

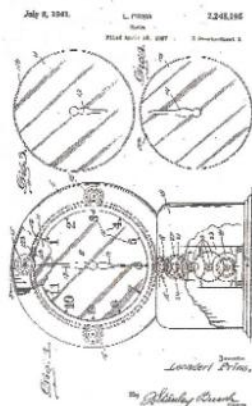
Deco Collector: Electric Mystery Clocks

By Jim Linz

The term "mystery clock" is generally applied to any clock where the source of motion is not readily visible; that is, the movement is not clearly attached to the hands. Mystery clocks with mechanical movements have fascinated the public for centuries so it is not surprising that soon after the synchronous electric clock was introduced, the new technology was used to again fool the public. Such clocks were produced under a number of brand names, most notably Jefferson Electric Company and Haddon Products.

Many of the Jefferson clocks as well as those produced by Tiffany, Rex Cole, Boots Boy, and LeCoulre are based on the inventions of Leendert Prins of the Netherlands. Prins resided in Flushing, New York during most of the 1930s before returning to the Netherlands in the mid 1940s.

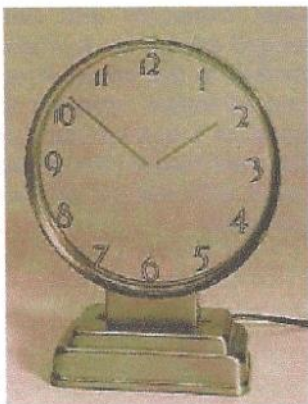
Prins' first U.S. patent (No. 1,855,648), issued on April 26, 1932, related to a method for rotating an advertising object around the face of a clock with no visible means of movement. This was accomplished by attaching the advertising object to a transparent disk. The object moved because the transparent disk was rotated by a gear drive attached to its outer edge, cleverly hidden from view.



Prins used this same basic approach in developing his first mystery clock. In this clock, there are four transparent discs; the outer two discs are stationary while the two inner discs, one with a minute hand glued in place, the other with an hour hand glued in place, rotate. Like the advertising clock described above, the discs are rotated by gear drives attached to the outer edge. The gearing drives the discs at different speeds. Prins applied for a patent on his invention April 30, 1937, but the patent (No. 2,248,195) was not granted until July 8,

1941. The patent was reissued May 1, 1945 (RE 22640).

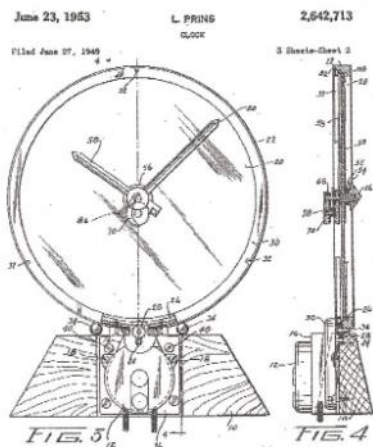
This method was used on the original synchronous mystery clock produced by the Etalage-Reclame Corporation. The company was located in New York City at 48 East 28th Street. In addition to Etalage, this movement was used in mystery clocks produced under the Rex Cole, Boots Boy, Tiffany, and LeCoultre labels.



In 1946, Prins applied for a patent for a second mystery clock. The original application was withdrawn and a new application filed in 1949. Application for a patent was also made in France. The U.S. patent (No. 2,642,713) was granted June 23, 1953. By this time, Prins was again living in the Netherlands.

Prins' second mystery clock used a simplified mechanism with a single rotating glass disc in place of the two rotating discs of the earlier design.

Although still mysterious because there was no obvious link between the hands and the clock movement, it looks more conventional in that the hands emanate from the center of the disc and there is some gearing visible from the rear.

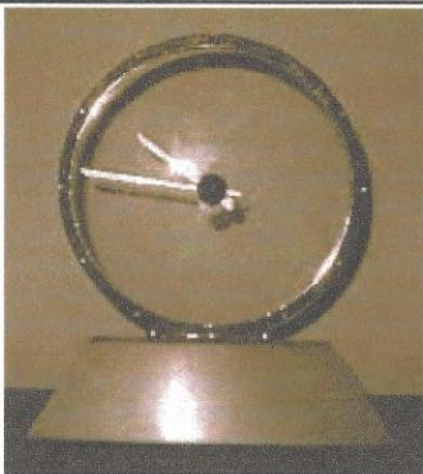


In the new design, the single glass disc is held in place by a retaining ring resembling a typical bezel. The minute hand, attached to the front of the glass by friction, can easily be turned to set the minutes. Unlike a typical clock, however, the hour hand is located behind the glass and is attached to a gear assembly.

The hour hand is driven by a

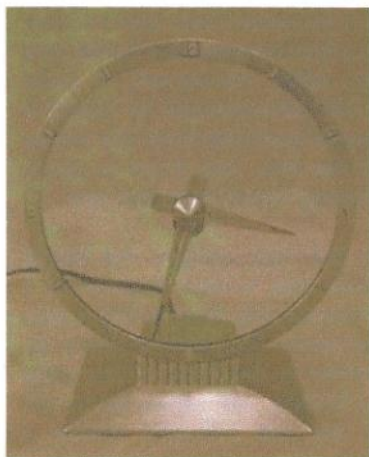
INVENTOR:
 LEENDERT PRINS
 BY *Wm. F. Gifford*
 ATTORNEY

gear assembly and counterweight connected to a shaft attached to the glass. A second counterweight attached to the base of the hour hand keeps the hour hand in the proper position with respect to the minute hand.



Jefferson Electric

Although the Jefferson Golden Hour is undoubtedly the most common mystery clock, having been produced from 1949 until sometime in the 1980s, it is based on Leendert Prins' second mystery clock patent (No. 2,642,713). Jefferson apparently purchased the rights to Prins' patent. It has also been reported that the movements were, at least initially, produced in the Netherlands by Nederlandsche Uurwerkfabrieken NUFA NV, and imported for use in Jefferson clocks. Many of the other mystery clocks, such as the Golden Minute, Golden View, Golden Helm, Golden Secret, and Exciting Hour, produced by Jefferson also used the Prins method.

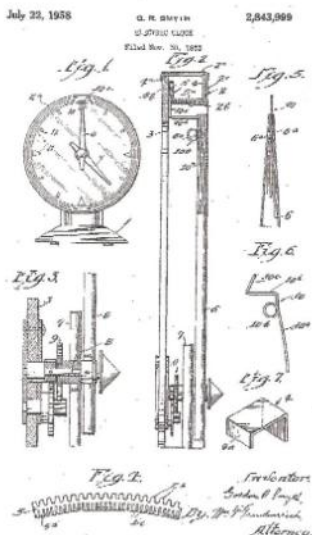


Haddon Clock Company

The Haddon Clock Company of Chicago made a number of mystery clocks some of which are similar in appearance to the Jefferson clocks. These clocks differ, however, in the method used to create the illusion. Unlike the Etalage and Jefferson clocks which employed

stationary hands moved by rotating glass, the Haddon clocks function much more like a typical clock. The glass is stationary and the hands move. The mystery is the means for moving the hands, since there is no visible source of power to the hands.

Like the Etalage and Jefferson clocks, the secret to the operation of the Haddon clocks lies in a gear mechanism hidden inside the metal ring surrounding the glass dial. In this case, however, it is the minute hand rather than the glass that is driven by the gear. A wire projecting from the minute hand engages the teeth in the gear to drive the clock. The hour hand is attached to the glass and is, in turn, driven by gears attached to the minute hand.

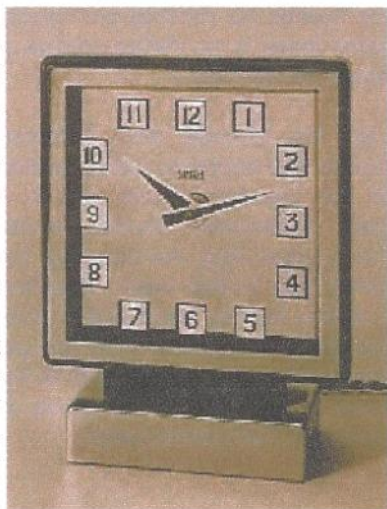


Although the wire is hidden from view, the illusion with this type of mystery clock is not quite as great because the minute hand is clearly touching the rim of the clock.

Gordon Smyth of Chicago developed this approach, applying for a patent on November 30, 1953. The patent (No. 2,843,999) was awarded July 28, 1958. Among the clocks using this method were the Golden Vision, Golden Visonette, and Commodore.

Smith's

Although the first electric mystery clocks marketed in the United States were based on the work of Leendert Prins, the first company to produce such a clock appears to be the English clock maker, Smith's. In 1935, the company introduced a square mystery clock. It utilized three pieces of glass enclosed in a polished nickel frame, with the center piece being slightly smaller. The numerals are on the front, stationary piece of glass and the hand assembly is attached to the rear glass, also stationary. The smaller center piece of glass has a hole in the center and is shaped at the bottom in such a way as to permit the glass to be slowly rocked from side to side. Each oscillation drives the hands forward by one minute.



Mastercrafters

Although better known for its motion clocks, Mastercrafters, another Chicago clock maker, also made a mystery clock, using a method similar to that employed by Smith's. At first glance, the Mastercrafters "Fantasy" clocks one might assume that it is a rectangular version of the Jefferson Golden Hour. Obviously, the Prins rotating glass method cannot work in a rectangular frame.

The key to this clock is a piece of transparent plastic sandwiched between two pieces of glass. The hands, mounted on the front piece of glass, are moved as the plastic sheet pivots at the top of the frame and slowly moves from side to side.

Mastercrafters was established shortly after World War II and continued in business until 1980.