

(No Model.)

C. F. ALLIS.

FIRE KINDLER ATTACHMENT FOR STOVES AND GRATES.

No. 287,402.

Patented Oct. 30, 1883.

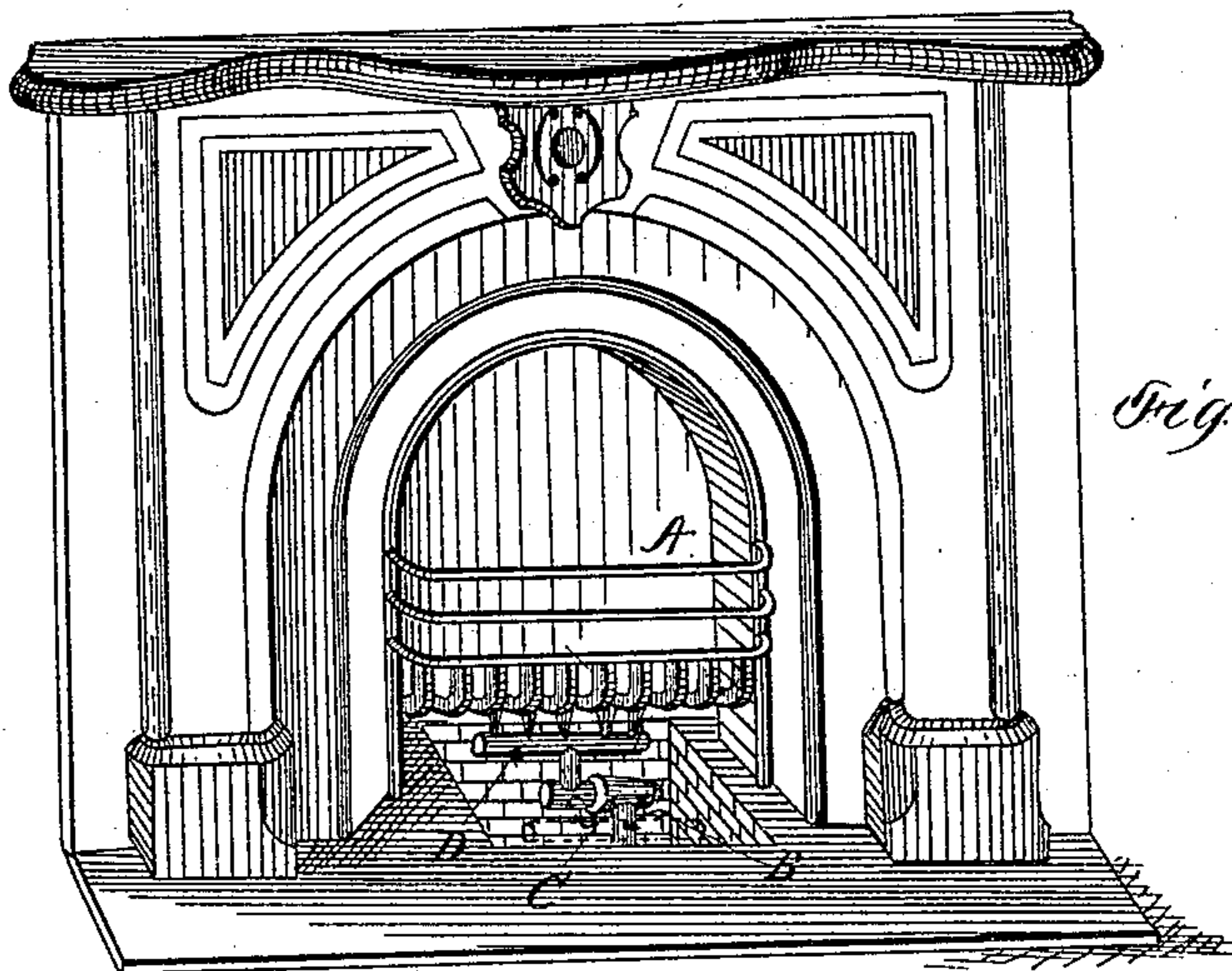


Fig. 1.

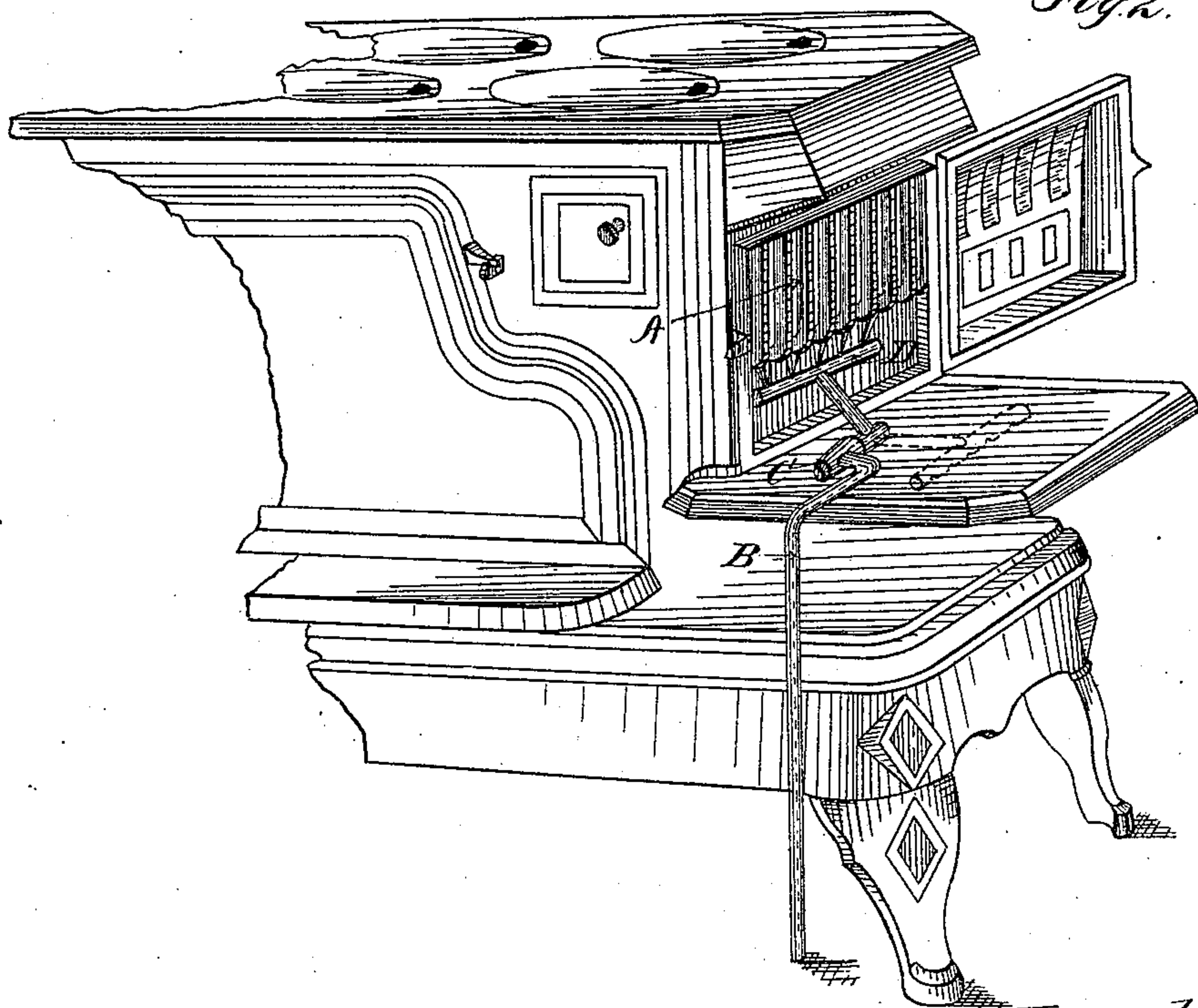


Fig. 2.

Witnesses.

W. R. Edelen

Robt. H. Porter.

Inventor

C. F. Allis

per Hallock & Hallen
Attys

UNITED STATES PATENT OFFICE.

CHARLES F. ALLIS, OF ERIE, PENNSYLVANIA.

FIRE-KINDLER ATTACHMENT FOR STOVES AND GRATES.

SPECIFICATION forming part of Letters Patent No. 287,402, dated October 30, 1883.

Application filed November 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. ALLIS, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented a certain new, useful, and Improved Fire-Kindler Attachment for Stoves, Grates, &c.; 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.

This invention relates to attachments for grates, stoves, &c., by which coals therein can be lighted by a gas-flame without the use of fire-kindlers.

The object of the invention is to enable a fire of coal—hard or soft—to be started through the means of an appliance connected with the grate or stove, and thus dispense with the use of kindling-wood, and so not only avoid the trouble of procuring the kindling, but also the dirt and litter often caused through its use. The said appliance consists of a pipe and burner combined and arranged substantially as will hereinafter be described and claimed. There should be provided a burner by which a series of flames may be had along the length of the grate, in order to get the best effect, and to this end I provide a T of pipe with the horizontal part perforated in such a manner as to give a series of jets along its length, and this is so placed as to lie along the front of the bottom of the grate. I also connect this T with the supply-pipe by a cock-joint, by which means the T can be turned down away from the grate when not in use for starting the fire, and when so turned down the gas is shut off, and when turned up for use the gas is turned on ready for use. The forms of stove or fire-grates or fire-places are so various that I cannot here show all the changes in construction and adjustment of the fixture which will be required; but they will all be on the same general plan, and what I do show is sufficient to enable a mechanic to construct and apply one to any form of stove.

I am aware that it is common to apply gas-burners to stoves and fire-places for the purpose of burning gas for fuel therein, and that

hydrocarbon-burners consisting of gas-pipe 50 perforated and in the form of a T, and that cock-joints, have been used; but none of these in any sense anticipate my invention, nor do they form any part thereof.

My device is shown in the accompanying 55 drawings as follows:

Figure 1 shows my device as applied to a grate in a fire-place. Fig. 2 shows it applied to a cooking-stove.

A represents the grate or fire-box; B, the 60 supply pipe or connection with the house gas-pipes; C, the cock-joint, and D the burner. In each figure the burner is shown in position for starting the fire, and its position when not in use is shown by dotted lines.

The construction will be easily understood 65 from the drawings and the general description given above, and need not be gone into here in detail.

The operation of the device is as follows: 70 The grate having been cleaned of the remains of the former fire and filled with fresh coals, the T-burner is turned up into place below the grate, and the gas is thereby turned on, and as soon as lighted will burn against the coals 75 and soon set them burning. As soon as the fire is well kindled the T-burner is turned down and the gas thus shut off and the burner is out of the way.

Of course the gas may be shut off by means 80 other than a cock-joint; but I intend using some means of turning the burner away from the fire, so that the jet-holes will not get filled with ashes or otherwise clogged. Such changes will be simple details of construction, 85 and can be made by any one to suit their convenience.

I am aware that removable gas-burners have been placed beneath grates for the purpose of igniting therein, but am not aware that burners having a drop-joint, so that the perforations can be removed from beneath the grate without disturbing the connections, have ever been used. Therefore

What I claim as new is—

1. The combination of a grate, a gas-supply pipe, and a burner attached to said gas-pipe by a swing-joint, substantially as de- 95

scribed, so that the burner may be swung out of the way, for the purpose set forth.

2. The combination of a grate, a gas-supply pipe, and a burner attached to said pipe
5 by a cock-joint, substantially as described, so that the burner may be swung out of the way, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES F. ALLIS.

Witnesses:

JNO. K. HALLOCK,
ROBT. H. PORTER.