

L. A. SMITH.

Improvement in Soldering Apparatus.

No. 120,466.

Patented Oct. 31, 1871.

Fig. 1.

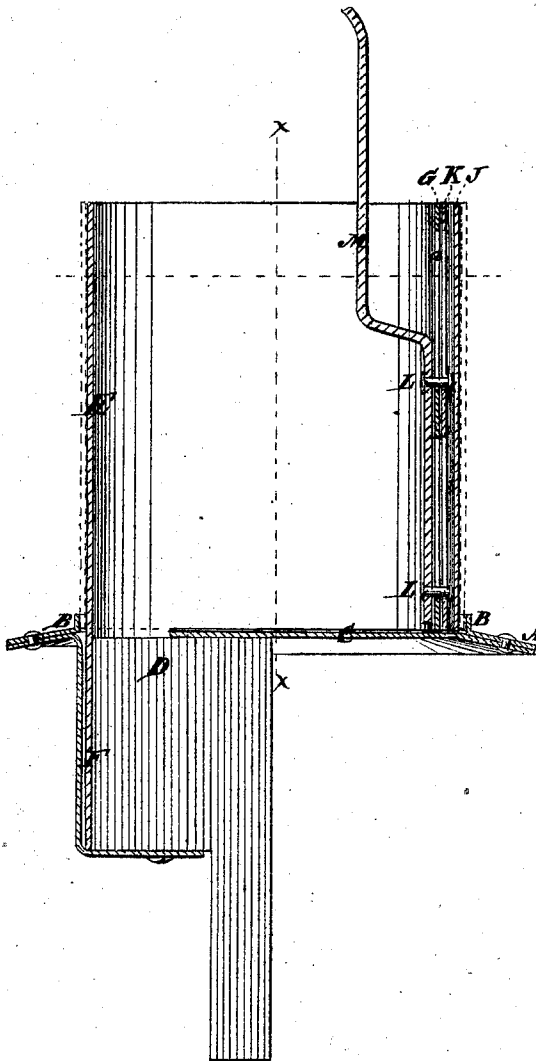


Fig. 2.

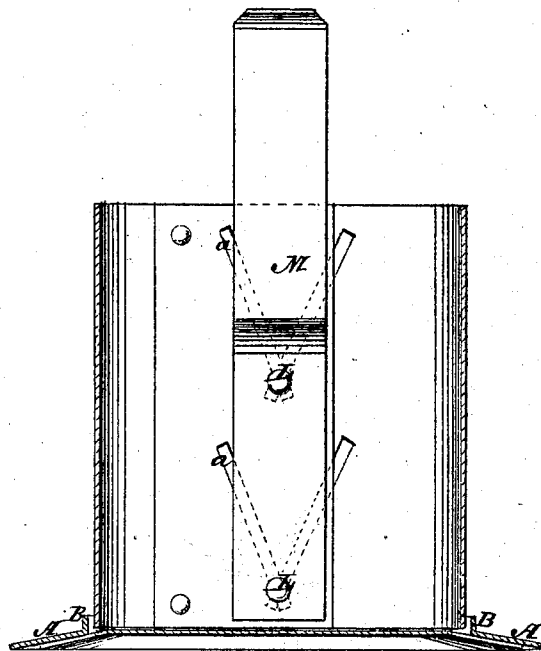
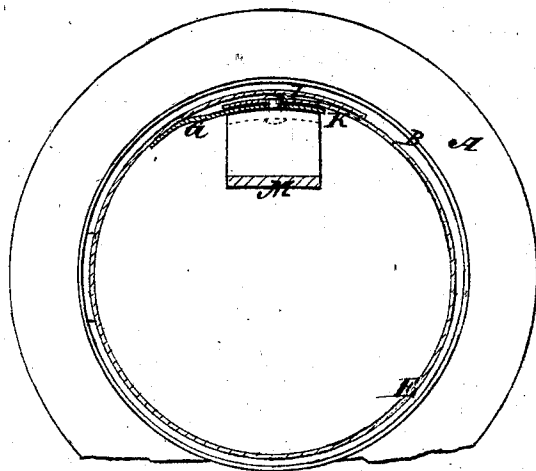


Fig. 3.



Witnesses:

E. Hoff.
Gustave Dieterich

Inventor:

L. A. Smith
PER *Munn & Co*
Attorneys.

UNITED STATES PATENT OFFICE.

LUKE ALBERT SMITH, OF KANSAS CITY, MISSOURI.

IMPROVEMENT IN SOLDERING APPARATUS.

Specification forming part of Letters Patent No. 120,466, dated October 31, 1871.

To all whom it may concern:

Be it known that I, LUKE ALBERT SMITH, of Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Improvement in Soldering Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to a new and improved device for holding tin cans for soldering them; and it consists in an expanding and contracting-cylinder, hereinafter described.

Figures 1 and 2 are sectional elevations of my improved can, and Fig. 3 is a horizontal section on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is a ring with a vertical flange, B, on the inner edge, mounted on any suitable support C D. E is an expanding and contracting-cylinder of sheet metal, arranged within said flange B and supported by an extension, F, secured to the side of D, below the ring A. At the side opposite this extension the shell of the cylinder is separated longitudinally, and the parts lap each other considerably, as is clearly shown in Fig. 3. The outer part J has a plate, G, attached to its inner side at some distance from the edge, and extend-

ing the whole distance, or nearly so. The inner part K laps the outer one between the latter and said plate G, and both plate G and the inner part K are provided with oblique slots *a a* crossing each other, or inclined in opposite directions, as is shown in Fig. 2, in which slots pins L, connected to a vertically-adjusting handle, work for expanding or contracting the cylinder, which is contracted by pulling the handle up, and expanded by pushing it down. The cylindrical part of the can to be soldered is placed over the cylinder E when contracted, with one end between said cylinder and the flange B. The cylinder E is then expanded, and the can to be formed swelled out against the flange B into the required shape, and then held for soldering, after which the cylinder E is contracted and the can removed. The ring A may be made in sections and fixed to be adjusted for larger or smaller cans, and it may either have the vertical flange or not.

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

The combination of the cylinder E, slotted plate G, bar M, and pins L, all being arranged substantially as specified.

LUKE ALBERT SMITH.

Witnesses:

WILLIAM REDHEFFER,
FRED. P. FLAGLER.

(136)