

W. W. HANNAH.

AUTOMATIC LIGHTING-DEVICE FOR GAS-BURNERS.

No. 181,260.

Patented Aug. 22, 1876.

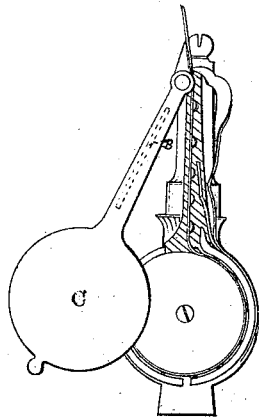


Fig. 1.

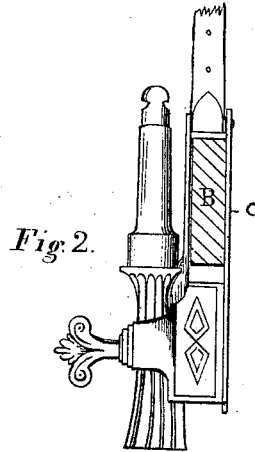


Fig. 2.

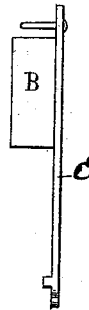


Fig. 3.

Witnesses.

*Shuman Van Ness*  
*J. M. Witbeck*  
*Wheeler H. Clarke*

Inventor.

*W. W. Hannah*

# UNITED STATES PATENT OFFICE.

WILLIAM W. HANNAH, OF HUDSON, NEW YORK.

## IMPROVEMENT IN AUTOMATIC LIGHTING DEVICES FOR GAS-BURNERS.

Specification forming part of Letters Patent No. **181,260**, dated August 22, 1876; application filed June 3, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM W. HANNAH, of the city of Hudson, in the State of New York, have invented an Improvement in Automatic Lighter for Gas-Burners, of which the following is a specification:

Letters Patent of the United States, No. 170,913, were issued to Henry S. Stockwell and Albert R. Weiss December 7, 1875, for automatic lighter for gas-burners. My improvement is particularly applicable to this lighter; and is designed to remedy a defect in their construction which has been to me a source of annoyance—I mean the inconvenience and difficulty of inserting the fulminate-ribbon when required.

The object of invention is to so construct the guideway or channel for the fulminate-ribbon that it shall be more accessible, more easily inserted and replaced by removing from the Stockwell and Weiss lighter what they call the guide-piece, which is fixed and permanent, being cast in one piece with the guard-flange next to the gas-socket, and substituting in its place a movable or replaceable guide-piece or bottom to the ribbon-channel, connecting it permanently with and to the inside of the arm of the pivoted cover of the magazine. This guide-piece, cover, and arm can all be cast in one piece, or be stamped or struck out flat, and the guide-piece afterward raised or turned up at right angles to the arm and cover. By attaching this guide-piece or channel-bottom to the arm of the cover, so as to be removed and swung back away from the ribbon whenever the magazine is uncovered to remove and replace the same, makes it also, in the principle of its operation, automatic, since its advantages are gained, or office necessarily performed, by the equally necessary opening of the magazine to permit the removal and replacement of the ribbons.

When the magazine is thus uncovered the back side of the ribbon is entirely open, and

accessible from the coil in the magazine up to the pivot-socket and anvil. This construction enables one easily to introduce the ribbon under the slide-piece or feeder and the hammer, for when the hammer is raised, as in turning on the gas, (the magazine being open,) there is nothing in the way of the ribbon. By closing the magazine the guide-piece B, or bottom of the ribbon-channel, is replaced, and ready for use.

The arm of the swing-cover forms the guard-flange on the outside of the guide-piece, same as it does in the patent above referred to.

Figure 1 of the accompanying drawings is a front view or elevation of the lighter with the cover swung off the magazine, the bottom and one side of the ribbon-channel being also necessarily removed or swung from their respective places. Fig. 2 is a side view or elevation, showing the back of guide-piece or bottom of ribbon-channel in place, as when the magazine is closed, the pivoted cover being in place, ready for use. Fig. 3 is a longitudinal sectional view of the cover-arm and guide-piece or channel-bottom.

The pivoted cover, having the bottom B of the guide-channel attached to its arm, and the slide-piece or feeder in its operation pressing upon it, renders it necessary to lock or fasten the cover in its place. For this purpose I cut a gain or notch in the upper edge of the rim of the ribbon barrel or magazine, and provide the cover with a beveled catch to fit into it. Other equivalent devices may be used for this purpose.

I claim as my invention—

In an automatic lighter for gas-burner, substantially such as described, the pivoted cover C, provided with the bottom or guide-piece B, as specified.

W. W. HANNAH.

Witnesses:

SHERMAN VAN NESS,  
JACOB M. WITBECK.