J. J. RIEHL.

BURNER.

APPLICATION FILED JUNE 4, 1909.

957,098.

Patented May 3, 1910.

Fig. 1.

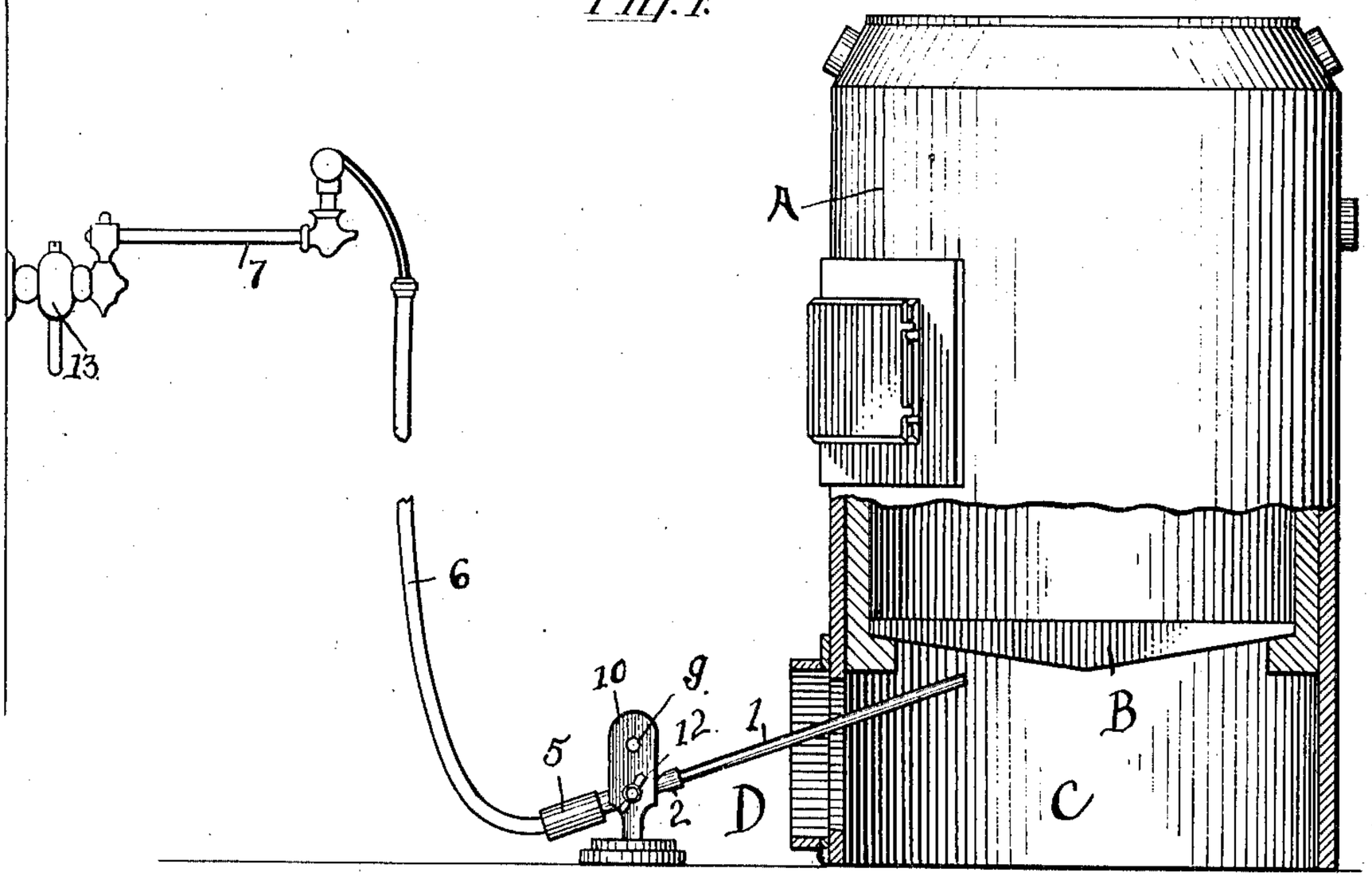


Fig. 2.

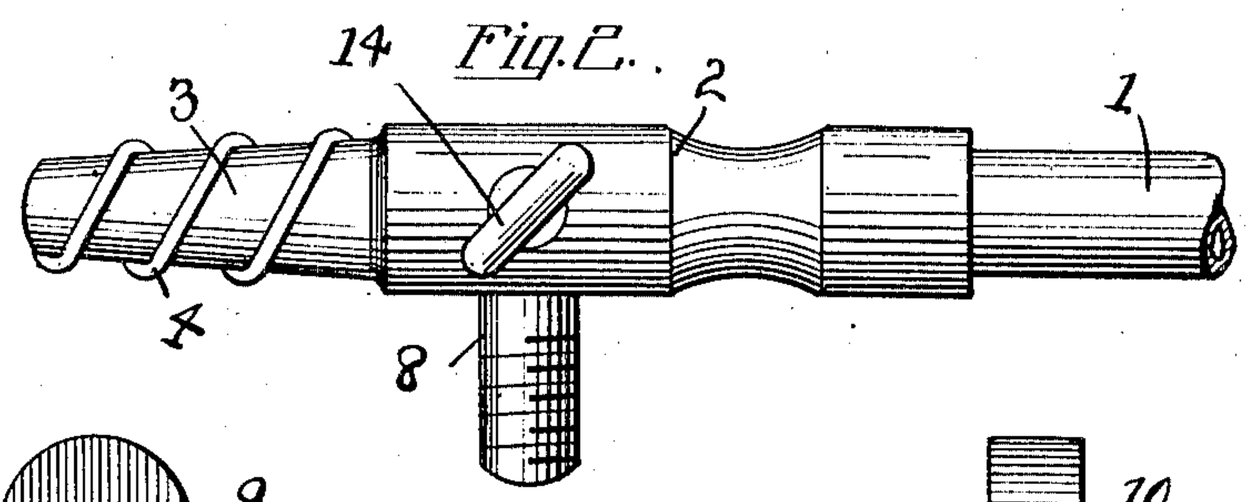


Fig. 3.

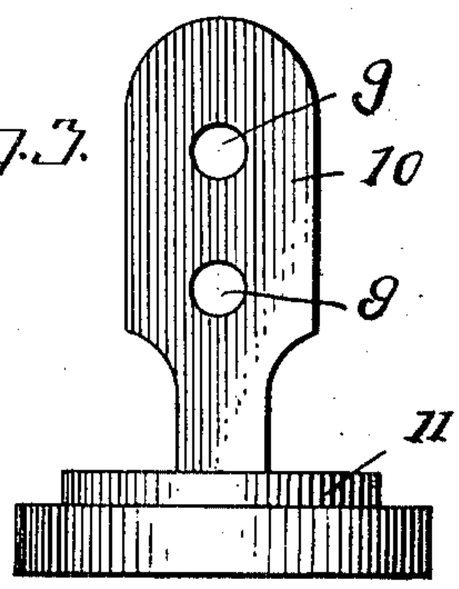
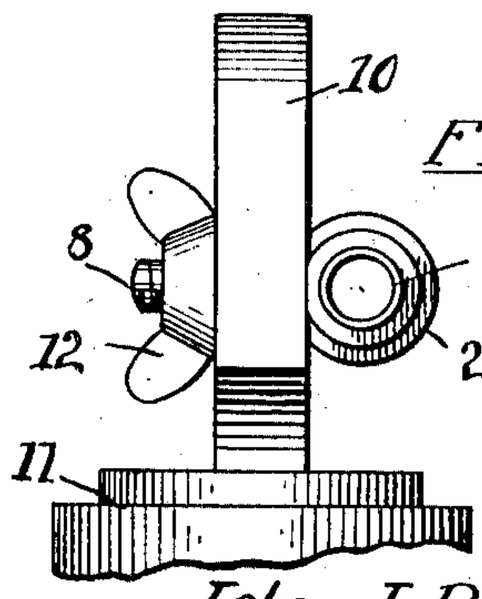


Fig. 4.



Witnesses

Wm. Smith.

James A. Voell

Inventor

John. J. Riehl.

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

JOHN J. RIEHL, OF CLEVELAND, OHIO.

BURNER.

957,098. Specification of Letters Patent. Patented May 3, 1910.

Application filed June 4, 1909. Serial No. 500,179.

To all whom it may concern:

Be it known that I, JOHN J. RIEHL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Burners, of which the following is a specification.

This invention relates to burners, and an object of the invention is to provide a burner adapted particularly for use as a fire starter, and to provide a nozzle or jet head adjustably connected to a bracket and adapted to be disposed immediately beneath the grate of a furnace and to further provide means whereby the jet or nozzle can be conveniently connected with a gas jet or other source of gas or fuel supply.

Other objects and advantages will be apparent as the nature of the invention is better set forth, and it will be understood that changes within the scope of the claim may be resorted to without departing from the spirit of the invention.

In the drawing, forming a portion of this specification and in which like characters of reference indicate similar parts in the several views:—Figure 1 is a side elevation of a portion of a furnace showing parts in section and showing the application of my burner thereto. Fig. 2 is a top plan view of the burner. Fig. 3 is a side elevation of the burner supporting bracket. Fig. 4 is an end view of the bracket.

With particular reference to Fig. 1 of the drawing, it will be seen that a furnace A is employed which may be of any suitable form but which is preferably provided with a grate B disposed immediately above an ash-pit C. The furnace herein shown is provided with an ash-pit doorway D through which extends the nozzle or jet member 1 of my improved burner.

The nozzle or jet member 1 is connected at its outer extremity to a hollow head 2 which is provided at its outer extremity with a tapered extension 3 upon which is formed exteriorly thereof a series of corrugations 4. The extension 3 is thus arranged to receive the socket member 5 of a hose or suitable connection 6, and as shown in Fig. 1 the said hose is connected to the jet of a gas burner 7. The head 2 of my burner is provided with a horizontally disposed threaded stud 8 adapted to be disposed in one of a vertical series of passages 9 formed in the vertical plate 10 of a supporting bracket 11. The stud 8 upon the head 2 has engaged therewith a winged nut 12 which is mounted upon the stud in such manner that it may be brought into frictional engagement with one of the side faces of the plate 10. In this manner it will be readily understood that the nozzle or jet member 1 of my improved burner is adapted to be adjusted angularly so that the end of the said nozzle or jet member within the ash-pit can be disposed immediately beneath the grate B. As clearly illustrated the burner 7 to which one end of the hose or connection 6 is connected is of the usual type and is provided with a suitable valve 13, but I do not desire particularly to rely upon the provision of this valve and I therefore provide the head 2 of my improved burner with a valve 14 adapted to be operated to permit gas from the burner 7 to be discharged therefrom into the nozzle or jet member 1 or to be cut off therefrom as will be readily understood.

In operation, the head 2 is suitably mounted upon the bracket 11 and is properly adjusted so that the end of the nozzle or jet member 1 within the ash-pit will be disposed immediately beneath the grate B as hereinbefore stated, after which the valve 13 of the burner 7 may be opened to permit the gas or fuel to be discharged to said nozzle or jet member 1. After the gas has been turned on at the burner 7 as just described, it can be lighted at the extremity of the nozzle or jet member so that the desired flame can be produced beneath the grate B to effectively ignite the fuel products. After the fuel products have been ignited as just described the gas discharged from the burner 7 can be cut off and my improved burner entirely disconnected from the burner 7 if desired and the nozzle or jet member 1 removed from beneath the grate B of the furnace A.

The device herein shown and described is extremely simple in construction, may be

manufactured at a relatively low cost and will effectively serve the purpose of a fire starter as will be readily understood.

I claim:—

A burner of the class described comprising a bracket having a vertical series of openings formed therein, a head adapted for vertical adjustment in the openings formed in said bracket, said head being arranged for angular adjustment, means upon the bracket for holding the head in its adjusted position, a nozzle carried by the head and a fuel conveying pipe connected with the said nozzle.

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

JOHN J. RIEHL.

Witnesses:
F. W. RIEHL,
R. BURGER.