

No. 825,798.

PATENTED JULY 10, 1906.

M. F. BECTON.
THERMOMETER.

APPLICATION FILED MAR. 27, 1906.

Fig. 1. *Fig. 2.* *Fig. 4.*

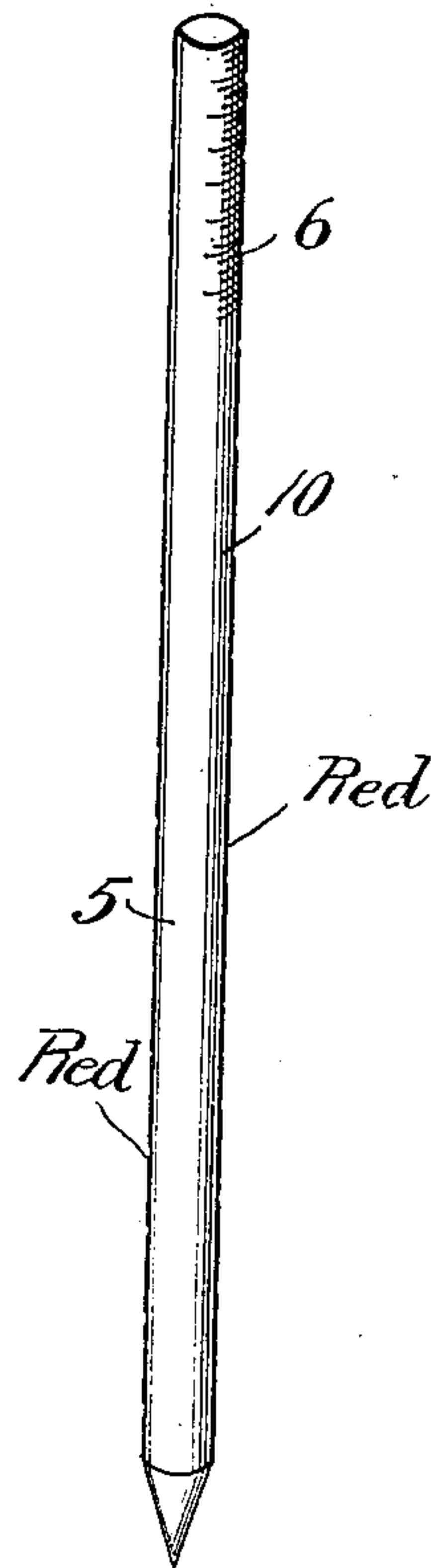
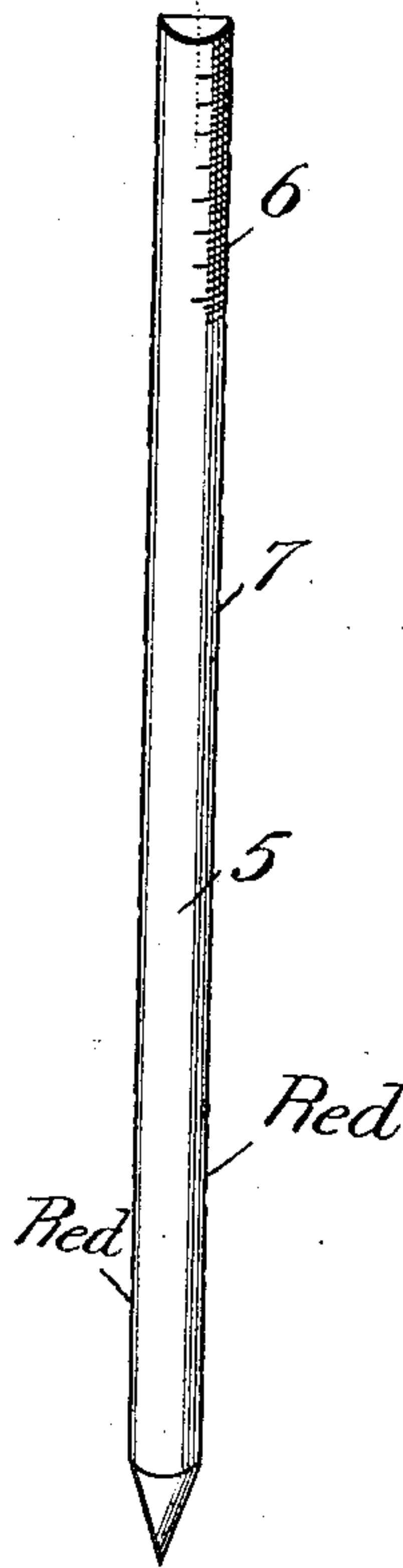
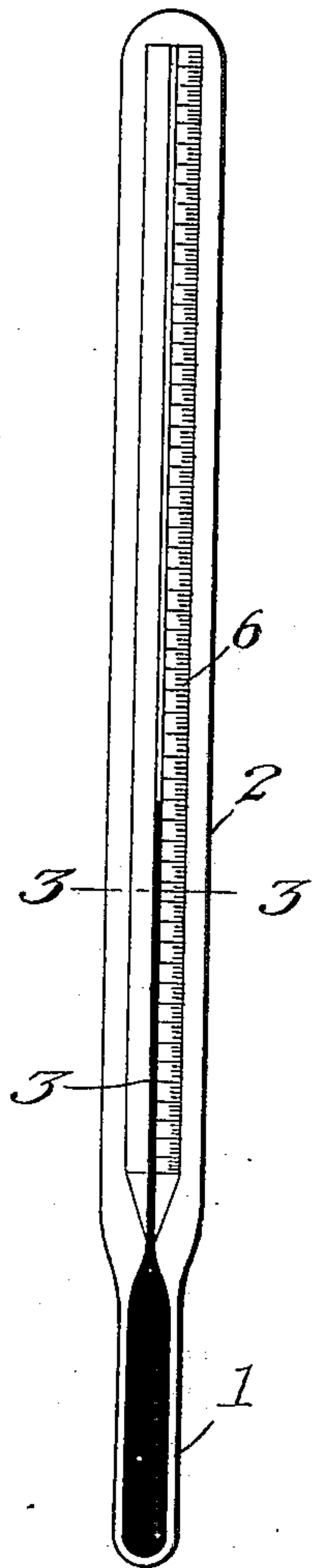
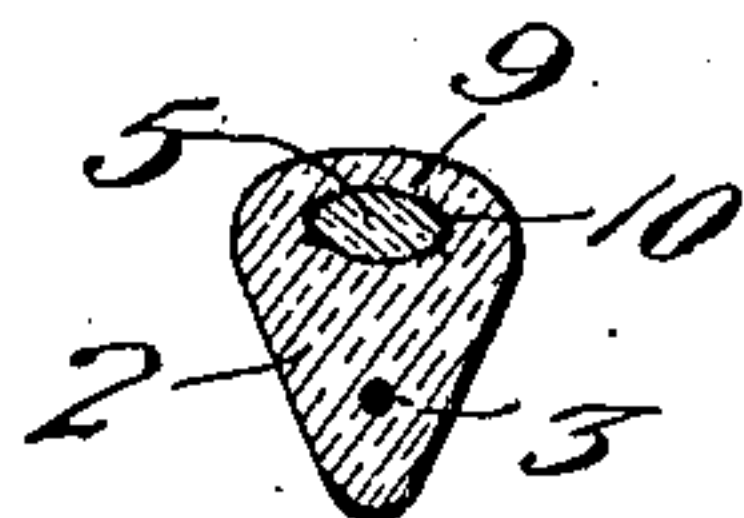
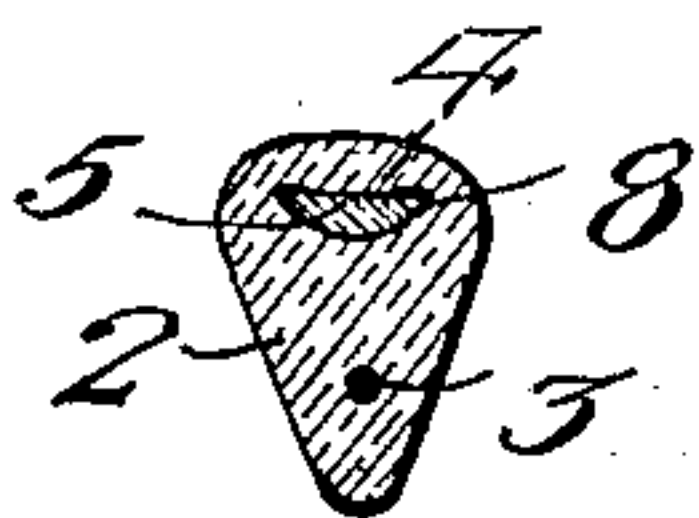


Fig. 3.

Fig. 5.



Witnesses

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THERMOMETER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MILLARD F. BECTON, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Thermometers, of which the following is a specification.

The invention relates to an improvement in thermometers, and particularly to clinical thermometers, wherein accuracy in reading is of the highest importance.

The main object of the present invention is the production of means for materially facilitating the reading of the thermometer, the arrangement of parts providing for the ready antiseptic cleaning of the instrument without affecting any portion thereof.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which—

Figure 1 is a view in elevation of a thermometer constructed in accordance with my invention; Fig. 2, a perspective of the scale-strip; Fig. 3, a section on line 3 3 of Fig. 1; Fig. 4, a perspective of a modified form of scale-strip; Fig. 5, a transverse section of a thermometer provided with the modified form of scale-strip.

Referring particularly to the drawings, my improved thermometer comprises a bulb 1 of any desired configuration and a tube 2, extending from the bulb, as is usual in thermometers of this character. The tube 2 is preferably of triangular shape in cross-section, as clearly shown in Figs. 3 and 4, and is formed near the apex thereof with a longitudinally-arranged bore 3 in open communication with the interior of the bulb 1 and providing the bore for the thermometer. The body of the tube in rear of the bore 3 is formed with a longitudinally-arranged opening 4, segmental in transverse outline, with the arcuate portion thereof next the mercury-bore, as clearly shown in Fig. 3. The opening 4 is arranged in practically the widest portion of the tube and is of a length transverse the tube equal to or greater than the transverse dimension of the tube taken through the mercury-bore, so that the scale-strip to be described may be readily visible from either side or directly in front of the mercury-column.

5 represents a strip of luminous glass or similar material upon which is suitably indicated the thermometer-scale 6. In the pre-

ferred form of thermometer the strip 5 is of segmental shape in cross-section, designed to fit snugly within the opening 4 in the tube.

In connection with the scale-strip I use means for readily directing the eye to the scale-strip—such, for example, as coloring the edges of the scale-strip in bright colors, as at 7, or in coloring the extreme edges of the opening 4, as at 8. By this construction a sharply-defined path is indicated within the tube 2, within which path is included the scale, so that the eye is readily directed to the scale when attempting to read the thermometer.

In Figs. 4 and 5 is shown a slightly-modified form of scale-bore and scale-strip, in that the opening 9 is of oval shape in section, while the scale-strip 10 corresponds thereto. I contemplate, of course, the use of the scale-finder in connection with the modified form of strip, it being understood that with the exception of the particular above referred to the modified form is identical with the preferred form. The scale-strips are preferably of luminous glass or similar material to provide a background for the scale-marks and are preferably slightly less in length than the length of the tube to provide for sealing the said strips within the opening in the tube during the manufacture of the thermometer.

The triangular formation of the tube, in conjunction with the luminous scale-strip and scale-finder, provides for the ready and convenient reading of the thermometer in practically any position of the tube from which the scale-marks and mercury-bore may be simultaneously seen.

In the use of the scale-strip the scale-marks are of course included wholly within the body of the tube, permitting the thermometer as a whole to be subjected to such antiseptic treatment as may be desirable for its proper use without affecting the scale marks or strip.

It is to be noted that the scale-strip as a whole is light-reflecting and in conjunction with its convex side, being arranged next the mercury-bore, provides for the accurate reading of the mercury-column.

Having thus described my invention, what is claimed as new is—

1. A thermometer comprising a body of substantially triangular shape in cross-section, said body being formed adjacent the apex with a mercury-bore and in rear of said bore with a longitudinally-arranged opening,

and a light-reflecting scale-strip carrying scale-marks inserted in said opening, the side of the strip next the bore being convex, and scale-finders of a contrasting color relative to the strip disposed to define the edges of the strip when in position.

2. A thermometer comprising a body of substantially triangular shape in cross-section, said body being formed adjacent the apex with a mercury-bore and in rear of said bore with a longitudinally-arranged opening, and a light-reflecting scale-strip carrying scale-marks inserted in said opening, the side

of the strip next the bore being convex, the width of the strip approximating the width of the body in alinement with the mercury-bore, and scale-finders of a contrasting color relative to the strip disposed to define the edges of the strip when in position.

In testimony whereof I affix my signature in presence of two witnesses.

MILLARD F. BECTON.

Witnesses:

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HENRY KARLE.