Historical summary of the Murday electric clocks as made by the Reason Manufacturing Company.

In the 1870s Henry Reason started manufacturing card games and toy pistols in Brighton, England.
His venture proved successful and in 1897 he formed a limited liability company under the name of The Reason Manufacturing Co. Ltd with premises in Gloucester Road. By 1896 the company had significantly increased its range of toys and extended its manufacturing facilities into several other premises.

In around 1890 Henry Reason struck up a friendly relationship with his neighbour Arthur Wright, an electrical engineer working for the Brighton Corporation. Through this relationship, Henry developed an interest in the expanding field of domestic electricity and became a major manufacturer of household fuse boxes for the Brighton Corporation.
In addition to fuse boxes, this new market for selling domestic electricity led to a profitable business in the manufacture of meters to measure its consumption. We can see from this brief history that by 1900 the Reason Manufacturing Company was firmly established as a supplier of electrical products.

Earlier, in 1894, Thomas Murday had collaborated with Gent and Parsons and was a co-patentee in one of the Gent company patents. By 1901 he was an employee of Standard Telephones and Cables (STC) and had patented a Hipp-toggle controlled regulator clock, with a count-wheel based system for delivering signals to impulse master clocks. He also patented a method of using the energy stored in a pendulum to synchronise the time upon receipt of a signal.
In a later Patent, No. 22,819 of 1908, he describes a method for changing the oscillatory motion of a pendulum into the step-by-step propulsion of a clock train. However, he failed to find a market, or create the demand, or the production facilities for his own patents. He had tried to exploit the Hipp -toggle as the switching method in electric master clocks but was beaten by a better exploitation of the Hipp principle as devised by George Bowell for his Silent Electric Clock Co. Bowell's Hipp based design was selected by the British Post Office for its master clock and slave requirements and became one of the most successful electric clock systems developed in the UK.

By 1910, Murday was living in Brighton, Sussex and collaborating with The Reason Manufacturing Company. It had become clear that the UK market for master clocks would be dominated by Synchronome and Gent for gravity arm systems and Bowell's Silent Electric for Hipp based systems. In these circumstances it is not surprising that, despite his earlier experience with clocks for industry and commerce, he concentrated on domestic clocks and engaged the Reason Manufacturing Co. to produce his Hipp controlled balance wheel and pendulum clocks. These were made for the small luxury segment of the domestic market and were very expensive to manufacture. Opinions vary as to how many were made. Known serial numbers indicate a few hundred at the most, however, research suggests that not all the numbers were used.

It would seem that in these circumstances Murday was not satisfied with his prospects and 1911 he emigrated to Sydney, Australia, where electric clock systems were expanding rapidly. There he was offered the job of managing the electric clocks and scientific

instruments business of Prouds and at last found success for himself and the company through the development and sales of master clock systems.

Prouds clocks were not made to Murday's early designs as made by Reason. An excellent account of Murday and his master clocks in Australia was written by Anthony Roberts and Norman Heckenberg and published in the BHI Horological Journal in February 2009.
Proud's 1913 catalogue shows images of the early half second pendulum and balance wheel clocks, but it seems certain that these were made by Reason for sale by Prouds and that after this initial offering production ceased.

When Murday went to Australia in 1911 things were changing at the Reason Manufacturing Company. In 1910, Reason had leased part of their premises to the firm of Allen West, a manufacturer of electric motor controls and switch gear.

West was a successful company that was growing fast and by 1915 it had acquired control of the Reason Company. During the First World War the firm manufactured armaments and other military items in addition to their electric motor control business. Engaged in the war effort, and with Murday in Australia, it seems very unlikely that production of the Hipp maintained balance wheel and half second pendulum clocks continued. .

Today, the clocks made to Murday's design by Reason, and in particular the large balance wheel version, are highly collectible and care must be taken to recognise the originals in comparison with the many reproductions made by amateurs from kits of parts and by model engineers to precise manufacturing instructions. Some reproductions have a very high level of finish and can fool collectors. Fortunately, genuine examples can be recognised by Reason's own engraved plate on the base together with the serial number on the movement. Any clock without these be must be regarded as suspicious.

A technical appraisal of these clocks can be found in the article by Charles Aked in the December 1970 issue of Antiquarian Horology, published by the AHS. .
Precision timekeeping cannot be claimed because in Murday's design the Hipp mechanism delivers impulse to the balance at one extremity of its swing instead of at the centre point where external interference causes the least disturbance to the balance.
In addition, the mechanism to convert the reciprocating motion of the balance crank to circular motion as required by the wheel train introduces no less than twelve friction points and requires approximately 45 degrees of balance arc to move from one operating position to the other. In consequence the disturbance to the balance is considerable.

Nevertheless, and in summary, these clocks have proved to be reliable and are, of course, highly decorative and very valuable.

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