ANNUAL REPORT

OF THE TREASURER OF THE STATE UNIVERSITY OF IOWA TO THE IOWA STATE BOARD OF EDUCATION, FOR THE YEAR 1912-1913—July 1, 1913.

GENERAL FUNDS JULY 1, 1912, TO JUNE 30, 1913.

	Balance July 1, 1912	Receipts	Warrants Paid	Balance June 30, 1913
Income	$ 25,753.77	$593,820.55	$533,032.03	$ 86,542.29
Library	352.67	21,928.50	17,600.36	4,680.81
Repr. & Contingent	2,707.95	20,103.30	23,114.07	*302.82
Building	24,069.14	125,710.27	128,425.92	21,353.49
Building Equipment	10,605.73	25,614.08	36,425.29	----------
Law Bldg. Equip.	516.49	----------	345.42	*34.41
Equip. & Supplies	420.71	7,500.00	7,870.07	50.64
Special Land	1,720.27	22,306.91	8,608.62	15,418.56
Donated Land	92.37	630.00	----------	722.37
Paving & Campus	*146.72	5,000.60	4,851.20	2.08
Ranney Int. Fund	2,493.75	3,872.33	4,566.94	1,799.14
Carr Int. Fund	2,342.75	2,620.48	2,230.00	3,733.23
Bryan Int. Fund	31.16	12.50	----------	43.66
Lowden Int. Fund	468.75	175.00	300.00	343.75
Jesup Prize Fund	50.00	----------	----------	50.00
Gifford Int. Fund	220.59	400.24	595.68	25.15
	$ 72,699.38	$829,694.16	$767,965.60	$134,427.94

PERMANENT LOAN FUNDS.

Permanent	$ 5,500.36	$ 44,443.50	$ 49,400.00	$ 543.86
Ranney	3,461.67	17,000.00	19,725.00	736.67
Carr	1,000.00	16,350.00	15,500.00	1,850.00
Gifford	737.08	----------	----------	737.08
	$ 10,699.11	$ 77,793.50	$ 84,625.00	$ 3,867.61

*Overdrawn.

PERMANENT FUND.

Balance cash on hand July 1, 1912.....$ 5,500.36

RECEIPTS.

Loan No. 830—John Kuchera	$ 1,300.00	
Loan No. 872—Harriet Black	1,000.00	
Loan No. 837—R. B. Sears	500.00	
Loan No. 1095—Jos. Hoffman	800.00	
Loan No. 1055—John W. Stoner	300.00	
Loan No. 1101—Victor Schnoeblin ...	745.00	
Loan No. 886—Robert Graham	2,000.00	
Loan No. 964—J. F. Packard	1,600.00	
Loan No. 977—James Fordice	500.00	
Loan No. 1030—John Ford	500.00	
Loan No. 1044—J. L. Roberts	100.00	
Loan No. 1049—Wm. Herzberg	2,000.00	
Loan No. 1051—Joe Draker	1,650.00	
Loan No. 1063—S. G. Jordan	400.00	
Loan No. 1093—George O. Holbrook..	5,100.00	
Loan No. 1084—C. E. Stewart	5,500.00	
Loan No. 869—W. P. Ten Eick.....	2,850.00	
Loan No. 942—W. P. Ten Eick.....	1,000.00	
Loan No. 1074—George Rupener	850.00	28,695.00

Received from sale of land:			
J. Mose McClure, Davis County....$	1,200.00		
A. R. Crawley, Appanoose County..	1,612.00		
W. L. Hicks, Appanoose County....	850.00		
A. H. Gray, Appanoose County.....	1,107.50		
Z. T. S. McFatridge, Appanoose Co.	844.00		
Chas. Brown, Davis County.....	810.00		
E. M. Coltrain, Appanoose County..	800.00		
J. E. Collen, Appanoose County....	3,325.00		
J. S. Coffin, Appanoose County.....	1,700.00		
John M. Hunt, Hardin County.....	1,000.00		
H. M. Adams, Appanoose County...	800.00		
H. T. Gilland, Appanoose County...	800.00		
Miley Lockman, Appanoose County.	800.00	15,648.50	
Rent of University land:			
L. W. Havard		100.00	
New loans:			
DISBURSEMENTS.			
Nos. 1106, 1107, 1109, 1110, 1113, 1114, 1115, 1118, 1120 (see list, page 165)			$ 49,400.00
		$ 49,943.86	$ 49,400.00
Balance cash on hand June 30, 1913.....			543.86
		$ 49,943.86	$ 49,943.86

A. WHITNEY CARR FREE SCHOLARSHIP FUND.

Balance cash on hand July 1, 1912.....$	1,000.00		
RECEIPTS.			
Loan No. C 27—Lucy Hempsted .....$	300.00		
Loan No. C 15—Jacob Albright	1,400.00		
Loan No. C 29—Lumley Tudor	7,500.00		
Loan No. C 31—Vincent Pelzer	1,000.00		
Loan No. C 32—W. H. C. Rogers	2,000.00		
Loan No. C 26—George Rupener	2,500.00		
Loan No. C 30—George Rupener	1,650.00	16,350.00	
DISBURSEMENTS.			
New loans No. C 33, C 35, C 36, C 37 (see list, page 165)			$ 15,500.00
		$ 17,350.00	$ 15,500.00
Balance cash on hand June 30, 1913.....			1,850.00
		$ 17,350.00	$ 17,350.00

MARK RANNEY MEMORIAL FUND.

Balance cash on hand July 1, 1912.....$	3,461.67		
RECEIPTS.			
Loan No. R 24—Lumley Tudor .....$	1,500.00		
Loan No. R 32—John F. Gurnett.....	3,500.00	5,000.00	
Fred Stevens, sale of property.....		12,000.00	
DISBURSEMENTS.			
New loans No. R 36, R 37, R 38, R 39 (see list, page 165)			$ 19,725.00
		$ 20,461.67	$ 19,725.00
Balance cash on hand June 30, 1913.....			736.67
		$ 20,461.67	$ 20,461.67

WAITE LOWRY GIFFORD MEMORIAL FUND.

Balance cash on hand July 1, 1912.....$	737.08		
Balance cash on hand June 30, 1913.....			$ 737.08
		$ 737.08	$ 737.08

INCOME FUND.

Balance cash on hand July 1, 1912.....			$ 25,753.77
RECEIPTS.			
From State Appropriations:			
Chap. 212, Sec. 2, Laws of 32d G. A.	$256,875.00		
Chap. 214, Sec. 2, Laws of 32d G. A.	43,750.00		
Chap. 244, Sec. 1, Laws of 33d G. A.	27,500.00		
Chap. 200, Sec. 1, Laws of 34th G. A.	25,000.00		
Chap. 200, Sec. 1, Laws of 34th G. A.	98,200.00	$451,325.00	
Tuitions:			
College of Liberal Arts.....$	19,745.25		
College of Applied Science	3,346.00		
College of Law	10,844.00		
College of Medicine	4,746.50		
College of Homeopathic Medicine ..	625.00		
College of Dentistry	9,393.25		
College of Pharmacy	2,455.00		
Graduate College	370.00		
Summer Session	1,227.00		
School of Music	7,512.50	$ 60,264.50	
Diploma fees		3,853.00	
Homeopathic Hospital receipts		6,808.45	
University Hospital receipts		47,035.86	
Ophthalmology and Otology receipts.....		1,297.27	
Dental Clinic receipts		6,361.84	
Law Loan Book Account receipts.....		327.50	
Engineering Testing Laboratory receipts.....		11.45	
Miscellaneous cash receipts		1,340.17	
Interest on deposits		2,559.96	
Permanent Fund interest (see list, page 162).....		12,635.55	593,820.55
Total receipts			$619,574.32
DISBURSEMENTS.			
Warrants paid July 1, 1912, to June 30, 1913.....			$533,032.03
Balance cash on hand June 30, 1913.....			86,542.29
			$619,574.32

LIBRARY FUND.

Balance cash on hand July 1, 1912.....$	352.67		
RECEIPTS.			
From State Appropriations:			
Chap. 200, Sec. 1, Laws of 34th G. A..		$ 21,875.00	
From Secretary		53.50	
DISBURSEMENTS.			
Warrants paid July 1, 1912, to June 30, 1913.....			$ 17,600.36
Balance cash on hand June 30, 1913.....			4,680.81
		$ 22,281.17	$ 22,281.17

REPAIR AND CONTINGENT FUND.

Balance cash on hand July 1, 1912		$ 2,707.95	
RECEIPTS.			
From State Appropriations:			
Chap. 212, Sec. 2, Laws of 32d G. A.	$ 7,500.00		
Chap. 244, Sec. 1, Laws of 33d G. A.	7,500.00		
Chap. 200, Sec. 1, Laws of 34th G. A.	5,000.00	20,000.00	
From Secretary		103.30	
DISBURSEMENTS.			
Warrants paid July 1, 1912, to June 30, 1913			$ 23,114.07
Balance overdrawn June 30, 1913		302.82	
		$ 23,114.07	$ 23,114.07

BUILDING TAX FUND.

Balance cash on hand July 1, 1912	$ 24,069.14	
RECEIPTS.		
From State Appropriations:		
Chap. 183, Sec. 1, Laws of 34th G. A.	125,000.00	
From Secretary	710.27	
DISBURSEMENTS.		
Warrants paid July 1, 1912, to June 30, 1913		$128,425.92
Balance cash on hand June 30, 1913		21,353.49
	$149,779.41	$149,779.41

EQUIPMENT NEW LAW BUILDING FUND.

Balance cash on hand July 1, 1912	$ 516.49	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913		$ 345.42
Transfer to Equipment New Building Fund		171.07
	$ 516.49	$ 516.49

EQUIPMENT NEW BUILDING FUND.

Balance cash on hand July 1, 1912	$ 10,605.73	
RECEIPTS.		
From State Warrants, Chap. 200, Sec. 2, 34th G. A.	25,500.00	
From Secretary	114.08	
Transfer from Equipment New Law Bldg. Etc. Fund	171.07	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913		$ 36,425.29
Balance overdrawn June 30, 1913	34.41	
	$ 36,425.29	$ 36,425.29

EQUIPMENT AND SUPPLIES FUND.

Balance cash on hand July 1, 1912	$ 420.71	
RECEIPTS.		
From State Warrants, Chap. 200, Sec. 2, 34th G. A.	7,500.00	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913		$ 7,870.07
Balance cash on hand June 30, 1913		50.64
	$ 7,920.71	$ 7,920.71

SPECIAL LAND FUND.

Balance cash on hand July 1, 1912	$ 1,720.27	
RECEIPTS.		
From State Warrants, Chap. 200, Sec. 2, 34th G. A.	20,000.00	
From Secretary	2,306.91	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913		$ 8,608.62
Balance cash on hand June 30, 1913		15,418.56
	$ 24,027.18	$ 24,027.18

DONATED LAND FUND.

Balance cash on hand July 1, 1912	$ 92.37	
RECEIPTS.		
From Secretary, rents	630.00	
Balance cash on hand June 30, 1913		$ 722.37
	$ 722.37	$ 722.37

PAVING AND SIDEWALKS FUND.

RECEIPTS.		
From State Warrants, Chap. 200, Sec. 2, 34th G. A.	$ 5,000.00	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913		$ 4,851.20
Balance overdrawn July 1, 1912		146.72
Balance cash on hand June 30, 1913		2.08
	$ 5,000.00	$ 5,000.00

MARK RANNEY MEMORIAL INTEREST FUND.

Balance cash on hand July 1, 1912	$ 2,493.75
RECEIPTS.	
From Secretary, rents, etc.	85.00
From interest on Ranney Memorial Fund (see list, page 164)	3,787.33

DISBURSEMENTS.

Warrants paid from July 1, 1912, to June 30, 1913..		$ 4,566.94
Balance cash on hand, June 30, 1913.....		1,799.14
	$ 6,366.08	$ 6,366.08

A. WHITNEY CARR FREE SCHOLARSHIP INTEREST FUND.

Balance cash on hand, July 1, 1912.....$	3,342.75	
RECEIPTS.		
From interest on A. Whitney Carr Scholarship Fund (see list, page 164)	2,537.13	
From Secretary	83.35	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913.		$ 2,230.00
Balance cash on hand June 30, 1913.....		3,733.23
	$ 5,963.23	$ 5,963.23

WAITE LOWRY GIFFORD MEMORIAL INTEREST FUND.

Balance cash on hand July 1, 1912.....$	220.59	
RECEIPTS.		
From interest on Waite Lowry Gifford Memorial Interest Fund (see list, page 164)	400.24	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913..		$ 595.68
Balance cash on hand June 30, 1913.....		25.15
	$ 620.83	$ 620.83

F. O. LOWDEN PRIZE INTEREST FUND.

Balance cash on hand July 1, 1912.....$	468.75	
RECEIPTS.		
From Secretary	175.00	
DISBURSEMENTS.		
Warrants paid from July 1, 1912, to June 30, 1913..		$ 300.00
Balance cash on hand June 30, 1913.....		343.75
	$ 643.75	$ 643.75

WM. JENNINGS BRYAN PRIZE INTEREST FUND.

Balance cash on hand July 1, 1912.....$	31.16	
RECEIPTS.		
From interest on Wm. Jennings Bryan Prize Fund (see list, page 164)	12.50	
Balance cash on hand June 30, 1913.....		$ 43.66
	$ 43.66	$ 43.66

CHARLES M. JESUP PRIZE FUND.

Balance cash on hand July 1, 1912.....$	50.00	
Balance cash on hand June 30, 1913.....		$ 50.00
	$ 50.00	$ 50.00

CAPITAL PERMANENT FUND.

By mortgage notes July 1, 1912.....		$235,345.00
By cash balance July 1, 1912		5,500.36
By cash received for sale and rent of land June 30, 1913		15,748.50
To mortgage notes on hand June 30, 1913.....$	256,050.00	
To cash balance June 30, 1913.....	543.86	
	$256,593.86	$256,593.86

MARK RANNEY MEMORIAL FUND.

By mortgage notes July 1, 1912.....		$ 67,975.00
By cash balance July 1, 1912		3,461.67
By cash received, sale of property		12,000.00
To mortgage notes on hand June 30, 1913.....$	82,700.00	
To cash balance, June 30, 1913	736.67	
	$ 83,436.67	$ 83,436.67

A. WHITNEY CARR FREE SCHOLARSHIP FUND.

By mortgage notes July 1, 1912		$ 49,000.00
By cash balance July 1, 1912		1,000.00
To mortgage notes on hand June 30, 1913.....$	48,150.00	
To cash balance June 30, 1913	1,850.00	
	$ 50,000.00	$ 50,000.00

WAITE LOWRY GIFFORD MEMORIAL FUND.

By mortgage notes July 1, 1912		$ 8,000.00
By cash balance July 1, 1912		737.08
To mortgage notes on hand June 30, 1913.....$	8,000.00	
To cash balance June 30, 1913.....	737.08	
	$ 8,737.08	$ 8,737.08

WM. JENNINGS BRYAN PRIZE FUND.

By mortgage notes July 1, 1912		$ 250.00
To mortgage notes on hand June 30, 1913.....$	250.00	
	$ 250.00	$ 250.00

FRANK O. LOWDEN PRIZE FUND.

By 25 shares preferred stock in The National Biscuit Company		$ 2,500.00
To 25 shares preferred stock in The National Biscuit Company .....$	2,500.00	
	$ 2,500.00	$ 2,500.00

RECAPITULATION OF BALANCES, JUNE 30, 1913.

Income Fund		$ 86,542.29	
Library Fund		4,680.81	
Building Tax Fund		21,353.49	
Equipment and Supplies Fund		50.64	
Special Land Fund		15,418.56	
Donated Land Fund		722.37	
Paving and Sidewalks Fund		2.08	
A. Whitney Carr Free Scholarship Interest Fund		3,733.23	
Mark Ranney Memorial Interest Fund		1,799.14	
W. J. Bryan Prize Interest Fund		43.66	
F. O. Lowden Prize Interest Fund		343.75	
Chas. M. Jesup Prize Fund		50.00	
Waite Lowry Gifford Memorial Interest Fund		25.15	
		$134,765.17	
OVERDRAWN.			
Repair and Contingent Fund	$ 302.82		
New Building Equipment Fund	34.41	337.23	
			$134,427.94
LOAN FUNDS.			
Permanent Fund		$ 543.86	
Mark Ranney Memorial Fund		736.67	
A. Whitney Carr Scholarship Fund		1,850.00	
Waite Lowry Gifford Memorial Fund		737.08	3,867.61
			$138,295.55
MORTGAGE LOANS.			
Permanent Land Fund		$256,050.00	
Mark Ranney Memorial Fund		82,700.00	
A. Whitney Carr Scholarship Fund		48,150.00	
Waite Lowry Gifford Memorial Fund		8,000.00	
W. J. Bryan Prize Fund		250.00	$395,150.00
F. O. Lowden Prize Fund (25 shares of National Biscuit Company stock)			2,500.00
			$535,945.55

First Nat'l Bank, W. J. McChesney, Treas. S. U. I.	$134,427.94
First Nat'l Bank, W. J. McChesney, Treas. S. U. I. (loan funds)	3,867.61
Mortgage notes on hand	395,150.00
25 shares stock in The National Biscuit Company	2,500.00
	$535,945.55

INTEREST COLLECTIONS FROM JULY 1, 1912, to JUNE 30, 1913.

PERMANENT FUND INTEREST.

Loan No. 725—Steph Bradley	$ 20.35
Loan No. 830—John Kuchera	48.75
Loan No. 837—R. B. Sears	24.10
Loan No. 853—L. J. Conklin	65.00
Loan No. 869—W. P. Ten Eick	142.50
Loan No. 869—W. P. Ten Eick	38.46

Loan No. 872—Harriet Black	37.92
Loan No. 878—C. H. Richey	200.00
Loan No. 886—Robert Graham	100.00
Loan No. 889—Maude Butler	40.00
Loan No. 899—Elizabeth Dennis	25.00
Loan No. 931—Anthony Sibel	200.00
Loan No. 942—W. P. Ten Eick	63.53
Loan No. 962—D. W. Jones	67.50
Loan No. 964—J. F. Packard	80.67
Loan No. 977—James Fordice	60.00
Loan No. 977—James Fordice	4.46
Loan No. 982—J. J. Edwards	100.00
Loan No. 1012—G. Eckhardt	140.00
Loan No. 1019—Mrs. J. C. Tobin	115.00
Loan No. 1020—Alex Grace	500.00
Loan No. 1023—A. D. Craig	150.00
Loan No. 1028—Jos. H. Miller	175.00
Loan No. 1030—John T. Ford	26.04
Loan No. 1030—John T. Ford	100.00
Loan No. 1038—J. H. Potter	67.50
Loan No. 1039—Jos. Lenoch	115.00
Loan No. 1041—Anthony Sibel	25.00
Loan No. 1044—J. L. Roberts	60.00
Loan No. 1049—Wm. Herzberg	100.00
Loan No. 1051—Joe Draker	82.50
Loan No. 1055—John W. Stoner	15.00
Loan No. 1063—Emily J. Jordan	80.00
Loan No. 1063—Emily J. Jordan	.22
Loan No. 1066—Inland Fuel Co.	100.00
Loan No. 1067—J. L. Edwards	75.00
Loan No. 1068—W. J. Hanson	400.00
Loan No. 1070—Jacob P. Miller	175.00
Loan No. 1073—W. J. Hanson	225.00
Loan No. 1074—George Rupener	365.57
Loan No. 1076—F. L. Zager	200.00
Loan No. 1078—D. M. Van Ness	200.00
Loan No. 1079—J. F. Winborn	250.00
Loan No. 1080—Albert Schmidt	155.00
Loan No. 1081—L. J. Conklin	17.50
Loan No. 1082—M. J. Giblin	507.00
Loan No. 1082—M. J. Giblin	504.50
Loan No. 1083—Katie McGuire	125.00
Loan No. 1084—C. E. Stewart	16.57
Loan No. 1084—C. E. Stewart	275.00
Loan No. 1085—E. A. Miller	300.00
Loan No. 1086—S. Lininger	300.00
Loan No. 1087—Stanley Marak	500.00
Loan No. 1088—Ann Mooney	250.00
Loan No. 1090—Edw. Kinney	175.50
Loan No. 1091—Ralph Evans	660.00
Loan No. 1092—Edw. Hummer	392.51
Loan No. 1093—G. O. Holbrook	412.50
Loan No. 1094—John D. Colony	240.00
Loan No. 1095—Jos. Hoffman	90.00
Loan No. 1096—Philip Michel	319.00
Loan No. 1097—F. S. Webster	151.21
Loan No. 1098—Frank Streb	165.00
Loan No. 1099—D. J. Berkey	262.50
Loan No. 1100—J. W. Wentz	250.00
Loan No. 1101—Victor F. Schnoeblin	187.25
Loan No. 1102—D. B. Hochstetler	120.00

Loan No. 1103—W. F. Andrews	800.00
Loan No. 1104—Joseph Wertz	218.66
Loan No. 1105—L. J. Guengerich	75.00
Loan No. 1106—John A. Renholz	105.78
	$ 12,635.55

MARK RANNEY MEMORIAL INTEREST FUND.

Loan No. R 7—Wm. Nelson	$ 38.24
Loan No. R 17—J. A. Northrup	150.24
Loan No. R 18—J. A. Northrup	150.24
Loan No. R 20—Elias Kinsinger	145.00
Loan No. R 21—John Giblin	200.00
Loan No. R 22—John Cash, Jr.	375.00
Loan No. R 23—E. E. Hanson	625.00
Loan No. R 24—Lumley Tudor	78.98
Loan No. R 25—W. W. Frost	100.00
Loan No. R 26—M. H. Donohue	885.28
Loan No. R 32—John F. Gurnett	192.50
Loan No. R 33—Josephine Remley	147.12
Loan No. R 34—D. J. Berkey	220.00
Loan No. R 35—J. Y. Stover	320.84
Loan No. R 36—Clay Brown	158.89
	$ 3,787.33

A. WHITNEY CARR SCHOLARSHIP INTEREST FUND.

Loan No. C 2—George R. Hall	$ 100.00
Loan No. C 3—George R. Hall	120.00
Loan No. C 6—Susan Wandling	75.50
Loan No. C 10—Elizabeth Butler	175.00
Loan No. C 15—Jacob Albright	70.00
Loan No. C 18—John A. Wolz	175.00
Loan No. C 24—L. L. Stutzman	135.00
Loan No. C 26—George Rupener	140.39
Loan No. C 27—Lucy Hemsted	50.00
Loan No. C 28—F. S. Webster	125.00
Loan No. C 29—Lumley Tudor	394.88
Loan No. C 30—George Rupener	111.36
Loan No. C 31—Vincent Pelzer	465.00
Loan No. C 32—W. H. C. Rogers	400.00
	$ 2,537.13

WAITE LOWRY GIFFORD MEMORIAL INTEREST FUND.

Loan No. G 1—N. Peterson	$ 150.24
Loan No. G 2—F. S. Webster	100.00
Loan No. G 3—F. E. Gates	150.00
	$ 400.24

W. J. BRYAN PRIZE INTEREST FUND.

Loan No. B 1—J. H. Potter	$ 12.50

During the year ending June 30, 1913, I have made new loans as listed below:

PERMANENT FUND.

	Amount.	Value of Security.
No. 1106—John A. Remholz	$ 7,000.00	$ 20,000.00
No. 1107—Robert Graham	8,200.00	44,000.00
No. 1109—Jacob P. Miller	500.00	Increase
No. 1110—John Newkirk	9,000.00	29,000.00
No. 1113—John Cornwall	5,000.00	24,100.00
No. 1114—Jos. A. Hrdliska	6,000.00	23,480.00
No. 1115—Thos. Coglan	9,000.00	29,000.00
No. 1118—George Rupener	700.00	Increase
No. 1120—Wm. J. Phillips	4,000.00	58,200.00
	$ 49,400.00	

MARK RANNEY MEMORIAL FUND.

No. R 36—Clay Brown	$ 8,800.00	$ 19,000.00
No. R 37—Wm. Zuber	8,000.00	22,000.00
No. R 38—E. F. Borschel	2,500.00	7,500.00
No. R 39—Wm. Nelson	425.00	Increase
	$ 19,725.00	

A. WHITNEY CARR SCHOLARSHIP FUND.

No. C 33—Julius Tudor	$ 2,500.00	$ 7,125.00
No. C 35—John McDonough	6,000.00	40,000.00
No. C 36—A. F. Weeber	4,500.00	28,800.00
No. C 37—E. F. Borschel	2,500.00	7,500.00
	$ 15,500.00	

LIST OF MORTGAGE NOTES ON HAND, JUNE 30, 1913.
PERMANENT FUND.

No.	Amount.	Interest paid to
725—Stephen Bradley	$ 400.00	January 1, 1913
878—N. B. Richey	4,000.00	January 1, 1913
899—Elizabeth Dennis	500.00	January 1, 1913
962—Jos. Plashil	1,350.00	January 1, 1913
982—John J. Edwards	2,000.00	January 1, 1913
1012—Gustav Eckardt	2,800.00	January 1, 1913
1019—Mrs. Jas. C. Tobin	2,300.00	January 1, 1913
1020—Alexander Grace	10,000.00	January 1, 1913
1028—Jos. H. Miller	3,500.00	January 1, 1913
1038—John H. Potter	1,350.00	January 1, 1913
1039—Joseph Lenoch	2,300.00	January 1, 1913
1044—Joseph L. Roberts	1,100.00	January 1, 1913
1063—Emily Jordan	1,200.00	January 1, 1913
1066—Inland Fuel Co.	2,000.00	January 1, 1913
1067—John L. Edwards	1,500.00	January 1, 1913
1068—Wm. J. Hanson	8,000.00	January 1, 1913
1073—Wm. J. Hanson	4,500.00	January 1, 1913
1076—Frederick L. Zager	4,000.00	March 1, 1913
1078—D. M. Van Ness	4,000.00	January 1, 1913

No.	Amount.	Interest paid to
1079—J. F. Winborn	5,000.00	March 1, 1913
1080—Albert Schmidt	3,100.00	January 1, 1913
1082—M. J. Giblin	10,000.00	May 1, 1913
1083—Katie C. McGuire	2,500.00	January 1, 1913
1085—E. A. Miller	6,000.00	January 1, 1913
1086—Samuel Lininger	6,000.00	March 1, 1913
1087—Stanley Marak	10,000.00	January 1, 1913
1088—Ann Mooney	5,000.00	January 1, 1913
1090—Edward Kinney	3,500.00	January 1, 1913
1091—Ralph Evans	11,000.00	January 1, 1913
1092—Edwin Hummer	6,500.00	January 1, 1913
1093—George O. Holbrook	2,400.00	January 1, 1913
1094—John D. Colony	4,800.00	January 1, 1913
1095—Jos. Hoffman	1,000.00	January 1, 1913
1096—Philip Michel	5,800.00	March 1, 1913
1097—F. S. Webster	3,000.00	January 1, 1913
1098—Frank Streb	3,300.00	January 1, 1913
1099—D. J. Berkey	5,250.00	January 1, 1913
1100—Jacob F. Wentz	5,000.00	April 1, 1913
1101—Victor F. Schnoeblin	3,000.00	January 1, 1913
1102—David B. Hochstetler	2,400.00	January 1, 1913
1103—Wm. Andrews	16,000.00	June 26, 1913
1104—Joseph Wertz	6,500.00	April 1, 1913
1105—L. J. Guengerich	1,500.00	January 1, 1913
1106—John A. Rennholz	7,000.00	January 1, 1913
1107—Robert B. Graham	8,200.00	No interest matured
1108—Lorin J. Conklin	1,650.00	No interest matured
1109—Jacob P. Miller	4,000.00	No interest matured
1110—John W. Newkirk	9,000.00	No interest matured
1111—Anthony Sibel	4,500.00	No interest matured
1112—Elizabeth Butler	800.00	No interest matured
1113—John Cornwall	5,000.00	No interest matured
1114—Joseph A. Hrdliska	6,000.00	No interest matured
1115—Thos. A. Coglan	9,000.00	No interest matured
1116—John T. Ford	1,500.00	No interest matured
1117—James M. Fordice	700.00	No interest matured
1118—George Rupener	6,350.00	No interest matured
1119—A. D. Craig	3,000.00	No interest matured
1120—Wm. J. Phillips	4,000.00	No interest matured
	$256,050.00	

A. WHITNEY CARR SCHOLARSHIP FUND.

No.	Amount.	Interest paid to
C 2—George R. Hall	$ 2,000.00	January 1, 1913
C 3—George R. Hall	2,400.00	January 1, 1913
C 6—Susana E. Wandling	1,500.00	January 1, 1913
C 18—John A. Walz	3,500.00	January 1, 1913
C 24—L. L. Stutzman	2,250.00	January 1, 1913
C 27—Lucy Hemsted	700.00	January 1, 1913
C 28—F. S. Webster	2,500.00	January 1, 1913
C 31—Vincent R. Pelzer	8,300.00	March 1, 1913
C 32—W. H. C. Rogers	6,000.00	April 1, 1913
C 33—Julius Tudor	2,500.00	No interest matured
C 34—Elizabeth Butler	3,500.00	No interest matured
C 35—John McDonough	6,000.00	No interest matured
C 36—A. F. Weeber	4,500.00	No interest matured
C 37—Edw. F. Borschel	2,500.00	No interest matured
	$ 48,150.00	

MARK RANNEY MEMORIAL FUND.

No.	Amount.	Interest paid to
R 17—J. A. Northrop	$ 3,000.00	January 1, 1913
R 18—J. A. Northrop	3,000.00	January 1, 1913
R 20—Elias Kinsinger	2,900.00	January 1, 1913
R 21—John Giblin	4,000.00	January 1, 1913
R 22—John Cash, Jr.	7,500.00	January 1, 1913
R 23—Ed. E. Hanson	12,500.00	January 1, 1913
R 25—W. W. Frost	2,000.00	January 1, 1913
R 26—M. H. Donohue	14,500.00	January 1, 1913
R 33—Josephine Remley	3,000.00	January 1, 1913
R 34—D. J. Berkey	4,000.00	April 1, 1913
R 35—Jacob Y. Stover	6,000.00	April 1, 1913
R 36—Clay Brown	8,800.00	January 1, 1913
R 37—Wm. Zuber	8,000.00	No interest matured
R 38—Edw. F. Borschel	2,500.00	No interest matured
R 39—William Nelson	1,000.00	No interest matured
	$ 82,700.00	

WAITE LOWRY GIFFORD MEMORIAL FUND.

No.	Amount.	Interest paid to
G 1—N. Peterson	$ 3,000.00	January 1, 1913
G 2—F. S. Webster	2,000.00	January 1, 1913
G 3—F. E. Gates	3,000.00	January 1, 1913
	$ 8,000.00	

WM. JENNINGS BRYAN PRIZE FUND.

No.	Amount.	Interest paid to
B 1—John H. Potter	$ 250.00	January 1, 1913

Respectfully Submitted,

W. J. McCHESNEY,
Treasurer.

ANNUAL REPORT

OF THE TREASURER OF THE STATE UNIVERSITY OF IOWA TO THE IOWA STATE BOARD OF EDUCATION, FOR THE YEAR 1913-1914—July 1, 1914

GENERAL FUNDS JULY 1, 1913, TO JUNE 30, 1914.

Funds	Balance July 1, 1913	Receipts	Warrants Paid	Balance June 30, 1914
Income	$ 86,542.29	$ 607,022.73	$ 636,967.24	$ 56,597.78
Library	4,680.81	16,138.14	19,570.12	1,248.83
Repair and contingent	*302.82	30,918.98	30,050.64	565.52
Building	21,353.49	147,950.26	158,347.15	10,956.60
Building equipment	*34.41	30,078.45	28,110.04	1,934.00
Equipment and supplies	50.64	7,510.15	4,340.36	3,220.43
Engineer equipment		12,500.00	11,359.98	1,140.02
Domestic Science		8,500.00	7,316.74	1,183.26
Dental College		4,000.00	4,153.77	*153.77
Paving and sidewalks	2.08	5,000.00	4,992.99	9.09
Special land	15,418.56	5,421.50	12,394.59	8,445.47
Donated land	722.37	370.00		1,092.37
Heating plant tunnel		10,063.45	8,691.33	1,372.12
Univ. extension		13,750.00	7,017.27	6,732.73
Univ. epidemiologist		4,583.30	3,276.98	1,306.32
Jesup prize	50.00			50.00
Ranney interest	1,799.14	4,442.06	4,034.00	2,207.20
Carr interest	3,733.23	2,418.73	2,330.00	3,821.96
Gifford interest	25.15	413.50	182.05	256.60
Lowden interest	343.75	175.00	150.00	368.75
Bryan interest	43.66	12.50	10.00	46.16
Total	$ 134,427.94	$ 911,268.75	$ 943,295.25	$ 102,401.44

PERMANENT LOAN FUNDS.

Permanent	$ 543.86	$ 63,990.00	$ 55,100.00	$ 9,433.86
Ranney	736.67	8,900.00	6,500.00	3,136.67
Carr	1,850.00	2,750.00	1,850.00	2,750.00
Gifford	737.08	3,000.00	3,500.00	237.08
Total	$ 3,867.61	$ 78,640.00	$ 66,950.00	$ 15,557.61

*Overdrawn.

PERMANENT FUND.

RECEIPTS.

Loan No.		
Balance cash on hand, July 1, 1913		$ 543.86
725—Stephen Bradley	$ 400.00	
878—N. B. Richey	4,000.00	
962—D. W. Jones	1,350.00	
1012—Gustav Eckardt	2,800.00	
1019—Mrs. J. C. Tobin	2,300.00	
1020—Alex. Grace	10,000.00	
1039—Jos. Lenoch	2,300.00	
1044—Jos. L. Roberts	1,100.00	

Loan No			
1063—Emily Jordon	1,200.00		
1066—Inland Fuel Co.	2,000.00		
1073 W. J. Hanson	4,500.00		
1076—F. L. Zager	4,000.00		
1078—D. M. Van Ness	4,000.00		
1079—J. F. Winborn	5,000.00		
1086—S. Lininger	6,000.00		
1092—Edwin Hummer	6,500.00		
1093—George Holbrook	1,000.00		
1095—Jos. Hoffman	400.00		
1110—John W. Newkirk	2,000.00		
		60,850.00	
Received from sale of lands:			
Rosa C. Bair—Appanoose Co.	800.00		
Henry R. Miller—Hardin Co.	2,040.00		
		2,840.00	
Received from rent of University land:			
Harvard & Goetz	100.00		
Z. H. Sayers	200.00		
		300.00	
DISBURSEMENTS.			
New loans:			
Nos. 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132 (See list, page 180.)			$ 55,100.00
		$ 64,533.86	$ 55,100.00
Balance cash on hand, June 30, 1914			9,433.86
		$ 64,533.86	$ 64,533.86

A. WHITNEY CARR FREE SCHOLARSHIP FUND.

Balance cash on hand, July 1, 1913		$ 1,850.00	
RECEIPTS.			
Loan No. C 24—L. L. Stutzman	$ 2,250.00		
Loan No. C 27—Lucy Hemstead	500.00	2,750.00	
DISBURSEMENTS.			
New Loans:			
No. C 38—Edw. Kinney			$ 1,850.00
		$ 4,600.00	$ 1,850.00
Balance cash on hand, June 30, 1914			2,750.00
		$ 4,600.00	$ 4,600.00

MARK RANNEY MEMORIAL FUND.

Balance cash on hand, July 1, 1913		$ 736.67	
RECEIPTS.			
Loans 17 and 18—J. A. Northrop	$ 6,000.00		
Loan 20—E. Kinsinger	2,900.00	8,900.00	

DISBURSEMENTS.			
New Loans:			
No. R 40—Edw. Casey			$ 3,500.00
No. R 41—Anton Hinek			3,000.00
		$ 9,636.67	$ 6,500.00
Balance cash on hand, June 30, 1914			3,136.67
		$ 9,636.67	$ 9,636.67

WAITE LOWRY GIFFORD MEMORIAL FUND.

Balance cash on hand, July 1, 1913		$ 737.08	
RECEIPTS.			
Loan No. G 1—N. Peterson		3,000.00	
DISBURSEMENTS.			
New Loans—No. G 4—Joseph Messill			$ 3,500.00
		$ 3,737.08	$ 3,500.00
Balance cash on hand, June 30, 1914			237.08
		$ 3,737.08	$ 3,737.08

INCOME FUND.

Balance cash on hand, July 1, 1913			$ 86,542.29
RECEIPTS.			
From State Appropriations:			
Chap. 212, Sec. 2, Laws of 32d G. A.	$188,375.00		
Chap. 214, Sec. 2, Laws of 32d G. A.	32,083.30		
Chap. 244, Sec. 1, Laws of 33d G. A.	20,166.65		
Chap. 200, Sec. 1, Laws of 34th G. A.	90,016.65		
Chap. 200, Sec. 1, Laws of 34th G. A.	22,916.65		
Chap. 328, Sec. 1, Laws of 35th G. A.	63,250.00	$416,808.25	
Tuitions:			
College of Liberal Arts	23,995.50		
College of Applied Science	4,411.75		
College of Law	9,784.00		
College of Medicine	5,401.00		
College of Homeopathic Medicine	245.25		
College of Dentistry	13,521.00		
College of Pharmacy	3,000.75		
College of Fine Arts	8,717.50		
Graduate College	405.00		
Summer Session and Library School	1,175.00	70,656.75	
Diploma Fees		4,077.00	
Homeopathic Hospital Receipts		8,025.92	
University Hospital Receipts		50,235.84	
Ophthalmology and Otology Receipts		1,367.17	
Dental Clinic Receipts		8,711.15	
Law Loan Book Acct. Receipts		356.85	
Eng. Testing Lab. Acct. Receipts		41.22	
Currier Hall Receipts		26,908.63	
Miscellaneous Cash Receipts		1,774.36	
Interest on Deposits		3,803.94	
Rents		1,203.00	
Permanent Fund Interest (See list, page 178)		13,052.65	
Total Receipts			$607,022.73
			$693,565.02

DISBURSEMENTS.

Warrants paid July 1, 1913, to June 30, 1914.....		$636,967.24
Balance cash on hand, June 30, 1914.....		56,597.78
		$693,565.02

LIBRARY FUND.

Balance cash on hand, July 1, 1913.....	$ 4,680.81		
RECEIPTS.			
From State Appropriations:			
Chap. 200, Sec. 1, Laws of 34th G. A.....	16,041.65		
From Secretary	96.49		
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$ 19,570.12
Balance cash on hand, June 30, 1914.....			1,248.83
		$ 20,818.95	$ 20,818.95

REPAIR AND CONTINGENT FUND.

RECEIPTS.

From State Appropriations:			
Chap. 212, Sec. 2, Laws of 32d G. A..	$ 7,500.00		
Chap. 244, Sec. 1, Laws of 33d G. A..	7,500.00		
Chap. 200, Sec. 1, Laws of 34th G. A..	5,000.00		
Chap. 328, Sec. 1, Laws of 35th G. A.	10,000.00	$ 30,000.00	
From Secretary		918.98	
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$ 30,050.64
Balance overdrawn July 1, 1913.....			302.82
Balance cash on hand, June 30, 1914.....			565.52
		$ 30,918.98	$ 30,918.98

BUILDING TAX FUND.

Balance cash on hand, July 1, 1913.....	$ 21,353.49		
RECEIPTS.			
From State Appropriations:			
Chap. 183, Sec. 1, Laws of 34th G. A.....	$147,793.04		
From Secretary	157.22		
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$158,347.15
Balance cash on hand, June 30, 1914.....			10,956.60
		$169,303.75	$169,303.75

EQUIPMENT NEW BUILDING FUND.

RECEIPTS.

From State Appropriations:		
Chap. 328, Sec. 2, Laws of 35th G. A.....	$ 30,000.00	
From Secretary	78.45	

DISBURSEMENTS.

Warrants paid July 1, 1913, to June 30, 1914.....		$ 28,110.04
Balance overdrawn, July 1, 1913.....		34.41
Balance cash on hand, June 30, 1914.....		1,934.00
	$ 30,078.45	$ 30,078.45

EQUIPMENT AND SUPPLIES FUND.

Balance cash on hand, July 1, 1913.....	$ 50.64		
RECEIPTS.			
From State Appropriations:			
Chap. 328, Sec. 2, Laws of 35th G. A.....	7,500.00		
From Secretary	10.15		
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$ 4,340.36
Balance cash on hand, June 30, 1914.....			3,220.43
		$ 7,560.79	$ 7,560.79

ENGINEERING EQUIPMENT FUND.

RECEIPTS.

From State Appropriations:			
Chap. 328, Sec. 2, Laws of 35th G. A.....	$ 12,500.00		
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$ 11,359.98
Balance cash on hand, June 30, 1914.....			1,140.02
		$ 12,500.00	$ 12,500.00

DOMESTIC SCIENCE EQUIPMENT FUND.

RECEIPTS.

From State Appropriations:			
Chap. 328, Sec. 2, Laws of 35th G. A.....	$ 8,500.00		
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$ 7,316.74
Balance cash on hand, June 30, 1914.....			1,183.26
		$ 8,500.00	$ 8,500.00

DENTISTRY EQUIPMENT FUND.

RECEIPTS.

From State Appropriations:			
Chap. 328, Sec. 2, Laws of 35th G. A.....	$ 4,000.00		
DISBURSEMENTS.			
Warrants paid July 1, 1913, to June 30, 1914.....			$ 4,153.77
Balance overdrawn, June 30, 1914.....		153.77	
		$ 4,153.77	$ 4,153.77

PAVING AND SIDEWALKS FUND.

Balance cash on hand, July 1, 1913	$ 2.08	
RECEIPTS.		
From State Appropriations:		
Chap. 328, Sec. 2, Laws of 35th G. A.	5,000.00	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 4,992.99
Balance cash on hand, June 30, 1914		9.09
	$ 5,002.08	$ 5,002.08

SPECIAL LAND FUND.

Balance cash on hand, July 1, 1913	$ 15,418.56	
RECEIPTS.		
From State Appropriations:		
Chap. 328, Sec. 2, Laws of 35th G. A.	5,000.00	
From Secretary	421.50	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 12,394.59
Balance cash on hand, June 30, 1914		8,445.47
	$ 20,840.06	$ 20,840.06

DONATED LAND FUND.

Balance cash on hand, July 1, 1913	$ 722.37	
RECEIPTS.		
From Secretary	370.00	
Balance cash on hand, June 30, 1914		$ 1,092.37
	$ 1,092.37	$ 1,092.37

HEATING PLANT TUNNEL FUND.

RECEIPTS.		
From State Appropriations:		
Chap. 328, Sec. 2, Laws of 35th G. A.	$ 10,000.00	
From Secretary	63.45	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 8,691.33
Balance cash on hand, June 30, 1914		1,372.12
	$ 10,063.45	$ 10,063.45

UNIVERSITY EXTENSION FUND.

RECEIPTS.		
From State Appropriations:		
Chap. 328, Sec. 1, Laws of 35th G. A.	$ 13,750.00	

DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 7,017.27
Balance cash on hand June 30, 1914		6,732.73
	$ 13,750.00	$ 13,750.00

UNIVERSITY EPIDEMIOLOGIST FUND.

RECEIPTS.		
From State Appropriations:		
Chap. 328, Sec. 1, Laws of 35th G. A.	$ 4,583.30	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 3,276.98
Balance cash on hand, June 30, 1914		1,306.32
	$ 4,583.30	$ 4,583.30

CHAS. M. JESUP PRIZE FUND.

Balance cash on hand, July 1, 1913	$ 50.00	
Balance cash on hand, June 30, 1914		$ 50.00
	$ 50.00	$ 50.00

MARK RANNEY MEMORIAL INTEREST FUND.

Balance cash on hand, July 1, 1913	$ 1,799.14	
RECEIPTS.		
From interest on Ranney Memorial Fund (see list on page 179)	4,390.87	
From Secretary	51.19	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 4,034.00
Balance cash on hand June 30, 1914		2,207.20
	$ 6,241.20	$ 6,241.20

A. WHITNEY CARR FREE SCHOLARSHIP INTEREST FUND.

Balance cash on hand, July 1, 1913	$ 3,733.23	
RECEIPTS.		
From interest on A. Whitney Carr Scholarship Fund (see list on page 179)	2,418.73	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 2,330.00
Balance cash on hand, June 30, 1914		3,821.96
	$ 6,151.96	$ 6,151.96

WAITE LOWRY GIFFORD MEMORIAL INTEREST FUND.

Balance cash on hand, July 1, 1913	$ 25.15	
RECEIPTS.		
From interest on Waite Lowry Gifford Memorial Fund (see list, page 180)	413.50	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 182.05
Balance cash on hand, June 30, 1914		256.60
	$ 438.65	$ 438.65

F. O. LOWDEN PRIZE INTEREST FUND.

Balance cash on hand, July 1, 1913	$ 343.75	
RECEIPTS.		
From Secretary	175.00	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		150.00
Balance cash on hand, June 30, 1914		368.75
	$ 518.75	$ 518.75

WM. JENNINGS BRYAN PRIZE INTEREST FUND.

Balance cash on hand, July 1, 1913	$ 43.66	
RECEIPTS.		
From interest on Wm. Jennings Bryan Prize Fund (see list on page 180)	12.50	
DISBURSEMENTS.		
Warrants paid July 1, 1913, to June 30, 1914		$ 10.00
Balance cash on hand, June 30, 1914		46.16
	$ 56.16	$ 56.16

CAPITAL.

PERMANENT FUND.

By mortgage notes July 1, 1913		$256,050.00
By cash balance, July 1, 1913		543.86
By cash received—sale of lands and rents		3,140.00
To mortgage notes on hand, June 30, 1914	$250,300.00	
To cash balance, June 30, 1914	9,433.86	
	$259,733.86	$259,733.86

MARK RANNEY MEMORIAL FUND.

By mortgage notes, July 1, 1913		$ 82,700.00
By cash balance, July 1, 1913		736.67
To mortgage notes on hand, June 30, 1914	$ 80,300.00	
To cash balance, June 30, 1914	3,136.67	
	$ 83,436.67	$ 83,436.67

A. WHITNEY CARR FREE SCHOLARSHIP FUND.

By mortgage notes, July 1, 1913		$ 48,150.00
By cash balance, July 1, 1913		1,850.00
To mortgage notes on hand, June 30, 1914	$ 47,250.00	
To cash balance, June 30, 1914	2,750.00	
	$ 50,000.00	$ 50,000.00

WAITE LOWRY GIFFORD MEMORIAL FUND.

By mortgage notes, July 1, 1913		$ 8,000.00
By cash balance, July 1, 1913		737.08
To mortgage notes on hand, June 30, 1914	$ 8,500.00	
To cash balance, June 30, 1914	237.08	
	$ 8,737.08	$ 8,737.08

WM. JENNINGS BRYAN PRIZE FUND.

By mortgage notes, July 1, 1913		$ 250.00
To mortgage notes on hand, June 30, 1914	$ 250.00	
	$ 250.00	$ 250.00

FRANK O. LOWDEN PRIZE FUND.

By 25 shares preferred stock in the National Biscuit Co., July 1, 1913		$ 2,500.00
To 25 shares preferred stock in the National Biscuit Co., June 30, 1914	$ 2,500.00	
	$ 2,500.00	$ 2,500.00

RECAPITULATION OF BALANCES, JUNE 30, 1914.

Income Fund	$ 56,597.78	
Library Fund	1,248.83	
Repair and Contingent Fund	565.52	
Building Tax Fund	10,956.60	
Equipment New Building Fund	1,934.00	
Equipment and Supplies Fund	3,220.43	
Engineering Equipment Fund	1,140.02	
Domestic Science Equipment Fund	1,183.26	
Paving and Sidewalks Fund	9.09	
Special Land Fund	8,445.47	
Donated Land Fund	1,092.37	
Heating Plant Tunnel Fund	1,372.12	
University Extension Fund	6,732.73	
University Epidemiologist Fund	1,306.32	
Charles M. Jesup Prize Fund	50.00	
Mark Ranney Memorial Interest Fund	2,207.20	
A. Whitney Carr Scholarship Interest Fund	3,821.96	
Waite Lowry Gifford Memorial Interest Fund	256.60	
F. O. Lowden Prize Interest Fund	368.75	
W. J. Bryan Prize Interest Fund	46.16	
	$102,247.67	
OVERDRAWN.		
Dental Equipment Fund	153.77	
		$102,401.44

LOAN FUNDS.

Permanent Land Fund	$ 9,433.86	
Mark Ranney Memorial Fund	3,136.67	
A. Whitney Carr Scholarship Fund	2,750.00	
Waite Lowry Gifford Memorial Fund	237.08	$ 15,557.61
		$117,959.05

MORTGAGE LOANS.

Permanent Land Fund	$250,300.00	
Mark Ranney Memorial Fund	80,300.00	
A. Whitney Carr Scholarship Fund	47,250.00	
Waite Lowry Gifford Memorial Fund	8,500.00	
W. J. Bryan Prize Fund	250.00	$386,600.00
F. O. Lowden Prize Fund (25 shares preferred stock National Biscuit Co.)		2,500.00
		$507,059.05

June 30, 1914.

First National Bank, W. J. McChesney, Treas. S. U. I.	$102,401.44
First National Bank, W. J. McChesney, Treas. S. U. I. Loan Funds	15,557.61
Mortgage notes on hand	386,600.00
25 shares preferred stock in National Biscuit Co.	2,500.00
	$507,059.05

INTEREST COLLECTIONS FROM JULY 1, 1913, TO JUNE 30, 1914.

PERMANENT FUND INTEREST.

Loan No. 725—Stephen Bradley	$ 27.45
Loan No. 878—N. B. Richey	273.34
Loan No. 899—Elizabeth Dennis	25.00
Loan No. 962—D. W. Jones	79.51
Loan No. 982—John J. Edwards	100.00
Loan No. 1012—Gustav Eckardt	166.05
Loan No. 1019—Mrs. Jas. C. Tobin	135.13
Loan No. 1020—Alexander Grace	500.00
Loan No. 1028—Jos. H. Miller	175.00
Loan No. 1038—John H. Potter	67.50
Loan No. 1039—Joseph Lenoch	115.00
Loan No. 1044—Joseph L. Roberts	73.75
Loan No. 1063—Emily Jordon	60.00
Loan No. 1066—Inland Fuel Co.	116.67
Loan No. 1067—John L. Edwards	75.00
Loan No. 1068—Wm. J. Hanson	400.00
Loan No. 1073—Wm. J. Hanson	260.00
Loan No. 1076—Frederick L. Zager	200.00
Loan No. 1078—D. M. Van Ness	200.00
Loan No. 1079—J. F. Winborn	250.00
Loan No. 1080—Albert Schmidt	155.00
Loan No. 1082—M. J. Giblin	506.67
Loan No. 1083—Katie C. McGuire	125.00
Loan No. 1085—E. A. Miller	300.00
Loan No. 1086—Samuel Lininger	300.00
Loan No. 1087—Stanley Marak	500.00

Loan No. 1088—Ann Mooney	250.00
Loan No. 1090—Edward Kinney	175.00
Loan No. 1091—Ralph Evans	660.00
Loan No. 1092—Edwin Hummer	471.54
Loan No. 1093—George O. Holbrook	132.00
Loan No. 1094—John D. Colony	240.00
Loan No. 1095—Joseph Hoffman	50.00
Loan No. 1096—Philip Michel	319.00
Loan No. 1097—F. S. Webster	165.00
Loan No. 1098—Frank Streb	165.00
Loan No. 1099—D. J. Berkey	262.50
Loan No. 1100—Jacob F. Wentz	250.00
Loan No. 1101—Victor F. Schnoeblin	150.00
Loan No. 1102—David B. Hochstetler	120.00
Loan No. 1103—Wm. Andrews	800.00
Loan No. 1104—Joseph Wertz	325.00
Loan No. 1105—L. J. Guengerich	75.00
Loan No. 1106—John A. Rennholz	385.00
Loan No. 1107—Robert B. Graham	410.00
Loan No. 1108—Lorin J. Conklin	82.50
Loan No. 1109—Jacob P. Miller	200.00
Loan No. 1110—John W. Newkirk	431.25
Loan No. 1111—Anthony Sibel	225.00
Loan No. 1112—Elizabeth Butler	40.00
Loan No. 1113—John Cornwall	275.00
Loan No. 1114—Joseph A. Hrdliska	250.00
Loan No. 1115—Thomas A. Coglan	331.25
Loan No. 1116—John T. Ford	48.96
Loan No. 1117—James M. Fordice	35.00
Loan No. 1118—George Rupener	251.00
Loan No. 1119—A. D. Craig	150.00
Loan No. 1120—Wm. J. Phillips	141.58
	$13,052.65

MARK RANNEY MEMORIAL INTEREST FUND.

Loan No. R 17—J. A. Northrop	$ 173.34
Loan No. R 18—J. A. Northrop	173.34
Loan No. R 20—Elias Kinsinger	199.38
Loan No. R 21—John Giblin	200.00
Loan No. R 22—John Cash, Jr.	375.00
Loan No. R 23—Ed. E. Hanson	625.00
Loan No. R 25—W. W. Frost	100.00
Loan No. R 26—M. H. Donohoe	870.00
Loan No. R 33—Josephine Remley	165.00
Loan No. R 34—D. J. Berkey	220.00
Loan No. R 35—Jacob Y. Stover	330.00
Loan No. R 36—Clay Brown	440.00
Loan No. R 37—Wm. Zuber	383.34
Loan No. R 38—Edw. F. Borschel	98 80
Loan No. R 39—William Nelson	37.67
	$ 4,390.87

A. WHITNEY CARR SCHOLARSHIP FUND.

Loan No. C 2—George R. Hall	$ 100.00
Loan No. C 3—George R. Hall	120.00
Loan No. C 6—Susanna E. Wandling	75.00

Loan No. C 18—John A. Walz	175.00
Loan No. C 24—L. L. Stutzman	169.88
Loan No. C 27—Lucy Hemsted	35.00
Loan No. C 28—F. S. Webster	125.00
Loan No. C 31—Vincent R. Pelzer	415.00
Loan No. C 32—W. H. C. Rogers	300.00
Loan No. C 33—Julius Tudor	137.50
Loan No. C 34—Elizabeth Butler	175.00
Loan No. C 35—John McDonough	275.50
Loan No. C 36—A. F. Weeber	206.25
Loan No. C 37—Edw. F. Borschel	98.80
Loan No. C 38—Edw. Kinney	28.80
	$ 2,418.73

WAITE GIFFORD LOWRY MEMORIAL FUND.

Loan No. G 1—N. Peterson	$ 163.50
Loan No. G 2—F. S. Webster	100.00
Loan No. G 3—T. J. Foster	150.00
	$ 413.50

W. J. BRYAN PRIZE FUND.

Loan No. B 1—J. H. Potter	$ 12.50

During the year ending June 30, 1914, I have made new loans as listed below:

PERMANENT FUND.

	Amount.	Value of Security.
Loan No. 1121—Joseph Lenoch	$ 3,000.00	$ 36,400.00
Loan No. 1122—John Ryan	4,000.00	10,500.00
Loan No. 1123—Emily Jordon	1,000.00	7,200.00
Loan No. 1124—James Lukavsky	8,000.00	42,370.00
Loan No. 1125—Joseph A. O'Leary	9,000.00	39,000.00
Loan No. 1126—John G. Andrews	4,800.00	32,000.00
Loan No. 1127—Alexander Grace	10,000.00	34,000.00
Loan No. 1128—John T. Winborn	4,000.00	12,000.00
Loan No. 1129—Arthur Plagmann	4,000.00	12,500.00
Loan No. 1130—L. L. Stutsman	3,000.00	18,000.00
Loan No. 1131—Joseph L. Roberts	800.00	6,400.00
Loan No. 1132—John A. Miller	3,500.00	20,000.00
	$ 55,100.00	

MARK RANNEY MEMORIAL FUND.

Loan No. R 40—Edw. Casey	$ 3,500.00	$ 12,250.00
Loan No. R 41—Anton Hinek	3,000.00	16,740.00
	$ 6,500.00	

A. WHITNEY CARR SCHOLARSHIP FUND.

Loan No. C 38—Edw. Kinney	$ 1,850.00	$ 8,000.00

WAITE LOWRY GIFFORD MEMORIAL FUND.

Loan No. G 4—Joseph Messill	$ 3,500.00	$ 12,000.00

LIST OF MORTGAGE NOTES ON HAND, JUNE 30, 1914.

PERMANENT FUND.

No.		Amount	Interest paid to
899	Elizabeth Dennis	$ 500.00	January 1, 1914
982	John J. Edwards	2,000.00	January 1, 1914
1028	Joseph H. Miller	3,500.00	January 1, 1914
1038	John H. Potter	1,350.00	January 1, 1914
1067	John L. Edwards	1,500.00	January 1, 1914
1068	Wm. J. Hanson	8,000.00	January 1, 1914
1080	Albert Schmidt	3,100.00	January 1, 1914
1082	M. J. Giblin	10,000.00	May 1, 1914
1083	Katie C. McGuire	2,500.00	January 1, 1914
1085	E. A. Miller	6,000.00	January 1, 1914
1087	Stanley Marak	10,000.00	January 1, 1914
1088	Ann Mooney	5,000.00	January 1, 1914
1090	Edw. Kinney	3,500.00	January 1, 1914
1091	Ralph Evans	11,000.00	January 1, 1914
1093	George O. Holbrook	1,400.00	January 1, 1914
1094	John D. Colony	4,800.00	January 1, 1914
1095	Joseph Hoffman	600.00	January 1, 1914
1096	Philip Michel	5,800.00	March 1, 1914
1097	F. S. Webster	3,000.00	January 1, 1914
1098	Frank Streb	3,300.00	January 1, 1914
1099	D. J. Berkey	5,250.00	January 1, 1914
1100	Jacob F. Wentz	5,000.00	April 1, 1914
1101	Victor F. Schnoeblin	3,000.00	January 1, 1914
1102	D. B. Hochstetler	2,400.00	January 1, 1914
1103	Wm. Andrews	16,000.00	June 25, 1914
1104	Joseph Wertz	6,500.00	April 1, 1914
1105	L. J. Guengerich	1,500.00	January 1, 1914
1106	John A. Rennholz	7,000.00	January 1, 1914
1107	Robert Graham	8,200.00	January 1, 1914
1108	L. I. Conklin	1,650.00	January 1, 1914
1109	Jacob P. Miller	4,000.00	January 1, 1914
1110	John W. Newkirk	7,000.00	January 1, 1914
1111	Anthony Sibel	4,500.00	January 1, 1914
1112	Elizabeth Butler	800.00	January 1, 1914
1113	John Cornwall	5,000.00	Feb. 15, 1914
1114	Joseph A. Hrdliska	6,000.00	January 1, 1914
1115	Thos. A. Coglan	9,000.00	January 1, 1914
1116	John T. Ford	1,500.00	January 1, 1914
1117	James M. Fordice	700.00	January 1, 1914
1118	George Rupener	6,350.00	January 1, 1914
1119	A. D. Craig	3,000.00	January 1, 1914
1120	Wm. J. Phillips	4,000.00	January 1, 1914
1121	Joseph Lenoch	3,000.00	No interest matured
1122	John Ryan	4,000.00	No interest matured
1123	Emily J. Jordan	1,000.00	No interest matured
1124	James Lukavsky	8,000.00	No interest matured
1125	Joseph A. O'Leary	9,000.00	No interest matured
1126	John G. Andrews	4,800.00	No interest matured
1127	Alexander Grace	10,000.00	No interest matured
1128	John T. Winborn	4,000.00	No interest matured
1129	Arthur Plagmann	4,000.00	No interest matured
1130	L. L. Stutsman	3,000.00	No interest matured
1131	Joseph L. Roberts	800.00	No interest matured
1132	John A. Miller	3,500.00	No interest matured
		$250,300.00	

MARK RANNEY MEMORIAL FUND.

No.		Amount	Interest paid to
R 21	John Giblin	$ 4,000.00	January 1, 1914
R 22	John Cash, Jr.	7,500.00	January 1, 1914
R 23	Ed. E. Hanson	12,500.00	January 1, 1914
R 25	W. W. Frost	2,000.00	January 1, 1914
R 26	M. H. Donohue	14,500.00	January 1, 1914
R 33	Josephine D. Remley	3,000.00	January 1, 1914
R 34	D. J. Berkey	4,000.00	March 22, 1914
R 35	Jacob Y. Stover	6,000.00	April 1, 1914
R 36	Clay Brown	8,800.00	January 1, 1914
R 37	Wm. Zuber	8,000.00	January 1, 1914
R 38	E. F. Borschel	2,500.00	January 1, 1914
R 39	Wm. Wilson	1,000.00	January 1, 1914
R 40	Edw. Casey	3,500.00	No interest matured
R 41	Anton Hinek	3,000.00	No interest matured
		$ 80,300.00	

A. WHITNEY CARR SCHOLARSHIP FUND.

No.		Amount	Interest paid to
C 2	George R. Hall	$ 2,000.00	January 1, 1914
C 3	George R. Hall	2,400.00	January 1, 1914
C 6	Susanna Wandling	1,500.00	January 1, 1914
C 18	John A. Walz	3,500.00	January 1, 1914
C 27	Lucy Hemsted	200.00	January 1, 1914
C 28	F. S. Webster	2,500.00	January 1, 1914
C 31	Vincent R. Pelzer	8,300.00	March 1, 1914
C 32	W. H. C. Rogers	6,000.00	April 1, 1914
C 33	Julius Tudor	2,500.00	January 1, 1914
C 34	Elizabeth Butler	3,500.00	January 1, 1914
C 35	John McDonough	6,000.00	January 1, 1914
C 36	A. F. Weeber	4,500.00	January 1, 1914
C 37	E. F. Borschel	2,500.00	January 1, 1914
C 38	Edw. Kinney	1,850.00	January 1, 1914
		$ 47,250.00	

WAITE LOWRY GIFFORD MEMORIAL FUND.

No.		Amount	Interest paid to
G 2	F. S. Webster	$ 2,000.00	January 1, 1914
G 3	T. J. Foster	3,000.00	January 1, 1914
G 4	Joseph Missell	3,500.00	No interest matured
		$ 8,500.00	

W. J. BRYAN PRIZE FUND.

B 1	John H. Potter	250.00	January 1, 1914

Respectfully submitted,

W. J. McCHESNEY,
Treasurer.

REPORT

OF THE REGISTRAR OF THE STATE UNIVERSITY OF IOWA FOR THE ACADEMIC YEARS 1912-1913 AND 1913-1914.

To the President of the University and the Iowa State Board of Education:

Gentlemen: I respectfully submit herewith the report of the Registrar of the University for the academic years 1912-1913 and 1913-1914.

It will be noted that attendance for the biennium just closed is considerably in excess of the attendance of the preceding biennium. The total registration in 1912-1913 was 2,255, an increase of 7.8 per cent over that of the preceding year. The attendance for the second year of the biennium just closed was 2,669, an advance of 18 per cent over that of the preceding year, and larger by about 200 than the total registration of any preceding year.

I should like to call your attention to the fact that in the last decade attendance in the University has increased 91.6 per cent.

Under the head, Ages of Students, it will be observed that during the last academic year there were registered 69 men and 50 women more than thirty-five years of age. These persons were registered in the Graduate and Professional Colleges. This indicates that the courses offered in the University are attracting in increasing numbers mature men and women.

For the first time in the history of the University, I believe, students were registered during the last biennium from every county in the state. The proportion of students residing beyond the boundaries of Iowa is not large, yet twelve other states furnish six or more each, while thirty-eight students come from homes representing states and territories in almost every part of the Union. Thirty-eight students are registered from foreign countries, the larger proportion of these coming from the countries of the Orient.

Almost one-third of all the students registered in the University come from the country, 32 per cent, indicating that the occupation of their parents is agriculture of some form.

The religious census deserves notice. In the interests of brevity, we have indicated but nine principal groups, all other students from scattering denominations being classified under the head, Other Denominations. In the registration of 1913-1914, 94 men and 24 women did not indicate any church or religious preference.

Respectfully submitted,

FOREST C. ENSIGN,
Registrar.

SUMMARY OF REGISTRATION, 1912-1913

ATTENDANCE BY COLLEGES.

	Men	Women	Total
The College of Liberal Arts—			
Fourth year	79	101	180
Third year	92	108	200
Second year	120	116	236
First year	231	162	393
Unclassified	43	22	65
	565	509	1,074
Summer session	87	89	176
	652	598	1,250
Duplicates	42	39	81
Total, excluding duplicates	610	559	1,169
The College of Law—			
Third year	49	0	49
Second year	66	0	66
First year	109	0	109
Unclassified	1	0	1
Total	225	0	225
The College of Medicine—			
Fourth year	16	1	17
Third year	16	0	16
Second year	30	0	30
First year	34	1	35
Unclassified	1	0	1
Total	97	2	99
Nurses	0	79	79
The College of Homeopathic Medicine—			
Fourth year	6	0	6
Second year	3	1	4
First year	3	0	3
Unclassified	1	0	1
Total	13	1	14
Nurses	0	17	17
The College of Dentistry—			
Fourth year	1	0	1
Third year	28	2	30
Second year	42	1	43
First year	88	2	91
Unclassified	14	0	14
Total	174	5	179
The College of Pharmacy—			
Regular Course:			
Third year	2	0	2
Second year	16	1	17
First year	25	1	26
Unclassified	1	0	1
Practitioner's Course:			
Second year	2	0	2
First year	1	0	1
Total	47	2	49
The Graduate College—			
Enrolled September to June	102	64	166
Enrolled summer session	78	60	138
Total	180	124	304
Duplicates	35	12	47
Total, excluding duplicates	145	112	257

Of this total the enrollment as candidates for the various degrees was as follows:

	Men	Women	Total
Doctor of Philosophy	34	5	39
Master of Arts	48	42	90
Master of Science	30	18	48
Master of Science in Medicine	5	1	6
Not candidates for degrees	28	46	74
Total	145	112	257
The College of Applied Science—			
Architectural Engineering:			
Second year	1	0	1
Chemistry:			
Fourth year	6	0	6
Third year	3	0	3
Second year	4	0	4
Civil Engineering:			
Fourth year	10	0	10
Third year	11	0	11
Second year	11	0	11
Electrical Engineering:			
Fourth year	11	0	11
Third year	5	0	5
Second year	8	0	8
General Engineering:			
Fourth year	2	0	2
Third year	3	0	3
Second year	1	0	1
Mechanical Engineering:			
Fourth year	6	0	6
Third year	7	0	7
Second year	6	0	6
First year	82	0	82
Total	177	0	177
The College of Fine Arts—			
Fourth year	0	2	2
Third year	0	2	2
Second year	1	2	3
First year	3	13	16
Special and unclassified	22	80	102
	26	99	125
Summer session (School of Music)	1	11	12
	27	110	137
Duplicates	0	6	6
Total, excluding duplicates	27	104	131
The Summer Session, 1912—			
The College of Liberal Arts	75	85	160
The Graduate College	69	54	123
The School of Music	1	11	12
	145	150	295
Duplicates	0	2	2
Total	145	148	293
At The Macbride Lakeside Laboratory at Okoboji—			
The College of Liberal Arts	12	4	16
The Graduate College	9	6	15
	21	10	31
Total for the summer session	166	158	324

These figures appear also in the summaries of the colleges and schools named.

	Men	Women	Total
Recapitulation—			
The College of Liberal Arts	610	559	1,169
The College of Law	225	0	225
The College of Medicine	97	2	99
Training School for Nurses	0	79	79
The College of Homeopathic Medicine	13	1	14
Training School for Nurses	0	17	17
The College of Dentistry	174	5	179
The College of Pharmacy	47	2	49
The Graduate College*	145	112	257
The College of Applied Science	177	0	177
The College of Fine Arts*	27	104	131
	1,515	881	2,396
Duplicates†	98	43	141
Total, excluding duplicates	1,417	838	2,255
†The duplicates are made up as follows:			
Students enrolled in more than one college or school in the regular year	81	38	119
Students enrolled in more than one college or school in the Summer Session	0	2	2
Students enrolled in one college or school in the Summer Session and another in the regular year	17	3	20
Total	98	43	141

STATISTICS FOR THE ACADEMIC YEAR 1912-1913

DEGREES AND CERTIFICATES, 1912-1913.

	Men	Women	Total
Advanced Degrees—			
Doctor of Philosophy	6	0	6
Master of Arts	13	4	17
Master of Science	9	3	12
Master of Science in Medicine	3	1	4
Civil Engineer	9	0	9
Engineer of Mines	1	0	1
Total advanced degrees	41	8	49
First Degrees—			
Bachelor of Arts	69	102	171
Bachelor of Science	9	0	9
Bachelor of Laws	46	0	46
Doctor of Medicine	15	1	16
Doctor of Medicine (Homeopathic)	6	0	6
Doctor of Dental Surgery	31	2	33
Graduate in Pharmacy	12	1	13
Pharmaceutical Chemist	1	0	1
Bachelor of Engineering	26	0	26
Bachelor of Science in Chemistry	3	0	3
Bachelor of Science (Col. Ap. Sci.)	1	0	1
Bachelor of Arts (Col. Fine Arts)	0	1	1
Bachelor of Music	0	1	1
Total first degrees	219	108	327

*These figures include students registered in the respective colleges in the Summer Sessions only.

DEGREES AND CERTIFICATES, 1912-1913—Concluded.

	Men	Women	Total
Certificates—			
Practitioner's Certificate in Pharmacy	1	0	1
Nurses' Training School	0	7	7
Nurses' Training School (Homeopathy)	0	4	4
School of Education	17	82	99
Resident Physicians	4	0	4
Internes (Homeopathy)	3	0	3
Total certificates	25	93	118
Total number of degrees and certificates granted	285	209	494

RESIDENCE OF STUDENTS BY COUNTIES, 1912-1913.

IOWA COUNTIES.	L. A.		Law	Med.		H.Med.		Dent.		Pharm.		Grad.		Ap. Sci	F. A.		N.	HN	Tot. ex.dup	
	M.	W.	M.	M.	W	M.	W.	M.	W.	M.	W.	M.	W.	M.	M	W.	W.	W.	M.	W.
Adair	3	2	1	1				2					1						5	1
Adams	3	2										1	1						4	3
Allamakee		3	1					2						4					7	3
Appanoose	6	3	1									2		3					11	3
Audubon	1	2														1		1	1	3
Benton	8	5	4	3				1				1		3					19	5
Black Hawk	9	6	7	3			1	3				3		1		1	1		25	8
Boone	4	5										1							5	5
Bremer	6	1		1										1					8	1
Buchanan	4	7		2				2					1	2					10	8
Buena Vista	4	1						4				2		1			5		11	6
Butler	3		1	1										1			2		4	2
Calhoun	5	2	2	1				2						1				1	11	3
Carroll	5	10	1	2				1										1	8	11
Cass	3	3	1					2		1			1						7	4
Cedar	11	12	3	1				1		1		3	2	2	1	3	1		20	15
Cerro Gordo	4	9	3			2								3					11	9
Cherokee	4	2	3					4					1						10	2
Chickasaw	7	3	2	1				2						2					13	3
Clarke	4	1								2				2					8	1
Clay	6		4					1				1		2		1			13	1
Clayton	4	2	4					4		2							1		12	3
Clinton	13	2	2	1		1		1		4		1		4					26	2
Crawford	10	5	3												1				12	5
Dallas	5	4		1						1									6	4
Davis		1								1									1	1
Decatur	6	5	2					2				2			1				11	5
Delaware	1	2	2									1	3				1		4	6
Des Moines	9	5		3								1	1	1					13	6
Dickinson	1															1			1	1
Dubuque	2	2	4	1				1				1	1	2			1		11	4
Emmet	2	7	1	1								1		2		1	1		7	8
Fayette	4	6	2					2						4					11	6
Floyd	4	2	1					2						2			1		9	3
Franklin	2	2	1										1						3	3
Fremont	5	2	1					1											7	2
Greene	1	4	1										1			1	1		2	5
Grundy	2	3	2					1				2				1	1		6	4
Guthrie	6	2	4					1							1				12	2
Hamilton	2	6						4											6	6
Hancock	3	1	2														1		5	2
Hardin	10	6	2					1				1			1		2		13	8
Harrison	4	4		1				1				2		2		2			10	4
Henry	5	12	1	2				3		1		3	1	4					18	13
Howard	4	1						1											5	1
Humboldt	2	5	1	3				1					1	2		1			9	6
Ida	10	3	1	2	1			1						1	1	2	1		14	7
Iowa	8	12	6	6				5		1			1	4		2	2		29	14
Jackson	9	7	4					2						5		1	1		20	8
Jasper	5	1	3	1				1						1			1		10	2
Jefferson	2		2	1				1				1	1	3					8	1
Johnson	83	160	17	12		2		10	1	7		41	55	27	16	55	12	3	202	275
Jones	5	3	5					1				2		2			3	2	14	8
Keokuk	6	9	2	2				1		2		2				1		3	13	12
Kossuth	6	3	2	2						1				1		2	1		12	5
Lee	2	5	4	2						2				2					12	5
Linn	11	11	4	3	1			5	2		1	5	7	11	1	3	5		38	30
Louisa	7	3	3					1		2			2	2		2			15	7
Lucas	3	4												1					4	4
Lyon	4	2	1											1					5	2
Madison	3	2	1									1							5	2
Mahaska	1	3	2									3	2	2		1			8	6
Marion			1					1				1							3	
Marshall	4	4	2	2		1								1					8	4
Mills																				
Mitchell	1	1				1								1					2	1
Monona	7	2	3					1				1		2					14	2
Monroe	5	1	1	1								2	1				1		8	3
Montgomery	5	2	1							1	1	1		1		1	2		8	5
Muscatine	8	9	3	1				1		3		1	3	5	1	4	2		21	17
O'Brien	11	3	1	2				2				1	1	2			1		17	5
Osceola	3		1													1			3	1
Page	7	3	3					2				3		1					14	3
Palo Alto	8	6	4	1				1						1			1		15	7
Plymouth	2	1		2				2				1							6	1
Pocahontas	9	5	2									1							10	5
Polk	11	12	7	1		3		2				3	1	3		1			27	13
Pottawattamie	4	3	1					2						2					8	3
Poweshiek	3	5	2					4				1	1				3	2	10	11
Ringgold	2		2					1				1							5	
Sac	3	1	1					1						2		1			6	2
Scott	6	13	13	1		1		1					2	3		3			25	16
Shelby	5	2	1												1				6	2
Sioux	14	4	5	2				4		2		1	1	4			2		30	6
Story	1		2					3				2	2	2				1	10	3
Tama	5	7	8	3				3		1		3	1	2	1	1			24	9

RESIDENCE OF STUDENTS BY COUNTIES, ETC., 1912-1913—Concluded

IOWA COUNTIES	L. A.		Law	Med.		H.Med.		Dent.		Pharm.		Grad.		Ap. Sci	F. A.		N.	HN	Tot.ex.dup	
	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.
Taylor	1	3	----	----	----	----	----	----	----	1	----	----	----	----	1	----	----	----	3	3
Union	3	2	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	4	2
Van Buren	3	1	2	----	----	----	----	1	----	----	----	2	----	----	----	----	----	----	7	1
Wapello	7	1	2	1	----	----	----	----	----	----	----	----	2	1	----	----	1	----	10	4
Warren	2	----	----	----	----	----	----	----	----	----	----	1	1	----	----	----	----	----	3	1
Washington	5	10	3	1	----	----	----	5	----	----	----	3	1	1	----	----	2	1	18	14
Wayne	7	3	3	1	----	----	----	4	----	----	----	2	----	2	----	1	1	----	15	5
Webster	6	10	6	----	----	----	----	3	----	----	----	----	----	1	----	----	1	----	16	11
Winnebago	4	3	1	1	----	----	----	----	1	----	----	----	3	1	----	----	----	----	6	7
Winneshiek	1	2	1	1	----	----	----	1	----	----	----	----	----	2	----	----	2	----	6	4
Woodbury	19	12	2	3	----	----	----	----	----	1	----	2	2	4	----	2	----	----	31	13
Worth	1	----	----	1	----	----	----	1	----	2	----	----	----	----	----	1	1	----	4	2
Wright	7	1	1	1	----	----	----	1	----	----	----	1	----	1	----	----	2	----	10	3
Other States and Foreign Countries.																				
Illinois	9	5	----	1	----	----	----	4	1	2	----	6	2	2	----	1	3	----	21	11
Kansas	4	----	3	----	----	----	----	----	----	----	----	1	----	----	----	1	1	----	8	2
Minnesota	3	5	1	2	----	1	----	11	----	1	----	6	1	3	----	----	2	----	26	8
Missouri	5	3	2	2	----	----	----	3	----	1	----	----	----	----	----	1	----	----	12	4
Nebraska	----	3	2	----	----	1	----	3	----	----	----	----	1	1	----	1	----	----	7	5
North Dakota	----	2	1	1	----	----	----	4	----	----	----	2	----	----	----	----	----	----	8	2
South Dakota	5	5	----	1	----	----	----	7	----	2	----	2	----	3	----	----	1	1	20	7
Other states	13	5	3	2	----	----	----	7	----	2	----	6	2	4	----	2	5	1	36	13
Foreign countries	9	1	1	1	----	----	----	7	----	----	----	4	----	5	----	----	----	----	26	1

AGES OF STUDENTS—1912-1913.	L. A.		Law	Med.		H.Med.		Dent.		Pharm.		Grad.		Ap. Sci	F. A.		N.	HN	Tot.ex.dup	
	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.
Under 17	1	----	----	----	----	----	----	----	----	----	----	----	----	----	10	19	----	----	11	19
17	5	4	----	----	----	----	----	----	----	1	----	----	----	2	----	1	----	----	7	5
18	13	21	1	----	----	----	----	----	----	1	----	----	----	5	1	4	----	----	20	25
19	70	55	5	----	----	----	----	5	----	5	----	----	----	20	2	15	1	2	105	67
20	97	78	16	2	----	----	----	16	----	4	----	1	----	23	4	8	5	1	158	85
21	122	97	20	3	1	1	----	37	1	8	----	1	1	42	4	11	16	4	239	127
22	89	74	32	10	----	1	----	28	----	9	----	2	5	30	3	11	7	1	189	90
23	63	65	43	18	----	1	----	29	1	11	----	7	9	12	2	4	11	3	169	91
24	47	42	41	13	----	3	----	18	----	4	----	12	8	14	----	5	5	1	136	59
25	35	23	22	20	----	2	----	13	----	1	----	9	9	11	----	5	4	2	100	43
26	20	21	15	2	----	1	1	7	----	----	----	12	9	6	----	2	8	1	55	40
27	11	15	9	4	1	----	----	7	----	2	1	13	4	7	----	1	1	----	49	19
28	6	9	6	6	----	3	----	----	----	----	----	11	7	2	----	----	5	----	33	21
29	5	5	9	7	----	----	----	5	----	----	1	13	7	2	----	1	4	1	46	18
30	2	8	1	3	----	----	----	4	2	----	----	9	9	----	----	2	4	----	19	22
31	6	5	----	2	----	----	----	2	----	1	----	3	4	----	1	2	3	1	13	15
32	----	4	2	4	----	----	----	2	----	----	----	2	3	1	----	1	2	----	10	10
33	3	5	----	2	----	----	----	----	----	----	----	6	4	----	----	3	3	----	10	13
34	1	5	----	----	----	----	----	----	----	----	----	4	5	----	----	----	----	----	5	10
35	3	5	2	----	----	1	----	----	----	----	----	5	2	----	----	----	----	----	10	7
Over 35	11	18	1	1	----	----	----	1	1	----	----	35	26	----	----	9	----	----	48	52

RELIGIOUS CENSUS—1912-1913.	L. A.		Law	Med.		H.Med.		Dent.		Pharm.		Grad.		Ap. Sc	F. A.		N.	HN	Tot.ex.dup	
	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.
Baptist—																				
Membership	18	27	6	7	----	1	----	8	----	----	----	8	6	4	----	7	3	1	48	40
Preference	5	----	2	1	----	----	----	2	----	----	----	----	1	3	1	----	----	----	13	1
Catholic—																				
Membership	61	85	40	8	1	2	----	21	----	6	----	1	16	15	1	10	10	----	145	119
Preference	3	1	2	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	6	1
Christian—																				
Membership	13	29	6	1	----	----	----	9	----	2	----	5	6	6	----	2	4	----	40	40
Preference	10	4	3	3	----	----	----	1	----	----	----	----	1	----	----	1	1	1	17	8
Congregational—																				
Membership	39	53	15	3	----	2	----	12	2	3	1	14	11	10	2	15	3	2	95	82
Preference	21	10	2	3	----	----	----	4	----	----	----	2	2	6	1	1	1	----	38	14
Episcopal—																				
Membership	15	12	12	----	----	----	----	2	----	1	----	----	2	3	2	8	3	----	33	24
Preference	2	7	3	----	----	----	----	3	----	2	----	----	1	1	----	1	1	----	11	9
Lutheran—																				
Membership	21	25	6	3	----	1	----	10	----	5	----	10	4	15	4	2	12	2	69	44
Preference	2	5	2	1	----	1	----	----	----	1	----	1	----	1	----	----	----	----	8	5
Methodist—																				
Membership	122	106	31	23	1	3	----	34	----	7	----	46	18	24	7	20	17	8	280	161
Preference	67	31	24	8	----	----	----	14	----	8	----	6	6	25	----	5	6	----	142	45
Presbyterian—																				
Membership	64	78	20	9	----	----	----	11	1	2	1	17	17	20	2	14	7	----	132	111
Preference	34	17	8	6	----	----	----	10	1	1	----	10	5	6	1	2	2	----	72	26
Unitarian—																				
Membership	1	3	1	1	----	----	----	----	----	----	----	3	----	----	----	1	1	----	6	4
Preference	4	7	1	1	----	1	----	----	----	----	----	3	4	1	----	2	----	----	10	12
Other denominations	51	26	10	10	----	1	1	12	----	4	----	15	6	14	3	5	7	3	111	46
Protestant preference	41	21	21	5	----	1	----	20	1	3	----	3	3	15	1	3	1	----	101	27
No statistics	16	12	10	4	----	----	----	1	----	2	----	1	3	7	2	5	----	----	40	12

OCCUPATION OF PARENTS, 1912-1913	L. A.		Law	Med.		H.Med.		Dent.		Pharm.		Grad.		Ap. Sci	F. A.		N.	HN	Tot.ex.dup	
	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.
Accountants, salesmen, managers	26	37	4	8	----	----	----	14	----	----	----	6	6	20	2	12	6	----	77	55
Agriculturists	209	193	86	32	1	5	----	52	2	9	1	60	31	46	5	22	59	9	464	282
Bankers	18	16	8	----	----	1	----	1	----	----	----	1	----	2	1	4	----	----	29	19
Contractors, builders, architects	17	20	4	2	----	1	----	8	----	4	----	9	3	11	----	3	5	1	55	32
Government service	22	16	3	2	----	1	----	1	----	1	----	3	3	4	----	3	4	----	33	24
Manufacturers	6	7	3	1	----	1	----	4	----	----	----	2	2	4	----	----	----	1	18	10
Merchants	103	87	37	16	----	----	----	37	1	14	----	14	19	42	2	24	7	----	246	134
Professions—																				
Law, medicine, dentistry, ministry, engineering, teaching	84	77	50	26	----	3	1	13	----	3	----	26	22	17	8	20	3	----	214	114
Other occupations—																				
Employers	39	28	7	2	----	----	----	13	----	1	----	4	6	11	2	1	5	----	78	39
Employees	70	59	21	6	1	1	----	27	1	13	1	11	11	17	4	6	7	5	164	89
No Statistics	16	19	2	2	----	----	----	4	1	2	----	9	9	3	3	9	3	1	39	40

SUMMARY OF REGISTRATION 1913-1914.

ATTENDANCE BY COLLEGES.

	Men	Women	Total
The College of Liberal Arts—			
Fourth year	60	108	168
Third year	98	100	198
Second year	179	136	315
First year	278	216	494
Unclassified	45	38	83
	660	598	1,258
Summer session	92	144	236
	752	742	1,494
Duplicates	46	56	102
Total excluding duplicates	706	686	1,392
The College of Law—			
Third year	46	----------	46
Second year	70	----------	70
First year	85	2	87
Total	201	2	203
The College of Medicine—			
Fourth year	13	----------	13
Third year	25	1	26
Second year	34	1	35
First year	33	1	34
Unclassified	1	----------	1
Total	106	3	109
Nurses	----------	86	86
The College of Homeopathic Medicine—			
Third year	2	----------	2
First year	3	----------	3
Total	5	----------	5
Nurses	----------	14	14
The College of Dentistry—			
Third year	50	1	51
Second year	67	1	68
First year	123	3	126
Unclassified	1	----------	1
Total	241	5	246
The College of Pharmacy—			
Regular course—			
Third year	1	----------	1
Second year	18	2	20
First year	31	5	36
Practitioner's Course—			
First year	3	----------	3
Summer session	2	----------	2
Total	55	7	62
The Graduate College—			
Enrolled September to June	125	44	169
Enrolled summer session	92	67	159
	217	111	328
Duplicates	36	16	52
Total excluding duplicates	181	95	276

Of this total the enrollment as candidates for various degrees was as follows:

	Men	Women	Total
Doctor of Philosophy	38	3	41
Master of Arts	68	37	105
Master of Science	32	6	38
Master of Science in Medicine	6	----------	6
Not Candidates for degrees	38	48	86
Total	182	94	276
The College of Applied Science—			
Chemistry—			
Fourth year	2	----------	2
Third year	4	----------	4
Second year	1	----------	1
Civil Engineering—			
Fourth year	8	----------	8
Third year	6	----------	6
Second year	29	----------	29
Electrical Engineering—			
Fourth year	5	----------	5
Third year	10	----------	10
Second year	22	----------	22
General Engineering—			
Fourth year	3	----------	3
Third year	2	----------	2
Second year	8	----------	8
Mechanical Engineering—			
Fourth year	6	----------	6
Third year	5	----------	5
Second year	6	----------	6
First Year—(The work of the freshman year is the same in all engineering courses)	111	----------	111
Total	228	----------	228
The College of Fine Arts—			
Fourth year	----------	1	1
Third year	1	3	4
Second year	----------	9	9
First year	2	27	29
Special and unclassified	15	82	97
	18	122	140
Summer Session (Music)	3	13	16
	21	135	156
Duplicates	5	32	37
Total, excluding duplicates	16	103	119
The Summer Session, 1913—			
The College of Liberal Arts	83	134	217
The Graduate College	88	57	145
Summer School for Library Training	1	22	23
The College of Pharmacy	2	----------	2
Music	3	13	16
	177	226	403
Duplicates	1	3	4
	176	223	399
At the Macbride Lakeside Laboratory, at Okoboji—			
The College of Liberal Arts	9	10	19
The Graduate College	4	10	14
Total for the Summer Session	189	243	432

These figures appear also in the summaries of the colleges and schools named.

SUMMARY.

	Men	Women	Total
The College of Liberal Arts*	706	686	1392
The College of Law	201	2	203
The College of Medicine	106	3	109
Training School for Nurses	----------	86	86
The College of Homeopathic Medicine	5	----------	5
Training School for Nurses	----------	14	14
The College of Dentistry	241	5	246
The College of Pharmacy*	55	7	62
The Graduate College*	181	95	276
The College of Applied Science	228	----------	228
The College of Fine Arts*	16	103	119
	1,739	1,001	2,740
Additional duplicates	60	11	71
Net Total to March 26, 1914	1,679	990	2,669

STATISTICS FOR THE ACADEMIC YEAR 1913-1914.

DEGREES AND CERTIFICATES GRANTED, 1913-1914.

	Men	Women	Total
Advanced Degrees:			
Doctor of Philosophy	4	----------	4
Master of Arts	13	10	23
Master of Science	9	4	13
Master of Science in Medicine	5	----------	5
Civil Engineer	17	----------	17
Engineer of Mines	1	----------	1
Mechanical Engineer	1	----------	1
Electrical Engineer	2	----------	2
Chemist	1	----------	1
Total Advanced Degrees	52	14	67
First Degrees:			
Bachelor of Arts	72	108	180
Bachelor of Science	7	----------	7
Bachelor of Laws	43	----------	43
Doctor of Medicine	13	----------	13
Doctor of Dental Surgery	48	1	49
Graduate in Pharmacy	14	1	15
Pharmaceutical Chemist	2	----------	2
Bachelor of Engineering	16	----------	16
Bachelor of Science in Chemistry	1	----------	1
Bachelor of Science (Applied Science)	4	----------	4
Bachelor of Arts (Fine Arts)	----------	1	1
Bachelor of Music	----------	2	2
Total First Degrees	220	113	333
Certificates:			
College of Education	19	92	111
Practitioner's Certificate in Pharmacy	1	----------	1
Nurses Training School	----------	17	17
Nurses Training School (Homeopathic)	----------	1	1
Resident Physicians	1	----------	1
Clinical Assistant's Certificate	2	----------	2
Total Certificates	23	110	133

*These figures include students registered in the respective colleges in the Summer Session only.

RESIDENCE OF STUDENTS BY COUNTIES, 1913-1914.

IOWA COUNTIES.	L. A.		Law		Med.		Hom.		Dent.		Pharm.		Grad.		Ap. Sci.		F. A.		N.		HN		Lib. T.		Tot. ex. dup	
	W.	M.	M.	W.	M.	W.	W.	M.	M.	W.	M.	W.	M.	W.	M.	W.	M	W.	W.	W.	W.	W.	M.	W.	M.	W.
Adair	6	1	1		1	1			3						1		1								10	2
Adams	4												1		2		1								6	1
Allamakee	5	3	3						2		2		1		5		1								12	3
Appanoose	7	1	1												1		2								12	3
Audubon	3	2	2																				1		7	2
Benton	11	26	6		1				1	1	1		4		3		1		1						15	5
Black Hawk	13	6	6			1			3				4		4		1		2						26	8
Boone	5	6	1						1		1						1								6	1
Bremer	5	6													2										10	
Buchanan	4	6			1				1						4		1				1				10	1
Buena Vista	5	4			1				3						1				4						9	4
Butler	5	6			1				1						1				2						9	2
Calhoun	5	6			1		1		4						1		1								11	1
Carroll	4	7			1				1				1				1				1				6	
Cass	7	5			1				3																10	
Cedar	13	6			1				3				1		1		4		2						20	3
Cerro Gordo	15	10		1	1				1						4				2				1		15	1
Cherokee	6	5			1				4						1		1								12	
Chickasaw	5	5							3						1										16	
Clarke	3	7			1				1		1				1										11	
Clay	7	6	1						1		1				1		1								9	1
Clayton	6	6	1						6		2				1		1		1						15	2
Clinton	6	7	4		2				5		2		1		5				1				1		30	4
Crawford	6	7	1		1				5				1				1								8	
Dallas	6	8	2		1				3				1												12	
Davis		9	1																						7	
Decatur	5	5	1						4				1												13	1
Delaware	4	5	1										2		2										5	1
Des Moines	20	4	1		1				1				2		5										30	1
Dickinson	2	4	1																						2	
Dubuque	8	8	1		1								1		4				1						14	1
Emmet	5	12											1		1				1						17	
Fayette	6	8	3		1				6						1		2		1		2		1		17	1
Floyd	4	8	1						2						1		2		1						17	1
Franklin		6	1		1												1								11	
Fremont	5	5							2				1												11	
Greene	5	5																							4	
Grundy	5	5	1								1						1						1		8	1

RESIDENCE OF STUDENTS BY COUNTIES, ETC., 1913-1914—Concluded

IOWA COUNTIES	L. A.		Law		Med.		Hom.		Dent.		Pharm.		Grad.		Ad Sci	F. A.		N.		HN		Lib. T.		Tot.ex.dup	
	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.
Guthrie	5		3						1						1	1							1	11	1
Hamilton	5	5							8				1											12	5
Hancock	1												2					1	1					2	2
Hardin	14	7	2						4									1	2					18	10
Harrison	7	6							2		1		3		3			2					1	13	8
Henry	15	4	1		1				5			1	2	2	10			1						29	9
Howard	5	2		1					1				2					1	1				1	5	5
Humboldt	3		1		2									2	1			1						7	3
Ida	12	5	3		2	1			2				1		1			1	1				1	20	8
Iowa	6	8	4		5				3		2		2		3	1	3	5					1	25	16
Jackson	13	11	4		1				2				2		6	1	2	3						26	14
Jasper	4	2	3		1				2				2	5	1			1					1	12	7
Jefferson		1									1		8		3									10	1
Johnson	94	227	20		15		1		9	1	7	1	29	22	30	11	66	10	2	1	3			212	310
Jones	8	3	3						2				2	1	2			3						17	7
Keokuk	13	10	1		2						1		1	1	2		2							17	10
Kossuth	5	4	3		1									1	1		4	2						10	5
Lee	3	5	4		1				1		2		2		3		2							16	6
Linn	12	16	11		3		1		8		1		10	3	11		5	4						50	25
Louisa	4	3	3								1		1		2		3							11	4
Lucas		5													1	1								1	5
Lyon	2		1						2		2						1	1						7	2
Madison	4	3	1		1				1		1		2	1			1							10	4
Mahaska	3	5	2										3	2	3									10	7
Marion			1		1				5				2											8	
Marshall	7		2		1				6				1		1			1						15	1
Mills									2				1											3	
Mitchell		2							1															1	2
Monona	1		1		1								1		2	1							1	8	1
Monroe	4	4	1		1								2	2				1						8	7
Montgomery	8	4									2	1		1	4		1	2						11	8
Muscatine	11	8	4		2				2		2		1	2	5	1	2	2						26	13
O'Brien	13	9	3		2				4				4		1			1						25	8
Osceola	5	3											2		2									7	3
Page	8								2		1		1	1	1									11	1
Palo Alto	13		4		1						1				2		1							20	1
Plymouth	2	6			1				3		2		2		1		2							10	8
Pocahontas	7	6	1		1								3											11	6
Polk	19	14	2		6		1		7		1		7	1	6	3	2							48	16
Pottawattamie	2	3												2	1								1	3	5
Poweshiek	6	9	1		1				3		1		1	2			3	4	1					11	16
Ringgold			2										1		1									4	
Sac		8	1										1	1	1								1	3	10
Scott	22	17	7		2								1	1	4		1							30	18
Shelby	5		1								1			1										7	1
Sioux	17	7	5		4				4	1	1		3	1	1		1	2						33	12
Story	4	8	1						2				3	3	1		1		1					11	12
Tama	7		2		2				1		1		4	2	1									16	2
Taylor	3	6									1		1				1							5	7
Union	5	9			1				2				2											8	9
Van Buren	11	6	1						1				2				1							12	7
Wapello	6	9	3		1				1						1		1	1					1	10	10
Warren	4		1						1				2			1								7	
Washington	15	2	2		1				4		2		4	2	8	1	1	1	1					32	6
Wayne	6	6	1		1				1		1		2		2	1	1	1						13	8
Webster	5	8	3		1				4			1			1			1					1	12	11
Winnebago	4	3	2		1					1	1						1							7	5
Winneshiek		3	1						1				2		1			2	2					5	6
Woodbury	24	6	5						2				3	1			2							34	8
Worth						1			1						6			1						7	2
Wright	5	3	2		1				3				4		2		1	1						15	5
Other States and Foreign Countries.																									
California	1								5															6	
Colorado	5	3														1								4	3
Idaho	5												2		2	1								9	
Illinois	11	4	2		2				5	1			5	3	5			5					1	29	13
Kansas	4	1							2					1										5	2
Minnesota	3	4	2		2		1		9				9	1	3		3	1						27	9
Missouri	4	3	1		2				4	1			1	1			2							12	6
Montana	2	1							4				1		4									11	1
Nebraska		2	4						4				2	1	3		1						2	13	6
New York	3	1											2		1									6	1
North Dakota					1				3				2											6	
South Dakota	5	2	1						8			1	3		5			1	1					21	5
Other states	10	4	1		3				6		1		8	3	2		2	4						27	11
Foreign countries	17	3			4				7				9		2	1	1							34	4

AGES OF STUDENTS—1913-1914.	L. A.		Law		Med.		Dom	Dent.		Pharm.		Grad.		Ap. Sci	F. A.		N.	HN	Lib. T.		Tot.ex.dup	
	M.	W.	M.	W.	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.	M.	W.
Under 17	----	1	----	----	----	----	----	----	----	----	----	----	----	----	5	12	----	----	----	----	5	13
17	4	3	----	----	----	----	----	----	----	----	----	----	----	2	1	4	----	----	----	----	7	7
18	23	36	----	1	----	----	----	4	----	1	----	----	----	11	1	8	----	----	----	----	35	44
19	78	78	3	----	----	----	----	14	----	3	----	----	----	25	1	17	----	----	----	1	118	94
20	145	110	18	----	----	----	1	19	----	11	3	1	----	43	6	26	4	2	----	----	232	130
21	139	100	26	----	5	----	1	43	----	9	----	----	1	40	3	22	8	1	----	3	240	129
22	123	108	19	----	8	1	1	47	1	8	----	1	----	32	4	14	18	5	1	1	236	128
23	80	69	37	----	15	----	1	33	----	5	----	10	11	19	----	12	8	2	----	1	183	93
24	54	46	35	----	19	----	1	26	1	4	2	13	14	13	1	7	9	2	----	----	150	76
25	45	25	30	----	14	----	----	17	1	3	1	18	6	9	2	6	9	2	----	----	119	48
26	29	28	15	----	21	----	----	12	----	5	----	23	7	4	1	6	5	2	----	2	100	44
27	15	16	6	----	5	1	----	8	----	2	----	13	12	2	1	1	6	1	----	3	47	37
28	9	17	5	----	1	1	----	4	1	3	1	13	9	3	----	1	2	----	----	2	32	29
29	7	12	2	----	2	----	----	1	----	----	----	18	11	9	----	3	4	----	----	1	29	28
30	4	9	3	1	6	----	----	6	----	1	----	13	6	1	----	1	2	----	----	1	28	18
31	----	----	----	----	2	----	----	1	1	----	----	11	8	----	----	1	3	----	----	----	8	9
32	----	8	----	----	1	----	----	1	----	----	----	10	4	1	----	----	3	1	----	----	5	4
33	8	----	1	----	3	----	----	2	----	----	----	6	2	1	----	1	2	----	----	----	19	5
34	10	10	----	----	2	----	----	----	----	----	----	7	3	----	----	2	3	----	----	----	14	18
35	----	----	----	----	----	----	----	1	----	----	----	4	2	----	----	2	----	----	----	1	3	5
Over 35	23	20	1	----	2	----	----	2	----	----	----	46	25	----	1	6	----	----	----	6	69	50

RELIGIOUS CENSUS—1913-1914.	L. A.		Law		Med.		Dom	Dent.		Pharm.		Grad.		Ap. Sci	F. A.		N.	HN	Lib. Tr.		Tot.ex.dup	
	M.	W.	M.	W.	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.	M.	W.
Baptist—																						
Membership	26	33	6	----	7	----	----	12	----	2	----	10	8	2	3	10	3	----	----	----	61	52
Preference	7	4	2	1	1	----	----	4	----	----	----	1	----	7	3	1	----	----	----	----	23	2
Catholic—																						
Membership	89	105	40	----	6	1	----	21	----	7	----	----	20	25	----	18	11	----	----	2	161	137
Preference	5	3	2	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	7	3
Christian—																						
Membership	24	33	3	----	5	----	1	12	1	2	1	7	3	13	2	7	2	1	----	----	61	41
Preference	12	3	5	----	2	----	----	3	----	1	----	----	2	----	----	1	----	1	----	----	18	6
Congregational—																						
Membership	57	58	10	----	7	----	1	15	1	2	3	14	8	9	1	14	5	1	----	5	100	87
Preference	25	13	4	----	3	----	----	4	----	----	----	2	2	5	1	1	2	1	----	----	35	17
Episcopal—																						
Membership	26	17	10	----	----	----	----	5	----	1	----	----	3	5	2	8	3	----	----	2	39	30
Preference	5	7	1	----	1	----	----	3	----	----	----	----	2	2	1	3	1	----	----	----	9	11
Lutheran—																						
Membership	32	31	7	----	2	----	1	20	----	8	----	16	4	18	3	9	12	2	----	----	97	54
Preference	4	4	----	----	1	----	----	----	----	----	----	----	----	1	----	1	----	----	----	----	6	5
Methodist—																						
Membership	173	144	24	1	23	----	----	45	----	10	2	54	25	29	4	25	15	6	----	6	340	202
Preference	64	36	22	----	6	----	----	17	----	8	----	14	3	29	----	7	8	3	----	1	143	52
Presbyterian—																						
Membership	77	100	13	----	13	----	1	19	----	1	1	35	24	29	3	27	10	----	1	4	178	149
Preference	30	28	9	----	4	1	----	16	----	2	----	10	6	6	1	7	3	----	----	----	71	39
Unitarian—																						
Membership	3	9	3	----	1	----	----	1	----	----	----	3	1	----	----	----	1	----	----	----	11	11
Preference	6	4	2	----	----	----	----	----	----	----	----	5	3	----	----	1	----	----	----	----	11	7
Other denominations	60	33	10	----	13	1	----	28	----	7	----	25	4	20	1	7	9	2	----	2	147	48
Protestant preference	24	10	13	----	4	----	----	8	2	----	----	7	1	11	----	----	----	----	----	----	67	13
No statistics	51	19	15	----	7	----	1	8	----	4	----	4	9	7	2	5	1	1	----	----	94	24

OCCUPATION OF PARENTS.	L. A		Law		Med.		Hom	Dent.		Pharm.		Grad.		Ad. Sci	F. A.		N.	HN	Lib. Tr.		Tot.ex.dup	
	M.	W.	M.	W.	M.	W.	M.	M.	W.	M.	W.	M.	W.	M.	M.	W.	W.	W.	M.	W.	M.	W.
Accountants, salesmen, managers	62	48	16	----	5	1	----	17	----	5	----	9	10	21	----	19	6	----	----	3	127	79
Agriculturists	223	244	68	1	35	1	2	70	2	16	2	75	35	56	5	35	41	11	----	6	513	337
Bankers	20	20	7	----	1	----	----	2	----	----	----	2	1	2	1	7	----	----	----	2	29	26
Contractors, builders, architects	15	14	4	----	1	----	----	3	----	----	----	3	2	2	1	1	2	1	1	----	26	19
Government service	22	23	6	----	1	----	----	11	----	1	----	2	3	6	1	4	5	1	----	1	43	32
Manufacturers	25	23	2	----	----	----	----	3	----	----	----	4	1	6	2	5	----	1	----	----	34	26
Merchants	136	97	28	----	17	----	----	43	1	8	----	20	21	49	5	30	10	----	----	3	270	137
Professions— Law, medicine, Dentistry, ministry, teaching, engineering	151	120	43	1	33	1	2	32	1	12	3	34	28	37	4	20	4	----	----	2	311	160
Other occupations—																						
Employers	7	----	5	----	----	----	----	3	----	----	----	2	----	1	----	1	1	----	----	----	18	2
Employees	99	81	11	----	11	----	1	42	----	11	2	32	15	43	5	19	12	3	----	2	227	116
No statistics	36	26	11	----	2	----	----	15	1	2	----	24	5	5	3	20	5	1	----	3	81	56

THE
Iowa State College of Agriculture And Mechanic Arts

AMES, IOWA

REPORTS

FOR THE YEARS 1912-1913 AND 1913-1914 AND RECOMMENDATIONS
FOR THE YEARS 1915-16 AND 1916-17

I. Report of the President.
II. Report of the Secretary.
III. Report of the Treasurer.

Iowa State College
of Agriculture and Mechanic Arts

Reports and Recommendations
By the
President

SUMMARY OF TOPICS.

EDUCATIONAL WORK..

Letter of Transmittal.

Appropriations recommended for educational work, improvements, and enlargements at the college in the biennium July 1, 1915, to June 30, 1917.

Report on educational work, improvements, and enlargements at the college in the biennium July 1, 1912, to June 30, 1914.

- The Student Body
- The Teaching Staff
- Collegiate Work
- Post-Graduate Work
- Sub-Collegiate Work
- Summer Session
- Winter Courses
- College Functions
- Campus
- Buildings and Land
- Equipment
- Administrative Work
- Finances

INDUSTRIAL SERVICE WORK.

Letter of Transmittal.

Appropriations recommended for industrial service, including experimental and extension work, in the biennium July 1, 1915, to June 30, 1917.

Report on industrial service work, including experimental and extension work, in the biennium July 1, 1912, to June 30, 1914.

- Experimental Work
- Extension Work
- Hog Cholera Serum
- Finances

LETTER OF TRANSMITTAL

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

To the Iowa State Board of Education.

Gentlemen: I have the honor to submit to you herewith recommendations for appropriations for educational work, improvements, and enlargements at the Iowa State College of Agriculture and Mechanic Arts in the biennium, July 1, 1915, to June 30, 1917; and my report on educational work, improvements, and enlargements at the college in the biennium, July 1, 1912, to June 30, 1914.

Through your unanimous action, it became my privilege to begin service as President of the Iowa State College of Agriculture and Mechanic Arts in September, 1912. In this, my first formal and required report, I desire to express my appreciation to all members of the Board of Education and Finance Committee for their support. In accepting the position as President, I realized the great opportunity and responsibility of the office. Two years of service have made me the more appreciative of the responsibility and opportunity of this position and the more determined to assist to the extent of my ability in carrying forward the great work of the college along lines clearly specified in the National and State laws under which the college is founded, and in accordance with the wishes of the Board of Education, the legislature and the people of the State.

It is a pleasure to acknowledge the valuable service of Acting President Stanton, who administered the affairs of the college for a period of two years prior to the beginning of my service. As recognition of his long and efficient service and to assure his continued connection with the most important affairs of the college, you have elected him, upon my recommendation, permanent Vice-President of the college.

Very respectfully,

Ames, Iowa.
September 23, 1914.

R. A. PEARSON,
President.

APPROPRIATIONS RECOMMENDED FOR EDUCATIONAL WORK, IMPROVEMENTS AND ENLARGEMENTS AT THE COLLEGE.

IN THE BIENNIUM JULY 1, 1915 TO JUNE 30, 1917.

A. PRESENT APPROPRIATIONS TO BE CONTINUED ANNUALLY.

It is recommended that the following appropriations, which were available for the purposes indicated (including experiment and extension work) in each of the two years ending December 31, 1915, under provision of Chapter 228 of the laws of the Thirty-fifth General Assembly, 1913, providing for a one-half mill tax, be made regular annual appropriations:

Support for collegiate departments	$ 125,000
Agricultural Extension, including home economics	48,000
Agricultural Experiment Station farm and work	57,000
Agricultural and home economics one and two year non-collegiate courses	12,500
Trade School and Engineering Extension	25,000
Engineering Experiment Station	5,000
Veterinary Practitioners' Course	5,000
Veterinary Investigations	10,000
Repair and Contingent	10,000
Two and four year courses in home economics for home makers and teachers	20,000
Equipment of departments and buildings	40,000
Maintenance and improvements of public grounds	10,000
Enlargement of buildings and small additional buildings	10,000
Total	$ 377,500

This asking is in no sense an increase. It has been the custom for the legislature to make permanent annual appropriations for regular maintenance items at all institutions. Such items are being paid to the institutions without further legislative action. But in this case the items were provided for by special millage tax of limited duration, hence necessity of asking renewal. If this renewal is allowed, work will continue as at present. If it is not allowed, work which is now being carried on will have to be abandoned.

B. ADDITIONAL MAINTENANCE FOR EDUCATIONAL WORK AT THE COLLEGE, ANNUALLY BEGINNING JULY 1, 1915.

1. Support for collegiate departments and Summer Session	$ 190,000
2. Sub-collegiate courses in agriculture and home economics, and trade schools in engineering	30,000
3. Winter short courses in agriculture, home making, and trades and trade school work	9,500

C. Special Appropriations for Improvements at the College, Including Equipment, Repairs and Minor Structures, One-half of Which Aggregate May Be Used Each Year of the Biennial Period Beginning July 1, 1915.

4.	Additional equipment and furnishings for buildings and departments, including buildings now under construction...	$ 106,000
5.	Extension of heating system and equipment for heating plant.	39,600
6.	Repairs and improvements for dairy building, old agricultural hall, and barns, and provision for fruit storage.....	8,000
7.	Temporary provision for home economics laboratories.....	1,500
8.	For enlargements of buildings and additional small buildings.	30,000
9.	Settling and storage water tank and filter.....	15,000

In connection with the above recommendations, attention is called to appropriations by the last General Assembly amounting to $92,000 to supplement certain items in the millage tax measure. With the arrangement of appropriations as indicated above, such supplementary item will not have to be requested for the coming biennium.

D. A Special Additional Appropriation for Enlargements, Including Buildings and Land, to Supplement the Building Millage Tax, is Urgently Recommended.

The following buildings and land are most needed at this time:

(This list includes buildings which may be erected on the special building millage tax.)

10.	Animal husbandry laboratories	$ 85,000
11.	Science building	65,000
12.	Hospital	30,000
13.	Dairy cattle barn	20,000
14.	Library building	225,000
15.	Addition to dairy building	25,000
16.	Home economics building	175,000
17.	Women's dormitories and dining hall.....	180,000
18.	Poultry building	100,000
19.	Veterinary building enlargement	47,000
20.	Beef cattle barn.....	20,000
21.	Abattoir	25,000
22.	Physics building	150,000
23.	Agricultural engineering building	150,000
24.	Judging pavilion and drill hall.....	200,000
25.	Animal husbandry farm and buildings.....	60,000
26.	Horticultural experiment farm	10,000
27.	Veterinary research and serum farm.....	32,000
28.	Additional land near the campus.....	35,000

It is recommended that approval of plans be secured for such buildings as it may be possible to erect during the biennium.

BRIEF STATEMENTS IN SUPPORT OF RECOMMENDATIONS FOR APPROPRIATIONS.

1. Support for Collegiate Departments and Summer Session....$190,000

Enrollment this year, excluding the Summer Session, is practically double the enrollment of ten years ago. The increased support is needed chiefly for additional teachers, not to care for an anticipated further increase of enrollment, but to properly teach the present student body. The increase of the college support fund by the last Assembly relieved the abnormal pressure under which the faculty was then working. It was not suficient to provide for the increase of enrollment that has occurred during the past two years. The additional 659 students of the last two years could not have been cared for except that the faculty was willing to take on additional work in excess of what should be expected of them. If the faculty is relieved of its present pressure by the appointment of additional teachers, it is expected they will be able to care for such increase of enrollment as occurs in the present biennium.

It is estimated that additional fuel and light and janitor service for the new buildings will cost $20,000 annually.

Members of the present faculty are entitled to some salary increase. Salaries at Ames are very low as compared with other institutions. Salaries of corresponding positions in the University of Illinois average nearly $1,000 more per year. Better salaries and perquisites at other neighboring institutions are a constant handicap in securing and holding the best teachers at the State College.

With the widening application of science to the industries, it becomes necessary to widen the scope of instruction, and this means an occasional establishment of a new department or sub-department. Such enlargements needed at this college include animal breeding, plant breeding, plant physiology, plant pathology, animal nutrition, telephone engineering, and highway engineering.

The Summer Session should have at least $17,000 additional to permit the best instruction for the rural and grade teachers who wish to learn something of agriculture, trade school work, and home economics. The attendance at this session has been rapidly increasing. In 1914 it was 618 as compared with 215 in 1913. In 1915 it may be expected to exceed 1,000. It is proposed to double the length of the course so as to give the best possible assistance to the many hundreds of teachers who are forced by state legislation to prepare themselves along vocational lines.

It is recommended that not to exceed five per cent of the total amount paid for salaries by the college shall be made available for retiring allowances at the discretion of the Board of Education. In this way the efficiency of the faculty will be increased without increased expense to the state.

2. Sub-Collegiate Courses in Agriculture and Home Economics and Trade Schools in Engineering.....$ 30,000

Work of this grade should be strengthened for the large number of young men and women who have not finished accredited high school courses and wish to spend one or two years in preparation for useful vocations. With the educational environment and sympathies at this college and the complete equipment which is provided for collegiate work, these courses can be given to greatest advantage.

3. Winter Short Courses in Agriculture, Home Making, Trades and Trade School Work .....$ 9,500

This is to partially provide for short and intensely practical courses, largely for mature people who come to the college for a short period during the winter holidays. This instruction is given to many people who

could not secure it in any other way. The lives and work of many citizens are made more efficient by these courses. Special attention is given to live stock, field crops, horticulture, dairying, home economics, painting and house decorating. With added support, the scope can be enlarged to include other branches which are insistently demanding attention. At least two-thirds of this appropriation should be directed to the strictly agricultural and home economics work.

4. Additional equipment and furnishings for Buildings and Departments, including Buildings now under construction $106,000

This item is of the utmost importance. The college is without suitable equipment in chemistry, where 1,764 students are enrolled. The chemistry equipment was burned in the chemistry building about two years ago. As is customary, this state building was not insured. A special appropriation was made by the last Assembly but it was $60,000 less than recommended. The new chemitry building is now fitted throughout with temporary equipment. The welfare of the majority of the students in the institution is concerned. At least $60,000 is needed for chemistry equipment. It should be noted that most of this is permanent equipment such as laboratory benches, and the asking will not need to be repeated when once granted.

New equipment also will be needed for the science division and the hospital when located in larger quarters.

The item requested also would provide for urgent needs in the Animal Husbandry Department where animals of different breeds are needed, both to provide for the increasing number of students and to replace stock which has outgrown its usefulness. The college should have representative animals of all types that are economically important in Iowa. There should be at least one stallion and two mares belonging to each of the principal draft breeds, and one bull and two cows belonging to each of the principal beef and dairy breeds, also typical specimens of hog and sheep breeds. At least $20,000 should be expended for live stock and necessary accompanying equipment.

One of the greatest needs of this college is a better reference library. Scientific investigations by members of the faculty and research students are severely handicapped by having to send away for scientific works needed temporarily. Too often the necessary books cannot be borrowed. The library has been poorly quartered and almost starved. To properly equip it in the single line of veterinary science so that it would contain the records of the best work done in Europe and America, would cost at least $15,000. Money spent for reference books is an economy because it enables investigators to quickly and accurately learn results of experiments elsewhere and thus it saves time and cost of duplicating experiments here. An expenditure of $25,000 could not be called extravagant as compared with the needs.

Other departments are in need of much equipment to replace what is worn out and to increase the teaching facilities which are needed for larger classes.

The equipment askings represent purchases which are needed at this time. It is difficult to see how a reduction of the items can result otherwise than merely to postpone some purchases and continue to that extent the embarrassment suffered by lack of equipment. In making these estimates for equipment effort has been made to hold them to the minimum.

5. Extension of Heating System and equipment for Heating Plant .....$ 39,600

This is made necessary by increased demands for heat for new buildings, including the extension of the heating tunnel and steam and other pipe

lines. An economy will be effected when the tunnel loop is finished as indicated. The items making up the total are as follows:

2 500 H. P. boilers	$ 7,000
2 sets chain grate stokers	3,425
Piping for boilers	1,200
Foundations and settings	2,100
Coal hopper	1,500
Ash conveyor	2,500
Turrell regulator	675
Railroad scales	1,500
Car moving apparatus	425
Feed water pump for boilers	750
Breeching to boilers	450
Exciter and alternating current machine	1,475
Vacuum system for heating three buildings	1,000
600 ft. heating tunnel to complete the tunnel loop	7,200
700 ft. heating tunnel to new buildings	8,400
	$ 39,600

6. Repairs and Improvements for Dairy Building, Old Agricultural Hall, Barns, and Provision for Fruit Storage .....$ 8,000

Considerable space now useless or partially used can be made available. Some of the barns need overhauling to provide modern systems of ventilation and to allow portions of these buildings to be used for different purposes than originally planned. A small building is needed for temporary protection of fruit when it is collected in the fall and must be held for a short time prior to marketing. The value of such a building could be saved in one or two seasons by the protection it would afford.

If provision is made for a new agricultural engineering building during the biennium, $15,000 should be provided for remodeling the building which that department now occupies so that it may be used for other lines of work.

7. Temporary provision for Home Economics Laboratories .....$ 1,500

Nearly 600 students are now taking work in the home economics building which was planned for about 250. Four laboratories will need to be fitted up next year in some other building. These will require cabinets and fitting rooms and they will be regarded as temporary because no other building can permanently spare the space. Some further changes also should be made in the laboratories of the present building to provide for the handling of larger classes.

8. Enlargements of buildings and temporary small buildings $30,000

A considerable number of small buildings are needed to properly supplement the larger buildings and to provide for instructional and experimental requirements distant from the main campus. At least $50,000 could be used to decided advantage in this manner, but the item named would be sufficient to somewhat relieve the situation. Among the buildings most urgently needed are the following:

(a) Cottages for foremen and laborers.....$14,000

The greatest difficulty is experienced in securing and holding good help on the college farms and other premises because of distance from residences for such persons. It is desirable also to have at least a few reliable men quartered near the college buildings to furnish help at a time of fire or other emergency.

(b) Barn for Dairy Bulls $2,000

Separate quarters are desirable for the several bulls which have to be maintained to represent different leading breeds at the Dairy Farm.

(c) Poultry Houses $1,350

Additional houses are needed to provide instruction for larger classes in poultry husbandry.

(d) Agricultural Engineering Annex $10,000

The agricultural engineering department needs suitable quarters for storing and demonstrating large tractors and other agricultural machinery. About $25,000 worth of such apparatus has been loaned to the college and much of it cannot be given good care because of limited space. The structure proposed is a cheap but durable shed building.

(e) Student quarters, cattle shed and judging pavilion $10,000

As the dairy farm is about a mile from the campus, it is necessary that a shed or pavilion be provided for stock judging and demonstration work on farms. It is also desirable to have students' quarters provided there for the accommodation of limited numbers of students who are assigned to the work of caring for stock and obtaining practical instruction.

(f) Shelter for rattler and grinding machines $950

It is proposed to build a small addition to one of the engineering buildings, at a point which will not disfigure the building, to accommodate the rattler and grinding machines which are noise and dirt producers and should be kept in quarters separate from other lines of work.

(g) Outside kiln and shed for ceramics $1,000

The need for this is due to the fact that the kilns are now located in a space which is also used for other purposes and these other purposes must be sacrificed when a blast is on because of uncomfortable heat.

(h) Storehouse for foundry castings and supplies $1,000

At the present time these castings and supplies are stored out of doors and they are deteriorating because of exposure to the weather. There are losses, also, which would not occur if a suitable building were used.

(i) Building for ore dressing and coal washing $7,000

This is to house equipment which is needed to permit necessary practical instruction in mining engineering.

(j) Temporary building for Trade School courses $4,000

These courses are making a good beginning. Laboratory rooms are needed for some of the work which it has not been feasible to provide for in the regular college laboratories. Later, with the enlargement of the college plant, permanent laboratories may be provided, but in the meantime a temporary building would serve the purpose.

(k) Practice cottage for the home economics division $5,000
(l) Small animal building and rendering plant for the veterinary division $7,000
(m) Indoor Rifle Range $8,000

This is much needed in the military training department. Military training is required at this college as a consideration in connection with the federal appropriations. Thus far special equipment has not been furnished, but the United States Government is becoming more and more insistent in this matter.

(n) Experimental Farm Buildings including storage quarters and other small structures $4,000

9. Settling and Storage Water Tank and Filter $15,000

The college water supply at times is as brown as coffee due to heavy iron content. The matter has been studied by competent engineers and they agree that a settling and storage tank with gravity filter will prove a satisfactory remedy. The amount requested is the result of a careful estimate.

10. Animal Husbandry Laboratories $85,000

The Animal Husbandry department needs more building space on account of its increased enrollment and to permit widening the scope of its work.

11. Science Building $65,000

Almost all of the departments in the Division of Science are severely taxed in efficiency on account of their limited space. These departments carry heavy work for all divisions of the college. The division is particularly short of laboratory space and it is proposed that two departments giving much laboratory work, namely, bacteriology and zoology, shall be quartered in the building. By removing these departments from their present quarters, other departments will be able to expand into the space vacated. This would provide for about twenty additional class rooms which are needed.

12. Hospital $30,000

Hospital facilities are urgently needed. At present there is an old residence building in use as a hospital. It is frequently overcrowded and many sick students must remain in their boarding houses. There are several thousand calls for help at the hospital every year and several hundred bed cases.

13. Dairy Cattle Barn $20,000

A modern dairy barn is needed to suitably care for the stock in hand and to show the latest and best ideas in dairy barn construction. The present building could easily be adapted for a stock judging pavilion which is greatly needed on the dairy farm.

14. Library Building $225,000

The college work is greatly handicapped for the want of a library building. The urgent recommendation of the Faculty Library Committee, that an adequate fireproof building be erected in the near future for library purposes, is strongly approved. The library occupies a few recitation rooms and some corridor space in Central building. The Faculty room has been given up for a general reading and study room. These quarters are entirely too small. New books cannot be properly cared for. Seminar work, which is so important in a scientific institution, is greatly handicapped. Research work is interfered with. Students' efforts in connection with debating and literary societies are discouraged. A new library building would be an immense relief. It should have space where students can profitably spend spare hours between recitations and laboratory work and facilities where they may go to look up special subjects assigned to them for study. Necessary space for literary societies should be provided in this building.

In the library building, or separately, there should be provided an auditorium for general meetings. It should have seating space for at least 2,500 people. Such a building is needed many times for convocations and

for lectures and musical events, besides commencement and special occasions. There is now no hall on the campus large enough to hold even the freshman class. For any such purpose the gymnasium must be seated at considerable cost, besides inconvenience to the required physical training work for one or two days.

15. Addition to Dairy Building $25,000

The present building has been in service several years and is now outgrown. It does not have space for instruction in cheesemaking because this work has been crowded out by market milk. The proposed addition would provide for cheesemaking, certain phases of market milk, and ice cream work, and a class room and laboratory.

16. Home Economics Building $175,000

The Home Economics division is growing more rapidly than any other division in the college. It will continue to grow rapidly. The present building was intended to accommodate 250 to 300 students. Double the number are now taking their work in that building and overflow rooms outside. The present home economics building could be utilized by other departments of the college with almost negligible cost for alterations. The division, which stands pre-eminently for woman's work at the college should have a structure commensurate with its importance and dignity.

17. Women's Dormitories and Dining Hall $180,000

The limit of available accommodations in Ames has been reached. Furthermore, the impression is getting out through the state that students should not come to this college because suitable living quarters cannot be found. The question of rooming the student body is one which is causing much anxiety. In the last biennium, when the enrollment of young women increased more than 250, the state has provided additional accommodations for less than half this number. Fireproof dormitories should be provided as soon as possible for all women students. No one can see a student rooming house in flames without coming to this conviction,—and such an experience has been had one or more times in practically every college in the country. Already too many students are living in rooms which they should not be compelled to occupy. The erection of dormitories for young women students means a benefit to the entire student body because they would serve to vacate houses now occupied by young women and which are greatly needed by the increasing numbers of young men. The college is receiving more and more demands from parents who insist that their daughters shall be located in buildings that are entirely under college control. These buildings can be made to pay all their expenses, and money spent in them should be looked upon as an investment.

18. Poultry Building $100,000

The poultry products of the state are reported as worth over $50,000,000. This great industry concerns almost every one who lives in the country and a large number of residents of towns. Instruction is needed and it is asked for. A modest structure for the interests concerned could be provided for the amount named.

19. Veterinary Building Enlargement $47,000

The veterinary buildings are large enough except in respect to a few phases of the work. These include instruction to the increasing numbers of agricultural students, and research. It is proposed to enlarge one of the wings.

20. Beef Cattle Barn $20,000

The present beef cattle barn was built many years ago. It might have been a good structure for certain purposes but it is not now well adapted for housing animals. It is old and unsafe and causes much criticism from farmers who themselves have far better equipment.

21. Abattoir $25,000

Provision needs to be given for instruction in slaughtering animals, and dressing and caring for meats, especially for local markets. A large amount of slaughtering is now going on in temporary quarters in connection with hog cholera serum manufacture and the slaughtering of animals in the Animal Husbandry department.

22. Physics Building $150,000

The Physics Department is one of the largest in the college. The work given by the department has nearly doubled in three years and the present quarters are inadequate and also not adapted to the work. The department is unable to give laboratory work with some of its courses because of lack of space. A new building adapted to the work would greatly increase the efficiency of the instruction given.

23. Agricultural Engineering Building $150,000

Nearly 1,800 students are taking work in the Agricultural Engineering Department. A large amount of equipment having high value is loaned by manufacturers. The department needs more room for instruction and more room for storage. This department has grown so rapidly and has become so firmly established that it should have a building better adapted to its needs. The building which it now occupies could well be used for sub-collegiate work.

24. Judging Pavilion and Drill Hall $200,000

The charter of this college requires instruction in military tactics. A large sum of money is received annually from the United States Government with the understanding that this provision of the charter will be faithfully observed. The War Department has been lenient with this and other institutions, but their requirements are becoming more exacting. It is of the highest importance that, in case of need, college trained young men shall be qualified to serve as lieutenants in the army. There is probably no point in the state where military training can be given to better advantage than at the land grant college. The same structure would serve advantageously as a judging pavilion when large quarters are needed. Also, it would serve for agricultural shows and demonstrations. In these respects it would serve a valuable purpose.

25. Animal Husbandry Farm and Building $60,000

The educational and experimental work of the Animal Husbandry Department is greatly handicapped because of lack of farm facilities. This department stands for the greatest activities of the state. It should have considerable land area and farm buildings so that it can develop and illustrate its teachings.

26. Horticultural Experiment Farm $10,000

The Horticultural Department needs a farm at a point distant from Ames where soil conditions and climate are somewhat different, for the purpose of developing and testing varieties and supplementing the work which is under way on the college farm.

27. Veterinary Research and Serum Farm $32,000

To satisfactorily conduct veterinary research, a farm is needed for the accommodation of animals under observation and other animals used in the production of protective lymphs and anti-toxins, etc.

28. Additional Land near the Campus $35,000

Additional land for college purposes is certain to be needed in the very near future, and it would be an economy to secure it at this time before prices are further advanced. The need of the land arises especially in connection with housing of students and providing suitable exercise grounds.

REPORT ON EDUCATIONAL WORK, IMPROVEMENTS, AND ENLARGEMENTS AT THE COLLEGE IN THE BIENNIUM JULY 1, 1912, TO JUNE 30, 1914.

THE STUDENT BODY.

ENROLLMENT.

The rapid increase of enrollment in recent years in this land grant college and in similar land grant colleges in other leading states is one of the most striking developments of the day in the educational world. To care for our increase of enrollment, which is 659 in two years, is our chief problem and explains our chief needs. The increase of 659 does not include Short Course or Summer Session students but those who are in the college for the full academic year.

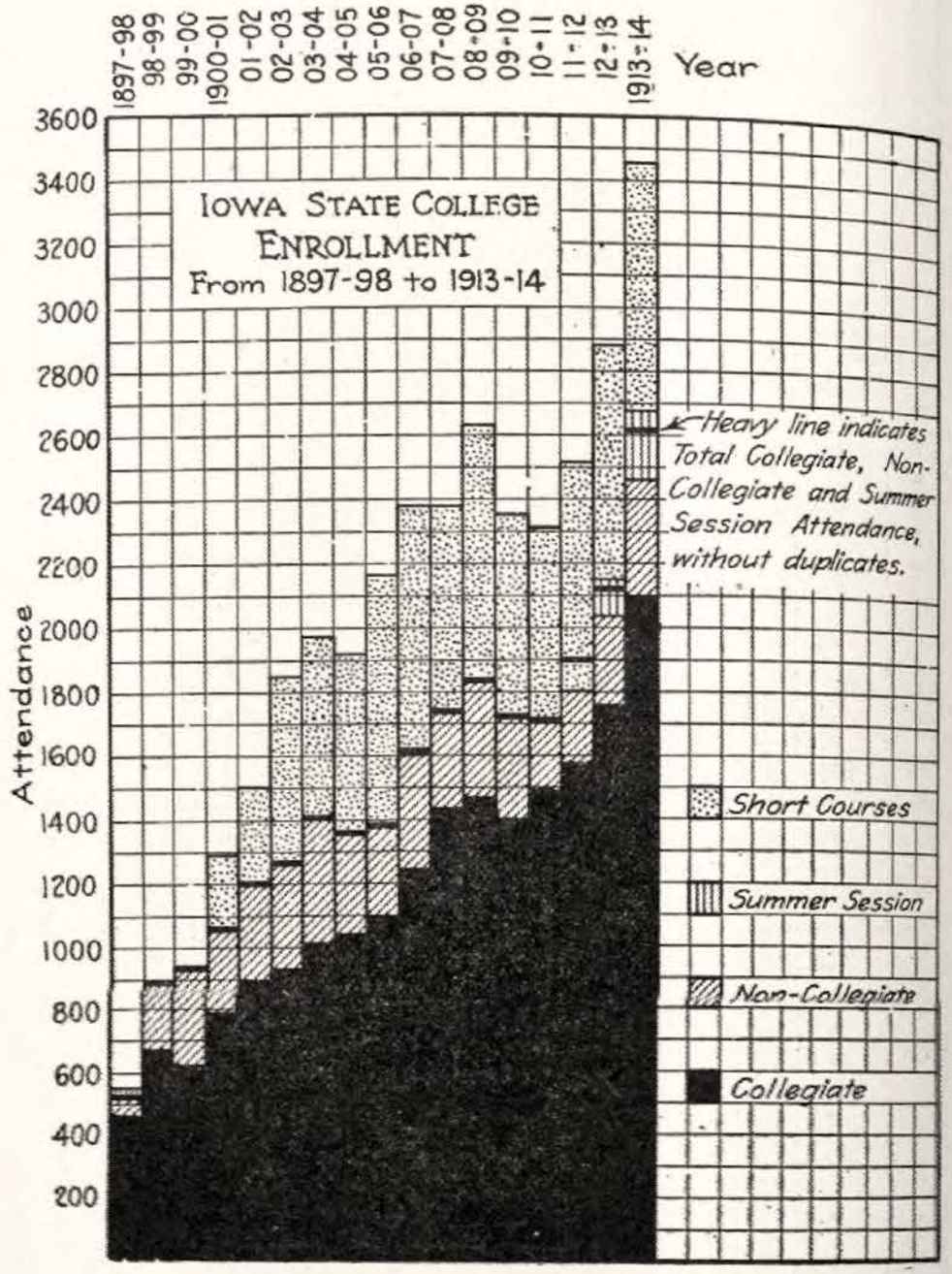
The following table and accompanying chart show the enrollment for the year 1897-98 and each year since:

ENROLLMENT AT IOWA STATE COLLEGE.

1897-98 to 1913-14.

Character of Courses	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15*
Collegiate:																		
Graduate	17	15	34	30	.....	6	22	12	23	15	14	14	29	16	22	15	36	.....
Agriculture	91	205	305	237	228	276	253	267	268	313	328	426	448	513	576	681	897	.....
Agricultural Engineering	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	34	67	89	136	.....
Engineering	137	105	229	315	415	443	505	530	570	592	704	681	586	687	528	495	615	.....
Home Economics	52	72	58	68	92	82	95	95	49	45	64	97	121	149	206	221	446	.....
Science	148	142	79	102	106	78	86	66	135	165	146	113	84	76	85	70	78	.....
Veterinary	9	37	42	47	69	48	62	68	56	82	108	191	115	100	85	70	70	.....
Music	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	14	9	13	9	7	.....
Net total	454	667	769	896	931	1,013	1,087	1,092	1,242	1,431	1,468	1,508	1,484	1,570	1,750	2,090	2,300	
Non-collegiate:																		
Preparatory	.....	24	24	42	32	66	34	29	37	37	20	26	21	.....	.....	.....	.....	.....
Two- and one-year Agriculture	71	124	154	101	94	100	104	64	81	105	82	132	119	148	188	218	275	.....
Two-year Engineering	.....	61	116	115	158	125	174	176	146	211	139	114	93	1	.....	.....	22	.....
Two-year Home Economics	.....	20	26	17	22	15	9	15	.....	.....	8	26	19	.....	.....	.....	24	.....
Music	.....	.....	.....	.....	27	21	78	42	31	21	56	69	12	79	42	66	48	.....
Net total	71	229	320	275	304	327	399	326	294	374	305	369	325	228	230	284	369	416
Net total of Collegiate and Non-collegiate	525	896	940	1,064	1,202	1,398	1,412	1,393	1,386	1,616	1,769	1,835	1,723	1,712	1,800	2,054	2,469	2,715
Summer Session:																		
Total	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	128	215	618
Duplicates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	63	133
Net total	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96	84	152	485
Net total of Collegiate, Non-collegiate and Summer Session	525	896	940	1,064	1,202	1,398	1,412	1,393	1,386	1,616	1,769	1,835	1,723	1,712	1,896	2,118	2,611	3,200
Short Courses:																		
Agriculture	22	.....	.....	229	300	578	558	502	737	723	605	747	576	656	567	703	604	.....
Home Economics	.....	.....	.....	.....	.....	.....	.....	.....	.....	32	27	49	61	49	47	61	54	.....
Engineering	.....	.....	.....	.....	.....	.....	.....	.....	39	.....	.....	.....	.....	.....	.....	.....	189	.....
Net total	22	.....	.....	229	300	578	558	502	776	755	632	796	637	695	614	764	847	.....
Grand total (net)	547	896	940	1,293	1,502	1,846	1,970	1,915	2,162	2,371	2,381	2,631	2,359	2,407	2,510	2,882	3,458	.....

*Estimated.



It will be noted that the largest increase is in agriculture and the next largest is in home economics. These two lines of work have attracted the greatest increases in student enrollment generally throughout the country. The reason is easy to understand. A vast store of knowledge concerning agriculture and home making has been developed during the last few years. This is now in form to be given to the people. The benefits of having this knowledge are being realized more and more. A new State law requires vocational instruction in the public schools, which means many teachers must be trained in agriculture, trade school work and domestic science. In a short time college enrollment in these two subjects may be expected to reach its normal level as has been the experience in other lines of instruction, which were earlier established in schools and colleges and have had their periods of rapid growth.

Enrollment in engineering courses shows a decrease in recent years at the State College but not as much decrease as was experienced at most other institutions. This was due to economic conditions throughout the whole country and already there is evidence that conditions are changing and the engineering enrollment will show an increase.

The decrease shown in enrollment in veterinary medicine was due to raising the entrance requirements so that this work would rest on the same educational basis as other important branches. The decrease of enrollment in industrial science is an indication of the preference of young people to prepare themselves for the more practical special technical lines rather than in the general sciences, which may not offer as many well paying positions. The following tables show the number of students in each class and course in the years 1912-13 and 1913-14:

Summary of Enrollment.

Year 1912-13.

1—Division of Agriculture.

Graduate Students:		
Agronomy	1	
Animal Husbandry	5	
Horticulture and Forestry	3	
Dairying	2	11

Senior Class:		
Agronomy	19	
Dairying	11	
Animal Husbandry	54	
Horticulture and Forestry	9	
Agricultural Engineering	7	
Agricultural Education	3	
Home Economics	22	
Science and Agriculture	1	126
Junior Class:		
Agronomy	19	
Dairying	9	
Animal Husbandry	58	
Horticulture and Forestry	13	
Agricultural Engineering	9	
Home Economics	46	154
Sophomore Class:		
Agronomy	22	
Animal Husbandry	100	
Dairying	19	
Horticulture and Forestry	17	
Agricultural Education	7	
Agricultural Engineering	22	
Home Economics	76	263
Freshman Class:		
Agriculture	289	
Agricultural Engineering	51	
Agricultural Education	12	
Home Economics	167	519
Specials:		
Agriculture	19	19
Irregular:		
Home Economics	10	10
Short Courses:		
Two Year Agriculture	183	
One Year Dairying	35	218
Winter Short Courses:		
Agronomy and Animal Husbandry	565	
Farm Dairying	15	
Creamerymen	80	
Home Economics	61	721

Silo School:			
Summer Course	65		
Winter Course	5	73	2114
2—Division of Veterinary Medicine.			
Senior Class	21		
Junior Class	18		
Sophomore Class	15		
Freshman Class	16	70	70
3—Division of Engineering.			
Senior Class:			
Mechanical Engineering	23		
Civil Engineering	36		
Electrical Engineering	18		
Mining Engineering	6		
Ceramics	1	84	
Junior Class:			
Mechanical Engineering	23		
Civil Engineering	31		
Electrical Engineering	32		
Mining Engineering	2	88	
Sophomore Class:			
Mechanical Engineering	22		
Civil Engineering	29		
Electrical Engineering	49		
Mining Engineering	7		
Ceramics	2		
Industrial Chemistry	1	110	
Freshman Class:			
Mechanical Engineering	68		
Civil Engineering	45		
Electrical Engineering	82		
Mining Engineering	5		
Ceramics	3		
Industrial Chemistry	4	207	
Specials:			
Mining Engineering	1	1	
Irregular:			
Mechanical Engineering	2		
Civil Engineering	3	5	495

4—Division of Science.			
Graduate Students	4		
Senior Class	11		
Junior Class	5		
Sophomore Class	21		
Freshman Class	26		
Specials	4		
Irregular	3	74	74
5—Department of Music.			
Collegiate Course	9		
Unclassified	121	130	130
6—Summer School.	128	128	128
Total			3011
Less duplicates			129
			2882
Music (unclassified)	55		
Summer School	44		
Winter Short Course	30		
	129		

Summary of Enrollment.

Year 1913-14.

1—Division of Agriculture.				
Graduate Students				
Agricultural Education	2			
Agronomy	3			
Animal Husbandry	3			
Horticulture	4	12		
Senior Class				
Agricultural Education	2			
Agricultural Engineering	13			
Agronomy	15			
Animal Husbandry	56			
Dairying	10			
Forestry	9			
Horticulture	5	110		
Junior Class				
Agricultural Education	5			
Agricultural Engineering	11			
Agronomy	20			
Animal Husbandry	69			
Dairying	17			
Forestry	4			
Horticulture	6	132		

Sophomore Class			
Agricultural Education	10		
Agricultural Engineering	40		
Agronomy	52		
Animal Husbandry	92		
Dairying	13		
Forestry	17		
Horticulture	8	232	
Freshman Class			
Agricultural Education	14		
Agricultural Engineering	69		
Agriculture	371	454	
Specials			
Agricultural Education	3		
Agricultural Engineering	2		
Agriculture	5		
Forestry	1		
Horticulture	1	12	
Irregular			
Agriculture	1		
Forestry	1	2	
Non-Collegiate			
Two-Year Agriculture	230		
One-Year Dairying	45	275	
Winter Short Courses			
Agronomy and Animal Husbandry	462		
Creamerymen	115		
Farm Dairying	27	604	1833
2—Division of Engineering.			
Senior Class			
Agricultural Engineering	13		
Chemical Engineering	2		
Civil Engineering	27		
Electrical Engineering	21		
Mechanical Engineering	20		
Mining Engineering	2	85	
Junior Class			
Agricultural Engineering	11		
Chemical Engineering	1		
Civil Engineering	24		
Electrical Engineering	32		
Mechanical Engineering	12		
Mining Engineering	3	83	

Sophomore Class			
Agricultural Engineering	40		
Ceramics	1		
Chemical Engineering	3		
Civil Engineering	39		
Electrical Engineering	40		
Mechanical Engineering	46		
Mining Engineering	5	174	
Freshman Class			
Agricultural Engineering	69		
Ceramics	3		
Chemical Engineering	5		
Civil Engineering	59		
Electrical Engineering	95		
Mechanical Engineering	67		
Mining Engineering	3		
Structure Design	3	304	
Specials			
Agricultural Engineering	2	2	
Irregular			
Civil Engineering	1		
Mechanical Engineering	1	2	
Non-Collegiate			
Two-Year Trade School	22	22	
Winter Short Courses			
Painters	57		
Engineering	51		
Highway Engineering	81	189	861
3—Division of Home Economics.			
Senior Class	42		
Junior Class	60		
Sophomore Class	96		
Freshman Class	239	437	
Specials	6	6	
Irregulars	3	3	
Non-Collegiate			
Two-Year Home Economics	24	24	
Winter Short Course	54	54	524
4—Division of Science.			
Graduate Students	13		
Senior Class	17		
Junior Class	9		
Sophomore Class	14		
Freshman Class	26		

Specials	4		
Irregulars	8	91	91
5—Division of Veterinary Medicine.			
Graduate Students	1		
Senior Class	14		
Junior Class	17		
Sophomore Class	14		
Freshman Class	31	77	77
6—Department of Music.			
Collegiate Course	7		
Unclassified	132	139	139
7—Summer School	215	215	215
Total			3740
Less Duplicates			
Agricultural Engineering	135		
Summer Session	63		
Music	84	282	282
			3458

If the student enrollment appears large it should be remembered that enormous interests are to be served. A large number of well trained men and women will be required in the State of Iowa to maintain her present standing against the increasing difficulties that come with increasing years of settlement and to develop her resources and maintain her position as compared with other states where wonderful progress is being made in connection with investigation and education along technical lines. In this conection some statistical data are of interest.

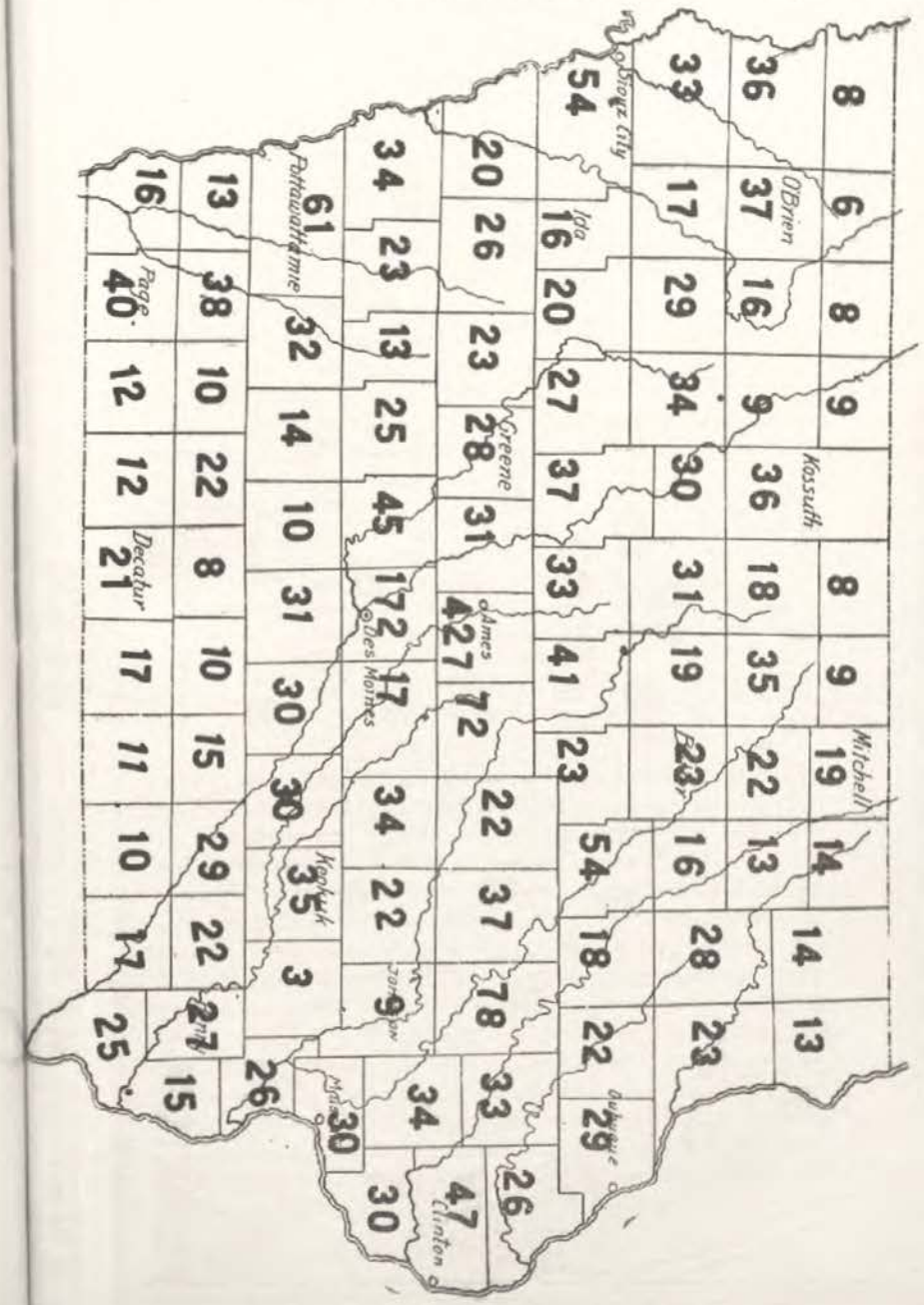
According to the 1910 census for the United States, Iowa had 217,044 farms with a total value of farm property of $3,745,860,544. The value increased 104% in the ten years ending 1910. Of this amount $2,801,973,729 was in land; $455,405,671 was in buildings; $95,477,948 in implements and machinery and $393,003,196 in live stock. The value of corn, Iowa's chief crop, exceeds $200,000,000 per year.

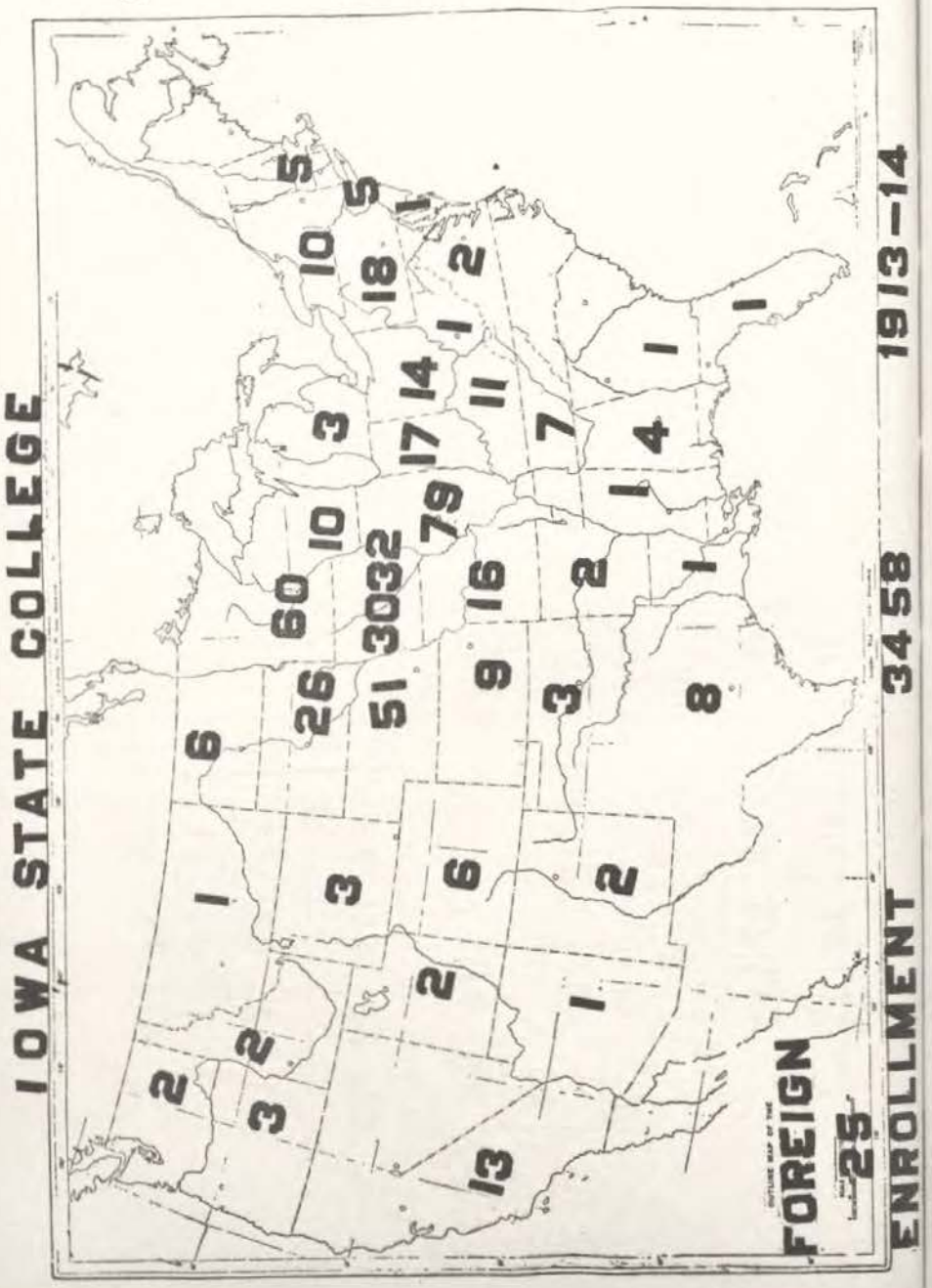
According also to federal authority, in 1909 Iowa had 5,528 manufacturing establishments, which employed an average of 78,360 persons and paid out during the year $43,514,000 in salaries and wages. The value of all manufactured products was $259,238,000. The State Bureau of Labor Statistics estimates the value of manufactured products for the year 1913 as $406,225,576, which is an increase of about 57 per cent over the amount reported

by the United States census for 1909. Iowa also produced products to the amount of $13,877,781 from mines and quarries.

Every county in the State is represented by a good-sized delegation in the student enrollment. The number from Story county is particularly large because many families move to Ames and make this city their home while the young people are being educated. In 1912-13 seven families in Iowa were represented by three children in the College. One hundred and three families were represented by two members. Thirty-five families in Ames sent two or more students, or altogether 76, to the College. There is a considerable number of students from other states but they do not equal in number the Iowa students enrolled in other states.

A small number of foreign students is included in our enrollment. These pay the additional tuition fee required of students from out of the State. In a personal letter the United States Commissioner of Education, Honorable P. P. Claxton, calls attention to the fact that the European war may be expected to have the effect of sending more foreign students to American institutions of higher learning. Some may come from the countries that are at war but more from South American and other peaceful countries whose young men have been going to England and Germany and France. In addition, the American students who would go abroad will now ask for instruction at home. Iowa State College will feel the effect of this added demand caused by the deplorable conditions in Europe. The graphic on page 229 shows the student enrollment by counties for the academic year of 1913-1914 and the one on page 230 shows the enrollment by states for the same year.





EFFICIENCY LECTURES.

The chief drawback to good scholarship in the case of too many of our new students is that they do not know how to study. They have not learned to concentrate their efforts on one subject. The students readily acknowledge this fact. Its result is that many a student does not get into the heart of his work until he has spent some months in college classes. A new plan has been adopted whereby all freshmen students are given five efficiency lectures early in their first semester. In the fall of 1913 these lectures were first given and the speakers were:

October 6—Student Economics,
By President Pearson.

October 13—College Spirit,
By Mrs. Hattie Moore Mitchell, of Des Moines.

October 27—(For Men) Personal Hygiene,
By Professor Hackett.
(For Women) Same Subject,
By Dr. Frances Brown Sherbon, of Colfax.

November 10—(For Men) Student Habits,
By Rev. Howland Hanson, of Des Moines.
(For Women) Same Subject,
By Mrs. S. K. Stevenson, of Iowa City.

November 24—(For Men) Disease Carriers,
By Dean Buchanan.
Later—(For Women) Same Subject, Same Speaker.

SELF-SUPPORT.

The students attending this College are an earnest, high-minded group. Cliques and snobbery and shiftlessness do not prevail. The young man or woman of small means, if character is right, has the same standing as any other student even though it is necessary to do menial work to help pay expenses. A few students wholly support themselves; a large number of students partly support themselves. This class is encouraged in every way possible, but all students are advised to provide themselves with sufficient funds to cover all expenses for the first year of work. This permits them to get acquainted with conditions and to find suitable location for their second year where they may earn money and, most important, it enables them to put their whole strength upon the important foundation work of the freshman year. Some statistics showing the extent to which students contribute to their own support while in college, as reported by the Y. M. C. A. Employment Bureau, are as follows:

About 350 earn their board by working as stewards, treasurers, waiters, dishwashers, and helpers in clubs, fraternities and cafes.

Nearly every club, fraternity and rooming house, and a number of private homes furnish rooms to students who take care of furnaces and do odd jobs.

Six earn all their college expenses as stenographers. Others do some work of this kind to help out on expenses.

Two men earn their college expenses by photographic work.

One man pays his expenses by mending shoes.

Eight students act as agents for laundries.

Three deliver daily papers.

Several students canvass clubs, etc., representing wholesale grocery and supply houses.

Several students receive rooms in college buildings for janitor work which they do.

Two hundred work at odd jobs Saturdays and other days when they have time off.

The college departments employ student help in so far as possible. Advanced students assist to a limited extent in laboratories and they assist professors in getting together materials for lectures and laboratories. Other work for the College includes labor on the farm, in the orchards and experimental plats, in the barns, mailing bulletins, correcting essays, etc.

The College treasurer's books show that in one recent year 802 students received $26,436 for work done for the College; 642 of them received less than $50 each, 46 received from $100 to $200 each. It is estimated that other student earnings amount to about $20,000 per year. Many students earn a large part of their expenses during the long summer vacation.

FEES.

Under provision of the law, tuition is free for students residing in Iowa. For others it is $25 per semester or $50 per year. Your Board has allowed eight free tuition scholarships annually for each of the four classes. This is in recognition of the fact that a large part of the support of this College is from the National Government and therefore is paid by other states and we have some obligation to these other states for this reason and because they, without charge, or in some cases for only nominal charge, are educating large numbers of youth from Iowa. There is some advantage, also, to a student body in having a few bright minds from other states and colleges mingling among them and through these few scholarships such students are encouraged to attend this college.

All students are charged fees to cover cost of material supplied to them for class room and laboratory work. These cover mimeograph notes which in a large measure take the place of expensive text books, and chemical substances which are used in experiments, and breakage of glassware which has been loaned to students. There is a general fee to cover incidental charges such as janitor services and hospital services and certain other necessary items. This has been reduced by the Board of Education from $10 to $9 per semester and should be further reduced whenever possible. The total amount of required fees is about $20 a semester or $40 a year.

ROOMING FACILITIES.

In general the rooming facilities are good. The majority of students are located in private rooming houses. Some are in club or fraternity houses, but there is a shortage of rooms. Prominent business men of Ames and members of the faculty have recently organized a Building and Loan Association and this is expected to make it easier for responsible people without ready capital to build homes and thus to relieve in part the pressing need for more rooms for students. City authorities state that about 150 houses were erected in the summer of 1914. The faculty committee on Public Safety has done good work in getting fire escapes put onto many houses, but the fire risk is still a large risk.

ORGANIZATIONS.

There are many students' organizations and these are encouraged in so far as good service is rendered. There are literary societies, technical clubs and fraternities, sororities and other social and general organizations. Membership in fraternities and sororities is dependent upon scholarship and this restriction appears to be approved by the societies as well as the Scholarship Committee.

PUBLICATIONS.

There are several publications controlled by students, including the following:

Iowa State Student, published three times a week.
Iowa Agriculturist, published monthly during the College year.
Iowa Engineer, published monthly during the College year.
The Bomb, annual publication by the junior class.
I. S. C. Alumnus, monthly ten months of the year.

During this biennium some interesting and promising innovations in connection with student conduct and the management of certain college affairs have been introduced.

FACULTY ADVISERS.

All freshmen students are now assigned to faculty members who serve as their special friendly advisers. Each member of the faculty who is able and willing to assume the task (and this includes practically all) has from five to ten freshmen students assigned to him or her, and endeavors to keep in close touch with these students through the year. Friendly conferences are held. The student is given to understand that the faculty adviser wishes to assist in every way possible. This relationship in many instances becomes close, friendly and most helpful as is shown by the records in the registrar's office and otherwise. In some cases the faculty member is assisted by a senior student.

STUDENT AND FACULTY CO-OPERATION.

Certain faculty committees are now assisted by students who are elected by their classes for this purpose. In many cases students are as much interested and are as efficient in looking after the college interests as a faculty member could be. It is a valuable training to the student to serve, and this service helps to promote close and friendly relationship between students and faculty. At present the student co-operaion with the faculty committees is on the following basis:

Grounds and Buildings Committee—

3 members from each class.
2 members from two-year agricultural courses.
1 member from two-year home makers' course.
1 member from two-year trade school courses.

Moral Welfare Committee—

3 members from each class.
2 members from two-year agricultural courses.
1 member from two-year home makers' course.
1 member from two-year trade school courses.

Public Health Committee—

3 members from each class.
2 members from two-year agricultural courses.
1 member from two-year home makers' course.
1 member from two-year trade school courses.

Publicity Committee—

4 members from each of the three upper classes.

Public Safety Committee—

3 members from each class.
2 members from two-year agricultural courses.
1 member from two-year home makers' course.
1 member from two-year trade school courses.

Public Service—

4 members from each of the two upper classes.

Gymnasium Evening Committee—

5 members from each of the two lower classes.

At first it was planned that the students would have their own organization and assist the faculty committees, but in October, 1913, at a conference attended by the President and the Chairmen of the above named faculty committees, and representative members of the corresponding student committees, it was unanimously agreed that:

(1) All student members should receive notice of all meetings of the Faculty Committees wtih which they co-operate.

(2) All students should attend certain of these meetings when especially requested.

(3) Selected representatives of the students should attend every meeting of the Faculty Committee with which they co-operate.

(4) Students should hold separate meetings as desired.

(5) Each student should have the same voting right as a member of the Faculty Committee.

(6) The different classes should be requested to make the present appointments on these co-operating committees permanent for the College year.

(7) Members of committees should be permitted to retain their badges after the period of service.

PROTECTION OF COLLEGE PROPERTY.

A new plan of making the whole student body feel responsible for and interested in the protection of college property is being tried. Every college suffers more or less loss through petty thefts of property and unnecessary breakage or other injury to its property. These losses have to be considered by administrative officers in making up the budgets. The losses are very often due to persons who have no connection with the institution. In order to check such losses to the utmost and in order to remove the chance of any person getting the idea that, because of unnecessary loss or injury, money appropriated by the legislature is used to repair or replace equipment already paid for by the State, the Board of Education set aside last year $2,000 from the amount paid in by the students as incidental fees. It was announced that from

the fund thus created all payments would be made for replacing college property which was removed or unnecessarily injured, and that the balance would be turned back to the student body for such use as they might wish in connection with improvements upon the campus, or for the college welfare. The student body became interested in reducing such items of expense. They became more watchful, and losses decreased. At the close of the year it was found that only $283.63 had been paid out, leaving a balance of $1,761.37 to be turned back to the student body, for some improvement or betterment.

A helpful influence toward the maintenance of the highest standards of good order was furnished by the class of 1914. When they were juniors, in October, 1912, this class adopted a resolution, pledging themselves to assist in developing such standards in the interest of the good name of the college.

MORAL INFLUENCES.

The moral standing of the student body and moral influences operating within it are worthy of note. The religious preferences of students are indicated by the following data collected by the registrar, for the year 1913-14.

Methodist	810	German Reform	2
Baptist	148	Free Reform	2
Congregational	335	Reformed	4
Presbyterian	386	United Brethren	23
Catholic	109	Latter Day Saints	4
Evangelical	19	Progressive Brethren	2
Lutheran	124	Jewish	5
Mission	1	Mennonite	1
London Mission	1	Church of God	1
Swedish Mission	2	Christadelphian	3
Episcopalian	73	Friends	20
Christian Science	15	Armenian	1
United Presbyterian	21	St. Jacob's Reformed	1
Christian	154	Dunkard	1
Unitarian	13	Church of England	1
Free Methodist	1	African M. E.	1
People's Liberal Church	1	No preference given	311
Restitution	2		
Universal	3	Total	2,611

Among the more evident moral influences in operation throughout the year are the following:

1. The Sunday morning chapel services held in agricultural auditorium and addressed by ministers of all denominations who

accept special invitations to come to the college for this single service. These services are well attended. Often the hall is filled to its capacity of nearly 900. An attractive feature of the service is the music furnished by a choir of college students.

During last year the speakers included:

Bishop H. S. Longley, Des Moines, Iowa, Episcopal Church.
Mr. A. J. Elliott, General Secretary, Y. M. C. A., New York City.
President A. E. Craig, Morningside College, Sioux City, Iowa.
Dr. E. A. Steiner, Grinnell College, Grinnell, Iowa.
Mr. E. P. Colton, General Secretary, Y. M. C. A., New York City.
Dr. J. F. Newton, Cedar Rapids, Iowa.
President D. E. Jenkins, Theological Seminary, Omaha, Neb.
President R. W. Cooper, Upper Iowa University, Fayette, Iowa.
President E. E. Sparks, Pennsylvania State College.
Dr. Osborne, Congregational Church, Burlington, Iowa.
Dr. Howland Hanson, Baptist Church (First), Des Moines, Iowa.
Dr. E. E. Hastings, President of Presbyterian Synod, Iowa.
Bishop Henderson, Bishop in Methodist Episcopal Church.
Dr. Walter Rauschenbusch, Rochester Theological Seminary, New York.
Dr. C. S. Medbury, Christian Church, Des Moines, Iowa.
Dr. J. J. Fitzpatrick, St. Mary's Catholic Church, Marshalltown, Iowa.
Dr. Herbert Martin, Drake Theological Seminary, Des Moines, Iowa.
Dr. R. C. Hughes, Secretary, Educational Board of Presbyterian Church.
Dr. B. S. Hayward, Kansas City, Mo.
President J. A. Earle, President of Des Moines College.
Dr. Harry D. Ward, Boston Theological Seminary, Boston.

2. Morning chapel service from 7:45 to 8:00 o'clock five mornings of the week. This service is conducted by the college chaplain with different members of the faculty usually serving as speakers. Prominent visitors to the college are sometimes heard. The attendance at this service is voluntary and usually falls between 100 and 400.

3. Churches of leading denominations in the city of Ames. The city is particularly fortunate in its churches and ministers, and large numbers of students attend such services regularly. They are encouraged to do so. Some affiliate themselves with churches while enrolled in the College. Many students are helpful in the church and its different organizations.

4. The Y. M. C. A. and Y. W. C. A. These are quartered in Alumni Hall on the campus and have paid secretaries. Last year over 85% of the young women students belonged to their association. The young men's association is well patronized. There is a Catholic Club, a Luther League, and Brotherhood of St. Andrew.

5. Bible Classes. A large number of Bible classes are conducted in fraternity and club houses once each week. Members of the faculty and senior students serve as leaders. These classes are well attended.

6. Student Pastors. Three churches now maintain student pastors at Ames. These men work in conjunction with their church and with the religious organizations on the campus. They are exerting a helpful influence.

7. Student religious services, including class prayer meetings, which are conducted entirely by the students.

RELATIONS BETWEEN LOWER CLASSES.

The relations between the two lower classes in this College, contrary to the long standing tradition of many higher educational institutions, have been placed upon a friendly, helpful basis. The idea of changing the attitude between the two lower classes from antagonism to friendliness has attracted considerable attention. It is hoped this will become a permanent tradition at Iowa State College. Credit for this unique action must be given to the Class of 1916. Near the close of its freshman year, in May, 1913, the following resolutions were unanimously adopted:

Whereas, it has long been a custom for varying degrees of antagonism to exist between the freshman and sophomore classes in institutions of learning; and,

Whereas, this feeling of antagonism frequently has led to violence; and,

Whereas, this traditional opposition between sophomores and freshmen is rapidly dying out in leading institutions of learning, and such opposition has no advantage but is detrimental to the best interests of the institutions and the student body; and,

Whereas, there are abundant reasons why the sophomore class should assist the freshman class in taking up new work in a strange institution, therefore, be it

Resolved, That this Class of 1916 in the Iowa State College of Agriculture and Mechanic Arts hereby expresses its emphatic disapproval of the idea of further continuing the traditional attitude of antagonism or unfriendliness between sophomores and freshmen, and records itself as favoring an attitude of friendliness and helpfulness.

We, the members of the Class of 1916, hereby pledge ourselves collectively and individually to use our best influence to prevent all acts of lawlessness or violence against members of the Class of 1917, and assert it to be our purpose to assist the members of the incoming class to become well established in their work as promptly as possible. It is our desire to hold friendly contests with the incoming class, such contests to be arranged by a joint committee; and be it further

Resolved, That the president of this class (1916) be instructed to appoint a committee of not less than thirty (30) members of this class (1916) to be known as a Freshman Reception Committee to meet freshmen on arrival prior to the opening of the college in September, and to co-operate with the Y. M. C. A. in providing for them in any way beneficial to their comfort. Members of said committee should be provided with badges and will be expected in all good faith to carry out in every possible way the letter and spirit of these resolutions.

A. Earle Holmes, President, 1916.

The members of the class faithfully lived up to their resolutions and the Class of 1917 appreciated the good treatment received at the hands of the sophomores. This class in turn adopted resolutions early in their freshmen year as follows:

Whereas, the Class of 1916 has this year adopted a new policy in respect to the relations between sophomores and freshmen and through a committee has extended assistance to members of the Class of 1917; and,

Whereas, the entire Class of 1916, the whole student body and the faculty have shown in every possible way their desire to assist members of this class to make a good start in our college work, therefore, be it

Resolved, That this Class of 1917 hereby expresses its appreciation and thanks to members of the Class of 1916 and all others for the splendid welcome and treatment we have received, and we declare it to be our purpose to reciprocate whenever opportunity offers; and, be it further

Resolved, That in harmony with action of the Class of 1916 this class goes on record as in favor of contests between the two classes and under supervision of committees duly appointed; and, be it further

Resolved, That these resolutions be spread upon the minutes of this class and the secretary is hereby directed to transmit copies to the president of the Class of 1916 and to the editor of the I. S. C. Student.

Roscoe Packer, President.
Jeannette Knapp, Secretary.
Class of 1917.

Near the close of their freshman year, in March, 1914, the members of the Class of 1917 took further definite steps in the interest of the next incoming class by adopting the following:

Resolved, That this class, having adopted a resolution of appreciation on account of the attitude of the Class of 1916 toward us, and having expressed ourselves as desiring to reciprocate, the president of the class is hereby authorized to appoint a committee of thirty-five (35) to act as a Reception Committee to members of the Class of 1918, and to carry out in good spirit the custom which is coming to be established at Iowa State College; namely: an attitude of friendliness and helpfulness between sophomores and freshmen instead of an attitude of antagonism, as has long been the rule in institutions of higher learning.

E. N. McDonnell, President, 1917.

The committee authorized by the resolution sent a cordial letter to each member of the new class besides otherwise carrying out the provisions of the class action.

CONTRIBUTIONS.

It is worthy of note that the student body has raised funds for especially worthy purposes on several occasions. By popular contribution they sent an old soldier to the reunion at Gettysburg. A fund was raised for the flood sufferers in Ohio.

WOMEN STUDENTS.

Last year there were 514 young women students. They are quartered in Margaret Hall, in a few sorority houses and in numerous other houses accommodating from 18 to 25 and under the supervision of the College. A chaperon resides in each house. Every effort is made to safeguard the health and protect the young women and promote their educational interests. The new women's dormitory is expected to accommodate about 100 young women and to be ready for occupancy after the first of January, 1915.

OCCUPATION OF GRADUATES.

Graduates from technical courses usually follow the line of work for which they have prepared themselves. A chief reason for this is that technical courses are hard and students do not enter them unless they really want to make use of the instruction. Often it has been said that college courses in agriculture educate young men away from the farm. The records show the contrary. Dean Curtiss has collected data regarding the occupation of 579 alumni from the Division of Agriculture from 1872 to 1913. Only 64 of these are not connected with agriculture. The remainder are connected with agriculture. For the five years, 1909 to 1913, data have been tabulated from 271 agricultural alumni whose employment is known. All but eleven of these are connected with agriculture. The largest group is engaged in farming, some are in special agricultural lines such as dairying or agricultural journalism. About one-third are teaching agriculture and a few are in agricultural experiment station work.

Professor Pew has collected data from all the 97 graduates from the Animal Husbandry course in 1910, 1911, and 1912, with the following interesting findings:

78 are farmers.
8 are college instructors and experiment station workers.
6 are teachers of agriculture in high schools.

2 are in agricultural journalism.
2 are salesmen.
1 is the expert of the Iowa Beef Producers Association.

We have not heard the criticism that engineering and veterinary students fail to follow the lines for which they are trained. The fact is that graduates from these divisions also are making good in their chosen work in all parts of the State. Naturally some graduates locate in other states. Every State institution has this experience, and it should be remembered that Iowa receives benefits from institutions in other states through probably more college graduates than she sends into other states.

The Faculty Appointment Committee reports having helped, in 1913-14, 58 graduates to secure teaching positions. Of these, 35 are in Home Economics positions; 16 are in Agriculture; 4 are in Science; and 3 are in supervisory positions. Thirty-eight of the positions are in Iowa. Minnesota took nine because of her advanced position in reference to vocational training, which is accompanied by good teachers' salaries. The salaries of the 58 appointments range from $70 to $150 per month.

The young men who take the two year course in agriculture almost always return to the farm. Many of them are carrying on large and important farm operations in the State.

NAMES OF GRADUATES.

The names of those receiving degrees and certificates during the biennium are as follows:

Graduates January 1, 1913.

Degree—Bachelor of Science in Agronomy.

Hugo Jordan Guerra
Paul Clifford Taff
D. Harold Zentmire

Degree—Bachelor of Science in Animal Husbandry.

Winthrop Kellogg Dyer
Guy E. Harmon
Rudolph H. Hicken
Robert C. McChord
James R. VanDeventer
Herbert Hopkins Whitehead

Degree—Bachelor of Science in Home Economics.

Caroline Mary Dean
Carrie Elinor Lake

Degree—Bachelor of Science in Mechanical Engineering.

Edward C. Cutler
Leland R. Miner
Carl Oscar Negaard

Degree—Bachelor of Science in Civil Engineering.

Lawrence E. Corray
Adolph Fick
Ralph Welles Gaylord
William Edward Jones
Harry Alfred Kerr

Degree—Bachelor of Science.

Howard Sheldon Coe

Graduates June, 1913.

Degree—Master of Science in Animal Husbandry.

Eric N. Boland
Frank B. Hills

Degree—Master of Science in Soils.

L. W. Forman

Master of Science in Dairying.

Kenneth G. MacKay

Master of Science in Horticulture.

Frank W. Allen

Master of Science.

William O. Ellis

Degree—Civil Engineer.

William O. Price
G. H. Mack
W. E. Buell
H. J. Brunnier

Degree—Engineer of Mines.

Herbert E. Robinson

Degree—Electrical Engineer.

Charles A. Hobein

Degree—Bachelor of Science in Agronomy.

Donald A. Hunt
Burton Joseph
Ralph Linton Helm
Paul Bird
Randall M. Tuttle
Joseph Miles Rees
Lynn W. Osborn
Ben H. Walker
Martin E. Sar
Lumir J. Vondracek
Milton O. Smith
Edwin Charles Harte
Eric Eyre Eastman
Virgill Clyde Miller
Charles S. Dorchester
Everett C. Watts

Degree—Bachelor of Science in Dairying.

Lloyd Paul Shaffer
Ami Lewis Allen
James Gray Watson
George J. Miller
William Douglas Meltzer
James A. Clutter
Roy Montgomery Day
Morton B. Newburger
Harold William McElroy
Earl Brunson Bisbee
Lessing B. Newburger
J. Henry Seba

Degree—Bachelor of Science in Animal Husbandry.

Max Merwyn Allender
Howard Clinton Barker
Daniel Thomas Batchelder
Harry John Boyts
Oran Russell Brasted
Charles Anson Burge
Charles Lloyd Burlingham
Lloyd Elliot Burnett
Clyde Burdette Campbell
Morris Earl Cochran
Roy Emery Coverdale
Thomas Farmer Crocker
Sherman Dickinson
Eleazer Robert Divine
Valente F. Dolcini
David Earl Elijah
Howard Claude Ferguson
Ray Gatewood
Lester Sidney Gillette
Earl S. Girton
Joseph B. Gratiot
Fred Eugene Hartnell
Earl Hilden Johnson
Isaac B. Johnson
Paul Allen Johnson
Oral Harry Joy
Paul Frank Kriethe
Forrest Wilkins McBride
Roy Wilson McDonald
Harry A. McMichael
Harry Ward Milligan
Harry M. Nordstrum
Edward Sanford Olson
Roscoe C. Pollock
Bryce Alfonzo Quint
John William Schwab
A. Jay Terrall
Bruce R. Vale
Ralph Hammond Van Keuren
Edward Vaughn
Harry Eugene Ward
Jerub Harry Warner
Edward Arthur Weyrauch
Charles E. Wheatley
Dick Grady Whitaker
Foster W. Wilson
Leslie O. Wise
Burton Henry Wormley

Degree—Bachelor of Science in Horticulture.

Jacob Peter Anderson
Clyde F. Cochran
Manly Secor

Degree—Bachelor of Science in Forestry.

Hal Beck Clark
Rudolph Louis Hensel
Horace Ives Ringheim
Edwin H. Steffen
Lyle Ford Watts

Degree—Bachelor of Science in Agricultural Engineering.

William Wallace Ashby
James Arentson
Ralph Upshaw Blasingame
Carl Richard Hoff
James C. Olsen
Manly Alexander Raymond Kelley
James Byron Kelley
Ralph T. Vincent
Wesley W. Warsaw
Donald S. Wormley

Degree—Bachelor of Science in Agricultural Education.

Shirley Marker Hackett
Arthur Floyd Scott

Degree—Bachelor of Science in Science and Agriculture.

Luke J. Baxter

Degree—Bachelor of Science in Home Economics.

Willa Tirrill Richardson
Helen D. Gage
Faith Fenton
Iva Adeline Beatrice Fuchs
Marie Hanson
Georgena Hawks
Edna May Arthur
Lilla M. Voss
Edna E. Prine
Blanche Hopkins
Edna Tong
Callie May Bliss
Gladys Bonner
Lena Fay Thompson
Lila Wygle
Jennie F. Mitchell
Nellie R. Patterson
Helen White
Leila Huebsch
Forrest Fern Rush
Eunice Ethel Woody
Miriam Hood Wills
Clara Hanson
Zelma Zentmire

Degree—Doctor of Veterinary Medicine.

Forest Ward Cairy
Roy Glenden Ross
Harry W. Hall
Royal F. Nordstrum
Chris E. Juhl
Arthur C. Swanson
David B. Wilson
William Edward Macklin
Charles Dobbs Rice
Frank V. Helsel
Percy Lester Ellis
Ralph J. Laird
Bernard L. Doyle
Herman H. Jonker
Carl Francis Neis
Harold Eugene Johnston
Robert Gorden Moore
Harry C. Paine
Glenn Darbyshire
Lewis F. Doty
Nathaniel S. Nutty
Charles Purl Wilson

Degree—Bachelor of Science in Mechanical Engineering.

Harry Prentice Allstrand
Myton M. Bonsteel
Benjamin Jones Egert
Clifford H. Glaze
Virgil W. Hale
Frank Alois Hill
Reuben Kuempel
Ichabod A. Lawton
Robert Nathaniel McKitterick
S. Oscar Nelson
Raymond B. Reis
Raymond R. Rogers
Cornelius G. Sauerberg
Ferdinand Edward Schmidt
James K. Shallenburger
Fred E. Triggs
Leon Joseph Wells
Fred T. Whiting
Floyd Everett Worley
G. Edward Wray

Degree—Bachelor of Science in Civil Engineering.

Herbert Miller
J. Raymond Johnston
Harvey B. Armour
Merle Cadwell Tyler
William F. Cochrane
Curtiss D. Weller
Jacob Butler Sullivan
Boyd H. Tong
Perry Judson Preston
John Henry Schwertley
Everett Harrold Frazier
Wayne Wilson
Ivan Emery Trottnow
William Neil Adams
Frank Alexander Mosher
Leo C. Vader
Adelbert Estey Wallace
John A. Illeman
John Richard Hamm
W. Earl Barker
Levi Sabin Gates
Harry Clyde Hunter

Degree—Bachelor of Science in Civil Engineering—Continued.

Joseph Pickus
Mark O. Chamberlain
Rudolph Martin Evans
Edwin Monroe Westbrook
Orville W. Crowley
Harry M. House
Amos Melberg
David Eugene Adams
Charles Capper
Homer X. White

Degree—Bachelor of Science in Electrical Engineering.

Seth A. Brown
Paul Spencer Clapp
Glenn L. Conlee
Harold E. Conlee
Arthur E. Hartung
Denver Wayne Hoot
Albert Lynn Hopkins
Paul R. Howland
Claron B. Hutchison
Don H. Kilby
Everett Flint Knight
Claude H. Mott
Frank Roberson
Joseph James Shoemaker
Earle R. Thornburg
Joseph N. Walton
Harry F. Good

Degree—Bachelor of Science in Mining Engineering.

Lyle Alden Butler
Alva Jesse Crawford
Clifford King Clark
Arthur Ware Hess
Raymond Layton Hurst

Degree—Bachelor of Science in Ceramics.

Hans Christian Pfund

Degree—Bachelor of Science.

Myrtle McDonald
Elizabeth McKim
Ruby Moss Lynch
Anna Marie Wolfe
Ruby H. Hopkins
Mildred Cady Walls
Edward Sawtelle Welles
Clyde Houghton Lissenden
Leona Peshak
William R. Tydeman
Elizabeth Deacon
Mary Georgeanna Miller

Graduates February 6, 1914.

Degree—Bachelor of Science in Agronomy.

Harlan W. Johnson
Policarpo Garza

Degree—Bachelor of Science in Animal Husbandry.

J. Fernando Grass
Paul E. Levson
Paul F. McLean

Degree—Bachelor of Science in Forestry.

J. Clifford Sterret

Degree—Bachelor of Science in Horticulture.

Virgil P. Johnson

Degree—Bachelor of Science in Civil Engineering.

Leroy D. Snyder

Degree—Bachelor of Science.

Iva B. Fuchs

Graduates June, 1914.

Degree—Bachelor of Science in Agricultural Education.

Lewis K. Bennett
Milton Elwood Scandrett
Ross Paul White

Degree—Bachelor of Science in Agricultural Engineering.

Edgar V. Collins
George Le Roy Costigan
Fred. C. Fenton
Harry Frank Good
Clyde I. Griffith
Arthur Henry Hoffman
Milton H. Hoffman
George W. Iverson
William G. Kaiser
Emil W. Lehmann
Charles A. Norman
Frank Stuart Rodger
Arthur W. Schultz
Claude Kedzie Shedd
Earl George Welch

Degree—Bachelor of Science in Agronomy.

Leon Ensworth Aldrich
Thomas Harold Benton
George Myron Clark
Ross L. Clark
Edgar V. Collins
Ezequiel E. Dominguez
William Elmer Frudden
Dolliver W. Graham
Hans Peter Hanson
Benjamin C. Helmick
Thomas David McClenahan
Earl S. Miles
Marion Elias Olson
Don Warren Pittman
Harold Wilcox Reid
Harold Shaw Robilliard

Degree—Bachelor of Science in Animal Husbandry.

Joe Bone
Paul Bradley
William Brand
William H. Brennan
Errett Brownlie Calderwood
Howard Harmon Camburn
Leslie M. Carl
Harry W. Cave
Dean Holmes Corlette
Joseph Clayton Cort
Glen Darbyshire
Henry Rankin Duncan
Rowan Wayne Dysart
Glenn A. Ellis
Frank Vail Farr
Fred L. French
Howell E. Gholson
Fred R. Glassburner
Luis S. Gonzalez
Ross McKinney Gridley
Ward Vladimir Gousseff
C. Wayne Hammans
Earl S. Haseltine
Carlos V. Hill
Hugh C. Hostetter
Arthur Robert Karr
Llewellyn W. Kube
Melvin Cornelius Larson
Ryle S. McKee
Thomas Bonar McKee
Lloyd Raymond Marchant
Byron Gilman Moad
Ora B. Moore
Roy James Murray
Bernard Floyd Myers
James Edgar Norton
Elmer M. Peterson
Wallace W. Reynolds
Ola Evertt Rider
Luman P. Sewell
A. Lee Smith
Robert Nelson Spencer
Clay William Stafford
Herman Steen
Harold E. Stone
Ralph J. Sunderlin

Degree—Bachelor of Science and Animal Husbandry—Continued.

Aubrey J. Swift
Theron A. Thornburg
Orville C. Ufford
Harry J. Venning
Harley Walker
John Higgins Warburton
E. Harry Watsabaugh
Russell Webb
Edwin C. Wetherbee

Degree—Bachelor of Science in Chemical Engineering.

Edwin John Hull
Lidmil Leo Palda

Degree—Bachelor of Science in Civil Engineering.

Earl Capel
Allen Howard Connolly
Frank D'Autremont
William Henry De Butts
William Livingstone Fahey
Charles M. Fisher
Field Bradford Forbes
Joseph A. Goodbarn
Liono Leslie Grand Pre
Ole G. Herm
Robert S. Johnson
Robert Tillman Johnson
Vernon S. Lawrence
Frederick John Longer
Lisle Nicholson
Henry M. Noel
Lee S. Packman
Frank D. Pearce
Donald De Witt Rait
William Alfred Reeves
Paul Bilsborough Reis
Vernon Harrison Roller
Fred Sarvis
Russell A. Smith

Degree—Bachelor of Science in Dairying.

Fayette Clifton Barney
Arthur F. Carlson
Willoughby A. Lee
Hugh M. Linn
John Albert Luithly, Jr.
Guy Lee Noble
Harry E. Ritter
Edward J. Shima
Verner H. Stork
Thomas Henry Wright, Jr.

Degree—Bachelor of Science in Electrical Engineering.

Edgar M. Bouton
John Henry Brumhall
Guy Chatburn
Harry K. Davis
Glenn Gladstone Hoskins
William John Hudson
Lauren Everett Hulse
Charles Neff Hutchinson
Charles Edward Ide
Carl Voigt Kriechbaum
Irving Eugene Loveland
Edgar Eugene Martin
Robert Horace Milner
Earle Glenn Nichols
James Bruce Patterson
Harry B. Porter
David Roy Scott
George R. Shaw
Lloyd G. Swanson
Claire H. Webster

Degree—Bachelor of Science in Forestry.

Willard Claire Hassel
Ralph W. Hayes
William Max Nagel
Robert G. Schreck
Serrin S. Van Boskirk
Ernest T. Wolf
Ray M. Wolven

Degree—Bachelor of Science in Home Economics.

Alice Bortine Anderson
Jessie Campbell
Ruth Cessna
Grace Marie Conlon
Elsie Myrtle Corwin
Charlotte Dryden
Helen Margaret Flint
Lura Mae Fogleman
Helen Dean Frink
Dorothy May Gallivan
Edna Murray Garvin
Maude Lillian Guthrie
Irene E. Hagglund
Eleanor Marie Hallock
Florence Jensen
Laura Lucinda Jones
Kate Esther Kerr
Lucy Kimball
Mabel Fay Kingsbury
Mayme Kirkpatrick
Marian Hermine Knapp
Frances Laffer
Marjorie Townsend McIntosh
Grace Mae Martfeld
Margaret Niles
Mary Margaret Nordstrom
Mabel Clare Parsons
Mabel C. Peters
Ilma G. Pitts
Beth Pryor
Emma Reno
Mildred Reynolds
Clara Irene Shinkle
Ellen Skegg
May Blanche Statler
Maisie Gail Stephenson
Lora Kristine Thompson
Mary Elizabeth Vaughn
Ruth Vincent
Helen Ames Wentworth
Jessie Witmer
Maude Campbell

Degree—Bachelor of Science in Horticulture.

Wayne W. Downing
Ellis L. Kirkpatrick
Frank Drew Millar
Edward Esher Smith

Degree—Bachelor of Science in Mechanical Engineering.

Donald Shearon Barry
Elmer H. Borg
Earl F. Borg
Earl F. Bragg
Robert C. Campbell
Herbert Edwin Freund
Charles Henry Hartnell
William John Hudson
George Simon Lafrentz
Walter Garfield Madison
Paul V. Miller
Harry J. Renken
Ralph Ewing Reuling
Raymond A. Schreiber
Herbert Sigfrid Selindh
Carl Wesley Stookey
Harlan Edward Tracy
Morris B. Wilder
J. Ora Winchell

Degree—Bachelor of Science in Mining Engineering.

Elmer August Almquist
Emil James Kratoska
George Thomas Wright

Degree—Bachelor of Science.

George W. Baker
Berenice Lillian Blake
Bernice Lucian Bradford
Dorothy Childs Cross
Cleo Grace Day
Maude M. Donohue
Madge Elliott
Annie Elizabeth Farnum
Frances D. George
Merrill Milo Manning
Helen Tabitha Osler
Blythe Viola Victoria Poage

Degree—Bachelor of Science in Veterinary Medicine.

Clayton L. Crider
Ecson Lee Finley
Harry A. Gamrath
Clifford Meron Gilchrist
Charles Henry Haggard
Howard C. Johnson
Thomas Seeter Leith
Harry Winter Paxton
Crittenden Ross
Karl William Schalk
Fred W. Shinn
Mark Speaker
Mulford Dell Studebaker
Rollin Mathias Thomas
Irl Donaker Wilson
Logan Alexander White

Degree—Master of Science in Agriculture.

Kenneth Cole Ikeler

Degree—Civil Engineer.

Charles William Okey
William Japhia Schlick
Wilbur M. Wilson
Louis D. Kelsey
Wilbur L. Fulton
Ray Floyd Weirick
Tansey Radford Agg
Roy Winchester Crum
Ralph Z. Kirkpatrick
Charles Sabin Nichols

Degree—Mechanical Engineer.

Frank S. Vincent
Jesse Greenleaf Hummel
Oscar Anton Olson
George G. Dana
Peter M. King

Degree—Chemical Engineer.

Edward N. Eaton

Degree—Electrical Engineer.

Wilson Lee Campbell
Morris E. Packman

Degree—Agricultural Engineer.

Leon Wilson Chase

Degree—Doctor of Science.

George L. McKay
James Wilson

The following table shows the number of degrees granted in the different courses during each year of the biennium, and total number of degrees granted up to June 30, 1914:

Summary of Graduates.

	1912-13	1913-14	Grand Total to June 30, 1914
Number of first degrees granted	250	258	3,401
Present Courses			
Agricultural Education	2	3	5
Agricultural Engineering	10	15	31
Agronomy	19	18	127
Animal Husbandry	54	58	334
Ceramics	1	0	5
Chemical Engineering	0	2	2
Civil Engineering	37	25	555
Dairying	12	10	66
Electrical Engineering	17	20	380
Home Economics	26	42	128
Forestry	0	8	8
Horticulture and Forestry	8	0	51
Horticulture	0	5	5
Industrial Chemistry	0	0	2
Industrial Science	13	14	508
Mechanical Engineering	23	19	322
Mining Engineering	5	3	53
Science and Agriculture	1	0	3
Veterinary Medicine	22	16	291
Courses Discontinued			
Agricultural Course, leading to Degree B. S., 1872-1880			102
Agricultural Course, leading to Degree B. S. A., 1883-1888 and 1894-1904			86
Science and Agriculture Course, leading to Degree B. S., 1889-1890 and 1909-1911			47
General Science Course for Ladies, 1872-1880 and 1904			48
General and Domestic Science Course, leading to Degree of B. S., 1887-1899			93
General and Domestic Science Course, leading to Degree of B. Ph., 1899-1900			21
General and Domestic Science Course, leading to Degree of B. S., 1901-1908			78
Agronomy Course, leading to Degree B. Ag., 1891-1898			50

Higher Degrees—			
Master of Science in Agriculture	0	1	56
Master of Science	1	0	42
Other Master Degrees	5	0	16
Engineers	6	19	81
Honorary Degrees	0	2	14
Advanced Degrees in Veterinary Medicine	0	0	4

THE TEACHING STAFF.

The College faculty is composed of the president, full professors and associate professors. It is the legislative body of the institution. Each division has its faculty, which is the legislative body for that division. All faculty actions are within lines established by the Board of Education or are subject to approval by the Board.

The following changes in the personnel of the staff occurred during the biennium:

RESIGNATIONS.

Professors, Associate Professors, and Assistant Professors:

Professor A. V. Storm, Head of the Agricultural Education Department, resigned to accept a position with the University of Minnesota. Professor B. H. Hibbard, Head of the Department of Economics, resigned to accept a position with the University of Wisconsin. Associate Professor John Piper Watson, Director of Physical Training, resigned to accept a position with the State University of Iowa. Assistant Professor A. S. Thompson and Mrs. A. S. Thompson resigned as Director and Vice-Director of the Music Department, respectively, to accept similar positions elsewhere. Associate Professor E. N. Wentworth of the Animal Husbandry Department resigned to accept a position on the editorial staff of the Breeders' Gazette. Professor A. MacMurray, Head of the Public Speaking Department, resigned to accept a similar position with the University of Kansas. Other resignations were as follows: Assistant Professor C. O. Alexander of the Agricultural Engineering Department; Assistant Professor Nelson C. Brown of the Forestry Department; Associate Professor Lola A. Placeway of the Chemistry Department; Associate Professor A. H. Hoffman of the Physics Department; Assistant Professor Arden R. Johnson of the Chemistry Department; Assistant Professor Walter Henry Cooper of the Dairy Department; Professor Willard John Kennedy of the Animal Husbandry Department transferred to the Agricultural Extension Department as Temporary Director, later resigned.

DEATHS.

There was one death in the instructing staff. Mr. Clyde F. Cornwall, who held a teaching fellowship in the Department of Bacteriolgy, died January 5, 1914, from heart failure following too strenuous physical exercise.

LEAVES OF ABSENCE.

Professor A. A. Bennett, Head of the Department of Chemistry, who served until the close of the college year 1912-13, following a service of twenty-eight years in this College and four years additional of college teaching, was given leave of absence with part salary for one year and without salary thereafter. During four years of the period at Ames he held the position of Professor of both Chemistry and Physics. Professor Bennett has rendered valuable service to the College and to the State.

Assistant Professor Ward M. Jones was granted leave of absence for one year without salary so that he might take up the work of Secretary of the Alumni Association. Associate Professor C. C. Fowler of the Chemistry Department was granted leave of absence for one year to enable him to complete his graduate work for the doctor's degree. Associate Professor I. A. Williams of the Mining Engineering Department was granted leave of absence for one year from September 1, 1912. Miss Jessie Mildred MacLean is absent on account of sickness.

APPOINTMENTS.

Professors, Associate Professors, and Assistant Professors:

Honorable James Wilson, Emeritus Professor of Agriculture. M. S. A., Iowa State College, 1907; LL. D., University of Wisconsin, 1904; LL. D., University of Edinburgh, 1913; D. Sc., Iowa State College, 1913; Secretary, U. S. Department of Agriculture, 1896 to 1912.

George Melvin Turpin, Professor of Poultry Husbandry. B. S. in Agr., Utah Agricultural College, 1909.

Guy Mitchel Wilson, Professor of Agricultural Education and Director of the Summer Session. A. B., Indiana University, 1900; M. A., 1908.

Allen H. Kimball, Associate Professor of Structure Design, in charge of Department. B. L., University of California, 1910; B. S., Massachusetts Institute of Technology, 1912; M. S., 1913.

H. B. Munger, Professor of Farm Management. B. S., Cornell University, 1912.

Jaffrey C. Harris, Associate Professor of Music and Head of Department. A. B., Cornell University.

Amos Peaslee Potts, Associate Professor of Ceramics in the Mining Engineering Department. Ceramic Engineer, Ohio State University, 1912.

George Chester Morbeck, Assistant Professor of Forestry. B. S. in Forestry, Michigan Agricultural College, 1904.

Ernest Muchmore Mervine, Assistant Professor of Agricultural Engineering. M. E., Lehigh University, 1909.

Charles Byron Williams, Assistant Professor of Agricultural Economics in the Department of Economics and Social Science. A. B., University of Chicago, 1900.

George Ernest Hesse, Assistant Professor of English. B. A., Ohio State University, 1910; A. M., Columbia University, 1912.

George Henry Von Tungeln, Assistant Professor of Rural Sociology in the Department of Economics and Social Science. Ph. B., Central Wesleyan College, 1909; M. A., Northwestern University, 1910.

Arthur William Rudnick, Assistant Professor of Dairying. B. S., Iowa State College, 1910.

George Waddel Snedecar, Assistant Professor of Mathematics. B. S., University of Alabama, 1905; M. A., University of Michigan, 1912.

Louis Agassiz Test, Associate Professor of Chemistry. B. M. E., Purdue University, 1894; A. C., 1896; Ph. D., University of Chicago, 1907.

John Anderson Wilkinson, Assistant Professor of Chemistry. B. Sc., Ohio State University, 1903; Ph. D., Cornell University, 1909.

Raemer R. Renshaw, Assistant Professor of Chemistry. B. S., University of Oregon, 1902; M. S., 1903; Ph. D., Columbia University, 1907.

T. Radford Agg, Assistant Professor of Civil Engineering. B. S. in E. E., Iowa State College, 1905.

Harrison B. Kinney, Assistant Professor of Soils. B. Sc., Drake University, 1911.

George Arthur Chaney, Assistant Professor of Mathematics. M. S., Highland Park College, 1906; M. A., University of Wisconsin, 1910.

Ned A. Merriam, Assistant Professor in Physical Training.

Henry William Vaughan, Assistant Professor of Animal Husbandry. B. Sc. in Agr., Ohio State University, 1908; M. Sc. in Agr., 1909.

Clyde McKee, Assistant Professor of Farm Crops. B. S. in Agr., Kansas State Agricultural College, 1910.

Sidney Longman Galpin, Assistant Professor of Geology in the Department of Mining Engineering and Geology. A. B., Western Reserve University, 1907; A. M., Cornell University, 1910; Ph. D., 1912.

Arthur Tabor Jones, Assistant Professor of Physics. B. S., University of Chicago, 1899; Ph. D., Clark University, 1913.

Rudolph Ray Bolton, Assistant Professor of Practice and Diagnosis in the Division of Veterinary Medicine. A. B., Ohio University, 1909; D. V. M., Cornell University, 1912.

Arden Richard Johnson, Assistant Professor of Chemistry. B. S., Chem. Eng., University of Wisconsin, 1906; M. S., 1908; Ph. D., 1911.

Orren Lloyd Jones, Assistant Professor of Animal Husbandry. B. S., University of Wisconsin, 1908; M. S., 1911; Ph. D., 1913.

Grace Schermerhorn, Assistant Professor in charge of Practice Teaching in Home Economics in the Agricultural Education Department. B. S., Columbia University, 1912.

PROMOTIONS.

Vice-President, Deans, Professors, Associate Professors, and Assistant Professors in Collegiate Work:

Edgar Williams Stanton appointed as Vice-President of the College. (In addition to other duties.)

Catherine J. MacKay from Professor of Home Economics to Acting Dean of the Division of Home Economics.

Robert Earle Buchanan appointed as Acting Dean of the Division of Industrial Science. (In addition to other duties.)

William Wallace Dimock appointed as Vice-Dean of the Veterinary Division. (In addition to other duties.)

William Harper Pew from Associate Professor to Professor of Animal Husbandry and Head of Department.

Winfred Forrest Coover from Associate Professor to Professor of Chemistry.

John Edward Brindley from Associate Professor to Professor of Economics.

Harold Edward Bemis from Associate Professor to Professor of Veterinary Surgery and Obstetrics.

Howard Sylvester Murphey from Associate Professor to Professor of Veterinary Anatomy and Histology.

John Edward Kirkham from Associate Professor to Professor of Structural Engineering in the Civil Engineering Department.

Everett Edgar King from Associate Professor to Professor of Railway Engineering in the Civil Engineering Department.

Gilmour Beyers MacDonald from Associate Professor to Professor of Forestry.

Maria M. Roberts from Associate Professor of Mathematics to Professor of Mathematics.

Clyde Williams from Athletic Coach to Professor of Physical Training.

Percy Edward Brown from Assistant Professor to Associate Professor of Soil Bacteriology.

Harold Criswell Bartholomew from Assistant Professor to Associate Professor of Electrical Engineering.

Henry Dale Bergman from Assistant Professor to Associate Professor of Veterinary Physiology and Pharmacology.

Julia Trueman Colpitts from Assistant Professor to Associate Professor of Mathematics.

Morris Irwin Evinger from Assistant Professor to Associate Professor of Civil Engineering.

Evan F. Ferrin from Assistant Professor to Associate Professor of Animal Husbandry.

Chester Charles Fowler from Assistant Professor to Associate Professor of Chemistry.

George Andrew Gabriel from Assistant Professor to Associate Professor of Industrial Chemistry.

Joseph Edward Guthrie from Assistant Professor to Associate Professor of Zoology.

Andrew R. Hackett from Assistant Professor to Associate Professor of Physical Training.

Bernard W. Hammer from Assistant Professor to Associate Professor of Dairying.

Ward Murray Jones from Assistant Professor to Associate Professor of Mathematics.

John Nathan Martin from Assistant Professor to Associate Professor of Botany.

Ruth E. Michaels from Instructor to Associate Professor of Home Economics.

Charles Murray from Instructor to Associate Professor of Veterinary Pathology and Bacteriology.

Roy Hiram Porter from Assistant Professor to Associate Professor of Mechanical Engineering.

Amos Peaslee Potts from Assistant Professor to Associate Professor of Ceramics.

William Randolph Raymond from Assistant Professor to Associate Professor of English.

Arthur Laurence Bakke from Instructor to Assistant Professor of Botany.

Winifred Sarah Gettemy from Instructor to Assistant Professor of Home Economics.

Bruce Magill Harrison from Instructor to Assistant Professor of Zoology.

William Roy Hechler from Instructor to Assistant Professor of Farm Crops.

John Hug from Instructor to Assistant Professor of Mechanical Engineering.

William Kunerth from Instructor to Assistant Professor of Physics.

Jesse Mildred MacLean from Instructor to Assistant Professor of English.

Frank D. Paine from Instructor to Assistant Professor of Electrical Engineering.

Herbert John Plagge from Instructor to Assistant Professor of Physics.

Frank Anson Robbins from Instructor to Assistant Professor of Electrical Engineering.

Ruth B. Safford from Instructor to Assistant Professor of English.

Fredrica Von Trice Shattuck from Instructor to Assistant Professor of Public Speaking.

Phineas Stevens Shearer from Instructor to Assistant Professor of Animal Husbandry.

Ross Madison Sherwood from Instructor to Assistant Professor of Poultry Husbandry.

Roland Schanel Wallis from Instructor to Assistant Professor of Civil Engineering.

Samuel Eugene Conybeare from Assistant to Assistant Professor of Agricultural Journalism.

Professors, Associate Professors, and Assistant Professors in Sub-Collegiate Work:

Jules Cunningham from Assistant Professor to Professor of Horticulture and Botany.

Mark G. Thornburg from Assistant Professor to Associate Professor of Animal Husbandry.

Henry Louis Eichling from Instructor to Assistant Professor of Agronomy.

Esther Lieper Cooper from Instructor to Assistant Professor of English.

Paul Revere Lisher from Instructor to Assistant Professor of Animal Husbandry.

Frederick L. Overly from Instructor to Assistant Professor of Horticulture and Botany.

Mogens Rasmussen Tolstrup from Instructor to Assistant Professor of Dairying.

The number and rank of teachers of all grades in collegiate work in the years 1912-13 and 1913-14 are indicated by the following tables:

1912-13

	Deans	Professors	Associate Professors	Assistant Professors	Instructors	Assistants	Part time Instructors	Fellows and Scholars
Agriculture	1	10	5	6	6	1	------	------
Agricultural Engineering	------	1	1	1	3	------	------	------
Engineering	1	4	10	9	15	1	------	------
Home Economics	------	1	1	1	4	------	------	------
Science	1	10	9	17	33	4	------	------
Veterinary Medicine	1	1	2	2	2	------	------	------
Total	4	27	28	36	63	6	------	------

1913-14

Agriculture	1	12	5	13	8	2	1	3
Agricultural Engineering	------	1	1	1	4	------	------	1
Engineering	1	6	12	12	10	1	------	------
Home Economics	1	------	2	1	8	------	------	------
Science	1	11	10	21	28	12	4	2
Veterinary Medicine	1	3	2	1	1	2	------	------
Total	5	33	32	49	59	17	5	6

Standing committees of the College faculty include the following: Advanced Standings and Substitutions, Appointments, Course of Study, Dates of Events, Entrance Requirements and Secondary School Relations, Fraternities, Graduate Study, Grounds and Buildings, Library, Literary Societies, Moral Welfare, Publicity, Public Health, Public Safety, Public Service, Rules, Scholarship, Student Accommodations, Student Social Life, Thesis, and Tuition Scholarships. Special committees are appointed as occasion requires. Student co-operative members, selected by the different classes, are associated with the faculty committees on Grounds and Buildings, Moral Welfare, Publicity, Public Health, Public Safety, and Public Service.

It is an unfortunate fact that many of the teachers in this College are much overworked. In the year 1912-13 the situation in three departments in the Division of Science, as reported by the Dean of the Division, was as follows:

Department	Enrollment 1912-13	Number of instructors	Number of students per instructor	Maximum No. each instructor can handle to advantage	Number of instructors required
English	936	9	103	60	15
Chemistry	1,229	14½	84	50	24
Mathematics	677	8	85	60	11

Remarks: Classes in English recite two and three hours per week. Classes in Chemistry recite two and three hours per week, but have in addition a large amount of laboratory work. Classes in Mathematics recite three and five hours per week.

In the year of 1913-14 the head of the Physics Department submitted data which showed the excessive amount of work required of teachers in his department. Data were shown from twenty-one leading universities and colleges in the United States. The average showed that one instructor cared for 42.5 students or 313 credit hours. At this college the average instructor in the Physics Department cared for 108 students or 532 student credit hours. It is needless to pretend that we can give as good work as our students should enjoy when members of the teaching staff are overloaded as these figures indicate.

In numerous departments at the beginning of the last biennium it seemed that the teachers were doing as much work as could be fairly expected of them but they have cheerfully and generously taken on additional numbers of students, and this largely has made it possible for the institution to show an increased attendance in two years of nearly 700. I have no hesitation in saying that at many other institutions a large part of these students would have been turned away with the statement that there were not enough teachers to instruct them.

SALARIES.

The salaries of members of our faculty and investigating staff were increased at the beginning of the year 1913-14 by reason of the increased appropriations made by the last General As-

sembly, but in many cases the salaries are yet below what they should be. The following is a comparison with the corresponding branches of work in the University of Illinois:

University of Illinois.

	Agriculture		Engineering		Liberal Arts and Science		Law	
	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Professor	15	$ 3,713	14	$ 3,803	38	$ 3,330	6	$ 3,433
Associate Professor			1	3,000	8	2,825		
Assistant Professor	14	2,628	19	2,286	28	2,378		
Associate	33	1,869	14	1,771	19	1,684		
Instructor	28	1,453	49	1,456	53	1,351		
Assistant	29	1,107	13	1,034	21	1,019		
Total	119		110		167		6	

Iowa State College.

(For the Year 1914-1915.)

	Agriculture		Engineering		Science		Veterinary Medicine	
	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Professor	16	$ 2,735	6	$ 2,817	10	$ 2,690	4	$ 2,375
Associate Professor	13	1,886	13	2,016	17	1,744	2	1,950
Assistant Professor	11	1,668	10	1,430	14	1,407	1	1,800
Instructor	21	1,297	13	1,039	37	1,067		
Assistant	1	1,000			6	882	2	1,200
Total	62		42		84		9	

It will be seen that the average difference in leading positions of corresponding rank is about $1,000 per year in favor of the teachers in Illinois.

In this College it frequently happens that a graduate student secures a position at a better salary than the instructors who taught this student themselves receive.

It would be an advantage if we could establish minimum salaries for different grades of teaching service as follows: Full professors, $2,750; associate professors, $2,250; assistant professors, $1,600; instructors, $1,000; assistants, $800.

Low salaries are compensated for to a very small degree by a policy of allowing traveling expenses for members of the faculty when attending scientific meetings which they may do to the advantage of the college. These trips are in addition to necessary official trips, such as to investigate buildings or educational policies elsewhere or to accompany classes of students on educational trips. The following statement shows the amounts expended in the last College year for traveling expenses for different purposes outside of extension work, experiment station work, and hog cholera serum work.

To accompany classes	$ 706.70
For interviews with candidates	450.49
To buy live stock and supplies	121.12
To attend scientific meetings, etc.	2,751.77
To study methods at other colleges	423.52
Part compensation for services	61.37
Buildings inspections and to consult architect	63.72
International Live Stock Exposition and Fairs	342.99
Miscellaneous	334.17
Total	$5,255.85

It will be noted that the amount expended on account of attending scientific meetings, etc., is only $2,751.77 or an average of less than $14 per teacher. It is believed that this small amount gives more satisfaction to the faculty and larger returns to the State as it is being used than if it were added to the salary payments.

The American Association of Agricultural Colleges and Experiment Stations has approved a plan, which it is hoped may be worked out with the co-operation of the United States Department of Agriculture, whereby members of agricultural faculties who are entitled to sabbatical leave of absence may combine this absence with a study along their special line in some foreign country for a period from a few months to a year. Under this plan the college would continue to pay a part or all of the salary during the absence and the Federal government would pay expenses and any appropri-

ate supplementary salary. It is believed that such trips would prove of great benefit to the institutions represented and they would do much to strengthen the spirit of loyalty on the part of the faculty.

RETIRING ALLOWANCES.

The Legislature of Iowa has taken the necessary steps for a legislature to secure pension benefits from the Carnegie Foundation. The Board of Education has done its part. But pensions are not as yet provided. Much might be said upon this subject. Criticism has been made of late, by persons whose opinions must be respected, to the effect that the State of Iowa should provide the small sum necessary to give retiring allowances to teachers who deserve this recognition, rather than ask for such aid from another source. The Legislature has gone on record as desiring to have a pension system. It is well known that college teachers are poorly paid, and the fact is evident to many who are closely in touch with the situation that efficiency of a college teaching staff is seriously affected when teachers who should no longer be in service are continued in service, as is now the practice and will certainly remain the practice until some appropriate plan is put into operation to care for them at least in part.

This subject has been thoroughly studied by Dean Eugene Davenport of the University of Illinois, and he has shown that an institution with a given amount of money for salary payments will secure larger and better returns if it sets aside a small portion of this fund to be used for retiring allowances and requires full and efficient service from all persons on the salary roll. In other words, a faculty made up entirely of strong, vigorous teachers, whose total salary payments amount to a given sum, is more efficient than a faculty including a few who have passed their period of efficiency, though this latter faculty receives a larger amount in salaries.

It is urgently recommended that provision be made by the legislature whereby a reasonable proportion of funds available for salaries may be set aside by the Board of Education annually for use as retiring allowances as the Board of Education may determine, the benefits to be extended to those who have served long and faithfully, and, to a limited extent, to their dependents.

COLLEGIATE WORK.

In 1911 a circular was issued by the United States Bureau of Education in which it was attempted to classify universities and colleges with reference to the value of their educational work. Class I includes many of the leading institutions of the country. Its definition is as follows: "Institutions whose graduates would ordinarily be able to take the Master's Degree at any of the leading graduate schools in one year after receiving the Bachelor's Degree without necessarily doing more than the amount of work regularly prescribed for such high degree."

In accordance with this definition, Iowa State College of Agriculture and Mechanic Arts may be included in the Class I list with her corresponding sister institutions in the adjoining and more distant states.

Through action of the Board of Education, steps have been taken to establish profitable co-operative arrangements between the State College of Agriculture and Mechanic Arts and other universities and colleges of the State, whereby students may take three years of work in the other institution, then two years of technical work at this College, a total of five years in the two institutions, and receive a degree from each. It is believed this arrangement will be profitable on both sides. It will, for example, permit many young men interested in agriculture or engineering to take their preliminary foundation work, which is mostly covered by our freshman and sophomore years, in another institution of their choice, and come to Ames for the two years work which are given to juniors and seniors. This will tend to lessen the number of students in the lower classes in this College and may benefit some by permitting them to take a part of their college work nearer home or in an institution favored by themselves or their parents for any reason, and it will relieve the other institution of the necessity of duplicating the expensive equipment provided here by the State for giving technical instruction. The five years of work should result in a course somewhat stronger along so-called cultural lines than

a four-year course in this College. It has an advantage also in leading to a degree from each institution. The plan depends upon a thorough understanding between the two institutions, whereby each is willing to accept the work of the other, and under which the courses will be worked out jointly so that there will be no question concerning the work in one institution fitting that given to the student at the other place. Co-operative arrangements are now under consideration with several institutions.

Steps have been taken to bring the different divisions of this College into closer relations by providing for visiting committees in the different division faculties to attend meetings of other division faculties. There has been some embarrassment because important subjects in courses of study leading to a degree are not represented in the division faculty in immediate charge of that degree. For example, the botany department has not been represented in the agricultural faculty, and the department of mathematics has not been represented in the engineering faculty. Both botany and mathematics are taught in departments in the Division of Industrial Science. Physics has not been represented in the home economics faculty or agricultural faculty, although it is an important subject in agricultural and home economics courses. The physics department is included in the Division of Engineering, where most of its work is required. Under the new plan, each division is represented by a committee of three of its teachers in each other division faculty. Further progress along this line is being considered with the hope that a plan may be developed which will bring together representatives of all departments or divisions which give important instruction leading to any degree, in the faculty which is primarily in charge of that degree.

The State Board of Examiners is charged with important duties in connection with the supervision of teachers. The State College is not represented in the membership of the Board. As a considerable number of students from this College enter the teaching profession, and it is highly desirable that they should do so, it would seem that this College should be represented on the Board, together with the State University and the State Teachers' College. It is believed that the State law should be amended to so provide.

It may be well here again to emphasize that the national Land Grand Act of 1862, under which this College is founded, provides in no uncertain terms for collegiate grade of instruction in agriculture, engineering, and all other lines of work included in our curriculum. The Land Grant Act does not exclude other and lower grades of educational work, but in various ways it specifically provides for collegiate work. As late as 1890 the author of the law, Hon. Justin S. Morrill of Vermont, wrote that he hoped no effort would be successful in reducing a land grant institution below the rank of a college, and he continued, "It was of course intended by giving the lead to Agriculture and the Mechanic Arts to enable the sons of farmers to obtain an education to fit them as farmers or for any other vocation which they might choose. It was hoped to be particularly valuable to the industrial classes but it was never intended to exclude education of the highest dignity."

From time to time even now, the question is raised as to whether land grant colleges are expected to do collegiate work. It is pointed out by some critics that as they are to serve the industrial classes it must be that Congress intended them to do a lower grade of work. As if the industrial classes are not entitled to the best! Farmers and mechanics chiefly make up our industrial classes. Thus far in our history the industrial classes have contributed the most important part of the learned men of the country. A better interpretation of the law would be that Congress wished to place the best educational facilities at the disposal of the great bulk of our population instead of having these advantages limited to comparatively few who are well to do or who might have special help in securing an education in a private institution.

This national law provides for a college where the leading object is to be to teach such branches of learning as are related to agriculture and the mechanic arts. This college teaching must be done to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life. This is called for by the national law and with the addition that it is to be without excluding other scientific and classical studies and that it is to include military tactics.

Collegiate work was started at land grant colleges in many States, both in agriculture and mechanic arts, under the provisions of this national law. The situation was well known in Congress when section 4, which refers to the grade of instruction, was amended in 1883. If Congress had wished to lower the grade of work in agriculture or mechanic arts from the collegiate grade, they could have made further amendments in section 4, but the part of this section which relates directly and indirectly to the grade of work to be given was carefully left without change.

The provisions of the Federal Land Grant Act have been accepted by the State of Iowa and the carrying out of these provisions has been entrusted to the Iowa State College of Agriculture and Mechanic Arts. The legislatures of Iowa have repeatedly shown that they want collegiate work of high character to be given at this College. This, of course, does not preclude sub-collegiate, experimental, extension and short course work, but collegiate courses offered should be at least equal to corresponding courses in other land grant institutions, else they would not be good enough for many young men and young women of this State who have chosen agriculture or engineering for their life work and who wish to have the best possible preparation. In these days it is recognized that agriculture or mechanic arts is as difficult to master as is law or liberal arts, and a thorough collegiate education is as profitable in the one as in the other. To advocate that education in agriculture of as high scholastic standard as education in other lines should not be offered in a great agricultural State, would be to indicate that agriculture is an inferior industry; at least it would be so regarded by the best and most promising young men and they would avoid such a calling. The same is true of engineering, veterinary medicine or industrial science, and it is true for young women in home economics.

The giving of collegiate instruction is the largest activity of this College. Doubtless it will always be so. The great purpose underlying collegiate courses is to prepare young men and young women for the best possible service along technical lines. The college begins where the schools leave off. As the public school system becomes better developed and reaches higher and higher, college courses are correspondingly changed. At the present time work is given in colleges which later will be undertaken by the schools, and this will allow the college to raise its entrance requirements and reach higher in the junior and senior years. On account of the enormous addition to our knowledge being made available through investigations and discoveries, there is a large store of knowledge which it is becoming desirable to include in the college curriculum as rapidly as possible.

AGRICULTURE.

The agricultural courses are intended to meet the requirements of the many who wish to secure collegiate instruction in the various phases of agriculture that are important in this State.

Almost everyone of the departments in the Agricultural Division is in need of additional facilities to enable it to keep up with the demands made upon it. It is not necessary to dwell upon the importance of animal husbandry or field crops or other such well known and well established subjects. Too much could hardly be asked for them. The prosperity of the State depends upon them. Every industry in Iowa is influenced by them. But it does seem necessary at times to emphasize the need of developing new lines of work for interests in the State that are less prominent but in themselves of great importance.

The scope of agricultural education is broadening each year. This is largely due to changing economic conditions. The average person would say that *bee keeping* is unimportant but more than one farm in eight has bees. Their product is net gain to the State and besides this it would be impossible to overstate their importance in fertilizing fruit and plant blossoms. And now the bees have their diseases and other troubles and they must be cared for intelligently.

Another subject which is certain to impress itself more and more as needing attention is forestry, especially *farm forestry*. The timbered area of this State amounts to 2,500,000 acres or seven per cent of the State. This is the same percentage as is given for Illinois. Many timber plantations have paid good returns in addition to their value for aesthetic purposes and prevention of erosion. It is estimated that annually in this State the lumber used in woodworking industries is worth more than $8,000,000. Additional lumber is used to the value of more than $7,000,000 and fence posts to the value of $5,000,000. The fuel, railroad ties, posts and mine timbers are estimated to be worth annually $10,000,000. When we consider the influence of forestry on temperature, wind, rain, stream flow and soil erosion in addition to lumber values, we find that the subject of forestry in Iowa is one of large importance.

Floriculture is another subject, the importance of which is not recognized, yet this is a large industry and affects the welfare of many people in Iowa. In 1908 the Iowa Horticultural Society gave considerable emphasis to the need of instruction in floriculture. The College receives requests from a good many persons desiring instruction along this line. A beginning is being made.

Market Milk Inspection. This is a subject of growing importance. It affects the business of a large number of people and the health of almost every family living in city or town.

There has been gratifying growth throughout the Agricultural Division. An important change has been made in connection with the supervision of the department of agricultural engineering. This department has made a remarkable growth in recent years, due to sympathetic co-operation between the divisions of agriculture and engineering. The work of the collegiate course in agricultural engineering is drawn from both divisions but the larger part is from engineering. The students taking the course are about equally divided as to whether they will follow professional engineering or agricultural work. In order to give the department the best that the institution can afford, the Board of Education in July, 1913, directed that it shall be administered jointly by the deans of agriculture and engineering.

Dean C. F. Curtiss calls special attention to the need of more liberal salaries if the best teachers are to be secured and held in the work of the College. Members of the faculty are resigning to accept better paying positions in states having much smaller agricultural interests. The following is taken from the Dean's report:

The total enrollment of collegiate students in the Division of Agriculture during the year ending June 30, 1914, was 954; in the sub-collegiate one and two year courses it was 275, making a total of 1,229 enrolled for the full year's work. In addition to this, there were 604 winter short course students enrolled for two weeks, making a total of 1,883 in the Division of Agriculture. The freshmen, sophomores, juniors and seniors show an increase of 297 in number enrolled in the last college year as compared with two years earlier. This is a 47% increase. In the same period the number of sub-collegiate students increased about 25%.

The educational work in the Division of Agriculture includes the following departments: Animal Husbandry, including Dairy Husbandry and Poultry Husbandry; Agronomy, including Soils, Farm Crops and Farm Management; Horticulture and Forestry; Dairying; Agricultural Engineering; Agricultural Journalism; and Agricultural Education. In the Animal Husbandry courses there is a Dairy Husbandry group of studies and a Poultry Husbandry group amounting to special courses in these subjects. In the Forestry Department a five-year collegiate course is offered in addition to the four-year course. In the Horticultural Department, Pomology and Gardening group subjects are offered which virtually amount to special courses in these subjects.

All of the courses in the Division of Agriculture are organized upon an excellent basis, with thorough instruction in technical subjects properly strengthened and supported by work in the natural sciences which come into close relation with the technical training. Emphasis has always been placed upon practical work in this institution in connection with the scientific and technical training. At least six months of practical

work are required of all students before graduation, and a large majority of the students spend all of their vacations in practical farm work of some kind. In addition to this, many of the students who enroll in the agricultural courses come from farms, where they have had practical farm experience for a number of years. An interesting development in agricultural education, however, is found in the fact that a considerable number of students entering both the two and four-year courses in agriculture come from cities and towns, with comparatively little previous farm experience. This number has increased constantly from year to year, not only in this institution but in other institutions in the Mississippi Valley. In some cases from one-fourth to one-third of the students have come from the cities, and in a few instances nearly one-half the students enrolled in some of the agricultural courses have been boys from the cities and towns. These students are necessarily somewhat handicapped by lack of practical experience. Most of them are required to spend all of their vacations in practical farm work, and in many cases this handicap is fully overcome and such students have been able, within a year or two after graduation, to take strong rank among agricultural college graduates. Some students drop out and take a year of practical work during their college course.

There appears to be an increasing demand for five-year courses, either in the form of extending the course by an additional year of instruction, or by adding a year of post-graduate work. The post graduate courses are taken mainly by those students who expect to engage in educational or research work.

Animal Husbandry Department.

The faculty of the Animal Husbandry Department consists of Professor W. H. Pew, three associate professors, three assistant professors, one fellow, one graduate assistant, one professor of Poultry Husbandry, and one assistant professor of Poultry Husbandry. This is the largest department in the institution. Its work is well organized and the instruction given has attracted students from all parts of the United States and from many foreign countries. Following are the courses of instruction and the number of students enrolled in each.

No. of Course	Subject of Course	No. of Students
1.	Market types of cattle and sheep	447
2.	Market types of dairy cattle, horses and swine	407
3.	Breed types of cattle and sheep	196
4.	Breed types of dairy cattle, horses and swine	191
6.	Advanced live stock judging	59
7.	Herd book study	81
8.	Animal breeding	70
9.	Animal nutrition	60
10.	Thesis	58
11.	Feeding and Management of live stock	164
12.		
13.	Advanced work in beef production	75
14.	Advanced work in pork production	62
15.	Milk production	81
16.	Advanced work in mutton and wool production	71

17.	Advanced work in horse feeding	72
20.	Animal feeding	48
21.	Principles of breeding	33
22.		
	Seminar	267
23.		
25.	Advanced types and breeds of farm animals	45
26.	Market and breed types of beef cattle and sheep	23
27.	Market and breed types of dairy cattle, horses and swine	27
46.		
	General poultry husbandry	272
47.		
48.	Breed types and judging	6
51.	Incubation	5
52.	Brooding	6
55.	Marketing and judging poultry products	6
	Total	2,832

The above enrollment shows an increase of 453 students over the Animal Husbandry enrollment during the year 1912-13.

Fifty-eight men graduated from the four-year course in Animal Husbandry at the close of the last collegiate year. Forty of these men are engaged in practical farm work at present. Some of these young men are taking post graduate work and some have taken up college and experiment station work. Others have secured positions with stock yard companies and in other lines of work directly connected with agriculture. It is needless to say that not all the young men completing a college course are situated so that they can become proprietors of farms immediately. Some of the men are in debt when they leave college and have no available capital with which to engage in farming. It is the ambition, however, of practically every graduate from the agricultural courses to take up farming as soon as possible.

The enrollment in the Animal Husbandry Department has increased so rapidly that there is now urgent need for larger quarters, better facilities for giving the work, and increased equipment, both in live stock and in laboratories. The most urgent need in the way of buildings is for an Animal Husbandry laboratory, for which the last legislature authorized an expenditure of $50,000 from millage tax funds when available. A building of this kind, with equipment for the careful study and analysis of meat products in their finished form, sustains a vital relation to the field of animal husbandry. The work of the department has been seriously handicapped by the lack of these facilities. No other state has anything like as extensive interests in animal production as has Iowa, and no other institution has anything like as large a number of students enrolled in the Animal Husbandry courses as we have at Ames. It is highly important that proper facilities be provided for the best instruction in this important branch of agriculture.

The Dairy Husbandry work and Poultry Husbandry work have been seriously handicapped by lack of suitable laboratories and other buildings. Both of these lines represent very important branches of Animal Husbandry work. The poultry industry of this State is of large magnitude and outranks the poultry interests of all other states. It serves a most important purpose in contributing to the food supply of the State and of the Nation.

Iowa's dairy interests have come to be recognized as vitally related to the permanence and prosperity of the agricultural industry, and the dairy educational work should be strongly organized in this institution. The constantly increasing enrollment has greatly increased the demand for live stock equipment for class use, and the expansion of building operations has made some encroachment upon the grounds formerly used for live stock. To meet this situation we ought to have additional farm lands for maintaining a portion of the breeding herds and flocks and for growing feed for the same. This additional land should be purchased soon while land is available at moderate prices. Values are now fully 100 per cent higher than they were eight or ten years ago, and there is every prospect that values will be still further increased.

The poultry department is urgently in need of a laboratory building. At the present time some rooms in the Chemistry Building are being used as temporary quarters. A poultry laboratory building should be provided in the near future. Such a building should have ample provision for educational and research work and be of fireproof construction.

The buildings on the Dairy Farm are of cheap construction and are not altogether suited to their purpose. They also lack capacity for carrying on the work. A portion of the old building can be utilized for a judging pavilion, and new buildings should be provided. To furnish proper buildings and equipment will require an expenditure of not less than $35,000. The Animal Husbandry Department should have not less than 200 acres of additional land, which will cost not less than $200 per acre. This will amount to $40,000.

Agronomy Department.

The Agronomy Department includes the work of Soils, Farm Crops and Farm Management. The faculty consists of Professor W. H. Stevenson, head of the department and professor of Soils; Professor Hughes, head of the Farm Crops work, and Professor Munger, head of the Farm Management work; one professor of Soil Bacteriology, two associate professors, two assistant professors, three instructors, two graduate assistants, two student assistants.

The work of this department is fundamental to all successful agriculture. It deals primarily with soil, with crop production and with farm management. We have been fortunate in securing for the Farm Management Professor H. B. Munger, of Cornell University, who has had excellent training and preparation in this field. Agriculture has been sadly lacking, in many instances, in business organization and system. The Farm Management instruction takes into account the essentials of successful organization and administration and the application of sound business policies to agriculture. It deals with the important problem of farm tenancy. During the past summer we have made a careful survey of one hundred farms in four counties in Iowa. During two years past Professor Lloyd has been making a careful study of the farm tenancy conditions in this State. Some very important and interesting information has been obtained which will be published soon in the form of a bulletin which will be used as the basis of instruction and further investigation.

The courses offered and the number of students enrolled in the Agronomy Department during the past year are as follows:

No. of Course	Subject of Course	No. of Students
	Soils.	
1.	Physics	168
2.	Fertility	149
3.	Research in physics	8
4.	Research in Fertility	21
6.	Advanced fertility	72
7.	Investigation of special soils	12
8.	Bacteriology	15
11.	Thesis—three-hour credit	7
12.	Thesis—five-hour credit	5
13.	Soils survey and mapping	17
14.	Advanced bacteriology	0
15.	Advanced physics	2
16.	Advanced fertility	3
17.	Seminar	24
18.	Seminar	15
	Total	518
	Farm Crops.	
1.	Corn growing and judging	410
2.	Small grain	372
3.	Corn and small grain judging	71
4.	Corn and small grain breeding	29
8.	Farm management	47
9. 10.	Research	21
15. 16.	Thesis	4
17.	Grasses, forage and fiber crops	124
19. 20.	Seminar	30
21.	Special advanced judging	45
	Total	1,153

The work of the department has been seriously handicapped by lack of laboratory room. Some changes in the assignment of chemistry work to the new building will afford temporary relief by the use of additional laboratories during the coming year; but there is an urgent need for a new, modern, well equipped building to provide for the work in the Soils, Farm Crops and Farm Management Departments. Such a building should be of fireproof construction and in harmony with the principal buildings upon the campus, and can be erected at a cost of not less than $100,000 if it is made large enough to provide for the needs of these lines of work in the near future. The enrollment in this course has shown a very large increase during the past year, and with the work more completely organized as it is now, there is every assurance that there will be a constant increase in the future.

Horticulture and Forestry.

The faculty of the Horticulture and Forestry Department consists of Professor S. A. Beach, head of the department; Professor G. B. MacDonald, Professor of Forestry; Professor Erwin in charge of Truck Gardening; Professor Culley, in charge of Landscape Gardening; two associate professors, two assistant professors, three instructors and two student assistants.

The work of this department is now well organized. It has been seriously handicapped during the past two or three years by a lack of suitable laboratories and facilities for giving the work. The limitations have been such that we have been obliged to abandon a part of the work that has been offered in the Horticultural course during the past two years. With the completion of the new greenhouses and horticultural laboratory, which will constitute a wing of the Plant Industry Building to be erected later, the work of the department will be on a good basis and the immediate needs well provided for.

A division has been made during the past year between the forestry and horticultural work, and distinct four and five-year courses are now offered in forestry. The Forestry courses now compare favorably with the best offered in any of the forestry schools and the graduates from the forestry work in this institution have taken exceptionally high rank in civil service examinations and in government forestry work. Provision for giving three months of practical work in a forestry camp in Minnesota durng the summer vacation has been of material assistance in strengthening the work of this department.

The garden and truck farm interests of the State have grown to large proportions. For a number of years the institution has been called upon for more extensive service in this field than we have been able to render. The horticultural course is now organized with a group of studies having special reference to the training of students for gardening and truck farming. Some remarkably successful results have been obtained by practical men in the gardening and truck farming work in parts of the State where this work has become a specialty. Without question the State's resources and attractiveness can be very greatly increased by the development of this phase of horticultural work.

Landscape gardening serves a most important purpose in a comparatively new agricultural State. The improvement and adornment of the farm home and surrounding grounds has a vital relation to the success and permanency of Iowa agriculture, and to the maintenance of a stable rural population. The landscape gardening work is equally serviceable to the residents of cities and towns.

Courses offered and students enrolled are as follows:

No. of Course	Subject of Course	No. of Students
	Horticulture.	
3.	Orcharding	
4.	Plant breeding	421
5.	Systematic pomology	49
8.	Landscape gardening	9
11.	Amateur floriculture	152
13.	Thesis	12
28.		1
	Seminar	
29.		25
31.	Landscape design	
30.	Fruit judging	11
32.	Landscape design	11
33.	Truck farming	11
34 and 35.	Greenhouse management	31
37.	Orchard practice	28
38.	Plant propagation	2
39.	Nursery and orchard practice	33
40.	Small fruits	30
46.	Fruit farm management	10
47.	Care of street and park trees	5
	Total	20
		842
	Forestry.	
1.	Farm forestry	
3.	Forest planting	293
9.	Forest management	15
10.	Forest valuation and finance	10
11.	Forest protection	..
12.	Forest administration	15
15.	Forest research	9
16.	Camp technique	..
17.	Forestry history and policy	15
18.		21
	Seminar	
19.		25
21.	Lumbering	
22.	Forest mensuration	..
23.	Forest utilization	..
25.	Wood technology	..
	Total	6
		409
	Total number enrolled in horticulture and forestry four-year courses	1,251

Dairy Department.

The faculty of the Dairy Department consists of Professor Mortensen, one associate professor, one assistant professor, and four instructors.

This department has attained very high rank among the dairy schools of the United States. Its work has been strong and efficient, both in scientific and practical instruction. Following are the courses offered and the number of students enrolled in each:

No. of Course	Subject of Course	No. of Students
10.	Domestic dairying	23
11.	Cheese making	16
12.	Farm dairying	430
13.	Milk testing and milk inspection	35
14.	Advanced butter making	18
16.	Technology of milk	12
17.	Dairy bacteriology	21
19.	Seminar	9
20.	Factory management	10
21.	Ice cream and ices	7
23.	Thesis	9
24.	Fancy cheese making	16
25.	Advanced dairy bacteriology	1
26.	Judging dairy products	16
27.	Advanced butter making	13
28.	Advanced butter judging	11
	Total	647

The investigations and instruction work of this department have established a high standard of efficiency in the dairy industry of this State and other states. Provision has been made during the past year for instruction in commercial milk production. The problem of improved methods in the production, manufacture and marketing of dairy products is one of the greatest importance to the agricultural industry and to the welfare of all of the people of the state and nation. No branch of agriculture in Iowa has made more marked progress in recent years than dairying. Where modern, intelligent methods have been followed it has brought profit to the dairy farm and restored fertility to impoverished soil. No branch of agriculture has a more direct relation to the maintenance of prosperous and successful rural life than dairying.

The Dairy Department is in urgent need of a $25,000 additional building. The present building is entirely inadequate to meet the rapidly increasing needs of the dairy work.

Agricultural Engineering Department.

The faculty of this department consists of Professor Davidson, one associate professor, one assistant professor, four instructors and one scholar. The department is administered jointly by the Dean of Agriculture and the Dean of Engineering.

This department has made marked growth during the past biennial period. It is recognized as occupying the foremost rank among similar departments of the United States. It was the first to offer a four-year collegiate course in Agricultural Engineering. The courses offered and the student enrollment are as follows:

No. of Course	Subject of Course	No. of Students
1.		
	Shop work	687
2.		
3.	Farm blacksmithing and horseshoeing	19
4.	Agricultural surveying	157
5.	Farm machinery and farm motors	125

6.	Farm structures	5
9.	Research	11
10.		
11.	Thesis	14
12.		
13.	Gas and oil engines and tractors	23
14.	Seminar	30
15.		
16.	Farm machinery	43
17.	Farm motors	34
18.	Farm motors	22
19.	Rural sanitation	24
20.	Irrigation and drainage	2
21.	Concrete construction	4
22.	Horticultural machinery	10
23.	Dairy engineering	10
24.	Farm structures	19
25.	Technical lectures	126
26.		
27.	Drainage engineering	2
28.	Irrigation	New
29.	Graphic methods	254
30.	Farm structures	2
31.	Irrigation and drainage	36
32.	Irrigation engineering	New
33.	Drainage engineering	New
	Total	1,658

The following table indicates the number of freshmen enrolled in Agricultural Engineering since the announcement of the special course.

Freshmen in the Agricultural Engineering course:

1909	3
1910	20
1911	36
1912	51
1913	70

The following table indicates the number of graduates in Agricultural Engineering for the past five years and the increase from year to year.

Graduates in Agricultural Engineering:

1910	1
1911	2
1912	3
1913	10
1914	15

There is a most urgent need for strengthening and extending the work of the Department of Agricultural Engineering. The total investment in farm machinery in this State, according to the last census, was $95,000,000. No other state approaches this expenditure for agricultural machinery. The question of the economical construction, lighting, ventilation and sanitation of farm buildings is a problem of vital importance that has received very little consideration in the past. The whole field of rural architecture and rural engineering has been neglected. The Agricultural

Engineering Department in this institution has entirely outgrown its present quarters and a new building is urgently needed. Such a building should constitute one of the permanent fireproof buildings of the campus, and if properly planned and constructed to meet the immediate and future needs, a suitable building will cost $200,000.

Agricultural Education Department.

The faculty of the Department of Agricultural Education consists of Professor G. M. Wilson, one assistant professor, one director of practice teaching in Home Economics and one director of practice teaching in Agriculture.

This department has grown out of the demand made upon this institution for the training of teachers of agriculture for the secondary schools. In at least twenty states the teaching of agriculture is required by law in all of the public schools. In 1910 there were 630 high schools and secondary schools in the United States giving instruction in agriculture. At the present time there are probably 2,500 high schools and schools of secondary grade giving instruction in agriculture. The demand for teachers is increasing more rapidly than they can be supplied by the agricultural colleges and by the other institutions giving limited training in agriculture.

The enrollment of students in the Department of Agricultural Education has made a marked increase during the past three years, as shown by the following tabulation:

No. of Course	Subject of Course	No. Students 1912-13	No. Students 1913-14
1.	Principles of education	13	88
2.	Principles of education	7	34
3.	Secondary education	..	17
4.	Secondary education	..	19
5.	History of education	15	17
6.	History of education	12	19
8.	Industrial education	16	..
9.	School administration	..	6
10.	School administration	..	4
11.	Practice teaching	..	47
12.	Practice teaching	..	45
	Total	63	296

There is no longer any uncertainty about the demand for industrial training in the public schools. It has come to be regarded as a fundamental and essential part of our educational system. The Thirty-fifth General Assembly made provision for the teaching of agriculture and home economics in all of the public schools of Iowa, beginning in 1915. The Department of Agricutural Education, in conjunction with the other departments, provides for the training of teachers of agriculture and home economics. There is no single field of work in which the institution has had, in recent years, such an overwhelming demand for its graduates as in the preparation of teachers of these two branches. This demand is so extensive that it will be impossible for all of the educational institutions combined to furnish an adequate supply of teachers in the immediate years to come.

To render the largest possible service in this field, provision should be made for a School of Agriculture in connection with this institution. Such a school of agriculture would serve as a model for all the communities of the State where this work is to be established. It would meet a most important need in connection with the practice work in the training of teachers, and would command a large enrollment of students from the beginning.

Agricultural Journalism.

This department is in charge of Professor F. W. Beckman. Its work includes instruction of students who wish to prepare themselves for work in agricultural journalism. It also includes a large amount of editorial work for the Division of Agriculture and the Agricultural Experiment Station and certain publicity work of the college. This department endeavors to give to the press the most important news items concerning the college and its educational work and many items of information originating at the college that might be helpful in the various fields of industry which the college seeks to serve. This is one of the chief ways in which the college sends out information to the people who maintain it.

The department needs additional help and it is desirable to somewhat enlarge its scope so as to increase its usefulness, but within the field of work assigned to this college. There is an increasing demand for trained young men and women in journalism devoted to the interests of agriculture, engineering and home making. Such positions require thorough training in the technical subjects even more than journalistic training, although the latter has now become almost vitally important. This latter could be cared for with slight additfonal cost and it would increase the service of the technical departments which are already sufficiently equipped.

Through the department of agricultural journalism the college could render valuable service to country editors, some of whom need a better understanding of agriculture and rural life. The country newspapers and their associated job offices represent an investment of millions of dollars, thousands of men are employed, and the product directly influences the characters and activities of a large portion of the population of the State. In so far as it is appropriate to do so this college could render most valuable service to these interests.

ENGINEERING.

From time to time the question is raised as to whether the term "Mechanic Arts" in the original law establishing land grant institutions should be construed to mean "Engineering" as that term is understood today. The perusal of standard dictionaries in use in 1862 brings out the fact that the meanings of these two terms have been almost reversed in the last fifty years. In 1862 "Mechanic Arts" meant as nearly as possible what today we understand by the term "Engineering," and in 1862 the term "Engineering" had a very restricted meaning. It is easy to show that

the provisions of the original law justify and even require such grade of instruction in engineering as is now given in this and others of the best known land grant institutions.

This matter is covered by a resolution unanimously adopted at the Twenty-third Annual Meeting of the Association of American Agricultural Colleges and Experiment Stations, held in Portland, Oregon, in 1909, which reads:

Resolved, That it is the sense of this association that the national laws which constitute the charter of the land grant colleges distinctly prescribe work of collegiate grade in agriculture and mechanic arts, including engineering in all its branches, and the sciences related to the industries, irrespective of whether the colleges are established separately or as parts of universities.

The United States government recognizes such a standard in its regulations.

The Board of Education has expressed itself firmly of the opinion that engineering instruction belongs at this institution with agriculture. In taking this position the Board is in true harmony with the leading agricultural thought. Ex-Secretary of Agriculture Hon. James Wilson was asked his opinion as to the desirability of maintaining engineering instruction in a college where agriculture is taught and he replied as follows:

"I am well satisfied that the interests of engineering and agriculture are so closely related in Iowa as to require close association of the educational work in these two lines. Second, I have no doubt whatever but that a wise interpretation of the Morrill law would lead one to reach the conclusion that it did require instruction in engineering such as has been given at practically all of the land grant colleges."

The fact is that both agriculture and engineering are highly technical subjects and they supplement one another. Each is helpful to the other. Agricultural work is coming to depend more and more upon engineering knowledge. This relates especially to land drainage, building construction, and the utilization of power and complicated machinery. An attempt to restrict or reduce engineering instruction in a land grant college would injure agriculture.

All the departments in the Engineering Division are well equipped and their equipment has been improved during the last biennium. Further equipment is needed. Even with these improvements and those contemplated, the average cost per student enrolled in engineering at Ames is low as compared with other institutions of equal rank.

The Dean of Engineering has been honored by election to the

presidency of the Society for the Promotion of Engineering Education and the presidency of the Land Grant College Engineering Association.

The following is taken from the report of Dean A. Marston:

General Developments.

The general developments in engineering at the Iowa State College during the past biennium have all been of a nature which adapts the work to the special requirements of Iowa while at the same time broadening its character and improving its general quality. New lines of collegiate work taken up during the past biennium are Highway Engineering, Structure Design and Transportation Engineering.

The Iowa State College has the honor of being the first to organize formally at one institution all three of the great lines of engineering educational work now recognized, viz:

Professional Engineering Education,
An Engineering Experiment Station,
Engineering Extension (including Trade School).

Especial attention is being given by the great engineering schools at the present time to the comparatively new subjects of experiment station and extension work. A recent circular inquiry has brought reports from almost all showing their great interest. It is now coming to be realized that the wide extension of mechanic arts instruction beyond the walls of colleges is a vital necessity to the state and nation. Inquiries as to our work and plans have been received during the year from all over the United States.

Co-operation With Other College Divisions.

A marked improvement has been made in our college during the past biennium toward greater efficiency by closer co-operation between the different divisions. Agricultural and science students can now elect some engineering subjects, and engineering students some agriculture and advanced science. The Engineering and the Science Divisions unite in a combined five-year course in science and engineering, whereby any student may in five years secure two degrees, in Science and in Engineering, respectively.

Co-operation With Other Iowa Colleges.

We have to report that the new plan of co-operation of the Iowa State College with other colleges is proving a success in our work. We now have graduates of other good colleges in the State entering here for engineering degrees, which they secure by two years additional work. Other prospective students are arranging by correspondence for five-year co-operative courses with other colleges whereby the Science degree is granted by the other college and the Engineering degree here.

Professional Engineering Educational Work.

Educating professional engineers continues the most important work of the Engineering Division. We now offer eight four-year and six five-year professional engineering courses of the highest grade, with the usual standard entrance requirements—graduation from an accredited four year

high school. Our engineering equipment is large and growing, though not yet nearly what it should be. It is housed in ten engineering buildings.

Agricultural Engineering.

This department is administered jointly through the Deans of Agriculture and Engineering. The work in agricultural engineering has had a most remarkable growth. The number taking the professional four year course increased during the biennium from 57 to 135. In addition all agricultural students take some of this work, and the civil engineering students take irrigation and drainage. The total number of student classifications in agricultural engineering subjects increased from 1,174 to 1,658 during the last two years.

The greatly increased amount of work demands additional instructors and equipment. Also, a new agricultural engineering building is greatly needed. At present the department is incompletely and inconveniently housed in an old building erected for another purpose. It is recommended that a new building be provided which is adapted to this line of work, at a cost of $225,000.

Civil Engineering.

Civil engineering has been one of our strongest four-year courses ever since the college was started. Structural engineering, railway engineering, highway engineering, hydraulic and sanitary engineering, geodesy and surveying, civil engineering laboratories, and civil engineering drawing are each in responsible charge of a competent professor. The quality of the work has been greatly improved during the last two years.

Some addition will need to be made to the instruction staff of the department to assist in laboratory and surveying work. Also the department needs a large amount of new laboratory and geodetic equipment.

Electrical Engineering.

Electrical engineering has the largest student enrollment of any of our engineering courses but has only four men in its faculty. The faculty should be increased by the addition of an associate or assistant professor of telephone engineering and by a new laboratory assistant. The telephone industry is very important in Iowa, where a telephone is found in nearly every farmer's home. The telephone interests of the State are making strenuous demands upon us for better facilities for instruction in their line. The college has been giving instruction in telephony for several years, and steps have been taken for enlarging this branch of work.

The electrical engineering department needs considerably more space for new laboratories, computing and class rooms. It also needs a large amount of new and modern equipment.

Mechanical Engineering.

Mechanical engineering is one of our oldest and strongest engineering courses, established when the college was started. The department gives instruction in shop work, in mechanical drawing and in mechanics, to all engineering students.

The biennium has seen the completion and main equipment of the new Steam and Gas Laboratory, one of the best in the country. Since the completion of the new Transportation Engineering Building, with its locomotive and automobile testing laboratories, the instruction by the mechanical engineering department in railway mechanical engineering and in automobile engineering has been greatly improved and extended. Additional laboratory and shop equipment is needed in considerable amount to complete the equipment of buildings already erected.

Mining Engineering and Geology.

This department has charge of several lines of work, as follows: Mining engineering, ceramic engineering, chemical engineering, and geology. In the first three lines of work regular four year professional engineering courses are offered. All of these departments are very important to Iowa, but are expensive and difficult to build up and properly maintain. They do not as a rule attract many students in the various institutions maintaining them. Nevertheless they offer great opportunities to graduates and are absolutely essential to the proper development of Iowa industries. We should use every effort by providing additional equipment to develop these three lines of engineering work. In chemical engineering the completion of the new Chemistry Building and the general improvements of our work in chemistry, together with the greatly increased demands for chemists, have materially increased the enrollment of students. The European war is forcing attention to the manufacture of chemical products in the United States.

A small building should be provided for ore dressing, coal washing and kiln and furnace, at cost of about $7,000.

We feel that there is great need in this State for special development of geology as applied to agriculture, and are pleased to report considerable progress in this direction. A number of members of the agricultural division faculty are taking post-graduate work in this line. Elective work in the same subject is offered to all agricultural students.

Physics and Illuminating Engineering.

Owing to the recent great increase in the number of agricultural and home economics students taking physics, a critical stage in the work of this department has been reached. All the agricultural and home economics students are now required to take physics at the proper times in their courses of study.

The number of student credit hours in physics has increased from 2313 in 1911-12 to 3296 for 1913-14, and an estimated total of 4204 for 1914-15. Thus the work has nearly doubled in three years. As a consequence, the inadequate instructing staff of the department has been carrying a heavy burden, and although some relief has been afforded in the past year, additional help is still needed. Additional laboratories properly equipped must be made available for the department as soon as possible.

Besides improving the already excellent work in physics for engineering students, it is proposed to develop at once new laboratory courses in the special applications of physics to home economics and to agriculture.

It is recommended that a new physics building be provided to house the physics department at a cost of $150,000.

Structure Design.

The new department of structure design, created to do pioneer work in the application of architecture to industrial structures, farm structures and the home, has already enrolled so many students as to demand the services of a competent associate or assistant professor next year. Additional equipment is needed. Three special courses are being prepared for the benefit of the students in home economics, engineering and agriculture, respectively dealing with the application of structure design to homes, individual structures and farm structures.

Transportation Engineering.

The great and rapidly increasing use of power vehicles on our public roads is rapidly making economic highway transportation a mechanical problem. Interurban railways seem certain of a great future development. Steam railways have reached a point in development where scientific tests of all equipment in the interests of economy are a necessity. During the biennium we have constructed and are now equipping our new Transportation Engineering Laboratory, which is the only place west of the Mississippi river where complete scientific tests can be made of locomotives of all sizes, automobiles and signal and brake equipment. No dynamometer has as yet been supplied for the locomotive laboratory and the one desired would cost $8,000. About $2,000 additional is needed for miscellaneous transportation engineering equipment.

HOME ECONOMICS.

In 1913, by action of the State Board of Education, the home economics work was reorganized as the Division of Home Economics. Previously it had been a department in the Division of Agriculture. It was considered that the work had become of sufficient importance to be recognized as equal with other main branches of work conducted by the college. Miss Catherine J. MacKay, who had been head of the department, was made acting dean of the division and she has since been made dean.

This division has made remarkable growth in enrollment during the biennium. The student attendance in collegiate work has increased from 206 in 1911-12 to 446 in 1913-14, or an increase of 117%. It is performing a most useful work and naturally its needs must increase if it is to meet the increasing demands. The graduates enter largely into teaching work but statistics show that very many of them soon become home makers. The work in home economics is developed strongly along technical lines but the course

includes studies in the Industrial Science Division, in English, languages, history, economics, and public speaking, and in the Engineering Division in physics and drawing, and in certain agricultural studies. In February, 1913, there were 253 home economics students registered in agricultural subjects including dairying, gardening, horticulture, forestry, landscape gardening, farm crops, poultry husbandry, agricultural botany, agricultural education and agricultural journalism. A canvass of the senior and junior classes showed that three times as many students preferred agricultural electives to liberal arts electives. This does not seem so strange when we remember that the farm land in Iowa operated by women is equivalent in area to a small state. Through the courtesy of the United States Census Bureau, exact data were compiled from the Census of 1910 for Page county and Story county as follows:

In Page county 43 farms are operated by women who own them. These include 4,662 acres valued at $642,100. There are 145 farms in Page county owned by women and rented to tenants or others. These comprise 19,561 acres valued at $2,427,550.

In Story county 43 farms are owned and operated by women and 12 others are operated by women. These 55 farms comprise 3,937 acres valued at $510,590. In this county 183 farms are owned by women and rented to tenants or others. They comprise 31,176 acres valued at $3,587,750.

These are believed to be representative counties, and on the basis of these data it would appear that the farm land in Iowa owned and operated by women and owned by women and rented to tenants or others is worth between $300,000,000 and $400,000,000. It is natural and right that there should be a large demand from women for instruction in home economics and agriculture combined.

The following is taken from Dean MacKay's report:

The purpose of the division is to train women as home makers and as teachers of and professional workers in home economics. A special effort is made to give a course that is properly balanced with reference to the needs of such women. The technical side of the work is given chief emphasis but work in literary, economics and other suitable subjects is included. Positions open for college trained women are dietitians in dormitories, clubs and hospitals, managers of dining and lunch rooms and cafeterias, food and sanitary officers, public lecturers and demonstrators, writers for women's columns, extension workers, county supervisors in home economics, social workers, designers for manufacturing establishments, milliners and dressmakers, and teachers.

The instruction in home economics has been given under two groups:

Domestic Science, which includes food preparation, cookery, home nursing, household management, nutrition, personal hygiene and theory and practice teaching.

Domestic Art, which includes sewing, elementary and advanced dressmaking, elementary and advanced textiles, textile design, millinery, applied design, history of art and costume design.

The physical culture department, which has charge of physical exercise for women students, recently has been transferred to this division for administration.

In connection with the department of agricultural education, courses in education are given which meet the requirements for State certificates. Work in practice teaching for senior students is carried on in co-operation with the public schools of Ames. The Ames high school maintains a normal training department, and domestic science and domestic art are required subjects of study. These subjects also are required in the public schools of lower grade. Senior students in home economics are given the privilege of teaching under expert observation. This work has been very successful and satisfactory. By its aid the graduates have been more thoroughly trained in class room methods and they have developed both ability and confidence. In connection with the public schools, classes have been formed for parents and others not attending school. These classes are under the supervision of the critic teachers and are taught by selected students of the senior class.

In domestic art the work is given with a view to developing appreciation and judgment of art in home planning, house furnishing and decorating and costume design as well as in the more commonly recognized lines. Such work broadens and develops an interest in decorative art in the home and in the community. A small amount of instruction is given in drawing, which is especially applicable to the needs of home economics students.

Dean MacKay puts special emphasis upon the need of additional teachers and the necessity of increasing salaries of professors and instructors to enable the College to retain the services of the best. Too often it happens that when a good teacher has been found and has been in the work long enough to become thoroughly familiar with it and thoroughly efficient, another institution induces her to leave because of less required teaching work or larger salary, or both. If our standards of instruction are to be maintained the best prepared and trained teachers should be secured and kept in service at least a reasonable length of time.

The home economics building was erected when there were 95 students in the department. In 1914-15, including students in the Industrial Science Division who take work in home economics, there will be approximately 600 students. Partitions have been removed to enlarge class rooms and laboratories, thereby reducing the number of rooms available. There are now only two class rooms left in the building and it is necessary to find additional space in some other building. There is no room in the home economics building large enough to assemble the lower classes, or even the upper classes.

A new building is urgently recommended. There are abundant evidences that the enrollment will continue to increase for some years to come. Suitable class rooms, laboratories, cloak rooms, study and rest rooms, and storage rooms are essential to good work. Space should be provided for department exhibits having educational value. Numerous minor improvements are also needed. It is recommended that a swimming pool be provided in connection with the young women's gymnasium.

INDUSTRIAL SCIENCE.

Dr. R. E. Buchanan, head of the Department of Bacteriology, was appointed Acting Dean of this Division in 1913, and since has been made Dean.

This division is given the name Industrial Science to emphasize the fact that its work is planned and conducted with a view to the application of science to the practical affairs of life. Under the organization of the college which has obtained for many years, a large part of the fundamental scientific work given to students in agriculture, engineering and home economics courses falls within this division. For example: chemistry is given in a department of the Division of Industrial Science. This division teaches about three-fifths of all the class work and about one-third of all the laboratory work given in the entire college. About ninety (90) per cent of the funds expended through the Division of Industrial Science is directly for the benefit of students in other divisions. About two-thirds of the salaries and current expenses of this division are directly for the benefit of students in agriculture and home economics. Practically every course offered by the Industrial Science departments is for the benefit of students in the other technical divisions named. Perhaps three or four per cent of the 350 courses in the Industrial Science Division are available as electives only to students seeking the Industrial Science degree. It is likely that these courses will be made useful also to a limited number of students in other courses permitting elective work.

To leave no doubt as to the purpose of the faculty of this division to meet the requirements of other divisions in connection with work given for these other divisions, the faculty of the Division of Industrial Science in the year 1912-13 expressed itself by the following resolution:

Resolved: That it is the sense of the faculty of the Division of Industrial Science that the subjects taught by them and required in other divisions of the College be specifically outlined in the fullest coöperation with the respective departments for which such subjects are taught.

This shows that in all studies emphasis is given to the practical applications. For example: the Department of History and Psychology recognizes that students taking its work are in this College to specialize in agriculture, engineering, industrial science, or home economics, and the courses are arranged accordingly. They are not arranged to meet the needs of those who wish to specialize in these subjects, nor are they treated simply as cultural studies, but as studies having a practical bearing on present day affairs. In the history department brief courses are included which deal with the history of industrial development of the United States and of the state of Iowa. Special attention is given to the history of agricultural development and the growth of manufacturing industries. The history of the public domain is included. In psychology instruction is given which bears directly upon the needs of the business man and the employer of labor. Courses are given also to meet the minimum requirements for those desiring to secure teachers' certificates.

The course leading to a degree in industrial science is not attended by a very large number of students but it is one of the vital features of the College work. A land grant institution without such a course would be an anomaly. Men who have taken this course today are filling positions of the highest importance in the world of science, especially agricultural science. They are experts upon plant diseases, insect pests, economic botany including grasses and forage plants, and horticulture. These men may be found in leading teaching and investigating positions in colleges, experiment stations, and the United States government service. By a coöperative course overlapping agriculture and industrial science a student may now prepare himself in the best manner possible for such positions as were just referred to.

The following is taken from the report of Dean R. E. Buchanan:

Several Departments in the Division of Industrial Science have been reorganized within the past year partially or wholly upon a committee basis, the committees in charge consisting of members of the staff with rank of assistant professor or above. The committee chairmen are appointed annually by the president. The departments at present thus organized are: Applied Economics and Social Science, Chemistry, and Physical Training.

Needs of the Division.

The departments of this division are greatly in need of additional teachers and recitation and laboratory room space. It must be borne in mind that the needs of this division increase rapidly inasmuch as

increases in enrollment in all divisions of the institution increase proportionately the amount of work to be given by the teachers within this division. It is urgent that an effort should be made to house the following departments in new buildings during the ensuing biennium: Zoology, Bacteriology and Hygiene, Botany, Library, and Military Science and Tactics.

It will be necessary to find additional room also for the following departments: English, Modern Languages, Mathematics, and Applied Economics and Social Science.

Department of Bacteriology and Hygiene.

The work of the Department of Bacteriology is directed along several distinct lines: General Bacteriology (in preparation for more technical bacteriology), Home Economics Bacteriology, Sanitary Bacteriology, Soil Bacteriology, Dairy Bacteriology, and Veterinary Bacteriology.

It has been the effort of this department to develop all of the phases of the science of bacteriology which would prove of value to the students in technology. During the past biennium we have started to develop and emphasize the work in Home Economics and Sanitary Bacteriology.

The great increase in the size of freshmen agricultural and home economics classes during the past several years is making itself felt in the work in bacteriology, which comes for the most part in the junior years of these courses. The increase in the amount of class and laboratory work will require additional instructors within the next biennium.

The present quarters for Sanitary Bacteriology and Household Bacteriology are inadequate and within a year will become seriously crowded; furthermore, the room now occupied is greatly needed by other departments. Plans are now being drawn for a new building. A portion of it is to house the departments of Bacteriology and Zoology jointly and is needed at once, and it is recommended that this portion of the building be built during the year 1915-16, and that the entire building be completed as soon thereafter as practicable. Provision will need to be made for equipping and furnishing this building, together with some additional special departmental equipment.

Department of Botany.

The teaching required of this department has increased very rapidly during the past biennium. Recognition of the fundamental nature of botany in its application is accorded in the various courses in four of the divisions of the institution. During the past biennium a serious effort has been made to place the instruction in morphology and physiology upon a firmer basis. The department needs an assistant or an associate professor in plant pathology, and additional assistants.

Additional space is required for this department and temporary relief will be given with the removal of Bacteriology from Central Building. This building, however, is not well adapted to laboratory purposes and it is urgently recommended, therefore, that plans should be made in the immediate future for the removal of botany to a new building in the science or plant industry group.

Department of Chemistry.

At the present time the Department of Chemistry is installed in its new building which takes the place of the Chemistry Building which was destroyed by fire in the spring of 1913. The fact that practically every student in this institution is required to take chemistry testifies to the fundamental nature of the work. In consequence the number of students enrolled in courses in chemistry has increased from 600 in 1910 to 1,800 in 1914. The urgent needs of the department are three in number: First: Permanent desks, lockers and plumbing for laboratories. Second: Additional new departmental equipment to replace equipment destroyed by fire. Third: Additional instructors.

Department of Economics and Social Science.

The work of this department has been strengthened during the past biennium by providing instructors to give agricultural economics and rural sociology courses to students in agriculture and home economics. It is proposed to still further strengthen the work of the department by providing further courses in agricultural law and forest economics in the fall of 1914. It is recommended that provision be made for an instructor to teach accountancy in the year 1915-16. This subject is of utmost importance in connection with farm management. Within the next biennium this department will unquestionably need additional recitation and office rooms.

Department of English.

The staff of the Department of English has been divided into three committees consisting respectively of the teachers who have to do with English primarily for students in agriculture, engineering and home economics. Each committee is headed by a chairman and it is planned that the chairmen will get in touch with the technical division faculties so that the work in the English Department may be coördinated with the work in the technical department.

The teaching force of the Department of English has been increased during the past biennium until the amount of work required of each teacher is now more reasonable than in 1912-13; it is still larger than the maximum of efficiency would demand. Several new instructors will be needed during the ensuing biennium. It will be necessary to provide additional recitation rooms during the coming biennium on account of the increasing enrollment of students.

Department of History and Psychology.

The number of students has now increased to more than 150 in elementary classes in this subject in addition to the advanced classes. The staff of this department will be strengthened the coming year by the addition of an assistant professor to teach the elementary work in psychology. The courses given are well adapted to the type of education for which this institution stands, and include courses in industrial and economic history in which American public land policies are outlined, also the Western Movement and Industrial History of the United States and England.

Library.

During the past biennium the library has been moved from its old quarters in Morrill Hall to temporary quarters in Central Building. The primary purpose of this move was to provide fireproof quarters for housing the books. Adequate space, however, is not available in Central Building.

On account of the crowded condition of the library, strong departmental libraries have come into existence. The engineering library is housed in Engineering Hall, the agricultural library in Agricultural Hall, and most of the books on history, bacteriology, botany and chemistry and many of those for the Department of Economics, particularly the Catt Library, are housed in the respective departments.

The following needs of the library are emphatic: The experiment station and research work of this institution is seriously hampered by the inadequate library facilities. The need of a larger support fund has been recognized by general faculty action. At a regular meeting of the faculty in the spring of 1914, a resolution was adopted asking that at least $15,000 annually additional be appropriated to the library for books and periodicals.

A new library building should be constructed in the near future. It should be large enough to provide for the growth of the library for a long period of years. Additional help is necessary. Six additional assistants should be provided.

Department of Mathematics.

As a result of the rapid increase of students in the freshman and sophomore years, a considerable increase in the staff of the department was imperative in 1912-13 and 1913-14. Some further additions will be necessary during the ensuing biennium. A conservative estimate of the needs of this department shows that with the use of rooms at their present efficiency, a net increase of five recitation rooms and four offices will be necessary. The courses in mathematics have been greatly strengthened during the past two years by the addition of elective courses in technical and engineering mathematics.

Department of Military Science.

All men are required to drill two periods per week during their freshman year and the subject is optional with physical training or athletics during their sophomore year. This department is seriously handicapped by its inadequate housing. In the spring of 1914, the department moved into rooms temporarily provided in the new Transportation Building for storing of arms and for office. But still the department does not have an adequate place for drilling in inclement weather and much time is lost for this reason. Other institutions of this character are erecting large buildings for this purpose. As soon as practicable, adequate facilities should be provided.

Department of Modern Languages.

The subject of modern languages was dropped as a required subject from the courses in engineering last year. This permitted the dropping of one instructor in German. It is probable, however, that the unexpected increase in the number of students registering in courses in scientific German will necessitate the addition of an instructor in this subject in the near future. The Department of Modern Languages is unique among other similar departments in institutions of this character in the emphasis which has been laid upon the courses in scientific German and French in contrast to the literary and dramatic. It is estimated that within the biennium two additional recitation rooms and two more offices and a modern language library and seminar room should be provided.

Department of Music.

The Department of Music has been entirely reorganized during the past biennium. Musical instruction for which college credit is allowed is under the direct jurisdiction of the Department of Music. All private lessons for which tuition is charged are cared for by a separate organization, the Music Council. The need of proper housing and facilities for the department is urgent. The work of the department during the last year is to be commended because of its emphasis on music for the many rather than music for the few.

Department of Physical Training.

This department is now housed in a new building with adequate facilities for the best work, and takes care of the regular instruction work in physical training for which students receive credit on the books of the registrar. The greatest needs of this department at the present time are the completion of the playgrounds located west of the engineering group of buildings and a fence about the athletic field. The athletics are managed by a separate organization, the Athletic Council.

Department of Public Speaking.

It is the policy of this department to teach public speaking—not elocution. Its most important work undoubtedly is the training which it gives in extemporaneous speaking. Its courses are deservedly popular. Considerable attention is being devoted to the encouragement of literary societies.

Department of Zoology.

Considerable relief will be afforded to the Department of Zoology the coming year by the housing of entomology in the Chemistry Building and the assignment of a portion of chemistry emergency building for laboratory work in elementary zoology. As has been previously noted, it is hoped that the Department of Zoology will be housed in a building to be erected next year—a building to be shared with the Department of Bacteriology.

By the development of courses in entomology and apiculture during the coming year, the work of the department will be greatly strengthened. Probably there is no science of more importance to agriculture and horticulture than entomology.

It is probable that within the next biennium one instructor and two assistants will be needed in addition to the present staff.

VETERINARY MEDICINE.

The Veterinary Division of this College is included in the list of accredited veterinary colleges of the United States as issued by the United States Bureau of Animal Industry. It was extensively written up and with most favorable comments in the American Journal of Veterinary Medicine for October, 1912. The work of the division is expanding and its value to the State is increasing, as would be expected of an institution newly provided with first class equipment and established by the State to serve live stock interests representing hundreds of millions of dollars. It should be kept in mind that the older a state becomes the more does it develop problems relating to animal disease. These are sometimes very acute. A disease may make its appearance and cause enormous losses in only a few weeks. As an insurance measure against such losses it is well to have a strong veterinary department. The work of the division along research lines, in the extension field and in the production of hog cholera serum, is referred to elsewhere. All these activities are of great value to the training of veterinarians for whom there is a large demand in Iowa and this work is the chief function of the division.

An important innovation has been tried whereby senior students are assigned for two weeks practice with leading veterinarians throughout the State. This is to give them a further insight into the many phases of the veterinarian's daily work. The students receive no compensation, but they do everything possible to assist the veterinarians to whom they are assigned. The experiment promises so well that the practice probably will be continued until a satisfactory ambulatory clinic can be organized.

Another development which was made possible by a special appropriation by the last General Assembly is the Veterinary Practitioners' Course, which continued one week and was attended by about seventy veterinarians who were given lectures and demonstrations and opportunity to discuss late developments of their science. This course was received with enthusiasm by the veterinarians and a marked increase of attendance is expected when the next course is given. Hereafter it will probably be conducted by the Veterinary Division and the Extension Department forces.

In 1910 the entrance requirements to the veterinary course were raised and made equal to the requirements for other college courses. There was a marked decrease in total attendance but it is interesting to note that the first class which entered under the higher

requirements graduated in 1914 eighty-five (85) per cent of its entering members, whereas the four preceding classes graduated respectively 41%, 47%, 56% and 41%. The second class entering under the new requirements, whose members are now juniors, is represented in College by 94% of its entering members.

In addition to veterinary students, the division has given instruction to a large number of students classified in other divisions, especially animal husbandry students. In one year about 100 such students take work in pathology and bacteriology, about 350 in anatomy and histology, about 100 in physiology, and about 175 in surgery.

Dean C. H. Stange points out the importance of enlarging and strengthening the veterinary faculty in order that it may keep even with the increasing demands made upon it. The undergraduate veterinary students are now increasing in number, student enrollment from other divisions is rapidly increasing, and there is a marked increase in number of graduate students. Additional help is needed also to operate an ambulatory clinic. The dean points out that members of the veterinary staff are making every effort to improve their work. Several of them are studying German in order that they may be able better to keep in touch with veterinary developments reported in that language. An urgent request is made for adequate salaries for the staff. Some of these experts have received and declined offers paying much more than they are paid by the College.

In order to keep the important lines of work in the division well balanced, Dean Stange recommends special assistance during the next biennium for the departments of surgery, practice and physiology. He says that lack of funds has forced the surgery and practice departments to practically dispense with their free clinics and charge for such work done at the hospital. This reduces the calls for help and correspondingly reduces the educational training which the students should have. In 1913-14 the record shows 1,204 surgical cases treated, of which 504 were on account of internal diseases. In physiology more work should be given on digestion. This is being called for more and more by advanced students in animal husbandry. Enterprising breeders of Iowa are going to schools in other states in search of such information which could be given here at slight additional cost. The largest benefit from stronger work along this line would come to the state through the veterinary student who later should become the reliable adviser to his many clients. Recommendation again is made for the establishment of an ambulatory clinic. For five years the need of this has been emphasized and now we find other and some smaller schools operating these clinics successfully. The plan of these clinics provides for taking a small group of students to the sick animal in the vicinity of the College. In this way many valuable cases of internal diseases, which are not otherwise accessible, are made available to the students.

In reference to funds for general support, Dean Stange points out that liberal increases are greatly needed. In some cases practically all the funds available have to be used for stenographic and janitor service, leaving very little for supplies, materials and special temporary help. The departments of pathology and anatomy have lost much valuable material for educational purposes because of insufficient funds to care for it. Better library facilities are also urgently recommended. Advanced work is handicapped by lack of scientific reference books and periodicals.

As to new buildings, Dean Stange recommends the following:

"The completion of the southwest building of the veterinary group for the research and diagnostic laboratories to relieve the pressure in some of the other buildings;

"An additional story to the pathology and anatomy wings to relieve the pressure in these departments;

"The construction of a laboratory building for biological products and a small-animal breeding building especially to relieve urgent needs of the serum and research work."

The dean also points out the importance of his division having a farm of about 160 acres to be used especially for clinical material and for research work and serum manufacture. Such a farm would be a distinct economy to a plant carrying on veterinary work of such character and in such quantity as now obtains at this College.

POST-GRADUATE WORK.

For many years this College has given post-graduate work, but this work now has been organized as a separate branch. By action of the Board of Education on July 15, 1913, a distinct division was created to be known as the Graduate Division. The President was designated as Acting Dean, but one who can give considerable time to this work should be appointed to this position, and he should be a specialist in one of the leading lines of technical work conducted at this College and in demand by graduate students. The increase in enrollment is chiefly in agricultural lines.

The importance of developing graduate work is felt especially in connection with the training of investigators for experiment station work and teachers for college work. Already some of the leading institutions of the country are discriminating against candidates for such positions who have not earned an advanced degree. More and more also we are to feel the demand for post-graduate study from persons who are to enter into practical work but wish first to fit themselves as highly trained specialists in the different phases of agriculture, engineering, home economics, industrial science and veterinary medicine.

The graduate work is given by members of the regular college faculty and thus far they have been able to carry the additional work without materially increasing the cost. A few graduate students have a decided effect in stimulating both undergraduates and teachers to their best efforts.

SUB-COLLEGIATE WORK.

The two-year sub-collegiate courses are making it possible for the facilities of the College to be used by a great many people who are entitled to this consideration and who will make good return to the State for the cost they incur. These courses should be further developed and made more widely known.

Gradually the introduction of vocational work into high schools will duplicate or replace certain phases of work given in these two year sub-collegiate courses, but it is doubtful if high schools ever can give the equivalent of work offered in a special two year course at a strictly technical institution.

The College is frequently urged to offer to students in the two-year sub-collegiate courses a limited amount of additional work which will enable them to qualify for teachers' positions in rural schools and schools of higher grade which do not require their teachers to be college graduates.

IN AGRICULTURE.

The two-year course in agriculture is becoming better known and it is believed it is destined to greatly increase in enrollment and service. This course is intended primarily for young men who have finished the eighth grade but have not graduated from an accredited high school and, therefore, are not eligible for admission to the four-year courses. Other provision is made for those who are eligible for admission to the four-year courses and can remain in college only two years. The work in the two-year sub-collegiate course is very strong on the practical side but theory is given proper emphasis. There is now an abundance of evidence to prove the value of this work. The students are given every facility to advance themselves, and any student in this course, as in other courses, who is thoroughly in earnest will find that he is respected and will be assisted by his fellow students as well as by the faculty. Some of the most industrious students in the College are registered in the two-year course in agriculture. They are a credit to themselves and their communities and this institution. The records show that these young men as a rule return to their farms and put into practice what they have learned. About 99 per cent of the two-year students in agriculture are planning to live on farms.

A separate building with suitable class rooms, laboratories, and equipment should be provided for this work. Secondary schools of agriculture, similar to our two-year course, are in successful operation in Kansas, Nebraska, Minnesota, and several other states. It is not the purpose of these schools to serve as preparatory schools for college entrance, but to fit young people for practical and successful rural life.

The one-year course in dairying is maintaining its high standard.

IN HOME MAKING.

This course was given for the first time in 1913-14 as the result of special provision made by the last general assembly. Through it the Division of Home Economics is able to give much practical instruction on household problems to women who have not completed a high school course but have finished the eighth grade. The work has made a favorable beginning and doubtless will show rapid development if well supported.

As to the purpose of the course, Dean MacKay states that it aims to dignify all occupations of the home by placing them upon a scientific and aesthetic basis, preparing girls for the duties and responsibilities of the home, giving them a broader view of life and a knowledge and training that will enable them to meet home conditions in a thoroughly practical and capable manner. It is possible for those who complete this course to use their education to some definite purpose. The training is such that young women will be able to obtain positions as tea room managers, institutional workers, dressmakers, milliners, designers and demonstrators.

Each subject is planned in progressive sequence throughout the four semesters. A high standard of work is maintained. A systematic and proportionate use of time for study is insisted upon.

Most of the work in this course is given in the home economics, science and agricultural divisions. Work offered in agriculture includes small fruits, vegetables, landscape gardening and dairying.

The need of a practice house for laboratory work in this course is felt keenly. Additional class rooms and sewing and cooking laboratory space also are needed because of increased enrollment.

IN ENGINEERING AND TRADE SCHOOL WORK.

Instruction of this character for young men who have finished the eighth grade but not an accredited high school course was started in the year 1913-14 as the result of an enactment by the last general assembly. The work is new and offers great promise, especially to many young men in cities and towns who wish to acquire a useful vocation. These courses will naturally become the culmination of a State system of industrial education with further development of vocational work in the schools, as is now provided for. Students taking these courses are expected to be prepared for such positions as surveyors, road makers, mechanical and structural draftsmen, electricians, stationary engineers, construction and shop foremen and expert mechanics. After a year or two of experience courses of study can be laid down which will best meet the requirements. It is a new field of work in this State and a little time is necessary to develop it along the most efficient lines.

SUMMER SESSION.

The Summer Sessions in 1913 and 1914 were successful from the standpoint of both instruction given and enrollment. These courses are helping to meet a great need, especially on the part of school teachers throughout the State who, under the provision of a law enacted by the last General Assembly, must prepare themselves to teach agriculture, trade school work and home economics. Some college courses are repeated in the Summer Session for the benefit of students who wish to get ahead in their work or make up shortages. Effort has been made in the Summer Session to hold down expenses for the students and with considerable success. Some families maintained camps on the border of the campus where a camping site is provided.

The enrollment in the Summer Session of 1914 was 618 as compared with 215 in 1913 and 128 in 1912. The 1914 enrollment represented 92 counties of Iowa. In the 1914 enrollment 419 were women, of whom 298 were in the grade and rural teachers' course, 25 were in the home makers' course and 96 in college credit courses; and 199 were men, of whom 10 were in the grade and rural teachers' course and 189 in college credit courses. The enrollment in 1914 included 37 school superintendents, 18 principals, 74 high school teachers, 308 grade and rural teachers, 150 college students, 5 college instructors and 19 farmers and housekeepers. In 1913 the enrollment included 55 superintendents, 40 high school teachers, 45 grade and rural teachers, 65 college students and 10 farmers and housekeepers.

In the Summer Session, emphasis is placed on the industrial subjects—agriculture, trade school work and home economics. A limited amount of work is given in other subjects to accommodate persons who are here to take one or more lines of technical work. Most of the Summer Session work is given in the divisions of agriculture and industrial science but the engineering division contributes important courses in manual training and engineering drawing. About 150 men and women, mostly teachers, were enrolled in manual training in 1914. The facilities of the engineering division are capable of accommodating a much larger number if teachers are provided. An interesting feature of the Summer Session is the conferences held during its progress. These are related especially to country life affairs.

The Summer Session has been limited to six weeks. In order to meet the demands that will be made next year, and doubtless annually, the session should continue at least twelve weeks with provision to enroll students for the first or a later six weeks period. This will necessitate a larger appropriation but it will make it possible for a great many more teachers to get the benefits of the work and prepare themselves as the recent legislation requires.

The faculty of the Summer Session each year was appointed chiefly from the regular college faculty with the addition of a few experts from other institutions.

The Summer Session Council which was created by the Board of Education in December, 1913, has general supervision of the work. It is composed of the president, the deans of the divisions cooperating (agriculture, engineering, home economics and industrial science), and the director. Professor G. M. Wilson, head of the department of agricultural education, serves as director. He points out that while the student enrollment increased about 188% from 1913 to 1914, the cost per student fell from about $36.50 in 1913 to about $19.50 in 1914, owing to economies that could be effected with the larger classes.

Director Wilson also calls special attention to the very large increase of enrollment of rural and grade teachers. This is in part due to the action of the Board of Education whereby free tuition is allowed rural and grade teachers. This action was taken to make the tuition charges here conform to the general practice of the State.

Work for these teachers' courses was given in accordance with the rules of the State Board of Examiners requiring that courses in agriculture, manual training and home economics be offered for the entire six weeks period. As supplementary work, a limited amount of instruction was given in the common branches, didactics and in the first grade certificate subjects.

Instruction in connection with the model school, which was given to teachers only as supplementary to vocational courses, proved to be popular with the pupils, all of whom came from the vicinity, as well as with the teachers. Vocational training was included with other subjects for the pupils. In a large way the school served as a model for rural and grade work.

It is interesting to note that in the rural and grade teachers' course there was a very general selection of industrial subjects, while the selection of common school and first grade certificate subjects was scattered and there was relatively a small number in these latter courses.

College credit courses were offered in 1914 in several departments. Because of pressure from the State Department and the recommendation of the Educational Council of the State Teachers' Association, many teachers preparing for high school work enrolled in College credit courses instead of in the general courses. This increased the enrollment in College credit work which was as follows, by departments:

Agricultural education	76	Farm crops	95
Agricultural engineering	19	Home economics	56
Animal husbandry	116	Horticulture	35
Bacteriology	21	Mathematics	11
Botany	23	Mechanical engineering	48
Chemistry	61	Physics	15
Dairy	13	Poultry	12
Economics	13	Psychology	27
English	36	Soils	40

The high character of the students' work in the Summer Session was commented upon by the instructors. A study of grades made in the summer and corresponding grades in the regular college year seemed to show conclusively that the Summer Session work is thoroughly well done.

Much good should come from the rural life conferences held in connection with the Summer Sessions. The attendance was 77 in 1913. In 1912 it was 20. In 1913 Professor T. N. Carver, of Harvard University, gave daily lectures on rural economics. Many Summer Session students attended these lectures and others given by agricultural experts. Local ministers were especially helpful in developing the rural life conferences. United States Commissioner of Education, P. P. Claxton, was a speaker at this conference in 1914.

Examinations for teachers' certificates were held at the College each year. In 1913, 13 teachers took the June examination and 27 the July examination. In 1914, 121 took the examination in June. Director Wilson calls attention to the fact that the legislation regarding vocational work in schools is only one phase in a general movement looking toward the modification of courses of study and the more general introduction of the useful vocational studies into the common school curricula.

In connection with the summer work excursions are arranged, general lectures are provided and a few social functions are held.

WINTER COURSES.

The service and value of the winter courses in agriculture are well known throughout the State. The work is both educational and inspiring. It is given during the winter vacation when regular college students are at their homes; thus the whole equipment of the college is available. The agricultural courses have included work in home economics. In the winter of 1913-14, similar courses were given for the first time in certain lines of engineering work and trades work. These courses could be extended to the great advantage of many people who would profit by a little additional technical training.

IN AGRICULTURE AND HOME ECONOMICS.

The short winter courses in agriculture have been continued as usual. The last one extended from December 29, 1913, to January 9, 1914. It included instruction in Agronomy, Animal Husbandry, Poultry, Dairying, Horticulture, Soils, Agricultural Engineering, Home Economics and Botany. All who come with a real desire to learn are admitted to these short courses and the attendance includes men and women, boys and girls. Sometimes father and mother and children come together. Instruction is given chiefly through lectures and practical exercises in the laboratories and stock judging pavilions. The class work is scheduled from 8 a. m. to 5 p. m. daily, except Sunday, and educational programs are provided for most of the evenings. Some of these evening programs are in charge of agricultural associations which hold their meetings during the short course period.

Registration in the last two short courses was as follows:

1912-13	691
1913-14	658

Special Silo Schools were held in 1912-13, which were attended by 73 persons.

IN ENGINEERING AND THE TRADES.

An innovation was made during the holidays in 1913-14 in the starting of short courses for persons engaged in engineering work and the trades. The subjects and dates of these courses were as follows:

General Engineering Subjects	Dec. 29, 1913 to Jan. 9, 1914
Highway Engineering	Dec. 29, 1913, to Jan. 7, 1914
Interior Painters and Decorators	Jan. 6 to 9, 1914

The number in attendance at each was as follows:

General Engineering Subjects	51
Highway Engineering	81
Interior Painters and Decorators	57
Total	189

These courses were the result of action by the last General Assembly which made definite provision for starting engineering and trade school extension and short courses in connection with the work of this College. The need of such courses cannot be questioned. Their popularity seems to have been established by this effort.

The painters were a high type of men, ambitious to learn the best and they spent their time most diligently. A resolution adopted by the Master House Painters and Decorators of the United States and Canada at their meeting in Cincinnati, in March, 1913, shows the feeling of this craft towards their special short course work. It is as follows:

It was moved and seconded that the president and faculty of the Iowa State College be commended on their advanced progressiveness in the matter of educating the young men in the building trades, and that we, the International Association of Master House Painters and Decorators of the Unted States and Canada, send them fraternal greetings, with the desire that every effort put forth by them will be successful, and that we stand ready and willing to furnish every aid of whatsoever description possible toward the success of their undertaking.

The county engineers in their special short course found much to instruct and interest them. One such officer who had attended every session regarded the short course as a big event in his life.

IN VETERINARY MEDICINE.

Reference to the short Veterinary Practitioners' Course will be found in connection with the report on collegiate work in the Veterinary Division

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COLLEGE FUNCTIONS.

At Commencement in 1913 the baccalaureate sermon was delivered by Rev. Charles R. Henderson of Chicago University and the commencement address was delivered by Gov. Adolph O. Eberhart of Minnesota. At Commencement in 1914 the baccalaureate sermon was delivered by President Henry Churchill King of Oberlin College and the commencement address by Dean A. W. Small of Chicago University.

RELIGIOUS SERVICES.

On account of the distance of the campus and the principal student residential portion of the city from the city churches and in order to allow our student body to hear the best ministers of the day, the practice has long been maintained of having Sunday morning chapel services with non-resident speakers. All leading denominations are represented, including Protestant and Catholic. The services formerly were held in the chapel in Morrill Hall but that room was not large enough and they are now held in Agricultural Auditorium and a larger room should be available for this purpose. The daily morning chapel services from 7:45 to 8:00 are attended by from 100 to 400 students and faculty members. All these religious services are attended voluntarily.

CONVOCATIONS.

On rare occasions throughout the year the entire College work is suspended for a half hour or an hour and students and faculty gather in the gymnasium for a special address or celebration. On these occasions the speakers have been the president of the College, Senator W. S. Kenyon, Governor Clarke, Ex-Secretary of Agriculture James Wilson, and others. A convocation held March 12, 1913, was in honor of Secretary Wilson, who long served in the faculty of this College and was called from here by

President McKinley to accept a place in the President's cabinet, where he made a record for a continuous service of sixteen years as well as a record for his supervision of the department during a period of great development in agricultural affairs. This convocation was attended by many notable persons of the State. It was followed by a banquet for the guest of honor which was provided for jointly by members of the faculty and business men of Ames.

Governor Clarke spoke on "The Day's Work of a Governor" on October 24, 1913.

Other speakers who have addressed audiences at the College during the biennium are the following:

Dr. J. M. Coulter, Head Professor of Botany, University of Chicago, December 13, 1912, "Relation of Science to Agriculture."

Dr. Herbert N. McCoy, Professor of Physical Chemistry, University of Chicago, on "Radium and Radio-activity," April 18, 1914, under the auspices of the Department of Chemistry.

Professor C. C. Nutting, Head of the Department of Zoology of the State University of Iowa, on the "Making and Use of a Research Museum in Zoology," February 28, 1913.

Bishop Theodore Henderson, February 11, 1914.

United States Senator Wm. S. Kenyon, November 10, 1913.

Ex-Secretary James Wilson, March 12, 1913.

Mayor James R. Hanna, of Des Moines, on "The Day's Work of a Mayor," May 19, 1914.

Frederick B. Wright, of Washington, D. C., Travelogue Lecture on "Children I Have Seen in Different Lands," March 17, 1914.

Dr. Crocker of the University of Chicago, on "Vegetable Physiology," April 30, 1914.

Plans are being made for free lectures by prominent persons to be given at intervals next year and at a time when students and faculty generally will be able to attend. These lectures will occur usually late in the afternoon. They will cover subjects of general interest and they will be planned so as to emphasize their educational and broadening influence, often referred to as "cultural."

MUSIC.

To a large extent the music events of the College are directed by a Music Council which is organized under special action of the Board of Education. Among the attractions brought to Ames by the council in 1913-14 was the Minneapolis Symphony Orchestra, which drew an audience of nearly 1800 people. This shows the appreciation of the community for high class music. A concert of this character has high value in a college community, and plans are being made for more such self-supporting entertainments in the future.

INTERCOLLEGIATE ATHLETICS.

By action of the Board of Education, intercollegiate athletics are under the management of the Athletic Council, which includes the President of the College, who is chairman, the Treasurer of the College, who is treasurer, the ranking professor in the Physical Training Department, two to four members of the faculty and four students. From receipts from games and contributions the council bears the expense of all such contests, including the expense of coaching and training teams for these purposes. State funds are not used for the support of intercollegiate contests. The greatest emphasis is placed upon clean, honorable playing. This College is among the leaders in suppressing unfair and dishonest practices in athletics. One of the chief methods by which athletic games and relationships are being improved is through the growing policy of leaving final authority with the College faculty, as has been provided for this College through the organization of the Athletic Council.

ALUMNI BUREAU.

During the biennium, the Alumni Association established a bureau with permanent headquarters in Alumni Hall, and with Professor Ward M. Jones as secretary. This bureau is rendering valuable service to the College by maintaining a directory of all alumni and helping to maintain their interest in their Alma Mater. It means much to the alumni to have their own headquarters where they may call for information and where they may meet when returning to the College.

The measure of work done by a college is best shown by the Alumni. Many an institution regards its Alumni body as its strongest resource. In such case the Alumni are well organized and are enthusiastic supporters of the institution. It means much to this College that the Alumni are giving attention to more efficient organization and cooperation.

THE CAMPUS.

Necessarily there are changes on the campus when an institution is rapidly growing and new buildings are being erected, but with all the changes a determined effort is being made to preserve the central quadrangle from encroachment and to preserve the hilly ground on the south side of the main campus as an attractive natural park. The problem of campus development has been studied by eminent landscape architects and, in the main, their reports are in harmony. So far as possible their ideas are being carried out, but the institution is now larger than they or perhaps anyone in their time supposed it could be. The further services of a landscape architect are now needed. Superintendent Sloss is entitled to much credit for his efforts to preserve the natural beauty of the campus.

The trolley line has been re-located by diverting it east of the central power plant and carrying the track directly toward the veterinary buildings. This has eliminated two very sharp curves and makes it possible to bring locomotives to the new transportation laboratory. It also vacated a site needed for the new greenhouses.

Arrangements have been made with the aid and coöperation of the State Board of Control for opening a road northward from the campus in extension of the road passing the front of the veterinary buildings. This road will be carried over a concrete bridge crossing Squaw Creek and will connect with the public road north of the College property. It is expected also to open a road on the south side of the Chicago and North-Western Railroad right of way from near the east line of the campus to the "north road" and later to extend this westward to connect with the road to Ontario near the northwest corner of the college grounds on the south side of the railroad. Another improvement made possible through the assistance of the Board of Control is the filling of the ditch adjacent to Boone street and almost directly south from the agricultural building. This ditch has long been a dangerous place as well as most unsightly. In these improvements and certain other campus improvements the College has availed itself of convict labor, a camp being established, and from about twenty to fifty convicts being employed. From the standpoint of the College this labor was satisfactory.

BUILDINGS AND LAND.

BUILDINGS.

Special effort is made at all times to keep the buildings in good repair and clean. The newer buildings are fireproof, or practically so, but in these and all others fire precautions are observed. Nevertheless the College suffered a heavy loss in the spring of 1913 when the old chemistry building was totally destroyed by fire. The origin of the fire could not be determined. The building contained much wood construction and this with chemicals in almost every room made it impossible to successfully fight the fire, although streams of water were soon running and an abundant supply of water was available.

The efficiency of class rooms and laboratories has been made a subject of study by a special faculty committee. Through their efforts some changes have been made in the schedule to more evenly distribute the demands on building space. There is, however, in several departments a great shortage of class rooms and laboratories.

The gymnasium which was started in the previous biennium was finished before the close of the first year of the biennium. The Steam and Gas Engine Laboratory was also completed comparatively early in the biennium. These have afforded much needed space and relief. The completion of the Gymnasium has permitted systematic physical exercise for hundreds of young men who were seriously in need of it. Young men coming to college from active work, often out of doors, must have more or less vigorous exercise along with their college studies if their health is to be maintained. The Gymnasium furnishes a suitable meeting place for large gatherings. Heretofore it has been impossible to get even one-half of the College community into the largest available room on the campus. In warm weather tents have been hired for important large meetings such as Commencement. The Gymnasium also provides splendid accommodations for the State Corn Show and for various College social functions.

The women's gymnasium facilities in Margaret Hall have been greatly improved by constructing locker and shower bath quarters in the basement under the gymnasium floor. Heretofore the space has been unused. It required only a little excavating and some underpinning for the walls to make the space available for improve-

ment. It is hoped that a swimming tank can be provided for the young women students in additional space under the gymnasium which is available for this improvement.

The available working space in Old Agricultural Building has been greatly increased also by making the basement usable, which has been done at small cost.

The old building formerly occupied by the Veterinary Division, which has been used as a store house, has been repaired and now provides headquarters for the construction and repair forces of the College under the direction of the Superintendent of Grounds and Buildings, and also for their materials.

The new Chemistry Building, which was begun in June, 1913, was finished in time for beginning the work of 1914-15. It is located north of Central Hall and just north of the trolley track. This building is fireproof. It has especially secure and safe storage for dangerous chemicals. It is built with a view to economy and efficiency. The plans were made after a study of plans of the best chemistry buildings in other States, and we believe we have secured the most possible for the money expended. The materials are brick, steel and concrete. It is as plain a building as a factory, and lighted and ventilated as well as possible. The new building contains slightly over 100,000 square feet of floor space. The cost of the building without equipment is approximately $250,000. It should be remembered that a large amount of chemistry work is required in the technical courses offered at this College. Next year approximately 1,800 students will be registered in chemistry courses. This large registration brings the number of square feet of floor space per student in the new building considerably below the space allowed in other institutions of the same grade, yet it is expected that first class work will be done. The building is a little larger than was intended because it was found that wing space planned for the future could be provided with the main contract at a remarkably low figure and it was considered the best economy to have it built at once, deferring some other building needed. This has resulted in making it possible to loan a limited amount of space in the Chemistry Building to other overcrowded departments.

The locomotive and automobile testing laboratory, which is a shop building costing about $65,000, was practically completed during the biennium. It stands west of Engineering Annex. Acknowledgment is made to President Gardner of the Chicago and North-

Western Railway Company, who arranged for Mr. R. Quayle, General Superintendent of Motive Power and Car Department, and Mr. W. E. Dunham, Supervisor of Motive Power and Machinery, to visit Ames and assist in completing the plans for this building. It is admirably adapted to instruction work such as a college should give in connection with locomotives and automobiles, their construction, power and efficiency. In these times men having scientific training along the lines indicated are in demand.

A new building for plant industry work, especially horticulture, was practically finished during the biennium at a cost of about $60,000. This building is located directly north of the auditorium of the Agricultural Building and is planned to constitute the southeast wing of a future building corresponding to the present Agricultural Building and standing about five hundred feet directly north of it. Attached to the building are greenhouses covering above one-half acre of ground. They will afford much needed space and facilities for giving instruction in plant propagation, plant breeding, truck gardening and commercial floriculture. The last two items represent very large and rapidly growing interests in the State. Credit for assistance in planning the greenhouses is given to Mr. Wesley Greene, Secretary of the State Horticultural Society, Mr. I. O. Kemble of Marshalltown, Mr. J. W. Dunford of Sioux City, Mr. C. N. Page of Des Moines, Mr. Roy F. Wilcox of Council Bluffs, Mr. Blaine C. Wilcox of Council Bluffs, Mr. Merritt Greene of Marshalltown, and Mr. J. S. Wilson of Des Moines, most of whom are engaged in greenhouse work on a large scale and all of whom are deeply interested in the development of this industry along right lines. These gentlemen visited Ames and advised with members of the faculty concerning the location and arrangement of the new greenhouses. The location was decided after much careful study. It seemed to be the best from the standpoint of sunshine throughout the entire day as well as accessibility for large numbers of students who can use the greenhouses in this location for short periods of spare time when they could not do so if the building were at some distant point. This location also will be a convenience to the many visitors on the campus.

The dormitory for women, to cost about $55,000, will be ready for occupancy about the first of January, 1915. This building, which is fireproof up to and including the attic floor, is a special

credit to the architects, Proudfoot, Bird & Rawson, because of its excellent arrangement and its very low average cost per occupant. The building is of brick and Colonial in style. It is intended to accommodate seventy-four young women students, but more will be cared for when it is possible to use in this way additional space in the building that will become available on account of completing plans to heat the building from the central heating plant instead of by an individual plant. The location for this building, on an attractive elevation across the valley southeast of the Dairy Building, was determined after receiving an opinion from the Attorney General to the effect that it would not be necessary to place the building adjacent to Margaret Hall, which is not a fireproof structure. The site selected seems to be ideal for a group of dormitory buildings for women. It is planned to make this new dormitory entirely self-supporting, and preliminary estimates show that this will be possible with reasonable charges for rooms and meals.

The State has purchased the residences on the campus formerly belonging to Professor Holden and Mrs. Beardshear. The latter home was built after the death of President Beardshear, by his family, but they now wish to have a smaller house and it proved to be advantageous for the College to take this property and use it together with the other residence for young women students.

The main agricultural building has been considerably relieved by transferring work which has been conducted in that building to suitable space in other buildings. The Chemical Section of the Agricultural Experiment Station is now well located in the new Chemistry Building, and the Agricultural Extension offices and the document rooms have been transferred to Morrill Hall.

Another increase of equipment, which is equivalent to a laboratory building, is the experimental farm located two miles south of the campus and purchased about one year ago. This farm is well adapted to its use for field and crop experiments and is destined to produce results of great value to the State.

Inexpensive buildings have been erected a short distance north of the veterinary group for the manufacture of hog cholera serum. A somewhat more distant location would have been better but with the limited appropriation and other limitations it was not possible to build elsewhere.

Much should be said concerning the need of new buildings. The increase of student enrollment produces the most urgent need. When this has been met the State doubtless will wish to replace

some of the old and unsuitable buildings with others that are safer and better but now no building can be spared if it will protect from rain and cold. A temporary wooden shed of the cheapest construction possible was erected as an emergency building for the chemistry department after the old building was burned and when the new one was under construction. It was expected to use this temporary building only one year but when the chemists moved out of it, four urgent requests were filed by department heads who wished to use it, and it has been allowed to remain although it is not as well built a structure as many a barn or cheap warehouse in the State.

New buildings which are greatly needed include the following: Library, auditorium, dormitories, animal husbandry building, science building, hospital, home economics building, dairy cattle barn, physics building, agricultural engineering building, poultry building, beef cattle barn, judging pavilion and drill hall, abattoir, rifle range, an addition to the dairy building and an addition to the veterinary buildings.

Facilities for furnishing pure and clear water for use on the campus are again asked for. At the present time there is a good water supply but the water contains much iron and often it is as brown as coffee when drawn from spigots in the buildings. It is estimated that a settling and storage tank with filter could be provided for $15,000.

LAND.

Additional land is needed for the following purposes:

Dormitory space and exercise grounds near the campus	$35,000
An animal husbandry farm of about 200 acres—estimated value of land and buildings	60,000
A horticultural experimental farm	10,000
A veterinary research farm	32,000

Special arguments for the buildings and land indicated will be found in connection with the tabulated statement of askings and in connection with the reports on educational work.

EQUIPMENT.

Reference should be made to the Secretary's report for a full statement of equipment of the College.

With the appropriations available for equipment it has been impossible to replace that which should be discarded because of age or poor condition and increase the equipment in proportion to the demands of the increased number of students. A liberal increase of the appropriation for equipment is recommended. Especially is this increase needed because of the loss of equipment in the Chemistry Building fire. As the State does not carry insurance on its property it becomes necessary to replace the chemistry equipment from State appropriations. The purchase of much department equipment has been postponed by necessity of getting equipment for new buildings, which has drawn heavily upon the limited funds. Although there are many urgent needs at this time only two others will be mentioned here: Books for the Library and live stock. A considerable fund could be used to advantage in respect to both of these kinds of equipment.

It is a pleasure to record the gift of an oil painting portrait of President S. A. Knapp from the Class of 1884. At present this hangs in the President's Office but it is hoped that when a new Library Building is erected a better place may be provided. A similar gift is acknowledged from the family of Professor Isaac P. Roberts, who was in charge of the agricultural work for a period in the early days of the College. It is planned also that this portrait will occupy a prominent position in a permanent College building.

ADMINISTRATIVE WORK.

While all administrative matters are subject to the approval of the Board of Education, there are many which need not be considered by the Board because they are merely incident to carrying out policies already established. The President's Office is the chief administrative office of the College but a large volume of work is handled elsewhere.

The Secretary's Office serves as a college auditing office and keeps records concerning available funds, bills, expenditures, and balances. This office also keeps records of meetings of the Board of Education and the Finance Committee in so far as matters are transacted which relate to this College. In the same office the work of the Junior Dean is cared for. This involves close scrutiny of class standings of all freshman and sophomore students and personal conferences with such students as need individual attention on account of the character of their records. The Junior Dean also classifies or assigns to classes all freshman and sophomore students. This has become an intricate and difficult task because of the necessity of keeping classes filled to the proper number and yet not overcrowded and because of the many conflicts that occur in the schedules of students.

The Treasurer's Office cares for all funds and is comparable with a bank. Funds are received and paid out as directed by the Finance Committee, the Board of Education, or, in certain routine and emergency matters, as directed by the Secretary's Office. The Treasurer's Office serves also as the registration office for the College. All students are listed here. The Purchasing Committee for the College is associated with the Treasurer's Office. This committee is charged with the responsibility of issuing orders for supplies and securing bids when the order is of sufficient importance.

The deans of the various divisions and the dean and vice-dean of the Junior College with the President constitute the Board of Deans, which meets weekly. This body does not legislate but takes under consideration the uniform administration of policies and rules throughout the entire institution. As stated elsewhere, the Faculty is the legislative body for the College.

One of the pleasant functions of the President's Office is to receive visitors. It is worthy of note that in June, 1913, Dr. Lauro Muller, the Brazilian Minister of Foreign Affairs, accompanied by military and naval aides representing the Brazilian and the United States governments, spent a day at the College with a view to getting suggestions for the development of educational work in Brazil. And in June, 1914, about sixty prominent eastern advertising men started a tour of Iowa by visiting this College. On account of the difficulty in securing special railroad rates, the College does not have as many excursions as in former years, yet very many visitors come to the campus throughout the year. In April, 1914, 318 Clay County farmers and their families visited the College.

The clerical work in the administrative offices is increasing rapidly, as would be expected on account of the increasing enrollment and campus developments. The College has been very economical in respect to this kind of service but some increases should be made in the near future. It is likely also that ways will have to be devised to relieve some of the administrative officers from the details which they are now forced to carry, to the detriment of more important duties which they should perform.

The supervision of the campus and the College buildings is in charge of the Superintendent of Grounds and Buildings, who reports directly to the President. The superintendent also has supervision of the College heating plant and the workmen employed on the campus for general purposes, including janitor work in the buildings.

The College Hospital is supported by a reservation of two dollars from the incidental fee of each student. A physician and trained nurse are in constant attendance. In February and March, 1914, there were several mild cases of small pox which led to the required vaccination of all persons in the College who had not been thus protected. The hospital is rendering a most important service as indicated by its report for the last two years on the number of cases handled, which is as follows:

	1912-13	1913-14
Total number of bed cases	264	367
Total number of dispensary cases	16,401	21,311
Total	16,665	21,678

In 1912-13 there was one fatal case (typhoid), and in 1913-14 one fatal case (pneumonia).

A new hospital is urgently needed. Last year there were times when more than a score of students were obliged to remain in their boarding houses when they should have been cared for at the hospital.

The official publications of the College include the following:

Catalogue, college directory, and publications giving information in regard to the College and its courses of instruction.

Bulletins of the experiment stations.

Bulletins of the extension departments.

FINANCES.

The financial operations of the College are given in detail in the reports of the Secretary and Treasurer. The State appropriations which will be available in 1913-14 for regular teaching work at the College and for equipment, maintenance of equipment, improvements and contingent requirements are as follows:

Acts and Purposes	Educational work at Ames	Equipment, repairs, improvements, etc.
212—1—32—1907—Support	$ 135,000	
215—1—32—1907—Additional support	20,000	
212—1—32—1907—Book and periodicals		$ 2,400
212—1—32—1907—Contingent and repair		23,000
244—2—33—1909—Additional support	15,000	
244—2—33—1909—Repair, minor improvement and contingent		13,000
244—2—33—1909—Library book fund		2,500
200—3—34—1911—Additional support	25,000	
200—3—34—1911—Additional support	50,000	
200—3—34—1911—Two year Agricultural course	25,000	
228—2—35—1913—Millage tax including—		
Additional support of collegiate departments	125,000	
Repair and contingent		10,000
Maintenance and improvement of grounds		10,000
Enlargement of buildings and small additional buildings		10,000
Equipment of departments and buildings		40,000
Two and four year home economics	20,000	
Veterinary practitioners' short course	5,000	
One and two year non-collegiate courses	12,500	
Totals	$ 432,500	$ 110,900

National funds, including endowment funds, available for educational work amount to practically $85,000.00.

A one-fifth mill state tax provides a fund which is used for the construction and equipment of buildings.

It is desirable to emphasize that a large part of the appropriations made to the College are for the support of other lines of work than teaching at the College. These are referred to elsewhere. The error is frequently made of assuming that Experiment Station funds and all other money appropriated for the College are used for regular instruction work.

The administrative officers of the College and the Finance Committee of the Board have found it difficult during the past year to care for needed expenditures, and the pressure became so heavy that a few weeks before the end of the fiscal year it became necessary to revoke all Educational Support Funds which had been allotted to the different departments, but not already expended, in order that this money might be used as was most urgently demanded on account of caring for the increased enrollment of students. Similar action was taken in reference to Equipment Funds.

The financial needs are stated elsewhere. It is obvious that the College should have as much support as it is now receiving and an additional amount because of its growth. The increase of educational funds being recommended is with a view to making the teaching staff, equipment and other facilities suitable for the present demands. If this is done it is believed that the faculty will gladly take care of the additional students who come during the next biennium as has been done during the last biennium. The developments taking place in other states, including liberal funds raised by special millage taxes, offer additional reason for liberality to these educational needs in Iowa, whose young men and young women should have the best possible opportunities.

Respectfully submitted,

R. A. PEARSON,
President.

INDUSTRIAL SERVICE, INCLUDING EXPERIMENTAL AND EXTENSION WORK; RECOMMENDATIONS AND REPORTS.

LETTER OF TRANSMITTAL

IOWA STATE COLLEGE OF AGRICULTURE
AND MECHANIC ARTS.

To the Iowa State Board of Education:

Gentlemen—I have the honor to submit to you herewith recommendations for appropriations for industrial service, including experimental and extension work, at and from the Iowa State College of Agriculture and Mechanic Arts in the biennium July 1, 1915, to June 30, 1917. Also, I hand you herewith my report on such work in the biennium July 1, 1912, to June 30, 1914.

Very respectfully,

R. A. PEARSON,
President.

Ames, Iowa,
September 23, 1914.

APPROPRIATIONS RECOMMENDED FOR INDUSTRIAL SERVICE, INCLUDING EXPERIMENTAL AND EXTENSION WORK IN THE BIENNIUM JULY 1, 1915, TO JUNE 30, 1917

A. Present Appropriations to Be Continued Annually.

Note—These items are referred to in connection with list of askings for educational items provided by millage tax. Their renewal does not represent an increase, but will provide for continuation of work on the present basis.

B. Additional Maintenance for Industrial Service, Including Experimental and Extension Work Annually, Beginning July 1, 1915.

Appropriations for experiment station work, investigations, and extension work are in the interest of protection of property, discoveries and the development of the natural resources of the State. Such expenditures are returned many fold to the wealth of the State. Large sums can be used to advantage. The following items indicate some of the more pressing needs along these lines:

1. Agricultural Experiment Station.

New problems continually arise on the farms and affect the welfare of the entire State. Perhaps the greatest of these for a number of years is a new disease of the corn plant. The value of the annual corn crop of Iowa is over two hundred million dollars. Experts estimate that the value was reduced by at least ten million dollars by the mysterious corn disease or diseases which were found scattered over a considerable area of the state in the season of 1914. Another great economic problem is furnished by the ravages of the Hessian fly. Other serious problems are awaiting satisfactory solution, and vast amounts of money and values in property are at stake. Studies of such problems cannot be properly undertaken with the current funds of the experiment station and an additional appropriation of at least $50,000 could be used profitably. With this addition, the funds for agricultural experimental work in Iowa will still be less than the funds in several other states, including Illinois, Minnesota, California, Ohio, and Kentucky.

2. Engineering Experiment Station.

The efficient combustion of Iowa coal, the study of water supply and sewage disposal, the investigation of drainage, and road problems are questions needing attention, and their solution means hundreds of thousands of dollars to the state in the saving of waste and protection of health. An appropriation of at least $16,000 would permit work to be started and enlarged along the lines indicated.

3. Veterinary Investigations.

New animal diseases frequently appear. These sometimes cause enormous losses. Complications have now appeared in connection with hog cholera. Two other new and threatening animal diseases have appeared in the state, not including foot and mouth disease. Live stock worth four hundred million dollars is concerned. Fifteen thousand dollars would provide for additional experts and the investigation of live stock maladies on a more satisfactory scale.

4. Agricultural and Home Economics Extension.

During the biennum, $53,250 will become available from the United States government for extension work in agriculture and home economics, provided the state equals these appropriations, under provisions of the Smith-Lever law. The amount required, therefore, would be $26,625 each year of the biennium. The funds appropriated by the State, as well as those from the federal government, are to be administered by the State College in accordance with plans approved by both the United States government and the College. It will be necessary, however, for the State legislature to formally accept the appropriations from the United States government and the general terms of the law directing their expenditure for agriculture and home economics. Such acceptance has been given already by the Governor of the State pending action by the Legislature. Increased appropriations from nation and State also would permit increasing the valuable work being done by county experts stationed throughout the State. It would permit further extension of agricultural and home economics knowledge through the usual lines and by correspondence courses, and especially it would permit home economics work to be carried on in connection with engineering extension work already provided for.

5. Engineering Extension.

Large numbers of young men in cities and towns, as well as many young women, would be glad of an opportunity to improve themselves along engineering or trade school lines by aid of correspondence courses, similar to the work which has been carried on with great success in Wisconsin. Courses in the trades are being called for, and enough of this work has been given to prove its popularity and value. Such courses are offered at points throughout the State and are comparable with the agricultural short courses. Additional instruction is needed also in manual training for schools. An appropriation of $15,000 would make it possible to develop these useful lines of work.

6. Serum Production.

Attention is invited to the question as to whether the hog cholera serum plant should be enlarged. The law passed by the Thirty-fifth General Assembly to provide for the manufacture of hog cholera serum, also requires certain executive work in connection with serum made elsewhere; it would seem a special appropriation for this work should be made rather than to require it to be supported from income from the manufacture of serum.

REPORT ON INDUSTRIAL SERVICE WORK, INCLUDING EXPERIMENTAL AND EXTENSION WORK, IN THE BIENNIUM JULY 1, 1912, TO JUNE 30, 1914.

EXPERIMENTAL WORK.

The chief developments of the biennium in experimental work were the establishment of the new experimental farm, and the beginning of veterinary investigations, especially in reference to hog cholera, as provided for by the Thirty-fifth General Assembly.

AGRICULTURAL EXPERIMENT STATION.

That the Agricultural Experiment Station is appreciated by the people of the State is shown by their requests for advice and their urgent appeals for help when a pest or other trouble which is new and not understood presents itself. The Corn Belt Meat Producers' Association in December, 1913, passed a resolution commending the practical work done at the Experiment Station in reference to feeding and management of cattle, hogs, and sheep. And they expressed their particular interest in continuing this work to include the production cost of calves raised on Iowa's high priced land, with a view to demonstrating the possibilities of profitable beef production in this part of the corn belt and with the marked change of land values.

The newest and largest problem, apparently, that has come to the Experiment Station is a peculiar condition of corn, which indicates a disease of the corn stalk. With this affection, the corn stalks are easily broken at the joints and much of the corn is down. The disease has been found in central, western and southern Iowa. How much farther it has extended is not known. The trouble locally, generally, has been attributed to worms or windstorms, but expert investigation has convinced the farmers concerned that these causes were not responsible. It appears that the trouble may be a combination of fungous diseases. One fungus attacks the roots, causing them to become red and decomposed; another attacks the joints, breaking down the pith and causing the plant to break off. The losses due to this disease in 1914 are estimated to considerably exceed ten millions of dollars. Much careful work will have to be done in the laboratory and in the field to determine the life history of the fungi and conditions affecting them.

The importance of further studying the soil fertility problem has been strongly emphasized. This subject becomes more important each year because of the heavy losses being incurred under our system of farming. In the Mississippi Valley farmers are doing what was done in New England, New York, and other Eastern states years ago. They are decreasing their wealth of plant food. They are not putting into the soil as much as is taken out. This subject should receive far more attention than it is now getting. Attention is invited to statements concerning the importance of agricultural experiment station work and recommendations as published in the last biennial report of the Board of Education.

The following is from the reports of Director Curtiss for the two years of the biennium:

Investigations were completed and publications issued, as follows:

Agronomy: Bulletins numbers—133, Growing Winter Wheat in Iowa; 135, The Germination Test of Seed Corn; 137, Alfalfa Management in Iowa; 138, Silver King, A Corn for Northern Iowa; 150, The Fertility of Iowa Soils; 150 (popular edition.) The Fertility of Iowa Soils. Research Bulletins numbers—8, Bacteria at Different Depths in Some Typical Iowa Soils; 9, Amino Acids and Acid Amides as Sources of Ammonia in Soils; 11, Methods for Bacteriological Examination of Soils; 13, Bacteriological Studies of Field Soils III, the Effects of Barn-Yard Manure.

Dairy: Bulletins numbers—134, Bacteria and Ice Cream; 139, Creamery Organization and Construction; 140, Lacto, A Frozen Dairy Product. Research bulletins numbers—14, The specific Heat of Milk and Milk Derivatives; 15, A Bacteriological Study of Blue Milk.

Chemistry: Research Bulletins numbers—7, The Volatile Aliphatic Acids of Corn Silage; 12, Chemical Studies of Lime-Sulphur, Lead Arsenate Spray Mixture; 10, Lactic Acid in Corn Silage.

Horticulture and Forestry: Bulletins numbers—127, Spraying Practice for Orchard and Garden; 142, The Wood-Using Industries of Iowa; 144, Cold Storage for Iowa Grown Apples; 148, Effect of Potato Scab Treatment on Seed Vitality; 149, Better Methods of Potato Production for Iowa.

Agricultural Engineering: Bulletins numbers—139, Creamery Organization and Construction (in cooperation with Dairy Section); 141, Modern Silo Construction.

Animal Husbandry: Bulletins numbers—136, Forage Crops for Swine; 143, Hogging-Down Corn.

Botany: Bulletins numbers—145, The Effect of City Smoke on Vegetation; 146, Iowa Seed Analyses, 1910-1913.

Entomology: Bulletins numbers—147, the Codling Moth in Iowa.

Circulars were issued as follows:

No. 2, Liming Iowa Soils (Reprint).
No. 3, Growing Alfalfa in Iowa.
No. 4, Good Seed Corn for 1913.

No. 5, Unlawful Iowa Weeds and Their Extermination.
No. 6, Feeding Corn Silage to Farm Animals.
No. 7, Bacteria and Soil Fertility.
No. 8, Inoculation of Legumes.
No. 9, Farm Manures.
No. 10, Green Manuring and Soil Fertility.
No. 11, Smut in Small Grains.
No. 12, Soiling Crops to Supplement Iowa Pastures.
No. 13, Potatoes.
No. 14, Some Common Internal Parasites (Worms) of Hogs and Their Treatment.
No. 15, Testing Soils in Laboratory and Field.
No. 16, Care, Feed and Management of the Dairy Herd.
No. 17, Rearing Chicks Successfully.
No. 18, Iowa 403, A. New Seedling Apple.

Press Bulletins were issued as follows:
No. 33, The Variegated Cutworm.
No. 34, Soil Experiment Fields for Iowa.
No. 35, Tuberculosis in Farm Poultry.

The above publications include 1,366 pages and the total number of copies in all editions exceeded 800,000, representing about ten million printed pages for each year of the biennium.

A large amount of material, showing results of investigations completed during the biennium awaits publication, and many other investigations are in progress. A valuable line of experiments is being conducted with the United States Department of Agriculture in reference to improvments of cereal and forage crops, farm tenantry, and soil survey work. Co-operative experiments are being conducted also with many individual farmers throughout the State.

On March 1, 1914, the station came into possession of a 160-acre farm, situated about one mile south of the Dairy Farm. This tract of land will be used for field experimental work of the Farm Crops and Soils Sections. The greater portion of the farm has already been laid out in experimental plots. Forty acres will be devoted to Soils investigations and the remainder of the area will be used for various Farm Crops investigations, with special reference to cereal breeding, alfalfa growing, variety and cultural tests, etc.

The removal of the greater part of the Soils and Farm Crops field experiments from the College Farm to the new Agronomy Experiment Farm has made it possible to transfer fifteen acres of land to the Truck Crops Section. This tract will enable this section to carry on some important investigations which have been handicapped, to some extent, heretofore, by a lack of land.

During the summer of 1914, two barns on the Agronomy Experiment Farm were completely rebuilt and enlarged. An appropriation was also made for the erection of a small office and laboratory building on this farm. This structure will be used until more adequate buildings can be provided.

A thorough drainage system has been planned for the farm referred to above, and an appropriation made to install a portion of the system.

During the year extensive improvements were made on the Dairy Building. These will prove distinctly helpful from the standpoint of the work of the Dairy Section.

The new plant laboratory and greenhouses which are under construction are notable additions to the building equipment of the experiment station. The plant laboratory has a cellar, basement, ground floor, and first floor. Opening from this laboratory on the south is a range of greenhouses of modern construction, covering an area of about one-half acre. It is expected that the greenhouses will be ready for occupancy early in the fall of 1914.

In the cellar is to be installed a cold storage room for cut flowers, and six refrigeration rooms for the use of the college and experiment station work in truck crops and pomology. The basement floor includes three plant propagation laboratories. The ground floor and first floor will be used in part for laboratories for the college work and in part for experiment station laboratories and offices.

The Chemical Section has been provided with commodious quarters in the new Chemistry Building. This change in location will give this section more adequate office and laboratory facilities.

Changes in the Staff.

Comparatively few changes in the staff are to be noted for the biennium. The following resignations were accepted:

1912-13—M. L. King, Assistant Chief in Agricultural Engineering; S. L. Jodidi, Assistant Chief in Soil Chemistry; H. C. Cosgriff, Field Superintendent; H. B. Kinney, Assistant in Soils; F. N. Marcellus, Assistant Chief in Poultry Husbandry; E. J. Strausbaugh, Herdsman.

1913-14—Arthur W Griffin, Assistant Chief in Agricultural Engineering; Charles R. Forest, Field Superintendent; E. H. Kellogg, Assistant in Soil Chemistry; George S. Tilley, Assistant Chief in Dairy; W. E. Ruth, Assistant in Chemistry.

The following appointments were made:

1912-13—Arthur W. Griffin, Assistant Chief in Agricultural Engineering; Charles R. Forest, Field Superintendent; Geo. M. Turpin, Assistant Chief in Poultry Husbandry; D. B. Adams, Herdsman; W. E. Ruth, Assistant in Chemistry

1913-14—C. W. Porter, Assistant in Agricultural Engineering; R. S. Potter, Assistant in Soil Chemistry; F. B. Howe, Assistant in Soil Survey; M. E. Sar, Assistant in Soil Survey; M. E. Olson, Field Superintendent; P. L. Blumenthal, Assistant in Chemistry; George S. Tilley, Assistant Chief in Dairy.

The station staff did not lose even one chief of a division during the year. The total list of resignations from the staff is small. On the other hand, the organization has been strengthened by the addition of a Chief in Farm Management and a number of well trained assistants.

The station is in closer touch with the agricultural problems of the State than ever before. The different sections are carrying on a very large number of cooperative experiments with farmers, county agents, and other parties. This work has the endorsement of those in touch with it and it gives promise of rendering a distinct and valuable service to the crop, live stock and horticultural interests of Iowa.

During the last year of the biennium, a larger sum was expended for station bulletins and other publications than in any previous year. This increased expenditure was due to the large number of projects that were completed, and also to the exceedingly heavy demand for certain publications, which has called for reprints of several bulletins and circulars and large editions of new publications.

The station maintains high standards for its work of a strictly scientific character. But it does not overlook the fact that there are statewide problems of the utmost importance to the agriculture of the State. Therefore, the staff endeavors at all times to work with enthusiasm in each of its fields, to the end that the station may be really useful and helpful and a leader in agricultural progress.

ENGINEERING EXPERIMENT STATION.

The Engineering Experiment Station has made good progress during the biennium. The work has been completely reorganized so as to secure the maximum efficiency, approaching in this respect that of a commercial organization. A new system of conducting the work and keeping the records has been inaugurated and is showing excellent results. The staff has been improved both in numbers and in quality. The output of the Station in the way of bulletins has also been improving both in quality and quantity. The service of the Station to the State has been widely extended and is receiving better recognition than ever before. Beginning with 1913, it became possible to use the appropriation for Good Roads Experimentation for work of a laboratory and scientific character exclusively. This came about by the creation of a new State Highway Commission by the legislature, as a separate State department. In the continuation of the Good Roads Experimentation work, however, we have acted throughout in cooperation with the State Highway Commission.

The following is taken from the report of Director A. Marston for the biennium:

The Engineering Experiment Station staff consists of the following men:

One director, six professors and two associate professors, who devote only a limited portion of their time to the work, and whose duties are, to an important degree, of an administrative character, although they are expected to do as much investigational work and writing of bulletins as practicable.

The following constitute the staff for conducting most of the regular investigational and testing work of the station:

One assistant to the director, eleven-twentieths time.
One associate professor, two-fifths time.
One industrial engineer, one-half time.
Five assistant engineers, full time.
Two laboratory assistants, full time.
One laboratory instructor, one-eighth time.

Of the total salary roll, only $1,500 per year is paid to the eight men, other than the director, whose duties are largely of an administrative nature. Every effort is being made to secure the utmost amount of actual results in the way of tests and scientific investigations possible for the money available.

Engineering Experiment Station Bulletins and Investigations.

During the biennial period of 1912-1914 nine experiment station bulletins were published and widely distributed, and the manuscripts for three more were practically completed for publication. The experiment station bulletins seem to be receiving more favorable attention from residents of the State and from engineers and others outside the State than ever before. We receive calls from foreign countries for our bulletins. The Executive Committee of the American Society for Testing Materials passed a resolution thanking the station for its cooperation in connection with the publication of bulletin No. 36 on Tests of Drain Tile. Some 36 special technical investigations are at present in progress in all stages of completion.

Engineering Experiment Station Services to Iowa—1912-1914.

In addition to the completion of the technical investigations and bulletins above mentioned, a large amount of additional service was rendered to the public.

A summary of the number of commercial tests made for cities, counties, state departments, manufacturing establishments and individuals, on special request, shows 485 for 1912-13, and 717 for 1913-14. Many thousands of other tests were made in connection with the technical investigations.

The station made special tests for 15 state departments or institutions, 1912-13, and 16, 1913-14.

Seven counties were served in a similar way 1912-13, and 29, 1913-14.

Tests or analyses were made or other special services rendered for 18 cities of the State 1912-13, and 54, 1913-14.

During the two years of the biennial period the experiment station rendered special technical service on request to 112 different industrial companies of Iowa.

The increased demands for service to the public cannot be met without a corresponding increase of resources.

VETERINARY INVESTIGATIONS.

This work was organized under provisions made by the Thirty-fifth General Assembly. Dr. Kurt Schern, who has had thorough training and extensive experience in connection with the investigation of animal diseases in Germany, was appointed to take charge of this work. Unfortunately, he is now obliged to be absent on account of the European war. Considerable information concerning hemorrhagic septicemia in cattle has been secured, and other

diseases have been studied. Much time has been given to hog cholera and complications of this disease.

Dean Stange emphasizes the importance of having veterinary investigations well supported and conducted by men highly trained in the science. Persons not familiar with this work seldom appreciate the difficulties surrounding it. An appropriation sufficient to provide for additional help and equipment is recommended. Especially is it pointed out that for research work some land should be available for the care of experimental animals.

EXTENSION WORK.

By action of the Board of Education, the extension work of the College, which now relates to all of the Divisions of the College, was placed under the immediate supervision of the President. As far as possible it is carried on in coöperation with the deans and staffs of the different divisions.

AGRICULTURAL EXTENSION WORK.

(Including Home Economics, Science and Veterinary Medicine.)

During this biennium, agricultural extension work was conducted along the usual lines with important expansion which was made possible by increased appropriations. Colt shows have been organized and are proving helpful to Iowa farmers. The department cooperated in the operation of special trains in the interest of beef cattle, dairy cattle, fruit growing, and alfalfa growing. Much attention was given to hog cholera. On account of the great prevalence of the disease these years, there was an unusually large demand for information. The county adviser work has been strengthened and additional counties have organized and others are seriously considering this movement.

Near the close of the biennium, Temporary Director W. J. Kennedy resigned, and Paul C. Taff was appointed Acting Director. The following is taken from Professor Taff's report covering the two years:

The work of the Department of Agricultural Extension is firmly established in Iowa. Since the Thirty-first General Assembly of Iowa made the initial appropriation of $15,000, the demand for extension work has grown faster than funds and instructional force could supply. There is no doubt but that this demand will continue. As counties are now organizing and employing county advisers, it will mean that the method of conducting extension work will change form somewhat. This does not mean that there will be less to do on account of the county agricultural experts. On the other hand it has been found that these men need our specialists and call for them very frequently. A strong effort is being made to assist in every way possible to further county work by supporting it in the college and experiment station.

Every line of work inaugurated has grown rapidly the past few years. The following lines of work were begun before the period covered by this report: Animal Husbandry, Farm Crops, Soils, Home Economics, Horticulture, Dairy and Schools. Since then, six new lines of work have been added: Veterinary Medicine, Agricultural Engineering, Dairy Manufactures, Truck Crops, Agricultural Economics, and Agricultural Education.

Agricultural Extension work will be assisted greatly through the help of the funds made available under the Smith-Lever act of the National Congress. It will be necessary for the State to appropriate an equal amount to any above the $10,000 which is given unconditionally.

In the short courses held during the biennial period ending June 30, 1914, there were enrolled 48,360 persons. The department assisted in Farmers' Institutes attended by 52,291 persons, and speakers addressed picnics and other meetings attended by more than half a million people. The data for the two years are given as follows:

	1912-13	1913-14
Attendance at short courses	21,885	26,475
Attendance at institutes	22,600	29,691
Attendance at other meetings (estimated)	300,000	400,000
Number of short courses held	99	140

The additional means the department has of reaching and instructing the people other than in meetings are numerous. Publications are becoming a large factor in disseminating information. The farming class as a rule is reading much more than formerly. A large number of bulletins, circulars and pamphlets has been published. Correspondence also has carried out an immense amount of information.

The dairy interests of Iowa are receiving much help from the ten cow test associations now in operation, and the data being collected will prove most valuable not only to those in the immediate vicinity where the work is being done, but to all dairymen. The questions of feeds and care will be much better understood after this material is finally assembled.

Home Economics courses are proving especially popular. The staff of extension workers in this line should be given great credit for the careful and systematic manner in which they have organized their work. A plan in use in this division probably could be well adopted in other lines of work, namely, using leaflets and pamphlets as a means of follow-up work. About twelve circulars for each year's course have been prepared, covering all subjects taught. These are distributed as the subjects are taken up in the class room. This leaves information with the people in written form instead of asking audiences to depend entirely upon their memory. Other departments are being urged to adopt this method. The work of the Home Economics Division is undoubtedly destined to continue to grow rapidly in this State.

The figures given above do not show the full number of people reached, as those visiting our traveling educational exhibits are not shown. Three different sets of exhibits have been made up and sent to county and district fairs. Each exhibit reaches about six fairs each season. An exhibit is also made at the State Fair each year. Short course exhibit cars are also sent along with the corps of workers. In each case a man who is capable of answering questions and explaining the material has charge of the exhibits. It is estimated that 100,000 people have profited from these exhibits.

There is a growing tendency in favor of teaching by demonstration instead of the purely lecture method. This is evidenced in the growth of the county agent movement. The agent is largely a demonstrator, and the chief demand is for demonstration fields, spraying and pruning demonstrations, cow test associations, etc. There is no question but that this is a development in the right direction. It is urged that work be developed in this direction as much as possible.

The U. S. Department of Agriculture has been liberal with support, both financial and otherwise. Cooperation has been established in the county agent work, boys' and girls' club demonstrations, and the eradication of hog cholera under their Project A. National assistance for the coming year has been promised, with additional help. With the Smith-Lever act in full operation, and the above work continued, the federal government will be a large factor in extension work.

The success of extension work depends largely upon the working staff. It would be only proper to say that members of our staff have been loyal and active in their respective lines and that they should have the credit for any success achieved. That they are loyal is proven by the fact that though the department has experienced a most important change, not a member of the staff of over thirty workers has resigned in the past nine months, though several have received attractive inducements.

Some of the new lines of work which are under consideration and which should be developed as rapidly as possible, are: Correspondence courses, entomology, rural architecture and landscape gardening, rural social welfare, farm management, and botany.

Special attention is called to the provisions of the Federal Act known as the Smith-Lever Law, which provides for payments from the national treasury to the various states for extension work in agriculture and home economics. Under this law, Iowa is now receiving $10,000 per year. By action of the Governor, the funds are paid to the Iowa State College of Agriculture and Mechanic Arts. This action holds until the Legislature has opportunity to act. The bill provides for further payments to the different states, provided such payments are duplicated by the states for the same purpose.

The amount available for this State will be $18,794 in the year 1915-16, and $34,456 in the year 1916-17. It is recommended that funds amounting to this total, or $26,625 for each year in the biennium, be provided so that the federal funds will become available, and that the entire amount be administered at the State College in furtherance of extension work in agriculture and home economics already under way.

ENGINEERING EXTENSION.

This useful line of work is being developed with the aid of successful experience in other States. It promises to be of great value to a large number of people. Dean Marston is temporarily assisting the President in organizing and supervising this work. He reports as follows:

In accordance with an act of the Thirty-fifth General Assembly, the Engineering Extension Department was organized in the summer of 1913. Professor K. G. Smith, formerly of Wisconsin, was placed in charge. His experience and other qualifications have enabled him to organize and develop this work with great success.

A strong staff of six men gives full time to the work, besides an Industrial Engineer who divides his time between station and extension work in connection with the Technical Service Bureau. Eight instructors devote part time to the work at the College. Another eight men have been employed on part time as local instructors of evening classes in various cities of the State.

During the winter of 1913-14 we inaugurated a new development in extension work by conducting Automobile Institutes in 27 cities of the State for the instruction of owners and users of cars. Local organizations bore part of the cost. About 3,000 persons received the instruction. Large as this number seems, especially for the first attempt ever made at such work, it constitutes only 3% of the automobile owners of Iowa. Probably $100,000,000 is invested in automobiles in this State. Our work in this line should be continued and extended.

Probably the most important part of the engineering extension work consists in the development of correspondence study, in cooperation with personal supervision from traveling instructors and local evening and day classes, under part time resident instructors. By this work every mechanic in the State is being afforded an opportunity to secure technical education training at home and at nominal expense, while continuing to earn his living at his trade.

We have conducted classes in six different cities the first year under eight different local instructors. The work is done in cooperation with the public schools, the Y. M. C. A.'s, the Commercial Clubs, the factory owners and other employers, and the labor organizations. The difficulty and cost of organizing, maintaining and conducting this work are great, but not too great in view of its importance. Two hundred and fifty students were enrolled for correspondence and class study courses the first year.

Manual training is another subject in which the engineering extension department has rendered an important service to the rural teachers and

to the boys of the State. The work is in close cooperation with the Agricultural Extension Department, and has occupied much of the time of one man.

Technical lectures have been given in a number of different cities. The new Technical Service Bureau will undoubtedly render great service this coming year to the cities, counties and factories of Iowa.

It is estimated that the Engineering Extension Department has rendered direct service of the various classes described to nearly 19,000 persons in Iowa in the first year of its work, without counting those reached in the manual training work.

Attention is called to the fact that the appropriation expires with 1915. It will not be repeated for next year unless the legislature takes action.

HOG CHOLERA SERUM.

The last General Assembly made an appropriation of $35,000 to provide for the production of biological products, especially hog cholera serum, and the distribution of this product and virus. The same law and appropriation cover the careful supervision of plants within the State which are making and distributing these latter products. Records are available to show that the serum and virus distributed from the new plant at Iowa State College during the past season have effected a saving of not less than $3,000,000 to the State. There was already a heavy demand for reliable serum and virus when the law became effective, and temporary quarters were provided so that the work might start as promptly as possible. Permanent buildings are now in use, representing an expenditure of about $20,000, and stock and cash on hand represent a value in excess of the balance of the original appropriation. Thus, on short notice, the plant could be closed and the entire value of the plant could be recovered by the State.

Permits to use virus have been issued to more than 1,200 veterinarians and farmers. These permits, under the law, are given only to farmers who wish to use the virus in their own herds or to practicing veterinarians who are deemed competent. Most of the persons holding permits visited the laboratory and received instruction before being authorized to use virus.

Fifty-nine permits have been issued to commercial concerns selling serum and virus within the State. Four of these permits have been revoked on account of serum not meeting the required standard. Seven applications for permits to sell serum and virus have been refused. Very great care has been taken in connection with authorizing distribution and use of virus.

With the aid of the Agricultural Extension Department much educational work has been done in all parts of the State. Four veterinarians are engaged constantly in this work and their efforts have been liberally supplemented from time to time.

It is worthy of note that, owing to the limitation of the State funds and the need of getting the work started rapidly, over $12,000 was advanced by private individuals and concerns, including several banks, so that a larger quantity of serum could be manufactured and placed in storage last winter awaiting a heavy demand which was expected to come, and did come, early in the summer season.

Director Stange reports that altogether practically 10,000,000 cubic centimeters of serum have been produced, and that 4,714 herds have been treated, with the showing that in healthy herds only 2.8% of the hogs died after treatment with serum alone, which is considered a remarkably good showing. With the simultaneous treatment, the loss was only 2.2%. Elsewhere the corresponding loss has been reported as high as 8%. Often the treatment is not applied until a considerable portion of the hogs are sick, but even in such cases the records show favorable results. Where serum alone was used the loss after treatment was 29%, and where the simultaneous treatment was used the loss in diseased herds was 11%. In both cases the percentage of sick hogs in the herds was higher than the percentage of deaths after treatment. The simultaneous treatment is used in the majority of cases, and reports show that in 76% of the herds having this treatment there was not a single loss.

Great care has been exercised by Director Stange in organizing this work. Dr. C. G. Cole, who had been engaged in the manufacture of serum for the United States Government, was placed in direct charge.

FINANCES

The finances of the industrial service work performed at and from the College are reported by the Secretary and Treasurer. The amounts available from State appropriations for industrial service work, including experiment and extension work, during the year 1914-15 are as follows:

Acts and Purposes	Amount
212-1-32-1907—Experiment Station Support	$ 25,000
216-2-32-1907—Agricultural Extension	27,000
212-1-32-1907—Engineering Experiment Station	3,500
212-1-32-1907—Good Roads Experimentation	5,000
244-2-33-1909—Engineering Experiment Station	1,500
200-3-34-1911—Agricultural Experiment Station	15,000
200-3-34-1911—Agricultural Experiment Station	15,000
200-3-34-1911—Agricultural Extension	5,000
200-3-34-1911—Agricultural Extension	10,000
200-3-34-1911—Engineering Experiment Station	5,000
200-3-34-1911—Good Roads Experimentation	5,000
228-2-35-1913—Engineering Experiment Station	5,000
228-2-35-1913—Engineering Extension	25,000
228-2-35-1913—Veterinary Investigations	10,000
228-2-35-1913—Agricultural Extension	48,000
228-2-35-1913—Agricultural Experiment Station	57,000
	$262,000

These appropriations support the different branches of work as follows:

Agricultural Experiment Station	$112,000
Engineering	25,000
Veterinary Investigations	10,000
Agricultural Extension	90,000
Engineering Extension	25,000
	$262,000

The appropriation to establish a hog cholera serum plant was $35,000.

The federal government appropriates $30,000 for agricultural experiment station work and $10,000 for agricultural extension.

The need of funds for the continuance and development of industrial service work is referred to on previous pages.

Respectfully submitted,

R. A. PEARSON,

President.

BIENNIAL REPORT

OF THE SECRETARY OF THE IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS, TO THE IOWA STATE BOARD OF EDUCATION FOR THE BIENNIUM 1912-1914

As the College has grown into new lines of work, its financial operations have widened and its accounting system has become more and more complex. It is aimed, however, in this report to take account of this added work, and, at the same time, so connect this report with previous ones as to make them, taken together, constitute a continuous and logical history of college finances. The report will deal with the following funds:

Collegiate Support fund.
Non-Collegiate Support funds.
Student Fees.
Extension Work.
Experiment funds.
Building and Improvement funds.
Hog Cholera Serum fund.

It will give in condensed form the receipts and expenditures of each fund, the balances at the beginning and close of the biennial period, the funds available for the present year and the purposes to which they have been appropriated by the Board of Education and the finance committee.

As preliminary to such exhibit a summary of the inventory of College property is given.

COLLEGE PROPERTY.

An inventory clerk is employed who takes account of the inventoried property at the beginning of each year, the purchases and sales made during the year, and the property on hand at the close of the year. The following is a summary of the inventory at the end of the biennial period, June 30, 1914.

SUMMARY OF INVENTORY.

REAL ESTATE:		
Farm proper, 660.38 acres at $150	$ 99,057.00	
Dairy Farm, 200 acres at $150	30,000.00	
Experiment Station Grounds, 60 acres at $150	9,000.00	
Plot for Horticultural Experiments, 13 acres at $150	1,950.00	
Orchard and Arboretum, 25 acres at $150	3,750.00	
Horticulture and Forestry, 55.50 acres at $125	6,937.50	
College Campus, 125 acres at $175	21,875.00	
College Park, 37 acres at $125	4,625.00	
Experimental Farm 163 acres at $195	31,785.00	
Total for 1,338.88 acres		$ 208,979.50
BUILDINGS:		
Agricultural Hall	$ 340,000.00	
Agricultural Engineering	105,000.00	
Barn, Cattle	10,000.00	
Barn, Experiment Station	17,100.00	
Barn, Horse	8,000.00	
Barn, Horticultural	5,500.00	
Barn, Sheep	1,000.00	
Book Store	2,250.00	
Carpenter Shop and Store Room	2,500.00	
Central	381,425.00	
Central Heating Plant	57,202.98	
Ceramics	15,000.00	
Chemistry (uncompleted)	116,073.38	
Chemistry, Emergency	4,040.42	
Dairy	60,000.00	
Dairy Farm Barns	15,750.00	
Dairy Farm House	2,250.00	
Engineering Hall	195,000.00	
Engineering Annex	35,750.00	
Fire Department	150.00	
Forge Shop	4,500.00	
Foundry	4,500.00	
Greenhouse	18,000.00	
Gymnasium	150,000.00	
Hog House	1,500.00	
Hog Houses, movable	500.00	
Home Economics	75,000.00	
Horticultural Laboratory	8,000.00	
Hospital	7,500.00	
Hospital Annex	1,000.00	
Machine Shop	18,000.00	
Margaret Hall	50,000.00	
Margaret Hall Annex	5,600.00	
Mechanical Laboratory	50,000.00	
Morrill Hall	35,000.00	
Music Hall	5,000.00	
Office Building	6,000.00	
Pattern Shop	6,000.00	
Pavilion No. 1 (old wooden)	4,000.00	
Pavilion No. 2	12,000.00	
Pavilion No. 3	13,500.00	
Poultry Farm Buildings	5,250.00	
Serum Plant	11,821.02	
Serum Plant Sheds	1,781.05	
Shed, Farm Crops Tool	450.00	
Sheds, Feeding	2,250.00	
Shed in Field	250.00	
Structural and Hydraulic Laboratory	25,000.00	
Tower for Chimes	6,650.00	
Transportation Building	50,000.00	
Veterinary Hospital	150,000.00	
RESIDENCES OCCUPIED BY:		
President Pearson	$ 12,000.00	
Professor Beach	5,250.00	
Professor Curtiss	5,000.00	
Professor Marston	5,250.00	
Professor Meeker	2,000.00	
Professor Mortensen	2,250.00	
Professor Noble	2,750.00	
Professor Stanton	6,000.00	
Professor Summers	2,000.00	
Superintendent Sloss	6,500.00	

Boarding Club	500.00	
Experiment Station Foreman	1,200.00	
Farm Foreman	1,800.00	
Farm Laborer	700.00	
Herdsman	1,200.00	
Public Grounds Residence	1,800.00	
Total buildings		$ 2,159,243.85
GENERAL EQUIPMENT:		
Waterworks, including water tower, deep well, pumping machinery, reservoir, fire pump and piping system	$ 52,393.64	
Old Power Plant, including pump and two boilers	2,500.00	
Heating station, including two 250 H. P. boilers and four 500 H. P. boilers, with mechanical stokers and induced draft apparatus, one 250 H. P. Corliss engine, directly connected with generator, three boiler feed pumps, feed water heater and piping system, coal and ash handling machinery, air compressor and other power plant apparatus	68,258.98	
Electric light, including switchboard appliances, pole line and transformers	14,190.19	
Heating tunnel, complete with steam and return main	69,878.01	
Sewage system	13,500.00	
Sewage disposal system	3,700.00	
Fire department	1,000.00	
Gas mains	1,750.00	
Total general equipment		$ 227,170.82
EQUIPMENT OF COLLEGE DEPARTMENTS.		
Agricultural dean's office	$ 362.75	
Agricultural dean's office (trophies)	3,575.00	
Agricultural education	59.00	
Agricultural engineering	8,236.11	
Agricultural extension	5,078.56	
Agricultural journalism	336.00	
Animal husbandry	925.00	
Bacteriology	4,591.89	
Botany	30,174.47	
Carpenter shop	350.00	
Chemistry	8,302.73	
Chimes and clock	9,000.00	
Civil engineering	14,321.83	
Dairy	7,110.97	
Dairy farm, livestock	22,486.00	
Dairy farm, other equipment	821.75	
Economics	100.00	
Electrical engineering	17,716.56	
Engineering dean	1,065.10	
Engineering extension	390.24	
English	75.00	
Farm, livestock	30,584.00	
Farm, other equipment	2,038.70	
Farm crops	1,250.00	
Good roads	5,273.19	
History	547.74	
Home Economics	4,099.34	
Horticulture and forestry	4,300.21	
Hospital	1,093.32	
Library, books and pamphlets	143,110.00	
Library	173.00	
Mathematics	126.00	
Mechanical engineering	43,314.73	
Military	455.64	
Music	2,128.45	
Mining engineering	14,090.94	
Photography	40.70	
Physical culture	894.10	
Physical training	6,261.15	
Physics	18,514.91	
Pipe organ	2,000.00	
Poultry, livestock	625.35	
Poultry, other equipment	1,579.60	
President's office	693.65	
Public grounds	1,800.00	
Public speaking	42.58	
Purchasing	121.00	
Secretary's office and Junior Dean	486.07	
Serum	3,734.89	

Soils	4,500.01	
Superintendent's office	163.25	
Superintendent (electrican)	125.00	
Superintendent (plumber)	300.00	
Superintendent (tools in store room)	225.00	
Superintendent (tools at heating plant)	225.00	
Treasurer and registrar	1,296.23	
Veterinary anatomy, specimens	7,178.80	
Veterinary anatomy	4,602.84	
Veterinary dean	3,384.50	
Veterinary investigation	1,947.14	
Veterinary pathology	4,946.69	
Veterinary physiology	1,720.91	
Veterinary surgery	5,848.98	
Zoology	22,525.40	
Total department equipment		$ 483,747.97

EQUIPMENT OF EXPERIMENT STATION:

Agricultural engineering	$ 1,044.09	
Animal husbandry, livestock	5,313.00	
Animal husbandry, other equipment	2,800.25	
Botany	1,075.83	
Bulletin	280.00	
Chemistry	5,195.52	
Dairy	969.60	
Dairy farm, livestock	901.00	
Dairy farm, other equipment	104.20	
Engineering experiment station	4,384.60	
Entomology	1,328.16	
Farm crops	2,416.65	
Horticulture and forestry	1,901.41	
Photo	1,929.40	
Poultry, livestock	226.45	
Poultry, other equipment	1,044.88	
Soils	4,833.23	
Veterinary	133.00	
Total station equipment		$ 35,881.27

EQUIPMENT OF TWO-YEAR COURSES:

Agricultural engineering	$ 1,010.59	
Agronomy	342.99	
Animal husbandry	233.48	
Dairy	354.30	
English	60.00	
Horticulture, bacteriology and botany	1,972.36	
Home economics	343.80	
Total for two-year equipment		$ 4,317.52

FURNITURE—COLLEGE DEPARTMENTS:

Agricultural assembly and general furniture	$ 3,316.87	
Agricultural dean's office	1,294.50	
Agricultural education	703.68	
Agricultural engineering	3,786.53	
Agricultural extension	2,062.49	
Agricultural journalism	1,139.91	
Agricultural library	989.37	
Animal husbandry	4,945.06	
Bacteriology	3,555.32	
Botany	6,066.29	
Chapel	75.00	
Chemistry	729.51	
Civil engineering	7,989.02	
Dairy	4,899.14	
Dairy farm	69.75	
Economics	1,114.17	
Electrical engineering	1,713.06	
Engineering extension	378.63	
Engineering hall general furniture	4,402.56	
English	3,835.39	
Farm	78.50	
Farm crops, including furniture in pavilion	12,205.24	
Good roads	381.00	
History and psychology	1,349.64	
Home economics	6,106.07	
Horticulture and forestry	6,346.28	
Hospital	722.75	

Inventory	35.00	
Library	1,423.00	
Margaret hall	3,706.20	
Margaret hall annex	1,047.53	
Mathematics	2,552.68	
Mechanical engineering	5,983.55	
Military	20.00	
Mining engineering	7,985.12	
Modern language	1,177.81	
Music	316.14	
Photography	32.99	
Physical culture	157.70	
Physical training	2,353.54	
Physics	5,311.40	
Poultry	67.50	
President's office	1,567.15	
President's residence	1,100.43	
Public speaking	936.63	
Secretary and junior dean's office	2,432.64	
Serum	484.80	
Soils	6,816.63	
Superintendent's office	350.00	
Superintendent (heating plant)	10.00	
Superintendent (carpenter shop)	12.00	
Treasurer's office	5,324.53	
Veterinary anatomy	2,439.45	
Veterinary dean	3,063.80	
Veterinary investigation	99.30	
Veterinary pathology	2,323.13	
Veterinary physiology	1,504.67	
Veterinary surgery	546.75	
Zoology	2,389.15	
Total department furniture		$ 143,826.95

FURNITURE—EXPERIMENT STATION:

Agricultural engineering	$ 66.35	
Chemistry	2,393.55	
Entomology	631.29	
Engineering experiment station	287.25	
Farm crops	814.50	
Horticulture and forestry	143.31	
Photo	372.75	
Poultry	70.42	
Soils	109.24	
Total station furniture		$ 4,888.66

FURNITURE—TWO-YEAR COURSES:

Agricultural engineering	$ 402.58	
Agronomy	502.46	
Animal husbandry	265.47	
Dairy	73.38	
English	427.27	
Horticulture, bacteriology and botany	1,268.73	
Home economics	224.28	
Total two-year furniture		$ 3,164.17

SUPPLIES—COLLEGE DEPARTMENTS:

Agricultural dean	$ 114.10	
Agricultural engineering	573.13	
Agricultural extension	3,658.66	
Animal husbandry	1,592.06	
Bacteriology	1,496.52	
Botany	1,266.82	
Chemistry	8,363.66	
Civil engineering	153.45	
Dairy	842.91	
Dairy farm	712.99	
Electrical engineering	853.03	
Engineering dean	55.85	
Engineering extension	213.70	
Farm	4,615.45	
Farm crops	313.20	
Home economics	1,138.69	
Horticulture and forestry	491.15	
Hospital	409.30	
Inventory	41.20	

Junior dean	182.18	
Mathematics	56.42	
Mechanical engineering	5,859.80	
Mining engineering	572.10	
Physical culture	100.00	
Physics	5,277.02	
Poultry	282.90	
President's office	129.11	
Secretary's office	112.47	
Serum, including serum on hand July 1	27,925.53	
Soils	4,481.94	
Veterinary anatomy	168.13	
Veterinary pathology	907.20	
Veterinary physiology	833.64	
Veterinary surgery	266.59	
Zoology	2,095.31	
Total department supplies		$ 76,161.51
SUPPLIES—EXPERIMENT STATION:		
Agricultural engineering	$ 171.77	
Animal husbandry	2,646.04	
Botany	125.65	
Chemistry	1,774.43	
Dairy	698.43	
Dairy farm	356.32	
Engineering experiment station	1,284.05	
Entomology	129.46	
Farm crops	151.35	
Horticulture and forestry	342.63	
Photo	955.60	
Poultry	74.17	
Soils	2,148.73	
Total station supplies		$ 10,858.64
SUPPLIES—TWO-YEAR COURSES:		
Agricultural engineering	$ 22.25	
Animal husbandry	307.23	
Agronomy	580.33	
Horticulture, bacteriology and botany	610.41	
Total two-year supplies		$ 1,520.22
Total college property		$ 3,359,761.08

RECEIPTS FOR THE BIENNIAL PERIOD.

The following are the receipts on account of the different funds during the past two years, and the sources from which they were derived:

I. COLLEGIATE SUPPORT FUNDS.

	1912-13	1913-14
From National Government:		
Interest on endowment fund	$ 35,486.20	$ 35,191.86
Morrill funds	50,000.00	50,000.00
From State:		
Annual appropriations, permanent	245,000.00	245,000.00
Two-year millage tax—		
⅞ of annual amount set aside for college departments	----------	75,000.00
⅞ of amount set aside for college work in home economics	----------	9,000.00
Special appropriation for college departments	----------	20,000.00
Annual appropriation for library, permanent	4,900.00	4,900.00
From Miscellaneous Sources:		
Tuition charged students from outside the state	9,460.00	11,867.50
Scholarship funds	1,410.00	1,325.00
Clay fund for support of agricultural journalism	1,000.00	1,000.00
Interest on treasurer's balances	3,676.34	2,946.64
Cancelled checks	46.28	101.10
Totals	$ 350,978.82	$ 456,332.10

II. NON-COLLEGIATE SUPPORT FUNDS.

	1912-13	1913-14
Agriculture:		
Annual appropriation, permanent	$ 25,000.00	$ 25,000.00
⅞ of annual amount set aside from two-year millage tax	----------	4,500.00
Portion of special appropriation set aside for this work	----------	2,400.00
Home Economics:		
⅞ of annual amount set aside from two-year millage tax for this department	----------	6,000.00
Amount of special appropriation devoted to this work	----------	1,600.00
Engineering:		
Amount of legislative appropriation and two-year millage tax assigned to trade school work at the college	----------	6,500.00
Veterinary Science:		
⅞ of annual amount set aside from two-year millage tax for practitioner's course	----------	3,000.00
Totals	$ 25,000.00	$ 49,000.00

III. STUDENT FEES.

All Courses:		
Incidental fees	$ 22,309.95	$ 31,730.24
Students' repair fund	----------	2,000.00
Hospital	5,071.50	8,176.00
Music (including rental of pianos)	194.50	229.55
Physical culture	352.60	612.50
Physical training	321.00	2,871.20
Reclassification (credited to F. L. & I.)	72.00	184.00
Organ practice (credited to F. L. & I.)	38.50	3.50
Four-Year Courses:		
Agricultural engineering	2,095.00	2,981.80
Animal husbandry	3,531.45	4,021.67
Bacteriology	841.50	1,048.05
Botany	1,837.50	2,804.55
Chemistry	11,511.09	15,321.93
Civil engineering	1,002.35	407.00
Dairy	2,054.50	2,657.40
Diploma (credited to registrar's office)	1,330.00	1,364.00
Electrical engineering	414.00	426.00
English	270.25	964.25
Farm crops	2,128.40	2,174.87
Home economics	2,572.25	3,827.68
Horticulture	424.22	456.50
Forestry	23.00	117.00
Mechanical engineering	2,547.23	2,733.98
Mining engineering	32.00	10.00
Physics	1,482.25	1,021.00
Special examinations (credited to library)	539.50	442.25
Special students	292.00	85.00
Soils	1,434.45	1,694.25
Summer school	769.85	1,213.25
Short course in engineering	----------	247.50
Veterinary department	1,068.50	----------
Anatomy	----------	442.00
Pathology	----------	265.00
Physiology	----------	46.00
Surgery and obstetrics	----------	164.00
Zoology	1,023.35	1,092.40
Photography	----------	72.00
Poultry	----------	183.00
Two-Year Courses:		
Agriculture—		
Agronomy	477.50	659.14
Agricultural engineering	721.36	811.10
Animal husbandry	994.25	1,096.04
Botany and horticulture	518.65	665.54
Dairy	476.25	902.61
Home economics	----------	178.00
Engineering—		
Trade school at college	----------	199.27
Engineering correspondence fees	----------	973.30
Totals	$ 80,753.70	$ 98,917.22

IV. EXTENSION WORK.

	1912-13	1913-14
Agriculture:		
Annual appropriation, permanent	$ 50,000.00	$ 42,000.00
Special appropriation		7,000.00
⅓ of annual amount set aside from two-year millage tax for this purpose		28,800.00
Totals agricultural extension	$ 50,000.00	$ 77,800.00
Engineering:		
Special appropriation		10,000.00
Millage tax ($15,000 less $6,500 set aside for two-year trade school work)		8,500.00
Totals	$ 50,000.00	$ 96,300.00

V. EXPERIMENT FUNDS.

Agricultural Experiment Station:		
From National Government—		
Hatch act	$ 15,000.00	$ 15,000.00
Adams act	15,000.00	15,000.00
From State—		
Annual appropriation, permanent	55,000.00	55,000.00
⅓ of annual apportionment from two-year millage tax		34,200.00
Special appropriation		10,000.00
Totals agricultural experiment station	$ 85,000.00	$ 129,200.00
Engineering Experiment Station:		
From State—		
Annual appropriation, permanent	$ 10,000.00	$ 10,000.00
⅓ of annual apportionment from two-year millage tax		3,000.00
Good Roads Experimentation:		
From State—		
Annual appropriation, permanent	10,000.00	10,000.00
Veterinary Investigations:		
From State—		
⅓ of annual apportionment from two-year millage tax		6,000.00
Special appropriation		2,000.00
Horse Breeding Experiment	300.00	1,564.19
Totals	$ 105,300.00	$ 162,764.19

VI. BUILDING AND EQUIPMENT FUNDS.

From State—Drawn from State Treasury—		
Repair and Contingent—		
Annual appropriation	$ 36,000.00	$ 36,000.00
Special appropriation		8,000.00
Millage tax apportionment		6,000.00
Special Building Tax	101,433.44	206,453.27
Chemistry building and equipment	10,272.24	56,298.90
Additional department equipment	20,230.64	12,269.36
Public grounds improvement	1,893.85	4,878.15
Heating plant	38,200.00	16,994.28
Equipment of buildings and departments		2,468.31
Totals from state	$ 218,030.17	$ 350,969.27
From Student and Others (credited to Room Rent account)—		
Rental of rooms	$ 2,865.91	$ 4,497.14
Sale of wreckage	153.27	43.36
Rental of residence lot	1.00	1.00

	1912-13	1913-14
Net receipts of superintendent's store-room	814.64	
Sale of old furniture		83.22
Totals	$ 221,864.99	$ 354,895.99

VII. HOG CHOLERA SERUM FUND.

From State—		
Special appropriation	$ 2,520.39	$ 32,479.61

SUMMARY OF RECEIPTS.

		1912-13	1913-14
I.	Collegiate support funds	$ 350,978.82	$ 456,332.10
II.	Non-collegiate support funds	25,000.00	49,000.00
III.	Student fees	80,753.79	98,917.32
IV.	Extension work funds	50,000.00	96,300.00
V.	Experiment funds	105,300.00	162,764.19
VI.	Building and improvement funds	221,864.99	354,895.99
VII.	Hog cholera serum fund	2,520.39	32,479.61
	Totals	$ 836,477.90	$ 1,250,687.21

The foregoing exhibit does not include refunds, nor department sales. These are omitted for they constitute no part of the real income of the college. Tuition and fees returned to the student are not available to meet department expenses; and receipts from products sold are, in general, fully offset by their cost of production. These refunds and sales are, therefore, stricken out of both sides of the account. They total as follows for the biennial period:

	1912-13	1913-14
Refunds	$ 5,412.32	$ 6,656.61
Sales	90,918.56	234,582.34
	$ 96,330.88	$ 241,238.95

These amounts will need to be added to the receipts and expenditures as shown by this report, in order to make the totals agree with those of the treasurer.

The following are the sales by departments:

SALES.

	1912-13	1913-14
Agricultural engineering	$ 1,461.09	$ 861.68
Animal husbandry	72.50	317.15
Bacteriology	97.94	12.91
Botany	2.75	
Chemistry	619.53	997.05
Civil engineering	141.30	
Dairy	34,060.08	28,995.23
Dairy farm	4,834.92	5,196.45
Farm	10,489.52	13,214.62
Farm crops	81.67	86.64
Fires, lights and incidentals	6,143.18	5,999.54
Home economics	4.28	25.22
Horticulture	1,854.44	2,735.09
Hospital	668.64	1,279.46
Janitor fund		16.02
Library	53.60	64.07
Mechanical engineering	693.66	696.08
Military		54.00
Mining engineering	48.60	7.99
Pathology		23.05
Physical culture		12.00
Physical training		21.85
Physics		2.50
Poultry	552.59	825.26
Printing		521.79
Public grounds	38.50	92.82
Publicity		20.10
Surgery		2,281.30
Veterinary	2,368.43	5.76
Zoology		57.85
Total sales for departments	$ 64,287.37	$ 64,335.87
Agricultural experiment station	16,077.86	15,028.01
Engineering experiment station	943.25	1,582.64
Agricultural extension	579.98	761.43
Serum fund	2,779.06	142,267.01
Store room	6,250.44	10,602.89
Two-year agriculture		3.49
Total sales	$ 90,918.56	$ 234,582.34

It will be noticed that these sales are made up, in large part, of the products of the farm, creamery and serum plant, together with transfers from the store room.

EXPENDITURES DURING THE BIENNIAL PERIOD

The expenditures during the biennial period, omitting the refunds, transfers, and that portion of the cost of department products covered by sales, as already explained, total as follows:

	1912-13	1913-14
College educational work	$ 429,811.07	$ 550,206.61
Non-collegiate educational work	27,849.08	46,540.32
Extension work	50,424.68	87,844.40
Experimentation	112,785.47	166,667.42
Buildings, improvements and equipment	229,239.68	359,486.68
Hog cholera serum department	2,520.39	10,699.87
Totals	$ 852,630.37	$ 1,221,445.30

These expenditures represent the cost of running the institution in the various divisions of its work, and repairing, enlarging and improving its plant. The permanent additions to its assets, made during the last two years, as shown by the increase in the college inventory, aggregate $587,270.86. All these expenditures are made in accordance with carefully prepared annual budgets. The heads of the different departments present their department needs in detail to the President of the College. These are considered by the Deans, the President, the committees of the Board of Education and finally by the Board itself. The askings which are the most necessary and urgent are allowed in so far as the funds available will permit. A reasonable amount is reserved in each fund as a working balance, and to meet emergencies. This balance varies during the year, but is kept large enough at all times to fully protect the institution against financial embarrassment.

In the exhibits of expenditures, the amount paid from fees, and the amount charged to the Support Fund are put in separate columns in order that the cost of the different lines of work to the state and nation may be readily seen. The fees are paid by students. They cover expenditures for laboratory material used by them, and in part the cost of supplying heat, light and janitor service for the laboratories and recitation rooms.

The following exhibit shows somewhat in detail the expenditures on account of the regular educational work of the College:

I. COLLEGE EDUCATIONAL WORK.

EXPENDITURES.

For What Purpose	1912-1913 From Fees	1912-1913 From Support Fund	1913-1914 From Fees	1913-1914 From Support Fund
I. Salaries:				
Professors, associate professors and assistant professors, and administrative officers		$163,130.71		$ 212,491.98
Instructors and assistants		63,359.56		82,109.90
II. Department expenses and equipment:				
Agricultural education		853.50		1,164.19
Agricultural engineering	$ 2,095.00	1,456.53	$ 2,981.80	2,077.19
Agricultural journalism		1,437.82		1,779.14
Animal husbandry	3,531.45	1,816.36	4,021.67	5,045.04
Bacteriology	841.50	758.54	1,117.35	2,007.61
Botany	1,837.50	1,229.02	2,804.55	1,178.57
Chemistry	11,304.35		15,321.93	5,275.08
Civil engineering	1,002.35	2,085.28	407.00	2,001.56
Dairy	2,054.50	960.54	2,657.40	1,891.24
Dairy farm		1,659.70		1,526.05
Economic science		483.78		765.77
Electrical engineering	414.00	1,347.25	426.00	1,517.89
Engineering short course			247.50	299.65
English	270.25	312.47	364.25	602.02
Farm		3,526.80		2,628.91
Farm crops	2,128.40	1,329.22	2,174.87	1,120.32
Forestry	23.00	1,057.46	117.00	1,214.21
History		170.62		464.63
Home economics	2,572.25	1,314.50	3,827.68	3,681.16
Horticulture	424.22	2,878.35	456.50	2,766.86
Hospital	3,762.48		3,607.14	
Library (general)	520.50	930.55	442.25	1,306.94
Library (books and periodicals)		5,028.98		5,209.77
Mathematics		151.85		171.61
Mechanical engineering	2,547.23	3,479.10	2,733.98	2,132.42
Military		534.39		705.72
Mining engineering	32.00	2,096.05	10.00	1,500.19
Modern languages		62.38		69.92
Music (including piano rentals)	194.50	39.79	239.55	127.68
Photography			72.00	115.97
Physical culture	352.60	55.51	445.68	
Physical training	321.00	772.17	2,871.20	1,714.37
Physics	1,482.25	1,131.61	1,021.00	1,751.48
Poultry		1,264.29	183.00	1,399.89
Public speaking		109.68		109.95
Soils	1,434.45	1,703.48	1,694.25	2,210.99
Structure design				183.69
Summer school	769.85	4,760.79	1,213.25	7,765.23
Veterinary department	1,068.50	2,813.98		
Anatomy			442.00	440.11
Pathology			265.00	333.64
Physiology			46.00	97.22
Surgery			164.00	1,250.56
Zoology	1,023.35	972.10	1,062.40	1,246.87
III. Scholarship funds:				
Clay-Robinson fellowship		350.00		375.00
Fruit-judging scholarship				225.00
International Harvester Co.		400.00		250.00
Meinrad Rumley scholarship		250.00		
State Fair scholarship		931.24		512.50
IV. Administrative and general expenses, including office help and expenses of the executive and administrative offices; printing, advertising, commencement, Sabbath services, ringing chimes, etc.	1,330.00	25,617.58	1,364.00	35,362.57
V. Maintenance of buildings and grounds:				
Buildings: heat, light and janitor service	32,420.45	29,322.86	31,917.74	44,394.83
Student repair fund			238.63	
Grounds: labor, equipment and supplies		23,126.75		13,783.96
Totals	$ 75,757.93	$354,053.14	$ 91,958.57	$ 458,248.04

SUMMARY.

	1912-13	1913-14
Salaries	$ 226,490.27	$ 294,601.88
Department expenses and equipment	98,129.41	127,419.13
Scholarship funds	1,931.24	1,362.50
Administrative and general expenses	26,947.58	36,726.57
Maintenance of buildings and grounds	76,312.57	90,096.53
Totals	$ 429,811.07	$ 550,206.61

It has been the policy of the authorities hitherto to charge the administrative expenses and the cost of maintaining the plant almost entirely to the Collegiate Support fund. Beginning with the new fiscal year, these expenses are to be divided more evenly among the different divisions.

II. NON-COLLEGIATE WORK.

The Legislature of 1911 appropriated $25,000 annually for the support of a two year non-collegiate course in Agriculture. The course met with such decided success that the last legislature increased the appropriation and extended the non-collegiate work to Home Economics, Engineering and Veterinary Science. This work is distinctly separated from that of the regular four-year college courses. It has its own corps of teachers, and its own support funds. Reporting upon the income and expenditures of each of these courses for the biennial period, we have:

(a) NON-COLLEGIATE COURSE IN AGRICULTURE.

This includes a two-year course in Agriculture and a one-year course in Dairying. At the time the Board asked the last legislature to grant this work an additional annual support fund of $12,500, Home Economics was included in the Agricultural division. Special accent was placed on the desirability of establishing and maintaining this feature of the non-collegiate work. The appropriation was granted with this understanding. In the year following the meeting of the legislature, Home Economics, because of its rapid development, was made a division by itself. In dividing the new tax fund, $5,000 was set aside for Home Economics and $7,500 was reserved for Agriculture. The receipts and expenditures for Home Economics are shown further on in this report; the expenditures for the Agricultural work proper are set forth in the exhibit which follows, and the receipts will be found in the summary attached thereto.

EXPENDITURES.

For What Purpose	1912-13 From Fees	1912-13 From Support Fund	1913-14 From Fees	1913-14 From Support Fund
I. Salaries:				
Professors, and assistant professors		$ 8,849.98		$ 12,902.55
Instructors and assistants		9,468.49		10,517.51
II. Current expenses and equipment:				
Agronomy	$ 477.50	444.68	$ 659.14	839.22
Agricultural engineering	721.36	482.94	811.10	1,468.23
Animal husbandry	994.25	453.88	1,066.04	928.09
Botany	363.30	1,862.98		
Chemistry				.82
Dairy	476.25	19.68	902.61	682.97
English		634.27		347.53
History		24.36		38.66
Horticulture	155.05	687.59	665.54	1,615.80
Mathematics				5.88
Public speaking		10.00		9.50
III. Administrative Expenses:				
Agricultural dean		182.22		174.98
IV. Heat and Light		1,500.00		1,100.00
Totals	$ 3,188.01	$ 24,661.07	$ 4,104.43	$ 30,622.85

The following is a summary of the financial operations of this part of the non-collegiate work for the two years:

RECEIPTS.

Cash balance July 1, 1912		$ 10,508.50
Income for 1912-13:		
Annual appropriation	$ 25,000.00	
Student fees as shown above	3,188.01	28,188.01
Income for 1913-14:		
Annual appropriation	$ 25,000.00	
Millage tax, ⅔ of annual apportionment	4,500.00	
Special appropriation; amount allotted to this department	2,400.00	
Student fees as shown above	4,104.43	36,004.43
Total		$ 74,700.94

DISBURSEMENTS.

For 1912-13 as shown in expenditure exhibit	$ 27,849.08	
For 1913-14 as shown in expenditure exhibit	34,737.28	$ 62,586.36
Cash balance on hand July 1, 1914		12,114.58
Total		$ 74,700.94

Of this amount, $2,000 will need to be reserved as a working balance; the remainder is available for the purchase of equipment and furniture. The following sums have been set aside for these purposes:

	Equipment	Furniture
Animal husbandry	$ 4,000.00	$ 262.00
Agricultural engineering	1,062.75	
Agronomy	222.80	129.50
Dairy	105.00	26.45
Horticulture	103.75	300.00
Botany and bacteriology	730.50	310.10
Chemistry	1,080.50	79.50
English	145.00	81.00
Totals	$ 7,540.30	$ 1,188.55

SUMMARY.

Equipment	$ 7,540.30
Furniture	1,188.55
Total	$ 8,728.85

This leaves about $1,400 for the further purchase of equipment.

TWO-YEAR HOME ECONOMICS.

In addition to the sums allotted to this work from the appropriations for Agriculture and Home Economics, as already explained, the annual sum of $20,000 was set aside by the legislature from the two-year millage tax for four-year and two-year Home Economics work. Of this amount, the non-collegiate course was allowed $5,000 annually. No portion of these amounts was available during the first year of the biennium, and in the second year only one of the semi-annual tax payments, amounting to about three-fifths of the annual tax collected had been paid in. These items, together with the student fees, aggregate as follows:

RECEIPTS.

Millage tax for agriculture and home economics; ⅔ of annual allotment	$ 3,000.00
Millage tax for four-year and two-year home economics; ⅔ of annual allotment	3,000.00
Special appropriation for agriculture and home economics, amount allowed home economics	1,600.00
Student fees	178.00
Total	$ 7,778.00

EXPENDITURES.

The following are the expenditures for the year:

Salaries	$ 5,598.79
Current expenses	943.54
Equipment	496.13
Heat and light	500.00
Total expenditures	$ 7,537.96
Balance	240.04
	$ 7,778.00

The above balance has been already appropriated for equipment and furniture.

ENGINEERING TRADE SCHOOL.

The last legislature made the following appropriations for Engineering Extension and Trade School work:

Special appropriation	$ 10,000.00
Two year millage tax, $25,000.00; ⅗ of annual apportionment available during the year	15,000.00
Total	$ 25,000.00

Of this amount the College authorities set aside $6,500 for the local Trade School. The student fees amounted to $190.27, making a total of $6,690.27 available for this work which was inaugurated at the beginning of the fiscal year of 1913-14. The expenses for the year are shown below:

EXPENDITURES.

Salaries of professors and instructors	$ 2,629.60
Current expenses	600.18
Equipment and furniture	46.74
Heat and light	400.00
Total	$ 3,676.52

This leaves a balance on hand for local trade school purposes of $3,013.75 which is treated, however, as a reserve or working balance needed to carry the work through the first nine months of the next year when the receipts from tax collections are low as compared with the other three months.

PRACTITIONERS' COURSE.

In apportioning the two year millage tax the last general assembly set aside $5,000 annually for the support of this course. Of this sum only one tax payment or about three-fifths of the annual fund allotted was available in the last biennium. The first course was given in August, 1914, after the expiration of the biennial period. The advertising, material purchased, and other expenses incurred in preparation, during the biennial period, amounted to $588.86.

This course, though not a college course, is quite different from the other non-collegiate courses. It is, as its name implies, a practitioners' course, and is attended by many graduates of veterinary schools.

The following is a summary of the expenditures on account of the non-collegiate courses, and shows the cost of this non-collegiate work to the institution.

SUMMARY OF EXPENDITURES—Non-collegiate courses.

	1912-13	1913-14
Two-year Agricultural course	$ 27,849.08	$ 34,737.28
Two-year Home Economics		7,537.96
Two-year Local Trade School		3,676.52
Practitioners' course		588.56
Totals	$ 27,849.08	$ 46,540.32

In comparing with the treasurer's books, there should be added to this summary the following:

	1912-13	1913-14
Refunds	$ 233.29	$ 537.94
Sales		3.49
Total	$ 233.29	$ 541.43

BUDGETS OF NON-COLLEGIATE COURSES.

(1914-1915.)

Each of these courses has a support fund of its own, and therefore a separate budget. In the industrial divisions of the work each instructor teaches in a particular course. In the Science divisions, the instructors teach in one or more of the courses. The Science part of the budget is therefore given first, and its totals used in the different course budgets following. Each of these latter budgets is preceded by a statement showing the income of the course.

SCIENCE BUDGET.

(Non-collegiate—1914-15.)

	Agriculture	Home Economics	Trade School	Total
Bacteriology and Botany:				
*J. O. Cunningham, professor, three-fifths time	$ 1,320.00			$ 1,320.00
Anna Wolfe, instructor	500.00	600.00		1,100.00
**Edward Isaac, one-half time, instructor	600.00			600.00
Current expenses		100.00		100.00
Chemistry:				
***Jean MacKinnon, instructor		1,000.00		1,000.00
W. H. Lancelot, instructor	750.00	150.00		
Student assistant		150.00		150.00
Current expenses	100.00	40.00		140.00
Economic Science:				
****Charlotte Dryden, instructor, part time		100.00		100.00
J. H. Peters, instructor, part time	200.00			200.00
English:				
E. Maclean, professor	1,050.00	400.00	350.00	1,800.00
Esther L. Cooper, assistant professor	900.00	200.00	100.00	1,200.00
Mabel Fleming, instructor	650.00	225.00	75.00	1,050.00
Mrs. E. S. Youtz, instructor	650.00	200.00	150.00	1,000.00
Current expenses	100.00	50.00		150.00

*Professor Cunningham receives $880 from Horticulture for the other two-fifths of his time.

**Mr. Isaac receives $600 from Horticulture for the other one-half of his time.

***Miss MacKinnon receives also $300 from the Chemistry department.

****Miss Dryden's total salary is $800, charged as follows:

Economic Science	$ 100.00
Public Speaking	600.00
Zoology	100.00

SCIENCE BUDGET—Continued

	Agriculture	Home Economics	Trade School	Total
History:				
T. G. Watson, instructor, part time	200.00	100.00		300.00
Current expenses	20.00			20.00
Mathematics:				
Gertrude Herr, instructor	450.00	200.00	450.00	1,100.00
Mary Miller, half time, instructor	170.00	60.00	170.00	400.00
Student assistant	85.00	30.00	85.00	200.00
Current expenses	15.00			15.00
Modern Languages:				
Mildred Semmons, half time, instructor	300.00	200.00	100.00	600.00
Public Speaking:				
Charlotte Dryden, part time, instructor	300.00	150.00		450.00
Current expenses	10.00			10.00
Zoology:				
Charlotte Dryden, part time, instructor	100.00			100.00
	$ 8,470.00	$ 3,905.00	$ 1,630.00	$ 14,155.00

The course budgets which follow, and in which the totals of the Science budget are used, give a full showing of the income and proposed expenditures on account of the non-collegiate work for 1914-15.

AGRICULTURE—INCOME AND BUDGET.

(Non-collegiate, 1914-15)

INCOME.

Annual appropriation	$ 25,000.00
Annual allotment from two year millage tax	7,500.00
Total	$ 32,500.00

BUDGET.

Administrative expenses	$ 175.00	
Fires, lights and janitor service	1,400.00	$ 1,575.00
Department Salaries and Expenses—		
Agriculture Engineering:		
C. K. Shedd, associate professor	$ 2,100.00	
Charles Miller, instructor	1,100.00	
H. O. Cameron, instructor, two-thirds time	667.00	
Current expenses	675.00	$ 4,542.00
Agronomy:		
H. L. Eichling, associate professor	$ 2,100.00	
D. Zentmire, instructor	1,400.00	
Peter Hanson, instructor	1,000.00	
Current expenses	350.00	$ 4,850.00
Animal Husbandry:		
M. G. Thornburg, professor	$ 2,200.00	
P. L. Lisher, associate professor	1,600.00	
R. O. McChord, assistant professor	1,300.00	
Assistant in Poultry	250.00	
Current expenses	400.00	$ 5,750.00

Dairying:		
M. R. Tolstrup, assistant professor	$ 1,700.00	
N. S. Golding, instructor	1,200.00	
Current expenses	300.00	$ 3,200.00
Horticulture:		
J. C. Cunningham, professor, two-fifths time	$ 880.00	
E. L. Overly, assistant professor	1,600.00	
Edward Isaac, one-half time	600.00	
Current expenses (including Field Superintendent)	375.00	$ 3,455.00
Science departments:		
Total of Agricultural column in Science budget		$ 8,470.00
Total		$ 31,842.00

SUMMARY.

Income	$ 32,500.00
Proposed expenditures	31,842.00
Balance unappropriated	$ 658.00

This balance is needed to meet emergencies.

An analysis of the budget shows the following as the expenses along the different lines:

Administration	$ 175.00
Salaries	27,922.00
Department current expenses	2,345.00
Heating, lighting and janitor service	1,400.00
Total	$ 31,842.00

HOME ECONOMICS—INCOME AND BUDGETS.

(Non-collegiate, 1914-15.)

INCOME.

Share of annual allotment from millage tax for Agriculture and Home Economics	$ 5,000.00
Share of annual allotment from millage tax for two and four year courses in Home Economics	5,000.00
Total	$ 10,000.00

BUDGET.

Department Salaries and Expenses—		
Home Economics proper:		
Joan Hamilton, supervisor	$ 1,500.00	
Annie H. Hawkes, instructor	1,200.00	
Current expenses	1,625.00	$ 4,325.00
Fires, lights and janitor service		700.00
Science Department:		
Total of Home Economics column in Science budget		3,905.00
Equipment for Chemistry Department:		
($154.50 less $20.04 from last year's balance)		134.46
Total		$ 9,064.46

SUMMARY.

Income	$ 10,000.00
Proposed expenditures	9,064.46
Balance unappropriated	$ 935.54

Askings for additional instruction and equipment sufficient to use up this entire balance are in the hands of the president.

The account analyzed shows expenditures along the following lines:

Salaries	$ 6,415.00
Current expenses	1,815.00
Equipment	134.46
Heating, lighting and janitor service	700.00
Total	$ 9,064.46

ENGINEERING—INCOME AND BUDGET.

(Non-collegiate, 1914-15.)

BUDGET.

Amount set aside for local Trade School from annual appropriation of $25,000.00	$ 6,545.00

INCOME.

Salaries:		
*K. G. Smith, professor, part time	$ 800.00	
*R. B. Dale, assistant professor, part time	900.00	
H. E. Freund, instructor	1,000.00	
Current expenses	1,365.00	
		$ 4,065.00
Heating, lighting and janitor service		500.00
Contingencies		350.00
Science Departments:		
Total of Trade School in Science budget		1,630.00
Total		$ 6,545.00

SUMMARY.

Amount allotted to Trade School	$ 6,545.00
Proposed expenditures, including balance for contingencies	6,545.00

The working balance for this fund is provided for by reserving for that purpose last year's balance, as already explained.

The analysis of expenditures shows the following:

Salaries	$ 4,830.00
Current expenses	1,365.00
Heating, lighting and janitor service	500.00
Contingencies	350.00
Total	$ 6,545.00

The budget for the Extension part of this joint appropriation of $25,000 is taken care of with the other Extension work under the heading "Extension Work."

*Professors Smith and Dale appear also in the Extension budget, receiving there additional salaries of $2,400.00 and $900.00 respectively.

PRACTITIONERS' COURSE—INCOME AND BUDGET.

(Non-collegiate, 1914-15.)

As the fund which maintains this course is derived from the millage tax, and as one of the two courses given is always held in the first or second month of each fiscal year, it is necessary to bring over a considerable balance from the previous year in order to meet expenses. The balance from last year is $2,411.44. An equal balance should be carried over to next year's account. This would leave the annual appropriation of $5,000 from the two year millage tax as the sum available for this year's budget. This amount will be sufficient to employ lecturers, provide material and meet all incidental expenses.

III. EXTENSION WORK.

The College carries on the following lines of extension work:

1. Agricultural Extension.
2. Engineering Extension.

Considering these in their order, we have:

1. AGRICULTURAL EXTENSION.

This work was begun in 1906. Its first annual appropriation was $15,000. This was gradually increased until last year it reached $77,800. This year, when it will receive its full annual allowance from the two-year millage tax, its income from the state will be $90,000. It will also receive $10,000 from the National Government under the Lever bill.

The following shows the receipts and expenditures of the department during the biennial period together with the balances at the beginning and close of such period:

RECEIPTS.

For 1912-13:		
Balance on hand July 1, 1912		$ 11,012.33
Annual appropriation		50,000.00
For 1913-14:		
Annual appropriation	$ 42,000.00	
Special appropriation	7,000.00	
Millage tax, three-fifths of annual allotment	28,000.00	77,800.00
Total		$ 138,812.33

EXPENDITURES.

	1912-13	1913-14
Salaries of staff	$ 29,123.13	$ 43,073.51
Office help	5,706.88	5,453.51
Outside help	3,696.52	4,537.99
Stationery and postage	1,699.81	1,896.25
Printing, bulletins, etc	8,122.16	6,054.29
Charts, maps and photos	221.69	272.93
General supplies	2,477.15	2,300.85
Freight, express and drayage	511.61	893.73
Telegrams and telephone	324.49	278.72
Furniture and equipment	405.21	946.67

EXPENDITURES—Continued

	1912-13	1912-14
State Fair expenses	198.71	200.00
Traveling expenses	3,487.20	5,363.53
Hog cholera expense	.....	2,644.38
Totals	$ 51,004.66	$ 74,205.06
Less receipts for testing, etc.	579.98	761.43
Net expenditures	$ 50,424.68	$ 73,443.63

SUMMARY.

Available funds	.....	$ 138,812.33
Expended in 1912-13	$ 50,424.68	.....
Expended in 1913-14	73,443.63	123,868.31
Balance on hand June 30, 1914	.....	$ 14,944.02

In drawing from the State Treasury the portion of this fund which comes from the two year millage tax, the amount drawn in the fall is about $10,000 less than that drawn in the spring. The fund on hand is, therefore, about the amount needed for a working balance. The budget for 1913-14 is consequently limited to the income for the year without taking this balance into account.

AGRICULTURAL EXTENSION—INCOME AND BUDGET.

1914-15.

INCOME.

From State:		
Annual appropriation, permanent	$ 42,000.00	
Annual appropriation from two year millage tax	48,000.00	$ 90,000.00
From National Government:		
Lever bill	.....	10,000.00
Total	.....	$ 100,000.00

BUDGET.

Salaries:

R. K. Bliss	Director	$ 3,000.00	
Paul C. Taff	Extension assistant professor of Soils and Farm Crops	2,200.00	
E. C. Bishop	*State leader of Junior work	900.00	
R. K. Farrar	Extension professor of Agricultural Education	2,200.00	
M. A. Hauser	Extension professor of Soils and Farm Crops	2,400.00	
K. W. Stoudler	Extension professor of Veterinary Medicine	2,800.00	
Neal S. Knowles	Extension professor of Home Economics	1,900.00	
Louise H. Campbell	Extension professor of Home Economics	1,800.00	
J. W. Coverdale	**Supervisor of County work	1,050.00	
R. S. Herrick	Extension associate professor of Pomology	2,200.00	
C. L. Fitch	Extension associate professor of Truck Gardening	2,200.00	
R. F. O'Donnell	Extension associate professor of Animal Husbandry	2,200.00	

*The United States Department of Agriculture pays Professor Bishop $1,800.00 additional, with the understanding that the college will pay his expenses not to exceed $900.00, including trip to annual conference, to be charged against the Traveling Expense account.

**United States Department of Agriculture pays $1,650.00 additional, with same understanding as above.

BUDGET—Continued

Kate R. Logan	*Assistant state leader of Junior work	600.00	
H. A. Bittenbender	Extension associate professor of Poultry Husbandry	2,000.00	
M. H. Hoffman	Extension associate professor of Agricultural Engineering	2,000.00	
Idaho Sutherland	Extension assistant professor of Home Economics	1,500.00	
Mabel Bently	Extension assistant professor of Home Economics	1,500.00	
T. R. Douglass	Extension associate professor of Soils and Farm Crops	2,000.00	
Haden Hart	Extension assistant professor of Animal Husbandry	1,600.00	
C. B. Williams	**Assistant professor of Rural Sociology	900.00	
	Extension assistant professor of Social Welfare	1,600.00	
Fred C. Fenton	Extension assistant professor of Agricultural Engineering	1,200.00	
George Dunlop	Extension assistant professor of Soils and Farm Crops	1,700.00	
W. A. Buchanan	Extension assistant professor of Animal Husbandry	1,600.00	
C. D. Rice	Extension assistant professor of Veterinary Medicine	1,800.00	
W. E. Simonson	Extension assistant professor of Veterinary Medicine	1,800.00	
L. E. Willey	Extension assistant professor of Veterinary Medicine (July 1, 1914)	1,800.00	
Mary B Richardson	Extension assistant in Home Economics, Junior work (July 1, 1914)	1,200.00	
James Watson	Extension assistant in Dairy Manufactures	1,400.00	
H. C. Barker	Extension assistant in Dairy Production	1,400.00	
Charles Dorchester	Extension assistant in Soils and Farm Crops	1,300.00	
Donald Hunt	Extension assistant in Soils and Farm Crops	1,200.00	
Jessie Campbell	Extension assistant professor in Home Economics	1,000.00	
A. A. Smith	Secretary	1,400.00	
Six county advisers at $50.00 a month		3,600.00	$ 60,050.00

Current Expenses:

Office help	$ 7,500.00	
Printing	7,500.00	
General supplies	5,500.00	
Traveling expenses	6,000.00	
Outside help (Dairy test work, short course, and institute help, by day, week or month)	4,000.00	
Stationery and postage	2,500.00	
State Fair fund	200.00	
Janitor ($100.00), heat and light ($700.00)	800.00	
Reserve fund	3,150.00	$ 37,150.00
Balance unappropriated	.....	1,900.00
Total	.....	$ 100,000.00

(2) ENGINEERING EXTENSION.

This work began with the last fiscal year, the fund for its support being included in the joint appropriation of $25,000 for Trade School and Engineering Extension. The amount set aside from the appropriation for the extension work was $18,500.00. The sum of $973.30 was received as correspondence fees, making a total available of $19,473.30.

*Miss Logan receives in addition $1,000.00 from the United States Agricultural Department.

**Also receives $900.00 from Economics department of college.

The following shows the expenditures for the year:

EXPENDITURES.

Salaries of staff	$ 8,435.86
Traveling expenses	1,761.76
Office help	799.07
Exhibit material for automobile exhibit	129.65
Other equipment and furniture	689.12
Current expenses	2,594.31
Total	$ 14,400.77

This leaves a balance on hand of $5,072.53 which is needed as a working balance to carry the work through until the millage tax, by which the extension department is maintained, is collected.

The following shows the amount set aside for the work of the present year and the budget voted by the Board:

INCOME AND BUDGET.

1914-15.

INCOME.

Amount of joint appropriation for Trade School and Extension set aside for Extension	$ 18,455.00

BUDGET.

Salaries:		
K. G. Smith, professor	$2,400.00*	
J. W. Parry, secretary and associate professor of engineering extension	2,000.00	
R. B. Dale, assistant professor	900.00**	
O. H. Johnson, field instructor	1,500.00	
E. S. Shortess, state organizer	1,800.00	
D. C. Faber, industrial engineer	1,000.00***	
R. E. Davis, part time automobile instructor	500.00	$ 10,100.00
Current expenses		8,205.00
Fires, lights and janitor service		150.00
Total		$ 18,455.00

The following is a summary of Extension fund expenditures for the biennium:

Agricultural Extension:		
For 1912-1913	$ 50,424.58	
For 1913-1914	73,443.63	$ 123,868.31
Engineering Extension:		
For 1913-1914		14,400.77
Total		$ 138,269.08

*Receives $800 additional from trade school.
**Receives $900 additional from trade school.
***Receives $1,000 additional from engineering experiment station.

IV. EXPERIMENT FUNDS.

These include the following:

1. Agricultural Experiment Station.
2. Horse Breeding Experimentation.
3. Engineering Experiment Station.
4. Good Roads Experimentation.
5. Veterinary Investigations.

They are taken up in order.

1. AGRICULTURAL EXPERIMENT STATION.

The Station is supported jointly by the state and nation. It was established in 1887 by the congressional act which appropriated $15,000 annually for its maintenance. This was increased in 1905 by the Adams Act which provided an additional annual fund of $15,000, making $30,000 which the national government now contributes toward the support of the Station. The state appropriated $10,000 in 1902. Successive legislatures have added to this amount until the present income from the state totals $112,000.00.

The following shows the receipts and expenditures of the Station for the biennial period:

RECEIPTS.

Cash balance on hand July 1, 1912		$ 23,027.70
Receipts 1912-13:		
From National Government, Hatch Act	$ 15,000.00	
From National Government, Adams Act	15,000.00	
From State, annual appropriation, permanent	55,000.00	85,000.00
Receipts 1913-14:		
From National Government, Hatch Act	$ 15,000.00	
From National Government, Adams Act	15,000.00	
From State, annual appropriation, permanent	55,000.00	
From State, special appropriation	10,000.00	
From two-year millage tax	$4,200.00	129,200.00
Total		$ 237,227.70

EXPENDITURES.

	1912-13	1913-14
Salaries of station staff	$ 35,418.69	$ 49,738.46
Salaries of station assistants	1,627.70	1,435.00
Agricultural engineering section	2,574.92	2,823.42
Animal husbandry section	15,954.28	16,666.88
Bacteriology section	284.52	549.61
Botany section	1,187.78	1,272.68
Bulletin section	7,839.61	8,655.27
Chemical section	3,663.05	3,886.43
Dairy section	2,618.74	2,237.61
Dairy farm section	2,404.50	3,182.91
Director's section	1,791.90	1,462.45
Entomology section	1,105.35	902.63
Farm crops section	5,829.06	10,051.52
Forestry section	1,327.87	1,372.59
General expenses	211.82	200.00
Horticulture section	7,553.31	8,030.89
Photo section	1,679.33	1,906.82
Poultry section	1,590.82	1,743.96
Soils section	7,180.80	11,346.17
Veterinary section	403.26	27.50
Totals	$106,247.31	$ 127,542.79

Less sales	16,077.86	15,028.01
	$ 96,169.45	$ 112,514.78
Part payment on purchase of additional farm		21,123.33
Total expenditures of national and state funds	$ 90,169.45	$ 133,638.11

SUMMARY.

Total receipts		$ 237,227.70
Expenditures, 1912-13	$ 90,169.45	
Expenditures, 1913-14	133,638.11	223,807.56
Balance on hand June 30, 1914		$ 13,420.14

In addition to the auditing of these accounts by the Finance Committee of the Board of Education, they have been examined and approved by a representative of the United States Department of Agriculture.

Among the expenditures for 1913-14 appears an item of $21,123.33, part payment on the purchase price of additional farm to be used for experimental purposes. The last legislature authorized the use of $35,000 of the Station appropriation for this purpose. A tract of 163 acres located about two miles south of the college grounds was contracted for. The price agreed upon, including interest on deferred payments, was $31,508.33. The final payment of $10,375.000, due Nov. 1, 1914, will be paid from the balance of $13,420.14, brought over from last year. This will leave $3,045.14 to apply on further land purchases contemplated by the Board. If the entire $35,000 is used in buying land, it will be necessary to appropriate to this purpose the sum of $446.53 from the reserve fund in the budget of 1914-15. The following exhibit shows the income for that year, and the purposes to which it is devoted in the budget:

AGRICULTURAL EXPERIMENT STATION INCOME AND BUDGET FOR 1914-1915.

INCOME.

From National Government:		
Hatch Act	$ 15,000.00	
Adams Act	15,000.00	$ 30,000.00
From State:		
Annual appropriation, permanent	$ 55,000.00	
Millage tax running two years	57,000.00	112,000.00
Total		$ 142,000.00

BUDGET.

Salaries of station staff as shown in general salary budget given later in this report		$ 64,613.00
Expenses of Sections:		
Bulletin section	$ 9,000.00	
Agricultural engineering	3,200.00	
Animal husbandry	7,700.00	
Dairy husbandry	3,150.00	
Poultry	1,700.00	
Soils section	12,400.00	
Farm crops section	7,325.00	
Pomology	4,800.00	
Truck crops	1,200.00	
Forestry	1,300.00	
Farm management	2,500.00	
Dairy	2,400.00	
Chemistry	3,700.00	
Botany	1,450.00	
Bacteriology	550.00	
Photography	800.00	

Director's office	2,100.00	
State fair	200.00	
Entomology	1,300.00	$ 66,775.00
Fires, lights and janitor service		3,900.00
Special items:		
Improvements including land, tiling, fencing and corn crib	$ 4,000.00	
Reserve	2,500.00	6,500.00
Balance unappropriated		212.00
Total		$ 142,000.00

This leaves a balance unappropriated of $212.00, as shown above. In order that bills against the Station may be promptly paid it will be necessary that some of the heavier expenditures be postponed until the latter part of the year. The demands upon the Station funds have increased to such an extent that the Board of Education is asking of the Legislature an additional annual appropriation of $25,000.00.

2. HORSE BREEDING EXPERIMENTATION.

The General Assembly of 1907 passed an act appropriating for experiments in breeding and developing a hardier type of horses an annual sum equal to that which might be alloted to the College, for such purpose, by the United States Department of Agriculture. The appropriation from the state was limited, however, to $7,500 annually. Under this law the following sums were drawn from the State Treasury and expended prior to the last biennial period:

Fiscal Year:	Amount
1907-8	$ 1,125.00
1908-9	5,000.00
1910-11	1,400.00
1911-12	450.00
Total prior to last biennium	$ 7,975.00

The following shows the amounts drawn and expended during the last biennium:

DRAWN FROM STATE TREASURY.

During fiscal year 1912-13	$ 360.00
During fiscal year 1913-14	1,564.19
Total	$ 1,924.19

EXPENDITURES.

During fiscal year 1912-13:		
Salary of horseman	$ 200.00	
Cablegrams	8.50	$ 208.50
During fiscal year 1913-14:		
Salary of horseman	$ 65.00	
Feeding and care of horses	1,584.00	1,649.00
Total expenditures		$ 1,917.50
Balance on hand June 30, 1914		6.69
Total		$ 1,924.19

The amount of state funds devoted to this work during the coming year will depend upon the allotment made by the Agricultural Department at Washington.

3. ENGINEERING EXPERIMENT STATION.

The appropriation for this work has been gradually increased from the $3,000 granted it in 1904, when it was established, up to the present annual appropriation of $15,000. The following shows the receipts and expenditures for the last biennium:

RECEIPTS.

Cash on hand July 1, 1912		$ 2,367.31
From state, annual appropriation, 1912-13		10,000.00
From state, annual appropriation, 1913-14	$ 10,000.00	
From state, millage tax, 1913-14	3,000.00	13,000.00
Total		$ 25,367.31

EXPENDITURES.

	1912-1912	1913-1914
Salaries:		
A. Marston	$ 500.00	$ 333.30
G. A. Gabriel	100.00	16.66
M. F. Beecher	620.83	729.16
A. O. Anderson	1,500.00	
C. S. Nichols	791.67	633.33
O. M. Smith	1,200.00	533.36
H. W. Wagner	1,345.84	1,500.00
W. H. Meeker		166.66
L. B. Spinney		166.67
F. A. Fish		166.66
S. W. Beyer		83.26
R. W. Crum		83.26
M. I. Evinger		83.33
W. J. Schlick		900.00
J. S. Coye		350.06
G. W. Armstrong		450.00
Total salaries	$ 6,058.34	$ 6,195.71
Office help	478.61	702.85
General and experimental labor	487.61	1,230.49
Water tax	8.76	7.24
Gas	44.40	213.36
Cuts and printing	2,728.53	684.83
Office supplies	236.76	327.99
Freight, express and drayage	103.72	113.34
Miscellaneous supplies	764.37	1,458.27
Gasoline and oil	28.23	6.41
Traveling expenses	913.81	1,724.96
Photos	15.36	
Electricity	38.76	28.04
Postage	140.29	175.00
Lumber	25.79	49.16
Furniture	34.43	35.60
Telegrams and telephones	41.84	60.04
Repairs	15.85	22.19
Ice	.60	.80
Coal	64.52	
Equipment	217.25	1,609.15
Chemical analysis		200.05
Total	$ 12,504.63	$ 14,845.42
Less sales, etc.	943.25	1,582.64
Total expenditures	$ 11,561.38	$ 13,262.78

SUMMARY.

Total receipts		$ 25,367.31
Expenditures, 1912-1913	$ 11,561.38	
Expenditures, 1913-1914	13,262.31	24,823.69
Balance on hand, June 30, 1914		$ 533.62

The cash on hand is treated as a working balance and not available for budget purposes. The following shows the income for 1914-15, and the expenditures decided upon by the Board:

ENGINEERING EXPERIMENT STATION—INCOME AND BUDGET. 1914-15.

INCOME.

Annual appropriation, permanent	$ 10,000.00	
Annual allottment from two year millage tax	5,000.00	
Total	$ 15,000.00	

BUDGET.

*Salaries:		
A. Marston, director	$ 300.00	
C. S. Nichols, assistant to director	600.00	
S. W. Beyer, mining engineer	100.00	
W. H. Meeker, mechanical engineer	200.00	
F. A. Fish, electrical engineer	200.00	
L. B. Spinney, illuminating engineer	200.00	
J. E. Brindley, engineering economist	100.00	
M. I. Evinger, hydraulic engineer	100.00	
R. W. Crum, structural engineer	200.00	
J. S. Coye, chemist	400.00	
H. W. Wagner, assistant engineer in mechanical and electrical engineering	1,600.00	
M. F. Beecher, assistant engineer in ceramics	1,000.00	
W. J. Schlick, drainage engineer	1,200.00	
C. G. Armstrong, assistant chemist	600.00	
———, analyst	900.00	
H. F. Clemmer, testing engineer	800.00	
Max Levine, bacteriologist	200.00	
D. C. Faber, industrial engineer	600.00	
———, junior research fellow	300.00	$ 9,600.00
Current expenses:		
Stationery, printing and office help		$ 2,100.00
Fires, lights and janitor service		900.00
Investigational and traveling expenses		2,000.00
Total		$ 14,600.00
Balance unappropriated		400.00
Total		$ 15,000.00

The work of the Station having developed much beyond the means available for its maintenance, the Board of Education asks the Legislature that its annual support fund be increased from $15,000 to $20,000.

4. GOOD ROADS EXPERIMENTATION.

The State provides an annual appropriation of $10,000 for this purpose. The work naturally connects itself closely with that of the Engineering Experiment Station; it is, in fact, in its object, a part of that Station. Since it has, however, a special support fund of its own, its financial operations are given separate presentation in this report.

The following shows its receipts and expenditures for the biennium, together with the cash balances on hand at the beginning and end of the period.

RECEIPTS.

Balance on hand, July 1, 1912		$ 3,137.62
Annual appropriation, 1912-1913	$ 10,000.00	
Annual appropriation, 1913-1914	10,000.00	20,000.00
Total		$ 23,137.62

*A number of the station staff devote only a portion of their time to the station work. Their total salaries and the division of the same will be found in the general salary budget given later in this report.

EXPENDITURES.

	1912-1913	1913-1914
Salaries:		
T. H. MacDonald	$ 1,983.32	----------
J. H. Ames	870.00	----------
J. E. Kirkham	250.00	----------
C. B. McCullough	1,225.00	----------
F. R. White	1,200.00	----------
A. Marston	----------	166.70
S. W. Beyer	----------	83.40
R. W. Crum	----------	83.40
T. R. Agg	----------	416.70
J. S. Coye	----------	1,224.94
O. M. Smith	----------	66.64
M. F. Beecher	----------	625.00
O. F. Nichols	----------	416.70
H. F. Wright	----------	750.00
A. W. Hess	----------	333.00
Total	$ 5,528.32	$ 4,166.48
Office help, general labor and traveling expenses	2,779.20	1,884.75
Investigation of bridge patents	250.00	----------
Office supplies, postage, freight, express, drayage, telegrams and telephones, furniture, equipment, photos, lantern slides, printing and repairs	2,228.62	3,077.61
Total	$ 10,786.14	$ 9,128.84

SUMMARY.

Total receipts		$ 23,137.52
Expenditures, 1912-1913	$ 10,786.14	
Expenditures, 1913-1914	9,128.84	19,914.98
Balance on hand, June 30, 1914		$ 3,222.54

The balance on hand is treated as a working and emergency balance, and is not considered as available for the budget purposes of the present year.

The following shows the available income and the budget for 1914-1915:

INCOME.

State, annual appropriation, permanent ..... $ 10,000.00

BUDGET.

*Salaries:		
A. Marston, director	$ 200.00	
C. S. Nichols, assistant to director	500.00	
S. W. Beyer, mining engineer	100.00	
R. W. Crum, structural engineer	100.00	
T. R. Agg, road engineer	1,000.00	
J. S. Coye, chemist	1,400.00	
M. F. Beecher, assistant engineer in road materials	600.00	
W. J. Schlick, drainage engineer	600.00	
C. G. Armstrong, assistant chemist	400.00	
H. F. Clemmer, testing engineer	400.00	
D. C. Faber, industrial engineer	400.00	
———, senior research fellow	500.00	$ 6,200.00
Current expenses:		
Stationery, printing and office help		$ 900.00
Fires, lights and janitor service		600.00
Investigational and traveling expenses		2,300.00
Total		$ 10,000.00

5. VETERINARY INVESTIGATIONS.

In answer to the demands of the live stock interests of the state that investigation be made of animal diseases, an annual fund of $10,000 was provided by the last legislature for this purpose. No part of it, however, was available until the second year of the biennial period and

*Salaries listed here are the partial salaries charged to this fund. For the full salaries, see the general salary budget given later in this report.

then not the full annual appropriation. The receipts for the year, together with the expenditures, are shown in the following exhibit:

RECEIPTS.

Special state appropriation		$ 3,000.00
Millage tax; ⅔ of annual allotment		6,000.00
Total		$ 9,000.00

EXPENDITURES.

Salaries:		
Dr. Kurt Schern	$ 2,103.43	
Dr. C. H. Stange	225.00	
Paul Parwin, laboratory assistant	371.20	
General and expert work	402.80	
Care of animals	129.65	
Traveling expenses	201.43	
Office supplies	46.78	
Postage	10.00	
General supplies	2,475.60	
Dissectors	769.35	
Equipment	2,044.94	
Lumber	133.84	
Telephones and telegrams	4.57	
Freight, express and drayage	28.02	
Gas	29.93	
Ice	12.15	
Total expenditures		$ 8,988.69
Unexpended balance, June 30, 1914		11.31
Total		$ 9,000.00

Leaving the balance to cover small emergency items, the fund available for the present year, and the use to which it is to be put are shown in the following:

VETERINARY INVESTIGATIONS—INCOME AND BUDGET 1914-15.

INCOME.

Appropriation from two year millage tax ..... $ 10,000.00

BUDGET.

Kurt Schern, professor	$ 2,400.00
Dr. C. H. Stange	300.00
Heating, lighting and janitor service	350.00
Current Expenses:	
Assistants, care of animals, traveling expenses, supplies, equipment and working balance	6,950.00
	$ 10,000.00

As the work is in the formative stage of development, it is not feasible to make, in advance, any very accurate estimate of the different items of expenditure for the present year. Since, however, considerable equipment was purchased with last year's fund, it is hoped that a larger proportion of the appropriation can be used directly for investigation purposes. The work already done has emphasized the need of such investigations, and has led the Board of Education to ask the legislature for an additional annual fund of $5,000.

The following is a summary of the expenditures for experiment work during the biennium:

SUMMARY OF EXPERIMENT FUND EXPENDITURES.

	1912-13	1913-14
Agricultural experiment station	$ 90,169.45	$ 133,638.11
Horse breeding experimentation	268.50	1,649.00
Engineering experiment station	11,561.28	13,262.78
Good roads experimentation	10,786.14	9,128.84
Veterinary investigations	----------	8,988.69
Totals	$112,785.47	$ 166,667.42

V. BUILDINGS, IMPROVEMENTS AND EQUIPMENT.

A sharp line of distinction is drawn between the department Support funds and funds which add to the plant and its equipment, and keep them in condition for efficient use. These latter funds include:

(a) The Special Building Tax.

(b) The special appropriations for Chemistry building, equipment and supplies; and for the central heating plant.

(c) The appropriations from the two year millage tax for improvements, equipment and small buildings, and the direct appropriations for the same purposes.

(d) The annual repair and contingent fund, and the rental of rooms, used for repairs and improvements.

(a) SPECIAL BUILDING TAX.

The expenditures under the Special Building Tax during the biennium have to do with the small balances brought over from the previous biennium as well as the larger sums used in the new building enterprises of the two years. Some of these larger buildings are not yet completed, and therefore only a part of the funds set aside for their erection has been expended.

The following are the smaller balances coming forward into the period to be accounted for.

		Balance July 1, 1912	Expended	Balance July 1, 1914
Central building		$ 1,304.22	----------	----------
Used for repairing walls, floors, etc., in dairy building from fund reserved on Schleuter contract as explained on page 396 of last biennial report		----------	$ 606.48	$ 697.74
Agricultural hall		21.96	----------	----------
Fixtures for photographic room		----------	17.26	4.70
Engineering hall annex		642.48	----------	----------
Lighting fixtures	$226.83			
Plumbing	303.43			
Painting	16.79			
Radiation	95.43			
	$642.48	----------	642.48	----------

SPECIAL BUILDING TAX—Continued

Ceramics building		397.74	----------	397.74
Domestic technology building		1,579.24	----------	----------
Screens	$347.24			
New door and frame, painting floors, removing partitions, floors in elevator shaft, cupboards, glass doors and shelving	379.12			
General	32.40			
	$758.76	----------	758.76	820.48
Judging pavilion		966.26	----------	----------
Proudfoot, Bird and Rawson	$ 7.09			
Grading	51.44			
Shades	23.20			
	$455.86	----------	455.86	510.40
Totals		$ 4,911.90	$ 2,480.84	$ 2,431.06

The following are the larger items of the Building Tax expenditures, and are, therefore, given fuller statement:

VETERINARY BUILDING.

The amount set aside for this building was $150,000. The unexpended balance at the beginning of the biennium was $9,570,70.

The following are the expenditures during the two years:

Balance on Benson and Marxer's contract			$ 4,876.71
Balance reserved at beginning of period as shown on page 399 of last biennial report		$ 5,252.60	
Deductions made including charge of $750 for 15 days delay in completing contract	$ 801.30		
Extras allowed	425.41		
Net deduction		375.89	
Balance paid		$ 4,876.71	
Proudfoot, Bird & Rawson			1,038.05
Grahl & Herman, balance on sheet metal contract			175.00
Elevator			250.00
Screens			190.76
Fitting up research laboratory			441.05
Fitting up room for Vice Dean Dimock			145.20
Heating, lighting and plumbing			108.86
Six single horse stalls, three box stalls, cement floor for basements of buildings 1, 2 and 6; doors for all box stalls in building No. 4, together with minor expense items			2,344.09
Total expended			$ 9,569.72
Balance unexpended			.98
Total			$ 9,570.70

GYMNASIUM.

The amount of Special Building Tax set aside for the erection of the Gymnasium was $150,000. Work was begun on the building in the spring of 1911. The expenditures from that time to the beginning of the last biennial period amounted to $69,321.10. These are summarized on page 400 of the last biennial report. The balance unexpended July 1, 1912, was therefore $80,678.90

The following are the expenditures during the biennium:

Balance on C. E. Heaps' contract on brick work			$ 17,315.31
Balance of contract unpaid July 1, 1912, as shown on page 400 of last biennial report		$ 16,366.91	
Extras allowed		948.40	
Balance paid		$ 17,315.31	
C. G. Hipwell, on contract for sheet metal work and roof			$ 5,858.81
Amount of contract		5,847.00	
Extras allowed	$ 140.25		
Deductions for material returned	128.44		
Net extras		11.81	
Amount paid		$ 5,858.81	
Crown Iron Works, contract for ornamental iron			4,123.00
Fraley & Young, contract for plastering			2,788.00
McClelland & Co., balance of contract of $6,124.00 for mill work			4,976.50
Art Mosaic Tile Co., terrazzo and cement work			3,824.54
Amount of contract	$ 4,200.00		
Deductions for work done by college and $200 for 29 days delay in completing contract	375.46		
Amount paid	$ 3,824.54		
Andreas Stone and Marble Co.			4,329.00
Amount of contract		4,829.00	
Deduction because of delay in completing contract		500.00	
Amount paid		$ 4,329.00	
Des Moines Sheet and Metal Co., contract for metal lath work			1,750.00
National Regulator Co., contract			1,269.00
Proudfoot, Bird & Rawson, balance of architects' fees on basis of 2½% of cost of building			1,864.64
Grahl-Herman Co., contract on metal work			1,382.00
Garver Hardware Co.			1,517.05
Amount of contract		1,650.00	
Deductions	221.20		
Extras allowed	88.25		
Net deductions		132.95	
Amount paid		$ 1,517.05	
A. E. Shorthill Co., balance of $15,000 contract for structural steel and iron			1,184.54
Balance unpaid July 1, 1912		1,579.54	
Deduction for delay in work	400.00		
Extras allowed	5.00		
Net deduction		395.00	
Amount paid		$ 1,184.54	
Central Chandelier Co., lighting fixtures			450.48
Painting			1,304.28
Plumbing			3,702.65
Lighting			871.51
Heating			8,230.74
General labor and material:			
Running track		1,413.00	
Floor construction main exercise room		2,534.00	
Handball court special exercise room		807.35	
Main roof monitor		3,120.00	
Reinforced floors, balconies		2,875.00	
Swimming pool except lining		790.00	
Placing of all millwork		1,800.00	
Grounds for plaster		140.00	
False frames		150.00	
Anchors, nails and bolts		250.00	13,879.35
Total expended			$ 80,621.37
Unexpended balance June 30, 1914			57.53
			$ 80,678.90

This balance of $57.53 will be used to cover minor items in finishing the building.

MECHANICAL ENGINEERING LABORATORY.

The sum of $50,000.00 was set aside by the legislature for the erection and equipment of this building. The building was erected, under contract, by C. E. Heaps. The heating, lighting and plumbing work was done by the College under the direction of Mr. Sloss, Superintendent of Buildings; the purchase and installation of equipment was under the direct charge of Professor Meeker, head of the Mechanical Engineering department who also acted as superintendent, having general oversight of all expenditures under the appropriation.

The following is a condensed exhibit of the expenditures during the biennium:

C. E. Heaps, on contract			$ 38,910.65
Original contract		$ 39,400.00	
Extras allowed	$ 549.65		
Deductions agreed upon	39.00		
Net above original contract		510.65	
Total		$ 39,910.65	
Reserved until roof is put in satisfactory shape		1,000.00	
Amount paid		$ 38,910.65	
Cost of wrecking old building			489.37
Proudfoot, Bird & Rawson, architects' fee 2½% on cost of building			1,033.36
Plumbing			1,027.40
Lighting			389.35
Heating			1,481.50
Heating tunnel			82.64
Material and labor, setting boiler			476.10
Concrete floor and foundations for machinery			485.98
Installing apparatus			742.41
Piping, valves, and labor connecting machinery with boiler			2,469.60
General items; freight, express, telegrams, traveling expenses, etc.			129.36
Total			$ 47,727.72
Balance unexpended			2,272.28
			$ 50,000.00

The balance of $2,272.28 will be needed to cover the following:

Payment of amount reserved on contract for completion of building	$ 1,000.00
Completing concrete floors	450.00
Material and labor installing steam turbine, and coal and ash handling machinery, and making proper connections	822.28
Total	$ 2,272.28

TRANSPORTATION BUILDING.

The appropriation for this purpose from the Special Building Tax was $65,000. The contract for the erection of the building was let to A. H. Neumann & Co.; the heating, lighting, plumbing, painting, sewers and other construction work were assigned to Superintendent Sloss while Professor King had charge of the purchase and installing of the equipment. The expenditures along these lines during the biennium were as follows:

EXPENDITURES.

A. H. Neumann & Co., contract		$ 43,502.85
Original contract	$ 42,830.00	
Extras allowed	972.85	
Total	$ 43,802.85	
Reserved until completion of contract	300.00	
Amount paid	$ 43,502.85	
Proudfoot, Bird & Rawson, architects' fee (2½% on cost)		1,188.72
Plumbing		1,129.38
Lighting		705.47
Heating		2,289.05
Painting		103.87
Sewers		584.66
Tunnel and water main		234.01
General expenses		78.54
Total expended		$ 49,816.55
Balance unexpended		15,183.45
		$ 65,000.00

This balance has been set aside for the following:

Payment of amount reserved on Neumann & Co.'s contract		$ 300.00
Plumbing		19.67
Equipment:		
4 Alden brakes	$ 2,800.00	
1 crane	1,343.09	
4 bearings for locomotive support wheels	1,524.00	
8 short supports for track	225.00	
6 bedplates for locomotive support wheels	2,914.00	
Gate valves for feed water tanks	44.16	
Rails for track	129.56	
Turnbuckles for track	75.00	
Lumber	45.78	
Piping for water supply	1,100.00	
Drawbar for dynamometer	155.00	
Temporary dynamometer	500.00	
Stack for locomotive	500.00	
Shades for building	100.00	
Safety links for dynamometer	328.00	
Labor installing above equipment	2,200.00	
Freight	300.00	
Incidentals	180.19	14,863.78
Total		$ 15,183.45

CHEMISTRY BUILDING.

The authority for the erection of this building is found in Joint Resolution No. 14 of the Thirty-fifth General Assembly, and Chapter 329 of the Laws of said Assembly. The joint resolution approves "plans and specifications for the erection of a Chemistry building at a cost not to exceed $250,000, to be built and erected under the provisions of Chapter 201 of the Acts of the Thirty-fourth General Assembly," which chapter

provides for the levying of a special building tax for the state educational institutions. Chapter 329, referred to above, appropriates $125,000 "as an emergency fund to be used as an additional fund for the construction of a chemistry building and the equipment of the same, and the purchase of laboratory supplies." Since this chapter authorizes the use of $25,000 for equipment and supplies, and the joint resolution provides that $250,000 may be used in the erection of the building, the College authorities have construed the two as placing a limit of $275,000 on *building and supplies* to be divided between the special building tax and the special appropriation as follows:

Special building tax	$ 150,000.00
Special appropriation	125,000.00
Total	$ 275,000.00

The contract for the erection of the building proper was let to the McCarthy Improvement Company for $200,000. It was directed that the heating, lighting and plumbing, and all other work necessary to complete the building should be done directly by the College under the supervision of Superintendent Sloss. The following are the expenditures from the building tax fund during the last biennial period:

EXPENDITURES.

McCarthy Improvement Co., on contract	$ 111,013.38
Proudfoot, Bird & Rawson, on architects' fee	4,560.00
Electric light wiring	422.28
Power	77.72
Total	$ 116,073.38

This leaves an unexpended balance of $33,926.62 of the $150,000 of Special Building Tax set aside for this building. This balance has been reserved to cover the following:

McCarthy Improvement Co., on contract	$ 32,486.62
Proudfoot, Bird & Rawson, on architects' fees	1,440.00
Total	$ 33,926.62

The expenditures charged the Special Appropriation of $125,000 and the further items to be paid from any unexpended balance to its credit will be found later in this report under "Special Appropriations."

WOMEN'S DORMITORY.

The Thirty-fourth General Assembly set aside $55,000 from the Special Building Tax for the erection of an addition to Margaret Hall. This addition is in the shape of a Woman's dormitory. The contract for its erection was let to W. F. Kucharo and Company for $55,000. The remainder of the work is to be done under the direct charge of Superintendent Sloss. The expenditures in the last biennium were as follows:

EXPENDITURES.

Proudfoot, Bird & Rawson, architects' fees	$ 927.50
Excavating	480.91
Sewers	109.83
Miscellaneous expenses	12.94
Total	$ 1,531.18

The following is Superintendent Sloss's itemized estimate of the cost of the building when completed:

W. F. Kucharo's contract	$ 40,457.50
Extras on building	1,900.00
Excavating	490.00
Heating and plumbing	8,000.00
Electric wiring	1,000.00
Electric fixtures	300.00
Cistern	200.00
Sewers	400.00
Kitchen equipment	400.00
Architects' fee	1,325.00
Lift	250.00
General expenses including inspector's salary	277.50
Total	$ 55,000.00

HORTICULTURAL LABORATORY AND GREENHOUSES.

The last legislature set aside $95,000 from the Special Building Tax for the erection of Agricultural laboratories. Of this amount, the Board of Education appropriated $60,000 toward the erection of a Horticultural laboratory and greenhouses. These are now under construction. The expenditures, prior to July 1, 1914, amounted to only $107.19, covering bills for clearing the site, excavating, and a few minor items of general expense.

The following summary shows the entire expenditures of the Special Building Tax fund during the biennial period, together with the balance in the hands of the College Treasurer at the beginning of the period and the annual amounts drawn by him from the State Treasury during the biennium:

SPECIAL BUILDING TAX SUMMARY.

COLLEGE TREASURER'S RECEIPTS AND DISBURSEMENTS.

1912-14.

RECEIPTS.

Balance in hands of college treasurer July 1, 1912	$ 41.24
Drawn from state treasury:	
During fiscal year 1912-1913	101,433.44
During fiscal year 1913-1914	206,453.27
Total	$ 307,927.95

EXPENDITURES.

Central building	$ 606.48
Hall of agriculture	17.26
Engineering hall annex	642.48
Domestic technology building	758.76
Judging pavilion	455.86
Veterinary building	9,569.72
Gymnasium	80,621.37
Mechanical engineering laboratory	47,727.72
Transportation building	49,816.55
Chemistry building	116,073.38
Women's dormitory	1,531.18
Horticultural laboratory—greenhouses	107.19
Total	$ 307,927.95

The combined accounts of the College and the State Treasurer, which give the condition of this fund as a whole, show the following:

RECEIPTS.

Cash in hands of state treasurer July 1, 1912	$ 91,274.67	
Cash in hands of college treasurer July 1, 1912	41.24	$ 91,315.91
Collected during fiscal year 1912-13	$149,068.60	
Collected during fiscal year 1913-14	169,528.97	318,597.57
Total		$ 409,913.48

EXPENDITURES.

Expended in the erection of buildings, as shown by college treasurer's books	$ 307,927.95
Balance in hands of state treasurer at close of biennial period after deducting all drafts of college treasurer included by him in accounts of the last fiscal year	101,985.53
Total	$ 409,913.48

In looking to the future of this fund, it is more convenient to deal with calendar than fiscal years. Transferring to this basis, we have as the amount available during the remained of the present calendar year the following:

Cash on hand July 1, 1914	$ 101,985.53
Estimated income July 1, 1914, to Jan. 1, 1915	72,000.00
Total	$ 173,985.53
Against this amount stand the following claims:	
Central building	$ 697.74
Agricultural hall	4.70
Ceramics	397.74
Domestic Technology building	820.48
Judging pavilion	510.40
Veterinary building	.98
Gymnasium	57.53
Mechanical Engineering laboratory	2,272.28
Transportation building	15,183.45
Chemistry building	33,926.62
Women's dormitory	53,468.82
Horticultural laboratory	59,892.81
	$ 167,233.55

This will leave an estimated balance, after completing the foregoing buildings, of nearly $7,000. The tax collections for 1915 on account of the Special Building Tax will amount to about $180,000, making the sum of $187,000 available for building purposes during the calendar year 1915. It is recommended by the Building Committee of the Board of Education that plans be submitted to the Thirty-sixth General Assembly for the erection of the following buildings:

Animal Husbandry building	$ 80,000.00
Bacteriological and Zoological building	65,000.00
College hospital	30,000.00
	$ 175,000.00

The last levy under the present tax law will be made in 1916, to be collected in 1917.

(b) SPECIAL APPROPRIATION FOR CHEMISTRY.

As already stated, the last legislature appropriated to the College the sum of $125,000 "as an additional fund for the construction of a chemistry building and the equipment of the same, and the purchase of laboratory supplies."

The following shows the expenditures, on account of this appropriation, during the biennial period:

EXPENDITURES.

McCarthy Improvement Co., on contract	$ 22,355.83
Excavations and foundations	10,089.18
Sewers and water mains	1,808.02
Sash and sills in basement	827.00
Ducts in basement	1,248.61
Wiring for electric lighting	2,742.87
Heating and plumbing, including plumbing to and in laboratory tables	11,036.37
Laboratory tables and sinks used at first in the Emergency building and then transferred to Chemistry building	2,062.43
Grading in basement	79.35
Apparatus and supplies	10,591.70
Wiring for power and direct current	1,682.78
High pressure steam	140.73
General expenses, including traveling expenses, salary of foreman, telegrams, telephone, drafting, tools and other minor items	1,816.27
Total expended	$ 66,481.14
Unexpended balance	58,518.86
	$ 125,000.00

The following is Superintendent Sloss's estimate of the way in which the unexpended balance will need to be used:

Balance of McCarthy Improvement Co.'s contract	$ 34,144.17
Extras on building after deducting stone furnished contractor	2,515.00
Sewers	39.35
Ducts in basement	653.33
Wiring for electric lighting	618.56
Heating and plumbing	10,762.94
Grading in basement	515.43

Basement fans for general ventilation	1,527.24
Partitions in wings	7,292.84
General, including salary of foreman	450.00
Total	$ 58,518.86

CENTRAL HEATING PLANT.

At the beginning of the biennial period there remained of the $43,000 appropriated by the Thirty-fourth General Assembly for the extension of the Central Heating system, an unexpended balance of $39,217.35. The last legislature added to this, for the further equipment of the central station and extensions of the tunnel, the sum of $30,000. The College had asked for $50,000. The reduction compelled Superintendent Sloss to postpone some greatly needed improvements in the plant, and use the new fund available almost entirely in tunnel extensions to the new buildings. The following shows the funds available during the two years, and the purposes for which they were used:

RECEIPTS.

Unexpended balance July 1, 1912		$ 38,217.35
Appropriation by Thirty-fifth general assembly		30,000.00
Total amount available		$ 68,217.35

EXPENDITURES.

For 1912-1913:		
Coal and ash handling machinery	$ 15,749.93	
Water heater	1,517.10	
Two 469 horse power boilers, chain grates, foundations and installation	13,982.21	
High pressure mains in tunnel	3,276.58	
Tunnel in gymnasium	3,602.23	$ 38,217.35
For 1913-1914:		
Tunnel extensions	$ 1,106.91	
Chimney	3,750.50	
Piping in tunnels	602.15	
Tunnel in Chemistry building	7,203.85	
Tunnel to Transportation building	1,636.12	
High pressure steam main	384.52	
High tension line in tunnel	2,310.22	16,994.28
Total expenditures		$ 55,211.63
Unexpended balance June 30, 1914		13,005.72
Total		$ 68,217.35

It is proposed to use the unexpended balance of $13,005.72 for the following purposes:

High pressure steam mains	$ 4,873.89
Chimney	3,746.21
Roof of central station	4,068.14
High tension electric light wires	307.17
Chemistry building tunnel	8.31
Total	$ 13,005.72

The tunnel extensions to the new buildings to be erected in the next two years, and the added equipment in the central plant and existing tunnels made necessary thereby, will require an appropriation from the

next legislature of at least $39,600. The following are the items making up such necessary askings:

Equipment:		
Two 500 H. P. boilers	$ 7,000.00	
Two sets chain grate stokers	3,425.00	
Piping for boilers	1,200.00	
Foundations and settings	2,500.00	
Coal hoppers	1,500.00	
Ash conveyors	2,500.00	
Turrell regulator	675.00	
Railroad scales	1,500.00	
Car moving apparatus	425.00	
Feed water pump to boilers	750.00	
Breeching to boilers	450.00	
Exciter for alternating current machine (old one worn out)	1,475.00	$ 23,400.00
Repairs and Improvements:		
600 ft. tunnel postoffice to Chemistry building	$ 7,200.00	
300 ft. tunnel old Agricultural building to Science buildings	3,600.00	
400 ft. tunnel to Animal Husbandry buildings	4,800.00	
500 ft. tunnel water pipe to new building	600.00	16,200.00
Total		$ 39,600.00

(c) PUBLIC GROUNDS IMPROVEMENTS.

The Thirty-fourth General Assembly appropriated $13,500 for the improvement of the College campus; of this amount there was on hand at the beginning of the biennium an unexpended balance of $6,771.32. The Thirty-fifth General Assembly set aside from the two year millage tax an annual fund of $10,000 for the maintenance and improvement of public grounds. Collections under this tax began with the calendar year 1914, and three-fifths of the fund for that year became available before the close of the biennial period ending June 30, 1914. This amount, however, was not drawn from the State Treasury until after the beginning of the new biennium. The balance of the earlier appropriation was drawn, and the following is the account with this portion of the campus improvement fund:

RECEIPTS.

Balance of appropriation of Thirty-fourth general assembly		$ 6,771.32

EXPENDITURES.

On wagon bridge across College creek	$ 28.51	
On new concrete roads	44,028.52	
Cement for future roads and bridge	2,016.00	$ 6,073.03
Unexpended balance June 30, 1914		$ 698.29
Total		$ 6,771.32

The amount available for the fiscal year 1914-15, and the proposed expenditures are as follows:

(c)[1] FUND AVAILABLE FOR PUBLIC GROUND MAINTENANCE AND IMPROVEMENT, 1914-15.

Balance from last year	$ 698.29
Three-fifths of annual tax fund available in last biennial period, but not used	6,000.00
Annual tax fund for 1914-15	10,000.00
Total	$ 16,698.29

PROPOSED EXPENDITURES.

Maintenance of public grounds	$ 4,700.00	
Road past Professor Coover's residence, Dairy building and farm house and north to railroad track and thence west to Veterinary building, parallel to track and east to farm road, including bridge across south campus creek	2,[illegible]	
Outlet for storm sewer	1,985.00	
Road from Quarantine hospital to the Chemistry building	4,000.33	
Sidewalk to Ridge avenue	12.50	
Grading around Chemistry building	600.00	
Grading around Women's dormitory	300.00	
Sidewalk from pavement north of Morrill hall to trolley track and grading road	823.81	
Drive from Farm house to old Agricultural hall	155.17	
Grading around Plant Propagation building	300.00	$ 18,361.81
Less amount of cement purchased last year, and to be used in above improvements		1,663.32
Total		$ 16,698.29

(d) SPECIAL DEPARTMENT EQUIPMENT APPROPRIATION.

The amount appropriated for this purpose by the Thirty-fourth General Assembly was $75,000. This was divided equally between the fiscal years ending June 30, 1912, and June 30, 1913. Only the latter year is included in the biennial period covered by this report. The unexpended balance from the previous year is, however, taken into account. The showing for the biennium is as follows:

RECEIPTS.

Unexpended balance on hand July 1, 1912	$ 5,120.46
Apportionment for year ending June 30, 1913	37,500.00
Total available fund	$ 42,620.46

EXPENDITURES.

Agricultural Education	$ 274.33	
Agricultural Engineering	1,178.00	
Animal Husbandry	2,309.60	
Bacteriology	1,359.25	
Botany	585.00	
Chemistry	1,102.25	
Civil Engineering	2,162.39	
Dairy	1,139.06	
Dairy Farm	1,676.36	
Electrical Engineering	1,284.45	
Engineering dean	153.39	
English	124.00	
Farm	301.30	
Farm Crops	153.44	
History	91.57	
Home Economics	738.79	
Horticulture	606.81	
Forestry	751.54	
Library	1,198.99	
Mechanical Engineering	4,197.68	
Military	50.00	
Mining Engineering	1,417.15	
Modern Languages	24.83	
Physics	1,358.85	
Physical Culture	96.70	
Physical Training	7,350.95	
Poultry	522.41	
President's office	100.00	
Public Speaking	62.38	
Soils	1,037.25	
Transportation	305.95	
Veterinary	7,298.74	
Water line to Anamosa camp	120.00	
Zoology	1,331.59	
Total		$ 42,620.46

(e) EQUIPMENT OF BUILDINGS AND DEPARTMENTS.

The law creating the two year millage tax sets aside an annual fund of $40,000 for the "equipment of buildings and departments." Three-fifths of the first annual amount ($24,000), was available in the fiscal year ending July 1, 1914. The expenditures for the different departments were as follows:

EXPENDITURES.

Animal Husbandry	$ 526.19
Botany	351.19
Chemistry	408.35
Dairy	232.06
Electrical Engineering	188.53
Farm	189.70
Dairy Farm	400.00
Home Economics	104.67
Physics	346.36
Physical Culture	520.87
Physical Training	17.00
Zoology	180.50
Total	$ 3,465.31

This leaves an unexpended balance of 20,534.69. It will be noted that the fund is designed to equip buildings as well as departments. In equipping buildings, it has been used to provide the special equipment necessary to fit buildings for their particular use. In the matter of the Chemistry building, for instance, there has been charged to this fund the expense of laboratory tables, special plumbing and special laboratory ventilation and power.

The following exhibit shows the amount available for the present year and the purposes for which it is proposed to use it.

EQUIPMENT FUND.

AVAILABLE 1914-15.

Balance from last year	$ 20,534.69
Annual fund for 1914-15	40,000.00

PROPOSED EXPENDITURES.

Chemistry Building Equipment—		
Chemistry proper:		
Electric wiring for power	$ 1,850.00	
Basement fan for special laboratory ventilating system	5,462.76	
Attic fans for ventilating system	2,675.00	
Sheet metal work connected with special ventilating system	8,500.00	
Hoods for professors' laboratories	300.00	
Temporary and permanent laboratory tables with plumbing to and in the tables; also shelving	10,637.24	
Auditorium laboratory tables	450.00	$ 29,875.00
Other departments having rooms in Chemistry building—		
Chemistry Section of Agricultural Experiment Station:		
Hoods with lockers and drawers, shelving, laboratory tables, fans, sinks, piping and casings	$ 2,140.00	
Chemical Section of Engineering Experiment Station, equipment and installation	750.00	
Chemical Engineering, installing in new quarters	500.00	
Photography:		
Sinks, shelves, benches, lockers, cases, blands for dark rooms, electrical apparatus and necessary wiring	1,000.00	
Plant Physiology and Entomology:		

Desks and platforms for two rooms	450.00	
Entomology equipment	50.00	4,890.00
Plant propagation equipment, as per list in secretary's office		4,000.00
Steam and Gas Laboratory:		
Engine	$ 4,280.00	
Condensers	926.15	
Steam turbine	2,500.00	
Steam superheater	1,000.00	
Feed water heater	200.00	
Gas calorimeter	300.00	
Freight, drayage and setting machinery	387.48	9,593.63
Transportation Building:		
Furniture for Transportation building	$ 787.14	
3 Alden brakes for Locomotive laboratory	2,100.00	
4 bearings for locomotive wheel supports	834.00	
2 weighing and 1 feed water tank for Locomotive laboratory	400.00	
2 scales for weighing water, and 1 for weighing coal in Locomotive laboratory	190.00	
1 charging barrow for handling coal	37.35	
10 hydraulic gages for water system in Locomotive laboratory	32.50	
Indicators for testing locomotives	377.25	
Recording apparatus for determining speed and R. P. M. in Automobile and Locomotive laboratory	414.70	
36" fan and motor for Automobile laboratory	223.00	
1—6 1/16" shaft for Automobile Testing plant	36.66	
2 roller bearings for Automobile laboratory	150.00	
2 floor stands for Automobile laboratory	56.00	
2 housings for bearings, Automobile laboratory	75.00	
1 Alden dynamometer, Automobile laboratory	250.00	
Tools (large) for shop and laboratories	115.50	
1 motor for shop	49.50	
2 wood pulleys for Automobile laboratory	94.50	
Lockers	69.00	
Drafting for equipment	79.25	
Freight on equipment	55.50	
Miscellaneous items	251.20	6,768.05
Electrical Engineering:		
Oscillagraph		451.55
Junior Dean's Office:		
Filing cases		225.00
Agricultural Engineering:		
Freight truck wheels and tires		175.00
Total		$ 55,978.23
Balance unappropriated		4,556.46
		$ 60,534.69

SPECIAL APPROPRIATION FOR ENGINEERING ANNEX FURNITURE.

Of the $5,000 appropriated by the Thirty-fourth General Assembly for this purpose there was remaining at the beginning of the biennial period a small balance of $186.63 which was expended for electric light fixtures.

REPAIR AND CONTINGENT FUND.

Prior to the meeting of the last legislature, the amount of this annual fund was $36,000. The legislature of that year added $10,000 to this amount from the two year millage tax; three-fifths of the first annual payment of which became available in the last year of the biennial period. The legislature also made a special repair appropriation of $8,000 for this year. Summarizing these amounts and the balance on hand at the beginning of the biennial period, and grouping the expenditures under the different buildings and the general expense account, we have the following showing of receipts and expenditures for the two years:

REPAIR AND CONTINGENT FUND EXPENDITURES—Continued.

RECEIPTS.

Cash balance on hand July 1, 1912		$ 21,127.39
Annual appropriation, 1912-1913		36,000.00
Annual appropriation, 1913-14	$ 36,000.00	
Three-fifths of annual mill tax appropriation	6,000.00	
Special appropriation, 1913-1914	8,000.00	50,000.00
Total available for the biennial period		$ 107,127.39

EXPENDITURES.

Agricultural Engineering Building:			
Rewiring	$ 1,087.89		
High pressure steam	210.40		
Roofing and repairing	4,994.32		
Enclosing repair room	56.26		
Office repairing, plastering and tinting	919.16		
Laboratory tables	132.00		
Extension of smoke pipes	128.31		
Fitting up three class rooms	452.19		
Gas piping in basement, and new floor in elevator	9.41		
General repairs	416.75	$ 8,559.12	
Campus and Grounds:			
Veterinary building grading	$ 286.34		
One light wagon	94.89		
Sewer maintenance	486.58		
Sewage disposal	339.62		
Two new pumps for water supply	3,870.32		
Campus maps for building committee	48.37		
Sewage plant enlargement	4,072.74		
Water pipe to Anamosa camp	219.52		
Part purchase price of Holden house	1,617.00		
General repairs	286.87	11,322.25	
Central Building:			
Shelving and other repairs in treasurer's office	$ 30.07		
Refinishing corridors	563.86		
Installing library	1,386.24		
Partitions in room 320 and blackboard in room 309	49.34		
Sinks, water and gas in Bacteriology department	72.11		
Corridor seats	47.40		
Storm doors	87.57		
General repairs	634.03	2,870.62	
Chemistry Building:			
Repairing and replacing waste pipes	$ 20.53		
Refitting sinks and laboratory tables	201.40		
Shelving (150 ft.)	15.20		
Kalsomining and varnishing on three floors	247.03		
5 doz. Eagle keyless locks, and 2 doz. padlocks	67.48		
Laboratory shingling	43.84		
General repairs	73.49		
Emergency building for use of Chemistry department	4,040.42		
Apparatus for distilled water and installing two electric furnaces	346.10		
Expenses of Professor Coover and Architect Proudfoot, investigating other chemical buildings	164.83		
Wrecking old building	474.03		
Sanitary and storm sewer from new Chemistry building and gas and water connections	1,176.96		
Emergency repairs on old Chemistry building and on Chemistry emergency building	2,217.12	9,088.43	
Dairy Building:			
Screen doors	$ 10.65		
Cement steps outside of ice cream room; high pressure steam for cheese room; gas connection for testing room; shelving in supply room; table for weighing room; blackboards	74.06		
Window shades	38.98		
Filter for Creamery	179.87		
Alterations for guinea pig room	49.71		
General repairs	290.11	643.38	
Domestic Technology Building			83.49

REPAIR AND CONTINGENT FUND EXPENDITURES—Continued.

Engineering Buildings:		
Two sanitary drinking fountains	$ 115.19	
Moving and storing Mechanical Engineering equipment	222.63	
Establishing Civil Engineering surveying monuments	200.00	
Moving direct current equipment	91.68	
Painting Engineering annex	80.84	
Replacing and repairing dark curtains	64.46	
Dark curtains for Engineering assembly	25.64	
Illumination in lecture room, Physics department	41.99	
Extension of water main between Engineering building and annex	142.28	
Shafting and pulleys for testing machine, Civil Engineering department	111.35	
Sewer for Steam laboratory	228.19	
Electric wiring and lamps, Mechanical Engineering laboratory	55.00	
Repairing Engineering annex machine shop and slate roof	2,453.28	
Table lights, Electrical Engineering department	22.41	
Radiators, room 314, Engineering building	42.54	
Changing conduits, room 116	13.16	
Rebuilding assay furnaces	26.68	
Installing apparatus, Mechanical Engineering laboratory	1,792.32	
Radiation in Engineering annex	280.92	
Connecting pattern shop motor	71.97	
Chemistry shelving	224.24	
Painting walls and floors, old Engineering hall	72.14	
General repairs	1,004.80	7,653.81
Farm Buildings and Equipment:		
Substitution of cement and iron stalls in old cattle barn	$ 502.08	
Fencing between bull pasture and calf pasture	15.04	
Isolation building for Dairy farm	73.94	
Repairing farm buildings	157.38	
Repairing and rewiring Experiment barn, cow barn and horse barn	56.58	
Repairs in house at Dairy farm	65.43	
Painting buildings, Dairy farm	220.81	
Repairs on barn, Dairy farm	56.41	
Ten fire extinguishers, Dairy farm	58.03	
Painting poultry buildings and farm house	101.89	
Silo for farm department	354.78	
Poultry colony houses	90.72	
Bull shed	224.01	
Shingling sheep barns	233.21	
New driveway in hay barn; new plank entrance way	163.58	
Tile drain at Dairy farm	110.38	
New floor in pavilion No. 2	167.84	
Ten poultry colony houses	203.16	
Repairing and painting machinery shed	41.70	
Repairing cattle barn	102.03	
Repairing central hog house	224.68	
Movable hog houses	286.29	
Installing electric motor	146.11	
Repairs, herdsman's cottage	33.11	
Experimental feeding shed repairs	50.21	
Sanitary improvements, farm buildings	449.22	
General repairs	802.36	5,457.10
Farm Improvements		
Drainage, grading, fruit trees and shrubbery at Poultry farm	$ 372.96	
Water supply for forage crops and hog lots	99.28	
Cinder paths, Poultry farm	22.00	
Repairing farm fences and gates	480.48	
General repairs	11.46	1,006.08
Fires, Lights and Incidentals:		
General repairs		7,594.29
Gymnasium:		
Lighting fixtures	$ 1,323.55	
Filter system	1,029.88	
General repairs	164.81	2,528.54
General Buildings:		
Painting	$ 710.76	
Sewer from Central heating plant and Experiment barns to septic tanks	721.86	
Night watchman's clock	61.05	
Drain from Power Plant to Squaw creek	722.75	

REPAIR AND CONTINGENT FUND EXPENDITURES—Continued.

Gun racks, Military department	116.98	
General repairs	496.20	2,869.60
Hall of Agriculture:		
Repairs in Soils laboratory and Agronomy department rooms	$ 237.73	
Furniture for Animal Husbandry department	105.61	
Fitting up room for Photo laboratory	47.97	
Lockers, Soils department	147.22	
Women's toilet and rest room	60.32	
General repairs	570.37	1,178.22
Horticultural Buildings:		
Sewage disposal plant, for house and barn	$ 305.65	
Repairing gardener's quarters	49.94	
Repairing Horticultural laboratory and entrance way	28.90	
Repairing and improving greenhouses	60.34	
Painting greenhouses, exterior and interior	329.84	
Double doors on implement and tool shed	21.54	
Compost yard	38.66	
Repainting barn and shed	52.95	
Repairing barn	10.88	
Vegetable forcing shed	1,796.39	
General repairs	394.72	3,019.81
Margaret Hall:		
Repairing and rewiring	$ 763.92	
Fire alarm	50.51	
Fitting up basement	5,563.97	
General repairs	33.34	$ 6,411.74
Morrill Hall:		
Repairing and rewiring	$ 122.29	
Wiring for chapel lantern and lamps for chapel ceiling	55.51	
Electric current for Zoology	124.38	
Repairs in chapel	206.44	
Repairing chapel organ	29.36	
American flag for chapel	6.00	
Remodeling basement for extension departments	4,291.30	
Ceiling in Entomological laboratory dark room and battery room partitions; sink, in store room; plumbing in dark room and for physiological desks; shelving in storeroom and basement; sink in laboratory; dumb waiter	299.58	
General repairs	522.75	5,727.61
Music Hall:		
Painting exterior and interior	$ 152.26	
Repairing front porch and furnace	277.93	
General repairs	96.68	526.87
Professors' Houses:		
Rewiring for all houses	$ 247.77	
Making connections with Central heating plant	275.43	
Painting and repairing president's residence	432.38	
Porch and bay window at vice president's residence	992.01	
New roof and other repairs in residence occupied by dean of Agriculture	767.36	
New porch and repairs on residence occupied by dean of Engineering	622.77	
Repairs on residence of Vice Dean Beach	113.42	
Painting and repairing house occupied by Professor Mortenson	485.11	
Repairs on residence occupied by Professor Noble (including cement walk)	119.09	
General emergency repairs	1,063.85	5,079.19
Veterinary Buildings:		
Window shades	$ 195.00	
Water main to Serum plant	864.62	
Fitting up Research laboratory	34.20	
General repairs	340.73	1,434.65
Other Buildings:		
Electric light fixtures, superintendent's residence	$ 96.20	
Herdsman's house	1,215.85	

REPAIR AND CONTINGENT FUND EXPENDITURES—Continued.

Repairing and rewiring Farm superintendent's residence	29.42	
Roof and gutters on Experiment station cottage	99.19	
Steam line to Farm superintendent's house	100.75	
General repairs	650.24	
Remodeling old Veterinary barn for use as superintendent's workshop and storeroom	286.22	3,177.78
Office expenses in connection with accounting of Repair and Contingent fund		66.67
Salaries:		
Half salary superintendent Grounds and Buildings (for two years)	$ 2,583.33	
Part salary college treasurer two years	200.00	
Part salary first carpenter, 2 years	1,391.50	
Part salary second carpenter, two years	1,020.50	
Part salary third carpenter, 2 years	1,034.25	
Salary of teamster, 2 years	1,150.00	
Salary of painter, two years	1,910.00	
Part salary, finance committee clerk, two years	1,205.59	10,495.15
Total expended		$ 96,793.56
Balance on hand		10,333.89
		$ 107,127.39

REPAIR AND CONTINGENT FUND BUDGET.

1914-15.

AVAILABLE FUNDS.

Cash balance from last year	$ 10,333.89
Annual appropriation, permanent	36,000.00
Allotment from two year milliage tax	10,000.00
Total	$ 56,333.89

PROPOSED EXPENDITURES.

(1) Fixed Charges:		
Thomas Sloss, superintendent, part salary	$ 1,350.00	
Herman Knapp, treasurer, part salary	100.00	
Fred Stocker, head carpenter, salary	738.00	
B. F. Seymour, second carpenter, salary	546.00	
F. A. Fox, third carpenter, salary	561.00	
Tom Fultz, teamster	600.00	
J. P. Reid, painter	1,020.00	
Harriette Carmichael, clerk	660.00	
Office expenses connected with accounting of building and repair funds	100.00	
Sewer maintenance	150.00	
Sewage disposal	500.00	
Superintendent's emergency fund	1,500.00	
Fires, lights and incidentals	5,500.00	$ 13,325.00
(2) Reappropriated to complete repairs and improvements under-way:		
Fitting up basement of Old Agricultural Hall	$ 1,200.00	
Gas connections in basement of Old Agricultural Hall	10.46	
Fireproof hoods in Ceramics laboratory	200.00	
Lantern screens, Physics department	30.00	
Installing apparatus, Mechanical Engineering laboratory	248.68	
Repairing central hog house	76.92	
Sanitary improvements on farm buildings	550.08	
Water supply to lower hog lots	7.00	
Fires, lights and incidentals department, repairs and improvements	4,521.57	
Repairing campanile and clock	31.00	
Soils lockers, Agricultural Hall	92.78	
Women's rest rom, Agricultural Hall	155.68	
Electric lights in superintendent's residence	1.99	
Steam line to residence occupied by Vice-President Stanton	224.57	7,310.73

(3) New appropriations:

SCIENCE DIVISION.

English Department:		
13 screens for offices	$ 20.00	
29 screens for class rooms	45.00	
Shelving for essay file room	25.00	

REPAIR AND CONTINGENT FUND BUDGET—Continued.

Partition in room 17	50.00	$ 140.00	
History Department:			
Shelving		20.00	
Library:			
Electric lift	$ 100.00		
Buzzer from delivery desk to ground floor	2.00		
Buzzer from librarian's office to delivery desk	3.00		
20 new shelves for stacks in English room	12.00		
Spring for main door to library	6.00	123.00	
Zoology:			
12 place physiological desks	$ 240.00		
1 sink	12.00		
Plumbing in new physiological desks	60.00	312.00	
Totals for Science division			$ 595.00

DIVISION OF AGRICULTURE.

Agricultural Journalism:			
8 screens for rooms 15, 16, 17 and 18		$ 12.00	
Animal Husbandry Department:			
Remodeling old pavilion and providing locker boxes	$ 75.00		
Blackboard	15.00	90.00	
Dairy Farm:			
Painting dairy room	$ 10.00		
Repairing floors in horse stalls	75.00		
New grates for boiler	15.00		
Panels in shed adjoining the Dairy barn and also one to divide the quarantine building	20.00		
New wagon scales (if Supt. Sloss and Prof. Meeker find present scales useless)	140.00		
Extension of tile drain from Dairy buildings	50.00		
4 individual hog houses	120.00		
Repairing present fences	150.00		
Repainting fence posts about the barn lot and along the roadway out to the farm	50.00		
2 gates	20.00		
Improved ventilation	25.00	675.00	
Poultry Farm:			
Completion of poultry tight fence around the farm	$ 150.00		
Cherry trees and planting to complete orchard	150.00	300.00	
Animal Husbandry Section:			
Concrete floors in the present long cattle feeding shed	$ 300.00		
Repairing cistern	25.00		
Piggery	600.00	925.00	
Dairy:			
50 steel lockers		200.00	
Farm:			
Shelter for cattle and horses	$ 500.00		
Cement water trough for cattle barn	30.00	530.00	
Farm Crops:			
Oiling floors in Farm Crops offices	$ 8.00		
Movable blackboard for pavilion	9.00		
Refinishing blackboards in room 307	1.00	18.00	
Horticulture:			
Repainting side walls of greenhouse	$ 50.00		
Repair of bench bottoms and supports in greenhouses	40.00		
Repainting old greenhouses	100.00		
Repair of down spouts	40.00		
Repair of greenhouse ventilators	25.00		
Catch basin for tile drain north of Horticultural barn	15.00		
Water plant for orchard north of C. & N. W. railway	125.00		
Storage room in basement of barn	150.00		

REPAIR AND CONTINGENT FUND BUDGET—Continued.

Ventilator flue for storage room	40.00	585.00	
Photographic Department:			
36 steel lockers at $2.25 each		56.25	
Soils Department:			
Repair on hood in room 4	$ 5.00		
2 shelves in room 6	5.00		
Plate glass for table tops	41.00		
Repairs on hoods in rooms 8, 11 and research laboratory	25.00	76.00	
Total for division of Agriculture			$ 3,467.25
Agricultural Engineering:			
Retinting walls in Annex	$ 50.00		
Repair blackboards in rooms 205, 208	10.00		
Wiring for lantern in room 205	25.00		
Black shades in room 205	25.00		
Lavatory in room 203	42.00		
Steam connections for the tunnel to new laboratory in basement of Old Agricultural Hall to run engines; also moving equipment and installing same	200.00		
Ventilator fan for repair shop	20.00		
100 lockers for freshmen and sophomore classes (to be made by students)	200.00		
Scales, etc.	50.00	$ 623.00	
Total for Agricultural Engineering			$ 623.00

DIVISION OF ENGINEERING.

Civil Engineering:			
Reservoir for pump section and storage	$ 475.00		
Installation of equipment on hand	400.00		
Piping in hydraulic laboratory for friction tests	200.00		
Drinking fountain	35.00		
New locks for building	50.00	1,160.00	
Electrical Engineering:			
Ventilating registers and fan in room 205	$ 100.00		
Partition in room 210, Engineering Hall	75.00	175.00	
Mechanical Engineering:			
Installing coal and ash handling machinery for gas and steam laboratory		2,000.00	
Mining Engineering:			
Installing apparatus		50.00	
Physics:			
2 oak cases for apparatus in Junior laboratory	$ 110.00		
Oak case for apparatus for room 209	30.00		
Extending compressed air connectionns to rooms 110 and 116	50.00		
Installing 680 square feet of blackboard in rooms 210, 214 and 216	70.00	260.00	
Transportation Building:			
Building shelving and cases	$ 200.00		
Coat hooks	10.00	210.00	
Total for division of Engineering			$ 3,855.00

DIVISION OF HOME ECONOMICS.

Domestic Science:			
Painting floors	$ 50.00		
Re-enameling desks in cooking laboratory	40.00		
Enameling bases of tables in cooking laboratory	35.00	$ 125.00	
Total for division of Home Economics			$ 125.00

DIVISION OF VETERINARY MEDICINE.

Dean's Office:			
Picture rail in library and museum	$ 10.00		
Lettering doors	50.00	$ 60.00	

REPAIR AND CONTINGENT FUND BUDGET—Continued.

Anatomy:			
Partition in dissecting room	$	75.00	
24 hooks for dissecting instruments		20.00	95.00
Pathology and Bacteriology:			
2 doors	$	25.00	
1 double door with felt between halves for incubator room		50.00	
Whitewash three rooms		15.00	
Repair still		6.25	
Heater and thermostat for incubator room		30.00	126.25
Physiology and Pharmacology:			
Screens for office and private laboratory	$	12.00	
Cement pedestal		10.00	
Wall table in Pharmacy laboratory		8.00	30.00
Practice and Diagnosis:			
Radiator installed in room 100	$	15.00	
Drawers in dispensary repaired and labeled		10.00	25.00
Surgery and Obstetrics:			
Stall for foot bath	$	10.00	
Change in feed bin and hay pulley		25.00	
Cabinet for operative surgery repaired		10.00	
Ceiling in corridor		260.00	
Ventilators on roof of corridor controlled by air system		196.00	501.00
Painting for all departments	$	500.00	
Of which $50 is to be charged to the Serum fund		—50.00	450.00
Total for division of Veterinary Medicine			$ 1,287.25

TWO-YEAR AGRICULTURE.

Agronomy:			
Partition wall	$	15.00	
Horticulture, Botany and Bacteriology:			
45 feet of treated tables attached to walls		150.00	
Total for Two-Year Agriculture			$ 165.00
General:			
Cistern for Home Economics	$	400.00	
Furnishings and fixtures for Women's Dormitory, in addition to $4,000 appropriated for equipment		500.00	
Partitions and alterations in Chemistry Emergency building, which is to be occupied by Zoology and Plant Physiology		300.00	
Remodeling locker room in Margaret Hall for use as rooms for girls		400.00	
Store room in Central building		300.00	
Drinking fountains: 1 for Home Economics building; 1 for old Agricultural Hall; 1 for Veterinary building		125.00	
Tile building for housing locomotive		400.00	
Fencing, including all fences requested for Farm, Animal Husbandry department and section, except Dairy and Poultry farms		600.00	
Professor Beach's Residence:			
Decoration of walls	$ 50.00		
Refinishing floors and woodwork	15.00	65.00	
Dean Curtiss's Residence:			
Hardwood floors	$ 100.00		
Completion of painting and papering	20.00		
Plastering ceilings of 3 rooms in basement	50.00	170.00	
Professor Summers's Residence:			
Repairing sunken wall of kitchen	$ 50.00		
Hardwood floors	150.00	200.00	
Chemistry Building:			
Shades	$ 700.00		

REPAIR AND CONTINGENT FUND EXPENDITURES—Continued.

Library and other shelving	600.00		
Blackboards	550.00		
Transfer of temporary and permanent equipment	1,500.00	3,250.00	
Heating tunnel to new Women's Dormitory		6,000.00	
Swimming tank at Margaret Hall, to be constructed January 1st, if balance permits		3,000.00	
Light and power for Dairy and Poultry farms, to be installed December 1st, if balance permits		1,000.00	
Repairs and improvements on the Dairy building for the coming year		602.00	
Reinforced concrete cattle pass over Ft. Dodge, Des Moines and Southern Railway Co. tracks		583.00	
General repairs on buildings		602.40	
Painting outside of sixteen buildings, and such other painting as is necessary		1,500.00	
Repairing old gymnasium in Margaret Hall, fitting it up for use of girls		400.00	
Grading lane near barns leading to pasture		150.00	
Shed for freight trucks and superintendent's automobile		1,000.00	
Blackboards for Chemistry building		50.00	
Expenses of moving Engineering Extension department from Morrill Hall to Chemistry building		10.00	
Starter for automobile, used by Superintendent of grounds		25.00	
Additional appropriation for coal conveying machinery for Mechanical Engineering department		500.00	
Doorway in Electrical Engineering department		50.00	
Repairs in Soil laboratories		185.00	
Steam heat in office of Farm Superintendent at horse barn		85.00	
Bill of Proudfoot, Bird and Rawson for plans and specifications for improvements made on the residence occupied by Vice-President		22.50	
Total for general			$ 22,474.90
Grand total			$ 53,228.13

SUMMARY.

Amount available for 1914-15	$ 56,333.89
Total of appropriations	53,228.13
Balance unappropriated	$ 3,105.76

The two items of Swimming Pool for Women, $3,000, and Electric Light and Power for Dairy and Poultry Farms, $1,000, in the foregoing list, are provisional appropriations dependent upon funds being available. It looks as if they would have to be cancelled in order to have a sufficient emergency fund for the balance of the year.

ROOM RENT.

The income derived from rental of rooms in College dormitories and other buildings, sale of wreckage, and other small items of revenue from College buildings, is credited to this account. This income is used to meet expenses connected with the buildings furnishing such revenue.

The following shows the receipts and expenditures during the biennium:

RECEIPTS.

Unexpended balance July 1, 1912			$ 3,268.05
For 1912-13:			
Rental of rooms	$ 2,865.91		
Sale of wreckage	153.27		
Rental of donated land	1.00		
Net receipts—storeroom	814.64	$ 3,834.82	
For 1913-14:			
Rental of rooms	$ 4,497.14		
Sale of wreckage	43.36		
Rental of donated land	1.00		
Sale of old furniture, etc.	83.22	4,624.72	
Total receipts			8,459.54
Total funds available			$ 11,727.59

EXPENDITURES.

For 1912-13:				
Salaries		$ 1,200.00		
Furniture and repairs		464.95		
Wreckage		.43		
Superintendent's office expense		24.28	$ 1,689.66	
For 1913-14:				
Salaries		$ 1,351.75		
Office building repairs		77.87		
Margaret Hall repairs and supplies		432.75		
Margaret Hall, painting		585.90		
Superintendent's office expense		11.25		
Net expenditures, store room account		108.22		
Margaret Hall Annex:				
Part purchase of Holden house	$ 4,000.00			
Remodeling	389.24			
Furniture	1,109.58			
Matron's board	101.23			
General expense	109.26	5,709.31	8,277.05	
Total expenditures				9,966.71
Unexpended balance June 30, 1914				$ 1,760.88
Total				$ 11,727.59

This balance is divisible as follows:

Room rent account proper	$ 1,055.56
Store room account	705.32
	$ 1,760.88

It will appear hereafter under these two separate headings.

The following shows the estimated income and expenditures on account of this fund for the coming year:

ROOM RENT.
1914-15.

ESTIMATED INCOME.

Balance brought over from last year	$ 1,055.56
Rental of rooms	7,500.00
	$ 8,555.56

ESTIMATED EXPENDITURES.

Salaries:		
Part salary of first carpenter	$ 342.00	
Part salary of second carpenter	414.00	
Part salary of third carpenter	279.00	
Part salary of Mrs. Phillips, clerk	300.00	$ 1,335.00
Board of matron at Margaret Hall Annex (estimated)		140.00
Beardshear House:		
Furniture	$ 1,000.00	
Repairs	500.00	
Board of matron (estimated)	140.00	
Rental at $40 per month for 11 months	440.00	2,080.00
Repairs on old North Hall, addition to Margaret Hall		200.00
Repairs on buildings rented, and repairs and purchase of furniture for same		4,700.56
		$ 8,555.56

The following is a summary of the entire expenditures on account of buildings and improvements. For easy reference and comparison, these are given for each year:

SUMMARY.

BUILDING AND EQUIPMENT FUND EXPENDITURES.

The expenditures for buildings, repairs and equipment during the biennial period may be summarized as follows:

	1912-13	1913-14
Repairs and contingencies	$ 45,196.62	$ 51,596.87
Special building tax:		
Hall of Agriculture	17.26	.....
Engineering Hall Annex	533.86	108.62
Domestic Technology building	317.40	441.36
Dairy building	.....	606.48
Veterinary building	8,596.73	972.99
Judging pavilion	253.84	102.02
Gymnasium	78,620.54	2,000.83
Chemistry building	.....	116,072.38
Mechanical Engineering laboratory	12,978.96	34,748.77
Transportation building	14.86	49,801.69
Girl's dormitory	.....	1,531.18
Horticultural laboratory	.....	107.19
Central heating plant	28,217.35	16,984.28
Chemistry building	10,272.24	56,398.90
Public grounds improvement	1,868.17	4,179.86
Engineering Hall Annex furniture	186.63	.....
Additional department equipment	20,250.56	12,269.90
Equipment of departments and buildings	.....	3,465.31
Room rent	1,659.66	8,277.05
Totals	$229,239.68	$ 359,486.68
Grand total for the two years		$ 588,726.36

VI. HOG CHOLERA SERUM PLANT.

The law of the last legislature, establishing at the College a Hog Cholera Serum laboratory, appropriated $35,000 for carrying out the provisions of the act.

The account with the fund shows the following:

RECEIPTS.

Appropriation of Thirty-fifth General Assembly		$ 35,000.00

EXPENDITURES.

Construction of building	$ 16,638.28
Temporary hog sheds	1,781.05
Refrigerator room	198.21
Virus plant	182.74
Lumber	264.39

Furniture and equipment	4,648.53		
Horse	184.94	$ 23,893.24	
Salaries	$ 6,463.60		
General labor	8,655.49		
Office help	2,608.81		
Traveling expense	376.02	18,103.92	
Serum purchased	$ 15,063.69		
Serum returned	1,220.96		
Hogs purchased	89,313.01		
Veterinary services	30.00		
Feed stuffs	9,057.77		
Miscellaneous supplies	7,450.66		
Coal	144.81		
Ice	390.17		
Laundry	226.98		
Electricity and gas	102.13		
Water	113.87		
Office supplies	681.34		
Photos	21.49		
Postage	549.50		
Freight, express and drayage	307.84		
Telephones and telegrams	174.62		
Printing	333.21		
Repairs	86.72	116,269.77	
Total expenditures			$ 158,266.93
Less sales			
For 1912-13		$ 2,779.66	
For 1913-14		142,267.01	145,046.67
Net expenditures			$ 13,220.26
Balance on hand June 30, 1914			21,779.74
Total			$ 35,000.00

It is proposed to use the balance of the Serum Fund appropriation to erect two small buildings, to cost about $12,000.00, one for a rendering plant, and the other a slaughter house. The remainder of the fund is to be used in the manufacture of a stock of serum which shall constitute a reserve, to be drawn upon in case of emergency.

A statement of the total expenditures for all purposes for the biennial period will be found at the beginning of that part of this report which discusses the expenditures for the different lines of work.

FUNDS AVAILABLE FOR 1914-15.

The amounts available for the coming year in the various funds have already been considered with the single exception of the Collegiate Support Fund. The balance to the credit of this fund at the close of the last fiscal year was $71,354.87. Of this sum, $25,000 is reserved as a working balance, leaving $46,354.87, available. From this amount, the following sums have been appropriated for equipment and furniture:

	Equipment	Furniture	Total for Department	Total for Division
Science Division:				
Dean's office		$ 33.25	$ 33.25	
Bacteriology	$ 200.00		200.00	
Botany	800.00	535.00	1,335.00	
Chemistry	3,000.00	1,000.00	4,000.00	
Economic Science		35.00	35.00	
English		201.00	201.00	
History and Psychology	100.00	33.25	133.25	
Library—general	1,000.00			
Books for special departments	512.50			
Books for Agricultural Education	100.00	99.00	1,702.50	
Mathematics		70.00	70.00	
Military	35.00		35.00	
Music	12.50	68.00	80.50	
Physical Training	248.00		248.00	
Zoology	800.00	804.00	1,604.00	
Totals for Science	$ 2,773.00	$ 1,602.00		$ 3,805.00
Division of Agriculture:				
Agricultural Education	$ 50.00	$ 176.90	$ 226.90	
Agricultural Journalism	25.00	158.00	183.00	
Animal Husbandry	4,400.00	183.00	4,583.00	
Dairy	1,181.02	50.00	1,231.02	
Farm Crops	148.00	403.39	551.39	
Forestry	292.00	130.00	422.00	
Horticulture	400.00	80.00	570.00	
Photography	400.00	68.00	468.00	
Soils	733.20	41.00	774.20	
Totals for Division of Agriculture	$ 7,719.22	$ 1,290.29		$ 9,009.51
Department of Agricultural Engineering	$ 501.00	$ 209.00		$ 710.00
Division of Engineering:				
Civil Engineering	$ 1,797.00		$ 1,797.00	
Electrical Engineering	1,332.00	$ 70.00	1,402.00	
Mechanical Engineering	200.00		200.00	
Mining Engineering	450.00	25.00	475.00	
Physics	1,480.60	266.00	1,746.60	
Structure Design	375.00	150.00	525.00	
Transportation building	1,185.00		1,185.00	
Totals	$ 6,819.60	$ 511.00		$ 7,330.50
Home Economics Division:				
Domestic Science	$ 920.00	$ 260.00	$ 1,180.00	
Domestic Art	1,150.00	277.00	1,396.00	
Dean's office		65.00	65.00	
Physical Culture		65.75		
Totals	$ 2,089.00	$ 627.75		$ 2,716.75

FUNDS AVAILABLE FOR 1914-15—Continued

	Equipment	Furniture	Total for Department	Total for Division
Veterinary Division:				
Anatomy	$ 265.50	$ 125.00	$ 390.50	
Pathology and Bacteriology	180.00	43.00	223.00	
Physiology and Pharmacology	150.00	25.00	175.00	
Practice and Diagnosis	100.00	65.00	165.00	
Surgery and Obstetrics	90.00	70.00	160.00	
Totals	$ 785.50	$ 328.00		$ 1,113.50
General:				
Inventory Clerk's department—Balopticon	$ 263.80		$ 263.80	
	500.00		500.00	
Document room		$ 225.00	225.00	
Margaret Hall	500.00		500.00	
Women's playground	600.00		600.00	
Men's tennis courts	300.00		300.00	
Leveling and grading exercise grounds	4,000.00		4,000.00	
Women's dormitory furnishings	2,552.00			
Chemistry building, chairs				
Totals for General	$ 8,715.80	$ 225.00		$ 8,940.80

Total appropriated	$ 33,626.06
Total available for appropriation	12,728.81
	$ 46,354.87

The balance given above is available for the purchase of permanent equipment, but cannot be used for the regular annual budget without causing the regular annual expenditures to exceed the regular annual income. The amount available for the collegiate educational budget for 1914-15 is as follows:

From National sources	$ 85,000.00
From State:	
Permanent annual appropriations	249,900.00
From two year millage tax (including $15,000 apportioned to the four year Home Economics course from the $20,000.00 set aside for the four year and two year Home Economics courses)	140,000.00
From Miscellaneous sources:	
Tuition collected from students coming from outside the state	10,000.00
Interest on bank balances	2,000.00
	$ 486,900.00

The budget is as follows:

EDUCATIONAL SUPPORT FUND BUDGET 1914-15.

I. Salaries:		
Professors, assistant professors and administrative officers	$234,033.83	
Instructors and assistants	110,937.79	$ 344,971.62
II. Department expenses and ordinary additions to equipment:		
Agricultural Education	$ 1,200.00	
Agricultural Journalism	850.00	
Animal Husbandry	2,000.00	
Agricultural Engineering	2,446.56	
Bacteriology	1,300.00	
Botany	950.00	
Chemistry	1,625.00	
Civil Engineering	1,450.00	

Dairy	1,800.00	
Dairy Farm	1,800.00	
Economics	750.00	
Electrical Engineering	1,200.00	
English	700.00	
Farm	2,700.00	
Farm Crops	1,075.00	
Farm Management	525.00	
Forestry	1,110.00	
History and Psychology	400.00	
Home Economics	2,500.00	
Horticulture	3,417.00	
Library	900.00	
Library, books and periodicals	4,900.00	
Mathematics	225.00	
Mech nical Engineering	1,900.00	
Military	700.00	
Mining Engineering	1,250.00	
Modern Languages	50.00	
Music	225.00	
Physics	1,610.00	
Physical Culture	50.00	
Photography	134.91	
Poultry	1,500.00	
Public Speaking	85.00	
Structure Design	300.00	
Soils	1,795.00	
Transportation department	1,220.00	
Veterinary	3,375.00	
Zoology	650.00	
Summer School fees reappropriated	1,039.59	51,708.06
III. Maintenance of Buildings:		
Heating and lighting and incidentals	$ 27,600.00	
Janitor fund	17,400.00	45,000.00
IV. Administrative and General:		
Agricultural Dean (including $200 State Fair)	$ 1,400.00	
Engineering Dean (including $200 State Fair)	1,600.00	
Science Dean	200.00	
Assignment Committee	615.00	
Carrying Campus mail	300.00	
Catalogues and Bulletins	3,250.00	
Commencement week expense	450.00	
Inventory Clerk	770.00	
Junior College Dean	2,300.00	
Matron's Office	1,180.00	
Non-resident Lecture fund	600.00	
President's Contingent fund	900.00	
President's Office	2,800.00	
Publicity	2,604.67	
Purchasing department	3,340.00	
Ringing chimes, care of clock and tower	190.00	
Registrar's Office	2,565.00	
Sabbath Service	700.00	
Secretary's Office	2,425.00	
State Teachers' Assn., headquarters	50.00	
Telephone service	200.00	
Y. M. C. A. Information Bureau	400.00	
Printing Section	300.00	
Treasurer's Office	4,260.00	33,559.67
V. Summer Session		10,000.00
		$ 485,239.35

SUMMARY.

I. Salaries	$ 344,971.62
II. Department expenses and ordinary additions to equipment	51,708.06
III. Maintenance of buildings	45,000.00
IV. Administrative and general	33,559.67
V. Summer School	10,000.00
Total	$ 485,239.35

The total of the budget is $485,239.35, while the funds to meet it aggregate $485,900.00.

The salary list constitutes the largest item in the budget. It is as follows:

SALARIES OF PROFESSORS, ASSISTANT PROFESSORS AND ADMINISTRATIVE OFFICERS.

	Support fund	Agricultural experiment station	Other college funds	Totals
Adminstrative—				
Raymond A. Pearson, president	$ 7,500.00			$ 7,500.00
E. W. Stanton, vice-president, secretary, dean of junior college and professor of mathematics	4,000.00			4,000.00
C. F. Curtiss, dean of agriculture and director of experiment station	2,500.00	$ 2,000.00		4,500.00
Anson Marston, dean of engineering, civil engineering	4,000.00		(c) $200.00 (d) 300.00	4,500.00
C. H. Stange, dean of veterinary medicine; veterinary	3,000.00	300.00	(h) 300.00 (g)1,200.00	4,800.00
R. E. Buchanan, dean of science; bacteriology	2,700.00	300.00		3,000.00
Catharine J. MacKay, dean of home economics; home economics	2,500.00			2,500.00
Maria M. Roberts, vice-dean of junior college mathematics	2,100.00			2,100.00
S. W. Beyer, vice-dean of engineering; mining engineering	3,300.00		(c)100.00 (d)100.00	3,500.00
S. A. Beach, vice-dean of agriculture; horticulture	2,000.00	1,300.00		3,300.00
W. W. Dimock, vice-dean of veterinary; pathology and bacteriology	2,600.00			2,600.00
Herman Knapp, treasurer and registrar; superintendent of college book store, (receives $500 from book store)	2,250.00	250.00	(e)100.00	2,600.00
Professors—				
C. N. Arnett, animal husbandry	2,600.00			2,600.00
F. W. Beckman, agriculture journalism	2,700.00	1,150.00	(a)1,000.00	2,850.00
Harold Edward Bemis, surgery and obstetrics	2,250.00			2,250.00
Fletcher Briggs, modern languages	2,250.00			2,250.00
J. E. Brindley, economic science	2,200.00		(d)100.00	2,300.00
P. E. Brown, soils	1,250.00	1,250.00		2,500.00
O. H. Cessna, history and psychology	3,000.00			3,000.00
F. E. Colburn, photography	750.00	1,500.00		2,250.00
W. F. Coover, chemistry	2,700.00			2,700.00
J. B. Davidson, agricultural engineering	1,500.00	1,500.00		3,000.00
F. A. Fish, electrical engineering	2,700.00		(d)200.00	2,900.00
H. D. Hughes, farm crops	1,500.00	1,500.00		3,000.00
R. K. Bliss, director agricultural extension department			(b)3,000.00	3,000.00
H. H. Kildee, dairy husbandry	1,250.00	1,375.00		2,625.00
E. E. King, railway engineering	2,400.00			2,400.00
J. E. Kirkham, structural engineering ($500 additional from highway commission)	2,200.00			2,200.00
J. R. Lincoln, military science	1,400.00			1,400.00
G. B. MacDonald, forestry	1,300.00	1,000.00		2,300.00
W. H. Meeker, mechanical engineering	2,700.00		(d)200.00	2,900.00
M. Mortensen, dairy	1,500.00	1,500.00		3,000.00
H. B. Munger, farm management	1,200.00	1,200.00		2,400.00
H. S. Murphey, veterinary anatomy and histology	2,250.00			2,250.00
A. B. Noble, English	2,500.00			2,500.00
L. H. Pammel, botany	2,600.00	400.00		3,000.00
W. H. Pew, animal husbandry	1,500.00	1,500.00		3,000.00
K. G. Smith, engineering extension			(i)2,400.00 (j) 800.00	3,200.00

SALARIES OF PROFESSORS, ETC.—Continued.

	Support fund	Agricultural experiment station	Other college funds	Total
L. B. Spinney, physics	2,800.00		(d) 200.00	3,000.00
W. H. Stevenson, agronomy	1,750.00	1,750.00		3,500.00
H. E. Summers, zoology	2,200.00	400.00		2,600.00
G. M. Turpin, poultry	1,250.00	1,375.00		2,625.00
Clyde Williams, physical training (also receives $1,500 from athletic council)	1,500.00			1,500.00
G. M. Wilson, agricultural education	2,700.00			2,700.00
Associate Professors—				
T. R. Agg, civil engineering	1,500.00		(c)1,000.00	2,500.00
C. E. Bartholomew, zoology	850.00	750.00		1,600.00
H. C. Bartholomew, electrical engineering	1,900.00			1,900.00
H. D. Bergman, physiology and pharmacology	2,000.00			2,000.00
J. C. Bowman, English	1,400.00			1,400.00
Iva L. Brandt, domestic art	1,200.00			1,200.00
G. A. Chaney, mathematics	1,600.00			1,600.00
Vina E. Clark, librarian	1,200.00	100.00		1,300.00
M. P. Cleghorn, mechanical engineering	2,200.00			2,200.00
Julia T. Colpitts, mathematics	1,600.00			1,600.00
M. F. P. Costelloe, agricultural engineering	2,250.00			2,250.00
M. I. Evinger, hydraulic engineering	1,700.00		(d)100.00	1,800.00
E. F. Perrin, animal husbandry	1,700.00			1,700.00
H. C. Ford, civil engineering	2,000.00			2,000.00
G. A. Gabriel, mining engineering	2,000.00			2,000.00
Winifred S. Gettemy, domestic art	1,300.00			1,300.00
J. B. Guthrie, zoology	2,000.00			2,000.00
B. W. Hammer, dairy bacteriology	1,000.00	1,000.00		2,000.00
J. C. Harris, music (also receives $700 from music council fund)	800.00			800.00
W. R. Hechler, farm crops	2,100.00			2,100.00
L. C. Hodson, mining engineering	2,200.00			2,200.00
O. Lloyd Jones, animal husbandry	1,900.00			1,900.00
A. H. Kimball, structure design	2,500.00			2,500.00
C. C. Major, mechanical engineering	1,950.00			1,950.00
J. N. Martin, botany	2,000.00			2,000.00
Ruth E. Michaels, domestic science	1,500.00			1,500.00
G. C. Morbeck, forestry	1,800.00			1,800.00
Chas. Murray, veterinary bacteriology	1,900.00			1,900.00
R. A. Norman, mechanical engineering	1,900.00			1,900.00
E. A. Pattengill, mathematics	1,600.00			1,600.00
R. H. Porter, mechanical engineering	1,700.00			1,700.00
W. B. Raymond, English	1,700.00			1,700.00
R. R. Renshaw, chemistry	1,800.00			1,800.00
Grace E. Russell, domestic art	1,600.00			1,600.00
Frederika V. Shattuck, public speaking (acting head)	1,400.00			1,400.00
L. B. Schmidt, history	2,250.00			2,250.00
P. S. Shearer, animal husbandry	1,600.00			1,600.00
R. M. Sherwood, poultry	1,600.00			1,600.00
R. E. Smith, soils	2,100.00			2,100.00
H. F. Staley, mining engineering	1,600.00			1,600.00
L. A. Test, chemistry	1,800.00			1,800.00
H. W. Vaughn, animal husbandry	1,700.00			1,700.00
G. H. VonTungeln, economic science	1,500.00	500.00		2,000.00
J. A. Wilkinson, chemistry	1,800.00			1,800.00
G. W. Snedecor, mathematics	1,600.00			1,600.00
R. W. Crum, civil engineering	1,500.00		(e)200.00 (d)100.00	1,800.00
Assistant Professors—				
J. H. Atkinson, English	1,400.00			1,400.00
A. L. Bakke, botany	1,350.00			1,350.00
J. T. Bates, mechanical engineering	1,500.00			1,500.00
R. R. Bolton, veterinary medicine	1,800.00			1,800.00
S. E. Conybeare, agricultural journalism	1,450.00			1,450.00

SALARIES OF PROFESSORS, ETC.—Continued.

	Support fund	Agricultural experiment station	Other college funds	Totals
F. H. Culley, horticulture	1,500.00			1,500.00
S. H. Dadisman, agricultural education	2,000.00			2,000.00
H. E. Ewing, zoology	1,600.00			1,600.00
Nellie Fitzgerald, domestic art	1,400.00			1,400.00
S. L. Galpin, geology	1,500.00			1,500.00
L. B. Greenfield, English	1,400.00			1,400.00
B. M. Harrison, zoology	1,500.00			1,500.00
O. T. Hokasaen, history	1,200.00			1,200.00
John Hug, mechanical engineering	1,300.00			1,300.00
J. G. Humiuel, mechanical engineering	1,500.00			1,500.00
John Ise, economic science	1,500.00			1,500.00
H. B. Kinney, soils	1,600.00			1,600.00
W. Kunerth, physics	1,400.00			1,400.00
Max Levine, bacteriology	1,200.00		(d)200.00	1,400.00
Clyde McKee, farm crops	2,000.00			2,000.00
Ned A. Merriam, physical training (also receives $750 from athletic council)	750.00			750.00
E. M. Mervine, agricultural engineering	1,800.00			1,800.00
F. D. Paine, electrical engineering	1,400.00			1,400.00
H. J. Plagge, physics	1,300.00			1,300.00
F. A. Robbins, electrical engineering	1,500.00			1,500.00
A. W. Rudnick, dairying	1,900.00			1,900.00
Ruth B. Safford, English	1,000.00			1,000.00
Grace Schermerhorn, agricultural education	1,500.00			1,500.00
H. E. Scullen, zoology	1,300.00			1,300.00
H. G. Stiles, physics	1,500.00			1,500.00
G. E. Thompson, physics	1,500.00			1,500.00
Winifred R. Tilden, physical culture	1,300.00			1,300.00
Dora G. Tompkins, English	1,250.00			1,250.00
T. F. Vance, history	1,500.00			1,500.00
R. S. Wallis, civil engineering	1,400.00			1,400.00
C. B. Williams, economic science (also receives $900 from agricultural extension)	900.00		(b)900.00	1,800.00
Harriett Sessions, reference librarian	1,000.00			1,000.00
C. G. Lang, physical training	1,800.00			1,800.00
Mrs. Emily Cunningham, adviser to women	1,000.00			1,000.00
C. H. Schemann, assistant to the president	2,100.00			2,100.00
Thomas Sloss, superintendent of grounds and buildings	1,350.00		(c)1,350.00	2,700.00
C. G. Tilden, college physician			(f)2,200.00	2,200.00
C. S. Nichols, assistant to dean of engineering	900.00		(d)600.00 (c)500.00	2,000.00
J. Buchanan, superintendent of co-operative experiments		2,350.00		2,350.00
L. C. Burnett, assistant chief in cereal breeding (also receives $1,250 from U. S. Government)		1,250.00		1,250.00
A. W. Dox, chief in chemistry		2,500.00		2,500.00
A. T. Erwin, assistant chief in truck crops		2,500.00		2,500.00
J. M. Evvard, assistant chief in animal husbandry		2,600.00		2,600.00
L. Greene, assistant chief in pomology		2,500.00		2,500.00
O. G. Loyd, assistant chief in farm management		1,900.00		1,900.00
C. M. King, assistant chief in botany		1,300.00		1,300.00
R. L. Webster, assistant chief in entomology		1,900.00		1,900.00
Totals	$225,700.00	$ 42,700.00	$ 17,350.00	$ 295,750.00

(b)Agricultural Extension.
(a)John Clay Endowment.
(c)Good Roads.
(d)Engineering Experiment Station.
(e)Repair and Improvement.
(f)Hospital.
(g)Serum Fund.
(h)Veterinary Investigation.
(i)Engineering Extension.
(j)Trade School.

Houses on the college grounds are occupied by President Pearson; Deans Stanton, Curtiss and Marston; Professors Beach, Mortensen, Meeker, Summers, Noble and Superintendent Sloss.

In the cases of President Pearson and Superintendent Sloss the houses are heated and lighted.

The foregoing salaries are for the College year running from Sept. 1, 1914. In order to obtain the amount which will be expended for salaries during the fiscal year, beginning July 1, 1914, the additions and deductions given below must be made. The salary total for the year will then stand as follows:

Salaries as given above in the Support fund column	$ 225,700.00
Add salaries for the last college year of those who have resigned or have been transferred to other work	3,116.33
	$ 228,816.33
Deduct saving in salaries due to the fact that new salaries and increases in salaries do not go into effect until September 1st, or two months after the beginning of the fiscal year	4,782.50
Total of salary roll of professors and administrative officers for fiscal year 1914-15	$ 224,033.83

The following is the list of instructors and assistants for the coming year with the salary of each and the fund to which it is chargeable:

SALARIES OF INSTRUCTORS AND ASSISTANTS.

	Support fund	Agricultural experiment station	Other college funds	Totals
Mabel Adams, Domestic Science	$ 1,200.00			$ 1,200.00
H. G. Anderson, Physics	1,000.00			1,000.00
D. E. Bailey, Chemistry	800.00			800.00
H. J. Burtis, Public Speaking	1,100.00			1,100.00
E. G. Bassett, Modern Languages	1,200.00			1,200.00
C. A. Baughman, Civil Engineering	800.00			800.00
Alma B. Booth, Domestic Art	1,000.00			1,000.00
J. W. Bowen, Chemistry	900.00			900.00
L. J. Bredvold, English	1,000.00			1,000.00
J. H. Buchanan, Chemistry	1,300.00			1,300.00
Helen A. Burling, Bacteriology	600.00			600.00
J. W. Cameron, Mechanical Engineering	1,050.00			1,050.00
Grace Campbell, Mathematics	500.00			500.00
B. R. Clem, Agricultural Engineering	1,100.00			1,100.00
A. F. Carlson, Dairy	1,200.00			1,200.00
E. C. Coad, Agricultural Education	1,000.00			1,000.00
Marian Daniells, Mathematics	1,200.00			1,200.00
J. R. Derby, English	1,100.00			1,100.00
L. DeVries, Modern Languages	1,200.00			1,200.00
H. S. Doty, Botany	800.00			800.00
J. F. H. Douglas, Physics	1,200.00			1,200.00
F. A. Dragoun	1,000.00			1,000.00
Anna M. Earhart, English	950.00			950.00
E. E. Eastman, Soils	600.00			600.00
F. Eberson, Bacteriology	500.00			500.00
Ruth Edgerton, Physical Culture	1,000.00			1,000.00
G. V. Emery, Physics and Mathematics	1,000.00			1,000.00
Mrs. Mary P. Fairfield, Modern Languages	1,200.00			1,200.00
Genevieve Fisher, Domestic Science	1,400.00			1,400.00
Elsie Franck, Domestic Art	1,000.00			1,000.00
J. H. Fraser, Zoology	600.00			600.00
L. S. Gillette, Dairy Husbandry	1,500.00			1,500.00
Helen R. Goodrich, Domestic Art	1,000.00			1,000.00
A. J. Hauser, Dairy	1,500.00			1,500.00
M. H. Havenhill, Agricultural Engineering	1,100.00			1,100.00

SALARIES OF INSTRUCTORS AND ASSISTANTS--Continued

	Support fund	Agricultural experiment station	Other college funds	Totals
Frank Harrington, Horticulture	1,300.00			1,300.00
Ada Hayden, Botany	900.00			900.00
H. C. Hetzel, Pomology	1,300.00			1,300.00
F. F. Householder, Physics	1,000.00			1,000.00
H. C. Hubbard, Physical Training (Also receives $1,300 from Athletic Council funds)	300.00			300.00
Margaret Irving, Public Speaking	800.00			800.00
Geo. Judisch, Physiology and Pharmacology	400.00			400.00
Rosemond Kedzie, Domestic Science	1,000.00			1,000.00
J. B. Kelley, Agricultural Engineering	1,300.00			1,300.00
J. A. Krall, Farm Crops	1,200.00			1,200.00
A. D. Latimer, Mathematics	1,200.00			1,200.00
H. J. Lechner, Farm Crops	1,300.00			1,300.00
E. W. Lehmann, Agricultural Engineering	1,300.00			1,300.00
D. S. Myers, Civil Engineering	1,200.00			1,200.00
G. E. Lignen, Physical Training	900.00			900.00
John Luthley, Dairy	1,200.00			1,200.00
Ingeborg Lommen, German	1,200.00			1,200.00
Jessie McArthur, English	900.00			900.00
Elizabeth McKim, Mathematics	850.00			850.00
Kjaerstine Mathiesen, English (Regular salary $950.00, extra work $29.46)	979.46			979.46
Agnes G. Mosher, Mathematics	1,300.00			1,300.00
Mrs. S. B. More, Chemistry	700.00			700.00
Nellie M. Naylor, Chemistry	1,000.00			1,000.00
Jean MacKinnon, Chemistry (Also receives $1,000 from Two Year Funds)	300.00			300.00
A. F. Nickels, Mechanical Engineering	1,050.00			1,050.00
Grace I. Norton, German	1,200.00			1,200.00
O. A. Olson, Mechanical Engineering	1,200.00			1,200.00
Mary Pettit, Domestic Science	1,200.00			1,200.00
J. C. Pomeroy, Physics	1,100.00			1,100.00
E. C. Potter, Mechanical Engineering	1,050.00			1,050.00
A. E. Potts, Dairy	1,200.00			1,200.00
R. C. Riedesel, Mechanical Engineering	900.00			900.00
Bertha M. Riley, Domestic Art	1,200.00			1,200.00
J. A. Sawin, Mechanical Engineering	1,050.00			1,050.00
F. H. Schoultz, Chemistry	800.00			800.00
J. L. Seal, Botany	600.00			600.00
W. J. Seur, Chemistry	800.00			800.00
Helen F. Smith, Mathematics	1,300.00			1,300.00
E. M. Spangler, Mechanical Engineering	1,000.00			1,000.00
A. Starbuck, English	1,150.00			1,150.00
Lola Stephens, Chemistry	1,200.00			1,200.00
Ingeborg Svendsen-Tune, Music (Also receives $1,100 from Music Council)	400.00			400.00
Laura M. Taggart, Chemistry	1,200.00			1,200.00
Avis Talcott, Chemistry	900.00			900.00
Helen Tappan, Mathematics	1,000.00			1,000.00
Lora Thompson, Domestic Art	900.00			900.00
T. R. Truax, Forestry	1,400.00			1,400.00
H. W. Richey, Horticulture ($100 per month beginning September 1, 1914)	1,000.00			1,000.00
E. C. Volz, Horticulture	1,200.00			1,200.00
R. B. Weirick, English	1,200.00			1,200.00
H. G. Werner, Zoology	1,000.00			1,000.00
M. H. Weseen, English	900.00			900.00
G. A. Williams, Zoology	600.00			600.00
Zelma Zentmire, Chemistry	400.00			400.00
Edna E. Walls, Domestic Science	1,200.00			1,200.00
R. M. Cole, Chemistry	900.00			900.00
J. D. Grossman, Anatomy and Histology	1,200.00			1,200.00
W. F. Guard, Surgery and Obstetrics	1,200.00			1,200.00
Harriett Kellogg, Curator of the Herbarium	500.00	$ 400.00		900.00
C. C. Kiplinger, Chemistry	950.00			950.00
Caroline E. Laird, Assistant Librarian	800.00			800.00
L. M. Larsen, Chemistry	850.00			850.00
———, Assistant, Pathology and Bacteriology	500.00			500.00

SALARIES OF INSTRUCTORS AND ASSISTANTS—Continued]

	Support fund	Agricultural experiment station	Other college funds	Totals
A. E. Maddy, Zoology	300.00			300.00
J. G. Hanmer, Farm Superintendent	1,350.00			1,350.00
Amy W. Noll, Desk Librarian	900.00			900.00
L. Pletcher, Chemistry	900.00			900.00
Betty H. Pritchett, Cataloguer	900.00			900.00
Robina M. Rae, Assistant Librarian	600.00	300.00		900.00
John Reardon, Gardener (Also receives from the Current Expense fund of the Horticultural Department $700; and $24 from the Current Expense funds of Farm Crops and Soils Sections of the Experiment Station)		200.00		200.00
L. A. Ramsey, Chemistry	900.00			900.00
Mary G. Rush, Assistant Librarian	700.00			700.00
Elizabeth J. Sherwood, Head Cataloguer, Library (2 months @ $1,100 per year $183.33, 10 months @ $1,200 a year $1,000.00)	1,183.33			1,183.33
C. W. Beese, Mechanical Engineering	200.00			200.00
I. T. Bode, Forestry	200.00			200.00
Wm. Diehl, Botany	400.00			400.00
Lois Edwards, Botany	100.00			100.00
J. C. Eldredge, Farm Crops	300.00			300.00
———, Fellowship, Soils	500.00			500.00
G. W. Goodrich, Animal Husbandry	200.00			200.00
S. G. Lake, Horticulture	200.00			200.00
P. S. McNutt, Botany	200.00			200.00
R. A. Needham, Soils	400.00			400.00
M. E. Olson, Farm Crops		900.00		900.00
Winifred Perry, Botany	100.00			100.00
E. B. Reynolds, Soils	300.00			300.00
O. C. Scholtz, Botany	200.00			200.00
E. G. Squires, Botany	200.00			200.00
W. W. Stanfield, Farm Crops	400.00			400.00
A. J. Swift, Animal Husbandry	200.00			200.00
C. W. Porter, Agricultural Engineering		1,500.00		1,500.00
P. L. Blumenthal, Assistant in Chemistry		1,500.00		1,500.00
C. E. Brashear, Assistant to Dean of Agriculture (Also receives $500 from Agricultural Dean's Current Expense)		500.00	(b)500.00	1,000.00
Russell Dunn, Animal Husbandry		1,500.00		1,500.00
L. W. Forman, Soils		1,850.00		1,850.00
W. G. Gaessler, Chemistry		1,700.00		1,700.00
L. V. Gowdy, Field Superintendent Horticulture (Also $416.17 from Current Expense Fund of Horticulture and Forestry and Two Year Horticulture)		683.33		683.33
S. C. Guernsey, Assistant in Chemistry		1,400.00		1,400.00
W. G. Kaiser, Assistant in Agricultural Engineering		1,200.00		1,200.00
S. B. Kuzerian, Assistant in Chemistry		1,200.00		1,200.00
A. R. Lamb, Assistant in Chemistry		1,400.00		1,400.00
C. W. Larson, Photography		980.00		980.00
T. J. Maney, Assistant in Horticulture		1,700.00		1,700.00
R. S. Potter, Assistant in Soil Chemistry		1,600.00		1,600.00
———, Assistant in Dairying		1,500.00		1,500.00
Student Assistant, Agricultural Journalism	200.00			200.00
Scholarship Agricultural Engineering	200.00			200.00
Student Assistants, Chemistry	1,075.00			1,075.00
Totals	$110,937.79	$ 21,913.33	$ 500.00	$ 133,351.12

PER CAPITA COST OF THE EDUCATIONAL WORK AT THE COLLEGE.

The foregoing budget of the collegiate educational departments, and the budgets for the two year non-collegiate courses give a clear idea of the cost of maintaining the educational work at Ames. In determining this cost, it will be noticed that certain items of the total disbursements of the institution for the year are not taken into account. These are omitted for the reason that they do not legitimately constitute a part of the annual expense of maintaining the educational departments. The following are the items stricken out:

1. *Extension work.* This work is important. It is educational; it should not, however, be charged to the student body at Ames. If its cost is included in the dividend in this problem, the thousands attending short courses throughout the state should be counted in the divisor. Both are omitted.

2. *All lines of experimentation.* This work too, is of immense value. It is of state wide concern, and should be supported by legislative appropriation. It should, however, be charged to the state as a whole, and not appear as an item in the per capita cost of instructional work.

3. *Cost of buildings, permanent improvements and permanent equipment.* These have been excluded because it would be obviously unfair to charge the half million dollars of improvements made at Ames during the past two years to the students of that period. The cost of repairs and maintenance is counted in but not the cost of the original buildings and equipment.

The items included in the cost of educational work at Ames are the following:

1. Salaries of professors, instructors and administrative officers	$ 344,971.62
2. Administrative and general expenses over and above salaries of administrative officers	33,509.67
3. Current expenses of educational departments, including the cost of departmental investigations, repair of apparatus and the purchase of equipment to replace that worn out	51,708.06
4. Care of public grounds and the heating, lighting and janitor service in public buildings	45,000.00
5. The cost of keeping the college plant in repair and making minor improvements	46,000.00
6. Summer session	10,000.00
7. Non-collegiate courses	49,045.00
	$ 580,234.35

The Registrar reports the attendance this year at 3,200. This does not include the students attending the winter short course at the College, though the expense of this course is charged to the educational departments.

Dividing the cost of the educational work by the number of students gives a per capita cost of $181.33. Reducing summer sessions to the yearly basis the college would still have an attendance of at least 2,800. Dividing this into the total cost would give a cost per capita of $207.24. These figures are certainly very reasonable as compared with the per capita cost at other institutions, when similar items are included in the aggregate amount.

* * * * * * * * * *

This report is prepared for those who desire to become thoroughly acquainted with the financial operations of the last biennium, and with the budgets for the present year. It is submitted to their considerate judgment.

Respectfully,

E. W. STANTON,

Secretary.

ANNUAL REPORT OF THE TREASURER OF THE IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS TO THE IOWA STATE BOARD OF EDUCATION, FOR THE YEAR 1912-1913, JULY 1, 1913.

EDUCATIONAL SUPPORT.

The following is a complete statement of the transactions of accounts for the fiscal year ending June 30, 1913.

	Balance July 1, 1912	Fiscal Year		Total		Support Fund	
		Expenditures	Receipts	Expenditures	Receipts	Net Expenditures	Net Receipts
Balance support funds	$ 73,059.99				$73,059.99		$ 73,059.99
Endowment interest fund		$ 78.12	$ 35,564.32	$ 78.12	35,564.32		35,486.20
Interest on treasurer's balance			3,676.34		3,676.34		3,676.34
Morrill fund			50,000.00		50,000.00		50,000.00
State support funds			245,000.00		245,000.00		245,000.00
Unclaimed treasurer's checks			46.28		46.28		46.28
Special equipment and instructional fund		8.00	300.00	8.00	300.00		292.00
Tuition		290.00	9,750.00	290.00	9,750.00		9,460.00
Salaries		163,130.71		163,130.71		$163,130.71	
Salaries—assistants		63,359.56		63,359.56		63,359.56	
Agricultural dean's office		898.32		898.32		898.32	
Agricultural education		853.50		853.50		853.50	
Agricultural engineering		5,098.12	3,641.59	5,098.12	3,641.59	1,456.53	
Agricultural journalism		1,437.82	1,000.00	1,437.82	1,000.00	437.82	
Animal husbandry		5,491.24	3,674.88	5,491.24	3,674.88	1,816.36	
Bacteriology		1,702.48	943.94	1,702.48	943.94	758.54	
Botany		3,108.77	1,879.75	3,108.77	1,879.75	1,229.02	
Chemistry		14,424.84	14,631.58	14,424.84	14,631.58		206.74
Civil engineering		3,246.58	1,161.30	3,246.58	1,161.30	2,085.28	
Dairy		37,116.87	36,156.33	37,116.87	36,156.33	960.54	
Dairy farm		6,494.62	4,834.92	6,494.62	4,834.92	1,659.70	
Economics		483.78		483.78		483.78	
Electrical engineering		1,761.25	414.00	1,761.25	414.00	1,347.25	
Engineering dean's office		1,593.27		1,593.27		1,593.27	
English		582.72	270.25	582.72	270.25	312.47	
Farm		14,016.32	10,489.32	14,016.32	10,489.32	3,526.80	
Farm crops		3,618.04	2,288.82	3,618.04	2,288.82	1,329.22	
History		110.62		170.62		170.62	
Home economics		3,929.13	2,605.63	3,929.13	2,605.62	1,314.50	
Horticulture		6,253.87	2,318.06	6,253.87	2,318.06	3,935.81	
Junior college dean's office		1,711.29		1,711.29		1,711.29	
Library		1,510.65	580.10	1,510.65	580.10	930.55	
Mathematics		151.85		151.85		151.85	
Matron's fund		216.90		216.90		216.90	
Mechanical engineering		6,827.76	3,348.66	6,827.76	3,348.66	3,479.10	
Military		534.39		534.39		534.39	
Mining engineering		2,176.65	80.60	2,176.65	80.60	2,096.05	
Modern language		62.38		62.38		62.38	
Music		73.25		73.25		73.25	
Physical culture		400.51	365.00	400.51	365.00	35.51	
Physical training		1,093.17	321.00	1,093.17	321.00	772.17	
Physics		2,628.11	1,496.50	2,628.11	1,496.50	1,131.61	
Poultry		1,816.88	552.59	1,816.88	552.59	1,264.29	
Public speaking		109.68		109.68		109.68	
Soils		3,592.18	1,888.70	3,592.18	1,888.70	1,703.48	
Summer school		5,546.64	785.85	5,546.64	785.85	4,760.79	
Veterinary		6,254.41	3,440.43	6,254.41	3,440.43	2,813.98	
Zoology		2,598.10	1,626.00	2,598.10	1,626.00	972.10	
Advertising		1,931.74		1,931.74		1,931.74	
Catalogue and bulletins		2,297.76		2,297.76		2,297.76	
Contingent expense		2,869.50		2,869.50		2,869.50	
Fire, lights and incidentals		51,021.55	39,194.33	51,021.55	39,194.33	11,827.22	
Inventory clerk		1,279.51		1,279.51		1,279.51	
Janitor fund		14,495.64		14,495.64		14,495.64	
President's office		3,656.95		3,656.95		3,656.95	
Public grounds		23,165.25	38.50	23,165.25	38.50	23,126.75	
Purchasing department		2,010.00		2,010.00		2,010.00	
Registrar's office		3,542.78	1,330.00	3,542.78	1,330.00	2,212.78	
Sabbath services		550.10		550.10		550.10	
Secretary's office		1,742.53		1,742.53		1,742.53	
Treasurer's office		2,646.93		2,646.93		2,646.93	
Books and periodicals	438.75	438.75		438.75	438.75		
Books and periodicals		4,590.23	4,900.00	4,590.23	4,900.00		309.77
Total	$ 73,498.74	$492,683.57	$490,595.77	$492,683.57	$564,094.51	$346,126.38	$ 417,537.32
Balances			2,087.80	71,410.94		71,410.94	
	$ 73,498.74	$492,683.57	$492,683.57	$564,094.51	$564,094.51	$417,537.32	$ 417,537.32

ANNUAL REPORT OF TREASURER—Continued.

MINOR INCOMES.

	Balance July 1, 1912	Fiscal Year		Total		Balance June 30, 1913
		Expenditures	Receipts	Expenditures	Receipts	
Agricultural fellowships	$ 531.71	$ 350.00	$ 385.00	$ 350.00	$ 916.71	$ 566.71
Hospital	2,835.08	4,432.62	5,741.64	4,432.62	8,576.72	4,144.10
International Harvester scholarship	150.00	400.00	250.00	400.00	400.00	----------
Piano rent	229.47	161.04	194.50	161.04	423.97	272.93
State fair scholarship	468.75	931.24	525.00	931.24	993.75	62.51
Meinrad Rumley scholarship	----------	250.00	250.00	250.00	250.00	----------
Room rent	3,268.05	8,009.10	10,154.26	8,009.10	13,422.31	5,413.21
Total	$ 7,493.06	$ 14,534.00	$ 17,500.40	$ 14,534.00	$ 24,993.46	$ 10,459.46

STATE APPROPRIATIONS FOR BUILDINGS AND EQUIPMENT.

	Balance July 1, 1912	Fiscal Year		Total		Balance June 30, 1913
		Expenditures	Receipts	Expenditures	Receipts	
Additional department equipment	$ 129.46	$ 30,350.56	$ 30,230.64	$ 30,350.56	$ 30,351.10	$ .54
Chemistry building	----------	10,272.24	10,272.24	10,272.24	10,272.24	----------
Engineering annex furniture	186.63	186.63	----------	186.63	186.63	----------
Heating plant equipment	17.35	38,217.35	38,200.00	38,217.35	38,217.35	----------
Public ground improvement	*968.00	1,893.17	1,893.85	1,893.85	1,893.85	----------
Repairs and contingent	21,127.39	21,127.39	----------	21,127.39	21,127.39	----------
Repairs and contingent	----------	24,069.24	36,000.00	24,069.24	36,000.00	11,930.76
Special building tax	41.24	101,433.44	101,433.44	101,433.44	101,474.68	41.24
Total	*968.00	$ 21,493.07	$ 227,550.02	$ 218,080.17	$ 227,550.70	$ 239,023.24	$ 11,972.54

*Overdraft.

AGRICULTURAL EXTENSION WORK.

	Balance July 1, 1912	Fiscal Year		Total		Balance June 30, 1913
		Expenditures	Receipts	Expenditures	Receipts	
Agricultural extension	$ 11,012.33	$ 11,012.33	----------	$ 11,012.33	$ 11,012.33	----------
	----------	39,992.33	$ 50,579.98	39,992.33	50,579.98	$ 10,587.65
Total	$ 11,012.33	$ 51,004.66	$ 50,579.98	$ 51,004.66	$ 61,592.31	$ 10,587.65

EXPERIMENTAL FUNDS OUTSIDE OF THE AGRICULTURAL EXPERIMENT STATION.

Engineering experiment station	$ 2,367.31	$ 2,367.31	----------	$ 2,367.31	$ 2,367.31	----------
Engineering experiment station	----------	10,137.32	$ 10,943.25	10,137.32	10,943.25	$ 805.93
Good roads experimentation	.20	.20	----------	.20	.20	----------
Good roads experimentation	3,137.32	3,137.32	----------	3,137.32	3,137.32	----------
Good roads experimentation	----------	7,648.62	10,000.00	7,648.62	10,000.00	2,351.38
Horse breeding experiment	----------	268.50	360.00	268.50	360.00	91.50
Total	$ 5,504.83	$ 23,559.27	$ 21,303.25	$ 23,559.27	$ 26,808.08	$ 3,248.81

SERUM FUND.

Serum fund	----------	$ 5,300.05	$ 5,300.05	$ 5,300.05	$ 5,300.05	----------

TWO YEAR FUNDS.

	Balance July 1, 1912	Fiscal Year		Total		Support Fund	
		Expenditures	Receipts	Expenditures	Receipts	Net Expenditures	Net Receipts
State support	$ 10,508.50		$ 25,000.00		$35,508.50		$ 35,508.50
Salaries		$ 8,849.98		$ 8,849.98		$ 8,849.98	
Salaries—assistants		9,468.49		9,468.49		9,468.49	
Agricultural dean's office		182.22		182.22		182.22	
Agricultural engineering		1,273.44	790.50	1,273.44	790.50	482.94	
Agronomy		939.18	494.50	939.18	494.50	444.68	
Animal husbandry		1,536.13	1,042.25	1,536.13	1,042.25	493.88	
Botany		2,242.98	380.00	2,242.98	380.00	1,862.98	
Dairy		570.18	550.50	570.18	550.50	19.68	
English		634.27		634.27		634.27	
Heating and lighting		1,500.00		1,500.00		1,500.00	
History		24.36		24.36		24.36	
Horticulture		851.14	163.55	851.14	163.55	687.59	
Public speaking		10.00		10.00		10.00	
Total	$ 10,508.50	$ 28,082.37	$ 28,421.30	$28,082.37	$38,929.80	$24,661.07	$ 35,508.50
Balances		328.93		10,847.43		10,847.43	
Total	$ 10,508.50	$ 28,421.30	$ 28,421.30	$38,929.80	$38,929.80	$35,508.50	$ 35,508.50

EXPERIMENT STATION.

	Balance July 1, 1912	Fiscal Year		Total		Support Fund	
		Expenditures	Receipts	Expenditures	Receipts	Net Expenditures	Net Receipts
Adams fund			$ 15,000.00		$15,000.00		$ 15,000.00
Hatch fund			15,000.00		15,000.00		15,000.00
State support	$ 23,027.70		55,000.00		78,027.70		78,027.70
Salaries		$ 39,418.69		$39,418.69		$39,418.69	
Salaries—assistants		1,627.70		1,627.70		1,627.70	
Agricultural engineering		2,574.92		2,574.92		2,574.92	
Animal husbandry		15,954.28	9,963.11	15,954.28	9,963.11	5,991.17	
Bacteriology		284.52		284.52		284.52	
Botany		1,187.78		1,187.78		1,187.78	
Bulletin		7,839.61	1.70	7,839.61	1.70	7,837.91	
Chemistry		3,663.05	40.15	3,663.05	40.15	3,622.90	
Dairy		2,618.74	747.15	2,618.74	747.15	1,871.59	
Dairy farm		2,404.50	204.96	2,404.50	204.96	2,199.54	
Director's		1,791.90		1,791.90		1,791.90	
Entomology		1,105.35		1,105.35		1,105.35	
Farm crops		5,829.06	1,173.52	5,829.06	1,173.52	4,655.54	
Forestry		1,327.87		1,327.87		1,327.87	
General expenses		211.82		211.82		211.82	
Horticulture		7,553.31	2,931.57	7,553.31	2,931.57	4,621.74	
Photo		1,679.33	681.99	1,679.33	681.99	997.34	
Poultry		1,590.82	34.23	1,590.82	34.23	1,556.59	
Soils		7,180.80	299.48	7,180.80	299.48	6,881.32	
Veterinary		403.26		403.26		403.26	
Total	$23,027.70	$106,247.31	$101,077.86	$106,247.31	$124,105.56	$ 99,169.45	$ 108,027.70
Balances			5,169.45	17,858.25		17,858.25	
Total	$23,027.70	$106,247.31	$106,247.31	$124,105.56	$124,105.56	$108,027.70	$ 108,027.70

Respectfully submitted,
HERMAN KNAPP,
Treasurer.

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS AGRICULTURAL EXPERIMENT STATION. IN ACCOUNT WITH THE UNITED STATES APPROPRIATIONS, 1912-1913.

For the year ending June 30, 1913.

Dr.		Hatch Fund	Adams Fund
To balance from appropriations for 1911-1912			
Receipts from the Treasurer of the United States, as per appropriations for fiscal year ended June 30, 1913, under acts of Congress approved March 2, 1887 (Hatch Fund), and March 16, 1906 (Adams Fund)		$15,000.00	$ 15,000.00
Cr.	Abstract		
By Salaries	1	7,141.57	8,634.46
Labor	2	964.81	1,255.92
Publications	3	2,017.63	
Postage and stationery	4	221.73	80.62
Freight and express	5	132.48	14.27
Heat, light, water and power	6	18.07	67.03
Chemicals and laboratory supplies	7	65.64	1,228.54
Seeds, plants, and sundry supplies	8	1,618.74	766.07
Fertilizers	9		1.15
Feeding stuffs	10	2,680.32	1,904.53
Library	11		
Tools, machinery and appliances	12	96.21	33.40
Furniture and fixtures		10.90	
Scientific apparatus and specimens	14	41.90	747.00
Live stock	15		
Traveling expenses	16		260.60
Contingent expenses	17		6.32
Buildings and land	18		
Balance			
Total		$15,000.00	$ 15,000.00

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS AGRICULTURAL EXPERIMENT STATION.

Supplementary Statement for the year ending June 30, 1913.

(This supplementary statement, while not required by law, is desired as an aid in interpreting the account rendered for the United States appropriation.)

Dr.	State Appropriation	Farm Products	Miscellaneous	Total
To balance on hand				$ 23,027.70
Receipts from other sources than the United States for the year ended	$ 55,000.00	$ 16,043.92	$ 33.94	71,077.86
Total				$ 94,105.56
Cr.				
By salaries				$ 37,310.42
Labor				11,746.49
Publications				4,378.00
Postage and stationery				964.32
Freight and express				1,120.07
Heat, light, water and power				445.22
Chemicals and laboratory supplies				1,396.67
Seeds, plants, and sundry supplies				7,433.86
Fertilizers				330.04
Feeding stuffs				4,196.27
Library				2.00
Tools, machinery, and appliances				118.61
Furniture and fixtures				183.48
Scientific apparatus and specimens				1,230.00
Live stock				1,738.49
Traveling expenses				3,163.23
Contingent expenses				25.00
Buildings and land				533.14
Balance				17,858.25
Total				$ 94,105.56

Respectfully submitted,

HERMAN KNAPP,

Treasurer.

ANNUAL REPORT OF THE TREASURER OF THE IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS TO THE IOWA STATE BOARD OF EDUCATION, FOR THE YEAR 1913-1914, JULY 1, 1914.

EDUCATIONAL SUPPORT.

The following is a complete statement of the transaction of accounts for the fiscal year ending June 30, 1914.

	Balance July 1, 1913	Fiscal Year		Total		Support Fund	
		Expenditures	Receipts	Expenditures	Receipts	Net Expenditures	Net Receipts
Balance support funds	$71,101.17		$ 101.10		$ 71,202.27		$ 71,202.27
Endowment interest fund			35,191.86		35,191.86		35,191.86
Interest treasurer's balance			2,946.64		2,946.64		2,946.64
Morrill support fund			50,000.00		50,000.00		50,000.00
State education support			349,000.00		349,000.00		349,000.00
Special instruction and equipment			85.00		85.00		85.00
Tuition		$ 1,105.00	12,972.50	$ 1,105.00	12,972.50		11,867.50
Salaries—educational support		212,491.98		212,491.98		$212,491.98	
Salaries—assistants		82,109.90		82,109.90		82,109.90	
Agricultural dean's office		1,064.60		1,064.60		1,064.60	
Agricultural education		1,164.19		1,164.19		1,164.19	
Agricultural engineering		5,997.03	3,919.84	5,997.03	3,919.84	2,077.19	
Agricultural journalism		1,770.14	1,000.00	1,770.14	1,000.00	770.14	
Anatomy		888.11	448.00	888.11	448.00	440.11	
Animal husbandry		9,446.48	4,401.44	9,446.48	4,401.44	5,045.04	
Bacteriology		3,160.37	1,083.46	3,160.37	1,083.30	2,076.91	
Botany		4,036.87	2,858.30	4,036.87	2,858.30	1,178.57	
Chemistry		23,523.13	18,248.05	23,523.13	18,248.05	5,275.08	
Civil engineering		2,419.06	417.50	2,419.06	417.50	2,001.56	
Dairy		33,618.47	31,727.23	33,618.47	31,727.23	1,891.24	
Dairy farm		6,724.50	5,198.45	6,724.50	5,198.45	1,526.05	
Economic science		765.77		765.77		765.77	
Electrical engineering		1,943.89	426.00	1,943.89	426.00	1,517.89	
Engineering dean		2,420.16		2,420.16		2,420.16	
Engineering short course		547.15	247.50	547.15	247.50	299.65	
English		966.27	364.25	966.27	364.25	602.02	
Farm		15,743.53	13,214.62	15,743.53	13,214.62	2,528.91	
Farm crops		3,411.58	2,291.26	3,411.58	2,291.26	1,120.32	
Forestry		1,336.21	122.00	1,336.21	122.00	1,214.21	
History		464.63		464.63		464.63	
Home economics		7,597.68	3,916.52	7,597.68	3,916.52	3,681.16	
Horticulture		5,966.95	3,200.09	5,966.95	3,200.09	2,766.86	
Library		2,028.59		2,028.59		2,028.59	
Junior dean's office		1,812.26	506.32	1,812.26	506.32	1,306.94	
Mathematics		171.61		171.61		171.61	
Matron's fund		651.67		651.67		651.67	
Mechanical engineering		5,668.50	3,536.08	5,668.50	3,536.08	2,132.42	
Military		759.72	54.00	759.72	54.00	705.72	
Mining engineering		1,518.18	17.99	1,518.18	17.99	1,500.19	
Modern languages		69.92		69.92		69.92	
Music		249.20		249.20		249.20	
Pathology		621.69	288.05	621.69	288.05	333.64	
Photography		195.97	80.00	195.97	80.00	115.97	
Physical culture		474.18	641.00	474.18	641.00		166.82
Physical training		4,656.97	2,942.60	4,656.97	2,942.60	1,714.37	
Physics		2,795.48	1,044.00	2,795.48	1,044.00	1,751.48	
Physiology		143.22	46.00	143.22	46.00	97.22	
Poultry		2,413.15	1,013.26	2,413.15	1,013.26	1,399.89	
Public speaking		109.95		109.95		109.95	
Soils		4,424.99	2,214.00	4,424.99	2,214.00	2,210.99	
Structural design		183.69		183.69		183.69	
Summer school		8,985.48	1,220.25	8,985.48	1,220.25	7,765.23	
Surgery		3,695.94	2,445.39	3,695.94	2,445.39	1,250.55	
Veterinary dean's office		1,771.17	5.76	1,771.17	5.76	1,765.41	
Zoology		3,188.72	1,941.85	3,188.72	1,941.85	1,246.87	
Catalogue and bulletins		3,200.00		3,200.00		3,200.00	
Contingent expense		3,612.06		3,612.06		3,612.06	
Fires, lights and incidentals		67,037.08	40,771.63	67,037.08	40,771.63	26,265.45	
Inventory clerk		880.66		880.66		880.66	
Janitor fund		16,384.03	16.02	16,384.03	16.02	16,368.01	
President's office		5,880.81	521.79	5,880.81	521.79	5,359.02	
Publicity		2,115.43	29.10	2,115.43	29.10	2,086.33	
Public grounds		13,876.78	92.82	13,876.78	92.82	13,783.96	
Purchasing committee		3,079.89		3,079.89		3,079.89	
Registrar's office		4,161.28	1,369.00	4,161.28	1,369.00	2,792.28	
Sabbath services		742.08		742.08		742.08	
Treasurer's office		3,518.81		3,518.81		3,518.81	
Secretary's office		2,152.01		2,152.01		2,152.01	
Books and periodicals	300.77	5,209.77	4,900.00	5,209.77	5,209.77		
Total	$71,410.94	$609,125.59	$609,009.52	$609,125.59	$680,480.46	$449,105.22	$520,460.09
Balances			56.07	71,354.87		71,354.87	
Total	$71,410.94	$609,125.59	$609,125.59	$680,480.46	$680,480.46	$520,460.09	$520,460.09

ANNUAL REPORT OF TREASURER—Continued.

MINOR INCOMES.

	Balance July 1, 1913	Fiscal Year		Total		Balance July 30, 1914
		Expenditures	Receipts	Expenditures	Receipts	
Agricultural fellowships	$ 566.71	$ 375.00	$ 250.00	$ 375.00	$ 816.71	$ 441.71
Hospital	4,144.10	9,886.60	9,455.46	9,886.60	13,599.56	3,712.96
International Harvester scholarship		220.00	220.00	220.00	220.00	
Piano rent	272.92	120.33	242.05	120.33	514.98	394.45
State fair scholarship	62.51	512.50	600.00	512.50	662.51	150.01
Fruit judging scholarship		225.00	225.00	225.00	225.00	
Room rent	5,412.21	19,046.87	15,224.54	19,046.87	20,637.75	1,590.88
Total	$ 10,459.46	$ 30,436.50	$ 26,417.05	$ 30,436.50	$ 36,876.51	$ 6,440.01

STATE APPROPRIATIONS FOR BUILDINGS AND EQUIPMENT.

	Balance July 1, 1913	Fiscal Year		Total		Balance June 30, 1914
		Expenditures	Receipts	Expenditures	Receipts	
Additional department equipment	$ .54	$ 12,269.90	$ 12,269.36	$ 12,269.90	$ 12,269.90	
Chemistry building		56,208.90	56,208.90	56,208.90	56,208.90	
Equipment of departments		3,465.31	3,465.31	3,465.31	3,465.31	
Heating plant equipment		16,994.28	16,994.28	16,994.28	16,994.28	
Public grounds improvement		4,179.86	4,878.15	4,179.86	4,878.15	$ 698.29
Repairs and contingent	11,930.76	51,596.87	50,000.00	51,596.87	61,930.76	10,333.89
Special building tax	41.24	206,494.51	206,453.27	206,494.51	206,494.51	
Total	$ 11,972.54	$351,209.63	$350,269.27	$351,209.63	$362,241.81	$ 11,032.18

AGRICULTURAL EXTENSION WORK.

Agricultural extension	$ 10,587.65	$ 10,587.65		$ 10,587.65	$ 10,587.65	
Agricultural extension		63,617.41	$ 78,561.43	63,617.41	78,561.43	$ 14,944.02
Total	$ 10,587.65	$ 74,205.06	$ 78,561.43	$ 74,205.06	$ 89,149.08	$ 14,944.02

EXPERIMENTAL FUNDS OUTSIDE OF THE AGRICULTURAL EXPERIMENT STATION.

Engineering experiment station	$ 805.92	$ 14,845.42	$ 14,582.64	$ 14,845.42	$ 15,388.57	$ 543.15
Good roads experimentation	2,351.38	9,128.84	10,000.00	9,128.84	12,351.38	3,222.54
Horse breeding experiment	91.50	1,649.00	1,564.19	1,649.00	1,655.69	6.69
Veterinary investigation		8,988.69	9,000.00	8,988.69	9,000.00	11.31
Total	$ 3,248.81	$ 34,611.95	$ 35,146.83	$ 34,611.95	$ 38,395.64	$ 3,783.69

SERUM FUND.

Serum fund		$152,966.88	$174,746.62	$152,966.88	$174,746.62	$ 21,779.74

TRADE SCHOOLS AND ENGINEERING EXTENSION.

Trade schools and engineering extension		$ 18,121.94	$ 26,808.22	$ 18,121.94	$ 26,808.22	$ 8,686.28

VETERINARY PRACTITIONER'S COURSE.

Veterinary practitioner's course		$ 588.56	$ 3,000.00	$ 588.56	$ 3,000.00	$ 2,411.44

TWO YEAR FUNDS.

	Balance July 1, 1913	Fiscal Year		Total		Support Fund		Balance June 30, 1914
		Expenditures	Receipts	Expenditures	Receipts	Net Expenditures	Net Receipts	
State support	$ 10,847.43		$ 36,500.00		$ 47,347.43		$ 47,347.43	
Salaries		$ 12,902.55		$ 12,902.55		$ 12,902.55		
Salaries—assistants		10,517.51		10,517.51		10,517.51		
Agricultural dean		174.98		174.98		174.98		
Agricultural engineering		2,403.32	914.99	2,403.32	914.99	1,488.33		
Agronomy		1,515.07	694.85	1,515.07	694.85	820.22		
Animal husbandry		2,083.39	1,155.30	2,083.39	1,155.30	928.09		
Botany		17.40	521.90	17.40	521.90		504.50	
Chemistry		.83		.83		.83		
Dairy		1,800.00	1,117.03	1,800.00	1,117.03	682.97		
English		347.53		347.53		347.53		
Heating and lighting		1,100.00		1,100.00		1,100.00		
History		38.66		38.66		38.66		
Home makers		7,537.96	3,178.00	7,537.96	3,178.00	4,359.96		
Horticulture		2,317.44	197.14	2,317.44	197.14	2,120.30		
Mathematics		5.88		5.88		5.88		
Public speaking		9.50		9.50		9.50		
Total	$ 10,847.43	$ 42,772.02	$ 44,279.21	$ 42,772.02	$ 55,126.64	$ 35,497.31	$ 47,851.93	$ 12,354.62
Balances		1,507.19		12,354.62		12,354.62		
Total	$ 10,847.43	$ 44,279.21	$ 44,279.21	$ 55,126.64	$ 55,126.64	$ 47,851.93	$ 47,851.93	$ 12,354.62

EXPERIMENT STATION.

	Balance July 1, 1913	Fiscal Year		Total		Support Fund		Balance June 30, 1914
		Expenditures	Receipts	Expenditures	Receipts	Net Expenditures	Net Receipts	
U. S. Adams support			$ 15,000.00		$ 15,000.00		$ 15,000.00	
U. S. Hatch support			15,000.00		15,000.00		15,000.00	
State support	$ 17,858.25		78,076.67		95,934.92		95,934.92	
Salaries		$ 49,738.46		$ 49,738.46		$ 49,738.46		
Salaries—assistants		1,435.00		1,435.00		1,435.00		
Additional farm		21,123.33	21,123.33	21,123.33	21,123.33	21,123.33	21,123.33	
Agricultural engineering		2,823.42	7.25	2,823.42	7.25	2,816.17		
Animal husbandry		16,666.88	9,152.43	16,666.88	9,152.43	7,514.45		
Bacteriology		549.61		549.61		549.61		
Botany		1,272.68		1,272.68		1,272.68		
Bulletin		8,655.27	10.00	8,655.27	10.00	8,645.27		
Chemical		3,886.43	93.63	3,886.43	93.63	3,792.80		
Dairy		2,237.61	18.08	2,237.61	18.08	2,219.53		
Dairy farm		3,182.91	283.77	3,182.91	283.77	2,899.14		
Director's		1,462.45		1,462.45		1,462.45		
Entomology		992.63		992.63		992.63		
Farm crops		10,051.52	1,374.66	10,051.52	1,374.66	8,676.86		
Forestry		1,372.59		1,372.59		1,372.59		
General expenses		200.00		200.00		200.00		
Horticulture		8,030.89	2,412.10	8,030.89	2,412.10	5,618.79		
Photo		1,906.82	1,014.64	1,906.82	1,014.64	892.18		
Poultry		1,743.95	48.58	1,743.95	48.58	1,695.37		
Soils		11,346.17	612.87	11,346.17	612.87	10,733.30		
Veterinary		27.50		27.50		27.50		
Total	$ 17,858.25	$148,666.12	$144,228.01	$148,666.12	$162,086.26	$133,628.11	$147,058.25	$ 13,429.14
Balances			4,438.11	13,429.14		13,429.14		
Total	$ 17,858.25	$148,666.12	$148,666.12	$162,086.26	$162,086.26	$147,058.25	$147,058.25	$ 13,429.14

Respectfully submitted.
HERMAN KNAPP,
Treasurer.

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS AGRICULTURAL EXPERIMENT STATION IN ACCOUNT WITH THE UNITED STATES APPROPRIATIONS, 1913-1914.

For the yead ending June 30, 1914.

Dr.	Hatch Fund	Adams Fund
To balance from appropriations, 1912-1913		
Receipts from the Treasurer of the United States as per appropriations for fiscal year ended June 30, 1914, under acts of congress, approved March 2, 1887, (Hatch fund), and March 16, 1906 (Adams fund)	$ 15,000.00	$ 15,000.00

Cr.	Abstract		
By salaries	1	$ 7,871.86	$ 10,671.12
Labor	2	772.51	1,191.94
Publications	3	2,054.68	
Postage and stationery	4	40.93	25.50
Freight and express	5	1.58	1.92
Heat, light, water and power	6		85.00
Chemicals and laboratory supplies	7		262.52
Seeds, plants, and sundry supplies	8	1,852.58	2,657.56
Feeding stuffs	10	1,162.88	
Library	11		
Tools, machinery and appliances	12	51.25	19.50
Furniture and fixtures	13	5.00	
Scientific apparatus and specimens	14	30.25	56.39
Live stock	15	1,142.61	
Traveling expenses	16	12.87	28.15
Contingent expenses	17		
Buildings and land	18		
Balance			
Total		$ 15,000.00	$ 15,000.00

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS AGRICULTURAL EXPERIMENT STATION.

Supplementary Statement for the year ending June 30, 1914.

(This supplementary statement, while not required by law, is desired as an aid in interpreting the account rendered for the United States appropriation.)

Dr.	State Appropriation	Farm Products	Miscellaneous	Total
To balance on hand				$ 17,858.25
Receipts from other sources than the United States for the year ended	$ 99,200.00	$ 14,985.97	$ 42.04	114,228.01
Total				$ 132,086.26

Cr.	Total
By salaries	$ 52,130.56
Labor	11,962.91
Publications	4,298.29
Postage and stationery	1,028.34
Freight and express	1,228.06
Heat, light, water, and power	882.94
Seeds, plants, and sundry supplies	11,044.30
Chemicals and laboratory supplies	453.59
Feeding stuffs	5,889.05
Tools, machinery and appliances	1,298.95
Furniture and fixtures	592.89
Scientific apparatus and specimens	1,196.26
Live stock	950.02
Traveling expenses	3,477.11
Contingent expenses	80.00
Buildings and land	22,152.85
Balance	13,420.14
Total	$ 132,086.26

Respectfully submitted,

HERMAN KNAPP,

Treasurer.