

(No Model.)

P. J. MILES.  
CLINICAL THERMOMETER.

No. 358,214.

Patented Feb. 22, 1887.

fig. 1.

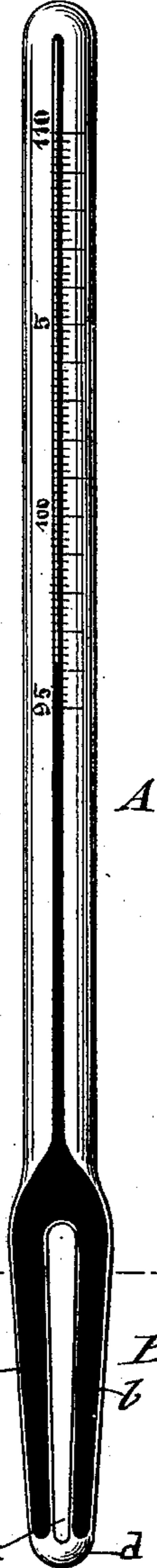


fig. 3.



fig. 4.

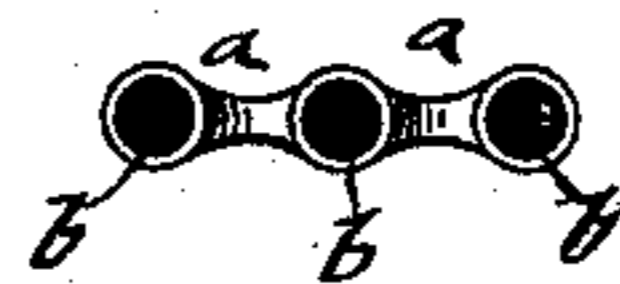
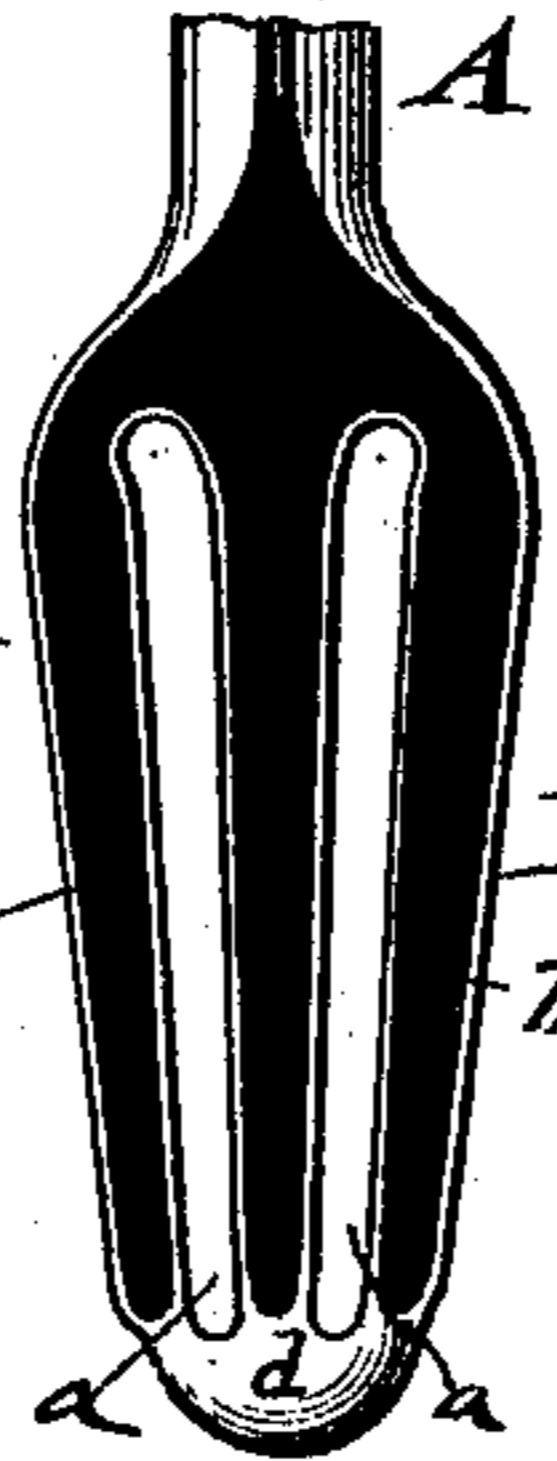


fig. 2.



WITNESSES:

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INVENTOR

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# UNITED STATES PATENT OFFICE.

PATRICK J. MILES, OF NEW YORK, N. Y., ASSIGNOR TO BAHMANN & HOEHN,  
OF SAME PLACE.

## CLINICAL THERMOMETER.

SPECIFICATION forming part of Letters Patent No. 358,214, dated February 22, 1887.

Application filed November 11, 1886. Serial No. 218,525. (No model.)

*To all whom it may concern:*

Be it known that I, PATRICK J. MILES, of the city, county, and State of New York, have invented certain new and useful Improvements in Thermometers, of which the following is a specification.

This invention relates to improvements in thermometers of that class which are used to indicate the temperature of the body, and which are known as "fever-thermometers," the improvement being designed with a view to enlarge the thickness of the mercurial column of the thermometer, so that the position of the same can be more easily read off than with the slender columns of mercury which were in the fever-thermometers heretofore in use, owing to the small-sized bulbs of the same; and the invention consists of a thermometer which is provided with a forked bulb, the lower ends of which are connected by a solid transverse stay, said bulb being tapering toward the lower end.

In the accompanying drawings, Figure 1 represents a side elevation of my improved thermometer. Fig. 2 is a side view of a modified form of the bulb; and Figs. 3 and 4 are horizontal sections, respectively on lines *x x*, Fig. 1, and *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the graduated tube, and B the bulb, of my improved thermometer. The bulb B is made of fork shape, so as to form two or three tubular portions, *b*, which are separated by air-spaces *a a*, and which converge gradually toward each other, so that the bulb is of less width at the lower end than at the upper end. The lower ends of the tubular portions *b b* of the bulb B are connected by solid transverse stay *d*, that

is melted onto said ends, as shown clearly in Figs. 1 and 2. This construction of the bulb has the advantage that nearly twice or three times the quantity of mercury can be stored in the bulb as compared with the bulbs of the fever-thermometers in common use. The bore of the graduated tube A is correspondingly enlarged, so that a thicker column of mercury is obtained, the height of which can be more conveniently read off on the graduated scale of the tube A. The forked shape of the bulb has the advantage that a large contact-surface is provided, whereby the mercury responds quickly to heat exerted on it by the body. The tapering shape of the bulb permits it to be more easily introduced below the tongue, the anus, or other interior parts of the body. The connecting-stay imparts strength to the lower part of the bulb and protects the tubular portions against breakage while in use.

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

1. A thermometer provided with a forked bulb forming tubular portions, said portions being connected at the lower end by a solid transverse stay, substantially as set forth.

2. A thermometer consisting of a graduated tube and a forked bulb composed of tubular portions converging toward each other, the lower ends of said tubular portions being connected by a solid transverse stay, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

PATRICK J. MILES.

Witnesses:

PAUL GOEPEL,  
MARTIN PETRY.