REPORT

OF

THE TREASURER

OF

CORNELL UNIVERSITY

FOR THE FISCAL YEAR ENDING AUGUST 1ST,

1910

REPORT

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TREASURER OF CORNELL UNIVERSITY

To the Board of Trustees:

I have the honor to submit herewith my report as Treasurer of Cornell University for the fiscal year, ending July 31, 1910.

INCOME

The regular income for the year, after setting aside \$27,130.47, for income on Special Funds, which can be used only for the purposes specified by donors of the funds and \$6,862.61, to complete contracts under appropriations for the year, lacked \$33,375.79 of covering the year's expenditures. To meet this deficit and to reduce accumulated deficit of August 1, 1909, \$42,276.68, being a part of the profits realized on securities sold, were, by order of the Board of Trustees, transferred from Premium and Discount to Income, thus reducing accumulated deficit from \$113,473.35, as reported, August 1, 1909, to \$104,572.46.

STATE COLLEGES

While this report covers the appropriations of the New York State College of Agriculture, the New York State Veterinary College, and the New York State College of Forestry, these figures are not included in the general tables unless specifically mentioned. It has been the policy of the University to keep the accounts of the State Appropriations and Property, distinct from the University funds. However, as the State colleges, from an educational standpoint, are an integral part of the University, in certain schedules the accounts of the colleges are specifically stated and included in order to give accurate figures for the University as a whole. During the year the Glass Houses provided for by the \$30,000 State appropriation were completed. Also the State Agricultural barn. The plans have been prepared and bids will be opened during the month of August for the addition to the north wing of the Veterinary College for which work the State has appropriated \$20,000.

ENDOWMENT

The productive funds of the University were increased during the year \$46,911.47. \$15,000 of which were received from the executors of the estate of Willard Fiske, on account of the Library endowment, \$1,000 from Mrs. Sarah L. Smith on account of a scholarship in civil engineering to be founded by her in memory of her son, Judson N. Smith, the balance from income being added to the principal of certain funds as provided under the terms of gifts, from sales of Wisconsin lands and the collections of the Cornellian Council.

CORNELLIAN COUNCIL

The Cornellian Council was organized comparatively late in the year, but collections amounting to over \$2,500 in excess of expenses were made. A permanent secretary has been appointed who will give his whole time to the work and it is expected that the contributions from the alumni will be an important source of income as has been the case in several other universities where similar organizations are at work.

SECURITIES

The kind of securities in which the Productive Funds of the University are invested is shown in the following table:

CLASSIFICATIONS OF INVESTMENTS

		Aug. 1, 1909		Aug. 1, 1910
Municipal bonds	.145%	\$1,259,900.00	.128%	\$1,122,800.00
State of New York scrip	.079	688,576.12	.078	688,576.12
Foreign Government Bonds	.050	443,640.00	.044	389,308.00
Bank Stock	.000	78,000.00	.009	81,200.00
Steam Railroad Bonds	.153	1,332,100.00	.159	1,399,100.00
Railroad Equipment notes .	.044	390,000.00	.037	325,000.00
Traction Bonds	.121	1,054,000.00	.121	1,068,000.00
Light and Power Co. Bonds	.120	1,042,000.00	.143	1,265,000.00
Miscellaneous Corporation				
Bonds	.072	644,500.00	.103	908,500.00
Stock other than Bank	.018	157,300.00	.040	352,300.00
Loans on Collateral	.017	144,240.00	.016	136,977.50
Real Estate Mortgages	.123	1,079,440.00	.099	870,490.00
Land Contracts	.010	92,254.77	.009	78,800.55
Real Estate	.012	104,406.51	.012	106,181.51
Special Deposits	.013	112,258.27	.000	4,998.52
Advances and Ledger Bal.	110.	101,126.00	100.	5,826.49
Cash	.003	29,876.38	100.	13,765.28
				-

1.000% \$8,753,618.05 1.000% \$8,816,823.97

The average rate of interest on the above is a trifle over 5% average rate received during the past year was 5.098%. No interest was credited to the premium and discount or the foreclosure profit and loss account, which increases by that amount the average rate upon the productive funds. This rate of income was credited to all special funds except the Roberts Scholarship fund, which is invested in securities given by the donor of the fund and which securities bear 4% and produce the amount required for the scholarship. During the year the Finance Committee has sold the following securities:

\$45,590 of United States of Mexico, Extension 5% bonds @ 9734,

\$29,000 Hornell Gas Light Company bonds @ par,

100 shares of Wells Fargo Company stock @ 475, \$58,000 Davenport and Rock Island Railway 5% @ 102.273, \$4,000 Grant Township, Reno County, Kans. 6% @ 110.50, \$30,000 Republic Iron and Steel Company, 1st Collateral trust 5% bonds

@ 105,

\$25,000 New York Central Lines 5%, equipment trust notes @ 104 1/2, and \$20,000 Agnes City Township, Kansas, 6% bonds @ 111.30, realizing a net profit upon the same of \$35,098.34. By reorganization arrangements the Chicago and Great Western debenture stock held, has been converted into preferred stock, and the Cincinnati Hamilton, & Dayton, collateral trust notes, were converted into general mortgage bonds.

FORM OF REPORT

This report is somewhat changed in form from past issues, particularly in the income and expense statements, in order to follow as far as possible the recommendations and suggestions of the Carnegie Foundation. The result in the expense schedule is not wholly satisfactory. Financially the University is administered as a unit, and except by an entire change in the manner of making appropriations and of accounts, it is impossible to give accurately the college or department items. Also there is an interchange

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of instruction between colleges for which credit can not be accurately estimated. This is particularly true with the College of Arts and Sciences which embraces general and scientific departments, such as Military, Physical Culture, Mathematics, Chemistry, Physics, Geology and Botany, in which probably the majority of instruction is given to students in other courses in the University. The figures in the expense schedule are carefully computed from the actual expenses as shown in the appropriation schedule, but the results do not always fairly show the true situation as between different colleges or departments.

NEW CONSTRUCTIONS AND ALTERATIONS

From the year's income we have met the balance advanced for the construction of Goldwin Smith Hall, the total cost of which was \$353,550.25. Also the last payment on the rebuilding of the heating plant and steam mains made necessary by the construction of Goldwin Smith and Rockefeller Halls, and the other minor increases in buildings. It will be remembered that in the summer of 1908, Sage College and Cottage were thoroughly overhauled and redecorated. Something over \$10,000 of this cost was met this year from the income on the Sage College Endowment and the surplus of income from the building. A balance of \$10,879.51 still remains to be cared for. During the year a new organ was installed in Sage Chapel at a cost of \$13,114.62. \$11,500 was expended in the construction of macadamized roads. The most important being that to Forest Home, the improvement of which made possible, in conjunction with the United States Government, a series of tests of different varieties of road material. Other minor improvements are the addition to the Sibley foundry, the reconstruction of the roof of Cascadilla building and the re-arrangement of White Hall to meet the growth of the College of Architecture.

DONATIONS

Following is a list of gifts to the University which passed through this office. It does not include many donations made directly to the Departments.

Niagara Sprayer Co. for Fellowship	\$ 1,000.00
C. W. Stuart & Co for Fellowship	500.00
Union Sulphur Company for Fellowship	1,500.00
Sarah L. Smith for Scholarship	
J. G. Sullivan for Alumni Fund	1,000.00
Coldwin Conith for Deading and Library C. C. U.S.	125.00
Goldwin Smith for Reading room and Library, G. S. Hall	4,000.00
Willard Fiske Estate for Jennie McGraw Fiske Memorial	2,040.00
Willard Fiske Estate for Jennie McGraw Fiske Memorial " "Willard Fiske Endowment Fund	15,000.00
A. R. Eastman for Prize in College of Agriculture	100.00
Committee on Portrait Dean Huffcut, for purchase of books	64.62
Class '97, for class '97 Fund	143.00
Col. O. H. Pavne, for building changes	15,766.75
" for Medical College, New York City	173,000.00
Charles Alfred Hasbrouck Estate, Homestead and Farm	10,000.00
Payne Whitney, Animal Hospital, Medical College, N. Y. City	1,050.00
Alumnae, Associate Alumnae Scholarship	150.00
Brooklyn Alumni, Fall Creek Gorge Improvements	60.00
Anonymous gift, Research Genito-Urinary Diseases	555.00
Frederick C. Stevens, Hackney Stallion "Volunteer"	2,500.00

SUMMARY OF INCOME

SUMMARY OF INCOME		
Income for the year 1909-10: University at Ithaca (see Schedule I) " New York		\$ 982,696.55 228,667.23
Expended at Ithaca (see Schedule II)	\$990,477.37 220,269.12 27,130.47 6,862.61	\$1,211,363.78 1,244,739.57
plete contracts	0,802.01	
Deficit of Income for year 1909-10		33,375.79
Deduct profits received on securities sold, tran by instruction of Board of Trustees	sferred	146,849.14 42,276.68
Accumulated deficit of Income Aug. 1, 1910		104,572.46
Summarized as follows: Cash deficit	\$ 24,054.14 63,120.55 17,397.77	
	\$104,572.46	
Total Income (Except State Colleges)	\$ 40,661.79 5,427.74	\$1,211,363.78 46,089.53
Received from New York State College of Agriculture (See Schedule I)		379,845.94
		\$1,637,299.25
Received from Carnegie Foundation for pensions to retired Professors		\$ 20,032.41
INCOME DUE SPECIAL FU	NDS	
Agricultural Experiment Station Hatch Fund Agricultural Experiment Station Income Fund Guiteau Student Loan Fund Cornell Infirmary Fund Agricultural Student Loan Fund Class '94, Debate Prize Fund Class '94, Memorial Prize Fund Caroline Corson French Prize Class '08 Fund Fuertes Medal Fund Guilford Essay Prize Fund Luana L. Messenger Prize Fund	466 7,153 29,901 45 129 104 16 101 21 109 17	.00 .83 .46 .52 .28 .27 .31 .81 .05

Carried forward \$40,303.67

Amount brought forward	\$40,303.67	
Polish Students Fund	11.71	
W. C. Seidell Book Fund	119.98	
H. K. White Prize Fund	33.38	
Frances Sampson Fine Arts Fund	30.69	
Woodford Medal Fund	383.20	
Dean Sage Sermon Fund	1,948.50	
Boardman Senior Law Scholarship Fund	18.26	
Mary F. Hall Scholarship Fund	470.87	
Woman's Guild Fund	633.02	
Hydraulic Laboratory Commercial Account	2,012.86	
Alumni Endowment Fund	6.16	
American Peony Society	200.00	
Musical Entertainments	358.80	
N. Y. Medical College	8,916.12	
Loomis Laboratory	324.61	
J. M. Polk Prize Fund	84.47	
Library Endowment Fund	1,044.00	
Flower Library Endowment Fund	38.28	
Barnes Library Endowment Fund	17.40	
Lucy Harris Book Fund	3.48	
W. Fiske Petrarch Book Fund	20.88	
W. Fiske Icelandic Book Fund	27.84	
W. Fiske Icelandic Salary Fund	29.40	
W. Fiske Publication Book Fund	17.40	
Sage Athletic Field	27.40	
Mechanical Laboratory Commercial Account	602.36	
Judson N. Smith Scholarship Fund	16.98	
Town of Spencer Scholarship Fund	73.45	
Classical Studies	43.83	
Physical Review	537.81	
Niagara Sprayer Company Fellowship	.04	
Herman Frasch Fellowship	1,269.28	
C. W. Stuart & Company Fellowship	83.40	
Padgham Scholarship	133.84	
Goldwin Smith Hall Library	3,315.24	
	Q62 == Q6:	
Less amount due income Hiram Corson Browning Prize	\$63,158.61	
Less amount due income imain corson browning i rize	30.00	
	\$63,120.55	
RE-APPROPRIATIONS	Ψυ3,120.33	

To complete the contracts of last year it will be	necessary to	reappro-
priate the following amounts:	3	
Architecture		
Archaeology	1,499.41	
Classical Studies	. 634.31	
School of Education		
Elocution and Oratory		
English		
French		
Casala	****	

Carried forward \$3,492.12

21.91

524.74 21.61 39.77 32.52

.56

Greek

American History
Ancient History
Mediaeval History
Modern European History

Latin

Amount bounts Commed		100 10	
Amount brought forward			
Philosophy		322.21	
Psychology		751.35	
" Ctatistics		13.91	
" " Statistics	*****	58.23	
Fublishing Studies		297.20	
Semitics		7.45	
Astronomy		5.55	
Botany Second	* * * * *	72.43	
Botany Special		67.09	
Chemical		1,847.04	
Geology		470.47	
Mathematics Goldwin Smith Trenches		101.39	
Procuriels & Department Lends		259.74	
Preswick & Popplewell Lands		250.00	
Civil Engineering		2,550.20	
Library		2,635.68	
" Bacteriology		358.47	
" Histology		202.51	
" Physical Diagnosis		56.30	
Advertising and Lectures		285.30	
Beebe Dam Changes		89.38	
Memorial Tablets		535.18	
Military		10.31	
Physical Culture		122.12	
Mechanical		,125.20	
Carnegie Filter		301.66	
Sibley Foundry Extension		800.00	
Morrill Hall changes		180.00	\$17,397.77
	_		4-11091-11
CASH STATEMENT			
Cash on hand August 1, 1909 \$	50.85	5.86	
Received August 1, 1909 to Aug. 1, 1910	3.154.46	1.08	
	* 10. 9. 10. 10.	- \$3	214,317.84
Disbursed Aug. 1, 1909 to Aug. 1, 1910			,159,444.47
		_	
			\$54,873-37
On deposit in First Nat'l Bank, Ithaca	30,73	0.63	
" Guaranty Trust Co., New York	8,41		
" First Nat'l Bank, Ithaca, on ac-		Dec. of Contract	
count State College of Forestry	8,98	3.00	
Cash and drafts in Office	6,73		
_			
	\$54,87	3.37	

PRODUCTIVE FUNDS

	IRODUCII	VE FUNDS		
	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Agricultural Student Loan Fund:	2404	400	36.5	******
Gift of the School of Practical Agriculture and Horticulture at Briercliff, N. Y., to aid students in the Agri-				
cultural College who are working				
Established, 1908	\$298.01		\$298.01	\$15.19
Alumni Fund: Consists of the contributions of Alumni through the Cor-		*		
nellian Council Alumni Loan Fund: Money advanced by		\$2,550.37	2,550.37	72.60
Alumni to guaran- tee expenses of the Cornellian Council Alumni Endowment		2,970.00	2,970.00	
Fund: Gift of Alumni to the Endowment fund of the University,				
Established 1908 Barnes Library Endowment Fund: Gift of Mrs. Harriet Barnes Newberry and A. Victor Barnes in memory of their father, the late Alfred Cutler Barnes. Estab-	125.00	125.00	250.00	12.74
lished 1904 Mrs. A. S. Barnes Shakespeare Prize Fund:	5,000.00		5,000.00	254.90
Gift of Mrs. A. S. Barnes, the income to be appropriated as a prize to the undergraduate student, who shall present the best essay upon the writings of Shakes- peare. Estab-				
lished 1887	1,000.00		1,000.00	50.98
Carried forward	\$6,423.01	\$5.645.37	\$12,068.38	\$406.41

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward Cottage Renewal Fund: Consists of the sur-	\$6,423.01	\$5,645.37	\$12,068.38	\$406.41
plus income from the Campus Cot- tages owned by the University, in excess of 5½% of the investment value transferred annually to cur- rent income; the fund to be held to renew the cottages or replace the in- vestment therein. Established in				and the second
Philo Sherman Ben-	9,436.93	1,532.32	10,969.25	559.19
nett Fund: Gift from the estate of Mr. Bennett the income to be used for a prize for the best essay discussing the Principles of Free Government. Established 1905	400.00		400.00	20.39
Class '86 Memorial Prize Fund: Gift of the Class of 1886, the income to be awarded an- nually as a prize				
in Junior Oratory	1,886.00		1,886.00	96.14
Class '91 Memorial Fund: Gift of Class of 1891, the income to be added to the principal until class action. Estab-		*		
lished 1891	580.54	29.59	610.13	29.59
Class '94 Memorial Prize Debate Fund: Gift of the Class of 1894, as a founda- tion of a prize				
in debate	500.00		500.00	25.49
Carried forward	\$19,226.48	\$7,207.28	\$26,433.76	\$1,137.21

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward Class '96 Memorial Fund: Gift of the Class of 1896, as a nucleus for a fund which shall be used for the establishment of a University	\$19,226.48	\$7,207.28	\$26,433.76	\$1,137.21
Club	869.57	44.33	913.90	44-33
versity Club Class of '98 Memorial Fund: Gift of Class of 1898 to be added to the fund for the estab- lishment of a Uni-	1,293.46	226.71	1,520.17	73.71
Versity Club Class of 1908 Fund: Established by Class of 1908 to be invested with University funds, the income less 5% transferred to University Surplus Fund to be paid over to Class Secretary. When no longer needed by the Class the fund is to revert to the University for general University purposes unless the Class at some regular meeting designate a particular University purpose for its	376.06	19.16	395.22	19.16
use. Established	1,480.41		1,480.41	73.47
Carried forward	\$23,245.98	\$7,497.48	\$30,743.46	\$1,347.88

Income

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward College Land Scrip Fund:	\$23,245.98	\$7,497.48	\$30,743.46	\$1,347.88
Consists of the proceeds received by the State of New York from the sale of the Land Scrip apportioned to the State by the U. S. under the Morrill Act of 1862	688,576.12		688,576.12	34,428.80
Cornell Endowment Fund: Consists of the \$500,- 000 given by Ezra Cornell, pursuant to his agreement with the State, for the founding of the University, together with the net profits derived from the sale of lands located un- der the scrip pur- chased by him under his contract with the State, of Aug. 4, 1886	4,927,936.38	2,186.45	4,930,122.83	251,474-39
Cornell Endowment Reserve Fund: Established in 1898 by setting aside the Land Con- tracts and pro- ceeds from future sales of Western Lands, the prin- cipal and income				4
to be used only for addition to Cornell Endowment Fund	522,020.00	2,480.39	524,500.39	26,612.57
Carried forward	\$6,161,778.48	\$12,164.32	\$6,173,942.80	\$313,863.64

	Aug, 1		Aug. 1,	Income received during year
Brought forward	\$6,161,778.48	\$12,164.32	\$6,173,942.80	\$313,863.64
Cornell Infirmary				
Fund:				
Gift of Messrs. Dean and William H.				
Sage, the income				
to be used for the				
Maintenance and				
needs of the Cor-				
nell Infirmary, established by				
them as a me-				
morial to their				
father, Henry W.				
Sage, said In-				
firmary being the former residence				
of Henry W. Sage				
and valued at				
\$60,000. Estab-	100 000 00			2410.22
lished 1897	100,000.00		100,000.00	5,098.00
Caroline Corson French				
Prize Fund: Gift of Professor				
Hiram Corson in				
memory of his wife				
Caroline Rollin				
Corson, the in-	No.			
ed as a French				
Prize. Establish-				
ed in 1902 as a				
Dante Prize and converted into a				
French Prize in				
1905	1,219.11	62.14	1,281.25	62.14
Hiram Corson Brown-				
ing Prize Fund:				
Gift of Professor				
Hiram Corson, the income to be				
awarded as a				
Browning Prize.				
Established 1902	1,051.80		1,051.80	53.63
0			•	

Carried forward \$6,264,049.39 \$12,226.46 \$6,276,275.85 \$319,077.41

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward	\$6,264,049.39	\$12,226.46	\$6,276,275.85	\$319,077.41
Daughters of the Revo-	The state of the s			
lution Endow-				
ment Fund:				
Gift of Miss Mary F.				
Hall, in honor of				
the N. Y. State				
Society of the				
Daughters of the				
Revolution, the				
come to be added		411		
to the fund during				
Miss Hall's life-				
time and then,				
provided principal				
amounts to \$1,000				
to be used for the				
publication of such				-
original studies in				
American History				
as are of perma-				
nent value, or as a				
suitable prize or				
prizes for research				
of superior attain-				
ments in Ameri-				
can History. Es-				
tablished 1908	524.65	26.71	551.36	26.71
Fayerweather Fund:	324.03	20.7-	333-	
Gift under the will of				
Daniel B. Fayer-				
weather, Estab-				
lished 1892	323,684.59		323,684.59	16,501.41
Willard Fiske Library	0-07		0-311-09	
Endowment Fund				
Gift under the will				
of Willard Fiske,				
to be used and ex-				
pended for the				
uses and purposes				
of the Library of				
the University.				
Established 1906	427,531.00	15,000.00	442,531.00	22,145.52
Willard Fiske Iceandic	7-7133	-31	44-133-1	1-43.3-
Book Fund:				
Gift under the will of				
Willard Fiske, the				
income to be used				
for the purpose of				
making additions to the Icelandic				
Collection in the				
Library of the				
University. Es-				
tablished 1906	8,000.00		8,000.00	407.84
	0,000.00			407.04
Carried forward	\$7,023,789.63	\$27,253.17	\$7,051,042.80	\$358,158.89

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward	\$7,023,789.63	\$27,253.17	\$7,051,042.80	\$358,158.89
Willard Fiske Icelandic				
Salary Fund:				
Gift under the will of				
Willard Fiske, the				
income to be used				
for the purpose of				
paying the salary				
of an Icelandic				
amanuensis, whose				
time shall be given to the care of the				
Icelandic collec-				
tion, and who				
shall be a native				
of Iceland, edu-				
cated, or princi-				
pally educated in				
Iceland, and re-				
commended for				
the said work by				
the Rector of the				
Latin School of				
Reykjavik. Es-				
tablished 1906	30,000.00		30,000.00	1,529.40
Willard Fiske Petrarch				
Book Fund;				
Gift under the will of				
Willard Fiske, the				
income to be used				
for the purpose of				
increasing the Petrarch and				
Dante collections				
in the Library of				
the University.				
Established 1906	6,000.00	re-	0.000.00	405.88
	.,		10,000,000	703.00
Willard Fiske Petrarch				
Salary Fund: Gift under the will of				
Willard Fiske, the				
income to be used				
in paying the				
salary, or a part				
of the salary of, a				
capable amanuen-				
sis, a portion of				
whose time shall				
be given to the				
care of the Petrarch				
and Dante collec-				
tions. Established	-			91111-91
1906	12,000.00		12,000.00	611.76
Carried forward	\$7,071,789.63	\$27,253.17	\$7,099,042.80	\$360,605.93

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward Willard Fiske Icelandic Publication Fund: Gift under the will of Willard Fiske, the income to be used for the purposes of the publication of an annual vol- ume relating to Iceland and the Icelandic collec- tion in the Library	\$7,071,789.63	\$27,253.17	\$7,099,042.80	\$360,605.93
of the University. Established 1906 R. P. Flower Library Endowment Fund: Established in 1901 by a gift of Mrs. Sarah M. Flower of \$10,000 the in- come to be used for the purchase and binding of books and periodi- cals for the Ros- well P. Flower Li- brary, founded by Governor Flower for the Veterinary College by a gift of \$5,000 in 1897. \$1,000 remaining unexpended at the time of his death	5,000.00		5,000.00	254.90
is added to the endowment Fuertes Medal Fund: Gift of the late Estevan A. Fuertes, the income to provide two medals, to be awarded annually; one to the student graduating, who has maintained the highest degree of scholarship during his four years; the other to the graduate, who may write a meritorious paper on some engineering sub-			11,000.00	560.78
ject. Established in 1893	1,000.0	0	1,000 0	50.98

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward	\$7,088,789.63	\$27,253.17	\$7,116,042.80	\$361,472.59
General Fund:				
Consists of the en-				
dowment of not				
less than \$100,000				
available for main-				
tenance of Rocke-				
feller Hall; re- quired as a condi-				
tion precedent to				
John D. Rocke-				
feller gift	106,000.00		106,000.00	5,403.88
Guiteau Student Loan	100,000.00		100,000.00	3,4-3,000
Fund:				
Gift under the wills				
of Frederick W.				
Guiteau and Mrs.				
Nancy G. Howe				
(\$94,689.03) the				
income to be used				
in advancing and				
assisting needful				
worthy young men	L.			
in pursuing their				
studies in the Uni-				
versity. Estab-		0.0		
lished 1904	231,078.59	3,178.38	234,256.97	11,042.30
Guilford Essay Prize				
Fund.				
Gift under the will of				
James B. Guilford to establish a prize				
the object where-	,			
of shall be the				
promotion of a				
high standard of				
excellence in Eng-				
lish prose compo-				
sition. Estab-				
lished 1902	3,000.00		3,000.00	152.04
Mary F. Hall Scholar-				
ship Fund:				
Gift of Miss Mary F.				
Hall, the income				
to be paid to her				
during her lifetime	,			
and at her death				
to be used for				
scholarships. Established 1902	16 100 00		16 100 00	9
Established 1902	16,500.00		16,500.00	841.17

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Lucy Harris Book Fund: Gift of George W. Harris, as a me-	\$7,445,368.22	\$30,431.55	\$ 7,475,799.77	\$379,812.94
morial to his wife, Lucy Thurber Harris, the income to be expended each year in the purchase of Eng- lish Poetry of the Victorian Era, and of biography and criticism con- nected therewith. Established 1893	1,000.00		1,000.00	50.98
Law School Fund: Gift of Douglass Boardman, the income to be used for a Law Prize.				
Established 1887 Henry W. Sage Library Endowment Fund: Gift of Henry W. Sage for endowment of Library.			2,000.00	101.96
Susan E. Linn Sage Professorial Fund: Gift of Henry W. Sage to endow the Chair of Ethics and Philosophy.	300.000,00		300,000.00	15,294.00
Established 1885 Susan E. Linn Sage School of Philoso- phy Fund: Gift of Henry W. Sage to enlarge the basis of the Susan Linn Sage Foundation and establish the Su- san Linn Sage School of Philoso- phy. Established	50,000.00		50,000.00	2,549.00
1891	200,000,00		200,000.00	10,196.00

Income

	Aug. 1,	Additions during year	Aug. 1,	received during year
Brought forward	\$7,998,368.22	\$30,431.55	\$8,028,799.77	\$408,004.88
Loomis Laboratory				
Fund:				
Consists of the En- dowment of the				
Loomis Labora-				
tory turned over				
to the University				
by the Trustees				
at the time the				
Laboratory was				
transferred to Cor- nell. Established				
1899	118,176.79		118,176.79	6,024.61
Luana L. Messenger			4	
Prize Fund:				
Gift of H. J. Messen-				
ger in memory of his mother, for an				
annual prize to				
the student writ-				
ing the essay giv-				
ing evidence of the best research				
and most fruitful				
thought in the field				
of human progress,				
or the evolution of civilization.				
Established 1902	1,000.00		1,000.00	50.98
Frank William Padg-	0.12-0.00			4
ham Scholarship:				
Gift of Amos Padg-				
ham, to found a				
scholarship in Sibley College in				
memory of his son.				
Established 1892	3,000.00)	3,000.00	152.94
Polish Student Loan				
Fund:				
Gift from Polish stu- dents at Cornell				
to be disbursed to				
candidates pre-				
sented by mem-				
bers of the Polish				
Club of the University. Estab-				
lished 1909	134.00	*34.0	0 100.00	5.10
	-34	34.9	-	3.77

Carried forward \$8,120,679.01 \$30,397.55 \$8,151,076.56 \$414,238.51

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward \$8,	120,679.01	\$30,397.55	\$8,151,076.56 \$	414,238.51
John Metcalf Polk Prize Fund: Gift of Wm. M. Polk to found a prize in the Cornell Medical Col- lege at N. Y. in mem- ory of his son. Es- tablished 1905	10,000.00		10,000.00	509.80
Professorial Pension Fund: Anonymous gift of \$150,000 to found a pension fund for full professors, excluding professors in the Medical College in New York City, or in State or National In- stitutions at Ithaca or elsewhere, toge- ther with the income received thereon.				
Established 1903	204,936.22	10,447.63	215,383.85	10,447.63
Professorial Pension income Fund: Consists of the payments of professors admitted to the benefits of the Pension Fund, with accrued income	16,280.32	3,737.46	20,017.78	970.96
Charles H. Roberts Scholarship Fund: Gift of Charles H Roberts of Oakes, Ulster Co., New York, the income to be used in the payment of five equal annual scholarships in the College of Agriculture, and open to all races of mankind, regardless of color, or political, or religious creeds, of good moral character and required qualifications, preference to be given to intelligence, and financial inability. Estab-				
lished 1906	30,000.00		30,000.00	1,200.00

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward Sage College Endow- ment Fund: Gift of Henry W. Sage. Established	\$8,381,895.55	\$44,582.64	\$8,426,478.19	\$427,366.90
1872 Dean Sage Sermon Fund: Gift of Dean Sage in	109,300.00		109,300.00	5,548.10
1872, as an endowment of Sage Chapel and increased by recent gifts from Mrs. Sage	75,000.00		75,000.00	3,823.50
Frances Sampson Fine Arts Prize: Gift of Professor Martin W. Sampson in memory of his wife to be awarded in books or artistic reproductions and not in money, to that student in the University who shows the most in- telligent apprecia- tion of the graphic arts and architec- ture. Established				
Wm. C. Seidell Book Fund: Gift of Mr. and Mrs. Gerritt S. Miller, the income to be used to purchase books for poor young men work- ing their way through the College of Civil Engineering. Es-	600.00		600.00	
tablished 1905 Sibley College Endow- ment Fund: Gift of Hiram Sibley.	1,000.00		1,000.00	50.98
Established 1884	50,000.00		50,000.00	2,549.00
Carried forward	\$8,617,795.55	\$44,582.64	\$8,662,378.19	\$439,369.07

	Aug. 1, 1909	Additions during year	Aug. 1,	income received during year
Brought forward	\$8,617,795.55	\$44,582.64	\$8,662,378.10	\$439,369.07
Judson N. Smith				
Scholarship Fund				
Gift of Mrs. Sarah L.				
Smith to found a				
scholarship in the				
College of Civil				2
Engineering in memory of her son				
and to be award-	,			
ed, under such				
rules as the Uni-				
versity may en-				
act on the basis				
of intelligence and				
financial inability,				
provided, how-				
ever, that the stu- dent must be of				
good, moral char-				
acter and meet the				
required qualifi-				
cations. Interest				
at the rate of 4				
per cent upon the				
fund to be paid to				
Mrs. Smith during her lifetime, the				
Scholarship taking				
effect at her death		1,000.00	1,000.00	16.98
Town of Spencer		PARTE S		
Scholarship for				
Young Women Fu	nd:			
Gift of Miss Mary F.				
Hall, to found a				
scholarship for young women of				
the town of Spen-				
cer, N. Y., the in-				
come, however,				
to be paid to her				
during her lifetime	2,500.00		2,500.00	127.45
Surplus Fund:				
Consists of 5% on annual income to				
cover such losses				
as may occur				
through bad in-				
vestments, fire or				
otherwise. Estab-				
lished 1886. Ac-				
cumulations used				
for purchase of land and erection				
of buildings		760.80	4,202.14	175 42
or bundings	3,441,34	700.00	4,202.14	175.43
Canadad formers	e0 6 6 0		. 40 6== =0==	· C 600

	Aug. 1,	Additions during year	Aug. 1,	Income received during year
Brought forward H. K. White Prize Fund: Gift of Horace K.	\$8,623,736.89	\$46,343.44	\$8,670,080	33 \$439,688.93
White, the income to be awarded as prizes to meritor- ious students in Veterinary Science	500.00		500.	.00 25.49
Women's Guild Fund: The gift of women interested in the University, the in- come to be used				
to aid needy sick students. Estab- lished 1892	6,557.41		6,557	.41 334.20
Women Student's Loan Fund: Consists of former Student Loan Fund, the income to be loaned to needy women	91337.47		***************************************	41 334.24
Woodford Medal Fund: Gift of Trustee Stewart L. Wood- ford for prizes in Oratory, Estab-		568.03	7,636.	
lished 1870	2,500.00	0.6	2,500	
*Decrease.	\$0,040,302.50	ф40,911.47	Ф0,007,274	.05 \$440,546.52
	TOTAL P	ROPERTY		
Productive Funds Income due Special Fur Premium and Discount Profit on Foreclosure Pr	ids			\$ 8,687,274.05 63,120.55 125,316.43 28,287.63
Loss definit of Income	not including	amount		\$ 8,903,998.66
Less deficit of Income due to complete contr (See Security list Sched	acts			87,174.69
Real Estate (See Schede		\$2	,895,041.46	\$ 8,816,823.97
Equipment (See Schedu			,819,772.98	5,714,814.44
Total property exclusiv State College Buildings State College Equipmen	*********	\$	471,796.67 174,739.73	\$14,531,638.41 646,536.40
				\$15,178,174.81

Western Lands remaining unsold:
In Wisconsin
In Minnesota
In Minnesota
I,459.37 Acres
40.
I,499.37
Respectfully submitted,
E. L. WILLIAMS,
Treasurer.

SCHEDULE I

II	COME	
UNIVERSITY AT ITHACA.		
Income from students:		
Tuition, Regular	\$272 162 00	
Summer Session		
	01	Ø
Student notes	2,439.75	\$339,769.49
Incidental Fees:		
Graduation Fees	7,774.10	
Gymnasium Fees	7,010.00	
Matriculation Fees	7,235.00	
Infirmary Fees		
" Extras	2,600.96	41,187.06
Liating and an arrange	2,009.90	41,107.00
Laboratories:		
Botanical	2,130.00	
Chemical	27,255.76	
Civil Engineering	514.50	
Political Science		
Geological		
Histological	572.00	
Sibley	22,542.50	
Anatomical	442.08	-
Neurological	216.00	
Physical	3,449.00	
Physical Culture	1,280.75	
Physical Geography	79.00	20 026 TA
Thysical Geography	79.00	59,936.19
Dormitories:		
Sage College	12,895.40	
Sage Cottage	2,791.00	15,686.40
Income from Investments (See Productive Funds): From Invested Funds Land Grant Act, July 2, 1862	406,117.72	440,546.52
Congressional Industrial Fund:		
Morrill Act Aug. 30, 1890	25,000.00	
Nelson Act March 4, 1907	15,000.00	40,000.00
Experiment Station		
Hatch Act, March 2, 1887	13,500.00	
Adams Act, March 16, 1906	8,775.00	
Income	43.06	22,318.06
	73	3-10-3-2
Gifts for Current Expenses:		
Agricultural Debate Prize	100.00	
Huffcutt Memorial Book Account	64.62	
Goldwin Smith Library	4,000.00	
Fall Creek Gorge Improvement	60.00	
Fiske Memorial	2,040.00	
Niagara Sprayer Co., Industrial		
Fellowship	1,000.00	
C. W. Stuart & Co., Industrial		
Fellowship	500.00	
Amount forwarded	\$7,764.62	\$959,443.72

Amount brought forward	\$2 264 62 5	959,443.72	
Gifts for Current Expenses: Herman Frasch Industrial Fellow	47,704.02	939,443-7-	
	* ****		
Associate Alumnae Scholarship	1,500.00	9,414.62	
Associate Ardiniae Scholarsinp	150.00	9,414.02	
Rents:			
Cornell Co-Operative Society	\$1,391.90		
Bovier House	120.00		
Cascadilla Building	7,053.65		
Casey Farm House	51.00		
Curran Farm House No. 1	168.00		
" " No. 2	84.00		
	110.00		
Dwyer House	120.00		
Ground Rent, Professors Cottages	42.00		
Judd Farm House	165.75		
Military Hall and Gymnasium Mitchell Farm House	160.00		
Morse Hall Rent	173.50		
Ostrander Farm House	72.00		
Rose Farm House	72.00		
Ryan Farm House	42.50		
Smith-Guinnip Farm House	48.00		
Hungerford Farm House	97.50		
Safe Deposit Box Rent	100.00	10,321.8	
Civil Engineering Commercial Acc't Mechanical Laboratory Commercial	200.00		
Account	912.58		
Mechanical Department			
Musical Entertainments	773.37		
Physical Review	6,140.98		
Physical Review	0,140.90		
Political Science	63.99		
Publishing Classical Studies	43.83		
Ten Year Book	74.10		
Interest on Student Notes	869.52		
Interest on Infirmary balance	950.00	10,050.37	
		.0	
Deduct transferred to Medical Acc't		989,230.51	
at New York City			
Inc. on Loomis Laboratory Endow-			
ment	6,033.96		
Inc. on J. M. Polk Prize Endowment	500.00	6,533.96	\$982,696.55
	-	1333.3-	+31-303
UNIVERSITY AT NEW YORK.			
Income from Students:			
	4-6		
Tuition, Regular	\$16,355.00	0	
e peciai courses	1,471.00	\$17,826.00	
Incidental Fees:			
Final Examinations	1,700.00		
Matriculation	225.00		
Hospital Quiz	950.00	2,875.00	
	-		Mary 2 2015
Amounts forwarded		\$20,701.00	\$982,696.55

Amount brought forward		\$20,701.00	\$982,696.55
1st year	455.00		
2d "	105.00		
3d "			
	2,065.00		
	1,750.00	1 0 0 0 0 0	
Breakage	1,140.00	5,515.00	
Income from Investments:			
Loomis Laboratory Endowment	6,033.96		
John M. Polk Prize Fund	500.00	6,533.96	
John St.	300.00	0,333.4	
Gifts for Current Expenses:			
O. H. Payne	173,000.00		
O. H. Payne, Build g Altera-			
tions	15,766.75		
Payne Whitney Animal Hospital .	1,050.00		
Research Genito Urinary Diseases	555.00	100 271 75	
Research Gentio Cilitary Diseases	555.00	190,371.75	
Dispensary	4,793.05		
Telephone	231.40		
Loomis Laboratory	180.76	2 212 22	0 664
Interest on Deposits	340.31	5,545.52	228,667.23
9 V			\$1,211,363.78
STATE VETERINARY COLLEGE.			
Income from Students:			
Tuition	\$1,000.00	\$1,000.00	
Laboratory Fees:			
Anatomy	576.00		
Bacteriology	446.00		
Materia Medica	247.25		
Pathology	195.00		
Physiology	235.20		
Urine Analysis.	119.35		
Surgery	260.00	2.078.80	
ouigny		2,070	
Income from grant by State:			
For Maintenance, Chap. 432,			
Laws 1909	35,000.00		
Laws 1909	140400000000000000000000000000000000000		
433, Laws 1909	5,661.79	40,661.79	
n In			
Experimental Farm	25.30		
Rent, Grooms Cottage	25.00		
Clinics and Medicine	1.574.70		
Tuberculine, etc	614.37		
Miscellaneous	109.57	2,348.94	46,089.53
6			
STATE AGRICULTURAL COLLEGE.			
Income from students: Fees:			
Agriculture	\$3,682.50		
Biology	810.00		
Dairy	198.05		
27411)	- 90.03		
Amounts forwarded	\$4,699.55		\$1,257,453.31

Amount brought forward	\$4,699.55		\$1,257,453.31
Fees:			
Entomology	416.00		
Farm Crops	101.25		
Farm Management	32.00		
Farm Mechanics	448.00		
Floriculture	10.50		
Home Economics	340.00		
Horticulture	299.00		
Plant Breeding	211.50		
" Pathology	521.25		
Thysiology	391,95		
Soils	359.50		
Winter Courses	5,050.30	\$12,896.80	
Winter Courses	5,050.30	Φ12,0Q0.00	
Income from grant by State: Maintenance Appropriation Chap.			
432, Laws 1909	175,000.00		1.0
For extension work, Chap. 466,			
For extension work, Chap. 433,	6,505.32		
Laws 1909	8,377.62		
For Barns, Chap. 433, Laws 1909	22,481.16		
" Glass Houses, Chap. 466, Laws			
"Equipment, Chap. 578, Laws	22,996.25		
1907	5,665.45	241,025.80	
Income from Sales and Services:			
Animal Husbandry	29,280.42		
Dairy Industry	82,331.26		
Dairy Industry	4,170.47		
Grape Rot Experimental Vineyards	3,649.07		
Horticulture	400.06		
Poultry Husbandry	4,831.35		
Miscenaneous	290.51		
Sale of old type, books, etc.	970.20	125,923.34	379,845.94
			\$1,637,299.25
Scher	ULE II		4-1-3/1-44-3
EXP	ENSES		
University at Ithaca.			
DEPARTMENTAL EXPENSES. (De-			
tails in Schedule III) College of Arts and Sciences	\$200 101 60		
College of Agriculture	21,700.00		
College of Architecture			
"Civil Engineering	21,349.72 63,633.44		
" Law	26,822.84		
" Medicine (at Ithaca)	32,177.58		
Sibley College of Mechanical En-	3-1-11.30		
gineering	116,894.23		\$604,982.49
Graduate School	1,501.11		
Library	39,131.22		
Summer Session	25,000.00		
Amount forwarded	\$65,632.33		

Amount brought forward.... \$65,632.33 \$604,982.49 DEPARTMENTAL EXPENSES:

DEPARTMENTAL EXPENSES:	************	***************************************	
Federal Agricultural Experiment			
Station, Hatch	13,540.13		
Federal Agricultural Experiment	13,340.13		
Station, Adams	11,631.51		
Federal Agricultural Experiment			
Station Income	37.04	90,841.01	
	37.54	3-1-4	
		MEC	
ADMINISTRATION AND GENERAL EXPE	NSES.		
Salaries, President's Office	12,160.00		
" Registrar's Office	4,580.00		
" Treasurer's Office	13,175.00		
Miscellaneous	7,856.49		
Advertising and Lectures	473.15		
Attorney's Fees and Expenses	1,500.00		
Chimer	240.00		
Contingent	11,902.78		
Insurance	1,109.87		
Printing and Stationery	5,500.00		
Reading Examination Papers	600.00		
Register	5,000.00		
Sage Chapel Preachers	3,300.00		
Sage Chapel Expenses	750.00		
Infirmary \$10,776.00			
" Outside 3,562.15	14,338.15		
Sage College	10,935.71	93,430.15	
FELLOWSHIPS, SCHOLARSHIPS AND PRIZE	ZES.		
Fellowships, University	11,516.65		
Scholarships, University	11,300.00		
C. H. Rol erts Scholarship	1,200.00		
Associate Alumnae Scholarship	150.00		
Boardman Senior Law Scholarship	100.00		
Agriculture Debate Prize	100.00		
Mrs. A. S. Barnes Shakespeare			
Prize	50.00		
Class 86 Memorial Prize	86.00		
Class '94 Debate Prize	25.00		
Hiram Corson Browning Prize	50.00		
Fuertes Medals	50.00		
Guilford Essay Prize	150.00		
Fran is Sampson Fine Arts Prize .	29.48		
Sibley Prizes	100.00		
H. K. White Veterinary Prize	25.00		
Woodford Medal Prize	100.00		
	020 70		
Ship Niagara Spra er Co. Industrial	230.72		
Fellowship	000.06		
Fellowship C. W. Stuart & Co., Industrial	999.96		
Fellowship	416.60	26,679.41	
renowship	410.00	20,079.41	
Amount forwarded			\$815,933.06
Titllouing for her seed to the territory			***************************************

Amount brought forward		\$815,933.06
OPERATION AND MAINTENANCE OF PLA		-
Care of Buildings (general)	2,330.00	
Ornamentation and care of grounds	7,000.00	
Road Construction	11,500.00	
Playground	792.67	
Electric Light and Power Labor	3,200.00	
Electric Service	1,600.00	
Firel	15,036.14	
Fuel		
Organ Panaira	3,842.16	
Organ Repairs	25.00	
Water Works	1,896.39	47,222.36
REPAIRS:		
General	\$13,993.10	
Extra Summer 1000	6,775.00	
Steam, Water and Sewers	4,264.63	
Beebe Dam	410.62	
Goldwin Smith Hall trenches	740.26	
Morse and Sibley Wiring	1,592.29	
Sibley College redecorating	350.00	28,125.90
orately contagning containing con	330.00	20,125.90
V 6		
New Construction and Alteration		
Foundry addition	1,000.00	
Carnegie Filter Plant	108.34	
Cascadilla roof and gutter	826.00	
Eddy dam bridge	250.00	
White Hall changes for Architect-		
ure	1,100.00	
Morrill Hall alterations	320.00	
Central Ave. Steam Mains 1908 bal.	1,463.86	
Sage College repairs, 1908 on ac-		
count	10,298.79	
Goldwin Smith Hall, balance build-	1115 2116	
ing account	34,643.80	
Sage Chapel Organ	13,114.62	
Memorial Tablets	364.82	63,490.23
	-	011755-0
MISCELLANEOUS:		
Mary Bartlett Hill Fund to C. U.		
C. A	111.50	
Mary F. Hall, Income from scholar-		
ship funds	950.00	
ship funds	24.55	
Guiteau Loan Fund	8,942.50	
Contribution to American Classi-	2134-21-	
cal School, Athens	250.00	
Contribution to American Classi-	230.00	
cal School, Jerusalem	100.00	
Contribution to American Classi-	100.00	
col Cohool Pome	250.00	
cal School, Rome	250.00	
C. U. Athletic Association rent		
Automatic Stoker experiment	399.88	
Amounts forwarded	\$11,228.43	\$954,771.55

America Inc.		Was a large and	
Amount brought forward	\$11,228.43	\$954,771.55	
MISCELLANEOUS:			
Committee on Emblem	250.00		
C. U. C. A. Handbook Annuities under W. Fiske will,	100.00		
Annuities under W. Fiske will.	6.610.000		
W. O. Fiske	404.24		
Grimsey	1,000.00		
M. Monzecchi	2,200.00		
W. L. Mitchell, Interest	225.00		
Preswick Annuity	300.00		
C. Preswick rights in Fall Creek	250.00		
Classical Studies	.45		
Philosophical Review	1,000.00		
Philosophical Review	5,603.17		
History and Political Science	3,003.17		
Studies	266.54	22,827.83	
	200.34	22,027.03	
		977,599.38	
Add amounts transferred to princi-		2111233.0	
pal of fund, viz:			
5% of general income (not includ-			
ing income on special funds)			
transferred to surplus fund	37,585.37		
Less restored to Income by order	3113-3.31		
Board of Trustees	37,000.00		
	- 371		
Balance transferred to Surplus			
Fund	585.37		
Alumni Fund	72.60		
Caroline Corson French Prize Fund	62.14		
Class 'or Memorial Fund	29.59		
Class '96 " " "	44.33		
Class '97 " "	73.71		
Class '98 Alumni Hall Fund	19.16		
Professorial Pension Fund	10,447.63		
Professorial Pension Fund income	970.96		
Daughters of American Revolu-			
tion Prize Fund	26.71		
Woman's Loan Fund	370.36		
Surplus	175.43	12,877.99	\$990,477.37
			56400000000
A CONTRACTOR OF THE CONTRACTOR			
University at New York.			
Salaries of Instruction and Research			
Officers of Instruction	\$109,143.24		
Chiefs of Clinic	1,899.84	\$111,043.08	
Departmental Expenses:			
Anatomy	663.39		
Chemistry	1,653.94		
Clinical Pathology	2,172.83		
Experimental Pathology	1,521.98		
Experimental Therapeutics	4,289.18		
Gynecology	13.40		
Laryngology	32.58		
Materia Medica	422.07		
Medicine	114.97		
	0.00		*********
Amounts forwarded	\$10,884.34	\$111,043.08	\$990,477.37

Amount brought forward			
Departmental Expenses:	\$10,884.34	\$111,043.08	\$990,477.37
Neurology	165.63		
Ophthalmology	10.00		
Otology	7.95		
Obstetrics	114.88		
Operative Surgery	48.61		
Orthopedics Pathology	.30		
Pharmacology	4,075.57		
Photography	487.73		
Pediatrics	17.24		
Physiology	8,497.19		
Surgery	101.15		
X-Ray	197.01		
Dispensary	4,266.57		
Loomis Laboratory	2,774.88		
Medical College Laboratory	368.98		
Hospital Quiz	1,500.00	34,122.15	
Administration and General Expenses	s:		
Salaries Clerk and Staff	4,320.00		
" Secretary and Assistant .	2,400.00		
Insurance	2,217.94		
Advertising	816.64		
Announcements	1,074.94		
Contingent	234.49		
Postage	170.00		
Printing	746.52		
Breakage refunds	416.50		
Prizes	500.00		
Animal Hospital	891.22		
Animals and Food	501.77	15,402.59	
Operation and Maintenance of Plant:			
Salaries	37,253.12		
Janitor's Supplies	355.25		
Engineer's Supplies	1,693.07		
Fuel	6,236.56		
Gas	665.12		
Water	1,560.30		
Furniture	439.33		
Miscellaneous	1,375.75		
Repairs	1,271.57	******	222 262 22
Alterations	8,851.23	59,701.30	220,269.12
B. B.			
STATE VETERINARY COLLEGE.			
Salaries of Instruction Departmental Expenses	\$24,808.31 6,475.86	\$31,284.17	
Administration and General Expense			
Office	909.05		
Librarian	218.50		
Advertising	601.66	1,729.21	
Amount forwarded		\$33,013.38	\$1,210,746.49

Amount brought forward		\$33,013.38	\$1,210,746.49
Operation and Maintenance of Plant			
Salaries	3,944.78		
Electric Light	100.30		
Gas	227.10		
Fuel	358.84		
Repairs	792.74		
Miscellaneous	1,020.47	6,444.23	
Experiment Station		6,385.63	45,843.24
STATE AGRICULTURAL COLLEGE.			
Salaries for Instruction and Research	\$89,331.25	\$80,331.25	
Departments:	4-3/333	4-2100	
Animal Husbandry	32,932.87		
Chemistry	686.54		
Dairy Industry	96,300.40		
Drawing	119.85		
Extension	5,297.98		
Entomology	3,642.07		
Farm Crops	1,158.82		
Farm Mechanics	1,027.05		
Farm Practice	18,968.07		
Farmers Reading Course	42.95		
Farmers' Wives Reading Course	1,139.50		
Home Economics	1,003.05		
Home Nature Study	2.04		
Horticulture	3,741.54		
Plant Breeding	514.94		
Plant Pathology	1,824.66		
Plant Physiology	1,638.40		
Pomology	5,804.01		
Poultry Husbandry	10,693.36		
Rural Art	548.27		
Rural Economy	220.03		
Rural School Leaflet	1,076.06		
Soils	1,231.08	189,712.54	
A1 11 11 10 10	-		
Administration and General Expense	34,671.12	34,671.12	
Special Extension work:	66		
1908 Appropriation	661.14		
1909	8,203.62	06.00	
1910 "	749.04	9,613.80	
New Buildings:			
Barns	22,481.16		
Glass Houses	22,996.25	45,477.41	368,806.12
	-		\$1,625,395.85
			11023303

SCHEDULE III DEPARTMENTAL EXPENSE

	PROFES- SORS	ASS'T PROF.	INSTRS.
Arts and Sciences, College of:	*********		
Archaeology			\$1,200.00
Education	\$3,500.00	\$1,500.00	
English	6,500.00	7,500.00	5,000.00
French	6,500.00		
German	3,000.00	5,000.00	2,000.00
Greek and Classical Archaeology	6,500.00		1,000.00
History	13,900.00		1,000.00
Latin	9,250.00		
Oratory		2,333.34	1,666.66
Philosophy	11,500.00		800.00
Phychology	4,000.00		800.00
Political Science and Economics	12,750.00		3,800.00
Semitics	2,500.00	********	
Botany	5,500.00		2,000.00
Chemistry	10,000.00	4,000.00	6,466.67
Entomology	500.00	(See Agric	
Geology	7,250.00		5,000.00
Mathematics	8,000.00	6,000.00	8,600.00
Neurology and Vertebrate Zoology	3,500.00		2,500.00
Physics	10,000.00	6,000.00	12,800.00
Music.	3,000.00		
Military Science	800.00		
Physical Culture	3,000.00	*****	2,000.00
Total Arts and Sciences Agriculture, College of	\$131,450.00	\$40,333.34	\$60,833.32
(From University Funds)			********
Architecture, College of	0,000.00	5,250.00	3,800.00
Civil Engineering, College of	19,000.00	19,700.00	14,400.00
Law, College of	17,500.00	2,000.00	
Medicine, College of (at Ithaca)	9,000.00	5,250.00	3,250.00
Sibley College	26,700.00	11,300.00	39,899.98
	\$212,650.00	\$83,833.34	\$122,183.30

SCHEDULE IV

Tuition Summer Session Laboratory and other fees	\$315,902.84 23,866.65 101,123.25	NEW YORK \$17,826.00
Total from students	\$440,892.74	26,216.00
From invested funds	399,583.76	6,533.96
College Land Scrip Fund	34,428.80	
From United States	62,318.06	** * * * * * * * * *
From State of New York	1 1 2 2 2 2 2 4 4	
Sage College and Cottage	15,686.40	
Rents of Buildings and Cottages	10,321.80	*********
Donations to current income	9,414.62	190,371.75
Departments (not from students)	1,885.95	4,973.81
Miscellaneous	8,164.42	571.71
	\$080 606 ==	Q 9 66+

\$982,696.55 \$228,667.23

University at Ithaca (See Schedule II)

		(bee benedule.	11)	
ASS'TS AND	TOTAL TEACH-	OTHER REG.	OTHER APPR'S	TOTAL
DEMONSTR'S	ING STAFF	EMPLOYEES		
*******		\$1,260.00	\$3,589.47	\$4,849.47
	1,200.00	540.00	41.95	1,781.95
********	5,000.00		267.39	5,267.39
975.00	19,975.00		53.82	20,028.82
	12,699.99		112.69	12,812.68
*******	10,000.00	*********	50.00	10,050.00
	7,500.00	*******	33.07	7,533.07
1,299.97	18,199.97		70.66	18,270.63
	9,250.00		84.51	9,334.51
150.00	4,150.00		222.61	4,372.61
*1,100.00	13,400.00		97.97	13,497.97
700.00	7,500.00		748.65	8,248.65
800.00	17,350.00		158.04	17,508.04
*********	2,500.00		53.05	2,553.05
2,000.00	9,500.00	2,820.00	1,665.15	13,985.15
9.595.18	30,061.85	4,048.00	22,111.96	56,221.81
	500.00			500.00
1,650.00	15,900.00	876.00	1,613.53	18,389.53
********	22,600.00	420.00	102.20	23,122.20
150.00	6,150.00	540.00	1,300.00	7,990.00
4,411.04	33,211.04	5,660.00	6,000.00	44,871.04
2,050.00	5,050.00	*******	1,479.34	6,529.34
1,200.00	2,000.00	420.00	913.79	3,333.79
3,400.00	8,400.00	770.00	2,182.98	11,352.98
\$29,481.19	\$262,097.85	\$17,354.00	\$42,952.83	\$322,404.68
	13,638.91		8,061.09	21,700.00
********	18,050.00	1,020.00	2,279.72	21,349.72
********	53,100,00	3,366.56	7,166.88	63,633.44
2,100.00	21,600.00	780.00	4,442.84	26,822.84
3,394.44	20,894.44	3,060.00	8,223.14	32,177.58
9,190.00	87,089.98	9,372.00	20,432.25	116,894.23
\$44,165.63 *Includes Le	\$476,471.18 ctures \$700.	\$34,952.56	\$93,558.75	\$604,982.49

CONDENSED AND COMBINED INCOME STATEMENT

STATE VETERINARY COLLEGE	STATE AGRICULTURAL COLLEGE	TOTAL
\$1,000.00 2,078.80	12,896.80	334,728.84 23,866.65 124,488.85
\$3,078.80	\$12,896.80	483,084.34
		406,117.72
*******		34,428.80
40,661.79	241,025.80	62,318.06
*******	********	15,686.40
25.00		10.346.80
*******		199.786.37
2,214.37	124,662.63	133.736.76
109.57	1,260.71	10,106.41
\$46,089.53	\$379.845.94	\$1,637,200.25

CONDENSED AND COMBINED EXPENSE STATEMENT

	UNIVERSITY	UNIVERSITY	
	AT ITHACA	AT NEW YORK	
Salaries of Instruction	\$476,471.18	\$111,043.08	
Departments	130,012.42	34,122.15	
Administration Salaries	37,771.49	6,720.00	
General Expenses	120,071.21	59,032.66	
Prizes, Scholarships, Fellowships and Loans	35,621.91	500.00	
Sage College and Cottage	10,935.71	********	
Summer Session	25,000.00		
Agricultural Experiment Station	25,208.68	********	
Library	39,131.22		
New Buildings	35,643.80		
Extraordinary Repairs	14,731.81	8,851.23	
Special Extension Work		********	
Income transferred to principal	12,877.99		
Sage College Organ	13,114.62		
Miscellaneous	13,885.33	**********	
	\$990,477.37	\$220.269.12	

SCHEDULE V

APPROPRIATIONS 1909-1910, EXPENDITURES ACCOUNT SAME AND BALANCES UNEXPENDED

	APPROPRIATIONS	EXPENDED	BALANCE UNEX- PENDED
Agriculture:			
Congres ional Industrial Fund	\$16,000.00	\$16,000.00	
Cornell University Contract	5,700.00	5,700.00	
Experiment Station, Hatch	15,463.17	13,540.13	\$1,923.04
" Adams	11,631.51	11,631.51	
" Income	503.04	37.04	466.00
Income Student Loan Fund	45.52	200	45.52
Income Agricultural Debate Prize	100.00	100.00	
Architecture	3,224.68	2,639.72	584.96
College Arts and Sciences:	W		4.0
Announcements	500.00	500.00	
Board Recommendations	628.00	447-53	180.56
Lectures	564.10	439.25	124.85
Dean's Office, Reading Room		10,7	100000
and Library	1,953.97	1,433.48	520.49
(a) Arts Departments:	7700.71	1100	- Second
American Classical School Athens	250.00	250.00	
American Classical School Rome	250.00	250.00	
American Classical School Jerusa-	-2	730000	
lem	100.00	100.00	
Archaeology	2,081.36	581.95	1,400.41
Classical Studies	634.76	.45	634.31
Education, School of	202.26	267.30	24.87
Elocution and Oratory	285.00	222.61	62.39
English (Cong. Ind. Fd.)	1,000.00	1,000.00	02.39
English	85.58	53.82	31.76
French	125.00	112.60	12.31
German	50.00	50.00	12.3.
	54.98	33.07	21.01
Greek		33.07	21.01
Amount forwarded	\$61,523.02	\$55,390.64	\$6,132.38

STATE VETERINARY		GRICULTURAL	тот	AL
COLLEGE	COL	LEGE		
\$24,808.31	\$80	,331.25	\$701,69	3.82
6,475.86	180	,712.54	360,32	2.97
1,127.55		,640.00	50,2	9.04
7,045.89		0,031.12	216,18	
11.43.5	0.00		36,12	
**********			10,93	
		644466	25,00	
*******			25,20	
		27777	39,13	
*******	4.5	,477.41	81,12	1.21
T. W. S. W. S. A. W. S. A. D.			23,58	3.04
6,385.63	C	,613.80	15,99	9.43
10.0				77.99
			13,11	
			13,88	5.22
	2.4.4.4	*****	13,00	5.33
\$45,843.24	\$368	3,806.12	\$1,625,39	5.85
				BALANCE
		APPROPRIATIONS	EXPENDED	UNEX-
		APPROPRIATIONS	EXPENDED	The second second
Assessment assessed for	and the same	00		PENDEL
Amounts carried for	ward	\$61,523.02	\$55,390.64	\$6,132.38
Arts Departments:				
History, American		555.29	30.55	524.74
" Ancient		42.62	21.01	21.61
" Mediaeval		54.16	14.39	39.77
" Modern Europe	an	51.62	19.10	32.52
Latin		85.07	84.51	
Dhilosophy	1.0111111			.50
Philosophy		420.18	97.97	322.21
Psychology		1,500.00	748.65	751.35
Philosophical Review		1,000.00	1,000.00	
Political Science and Pol		296.09	296.09	
	ance	302.62	288.71	13.91
Sta	tistics	231.47	173.24	58.23
" " " Pul	olic Studies	563.74	266.54	297.20
Semitics		60.50	-53.05	7.45
(b) Science Departments:		3	555	1.45
Astronomy		00.00	84.45	5.55
		3,704.67		
Botany Botany, Special			3,632 24	72.43
		200.00	132.91	67.00
Chemical		28,000 00	26,152.96	1,847.04
Geology		2,540.00	2,069.53	470.47
Mathematics		203.59	102.20	101,30
Mathematics Cong. Ind.	Fund	7.000.00	7,000.00	
Neurology		1,300.00	1,300.00	
Physical Review		6,140.98	5,603.17	537.81
Physical		10,000.00	10,000.00	301
Athletics:		53,512127		
Rent Athletic Office		200.00	200.00	
	10.000	200.00	200.00	
Buildings and Grounds:		0-2 120 20	0	
Care of Buildings		\$11,400.00	\$11,400.00	
Care of Grounds and Orn				
tion	******	7,000.00		
Special Roads		11,500.00	18,500.00	
		-		
Amount forwarded		\$155,965.62	\$144,661.91	\$11,303.71

	APPROPRIATIONS	EXPENDED	BALANCE UNEX- PENDED
Amounts brought forward Buildings and Grounds:	\$155,965.62	\$144,661.91	
Electric Service	1,600.00	1,600.00	
Electric Light and Power, Labor	3,200.00	3,200.00	
Morse, Sibley, Wiring, etc	1,725.00	1,592.29	132.71
Fuel	16,500.00	(15,036.1/	
Fuel Central Ave. Steam Main		1,463.86	
Goldwin Smith Hall	35.643.80	34,643.80	
(Includes \$1,000 French covers)		740.26	259.74
Heating, Labor	4,150.00	3,842.16	307.84
RepairsSteam, Water and Sewer Repairs	14,000.00	13,988.10	11.90
Steam, Water and Sewer Repairs	4,500.00	4,264.63	235-37
University Water Works	2,500.00	1,896.39	603.61
1909-10 Alterations and redecora-			
tions in Boardman, Franklin,			
Goldwin Smith, Sage Green-	A ventera	****	
house, Stimson and Sibley	6,775.00	6,775.00	
Purchase Preswick and Popple-	200 00	200 000	0.000 000
well Lands	500.00	250.00	250.00
Regular Summer Survey and			
Special Appropriation	77 770 04	8 600 74	0 550 00
Hydraulic Laboratory Commer-	11,170.94	8,620.74	2,550.20
cial account	2,075.36	62.50	2,012.86
Graduate School:	2,0/5.30	02.50	2,012.00
Dean's Office		J 555.41	
Announcements	1,150.00	445.70	148.89
Guiteau Income Fund	16,096.33	8,942.50	7,153.83
Infirmary	44,239.61	\$10,776.00	29,901.46
City Hospital	111-07	3,562.15	2/3/200
Interest and Annuities:		3 0/3	
Mitchell Bond Interest	225.00	225.00	
Preswick Annuity	300.00	300.00	
Fiske Annuities:			
Monzecchi	2,200.00	2,200.00	
Grimsey	1,000.00	1,000.00	
W. O. Fiske	404.24	404.24	
Law, College of	1,644.00	1,407.49	236.51
Law Library	3,651.31	3.335.35	315.96
Library	41,766.90	39,131.22	2,635.68
Anatomy and Canaral Expanse		2 100 05	258 47
Anatomy and General Expense. Bacteriology	3,557.72 439.01	3,199.25 236.50	358.47
Histology	1,647.73	1,591.43	56.30
Obstetrics	30.00	26.00	4.00
Physiology, etc	5,935.15	5,935.15	4.00
Surgery	25.00	10.52	14.48
Medicine	50.00	J-	50.00
Embryology Research	250.00	250.00	
Physical Diagnosis	60.00	19.90	40.10
Music	6,450.00	6,450.00	
Organ	13,114.62	13,114.6	
Operating Expense:			
Advertising and Lectures	758.54	473.15	285.39
Attorney's Fees and Expenses	1,500.00	1,500.00	
Amounts forwarded	\$406,800.88	\$347,729.36	\$59,071.52

*	APPROPRIATIONS	EXPENDED	BALANCE UNEX- PENDED
Amounts brought forward	\$406,800.88	\$347,729.36	
Operating Expense:			
Beebe Dam Changes	500.00	410.62	89.38
Bell Ringing	250.00	249.00	1.00
Contingent	11,902.78	11,002.78	3.25
C. U. C. A. Handbook	100.00	100.00	
Insurance	1,200.00	1,100.87	90.13
Printing and Stationery	5,500.00	5,500.00	3
Reading Entrance Examination	313	2135	
papers	600.00	600.00	
Register	5,000.00	5,000.00	
Eddy Dam Bridge	250.00	250.00	
Automatic Stoker	399.88	399.88	
Memorial Tablets	900.00	364.82	535.18
Physical Education	7	9	500
Military Science	924.10	913.79	10.31
Physical Culture	2,305.10	2,182.98	122.12
Com. on playground	792.67	792.67	
Prizes:	13		
Mrs. A. S. Barnes Shakespeare	179.28	50.00	129.28
Philo S. Bennett	104.27	Managa.	104.27
Class '94 Debate	41.31	25.00	16.31
Class '86 Memorial	187.81	86.00	101.81
Hiram Corson Browning	71.05	50.00	21.05
Fuertes Medal	107.61	50.00	57.61
Guilford Essay	169.14	150.00	19.14
Luana L. Messenger	254.38		254.38
Frances Sampson	60.17	29.48	30.69
W. C. Siedell Book Fund	119.98		119.98
Sibley Prize	100.00	100.00	
White Veterinary	58.38	25.00	33.38
Woodford Medal	483.20	100.00	383.20
Sage Chapel:			
Dean Sage Sermon Fund	5,248.50	3,300.00	1,948.50
Expense	750.00	750.00	
Organ	194.54	25.00	169.54
Sage College Income	21,234.50	110,935.71	
" " Repairs		10,298.79	
Salaries	483,825.00	482,143.96	1,081.04
Summer Session	25,000.00	25,000.00	444
Scholarships and Fellowships	23,700.00	22,816.65	883.35
Associate Alumnae Scholarship	150.00	150.00	14.00
Boardman Senior Law Scholarship	118.26	100.00	18 26
Mary F. Hall Scholarship	1,494.32	∫825.00	544.32
the same at the same at the same at		125.00	
F. W. Padgham Scholarship	133.84		133.84
C. H. Roberts Agr. Scholarship	1,200.00	1,200.00	
Daughters of American Revolution	25.00		25.00
Sibley College, M. E. and M. A	20,087.85	18,962.56	1,125.20
Congressional Industrial Fund, Fac	3,000.00	3,000.00	
Congressional Industrial Fund,			
Salaries	13,000.00	13,000,00	
Mechanical Laboratory Com. Acc't	896.05	293.69	602.36
Amounts forwarded	\$1,039,419.85	\$971,097.61	\$68,322.24

			INCOME
	APPROPRIATIONS	S EXPENDED	UMEX-
			PENDED
Amounts brought forward	\$1,039,419.85	\$971,097.61	\$68,322.24
Polish Student Loan	11.71		11.71
Women's Guild Fund	657.57	24.55	633.02
Cornell Alumni Endowment Fund	6.16		6.16
American Peony Society Fund	200.00		200.00
Musical Entertainments Fund	438.14	79.34	358.80
Carnegie Filter	500.00	108.34	391.66
Mary Bartlett Hill Fund and Interest	111.50	111.50	
White Hall Changes	1,300.00	1,100.00	200.00
Sibley Foundry Extension	1,800.00	1,000.00	800.00
Goldwin Smith Library	4,000.00	684.76	3,315.24
Committee on Emblem and Medal	250.00	250.00	
Herman Frasch Fellowship	1,500.00	230.72	1,269.28
Niagara Sprayer Co. Fellowship	1,000.00	999.96	.04
C. W. Stuart & Co. Fellowship	500.00	416.60	83.40
Morrill Hall changes	500.00	320.00	180.00
Sibley College Redecoration	.350.00	350.00	
Cas. Roof and Gutters	826.00	826.00	
Medical	222,651.28	213,735.16	8,916.12
Loomis Laboratory	6,358.57	6,033.96	324.61
J. M. Polk	584.47	500.00	84.47

\$1,282,965.25 \$1,197,868.50 \$85,096.75

SCHEDULE VI

DALANCE	GENERAL	LEDGER	ATICHET	T. T.	Tre
BALANUE	GENERAL	LEDGER	AUGUSI	1. 10	110

Campus Cottage	\$59,960.86	Income	\$5,445,800.04
Sage Block	31,000.00	Productive Funds	3,863,732.67
Inc. Corson Brown-	.0 .6	Income due special	
Gym. Addition	38.06 2,325.38	Funds	12,302.29
Morse Hall Addition	1,214.50	Rent Deposit	1,955.00
Bonds & Mortgages .	870,490.00	Civil Eng. Com. accit	2,012.86
Securities	7,599,784.12	Mechanical Laby.	2,012.00
Bennett Fd. Mtgs.	1,620.00	Com. Acc't	602.36
Bills Receivable	136,977.50	Civil Eng. Survey	002.30
Warren States Cont.	400.00	Camp	792.54
Foreclosure	15,220.65	Goldwin Smith Hall	12-21
Cash	54,873.37	Library	3,315.24
Agr. Exp. Station,		Amer. Peony Society	200.00
Adams	473.20	Jennie McGraw Fiske	
State Appro. Exten.		Memorial	2,040.00
Work No. 1	1,233.18	Agr. Exp. Sta. Hatch	1,923.04
State Appro. Exten.		State App. Agri. Col.	
Work No. 2	749.04	Main	22,203.52
State Appro. Enlarge-		Cong. Industrial Fd.	45,000.00
ment of Vet. Col.	49.28	Agr. Exp. Sta. Income	466.00
State Col. Forestry		State Income	1,064.61
Lumbering Acc't	288.53	State Col. Forestry	
State App. Vet'y Col.	2,725,45	Inc	8,983.90
Extension	1,003.60	State Vet'y Col. Inc.	5,852.63
Students	1,366.46	State Vet'y Col.	10000000
Student Notes	30,371.30	Maintenance	1,043.54
Amount forwarded	\$8 800 110 01	Amount forwarded	\$0.410.000.04

Amount forwarded \$8,809,439.03 Amount forwarded \$9,419,290.24

Sage College Repairs 10,879.51 Nic Cash Advances 9,135.60 1 Departments 1,889.37 C. Expenses 4,706.58 1 Sundry Persons 3,092.48 Mu	osure 28,287.63 stern Lands 4,963,702.97 dry Persons 202.90 dry Accounts 71.23 man Frasch Fel- wiship 22,28 gara Sprayer Co. ellowship 24,04 W. Stuart & Co. ellowship 83.40 sical Entertain- ments 358.80 sical Review 537.81
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\$14,589,721.83

\$14,589,721.83

SCHEDULE VII

CORNELL UNIVERSITY MEDICAL COLLEGE AT NEW YORK CITY

T	RIAL BALANCI	E, JULY 30, 1910	
Tuition	\$ 200.00	Registration	\$225.00
1st Year Laboratory	70.00	Tuition	16,645.00
2d Year Laboratory	35.00	1st Year Laboratory	525.00
3d Year Laboratory	35.00	2d YearLaboratory	140.00
Hospital Quiz	1,500.00	3d Year Laboratory	2,100.00
Special Courses	900.00	4th Year Laboratory	1,750.00
Breakage	1,112.57	Final Exams	1,700.00
Prizes	500.00	Hospital Quiz	950.00
Insurance	2,217.94	Special Courses	1,471.00
Advertising	816.64	Breakage	1,140.00
Advertising, Announce-		Interest	340.31
ments	1,074.94	Prizes	500.00
Expenses, Incidental	165.07	Donations	173,000.00
Travelling	69.42	" Animal Hosp.	1,050.00
Supplies, Janitor Engineer	355-25	Dispensary Receipts	4,793.05
" Engineer	1,693.07	Research, G-U Diseases	555.00
Fuel	6,082.12	Telephone	231.40
Lighting, Gas	665.12	Alterations to Building	15,766.75
Water	1,560.30	Salaries, Profs & Insts .	205.54
Telephone	716.93	" Clerk and Staff	182.20
Laundry	103.58	Drugs and Medicines	21.05
Ice	73-43	Chemistry	1.04
Repairs to Building	1,271.57	Medicine	5-75
Alterations to Building	8,851.23	Pathology	3.15
Furniture	439-33	Photography	7.75
Postage	170.00	Physiology	22.83
Printing	364.92	Loomis Laboratory	6,214.72
Uniforms	45.45	Cash in Bank July 31,	
Alcohol	436.36	1909 \$ 18.01	
Commencement	416.50	Cash Dr. Polk,	
Salaries, Profs. Insts	108,448.78	Dean 500.00	518.01

Amt. brought forw'd	\$140,480.52	\$230,064.55
Salaries, Clerk and Staff	34,114.76	
Sec'y and Assistants	2,400.00	
" Chiefs of Clinic	1,899.84	
Supplies, Dispensary	157.77	
Printing	306.55	
Drugs and Medicine	3,767.00	
Dermatology, Dispensary		
Genito-Urinary, Dispen-		
sary	47-30	
Gynecology	13.40	
Laryngology	9.70	
Medicine	.20	
Neurology	23.80	
Ophthalmology	10.00	
Otology	7-95	
Surgery	101.15	
Anatomy	663.39	
Chemistry	1,654.98	
Clinical Pathology	2,172.83	
Laryngology	22.88	
Materia Medica	422.07	
Medicine	120.52	
Neurology	141.83	
Obstetrics	114.88	
Operative Surgery	48.61	
Orthopedics	.30	
Pathology	3,055.32	
Photography	495.48	
Library, Pathology	1,023.40	
Publications	381.60	
Animals and Food	501.77	
Pediatrics	17.24	
Physiology	2,126.94	
Physiology, Equipment	6,393.08	
X-Ray	197.01	
Salaries, Exp. Therap	2,842.96	
Loomis Laboratory	2,774.88	
Exp. Therapeutics	1,802.86	
" Equip	. 2,486.32	
Salaries, Loomis	4,197.60	
Pharmacology	604.12	
Exp. Pathology	1,521.98	
Animal Hospital	891.22	
Medical College Lab'y .	368.98	
Salaries, Med. Col. Lab'y	600.00	
Fuel " " "	154.44	
Cash in bank \$8,416.12 Cash Dr Polk,		
Dean 500.00	8,916.12	Annual Control
	\$230.064.55	\$230.064.55

	SCHEDU	LE VIII	
STATE COLLEGE	PORESTRY B	ALANCE SHEET, AUG. I,	1910
Contingencies Clerk Stationery Lectures Salaries	\$4,723.84 1,222.58 2,129.08 1,825.00 36,274.96	New York State	\$50,000.00
Lib. & Demonstrations .	2,608.64		
Equipment	689.06		
Forest Nursery	526.84		
-	\$50,000.00		\$50,000.00
STATE COLLEGE FORESTRY	LUMBERING	ACCOUNT BALANCE SHEET	AUG. 1, 1910
Exp. Aug. 1		Receipts	
1909, to	Aug. 1,	Aug. 1, '09	to to Aug. 1,
Maintenance \$108.22	1910	N. Y. State Aug. 1, 19	10 1910
	\$17,188.55	Maintenance	\$60,000.00
Improvement .	22,533.99	Improvement .	2,458.40
Equipment	4,457.33		16,765.26
Building	6,151.62	Equipment Building	1,182.73
Sur'y & Est'g	5,297.22	Sur'y and Est'g	.25
Pordwood Lulpwood	54,119.36	Cordwood	298.20
Cogging	16,275.47 86,870.76	Pulpwood	50,977.29 28,881.26
Cogging Telegraph poles		Logging	
Ties and Posts	1,958.07	Telegraph poles	57,460.08
Fire Fighting	580.47	Ties and Posts	2,280.50
Contr. R. R.	500.47	Tuition	2,660.00
Main Line	3,000.00	Interests	1,125.73
Main Diffe	108.22	Rents	2,821.02
Income	159,994.04	Income	159,994.04
McDonald & Son	18,114.37	McDonald & Son	18,114.37
Brook'n Coop-	10,114.37	Brook'n Coop-	10,114.37
erage Co	94,234.16	erage Co	93,986.83
Santa Clara	941-34.20	Santa Clara	93,900.03
Lumber Co	27,805.36	Lumber Co	27,790-31
State Col. For. Bank Acc't . 8,083.99	11-10-0		-1119-3
Due C. U. from			
State 288.53	8,695.37		-
	\$527,895.67		\$527.895.67
	Schedu	ILE IX	
ВА	LANCE SHEET	JULY 31, 1910	
NEW YO	ORK STATE VI	ETERINARY COLLEGE	
State of New York State of New York Insura			\$550,000.00
Income Veterinary College	e		60,561.43
Building and Equipment	Exp	\$150,000.00	
Fire Loss Exp		13,308.64	
Departments Exp		77,625.06	
Expense		340,021.02	
Experimental Work	*****	6,684.57	
North Wing		49.28	
Amount forwarded	1,	\$593,688.57	\$623,870.07

Amount brought forward C. U. Income Unexpended C. U. Maintenance Unexpended	\$593,688.57 5,852.63 1,043.54	\$623,870.07
Amount forwarded	\$600,584.74	\$623,870.07

SCHEDULE X

NAME	WHEN DUE	RATE
Agnes City T'p, Lyon Co. Ks., (R. R. Aid)	1917	6
Aurora T'p, Cloud Co. Kan., (Refunding)	1909-1916	51/2
Beatrice, Nebraska (Water Works)	1916	4
Beatrice, Nebr., Sch. Dist. (Sch. House)	1910-1916	6
Belleville T'p, Chaut. Co., Kan. (Refunding)	1911-1923	41/2
Blue Rapids T'p, Marshall Co., Kans. (Refunding)	1910-1929	
Burlingame City (Funding)	1919-1924	5 5 8
Burr Oak T'p, Jewell Co., Kan. (R. R. Aid)	1910	
Caldwell City, Sumner Co., Kan. (Water Works)	1920	41/2
Center T'p, Dickinson Co., Kan. (Refunding)	1909-1920	5
Centerville T'p, Linn Co., Kan. (Refunding)	1909-1920	43/4
Chase Co., Kan. (R. R. Aid)	1922	6
Chase Co., Kan. (R. R. Aid)	1922	6
Chautauqua Co., Kan. (Refunding)	1910	5
City of Fairbury, Neb. (R. R. Aid)	1911	
Clarks Creek T'p, Morris Co., Kan. (Refunding)	1911-1919	5
Clay County, Kan. (Refunding)	1914-1929	5 5 6
Crook Co., Wyoming (C. H. & J.)	1911	
Crow Wing Co., Minn. (R. R. Aid)	1912	6
Crow Wing Co., Minn. (R. R. Aid)	1912	6
Delight T'p, Custer Co., Nebr. (R. R. Aid)	1910	5
Diamond Valley T'p, Morris Co. (Refunding)	1911-1919	5
Eden T'p, Sumner Co., Kan. (Refunding)	1912-1917	43/4
Edwards Co., Kan. (R. R. Aid)	1916	6
Elk T'p, Cloud Co., Kan. (Refunding)	1911-1921	41/2
Elk T'p, Republic Co., Kan. (Refunding)	1910-1914	5
Escambia Co., Fla. (Armory)	1911-1915	6
Eureka T'p, Barton Co., Kan. (R. R. Aid)	1916	6
Fairmont, Nebr. (Ref. Water)	1912	5
Fargo, North Dakota (Refg.)	1913	
Glynn Co., Ga. (Refunding)	1925	5 6 5 6 5
Graham Co., Kan. (Refunding)	1918	0
Grant T'p, Jewell Co., Kan. (Refunding)	1911-1915	5
Grant T'p, Reno Co., Kan. (R. R. Aid)	1917	0
Great Bend T'p, Barton Co., Kan. (R. R. Aid)	1917	0
Green Garden T'p, Ellsworth Co., Kan. (Rfdg.)	1911-1919	5
Henderson Co., N. C. (Refunding)	1925	
Hickory T'p, Butler Co., Kan. (R. R. Aid)	1908-1912	4 3/4
Highland T'p, Morris Co., Kan. (Refunding) Houston Heights Municipality (Sch. Bldg.)	1911-1915	5 5 4½
Tola T'n Allen Co Wan (Potunding)	1933	5
Iola T'p, Allen Co., Kan. (Refunding) Kiowa Co., Kan. K. P. & W. (R. R. Aid)	1911-1918	4/2
Kiowa Co., Kan. (R. R. Aid)	1917	5
Lane T'p, Greenwood Co., Kan. (Refunding)	1917	5 5 5
Liberty T'p, Dickinson Co., Kan. (Refunding)	1910-1924	5
Diverty 1 p, Dickinson co., Kan. (Retunding)	1909-1920	5

Amount brought forward \$600,584.74
C. U. Appr. for Exp. Work Unexpended 3,334.61
C. U. Appr. for North Wing Unexpended 19,950.72 \$623,870.07

\$623,870.07 \$623,870.07

	SECURI	TIES-MUNICIPA	L BONDS	
COST	BALANCE	PURCHASED	SOLD OR	BALANCE
	AUG. 1, '09	DURING YEAR	PAID DURING	AUG. 1, '10
			YEAR	
100	\$20,000.00	1.0-1.0-1.0-0.0-0.0-	*20,000.00	
106	7,500.00		1,000.00	6,500.00
100	7,000.00	10.100 0.000 0.000	Same	7.000 00
1001/4	8,000.00	0.00000000	1,000.00	7,000.00
100	11,000.00		2,000.00	9,000.00
101/2	11,500.00		1,500.00	10,000.00
4.60b	6,000.00			6,000.00
11234	5,000.00	0.0000000000000000000000000000000000000	5,000.00	
100	1,600.00	10.000.000	1,600.00	
101	8,000.00	34534554	2,000.00	6,000.00
100	12,000.00	0.1001019	3,000.00	9,000.00
104 1/4	20,000.00			20,000.00
1131/2	45,000.00		1	45,000.00
4 ½ b	5,000.00		*****	5,000.00
97	5,000.00	11 1 2 2 1 2 1 2 1	3,000.00	2,000.00
100	4,000.00	10.00 - 0.00 - 0.00	1,000.00	3,000.00
4.40b	8,000.00	101 91019		8,000.00
100	4,000.00	12 4 4 4 4 4 4 4	2,000.00	2,000.00
115.53	25,000.00		4 - 4 - 4 - 4	25,000.00
100	30,000.00		0.0000000000000000000000000000000000000	30,000.00
102	5,000.00		5,000.00	********
101	10,000.00	031100336	1,000.00	\$9,000.00
4.60b	8,000.00	******	3,000.00	5,000.00
99	16,000.00	771110777		16,000:00
100	9,500.00	03-1(01)	1,000.00	8,500.00
4 ½ b	3,000.00		****	3,000.00
1081/4	5,500.00		3,000.00	2,500.00
112.39	12,000.00	1 11-1	110 0111	12,000.00
4 1/2 b	7,500.00	THE RESERVE OF THE PARTY OF THE		7,500.00
1051/2	20,000.00	100000000000		20,000.00
100	4,000.00	10 1 1 1 20 20 10		4,000.00
100	10,000.00	10.000		10,000.00
4 1/2 b	5,000.00		511111111	5,000.00
4.8ob	4,000.00		†4,000.00	
112.58	7,000.00		* * * * * * * * *	7,000.00
45/8b	10,000.00	((3) (1) ((3) (1)	00.000,1	9,000.00
107 1/2	20,000.00	14. 5 4. 4. 1. 1. 1	* * * * * * * * *	20,000.00
100	2,000.00	0.0000000	1,500.00	500.00
45/8b	4,000.00		1,000.00	3,000.00
4.65b	10,000.00	**		10,000.00
100	6,500.00		1,000.00	5,500.00
100	11,000.00	0.00 (0.00 (0.00)	\$1.10 × 1.00 × 1.00	11,000.00
98	40,000.00	9.0	********	40,000.00
458b	16,000.00	9 - 1 9 - 1	1,000.00	15,000.00
45/8b	7,000.00		1,000.00	6,000.00
	\$496,600.00		\$66,600.00	\$430,000.00

NAME	WHEN DUE	RATE
Amounts brought forward		
Lincoln T'p, Cloud Co., Kan. (Refunding)	1010-1020	41/2
Lost Springs T'p, Marion Co., Kan. (Refunding)	1905-1914	
Luverne Ind. Sch. Dist., Minn. (Sch. House)	1010	5
Lyon T'p, Dickinson Co., Kan (Refunding)	1915-1921	5
Marquette City, McPherson Co., Kan. (Rfdg.)	1911-1925	5 5 5
*Mound City T'p, Linn Co., Kan. (Refunding)	1910-1930	5
Mound T'p, McPherson Co., Kan. (R. R. Aid)	1916	6
Neosho T'p, Coffey Co., Kan. (Refunding)	1911-1912	5
Ness County, Kan. (Refunding)	1910-1924	5
New York City (Corp. Stock)	1958	4
Nevada T'p, Ness Co., Kan. (Refunding)	1911-1917	#
Newton City Von (P. D. Aid)	1911	5
Newton City, Kan. (R. R. Aid) Oak T'p, Smith Co., Kan. (Refunding)	1911-1918	
Oskaloosa T'p, Jefferson Co., Kan. (Refunding)	1910-1926	5 1/4
Dorgong City: Von (P. D. Aid)	1910 1920	6
Parsons City, Kan. (R. R. Aid) Payne T'p, Sedgwick Co., Kan. (Refunding)		5
Pierce Williams Pierce Co. Nobr (Water Works)	1913-1923	
Pierce Village, Pierce Co., Nebr. (Water Works) Plumb T'p. Phillips Co., Kans. (Refunding)	1922	5
Plum Grove, T'p Butler Co., Kan. (Refunding)	1909-1915	434
	1912-1915	43/4
Reno Co., Kan. (Refunding)	1918-1928	4 1/2
Richland T'p, Rooks Co., Kan. (Refunding).	1910-1921	5
Rock Creek T'p, Nemaha Co., Kan. (Refunding)	1911-1924	5 6
Rolling Prairie T'p, Morris Co., Kan. (Refunding)	1910-1927	5
Saline Co., Kan. (R. R. Aid)	1916	0
San Antonie, Texas (Pub. use)	1910-1920	5 5 6 5½
Scandia T'p, Republic Co., Kan. (Refunding)	1911-1929	5
Sch. Dist. No. 58, Allen Co., Kan. (School)	1911-1919	5
Sch. Dist. No. 3, Carbon Co., Wyoming (Rfdg.)	1925	0
Sch. Dist. No. 73, Lincoln Co., Wash. (School) Sch. Dist. No. 1, Sheridan Co., Nebr. (Sch. House)	1914-1924	5/2
Sch. Dist. No. 1, Sheridan Co., Nebr. (Sch. House)	1913	7 5 1/2
Sch. Dist. No. 61, Spokane Co., Wash. (School)	1914-1924	5.72
Shell Rock T'p, Greenwood Co., Kan. (Refunding)	1010-1018	5 7 5 5 5 6
Sheridan County, Kan. (Funding)	1910	7
Sheridan T'p, Sheridan Co., Kan. (Refunding)	1917-1918	5
Shoshone Co., Idaho (Refunding)	1910	7
Silverdale T'p, Cowley Co., Kan. (Refunding)	1911-1923	5
Smoky Hill T'p, McPherson Co., Kan. (Rfdg.)	1911-1929	5
So. Haven T'p, Sumner Co., Kan. (Refunding)	1911-1915	5
So. Stillwater, Minn. (Elec. Lt.)	1911-1920	()
Spring Creek T'p, Coffey Co., Kan. (Refunding)	1910-1919	5 41/2
Spring Creek T'p, Coffey Co., Kan. (Refunding)	1910-1913	4/2
St. Louis County, Minn. (R. R. Aid)	1913-1923	5 5 5 4½
St. Louis County, Minn. (R. R. Aid)	1913-1923	5
State of New York (Land Scrip)	5 and 60 and 500	5
Stranger T'p, Leavenworth Co. (Refunding)	1908-1920	4/2
Stromsburg City, Nebr. (Ref. Water)	1910-1911	5 8
Sumner T'p, Osborne Co., Kan. (R. R. Aid)	1909	0
Sumner T'p, Sumner Co., Kan. (Rfdg.)	1909-1917	4 3/4
Tacoma, Wash. (Water and Light)	1913	5 5 5 4 ¹ / ₂
Tacoma, Wash. (Water and Light) Thomas County, Kan. (Refunding)	1913	5
Thomas County, Kan. (Refunding)	1914	5
Tonganoxie T'p, Leavenworth Co., Kan. (Rfdg.)	1910-1925	4.22
Union T'p, Jefferson Co., Kan. (Refunding)	1929	5
Valley Center, Sedgwick Co., Kan. (Refunding)	1010-1020	4 14

Amounts forwarded

COST	BALANCE	DUDOUTERD	COLD ON DAID	BALANCE
0031	AUG. I, '00	PURCHASED DURING YEAR	SOLD OR PAID DURING YEAR	AUG. I, '10
	\$196,600.00	DURING IEAR		
100			\$66,600.00	\$430,000.00
100	15,000.00	******		15,000.00
100	10,000.00	*******		10,000.00
108	20,000.00	******	20,000.00	
101	8,000.00	******	1,000.00	7,000.00
4.60b	7,500.00	******	*****	7,500.00
4 ½ b	6,000.00	*******	********	0,000.00
100	14,000.00	991991991	*****	14,000.00
4 ½ b	3,000.00	*******	1,000.00	2,000.00
103 1/4	67,000.00		2,000.00	65,000.00
100	******	25,000.00		25,000.00
103 1/4	6,000.00		1,000.00	5,000.00
99	34,000.00	********		34,000.00
100	15,000.00	********	2,000.00	13,000.00
43/4b	18,000.00		** * * * * * * * *	18,000.00
101	11,000.00			11,000.00
103 1/2	6,000.00			6,000.00
4 ½b	8,800.00	*******	2,000.00	6,800.00
100	8,000.00		1,000.00	7,000.00
100	7,500.00			7,500.00
100	6,000.00			6,000.00
45/8b	6,000.00			6,000.00
45/8b	5,000.00		1,000.00	4,000.00
45/8b	16,000.00			16,000.00
103 1/2	50,000.00	*******		50,000.00
100	25,000.00		*******	25,000.00
4.70b	18,000.00			18,000.00
4½b	7.000.00		500.00	6,500.00
105	19,000.00	*******		19,000.00
4 7/8b	7,000.00			7,000.00
105.26	4,000.00			4,000.00
43/4b	7,000.00			7,000.00
45/8b	11,000.00	*******	2,000.00	9,000.00
102	5,000.00		*******	5,000.00
100.56	7,000.00	******	5,000.00	2,000.00
113.22	10,500.00	******	10,500.00	
100.56	12,000.00	*******	1,000.00	11,000.00
1011/2	9,000.00		1,000.00	8,000.00
1011/2	5,000.00			5,000.00
43/4b	12,000.00	*******	2,000.00	10,000.00
100	5,000.00		3,000.00	2,000.00
100	4,000.00		500.00	3,500.00
100	54,000.00		300.00	54,000.00
102.04	12,000.00		*******	12,000.00
102.04	688,576.12			688,576.12
100.	5,000.00			5,000.00
4½b		*******	1,000.00	2,000.00
1121/4	3,000.00	*******	7,000.00	2,000.00
		********	\$2.00 LECTED AT 180 L	
4.60b	1000.00		1,000,00	26,000.00
102	26,000.00	*******	*******	25,000.00
100	25,000.00		********	28,000.00
101 1/2	28,000.00	*******	*******	
100	15,000.00	*******		15,000.00
45/8b	15,000.00	******	7.000.00	15,000.00
100	10,000.00	2311112222	3,000.00	7,000.00
-164	\$1,901,476.12	\$25,000.00	\$135,100.00	\$1,791,376.12

NAME	WHEN DUE	RATE
Amounts brought forward		
Walnut T'p, Brown Co., Kan. (Refunding)	1914-1918	2.
Waring T'p, Ness Co., Kan. (Refunding)	1911-1917	5 5 5
Washington T'p, Rice Co., Kan. (Refunding)	1911-1921	5
Wighita Sch Diet Kan (Schools)	1911	5
Wichita Sch. Dist. Kan. (Schools)	1010	5
Wood River 1 p, custer co., rest. (R. R. Hu)	1910	2
FOREIGN GOVERNMENT BONI	s	
Argentine Republic (Internal)	1909-1945	5
Imperial Japanese Government (1st 4 1/2's)	1910-1925	4 1/2
Imperial Japanese Government (1st 4 1/2's)	1910-1925	41/2
Imperial Japanese Government (2d 4 1/2's)	1910-1925	4 1/2
Republic of Cuba (Ext. Loan)	1910-1944	
Republic of Cuba (Ext. Loan)	1910-1944	5 5 5
San Paulo, Brazil (Treasury Notes)	1919	5
U. S. of Mexico (Loan of 1904)	1954	4
U. S. of Mexico (Ext. Loan)	1945	5
RAILROAD BONDS		
Atchison, Topeka & Santa Fe Ry. (Gen'l Mtg)	1995	4
Atchison, Topeka & Santa Fe Ry. (1st Mtg.)	1958	4
Atlanta, Birmingham & Atlantic (Rec. Certif)	1911	5
*Atlantic City R. R. Co. (Gold Mtg.)	1919	5 3½
*Baltimore & Ohio R. R. Co. (Prior Lien)	1925	3 1/2
*Baltimore & Ohio R. R. Co. (1st Mtg.)	1948	4
Baltimore & Ohio R. R. Co. (1st Mtg.)	1948	4
Canada Southern Rv. Co. (1st Mtg. Extension)	1913	6
Carolina, Clinchfield & Ohio Ry. (1st Mtg.)	1938	5
*Central Branch Ry. Co. (1st Mtg.)	1919	4
*Chesa. & Ohio Ry. (1st Con. Mtg.)	1939	5 4 4 4
Chicago Great Western R. R. Co. (Deb.)		4
Chicago Great Western R. R. Co. (Deb.)		4
Chicago, Rock Island & Pac. Ry. Co. (1st & Rfd.)	1934	
Chicago, Rock Island & Pac. Ry. Co. (1st & Rfd.)	1934	4 6
*Chicago, Rock Island & Pac. Ry. Co. (1st Mtg.) †Cin. Ham. & Day. Ry. Co. (Col. T'st)	1917	
TCin. Ham. & Day. Ry. Co. (Col. T'st)	1908	4 1/2
Cin. Ham. & Day. Ry. Co. (Col. 1 st)	1959	41/2
Colorado, Utah Con. Co. (Guar. Col. Tr.)	1911	6
Delaware & Hudson Co. (Conv. Bonds)	1916	4
Delaware & Hudson Co. (Conv. Bonds)	1916	4
Delaware & Hudson Co. (Conv. Bonds)	1916	4
*E. Tennessee, Va. & Georgia Ry. (Con. Mtg.)	1956	5
Galveston, Har'g & San. An. (M & P Ext)	1931	5
Galveston, Har'g & San. An. (M & P Ext)	1931	5
Galveston, Har'g & San. An. (M & P Ext)	1931	5 5 5 5 5 6
*Ga. Car. & North. Ry. (1st Mtg.)	1929	5
*Knoxville & Ohio Ry. Co. (1st Mtg.)	1925	,
Lake Shore & Mich. So. Ry. Co. (Deb.)	1931	4 4 1/2
*Lehigh Valley Ry. Co. (1st Mtg.) *Long Island R. R. Co. (1st Con. Mtg.)	1940	4/2
Macon Dub. & Sav. Ry. Co. (1st Con. Mtg.)	1931	5
	1947	3
Carried forward		
w A		

^{*}A gift

[†]Exchange in reorganization

	DALANCE D	UDOULERD	SOLD OD D	ATD DATAMOR	
COOM			SOLD OR P.		
COST	AUG 1, '09	DURING	DURING	AUG. 1, 10	
		YEAR	YEAR		
	\$1,901,476.12		\$135,100	\$1,791,376.12	
4½b	5,000.00			5,000.00	
103 1/4	9,000.00		5,000	4,000.00	
45/8b	12,000.00		1,000	11,000.00	
99	16,000.00		16,000		
102	5,000.00		5,000		\$1,811,376.12
	\$1,948,476.12	\$25,000	\$162,100	\$1,811,376.12	
99	9,730	*****	*****	9,730	
88	24,350			24,350	
92	48,700			48,700	
88	73,050			73,050	
100 1/2	50,000	* * * * * * *		50,000	
105 1/2	50,000			50,000	
6½b	48,600		5,832	42,768	
931/2	49,000			49,000	
961/2	90,210		*48,500	41,710	389,308,00
	\$443,640		\$53,332	\$389,308	
1001/4		25,000	5,000	20,000	
		25,000			
4½b	50,000		*****	50,000	
99	25,000	*****	*****	25,000	
112	10,000	*****		10,000	
951/2	4,000		*****	4,000	
103	500			500	
99	*****	25,000	*****	25,000	
100	23,000	*****	****	23,000	
95	25,000		*****	25,000	
951/4	11,000			11,000	
1181/2	25,000		*****	25,000	
933/4	60,000		60,000		
92 1/2	40,000		40,000		
88 7/8	25,000			25,000	
89 1/2	25,000			25,000	
1211/2	25,000			25,000	
975/8	25,000		25,000		
915/8		25,000		25,000	
100	25,000			25,000	
	25,000				
95				25,000	
100	2,000	127.000	******	2,000	
102 1/2		23,000	*****	23,000	
1203/4	15,000			15,000	
108	30,000	*****		30,000	
100	10,000		*****	10,000	
1113/8	10,000			10,000	
109 1/2	5,000	*****	*****	5,000	
1221/2	10,000			10,000	
94 1/2		25,000		25,000	
108	10,000			10,000	
1171/2	10,000		****	10,000	
97	25,000			25,000	
	\$550,500	\$123,000	\$130,000	\$543,500	\$2,200,684.12

^{*\$45,590.00} sold at 97 34.

NAME	WHEN DUE	RATE
Amounts brought forward		
Michigan Central Rd. Co. (Deb. of 1909)	1929	4
Mo. Kans. & Eastern Ry. (1st Mtg.)	1942	5
Mo. Kans. & Oklahoma R. R. Co. (1st Mtg.)	1942	5
Mo. Kans. & Oklahoma R. R. Co. (1st Mtg.)	1942	5 5
*Mo. Kans. & Texas Ry. Co. (1st Mtg.)	1990	4
Mo. Kans. & Texas of Texas (1st Mtg.)	1942	5
Mo. Pacific Ry. Co. (Cons'l 1st Mtg.)	1920	
Mo. Pacific Ry. Co. (Cons'l 1st Mtg.)	1920	6
New York Central & Hudson R. R. Co	1934	4
New York, Chic. & St. Louis Rd. Co. (Deb. of 'o6)	1931	4
N. Y., New Haven & Hartford (Conv. Deb.)	1948	6
N. Y., N. Haven & Hartford R. R. Co. (3 yr. note)	1910	5
*N Y, Ont. & West. Ry. (Refunding)	1992	4
*N. Y., Ont. & West. Ry. (Refunding)	1992	4
N. Pac. & Gt. Nor. Ry. (C. B. & Q. Col.)	1921	4
N. Pac, & Gt. Nor. Ry. (C. B. & Q. Col.) N. Pac, & Gt. Nor. Ry. (C. B. & Q. Col.)	1921	4
N. Pac. & Gt. Nor. Ry. (C. B. & Q. Col.)	1921	4
*Ohio River R. R. Co. (Gen. Mtg.)	1937	5
*Oregon Rd. & Nav. Co. (Con. Mtg.)	1946	4
Pennsylvania Rd. Co. (Conv.)	1915	31/2
Pennsylvania Rd. Co. (Conv.)	1915	3 1/2
*Richmond & Peter'g Ry. Co. (Con. Mtg.)	1940	4 1/2
Seaboard Air Line (Rec. Cer. Ser. C.)	1912	5
*Sciota Valley & New England (1st Mtg.)	1989	4
So. Indiana Ry. Co. (1st Mtg.)	1951	4
So. Pacific Co. (Conv. Bonds)	1929	4
So. Pacific Co. (1st Mtg.)	1955	4
Spokane & Inland Emp. Rd. Co. (1st Rfdg.)	1926	5
St. Louis, Iron Mt. & So. R. & G. Div. (1st Mtg.)	1933	4
St. Louis, Iron Mt. & Southern (Gen. Mtg.) St. Louis, Iron Mt. & Southern (Gen. Mtg.)	1931	5
St. Louis, Iron Mt. & Southern (Con. Mtg.)	1931	5
St. Louis & San Francisco Rd. Co. (7 yr. note)	1931	5 4 1/2
St. Paul, Min. & Man. Ry. (Mont. Ext.)	1912	
Tidewater Company (note)	1937	6
Tol. & Ohio Central Ry. Co. (Gen. Mtg.)	1935	5
Union Pacific Rd. Co. (1st and Refunding)	2008	4
Union Pacific Rd. Co. (Conv.)	1927	4
Vera Cruz & Pacific Ry. Co. (1st Mtg.)	1934	41/2
*Wabash Ry. Co. (1st Mtg.)	1939	5
*West Va. & Pittsburg Rv. Co. (1st Mtg.)	1990	4
*Wheeling & Lake Erie (1st Mtg.)	1949	4
EQUIPMENT NOTES	25.55	
Boomer Coal & Coke Co. (Equipment)	1913-1914	5
Chicago, Rock Island & Pacific Ry. Co.	1917	41/2
Cincinnati, Hamilton & Dayton R. R. Co	1913-1916	4 1/2
Colorado & Southern Ry. Co	1914	5 4 1/2
Delaware & Hudson Co	1922	4 1/2
Evansville & Terre Haute (Series C)	1912	41/2
Iron Mountain Car Trust	1912	5
New York Central Lines	1917	5
Carried forward		

COST	BALANCE AUG. 1, '09	PURCHASED DURING	DURING		
	\$550,500	YEAR \$123,000	\$130,000	\$543,500	\$2,200,684.12
4.40b	\$550,500			25,000	42,200,004.12
				25,000	
105	25,000		*****	10,000	
101	10,000		*****	15,000	
107				10,000	
101	10,000			25,000	
5%b	10,000			10,000	
1111/8	0.000	25,000		25,000	
	*****	14,000		25,000	
951/2	25,000			25,000	
4.47b	6,600			6,600	
100	25,000		25,000		
100	10,000		23,000	10,000	
102 7/8	10,000			10,000	
96	25,000			25,000	
961/2	50,000			50,000	
981/4	25,000	******		25,000	
100	86,000			86,000	
1023/4	5,000			5,000	
895/8	25,000			25,000	
901/4	25,000			25,000	
100	10,000			10,000	
99	25,000		25,000		
1021/8	10,000		- 31	10,000	
94	10,000			10,000	
96	9,000			0,000	
4 3/8b		25,000		25,000	
98		25,000		25,000	
5%b	25,000			25,000	
101 1/4	35,000			35,000	
103	5,000			5,000	
1173/8	10,000			10,000	
97	25,000			25,000	
100	1,000		1,000		
1023/4		25,000	*****	25,000	
96	20,000			20,000	
4.15b	50,000			50,000	
863/4	20,000			20,000	
955/8	50,000			50,000	
118	14,000			14,000	
100	10,000			10,000	
89 1/2	15,000	*****		15,000	1,399,100.00
	\$1,332,100	\$237,000	\$181,000	\$1,399,100	
1001/2		25,000	1,,,,,,	25,000	
5½b	20,000			20,000	
99	20,000	30,000	20,000	30,000	
5 7/8b	25,000			25,000	
94 3/4	50,000			50,000	
97 1/2	25,000			25,000	
5 1/4 b	25,000			25,000	
981/4	25,000		†25,000		
9074	-31-44			-	
	\$190,000	\$55,000	\$45,000	\$200,000	\$3,599,784.12

NAME	WHEN DUE	RATE
Amounts brought forward		
Pere Marqette R. R.	1909	41/2
Pere Marqette R. R	1913	6
Seaboard Air Line Ry. (Series C)	1911-1913	41/2
Seaboard Air Line Ry	1912	5
Seaboard Air Line Ry Seaboard Air Line Ry Series H	1914	5
St. Louis & San Francisco, Series G	1913	4 1/2
Wabash Rd. Co., Series C	1913	4 1/2
Wabash Rd. Co., Series C	1914	4 1/2
TRACTION BONDS		
Atlantic City Elec. Co. (1st & Refunding)	1938	5
Balt. Spar. Pt. & Chesa. Ry. (1st Mtg.)	1953	41/2
Brooklyn Un. El. R. R. Co. (1st Mtg.)	1950	5
Brooklyn Un. El. R. R. Co. (1st Mtg.)	1950	5
Calumet & So. Chicago (1st Mtg.)	1927	5 5 5 5 5
Cayuga Lake Elec. Rv. Co. (1st Mtg	1922	6
Cen. El. Rv. Co. of Kansas City (Mtg.)	1914	5
Chicago Railways Co. (1st Mtg.)	1927	5
Cleveland Railway Co. (1st Mtg.)	1912	5
Davenport & Rock Island Ry. (1st Mtg.)	1911	6
Davenport & Rock Island Ry. (1st Mtg.)	1911	-
Des Moines City Ry. (Refunding Mtg.)	1921	5 5 4 1/2
Des Moines City Ry. (Refunding Mtg.)	1921	11/
Detroit & North Western Ry, Co (1st Mtg.)	1921	4/2
Detroit United Ry. (Col. Trust)	1932	5 4 1/2 5 6 5 5 4 6
Eastern Pa. Rys. Co. (1st Mtg.)	1936	5
Hudson Companies (Col. Note)	1011	6
Hudson Companies (Col. Note) Hudson & Man. Rd. (Car. Trust, Ser. A)	1913	5
Hudson & Man. Rd. (Car. Trust, Ser. A.)	1914	5
Indianapolis St. Ry. Co. (Gen. Mtg.)	1933	4
Interborough Rap. Tran. Co. (Conv. Notes)	1911	
Ithaca St. Ry. (1st Mtg.)	1922	6
Ithaca St. Ry. (1st Mtg.)	1922	6
Ithaca St. Ry. Co. (2d Mtg.)	1922	6
Ithaca St. Ry. Co. (2d Mtg.)	1922	6
Ithaca St. Ry. Co. (2d Mtg.) Kansas City Elev. Co. (Gen. Mtg.)	1922	6
Kansas City Elev. Co. (Gen. Mtg.)	1922	4
Kansas City Ry. & Lt. (1st Refunding)	1913	5
Metropolitan St. Ry. Co. (Gen. Mtg.)	1997	2
Metropolitan St. Ry. Co. (Gen. Mtg.)	1913	5
Muscatine Cit. Ry. & Lt. Co. (1st Mtg.)	1917	5
Muscatine Cit. Ry. & Lt. Co. (1st Mtg.)	1917	5
Nassau Elec. R. R. Co. (Cons. Mtg.)	1951	4
N. Y. & Jersey Rd. Co. (1st Mtg.) N. Y. & Jersey Rd. Co. (1st Mtg.)	1932	5
N. Y. & Jersey Rd. Co. (1st Mtg.)	1932	. 5
No. Ohio Traction Co. (Cons. Mtg.)	1919	5
No. Texas Traction Co. (1st Mtg.)	1933	5
No. Texas Traction Co. (1st Mtg.)	1933	5
Oregon Electric Ry. Co. (1st Mtg.)	1933	555555455555555
Rochester Ry. Co. (Gold Mtg.)	1930	5
Carried forward		

COST	AUG. 1, '09	PURCHASED DURING	PAID DUR-	BALANCE AUG. I, 'IC	
	e	YEAR	ING YEAR		4
993/4	\$190,000	\$55,000	\$45,000	\$200,000	\$3,599,784.12
	25,000	*****	25,000		
5.40b	20,000	*****	*****	20,000	
4 7/8b	50,000	*****	25,000	25,000	
993/8	26,000	*****		26,000	
5 7 8b	24,000		*****	24,000	
5 % D	25,000	*****	25,000		
5 1/4 b 6% b 6% b	5,000			5,000	
0%0	25,000	******	*****	25,000	325,000.00
	\$390,000	\$55,000	\$120,000	\$325,000	
98		25,000		25,000	
94 1/2	15,000			15,000	
1013/4	25,000			25,000	
106 1/2	25,000			25,000	
1991/2	20,000			20,000	
103	2,000			2,000	
99 1/2-3/4	18,000	7,000		25,000	
99 3/8	50,000			50,000	
981/4	25,000			25,000	
102	50,000		150,000	-3,000	
1023/8	8,000		†8,000		
5½b	10,000			10,000	
100	15,000			15,000	
97 1/2	15,000	*****		15,000	
95	25,000		25,000		
93 1/2	50,000		111111	50,000	
86		15,000		15,000	
993/4	25,000			25,000	
5½b	10,000			10,000	
971/2	10,000			10,000	
87	25,000			25,000	
99	50,000		1		
103	30,000			50,000	
102	5,000			30,000	
103	25,000	2.000.000		5,000 25,000	
6 ½b	3,000				
102	4,000			3,000	
90	25,000			4,000	
53/8b	25,000			25,000	
100	25,000			25,000	
1123/8	50,000			25,000	
973/4		25,000	*****	A STATE OF THE STA	
971/2	6,500	23,000		25,000	
5.45b	3,500			0,500	
873/4	25,000			3,500	
100	10,000			25,000	
101	25,000			10,000	
5 1/4 b	25,000			25,000	
98				25,000	
99	15,000			15,000	
	10,000	22322	*****	10,000	
5.45b	25,000	25,000		25,000	
		-			
old at 102,273	\$810,000	\$97,000	\$83,000	\$824,000 \$	3,924,784.12

NAME	WHEN DUE	RATE
Amounts brought forward		
Rochester Ry. Co. (Gold Mtg.)	1930	5
Rochester Rv. Co. (Gold Mtg.)	1930	5
Saginaw Valley Tract. Co. (1st Mtg.)	1920	5 5 5 5 6 6
Sciota Valley Tract. Co. (1st Mtg.)	1923	5
Sciota Valley Tract. Co. (1st Mtg.)	1939	5
Steinway Ry. Co. (1st Mtg.)	1922	6
Toledo Tract. Co. (Cons. 1st Mtg.)	1912	6
Toledo Rys. & Lt. Co. (Con. 1st Mtg.)	1909	4
Toledo Rys. & Lt. Co. (Con. 1st Mtg.)	1909	4
West Side R. R. Co. of Elmira (1st Mtg.)	1914	5
LIGHT AND POWER BONDS		
Associated Gas & Elec. Co. (1st & Coll. Trust)	1939	5
Baltimore Un. El. L & P. Co. (Con. 1st Mtg.)	1929	41/2
Bay City Gas Co. (Gen. Mtg.)	1920	5
Butte Elec. & Po. Co. (1st Mtg.)	1931	5
Butte Elec. & Po. Co. (1st Mtg.) Butte Elec. & Po. Co. (1st Mtg.)	1951	5
Butte Elec. & Po. Co. (1st Mtg.)	1951	5
California Gas & El. Co. (Unif. & Refd.)	1937	5
Canton Elec. Co. (1st & Ref. Mtg.)	1937	5
Chippewa Valley Ry. Lt. & Por. Co. (1st Mtg.)	1924	5
Conn. Riv. Po. Co. of N. Y. (1st Mtg.)	1937	5
Consolidated Ltg. Co. of Vt. (1st Mtg.)	1926	5
Decatur Gas & Elec .Co. (1st Mtg.)	1929	5
Detroit City Gas Co. (Gold Mtg.)	1923	5
Dominion Po. & Tran. Co. (Gold Bd.)	1925-1927	555555555555555556666
Grand Rapids-Musk. Po. Co. (1st Mtg.)	1931	5
Green Bay Gas & El. Co. (1st and Refunding)	1925-1935	5
Hornell Gas Lt. Co. (1st Mtg.)	1910-1924	5
Hornell Gas Lt. Co. (1st Mtg.)	1917-1920	2
Ithaca Gas Lt. Co. (1st Mtg.) Lacrosse Water Po. Co. (1st Mtg.)	1931	5
Lincoln Gas Co. (1st Mtg.)	1931	6
Lincoln Gas Co. (1st Mtg.)	1911	6
Mt. Whitney Power & Elec. Co. (1st Mtg.)	1939	6
Muncie Elec. Lt. Co. (1st Mtg.)	1939	
Nassau Lt. & Po. Co. (1st Mtg.)	1927	5
Newburg Lt. Ht & Po. Co. (1st Mtg.)	1921	5
N. Y. Gas El. Ht. Po. Co. (1st Mtg.)	1948	5
N. Y. Gas El. Ht. Po. Co. (1st Mtg.) N. Y. Gas El. Ht. Po. Co. (1st Mtg.)	1948	5
N. Y. Gas El. Ht. Po. Co. (1st Mtg.)	1948	5
New York & Queen Elec. Lt. & Po. Co. (1st Con.)	1930	5
Niagara Falls Po. Co. (1st Mtg.)	1932	5
Niagara Lock, & Ont. Po. Co. (1st Mtg.)	1954	5
Ontario Po. Co. of Niagara Falls (1st Mtg.)	1943	5
Pacific Lt. & Po. Co. (1st. Mtg)	1942	5
Portland Gas & Coke Co. (1st & Refunding)	1940	5
Portland Gen. El. Co. (1st Mtg.)	1915-1935	5
Potomac El. Po. Co. (Cons. Mtg)	1936	555555555555555555555555555555555555555
San Diego Con. Gas & Elec. Co. (1st Mtg.)	1939	5
Seattle Lighting Co. (Refunding Mtg.)	1949	5
Shawinigan Wa. & Po. Co. (Con. Mtg.)	1934	5
Southern Lt. & Traction Co. (Col. Tr.)	1949	5
Carried forward		

соѕт	BALANCE AUG. 1, '09	PURCHASEI DURING	SOLD OR	BALANCI NG AUG. 1,	
		YEAR	YEAR		
	\$810,000	\$97,000	\$83,000	\$824,000	\$3,924,784.12
1111/2	25,000			25,000	
110	25,000			25,000	
102	50,000			50,000	
99	25,000			25,000	
5.20b	25,000			25,000	
114	15,000			15,000	
	40,000		******	40,000	
971/2	A STATE OF THE PARTY OF THE PAR				
92	4,000			4,000	
94	10,000			10,000	e69
101	25,000	****		25,000	\$1,068,000
	\$1,054,000	\$97,000	\$83,000	\$1,068,000	
95		25,000		25,000	
4.90b	25,000	- 3,		25,000	
5 1/4 b		15,000		15,000	
6%b	6,000	- 5,		6,000	
90	34,000			34,000	
6%b	15,000			15,000	
				25,000	
951/2	25,000	25.000	* * * * * * *		
97 1/4		25,000	****	25,000	
97 1/2		25,000		25,000	
92	25,000		******	25,000	
97 1/2		25,000		25,000	
100		12,000		12,000	
101	44,000	*****		44,000	
95	25,000	*****	*****	25,000	
99	25,000	14:4-4-4-4-4	* * * * * *	25,000	
100	9,000			9,000	
95	25,000		25,000	4 3 4 4 4 4 4	
100	4,000		4,000		
100	100,000	*****	100,000		
55/8b	25,000	*****	44444	25,000	
981/2	50,000		******	50,000	
107.79	5,000	*****	*****	5,000	
100		25,000	*****	25,000	
971/2		25,000		25,000	
5.45b	25,000			25,000	
100	25,000			25,000	
105	25,000			25,000	
801	50,000			50,000	
1101/2	25,000			25,000	
100		25,000		25,000	
991/2	10,000			10,000	
95	100,000			100,000	
95	100,000			100,000	
90	25,000			25,000	
981/2		25,000			
	25.000	25,000		25,000	
102 1/2	25,000		*****	25,000	
	25,000			25,000	
97 1/2	25,000		*****	25,000	
97 1/2	127722	25,000	*****	25,000	
90	50,000			50,000	
94 1/2		50,000	*****	50,000	
	\$0,52,000	\$302,000	\$129,000	\$1,125,000	\$4,992,784.12

NAME	WHEN DUE	RATE
Amounts brought forward		
St Louis Un. El. Lt. & Po. Co. (1st Mtg.)	1932	
Utah Lt. & Po. Co. (Prior Lien)	1930	5 5 5 5 5
Washington Wat. Po. Co. (1st Mtg.)	1939	5
Watertown Lt. & Po. Co. (1st Mtg.)	1959	5
Western United Gas & Elec. (1st & Refunding)	1950	5
Western Electric Co. (1st Mtg.)	1922	5
MISCELLANEOUS BONDS		
American Agri. Chem. Co. (1st Mtg.)	1928	5
American Cigar Co. (Series A Notes)	1911	4
American Lumber Co. (1st & Refunding)	1920	46655655566
American Tobacco Co. (Bond)	1944	6
Buffalo & Sus. Iron Co. (1st Mtg.)	1932	5
Central Coal & Coke Co. (Gen. Con. Mtg.)	1919	6
Central Leather Co. (1st Lien)	1925	5
Central Leather Co. (1st Lien)	1925	5
Central Leather Co. (1st Lein)	1925	5
Central Leather Co. (1st Lein) Consolidated Land Co. (1st Mtg.) Corn Products Refining Co. (1st Mtg.)	1918	0
Corn Products Refining Co. (1st Mtg.)	1934	5
Cudahy Packing Co. (1st Mtg.)	1924	5
Delaware River Ferry Co. (Sinking Fund)	1921	5
Flambeau River Lumber Co. (1st Mtg.)	1913-1915	0
Great Southern Lumber Co. (1st Mtg.)	1912-1915	0
International Steam Pump Co. (1st Lien)	1929	5 6
Leav. City & Ft. Leav. Wat Co. (Water Works) Long Bell Lumber Co. (1st & Refunding)	1912	6
Montreal Loc.'& Mac. Co. (1st Mtg.)	1919	4
National Enameling & Stamping Co. (Ref. Mtg.)	1924	4
New York Dock Co. (1st Mtg.)	1951	5 4 5 5 6 5
New York Dock Co. (1st Mtg.)	1934	-
Republic Iron & St. Co. (1st & Col. Ir.)	1934	5
Richmond Loc. & Mac. Wks. (Con. Mtg.)	1929	6
Rogers Brown Iron Co. (1st Mtg. & Refunding)	1924	5
Scarsdale Co. (1st Mtg.)	1919	6
Scarsdale Co. (1st Mtg.)	1916	6 5 4½ 6
Trow Dir. Ptg. & Bkdg. Co. (1st Mtg.)	1911-1914	5
United Fruit Co. (Sinking Fund)	1923	41/2
U. S. Rubber Co. (Col. Tr. 10 yr. note)	1919	6
Union Typewriter Co. (3 yr. note)	1913	5
Va. Caro. Chemical Co. (1st Mtg.)	1923	5
STOCKS		
*American Light & Traction Co., Preferred		6
American Tobacco Co., Preferred		6
*Baltimore & Ohio R. R. Co., Preferred		4
Chicago, Gt. Western Ry. Co., Preferred		-
(Taken in reorganization for Debenture Stock)		
Delaware & Hudson Co		q
*ist National Bank of Ithaca		12
*ist National Bank of Ithaca		12
Great Northern Ry. Co., Preferred		7
Great Northern Ry. Co., Preferred		7
Carried forward		
*A gift.		

COST	BALANCE F AUG. 1, '09		SOLD OR PAID DUR	BALANCE - AUG. 1, 10	
		YEAR	ING YEAR	3	
	\$952,000	\$302,000	\$129,000	\$1,125,000	\$4,992,284.12
100	25,000			25,000	
100	15,000		*****	15,000	
1023/4	25,000			25,000	
961/2	25,000			25,000	
98		25,000		25,000	
99		25,000	* * * * * *	25,000	\$1,265,000
	\$1,042,000	\$352,000	\$129,000	\$1,265,000	
5½b	25,000			25,000	
5%b	25,000			25,000	
100		25,000		25,000	
1051/2-112	25,000	50,000		75,000	
	20,000			20,000	
99	20,000			20,000	
100	70.2300023				
89	20,000			20,000	
99 1/2	30,000			30,000	
99 1/4	50,000			50,000	
99	111111	20,000	*****	20,000	
98	20,000			20,000	
981/2	25,000		111111	25,000	
104	8,000	*****	1,0 0	7,000	
		40,000		40,000	
100	10,000	15,000		25,000	
961/2		25,000		25,000	
100	30,000		*****	30,000	
981/2		25,000	*****	25,000	
5%b	25,000	* * * * * * *		25,000	
97		25,000		25,000	
*****	27,500	*****	12.000	27,500	
90	20,000		†20,000		
98	10,000	*****	110,000	******	
115	24,000	*****	****	24,000	
96.33		25,000		25,000	
95	25,000	*****		25,000	
100 1/2		25,000	*****	25,000	
5½b	130,000	*****	5,000	125,000	
953/4	25,000			25,000	
102 1/4	25,000			25,000	
97.25	*****	25,000	*****	25,000	
5.57b	25,000	*****		25,000	\$908,500
	\$644,500	\$300,000	\$36,000	\$908,500	
100	25,000			25,000	
1011/4	10,000	15,000		25,000	
94	300			300	
94		100,000		100,000	
171-175		25,000		25,000	
163.50	10,000			10,000	
125	40,000			40,000	
116	10,000			10,000	
1331/2		15,000		15,000	
tSold at 105	\$95,300	\$155,000		\$250,300	\$7,166,284.12

NAME	WHEN DUE	RATE
Amounts brought forward		
Knickerbocker Trust Co		12
National Bank of Commerce		8
N. Y. Central & Hudson River R. R. Co		8 6 6
New York Central & Hudson River R. R. Co		6
N. Y. Dock Co., Pfd		4
Northern Pacific Ry. Co		4 7
Reading Company (1st Preferred)		4
*Reading Company		4
Sears, Roebuck & Co., Preferred		4 7
*Wells Fargo & Co		10
*Wheeling & Lake Erie, 1st Preferred		44
*Wheeling & Lake Erie, 2nd Preferred		24
Wheeling & Dake Dire, 2nd Preferred		-4
Carried forward		

BONDS AND MORTGAGES

NO.	NAME	COUNTY	STATE
31	Joel Stull	McHenry	Illinois
60	H. Tuttle	Tompkins	New York
151	W. & J. Davidson	York	Nebraska
265 276	Sigma Phi Association	Tompkins	New York
338	J. W. Jenks	**	**
399	Fred Barber	Chariton	Missouri
436	Delta Kappa Epsilon	Tompkins Grundy	New York Missouri
502 546	E. T. Wilcox	Lancaster	Nebraska
643	H. L. Horn	York	"
751	C. C. Hennings	Cass Cass	
771	H. Wilkinson	York	44
797	S. Dowers	Polk	"
813	J. A. Farrar H. Johnson	Filmore Butler	44
841	W. Lefler	Sarpy	44
861	F. Krupicka	Saline	16
885 886	W. M. Russell	York Saunders	
888	R. Pryce	York	**
949	W. B. Davis	Cass	"
956	M. E. Tigard	Saline Barnstable	Massachusetts
1035	Claus Pepper	Linn	Missouri
1074	P. O. Berg	Polk	Minnesota
1096	A. O. Lebakken B. F. Fye	Grand Forks, Hamilton	North Dakota Nebraska
1136	C. L. Raney	Montgomery	Iowa
1162	H. Schmid	Polk	Nebraska
1163	B. Keller	Polk	

COST	BALANCE	PURCHASED SO	OLD OR PAID	BALANCE	
	AUG. 1, '09	DURING	DURING	AUG. 1, '10	
			YEAR	YEAR	
	\$95,300	\$155,000		\$250,300	\$7,166,284.12
	5,000	3,200	*****	8,200	
300	23,000		*****	23,000	
173	10,000	5,000		15,000	
100	10,000			10,000	
101	27,500	4		27,500	
		25,000	* * * * * *	25,000	
133 1/2	20,000	* * * * * * *		20,000	
80	30,000			30,000	
100	1141144	20,000	221241	20,000	
1211/2	10,000	******	110,000		
235	3,000			3,000	
	1,500			1,500	433,500.00
	\$235,300	\$208,200	\$10,000	\$433,500	
	\$7,090,016.1	2 \$1,285,200	\$775,432		\$7,599,784.12

\$58,900	\$22,450	\$36,450	\$7,599,784.12
1,600	******	1 600	
800		800	
1,000		1 000	
800		800	
1,000		1 000	
2,000		2 000	
400	400		
800	800		
350	******	350	
1,000	1,000		
1,800	1,800		
900	900		
850	850		
1,600		1,600	
1,000	1,000		
1,000		1,000	
1,000	1,000		
2,100	2,100		
1,700	1,700		
1,000		2,000	
700	700	1,000	
	700		
2,200 800	******	800	
5,000		5,000	
800		800	
1,500	*****	1,500	
3,000	*****	3,000	
700	200	500	
3,500	*****	3,500	
3,000	*****	3,000	
3,000	*****	\$3,000	
\$10,000	\$10,000		
AUG. 1, '09	YEAR		
BALANCE	PAID DURING	BALANCE	

NO.	NAME	COUNTY	STATE
	Amounts brought forward		
1210	J. A. Crabtree	Cass	Nebraska
1249	J. A. Whitlock	Lancaster	**
1293	W. W. Vance	York	**
1448	E. A. Britton	Adams	Iowa
1453	M. I. Courtney	Lancaster	Nebraska
1456	G. Wiebe	Gage	"
1474	R. T. Rutledge	Chariton	Missouri
1488	J. B. Hampton	Boone	
1512	F. M. Farr	Shelby	
1544	B. M. Watson	Cass	North Dakota
1553	J. T. Davis	Woodbury	Iowa Missouri
1602	H. A. Tomlin	Linn Pottawatamie	Missouri
1630	W. H.Blaney	Adair	it
1684	E. Hasselbalch	Polk	Nebraska
1696	W. Roubal	Colfax	11 COTASKA
1707	G. T. Hutchinson	Nuckolls	**
1756	W. M. Emmons	Monroe	Missouri
1780	M. Bunton	Macon	**
1785	E. Mendenhall	Hamilton	Nebraska
1794	J. E. Creighton	Tompkins	New York
1797	D. T. Evans	Macon	Missouri
1821	E. Mittilstadt	Stanton	Nebraska
1822	E. Eckart	Allen	Kansas
1826	A. Peterson	Polk	Nebraska
1828	J. C. Kerr T. H. Rees	Scotland Macon	Missouri
1833	E. Hahn	Polk	Nebraska
1837	A. Bruns	Merrick	11 Coraska
1848	J. F. Roubinek	Colfax	44
1858	A. Lind	Polk	a
1868	C. B. Rodgers	Gage	.0.
1869	F. Schramm	Washington	Kansas
1874	G. W. Cooper	Linn	Missouri
1880	W. H. Bowman	Gage	Nebraska
1883	J. Cohn	Otoe	**
1884	J. Cohn	Mountale	**
1896	A. H. Persing	Merrick Merrick	**
1904	A. K. Deuel	Jefferson	**
1900	J. Madigan	Saline	11
1920	J. Jacobs	Livingston	Missouri
1954	P. M. Sears	Charitan .	44
1973	E. D. Carpenter	Livingston	44
1980	E. Shreffler	Filmore	Nebraska
1991	M. Liland	Resliland	North Dakota
1993	R. W. Griffith	Kittson	Minnesota
1998	C. Flynn	Plymouth	Iowa
2005	J. A. Tisthammer D. Brainerd	Boone	Nebraska
2006	E. M. Newman	Woodbury Platt	Iowa Nebraska
2000	H. Zwick	Seward	Nebraska
2023	E. D. King	Coffey	**
2034	J. E. Lonsdale	York	- 11
2047	P. Houck	Saline	**
	arried forward		

BALANCE AUG. 1, 'co	PAID DURING YEAR	BALANCE	
\$58,900	\$22,450	\$36,450	\$7,599,784.12
2,000	*******	2,000	w1,599,104.12
1,000		1,000	
1,000		1,000	
2,000		2,000	
800		800	
4,000		4,000	
900		900	
650	*****	650	
1,500	1,500		
1,500		1,500	
2,000		2,000	
3,700		3,700	
600	4.4.4.4.4.4	600	
1,250		1,250	
3,200		3,200	
900		900	
1,800	1,800	*	
2,000		2,000	
450	100	350	
900		900	
1,000	500	500	
1,100		1,100	
1,000	1,000		
600		600	
2,000	2,000		
2,100		2,100	
1,600	1,600		-
1,200		1,200	
1,200	1,200		
2,000	2,000		
800	800	444444	
4,000	4,000		
2,400		2,400	
2,000	2,000		
4,000		4,000	
800	800		
1,700		1,700	
1,200	1,200	* * * * * * *	
1,700	1,700	******	
1,100	1,100	******	
1,000	* * * * * * *	1,000	
800	*****		
1,300		1,300	
500		500	
1,700	1,700		
1,700		1,700	
2,400		2,400	
2,000	8	2,000	
850	850		
2,000	2,000		
1,500	1,500		
1,800	1,800		
1,500	1,500	******	
1,000	1,000		
1,800	1.800	******	the same of the sa
\$146,400	\$57,900	\$88,500	\$7,599,784.12

NO.	NAME	COUNTY	STATE
46.00	mounts brought forward		Nebraska
2060	A. F. Pinkham	Cass	· ·
2063	E. A. Armstrong	Filmore	- 11
2064	J. R. Mason	Nance	**
2068	M. Pearson	Adams	**
2086	J. D. Stone	Filmore	16
2123	S. R. Carney	Filmore	
2161	P. Hurtz	Gage	
2167	B. Brown	York	
2172	J. Sklenar	Burt	
2174	J. A. Gunn	Randolph	Missouri
2180	S. M. Kensinger	Hamilton	Nebraska
2104	J. H. Croft	Clay Audrain	Missouri
2200	J. Finnegan	Lancaster	Nebraska
2221	A. Rustad	Cass	ri coraska
2241	M. Donnelly	Audrain	Missouri
2246	J. H. Mason	Macon	"
2247	C. Zabokrtsky	Washington	Kansas
2260	G. Maltby	Montgomery	Iowa
2263	J. Mohlman	Plymouth	**
2264	J. Bowman	York	Nebraska
2268	J. H. Stromer	Gage	**
2280	J. P. Swanson	Polk	
2281	C. Kiesselbach	Polk	
2285	F. Krejci	Filmore	-
2295	S. Wickersham	Monona Filmore	Iowa
2312	S. Kitt H. H. Webster	Coffey	Nebraska
2315	E. A. Baker	Randolph	Missouri
2324	J. Dunn	Polk	Nebraska
2327	A. C. Jones	Polk	41
2330	H. G. Hill	Taylor	Iowa
2332	G. W. Ryan	Pembina	North Dakota
2339	M. W. Mahoney	Butter	Nebraska
2354	P. Harden	York	. "
2355	D. Wilkey	Page	Iowa
2356	I. O. Stensrud	Cass	North Dakota
2362	M. Buck	Richland	Vanna
2368	L. W. Leake	Labette Cass	Kansas North Dakota
2371	J. W. Netzley	Gage	Nebraska
2374	J. R. Harris	Polk	recordska
2392	A. Anderson	Kittson	Minnesota
2393	A. A. Vigan	Cass	North Dakota
2396	J. B. Hockridge	Cass	**
2399	W. F. Gelle	Richland	+1
2401	H. H. Schnebly	York	Nebraska
2410	J. G. Lutz	Nuckolls	11
2414	H. Sauvageau	Cass	North Dakota
2417	S. Phillips	Hamilton Filmore	Nebraska
2418	T. J. Watson	Cass	North Delect-
2427	H. J. Voss	Thayer	North Dakota Nebraska
2429	J. B. Schommer	Filmore	ii aska
2460	C. Heesacker	Platt	44
-4-9			

Carried forward

BALANCE AUG. I, '00	PAID DURING	BALANCE	
\$146,400	YEAR \$57,900	\$88,500	\$7,599,784.12
3,000	*37,900	3,000	\$7,599,794.12
2,000	2,000		
1,600	1,600		
1,000		1,000	
1,000	1,000		
600		600	
800		800	
1,100	1,100		
2,500	2,500		
900		900	
1,500	1,500		
3,000	3,000		
3,000	3,000	******	
1,000	1,000		
2,000	* * * * * * *	2,000	
1,700	*****	1,700	
1,000	*****	1,000	
2,800	*****	2,800	
900	*****	900	
2,500	******	2,500	
300	300		
2,000		2,000	
1,000	200	800	
1,000	600	1,000	
600	600		
700	300	400	
1,700		2,200	
1,300	******	1,700	
800		800	
800	1	800	
700		700	
750		750	
1,000		1,000	
2,000		2,000	
700		700	
1,200	1101111	1,200	
1,600	1111111	1.600	
600	600		
2,000		2.000	
800	800		
1,000	*****	1,000	
1,200		1,200	
800		800	
600		600	
1,600		1,600	
400	400		
3,000		3 000	
1,800	1,800		
500	500		
2,375		2,375	
700		700	
1,800	1.800		
700	700		
2 500		2,500	
\$223,025	\$82,600	\$140,425	\$7,599,784.12

NO.	NAME	COUNTY	STATE
	Amounts brought forward		
2477	T. C. Ball	Wilson	Kansas
2478	I. James	Montgomery	116
2496	F. J. Suing	Cedar	Nebraska
2498	F. W. Hammond	Hamilton	ü
2499	S. L. Bender	Saline	11
2526	R. G. Thompson	Hamilton	**
2532	A. H. Underhill	Gage	14
2555	R. Mount	11	10
2567	I. C. Wood	Pawnee	-16
2573	J. T. Buening	Nemaha	Kansas
2579	J. E. McPherson	Republic	
2592	A. Potmesil	Madison	Nebraska
2598	F. A. Lenhard	Filmore	No at Datasta
2605	T. H. Canfield	Cass	North Dakota
2630	J. R. Frantz	Marshall	Kansas Nebraska
2635	O. Olson O. Sauvageau	Cedar Cass	North Dakota
2639	C. E. Franson	Wilkins	Minnesota
2642	J. S. Johnson	Hamilton	Nebraska
2643	P. Leddy	Phelps	Nebraska
2647	C. S. Wicks	Wilson	Kansas
2648	F.L. Richter	Cass	North Dakota
2649	N. Dorval		10
2650	H. Larson		Iowa
2661	C. C. Nourse	Polk Macon	Missouri
2667	J. J. Grim J. Yokom	Cass	North Dakota
2671	R. H. Arthur	Nance	Nebraska
2681	A. A. Andrews	Cass	North Dakota
2685	J. Akeson	Cass	- 11
2692	J. Riechert	Livingston	Missouri
2695	A. B. Searles	Lancaster	Nebraska
2697	S. D. Dudney	Nance	A second
2700	A. Linderbert	Montgomery	Iowa Kansas
2702	J. M. Upton	Chautauqua Gage	Nebraska
2711	P. N. Hageness	Traill	North Dakota
2713	S. Sorsen	The state of the s	**
2719	T. Morrisey, Sr	Lancaster	Nebraska
2720	A. Schultz	- "	"
2721	S. M. Bushong	Pawnee	44
2724	F. F. Tully	Boone	
2725	M. M. Saylor	Nuckolls Phelps	
2737	A. MacWilliam	Cass	North Dakota
2738	I. T. Workman	Traill	1101111
2739	H. Anderson	Richland	- 0
2742	H. G. Thorell	Phelps	Nebraska
2751	L. F. Hermunslie	Richland	North Dakota
2752	T. C. Hora	Washington	Kansas
2753	T. Knox	Traill	North Dakota Missouri
2757 2782	J. W. Ellis C. Jensen	Pettis Hamilton	Nebraska
2702	A. Bengston	Lancaster	11 COLASKA
-191	Tr. Toughous and a service and a service as	- Landing Control	

BALANCE	PAID DURING	BALANCE	
AUG. 1, '09	YEAR		
\$223,025	\$82,600	\$140,425	\$7,599,784.12
800		800	
800	* * * * * * *	800	
1,500		1,500	
1,200		1,200	
1,400	****	1,400	
1,500		1,500	
1,000		1,000	
400	*****	400	
1,300		1,300	
1,500	*****	1,500	
1,000	*****	1,000	
1,000		1,000	
800	100	700	
2,250	*****	2,250	
1,500		1,500	
700	200	500	
5,000		5,000	
1,000	*****	1,000	
1,600	******	1,600	
1,200	*****	1,200	
1,200		1,200	
1,000	*****	1,000	
1,300		1,300	
2,000	*****	2,000	
1,600		1,600	
7,000	******	7,000	
315		315	
1,600		1,600	
1,500	*****	1,500	
3,000		3,000	
1,600	1 4 4 4 4 4 4	1,600	
1,200		1,200	
2,000		2,000	
3,500		3,500	
1,800		1,800	
1,000		1,000	
800	800		
1,300	1,300		
1,800		1,800	
1,200	****	1,200	
1,000	1,000		
1,000		1,000	
1,000		1,000	
1,000		1,000	
1,600	49.49.44.4	1,600	
3,800		3,800	
2,500	2,500		
1,800		1,800	
1,500		1,500	
1,300	******	1 300	
3,700		3 700	
3,500	*****	3 500	
700		700	
3,000		3,000	
2,400	******	2,400	
\$316,990	\$88,500	\$228,490	\$7,599,784.12

NO.	NAME	COUNTY	STATE
	Amounts brought forward		
2793	D. A. Dickinson	Boone	Nebraska
2800	W. A. Hermlee	Thayer	11
2806	F. Herman	Staton	34.
2807	M. Sullivan	Nuckolls	44
2800	J. Prendergast	Pocahontas	Iowa
2810	A. A. Riley	44	H
2814	F. Quevillon	Dunn	Wisconsin
2820	W. Schulz	Pierce	Nebraska
2821	F. Pagel	Thayer	
2846	A. A. Funk	O'Brien	Iowa
2850	J. W. Wiebe	Gage	Nebraska
2853	H. W. Cassill	Washington	Kansas
2856	S. Slaughter	Saunders	Nebraska
2858	M. Huber	Lancaster	**
2860	H. H. Fairchild	Jefferson	
2863	N. Wilcox	Taylor	Iowa
2866	J. D. Beal	Livingston	Missouri
2871	J. Flakne	Polk	Nebraska
2874	P. P. Skorstad, Sr	Clay	Minnesota North Dakota
2876	A. P. Osley	Richland	Nebraska
2881	S. B. Smith	Phelps	Kansas
2885	P. L. Markey	Chautauqua Lancaster	Nebraska
2889	A. Edwards	Woodbury	Iowa
2891	H. Jeppson	Phelps	Nebraska
2898	D. W. Hilsabeck	" incips	1100140114
2899	G. Stopak	Nance	11
2904	E. L. Melvin	Boone	- Ci
2911	A. Rostvang	Richland	North Dakota
2914	S. Bagley	Taylor	Iowa
2915	J. A. Hogan	Lancaster	Nebraska
2918	T. S. Reitan	Clay	Minnesota
2920	L. Schill	Norman	22.2
2921	P. Anderson	Phelps	Nebraska
2922	C. Vieselmeyer	Thayer	** ** *
2936	E. K. Atkinson	Tompkins	New York
2939	F. Nichols	Pierce	Nebraska Nesth Dalasta
2946	M. Mortensen	Cass	North Dakota
2947	J. F. Romine	Macon	Missouri
2953	W. Wymore	Macon Republic	Kansas
2957	J. F. Henry	Moniteau	Missouri
2961	H. Snodgrass	Merrick	Nebraska
2963	W. E. Stewart	Washington	Kansas
2968	H. T. Olanson	Polk	Minnesota
2970	L. Skamfer	Richland	North Dakota
2973	A. N. Macy	Cloud	Kansas
2975	A. Denker	Polk .	Nebraska
2979	The Bee Building Company	Douglass	44
2980	J. G. Wagner	Stanton	**
2983	P. F. Cahill	Boone	11
2984	O. A. Johnson	Hamilton	14
2985	H. Goettsch	Cheraker	Iowa
2992	W. M. Allbury	Sarpy	Nebraska
2993	F. L. Osberg	Knox	

BALANCE AUG. I, '00	PAID DURING	BALANCE	
	YEAR		
\$316,990	\$88,500	\$228,490	\$7,599,784.12
1,000	******	1,000	
3,000		3,000	
700	700	* * * * *	
700		700	
2,500		2,500	
1,500		1,500	
150		150	
1,400	1,400		
500		500	
5,000		5,000	
2,400	400	2,000	
2,000	*****	2,000	
2,500	2,500		
1,000	-13	1,000	
3,800	800		
		3,000	
500	*****	500	
3,150		3,150	
1,600		1,600	
1,500	****	1,500	
800	****	800	
800		800	
1,100		1,100	
1,600	1,000	600	
1,200	1,200		
1,300		1,300	
1,500		1,500	
1,100		1,100	
1,300	1,300		
500		500	
1,600		1,600	
650		650	
1,000		1,000	
		750	
750		1,700	
1,700		2,000	
2,000	*****		
2,500	1111111	2,500	
300	300		
600		600	
2,000	2,000		
600	600		
1,100	1,100		
1,000	1,000		
1,250		1,250	
1,200	1,200	****	
500		500	
1,800		1,800	
200	100	001	
3,500	3,500		
200,000		200,000	
1,000	500	500	
3,500	3,500		
1,200	313	1,200	
3,200		3 200	
1,600		1 600	
1 200		1,200	
1,200		1,200	
\$599,040	\$111,600	\$487,440	\$7,599,784.12

NO.	NAME	COUNTY	STATE
	Amounts brought forward		
3009	D. D. Howe	Woodbury	Iowa
3018	H. Wehnes	Gage	Nebraska
3020	E. K. Atkinson	Tompkins	New York
3021	O. A. Johnk	Clay	Minnesota
3025	W. Johnston	Merrick	Nebraska
3027	S. R. Jenkins	Montgomery	Iowa
3028	W. H. H. Leck	Washington	Kansas
3035	C. Sherman	Lyon	Iowa
3036	F. Grabe	Washington	Nebraska
3039	E. J. Rathbun	Woodbury	lowa
3040	H. Bonin	Thayer	Nebraska Iowa
3045	S. Purdy	Adair Merrick	Nebraska
3050	R. C. Lambert	Woodbury	Iowa
3051	N. J. Wagner	Mills	ii
3058	J. Ward	Cass	Missouri
3062	F. E. Ely	Gage	Nebraska
3066	E. Scanlon	Saunders	11
3069	P. Hickman	Lyon	Iowa
3071	C. W. Carlson	Woodbury	11
3073	T. Peterson	Plymouth	**
3074	W. Lindsey	Cass	Missouri
3075	T. B. Trumbo, etc	Cass	11
3077	E. G. Snyder	Boone	Nebraska
3080	D. Wilson	Adair	Iowa
3081	T. J. Bender	Filmore	Nebraska
3087	E. F. Medlar	Fillmore	Nebraska
3090	D. D. Darnell	Henry	Missouri
3105	H. Fraemke	Thayer	Nebraska
3110	S. Marples	Gage	· ii
3111	A. S. Waldron	Grundy	Missouri
3115	J. H. Schierbaum	Grundy	1113501111
3117	I. Ratliff	Cass	**
3122	E. S. Powell	Macon	14
3125	N. Jakobson	Tefferson	Nebraska
3134	A. Meyer	Thayer	11
3136	J. T. Price	Morgan	Missouri
3137	O. Anderson	Richland	North Dakota
3142	J. E. Swaney	Thayer	Nebraska
3144	B. Wegner	Merrick	
3147	D. Keleher	Woodbury	Iowa
3148	E. T. Keleher		
3150	C. S. Borroughs	Gage	Nebraska
3153	A. H. Anderson	Woodbury	Iowa
3154	M. Casey	Madison	Nebraska
3155	C. W. Foresman	Republic	Kansas Nebraska
3157	J. C. Robinson	Cedar Montgomery	Iowa
3161	G. M. Metz.	Dixon	Nebraska
3165	G. H. Stivers	Cherokee	Iowa
3168	G. Gineau	Thayer	Nebraska
3171	A. G. Wolfenbarger	Gage	11
3172	A. E. Inman	Tremont	Iowa
3173	M. Wiszman	Fillmore	Nebraska
3-13			

BALANCE AUG. 1, '00	PAID DURING	BALANCE	
\$599,040	YEAR	0.0	0
1,200	\$111,600	\$487,440	\$7,599,784.12
2,500	******	1,200	
1,500		2,500 1,500	
2,000		2,000	
3,000	4 4 4 4 4 4 4	3,000	
1,800	1,800		
2,000		2,000	
2,500	2,500		
1,350	1,100	250	
600	600	******	
2,000		2,000	
2,500		2,500	
2,200		2,200	
1,800		1,800	
2,200		2,200	
700		700	
3,300	*****	3,300	
2,500		2,500	
2,000	****	2,000	
700		700	
1,300	800	500	
300	******	300	
550	* * * * * * *	550	
1,000	500	500	
600	******	600	
2,500	*****	2,500	
1,200	*****	1,200	
3,300	3,300		
2,400	1,500	900	
1,600		1,600	
2,500	******	2,500	
1,000	****	1,000	
1,800	1,000	800	
900	900	*****	
2,000	2,000		
1,000	* * * * * *	1,000	
1,000		1,000	
2,000	2,000	1,200	
800		800	
2,700		2,700	
2,000	2,000		
1,600		1,600	
900	900		
2,000	2,000		
1,700	1,700		
1,500	1,500		
1,200	1,200		
1,200	1,200		
800	800		
2,300	2,300		
2,500		2,500	
5,000	5.000		
4,000	4,000		
4,500		4,500	
\$700,240	\$152,200	\$548,040	\$7,599,784.12

NO.	NAME	COUNTY	STATE
Δ	mounts brought forward		
3174	M. Wiszman	Seward	Nebraska
3175	C. Adair	Fillmore	44
3176	L. M. Swett	Gage	**
3177	E. F. Medlar	Thayer	"
3180	W. J. Oliver	Nodaway	Missouri
3181	H. Rustad	Richland	North Dakota
3182	H. Anderson	Cass	
3183	O. Anderson	Cass	**
3184	J. T. Gylland	Richland Adair	Missouri
3185	P. E. Butler	Cloud	Kansas
3190	S. Magnusson	Richland	North Dakota
3191	J. Ready	Wilkins	Missouri
3193	J. A. Stenhjem	Cass	North Dakota
3194	M. Martinson	Richland	44
3195	P. Bergin	Dixon	Nebraska
3196	S. J. Liland	Richland	North Dakota
3197	W. W. Pease	Richland Worth	Missouri
3200	F. Herrick	Richland	North Dakota
3202	J. A. Leer	Richand	1401 til Dakota
3213	Minnesota Canada Land Company	Thayer	Nebraska
3214	J. W. Little	Fillmore	"
3216	O. N. Bohne	Richland	North Dakota
3217	F. Burns	Republic	Kansas
3218	J. Sandell	Polk	Nebraska
3219	S. A. Swanson	Hamilton	Minamai
3222	J. Irish	Chariton Macon	Missouri
3224	J. Sorenson	Platt	Nebraska
3227	F. Moritz	Pocahontas	Iowa
3228	H. H. Dagsforrde	Nuckolls	Nebraska
3229	J. R. Clement	Thayer	Iowa
3230	J. M. Jones	Fillmore	Nebraska
3231	M. C. Nelson	Polk	**
3232	W. Stenzel	Platt	u
3233	J. Novacek F. S. Crane	Butler Ida	Iowa
3235 3238	J. L. Campbell	Hancock	Iowa
3240	E. J. Crook	Gage	Nebraska
3241	J. E. Ingerson	York	"
3242	J. Dynes	Cass	North Dakota
3243	J. H. Moxham	Republic	Kansas
3245	M. Gouff	Gage	Nebraska
3247	T. Kiesselbach	Polk	
3238	G. J. Morris	Nuckolls Douglass	44
3250	B. Hampton	Saline	44.
3252	Commercial Building Company	Douglass	44
3253	M. P. Holland	Lancaster	44
3254	C. A. Bush	Clay	"
3255	H. Luhring, Jr	Washington	Kansas
3256	G. McMurry	Gage	Nebraska
3257	D. A. Pollock	Fillmore Nuckolls	46
3258	C. Diamit,	TIUCKOIIS	

BALANCE AUG. I, '09	PAID DURING YEAR	BALANCE	
\$700,240	\$152,200	\$548,040	\$7,599,784.12
4,500		4,500	\$7,599,704.12
2,600	2,600	******	
800	*****	800	
1,200		1,200	
2,600	2,600		
1,500	1,500		
1,700		1,700	
2,000	*****	2,000	
2,000	2,000		
1,100	1,100	14 4 4 4 4 4 4 4 4	
500	500		
2,000	2,000	44	
2,000	2,000		
1,500	1,500		
2,000		2,000	
1,200		1,200	
1,600	1,600		
1,000	******	1,000	
4,000	4,000		
300	300		
1,000		1,000	
3,200	1.100	29,000	
800	3,200	800	
1,500	*****	1,500	
1,300	1,300		
2,000		2,000	
1,200	1,200		
750		750	
800	800	*****	
1,300	1,300		
4,000		4,000	
1,500	******	1,500	
400	400		
1,200	1,200		
1,250	1,250	******	
3,400	400	3,000	
600	600		
2,000		2,000	
6,000	******	6,000	
2,600		2,600	
2,000	2,000		
1,000		1,000	
3,600	******	3,600	
1,200		1,200	
1,200		1,200	
7,000	******	7,000	
1,000	1,000		
30,000	*******	30,000	
400	200 T 200		
1,200	1,200	1,500	
2,500	1,000	1,000	
4,500		4,500	
1,000		1,000	
\$859,740	\$190,950	\$668,790	\$7,599,784.12

NO.	NAME	COUNTY	STATE
	Amounts brought forward		
3262	J. P. Lofgren	Phelps	Nebraska
3263	G. S. Shaklee	Sumner	Kansas
3264	C. S. Ellison	LaBette	**
3265	I. H. Ellison	11	44
3268	A. T. Wilhite	Randolph	Missouri
3260	G. S. Stoner	Saunders	Nebraska
3271	R. Fisher	Gage	"
3272	H. Herpolsheimer	Lancaster	11
3273	C. Cramer	Polk	Iowa
*3275	E. J. Kemp	Westchester	New York
*3276	R. G. Abercrombie	a	**
*3277	R. G. Abercrombie	"	**
*3278	J. English	**	**
*3279	J. English		44
*3281	S. E. Connell	**	
*3282	A. Clark	**	"
3283	D. Rosenstein	Hennepin	Minnesota
3284	O. L. Kaminske	Mitchell	Kansas
3285	J. Gugerty	Grundy	Missouri
3286	W. A. Stocking	Tompkins	New York
3287	O. Schreck	Moniteau	Missouri
3288	J. Craig	Tompkins	New York
3289	R. Sweeney	Chippewa	Wisconsin
3290	T. Gill	Clay	Nebraska
3291	E. D. W. Dodson	Clay	Kansas
3292	C. Anderson	Wilkin	Missouri
3293	R. Schapke	Dixon	Nebraska
*3294	M. R. Connell	Westchester	New York
*3295	R. G. Abercrombie	ii ii	11
*3296			**
*3297 *3298	G. C. Andrews	**	- 11
*3299	S. E. Connell	**	ii
3301	H.B. McLeod	Stanton	Nebraska
*3302	H. Voorhees	Hennepin	Minnesota
3304	T. L. Stuart	Merrick	Nebraska
3304	J. T. Allen	Moniteau	Missouri
3306	G. L. Woodward	Phelps	Nebr ka
3307	O. J. Engelstad	Polk	Mir.nesota
3308	P. J. Engum	Richland	North Dakota
3300	A. Koehler	Hall	Nebraska
3310	Great Lakes Dock Company	St. Louis	Minnesota
55-5		- Labour	

^{*}A gift.

BALANCE	PAID DURING	BALANCE	
AUG. 1, '09	YEAR	4.44	
\$859,740	\$190,950	\$668,790	\$7,599,784.12
1,000	** * * * * *	1,000	
7,000		7,000	
725	725		
725	725		
2,100	****	2,100	
2,200		2,200	
1,200		1,200	
30,000	2,500	27,500	
10,000	44444	10,000	
7,000	****	7,000	
3,000		3,000	
1,500	9. 4. 4. 9. 4. 4. 4.	1,500	
2,000	*****	2,000	
500		500	
5,000		5,000	
15,000		15,000	
16,500	1,500	15,000	
4,000		4,000	
1,600		1,600	
3,500	*****	3,500	
6,000		6,000	
3,000		3,000	
500	500		
700	*****	700	
3,000	* * * * * * * *	3,000	
1,500	1,000	500	
2,000	444444	2,000	
5,000		5,000	
5,000		5,000	
15,000		15,000	
5,800	4.4 * 2.4 * *	5,800	
1,000		1,000	
4,000		4,000	
3,000		3,000	
50	50		
1,200		1,200	
800		800	
2,500	2,500		
800		800	
800		800	
8,500	8,500		
35,000		35,000	870,490.00
\$1,079,440	\$208,950	\$870,490	\$8,470 274.12

The second secon		
Amount brought forward		\$8,470,274.12
Loans on collateral		136,977.50
C (1D)		
Special Deposits.	Ø- 10- 00	
Columbia Trust Co., @ 3%	\$1,497.92	
Equitable Trust Co., @ 2½%	481.30 570.88	
Guaranty Trust Company, @ 3%		
Ithaca Trust Company, @ 3% Mercantile Trust Company, @ 3% Metropolitan Trust Company, @ 3½% Union Trust Company, @ 2½%	1,358.81	
Metropolitan Trust Company @ 21/07	123.04	
Union Trust Company @ 21/9/	373.30	
United States Trust Company, @ 2 1/2%	145.19	
-	-439	4,998.52
Real Estate.		1123
Sage Block, Ithaca, 6%	31,000.00	
Campus Cottage Account 51/2%	59,960.86	
Foreclosure Property 7%	15,220.65	106,181.51
-		
Land Contracts.		
Western Land Contracts Schedule	78,400.55	-0.0
Warren States Contract 5%	400.00	78,800.55
		\$8,797,232.20
Advances for purchase or construction.		φο,/9/,232.20
Farm Land Purchase	25,873.00	
Sage College Repairs	10,879.51	
Gymnasium Addition	2,325.38	4
Morse Hall Addition	1,214.50	40,292.39
		4-1-2-07
Ledger Balances.		
Departmental Accounts	1,889.37	
Expense Accounts	4,706.58	
Students	1,366.46	
Bennett Mortgage	1,620.00	
Sundry Persons	3,092.48	
Agricultural Experiment Station, Adams	473-20	13,148.09
Cash Advances.		
G. F. Atkinson, acc't European Fungi Collection	400.00	
H. E. Dann, acc't Music Festival	200.00	
L. M. Dennis, acc't Purchasing Trip	150.00	
E. S. DeLany, Petty Cash, Agricultural College	200.00	
V. A. Moore, Petty Cash, Veterinary College	100.00	
V. A. Moore, Petty Cash, Veterinary College W. M. Polk, Petty Cash, Medical College	500.00	
Martha Van Rensselaer, acc't Inspection Trip	200.00	
Flora Rose, acc't Inspection Trip	200.00	
Harriet A. Sutherland, Petty Cash, Infirmary	25.00	
L. H. Van Kirk, Postmaster, acc't Postage	73.66	
L. A. Wait, acc't Salary	3,000.00	
	108601	9,135.60
L. A. Wait, acc't Salary Mrs. G. S. Martin, acc't Sage Board account	4,086.94	
Mrs. G. S. Martin, acc't Sage Board account	4,080.94	00 0 0 0 0 0
_	4,000.94	\$8,859,808.28
Less Amounts due	4,000.94	\$8,859,808.28
Less Amounts due Bills payable	4,000.94	\$8,859,808.28
Less Amounts due Bills payable \$6,500.00 Bennett Book Fund 2,158.90	4,000.94	\$8,859,808.28
Less Amounts due Bills payable	4,080.94	\$8,859,808.28
Less Amounts due Bills payable . \$6,500.00 Bennett Book Fund 2,158.90 Sage Room Deposit 1,955.00 C. E. Survey Camp 792.54	4,080.94	\$8,859,808.28
Less Amounts due Bills payable	4,050.94	\$8,859,808.28
Less Amounts due Bills payable . \$6,500.00 Bennett Book Fund . 2,158.90 Sage Room Deposit . 1,955.00 C. E. Survey Camp . 792.54	4,050.94	\$8,859,808.28

Amounts brought forward			\$8,859,808.28
Memorial Book Fund	140.25 202.90		56.749.59
			\$8,803,058.69
Cash in bank		\$54.873.37	40,003,009
Agricultural Income	\$5,283.52		
\$175,000 App'n for 1909-1910, main-	Φ5,203.52		
tenance State College of Agriculture.	22,203.52		
Income State College of Agriculture	1,064.61		
State College of Forestry Income State Veterinary College Income	8,983.90		
State Veterinary College Maintenance	5,852.63		
Due C. U. from State:	\$44,431.72		*
App'n for Extension work			
1909-1910 \$1,233.18 App'n for Extension work			
1010-1011 740.04			
App'n for Enlargement Veterinary College 49.28			
App'n for College of Forestry			
Land Account 288.53			
App'n for Extension Work,	0	0	
Veterinary College \$1,003.60	\$3,323.03	\$41,108.09	13,765.28
			\$8,816,823.97
Schedu	TR VI		
FORECLOSURE [Aug 1, 196	C 045 615 616 515		1910 Income
J. H. Catlin \$12,900.		12 0 7.00	00.00 \$1,117.51
W. G. Clark 2,320.	65		0.65
S. H. Lamport 725.	oo Sold for		
\$15,945.	65	\$15,22	0.65 \$1.117.51
Profit on foreclosure property	17		
sold		\$28,28	37.63
Credit balance	- 7	\$13,00	66.98
Schedu	LE XII		
SUSPENSE	ACCOUNT		
Lots in Topeka		\$1.04	3.30
New York Dock Company Stock		2,50	0.00
LaCrosse Water Power Company Stock		1,25	0.00
Connecticut River Power Company Stoo	ck	10	0.00
Note.—This Suspense Account consists of prof securities or as bonus on purchases and is no	operty of unce	ertain value ta	ken in adjustment
of securities or as homes on nurchases and is no	t included in	he University	gecote

SCHEDULE XIII

			SUMMARY OF I	NTEREST RATE:	S	
			Aug. 1, 1909	Aug. 1, 1910	Increase	Decreas.
Securitie	s bear	ing				
2 % int	t. or d	ividend	\$ 1,746.30			\$ 1,746.30
21/2%	"	44	3,366.57	999.79		2,366.78
3%	44	- 11	90,571.52	3,875.69		86,695.83
31/2%	43	1.6	70.573.88	54,123.04		16,450.84
4%	**	15	873,800.00	915,800.00	42,000.00	
41/2%	**	11	714,700.00	550,050.00		155,650.00
43/4%	11	14	48,500.00	36,000.00		12,500.00
5 %	4.6	10	5,114,579.61	5,440,501.62	325,922.01	
51/4%	***	11	18,000.00	18,000.00		
51/2%	-11	16	171,862.72	149,802.72		22,060.00
6 %	**	11	1,251,415.67	1,278,156.45	26,740.78	
7 %	44	46	30,827.24	91,222.89	60,395.65	
7 %	44	-11	43,945.65	23,000.00		20,945.65
9 %	- 66			25,000.00	25,000.00	
10 %	"	**	10,000.00			10,000.00
12 %	**	11	50,000.00	58,200.00	8,200.00	
Non pay	ing .		158,500.00	143,500.00		15,000.00
Advance	es and	Ledger				
Balan	ces		71,352.51	5,826.49		65,526.02
Cash iter	ns		29,876.38	13,765.28		16,111.10

\$8,753,618.05 \$8,816,823.97 \$488,258.44 \$425,052.52

\$8,816 823.97

The average rate on the above is 5.01 per cent. The rate of interest upon invested funds, actually received during the past year averaged 5.098 per cent.

SCHEDULE XIV

CHANGES IN INVESTMENTS SINCE AUGUST 1, 1	909
Securities on hand Aug. 1, 1909 as per Treasurer's Report	\$8,753,618.05
(See Productive Funds) \$1,285,200.	00
Western Land Contracts—Sales during the year (Schedule XIX)	00
Increase in Campus Cottage Account 2,500.	\$1,290,465.00
	10,044,083 05
Deduct, paid or sold during the year:	
Corporation Bonds, Notes and Stocks (See Productive Funds)	00
Sundry Bonds and Mortgages (See Productive	
Funds) 208,950.	
Decrease, Loans on collateral	
Decrease in Foreclosure Account	
Decrease in Special Deposits	75
Western Land Contracts, Paid during year	
(See Schedule XIX)	
Decrease in Cash Item	
Decrease in Cash Item	10 \$1,227,259.08

SCHEDULE XV

OCH	IEDULE ILV		
BALANCES DUE AUG. 1, 1910, OF	N CONTRACTS FO	R WESTERN I	ANDS SOLD
Carl N. Anderson		7%	\$ 419.00
Louis Anderson		7	243.24
Chas. T. Geroue		6	270.00
Jump River Land Co		6	4,286.45
Fred A. Hunter		6	390.00
Cornell Land and Power Co		51/2	30,000.00
Julius Kuehl		6	275.00
J. B. Saunders		6	150.00
South Muscatine Lumber Co		51/2	17,500.00
Ole E. Lund		6	200.00
Ben R. Eide		6	225.00
Carl Flug		6	135.00
Gust Wegan		6	500.00
Gustav and Augusta Lange		7	340.00
J. L. Gates Land Co		51/2	21,841.86
South Alberta and Minnesota Land	Co	6	800.00
Ole O. Smestuen		6	325.00
Christian Anderson			500.00
			\$78,400.55
			77 77 33
Sch	EDULE XVI		
RE	AL ESTATE		
Land	Acres		
Campus		\$217.758.05	
*Agricultural Farm	577	15,311.30	
Veterinary Farm	115	6,536.00	
Cornell Heights Lots		3,250.00	
Hasbrouck Farm	52	4,200.00	\$247,055.35
			4-17-55-55
Buildings	Built or acc	uired	
Barnes Hall	1889	\$53,659.87	
Boardman Hall	1891	102,699.62	
Cascadilla Building	1868	37,010.94	
Carnegie Filtration Plant	1903	22,000.00	
Franklin Hall	1883	100,923.11	
Fuertes Observatory	1902	6,624.92	
Goldwin Smith Hall	1904	353,550.25	
Hasbrouck Lodge, etc	1910	5,800.00	
Hydraulic Laboratory Building	1902	7,390.00	
Infirmary	1898	60,000.00	
Library	1890	296,020.90	
Lincoln Hall	1888	72,603.10	
MacKoon Cottage	1883	14,248.97	
McGraw Hall	1871	120,000.00	
Medical College, New York City	1901	850,000.00	
Loomis Laboratory, New York C	ity 1906	120,000.00	
Medical College Laboratory, N. Y	. City 1906	75,000.00	
Military Hall and Gymnasium	1883-1802	56,902.72	
Morrill Hall	1868	70,111.25	
Morse Hall and Annex	1890-1898	133,930.10	
	-		
Court of Court of			

Carried forward.....

^{*\$25,873.00} now carried in the Farm Purchase Account was advanced from Productive Funds for the purchase of Agricultural Farms and is carried as an investment to be cancelled by annual payments from the University appropriation to Agricultural. As the payments are made the amount will be carried to Real Estate Account. This account also does not include the value of the Preswick farm, payment for which is made in the form of an annuity.

Amounts brought forward \$2	9	\$217.055.25
North Barn		\$247,055.35
	5,987.30	
Power House		
President's House	50,000.00	
Repair Shop1895	6,000.00	
Rockefeller Hall	274,494.01	
Sage Chapel and Organ1874-1895	40,000.00	
H. W. Sage Memorial Apse1898	12,000.00	
Memorial Chapel1883	11,547.76	
Sage College and Conservatory 1875-1895	210,662.15	
Sage College Cottage	13,000.00	
Sibley Buildings1871–1902	218,361.56	
South Barn	5,000.00	
Stimson Hall	130,756.63	
Susan Linn Sage Cottage	11,215.79	
Thurston Cottage	10,000.00	2612086 **
White Hall1873	80,485.16	3,647,986.11
Total C. U. Real Estate		\$2 80 = 01 × 16
		\$3,895,041.46
State Veterinary College Original Buildings1895	*** ***	
Operating Ward	6,796.67	141,796.67
Operating Ward1908	0,790.07	141,790.07
State Agricultural College		
Original Buildings	225 200 00	
Original Buildings	275,000.00	
Poultry Houses	2,001.00	
Barn	2,957.00	
Glasshouses	27,043.00	220 000 00
Glassifouses	27,043.00	330,000.00
		\$4,366,838,13
		\$4,366,838.13
		\$4,366,838.13
Schedule XVII		\$4,366,838.13
Schedule XVII EQUIPMENT		\$4,366,838.13
EQUIPMENT		
Archaeology		\$ 5,535.00
Archaeology		\$ 5,535.00 25,100.51
Archaeology		\$ 5,535.00 25,100.51 18,964.12
Archaeology		\$ 5,535.00 25,100.51 18,964.12 100,183.07
Archaeology Architecture Botanical Chemical Civil Engineering		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service		\$ 5,535.00 25,100.51 18,964.12 100,183.07
Archaeology Architecture Botanical Chemical Civil Engineering		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture)		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library		\$ 5,535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library Mathematical		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00 487.00
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library Mathematical Mechanical Medical, New York Medical, Ithaca:		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00 487.00 216,921.40
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library Mathematical Mechanical Medical, New York Medical, Ithaca:		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00 487.00 216,921.40
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library Mathematical Mechanical Medical, New York Medical, Ithaca: Embryology Research Histology		\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00 487.00 216,921.40
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library Mathematical Mechanical Medical, New York Medical, Ithaca: Embryology Research Histology	\$ 5,465.31	\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00 487.00 216,921.40
Archaeology Architecture Botanical Chemical Civil Engineering Electric Service Entomological Geological German Greek Grounds Gymnasium Infirmary Law Department (furniture) Library Mathematical Mechanical Medical, New York Medical, Ithaca: Embryology Research	\$ 5,465.31 16,699.33 18,369.14	\$ 5.535.00 25,100.51 18,964.12 100,183.07 61,730.66 29,177.35 20,138.30 76,800.31 488.75 2,613.70 8,448.70 11,172.50 7,259.51 6,530.25 740,416.00 487.00 216,921.40 63,443.90

A	0	4
Amounts brought forward \$. Anatomy	10,533.78	\$1,395,411.03
Surgery and Medicine	300.00	
_	3	62,735.77
Military		2,853.41
Museum Classical Archaeology		19,517.90
Neurology		44,548.88
Physical		124,649.26
Pedagogy		3.307.45
Physical Geography		12,084.43
Psychological		13,605.05
Water Works System	*******	29,700.00 34,728.65
Repairs		7,899.90
Furniture		14,201.20
Miscellaneous		15,455.00
Steam Heating and Tools		978.00
Agricultural Experiment Station		17,182.40
Classical		720.00
Fire Apparatus		1,919.00
Memorial Chapel, Statuary		18,274.75
	-	e. e
State Veterinary College		\$1,819,772.98
State Veterinary College		44,182.39
State Agricultural College	*****	130,557-34
		\$1,994,512.71
Schedule XVIII		
CAPITAL ACCOUNT 1909-1910)	
Capital August 1, 1909		\$8,753,618.05
Add:		
Alumni Fund	\$2,550.37	
Alumni Endowment Fund	125.00	
Alumni Loan Fund	2,970.00	
Cottage Renewal Fund	1,532.32	
Class 'of Memorial Fund	29.59 44.33	
Class '96 Memorial Fund Class '97 Memorial Fund	226.71	
Class '98 Alumni Hall Fund	19 16	
Cornell Endowment, Reserve Fund	2,480.30	
Corson French Prize Fund	62.14	
W. Fiske Library Endowment Fund	15,000.00	
Guiteau Student Loan Fund	3,178.38	
Mary F. Hall, D. A. R. Fund	26.71	
Professorial Pension Fund	10,447.63	
Professorial Pension Income Fund	3.737.46	
Judson N. Smith Fund Surplus Fund	1,000.00	
Surplus Fund	760.80	
Women's Student Loan Fund	568.03	
Summer School Laboratory bills not charged	1,630.06	
Decrease in Student balances	556.39	80 820 44
Decrease in Cash Deficit	42,093.97	89,839.44
		\$8,843,457.49
Less:		
Decrease Polish Student Loan Fund	34.00	
Decrease Foreclosure Profit and Loan	2,836.11	
Decrease in Premium and Discount	23,763.41	26,633.52
	-	\$8,816,823.97



SCHEDULE XIX WESTERN LANDS

RECEIPTS AND DISBURSEMENTS ACCOUNT WESTERN LANDS FOR YEAR ENDING AUGUST 1, 1910

Receipts, Aug. 1, 190			
1010	og to Aug. 1,	Disbursements Aug.	1, 1909 to Aug
Land and Timber		Taxes	\$179.61
Contracts	\$16,169.22	Commissions	105.00
-	Φ10,109.22	Balance	15,884.61
	16,169.22	-	
Excess of Receipts			\$16,169.22
over Disbursements	15,884.61		
C. U. Balance Aug. 1,	15,004.01		
1909	4,947,818.36		
1909	4,947,010.30		
C. U. Balance Aug. 1,			
1010	\$4,963,702.97		
	4317-31131		
	TRIAL BALANCE	E LAND LEDGER	
Expense	\$1,726,849.03	Land	\$4,531,837.87
Cornell University	4,963,702.97	Timber	2,211,616.59
Balances due on Con-	112.011.21	Trespass	20,063.90
tracts	78,400.55	Hay	4,268.14
	, , , , , , ,	Farm Land Rent	758.05
		College Land Scrip	408.00
-	-	_	
	\$6,768,952.55		\$6,768,952.55
	PADM TA	ND SALES	
	PARM DA		eres Amount
Southern Alberta and I	Minnesota Land	Co 70	0.04 \$1,140.00
Rudolph Petsch			0.000,1
Christian Andorson		0	
Christian Anderson			0.00 025.00
Christian Anderson			0.00 625.00
Christian Anderson			
Christian Anderson			9.94 \$2,765.00
		310	
SUMMA	ARY OF BALANCI	310 ES DUE ON CONTRACTS	9.94 \$2,765.00
SUMMA August 1, 1909, Balanc	ARY OF BALANCI	310	9.94 \$2,765.00
SUMMA August 1, 1909, Balanc Add:	ARY OF BALANCI	BS DUE ON CONTRACTS	\$2,765.00 \$91,804.77
SUMMA August 1, 1909, Balanc Add:	ARY OF BALANCI	310 ES DUE ON CONTRACTS	\$2,765.00 \$91,804.77
SUMMA August 1, 1909, Balanc Add:	ARY OF BALANCI	BS DUE ON CONTRACTS	\$2,765.00 \$91,804.77 2,765.00
SUMMA August 1, 1909, Balanc Add: Farm Land Sales durin	ary of Balanci e due g the year	BES DUE ON CONTRACTS	\$2,765.00 \$91,804.77 2,765.00 \$04.569.77
SUMMA August 1, 1909, Balanc Add: Farm Land Sales durin	ary of Balanci e due	BS DUE ON CONTRACTS	\$2,765.00 \$91,804.77 2,765.00 \$04.569.77
SUMMA August 1, 1909, Balanc Add: Farm Land Sales durin Amount received accou	ary of Balanci e due g the year unt Land and Ti	BES DUE ON CONTRACTS mber Contracts	\$91,804.77 \$91,804.77 2,765.00 \$94,569.77 16,169.22
SUMMA August 1, 1909, Balanc Add: Farm Land Sales durin Amount received accou	ary of Balanci e due g the year unt Land and Ti	BES DUE ON CONTRACTS	\$91,804.77 \$91,804.77 2,765.00 \$94,569.77 16,169.22
SUMMA August 1, 1909, Balanc Add: Farm Land Sales durin Amount received accou	ary of Balanci e due g the year unt Land and Ti	as due on contracts	\$91,804.77 2,765.00 \$94,569.77 16,169.22
SUMMA August 1, 1909, Balance Add: Farm Land Sales durin Amount received accou Balance Aug. 1, 1910	g the year	ate on contracts mber Contracts DF ACREAGE	\$91,804.77 2,765.00 \$94,569.77 16,169.22 \$78,400.55
August 1, 1909, Balance Add: Farm Land Sales durin Amount received accou Balance Aug. 1, 1910	g the year summary of summary of 1, 1909	ate on contracts mber Contracts	9.94 \$2,765.00 \$91,804.77 2,765.00 \$94,569.77 16,169.22 \$78,400.55
August 1, 1909, Balance Add: Farm Land Sales durin Amount received accou Balance Aug. 1, 1910	g the year summary of summary of 1, 1909	ate on contracts mber Contracts DF ACREAGE	9.94 \$2,765.00 \$91,804.77 2,765.00 \$94,569.77 16,169.22 \$78,400.55
August 1, 1909, Balance Add: Farm Land Sales durin Amount received account Balance Aug. 1, 1910. Balance unsold August Sales during the year.	g the year	ate on contracts mber Contracts	\$91,804.77 \$91,804.77 2,765.00 \$94,569.77 16,169.22 \$78,400.55

SCHEDULE XX

NEW YORK STATE VETERINARY COLLEGE MAINTENANCE ACCOUNT

Balance on hand August 1, 1909	\$24,808.31	\$ 1,555.65
Pay Roll (Other Employees)	3,910.00	
Electric Lights	100.30	
Gas	227.10	
Fuel	358.84	
Repairs	636.65	
Advertising	417.35	
Librarian	218.50	
Departments	4,268.95	
Office	201.36	
Team and Wagons		
Grounds and Contingent Expenses	250.00	
Grounds and Contingent Expenses	24-75	
	0	
Palance unaverended Aug	\$35,512.11	
Balance unexpended Aug. 1, 1910	1,043.54	
	\$36,555.65	\$36,555.65
INCOME OF VETERINARY COLLEG	E	
Balance on hand August 1, 1909		\$4,370.39
Experiment Station	\$ 25.30	
Laboratory Fees	2,078.80	
Tuition	1,000.00	
Rent Groom's Cottage	25.00	
Clinics and Medicine	1,574.70	
Tuberculin, etc	614.37	
Miscellaneous	109.57	5,427.74
Expended Aug. 1, 1909 to July 31, 1910:	21.29	
Salaries	34.78	
Repairs	156.09	
Advertising	184.31	
Departments	2,200.91	
Office	617.69	
Team and wagons	513.75	
Contingent Expenses	206.69	
Experiment Station	25.28	
	P 2 2 4 7 7 7	
Polance unaversaded Aug v vers	\$ 3,945.50	
Balance unexpended Aug. 1, 1910	5,852.63	
A	\$ 9,798.13	\$9,798.13
1909—\$10,000 APPROPRIATION FOR SPECIA	T DESEADOR	
		2
Appropriation		\$10,000.00
Expenditures heretofore reported		279.76
	-	
Balance unexpended Aug. 1, 1909		\$9,720.24
Carried forward		

Amount brought forward		\$9,720.24
Expenditures:		
Assistants to do scientific work	\$1,400.45	
Attendant	540.00	
Labor	871.84	
Horses, Wagons and Implements	831.81	
Animals for experimental purposes	545.47	
Feed for animals	626.33	
Lumber, cement, fencing, etc	971.69	
Instruments, drugs, equipment		
Contingent		
Hog Cholera Serum		
3.08		
	6,385.63	
Balance unexpended Aug. 1, 1910	3,334.61	
		-
	\$9,720.24	\$9,720.24
1909—\$20,000 APPROPRIATION FOR NORTH W Appropriation Expended for advertising for bids. Unexpended balance, Aug. 1, 1910	\$ 49.28	ION \$20,000.00
		\$20,000.00
	,p20,000.00	
	φ20,000.00	B. W. C. C.
Schedule XXI	.,р20,000.00	2000
STATE COLLEGE OF AGRICULTUR	tE.	
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION	te (1908–1909)
STATE COLLEGE OF AGRICULTUR	te (1908–1909) \$150,000.00
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported	te (1908–1909) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation	te (1908–1909) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows:	te (1908–1909) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing	(1908–1909 – \$1,356.58) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries	\$1,356.58 12,550.30) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing Salaries Janitors	\$1,356.58 12,550.30 472.00) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing Salaries Janitors Farm Practice	\$1,356.58 12,550.30 407.05) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture	\$1,356.58 12,550.30 472.00 407.05 214.89) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology.	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology Pomology Poultry Husbandry Lighting	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology Pomology Poultry Husbandry Lighting Animal Husbandry	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology Pomology Poultry Husbandry Lighting Animal Husbandry	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported. Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry Farm Crops	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00 46.34) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry Farm Crops Soils	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00 46.34 61.72) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported. Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry Farm Crops Soils Drawing	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00 46.34 61.72 5.58) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology Pomology Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry Farm Crops Soils Drawing Farm Mechanics	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00 46.34 61.72 5.58 -35) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries. Janitors Farm Practice Horticulture Plant Pathology Pomology. Poultry Husbandry Lighting Animal Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry Farm Crops Soils Drawing Farm Mechanics Rural Economy.	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00 46.34 61.72 5.58 .35 52.05) \$150,000.00 132,854.46
STATE COLLEGE OF AGRICULTUR 1908 STATE MAINTENANCE APPROPRIATION Appropriation Expenditures heretofore reported Balance unexpended Aug. 1, 1909 Expended as follows: Office, General Maintenance and Printing. Salaries Janitors Farm Practice Horticulture Plant Pathology Pomology Pomology Poultry Husbandry Lighting Animal Husbandry Farmers' Wives' Reading Course Farmers' Reading Course Rural School Leaflet Home Nature Study Rural Art Dairy Industry Farm Crops Soils Drawing Farm Mechanics	\$1,356.58 12,550.30 472.00 407.05 214.89 183.40 214.09 365.45 327.30 126.73 56.70 42.95 91.65 2.04 137.99 310.00 46.34 61.72 5.58 -35	

\$17,145.54 \$17,145.54

\$11,250.96

1900 STATE MAINTENANCE (1909-1910) Appropriation \$175,000.00 Expended as follows: Office, General Maintenance and Printing \$22,711.00 Chemistry 566.91 Rural Economy 176.08 Plant-Breeding 208.11 Extension 193.42 Drawing 114.27 Salaries Plant Physiology Plant Pathology 76.780.05 1,249.57 989.75 Farm Practice 14,848.98 Home Economics 566.73 Animal Husbandry 4,046.77 Entomology 2,975.84 Farm Crops 1,005.59 Soils 962.84 Poultry Husbandry Farm Mechanics 3,696.22 405.16 Pomology..... 1,814.00 Rural School Leaflet 984.41 Farmers' Wives' Reading Course 1.082.80 Rural Art 410.28 Dairy Industry 8,891.25 Horticulture 2,920.84 5,103.81 152,796.48 Balance unexpended Aug. 1, 1910 \$ 22,203.52 1008 APPROPRIATION FOR EXTENSION WORK UPON THE FARMS AND AMONG THE FARMERS OF THE STATE \$10,000.00 Appropriation 9,338.86 661.14 Balance unexpended Aug. 1, 1909 Expended as follows: Extension (publications, lectures, etc.) \$661.14 661.14 1909 APPROPRIATION FOR EXTENSION WORK, ETC. \$10,000.00 Appropriation 1,407.18 8,592.82 Balance unexpended Aug. 1, 1909 Expended as follows: Extension (publications, lectures, etc.) \$6,322.71 1,880.91 Surveys 8,203.62 Balance Aug. 1, 1910 \$ 389.20 1010 APPROPRIATION FOR EXTENSION WORK, ETC. Appropriation \$12,000.00 Expended as follows: Extension Work \$427.89 Surveys 321.15 749.04

Balance Aug. 1, 1910

AGRICULTURAL INCOME ACCOUNT	
Balance Aug. 1, 1909	\$ 4,304.04
etc\$ 4,170.47	
Sales \$ 2,380.65 Testing \$ 26,899.77 29,280.42	33,450.89
Expended	\$37,754.93
By Farm Practice Department 3,712.04 By Animal Husbandry 28,759.37	32,471.41
Balance Aug. 1, 1910	\$ 5,283.52
STATE AGRICULTURAL COLLEGE INCOME ACCOUNT	
Balance on hand Aug. 1, 1909	\$6,996.84
Received from Dairy Industry Sales \$82,331.26	
Received from Poultry Husbandry Sales 4,831.35	
Received from fees—Winter Course \$5,050.30 "" First Term 3,859.45	
" " Second Term 3,987.05	
12,896.80	
" " Horticultural Sales 400.06	
Received from Gross sales from Grape Rot Experimental Vineyards, etc	
Received from Sundry Sources	
Received from sale of Old Type, Books, etc 970.20	105,369.25
Expended as follows:	\$112,366.09
Dairy Industry Department \$87,099.15	
Poultry Husbandry Department 6,631.69	
Office 9,804.24	
Pomology	
Entomology. 666.23 Home Economics 526.32	
Home Economics 526.32 Horticultural Department 605.81	
Plant Pathology 651.51	
Plant-Breeding Department	
Farm Crops	
Plant Physiology	
Farm Crops 106.89 Plant Physiology 388.83 Farm Mechanics 621.54	111.301.48
Farm Crops 106.89 Plant Physiology 388.83 Farm Mechanics 621.54 Soils Department 206.52	\$1.064.61
Farm Crops 106.89 Plant Physiology 388.83 Farm Mechanics 621.54 Soils Department 206.52 Balance Aug. 1, 1910	\$1,064.61
Farm Crops	

\$7,407.79 \$44,239.61

SCHEDULE XXIII

	50.1	DOUBLE TELL			
	SURPLUS C	OR INSURAN	ICE FUND		
Amount of Fu	nd Aug. 1, 1909 al Income not includes				\$3,441.34
5% of Gener	al income not in	cluding ind	come on		
Income on Fur	nd		••••• ФЗ	7,585.37	
Income on I un				175.43	37,760.80
V					\$41,202.14
Amount transf	ferred to Income				37,000.00
Amount of fun	d Aug. 1, 1910			-	P
Amount of fun	u Aug. 1, 1910				\$ 4,202.14
	Sch	EDULE XX	IV		
		UDENTS' LO			
Amount of fun	d Aug. 1, 1909				\$7,068.28
Received on lo	ans during year			1,163.77	φ/,008.28
Income on fun	ds			370.36	1,534.13
		4	_		
Amount of fun	d Aug. 1, 1910		*****		8,602.41
	Car	HEDULE XX	237		
	Principal of	STUDENT I	OAN FUND	Downsata	of Loans
	Fund	Income	Loans	Payments of Principal	
1906-07	\$132,678.38 \$	6,747.44	\$ 7,302.00	\$ 395.00	\$.82
1907-08	211,999.99	8,344.45	7,226.00	1,142.00	
1908-09	231,078.59	11,392.18	7,802.10		
1909-10	234,256.97	11,942.36	8,942.50	2,780.00	398.38
		\$38,426.43	\$31,272.60	\$6,586.00	\$699.38
Less payments	of loans		\$ 6,586.00		4.33.0-
T	d:		0		
Loans outstand	ding		\$24,686.60		
	Sch	EDULE XX	VI		
		ELL INFIRM			
Balance on har	nd August 1, 1909		0000000	9	\$19,023.65
Received from	Infirmary Fees				16,558.00
Received fron	n Infirmary patier	its for ser	vices not		
covered by f	ees				2,078.06
	outside patients . Endowment Fund .				531.90
	h balance				5,098.00
Theolife off cas	a balance			_	930.00
					644,239.61
	EXPENDED AUGUS	T 1, 1909	TO AUGUST	1, 1910	
Labor (House	and Grounds)			\$1,621.33	
Supplies	*************			4,153.01	
	rofessional)			255.87	
	ouse)			208.17	
Gas (Heat and	Light)			536.58	
Electric Lights	Light)			124.10	
Water				112.15	
				274.63	
			_		

Carried forward

Amounts brought forward	\$740,770	\$44,239.61
Care of Grounds		
Contingent		
Furniture		
Superintendent		
Nurses		
Nuises	1,919.00	7
2004	\$10,776.00	
Outside Care 1909-10	3,562.15	14,338.15
		\$29,901.46
Schedule XXVII		
ESTIMATED INCOME 1910-191	1	
Income on Securities		\$440,546.00
Rent of Sage College and Cottage	\$15,500.00	
Rent of Cascadilla and Cottages	10,500.00	
Student Fees Regular Session	397,859.00	
Student Fees Summer Session	23,866.00	
	20,000.00	
Cornell Infirmary		
Interest on Student Notes	700.00	
Departments	2,000.00	
Alumnae Scholarship	150.00	
Agr. Exp. Station, Hatch\$13,500.00		
" " Adams 13,500.00		
" " Income 50.00	27,050.00	
Cong. Ind. Fund, Morrill \$25,000.00 Pelson 20,000.00		
" " Nelson 20,000.00	45,000.00	542.625.00
		\$983,171.00
5% of General Income to Surplus Fund	37,500.00	
5% of General Income to Surplus Fund Amount transferred to principal of Fund	12,000.00	49,500.00
Estimated Income Ithaca		933,671.00
Estimated Income Ithaca		202,940.00
	\$1	,136,611.00
Excess of expenditures over Income to Aug. 1, 1910		
(See 1st page Treas. Report)	24,054.14	
Amount of Income due Special Funds	63,120.55	
Amount due on appropriation to complete contracts	3,33	
of last year	17.397.77	
	\$104,572.46	
	4104,572.40	

CERTIFICATE OF AUDITING COMMITTEE

We hereby certify that we have examined the University Cash Book, Dr. and Cr. from Aug. 1, 1909, to Aug. 1, 1910; the balance due on Western Land Contracts, as specified in Schedule XVI of the foregoing report, amounting to \$78,400.55; that we have compared the same with notes exhibited by E. L. Williams, Treasurer, and with receipts for those in the course of collection; and that we have examined the securities as specified in Schedule X of this report, amounting to \$8,816, 823.97, and find all of same correct.

HENRY B. LORD, CHARLES E. TREMAN JARED T. NEWMAN, Auditing Committee.

INDEX

AGRICULTURAL COLLEGE, appropriations				
	expense	35		
	income	29		
APPROPRIATIONS	* 	38		
Bonds, equipment		52		
government		50		
light and power .		56		
		58		
municipal		47		
		50		
		54		
		81		
CASH STATEMENT	***************************************	10		
DONATIONS	******************************	7		
ENDOWMENT		11		
EQUIPMENT		80		
Expense		30		
by colleges		36		
	ombined	38		
medical		33		
FORECLOSURE ACCOUNT .		77		
Forestry, appropriations		86		
balance sheet .		45		
lumbering acco	ount	45		
GUITEAU LOAN FUND		87		
INFIRMARY	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	87		
INCOME		27		
combined and cor	ndensed	36		
estimated for 191	o-ii	88		
medical		28		
special funds, due	on	8		
summary of		8		
INTEREST RATES		78		
INVENTORY, equipment		80		
real estate		79		

4	PAGE
Investments, changes in	
classification of	0.00
list of	
LEDGER BALANCE SHEET	100
LOAN FUND, Guiteau	
Women Students'	87
MEDICAL COLLEGE, balance sheet	43
Mortgages	60
PRODUCTIVE FUNDS	11
PROPERTY, Total	25
REAL ESTATE	79
RE-APPROPRIATIONS	9
SECURITIES, List of	46
Stocks	58
SURPLUS ACCOUNT	87
Suspense Account	77
TOTAL PROPERTY	25
VETERINARY COLLEGE, appropriations	83
balance sheet	45
expense	34
income	29
WESTERN LAND, accounts	82
contracts	79
Women Students' Loan Fund	87

APPENDIX

		ALLENDIA
Schedule	Page	
1	27	Income Statements.
II	30	Expense Statements.
III	36	Departmental Expense.
IV	36	Condensed and Combined Income and Expense Statements
V	38	Appropriations, Expenditures and Balances.
VI	42	Trial Balance, General Ledger.
VII	43	Trial Balance, Medical College at New York City.
VIII	45	Trial Balance, State College of Forestry.
IX	45	Trial Balance, State Veterinary College.
X	46	Securities.
XI	77	Foreclosure Properties.
XII	77	Suspense Account
XIII	78	Summary of Interest Rates.
XIV	78	Changes in Investments.
XV	79	Balances unpaid on Contracts for Western Lands sold.
XVI	79	Real Estate.
XVII	80	Equipment.
XVIII	81	Capital Account.
XIX	82	Western Lands.
XX	83	New York State Veterinary College.
XXI	84	New York State College of Agriculture.
XXII	86	New York State College of Forestry.
XXIII	87	Surplus Fund.
XXIV	87	Women Students' Loan Fund.
XXV	87	Guiteau Student Loan Fund.
XXVI	87	Cornell Infirmary.
XXVII	88	Estimated Income for 1910-1911.

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APPENDIX I

CHANGES IN THE STAFF OF INSTRUCTION

The following new appointments were made during the year 1909-1910:

- E. B. Titchener, Sage Professor of Psychology in the Graduate School (transfer to occur January 26, 1910), November 6, 1909.
- J. S. Shearer, Professor of Physics, November 6, 1909.
- J. Rogers, Professor of Clinical Surgery, April 30, 1910.
- F. L. Ackerman, Acting Assistant Professor of Design in the College of Architecture, January 4, 1910.
- G. A. Everett, Acting Assistant Professor of Oratory and Debate, March 29,
- G. L. Current, Instructor in Experimental Engineering, October 12, 1909.
- H. E. Howe and H. O. Taylor, Instructors in Physics, October 12, 1909.
- B. J. Lemon, Instructor in Chemistry, October 26, 1909.
- F. R. Perrin, Instructor in French, October 26, 1909.
- E. J. Fluegel, Instructor in German, October 26, 1909.
- J. R. Turner, Instructor in Economics, October 26, 1909.
- D. Symmers, Instructor in Pathology, November 9, 1909.
- F. N. Menefee and E. V. Baron, Instructors in Civil Engineering, January 4, 1910.
- S. L. Galpin, Instructor in Geology and Mineralogy, January 18, 1910.
- W. E. Hopper, Instructor in Geology and Physical Geography, January 18, 1910.
- D. Steele, Instructor in Economic Geology, January 18, 1910.
- E. R. Faulkner, Instructor in Surgical Pathology, February 15, 1910.
- W. H. Hook, Instructor in Experimental Engineering, March 8, 1910.
- J. F. Putnam, Instructor in Experimental Engineering, April 12, 1910.
- A. S. Leverty, Clinical Instructor in Medicine, Department of Neurology, May 24, 1910.
- W. C. Thro, Instructor in Clinical Pathology, May 24, 1910.
- S. R. Wing and C. A. Harrington, Assistants in Physics, October 12, 1909.
- D. H. Lehman, Assistant in Physical Culture, October 12, 1909.
- E. Freudenheim and R. S. Hollingshead, Assistants in Chemistry, October 12, 1909.
- T. K. Davis, Assistant in Histology and Embryology, October 12, 1909.
- E. B. Cobb, Assistant in American History, October 12, 1909.
- J. T. Lloyd, Assistant in Biology, October 12, 1909. L. M. White, Assistant in English, October 26, 1909.
- H. M. Barr, L. Buell, and I. E. Nightingale, Readers in English, October 26,

C. R. Hugins, Assistant in Public Speaking, October 26, 1909.

R. T. McKnew and W. D. Craig, Assistants in Physics, October 26, 1909.

A. Berg, Hospital Interne in Veterinary College, October 26, 1909.

L. W. Wing and A. K. Rotheberger, Assistants in Bacteriology, October 26 1909.

R. J. Shepard, Assistant in Extension Teaching, October 26, 1909.

J. C. Andrews and H. E. Riegger, Assistants in Chemistry, November 9, 1909.

W. E. Caldwell, Assistant in Ancient History, November 9, 1909.

R. E. Wheeler, Assistant in Extension Work, November 9, 1909.

J. G. Brody, Assistant in Pharmacy, November 9, 1909.

G. E. Robinson, G. W. Blair, W. B. Clift, and W. Knapp, Assistants in the Military Department, November 30, 1909.

C. A. Carroll, Reader in English, November 30, 1909.

R. Cross and R. L. French, Assistants in Winter Course, November 30, 1909.

J. H. Phillips, Assistant in Soil Technology, November 30, 1909.

M. H. Givens, Assistant in Biochemistry, November 30, 1909.

L. M. Dav, Assistant in Psychology, January 18, 1910.

E. E. Barker and A. B. Clayton, Assistants in Geology, January 18, 1910.

V. E. Nunez and A. W. Conklin, Assistants in Chemistry, February 5, 1910. H. L. Rees, Assistant in Plant Pathology, February 5, 1910.

L. V. Walker and S. O. Dillon, Assistants in Chemistry, February 15, 1910.

T. H. Evans, Assistant in Clinical Pathology, February 15, 1910.

H. P. Reid, Assistant in the Military Department, March 8, 1910.

F. H. Rhodes, Assistant in Chemistry, March 8, 1910.

F. T. Finch, Assistant in Poultry Husbandry, March 29, 1910.

M. W. Fisk, to assist in experimental work in Dairy Department, March 29, 1910.

L. J. Ulrich, Assistant in Chemistry, April 12, 1910.

J. C. Fogle, Assistant in Reference Library, January 18, 1910.

SUMMER SESSION, 1910

J. Q. Adams, Assistant Professor of English.

C. D. Albert, Assistant Professor of Machine Design.

A. L. Andrews, Instructor in English.

J. Bauer, Instructor in Economics.

S. Blanton, Instructor in Elecution.

H. B. Brown, Instructor in Botany.

L. A. Bryant, Supervisor of Music, Ithaca Public Schools.

J. C. Cothran, Assistant in Chemistry.

H. E. Dann, Professor of Music.

D. Derickson, Assistant Professor of Civil Engineering.

D. C. Gillespie, Instructor in Mathematics.

R. J. Gilmore, Assistant in Biology.

J. E. Griffith, Head of Department of Drawing, High School of Commerce, Cleveland, Ohio.

H. B. Hilliard, Head of Department of Piano Instruction, Ithaca Conservatory of Music.

- A. C. Houlehan, Assistant in Chemistry.
- E. F. Johnson, University Organist.
- E. E. McCready, Director Industrial Education, Public Schools, Syracuse.
- F. A. Molby, Instructor in Physics.
- A. H. Morgan, Graduate Student in Zoology.
- R. A. Mordoff, Assistant in Physical Geography.
- E. F. Rathjen, Assistant in Chemistry.
- E. W. Rettger, Assistant Professor of Applied Mechanics.
- R. D. Schrock, Instructor in Physiology.
- W. B. Smith, Assistant in Machine Shop.
- A. A. Somerville, Instructor in Physics.
- L. T. Sutherland, Assistant in Chemistry.
- T. Tapper, Lecturer, Institute of Musical Art, New York City.

The following new appointments were made up to and including July 9,

- B. G. Wilder, Professor of Neurology and Vertebrate Zoology, Emeritus, June 23, 1910.
- W. T. Hewett, Professor of the German Language and Literature, Emeritus, June 23, 1910.
- L. A. Wait, Professor of Mathematics, Emeritus, June 23, 1910.
- C. H. Knight, Professor of Clinical Medicine, Department of Laryngology and Rhinology, Emeritus, June 23, 1910.
- F. S. Dennis, Professor of Clinical Surgery, Emeritus, June 23, 1910.
- G. P. Bristol, Director of the School of Education, April 30, 1910.
- W. N. Barnard, Secretary of Sibley College, May 17, 1910.
- J. I. Hutchinson and V. Snyder, Professors of Mathematics, April 30, 1910.
- A. B. Faust, Professor of the German Language and Literature, April 30, 1910.
- E. M. Chamot, Professor of Sanitary Chemistry and Toxicology, April 30, 1910.
- A. W. Browne, Professor of Inorganic and Analytical Chemistry, April 30, 1910.
- E. H. Wood, Professor of Mechanics of Engineering, April 30, 1910.
- H. D. Hess, Professor of Machine Design, April 30, 1910.
- W. H. Glasson, Acting Professor of Economics and Politics, May 17, 1910.
- A. C. Gill, Professor of Mineralogy and Petrography, June 23, 1910.
- D. H. Udall, Professor of Veterinary Medicine and Hygiene, June 23, 1910.
- J. P. Bretz, Professor of American History, June 23, 1910.
- A. Hoch, Professor of Clinical Medicine, Department of Psychopathology, June 23, 1910.
- S. P. Beebe, Professor of Experimental Therapeutics, June 23, 1910.
- A. Livingston, Assistant Professor of the Roma-ce Languages and Literatures, February 5, 1910.
- G. H. Sabine, Acting Assistant Professor of Logic and Metaphysics, March 8,
- F. R. Sharpe, W. B. Carver, and A. Ranum, Assistant Professors of Mathematics, March 29, 1910.

- A. Gordon, Assistant Professor of the Romance Languages and Literatures, March 29, 1910.
- H. L. Jones, Assistant Professor of Greek, March 29, 1910.
- G. A. Everett, Assistant Professor of Oratory, April 26, 1910.
- E. J. Fluegel, Assistant Professor of the German Language and Literature, April 26, 1910.
- A. W. Boesche, Assistant Professor of the German Language and Literature, April 30, 1910.
- J. Bauer, Assistant Professor of Economics, May 17, 1910.
- G. B. Upton Assistant Professor of Experimental Engineering, May 24, 1910.
- L. D. Hayes, Assistant Professor of Machine Design, May 24, 1910.
- F. A. Burr, Assistant Professor of Power Engineering, May 24, 1910.
- J. P. Schaeffer, Assistant Professor of Anatomy, May 24, 1910.
- W. C. Thro, Assistant Professor of Clinical Pathology, June 7, 1910.
- J. Fraenkel and J. R. Hunt, Assistant Professors of Clinical Medicine, Department of Neurology, June 7, 1910.
- J. C. Torrey, Assistant Professor of Experimental Therapeutics, June 23, 1910.
- E. S. Savage, Assistant Professor of Animal Husbandry, July 9, 1910.
- W. A. Hurwitz and E. J. Miles, Instructors in Mathematics, March 29, 1910.
- L. Pumpelly, Instructor in the Romance Languages and Literatures, March 29, 1910.
- W. D. Zinnecker, Instructor in German, April 12, 1910.
- F. M. Smith, L. N. Broughton, F. Peek, and D. W. Prall, Instructors in English, May 17, 1910.
- R. Saby and A. P. Usher, Instructors in Economics, May 17, 1910.
- M. M. Goldberg, Instructor in Physics, May 17, 1910.
- F. McAllister, Instructor in Botany, May 17, 1910.
- H. W. Mayes and M. H. Givens, Instructors in Physiology and Biochemistry, May 17, 1910.
- F. F. Koenig, Instructor in Veterinary Medicine and Parasites, May 17, 1910.
- F. S. Jones, Instructor in the Study of Poultry Diseases, May 17, 1910.
- C. E. Hayden, Instructor in Physiological Research, May 17, 1910.
- F. E. Klinck, W. R. Straus, C. A. Carpenter, and J. A. Fried, Instructors in Machine Design, May 24, 1910.
- S. R. Wing, Instructor in Experimental Engineering, May 24, 1910.
- P. W. Thompson, Instructor in Power Engineering, May 24, 1910.
- J. G. Pertsch, Instructor in Electrical Engineering, May 24, 1910.
- H. E. Kramm, Instructor in Economic Geology, May 24, 1910. T. C. Ulbricht, Instructor in Power Engineering, May 24, 1910.
- H. DeWolf, Instructor in Medicine, June 7, 1910.
- M. Goodridge, Instructor in Therapeutics, June 7, 1910.
- E. F. DuBois, Instructor in Clinical Medicine and Applied Pharmacology, June 7, 1910.
- R. Cecil, Instructor in Pathological Anatomy, June 7, 1910.
- J. F. McClendon, Instructor in Histology, June 7, 1910.
- J. G. Brody, Instructor in Pharmacology, June 7, 1910. C. D. Corwin, Instructor in Machine Design, June 14, 1910.
- R. L. Daugherty. Instructor in Mechanics, June 14, 1910.

E. N. Burrows, Instructor in Civil Engineering, June 17, 1910.

E. L. Schaub, Instructor in Philosophy, June 23, 1910.

R. H. Wheeler, Instructor in Extension Teaching, July 9, 1910.

P. Work, Instructor and Investigator in Vegetable Gardening, July 9, 1910.

L. B. Cook, Instructor in Dairy Industry, July 9, 1910.

H. B. Young, Instructor in Home Economics, July 9, 1910.

A. Dick, Instructor in Sewing (December, January, February), July 9, 1910.

N. W. Dougherty, Instructor in Civil Engineering, July 9, 1910.

G. S. Martin, Lecturer on Economics, April 26, 1910.

A. S. Taylor, Lecturer on Surgery of the Peripheral Nervous System, June 7, 1910.

J. R. Knipfing, Assistant in Mediæval History, May 17, 1910.

A. S. Roberts, Assistant in American History, May 17, 1910.

H. Lubin, Assistant in Economics, May 17, 1910.

J. C. Stevens, Assistant in Economics and Finance, May 17, 1910.

W. G. Mallory, H. G. Ayres, C. C. Bidwell, J. W. Hornbeak, H. L. Howes, and O. E. Buckley, Assistants in Physics, May 17, 1910.

B. B. Higgins, Assistant in Botany, May 17, 1910.

H. M. Jennings and W. A. Verwiebe, Assistants in Physical Culture, May 17,

J. A. Badertscher and P. E. Smith, Assistants in Histology and Embryology, May 17, 1910.

W. E. Humphrey, Assistant in Architecture, May 17, 1910.

R. R. Birch, W. E. Fritz, and C. I. Corbin, Student Assistants in the State Veterinary College, May 17, 1910.

J. Storrer, Assistant in Geology, May 31, 1910.

W. H. Sheldon, Assistant in Medicine, June 7, 1910.

E. L'Esperance, Assistant in Pathology, and Cataloguer, June 7, 1910.

L. R. Greer, Assistant in Physiology, June 7, 1910.

R. A. Cooke, Assistant in Experimental Therapeutics, June 7, 1910.

E. J. Connell, Clinical Assistant in Surgery, Department of Laryngology and Rhinology, June 7, 1910.

T. A. Mulcahey, Clinical Assistant in Surgery, Department of Otology, June 7, 1910.

J. A. Riche, Assistant in Physiology, June 7, 1910.

W. Dunn, Assistant in Experimental Therapeutics and Microphotography, June 7, 1910.

B. Feldstein, Assistant in Experimental Therapeutics, June 7, 1910.

E. V. Van Alstyne, Assistant in Experimental Therapeutics, June 7, 1910.

C. E. Power, Assistant in Physics, June 14, 1910.

W. E. Koerner, J. S. King, and A. R. Hitch, Assistants in Chemistry, June 14, 1910.

C. E. Leighty, Assistant in Plant-Breeding, June 14, 1910.

A. M. Atwater, Assistant in Plant-Breeding Laboratory, June 14, 1910.

W. A. Gibbons, Assistant in Chemistry, June 23, 1910.

H. M. Bower and R. J. Gilmore, Assistants in Biology, July 9, 1910.

G. R. Hill, Assistant in Plant Physiology, July 9, 1910.

H. Anderson, Assistant in Plant Pathology, July 9, 1910.

A. C. Beal, Assistant in Floriculture, July 9, 1910.

W. W. Fisk, Assistant in Dairy Industry, July 9, 1910.

- T. J. McInerney, Student Assistant in Dairy Industry, July 9, 1910.
- B. B. Robb, Student Assistant in Farm Mechanics, July 9, 1910.
- G. E. Bennett, Student Assistant in Home Economics, July 9, 1910.
- S. Bailey, Assistant in Home Economics Laboratory, July 9, 1910.

C. T. Gregory, Assistant in Plant Pathology, July 9, 1910.

- H. N. Kutschbach and D. L. Earl, Assistants in Farm Management (July to September 30), July 9, 1910.
- J. C. McLearn and L. Vanderhoef, Assistants in the Library, June 7, 1910.
- V. C. Ryder and W. B. Flannery, Assistants in the Law Library, June 17, 1910.
- L. L. Utter, Assistant in the Library, June 23, 1910.

APPENDIX II

REPORT OF THE SECRETARY OF THE UNIVERSITY FACULTY

To the President of the University:

SIR:—I have the honor to submit the following report upon the work of the University Faculty for the academic year 1909-10:

At the beginning of the current year the work of the Graduate Department, formerly under the jurisdiction of this Faculty, passed to the control of the Graduate School organized under action of the Board of Trustees communicated to this Faculty April 16, 1909.

The Faculty's work now consists of miscellaneous business transacted in legislative sessions held at monthly intervals, and of specific business transacted mainly by standing committees invested by the Faculty with various powers.

MISCELLANEOUS LEGISLATION

CALENDAR—Nov. 12, 1909. The following rules governing the University calendar were adopted:

- The first day of instruction shall be the last Thursday in September, and Commencement shall be on a Wednesday in June thirty-eight weeks later.
- 2. The year shall consist of two terms, each of one hundred session days, including instruction days and days given to the examination period known as Block Week, but not including Sundays or vacations.
- 3. Vacations shall be as follows: Thanksgiving and the Friday following, 2 days; at Christmas, average 11 week days; Founder's Day, 1 day; Junior Week, 3 days following Block Week, the third day (Saturday) being

for the second term's registration; Spring vacation, 4 week days, beginning on a Thursday near the 1st of April; Navy and Spring Day, 1 day, the Saturday nearest the 3oth of May.

Dec. 10, 1909. The Faculty received notice from the Board of Trustees of their approval of the foregoing calendar rules, except that Commencement Day be on a Thursday until further action of the Trustees, and that for 1910-11 instruction begin on Friday, Sept. 30, instead of Thursday, Sept. 29.

Insignia—Dec. 10, 1909. The special committee on insignia (see President's Report for 1908–1909, p. xii) received the Faculty's permission to submit to the Board of Trustees a plan for securing competition for an University emblem. Under authorization of the Trustees the committee offered a prize of \$200 for the best design, and on June 10, 1910, the committee reported its award of the prize to Messrs. Bailey, Banks, & Biddle of Philadelphia. A second prize of \$50 was added by the Trustees and was awarded to Mr. Edwin S. Healy of Bloomfield, N. J. About 150 designs were received by the committee. As neither of the premiated designs was adopted, the Faculty instructed the committee to continue its work in the selection of an emblem and to report at the October meeting, 1910.

FOOTBALL—Dec. 11, 1909. At a special meeting called on the foregoing date, the Faculty adopted the following resolutions:

Resolved, That it is the insistent opinion of this Faculty that the continuance of football as a game for undergraduates depends upon a thoroughgoing and effective revision and enforcement of the rules regulating the game and the selection and conduct of players, officials, and coaches, with a view to securing greater safety of life and limb and higher standards of honor and fair play.

Resolved, further, That the Secretary be instructed to forward a copy of the foregoing resolution to the Cornell member of the Football Rules Committee, with the request that he read and present it to the committee at the next meeting of the committee at which the question of revision of the

rules is discussed

COMMITTEE ON RELATIONS TO SECONDARY SCHOOLS—Mar. 11, 1910. A standing committee under the foregoing title, to consist of eight members including the Registrar, was authorized, and the President was requested to appoint the same.

UNIVERSITY PUBLICATIONS—Apr. 15, 1910. The Faculty approved the following recommendations of the Committee on University Policy:

(1) That all of the official publications of the University be combined into a uniform series called "The Official Publications of Cornell University." In this group there should be included the annual Register, the general Circular of Information, the Announcements of the separate Colleges, the President's Report, an Illustrated Circular, the Announcement of the Summer Session, and such other pamphlets as may be officially authorized.

(2) That the Register, as a book for general informational purposes to be sent to prospective students, be superseded by an annual "General Announcement" or "Circular of Information," and that the main purpose of the Register hereafter shall be to serve as a permanent record of the University year; and further that a charge of twenty-five cents per copy be made for the Register, the chief purpose of this charge being to indicate

that the volume is not intended for general gratis distribution for informa-

tional purposes.

(3) That a uniform size of 6 x 9 inches outside measurement be adopted for the official publications of the University, and that all special publications of the several colleges conform to this size, as far as is feasible.

(4) That there shall be uniformity throughout the series in

(a) Method and style of announcing courses, involving the elements to be announced and their relative order;

(b) The use of abbreviations, capitals, italics, punctuation, etc.

Address to Berlin-Apr. 15, 1910. The following congratulatory address was sent to the University of Berlin under the Faculty's instructions of this date:

Cornell University sends to the Friedrich-Wilhelms University at Berlin cordial felicitations and greetings on the auspicious occasion of the

celebration of the one hundredth anniversary of its foundation.

Established in the time of Germany's need by wise statesmen, the great Berlin University, by its promotion of exact research in all the fields of human inquiry and by the unfolding of scientific principles salutary for the State and Society, has been an ever-flowing source of the people's strength, a wise guide in the learning and culture of the Fatherland and of all lands.

In recognition of this world-wide service, of which the American Republic is a grateful beneficiary, Cornell University has delegated Jeremiah Whipple Jenks, Professor of Economics and Politics, to bear its message of greeting and good-will to the Rector and Senate of its illustrious sister institution.

May the Friedrich-Wilhelms University through future centuries continue its high, unhampered mission of enlarging the domain of beneficent truth and of enlightening and quickening the ideals of human progress.

RETIREMENT OF PROFESSOR L. A. WAIT-June 10, 1910. The following resolutions were adopted on this date:

On the retirement of Professor Lucien Augustus Wait from active teaching, after a long and successful professional career, his colleagues in the University Faculty desire to place on record their high estimate of his services to the cause of education and sound learning.

Called in 1870 to an assistant professorship in the Department of Mathematics in the third year of its history, fresh from study at Harvard, he bore an important part in shaping the policy of the department, and in establishing its well-known high standards. His unusual ability as a teacher and organizer led to his promotion in 1877 to the associate headship of the department, relieving Professor Oliver of much of the administrative work;

and he became sole head at Professor Oliver's death in 1895.

His administration has always been notable for efficiency, harmony, and devotion to high ideals of scholarship. In planning the mathematical instruction, he has kept steadily in view its various aims and purposes, including intellectual discipline, preparation for the scientific professions or for work in pure science, and the training of teachers and investigators. How well he has succeeded in the difficult task of holding an even balance among the diverse interests is well known to all who have had any personal concern in the matter. On the disciplinary side, he has been careful to have the instruction of every grade placed upon a sound logical basis; on the scientific side, while keeping in close touch with the related departments in the College of Arts and Sciences, he has also studied the needs of the various professional colleges; and in the interests of prospective teachers he has always given due prominence to the pedagogical side of the work.

A notable feature of his administration is the encouragement he has given to the research work of his younger colleagues and of the graduate students

He has always planned that each instructor, after his initiatory period, should take some share in the graduate work, and should not be so over-burdened as to leave no time for his private investigations. Professor Wait has also encouraged the preparation of suitable text-books, being ever eager to adopt progressive methods of presentation and instruction, and has himself set an example of thoroughness and effectiveness in the class-room.

While firm in enforcing the rules and standards of the department, his unfailing courtesy is proverbial; and his qualities as a teacher and a man have gained him the warm regard of a long line of Cornell alumni, and of the Faculty and Trustees, many of whom are numbered among his former

students.

A man of ripe and varied culture, Professor Wait has taken a deep interest in all the educational problems which have come before the Faculty, and his accustomed attitude has exhibited a fine blending of the progressive and the conservative. We shall miss his genial presence from our meetings, but we hope he may long remain a member of our University community.

GOLDWIN SMITH—June 10, 1910. The following resolutions were drafted by the committee appointed under Faculty action of the foregoing date:

By the death of our beloved colleague, Goldwin Smith, this Faculty has lost its senior member, and Cornell University one of its truest and most sympathetic friends. From its opening, in 1868, through all its existence he has identified himself with the University's interests. During its earliest years, while he was resident with us, by his brilliant and inspiring lectures and not less by his personality he was an inestimable influence. His very presence was a power. After his retirement to Canada he still for many years continued to return to us for his courses of lectures; and always his coming was hailed, alike by Faculty and students, as a great and inspiriting occasion. None were too mature to listen to him gladly; and, whether in the class room or in that social converse to which he so generously welcomed even his boys, he was not only a rare intellectual force but a potent inspiration to character. Who of us can ever forget that spare and stately though slightly stooping figure,—that face so eloquent of thought and of experience, so noble in its grave and lofty calm,—that mirthful and mirth-provoking smile which ever and anon broke like a sunbeam through its sadness, that quizzical twitching of the mouth which heralded and softened his satire,—that voice, so quiet yet so expressive? These, with his pure and noble life and his loyal and unselfish services to Cornell, will be a memory long cherished by this Faculty. He will stand out in the history of the University as one of those who did most to shape and to vitalize its early career.

THE FACULTY'S STANDING COMMITTEES

1. Admission by Certificate—During the year 1909—10 the number of schools from which students were received by certificate was 264, and the number of students presenting certificates was 586. The number of schools whose students had no mark below a pass was 107, and the number of students admitted with no mark below a pass was 293. These figures on the number of students admitted with no mark below a pass show a marked improvement over the years 1907—08 and 1908—09. Thirty-five schools, warned in the period from 1906 to 1909, have sent no students to the University since the date of warning, and the schools have been continued as on probation. The privilege of recommending students in one or more subjects was withdrawn from five schools, and the entire privilege

withdrawn from one school. Thirty schools received notification that the work done by their graduates, admitted at the beginning of the year, was unsatisfactory.

In the report of last year, written by Dean Crane, reference was made to the proposed Entrance Certificate Board to be created under the authorization of the Association of Colleges and Preparatory Schools of the Middle States and Maryland. Up to the present time not enough colleges have ratified the proposed constitution to enable the organization to begin work. At the last general meeting of the institutions interested in this matter, the delegate from Cornell University was Professor G. P. Bristol, Chairman of the Committee on Admission by Certificate, who made a report adverse to our participation in the proposed Certificate Board. Our own system, developed through twenty-five years of careful work and attention to details, seemed to promise better satisfaction of our needs than the plan under consideration by the new organization. With the present administration of our own system, there is a minimum of friction between both parties interested in it, the University and the secondary schools, and there is greater satisfaction with the results than at any time hitherto.

There are still weak points in the system and these are inherent in its nature. The pressure to grant a certificate may be almost irresistible in certain cases, and such pressure is more likely to come from private than from public schools. A few years ago the University Faculty had before it a proposition to discontinue the practice of admitting students upon certificate from private schools. A majority of the Faculty appeared at that time to favor such a movement, but the opposition of a part of the members was so strong that the matter was dropped. There is now a feeling in the committee that the question might wisely be renewed. With the steady extension of the system of examinations of the College Entrance Examination Board, there seems to be less reason for maintaining the certificate privilege in the case of private schools, i.e., of endowed institutions charging tuition, than there was hitherto. The expense involved, if the students at such schools have to go some little distance to attend an examination of the Board, is small and needs scarcely be considered in the case of students who are able to attend this class of schools.

The provisional acceptance of 60 per cent, as a pass mark for credentials issued by the State Department of Education, continues under the conditions laid down last year, that is, the acceptance of 60 per cent during the period of 1909-1913. As yet, there are not sufficient data at hand to determine whether this tentative arrangement will prove satisfactory or not.

The new Standing Committee on Relations to Secondary Schools, authorized on March 11, 1910 and referred to above, was constituted with a desire to place the various questions that relate to the articulation between school and college, including the question of school certificates, under the jurisdiction of a single committee. The new committee, it has been thought, might in process of time, take over the functions of the Committee on Admission by Certificate. The Committee on Relations to Secondary Schools will not organize its work until the beginning of the next academic year.

2. University Undergraduate Scholarships—The policy of the committee during the past year has been marked by certain new departures of importance. Hitherto when a vacancy has been created for any reason, it has been found impracticable to fill it by a new appointment. Consequently the scholarship in such cases has lapsed. This year, however, it was suggested that vacancies be filled from the list of competing candidates of merit who had failed to win an original appointment. A vacancy was caused by the death of one of the freshmen scholarship holders in December, 1909, and the committee at the end of the first semester recommended to the Faculty the method above mentioned of appointing a successor. This proposal met the approval of the Faculty and seems to offer a suitable precedent for dealing with similar cases in the future. At times, of course, there may be no one of the unsuccessful competing candidates whose merit warrants appointment. No satisfactory method of dealing with such cases has yet suggested itself to the committee.

Another question brought up for the first time this year touched the extent of the claim of the estate of a scholarship holder who died during his incumbency. This question was raised by the death of the incumbent above referred to. The committee, upon the suggestion of the Executive Committee of the Board of Trustees, recommended a pro rata payment in such cases, and the Faculty at once adopted this recommendation as a just

practice, applicable to this and similar cases.

The work of the scholarship holders has been most satisfactory. At the end of the first semester a few students were of lower grades in certain studies than the committee felt was warranted by the proper standards for the incumbents of these scholarships. They were informed by the committee that better work was expected, and at the close of the year these students made a showing that was entirely satisfactory. The general proficiency of the entire number of 36 incumbents for the second semester was such that it was unnecessary to call a meeting of the committee to consider whether they were entitled to receive their stipends. It was perfectly clear that all had done excellent work.

3. EXCUSES FROM PHYSICAL TRAINING—The work of this committee covers excuses from the two Departments of Physical Culture for men and

for women and the Department of Military Science and Tactics.

Attended prescribed work

Excused for physical disability

Excused because of outside labor

Total

Total

b) Department of Physical Culture for Men.

For physical defects	20
Labor students	20
Total excused	40

c) Department of Military Science and Tactics. The following figures are based upon the enrollment in the department on the date of the annual inspection, May 26, 1910:

Aggregate number of Cadets in the Cadet Corps. Freshmen required to take drill. Volunteers from upper classes. Total.	491 98 589	589
Total number of men students in the freshman class (approximate)		1,000 491 509
The 509 freshmen not taking drill are classifiable as follows: Freshmen defaulting in drill Freshmen excused by authority:		76
Athletics Physical disability Labor students Aliens Quakers Passed up because of military work in other schools. Three year courses, etc.	100 53 131 34 3 46 66	
Total excused		433_
Aggregate		500

Excuses granted for athletics to the number of 100, as indicated in the foregoing table, were apportioned as follows (by the Athletic Council):

Track	35
Crew, including five coxswains	40
Lacrosse	II
Fencing	4
Baseball	10
Total	100

In 1907-08 the maximum number of excuses authorized was 82. In 1908-09 the number was raised to 120 in order to meet possible contingencies, but only 101 were actually called for and excused. In 1909-10 the maximum number of excuses for athletics authorized by the committee was 100.

4. STUDENT AFFAIRS—The duties of this committee consist in the regulation of student organizations, both athletic and non-athletic, and in the administration of discipline for misconduct. In regard to the regulation of student organizations, the committee censors all schedules for intercollegiate contests, both in Ithaca and abroad, including events connected with non-athletic organizations, such as the musical clubs, the orchestra, dramatic clubs, debates, and also fraternity delegates. The number of men entitled to leave Ithaca in order to participate in out-of-town engagements is determined by the committee, and a recommendation is then issued to the Dean of the college concerned that individuals thus named are eligible for leaves of absence. The number of leaves of absence requested on behalf of student organizations is relatively small. The maximum number of absences permitted by the committee to any individual for one term is seven days and this maximum is rarely reached. It is the established policy of the committee not to grant or recommend leaves of absence for events in Ithaca. The record of individual leaves of absence is placed on file in the Registrar's office and an examination of the same will show that leaves granted to individuals on account of student organizations have not been excessive.

In regard to the administration of discipline for misconduct, the committee has spent a good deal of time on this aspect of its duties. A careful examination of the records of the police court of the City of Ithaca during the calendar year 1909 showed that only 42 cases had come under the court's jurisdiction, and these were for minor violations of city ordinances, and there were no crimes committed against property or persons. In the academic year from September 1, 1909 to July 1, 1910, 19 students were arrested and convicted in the city court. Four of these had sentence suspended. The remaining 15 cases consisted of minor offenses,—disorderly conduct, theatre disturbances, violation of speed law, etc.

On the whole, the committee regards the statistics drawn from the court's records as evidence of an unusually high condition of obedience to law on the part of so large a student population.

There were 14 cases brought before the committee for fraud in examination. Of these 14 students, 12 were found guilty, 6 of whom were removed from the University, and 6 were "paroled," reprimanded, or had their credits cancelled. As to the committee's work in relation to the general conduct of students, there has been in the past no efficient machinery by which the committee could discover what students were delinquent either in studies or morals. All students come to the University with certificates of good moral character and with educational credentials that furnish assurance of their having gone through a period of rigorous mental discipline. committee estimates that 99 per cent of the students in the versity are above reproach, so far as their moral conduct is concerned. They go about their daily work regularly and in every way maintain the traditions of the University as regards good behavior. A small contingent, however, probably not in excess of one per cent of the entire student population, have, for one reason or another, false standards of living and fall into dissolute habits and waste their time until they are dropped from the University rolls by their faculties. Heretofore, the University has left these individuals without any supervision, and there would be justification for this course, no doubt, were it not for the fact that the University as a whole is judged by a disorderly contingent of this sort, however small. In order to improve these conditions, the committee called into consultation a committee of students, seven of whom were seniors and five juniors, at the middle of the academic year. After a thorough consideration of the situation, the committee of students recommended to the Faculty's committee the adoption of a system in vogue at some other Universities, whereby a proctor or patrol officer is employed to work in co-operation with the student committee and the faculty committee for the betterment of conditions among students. On the recommendation of the two committees, the Trustees of the University unanimously approved this plan and made the necessary appropriation to carry it out.

During the past two years there has been considerable agitation in the college press regarding the so-called "hat clubs," particularly those going under the names "Mummy Club" and "Nalanda Club." The committee investigated the scholarship record of the members of these clubs for several years back, and after consulting with alumni who have been members of

them, the committee came to the conclusion that these clubs were a menace to the discipline of the University and should therefore be judiciously and insistently reformed or abolished. The continuance of the clubs was permitted by the committee, subject to their pledging prescribed reforms, and the committee further forbade the use of the clubs' insignia as militating against the spirit of democracy in the University. The clubs declined to conform to the committee's requirements, and it was therefore ordered that the clubs be forthwith disbanded.

Respectfully submitted,
WM. A. HAMMOND,
Secretary of the University Faculty.

APPENDIX III

REPORT OF THE DEAN OF THE GRADUATE SCHOOL

To the President of the University:

SIR: I have the honor to submit herewith my first report as Dean of the Faculty of the Graduate School.

ORGANIZATION

The action of the Board of Trustees establishing the Graduate School was communicated to the University Faculty on April 16, 1909, and reads as follows:

Resolved, (1) That the division of the Graduate School which has hitherto been designated the Graduate Department shall after Commencement

Day, 1909, be designated the Graduate School;

(2) That the Faculty of the Graduate School shall consist of those professors and assistant professors who are actively engaged in supervising the work of graduate students as members of special committees in charge of the major and minor subjects;

(3) That this Faculty shall have exclusive jurisdiction over all graduate

work and advanced degrees;

(4) That legislation for the further organization of this Faculty await the recommendations of the Faculty itself. And the President is hereby authorized to convoke this Faculty and request them to consider this subject and also any matters relating to graduate work and advanced degrees which they may deem expedient; it being understood, however, that all matters relating to graduate work and advanced degrees for the year 1908–1909 remain as heretofore in the hands of the University Faculty;

(5) That the new Faculty hereby created shall on Commencement Day, 1909, and thereafter, take over completely from the University Faculty all its functions and powers in relation to graduate work and advanced degrees

and shall thereafter have exclusive jurisdiction over such matters.

At the first meeting of the Faculty of the Graduate School, held on April 23, 1909, it was voted "that the President be requested to nominate a Dean of the Faculty." The nomination of Professor Ernest Merritt as Dean was presented by the President and confirmed by the Faculty on May 13, 1909.

At its third meeting, on May 27, the Faculty referred the question of the further organization to a committee, consisting of the Dean, as chairman, and ten other members, two being elected at large, and two from each of four groups in the Faculty, namely the groups of Arts, of Pure Sciences. of Constructive Sciences, and of the sciences represented in the Colleges of Agriculture, of Medicine, and of Veterinary Medicine. The following were elected members of the committee: Professors Bristol, Comstock, Dennis, Haskell, Hull, Jenks, Kimball, Moore, Nichols, Sampson. In the fall of 1000, this committee also took over the functions of the former Committee on Graduate Work of the University Faculty.

The committee presented a preliminary report on December 10, 1909. giving the outline of a plan of organization and requesting an expression of the opinion of the Faculty on the general principles involved. The main features of the plan proposed were approved by the Faculty and the committee presented a formal report on March 11, 1010, which, after slight amendment, was adopted by the Faculty in the following form:

For the convenient discussion of questions which chiefly concern those engaged in related fields of work, and for the purpose of electing representatives to the General Committee of the Graduate School, the members of this Faculty are to be divided into five groups, as follows:

A. Languages and Literatures.

B. History, Political Science, Law, Philosophy, Education.
C. Mathematics, Astronomy, Physics, Chemistry, Geology, Physical Geography.

D. Biological Sciences.

E. Engineering, Architecture, Applied Physical Sciences.

Each member of this Faculty will be requested to indicate the group to which he desires to belong. In case the nature of the work renders membership in two groups proper, this is to be permitted.

The General Committee of the Graduate School will consist of five members at large elected by the Faculty, and five members elected by the groups, one member being elected by each group. The Dean shall be ex-officio

chairman of the General Committee.

The term of office of the members of the General Committee is to be three years, the length of term for the members first elected to be arranged by lot after their election so as to make the number retiring each year as nearly as possible equal. New members of the General Committee are to take office on May 1.

The representatives of each group on the General Committee shall be

ex-officio chairman of that group.

It shall be the duty of the General Committee to pass upon questions which do not involve a change of policy; to consider such matters as may be referred to it by the Faculty; and upon its own initiative to make recommendations to the Faculty regarding questions involving the interests of the Graduate School.

Meetings of the five groups of the Faculty, organized in accordance with the above action, were held soon after the action was taken, and in the case of two groups several meetings were held before the close of the college year. Besides electing representatives on the General Committee, the groups discussed certain questions raised by the General Committee regarding admission to the Graduate School and admission to candidacy for advanced degrees, and have in several instances made recommendations to the Faculty which will come up for consideration in the fall.

The groups prove to be more nearly equal numerically than might be expected, the number of members in each being at present as follows: A, 20; B, 21; C, 25; D, 37; E, 21. Eleven members of the Faculty elected

to become members of two groups.

In establishing these five groups, the Faculty has not delegated to them any part of its control of graduate work. The final decision will in all cases still remain with the Faculty. Each group, however, constitutes a committee whose members are engaged in related lines of work, and who therefore approach the questions connected with graduate work from much the same point of view. It seems probable that many of the problems of the Graduate School may be handled more efficiently by having their discussion by the groups precede their discussion by the Faculty.

It will be noticed that the authority of the General Committee is limited to the decision of such questions as do not involve a change in policy. But, like the groups of the Faculty, it is authorized to make recommendations to the Faculty on its own initiative regarding any questions which concern the interests of graduate work. Containing as it does representatives elected from all branches of the Faculty, the General Committee will in all likelihood exert an important influence on the policy of the Graduate School.

No further questions regarding the organization of the Graduate School are now under consideration, either by the Faculty or the General Committee. The purposes of such organization seem to me to be two in number: (1) to systematize the administrative work of the Graduate School in such a way as to reduce this routine to the minimum compatible with efficiency and to leave each member of the Faculty as free as possible to devote himself to teaching and scholarly work; and (2) to facilitate the interchange of views among the members of the Faculty, to the end that a uniformly high standard may be maintained in all lines of graduate work. If experience shows that these purposes are accomplished, I believe that any future elaboration of the plan of organization is undesirable. Too much systematization—or standardization—is to be deplored in all lines of teaching; but it is especially to be avoided in the case of graduate teaching, where the individual and personal element plays so important a part.

GRADUATE WORK DURING THE SUMMER

On several occasions during the past five years the Dean of the University Faculty has called attention to the need of a more clearly defined policy in regard to graduate work in the summer.* The students who desire to do

^{*}See the report of the Dean of the University Faculty, (Appendix II to the President's Report), 1904-5 p. XVII; 1905-6, p. XV; 1906-7, p. XX; 1907-8, p. XVII; 1908-9 p. XIX.

graduate work during the summer, fall into two groups: (1) Graduates of Cornell or of other universities, usually teachers, who attend the summer session and wish to obtain an advanced degree by summer work only. For several years past, special provision has been made for this class of students in the summer sessions of the Universities of Chicago, Columbia, Wisconsin, Michigan, and many other universities, and in several instances graduate work has become an important feature of the summer session. (2) Graduate students who are in residence during the regular session of the University, but who for various reasons find it desirable to continue their work during the summer. In several of the biological sciences, for example, the conditions for advanced work are especially favorable during the summer months and many lines of investigation can scarcely be carried on at any other time.

The General Committee was helped in the consideration of the question of summer work by the replies to a circular letter which was sent to all members of the Faculty asking for an expression of opinion on the subject. The recommendations of the committee, first presented to the Faculty on December 17, 1909, were finally adopted at the meeting on January 14, 1910, in the following form:

Resolved, That members of the University Faculty who desire to offer summer work for graduate students are authorized to do so; and that students taking such summer work may, at the discretion of their special committees, be relieved from residence during an equal part of the University year. But no graduate student shall receive credit for more than two terms' credit during any twelve consecutive months, and work done during the summer must be done under the personal direction of the member of the committee having charge of the work.

Work done in the summer session, under the direction of a member of the Faculty of the Graduate School, may be counted for residence toward

the Master's degree under the following conditions:

One term's residence to be satisfied by three summer sessions and two terms' residence by five summer sessions.

It will be seen that the Faculty's action exerts no pressure upon its members to provide for graduate work in the summer. It is to be assumed, therefore, that such work will be offered only by those members of the Faculty who find the conditions favorable to its successful prosecution. While the predominant sentiment of the Faculty was in favor of granting credit toward an advanced degree for graduate work done in the summer session, a considerable number were of the opinion that such work could not be properly done in their particular subjects. In correspondence with prospective students I have called attention to the fact that graduate work is not offered in all subjects, and that its continuance from year to year cannot be guaranteed.

GENERAL FACULTY ACTION

For a number of years past, the degrees of Master of Civil Engineering, Master of Mechanical Engineering, and Master of Science in Agriculture have in special cases been conferred upon graduates of this University after two years of professional practice and study in absentia. In the spring of 1909, the Faculty of the College of Agriculture voted to recommend to the

University Faculty that this practice, in the case of the degree of M.S. in Agr., be discontinued. The recommendation was received too late to be acted upon before the close of the academic year, and was therefore presented to the Faculty of the Graduate School. In the meantime a similar recommendation had been voted by the Faculty of Sibley College with regard to the degree of M.M.E., and the Faculty of the College of Civil Engineering later recommended that the degree of M.C.E. be no longer conferred for work done in absentia. The first two recommendations were adopted by the Faculty of the Graduate School on March 23, and the last was adopted on May 13, 1910.

On March 23, acting upon the recommendation of the General Committee, the Faculty took the following action affecting the eligibility of instructors to membership on this Faculty:

Instructors who hold the Doctor's degree are to be eligible for membership on the special committees in charge of the work of graduate students. This Faculty recommends to the Board of Trustees such a change in the statute establishing the Graduate School as will add to the Faculty those instructors who are actively engaged in supervising the work of graduate students as members of special committees in charge of the major and minor

subjects.

The recommendation of the Faculty was adopted by the Board of Trustees on May 24. During the year 1909–10, there were twenty instructors who held the degree of Ph.D. and who might therefore become members of the Faculty of the Graduate School in case graduate students should select work with them for a major or minor subject.

In the past the distinction between the special committee, in charge of the work of the graduate students, and the examining committee, which conducts the examination for the degree, has not been entirely clear, although the prevailing practice has been for the special committee to act also as the examining committee. In a report presented to the Faculty on December 10, 1909, the General Committee recommended the adoption of the following resolution:

Resolved, That the examining committee for the Doctor's degree should contain two members in addition to the members of the candidate's special committee, these additional members to be selected by the Dean; and that the examining committee for the Master's degree should have one member in addition to the members of the special committee.

The recommendation was approved in principle by the Faculty on December 20 by a vote of 37 to 17. But when the resolution came up for final action on March 23, 1910, it failed of adoption by a vote of 14 to 14. At the same meeting on motion of the President it was voted that

All examinations for advanced degrees are examinations of this Faculty, and it is the right of every member of the Faculty to attend the examinations.

The Dean was requested by the Faculty, "in announcing the examinations for the advanced degrees to qualify them in terms of the groups into which this Faculty has been divided." On March 23 the Faculty adopted the following statement regarding the normal distribution of time between the major and minor subjects required for the Doctor's degree:

Ordinarily not less than one-half of the time of a candidate for the degree of Doctor of Philosophy shall be devoted to his major subject, and not more than one-quarter of his time to each minor subject. But a different distribution of time may be made in case the members of his special committee are agreed.

POLICY AND DEVELOPMENT OF THE GRADUATE SCHOOL

The establishment of the Graduate School, by directing special attention to graduate work, has naturally led to the discussion by the Faculty of fundamental questions of policy as well as of problems of organization. As a result of such discussion the Faculty on December 17, 1909, adopted the following statement:

The purpose of the Graduate School is to provide the student with the method and discipline of original research, to the ultimate end that he may contribute to the advancement of knowledge. In furnishing this opportunity for independent investigation, the school seeks to make conditions of study such as will enable the candidate for an advanced degree to devote himself wholly to his chosen field, unhampered by the restrictions that necessarily obtain in undergraduate work. From the undergraduate examinations and recitations he will come into freedom of association with older scholars who will seek to make his work profitable to him by giving him such aid and direction as he may show himself to need. The daily lesson is largely replaced by the larger task, whose accomplishment lies mainly in the student's own hands, after the facilities of the library and laboratory and friendly guidance have been placed at his service. Inasmuch as subjects vary greatly, requirements for all subjects are impossible to state in terms that shall be at the same time specific and uniform. In some departments of knowledge, original research may begin with the student's entrance into the school, while in other and older departments of knowledge, much preliminary graduate work is needed to fit the candidate for profitable research. But in all cases certain obvious requirements are made, a definite minimum period of residence, the mastery of some one subject, adequate acquaintance with allied subjects, the passing of a final examination, and the presentation of a satisfactory thesis.

Previous to the retirement of the first General Committee on May 1, this committee prepared a report of a general character on the needs and policy of the Graduate School. At the meeting on May 13, the recommendations of the committee were adopted in detail and the report as a whole was then adopted by unanimous vote. Representing as it does the sentiment of the Faculty as a whole, this report, which is given below, may well take the place of the discussion by myself of the important questions which it raises.

REPORT OF THE GENERAL COMMITTEE

The first Committee of the Graduate School, elected in June, 1909, was instructed by the Faculty to recommend a plan for the permanent organization of the School. From time to time during the year the committee has

made reports to the Faculty in accordance with these instructions, and the essential features of the plan proposed have been adopted. During the consideration of the problem of organization the committee has frequently been led to discuss questions of a more general character, in which the interests of the University as a whole, as well as the interests of the Graduate School, are involved. At this time, when the establishment of the Graduate School has directed especial attention to the problems of advanced instruction and research, it seems peculiarly appropriate that such broad and fundamental questions should receive consideration, and the committee therefore presents to the Faculty the following report:

In the opinion of your committee a Graduate School is preeminently a school of research. Its purpose is to contribute to the advancement of knowledge, both by the training for productive scholarship which it offers to its students, and through the investigations carried on by the members of its Faculty. A graduate school which is associated with a group of undergraduate colleges as a part of a university may serve another purpose of almost equal importance through its influence on the undergraduate body. In the development of the Graduate School of Cornell University that policy should be pursued which accomplishes these purposes most fully and efficiently.

In this country, recognition of the fact that graduate work and research are essential features of a true university has come only gradually. But the appreciation of the importance of such work is now widespread, both in university circles and among the public generally. Of especial significance is the position taken by the Association of American Universities, which makes membership in the Association conditional upon the possession of a strong graduate department. This University was among the first to recognize the importance of advanced work, and opportunities for advanced study have been offered almost from the opening of the University in 1868. The first Doctor of Philosophy received his degree in 1872, and since that time more than a thousand advanced degrees, over three hundred of them being doctorates, have been conferred. The high standing attained by the holders of our advanced degrees as teachers and investigators, and in other lines of professional work, is sufficient evidence of the success of our graduate department in the past; while the fact that this success has been achieved with incomplete organization, and without systematic efforts to promote graduate work, encourages us to hope that still greater success may be attained in the future.

There are several obvious ways in which our Graduate School might be strengthened: for example, by the establishment of new professorships, and by improved facilities in the way of material equipment. As money becomes available, we have no doubt that these needs of the Graduate School will receive the careful attention of the President and Board of Trustees. In the meantime we deem it advisable for the recently organized groups in our Faculty to consider what are the most urgent needs of the School as they affect that group. As occasion arises, it will then be possible for this Faculty to make definite recommendations and to furnish such information as may be needed by the President in the consideration of such recommendations.

Since, however, no adequate fund is now available for the expansion of the Graduate School, it is important for us to consider in what ways graduate work may be strengthened under the conditions which now exist. While widely different opinions are doubtless held regarding the relative importance of the different lines of work represented in the University, no member of this Faculty would wish to see proper financial support withdrawn from one college or school in order to develop another, however desirable such development might be in itself. It is important, therefore, that we should carefully consider the place which a graduate school should occupy in a symmetrically developed university. Once a substantial agreement has been reached by the members of this Faculty regarding the ideal toward which the University should strive, we may reasonably expect that progress toward the attainment of this ideal will begin.

To assist in the discussion of the problems which confront the Graduate School, tables have been prepared—contained in the appendix to this report—giving the registration of graduate students at Cornell and at other universities, the growth of the Graduate School during the past fifteen years, and other statistics of interest to members of the Faculty. The facts brought out by these tables and by the discussion which accompanies them seem to justify two conclusions:—

(1) That our Graduate School, as compared with the graduate schools of other universities, is not as strong numerically as the standing of Cornell in other respects would lead us to desire and expect (Table I); (2) that while the number of graduate students is slowly increasing, the growth of the Graduate School is not so rapid as that of the undergraduate colleges of the University (Table II).

Although statistics bearing upon the numerical strength of our Graduate School have been used as a basis for the discussion which follows, it is by no means our desire to assign great weight to mere numbers in estimating the success of graduate work. A university which contributes its share to the advancement of knowledge through the efforts of its faculty, and whose undergraduates receive through association with their teachers such inspiration as will make them independent and progressive thinkers, may fairly be said to possess a strong and successful graduate school, even if it has only a few graduate students. Numerical weakness in graduate work is significant only because it raises the presumption that a university is also weak in the features which attract advanced students, namely, facilities for investigation, and activity on the part of its faculty in research and progressive scholarship. A university can get along without graduate students; but if it lacks the qualities which attract such students it is no longer in any true sense a university. In our opinion, the fact that the percentage of graduate students at Cornell has steadily diminished for over fifteen years is a signal of danger, which should not be ignored.

The discussion of the more remote and obscure causes which have contributed to this result presents many difficulties, and would probably be neither profitable nor convincing. It seems clear, however, that an important cause is to be found in the rapid growth of the undergraduate colleges. Each year instruction must be provided for two or three hundred

more undergraduates. The demands thus made upon the time and energy of our teachers, and upon the income of the University, are immediate and pressing. In consequence the University is unable to provide the expensive material equipment which is absolutely essential in many lines of advanced work; the time which the members of the teaching staff can give to graduate instruction is restricted; and worst of all, the pressure of administrative work and elementary instruction compels the members of our Faculty to reduce greatly the time devoted to investigation and other scholarly work.

While citing these unfortunate results of the growth of the University, it is proper to direct attention also to certain equally obvious benefits which the Graduate School receives from the increase in the number of undergraduates. It is customary here, as in other universities, to provide for the increasing needs of elementary instruction by the appointment of instructors and assistants who combine graduate study with their teaching work. Of the 311 students now registered in the Graduate School 124 are members of the teaching staff. In some departments practically the whole increase in the number of graduate students during the past fifteen years may be accounted for by the increase in the number of instructors and assistants. This body of young men, who are at the same time students and teachers, forms a very desirable element in the Graduate School, and one whose presence is largely due to the rapid growth of the undergraduate colleges.

It is often said that the only limit to the growth of a university, even without an increase in its endowment, is that set by the capacity of its class rooms and laboratories; for as the attendance increases, the salaries of the additional teachers required will be met by the increased receipts from tuition. The data presented in Table IV show that Cornell has in fact very nearly reached a condition for which the above statement is correct. If the present tendency is allowed to continue until the average salary of our teachers has fallen to \$1070, instead of \$1100 as at present, the salary of each additional teacher will be paid by the tuition received from the new students who make his presence necessary, and the growth of the University can continue—until checked by the inadequacy of our material equipment without further change in the relative number of professors, instructors, and assistants on our instructing staff. In the past, however, the growth of the University has necessitated a steady decrease in the relative number of professors and assistant professors on our instructing staff. In 1898-1899, 41 per cent of our teachers were of the professorial grade. At present only 33.5 per cent are of that rank. If the percentage had remained the same as in 1898-1899 we should now have 233 professors in our University Faculty instead of 189. It must not be forgotten that an increase in the number of undergraduates brings with it an additional burden of administrative work, and that this burden, together with the responsibility of planning the work of instruction so as to handle such large numbers, must fall upon the permanent members of the staff. Unless the permanent staff is increased in the same ratio as the whole teaching staff, the time of the members of our Faculty will be increasingly occupied by administrative routine, and advanced work and research must necessarily suffer. It is doubtless a coincidence, and yet not devoid of significance, that the decrease in the relativenumber of graduate students is almost exactly the same as the decrease in the percentage of professors and assistant professors.

It is apparent that further increase in undergraduate instruction must necessitate the erection of additional buildings and the expansion of the material equipment. Several of our colleges and departments are already so crowded that growth is impossible without an increase in buildings and equipment. Under such circumstances the growth of these colleges and departments, unless provided for by additional endowment, would necessarily require a withdrawal of financial support-already inadequate-from the Graduate School, and at the same time a lowering of the standard of teaching throughout the University. Assuming that increased endowment for material growth is obtained, we may still properly ask whether an institution in which the average teacher's salary is \$1070, and in which nearly half of the instruction is in the hands of temporary assistants receiving a salary of \$500 or less, represents the type of institution that we are content to accept as our ideal in the development of Cornell University. May it not be that we can do more good for the cause of education by directing our efforts toward making Cornell the best university in the country, rather than the largest?

If we are to retain the advantages which a university possesses as compared with a number of isolated colleges, a proper balance should be maintained between the different colleges of the University; and in each college we should strive to bring about such a growth within each department as will preserve a proper proportion between elementary and advanced work.

The present condition is not one which will take care of itself. It may be urged that a proper balance between graduate and undergraduate work will be automatically maintained; that provision need not be made for advanced instruction until the demand is shown by a large increase in the attendance of graduate students. Such an argument, however, ignores several essential facts. It is a relatively simple matter for a teacher to drop his advanced work in order to give instruction to elementary classes. But it is a different thing for a man whose time has been occupied by the routine of administration and elementary work to change suddenly to graduate instruction and the direction of research. Again, from the standpoint of a graduate student, the attractiveness of a university is determined either by the excellence of its facilities for experimental work, or by the standing of the members of its faculty as investigators and progressive scholars. Unless our Faculty contains men eminent in their fields of knowledge and prepared to give graduate students the special training and the inspiration that they seek, and unless the University already possesses the material equipment that is required, graduate students will not come to us. Provision for graduate students must be made years in advance, and not after the need of it has been shown by the returns from the Registrar's office.

The problem to which we invite the attention of the Faculty is, therefore, not merely the strengthening of the Graduate School for its own sake. It is rather that of stimulating increased activity in those lines of work which distinguish a true university from a large college, to the end that Cornell may retain the honorable position which she has held in the past, and now

holds, among the universities of the country.

In the opinion of your committee one of the most effective means of strengthening the Graduate School, and at the same time of maintaining a high standard of undergraduate teaching, is for the members of this Faculty to use their influence, both individually and as a body, to encourage scholarly work among all members of the instructing staff. Let it be understood that each member of our staff is expected to contribute in some way to the advancement of knowledge, and not merely to teach what he has received from others. If there are any who are overburdened with routine teaching, the load should be lightened to such an extent as to make research possible. Whenever it is practicable, each member of the staff should be given the opportunity of taking part to some extent in advanced teaching as well as in elementary work. Most important of all, recommendations for appointment or advancement should usually be determined not merely by success in teaching or in administrative work, but largely by ability and activity in scholarly work and investigation.

These suggestions do not possess any especial novelty. They doubtless represent the policy which many—perhaps most—of the departments of the University already attempt to follow; and in all likelihood, they will be accepted in principle by all members of the Faculty. We feel, however, that concerted action by the Faculty, and perhaps the adoption of definite

resolutions embodying these, or similar principles, is desirable.

Even if the interests of the Graduate School alone were to be considered it would not be desirable to differentiate graduate work from the other work of the University to such an extent as to have the Faculty of the Graduate School made up of professors whose whole time is devoted to graduate work and-research. And in its effect on the University as a whole, we feel that such a policy would be very unfortunate. In our opinion one of the most important benefits of a strong graduate school arises from the influence which it may be made to exert upon the undergraduate body. The mere presence at the University of a body of advanced students and investigators means little to the undergraduate. But if he actually receives his instruction from these men he can scarcely fail to acquire to some extent their point of view. The spirit of progress and the attitude of fair and open minded inquiry, which a graduate school preeminently represents, are the mental qualities that are needed more than any others in all lines of life. Unless our undergraduates acquire in some degree this spirit their college education has failed in its most important object,—beside which the mere acquisition of knowledge is of little moment.

But we cannot expect teachers to give to their students a spirit which they do not themselves possess. And while teachers whose whole time is occupied by elementary teaching and routine may make excellent drill masters, such a condition is in the highest degree unfavorable for the maintenance of the spirit of progressive scholarship. It seems clear, therefore, that if the University is to achieve its highest purpose it must first of all demand of

all its teachers those characteristics which are recognized as essential to membership in this Faculty; and having done so, it should assist in maintaining their activity and enthusiasm by encouraging all teachers, young and old, to contribute to progress in their fields of knowledge by scholarly work and investigation. Those who are sufficiently mature should further be given the opportunity of taking part in the direction of graduate work.

We feel that such a policy will contribute both to the effectiveness of undergraduate teaching and to the strength of the Graduate School. If the income of the University does not permit a great increase in this Faculty by the apppointment of professors whose chief work is with graduate students, we may nevertheless increase its effective strength by calling to our assistance all members of the staff whose training has prepared them to take part in such instruction. If we cannot call from other universities as many eminent men as we might desire, we may at least take such steps as will help in the development of men of eminence here. Such men may prove as valuable to the University during their development as when their reputations are established.

There is another way in which your committee feels that the efficiency of the Graduate School and of the University might be increased. The growth of the University has brought with it a large increase in the routine administrative work connected with teaching. This is doubtless most marked in the departments which have laboratories, but it is felt to a greater or less extent by all. It is, moreover, the heads of the departments who usually suffer most from the increased demands upon their time from this cause. In some cases the situation is improved to some extent by distributing such work, and the responsibility which goes with it, among several members of the department, so that the burden on any one individual is not a serious one. But in many cases the work could be more economically handled by providing a sufficient number of assistants outside of the instructing staff-stenographers, clerks, laboratory helpers, etc.-who work under the direction of the professors in charge. To obtain real relief in this way it would be necessary to pay salaries that are comparable to what such men and women would receive for similar work outside of the University. But even then the saving to the University would be very considerable. present some of our best men are largely prevented from devoting their time to the real university work of teaching and investigation, not by the time required for the consideration of broad questions of policy, but by the purely routine duties connected with the administration of their departments. While we are aware that the problem is one that requires action by individual departments and by the administrative authorities of the University rather than by this Faculty, the results of the present situation seem to us so serious as to call for mention in this report.

We desire finally to direct attention to another matter whose indirect bearing upon the success of the Graduate School is important. The statute establishing the Graduate School has made this Faculty responsible for all graduate work, in whatever college or department such work may be done. Among the many benefits which we believe will follow from this plan of organization is that of increased co-operation between members of this

Faculty in providing for the needs of graduate students. We feel, however, that such co-operation should be voluntary, and should come spontaneously as the result of discussion between individual members of the Faculty working in related fields. In the opinion of your committee, this Faculty is not to be regarded as a federation of colleges or of departments, but as an association of individuals having equal rights and privileges with respect to graduate work.

In presenting this report the committee's chief purpose has been to bring before the Faculty for consideration certain questions of policy, which in our opinion are of greater importance in the development of the Graduate School than any details of organization or administration. In order to facilitate action by the Faculty, if such action is desired, we have summarized the recommendations of the committee in the following paragraphs:—

- (r) It is recommended that each group in this Faculty take under consideration the needs of the Graduate School as they affect that group, with a view to making recommendations to the Faculty, or through this Faculty to the President and Board of Trustees, in regard to such action as the best interests of graduate work may seem to demand. Whenever the financial condition of the University permits increased appropriations for graduate work and research, this Faculty will then be in a position to make definite recommendations and to furnish such information as may be needed in their consideration.
- (2) It is important for the interests of the Graduate School and of the University as a whole that the work of teaching be so distributed that all members of the instructing staff may have a reasonable amount of time for scholarly work and research. And it is recommended that all members of this Faculty use their influence, both collectively and individually, to encourage such work by all members of the teaching staff.
- (3) So far as practicable each member of the staff should be given the opportunity of taking part in advanced instruction as well as in elementary teaching.
- (4) Recommendation for appointment and promotion should be contingent upon the possession of ability and activity in scholarly work and investigation, and not merely upon success in teaching.
- (5) In order that those members of the Faculty who are charged with the administration of large departments should still be able to devote the greater part of their time to the real university work of teaching and investigation and to broad questions of policy, it is highly desirable that they should be provided with such assistance from outside the teaching staff as will relieve them from the purely routine work which now occupies so large a part of the time of many of our most highly paid professors. The economy that could be effected by such a policy is so great as to justify the payment to assistants of salaries that are comparable to those paid for similar services outside the University. Without such salaries it is rarely possible to secure and retain the services of competent persons, and the relief obtained by our department heads is either temporary or altogether illusory.

(6) This Faculty is not to be regarded as a federation of colleges or departments, but as an association of individuals having equal rights and

privileges in respect to graduate work.

(7) The best interests of the University require a symmetrical development of the several departments and colleges. In the growth of each college and department a proper proportion should be maintained between the energy devoted to undergraduate instruction on the one hand, and that devoted to graduate work and investigation on the other. If the conditions do not permit the proportionate development of these two phases of university work, steps should be taken to restrict further increase in our undergraduate registration.

G. P. BRISTOL,
J. W. JENKS,
J. H. COMSTOCK,
D. S. KIMBALL,
V. A. MOORE,
E. E. HASKELL,
C. H. HULL,
M. W. SAMPSON,

ERNEST MERRIT, Chairman.

The tables referred to above will be found at the close of this reportwhere will be found also statistics connected with the work of the year 1909-1910.

Respectfully submitted,

Ernest Merritt,

Dean of the Faculty of the Graduate School.

TABLE I

Total Registration, and Registration of Graduate Students, in different Universities, November 1, 1909.

(From statistics published by R. Tombo, Science, Dec. 24, 1909.)

University	Total Registration	Total after deducting Summer School, etc.	Graduate Students	Ratio of Graduates to Total	Ratio of Graduates to second column
California	4084	3147	337	8.2	10.7
Chicago	5487	1891	44 I	8.0	23.3
Clark	(Data 1	not given in Profes	sor Tombo's	s paper)	
Columbia	6132	3735	797	13.0	21.3
Cornell	5028	3675	256	5.1	6.9
Harvard	5558	3312	423	7.6	12.8
Illinois	4502	3175	230	5.1	7.2
Indiana	2231	1042	111	5.5	10.6
Iowa	2246	1308	121	5.4	9.2
Johns Hopkin	ns (Data 1	not given in Profes	sor Tombo's	paper)	
Michigan	5259	3212	151	2.8	4.7
Minnesota	4351	3097	93	2.1	3.0
Missouri	2589	1947	122	4.7	6.2
Nebraska	3402	2826	97	2.8	3.4
New York	3843	2184	264	6.9	12.1
Northwestern	1 3197	1426	82	2.6	5.7
Pennsylvania	4857	2963	389	8.0	13.2
Princeton	1398	1398	134	9.5	9.5
Stanford	1620	1555	84	5.2	5.4
Wisconsin	4245	3213	259	6.1	8.1
Yale	3276	2682	413	12.6	15.4

The numbers in the second column give the total registration exclusive of students in the summer session, medicine, law, divinity, pharmacy, dentistry, and such courses as our short course in agriculture. Owing to the fact that practically no graduate work is done in these branches, and that some are not represented at Cornell, it is thought that this column gives a fairer comparison with other universities for the purpose of this discussion than the first column.

Inspection of the table shows:

- (1) If students registered in the work mentioned in the preceding paragraph are left out of the consideration, only one other university has a larger registration than Cornell.
 - (2) Four universities have a larger total registration than Cornell.
 - (3) Eight universities have more graduate students than Cornell.
- (4) In twelve universities the ratio of graduate students to the total registration is larger than at Cornell. If statistics from Clark and Johns Hopkins were included, this number would undoubtedly be raised to fourteen.
- (5) If we compare the number of graduate students with the numbers in the second column we find the ratio is larger for twelve universities than for Cornell.

TABLE II

Showing the number of graduate students and the total registration at Cornell from 1891 to 1909.

[From data contained in the President's Report 1908-09.]

Year	Total registration except Summer School, Short Course, and Medicine	Graduate Students ²	Percentage of Graduate Students to Total
1891-1892	1538	133	8.65%
1892-1893	1700	170	10.
1893-1894	1810	240	13.2
1894-1895	1689	185	10.95
1895-1896	1702	145	8.5
1896-1897	1808	161	8.9
1897-1898	1835	166	9.05
1898-1899	1823	190	10.4
1899-1900	1966	174	8.8
1900-1901	2154	205	9.5
1901-1902	2412	189	7.84
1902-1903	2626	201	7.63
1903-1904	2720	197	7.27
1904-1905	2912	211	7.24
1905-1906	3067	232	7.56
1906-1907	3175	239	7.52
1907-1908	3414	249	7.32
1908-1909	3764	310	8.1 ³ 7.2

The students in medicine have been left out partly because the College was established during the period covered by the table, and partly because of the fact that this College is in large part separated from the rest of the University. The effect is to make the relative decrease in the number of graduate students slightly less marked than it would otherwise be.

in the number of graduate students signtly less marked than it would otherwise be.

"Complete registration for the year.

3The apparent increase from 7.32% in 1907-08 to 8.1% in 1908-09 is due to the fact that 38 seniors who had completed the 120 hours required for the bachelor's degree were allowed to register in the Graduate School during the second term. In previous years cases of this kind were rare. To make the comparison a fair one these 38 seniors should not be included. The percentage of graduate students is then reduced to 7.2%.

TABLE III

Showing the number of graduate students, arranged according to the groups in which the major subject lay, for the years 1895-1910.

	A	В	C	D	E
Year	Languages and Literature	History, Pol. Econ., Philosophy	Physical Sciences	Biological Sciences	Engineering and Architecture
1895-1896	24	36	26	16	29
1896-1897	30	29	34	22	18
1897-1898	26	39	38	25	18
1898-1899	32	36	44	27	23
1899-1900	29	40	46	32	17
1900-1901	29	38	41	48	27
1901-1902	28	39	36	45	22
1902-1903	34	37	4.5	40	27
1903-1904	23	25 28	39	42	25
1904-1905	2 I	28	46	56	28
1905-1906	24	35	66	72	34
1906-1907	27	39	71	61	29
1907-1908	28	43	74	61	28
1908-19091	20	52	82	84	30
1909-19101	17	42	88	83	39

TABLE IV

Facts bearing upon the effect of further increase in the number of students at Cornell University.

If in the future the ratio of teachers to students is to remain the same ten new teachers must be added for an increase of 86 students.

Of the total 3810 students at Ithaca in 1908-09, 1865, or 49%, were in colleges for which the tuition is \$150. (Architecture, 133; Civil Engineering, 569; Sibley, 1163). If the new students are distributed among colleges like the old, 40% will be in colleges where tuition is \$150; of the remainder we may assume that those in Agriculture will have the additional expense provided for by state appropriation, say at the rate of \$100 per student. The tuition received from 100 new students will therefore be

$$49 \times 150 + 51 \times 100 = 7350 + 5100 = 12450$$
,

and the tuition received from 8.6 students will be \$1070, as compared with \$1100 required for an additional teacher at the present average salary.

The receipts from tuition will, therefore, not quite meet the expense of the additional teachers required. Since increased registration must also bring

Seniors registered in the Graduate school during the second term have not been included.

Register, 1908-09 pp. 743-745.

3President's Report, 1908-09, p. 15.

4Including also officers of administration, janitors, etc., President's Report, p. 25.

some increase in the general expenses of the University, it will be seen that the present tuition will not permit further growth without a reduction in teaching efficiency. Without an increase in endowment the growth of the University therefore necessitates either (1) a reduction in the average salary paid to teachers, i.e., a decrease in the relative number of professors as compared to instructors and assistants; or (2) an increase in the amount of teaching carried by each member of the staff. In the past the situation has been met by the first of these alternatives.

STATISTICS OF ATTENDANCE, 1909-1910

During the year 1909-10, including the summer session of 1909, 309 graduate students were registered in the Graduate School, as follows:

Regular session 288 Summer Session only 16 In absentia 5 Total 309 Arranged according to the degrees for which they were candidates: Candidates for Ph.D. 156 "A.M. 72 "A.M. 72 "M.S. in Agr. 25 "M.C.E. 8 "M.M.E. 21 "M.S. in Arch 1 Not candidates for a degree 26 Total 309 Advanced degrees were conferred at Commencement, June, 1910, as follows: 35 Doctor of Philosophy 35 Master of Arts 16 Master of Science in Agriculture 14 Master of Civil Engineering 2 Master of Mechanical Engineering 2 Total 69	Bradante benderite were registered in the oraquate benevit, as renew	
Total	Summer Session only	16
Arranged according to the degrees for which they were candidates: Candidates for Ph.D	In absentia	5
Candidates for Ph.D. 156 "A.M. 72 "M.S. in Agr. 25 "M.C.E. 8 "M.M.E. 21 "M.S. in Arch 1 Not candidates for a degree 26 Total 309 Advanced degrees were conferred at Commencement, June, 1910, as follows: Doctor of Philosophy 35 Master of Arts 16 Master of Science in Agriculture 14 Master of Civil Engineering 2 Master of Mechanical Engineering 2	Total	309
## A.M.	Arranged according to the degrees for which they were candidate	es:
" "M.S. in Agr. 25 " M.C.E. 8 " "M.M.E. 21 " "M.S. in Arch. 1 Not candidates for a degree 26 Total. 309 Advanced degrees were conferred at Commencement, June, 1910, as follows: Doctor of Philosophy 35 Master of Arts 16 Master of Science in Agriculture 14 Master of Civil Engineering 2 Master of Mechanical Engineering 2	Candidates for Ph.D.	
## M.C.E. 8 ## "M.M.E. 21 ## "M.M.E. 21 ## "M.S. in Arch 1 Not candidates for a degree 26 Total 309 Advanced degrees were conferred at Commencement, June, 1910, as follows: Doctor of Philosophy 35 Master of Arts 16 Master of Science in Agriculture 14 Master of Civil Engineering 2 Master of Mechanical Engineering 2	Λ.Μ	
" "M.M.E." 21 " M.S. in Arch 1 Not candidates for a degree 26 Total 309 Advanced degrees were conferred at Commencement, June, 1910, as follows: Doctor of Philosophy 35 Master of Arts 16 Master of Science in Agriculture 14 Master of Civil Engineering 2 Master of Mechanical Engineering 2	" MCF	25
M.S. in Arch	" " M.M.E.	
Not candidates for a degree	" " M.S. in Arch	-
Total	Not candidates for a degree	26
Advanced degrees were conferred at Commencement, June, 1910, as follows: Doctor of Philosophy		
follows: 35 Doctor of Philosophy	Total	309
Master of Arts		1910, as
Master of Arts. 16 Master of Science in Agriculture 14 Master of Civil Engineering 2 Master of Mechanical Engineering 2	Doctor of Philosophy	25
Master of Science in Agriculture	Master of Arts	
Master of Civil Engineering	Master of Science in Agriculture	14
The state of the s	Master of Civil Engineering	
The state of the s	Master of Mechanical Engineering	2
		69

Among the students registered in the Graduate School during the year there were graduates of 97 different institutions, distributed as follows:

GRADUATE STUDENTS, 1909-1910

Adelphi College	1 1 5	Calcutta University University of California University of Cape of Good Hope Charles City College	I 2 I
Baker University	1	University of Chicago	-1
Barnard College	2	Clemson College	2
Boston University	1	Colgate University	4
Brigham Young University	I	College City of New York	T
Brown University	1	University of Colorado	2
Bryn Mawr College	1	Columbia University	4

Cornell University 1441 Oberlin College..... 3 Denison University..... Ohio State University..... 5 De Pauw University...... Ohio Northern University I Drake University..... 1 University of Oklahoma..... I Drury College..... T Oregon Agr. College..... I Ottawa University..... I I University of Edinburgh..... Pomona College..... 1 I Elmira College..... Presbyterian College of South 2 Franklin & Marshall College . . Carolina 1 Georgia School Tech...... German Wallace College..... T Purdue University..... 1 I Roberts College..... T Hamilton College..... Rutgers College..... 1 T Hobart College Smith College..... 3 Howard College..... Stanford University..... I 2 University of Illinois..... Teachers College 5 T Illinois Wesleyan College.... Tech. Hochschule) München) . . T I University of Indiana..... University of Tokio..... 5 T Iowa State College..... 4 Toronto School Prac. Sci..... T University of Kansas..... University of Toronto..... 2 University of Kentucky..... Keystone State Normal..... Trinity College 1 T Louisiana State University... Ursinus College..... I T Utah Agr. College 4 Maryland Agr. College Valparaiso University..... 1 Vanderbilt University.....

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Massachusetts Agr. College....

Mass. Inst. Tech.....

Miami University.....

University of Michigan

Michigan Agr. College...... University of Missouri.....

Mt. Holyoke College

University of Nebraska.....

Nebraska Wesleyan Univ.

New Hampshire A. & M. College

New Hampshire State College .

University of North Carolina...

North Carolina A. & M. College

University of North Dakota ...

North Dakota Agr. College

DEAN'S REPORT-GRADUATE SCHOOL

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Vassar College.....

Wabash College...... Wake Forest College.....

Washburn College.....

Washington College.....

Washington & Jefferson Coll ..

Wesleyan University.....

Western Reserve University ...

Westminster College

University of West Virginia . . .

Williams College

Wilson College.....

University of Wisconsin

Of the 306 graduate students in residence, 37 are seniors in Cornell University who have completed the work for the first degree, but who have not yet actually received the degree.2

¹³⁹ are seniors who have completed their work for the first degree and have been permitted to register in the Graduate School.

a Seniors in the College of Arts and Sciences who have completed all requirements for the A.B. degree except the requirement of residence are permitted to register in the Graduate School provided they are prepared to become candidates at once for an advanced degree. Seniors in other colleges have been allowed to register in the Graduate School when all requirements for the first degree have been met.

The distribution among the five groups of the Faculty of the major and minor subjects selected by graduate students in residence was as follows:

	Majors			Minors			
	Graduates	Seniors	Total	Graduates	Seniors	Total	
Group A	17	16	33	29	18	47	
Group B	42	II	53	70	13	83	
Group C	88	5	93	152	7	159	
Group D	83	4	87	127	9	136	
Group E	39	1	40	48	0	48	
Č. I.	-	_			-	_	
Total	269	37	306	426	47	473	

APPENDIX IV

REPORT OF THE DEAN OF THE FACULTY OF ARTS AND SCIENCES

To the President of the University:

SIR:—As Dean of the Faculty of Arts and Sciences, I have the honor to submit the following report for the year 1909-10.

The class of 1910 was the first to experience the full force of the rule requiring for graduation eight terms of residence as well as 120 hours of Members of that class had been accustomed, like their predecessors, to think of their hours as the main matter. They knew that last year certain students whose credits were complete had been graduated without eight full terms of residence (Report, p. XLIX). They made no discrimination between their case and that, and a number of them, whose credits promised to be by February at least 120 hours, applied to the Faculty, with great variety of ingenious argument, to be granted the same indulgence as the preceding classes. But the Faculty made a discrimination. They knew that unlike the class of 'oo, the present seniors had had full notice before entering the College. They were of opinion, therefore, that no injustice would be done by enforcing the new residence requirement. They were of the opinion, too, that the only feasible way of administering it at all was to enforce it with the same strictness that had long been observed in exacting the requirement of 120 hours credit. They, therefore, refused all petitions to graduate short of residence in any degree.

In the course of the discussion which led to this conclusion the view was urged upon the Faculty that, for many students, graduate study was in effect a vocational training, preparatory to one or another of the newer professions, and that the Faculty ought to give to Arts seniors who wished to begin their professional studies in the Graduate School the same privilege of double registration now granted to seniors who wish to register in one or another of the professional colleges. Influenced, it may have been, by this educational argument, and moved also, I fancy, by requests to the same

effect from several students whose expectation of graduating short of residence had been disappointed, the Faculty voted, on the fifth of November, "that in case a student has fulfilled all requirements for the A.B. degree except the residence requirement, this Faculty will offer no objection to his registration in the Graduate School, provided, however, that his work has been of such character as to enable him to become a candidate at once for an advanced degree." At the same time they referred the general question of the eight-term residence requirement to a special meeting, to be held the fifteenth of November. The special meeting reaffirmed the requirement in full, but directed the Committee on Educational Policy to consider "the question of recommending qualified seniors for admission to the Graduate School with the understanding that their first year of graduate study should be counted as fulfilling the requirements of the last two terms of study towards the degree of A.B." At the December meeting of the Faculty the committee reported its opinion:

"Whether or not it is desirable that the degree of Doctor of Philosophy be conferred within two years after the degree of Bachelor of Arts your committee regards as a question for the Graduate School." "If the conditions of candidacy for an advanced degree may be met by the end of junior year, their nature and extent must deeply affect the elections of our more ambitious undergraduates." "The acceptability of the first year of graduate study as fulfilling the requirements of the last two terms of residence towards the degree of Bachelor of Arts will depend upon the nature of the Graduate School's requirements for that year and upon the manner in which their fulfillment is to be ascertained."

The committee, therefore, asked to be discharged from further consideration of the question until the Graduate School should have determined the conditions of candidacy for an advanced degree and the effective requirements during the first year of such candidacy. This report the Faculty adopted in full.

Of the 32 seniors who, by February, 1910, had fulfilled all of the requirements for the A.B. degree except the residence requirement, an even score were qualified, under the Faculty's action of November, to register in the Graduate School as candidates for advanced degrees, and actually did so. But the Faculty's December action seemed to indicate that the November arrangement was regarded as provisional, and likely to be revised when the newly organized Faculty of the Graduate School should have "determined the conditions of candidacy for an advanced degree and the effective requirements during the first year of such candidacy." Meanwhile the Dean's office and the Committee on Academic Records were somewhat puzzled how to deal with the twenty Arts-Graduate students.

It was at length decided to make use of the analogy between the November legislation and the older rules about double registration. When an Arts senior registers also in the College of Law, or in an engineering college, as a candidate for a professional degree, he becomes wholly subject, for the year in question, to those rules of the professional college which regulate the amount and character of his work. Our Faculty, being well assured of the exacting nature of those rules, and having already made up their mind to accept one year's work in professional subjects toward the degree

of A.B., have no hesitation in recommending the graduation of such doubly-registered seniors upon the certificate of the professional college that they have done a satisfactory year's work. In the view of the committee, the requirement that Arts students registered also in the Graduate School must be candidates for some advanced degree was similarly designed to make sure that during the remainder of their residence for the A.B. degree such doubly-registered Arts students should do a reasonable amount of work. The committee accordingly declined to include in the list of candidates recommended to our Faculty for graduation the name of any senior who was registered also as a graduate student, until a certificate that his graduate work was satisfactory had been given by the Dean of the Graduate School. I am not aware that any doubly-registered student who expected an A.B degree at the last Commencement actually failed to receive it for want of such certificate; but some of them apparently had difficulty in getting the certificate and in such cases the difficulty was, I fear, not without reason.

THE REGISTRATION OF ARTS STUDENTS AS GRADUATES

We have now had two years experience with graduate registration by Arts students still awaiting their baccalaureate degrees,-last year under the provisional legislation just described, and the preceding year under the provisions given on page XLIX of last year's Report. In all nearly fifty students were involved. The number is sufficient to warrant some deductions. It seems that doubly-registered Arts-Graduate students are, in fact, of two roughly distinguishable sorts. One sort regard the period as the beginning of serious graduate study. They are, as a rule, adequately prepared. They are, almost without exception, of exemplary diligence. Their candidature for an advanced degree is undertaken in good faith. They deserve all reasonable encouragement, and for them it is probably desirable that the present arrangement, or something to the same effect, should be maintained. The other sort of Arts-Graduate, having accomplished the comparatively easy task of piling up 120 hours credit in less than eight terms, is chiefly concerned to pass, in as agreeable a manner as he may, the tag end of his required residence. He has several reasons for desiring to come under the rules of the Graduate School. It pleases his parents, and impresses friends of the family. It entitles him to crow over his classmates in the College. It may even enable him to escape examinations for which he would otherwise be held. If, to secure these delights, he must become a candidate for an advanced degree (which, avowedly, he has not the remotest intention of ever taking) he, or she, will make a formal declaration of candidacy with any major and minor subjects for which the fleeting approval of a special committee can somehow be obtained. A pseudo-graduate student of this sort does not promptly enter, of his own choice, into any active relations with his special committee. He rather attempts to postpone so long as possible the making of definite plans for the graduate work which he has no desire to do. Postponement for at least a term proves easy, and the special committee, however assiduous, is virtually helpless in the situation. The whole organization of the Graduate School, including that of its special committees, is for the guidance of candidates who really plan to proceed to a degree. Such are justly allowed, when needful, an initial period of deliberation in order to choose and to bring under way those schemes of graduate work which they will later carry out under the specific oversight of their special committee, and upon which, in due course, they will be tested by thesis and examination. Of such an organization it is easy for a shirking Arts senior to take a brief advantage: Having already 120 hours credit, he resolutely marks time, assured that a minimum of work will receive approval. For the special committee is well aware that to withhold its approval will deprive him of the baccalaureate degree which. by 120 hours credit and eight terms residence, he is universally considered to have earned at the hands of the Faculty of Arts and Sciences. This penalty, if inflicted, would seem unduly severe. And even if it were deserved, the special committee, directly responsible only for graduate work, would be reluctant to inflict it upon one still in fact and substance an undergraduate student. He (or she) may, therefore, shirk with impunity.

It may well be that the Faculty of the Graduate School will prove unable ever so to "determine the conditions of candidacy for an advanced degree and the effective requirements during the first year of such candidacy" as to prevent shirking during the first term, or even the first year, of graduate work. It may even be undesirable for them to make the attempt. So far, at any rate, they have not done what our Faculty seemed last December to expect. It is fortunate, therefore, that the Faculty of Arts and Sciences, which bears the responsibility for Arts students until they receive the A.B. degree, has an immediate and obvious remedy in its own hands. If each professor in our Faculty, whenever asked, as a member of the Faculty of the Graduate School, to act upon the special committee of an Arts-Graduate student, shall refuse to do so unless the student's past record and present intentions give assurance that he will make a desirable graduate student, the others will then be obliged to complete their residence under the rules of this College, where they belong. Not that our rules, or any rules can make a faithful worker out of a confirmed soldierer. But we should at least not appear, as there is danger that we now may, to be taking our own eightterm requirement in a merely formal sense and licensing loafers to loaf for the remainder of their course after 120 hours have been secured.

If, however, it shall prove that this immediate and obvious remedy does not work, our Faculty may be disposed to consider other measures to the same end. The machinery which the Graduate School finds adequate for its purposes not answering ours at this point, we may ourselves be obliged to impose such additional conditions upon the registration of our students in the Graduate School as may eliminate from the ranks the conspicuous few that, in the guise of graduate students, are merely marking time until June.

REARRANGEMENT OF FRESHMAN COURSES

Besides discharging their routine duties (described by my last Report, p. XXXIII) in advising freshmen as to the choice of their studies, the Administrative Board in Charge of the Work of Freshmen and Sophomores gave

further attention this year to certain phases of the matter referred to them by the President and reported upon in a general way a year ago (pp. xlix-li)—"the proper method of instructing underclassmen." The first point of attack at this time was the number of courses which students, especially freshmen, took concurrently. But the closely related questions soon came in of the frequency of recitations, and the number of courses open to freshmen that begin with the second term of the year.

Inquiry into the number of courses pursued concurrently showed that out of 937 students whose records were examined there were twelve who took less than four classes. These were all exceptional cases of one sort or another—special students or such as, on account of ill health, were permitted to carry less than the usual minimum of hours. Of the remaining 925 only 90 or 9.7 per cent were registered for four courses; 280 or 30.3 per cent were registered for five courses; 332 or 35.9 per cent for six courses; 179 or 19.5 per cent for seven courses; and 44 or 4.6 per cent for eight or nine courses. In other words six courses was the typical registration. Over one-third of all the students followed that number, while twice as many were registered for seven courses as for four.

The cause was not far to seek. The list of courses open to freshmen illustrated it perfectly. In all they numbered 66. Four of them came six hours a week, seven came five hours, and five four hours, making sixteen courses, or less than a quarter of the whole number which exceeded three hours per week. Thirty-eight, or more than one-half of the whole, were three-hour courses. There were also nine two-hour courses and three onehour courses. Three-hour courses were almost universal in the languages (there were six-hour courses, pursued by single sections in "baby Greek", "German 1 and 2", and "French 1 and 2", and a one-hour course in "Sight Latin," but the latter could be taken only as supplementary to a three-hour course). Three-hour courses were also likewise used exclusively in freshman history, and commonly in the natural sciences. The sciences, however, made use of several two-hour courses also. In the exact sciences (mathematics, physics, and chemistry) the five-hour course was typical, though there were some courses of six hours, some of four hours, and in mathematics some of three and even two hours. In short the three-hour course was the common one for freshmen as well as other students. In order to make the required number of credits, even freshmen were compelled, except in the exact sciences, to register for five or six courses per term whether they liked or not.

In their preparatory schools the freshmen had been accustomed to study but four subjects, in some of the better preparatory schools but three subjects. The Board were of the opinion that the transition from school to college might properly be marked, in many instances, by an increasing diversification of the students' academic interests, and in others by the more intensive study of a single subject such as would require the prosecution concurrently of several classes in it. But in view of the diversion of attention and dissipation of interest inevitably attendant upon the beginning of a college course, they doubted the wisdom of further multiplying distractions by practically forcing all freshmen to double the accustomed number of their classes.

The practice of the departments which at present entails this result has been of gradual growth. Under the earlier organization of our instruction, when each freshman was held for some fixed group of subjects, determined by the degree which he sought to obtain, five-hour freshman classes were the rule in most if not all of the departments. The establishment of a single Arts degree with universal freedom of election for all students in the College, seems to have induced a gradual cutting down of freshman classes to three hours,-perhaps as a measure of interdepartmental competition for the favor of elective students. Its effectiveness for this purpose must have been lost as soon as the practice became general, but the same inducements which first brought certain departments to adopt it would deter any from abandoning it until all or most should do so. The blame, if blame there be, attaches, in my opinion, less to the departments severally than to the organization of the College as a whole. So long as there was no conscious correlation of freshman courses, no obligation upon any department to adjust its classes to those in other departments, scarcely even an opportunity for consultation with a view to such an adjustent, it cannot be thought surprising that the duty which each department certainly owed to its own subject should have absorbed its attention and dictated its policy. If, in consequence, the interests of the College as a whole were in some degree overlooked, the Board felt confident (and the event has proved it rightly confident) that cordial co-operation from the departments would be forthcoming to repair the oversight as soon as its existence should be realized. It was in this confidence that the Board approached the question whether more frequent recitations were, on the whole, desirable in freshman courses.

THREE-HOUR AND FIVE-HOUR CLASSES

Members of the Board who had taught the languages to freshmen in three-hour sections and in five-hour sections agreed that the five-hour classes learned faster and with more certainty. It was even asserted by several men of experience in the matter that in courses coming five hours a week throughout one year (180 recitations) as much was uniformly accomplished as in courses coming three times a week throughout two years (216 recitations, or 20 per cent more). Other members who, at Cornell and elsewhere, had taught on both a three-hour and a five-hour schedule were equally emphatic that the latter was better for the student, though they were by no means certain that it was easier for the teacher. The Board apparently considered such experience more weighty than psychological theories of attention largely based upon laboratory experiments, and concluded that less than six classes concurrently would afford variety sufficient to sustain the student's interest. They considered, too, that five-hour classes promised to put him in early possession of a working knowledge of the tools of further study, notably of the languages, and that they would also enable one who might be late in deciding upon graduate study to repair more promptly the deficiencies of his equipment.

In the respect of the number of courses open to freshmen the second term, the Board saw a further advantage in classes of greater frequency than

three hours per week. In spite of the request of the Faculty, passed years ago, that the departments, in arranging their schedules, provide courses beginning in February, it was the fact that but 23 of the 66 scheduled freshman courses did begin then, and of these 23 all but five were in the scientific subjects. This proved embarrassing to mid-year matriculants, and to such September matriculants as, having completed in the first term a six-hour course in chemistry or physics, were seeking to make up a full schedule in the second term.

In consequence of these and, no doubt, of other considerations, the Board recommended that the work hitherto done in three hours a week throughout the year in the first and second-year courses in the modern languages be given hereafter in sufficient hours per week during the first term and be repeated the second term. They likewise directed their chairman "to confer with the departments concerned with a view to bringing about this state of affairs," and to confer also as to the possibility of giving each of the freshman history courses in a single term, instead of extending them both throughout the year. Conferences were held. The departments proved in general favorable to the suggested changes. The Announcement of Courses issued in May shows German 1 and French 1 as six-hour courses and German 2 and French 2 as five-hour courses. The courses in Spanish were left at three hours, partly because many of the students studying that language, especially in the first year, were not in the College of Arts and Sciences and might experience difficulty in making a place for a five or six-hour Spanish course in their required curricula. The freshman courses in history, however, have been made five hours each, and the English Department, instead of its two freshman courses of three hours each, has announced a single freshman course of four hours. The Board feared that limitations of laboratory space and equipment might constitute a serious obstacle to similar changes in the "natural history" courses and seemed content that those should remain at three hours while the working of changes already planned should be under observation.

Among the phases of the experiment which will call for most careful consideration, not only by the Board but by all members of the Faculty, the more important are, perhaps, the effect upon students and teachers of a more intensive study of fewer subjects during the freshman terms, and the extent to which, if at all, students may show a disposition to elect three-hour courses not because they want the subjects, but as an insurance against failing in over-many hours.

MID-YEAR MATRICULATION

As a result of the change, freshmen in Arts and Sciences can now begin their course to as good advantage with the second term as with the first. The number of high school pupils seems to be growing who either commence their school course at mid-year or possess sufficient ability to finish it in less than the scheduled time. Such are ready for college in February, and if they must wait until September many of them will drift into such employments as are likely forever to deprive them of the privilege of a college course. There is also, every September, a considerable group of applicants for ad-

mission who are rejected for entrance deficiencies so slight that it would be easy to repair them by February. To keep these out until the following September is to waste their time. Their number, too, is likely to increase with our growing strictness in respect of entrance conditions. And the hardship of making them wait a whole year is the greater since our recent action (last Report, pp. xxxiv-xxxvi) denies them surplus entrance cred t upon certificate for such extra studies as they may pursue in preparatory school during the year of enforced waiting. It is, therefore, a merit of the change in freshman courses that it will facilitate mid-year matriculation. And further facilitation may be expected from the action taken by the University Faculty to provide entrance examinations in January as well as in September.

ENTRANCE REQUIREMENTS IN LANGUAGE

Until 1008 all matriculants in the College were required to satisfy what we now know as the "old entrance requirements," including either (a) all of the entrance Latin plus all of some other entrance language, equivalent to seven language units of the "new" requirements, or else (b) all of two modern foreign languages, equivalent to six "new" language units, plus advanced entrance mathematics or a science. In any case, therefore, at least six units of foreign language were required for admission to the College. By action taken on the first of November, 1907, (cf. pp. xxv-xxvII of Dean Hill's Report) our Faculty adopted the "new entrance requirements," which were to be optional in 1908 and 1909 and the sole rule in 1910. These new requirements, while apparently increasing the total amount of preparation demanded, worked a marked decrease in the linguistic preparation, namely from six units (or in many cases seven units) to four only. Furthermore, they did not call for advanced entrance preparation in any foreign language whatever, whereas the old requirements had exacted the full preparation, both elementary and advanced, in two languages.

The vast majority of the students admitted in 1908 and in 1909 voluntarily offered as much preparation in foreign languages as would have satisfied the old requirements, and less than one-tenth came with the permissible minimum of linguistic preparation. Experience soon showed, however, that an altogether disproportionate share of these failed to meet the expectations of the Faculty and came, in consequence, before the Committee on Academic Records. It was chiefly this circumstance, apparently, which induced our Faculty to retrace its steps in some degree by voting, June 3, 1910, upon the recommendation of the Committee on Educational

Policy:

First, that instead of the four units of foreign language now required for admission, there be required in future five units of foreign language, of which three must be offered in some one language and two in some other language. [This would leave but four elective units instead of the present five.]

Second, that out of the total of 15 units required, the remaining four elective units, or any of them, may be single units in language, as in other

subjects.

'Third, that the description of the entrance requirements in the foreign languages be accordingly so revised, and the corresponding entrance exami-

nations be so arranged as to enable an applicant for admission to offer either one or more units in any language, namely, in Greek 1, or 2, or 3; in Latin 1, or 2, or 3, or 4; in German 1, or 2, or 3; in French 1, or 2, or 3; in Spanish 1, or 2, or 3.

The date of passing these resolutions was so late in the year that it was not possible, before Commencement, for them to receive deliberate consideration at the hands of the University Faculty. It remains, therefore, still to be determined whether or not that body, in case it considers that entrance requirements have become a matter of general University policy concerning more than one college, will be disposed to authorize the changes which our Faculty has proposed. And until this is decided it is idle to consider a date for putting our suggestions into force. They are, however, an important portion of the legislation of the Faculty of Arts and Sciences during the year just closed, and as such require mention here, whether or not they are destined eventually to be approved.

The first of them, being but a partial reversion from requirements found unsatisfactory to those in force before 1907, calls for no further comment. The second and third, which provide for counting single units of entrance language, are, however, in part new, and may need a word of explanation. The "old" entrance requirements permitted single units (school years) to be counted after the first two in the same language, e.g., Virgil, as one unit after Latin Grammar and Caesar (2 units), or advanced German as one unit after Elementary German (2 units). The "new" entrance requirements of 1907 continued this policy, and it is in no wise affected by the vote of June third. But that vote also permits single beginning years of a language to be counted. This is new. And it should be pointed out so clearly as to preclude any possible misapprehension that a beginning year may be counted only when offered in a third language by an applicant for admission who has also studied a first language for at least three years, and a second language for at least two. This is very different from accepting a single year in each of two or three languages, when offered by a man who has never gone beyond the first year in any of them, and may be, in fact, quite incapable of learning enough of any language to make the slightest use of it.

Instead, therefore, of relaxing in any degree the present linguistic requirements for admission to the College, the most recent action of our Faculty, taken as a whole, looks towards greater strictness in them. The Faculty desires, however, to encourage any student who plans learning a third language to take it up, if possible, while still in school, instead of postponing the most elementary study of it until he has come to college.

The Faculty likewise voted (Minutes, ii, 86) "that the subject of Agriculture be not accepted by this College in satisfaction of entrance requirements."

The following is the customary table of Leaves of Absence 1904-10:

Ground	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10
Personal illness		56	48	37	151	640	1140
Illness or death in family Request of parents		31	30	22	37	44	70
Wedding	22	14	5	4	25	21	16
Business.		18	13	7	14	28	10
Delegate to convention.	67	42	32	23	48	31	64
Voter	20	19	I	-	5	16	29
Department excursion		61	6	1	9	32	17
Examinations	60	29	7	7	6	140	96
Missed connections	20	22	2	6	3	12	24
Student organizations	34	6	-	-	3	_	26
Miscellaneous	-	-	-	-	-	59	110
	23	11	11	24	8	55	62
Total	456	309	155	131	309	1088	1664

To the comments made last year (pp. XLIII-XLV) upon the inadequacy of these figures, and the danger that they may prove misleading, I would add only that the issue of 1650 leaves of absence, the majority of which, in effect, merely record what the students themselves report, occupies a larger portion of my office hours than the obvious usefulness of the leaves themselves might appear to justify.

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DELINQUENT STUDENTS

Acting upon the authority recently given them by the Faculty (p. xlv of the last Report), the Committe on Academic Records dismissed two students early in May for flagrant neglect of their work. Last year, it may be recalled, no less than five were dismissed during term time for the same reason. The customary examination of students' records was also made after the close of each term, and students were dropped, placed on probation, or warned, as seemed to be needful. The net result (including in the totals the students dropped before the examinations) is shown by the following table. As is customary, the figures for preceding years are also given by way of comparison.

	Students dropped after examination			Students warned or put on probation			Aggre- gate	Total stu-	Per
Academic year	First term	Second term	Total	First term	Second term	Total	for year	dents regis- tered	dealt with
1904-05	23	20	43	18	10	28	71	684	10.4
1905-06	21	16	37	20	18	38	7.5	705	10.6
1906-07	18	15	33	42	48	90	123	748	16.4
1907-08	21	21	42	24	21	45	87	820	10.6
1908-09	27	22	54	33	29	62	116	902	12.7
1909-10	32	28	60	29	33	62	122	970	12.8

During the last two years there has been a marked growth in the apparent interest taken by fraternal and athletic organizations among the students in the academic standing of their members, and the Faculty, at their April meeting, approved the policy, already adopted in some degree by the Dean's office and by various professors, "of furnishing, to apparently responsible bodies making inquiry, information as to the standing of students." (Minutes ii 88). There can be no doubt that a co-operation of this sort between Faculty and students holds a promise of much good; but it also contains a potentiality of no small evil. All will depend upon the use made by "apparently responsible bodies" of the information furnished in reply to their requests. If they use it to admonish the slothful and negligent, and to encourage with appreciation the good scholars among their members, there should result, in some measure, that improvement of scholastic standing which the President has recently enjoined it upon certain organizations to effect. If, on the other hand, the certainty that any of its abler members is far above the passing mark should be treated by any "apparently responsible body" merely as evidence of a margin of safety on account of which he might be urged to neglect his class work in order to achieve the glory of "prominence" in "activities," the net result would be most unfortunate. For the scholastic standards of the College are far more debased when a man of known capacity sinks to the passing mark than they are elevated when half-a-dozen incompetents are somehow driven just above it.

WORK OF COMMITEEES

During the year the Committee on Educational Policy held eleven meetings, the Administrative Board five meetings, and the extremely laborious Committee on Academic Records twenty-six meetings. Each also employed sub-committees upon various subjects. The chief results of their labors, so far as they eventuated in positive action, have been set forth above. The Committee on Educational Policy also gave much time to considering "the relation of student activities to the work of the College," and was assisted, at some of the deliberations upon that subject, by Professor Young and by Mr. Dugan, Graduate Manager of Athletics, also by a group of seven representative students who readily accepted its invitation to a joint session and freely exchanged views with the members of the committee. It seemed clear that the questions involved were such that no one college could effectively deal with them alone, and in view of the progress of a related inquiry in the University Faculty, the committee concluded to make no report to our Faculty concerning the matter. I fancy that the members of the committee all felt, however, that their time had not been wasted, and that their understanding of the situation had been materially increased. They expressed their cordial thanks to the gentlemen who, through conference, had helped them to that result.

Respectfully submitted,
CHARLES H. HULL,
Dean of the Faculty of Arts and Sciences.

APPENDIX V

REPORT OF THE DIRECTOR OF THE COLLEGE OF LAW

To the President of the University:

SIR: I have the honor to submit the report of the College of Law for the academic year 1909-1910. There have been no changes during the year in the resident Faculty, and all courses have been given regularly as announced. The course in Bankruptcy, omitted last year under circumstances mentioned in my last report, was given this year by Mr. William H. Hotch-As Mr. Hotchkiss's duties as Superintendent of Insurance forbade any long absences from Albany, the course was given on consecutive Fridays and Saturdays, two to three hours each day, but without any interruption of the regular senior work. The course in Patent Law was given by Mr. William Macomber of the Buffalo Bar. His lectures have been received with marked interest by the law students, and have been attended by a considerable number of students in the engineering colleges. The courses in Patent Law and in Admiralty have in the past been given only once in each period of three years. This arrangement compels students in the first year of their studies to pursue whichever of these courses may happen to be given in the particular year. With the present enrollment in the college these classes are too large for the accomplishment of the best results. Moreover the courses are of such a character that it is desirable that students pursuing them should have advanced further in their general law studies than have the first-year students at the time the lectures are given. It is desirable that these courses be given in alternate years. If this change should be made, first-year students could be excluded and the courses obtained in the junior and senior years.

The registration this year has been the largest in the history of the college. An inspection of the subjoined table will show that the increase in new students has been almost entirely in the four-year course. The wisdom of establishing the four-year course, and especially of the changes made several years ago in its arrangement, is demonstrated both by its growing appeal to entering students, and by the superior scholarship in law subjects of students pursuing that course. In January the average marks of the four-year sophomores was 13% higher than the average mark of the three-

year students pursuing the same subjects.

The registration in the college for the past eleven years is shown in the following table:

Year	Seniors	Juniors	4 Year 2	4 Year 1	3 Year 1	Special	Total
1899-1900	52	61	_	_	61	4	168
1900-1901	45	52	-	-	78	7	182
1901-1902	34	71		_	86	7	198
1902-1903	48	77	-	-	95	5	225
1903-1904	53	76	-	-	100	3	241
1904-1905	53 58	80	-	-	86	4	228
1905-1906	65	69	-	-	83	4	221
1906-1907	51	70	-	-	89	I	211
1907-1908	48	68	-	-	85	5	206
1908-1909	48	58	15	29	71	6	227
1909-1910	49	56	22	54	70	10	261

The increase noted cannot be expected to continue. Indeed the advanced entrance requirements in the three-year course, which will take full effect in September, 1911, will undoubtedly result in a considerable decrease in the number of students entering that course, although for reasons hereafter stated it is probable that the decrease will not be so great as was expected when the new requirements were first adopted.

In addition to the students in the College of Law, 26 students from other colleges have been pursuing courses given in this college. The tendency for some years has been toward a decrease in the number of students of this class, and especially in the number of Arts seniors pursuing the entire first-year law work with a view to completing the courses in Arts and in Law in six years. Of the latter class this year there were only 9. The decrease is probably due in part to the present requirement of the Faculty of Arts and Sciences that a student, in order to enjoy the privilege of pursuing the first year of Law work as the senior work in Arts and Sciences, must at the beginning of his senior year have credit in at least ninety hours of work in Arts and Sciences. This cause is not alone sufficient to account for the entire falling off in numbers. It may be that there is a growing tendency among students to abandon their Arts courses for professional study at an earlier period than the beginning of their fourth year. That there is some such tendency is indicated by the increasing number of transfers from Arts and Sciences at the end of the freshman and sophomore years. It may also be that those who pursue their Arts work to the senior year are coming to prefer to take the full Arts course and so to devote seven years instead of six to the two courses.

Of the regular law students, 93 are from outside the state of New York. Last year there were 74; in 1907-1908, 63; in 1906-1907, 62; in 1905-1906, 57.

The number of students in attendance at this time, May 2, is 225. Of the 36 registered but no longer in attendance, 1 completed his work for graduation; 2 transferred to other colleges of the University; 15 voluntarily withdrew; and 18 were dropped for failure in or neglect of work.

Of the 74 students pursuing the first year of the three-year course (70 regular students and 4 specials), 4 have the A.B. or equivalent degree and

25 others have had one or more years of college work. If to these be added the 22 sophomores in the four-year course, 24 seniors in other colleges of the University taking first-year law subjects, and the 54 four-year students entering this year, we have a total of 129 students out of 176 who have had from one to four years of college work, or who will have had one year of such work before pursuing more than one law subject. This leaves only 47 of the 176 to complete their law course without such a foundation.

The diminishing proportion of students endeavoring to pursue their professional studies without previous college training has been a subject of comment in previous reports. The tendency seems almost constant. In 1907-1908, these students constituted 44% of the class; in 1908-1909, 38½%; this year, 26¾%. It would seem, therefore, that the transition to the new entrance requirements, whereby at least one year of college work will be required for admission to the three-year course, may occur without so great a diminution in the number of students as was expected when the new requirements were adopted. It must, on the other hand, be borne in mind that there are still this year 47 students in the first-year class who could not meet the new requirements because they have had no college work. Moreover, it is probable that some of those included in the foregoing computation as having had one year of college work could not entirely fulfil the new requirements. While they have attended college a full year they may not have successfully performed the entire work of the year.

The method of supervising the Arts studies of the four-year students, referred to in my last report, has been continued this year. An effort has been made to lighten the task thereby imposed upon professors in Arts and Sciences by the adoption of a system of forms as similar as practicable to those used for like purposes by the Underclass Administration Board of the Faculty of Arts and Sciences. While the results of this method have not been in all respects entirely satisfactory, it is believed that much good has been accomplished, and the Director wishes to renew his expression of appreciation for the hearty assistance and co-operation he has received from the Dean and the Faculty of the College of Arts and Sciences in this effort at supervision.

Upon the recommendation of the Faculty, the Trustees have made a change in the terms of the Boardman Senior Law Scholarship. The former terms of the statute providing for its award were framed with reference to conditions in the college at the time the scholarship was established. It was open, therefore, only to the students in the three-year course who had pursued both the first and second years in the College of Law. Not only were the four-year students excluded from competition, but also students who had taken the first year of law work while seniors in the College of Arts and Sciences. The introduction of the four-year course and its great growth in numbers suggested the desirability of opening the competition to all students pursuing the first two years of law work, whether in the four-year or the three-year course and whether registered in their first year in the College of Arts and Sciences or in the College of Law.

A memorial to the late Dean Huffcut has been presented by his former students and colleagues in the Law Faculty. It is a life-size, three-quarter length portrait by Mr. J. Colin Forbes, of London, and has been hung in the upper reading room of the Library with the portraits of Judge Boardman and Judge Finch. It is a striking likeness and possesses artistic merit worthy of the artist's reputation.

The Librarian having fallen ill has been granted a leave of absence from April 20 to the beginning of the next academic year. Upon his sick-bed he has prepared his annual report which is herewith submitted. The condition of the Library, as disclosed by the report, as well as the circumstances of the preparation of the report itself, testify to his faithful services. The increase generously made in the appropriation for maintaining the Library has proved reasonably sufficient to meet the increased expenses referred to in the last report of the Director. The over-crowding of the shelves has, however, become serious, and there is most urgent need of an immediate increase in shelf-room. If the plans now under way for meeting this need should be fully carried out, there will be sufficient space provided to accommodate the growth of the Library for a number of years.

Respectfully submitted,
FRANK IRVINE,
Director of the College of Law.

APPENDIX VI

REPORT OF THE DIRECTOR OF THE MEDICAL COLLEGE

To the President of the University:

SIR: I have the honor to present my report upon the Medical College of the University.

It is with much pleasure I call attention to the cordial support given by the Faculty and instructors to the change made necessary in the administration of the school by the alterations which have sprung from raising the admission requirements and from rearrangement and extension of the teaching schedules. Every one has entered into the spirit of the advance, and by increasing efforts has confirmed and given strength to our purpose.

The changes in our curriculum have been made in such manner as to give greater opportunity to the student than was possible with the larger classes. This commenced with the first year of our new departure, 1908-09, and was continued with the succeeding year. The alterations for the coming year will be put in operation at the opening of the session for this year. Meanwhile, tentative alterations have been adopted for the coming fourth year. For the details of these changes I refer you to the schedule of exercises accompanying our Announcement for the year 1910-11.

The improvements in our clinical courses, especially in the Department of Medicine, are of prime importance. Through an arrangement of the service at Bellevue Hospital, due largely to the loyal co-operation of Professor Coleman, Professors Thompson and Dana have organized the services in the Cornell Medical Division, so that one continuous service extends from October first to June first, the other covering the remainder of the year. By this plan Professor Thompson assumes control during the college year, with Professors Coleman and Meara in charge of forty beds each. During the remainder of the year the service is arranged under the direction of Professor Dana, with Professor Hastings and Doctor Norton in charge. trustees of the hospital have equipped a clinical laboratory in connection with our wards, which, under the direction of Professor Hastings and Assistant Professor Thro, co-operates in the work of the attending physicians and will together with them bring the service to a higher plane of efficiency. Through the clinical workers appointed in connection with the Departments of Physiology, Pathology, and Chemistry, every opportunity will be afforded this service to work out problems of diagnosis and treatment which may require such exhaustive investigations as can only be carried on in the laboratories of their several departments. A similar arrangement of the surgical service is desirable, and the intention is to bring it about as soon as possible.

The condition of the Dispensary service is unsatisfactory from several points of view. The chief defect lies in the increasing difficulty in getting adequate service from the attending physicians in some of the departments, which as in the case of the General Medical, cover a large number of patients. The recommendation is made that some of these positions be salaried.

In connection with this subject I desire to call attention to the inauguration of a service to be extended to the homes of such of our patients as are unable to enter a hospital and yet require more attention and supervision than visits to the dispensary permit. To that end one or more trained nurses, in addition to those already employed within the building, should be assigned to this outside duty. Apart from the humanitarian phases of this work, it would, if properly conducted, add to the value of the service we render, and thus increase our influence and the number and quality of our patients.

It is recommended that the X-Ray Department be developed in keeping with the present status of this work in other institutions. The demands upon radiography, as an aid in medical and surgical diagnosis, have increased beyond the capacity of our plant; for this purpose alone we need additional apparatus. The therapeutic uses of this agent should also be further developed and if possible a Department of Electro-Therapeutics should be organized so as to take over the therapeutic development and application of all forms of this element.

The Departments of Medicine, Pediatrics, Neurology, and Psychopathology will be greatly benefitted by the inauguration of these several improvements. The scope of the work in neurology and in psychopathology should be widened so as to afford every opportunity for special workers. This would be gained by the additions asked for to the facilities of our dispensary.

I ask attention to the vacancy in the Department of Anatomy. For the past year the department has been conducted by the heads of its subdivisions. Reference to the reports shows that embryology, histology, descriptive and

applied anatomy have each been admirably presented; but the proper conduct of the department as a whole requires the presence of an administrator as well as an accomplished anatomist, to the end that all the forces now engaged therein (and they are all very capable) may, through fitting organization and co-operation, allow more complete development.

The Professor of Chemistry and Physics gives testimony to the advantages already realized from the better trained students we are now securing in our first year. "Work of instruction is highly satisfactory under the new schedule." "Abbreviation of time allowed for study in this department has been to great extent compensated for by greater capacity for full utilization of time on part of more perfectly trained students." "Class in physiological chemistry has done more satisfactory work than any we have hitherto had."

Permit me to ask attention also to the report of Professor Hatcher. Owing to his service in connection with the labors of the Council of the American Medical Association on Pharmacy and Chemistry of which he is a member, and the work of the Committee of Revision of the United States Pharmacopoeia, Professor Hatcher has at times found greater need than usual for the services of an additional instructor—one that can be used in recitation work and yet give most of his time to the laboratory. The work which Professor Hatcher is carrying on outside the College is of such importance to the profession at large, bringing credit not only to him personally but to his department in our College, that serious consideration should be given his suggestion.

This raises, at the same time, a similar question in regard to each of our departments, and especially the Departments of Chemistry, Physiology, and Pathology, whose chiefs are liable to just such demands from an outside source as have come upon the Department of Pharmacology. It was the expectation that with the better trained students much of the recitation work could be curtailed. The subject is one calling for careful consideration on our part so as to determine the limit to which the machinery for research is to be permitted to encroach on that needed for instruction.

The development of our laboratories, especially in connection with our clinical work, increases our need for animals to such an extent, the question of supply is becoming more pressing each year. When to this is added the question of proper care or housing, it is evident that we must enter upon some plan less wasteful than that we now carry on. To this end I recommend that we make an arrangement which will permit us to house our animals in the country, transferring to our laboratories such only as will be in actual use in connection with the work in hand.

Some indication of the need for a betterment of our present system of "animal supply and keep" is seen in the reports of the Departments of Pathology, Physiology, and Experimental Therapeutics. The extent of the work in all these departments is steadily growing, and the nature and scope of the several problems they have been engaged upon during the past year is outlined in the appended lists of publications and problems now in hand. I ask special attention to each of these reports and in connection therewith to the reports of Professor Thompson, Professor Meara, and

Professor Hastings. Here will be seen the beginnings of that form of co-operation between the clinical and laboratory phases of medical instruction and investigation which we aim to develop to a plane in keeping with our opportunities.

Permit me before closing to call attention to the work of Professor Gwyer in connection with the Animal Hospital. Through the generosity of Mr. Payne Whitney this institution was reopened last January first. The value of the work is increasingly evident each month. Apart from the advantages it offers for the cure of valuable animals, the extent to which the work can be utilized in demonstrating Operative Surgery makes it a valuable asset in our course of instruction.

Respectfully submitted, W. M. Polk, Director of the Medical College.

APPENDIX VII

REPORT OF THE SECRETARY OF THE ITHACA DIVISION OF THE MEDICAL COLLEGE

To the President of the University:

SIR: I have the honor to present my eighth annual report as Secretary of the Cornell University Medical College at Ithaca covering the college year 1909—10, the twelfth year of the Medical College.

This year, for the first time, the students of both the first and second-year classes were all college graduates and, as we expected, the number in attendance was less than ever before in the history of the Ithaca Division of the college. There were nine students in the first-year class and nine in the second-year class. Of the second-year students, five were graduates of Cornell University, having taken the combined course, and four were from other institutions. There was but one woman in this class. Of the first-year students, three were taking the combined Arts-Medical course and received their A.B. degree in June, 1910. The others were graduates of other institutions. There were three women in this class. There is no explanation for the small number of students entering the Medical College this year from our own College of Arts and Sciences. I know of no time during the past twelve years when there have not been more students of this class, and the prospects are that there will be at least three times as many entering the Medical College in the combined course next year.

Both instructors and professors have not only been giving the regular work for medical students but, as should be the case in real live departments, have been devoting a considerable amount of time to research in various lines and to directing the investigations of advanced students. The results of some of this work have already been published in different scientific periodicals and society proceedings and much work is still in progress. Last year to show the scope and character of the research in the Medical College, I gave in my report a list of the investigations under way and completed, and the showing this year is even more creditable.

In the Departments of Anatomy, Physiology, and Histology, there have been as in the past a number of students working for the degrees of A.M. and Ph.D. The Department of Histology conducted the regular required course in this subject for the Veterinary students and gave instruction to students in the College of Arts and Sciences and other colleges of the University. The Department of Physiology also gave instruction to students in the Colleges of Agriculture and of Arts.

It was thought when Stimson Hall was built that it would accommodate two hundred students. Since that time many changes have taken place in the methods of teaching; more stress is laid upon research work; biochemistry has been transferred to the building; and we now find that, even with our small classes, practically the whole of the building is in constant use. The laboratories, of course, will accommodate many more students than we now have but it would be impossible to use part of the room for other departments and to get along with less than the whole building without entire reconstruction. The laboratories are all well equipped and thoroughly modern, and enable us to offer facilities for instruction and research equal to any in the country.

The Faculties in Ithaca and New York have been kept in closer touch with each other than ever before. In furtherance of this, the Secretary of the College at Ithaca has attended seven meetings of the Faculty in New York and the Dean of the Medical College has made one visit to Ithaca. Furthermore, Drs. Ewing, Thompson, Hastings, and Lusk of the New York Faculty visited here during the year and Drs. Moore, Simpson, Hunter, Emerson, and Dresbach visited the Medical College in New York City. In this way the different departments in the two divisions of the college have been able to closely correlate their work. The small size of the classes has been a great advantage to the students as they have received so much individual personal attention from the professors of the various departments.

By the elimination of physics and chemistry from the medical course, it has been possible greatly to improve the curriculum. Besides strengthening the first-year courses in anatomy, histology, physiology, organic chemistry, and biochemistry, the second-year work has also been somewhat extended and a new course has been added in physical diagnosis. To take care of the extra work, it was necessary to make important changes and additions to the Faculty. Professor Baker gave up the course in medicine and confined himself entirely to the work in obstetrics. Dr. Charles P. Emerson was appointed Assistant Professor of Medicine to have charge of the elementary work in this subject. Dr. Melvin Dresbach was appointed Assistant Professor of Pharmacology with direct responsibility for the pharmacological work. Dr. S. A. Munford, Medical Examiner at the Gymnasium, was appointed Instructor in Physical Diagnosis. The in-

creased work in surgery was taken care of by Dr. Tinker. The extended work in pathology was given by Professor Moore and Dr. Boynton.

The new curriculum has proved very satisfactory. I believe, however, that the future will show that it is advisable further to restrict the work in the so-called practical branches of medicine, surgery, and obstetrics, which are now given in the first two years of the course, and to limit these two years almost entirely to the fundamental subjects of anatomy, including histology and embryology; physiology, including biochemistry; and bacteriology and pathology. A brief summary of the reports from the different departments is given below. A more detailed report of the work, aims, and requirements of these departments will be found in the extended reports from the head of each department.

The Department of Anatomy is well equipped with models, apparatus, and specimens. The work of instruction has been normal and satisfactory. Instructor Baldwin has this year been teaching in the anatomical laboratory of the New York Division of the college and it was not possible to obtain in his place a trained man who would devote his whole time to anatomy. Nevertheless, the decrease in the number of students has made it possible for the Professor of Anatomy together with one full time instructor and two assistants, who were practising physicians, to carry on the work satisfactorily. Dr. Jacob Parsons Schaeffer has been appointed Assistant Professor of Anatomy for next year. He is a thoroughly trained anatomist who has taken his M.D. from the University of Pennsylvania, his A.M. and Ph.D. from this University, and I wish especially to commend his faithful and efficient work both in teaching and research.

Dr. Kingsbury reports that the work of the Department of Histology and Embryology has proceeded with regularity along the same general lines as last year. Some new courses have been added for students in Arts and Civil Engineering. The staff has not been changed with the exception of one assistant. Dr. William A. Hilton, who has been connected with the department for some time and who has done splendid work both as a teacher and investigator, has been promoted to an instructorship of the higher grade. Some of the small deficiencies in the equipment have been filled and it should not be difficult to round out each year some more of the many items still needed.

Emeritus Professor Gage has continued his investigation in his rooms in Stimson Hall to the gratification of the Medical Faculty to whom he always finds time as in the past to give advice and help in their research work.

Professor Simpson reports that the work of instruction in physiology has been very satisfactory particularly in the practical classes. A specialized course of lectures on general physiology for medical students was given this year separate from the general course for students of the Colleges of Agriculture and Arts and Sciences. Assistant Professor Dresbach, who was this year in charge of the work in pharmacology, has been appointed Assistant Professor of Physiology for next year in place of Instructor Schrock. It is to be hoped that by another year he may be relieved of his work as assistant medical examiner at the gymnasium and be able to devote his whole time to research and teaching in physiology. Mr. Mayes has been

appointed a full time instructor, taking the place of two assistants. Many new pieces of apparatus and much equipment have been procured during the year and in addition a large number of diagrams have been made for illustrating lectures. Dr. Simpson considers the laboratories now fairly well supplied with apparatus both for teaching and research. The skilled mechanician has proved a most important adjunct to the efficiency of the department and has also made it possible to save much in both repairs and new apparatus. It is hoped a few needed pieces of apparatus may be added next year and that the accommodation for the animals may be improved.

Professor Hunter reports that the work in biochemistry has been most satisfactory. The application of biochemistry to the problems of metabolism and clinical medicine have been especially emphasized and a further extension of this phase of the subject is contemplated for future years. Besides teaching the medical students, Dr. Hunter has given a part of the general course in physiology for Arts students. A full time instructor has been appointed for next year in place of the student assistant heretofore assigned to biochemistry. The laboratory was this year in full working order and is excellently stocked with general apparatus. There is still need of some special pieces of apparatus which should be secured within the next few years. An efficient preparator is also needed.

The work in organic chemistry in the revised curriculum has been extended to include some laboratory work. The course was taken by only a few of the medical students as most of them had previously had satisfactory courses in this subject. This would seem to indicate that in the not distant future this subject may be added to our present entrance requirements.

The work in pharmacology has this year been entirely in the hands of Dr. Melvin Dresbach, who, as already noted, was appointed Assistant Professor of Pharmacology. He is a graduate B.S., 1897, and M.S., 1900. of the Ohio State University and M.D., 1903, of the Ohio Medical University. Since 1905 he has been instructor in physiology and pharmacology in this University. Dr. Dresbach says that the extended time allowed this year for pharmacology has permitted a decided improvement in the course, not only in the thoroughness and unification of the work but also in affording opportunity for demonstrating an additional number of important principles underlying drug action. In spite of the fact that much of Dr. Dresbach's time was occupied, especially during the first term, with his work as assistant medical examiner at the gymnasium, he was able to do some very creditable research. The work in pharmacology has been carried on in the laboratories of physiology and biochemistry, and a large part of the apparatus of these laboratories has been utilized for it so that the equipment has been fairly complete.

Doctor Moore reports that, in the course in bacteriology one laboratory section was changed to a recitation from a text-book and upon the ground covered in the lectures, and that two more university hours of laboratory work have been added in pathology. This additional work in pathology was devoted to the study of both histological and gross pathology. In the gross pathology, the student studied not only human tissues furnished by

Dr. Ewing, Professor of Pathology in the Medical College in New York, but also fresh bovine tuberculosis, glanders, rabies, and other infectious diseases of animals communicable to man. Dr. Moore believes that the study in this way of the tissue of animals afflicted with diseases transmissable to man gives a much broader horizon and an excellent preparation for the study of special pathology in the third year. He expresses much regret that the illness of Dr. S. H. Burnett, Assistant Professor of Pathology in his department, made it necessary at the last moment to find some other experienced teacher to give laboratory instruction in pathology. Dr. W. H. Boynton, a graduate of our Veterinary College, who had had three years of work in the University of California, was secured and has proved a most efficient and enthusiastic teacher.

Professor Tinker reports that the previous college training of the students has permitted this year certain important modifications in teaching the beginning surgery. The students are capable of covering a good deal of ground in a short time and they better appreciate the value of the work. An especial effort has been made to teach methods, particularly in surgical diagnosis. He says, "Judging by the quality of the work and the amount covered, the higher entrance requirements will prove a very important change. Probably largely because of this better preliminary preparation, the work of the class in beginning surgery at Ithaca has been more satisfactory this year than in any previous year." His report deals at length with the methods he has employed in teaching elementary surgery.

The work in obstetrics, under Professor Baker, has been satisfactory. The extra time has been utilized to consider some of the pathological, in addition to the physiological, sides of the subject.

The elementary work in medicine was given this year by Professor Charles P. Emerson. He was graduated A.B. from Amherst, 1804, M.D. from Johns Hopkins, 1800. He was on the teaching staff of the Johns Hopkins Medical School in the department of medicine from 1800 to 1000 when he left there to become the superintendent and medical director of the Clifton Springs Sanitarium. Dr. Emerson has come to Ithaca twice weekly during the second half of the year and has conducted the course as a combined lecture, recitation, and conference course. He has proved a decided addition to our staff and a most excellent and inspiring teacher. An attempt was made to give a "bird's-eye view" of the subject, entirely disregarding all that is doubtful or theoretical, and emphasizing as strongly as possible those points concerning each disease which should be clearly understood and should always be remembered. Since there was no textbook which dealt with the subject with this point in view, Dr. Emerson found it necessary to write a book for the students, the typewritten sheets of which were supplied before each recitation.

The work in physical diagnosis, which was new this year, covered primarily the normal physical signs and methods of examination and was given most excellently by Dr. Samuel A. Munford, B.A., Monmouth College, 1900; M.D., Jefferson Medical College, 1905. He was formerly instructor in physical diagnosis in the Jefferson Medical College, assistant in the Pennsylvania State Tuberculosis Clinic, and chief of the Jefferson Tubercu-

losis Clinic. One exercise was held weekly in Stimson Hall for the study of a paid living model together with skeletons, models, and preserved specimens, and later of selected pathological cases from the university and city. The other exercise was given for the men students in the gymnasium where they assisted in the examination of the entering students. Dr. Munford believes that the 1235 men who were examined afforded excellent material for this course, as in addition to the normal, the physical signs of almost every text-book variation from the normal were encountered save those of disease of the lungs. The additional exercise for the woman student was given at the women's gymnasium under the direction of Dr. Almgren.

Ever since the establishment of the Medical College at Ithaca, the Trustees have been very liberal in supplying the constantly increasing demands made necessary by the advances in medical science and the improvements in the methods of instruction. The acquisition of Stimson Hall; the addition of more and better equipment; and the increasing number of higher grade instructors have likewise increased the yearly cost for maintenance until during the past year the appropriation for the Ithaca Division of the College. including salaries, new equipment, and general maintenance, exclusive of heat, light, and power, amounted to nearly \$33,000. With the establishment of the higher entrance requirements, the number of students, as already noted, has fallen off so that the tuition and fees supplied but a small portion of this money and as there is no special endowment for the Ithaca Division of the Medical College, the principal amount of the annual appropriation for the maintenance was of necessity derived from the general endowment fund of the University. Since the students now have had three or four years of college work before beginning their medical course, some of the educational reasons for duplicating the first two years of the medical course at Ithaca have disappeared. The question then arose as to whether or not it was advisable to continue at all the first and second years at Ithaca. The work of the first year consists of anatomy, physiology, histology and embryology, organic chemistry, and biochemistry, subjects which are also taken by students in the other colleges of the University and which have always been given at the University, although in a less extended form, in anatomy, physiology, and biochemistry. It was evident, therefore, that much of this work must be retained even if the medical course at Ithaca was given up. This was not so, however, with the courses in materia medica, obstetrics, medicine, surgery, and physical diagnosis, which were given especially for the medical students. Likewise, it would be true also to a less extent for bacteriology and pathology, for it has become evident that additional special professors and equipment devoted entirely to the Medical College must soon be provided for these subjects. For the above reasons, then, the Executive Committee of the Trustees on March 8 took the following action: "Resolved, That at the close of the present year and until further action of the Trustees, the second year course in the Ithaca Division of the Medical College be suspended." Accordingly a one-year course in Medicine has been arranged at Ithaca in which the subjects of organic chemistry, biochemistry, physiology, and histology and embryology are completed and something more than half of the work

in anatomy is finished. The students will then take the second, third, and fourth years at the college in New York City. The first-year course will undoubtedly be taken by the majority of those students who are taking the combined seven-year Arts-Medical course, and who have had their three years of Arts at Cornell and take the first year in the Medical College as the fourth year in Arts. But it is not likely that there will be many graduates of other colleges, except the women, who must take their first year here, who will come to Ithaca for a single year in the Medical College. It remains, therefore, to be demonstrated whether or not a single year in Medicine at the University in Ithaca and separate from the rest of the course will be successful. Cornell University was the first institution to establish the first two years of the course separate from the last two years. These latter should be given in a large center with an abundance of clinical material. The feasibility of this separation of the two parts of the medical course was soon recognized and imitated by a number of leading educational institutions which were located, as we are, at a distance from large hospitals and clinics. Few of them, however, duplicated the first two years at both places. success of the plan has been repeatedly attested by the teachers in the last two years in our Medical College in New York as well as by the success of the Ithaca students. Therefore, I would urge all friends of the Medical College to exert their efforts to obtain a special endowment for the Ithaca Division of the college so that the work of the second year may be started again. The yearly expense of maintaining the second year in addition to the first would be now about \$7,000, but in a few years, because of promotions and natural growth, this would amount to about \$12,000 per year. This would require an endowment at first of \$150,000, to be later increased to \$300,000. highly desirable that the whole of the Ithaca Division of the Medical College should have a separate endowment. As already stated the cost of maintaining the two years of medical work at Ithaca was during the past year about \$33,000, which in a few years, I believe, would be increased to nearly \$50,000 and would require an endowment of approximately \$1,000 000. Either of these endowments need not all be supplied by one fund but might be separate endowments for special professorships or departments. greatest present need of the Medical College at Ithaca is, I believe, funds to enable the Trustees to reestablish the second year of the course.

I cannot close this report without expressing to you our extreme regret at losing the professors and instructors who have given the second-year work. They are an unusually enthusiastic and efficient lot of teachers and it is in no inconsiderable degree due to their painstaking and conscientious work that the past year has been the best and most successful in the history of the Medical College at Ithaca.

Respectfully submitted,
ABRAM T. KERR,
Secretary of the Ithaca Division of the Medical College.

APPENDIX VIII

REPORT OF THE DIRECTOR OF THE NEW YORK STATE VETERINARY COLLEGE

To the President of the University:

SIR:—I have the honor to submit the following report of the work of the New York State Veterinary College for the academic year 1909-10.

FACULTY

At the beginning of this college year there were added to the instructing staff one assistant professor, one instructor, and three assistants. Two assistants were also appointed in connection with the research work at the Veterinary Experiment Station. At present the instructing staff consists of four professors, one acting professor, two assistant professors, four instructors, and three assistants. In addition to these are those who teach veterinary students animal husbandry, chemistry, embryology, histology, and parasites in other departments of the University.

In view of the long and efficient service which Dr. James Law, first Director of this College, has rendered the veterinary profession, it was very fitting for the alumni to present the University with his portrait as an expression of their appreciation of his work as a teacher and leader. This was done with appropriate exercises May 14, 1909.

STUDENTS

In my former report I pointed out the effect, by way of temporarily reducing the number of students, of the higher entrance requirements which went into force in 1905. This year there is a total enrollment of 101 students. There are 44 freshmen, an increase of 15% over the entering class of 1908. Judging from the inquiries, there is every reason to expect that the steady increase in the number of students that has taken place since 1905 will continue.

INSTRUCTION

Several changes have been made in the curriculum. The essential advantages gained were the concentration of the work in such a manner as to avoid the very unsatisfactory practice of extending certain courses in medicine and surgery over two years. The course in general pathology was lengthened to include two university hours in the morbid anatomy resulting

from animal parasitism. The reorganization of the clinical work as outlined in my report for 1908-09 has proved to be very satisfactory. During the year 1908-09 the clinics were, considering our facilities for such work, well patronized. There was a total of 1119 cases treated in these courses of practical instruction. They were distributed as follows:

Consulting and Medical clinics	303	cases
Small animal clinic	327	
Ambulatory clinic	351	
Total	110	11

A special course of lectures with demonstrations on the diseases of small animals was given by Dr. Frank H. Miller of New York. This course was of special value, coming as it did from a man of wide practical experience and a good teacher. Considerable interest has been aroused by a series of lectures by non-resident veterinarians and those especially interested in the live stock industry. Among these were Dr. W. G. Hollingworth, President of the State Veterinary Society; Dr. C. J. Marshall, Professor of Veterinary Medicine, University of Pennsylvania; and Hon. W. D. Hoard, ExGovernor of Wisconsin.

In January a two-day conference for veterinarians was held, at which about 125, or more than 10% of the practitioners of the state, were present. The Faculty provided a program of as instructive and helpful a nature as possible and opportunities were afforded for general discussion. This conference, which was more largely attended than the one last year, gives an appreciative point of contact between the college and the practitioners. These gatherings indirectly bring the college in closer touch with the live stock interests of the state than would otherwise be possible.

Last summer for the first time the consulting and ambulatory clinics were kept open. The result was very gratifying. The opportunity which this affords for practical clinical teaching was taken advantage of by a few students and it is expected that in the future this will become an attractive and valuable adjunct to the teaching facilities of the college. Dr. J. N. Frost is in charge of the work during the summer vacation.

The Department of Therapeutics and small animal clinic has been separated from the Department of Physiology and placed in charge of Dr. Howard J. Milks. This has been a decided advantage in that it has given relief to the overcrowded Department of Physiology and made it possible for that department to devote more time to research work. Further, it has permitted of more personal supervision of the clinic for small animals by the head of the department than was possible when the work was combined. This change has greatly added to the efficiency of the instruction in each department.

The teaching of clinical medicine with both large and small animals is very unsatisfactory to both teacher and students with the present temporary quarters and inadequate equipment. The need for clinical buildings, in order that we may have the mechanism necessary to give the instruction called for in our curriculum, is very acute. The great necessity for clinical

buildings to complete the unit for giving instruction has been placed before the trustees and by them transmitted to the legislature. As a result, a bill asking for an appropriation of \$130,000 for buildings has been introduced. With the equipment completed there is every reason to expect that the teaching in practical medicine will be highly satisfactory.

OPTIONAL FOUR-YEAR COURSES

The rapidly increasing demands upon the veterinary profession for greater knowledge of the diseases of animals and methods for their prevention, together with the knowledge necessary for meat, milk, and dairy inspection, suggest the desirability of extending the course of instruction to four years. After careful consideration the Faculty of this college has voted to introduce into its forthcoming announcement an optional four-year course of study.

DIAGNOSIS

The routine work of diagnosis for the veterinarians of the state and for the State Department of Agriculture has considerably increased during the year. The demand for tuberculin and anthrax vaccine has remained about the same as in previous years. The call for mallein has been less than heretofore, but the number of diagnoses by the agglutination method has been much larger. The examinations for rabies number 588 during the year ending January 1, 1910. The work in veterinary sanitation which the college is rendering to the livestock industry is coming to be more fully appreciated and already it is recognized by many breeders and dairymen as a valuable service to the state.

RESEARCH

The appropriation granted by the last legislature for research, experimentation, and extension work has made it possible for us to undertake a number of investigations and researches into certain phases of some of the more important diseases of cattle, swine, and poultry. While this work could not have been undertaken without the appropriation from the state, it is equally true that the experiments now in hand with bovine tuberculosis, infectious abortion, granular venereal diseases of cattle, and infectious maladies of poultry could not have been made except for the farm provided by the University and which is known as the Veterinary Experiment Station. The value of the Experiment Station has also been felt in affording opportunity to students to come into closer contact with experimental work, and also in providing the clinic with material for physical examination and diagnosis.

In addition to the investigations at the Veterinary Experiment Station, considerable research work has been done in the various departments and findings of value have been recorded. The discovery of the Gid parasite in the investigation of a fatal disease among sheep is worthy of note. Considerable new data have been collected relative to rabies, glanders, and tuberculosis. Dr. Fish has made a valuable contribution on methods for

identifying animals. This work became very desirable and the results obtained are of much importance to the practising veterinarian because of the state law, enacted at the last legislature, requiring the marking of tuberculin-reacting cattle. The results of Dr. Fish's work have been published in a circular from this college and mailed to all legalized veterinary practitioners in the state.

Dr. Williams is making an extended investigation into the nature, extent, and methods for preventing certain disorders resulting in abortion and sterility in cattle. We also have under way investigations relative to the various methods of infection with rabies, and others in connection with methods of diagnosing glanders.

EXTENSION WORK

In the extension work an exhibit illustrating the various methods for shoeing horses to correct different forms of foot troubles, and also exhibits of a helpful and suggestive nature relative to veterinary hygiene and certain diseases of animals, were made by Dr. D. H. Udall at the state and a few county fairs. A number of lectures have been given at farmers' institutes and schools on topics of veterinary hygiene and preventive medicine. One of the most taxing but perhaps helpful lines of extension work is the answering of the numerous inquiries which are made relative to the methods for preventing various diseases and disorders of animals.

During the summer vacation the Director of the College spent several weeks for the Commissioner of Agriculture in the study of the methods employed in several countries in northern Europe for the control of bovine tuberculosis. A somewhat detailed report of the methods employed in Denmark, England, Germany, and Holland, with the results thus far obtained, was made to the Commissioner of Agriculture late in the summer. In the fall of 1909, the Director was appointed a member of the International Commission for the study of methods for the control of bovine tuberculosis. The work on this commission has consumed considerable time which to that extent has interfered with other labors.

The Faculty has made several contributions to veterinary literature. The comprehensive volume on veterinary obstetrics by Dr. W. L. Williams is worthy of special mention.

NEEDS OF THE COLLEGE

The acute needs of the college are at present centered in the necessity for suitable buildings and equipment for teaching clinical medicine of both large and small animals. With the completion and equipment of the buildings asked for, the college will be well provided for until the increase in the number of students demands enlargement for their accommodation.

The appropriations requested for the year 1910-11 are as follows: Maintenance, \$35,000; research and experimental work with animal diseases \$10,000; for clinical buildings \$130,000. The very generous consideration of our needs by the legislature last year gives reason to hope that our requests may be granted.

During the year there has been hearty co-operation on the part of the Faculty in carrying into effect every line of work suggested that seemed to be for the best interests of the veterinary profession. In working for the practitioners, as well as in giving as valuable instruction as possible to undergraduates, the college is striving to render a maximum service to the state.

Respectfully submitted,
V. A. Moore,
Director of the New York State Veterinary College.

APPENDIX IX

REPORT OF THE ACTING DIRECTOR OF THE NEW YORK STATE COLLEGE OF AGRICULTURE

To the President of the University:

Sir:—I have the honor to submit herewith the report of the New York

State College of Agriculture for the year 1909-1910.

The past year has been an active one in the development of the College of Agriculture. The increasing agricultural interest and activity in the state has been clearly manifested by the increased demands on the staff of the College of Agriculture for information and assistance and by a marked increase in the number of students in attendance at the College. The absence of Director Bailey during the year has been a great interruption but the Faculty has co-operated earnestly and cordially with the Acting Director in the prosecution of the work, and the year just closing may be reported as a successful one.

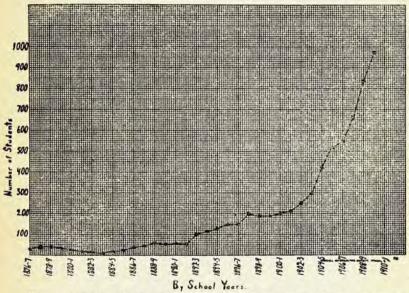
No changes have been made in the higher positions on the staff during the year. The handling of a larger number of students has, however, made it necessary to appoint a number of new assistants in minor places and the staff now numbers 84, exclusive of student assistants and stenographers.

INCREASE IN NUMBER OF STUDENTS

The number of students attending the College of Agriculture has increased very rapidly in recent years. During the first twenty years, from 1868 to 1887, the total number of students in any year did not exceed fifty. In the year 1892-93 the short winter-course was added, and the total number of students reached 103. There followed a gradual increase until in the year 1903-04 the total registration reached 296. In the spring of the year 1904 the College became a State institution, and an appropriation was granted for the erection of buildings. The succeeding year, 1904-05,

the registration advanced to 418. From that time the increase has been constant, and in the five-year period since, the registration has been more than doubled, being this year a total of 968 students in all grades. This increase is graphically illustrated in the accompanying chart.

CHART SHOWING INCREASE IN ATTENDANCE FROM YEAR 1876-77 TO



The registration of various grades of students since the College became a State institution is shown in the following table:

REGISTRATION OF STUDENTS FOR LAST SIX YEARS

	1904-5	1905-6	1906-7	1907-8	1908-9	1909-10
Regulars	98	129	145	200	272	419
Specials	90	95	124	138	144	120
Post-Graduates	31	40	36	43	58	58
Winter-Course	199	253	244	270	364	371
Totals	418	517	549	660	838	968

The registration of Winter-course students in 1909-10 would have teen considerably larger had it not been found necessary to limit the registration.

PERCENTAGE OF STUDENTS FROM NEW YORK STATE

It has been stated that a large proportion of the students of the College of Agriculture come from foreign countries and other states. A correct idea of the distribution can be obtained from the following table:

Students	1907-8	1908-9	1909-10
From New York	474	610	706
From other states	146	188	213
From foreign countries	40	40	49
	-		-
	660	838	068

It will be seen from an examination of the above table that for the last three years 72.6 per cent of the students have come from the State of New York. It is important that the significance of out-of-state students be not incorrectly estimated. The number of out-of-state students is one indication of the esteem in which the work of the New York State College of Agriculture is held; and one of the most valuable features of a large institution with a cosmopolitan student body is the contact with persons from other states and other countries with different ideals, practices, and customs.

Moreover, a part of the support of the College of Agriculture is provided from Cornell University funds, and the University does not confine its activities to the State. No State College of Agriculture, so far as the writer can learn, limits its attendance to residents of the state, and it would probably be a mistake ever to make such limitations.

NECESSITY FOR INCREASED FACILITIES

During the year 1908-09 when a total of 838 students were in attendance at the College, considerable difficulty was experienced in finding space to conduct the courses properly. With the greatly increased registration the present year the difficulty has been multiplied and the crowded condition throughout the year has been serious. In several courses it has been necessary to abandon the laboratory work, which in agricultural studies is essential.

The recognition of the seriousness of our crowded condition early in the first term led to urgent recommendations being sent to the President that steps be taken to bring the condition to the attention of the legislature in order that provision might be made for the erection of the necessary buildings to relieve the congestion. Through the hearty co-operation of the President, the Board of Trustees, and the Faculty of this College, a systematic scheme of development has been worked out, which is intended to cover the buildings needed to accommodate the growth of the College of Agriculture for the next ten years. In accordance with this plan of development, which was adopted by the Board of Trustees and presented to the legislature, provision has been made by the State for beginning the development by the erection of three of the needed buildings, namely, a Class Room and Laboratory building with Auditorium, to cost \$113,000; a Poultry building, to cost \$90,000; and a Home Economics building, to cost \$154,000, \$200,000 being appropriated to begin the construction this year and the Trustees being authorized to contract for the erection of these three buildings for the full amount indicated.

While these buildings will bring relief, the College is so congested at the present time that the new buildings will quickly be crowded and they are

not sufficient to meet the immediate needs of the College. It is, therefore, my duty to point out that provision should be made at the earliest possible date for the erection of the Central Heating Plant, the Plant Industry building, the Animal Husbandry building, and the extension of the greenhouse laboratories in accordance with the plans adopted. The buildings provided for by the legislature this year will require separate heating systems from any now in operation. The heating plant in the basement of the Main College building cannot be extended and is already overtaxed. The new greenhouses also have a separate heating plant but it cannot well be expanded. The maintenance of so many separate heating plants is expensive of administration and very unsatisfactory. The erection of a central heating and power plant capable of expansion to meet future requirements is of first importance.

In his report last year, Director Bailey called attention to the crowded condition of the Agronomy building, which, he said "is the most congested part of the College buildings at present." Instead of planning to extend the Agronomy building now, it was thought best to plan a separate building to house certain parts of the agronomy work, and a Plant Industry building designed especially to house the Departments of Plant Pathology, Plant-Breeding, Plant Physiology and related work, was urged this year as one of the most pressing needs of the College. This was not granted, however, and therefore remains one of the most urgent needs of the immediate future.

The importance of extending the facilities of our Animal Husbandry Department was urged by Director Bailey in his report last year. Animal husbandry is one of the largest agricultural interests in the state and the work and facilities of this phase of the college service should be materially expanded. The department is now housed in a very inadequate building. When other facilities are provided, it is planned to utilize its present building for the work in Farm Mechanics, an important department now housed temporarily in a part of the basement of the Agronomy building. The space here is too small to accommodate the students in Farm Mechanics, and the work is objectionable in the Agronomy building as the noise and odor from the engines and machinery is a serious and constant interruption to the laboratory and class work in other parts of the building.

The new greenhouse laboratories which have just been completed are so much less extensive than originally planned, as a result of the reduction of the appropriation originally requested for them, that it has been necessary for the College to repair and maintain the old range, which it was intended should be abandoned as soon as the new houses were completed. It should be planned to extend the greenhouses as early as possible, as the old range has been used for many years and is rapidly reaching a condition where t cannot be repaired. Much of the laboratory work in horticulture, farm crops, soils, plant pathology, plant physiology, and plant-breeding cannot be conducted without greenhouse laboratories.

The demands to be made on the College in the near future will doubtless exceed the demands of the past. The people of the State are only just beginning to realize what a college of agriculture can do for them. The students are increasing rapidly in all departments, and the teaching and

extension requirements of the College are growing much more rapidly than the facilities therefor. If the College is to meet its obligations, this condition must be clearly recognized by the authorities of the University and the people of the State, and provision made to supply the increased facilities as they become necessary.

EXTENSION WORK

No part of the service of the College of Agriculture has attracted more attention or is more important than the extension work. The active interest which has recently been aroused in New York agriculture, necessitates greater activity in this department of the college work. For many years New York was the foremost agricultural state, but it has gradually fallen to fourth place in rank among the states. Now, again, there is evident a general awakening of interest among farmers and the state is beginning to move forward again. Agricultural lands are rising in value. The poorer and waste lands must be brought into productive condition. To develop the agriculture of the state the land must be worked by trained men. For the agriculture of the state to be effected in any large way by the young men receiving training in the regular college work will require a decade or longer, and while this is a short period in the life of the State it is too long a period to fulfil the requirements of the present generation. One of the most pressing needs is to spread the knowledge of improved agricultural methods broadcast among the farmers of the State. Only a very few of the older generation of farmers will come to the College or to any of the schools of agriculture to receive instruction, and the instruction must, therefore, be carried to these farmers on their farms.

The extension work has always been an important feature of the activities of the College. The Farmers' Reading-Course and the Farmers' Wives' Reading-Course have attracted more attention during the past year than ever before. This method of reaching the people is capable of great extension. It is very effective as supplementing the bulletins by correspondence and carries the lesson home in a personal and effective way. It is possible that the pushing of these reading-courses more in accordance with the methods followed by commercial correspondence schools will vitalize and improve the efficiency of this part of the work.

The educational exhibits made by the College at the State Fair and at several county fairs last summer attracted much attention and are doubtless an efficient aid in carrying instruction to the people.

Special Railway Farm Trains have been utilized to considerable extent during the past year for lectures and demonstrations. While the value of this method of instruction was at first questioned, the results of the year's work indicate that much good may be accomplished by its use. The following special trains have been run during the year, and others are under consideration:

1. A Fruit Special over the New York Central Railway in the northwestern part of the State. Five days, December 6 to 10. Attendance 15,000. Special cars contained exhibits of fruit grown in New York in comparison with selected products from the irrigated fruit regions of Oregon, Washington, and Colorado. Demonstrations were made at every stop of the box-packing methods, control of diseases by spraying, and the like, accompanied by special lectures on improved orchard methods.

- 2. A Farm Special over the Buffalo, Rochester & Pittsburgh Railway. Three days, April 18 to 20. Attendance, 4,429. On this trip lectures and demonstrations were given on dairying, cow testing, butter making, poultry raising, alfalfa growing, improvement of pastures, and other important agricultural topics. A special poultry exhibit was arranged and presented in one car of this train.
- 3. A Farm Special over the New York Central lines in northern and northeastern New York. Four days, May 10 to 13. Attendance, 8,000. Special lectures and demonstrations on dairying, pastures, forestry, etc., as above.
- 4. A Farm Special over the Lehigh Valley Railway in central New York. Two days, May 9 and 14. Attendance, 1,711. Special lectures and demonstrations as above.
- A Farm Special over the Ithaca-Auburn Short-line. One day, May
 Attendance, 887. Special lectures and demonstrations as above.

The experience gained in the special train teaching indicates that especially good results follow the demonstration and exhibit features. The outfitting of the trains at Ithaca enables the inclusion of illustrative animals, as cows, poultry, etc., and apparatus for demonstration.

In so far as possible it has been the plan to run these trains in co-operation with the State Department of Agriculture and the agricultural schools of the sections traversed by the trains, and we are pleased to acknowledge the efficient aid furnished by the State Department of Agriculture, the State School of Agriculture at St. Lawrence University, and by the State Department of Forest, Fish, and Game. I desire in this connection to call attention to the service to the state and to this institution which the various co-operating railways have rendered. The train service in all cases has been furnished free of expense to the state or the College, and this generous public-spirited policy on the part of the railways of the state is worthy of special commendation.

The other features of the extension work, such as, special lectures, cooperative experiments, Farmers' Week, and the like, are being constantly
extended, yet we are ever reminded that the work falls far short of what it
should be and what is imperatively demanded to accomplish the results
which the conditions require. More work should be done with individual
farmers. Demonstrations on their own farms in spraying, growing alfalfa,
renovating pastures, selecting and improving corn and potatoes, and the
like, bring the lessons home to them. Numerous co-operative experiments of this nature should be arranged in various parts of the state for the
benefit of the immediate communities. The College is earnestly endeavoring
to enlarge its service to the state in this direction. The available funds,
however, are insufficient to allow the work to be expanded fully to meet
the obligation resting upon us.

INDUSTRIAL FELLOWSHIPS

A new method of co-operation with companies or individuals is being tested, which it is believed may prove of considerable service to the State and to the College and to the companies concerned. This plan is to facilitate the investigation of agricultural problems which commercial firms are interested in having solved, by accepting from them the endowment of Industrial Fellowships in the College with sufficient funds to enable the employment of a specially prepared graduate student to undertake a thorough investigation of the problem as a principal part of his work for a higher University degree.

Many bright young men are anxious to work for higher degrees. These industrial fellowships will give young men an opportunity to earn their support while working for their degrees. The fact that they are being paid to solve a certain problem will stimulate their work on this problem. The company endowing the fellowship is benefitted by having a man of superior talent employed to solve a problem which is of special importance to it, and by knowing that the work is being conducted under the direct supervision of the experts of the College of Agriculture. Problems may be suggested for such industrial fellowships which are entirely unsatisfactory. To be satisfactory, a problem must be of such a nature that the University authorities are willing to accept it as a suitable subject for a major doctorate thesis.

The following industrial fellowships in the College of Agriculture have been accepted by the University and are now in operation:

Niagara Sprayer Company Fellowship, established by The Niagara Sprayer Co., Middleport, N. Y., July 31, 1909. For the investigation of the fungicidal value of lime-sulphur mixtures as applied to the control of diseases in plants. \$1500.00 a year for two years. Held by Mr. Errett Wallace.

The C. W. Stuart & Company Fellowship, established by C. W. Stuart & Co., Nurserymen of Newark, N. Y., November 4, 1909. For the investigation of the diseases of nursery stock, with special reference to fire blight and its control. \$750.00 a year, for two years. Held by Mr. V. B. Stewart.

The Herman Frasch Fellowship, established by the Union Sulphur Company, New York City, April 20, 1910. For the investigation of the value of dry sulphur as a fungicide used on the plants or in the soil in the control of plant diseases. \$3000.00 a year for four years. Held by C. N. Jensen and F. M. Blodgett.

The John Davey Fellowship, established by The Davey Tree Expert Company, of Kent, Ohio, April 1, 1910. For the investigation of the diseases of shade, forest, fruit, and ornamental trees, with special reference to the cause and nature of heart rots. \$750.00 a year, for two years. Held by Mr. W. H. Rankin.

The Department of Plant Pathology has been responsible for the arrangement of all of the industrial fellowships thus far established in the College of Agriculture. I wish to call your attention to the very liberal endowments made in several instances.

INSTRUCTION IN FORESTRY

The time has come in the development of the agricultural interests of the State when this College must provide instruction in forestry. necessity for this, which was clearly set forth by Director Bailey in his 1007 report, is increasingly borne in upon us. In an old and thickly settled state like New York the forestry problem is largely reduced to the proper handling of the farm woodlot. The handling of the state forests and the forests on extensive estates of wealthy men is comparatively a small problem and demands the attention of but a limited number of trained foresters. However, on almost every farm in the state there exists a considerable area of rough land which is practically worthless in the present state of our agricultural advancement for other than forest purposes. It is highly important, therefore, that students of this College who are going back to the farms of New York in ever increasing numbers should have had sufficient training in forestry to understand the best methods of reforesting such areas and caring for farm woodlots. The farm woodlots or forests which now exist, and there is some forest on almost every farm, are in general handled without method or regard to their maintenance, and are not intelligently looked upon as a farm crop. These are capable in many cases of furnishing a material and continuous source of income if properly handled. In too many cases now they are handled by wasteful and destructive methods. Every agricultural student should receive the training which will prepare him to utilize this resource of the farm to the best advantage.

Recognizing keenly the importance of this problem and our responsibility to the farmers of the state and to our students, I would most earnestly recommend that a Department of Forestry be established in this College where our students may receive the proper instruction in this subject. The technical instruction in forestry which our students should receive will not require an extended period of study and a large force of instructors will not be necessary. The closely allied branches of study, such as plant physiology, plant pathology, principles of agriculture, horticulture, soils, climatology, and the like, are now regularly given in this College, so that a strong course in forestry can easily be arranged.

The importance of instructing farmers of the state on these problems in connection with our extension work will also be clearly recognized.

SUMMER INSTRUCTION IN AGRICULTURE

Up to the present it has not been feasible to introduce instruction in agriculture into the Summer Session of the University. The Summer Session is patronized largely by the public school teachers of the State who desire training in special lines. There is a growing interest in the introduction of agriculture into the public schools of the State. As the legislature has this year provided means for introducing such instruction in the rural schools, it is probable that there will now be a considerable demand for a course of instruction in agriculture, planned to fit teachers to give such instruction in the elementary and high schools. This College of Agriculture is the natural place in the State to which teachers should look for their instruction,

and it is clearly our duty to make provision for such a course of instruction. The difficulty of arranging for work during the vacation period is enhanced by the fact that the Faculty of the College of Agriculture is already required to remain on duty during the summer in connection with the extension work and the investigations of the Experiment Station. Furthermore, the Faculty of the College are already seriously over-worked, and it is certain that no extra work of this kind can be undertaken without the addition of other instructors. A special fund for this purpose was this year included in the appropriation items requested from the legislature but was not granted. Apparently no action can be taken on this matter at the present time, but it is important that a good course in agriculture designed for teachers be given in the summer, and I would urge that every effort be made to accomplish this result.

DEMONSTRATION FARMS

Considerable has been said recently with reference to the establishment of demonstration farms in various parts of the State and numerous requests have come to the College of Agriculture, particularly from certain railways of the state, that we co-operate in the management of such farms, in order that they may be made to teach lessons of value and serve to stimulate the use of better farming methods in the communities in which they are located. There would seem to be no very important reason for the establishment of ordinary demonstration farms to demonstrate that farming pays, which is usually considered to be a fundamental purpose of such farms, as there are dozens of farms in every county of the state already in operation that might just as well serve as such examples. That farming pays requires no demonstration, as many thousands of the farmers of the state are making comfortable livings for themselves and their families. It must be admitted, however, that a considerable part of the lands in certain sections of the state are not being wisely utilized and that there is great opportunity for improvement. Many lands are now being farmed at a small profit or at an actual loss, which if used for a different type of farming might be conducted at a profit. Unfortunately, the information is not at hand to enable farmers in all cases to determine the best type of farming to be pursued on a certain tract of land. This information can be obtained to some extent from the experience of farmers on similar types of soil under similar conditions and by experimentation. The farm surveys which are being conducted by the Department of Farm Management of the College are intended to supply knowledge of this kind. In this work the different types and methods of farming pursued by the farmers of a certain section are being compared with reference to kinds of soil, expenses, profit, and other factors. The data collected in a given region, when tabulated and summarized, indicates rather conclusively the types of farming that pay the best in that region, as the surveys so far as possible include records from all of the farms of the section concerned.

All of the problems, however, cannot be determined from the results of such surveys. The survey may be expected in many instances to indicate certain conclusions that require to be demonstrated by further trial. It is

believed that farms could be run to make such trials, and while used, therefore, as demonstration or, as I prefer to call them, educational farms, would be in considerable measure experimental, to determine the profitableness of a certain type of farming.

As an illustration, it is believed that certain hill land farms in the southern part of the state might be run profitably as special sheep farms. The number of sheep per given area, the kind of crops to grow in connection with such a farm and the proper proportion of each, require to be studied. These factors can be determined only by actual trial. Unquestionably it would be of value to the farming interests of the state to have the data that could be obtained in the running of such a farm. A considerable number of special types of farming believed to be promising for the poorer lands of the state require to be tested in a practical way, and it is believed that, so far as possible, the College should accept advantageous offers of co-operation in cases where it seems probable that results of value to the respective communities can be obtained. This type of co-operation would be similar in a measure to the industrial fellowships discussed in another part of this report, whereby the College co-operates with companies or individual parties by accepting certain funds to be utilized in the solution of specific problems. Respectfully submitted.

H. J. WEBBER,

Acting Director of the New York State College of Agriculture.

APPENDIX X

REPORT OF THE DIRECTOR OF THE COLLEGE OF ARCHITECTURE

To the President of the University:

SIR:—I have the honor to submit the report of the College of Architecture for the academic year 1909-10.

The increase in attendance this year, though slightly in excess of the increase in the University as a whole, has been small in comparison with the rate for the two years preceding. This is perhaps due in part to the fact that the increase in the two years was abnormal, but there is a further reason in the fact that limited facilities and larger attendance have led naturally to a more rigid enforcement of standards both for admission and in the College.

The alterations made for the Department of Drawing and Painting in Franklin Hall in the summer of 1909 have increased the value of these rooms even beyond our expectations, not only in making space available that was formerly useless, but more effectively in providing an abundance of steady uniform light without which work in drawing and painting cannot be done with any satisfaction or success. As I have taken pains in the past

to point out the effect of environment and light—or the lack of it—on the work, I cannot now refrain from pointing out that every branch of the work affected by this change has been markedly better this year than ever before in the history of the College.

Although I do not anticipate any growth beyond the capacity of these rooms within the next three or four years, the fact remains that they are now used well up to their capacity and I am not entirely free from anxiety in the matter.

In the drafting rooms in White Hall we have been able to find place for the students only by the utmost crowding, and even then it has been necessary to block up aisles and passageways to an extent distinctly inconvenient if not positively dangerous. At the time of writing this report the drafting rooms are being enlarged by the somewhat heroic process of removing four massive stone partitions, thus throwing into the rooms two hitherto unused and unusable halls, increasing the available floor space by about 1000 sq. ft., and making place for nearly 30 additional students.

While this solves the problem of drafting room space at least temporarily, we have much difficulty in finding rooms for the regular classroom work such as lectures, recitations, etc., having under our control just one room for the entire college where recitations and lectures can be held, and this room one with a seating capacity smaller than the number of students in some of our classes. Briefly outlined, our most pressing needs in this respect are: an additional lecture room to seat not fewer than 150, a seminary room, and a large room for work that calls for drawing in connection with recitation exercises.

During the present year we have been using rooms in the Department of Mathematics for recitations, but this has been far from simple as a matter of schedule and there is no certainty that the arrangement can be continued for another year, though our present attitude is one of faith that it may be. I hope to find somewhere next year a lecture room available for our large classes in the History of Architecture, but failing in that we probably can continue to give the work as at present, though there are obvious difficulties and some dangers in giving monthly preliminary examinations in a room where each seat occupies but twenty inches in width and the number of pupils is greater than the number of seats.

The standard of work throughout the College during the year has been very satisfactory. In the Beaux-Arts Society competitions our students have quite held their own, especially distinguishing themselves in the March competition—the last in which they took part, where with six entries we received two First Medals (the only firsts given), three Second Medals, and one Mention. Pennsylvania had but one entry and took a Second Medal, while Columbia with ten entries took nothing higher than Mention. Competitors from numerous private ateliers received, in general, Mentions and a few Second Medals.

We have this year for the first time had a representative in the competition for the recently established scholarship in the American Academy in Rome, a scholarship paying \$1000 a year in money with residence at the ome of the Academy in Rome for two and a half years or longer. This competition is open only to graduates of schools of approved standing and our representative, Joseph M. Kellogg, '09, with 50 competitors, took second place in a close decision.

The new arrangement providing for the teaching of Descriptive Geometry and the Theory of Construction within the College has been a pronounced success under Assistant Professor Young, B. Arch., Cornell, 'oo, who comes to us directly from ten years of most valuable experience on the highest class of work.

In addition to the regular exhibitions of student work, the College has held during the year two noteworthy art exhibitions, the first an exhibition of paintings by the Philadelphia Water Color Club; and the second an exhibition of sketches in oils and pastel by F. L. Ackerman, and etchings by J. André Smith, both graduates of the College and now practicing architects in New York. Both exhibitions were well received by the public and were of great educational value, especially to the students in architecture.

After all other problems have been given full consideration, the one problem remaining, the most important of all, and the one more difficult from the administrative point of view than all the others combined, is the problem of holding together an adequate instructing staff under present salary conditions within and without the University. I am not unmindful of the fact that the administration is already acutely conscious of this difficulty as applying to the entire University; but in architecture the demand in professional circles is so great and the salaries and opportunities so good that unless the College positions can be made more attractive we shall be reduced to the necessity of filling in our staff either with young and inexperienced men or with the professional derelicts, except in the rare instances where we find a man of talent to whom the quiet life of the teacher appeals more strongly than the hurly-burly and emoluments of practice.

Thus far we have been extremely fortunate in having at the head of every one of our departments a man imbued with the love of the work, but it is very hard to keep this up and even harder to fill the secondary places at the much smaller salaries; and recently some of the western schools have been practically doubling our salaries in their efforts to secure good men from the eastern schools. I feel that we are rapidly approaching a crisis in this respect and that the time will come very soon when we must meet the situation squarely or give up the position we now hold among the schools of architecture.

Much has been said, by those who need to find argument against Cornell, about the advantages of a large city for the study of architecture, much that is sound and true; but if we could have the money to spend on our school here in Ithaca that it would take to maintain it with anything like its present efficiency in the city of New York we could have a school here unquestionably better than any school in America today. As a matter of fact we come near to having just such a school now, but I do not believe it to be humanly possible to hold our present position on the present financial basis, and it is this conviction that has led me to advise the advance in tuition which goes into effect next year.

In this connection it is interesting to note the relation between salary list, number of students, and the tuition roll during the past twelve years.

	Cost of instruc- tion in architec- ture for each tudent registered	Excess of salary list over total tuition.	Excess of tuition oversalary list.
1898-99	\$239.60	\$5,500	
1904-05	198.53	5,000	
Average for 7 years, 1898-99 to 1904-05	224.27	5,010	
1905-06	166.66	3,375	
1906-07	161.58	3,000	
1907-08	132.50	750	
1908-09			\$1,925
1909-10	112.85		1,700

The figures for 1909-10 are not on the same comparative basis as the others because the salary list this year includes \$2,000 for instruction formerly given in the College of Civil Engineering. Deducting this to show 1909-10 in its true relation to the preceding years gives the cost per student \$97.74 and the excess of tuition over salary list \$3,700.

I do not present these figures as showing any accurate account of income and expense, because,

First, the salary list in architecture is not by any means the entire cost of instruction to students in architecture, though it is a much larger proportion of that expense now than ever before.

Secondly, only about 90% of our students pay tuition, but this percentage is probably so nearly constant as to have no material effect upon the comparative value of the figures given.

Thirdly, the general cost of maintenance and equipment has increased with the growth of the College, though aside from money expended on buildings this increase has been a comparatively small item.

What the figures do show is that in the important items of expense the cost to the University of teaching 140 students is only about one-half the rate per student that it has cost to teach 60 students, and that the College with 140 students and their tuition costs the University on a conservative estimate between six and seven thousand dollars a year less than it has cost when the number of students ranged from 43 to 65. With the advance in tuition next year and little if any increase in the cost of instruction the tuition roll should exceed the salary list by about \$4,000.00, showing a gain to the University of approximately \$9,000 over the average year prior to 1905–06, and that without taking any account of the instruction formerly given by other departments of the University but now given by this College and counted as a part of the expense of this College.

I wish to call particular attention to the item of "cost per student", because in work where so much of the instruction must be individual instruction the cost per pupil never can go very low, and I believe that the pendulum has swung to the extreme in this direction and must inevitably swing back to a normal, which I think may well be somewhere between \$125 and \$150 a student so long as the total number does not go much below 120 students.

In the matter of equipment there is little to be said that has not been said in earlier reports. Our equipment is good, in many respects exceptionally good, but with several weak points that must be strengthened as conditions permit. The proper care and safety of our library, which is now as in the past our great treasure, is a source of considerable anxiety, as I feel that so valuable a collection so much and so constantly used should have an attendant whose sole business would be to care for it, protecting, preserving, indexing, and keeping it in order. Thus far we have been remarkably fortunate in the small annual loss through the disappearance of books and plates, and I do not know of a single case of apparent deliberate mutilation so common in art libraries, but we can scarcely hope always to be so fortunate, and I believe that the demands of reasonable care call for more attention than it is possible to give under present conditions. Since this library is but a branch of the general library, it seems to me that the person in charge should be a member of the library staff rather than of the college staff, both as a matter of administration and efficiency in service.

Respectfully submitted,

CLARENCE A. MARTIN,

Director of the College of Architecture.

APPENDIX XI

REPORT OF THE DIRECTOR OF THE COLLEGE OF CIVIL ENGINEERING

To the President of the University:

Sir:—I have the honor to submit the following report for the College of

Civil Engineering for the year 1909-10.

The registration for the year, as shown by the class roll-calls, has been as follows, classifying according to subjects taken rather than by official standing as in the Register:

	First Term	Second Term	
Graduates	9	10	
Seniors	124	115	
Juniors	123	113	
Sophomores	122	125	
Freshmen	193	163	
Total	571	526	

This list includes 14 graduates in the undergraduate courses.

Of the new students, 2 entered the freshman, 11 the sophomore, and 1 the junior class.

Instruction has also been given to students from other Colleges as follows:

	First Term	Second Term
Sibley	350	625
Architecture	4	4
Arts	49	51
Agriculture	3	1
Graduates	4	5
Total	410	686

The year opened very auspiciously indeed. The entering class was the largest in the history of the College, numbering 193, or an increase of 23 over the previous year. The senior class also was the largest in the history of the College.

The work of instruction was substantially the same as that of the previous year. Minor changes, such as those necessary to bring the work of the College more fully up to date, were made. Among the more important of these may be mentioned the securing of Mr. A. P. Mills for the work of the testing laboratory. Mr. Mills has made a special study of testing materials, and so brought to the College an excellent experience in this line of work. The importance of this laboratory to the College can hardly be over-estimated. It is an important factor in the work of instruction and at the same time serves the people of a large territory who have need of the work it can accomplish. During the year we have added a new 10,000-pound wire testing machine to the laboratory, and before the year is over will have a new 100,000-pound tension and compression machine in place.

The work of the College in sanitary engineering has made good progress. The establishment in Lincoln Hall by the State Department of Health, of a branch of the State Sanitary Laboratory at Albany, has aided this work materially. The actual seeing of things done in the laboratory has doubled the interest of those students studying sanitary engineering, making them feel that they were in close touch with practical work. For this addition to the College, we are indebted to the efforts of the President, to the kind assistance of the State Commissioner of Health, Doctor Eugene H. Porter, and to the labors of Professor H. N. Ogden of the Department of Sanitary Engineering.

The hydraulic laboratory, while much too small to meet the needs of the College, received some modification during the year. One of the floors has been fitted up for demonstration purposes; that is, the carrying on of certain experiments for the purpose of aiding the teaching of theoretical hydraulics. This work was very successful and again illustrates the importance of a combination of the theoretical and practical in reaching results. The laboratory was the recipient, during the year, of gifts well worthy of mention. The Neptune Meter Company very kindly presented it with seven of its water meters, two of them skeleton ones showing form of construction, together with a complete outfit for testing 5% to 2 inch meters. Our sincere appreciation has been expressed for this generous gift. The Hersey Manufacturing Company very kindly presented the laboratory with two of its water meters and we have expressed our appreciation of

their kindness. The Buffalo Meter Company also presented the laboratory with two of its water meters and we have expressed our appreciation of their courtesy. These gifts have added materially to our equipment and serve a most useful purpose in the work of instruction in hydraulics. A small Doble impulse wheel was purchased for the laboratory and will soon be installed. It is fitted with plate glass sides for the purpose of permitting a careful inspection and study of this type of wheel.

Nothing calling for special notice has occurred in the other departments;

the usual good reports of their work can be registered.

In regard to the needs of the College, I feel called upon to emphasize the want of more room in all of its buildings. Lincoln Hall is greatly overcrowded. The hydraulic laboratory is no longer large enough to meet the demands put upon it. The great interest that has been aroused in this country during the last few years in cheap power, water power, calls for extensive work along all hydraulic lines. The Fuertes observatory is also too small. While it met the demands of eight or ten years ago when the number of students in attendance was less than 200, it can not be expected to meet the present demands when we have nearly 600 students.

Respectfully submitted, E. E. HASKELL,

Director of the College of Civil Engineering.

APPENDIX XII

REPORT OF THE DIRECTOR OF SIBLEY COLLEGE

To the President of the University:

SIR:—I have the honor to submit the following report for Sibley College for the year 1909-1910.

Several changes looking to increased efficiency in the work of instruction

have been planned during the year.

For many years students of Sibley College have received instruction in Mechanics of Engineering in the College of Civil Engineering, either directly under Professor Church or in his department; and all who have ever studied under him know how great is the advantage and the privilege of knowing him both as a teacher and as a man. The Faculty of Civil Engineering has carried this burden of instruction very efficiently and with great patience even when hampered for room and teachers for its own work. To remove this burden and at the same time to establish a closer relation between the work of Mechanics and that of the mechanical laboratory and the Department of Machine Design, the instruction in Mechanics for students of mechanical and electrical engineering will hereafter be given in Sibley College.

A very important part of the work of a college of engineering is to help to extend engineering knowledge; not only because of the knowledge itself, but also because teaching is vitalized by being in an atmosphere of enthusiasm for research. During the past six years the energies of the Faculty of Sibley College have been so concentrated upon teaching and upon the development of the course of instruction that the work of investigation has received but little attention. Next year systematic work in research will be undertaken under the direction of Professor Carpenter, and it is hoped that henceforth frequent contributions will be made to the data of engineering.

MECHANICAL LABORATORY

The course in Materials of Engineering has previously been given as a class-room course. It has been recognized that lectures and recitations alone are inadequate for the teaching of this subject, and as a result, while the metallurgy is still given as a lecture course, the division of the subject dealing with the properties of materials is taught by actual demonstrations by teachers before small section of students. A new special equipment has been provided for this purpose.

In the Strength of Materials laboratory several obsolete machines have been replaced by machines of latest design.

POWER ENGINEERING

The scope of the course formerly given as "Steam Machinery" has been greatly increased and the time given to it has been extended to include the first term of the senior year. It is now called "Elementary Heat-Power Engineering." The work of this course in the junior year is devoted chiefly to thermo-dynamics, while the senior work will include more advanced topics connected with the development of power from heat.

MACHINE DESIGN AND CONSTRUCTION

Only slight changes have been made in the work of Machine Design, the development of the past few years having brought this course up to a standard that corresponds to the needs of present engineering practice.

Quite important additions have been made to the equipment of the machine shop, pattern shop, and foundry. The floor space of the foundry was insufficient for the accommodation of the class taking the work during the year. The addition now nearly completed—which will double the foundry—will relieve this congestion temporarily. The machine shop room, which has been fully utilized, has been crowded for several years and is entirely inadequate for the future.

ELECTRICAL ENGINEERING

The work of this department has been reorganized into three sub-departments; advanced theory, advanced laboratory, and introductory courses. This has proved a good working arrangement. The imperative need of

the Department of Electrical Engineering is for a suitable laboratory in which to bring together, for effective use, the present scattered equipment.

In conclusion, I can only repeat what has been urged so often, that unless increased building accommodations can be provided for the shops and laboratories of Sibley College, the number of students will have to be limited.

Respectfully submitted,
A. W. SMITH,

Director of the Sibley College of Mechanical Engineering.

APPENDIX XIII

REPORT OF THE DIRECTOR OF THE SUMMER SESSION

To the President of the University:

SIR:—I beg to submit my fifth annual report as Director of the Summer Session which closed August 16, 1910.

THE TEACHING STAFF

The present year the Faculty numbered 99, 44 of whom are considered of professorial grade. Of the entire number 76 belong to the regular teaching force of Cornell, and 23 have come from outside the University. Of the men appointed specially for work in the summer, Messrs, Condra, P. R. Dean, Furlong, Hawkins, Lieder, Mann, Poland, Wood, and Woodburn have been members of the Summer Session Faculty in previous years. This year we have had as members of the Faculty for the first time, Miss Laura Bryant, Supervisor of Music in the Ithaca Schools; Messrs. J. Earl Griffith, head of the department of Drawing in the High School of Commerce, Cleveland, Ohio: H. B. Hilliard, head of the department of Piano Instruction, Ithaca Conservatory of Music; E. E. McCready, Director Manual Training, Public Schools, Syracuse, New York; Thomas Tapper, Lecturer in the Institute of Musical Art, New York City. It is a pleasure to bear witness to the earnest and devoted service of all the teachers in the Summer Session. Those from other institutions do not fall behind the members of Cornell faculties in their interest in the work, or in their unselfish and devoted labor. In looking back over the session, which in the opinion of all connected with it has been a marked success, I cannot but feel that the success is due to the teachers, and to the enthusiasm which they have put into their work and have communicated to all who received their instruction.

I repeat my statement of last year that it is a matter of most favorable comment by those who come here to study that their instructors spare no pains to meet the personal needs and inquiries, and give freely their time and

attention to the needs of their pupils. I feel, furthermore, that what may be considered a characteristic form of the "Cornell spirit" is shown clearly and abundantly in the teaching of the Summer Session. The standards of the University are carefully maintained and Cornell's reputation is not allowed to suffer. The great mass of persons who attend the University in the Summer Session are serious-minded people of earnest purpose, and many of them keen judges of good teaching. That so little criticism is made (it would be next to impossible to have no criticism) is a cause for congratulation.

STATISTICS OF ATTENDANCE

	1905	1906	1907	1908	1909	1910
Teaching staff	58	62	68	71	79	99
Number of students	619	642	755	841	889	987
Cornell University students of						
previous year	294	225	288	372	375	387
Former Cornell students	59	85	92	84	116	130
Graduates of Cornell University	25	23	19	15	22	37
Graduates of other colleges	100	129	131	125	141	145
Non-graduates from other colleges	59	70	95	107	62	136
Teachers	218	263	302	294	331	377
Holding first degree only	111	133	123	173	153	164
Holding second degree	19	21	27	26	28	18
New York State	238	288	320	326	372	428
Outside New York State	381	354	435	515	517	559

Of the teachers in attendance there were engaged in teaching in:

1907	1908	1909	1910
22	32	40	26
18	12	15	15
III	147	129	160
120	82	131	134
17	8	11	3
14	13	21	39
5	22 18 111 120 17	22 32 18 12 111 147 120 82 17 8	22 32 40 18 12 15 111 147 129 120 82 131 17 8 11

The figures show a gain of 100 in our registration over last year. This is somewhat more than the average gain for the previous two years, but may be considered about normal. The increase in the number of our own "Undergraduates of the previous year" is but 12. This is an indication of a more satisfactory treatment of students whose work during the previous years has been below standard. For a number of years it was the custom for any student who failed in June to remain through the Summer Session. These cases, for the last two years, have been carefully examined, usually by a standing committee of one of the faculties. Some of these students have been directed by their faculty to take work in the Summer Session, and such work is sometimes specified. Others, whose cases seemed hopeless, have been told that they cannot improve their standing in the regular course by taking summer work. By this treatment men are made to feel that it is not safe to neglect work during the winter and spring with the expectation of making it up as a matter of course in the summer. The present situation is more satisfactory from every point of view. I note with gratification the considerable increase in the number of our own graduates returning for summer work. The direct interest in the work of the Summer Session of our own graduates engaged in teaching and their attendance here in larger numbers than ever before are very encouraging. Conversations with a number of them have been very helpful, and I have received valuable sugrestions as to the University's work in connection with the training of teachers. The number of undergraduates from other colleges has reached, this year, a much larger figure than before. As with our own undergraduates, two classes of students are represented, the better and more ambitious, and those who have failed in one or more branches of study at their home college. While exact figures are not available, the impression is warranted, I think, that the numbers of the former class are increasing. The number of teachers in attendance shows a gratifying increase. It is quite evident that the drop last year in the number of high school teachers was accidental, and not due to any shortcomings in the work.

THE DEPARTMENT OF MUSIC

It has been a particular satisfaction to be able to offer this year a well considered and fully rounded out program of instruction in Public School Music. The work was laid out with Professor Dann in the winter, and wide publicity was given to the plan among teachers and supervisors of music in the public schools of the country. Professor Dann has had associated with him Messrs. Thomas Tapper, H. B. Hilliard, Edward F. Johnston, and Miss Laura Bryant as instructors. They have given instruction in all the grades of music in the public schools from the kindergarten to the high The various branches of instruction are arranged so as to form a complete course of training for a supervisor or director of music in the schools of any city or state. The attendance has been large, the spirit one of remarkable enthusiasm and earnestness. The work has been severe, but none has shirked, and the results for the first year have been extremely gratifying. The work is no longer an experiment. Its success is assured, and we may expect a steady increase in numbers. Nearly all public school teachers are expected to have some training in music. The opportunities for obtaining such training of recognized high standard and quality have been few. It is no small service to education that we are rendering in establishing this work upon a firm foundation. Beyond the services rendered to the students in music, the presence here of so many musicians has added much to the pleasure of the session. Mr. Johnston, the University Organist, has given us a splendid series of recitals on the organ. We have had the kindly assistance at the Thursday evening recitals of Miss Butterfield, Mrs. Chamot, and Mrs. Atwater. On the last Thursday evening of the session, we had a varied program presented by the Department of Music, which included some fine chorus work. For the Sunday evening meeting on the campus, the hearty singing of the students of music, who volunteered to lead in the exercises, was an added pleasure.

OTHER DEPARTMENTS

After a lapse of two summers, we have this year revived the work in Nature-Study, under the direction of Mr. Layton S. Hawkins, a member of the faculty of the State Normal School at Cortland. Mr. Hawkins is no stranger to Cornell or to our Summer Session. He has had close relations, both as a student and teacher, to our biological work in previous years. His work in the new field this year has been of the finest quality. He has known how to combine popular presentation of scientific truth with the attitude of a true student of science. He has avoided the two great dangers attending nature-study,—that of making it practically identical with elementary zoology on the one hand, and of allowing it to drift off into mere gush on the other hand. There is a place, and an important place, in school work for nature-study rightly viewed and taught, but that it shall be rightly viewed and taught requires thoughtful and judicious preparation for its teaching.

New courses were offered this year in Speaking and Reading by Mr. Blanton. Such large numbers presented themselves for the work that Mr. Blanton was unable to carry all which had been planned. Professor Winans very kindly came to our assistance and took charge of the course in Public Speaking. In this way, Mr. Blanton was able to give his entire attention to the work in Voice Training and in Oral Reading. These courses form a very excellent extension of our previous work in English and ought certainly to be continued. A further extension of work this year was the giving by Mr. Perrine of a course in Elementary Geology. Its success was decided and the demand for work in the subject seems to warrant more courses in it another year. A course in Industrial Geography under Professor Condra has been of great value and it has been a surprise, I think, to many of us here to realize how large a field of possible illustration is presented by the plant of the University itself, especially of the College of Agriculture, and by the industries in and around Ithaca.

We have had, this year, confirmation of the opinion expressed by Director Haskell of the College of Civil Engineering, that there would be a steady demand for instruction during the Summer Session in Concrete Construction. Last year two courses in this subject were offered tentatively. This year, they were put into the regular announcement, and so many applied for the course that Professor Derickson, who had charge of the work, was obliged to have an assistant to handle it properly. Closely allied to this work are two courses, which were offered conditionally upon the demand for the same, in Hydrostatics and Hydraulics. They have been given by Professor Seery, and it seems likely that there will be a sufficient call for these courses each year to warrant our including them in the regular program hereafter.

In Sibley College, a course in Machine Design has been given by Professor Albert. It does not seem to Professor Kimball that this work is as yet so certain to be called for in the summer as to warrant our making it a part of the regular program.

SPECIFIC COURSES FOR TEACHERS

In addition to various courses of instruction in some departments, we have provided specific courses intended to deal primarily with the pedagogic side of the subject matter and have invited here successful teachers from our best high schools to conduct them. Mr. P. R. Dean of the Curtis High School, New York City, conducted one such course in algebra, and one in geometry; Mr. P. R. Mann, of the Morris High School, New York City. carried a course in high school biology; Mr. R. C. Gibbs, of our own staff, who has had experience in high school teaching, conducted a course in physics from the same point of view. In this course we had the assistance for two weeks of Mr. George C. Hodges, head of the department of physics in the Utica Free Academy, and known throughout the state as one of the most successful high school teachers of physics. The work of these gentlemen was directly helpful. I feel that such courses are of the greatest possible value and must always form a necessary part of our instruction. The teachers' view has also been held steadily in much of the work of the other departments, and the mention of some courses specifically should not be interpreted to mean that other departments were lacking in similar work. All through the work in geography, for instance, the teaching point of view is kept steadily at the front. The work in industrial education has been continued this year with slight extensions and modifications and mainly in the lines which our previous experience has proved to be most efficient and satisfactory. It is a pleasure to note that the leaders of industrial and trades schools in several of the cities of the State are men trained partly or largely in our Summer Session. In all of this work, we have had the constant advice and encouragement of Mr. Arthur D. Dean, Chief of the Division of Trades School of the New York State Education Department.

DEPARTMENT CONFERENCES

Meetings of the various departments in evening conferences once a week have been continued this summer and with gratifying results. In the conferences on Industrial Education, in addition to members of the Faculty of the Summer Session, we have had addresses by Mr. Daniel Upton, Principal of the State Normal School, Buffalo, New York; Professor Harry B. Smith. of the State Normal College, Albany; Dr. A. S. Downing, First Assistant Commissioner of Education, State of New York; Mr. E. S. Barney, Principal Hebrew Technical Institute, New York City; Mr. Alvin E. Dodd, Director North Bennet Street Industrial School, Boston, Mass. These gentlemen served without compensation beyond their necessary expenses in coming here and deserve our hearty thanks for their interest in the work and willingness to give their valuable help. To the students in entomology weekly lectures were given on Monday afternoon by Professors Comstock, Needham, MacGillivray, Herrick, and Crosby. These were attended by a large audience and were of much interest. As these professors were not members of the regular teaching staff, their kindness in volunteering to help with the work was very generous. The Department of Geography offered a course of public lectures once a week, and other departments conducted most successful weekly conferences.

GENERAL LECTURES AND ENTERTAINMENTS

It was a distinct advantage to all connected with the Summer Session this year to have the first public address given by the President of the University, and we are grateful to him for assuming this service in addition to the many cares and responsibilities of a busy time of the year. Our best students expressed their great pleasure at the opportunity of hearing him speak on education and of meeting him personally. The first of the regular lectures on Monday evenings was given by Principal William McAndrew, of the Washington Irving High School, New York City. As a leader of this technical high school for girls, which has done much novel and remarkable work, Mr. McAndrew gave in his address, which was fully illustrated, many practical suggestions of great value. Mr. Lee S. Hanmer, of the Russell Sage Foundation for Child Hygiene, gave the next lecture on "Playgrounds and Games for School Children." Mr. Hanmer made a fine presentation of his work together with interesting views of what has been accomplished in various places. These lectures were followed by a series describing travel in remote countries. The first was by Dr. Fred W. Foxworthy, a graduate of the University, now connected with the government scientific work in the Philippines, who gave a most instructive talk on "Borneo." Mr. Louis A. Fuertes gave an illustrated talk on "Yucatan," and delighted his audience Mr. Charles W. Furlong carried an interested audience with him on his travels in Terra del Fuego: Mr. O. D. Von Engeln gave us a delightful hour as he described the "Glacial District of Alaska." On one evening at the Sage Chapel, Dr. E. J. Bailey gave a pleasing reading of several poems with accompaniment on the violin by Dr. P. R. Pope, and on the organ by Mr. Edward F. Johnston. All of these gentlemen deserve most hearty thanks for their assistance. No less valuable were the talks of an informal character given to different groups of students: by Dr. Andrew D. White on the "Power of Music," and by Professors T. F. Crane and J. M. Hart on the "Study of Classic Literature." Professor Hiram Corson yielded to repeated requests and gave an evening of readings from English literature. It is needless to say that he had a crowded room and a most appreciative audience. Professor George L. Burr gave an address at one of the Sunday evening out-of-door meetings on "Cornell and Her Ideals," with which the large number of people present were much pleased.

RETROSPECT AND OUTLOOK

In studying the results of the work of five Summer Sessions, I see some mistakes, which we have, I believe, now succeeded in avoiding. Our experience shows pretty clearly that we have certain peculiar advantages for summer work here at Cornell. First, this is a favorable situation for living in mid-summer. While we have days of considerable heat, it is seldom that more than two or three such days come together, and almost without exception the nights are cool and comfortable. The great majority of our students live on East Hill and under favorable conditions for their physical comfort. This is particularly true of the women in Sage College and Cottage. Secondly, the situation of the University is particularly favorable for

all forms of field work. The country in the immediate vicinity is remarkably rich in material for illustration and demonstration in botany, zoology, geography, and geology. The importance of this can hardly be overstated. It permits systematic and serious study to be combined with outof-door exercise and a most healthful manner of living. A good deal of the book work required in courses which do not call for field work can be done (and a glance at the campus at any hour during the day will show that it is done) in the open air. In addition to study in the fields and forests near the University, excursions are made each year to points on Cayuga Lake, including the wonderfully rich marshes at its lower end: to the gorges at Taughannock and Enfield; to the peat bogs near McLean; to Watkins Glen; and to Niagara Falls. These excursions are taken by considerable numbers of our students who are not primarily interested in them as a part of their work, but who welcome the opportunity of seeing these places of great natural beauty under the favorable conditions attending expert and scholarly guidance. The proximity of the George Junior Republic and the State Reformatory at Elmira, and the opportunity of visiting some of the greatest industrial plants of the world at Buffalo, add greatly to the possibilities of our work.

There is no place where all the kinds of work just mentioned can be done under better conditions than here at Cornell, and there are few, if any, where they can be done as well. Our large library, situated in the country, makes work of a literary, linguistic, and historical nature also possible. There are few libraries anywhere offering better facilities in these lines than our own, and I think it doubtful if there is another as good outside of our large cities. It is used every summer by a considerable number of scholars who take advantage of their vacation season to live in the country and to have at the same time the books needed for their work.

There is another field in which, as yet, we have done nothing directly in the Summer Session. This is agriculture and the training of teachers for it. This duty is placed upon us by our relations to the state, primarily through the State College of Agriculture, and to its public educational interests. There are many problems of education which deal primarily, or even wholly, with social conditions in large cities. I do not feel that we are primarily interested in these problems, or are in a specially favored position to assist in their solution, but the problems of educational and social conditions in the smaller towns of the state, and in the strictly rural districts, we ought to attack without further delay. It is a large field and calls for our best efforts. Much of the necessary preparation for teaching the science of agriculture must be done in the summer, and it is the plain duty of the Summer Session to take up vigorously this matter. The State of New York has just changed by legislation the entire system of supervision and direction of our village and rural schools. A large number of district superintendents are to be chosen, and one qualification which they must possess is a knowledge of the teaching of the science of agriculture. We ought to give them the best and most efficient help in this direction. Without neglecting any department of instruction for which teachers wish to improve their own preparation, our peculiar work seems to me indicated by the considerations stated above.

The organization of our School of Education means a vital relation between its work and that of the Summer Session, and this means a closer relation than ever before between the work of the Summer Session and that of the "regular" year. The experiences of the present year warrant the belief that this relation is steadily improving and that the Summer Session continues to gain friends and supporters.

Respectfully submitted,

GEORGE P. BRISTOL,

Director of the Summer Session.

APPENDIX XIV

REPORT OF THE ADVISER OF WOMEN

To the President of the University:

SIR:—I have the honor to submit herewith my report as University Adviser of Women for the year 1909-10.

ATTENDANCE

The year has shown a slight decrease in the number of women in attendance. Last year there were registered at the office of the Warden of Sage College 371 women the first semester and 360 the second. This year there were registered 356 women the first semester and 350 the second, a decrease of 15 for the first semester and 10 for the second.

The following table shows the distribution of the women students accord-

ing to place of residence:

		First Terr	m Second	Term
(Sage College	174	169	
University Dormitories	Sage Cottage	37	33	
(Total		211	202
	(Alumnae House		23	
Other Organized Houses	Mrs. Kerr's House		11	
	/ Total		34	34
At work in private famili	es	. 12	13	
At home		64	64	
			39	
Total outside dormitories			145	148
Total registered			356	350

THE "OUTSIDE" WOMEN

The houses described as "other organized houses" are houses accommodating ten or more women students and organized under the rules of the Self-Government Association. It is very desirable that the girls described

as "scattered" be brought so far as possible into these organized groups; not merely because such concentration would greatly facilitate the work of supervision, but still more because it would make possible a fuller and freer social intercourse and a closer acquaintanceship among the women students.

How to bring the "outside" women, as they are called, into closer touch with the life of the University and give them a real share in its many activities, has been indeed a somewhat difficult problem, and will doubtless continue to be so, so long as any considerable proportion of them are scattered over the town in very small groups. The Self-Government Association by organizing house groups as soon as they attain sufficient size, and by giving representation on the central committee to the women scattered in small unorganized groups, as well as by social undertakings of various sorts, has done much to create a sense of solidarity among the women students.

A new plan has been devised and was put into operation just tentatively late this year by which it is hoped to accomplish something more in the same direction. At the beginning of the year every new woman student will be assigned to an upperclassman, whose duty it will be to call upon her, introduce her to her friends, find out what she is interested in, and put at her disposal so far as possible, the resources of the University. Care will be taken in making the assignments to see that "outside" girls and "Sage" girls are brought together. Before the close of the term the upperclassman will report to the Adviser of Women on a card prepared for the purpose what she has done and her estimate of the new student. This information will be regarded as strictly confidential. It is believed that the necessity of reporting will act as an incentive to the upperclassman to do the work assigned her, and that the information thus furnished the Adviser of Women may prove very helpful in her work with the individual girls.

THE HOUSING PROBLEM

Probably the only true solution of this problem would be the housing of all women students in University dormitories. Since that is impossible, the next best thing would be an adequate number of private dormitories, such as Alumnae House and Mrs. Kerr's house. Under existing local conditions, however, it is extremely difficult to secure such houses for the use of women students. Among the householders who have not tried taking women lodgers, there is a tradition current, that in spite of the fact that they are quieter and less destructive than men, they are undesirable because they demand a greater number of "privileges." The householders say, moreover, that they cannot get as good prices from the women as from the men. It is, therefore, not a little difficult to secure a sufficient number of places that meet the requirements imposed by the University.

It is hoped that this difficulty can be partly obviated by giving the house-holder who does meet the requirements the benefit of a little advertising by the publication of a list of "approved" houses, which will accompany a circular of information to be sent to all women students who cannot obtain places in the University dormitories. This year's experience has demonstrated the state of the control of the co

strated very clearly the necessity for such a circular of information, in order to prevent new students, ignorant of the University rules governing the housing of women, from committing themselves for the rental of places which they cannot be allowed to retain.

SOCIAL LIFE

Except possibly in the case of the "scattered" girls, the social life of the women students has been sufficiently full and varied. Besides the annual Sage College reception to the Faculty and Trustees, which was given this year in February, there have been numerous teas and dances given by various groups of girls. The Head of Sage College has been "at home" regularly to the girls one evening each week; and both she and her assistant, Miss Seely, have entertained different groups at frequent intervals during the year. I am convinced that for the students living in the University dormitories and in the organized houses there is an abundance, in many cases unquestionably too much, of social diversion. This is true also of not a few of the girls living at home. There is, however, a comparatively small number of scattered girls whose lives are too poor in this respect, and in whose behalf next year special efforts will be put forth.

SELF-GOVERNMENT ASSOCIATION

Probably the most notable event of the year from the women students' point of view was the Conference of the Inter-Collegiate Association of Student Government Organizations, which met here in November. The president of our association was president of the conference, which was attended by nearly forty delegates, representing seventeen institutions. The Cornell women acquitted themselves most creditably as hostesses and appreciated very warmly the assistance rendered them by Mrs. Schurman, who entertained the delegates at a tea; and by the University Athletic Association, who made them their guests at the Harvard-Cornell football game and at the joint concert of the Harvard-Cornell musical clubs. The discussions held during the conference were stimulating and helpful. I am inclined to think, however, that if a similar conference were organized to embrace the women's self-government organizations of the co-educational institutions of the middle west, our association would find it more profitable to join such a group. Only three of the institutions represented in this year's conference are co-educational; and since many of our problems do not exist for the woman's college at all, there is a whole group of questions, important for us, that receives little or no discussion in this conference.

HEALTH

The health of the women students has been carefully looked after by Miss Canfield and Dr. Almgren. The usual physical examinations have been regularly and carefully made and corrective work prescribed wherever necessary. In addition, there has been held this year for the first time an eye examination of all entering women and of all others under the care of

the physical training department. The examination revealed a very considerable number of cases of eye-strain that without it would almost certainly have been neglected until serious results ensued.

As a result of the Christmas holidays three contagious diseases appeared in the dormitories—diphtheria, measles, and mumps. Prompt diagnosis and isolation of each case prevented any spread of the disease, though there were later in the year two more sporadic cases of measles.

The greatest menace to the health of the women students is their own persistent disregard of the simplest and most obvious rules of right living in the matter of rest, diet, and exercise. It should be said also that their disregard of these rules is not in any way necessitated by the demands of their college work. It is "overplay," not "overwork," that sends the woman student, at least, into the Infirmary to recuperate. Throughout the year, as the daily Infirmary report came into the office, I have made careful inquiry into the circumstances in each case, and with just one possible exception, the impairment of health was due to quite other causes than the pressure of university work. As a matter of fact, I believe that if that pressure were considerably increased, and the far more exhausting pressure of social engagements and outside "activities" correspondingly reduced, the effect upon the health of the students would be altogether good. A movement has been initiated by the students themselves this year that may bring about some amelioration of existing conditions. A Health League has been organized for the purpose of disseminating information concerning the laws of health and of awakening in the girls a higher ideal of physical efficiency. It is purely a student movement, begun and carried on among themselves, and, therefore, probably all the more likely to prove effective.

VOCATIONAL WORK

Unquestionably the most interesting, and I believe the most fruitful part of the work of the office this year, has been what I have called, for lack of a better term, the vocational work. Very early in the course of my conferences with the students I became aware that they were almost universally expecting, upon leaving college, to take up the work of teaching, though some of them frankly declared that they "couldn't bear the thought of it." Very few of them even knew that other fields of remunerative work were open to them; still less the attractions or opportunities that other fields offered as compared with teaching, the amount and character of the training necessary to fit for them, or the extent to which the curriculum of the University could be made to yield the necessary special training. By means of talks to groups of girls and innumerable conferences with individual students concerning their own special needs some little information of this kind has been disseminated.

My individual efforts in this direction have also been most ably supplemented by a course of lectures on professional opportunities open to women, given at intervals during the year by non-resident lecturers. You will doubtless remember that I asked for and received early in the year a small appropriation for this purpose. Miss Rose, of our own Department of

Home Economics, kindly gave her services for the opening lecture of the course: and I was able out of the fund to pay the expenses of five other women, prominent in various fields of activity, who were willing to contribute their services. Miss Rose's lecture dealt with the professional opportunities opening up to women in the field of home economics. The second lecture in the course was given by Mrs. Florence Kelly, Cornell, '82, National Secretary of the Consumer's League, who spoke on "Social Work for College Women." Mrs. Kelly also lectured while here to one of the classes in economics on the work of the Consumer's League. Miss Zaidee Brown, library organizer. of the New York State Library, spoke on library work for women; and Mrs. Woolman, of Teachers College, Columbia, on opportunities in domestic art. Miss Sarah Louise Arnold, Dean of Simmons College, was obliged at the last moment to cancel her engagement on account of an outbreak of scarlet fever in the dormitory at Simmons, but will give the opening lecture of the course next year. Miss Laura Drake Gill, formerly Dean of Barnard College and now in charge of the research department of the Women's Educational and Industrial Union of Boston, gave the last lecture of the course this year on the subject "What Shall the College Woman Do?"-a lecture full of inspiration and brimful of practical suggestion. Miss Gill, who is President of the Association of Collegiate Alumnae, also talked to the seniors, while here, on the work and aims of that organization. This work of the non-resident lecturers has been extremely stimulating and helpful and should receive more generous support another year.

In addition to this work of instruction concerning the possibilities open to college women, much time and effort have gone into the work of consultation with individual students in order to assist them so far as possible in the choice of a suitable vocation, and in the selection of such courses from the curriculum as will yield them, so far as the University offers it, the necessary training. In order to do this as systematically and intelligently as possible, I have devised a record slip, which is partially filled out by every woman student entering the University and is gradually completed as she completes her course. In addition to the necessary information as to academic training, etc., the slip calls for information as to whether or not the student expects to take up remunerative work on leaving college and as to preference in the matter of vocation. These slips are filed by classes and it is then a comparatively simple matter to determine in each class the individuals who are in need of assistance or advice. In the case of seniors, graduates, and special students also, these slips will show at a glance the number of women in college who can be regarded as trained for any particular line of work, with the amount and character of such training in each case; so that any department head or other member of faculty receiving a request for a woman with special training can know at once by application to this office whether Cornell has any woman who can meet the requirements. Provision is made also for continuing the record after graduation; and if it is possible to keep the post-graduate record fairly complete for any considerable number of years, the information contained in it ought to prove interesting and valuable.

In addition to the effort made to assist the students in the selection of such work as will either fit them for a special vocation or give them the necessary preparation for later vocational training, no little time has gone into the work of bringing this office into touch with the various employing agencies that are using college trained women, in order that as our students complete their training we may be able to assist effectively in bringing the work and the worker together.

For example, this office is now on the mailing list of the federal civil service commission, the civil service commissions of a number of the states, and the municipal civil service commissions of the leading cities; and notice of all examinations to which women are eligible are received whenever they are issued. Communication has been established also with a considerable number of social service organizations (charity organization societies, bureaus of municipal research, playground associations, women's reformatories, etc.), and the efforts exerted in this field have already resulted in the placing of several members of the graduating class in satisfactory positions. Investigation of the possibilities open to trained women is going forward by means of inquiries sent to large employing agencies in various fields of business and industry, as to the efficiency and desirability of women's work in the field, the remuneration, the kind of preparation needed, etc. The responses to such inquiries have been surprisingly cordial, and the result should be in time the accumulation of a fund of information valuable alike to the student seeking employment in any of these fields and to the institution undertaking to prepare students for them.

In order to assist students desirous of continuing their academic work information has been sought concerning fellowships and graduate scholarships open to women in the leading colleges and universities of the country, and this information has been filed in the office, where it can be readily consulted. Information has also been collected and made accessible to the students concerning the means of obtaining certain kinds of technical training which Cornell does not give, such as library and secretarial training.

As a result of such efforts eight of the women leaving college this year are already placed in positions other than ordinary secondary school teaching. Nearly all of the rest of them, if they take up remunerative work at all, will go into teaching; but if the work begun this year is continued, it may be expected that succeeding classes will show a greater variety in choice of vocation.

In order to multiply my own efforts in this direction and make them effective over a wider area I have written to each of the organized Cornell Alumnae Clubs (New York, Albany, Troy, Buffalo, Rochester, Philadelphia, Washington, Cleveland) asking for the appointment from their membership of a good strong vocation committee whose business it will be to keep me informed of any sort of opening in their vicinity that they think a Cornell woman might fill or to investigate the possibilities in any particular field when requested. The clubs are responding warmly and every effort will be made to keep them as closely in touch with the work of the office as possible.

To this end there is now in course of preparation a circular which is intended to furnish as full information as possible concerning the facilities for vocational training for women offered at the University. It is proposed to include in the circular also information as to the kind of secondary school training required for certain of the vocations (e.g., stenography and type-writing for secretarial work and for admission to many of the positions in the federal civil service), and to send it to all Cornell alumnae now teaching in the secondary schools. I have also during the year addressed meetings of the alumnae in New York, Buffalo, Albany, and Rochester (Ithaca, of course), and have been given the warmest assurance of a willingness to serve the University in any way possible.

Before closing this report I wish to express the warmest appreciation for the very efficient service rendered by Mrs. Barbour and Miss Seely in the work of supervision of the University dormitories. Mrs. Barbour's loyalty, tact, patience, and good judgment have been unfailing and have

contributed not a little to such success as has been attained.

Respectfully submitted,
GERTRUDE SHORB MARTIN,
University Adviser of Women.

APPENDIX XV

REPORT OF THE REGISTRAR

To the President of the University:

SIR:—I have the honor to submit herewith my fourteenth annual report as Registrar of the University. The report covers the academic year 1909-1910, including the Summer Session of 1910.

THE YEAR

	in	Days Session	Sun- days	Holi- days	Vaca- tion	Total
First term, Sept. 28-Jan. 26		90	15	3		108
First term, vacation, Jan. 27, 28					2	2
Christmas vacation, Dec. 23-Jan. 4				* *	13	13
Second term, Jan. 29-June 23		114	19	2		135
Easter vacation, Mar. 25-April 4					II	II
Summer vacation, June 24-July 5					12	12
Summer Session, July 6-Aug. 16		36	6			42
Summer vacation, Aug. 17-Sept. 26	•				41	41

In addition to the 240 days in session given above, the University Library was open every day in the year except holidays and there was no time during the year when college activities entirely ceased. The shops and some of the laboratories were also open during nearly all the vacation period.

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5 140 559	9844		1186	625	262	087	4786	700	825
140 550				371	91	387	374		391
140	2811		1186	25.4	246	009	4412	782	610

STUDENTS

The table given on page xci, which shows the attendance for 1909-1910, gives the number of students who have received instruction this year, including those in the 1910 Summer Session and in the Winter Courses in Agriculture, but excluding duplicates, as 5,194, an increase over last year's attendance of 335.

The accompanying table shows the attendance in each course since the opening of the University in 1868. Previous to 1897 optional and special students were separately tabulated but now these are distributed as far as possible among the groups to which they belong.

The attendance for the year is the largest in the history of the University and the increase in the number of regular students this year is 242. Special attention is called to the fact that the above table includes winter and summer course students only as separately tabulated.

MATRICULATES

The following table shows that 1,882 students have registered during the present year for the first time. The table also shows the method of admission.

Graduates Advanced standing Regents' credentials School certificates By examination As special students	64 222 329 574 14 95	Coll. Ent. Board Exams Medical (N. Y. City) Medical (Ithaca) Veterinary students Summer session (1910)	27 44 6 37 470
		Total	1,882

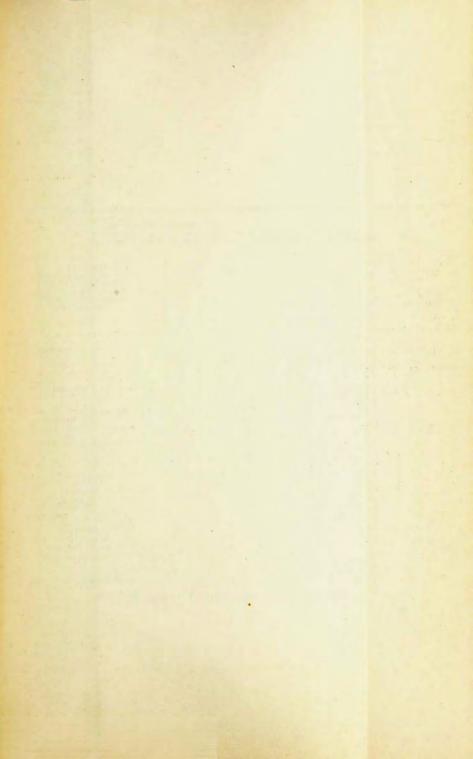
The small number entering by some of the above methods is due to the fact that two or more methods have been combined in a single case, the student, however, being listed in the group to which the major portion of his entrance belongs.

ADMISSION FROM OTHER COLLEGES AND UNIVERSITIES

The Registrar has charge of all credentials presented by applicants coming from other institutions and this system has given uniformity of action on similar certificates when the applicants enter different courses at this University.

In the following lists should be included properly a number of cases of special students who, coming from other colleges, would have been eligible for admission to advanced standing. Such students, however, preferred to be admitted as specials. Some later changed to a regular course but are not included in these tables.

The number of students admitted to advanced standing as candidates for the first degree during the past twenty-four years is, as nearly as may be ascertained, as follows. The former courses in Chemistry, Pharmacy, Medical Preparatory, and Optional have been omitted from the table but the numbers retained in the totals:



Year	Arts	Phil.	Let.	Sci.	Agri.	Arch.	Civil Eng.	Mech. Eng.	For- estry	Law*	Vet.	Med.	No. of Cases
1886-87	2	8	I	4	I	4	6	18				**	50
1887-88	6	4	I	1			11	10					37
1888-89	5	4.4	6	6	I	2	12	21					58
1889-90	4	5	6	3	2	1	2	25				4.2	50
1890-91	8	5 8	2	4	I		14	28		4.6			65
1891-92	7	9	2		2	2	10	52	4.4		+1+		89
1892-93	6		2 1 5 3	588		6	II	44		4.4		4.0	87
1893-94	5	6	5	8		6	6	56					94
1894-95	4	2	3	3	2	3	6	44		4.4			71
1895-96	5	11	4	3 7	3	3	9	33					85
1896-97	IO	4	2	4	3	3	11	42		12	5		100
1897-98	11	6		7	9	2	15	41		15	1		108
1898-99	27	6	1	7		3	16	56	2	6	3	2	134
1899-00	28			1	5	3	25	64	1	7	4		138
1900-01	37	4.4	4.4		4	6	6	64	3	10	2	2	134
1901-02	38	42			9	2	29	92	5	7		2	184
1902-03	33	2014			8	2	24	105	9	12	1		194
1903-04	31	++	4.4		9	5	39	112	4.06	9	1	1	207
1904-05	29	+ 4			9	5	44	IOI		3	4.4		191
1905-06	39		4.4		14	8	36	89		1			187
1906-07	40				19	5	55	86		15			220
1907-08	43				22	10	60	79		11			225
1908-09	37				21	10	53	71		5	I	5	203
1909-10	47		4.4		41	7	30	88		9			222

Of the 222 admitted in 1909-1910, 113 registered as freshmen, 70 as sophomores, 29 as juniors, and 10 as seniors.

During the last twenty-four years there have been admitted from 450 other institutions of collegiate rank, 3,200 students. The distribution of these students can be seen by reference to the table on page xciii of the Report for the year 1907–1908.

ADMISSION ON SCHOOL CERTIFICATE, REGENTS' CREDENTIALS, AND EXAMINATIONS

The Registrar has charge of the credentials of those entering by school certificate, by Regents' credentials, and by examinations, including the examinations conducted by the College Entrance Examination Board.

During the last sixteen years the number of applicants admitted by school certificate, by Regents' credentials, and by examinations, has been as follows:

	94.5	95-6	95-7	97-81	198-9	99-00	100-1	'or-2	02-3	103-4	'04-5	'05-6	'06-7	07-8	'o8-9	109-10
Certificate	156	164	102	193	199	275	296	357	308	315	317	380	324	465	578	574
Regents'																
Coll Ent Exam Pd																
Coll. Ent. Exam. Bd N. Y. C. Ex				++												
								-	-	_	- 7.7		-		_ 3	
Total .	270	211	261	258	275	462	520	617	557	572	600	658	584	702	005	044

The Regent's credentials mentioned above do not include medical and veterinary student certificates.

^{*}No data prior to 1896-1897.

The discrepancy in numbers in the freshman class compared with those given in the Register, is due to students being there listed as freshmen because of some shortage when otherwise they belong to a higher class.

The small number credited to entrance by examination would become much larger if those taking a few examinations to make up a shortage in another group were included. It is not unusual to have a student enter partially by certificate, by examination, and by College Board examination. The combining of school with Regents' credentials, however, is not a common method of admission and is employed only in very exceptional cases.

It should be noted that the number entering entirely by our examinations is small. The preparatory schools are now better acquainted with our entrance requirements. Certain Regents' credentials admit to the Colleges of Arts and Sciences, of Agriculture, and of Law, and under certain conditions relieve all students from taking entrance examinations. Regents' pass cards for single subjects are accepted if the grade be at least 60%, the University Faculty having agreed to accept the Regents' pass of 60% for the years 1909 to 1913 inclusive. The failure of several students to pass the entrance examinations before completing the high school course has influenced others to complete their course in school and enter the University by certificate.

PETITIONS

The usual form of petition has been continued by the several Faculties. Where the petition relates to routine matters and a mere change of registration of studies, a much simpler method has been adopted for changes in registration, and the strict enforcement of registration rules has made a marked improvement in the students' work. The Faculties of Arts and Sciences, Agriculture, Civil Engineering, Medicine, and Veterinary Medicine have filed the petitions in the offices of these Colleges and have notified the Registrar of the action taken; while the Law and Mechanical Engineering Faculties have returned the petitions to this office and the office has notified the students by mail.

The registration of old students takes place after the matriculation of new students. This allows new students a day to arrange their work before instruction begins. Old students are not required to be at the University until the day preceding the one on which instruction begins. The system of registering new students in September in groups alphabetically arranged, and of sending out by mail permits for registration, has solved the problem of overcrowding at registration and gives each student abundant time to get started aright.

The inserted table gives the number admitted to graduation at the 1910 Commencement as well as those of former years. 12,012 degrees have been conferred, but there are some duplicates between the first and second degrees. One degree (M.D.) was conferred in 1899, but in 1907 was revoked because the candidate declined to accept it. One degree (D.V.M.) was conferred in June, 1905, but owing to a technicality was withdrawn and conferred again June, 1906, while another degree (D.V.M.) was conferred in 1907 but dated



as June, 1906. Care has been taken to discriminate between closely allied degrees, but such have been grouped so as to show at a glance the number in each department.

Respectfully submitted,
DAVID F. Hov,
Registrar.

APPENDIX XVI

REPORT OF THE LIBRARIAN

To the President of the University:

SIR:—I have the honor to submit herewith my annual report on the University Library, for the year ending June 30, 1910.

The following table shows the additions made to the various more or less independent collections composing the University Library, and the present extent of each:

	Volumes	Present e	extent in
	Added 1909-10	Volumes	Pamphlets
General Library	11,005	329,306	57,000
Law Library	1,336	41,174	Le se acce
Flower Veterinary Library	198	3,604	
Barnes Reference Library	66	1,639	
Goldwin Smith Hall Library	461	1,631	
Stimson Hall Medical Library	56	979	
Agricultural College Library	1,512	4,232	
Forestry Library	11	1,131	
Totals	14,645	383,696	57,000

The President White Library, the four Fiske collections and the eight seminary collections are not separately enumerated in the table, but are included in the statistics for the general library. Of the additions to the general library (numbering 11,005 volumes), 3,745 volumes were gifts and of these, 283 volumes were gifts to the newly established library of the Mathematical seminary which has been officially named the Evans Mathematical Library, in honor of the late Professor E. W. Evans. Of the accessions to the other collections named in the table the gifts number 69 volumes for the Law Library, 13 volumes for the Flower Library, 22 volumes for the Stimson Hall Library, and 70 volumes for the Agricultural College Library.

The chief gift of the year was the fund of \$4,000 given by the late Goldwin Smith for the increase of the special library in Goldwin Smith Hall, and the

additions for the year to that collection have been almost entirely purchased from this fund. As heretofore the library is indebted to Ex-President White for many valuable gifts, of which fuller mention is made by Professor Burr in his report from the President White Library. Theodore Stanton, '76, has this year completed his gift of the Tauchnitz collection of British and American authors, numbering now 4,150 volumes, and has signified his intention to keep it up to date by presenting the future volumes which may appear. M. Louis LeBlois, of Paris, presented to the library a valuable series of reports of the proceedings in the Dreyfus case, rounding out the Dreyfus collection given by Mr. Stanton. From the Reverend I. A. Staunton, of Utica, we received a complete set of the Journals of the Diocese of Central New York, from its formation in 1868 to the present time: from Professor G. L. Raymond, a complete set of his writings on aesthetics; from Mr. W. K. Bixby, of St. Louis, a copy of the privately printed Inventory of the contents of Mount Vernon in 1810; from Mrs. Bayard Taylor, Repsold's Geschichte der astronomischen Messwerkzeuge; from J. F. Magee, Jr., his facsimile edition of the 13th century manuscript of the Bonus Socius collection of chess problems; from Comptroller Metz, the Manual of accounting and business practice of the city of New York: from Col. Milton T. Foreman, the elaborate Report on Transportation subways in the city of Chicago. From Senator Elihu Root and Congressman John W. Dwight the library has received some important government publications not distributed to the depository libraries. From the national government and from various state and municipal governments the usual supply of federal, state, and municipal documents has been received. To yourself and to various members of the University staff the library is greatly indebted for frequent and valuable additions. These, as well as the other gifts of the year, have all been promptly acknowledged, and a list of the donors is submitted as an appendix to this report.

Among the more important purchases of the year may be noted the rare 1512 edition of the first Spanish translation of Petrarch's Trionfi, and the 1524 edition of the Spanish translation of his De Remediis; facsimiles of the Wolfenbüttel manuscript of Tibullus, and of the miniatures of the Dresden manuscript of Galen; the Oxford edition of Homer's Odyssey in Proctor's Greek type; Grosart's edition of the poems of G. Daniel; Edmonds's Lamport Garland: the latest editions of the complete works of Ruskin, Thoreau, Mark Twain, Pinero, and Rydberg; Harington's translation of the Orlando Furioso, 1607; Hunter's edition of the Magnum Rotulum Scaccarii; Rivoira's Lombardic Architecture; Burnham and Bennett's Plan of Chicago; Latham's English Homes; Macfall's French Pastellists of the 18th century; Thiis's Norske Malere; the orchestral score of Wolf-Ferrari's Vita Nuova; Evans's Scripta Minoa; T. Edwards's Antapologia, 1646; Eyton's Osteologia Avium; Ganglbauer's Käfer von Mitteleuropa; Schubeler's Viridarium Norvegicum; Solereder's Anatomie der Dicotyledonen; complete sets of the Acta Sanctae Sedis, 1865-1908; Archiv für Hygiene, 1883-1909; Archives de Psychologie 1889-1907; Archiv des deutschen Landwirthschaftsraths, 1877-1903; Journal des Museum Godeffroy, 1873-1909; American Monthly Microscopical Journal, 1880-1902; The Microscope, 1881-97; the Färber-Zeitung, 1889-1907; The Zoologist, 1843-1909. The following sets have been completed: the London Bankers' Magazine, the New York Bankers' Magazine, the publications of the Turin Academy of Sciences, the Proceedings of the American Society for Municipal Improvement, Punch, and the Tropical Agriculturist. The purchases made for the library of the College of Agriculture include the following important sets: Biometrika, the Botanical Gazette, the Proceedings of the American Pomological Society, Thoreau's complete works, and the Journal of the Royal Horticultural Society.

Dr. A. C. White, assistant librarian in charge of accessions and classification, reports that the accessions to the University Library have been promptly classified as received, including the accessions to the general library of the State College of Agriculture and the special entomological library of that college, which have been classified and their titles incorporated in the general series of shelf lists of the University Library. The books belonging to the Romance seminary and the Evans Mathematical library have been classified and card shelf lists of these special collections have been prepared. Dr. White has also, as heretofore, had the care of the binding of miscellaneous gifts and unbound book purchases and of the repair or rebinding of worn-out volumes. The binding of current periodicals has been under the immediate care of Miss Stubbs, the assistant in charge of periodicals.

The report of Miss K. Dame, assistant librarian in charge of the catalogue, shows that the number of volumes, pamphlets, and maps catalogued for the general card catalogue during the year was 14,004. For these 14,711 cards were written and 1817 printed cards were obtained from the Library of Congress. The printed card catalogue, issued by the American Library Association, of the facsimiles of manuscripts in modern languages owned by American University libraries has been received and filed. The absence of Miss Dame on sick leave for several months of the year made necessary the postponement until next year of some work in the analysis of serials and on the cataloguing of the manuscripts of the White Library which will now be taken up. During Miss Dame's absence Miss Fowler took charge of the work in this department, in addition to the routine work necessary on the Dante and Petrarch collections.

Mr. Hermannsson, the curator of the Icelandic collection, prepared a bibliography of the Sagas of the Kings of Norway and related Sagas and Tales which was published in May, forming volume III of "Islandica," the annual relating to Iceland and the Fiske Icelandic collection. In May, Mr. Hermannsson was granted leave of absence until October and is now in Denmark, engaged in investigations in the Scandinavian libraries, largely in the interests of the collection.

From the President White Historical Library, Professor Burr makes the following report:

"I have the honor to report a continuance of the generosity of Dr. White as well as the usual growth from the stipulated funds of the library. Some three months of the past year were spent by Mr. White in Spain; and thence he sent to the library some very interesting volumes—a copy of the rare old Mozarabic liturgy still in use at Toledo, the catalogue of the Columbian

Library at Seville, and sundry other things not easy to pick up outside of the land of their origin. In France, too, he bought for us some rare things, among them an exceedingly interesting body of autograph documents relating to the insurrection of the Paris Commune in 1871.

"The income of his Warfare of Science, too, has continued to make possible for us many purchases. Among the most notable are our acquisitions from the great Jackson collection on the Protestant Reformation. These include a copy of Lorenzo Valla's Notes on the New Testament, as published by Erasmus in 1505, the commentaries on the Gospels by Letèvre of Étaples (1521), the letters of Oecolampadius and Zwingli (1536)—Conrad Pellican's copy with his marginal notes and an interpolated letter in his autograph,—Bucer's Commentaries (1530), the works of Urbanus Regius (1577), Beza's Icones (1581), and a multitude of other treasures. Among the acquisitions of the past year may be named an unpublished little Nuremberg chronicle of the Reformation period (1487–1547), an old manuscript copy of the earliest instructions of the Spanish Inquisition, and an addition to our body of manuscript witch-trials. In the field of the French Revolution, too, notable additions have been made."

Mr. W. H. Austen, assistant librarian in charge of the reference and loan departments of the general library, has been absent on leave since the end of March, and the routine work in the Reading Room has been carried on by the assistants, Miss Wilder and Miss Gregory, who have supplied the statistics concerning the use of the library. The library has been open 308 days during the year, and was closed only on Sundays and on five general holidays, only one of which fell in term time. The number of registered users recorded at the general delivery desk includes those who have drawn books from the general library only, and does not include those registered at the desk of the open shelf circulating library. This registration is as follows:

University officers					 		 					 		, .				451
Students of all classes.	i	4 1						- 1	6		c						416	430
Special borrowers			4		 			4			+				,			37

The number of reserved books in the reading rooms and seminary rooms in the library building is 13,366, the number kept in locked presses is 1,397, and the number reserved during the year at the delivery desk for special use was 1,712. The number of volumes from the general library at present on deposit in the various laboratory and department collections, in other buildings, is now 19,388. The number of volumes reported as missing from these collections during the year is as follows:

From the reading room shelves	39
From seminary rooms	6
From the open shelf circulating collection	3
From department and laboratory collections	149

During the year we have borrowed 150 volumes from fourteen other libraries and have lent 188 volumes to forty-seven other libraries. These loans, it may be noted, represent an expenditure of time, labor, and money frequently altogether disproportionate to the service rendered and the position taken by the Library of Congress, that "it is no more than fair to

expect that only in cases of real importance shall there be a resort to the device of inter-library loans," seems fully justified.

The following table gives the recorded use of books for the last two years. The use made of the Library, however, is shown only in part by these figures, as no record is kept of the large and constant use of the books on open shelves in the building, or of the use made of the books in the special libraries and those deposited in department collections:

REFERENCE AND DEPARTMENT USE

Volumes used in reading rooms. Volumes sent to seminary rooms. Volumes sent to departments	71,017 3,814 6,682	66,839 3,711 6,047
Volumes from general library Volumes from open shelf circulating library Volumes lent to other libraries	20,311 5,860 155	20,766 5,921 188
Total recorded use	107,839	103,472

The slight decrease in the recorded use in the general reading rooms is probably largely due to the use made of the growing reference collection in Goldwin Smith Hall. The open shelf circulating collection continues to be largely used, especially by students. The number of students who have registered and taken books for home use from this collection was 855, as compared with 430 who drew books from the general library. On the other hand, the number of officers who have drawn books from this collection is only 179, as compared with 451 taking books from the general library. During the year ten volumes from this collection were reserved for class use in the general reading room. The number of readers who used the oooks of this collection in the room without taking them for home use was 3,832.

Mr. W. W. Ellis, curator of the shelves, reports that in addition to the daily inspection of new books for correction of possible errors in call numbers or bookplates, which must be done before they are sent to the stacks, or to the department libraries, the regular inventory has been taken. The inventory revealed 281 volumes standing on the wrong shelves as against 207 last year. The number of volumes missing from their proper places in the stacks, and unaccounted for when the inventory was taken, is this year 381 as against 351 last year. The number reported missing at the time of the inventory shows a slight increase from year to year; many of these, of course, are only temporarily misplaced, and, with the large numbers who have access to the shelves in the stacks, it is doubtful if any measures can prevent a considerable amount of misplacement. In the absence of Mr. Austen, Mr. Ellis has also undertaken the checking of the laboratory and departmental collections in June of this year, with the following results: 121 volumes could not be found at that time, 14 volumes were found at various places without record, and 24 volumes were found to be in the stacks though recorded elsewhere. During the year some progress was made in the exchange of duplicates, and 50 volumes and 278 parts have been received from other libraries, while 43 volumes, 196 pamphlets, and 2,508 parts have been sent to other libraries on exchange account. The duplicates have also been rearranged in systematic order. In place of the annual dusting of the books by the janitors during the summer vacation, Mr. Ellis recommends the purchase of a vacuum cleaner, by means of which it might be possible to carry on the dusting at any convenient time, without annoyance to the users of the library, and with much less risk of injury to the bindings. The ordinary vacuum cleaner, however, is not well suited for dusting the books on the shelves, and it would seem to require a machine giving a combination of blast and suction to do the work satisfactorily; but the matter calls for further investigation.

The growth of the library since 1907, when the new stacks for the newspaper and document collections were fitted up in the former lecture room. has brought us again almost to the point of congestion in many places. In April, Mr. Ellis made a careful measurement of all the shelving in the library and found that, in the stacks and White Library, of the total shelf space available if every shelf were filled solidly with books, an average of over 70 per cent of the space is actually filled and in the White library 88 per cent is actually filled. But in a growing library, classified or arranged by subjects, it is simply impossible to fill the shelves to their nominal capacity. Vacant space must everywhere be left between classes to permit the insertion of new books and of books returned from circulation, for it is a physical impossibility to shift quickly any large collection of books. We must face the fact that a classified library necessarily must occupy more space than one not classified. How misleading are the ordinary estimates of shelf capacity may be judged from the following statement made by the Librarian of the Boston Public Library in 1909: "When the central building in Boston was first occupied it had an estimated shelf capacity of 1,500,000 volumes. Within less than 15 years we find the space severely taxed with 750,000; principally, of course, because the various classes or departments do not increase symmetrically."

In our own case this overcrowding of the shelves has again begun to be felt. More shelf room is urgently needed and, unless some steps are promptly taken to provide it, we shall soon have to resort again to the unsatisfactory and inconvenient expedient of packing away large numbers of our books in boxes, or removing them to some other building, and thus decreasing the usefulness of the library. I, therefore, respectfully urge that immediate provision be made for additional shelf room to relieve the congestion.

In the first term of the year, Mr. Austen gave his regular course of lectures on the use of books. In the second term the Librarian gave the usual course in general bibliography. The annual record of publications by the University and its officers has been prepared by Miss Dame. The list of donors has been prepared by Miss Thornburg.

Respectfully submitted,

GEO. WM. HARRIS, Librarian

APPENDIX XVII

PUBLICATIONS, 1909-1910

Under the Auspices of the University

The University records. 9 s. no. 5-10 s. no. 9. m. Ithaca, 1909-1910. 10 nos. 8°. Illus.

Contents:—ix. 5. Announcement of N. Y. State Veterinary College 1909-1910.

- x. 1. Courses of instruction.
- x. 2. President's report, 1908-1909.
- x. 3. The register, 1909-1910.
- x. 4. The College of Arts and Sciences.
- x. 5. Announcement of the 19th summer session, 1910.
- x. 6. Announcement of the Graduate School, 1910-1911.
- x. 7. Announcement of the College of Law, 1910-1911.
- x. 8. Announcement of the N. Y. State College of Agriculture, 1910-1911.
 - x. 9. The N. Y. State Veterinary College.

Official publications of Cornell University. Vol. i. no. A. Ithaca, 1910. 8°. pp. (2) + iii. + 70.

Contents:—i. A. College of Arts and Sciences: courses of instruction,

Abstracts of work done in the laboratory of veterinary physiology, under the direction of P. A. Fish. No. 7. Ithaca, 1910. 8°. pp. 36. Plate.

A brief account of some portions of Cornell University for the Japanese Commercial Commissioners, October 8, 1909. [Ithaca, 1909.] 8°. pp. (34). Photo-engrs.

Japanese and English.

Circular of the New York State Veterinary College. No. 2. Ithaca 1910. 8°. pp. 16.

The Cornell civil engineer: monthly publication of the Association of Civil Engineers of Cornell University. Vol. xviii. Oct., 1909–June, 1910. Ithaca, 1909–1910. 8°. pp. ii. + 421. Illus.

The Cornell countryman. Vol. vii. Oct., 1909-June, 1910. Ithaca 1910. 8°. pp. 326. Illus.

Directory of resident officers of instruction and government and of students, Oct. 13, 1909. [Ithaca, 1909.] sm. 8°. pp. 75.

Same, Feb. 7, 1910. [Ithaca, 1910.] sm. 8°. pp. 77.

Exercises attending the presentation of the portrait of Dr. James Law by the Alumni of the New York State Veterinary College to Cornell University, May 14, 1909. [Ithaca, 1909.] sm. 8°. pp. 15. Port.

In memoriam, Ross Gilmore Marvin, 1905: service at Sage Chapel, Cornell University, Sunday, April twenty-fourth, 1910; memorial address by Commander R. E. Peary. [Ithaca, 1910.] 8°. pp. 14 + (1).

Islandica: an annual relating to Iceland and the Fiske Icelandic collection in Cornell University Library, edited by G. W. Harris. Vol. iii. Ithaca, 1910. 8°. pp. (5) + 75.

iii. Bibliography of the sagas of the kings of Norway and related, sagas and tales, by H. Hermannsson.

The journal of physical chemistry, editor, W. D. Bancroft. Vol. xiii.
no. 7-xiv. no. 6, Oct., 1909-June, 1910. m. Ithaca, 1909-1910. 9 nos.
8°. Illus.

Issued monthly except in July, August and September.

Needs of the New York State colleges at Cornell University, the New York State College of Agriculture, the New York State Veterinary College, showing their immediate needs and a forecast of their building requirements for ten years. [Ithaca], 1910. 1.8°. pp. 31. Plans.

The philosophical review; edited by J. E. Creighton, with the co-operation of J. Seth. Vol. xviii., no. 4-xix. no. 3, July, 1909-May, 1910. 2m. New York, 1909-1910. 6 nos. 8°.

The physical review; a journal of experimental and theoretical physics, conducted by E. L. Nichols, E. Merritt and F. Bedell. Vol. xxix.-xxx., July, 1909-June, 1910. m. New York, 1909-1910. 2v. 8°. Illus.

Publications of Cornell University Medical College: researches from the Department of Medicine, edited by F. L. Keays. Vol. ii. New York, 1909. 8°. Illus

Publications of Cornell University Medical College: studies from the Department of Pathology. Vol. ix. New York, 1909. 8°. Illus.

Seventh annual music festival, Cornell University, April 28, 29 and 30, 1910, given by the Department of Music. Ithaca, 1910. 8°. pp. 72 + (4). Portrs. and plates.

Some facts concerning the New York State College of Agriculture at Cornell University, by H. J. Webber, presented to a hearing of legislative committees, Albany, April 5, 1910. Ithaca, 1910. 8°. pp. 20. Diagr.

Bulletin of the Agricultural Experiment Station. No. 268-277, June, 1909-May, 1910. Ithaca, 1909-1910. 10 nos. 8°. Illus.

Circular of the Cornell University Agricultural Experiment Station. No. 7, May, 1910. Ithaca, 1910. 8°. pp. 16.

Cornell reading-course for farmers. 10 s. no. 46-50, Nov., 1909-March, 1910. m. Ithaca, 1909-1910. 7 nos. 8°. Illus.

Cornell reading-course for farmers' wives, M. Van Rensselaer, supervisor. N.S. vol. i., no. 6-8, Oct., 1909-Feb., 1910. Ithaca, 1909-1910. 3 nos. 8°. Illus.

Cornell rural school leaflet, A. G. McCloskey, editor. Vol. iii., Sept. 1909-May, 1910. Ithaca, 1909-1910. 13 nos. 8°. Illus.

Home nature-study course, by A. B. Comstock. N.S. vol. vi., Oct. 1909-April, 1910. 2m. Ithaca, 1909-1910. 4 nos. 8°. Illus.

By Officers

In the present list are included the titles of books, pamphlets and contributions to periodicals, transactions, etc., published by officers and fellows of the University during the period extending from July 1, 1909, to June 30, 1910, with some titles omitted in previous lists.

- Adams, J. Q., jr. The original performances of "The rivals." (Nation, 14 April, 1910, vol. xc., p. 374.)
 - Also in N. Y. Evening Post, 19 April, 1910.
- The text of Sheridan's "The rivals." (Modern Language Notes June, 1910, vol. xxv., p. 171.)
- editor. The rivals, a comedy by R. B. Sheridan, with an introduction and notes. Boston, 1910. 12°. pp. xxvi. + 160. Illus.
- Albee, E. The meaning of literature for philosophy. (Internat. Jour. of Ethics, Oct., 1909, vol. xx., p. 1.)
- [Review of] Clavis universalis, by A. Collier; edited by E. Bowman. (Philosophical Review, May, 1910. vol. xix., p. 348.)
- [Review of] Valuation, its nature and laws; by W. M. Urban-(Same, March, 1910, vol. xix., p. 205.)
- Allen, A. A. The English sparrow. (Cornell Rural School Leaflet, Oct., 1909, vol., iii., p. 1.)
 - The food of birds. (Same, March, 1910, vol. iii., p. 118.)
 - The song sparrow. (Same, Jan., 1910, vol. iii., p. 28).
 - The vesper sparrow. (Same, Nov., 1909, vol. iii., p. 10.)
- See also Wright, A. H., and A. A. Allen. The early breeding habits.
 of amblystoma punctatum. The increase of austral birds at Ithaca.
 Regular summer crossbills at Ithaca.
- Andrews, A. Le R. Dr. Röll's proposals for the nomenclature of sphagnum. (Bryologist, Jan., 1910, vol. xiii., p. 4.)
- Bailey, E. J. Studies in English masterpieces. Nos. XIII-XVIII. Albany
 - A Cornell poet. (Cornell Era, Dec., 1909, vol. xlii., p. 45.)
- Outlines of English masterpieces: a series of nine articles. (Amer. Education, Sept., 1909-June, 1910.)

- Bailey, H. C. A clinical study of crystalline strophanthin. (Jour. of Pharmacology and Experimental Therapeutics, Oct., 1909, vol. i., p. 349.)
- Bailey, L. H. Manual of gardening: a practical guide to the making of home grounds and the growing of flowers, fruits and vegetables for home use. New York, 1910. sm. 8°. pp. xvi + 539. Illus.
- The nature-study idea: an interpretation of the new schoolmovement to put the young into relation and sympathy with nature. 3d ed., revised. New York, 1909. 8°. pp. ix. + 246.
- The training of farmers. New York, 1909. sm. 8°. pp. viii. + 263.
- The agricultural situation. (Cornell Countryman, Feb., 1910, vol. vii., p. 158.)
- The call of the hoe. (Collier's National Weekly, 11 Sept., 1909, vol. xliii., p. 15.)
- The country school. (Cornell Countryman, May, 1910, vol.vii., p. 263.)
- The field of research in horticulture. (Proceedings of the Soc. for Horticultural Science, 1908-1909, 6th Annual Meeting, p. 42.)
- The good problem of weeds. (Collier's National Weekly, 17 July, 1909, vol. xliii., p. 19.)
 - Moon-farming. (Independent, 21 Oct., 1909, vol. lxvii., p. 907.)
- The point of view on the scope and work of the irrigation congress. (Cornell Countryman, Oct., 1909, vol. vii., p. 3.)
- A statement on the agricultural situation in New York State.
 (Bulletin of the N. Y. State Agricultural Department, 1909, no. 12, p. 1.)
- editor. The principles of agriculture: a text-book for schools and rural societies. 15th ed., revised. New York, 1909. 8°. pp. xv. + 336. Illus.
- Baldwin, W. M. An adult human pancreas, showing an embryological condition. (Anatomical Record, Jan., 1910, vol. iv., p. 21.)
- The relation of the pancreas to sugar metabolism. [Proceedings of the Amer. Physiological Soc.. (Amer. Jour. of. Physiology, March, 1910 vol. xxv., p. xxi.)
- Bancroft, W. D. The chemical reactions of phosphorescence. (Zeitschrift für Physikalische Chemie, Jan., 1909, vol. lxix., p. 15.)
- The electrochemistry of light. VII-IX. (Jour. of Physical Chemistry, June-Oct., 1909, vol. xiii., pp. 449, 538; April, 1910, vol. xiv., p. 292.)
- The photographic plate. 1-111. (Same, Jan.-March, 1910, vol. xiv., pp. 12, 97, 201.)
- [Papers from the laboratory of W. D. Bancroft, published in the Jour. of Physical Chemistry, 1909, vol. xiii.]

Some zinc alloys, by B. E. Curry, p. 589; Experiments on solarization 1., by G. A. Perley, p. 630; The phosphorescence of some inorganic salts, by J. A. Wilkinson, p. 671.

Professor Bancroft has also published about 60 book reviews in the Jour. of Physical

Chemistry.

- Barnard, W. N., and others. Elementary heat-power engineering, by W. N. Barnard in conjunction with C. F. Hirshfeld and A. W. Smith. Pts. 1-4. Ithaca, 1910. 8°. pp. 254 + iv.
- Barnes, F. A. Discussion of paper on the study of engineering contracting in engineering colleges. (Jour. of the Amer. Soc. of Engineering Contractors, March, 1910, vol. ii.)
- See also Crandall, C. L., and F. A. Barnes. Field book for railroad surveying.
- Barringer, T. B., jr. A practical hospital polygraph. (Amer. Jour. of the Medical Sciences, Nov., 1909, N.S. vol. cxxxv., p. 410.)
- Report of a case of Stokes-Adams disease. (Archives of Internal Medicine, Aug., 1909, vol. iv., p. 186.)
- joint author. The effect of digitalis on the ventricular rate in man by Hewlett and T. B. Barringer, jr. (Same, Feb., 1910, vol. v., p. 93.)
- Barrows, C. C. Acute complete inversion of the uterus. (Amer. Jour. of Obstetrics, March, 1910, vol. lxi., p. 488.)
- Appendicitis in children. (N. Y. Medical Jour., 25 Nov., 1905, volxxxii., p. 1097.)
- Dermoid cyst delivered through rectum and anus by advancing head. (Amer. Jour. of Obstetrics, March, 1910, vol. lxi., p. 492.)
- Ectopic gestation sac containing fœtus; appendix. (Amer. Gynæcological and Obstetrical Jour., 1900, vol. xvi., p. 260.)
- Intravascular antisepsis. (N. Y. Medical Jour., 4, 11 July, 1903, vol. lxxviii., pp. 1, 65.)
- Prolapse of ovary, an operation for its cure with report of 12 cases. (Medical Record, 15 Oct., 1904, vol. lxvi., p. 601.)

Also separately reprinted.

- Reconstruction of the female urethra. (Amer. Jour. of Obstetrics, Dec., 1909, vol. lx.)
- Shock and hæmorrhage as causes of death following abdominal operations. (N. Y. Medical Jour., 7 Oct., 1905, vol. lxxxii., p. 747.)

 Also separately reprinted.
- The surgical treatment of posterior displacement of the uterus. (Same, 27 Nov., 1909, vol. xc., p. 1046.)
- The treatment of acute septicæmia by the intravenous infusion of a solution of formaldehyde, with report of a case. (Same, 31 Jan., 1903, vol. lxxvii., p. 177.)

- Uterine fibroids complicating pregnancy. (Amer. Jour. of Surgery 1908, vol. xxii., p. 100.)
- Bauer, J. [Review of] Larmes et sourires detl'émigration italienne: by R. Paulucci di Calboli. (Economic Bulletin, Dec., 1909, vol. ii., p. 379.)
- [Review of] A traffic history of the Mississippi River system by F. H. Dixon. (Same, June, 1910 vol. iii., p. 158.)
- [Review of] Die volkswirtschaftliche Bedeutung der technischen Entwicklung der deutschen Zuckerindustrie; by T. Schuchart. (Same. Dec., 1909, vol. ii., p. 352.)

Mr. Bauer has also published a large number of short unsigned book reviews and annotations in the Economic Bulletin.

- Bedell, F., and C. A. Pierce. Direct and alternating current testing. New York, 1909. 8°. pp. x. + 265. Diagrs.
 - editor. The physical review, 1909-1910.
- Bennett, C. E. Rejoinders [to Mr. Bradley]. (Classical Weekly, 4 Dec., 1909, 5 March, 1910, vol. iii., pp. 60, 149.)
- [Review of] Historische Grammatik der lateinischen Sprache, Supplement: Syntax des Nominativs und Akkusativs in Lateinischen; von C. F. W. Müller. (Classical Philology, Jan., 1910, vol. v., p. 106.)
 - associate editor. Classical philology, 1909-1910.
 - editor. Cornell studies in classical philology, 1909-1910.
- translator. Horace, the Odes, translated into English prose. New York, 1910. 8°. pp. 26-126. (The classics, Greek and Latin: Latin vol. iii.)

An, ed. of 9 numbered copies was also privately and separately published.

Bentley, M. Eugenics. (New Internat. Year Book, 1909, p. 656.)

- Mental inheritance. (Popular Science Monthly, Nov., 1900, vol., lxxv., p. 458.)
 - Psychical research. (New Internat. Year Book, 1909, p. 603.)
 - Psychology. (Same, p. 604.)
 - Psychotherapy. (Same, p. 608.)
- [Review of] Die Bedeutung der Tropismen für die Psychologie; von J. Loeb. (Philosophical Review, March, 1910, vol. xix., p. 216.)
- [Review of] Grundzüge der physiologischen Psychologie, 6th ed. Bd. 1; von W. Wundt. (Same, p. 217.)
- [Review of] The origin and development of the moral ideas; by E. Westermarck. (Amer. Jour. of Psychology, April, 1910, vol. xxi., p. 334.)
- [Review of] Die Reproduktion und Associazion von Vorstellungen Teil 1.; von A. Wreschner. (Philosophical Review, July, 1909, vol. xviii. p. 456.)

- See also Titchener, E. B., and M. Bentley, editors. Cornell University studies in psychology.
- Bizzell, J. A. See Lyon, T. L., and J. A. Bizzell.—The availability of soil nitrogen.—Changes produced in soils.—Effect of steam sterilization on the water soluble matter in soils.—Some conditions favoring nitrification in soils.
- Blaker, E., and W. J. Fisher. Experiments in physics, for students of science. [2d ed.] Ithaca, 1909. 8°. pp. 213. Diagrs. and figs.
- Bretz, J. P. [Review of] The expansion of New England: the spread of New England settlement and institutions to the Mississippi River, 1620-1865; by L. K. Mathews. (Amer. Historical Review, April, 1910, vol. xv., p. 618.)
- [Review of] New Hampshire as a royal province, by W. H. Fry; The province of New Jersey, 1664–1738, by E. P. Tanner. (Economic Bulletin, June, 1909, vol. ii., p. 130.)
- [Review of] Transportation and industrial development in the middle west; by W. F. Gephart. (Amer. Historical Review, Jan., 1910, vol., xv., p. 424.)
- Brown, H. B. The genus cratægus, with some theories concerning the origin of its species. (Bulletin of the Torrey Botanical Club, May, 1910, vol. xxxvii., p. 251.)
- A peculiar specimen of arctium. (Plant World, June, 1909, vol. xii., p. 135.)
- Browne, A. W., and F. F. Shetterly. On the oxidation of hydrazine.

 1v. (Jour. of the Amer. Chemical Soc., July, 1909, vol. xxxi., p. 783.)
- Bull, C. S. The adverse influence of diabetes in certain operations on the eye. (Transactions of the Amer. Ophthalmological Soc., 1999.)
 - Abstract of the same, with additions, in Medical Record, 2 Oct. 1909, vol. lxxvi, p. 549.
- —The management of acute hemorrhagic glaucoma in the presence of advanced arteriosclerosis. (Jour. of the Amer. Medical Assoc., 24 July, 1909, vol. liii., p. 259.)
- The post-operative history of eighteen cases of magnetic foreign bodies removed from the eye by the haab or giant magnet. (Transactions of the Amer. Ophthalmological Soc., May, 1910.)
 - Burr, G. L., joint editor. The American historical review, 1909-1910.
- Buxton, B. H., and A. H. Rahe. Effect of dilution upon the flocculation of colloids. Pt. III-IV. (Jour. of Medical Research, June, 1910, vol. xxii, p. 483.)
- See also Coleman, W., and B. H. Buxton. The bacteriology of the blood in convalescence from typhoid fever.
- Campbell, C. M. A modern conception of dementia præcox, with five illustrative cases. (Review of Neurology and Psychiatry, Oct., 1909, vol. vii., p. 623.)
 - ____ sub-editor. Review of neurology and psychiatry, 1909-1910.

- translator. On habit-neuroses and psycho-neuroses in the light of Freud's investigations and on psycho-analysis; a free translation of Ferenczi's article in the Wiener Klinische Rundschau, 1908. (State Hospitals Bulletin, March, 1910, vol. ii., p. 849.)
- Carpenter, R. C. Heating and ventilating buildings. 5th ed., revised and enlarged. New York, 1910. 8°. pp. xvi. + 562. Illus.
- Test of the high pressure fire pumping stations of the city of New York. (Transactions of the Amer. Soc. of Mechanical Engineers, 1909.)
- and others. Test of the Franklin air cooled motor.—Test of the Pierce motor.
- In connection with R. P. Lay and L. R. Evans; read before the Soc. of Automobile Engineers.
- Carver, W. B. Degenerate pencils of quadric spreads connected with the configuration $\Gamma_{n+4,n}^{n+2}$. (Bulletin of the Amer. Mathematical Soc. July, 1909, vol. xv., p. 483.)
- Catterall, R. C. H. [Review of] A constitutional history of England; by A. M. Chambers. (Amer. Historical Review, Jan., 1910, vol. xv., p. 427.)
- [Review of] An introductory history of England; by C. R. L. Fletcher. Vol. iii. (Same, April, 1910, vol. xv., p. 674.)
- [Review of] Mirabeau and the French Revolution; by F. M. Fling. Vol. I. (Same, Jan., 1910, vol. xv., p. 371.)
- Chamot, E. M. Preliminary investigation of the water purification plants of New York State. (29th Annual Report of the N. Y. State Dept. of Health, 1908, vol. ii., p. 320.)
- Quantitative analysis by means of the microscope, (Proceedings of the 7th Internat. Congress of Applied Chemistry, 1909.)
- Review of American progress in the microchemistry of foods. (Same.)
- and D. S. Pratt. A study of the phenolsulphonic acid method for the determination of nitrates in water. 11. The composition of the yellow compound. (Jour. of the Amer. Chemical Soc., May, 1910, vol. xxxii., p. 630.)
- Church, I. P. Mechanics of the gyroscope. (Cornell Civil Engineer, March, 1910, vol. xviii., p. 201.)
- The stand pipe in water power plants. (Same, Oct., 1909, vol. xviii., p. 13.)
- Clark, S. B., [Review of] Abbildungen zur alten Geschichte; herausgegeben von H. Luckenbach. (Classical Jour., April, 1910, vol., v. p. 287.)
- Coleman, W. Diet in typhoid fever. (Jour. of the Amer. Medical Assoc., Oct., 1909, vol. liii., p. 1145.)
- The treatment of typhoid fever. (Jour. of the Medical Soc. of N. J., Dec., 1909, vol. vi., p. 339.)

- and B. H. Buxton. The bacteriology of the blood in convalescence from typhoid fever, with a theory of the pathogenesis of the disease. (Jour. of Medical Research, July, 1909, vol. xxi., p. 83.)
- See also Shaffer, P. A., and W. Coleman. Protein metabolism in typhoid fever.

Coley, W. B. Hernia. (Progressive Medicine, June, 1910.)

- Inguinal hernia in the female. (Annals of Surgery, Sept., 1909, vol. l., p. 609.)
- A plea for more conservative treatment of sarcoma of the long bones. (Jour. of the Amer. Medical Assoc., 29 Jan., 1910, vol. liv., p. 333.)
- The treatment of inoperable sarcoma by bacterial toxins (the mixed toxins of the streptococcus erysipelas and the bacillus prodigiosus.) (Proceedings of the Royal Soc. of Medicine, Nov., 1909.)
- and I. S. Chaffee. Volvulus of giant sigmoid colon. (Annals of Surgery, Aug., 1909, vol. l., p. 465.)
- Comfort, W. W. Les maîtres de la critique littéraire au xixe siècle; essays selected and edited by W. W. Comfort. Boston, 1909. 16°. pp. v. + 162. (Heath's modern language series.)
 - Poetica medici. (Academy, 7 May, 1910, vol. lxxviii., p. 446.)
- The value of the classics; an outsider's view. (Classical Weekly, 16 Oct., 1909, vol. iii., p. 18.)

Comstock, A. B., editor. Home nature-study course, 1909-1910.

- Conn, H. J. Future methods of soil bacteriological investigations. (Centralblatt für Bakteriologie, 9 Dec., 1909, Pt. 2, vol. xxv., p. 454.)
- Cooper, L. On the teaching of written composition. (Education, March, 1910, vol. xxx., p. 421.)
- On Wordsworth's 'To Joanna'. (Academy, 29 Jan., 1910, vol. lxxvii., p. 108.)
- A sea-change in spelling. (Nation, 9 Dec., 1909, vol. lxxxix., p. 568.)
- [Review of] The autobiography, a critical and comparative study; by A. R. Burr. (Philosophical Review, May, 1910, vol. xix., p. 344.)
- [Review of] The first English translations; by W. J. Harris. (Nation, 24 Feb., 1910, vol. xc., p. 192.)
- [Review of] Selections from the works of Samuel Johnson; by C. G. Osgood. (Same, 30 Dec., 1909, vol. lxxxix., p. 656.)

- Corson, H. Spiritual vitality. (Light, 9 July, 1910, vol. xxx., p. 322.)
- Cox, E. G. Celtic lore. (Modern Language Notes, Feb., 1910, vol. xxv., p. 64.)
- In search of Szakacs Janosne. (Cornell Era, Feb., 1910, vol. lxii., p. 139.)
 - A modern Celtic college. (Gaelic American, 5-12 July, 1909.)
- Craig, C. F. On a class of hyperfuchsian functions. (Transactions of the Amer. Mathematical Soc., Jan., 1910, vol. xi., p. 37.)
- Craig, J. Botanical excursions, German field methods. (Ottawa Naturalist, Dec., 1909, vol. xxiii., p. 163.)
 Also separately reprinted.
- Fruit growing in Europe. (Report of the Illinois State Horticultural Soc., Dec., 1909.)
- Orchard planting plans. (Report of the Western N. Y. Horticultural Soc., 1910, p. 67.)
- Requirements of certain markets and the best varieties of fruits for those particular markets. (Same, p. 77.)
- editor. National nurseryman; monthly journal devoted to nursery and tree growing interests, 1909-1910.
- editor. Proceedings of the 31st Biennial Session of the American Pomological Society, 1910.

Professor Craig has also contributed to the horticultural department of the Tribune Farmer.

- Crandall, C. L. A review of the development of metal bridge building in America. (Bulletin of the Amer. Railway and Maintenance of Way Assoc. Nov., 1909, no. 117, p. 29.)
- and F. A. Barnes. Field book for railroad surveying. 3d ed., enlarged. 1st thous. New York, 1909. 16°. pp. vii. + 88. Diagrs.
- Creighton, J. E. An introductory logic. 3d ed., revised and enlarged. New York, 1909. sm. 8°. pp. xvi. + 520.
- Knowledge and practice an address delivered before the Phi Beta Kappa Society of Brown University, June 15th, 1909. (Internat. Jour. of Ethics, Oct., 1909, vol. xx., p. 29.)

Also separately reprinted.

- The notion of the implicit in logic. (Philosophical Rev., Jan., 1910, vol. xix. p. 53.)
- [Review of] Darwin and the humanities; by J. M. Baldwin. (Same, March, 1910, vol. xix., p. 210.)
- [Review of] Idealism as a practical creed; by H. Jones. (Same, p. 200.)
- [Review of] Is immortality desirable? by G. L. Dickinson. (Internat. Jour. of Ethics, Oct., 1909, vol. xx., p. 102.)

- American editor. Kant-Studien, 1909-1910.
- editor. The philosophical review, 1909-1910.
- Crosby, C. R. Chalcis-flies reared from galls from Zumbo, East Africa. (Broteria, Zoological Ser., Aug., 1909, vol. viii., p. 77.)
- Curtis, H. B. Construction of a sun dial that will keep accurate time. (Popular Astronomy, Dec., 1909, vol. xvii., p. 609.)
- Dame, K. Shall women vote in parish meetings? (Churchman, 3 July, 1909, vol. c., p. 19.)
- Dana, C. L. The cure of early paresis. (Jour. of the Amer. Medical Assoc., 21 May, 1910, vol. liv., p. 1661.)
- The modern views of heredity, with the study of a frequently inherited psychosis. (Medical Record, 26 Feb., 1910, vol. lxxvii., p. 345.)
- The symptomatology and functions of the optic thalamus. (Jour. of the Amer. Medical Assoc., 1909, vol., liii., p. 2047.)
- Dann, H. E., compiler. Christmas carols and hymns. New York, 1910.
 8°. pp. 115. Music.
- compiler. High school hymnal. New York, 1910. 8°. pp. 140.
- Dayton, H. Location of the cardiac apex beat. (Amer. Jour. of the Medical Sciences, Oct., 1909, N. s. vol. cxxxviii., p. 543.)
- Percussion of the lungs. (Medical Record, 24 July, 1909, vol. lxxvi., p. 148.)

The last two articles are reprinted in Publications of Cornell University Medical College: researches from the Department of Medicine, Oct. 1909, vol. ii.

Dennis, F. S. The influence of alcohol on trauma. (N. Y. Medical Jour., 28 May, 1910, vol. xci.)

Also separately printed.

- Dennison, B. C. Lightning protection. (Sibley Jour., Feb., 1910, vol. xxiv., p. 187.)
- [Abstract of] Turbo-alternator design; [by] H. G. Reist. (Same, April, 1910, vol. xxiv., p. 311.)
- See also Norris, H. H., and B. C. Dennison. The electrical characteristics of circuits and machines.
- Diederichs, H., translator. The design and construction of internal-combustion engines, by H. Güldner; translated from the 2d revised ed., with additions on American engines, by H. Diederichs. New York, 1910. sm. 4°. pp. 700. 36 folding plates and figs.
- Dorsey, H. G. Coefficients of linear expansion at low temperatures; abstract of a paper presented at the Boston meeting of the Physical Soc., Dec. 28-31, 1909. (Physical Review, Feb., 1910, vol. xxx., p. 271.)
- Magnetostriction; abstract of a paper presented at the Winnipeg meeting of the British Assoc. for the Advancement of Science. (Engineering, Sept., 1909, vol. lxxxviii., p. 428.)

- Magnetostriction in iron-carbon alloys. (Physical Review, June 1910, vol. xxx., p. 698.)
- Douglas, J. F. H. The additional loss in d.c. machines. (Sibley Jour., Jan., 1910, vol. xxiv., p. 141.)
- Transmission line calculations. (Electrical World, 28 April, 1910. vol., lv., p. 1066.)
- Dresbach, M. Observations upon the blood pressure of the sheep. (Amer. Jour. of Physiology, 1 March, 1910, vol. xxv., p. 433.)
- and B. F. Kingsbury. Two new forms of cut-out key. (Quarterly Jour. of Experimental Physiology, 14 April, 1910, vol. iii., p. 777.)
- Durand, E. J. Chart, showing probable homologies of parts in selected representatives of the great groups of green plants. Ithaca, 1910. 32X22 inches. Single sheet.

Privately printed.

- The perithecium of the ascomycetes; review of Dangeard, P. A. L'origine du périthèce chez les ascomycetes. (Botanical Gazette, July, 1909, vol. xlviii., p. 67.)
- Edlund, R. C. Freshman guidance. (Cornell Era, Feb., 1910, vol. xlii., p. 148.)
- A plea for American drama [Woodford prize oration, 1909]. (Representative college orations, by E. Du B. Shurter, 1909, p. 69.)
- Embody, G. C. A list of birds observed at Ashland, Virginia. (Auk, April, 1910, vol. xxvii., p. 169.)
- A new fresh-water amphipod from Virginia, with some notes on its biology. (Proceedings of the U. S. National Museum, 1910, vol. xxxviii., p. 299.)
- Notes on the food of a king eider. (Science, 22 April, 1910, N. S. vol. xxxi., p. 630.)
- Engeln, O. D. von. Photography in glacial Alaska. (National Geographic Magazine, Jan., 1910, vol. xxi., p. 55.)
- —— See also Tarr, R. S., and O. D. von Engeln. A laboratory manual of physical geography.
- Ewing, J. Animal experimentation and cancer. (Jour. of the Amer. Medical Assoc., 22 Jan., 1910, vol. liv., p. 267.)
- A case of chronic pneumonia, polyserositis and senile malnutrition. (Proceedings of the N. Y. Pathological Soc., 1910, N.s. vol. x.)
 - A case of Delhi boil. (Same, p. 12.)
- Chorioma, a clinical and pathological study. (Surgery, Gynecology and Obstetrics, 1910, vol. x., p. 366.)
- The pathogensis of the toxemia of pregnancy. (Amer. Jour. of the Medical Sciences, June, 1910, N.S. vol. cxxxix., p. 828.)

×

- Teratoma testis. (Proceedings of the N. Y. Pathological Soc., 1909, N. S. vol. ix., p. 83.)
- and C. G. L. Wolf. The clinical significance of the urinary nitrogen.

 Nitrogenous metabolism in typhoid fever. (Archives of Internal Medicine, Oct., 1909, vol. iv., p. 330.)

Reprinted in Publications of Cornell University Medical College: Studies from the Department of Pathology, 1909, Vol. ix.

- Faust, A. B. The German element in the United States, with special reference to its political, moral, social and educational influence. Boston, 1909, 2v. 8°. Illus.
 - Same. 2d ed. [with revisions]. Boston, 1910, 2v. 8°. Illus.
- Fetter, F. A. [Review of] The case against socialism; by G. E. Raines.—Present day socialism; by G. E. Raines.—Socialism in local government; by W. G. Fowler.—Problems and perils of socialism; by J. St. L. Strachey.—The triumph of socialism; by J. D. Mayne. (Economic Bulletin, June, 1910, vol. iii., p. 177.)
- Fippin, E. O. The drainage situation in New York. (Cornell Countryman, March, 1910, vol. vii., p. 179.)
- The improvement of soil surveys. (Proceedings of the Amer. Soc. of Agronomy, 1909–1910.)
- The relation of lime to soil improvement [paper read before the Nat. Lime Manufacturers' Assoc. at Pittsburg, Pa., Jan. 27, 1910]. (Circular of the Cornell University Agricultural Experiment Station, May, 1910, no. 7, p. 1.)
- Rural leadership. (Rural Manhood, April, June, 1910, vol. i., no. 4, p. 6, no. 6, p. 6.)
- See also Lyon, T. L., and E. O. Fippin. The principles of soil management.
- Fish, P. A. Canine tetanus. (Abstracts of work done in the laboratory of veterinary physiology, 1910, no. 7, p. 3.)
 - A case of auto-enterectomy in the bitch. (Same, p. 35.)
- The exchange of air in the Eustachian or guttural pouches of the horse. (Amer. Jour. of Physiology, 2 May, 1910, vol. xxvi., p. 229.)
- A fly-blown and distempered dog. (Abstracts of work done in the laboratory of veterinary physiology, 1910, no. 7, p. 15.)
- The identification of animals by branding and otherwise. (Circular of the N. Y. State Veterinary College, 1910, no. 2, p. 1.)

Also in the Report of the N. Y. State Veterinary College, 1908-1908, p. 78.

- Report of the small animal clinic, 1908–1909. (Report of the N. Y. State Veterinary College, 1908–1909, p. 44.)
- Fisher, W. J. The flow of a gas through a capillary tube. (Physical Review, Feb., 1910, vol. xxx., p. 269.)

- The molecular and the frictional flow of gases in tubes. (Same, Sept., 1909, vol. xxix., p. 325.)
- The temperature coefficients of gas viscosity. IV. An apparent relation between viscosity and specific heat. (Same, Aug., 1909, vol. xxix., p. 147.)
 - See also Blaker, E., and W. J. Fisher. Experiments in physics.
- Fite, W. B. Groups of order 3m in which every two conjugate operations are permutable. (Mathematische Annalen, 14 Oct., 1909, vol. lxvii., p. 498.)
- Irreducible homogeneous linear groups in an arbitrary domain. (Transactions of the Amer. Mathematical Soc., July, 1909, vol. x., p. 315.)
- [Review of] Gruppen-und Substitutionentheorie; by E. Netto. (Bulletin of the Amer. Mathematical Soc., Oct., 1909, vol. xvi., p. 33.)
- Geissler, L. R. The measurability of attention by Professor Wirth's methods. (Amer. Jour. of Psychology, Jan., 1910, vol. xxi., p. 151.)
 - The measurement of attention. (Same, Oct., 1909, vol. xx., p. 473.)
- See also Titchener, E. G., and L. R. Geissler. A bibliography of the scientific writings of Wilhelm Wundt (continued).
- Gibbs, R. C. The effect of temperature on fluorescence and absorption.

 11. Fluorescence and absorption of canary glass at low temperatures. (Physical Review, March, 1910, vol. xxx., p. 377.)
- See also Molby, F. A., and R. C. Gibbs. The absorption of limonene at low temperatures.
- Gibson, C. L. Perforatory gastric ulcer. (N. Y. State Jour. of Medicine, Oct., 1909.)
- Sarcoma of the prostate. (Jour. of the Amer. Medical Assoc., 23 April, 1910, vol. liv.)
- The technique of operations on the lower portion of the ureter. (Amer. Jour. of the Medical Sciences, Jan., 1910, N.S. vol. cxxxix., p. 65.)
- Tuberculosis of the pericardium cured by incision and drainage. (Medical Record, 7 Aug., 1909, vol. lxxvi., p. 216.)
- Unusual cases of prostatic disease. (Medical and Surgical Reports of St. Luke's Hospital, vol. i., p. 70.)
- Guerlac, O. G. The Institute of France. (N. Y. Evening Post, 23 April, 1910.)
- La langue française aux États-Unis. (La Grande Revue, 25 Sept., 1909, vol. lviii.)
- The two Frances. (Amer. Mc All Record, Feb., 1910, vol. xxviii., p. 5.)
- [Review of] L'église de Paris et la révolution; par P. Pisani. (Amer. Historical Review, April, 1910, vol. xv., p. 650.)

- [Review of] Les projets de restauration monarchique et le généra-Ducrot; par le vicomte de Chalvet-Nastrac. (Same, Oct., 1909, vol., xv., p. 149.)
- Gwyer, F. Thymus gland treatment of certain diseases: goitre, arteriol sclerosis, rheumatoid arthritis, hæmorrhoids, cystic tumor of breast, pulmonary tuberculosis, cancer: a report of experimental work. (N. Y. Medical Jour., 19 Feb., 1910, vol., xci.)
- Hammond, W. A. [Review of] Is immortality desirable? by G. L. Dickinson. (Philosophical Review, Jan., 1910, vol. xix., p. 92.)
- Harper, W. M. The brood mare. (Cornell Reading-Course for Farmers, Nov., 1909, no. 46, p. 1.)
 - Feeding the horse. (Same, Jan., 1910, no. 48, p. 33.)
 - The foal. (Same, Dec., 1909, no. 47, p. 17.)
 - Harness and harnessing. (Same, March, 1910, no. 50, p. 77.)
 - Horse training. (Same, Feb., 1910, no. 49, p. 65.)
- Harris, F. S. Biological conditions in Book of Mormon lands. (Improvement Era, March, 1910, vol. xiii., p. 385.)
 - Pruning of fruit trees. (El Progreso, 4 Feb., 1910, vol. xi., p. 3.)
- A republic within a county. (Improvement Era, Sept., 1909, vol. xii., p. 886.)
- Harris, G. D., and others. Oil and gas in northwestern Louisiana, with special reference to the Caddo field, by G. D. Harris and I. Perrine and W. E. Hopper. (Bulletin of the Geological Survey of Louisiana, 1909, no. 8, p. 1.)
- Harris, G. W., editor. Islandica: an annual relating to Iceland and the Fiske Icelandic collection in Cornell University Library. Vol iii., 1910.
- Hart, J. M. The hypnerotomachia. (Nation, 26 Aug., 1909, vol. lxxxix., p. 182.)
 - Perverted meanings. (Same, 14 Oct., 1909, vol. lxxxix., p. 352.)
- [Review of] Confision del amante, por J. Goer; herausgegeben von A. Birch-Hirshfeld. (Same, 6 Jan., 1910, vol. xc., p. 17.)
- [Review of] English nativity plays; by S. B. Hemingway. (Same, 30 Sept., vol. lxxxix., p. 311.)
- [Review of] The oldest English epic; translated by F. B. Gummere. (Same, 22 July, 1909, vol. lxxxix., p. 79.)
- [Review of] Swift's Battle of the books; edited by A. Guthkelch. (Same, 16 Sept., 1909, vol. lxxxix., p. 259.)
- [Review of] Verse satire in England before the Renaissance; by S. M. Tucker. (Same, 23 Sept., 1909, vol. lxxxix., p. 277.)
- Hatcher, R. A. Note on strophanthin. (Jour. of the Amer. Medica! Assoc., 26 March, 1910, vol. liv., p. 1050.)

Also separately reprinted.

- Scopolamin and morphin in narcosis and in childbirth; report to the Council on Pharmacy and Chemistry of the Amer. Medical Assoc. (Same, 5-12 Feb., 1910, vol. liv., pp. 446, 516.)
 Also separately reprinted.
- Hayes, A., Jr. The relation of the law to public health. (Popular Science Monthly, March, 1910, vol. lxxvi., p. 280.)
- [Review of] Mechem & Gilbert, Cases on damages. (Columbia Law Review, Nov., 1909, vol. ix., p. 644.)
- [Review of] Sedgwick, Elements of the law of damages. (Same March, 1910, vol. x., p. 280.)
- Haynes, I. S. The early diagnosis of intestinal cancer. (N. Y. State Jour. of Medicine, Nov., 1910, vol. ix., p. 452.)
 Also separately reprinted.
- Nephrectomy in pyo-nephritis—the history of a case with interesting features. (Amer. Jour. of Dermatology, 1910, vol. xiv.)

 Also separately reprinted.
- Hedges, C. C., joint author. A chemical study of the lime-sulphur wash, [by] L. L. Van Slyke, C. C. Hedges and A. W. Bosworth. (Bulletin of the N. Y. Agricultural Experiment Station, Dec., 1909, no. 319. p. 383.)
- Hermannsson, H. Bibliography of the sagas of the kings of Norway and related sagas and tales. Ithaca, 1910. 8°. pp. (5) + 75. (Islandica III.)
- Herrick, G. W. A new species of aspidiotus. (Entomological News, Jan., 1910, vol. xxi., p. 22.)
- Notes on mites affecting chickens. (Jour. of Economic Entomology Oct., 1909, vol. ii., p. 341.)
- The outbreak of aphids in 1909. (Proceedings of the Western N.Y. Horticultural Soc., 55th annual meeting, 26 Jan., 1910, p. 204.)
- The pecan case-bearer. (Bulletin of the Texas Experiment Station, 1909, no. 124.)
- Articles in the Rural New Yorker, Sept., 1909-April, 1910, vol. lxviii.—lxix.: The strawberry flea-beetle, 25 Sept.; Insect parasites as an aid to man, 2 Oct., p. 861; The root aphis on apple, 12 Feb., p. 164, Controlling the bud-moth, 19 Feb. p. 193; Spraying for the terrapin scale, 19 Feb., p. 200; Work of the grape-berry moth, 19 Feb., p. 201; The strawberry root-worm, Feb.; The outbreak of apple lice in 1909, 5 March, p. 260; Hornets as flycatchers, 30 April, p. 515.
- and R. W. Harned. Notes on additional insects on cultivated pecans. (Jour. of Economic Entomology, Aug., 1909, vol. ii., p. 293.)
- Hess, H. D. The iron and steel industry as an engineering field. (Sibley Jour., Dec., 1909, vol. xxiv., p. 100.)
 - Hewett, W. T. The Darwin celebration in Cambridge. (Nation, 15 uly, 1909, vol. lxxxix., p. 58.)
 - The Geneva anniversary. (N. Y. Evening Post, 7 Aug., 1909.)

- Hill, I. L. Report of a maternity clinic with a study of infant mortality. New York, 1910. pp. 64.
- Infant mortality in obstetric practice. (N. Y. Medical Jour., 16 April, 1910, vol. xci., p. 798.)
- Hirshfeld, C. F. See Barnard, W. N., and others. Elementary heat-power engineering.
- Hitzrot, J. M. Intravenous local anæsthesia. (Annals of Surgery, Oct., 1909, vol. 1., p. 783.)
 Also separately reprinted.
- Hoch, A. The manageable causes of insanity. (State Hospitals Bulletin, Sept., 1909, p. 358.)
- On some of the mental mechanisms in dementia præcox, being a part of the symposium before the Amer. Neurological Assoc. at Washington, May, 1910.
- Hoobler, B. R. Bacterial vaccines in children's diseases. (Archives of Pediatrics, Sept., 1909, vol. xxvi., p. 674.)
- The therapeutic use of bacterial vaccines. (Amer. Jour. of the Medical Sciences, Jan., 1910, N.S. vol. cxxxix., p. 39.)
- Hopkins, G. S. Directions for the dissection and study of the cranial nerves of the horse. n.p., n.d. pp. 20. 5 colored plates.
- Howe, H. E. The electrical conductivity of fluorescent anthracene vapor. (Physical Review, April, 1910, vol. xxx., p. 453.)
- Hunt, J. R. The sensory system of the facial nerve and its symptomatology [presidential address delivered before the N. Y. Neurological Soc. Feb. 2, 1909]. (Jour. of Nervous and Mental Disease, 1909, vol. xxxvi., p. 321.)
- The symptom-complex of the acute posterior poliomyelitis of the geniculate, glossopharyngeal, auditory and pneumo-gastric ganglia. (Archives of Internal Medicine, June, 1910, vol. v.)
- Hunter, A. The determination of small quantities of iodine, with special reference to the iodine content of the thyroid gland. (Jour. of Biological Chemistry, May, 1910, vol. vii., p. 321.)
- A method for the determination of small quantities of iodine in organic material. (Proceedings of the Soc. for Experimental Biology and Medicine, 1909, vol. vii., p. 10.)
- See also Simpson, S., and A. Hunter. The possible vicarious relationship between the pituitary and thyroid glands.—Relations between the thyroid and pituitary glands.
- Hutchinson, J. I. On linear transformations which leave an Hermitian form invariant. (Amer. Jour. of Mathematics, April, 1910, vol. xxxii., p. 195.)
- Picard's algebraic functions of two variables. (Bulletin of the Amer. Mathematical Soc., July. 1909, vol. xv., p. 495.)

- Isaacs, A. E. Calculus in the lower segment of the ureter in the female. (Medical Record, 19 June, 1909, vol. lxxv., p. 1054.)
- Excision of sternum for sarcoma. (Amer. Jour. of Surgery, Sept., 1909, vol. xxiii., p. 291.)
- Tuberculosis of the genito-urinary organs. (Amer. Medicine, May, 1910, N.s. vol. v., p. 250.)
- Typhoid fever from the surgical point of view. (N. Y. Medical Jour., 4 Dec., 1909, vol. xc., p. 1104.)
- Jacoby, H. S. Structural details; or, Elements of design in heavy framing. New York, 1909. 8°. pp. ix. + 368. Illus.
- [Review of] Text book on graphic statics; by C. W. Malcolm. (Engineering Literature: Supplement to Engineering News, 16 Dec., 1909, vol. xlii., p. 58.)
- [Review of] Theory of structures; by R. J. Woods. (Same, 10 Jan., 1910, vol. xliii., p. 9.)
- joint author. Report of Committee no. vII. on wooden bridges and trestles. (Proceedings of the 10th Annual Convention of the Amer. Railway Engineering and Maintenance of Way Assoc., 1909, vol. x., p. 533.)
- Same [to be presented to the 11th Annual Convention of the Amer. Railway Engineering and Maintenance of Way Assoc.] (Bulletin of the Amer. Railway Engineering and Maintenance of Way Assoc., Dec., 1909, no. 118, p. 23.)
- Jenks, J. W. Governmental action for social welfare. New York, 1910.

 8°. pp. xvi. + 226. (American social progress series.)
- Do trusts make high prices? (Review of Reviews, March, 1910, vol. xli., p. 343.)
- The immigration problem. (Proceedings of the Internat. Committee of the Y. M. C. A., May, 1910.)
- Monetary conditions in China. (Chinese Students' Monthly, Dec., 1909, p. 110.)
- Monetary conditions in China; address at Worcester. (China and the far east: Clark University lectures, March, 1910, p. 121.)
 - The rising cost of living. (Delineator, April, 1910, p. 310.)
- [Review of] Business administration; by C. C. Parsons. (Economic Bulletin, June, 1910, vol. iii., p. 164.)
- Karapetoff, V. What a senior in engineering ought to know about mathematics. Ithaca, [1910].
- Anarchical vs. petrified spelling. (Nation, 13 Jan., 1910, vol. xc.. p. 34.)

- Contributions to discussion at the annual convention. (Proceedings of the Amer. Institute of Electrical Engineers, 1909, vol. xxvii., pp. 1249, 1264, 1268, 1272.)
- Contributions to discussion on "Teaching engineering mathematics." (Proceedings of the Soc. for the Promotion of Engineering Education, 1909, vol. xvii., p. 54.)
- Efficiency in engineering education. (Convention Bulletin of the Soc. for the Promotion of Engineering Education, June, 1910.)
 - The new business man. (N. Y. Call, 19 Dec., 1909.)
 - Some life ideals. (Sibley Jour., Oct., 1909, vol. xxiv., p. 1.)

 Also separately reprinted for the Simplified Spelling Board.
- Keays, F. L. Compressed air illness, with a report of 3692 case. (Publications of Cornell University Medical College: researches from the Department of Medicine, Oct., 1909, vol. ii., p. 1.)
- editor. Publications of Cornell University Medical College: researches from the Department of Medicine, 1909.
- Kemmerer, E. W. The bibliography of economics in the United States. (Papers of the Bibliographical Soc. of America, 1909, vol. iv., p. 83.)
- Federal corporation tax. (Papers and Proceedings of the 3d Internat, Conference on State and Local Taxation, 1909, p. 245.)
- State finance, 1907 and 1908. (N. Y. State Library Bulletin on Review of Legislation, 1907 and 1908.)
 - Taxation, 1907 and 1908. (Same.)
- [Review of] Jevons, W. S. Investigations in currency and finance. (Annals of the Amer. Academy of Political and Social Science, May, 1910, vol. xxxv., p. 260.)
 - managing editor. Economic bulletin, 1909-1910.
- Kessler, A. G. See Lewis, G. W., and A. G. Kessler. The rating of stationary engines.
- Keyes, E. L., jr. Diseases of the genito-urinary organs considered from a medical and surgical standpoint. New York, 1910. 8°. pp. xvii. + 975. Illus.
- The effect of venereal disease upon the public health. (N. Y. Medical Jour., 1 Jan., 1910, vol. xci.)
- Functional diagnosis of renal disease, especially by experimental polyuria. (Annals of Surgery, March, 1910, vol. li., p. 340.)
- Non-tubercular renal infections. (Boston Medical and Surgical Jour., 10 March, 1910, vol. clxii., p. 307.)
- Radiographic studies of the renal pelvis and ureter. (Transactions of the Amer. Urologic Assoc., 1909, vol. iii.)

- Kimball, D. S. [Review of] Efficiency as a basis for operation and wages; by H. Emerson. (Economic Bulletin, June, 1910, vol. iii., p. 156.)
- Kingsbury, B. F., and H. D. Reed. The columella auris in amphibia. (Jour. of Morphology, Nov., 1909, vol. xx., p. 549.)
- See also Dresbach, M., and B. F. Kingsbury. Two new forms of cut-out key.
- Lambert, A. The obliteration of the craving for narcotics. (Jour. of the Amer. Medical Assoc., 25 Sept., 1909, vol. liii., p. 985.)
- The treatment of alcohol and morphine addiction. (N. Y. State Jour. of Medicine, Jan., 1910, vol. x. p. 4.)
- and C. G. L. Wolf. Protein metabolism in pneumonia. (Archives of Internal Medicine, April, 1910, vol. v., p. 406.)
- Law, J. Text book of veterinary medicine. Vol. v. 2d ed., revised. Ithaca, 1909. 8°. pp. 621.
- Lewis, G. W. Gas analysis apparatus and methods used in the analysis. (Horseless Age, 16 March, 1910, vol. xxv., p. 397.)
- Gasoline analysis, theoretical computations of gasoline used in tests. (Same, 23 March, 1910, vol. xxv., p. 429.)
- Study of fuel mixture of a Franklin air cooled motor. (Same, 9 March, 1910, vol. xxv., p. 361.)
- and A. G. Kessler. Rating of stationary gas engines. (Sibley Jour., June, 1910, vol. xxiv., p. 403.)
- Livermore, K. C. Women as farmers. (Vocations for the trained woman; edited by A. F. Perkins, 1910, p. 133.)
- See also Warren, B. F., and K. C. Livermore. Laboratory exercises in farm management.
- Lusk, G. The elements of the science of nutrition. 2d ed., revised and enlarged. Philadelphia, 1909. 8°. pp. 402. Frontisp. and diagrs.
- The fate of the amino acids in the organism. (Jour. of the Amer. Chemical Soc., May, 1910, vol. xxxii., p. 671.)
- A plea for hospital reorganization. (Jour. of the Amer. Medical Assoc., 30 April, 1910, vol. liv., p. 1421.)
- See also Ringer, A. I., and G. Lusk. Ueber die Entstehung von Dextrose aus Aminosäuren bei Phlorhizinglycosurie.
- Lyon, T. L. Soils of New York State. (Bulletin of the N. Y. State Department of Agriculture, 1909, no. 9, p. 179 d.)
 - Also reprinted in Circular No. 1 of the same department p. 9.
- and J. A. Bizzell. The availability of soil nitrogen in relation to the basicity of the soil and to the growth of legumes. (Jour. of Industrial and Engineering Chemistry, July, 1910, vol. ii., p. 313.)

- ——— Changes produced in soils by subjecting them to steam under pressure [abstract of papers presented at the 7th Internat. Congress of Applied Chemistry, 1909]. (Jour. of the Soc. of Chemical Industry, 15 July, 1909, vol. xxviii., p. 721.)
 - Effect of steam sterilization on the water soluble matter in soils. (Bulletin of the Cornell University Agricultural Experiment Station, April, 1910, no. 275, p. 129.)
 - Some conditions favoring nitrification in soils. (Science, 26 Nov., 1909, N.S. vol. xxx., p. 773.)
 - and E. O. Fippin. The principles of soil management. New York, 1909. sm. 8°. pp. xxxiii. + 531. Illus. (Rural text-book series.)
 - and J. O. Morgan. The effect of fertilizers applied to timothy on the corn crop following it. (Bulletin of the Cornell University Agricultural Experiment Station, Feb., 1910, no. 273, p. 53.)
 - McClendon, J. T. On artificial parthenogenesis of the sea urchin egg. (Science, 1 Oct., 1909, N.S. vol. xxx., p. 434.)
 - On the dynamics of cell division. 1. (Archiv für Entwicklungsmechanik, 1910, vol. xxix.)
 - On the effect of centrifugal force on the frog's egg. (Archiv für Zellforschung, 1910, vol. v., p. 1.)
 - On the nucleo-albumin in the yolk platelets of the frog's egg, with a note on the black pigment. (Amer. Jour. of Physiology, 1 Dec., 1909, vol xxv., p. 195.)
 - McCloskey, A. G., editor. Cornell rural school leaflet, 1909-1910.
 - MacGillivray, A. D. Blennocampinæ—descriptions of new genera and species—synonymical notes. (Canadian Entomologist, 1908, vol. xl., p 289.)
 - Emphytinæ—new genera and species and synonymical notes. (Same, p. 365.)
 - Fleas and the bubonic plague. (Good Health, Sept., 1909, vol. xliv.)
 - The house-fly. (Cornell Rural School Leaflet, 1909, vol. iii., p. 14.)
 - The house-fly as a carrier of disease. (Good Health, 1909, vol. xliv., p. 498.)
 - A new genus and some new species of tenthredinidæ. (Canadian Entomologist, 1909, vol. xli., p. 345.)
 - A new genus and species of blennocampinæ from Texas. (Same, 1908, vol. xl., p. 454.)
 - A synopsis of the American species of scolioneurinæ. (Annals of the Entomological Soc. of America, Dec., 1909, vol. ii., p. 259.)
 - Two new species of saw-flies. (Canadian Entomologist, 1909, vol. xli., p. 402.)

- McMahon, J. On the use of *n*-fold Riemann spaces in applied mathematics. (Bulletin of the Amer. Mathematical Soc., July, 1909, vol. xv., p. 486.)
- Meara, F. S. A case of so-called congenital malaria. (Archives of Pediatrics, July, 1909, vol. xxvi., p. 517.)
- Meningitis and conditions simulating meningitis. (Same, April1910, vol. xxvii., p. 261.)
- Treatment of pneumonia; a lecture. (N. Y. Medical Jour., 8 Jan., 1910, vol. xci., p. 53.)
- The treatment of rheumatic fever. (Amer. Jour. of the Medical Sciences, March, 1910, N.S. vol. cxxxix., p. 328.)
- and A. S. Taylor. A case of cerebral hemorrhage (birth) with operation. (Archives of Pediatrics, Nov., 1909, vol. xxvi., p. 846.)

Merritt, E., editor. The physical review, 1909-1910.

- See also Nichols, E. L., and E. Merritt. Studies in luminescence. XI.
- Minns, E. R. Barnyard manure, its value and uses. Chicago, 1909. 8°. pp. 28.
- An ear-to-row corn contest. (Rural New Yorker, 2 April, 1910, vol. lxix., p. 409.)
- Molby, F. A. The rotatory dispersion of quartz at -109°C. and observations at other temperatures. (Physical Review, Feb., 1910, vol. xxx., p. 273.)

Abstract of a paper presented at the Boston meeting of the Physical Soc., Dec. 28-31, 1909.

- The rotatory power of limonene at low temperatures. (Same, Jan., 1910, vol. xxx., p. 77.)
- —and R. C. Gibbs. The absorption of limonene at low temperatures. (Same, p. 92.)
- contributor. Results of magnetic observations made by the Coast and Geodetic Survey between July 1, 1908, and June 30, 1909, by R. L. Faris. (Report of the Supt. of the Coast and Geodetic Survey for 1908-1909, Appendix no. 3, p. 75.)

In part the observations were made by Mr. Molby.

- Molitor, D. A. Geodetic surveying for the use of students in the College of Civil Engineering, Cornell University. Ithaca, 1910. 8°. pp. 29 Diagrs.
- The Panama canal. (Jour. of the Cleveland Engineering Soc., June, 1910.)
- Monroe, B. S. Early days of Delta. (Alpha Zeta Quarterly, 8 Dec., 1909, vol. iii.)
- Moore, V. A. Report of the New York State Veterinary College for the year 1908-1909, transmitted to the Legislature, Jan. 17, 1910. Albany, 1910. 8°. pp. 100.

- Animal experimentation; the protection it affords animals themselves and its value to the live stock industry of the country. (Jour. of the Amer. Medical Assoc., 1910, vol. liv., p. 854.)
- Bovine tuberculosis and methods for its control [Proceedings of the 22d Annual Convention of the Assoc. of Amer. Agricultural Colleges and Experiment Stations]. (Bulletin of the Office of Experiment Stations U. S. Dept. of Agriculture, 1909, no. 212, p. 88.)
- Bovine tuberculosis in New York, its extent, spread and prevention. (Proceedings of the N. Y. State Dairymen's Assoc., 1906-08.)
- Diagnosis of rabies, its spread and methods of control in New York

 State. (Proceedings of the Amer. Veterinary Medical Assoc., 1909.)

 Also in Amer. Veterinary Review, Oct. 1909, vol. xxxvi, p. 20.
- Dr. Law and veterinary education. (Exercises attending the presentation of the portrait of Dr. James Law, 1909, p. 11.)
- A study of tubercle bacteria in milk and feces of tuberculinreacting cows. (29th Annual Report of the N. Y. State Dept. of Health, 1908, vol. i., p. 567.)
- Veterinary science and its problems. (Amer. Veterinary Review, June, 1910, vol. xxxvii., p. 328.)
- and others. Report of committee on diseases of the Amer. Veterinary Medical Assoc., 1909. (Proceedings of the Amer. Veterinary Medical Assoc., 1909.)

Also in Amer. Veterinary Review, Oct. 1909, vol. xxxvi, p. 114.

- Murlin, J. R. The daily curve of nitrogen elimination in the pregnant as compared with the non-pregnant dog [preliminary]. (Proceedings of the Society for Experimental Biology and Medicine, 1910, vol. vii.)
- The metabolism of development. I. The energy metabolism of the pregnant dog. (Amer. Jour. of Physiology, April, 1910, vol. xxvi., p. 134.)
- joint author. The energy metabolism of parturient women [preliminary], by T. M. Carpenter and J. R. Murlin, [Proceedings of the Amer. Physiological Soc.] (Same, March, 1910, vol. xxv., p. xxvi.)
- joint author. The influence of oils and of lecithin on the protein metabolism [preliminary], by L. H. Mills and J. R. Murlin. (Proceedings of the Soc. for Experimental Biology and Medicine, 1910, vol. vii.)
- Nammack, C. E. The diagnosis and treatment of peptic ulcer. (Medical Record, 1 Jan., 1910, vol. lxxvii., p. 10.)

Also separately reprinted.

— Ministering women. (N. Y. Medical Jour., 28 May, 1910, vol. xci., p. 1110.)

Also separately reprinted.

— Norway for neurasthenia. (Same, 7 May, 1910, vol. xci., p. 946.) Also separately reprinted.

Nasmyth, G. W. The cosmopolitan movement and international arbitration: address presented at the Lake Mohonk Conference on Internat. Arbi-

- tration, May 19-21, 1909. (Report of the 15th Annual Meeting of the Lake Mohonk Conference on Internat. Arbitration, 1909, p. 150.)
- Experiments in impact excitation with the Lepel singing arc; abstract of a paper presented at the Boston meeting of the Amer. Physical Soc., Dec. 28-31, 1909. (Physical Review, Feb., 1910, vol. xxx., p. 281.)
- An improved form of the Duddell singing arc: abstract of a paper presented at the Washington meeting of the Amer. Physical Soc., April 26–27, 1909. (Electrician, 20 Aug., 1909, vol. lxiii., p. 746.)
- The peace movement in the colleges. (Independent, 17 Feb., 1910, vol. lxviii., p. 362.)
- [Review of] An elementary manual of radiotelegraphy and radiotelephony for students and operators; by J. A. Fleming. (Physical Review, July, 1909, vol. xxix., p. 88.)
 - editor. The quill of Quill and Dagger, 1909-1910.
- Needham, J. G. General biology; a book of outlines and practical studies for the general student. Ithaca, 1910. 8°. pp. xiv. + 542. Illus.
- Kinglets captured by burdocks. (Bird Lore, Nov.-Dec., 1909, vol. xi., p. 261.)
- Notes on the neuroptera in the collection of the Indian Museum. (Records of the Indian Museum, 1909, vol. iii., p. 185.)
- Notes on the neuropteroid insects of Isle Royal, Mich. (Report of the Michigan State Geological and Natural History Survey for 1908, p. 305.)
- Nichols, E. L. Ogden Nichols Rood, a biography. (Biographical Memoirs of the National Academy of Sciences, 1909, vol. vi., p. 499.)
- and E. Merritt. Studies in luminescence. x1. The distribution of energy in fluorescence spectra. (Physical Review, March, 1910, vol. xxx., p. 328.)
 - editor. The physical review, 1909-1910.
- Niles, W. L. Third annual report of the Christ Church Tuberculosis Class. New York, 1909. pp. 16.
- The cutaneous and conjunctival tuberculin tests in the diagnosis of tuberculosis. (Publications of Cornell University Medical College: researches from the Department of Medicine, Oct., 1909, vol. ii.)
- Norris, H. H. Sibley College in 1910. (Sibley Jour., Jan., 1910, vol. xxiv., p. 131.)
- and B. C. Dennison. The electrical characteristics of circuits and machines. New York, 1910. 8°. pp. 200.
- Northup, C. S. Influences of religion on English literature. (Dial., 16 Jun. 1910, vol. xlviii., p. 431.)

- Like a midsomer rose. (Modern Language Notes, Dec., 1909, vol. xxiv., p. 257.)
- Misinterpretations of the Carlyles. (Dial, 16 Oct., 1909, vol. xlvii., p. 283.)
- A new survey of nineteenth century literature. (Same, 1 March, 1910, vol. xlviii., p. 152.)
- The story of New England expansion. (Same, 16 April, 1910, vol. xlviii., p. 272.)
- [Review of] English literature, its history and its significance in the life of the English speaking world; by W. J. Long. (Jour. of English and Germanic Philology, April, 1910, vol. ix., p. 281.)
- [Review of] Selections from early American writers, 1607-1800, edited by W. B. Cairns. (Jour. of Pedagogy, June, 1900, vol. xx., p. 177.)
- co-operating editor. The journal of English and Germanic philology.
 - co-operating editor. The journal of pedagogy, 1909-1910.
- Nutt, J. J. Intraperineural neurotomy; an operation for infantile cerebral hemiplegia. (Amer. Jour. of Orthopedic Surgery, Nov., 1909, vol. vii., p. 151.)
 - Olmsted, E. W. Les Cabotins. (Cornell Era, Jan., 1910, vol. xlii., p. 96.)
- editor. Legends, tales and poems, by G. A. Becquer, edited with introduction, notes and vocabulary. [2d ed., corrected and enlarged. Boston, [1910]. sm. 8°. pp. lxvii. + 288. Port. (Internat. modern language series.)
- and F. D. Burnet, translators. The fountain of the satyr, translated from the Portuguese of Eugenio de Castro. (Poet Lore, Jan,-Feb., 1910, vol. xxi., p. 88.)

The prefatory note is by Professor Olmsted alone.

- Orndorff, W. R., and T. G. Delbridge. Tetrachlograllein and some of its derivatives. (Amer. Chemical Jour., Sept., 1909, vol. xlii., p. 183.)
- Owens, F. W. The introduction of ideal elements and a new definition of projective n-space. (Transactions of the Amer. Mathematical Soc., April 1910, vol. xi., p. 141.)
- [Review of] Grundlagen der Analysis; von M. Pasch. (Bulletin of the Amer. Mathematical Soc., Jan., 1910, vol. xvi., p. 213.)
- Perley, G. A. Experiments on solarization. 1. (Jour. of Physical Chemistry, Nov., 1909, vol. xiii., p. 630.)
- Perrine, I. See Harris, G. D., and others. Oil and gas in northwestern Louisiana.
- Pertsch, J. G. Electric railway problems. Part 1. Method and applications of graphical integration and differentiation. (Sibley Jour., March, 1910, vol. xxiv., p. 245.)

- —— Same. Part II. Analytical and graphical construction of speedtime graphs and applications. (Same, April, 1910, vol. xxiv., p. 333.)
- Problems in high-tension power transmission. (Same, Oct., 1909, vol. xxiv., p. 15.)
- Peterson, E. G. Ascending tracts in the spinal cord of the cat [abstract], (Report of the British Assoc. for the Advancement of Science, 1909.)
- Pierce, C. A. Studies in thermo-luminescence. 111. The distribution of energy in the luminescence spectrum of sidot blende. (Physical Review, June, 1910, vol. xxx., p. 663.)
- See also Bedell, F., and C. A. Pierce. Direct and alternating current testing.
 - Polk, W. M. Address-Florence Nightingale celebration, May 20th, 1910.
- Further development of the surgery of the upper pelvic floor by direct suprapubic approach.—The end results of surgical operations for neurasthenia, associated with ptoses of pelvic viscera. (Transactions of the Amer. Gynecological Soc., 1910, vol. xxxv.)
- Pope, P. R. German composition, with notes and vocabularies. 2d revised ed. New York, 1910. 12°. pp. x. + 205.
- Richard Wagner's Farce of the ancient mariner. (Nation, 27 Jan., 1910, vol. xc., p. 84.)
- Strauss and Wagner. (Musical America, 19 March, 1910, vol. xi., p. 16.)
- Publow, C. A. Questions and answers on buttermaking. New York, 1909. 8°. pp. 3 + 75.
- Fancy cheeses for the farm and factory. (Bulletin of the Cornell University Agricultural Experiment Station, Dec., 1909, no. 270, p. 1.)
- and H. C. Troy. Questions and answers on milk and milk-testing. New York, 1909. 8°. pp. 2 + 97. Frontisp.
- Rahe, A. H. See Buxton, B. H., and A. H. Rahe. Effect of dilution upon the flocculation of colloids.
- —— See also Torrey, J. C., and A. H. Rahe. The distribution of bacteria in bottled milk.
- Ranum, A. The group of classes of congruent quadratic integers with respect to a composite ideal nodulus. (Transactions of the Amer. Mathematical Soc., April, 1910, vol. xi., p. 172.)
- [Review of] La geometria non-euclidea; da R. Bonola. (Bulletin of the Amer. Mathematical Soc., June, 1910, vol. xvi., p. 490.)
- Reed, H. D., and A. H. Wright. The vertebrates of the Cayuga Lake Basin, N. Y. (Proceedings of the Amer. Philosophical Soc., 1909, vol. xlviii., p. 370.)

- See also Kingsbury, B. F., and H. D. Reed. The columella auris in amphibia.
- Rice, J. E., and C. A. Rogers. Building poultry houses. (Bulletin of the Cornell University Agricultural Experiment Station, April, 1910, no. 274, p. 77.)
- The principles of brooding; the improved New York State gasoline-heated colony-house brooding system. (Same, May, 1910, no, 277. p. 179.)
- Richtmyer, F. K. The dependence of the photo-electric current on light intensity. (Physical Review, July, 1909, vol. xxix., p. 71.)
- Illuminating engineering from the educational standpoint: paper presented to the Illuminating Engineering Soc., Sept., 28, 1909 [abstract]. (Illuminating Engineer, London, 1909, vol. ii., p. 851.)
- On the photo-electric effect with the alkali metals. 11. (Physica! Review, Oct., 1909, vol., xxix., p. 404.)
- Some photo-electric properties of the alkali metals. III. The dependence of the photo-electric current on the wave length of the incident light. (Same, March, 1910, vol. xxx., p. 385.)
 - Same IV. Laboratory applications. (Same, p. 394.)
- Ries, H. Economic geology, with special references to the United States., 3d ed. New York, 1910. 8°. pp. xvi. + 537. 66 plates and 237 figs.
- The clays of Nova Scotia and New Brunswick. (Bulletin of the Canadian Mining Institute, 1910, no. 2.)
- and H. Leighton. History of the clay-working industry in the United States. 1st ed. New York, 1909. 8°. pp. viii. + 270. 8 plates. and 3 figs.
- Riggs, L. W. The determination of iodine in protein combinations. 2d paper. (Jour. of the Amer. Chemical Soc., May, 1910, vol. xxxii., p. 692.)
- Riley, W. A. The case against the house-fly, a danger and a nuisance, (Rural New Yorker, 26 June, 1909, vol. lxviii., p. 621.)
- Dipylidium caninum in an American child. (Science, 4 March, 1910, N.s. vol. xxxi., p. 349.)
- Earlier references to the relation of flies to disease. (Same, 18 Feb., 1910, N.S. vol. xxxi., p. 263.)
- Kircher and the germ theory of disease. (Same, 27 April, 1910, N.S. vol. xxxi., p. 666.)
- A little-known poultry worm. (Rural New Yorker, 23 April, 1910, vol. lxix., p. 490.)
- Papers from the Tortugas Laboratory of the Carnegie Institution. (Nation, 7 Oct., 1909, vol. lxxxix., p. 334.)
- Worms in dried codfish. (Rural New Yorker, 5 Feb., 1910, vollxix., p. 130.)

- Ringer, A. I., and G. Lusk. Ueber die Entstehung von Dextrose aus Aminosäuren bei Phlorhizinglycosarie. (Zeitschrift für Physiologische Chemie, 17 May, 1910, vol. lxvi., p. 106.)
- Robertson, F. W. Sterilization for the criminal unfit. (Amer. Medicine, June, 1910.)
 - Rogalsky, G. F., editor. Delta Chi Quarterly, 1909-1910.
- Rogers, C. A. Feeding color, an aid in studying physiological development. (Cornell Countryman, May, 1910, vol. vii., p. 269.)
- —— See also Rice, J. E., and C. A. Rogers. Building poultry houses.

 —The principles of brooding.
- Rogers, J. The significance of thyroidism and its relation to goitre. (Annals of Surgery, Dec., 1909, vol. l., p. 1025.)
- Rose, F. The care and feeding of children. Pt. 1. (Cornell Reading-Course for Farmers' Wives, Jan., 1910, N.S. vol. ii., p. 64.)
- Human nutrition. Pt. 1-2. (Same, Nov.-Dec., 1909, vol. ii., pp. 24, 48.)
- Sano, S. Electricity in Japan. (Sibley Jour., May, 1910, vol. xxiv., p. 369.)
- Voltage wave form of delta connected alternators. (Electrical World, 14 Oct., 1909, vol. liv., p. 909.)
- Savage, E. S. The substitution of roots for concentrated foods in rations for milk production; under the direction of H. H. Wing. (Bulletin of the Cornell University Agricultural Experiment Station, June, 1909, no. 268, p. 441.)
- and G. W. Tailby, jr. Substitutes for skimmed milk in raising calves; under the direction of H. H. Wing. (Same, July, 1909, no. 269 p. 489.)
- Schaeffer, J. P. On the genesis of air cells in the conchæ nasales [presented at the 25th session of the Amer. Assoc. of Anatomists, 1909]. (Anatomical Record, April, 1910, vol. iv., p. 167.)
- The sinus maxillaris and its relations in the embryo, child and adult man. [presented at the 24th session of the Amer. Assoc. of Anatomists, 1908]. (Amer. Jour. of Anatomy, April, 1910, vol. x., p. 313.)
- Some practical considerations on the sinus maxillaris. (University of Pennsylvania Medical Bulletin, 1909, vol. xxii., p. 235.)
- Schmidt, N. Government by the people: an address at the Ontario County Woman Suffrage Convention at Phelps, N. Y., May 24, 1909. New York, 1909. 8°. pp. 7.
- Alexandrium. (Jour. of Biblical Literature, 1910, vol. xxix., p. 77.)
 - Art life in Ithaca. (Cornell Daily Sun, 27 April, 1910, p. 4.)

- The brotherhood of nations: address before the Free Religious Association at the annual festival. (Proceedings of the 42d Annual Meeting of the Free Religious Assoc., 1909, p. 61.)
- Commerce as a peace-maker. (Chicago Commerce, r April, 1910, vol. v., p. 21.)
- Criticisms and discussions. (Common Sense Bible Teacher, 1 July, 1909, p. 188.)
- The ethics of Dante. (Ethical Addresses, Jan., 1910, vol. xvii., p. 133.)
- Greek inscriptions from the Negeb. (Amer. Jour. of Archæology, Jan.-March, 1910, 2 s. vol. xiv., p. 60.)
- The influence of the doctrine of evolution upon religious thought: an address before the Free Religious Association held in Boston, Dec. 28, 1909. (Proceedings of the 42d Annual Meeting of the Free Religious Assoc., 1909, p. 27.)
- Kadesh Barnea. (Jour. of Biblical Literature, 1910, vol. xxix., p. 64.)
- The religions and the morals of the world. (Dial, 16 Nov., 1909, vol. xlvii., p. 377.)
- Wolf-Ferrari's 'Vita nuova'. (Ithaca Daily News, 2 May, 1910, p. 5.)
- [Review of] God, an inquiry into man's highest ideal and a solution of the problem from the standpoint of science; by P. Carus. (Internat. Jour. of Ethics, Oct., 1909, vol. xx., p. 114.)
- [Review of] Jesus and modern religion; by E. A. Rumball. (Same, April, 1910, vol. xx., p. 381.)
- [Review of] Life and ministry of Jesus; by R. Otto. (Same, Jan., 1909, vol. xx., p. 253.)
- [Review of] Studies in mystical religion; by R. M. Jones. (Same, Oct., 1909, vol. xx., p. 109.)
- Schoder, E. W. Friction head hydraulics and pipe flow diagrams. (Cornell Civil Engineer, May, 1910, vol. xviii., p. 288.)
 - Some first steps in hydraulics. (Same, Feb., 1910, vol. xviii., p. 171.)
- and K. B. Turner. Hydraulic laboratory manual for juniors in civil engineering, Cornell University. Ithaca, 1909. 1.8°. pp. 18.
- Schurman, J. G. Cornell University. 17th annual report of President Schurman, 1908-1909, with appendices. Ithaca, 1909. sm. 8°. pp. 71 + clxx. Folding tables. (University Records. 10 s. no. 2.)
- Report of the New York State Veterinary College for the year 1908-1909, transmitted to the Legislature, Jan. 17, 1910. Albany, 1910. 8°. pp. 100.

- Twenty-first annual report of the Cornell University Agricultural Experiment Station, 1908, transmitted to the Legislature, Jan. 15, 1909. Albany, 1909. 8°. pp. 821. photo-engrs. and udcts.
- Address of greeting to the University of Leipzig: speech [in German] on behalf of the American universities. (Die Feier des 500 jährigen Bestehens der Universität Leipzig, 1910, p. 1111.)
- Agriculture and education; address before the N. Y. State Fruit Growers' Assoc., Rochester, Jan. 7, 1910. (Annual Report of the N. Y. State Fruit Growers' Assoc., 1910, p. 84.)
- The relation of the university to the medical school: address before the Joint Conference of the Council on Medical Education and the Committee on Medical Legislation of the Amer. Medical Assoc., Chicago, Feb. 28, 1910. (Jour. of the Amer. Medical Assoc., 16 April, 1910, vol. liv., p. 1281.) Also separately reprinted.
- Remarks, introducing Commander Peary. (In memoriam, Ross Gilmore Marvin, 1910.)
- The Rockefeller foundation bill; speech before the Cornell Congress, April 22, 1910. [Ithaca, 1910.] 8°. pp. 27.
- A school for sanitarians: address before the 9th Annual Conference of Sanitary Officers of the State of N. Y., Rochester, Nov. 11, 1909. (Proceedings of the 9th Annual Conference of Sanitary Officers of the State of N. Y., 1909, [issued by the N. Y. State Dept. of Health], p. 82.)
- Some problems of our universities—state and endowed. (Transactions and Proceedings of the Nat. Assoc. of State Universities, 1909, no. 7, p. 18.)

Also separately reprinted,

- Shaffer, N. M. On a possible method of infection in acute polimyelitis. (N. Y. Medical Jour., 4 June, 1910, vol. xci.)
- Shaffer, P. A., and W. Coleman. Protein metabolism in typhoid fever. (Archives of Internal Medicine, Dec., 1909, vol. iv., p. 538.)
- Sharpe, F. R. The general circulation of the atmosphere. (Amer. Jour. of Mathematics, Jan., 1910, vol. xxxii., p. 52.)
- The topography of certain curves defined by a differential equation. (Annals of Mathematics, April, 1910, 2 s. vol. xi., p. 96.)
- [Review of] A treatise on the mathematical theory of elasticity; by A. E. H. Love. (Bulletin of the Amer. Mathematical Soc., Nov., 1909, vol. xvi., p. 90.)
- Shetterly, F. F. See Browne, A. W., and F. F. Shetterly. On the oxidation of hydrazine. IV.
- Sicard, M. H. Pleurisy with effusion; a report of cases with remarks on diagnosis. (Publications of Cornell University Medical College: researches from the Department of Medicine, Oct., 1909, vol. ii.)

- Simpson, S. Causal factors in the diurnal variation of body-temperature [abstract]. (Report of the British Assoc. for the Advancement of Science, 1909.)
- and A. Hunter. The possible vicarious relationship between the pituitary and thyroid glands [preliminary communication]. (Quarterly . Jour. of Experimental Physiology, 14 April, 1910, vol. iii., p. 121.)
- ———— Relations between the thyroid and pituitary glands. (Proceedings of the Soc. for Experimental Biology and Medicine, Oct., 1909, vol. vii., p. 11.)
- joint author. The cortico-spinal tract in the guinea-pig [abstract]; by I. L. Reveley and S. Simpson. (Report of the British Assoc. for the Advancement of Science, 1909.)
- joint author. The pyramid tract in the sheep [abstract]; by J. L. King and S. Simpson. (Same.)
- Smith, A. W. See Barnard, W. N., and others. Elementary heat-power engineering.
- Snyder, V. Infinite discontinuous groups of birational transformations which leave certain surfaces invariant. (Transactions of the Amer. Mathematical Soc., Jan., 1910, vol. xi., p. 15.)
- The Princeton colloquium. (Bulletin of the Amer. Mathematical Soc., Dec., 1909, vol. xvi., p. 105.)
- Surfaces invariant under infinite discontinuous birational groups defined by line congruences. (Amer. Jour. of Mathematics, April, 1910, vol. xxxii., p. 177.)
- [Review of] Allgemeine Formen-und Invariantentheorie. Bd. 1.; by W. F. Meyer. (Bulletin of the Amer. Mathematical Soc., May, 1910, vol. xvi., p. 437.)
- [Review of] Die Lehre von den geometrischen Verwandtschaften. 3er Bd.; by R. Sturm. (Same, Feb., 1910, vol. xvi., p. 250.)
- [Synoptic review of recent books on] Descriptive geometry. (Same. Dec., 1909, vol. xvi., p. 136.)
 - editor. Bulletin of the American Mathematical Society, 1909-1910.
- translator. The Salzburg meeting of the Deutsche Mathematiker-Vereinigung [translated from Dr. Dintzl's German manuscript]. (Bulletin of the Amer. Mathematical Soc., Dec., 1909, vol. xvi., p. 114.)
- Stockard, C. R. A case of malformation identical in both arms. (Amer. Jour. of Obstetrics, 1910, vol. lxi., p. 245.)
- Further studies on the rates of regeneration in different salt solutions. (Science, 1910, N.S. vol. xxxi.
- The independent origin and the self-differentiation of the optic lens. (Same.)

- The influence of alcohol and other anæsthetics on developing embryos. (Proceedings of the Soc. for Experimental Biology and Medicine, Nov., 1909, vol. vii.)
- —— Influence of regenerating tissue on the animal body. (Jour. of the Amer. Medical Assoc., Jan., 1910, vol. liv.)
- Studies of tissue growth. III. The rates of regenerative growth in different salt solutions. (Archiv für Entwickelungsmechanik der Organismen, 1910, vol. xxix.)
- Same IV. The influence of regenerating tissue on the animal body. (Same.)
- Strunk, W., jr. Dramatics at Cornell. 1. Recent progress of the masque. (Cornell Era, Jan., 1910, vol. xlii., p. 89.)
- The phlegmatic complexion. (Nation, 18 Nov., 1909, vol. lxxxix., p. 484.)
- [Review of] Exodus and Daniel; two old English poems preserved in Ms. Junius II in the Bodleian Library of the University of Oxford, England; edited by F. A. Blackburn. (Jour. of English and Germanic Philology, July, 1909, vol. viii., p. 456.)
- [Review of] Lodge's 'Rosalynde', being the original of Shakespeare's
 'As you like it'; edited by W. W. Greg. (Same, p. 454.)
- Symmers, D. Certain unusual lesions of the lymphatic apparatus (Archives of Internal Medicine, Sept., 1999, vol. iv., p. 218.)

Also reprinted in Publications of Cornell University Medical College: studies from the Department of Pathology, 1909, vol. ix.

- The incidence and significance of smooth atrophy of the base of the tongue. [Transactions of the N. Y. Academy of Medicine.] (Medical Record, 9 April, 1910, vol. lxxvii., p. 639.)
- Tailby, G. W., jr. See Savage, E. S., and G. W. Tailby, jr. Substitutes for skimmed milk in raising calves.
- Tanner, J. H. [Review of] Plane and solid geometry; by E. A. Lyman. (Western Jour. of Education, Sept., 1909, p. 332.)
- Tarr, R. S., and B. S. Butler. The Yakutat Bay region, Alaska: physiography and glacial geology, by R. S. Tarr; areal geology, by R. S. Tarr and B. S. Butler. (U. S. Geological Survey. Professional paper 64. 1909.)
- and O. D. von Engeln. A laboratory manual of physical geography, or use in connection with a general course in physical geography in high and secondary schools and in colleges. New York, 1910. sm. 4°. pp. xvii. + 362. Illus.
- and F. M. McMurry. New geographies. New York, 1910. 2V. 12°. Maps and figs.
- and L. Martin. The National Geographic Society's Alaskan expedition of 1909. (Nat. Geographic Magazine, Jan., 1910, vol. xxi., p. 1.)

PUBLICATIONS BY UNIVERSITY OFFICERS CXXXIII

- associate editor. Bulletin of the American Geographical Society, 1909-1910.
 - associate editor. The journal of geography, 1909-1910.
- See also Williams, H. S., and others. Watkins Glen-Catatonk folio, New York.
- Thilly, F. Contemporary American philosophy: studies in language and literature. New York, 1910. 8°.
 - Philosophy. (Internat. year book, 1910, p. 579.)
- Proceedings of the 9th annual meeting of the Amer. Philosophical Assoc. (Philosophical Review, March, 1910, vol. xix., p. 168.)
 - The self. (Same, Jan., 1910, vol. xix., p. 22.)
- [Review of] Aus meinem Leben; von F. Paulsen. (Internat. Jour. of Ethics, Oct., 1909, vol. xx., p. 125.)
- [Review of] Ethics; by J. Dewey and J. H. Tufts. (Science, 16 July, 1909, N.S. vol. xxx., p. 89.)
- [Review of] A handbook of Christian ethics; by J. C. Murray, (Philosophical Review, Sept., 1909, vol. xviii., p. 549.)
- [Review of] Lectures on humanism; by J. S. Mackenzie. (Same. p. 559.)
- [Review of] Die Philosophie des jungen Leibniz; von W. Kabitz. (Same, Nov., 1909, vol. xviii., p. 642.)
- [Review of] Die Philosophie des Spinoza im Lichte der Kritik; von F. Erhardt. (Same, March, 1910, vol. xix., p. 192.)
- [Review of] Religion, critique et philosophie positive chez Pierre Bayle; par J. Delvolve. (Same, Sept., 1909, vol. xviii., p. 560.)
 - --- editor. International journal of ethics, 1909-1910.
- Thompson, W. G. Practical dietetics, with special reference to diet in diseases. 4th ed., enlarged and completely rewritten. New York, 1909. 8°. pp. xxvi. + 928. Illus.
- Clinical experiments with homologous vaccines in the treatment of septic endocarditis and pyemia. (Amer. Jour. of the Medical Sciences, Aug. 1909, N.S. vol. exxxviii., p. 169.)

Also reprinted in Publications of Cornell University Medical College: researches from the Department of Medicine, Oct., 1909, vol. ii.

- The educational value of the trained-nurse. (Trained Nurse and Hospital Review, Aug., 1909.)
- Modern dietetic principles, their practical application. (Boston Medical and Surgical Jour., 28 April, 1910, vol. clxii., p. 551.)
 - Also separately reprinted.
 - Tetanus cured with antitoxine. (Bellevue Hospital Reports, 1910.)
- —— Trichinosis; a clinical study of 52 cases. (Transactions of the Assoc. of Amer. Physicians, 1910.)

- Visceral sarcomata; cases of sarcoma of the stomach, heart, mediastinum, etc. (Medical Record, 2 April, 1910, vol. lxxvii., p. 563.)
- Titchener, E. B. Lectures on the experimental psychology of the thought processes. New York, 1909. sm. 8°. pp. xii. + 318.
- Do combination tones originate in the middle ear? A reply. (Psychological Bulletin, May, 1910, vol. vii., p. 173.)
- Helmholtz' explanation of difference tones. (Same, Jan., 1910, vol. vii., p. 31.)
- The past decade in experimental psychology. (Amer. Jour. of Psychology, July, 1910, vol. xxi., p. 404.)
- and L. R. Geissler. A bibliography of the scientific writings of Wilhelm Wundt: first supplementary list. (Same, Oct., 1909, vol. xx., p. 570.)
- American editor. Mind, a quarterly review of psychology and philosophy, 1909–1910.
 - associate editor. The American journal of psychology, 1909-1910.
- and M. Bentley, editors. Cornell University studies in psychology. No. 63. E. Murray. Organic sensation. (Amer. Jour. of Psychology, July, 1909, vol. xx., p. 387.)
- — Same. No. 64. L. R. Geissler. The measurement of attention. (Same, Oct., 1909, vol. xx., p. 473.)
- — Same. No. 66. C. W. Perkey. An experimental study of imagination. (Same, July, 1910, vol. xxi., p. 422.)
- — Same. No. 67. T. Nakashima. Time-relations of the affective processes. (Psychological Review, Sept., 1909, vol. xvi., p. 303.)
- Torrey, J. C. The relationship of amboceptors in complement fixation and in bacteriolysis. (Jour. of Medical Research, Feb., 1910, vol. xxii., p. 95.)
- and A. H. Rahe. The distribution of bacteria in bottled milk and certain controlling factors. (Jour. of Infectious Diseases, May, 1910, vol. vii., p. 377.)
- Troy, H. C. Sources of error in testing milk for fat by the Babcock method. (N. Y. Produce Review, 16 March, 1910, vol. xxix., p. 778.)
- See also Publow, C. A., and H. C. Troy. Questions and answers on milk and milk-testing.
- Tsanoff, R. A. [Review of] Kant's philosophy as rectified by Schopenhauer; by M. Kelly. (Philosophical Review, Jan., 1910, vol. xix., p. 93.)

- [Summaries of various philosophical articles, English, French and German.] (Same, July-Nov., 1909, vol. xviii., pp. 472, 573, 578, 678; Jan.-May, 1910, vol. xix., pp. 100, 102, 230, 360, 363.)
- Turner, K. B. See Schoder, E. W., and K. B. Turner. Hydraulic laboratory manual.
- Ward, G. G., jr. The relation of the thyroid gland and thyroidism to the toxemia of pregnancy. (Surgery, Gynecology and Obstetrics, Dec., 1909, vol. ix., p. 617.)

Also separately reprinted.

- Warren, G. F. Teachers' manual to accompany the elements of agriculture. New York, 1909. sm. 8°. pp. 32.
- Agriculture for high schools. (Proceedings of the 2d Annual Conference on Agricultural Science in the Summer School of Agriculture, Amherst, Mass., July, 1909.)
- Agriculture for high schools. (Cornell Countryman, May, 1910, vol. vii., p. 256.)
 - The census of agriculture. (Same, June, 1910, vol. vii., p. 289.)
- High school agriculture [Proceedings of the 13th Annual Meeting of the N. Y. State Science Teachers' Assoc.] (Bulletin of the N. Y. State Education Dept., 15 Nov., 1909, no. 459, p. 21.)
- Planting grain. (Cornell Rural School Leaflet, Nov., 1909, vol. iii., p. 31.)
- Rural progress and outlook. (Rural Manhood, Jan., 1910, vol. i., p. 13.)
- and K. C. Livermore. Laboratory exercises in farm management. New York, 1910. pp. xii. + 158.
 - advisory editor. Cornell rural school leaflet, 1909-1910.
- Webber, H. J. Some facts concerning the New York State College of Agriculture at Cornell University, presented to a hearing of legislative committees, Albany, April 5, 1910. Ithaca, 1910. 8°. pp. 20.
- Adams act research at Cornell. (Proceedings of the Soc. for Horticultural Science, 1908-1909, 6th Annual Meeting, p. 6o.)
- Weil, R. The antitryptic activity of human blood serum. (Amer. Jour. of the Medical Sciences, May, 1910, N.S. vol. cxxxix., p. 714.)
- Experimental study of the antitryptic activity of human serum. (Archives of Internal Medicine, Feb., 1910, vol. v., p. 109.)
- On the resistance of human erythrocytes to cobra venom. (Jour. of Infectious Disease, Nov., 1909, vol. vi., p. 688.)

Also reprinted in Publications of Cornell University Medical College: studies from the Department of Pathology, 1909, vol. ix.

— Variation in resistance of human erythrocytes. (Proceedings of the Soc. for Experimental Biology and Medicine, Oct., 1909, vol. vii., p. 2.)

- and S. Feldstein. A new method of testing the interaction of ferments and antiferments. (Same, Dec., 1909, vol. vii., p. 61.)
- and M. Rebling. Avoidance of hemolysis in transfusion. (Amer. Jour. of Surgery, March, 1909, vol. xxiii., p. 268.)
- Whetzel, H. H. End rot or fiber rot of seedlings. (Special Crops, Aug., 1909, vol. viii., p. 143.)
 - Fiber rot disease of ginseng. (Same, Dec., 1909, vol. viii., p. 229.)
- Fiber rot or rust of ginseng roots. (Same, Aug., 1909, vol. viii., p. 146.)
 - Spraying for alternaria blight. (Same, June, 1909, vol. viii., p. 104.)
- Summer use of concentrated lime sulphur. (Ninth Annual Report of the N. Y. State Fruit Growers' Assoc., Jan., 1910, p. 31.)
- and V. B. Stewart. Fire blight of pears, apples, quinces, etc. (Bulletin of the Cornell University Agricultural Experiment Station, Dec., 1909, no. 272, p. 29.)
- joint author. Peach leaf curl, by E. Wallace and H. H. Whetzel. (Same, April, 1910, no. 276, p. 155.)
- Whipple, G. M. Questions in school hygiene. Syracuse, 1909. 8°. pp. 88. (Cornell Study Bulletins for Teachers, 4.)
- The effect of practise upon the range of visual attention and of visual apprehension. (Jour. of Educational Psychology, May, 1910, vol. i., p. 249.)
- The effects of prolonged rapid and deep breathing. (Science, 7 Jan., 1910, N.S. vol. xxxi., p. 26.)
- The instruction of teachers in school hygiene. (Pedagogical Seminary, March, 1910, vol. xvii., p. 44.)
- New instruments for testing discrimination of brightness and of pressure and sensitivity to pain. (Jour. of Educational Psychology, Feb., 1910, vol. i., p. 191.)
- A range of information test. (Psychological Review, Sept., 1909vol. xvi., p. 347.)

Also separately reprinted,

- The spelling of university students. (Jour. of Educational Psychology, Jan., 1910, vol. i., p. 31.)
- The teaching of psychology in normal schools [report of the Committee of the Amer. Psychological Assoc. on the Teaching of Psychology]. (Psychological Review Monographs, April, 1910, no. 51, p. 2.)
- [Review of] Civics and health; by W. H. Allen. (Economic Bulletin, Dec., 1999, vol. ii., p. 381.)
 - Another review of the same in Jour, of Educational Psychology, Jan. 1910, vol. i, p. 48.
 - [Review of] The distribution and functions of mental imagery; by H. Betts. (Jour. of Educational Psychology, April, 1910, vol. i., p. 216.)

PUBLICATIONS BY UNIVERSITY OFFICERS CXXXVII

- [Review of] Lehrerschaft und Schulhygiene in Vergangenheit und Gegnewart; von K. Roller. (School Review, Oct., 1909, vol. xvii., p. 584.)
- [Review of] Memories of my life; by F. Galton. (Jour. of Educational Psychology, Feb., 1910, vol. i., p. 107.)
- [Review of] Schularzttätigkeit und Schulgesundheitspflege; von G. Leubuscher. (School Review, June, 1910, vol. xviii., p. 430.)
- [Review of] The teaching of spelling; by E. R. Bailey and J. M. Manley. (Jour. of Educational Psychology, May, 1910, vol. i., p. 305.)
- [Review of] Von der Kinderseele; Beiträge zur Kinderpsychologie aus Dichtung und Biographie; von G. Bäumer und L. Droescher. (Same, April, 1910, vol. i., p. 219.)
 - associate editor. The journal of educational psychology, 1910.
- White, P. J. Some common weeds and how to destroy them. (Cornell Rural School Leaflet, April-May, 1910, vol. iii., p. 128.)
 - Testing farm seeds. (Same, Jan., 1910, vol. iii., p. 66.)
- Wilder, B. G. A brain of about one-half the average weight from an intelligent white man. (Proceedings of the Amer. Philosophical Soc., 1910, vol. xlix., p. 188.)

Also separately reprinted. Abstract of same in Ithaca Jour., 25 April, 1910.

— The brain of the American negro. (Proceedings of the 1st National Negro Conference, 1909, p. 22.)

Also separately reprinted, with 9 pp. of additional information,

— Definition of football: letter to the editor. (Ithaca Jour., 4 Nov., 1999.)

Also in Cornell Daily Sun, 5 Nov. 1909.

— The educational uses of the acanth shark: address before the Biological Soc. of Cornell University, March 21, 1910; abstract. (Same, 23 March, 1910.)

Issued under the title Sharks as mental and physical pabulum.

- Lincoln and the negro: letter to the editor. (Same, 3 June, 1910.)
- Motive should count even when knowledge and judgment are lacking; letter to the editor. (Cornell Daily Sun, 16 Nov., 1909.)
- Simplified spelling: letter to the editor. (Ithaca Jour., 28 Jan., 1910.)
- Simplified spelling again: letter to the editor. (N. Y. Tribune, 13 Sept., 1909.)

Also in Ithaca Jour., 21 Sept., 1909.

- Simplified spelling and reason: letter to the editor. (Ithaca Jour., 5 Feb., 1910.)
- The statue of Robert E. Lee; letter to the editor. (Harpers' Weekly, 16 Oct., 1909, vol. liii., p. 5.)
 Also in Ithaca Jour., 2 Nov., 1909.

- Who is "A. E. D."? Letter to the editor. (N. Y. Tribune, 14 Nov., 1909.)
- [Review of] The frog book; [by] M. C. Dickerson. (Nation, 30 Sept., vol. lxxxiii., p. 248.)
- composer. Last night: duet, with piano accompaniment and flute obligato; words by C. Winther [music by B. G. Wilder]. Ithaca, 1909. 4°. pp. 4. Music.
- Willcox, W. F. Carroll D. Wright—obituary note. (Jour. of the Royal Statistical Soc., March, 1909, vol. lxxii., p. 67.)
- The college in the university. (Jour. of the 10th Annual Conference of the Assoc. of Amer. Universities, 1909, p. 31.)
- Death rate from tuberculosis. (Monthly Bulletin N. Y. State Dept. of Health, March, 1910, N.S. vol. v., p. 88.)
- Distribution of the Nobel prizes. (Science, 29 Jan., 1909, N.S. vol. xxix., p. 184.)
 - Divorce statistics: letter (N. Y. Times, 24 Jan., 1909.)
- The economic loss to N. Y. State in 1907 from tuberculosis. (Transactions of the 6th Internat. Congress on Tuberculosis, 1908, vol. iii., p. 37.)
- National bureau of health: letter to Professor Irving Fisher. (Charities and the Commons, 13 Feb., 1909, vol. xxi., p. 974.)
- Obituary note on Richard Boeckh. (Bulletin of the Amer. Economic Assoc., June, 1908, vol. i., p. 113.)
- The outlook for American statistics: address as acting president of the Amer. Statistical Assoc. (Quarterly Publications of the Amer. Statistical Assoc., March, 1910, vol. xii., p. 43.)

Also in Amer. Jour. of Sociology, March, 1910, vol. xv., p. 633. Also separately reprinted.

- Statistics of marriage and divorce in the United States. (Bulletin de l'Institut International de Statistique, 1909, vol. xviii., p. 305 [French text] p. 609 [English text].)
- Stature of the Japanese: letter. (N. Y. Evening Post, 12 June, 1908.)
 - The tuberculosis war: letter. (N. Y. Tribune, 24 April, 1910.)
- The twelfth session of the International Statistical Institute at Paris, 1909. (Publications of the Amer. Statistical Assoc., Dec., 1909, N.S. vol. xi., p. 647.)

Also separately reprinted.

- What are the causes of the present high range of prices? (Jour. of Commerce and Commercial Bulletin, 3 Jan., 1910, 2d sect., p. 2.)
- [Review of] Statistik und Gesellschaftslehre; von G. von Mayr. 3^{er} Bd.: Sozialstatistik. (Political Science Quarterly, June, 1910, vol. xxv., p. 353.)

- [Review of] Statistique internationale du mouvement de la population. (Bulletin of the Amer. Economic Assoc., Sept., 1908, vol. i., p. 218.)
 - Review of Sundbärg, Apercus statistiques internationaux. 10e année. (Same, June, 1908, vol. i., p. 144.)
 - joint editor. Letters, lectures and addresses of Charles Edward Garman, a memorial volume, prepared with the cooperation of the class of 1884, Amherst College by E. M. Garman. Boston, 1909. 8°. pp. xiii. + 616. 2 portrs.
 - Williams, C. H. The schematism in Baldwin's logic. (Philosophical Review, Jan., 1910, vol. xix., p. 34.)
 - Williams, H. B., and C. G. L. Wolf. Protein metabolism in cystinuria. 11. (Jour. of Biological Chemistry, Aug., 1909, vol. vi., p. 337.)
 - Williams, H. S. The migration and shifting of Devonian faunas. (Popular Science Monthly, July, 1910, vol. lxxvii., p. 70.)
 - and others. Watkins Glen-Catatonk folio, New York, by H. S. Williams, R. S. Tarr and E. M. Kindle. (U. S. Geological Survey. Geological atlas of the United States no. 169. 1909.)

Also issued in octavo form, called Field ed., pp. 242.

٠

- Williams, W. L. The castration of crypt-orchids. (Amer. Veterinary Review, May, 1910, vol. xxxvii., p. 173.)
- The 1xth International Veterinary Congress at the Hague, Sept., 1909 [editorial]. (Same, Nov., 1909, vol. xxxvi., p. 149.)
- The nomination of the New York State Board of Veterinary Examiners. (Same, July, 1909, vol. xxxv., p. 472.)
- The veterinary profession and the state [editorial]. (Veterinary Jour., Oct., 1909, vol. lxv., p. 492.)
- Winters, J. E. Intestinal infections in children: philosophy of feeding in intestinal infections on the basis of infant physiology. [New York, 1910.] sm. 8°. pp. 16.
- Wolf, C. G. L., and H. C. Thacher. Protein metabolism in Addison's disease. (Archives of Internal Medicine, 1909, vol. iii., p. 438.)
- See also Ewing, J., and C. G. L. Wolf. The clinical significance of the urinary nitrogen. III.
- See also Lambert, A., and C. G. L. Wolf. Protein metabolism in pneumonia.
- See also Williams, H. B., and C. G. L. Wolf. Protein metabolism in cystinuria.
- Woolsey, G. Post operative intestinal obstruction. (Surgery, Gynecology and Obstetrics, June, 1910, vol. x., p. 608.)
- Wright, A. H. The anura of Ithaca, N. Y.: a key to their eggs. (Biological Bulletin, Jan., 1910, vol. xviii., p. 69.)

- —— and A. A. Allen. The early breeding habits of amblystoma punctatum. (Amer. Naturalist, Nov., 1909, vol. xliii., p., 687.)
- ———— The increase of austral birds at Ithaca. (Auk, Jan., 1910, vol. xxvii., p. 63.)
 - Regular summer crossbills at Ithaca, N. Y. (Same, p. 83.)
- See also Reed, H.D., and A. H. Wright. The vertebrates of the Cayuga Lake Basin.



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