

A Pole Holder Cover

Field of Invention

The present invention relates to a pole holder cover. Specifically, the invention relates to a pole holder cover for use with a pole holder.

Background

Wet laundry is normally spaced out on poles so that they can be placed out in the sun to dry. In high-rise buildings, wall mounted pole holders are used to hold these poles. These conventional pole holders are normally made of steel tubes having one end embedded into the exterior wall of a building and the other end exposed for receiving the poles to be held. For securing the poles in the pole holders, these poles are typically inclined.

Although these conventional pole holders are deemed effective for the purpose of holding the poles to the wall, few problems can arise. When it rains, water is collected inside the tubular pole holders.

The residual water trapped in the pole holder also provides a good breeding ground for mosquitoes. Detection of the existence or emergence of these breeding grounds is difficult and inexhaustible due to the time-consuming and effort-expending task of inspecting the myriad of pole holders within a single building. This may compromise the health of people living in that area as these mosquitoes, including the aedes mosquito, may carry insect-borne diseases.

A covering cap, usually made of plastic, is typically used for covering the opening of the pole holder. However, such covering caps are easily damaged which consequently results in the opening of the pole holder being exposed to the rain even with a covering cap attached thereto. Additionally, removal of the covering cap from the pole holder requires substantial physical manipulation. As damp articles on poles are heavy and require lifting by both hands, releasing one hand from the pole to remove the covering cap from the pole holder is counter-intuitive and dangerous.

Hence, this clearly affirms a need to improve pole holder cover for addressing the foregoing problems.

Summary of Invention

- 5 The present embodiment of the invention disclosed herein provides a pole holder cover for covering the opening of a pole holder.

In accordance to an aspect of the invention, there is disclosed a pole holder cover comprising a body and a first structure. The body is for defining an access area and
10 is coupleable to a pole holder having a channel formed therein and an opening to the channel. The access area substantially coincides with the opening when the body is coupled to the pole holder. The first structure is coupled to the body for displacing between a first position and a second position. The first structure is resiliently biased towards the first position. The first structure substantially
15 extending across the access area when in the first position wherein when the body is coupled to the pole holder, the first structure substantially impedes access to the channel when in the first position, and the first structure is displaceable towards the second position for substantially enabling access to the channel.

Brief Description of Drawings

20 Embodiments of the invention are described hereinafter with reference to the following drawings, in which:

FIG. 1 shows an exploded isometric view of a pole holder cover with a body, a first
25 cover, a second cover, a curtain and an elastic band according to an embodiment of the invention;

FIG. 2 shows a side elevation of the pole holder cover of FIG. 1 attached to a pole
holder with the first cover in a first position;

30 FIG. 3 shows a front elevation of the pole holder cover of FIG. 1 according to view 'A' of FIG. 2 with the first cover in the first position;

FIG. 4 shows a partial side sectional elevation of the pole holder of FIG. 1 according to

view 'B-B' of FIG. 3 with the first cover in the first position;

FIG. 5 shows a partial side sectional elevation of the pole holder of FIG. 1 according to view 'B-B' of FIG. 3 with the body coupled to a pole holder and the first cover in a second position;

FIG. 6 shows a partial side sectional elevation of the pole holder of FIG. 1 according to view 'B-B' of FIG. 3 with the body coupled to a pole holder, the first cover in a second position and a pole received in the pole holder; and

FIG. 7 shows an isometric view of the pole holder of FIG. 1 with the body coupled to a pole holder, the first cover in a second position and the second cover in an open position.

Detailed Description of the Embodiment

A pole holder cover is described hereinafter for addressing the foregoing problems in which like elements are numbered with like reference numerals. An embodiment of the invention, a pole holder cover 20 is described with reference to FIGS 1 to 7.

Referring to FIGS. 1 to 7, the pole holder cover 20 comprises a body 22 for attachment to a pole holder 24. The pole holder 24 is typically a cylindrical tube mounted to and extending from a supporting structure (not shown), for example, a concrete wall. The pole holder 24 is shaped for defining a channel 26 and an opening 28 to the channel 26. A pole 30 is insertable into the channel 26 through the opening 28 for being supported by the pole holder 24 as a cantilever structure.

The body 22 of the pole holder cover 20 is preferably shaped for mounting onto the pole holder 24 and for defining an access area 32 substantially coinciding with the opening 28 of the pole 30 when the pole holder cover 20 is coupled to the pole holder 24. This enables the body 22 to fit around the pole holder 24 without impeding access to the opening 28 of the pole holder 24. The body 22 is coupled to the pole holder 24 using fasteners or by interference fitting. Preferably, the body 22 is screw-clamped onto the pole holder 24 using a screw-feed arrangement 34.

The pole holder cover 20 further comprises a first cover 36 coupled to the body 22 for

displacing between a first position and a second position. Preferably, the first cover 36 is biased towards the first position and displaceable towards the second position when a force is applied to the first cover 36 substantially in the direction of the second position. A pair of protrusions 42 extends from the body 22 in outwardly opposing
5 directions. A pair of first arms 44 extends from the first cover 36 towards the pair of protrusions for coupling thereto. This enables the first cover 36 to pivot about the pair of protrusion 42 when traveling between the first position and the second position. When in the first position with the pole holder cover 20 being coupled to the pole holder 24, the first cover 36 substantially extends over the access area 32 for substantially
10 impeding access to the opening 28 of the pole holder 24. The first cover 36 travels substantially away from the access area 32 when being displaced towards the second position.

The pole holder cover 20 further comprises a second cover 46 for displacing between a
15 closed position and an open position. Preferably, the second cover 46 is biased towards the closed position and displaceable towards the open position when a force is applied to the second cover 46 substantially in the direction of the open position. A pair of second arms 52 extends from the second cover 46 towards the pair of protrusion 42 for coupling thereto. This enables the second cover 46 to pivot about the pair of
20 protrusion 42 when traveling between the closed position and the open position. When in the closed position with the pole holder cover 20 being coupled to the pole holder 24, the second cover 46 substantially extends over the access area 32 for substantially impeding access to the opening 28 of the pole holder 24. The second cover 46 travels substantially away from the access area 32 when being displaced
25 towards the open position.

Each of the first cover 36 and the second cover 46 travels along an arcuate path about the pair of protrusions 42 between their respective positions. Alternatively, one or both of the first cover 36 and the second cover 46 is configurable for displacing along an
30 axis (not shown). Preferably, each of the first pair of arms 44 and the second pair of arms 52 snap-couples with the pair of protrusions 42 on the body 22.

When the first cover 36 and the second cover 46 are at in the first position and closed
position 46 respectively, the second cover 46 is preferably disposed substantially
35 between the access area 32 and the first cover 36. Each of the first cover 36 and the

second cover 46 preferably has a curved structural portion having a surface of revolution about the pair of protrusions 42. Additionally, the first pair of arms 44 is preferably longer than the second pair of arms 52. This enables one of the first cover 36 and the second cover 46 to be independently displaced without coinciding with the other thereof.

A first concavity 54 and a second concavity 56 are formed along an edge of the first cover 36 and the second cover 46 respectively. The access area 32 of the body 22 is exposed through the first concavity 54 and the second concavity 56 when the first cover 36 and the second cover 46 are in the second position and the open position respectively.

A lip 58 extends from the first concavity 54 away from the body 22. Collectively, the first concavity 54 and the second concavity 56 are preferably shaped and dimensioned for substantially conforming with a portion of the length-traverse cross-sectional curvature of the pole 30. The first concavity 54 and the second concavity 56 enables the first cover 36 and the second cover 46 to surround the pole 30 when received within the channel 26 of the pole holder 24, without exposing areas of the channel 26 that is not occupied by the pole 30.

Preferably, an elastic band 60 extends over the first cover 36 and the second cover 46 for biasing one of the first cover 36 and the second cover 46 towards the other thereof. The elastic band 60 consequently biases the first cover 36 and the second cover 46 towards the first position and the closed position respectively.

Alternatively, each of the first cover 36 and the second cover 46 is biased towards the first position and the closed position respectively by springs (not shown) operatively integrated with one or more of the body 22, the first pair of arms 44 and the second pair of arms 52.

The second cover 46 has an external face and an internal face. The internal face outwardly opposes the external face and opposes the body 22. A curtain 66 extends across the second concavity 56. The curtain 66 is preferably a rubber curtain heat-sealed to the internal face of the second cover 46. The curtain 66 has a notch 68 preferably having a shape similar to that of the second concavity 56 and disposed

concentric the second concavity 56.

The curtain 66 has a border 70 extending adjacent the second concavity 56. Slits 72 extend from the notch 68 towards the border 70 in the curtain 66. The slits 72 enable the curtain to substantially deflect and form a seal substantially around a portion of the pole 30 when the pole 30 is received within the second concavity 56. A chamfer (not shown) is formed along an edge of the second concavity 56 adjacent the external face of the second cover 46. Alternatively, the curtain 66 is formed from soft foam or bristles. Preferably, the body 22, the first cover 36 and the second cover 46 are formed from plastic.

During installation of the pole holder cover 20 onto the pole holder 24, the body 22 of the pole holder cover 20 is mounted over the pole holder 24. A step 76 is formed along the internal circumference of the body 22 to prevent over-passaging of the pole holder 24 through the body 22 for physically colliding with the first cover 36 or the second cover 46. The screw-feed arrangement 34 is then operated for coupling the body 22 to the pole holder 24. A beveled edge 78 extends along the internal circumference of the body 22 adjacent the access area 32.

To insert the pole 30 into the pole holder 24, an end of the pole 30 is positioned within the first concavity 54. The lip 58 and the external face of the second cover 46 facilitate engagement of the end of the pole with the first concavity 54. Resting the end of the pole 30 on the second concavity 56 or the lip 58 applies a force thereto to thereby displace the first cover 36 towards the second position. When the first cover 36 approaches the second position, the second concavity 56 is progressively exposed. Next, the end of the pole 30 is displaced towards the second concavity 56 for abutting with the chamfer of the second concavity 56. This displaces the second cover 46 towards the open position and enables the end of the pole 30 to slide towards the curtain 66. Should the diameter of the pole 30 be dimensionally smaller than the second concavity 56, the second cover 46 will remain in the closed position 48. As the end of the pole 30 travels through the second concavity 56, it deflects the curtain 66 and approaches the opening 28 of the channel 26. The end of the pole 30 then slides across the beveled edge 78 and is guided thereby into the channel 26 of the pole holder 24.

When the pole 30 is held in the pole holder 24, the first cover 36 and the second cover 46 clasps onto and around a portion of the pole 30 to substantially prevent travel of liquid, for example rainwater, into the channel 26. The first cover 36 and the curtain 66 further prevent liquid traveling along the pole 30 from flowing into the channel 26.

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To remove the pole 30 from the pole holder 24, the pole 30 is simply pulled away from the pole holder 24. When the pole 30 is removed from the pole holder 24, the first cover 36 and the second cover 46 is biased back to the first position and the closed position respectively to cover the opening 28 of the pole holder 24 to substantially
10 impede travel of liquid thereinto.

In the foregoing manner, a pole holder cover is described according to one embodiment of the invention for addressing the foregoing disadvantages of covers. Although only one embodiment of the invention is disclosed, it will be apparent to one skilled in the art in view of this disclosure that numerous changes and/or modification
15 can be made without departing from the scope and spirit of the invention.

Claims

1. A pole holder cover comprising:

a body for defining an access area, the body being coupleable to a pole holder having a channel formed therein and an opening to the channel, the access area substantially coinciding with the opening when the body is coupled to the pole holder; and

a first structure coupled to the body for displacing between a first position and a second position, the first structure being resiliently biased towards the first position, the first structure substantially extending across the access area when in the first position,

wherein when the body is coupled to the pole holder, the first structure substantially impedes access to the channel when in the first position, and the first structure is displaceable towards the second position for substantially enabling access to the channel,

the first structure defining a concavity being shaped and dimensioned for conforming with the cross-sectional shape of and for receiving a portion of a pole received in and extending from the pole holder to thereby substantially impede flow of liquid along the pole into the channel of the pole holder.

2. The pole holder cover as in claim 1, further comprising:

at least one arm extending from the body to the first structure for pivotably coupling the first structure to the body.

3. The pole holder cover as in claim 1, further comprising:

a second structure coupled to the body and reciprocable between a closed position and an open position, the second structure being resiliently biased towards the closed position,

wherein when the body is coupled to the pole holder, the second structure extends across at least a portion of the opening of the pole holder when in the closed position, and interaction of the pole with the second structure when being inserted into the channel displaces the second

structure at least towards the open position.

4. The pole holder cover as in claim 3, a portion of the second structure being disposed between the channel and the first structure when the first structure is in the first position and the second structure is in the closed position.
5. The pole holder cover as in claim 4, the first structure comprising a lip formed extending away from an outer face of the second structure,
wherein when the first structure is in the first position and the second structure is in the closed position, the outer surface of the second structure substantially guides an extremity of the pole towards the lip for engaging the pole with the lip to thereby enable displacement of the first structure towards the second position.
6. The pole holder cover as in claim 4, further comprising:
a curtain defining a notch for the passage of the pole therethrough, the curtain being disposed across the opening of the channel when the body is coupled to the pole holder.
7. The pole holder cover as in claim 5, the curtain being elastic for shape fitting substantially around the circumference of the pole when the pole is inserted through the notch of the curtain.
8. The pole holder cover as in claim 6, the curtain comprising:
a border; and
a plurality of slits extending from the notch towards the border for enabling substantial deflection of the curtain.
9. The pole holder cover as in claim 6, wherein the curtain is made from one of rubber, soft foam and bristles.
10. The pole holder cover as in claim 3, further comprising:
an elastic band extending around the first structure and the second

structure for biasing one of the first structure and second structure towards the other thereof.

11. The pole holder cover as in claim 3, further comprising:
- 5 at least one spring for biasing at least one of the first cover towards the first position and the second cover towards the closed position.

A Pole Holder Cover

Abstract

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A pole holder cover for covering the opening of a pole holder is described for preventing collection of rainwater in the pole holder. The pole holder cover comprises a body coupled to a pole holder and a first structure is coupled to the body for displacing between a first position and a second position. The first structure being
10 resiliently biased towards the first position, wherein the first structure impedes access to the opening of the channel when in the first position, whereby the first structure is displaceable towards the second position for substantially enabling access to the channel.

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Figure 1