

A. Cary's Tempering Oven.

116267

Fig. 1.

PATENTED JUN 27 1871

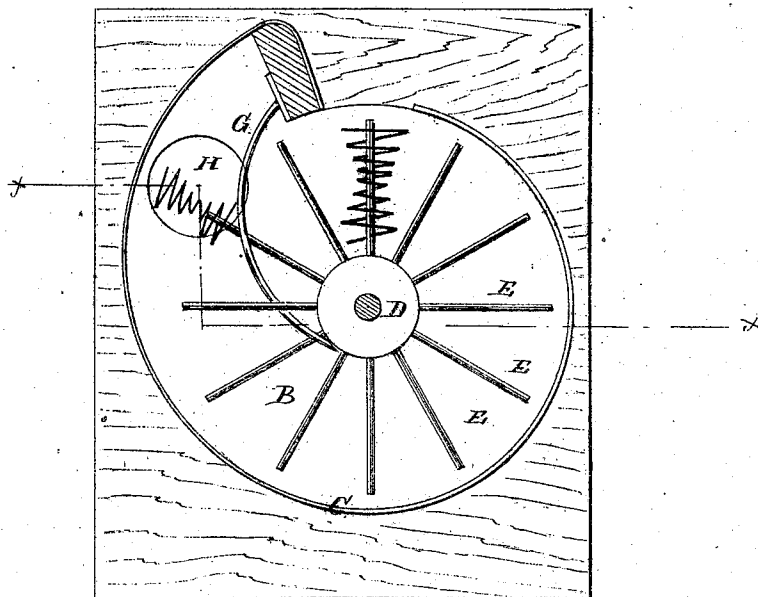
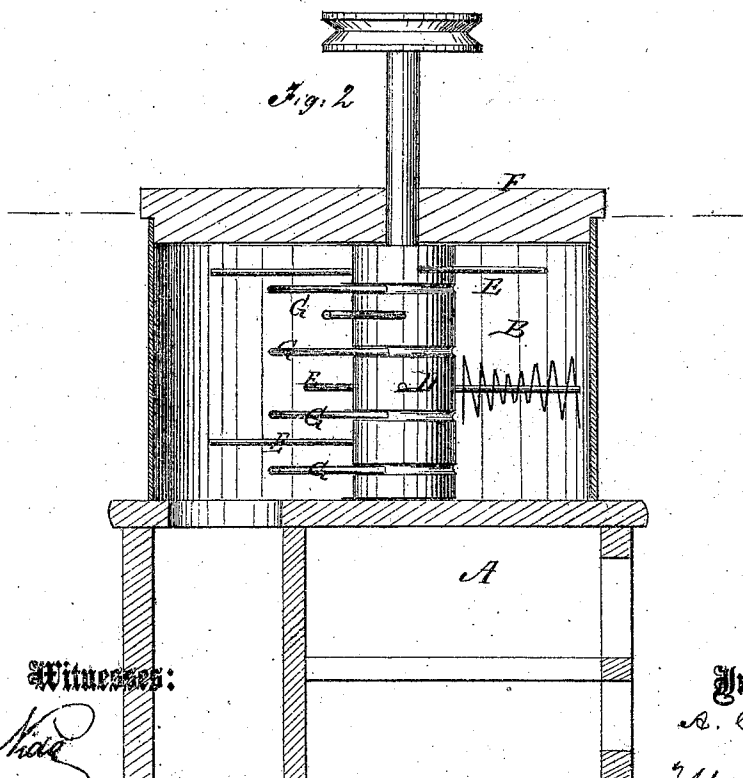


Fig. 2



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

ALANSON CARY, OF NEW YORK, N. Y.

IMPROVEMENT IN TEMPERING-OVENS.

Specification forming part of Letters Patent No. 116,267, dated June 27, 1871.

To all whom it may concern:

Be it known that I, ALANSON CARY, of city, county, and State of New York, have invented a new and useful Improvement in Tempering-Oven; 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.

This invention relates to a new and useful improvement in furnaces or ovens for tempering springs, especially designed for tempering spiral-wire furniture-springs; and consists in a tempering-chamber connected with a furnace or fire-box, having therein a vertical shaft with horizontal rods or arms attached thereto, on which the spiral springs are suspended; and in curved detaching-rods connected with the casing, by means of which the springs are taken from the cylinder-rods and delivered from the tempering-chamber, as will be hereinafter described.

In the accompanying drawing, Figure 1 represents a top view with the cap or cover of the tempering-chamber removed. Fig. 2 is a vertical section of Fig. 1 taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is the furnace or fire-box. B is the tempering-oven, which is heated to the proper temperature for tempering springs—600°, more or less. C is the casing, which is cylindrical in form, in

the center of which is vertical shaft D, either with or without a cylinder or drum, but with horizontal arms or rods E connected therewith, extending radially in one or more tiers, as seen in the drawing. F is the cap or cover of the tempering-chamber. G represents the curved detaching-rods, which are arranged as seen in Fig. 1, so that when the shaft has made about half a revolution the springs will be gradually forced from the rods and will drop down through the orifice H, and will be delivered into a proper receptacle beneath. To allow of this mode of discharging the spring the casing is made to somewhat resemble a scroll, as seen in Fig. 1. The shaft, with the arms E, is made to revolve very slowly, so that the springs which have been suspended on the rods will be exposed to the heat a sufficient length of time. The oven or chamber being kept at a uniform temperature at the required degree of heat, it will be seen that the springs will be evenly heated and automatically discharged at the right moment.

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

In combination with the shaft or drum D and arms E, the detaching-rods G, arranged to operate substantially as specified.

The above specification of my invention signed by me this 29th day of March, 1871.

Witnesses: ALANSON CARY.

GEO. W. MABEE,
ALEX. F. ROBERTS.

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