

Census  
Q  
G2065  
UN 3  
1900

~~REFERENCE COPY~~

CENSUS  
HV  
1786  
B6-1X  
1900

DEPARTMENT OF COMMERCE AND LABOR

BUREAU OF THE CENSUS

S. N. D. NORTH, DIRECTOR

SPECIAL REPORTS

THE BLIND AND THE DEAF

1900

*Bureau of the Census  
Library*



~~33837~~

WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1906

317.3  
 7 2 58 SBL

## CONTENTS.

### THE BLIND.

|  | Page |
|--|------|
| Introduction.....                                  | 3    |
| Summary of results.....                            | 5    |
| Sex.....   | 5    |
| States and territories.....                        | 5    |
| Color.....   | 6    |
| Nativity of the blind whites.....                  | 8    |
| Age.....   | 8    |
| Age when blindness occurred.....                   | 10   |
| Causes of blindness.....                           | 11   |
| Marital condition.....                             | 15   |
| Consanguinity of parents, and blind relatives..... | 16   |
| School attendance.....                             | 17   |
| Occupations.....                                   | 17   |
| The blind-deaf.....                                | 18   |

### GENERAL TABLES.

|  |    |
|--|----|
| Table 1.—The blind, by degree of blindness, present age period, and color and nativity, for states and territories: 1900.....  | 21 |
| Table 2.—The blind, by degree of blindness, present age, and period of life and age when blindness occurred, for states and territories: 1900.....   | 24 |
| Table 3.—The blind, by degree of blindness, present age period, color and nativity, sex, and period of life and age when blindness occurred, for continental United States: 1900.....  | 32 |
| Table 4.—The blind, by degree of blindness and period of life when blindness occurred, for states and territories: 1900.....   | 34 |
| Table 5.—The blind, by degree of blindness and period of life and age when blindness occurred, for states and territories: 1900.....   | 35 |
| Table 6.—The blind, by degree of blindness and age when blindness occurred, for states and territories: 1900.....  | 38 |
| Table 7.—The blind, by degree of blindness, sex, marital condition, and period of life and age when blindness occurred, for continental United States: 1900.....   | 42 |
| Table 8.—The blind, by degree and causes of blindness, color and nativity, and sex, for continental United States: 1900.....   | 44 |
| Table 9.—The blind, by degree and causes of blindness, for states and territories: 1900.....   | 46 |
| Table 10.—The blind, by degree and causes of blindness and period of life and age when blindness occurred, for continental United States: 1900.....  | 48 |
| Table 11.—The blind, by degree and causes of blindness, consanguinity of parents, and classes of blind relatives, for continental United States: 1900.....   | 49 |
| Table 12.—The blind, by degree of blindness, color, school attendance, present age, and sex, for continental United States: 1900.....  | 50 |
| Table 13.—The blind, by degree of blindness, color, school attendance, and period of life and age when blindness occurred, for continental United States: 1900.....  | 50 |
| Table 14.—Number and per cent distribution by class of occupations of the blind 10 years of age and over gainfully employed, by degree of blindness in relation to age when blindness occurred, for continental United States: 1900..... | 51 |
| Table 15.—The blind 10 years of age and over engaged in each specified occupation and class of occupations, by degree of blindness, age, color, and sex, for continental United States: 1900.....  | 52 |
| Table 16.—The blind 10 years of age and over engaged in each specified occupation and class of occupations, by degree of blindness and period of life and age when blindness occurred, for continental United States: 1900.....          | 56 |
| Table 17.—The blind-deaf, by period of life and age when blindness occurred and age when deafness occurred, for continental United States: 1900.....   | 61 |

## THE DEAF.

|  | Page. |
|--|-------|
| Introduction.....  | 65    |
| Comparison with former censuses.....   | 66    |
| Discussion of the results.....   | 69    |
| Age or period of life when deafness occurred.....  | 69    |
| The deaf from childhood of the census of 1900 compared with the deaf and dumb of former censuses, by states and territories.....       | 72    |
| Geographic distribution of the deaf.....   | 73    |
| Degree of deafness.....  | 78    |
| Ability to speak.....  | 79    |
| Correlated conditions.....   | 83    |
| Condition of speech naturally resulting from deafness contrasted with the actual condition revealed by the census returns, by age..... | 83    |
| Ability to read the lips.....  | 86    |
| Usual means of communication.....  | 89    |
| Sex.....   | 99    |
| Race.....  | 101   |
| Nativity of whites.....  | 104   |
| The process of audition, and the mechanism whereby it is effected.....   | 107   |
| Causes of deafness.....  | 108   |
| Consanguinity of parents.....  | 125   |
| Deaf relatives.....  | 126   |
| Present age.....   | 142   |
| Marital condition.....   | 144   |
| School attendance.....   | 144   |
| Occupations.....   | 146   |

## GENERAL TABLES.

|  |     |
|--|-----|
| Table 1.—The deaf, classified by degree of deafness, ability to speak and to read the lips, and means of communication, with respect to period of life when deafness occurred: 1900.....       | 159 |
| Table 2.—The deaf, classified by sex, race, nativity, school attendance, and kind of school, with respect to period of life when deafness occurred: 1900.....                                  | 159 |
| Table 3.—The deaf, classified by marital condition, consanguinity of parents, and deaf relatives, with respect to period of life when deafness occurred: 1900.....                             | 159 |
| Table 4.—The deaf, classified by present age, with respect to period of life when deafness occurred: 1900.....   | 159 |
| Table 5.—The deaf, classified by causes of deafness, with respect to period of life when deafness occurred: 1900.....  | 160 |
| Table 6.—The deaf 10 years of age and over, classified by occupations, with respect to period of life when deafness occurred: 1900.....  | 160 |
| Table 7.—The deaf, classified by period of life when deafness occurred, by states and territories: 1900.....   | 162 |
| Table 8.—The deaf from childhood in 1900 and the deaf and dumb 1830 to 1890, by states and territories.....  | 163 |
| Table 9.—Distribution per 1,000,000 of total population of the deaf from childhood in 1900 and the deaf and dumb 1830 to 1890, by states and territories.....                                  | 164 |
| Table 10.—General summary of the deaf-blind, by classes: 1900.....   | 165 |
| Table 11.—The deaf, classified by period of life when deafness occurred and degree of deafness, by states and territories: 1900.....   | 166 |
| Table 12.—The deaf, classified by ability to speak, period of life when deafness occurred, and degree of deafness, by states and territories: 1900.....  | 168 |
| Table 13.—Distribution of the deaf per 1,000,000 of total population, by ability to speak, period of life when deafness occurred, and degree of deafness, by states and territories: 1900..... | 170 |
| Table 14.—The deaf, classified by age and period of life when deafness occurred, by states and territories: 1900.....  | 172 |
| Table 15.—The deaf, classified by age when deafness occurred and ability to speak, by states and territories: 1900.....  | 174 |
| Table 16.—The deaf, classified by present age and nativity of whites, by states and territories: 1900.....   | 178 |
| Table 17.—The deaf, classified by age when deafness occurred, by states and territories: 1900.....   | 180 |
| Table 18.—The deaf, classified by age and period of life when deafness occurred and present age: 1900.....   | 184 |
| Table 19.—The totally deaf, classified by age and period of life when deafness occurred, present age, and ability to speak: 1900.....  | 186 |
| Table 20.—The partially deaf, classified by age and period of life when deafness occurred, present age, and ability to speak: 1900.....  | 188 |
| Table 21.—The totally deaf, classified by age and period of life when deafness occurred and present age, by states and territories: 1900.....  | 190 |
| Table 22.—The partially deaf, classified by age and period of life when deafness occurred and present age, by states and territories: 1900.....  | 193 |

# CONTENTS.

|   | Page |
|---|------|
| Table 23.—The deaf, classified by degree of deafness, period of life when deafness occurred, color, nativity, sex, and present age: 1900.....   | 196  |
| Table 24.—The deaf, classified by ability to speak, age when deafness occurred, color, nativity, sex, and present age: 1900.....  | 197  |
| Table 25.—The deaf from each cause, by states and territories: 1900.....  | 200  |
| Table 26.—The deaf from each cause, by race, sex, and nativity: 1900.....   | 204  |
| Table 27.—The deaf from each cause, classified by age and period of life when deafness occurred: 1900.....  | 206  |
| Table 28.—The deaf from each cause, classified by consanguinity of parents and deaf relatives: 1900.....  | 208  |
| Table 29.—The totally deaf (parents cousins) from each cause, classified by age and period of life when deafness occurred, with respect to the number having deaf relatives of the specified classes: 1900.....                       | 211  |
| Table 30.—The totally deaf (parents not cousins) from each cause, classified by age and period of life when deafness occurred, with respect to the number having deaf relatives of the specified classes: 1900.....                   | 215  |
| Table 31.—The totally deaf (consanguinity of parents not stated) from each cause, classified by age and period of life when deafness occurred, with respect to the number having deaf relatives of the specified classes: 1900.....   | 219  |
| Table 32.—The partially deaf (parents cousins) from each cause, classified by age and period of life when deafness occurred, with respect to the number having deaf relatives of the specified classes: 1900.....                     | 223  |
| Table 33.—The partially deaf (parents not cousins) from each cause, classified by age and period of life when deafness occurred, with respect to the number having deaf relatives of the specified classes: 1900.....                 | 227  |
| Table 34.—The partially deaf (consanguinity of parents not stated) from each cause, classified by age and period of life when deafness occurred, with respect to the number having deaf relatives of the specified classes: 1900..... | 231  |
| Table 35.—The deaf, classified by age and period of life when deafness occurred, sex, and deaf relatives: 1900.....   | 235  |
| Table 36.—The deaf, classified by age and period of life when deafness occurred, consanguinity of parents, and deaf relatives: 1900.....  | 236  |
| Table 37.—The deaf, classified by age and period of life when deafness occurred, sex, marital condition, and deaf relatives: 1900.....  | 238  |
| Table 38.—The deaf, classified by age and period of life when deafness occurred, race, school attendance, ability to speak, and means of communication: 1900.....   | 240  |
| Table 39.—The deaf, classified by sex, present age, race, and school attendance: 1900.....  | 242  |
| Table 40.—The totally deaf 10 years of age and over engaged in each specified occupation, classified by race, sex, and present age: 1900..  | 243  |
| Table 41.—The partially deaf 10 years of age and over engaged in each specified occupation, classified by race, sex, and present age: 1900..  | 246  |
| Table 42.—The totally deaf 10 years of age and over engaged in each specified occupation, by ability to speak and age when deafness occurred: 1900 .....  | 249  |
| Table 43.—The partially deaf 10 years of age and over engaged in each specified occupation, by ability to speak and age when deafness occurred: 1900.....   | 251  |
| Table 44.—The totally deaf 10 years of age and over engaged in each specified occupation, by race and school attendance: 1900.....  | 253  |
| Table 45.—The partially deaf 10 years of age and over engaged in each specified occupation, by race and school attendance: 1900.....  | 255  |
| Table 46.—Number and per cent of the deaf 10 years of age and over engaged in each specified group of occupations, by age and period of life when deafness occurred: 1900.....  | 257  |
| Table 47.—Number and per cent of the deaf 10 years of age and over engaged in each specified group of occupations, classified by ability to speak, race, sex, present age, and school attendance: 1900 .....                          | 258  |

# DIAGRAMS AND MAPS.

## DIAGRAMS.

|  | Page. |
|--|-------|
| Diagram 1.—Ratio of deaf and dumb, per million of population, in the census years 1830 to 1900.....  | 68    |
| Diagram 2.—Ratio of the deaf from childhood (under 20) per million of population, in the census years 1830 to 1900.....                                      | 69    |
| Diagram 3.—Ratio of the totally deaf from early childhood (under 5) per million of population of the same age.....   | 71    |
| Diagram 4.—Ratio of the totally deaf from birth (congenital) per million of population of the same age.....  | 71    |
| Diagram 5.—Ratio of the totally deaf from early childhood (after birth and under 5—noncongenital) per million of population of the same age.....             | 72    |
| Diagram 6.—Number of deaf, by age periods when deafness occurred.....  | 72    |
| Diagram 7.—Number of deaf from childhood (under 20), by age when deafness occurred.....  | 72    |
| Diagram 8.—Number of deaf (total and partial), by period of life when deafness occurred.....   | 78    |
| Diagram 9.—Number of deaf (total and partial), by age periods when deafness occurred.....  | 79    |
| Diagram 10.—Number of totally and partially deaf from childhood (under 20), by age when deafness occurred.....   | 79    |
| Diagram 11.—Number of deaf, by period of life when deafness occurred and ability to speak.....   | 79    |
| Diagram 12.—Number of deaf, by degree of deafness and ability to speak.....  | 80    |
| Diagram 13.—Number of deaf, by age periods when deafness occurred and ability to speak.....  | 81    |
| Diagram 14.—Number of deaf from birth and those who became deaf under specified ages, by ability to speak.....   | 81    |
| Diagram 15.—Percentage of deaf from birth and under specified ages, by ability to speak.....   | 81    |
| Diagram 16.—Percentage of the deaf who speak well, imperfectly, or not at all, by age periods when deafness occurred.....                                    | 82    |
| Diagram 17.—Number of totally deaf, by age periods when deafness occurred and ability to speak.....  | 82    |
| Diagram 18.—Number of partially deaf, by age periods when deafness occurred and ability to speak.....  | 83    |
| Diagram 19.—Percentage of totally deaf from early childhood (under 5), by age and ability to speak.....  | 85    |
| Diagram 20.—Number of deaf, by period of life when deafness occurred, degree of deafness, and ability to speak, in relation to ability to read the lips..... | 87    |
| Diagram 21.—Number of deaf who read the lips, by age periods when deafness occurred.....   | 88    |
| Diagram 22.—Methods of communication employed by the deaf.....   | 89    |
| Diagram 23.—Number of deaf who employ the methods of communication specified.....  | 90    |
| Diagram 24.—Number of deaf, by period of life when deafness occurred and degree of deafness, in relation to methods of communication.....                    | 90    |
| Diagram 25.—Number of totally deaf from childhood (under 20), by age when deafness occurred, in relation to methods of communication.....                    | 91    |
| Diagram 26.—Number of partially deaf from childhood (under 20), by age when deafness occurred, in relation to methods of communication.....                  | 91    |
| Diagram 27.—Number of totally deaf from early childhood (under 5), by age when deafness occurred, in relation to methods of communication.....               | 92    |
| Diagram 28.—Number of partially deaf from early childhood (under 5), by age when deafness occurred, in relation to methods of communication.....             | 92    |
| Diagram 29.—Number of deaf using special means of communication—sign-language and finger-spelling—by age periods when deafness occurred.....                 | 94    |
| Diagram 30.—Number of deaf using ordinary means of communication—speech and writing—by age periods when deafness occurred.....                               | 94    |
| Diagram 31.—A sectional view of the human ear.....   | 107   |
| Diagram 32.—Plan of the organ of hearing.....  | 107   |
| Diagram 33.—Number of deaf, by classified causes of deafness.....  | 111   |
| Diagram 34.—Number of deaf, by unclassified causes of deafness.....  | 112   |
| Diagram 35.—Number of deaf from childhood (under 20) and from adult life (20 and over) who lost hearing from assigned causes.....                            | 119   |
| Diagram 36.—Number of deaf who lost hearing at the specified ages from the principal assigned causes.....  | 120   |
| Diagram 37.—Number of deaf from the assigned causes, by degree of deafness.....  | 123   |
| Diagram 38.—Classification of deaf relatives.....  | 127   |
| Diagram 39.—Classes of deaf relatives.....   | 128   |
| American Manual Alphabet used in finger-spelling.....  | 96    |

## MAPS.

|  |     |
|--|-----|
| Map 1.—Number of deaf per million of population, by states and territories.....  | 78  |
| Map 2.—Number of totally deaf per million of population, by states and territories.....  | 78  |
| Map 3.—Number of partially deaf per million of population, by states and territories.....  | 78  |
| Map 4.—Number of deaf from classified causes per million of population, by states and territories.....                                 | 116 |
| Map 5.—Number of deaf from suppurative affections of middle ear per million of population, by states and territories.....              | 117 |
| Map 6.—Number of deaf from catarrhal affections of middle ear per million of population, by states and territories.....                | 117 |
| Map 7.—Number of deaf from affections of the labyrinth per million of population, by states and territories.....                       | 117 |
| Map 8.—Number of deaf from affections of the auditory nerve per million of population, by states and territories.....                  | 117 |
| Map 9.—Number of congenital deaf per million of population, by states and territories.....   | 117 |
| Map 10.—Per cent of sunshine in each state and territory, 1870 to 1891, inclusive.....   | 117 |
| Map 11.—Number of totally deaf from birth (congenital) per million of population, by states and territories.....                       | 118 |
| Map 12.—Number of totally deaf from early childhood (under 5, noncongenital) per million of population, by states and territories..... | 118 |

## LETTER OF TRANSMITTAL.

DEPARTMENT OF COMMERCE AND LABOR,  
BUREAU OF THE CENSUS,  
Washington, D. C., June 15, 1906

SIR:

I have the honor to transmit the Special Report relating to the Blind and the Deaf, in 1900, compiled in accordance with section 7 of the act of Congress of March 6, 1902.

The preliminary data for this report were collected by the enumerators of the Twelfth Census, who reported the name, age, sex, and post office address of each person alleged to be blind or deaf, as a basis for a more complete return to be secured by correspondence with the individuals.

The inquiry was initiated and the correspondence conducted under the direction of Dr. Alexander Graham Bell, who determined the scope of the investigation and specified the tabulations to be made from the data secured. He also prepared the text relating to the deaf. In arranging the classification of the causes of blindness, Doctor Bell was assisted by the late Dr. Swan M. Burnett, who kindly revised the comments relating to this part of the work. The compilation of the statistical tables was performed in the division of vital statistics under the supervision of the late William A. King, chief statistician for vital statistics.

The returns collected in connection with this inquiry have not only served as the statistical basis for this report, but have been utilized to the more immediate advantage of the blind and deaf by preparing, upon request, lists of addresses and personal data for schools, libraries, and other institutions established for the benefit of these classes. Over 203 lists aggregating 42,084 names of blind persons and 29,544 of deaf have been supplied by the Bureau of the Census, and it is believed that this use of the data will contribute more directly to the personal benefit of the blind and deaf than any other that could be made.

Very respectfully,



Director.

Hon. VICTOR H. METCALF,  
Secretary of Commerce and Labor.