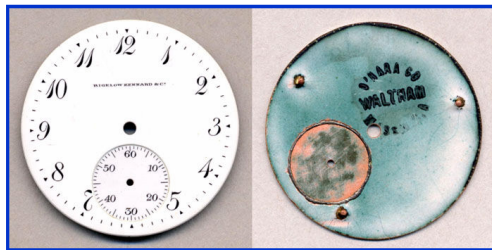


O'Hara Watch Dials *by Mark Edgar*

Daniel O'Hara made some of the very best mass produced watch dials from 1890-1910. O'Hara was born in Cincinnati, Ohio in 1856 where he became a watch case engraver. After moving to Kentucky, he continued watch case engraving and later became a foreman at Waltham's watch case manufacturing department. The very creative O'Hara held 20 patents on watch cases; however, due to reorganization in the Waltham Company he joined the Waltham Dial Company in 1890. O'Hara and his partners, Frank and Edwin Wetherbee, made some of the best fancy watch dials of that period. In 1892, Edwin Wetherbee left the Waltham Dial company to join the Trenton watch company. At this point the company was renamed the O'Hara Dial Company. Frank remained as a foreman for many years. O'Hara made watch dials for 20 years. He died in 1912 of tuberculosis.



The dial manufacturing process began by rolling copper into very thin sheets and then stamping round dial blanks. The edges of the blanks were rolled to help create a "reservoir" for the enameling process. The feet for the dial were welded to the round copper blank. The back of the copper blank was coated with scrap enamel (note the photo on the right) which caused the future front of the dial



to become concave due to the differences in expansion rates between copper and enamel. The white dial face was created by applying enamel, firing, and stoning several thin layers. A single-sunk dial (see photo) was created by lathe-cutting the front and back of the dial with emery until the copper base showed. The remaining copper was dissolved with acid and the edges were polished. The hole for the hand arbors was made in the same fashion. The numbers and dial decorations were added in



successive layers with enamel firing in between. The layering of colored decorations created the appearance of depth to the dial. Gold and silver decorations were applied just prior to the last layer of enamel. During the final firing, the gold or silver floated to the top enhancing the feeling of depth.

Application of decorations was historically done by hand, with decals, silk-screening, or photographically; however, in each case, time-consuming touch up was required. O'Hara studied a Swiss off-set printing process and

adapted it to applying decorations to watch dials in multiple layers. The process included photoengraving or etching a design on a metal surface, filling the metal die with a suspension of enamel in a liquid, and transferring the design to a stamp which was subsequently applied to the dial. The dial was then fired which burned off the liquid and caused the enamel to fuse into the white dial. In this manner, some spectacular dials were produced.

Identification of an O'Hara dial can be easily seen if the back of the watch dial is accessible and is stamped with "Waltham Dial Co." or "O'Hara Dial Co. Waltham, Mass". Often the back of the dial is inaccessible, and in later years, the dials were not stamped because O'Hara made dials for many other companies which prohibited dial manufacturer identification. Since O'Hara made high quality dials, identification can be qualitatively accomplished by assessing the characteristics of the dial. Dial characteristics include a smooth white, glossy background free of defects, no copper showing around smooth holes, glossy black figures with no ragged edges, clear graduations, and very fine circles.

In the late 1890's, competition intensified especially from Europe. O'Hara was forced to buy the high-grade white enamel from Europe because he was unable to develop his own. The European sources charged a high price which forced O'Hara to have high dial prices in comparison to the imported European dials. O'Hara began to make a wide variety of other products including coasters, pin trays, lapel pins, bicycle emblems, mugs, and other products.

References used included the NAWCC website, and NAWCC Bulletins 367 and 368.