

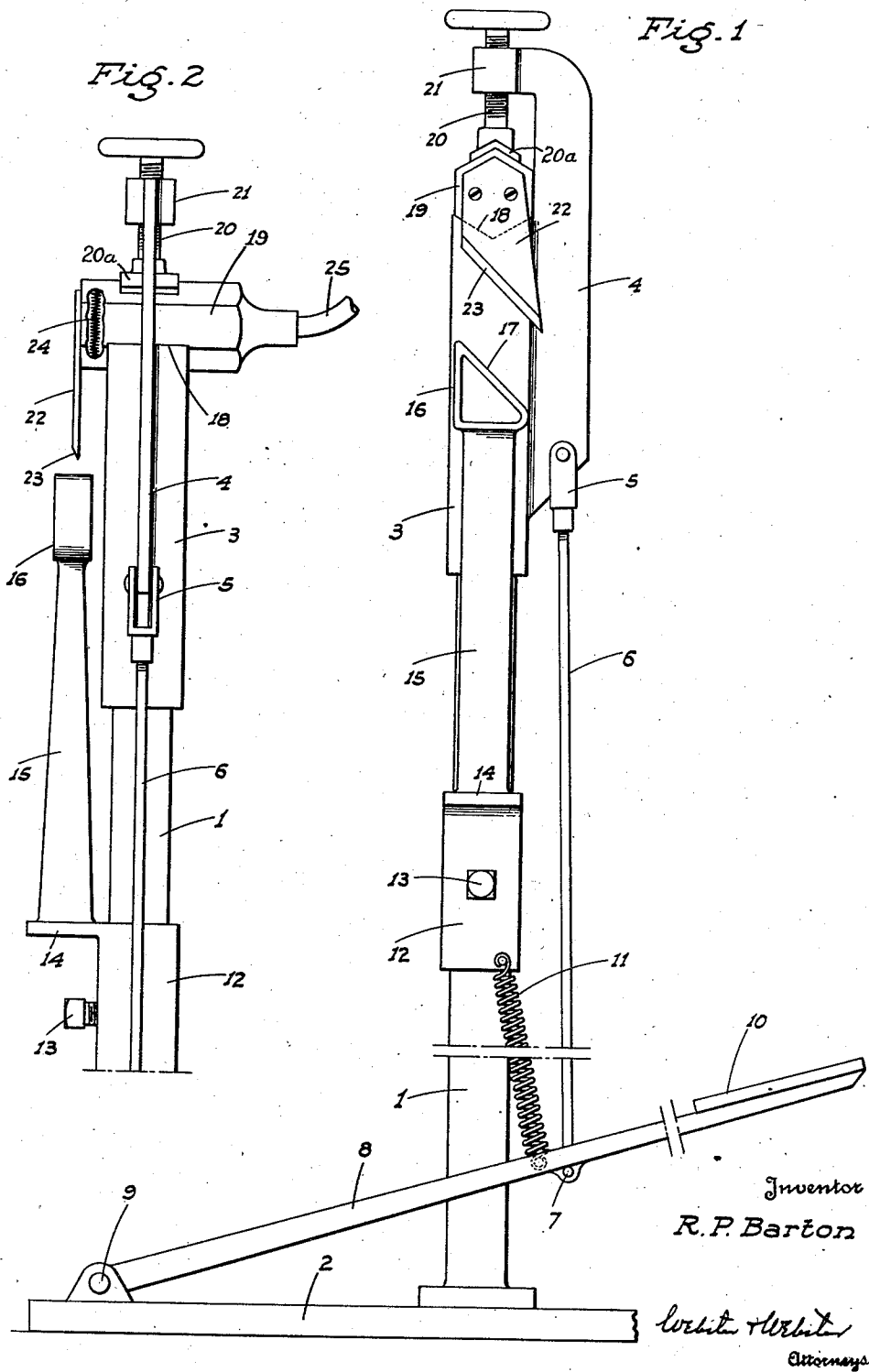
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BEAK TRIMMING DEVICE FOR POULTRY

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BEAK TRIMMING DEVICE FOR POULTRY

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This invention is directed in general to a device especially designed for use by poultry producers, and in particular the invention is directed to, and it is an object to provide, a device operative to trim or cut away a predetermined portion of the point of the upper beak of poultry, whereby to prevent one fowl from pecking and injuring other fowl, which injury by pecking is presently a serious problem on poultry farms.

Another object of this invention is to provide a beak trimming device, as above, which includes a cutting block against which the beak is disposed, and a vertically movable blade mounted to cooperate in beak cutting relation with the cutting block; the blade being electrically heated in order to cauterize the beak at the cut, and said blade being adjustable relative to the cutting block so that the amount of beak to be cut away can be varied.

A further object of this invention is to provide a beak trimming device for poultry, which comprises an upstanding post, a vertically movable slide mounted on the upper end portion of the post, the slide supporting a laterally offset, downwardly facing beak cutting blade, a beak supporting cutting block fixed in connection with the post for cooperation with the blade, and means to reciprocate the slide; the blade being electrically heated and adjustable lengthwise of said cutting block.

A further object of the invention is to produce a simple and inexpensive device, and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawing similar characters of reference indicate corresponding parts in the several views:

Figure 1 is an elevation of the device facing the blade.

Figure 2 is a fragmentary elevation of the device looking edgewise of the blade.

Referring now more particularly to the characters of reference on the drawing, the device comprises a rigid upstanding post 1 supported at its lower end on a horizontal base 2. A vertically elongated tubular slide 3 engages over the upper end portion of the post; the post preferably being non-circular in cross section and the slide matchingly engaging the same, whereby said slide cannot rotate relative to the post.

On one side the tubular slide 3 includes a vertical web 4, which is connected at its lower

end by a clevis 5 with a depending rigid actuating rod 6. The lower end of the rod 6 is pivotally connected, as at 7, to a foot lever 8 intermediate the ends of the latter. At its lower end the foot lever 8 is pivotally connected to base 2, as at 9, while the other end of lever 8 is fitted with a foot pedal 10.

A heavy-duty tension spring 11 connects between the lever 8 intermediate its ends and a suitable point on the post 1 thereabove, said spring being operative to normally maintain the lever 8, and consequently the rod 6 and slide 3, in a raised position. Some distance below the slide 3 the post 1 is fitted with a collar 12 secured in place by means of a set screw 13, said collar including a laterally projecting bracket 14. The bracket 14 supports, in fixed relation, a rigid pedestal 15 which is formed at its upper end with a beak engaging cutting block, which is indicated generally at 16. The cutting block 16 is hollow, open at its outer end, and includes a relatively thin sloping or diagonal top plate 17. The cutting block 16 is normally disposed some distance below the upper end of tubular slide 3, and said upper end of the slide is formed with an upwardly facing transverse cradle 18, in which a horizontal, transversely extending blade supporting body 19 is disposed; one end of said body overhanging the cutting block 16. The body 19 is held against escape from the cradle 18 by means of a manually releasable screw clamp 20 whose stem is vertically threaded through a boss 21 formed integrally with an upper extension of web 4, and overhanging the cradle 18. The body 19 is non-circular in cross section and is matchingly engaged between the cradle 18 and a body engaging head 20a on the screw clamp 20, whereby to prevent rotation of said body. However, upon release of screw clamp 20 the body 19 is adjustable lengthwise to vary the extent of its overhang relative to the cutting block 16.

A beak trimming knife or blade 22 is fixed in face to face engagement with and depends from the end of body 19 above cutting block 16; the cutting edge 23 of blade 22 being diagonal and parallel to the sloping plate 17 of the cutting block. The body 19 includes a resistance heater, indicated generally at 24, to which electric current is supplied by a flexible cord 25. When the heater 24 is energized the heat therefrom is transmitted through the body to the blade 22. When the slide 3 is in raised position the blade 23 is disposed some distance in clearance relation above the top plate 17 of the cutting block. To trim the upper beak of a fowl, the upper and

lower beaks are straddled over the top plate 17 from the open end of cutting block 16. Thereafter the foot pedal 10 is depressed, causing the blade 23 to forcefully fall, trimming off an outer end portion of the upper beak of the fowl. As the blade 23 is heated the cut is immediately cauterized and the wound is effectively sealed. By adjusting the position of body 19 axially, the amount of beak 10 to be trimmed off can be regulated, as is evident.

The cutting block 16, together with the pedestal 15, is preferably made of metal, such as copper, which dissipates heat rapidly, whereby the cutting block does not tend to heat up during use of the device and from engagement of the blade therewith. It is desirable that the cutting block be maintained as cool as possible, due to the fact that the upper and lower beaks of the fowl must straddle the top plate 17 during the trimming operation.

With my improved beak trimming device, a portion of the upper beak of a fowl can be cut away quickly and with a minimum of pain to such fowl, and the wound requires no subsequent attention, due to the cauterization as above described.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

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

1. A beak trimming device for poultry, comprising means adapted to support the beak, a blade mounted for movement in cutting relation to a supported beak, and means to actuate the blade; said beak supporting means comprising a cutting block which is hollow and open at one end, the cutting block having a top plate which the upper and lower beak of a fowl is adapted to straddle from said open end of the block.

2. A device as in claim 1 in which the blade is heated; and in which the cutting block is of a material which dissipates heat rapidly.

3. A beak trimming device for poultry, comprising an upstanding member, a laterally offset upwardly facing cutting block secured in connection with said member, a slide mounted on the member above the cutting block, a downwardly facing blade secured in connection with the slide above and in cooperating relation to said cutting block, and means to actuate said slide.

4. A beak trimming device for poultry, comprising an upstanding member, a laterally offset upwardly facing cutting block secured in connection with said member, a slide mounted on the member above the cutting block, a downwardly facing blade secured in connection with the slide above and in cooperating relation to said cutting block, and means to actuate said slide; said actuating means including a foot pedal.

5. A beak trimming device for poultry, comprising an upstanding member, a laterally offset upwardly facing cutting block secured in connection with said member, a slide mounted on the member above the cutting block, a downwardly facing blade secured in connection with the slide above and in cooperating relation to said cutting block, and means to actuate said slide; the blade securing means comprising an electrically heated body mounted on the slide with one end overhanging the cutting block, the blade being secured to said body in face to face engagement with said one end thereof.

6. A beak trimming device for poultry, comprising an upstanding post, a slide mounted on the post, a laterally offset, downwardly facing blade carried by said slide, an upwardly facing cutting block mounted in connection with the post in cooperating position below the blade, and means to actuate the slide.

7. A beak trimming device for poultry, comprising an upstanding post, a slide mounted on the post, a laterally offset, downwardly facing blade carried by said slide, an upwardly facing cutting block mounted in connection with the post in cooperating position below the blade, and means to actuate the slide; said actuating means comprising a foot lever, a connecting rod between the foot lever and slide, and a spring acting to raise the slide to a normal position with the blade clear of the cutting block.

8. A beak trimming device for poultry, comprising a post, a slide on the post, a laterally offset, upwardly facing cutting block mounted in connection with the post below the slide, an electrically heated body mounted on the slide and at one end overhanging the cutting block, said body being adjustable lengthwise, a downwardly facing blade mounted on the body at said one end, the blade being heated from the body, and means to reciprocate the slide.

9. A beak trimming device for poultry, comprising a fixed cutting block, and a blade mounted for movement to and from the working face of the block; said block being hollow, open at one end, and said working face being formed by one side of a relatively thin plate which extends to said open end of the block.

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