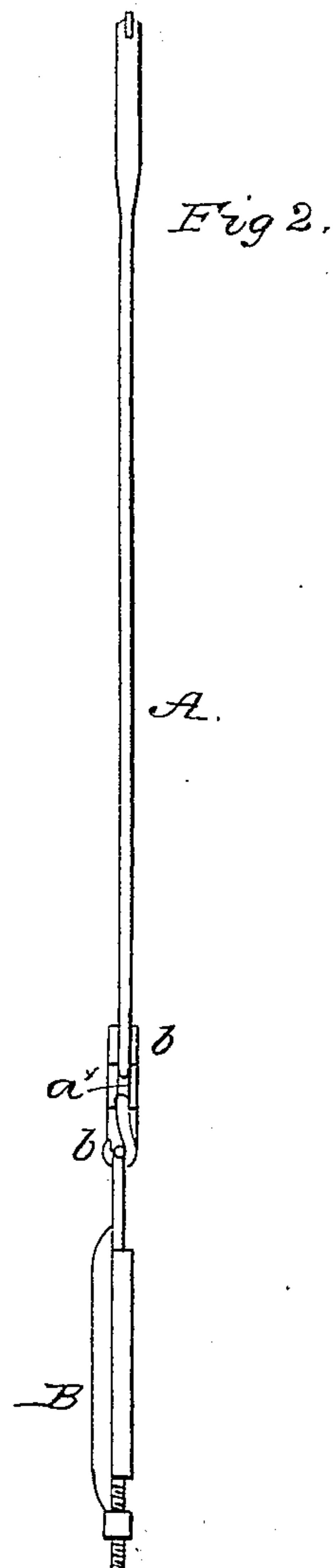
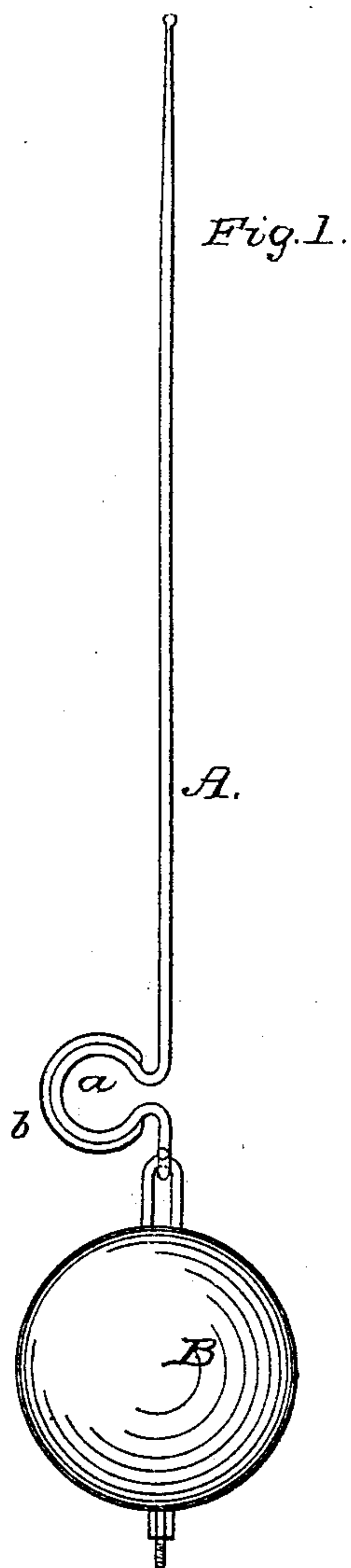


M. BEMIS.

Pendulum.

No. 26,008.

Patented Nov. 8, 1859.



Witnesses
R. H. Eddy
W. P. Hale

Inventor
Merrick Bemis

UNITED STATES PATENT OFFICE.

MERRICK BEMIS, OF ASHBURNHAM, MASSACHUSETTS.

COMPENSATING PENDULUM.

Specification of Letters Patent No. 26,008, dated November 8, 1859.

To all whom it may concern:

Be it known that I, MERRICK BEMIS, late of Anoka, Minnesota, but now residing in Ashburnham, in the county of Worcester and State of Massachusetts, have invented an Improvement in Clock-Pendulums; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, denotes a side view, and Fig. 2, an edge view of the pendulum containing my invention.

In such drawings A, exhibits the rod and B, the ball of a common clock pendulum.

In carrying out my invention, I construct a portion, viz., *a*, of the steel rod in the form of a bow or segment of a circle or a bend approximating thereto the same being essentially as represented in Fig. 1, and furthermore I apply to the said bow or bend, a clasp or segment *b*, of brass or other metal having an "expansive ratio" different from that of the bow of the pendulum rod, that is to say, should the pendulum rod be constructed of steel, the encompassing clasp may be made of brass, the "expansive ratio" of brass to that of steel being very nearly as 8 to 5. The bend or bow *a*, and its compensating segment to operate to good advantage, should each be more than one hundred and eighty degrees in length or very nearly a full circle, as represented in the

drawings, the two being soldered or otherwise suitably connected together in such manner as to insure equality in the length of the pendulum under any change of temperature.

The operation of the compensating clasp will be such as to contract the bowed part *a*, in proportion to the increase of length in the rod created by any change of temperature.

The above mode of constructing the compensating pendulum has the merits both of simplicity and cheapness of construction, and besides has been found to operate to excellent advantage.

I do not claim in combination with a pendulum, a compensation apparatus or one composed of bars of two or more metals having different degrees of expansion under any change of temperature; but

What I do claim is—

My improved mode of making a compensating pendulum, viz., by arranging a part of the rod in the form of a bow or sectoral bend and applying to such bend or part, a clasp or bow of metal having a different "expansive ratio," the whole being substantially as specified.

In testimony whereof, I have hereunto set my signature.

MERRICK BEMIS.

Witnesses:

R. HIDDY,
F. P. HALE, Jr.