

(No Model.)

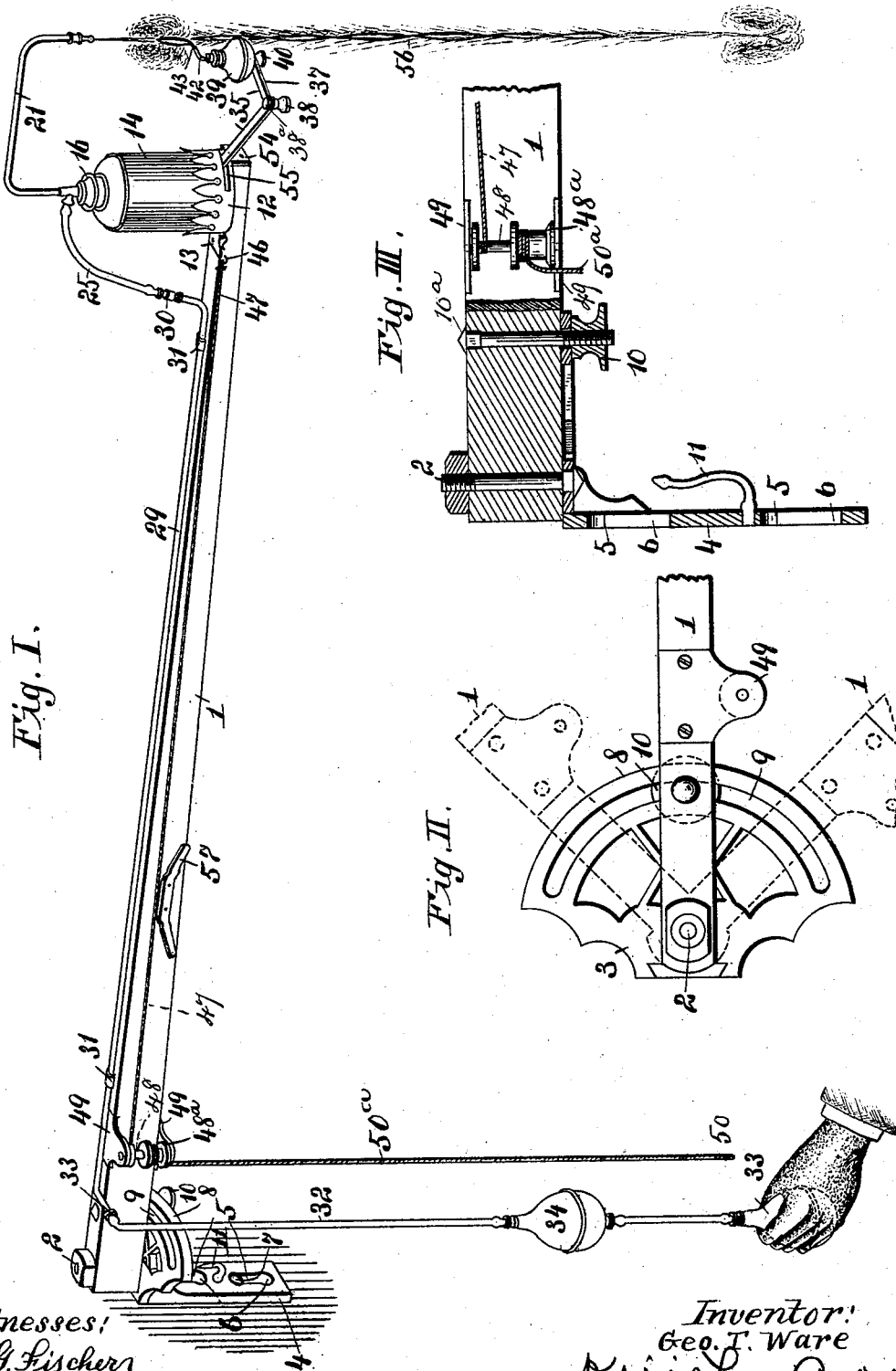
2 Sheets—Sheet 1.

G. T. WARE.

FIRE COMMUNICATOR OR DISPLAY DEVICE.

No. 492,595.

Patented Feb. 28, 1893.



Witnesses:  
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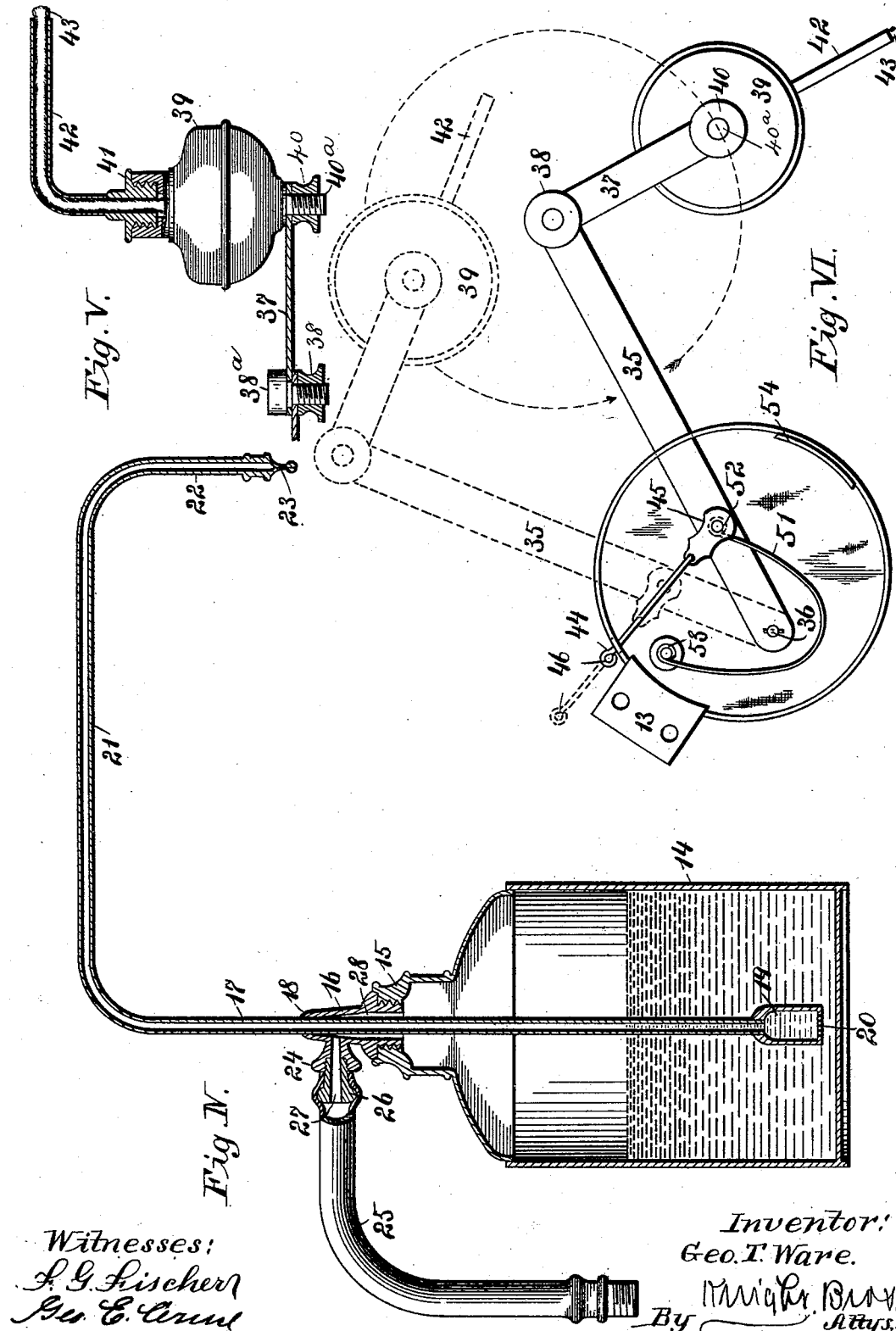
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# UNITED STATES PATENT OFFICE.

GEORGE T. WARE, OF PLEASANT HILL, MISSOURI.

## FIRE-COMMUNICATOR OR DISPLAY DEVICE.

SPECIFICATION forming part of Letters Patent No. 492,595, dated February 28, 1893.

Application filed March 26, 1892. Serial No 426,564. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE T. WARE, of Pleasant Hill, in the county of Cass and State of Missouri, have invented certain new and useful Improvements in Fire Communicators or Display Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to a certain new and useful device for communicating fire and displaying the same; and the same may be used for a variety of purposes, such as theaters, railway signals, processions, secret organizations, &c.; and my invention consists in features of novelty hereinafter described and pointed out in the claims.

Figure I, is a perspective of my device, attached to a suitable support. Fig. II, is an enlarged detail plan view of my means for adjusting the same. Fig. III, is an enlarged section of the bracket for supporting the arm and the adjusting device showing pulley for operating the communicating lamp. Fig. IV, is an enlarged detail sectional view of the reservoir for holding the display liquid. Fig. V, represents a side elevation of the communicating lamp, showing the wick tube and support in section. Fig. VI, is a large detail bottom view of the communicating lamp, and the means for operating the same.

Referring to the drawings: 1, represents a long horizontal arm secured at its rear end by a bolt 2, to a bracket 3, having a vertical leg 4, provided with slotted openings 5, said openings being provided at their lower ends with enlargements 6, for passing over a screw or like device 7, for holding said bracket; said openings 5, being narrower at their upper ends, form a tight connection between the bracket and the screw over which they are placed. The bracket 3, is also provided with a horizontal semi-circular support 8, having a semi-circular opening 9, therein in which fits a screw-bolt 10<sup>a</sup> having a thumb-nut 10, said screw-bolt engaging the arm 1 and passing down through said semi-circular opening and whereby, when said thumb-nut is adjusted, the arm 1, may be fixed at any desired point; and by loosening said thumb-nut the arm 1, may be shifted, as shown in dotted lines, Fig. II. The leg 4, of the bracket is provided with a

hook 11, the purpose of which will be described later on. To the outer end of the arm 1, is secured a cup 12, partly by means of a flange 13, secured thereto.

14, represents a reservoir resting in the cup 12, said reservoir having an internal threaded top 15, into which screws a tapering plug 16.

17, represents a tube passed through and having a tight connection with the plug 16, as shown at 18, having an enlarged lower end, as shown at 19, in which are perforations 20, said tube extending down into the reservoir 14, to a point near its bottom. The tube 17, is provided with a right-angle extension 21, and a downward extension 22, with a contracted nozzle 23, on its lower end; but I do not confine myself to the shape shown of said tube.

24, represents a stub tube extending out from the side of the plug 16, to which is secured one end of a flexible or other tube 25, by means of a plug 26, or other suitable coupling, said tube 24, having a central passage 27, connecting with an opening 28, in the plug 16. To the opposite end of the tube 25, I connect a pipe 29, as shown at 30. The pipe 29, is secured to the arm 1, by means of staples 31, said pipe extending rearwardly along said arm, and connected at its rear end with a tube 32, as shown at 33, said tube 32, being preferably formed of rubber, or other flexible material. To the tube 32, is attached, an air pumping device consisting preferably, of two bulbs 33, 34, the bulb 33, being for the purpose of forcing air into the tube 32; and the bulb 34, acting as a receiver or storage chamber for the same. The air is drawn in through the bulb 33, and forced through the tube 32, and tube 29, into the reservoir 14, forming a pressure on the combustible fluid contained therein, said pressure forcing the fluid through the tube 17, and out at the nozzle 23, in a fine stream or spray. Beneath the cup 12, is pivoted an arm 35, as shown at 36, said arm having a jointed extension 37, connected to the arm 35, by a screw 38<sup>a</sup> and a thumb-nut 38, by which means the extension 37, may be adjusted, at any desired angle. To the outer end of the extension 37, is secured a lamp reservoir 39, by means of a screw 40<sup>a</sup> and a thumb-nut 40, said lamp reservoir 39, having a screw plug or cap-piece

41, secured thereto connected with which is a tube 42, having a wick 43, extending down into said reservoir.

44, represents a link connected with the arm 35, by a strap 45, said link being looped at its outer end, as shown at 46, to which may be attached a cord 47, said cord extending rearwardly along said arm 1, to a pulley 48, pivoted to brackets 49, secured to said arm, the cord passing around said pulley a number of times. This pulley is provided with a spool 48<sup>a</sup> having an operating cord 50<sup>a</sup> so that as the end 50 is pulled outward the arm 35, bearing the lamp, will be thrown around causing the lamp to pass nearly beneath the discharge nozzle 33, in order to ignite the gasoline or other material contained within the tank 14, and which is being forced out by the pressure of air thereon, so that the flame is formed of a greater or less length, according to the amount of pressure on the fluid in the reservoir 14.

51, represents a spring having one of its ends connected with the arm 35, as shown at 52, and having its opposite end connected with the bottom of the cup 12, as shown at 53. The object of the spring is to throw the lamp 39, away from its position under the nozzle 23, when the cord 47, has been released; the lamp thus remaining, while at rest, to one side, out of contact with the stream of combustible fluid.

54, represents a flange by which the cup is secured to the forward end of the arm 1. The arm 35, operates in a slot 55, in the cup which limits its backward and forward movement.

It will be seen that by pressing on the bulb 33, the combustible material in the reservoir 14, is forced out through the nozzle 23, and as the flame of the lamp is moved into contact therewith, a blaze is formed, which may extend to the floor, as shown at 56, or a part of this distance, if desired, according to the amount of air forced into the reservoir 14; or the blaze may be made to shoot in other directions by changing the form of the tube 21.

57, represents a bracket on the arm 1, over which the cord 47 may be secured when the device is not in use. The hook 11, serves as a support to the tube 32, and bulbs 33, 34, when not in use.

I claim as my invention—

1. The combination of the bracket, the long horizontal arm supported on the bracket having flanges 13, 54, the cup 12 located between the flanges, the reservoir 14 supported in the cup, the tube 21 extending from the reservoir an air tube connected with the reservoir and supported by the arm and an air pumping device connected with the air tube; substantially as described.

2. The combination of a supporting arm, a

reservoir 14, the discharge tube 21 extending from the reservoir, an air tube connected with the reservoir, a pumping device connected with the air tube, a pivoted arm and extension and a lamp supported on the extension, substantially as described.

3. The combination of a reservoir 14; means for supporting the same; means for conveying air into said reservoir a tube for discharging the liquid from the reservoir; an adjustable arm a lamp; said lamp being supported on the adjustable arm; a cord in connection with said arm for moving the burner of said lamp into contact with the fluid discharged from said reservoir, and a spring for returning said arm and lamp back to their normal position; substantially as described and for the purpose set forth.

4. The combination of a reservoir 14, having a discharge tube 21; means for forcing air into said reservoir; a pivoted arm 35, having an extension 37; a thumb-screw 38, for adjusting said extension; a lamp 39, secured to said extension; a link 44; a cord 47, for moving said arm; to throw said lamp in contact with the fluid discharged from the tube leading from said reservoir, and a spring for throwing said arm 35, and the lamp supported thereon, to one side and out of contact with the stream shooting from said reservoir; substantially as described and for the purpose set forth.

5. The combination of a reservoir 14; a discharge tube leading therefrom; a plug 16, connected with said reservoir, and forming a tight connection with said discharge tube; said plug having an air space 28; a tube 24, connected therewith, and having a central opening; a pipe 25, connected with said tube, and means for forcing air through said pipe 25, into said reservoir; substantially as set forth.

6. The combination of the pivoted arm 1; a reservoir 14, supported thereon having a discharge tube 21; an air tube secured along said arm and connected with said reservoir, and bulbs 33, 34, on said air tube by which air is forced through the latter; substantially as and for the purpose set forth.

7. The combination of the pivoted arm 1; a reservoir 14, supported thereby; a discharge tube 21; an air tube leading into said reservoir; a pivoted arm supported by the arm 1; a lamp on said pivoted arm; a cord connected with the arm which supports the lamp; said cord extending around the pulley 48, for operating said lamp supporting arm; substantially as and for the purpose set forth.

GEORGE T. WARE.

Witnesses:

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