D. BERKEY.

Vapor-Stove for Heating Soldering-Irons.

No. 134,583. Patented Jan. 7, 1873.

Fig. 1

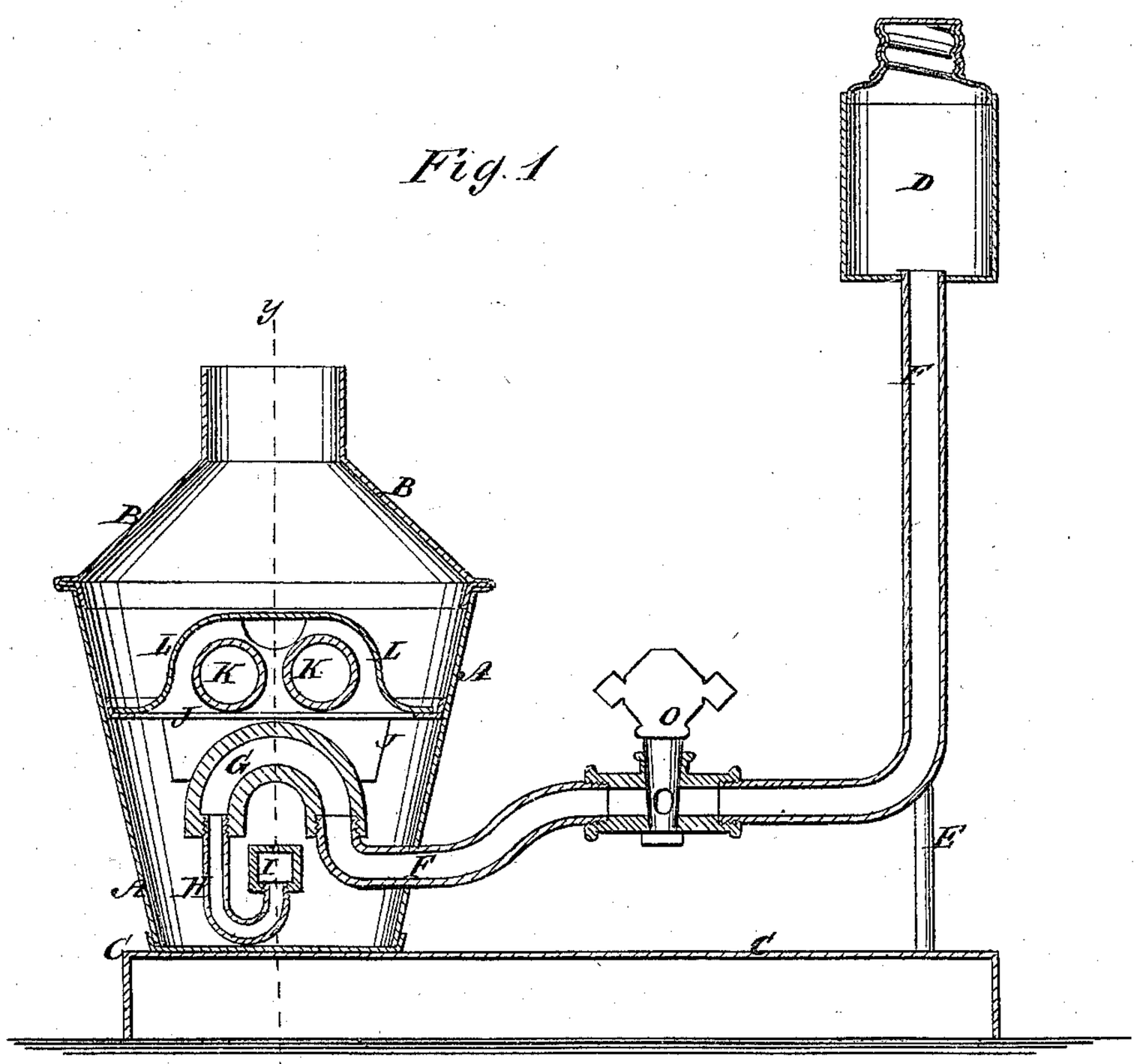
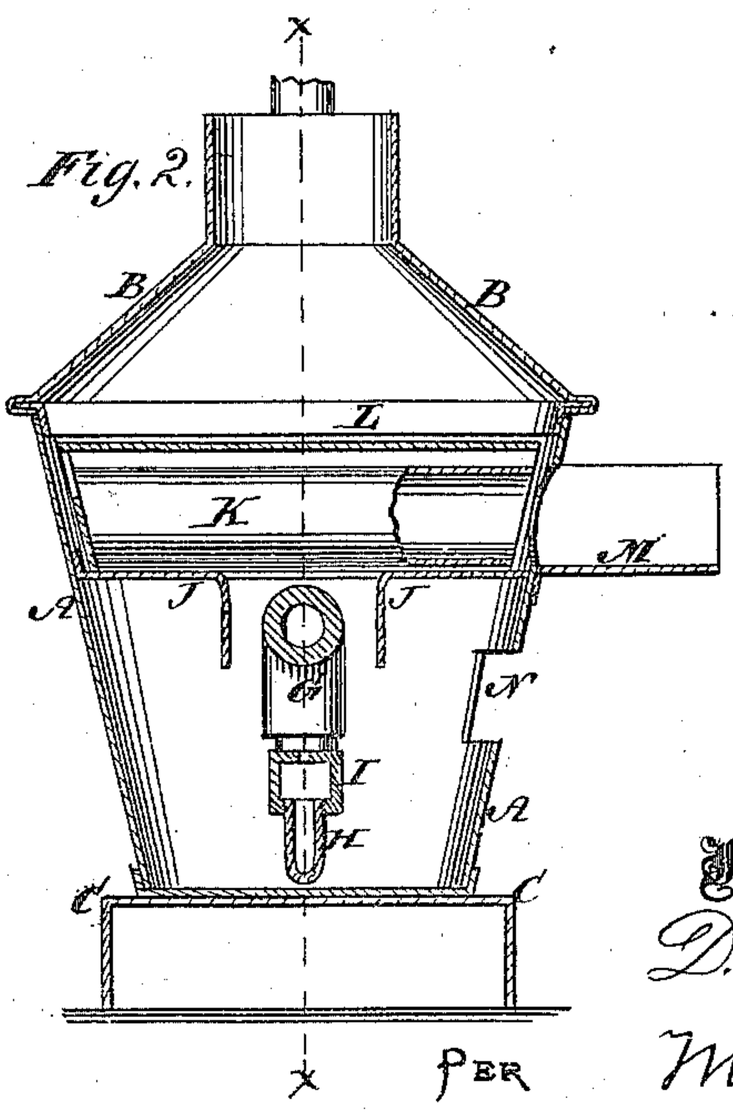


Fig. 2.



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UNITED STATES PATENT OFFICE.

DAVID BERKEY, OF HUNTINGTON, INDIANA.

IMPROVEMENT IN VAPOR-STOVES FOR HEATING SOLDERING-IRONS.

Specification forming part of Letters Patent No. **134,583**, dated January 7, 1873.

To all whom it may concern:

Be it known that I, DAVID BERKEY, of Huntington, in the county of Huntington and State of Indiana, have invented a new and useful Improvement in Vapor-Stove, of which the following is a specification:

Figure 1 is a detail vertical section of my improved vapor-stove taken through the line *x x*, Fig. 2. Fig. 2 is a detail vertical section of the same taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved vapor-stove or fire-pot for tinners' use for heating their soldering-irons, which shall be simple in construction, convenient in use, and effective in operation, heating the irons quickly and thoroughly and with a comparatively small expenditure of fuel; and it consists in an improved vapor-stove formed of the body and cover, the oil-reservoir, the pipes, the burner, the slotted and flanged disk, the tubes and their cap, constructed, arranged, and operating as hereinafter more fully described.

A is the body of the stove, which is made of any sheet metal or cast-iron, and in the form of an inverted frustum of a cone. The body A is provided with a conical cover, B, terminating in a neck to receive the smoke-pipe. The stove A is attached to a platform or stand, C. D is the reservoir to contain the kerosene or other light hydrocarbon. The reservoir D is supported by rods E, the lower ends of which are attached to the stand C. From the reservoir D a pipe, F, leads downward, and is then curved to enter the lower part of the stove A. To the end of the pipe F is attached a semicircular piece, G, of pipe, which should be heavier than the pipe F to enable it to better withstand the heat. To the other end of the semicircular pipe G is attached a short piece, H, of pipe, which is bent into such a shape that its other end, to which the burner I is attached, may be directly beneath the center of the curved pipe G, so that the flame from the said burner I may strike the said pipe G and vaporize the liquid before it passes to the burner. The burner is made in the form of a short tube, of a somewhat larger diameter than the pipe H, and with a number of small holes in its closed upper end. J is a disk fitting into the stove A, and supported by the inclined sides of said stove. The middle part of the disk J has a slot with flanged side edges formed in it, which slot and flanges are formed by cutting a central and cross slits in said disk, and turning down the flaps thus formed. The disk J is so adjusted that the slot may be longitudinal with the semicircular pipe G, the flanges of said disk overlapping the sides of the said pipe G so as to collect the heat from the burner and guide it through the slot in the said disk J, so that it may come into direct contact with the copper tubes K placed above and upon the disk J, and the open ends of which communicate with holes in the side of the stove A, through which the irons are inserted to be heated. The pipes K are covered with a cap, L, through which, at a point furthest from the holes in the side of the stove A, is formed a hole, through which the heated products of combustion pass into the upper part of the stove, whence they pass into the stove-pipe. To the side of the stove A, just below the holes in said side, is attached an apron or hearth, M, to support the handles of the soldering-irons. In the side of the stove, a little below the hearth M, is formed a draft-opening, N. The pipe F is supplied with a stop-cock, O, to enable the flow of the combustible liquid to be regulated or stopped, as required.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved vapor-stove, consisting of the stove A, cover B, oil-reservoir D, pipes F G H, burner I, slotted and flanged disk J, tubes K, and cap L, said parts being constructed, arranged, and operating substantially as herein shown and described, and for the purpose set forth.

DAVID BERKEY.

Witnesses:
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