

G. F. ANDREWS.
PILL INJECTOR.
APPLICATION FILED AUG. 8, 1916.

1,262,732.

Patented Apr. 16, 1918.

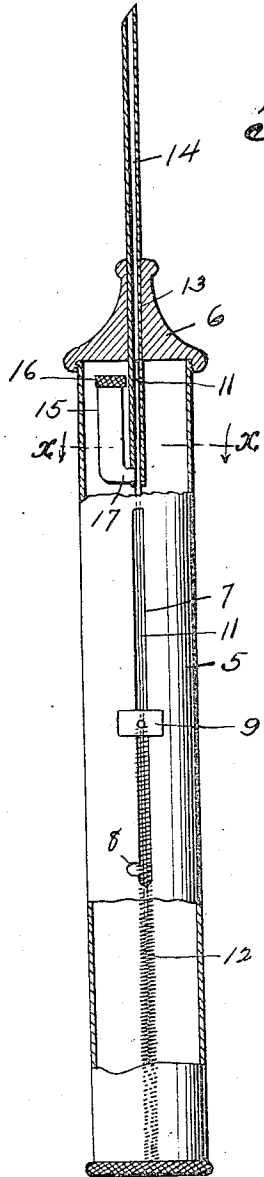


Fig. 1.

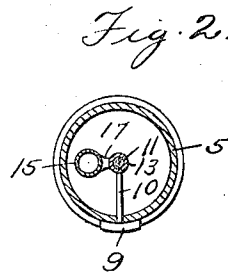


Fig. 2.

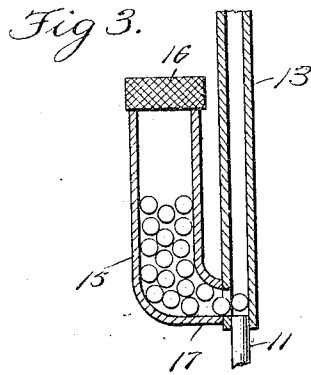


Fig. 3.

Inventor

George F. Andrews

By *Shepherd Campbell*
Attorney

UNITED STATES PATENT OFFICE.

GEORGE F. ANDREWS, OF HOMINY, OKLAHOMA.

PILL-INJECTOR.

1,262,732.

Specification of Letters Patent.

Patented Apr. 16, 1918.

Application filed August 8, 1916. Serial No. 113,824.

To all whom it may concern:

Be it known that I, GEORGE F. ANDREWS, a citizen of the United States of America, residing at Hominy, in the county of Osage and State of Oklahoma, have invented certain new and useful Improvements in Pill-Injectors, of which the following is a specification.

This invention relates to an injector for inserting pills beneath the hides of young cattle and it has for its object the provision of an improved device of this character constructed in such manner that one pill at a time may be fed from a magazine into a hollow needle and there held securely against accidental dropping during the time that the operator is inserting the needle preparatory to ejecting the pill therefrom.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawing

Figure 1 illustrates the invention partly in side elevation and partly in section, and Fig. 2 is a horizontal sectional view of the device on line X—X of Fig. 1 and Fig. 3 is a detail sectional view upon an enlarged scale through the magazine and associated parts with the plunger at its lowermost limit of movement.

Like numerals designate corresponding parts in the figures of the drawing.

Referring to the drawing the numeral 5 designates a casing the forward end of which is closed by a cap 6. This casing is provided in its side with an elongated slot 7 and a transverse slot 8, said transverse slot being disposed adjacent the lower end of the slot 7 and communicating with the slot 7.

A thumb piece 9 is connected by a shank 10 with a plunger 11, the latter being disposed centrally within the receptacle 5. A spring 12 surrounds the lower portion of the plunger 11 and bears between shank 10 and the bottom of the casing 5. This spring normally tends to force the plunger 11 outwardly. The forward portion of the plunger is disposed within a barrel 13 which forms a continuation of and is in communication with a hollow needle 14. A magazine 15 receives the pills and this magazine may be provided with a removable cap 16. The lower end 17 of the magazine is directed transversely and communicates with the barrel 13. The parts are so proportioned that when the thumb piece 9 is drawn inwardly

to its limit of movement against the tension of spring 12 and to the extreme inward end of slot 7, the outer end of the plunger will uncover the mouth of the reduced end 17 of the magazine and one pill will be permitted to enter the barrel in advance of the plunger. The plunger is then permitted to move outwardly a slight distance or until the shank 10 may be moved into slot 8. This slight outward movement of the plunger covers the mouth of the magazine and prevents more than one pill entering the barrel 13 at one time.

Since calves and young cattle frequently offer considerable resistance to the injection of the pills used for the prevention of black-leg, it is highly desirable to provide a structure which will hold the pill safely against loss during the time that the needle is being inserted beneath the hide of the animal.

Heretofore it has been necessary to employ an assistant to aid in holding the animal while the pill is being injected. With the present device this will not be necessary because the instrument will safely hold the pill during the struggles of the animal and until the needle has been satisfactorily inserted, after which the thumb piece is moved laterally to release its shank 10 from slot 8 and said thumb piece then moves outwardly in slot 7 and the plunger 11 ejects the pill from needle 14 in a manner that will be readily understood.

It is to be understood that the invention is not limited to the precise construction set forth but that it includes within its purview such changes as fairly come within the spirit as well as the exact terms of the appended claims.

Having described my invention what I claim is:—

1. A device of the character described comprising a pill magazine, a hollow needle with which said magazine communicates and a plunger mounted to reciprocate in said needle and movable across the mouth of said magazine, said plunger uncovering the mouth of the magazine when at its inward limit of movement and means for holding the plunger at an intermediate position at which latter position it covers the mouth of said magazine.

2. A device of the character described comprising a tubular body having an elongated longitudinal slot in its wall and a transverse slot communicating with said

longitudinal slot, a plunger within the body,
a thumb piece movable upon the exterior of
the body and a shank connecting the plunger
and thumb piece, a spring surrounding the
5 inner portion of the plunger and normally
tending to force the plunger outwardly, a
hollow needle carried by the body in which
said plunger is slidably disposed and a mag-
azine having a mouth communicating with
10 the hollow needle and across the mouth of
which said plunger moves, the relative pro-
portions of the parts being such that when

the shank of the thumb piece is at its inward
limit of movement said plunger uncovers
the mouth of the magazine and when said 15
shank is disposed in the transverse slot said
plunger covers the mouth of the magazine.

In testimony whereof I affix my signature
in presence of two witnesses.

GEORGE F. ANDREWS.

Witnesses:

S. B. EEROD,

O. L. BARLOW.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."