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VOLUME VII

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TWELFTH CENSUS OF THE UNITED STATES,
TAKEN IN THE YEAR 1900

WILLIAM R. MERRIAM, DIRECTOR

MANUFACTURES

PART I

UNITED STATES BY INDUSTRIES

PREPARED UNDER THE SUPERVISION OF S. N. D. NORTH,
CHIEF STATISTICIAN FOR MANUFACTURES

WASHINGTON
UNITED STATES CENSUS OFFICE
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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
Washington, D. C., June 15, 1902.

. have the honor to transmit herewith Part I of the Report on Manufactures for the Twelfth Census.
This volume contains the introductory text summarizing and analyzing the statistics of manufactures and anical industries, and also the general tables which embody these statistics for the United States, by states, dustry groups, and by specified industries.
The introductory text consists of five chapters: Chapter I is confined to a descriptive statement of the plan, , and methods of the manufacturing census, the increasing difficulties which attend the taking of such a s, and some discussion of the census law. This chapter concludes with a section contributed by Hon. ll D. Wright, United States Commissioner of Labor, on the importance of correlation between the work e permanent Census Office and of the several state bureaus. The second chapter of the introductory text is mmary and analysis of the general results of the manufacturing census and their proper interpretation. The chapter is an analysis of the statistics of manufactures in cities, contributed by Mr. William M. Steuart, of division. The fourth chapter is an analysis of the statistics of power as employed in manufactures, ibuted by Expert Special Agents Edward H. Sanborn, of Philadelphia, and T. C. Martin, of New York. ifth chapter is an explanation of the general tables which immediately follow it.
Part II of the Report on Manufactures, transmitted on March 19, contains the statistics of manufactures nechanical industries in the several states and territories, and in their several subdivisions, comprising ies and cities. The presentation of the statistics of this part is accompanied by a descriptive and historical nt of the development of manufactures in each state and territory.
Part III of the Report on Manufactures contains monographs prepared by expert special agents, and by ers of the clerical force of the division of manufactures, on certain selected industries. The reports in III relate to the textile industries; the manufacture of food products; the lumber industry, and the facture of turpentine and rosin; the manufacture of clay and pottery products, and of glass; the manufacture ther, and of boots and shoes; the manufacture of paper and pulp; and printing and publishing.
Part IV of the Report on Manufactures contains monographs prepared by expert special agents and others selected industries whose chief raw material is one or another of the metals; and also upon the manufacture emicals; coke; petroleum; manufactured gas; wastes and by-products in manufactures; and upon patents eir relation to manufactures.
A special report on comparative rates of wages in 1890 and 1900, prepared by Expert Special Agent Davis R. y, Ph. D., of the Institute of Technology, Boston, Mass., and based upon actual transcripts of pay rolls in vo years, will be published as a supplemental volume of the Report on Manufactures.
In transmitting the final results of the Twelfth Census of Manufactures, it is a pleasure to acknowledge the es of those assistants who, in cooperation with an exceptionally efficient clerical force, have made possible mpletion of the work within the time limit set by the law—an achievement unprecedented in census work. William M. Steuart has been expert chief of division from the beginning of the work, and his experience, d in two prior censuses, has been of the utmost value at all stages. Mr. Frank L. Sanford has had charge e work of classification; and all of the final results, both in the office work and the work of the expert special s, have gone to the printer under his immediate supervision. Mr. Joseph D. Lewis has had charge of the rtant work of the revision of the returns, and has rendered expert assistance in the preparation of many

of the reports on selected industries. Both Mr. Sanford and Mr. Lewis were connected with the division of manufactures of the Eleventh Census. Mr. Arthur L. Hunt has acted as assistant chief of division, and had general supervision over the special reports prepared in the division. Mr. Ralph M. Greenlaw has had charge of the field work and of the tabulation of the returns. Frederick S. Hall, William A. Countryman, and Elbert H. Loyd have contributed important portions of the text of various reports and critical analyses of results. Acknowledgment of valuable assistance rendered should, in strict justice, be extended to many other members of the force.

Very respectfully,

S. N. D. North

Chief Statistician for Manufactures.

Hon. WILLIAM R. MERRIAM,
Director of the Census.