(No Model.)

A. H. HOYT.

HINGE CONNECTION FOR ELECTRICAL MEASURING INSTRUMENTS.

No. 603,042. Patented Apr. 26, 1898.

Fig. 1.

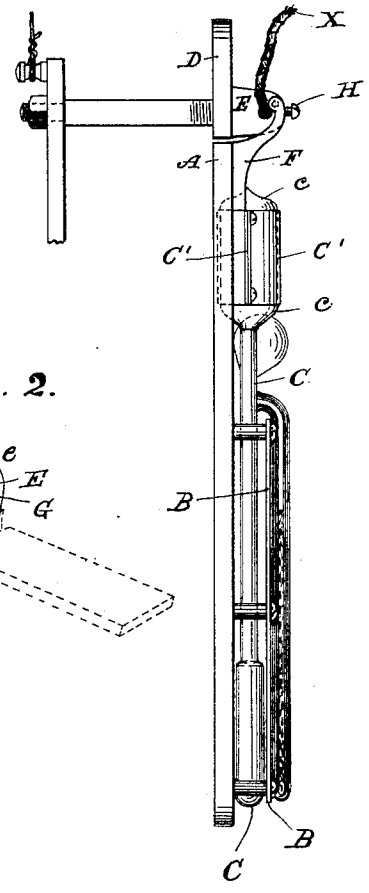
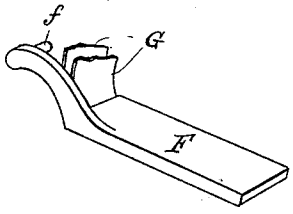


Fig. 2.

Fig. 3.



Witnesses

F. P. Thrasher

H. R. Clough

Inventor

Adrian H. Hoyt

By his Attorney J. B. Thurston

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ADRIAN H. HOYT, OF PENACOOK, NEW HAMPSHIRE.

HINGE CONNECTION FOR ELECTRICAL MEASURING INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 603,042, dated April 26, 1898.

Application filed November 1, 1897. Serial No. 656,989. (No model.)

To all whom it may concern:

Be it known that I, ADRIAN H. HOYT, a citizen of the United States, residing at Penacook, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Hinge Connections for Electrical Measuring Instruments; and I do hereby declare the following to be 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.

This invention relates to thermal registering maximum meters, and such instruments require a hinge for connecting the stationary and movable parts. The hinge forms an essential element in such instruments, as one of any ordinary construction will not afford an electrical connection which will be constant. Therefore my present invention is confined more especially to perfection in the electrical connection of hinges for this class of instruments.

The object of my invention is to produce a hinge whose electrical conductivity is not dependent upon frictional contact of the movable parts of same.

Hence my invention consists in the substitution for a hinge of a copper ribbon wound spirally on an axle or shaft, one end of said ribbon being soldered or otherwise rigidly attached to the shaft and the other end similarly connected to the movable part of the instrument, thus producing a certain electrical contact and allowing the liquid in the drip-tube to be returned to its normal position without in any way interfering with the electrical conductivity of the instrument, as fully set forth in the following specification and claims and clearly illustrated in the annexed drawings, forming a part of the same, of which—

Figure 1 is an edge view of a thermal registering maximum-meter to which is applied my improved electrical connection, Figs. 2 and 3 being detail perspective views showing my improved ribbon connection for the stationary and movable parts of the instrument.

Similar letters designate corresponding parts in all the views.

A is a wooden base, to which is attached a suitable graduated scale B and a thermal tube C, having a suitable bulb or heating area *c*.

Of the two detail views of my improved hinge or electrical connection, Figs. 2 and 3, the former shows the stationary member and the latter the movable member.

The stationary member consists of two blocks E, mounted on a plate D, formed of some suitable insulating material, and these blocks are formed or attached to opposite ends of a hollow shaft *e*, its opening being represented at *e'*. A perforation or socket e^2 is formed in one of said blocks E, near the opening *e'*, for the reception of a laterally-projecting stud *f*, formed at the adjacent end of a movable member F, the opposite end of which may be connected to the heating resistance C' C', the electrical connections of this improved hinge being produced by means of a copper ribbon G, passing spirally around the hollow shaft *e* and having one of its ends soldered or otherwise rigidly attached to said shaft and the opposite end similarly attached to the movable member F. Set-screws H are threaded to the blocks E in a manner to bear upon the circuit-wires X within the opening *e'*. The movable member of this hinge is shown by dotted lines in Fig. 2 as when connected and in its normal position.

Having described my improved electrical connection, what I claim is—

1. In a thermal registering maximum-meter, electrical connections for the stationary and movable parts of the instrument consisting of flexible metal strips or ribbons.

2. In a thermal registering maximum-meter, a hinge comprising a stationary and movable portion, and a copper ribbon having one end electrically connected to the stationary and the other end to the movable part of the hinge, substantially for the purpose set forth.

3. An electrically-connected hinge comprising a stationary member composed of two blocks of metal joined by a hollow shaft or cylinder one of said blocks having a small perforation or socket near the opening leading to said hollow shaft, a movable member having an arm projecting from its edge adjacent to the stationary member provided near its outer end with a lateral projection fitting the small socket in said stationary

member, a copper ribbon passing spirally around said hollow shaft and having its ends soldered or otherwise rigidly attached one to said shaft and the other to said movable member, and set-screws threaded to perforations in the stationary member and communicating with the opening in its shaft.

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

ADRIAN H. HOYT.

Witnesses:
I. ALBERT MASSIE,
JOHN M. MESERVE.