

(No Model.)

J. H. SHEPHERD & H. H. BEUSCHOTEN.

VAPOR STOVE.

No. 278,752.

Patented June 5, 1883.

Fig. 1.

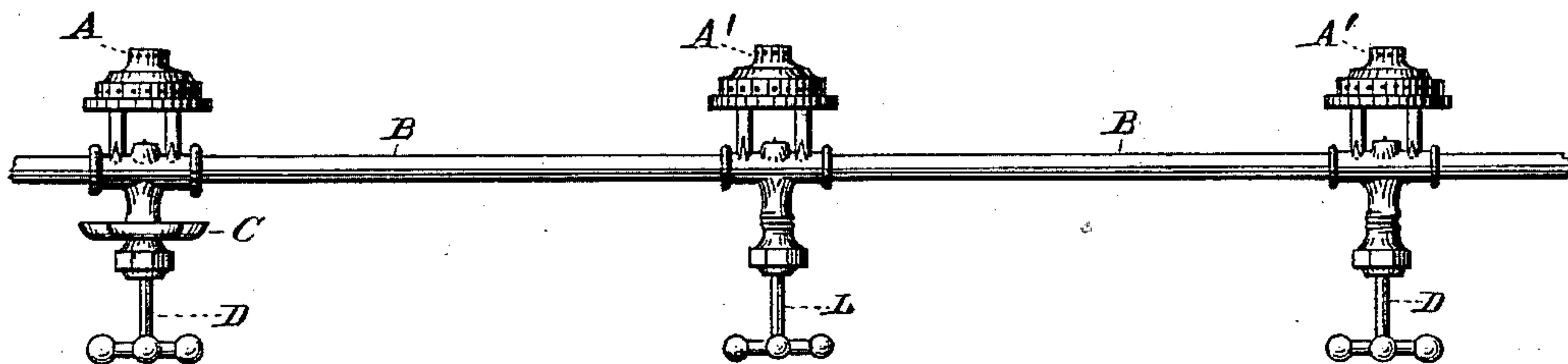


Fig. 2.

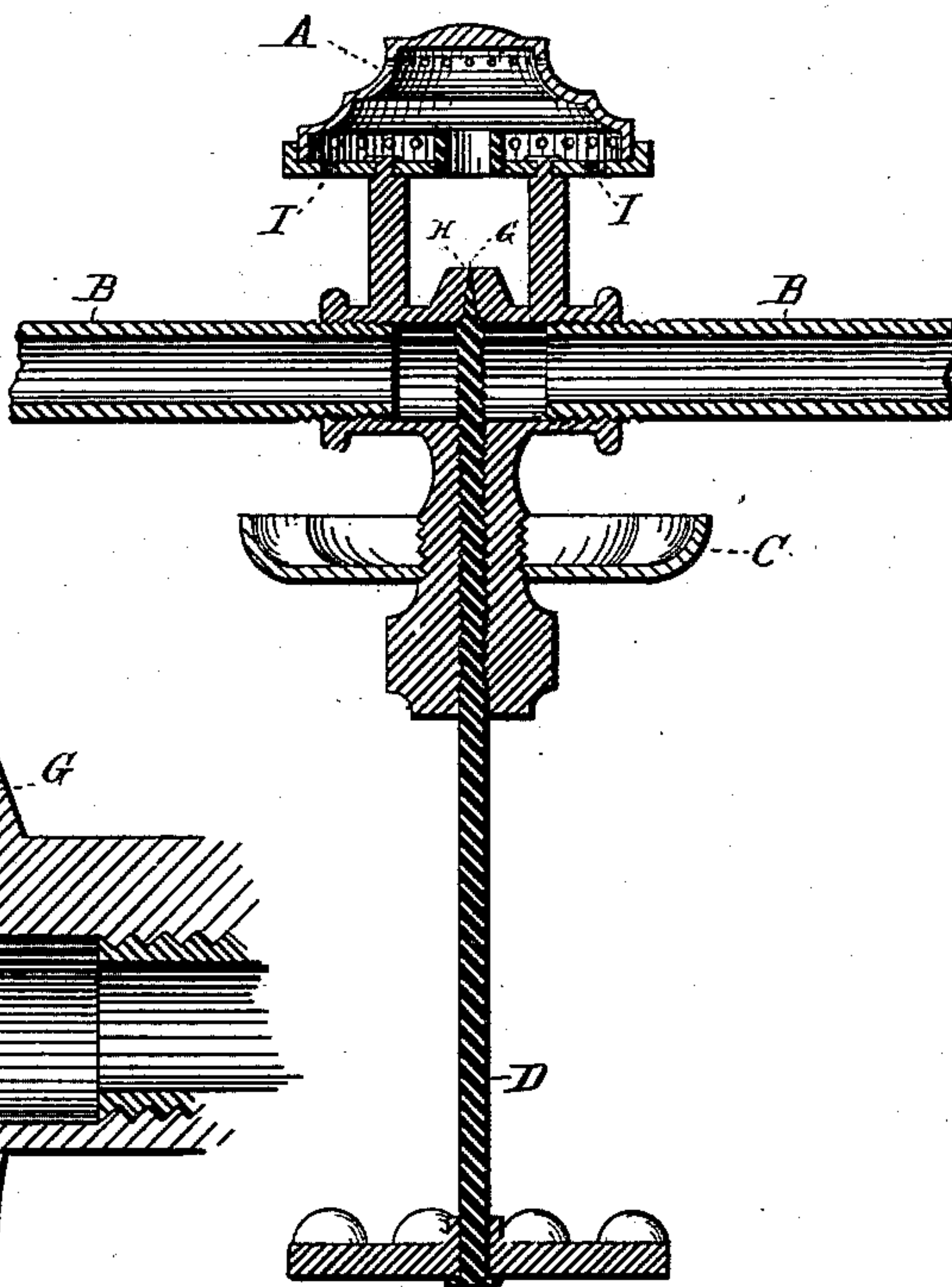
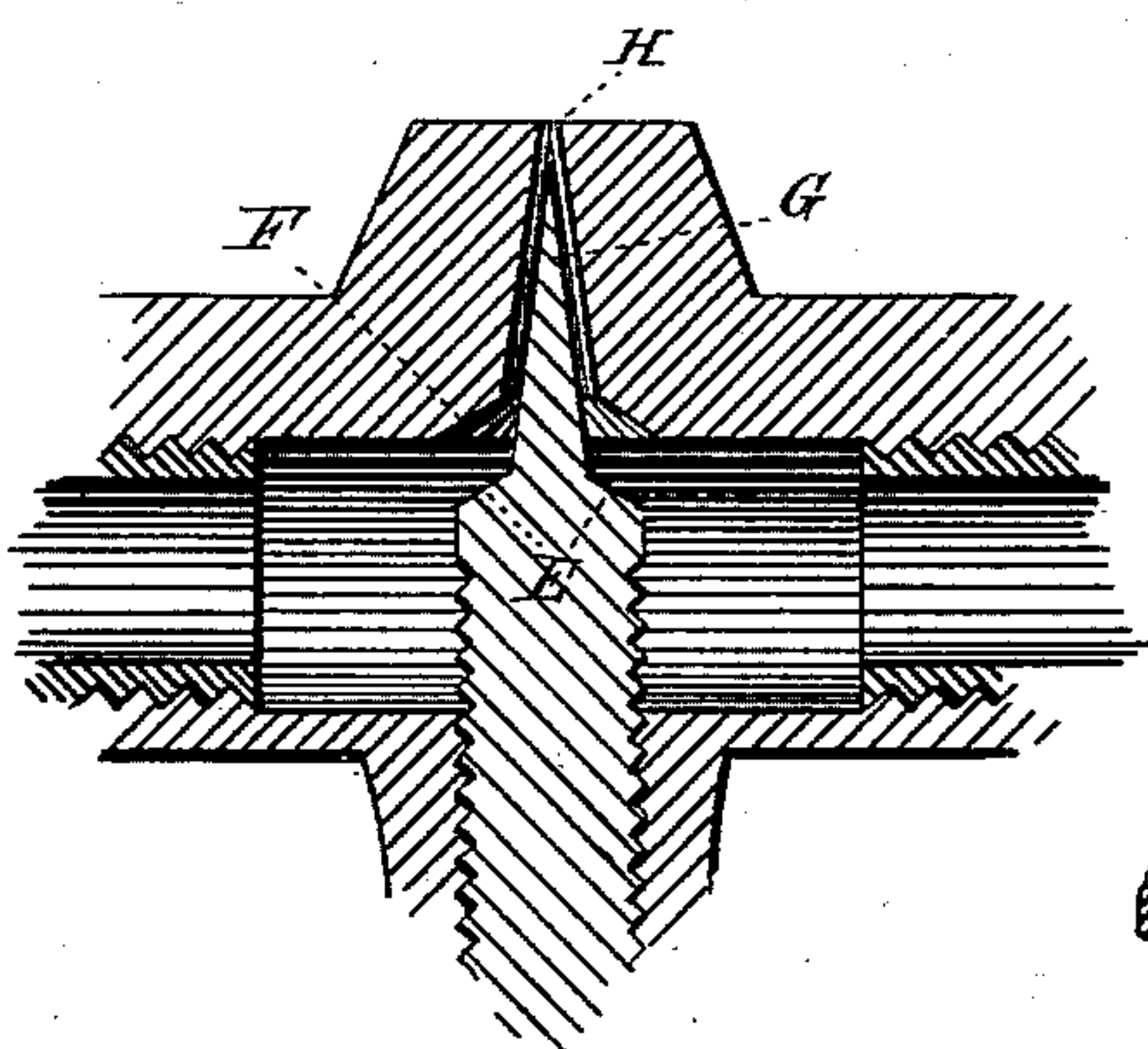


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN H. SHEPHERD AND HOWARD H. BEUSCHOTEN, OF HURON, OHIO.

VAPOR-STOVE.

SPECIFICATION forming part of Letters Patent No. 278,752, dated June 5, 1883.

Application filed October 23, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. SHEPHERD and HOWARD H. BEUSCHOTEN, of Huron, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Vapor-Stoves; and we 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 pertains to make and use the same.

Our invention relates to a vapor-stove; and it consists in certain features of construction and combinations of parts, as will hereinafter be described, and pointed out in the claims.

In the drawings, Figure 1 is an elevation showing our invention. Fig. 2 is a cross vertical section of one portion of the device shown in Fig. 1. Fig. 3 is an enlarged view of a portion of the device shown in Fig. 2, showing more clearly our needle-valve.

A A' A' represent the burners of a vapor-stove; B B, copper tubes connecting the burners.

C is a generating-pan placed under a portion of the tubes B B.

D D D are portions of the stems of the needle-valves with handles attached for operating the same.

E represents a shoulder on and makes a part of the needle-valve. F represents a valve-seat, upon which the shoulder E presses in closing the valve.

G is the point of the needle-valve, and H the small orifice, through which the point G slightly protrudes when the valve is closed. In Fig. 2 are shown small orifices I I in the burner A, through which jets of flame are projected upon the tubes B B in the usual manner in vapor-stoves. The generating-pan C is placed directly under the tubes B B.

We have discovered that tubes made of copper, owing to the great heat-conducting capacity of copper, will conduct heat along the

copper tubes B B in sufficient quantity to protect the vapor in said tubes and keep it from condensing. By our arrangement of the pan C under the tubes B B, as aforesaid, and by the tubes being made of copper or its equivalent, we are enabled to use the tubes B B not only as conductors of fluid from one burner to another, but also to use them as generators and conductors of vapors from one burner to another, thereby enabling us to dispense with generating-pans from all the burners on a stove except one. By the employment of copper tubes B B and the pan C, situated beneath them, we are enabled, after lighting the burner under which the pan is placed in the usual manner, to light any or all of the other burners on the stove by simply applying a match to each burner, a result we believe never before attained, and we also believe that this result is unattainable except by the use of an invention and discovery as aforesaid.

We do not claim any invention or discovery in the use of copper tubes, but only in the new adaptation of said copper tubes and their combination with the other parts, so as to produce the new result described.

What we claim is—

1. The combination, with two or more burners and a copper tube connecting said burners, of a generating-pan located beneath one of the burners, substantially as set forth.

2. The combination, with two or more burners, only one of which is provided with a generating-pan, of a copper tube connecting all of said burners, substantially as set forth.

In testimony whereof we sign this specification, in the presence of two witnesses, this 17th day of October, 1882.

JOHN H. SHEPHERD.

HOWARD H. BEUSCHOTEN.

Witnesses:

W. E. NEWTON,

F. J. MARTIN.