

Chapter 12

OTHER ENGINEERING TOPICS

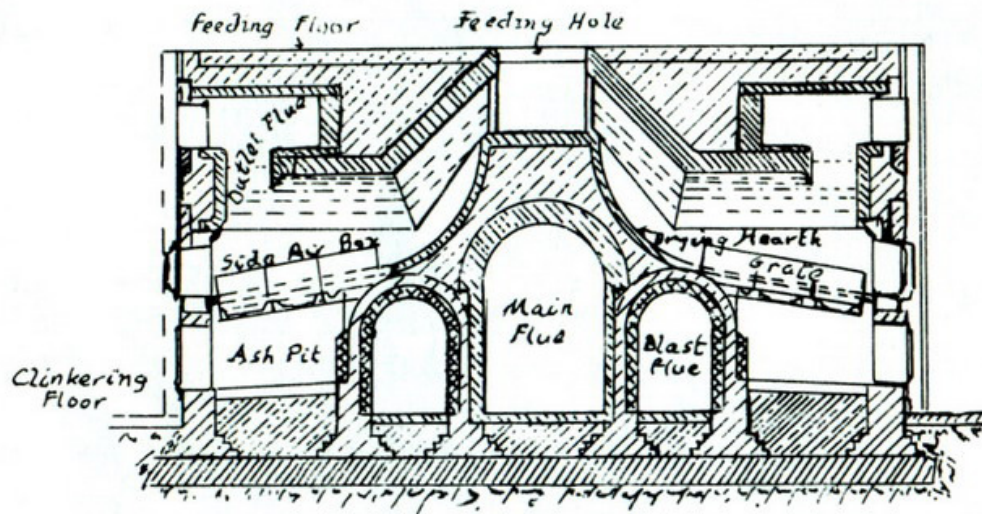


Fig. 12.1. Section of Horsfall destructor furnace (1923).
(Courtesy, O.U.P.)

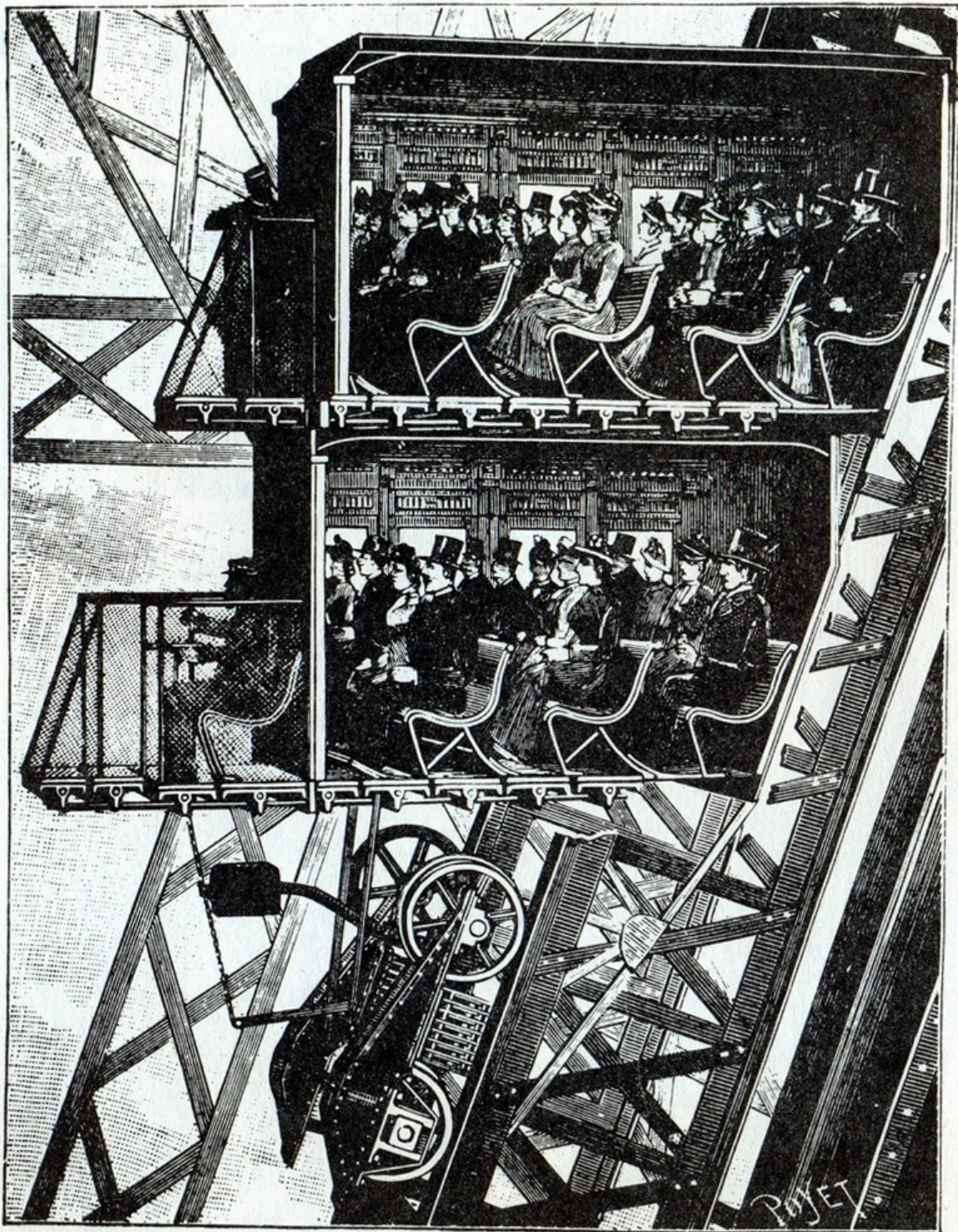


Fig. 12.2. Otis elevator, Eiffel tower (1889).
(de Vries, *Victorian Inventions*)

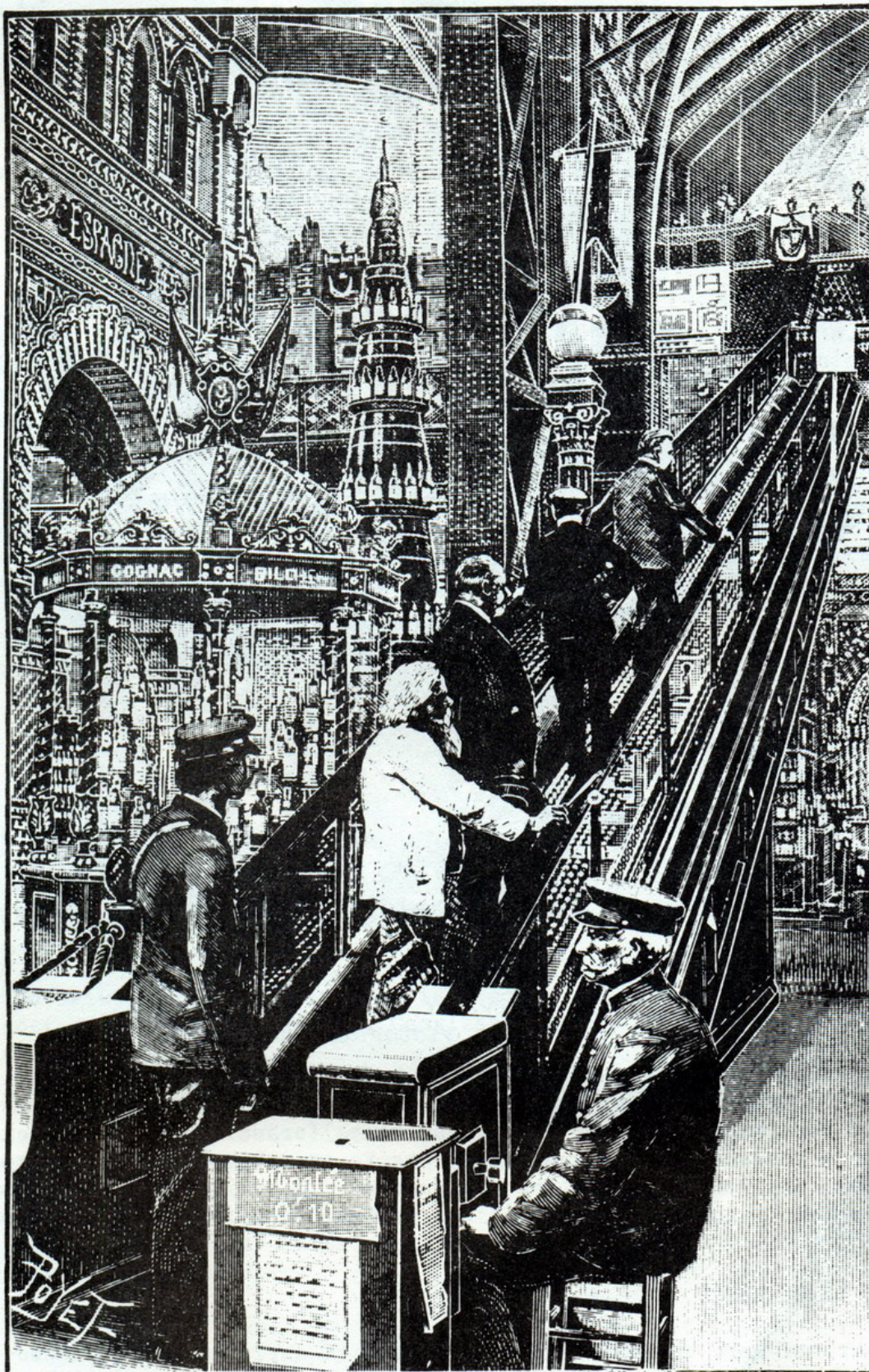


Fig. 12.3. Rolling staircase at Paris World Exhibition (1900). (de Vries, *Victorian Inventions*)



Fig. 12.4. Drake's oil well (1859).
(Courtesy, The Bodley Head)

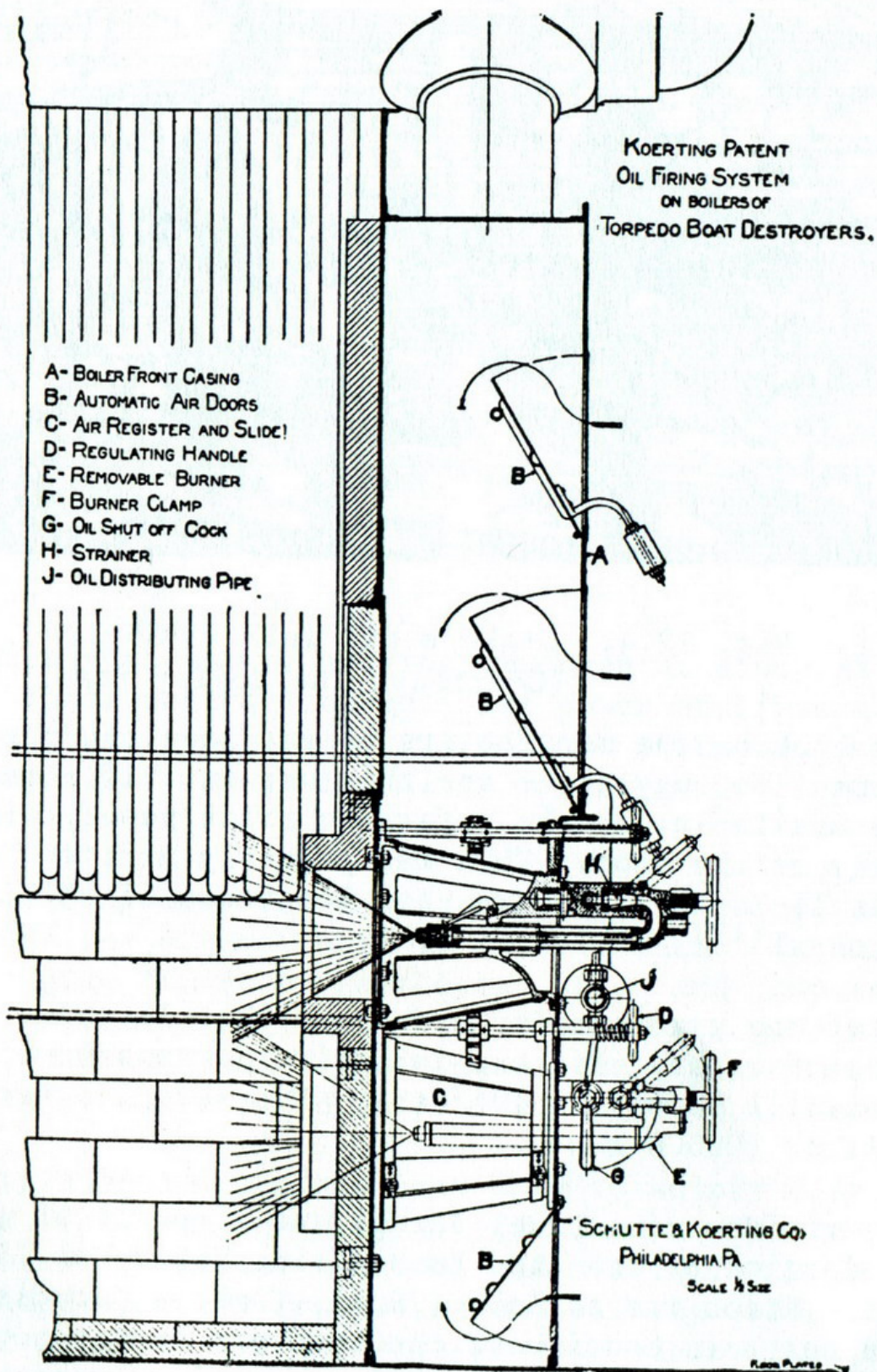


Fig. 12.5. Koerting oil burner (1911).

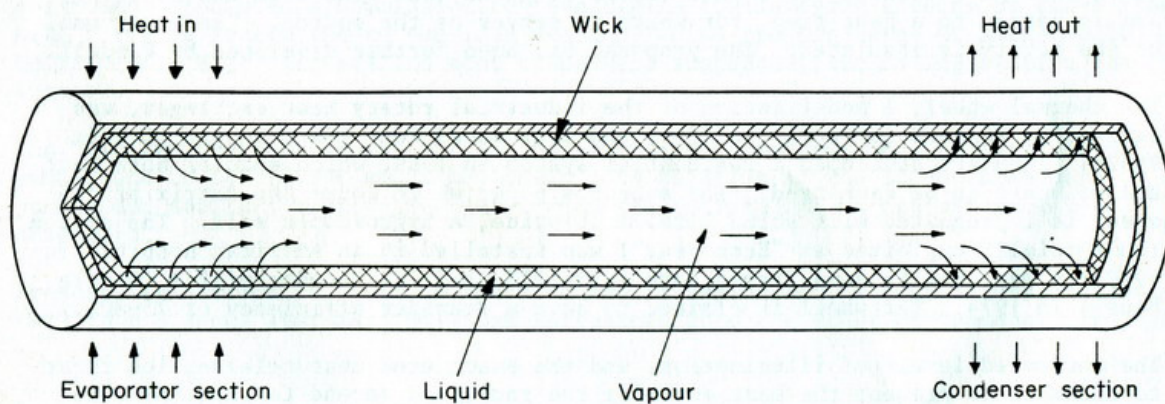
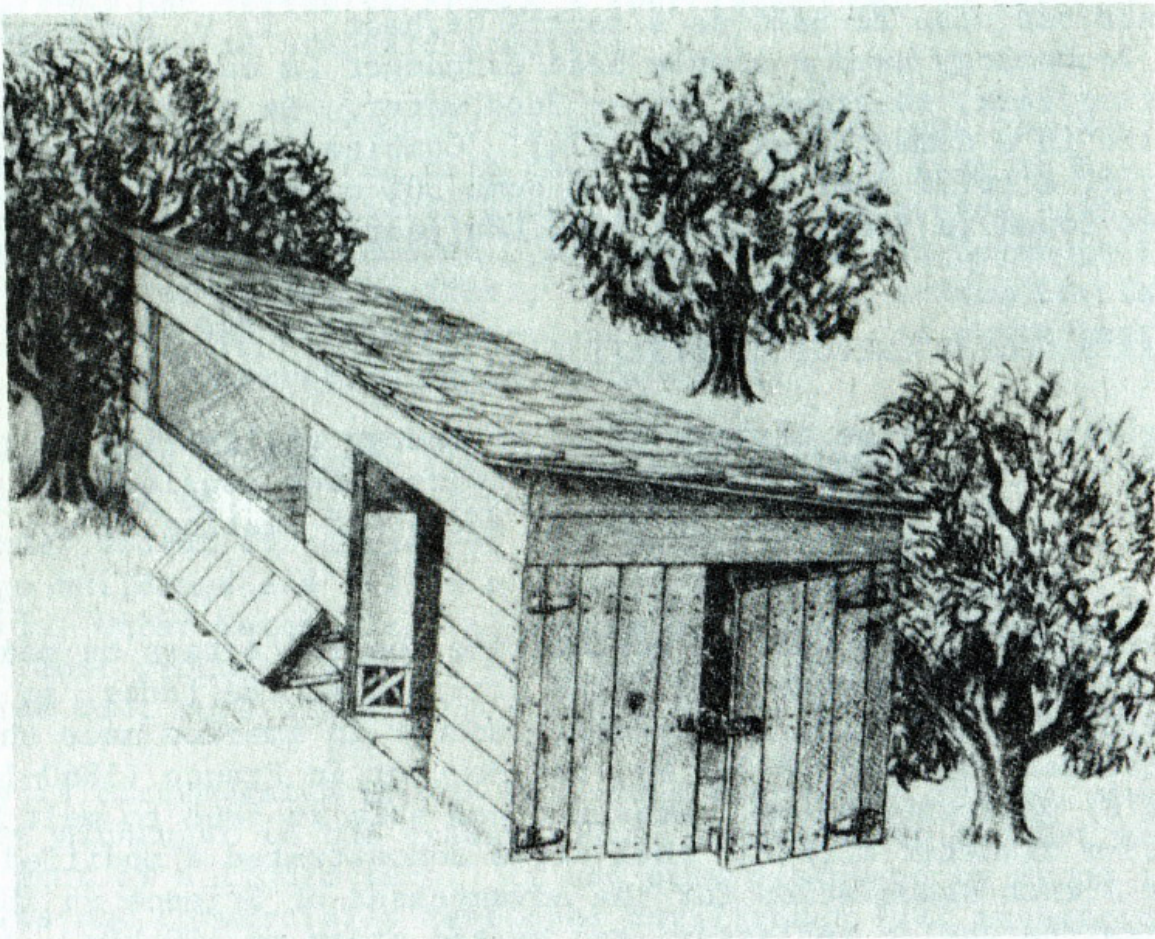


Fig. 12.6. Heat pipe.



WHERE IT STARTED—Sketch made in early days shows shed at Linwood and Myrtle Aves, Monrovia, where William J. Bailey developed

first 24-hour solar water heater in 1908-9. Collector panel can be seen angled against wall at left, with storage tank visible inside door.

Fig. 12.7. Bailey's solar water heater (1908).

REFERENCES

1. Anon (1927-28) Sanitary engineering — a historical review, *Proc. Amer. Soc. Civil Engr.* 1927, p. 1588; 1928, p. 1501.
2. Anon (1857) General Board of Health — Report of the Commissioners appointed to enquire into the warming and ventilation of dwellings, HMSO, London.
3. Anon (1973) *Electricity Supply in Britain — A Chronology*, Electricity Council.
4. Anon (1947) *Garchey System of Domestic Refuse Disposal*, M. Hall & Co.
5. Anon (1971) The heat pipe, *NEL Rep* 491, NEL, Glasgow.
6. Abel, —. (1927) Die Entwicklung des Gesundheitstechnik während der letzten 50 Jahre, *Gesund-Ing.* 50, (53), 962.
7. Adams, H. C. (1923) *Domestic Sanitation and House Drainage*, Hodder & Stoughton.
8. Beckmann, J. (1846) *History of Inventions* (4th Ed.), Bohn, London.
9. Bernan, W. (1845) *History and Art of Warming and Ventilating*, Bell, London.
10. Braudel, F. (1973) *Capitalism and Material Life 1400-1800*, Weidenfeld.
11. Chadwick, E. Flint (1965) *Report on the Sanitary Condition of the Labouring Population of Great Britain 1842*, Edinburgh U.P.
12. Davey, N. (1964) *Building in Britain*, Evans.
13. Debesson, G. (1908) *Chauffage des Habitations*, Dunod, Paris.
14. Derry, T. K. and Williams, T. I. (1960) *Short History of Technology*, O.U.P.
15. George, M. D. (1925) *London Life in the 18th Century*, Kegan Paul.
16. Green, T. M. (1977) Nothing new under the sun: solar heaters used at turn of century, *Los Angeles Times*, 13 Nov.
17. Hadfield, R. A. (1923) *History of Metallurgical Science*, Lecture to Birmingham Univ. Metall. Soc.
18. Hamilton, S. B. (1958) A short history of structural fire protection, *National Building Studies*, 27, HMSO, London.
19. Jones, W. (1904) *Heating by Hot Water, Ventilation and Hot Water Supply*, Crosby Lockwood.
20. Klein-Rebour, F. (1973) Bois et charbon au cours des siècles, *Chaud-Froid-Plomberie*, (326), 44.
21. Knowles, C. C. and Pitt, P. H. (1972) *The History of Building Regulation in London 1189-1972*, Architectural Press.
22. Levy, S. I. (1922) *Incandescent Lighting*, Pitman.
23. Millbank, P. (1979) Lift development — a reaction to tougher specifications, *Electrical Rev.*, 204, (15), 28.
24. Picard, Ph. (1897) *Chauffage et Ventilation*, Baudry, Paris.
25. Strandh, S. (1979) *Machines*, Mitchell Beazley.

