

O. E. HENDRICKS.

DRILL HEAD.

APPLICATION FILED SEPT. 10, 1908.

915,674.

Patented Mar. 16, 1909.

Fig. 1.

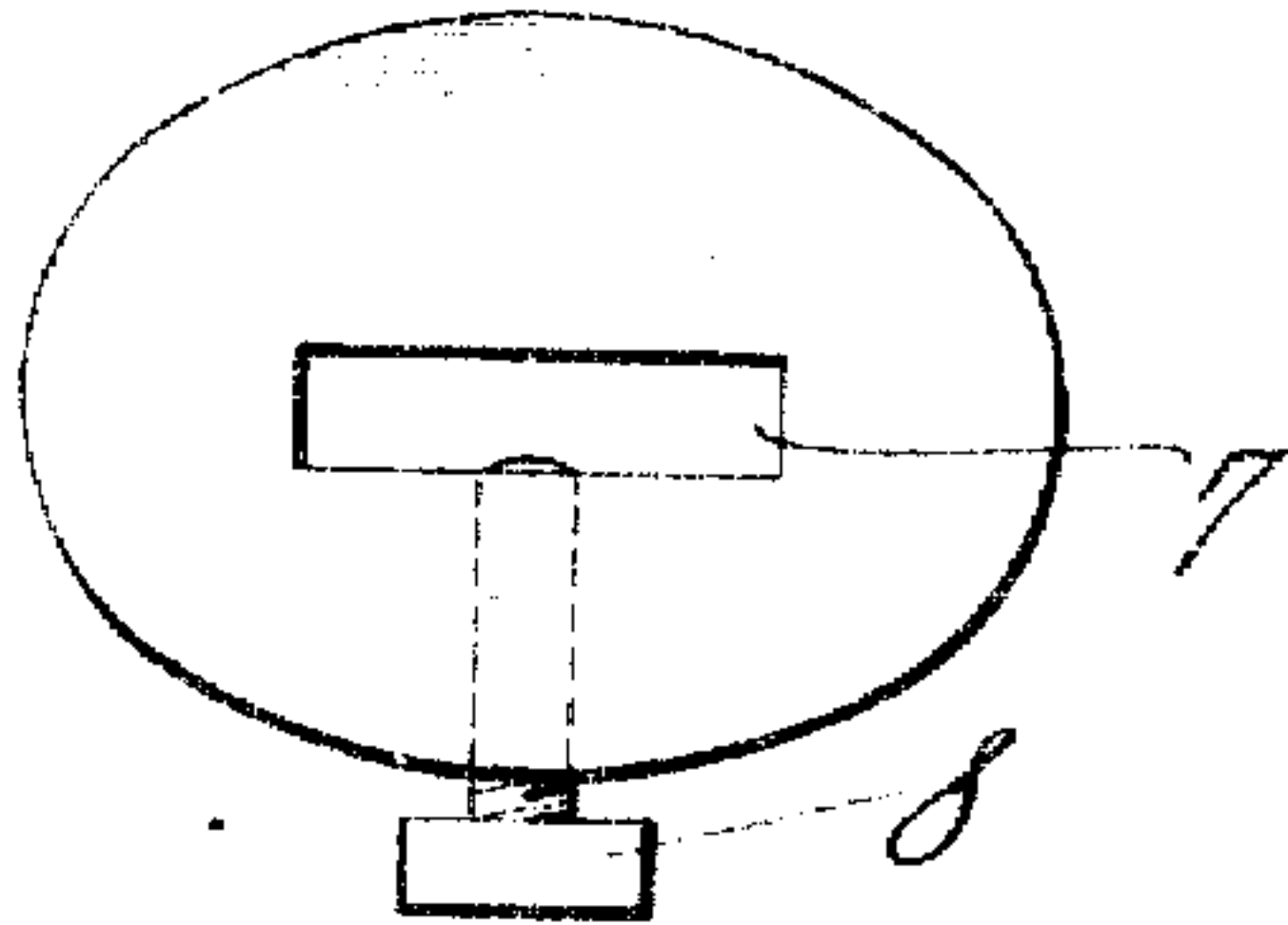


Fig. 2.

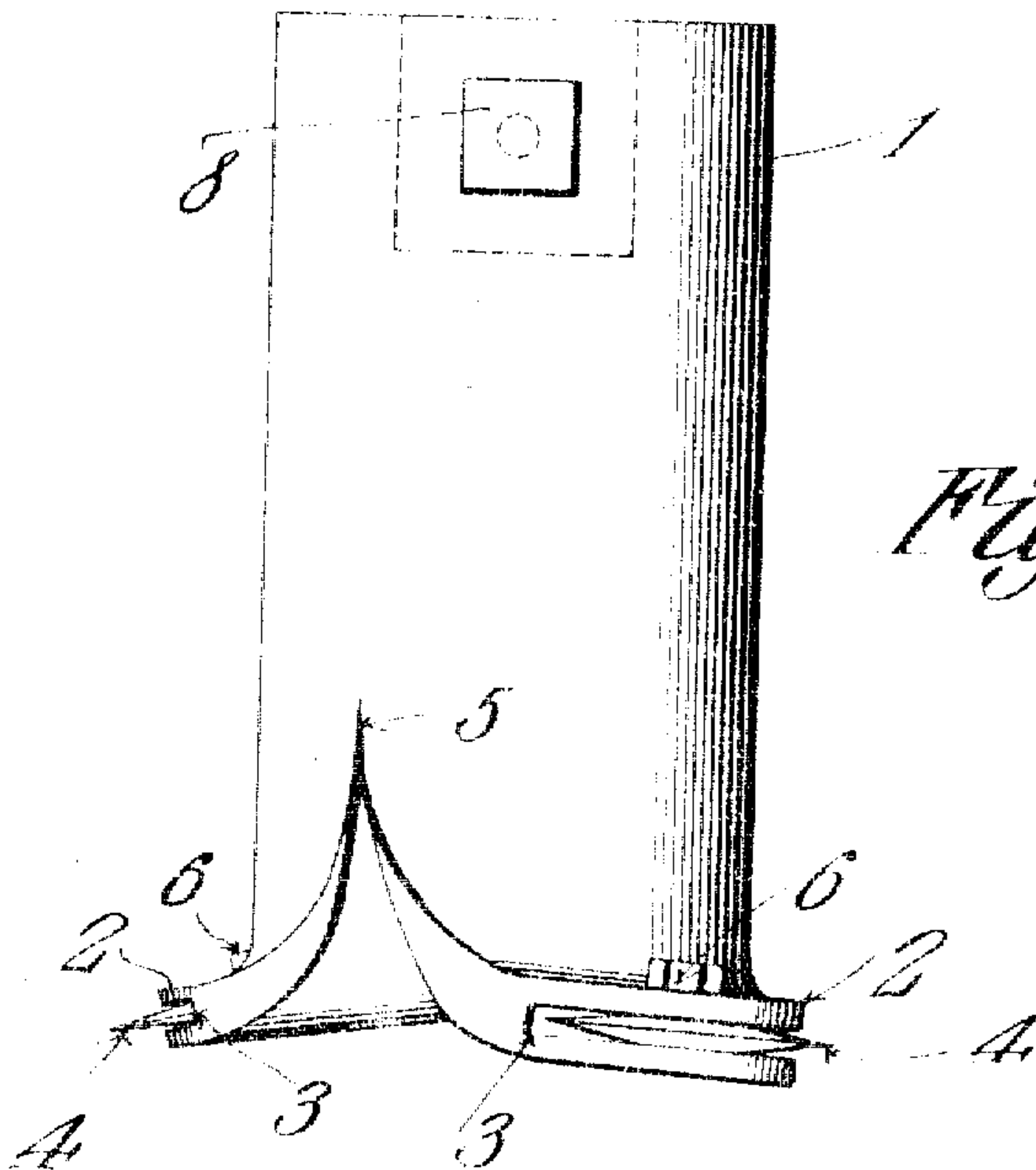
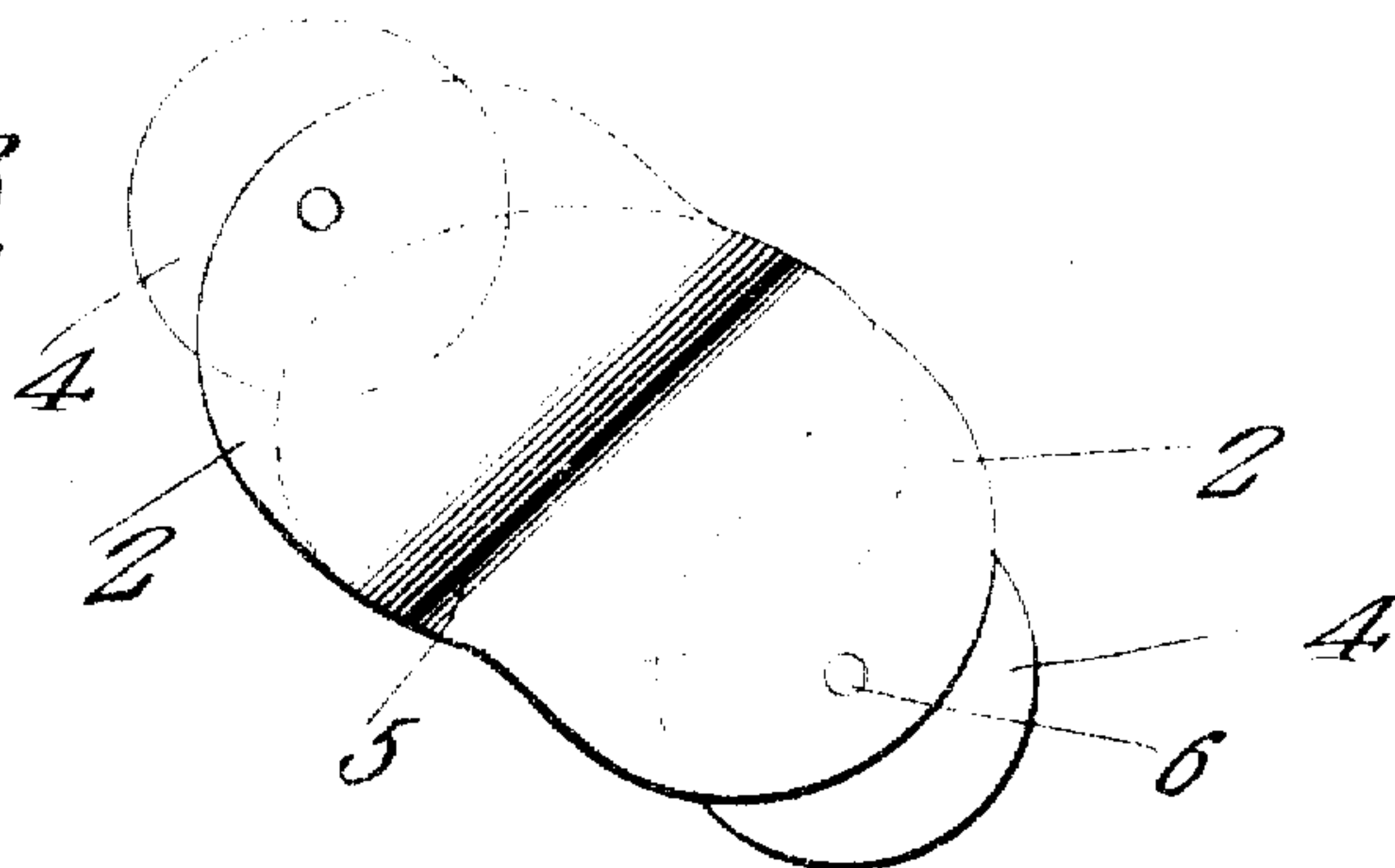


Fig. 3.



Witnesses

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OSCAR E. HENDRICKS, OF OTTUMWA, IOWA, ASSIGNOR OF ONE-THIRD TO ANDREW L. LOVE
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DRILL-HEAD.

No. 915,674.

Specification of Letters Patent.

Patented March 16, 1909.

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To all whom it may concern:

Be it known that I, OSCAR E. HENDRICKS, a citizen of the United States, residing at Ottumwa, in the county of Wapello and State of Iowa, have invented a new and useful Drill-Head, of which the following is a specification.

The improved drill head herein described, is of the class designed and adapted primarily, though not exclusively, for use in connection with an auger of the sort used in coal mining operations.

The objects of the invention are, the provision in a merchantable form, of a device of the class above mentioned, which shall be inexpensive to manufacture; facile in operation and devoid of complicated parts; the provision in a novel form, of a drill head which may be readily attached to any auger of standard make, and speedily removed therefrom; other and further objects being made manifest hereinafter, as the construction and operation of the device is unfolded in the subsequent description.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that divers changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 is a top plan of the stock 1. Fig. 2 is a front elevation of the complete device. Fig. 3 is a bottom plan.

In carrying out my invention, I provide a stock 1 which may be of any form, preferably however, it is elliptical in transverse section, as shown, the stock being upwardly split from its lower terminal to form bifurcating arms 2. These arms 2 are flattened, bent outward from the stock 1 and disposed in oppositely inclined planes as shown in Fig. 2. The terminals of the arms 2 are slotted at 3 and in the slots 3 are mounted disks which may be of any shape. I prefer, however, that they take the form of rotatable double-convex disks 4, mounted at their centers as shown, upon the pintle 6.

The line 5 along which the stock 1 is upwardly split, should assume an angle of substantially forty-five degrees to the shorter axis of the cross-sectional ellipse, as shown in Fig. 3, this construction serving to make the attachment between the arms 2 and the stock 1 more strong than any other that I am aware of.

It is intended that this invention shall be capable of detachment from the auger with which it is used, in order that a single auger may be used with several drill heads of the sort described, and to facilitate the above arrangement, the top of the stock carries an internal, longitudinally disposed slot 7. This slot 7 is disposed in the longer axis of the cross-sectional ellipse and a set screw 8 is arranged in substantially the shorter axis of the cross-sectional ellipse, thus disposing the head of the set-screw 8 within the circle described by the ends of the longer axis of the cross sectional ellipse, and securing from blows or friction which would tend to loosen the set-screw in its hold upon the auger by which my invention is carried.

Having thus described my invention, what I claim as new and desire to protect by Letters-Patent, is:—

1. In a device of the class described, a stock elliptical in cross section, the said stock being upwardly split from the lower terminal at an angle of substantially forty-five degrees to the minor axis of the cross sectional ellipse to form bifurcating arms, the said arms being outwardly flexed from the stock; cutting means carried by the terminals of the arms.

2. In a device of the class described, a stock elliptical in cross section, and having in its upper face a slot disposed in the longer axis of the cross sectional ellipse; a set-screw mounted in the stock, arranged to cooperate with the slot, and disposed in the shorter axis of the cross sectional ellipse; arms projecting laterally from the lower terminal of the stock; cutting means carried by the terminals of the arms.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

OSCAR E. HENDRICKS

Witnesses:

J. J. SMITH,
A. L. LOVE.