J. R. SCOHY.

GLASS CUTTER.

APPLICATION FILED DEC. 11, 1920.

1,435,985.

Patented Nov. 21, 1922.

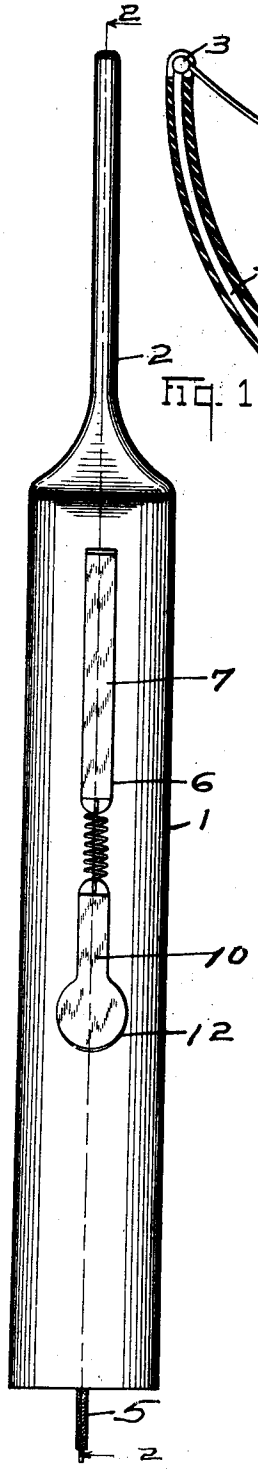


Fig. 1.

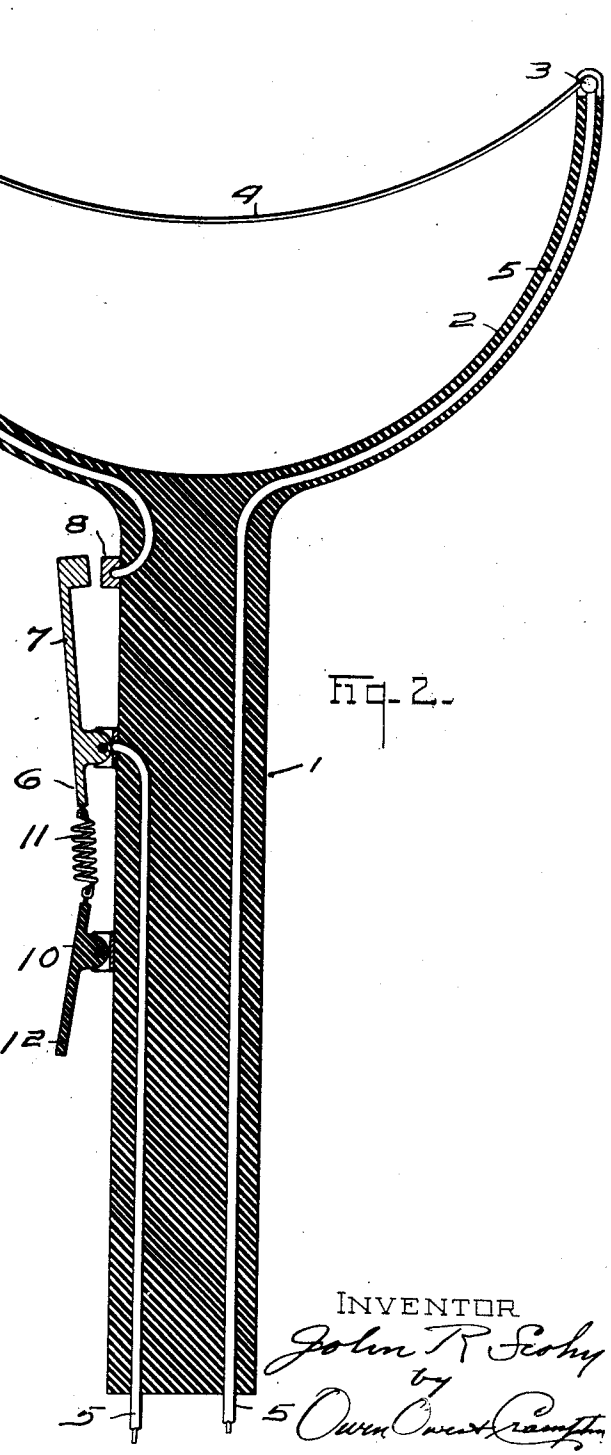


Fig. 2.

INVENTOR

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by

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UNITED STATES PATENT OFFICE.

JOHN R. SCOHY, OF OKMULGEE, OKLAHOMA.

GLASS CUTTER.

Application filed December 11, 1920. Serial No. 429,842.

To all whom it may concern:

Be it known that I, JOHN R. SCOHY, a citizen of the United States, and a resident of Okmulgee, in the county of Okmulgee and State of Oklahoma, have made an Invention Appertaining to Glass Cutters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

My invention has for its object to provide means for severing or cutting glass cylinders by means of a hot wire.

The invention may be contained in structures of different forms and to illustrate a practical application of the invention I have selected one of the structures containing the invention and shall describe it hereinafter. The structure selected is illustrated in the accompanying drawings.

Figure 1 of the drawings is an edge view of the glass cutter, and Fig. 2 is a sectional view taken on the line 2—2 indicated in Fig. 1.

1 in the figures is a handle that may be formed of any suitable material such as, fibre. The handle 1 is provided with arms 2. Pins 3 are located in the ends of the arms and are connected together by means of a resistance wire 4. The resistance wire 4 is of such a length that when placed against a glass cylinder to be severed it will conform throughout the greater portion of its length to the curvature of the cylinder. The pins 3 are connected to wires 5 located within the arms 2 and within the handle 1. The wires 5 are connected to a source of current supply.

A switch 6 is located in the circuit of the wires 4 and 5. It is provided with a movable switch member 7 and a contact member 8. The switch member 7 is pivoted to a lug or a pair of ears 9 secured to the handle 1. A second pivoted member 10 is also secured to the handle 1, and a spring 11 is connected between the switch member 7 and the pivoted member 10 in such a way that when the end 12 of the pivoted member 10 is moved away from the handle 1 the spring 11 will draw the switch member 7 away from the contact 8, but when the end 12 of the pivoted member 10 is moved towards the handle 1 the spring will be compressed and will push the switch member 7 against the contact 8 to close the circuit of the wires 4 and 5 since the spring passes to opposite sides of the line connecting the pivot points of the two members.

In use of the structure the wire 4 is placed against the glass cylinder to be cut and the switch 6 is closed by the operation of the pivoted member 10 to cause a current to pass through the wire 4 which heats the wire to the required temperature. The wire 4 is then drawn by manipulation of the handle around the glass cylinder and the local expansion of the glass caused by the high local temperature produced by the wire 4 will cause the cylinder to sever along the line that the wire 4 is drawn. If desired the surface of the glass cylinder may be first scratched or cut by the glass cutting point and then the wire 4 may be drawn along the cut or scratch, which will cause the cylinder to sever along the marked or scratched line.

I claim:

In a glass cutter, a supporting handle, a pair of arms extending circularly from the handle and substantially forming a semi-circle, a resistance wire extending between the ends of the said arms and forming substantially a 90° arc of a circle subtending the semi-circle formed by the arms.

In testimony whereof I have hereunto signed my name to this specification.

JOHN R. SCOHY.