This invention comprises novel mobile home skirting that is economically manufactured, quickly installed, easily removed, and conveniently stored. This invention resides in a system of skirting made of basically identical panel sections. Each panel section has a lower panel removably connected to an upper panel. Each upper panel is adapted to be connected or fixed to the underside of a mobile home. The lower panel can be lowered into contact with the ground and fastened. Each panel section is provided with means for aligning it with the next panel section. Also a utility panel and access panel is provided. The panels are best made available in lengths of 4 feet and 6 feet for fitting all sizes of mobile homes.

8 Claims, 9 Drawing Figures
MOBILE HOME SKIRTING

BACKGROUND OF THE INVENTION

This invention relates to skirting for mobile homes. More particularly, this invention relates to skirting for enclosing the space beneath mobile homes.

There is a plethora of prior art relating to mobile home skirting. The skirting is deemed necessary for shielding the mobile home from the weather beneath the trailer floor. More particularly, the skirting protects the underside of the mobile home from drafts, wind currents, and excessive circulation of air. The skirting also defines an enclosed space that can be used for storage. The skirting prevents trash from drifting in and collecting beneath the mobile home. The trash is obviously unsightly, unsanitary, and a fire and health hazard.

A major effort can be found in prior art trailer house skirts for providing easily installable and removable skirting configurations. However, the prior art skirting is complicated and therefore costly to manufacture and install. Some of the skirts have failed to provide the decorative appearance to the mobile home that is in so much demand. Also, variations in height of the trailer from the ground presents an additional problem that adds to the unsightliness of the skirting. Another important consideration is that the skirting must be made easy to remove and store for transport along with the mobile home. The prior art skirting has not always met this requirement.

SUMMARY OF THE INVENTION

It is therefore an object of this invention to provide a novel system of skirting for mobile homes that has all of the desirable features and none of the disadvantages pointed out hereinabove.

Another object of this invention is the provision of a novel system of skirting for mobile homes having a plurality of panel sections, each comprising two vertically, and/or electricity leading thereunder. Accordingly, there is provided a panel section of preferably 1 foot length and a template-like component for dressing up the panel around the utility line admitted through the utility panel. Inasmuch as the underside of the mobile home enclosed by this novel system of skirting must be inspected from time to time, there is an access door panel provided that is hinged to be raised up for admission to the underside of the mobile home. The underside of the mobile home can also be used as a storage space with the provision of the access door panel.

Each panel section is in the shape of an horizontally elongated rectangle. Each section has an upper panel adapted to be fixed to the underside of the mobile home. A lower panel is slideably connected to the upper panel on the side facing the underside of the mobile home. The lower panel is vertically adjustable so that it can be lowered and fastened to the ground. Moreover, both the upper and lower panels are provided with self-alignment means so as to assure coplanar alignment with an adjoining panel section.

The invention further resides in certain novel features of construction, combinations and arrangements of parts, and further objects and advantages of the invention will be apparent to those skilled in the art to which it pertains from the following description of the present preferred embodiment thereof described with reference to the accompanying drawings, which form a part of this specification, and wherein the same reference numerals and characters represent corresponding parts throughout the several views, and in which:

FIG. 1 is a side elevational view of a mobile home having skirting embodying the invention installed thereon;

FIG. 2 is an isometric view of a backside of a section of the mobile home skirting shown in FIG. 1;

FIG. 3 is an isometric view of a frontside of the section of mobile home skirting shown in FIG. 2;

FIG. 4 is an enlarged end view of a clip and fastening means in assembly with a novel panel section and the mobile home;

FIG. 5 is an enlarged side elevational view of a fastener assembly for adjustably connecting a lower panel to an upper panel of a panel section;

FIG. 6 is an enlarged side elevational view of the details of a security device for connecting the novel panel section to the ground;

FIG. 7 is an isometric view of an access door panel section of the mobile home skirting embodying the invention;

FIG. 8 is an isometric view of a novel utility panel section of the mobile home skirting embodying the invention; and

FIG. 9 is a front elevational view of a template-type panel for use with the utility panel section shown in FIG. 8.

It is to be understood that the invention is not limited to the details of construction and arrangements of parts shown in the drawings and hereinabove described in detail, but is capable of being otherwise embodied and being practiced, and carried out in various ways. It is further understood that the terminology employed herein is for the purpose of description and there is no intention to herein limit the invention beyond the requirements of the prior art.
Referring to FIG. 1, the reference numeral 10 indicates generally mobile home skirting embodying the invention. The skirting 10 comprises a plurality of identical panel sections 11 connected to the underside and along the periphery of a parked mobile home 12. The mobile home 12 has a tow bar 13 at the front end thereof adapted to be connected to a rear bumper trailer hitch of a towing vehicle, not shown.

The panel sections 11 are of horizontally elongated rectangular configuration. The panel sections 11 are preferably formed in lengths of 4 feet and 6 feet to fit any size of trailer house. For example, if the mobile home is 8 feet wide, two 4 foot panel sections can be used along each end. If the mobile home is 18 feet in length, three 6 foot panel sections can be used along each side as shown in FIG. 1. Where an access door panel section 1 foot in length is used, the panel sections can be manipulated in a manner readily apparent to one skilled in the art to meet individual requirements.

For example, a utility panel section and an access door panel section can be placed end-to-end to form a 4 foot panel section at either end of the mobile home 12 or on either side thereof, depending on the utility line arrangement in the mobile home parking space or lot. Where necessary or desired, several utility panel sections and/or access door panel sections can be installed around the trailer periphery.

Each panel section 11 comprises an upper part 14 of rectangular configuration, and a lower panel 15 also of rectangular configuration. The panels 14 and 15 are of the same length. Although the 4 and 6 foot lengths are preferred, it will be understood that the panel sections 11 can be of any desired length. Preferably, for mobile home installations, the upper panel 14 is 2 feet high, and the lower panel 15 is 1 foot high. The lower panel 15 preferably overlaps the upper panel 14 by an amount of 6 inches to 12 inches, as will be further described hereinafter.

The panel sections 11 are preferably made of any suitable thicknesses of Masonite* ("a trademark of Masonite Corp. of Memphis, Tenn."), plywood, or of any desired or available composite and/or synthetic material having characteristics similar to that of plywood. It will be understood, however, that any suitable material can be used that is known to one skilled in the art.

Referring to FIGS. 2, 3, and 4, the upper panel 14 of each panel section 11 is adapted to be connected to an horizontal undersurface 16 of the mobile home 12 by means of a plurality of three longitudinally spaced and aligned L-shaped clips 17. As best seen in FIG. 4, each clip 17 has a vertical flange 18 of horizontally elongated rectangular configuration secured to a backside 20 of the upper panel 14 by means of three hexagonal nuts 21 threaded onto three bolts 22. Each bolt 22 preferably has a round head with a cross-slot for a standard screwdriver blade, not shown. The bolts 22 each extends through the upper panel 14, the flange 18, and has one of the nuts 21 threaded thereon. Lockwashers, not shown, can be provided if desired. It will be understood that other suitable alternative fastener means can be provided, such as rivets.

Each clip 17 is also formed with an horizontally elongated rectangular upper flange 24 disposed at a right angle to the flange 18. The flange 24 is adapted to be flat against the underside 16 of the mobile home 12 and to be secured thereto by three round head screws 25 having a cross-slot 26 formed in the heads thereof for a screwdriver blade, not shown.

It will be understood that different model mobile homes have different underside construction, and accordingly, the fastener means may be changed to take advantage of the various forms of construction.

The lower panel 15 is slideably connected to the backside 20 of the upper panel 14 by means of a spring-loaded fastener assembly, indicated generally by the reference numeral 30 in FIGS. 2, 3, and 5. Each fastener assembly 30 comprises a pin member 31 having an enlarged cylindrical head 32 and an elongated cylindrical shank 33 of reduced diameter extending through the upper panel 14 and a vertically elongated substantially rectangular slot 34 formed in the lower panel 15. A flat washer 35, a helical compression spring 36, and a plain flat washer 37, similar to the washer 35, are respectively disposed over the shank of the pin 31. A cotter pin 38 extends through a diametrically extending drill hole in an outer terminal end of the shank 33 for holding the washers 35 and 37, and the spring 36 in assembly on the pin 31. The spring 36 provides the desired amount of pressure to cause the frictional engagement of the frontside 40 of the lower panel 15 with the backside 20 of the upper panel 14.

Preferably, the slot 34 is approximately 5/8 inches in length beginning about 1 inch from the upper terminal edge of the lower panel 15. Moreover, the power panels 15 of the 6 foot sections 11 are formed with three parallel vertical slots 34, spaced an equidistance apart and an equidistance from each lateral terminal edge of the lower panel 15. Preferably, the center slot 34 is centered in the lower panel 15. The 4 foot length panel sections referred to hereinafter are each provided with only two fastener assemblies 30 spaced about 1 foot from each end or lateral terminal edge of the panel section.

The lower panel 15 is easily pulled down into contact with the ground 41, FIG. 6, without any need for disengaging the spring-loaded fastener assemblies 30, FIG. 5. The panels 14 and 15 are resiliently biased together into frictional engagement and will not rattle in the wind or work loose due to the elimination of a threaded fastener arrangement. Each panel section 11 is fastened to the ground 41 by positive securing means, indicated generally by the reference numeral 50. The lower panel 15 of each panel section 11 is preferably provided with three securing means 50 equally spaced apart from each other and from the lateral terminal edges or ends of the lower panel 15. The 4 foot panel sections may be provided with two securing means 50.

Each panel section securing means 50 comprises an L-shaped clip 51 and a staking rod 52. The clip 51, FIG. 6, has a vertical, horizontally elongated rectangular flange 53 disposed flat against and secured to a backside 54 of the lower panel 15. Preferably, three nuts 56 and three bolts 57 are used to fasten the clip 51 to the lower panel 15 in a conventional manner as shown in FIGS. 2, 3, and 6. It will be understood, however, that other conventional fastening means, such as rivets, can be used where desired. The clip 51 has a horizontal elongated rectangular flange 58 disposed perpendicular to the vertical flange 53. The flange 58 is formed with a centrally located cylindrical opening for
permitting the insertion of the staking rod 52. The rod 52 is adapted to be pressed into the ground 41 until only an arcuate ring-type head 60 is visible. The head 60 is larger than the central opening in the flange 58 and strong enough to allow the rod 52 to be removed. The length of the rod 52 should be great enough to hold the lower panel 15 in the down position in most all soils that will be encountered, including sandy type soils. Also the rod 52 must be of great enough diameter to permit the same to be driven into position like a stake, regardless of the hardness of the ground 41.

The panel section 11 of FIGS. 1, 2, 3, 4, and 5, is provided with means, indicated generally by the reference numeral 61, for aligning the same with an adjoining panel section in end-to-end relationship therewith. The alignment means 61 comprise a vertically elongated rectangular panel strip 64 connected along a lateral terminal edge or end 65 on the frontside 66 of the upper panel 14, preferably by means of two nuts 67 and two bolts 68. The panel strip 64 is of the same vertical dimension as the upper panel 14, and is preferably approximately 3 inches wide in the preferred embodiment described in this specification. The panel strip 64 is of sufficient width to close the vertical crack or seam defined by the adjoining panel sections 11, and yet serve as an alignment means for guiding and retaining the adjoining panel section in place.

Similarly, the lower panel 15 is provided with a vertically elongated rectangular panel strip 70 of the same vertical dimension as the lower panel 15. The panel strip 70 is preferably of the same width as the panel strip 64 and is connected by means of three nuts 71 and three bolts 72 to the lateral terminal edge or end 73 of the lower panel 15 on the backside 54 thereof. The panel strip 70 is of sufficient width to close the vertical crack or seam defined by the adjoining panel sections 11, and yet adequately function as alignment means for guiding and retaining the abutting panel section in place. It will be noted that the panel strips 64 and 70 are parallelly spaced apart by the combined thicknesses of the upper panel 14 and the lower panel 15.

Referring to FIG. 7, an access door panel section is indicated generally by the reference numeral 80. The access door panel section 80 comprises a lower panel 81 slideably connected to a backside of an upper panel 82 by two fastening means 30 for vertical movement as described in connection with panels 14 and 15 of FIGS. 1 through 6. The upper panel 82 is pivotedally connected to a fixed top panel 83 by means of two piano hinges 84 and 85. The lower panel 81 is preferably free of the ground staking arrangement 50 shown in FIG. 6. The lower panel 81 is of the same vertical dimension as the other lower panels 15 of the skirting system embodying this invention.

Since the panels 81 and 82 are intended to swing outwardly and upwardly in an arc of approximately 180° about the horizontal axis defined by the piano hinges 84 and 85, no panel strip is used for aligning purpose similar to the panel strip 70 shown in FIGS. 2 and 3. However, vertically elongated rectangular panel strips 86 and 87 are respectively connected to a lateral of the panel 82 and of the panel 83 by means of nut and bolt fastener assemblies 88. Because of the repeated use anticipated for the access door panel section 80, five fasteners 88 are used to connect the panel strip 86 to the upper panel 82, and two fasteners 88 are used to connect the panel strip 87 to the fixed panel 83.

The combined vertical dimension of the panels 82 and 83 is the same as for the upper panel 14 of the panel section 11. However, there must be some crack width between the adjacent marginal edges of the panels 82 and 83, and the panel strips 86 and 87 to allow the access door panel 80 to be properly operated. Moreover, due to the heavy duty nature of the access door panel 80, extra long angle members 90 and 91 are used to connect the fixed panel 83, as well as the entire access door assembly, to the underside of the mobile home, in the manner shown in FIG. 4. Preferably, provision is made for 10 fasteners, not shown, to be used to connect the members 90 and 91 to the mobile home. A similar number of fasteners 92 may be used to connect the members 90 and 91 to the fixed panel 83.

The access door panel section 80 is preferably 4 feet long. This length, when used with the 1 foot long utility panel section indicated generally by the reference numeral 100 in FIG. 8, provides a combined section length of 5 feet. Accordingly, in order to maintain the esthetic appearance of the skirting system embodying the invention, an upper panel 101 is not provided with a panel strip, such as the strip 64 of the panel section 11. Preferably the utility panel 100 is placed adjoining the access door panel section 80. A lower panel 102, however, is provided with a panel strip 103 for alignment purposes, for closing the crack between the lower panels 102 and 81, and for providing a door stop for the access door panel section 80. The panel strip 103 is preferably connected to the lateral marginal edge of the lower panel 102 by means of three fastener assemblies 104. The lower panel 102 is provided with one centrally located staking device 50, as described in connection with FIG. 6.

Moreover, the lower panel 102 is connected to the backside of the upper panel 101 by two fastener assemblies 30 for permitting the vertical adjustment of the lower panel 102. Since the utility panel 100 is only 1 foot long, a single angle member 105 is provided to connect the upper panel 101, as well as the entire utility panel section 100, to the underside of the mobile home. The member 105 is formed with holes to permit five fasteners, not shown, to be used to connect the same to the mobile home, and the same number of fasteners 107 to be used to connect the member 105 to the upper panel 101.

FIG. 9 shows a template-like panel 110 that is preferably approximately 9 inches dimension along each side, and is divided into two equal parts with a circular opening 111 formed in the center thereof along the parting line. The panel 110 is to dress up what usually turns out to be an unsightly opening through which a utility line passes to the underside of the mobile home. For purposes of illustration, it is assumed that the utility line, not shown, is a 3 inch sewer pipe around which the upper panel 101 has been fitted. The patch panel 110 is applied onto the frontside of the utility panel section 100 after the latter has been secured in place. If the utility panel section 100 is botched during installation, the patch panel 110 will cover up the damage and provide a neat appearance. If the utility panel section 100 is damaged beyond use, it is much more economical and generally better to
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It will be understood that a plurality of patch panels 110 can be provided ready made to fit about the various utility lines or piping of different diameters and cross-sectional configurations. However, it may be preferable in some cases to provide a blank patch panel 110 that can have any sized opening 111 desired cut out by the person installing the skirting of this invention.

It will be understood that this invention can be modified to adapt it to various circumstances and conditions, and it is accordingly desired to comprehend within the purview of this invention such modifications as may be considered to fall within the scope of the appended claims.

What is claimed is:

1. Mobile home skirting comprising, horizontally elongated upper panel means, horizontally elongated lower panel means disposed in side-by-side relation with said upper panel means and adapted to extend below a lower marginal edge thereof, said lower panel means being laterally coextensive with said upper panel means, said lower panel means having vertical guide means formed therein, fastener means having shank means extending through said upper panel and said lower panel guide means for guiding said lower panel means up and down relative to said upper panel means, first L-shaped bracket means connected to an upper marginal edge of said upper panel means adapted to be secured to an underside of a mobile home, second L-shaped bracket means connected to a lower marginal edge of said lower panel means and adapted to be connected to the ground, upper panel guide strip means coextensive with a lateral marginal edge of said upper panel means in overlapping side-by-side relation and extending beyond said marginal edge of said upper panel means, and lower panel guide strip means coextensive with a marginal edge of said lower panel means in overlapping side-by-side relation parallel to and spaced from said upper panel guide strip means, and said lower panel guide strip means extending beyond said lateral marginal edge of said lower panel means.

2. Mobile home skirting as set forth in claim 1, wherein said fastener means comprise, a bolt extending through said upper panel means and through said lower panel guide means, a first washer, and helical spring, and a second washer each disposed over said bolt, and a nut threaded onto said bolt a sufficient distance to place the desired amount of tension on said helical spring for frictionally biasing said lower panel means against said upper panel means.

3. Mobile home skirting as set forth in claim 1, wherein said second L-shaped bracket means is formed with a centrally located opening therein, and further comprising securing rod means having an elongated rod portion adapted to extend through said centrally located opening in said second L-shaped bracket means and into the ground for securing said lower panel means to the ground, and said securing rod means has an enlarged eyelet at the upper end thereof for bearing against said second L-shaped bracket means and for ease of removing said securing means from the ground.

4. Mobile home skirting comprising, upper panel means, lower panel means disposed in side-by-side relation with said upper panel means and adapted to extend below a lower marginal edge thereof, said lower panel means being laterally coextensive with said upper panel means, said lower panel means having vertical guide slot means formed therein, fastener means having means extending through said lower panel guide slot means and said upper panel means for guiding said lower panel means up and down relative to said upper panel means, first bracket means connected to an upper marginal edge of said upper panel means adapted to be secured to an underside of a mobile home, upper panel guide strip means coextensive with a lateral marginal edge of said upper panel means in overlapping side-by-side relationship and extending beyond said lateral marginal edge of said upper panel means, and lower panel guide strip means coextensive with a marginal edge of said lower panel means in overlapping side-by-side relationship parallel to and spaced from said upper panel guide strip means, and said lower panel guide strip means extending beyond said lateral marginal edge of said lower panel means.

5. Mobile home skirting as set forth in claim 4, further comprising second bracket means connected to a lower marginal edge of said lower panel means and adapted to be connected to the ground.

6. Mobile home skirting comprising, a plurality of panel sections adapted to be arranged end-to-end, each panel section including an upper panel and a lower panel arranged in vertically adjustable overlapping relationship, means for detachably securing said upper panel to a mobile home, vertical adjustment means for permitting vertical adjustment of said lower panel relative to said upper panel and for securing the same together, and alignment means for aligning adjacent ends of adjacent panel sections with each other and permitting vertical adjustment of said lower panel relative to said upper panel for enclosing space beneath the mobile home, said alignment means comprising an upper vertically elongated rectangular panel strip secured in overlapping coextensive relationship to said upper panel along one lateral edge thereof, said upper panel strip being connected to said upper panel in such manner as to extend over an adjacent upper panel disposed in end-to-end relation with said upper panel, and a lower vertically elongated rectangular panel strip secured in overlapping coextensive relationship with said lower panel along one lateral marginal edge on a side opposite to the side adjacent to said upper panel and at one end thereof adjacent said upper strip, and said lower panel strip being connected to said lower panel in such a manner as to extend over an adjacent lower panel in end-to-end relation with said lower panel.

7. Mobile home skirting comprising, a plurality of panel sections adapted to be arranged end-to-end, each panel section including an upper panel and a lower panel arranged in vertically adjustable overlapping relationship, means for detachably securing said upper panel to a mobile home, vertical adjustment means for permitting vertical adjustment of said lower panel relative to said upper panel and for securing the same together, said vertical adjustment means comprising vertical slot means formed in said lower panel, and
fastener means having a portion extending transversely through said upper panel and through said slot means in said lower panel for releaseably securing the same together, said fastener means resiliently biasing said lower panel into frictional engagement with said upper panel, and alignment means for aligning adjacent ends of adjacent panel sections with each other and permitting vertical adjustment of said lower panel relative to said upper panel for enclosing space beneath the mobile home, wherein said fastener means comprise, a bolt extending through said upper panel and through said slot means in said lower panel, a first washer, an helical spring, and a second washer each disposed over said bolt, and a nut threaded onto said bolt a sufficient distance to place the desired amount of tension on said helical spring for frictionally biasing said lower panel against said upper panel.

8. Mobile home skirting for a mobile home comprising, a plurality of panel sections adapted to overlap and to be connected together at the lateral edges thereof to form a skirt for the mobile home, each panel section including an upper panel and a lower panel in overlapping relationship along the lower edge portion of said upper panel and along the upper edge portion of said lower panel, horizontal flange means connected to an upper edge portion of said upper panel for securing the same to the mobile home, said lower panel being laterally coextensive with said upper panel and having vertical slot means formed therein, means connecting said lower panel to said upper panel and extending through said vertical slot means in said lower panel for allowing the vertical adjustment of said lower panel relative to said upper panel, and horizontal flange means connected to a lower edge portion of said lower panel for anchoring said lower panel to the ground wherein said anchoring means comprise an L-shaped clip having one flange connected to and carried by said lower panel and having another flange with an opening formed therein, and a rod enlarged at one end thereof, and said rod being inserted through said another flange and into the ground for fastening said clip and said lower panel to the ground.

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