May 22, 1951 L. A. HEINLE 2,554,105

TAG

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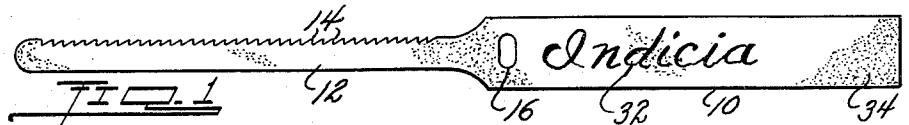

FIG. 1

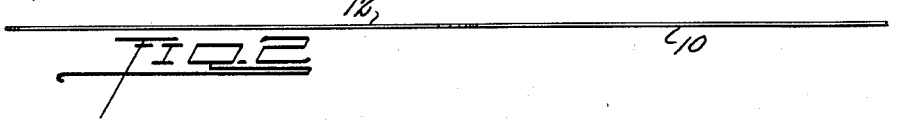

FIG. 2

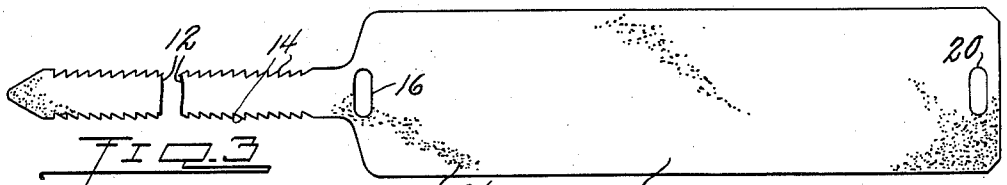

FIG. 3

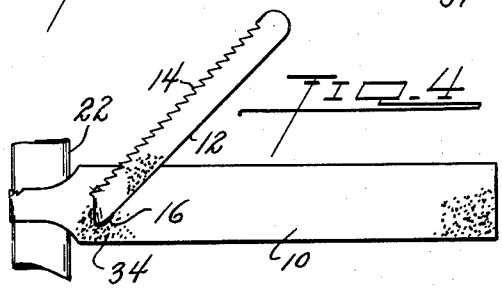

FIG. 4

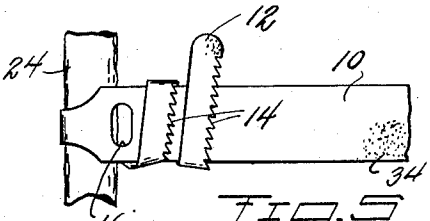

FIG. 5

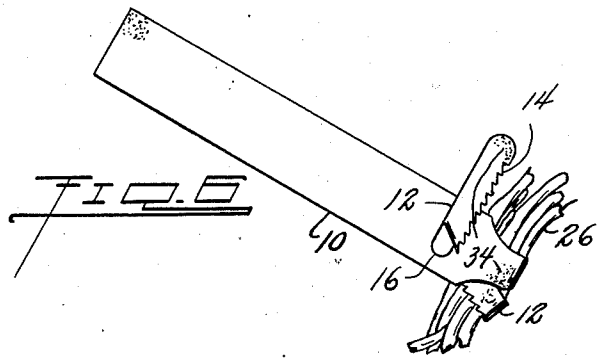

FIG. 6

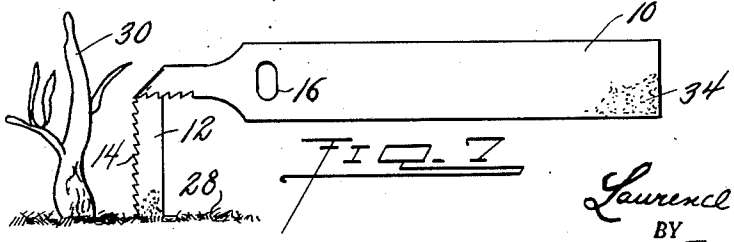

FIG. 7

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TAG

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2 Claims. (Cl. 40—2)

1

This invention relates to tags.

An object of this invention is to provide a one-piece tag which may be readily attached and locked onto an article or bundle of pieces and provide an indicia receiving plate portion easily marked.

Another object of this invention is to provide a tag having an indicia receiving plate portion which legibly retains the marking thereon under adverse circumstances such as friction or weathering and therefore is particularly useful in garden plant identification.

Another object is to provide a one-piece metal tag which is readily wrapped about an article regardless of shape, conforms to the general periphery of the article with sufficient gripping to retain its position and to hold the lock.

Still another object of the invention is to provide a one-piece metal tag sufficiently pliable to be easily configured into any desired design and have sufficient rigidity to maintain the form into which it was shaped.

And another object of this invention is to provide a one-piece tag from substantially pure sheet zinc of a thickness to have great pliability yet sufficient rigidity to be self-sustaining and to mechanically apply an overall surface finish which will accept all kinds of normal marking, retain the same and yet have a smooth feel to the touch.

Other objects and advantages of this invention relating to the arrangement, operation and function of the related elements of the structure, to various details of construction, to combinations of parts and to economies of manufacture, will be apparent to those skilled in the art upon consideration of the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

Referring to the drawings:

Fig. 1 is a plan view of a tag embodying the invention herein;

Fig. 2 is a side elevation of the tag of Fig. 1;

Fig. 3 is a plan view of a modified tag embodying additional features of the invention;

Fig. 4 is a view showing one form of use for the tag;

Fig. 5 is a view showing another form of use for the tag;

Fig. 6 is a view showing the tag in use to hold a bundle of articles together and provide ample marking space for identification data; and

2

Fig. 7 is a view illustrating still another use for the tag.

The tag is fabricated from commercial or substantially pure zinc sheets, strips or ribbons having a thickness of approximately .008". Thickness of .006" may be used and up to include .010". Beyond these limits, problems of utility and economy arise. An .008" thickness of the zinc provides a tag sufficiently pliable to be easily handled for manual shaping to such forms as desired in an attaching operation and yet has an inherent rigidity to be self-sustaining and shape retaining in whatever form it may be twisted or bent. This rigidity is sufficient to withstand normal weathering when used in exposed locations. However, time and exposure do not effect the tag and it may be re-shaped and re-used. Other metals and alloys embodying the primary requirements are available, but for economy and results, particularly the finish, zinc appears the more practical.

One preferred form of the tag embodies a plate portion 10 from which there is a comparatively narrow predetermined length extension 12 provided with a series of teeth 14 along at least one edge thereof. The teeth of this serrated edge may be of various sizes and their sides of various angular extent to accommodate particular uses of the tag.

The plate portion 10 is provided with an elongated aperture 16 therethrough adjacent the junction of the extension. The maximum length of the aperture approximates the width of the extension for facilitating and maintaining the locking of the tag onto an article.

The tags are subject to a wide variation in size and modifications. For example, the tag as shown in Fig. 3 embodies an enlarged plate portion 18 with the extension 12 serrated along both major sides thereof and a second aperture 20 is provided through the plate remote from the aperture 16.

The tag has a wide variety of uses, a few typical examples being illustrated herein.

Referring to Fig. 4, the extension is wrapped about an article 22 and the free end of the extension passed through the aperture 16 and slightly twisted to interlock a tooth 14 with the adjacent portion of the periphery of the aperture.

In Fig. 5 the extension is shown wrapped about a growing plant 24 and then wrapped or bent around the plate portion nearest the plant. This allows the tag to expand as the plant

grows, keeping the tag mounted on the plate so long as there is any of the extension embracing the plate.

In Fig. 6 a bunch of items **26** are shown with the extension wrapped twice around the group and the extension interlocked with the plate similarly to the showing in Fig. 4.

In Fig. 7 the extension is intermediately bent angularly and the extension thrust into the earth **28** adjacent a plant **30**, thereby mounting the plate portion in a sign position with the teeth **14** resisting removal.

Regardless of use or shaping, indicia **32** may be placed on either side of the plate, or, as a matter or fact, may be placed on any portion of the tag. A waxy pencil, crayon or the like is preferred, but any normal marker may be used and the indicia will be permanently retained, resisting age, friction, weather and most chemical attacks.

This indicia retaining feature is due to the finish **34** on the surface of the tags as herein disclosed. During fabrication of the tags, the sheet metal is operated upon by dies which impart minute depressions inwardly from the surface approximately $1/350''$ apart in each direction or about 122,500 per square inch. The arrangement may be in regular rows or in irregular distribution. The resulting surface has a smooth or satin-like feel to the touch and an attractive non-glare yet silky appearance. This finish will take and retain marking thereon as hereinbefore described without undue wear on the marking implement. The depressions may be larger with fewer in a given area, but as the size increases, the niceties described are lessened. In coarser finishes, a less desirable abrasive surface is developed. A finer surface is unnecessary so a surface between 100,000 and 150,000 depressions per square inch has been found more satisfactory.

Where the tags are to meet extreme weathering, chemical fumes, long time storage or the like, a dichromate bath may be given the tags to form a protective coating thereover. The dichromate baths are acceptable in that they may be used without filling the depressions or being otherwise detrimental.

Zinc accepts the die operations which impart uniform depth depressions without developing some objection.

It is to be understood that the above detailed description of the present invention is intended to disclose an embodiment thereof to those skilled in the art, but that the invention is not to be construed as limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of being practiced and carried out in various ways without departing from the spirit of the invention. The language used in the specification relating to the operation and function of the elements of

the invention is employed for purposes of description and not of limitation, and it is not intended to limit the scope of the following claims beyond the requirements of the prior art.

What is claimed and is desired to secure by United States Letters Patent:

1. As an article of manufacture, an identification tag comprising a unitary strip of substantially pure sheet zinc of approximately .008 of an inch thick, said tag embodying a plate portion and an integral extension therefrom, the thickness of said metal permitting ready manual distortion of said extension to embrace an object for affixing the tag thereto and inherently retain its distorted form, said tag having at least a portion of its surface mechanically operated upon to provide a marking surface including a predetermined pattern of depressions therein distributed approximately 125,000 to the square inch, said depressions being of such a minute depth as not to detract from the smooth manual feel of the marking surface yet sufficient to receive crayon-like writing instrument indicia thereon and retain the same against normal friction or weathering.

2. An identification tag comprising a unitary strip of relatively thin flexible sheet metal, the thickness of said metal permitting ready manual distortion to embrace an object for affixing the tag thereto and inherently retain its distorted form, said tag having at least a portion of its surface mechanically operated upon to provide a marking surface including a predetermined pattern of depressions therein distributed approximately 125,000 to the square inch, said depressions being of such minute depth as not to detract from the smooth manual feel of the marking surface yet sufficient to receive crayon like writing instrument indicia thereon and retain the same against normal friction or weathering.

LAWRENCE A. HEINLE.

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