

CLOCK

This invention relates to clocks.

Hitherto, one known table clock possessing visual decorative appeal is shown in published Japanese Patent Application No.

56-49972. This table clock is designed so that the whole clock
5 body can pivotally oscillate and hence possesses dynamic decorative appeal as well as displaying the time of day.

However, this known table clock provides only a very simple movement, has insufficient visual decorative appeal, and it is very difficult to read the time of day because the clock body
10 also rotates.

The present invention seeks to provide a clock which presents a more complicated movement to enhance visual decorative appeal but which permits very easy reading of the time of day.

According to the present invention there is provided a clock
15 comprising: a first pole member pivotally mounted at a point intermediate its ends on a base member and having a bob at one end; a second pole member one end of which is pivotally connected to the other end of the first pole member; and a clock body secured to the other end of the second pole member.

20 Preferably the first pole member is pivotally mounted at

a substantially central point on the base member.

The bob may carry a magnet for interaction with an electromagnetic coil on the base member, in operation, causing the first pole member to oscillate.

5 The invention is illustrated, merely by way of example, in the accompanying drawings, in which:-

Figure 1 is a front view of a table clock according to the present invention; and

10 Figure 2 is a side view of the clock of Figure 1 with a portion broken away.

Referring to the drawings, a table clock according to the present invention has a base 1 on which there is a hollow triangular support body 2. To an upper part of the rear of this support body is secured a coupling member 3. A first pole member 5 is
15 rotatably coupled to this coupling member 3 through a coupling member 4. The coupling member 4 is positioned slightly above the centre of the first pole member 5. To the lower end of the first pole member 5 is attached a bob 6. A permanent magnet 7 provided on the lower end of this bob 6 can come to opposed relation
20 to a driving coil 8 provided inside the base 1. Thus the interaction between the permanent magnet 7 and the driving coil 8 causes the first pole member 5 to oscillate.

To the upper end of the first pole member 5 is secured a frontwardly projecting coupling member 9. A coupling member 10
25 is rotatably coupled to the coupling member 9. An upper end of a second pole member 11 is attached to the coupling member 10 and to the lower end of this second pole member 11 is secured

a clock body 12. The centre of gravity of the combination of the first pole member 5, the bob 6 and the coupling member 9 lies in a position lower than the coupling member 4. Since the clock body 12 serves as a weight, the centre of gravity of the second pole member 11 also lies in a position lower than the coupling member 10.

The first pole member 5 is driven by the electromagnetic interaction between the permanent magnet 7 and the driving coil 8 so as to oscillate. Thus, the coupling members 9,10 perform arcuate motion about the coupling member 4 but, the second pole member 11 is always displaced laterally or from side-to-side while maintaining its vertical posture because it pivots about the coupling member 9 and the clock body acts as a weight. The clock body 12 attached to the lower end of the second pole member 11 moves in an arcuate path while keeping its time display section in the vertical posture (illustrated by the chain lines in Figure 1). In other words, the line joining the six o'clock and twelve o'clock positions of the time display section always remains vertical.

Incidentally, depending upon the relation between the natural frequency of the first pole member 5 and the natural frequency of the second pole member 11 is possible to cause the second pole member 11 to swing in opposite phase to the first pole member 5. In this case, it is possible to enhance change of movement though degrading somewhat the easiness of reading the time of day from the clock body.

The table clock of Figures 1 and 2 presents a variety of "double" motion by use of very simple configuration, and the

degree of visual decorative appeal is increased. In the case where the second pole member is designed so as to be displaced from side to side while keeping the time display section in the vertical posture, the time of day can be read very easily. Further, 5 since several modes of double motion can be achieved depending upon the relation between the first pole member and the second pole member, it is possible to promote still more variety of motions.

19



-5-

CLAIMS

1. A clock comprising: a first pole member pivotally mounted at a point intermediate its ends on a base member and having a bob at one end; a second pole member one end of which is pivotally connected to the other end of the first pole member; and a clock
5 body secured to the other end of the second pole member.
2. A clock as claimed in claim 1 in which the first pole member is pivotally mounted at a substantially central point on the base member.
3. A clock as claimed in claim 1 or 2 in which the bob carries
10 a magnet for interaction with an electromagnetic coil on the base member, in operation, causing the first pole member to oscillate.
4. A clock substantially as herein described with reference to and as shown in the accompanying drawings.