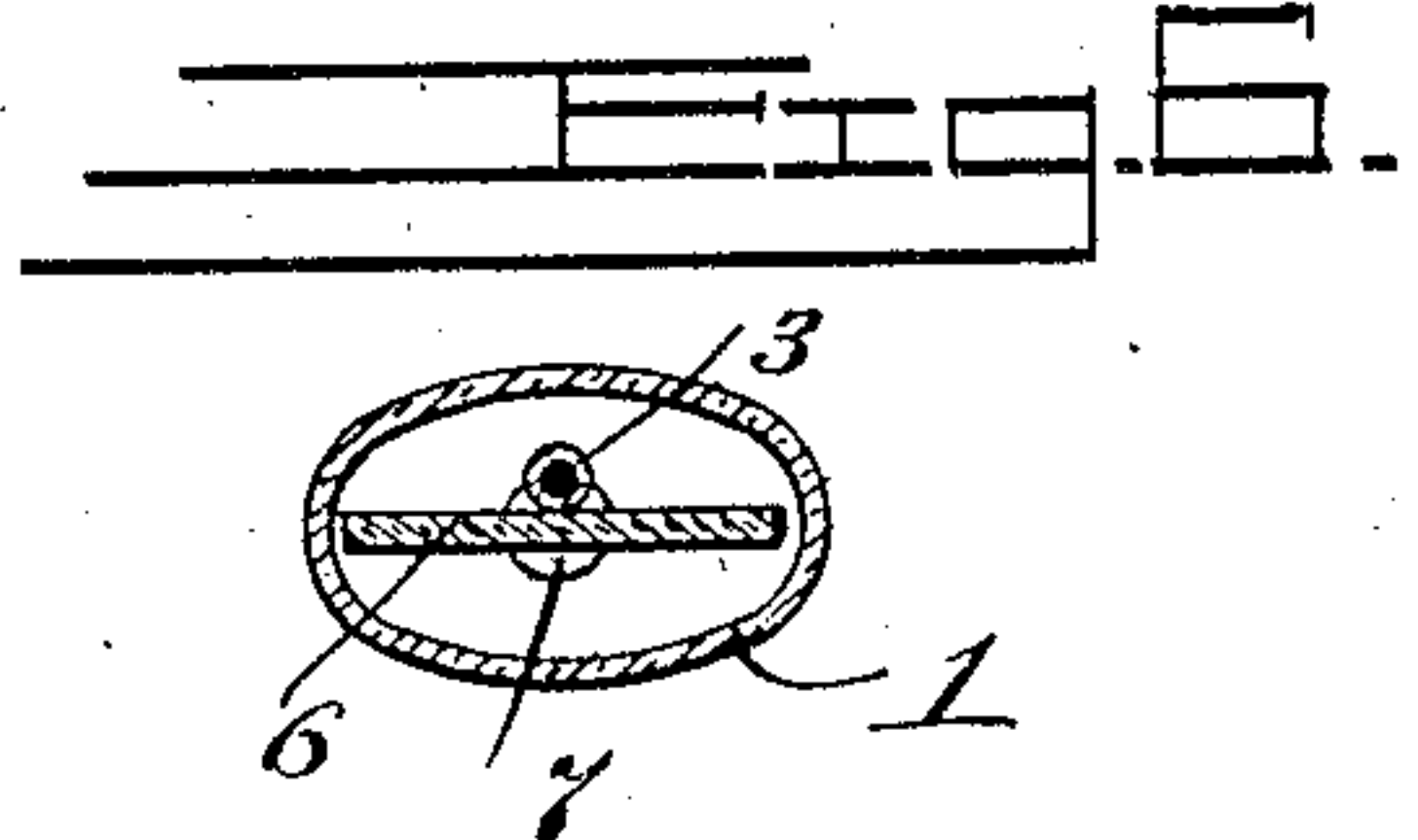
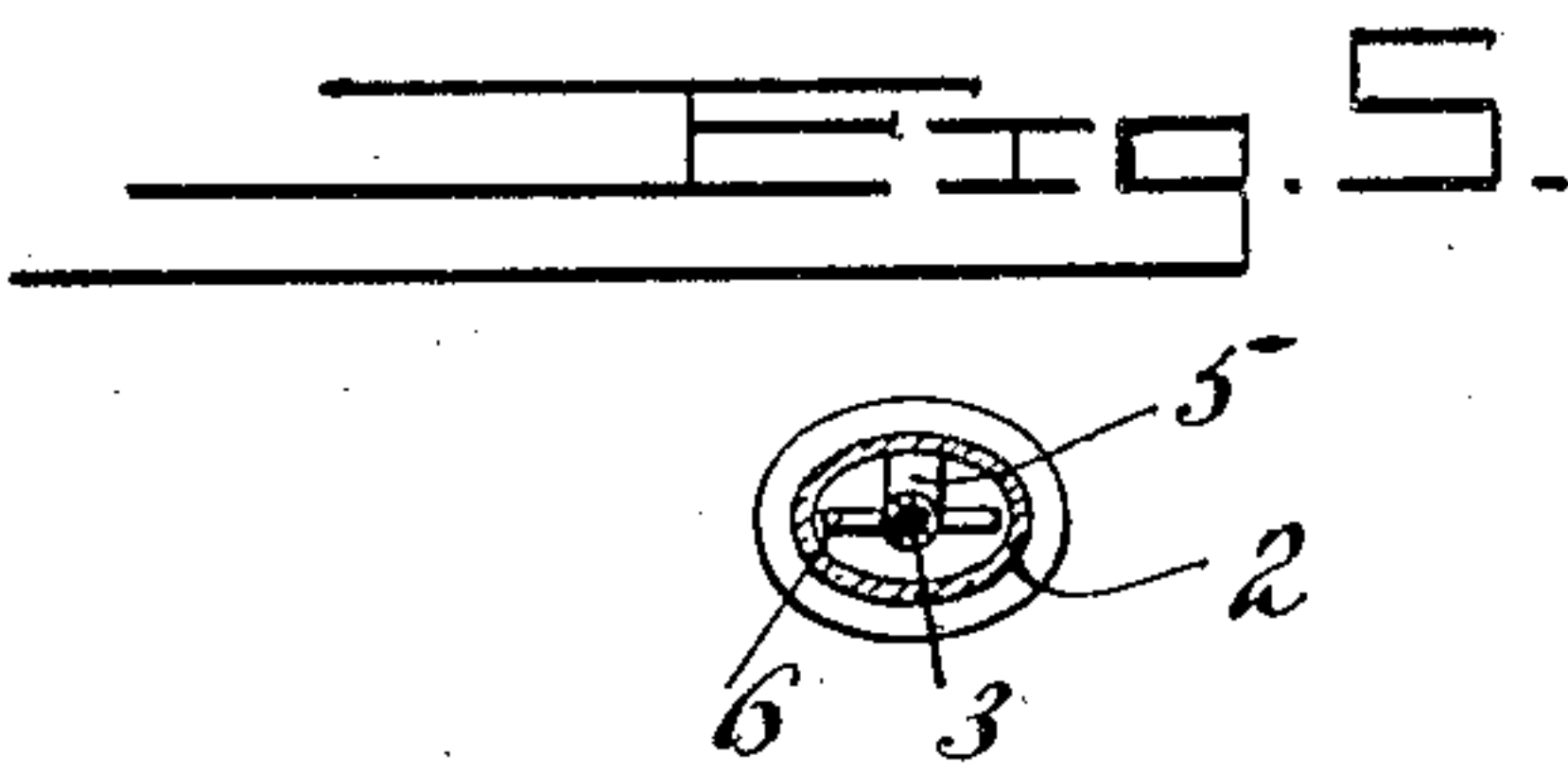
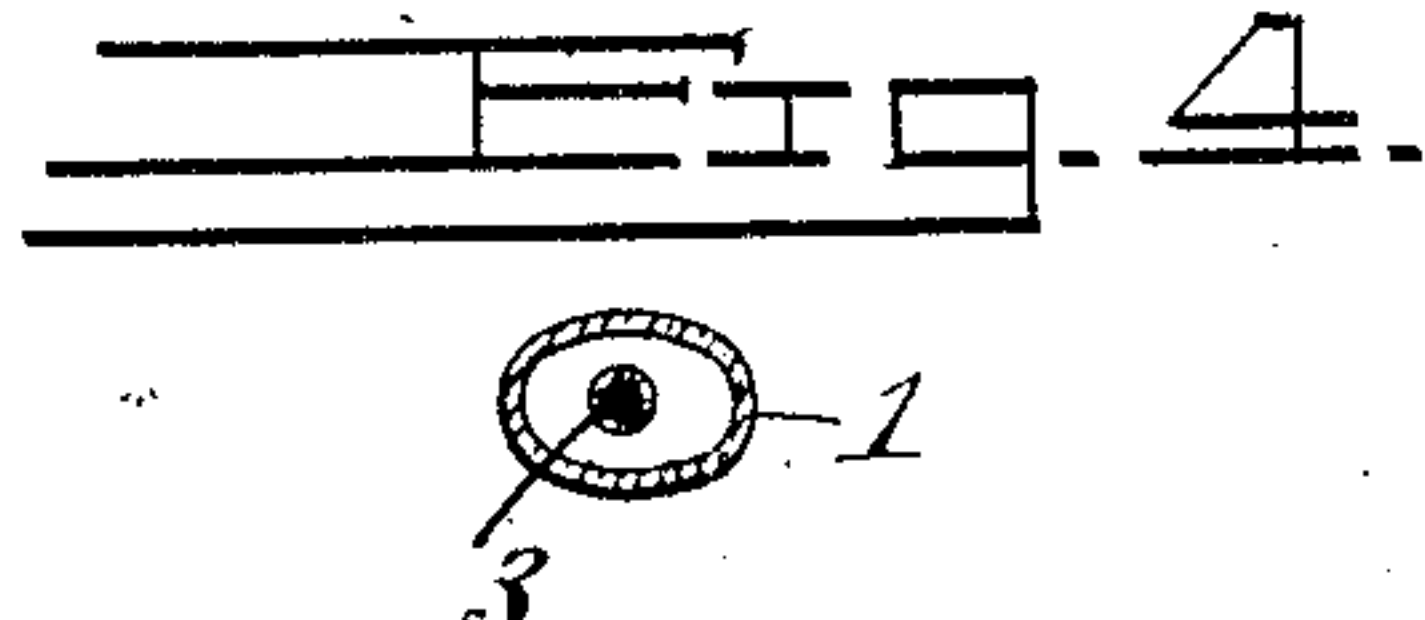
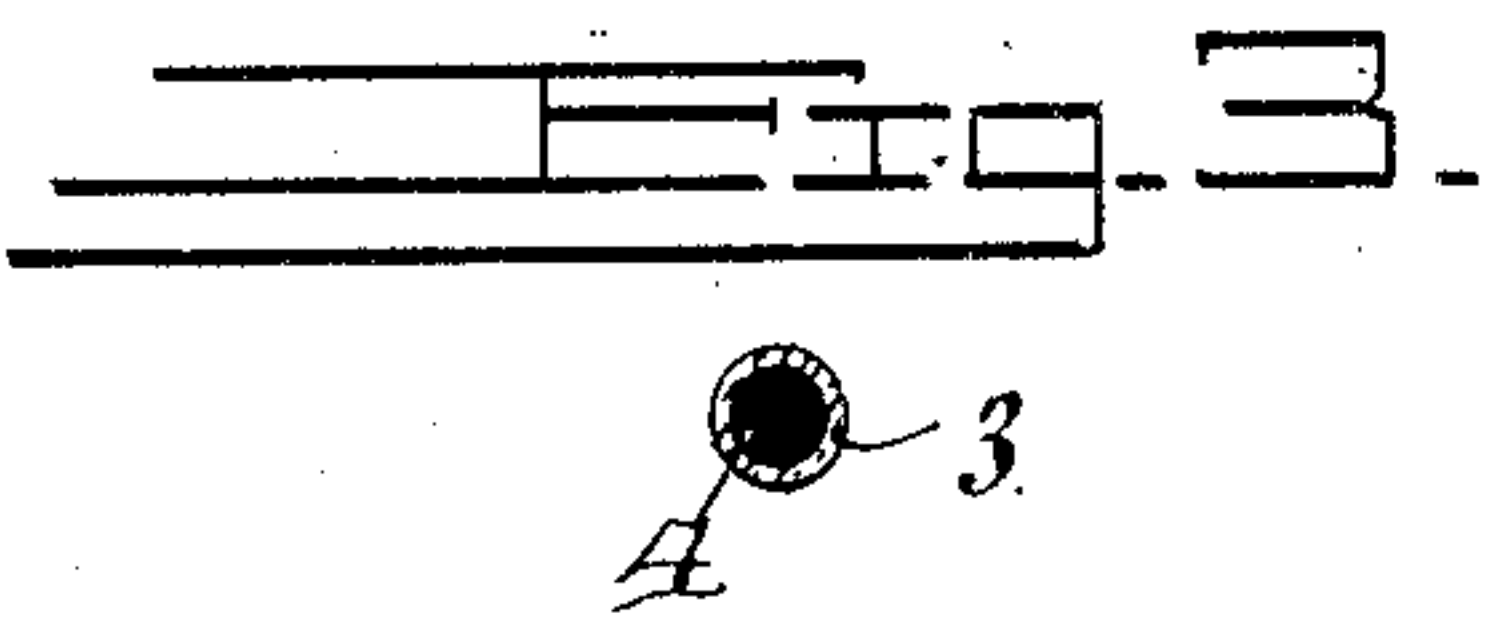
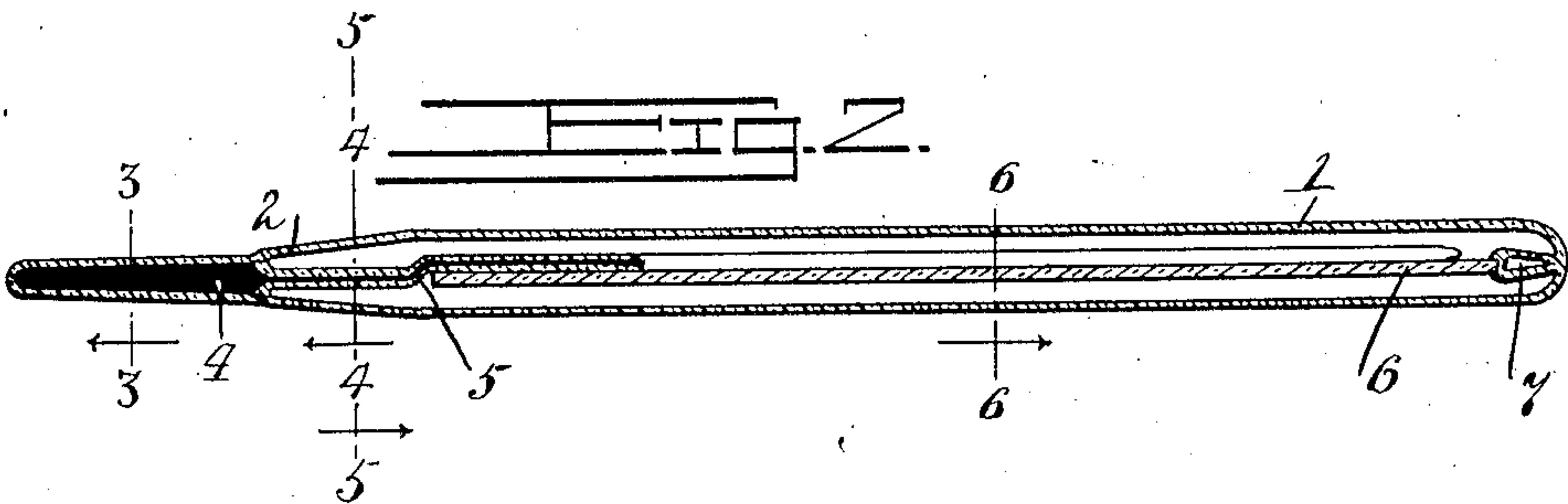
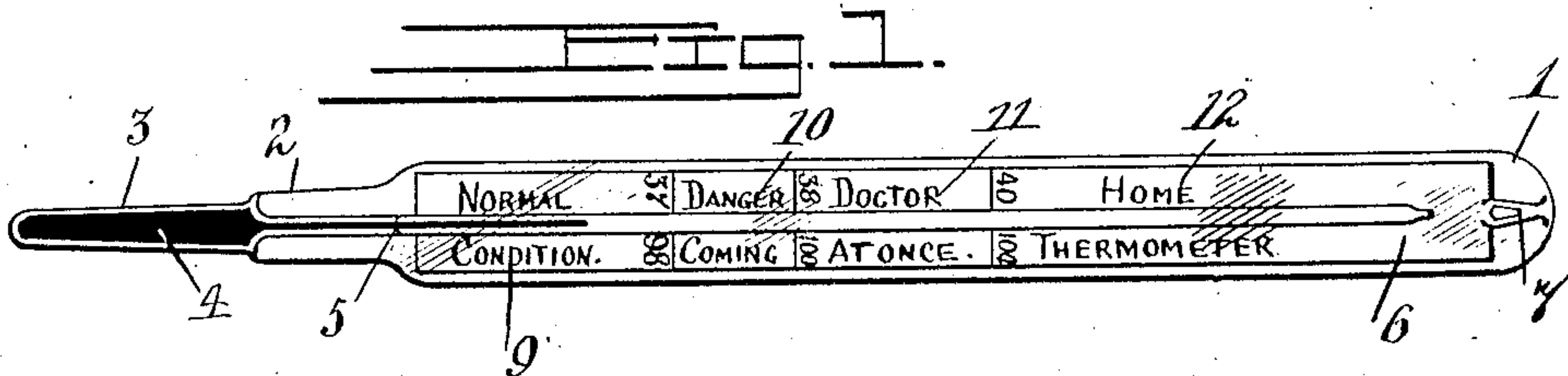


No. 878,481.

PATENTED FEB. 4, 1908.

S. LACHAPELLE.
THERMOMETER.

APPLICATION FILED AUG. 1, 1907.



Witnesses:

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UNITED STATES PATENT OFFICE.

SEVERIN LACHAPELLE, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR OF ONE-FOURTH TO GEORGE W. PARENT AND ONE-FOURTH TO GASTON DE WERTHEMER, BOTH OF MONTREAL, QUEBEC, CANADA.

THERMOMETER.

No. 878,481.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed August 1, 1907. Serial No. 386,577.

To all whom it may concern:

Be it known that I, SEVERIN LACHAPELLE, M.D., professor of pediatrics, Laval University, a subject of the King of Great Britain, residing at the city and district of Montreal, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Thermometers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to thermometers.

The object of my invention is to provide a thermometer particularly adapted for use in the home, having means for indicating the condition of a patient to a person unskilled in the medical profession.

My invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed.

In the accompanying drawings, forming part of this application, I have illustrated one form of embodiment of my invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a front elevation; Fig. 2 is a longitudinal central section; Fig. 3 is a transverse section taken approximately on line 3—3 of Fig. 2 looking in the direction indicated by the arrow; Fig. 4 is a transverse section taken approximately on line 4—4 of Fig. 2 looking in the direction indicated by the arrow; Fig. 5 is a transverse section taken approximately on line 5—5 of Fig. 2 looking in the direction indicated by the arrow; and, Fig. 6 is a transverse section taken approximately on line 6—6 of Fig. 2 looking in the direction indicated by the arrow.

Broadly speaking, my invention is characterized by a tube closed at both ends and having therein a body of mercury, forming the ordinary thermometric column. This tube is incased in an oval shaped casing having its lower end sealed on the column and having disposed therein a glass plate containing in written language indications of the physical condition of a patient to whom the thermometer is applied. The upper end of the casing is sealed so that a drop of the material forming the casing rests on the upper end of the strip or plate and holds it firmly in position.

In the use of ordinary forms of clinical

thermometers it is necessary for the user to have a knowledge of physiology in order to determine the danger point of a patient's temperature, and to avoid this objection I provide in my thermometer a plainly printed strip indicating the normal and dangerous conditions of a patient, and also giving instructions to summon a physician when the temperature of the patient indicates a dangerous condition.

In the practice of medicine, particularly in diseases of children, it is often difficult for the physician to determine the temperature of the patient because of the nervousness and aversion of the child, so that I provide a thermometer which can be used by the mother while the child is in a passive condition. Thus, without a knowledge of physiology or disease, the mother can ascertain the condition of the child without the necessity of having to acquire any particular knowledge along these lines.

It will be understood that all of the parts of my invention are formed of glass, for hygienic reasons and also to permit the inclosed strip being seen through its protecting casement.

Referring to the drawing 1 designates a casing of glass having a pointed end 2 which is welded to a thermometric column 3 at a point adjacent its lower end, which lower end is filled with a body of expansible fluid 4 such as mercury or alcohol.

The column 3 is provided with a bent portion 5 and extends within the casing 1 to a point adjacent its end opposite to that which is welded to the column. A glass strip 6 is disposed within the casing 1 so that its lower end rests against and is held by the bent portion 5 of the column 3, and its upper end is held in position by a drop of glass 7 which is formed when the upper end of the casing 1 is sealed.

The casing 1 performs the double function of retaining the strip 6 in place and at the same time protects the column 3 from the heat of the hand of the user.

The strip 6 is provided with a temperature scale showing 37, 38 and 40 degrees C. and the corresponding degrees F. Between the degrees of the scale indicating 37 and lower degrees C. there is a space designated by the words "Normal condition"; between 37 and 38 degrees C. there is a space 10 designated by the words "Danger coming"; between 38 and 40

degrees there is a space designated by the words "Doctor at once"; and, above 40 degrees C. there is a space 12 for advertising matter. Advertising matter may likewise
5 be placed on the rear face of the strip 6. These designations of "normal," "danger," etc., indicate to the user the physical condition of the patient to whom the lower end of the thermometer column is applied, with-
10 out such user having a particular knowledge of the relation between the temperature of the patient and his physical condition with relation to health or disease.

Having thus fully described my invention
15 what I claim as new and desire to secure by Letters Patent is:—

1. In combination with a thermometric column, having a bent portion, a strip dis-
posed with one end against the bent portion
20 of the column and provided with sections in-

dicative of the physical condition of the per-
son to whom the column is applied and a
transparent casing disposed around the col-
umn and strip.

2. In combination with a thermometric 25
column, having a bent portion, a strip dis-
posed with one end against the bent portion
of the column and provided with sections in-
dicative of the physical condition of the per-
son to whom the column is applied with a 30
transparent casing disposed around the col-
umn and strip and having its upper end
closed and attached to the upper end of the
strip.

In witness whereof I have hereunto set my 35
hand in the presence of two witnesses.

SEVERIN LACHAPELLE.

Witnesses:

C. C. COUSINS,
E. M. SLINNEY.