Anited States Patent Pffice.

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Letters Patent No. 62,704, dated March 5, 1867.

IMPROVED MODE OF KINDLING FIRES.

The Schedule referred to in these Tetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM H. Towers, of the city of Boston, county of Suffolk, and State of Massachusetts, have invented a new and improved Mode of Kindling Fires, which may be used to ignite anthracite coal and other fuel without the use of charcoal or other kindling material; and I do hereby declare that the following is a full and exact description of the construction and use of the same.

The nature of my invention consists in the introduction, by means of a jointed pipe, of one or more jets of gas beneath the grate supporting the fuel, the flame of which gas coming in contact with the fuel will, in a very few minutes, cause its full and complete ignition without any kindling material having been used.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

To the side of the stove, or to the wall or jamb near the stove or grate, I fix, by means of staples or other convenient fastenings, a gas pipe, connected with the other gas pipes of the house, and thence with the gas mains. At the end of this pipe, by means of a swivel-joint, I fix an arm or branch pipe similar to an ordinary jointed bracket gas fixture with a jet or burner. By means of the swivel-joint or joints the bracket may be swung round, so as to bring an ignited gas jet immediately under the coal or fuel in the grate or stoye, on which it is allowed to play till the coal or fuel is fully ignited. The bracket or arm may then be swung back and folded up, so as to rest against the side of the stove or against the wall till again wanted to kindle a fire. By means of suitable joints the bracket may be made to project the burner into the stove instead of passing under the grate. The burner at the end of the bracket may be a simple jet, such as is used in the ordinary gas heaters, or it may be a compound burner which will draw in with the gas a volume of air, so as to burn the gas and produce the greater amount of heat. Instead of the arrangement of pipes above described, something like what is known as a drop-light may be used to bring the gas down from the gas fixture to the fuel in the grate or stove, or the gas jet may be introduced by means of a flexible tube temporarily or permanently attached to the gas fixtures for the purposes of this invention. The advantages of this invention are that a fire may be lighted in a few minutes and at small cost, and removes the necessity of providing other kindling. I am aware that gas compressed in portable reservoirs has been used for lighting fires; this, however, I do not claim, nor is it practicable, except at great expense.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—The use of gas for kindling fires, substantially as herein set forth and described.

Witnesses:

CHARLES E. ABBOTT, WM. J. GARDNER. WM. H. TOWERS.