

Cleaning and Conserving the Refrigeration System

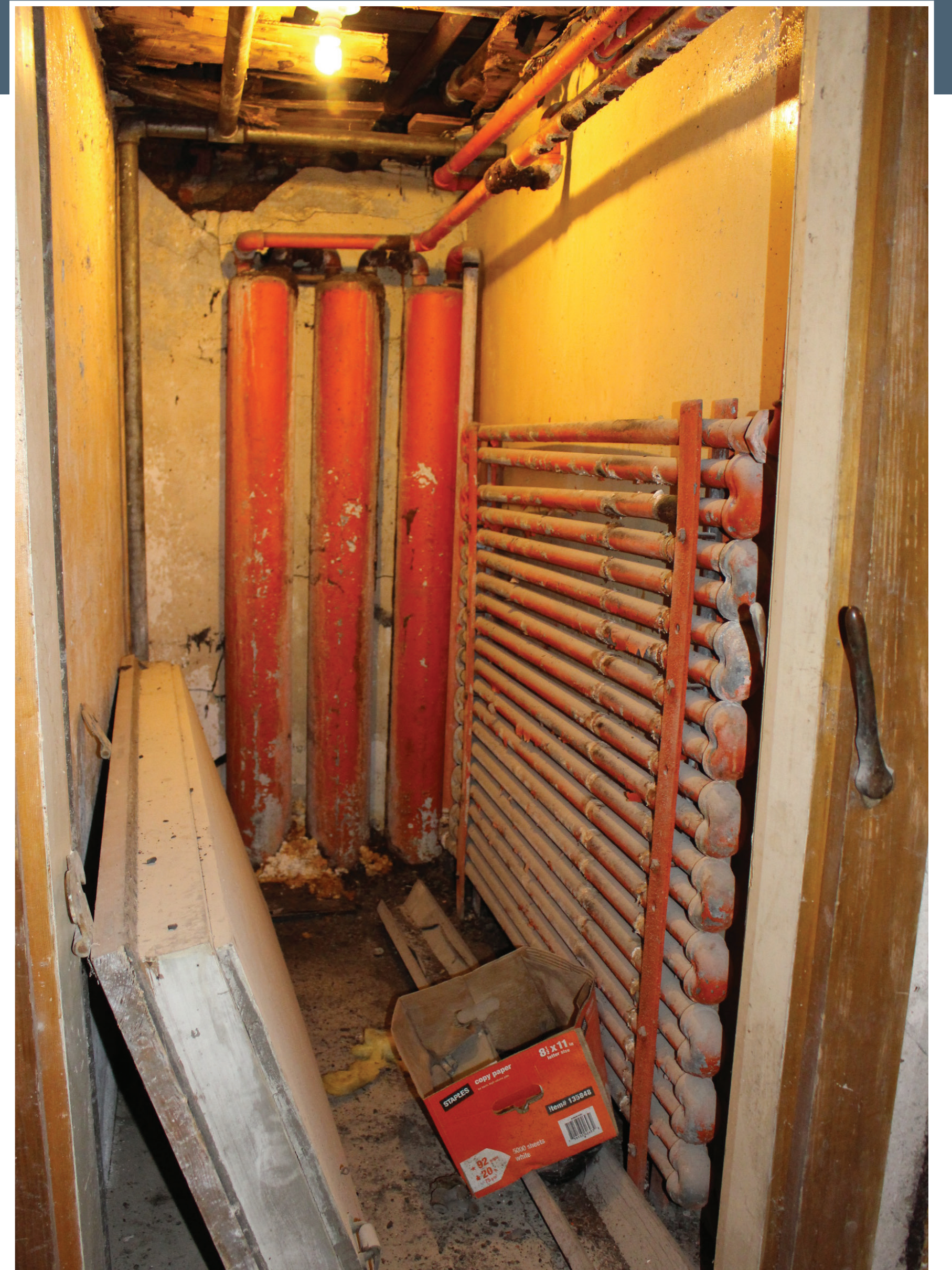
The major components of the Castle's sophisticated ammonia brine refrigeration system are still in place in the basement today. The unit was no longer functioning by the time the Tobey family was living in the house in the 1940s and 1950s, and by 2017, it had corroded so badly that holding tanks were oozing what remained of the system's ammonia. The Blackburn conservation team drilled tiny holes in the bottoms of the tanks and emptied them of their century old ammonia (which had turned into a thick black sludge).

Once emptied of ammonia, surface corrosion was cleaned from the metal tanks and piping in the basement's refrigeration closets, as well as in the two refrigerators on the home's first floor. The original bright orange paint was replicated and these parts were given a new coating to protect them from future rust.

The system's large brine tank was similarly cleaned and its original green paint was reproduced.

Did You Know?....

The Castle had built in refrigerators in its cook's pantry, butler's pantry (both on the first floor), as well as in the basement (there were even two walk-in refrigerators down there!). Although ammonia brine systems are no longer the preferred technology for home refrigeration, some ice skating arenas still use it today to create and maintain their ice rinks.



above | A walk-in refrigerator in the basement, before restoration, 2017.

below | A conservator from Blackburn Building Conservation painting refrigeration piping to match the original color, 2017.



The Castle's refrigeration motor and brine tank, before restoration, 2017.