Feb. 16, 1960 H. W. DRYDEN 2,924,903

WING BAND FOR CHICKS

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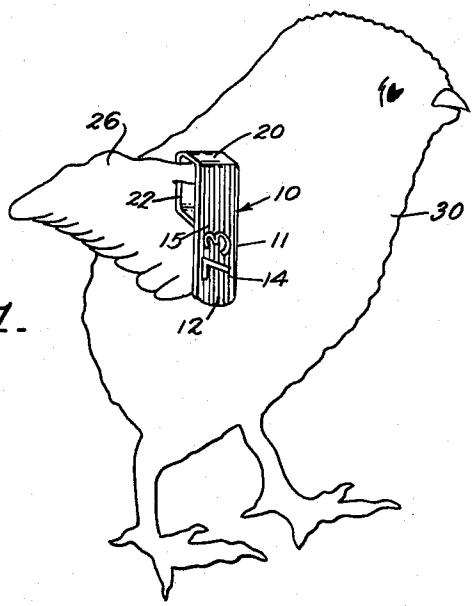


Fig. 1.

Fig. 2.

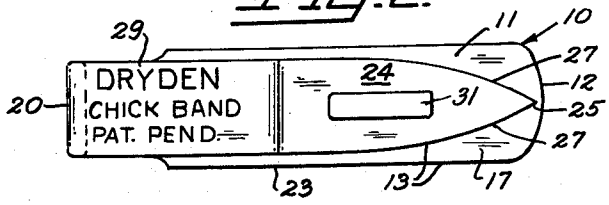


Fig. 3.

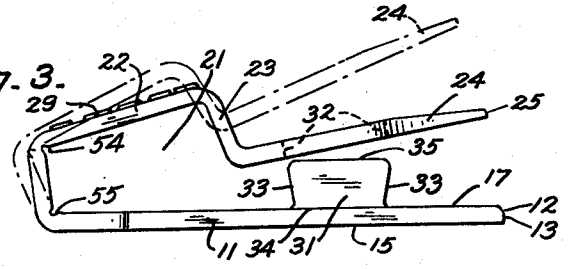


Fig. 5.

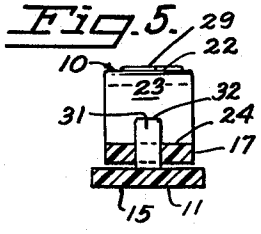
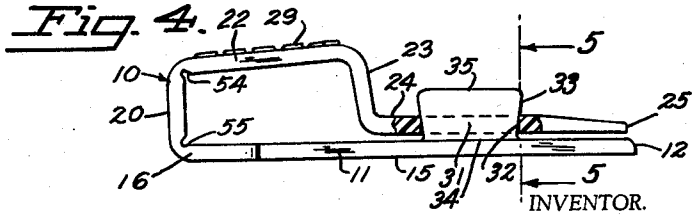


Fig. 4.



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Fig. 6.

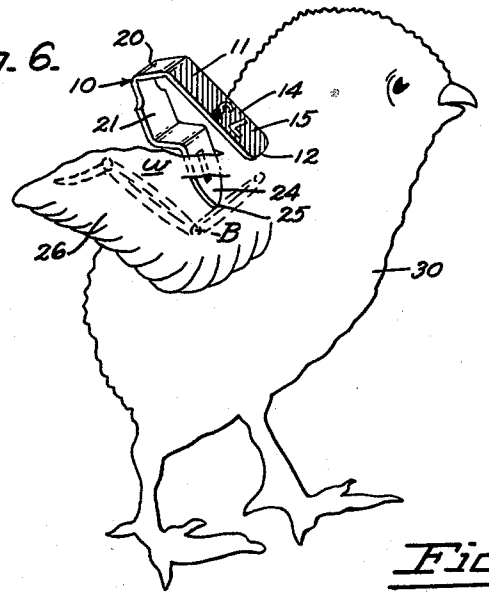


Fig. 8.

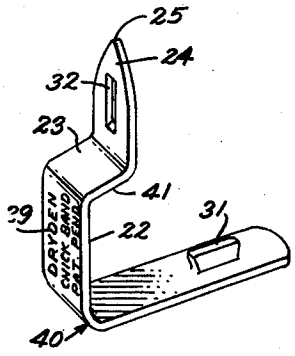
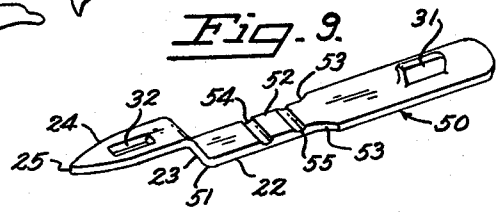


Fig. 9.



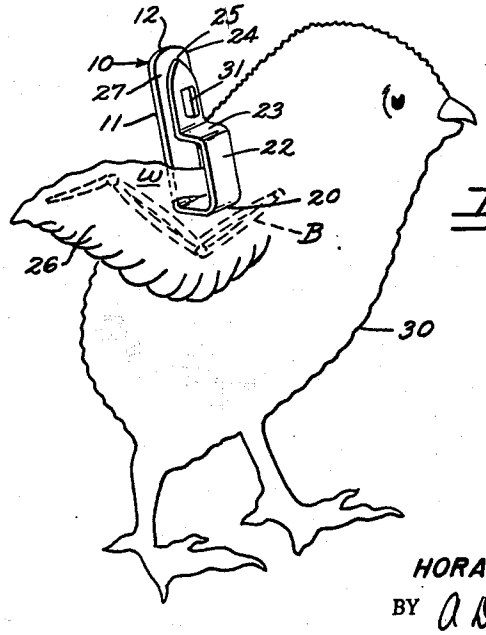


Fig. 7.

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WING BAND FOR CHICKS

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Application June 24, 1957, Serial No. 667,379

1 Claim. (Cl. 40—302)

This invention relates to an improved marking device. This application is a continuation-in-part of application Serial No. 597,760, filed July 13, 1956, and now abandoned.

My new marker is especially useful as a chick wing marker, and will be described principally in that connection, but it may be used wherever identification is desired, as, for example, for dressed chickens, for nursery stock, for turkeys, as ear tags for livestock, etc.

Among other things, the invention solves the long-standing problems of pedigreeing day-old chicks. The problems have been how to provide these chicks with a marker which is not too big or heavy for them, which will not injure them either during application or afterward, which cannot accidentally come off and get lost, and which is readable so that the user does not have to manipulate the chick unduly, either during application or afterward, while trying to read it.

Heretofore, most chick wing markers have been made from metal, such a marker being exemplified by the Haas Patent 1,844,359, issued February 9, 1932. No metal marker has ever been fully satisfactory. Their sharp edges have frequently injured chicks, and the point that projected from them, and was used to insert them through the wing, later scratched and sometimes wounded the chicks under normal living conditions. Further disadvantages of all metal identification tags for chicks have been that special fastening tools had to be used for installation and that it either tok two persons to put on each badge or an unusually dextrous person. When installed, the band was not easy to read, because the figures were small and did not stand out clearly, usually being indented. In summary, metal bands have been hard to apply, have been hard to read, have tended to lose their shape because of the flexibility of the metal, inevitably have had sharp edges which cut into the wing, have tended to slip over the wristbone of the chick, causing serious damage and deformity, and have frequently become unfastened and lost off chicks.

Consequently, one object of the present invention is to provide a satisfactory wing band for marking day-old chicks.

Another object is to provide a fowl marker which can be applied to a day-old fowl and yet can remain on the wing without danger of loss throughout the life of the chicken, duck, pheasant, or other type of bird.

Another object of the invention is to provide a wing marker for day-old chicks presenting the indicia very legibly and displaying it in such a way that the indicia will not be concealed beneath the feathers as the chick grows older. In fact, the numbers or letters constituting the indicia may be large enough to serve as identification for the trapnesting of adult chickens, turkeys, etc.

Another object of the invention is to provide a novel wing badge for young chicks which will not tend to slip over the wrist and harm the chick. Achievement of this object contrasts with the practice, where metal bands are

employed, of having to check each chick carefully after a week or ten days and replace or relocate many bands because they then show up as injuring the wing.

Another object of the invention is to provide a wing marker for day-old chicks in which there will be no sharp edges that tend to cut into the wing and damage the chick.

Another object of the invention is to provide a wing marker for young chicks which can be clasped on without any tools and when so clasped will stay on and not come off accidentally. If sealing tools are used, this marker is made so that there is no chance for it ever to come off accidentally.

Another object of the invention is to provide a wing badge or band for young chicks which will not lose its shape and which, once installed, will retain its attitude where it is clearly readable.

Another object of the invention is to provide a fowl marker which can be made in a variety of colors to aid in identifying the chicks, and which can have the indicia placed on in a color or colors sharply contrasting with the background. This contrasts with metal bands, where attempts to paint them or otherwise apply colored backgrounds failed because the color wore off.

Another object is to provide an all-plastic identification marker. As stated above, such a marker may be used for a variety of purposes. For example, it may be used on dressed chickens to identify them by trademark. This would solve the problem of trademark identification on such gods, for there are many people who will not purchase a dressed chicken which has a metal label on it, for fear of its injuring their teeth, of its having an effect on the taste of the chicken, or of chemical reactions with the meat. The present invention eliminates this problem and makes trademarking of such goods feasible. It also has wide uses elsewhere.

Another object is to provide a generally flat plastic marker that is easily applied as a loop of the correct size.

The structure which achieves the above objects and overcomes the problems that confronted the prior art comprises an all-plastic, one-piece wing badge so shaped and constructed as to provide for legibility, proper support, and all the features enumerated above. It has an integral latch constructed according to the principles disclosed in my pending application, Serial No. 480,233, filed January 6, 1955.

Also, the badge is preferably colored red in order to accomplish, in an unusual and unexpected manner, a final very important object, the prevention of cannibalism and pecking.

Other objects, advantages, and features of the invention will appear from the following description of preferred forms thereof.

In the drawings:

Fig. 1 is an enlarged view of a young chick on which has been secured a marker embodying the principles of the invention. The marker is lined to indicate the color red.

Fig. 2 is a further enlarged bottom plan view of the marker of Fig. 1. The marker is not lined for color in Figs. 2 through 9, to show the structure more clearly.

Fig. 3 is a view in side elevation of the marker of Fig. 2, showing in solid lines the badge in its normal unfastened position, and in dotted lines a fully opened position with its ends spread apart for application to a chick, etc.

Fig. 4 is a view in side elevation and partly in section, generally similar to Fig. 3 but showing the badge in its closed position.

Fig. 5 is a view in section taken along the line 5—5 in Fig. 4.

Fig. 6 is a view similar to Fig. 1 showing an initial stage in the application of the marker to a baby chick.

Fig. 7 is a view similar to Fig. 6 showing an intermediate stage in the application of the marker.

Fig. 8 is a view in perspective of a modified form of band molded in a more open position.

Fig. 9 is a view in perspective of another modified and preferred form of band, molded in a nearly flat position but readily applied as a loop.

The marker **10**, shown in Figs. 1–7, is of simple appearance, but its structure has been subtly designed so as to achieve the above-mentioned objects and to fulfill a need which has existed for many years and was never heretofore successfully met.

In the first place, my novel wing badge **10** comprises a unitary, all-plastic, one-piece marker. As seen when finished, it comprises a single continuous strip of plastic molded, or otherwise formed, into the shape shown in the drawings. Preferably the device is molded from cellulose acetate butyrate, a plastic produced by Eastman Kodak Company under the trademark "Tenite." This is a tough, strong, plastic material that will bend without breaking, while ordinarily possessing a high degree of rigidity.

An important feature of the marker **10** is a long, flat portion **11** extending the full length of one side of the badge and constituting one side thereof. This flat portion **11** has a rounded end **12**, and the end and side edges **13** are rounded, leaving no sharp edge that could harm a chick, like the edges inevitably present on metal markers. The indicia **14** may comprise numbers, letters, or other signs on the outside face **15** of the flat portion **11**. As shown in Fig. 1, when this badge **10** is installed, the indicia **14** faces the onlooker, and the barge **10** hangs down in a clearly visible position. The indicia is printed on a flat, easy to read surface that always stays flat.

The remainder of the strip continues on at a narrower width from the end **16** of the flat portion **11**. This narrower width is important in enabling ready insertion through the wing web. The band is formed to provide a curved, but approximately perpendicular end portion **20** that leads from the end **16** in a rounded curve to and constitutes part of a short loop portion **21** having a flat portion **22** spaced away from but generally parallel to the long, flat portion **11**. The size of the loop **21** is carefully calculated to provide the maximum in comfort and safety for a day-old chick and to assure that it will not cramp the chick as its grows older. The loop portion **21** is ended by an inclined portion **23** that extends preferably at about 45° from the parallel portion **22** toward the long, flat portion **11** and leads into a short, flat portion **24**, the corners again being rounded. This gradual bend **23** is important during insertion of the band, making it significantly easier than would be the case if it were a right angle.

When the marker is installed, the portion **24** lies against the inside face **17** of the long, flat portion **11**. Before the band **10** is installed, the portion **24** lies at an angle as shown in solid lines in Fig. 3. The plastic is light in weight, strong and flexible, yet it has a very desirable rigidity so that the loop portion **21** will not be flattened during ordinary use and could only be flattened by applying extreme pressure thereto. However, it has sufficient flexibility for the marker to open widely when applying it, as shown in dotted lines in Fig. 4. The flattening tendency of metal bands is one of their principal defects; it makes them very hard to read and also causes wing damage.

The outer face **28** is preferably provided with raised lettering **29** that acts to give a non-skid grip and thereby makes handling and application easier. Serrations or roughening may be used, but the raised lettering makes for economy, since it may comprise the trademark and the patent status marking.

This short, flat portion **24** terminates in a sharp, pointed end **25** which is so constructed as to make it possible to insert it through the wing **26** of a chick **30** without any additional tool, its sharpness being sufficient for such insertion. At the same time, the side edges **27** of even the pointed portion **25** are rounded and only the point **25** itself is sharp. A feature of the invention is that, when the badge is in its closed position, this sharp point **25** lies short of the rounded end **12** of the long, flat portion **11**. This construction acts to protect the chicken from even the sharp, pointed end **25** after the badge **10** has been installed.

The inner surface **17** of the long, flat portion **11** is provided with an upstanding stud **31**, and the short, pointed, flat portion **24** is provided with an opening **32** adapted to receive the stud **31**. These clasp portions **31** and **32** are constructed in accordance with my invention disclosed in pending application Serial No. 480,233, filed January 6, 1955. The stud **31** flares outwardly at its ends **33**, being narrower at its base **34** than at its top portion **35**. Since the entire unit material is made of one piece of plastic and since plastic has substantially more elastomeric qualities of flow than does a metal member, the opening **32** can actually be somewhat smaller than the stud's outer end **35**, and the stud **31** will still fit through the opening **35**, doing so with a sharp action which makes it difficult to loosen the applied badge **10**, although this can be done readily with the fingernails if desired or with a pen knife. However, the action is sufficiently tight so that it is impossible for the badge **10** to be detached accidentally or for the chicken **30** to remove it by any action that it might do. A large number of tests have been carried on with these markers **10**, and so far not one has been lost off a chick. If it should be thought, however, that someone might tamper with the band, it can be made completely tamper-proof by sealing or flattening the stud **31** which projects through the slot **35** as with a pair of ordinary sharp-nosed pliers.

The installation of the band is shown in Figs. 6 and 7. As shown in Fig. 6, where the wing bones are also illustrated in order to show the structure of the wing, the band is inserted through the web W of a chick's wing **26**, beyond the bones B. The band **10** at this time is open and its ends may be somewhat spread apart while the chick **30** is held in one hand and the badge **10** in the other. The sharp-pointed end **25** is then forced through the wing W without any additional preparation and the badge **10** is pushed in (Fig. 6). Then the marker **10** is turned around so that the web portion W which is enclosed by the badge **10** lies substantially against the end curved portion **20**. The badge **10** is lifted up substantially as shown in Fig. 7 and closed simply by snapping the stud **31** into the opening **32** with a thumb and forefinger. The marker **10** is then released and it drops naturally to the position shown in Fig. 1, which it maintains from then on.

Even when the chick **30** flaps its wings or lifts them, the badge **10** is visible and is of such light weight that it does not interfere with any of the chick's normal activity. It can last for life and identify the pedigree during all this time. The figures, while not so large as those on the large size badges which are used for trap nesting (according to the principles of several prior patents issued to me), nevertheless are very large for the purpose here concerned and provide amazing legibility. The plastic can be molded in any desired color, the indicia **14** being stenciled on, as by a silk screen or other process, with a type of ink which practically imbeds itself in the plastic and cannot be washed or scraped off under ordinary procedures.

A modified form **40** of the band, shown in Fig. 8, resembles the one previously described, except that it is molded in a more open shape and is provided with an offset **41**. When closed, it is identical in conformation with the band **10**.

Another modified and preferred form of band **50** is shown in Fig. 9. As molded, it is nearly flat, except for an offset **51** at the inclined portion **23** between the loop's outer side **22** and the short, flat portion **24**. Also, the shank

portion 52 between the narrowing shoulders 53 and the offset portion 51 is provided with a pair of transverse indentations 54, 55, spaced apart a distance equal to the height of the offset at 51, to form the opposite end of the loop. This offset 51 and indentations 54, 55 give the proper shaped loop when the band 50 is closed. When closed, band 40 and band 50 look like the band 10.

Picking and cannibalism have been a serious problem in the poultry industry. Most large producers have gone to the extent of cutting off the beaks of the chicks to prevent the trouble. The use of my new plastic band makes it possible to eliminate this very expensive and messy operation. I have discovered that it is possible to counteract the dangerous tendency toward picking and cannibalism among young chicks by placing red wing bands on the chicks. Preferably a somewhat orange red, such as vermillion, is employed. This astonishing result is backed up by tests which, so far, indicate that the incorporation of the red color on the chick's wing has an educational or reverse-psychological effect. Apparently it teaches the chickens that not everything red is blood. Then, when the blood starts to show in the developing feathers, the chickens do not have a desire to pick. Whereas picking is common, at an age of about thirty to forty days, in a flock without these bands, picking has been almost totally absent at that age in a flock where the chicks wear my new red bands. This red color is indicated in Fig. 1. Since the plastic can be colored red before molding, so that the band is red throughout, the color can never come off, as it would if it were surface material on metal. In tests, bands of other colors, such as green and brown, failed to discourage picking, while the orange-red bands eliminated picking.

As stated earlier, the invention also has utility as a tag for dressed poultry. In this instance it is preferable and many State laws require that the tag be sealed. This can easily be accomplished by a few drops of liquid plastic cement, such as cellulose acetate dissolved in acetone, placed at the juncture between the locking tab 35 and the upper surface of the portion 24 at about the location where the lead line 33 in Fig. 4 touches the article. Or it can be sealed with pliers in the ordinary manner, mentioned above. Thus the marker of this invention, which is very easily applied and very easily sealed, may serve as an ideal marker for dressed poultry.

To those skilled in the art to which this invention relates, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the spirit and scope of the invention. The disclosures and the description herein are purely illustrative and are not intended to be in any sense limiting.

I claim:

An identification marker comprising a unitary, elongated plastic strip having a normally flat main portion and a shorter, flat, offset end portion connected by a stiff shank portion to said main portion and lying in a plane generally parallel to that of said main portion, the end of said offset portion being pointed and having a stud-receiving opening therethrough, said main portion having a rounded end at the opposite extremity from said offset portion with a stud thereadjacent on one face extending toward the plane of said offset portion, said main portion bearing marking indicia on the other face, said main portion having a longer and wider part extending from said rounded end and a succeeding shorter and narrower part connected to said wider part by narrowing shoulders and extending toward said offset portion, said offset portion and said shank portion being the width of said narrower part, said narrower part having a pair of spaced widthwise-extending indentations providing two parallel lines of flexure for converting said strip into a looped band with a predetermined precise shape, one said indentation lying adjacent said narrowing shoulders and the other being spaced from it at a distance approximately equal to the length of said web, so that said strip is readily closed by flexure along said indentations to provide a loop section with a generally rectangular shape, a portion of said narrower part lying parallel to said wider part and adapted to be locked closed by engagement of said stud with said stud-receiving opening, wherein said offset portion lies snugly against said wider part, the narrow width of said offset portion, said web, and said narrow part enhancing the ease of insertion when said pointed end is forced through an object to be marked while said marker is in its original, generally flat position, said juncture forming a stop and indicator beyond which the strip is not pushed through said object, said band then being closed as stated, said pointed end lying short of said rounded end when the marker is closed, to guard said pointed end and prevent it from sticking into or against other things, the loop being stiff enough to resist distortion after installation.

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