A grave marker assembly having a marker protective structure including a generally horizontal base wall, a substantially continuous generally upwardly directed transition portion and an outwardly directed stabilizing ground engaging portion. The base wall and the transition portion cooperate to define a unitary marker receptacle. At least a major portion of the receptacle disposed within an opening in the earth. The grave marker disposed within the receptacle and having at least a portion of the lower surface thereof in overlying contact with the upper surface of the protective structure base wall. A substantially rigid marker supporting base in underlying supporting position with respect to the protective structure base wall. Fastener means securing the grave marker to the underlying rigid marker supporting base with the base wall secured therebetween. The stabilizing ground engaging portion in overlying contact with the earth surrounding the receptacle.

The protective structure transition portion may preferably be in peripheral substantially continuous contact with the marginal edge of the grave marker. The ground engaging portion of the protective structure preferably has a transverse width of about 1.5 to 8 times the height of the transition portion. Drainage passageways may be provided through the transition portion to permit water within the receptacle to flow outwardly and be discharged to a position underlying the ground engaging flange. The transition portion may have a number of inwardly projecting spacer elements which cooperate with the marginal edge of the grave marker and other portions of the transition wall to define a number of vertical passageways. A water permeable material may be provided exteriorly of the receptacle to facilitate drainage of water therefrom.
GRAVE MARKER PROTECTIVE STRUCTURE

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a decorative, stabilizing vegetation-inhibiting grave marker receptacle and more specifically to such a receptacle having integral seal means and stabilizers to prevent undesired displacement of the marker assembly.

2. Description of the Prior Art

Generally flat plate-like grave markers which are placed in horizontal position close to or at ground level are finding increasing use. A suitable grave-identifying embossment is provided on the exposed upper surface of such markers. A rectangular marker supporting base member of uniform thickness, generally made from precast concrete or granite, is placed within an opening in the earth. The marker is secured by suitable fasteners to the top of the base and is thereby maintained in the desired position. The marker is generally so secured in face-to-face contact with the upper surface of the base. One conventional means of effecting such securing is by means of bolts having their heads positioned within or below the marker base and free ends extending upwardly through openings in the marker. Nuts are secured over the free ends. Alternatively, the bolts may be threadedly secured to threaded bores within the marker or depending from the lower surface of the marker and the heads secured to the base member.

These grave markers, which are generally made of a suitable metal such as bronze, provide an attractive uniform appearance to a cemetery as they eliminate the variations in height, size and appearance so frequently encountered with respect to cemeteries having tombstones.

Such markers frequently reduce the amount of hand maintenance of vegetation required to obtain the desired aesthetically pleasing cemetery appearance. As the markers are secured at or close to ground level, some installations may permit the passage of a power lawn mower thereover. Others, while not so installed, do permit simplified hand trimming as by manual or power trimmers in a fashion not possible where a physical obstruction such as a tombstone extends upwardly a substantial distance above ground.

One of the main problems encountered in connection with the use of such markers is that with the passage of time, grass and other vegetation extend over and obscure the markers. In numerous instances the grass substantially completely covers the marker. Frequently, this process is accelerated by rain and snow eroding the surrounding soil and moving it down onto the marker. This provides a fertile soil foundation for root expansion of the surrounding grass. Thus, vegetation presents two hazards, i.e., elongation of the individual plants in a direction overlying and obscuring the marker and root expansion thereover. Removing the covering soil and vegetation which it supports is a time consuming and difficult task which can at best be expensive and imperfectly accomplished. In addition, the identifying embossments on the markers provide surface irregularities which entrap soil and present physical obstructions to proper cleaning.

Another serious problem with such marker installations is the tendency for the marker and supporting member to sink into the ground as the ground becomes softened by rain or snow. Also contributing to this undesired movement are the alternate freeze-thaw cycles encountered during the winter. In addition, this sinking action may occur irregularly in such fashion that portions of the marker may move upwardly to a substantial distance above ground. Such movement not only is aesthetically unpleasing, but also it creates an obstruction which presents a physical hazard to both people and equipment. This produces a need for inefficient, time-consuming and expensive hand trimming by a manual or power trimmer.

An additional problem encountered with such markers is that the water and soil which impinge upon the marker are potentially corrosive materials which over an extended period of time may severely and permanently damage the marker.

Various forms of grave marker protective devices have been previously known. U.S. Pat. No. 2,383,767 discloses a ground surfaced rigid rectangular frame of tubular construction having an inwardly open portion which receives the larger edges of the marker. The frame material may be plastic with the frame resiliently engaging the marker.

U.S. Pat. No. 2,095,290 discloses a modified marker having drain holes communicating with underlying pipes which are cast into the concrete base. The vertical drainpipes connect with horizontal drainpipes which are also cast in the irregularly shaped base member. The base has a portion which extends upwardly to provide a rigid marker border above ground level.

U.S. Pat. No. 3,378,942 discloses an irregularly shaped protective channel frame into which a conforming concrete base is cast. An inwardly directed leg of the channel frame is disposed intermediate the outer portions of the marker underside and a portion of the base. The corners of the channel frame are provided with two open V-shaped grooves for carrying water to the outer periphery. The assembly is set into the ground with the V-shaped drainage grooves disposed above ground. Water impinging upon the grooves intermediate the corners of the base is caused to flow horizontally to a corner for discharge. No stabilizing means or ground contacting vegetation inhibiting means are provided. U.S. Pat. No. 3,082,559 contains a similar disclosure of a surrounding grave marker into which an irregularly shaped concrete base is cast. The corners provide gaps for drainage of water to the outer periphery. The outer periphery has an upstanding raised rim which resists grass growth over the edge. The surround is of solid transverse cross section having an outer vertical face and top wall extending therefrom.

None of the known systems is adapted for use with conventional rectangular concrete or granite marker supporting bases. Also, these structures fail to provide positive means for resisting sinking or tilting of the marker assembly. In addition, no effective means of preventing vegetation expansion, while simultaneously providing no significant obstacle to the use of power mowers, in connection with assemblies having the above-named features is provided. This is particularly important as an increasing number of memorial parks are requiring installation of memorial markers at or below ground surface. These prior systems also provide no means for effectively draining undesired moisture from an assembly which employs a conventional marker base to an underground position.

One suitable system which provides a structure for receiving both the marker and a connected underlying
concrete or granite marker supporting base within the receptacle is disclosed in my U.S. Pat. No. 3,604,172.

SUMMARY OF THE INVENTION

This invention has solved the above-described problems by providing a protective structure which has a receptacle for receipt of a grave marker. A grave marker has an underlying marker supporting base, which may be a conventional granite or concrete base, secured in underlying position with respect to the marker in such fashion that a portion of the protective structure is sealingly, peripherally secured therebetween.

The receptacle of this invention has a generally horizontal base wall, a substantially continuous generally upwardly directed transition portion and an outwardly directed stabilizing ground engaging portion. The base wall and transition portion cooperate to define a unitary marker receiving receptacle. At least a major portion of the receptacle is positioned within an opening in the earth and the grave marker is disposed within the receptacle, preferably with its marginal edges in contact with the transition portion of the protective structure. A substantially rigid marker supporting base is positioned under the horizontal base wall in contact therewith. Fastener means secure the grave marker to the rigid marker supporting base with the base wall secured therebetween. The ground engaging flange, which preferably has a transverse width of about 1.5 to 8 times the height of the transition portion, is in overlying contacting relationship with respect to the earth surrounding the receptacle.

In order to facilitate drainage from the receptacle, a plurality of drainage passageways extending through the transition portion may be provided to permit water within the receptacle to flow outwardly and be discharged at a position underlying the ground engaging flange. Spacer means may be provided to facilitate more efficient drainage from the receptacle.

The protective structure preferably is of substantially uniform transverse cross sectional configuration on all sides thereof, exclusive of the drainage passageways and spacer means. The rigid marker supporting base may advantageously be of a conventional variety having a generally rectangular peripheral configuration in plan and being of substantially uniform thickness. The length of the protective structure measured from one marginal edge of the ground engaging portion to an opposed marginal edge thereof is preferably greater than the length of the rigid marker supporting base. Similarly, the width of the protective structure is preferably greater than the width of the rigid marker supporting base.

It is an object of this invention to provide a grave marker assembly having a decorative ground-recessed receptacle for receiving a grave marker in order to resist undesired physical displacement of the assembly as well as resisting physical obliteration and corrosion of the marker by encroachment of surrounding vegetation and soil.

It is another object of this invention to provide such a structure wherein integral passageways discharge water and other foreign materials from the receptacle to the adjacent soil.

It is a further object of this invention to provide such a structure which can be economically manufactured and installed and is adapted for use with conventional substantially rectangular marker supporting base members and conventional grave markers as well as unconventional base members and markers.

It is another object of this invention to provide a receptacle having ground surface engaging portions which establish uniform peripheral resistance to undesired physical displacement of the marker.

It is yet another object of this invention to provide such a protective structure which resists damage to the marker resulting from undesired contact with power mowers and other lawn maintaining equipment as well as resisting interference with the mower by either the protective structure or the marker.

These and other objects of this invention will be understood from the following description of the invention on reference to the illustrations appended hereto.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top plan view of the grave marker installation provided with a protective structure of this invention.

FIG. 2 is a sectional elevation of the structure of FIG. 1 taken along 2—2.

FIG. 3 is a fragmentary cross sectional illustration of a modified form of protective structure of this invention having drainage passageways and showing water permeable material positioned in association therewith.

FIG. 4 is a front elevational view of the inner surface of one side of the form of structure shown in FIG. 3.

FIG. 5 is a cross sectional illustration similar to FIG. 2 showing another form of protective structure of this invention.

FIG. 6 is a cross sectional illustration of another embodiment of the protective structure of this invention showing spacer means provided on the transition portion.

FIG. 7 is a fragmentary top plan view of the form of protective structure shown in FIG. 6 illustrating the same in association with a grave marker.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now more specifically to the drawings with particular reference to FIGS. 1 and 2, a conventional flat grave marker 2 bearing a suitable informational legend 4 is shown. A substantially rigid marker supporting base 6 is positioned in underlying relationship with respect to the marker 2. It is noted that in the form shown in FIGS. 1 and 2 the marker supporting base 6 has a greater width than the grave marker 2. The marker 2 is secured to the marker supporting base 6 by fastener means 8 which in the form shown are bolts having their heads permanently secured under the marker supporting base 6 and having their free ends secured to the marker 2. If desired, the base 6 may be provided with preformed bores extending completely therethrough. In such structures the head of bolt 8 would be positioned immediately below the lower surface of base 6.

The protective structure shown in FIGS. 1 and 2 has four sides, each of which has a substantially uniform transverse cross sectional configuration throughout its length. Reference herein to uniformity of cross section or continuity of portions of the protective structure and words of similar import shall be deemed to encompass structures having departures in the form of drainage openings, spacer members or reinforcing means as will be described below. The protective structure has a base
wall 12, an upwardly directed transition portion 14 and an outwardly directed stabilizing ground engaging portion 16 which is in overlying contact with the earth 18 surrounding the marker 2. The ground engaging flange is preferably substantially flat and in surface to surface contact with the earth. The terms "earth" and "ground" and words of similar import as used herein shall be employed interchangeably to refer to the underlying material over which flange 16 lies and protectively shelters be it earth as the term is generally understood, including soil and vegetation growing therein, or some other material and shall include, for example, materials such as mulch, peat moss or other vegetation supporting substances or a water permeable material. The term "water permeable material" as used herein refers to material having a superior capacity for permitting the flow of water therethrough and includes, for example, concrete as gravel, sand, cinders, stone chippings and mixtures thereof.

The base wall 12 and the transition portion 14 cooperate to define an upwardly open receptacle within which the marker 2 is received. In the form shown, it is noted that the base wall 12 is not continuous and that it defines an elongated opening which is of lesser area than that of marker 2. The base wall 12 is preferably compressively peripherally continuously secured between the lower surface 20 of the marker 2 and the upper surface 22 of the marker supporting base 6. This serves to provide a seal about the periphery of the lower surface 20 of the marker 2 in order to resist entry of moisture, soil and other potentially corrosive materials thereunder. In addition, the base wall 12 serves as a cushion for the grave marker 2 which eliminates the rigid connection between the marker 2 and the marker supporting base 6. As a result, should a load be placed upon the marker 2 either from equipment or humans, the base wall 12 will tend to resiliently compress and damage to the marker assembly will be resisted. It is noted that, as a result of the position of the base wall 12, surfaces 20, 22 are in generally parallel spaced apart relationship with respect to each other. In addition, it is noted that the fasteners 8 extend upwardly through the opening in base wall 12 without interference from the base wall 12.

In the form shown in FIG. 2 the transition wall consists of two distinct sectors. Lower transition wall sector 26 originates at the outer extremity of base wall 12 and extends substantially vertically upward. Lower sector 26 merges into upper sector 28 which is preferably substantially straight and is directed angularly outwardly, terminating in the inner portion of ground engaging flange 16. In a preferred form of the invention the lower sector 26 of transition portion 14 is in substantially continuous surface to surface peripheral engagement with the marginal edge 30 of the marker. This provides improved sealing which resists entry of moisture and other undesired foreign materials between the lower sector 26 and the marginal edge 30. As a result, effective bottom and side seals are provided in the marker protective assembly, with the bottom seal being more substantial in that it is positively compressively mechanically maintained.

The ground engaging flange 16 preferably is in overlying surface to surface engagement with the earth 18. In the preferred embodiment of the invention the transverse width of the ground engaging flange 16 from its point of origin at upper sector 28 to its outer free edge 32 is about 1.5 to 8 times the height of the transition portion 14 measured in a plane perpendicular to the ground engaging flange 16 between the lower surface of the ground engaging flange 16 and the upper surface of the base wall 12.

With the structure shown in FIG. 2 it will be appreciated that the ground engaging flange 16 and transition portion 14 cooperate to provide a physical barrier which resists erosion of the surrounding earth onto the marker 2 and into regions immediately adjacent the same. In addition, the ground engaging flange serves to resist extension of vegetation 34 onto the marker surface either by individual plant elongation or root expansion. Vegetation expansion through soil erosion which is resisted in the fashion described above is also prevented.

Another advantageous feature of the structure of this invention is that undesired sinking of the marker assembly into the soil responsive to rain, snow and freeze-thaw cycles is resisted, as is uneven sinking or listing which produces upward projection of portions of the marker into potentially interfering position with respect to mowers and humans. This is accomplished as a result of the downwardly directed gravity force which is applied primarily to base wall 12 being transmitted through transition portion 14 to stabilizing ground engaging flange 16 which bears on the surrounding earth surface and, as a result, positively resists downwardly displacement in a substantially uniform fashion throughout the periphery of the protective structure. If desired, the protective structure may be further strengthened by providing stiffening means, such as integrally formed ribs, either throughout the structure or in certain portions thereof. For example, transverse ribs could originate within base wall 12 and extend upward through the transition portion 14 and into ground engaging flange 16 or, alternatively, ribs could be provided in only one or two of the three sections.

Referring now to FIGS. 3 and 4, another advantageous feature of the present invention will be considered. As was true in connection with the embodiment shown in FIGS. 1 and 2, the structure of FIG. 3 has a base wall 12, a transition portion 14 and a ground engaging flange 16. In the preferred form of the invention these structural sectors are of substantially uniform thickness with respect to each other and are preferably of substantially uniform thickness throughout their length. It may, in some instances, be desirable to provide a base wall 12 of reduced thickness in order to improve the sealing properties. The base wall 12 should generally, however, be of an average thickness of at least fifty percent of the average thickness of the ground engaging flange 16. In the form shown, the transition portion 14 has a plurality of drainage passageways 36 extending through it and communicating with the exterior of the protective structure in the region generally underlying the ground engaging flange 16. While no specific number of passageways or size of passageways need be provided, it is preferred that each transition portion 14 be provided with a number of laterally spaced passageways 36. With the lower sector 26 positioned in surface to surface contact with the marginal edge 30 of the marker 2 as is shown in FIG. 2, any water which would tend to accumulate between the upper portion of the marker edge 30 and the upper sector 28 will be harmlessly discharged through drainage passageways 36 to a position within the earth 18 under-
Lying ground engaging flange 16. In order to facilitate efficient discharge of such moisture and other foreign material, it is preferred to provide a quantity of water permeable material 38 exteriorly of the receptacle at a position adjacent the exterior of drainage openings 36.

Referring now to FIG. 5, another aspect of the invention will be considered. In the form of the invention illustrated in this figure, grave marker 40 is secured to an underlying marker supporting base 42 by means of fasteners 44. It is noted that, in the form illustrated, the marker supporting base 42 is a conventional preformed granite or concrete structure having a generally rectangular periphery in plan and a substantially uniform thickness with an upper surface 46 disposed in spaced underlying relationship with respect to lower surface 50 of marker 40. In the form shown, the marker supporting base 42 has an upper surface 46 provided with an area generally equal to that of lower marker surface 50. In the form shown in FIG. 2, the marker supporting base 6 has a larger top surface 22 than the lower surface 20 of marker 2. In prior art systems an oversized base 6 was frequently employed in order to permit the upper surface of the base 6 to be exposed in sections immediately adjacent the outer marginal edge of the marker to provide an aesthetically pleasing, decorative border therearound. In the present system the use of this oversized base is not required as the protective structure of this invention shields the base from view and permits the protective structure to function as a decorative frame for the marker.

Referring once again to FIGS. 1 and 2 or FIG. 5, a preferred relationship of the present invention which contributes to the stability of the assembly with respect to the earth surface will now be considered. In this preferred relationship, the width of the protective structure measured from one marginal edge of the ground engaging flange 16, 52 to the opposite marginal edge thereof is greater than the width of the rigid marker supporting base 6, 42. Similarly, the length of the protective structure measured from one marginal edge of the ground engaging flange 16, 52 to the opposite marginal edge thereof is greater than the length of the rigid marker supporting base 6, 42.

Referring once again to FIG. 5, it is noted that, in the form shown, the ground engaging flange 52 is connected to the base wall 54 by means of a substantially vertical transition portion 56. It is also noted that the transition portion 56 intersects with the ground engaging flange 52 in a substantially right angle intersection. If desired, for aesthetic purposes, or other reasons, one may provide a curved transition between the flange 52 and portion 56. A plurality of drainage passageways 58 are provided in vertical transition portion 56 at a level above the marginal edge 62 of marker 40.

It is noted that with the receptacle positioned with at least a major portion thereof disposed within the earth 64, the uppermost portion of marker 40 which contains an information legend 66 is disposed at a level generally equal with the upper surface 68 of the earth. As a result, power equipment, such as the rotary mower 70 or a reel type mower, for example, passing over the marker assembly will freely clear the same with neither the blade 72 nor the protective housing 74 coming into contact with the marker. This is a direct result of not only the initial positioning of the marker as provided by the structure of the invention, but also the stabilizing effect which resists undesired departures from the initial position.

Referring now to FIGS. 6 and 7, a further embodiment of the invention will be considered. In this form of the invention the protective structure has a base wall 80 with a transition portion 82 having a substantially vertical lower sector 86 and an angularly outwardly directed upper sector 88 which merges into ground engaging flange 90. It is noted that in this embodiment a plurality of drainage passageways 96 are positioned within the lower sector 86 and preferably within the lower extremity thereof. The lower sector 86 has a plurality of inwardly directed spacer ribs 100 which cooperate with marginal edge 102 of the grave marker and remaining portions of the lower sector 86 to define a plurality of passageways 104 which serve to facilitate efficient discharge of the water through drainage openings 96.

While the protective structure of this invention may be made of a wide variety of materials including metal, plastics and combinations thereof, for example, for optimum economy, strength and sealing capability, as well as durability, it is preferred to employ a hard somewhat resilient plastic material. Among the suitable materials are vinyls, polyesters and polyolefins. Specific examples are polyvinyl chloride, polyethylene and polypropylene. In establishing the structure out of plastic it will be appreciated that one might mold the structure as a unit or the cross sectional profile may be extruded and the four sides cut to length with joinder being effected at corners by welding, adhesives or other suitable means. In the context of the present disclosure, reference to a "unitary" structure shall be deemed to encompass these two approaches as well as other means of providing a functionally unitary structure.

It will, therefore, be appreciated that the protective structure and marker assembly of the present invention provide an aesthetically pleasing marker protective structure which permits ready securement of a conventional metallic marker or other suitable marker to a conventional marker supporting base in a fashion which facilitates the use of unskilled or semi-skilled labor. The resultant assembly positions the marker in desired islaying posture while resisting undesired sinking or listing into potential equipment or human interfering position. In addition, positive means are provided for resisting extension of undesired vegetation over the marker by plant elongation, root expansion or deposit of soil on the marker surface. Also, erosion of soil to position the potentially corrosive soil in contact with the marker is resisted. In a preferred form drainage passageways are provided to harmlessly discharge any water or flowable material which might enter the marker containing receptacle to position the same harmlessly exteriorly of the receptacle. Seal means are provided to resist entry of potentially corrosive material under the marker and, if desired, along portions of the marginal edge thereof. All of this is accomplished while employing economical materials which may readily be fabricated into the protective structure and be installed without substantial effort.

Whereas particular embodiments of the invention have been described above for purposes of illustration, it will be appreciated by those skilled in the art that numerous variations of the details may be made without departing from the appended claims. I claim:
1. A grave marker assembly comprising a marker protective structure comprising a generally horizontal base wall, a substantially continuous generally upwardly directed transition portion and an outwardly directed stabilizing ground engaging portion, said base wall and said transition portion cooperating to define a unitary marker receiving receptacle, at least a major portion of said receptacle disposed within an opening in the earth, said grave marker disposed within said receptacle and having at least a portion of the lower surface thereof in overlying contact with the upper surface of said protective structure base wall, a substantially rigid marker supporting base in under-lying supporting position with respect to said protective structure base wall, fastener means securing said grave marker to said rigid marker supporting base with said base wall secured theretoo, and said ground engaging portion in overlying contact with the earth surrounding said receptacle.

2. The grave marker assembly of claim 1 including at least a portion of said protective structure transition portion in contact with the marginal edge of said grave marker.

3. The grave marker assembly of claim 2 including the lower portion of said protective structure transition portion in circumferentially substantially continuous contact with said marginal edge of said grave marker.

4. The grave marker assembly of claim 1 including drainage passageways extending through said transition portion to permit water within said receptacle to flow outwardly to be discharged at a position underlying said ground engaging flange.

5. The grave marker assembly of claim 4 including said transition portion having a generally vertically directed lower sector and an upwardly and angularly outwardly directed upper sector.

6. The grave marker assembly of claim 5 including said transition portion lower sector disposed in contact with the grave marker marginal edge, and said drainage passageways disposed within said upper sector of said transition portion at locations spaced about the periphery thereof.

7. The grave marker assembly of claim 4 including said transition portion having a number of inwardly projecting spacer elements which cooperate with the marginal edge of said marker and other portions of said transition portion to define a number of vertical passageways, and said drainage passageways communicating with said vertical passageways.

8. The grave marker assembly of claim 4 including water permeable material disposed exteriorly of said receptacle adjacent said drainage passageways to facilitate discharge of water from said receptacle.

9. The grave marker assembly of claim 1 including said ground engaging portion having an average transverse width of about 1.5 to 8 times the height of said transition portion measured in a plane perpendicular to said ground engaging portion between the lower surface of said ground engaging portion and the upper surface of said protective structure base wall.

10. The grave marker assembly of claim 9 including said protective structure base wall having an average thickness of greater than fifty percent of the average thickness of said ground engaging portion.

11. The grave marker assembly of claim 9 including the outer marginal edge of said ground engaging portion defining an outer periphery of said protective structure which is substantially rectangular.

12. The grave marker assembly of claim 9 including said protective structure being of generally uniform transverse cross sectional configuration on all sides thereof.

13. The grave marker assembly of claim 9 including the upper surface of said rigid marker supporting base underlying said grave marker disposed in spaced position with respect thereto, and said protective structure base wall compressed in continuous peripheral sealing relationship between said grave marker and said marker supporting base to establish a seal therebetween for resisting entry of water under said grave marker.

14. The grave marker assembly of claim 9 including said rigid marker supporting base having a generally rectangular peripheral configuration in plan and being of substantially uniform thickness, the length of said protective structure measured from one marginal edge of said ground engaging portion to the opposite marginal edge thereof is greater than the length of said rigid marker supporting base, and the width of said protective structure measured from one marginal edge of said ground engaging portion to the opposite marginal edge thereof is greater than the width of said rigid marker supporting base.
UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,758,999 Dated September 18, 1973

Inventor(s) Joseph J. Matvey

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 2, line 17 Change "2,383,767" to --2,383,787--

Column 6, line 47 Change "substantially" to --substantially--

Column 8, line 44 Change "isplaying" to --displaying--

Signed and Sealed this Twenty-first Day of September 1976

RUTH C. MASON Attesting Officer
C. MARSHALL DANN Commissioner of Patents and Trademarks
Disclaimer


Hereby disclaims the portion of the term of the patent subsequent to Sept. 14, 1988.

[Official Gazette November 6, 1973.]