Oct. 29, 1935. J. E. LAYTON 2,018,796

PROTECTIVE HEADGEAR FOR CHICKENS

Filed April 9, 1934

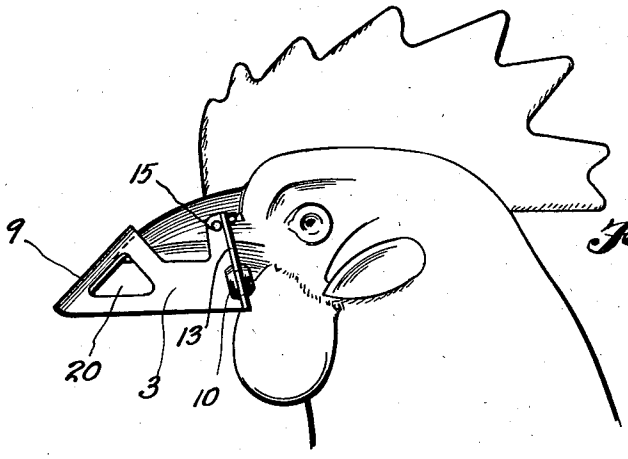


Fig. 1

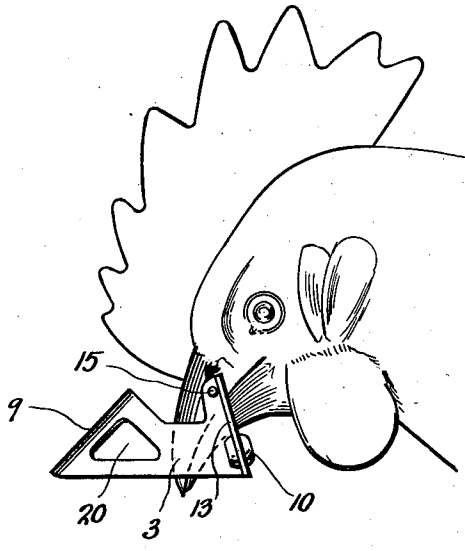


Fig. 2

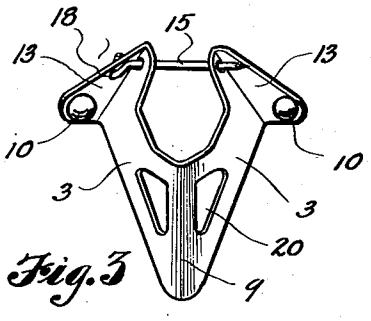


Fig. 3



Fig. 4

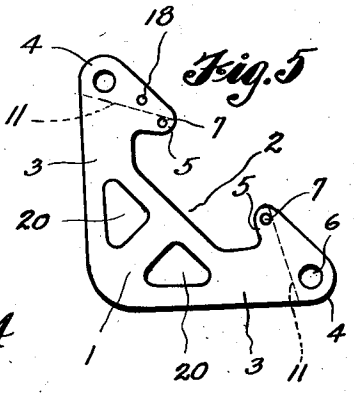


Fig. 5

INVENTOR
JOSEPH E. LAYTON
BY
Cook & Robinson
ATTORNEY

Patented Oct. 29, 1935 2,018,796

UNITED STATES PATENT OFFICE

2,018,796

PROTECTIVE HEADGEAR FOR CHICKENS

Joseph E. Layton, Seattle, Wash.

Application April 9, 1934, Serial No. 719,683

10 Claims. (Cl. 119—97)

This invention relates to improvements in protective head gear for chickens and turkeys, and it has particular reference to a form of guard designed to be applied to the beak of a fowl as a means of preventing the fowl from picking, pulling feathers or fighting with other fowls of the flock.

Explanatory to the present invention, it will here be stated that while there is always a certain amount of picking, feather pulling and fighting among domestic fowls of all flocks, which may be injurious to a certain extent, there is also a very destructive and most serious form of cannibalism, especially in flocks of laying pullets and hens. This, in the present understanding, is the act of one or a number of fowls destroying another by picking out the digestive and reproductive organs through the vent. Cannibalism among chickens as well as other domestic fowls may be due primarily to the fact that it is the practice of present-day poultrymen to breed chickens with the object of producing heavy laying fowls without giving much regard to the physical up-building of the parent stock. As a result, it is not uncommon that many pullets and hens lay over three hundred eggs in a year. The fowl, especially as a pullet, suffers from this heavy production to the extent that the frequent dilation of the oviduct, in the act of laying the egg, often causes prolapse and bleeding. The presence of blood issuing from the vent attracts the other fowls which begin picking the protruding and bleeding part and it is then only a question of a very short time until the unfortunate fowl is in a drying condition by reason of its vital organs being picked out. The annual poultry mortality today, resulting from this form of destructive cannibalism, often amounts to twenty per cent (20%) of the laying fowls in many flocks.

Various forms of protective devices have been provided for protecting fowls against this form of cannibalistic destruction, one form being a "pick-out" shield disclosed in the pending application of John Gawiler, filed January 22, 1922, under Serial No. 588,213, which shield comprises a metallic plate with a fastener whereby it may be pivotally suspended from the rump of a fowl to protectively overhang and shield the vent. The device mentioned is effective for its intended purpose, but is useful for this one purpose only and has certain other objectionable features especially with respect to method of attachment, egg cleanliness, vent sanitation and annual replacement costs of said protective shield. There are also other devices such as "blinders" and "beak-tips," intended to control cannibalism in laying fowls, but, in practical application, they have not proven entirely satisfactory.

In view of the above statements, it has been the object of the present invention to provide a novel and practical form of guard that may be easily and readily applied, without injury, to the beak of a chicken or turkey in a manner not to interfere with the fowl in the natural act of eating or drinking and will so cover the sides and end of the beak, when held in a horizontal or semi-horizontal position, that the fowl will not be able to injure another by picking, feather pulling, fighting or vent picking.

More specifically stated, the present invention resides in the provision of a guard in the form of a metallic plate designed and partially formed according to the contour of the beak and to be pivotally attached to the beak of a fowl by a pivot pin extending through the nostrils; the plate being formed to extend along opposite sides of the beak and terminating forwardly thereon in a rounded end or point. When the fowls head is raised from the natural position of eating or drinking, the upper center of the plate rests upon the end of the beak in its protective position, the front and two sides completely covering the beak. As the head is lowered for eating or drinking the pivot pin permits the guard to remain in a horizontal position thereby allowing complete freedom in the natural act of eating or drinking.

Other objects reside in the provision of means for counterbalancing the pivoted guard so that it will automatically retain its horizontal position, and in the particular design whereby the device is prevented from catching on objects and from becoming clogged during normal use and will permit of clear vision for feeding.

Other objects of the invention reside in the various details of the construction of the device and its manner of use, as will hereinafter be fully described.

In accomplishing these objects of the invention, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawing, wherein—

Fig. 1 is a view in perspective, illustrating a device embodied by the present invention, as applied to the beak of a fowl.

Fig. 2 is a view illustrating the relative horizontal pivotal action of the guard on the beak when the fowl's head is lowered.

Fig. 3 is a front perspective view of the device.

Fig. 4 is a perspective view of the attaching pin.

Fig. 5 is a view of the flattened blank from which the guard is formed.

Referring more in detail to the drawing—

The device, as seen best in Fig. 3, is made from a single piece of sheet metal, preferably aluminum, cut and bent into the form of a V-shaped protective guard that is adapted when functionally applied, to overlie and to extend slightly beyond the outer end portion of the fowl's beak and to extend also along the opposite sides of the beak.

Preparatory to making the device, a blank therefor is cut from a flat sheet of metal. The blank 1, as seen in Fig. 5 in the form of an isosceles triangle, has a substantial recess 2 formed therein symmetrically of the base, thereby forming the plate with two leg portions 3—3 in substantially right angular divergence and each leg terminates in a foot having a rounded heel 4 and an inwardly projecting toe 5. A large perforation 6 is formed concentric of the rounded heel and a small perforation 7 is formed in the toe of each foot.

To form the blank into the protective guard, it is bent along a line bisecting the right angle at the junction of the leg portions, to form a V-shaped enclosure with the two leg portions in diverging relationship, as seen in Fig. 3, and joined in a rounded prow 9. The opposite sides of the guard thus formed slope downwardly relative to the vertical plane.

Prior to bending or shaping the device, counter weights 10, in the form of lead shots, are placed in the perforations 6 and are expanded by impact or pressure against opposite sides to cause them to be locked in the plate. Then, that part of each foot containing the counter weight is bent outwardly, at a right angle along a line forwardly of the lead shot and rearwardly of the toe perforations 7, as along the dotted lines 11 in Fig. 5. In the finished guard these outwardly bent wing portions 13, by reason of their position and shape prevent the device catching on wire or the edge of a feeding trough or pan or a watering fount or pail.

The deep cut recess in the plate provides considerable open space at opposite sides of the beak and provides ample clearance for the comb if it is of the overhanging character.

When the device is applied to the beak of the fowl, the opposite side portions, or legs, extend along opposite sides of the beak, and the rounded end portion extends beyond the end of the beak, but rests along its inner portion, upon the beak as seen in Fig. 1. The guard is pivotally attached to the beak by a round metal pin 15, which extends through the perforations 7 of the toes 5, and through the nostrils of the beak. The pin only pierces the thin bone-like membrane of the beak and causes no bleeding, pain or discomfort to the fowl.

The pin preferably is as shown in Fig. 4 and has one end sharpened for easy and painless application and has its opposite end bent downwardly then laterally for projection through a perforation 18 of the wing at that side, then adapted to be bent upwardly to retain it against displacement from the perforations or turning therein.

A detail of construction of the device resides in the fact that the same is so counterweighted that the guard will balance in a horizontal position. Thus, when the fowl lowers its head, as seen in Fig. 2, for eating or drinking, the guard pivots about the axis of the pin and remains horizontal thereby causing no interference with the fowl's consumption of food or liquid. Cut outs 20 are provided on opposite sides of the guard to make it lighter and to prevent feed packing therein

This device is relatively inexpensive, may be easily and readily applied without pain to the fowl and when applied, as proven by practical tests, very effectively serves the intended purpose of a protective beak guard, thus insuring against cannibalism or other physical injury due to fighting or picking.

The device also has the advantages of permitting clear vision of the fowl to the lower mandible for feeding and permits free use of the beak for feather cleaning.

It is apparent that changes in details of construction might be made without departing from the spirit of the invention, therefore, it is desired that the claims shall not be confined to the details shown, but shall be given an interpretation commensurate with the invention disclosed.

Having thus described my invention, what I claim as new therein and desire to secure by Letters Patent is—

1. A balanced guard member of the character described applicable to the beak of a fowl in a manner to extend about the end thereof when the fowl's head is raised, and a pivot member adapted to be extended through the fowl's beak for attaching the guard thereto in a manner permitting the guard member to retain its position of balance when the head of the fowl is lowered.

2. A guard of the character described comprising a plate adapted to be applied over the end and along opposite sides of the beak of a fowl as a protection from the latter when the fowl's head is raised, and a pin extended between opposite sides of the guard at a point of balance for pivotally attaching the guard to the beak in a manner permitting the guard to retain its position of balance when the fowl's head is lowered.

3. A guard of the character described adapted to be applied to the beak of a fowl and having opposite side portions for extending along opposite sides of the beak and joined in a bend that will extend somewhat beyond the end thereof and a pivot pin extended between the opposite sides of the guard for pivotally connecting the guard to the beak through the nostrils and means associated with the guard for counterbalancing the outer portion whereby it will be caused to maintain a substantially horizontal position when the head of a fowl, to which it is applied, is lowered as in the act of eating or drinking.

4. A device as in claim 3 wherein the outer end portion of the guard has a part thereof designed to overlie and to rest upon the beak when the fowl's head is in raised position.

5. A guard of the character described comprising a plate formed for application over the outer end and along opposite sides of the beak of a fowl, a pivot pin extended between opposite sides of the guard for attaching it to the beak, and weights applied to the inner end of the guard whereby it is caused to maintain a horizontal position of balance, when the fowl's head is lowered.

6. A guard of the character described applicable to the beak of a fowl to extend along the sides and beyond the end thereof and having opposite side plates in diverging relationship and a pivot pin extended between the side plates at the inner end of the guard whereby the device may be pivotally attached to the beak of the fowl, wings

outwardly turned on the inner ends of the side plates, and counterweights applied to said wings to maintain the device in a horizontal position of balance.

7. A guard of the character described applicable to the beak of a fowl to extend along the sides and beyond the end thereof and having opposite side plates in diverging relationship and joined in a rounded ridge inclined inwardly and upwardly to rest upon the outer end portion of the beak of a fowl when applied thereto; said side plates having perforations therein at the inner end of the guard, a pivot pin extended through the perforations for attaching the device to the upper mandible of the beak; said plates having outturned wings at their inner ends, and weights applied thereto whereby the guard is automatically retained in horizontal position when the fowl's head is lowered.

8. A device as in claim 7 wherein the upper part of the guard is cut away to a substantial depth at opposite sides of the beak and forwardly of the pivot point for overhanging comb clearance when the fowl's head is lowered in the natural act of eating or drinking.

9. A guard of the character described applicable to the beak of a fowl to extend about the end thereof to prevent pecking when the fowl's head is raised and means for pivotally attaching the guard to the beak and permitting a relative lifting of the guard from the end of the beak.

10. A guard of the character described applicable to the beak of a fowl and comprising a plate formed to extend about the end of the beak to prevent pecking, and along the sides thereof and provided at its inner end with means for pivotal attachment to the upper mandible of the beak, thereby to permit upward swinging of the outer end from the beak.

JOSEPH E. LAYTON.