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ABSTRACT

(54) BUS-STOP SHELTER

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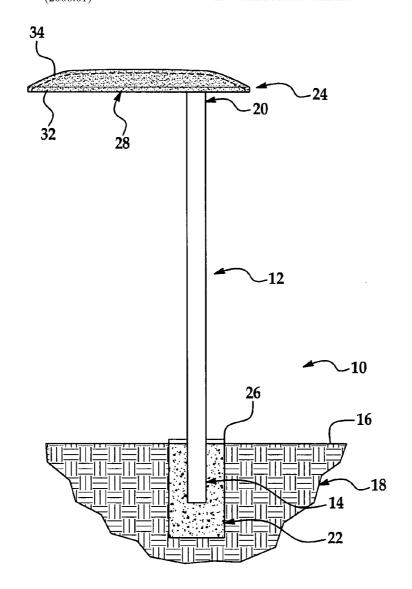
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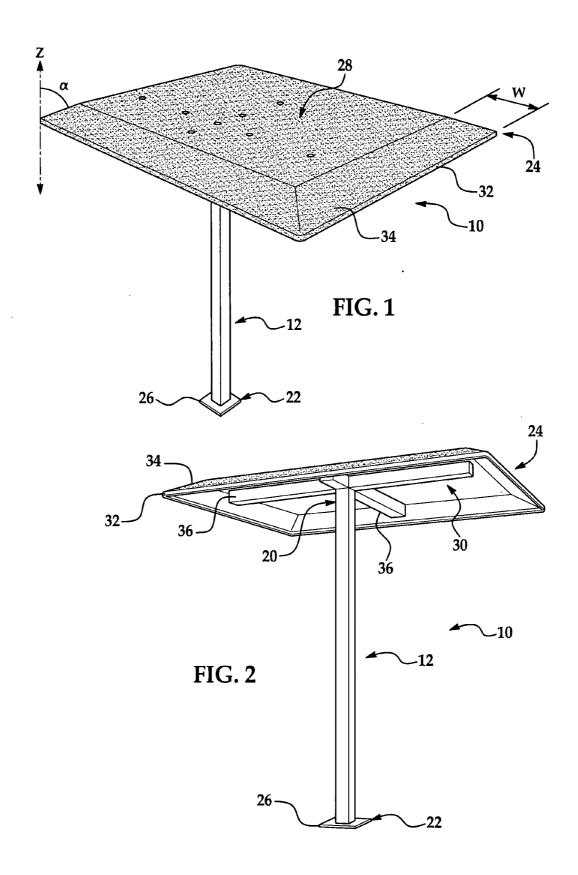
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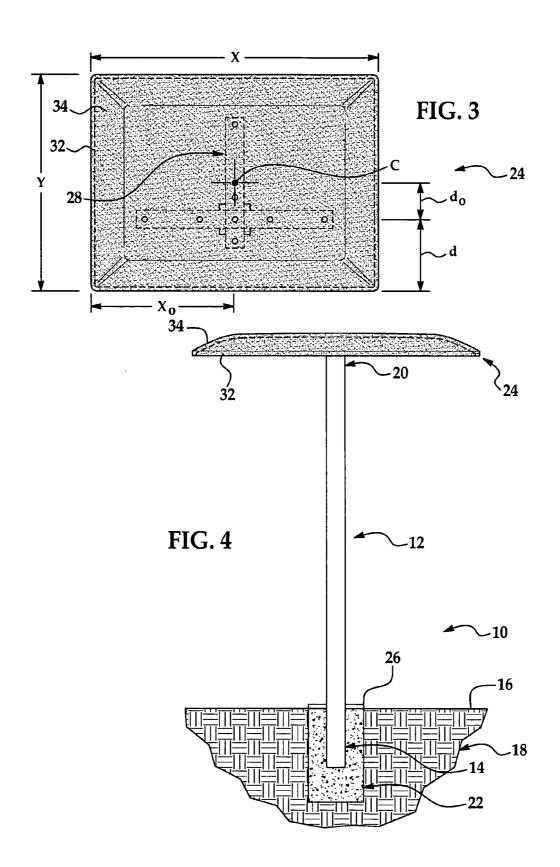
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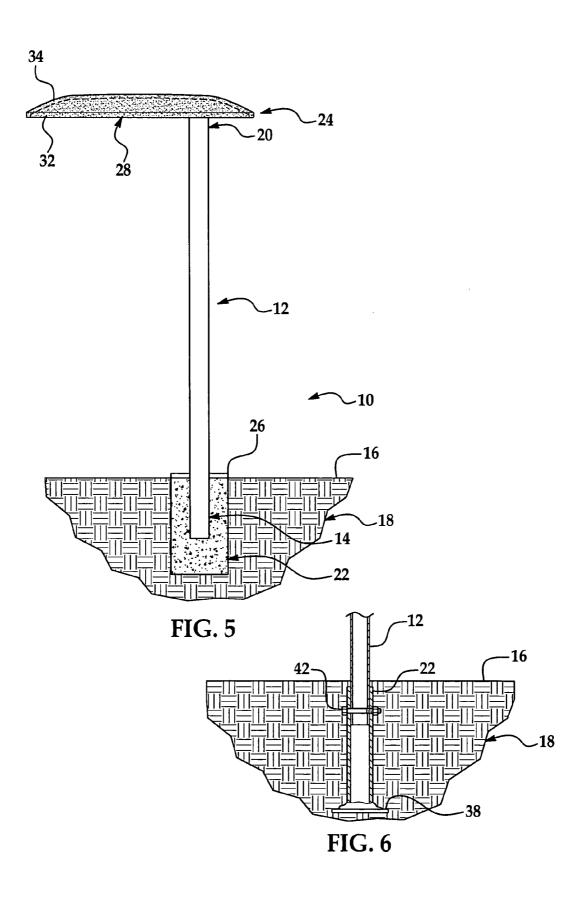
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A shelter is adapted to protect any prospective passengers of a bus from weather-related elements while he or she awaits arrival of the bus at a bus stop. The bus-stop shelter includes an upstanding post defining a first end thereof adapted to be installed below a surface of ground by which the shelter is supported and a second end of the post adapted to be disposed above the ground surface. A canopy defines a substantially central portion thereof and is adapted to be supported at a portion of the canopy off the central portion by the second end of the post and substantially over the prospective passenger such that the canopy protects the prospective passenger from the weather-related elements.









BUS-STOP SHELTER

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates, generally, to a shelter and, more particularly, to a shelter adapted to protect any prospective passengers of a bus from weather-related elements while he or she awaits arrival of the bus at a bus stop.

[0003] 2. Description of Related Art

[0004] It is generally known for a prospective passenger of a bus to wait for the bus while he or she stands or sits under a shelter that is located at a bus stop and protects the prospective passenger from weather-related elements-such as, but not limited to, hail, rain, sleet, snow, and sunlight. This type of shelter is usually employed as part of a public mass-transportation system of a metropolitan area and continually used by residents of or visitors to the area on a daily basis throughout a year.

[0005] Generally, such shelters include a plurality of opaque or transparent exterior walls, a roof, a relatively sophisticated metal framework supporting the exterior walls and roof, and some of these shelters include also an interior wall or a plurality of interior walls. In this way, the known bus-stop shelter defines at least one room-like space (and often a plurality of such spaces) within which the prospective passengers wait for the bus. The known bus-stop shelter is also installed by use of a concrete base or foundation at a particular site, such as on or adjacent a sidewalk, a certain distance from the road, street, or like upon which the bus travels. The known bus-stop shelter can even include a raisable roof, seats or benches attached or unattached to the framework, a telephone, a telephone-booth-like area, a mailbox, and a newspaper dispenser, just to name a few features of the known bus-stop shelter.

[0006] However, there are many disadvantages and/or problems with the known bus-stop shelter. More specifically, since the inside of the shelter can be unobservable to persons located outside the shelter, criminal or like activity—for example, theft—can be perpetrated within the shelter without any person (other than those located inside the shelter, which, in some such cases, may consist of only the perpetrator and a victim thereof) witnessing such activity. Also, owing to the fact that the inside of the shelter receives any of its light predominantly from the sun or possibly at least one streetlight located sufficiently near the shelter, the inside of the shelter can be inadequately lighted, whether during the day or night, such that the prospective passengers are waiting inside the shelter in an undesirable and/or dangerous level of darkness. This can result in the criminal or like activity not being witnessed as well. Accordingly, the inside of the fully or partially enclosed shelter may be relatively more susceptible to being a site of occurrences of such activity, rendering the shelter unsafe at times.

[0007] And, each of the room-like spaces of the known bus-stop shelter can become uncomfortably warm for the prospective passengers, especially during warm-weather months in warm-weather locales. Furthermore, since the shelter is at least partially enclosed, the prospective passengers do not have completely free and clear, unobstructed access into and from the inside of the shelter. In addition, because the shelter includes a plurality of walls, there is a great amount of surface area upon which graffiti can be applied or that can be vandalized, especially since some of the walls are made of glass or fiberglass. As a result, the shelter

can become aesthetically displeasing. Moreover, a considerable amount of fabrication, including a substantial amount of concrete work, and "footprint" of the shelter are required to install it at each site of the shelter while a considerable amount of expense is required to build and maintain it. In particular, since any shelter is subject to continual abuse in an urban or suburban setting throughout a given year, a corresponding local governmental entity typically must expend a significant amount of funds to not only construct its collective shelters, but to clean, repair, and/or replace them as well.

[0008] Plus, the known bus-stop shelter is not modular and, therefore, readily adapted to its being constructed as multiples of a single unit such that it can inexpensively, quickly, and simply provide different sized shelters. As a result, if the shelter needs to be enlarged, then instead of merely arranging or fitting, say, a pair of them together in a standardized way, it must be added onto in a custom way. The shelter can be located a long distance from the position where the bus actually stops to pick up the prospective passengers and occupy an inefficient amount of area of, for instance, the sidewalk, thus restricting access to the sidewalk by passers-by, too. Due to changes in a physical layout and/or population of a city, county, township, village, etc., a bus line or system must adapt accordingly such that particular bus stops located along the line or system must be continually relocated as well. Yet, the bus-stop shelter of the related art is not conducive to such relocation in an inexpensive, quick, and simple manner.

[0009] Thus, there is a need in the related art for a bus-stop shelter that provides effective shelter to the awaiting bus passengers from inclement weather and direct sunshine. There is a need in the related art for such a shelter that also has a simple ergonomic design. There is a need in the related art for such a shelter that also is safer relative to the known bus-stop shelter. There is a need in the related art for such a shelter that also is more comfortable in a certain respect relative to the known bus-stop shelter. There is a need in the related art for such a shelter that also provides to the prospective passengers completely free and clear, unobstructed access into and from the inside of the shelter. There is a need in the related art for such a shelter that also is more practical, vandal-resistant, and aesthetically pleasing relative to the known bus-stop shelter. There is a need in the related art for such a shelter that is also simpler and less expensive to construct, especially install, and maintain relative to the known bus-stop shelter. There is a need in the related art for such a shelter that is also modular and, therefore, readily adapted to its being constructed as multiples of a single unit such that it can provide different sized shelters. There is a need in the related art for such a shelter that also can be simply located suitably close to the position where the bus actually stops to pick up the prospective passengers while still not interfering with traffic of the road, street, or like. There is a need in the related art for such a shelter that also occupies no area of the sidewalk such that it does not restrict any access to the sidewalk by passers-by. There is a need in the related art for such a shelter that is also conducive to relocation thereof in an inexpensive, quick, and simple manner.

BRIEF SUMMARY OF THE INVENTION

[0010] The present invention overcomes the problems in the related art in a shelter adapted to protect any prospective passengers of a bus from weather-related elements while he or she awaits arrival of the bus at a bus stop. The bus-stop shelter includes an upstanding post defining a first end thereof

adapted to be installed below a surface of ground by which the shelter is supported and a second end of the post adapted to be disposed above the ground surface. A canopy defines a substantially central portion thereof and is adapted to be supported at a portion of the canopy off the central portion by the second end of the post and substantially over the prospective passenger such that the canopy protects the prospective passenger from the weather-related elements.

[0011] An advantage of the bus-stop shelter of the present invention is that it provides effective shelter to the awaiting bus passenger from inclement weather and direct sunshine.

[0012] Another advantage of the bus-stop shelter of the present invention is that it has a simple ergonomic design.

[0013] Another advantage of the bus-stop shelter of the present invention is that it is safer relative to the known bus-stop shelter.

[0014] Another advantage of the bus-stop shelter of the present invention is that it is more comfortable in a certain respect relative to the known bus-stop shelter.

[0015] Another advantage of the bus-stop shelter of the present invention is that it provides to the prospective passenger completely free and clear, unobstructed access into and from the inside of the shelter.

[0016] Another advantage of the bus-stop shelter of the present invention is that it is more practical, vandal-resistant, and aesthetically pleasing relative to the known bus-stop shelter.

[0017] Another advantage of the bus-stop shelter of the present invention is that it is simpler and less expensive to construct, especially install, and maintain relative to the known bus-stop shelter.

[0018] Another advantage of the bus-stop shelter of the present invention is that it is modular and, therefore, readily adapted to its being constructed as multiples of a single unit such that it can provide different sized shelters.

[0019] Another advantage of the bus-stop shelter of the present invention is that it can be simply located suitably close to the position where the bus actually stops to pick up the prospective passenger while still not interfering with traffic of the road, street, or like.

[0020] Another advantage of the bus-stop shelter of the present invention is that it occupies no area of the sidewalk such that it does not restrict any amount of access to the sidewalk by passers-by.

[0021] Another advantage of the bus-stop shelter of the present invention is that preexisting pavement can be used to install it.

[0022] Another advantage of the bus-stop shelter of the present invention is that it can be installed on clay, dirt, grass, mud, sand, or other suitable non-cement, -concrete, or paved ground.

[0023] Another advantage of the bus-stop shelter of the present invention is that the canopy thereof is tapered, making it practically impossible for vandals to hang onto and swing from it.

[0024] Another advantage of the bus-stop shelter of the present invention is that the canopy thereof may include at least one solar panel by which space covered by the shelter can be heated to a certain extent and adequately lighted, whether during the day or night, such that each prospective passenger is waiting inside the shelter in some heat and a desirable and safe level of light.

[0025] Another advantage of the bus-stop shelter of the present invention is that it can be installed practically in any

location without any major planning-related concerns and inexpensively, quickly, and simply relocated without having to dig up any concrete.

[0026] Another advantage of the bus-stop shelter of the present invention is that it has a smaller "footprint" relative to the known bus-stop shelter and does not require a concrete platform for installation of the base of the shelter.

[0027] Another advantage of the bus-stop shelter of the present invention is that it is conducive to relocation thereof in an inexpensive, quick, and simple manner.

[0028] Other objects, features, and advantages of the busstop shelter of the present invention will be readily appreciated as it becomes better understood while reading the subsequent description of an embodiment thereof taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0029] FIG. 1 is a perspective top view of an embodiment of the bus-stop shelter of the present invention.

[0030] FIG. 2 is a perspective bottom view of the embodiment of the bus-stop shelter of the present invention shown in FIG. 1.

[0031] FIG. 3 is an elevated bottom view of the canopy of the embodiment of the bus-stop shelter of the present invention shown in FIG. 1.

[0032] FIG. 4 is an elevated front view of the embodiment of the bus-stop shelter of the present invention shown in FIG. 1 illustrating a footing thereof installed below a surface of ground by which the shelter is supported.

[0033] FIG. 5 is an elevated side view of the embodiment of the bus-stop shelter of the present invention shown in FIG. 1 illustrating the footing thereof installed below a surface of ground by which the shelter is supported.

[0034] FIG. 6 is an elevated side partial view of another embodiment of the bus-stop shelter of the present invention illustrating a footing thereof installed below a surface of ground by which the shelter is supported.

DETAILED DESCRIPTION OF AN EMBODIMENT OF THE INVENTION

[0035] Referring now to the figures, throughout which like numerals are used to designate like structure, a bus-stop shelter of the present invention is generally indicated at 10 in FIGS. 1, 2, 4, and 5. The shelter 10 is adapted to protect any prospective passengers (not shown) of a bus from weather-related elements while he or she awaits arrival of the bus at a bus stop.

[0036] While the bus-stop shelter 10 is described below and shown in the figures used in connection with protecting the prospective passenger from hail, rain, sleet, snow, sunlight, and so forth, it should be appreciated by those having ordinary skill in the related art that the shelter 10 can be used to afford general coverage, protection, and refuge from such natural elements on a temporary or emergency basis. For example and not by way of limitation, the shelter 10 can be used by a person awaiting a taxicab or train, a passerby caught in a storm of some sort, or even merely as a meeting place. It should be so appreciated also that a seat or bench, telephone, mailbox, newspaper/magazine dispenser, vending machine, and/or audio/visual equipment, just to name a few amenities,

can be placed within coverage area of the shelter 10 so as to provide comfort and/or convenience to persons using the shelter 10.

[0037] Referring now to FIGS. 1 through 5, the bus-stop shelter 10 includes generally an upstanding post, generally indicated at 12, defining a first end, generally indicated at 14, of the post 12 adapted to be installed below a surface 16 of ground, generally indicated at 18, by which the shelter 10 is supported. A second end, generally indicated at 20, of the post 12 is adapted to be disposed above the ground surface 16. A canopy, generally indicated at 24, defines a substantially central portion, generally indicated at 28, of the canopy 24 and is adapted to be supported at a portion of the canopy 24 off the central portion 28 by the second end 20 of the post 12 and substantially over the prospective passenger such that the canopy 24 protects the prospective passenger from the weather-related elements.

[0038] More specifically and in an embodiment of the busstop shelter 10, as best shown in FIGS. 4 and 5, the post 12 is substantially uniform and constructed with a heavy-gauge steel—preferably, 11-gauge steel—and defines a substantially square or circular transverse cross-section. In particular, each side of the post 12 is about three inches long. The post 12 is also less than about twelve feet long and disposed about ten feet above the ground surface 16. In this way, fewer than about two feet of length of the post 12 are disposed below the ground surface 16. Since the installed post 12 is substantially immovable, the prospective passenger, while standing under the canopy 24 awaiting arrival of the bus, can safely lean against the post 12.

[0039] It should be appreciated by those having ordinary skill in the related art that the post 12 can be made of any suitable material. It should be so appreciated also that the post 12, in general, and first end 14 of the post 12, in particular, can have any suitable size, shape, and structure and have any suitable relationship with the ground surface 16. It should be so appreciated also that the second end 20 of the post 12 can have any suitable size, shape, and structure as well.

[0040] In an embodiment of the bus-stop shelter 10 and as best shown in FIGS. 4 and 5, a footing, generally indicated at 22, is disposed in the ground 18 below the surface 16 and receives the first end 14 of the post 12 such that the footing 22 supports the post 12. In particular, the footing 22 includes a cement sleeve 22 that is substantially symmetrical and adapted to be placed into the ground 18. Upon such installation of the sleeve 12, the sleeve 22 is disposed about two feet below the ground surface 16 such that only a relatively small portion of the sleeve 22 protrudes above the ground surface 16, such portion being a base 26 of the bus-stop shelter 10. Only a portion of the sleeve 22 receives—matingly or otherwise—the first end 14 of the post 12 such that the first end 14 of the post 12 does not extend completely through the sleeve 22. In this way, the sleeve 22 supports the post 12. The sleeve 22 also defines a substantially square transverse cross-section. In particular, each side of the sleeve 22 is about four and a half inches long such that the bus-stop shelter 10 defines a "footprint" about four and a half inches long by about four and a half inches wide.

[0041] To install this embodiment of the bus-stop shelter 10, the sleeve 22 is placed into the ground 18, and the sleeve 22 matingly receives the first end 14 of the post 12 such that the base 26 is exposed above the ground surface 16. Or, the sleeve 22 is cemented to the post 12, and the combination of the sleeve 22 and post 12 is placed into the ground 18 such that

the base 26 is exposed above the ground surface 16. Either way, the sleeve 22 supports the post 12, and the resulting void in the ground 18 is backfilled. If the shelter 10 is to be relocated, a person inexpensively, quickly, and simply digs into the ground 18 to free the post 12 from the sleeve 22 and then the sleeve 22 or the combination of the sleeve 22 and post 12. When the resulting void in the ground is backfilled, no sign of the shelter 10 ever having been installed there is visibly evident.

[0042] It should be appreciated by those having ordinary skill in the related art that the footing 22 of this embodiment of the bus-stop shelter 10 can be made of any suitable material. It should be so appreciated also that the footing 22 can have any suitable size, shape, and structure and have any suitable relationship with the ground, in general, and ground surface 16, in particular, and first end 14 of the post 12. In turn, it should be so appreciated also that this embodiment of the shelter 10 can define a "footprint" of any suitable shape, size, and structure. It should be so appreciated also that the footing 22 can be fastened to the first end 14 of the post 12 by any suitable means such that the footing 22 supports the post 12.

[0043] In an alternative embodiment of the bus-stop shelter 10 and as shown in FIG. 6, the footing 22 includes a combination of a steel sleeve 22 and steel base plate 38 that is substantially symmetrical and adapted to be placed into the ground 18. In particular, a bottom edge of the sleeve 22 is secured-preferably, welded—substantially symmetrically to a central portion of a top surface of the plate 38. In this embodiment, the plate 38 is substantially square—preferably. about eight inches by about eight inches by about one-eighth inch—and the sleeve 22 is substantially tubular—preferably, defining about a twenty-four-inch length, about a four-anda-half-inch diameter, and about a one-eighth inch thickness of the sleeve 22. The sleeve 22 defines also a hole (not shown) extending completely transversely through the sleeve 22 about eighteen inches from the bottom edge of the sleeve 22 (or the top surface of the plate 38) and defining about a three-quarter-inch diameter of the hole. The sleeve 22 also is adapted to matingly receive the first end 14 of the post 12, and the hole also is adapted to receive a fastener 42, such as a bolt 42, to fasten the first end 14 of the post 12 within the sleeve 22. [0044] To install this alternative embodiment of the busstop shelter 10, the sleeve 22 is concreted into the ground 18 above the plate 38 and below the hole, and the first end 14 of the post 12 is matingly received within the sleeve 22 such that the hole lies beneath the ground surface 16. The hole receives the bolt 42 to fasten the first end 14 of the post 12 within the sleeve 22, and the resulting void in the ground 18 is backfilled. If the shelter 10 is to be relocated, a person inexpensively, quickly, and simply digs into the ground 18 to the bolt 42 and unfastens the bolt 42, thus freeing the post 12 from the sleeve 22. In this way, no concrete must be dug up. When the resulting void in the ground is backfilled, no sign of the shelter 10 ever having been installed there is visibly evident.

[0045] It should be appreciated by those having ordinary skill in the related art that the footing 22, in general, and each of the sleeve 22 and plate 38, in particular, of this alternative embodiment of the bus-stop shelter 10 can be made of any suitable material. It should be so appreciated also that each of the sleeve 22 and plate 38 can have any suitable size, shape, and structure and have any suitable relationship with each other, the ground, and the first end 14 of the post 12. In turn, it should be so appreciated also that this embodiment of the

shelter 10 can define a "footprint" of any suitable shape, size, and structure. It should be so appreciated also that the sleeve 22 can be secured to the plate 38 in any suitable manner. It should be so appreciated also that the fastener 42 can be any suitable fastener. It should be so appreciated also that the footing 22 can be fastened to the first end 14 of the post 12 by any suitable means such that the footing 22 supports the post 12. It should be so appreciated also that the hole can be any suitable size and shape and have any suitable relationship with the sleeve 22 and first end 14 of the post 12.

[0046] As best shown in FIGS. 1 through 3 and 5, the canopy 24 defines a perimeter and a center point "c" of the canopy 24. The second end 20 of the post 12 is operatively secured—preferably, welded—to an underside, generally indicated at 30 in FIG. 2, of the canopy 24 and supports the canopy 24 above the ground surface 16 proximate the perimeter of the canopy 24. The canopy 24 defines also a substantially rectangular transverse cross-section.

[0047] In particular and as shown in FIG. 3, the canopy 24 defines a length "x" and a width "y." The second end 20 of the post 12 supports the canopy 24 at a distance "xo" about halfway along "x" (away from "y") and a distance "d" from "x." In this way, the second end 20 of the post 12 supports the canopy 24 at a distance "do" from the center point "c" of the canopy 24. As a result, the bus-stop shelter 10 can be simply located suitably close to the position where the bus actually stops to pick up the prospective passenger while still not interfering with traffic of the road, street, or like; the shelter 10 occupies no amount of area of the sidewalk such that the shelter 10 does not restrict any amount of access to the sidewalk by passers-by; and preexisting pavement can be used to install it. The canopy 24 defines also a thickness, a substantially uniform circumferential edge 32, and four arcuate corners of the canopy 24.

[0048] The canopy 24 is also reinforced with fiberglass for structural integrity of the canopy 24. A preferred embodiment of the shelter 10 includes at least one solar panel (not shown). In such embodiment, the canopy 24 includes preferably a plurality of solar panels by which space covered by the canopy 24 can be heated to a certain extent and adequately lighted, whether during the day or night, such that each prospective passenger is waiting under the canopy 24 in some heat and a desirable and safe level of light. The canopy 24 is also tapered from adjacent a perimeter of the canopy 24 to the perimeter. In particular and as shown in FIG. 1, the canopy 24 defines a substantially uniform bevel 34 extending completely about a circumferential area of the canopy 24. More particularly, the bevel 34 defines a width "w" and forms an angle "\a" from a line "z" extending vertically from the perimeter of the canopy 24. Not only does the bevel 34 help to protect each user of the bus-stop shelter 10 from natural elements that are incident toward the shelter 10 at a slant, but the bevel **34** also makes it practically impossible for vandals to hang onto and swing from the canopy 24.

[0049] It should be appreciated by those having ordinary skill in the related art that the canopy 24, in general, and underside 30 of the canopy 24, in particular, can have any suitable shape, size, structure and relationship with the second end 20 of the post 12. It should be so appreciated also that the canopy 24 can be supported by the second end 20 of the post 12 by any suitable means. It should be so appreciated also that each of "x," "y," "x_o," "d," "d_o," "w," and "a" can have any suitable measurement. It should be so appreciated also that the canopy 24 can define any suitable thickness, the edge

32 can define any suitable height, and each of the corners of the canopy 24 can define any suitable radius. It should be so appreciated also that the canopy 24 can be reinforced with any suitable type of material and include any suitable number of solar panels each having any suitable shape, size, and structure and relationship with the remainder of the canopy 24.

[0050] As best shown in FIGS. 1 through 3, the bus-stop shelter 10 further includes a pair of cross-members 36 extending substantially outward from and secured—preferably, welded—to the second end 20 of the post 12, contacting the underside 30 of and assisting in supporting the canopy 24 above the ground surface 16, and adapted to provide structural integrity to the shelter 10. In combination with each other, the cross-members 36 and post 12 form a box frame.

[0051] In particular, the cross-members 36 form a substantial right angle with respect to each other and collectively with the post 12. The cross-members 36 also are substantially identical relative to each other with respect to shape, size, and structure and relative to the post 12 with respect to shape and structure. The cross-members 36 are also positioned substantially symmetrical relative to the length of the underside 30 of the canopy 24, wherein neither of the cross-members 36 extends to the bevel 34 of the canopy 24. The cross-members 36 are also fastened—preferably, bolted—to the underside of the canopy 24 and are constructed with a heavy-gauge steel—preferably, 11-gauge steel. The canopy 24 is bolted to the second end 14 of the post 12 and each of the cross-members 36.

[0052] It should be appreciated by those having ordinary skill in the related art that the canopy 24 can include any suitable number of cross-members 36. It should be so appreciated also that each of the cross-members 36 can have any suitable shape, size, and structure and relationship with each other and each of the second end 20 of the post 12 and underside 30 of the canopy 24. It should be so appreciated also that the cross-members 36 can be fastened to the underside of the canopy 24 by any suitable means. It should be so appreciated also that the cross-members 36 can be constructed with any suitable material.

[0053] The bus-stop shelter 10 is aesthetically pleasing and inexpensively, quickly, and simply installed. Such installation can occur practically anywhere, requires minimal planning, and does not require an expensive concrete base or platform, a large "footprint," closing down a sidewalk, and restricting access. The shelter 10 is less likely to be subject to constant abuse and a strain on local governmental budgets and can be relocated without concrete having to be dug up, too. In operation of the bus-stop shelter 10, the prospective passenger stands under the canopy 24 (as opposed to, say, inside a distant building or under a nearby tree or distant overhang). The shelter 10 protects the prospective passenger from the weather-related elements while he or she awaits arrival of the bus at the bus stop. Meanwhile, the prospective passenger remains comfortable, dry, safe, and practically fearless of being vandalized and, therefore, using a public bus system.

[0054] The bus-stop shelter 10 provides effective shelter to the awaiting bus passenger from inclement weather and direct sunshine. Also, the bus-stop shelter 10 has a simple ergonomic design and a smaller "footprint" relative to the known bus-stop shelter. And, the bus-stop shelter 10 does not require a concrete platform for installation of the base of the shelter 10, provides to the prospective passenger completely free and clear, unobstructed access into and from the inside of the shelter 10, and occupies no amount of area of the sidewalk

such that it does not restrict any amount of access to the sidewalk by passers-by. Furthermore, the bus-stop shelter 10 is modular and, therefore, readily adapted to its being constructed as multiples of a single unit such that it can provide different sized shelters 10 and conducive to relocation thereof in an inexpensive, quick, and simple manner. In addition, the bus-stop shelter 10 is simpler and less expensive to construct (especially install) and maintain and safer and more practical, vandal-resistant, aesthetically pleasing, and comfortable in a certain respect relative to the known bus-stop shelter. Moreover, the bus-stop shelter 10 can be simply located suitably close to the position where the bus actually stops to pick up the prospective passenger while still not interfering with traffic of the road, street, or like, installed practically in any location without any major planning-related concerns, and inexpensively, quickly, and simply relocated without having to dig up any concrete. Plus, the canopy 24 is tapered, thus making it practically impossible for vandals to hang onto and swing from it, and may include at least one solar panel by which space covered by the canopy 24 can be heated to a certain extent and adequately lighted, whether during the day or night, such that each prospective passenger is waiting under the canopy 24 in some heat and a desirable and safe level of light. Preexisting pavement can be used to install the bus-stop shelter 10 as well. The bus-stop shelter can be installed on clay, dirt, grass, mud, sand, or other suitable non-cement, -concrete, or paved ground, too.

[0055] The bus-stop shelter 10 has been described in an illustrative manner. It is to be understood that the terminology that has been used is intended to be in the nature of words of description rather than of limitation. Many modifications and variations of the bus-stop shelter 10 are possible in light of the above teachings. Therefore, within the scope of the appended claims, the bus-stop shelter 10 may be practiced other than as specifically described.

What is claimed is:

- 1. A shelter adapted to protect any prospective passengers of a bus from weather-related elements while the prospective passenger awaits arrival of the bus at a bus stop, said bus-stop shelter comprising:
 - an upstanding post defining a first end thereof adapted to be installed below a surface of ground by which said shelter is supported and a second end of said post adapted to be disposed above the ground surface; and
 - a canopy defining a substantially central portion thereof and adapted to be supported at a portion of said canopy off said central portion by said second end of said post

- and substantially over the prospective passenger such that said canopy protects the prospective passenger from the weather-related elements.
- 2. A bus-stop shelter as set forth in claim 1, wherein said shelter comprises further a footing that is disposed in the ground and receives said first end of said post such that said footing supports said post.
- 3. A bus-stop shelter as set forth in claim 2, wherein said footing includes a concrete sleeve that receives said first end of said post such that said footing supports said post.
- **4.** A bus-stop shelter as set forth in claim **3**, wherein said sleeve is adapted to matingly receive said first end of said post such that said footing supports said post.
- 5. A bus-stop shelter as set forth in claim 2, wherein said footing includes a base plate and a sleeve that is secured to said base plate and receives said first end of said post such that said footing supports said post.
- **6**. A bus-stop shelter as set forth in claim **5**, wherein said sleeve is adapted to matingly receive said first end of said post such that said footing supports said post.
- 7. A bus-stop shelter as set forth in claim 6, wherein said sleeve defines a hole extending through said sleeve and adapted to receive a fastener to fasten said first end of said post within said sleeve.
- **8**. A bus-stop shelter as set forth in claim **7**, wherein said sleeve is concreted into the ground above said base plate and below said hole, said first end of said post is matingly received within said sleeve such that said hole lies beneath the ground surface, and said hole receives said fastener to fasten said first end of said post within said sleeve.
- 9. A bus-stop shelter as set forth in claim 1, wherein said canopy defines a perimeter thereof and said second end of said post supports said canopy above the ground surface proximate said perimeter.
- 10. A bus-stop shelter as set forth in claim 1, wherein said canopy includes at least one solar panel.
- 11. A bus-stop shelter as set forth in claim 1, wherein said canopy is tapered from adjacent a perimeter of said canopy to said perimeter.
- 12. A bus-stop shelter as set forth in claim 1, wherein said bus-stop shelter comprises further a pair of cross-members extending substantially outward from and secured to said second end of said post, contacting an underside of and assisting in supporting said canopy above the ground surface, and adapted to provide structural integrity to said bus-stop shelter.

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