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Wagner

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[54] **SHRUB PROTECTOR**

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[51] **Int. Cl.** **A01g 13/00**

[58] **Field of Search** ..... 47/26–29; 40/125; 248/354 L, 354, 460, 462; 256/43

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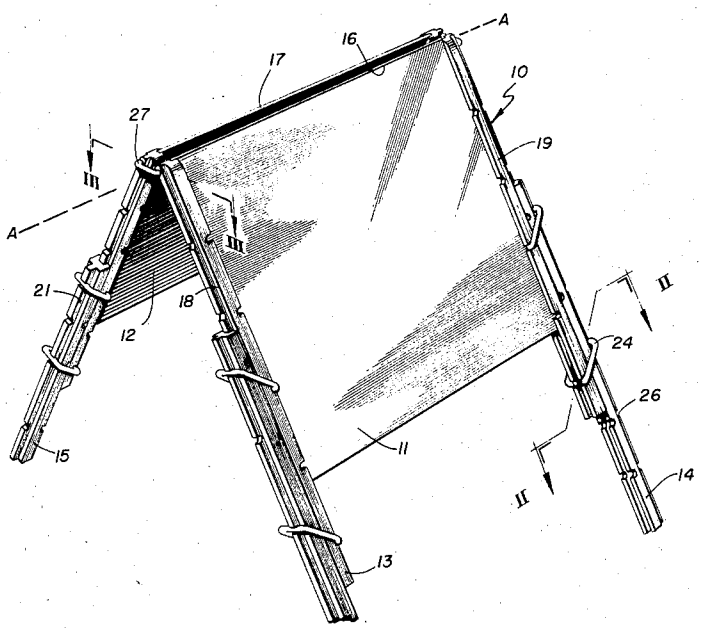
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[57] **ABSTRACT**

A shrub protector consisting of two plates hingedly joined together and provided with individually-adjustable legs.

1 Claim, 3 Drawing Figures



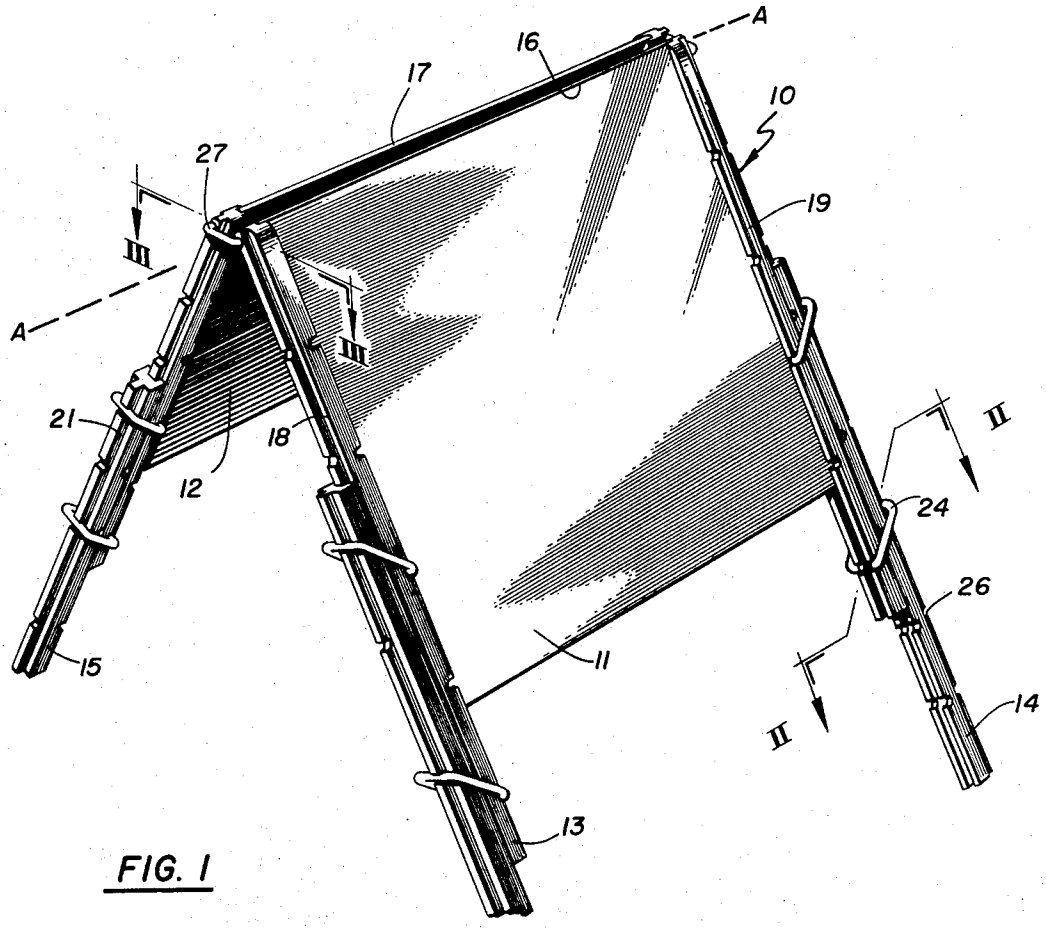


FIG. 1

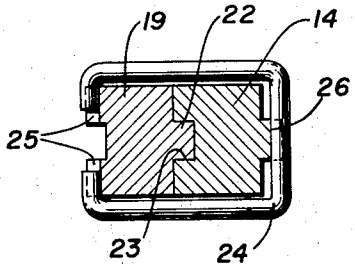


FIG. 2

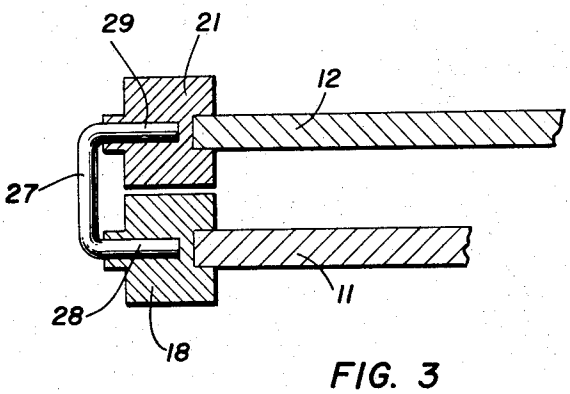


FIG. 3

SHRUB PROTECTOR

BACKGROUND OF THE INVENTION

In cold climates there is a considerable problem in protecting shrubbery during the winter months. Shrubbery which is not so protected can be badly damaged by ice, particularly if the shrubbery is located under the eaves of a house. Suitable protection has been provided in the past in the form of wooden structures, which are constructed over the shrubbery in the fall season of the year. These structures are not only expensive to install, but their appearance leaves a great deal to be desired. Furthermore, they are subject to deterioration due to the weather. These and other difficulties experienced with the prior art devices have been obviated in a novel manner by the present invention.

It is, therefore, an outstanding object of the invention to provide a shrub protector which can be stored during the summer time and easily set up in the fall.

Another object of this invention is the provision of a shrub protector which, because of its construction, will resist damage from ice and snow and which therefore can be used for many years.

A further object ot the present invention is the provision of a shrub protector having means for adjusting to adjusting to irregular land conformation around a shrub.

It is another object of the instant invention to provide a shrub protector which is constructed from readily obtainable simple metal materials, therefore, can be manufactured inexpensively.

A still further object of the invention is the provision of a shrub protector which is simple in construction which can be readily manufactured from simple materials, and which is capable of a long life of useful service with a minimum of maintenance.

SUMMARY OF THE INVENTION

Generally speaking, the invention consists of a shrub protector having a first place, having a second plate hingedly connected to the first plate, having two spaced parallel legs assoicated with each plate, and having means for adjustably connecting each leg to its plate.

More specifically, each plate has a reinforcing strip extending along two opposed sides with a rib which slidably engages a groove on a leg. The legs and reinforcing strips are provided with spaced notches and joined by metal bails which lock in the notches. Preferably, the legs and the reinforcing strips are formed of extruded metal.

BRIEF DESCRIPTION OF THE DRAWINGS

The character of the invention, however, may be best understood by reference to one of its structural forms, as illustrated by the accompanying drawings, in which:

FIG. 1 is a prospective view of a shrub protector embodying the principles of the present invention,

FIG. 2 is a sectional view of a portion of the invention taken on line II—II of FIG. 1, and

FIG. 3 is a sectional view of the invention taken on the line III—111 of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring first to FIG. 1, which best shows the general features of the invention, the shrub protector, indicated generally by the reference numeral **10**, is shown as consisting of a first plate **11** and a second plate **12** which are hingedly joined at their upper ends for pivotal motion about an axis A—A. Two legs **13** and **14** are associated with the first plate **11**, while a similar leg **15** and a leg, not shown, are associated with the second plate **12**. Means is provided for adjustably connecting each leg to its plate.

As is evident in the drawings, each of the plates **11** and **12** is rectangular and the hinged connection along the line A—A takes place along corresponding first sides **16** and **17**. The plate **11** has reinforcing strips **18** and **19** extending along two opposed sides at right angles to the first side **16**. The second plate **12** is similarly provided with a reinforcing strip **21** along one side and a similar reinforcing strip, not shown, along the other side.

FIG. **2** shows particularly well the way in which the legs and reinforcing strips are joined. The reinforcing strip **19** is provided with a longitudinal rib **27** which fits into a correspondingly-shaped and-sized groove **23** formed on the leg **14**. The legs and reinforcing strips are provided with spaced notches and joined by bails **24** which lock in the notches to hold each leg in an adjusted position relative to its reinforcing strip. As can be seen in FIG. **2**, each bail **24** is generally U-shaped with an inwardly-directed extension at the free end of each leg. These extensions lie in notches **25** on the groove side of the reinforcing strip **19**. Similarly the notches **26** formed on a rib of the leg **14** receive the bight of the bail **24**.

FIG. **3** shows the manner in which the plates **11** and **12** are hinged together. A U-shaped element **27** has its legs residing in bores **28** and **29** formed in the reinforcing strips **18** and **21** respectively.

As is evident in the drawings, the legs **13, 14,** and **15** and the reinforcing strips **18, 19,** and **21** are all formed from extruded metal, preferably aluminum. As is evident in FIG. **2**, the extrusion provides a groove to hold the panel **11** and a rib **22** to cooperate with a similar groove **23** on the leg **14**. The leg **14** also has a rib in which are formed the notches **26**. As is evident in FIG. **1**, the extruded element is provided with notches both around the grooves and on the ribs, irrespective of whether they are actually used or not, so that they stack.

The operation of the invention will now be readily understood in view of the above description. The plate **11** and **12** are opened up about the hindge axis A—A to form a small tent-like configuration which is placed over the shrub which is to be protected. The legs **13, 14** and **15,** as well as the one, not shown, in the drawings, are adjusted to match the irregular ground around the shrub. If desired, the legs may be inserted into the ground to hold the entire structure in a more stable condition. In order to adjust the length of the leg, it is only necessary to loosen the bails **24** by pulling the leg downwardly. Then the leg may be inserted in any position that is necessary and the bails reinserted in the notches. The bails operate to lock the leg tighter if pressure is put in the upward direction on the leg; in other words, the greater the load of snow and ice on the

plates **11** and **12**, the more tightly the legs are held in place. It can be seen that the device can be entirely made of rust-proof metal, the plates **11** and **12** preferably being aluminum sheets and the legs and reinforcing strips, as has been stated, being made of extruded aluminum. The bails **24** may be stainless steel, as well as the U-shaped element **27**. This construction is not only inexpensive, but it is simple and rugged and will not be affected by the weather. After the spring season arrives, the entire assemblage may be folded up with the plates **11** and **12** lying together and the legs **13, 14** and **15**, etc. being adjusted to positions coextensive with the reinforcing strip with which they are associated. The apparatus thus stored takes up very little room. A large number of the shrub protectors may be neatly stacked in a storage space.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material spirit thereof. It is not, however, desired to confine the invention to the exact form herein shown and described, but it is desired to include all such as properly come within the scope claimed.

The invention having been thus described, what is claimed as new and desired to secure by Letters Patent is:

1. A shrub protector, comprising:

a. a first plate, having a first side, and two other opposed sides,

b. a second plate having a first side, and two other opposed sides hingedly connected to the first plate, along the first side of each plate,

c. two spaced, parallel legs associated with each plate, and

d. means adjustably connecting each leg to its plate, each plate having a reinforcing strip extending along two opposed sides extending at right angles to said first side, and

f. the legs and reinforcing strips being provided with spaced notches and joined by bails which lock in the notches to hold each leg in an adjusted position relative to its reinforcing strip,

wherein each plate is rectangular,

wherein each reinforcing strip is provided with a rib which slidably engages a groove on a leg,

wherein the plates are hingedly connected by means of a U-shaped element having its ends located in bores in the ends of the reinforcing strips, and

wherein the legs and the reinforcing strips are formed of extruded material of the same cross-sectional size and shape, the said shape consisting of a rectangle having a notch at one side and a rectangular protrusion at the other side, the rectangular protrusion having parallel sides.

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