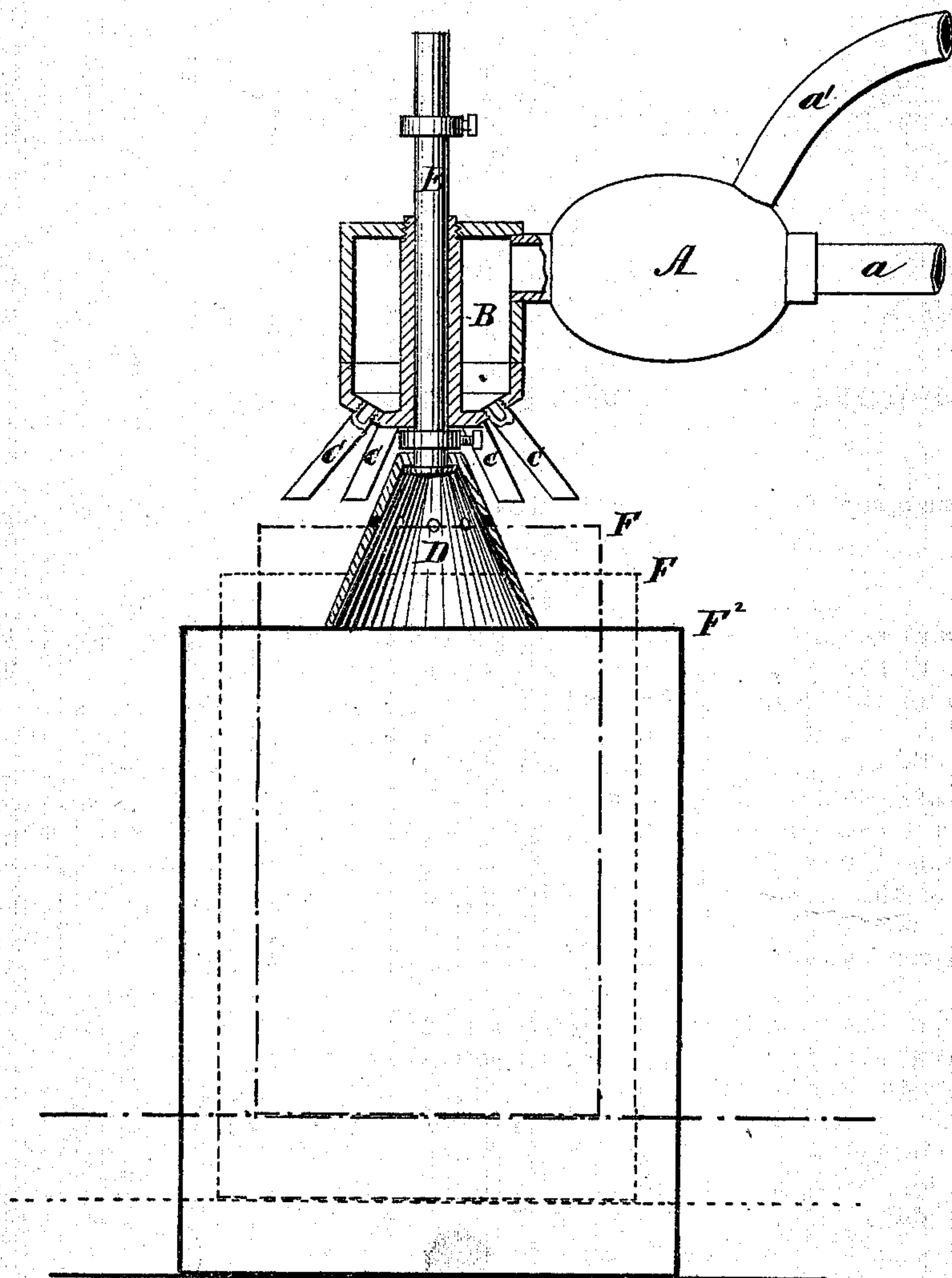


W. D. BROOKS.
Soldering-Machines.

No. 139,539.

Patented June 3, 1873.



Witnesses:
H. M. Mathis
John C. Remon

Inventor:
William D. Brooks
Per [Signature] Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM D. BROOKS, OF BALTIMORE, MARYLAND, ASSIGNOR TO MARY C. BROOKS AND GEORGE D. BROOKS, OF SAME PLACE.

IMPROVEMENT IN SOLDERING-MACHINES.

Specification forming part of Letters Patent No. **139,539**, dated June 3, 1873; application filed May 8, 1873.

To all whom it may concern:

Be it known that I, WILLIAM D. BROOKS, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Soldering Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which the drawing is a sectional elevation illustrative of my improved mode of applying the burners.

The invention relates to the means for avoiding the necessity of changing the circle of blow-pipes at every change in the size of cans to be soldered; and consists in a novel and peculiar mode of attaching the burner-pipes to their supply-chamber, as hereinafter fully described and pointed out in the claim.

In the drawing, A is a mixing-chamber, receiving gas through pipe *a* and air through pipe *a'*; and B, a receiving-chamber connected therewith, and which is slightly beveled or convex on its subjacent side. C are the burner-pipes, which stand out obliquely from the bot-

tom of the chamber B around the cap or top holder D that is attached to its lift-rod E. The oblique arrangement of these pipes enables me to employ the same set of burners with several different sizes of cans. In order to do this the smaller can F is brought into close proximity to the burners C, while the second size, F¹, is held at a greater distance therefrom, and the still larger size, F², at a yet greater distance.

This simple change from my prior inventions enables me to avoid the trouble of taking off one circle of burners and fixing another in place at every change in the size of a batch of cans that are to be soldered.

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

The series of burners C attached obliquely to the gas-receiving chamber B, as and for the purpose described.

WM. D. BROOKS.

Witnesses:

SOLON C. KEMON,

THOS. D. D. OURAND.