

No. 848,458.

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W. P. GRAFTON.
CLINICAL THERMOMETER.
APPLICATION FILED JUNE 9, 1906.

Fig. 1.

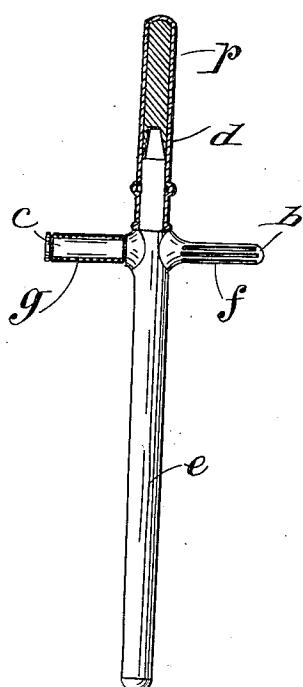
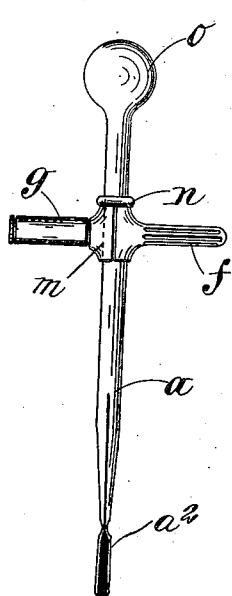


Fig. 2.



WITNESSES:

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CLINICAL THERMOMETER.

No. 848,458.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WALTER PATRICK GRAFTON, a subject of the King of Great Britain, residing at 1 The Village, Old Charlton, Kent, England, engineer, have invented or 5 certain new and useful Improvements in or Relating to Clinical Thermometers, of which the following is a specification.

My invention relates to clinical thermometers in which the return of the mercury to the bulb is brought about either by shaking or by centrifugal action; and the object of the invention is to enable the operation to be performed with the minimum of trouble and 15 without the liability of the thermometer slipping from the fingers and being broken.

My invention consists in a holder for a thermometer provided with a pair of arms projecting in alinement with one another at 20 opposite sides of the holder and at right angles to the axis of the said holder, so that when the said arms are held between the fingers the holder, and thereby the thermometer, may be easily rotated about the arms 25 as an axis and at such a speed that the centrifugal force developed will cause the mercury to be driven past the constriction in the bore back into the bulb.

The invention also consists in the construction of the arms as hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side elevation of a thermometer-case to which the invention is applied, and Fig. 2 is 35 a similar view of a thermometer provided with a pair of detachable arms.

Similar letters of reference indicate like parts in both views.

In Fig. 1 of the drawings the holder for the 40 thermometer is in the form of a case comprising the body *e* and cap *d*. The body *e* is provided at its upper end with the arms *b* and *c*, projecting in alinement with one another and at right angles to the axis of the case, the 45 arms being of a length to permit them to be held between the finger and thumb, so as to be readily rotated. The arm *b* is grooved or otherwise roughened, as at *f*, so as to give a better grip to the finger and thumb, and the 50 arm *c* is provided with a sleeve *g*, loosely mounted thereon and serving as a bearing during the rotation of the case.

Instead of providing the case with arms the arms may be applied to the thermometer

as shown in Fig. 2. In this case the arms, 55 which are similar in construction to the arms shown in Fig. 1, are secured to a holder in the form of a split sleeve *m*, which fits snugly upon the thermometer and is held thereon by friction. 60

To prevent any liability of the thermometer from being thrown out of the sleeve by the centrifugal force developed by the rapid rotation of the thermometer about the arms as an axis, I preferably provide the thermometer with a collar *n*, with which the sleeve *m* engages, as shown.

In order that the centrifugal force developed shall cause the mercury to move toward the bulb of the thermometer, the axis 70 of rotation should be situated toward the upper end of the case or thermometer. In either case it is advisable to counterbalance the long or bulb end *a* by weighting the opposite end of the case or thermometer, so as to 75 promote smoothness and rapidity of rotation by causing the center of gravity of the whole to coincide as nearly as possible with the axis of rotation. In Fig. 1 the cap *d* of the case is elongated and weighted at *p*, while in Fig. 80 2 the counterbalance is effected by providing the upper end of the thermometer with an enlargement *o*.

I claim—

1. A casing in which is held a clinical thermometer, provided with oppositely-arranged arms, upon one of which is loosely mounted a sleeve.

2. A holder for a clinical thermometer, having oppositely-arranged arms, one of 90 which is provided with a bearing in which the arm is adapted to turn.

3. A case for a clinical thermometer provided with a pair of arms, one of which is rigidly attached to the case, said arms projecting in alinement with one another at opposite sides of and at right angles to the axis of the instrument, for the purpose specified. 95

4. A case for a clinical thermometer provided with a pair of arms, both of which are rigidly attached to the case, said arms projecting in alinement with one another at opposite sides of and at right angles to the axis of the instrument, for the purpose specified. 100

5. A casing in which is held a clinical thermometer, provided with oppositely-arranged arms, one of which is roughened and the other having a sleeve loosely mounted thereon. 105

6. A case for a clinical thermometer having one end weighted and provided with oppositely-arranged arms, upon one of which is loosely mounted a sleeve.

5 7. A case for a clinical thermometer, having one end weighted and provided with oppositely-projecting integral arms, one arm having a sleeve loosely mounted thereon and the other being roughened.

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Witnesses:

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