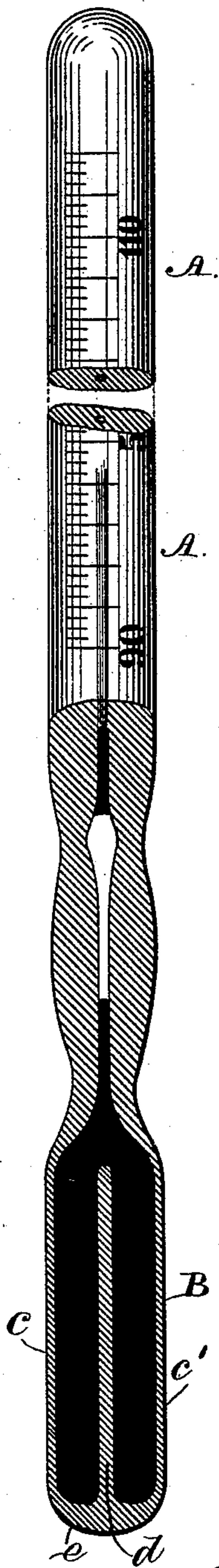
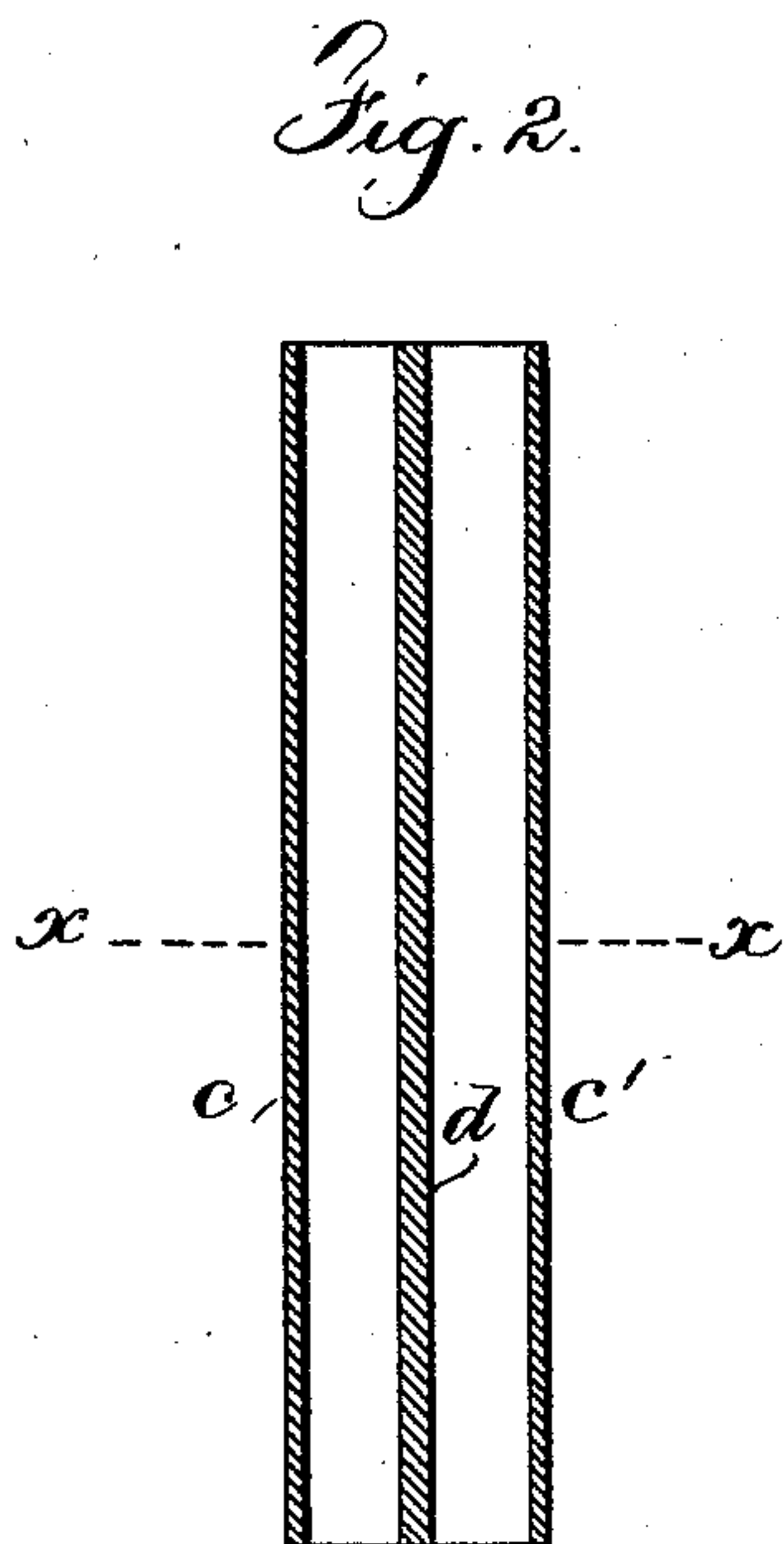


(No Model.)

J. BARRY.
CLINICAL THERMOMETER.

No. 424,165.

Patented Mar. 25, 1890.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN BARRY, OF NEW YORK, N. Y.

CLINICAL THERMOMETER.

SPECIFICATION forming part of Letters Patent No. 424,165, dated March 25, 1890.

Application filed July 5, 1889. Serial No. 316,556. (No model.)

To all whom it may concern:

Be it known that I, JOHN BARRY, of the city, county, and State of New York, have invented a new and useful Improvement in Clinical Thermometers; and the following is declared to be a full, clear, and exact description of the same.

Clinical thermometers as heretofore made have had either a single bulb of mercury or a double or forked bulb, or, in other words, two bulbs, between which is an air-space; but the single bulb does not act or respond as quickly as desired in taking the temperature of the body, and the forked bulb, while quick-acting, lacks strength to resist the pressure often exerted by the muscles of the body against the opposite sides of the two tubular parts of the bulb. It also requires a large case and is difficult to keep clean.

My invention is designed to overcome these objections; and it consists in a clinical thermometer having two parallel tubular portions forming the bulb, the glass of the tubes or cylinders being welded or united throughout by a connecting-web, so as to obtain great strength in the bulb to withstand the pressure frequently resulting from the contraction of the muscles upon the bulb when inserted into the body.

In the drawings, Figure 1 is a sectional elevation of my improved thermometer. Fig. 2 is a vertical section, and Fig. 3 a cross-section at $x x$, of the connected tubes or cylinders of glass which form the bulb of my improved thermometer.

A represents the graduated tube or stem of my improved clinical thermometer, and B the bulb. This graduated tube or stem A may be

made of any usual shape and in any desired manner.

Referring to Figs. 2 and 3, the tubes or cylinders $c c'$ are melted, welded, or connected together throughout their entire length by a web d . These connected tubes or cylinders $c c'$ are cut in the desired lengths and one end is sealed, as at e , and the opposite end of the tubes are drawn together and united to the lower end of the graduated tube or stem A in the usual manner, and the thermometer is filled and otherwise completed.

The parallel tubes or cylinders forming the bulb B are stronger than a single or forked bulb would be, and the same can be readily introduced beneath the tongue or into or in contact with any other part of the body, and because of the large extent of surface presented the action is sensitive and quick in recording the temperature and the thermometer is easily kept clean. The parallel tubes or cylinders are more compact than divided bulbs and take a smaller case and less room in the pocket.

I claim as my invention—

A clinical thermometer consisting of a graduated tube or stem and a bulb composed of two parallel tubes having a connecting and supporting web throughout their length, closed at one end and opening together and into the graduated tube, substantially as specified.

Signed by me this 29th day of June, A. D. 1889.

JOHN BARRY.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.