#### UNITED STATES DEPARTMENT OF COMMERCE

JESSE H. JONES, Secretary

#### BUREAU OF THE CENSUS

J. C. CAPT, Director (Appointed May 22, 1941)
WILLIAM LANE AUSTIN, Director (Retired January 31, 1941)
PHILIP M. HAUSER, Assistant Director



SIXTEENTH CENSUS OF THE UNITED STATES: 1940

# POPULATION

# COMPARATIVE OCCUPATION STATISTICS FOR THE UNITED STATES, 1870 TO 1940

A comparison of the 1930 and the 1940 census occupation and industry classifications and statistics; a comparable series of occupation statistics, 1870 to 1930; and a social-economic grouping of the labor force, 1910 to 1940

Bureau of the Census

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By Dr. ALBA M. EDWARDS

Prepared under the supervision of Dr. LEON E. TRUESDELL Chief Statistician for Population

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#### LETTER OF TRANSMITTAL

DEPARTMENT OF COMMERCE,
Bureau of the Census,
Washington, D. C., June 30, 1943.

SIR:

I transmit herewith a volume presenting Comparative Occupation Statistics for the United States for the period from 1870 to 1940.

The Bureau of the Census is fortunate in having available for the preparation of this report Dr. Alba M. Edwards, who has been responsible for the occupational classification of workers during the latter half of the rapidly changing 70-year period covered by the report and has contributed materially to the development of occupational and industrial classifications and of methods of tabulation in this complex statistical field. His treatment of many of the special problems involved in the preparation of the series of statistics herewith presented is based largely upon his contact with the tabulation and analysis of the returns from the later censuses and upon his association with the staff members responsible for the censuses of 1900 and earlier. Dr. Edwards has made a unique contribution in the development of the social-economic grouping of workers presented in Part III of this volume.

Associated with Dr. Edwards in the preparation of this report were Zora P. McCracken, Ruth S. Buckner, and M. Claire Casey, each of whom had had many years of experience in census occupation statistics, and Dr. John D. Durand, who collaborated in the preparation of Chapter IV of Part I of the report, the chapter entitled "Adjustment of 1930 Gainful Worker Statistics and 1940 Labor Force Statistics to a Comparable Basis."

Respectfully,

J. C. Capt, Director of the Census.

Hon. Jesse H. Jones, Secretary of Commerce.

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#### FOREWORD

The work of an occupational statistician is fraught with difficulties which may not be evident to the casual user of his products. Some problems which are common to many fields of statistical compilation and analysis occur in especially acute forms in occupational statistics.

First there is the dilemma of classification, whose two horns are theoretical nicety and practical utility. General Francis A. Walker, the superintendent of the Ninth Census, of 1870, wrote concerning the classification of occupations:

"The plan pursued in the compilation of these tables has been . . . to constitute as many distinct subdivisions as the nature of the material furnished by the enumerators would allow to be formed with a reasonable approach to completeness . . . ."

General Walker went on to admit that the resulting classification was "rough and ready" and not scientifically precise. Since he joined the Bureau of the Census in 1909, Dr. Edwards has borne a central share of responsibility for devising and improving the schemes of classification by which to distill from the census-takers' returns for millions in the population a coherent and meaningful statistical picture of the occupations of Americans. In this task he has had to attempt to meet needs as widely different as those of academic scholars interested in structural changes in the economy and those of employment agents or personnel managers in search of particular kinds of workmen.

A second dilemma is created by the need for historical comparability of data and the necessity of adapting statistical methods to continually changing circumstances. Many of the specific occupations which bulk large in the 1940 census were undreamed of in 1870; and even broad occupational groupings have so changed in meaning or content that a description of the present population in terms of the "rough and ready" categories of 1870 would be unrealistic. Dr. Edwards has performed a valuable service by making available in this volume a collation of seventy years' occupational statistics, critically edited to reveal the real trends in the American social and economic structure which have been concealed behind the changing occupational tables of successive censuses. No one else is so well qualified as Dr. Edwards for this task, and his accomplishment presented in the following pages is a fitting culmination of his long identification with the promotion of better occupational statistics for the United States.

STUART A. RICE

#### PREFACE

The most nearly dominant single influence in a man's life is probably his occupation. More than anything else, perhaps, a man's occupation determines his course and his contribution in life. And when life's span is ended, quite likely there is no other single set of facts that will tell so well the kind of man he was and the part he played in life as will a detailed and chronological statement of the occupation, or occupations, he pursued. Indeed, there is no other single characteristic that tells so much about a man and his status—social, intellectual, and economic—as does his occupation. A man's occupation not only tells, for each workday, what he does during one-half of his waking hours, but it indicates, with some degree of accuracy, his manner of life during the other half—the kind of associates he will have, the kind of clothes he will wear, the kind of house he will live in, and even, to some extent, the kind of food he will eat. And; usually, it indicates, in some degree, the cultural level of his family.

In similar manner there probably is no single set of closely related facts that tell so much about a nation as do detailed statistics of the occupations of its workers. The occupations of a people influence directly their lives, their customs, their institutions—indeed, their very numbers. In fact, the social and the economic status of a people is largely determined by the social and economic status of its gainful workers. And, were the figures available, the social and industrial history of a people might be traced more accurately through detailed statistics of the occupations of its gainful workers than through records of its wars, its territorial conquests, and its political

struggles.

With present-day interest in social problems and in their statistical measurement, it has become quite evident that statistics which show the actual life conditions of 40 percent of the population for one-third of each workday, and which give at least a rough index of their life conditions for the balance of the time—as well as giving a rough index of the life conditions of those dependent upon them—are far too important to be neglected.

In the United States, today, there is a real need and an urgent demand for statistics relating to the occupations of the people. Indeed, such statistics are basic to the efficient functioning of many present-day activities of Federal and State governments. Such data are of central importance in the recruitment and placement functions of both public and private employment services in the present war period, when necessity for rapid readjustments calls for accurate statistics on the skills, both of present workers and of potential workers. Carefully classified occupation statistics are essential, also, to agencies and individuals concerned with vocational guidance and with occupational training. In fact, whether the problem under consideration be one of those which affect mainly the working classes or one of those which affect society as a whole, occupation is usually an important factor in its solution.

Along with the growing recognition that occupation is a leading factor in many present-day social and economic problems has come a greatly increased demand for a comparable series of occupation and industry statistics for the United States, extending over a considerable period and showing not only the occupational and industrial distribution of the Nation's labor force at different points of time but showing, also, the occupational and

industrial trends that have obtained.

Among those who have desired to consider the Nation's labor force in its broader aspects, rather than in detail by occupation, there has come a recognition of the significance of statistics presenting a summary grouping of the workers into a few large social-economic groups or strata, such as professional persons, clerical workers, skilled workers, etc. To facilitate their analysis of the labor force on this broader plane, they have experienced the need for summary statistics, extending over several decades and showing trends in the social-economic stratification of the labor force.

Because of differences in the scope of the several decennial censuses of occupations, and because of differences in the enumeration, in the processing of the returns, and in the presentation of the resulting statistics, the occupation statistics for the different censuses frequently are not directly comparable. It is appropriate that the Bureau of the Census undertake to put the occupation statistics resulting from its different enumerations into comparable form. The present report represents an effort by the Bureau to fill the gaps and to smooth out the irregularities in its statistics and thus to facilitate the study of occupational and industrial trends over the 70-year period from 1870 to 1940—a period during which the United States changed from a predominantly agricultural nation to a highly industrialized urban nation—a period, also, during which the Nation's population more than trebled and its labor force more than quadrupled.

XII PREFACE

Part II of the present report was substantially completed before the beginning of the 1940-42 census period. It applies, therefore, to the period 1870 to 1930 and includes no data from the 1940 census. Because of the marked differences between the Standard Occupational Classification adopted for use at the 1940 census and the classifications followed at the 1930 and earlier censuses, it is impossible to regroup the occupations reported at the 1930 and earlier censuses according to the 1940 census classification. For the same reason, numerous estimates would be involved in regrouping the 1940 census occupations according to the 1930 classification, which is the classification followed in the 1870 to 1930 series of statistics presented in Part II of this report. Since the preparation of such estimates would have further delayed the release of the valuable historical data presented in Part II, it was deemed advisable to present the 1930-40 comparisons separately. This is done in Part I.

A. M. E.