SUPPLEMENTARY DATA APPENDIX

A Individual identifiers, gender, and matching of employees over time

In order to match workers across years, we start by assigning to each employee in each year an identifier. Specifically, for each year, individuals with the same full name, employed in the same department, with the same place of birth, and (starting in 1851) with the same place of appointment, are assigned the same identifier. This allows for individuals to appear multiple times in each year of the Official Register, if they are employed in multiple positions.

We then build the variable *gender*. We infer that an employee is a female in several way. First, most female employees appear in the data with the prefix "miss" of "mrs". Second, some employees appear in the Official Register employed simply as "ladies". Third, we infer that the employee is a female based on the occupation titles (e.g., "matron", "waitress", "housemaid", "directress").

We then match workers across years in several steps of matching, based on their first name, midname, last name, suffix, place of birth (state, or foreign country), place of residence at time of appointment, gender and department. We employ different combinations of these characteristics in different steps of matching, to allow for typos in the spelling of the full name, for missing information on place of birth or of residence in some years, and for individuals' movements across departments. In total we employ 133 different steps of matching. Importantly, our matching algorithm directly takes into account the fact that bureaus can change departments across years.

In order to allow for cases in which an employee leaves the federal bureaucracy only temporarily, our matching algorithm allows a worker in time t not matched in t + 1 to be matched again in any year after t + 1. More specifically, we start by matching workers in year 1817 to workers in year 1819. We then match workers in year 1819 to workers in year 1821, and then we match workers in year 1817 who were not matched to workers in year 1819 to workers in year 1821. We repeat this procedure for all years: for each year t, we match workers in year t - 1 to workers in year t, and we repeat the same procedure for all years in year t - 2 who were not found in year t - 1 to workers in year t, and we repeat the same procedure for all years the same procedure for all years before year t.

Finally, we assign a unique time-invariant individual identifier to each employee, in order to trace their career in the federal bureaucracy.

We implement the following 133 steps of matching.

- 1. full name, place of birth, place of first appointment, department, gender
- 2. full name, place of birth, place of first appointment, gender
- 3. full name, place of birth, department, gender
- 4. full name, place of first appointment, department, gender
- 5. first name, midname, last name, place of birth, place of first appointment, department, gender
- 6. first name, midname, last name, place of birth, place of first appointment, gender
- 7. first name, midname, last name, place of birth, department, gender
- 8. first name, midname, last name, place of first appointment, department, gender
- 9. first name, initial midname, last name, suffix, place of birth, place of first appointment, department, gender
- 10. first name, initial midname, last name, suffix, place of birth, place of first appointment, gender
- 11. first name, initial midname, last name, suffix, place of birth, department, gender
- 12. first name, initial midname, last name, suffix, place of first appointment, department, gender
- 13. first name, initial midname, last name, place of birth, place of first appointment, department, gender
- 14. first name, initial midname, last name, place of birth, place of first appointment, gender
- 15. first name, initial midname, last name, place of birth, department, gender
- 16. first name, initial midname, last name, place of first appointment, department, gender
- 17. first name, last name, suffix, place of birth, place of first appointment, department, gender
- 18. first name, last name, suffix, place of birth, place of first appointment, gender
- 19. first name, last name, suffix, place of birth, department, gender
- 20. first name, last name, suffix, place of first appointment, department, gender
- 21. first name, last name, place of birth, place of first appointment, department, gender
- 22. first name, last name, place of birth, place of first appointment, gender
- 23. first name, last name, place of birth, department, gender

- 24. first name, last name, place of first appointment, department, gender
- 25. full name, place of birth, gender
- 26. full name, place of first appointment, gender
- 27. full name, department, gender
- 28. first name, midname, last name, place of birth, gender
- 29. first name, midname, last name, place of first appointment, gender
- 30. first name, midname, last name, department, gender
- 31. first name, initial midname, last name, suffix, place of birth, gender
- 32. first name, initial midname, last name, suffix, place of first appointment, gender
- 33. first name, initial midname, last name, suffix, department, gender
- 34. first name, initial midname, last name, place of birth, gender
- 35. first name, initial midname, last name, place of first appointment, gender
- 36. first name, initial midname, last name, department, gender
- 37. first name, last name, suffix, place of birth, gender
- 38. first name, last name, suffix, place of first appointment, gender
- 39. first name, last name, suffix, department, gender
- 40. first name, last name, place of birth, gender
- 41. first name, last name, place of first appointment, gender
- 42. first name, last name, department, gender
- 43. full name, place of birth, place of first appointment, department
- 44. full name, place of birth, place of first appointment
- 45. full name, place of birth, department
- 46. full name, place of first appointment, department
- 47. first name, midname, last name, place of birth, place of first appointment, department
- 48. first name, midname, last name, place of birth, place of first appointment

- 49. first name, midname, last name, place of birth, department
- 50. first name, midname, last name, place of first appointment, department
- 51. first name, initial midname, last name, suffix, place of birth, place of first appointment, department
- 52. first name, initial midname, last name, suffix, place of birth, place of first appointment
- 53. first name, initial midname, last name, suffix, place of birth, department
- 54. first name, initial midname, last name, suffix, place of first appointment department
- 55. first name, initial midname, last name, place of birth, place of first appointment, department
- 56. first name, initial midname, last name, place of birth, place of first appointment
- 57. first name, initial midname, last name, place of birth, department
- 58. first name, initial midname, last name, place of first appointment, department,
- 59. first name, last name, suffix, place of birth, place of first appointment, department
- 60. first name, last name, suffix, place of birth, place of first appointment
- 61. first name, last name, suffix, place of birth, department
- 62. first name, last name, suffix, place of first appointment, department
- 63. first name, last name, place of birth, place of first appointment, department
- 64. first name, last name, place of birth, place of first appointment
- 65. first name, last name, place of birth, department
- 66. first name, last name, place of first appointment, department
- 67. Full name, place of birth
- 68. Full name, place of first appointment
- 69. Full name, department,
- 70. first name, midname, last name, place of birth
- 71. first name, midname, last name, place of first appointment
- 72. first name, midname, last name, department

- 73. first name, initial midname, last name, suffix, place of birth
- 74. first name, initial midname, last name, suffix, place of first appointment
- 75. first name, initial midname, last name, suffix, department
- 76. first name, initial midname, last name, place of birth
- 77. first name, initial midname, last name, place of first appointment
- 78. first name, initial midname, last name, department
- 79. first name, last name, suffix, place of birth
- 80. first name, last name, suffix, place of first appointment
- 81. first name, last name, suffix, department
- 82. first name, last name, place of birth
- 83. first name, last name, place of first appointment
- 84. first name, last name, department
- 85. initial first name, initial midname, last name, suffix, place of birth, place of first appointment, department, gender
- 86. initial first name, initial midname, last name, suffix, place of birth, place of first appointment, gender
- 87. initial first name, initial midname, last name, suffix, place of birth, department, gender
- 88. initial first name, initial midname, last name, suffix, place of first appointment, department, gender
- 89. initial first name, initial midname, last name, place of birth, place of first appointment, department, gender
- 90. initial first name, initial midname, last name, place of birth, place of first appointment, gender
- 91. initial first name, initial midname, last name, place of birth, department, gender
- 92. initial first name, initial midname, last name, place of first appointment, department, gender
- 93. initial first name, initial midname, last name, suffix, place of birth, gender

- 94. initial first name, initial midname, last name, suffix, place of first appointment, gender
- 95. initial first name, initial midname, last name, suffix, department, gender
- 96. initial first name, initial midname, last name, place of birth, gender
- 97. initial first name, initial midname, last name, place of first appointment, gender
- 98. initial first name, initial midname, last name, department, gender
- 99. initial first name, initial midname, last name, suffix, place of birth, place of first appointment,department
- 100. initial first name, initial midname, last name, suffix, place of birth, place of first appointment
- 101. initial first name, initial midname, last name, suffix, place of birth, department
- 102. initial first name, initial midname, last name, suffix, place of first appointment, department
- 103. initial first name, initial midname, last name, place of birth, place of first appointment, department
- 104. initial first name, initial midname, last name, place of birth, place of first appointment
- 105. initial first name, initial midname, last name, place of birth, department
- 106. initial first name, initial midname, last name, place of first appointment, department
- 107. initial first name, initial midname, last name, suffix, place of birth
- 108. initial first name, initial midname, last name, suffix, place of first appointment
- 109. initial first name, initial midname, last name, suffix, department
- 110. initial first name, initial midname, last name, place of birth
- 111. initial first name, initial midname, last name, place of first appointment
- 112. initial first name, initial midname, last name, department
- 113. fuzzy matching on full name, blocking on: initial first name, last name, department, place of birth, place of first appointment, gender
- 114. fuzzy matching on full name, blocking on: initial first name, last name, place of birth, place of first appointment, gender
- 115. fuzzy matching on full name, blocking on: initial first name, last name, department, place of birth, gender

- 116. fuzzy matching on full name, blocking on: initial first name, last name, department, place of first appointment, gender
- 117. fuzzy matching on full name, blocking on: initial first name, last name, place of birth, gender
- 118. fuzzy matching on full name, blocking on: initial first name, last name, place of first appointment, gender
- 119. fuzzy matching on full name, blocking on: initial first name, last name, department, gender
- 120. fuzzy matching on full name, blocking on: first name, initial last name, department place of birth, place of first appointment, gender
- 121. fuzzy matching on full name, blocking on: first name, initial last name, place of birth, place of first appointment, gender
- 122. fuzzy matching on full name, blocking on: first name, initial last name, department, place of birth, gender
- 123. fuzzy matching on full name, blocking on: first name, initial last name, department, place of first appointment, gender
- 124. fuzzy matching on full name, blocking on: first name, initial last name, place of birth, gender
- 125. fuzzy matching on full name, blocking on: first name, initial last name, place of first appointment, gender
- 126. fuzzy matching on full name, blocking on: first name, initial last name, department, gender
- 127. fuzzy matching on full name, blocking on: initial first name, initial last name, department, place of birth, place of first appointment, gender
- 128. fuzzy matching on full name, blocking on: initial first name, initial last name, place of birth, place of first appointment, gender
- 129. fuzzy matching on full name, blocking on: initial first name, initial last name, department, place of birth, gender
- 130. fuzzy matching on full name, blocking on: initial first name, initial last name, department, place of first appointment, gender
- 131. fuzzy matching on full name, blocking on: initial first name, initial last name, place of birth, gender
- 132. fuzzy matching on full name, blocking on: initial first name, initial last name, place of first appointment, gender

133. fuzzy matching on full name, blocking on: initial first name, initial last name, department, gender

B Cleaning and geo-location of places of employment

Information on an employee's place of employment is typically contained in the column "where employed" of the Official Register (see Figure B1).⁴⁴ In some cases in which this column contains only the state of employment, more information on the precise location can be obtained by manually reviewing the pages of the Official Register. For example, as can be seen from the extract of the 1865 Register shown in Figure B2, the specific Indian agencies of the Indian Office are listed as sections of the Register, with the list of individuals employed in each agency, while the "where employed" column simply contains the state where the agency is located.

We then manually code each observation in order to build three variables. The variable *Location* contains the name of the location of employment. In the majority of cases, this is a city or a town; in some cases, this can be a river, a lake, a county, or a lighthouse located in an isolated location. In some cases, the "where employed" column contains the name of a specific building (e.g., "Washington barracks, d c" or "Watertown arsenal") which we assign to the corresponding location. In the cases in which the location is an agency, we assign the location of the headquarter of the agency, whenever this information can be found through an online search. The variable *State* contains the name of the state (or the territory) where the employee is located. The variable *Foreign Country* is an indicator taking value one if the individual is employed abroad. We harmonize the names of the locations to account for different spellings of the same location. We obtain a total of 11,873 locations in the United States

We then manually assign coordinates to each of these 11,873 locations through extensive online searches. While in most cases the geolocation does not present any issue, and we can simply rely on Google Maps in order to geolocate a city or a town, the geolocation of some cases is worth discussing. First, the name of the location might not appear in Google Maps if the location has an historical name or is no longer inhabited today: in these cases, we conduct additional online searches in order to recover the original geolocation. Second, in cases in which the location is a river or a lake, we assign the coordinates only if (i) the river/lake is small in size, so that it is entirely contained in a county, or (ii) the Register contains additional information about the location of the employee in the river/lake (e.g., "Mississippi river near friars point"). We are able to precisely geolocate a total of 10,236 out

⁴⁴The column is sometimes labeled "residence", or "where located".

of 11,873 locations.⁴⁵ We are unable to assign coordinates to all locations since in a minority of cases the Register reports only the State of employment, or it reports vague geographic information (such as "on a river" or "along the coast").

Finally, we use ArcGIS to overlay the coordinates of each location to a map of the U.S. counties as of 1890, and assign to each location its 1890 county.

 $^{^{45}}$ In the paper, after the minor data restrictions that we impose, we are left with 9,651 unique locations.

Figure B1: "Where employed" column from the 1875 Official Register

	Customs Service.					
Name.	Office.	Where employed.				
Joseph Flesheimer Edward L. Wright Charles J. Linke Orrin W. Robinson Peter C. Bird Albert C. Hayward Henry C. Carleton Hiram K. Cole Josiah R. Brooks Alfred Meade John A. French John Q. Bernard Hylor A. Downs Ashbell Roach	Deputy collector and inspector. do	Superior, Wis Torch Lake Menomonee Houghton White Fish Point Houghton Bayfield, Wis Detour Isle Royale Menomonee Ontonagon Marquette Sault Ste. Marie do				

 $\it Notes:$ The figure shows an extract from the 1875 Register, highlighting the locations under the "where employed" column.

Figure B2:	Agency of	f employment	from the	1865	Official Register

134 INT	CERIOR DEPA	ARTMENT.	
	Indian Office.		
Names and offices.	Where employed.	Where born.	
Omaha Agency. R. W. Furnasagent Hiram Chaseinterpreter Ottoe and Missouria Agency.		Ohio. Nebraska	
William DailyagentBaptiste BarnabyinterpreterJames BevinsblacksmithM. Lodgeasst. blacksmithL. A. StebbinsfarmerA. L. TinkhammillerEbbin Jordanengineer	do do do do do do	Indiana Nebraska Pennsylvania Ottoe Nation New York Vermont Maine	
Pawnee Agency. Daniel H. Wheeleragent Milo Tillowfarmer James Welchblacksmith Henry P. Coolidgegunsmith Co-low.ah, (Indian)asst. smith	do do do	Pennsylvania England Ohio Nebraska	

Notes: The figure shows an extract from the 1865 Register (page 134).

C Re-construction of the organizational hierarchy

C.1 Bureaus in the Treasury Department

Figure C11 shows all the organisation in bureaus of the Treasury Department for each year between 1817 and 1905. All the bureaus of the Treasury Department are listed in C11. Below we report some notes, and related sources, on the most complicated cases.

- United States Mint. Despite being formally an independent body until 1873, it was connected to the Treasury Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), pages 196-198.
- Customs. Customs has been under the First Comptroller until 1849 and then again from 1894. In the period between these two years it is a separate office with a commission as its head. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), pages 145, 279.
- Lightouse Administration. From 1817, the Lighthouse administration has been under the Fifth Auditor until the creation of the lighthouse board in 1852. The source is *https://uslhs.org/history-administration-lighthouses-america*. It was then moved to the Commerce and Labor Department in 1903. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), pages 281.
- Commissioner of Claims. The commissioner of claims has been abolished in 1818 and its duties have been transferred to the Third Auditor. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 143.
- Commissioner of Internal Revenue. The Commissioner of internal revenue has been created in 1862 to provide internal revenue support to government. It works directly under the Secretary of the treasury. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 269.
- Solicitor of the Treasury. The Solicitor of the treasury has been created in 1830. Before that, the duties of this office were performed by the First Comptroller or Fifth Auditor, then moved to the Justice Department in 1870. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), pages 144 and 272.

- Land Patents. The secretary for signing land patents has been created in 1833 (and appears in 1835 in Register for the first time), and then goes under the General Land Office. Source: https://scrc1.wordpress.com/2010/12/10/when-the-president-signed-every-land-grant/
- Second Comptroller. The Second Comptroller has been abolished in 1894. Source: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 279.
- Coast and Geodetic Survey. The Coast and Geodetic Survey has been created under the Treasury department in 1836 and remained there until 1903; before then, under it was under the Navy but with only Navy officials, not civilians and, hence, it is not in our dataset. The Coast and Geodetic Survey was in Treasury also between 1832 and 1834, but it did not start operating. Importantly, the Weights and Measures was also part of the the Coast and Geodetic Survey. It then moved to the Commerce and Labor Department in 1903. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), pages 152-154 and 281.
- Office of the Sixth Auditor. The Office of the Sixth Auditor has been created in 1836. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 144.
- Office of the Chief Clerk. Importantly, the chief clerk of the Treasury is in charge of the "Office of the Chief Clerk", with supervision among other things of buildings of the Treasury, and in charge of "direction of those persons employed as engineers, machinists, firemen, or laborers, who are paid from appropriation for contingent expenses of the Department". Hence, the chief clerk and all these other employees are part of the divisions of Secretary Office. Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 50.
- General Land Office. The General land office has been part of the Treasury and moved to the Interior when the Department has been created. In 1836, several positions within General land office were added (solicitor, recorder, principal clerks,...). Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), pages 148 and 149.
- Supervising Architect Office. The Supervising Architect Office, originally known as the Bureau of Construction, has been created in 1852 but it appears for the first time

in the US Official Register in 1855. Source: https://www.gsa.gov/real-estate/historic-preservation/historic-building-stewardship/architecture-and-government/a-timeline-of-architecture-and-government

- Steamboat Inspection Service. The SteamBoat Inspection Service has been created in 1838, with judges at the management of it. In 1852 it has been placed under Treasury Department. However, it appears for the first time in the Official Register in 1859. In 1903 it is then moved to the Department of Commerce and Labor. Sources: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), pages 158, 159, 161.⁴⁶
- Comptroller of the Currency. The Comptroller of the Currency has been created in 1863. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 270. In 1902, a new statute specifically added employees of the comptroller of the currency, including bank examiners, receivers, attorneys for receivers, and clerks in national banks outside DC.⁴⁷
- Bureau of Engraving and Printing. The Bureau of Engraving and Printing has been created in 1862, known as "First Division of National Currency Bureau". We decided to list it as independent bureau since 1862 because a) its importance and b) right from its early days it looks a separate organization within the Treasury Department. Note: the Comptroller of the Currency declares he has no supervision over the Bureau of Engraving and Printing. It has been recognised by Congress as bureau formally only in 1875. Sources: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 269.
- Bureau of Statistics. The Bureau of Statistics has been created in 1866. It has then moved to the Department of Commerce and Labor in 1903. Sources: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 271 and 281.
- Marine Hospital. The Marine Hospital has been under the responsability of Customs, until the establishment of the Supervising Surgeon of the Martine Hospital (then renamed Surgeon General) in 1870 with the first Supervising Surgeon appointed in 1871. It appears for the first time has separate office in the US Official Register starting in

⁴⁶See also: https://en.wikipedia.org/wiki/Steamboat_Inspection_Service

⁴⁷See also: https://www.archives.gov/publications/prologue/2004/winter/genealogy-official-register.html. Note: these employees are dropped from our sample.

1873. Source: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 157 and 158.

- Revenue Cutters/Revenue Marine Service. Similarly to Customs, the Revenue Cutters has been under the responsibility of the First Comptroller until 1843. After 1843 it is placed under Customs. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 154 and 155.
- Life Saving Service. The Life Saving Service was placed un the customs until 1878 and, after that, it became a separate bureau. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 274.
- Bureau of Navigation. The Bureau of Navigation has been established in 1884. In 1903 it was moved under the Department of Commerce and Labor Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 275 and 281.
- Bureau of Immigration. The Bureau of Immigration has been established in 1891. In 1903 it was moved under the Department of Commerce and Labor Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 276 and 281.
- National Bureau of Standards. The National Bureau of Standards has been created as separate bureau in 1901. Before that it was under the responsibility of the Coast and Geodetic Survey. In 1903 it was moved under the Department of Commerce and Labor Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 280 and 281.

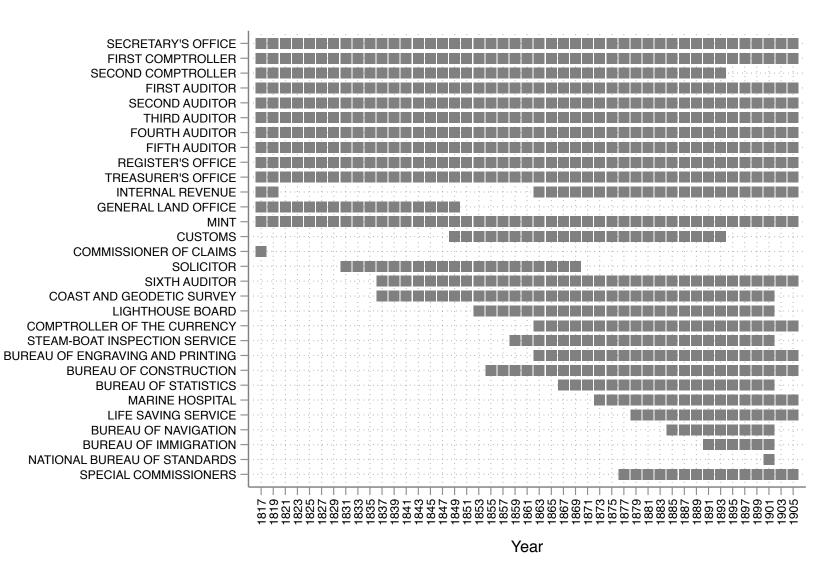


Figure C3: Bureaus in the Treasury Department

Notes: The figure shows the organization in bureaus of the Treasury department for each year between 1817 and 1905.

C.2 Bureaus in the War Department

Figure C4 shows the organization in bureaus of the War department for each year between 1817 and 1905. All the bureaus of the War Department are listed in C4. Below we report some notes, and related sources, on the most complicated cases.

- Indian Affairs. The Indian Affairs is placed under the supervision of the Secretary of War. It is transferred to the Interior Ministry, upon its creation in 1849. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 125 and 137.
- Adjutant and Inspector General's Office. The Adjutant and Inspector General's Office is split in 1821 into Adjutant Office and Inspector Office. The Inspector general office is not an office/bureau of the war department until 1972. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 132 and page 271.
- Adjutant General. The Adjutant General Bureau is active in the War Department until 1904 when it is merged with Record and Pension Office in 1904 to creare the new Military Secretary's office. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 249.
- Pension office. The Pension Office has been created in 1833. Before that, some clerks in the general department were in charge of pensions. Indeed the Official Register started including "pensions agents" starting from 1827. However, we do not consider them in our dataset since they appear on and off depending on the year. We focus from 1833 onwards. In 1849, the Pension Office has been transferred to the Department of Interior. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 249.
- Bounty Land Office. The Bounty Land Office appears for the first time as a separate office in the US Official Register in 1833. Before 1833 it was called "office" but, in reality, it was place under the responsability of the Office of the Secretary. We consider it a separate bureau starting in 1833, following the classification of the US Official Register. This bureau is then moved to the Pension Office from 1843. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 136 and 137.
- **Topographical Bureau**. The Topographical Bureau has been created in 1831, but in the US Official Register it appears as separate bureau from 1835. In 1863 it be-

comes part of the Engineer Office. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 134 and 237.

- **Topographical Bureau**. The Topographical Bureau was created in 1831, but it appears as an independent bureau in the US Official Register only in 1835. From 1863 it becomes part of Engineer Office. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 134 and 237.
- **Purchasing Department**. The Purchasing Department was abolished in 1842 and its duties were transferred to the Quartermaster Bureau. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 133.
- **Provost Marshal Generals**. The Provost Marshal Generals Bureau was created in 1863. It was then discontinued in 1866 and its duties transferred to Adjutant General. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 237 and 238.
- Military Justice/Judge Advocate General. The Judge Advocate General was created in 1864. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 237.
- Freedmen Bureau. The Freedmen Bureau was created in 1866 and was then abolished in 1872 with its duties transferred to Adjutant General. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 238.
- The Signal Office. The Signal Office was create in 1864. Source: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 237.
- Office of Inspector of National Cemeteries. The Office of Inspector of National Cemeteries. We do not consider the Office of Inspector of National Cemeteries as a separate office. It is only present for 2 years and without a head and only with a group of superintendents. Most precisely, it appears in the US official Register in 1873 and then abolished in 1876. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 241.
- War Record Office. The War Record Office was created in 1879, but it appears for the first time in the US Register in 1881. In 1899 it was merged with Record

and Pension. Source: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 242.

- Office of Superintendent of State War and Navy Building. The Office of Superintendent of State War and Navy Building was created in 1883 as a detached agency. Before this period it was placed un the Engineer Office of the War Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 419.
- Mississippi River Commission. The Mississippi River Commission was a temporary commission created in 1879. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 243.
- Missouri River Commission. The Missouri River Commission was a temporary commission created in 1884 (and abolished in 1902). Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 243.
- Record and Pension. The Record and Pension office was established in 1889 and it was called initially "division" and "bureau" from 1891. In 1899 it was merged with the War Records Office in 1899. It was then merged with the Record and Pension Office in 1904 to create the new Military Secretary's Office. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 242 and 249.
- Board of Ordinance and Fortifications. The Board of Ordinance and Fortifications was established in 1888 but it appears for the first time in the US Official Register only starting in 1893. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 242.
- Insular Affairs. The Insular Affairs Bureau was established in 1902. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 248.
- Military Secretary's Office. The Military Secretary's Office was created from the merge of Adjutant and Record and the Pension Office in 1904. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 249.

- Board of Road Commission. The Board of Road Commission was created in 1905 and it was also known as the Alaska Road Commission.⁴⁸
- Isthmian Canal Commission. The Isthmian Canal Commission was an administration commission set up to oversee the construction of the Panama Canal in the early years of American involvement. Established the February 26, 1904, reported directly to the Secretary of War.⁴⁹

⁴⁸Source: https://en.wikipedia.org/wiki/Alaska_Road_Commission
⁴⁹Source: https://en.wikipedia.org/wiki/Isthmian_Canal_Commission

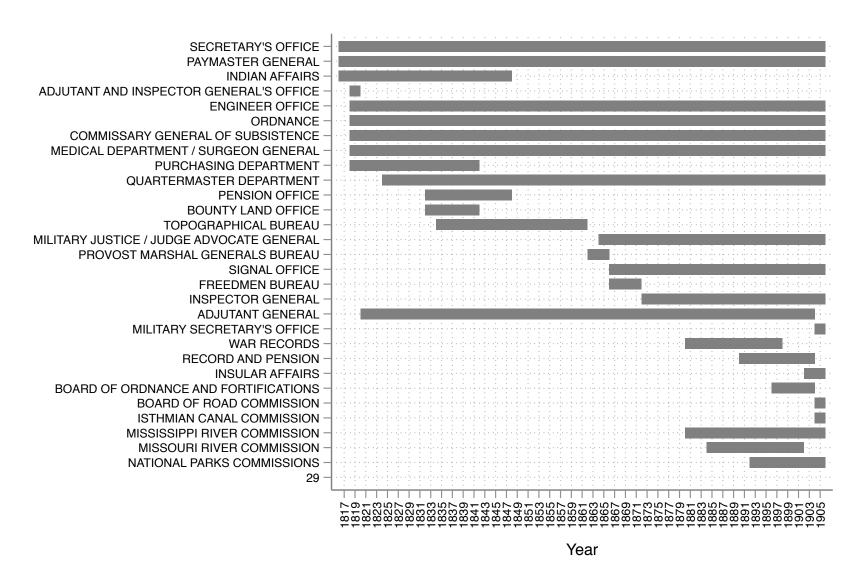


Figure C4: Bureaus in the War Department

Notes: The figure shows the organization in bureaus of the War department for each year between 1817 and 1905.

C.3 Bureaus in the Navy Department

Figure C5 shows the organization in bureaus of the War department for each year between 1817 and 1905. All the bureaus of the Navy Department are listed in C5. Below we report some notes, and related sources, on the most complicated cases.

- Board of Navy Commissioners. The Board of Navy Commissioners is attached to the Office of the Secretary. It exists until 1842. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 164 and 167. The Navy Yards, the Ordinance of Hydrography, Construction and Repair, Provisions and Clothing, Medicine and Surgery: all these bureaus were created in 1842 out of the Board of Navy Commission which is abolished.
- Navigation, Steam Engineering, Equipment and Recruiting. As reflected in C5, these three different bureaus were created in 1862. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 299.
- Navy Observatory and Hydrographic Office. The Navy Observatory and Hydrographic Office were both created in 1846. Until 1862 placed under the Bureau of Ordinance and then moved to the newly formed Bureau of Navigation. The Hydrographic Office was transferred to the Bureau of Equipment in 1898. The Naval Observatory has been transferred to the Bureau of Equipment in 1889. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 174, 300, 312, 314.
- Nautical Almanac Office. The Nautical Almanac Office was created in 1849. It was placed under the Bureau of Ordinance until 1862 when it was placed under the Bureau of Navigation just formed. It was then transferred to the Bureau of Equipment in 1889. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 174, 300, 312.
- Judge Advocate General. The Judge Advocate General was created in 1880. Source: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 337.

- Marine Corps. The Marine Corps Office was created in 1798, less then two months after the creation of the Navy Department. The Corps Office was place under the immediate direction of the Secretary of the Navy by the President and the commandant rendered his reports to the head of the Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 195.
- Navy Academy. In 1850, the Navy Academy was placed under the supervision of the Chief of the Bureau of Ordinance and Hydrography. In 1889, the Naval Academy was placed again under the supervision of the Bureau of Navigation. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 339.
- Navy Proving Ground. The Navy Proving Ground was placed under the Bureau of Ordinance.⁵⁰
- Navy Home. In 1898, the personnel and administration of the United Stated Naval Home were transferred from the Bureau of Yards and Docks to the Bureau of Navigation. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 341.
- Navy Intelligence. In 1882, the Office of Naval Intelligence was established as a part of the Bureau of Navigation. The office was place under the supervision of the Assistant Secretary of the Navy in 1890, but it was again transferred to the Bureau of Navigation in 1898. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 338.
- Navy Station. The Navy Station Office was placed under the Bureau of Ordinance. Source: new eye for the navy: the origin of radar at the naval research laboratory, by David K. Allison, page 12.
- Navy Torpedo Station. The Navy Torpedo Station was placed under the Navigation Bureau until 1888 and then merged with other stations in the same location and moved under Naval Ordinance. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 310.

⁵⁰Source: https://www.archives.gov/research/guide-fed-records/groups/156.html156.11

- Navy War College. The Navy War College was part of the Bureau of Navigation until 1888 and then transferred under the bureau or Naval Ordinance. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 338.
- Board of Navy Commission Office. We assign this office to the category *Temporary Commissions and Offices* until 1841 when it is discontinued.
- NAvy Records of the Rebellion. We assign this office to the category *Temporary Commissions and Offices* for only two years, 1895 and 1897.

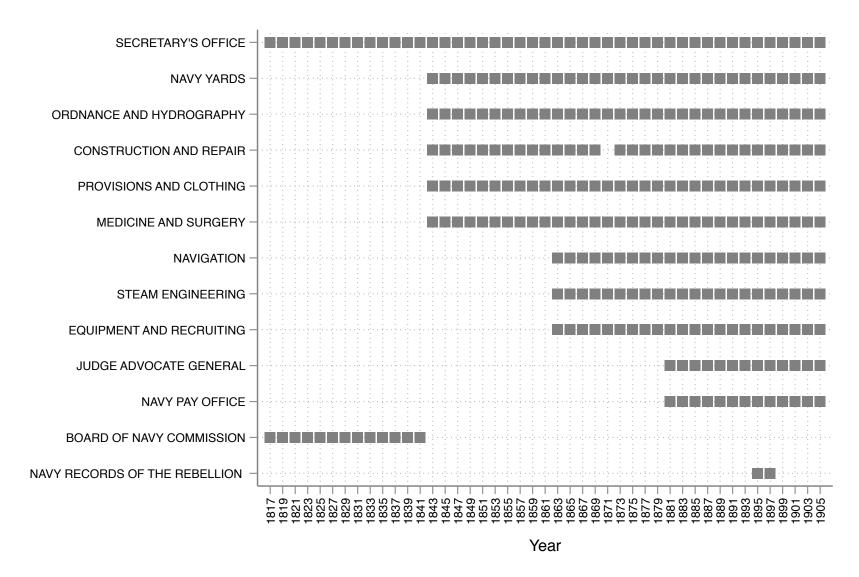


Figure C5: Bureaus in the Navy Department

Notes: The figure shows the organization in bureaus of the Navy department for each year between 1817 and 1905.

C.4 Bureaus in the Interior Department

Figure C6 shows the organization in bureaus of the Interior department for each year between 1817 and 1905. All the bureaus of the Interior Department are listed in C6. Below we report some notes, and related sources, on the most complicated cases.

- General Land Office. The General Land Office has been transferred in 1849 from the Treasury Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.
- Patent Office. The Patent Office has been transferred in 1849 from the State Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.
- Indian Office. The Indian Office has been transferred in 1849 from the War Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.
- Pension Office. The Pension Office has been transferred in 1849 from the War Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.
- Census Office. The Census Office has been transferred in 1849 from the State Department. Subsequently, in 1903, it has been transferred to the Department of Commerce and Labor. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.
- Government Hospital for the Insane. The Government Hospital for the Insane has been established in 1855 with a superintendent in charge. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 216 and 217.
- Metropolitan Police. Since 1861, the board of Metropolitan Police commission of DC submits annual reports to the Secretary of Interior. From 1873, it is transferred to the Justice Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 360.
- **Penitentiary**. The Penitentiary is part of the Department of the Interior until 1863, when it disappears from the US Registry. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.

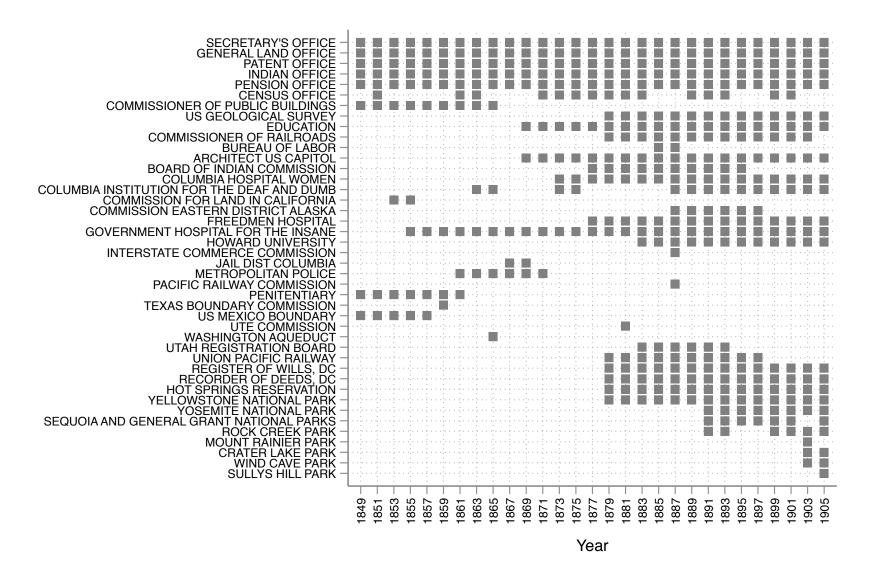
- Washington Aqueduct. We do not assign the Washington Aqueduct as a separate office. It was assigned to the supervision of the Engineer Office in War Department in 1862 and then back to Engineer in 1867. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 359.
- Commissioner of Public Buildings. The Commissioner of Public Buildings was transferred to the Engineer War in 1867. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 199 and 238.
- Jail Dist Columbia. The Jail Dist Columbia has been transferred from the Interior Department to the Justice Department in 1872. Note: it is absent in the Official Register in 1871. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 333.
- Architect of the Capitol. The Architect of the Capitol has been transferred from the War Department to the Interior Department in 1862. However, it appears in the US Official Register only starting 1869. In 1902 its name changed to Superintendent of Capitol Building and Grounds in 1902. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 358 and 365.
- US Geological Survey. The US Geological Survey is a new office established in the Interior Department in 1879. However, employees in charge of geographical surveys appear already in 1875 in the Official Register, and so we assign them to Other Employees and Autonomous Divisions and Agencies. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 362.
- Office of Education. The Office of Education has been independent until it was placed under the Interior Department in 1868 and renamed Bureau of Education in 1870. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 359.
- Columbia Hospital for Women. The Columbia Hospital for Women has been established in 1866 but it appears for the first time in the Interior Department and in the US Register starting 1873. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 229.

- Freedmen Hospital. The Freedmen Hospital is placed under control of the secretary of War from 1872 and 1874 and then placed under the Department of Interior after that. It appears for the first time in the US Register in 1877. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 361.
- Columbia Institution for the Deaf and Dumb. The Columbia Institution for the Deaf and Dumb has to report to the Secretary of Interior starting in 1857, but since is absent in several years it is listed ad temporary commissions. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 217.
- The Board of Indian Commission. The The Board of Indian Commission has been established in 1869, unrelated to the Indian Affairs, and directly responding to the Secretary of Interior. It appears in the Register starting in 1877. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 360.
- The Commissioner of Railroads. The The Commissioner of Railroads has been created in 1878. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 361.
- Ute Commission. The Ute Commission is a temporary commission present only for one year, in 1881.⁵¹
- Bureau of Labor. The Bureau of Labor was established in 1884 and then moved under the Department of Labor in 1888. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 363.
- Interstate Commerce Commission. The Interstate Commerce Commission has been established in 1887 under the Interior Department but then moved as an independent detached agency in 1889. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 420 and 421.
- Howard University. Howard University reports to the Secretary of Interior starting from its establishment in 1867. It appears in the US Register for the first time in 1883. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 359.

 $^{^{51}} Source: \ https://digitalcommons.law.ou.edu/cgi/viewcontent.cgi?article=6987 context=indianserialset$

• National Parks. There are several national parks present under the Interior Department. We assign them to Temporary Commission and Other Bodies.

Figure C6: Bureaus in the Interior Department



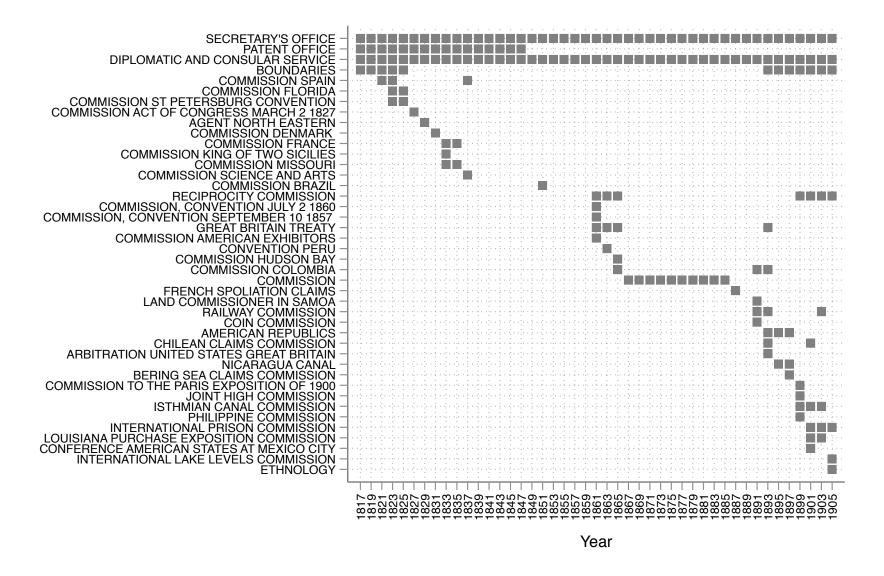
Notes: The figure shows the organization in bureaus of the Interior department for each year between 1817 and 1905.

C.5 Bureaus in the State Department

Figure C7 shows the organization in bureaus of the State department for each year between 1817 and 1905. All the bureaus of the State Department are listed in C7. Below we report some notes, and related sources, on the most complicated cases.

- The Patent Office. The Patent Office has been transferred by the Interior Department to the State Department in 1849. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 240.
- Governors of Territories. In 1873 the Governors of Territories has been transferred to the Secretary of Interior. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 338.

Figure C7: Bureaus in the State Department



Notes: The figure shows the organization in bureaus of the State department for each year between 1817 and 1905.

C.6 Bureaus in the Justice Department

Figure C8 shows the organization in bureaus of the Justice department for each year between 1817 and 1905. All the bureaus of the Justice Department are listed in C8. Below we report some notes, and related sources, on the most complicated cases.

- Jail Dist Columbia. The Jail Dist Columbia has been transferred from the Interior Department to Justice in 1872. It is absent from the US Official Register in 1871. *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 333.
- Metropolitan police. Metropolitan Police is moved to Justice Department in 1873. Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 360.
- Commission Classify Laws. The Commission Classify Laws has been created in 1897 and it has submitted its last report in 1906. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 335.
- Forth Leavenworth. Forth Leavenworth has been created in 1895 and it appears for the first time in the US Register starting in 1899. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 333.
- Spanish Claims. The Spanish Treaty Claims Commission has been created in 1901 (until 1910). Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 336.
- Enforcement of Antitrust Laws. The Enforcement of Antitrust Laws is an OFfice headed by an assistant attorney general. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 336.
- Insular Affairs. The Bureau of Insular Affair has been created in 1902. Source: Development of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 336.
- Penitentiary Atlanta Georgia. Established in 1899 and its construction ended in 1902. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 333.

• Solicitor Commerce Labor. The Solicitor Commerce Labor is created in 1904. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 336.

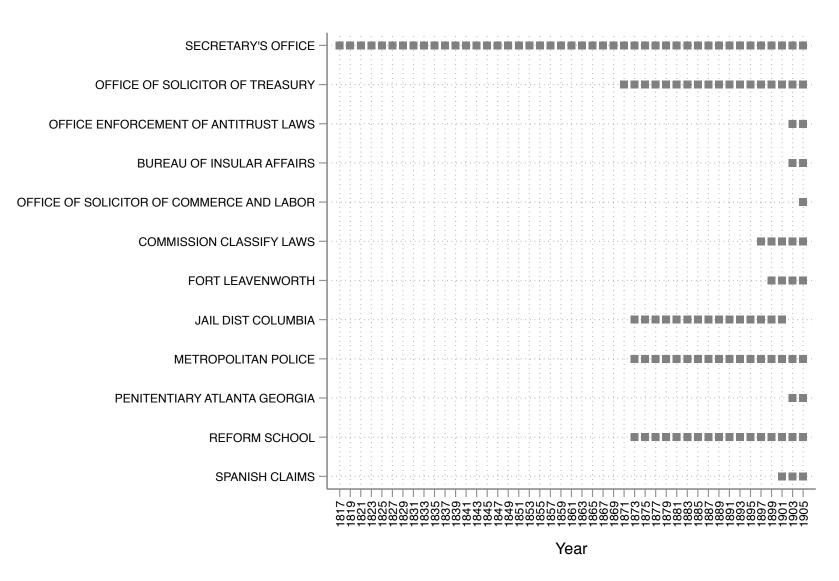


Figure C8: Bureaus in the Justice Department

Notes: The figure shows the organization in bureaus of the Justice department for each year between 1817 and 1905.

C.7 Bureaus in the Agriculture Department

The Agriculture Department has been created in 1862 from the Agriculture Division of the Patent Office. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213. All the bureaus of the Agriculture Department are listed in C9. Below we report some notes, and related sources, on the most complicated cases.

- Bureau of Animal Industry. The Bureau of Animal Industry is created in 1884. It takes the responsability of the Signal Office of the War Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 381.
- Weather Bureau. The Weather Bureau was created in 1890. It takes the responsability of the Signal Office of the War Department. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 385.
- Plant Industry. The Plant Industry has been created in 1901, consolidating various divisions of the Office of the Secretary. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.
- Soils. Soils used to be a division of the Office of the Secretary and elevated to the Bureau in 1901. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.
- Chemistry. Chemistry used to be a division of the Office of the Secretary and elevated to the Bureau in 1901. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.
- Forestry. Forestry used to be a division of the Office of the Secretary and elevated to the Bureau in 1901. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.
- Statistics. Statistics used to be a division of the Office of the Secretary and elevated to the Bureau in 1901. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.

- Entomology. Entomology used to be a division of the Office of the Secretary and elevated to the Bureau in 1904. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.
- **Biological Survey**. The Biological Survey was a division of the Office of the Secretary and was elevated to the Bureau status in 1905. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 386.

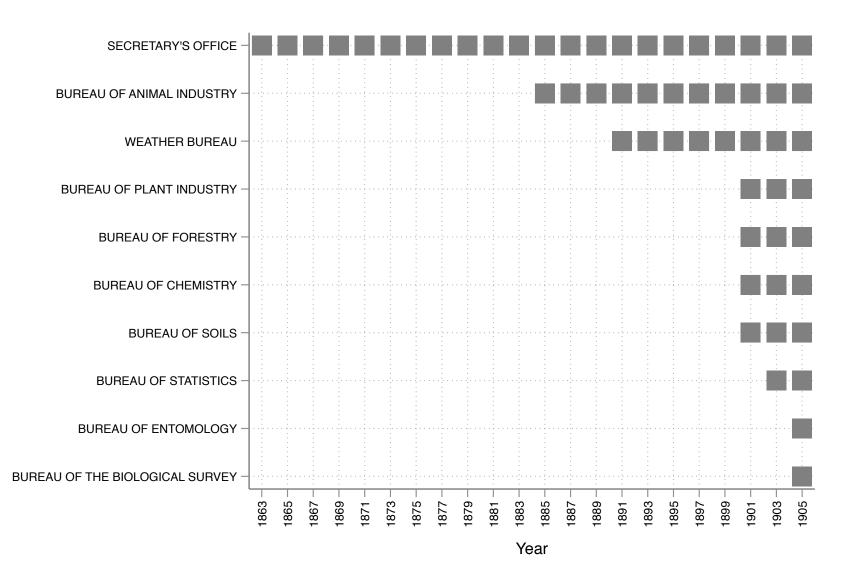


Figure C9: Bureaus in the Agriculture Department

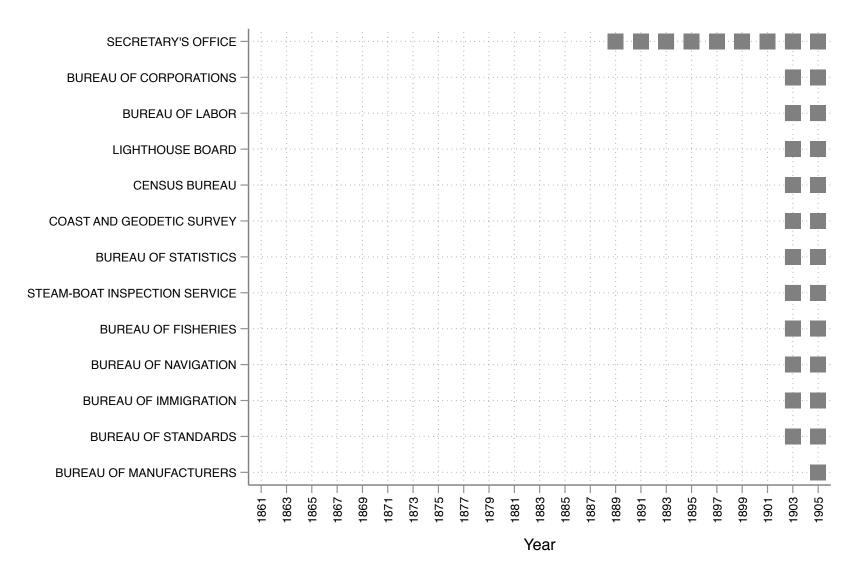
Notes: The figure shows the organization in bureaus of the Agriculture department for each year between 1817 and 1905.

C.8 Bureaus in the Labor Department

The Labor Bureau has been established under the Interior Department in 1884 and then moved under a separate Department (Department of Labor) in 1888. In 1903 it becomes a bureau under the newly created Department of Commerce and Labor. Source: *Development* of the National Administrative Organisation of the United States by Lloyd Milton Short (1923), page 363 and 401.

Figure C10 shows the organization in bureaus of the Labor department for each year between 1817 and 1905. All the bureaus of the Labor Department are listed in C10.

Figure C10: Bureaus in the Labor Department



Notes: The figure shows the organization in bureaus of the Labor department for each year between 1817 and 1905.

C.9 Other Detached Agencies and Bodies

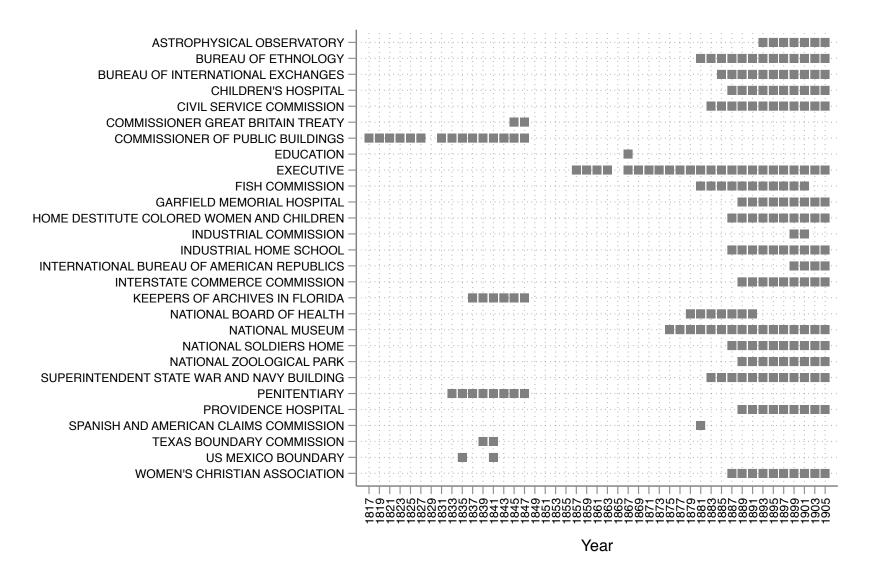
- Commissioner of Public Buildings. The Commission has been independent until 1849. Then, the Commissioner of Public Buildings was transferred to the Engineer War in 1867. Architect of the capitol is an office which responds to the commissioner of public buildings until 1850, when it becomes independent (responding directly to the President), but actually listed in the US Register under Interior. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 199, 213 and 238.
- **Penitentiary**. The Penitentiary is part of the Department of the Interior until 1863, when it disappears from the US Registry. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 213.
- US Mexico Boundary: Commissioner for Running Boundary Line with Mexico. The Commissioner, appears in 1835 and 1841, and then after Texas becomes a state between 1848 and 1855 under Interior Department.⁵²
- Police of Capitol. The Police Capitol appears in 1835 for the first time in the US Official Register, but it was initially created in 1828. It is considered part of the Commissioner of Public Building.
- Washington City Guard. The Washington City Guard is part of the Commissioner for Public Buildings
- Office of Education. The Office of Education has been independent until it was placed under the Interior Department in 1868 and renamed Bureau of Education in 1870. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 359.
- National Board of Health. The National Board of Health exists from 1879 and 1885. It submits annual reports to the Secretary of the Treasury, but it is essentially ad independent agency advising all departments on matters of public health. It appears for the first time in the US Register in 1891. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 274 and 275.

⁵²Source: Treaties and Other International Acts US, page 419 https://en.wikipedia.org/wiki/United_States_and_Mexican_Boundary_Survey

- Bureau of Ethnology. The Bureau of Ethnology is created in 1879 and it is reported as independent detached Agency. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 482.
- Fish Commission. The Fish Commission is created in 1871. It is then moved under the Department of Commerce and Labor in 1903. It appears for the first time in the US Register in 1881. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 401 and 419.
- Office of Superintendent of State War and Navy Building. The office is created in 1883 as a detached agency. Before 1883 it is under the War Department.
- Civil Service Commission. The Civil Service Commission is create in 1883 with the Pendleton Act.
- Interstate Commerce Commission. The Interstate Commerce Commission is established in 1887 under the Interior Department, but then moved as independent detached agency in 1889. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 420 and 421.
- Children's Hospital. The Children's Hospital is incorporated in 1870.⁵³
- Industrial Commission. The Industrial Commission is established in 1898 and lasted until 1902. Source: *Development of the National Administrative Organisation of the United States* by Lloyd Milton Short (1923), page 424.

⁵³Source: https://childrensnational.org/about-us/our-history#tab-7





Notes: The figure shows the other independent agencies in the Federal Bureaucracy for each year between 1817 and 1905.