IN THE SENATE OF THE UNITED STATES.

LETTER

FROM

THE SECRETARY OF THE INTERIOR,

TRANSMITTING

A report of examination and review of the Census Office.

APRIL 4, 1892.—Referred to the Committee on the Census and ordered to be printed.

DEPARTMENT OF THE INTERIOR, Washington, March 28, 1892.

SIR: I have the honor to transmit herewith for the consideration of Congress, a copy of my letter of the 15th instant to the Superintendent of Census, based upon a report of the examination and review of the Census Office, rendered March 5, 1892, and a copy of said report, together with the Superintendent's letter of March 17 in relation thereto. Very respectfully,

JOHN W. NOBLE, Secretary.

The President of the Senate.

REPORT OF EXAMINATION AND REVIEW OF THE CENSUS OFFICE.

DEPARTMENT OF THE INTERIOR, Washington, March 5, 1892.

Sir: We have the honor to submit the following report of our examination and review of the Census Office, in pursuance of your order under date February 2, 1892.

Respectfully,

GEO. W. EVANS,
Chief Finance Division.
A. C. TONNER,
Chief Appointment Division.

The SECRETARY OF THE INTERIOR.

Appropriated for Eleventh Census, exclusive of printing, and farms, how gages.	mes, and mort-
March 1, 1889. June 18, 1890 August 30, 1890 March 3, 1891	\$1,000,000.00 3,075,000.00 1,400,000.00 1,000,000.00
Total	6, 475, 000. 00 6, 400, 566. 14
Balance on hand January 31, 1891	74, 433. 86
Appropriated for farms, homes, and mortgages.	
March 3, 1890	1, 000, 000, 00 941, 073, 95
Balance on hand January 31, 1891	58, 926. 05
Appropriated for printing and engraving.	
December 19, 1891	250, 000. 00 350, 000. 00
Total Expenditures to January 31, 1891	600, 000. 00 428, 867. 82
Balance on hand January 31, 1891	171, 132, 18
SUMMARY.	
Total appropriations	8, 075, 000. 00 7, 770, 507. 91
Balance on hand January 31, 1892	304, 492. 09

7, 770, 507, 91

7,770, 507. 91

6, 400, 566, 14

941, 073, 95 428, 867, 82

GENERAL SUBDIVISION OF THE \$7,770,507.91 EXPENDED JANUARY 31, 1892.

ADMINISTRATION. \$2,878,751.32 Furniture and fixtures 56, 703. 05 Miscellaneous, rent, stationery, office supplies, expenses of employés other than special agents 731, 288, 51 - \$3, 666, 742. 88 SPECIAL AGENTS. For per diem in lieu of subsistence 866, 878, 84 339, 731. 67 incidental to the work 151, 557, 73 1, 358, 168, 24 177, 745, 00 66, 927, 60 Compensation Clerk-hire 15, 659. 50 Miscellaneous..... 260, 332, 10 ENUMERATORS. Enumerators, payment to..... 2, 485, 264, 69

Expenses of Eleventh Census

Distributed as follows:

The foregoing expenditures have been charged to branches of investigation as follows:

SPECIAL SUBDIVISIONS.

Canque nronar	\$621, 310, 79
Census proper	
Supervisors	270, 333. 99
Enumerators	2, 485, 264, 69
Population and social statistics (see Hunt's exhibit, p. 12)	1, 175, 203. 39
Manufactures	560, 094, 23
Agriculture	167, 897, 17
Vital statistics and special classes, including King's, Olcott's, and Tif-	
fany's divisions	236, 477, 49
Wealth, debt, and taxation	167, 377, 13
Mines and mining	195, 262, 05
Fish and fisheries	126, 823, 47
Transportation	121, 888, 42
Insurance	47, 217, 30
Churches	32, 287, 24
Pauperism and crime	42, 351, 68
Printing and stationery	559, 528, 37
Farm, homes, and mortgages	961, 190. 50
Total	7 770 507 01

All outstanding liabilities have been paid, as far as could be ascertained, except thirteen enumerators whose accounts have been suspended awaiting explanation (the total of which will not exceed \$500) and miscellaneous contingent expenses of \$1,000, and Western Union Telegraph account, estimated at about \$6,000, and the salary and expenses of Special Agent Thomas Donaldson (Indian statistics), who has not yet rendered his personal account, estimated at \$9,000; in all, \$16,500.

Estimated cost to finish Eleventh Census, by divisions, from February 1, 1892, to June 30, 1892, inclusive.

1 Superintendent and his personal force	\$2 0, 995, 00
i chief clerk and administrative force, including clerks, watchmen,	FO 10F 04
messengers, charwomen, etc	53, 125. 00
Division 1. Appointments	11, 800, 00
2. Disbursements	14, 535.00
3. Geography	6, 730.00
4. Population	372, 221, 00
5. Vital statistics	35, 000. 00
6. Churches (so says Mr. Porter)	1,500.00
7. Education	10, 000. 00
8. Pauperism and crime	3, 635. 00
9. Wealth, debt, and taxation, national and State finances.	16, 500, 00
10. Agriculture	150, 000, 00
13. Manufactures	500, 000. 00
14. Mines and mining (finished).	
15. Fish and fisheries.	10, 000, 00
16. Transportation	7, 500, 00
17. Insurance	7, 500, 00
19. Special classes	30, 000, 00
20. Supervisor's correspondence (finished).	
21. Alaska	1, 485, 00
22. Indian statistics.	4, 800, 00
23. Social statistics	8, 500, 00
24. Abolished.	
25. Revision and results	30, 000, 00
Rents	26, 775.00
Stationery, contingent and miscellaneous expenses, including light,	, , , , , , , , , , , , , , , , , , , ,
fuel, ice, and traveling expenses	20, 000. 00
To carry special agents now on pay and not included in division	
estimates	21, 480, 00
	,
OUTSTANDING LIABILITIES.	
Coloration de la colora	
Due enumerators	
Miscellaneous expenses	
Telegraph accounts	
Special Agent Thomas Donaldson	
Unadjusted special agents' accounts	
Changaston special agents accounts	30, 870. 55
	00,010.00
	1, 393, 951. 55
Deduct balance on hand February 1, 1892	77, 505. 80
	•••
Total to finish Eleventh Census from February 1, 1892	1, 316, 445, 75
Estimated cost to finish farms, homes, and mortgages, from February 1, 189	2 to June 30
	», w. o a w. o o o ,
1893, inclusive.	
Division 11 Varing hames and montagenes 6000 405 00	
Division 11. Farms, homes, and mortgages	
Division 11. Administrative force: 4 watchmen, 5 assist-	
ant messengers, 1 skilled laborer and 4 charwomen 10, 720, 00	
Rent	
Stationery	1.
Expenses of special agents not included in division esti-	
mates	
653, 118, 05	
Deduct balance on hand February 1, 1892, 59, 350. 19	
Deduct balance on hand February 1, 1892, 59, 350. 19	\$593, 7 67. 86
Deduct balance on hand February 1, 1892, 59, 350. 19 Estimated cost to complete Eleventh Census.	\$593, 767. 86 1, 316, 445. 75
Estimated cost to complete Eleventh Census.	
Estimated cost to complete Eleventh Census and farms, homes, and	1, 316, 445. 75
Estimated cost to complete Eleventh Census Grand total to finish Eleventh Census and farms, homes, and mortgages, from February 1, 1892,	1, 316, 445. 75 \$1, 910, 213. 61
Beduct balance on hand February 1, 1892,	1,316,445.75 \$1,910,213.61 1,1892, for
Bestimated cost to complete Eleventh Census Grand total to finish Eleventh Census and farms, homes, and mortgages, from February 1, 1892, There is a balance of the appropriation on hand March printing, engraving, and binding, of \$154,647.50, which will be	1,316,445.75 \$1,910,213.61 1,1892, for e sufficient
Beduct balance on hand February 1, 1892,	1,316,445.75 \$1,910,213.61 1,1892, for e sufficient

Employés by divisions and grades, exclusive of special agents, March 3, 1892.

	Name of division.	Superintendent.	Chief clerk.	Disbursing clerk.	Stenographers.	Chiefs of divisions.	Clerks, class 4.	Clerks, class 3.	Clerks, class 2.	Clerks, class 1.	Clerks at \$1,000.	Copyists.	Computers.	Messengers.	Watchmen.	Assistantmessengers.	Skilled laborers.	Laborers.	Messenger boys.	Charwomen.	Per diem employés	Totals.
Superintend.		1			2			1			1	1	 .		ļ	1		1				8
ent. Chief clerk			1						1		4	3	4		13	2	3	12	2	25		70
Division: 1	Appointments Disbursements Geography Population Vital statistics Church statistics Educational sta- tistics.			i		1 1 1		2 1 1 1	7	1 1 9 4	2 1 	2 3 13 9 1	3 1 3 51 1 3 3	i	•••	5 2	181	12	3	• • • •		18 8 9 287 23 6 5
8	Pauperism and	٠.						1			٠		3				2		١.,		•••	6
10	National and State finances.				٠.	ļ		• • •	1	:3	2	4	1				1	•••				12
11	Farms, homes, and mortgages.							2	1	1	13	38	8		• • •		54	2		• • •	•	119
12 13 16 18	Agriculture Manufactures Transportation Printing and sta-					i	i .	1 2	2 1	2 3 1	3 8 5	19 42 1	$\begin{array}{c c} 31 \\ 23 \\ 2 \\ 6 \end{array}$			4 1 2	97 51 4	5 3 5	••	 i	 46	164 133 9 68
19	tionery. Statistics, special					٠.	1			2		3	8	ļ	ļ		4	ļ	1.			10
22	Statistics of In-				ļ								2	ļ	ļ		ļ					2
23	dians. Social statistics— cities.								1.				1		 			 				2
25	Revision and results.				• •					5	4	5	6		,			1			•••	21
		1	1	1	2	5	4	12	15	33	56	144	160	1	13	17	399	46	7	26	46	989

Financial condition on March 1, 1892, Eleventh Census.

OUTSTANDING LIABILITIES.

Enumerator's accounts. \$500.00 Miscellaneous and contingent expenses 1,000.00 Western Union Telegraph account 6,000.00 Salary and expenses of Special Agent Thomas Donaldson 9,000.00 Unadjusted accounts of special agents 14,370.55	
Balance of appropriation on hand March 1, 1892	
Deficiency	2, 972. 15
FARMS, HOMES, AND MORTGAGES.	
Balance on hand March 1, 1892	51, 284. 20
PRINTING, ENGRAVING, AND BINDING.	
Balance on hand March 1, 1892	158, 647. 50

Itemized cost of running the Eleventh Census, per annum and per month, with the force in employ March 3, 1892, including all expenses.

No.		Rank.		Per annum.	Total per annum.	Cost per month,
1	Superintendent	*********			\$6,000,00	
1	Chlef clerk		• • • • • • • • • • • • • • • • • • • •		2 500 00	
1	Disbursing clerk				2, 500, 00	
2	Stenographers			\$2,000	4,000.00	
3	Chiefs of divisions			2,000	6, 000, 00	
3	Clerks, class 4	******************	• • • • • • • • • • • • • • • • • • • •		5, 400, 00	
5		*************************			8, 000, 00	100
12	Clerks, class 2			1,400	16, 800, 00	
26	Clerks, class 1	********************		1, 200	31, 200, 00	
39	Clerks			1,000	39, 000, 00	
91	Copyists			900	81, 900, 00	
1					840.00	1 0
119	Computers			720	85, 680, 00	
5	watchmen				3, 600, 00	
12	Assistant messenger	'8	· · · · · · · · · · · · · · · · · · ·	720	8, 640, 00	
336				600	201, 600, 00	
36					21, 600, 00	
7					2, 800, 00	
18	Char-women			240	4, 320, 00	
110	(1)-4-1					200 000 00
18	Consider the contract of the co					\$44, 365, 00
25	Special agents	*	• • • • • • • • • • • • • • • •			4, 167, 08
. !	Don't of 50 months	ΦΕΟΟ mash			18, 900, 00	1, 575. 00
	Ctationana migaellan	\$500 each	1		25, 000, 00	2, 083, 33
		eous, and contingent expens uses of special agents not he			14, 117, 64	1, 176, 47
	Total				640, 402, 64	53, 386, 88

This estimate does not include the expenses of special agents in the field; said expenses are not estimated or included.

The average per capita annual salary of the present force, March 3, 1892, of the Census Office, including Superintendent, but exclusive of special agents, is as follows:

Note.—In the above estimated cost of running the Eleventh Census per annum and present month, the rent of the fifty machines is given at \$500 each per annum. We have since ascertained that the rental of said machines is now, and will be, at the rate of \$1,000 each for fifty or less, and \$500 each for all in excess of fifty, thus making the rental double that above given, and the cost per annum \$665,402.64 instead of \$640,402.64, and an increase for the month of March to \$2,083.33; in all for March, \$55,470.21.

Itemized cost of running farms, homes, and mortgages, per annum and per month, with the force in employ March 3, 1892, including all expenses.

No.		Rank.		Per- annum.	Total per annum.	Cost per month.
	Climber slage 2		1	41 000	4. 000	and distributions between a substantial medical and
1	Clurk class o .			\$1,600 1,400	\$4, 800 1, 400	
1	Clerk, class 1			1. 200	1, 200	
13	Clerks			1 1 000 1	13, 000	
39	Copyists			900	35, 100	
8	Computers			720	5, 760	
4	Watchmen			720	2, 880	
54	Skilled laborers	5		600	32, 400	The second
2					1, 200	
4	Charwomen	المتاكم ويروا والمستناء والمناف والمتاه والأناف والمرايي		240	960	
90	P15 (A.J.)					
29	Charles agents	أجام والمرابع والمرابع والمرابع والمرابع والمرابع والمرابع والمرابع			98, 700	\$8, 225.
0	Special agents.		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		6, 570	547.
	Stationary		• • • • • • • • • • • • • • • • • • • •		$egin{array}{c} 1.800 \ 2.500 \ \end{array}$	150, 0 208, 3
	Succionery		** * * * * * * * * * * * * * * * * * * *		2, 500	200.
	Total				109, 570	9, 130,
			*************		100,010	o, 100,

Itemized cost of running printing, engraving, and binding, per annum and monthly, with the force in employ March 3, 1892.

No.	Rank. Per annum and per day.	Total per annum.	Cost per month.
2 1 4 2 6 4 14 33 4 5 9 8 4 2 22 3 1 10	Chiefs of divisions \$2,000,00 Clerk, class 4 1,800,00 Clerks, class 3 1,600,00 Clerks, class 2 1,400,00 Clerks, class 1 1,000,00 Clerks, class 1,000,00 Copylsts 900,00 Completers 720,00 Watchmen 720 Assistant messengers 600,00 Skilled laborers 600,00 Charwomen 240,00 Employés at \$4 per day, 300 days 8,00 Employés at \$2,20 per day, 300 days 70,40 Employés at \$2,50 pèr day 2,50 Employé at \$2,50 pèr day 2,50 Employés at \$2,20 per day 2,30 Employés at \$2,20 per day 36,00	\$4,000 1,800 6,400 2,800 7,200 4,000 12,600 23,700 2,880 3,600 5,400 4,800 960 2,400 11,120 1,800 750 690 10,800	
147	Total	117, 760 3, 650 5, 500 126, 910	\$9, 813, 33 304, 17 458, 35 10, 575, 85

The per capita annual and monthly salary of the present force exclusive of the special agents, March 3, 1892, of printing, engraving, and binding, is as follows:

Annual	 \$823.48
Monthly	 68.62

Number of employés in Census Office, by months, from April 1, 1889 (the beginning), to March 1, 1892, exclusive of special agents.

egen die een een die Gegende die een een die gegen die gegen Standard gegen die g	Month.		Eleventh Census.	Farms, homes, and mortgages.	Printing, engraving, and binding.	Total.
	4000	***************************************		his memerical processing and date	Benediction and the second section of the secti	***************************************
April	1889.		6			
			33		• • • • • • • • • • • • • • • • • • • •	33
June			54			54
July			69			69
			97			97
	*****		129	· • • • • • • • • • • • • • • • • • • •		120
		********	$\begin{array}{c} 176 \\ 232 \end{array}$		• • • • • • • • • •	170
			302	•••••	• • • • • • • • • • • •	232 302

	1890.					
			432			432
	*************		- 629			629
			712	119		831
			860 984	127 138		987 1.122
			1.089	$\frac{138}{202}$		1,122 $1,291$
			1,587	225		1,812
			1,874	241		2, 115
			1, 954	258		2, 212
	• • • • • • • • • • • • • • • • • • • •		1,975	263		2,238
December			1,912	272		2, 184
December	** * * * * * * * * * * * * * * * * * * *		1, 914	247	,	2, 161
	1891.				1	
January			1, 913	238		2, 151
February			1,792	288	41	2, 121
			1,708	547	43	2, 298
			2,499	571	49	3, 119
	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2, 459	600	49	3, 108
	******************		1,822	636 561	102	2, 560
			1, 673 813	390	96 107	2, 330 1, 310
			697	274	124	1, 095
			692	238	123	1, 053
			589	252	122	963
December	,		588	243	131	962
	1000					
January	1892.	* *	609	219	1,49	971
February	• • • • • • • • • • • • • • • • • • •		707	130	143 152	889
a cortain y	************************		101	190	102	500

Statement of amounts paid for rent of buildings in Washington, D. C., by the Census Office from the beginning up to and including the month of January, 1892, as per memoranda of contracts immediately following:

Expenses of Eleventh Census.

Atlantic Building Company	
Abell, E. F. (Sun Building)	
Central Methodist Protestant Church	
Masonic Hall (Clifford & Collier)	
Inter Ocean Building Company	
McDowell, S. C	
Spalding, Harvey	
Willard, C. C. 500.00	
	\$61,819.48

FARMS, HOMES, AND MORTGAGES.

Inter Ocean Building Company	249.99
McDowell, S. C.	257, 14
National Union Insurance Company	049.84
	112.90
이렇게 되었다면 보고 있었다면서 그 보고 있는 것은 말을 받는다는데 말했다. 모든 [

10,699.87

PRINTING, ENGRAVING, AND BINDING.

Spalding, Harvey	\$2,083.31
Grand total	74, 572. 66
Buildings now occupied by the Census Office.	
Inter Ocean Building (annual rent) Harrison Flats annex (annual rent) Central Methodist Protestant Church, Ninth street (annual rent)	5,500,00
Total	26, 400, 00

By a comparison of the rents paid by the Census Office for buildings in Washington with the rents paid by other departments, and considering the floor space, tenure of occupation, and incident wear and tear, it is our judgment that the rents paid by the Census Office have not been and are not now excessive.

STATEMENT OF BUILDINGS AND ROOMS AT WASHINGTON, D. C., RENTED FOR THE USE OF THE CENSUS OFFICE, FROM MAY 3, 1889, TO JAN-UARY 2, 1892, WITH DATES OF RESPECTIVE LEASES, ETC.

Atlantic Building, F street, between Ninth and Tenth streets, NW.—Seven rooms on the fourth floor, Nos. 50 to 55 inclusive. Lease dated May 3, 1889, term month to month from May 3, 1889, at \$150 per month.

Four rooms on fourth floor, 60, 61, 64 and 66. Lease dated May 23, 1889, term month to month from May 23, 1889, at \$85.71 per month.

Three rooms on fourth floor, Nos. 57, 59, and 62, and five rooms on the fifth floor, Nos. 69, 70, 71, 72, and 73. Lease dated July 1, 1889, term month to month from July 1, 1889, at \$153.58 per month.

Building to be erected by John Paul Jones, No. 512 Ninth street NW. (Inter Ocean Building).—Five upper floors of stories and attic rooms above. Lease dated August 6, 1889. Term one year from July 1, 1889, at \$12,000 per annum, payable in monthly installments from date of occupancy.

Harrison Flats, corner Third and G streets, NW.—Whole building. Lease dated October 3, 1889. Term one year from September 15, 1889,

at \$6,000 per annum, payable in monthly installments.

Building adjoining Harrison Flats, on Third street, NW.—Whole building. Lease dated October 3, 1889. Term one year from March 1, 1890, at \$6,500 per annum, payable in monthly installments from and after March 1, 1890, if ready for occupancy on that date.

McDowell Mill, southeast corner North Capitol street and Massachusetts avenue.—One room on second floor. Lease dated February 1, 1890. Term from January 27 to June 27, 1890, at \$100 per month, payable at end of each month.

One room on main floor, and one room on third floor. Lease dated February 11, 1890. Term from 7th of February to 27th of June, 1890, at \$200 per month, payable at end of each month.

One-story brick building, south side Massachusetts avenue, near North Capitol street, adjoining McDowell Mill, southeast corner Massachusetts avenue and North Capitol street.—Whole building. Lease dated March 30, 1890. Term, month to month from 7th of March, 1890, ending June 27, 1890, at \$100 per month.

Second National Bank Building, No. 509 Seventh street NW.—Room No. 1, first floor, Nos. 20, 25, and 26, second floor, and all of third and fourth floors of said building. Lease dated March 25, 1890. Term \$420 per month, from March 3, 1890.

Adams building, Nos. 1333-1335 F street NW.—Room No. 42 on fourth floor to be used for office purposes only. Lease dated April 26, 1890; term from April 1, 1890, month to month, ending December 31, 1890, at \$50 per month.

McDowell mill, southeast corner North Capitol street and Massachusetts avenue.—One room on main floor, one on second floor, one on third Lease dated June 14, 1890; term, month to month from June

28, 1890, at \$250 per month.

One-story brick building on south side Massachusetts avenue, near North Capitol street, adjoining McDowell mill.—Whole building. Lease dated June 14, 1890; term, month to month from June 28, 1890, at \$100 per month.

Inter Ocean building, 512 Ninth street NW.—Seven upper floors of stories and attie rooms above. Lease dated July 25, 1890; term, one year from July 1, 1890, at \$15,870 per annum (or \$1,870 for basement and \$2,000 per annum per floor), payable monthly. Lease dated August **6**, 1889; canceled.

Second National Bank building, No. 509 Seventh street NW.—Rooms 1, 20, 25, and 26 on second floor and all of third and fourth floors. Renewal. Lease dated September 6, 1890; month to month from July

1, 1890, at \$420 per month.

McDowell building, E street, between North Capitol street and Delaware avenue.—Whole building. Lease dated January 1, 1891; term, month to month from January 1, 1891, at \$350 per month.

Lincoln Hall building, Ninth and D streets NW.—Five rooms. Lease dated October 13, 1890; term, month to month from October 14, 1890,

at \$150 per month.

National Union building, 918 F street NW.—Seventeen rooms; 6 on third floor, 6 on fourth floor, and 5 on fifth floor. Lease dated March 13, 1891; term, month to month from March 10, 1891, at \$400 per month.

One room on fifth floor, No. 55. Lease dated May 6, 1891; term,

month to month from May 6, 1891, at \$25 per month.

Harrison flats, corner Third and G streets NW.—Whole building. Lease dated August 14, 1891; term, month to month from September 16, 1891, at \$500 per month.

Building adjoining Harrison flats on Third street NW.—Whole building. Renewal. Lease dated March 10, 1891; term, month to month

from March 1, 1891, at \$541.662 per month.

Ninth Street Methodist Protestant Church building, No. 513 Ninth street NW.—Three rooms. Lease dated April 27, 1891; term, one year from April 1, 1891, at \$1,900 per annum, payable monthly.

McDowell building, E street, between North Capitol street and Delaware avenue.—Whole building. Renewal. Lease dated June 23, 1891;

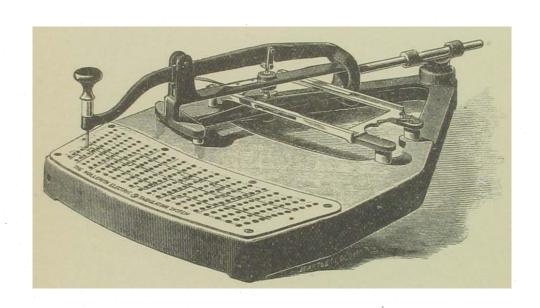
term, month to month from July 1, 1891, at \$350 per month.

Inter Ocean building, No. 512 Ninth street NW.—Seven upper floors of stories and attic rooms above. Renewal. Lease dated June 26, 1891; term, one year from July 1, 1891, at \$15,870 per annum, payable in monthly installments.

Inter Ocean building, No. 512Ninth street NW.—Basement and eight upper floors of stories and attic rooms above. Lease dated October 31, 1891; term, one year from January 1, 1892, at rate of \$19,000 per annum, payable in monthly installments. Lease dated June 26, 1891; canceled.

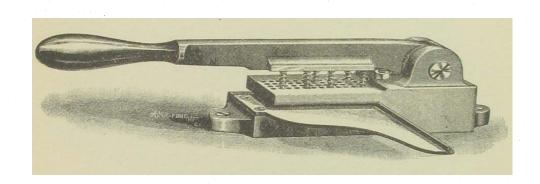
Building adjoining Harrison flats, on Third street NW.—Whole building. Lease dated January 2, 1892, at \$458.33\frac{1}{3} per month. Lease dated March 31, 1891; canceled.





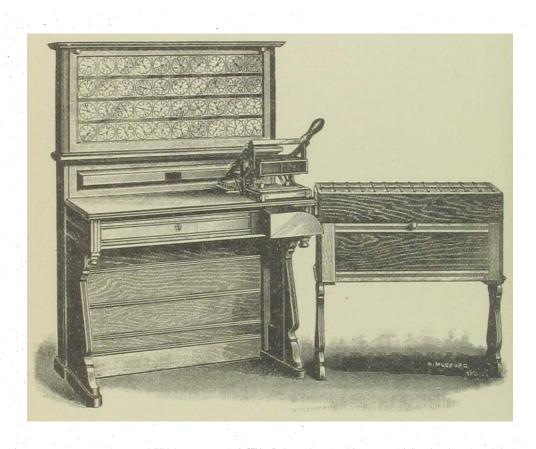
THE HOLLERITH ELECTRIC TABULATING SYSTEM KEYBOARD PUNCH

HERMAN HOLLERITH, WASHINGTON, D. C.



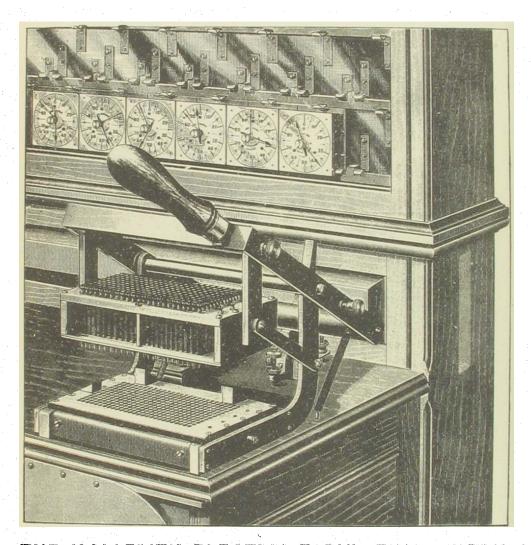
THE HOLLERITH ELECTRIC TABULATING SYSTEM GANG PUNCH

HERMAN HOLLERITH, WASHINGTON, D. C.

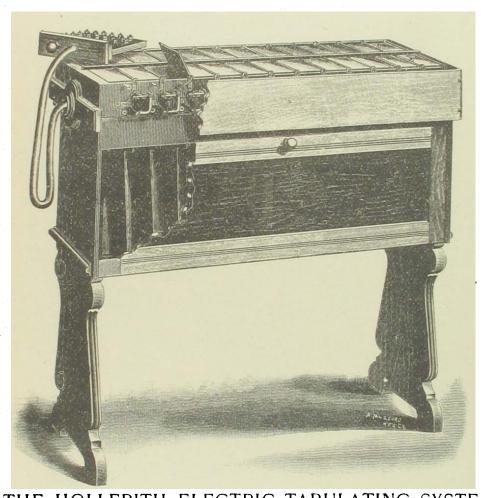


THE HOLLERITH ELECTRIC TABULATING SYSTEM HERMAN HOLLERITH, WASHINGTON, D. C.

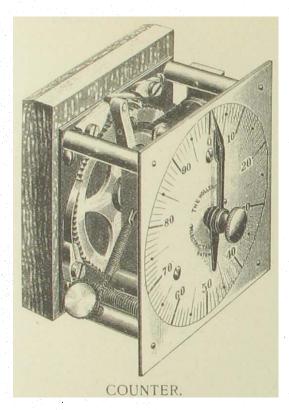


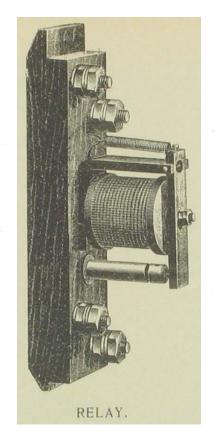


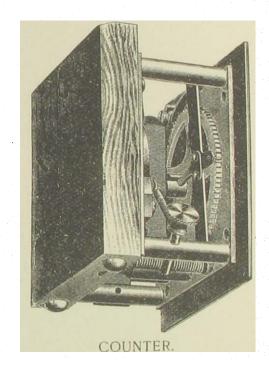
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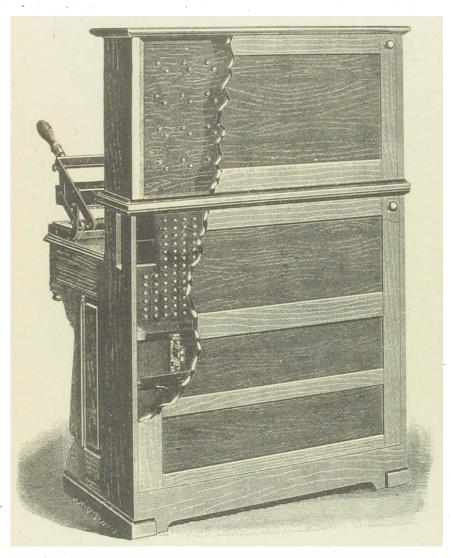






THE HOLLERITH ELECTRIC TABULATING SYSTEM.

HERMAN HOLLERITH, WASHINGTON, D. C.



THE HOLLERITH ELECTRIC TABULATING SYSTEM HERMAN HOLLERITH, WASHINGTON, D. C.

KEYBOARD AND GANG PUNCHES, AND ELECTRICAL TABULATING MA-CHINES.

KEYBOARD AND GANG PUNCHES.

18 keyboard pune 650 keyboard pu	hes, purcl iches, pur	hased at \$41. chased at \$2	66} 4.60	 	\$750 15, 990
50 gang punches	it \$28			 	1, 400
Total				 	18, 140

The work for which these were used has been finished; they are the property of the United States and are stored, except a few now in use correcting original errors.

ELECTRICAL TABULATING MACHINES CONTRACT.

Contract of Herman Hollerith, of New York City, for tabulating machines.—Contract dated December 13, 1889, leasing six of Hollerith's electrical tabulating machines at \$1,000 per annum each; term one year from and including such date as designated by the Superintendent of

Contract dated January 4, 1890, leasing fifty of Hollerith's tabulating machines; rate, conditions, time payment, etc., same as lease of December 13, 1889.

By contract dated April 28, 1891, lease for six machines dated December 13, 1889 (which expired April 28, 1891), continued from April 23, 1891, from month to month at will of Secretary of Interior upon terms and conditions expressed in lease of December 13, 1889.

Contract dated June 1, 1891, leasing fifty of Hollerith's electrical tabulating machines; term month to month from June 1, 1891, at the rate of \$1,000 per annum per machine, lease dated January 4, 1890, which expired July 1, 1890, canceled.

Contract dated July 16, 1891, leasing forty of Hollerith's electrical tabulating machines; term month to month at rate of \$500 per machine per annum, from and after date fixed by Superintendent of Census after delivery of machines. Reduced rates allowed upon condition that fiftysix machines contracted for under date of April 28 and June 1, 1891, as well as those provided for in the lease, being used by Census Office only during office hours, to wit, 9 a.m. to 4 p.m.

By Department letter of December 19, 1891, Superintendent of Census authorized to rent as many of electrical tabulating machines as required during January, 1892, on same terms and conditions as specified in contract dated April 28, June 1, and July 16, 1891.

The total amount paid for rental of electrical tabulating machines to

January 31, 1892, was \$96,742.20.

What has been done and remains to be done by the use of these machines is fully set forth in the report on population, wherein it is estimated that the rental of the machines to conclusion, say twenty months, at present rental of \$500 per annum, will amount to \$41,666.

After a careful examination of the workings of these machines it is our judgment that they are infallibly correct, and in point of time and

expense their use has been satisfactory and economic.

In this connection, however, we deem it proper to state that much the largest percentage of errors arose from the great desire of the operatives to make a record, stimulated by the expectation of promotion or continuance in the service

DIVISION No. 3.—GEOGRAPHY.

[John D. Leland, chief of division, in charge.]

SCOPE OF WORK.

The study and tabulation of the civil divisions of the country, for laying out the plans for enumeration and presenting the results.

The laying out of sanitary districts in which mortality statistics are

considered in connection with the population of such districts.

Computing the areas of cities for social statistics.

Figuring areas of States and counties, and center of population.

Fixing the rates of compensation to enumerators with reference to geographical features, density or sparseness of settlement, and other considerations pertinent thereto.

Distributing the population by color, sex, and nativity, with reference to drainage basins, temperature, rainfall, humidity, latitude, longitude,

topographic features, and altitude.

Examining and verifying the publication of population by minor civil divisions, to the end that each division, by its title, shall be accounted for

The work remaining to be done by this division is the making of maps and diagrams for illustrating the reports as fast as the figures are compiled by the various divisions of the office, the distribution of the population by the above-stated geographic and other features, by color, nativity, and sex; for counties—the total population for States having been so distributed—making permanent records of supervisers' schemes of subdivision, and much miscellaneous work.

DIVISION NO. 4—POPULATION.

[William C. Hunt, expert special agent, in charge.]

The first actual work in connection with the count of population was

begun June 14, 1890.

The first, or rough count, was derived from what was known as the family count, that is, the number of persons returned for each family enumerated.

The complete result of the entire country, according to the first or rough count, was announced October 28, 1890, in bulletin form. The verified account, upon which the new apportionment was based, was

announced November 26, 1890.

The enumerators' work began June 2, 1890. Thus it will be seen that the time occupied from June 2, 1890, when the enumerators began work, to November 26, 1890, when the announcement was made of the gross population of the country, was five months and twenty-four days. This result would likely have been reached in September preceding had the

reports of supervisors at remote places been received.

The total cost of the work of this division from the beginning, May 18, 1889, to January 31, 1892, inclusive, has been \$931,088.30. Of this amount, however, \$53,862.59 has been expended on account of veteran's work, which is entirely foreign to the population work proper; \$2,503.53 was expended on incidental work performed by this division, on account of the Alaska and Indian divisions of the Census Office; \$13,134.94 was expended for preliminary work incidental to the enumeration during the months from March to July, 1890, inclusive; \$99,890.20 was expended on the examination of work performed by this division in connection with the payment of enumerator's accounts. The foregoing

amounts make a total of \$169,391.35 to be deducted from the aforesaid \$931,088.30, leaving a balance of \$761,696.95 as representing the actual

cost of the population work proper.

It may be said regarding the total cost of this division to date that the total figures taken from the disbursing division include, in addition to population proper, the cost of divisions pertaining to Indians, Alaska, education, and social statistics of cities. The whole amount charged to population and social statistics, as shown by the disbursing

division records, has already been given, viz, \$1,175,203.39.

For purposes of detailed tabulation, that is, to distribute the population according to color, sex, age, place of birth, parentage, occupations, etc., the information returned on the population schedules concerning each individual enumerated, or 62,622,250 in all, has been transferred to punched cards, this work having been accomplished in six months by a force of about 500 female clerks working in the daytime, and a similar force of male clerks working at night. These punched cards have been counted once, giving results as to color, sex, general nativity, and ages for each State, county, and for all municipal corporations of whatever size. In addition, special results were obtained by this first run of the cards as to the citizenship of the foreign-born male population, and as to the number of house holders who own or hire the home or farm occupied by them. The results of this first count will be shortly published, in bulletin form, by groups of States, making from ten to twelve bulletins in all. The information derived from this first count is equivalent to about 500 pages of print, compendium size.

The work regarding population proper, accomplished to January 31, 1892, at a cost of \$761,696.95, as stated, may be briefly enumerated as follows: Three counts have been made direct from the schedules, that is, two family counts and one dwelling-house count, by which the aggregate population of the country was ascertained for the purpose of apportionment, and also by counties and minor civil divisions. These results have all been issued in bulletin form, and the matter comprehended by them in the hands of the printer for the compendium, representing 500 pages of print. In addition, a special talley, according to white and colored, was made in the Southern States, besides a special count, according to race, for the State of California, for the purpose of legislative apportionment. These two special counts were also made direct from

the schedules.

The foregoing shows briefly what has been done by this division and the cost attending the same.

What remains to be done, and the cost pertaining thereto, is briefly as follows:

There are four more counts of the cards yet to be made. The next, or second count, will comprehend conjugal conditions; that is, single, married, married in census year, widowed, divorced and unknown conjugal condition, classified by ten age periods and fourteen birthplaces of mothers, the last item being obtained for vital statistics purposes.

The third count will give the population distributed by color, sex, and by single years of age; by particular State or Territory where born, for the native white and native colored, together with eight or ten general points as to illiteracy and language spoken. It will also comprehend the number of soldiers, sailors, marines, and widows of such as have died, both Union and Confederate, classified by age periods.

The fourth and fifth counts will deal with foreign parentage and with occupations, and with months unemployed, at remunerative occupations. By these four counts the essential results regarding the popu-

lation will have been reached.

Besides the four counts above mentioned, special counts will be made regarding the number of married women who are mothers of children, classified as regards place of birth and ages so as to show the relative fecundity of women of the various nationalities; for illiteracy and language spoken as regards nativity and occupations; for the veterans of the late war as regards place of birth and occupations, and also as to the number who own or hire the home or farm in which they live.

Supplementary statistics concerning the tenants of home or farms will also be obtained from the population schedules, showing for such persons simple classifications as to color, sex, conjugal condition, age

periods, place of birth, citizenship, and occupations.

To complete the work of this division in sixteen months from date there will be required 275 employés at an average of \$60 per month each, making \$264,000, and the employment of 50 tabulating machines for said period at a cost of \$500 per annum each, making \$33,333, or in all,

\$297,333 to finish.

Assuming that the special features of the census (or the additional count) would require the equivalent in machine work of one additional run requiring four months' time, it will be necessary to add \$74,888 (including machine rent) to cover the cost of this special work, or an estimated total for twenty months' work of \$372,221 (including rent of fifty machines).

Making some slight allowance for errors in estimate, it would be, perhaps, fair to say it will take at least \$392,000 to complete the census re-

garding population.

DIVISION NO. 5.—VITAL STATISTICS.

[William A. King, chief of division.]

The work of this division, primarily, consists in securing returns of deaths and births; of compiling the returns of deaths by age, sex, and cause of death, conjugal condition, nativity, color, occupation, etc., in relation to each other; the reduction of the figures so compiled to rates per 1,000 of population of corresponding conditions, and the preparation of life tables, maps, charts, and diagrams such as are given in volumes 10 and 12 of the Tenth Census.

WORK COMPLETED.

The five years' statistics, amounting in bulk of work to almost as much as the whole work upon mortality in 1880, have been exhaustively compiled, and the special statistics of the Jews have also been completed, the results of the latter being published, in part, in Bulletin No. 19.

For the census year, all tables giving details for the smaller areas have been finished, and much of the machine work is completed, the results being set forth in result slips, showing the reading taken from

the dials in the machines.

Owing to the small force employed for the few months past, the work of transferring these results to the tabular sheets, and the after consolidation necessary, has been in arrears, and is now being brought up as fast as possible. When the mortality statistics are compiled and the figures representing deaths are in hand, the preparation of the vital statistics really commences, and this work depends upon obtaining corresponding data representing living population. Many of the tables complied will be used only as a basis for computing death rates

per 100 of population of corresponding ages, occupations, nativities, etc.

It is estimated that about 80 per cent of the work of compiling the

mortality figures has been finished.

The force now employed is represented by 22 clerks, now on duty, engaged in operating six tabulating machines, handling cards, marking differences on result slips, transferring and consolidating figures, and calculating rates. With an additional force of 3 clerks, making in all 25, it is estimated that the work of tabulating the mortality returns will be completed during the calendar year 1892, and also much of the work of computation involved in the vital statistics, the final finish of which depends upon information to be furnished by the population division.

The cost of the work of this division, from its beginning to January

31, 1892, amounts to \$141,472.01.

It is estimated that the further expense of completing the work upon the plans now mapped out, including computation of rates, etc., will be \$35,000.

DIVISION NO. 7.—EDUCATIONAL STATISTICS.

[James H. Blodgett, special agent in charge.]

The estimate laid out for the work (April 1, 1890) of this division was \$53,400.

The work thus far accomplished is as follows:

Five preliminary bulletins showing the public school attendance by counties, by sex, and color; private and parochial school attendance by States as known July 1, 1891; corrected tables for the bulletins for final report.

The examination of candidates for appointment was charged to this division, requiring much of the time of Mr. Blodgett and 5 clerks, at a

cost of \$6,700, 2,234 persons being examined.

The work yet to be done, now in preparation, is: Tables for the groups of professional schools, and correction of tables. Material needed for the population division to finish is: Number, age, sex, nativity, and time spent in school; number, age (10-21, over 21), sex, nativity, and occupation of illiterates.

It is estimated that the work of this division can be brought to a finish, provided the population division furnishes the data above re-

ferred to, with 13 clerks at a cost of \$10,000.

DIVISION NO. 8.—PAUPERISM AND CRIME.

[Fred II. Wine, special agent in charge.]

The work of this division consists in collecting and compiling statistics of the prisons, benevolent institutions, reformatories, almshouses, and soldiers' homes of the United States.

The work thus far accomplished is as follows:

Six bulletins relating, respectively, to convicts in penitentiaries, inmates of juvenile reformatories, paupers in almshouses, prisoners in county jails, sentences of convicts in penitentiaries, and paupers in almshouses classified by age and sex, have been published.

The completed work now ready for the text to be written, together with the completed result slips yet to be tabulated, and the machine work on benevolent institutions, almshouses, and soldiers' homes, are sufficient to keep the present force of five persons employed for the

next four or five months.

It is estimated that seven-tenths of the work has been accomplished. Before final completion, however, results may be obtained from the Population Division for purpose of comparisons and the computing of rates.

With these results in hand the work of this division, including the text for the final report, can, with the present force, be completed within the present calendar year at a cost of \$3,635.

DIVISION NO. 10.—NATIONAL AND STATE FINANCES.

[J. K. Upton, special agent in charge.]

The work of this division has been the compiling of the national and State debt of the United States.

On December 1, 1890, by order of the Superintendent of Census, the Ninth Division, of which Mr. T. Campbell-Copeland, special agent, was in charge, was abolished, and the work thereof, viz, the collecting and tabulating statistics of the wealth, debt, and taxation of the country, was transferred to this, the Tenth Division.

The cost of the work of the Tenth Division, prior to the date of the consolidation (December 1, 1890,) was about \$5,000. The cost of the work in this division (the Tenth) from the date of its consolidation to January 31, 1892, has been \$41,000. Deducting these two items, viz, \$46,000, from the total cost of the two divisions from the beginning to January 31, 1892, being \$167,377, leaves \$121,377 chargeable to the Ninth Division, expended by Mr. Campbell-Copeland, in charge.

It is conservatively estimated that no inconsiderable portion of the \$121,377 expended was absolutely barren of any available results.

The work yet to be done comprises the tabulation of the valuation and taxation of the country, excepting that of the New England States, which is practically completed for the printer, except copying.

There remains also to be tabulated the receipts and expenditures of the counties and principal cities of the country, except those of the New England States. The tabulation of such statistics in those States is well advanced. The tabulation of the receipts and expenditures of the States has been completed for the entire country and is ready for the printer.

It is estimated that to complete the work of this division, provided no interruption occurs in the nature of Congressional inquiries, which are now constantly occurring and requiring the time of the present force, and that with 26 competent and experienced clerks (6 clerks now employed), the entire work might be ready for the printer at the close of the present calendar year, at a cost of \$17,160.

DIVISION NO. 11.—FARMS, HOMES, AND MORTGAGES.

[George K. Holmes, special agent in charge.]

This division is considered under two distinctive heads, viz: Farms, homes, and mortgages, and recorded indebtedness.

INVESTIGATION OF RECORDED INDEBTEDNESS.

Field work completed.

One hundred and fifty clerks at \$15,000 per month can do the tabulation probably in ten months. Add 10 per cent to this estimate for underestimation and the total remaining cost of completing the recorded indebtedness investigation is \$165,000.

Five hundred clerks capable of doing tabulation can be employed as economically as 150 can be employed, but there is a loss of economy in the employment of less than 150 clerks.

FARM AND HOME INVESTIGATION.

A considerable amount of field work yet remains to be done. Men must be employed in 1,202 counties in the Southern States, at an estimated cost of \$180,300, all expenses included.

Some supplementary work must be done in about 100 counties (the number is not now exactly known) in the East, West, and Far West, and on the Pacific Slope, at an estimated cost of \$53,125.

Estimated cost of field work to be done in farm and home investiga-

tion, \$233,425.

No tabulation has been done for this investigation and an estimate cost is very uncertain.

Perhaps four States could be tabulated a month by 150 clerks, or the United States in about one year.

With the addition of 10 per cent for underestimate, the probable cost of tabulation would be about \$200,000.

This is the largest statistical investigation of a special subject ever undertaken in any country, and the cost of it has been proportionate to the magnitude of the work.

There are still to be obtained returns from about 500,000 of the 12,500,000 families in the United States.

SUMMARY.

Cost of completion of recorded indebtedness tabulation. Cost of farm and home field work to be done. Office work in connection with this field work.				
Office work in connection with th Farm and home tabulation	is field work			30, 000 200, 000
Total			•	628, 425

In making these estimates the intention is to make them large enough to cover all sorts of contingencies, most of which are improbable, and perhaps the percentages added for underestimation are too liberal.

The plan for doing the field work in the South, for which an estimate is made, is the collection of data through special agents, and is the most expensive one of several plans considered. If it be found practicable, however, to obtain the data through the county officers, recorders, or county clerks, it will reduce the cost above \$100,000.

The total of \$628,425, therefore, being an outside limit, it may more fairly be estimated that the total cost of completing the work of this

division would be not far from \$500,000.

A full report under investigation of farm and home ownership and indebtedness can not be made without the coöperation of the population division, on which this division must necessarily depend for detail as to the ownership and tenancy of farms and homes, and for a description of the persons who hire farms and homes, or who own them free of incumbrance.

The information for which this division does not depend upon the population division relates to the indebtedness on farms and homes, the rate of interest paid thereon, the objects for which it was incurred, and various items of descriptions of the owners of mortgaged farms and homes.

It is estimated that 60 per cent of the work of the division of farms, homes, and mortgages has been done.

DIVISION NO. 12-AGRICULTURE.

[John Hyde, special agent, in charge.]

The total expenditures in connection with the work of this division up to January 31, 1892, amounted to \$167,879.17, and it is estimated the

sum required to complete the work will be \$150,000.

Seventeen bulletins have been issued, including 6 on different branches of horticulture (an entirely new investigation), 7 on irrigation and the arid lands, covering the entire agricultural conditions of four States and three Territories, 2 on live stock, 1 on tobacco, and 1 on hops.

The collection and tabulation of statistics on sugar (except two dis-

tricts), rice (except one district), flax, and hemp are completed.

The collection and tabulation of the statistics of cotton production in Alabama and Mississippi are completed, and the same may be said of

cereal production in Illinois.

An immense amount of work has been done, in correspondence and otherwise, in supplying the omissions and correcting the errors of the enumerators as regards such agricultural statistics as have not yet been tabulated.

No more field work remains to be done, unless in the term "field work" be included the making good, in not more than half a dozen districts, of such work of the enumerators as can not otherwise be made

reasonably complete and accurate.

The investigations that are not yet complete, but the completion of which is provided for in the foregoing estimate, include the number, value, and tenure of farms; classification of farms by acreage, improved and unimproved; the labor expended on farms; the acreage and production of cotton, corn, wheat, oats, barley, rye, buckwheat, pease, and beans; the amount and value of forest products on farms; the number of neat cattle, sheep, swine, and poultry; and the amount of dairy and apiary products, and also of wool.

DIVISION NO. 13.—MANUFACTURES.

[Frank R. Williams, expert special agent in charge.]

The work of this division, in charge of Mr. Frank R. Williams, ex-

pert special agent, practically began April 17, 1889.

Primarily, the work of the division consisted of collecting statistics relating to all branches of mechanical manufacturing industries, by the personal visitation of special agents and enumerators to each establishment engaged therein, wherever located within the confines of the United States.

The term "establishment of productive industry" embraces not only mills and factories, but also the operations of all small establishments and mechanical trades, such as blacksmithing, carpentering, coopering, dressmaking, masonry, and bricklaying, mechanical dentistry, millinery,

tailoring, wheelwrighting, etc.

In addition to work outlined above, the division has been charged with the collection of data relating to the quantity of distilled spirits consumed in the arts, manufactures, and medicine, a work which involved the collection of individual reports from upwards of 400,000 establishments or firms.

The compilation of these data has been completed and the results

published (Census Bulletin No. 22).

The division has also been charged with the duty of collecting statistics relating to telegraph companies, and information referring to the operations of telephone companies and electrical industries.

On April 14, 1890, about \$20,000 had been expended, at which time the sum of \$615,000 additional was submitted as an estimated amount

required to complete the work of the division.

Subsequent to the date this estimate was made, the investigation relating to telephones, telegraphs, etc., was transferred from the division of transportation and assigned to this division. The probable cost of this work and the collection of statistics of the electrical industries would increase the above estimate by about \$100,000, which, added to the former estimate, would make the amount necessary to complete the work \$715,000.

May 29, 1891, Mr. Williams reported that \$250,000 was estimated as the sum required to complete the collection and compilation of statistics of manufactures, exclusive of the amount required to complete the

inquiry relating to the electrical industries.

At this date the sum of \$452,721 has been expended. To this sum should be added \$100,000 estimated for electrical industries, making the total estimate for the entire work \$350,000 required to complete.

On November 24, 1891, the sum of \$544,000 had been expended for all purposes, and he furnished an estimate to the Superintendent of Census, stating that an additional sum of \$500,000 would be required

to complete the work of his division.

On the 12th of June, 1891, the Superintendent of Census reduced the clerical force of the division from 170 to 54, by the discharge or transfer to other branches of census work of 116 clerks. The 170 clerks above referred to had been retained on account of their special fitness for this work, and they had been selected from about 600 clerks originally assigned to the division from time to time, the balance of the 600 having been found unsuited to the important work of the division.

Other reductions were made, from time to time, during the succeeding months, which left the clerical force of the division barely sufficient to conduct the current and other work incidental to the immense number of returns collected. Many of these returns are incomplete, and the correspondence required to secure the data essential to their completion has, of necessity, also practically been suspended. The discontinuance of all field work, which was ordered by the Superintendent on June 30, 1891, and the suspension of the expert special agents, which was made September 8, 1891, together with the reduction of the clerical force as noted, resulted in the practical suspension of the work of this division, so far as it related to the tabulation and preparation of any data whatever for early publication.

The suspension of work, as above noted, and its resumption dependent upon future appropriations by Congress, are assigned by Mr. Williams as the principal reasons for his increase in the last estimate of

November 24, 1891.

He also assigns as additional reasons for the increased estimate the fact that examination of the returns shows that a large percentage collected by enumerators are so incomplete as to require a new canvass of the rural districts.

It should be stated, in this connection, that the enumerators referred to above collected returns from all manufacturing establishments located in the rural districts, during the progress of their work of

enumerating the inhabitants, and they were required by law to complete the duties assigned them during the month of June, 1890, while the special agents appointed to collect similar information in the cities and towns withdrawn from the enumerators were not restricted as to

the time in which the work should be completed.

In both the cities, viz, St. Louis and Washington, D. C., where the returns were collected by special agents, for which tabulations have been completed for publication and forwarded to the printer, a supplementary canvass was found necessary, owing to the failure of these special agents to collect returns from important manufacturing establishments, and a similar condition of affairs will probably be found to exist, in greater or less degree, in nearly all the large cities.

The above estimate also provides for a complete recanvass of the city

of Philadelphia, which, it is believed, will be found necessary.

With a force of from 250 to 300 competent clerks, and facilities for such recanvass as may be found necessary, it is believed that this division will be enabled to have ready for the printer within 90 days from the date such force becomes available, statistics of manufactures for 20 or more principal cities and the statistics for certain leading industries for which special schedules have been prepared and returns already collected.

It is also believed that within six months from said date it will be found practicable to have ready for the printer complete statistics of manufactures of several States by industries, if no unforeseen obstacles are encountered and the field work shall be completed as promptly as

hoped for.

It is also probable that a complete report for all branches of manufactures can be made ready for the printer in from twelve to eighteen months after the resumption of work as outlined and at the cost estimated.

DIVISION NO. 15.—FISH AND FISHERIES.

[Charles F. Pidgin, special agent, in charge.]

Mr. Pidgin, special agent in charge, resides in Boston, and we have thus far been unable to have a personal interview with him.

The division in the office here has been temporarily disbanded, and the force (three persons) transferred to the division of manufactures.

From the beginning to January 31, 1892, there was expended \$126,823.47. Of this amount there was expended by Special Agent Smiley \$107,824.34, leaving \$18,999.13 expended by present Special Agent Pidgin, in charge.

Under date January 13, ultimo, Mr. Pidgin estimated it would cost

\$10,000 to complete the work.

DIVISION NO. 16.—TRANSPORTATION.

[William W. Mayberry in charge of division.]

The work of this division covers the collection of statistics of steam railroads for the years 1880, to June 30, 1890, inclusive; street-railway statistics for the year ending June 30, 1890; water-transportation statistics for the year 1889, including the Pacific and Atlantic coasts, Gulf of Mexico, the Great Lakes, the rivers of the Mississippi Valley, and canals.

Data for steam railroads is all collected and compiled, by groups, for

the years 1880 to 1889, inclusive.

Seven bulletins of steam railroads have been issued, and material for the remaining three are in the hands of the printer.

Data for the year 1890 will be ready for compilation by March 15.

Data for express statistics is completed and ready for print.

Final report for street railways is now in the hands of the printer. Compilation of statistics for the Atlantic coast and the Gulf of Mexico

will be completed by March 1.

Compilation for the Pacific coast has been made and material is ready to edit for final report.

The final report on the Mississippi Valley is now in proof.

The editing of the final report on the Great Lakes will be completed and matter given to the printer by March 1.

The editing of the final report on canals will be finished and matter given to the printer by May 15, proximo.

Cost of work thus far has been \$124,461.

The estimated sum to complete the work is \$7,500. Time—present force, 10 persons—August 1, 1892.

DIVISION No. 19.—SPECIAL CLASSES.

[W. H. Olcott, chief of division.]

This division is devoted to the special classes, and has charge of all statistics relating to the insane, blind, deaf, dumb, feeble-minded, and otherwise physically defective population of the United States.

The actual cost of the work of this division, from its beginning to January 31, 1892, has been \$65,870.27. It is estimated that the approximated sum of \$30,000 will be required to complete the work with the present force of 14 clerks.

The final completion of this work is dependent upon the results of the population division, and it is necessary to show the ratio of each special class to the population by color, sex, nativity, parentage, age, occupation, etc., for each county, city, and ward in the United States.

It is estimated that about six-tenths of the work has been completed, and it will require at least two years to finish it with the present force.

DIVISION NO. 21.—ALASKA.

[Ivan Petroff, special agent in charge.]

Information collected by special agents in the field on the two "population" and nine "special" schedules all on hand and being digested.

Tabulation of families to houses and sizes of families nearly com-

pleted.

Tabulation of population by sex, race, and age periods, and of Indian tribes, completed.

Tabulation of birthplace, illiteracy, and language in hand.

Preparation of illustrations and maps completed.

Preparation of manuscript for final report keeping up with tabulation. Present force engaged on Alaska work: One special agent in charge of division; 3 clerks detailed from population division; 1 typewriter, detailed from educational division.

Total cost of investigation to January 31, 1892, \$38,444.43, including sums probably otherwise accounted for under "population" and "enumeration."

Time needed to complete Alaskan work with present force (5 clerks) and within its present scope, three months, at a cost of \$1,485, exclusive of salary of special agent in charge.

DIVISION NO. 22.—INDIAN STATISTICS.

[Thomas Donaldson, expert agent in charge.]

The census of the Indians embraced two propositions. First, their

enumeration; second, a report on their condition.

The work of the division has thus far cost \$72,500, inclusive of the amount due Special Agent Donaldson, not yet paid, but included in the disbursing officer's statement of unpaid liabilities, estimated at \$12,000; and the work yet to be completed, consisting of tabulation of data, which will cost \$4,850.

DIVISION NO. 23.—SOCIAL STATISTICS OF CITIES.

[Harry Tiffany, special agent in charge.]

The work of this division is confined to the social statistics of cities having a population of 10,000 and over. In other words, the purpose is to show the conditions under which this portion of the population live.

The collection of these statistics has been done almost entirely by correspondence, the Census Office depending largely on the cooperation of the chief executives of the large cities. Such collection is intended to show, for each city, altitude and topography, cemeteries, with the distinction of burials within and without the city limits, drainage, fire department, city officials, and cost of government, licenses, parks, police, public buildings, streets, street lighting, and waterworks, with a table showing the movement of population for each city, with reference to suburban travel within a distance of 20 miles of each place.

The work of this division was commenced June 17, 1889, and up to January 31, 1892, has cost \$17,500. To complete the work, for which all information is had and almost all of which is tabulated, and all

revised, it will require the additional sum of \$8,500.

To prepare this work for the printer will require, including the chief of division and 14 clerks, ninety days.

DIVISION NO. 25.—REVISION AND RESULTS.

[Armin E. Shuman, special agent, in charge.]

This division is charged with all revision of all tabulations and all computations made by the several statistical divisions of the Census Office; the revision of all manuscript pertaining to the various collections and tabulations made; the scrutinizing of the forms used for tabulating; in fact, to see that all work prepared for publication is correct in form and in mathematical computations before being turned over to the printer.

What has been done is expressed in the bulletins issued.

As the divisions of population, manufactures, agriculture, and vital statistics are completing their respective compilations, and as this class of work will come in in large portions by July 1, 1892, it is estimated that from that date the present force of 22 clerks will necessarily require a considerable increase to bring the results to an early publication.

The conclusion of this division depends upon the final completion of

The cost attached to this division has not been kept, and its cost to the final can not be calculated with any degree of accuracy or approxi-

It can not cost less than \$30,000 to finish.

IN CONCLUSION.

In our examination and review of the Census Office we find the list of subjects of inquiry and investigation in connection with the Eleventh Census have not been without the authority and requirements of the act of March 1, 1889, providing for the taking of the Eleventh and subsequent censuses. Our report and the facts, however, show that the sum of \$6,475,000, originally fixed and limited as the maximum cost of the Eleventh Census, exclusive of printing, engraving, and binding, has been exhausted, leaving a deficit on March 1, 1892, after paying outstanding liabilities, of \$2,972.15.

During the formative period of the Census Office, the force being new and inexperienced and the plans of procedure undergoing changes and modifications, we are assured that while the force was industriously yet, in a large measure, was neither "advantageously nor profitably"

employed.

It can not be denied that from the beginning the force, in the main, has been industrious and faithful, and that the force now employed, taken as a whole, will compare favorably in intelligence, industry, and aptitude with that in other bureaus of the Government, while the aver-

age per capita compensation is much less.

Upon receipt from the appointment division of the Census Office of a report (see p. 5), showing by divisions and grades the total number of persons employed March 3, 1892, we made upon that data our estimated cost for running the Eleventh Census; farms, homes, and mortgages, and printing, engraving, and binding per annum and per month (see p. 6).

The large force charged to printing, engraving, and binding seemed excessive, and we found after an interview with Mr. Ketchum, in charge, that he has upon his roll only 74 people, whereas the Census Report shows 146. This difference of 72 people the chief elerk, Mr. Childs,

says is distributed throughout other divisions.

Question. Is it proper to charge the 72 people to printing, engraving,

and binding?

For amendment to foregoing see page 30.

CORRESPONDENCE OF THE SECRETARY OF THE INTERIOR AND SUPERINTENDENT OF CENSUS.

DEPARTMENT OF THE INTERIOR, Washington, March 15, 1892.

SIR: By reference to the report of Messrs. George W. Evans and A. C. Tonner, made in pursuance of my order under date February 2, ultimo, with the scope and purpose of which you were advised, I find as follows:

First. That the appropriations made for taking the Eleventh Census and pursuing the inquiries and investigations in connection therewith have been expended, and that on March 1, instant, after paying all outstanding liabilities, there remained a deficit of \$2,972.15, and that the balance on hand March 1, 1892, for farms, homes, and mortgages was \$51,284.20.

Second. That, based upon the estimates of the persons in charge of the various divisions, the amount necessary to finish the Eleventh Census, from March 1, instant, aggregates \$1,336,182.59, and for farms, homes, and mortgages the sum of \$601,833.85, making a grand total to finish of \$1,938,016.44. The report shows that there remained on hand March 1, instant, to the credit of printing, engraving, and binding, \$154,647.50, which I am informed is sufficient to conclude the work thereto allotted.

On page 8 of your report, under date June 30, 1891, you state:

I should think it safe, however, to estimate the probable cost of the completion of the work, including the inquiries which were authorized by Congress after the act of March 1, 1889, was passed, and hence not provided for in the original appropriation for the Eleventh Census, at \$1,000,000. This sum, in my opinion, will finish the entire work, including farms, homes, and mortgages, and the names of veterans of the war, in accordance with the plans and in a manner highly creditable to the nation. Meantime I have the honor to inform you that the present appropriations are sufficient to keep the work of all divisions moving as rapidly as anticipated in the forecasts of the work.

On page 3 of your letter, addressed to the Secretary, under date December 29, 1891, you state:

I have ventured no estimate whatever as to the probable cost of this census. I have reason to believe, however, that the total cost, exclusive of printing, and farms, homes, and mortgages, will not exceed \$7,000,000.

Deducting from this your last estimate the \$6,475,000 now consumed, there is left \$525,000 necessary, according to your estimate, to finish the Eleventh Census.

Recognizing the fact that you are in nowise responsible for the amount appropriated and for the scope of inquiries defined for investigation by Congress, and fully appreciating that it is very difficult to estimate with any degree of accuracy the amount necessary to finish, yet I am surprised at the great variance between your estimates and those made by Messrs. Evans and Tonner, especially in view of the fact that those

gentlemen obtained their data from the experts and chiefs in charge of their respective subjects, the same sources, doubtless, from which you

obtain your information for collation and estimate.

When, in June last, it was brought to my attention that the unexpended balance of the appropriation for the Eleventh Census would be on July 1 following about \$600,000, and that the number of people employed was then about 1,700 (exclusive of farms, homes, and mortgages, and printing, engraving, and binding), it became necessary to reduce the force, so that the census might be kept in esse until Congressional aid could be had, and much the larger portion of that remaining was transferred from other divisions to that of population. This was done, as you often stated, with the view of publishing at the earliest practicable date your compendium, which you regarded as next in importance to the verified account of the gross population of the country for apportionment purposes, which was announced November 20, 1890. I allude to this matter in no sense of criticism, for I appreciate the unforeseen difficulties and consequent delays to which you have been subjected, but in view of the fact that when Congress recently had under consideration the census deficiency appropriation much was said regarding the publication of statistics of unimportant subjects, whereas nothing had been published in respect to the great and important industrial, manufacturing, and agricultural interests of the country, I am strongly of the opinion that the statistics of manufactures of at least twenty cities should be published at the earliest possible date, thereby giving to the country a comparative idea of the marvelous growth of our industrial enterprises during the last decade.

I note from the report before that it will cost to run the Eleventh Census during the current month, with the force now in employ, \$55,470.21, and so on if the force is neither increased nor decreased. I am also confronted by the question whether the \$200,000 recently granted by Congress for the relief of the Eleventh Census is intended to carry it to the end of the present fiscal year, or whether more can be expected in the interim. If more can not be had without prejudice then it is apparent the present current expenses must be reduced in order to carry

the Eleventh Census to the close of the fiscal year.

Now, in view of the fact that the population of the country for apportionment purposes has been determined and that the tabulation of all the other matter contained in the schedules are of minor importance, at least at this time, in comparison with the manufacturing and agricultural statistics, I submit whether it would not be best, if feasible, to suspend the work of all the divisions whose ultimate results depend upon the final reports of the population division, and transfer the force of the divisions of manufactures and agriculture, at least during the remainder of the present fiscal year, and thereby obviate the necessity, if possible, of resorting to Congress for further deficiency assistance.

The report as furnished by your office under date March 3, instant, shows that there were then in the appointment division 18 employés, exclusive of the expert special agent in charge, and that their salaries aggregate \$15,160 per annum, and inclusive of the expert special agent in charge, \$17,350 per annum; and that there were in the disbursing division 8 employés, the aggregate of whose salaries was \$10,260 per annum. I submit the question whether, in the light of economy, the appointment division could not be dissolved or reduced to a minimum, and the disbursing division absolutely discontinued and its work transferred to the disbursing office of the Department.

I quote from the report before me:

The large force charged to printing, engraving, and binding seemed excessive, and we found after an interview with Mr. Ketcham, in charge, that he has upon his roll only 74 people, whereas the Census Report shows 146. This difference of 72 people the chief clerk, Mr. Childs, says is distributed throughout other divisions.

Is it proper to charge these 72 people to printing, engraving, and

binding?

It is my opinion, sustained by persons whose judgment is worthy of highest consideration, that in view of the fact that during the taking of the Tenth Census Congress became exceedingly annoyed over the frequent appeals for help, and the repeated assurances that the sums asked for were sufficient to finish, so that the last appropriation made was accompanied by an act to close the work, and thereby a large amount of accumulated material remains unpublished. I therefore submit whether it would not be best to determine upon an amount absolutely sufficient to finish, and advise Congress thereof, and then get what can be had.

I shall be pleased to hear from you, in writing, upon the subjects of this communication, as also upon your policy and plans for the future, and, at your convenience, will be glad to confer with you personally.

Allow me, in this connection, to reassure you of my high appreciation, of my entire confidence in your ability and fidelity to the great trust confided to you, as I have on different occasions heretofore expressed it, and to say that this letter is written in no spirit of censure or criticism, but in the performance of my official duty, when I deem you should be advised of my views, that we may act upon full consultation and in harmony.

Very respectfully,

JOHN W. NOBLE, Secretary.

The SUPERINTENDENT OF CENSUS.

DEPARTMENT OF THE INTERIOR, CENSUS OFFICE, Washington, March 17, 1892.

SIR: I have the honor to acknowledge the receipt of your letter of the 15th instant, together with a copy of the reports and estimates of Messrs. George W. Evans and A. C. Tonner. Before taking up the questions relating to the future administration of the Census Office suggested in your own letter, allow me to express my gratification at the thoroughness and fairness of the work performed by these gentlemen. The task allotted them was beset with difficulties in spite of the fact that every possible facility was afforded by the experts in charge of the several branches of the work, by the chief clerk, and by the Superintendent. The result of their labors is, in my opinion, a concise, clear, and impartial statement of the affairs of the Census Office from the beginning to the present time, together with a safe estimate of its probable requirements. This estimate could probably be reduced here and there, and undoubtedly will be, but to work up all the valuable material now on hand and prepare it for the final volumes will undoubtedly take, for the census proper, \$1,000,000, and for the farms, homes, and mortgages an additional \$500,000. A few months ago I expressed, as you know, a hope that the work might all be completed for less money than this, but upon more careful investigation I am inclined to the opinion that by the exercise of great economy this office

will require \$1,000,000 to carry on the work of the Bureau for the present calendar year, and have so informed the appropriations committees of both houses of Congress. By this I mean to carry it on to a rapid conclusion. The requirements of the office have been so clearly set forth in the report of Messrs. Evans and Tonner that it is not necessary for me to refer in detail to the purposes for which this appropriation is needed.

Before taking up the suggestions in your own letter, permit me to call attention to one statement in the accompanying report, which seems to have been based on information supplied by Mr. Childs, the chief clerk, namely, the statement that 72 of the 146 persons employed on Dr. Ketcham's rolls were "distributed throughout other divisions." Without further explanation this is liable to mislead. It is true that at the present time 66 persons, (and probably 72 at the time of the report) carried on the printing, engraving, and binding rolls are employed in other divisions but not on other work. They are engaged in the work of preparing copy and reading proofs—22 under the direction of Mr. Shuman, 23 under the direction of Mr. Hunt, and 8 in preparing the maps and diagrams for the final volumes under the direction of Mr. Gannett. The remaining persons are watchmen and charwomen employed in the buildings devoted to the printing division, but controlled, as all the labor is, by the chief clerk's office. I do not think with this explanation that either the spirit or the letter of the law is violated in the distribution. I have consulted the First Comptroller of the Treasury Department several times personally in regard to similar matters, and have uniformly met with no objection. The precedent for this may be found in the Tenth Census, when precisely the same course was adopted by my predecessor, Gen. Walker, and approved by the Department. I shall be glad if you will permit Messrs. Evans and Tonner to make this explanation in their report, as it was clearly an oversight on the part of the chief clerk and is liable as it stands to misconstruction by unfriendly or unfair critics.

Referring to your own letter, I have the honor to say that the variance between the estimates made by Messrs. Evans and Tonner, and the hope expressed by me in the report of June 30, 1891, is due to several causes. In the first place, estimates as to the probable cost of statistical work are very uncertain until after the returns have been examined and edited. This is illustrated in the instance quoted by Messrs. Evans and Tonner in which Special Agent Williams gave as his estimate \$250,000 to complete the work, May 29, 1891, but now thinks the amount required will be \$500,000. This latter amount includes \$100,000 for electrical statistics and a large sum to complete I am informed that the statistics of lumber on an elaborate scale. these two industries have petitioned Congress for separate appropriations to complete this work. Indeed the statistics are regarded as so important that the lumber association has offered to furnish the necessary money to carry the work through. The delay in the work in consequence of inadequate appropriations by Congress will also add greatly to the cost of this work. The estimates made by Messrs. Evans and Tonner are undoubtedly outside estimates, and include all investigations. As I have said, they can probably be reduced to \$1,500,000, provided Congress does not dole the money out in driblets, and thereby compel the Census Office to continually change its force. The effect of small and frequent appropriations upon the organization of the office is pernicious. Employment is uncertain from month to month; competent and experienced clerks are constantly resigning to take other places,

and those who remain are nervously watching for the opportunity to follow suit. The ranks thus depleted are made up by clerks who must be instructed all over again in the work. In asking for additional appropriations to continue the census work, I am satisfied that the estimate (\$1,000,000) will enable the office to push the work rapidly during the calendar year. By the end of that time, I believe an absolutely accurate estimate can be made for the completion of the work. In answer to the question, I have already informed both committees of Congress that I should prefer not to venture another estimate as to the total cost of the census until this office is able to determine with exactitude the condition of the work next autumn. It may be possible to save consideration in the three great divisions of populations, manufactures, and farms, homes, and mortgages.

I note what you say in regard to the criticisms made because some of the less important inquiries of the census were nearer completion than the statistics of the industrial, manufacturing, and agricultural

interests of the country. There are two reasons for this:

First. Under the present system the special agents employed to collect the statistics of manufactures can not well be sent into the field until after the enumerators have completed their work. It is also impossible to begin the tabulation of either of these branches of inquiry until after the rough count of the population and the payment of the enumerators. So long as the present system exists, these important branches of inquiry must necessarily be about one year behind the population work. With a sufficient force the statistics of manufactures for twenty large cities can be ready in ninety days from this date, and within six months the statistics of all the important branches of industry will be completed. Within the last week, a report on the woolen industry of the country has been made public. A similar report on the cotton and silk industry will follow, and a short time thereafter the complete report on iron and steel. Great progress is being made in the agricultural statistics and results are being made public almost every

In reference to the recent appropriation of \$200,000 for the Eleventh Census, I have the honor to inform you that I informed both committees positively that \$400,000 would be required to carry on the work of the office (including farms, homes, and mortgages) until July 1, 1892. I was given to understand that this amount would ultimately be forthcoming, but that the committee preferred to appropriate the smaller amount As you know, the Senate added \$50,000 for farms, homes, and mortgages, and this amendment was accepted by the House. I have always been ready and willing to appear before the several committees and explain the condition of affairs in the Census Office, to answer all criticisms and questions as to the work, and in every possible way set forth the requirements of the Bureau. With your approval, I shall at once inform the chairmen of the Appropriations Committees and Census Committees of the absolute necessity of further relief for this fiscal year. Without it this office must, as you very truly say, stop some of the work now nearly completed or delay the statistics of manufactures. A reference to the estimates as furnished by Messrs. Evans and Tonner brings out the fact that the sum of \$78,150 will bring to conclusion the work of 11 divisions, namely: Geography; statistics of churches; education; pauperism and crime; wealth; debt, and taxation; fish and fisheries; transportation; insurance; Alaska; Indians; and social statistics of cities.

This, be it remembered, is an outside estimate. Since these estimates

were given, I have again gone over this work with the special agents in charge and believe the work can all be finished in these divisions and put in the hands of the printer for \$60,000, or, at most, \$65,000. This being the case, you will, I feel sure, agree with me that the thing to do is to push this work through to completion and abolish the divisions. The saving thus brought about will be great. The same report estimates that the cost of completing the vital statistics and statistics of special classes will be about \$65,000. I do not think this estimate can be reduced much. You will thus see that thirteen divisions of the work can be closed out for, say, \$130,000, or, at outside, \$150,000. I will, as you suggest, at an early date consolidate the appointment division with the chief clerk's office, and make such other reductions in the administration of office as may be found possible.

This done, we shall be directly concerned in the onlythree great divisions remaining of the Eleventh Census, namely, population, manufactures, and agriculture. I have purposely left out of consideration the division of farms, homes, and mortgages, as that will be provided for by Congress separately. To draw the few remaining clerks from the small divisions of the office would merely delay results now nearly attained, prolong the organization of divisions, with special agents and experts, and add greatly to the relative cost of the work. Instead of this, I would suggest the following plan and earnestly ask your approval:

That the Division of Manufactures be at once increased by adding about 100 good male clerks, making the total number 250. The office has now nearly this number of clerks, many of whom performed good service in the same division, waiting to be reinstated. Most of them are ready to accept employment at from \$50 to \$60 per month. It might also be advisable to bring up the number of employés in the agricultural division to 200. Meantime I will ask a hearing of the committees and explain the situation, and if possible secure the additional \$100,000 which will be sufficient to meet all possible expenses for the fiscal year. In the event of failing to do this, I would suggest that a sufficient number of the clerks in the Population Division be granted leave without pay say for the months of May and June, should the financial condition of the office make it necessary. By that time all the material for the population volume of the compendium will have been completed and printed and the country can better afford, as you very wisely suggest, to wait for the more complicated tabulations of the population than for the statistics of manufactures and agriculture. As you perhaps know a greater proportion of the clerks in the population division are young women who have been steadily employed now for fully two years. Most of them live in the District and few of them are likely to secure other places at the same salary. A vacation of 60 days will be no hardship in view of their steady employment, and the delay occasioned will merely postpone the final population volume.

On the other hand, the failure to reinstate those now anxiously awaiting your decision will cause considerable hardship because the office is at least morally obligated to reëmploy them. If this plan meets your approval, it affords this office at least a chance to go on with all the work at full speed, and at the same time gives an opportunity to put down the brakes most effectively in May and June after the compendium work is out of the way. A reference to the report of Messrs. Evans and Tonner will show that to stop the work of the thirteen minor divisions of the office would not give the office, all told, more than 104 persons out of which a clerical force of 75 might be secured. There are now nearly 300 clerks in the population division, and to this

an allowance must be made for the stoppage of the machines. Of course it will be most unfortunate to make any further stops or reductions until the work is completed; and I will use my best endeavors to impress the committees with the importance of continuing this work at full speed.

The above suggestion is only made, therefore, as the most feasible plan to follow in the event of my failure to secure the needed \$100,000. I am also of the opinion that to start up now at full speed and give employment to the furloughed clerks will lessen the irritation resulting from the importunities for reinstatement, and demonstrate conclusively that no stone has been left unturned on the part of this office to carry all the inquiries called for by Congress to a successful termination. My own experience has shown that in spite of the large number of investigations called for by the law and the comparative unimportance of some of them to some people, it is a most difficult task to select any one inquiry, no matter how insignificant, for delay or abandonment without disappointing thousands of interested and thinking people throughout the country and seriously impairing the census as a whole. Up to the present time this office has abandoned no inquiry and results have been published in all branches of the work. Throughout the country the work of the Eleventh Census is winning its way in spite of the unfair criticisms of a few communities in which it became my duty to suppress fraud and padding, or where the population returns were disappointing.

Permit me in conclusion to express my gratitude for the kind and generous expressions of appreciation and confidence with which you conclude your letter. I would indeed be a poor officer if I could not appreciate your anxiety in this matter and accept your suggestions in the spirit in which they are given. From the beginning of the work, through the thickest of the fight, when the air was full of missiles, I have always received at your hands confidence, encouragement, and support. That I have been faithful to my trust I know, and I have always been comforted and sustained by the thought, as-expressed in your letter, that you had known and appreciated that faithfulness. The work will speak for itself, and, as you will see by extracts from recent letters, etc., is being passed upon by the intelligent people of the country. That you may in after years look upon it as one of the satisfactory branches of your vast department is my earnest hope and

desire.

I have the honor, dear sir, to be faithfully yours,

ROBERT P. PORTER,

Superintendent of Census.

The SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR, Washington, March 19, 1892.

SIR: The Superintendent of Census having called our attention to that portion of our report, page 56, relating to an excess number of persons charged to and paid from the printing, engraving, and binding appropriation, we have the honor to inform you that our report was based, as therein stated, upon the unexplained statement of Mr. Childs. We have further investigated the matter, and find that the persons, though "distributed throughout other divisions," have been largely, if not en-

tirely, engaged upon proof-reading, and, therefore, properly chargeable to printing, engraving, and binding.

To this extent we beg leave to amend our report.

Very respectfully,

GEO. W. EVANS, Chief Division of Finance. A. C. TONNER, Chief of Appointment Division.

The SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR, Washington, March 26, 1892.

SIR: I am in receipt of your letter of the 21st instant, submitting an estimate of \$250,000 for "continuing the work of collecting and compiling the statistics of farms, homes, and mortgages for the fiscal year ending June 30, 1893." Also your letter of the 24th instant, submitting an estimate of \$250,000 for "continuing the work of compiling the result of the Eleventh Census."

In this connection I beg leave to invite your attention to that portion of the report of the "committee of inquiry," recently made to me, wherein it is estimated that it will cost to complete the Eleventh Census \$1,316,445.75; and that of farms, homes, and mortgages \$593,767.86.

I would be pleased to have you advise me whether or not the estimates herewith submitted by you, added to the one for \$1,000,000 for the Eleventh Census now before Congress, and the appropriation of \$50,000 recently made for farms, homes, and mortgages, deficiency act of March 8, 1892, will be the final amount required to complete both branches of the census work and bring the same to a successful close.

Very respectfully,

John W. Noble, Secretary.

The SUPERINTENDENT OF CENSUS.

DEPARTMENT OF THE INTERIOR, CENSUS OFFICE, Washington, March 30, 1892.

Sir: I have the honor to acknowledge the receipt of your letter of March 26, 1892, relative to the estimates for the amount necessary for continuing the work of the Eleventh Census, and asking whether the estimates submitted in my letter of the 21st instant, added to the one for \$1,000,000 for the Eleventh Census now before Congress, and the appropriation of \$50,000 recently made for farms, homes, and mortgages, will be the final amount required to complete both branches of the census work.

I believe that the Eleventh Census can practically be completed for this amount, and that it certainly will be sufficient money to pay the running expenses of that branch of the Census Office for the fiscal year ending June 30, 1893, and that it would not be advisable to ask of Congress a larger amount; nor should I feel justified at this stage of the work, knowing how uncertain and difficult it is to estimate accurately the cost of preparing for publication the vast amount of material we now have on hand in the office, in making a positive estimate beyond this period.

As to farms, homes, and mortgages, the balance on hand March 1, 1892, was in round numbers \$50,000. Fifty thousand dollars was appropriated March 8, 1892. These two amounts added to the \$250,000 estimated for March 21, 1892, would make \$350,000, or \$243,767.86 less than the amount estimated by the "committee of inquiry" as necessary to complete the farms, homes, and mortgages investigation.

As will be seen, this office has on hand in the appropriation for the mortgage division, after paying the expenses of the present month. about \$90,000. Unless a large force is put into the field it would be impossible to use more money than the amount herein asked for to carry on this work as rapidly as would seem to be prudent. Since the estimates were made by the committee of inquiry I have suggested and put into execution a plan by which I hope to materially reduce the cost of obtaining the data still uncollected for the branch of this division of the work relating specifically to farms and homes and the mortgages While not wishing to appear too positive, I am of the opinion that the work of the census can be completed with the appropriations. estimates of which were sent to you on the 21st instant. If, however, you feel otherwise in regard to the matter, I shall be glad to go over the subject again with you or with the committee referred to in your letter. It will be my endeavor to reduce the expenses in every possible way, and as you know, to bring the work to as rapid a conclusion as possible.

In this connection I have the honor to inform you that the office has been thoroughly reorganized to take effect on the 1st of April, and the divisions which numbered, as you know when the office was working at the highest notch, 25, have been reduced to 9. I felt, upon looking over the matter, that some of the divisions as you will see by the accompanying circulars, could just as well be abolished altogether, and that others where their life is only a question of a few months, hastened to a termination by consolidating them with the larger divisions of the office. In this way I shall be able to effect a great saving in expendi-

ture for time clerks, messengers, and laborers.

Very respectfully,

ROBERT P. PORTER, Superintendent of Census.

The SECRETARY OF THE INTERIOR.