was a gala occasion in Pittsburgh's early history. It was witnessed by "a vast concourse of people... and proved the embryo of the prosperity and grandeur of the western world" (p. 162). The mill ground nineteen bushels of wheat per hour. In 1811 one of Evans' flour mills, powered by one of his high pressure steam engines, was built at Marietta, Ohio. In 1815 the Pittsburgh Steam Engine Company, an Evans company, announced that it was able to build steam engines and could supply all kinds of mechanical articles. The company was provided with an anvil and an anchor foundry; a brass foundry; a pattern maker's shop; a boring and turner's shop; a screw-making machine; a butt-hinge factory, and other special equipment. The following year the first steam paper mill, equipped with Evans' improved Columbian engine, was opened in Pittsburgh. During the same year the steamboat "Oliver Evans," built in Pittsburgh, left for New Orleans loaded with passengers and freight.

Oliver Evans was not only an inventor, but an author as well. He worked for years upon a volume, The Young Mill-wright and Miller's Guide (Philadelphia, 1795). In 1794, upon completing it, he appealed to the Pennsylvania legislature for money to enable him to publish it. The legislature refused, giving as a reason the fact that the state needed all its funds to suppress an uprising (the Whiskey Insurrection) in the western part of the state. Evans finally succeeded, however, in interesting one John Nicholson of Philadelphia, who aided him in publishing his volume. The book went through fifteen editions between 1795 and 1860 and became an indispensable manual for millers.

Evans was indeed a versatile man. He was inventor, author, merchant, broker, and commission man. When he died on April 15, 1819, the *Pittsburgh Gazette* declared that his name would "be remembered by a nation's gratitude, when the comparatively insignificant herd of metaphysicians and conquerors shall have passed into total oblivion" (p. 273).

University of Pittsburgh

JOHN W. OLIVER

George Washington Traveled This Way. Personalized Visits to the Washington Country. By Fred L. Holmes, author of Abraham Lincoln Traveled This Way. Foreword by Glenn Frank, president of the University of Wisconsin. (Boston, L. C. Page & Company, 1935. xviii, 288 p. Illustrations, maps.)

MR. HOLMES approaches his task of producing a Baedeker of the travels of George Washington with a nonchalance that one feels would not have been possible had he lived for any length of time in the Washington country, or were his youthful memories spotted with recollections of visits to countless wayside inns where the Father of His Country was reputed to have spent the night. Unencumbered by such entanglements, he achieves a long view of Washington's perambulations and in twenty-five chapters treats of successive chronological units in the hero's life, giving each its geographic setting. The author's enthusiasm for historical touring gives color and charm to the entire work, and among his readers there will probably be many who will be inspired to follow a Washington trail for the first time.

One wishes, however, that the author's standards of scholarship were as high as his enthusiasm. He often becomes too zealous, as when he says that in the French Creek Valley "game is almost as plentiful as when Washington traveled this way" (p. 38). An examination of his footnotes makes one rather doubt the truth of Glenn Frank's statement in the introduction that "the archives have been plundered for materials" (p. xii). Practically his only source materials are the Washington diaries, and he frequently resorts to unreliable secondary works and to the oral pronouncements of local antiquarians for supplementary materials. Moreover, a number of actual errors in fact have crept into the work; typical of these are the identification of Bedford as the seat of the Whiskey Insurrection (p. ix), the inclusion of Ligonier among the forts erected by Washington in the period immediately following Braddock's defeat (p. 53), and the statement that "Washington's crowning act was the hoisting of the British flag" over the ruins of the French Fort Duquesne in November, 1758 (p. 53). The reader will do better to consult the maps in the George Washington Atlas edited by Lawrence Martin (United States George Washington Bicentennial Commission-Washington, 1932) rather than to attempt to trace Washington's journeys on the inadequate sketch that is included in Mr. Holmes's book.

Of Washington's seven journeys into western Pennsylvania five are given attention in this volume. A chapter is devoted to the expedition of 1753, on which the twenty-one-year-old Virginian first proved his ability, and another chapter concerns the route of the military expeditions of 1754 and 1755. It is rather a shock, however, to find the Forbes expedition of 1758, on which Washington performed outstanding services, barely mentioned, with no attention whatsoever to the route that it followed. The journeys of 1770 and 1784, made by Washington for the purpose of looking after land purchases, are briefly summarized.

Although the sections that deal with western Pennsylvania contain no material that is not readily available elsewhere, Mr. Holmes has performed a service to the region by calling to the attention of a much wider group than that reached by monographic studies or local publications the scenes of Washington's activities in western Pennsylvania.

Western Pennsylvania Historical Survey

MARIAN SILVEUS

Regional Shifts in the Bituminous Coal Industry with Special Reference to Pennsylvania. (University of Pittsburgh Bureau of Business Research Monographs, No. 4.) By WILBERT G. FRITZ and THEODORE A. VEENSTRA. (Pittsburgh, Bureau of Business Research, University of Pittsburgh, 1935. xvii, 197 p. Charts.)

"This study of the soft coal industry is part of a long-term program in regional economic research at the University of Pittsburgh, under a grant from The Buhl Foundation supplemented by funds from the University" (p. vii).

The first part of this book, which comprises nine chapters, is a collection of economic data, with discussion by the authors, about the coal industry of Pennsylvania, arranged to illustrate the changes that occurred in the period from 1917 to 1929. In this period the proportion mined in Pennsylvania of the total soft coal mined in the United States fell from 31.3 per cent to 26.8 per cent (in 1840 Pennsylvania produced 42.2 per cent of the total, but in 1934 only 25.1 per cent). The total production of the nation fell 17 million tons, from 551 million to 534 million, whereas the production of Pennsylvania fell 29 million tons, from 172 million to 143 million, and in the same period that of the important coal-producing states of Ohio, Indiana, and Illinois also declined. On the other hand the production of the southern Appalachian field, notably in southern West Virginia and Kentucky, increased.

These changes are referred to the over-expansion and threat of further expansion of the industry; to wide variation of business activity and seasonal changes in demand for coal; to the geographic spread and shift of the industries that consume coal; to technologic changes that affect the types and amounts of coal used; to the rising importance of competitive fuels; to costs of transportation that favor one region at the expense of another; and to inequalities in the costs of labor in the various regions, particularly between fields where union labor is employed and those where non-union labor is employed.