

B. I. HERMANSON.

HOE.

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979,299.

Patented Dec. 20, 1910.

Fig. 1.

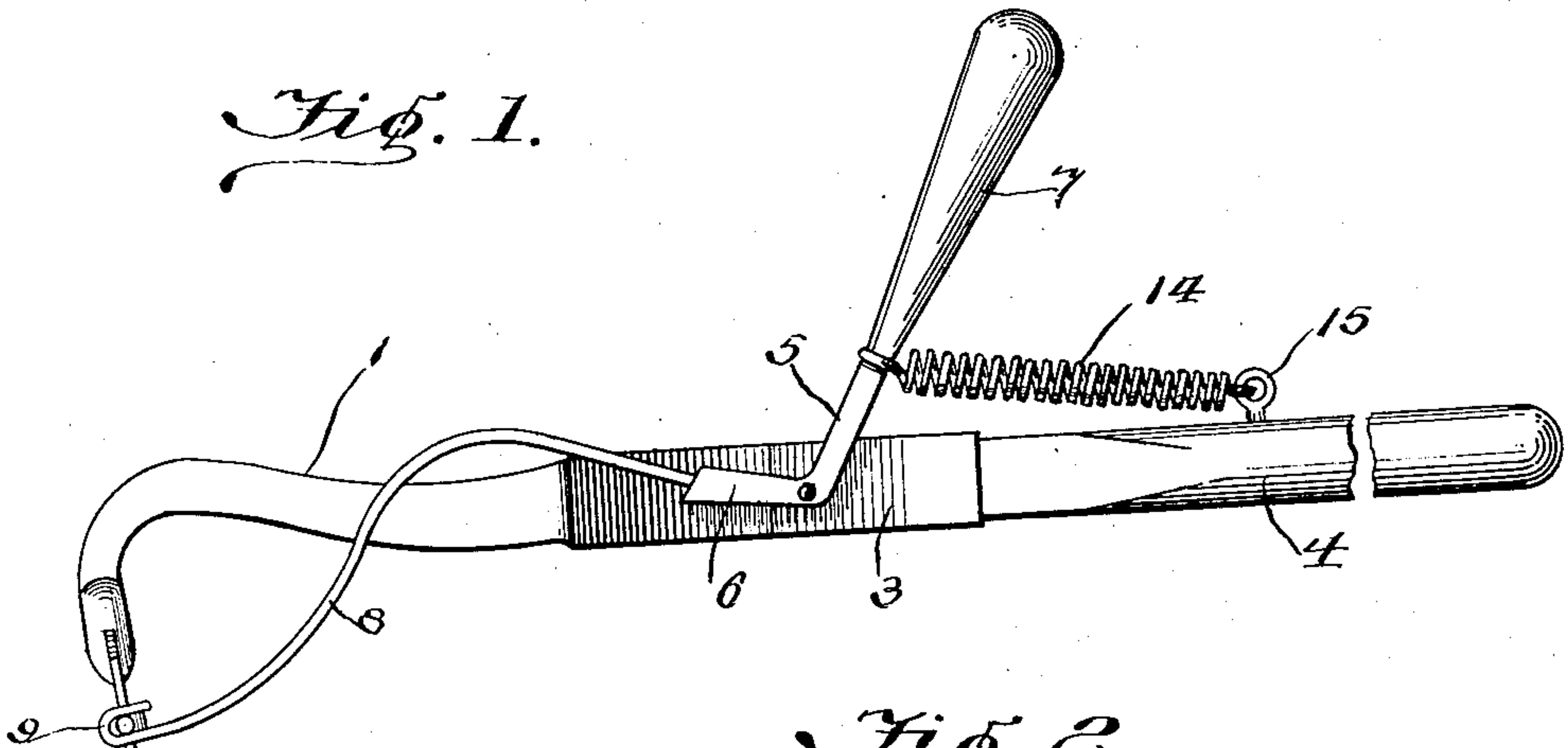


Fig. 2.

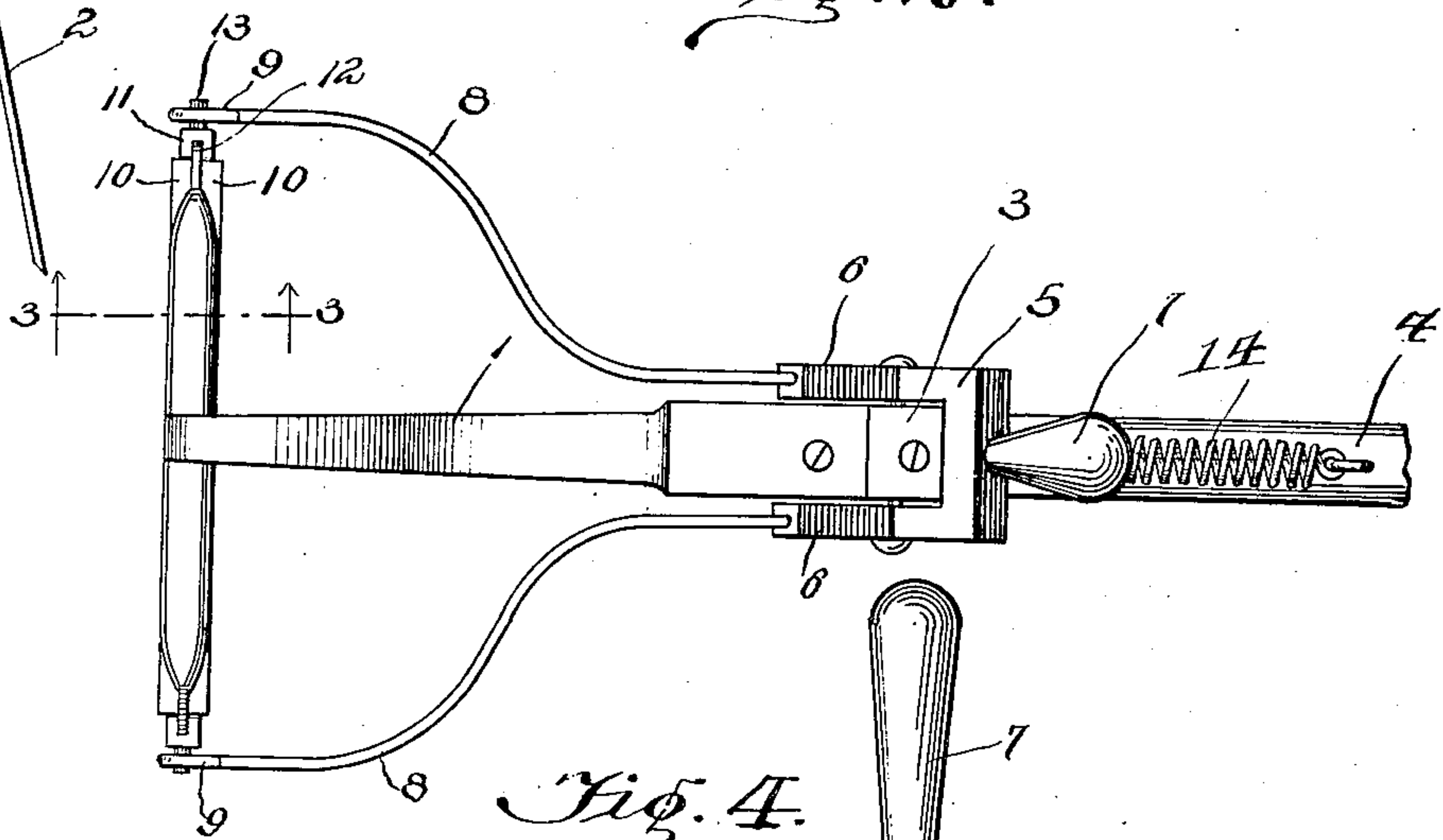
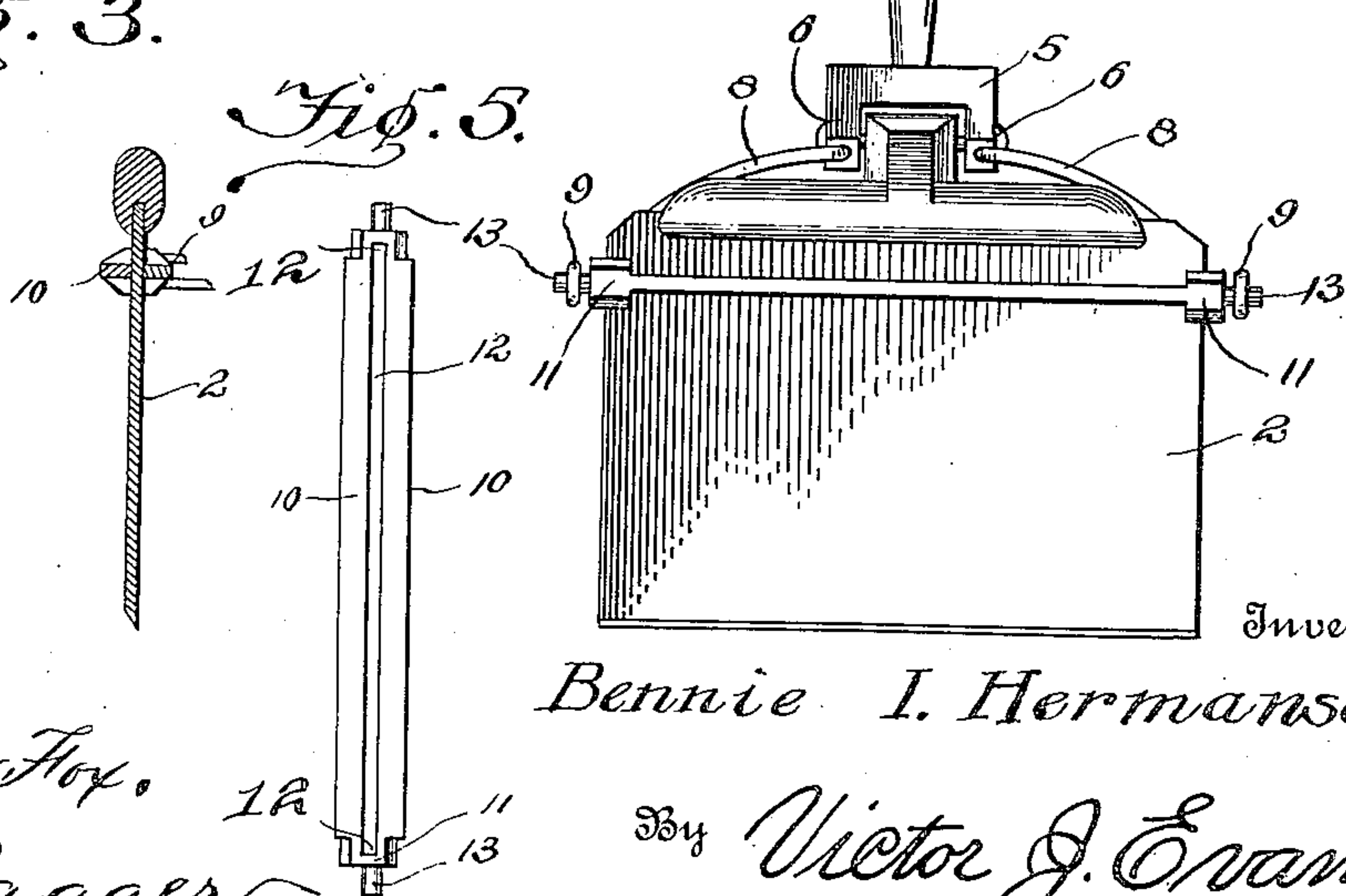


Fig. 4.

Fig. 3.

Fig. 5.



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UNITED STATES PATENT OFFICE.

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HOE.

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To all whom it may concern:

Be it known that I, BENNIE I. HERMANSON, a citizen of the United States of America, residing in the town of Arendahl, in the county of Fillmore and State of Minnesota, have invented new and useful Improvements in Hoes, of which the following is a specification.

This invention relates to hoes such as are ordinarily used for garden and field cultivation by hand, and it has for its object to provide a simple and efficient means whereby the blade of the hoe may be cleaned and freed from adhering soil, thus increasing the efficiency and facilitating the use of the hoe.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawing,—Figure 1 is a side elevation of a hoe equipped with the improved cleaning attachment. Fig. 2 is a top plan view of the same. Fig. 3 is a sectional detail view taken on the line 3—3 in Fig. 2. Fig. 4 is a front elevation. Fig. 5 is a plan view of the scraper detached.

Corresponding parts in the several figures are denoted by like characters of reference.

The shank 1 of the hoe blade 2 is provided with a socket 3 for the reception of a handle 4. Pivotally supported upon the socket 3, astride of said socket, is a yoke 5 having forwardly extending arms 6, 6 and an upwardly extending handle 7 whereby it may be manipulated. Extending forwardly from the arms 6 are resilient limbs 8, each of which is bent to form a terminal loop 9, said loops lying adjacent to the side edges of the blade 2.

The cleaning device proper includes two blades or scrapers 10, 10 connected at their ends by means of heads 11 having grooves 12 slidably engaging the side edges of the blade 2, the scrapers 10 being disposed ad-

jacent to and in slidable engagement with the front and rear faces of said blade. The head members 11 are provided with trunnions or pivots 13 engaging the loops 9, as will be clearly seen in the drawings. A retracting spring 14 connects the handle 7 with an eye 15 conveniently located upon the handle 4, said handle 7 being thereby normally retracted to elevate the limbs 8, thereby supporting the scraping device normally in a position adjacent to the upper edge of the blade.

It will be seen that a hoe equipped with the improved cleaning device is capable of being efficiently used in the ordinary manner, the cleaning device forming no obstruction to such use. When the hoe is used in damp or clay soil and a portion of said soil adheres to the blade, thereby interfering with its efficient use, it is only necessary to manipulate the handle 7 against the tension of the spring 14, thereby depressing the limbs 8 and causing the blades or scrapers to be moved downwardly upon the blade, thereby detaching the soil adhering to said blade. The handle member 7 may be actuated either by the hand or by the foot of the operator. The entire device is simple in construction and may be readily applied to hoes of the ordinary well known kind. It is obvious that the yoke 5 may be supported at some other place than upon the socket 3, and said socket, as well as the shank 1, may to all intents and purposes be regarded as a part of the hoe handle upon which the yoke 5 may be supported in any convenient position.

Having thus described the invention, what is claimed as new, is:—

1. The combination with a hoe, of a spring actuated yoke pivoted upon the handle and having forward extending arms, resilient limbs connected with said arms and having terminal loops, and a scraping device engaging the blade and having terminally disposed pivot members engaging the loops.

2. The combination with a hoe, of a yoke pivotally supported upon the handle of said hoe and having rearward extending members provided with terminal loops, a scraping device slidably engaging the blade provided with terminally disposed pivot members engaging the loops, and a handle whereby the yoke may be actuated.

3. A hoe having a handle and a blade,

a pivotally supported spring actuated yoke having forward extending members provided with terminal loops, a scraping device slidably engaging the blade and having terminally disposed pivot members engaging the loop, and a handle extending upwardly from the yoke.

4. A hoe including a handle and a blade, a pivotally supported spring actuated yoke having resilient limbs provided with terminal loops disposed adjacent to the sides of the blade, a scraping device including

two scrapers, grooved heads connecting the same and slidably engaging the side edges of the hoe blade, and pivot members extending from the heads and engaging the loops of the resilient members.

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

BENNIE I. HERMANSON.

Witnesses:

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