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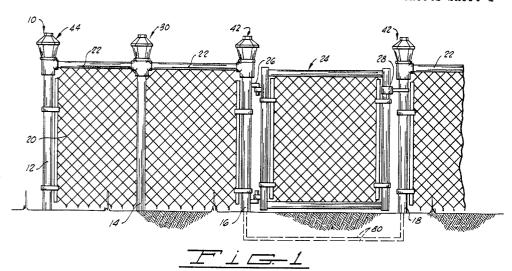
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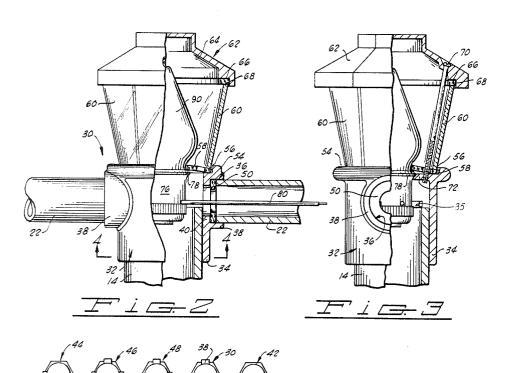
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ILLUMINATED FENCE

Filed April 9, 1962

2 Sheets-Sheet 1





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INVENTOR. Russell E. Thedrord

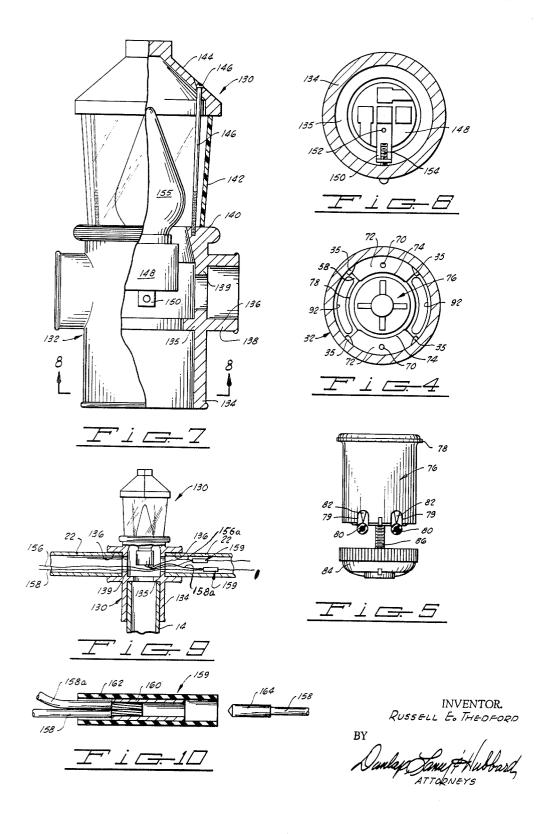
BY

Samey Aubbard

## ILLUMINATED FENCE

Filed April 9, 1962

2 Sheets-Sheet 2



3,222,509 ILLUMINATED FENCE Russell E. Thedford, Rte. 1, Moore, Okla. Filed Apr. 9, 1962, Ser. No. 186,114 6 Claims. (Cl. 240—2)

This is a continuation-in-part application of my copending application, S.N. 131,294, filed August 14, 1961, now abandoned.

This invention relates generally to improvements in 10 fences, and more particularly, but not by way of limitation, to an improved illuminated chain-link fence.

As is well known in the fence art, chain-link fences are presently very popular for use around all types of installations, such as industrial plants, homes and swim- 15ming pools. It is also popular to provide lighting in and around a fenced area for safety and decorative purposes during nighttime. The lighting is frequently separate from the fence construction which requires either the use buildings and the like which normally detract from the overall appearance of an installation.

Many efforts have been made to combine lighting with fencing but, to the best of my knowledge, these prior combination structures have not been popular, principally 25 because of the cost both of materials and installation, as well as the unsightly appearance of the structures during daylight hours. For example, it has been known to mount light fixtures at one or more locations along the top of a fence which requires the use of special clamps 30 for attaching the fixtures to the fence, as well as the rather complicated wiring job, including the use of weatherproof wiring and means for supporting the wiring along the fence. It has also been proposed to install lights inside of one or more hollow fenceposts and run the various 35 wires at least partially through the top rail of the fence. In this latter type of operation, the fenceposts containing lights must be specially constructed at a high cost, and the top rail of the fence is connected to the various fenceposts by brackets which require that the wires leading to 40and from the various lights to be extended from the top rail down along the side of the fenceposts containing a light which detracts from the appearance of the fence installation and entails substantial additional cost, not only in materials, but in labor required to install the fence.

The present invention contemplates a novel fence construction wherein lights are provided in the tops of various fenceposts of the fence and the wires leading to and from the lights are completely enclosed in the top rail of the fence to provide a neat appearing and safe construction. The present invention also contemplates a novel cap construction for a wire-mesh fencepost which includes a light socket and fixture, wherein the cap is easily installed on a fencepost and provides a connection between the fencepost and the top rail of the fence. The present invention further contemplates a novel wiring construction for use in wire-mesh fences wherein the various lights can be connected by unskilled workmen utilized for erecting the fence.

An important object of this invention is to provide  $^{60}$ a fence construction having a neat and attractive appearance during both daylight and nighttime.

Another object of this invention is to provide an ilside of the fence.

Another object of this invention is to provide a novel cap construction for the wire-mesh fencepost which not only provides the light fixture but also provides a connection between the fencepost and the top rail of the fence. Another object of this invention is the provision of

a novel cap construction the body of which can be cast as a unit and which is easily disassembled and assembled to replace burned out light bulbs.

A further object of this invention is to provide an illuminated fence which may be erected with relatively unskilled manpower.

Another object of this invention is to provide an illuminated fence which will not be adversely affected by inclement weather.

A still further object of this invention is to provide an illuminated fence construction which is economically manufactured, which is simple in construction, and which will have a long service life.

Other objects and advantages of the invention will be evident from the following detailed description when read in conjunction with the accompanying drawings which illustrate my invention.

In the drawings:

FIG. 1 is an elevational view of a portion of a chainof separate lampposts and fixtures or fixtures mounted on 20 link or wire-mesh fence constructed in accordance with this invention.

> FIG. 2 is an enlarged elevational view of my novel cap construction, with approximately one-fourth of the cap being broken away to illustrate details of construction.

FIG. 3 is another enlarged elevational view of my novel cap construction taken from the side of FIG. 2, also with approximately one-fourth of the cap broken away to better illustrate details of construction.

FIG. 4 is a sectional view taken substantially on line 4-4 of FIG. 2, with the fencepost removed in order to better show details of construction.

FIG. 5 is an enlarged elevational view of an electric lamp socket used in the novel cap construction of FIG. 2.

FIG. 6 is a schematic illustration of various types of caps which may be constructed in accordance with my invention.

FIG. 7 is an enlarged elevational view of another embodiment of my novel cap construction with approximately one-fourth of the cap broken away to better illustrate details of construction.

FIG. 8 is a sectional view taken substantially on line 8—8 of FIG. 7.

FIG. 9 is an elevation in section of a typical connection provided between a fencepost and top rail by the novel cap construction of FIG. 7 in a fence constructed in accordance with my invention.

FIG. 10 is an enlarged, longitudinal sectional view of an electrical coupling used in the embodiment of my invention illustrated in FIG. 9.

Referring now to the drawings, and in particular to FIG. 1, reference character 10 generally designates an illuminated fence constructed in accordance with this invention. The fence 10 may include a corner post 12, an intermediate post 14, and gate posts 16 and 18. A conventional chain-link 20 or other desired wire-mesh or the like is stretched between the corner post 12 and gate post 16. Tubular top rails 22 extend between each adjacent pair of posts to interbrace the posts and provide a rigid structure. A suitable gate 24 is suitably supported by hinges 26 from the gate post 16 and may be secured to the gate post 18 by a suitable latch 28.

As shown in FIGS. 2 and 3, the present invention utilizes a novel cap construction, a typical cap being indicompletely enclosed and cannot be observed from either necting the various fenceposts and the top rails 22. The typical cap 30 includes a body portion 32 which is hollow and has a lower tubular shank portion 34 of a size to telescope over the upper end of the intermediate post 14, for example, until the four projections 35 which extend radially inwardly abut the top of the post 14. The body 32 has apertures 36 in diametrically opposite sides of the

side walls, the apertures being formed by annular flanges 38. The apertures 36 receive the ends of the tubular top rails 22 which abut against suitable annular shoulders 40 formed with the apertures 36.

Of course it will be appreciated that the size of the tubular shank portion 34 will depend upon the size of the particular post upon which the cap is to be situated. In practice, the corner post 12 and gate posts 16 and 18 will usually be considerably larger than an intermediate post 14, the particular size being dependent upon the 10 loads applied to the respective fencepost in a particular fence configuration. Also, it will be appreciated that the novel cap construction 30 may have a variety of arrangements of apertures 36, as illustrated in FIG. 6. The cap construction 30, as described above, is normally used on 15 an intermediate fencepost such as 14. The cap 42 which has only one aperture formed by a flange 38 is customarily used on the gate posts 16 and 18. The cap 44, which is provided with two apertures formed by flanges 38 disposed at 90°, is the type used on a corner post. Similarily, 20 it will be evident that the caps 46 may be used on a post which is common to two fences which intersect at 90°, and the cap 48 may be utilized at a similar intersection but from which only one lateral fence extends. In any event, each of the apertures 36 formed by a flange 38 will nor- 25 mally be sized to closely receive the end of the respective top rail 22, which customarily will be of a uniform diameter throughout a particular fence installation.

An annular sealing gasket 50 is preferably provided within the apertures 36 between the shoulder 40 and the 30 end of the respective top rails 22 to assist in maintaining the interior of the cap watertight. The top rails 22 extend into the apertures 36 until they abut against the gaskets 50 so that when the various fenceposts are embedded in the ground the tubular top rails 22 will provide 35 an interconnecting brace between the top ends of adjacent fenceposts to assist in withstanding the tension of the chain-link 20. Of course, the chain-link 20 may also be connected to the top rails 22 to provide such support as may be required. It will be noted that the upper end 40 of the post 14 abuts against the inwardly directed projections 35 which are disposed at a point to insure that the upper ends of the posts do not cover the apertures 36 and thereby interrupt communication between the interior of the cap and the interior of the tubular top rails 22. A 45 continuous passageway is thereby formed through each tubular top rail 22 and the body portions 32 of the several caps receiving electrical leads as hereinafter described in greater detail. It will also be noted that the body portion 32 of the several caps may very easily be formed by cast- 50 ing of aluminum to provide a light and economical struc-

The upper end 54 of the cap body 32 is preferably provided with an annular groove 56 for receiving an annular 60. The gasket 58 may be fabricated from any suitable resilient material. The light shield 60 is preferably fabricated from glass, either clear or frosted, as may be desired. The shield 60 may be either cylindrical or polygonal in cross section and preferably increases in diameter 60 toward its upper end. A cover 62 formed of cast aluminum or the like is positioned on top of the upper end of the shield 60. The cover 62 is preferably somewhat conical or pyramidal in configuration, substantially as illustrated in the drawings, to create the appearance of a 65 gas lamp. The interior 64 of the cover 62 is preferably hollowed out and is also provided with an annular groove 66 for receiving an annular gasket 68 and the upper end of the shield 60. The cover 62 and the shield 60 are secured in place by suitable bolts 70 which extend through 70 apertures in the cover 62 and preferably through the interior of the shield 60, and are threaded into inwardly extending flanges 72 formed on the cap body 32. In some cases when the diameter of the shield is small, it

the outside of the shield 60. When the bolts 70 are tightened, the cover 62 will be drawn tightly against the shield 60 and the gaskets 58 and 68 will provide a substantially watertight construction.

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There are preferably two inwardly extending flanges 72, as best seen in the sectional view of FIG. 4, which are disposed on diametrically opposite sides of the cap body 32 and have arcuate inner edges 74 of the same radius of curvature to form a portion of a circle. An electric lamp socket 76 is provided with a peripheral flange 78 which has a larger diameter than the circle formed by the arcuate inner edges 74 of the inwardly directed flanges 72. The body of the lamp socket 76 may be dropped between the flanges 72 and the peripheral flange 78 will engage the flanges 72 to support the socket within the body 32.

In accordance with an important feature of the present invention, the lamp socket 76 is of the type which may be, both electrically and mechanically, easily and quickly connected to insulated conductors. The socket 76 is a typical socket of this type is illustrated in greater detail in FIG. 5. The lamp socket 76 is provided with two parallel grooves 79 for receiving two insulated leads or conductors 80. A sharpened projection 82 is provided in each of the grooves 79 for piercing the insulating sleeves of the conductors 80 to establish electrical contact with the conductors 80. A bottom cap 84 is threaded onto a screw 86 which is connected to the socket 76. When the conductors 80 are placed in the grooves 79 and the bottom cap 84 screwed down tightly against the conductors 80, the conductors 80 will be forced upwardly into the grooves 79 and will be pierced by the sharpened projections 82 such that the conductors 80 will simultaneously be electrically and mechanically connected to the socket 76. Although the combination of this type of quick-connect socket in a fence construction is an important feature of the present invention, the socket 76 as well as several other equivalent sockets are well known and presently available on the market.

It will be noted that the gasket 58 is preferably disposed above the flange 78 and serves to hold the socket 76 in place. The gasket 58 has an aperture (not referenced) sufficiently large to receive the shank of an electric light bulb 90 which is threaded into the socket 76. The gasket 58 may also be provided with arcuately shaped apertures 92 to provide ventilation between the interior of the cap body and the interior of the shield 60 and prevent excessive condensation of moisture in extreme weather conditions.

An important feature of this invention is the complete enclosure of the electrical conductors 80 within the continuous passageway formed by the interconnecting top rails 22 and the various cap constructions, and also the fence posts as required. Thus it will be seen that the gasket 58 and the lower end of a light-transmitting shield 55 electrical lead wires or conductors 80 may extend, for example, from a suitable source of electric power through the top rail 22 to the cap 42 on the gate post 18, downwardly through the gate post 18 and then through a suitable buried conduit (not shown) under the gate 24 to the gate post 16, upwardly through the gate post 16, through the cap 42 on the gate posts 16, through the top rail 22, through the cap 30, the top rail 22 to the corner cap 44, and thence to the remainder of the fence installation.

It will be noted that the fence construction 10 can be installed by relatively unskilled electrical workers, such that personnel who normally install fences may also install the electrical wiring. When installing the fence 10, the several posts are first embedded in the ground in a vertical position at the desired intervals. The various caps may then be disassembled by removing the bolts 70 and the cap bodies 32 may be placed on the respective fencepost, and the top rails 22 may accurately be cut to the desired length. Next, beginning at the end of the may be necessary for the bolts 70 to pass downwardly on 75 fence adjacent the power source, the electrical conductors 5

80 may be secured in position in some suitable manner and then threaded through the top rail 22 and through the apertures 36 into the interior of the next body 32 and outwardly through the opposite aperture 36. A portion of the conductors may be conveniently pulled upwardly through the top of the cap body 32, placed in the groove 79 and the bottom cap 84 screwed tightly against the socket 76 to simultaneously mechanically and electrically connect the socket to the electrical conductors 80. The electrical conductors 80 may then be drawn tight as the 10 socket is lowered to rest on the flanges 72 in position within the cap body 32. The conductors then may be threaded through the next top rail 22 before the top rail has been inserted in the respective aperture. The gasket 58 may be placed over the periphal flange 78 of the socket 15 76 and within the annular groove 56, and a suitable electric light bulb 90 threaded into the socket 76 through the aperture in the gasket 58. The light shield 60 and the cover 62 may then be placed in position and the 62 and shield 60 in position and form a watertight construction. This manner of construction is continued around the fence and when the posts and top rails are that in the event the electric light bulb 90 should burn out, it may easily be replaced merely by removing the threaded bolts 70.

Another novel cap constructed in accordance with the present invention is shown in FIGS. 7, 8 and 9 and is generally designated by reference character 130. The cap 130 is used in a fence such as 10 for interconnecting a fencepost, such as the intermediate post 14 and adjacent sections of the top rail 22 as previously described in connection with the cap 30. The cap 130 includes a body 35 portion 132 which is hollow and has a lower tubular shank portion 134 of a size to telescope over the upper end of the post 14 until an annular shoulder 135 abuts the top of the post. The body 132 also has one or more apertures 136 in the side walls thereof formed by flanges 40 138. The number of apertures in a particular cap 130 will be dictated by the use of the cap on the fence construction 10 as previously described in connection with the cap 30, and may have any of the configurations illustrated in FIG. 6. The various apertures 136 are sized to 45 closely receive the ends of the respective top rails 22 and the top rails 22 are inserted into the aperture 136 a sufficient distance to abut the respective annular shoulders 139, as best seen in FIG. 9. Thus, when the various fenceposts are supported in the ground, the top rails 22 50 will be secured in position to interbrace the posts against the tension of the chain-link 20 and also support the chainlink or wire-mesh as required. Also, suitable screws (not shown) may be threaded through the shank 134 and the flange portions 138 of the body portion 132 into contact 55 with the fenceposts and top rail to provide a more rigid connection, if desired. It will also be noted that the cap body 132 may be easily formed by casting of aluminum to provide a light and economical construction.

As shown most clearly in FIG. 7, the upper end 140 60 of the cap body 132 is substantially flat to receive the lower end of a transparent shield 142. The shield 142 may be fabricated of glass or any other transparent or translucent material but is preferably formed out of a plastic material to minimize the possibility of breakage, 65 and may be either cylindrical or polygonal in cross section. Also, the shield 142 preferably increases in diameter toward its upper end. A cover 144 formed of cast aluminum or the like is positioned on top of the upper end of the shield 142 and is secured in position by suit- 70 able bolts 146 extending down along the inner surfaces of the shield 142 into engagement with the upper end of the body 132 to securely clamp the shield 142 and cover 144 in place. The cover 144 is preferably somewhat

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drawings to provide the appearance of a gas lamp to the construction.

A suitable incandescent light socket 148 is positioned in the central portion of the body portion 132 and is supported along the center line of the body by a suitable bracket 150 as illustrated in FIGS. 7 and 8. The bracket 150 is conveniently an L-shaped member secured to the lower end of the socket 148 by a screw 152 and to one side of the body portion 132 by a longer screw 154. The screw 154 may be easily threaded through the side wall of the body portion 132 and will provide adequate support for the socket 148. A suitable bulb 155 is threaded into the socket 148 and extends through the upper end of the body portion 132 into the shield 142 and, if desired, on up into the hollow cover 144. The bulb 155 will then provide illumination around the entire periphery of the shield 142 and may be easily replaced merely by unthreading the bolts 146 and removing the cover 144.

As previously mentioned, an important feature of this bolts 70 threaded in place to securely clamped the cover 20 invention is the complete enclosure of the electrical lead wires 156 and 158 in the top rails 22 along the length of the fence. The leads 156 and 158, shown on the left-hand side of FIG. 9, may extend from a source of installed, the chain-link 20 may be suspended in position electrical energy (not shown) used for energizing the between the various fenceposts. It will be appreciated 25 electric light bulb 155. Each of the leads 156 and 158 is provided with an insulated, quick-connecting, bayonet type electrical coupling 159 as shown in detail in FIG. 10. The bare end of lead wire 158 together with the bare end of a complementary lead wire 158a is compressively or otherwise retained within a conductive sleeve 160 so that an electrical circuit is provided from the source through the lead wire 158, through the contacting bare ends of the leads 158 and 158a, and through lead 158a to the socket 148. It will be understood that the lead wire 156 is similarly connected to a corresponding lead wire 156a by a similar conductive sleeve 160 to provide a complete electrical circuit to the socket 148 and the bulb 155. A suitable insulating sleeve 162 covers the conductive sleeves 160. A metallic tip 164 is mechanically and electrically connected to the other end of each of the sections of leads 156 and 158 and in conjunction with the conductive sleeves 160 provides an insulated bayonet type quick-connect coupling between each successive pair of electrical leads as hereafter described.

Each of the leads 156 and 158 is of a length sufficient to extend through the top rail 22 and preferably through the cap 130 to substantially the point shown in FIG. 9. The next successive set of leads 156 and 158 is then connected by inserting a metallic tip 164 on the end thereof into the conductive sleeve 160 to provide an electrical connection. Each of the successive lead wires 156 and 158 is sufficiently long to extend through the next succeeding section of top rail 22 to the next succeeding light socket 148. At the end of each successive lead wire 156 and 158, electrical couplings such as that shown in FIG. 10 are provided so that any desired number of sections of the leads 156 and 158 may be interconnected to supply electrical power to any number of illuminated caps 130 as desired. When the last illuminated cap 130 in the series has been reached, the insulated sleeve 162 will protect the conductive sleeve 160 from contact with the metallic fence structure so that no electrical shorts will develop. Since the entire wiring circuit is retained within the fence structure, electrical shorts due to excessive moisture collecting in the sleeves 160 are not a danger.

Since the top rails 22 are connected to the upper ends of the various fenceposts by the caps 130 with the interior of the top rail in communication with the interior of each cap 130, the leads 156 and 158 are completely enclosed in the top rail throughout the length of the fence, except at each gate 24 as illustrated in FIG. 1. conical or pyramidal in configuration as illustrated in the 75 At each gate, the leads 156 and 158 are run down

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through the gate posts 16 and 18 and are easily buried underneath the gate to prevent any loose wires from showing in a fence installation and to adequately protect the leads 156 and 158 against inadvertent breaking either through operation of the gate 24 or by people 5 walking through the gate.

From the foregoing, it will be apparent that the present invention provides a novel illuminated fence construction which will have a neat and attractive appearance both during daylight and during nighttime. The top rails of the fence are easily and conveniently connected to the various fenceposts by a cap construction which also serves to hold a light socket and bulb, as well as what is normally considered a light fixture, to provide an overall rigid construction. The various electrical leads 15 used for the light are completely enclosed and may be easily connected to the various lights by relatively unskilled workmen who may be employed to erect the fence.

Changes may be made in the combination and arrangement of parts or elements as heretofore set forth in this specification and shown in the drawings, it being understood that changes may be made in the precise embodiment disclosed without departing from the spirit and scope of the invention as defined in the following claims. 25 I claim:

- 1. An illuminated fencepost cap for constructing a chain-link fence having a series of spaced, vertical posts and a tubular top rail extending between adjacent posts comprising:
  - a hollow body having a lower tubular shank portion adapted to receive the upper end of a vertical post and having generally vertically extending side walls; at least one aperture in the side walls for receiving

an end of a tubular top rail;

- an electric lamp socket disposed within the body;
- a light transmitting shield above the aperture; and a source of light within the cap and disposed to emit light through the light transmitting shield.
- 2. An illuminated fence comprising:
- a series of spaced, vertically disposed posts,

hollow cap means on top of each of the vertically disposed posts,

a tubular top rail interconnecting adjacent pairs of said cap means for supporting fencing means, the interiors of the tubular top rails communicating with the interiors of the respective hollow cap means to provide a continuous passage through the successive top rails and cap means;

said cap means including:

- a hollow body having a lower tubular shank portion adapted to receive the upper end of one of said vertically disposed posts and having generally vertically extending side walls,
- at least one aperture in the side walls for receiving an end of a tubular top rail,
- an electric lamp socket disposed within the body, a light transmitting shield above the aperture;
- a source of light within at least one of said cap means and disposed to emit light through said shield;
- electrical leads extending from an electric power source through the continuous passage and successively connected to each of the electric lamp sockets within the cap means.
- 3. An illuminated fencepost cap for constructing a chain-link fence having a series of spaced vertical posts and a tubular top rail extending between adjacent posts, the cap comprising:
  - a hollow, generally tubular body having a lower tubular shank portion adapted to receive the upper end of a vertical post and having generally vertically extending side walls;
  - at least one aperture in the side walls for receiving an end of a tubular top rail;

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stop means on the body for abutting against a vertical post received in the shank portion and preventing ingress of the post into the shank portion to a sufficient extent to cover the aperture;

inwardly directed flange means adjacent the upper end of the vertically extending side walls;

- an electric lamp socket having a peripheral flange therearound disposed within the body and supported by the inwardly directed flange means;
- a generally tubular light transmitting shield supported on top of the body;
- a cover member covering the top of the shield; and bolt means extending between the body and the cover member for drawing the two members together and clamping the shield therebetween.

4. An illuminated fence comprising:

a series of spaced, vertically disposed posts; hollow cap means disposed on each of said posts; a tubular top rail interconnecting each adjacent pair of cap means, the tubular top rails communicating with the interior of the cap means for providing a continuous passageway through the several top rails and cap means;

at least one of said hollow cap means including,

- a hollow, generally tubular body having a lower tubular shank portion receiving the upper end of a vertical post and having generally vertically extending side walls,
- at least one aperture in the side walls for receiving an end of one of the tubular top rails,
- stop means on the body abutting said vertical post received in the shank portion,
- inwardly directed flange means adjacent the upper end of the generally vertically extending side walls,
- an electric lamp socket having a peripheral flange therearound disposed within the body and supported by the inwardly directed flange means,
- a light transmitting shield supported on top of the body, a cover member covering the top of the shield, and
- fastener means extending between the cover member and body for drawing the cover member and body together and clamping the shield therebetween; and

insulated electrical conductor means extending through the passageway and connected with said lamp socket.

- 5. An illuminated fencepost cap for constructing a chain-link fence having a series of spaced, vertical posts and a tubular top rail extending between adjacent posts, the cap comprising:
  - a hollow, generally tubular body having a lower tubular shank portion adapted to receive the upper end of a vertical post and having generally vertically extending side walls;
  - at least one aperture in the side walls for receiving an end of one of the tubular top rails;
  - stop means on the body for abutting against a vertical post received in the shank portion and preventing ingress of the post into the shank portion to a sufficient extent to cover the aperture;
  - stop means within said aperture for limiting the ingress of a top rail;
  - inwardly directed flange means adjacent the upper end of the generally vertically extending side walls:
  - an electric lamp socket having a peripheral flange therearound disposed within the body and supported by the inwardly directed flange means;
  - an annular, resilient gasket disposed within said body adjacent said inwardly directed flange and having its inner periphery above said peripheral flange;
  - a light transmitting shield supported on top of said body;
  - a cover member covering the top of the shield; and bolt means extending between said cover member and

said body within the interior of said shield and threaded into the inwardly directed flange means.

- 6. An illuminated fence post cap for constructing a chain link fence having a series of spaced, vertical posts and a tubular top rail extending between adjacent posts, 5 the cap comprising:
  - a hollow, generally tubular body having a lower tubular shank portion adapted to receive the upper end of a vertical post and having generally, vertically extending side walls;

at least one aperture in the side walls for receiving an end of a tubular top rail;

stop means on the body for abutting against a vertical post received in the shank portion and preventing ingress of the post into the shank portion to a suffi- 15 cient extent to cover the aperture;

inwardly directed flange means adjacent the upper end of the vertically extending side walls;

an electric lamp socket having a peripheral flange therearound disposed within the body and supported 20 by the inwardly directed flange means;

a generally tubular light transmitting shield supported on top of said body;

an annular resilient gasket between the lower end of the shield and the upper end of the body, the gasket having a center opening smaller than the peripheral

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flange on the lamp socket and adapted to loosely encircle the shank of a light bulb which may be screwed into the socket, the gasket being disposed above the portion of the peripheral flange of the lamp socket; a cover member covering the top of the shield; and, bolt means extending between the body and the cover member for drawing the two members together and clamping the shield therebetween.

## References Cited by the Examiner UNITED STATES PATENTS

## 5/1872 Burger \_\_\_\_\_ 250—25 126,783 Heilenday \_\_\_\_\_ 240—25 1,357,559 11/1920 Townsend \_\_\_\_\_ 240-25 1,545,711 7/1925 1/1930 Fox \_\_\_\_\_ 240—10 1,745,212 Lucas \_\_\_\_\_ 240—2 1,794,467 3/1931 Flaherty \_\_\_\_\_ 240—78 X 2,078,793 4/1937 Moreno \_\_\_\_\_ 240—10 X 1/1950 2,495,639 Dennis \_\_\_\_\_\_ 240—25 Richards \_\_\_\_\_ 339—47 X 8/1952 2,608,641 8/1956 2,758,291 Charbonneau \_\_\_ 339—100 X 2,780,704 2/1957 Kroes \_\_\_\_\_ 240—84 X Kester \_\_\_\_ 240—52.1 X 3,004,145 10/1961

Harling \_\_\_\_\_ 240-25

NORTON ANSHER, Primary Examiner.

2/1962

6/1963

3,023,306

3,094,286