

No. 779,593.

PATENTED JAN. 10, 1905.

S. M. GORHAM.
TABLEAU IGNITING MACHINE.
APPLICATION FILED JULY 15, 1903.

2 SHEETS—SHEET 1.

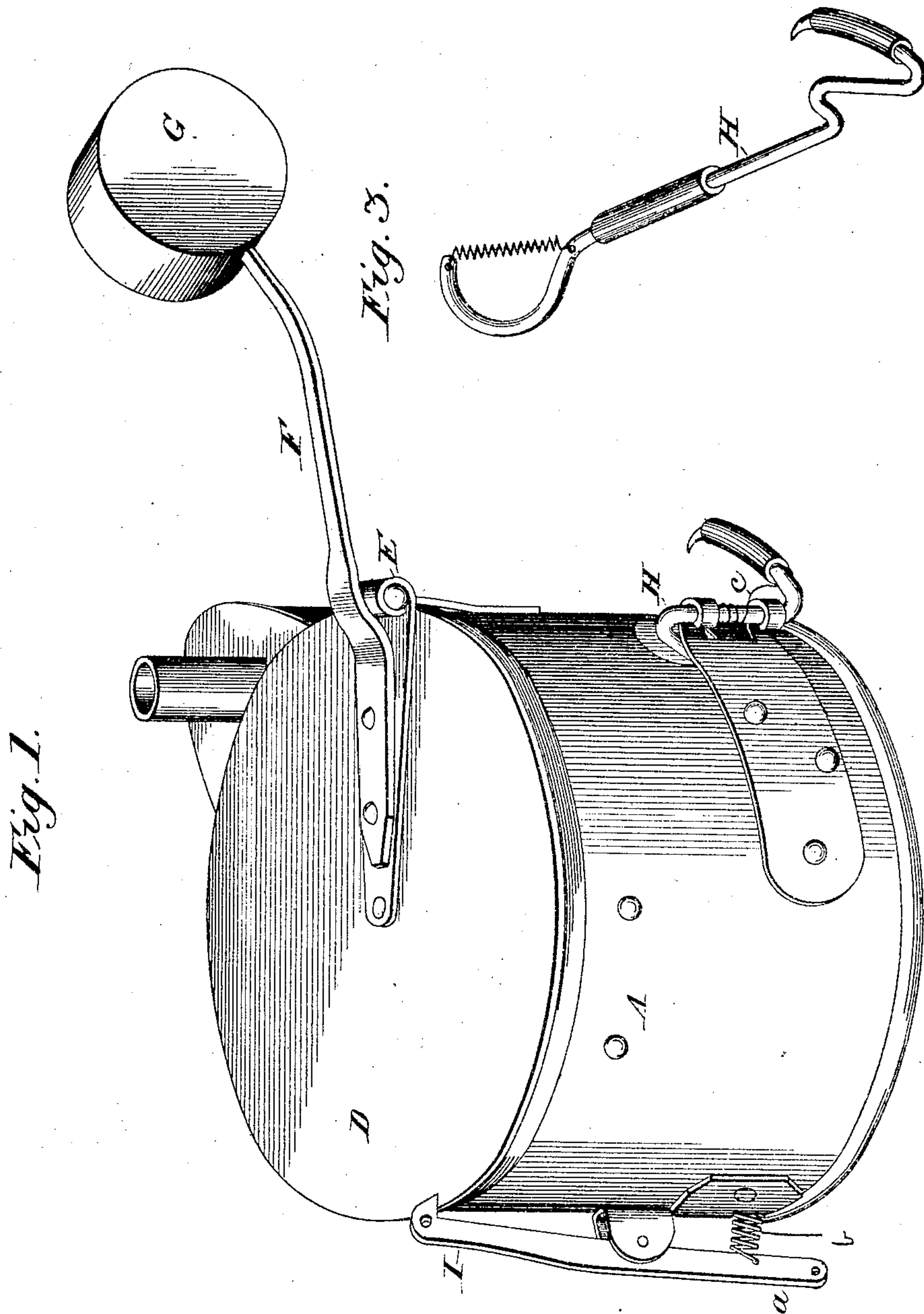


Fig. 1.

Fig. 3.

Witnesses:

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Jesse E. LaDow.

Inventor:

Samuel M. Gorham

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2 SHEETS—SHEET 2.

Fig. 2.

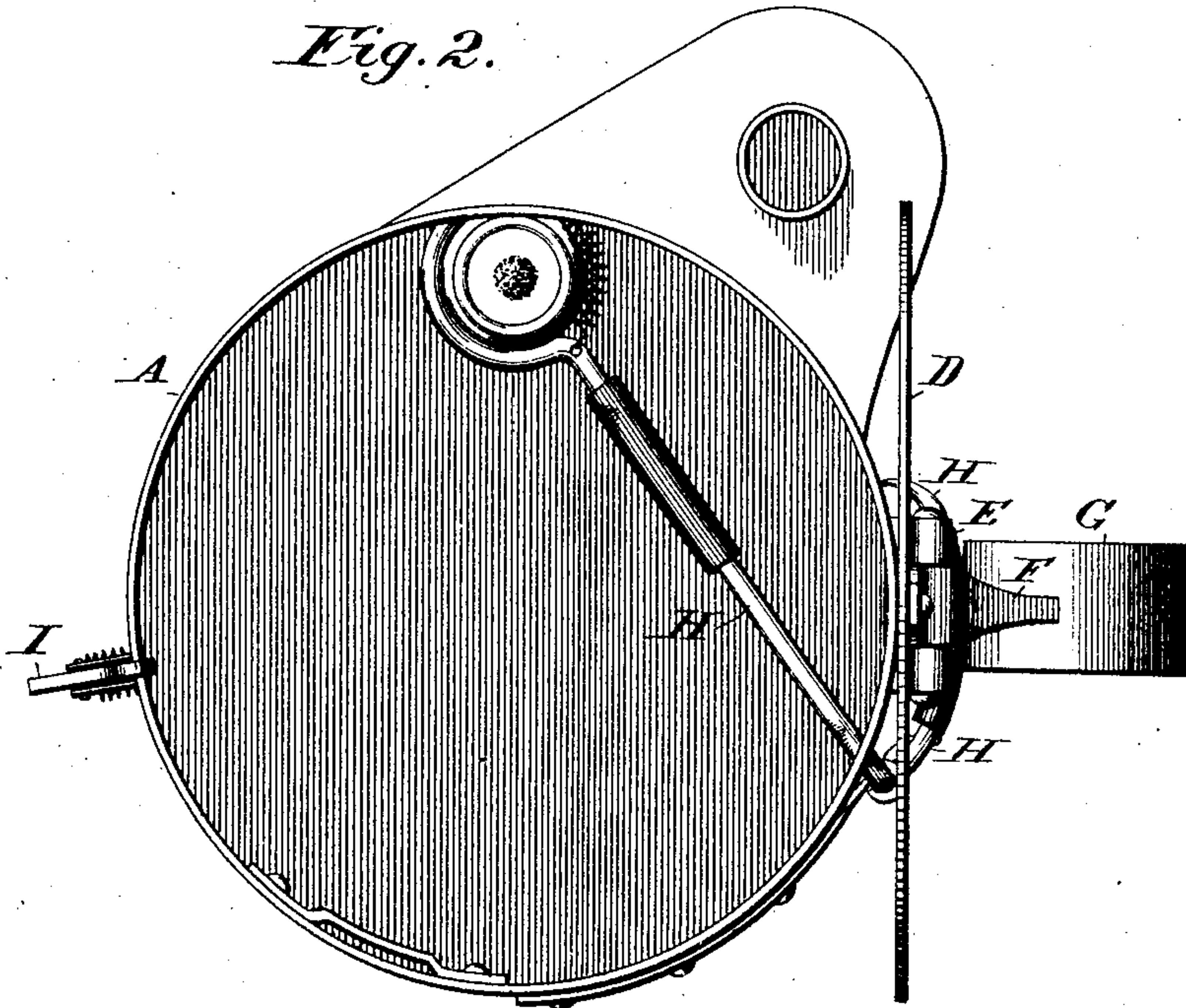
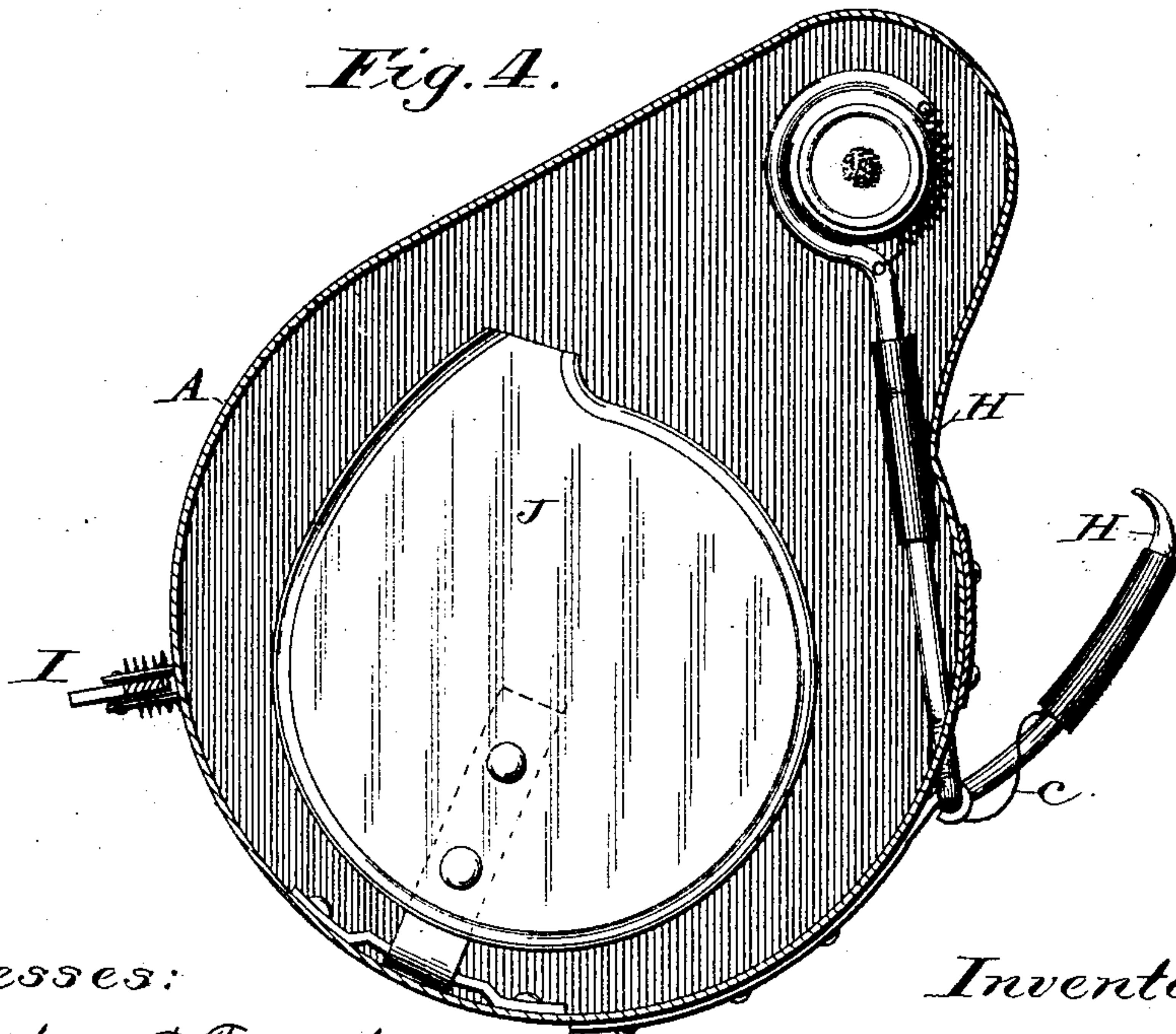


Fig. 4.



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UNITED STATES PATENT OFFICE.

SAMUEL M. GORHAM, OF MANSFIELD, OHIO, ASSIGNOR OF ONE-HALF TO
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TABLEAU IGNITING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 779,593, dated January 10, 1905.

Application filed July 15, 1903. Serial No. 165,701.

To all whom it may concern:

Be it known that I, SAMUEL M. GORHAM, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented a new and useful Improvement in Tableau Igniting-Machines, of which the following is a specification.

My invention relates to improvements in a machine for igniting red or other colored fire powder or preparation to be used in tableaux in theaters or other places of amusement or instruction or in degree work in secret societies and orders or wherever it is desirable to use red or colored fire.

The objects of the improvement are to provide a machine whereby the red or colored fire powder or preparation can be instantaneously ignited by the spectator from a distance and out of sight of the operators and without the preliminary exposure of a light, as occurs in the ignition of the powder with a match or other exposed means. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a general view of the exterior of the machine set up and arranged as it would be with the lid closed ready for operation. Fig. 2 shows the machine with the plate removed immediately after operation with the lid open and the lever which swings the lamp into position to ignite the powder. Fig. 3 shows the lever or arm by which the lamp is swung from its normal position in the receptacle at the side under the fuse. Fig. 4 shows the plate upon which the powder is spread preparatory to being ignited.

The several parts of the machine are referred to by letters in the drawings and the same letters are used to designate the same parts in each figure of the drawings.

A is a circular box or drum-shaped receptacle closed at the bottom, but open at the top, as shown in Fig. 2 of the drawings. This receptacle is elevated the desirable height. The lid D is hinged to the upper rim of the box, as shown at E in Figs. 1 and 2, and has an arm F extending outward a suitable distance, and the arm at the end is provided with a circular-shaped weight or disk G of sufficient

weight for the purpose and rigidly attached to said arm, as shown in Fig. 1. The arm or lever H has at one end—the end within the box—a ring or other suitable means to hold a spirit-lamp in the position and manner shown. This arm H is pivoted to the box at the point where it passes out through the side of the box and then is turned at an angle backward so as to be struck and moved by the descending weight G. The outer end of the arm H may be covered with rubber or other suitable material to break and deaden the contact of the weight with it.

The lid D is held in place when closed ready for operation by trigger I and is released when desired by the operator pulling on the cord or wire attached to the lower end of the trigger at the point *a*. The trigger I occupies a vertical position on the outside of the box and is pivoted to the side of the box at about midway of its length, and it is held in position to hold the lid closed by the spring *b* and at the point indicated, and the notch at the upper end extending over the edge of the lid holds it in that position until released by the operator.

The arm or lever H is actuated by the spring *c* so that in its normal position the lamp, held at its inner end, is held in the small receptacle at the side of the box and away from the fuse. In this position it is ready to be struck and swung or operated by the descending weight. The plate J is placed in a position about level with the upper edge of the box and is held in that position to the inside of the box by an arm or any other suitable means for the purpose. The fuse, of celluloid, is laid under the powder when spread on the plate at *d*. The lamp will be swung immediately under this point in the operation.

The mode of operation is as follows: Open the lid D and cover the plate J with such quantity of red or other colored fire powder as may be desirable for the purpose. Lay the celluloid fuse on the top of the powder at *d*, then close the lid and with the lamp lighted the machine is ready for operation. The operator at the moment desired will release the lid by pulling on the cord or wire attached to

the trigger at *a*. With the lid released the weighted end of arm G will descend with sufficient momentum and striking the outer end of lever H will swing the lamp under the
5 fuse, ignite the fuse, and it will ignite the colored-fire powder.

Having fully described my invention, I claim and desire to secure by Letters Patent the following:

10 In a flash-lamp, the combination of a receptacle, a plate within the receptacle, a spring-actuated lever extending through the recep-

tacle and, pivoted to the side thereof, a lamp supported by said lever, a lid for the receptacle, a weighted arm hinged thereto and a
15 spring-actuated trigger pivoted to the outside of said receptacle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL M. GORHAM.

Witnesses:

L. R. PARSONS,
W. S. KERR.