FOR ELECTRIC  
FENCE INSULATORS

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3 Claims. (Cl. 174-161)

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This invention relates to a mounting or fastening means for insulators as used on electrified fences or enclosures for live stock.

It is particularly aimed to provide an exceedingly simple construction which may be expeditiously applied and adjusted and one which may be used in a single size for the different sizes of live stock.

It is also aimed to provide a structure wherein the wire may be arranged at different heights without detaching the same from the insulator and without danger of shock.

It is further aimed to provide a structure wherein the insulator may be attached and detached without separation of its fastening means and from the same side or face of the fence post.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating an operative embodiment.

In said drawings:

Figure 1 is a view in elevation of a fence post with a conductor wire secured thereto by means of my invention;

Figure 2 is an enlarged vertical sectional view taken on the line 2-2 of Figure 1;

Figure 3 is a cross-sectional view taken on the line 3-3 of Figure 1;

Figure 4 is a cross-sectional view taken on the line 4-4 of Figure 2;

Figure 5 is a section taken on the line 5-5 of Figure 2;

Figure 6 is a section taken on the line 6-6 of Figure 3;

Figure 7 is a detail looking toward the inner surface of the post to show the slot formation; and

Figure 8 is a horizontal section taken on the same plane as Figure 3, through a modified form.

Referring specifically to the drawings wherein like reference characters designate like or similar parts, any suitable fence post is employed as at 10. By way of example, this post is preferably of angle form in cross section and at various elevations has any desired number of vertical slots 11. Within the length of these slots, any desired number of sockets 12 may be provided by striking out the same from the inner or rear surface of the post as shown. By way of example, I have shown two of the sockets within the length of each of the slots 11, but I may use a single socket or more than two, as preferred.

Such sockets are intersected or crossed by the adjacent slots 11 as shown.

The invention enables me to adjustably mount

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at any desired height, a conductor or electrified wire or number of wires 13 around an enclosure to aid in fencing in cattle. The conductor 13 is connected to an insulator 14 of suitable construction which preferably has a groove 15 around the same in which a fastening wire 16 is secured and which is terminally tied or attached to the conductor 13 as at 17.

The insulators 14 are mounted on detaching bolts or rods 18, being loose on the latter, and the rear ends of the latter being returned and welded to the remainder as at 19, providing enlargements at 20 for engagement in the sockets 12, and outwardly of the enlargements preferably being further enlarged as at 21.

A nut 22 is adjustably secured on the bolt 18 by means of screw threads at 23, and it bears against a cup-shaped washer or the equivalent 24, which in combination with a recess or depression 25 in the insulator, mounts an expansive coil spring 26 which surrounds the rod therebetween. Through the adjustment of the nut 22, the spring 26 may be placed under any desired tension.

It will be noted that the inner end of the insulator 14 is hollow as at 27 and that the projecting portion of the adjacent socket 12 extends into the insulator and is of such size as to serve to center it.

As a result of the construction described, the insulator 14, rod 18 and parts attached to them form a unit. Even with the wire 13 attached to the insulator, the insulator may be fastened to the post or its adjustment with respect to the post changed by removing the bolt 18 from engagement with any slot 11 to engagement with any of the remaining slots 11, and also from any of the sockets 12 thereof, to any remaining sockets. Thus, in attaching the structure, bolt 18 with the insulator in place and other parts attached, with or without the wire 13 connected thereto, is inserted into one of the slots 11 with the enlargement 21 vertical as suggested for example in Figure 5. Thereupon, the enlargement 21 is manually engaged and turned 90 degrees as shown in Figure 6, as a result of this turning, the enlarged portion 20 snapping into the adjacent socket 12 and being held in place therein at the appropriate tension through the expansion of the spring 26. It is to be borne in mind that the tension of the spring 26 may be adjusted to suit conditions and that the elevation of the wire 13 may be varied simply by positioning the enlargement 20 in any of the available sockets 12.

Various changes may be resorted to provided they fall within the spirit and scope of the in-

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vention. For instance, as shown in Figure 8, in lieu of the depression 25, I may use a cup-shaped washer 25' to engage the adjacent end of the spring 26 as a seat. Such washer 25' may engage the insulator here designated 14a, along the spherical surfaces as at 25a.

I claim as my invention:

1. In combination with a support having a slot, a bolt, said bolt having an enlargement insertable through the slot and turnable to prevent retraction through the slot, an insulator on the bolt engageable with the opposite face of the support to said enlargement, spring means on the bolt for urging the enlargement snugly against the support when said enlargement is disposed transverse of said slot and holding the insulator firmly against the adjacent side of the support, said support having a struck-out portion providing a depression to receive the enlargement, said insulator having a recess on one end entered by the struck-out portion for centering purposes.

2. In combination with a support having an elongated slot therein, a rod disposed through the slot and provided with a handle at one end thereof adapted to be turned transverse to the slot to prevent movement therethrough, said support being provided with sockets at spaced intervals

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and through which the slot extends, said rod movable along the slot from one socket to another selectively, an insulator on the rod engageable with the support, and a spring on the rod adapted for urging the insulator against one side of the support and holding the inner end of the handle firmly in one of the sockets, when said handle is turned transverse to the slot.

3. In combination with a support having an elongated slot therein, a rod disposed through the slot and provided with a handle at one end thereof adapted to be turned transverse to the slot to prevent movement therethrough, said support being provided with sockets at spaced intervals and through which the slot extends, said rod movable along the slot from one socket to another selectively, an insulator on the rod engageable with the support, and a spring on the rod adapted for urging the insulator against one side of the support and holding the inner end of the handle firmly in one of the sockets when said handle is turned transverse to the slot, said sockets being formed outwardly, the adjacent end of the insulator being hollow to receive the protruding portion of the corresponding socket.

HARRY C. JOHNSON.