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Success, 1809-1812; 4.7 Conclusion

Chapter 5. The Gas Light and Coke Company 5.1 Introduction; 5.2 The New Company; 5.3 Building a Network, 1814-1820; 5.4 Outside the Company: Users and Fitters; 5.5 Conclusion; Conclusion; A New Phase of the Industrial Revolution; Questions about the Industrial Revolution; Business and Entrepreneurship; Builders, Mediators, and Users; Technological Networks; Notes; Bibliography; Index

Sommario/riassunto

An argument that the gas industry was the first integrated large-scale technological network and that it signaled a new wave of industrial innovation. In *Progressive Enlightenment*, Leslie Tomory examines the origins of the gaslight industry, from invention to consolidation as a large integrated urban network. Tomory argues that gas was the first integrated large-scale technological network, a designation usually given to the railways. He shows how the first gas network was constructed and stabilized through the introduction of new management structures, the use of technical controls, and the application of means to constrain the behavior of the users of gas lighting. Tomory begins by describing the contributions of pneumatic chemistry and industrial distillation to the development of gas lighting, then explores the bifurcation between the Continental and British traditions in distillation technology. He examines the establishment and consolidation of the new industry by the Birmingham firm Boulton & Watt, and describes the deployment of the network strategy by the entrepreneur Frederick Winsor. Tomory argues that the gas industry represented a new wave of technological innovation in industry because of its dependence on formal scientific research, its need for large amounts of capital, and its reliance on business organization beyond small firms and partnerships--all of which signaled a departure from the artisanal nature and limited deployment of inventions earlier in the Industrial Revolution. Gas lighting was the first important realization of the Enlightenment dream of science in the service of industry.
