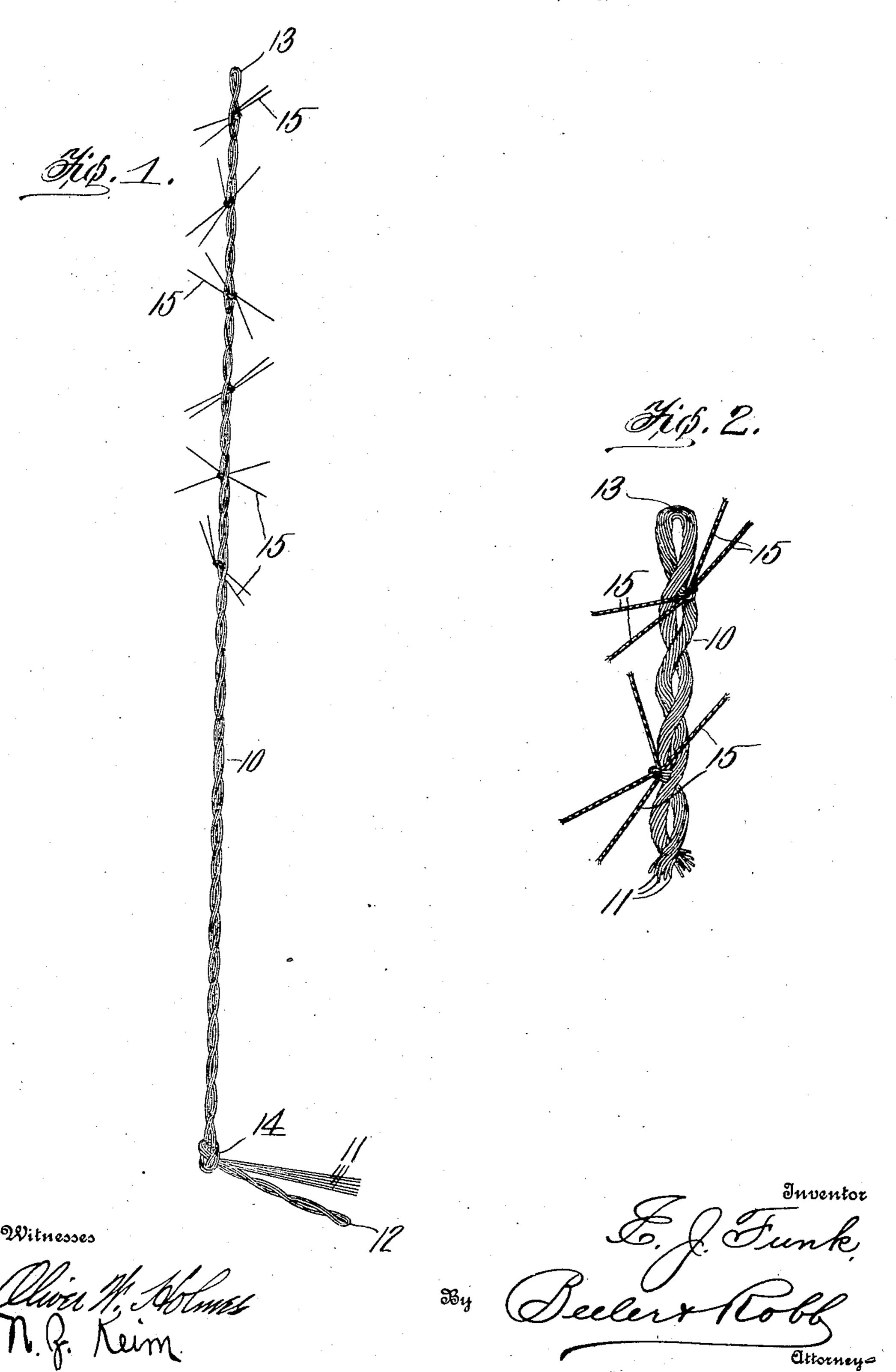
## E. J. FUNK. INSTRUMENT TO CURE GAPES. APPLICATION FILED MAR. 20, 1908.



## UNITED STATES PATENT OFFICE.

EMMA J. FUNK, OF SINGER GLEN, VIRGINIA.

## INSTRUMENT TO CURE GAPES.

No. 894,198.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EMMA J. FUNK, a citizen of the United States, residing at Singer Glen, in the county of Rockingham and State of Virginia, have invented certain new and useful Improvements in Instruments to Cure Gapes, of which the following is a specification.

This invention relates to that class of devices or appliances which are employed for
the purpose of operating upon the throats or
windpipes of fowls, and has particular reference to a device of the character set forth
which is intended for the purpose of removing what are commonly called gape worms
from the windpipes of small chickens.

It is generally understood that the disease known as gapes among poultry, especially young chicks, is due to a formation or growth 20 upon the inner wall of a chick's windpipe usually at the lower middle portion thereof and consisting of a sort of parasite of a soft spungy nature, red in color, resembling a worm and varying in length from \frac{1}{4} to \frac{3}{4} of an 25 inch. The germs of this parasite are to be found in the soil and hence it is very common for young chicks to be affected thereby, and when the disease makes its appearance it is only a matter of a few days when the victim 30 thereof must succumb unless relieved. Various means and devices have been attempted or employed for this purpose. A horsehair looped and inserted into the affected part has been known to be effective but this lacks 35 much of having the qualities such as are necessary for the purpose. Again, brush like devices of various types have been employed but these are injurious to a great extent by reason of the fact that they are so severe in use.

For a full understanding of the present invention, reference is to be had to the following detail description and to the accompanying drawings, in which,

Figure 1 is a general view of the entire device, and Fig. 2 is a portion of the same on an enlarged scale.

Similar parts are referred to throughout this description by the same reference characters.

This device in its preferred embodiment includes a flexible body portion made up of a plurality of fibers of uniform diameter, such as horsehair. However, it is to be understood that the invention is not limited in this respect to any specific kind of material.

For instance, a fine grade of wire might be employed in the same manner as the fibrous elements. For convenience it will be understood therefore as this description progresses. that the term fiber will comprehend any suit- co able, flexible material and out of which may be formed the said flexible body. As herein illustrated the body 10 is made up of a plurality of fibers 11, the number of the same depending upon their size and rigidity and also 65 upon the size of the device desired for any particular occasion, different sizes of devices being desired for operating upon different sized fowls. As a convenient illustration of the manner of formation of the body 10 one 70 or more fibers are looped as at 12 and are twisted together and then looped again as at 13 thus forming a rounded and smooth terminal whereby the device may be easily inserted into the trachea without injury. At 75 the end opposite the end 13 one or more knots 14 may be formed serving the purpose not only of holding the ends together which might be loose but also assisting the operator in the manipulation of the device, increasing 80 the finger hold thereof.

Thus far described the device may be used for the purpose of loosening the objectionable parasite from the chick's trachea, but without some special means in connection 85 therewith as described the loosened particles will not be withdrawn in an effective and satisfactory manner. To this end I have found it exceedingly effective to provide upon the flexible body 10 one or more soft 90 textile members 15. Each of these members consists preferably of one or more short loose-ended threads of silk. These members 15 are preferably arranged at spaced intervals along that portion of the body proxi- 95 mate to the end 13. I have found in practice that these elements should be spaced approximately for ordinary purposes about \{\frac{5}{8}} of an inch, and that the loose ends should be about \( \frac{3}{8} \) of an inch in length. It will be un- 100 derstood, however, that these dimensions are merely suggestive and are not to be considered as compulsory in any respect. The textile members 15 are securely knotted or tied at the intermediate portions to a portion 105 of the body to which it is applied. It will now be seen that while the body 10 is effective in dislodging the objectionable parasites from the chick's trachea, the members 15 will effectively collect and withdraw the same 110

when the instrument has been given several turns and withdrawn from the trachea.

The device may be used over and over again, it being only requisite that it be thor-5 oughly rinsed or cleansed after each operation and then dried in such a manner as to protect or preserve the loose-ended formation of the thread members. The device is easy, simple, and cheap of construction, con-venient of operation, and has been found exceedingly effective for the purposes for which it is intended.

Having thus described the invention, what

is claimed as new, is:

1. The hereindescribed instrument for the cure of gapes comprising a flexible body formed of a plurality of spirally connected fibers, said fibers being looped at an intermediate portion to form a rounded and smooth 20 end, and a plurality of soft loose-ended members tied and knotted at intervals to said

body, for the purposes set forth.

2. The hereindescribed instrument for the cure of gapes comprising a flexible body composed of a plurality of fibers twisted 25 and retwisted together and being of substantially uniform diameter throughout its length, and a plurality of short loose-ended silk members attached at intervals to said body, each of said members consisting of a plu- 30 rality of threads passed through said body between certain of the fibers and knotted thereto.

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

EMMA J. FUNK.

Witnesses:

E. B. Crawford, RALPH STAPLES.