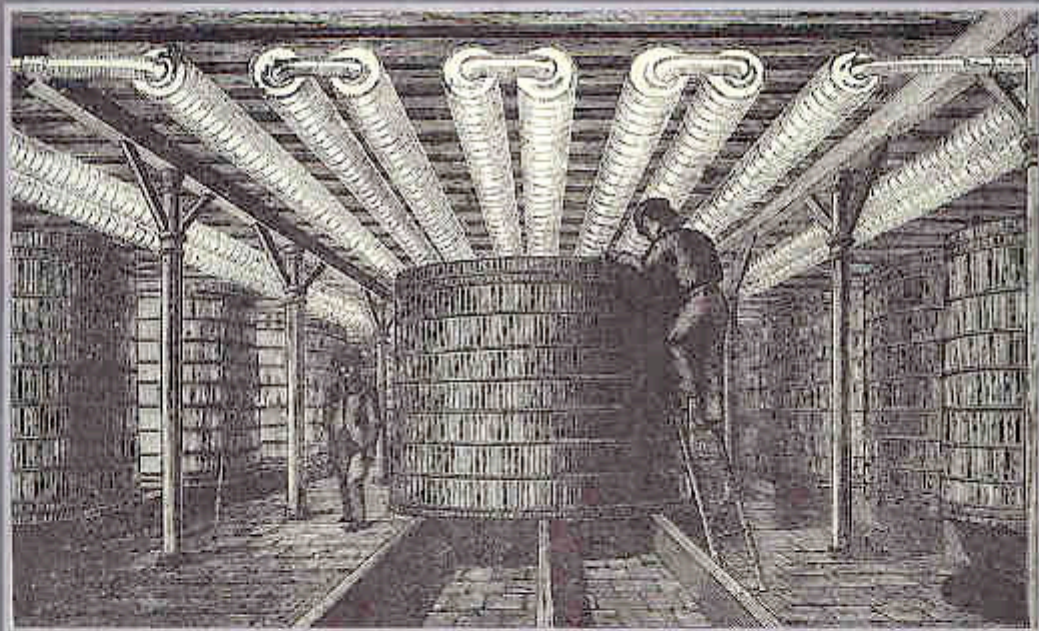


Industrial Refrigeration and Air Conditioning



Part 1.3 Applications

Part 1.3 Refrigerating Systems

Illustrations in following order

BREWING

Nineteenth Century American Breweries

Boyle Ice Machine Company

J & E Hall

Pontifex-Wood

Pontifex

Unknown

Haslam Foundry

ICE SKATING RINKS

Paris

Rockefeller Centre, New York

DAM CONSTRUCTION

Hoover dam

FOOD PROCESSING

Artificial butter

Dairy

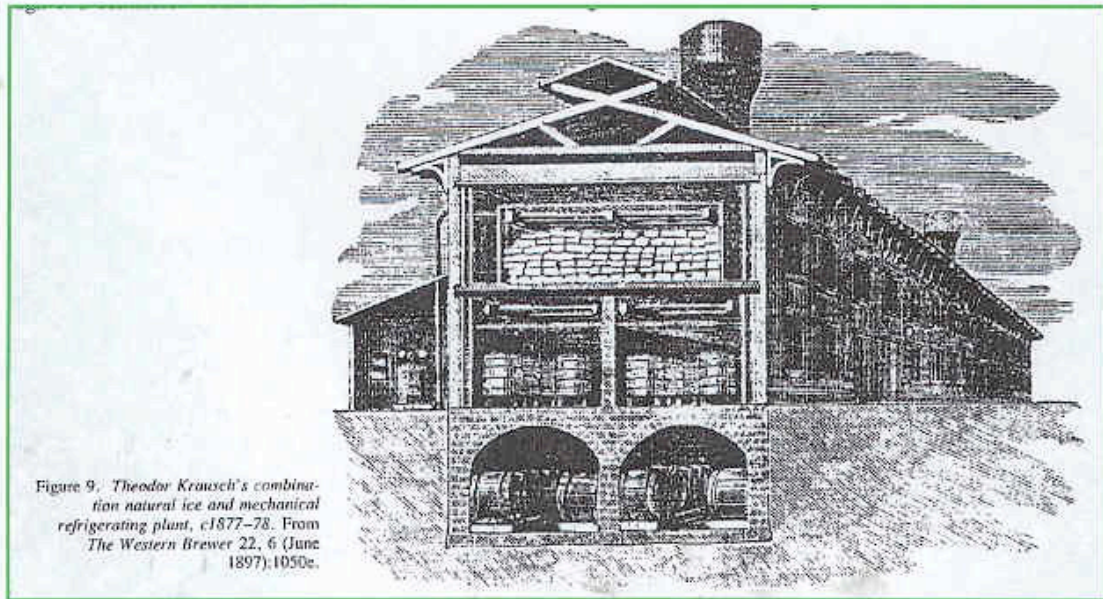


Figure 9. Theodor Krausch's combination natural ice and mechanical refrigerating plant, c1877-78. From *The Western Brewer* 22, 6 (June 1897):1050e.

Combined natural ice and mechanical refrigeration for brewery, 1897
 [Artificial Refrigeration and the Architecture of 19th-Century American Breweries, p.28]

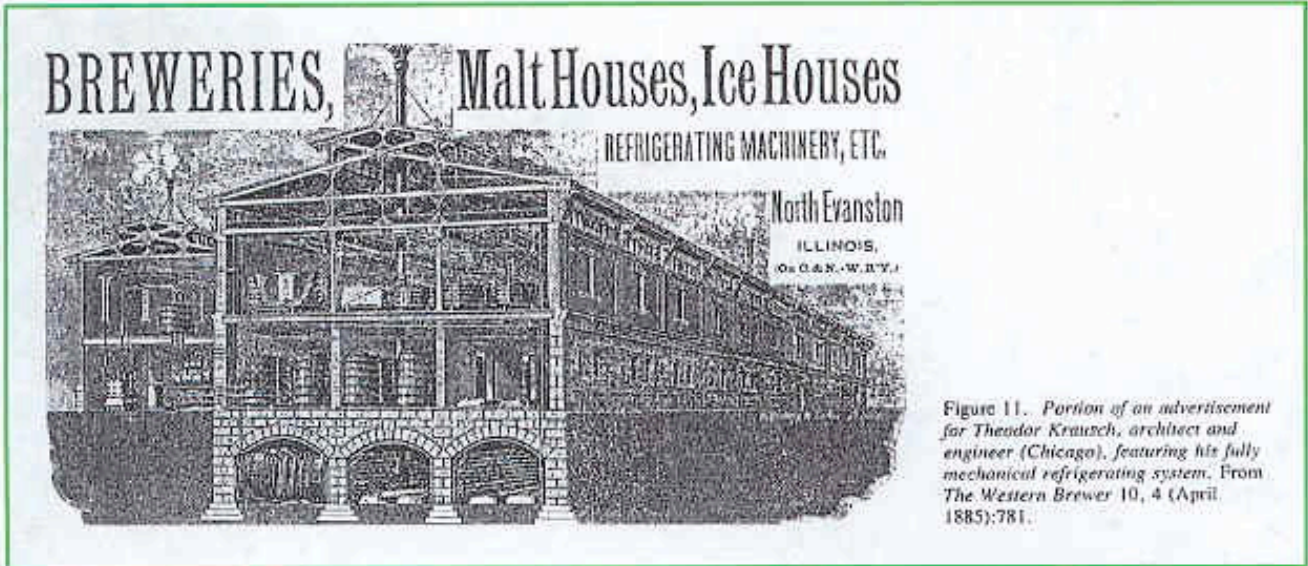
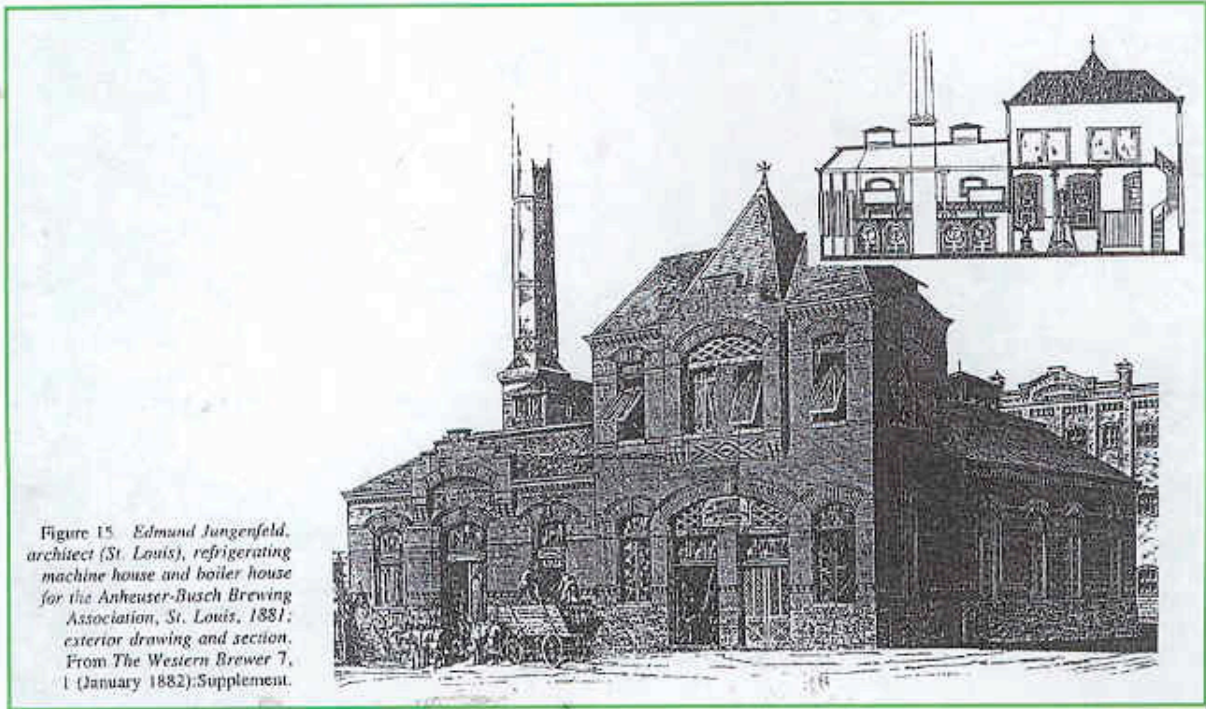
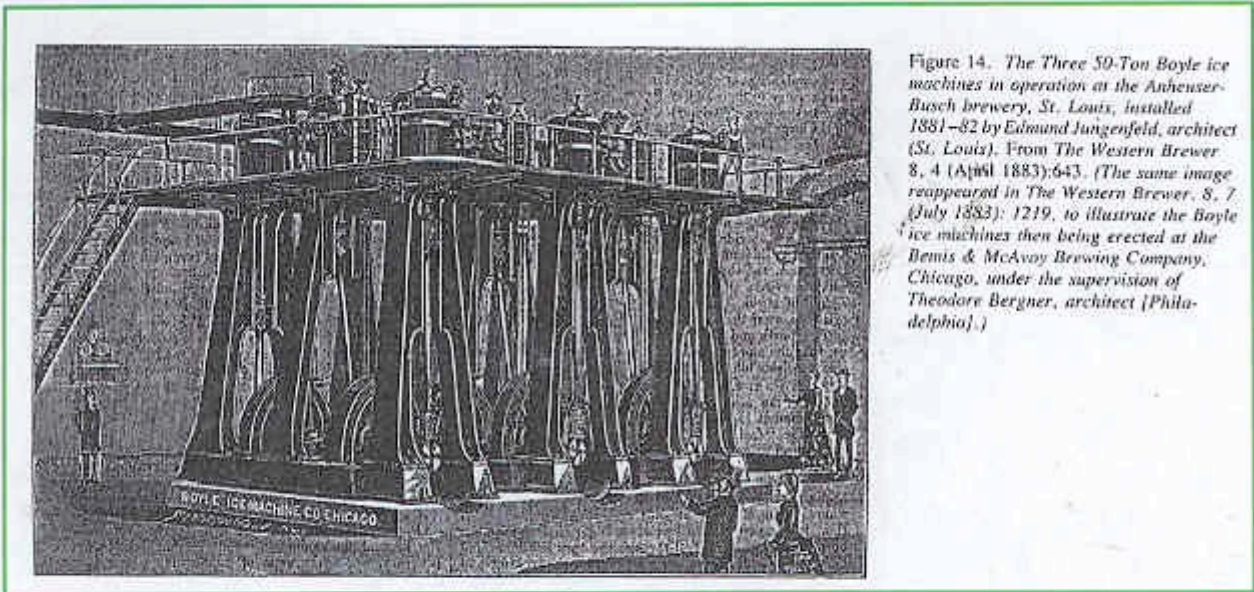


Figure 11. Portion of an advertisement for Theodor Krausch, architect and engineer (Chicago), featuring his fully mechanical refrigerating system. From *The Western Brewer* 10, 4 (April 1885):781.

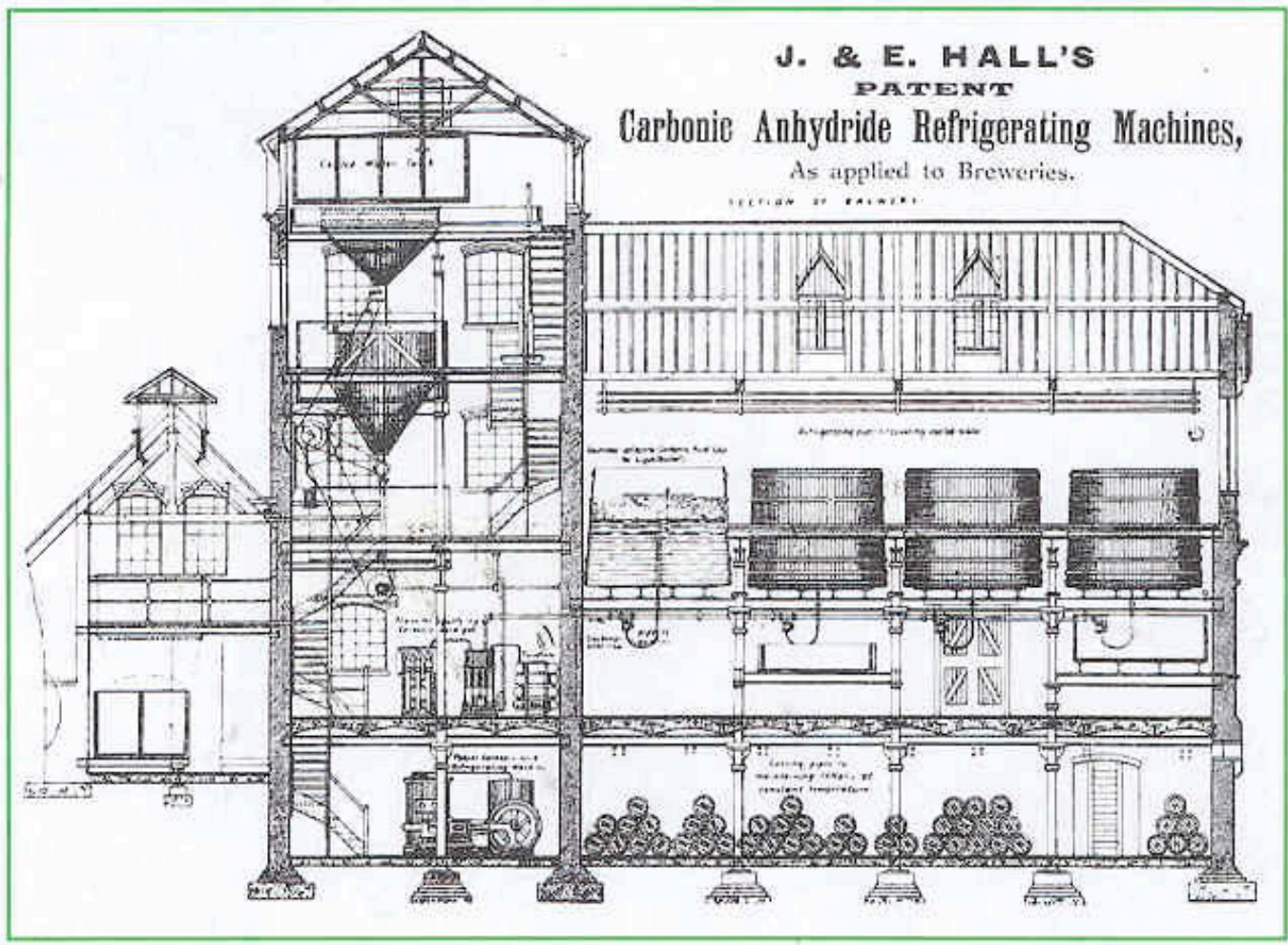
Brewery Refrigerating Machinery, 1885
 [Artificial Refrigeration and the Architecture of 19th-Century American Breweries, p.30]



Refrigerating machine house & boiler house at St Louis Brewery, 1881.
[Artificial Refrigeration and the Architecture of 19th-Century American Breweries, p.32]



Boyle ice-machine in St Louis Brewery, 1882.
[Artificial Refrigeration and the Architecture of 19th-Century American Breweries, p.31]



*J & E Hall's refrigerating machines for brewery use, c.1890 (?)
 [Halls of Dartford, p.79]*

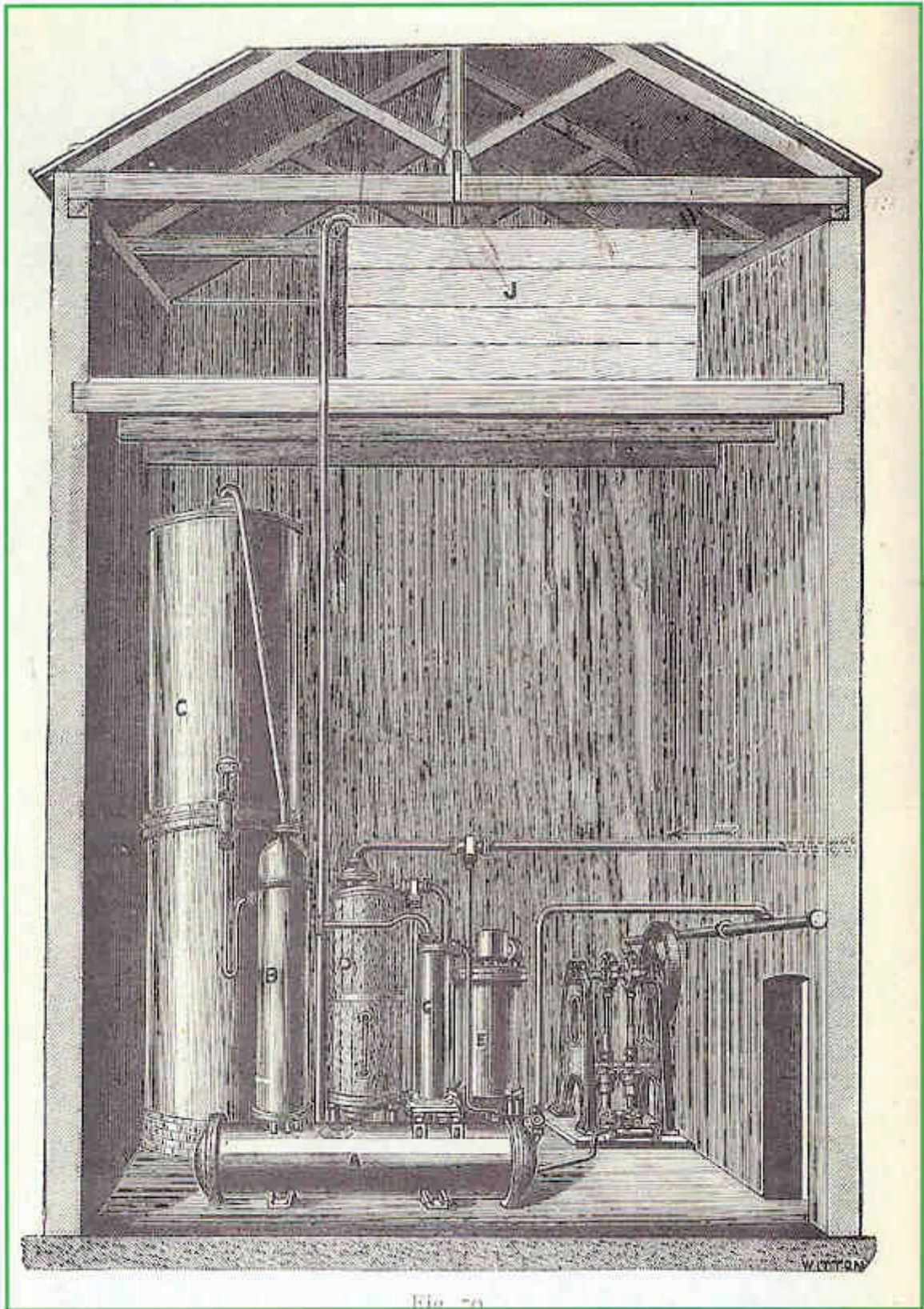
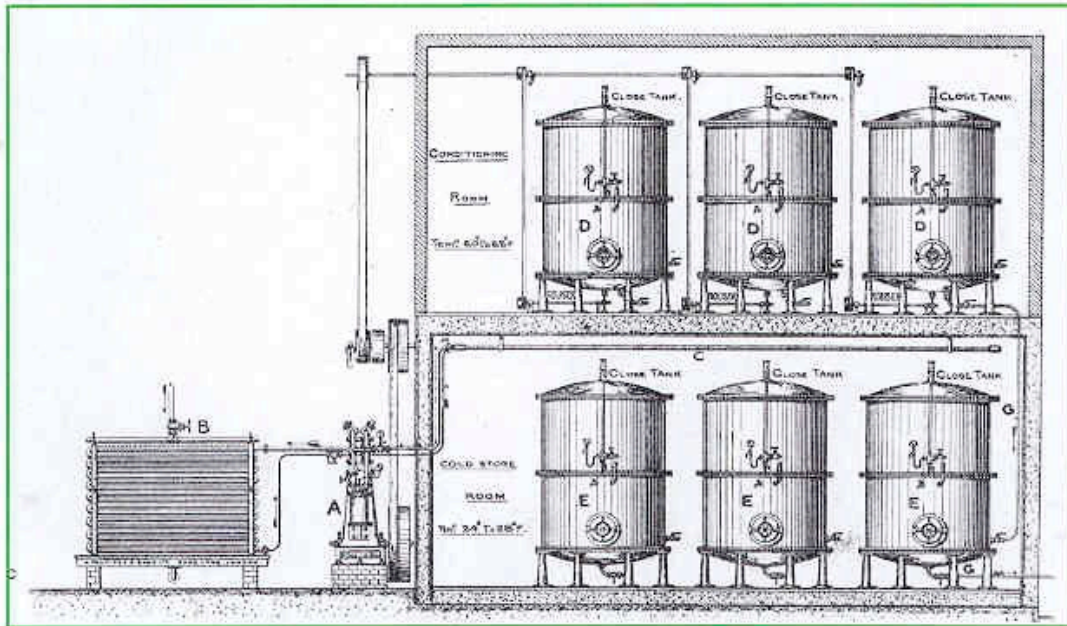
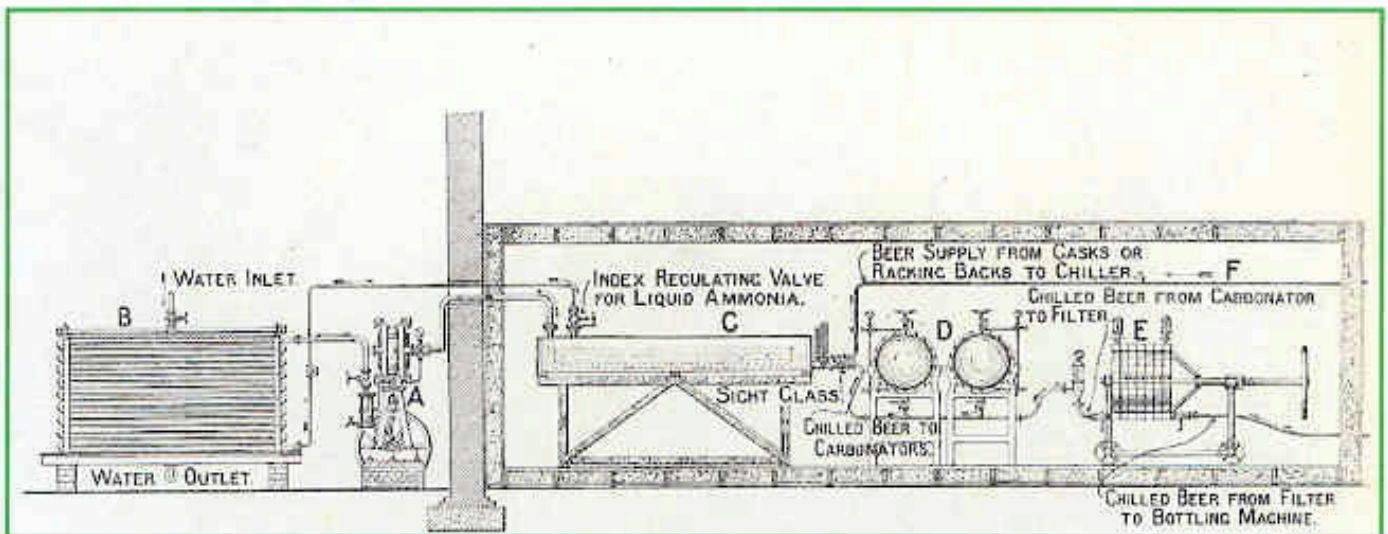


Fig. 70

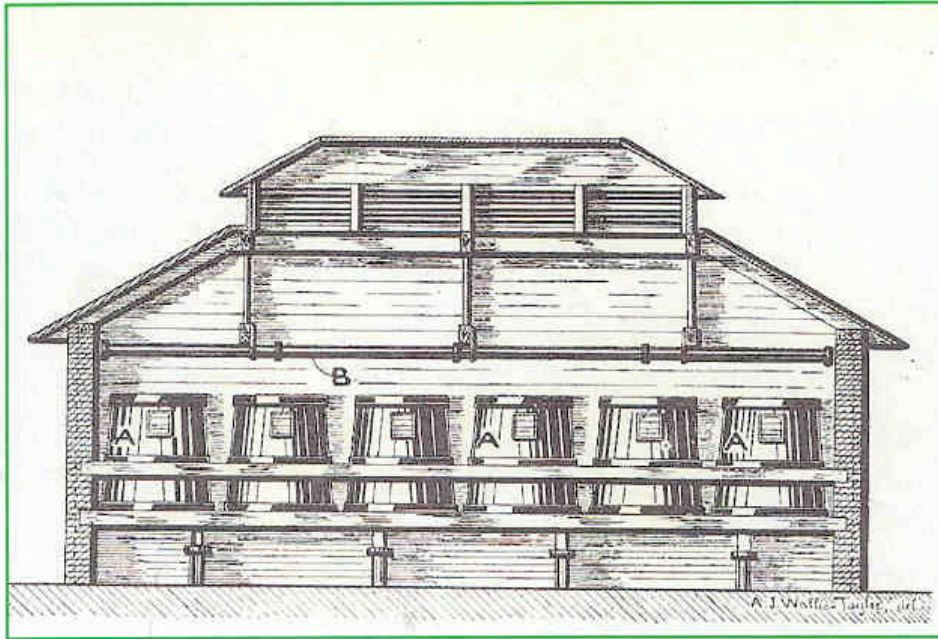
*Pontifex-Wood ammonia absorption refrigeration for a brewery, c.1900
[Refrigerating and Ice-Making Machinery, p.190]*



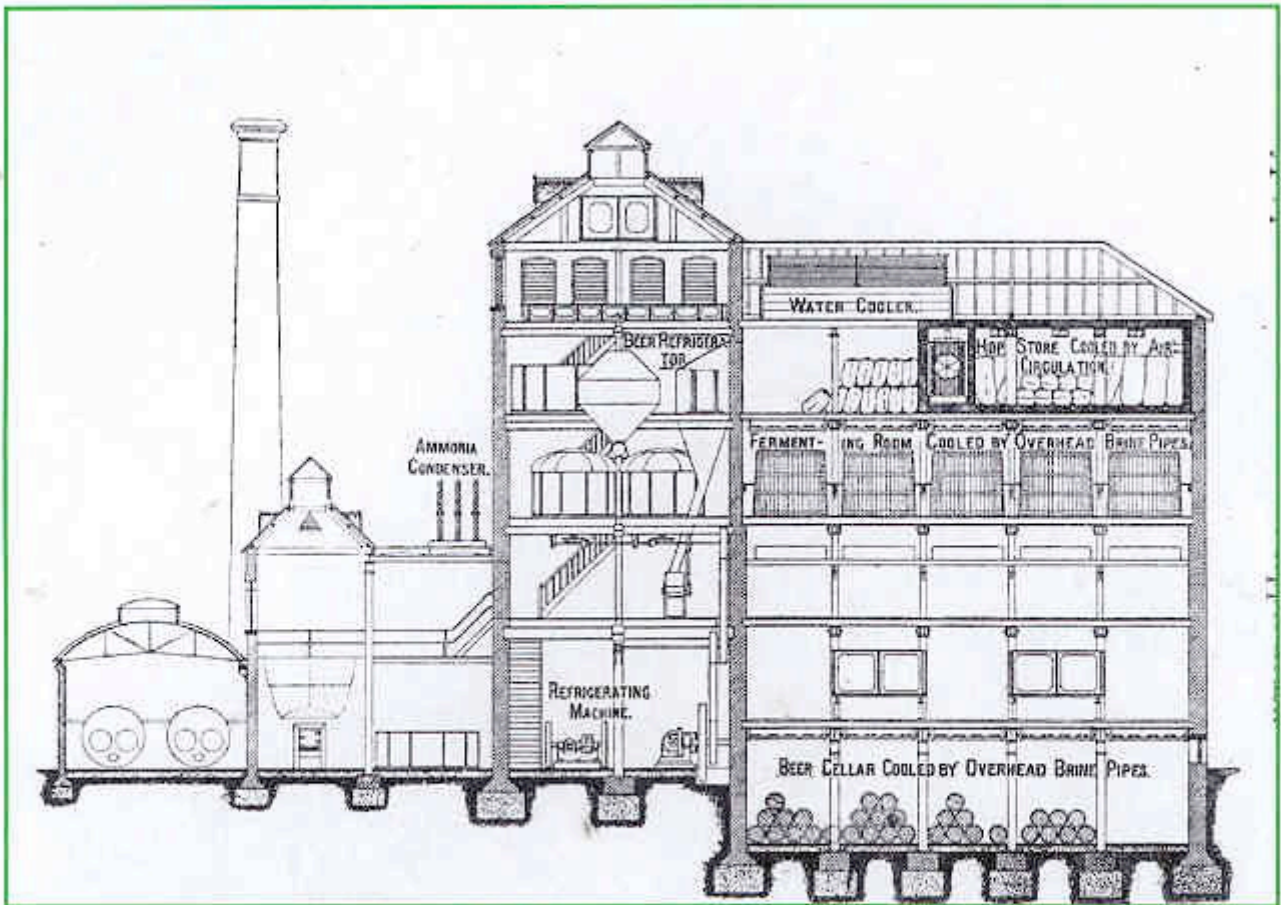
*Pontifex refrigeration for a brewery with chilling tanks, c.1908
[Refrigeration, p.193]*



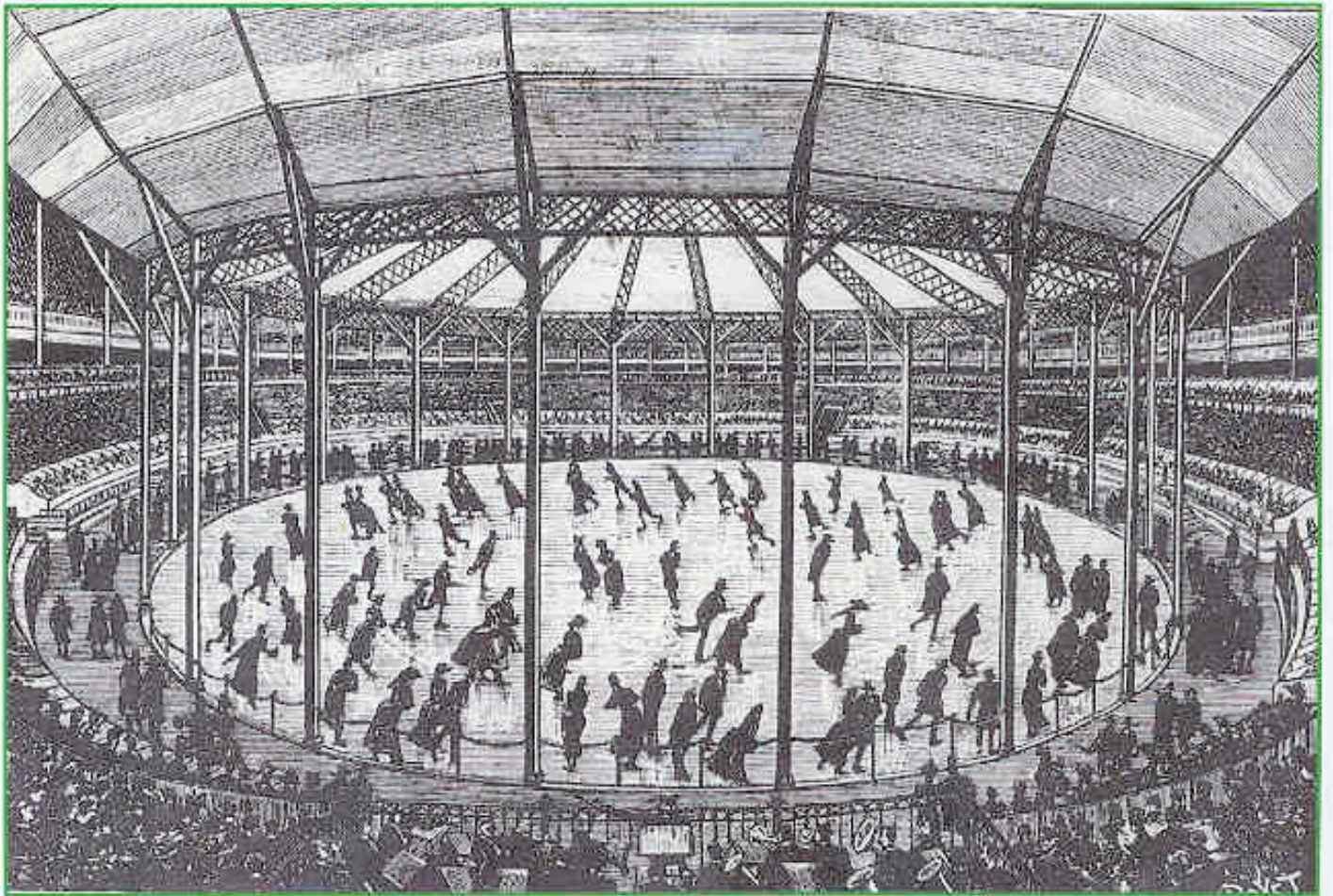
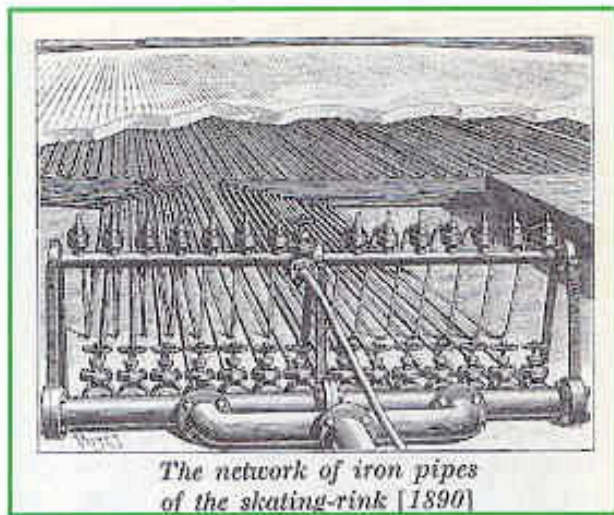
*Pontifex arrangement of refrigeration for a brewery, c.1908
[Refrigeration, p.191]*



*Brine system for brewery fermenting room, maker unknown, c.1900
[Refrigerating and Ice-Making Machinery, p.198]*

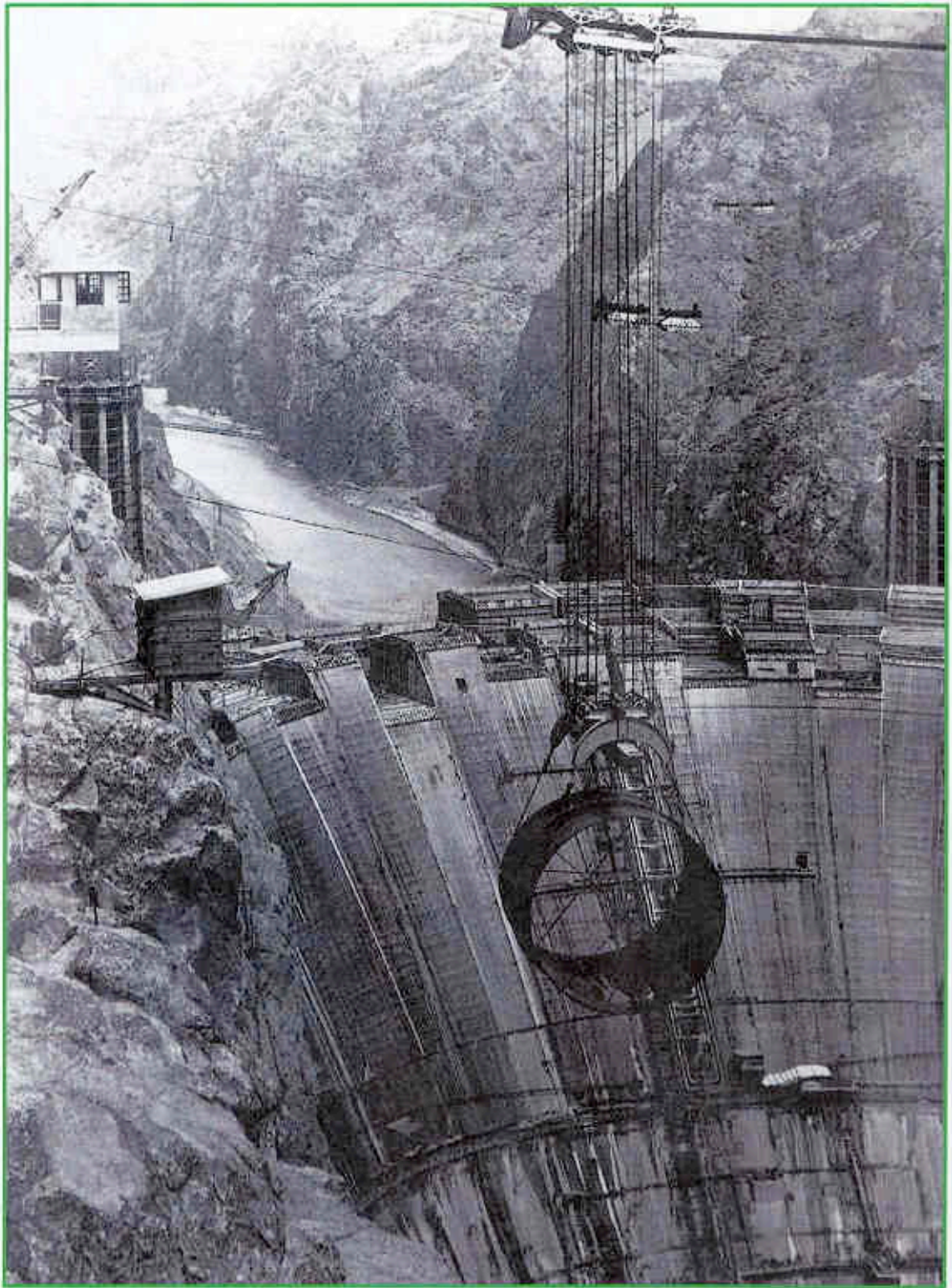


*Haslam arrangement of refrigeration for a brewery, c.1908
[Refrigeration, p.188]*

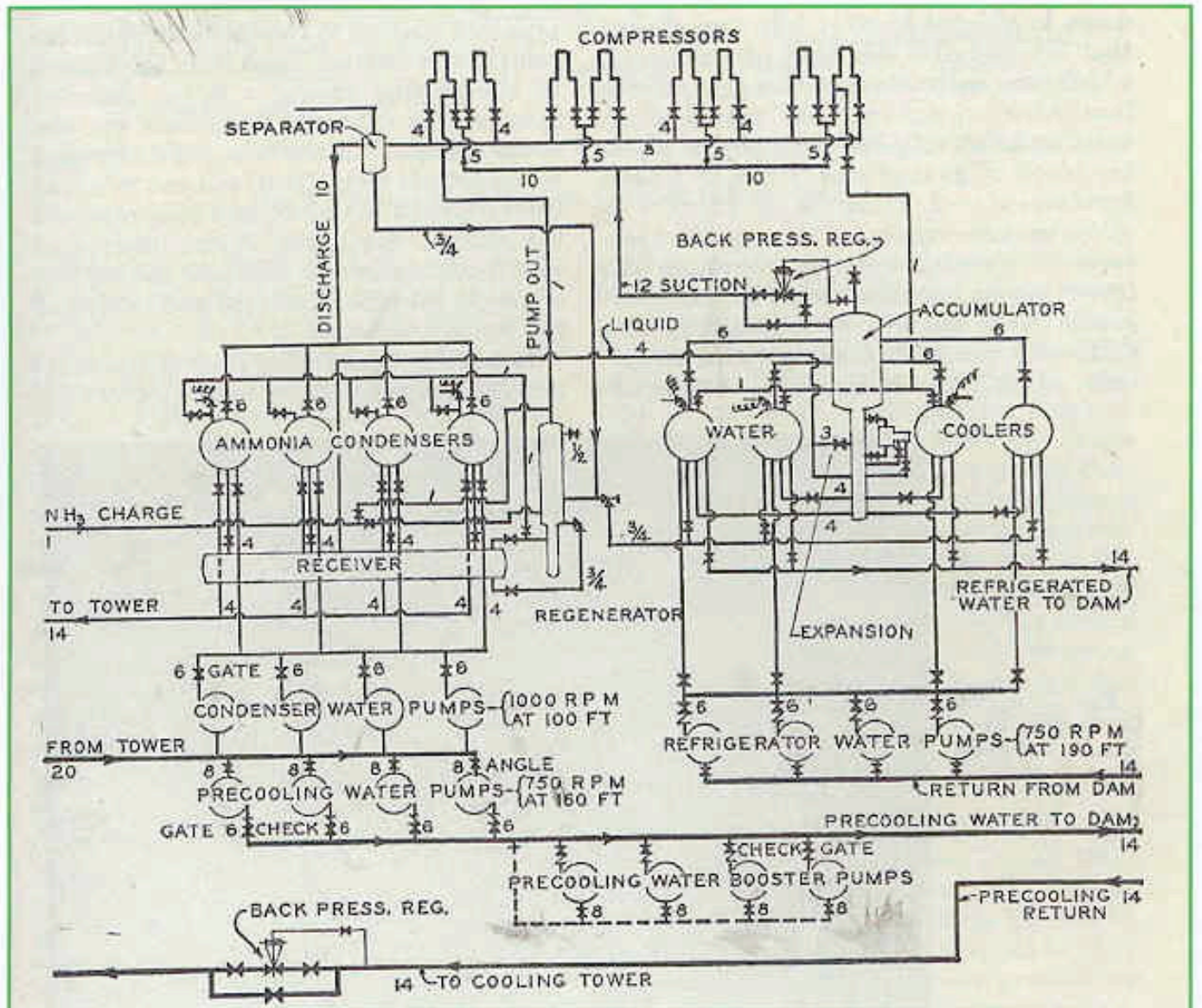




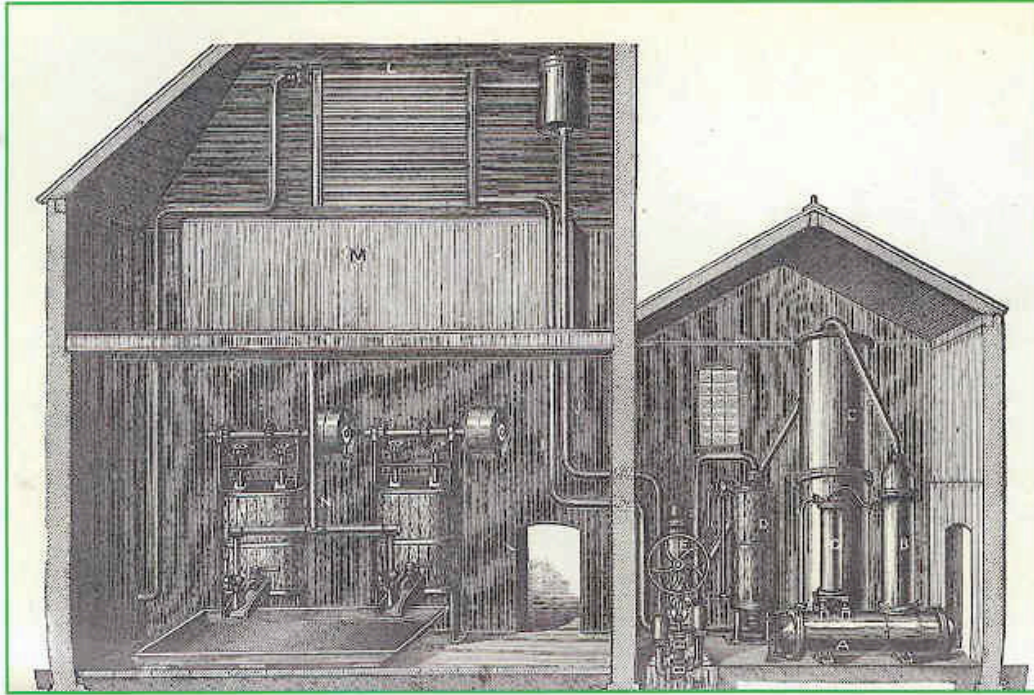
*Ice skating rink. Laying the pipe grid. Rockefeller Centre, New York, 1936
[Works in Progress, pp.136-137]*



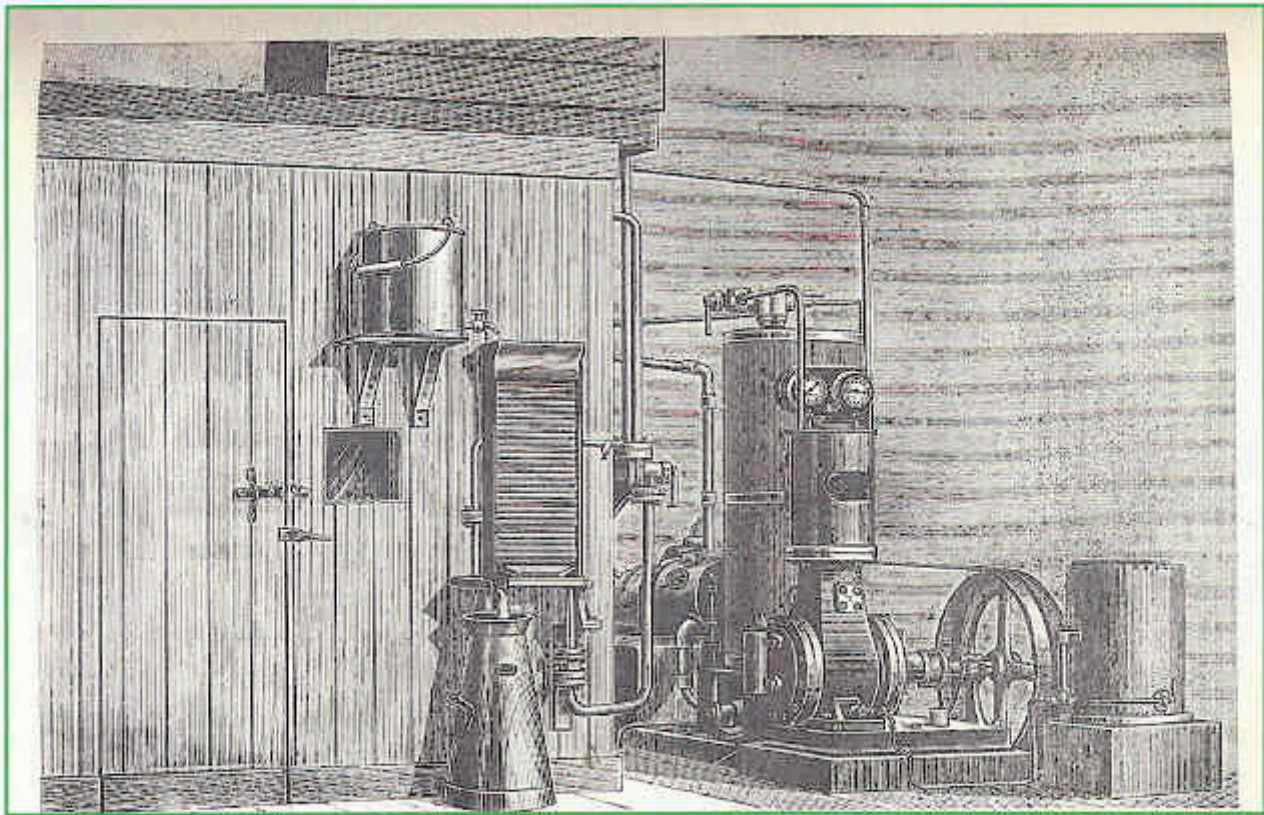
*Hoover Dam (originally named Boulder Dam), built 1931-35.
Some 580 miles of 1-inch pipe was embedded in the structure through which
chilled water was circulated to cool the concrete so it would cure properly.
[Works in Progress, p.124]*



*Refrigerating plant for cooling the concrete of the Hoover Dam, 1931-35.
[ASRE Data Book, 1954-55, p.41-05]*



*Pontifex-Wood ammonia absorption refrigeration for an artificial butter factory, c.1900
[Refrigerating and Ice-Making Machinery, p.200]*



*Pontifex-Wood ammonia absorption refrigeration for a dairy, c.1900
[Refrigerating and Ice-Making Machinery, p.203]*