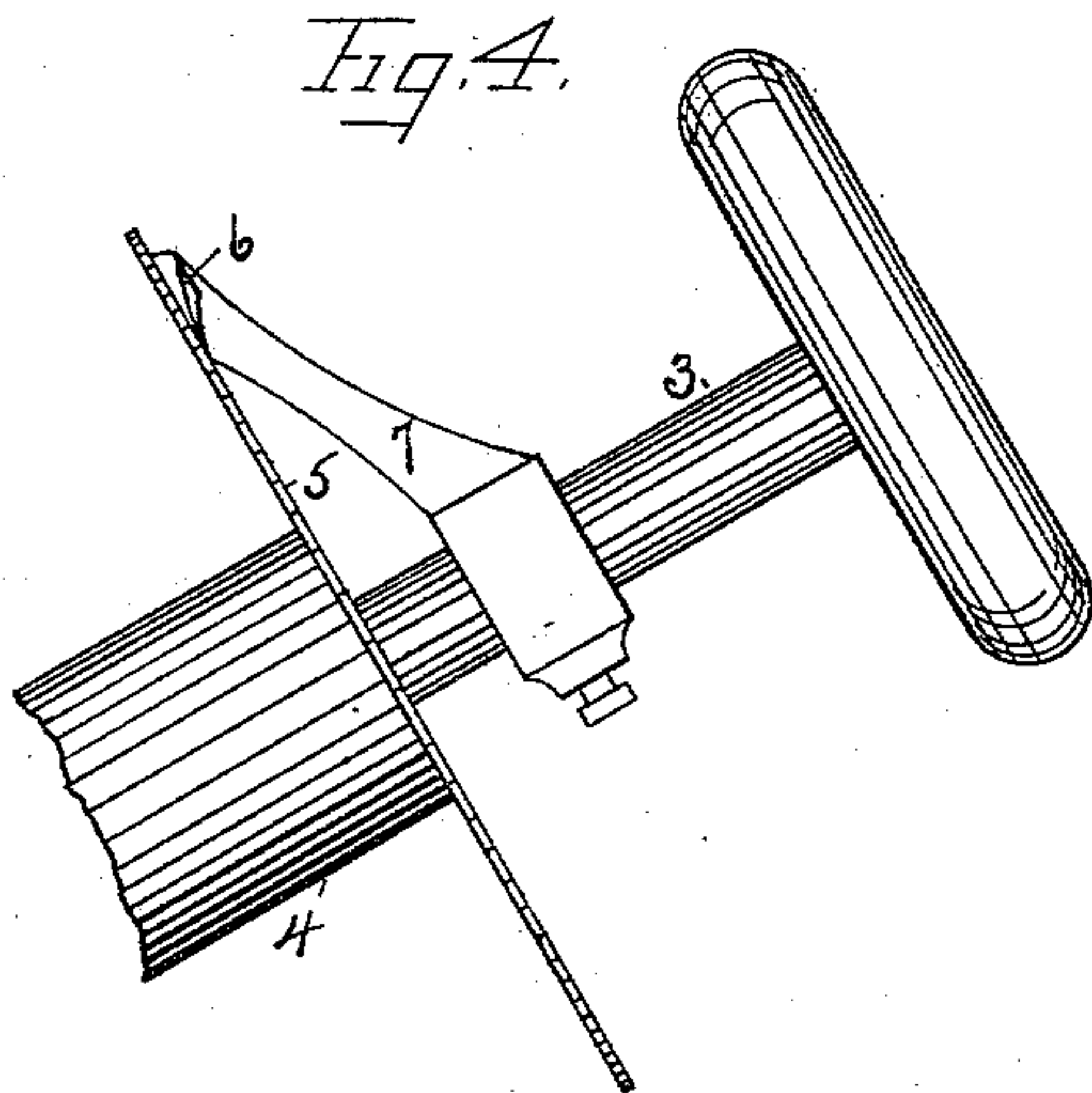
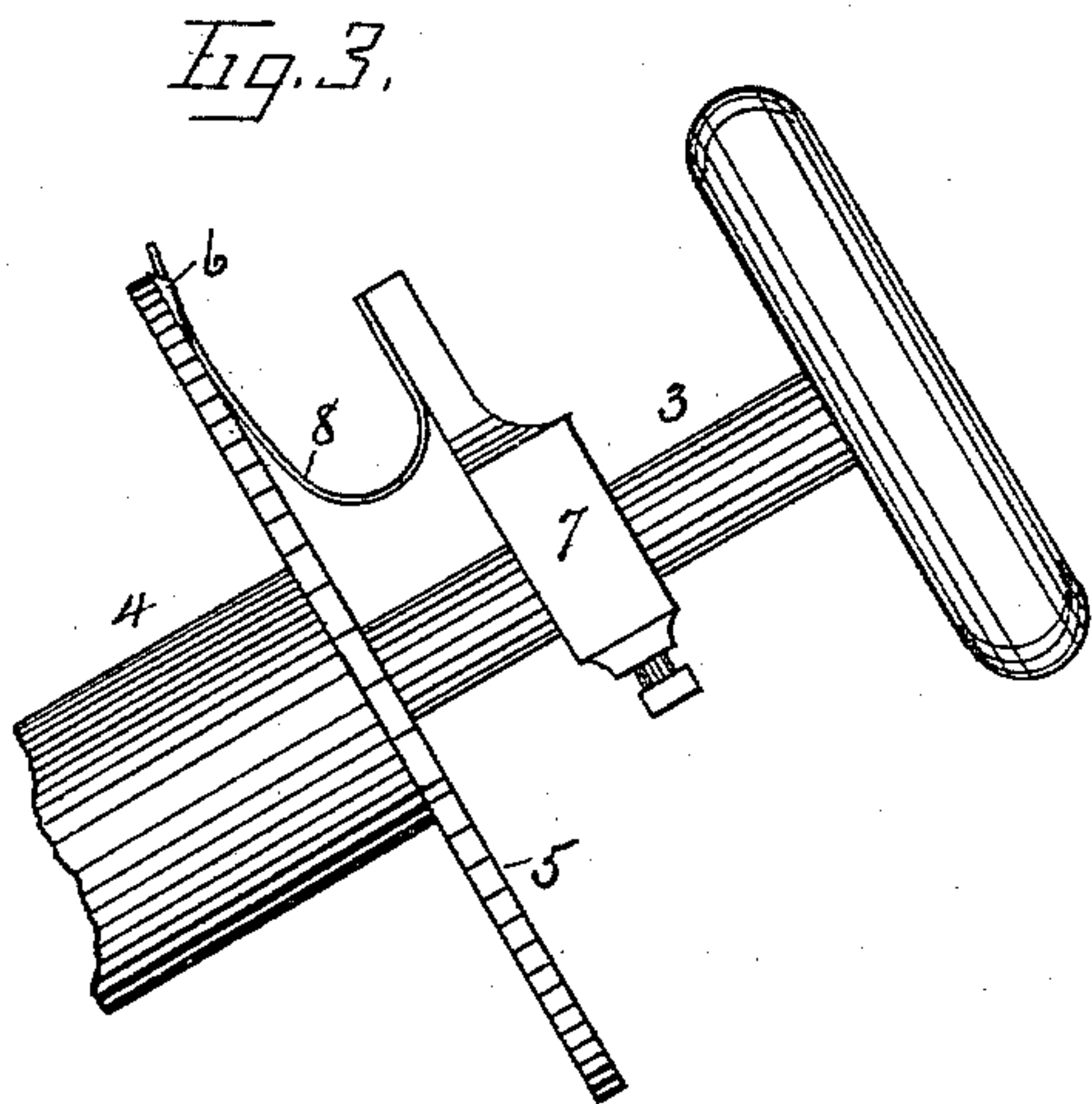
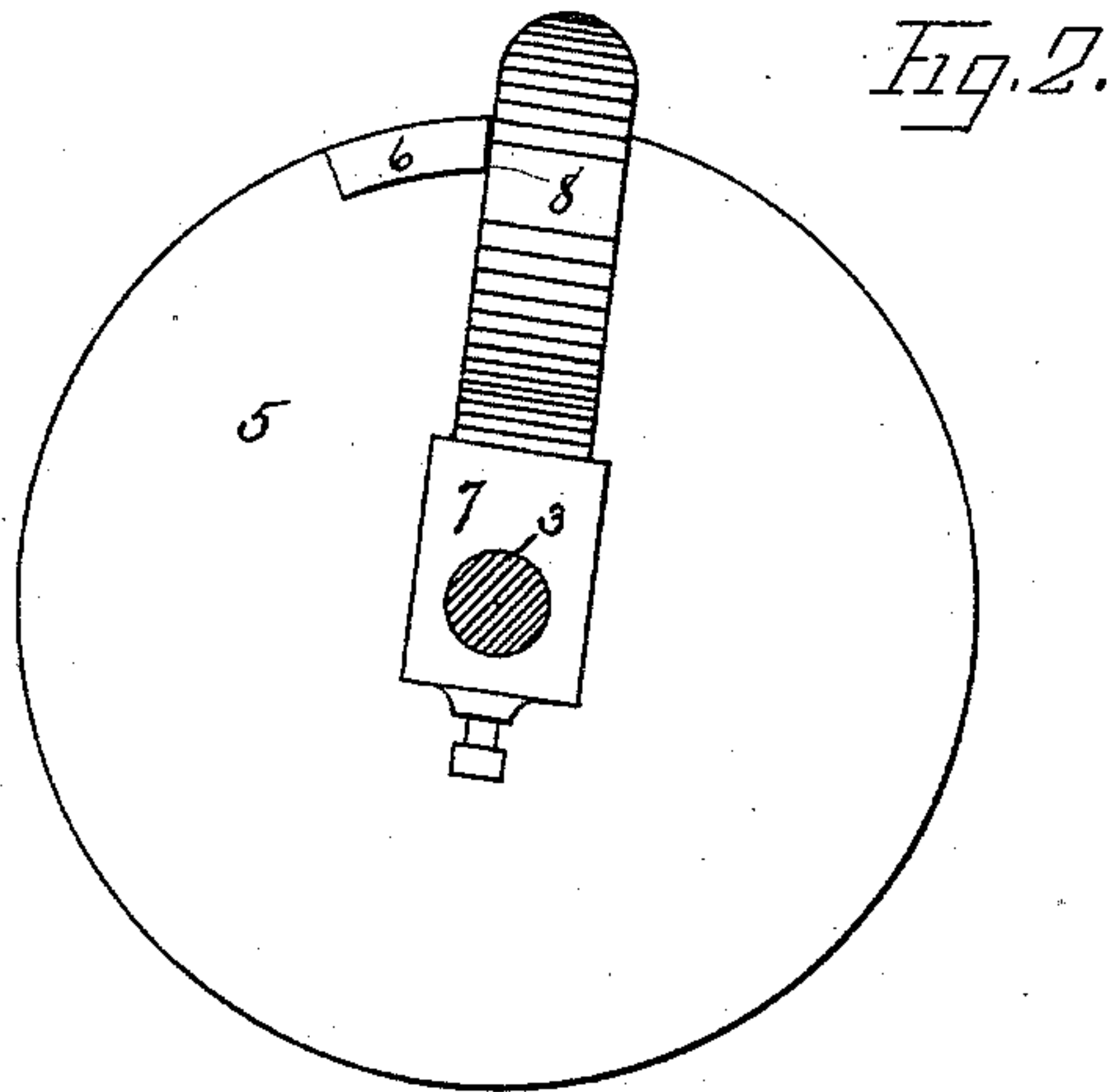
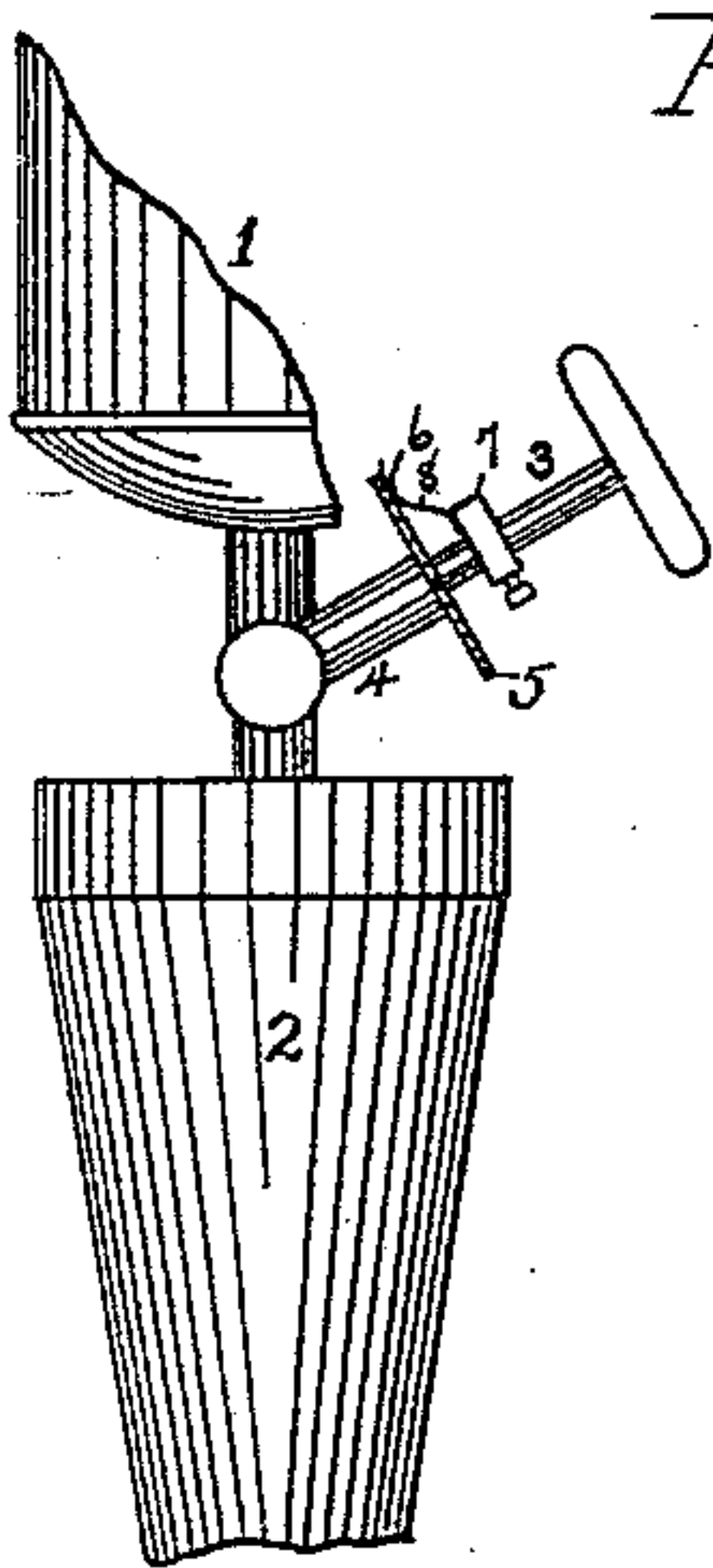


(No Model.)

C. M. HOLLINGSWORTH.
VALVE FOR VAPOR STOVES.

No. 457,779.

Patented Aug. 18, 1891.



WITNESSES

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CHARLES M. HOLLINGSWORTH, OF CLEVELAND, OHIO.

VALVE FOR VAPOR-STOVES.

SPECIFICATION forming part of Letters Patent No. 457,779, dated August 18, 1891.

Application filed January 8, 1891. Serial No. 377,118. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. HOLLINGSWORTH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Valves for Vapor-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of my invention in its preferable form applied to a vapor-stove. Fig. 2 is an enlarged front view of the same. Fig. 3 is a side view of a modified form of said invention, and Fig. 4 is a side view of another modified form thereof.

In the operation of vapor-stoves substantially like that shown in Letters Patent No. 421,834, granted to me February 18, 1890, and also shown in numerous of my other patents and applications, a volatile liquid hydrocarbon is fed through a valve-controlled outlet from a tank into a vaporizing-chamber, from which both the liquid and the vapor formed therefrom flow by gravity downward through a closed conduit to the burner. As I have explained in a prior application, it is desirable to provide these stoves with a stop arrangement properly adjusted at the factory, whereby an ordinary user of the stoves may be assisted in opening the valve just far enough to supply the normal feed—that is to say, the right quantity of liquid to produce at the burner a regular flame of the proper size. It is also desirable that this stop mechanism be easily movable out of the way, so that in starting the stoves the valve may for a short time be opened beyond the point for securing the normal feed and then moved back to the stop or point where the normal feed is supplied. The form of valve usually employed to close the outlet from the tank is a screw-down valve, which by frequent use becomes so loose that a person with an unsteady hand may move the valve too far, and sometimes an accidental touch or a jarring of the floor will cause it to move from the position in which it has been placed and in which the stove is operated properly.

While it is not pretended that the invention hereinafter described may not be ad-

vantageously used in connection with other devices than vapor-stoves, yet in all the various forms in which it is shown in the drawings this invention is particularly adapted to be used in connection with that form of vapor-stoves above referred to and shown in the prior patent, for the purpose, primarily, of preventing accidental displacement of the valve and for the further purpose of indicating when the valve has been opened to the point for supplying the normal feed and at the same time permitting it to be turned past the point, when desired.

I will now proceed to describe the invention as shown in the drawings.

1 represents a tank having an outlet through which the liquid is discharged drop by drop into the vaporizing-chamber 2. A screw-down valve 3 is adapted to close this outlet. The valve-stem screws into the valve-sleeve 4, and is provided with the usual hand-wheel on its end for operating it.

5 represents a disk secured to a valve-sleeve and having a boss or projection 6 on its face.

7 represents an arm surrounding the valve-stem and adjustably secured thereto by a set-screw.

8 represents a spring rigidly secured at one end to the arm 7 and adapted to press at its free end against the disk 5, and thus act as a spring-pressed friction-brake on the valve-stem to prevent any sudden or accidental movement thereof. The spring, when the valve has been opened sufficiently, strikes the boss 6 and stops the farther opening of said valve; but when it is desired to open it farther the spring is drawn down and back by the fingers and the valve opened, as desired. In Fig. 3 the spring is U-shaped, one end being secured to the arm 7, while the other bears against the disk; but this form of the device operates in substantially the same manner and with the same results. In Fig. 4 the disk 6 is made of spring metal and the arm which is attached to the valve-stem engages with it. This is a mere reversal of the parts and operates in the same manner to produce the same results.

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

1. The combination of a valve-sleeve and a screw-down valve with a disk secured to the valve-sleeve and an arm adjustably secured to the valve, either the disk or arm being resilient and producing a pressure upon the other, substantially as and for the purpose specified.

2. The combination of a valve-sleeve and a disk rigid therewith with a screw-down valve, an arm adjustably secured thereto, and a spring exerting its pressure against said arm and disk, substantially as and for the purpose specified.

3. The combination of a valve-sleeve and a disk rigid therewith having a boss on its front face with a screw-down valve, an

arm adjustably secured thereto, and a spring exerting its pressure against said arm and disk, substantially as and for the purpose specified.

4. The combination of a valve-sleeve and a disk rigid therewith having a boss on its front face with a screw-down valve, an arm adjustably secured thereto, and a spring secured at one end to said arm and bearing at the other end against the face of said disk, substantially as and for the purpose specified.

CHARLES M. HOLLINGSWORTH.

Witnesses:

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