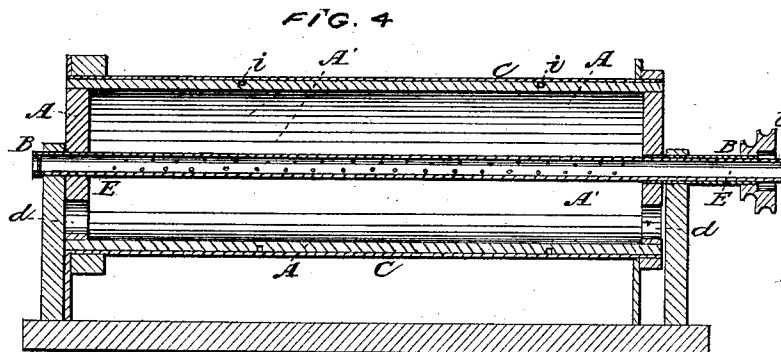
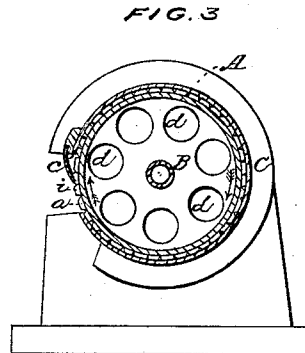
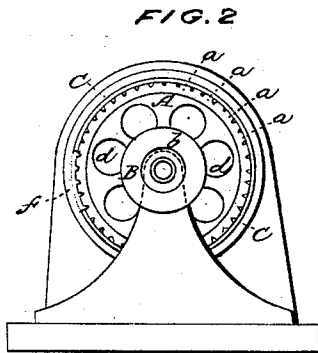
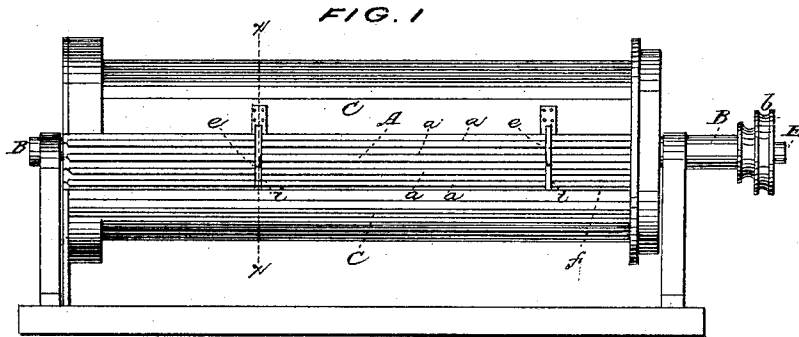


H. C. GEE.
Annealing Wire.

No. 65,481.

Patented June 4, 1867.



WITNESSES:

J. Chace.
E. Banta

INVENTOR:

Henry C. Gee

United States Patent Office.

HENRY C. GEE, OF NEW YORK, N. Y.

Letters Patent No. 65,481, dated June 4, 1867.

APPARATUS FOR ANNEALING WIRE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY C. GEE, of the city, county, and State of New York, have invented a new and useful improvement in Wire-Annealing Machines; and 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 drawings, in which—

Figure 1 is a side view of my invention.

Figure 2, an end view.

Figure 3, a cross-section, taken on the line *x x*, fig. 1.

Figure 4, a central vertical and longitudinal section of the same.

This invention relates to new and useful improvements in wire-annealing machines, and the invention consists in a hollow cylinder which has longitudinal grooves on its outer surface for holding the wires, and which is arranged to rotate within a fixed jacket or case, the said jacket holding the wires in the grooves, and also preventing the escape of heat from the cylinder; and in suspending the cylinder on a hollow perforated shaft, through which gas is admitted to the inside of the cylinder and burned therein to furnish the annealing heat, as hereinafter more fully explained.

A, in the accompanying drawing, is the fluted or grooved cylinder, *a a* being the grooves. C is the jacket, and encircles the cylinder, with the exception of a break or open space, as seen in fig. 1, also as shown by *f*, fig. 2. The cylinder has an internal chamber, A', fig. 4, and there are air-passages *d d* at each end of the cylinder leading into said chamber A. The cylinder is suspended on hollow bearings or journals B B, through which passes a gas pipe, E, and which is within the chamber A', filled with perforations, fig. 4, for admitting gas to the inside of the cylinder. The cylinder A has also two grooves, *i i*, cut around in its outer surface, and in each of these grooves runs a finger, *e*, figs. 1 and 3, which is fixed to the stationary case or jacket C. These fingers reach in beyond the bottom of the wire-holding grooves and throw the wires out of the cylinder as the wires reach these finger *e* and the open space in the jacket C. B is a pulley for rotating the cylinder.

Its operation is as follows: The gas is let on and ignited within the cylinder A and the cylinder set in motion. When the cylinder has attained a proper heat, then the wire, which is cut up into suitable lengths, is run or fed into the grooves *a a*, at the end of the cylinder, and one person is employed feeding in the sections of wire as the cylinder revolves. When a wire has been carried around and reaches the open space in the jacket, it has by that time been subjected to a sufficient heat, and is then thrown out at the side of the machine by the stationary fingers *e e*, which run in the annular grooves *i i*, and reach below the wires and consequently wedge them out of the cylinder.

By these means I obtain a machine which is handy, snug, and inexpensive, and for light work a very desirable machine.

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

1. I claim the fluted-chambered cylinder A, with hollow journals B B, perforated pipe E, and jacket C, all arranged and operating substantially in the manner and for the purpose set forth.

2. I claim, in connection with the above, the annular grooves *i i* in the cylinder A, and the stationary fingers *e e*, substantially as and for the purpose herein described.

In testimony whereof I have hereunto set my signature.

HENRY C. GEE.

Witnesses:

A. NEILL,

E. N. CANTA.