Dec. 29, 1953 H. W. FATKIN 2,663,937

SURVEYOR'S PLUMB LINE TARGET

Filed July 30, 1951

Fig. 1.

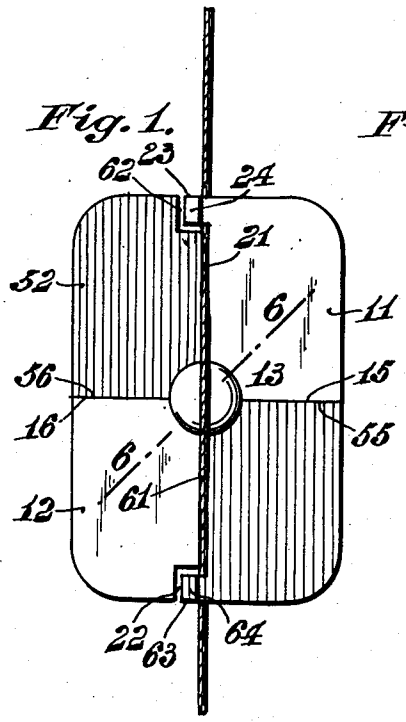


Fig. 2.

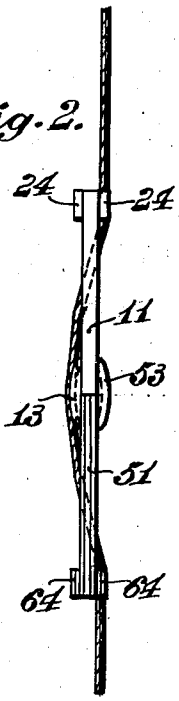


Fig. 3.

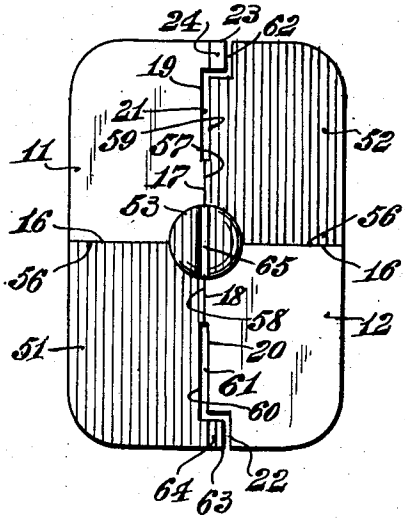


Fig. 4.

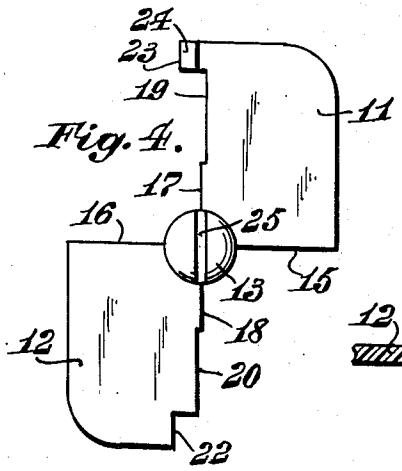
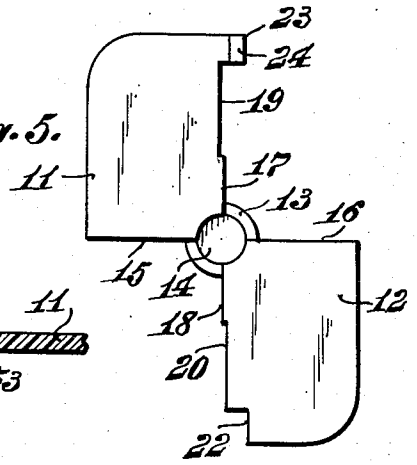


Fig. 5.



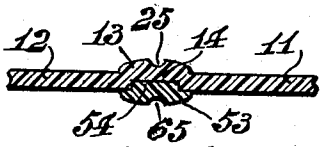


Fig. 6.

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SURVEYOR'S PLUMB LINE TARGET

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8 Claims. (Cl. 33—74)

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This invention relates to a surveyor's plumb line target, that is, to a target for surveyor's use adapted to be mounted adjustably on a plumb line, and while serving the purpose of the more cumbersome rods and targets yet permitting more accurate sighting in the running of lines and grades.

The present invention relates more particularly to the construction and arrangement of a target of the type such as are adapted to be quickly and easily mounted at desired positions on a string such as a plumb line.

The principal object of the present invention is to provide a plumb line target which will be efficient in use yet which may be inexpensively made.

A further object of the invention is to provide a target, of the character aforesaid, in which the colors of the several parts will be of a permanent character as distinguished from the painted targets at present in common use, which quickly become scratched and defaced by reason of the rough usage to which they are subjected.

A further object of the invention is to provide a target, of the character aforesaid, which may be molded of plastic, and of a minimum number of similar parts, whereby the cost of the molds may be kept to a minimum.

The nature and characteristic features of the present invention will be more readily understood from the following description, taken in connection with the accompanying drawing forming part hereof, in which:

Figure 1 is a front elevation of a target embodying the main features of the present invention, the same being shown in connection with a portion of a plumb line on which it is mounted;

Fig. 2 is a side elevation thereof;

Fig. 3 is a rear elevation thereof, the same being shown detached from the line;

Fig. 4 is a front elevation of one of the component parts of the target;

Fig. 5 is a rear elevation thereof; and

Fig. 6 is a section taken on the line 6—6 of Fig. 1.

It should of course be understood that the description and drawing herein are illustrative merely and that various changes and modifications may be made in the structure disclosed without departing from the spirit of the invention.

Referring to the drawing, in the particular embodiment of the invention therein shown, the target may be generally rectangular in outline, or it may be of any other desired symmetrical shape, having at least one face thereof divided into a plurality of areas of contrasting colors, separated from each other along central vertical and horizontal lines.

The target of the present invention is preferably made of two members of identical shape

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and form, one member being molded of white plastic, and the other member being molded of a plastic of a contrasting color, preferably red. Each of the members may be formed in the same mold and they are so shaped that when joined to each other two diagonally opposite areas of white are provided and two diagonally opposite colored areas are provided.

To arrive more readily at an understanding of the invention reference should first be had to Figs. 4 and 5 of the drawing wherein there is shown, detached, one of the members, which is made of white plastic, and it should be understood that the other member, which is made of colored plastic, is preferably of identical shape and, in fact, can be made in the same mold.

The member shown separately in Figs. 4 and 5 of the drawing, and as a part of the complete device in Figs. 1 and 2, comprises two substantially rectangular portions 11 and 12 each joined to the other at their inner corners by a bridging button 13 and a part 14, beneath said button, of one half the thickness of the portions 11 and 12.

The colored member is also composed of two substantially rectangular portions 51 and 52 likewise joined to each other at their inner corners by a bridging button 53 overlying a part 54 of one half the thickness of the portions 51 and 52. When the members are united to form the complete target the faces of the part 54 may be joined by cement, or be otherwise secured, to the part 14.

The portions 11 and 12 each have horizontal margins 15 and 16 respectively to which the corresponding margins 55 and 56 of the portions 51 and 52 are joined by cement, or which are otherwise secured thereto.

The portions 11 and 12 also each have vertical margins 17 and 18 respectively extending above and below the bridging button 13 and lying in the central vertical plane. Likewise the portions 51 and 52 have similarly located margins 57 and 58 respectively. The margin 58 of the portion 52 is secured by cement, or otherwise, to the margin 17 of the portion 11 and likewise the margin 57 of the portion 51 is secured to margin 18 of the portion 12.

Beyond the margin 17 of the portion 11 the inner edge is recessed slightly as at 19 and likewise the inner edge of the portion 12 is recessed as at 20. In the same way the portion 51 has its inner edge recessed as at 59 and the portion 52 has its inner edge recessed as at 60. The foregoing arrangement is such that, when the two members are assembled, slots 21 and 61 are provided for the passage of the line therethrough.

The portion 12 and the portion 52 each have a larger recess, 22 and 62 respectively, into which extend the lugs 23 and 63, respectively carried by the portions 11 and 50. These lugs extend across the outer ends of the slots 21 and 61 and form abutments which serve to hold the target at

any desired location on the line to which it may be moved.

However, to facilitate the mounting of the target on the plumb line, the lugs **23** and **63** are smaller in dimensions than the recesses **22** and **62** into which they respectively extend, thus providing entrance passageways through which the line is initially passed to position the same with respect to the slots **21** and **61** and the lugs **23** and **63**.

Further to guide the line and to assist in holding the target at desired locations thereon the bridging button **13** is provided with a vertical groove **25** and likewise the bridging button **53** is provided with a vertical groove **65**.

Also to prevent the line from becoming accidentally disengaged from the slots **21** and **61**, the lugs **23** and **63** are provided on their front and rear faces with retaining projections **24** and **64**.

A target constructed as aforesaid will be found, in practice, to be inexpensive, durable and efficient, and will be permanent in character, particularly in that the color of each portion will extend through the body thereof and will not become scratched and defaced in use.

I claim:

1. A plumb line target for surveyors' use comprising two unitary molded members of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, and said members being secured each to the other along horizontal and vertical lines.

2. A plumb line target for surveyors' use comprising two unitary molded members of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, and said members being secured each to the other along horizontal and vertical lines.

3. A plumb line target for surveyors' use comprising two unitary molded members of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, said members also being secured each to the other along horizontal and vertical lines, and the device having vertical slots between said members through which passes the line on which the target is mounted, said slots being provided by forming recesses in the inner marginal edges of said members.

4. A plumb line target for surveyors' use comprising two unitary molded members of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, said members also being secured to the other along horizontal and vertical lines, the device having vertical slots between said members through which passes the line on which the target is mounted, said slots being provided by forming recesses in the inner marginal edges of said members and each of said members having a lug extending across the outer end of one of said slots and adapted to be engaged by said line.

5. A plumb line target for surveyors' use comprising two unitary molded members of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, said members also being secured each to the other along horizontal and vertical lines, and each of said members having an integral central bridging part connecting the two portions thereof, and means for mounting the target adjustably on a plumb line.

6. A plumb line target for surveyors' use comprising two unitary molded members of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, said members also being secured each to the other along horizontal and vertical lines, the device having vertical slots between said members through which passes the line on which the target is mounted, said slots being provided by forming recesses in the inner marginal edges of said members, each of said members having a lug extending across the outer end of one of said slots and adapted to be engaged by said line, and each of said members having an integral central bridging part connecting the two portions thereof.

7. A plumb line target for surveyors' use comprising two unitary molded members molded of plastic and of similar shape and the material of one member contrasting in color with that of the other member, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, said members also being secured each to the other along horizontal and vertical lines, and each of said members having an integral central bridging part connecting the two portions thereof, and means for mounting the target adjustably on a plumb line.

8. A plumb line target for surveyors' use comprising two members molded of plastic and of similar shape and contrasting colors, each of said members having two portions each with an area diagonally disposed with respect to a similar area of the other, said portions being integrally united to each other at their inner corners, said members also being secured each to the other along horizontal and vertical lines, and the device having vertical slots between said members through which passes the line on which the target is mounted, each of said members having a lug extending across the outer end of one of said slots and adapted to be engaged by said line, and each of said members having an integral central bridging part connecting the two portions thereof, said bridging part having a vertical recess therein for positioning the line.

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