

(No Model.)

J. BARRY.
Thermometer Tube.

No. 233,963.

Patented Nov. 2, 1880.

Fig 1.

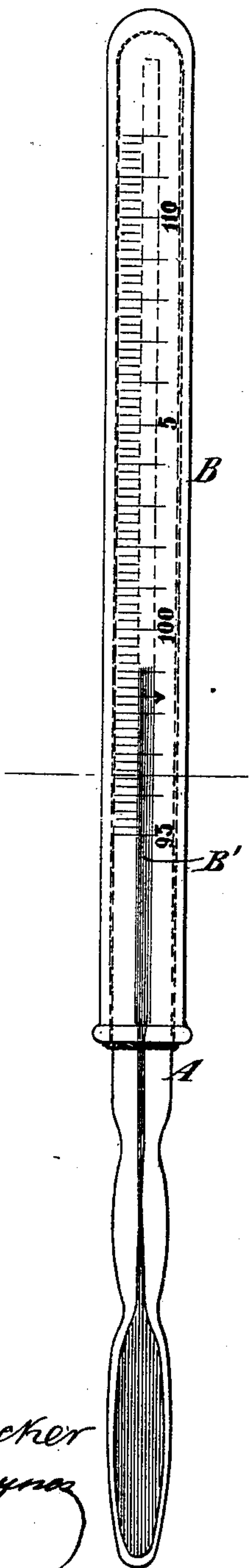


Fig 2.

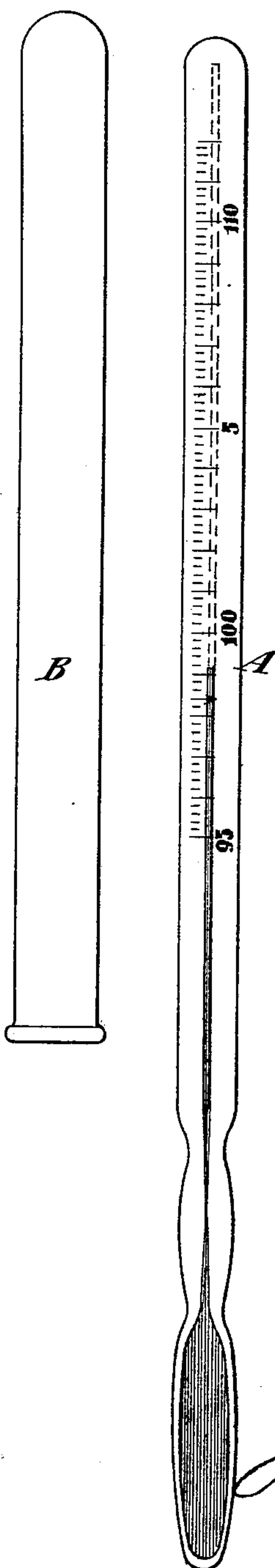
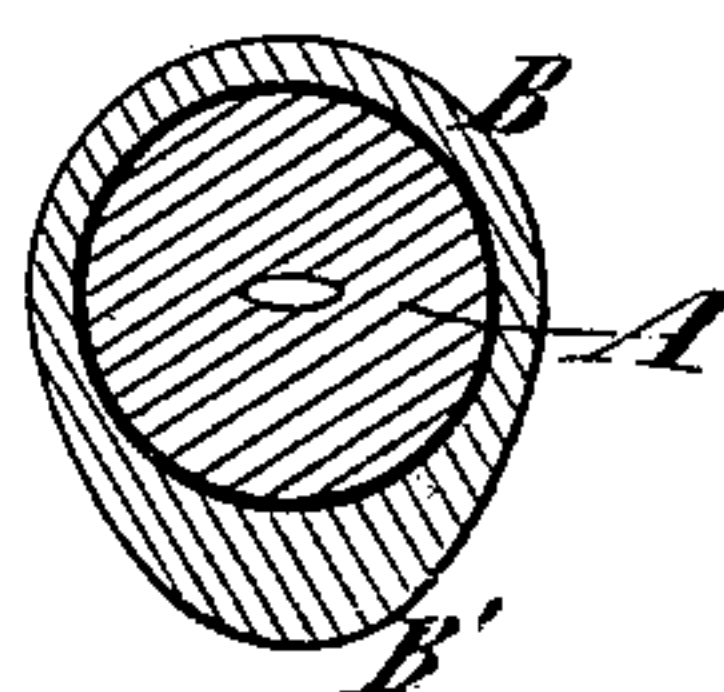


Fig 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN BARRY, OF NEW YORK, N. Y.

THERMOMETER-TUBE.

SPECIFICATION forming part of Letters Patent No. 233,963, dated November 2, 1880.

Application filed September 17, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN BARRY, of the city and county of New York, in the State of New York, have invented a certain new and useful
5 Improvement in Thermometers, of which the following is a specification.

My invention relates particularly to clinical and chemical thermometers having a fine bore; and the object is to enable the height of mer-
10 cury or fluid in the bore to be more easily seen, and at the same time to protect the thermometer-tube and prevent the black on the engraved scale from being defaced.

To this end the invention consists in a glass
15 jacket for a thermometer-tube having a greater thickness upon one side, so as to produce a rounded protuberance of lens-like character upon its exterior, which serves to magnify the column of mercury or fluid and render it more
20 prominent.

It also consists in the combination, with a thermometer-tube of cylindric form, of a jacket of the kind above described fitted and secured outside the tube.

25 In the accompanying drawings, Figure 1 represents a side view of a thermometer tube and jacket embodying my invention. Fig. 2 represents an exterior view of the tube and jacket detached one from the other; and Fig.
30 3 represents a transverse section of the tube and jacket when together, upon a larger scale.

Similar letters of reference designate corresponding parts in all the figures.

35 A designates a thermometer-tube of cylindric form, or at least having the portion upon which is marked the scale of cylindric form, and which is no wise different from the clinical and chemical thermometer tubes now employed.

40 B designates a glass jacket having a bore of cylindric or other form corresponding with the exterior of the thermometer-tube, and of

sufficient size to enable it to be readily slipped over the said tube A. Upon the exterior of this jacket is a rounded protuberance, B', of
45 lens-like character, producing a greater thickness of glass at that point.

When the jacket is placed over the thermometer-tube it should be of sufficient length to extend below the scale marked thereon, and
50 the jacket may be secured by any suitable cement to the tube, so that the rounded protuberance B' will be coincident with or opposite the front of the tube A. It will be sufficient to apply this cement only at the lower
55 end of the jacket.

The magnifying properties of the lens-like protuberance B' enable the mercury or fluid in the bore to be very easily seen, and the jacket forms a protection to the tube and prevents
60 the black on the engraved scale from being defaced by the hands, as the hands do not come in contact with the part of the tube upon which is the scale.

The jacket is very desirable, inasmuch as it
65 can be applied to thermometer-tubes already made.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A glass jacket for a thermometer-tube
70 having a greater thickness upon one side, so as to form a lens-like protuberance upon the exterior, substantially as and for the purpose specified.

2. The combination, with a thermometer-
75 tube, of a glass jacket having a lens-like protuberance upon its exterior, and secured outside said tube with said protuberance opposite the front of the said tube, substantially as and for the purpose specified.

JOHN BARRY.

Witnesses:

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