# Financial Statement of the University of Illinois for the twelve months ending June 30, 1897.

RECEIPTS, JULY 1, 1896—JUNE 30, 1897.		
Balances— State appropriation, general State appropriation. Laboratory of Natural History U. S. Agricultural Experiment Station	\$170, 180 25 246 73 166 28	\$170,593 26
Overdraft current funds		1,237 08
Interest on endowment and land contracts. Fees from students. Departments and laboratories. Miscellaneous. State appropriations. State appropriations, Laboratory Natural History. U. S. Government. U. S. Agricultural Experiment Station. School of Pharmacy. School of Medicine.	\$23, 241 10 22, 915 95 3, 638 83 7, 407 21 111, 364 93 9, 900 00 22, 000 00 18, 018 67 13, 465 46 3, 152 00	\$169,356 18 \$169,356 18
Expenditures, July 1, 1896—June 30, 1897.	-	\$404,460 32
Salaries for instruction. Salaries for services. Departments and laboratories. Miscellaneous State appropriation (ther than for salaries.	\$106, 455 35 13, 511 70 4, 610 90 16, 672 21 167, 987 25	309, 237 41
Laboratory of Natural History. Agricultural Experiment Station. School of Pharmacy. School of Medicine.	\$8,800 67 18,107 75 13,585 36 3,088 43	43,582 21
Balance		\$51,640 70
		\$404,460 32

#### WARRANTS FOR YEAR ENDING JUNE 30, 1898.

#### GENERAL UNIVERSITY WARRANTS.

No.	Date.	To whom.	For what.	Amount
	1897.	1		
1	July	C. A. Kofoid	Salary, part May and June, 1897	\$189 70
$\frac{1}{2}$		Miles Newherry	1 11 14 14	
3	• • •	Lydia M. Hart	Drawings	31 85
<b>4</b> <b>5</b>	<b>''</b>	IU. & C. Elect. St. R'v Co	(fas and power	750 29
5	**	Odin Coal Co	Coal	1,110 0
6	••	Petty & Sayers	CoalCabinet	69 50
7	• • •	A. P. Carman	Petty expenses	3 70
8	• •	E. G. Howe.	**	6 70
9		H. E. Summers	1	25 5'
10	• •	Hack & Anderson	Printing catalogue	739 00
11	• •	Maxwell & Mollett	Liers etc	5 50
12	• •	J. C. Sedgwick	Trestle work	11 08
13	• •	E. W. Sampson	Trestle work Trays Chemicals, etc. Milk tester	9 50
14	<b>.</b>	Kny. Scheerer Co	Chemicals, etc	25 40
15	₽.	Richards & Co.	Milk tester	8 8
16				
17	**	Creamery Package Mfg Co	Creamery apparatus, etc	16 13
18		C. & II. Phoenix Telephone Co.	Services to September 5, 1897	45 00
19	6.6	Union Mfg Co.	Water 3 months, to July 1, 1897	125 00
20	4.4	Champaian County Herald	Printing proceedings, etc.	88 2
21		Standard Oil Co	Greamery apparatus, etc. Services to September 5, 1897 Water, 3 months, to July 1, 1897 Printing proceedings, etc.	20 9
22		Richards & Co	Tubing, filter, paper, etc	24 50
23	• •	Charles W Bird & Co	Duplicator and supplies	3 8
24	• •	Edward I Nolan treasurer	Proceedings for 1897	5 00
25		Ginn & Co	Subscription	2 00
26	4.4	Crosby Steem Gauge and V. Co.	Subscription	111 9
27	• •	Whitell Tetum & Co	Chomicals	22 5
28	4.4	Fighborg & Roon	Chemicals	19 00
29	4.4	Corl Figabor	Mu-ic	5 89
30		Dublic School Dublishing Co.	A drontigoment	12 50
31		Illinois Formore' Institute	Advertisement	20 00
32		A shareft Mf. Co	Indicator cocks	11 20
33		Asherott Mig Co	Mambarahin foo 1907	10 00
34		J. H. Washourh	Membership fee, 1897 Thermometers, etc	115 28
35		Enger & Amend	Hermometers, etc	115 26
90		Eugene Dietzgen Co	Paper, cloth, etc	11 9
36 37		Diamond Clamp and Flask Co.	Drass castings	8 03 25 00
		Clarator d Drill C	Jersey calf	
38		Charles A Sakisman & Co	Socket, reamers, etc	4 0
39		Unaries A. Schleren & Co	Uement	1 40
40 41		James B. Clow & Sons	Cement. Unions, plugs, valves, etc Corks, glass, drugs, etc M.nerals, microscope. Stop watch Hay and straw	13 5
	• •	Parach & Funer Co	OUTES, glass, drugs, etc	115 58
42		Dausen & Lomo Optical Co	Minerals, microscope	346 2
43		IT Mo Foddon & Doo	Stop watch	4 50
44		H. McFadden & Bro	nay and straw	7 4
45		F. D. Winkley	Cover and tap	1 4:
46		Urr & Lockett Hardware Co	Screw nooks, etc	4 40
47		j. C. vaughan	Cover and tap. Screw hooks, etc. Seeds. Music.	9 1
48		Lyon & Healey	Music	9 1
49				
50		G. E Stechert	Subscripti 'n, etc	55 30
51	::	Boyer Ry Speed Recorder Co	Charts, etc	3 9
52		Maltby & Wallace Co	Cap, screws, etc	12 6
53		Twin City Electric Co	Rubber tubing, etc	1 3
54		Mittendorf & Kiler	Subscripti n, etc. Charts, etc. Cap, screws, etc. Rubber tubing, etc. Wardrobe, glass, etc.	15 3
55		J. D. Phillips	Lottering diplomasFlower pots	76 50
56		Thomas Franks	Flower nots	1 0

## $Warrants{\rm-Continued}.$

).	Date		To whom.	For what.	Amou
i	1897.			Alcohol Tubing, etc Hardware, plumbing, etc Locks, keys, etc. Ribbons Diplomas. Advertisement, to July 17, 1897 Typewriting. Tees, unions, etc. Tin, galvanized iron, etc. Stop watch and repairing. Printing invitations and stationery Books, supplies, etc. Janitor supplies, etc. Printing announcement, etc. Blue prints Expenses to board meeting Services and expenses Laws of 1897. Mimeograph work. Stakes	
:7 T	uly	1	E H Davis & Co	Alcohol	3
8	ury,		Goodrich Hard Rubber Co.	Tubing, etc.	[ *
9	* *		Hubbard & Sons	Hardware, plumbing, etc	3
0			Yale & Towne Mfg Co	Locks, keys, etc	1
31			The Smith Prem'r Typewrit'r Co	Ribbons	
2			Western Banknote and Eng. Co	Diplomas	3
3	• •	ı	Engineering News Pub. Co	Advertisement, to July 17, 1897	
4	• •	- [	Chicago Times-Herald		3.
5	• • •		Hammer Dry Plate Co	Dry plates	1
6	::		J. T. Wolcott	Typewriting	-:
7	• • •		J. D. Wallace	Tees, unions, etc	1
8 9 0		1	T. H Trevett	Tin, galvanized iron, etc	1
9			A. F. Wuestemann	Stop watch and repairing	15
0			A. C. McClurg & Co	Printing invitations and stationery	13
1 2 3			William Drie	Coleimining pointing eta	10
5			F Honey	Lanitar cupplies ata	6
4	4.4	- 1	The Carette	Printing aunouncement etc	22
<u>4</u>			(1 'T Wilder	Rlua printe	5
4 5 6 J	ulv	10	F M McKay	Expenses to hoard meeting	160
7	uly.	ΤΛ	Alex McLean	Expenses to board incetting	28
ė l		Ì	J. E. Armstrong	**	6
8 9 0 1 2 3		-	T. J. Smith	**	6' 98
ŏ	4.4		Isaac S. Raymond	***	62
1			Mann, Haves & Miller	Services and expenses	83
2	6.6	.	Chicago Legal News Co	Services and expenses Laws of 1897 Mimeograph work Stakes Expenses Test pine, fire clay, etc. Drugs, basket balls, etc Hardware, etc Lumber, etc Bunting, crash, etc Expenses.	1
3			Chicago Legal News Co. H. P. Harris Bevis & Co. B. V. Swens n. Robinson & Burr A. P. Cunningham & Son, Henry Trevett. C. A. Besore G. C. Willis. S. A. Fowles	Mimeograph work	1'
1 5 7 8 9			Bevis & Co	<u>S</u> takes	10
5			B. V. Swens n	Expenses.	6:
5	4.6		Robinson & Burr	Test pine, fire clay, etc	56
7	• • • • • • • • • • • • • • • • • • • •		A. P. Cunningham & Son,	Drugs, basket balls, etc	25
3			Henry Trevett	Hardware, etc	100
2		- 1	C. A. Besore	Lumber, etc	149
2		- 1	G. C. Willis	Bunting, crash, etc	139
Ĺ		- 1	S.A. Forbes	Expenses	5' 38
2		ļ	G. C. Willis S. A. Forbes W. O. Krohn Goes Lithograph ng Co T. R. Leal Amos F. Moore Warner & Swasey Hubbard & Sons	Duinting waynest backs	41
3		- [	Goes Lithograph ng Co	Printing warrant books Grading, hauling, etc	
5		1	Amag a Magaza	Horses	59 425
3	6.4		Warner & Sween	Tolog one	1,200
il .			Hubbard & Sone	Hardware etc	20
3		1	J. C. Sedowick	Expenses and lumber	20 12
Ó			James H. Rice Co	Teles ope. Hardware, etc. Expenses and lumber. Lumber	
n)		- 1	J. C. Sedgwick James H. Rice Co. Charles H. Mears & Co.	Printing proposals	24
1.11	uly,	15	Inter Ocean.	Printing proposals	40
2			Tribune Co		34
3			Ashero t Mfg Co	Indicators, etc	36
			William Price	Painting	34 36 30
		- 1	W. W. Walls & Co	Lumber	81 34
3	• • •		Champaign County Herald	Printing letter head	34
	• • •		Crosby Steam Gauge and V. Co	Cards	2
		- 1	Unampaign Supply Co	gat. valves, ete	14
	• • •		A. H. Abbott & Co	Mats	15
			western Union Telegraph Co	Telegrams for May and June	38
		- 1	A. B. DICK CO	Lumber Printing proposals Indicators, etc. Painting Lumber Printing letter head Cards Gat- valves, ete Mats Telegrams for May and June Mimeograph paper, etc. Books Binding, etc.	
	4.6		Word Prog	Binding ota	10
			Thomas Naughton	Telegrams for May and June Mimeograph paper, etc. Books. Binding. etc. Photographs. Lumber Sash Labor, hardware, etc. Tuning pianos Batteries, etc. Expenses wiring building, etc. Postage	10
		- 1	Charles A Resore	Lumber	60
	4.4		Revis & Co	Sagh	5
		- 1	T. H. Trevett	Labor, hardware, etc	1
		ļ	Clayton F. Summy Co	Tuning pianos	1
	4 4	- 1	Twin City Electric Co	Batteries, etc.	(
	4.4	- 1	B. V. Swenson.	Expenses wiring building, etc	20
	6.6		Isaac Fielding	Postage	35
1	4.4		W. W. Lindley		120
	4.4	- ).	S. W. Shattuck, business mgr. S	Su dry items	84
	4.6		Isaac F1: Iding. W. W. Lindley. S. W. Shattuck, business mgr. IS. S. W. Shattuck, business mgr. IS. W. Shattuck, business mgr. IS. A. S. Draper F. J. Burrill S. W. Shattuck N. C. Ricker Ira O. Baker S. A. Forbes	Su dry items Pay-rolls of students, June, 1897 Pay-rolls of mea, June, 1897 Salary, July, 1897	84 542
	4.6		S. W. Shattuck, business mgr.	Pay-rolls of men. June, 1897	620
Jτ	ıly,	31	A. S. Draper	Salary, July, 1897	589
1	• •		T. J. Burrill	**	200
3			S. W. Shattuck		166
	• •	- 13	N. C. Ricker		191
	4.4				
		-	Ira O. Baker. S. A. Forbes. U. W. Rolfe.	::	183 83

#### $Warrants-{\bf Continued}.$

١.	Date.		To whom.	For what.	Amo
-	1896.				
3	Jul <b>y</b>	31	D. McIntosh	Salary, July, 1897	. \$
4			A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr		. 1
5			A. W. Palmer		. 1
6			F. F. Frederick		
7			S. W. Parr		1 1
اج 9			H. J. Barton		
0	4.4		C. M. Moss	:::::::::::::::::::::::::::::::::::::::	
ĭ			D. K. Dodge L. P. Breckenridge David Kinlev	, , , , , , , , , , , , , , , , , , , ,	
$\tilde{2}$			David Kinley		1 1
3			Eugene Davenport Arnold Tompkins A. P. Carman George W. Myers.		
1			Arnold Tompkins	. 44	. 1
5			A. P. Carman		. 1
3			George W. Myers		. 1
7	• • •		H. E. Summers		
3			E. J. Townsend	44	. 1
9  0			H. E. Summers E. J. Townsend E. B. Greene James M White Katharine Merrill		
í	4.4		Katharina Marrill		
2			W O Krohn		
3			W. H. Van Dervoort		
1	• •		W. D. Pence		. 13
5	4.4	-	Katharine Merrill W. O. Krohn W. H. Van Dervoort W. D. Pence H. S. Grindley T. A. Clark B. V. Swenson A. H. Daniels Percy F. Bicknell Geo. D. Fairfield Chas. W. Tooke Walter H. Jones Henry H. Everett Fred A. Sager Wm. Esty Lewis A. Rhoades Frank Smith Q. D. McLane	44	
3	4.4		T. A. Clark	44	. 1
7	• •		B. V. Swenson	44	. 1
3			A. H Daniels	**	. 1
9	• • • • • • • • • • • • • • • • • • • •		Percy F. Bicknell	**	
9			Geo. D. Fairneld	**	. 1
2		- 1	Walter H. Lenes		1
ŝ			Henry H Everett	**	
í			Fred A Sagar	**	
5			Wm. Esty	**	
3	• •		Lewis A. Rhoades	**	. î
7			Frank Smith	**	. 1
3			C. D. McLane	6.6	
9			Frank Smith. C. D. McLane. P. G. Holden. J. E. McGilvrey. W. J. Fraser. J. C. Blair. Edward G. Howe. W. L. Pillsbury. Geo. W. Graham Lillie Heath Sue W. Ford L. A. Boice. W. F. Marker. D. Melntosh.		
)			J. E. McGilvrey		. 1
Ų	4.4		W. J. Fraser		
3	4.4		J. C. Blair	**	
1	4.4		W I. Pillebury	***	
5			Geo.W Graham		
6	• •		Lillie Heath	44	
7	• •		Sue W. Ford	• •	. 1
3	4.4		L. A. Boice	••	.  - 8
9			W. F Marker	**	.
9	• • • • • • • • • • • • • • • • • • • •		D. McIntosh		
1			C V. Millar		
2			C V Millar Richard Uttenweiler Henry J East. W. R. Hoffman		
			W D Hoffman	**	.
4	• •		L. G. Lathron		
3	4.4		J. J. Johnson		
7	4.4		Joe Morrow	44	
ġ.			Albert R. Lee.	44	.] :
)	4.4		B. F. Sturtevant Co	Extras on heating contract	
)			H. M. Dickson Mfg Co	Changing counters	. 1
1			Robinson & Burr	Speaking tubes	
3			Peoria Steam Marble Works	Contract and extras	. 1
3			Kicker & White	Architects' commission	. 5
5			n. m. n. Construction Co	Models and towards	
3			Rrickhuilder Publishing Co	Subscription to January 1909	
7			Schäffer & Rudenhero	Calirometer	:  ,
3			W. L. Pillshurv	Expenses to trial, etc.	
á	4 4		S. W. Shattuck, business mgr.		
Н	• •		S. W. Shattuck, business mgr.	Scholarships	5
l	4 4		Warner & Swasey	Observatory equipment	1,0
2	• •		Geo. Carpenter & Co	Sails rented	1,0
3			Pittsburgh Plate Glass Co	Glass	
1			Dickinson Cement Co	Cement	
آر	• • • • • • • • • • • • • • • • • • • •	Į	J. C. Sedgwick	Extras on heating contract. Changing counters Speaking tubes. Contract and extras Architects' commission. Name plates Medals and targets. Subscription to January, 1898. Calirometer Expenses to trial, etc. Scholarships. Observatory equipment. Sails rented Glass Cement. Lumber Work on drawings. Cleaning walls. Blue prints	-
5		-	Geo. W. Parker & Son	wire doors, etc	
7	4.		Unas. Howison	work on drawings	
31	4.4	- 1	y ic Deasiey	Oleaning Walls	

Date.		To whom.	For what.	Amou
İ		l		<u> </u>
1897.	94	Office Chasicles Mills Co	Binding case's, etc	
July	91	The Neverton	Dinding cases, etc	\$6
		Hubbard & Song	Hardware etc	'
3		A. C. McClure & Co	Painting renairs etc	14
11		Chas. A. Besore	Lumber	54
		Champaign Supply Co	Pipe fittings, etc	1
3 ''		Walker & Mullekin	Frames, etc	10
ź ::		Ill. Soc. of Eng. and Surveyors.	Advertisement	10
9		Petty & Sayers	Tables	20
7		E. Davenport	Expenses Advertising Freight Expressage Sundry items	
)		Chicago Chonicle Co S. W. Shattuck, Business M'g'r	Advertising	69
		S. W. Shattuck, Business M'g'r	Freight	99
į		44	Expressage	57 82
· ·		W W Lindley	Posters	58
		W. W. Lindley Arthur W. Palmer	Postage Expenses	10
Aug.	14	J E Armstrong	Expenses	10
7		F. M. McKav	6.6	8
3  **		S. A. Bullard	**	68
		W. L. Pillsbury	**	78
· · ·		T. R. Leal	Grading, hauling, etc	69
1		R. W. Stark	Salary, July. 1897	50
::		Edward Bush	Collecting samples	:
0		Chas. T. Wilder	Grading, hauling, etc. Salary, July, 1897 Collecting samples Blue prints. Brick and sand Expenses, etc. Lumber. Services as architect Glass, drugs, etc. Shellac, finishing, etc. Contract painting, etc.	6
1 ::		Sneidon Brick Co	Brick and sand	19
3		J. C. Sedgwick	Expenses, etc	1
7		Soth I Temple	Sarviges as avabited	10 20
<u>'</u>		A Swannell	Glace druge ata	200
ğ  ··		Hill Art Glass and Dec'r'tive Co.	Shellac finishing etc	74
) • •		McClellan & Price	Contract painting, etc	5
		J. D. Green	Roofing cornice labor etc	5° 278
• • •		J. D. Green Alexander Lumber Co J. M. Chase	Lime, plaster, etc	
3 ::		J. M Chase	Painting	140
£(		The Gazette	Printing	3
)		Knowlton & Bennett	Lime, plaster, etc. Painting Printing Tracing paper, blanks, etc Frames, chairs, etc Printing proposals Advertisement Lumber Cement walks Services as architect Taxes on lands Services of clerk Extra on copper work Contract for cut stone roofing plumbing	1
)		Mittendorf & Kiler	Frames, chairs, etc	1
4		Chicago Record	Printing proposals	3
3		Chag A Bagana	Advertisement	19
) ••		P E Taintor	Coment wells	1, 14
í ··		C. D. McLane	Services as architect	200
		S. W. Shattuck, Business M'g'r	Taxes on lands.	1,45
3  ''		E. G. Keith	Services of clerk	150
		J. C. McFarland	Extra on copper work	5, 15
5		Minnesota Sandstone Co	Contract for cut stone	5, 15
5		J. C. McFarland	roofling	71
7		Robinson & Burr	plumbing	340
3		reoria Steam Marble Works	marble work	1, 11
3		Twin City Floateia Co	mosaic work	76
í ··		Jag H Rice Co	wiring	15
		J. A. Boland	" nlastering	1 90
3		Chicago Arch'l Iron Works	ornamental iron	28 1, 20 1, 34
í "		Expand'd Metal Fire Proof'g Co	fire proofing	1, 21
5 "		Orr & Lockett Hardware Co	'' hardware	1, 21 73
j ''		H. M. Dickson Mfg. Co	" mill work	83
7		Hill Art Glass and Dec'r'tive Co	_ '' painting	66
3 ::		Chas. H. Besly & Co	Emery cloth	1 :
3 ::		Eimer & Amend	Air pump, tubes, etc	100
2 ::		Library Bureau	Oak cases and cards	2
 [		One & Lookett Handman C-	vyater pipe	3 65
3 "		II & C. Electric Street R'v Co	Current and gas	8
Aug.	20	T Wilee Co	Contract for flooring	16
Aug.	40	H. M. R. Construction Co	library building	1,09
3		Wylie Miller	Repairing slate roof	20
ý ··		Hill Art Glass and Dec'r'tive Co.	Labor, oils, etc.	20 16
3 "		Vic Beasley	Plastering, etc.,	8
• • •		H. M. Dickson Mtg. Co	Doors, locks, lumber	6
) ;;		Champaign County Herald	Printing programs, etc	80 68 10
! ::		The Gazette	Gemein waise as architect Taxes on lands. Services as architect Taxes on lands. Services of clerk Extra on copper work Contract for cut stone roofling plumbing marble work. wiring glass glass plastering ornamental iron fire proofing hardware mill work painting Emery cloth Air pump, tubes, etc Oak cases and cards Water pipe Locks, knobs, etc Current and gas Contract for flooring library building Repairing slate roof Labor, oils, etc. Plastering, etc Doors, locks, lumber Printing programs, etc Printing circulars, etc Photographs Metal polish Painting roof, etc Clock, oil, etc.	26
2 ''		Thos. Naughton	Photographs	19
3 ''		Oldham Bros	Metal polish	
í · ·			Heinting woof ata	15

)	Date.		/ Т	o whom.			For what.		Amou
	1897.								1
<sub>1</sub>	Δ 11 07	20	Champaign	Supply Co	_	Pine tee	s, etcoth, batse		\$3
7	Aug.	20	McBeath &	Park		Cleese ch	oth bats		40
3			Geo. W. Par	ker & Son		Book cas	е		2
9			Berkefeld F	ilter Co		Filters		• • • • • • • • • • • • • • • •	_
0			Fuller & Fu	ller Co		lodine, et	t <b>c</b>		1
1			Prentiss Too	ol and Suppl	у Со	Drill	<b></b> .		55
2	::		Mary Turne:	r Carriel	• • • • • • •	Expenses	š		9
3	• •		T. K. Leal		• • • • • • •	Grading.	hauling, etc.	· · · · · · <del>·</del> · · · · · · · · · ·	13
4 5			Isaac Fieldi W. W. Lindl S. W. Shattu	ng	• • • • • • •	Postage.	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	2 2
6	4.4		S W Shotte	ak Bucines	e Mor	Potty ovr	enses	• • • • • • • • • • • • • • • • • • • •	1
7	• •		S. W. Shark	ick, pusines	s mgr.		ленаса		20
8	• •		4.5	• •	6.6	Expressa	ge		5
9	• •			4.4		Pay roll	of men. July.	1897	1,43
0	• •		• •	• •	* *	Pay roll o	of students, J	uly, 1897	29
1	Aug.	31	A. S. Draper T. J. Burrill S. W. Shattu			Salary, .	ge of men, July, of students, J August, 1897		58
4			T. J. Burrill				• • • • • • • • • • • • • • • • • • • •		20
3			S. W. Shattu	1ck					16
4			N. C. Kicker	•	• • • • • • •			• • • • • • • • • • • • • • • • • • • •	19
5	4.6		ira O. Baker		. <b></b>				18
7			C. W. Rolfo				4.4		. 17
3	6.6		N. C. Ricker Ira O. Baker S. A. Forbes C. W. Rolfe. D. McIntosh		· · · · · · · · ·				. 17
	4.4		A. N. Talbot A. W. Palme F. F. Freder S. W. Parr H. J. Barton						17
Ó	4.6		A. W. Palme	r		• •	* *		17
ĺ	4.6		F. F. Freder	ick			* *		158
3		1	S. W. Parr						178
3		- 1	H. J. Barton				• • • • • • • • • • • • • • • • • • • •		166
ŀ									178
5			D. K. Dodge L. P. Brecke David Kinle Eugene Dav Arnold Tom						166
3	4.4	ĺ	L P. Brecke	nriage			4.6		166
			Fugara Dar	y	• • • • • • •				187 91
	4.4		Arnold Tom	nkine		1.4	4.6		150
			A P Carma	pamo		4.4	4.6		187
			George W. V	vers			4.4		148
			A. P. Carmar George W. M H. E. Summ Edgar J. To	ers		• •			137
3	4.4		Edgar J. To	wnsend		4.6	4.4		137
Į.	• •	J	E. B. Greene James M. W. Katharine M Wm. O. Krol Wm. H. Van			• •			141
	::	ŀ	James M. W	hite					128
3			Katharine M	errill	• • • • • • •				108
3			Wm. U. Kroi	Dowroowt	• • • • • • • •				150 137
	4.6					6.6	4.4		125
	4 6		H. S. Grindle	-ν		4.4	4.4		100
			H. S. Grindle T. A. Clark . B. V. Swense A. H. Daniel Percy F. Bic				4.4		125
		-	B. V. Swens	on		• •	* *		100
		- 1	A. H. Daniel	s			4.6		100
		- 1	Percy F. Bic.	knell					129
			Geo. D. Fairl	tield					108
1			Percy F. Bic Geo. D. Fairl Chas. W. Too Walter H. Jo Henry H. Ev Fred A. Sage William Est Lewis A. Rho Frank Smith	оке	• • • • • • • • • • • • • • • • • • • •			•••••	100
	4.4	- 1	waiter H. Jo	nes			6.	• • • • • • • • • • • • • • • • • • • •	75
1	6.6	- 1	Fred A Seco	от. Ст.	••••				116 91
			William Est	7			4 4		100
			Lewis A. Rh	pades		* *			125
	4.4	- 1	Frank Smith			• •	**		100
	6.6		Frank Smite C. D. McLan P. G. Holden J. E. McGilvo W. J. Fraser Joseph C. Bl Edward G. H W. L. Pillsby Geo. W. Gral Lillio Heath	e		4.4	• •		91
1		- 1	P. G. Holden						50
		- ]:	L. E. McGilve	e <b>ry</b>	• • • • • • • •		**		100
			w. J. Fraser		•••••		4.6		33
	4.6	- }:	roseph U. Bl	aif	• • • • • •		**		41 150
	4.4	- [	waru G. H W. L. Pillebr	ιο w υ ιν <del>ν</del>	•••••		* *		158
	4.4	- [,	Geo. W. Gral	19m			* *		100
		-  -	Lillie Heath				* *		60
*	• • •	- 1	Sue W. Ford				* *		50
	• •	- [:	Geo. W. Gran Lillie Heath Sue W. Ford L. A. Boice Wm. F. Mark Joe Morrow Albert R. Lee Richward Ut	• • • • • • • • • • • • • • • • • • • •			* *		50
		Į.	Wm. F. Mark	er		"			50
			Joe Morrow.						75
		:	Albert R. <u>Le</u> e				**		20
1	• • •	- 1	Richward Ut Henry J. Eas W. R. Hoffm J. J. Johnson	tenweiler	• • • • • •				50
	4.6	1	neniy J. Eas	Մ	••••		**		40
1		- [.	vv. n. Homm	аш	• • • • • •				37 32

о.	Date.		To whom.	For what.	Αμόι
i			1	1	<u> </u>
	1897.	٠.	D. McIntosh, C. V. Millar R. W. Stark S. W. Shattuck L. P. Breckenridge B. F. Sturtevant Co Ascheroft Mfg. Co Yale & Towne M'f'g Co. Eimer & Amend. Bausch & Lomb Optical Co. Richards & Co. Rochester Optical Co. Jones & Laughlin Winslow Bros Co. John B. Bennett Putnam Machine Co. Crane Co.	g , , , , , , , , , , , , , , , , , , ,	
62	Aug.	31	D. McIntosh,	Salary, August, 1897	\$7
63			C. V. Millar		6
34			R. W. Stark		5
35			S. W. Shattuck	Part salary to June 30, 1897	5
6			L. P. Breckenridge	Salary 3 monhts, to September, 1897 Final payment on heating contract.	1,35
37	**		B. F. Sturtevant Co	Final payment on heating contract.	1,35
8	• • •		Ascheroft Mfg. Co	Indicator springs	1 1
39			Yale & Towne M'f'g Co	Indicator springs Locks and keys Balance Tubing, etc Microscope lenses, etc.	11
10			Eimer & Amend	Balance Tubing, etc	11
1	::		Bausch & Lomb Optical Co	Microscope lenses, etc	8 3 7 2 33
2	• • • • • • • • • • • • • • • • • • • •		Richards & Co	Bottles, tubing, etc. Photographic supplies Bolts and iron.	3
3	• • • • • • • • • • • • • • • • • • • •		Rochester Optical Co	Photographic supplies	7
4	• • • • • • • • • • • • • • • • • • • •		Jones & Laughlin	Bolts and iron	1 2
5	• • •		Winslow Bros Co	Bronze tablets	33
6	4 4		John B. Bennett	Contract for tunnels	6,88
7	• •		Putnam Machine Co	Lath	50
8	• •		Crane Co.	Pipe, tees, etc	17
9			Engineering News Pub.Co	Advertisement	1
Ō			A. P. Cunningham & Son	Thermometers.	1
1			J. C. Vaughan	Grass seeds, plants, etc.	1
$\hat{2}$			Orr & Lockett Hardware Co	Hardware	1 *
3			Sheldon Brick Co	Sand	
4			Champaian Times	Printing	i
5			Home Comfort Heat & Plum Co.	Pine	1 12
6	4.6		IInion Mfc Co	Water 2 months	19
7			Cune Co. Engineering News Pub. Co. A. P. Cunningham & Son. J. C. Vaughan. J. C. C. C. C. J. Home Comfort Heat. & Plum. Co. J. Home J. C. Vaughan. J. C. Vaug	Contract for tunnets Lath Pipe, tees, etc. Advertisement. Thermometers Grass seeds, plants, etc Hardware Sand Printing Pipe Water, 3 months. Oils, etc	12
8	4.4		Hubbard & Sone	Oils, etc Stertilizers, nails, etc	1
$\tilde{9}$			G E Stochort	Rooks ota	3
ő			Mittandarf & Kilon	Dieture frames	0
ĭ			Watson Forthmon	Books , etc. Picture frames. Rubber bandages.	
$\overline{2}$	4.6		Modley Sofe Co	Cofo	
3			T H Troppett	Cundnesses etc	4
4			Lowton &	Dunlianton	
5			Teneration Emmanism	Duplicator	
6			Typewriter Emporium	Caomet	1
	4.4		Agricultural Experiment Stat II	Duching	28
7	٠.		Repair snop, Univ. of III	Safe Sandpaper, etc. Duplicator Cabinet Ditching Labor and material	28
$\frac{8}{9}$			Repair snop. Univ. of III	(Cl	1,04
			Mach Laboratory	Unemicals, etc	1 0
0	α <i>1</i>		mechanical department	Chemicals, etc Labor and material Chemicals Chemicals Advertisement Cutter and threader Castings Blue prints Glass putty etc	35 70
1	Sept.	15	The first O	Chemicals	70
$\frac{2}{3}$			Tribe Inter Ocean Tribune Co. Smalley Mfg Co. Crosby St'm Gage & Valve Co. Chas. T. Wilder.	Advertisement	
4			Creation Man Co	O	10
5			Charley Mig Co	Cutter and inreader	10
6	6.4		Crossy Stm Gage & Valve Co.	Castings	
	• •		Chas. T. Wilder	Blue prints	4
7			The swanner	Giass, putty, etc	١.
3			W. W. Walls & Co	Lumper	1
9	4.4		Twin City Electric Co	Awnings, etc	4
9	• •		Date & Sesore	ricoring, etc	10
1			remy & Sayers	Blue prints. Glass, putty, etc Lumber. Awnings, etc Flooring, etc Sand. Ayneretis	1 4 10 1
2	4.4		wm. J. Bolmer	Apparatus	1
3			Funer & Fuller Co	Soga	
1			Champaign Supply Co	Sand Apparatus Soda Nipples, pipes, etc. Pipe, tees, etc. Ink. Pipe Tube Stationery, etc. Linoleum matting, etc. Chairs, desks, etc. Telegrams Platinum wire, etc.	4 3
5∤			Maitox & Mallace Co	Pipe, tees, etc	3
3			р н. Lloyd & Son	Ink	
7	4.4		Jas. B. Clow & Son	Pipe	2
3			E. H. Sargent & Co	Tube	
9			A. C. McClurg & Co	Stationery, etc	9 50
)			Chicago Carpet Co	Linoleum matting, etc	50
ı			brunswick Balke Collender Co	Chairs, desks, etc	1,27
2			Western Union Telegraph Co	Telegrams Platinum wire, etc. Lantern, etc.	,
3	4.4		O. S. Blakeslee	Platinum wire, etc	33
L	4.4		J B. Colt & Co	Lantern, etc	23
5	4 4		V. W. Shuck	Level, etc	
3			Western Onton Flegraph Co. O. S. Blakeslee. J. B. Colt & Co. V. W. Shuck. Library Bureau	Level. etc	30
7	4.4			Contracts for brackets, floors, etc.	2,75
3			Gresham & Lloyd	Contracts for brackets, floors, etc Contract for lighting fixtures	
9	4.4		Gresham & Lloyd. F. J. Foote E. H. Renner & Bro J. C. Sedgwick	Work on batteries, etc.	g
ó			E. H. Renner & Bro	Work with team	9
ĭ			J. C. Sedgwick	Ventilating Military Holl	6
2	6.6		Vic Beasley	Plastering	25
3			Chicago Times Herald	Contract for lighting fixtures Work on batteries, etc. Work with team Ventilating Military Hall. Plastering. Advertisement. Work Typewriter and cabinet Contract for paint'g & calcimining. Balance on horses.	3
4	• •		Chas Mullendorf	Work	2
5			Smith Premier Tynewriter Co	Tynewriter and cahinet	13
6		l	Wm Price Estate	Contract for point'r & coleimining	78
			The Fire Harara	Congress tor barnes or carcimining.	1 '5

Dat		To whom.	,	or wha	
400		Ricker & White Geo. W. Myers Walter H. Jones T. R. Leal Robinson & Burr Ohio Storage Battery Co John B. Bennett Armour Institute of Technology LaFayette Lumber Mfg Co S. W. Shattuck, business m'g'r  A. S. Draper T. J. Burrill S. W. Shattuck N. C. Ricker			
1897 Sept.	1. 15	Diakon & White	Winel neumon	١ ١	
Sept.	19	Geo W Myers	Evnenses		· · · · · · · · · · · · · · · · · · ·
		Walter H. Jones	Expenses	• • • • • • • •	• • • • • • • • • • • • • • • • • • • •
		T. R. Leal	Hauling and g	rading	• • • • • • • • • • • • • • • • • • • •
• •		Robinson & Burr	Contract for h	eating	mains
4.6		Ohio Storage Battery Co	Battery cells	outing .	
		John B. Bennett.	Contract for h	eating t	unnels
		Armour Institute of Technology	Books		
		LaFayette Lumber Mfg Co	Locker cases.		
		S. W. shattuck, business m'g'r	Expressage		
• •			Freightage	<i></i>	
		•• ••	Pay roll of stu	dents, A	ugust, 1897
		** **	Pay roll of me	n, Augu	st, 1897
Sept	30	A. S. Draper	Salary, Septer	nber, 18	97
		T. J. Burrill		• •	. <b></b>
• •		S. W. Shattuck	• •	• • • • • • • • • • • • • • • • • • • •	
		N. C. Ricker	• • •		
		Ira O. Baker	•••	• • • •	. <b></b>
		S. A, Forbes	**		
• •		C. W. Rolfe		••	
• •		D. McIntosh			
• •		A. N. Talbot	• •	• • • • •	
		A. W. Palmer		•••	
• •		F. F. Frederick	4.6	* *	
• •		A. S. Draper. T. J. Burrill. S. W. Shattuck N. C. Ricker. Ira O. Baker S. A. Forbes C. W. Rolfe. D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr. H. J. Barton		• •	
• •		S. W. Parr.  H. J. Barton.  Chas. M. Moss D. K. Dodge.  L. P. Breekenridge.  David Kinley.  Eugene Davenport.  Arnold Tompkins.  A. P. Carman.  George W. Myers.  Edgar J. Townsend.  E. B. Greene.		•• ,	. <b></b>
		Chas. M. Moss			<b></b>
		D. K. Dodge			
		L. P. Breckenridge			
• •		David Kinley	• • •		
		Eugene Davenport			
• •		Arnold Tompkins	• •		
• •		A. P. Carman		••	
		George W. Myers		• •	. <b></b> .
• •		Edgar J. Townsend			
• •		E. B. Greene	• •	• •	
• •		G. E. Gardner	• •	• • •	
		C. C. Pickett	• •		. <b></b>
• •		Katharine Sharp		**	
• •		Geo. T. Kemp	**	••	
		James M. White	• •	44	
• •		L. A&Rhoades	• • •		
• •		H. H. Everett			
		W. H. Van Dervoort			
• •		W. D. Pence			
		Walter H. Jones	::		
		H. S. Grinaley	::		
		T. A Clark			
		H. S. Piatt	::		
		B. V. Swenson			
• •		Edgar J. Townsend E. B. Greene G. E. Gardner C. C. Pickett. Katharine Sharp Geo. T. Kemp James M. White. L. A. Rhoades. H. Hf Everett W. H. Van Dervoort. W. D. Pence. Walter H. Jones. H. S. Grindley T. A. Clark H. S. Piatt B. V. Swenson. A. H. Daniels. George D. Fairfield. Charles W. Tooke Fred A. Sager. William Esty. Frank Emith	,	• • •	<b></b>
		George D. Fairfield	::		
		Charles W. Tooke	•••		
• •		Fred A. Sager			
		William Esty	• • • • • • • • • • • • • • • • • • • •		
		Frank Smith	••		
		C D. McLane	**	• •	
• •		P. G. Holden		• •	
* 4		J. E. McGilvrey	• •		
		S. J. Temple	• • •		
		J. D. Phillips	••		
• •		Violet D. Jayne	• •	• •	
• •		Mary L. Jones	**	••	<b> </b> .
		Oscar Quick	• •		
		Edward J. Lake		• •	
• •		Ella H. Morrison	• •	• •	
		George A. Huff	• •		
• •		William Esty Frank Smith. C D. McLane. P. G. Holden. J. E. McGilvrey S. J. Temple. J. D. Phillips. Violet D. Jayne Mary L. Jones. Oscar Quick. Edward J. Lake. Ella H. Morrison George A. Huff W. J. Fraser Carlton R. Rose Joseph C. Blair. Margaret Mann Alison Fernie. Agnes. S Cook. H. C. Howland C. H. Rowell. Geo. H. Meyer.	• •	••	
• •		Carlton R. Rose	• •	••	. <b> </b>
		Joseph C. Blair	• •	• •	
• •		Margaret Mann	4.4		
		Alison Fernie	+ +	• •	
		Agnes S Cook	4.6	• •	
		H. C. Howland	4.6	4.6	
		O TT D- 1	4.6	* *	

0.	Date.		To whom.	]	For what.		Amou
	1897.						1
14	Sept.	30	W. H. Kavanaugh John P. Hylan Alice Putnam A. C. Burnham C. F. Hottes W. C. Brenke Jessie Y. Fox G. D. Hubbard H. A. Webber C. V. Seastone R. B. Ketchum	Salary, Septe	mber, 1896		80
15			John P. Hylan				80
16			Alice Putnam		**		80
17			A. C. Burnham				90
18			C. F. Hottes				76
19			[W. C. Brenke				78
30			Jessie Y. Fox	• • •			30
$\frac{21}{22}$			G. D. Hubbard				50
3			C V Seestone				56 56
24			R R Katahum				50
5	4.6		R. B. Ketchum Jas. H. McKee H. V. Carpenter John L. Sammis	• •			51
6	4.4		H. V. Carpenter	4 4	• •		56
7			John L. Sammis	4.6			5
8					• •		50
9	6.6		C. B. Clark A. R. Curtiss				8
10			A. R. Curtiss		**		85
31			Henry Jones	• •			66
32	• • •		Henry Jones. J. H. Wilson. D. H. Carnaham.	•••			60
33		•	р. н. Carnaham	• • • • • • • • • • • • • • • • • • • •			30
34			H. U. Hobart				30
35			E. W. Poole	**			30
36			r. w. Schacht.,	• •			30
37 38			A. E. Faul			<i>.</i>	18
39	4.6		E. W. Poole. F. W. Schacht. A. E. Paul. A. St. J. Williamson E. G. Howe.				150
10			Lillie A. Clendenin	4.4			6
1	• •		R. S. Douglass	• •			7
12			C. B. Randolph				71
13	• •		R. S. Douglass C. B. Randolph C. W. Alvord				70
14			W. L. Pillsbury		• •		16
5	• •		George W. Graham				10
16			Lillie Heath	• •			1 7
17			Sue W. Ford				5
18			L. A. Boice			. <b></b> .	5
19			W. F. Marker			<i></i>	5
50	4.4		Jennie M. Laffin	a	,, ,,,,,,		4
51			S. W. Snattuck	Salary, 3 mon Salary, Septe	itns to date.	. <b></b>	10
$\frac{52}{53}$			C V Millon	Salary, Septe	moer. 1897.	• • • • • • • • • • • • •	7
54			R. W. Stark	4.6			5
55			F J. Foote				7
56	• •		Joe Morrow	4.4			7
57			E. W. Justus		* * * * * * * * * * * * * * * * * * * *		5
8	4.4		M. T. Lindsey				4
59			I. H. Allen				4
30			Richard Uttenweiler	• • • •	* * * * * * * * * * * * * * * * * * * *		6
31			C. W. Alvord W. L. Pillsbury. George W. Graham Lillie Heath Sue W. Ford L. A. Boice W. F. Marker Jennie M. Laflin S. W. Shattuck D. McIntosh C. V. Millar R. W. Stark F. J. Foote Joe Morrow E. W. Justus. M. T. Lindsey I. H. Allen Richard Uttenweiler Fred Atkinson C. B. Ewalt	• • •	**		3
2	::		O. D. Ewait	• • •			2
33			H. J. East				4
34 35			W P Hoffman				3
66 66			I. G. Lathron				3
37	"		R. J. East. W. R. Hoffman L. G. Lathrop J. J. Johnson Elbert E. Pound A. S. Golden				3
8			Elbert E. Pound	4.4			
39	6.6		Elbert E. Pound A. S. Golden Allen McGlaughlin Philip Schwehm J. Bishop & Co. Arthur W. Palmer Fuller & Fuller Co. Cambridge Botanical Supply Co Isaac S. Raymond. F. M. McKay S. A. Bullard. J. E. Armstrong.	4.6			3
70	* *		Allen McGlaughlin	4.6			3
71	" "		Philip Schwehm	4.6			2
72			J. Bishop & Co	Repairs on pl	atinum war	e	11
73			Arthur W. Palmer	Expenses			1
14			Fuller & Fuller Co	Acids, ammor	nia, etc		6
75			Cambridge Botanical Supply Co	Covers, paper	rs, etc		6
76			Isaac S. Raymond	Expenses to l	board meeti	ng	6
77			F. M. McKay		••		2
78			S. A. Bullard	::	::		2
79 30			Alor Melene				
30 31	4.4		Wilson Moore & Mallysins	Formal committee			13
$\frac{51}{32}$			Isaaa Fielding	Degai service	88		3
33			W W Lindley	rostage stam	rps		5
84	• •		J. E. Armstrong. Alex. McLane Wilson, Moore & McIlvaine Isaac Fielding. W. W. Lindley G. E. Stechert American Association for the	Legal service Postage stam Books			6
85	**		American Association for the				1
50			Advancement of Science Goodsell Observatory of Carleton College A. C. McClurg & Co	Subscription			
	• •		Goodsell Observatory of Carle-	Cassoripuon		• • • • • • • • • • • • • • • • • • • •	1
86							

#### $Warrants{\rm--Continued}.$

o.	Date.	To whom.	For what.	Amour
	1897.			
88	Sept. 3	Twin City Electric Co	Gas fixturesSupplies, etcPrinting pamphlets, etcPipe supplies, etc	\$10 32 17
89	2001	E. Henry	Supplies, etc	32
90		The Gazette	Printing pamphlets, etc	17
91	• •	Champaign Supply Co	Pipe supplies, etc. Cloth. Services to December 15, 1897. Services. Sonometer, coil, etc. Mimeograph work. Laundry work. Rubber tubing, chemicals, etc.	22
92		G. W. Yates	Cloth	1 1
93 94		C. & U. Phoenix Telephone Co.	Services to December 15, 1897	49 23
95		W A Olmsted Scientic Co	Sonometer coil etc	51
96		H. P. Harris	Mimeograph work	10
97		Empire Steam Laundry	Laundry work	6
98	• •	Eimer & Amend	Rubber tubing, chemicals, etc	86
99			Acids and filters Chemicals Expenses	15
00		Indenarus & Co	Chemicals	374
01		Eugene Davenport  Katharine L. Sharp  Gara & Philbriak	Expenses	8 15
02		Katharine L. Sharp	Everyingtion of title	12
$\frac{03}{04}$		I ron & Hooly	Music stand ata	14
05	4.4	Clayton F Summy Co	Tuning nianos	7 18
06		Richards & Co	Bottles, tubes, etc.	22
07	**.	John B. Bennett	Examination of title Music stand, etc Tuning pianos Bottles, tubes, etc. Cement tops for tables, etc	11
08	• •	Henry Trevett	Hardware Labor	106
09	• •	C. N. Clark & Co	Labor	4
10	• •	Eugene Davenport Katharine L. Sharp Gere & Philbrick Lyon & Healy Clayton F. Summy Co Richards & Co John B. Bennett Henry Trevett C. N. Clark & Co Standard Oil Co. Chas. A. Besore. Hubbard & Sons Sheldon Brick Co Wm. Price estate Robinson & Burr R. S. Wilber J. C. Sedgwick Mittendorf & Kiler Champaign Cabinet Co. H. Swannell Petty & Sayers Cunningham Bros Wallace Supply Co Walker & Mulliken Chemical Laboratory Lord & Burnham Co. T. H. Castor & Co. Whitall, Tatum & Co E. Davenport & Co Frank W. Dorr Carl Fischer J. Clurch Co Yale & Towne Mfg Co.	Öil Lumber Hardware, plumbing, etc	10
11	• •	Chas. A. Besore	Lumber	359
12	• • • • • • • • • • • • • • • • • • • •	Hubbard & Sons	Hardware, plumbing, etc	168
13	• •	Sheldon Brick Co	Sand Tar oil, etc Pipe fittings, etc. Drayage	1 1 1 5
14		Wm. Price estate	Pine fittings eta	15 118
$\frac{15}{16}$	4.4	P & Wilher	Drawara	65
17	4.	J. C. Sedowick	Drayage Labor Picture frames. Book case. Toilet paper, supplies, etc.	20
18	4.4	Mittendorf & Kiler	Picture frames	15
19		Champaign Cabinet Co	Book case	19 75
20	4.6	H. Swannell	Toilet paper, supplies, etc	75
21		Petty & Sayers	Oak	1
22		Cunningham Bros	Plates, etc	9
23	• • • • • • • • • • • • • • • • • • • •	Wallace Supply Co	Oak Plates, etc Radiators. Chairs Chemicals, etc. Lights of glass Encyclopedia Rottlas	82
24		Walker & Mulliken	Charriagh ata	27 22
$\frac{25}{26}$		Chemical Laboratory	Lighta of gloss	25
27 27		T H Caston & Co	Enevelopedia	1
28	4.6	Whitall Tatum & Co	Bottles	3
$\tilde{29}$	• •	E. Davenport & Co	Paper cloth, etc	16
30		Frank W. Dorr	Specimens of earthworms	16 4
31		Carl Fischer	Bottles. Paper cloth, etc Specimens of earthworms Music	7
32		J. Church Co	Sheet music	23
33		Yale & Towne Mfg Co	Sheet music	22
34	4.4	Lawton & Co	Populators and renning	15 5
35 36		Alex Mielson	Specimens	2
37		Montgomery Ward & Co	Plates	. 3
38	• •	Chas. H. Besly & Co	Steel wire, rods, etc	19
39		Carl Fischer. J. Church Co Yale & Towne Mfg Co Lawton & Co Geo. E. Marshall & Co Alex. Nielsen. Montgomery Ward & Co. Chas. H. Besly & Co. Eugene Arnstein. E. G. Smith. Francke & Schindler Gross & Delbridge Co. J. B. Colt & Co.	Duplicators and refilling Record books, etc. Specimens Plates Steel wire, rods, etc Enamels Hook and gauge Brass screws, etc Chemicals, etc	3 8
40	* *	E. G. Smith	Hook and gauge	8 4
41	• •	Francke & Schindler	Brass screws, etc	4
42	• •	Gross & Delbridge Co	Chemicals, etc Objective Cement Lockers, etc. Seeds Music Expressage Freightage Sundry items Contract steam pipe covering Tables, desks, etc Contract for central heating plant. Expenses to board meeting  water, 3 months, to January 1, 1898. Gas to Sept. 24; notor to Oct. 1; electric lights to Sept. 28. Drawing boards Fountain pens, etc	21
43	• • • • • • • • • • • • • • • • • • • •	J. B. Colt & Co	Objective	5 7
44		W. W. Walls & U0	Lograng eta	600
45 46		J. C. Venghen	Seeds	6
47		E. T. Paul Music Co	Music	ĭ
48		S. W. Shattuck, Business Mer.	Expressage	$4\hat{2}$
19	4.4	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Freightage	87
50			Sundry items	94
51	Oct.	Walsh & Wyeth	Contract steam pipe covering	1,399
<b>04</b> 1	• •	Library Bureau	Tables, desks, etc	1,349
53	• • •	M. Yeager & Son	Contract for central heating plant.	9,100
51		W. L. Pilisbury	expenses to board meeting	10 52
55		IInion Mfc Co	Weter 2 months to January 1 1909	52 125
56		II & C Gas and Plastric Co	Ges to Sent 21: motor to Oct 1:	140
57		U. & O. Gas and Electric Co	electric lights to Sept. 28	487
58	• •	G. R. Petty & Co	Drawing boards	33
59	* *	Knowlton & Bennett	Fountain pens, etc	5
60		J. M. Chase	Prawing boards. Fountain pens, etc Varnishing, etc Collecting samples of water Nails.	1 1
61		Whatton St. John	Collecting samples of water	1 3

10.	Date.		To whom.	For what.	Amou
	1898.			Typewriter ribbons. Stakes Fish Barometer, etc. Zinc, etc. Printing blanks, etc. Pripe and fittings. Lights of glass. Lockers for warerobes, etc. Advertisement to October 31, Gate valves, etc. Tracing cloth, etc. Rugs, cushions, etc. Wardrobe and table. Syringes, scissors, etc. Repairs on micrometer Brass rod, etc. Weights, etc. Carbons. Stationery and supplies. Books. Leather cushions, chairs, table Expenses. Petty expenses, etc Expenses. Hauling, grading, etc. Hardware Pipe, bushings, etc. Plates, etc. Photos. Library supplies, etc Seed boxes Supplies. Expenses.  'to board meeting Services of clerk 3 months Blue prints of railroad constr Spectrometer Motor. Cylinder oil Swing churn, fittings. etc. Belt. Museum supplies. Use of telephones, etc Microscopes, etc Valves, packing, etc. Printing board proceedings, claw books. Cyndry items Expensese Freightage	
663	Oct.	F. S. V	Webster Co	Typewriter ribbons	\$2 \$2
664	* * *	Miller	& Leming	Stakes	7
665		L. V.	Manspeaker	Fish	12
$\frac{666}{667}$		Henry	City Floatnia Co	Barometer, etc	
668		Cham	neign County Ptg. Co.	Printing blanks ata	190
669		Crane	Co	Pine and fittings.	88
670	**	James	H. Rice Co	Lights of glass	89
671		Orr &	Lockett Hardware Co	Lockers for warerobes, etc	369
672	• • •	Public	c School Pub. Co	Advertisement to October 31,	1897 12
573	• • •	Schoo	l News & Prac. Educator	July, Sept. an	d Oct. 12
674		Nation	nal Tube Works	Gate valves, etc	25
675 676		Chico	cunningham & Son	Programshions ota	131
377		HE	Scholle & Co	Wordrohe and table	181
578		Banse	ch & Lomb Optical Co	Syringes, scissors, etc.	14
379	• •	Warn	er & Swasev	Repairs on micrometer	5
680	**	Machi	nist Supply Co	Brass rod, etc	8
681		Robin	son & Burr	Weights, etc	17
682	4.4	J. B. 0	Colt & Co	Carbons	17
683	• • •	A. C.	McClurg & Co	Stationery and supplies	208 141 es 319
684	• • •	Gusta	v E. Stechert	Books	141
685 686	::	Bruns	wick-Baike-Collender Co	Leather cushions, chairs, tabl	es 319 22
687		S. E. I	Shottnel	Expenses	126
388	* *	F I'i	Agirs	Evnances	31
689		w"	Fraser	Expenses	31
690	• •	T. R.	Leal	Hauling, grading, etc.	59
691	* *	J. T. V	Wolcott	Work	21
392	• •	Chas.	A. Besore	Lumber, etc	93
393	* *	Т. Н.	Trevett	Hardware	12
394	• • •	Cham	paign Supply Co	Pipe, bushings, etc	36 10
395		<u>С</u> , н.	Baddeley	Plates, etc	10
96	4.4	Thom	as Naughton	Photos	
97		Millor	ry Bureau	Library supplies, etc	367
398 399		R R	Rowker	Supplied	25
700		Alexa	nder Lumber Co	Evnenges	5
701		J. E. N	McGilvrev	Expenses	27
702	• •	Lucy	L. Flower	" to board meeting	63
703	• •	E. G.	Keith	Services of clerk 3 months	150
704	• • •	North	ern Pacific R'y Co	Blue prints of railroad constr	uction 15
05	44	Thom	as W. Gleeson	Spectrometer	74
06 07		Pt. WE	ayne Electric Corporation	Motor	75
08		у сана	Borbor & Co	Cylinder oil	10
09		Miller	Harness Co	Wagon ate	46
10	4 4	Cham	naign Sunnly Co	Relt	11
11		F. Cor	mack	Museum supplies	
12		Centra	al Union Tel. Co	Use of telephones, etc	9
13		Bausc	h & Lomb Optical Co	Microscopes, etc	342
14	,	Crane	Co	Valves, packing, etc	30
15		Cham	paign County Herald	Printing board proceedings,	etc 119
16		vv est	rub Co	Law books	132
17	4.	runer	og ruller Co	Grupe etc	8
18 19		I TE	rmetrone	Expanses to board mosting	125 30
20	4.4	B. V	Swenson	Materials etc	18
21		lš. w	Shattuck, business mor	Sundry items	61
$2\overline{2}$	• •	~. ';;	characki, sasinossi, mgr.	Expressage	59
23		`	**	Freightage	87
24		• •	** **	Pay-rolls of men, September,	1897 1,331
25	·••	۱. ۾''۔	_ '' '	Freightage Pay-rolls of men, September, students, Salary, October, 1897	378 583
26	Oct. 30	A. S. I	Oraper	Salary, October, 1897	583
27 28		1. J. E	Surrill	44 44	
28		N C	Biakon		166
30		F. O. 4	Rakan	44 44	191
31		S Y F	Forhes	4. 4.	187 83
32	• •	č. W	Rolfe		175
33	4.61	D. Me	Intosh		
34	• •	$\hat{\mathbf{A}}$ . $\hat{\mathbf{N}}$ .	Talbot		175
35	• •	A. W.	Oraper Surrill Shattuck Ricker saker Forbes Rolfe Intosh Talbot Palmer Prederick Parr Barton		175
36	• •	F. F. I	Frederick	44 44	158
37					175

	Date.		To whom.			For	For what.	Amount.
739	1897. Oct	30 C. M.	Moss		Salary,	October,	1897	_
741	: : :	_	. Breckenridge		: :	::		186 66
742	::	OE MC	inley		::	::		
744	::		Tompkins.		::	::		-
746	: :	ĀŅ ĀΉ	CarmanIones		::	::		_
747	::	EIC MF	E. B. Greene		::	::		-
749	:	30 50	Pickett		:	:		
750	::	Katk	narine L. Sharp		::	::		-
152	:	66.	Geo. W. Myers		:	:		
753	::	E]⊢	Townsend		::	::		
755	::	L.	Rhoades		:	:		
756	::	H≱	H. Everett.		::	::		133 33
758	::	M:	). Pence		::	::		
692	: :	ijĘ. V ∀	Glark		: :	: ;		133
761	::	Hi Sp	Piatt		::	::		100 00
363	:	Б. А. Н.	Swenson Daniels		:	::		108 83
764	: :	Geo.			::	::		108 83
992	:	≽ خ جز	Sager		:	:		100 00
767	::	i ⊠	Esty		::	: :		
200	::	Fran	ik Smith		: :	::		100
170	::	io.	Holden		::	::		
771	::	ક્રો⊢ ~ 2	McGilvrey		::	: :		108
773	::	J.	Phillips		::	::		888
775	: :	V 10 X	et D. Jayne		: :	: :		28 28 28 28 28 28 28 28 28 28 28 28 28 2
776	::	Ösc	Oscar Quick		::	: :		_
222	::	되 교 교	Lake. H. Morrison		:	:		299
779	::	Geo.	A. Huff		::	: :		120 00
202	::	ڪ ح	. Fraser		: :	::		82 20
28	::	) ()	Blair		::	::		45.83
25 Z	::	Mar	garet Mann		::	::		222
385	:	Agn	Agnes S. Cook		:	:		_
8 2 2 8	::	A.	L. Howland	:	::	: :		86
8	:	H. N	leyer in roweii		:	:		_
26.5 26.5	::	٦. ۳.	I. Kavanaugh		::	::		200 200 200 200 200 200 200 200 200 200
797	:	Alice F	e Putnam		:	:		_
79%	::	A.C.	C. Burnham		::	::		2000
194	::	K K C	Brenke		:	:		_
795	::	Jess	ssie Y. Fox		::	::		
797	::	(Q)	Hubbard		::	: :		_
200	::	HO HO	. Webber		::	::		
008	::	E B	Ketchum		: :	: :		
38	::		/ Carpenter		: :	: :		
98	::	M.B.	Hammond		::	::		
200	::	Anna C. B.	a Fossier Clark		:	:		
808	::	A.R	Curtiss		::	::		
88	:	J.H.	J. H. Wilson.		:	;		
608	::	E C	H. Carnahan		::	::		
811	:	ģ⊞.	W. Poole		:	:		38 38
815	::	Ei-	. Schacht	:	::	::		
814	:	Don E	Sweeney		:	•		

ο.	Date.	To whom.	For what.	Amou
	1897.			
15	Oct. 30	A. St. John Williamson	Salary October 1897	\$10
16	000.	E. G. Howe	Salary, October, 1897	150
Ĩ7	•••	Lillie A. Clendenin		65
18	••	R. S. Douglass		75
19	4.4	C. B. Randolph	Services, October, 1897	75 70
20	::	C. W. Alvord		70
21	::	W. L. Pillsbury		162 100
22	::	Geo. W. Graham	Services, October, 1897	100
3		Lillie Heath		75
34		Sue w. Ford		55 55
26	••	W F Marker		
27		K. A. Boice W. F. Marker Jennie M. Laflin. Georgia E. Hopper Adelaide M. Chase		55 45
8	4.4	Georgia E Hopper		30
29		Adelaide M. Chase	6	25
3Ö	• •	Leo C. Smith		20
31	• •	C. V. Millar	Water survey, October, 1897	75
32	•••	R. W. Stark		50
33	•••	F. J. Foote	Services, October, 1897	1 75
34		Leo C. Smith C. V. Millar R. W. Stark F. J. Foote	Services, October, 1897	75
35	::	F. W. Justis W. H. Zimmerman M. T. Lindsey I. H. Allen Richard Uttenweiler		50
36	::	W. H. Zimmerman	44 44	50
37		M. T. Lindsey		40
38		Bighand Https://or	;; ;;	40
39 <b>1</b> 0		Fred Atlance	44 44	60
‡0 ‡1		Ches R Ewelt	Salary, October, 1897.	25
$\frac{1}{12}$		D Maintoch	Salary October 1807	75
13	* *	Henry J. East	Salary, October, 1001	75 40
$\tilde{14}$	6.6	Samuel Morse		40
$\bar{15}$		W. R. Hoffman	**	37
16		L. G. Lathrop		32
17	•••	J. J. Johnson	**	32
18	•••	E. E. Pound	**	32 32
19	::	A. S. Golden	**	32
50		Allen McGlaughlin		32
51		Philip Schwehm		27
52		E. A. Nelson	0.11. //	32 25
53 54		U. U. Adams	Collecting class material	25
55 55		Watson Faulkner	Collinator etc	150
56		Ismag C Riddle	Chronograph ota	495
57		G W Sheldon & Co	Ogen freight etc	95
58		John Gayner	Fruit iar	25 18
5 <u>ŏ</u>		R. R. Bowker	Subscription	1
60	••	F. B. Stevens	Plumbago, tools, etc.	125
61	•••	Narragansett Machine Co	Scales, etc	122
$\bar{6}2$	• •	Wm. J. Bohm	Glass cylinder	. (
63		Chas. A. Schieren & Co	Collecting class material Alcohol Collimater, etc. Chronograph, etc Ocean freight, etc. Fruit jar. Subscription Plumbago, tools, etc Scales, etc. Glass cylinder Belt Books.	14
34		D. Appleton & Co	Books	.  •
35	::	Geo. W. Southwick & Co	Wire belt lacing	.  8
36	::	Maitby & Wallace Co	Pine and cherry lumber	60
$\frac{37}{2}$	::	Boston Musical Instrum'nt Mfg	Horn	4
38	::	Chas. H. Besly & Co	Files, rods, etc	25
$\frac{69}{20}$		Baker & Adamson Chemical Co	Nitric and muriatic acids	68
70 71	1	J. O. vaugnn	Seeus	18
71		Topos & Langhing	Tron	32: 18: 26: 400: 1:
(2 73		Alexander Camber Co	Lumbon	10
74		L. P. Rreckenridge	Services as anoinear	100
75		E B Greene	Rooks	19
76		Geo. E. Marshall & Co	Index Book	1
77		Vale & Towne Manufacting Co.	Refitting keys, etc.	
78		Walker & Mulliken	Picture frames	
<b>7</b> 9	**	Sweet, Wallach & Co	Photograph supplies	10
80	• • •	Eimer & Amend	Scales, etc.	1
81		G. Cramer Dry Plate Works	Fruit jar Subscription Plumbago, tools, etc. Scales, etc. Glass eylinder. Belt. Books. Wire belt lacing. Pine and cherry lumber. Horn Files, rods, etc. Nitric and muriatic acids. Seeds. Coal. Iron Lumber. Services as engineer Books. Index Book Refitting keys, etc. Picture frames. Photograph supplies Scales, etc. Plates. Jars, etc. Emery wheels. Drills. Files, etc Plunger, ring., etc. Shades, etc. Chucks Gravity apparatus. Wire	1
$\bar{8}^2$	**	Kariher Grocery Co	Jars, etc	4
83	**	Norton Emery Wheel Co	Emery wheels	. 16
84	4.6	Cleveland Twist Drill Co	Drills	. 10
85	::	Allerton, Clarke & Co	Files, etc	12 16
86	::	Henry K. Worthington	Plunger, ring., etc	
87		Twin City Electric Co	Snades, etc	. 16
88 89		westcott Chuck Co	Chucks	. 19
	73	intente Bros. Testing Mach. Co.	caravity apparatus	11 49

Date.		To whom.	For what.	Amoun
1897.				i
Oct	30	Burrows Bros Company	Books. Tracing cloth, etc. Lumber Printing and binding. Note covers, etc Extra stairway, stacks, etc. Sash, sockets, etc. Fittings, etc. Expenses visiting schools. Expenses visiting sub-contractor.	\$28
5 000.	90	Knowlton & Rennett	Tracing cloth etc	626
		Charles A. Besore	Lumber	94
۱۱ ''		The Gazette	Printing and binding	77
1 11		D. H. Lloyde & Son	Note covers, etc	21
3		Library Bureau	Extra stairway, stacks, etc	442
71		Orr & Lockectt Hardware Co	Sash. sockets, etc	9
4.		Robinson & Burr	Fittings, etc	103
2		Mittendorf & Kiler	Wardrobe, baskets, etc	46
		J. E. McGilvrey	Expenses visiting schools	43
Nov.	4	Edward Gleason	Final payment as sub-contractor	
. 1		H. M. R. Construction Co	on contract	650
51		Library Bureau	on contract	250
Ł1		John B. Bennett	Final payment on tunnels, etc	80
) (		Schipper & Block Carpet Co	Contract for window shades Cutting trees, hauling, etc Contract for plumbing in gymnas'm	198
::		T. K. Leal	Cutting trees, nauling, etc	115
		Mittendorf & Kiler J. E. McGilvrey Edward Gleason. H. M. R. Cønstruction Co. Library Bureau John B. Bennett. Schipper & Block Carpet Co. T. R. Leal Walsh & Henck E. Barr. A. P. Carman M. Yeager & Son John W. Stipes S. A. Bullard Yale & Towne Manufacting Co. Walch & Wyeth T. R. Leal	Contract for plumbing in gymnas'm	100
3 .:		A D Common	conservatory	241 10
<b>'</b>		M Voogen & Sco	Contract for booting plant	9.750
Pi		John W. Stings	Contract for nearing plant	1,800
	15	OULL W. Olipes	Dureet paving	1,800 25
Nov.	15	Vala & Towns Manufacila ~ Ca	Кола	6
		Wolch & Wyoth	Pine coverings	4
"		T R Leal	Hauling maying etc	42
		Sangamon Coal Co	Coal	130
		Walch & Wyeth. T. R. Leal. Sangamon Coal Co. Twin City Electric Co. Urbana & Champaign Elect. Lt. Ry. Co. M. C. Lilley & Co. Charles H. Besly & Co. Eugene Dietzgen Co. Fuller & Fuller Co. Price's Pharmacy. Callaghan & Co.	conservatory.  Expenses. Contract for heating plant. Street paving. Expenses. Keys. Pipe coverings. Hauling, moving, etc. Coal. Labor and material on transformers	27
		Urhana & Chamnaion Float	Land and material on mansionings	
1		Lt By Co	Cedar poles etc	20
2 *	1	M. C. Lilley & Co	Cedar poles, etcBugle	5
		Charles H Besly & Co.	Steel gauges	5 2
	- 1	Eugene Dietzgen Co	Paper cloth	11 23
• •	1	Fuller & Fuller Co	Corks, etc	23
• • •	- (	Price's Pharmacy	Sulphur, etc	1
	- 1	Callaghan & Co	Law books	2.532
• •	Į.	Crane Company	Bushings, nipples, etc	52
		Chas. A. Hart	Expenses	32 56
• • •	1	H. E. Summers		<sup>3</sup> 56
• • •		E. Harlen Scott	Bugle. Steel gauges Paper cloth. Corks, etc Sulphur, etc Law books. Bushings, nipples, etc Expenses Tubes, rubber stoppers	` 4
• • •		Eimer & Amend	Tubes, rubber stoppers	26
* * *	- 1	Prang Educational Co	Colored card-board	3
::		M. Lowenstern & Son	Qil cloth	1
1	- 1	Jones & Laughlins	Tubes, rubber stoppers Colored card-board Oil cloth Steel, bolts, etc Repairs on lathe. Gasoline, oils, etc Copper, etc Paper Shades and hanging Photograpbs. Printing Music.	22
1	- 1	Flather & Company	Repairs on lathe	3
::	- 1	E. Henry	Gasoline, oils, etc	6
::	- {	Wm. Miebach & Co	Copper, etc	1 16
	i	Wm Dries Fotots	Chades and hanging	3
	- 1	Thomas Nanghton	Dhotographs	3
	- 1	The Corette	Printing	4.
	- 1	E T Poul Musia Co	Musia	1
		Lyon & Hooly	Rand folios	4
	- 1	Roston Musical Inst. Co.	Horn	35
	ı	Carl Figher	Music	Q.
		Ira O. Baker	Photographs. Printing Music. Band folios. Horn. Music. Expenses. Subscription.	$\frac{8}{3}$
		American Architect & Build		9
I		News Co	Subscription	4
		Kenyon News & Postal Sub.Co.	Markers, etc.	24
		W. F. John Barnes Co	Subscription.  Markers, etc. Emery tools, etc Copy of publication. Slides from photographs. Sewer pipe. Micrometer. Slating, labor, etc. Moulding, etc, Mantel, grate, etc. Rent of tarpaulins and coal. Watt meter, etc. Blue prints. Fire screens. Lumber, etc. Pipe and fittings. Pipe, lead. Microscopes, filters, etc. Shannon files. Aluminum wire.	68
		National Brick Mfg Ass'n	Copy of publication	ĭ
••	- 1	L. Manasse	Slides from photographs	11
		National Sewer Pipe Co	Sewer pipe	33
•••		Tinius Olsen & Co	Micrometer	75 45
• •	- {	Central Ill. Slate Roofing Co	Slating, labor, etc	45
	- 1	J. D. Green	Moulding, etc,	2
	- 1	T. H. Trevett	Mantel, grate, etc	35
i ::	- 1	C. J. Sabin	Rent of tarpaulins and coal	17
::	- [	Westinghouse Elect. & Mfg Co	Watt meter, etc	107
	- 1	Charles T. Wilder	Blue prints	44
	- 1	Geo. E. Martin	Fire screens	. 8
::	- 1	Charles A. Besore	Lumber, etc	160
	- 1	James B. Clow & Son	Pipe and fittings	300
1 ::		Robinson & Burr	Pipe, lead	7
	- 1	Bausch & Lomb Optical Co	Microscopes, filters, etc	132 6

No.	Date.		To whom.	For what.	Amoun
	1897.	1			1
965	Nov. 1	5	J. Bishop & Co	Remodeling platinum ware	\$94
966	1.0	-	J. S. Ford Johnson & Co	Furniture	45
967	• • •		Gross & Delbridge Co	Remodeling platinum ware Furniture. Stethoscope, bandages, etc. Basket balls. Advertisement. Calico, cheese cloth, etc. Books. Art studies. Studies. Books.	15
968	l ::	ì	Narragansett Machine Co	Basket balls	18
969	::		Indiana Engineering Society	Advertisement	6
970	::		Indiana Engineering Society G. C. Willis B. T. Batsford Lechtertier Barbe Geo. Rowney & Co. Bernh Liebisch Dr F. Krantz Newton A. Wells Gresham & Lloyde Carl Fischer	Calico, cheese cloth, etc	31
971	;;	-	B. T. Batsford	Books	149
972			Lechtertier Barbe	Art studies	25
$973 \\ 974$		1	Rornh Lichigah	Pooks	15 10
975		-	Dr F Krantz	Chamical annaratus	155
976			Newton A. Wells	Contract decorating library	1,069
977			Gresham & Lloyde	Books. Chemical apparatus. Contract, decorating library. lighting fixtures, etc	210
978	• •		Carl Fischer	Music	12
979			Mittendorf & Kiler	Burlap, frames, etc	44
980	* * *		W. M. Hinton School News & Pract. Educator Eugene Dietzgen & Co Armour Institute.	Hise of calf	2
981	::		School News & Pract. Educator	Advertisement. Beam compass, etc. Book and sorting tray.	12 27
982			Eugene Dietzgen & Co	Beam compass, etc	27
983			Armour Institute	Book and sorting tray	4
984 985				Subscription	3 30
986			Brunswick Ralka Collandar Co	Ram. Oak desks and chairs. Castings, etc. Metal polish, etc.	318
987			A. H. Andrews Co.	Castings etc	2
988			Geo W Hoffman	Metal polish etc	2
989			Brunswick Balke Collender Co. A. H. Andrews Co. Geo. W. Hoffman. Mandel Bros. Marshall Field & Co. J. L. Kerr J. C. Blair. E. H. Renner & Bro. W. W. Lindley. Ozias Riley. S. W. Shattuck, Business Mgr.	Rugs	118
990			Marshall Field & Co	Pillows, etc	12
991	1 ::	ĺ	J. L. Kerr	Mason and materials furnished	1 101
992			J. C. Blair	Expense	19
993	::		E. H. Renner & Bro	Hauling coal, etc	107
994			W.W.Lindley	Hauling coal, etc. Postage stamps Sundry items. Expressage.	30
995			Ozias Riley		69
996			S. W. Snattuck, Business Mgr.	Sundry items	73
997 998			,	Expressage	99 123
999				Pow rolls of man October 1897	1,479
በበበ	6.6		44	students October 1897	219
001	Nov. 3	0	A. S. Draper T. J. Burrill S. W. Shattuck	Freightage Pay-rolls of men October, 1897. students October, 1897. Salary, November, 1897.	583
UU2		Ì	T. J. Burrill	, , , , , , , , , , , , , , , , , , ,	200
003	**		S. W. Shattuck	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	166
004		-	S. W. Shattuck N. C. Ricker Ira O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss		191
005		- 1	Ira O. Baker	,	187
006			S. A. Forbes		83
007 008			D. Molmtock		175 50
009	4.4		A N Talbot		175
010	6.6	-1	A W Palmar		175
11	4 4	- 1	F. F. Frederick	**	158
12	4.	1	S. W. Parr	**	175
13		1	H. J. Barton	**	175 175
)14		١	Chas. M. Moss	44	175
)15			D. K. Dodge L. P. Breckenridge David Kinley Eugene Davenport Arnold Tompkins	** ************************************	166
016		- ]	L. P. Breckenridge		187
17			Pavid Kinley		187
18			Eugene Davenport		91
19			A P. Company		166
$\frac{020}{21}$			Arnold Tompkins. A. P. Carman. Walter H. Jones. E. B. Greene G. E. Gardner C. C. Pickett. Katharine L. Sharp. Geo. T. Kemp Geo. W. Myers Edgar J. Townsend Jas. M. White Lewis A. Rhoades.	**	187 100
$\frac{21}{22}$	4.	-	E B Greene		141
23	• •	-	G E Gardner	**	166
24	٠.		C. C. Pickett	**	125
25		-	Katharine L. Sharp	**	166
26	* *	-	Geo. T. Kemp	**	166
27	* * *		Geo. W. Myers		150
28			Edgar J. Townsend		137
29			Jas. M. White	.,	133
30			Lewis A. Rhoades		141
31			Henry H. Everett		133
32		ļ	Jas. M. White Lewis A. Rhoades. Henry H. Everett Wm. H. Van Dervoort W. D. Pence H. S. Grindley T. A. Clark H. S. Piatt B. V. Swensen A. H. Daniels Geo. D. Fairfield Chas. W. Tooke		137 133
33 34		J	H S Grindley		108
35			T A Clark		133
36	• •		H S Piett		100
37	**		B. V. Swensen		100
			A. H. Daniels	**	108 108
1.3751		- 1	42. 44. To GHI 1010 10		1 200
)38 )39		- 1	(leo. D. Fairfield		108

۶-	Date.		To whom.		For what.			
- '	1897.	-		i				
l	Nov. 8	30	Fred A. Sager	Salary,	November,	1897		
3			Wm. Esty	1	**			
			Frank Smith	::	• • • • • • • • • • • • • • • • • • • •			
			C. D. McLane	l ::				
			P. G. Holden J. E. McGilvrey S. J. Temple			• • • • • • • • • • • • • • • • • • • •		
			S. I. Tample					
	4.4		J. D. Phillips. Violet D. Jayne. Mary L. Jones. Oscar Quick. Edward J. Lake. Ella H. Morrison Geo A. Huff					
	4.4		Violet D. Javne	•••				
			Mary L. Jones		• •			
ı	• •		Oscar Quick					
1	• •		Edward J. Lake	• • •	• •			
3			Ella H. Morrison					
ij	•• /		Geo. A. Huff		• •			
	•• '		W. J. Fraser					
1			Carlton R. Rose					
3	٠.		Margarat Mann					
3		į	Alison M. Fernie		• •			
ij			Joseph C. Blair Margaret Mann. Alison M. Fernie. Agnes S. Cook. A. C. Howland. Chester A. Rowell. G. H. Meyer. W. H. Kavanaugh. J. P. Hylan Alice Putnam. A. C. Burnham Chas, F. Hottes		• •			
	4.6	- 1	A. C. Howland.					
		}	Chester A. Rowell		••			
Ì	4.6		G. H. Meyer	١. ، ،	• •			
1			W. H. Kavanaugh					
	• • •	- 1	J. P. Hylan	::				
5	• • •		Alice Putnam					
	• • •		A. U. Burnham	::				
		j	A. C. Buffman Chas. F. Hottes W. C. Brenke. Jessie Y. Fox Jas. H. McKee Geo. D. Hubbard.					
			Jassia V Foy					
1	6.6	Ì	Jas H McKee					
		- 1	Geo. D. Hubbard					
i	• •		H. A. Webber					
	• •		H. A. Webber C. V. Seastone R. B. Ketchum			**********		
	• •		R. B Ketchum	•••				
		1	K. B. Ketchum H. V. Carpenter J. L. Sammis M. B. Hammond Anna Fossler C. B. Clark A. R. Curtiss		• •			
			J. L. Sammis					
			M. B. Hammond					
			Anna Fossler	':	• • • • • • • • • • • • • • • • • • • •			
١			U. B. Clark	l .:	• • • • • • • • • • • • • • • • • • • •			
		1	A. R. Curtiss					
			Henry Jones J. H. Wilson D. H. Carnaham					
	6.6	-	D 4 Carnaham					
			A. C. Hobart					
		- 1	A. C. Hobart. E. W. Poole F. W. Schacht. E. E. Paul.	• •				
			F. W. Schacht	• •				
		- 1	E. E. Paul	• •				
	• •		Don Sweeney		• •			
	• •		A. St. J. Williamson					
	• •		Don Sweeney. A, St. J. Williamson Edward G. Howe. Lillie A. Clendenin	• • •				
	• • •		Lillie A. Clendenin					
	• • •	-	Billie A. Clendellill R. S. Douglass C. B. Randolph C. W. Alvord W. L. Pillsbury Geo. W. Graham Lillie Heath					
	• •		C. B. Kandolph					
-			W. I. Dillahung					
1		- 1	Goo W Graham					
		- [	Lillie Heath		**			
	٠.	- )	Sue W. Ford					
		- 1	L. A. Boice	• •				
l		-	Lillie Heath Sue W. Ford L. A. Boice W. F. Marker					
l		-1	Jennie M. Laflin	• • •				
	• •		W. F. Marker. Jennie M. Laffin Georgia E. Hopper Adelaide M. Chase A. W. Palmer C. V. Millar R. W. Stark F. J. Foote Joe Morrow E. W. Justus					
	• •	- 1	Adelaide M. Chase		**			
		- 1	A. W. Palmer		3 months to	date		
		- 1	C. V. Millar		November,	1897		
		- 1	K. W. Stark					
		-	F. J. Foote					
		1	Joe Morrow					
ĺ	**	-	E. W. Justus W. H. Zimmerman M. T. Lindsey I. H. Allen			,		
		-1	w. fl. Lindger		4.4	*******		
		- 1	I H Allon					
j		- {	R Uttonwoiler		4.4			
1		-	R. Uttenweiler. Fred Atkinson					
ĺ		-1	C R Ewelt	4.4				
l			C. B. Ewalt D. McIntosh	4.4				
		-	H. J. East					

о.	Date.		To whom.	For what.	Amou
.	1897.				
อกไ	Nov.	30	W R Hoffman	Salary, November, 1897	\$3
31	11017.	00	L. G. Lathron	. Danary, 100 comber, 100	9
$\tilde{2}$	4.4		J. J. Johnson	' '' ''	3
3	6.6		E. E. Pound	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	8
4	4.6		A. S. Golden		l š
5	4.4		Allen McGlaughlin		3
6	4.4		E. A. Nelson	· · · · · · · · · · · · · · · · · · ·	3
7			Philip Schwehm	1	2
81	• •		E. Barr	. Contract masonry foundation	56
9			T. R. Leal	Grading and hauling	6
0			C. C. Adams	. Collecting class materials, etc	3
1	• • •		W. A. Olmsted Scientific Co	. Hydrometer, etc	7 9
2	• • •		Gustay E. Stechert	. Books	7
3	::		B. V. Swenson	Books Indicator coil, etc. Subscription to Dec. 1, 1898.	8
L			Municipal Engineering Co	Subscription to Dec. 1, 1898	
5			Engineering Record	.] 31, 1898	
3			Engineering News Pub. Co	To:	1
7			V. A. Offissed Scientific Co.  Gustav E. Stechert. B. V. Swenson Municipal Engineering Co.  Engineering Record Engineering News Pub. Co. Robinson & Burr. Charles A. Besore. U. R. Greenbelch	Pipe supplies, etc	7
3	6.6		Unaries A. Besore	Lumper	1 7
9	• •		J. D. Greennalen	Manalin	1
			Orang & Co	Musin	1
	4.4		Detroit Twist Drill Co.	. vy aste	, 1
3			Modent Potent Puller Co	Onlorg	1
			Hubbard & Song	Plumbing and metaviole	4
5			Smith & Webster	Pipe supplies, etc. Lumber Lumber Lamp Muslin Waste Drills Pulleys Plumbing and materials Slate base Batteries, sockets, etc. Advertisement to Dec. 16, 1897. Paints, oils, etc. Catalogue slips, etc. Fire screens Contract for boilers  "superstructure plumbing. Expenses, six months	1 2
3			Twin City Electric Co	Retteries soakets etc	1 1
í			Engineering News Pub Co	Advertisement to Dec 16 1897	1 1
3	4.4		C. Hunt	Paints oils etc.	1
			Library Bureau	Catalogue slips, etc.	4
			George Martin	Fire screens	-
U	• •		National Water Tube Boiler C	Contract for boilers	1,62
1	4 4		Lord & Burnham	. '' '' superstructure	1,35
3	• •		Walsh & Heuck	Expenses, six months	78
Į.			A. S. Draper	. Expenses, six months	7
5			M. E. Jones	. Cow and heifer	40
5			Hubbard & Sons	. Contract for iron pipe, valves, etc	92
4.	···	00	George Martin. National Water Tube Boiler C Lord & Burnham. Walsh & Heuck A. S. Draper M. E. Jones. Hubbard & Sons. Carmichael & Andrews. J. E. McGilvrey W. L. Pillsbury. E. H. Renner & Bro W. W. Lindley. F. M. McKay. Alex McLane S. A. Bullard J. E. Armstrong N. B. Morrison Isaac S. Raymond. Thomas J. Smith T. R. Leal S. W. Shattuck, business mgr	Cow and heifer. Contract for iron pipe, valves, etc. 'bridge Expenses visiting schools.	50
3  1	Dec <sub>:</sub> ,	20	J. E. McGilvrey	. Expenses visiting schools	3
4			W.L. Pillsbury	Expenses Hauling coal, etc. Postage stamps Expenses	1
)			E. H. Kenner & Bro	Hauling coal, etc	6
			W. W. Lingley	Postage stamps	. 6
		- 1	Alox MeLeno	Expenses	6
	4.4		S A Bulland		1
			J E Armetrone		1
		1	N B Morrison		16
1	6.6	- 1	Isaac S. Raymond	44	2
			Thomas J. Smith		1
	4.4		T. R. Leal	Hauling, filling ditch, etc Taxes on Minnesota lands	8
ıļ.		J	S. W. Shattuck, business mgr	Taxes on Minnesota lands	28
		- 1		Expressage	6
	4.4		44 44	Freightage.,	32
1			** ** **	Freightage. Sundry items Pay rolls of students, Nov'mb'r, 1897 Pay rolls of men, November, 1897. Salary for December, 1897.	18
-				Pay rolls of students, Nov'mb'r, 1897	22
١.				Pay rolls of men, November, 1897	1,01
1	Dec:	31	A. S. Draper T. J. Burrill S. W. Shattuck N. C. Ricker	Baiary for December, 1897	58
	4.4		I. J. Burrill		
	• •		N. C. Piakon		16 19
		1	N. C. Ricker	0 44 44	
		- 1	C A Dowlog	: :: :: :: :: :: :: :: :: :: :: :: :: :	18
		- 1	C W Polfo		17
			D MaIntogh		5
ĺ		1	A N Talbot		17
			A. W. Palmer		17
		- 1	N. C. Kicker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr J. Barton		15
		1	S. W. Parr		17
		- 1	H. J. Barton		17
		1	Chas. M. Moss.		17
		. 1	H. J. Barton Chas. M. Moss. D. K. Dodge L. P. Breckenridge		16
	• •	- 1	L. P. Breckenridge		18
		- 1	David Kinley		18
	• •		Eugene Davenport	44	9
	• •		Arnold Tompkins		16
	• •	1	L. F. Frederinge David Kinley Eugene Davenport. Arnold Tompkins A. P. Carman W. H. Jones E. B. Greene.	4.	18
. 1	6.6	Ì	W. H. Jones	44 44	10
				44 44	14

۱٠٠	Date.	To whom.		For what.			
1	1897.						
8	Dec: 31	G. E. Gardner C. C. Pickett. Katharine L. Sharp George T. Kemp. Geo. W. Myers Edgar J. Townsend James M. White Lewis A. Rhoades H. H. Everett Wm. H. Van Dervoort W. D. Pence, H. S. Grindley T. A. Clark H. S. Piatt B. V. Swenson	Salary,	December,	1897	\$166	
9	::	C. C. Pickett	1	• •		125	
0		Katharine L. Sharp	::	•••		166	
ĭ		George T. Kemp	::	• • •		166	
2		Geo. W. Myers	i ::			150	
3	• • •	Edgar J. Townsend	::			137	
4	4.4	James M. White		4.4		133	
5		Lewis A. Khoades			• • • • • • • • • • • • • • • • • • • •	141 133	
7		W. II Von Donwoont	٠. ا			137	
8		W D Pone's				10	
9		H S Grindley				133	
0	4.4	T A Clark				133	
1	4.4	H. S. Piatt. B. V. Swenson. A. H. Daniels		••*	,	100	
2		R V Swangon		• •		108	
3	4.4	A H Daniels		• •		108	
4	4.4	Geo D Fairfield			•••••	108	
5	4 4	Chag W Tooke		* *		108	
6	4 4	Frad A Sager		• •		100	
7	4.4	William Esty				108	
8	• •	B. V. Swenson. A. H. Daniels. Geo. D. Fairfield Chas. W. Tooke Fred A. Sager William Esty Frank Smith C. D. McLane. P. G. Holden				100	
9		C. D. McLane		• •		10	
ő	• •	J. E. McGilvrey J. E. McGilvrey Seth J. Temple J. D. Phillips Violet D. Jayne.		• •		5	
ĭ	• •	J. E. McGilvrev	• •	* *		108	
$\tilde{2}$	• •	Seth J. Temple	••	• •		100	
3	4.4	J. D. Phillips	• •	• •		8	
4	• •	Violet D. Jayne	• • •	• •		12	
51	• •	Mary L. Jones Oscar Quick	**	• •		120 100	
6	••	Oscar Quick	"	• •		8	
7		Oscar Guick Edward J. Lake. Ella H. Morrison Geo. A Huff W. J. Fraser Carlton R. Rose. Joseph C. Blair	•••			7	
8	• •	Ella H. Morrison	,	• •		10	
9	• • •	Geo. A Huff		• • • • • • • • • • • • • • • • • • • •		12	
0	• • •	W. J. Fraser		• • • • • • • • • • • • • • • • • • • •		3	
1		Carlton R. Rose		• •		8	
2	• • •	Joseph C. Blair		• • • • • • • • • • • • • • • • • • • •		4	
3	•••	Joseph C. Blair Margaret Mann Alison M. Fernie. Agnes S. Cook. A. C. Howland Chester H. Rowell. George H. Meyer. W. H. Kavanaugh J. P. Hylan A. Ice Putnam A. C. Burnham Chas. F. Hottes. W. C. Brenke Jessie Y. Fox. Jas. H. McKee. Geo. D. Hubbard H. A. Webber.	l ::	•••		7.	
4		Alison M. Fernie		• • • • • • • • • • • • • • • • • • • •		10	
5		Agnes S. Cook				7	
6		A. C. Howland	l ::	• • • • • • • • • • • • • • • • • • • •		8	
7		Chester H. Rowell	::			70	
8		George H. Meyer				70	
9		W. H. Kavanaugn	٠.,			8	
0		J. P. Hylan		'••		80	
2		Ance Putnam				9	
3	4.4	Chag E Hottog				7	
4		W. C. Propho				7	
5	4.4	Loggio V For		• •		3	
6	4.6	Jos H Makes	,			50	
7	4.6	Goo D Hubbard	٠.		**********	5	
ŝ	6.6	H A Webber				5	
9		C. V. Seastone.				5	
0	4.6	Geo. D. Hubbard H. A. Webber. C. V. Seastone. R. B. Ketchum H. V. Carpenter J. L. Sammis. M. B. Hammond Anna Fossler C. B. Clark A. R. Curtiss Henry Jones J. H. Wilson D. H. Carnaham A. C. Hobart E. W. Poole F. W. Schacht A. E. Paul	• • •	4.4		5	
1	4 4	H. V. Carpenter		• •		5	
2	• •	J. L. Sammis.				5	
3		M. B. Hammond	•••	•		5	
4	• •	Anna Fossler	٠٠.	• •		5	
5		C. B. Clark		* *		8	
6	• •	A. R. Curtiss			*********	8	
7		Henry Jones	• • •	• •		6	
ġ		J. H. Wilson		• •		6	
9	• •	D. H. Carnaham		• •		3	
0	• •	A. C. Hobart	::	* *		3	
11	4.4	E. W. Poole		•••		30	
$\bar{2}$	• •	F. W. Schacht	::	* *		3	
3	4 •	A. E. Paul	٠٠.	**			
4	4.4	Don Sweney		* *		3	
5	• •	A. St. J. Williamson	٠٠.	* *		10	
6		Edward G. Howe		• •		15	
7		Lillie A. Clendenin		• •		6	
8	••	R. S. Douglass		• •		7	
9		C. B. Randolph,				70	
0	• •	A. E. Paul. Don Sweney A. St. J. Williamson Edward G. Howe Lillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alvord W. L. Pillsbury S. W. Shattuck Geo. W. Graham		4.6		70	
	••	W. L. Pillsbury				165 100	
1 2							

No. Date.		To whom.	For what.	Amou
	1897.			
274		Lillie Heath	Salary for services, December, 1897	\$75
240		Sue W. Ford	04141, 101 801 (1008), 2 00011801, 1001	55
276 277		Lillie Heath Sue W. Ford L. A. Boice W. F. Marker Jennie M. Laßin Georgia E. Hopper. Adelaide M. Chase. F. J. Foote. Joe Morrow E. W. Justus W. H. Zimmerman M. T. Lindsey I. H. Allen Richard Uttenweiler Fred Atkinson. C. B. Ewalt	**	55
277		W. F. Marker		55
278		Jennie M. Lafin	**	45
79	::	Georgia E. Hopper		30
80		Adelaide M. Chase	1 :: ::	25
81		F. J. Foote		75 75
32 33		Joe Morrow		1 75
		IW II Zimm ann an		50 50
34 35		W. H. Zimmerman		4(
36		M. I. Linusey		40
57		Richard Httonwoiler	**	6
8		Fred Atkinson	**	3
39		C. B. Ewalt	**	38 28
0		Henry J East		40
91		W. R. Hoffman		3
92	• •	L. G. Lathron	**	3' 3'
3	• •	Henry J. East W. R. Hoffman L. G. Lathrop J. J. Johnson	**	32
4	4.4	E. E. Pond		32
5	• •	A. B. Golden		3
6	• •	Allen McGlaughlin	**	32
7	• •	E. A. Nelson	44	32
8		Philip Schwehm	44	2'
9		J. J. Johnson E. E. Pond A. B. Golden Allen McGlaughlin E. A. Nelson Philip Schwehm D. McIntosh C. V. Millar R. W. Stark Chas. H. Mears & Co P. E. Taintor Walcott, Webster Mfg. Co R. R. Bowker New York Tribune C. C. Gere		78
00	;;	C. V. Millar	Salary for December, 1897. Salary for services, December, 1897 Lumber. Cement floor and walks. Shower apparatus. Publications. Subscription Clock. Coke. etc.	78
1(	<i>(</i> ;	R. W. Stark	Salary for services, December, 1897	5
2	• •	Chas. H. Mears & Co	Lumber	20
3		P. E. Taintor	Cement floor and walks	18
4		Walcott, Webster Mig. Co	Snower apparatus	38
5		K. R. Bowker	Publications	10
6		New York Trioune	Subscription	19
8		Chaganasha & Ohia Ca	Color of	1 1
9		Wegtinghouse Flor & Mfg Co	Cinavit hasalran	22
0		E Dietzgen Co.	Instrument and rubber stemp	-6
1		Kenffel & Eccar Co	Rangire on tone	10
2		Toledo Bridge Co	Rlue prints	10
3	• •	John A. Bashear	Grating and prisms, etc	96
4	• •	W. J. Keep.	Testing apparatus	200
.5		Lydia Hart	Work on charts	27
6	::	Richards & Co	Tubes, bottles, etc	27 14
7		Herring, Hall, Marvin Co	Coin safe,	48
8		Sheldon Brick Co	Labor	- {
9	• • • • • • • • • • • • • • • • • • • •	J. R. Wood	Fire brick	31
0		S. S. White Dental Mfg. Co	Cylinder and oxygen	36
ĭ		A. C. McClurg & Co	Books	329
2		Jones & Laughlins	Channel beams	48
3	4.4	Character Carrie Co.	Expenses	23
4 5		The Tilini	Subscription Clock Coke, etc Circuit breaker Instrument and rubber stamp Repairs on tape Blue prints Grating and prisms, etc. Testing apparatus. Work on charts Tubes, bottles, etc. Coin safe, Labor Fire brick. Cylinder and oxygen Books Channel beams. Expenses. Sewer tile, etc.	12 14
- 1	1898.	1 100 1 000 100	Dunautipuon, euc	146
6	Jan 7	A. Selicoorty	Old iron	1
	, m,	Electric Appliance Co	Wire tane etc	18
3	4.	Wm. J. Bohm.	Glass tube	1
9	• •	James B. Clow & Son	Pipes, tees, etc.	20
Ó	• •	C. & U. Phoenix Tel. Co.	Services to March 10, 1898	36
ĭ	• •	Singbusch & Stoltev	Soap	1
2	• •	Miller & Leming	Stakes	
3	• •	Sangamon Coal Co	Coal	186
1	• •	Cunningham Bros	Shellac	2
5		Mrs. Frank Smith	Preparation of class material	4
6		E. Henry	Janitor supplies	72
7	• •	Twin City Ice & Cold St'r'ge Co.	Ice	_8
8	::	Champaign Co. Printing Co	Printing	71
9		i. E. WcGiládea	Expenses	21
0		Acme Burnisher Co	Gas burnishers	26
1		T. H. Trevett	vise, screws, wire, etc	. 16
2		F. F. Pettibone & Co	raper	17
3		J. U. vaughan	Seeas	17
4		Sanders Publishing Co	Subscription, etc. Old iron Wire tape, etc. Glass tube. Pipes, tees, etc. Services to March 10, 1898. Soap Stakes. Coal Shellac. Preparation of class material Janitor supplies Ice. Printing. Expenses. Gas burnishers. Vise, screws, wire, etc. Paper. Seeds. Advertisement.  Keys, locks, etc.	14
5		The Farmer's Voice	**	7
6		W. D. Hoard & Co	Keys, locks, etc	7 4 14
7				

Vo. Date.		To whom.	For what.	Amour
1	1898.			
349	fan.	7 W. I. Saffell & Co	Couch, chairs, etc	\$34
350	• • •	Athletic Association	Photographs	3
351		C. H. Baddelev	Lamps, plates, cans, etc	45
52		John J. McVey	Book supports	9
53		Hubbard & Sons	Book supports Sewer pipe, etc. Baskets, nuts Scale beam. Steel Labels Horse for experiment use. Expenses. Photographs. Hoisting apparatus. Cement driveway.	31
54	4.4	L. K. Howse & Co	Baskets, nuts	11
55		Montgomery Ward & Co	Scale beam	3
56		Scully Steel & Iron Co	Steel	1
57 58	4.6	Dennison Mig. Co	Hangs for experiment use	2 5
59 59	4.4	H H Everett	Fynancia	13
60		Thomas Naughton	Photographs	13
61		Manning Maywall & Moore	Photographs. Hoisting apparatus Cement driveway	31
62	4.4	P. E. Taintor	Cement driveway	63
63	4 6	Chas. A. Besore	Lumber, paper, etc	86
64	• •	Union Tile Co.	Tile	3
65		(Inamparan County Herald	Printing programs, etc	67
66	4.4	C. G. Armstrong	Services	150
67		D. H. Lloyde & Son	Services. Music	14
68	4.4	C. G. Armstrong D. H. Lloyde & Son Adler & Hornsteiner	Clerionate horne ata	132
69		Lyon & Healy College Review Stock Co. Chas. W. Groves Smith-Premier Typewriter Co.	Music	74
70	• •	College Review Stock Co	Advertisement Educational Directory,	5
71		Chas. W. Groves	Educational Directory,	5
72	• • •	Smith-Premier Typewriter Co.	Ribbons. Chemicals, tubes, etc.	6
73		Smith-Fremer Typewriter Co. Richards & Co. Machinists Supply Co. Maltby & Wallace Co. W. F. & John Barnes Co. Eimer & Amend. E. H. Renner & Bro. Burrows Bros. Co. C. A. Cytter.	Unemicals, tubes, etc	51
74		Machinists Supply Co	Sheet brass, etc	15
75		Maitoy & Wallace Co	Drop nangers	3
76		W. F. & John Barnes Co	Pulley	2
77 78		E II Poppor & Pro	Harling cool	24
79		Burrows Prog Co	Hauling coal	65
30		C A Cuttor	Pariodicals	22
81	4.4	A C McClure & Co	Periodicals. Ink, paper, books, etc. Blue prints.	287
32		Chas T Wilder	Rlue prints	19
83		F.W. Devoe & C.T. Raynolds Co	Stencils	1
84	4 4	Burrows Bros. Co. C. A. Cutter A. C. McClurg & Co. Chas. T. Wilder F. W. Devoe & C.T. Raynolds Co F. F. Frederick. G. C. Willis T. R. Leal Kaehler & Martini Hartmaun & Braun A. B. Dick Co. C. F. Bradley Co. Western Bank Note & Eng. Co. Chas. H. Besly Co. Kariher Grocery Co. W. W. Walls & Co. Baker & Adamson Chemical Co Liquid Carbonic Acid Mfg. Co.	Expenses	6
85	4.4	G. C. Willis	Crash, flannel, etc.	31
86		T. R. Leal	Grading, hauling, etc	89
87	4.4	Kaehler & Martini	Crash, flannel, etc. Grading, hauling, etc. Chemical apparatus, etc.	1, 292
88		Hartmann & Braun	Apparatus	4.98
89		A. B. Dick Co	Mimeograph ink	1
90		C F. Bradley Co	Mimeograph ink. Typewriter ribbons, etc	5
91[		Western Bank Note & Eng. Co.	Diplomas Emery wheel, wire, solder, etc	125
92		Chas. H. Besly Co	Emery wheel, wire, solder, etc	9
93		Kariner Grocery Co	Matches, etc	1 2
94		W. W. Walls & Co	Matches, etc. Cement, etc. Filters, etc.	2
95 96		Baker & Adamson Chemical Co	riters, etc	. 5
97	4.4			3
98		W S Royal	Oil	1
99		Champaian Times	Printing reports	1 1
00		E. G. Howe	Oil Printing reports Expenses	1 8
01		W. S. Royal.  Champaign Times. E. G. Howe. H. W. Lynch. Consolidated Oil & Feed Co	Coal	499
02		Consolidated Oil & Feed Co	Coal Qil	492
03		Odin Coal Co	Coal	1,30
04	٠٠.	U. & C. R'y Gas & Electric Co.	Motor to Jan. 1, '98; gas to Dec. 24. '97	929
)5	* *	Odin Coal Co.  U. & C. R'y (Jas & Electric Co. Carmichael & Andrews M. Lowenstern & Son. Holland Linseed Oil Co.	Coal. Motor to Jan. 1, '98; gas to Dec. 24, '97 Contract for bridge.	429
)6		M. Lowenstern & Son	Blanket	.  - 8
07		Holland Linseed Oil Co	Qil	.  8
80		Chas. F. Witt. Walch & Wyeth School News & Pract'l Educ't'r Callaghan & Co.	Repairs on apparatus	.  2
9		Walch & Wyeth	Pipe coverings	21
10		School News & Pract'l Educ't'r	Advertisement, 3 months	12
11		Canagnan & Co,	Books. Slate and tin roofing, etc	14
12		J. D. Green Orr & Lockett Hardware Co	Breaker leaks of	58
13		Urr & Lockett Hardware Co	Brackets, locks, etc	64
14		J. A. Wood.	Brick.	28
15 16		Crane Co	Pipe, tees, ells, etc. Frames, lead, oils, etc. Contract plumbing.	176
17		William Price estate Walsh & Heuck	Contract plumbin	10
18	414	E Rorr	Brick work	30
19		wash & neuek E. Barr Robinson & Burr F. J. Dibble Lunkenheimer Co The Gazette	Sewer nine etc	3
20	4.4	F. J. Dibble	Transmitter and recervoir course	75
21	4.4	Lankenheimer Co	Sewer pipe, etc. Transmitter and reservoir gauge Valves. Printing.	1 4
22		The Gazette.	Printing	55 55 96
551	4.4	Henry Trevett	HardwareBlue prints of bridge	\ QF
23	6.6			

Date.		To whom.			For wh	at	Amou	
1898.		Library Bureau  Knowlton & Bennett Sweet & Wallach Ct Nevins Memorial  John Wiley & Sons Architectural Recor Chas. F. Hottes Astronomical Journ Kenyon News & Post Wm. Bond & Son. Central Union Tel. C Leland Stanford Jr. Patterson Bros. Wm. T. Comstock Am. Arch. & Bldg. N Rogers & Manson Eimer & Amend T. R. Leal E. H. Renner & Bro W. W. Lindley Ozias Riley S. W. Shattuck, Bus						
Jan.	7	Library Bureau		Travs. card.	s. etc		, s	
o an.	•	Knowlton & Bennett		Index book			\$ 1	
		Sweet & Wallach Co		Negatives			-	
• •		Nevins Memorial		Copy of cat	alogue			
		John Wiley & Sons.		Books			1	
::		Architectural Recor	d	Subscriptio	n			
		Chas. F. Hottes		Books			1	
1 ::		Astronomical Journ	αl	~			6	
- "		Kenyon News & Post	al Sub. Co.	Subscriptio	n to perio	odicals for 1898.	31	
Jan.	19	Wm. Bond & Son		Chronomete	ar	· · · · · · · · · · · · · · · · · · ·	15	
::		Lolond Stanford In	TInizongitz	Rent or tere	phones.	• • • • • • • • • • • • • • • • • • • •	4	
		Petterson Rres	OHIVEISILY	Brass nine			1	
		Wm T Comstock		Subscription	n for 1898	· · · · · · · · · · · · · · · · · · ·	1 *	
•••		Am. Arch. & Bldg. N	lews Co	Subscriptio	n to Dece	ember 31, 1898	2	
•••		Rogers & Manson					2	
•••		Eimer & Amend		Flasks, wire	e. etc		4	
•••		T. R. Leal		Hauling and	d grading	g, etc	9	
		E. H. Renner & Bro		Hauling coa	al, etc		9	
::		W. W. Lindley		Postage sta	mps		4	
		Ozias Riley					4	
::		S. W. Shattuck, Bus	iness Mgr.	Sundry iten	ns		8	
		1		Freightage	• • • • • • • • •	• • • • • • • • • • • • • • • • •	١	
1 ::				Expressage		s, Dec., 1898 nuary, 1898	90	
1				I was round or	students	s, Dec., 1898	30	
Jan	21	A. S. Draper T. J. Burrill S. W. Shattuck N. Clifford Ricker Ira O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer P. F. Frederick S. W. Parr H. J. Barton		Salany for I	men, Jai	nuary, 1898	1,07	
9 411	ĐΙ	T I Russill	• • • • • • • • • • • • • • • • • • • •	Sarary, 101 9	anuary,	.898	20	
		S W Shottnek		• •	• • •		16	
		N Clifford Ricker					19	
		Ira O. Baker		• •	• •		18	
• •		S. A. Forbes		• •	• •		1 8	
		C. W. Rolfe		• •			17	
::		D. McIntosh					1 8	
•••		A. N. Talbot		! ::	• •		1 17	
		A. W. Palmer		1 ::	• •		17	
		F. <u>F.</u> Frederick		1 ::			12	
::		S. W. Parr		l ::	• • • • • • • • • • • • • • • • • • • •		17	
		H. J. Barton		::			17	
		С. ш шоѕѕ	• • • • • • • • • • • • • • • • • • • •				17	
		D. K. Douge					16	
::		Dorid Kinley	•••••	1			18 18	
		Eugene Davennort	•••••				1	
		Arnold Tompkins	•••••				10	
		A. P. Carman		• •			18	
• •		W. H. Jones		•••	• •		10	
• •		E. B. Greene	***		• •		14	
		G. E. Gardner		٠٠,	• •		16	
		C. C. Pickett		٠٠.	• • •		12	
		F. F. Frederick S. W. Parr. H. J. Barton. C. M. Moss. D. K. Dodge. L. P. Breckenridge. David Kınley. Eugene Davenport. Arnold Tompkins. A. P. Carman. W. H. Jones. E. B. Greene. G. E. Gardner C. C. Pickett. Katharine L. Sharp Geo. T. Kemp. G. W. Myers. E. J. Townsend Jas. M. White. Lewis A. Rhoades. Henry H. Everett			• •		16	
::		Geo. T. Kemp	• • • • • • • • • • • • • • • • • • •		••		10	
		G. W. Myers	• • • • • • • • • • • • • • • • • • • •	1 ::	• •		1	
1		E. J. Townsend	•	.:				
1		Jas. M. White	• • • • • • • • • • • • • • • • • • • •	::				
::		Lewis A. Khoades	•• • • • • • • • • • • • • • • • • • • •	l			14	
		Henry H. Everett	•••••				1 1	
		W. H. VanDervoort						
		H S Grindley	•••••					
		T A Clark			4.4		1 1	
		H S Piett					1	
		Lewis A. Khoades. Henry H. Everett. W. H. VanDervoort. W. D. Pence. H. S. Grindley T. A. Clark. H. S. Piatt. B. V. Swenson. A. H. Daniels G. D. Frinfold					10	
		A. H. Daniels		•••				
1		G. D. Fairfield					1 1	
• • •		Chas. W. Tooke.		• • •	• •		. 1	
4.6		Fred A. Sager		••	• •		1 1	
		G. D. Fairfield.  Chas. W. Tooke.  Fred A. Sager.  William Esty.  Frank Smith  C. D. McLane		•••	• •		1	
3		Frank Smith		**				
		C. D. McLane		::	• •		. 1	
N		J. E. McGilvrey Seth J Temple J. D. Phillips Violet D. Jayne		1 ::	• •			
)		J. E. McGilvrey	<b></b>	::	::		1	
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Ī	1898.						
)1	Jan.	31	E. J. Lake Ella H. Morrison. Geo. A. Huff.	Salary for	January,	1898	\$7 10
)2			Ella H. Morrison	::	• •		10
)3			Geo. A. Huff	::			12
)4			W.J. Fraser				
55			W. J. Fraser C. R. Rose J. C. Blair Margaret Mann				8
)6 )7	4.4		Manganot Mann			,	4
8			Aligon M. Fornio		4.6		10
)9	4.4		Agnes S. Cook		4.4		1 7
iol	• •		A.C. Howland!	••			١ ٤
1	• •		Chester H. Rowell	• • •			7
2	4.4		Geo. H. Meyer	• •	• •		7
3			W. H. Kavanaugh	"			8
4			J. P. Hylan	:	• •		8
5			Alice Putnam	;;	• • •		8
6			A. C. Burnham		• • • • • • • • • • • • • • • • • • • •		9
7			Maude W. Straight				7
8			Chas. F. Hottes				3
9			W. C. Brenke			· · · · · · · · · · · · · · · · · · ·	3
0  1			Lossio V For				7
2	4.4		Jemes H. McKee		4.4	• • • • • • • • • • • • • • • • • • • •	1 8
3			George D. Hubbard		• •		٠٤
4			Margaret Mann. Alison M. Fernie Agnes S. Cook A. C. Howland! Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh J. P. Hylan Alice Putnam A. C. Burnham. Maude W. Straight. Chas. F. Hottes W. C. Brenke C. T. Wilder. Jessie Y. Fox James H. McKee George D. Hubbard H. A. Webber C. V. Seastone R. B. Ketchum H. V. Carpenter J. I. Sammis M. B. Hammond Anna Fossler C. B. Clark A. R. Curtis Henry Jones J. H. Wilson D. H. Carnahan A. C. Hobart A. C. Hobart J. H. Carnahan J. C. Hobart J. H. Carnahan		4.4		
5			C. V. Seastone	٠.	4.4		Ě
6	• •		R. B. Ketchum	• •	• •		Ì
7	• •		H. V. Carpenter		• •		8
8	• •		J. L. Sammis	• • •	• •		E
91			M. B. Hammond	::	• • •		
0			Anna Fossler		::		
1			C. B. Clark	1			
3		-	A. R. Curtis				8
3	4.6		Henry Jones				(
1			D. H. Corneben				6
5	4.4		A C Hobert				5
7			A. C. Hobart E. W. Poole F. W. Schacht				9
3		- 1	F. W. Schacht	4.			9
ğ	• •			• •			9
Ď		-	Don Sweeney		• •		9
1	٠.		A. St. J. Williamson				1
2	• • • • • • • • • • • • • • • • • • • •	- 1	Edward G. Howe				15
3		1	Lillie A. Clendenin				6
1		- 1	A. E. Paul.  Don Sweeney. A. St. J. Williamson Edward G. Howe. Lillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alvord W. L. Pillsbury. Geo. W. Graham Lillie Heath		**		7
5		- 1	C. B. Kandolph		4.4		7
7		- 1	W f. Billabuny				7 16
3	•	- 1	Goo W Grehem		4 4		10
			Lillie Heath				7
ĺ	4.4		O 177 TO 1		4.6		5
ĺ			L. A. Boice				5
3	• •	1	Sue W. Ford L. A. Boice. Wm. F. Marker. Jennie M. Laffin Georgia E. Hopper Adeline M. Chase Mary T. Pierce F. J. Foote. Joe Morrow E. W. Justus	• •	4.4		5
ł.			Jennie M. Laflin	• •			4
Į.	4.6		Georgia E. Hopper	4.4	4.4		3
5	• •	- 1	Adeline M. Chase	• •	• •		2
3	• • •		Mary T. Pierce		• •		2
	::		F. J. Foote		• • •		3
3	• • •	-  -	Joe Morrow	• • • • • • • • • • • • • • • • • • • •	• • •		7
2	**		E. W. Justus W. H. Zimmerman M. T. Lindsay I. H. Allen Richard Uttenweiler				5
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			III. I. Lillusay				4
			Richard Uttenweiler	• •			6
			Fred Atkinson	4.4			3
	• •	- 1.	Fred Atkinson Chas. B. Ewalt				2
	• •		D. McIntosh	• •	• •		7
1	44	- [	Chas B. Ewall D. McIntosh C. V. Millar R. W. Stark Henry J. East W. R. Hoffman	• •	٠:		ż
3	• •		R. W. Stark		• •		5
1	٠.	- [	Henry J. East	• •	4.4		4
		- [	W. R. Hoffman	• •	**		· 3
	• •	- [	W. K. Hollman L. G. Lathrop J. J. Johnson E. E. Pound A. S. Golden A. McGlaughlin E. A. Nelson	• •	* *		3
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İ		-	E. E. Pound	::			: 3
1		1	A. S. Golden	• • • • • • • • • • • • • • • • • • • •			0.
1		1.	A. McGlaughlin	44	4.		3

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	1898.		,		İ
77	Jan. 3	Philin Sc	hwehm	Salary for January 1898	\$2
<del>i</del> 8	oan;, s	Chas T V	hwehm Vilder Battery & Optical Co. lishing Co	Salary for January, 1898	6
70		MaIntoch	Rattery & Ontical Co.	A chartee names	"
79 80	• • •	Wort Pub	lighing Co	Asbestos paper. Subscriptions Jeloluse. Printing, etc.	2
0V		National	Islalusa Co	Talaluea	-
81		Chambial	Jeloluse Co gn County Herald	Dwinting ata	3
32		Champar	gn County Heraia	Frinting, etc	3
33		F. Daven	port	Expenses. Labor and material on bridge Boiler rivet steel	1
34		John B. B	ennett sel & Iron Co serer & Co len 10s. Co	Labor and material on bridge	1 4
35	::	Scully Sto	eel & Iron Co	Boiler rivet steel	6
36	ł	Kny, Scho	eerer & Co	Condensers	6
37		E. S. Gold	len	Tags for furniture, etc	1
8	4.4	Wm. Pric	e estate	Painting roof, etc. Book. Scales Services in rehearsals, etc. Bent of double bass.	3
$\tilde{9}$		Burrow B	ros. Co	Book	"
ŏ		Oneon &	00.00	Seeles	5
3		A E The	DO	Couries in ush saugala sta	"
1		B. E. 110	шаѕ	Services in renearsals, etc	
2		B. N. Ket	ney	Kent or double bass	
3		C. J. Sabi	<u>n</u>	Coal	
4		J. D. Phil	lips	Lettering diplomas	
5	• •	Henry H.	Everett	Coal. Lettering diplomas. Expenses	1
6	• •	J. A. Reev	mas n n lips Everett ees. nnett		4
7	* *	Ralph Re	nnett	Photographs	
8	**	J T WAL	ott	Typewriting etc	4
2		Lord & D	nmham Co	Contract for conservatory	9 79
9		Hora & P	cott	Photographs Typewriting, etc. Contract for conservatory heaters, pipe, etc.	2,73 1,00
0		Transard.	ω 130 HS	neaters, pipe, etc	1,00
1		Nown Mr. 6		Lectures	10
<b>2</b>	::	ந். G. Kei	th e L. Sharp	Salary for services	15
3		Katharine	E. Sharp	hxnenses	
4	• •	C. A. Kof	oid	Grading and hauling Expenses visiting schools	
5	4.4	T. R. Lea		Grading and hauling	3
6		I E McG	ilvrey	Evnenses visiting schools	. 4
7	4.4	Wolton	Tonog	Expenses for music	
		TT are to TT	Jones	Expenses for music	
8		пенгу це	ii Chemicai Co	Lamp, weights, etc	
9		Standard	O11 Ç6	$[\underline{\mathcal{O}}_{11},\ldots,\ldots,\ldots]$	2
0		Jones & L	aughlins	Expenses for music Lamp, weights, etc. Oil Machine bolts, steel, etc. Cardboard boxes. Glue, hard oil, etc. Gas Repairing tube. Shades. Rods. rubber, etc. Governors. Lantern slides. Apparatus	2'
1		Pictorial.	Printing Co	Cardboard boxes	5
2		Fuller & 1	Fuller Co	Glue, hard oil, etc	
3		Chicago (	alcium Light Co	Gas	
4		Wm J R	hm	Renairing tube	
5		Electric A	pplienes Co	Shadaa	49
		Coodman	Violage ita Ca	Doda mubbon oto	1
6		Goodyear	v dicanite Co	Company and the contract of th	1
7		Garaner C	vovernor Co	Governors	1'
8		Samuel M	Morton	Lantern slides	3
9		Otis C. W.	hite	Apparatus. Platinum tube Proceedings	129 129 3
01		Eimer & 1	Amend	Platinum tube	129
1		National 1	Educational Ass'n	Proceedings	3'
$\overline{2}$	4.4	Engineeri	ng News Pub. Co	Subscription Library notes, etc	- 4
3	. • •	Library F	lureau	Library notes etc	12
4		Guetav E	Stachart	Books	45
5	4.4	A C Mac	luna & Co	Pooles stationous ata	90
		Orn & MUC	kott Handman Ca	Sand paper also see	268
6		OLL & POC	keu hardware Co	Sand paper, giue, etc	2
7	• •	Cosmobor	itan incand ct L't Co	Lights, chimneys, etc	18
3	• • • • • • • • • • • • • • • • • • • •	<u> P</u> uolisher	s' weekly	rubilications,	3
9	••	Bausch &	s' WeeklyLomb Optical Co	Subscription. Library notes, etc Books Books, Stationery, etc. Sand paper, glue, etc. Lights, chimneys, etc. Publications. Oven, thermometer, etc. Photographs	30
0		Thomas N	laughton	Photographs Tracing cloth, etc.	
i	• •	A. P. Cun	ningham & Son.	Tracing cloth, etc	2
2	• •	Mittendor	f & Kiler	Burlan, chairs, etc.	19
3		F K Roh	agon & Bro	Crash matting ate	58
		Croaby Ct	m Congo & Volve Co	Photographs Tracing cloth, etc. Burlap, chairs, etc. Crash, matting, etc. Globe valves Printing. Lumber and coal. Coal Hard brick Services, medicine, etc.	O(
1		Orosby St	m Gauge & vaive Co.	Description of	4'
5		ne Gazet	ie	£1111/1111g	. 90
3	::	∪nas. A. l	sesore	Lumper and coal	90 315
7		James Lit	tler	Coal	1
3	• •	E. Barr		Hard brick	· (
$\tilde{9}$	• •	Dr. H. E.	Cushing	Services, medicine, etc	
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ĭ		Henry Og	endorf	Hauling dead horse	2
2	4.4	T M Oba	,OH4011	Pointing would not so	26
		Cholder F	Dui alz. Cla	I aumung	
3		Sueidon F	PICK CO	Nalu	3
4		ப்பமைard	& sons	Printing letter neads Hauling dead horse. Painting. Sand. Valves, fittings, etc. Anchor bolts, tees, plugs, etc. Pipe, valves, regulator, etc. Repairing roofs of buildings. Book. Law hooks.	38
5	••	∪namp'ig	n M'hine & Supply Co	Anchor bolts, tees, plugs, etc	19
6	••	Robinson	& Burr	Pipe. valves, regulator, etc	152
7	• •	J. D. Gree	n	Repairing roofs of buildings	150
8		Edwin D	Weary	Book	3
9		Callaghan	& Co	Lawhooks	14
nΙ		Richarda	& Co	Repairing roofs of outdings	410
	Feb. 1	Toronards	w ∪0	Dalances, Weights, etc	100
1	Fob 4				

No.	Date.	To whom.	For what.	Amount.
	1898.			
1653	Feb 14	A. E. Wuesteman	Regulator Lead tubing Toilet paper, etc Globes, carbons, elc. Pyrometer, etc. Rubber boots Cement Lice Decimal classification, etc Pipe, galvanized iron, etc Lights, chimneys, etc Magnesia pipe covering Pump Brooms, soap, etc	\$1 50
T00#		Walsh & Heuck	Lead tubing	1 20
1655	• •	The Floatric Are Light Co	Clobed cart one ole	52 80
1656 1657	• •	One on & Co	Pyromoton ota	18 01 14 75 9 00
1658		The Broadway	Rubbar boots	14 19
1659	4.6	P E Taintor	Cement	3 50
1660		Twin City Ice & Cold St'r'ge Co	Ice	3 76
1661		Library Bureau	Decimal classification, etc	87 50
1662		Henry Trevett	Pipe, galvanized iron, etc	68 05
1663	• •	Cosm'p'lt'n Incan.Gas Light Co	Lights, chimneys, etc	21 50
1664	::	Walch & Wyeth	Magnesia pipe covering	6 34
1665		Manning, Maxwell & Moore	Pump	6 00
1966		E. Henry	Brooms, soap, etc	38 30 20 43
1667 1668		Pomulan Astronomy	Forton alidea	11 25
1669		Burgeh & Lomb Onticel Co	Wnives labels jars etc	28 11
1670		Eimer & Amend	Chemical annaratus ate	100 48
1571		William Cox	Computers	20 65
1672		Kenyon News & Postal Sub. Co	Subscriptions	5 50
1673	• •	Keuffel & Esser Co	Dividers	17 50
1674		Burrow Bros. Co	Books,	11 24
1675		Western Electric Co	Magnesia pipe covering Pump Brooms, soap, etc. Brackets, shades, etc. Lantern slides. Knives, labels, jars, etc. Chemical apparatus, etc Computers. Subscriptions Dividers Books. Cells, battery, jars, etc. Shovels, galvanized iron, etc Repairs on pump Paper, cloth, etc. Bran, straw, etc. Subscription.  Advertisement Electric motor Blackboards Expenses	25 56
1676		T. H. Trevett	Shovels, galvanized iron, etc	29 03
1677		Wm. J. Bohm	Repairs on pump	3 50
1678		Eugene Dietzgen & Co	Paper, cloth, etc	19 50 12 45
1679 1680		Western News Co	Bran, straw, etc	33 00
1681		Recal Repealt	Subscription	1 50
1682	••	Whiteside Co. Farmers' Inst.	Advertisement	1 00
1683		E. S. Blakeslee	Electric motor	10 00
1684	• •	W. A. Olmsted	Blackboards	14 40
1685	**	A. P. Carman	Expenses	14 61
1686	::	Chas. A. Besore	Lumber and coal	219 05
1687	::	Brunswick-Balke Collender Co	Oak desk	10 00 267 76
1688		H.W. Lynch	Expenses Lumber and coal. Oak desk Coal	267 76
1689		Odin Coal Co	Pipe fittings, etc. Jars, bottles, apparatus, etc Books Postage Postage Expenses Hauling coal, etc. Ocean freight, etc Expressage Pay rolls, students, January, 1898 Pay rolls, men, January, 1898 Salary for February, 1898	357 01
1690 1691		Whitell Tetum & Co	Tang bottles enperatus etc	101 28 172 56
1692		Gustay F Stochart	Pooks	189 86
1693		W W Lindley	Postage	18 00
1694		Ozias Rilev	Postage stamps	38 00
1695	•••	A. W. Palmer	Expenses	8 25
1696	٠٠.	E. H. Renner & Bro	Hauling coal, etc	116 29
1697	1 ::	S. W. Shattuck, business mgr.	Ocean freight, etc	94 51 50 80
1698	::		Expressage	50 80
1699	l	1	Pay rolls, students, January, 1898	251 98
1700	Feb. 2	A. S. Draper	Pay rolls, men, January, 1896	851 43
1702	red:. 2	T I Rurrill	Salary for February, 1888	583 33 200 00
1703		T. J. Burrill S. W. Shattuck N. C. Ricker		166 66
1704	• • •	N. C. Ricker	44	191 66
1705		Ira O. Baker	4.	. 187 50
1706		S. A. Forbes	**	83 33
1707	1 ::	[C. W. Rolfe	**	. 175 00
1708	1	D. McIntosh	**	.   50 00
1709	1	A. N. Talbott		175 00
1710	1	A. W. Paimer		
$\frac{1711}{1712}$		S W Popp		. 158 33 175 00
1713		H J Barton	4.4	175 00
1714		Chas M Moss		175 00
1715	•••	D. K. Dodge		
1716		L. P. Breckenridge	**	187.50
1717		David Kinley	**	. 187 50
1718		Eugene Davenport		.1 95 87
1719		Ira Ö. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbott A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss D. K. Dodge L. P. Breckenridge David Kinley Eugene Davenport Arnold Tompkins A. P. Carman	***	. 166 +6
1720	1 ::	Arnold Tompkins A. P. Carman Walter H. Jones E. B. Greene Geo. E. Gardner C. C. Pickett Katharine L. Sharp Geo. T. Kemp Geo. T. Kemp Edgar J. Townsend		. 187 50
1721	1	Walter H. Jones		. 100 00
1722	1	E. B. Greene	***	. 141 66
1723 1724	il .	C C Pickett		
1724		Katharina I. Sharn	:: :::::::::::	. 125 00
1726		Geo. T. Kemp.		
		10000 Ti Hompinioni	1	. 100 00
1727	1 ::	Geo. W. Myers	44	. 150 00

### $Warants{\rm--Continued}.$

υ.	Date.	To whom.	For what.		
	1898.			İ	
729	Figh 29	James M. White	Salary for February, 1898	. 13	
30 31 32	200;,	Lewis A. Rhoades	44	14	
31	• •	Henry H. Everett	4.4	. 13	
32		Wm. H. VanDervoort	**	. 13	
33	1 ::	W. D. Pence	**	. 13	
34		H. S. Grindley	**	10	
35		T. A. Clark	**	12	
36		H. S. Platt	<u>'</u> '	. 10	
37 38		A U Deniela			
39		Geo D Fairfield	•••	10	
ίÖ		Chas W. Tooke		10	
1		Fred A Sager	4.	10	
$\hat{2}$	•••	William Esty		10	
3		Frank Smith			
4		C. D. McLane		. 10	
5		P. G. Holden	٠,		
16	• • •	J. E. McGilvrey		. 10	
17	• •	S. J. Temple	٠	. 10	
18	**	J. D. Phillips	٠٠	.  8	
9	::	Violet D. Jayne	**	. 12	
50		Osear Quick	**		
51		Wm. H. VanDervoort. W. D. Pence. H. S. Grindley T. A. Clark H. S. Piatt B. V. Swenson A. H. Daniels Geo. D. Fairfield Chas. W. Tooke Fred A. Sager William Esty Frank Smith C. D. McLane P. G. Holden J. E. McGilvrey. S. J. Temple. J. D. Phillips Violet D. Jayne. Osear Quick Edward J. Lake. Eduard J. Lake.	**	1 .3	
$\frac{52}{2}$		Ella H. Morrison Geo. A. Huff W. J. Fraser Carlton R. Rose Joseph C. Blair		. 10	
53		W T Frager	'	. 12	
54		Coulton D. Poss			
55 56		Togonh C Plain	• • • • • • • • • • • • • • • • • • • •		
57		Margaret Mann			
58		Allison M. Fernie.	4.		
59		Agnes S. Cook	4.		
30		A. C. Howland	• • • • • • • • • • • • • • • • • • • •		
51	• • •	Chester H. Rowell			
32		Geo. H. Meyer			
63		W. H. Kavanaugh		.) 8	
64	. "	J. P. Hylan			
65		Joseph C. Blair Margaret Mann Allison M. Fernie Agnes S. Cook A. C. Howland Chester H. Rowell Geo. H. Meyer W. H. Kavanaugh J. P. Hylan Alice Putnam A. C. Burnham Maude W. Straight Chas. F. Hottes W. C. Brenke C. T. Wilder Jessie Y. Fox Jas. A. McKee Geo. D. Hubbard H. A. Webber C. V. Seastone. B. B. Ketchum	٠,	. 8	
66		A. C. Burnham	٠,		
67	1	Maude W. Straight	٠,		
68		Chas. F. Hottes	••	.] 3	
39		W. C. Brenke	٠,		
70 71		Loggie V. Hor	4	. 3	
$7\hat{2}$		les A Makee	٠,		
73		Goo D Hubbard	••		
74		H A Webber	• • • • • • • • • • • • • • • • • • • •		
75		C. V. Seastone	64	1 1	
/6	••	R. B. Ketchum	4,		
7		H. V. Carpenter	4.		
78		J. L. Sammis			
79		M. B Hammond			
79 30	::	G. V. Seastone. R. B. Ketchum H. V. Carpenter J. L. Sammis. M. B Hammond. Anna Fossler.		.1 5	
31	::	C. B. Clark		.  8	
32	1 ::	A. R. Curtis		.\ 8	
33		Henry Jones		.1 (	
34		J. H. Wilson		.] (	
35		р. н. Carnanan		.  §	
36		C. B. Clark A. R. Curtis Henry Jones J. H. Wilson D. H. Carnahan A. C. Hobart E. W. Poole F. W. Schacht A. E. Paul Don Sweeney A. S. Williamson Edward G. Howe			
37		E. W. Poole			
38 39		A E Poul		.  :	
90		Don Sweeney		.  }	
)1		A S Williamson			
2		Edward G Howe		1	
3	••	Lillie A. Clendenin	**		
4	•••	R. S. Donglass			
5		C. B. Randolph	44	. 1	
6	••	A. S. Williamson. Edward G. Howe Lillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alvord W. L. Pillsbury Geo. W. Graham Lillie Heath Sue W. Ford L. A. Boice. W. F. Marker Jennie M. Laflin Georgia E. Hopper	44		
)7		W. L. Pillsbury	44	. 16	
98		Geo. W. Graham		. 10	
JY		Lillie Heath	44	: 1	
00		Sue W. Ford		.1 1	
01		L. A. Boice		.] 5	
02	**	W. F. Marker			
03 04		Jennie M. Laflin		. 1 4	
		Hanner Hanner	1 ''	.1	

No.	Date.		To whom.	For what.	Amount
	1898.				
1805		28	Adelaide M. Chase	Salary for February, 1898	\$25 0
TOOD	::		Mary T. Pierce		25 0
1807			W. O. Waters		20 0
1808 1809			Joe Morrow		75 0
1810			F W Instru	:::::::::::::::::::::::::::::::::::::::	75 0 50 0
1811	• •		F. J. Foote E, W. Justus W. H. Zimmerman M. T. Lindsey	**	50 0
1812		1	M. T. Lindsev	**	40 0
1813			I. H. Allen	6.6	40 0
1814	::		Richard Uttenwiler		60 0
1815 1816		- 1	Fred Atkinson	***	35 0
1817	o 44	l	C. B. Ewalt Henry J. East W. R. Hoffman L. G. Lathrop J. J. Johnson A. S. Golden Allen McGlaughlin E. A. Nelson	:: :::::::::::::::::::::::::::::::::::	25 0 40 0
818			W. R. Hoffman	**	37 (
819	• •	i	L. G. Lathrop	**	32 0
820			J. J. Johnson	***	32 0
821	::		A. S. Golden		32 0
1822		- 1	Allen McGlaughlin	44	32 0
823 824	i	- 1	E. H. HOISOH		32 C
825			C. V. Millar	**	75 0
826			R. W. Stark	Salary, February, 1898.	50 0
827			D. McIntosh		75 0
828			A. W. Palmer	Salary, 3 months, to Feb. 28, 1898	25 0
1829 1830			J. C. Blair	Books	2 7
1831			Frank Smith	Class metarials atc	3 2 21 3
832	• •		E. O. Vaile	Advertisement	10 0
833	• • •		E. Barr	Pressed brick, etc	8 1
834		'	Hibbard, Spencer, Bartlett &Co	Netting	6.5
835			Bausch & Lomb Optical Co	Objective, etc	7 4
1836 1837			Western News Co	Subscriptions	21 6 18 2
838			Wm McGuire	Painting hridge samples	10 4
839	••		Shawmut Fuse Wire Co	Switch	5 8
1840			Howe, Brown & Co	Tool steel, etc	55 4
841	l ::		L. P. Breckenridge	Expenses of lecture	14 5
1842 1843			Charles Lents & Son	Centrifuge and attachment	24 1 2 0
1844			Ginn & Co	Rook	20
845	••		Burrows Bros. Co	Subscription	2 0 7 0
846	**		Jones & Laughlins	Bolts, steel, etc	15 2 17 6
847			Medart Patent Pulley Co	Pulleys	17 6
848			Yale & Towne Mfg Co	Keys	3 1
849 850			Odin Coal Co	Coel	101 9 585 6
	March	18	Alex McLean	Expenses	43 9
852			F. M. McKay	212,01200	28
853		)	Samuel M. Inglis		10 (
854			Laac S. Raymond		13 2
855 856			S A Bullord	Salary, February, 1898.  Salary, 3 months, to Feb. 28, 1898. Books. Letter plates, etc. Class materials, etc. Advertisement. Pressed brick, etc. Netting. Objective, etc. Subscriptions. Thermometers, etc. Painting bridge samples. Switch. Tool steel, etc. Expenses of lecture. Centrifuge and attachment. Subscription. Book. Subscription. Book. Subscription. Book. Subscription. Expenses of lecture. Coal. Expenses.  Work on museum material. Rent of land. Milk. On contract. Hardware and contract for mains. Paint and painting. Making cement floor. Subscription. Copies af pamphlets. Analytical balance. Hardware Hardware Hardware Advertisement.	34 3 31 8
857	••		J. E. Armstrong	**	13 8
858			Mrs. Dora S. Smith	Work on museum material	25 (
859			Samuel Bartley	Rent of land	10 (
860		]	Morrison & Woodward		25 (
861			S. B. Hedges	Milk	18 5
862 863		ı	Hubbard & Sons	Hardware and contract for mains	239 1 424 9
864	**	1	J. Wiseman & Son	Paint and painting	10 5
865			P. E. Taintor	Making cement floor	10 8 303 8
866		J	The Inland Publishing Co	Subscription	8
867	• • •		The New England Pub. Co	Paint and painting Making cement floor Subscription Copies af pamphlets Analytical balance	14
868		ł	James G. Bildle	Analytical balance	92 2
869 870		1	The Illini	Advertisement	11 2 125 (
871	•		A Tompkins	Copies at pamphiets. Analytical balance. Hardware Advertisement Expenses	9
872	* *		Franke & Schindler	Wire rope	6
873	4.4		Miller & Sibley	Jersey heifer	195
874	• • •	1	Eimer & Amend	Chemicles	19
875		- 1	Weston Electric In'st Co	Advertisement Expenses Wire rope Jersey heifer Chemieles Repairing Coal Valve Chemicles,	9 1
876 877		- 1	A. I. Ida & Son	Volvo	418 5
		- 1	A. D. 100 & OUL	Y GOL Y C	1 0 1

301						Amou
301	1898.		Mathiessen & Hegle Zinc Co Champaign Mach. & Supply Co Electric Appliance Co Crosby St'm Gauge & Valve Co Wm. S. Royal Illinois Malleable Iron Co J Manz & Co. Callahan & Co Callahan & Co Orr & Lockett Hardware Co. Bausch & Lomb Optical Co L. H. Owbridge. H. D. Oldham Robinson Bicycle Trainer Co. Chas. H. Besly & Co. Bates & Guild Co. Grant Gear Works Henry J. Green S. A. Forbes. W. L. Pillsbury T. R. Leal S. W. Shattuck, business mgr. A. S. Draper. T. J. Burrill S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. W. Shattuck S. A. Forbes S. A. Forbes			1
301	March	18	Mathiessen & Hegle Zinc Co	Spelter		. \$9
			Champaign Mach. & Supply Co	Hardware		35
31	• •		Electric Appliance Co	Electrical suppli	es :	1
32	• • •		Crosby St'm Gauge & Valve Co	Pantagraph, etc.		16
33			Wm. S. Royal	<u> Oil</u>		1 1
34			Illinois Malleable Iron Co	Fittings	• • • • • • • • • • • • • • • • • • • •	2
35	• •		J. Manz & Co	Portrait		6
36			Callanan & Co	Books		2
37			Popular & Lockett Hardware Co	Hooks, plates, et	C	13 18
381 39 <sub>1</sub>			L. H. Ombridge	Dheteerenhe	manies	10
90			L. D. Oldhom	Photographs	ota	9
1			Robinson Riavalo Trainor Co	Tuk, peus, paste, Troinors and die	le	43
$\hat{2}$	4.4		Chas H Resly & Co	Rode tuhing nli	are ate	19
3			Bates & Guild Co	Pancil sketches	015, 010	13
4			Grant Gear Works	Machine		60
5			Henry J. Green	Thermograph an	d thermometers	31
6	• •		S A. Forbes	Expenses		87
7			W. L. Pillsbury	EAD CHEOS		ğ
8			T. R. Leal	Hauling and lab	or	87
$\breve{9}$			S. W. Shattuck, business mgr.	Pay-rolls of mer	. Feb., 1898	833
Ö			or it charten, subliques ingi-	stuc	lents, Feb., 1898	333
	March	31	A. S. Draper	Salary, March 18	398	333 583
$\tilde{2}$		-	T. J. Burrill	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		200
3	4.4		1. b. Burri N. C. Ricker Ira O. Baker S. A. Forbes C. W. Rolfe	4.6	***************************************	166
4	• •		N. C. Ricker	• 6		191
5	4 4		Ira O. Baker	* *		187 83
6			S. A. Forbes	• •		88
7	4 4		C. W. Rolfe	* *		175
8	• •		C. W. Rolle D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr U. J. Postfor	• •		50
9	• •		A. N. Talbot			175
0	• •		A. W. Palmer			175 158
1			F. F. Frederick			158
2		1	S. W. Parr	• •		175
3			H. J. Barton	• •		175
1	• •		Chas. M. Moss	• •		175 175
5			D. K. Dodge	* *		166 187
6			L. P. Breckenridge	••		187
71			David Kinley	::		187
3	::		E. Davenport			95
9	• •		Arnold Tompkins		•••••	166
9			A. P. Carman		•••••	187
2	4.4	ı	walter H. Jones	4.4		100 141
3		- 1	Coo F Condnor			166
i	4.6		C C Pielrott	4.4		125
5	4.4	- 1	Katherine I. Shewn	4.6		166
3		- 1	Goo T Komp	4.6		166
7	4.4		G W Myorg			150
3	* *	- 1	Edgar J Townsend	4.4		137
á	4.4		Jas. M. White	4.6		139
ó	4.4	ļ	L. A. Rhoades.			141
ĺ	4.4		Henry H. Everett	* *		133
3			F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss D. K. Dodge I. P. Breckenridge David Kinley E. Davenport Arnold Tompkins A. P. Carman Walter H. Jones E. B. Greene Geo. E. Gardner C. C. Pickett Katharine L. Sharp Geo. T. Kemp G. W. Myers Edgar J. Townsend Jas. M. White L. A. Rhoades Henry H. Everett W. H. Van Dervoort W. D. Pence H. S. Grindley T. A. Clark H. S. Piatt H. S. Piatt H. S. Piatt R. V. Swenson A. H. Daniels Geo. D. Fairfield	4.4		141 133 137
3	4.6		W. D. Pence	* *		133
L	"		H. S. Grindley	4.6		108
5	• •		T. A. Clark	* *		138
3	• •		H. S. Piatt	**		100
7	• • •		B. V. Swenson	• •		108
3			A. H. Daniels	• •		108
)	• •		Geo. D. Fairfield	• •		108
			Chas. W. Tooke	**		108
1			Fred A. Sager	4.		100 108
3	* * *		william Esty	4.4		108
3	* *		R. V. Swenson A. H. Daniels Geo. D Fairfield Chas. W. Tooke Fred A. Sager William Esty Frank Smith C. D. Malagne			100
1	* * *		U. D. McLane			100
5	::		r. G. Holden			108 108 100
6			J. E. McGilvrey			108
7	* *		Seth J. Temple	4.4		100
8		ļ	Frank Smith C. D. McLane P. G. Holden J. E. McGilvrey Seth J. Temple J. D. Phillips Violet D. Jayne, Oscar Quick Edward J. Lake Ella H. Morrison Geo. A. Huff W. J. Fraser	**		83 125
9	* *		v loiet D. Jayne,	**		125
0	* *	1	Uscar Quick			80
1			Edward J. Lake	4.4	· · · · · · · · · · · · · · · · · · ·	70 100
$\frac{2}{3}$	4.4		Dila d. Morrison	• •		100
3	4.4		Geo. A. Hull	4.4		120 37

о.	Date.	To whom.	For w	пат.	Amor
	1898.				
55	March 31	Carlton R. Rose	Salary, March, 1898		. \$8
oo,	• •	II C Blair			4
57	••	Margaret Mann	l ·		.7
58	•••	Margaret Mann. Alison M. Fernie. Agnes S. Cook.	::		10
59		Agnes S. Cook			7
30 31	• •	A. C. Howland Chester H. Rowell Geo. H. Meyer W. H. Kavanaugh J. P. Hylan			7
2		Coo H Moron			1 4
3		W H Kayanangh	• •		8
4		J P Hylan			8
5		Alice Putnam	•••		Š
6		A. C. Burnham	•••		9
7	• •	Alice Putnam A. C. Burnham Maude W. Straight. Chas. F. Hottes	•••		1 7
8		Chas. F. Hottes	••		7
9		W. C. Brenke	::		7
0	• •	C. T. Wilder	1		7
1	• •	Jessie Y. Fox	1		3
2		1. H. Wckee	1		5
3		Geo. D. Hubbard			5
4		H. A. Webber			5
5		D. V. Seastone			5
7		H V Comporter			5
3		Chas. F. Hottes W. C. Brenke. C. T. Wilder. Jessie Y. Fox. J. H. McKee. Geo. D. Hubbard. H. A. Webber. C. V. Seastone. R. B. Ketchum. H. V. Carpenter. J. L. Sammis. M. B. Hammond. Anna Fossler.			5
9	• •	M R Hammond	**		5
ار	* *	A. R. Curtiss Henry Jones J. H. Wilson			5
ĭ	• •	C. B. Clark	•••		8
2	٠.,	A. R. Curtiss	**		l š
3	4.4	Henry Jones			6
1		J. H. Wilson	••		6
5	4.4	D. H. Carnaham A. C. Hobart F. W. Schacht A. E. Paul	• • •		3
3		A. C. Hobart	::		3
7	••	F. W. Schacht	] ::		3
3		A. E. Paul	;; ,	,	3
)	• • •	Don Sweeeey	1		3
0	4.4	A. E. Paul Don Sweeeey. A. S. Williamson Edward G. Howe Lillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alward W. L. Pillsbury S. W. Shattuck D. McLutosh			1 15
1		Edward G. Howe			6
3		P. S. Donglege			7
1		C B Randolph			7
5	4.6	C. W. Alward	**		7
3		W. L. Pillsbury	••	services	16
7	. "	S. W. Shattuck	••		16 10
3		D. McIntosh	::	**	7
)		C. V. Millar R. W. Stark Geo. W. Graham Lillie Heath Sue W. Ford			7
)	::	R. W_Stark	1 11		5
L	::	Geo. W. Graham	11	services	10
3		Lillie Heath			7
3	4.4	Sue W. Ford			. 5
ļ					5
5		Jennie M. Lafflin Georgia E. Hopper Adelaide M. Chase			4
?		Adoleido M. Chaso			2
3		Mary I. Piarca		•••••	2
		Mary L. Pierce			2
		F. J. Foote	4.6	services	7
	" "	F. J. Foote. Joe Morrow E. W. Justus W. H. Zimmerman	**		7
		E. W. Justus	6.6		5
		W. H. Zimmerman	• •		5
			• •	**	4
1	**	J. H. Allen	• •		4
1	**	Richard Uttenweiler	• •	::	6
	::	Fred Atkinson	••	::	š
	::	C. B. Ewalt			2
	:: 1	Henry J. East	44		4
1		w. K. Hoffman			3
		ப. பு. Latnrop			3
		C. B. Ewalt Henry J. East W. R. Hoffman L. G. Lathrop J. J. Johnson E. A. Nelson A. S. Golden Allen McGlaughlin Philip Schwehm W. F. Marker Central Electric Co			3: 3:
1		A S Golden	* *	••••••	3
		Allen McGlanghlin	**		3.
		Philip Schwehm			2
1		W. F. Marker. Central Electric Co American Steam Gage Co J. H. Young	4.4		5
		Control Electric Co	Wire tubes lamps	ote	70
sl.					2

о.	Date.		To whom.	For what.	Amoun
1	4000		1		1
91	1898. March	91	Dich! Prog	Pocket recorder. Timer. Tinct. Services Book Acid and ammonia.	\$125
$\frac{31}{32}$	• •	ĐΙ	C C Gere	Timer	17
33			Whitall. Tatum & Co	Tinct.	15 9
34	4.4		E. Hastings	Services	10 (
35			John Wiley & Sons	Book	1 2
$\frac{36}{37}$			The Baker & Adam'n Chem.Co Fauth & Co. Samuel M. Morton David S. Jordon H. H. Scurlock C, & U. Phoenix Telephone Co. Geo. Wittbold Detroit Flower Pot Mfy Ozias Riley, P. M E. H. Renner & Bro. J. E. McGilvrey T. R. Leal	Acid and ammonia	44 3
38	4.4		Samuel M. Morton	Sunshade Lantern slides and express	15 6
39			David S. Jordon	Mounting skin	
40			H. H. Scurlock	Mounting skin Blue print. Telephone services. Plants Flower pots Stamps Hauling Expenses. Labor and hauling Expressage Freight Expenses, etc.	2 5 2 5 37 2
41	• •		C, & U. Phoenix Telephone Co.	Telephone services	37 2
42	• • • • • • • • • • • • • • • • • • • •		Geo. Wittbold	Plants	9 7
43			Detroit Flower Pot Miy	Flower pots	10 6
44 45	• •		F H Roppor & Rro	Hauling	79 ( 193 2
46			J. E. McGilvrey	Expenses	14 4
47			T. R. Leal. S. W. Shattuck, business mgr.	Labor and hauling	90 8 52 2 197 8
48			S. W. Shattuck, business mgr.	Expressage	52 2
49	• •			Freight	197 8
50			m, m, m, m, m, m, m, m, m, m, m, m, m, m	Expenses, etc	
52	April	15	The W. J. Johnston Co	General index	8 0
52 53			The W. J. Johnston Co	Expenses, etc. General index. Switch connections. Wire Repairing sheet tin and boxes	59 6
54			J. D. Green	Repairing sheet tin and hoves	18 1
55			Engineering News Publish'gCo	Advertisement.	6 8
56			John Rocoling's Sons Co. J. D. Green. Engineering News Publish'gCo G. Cramer Sweet, Wallach & Co. Wilson & Christensen.	Plates	20 8 53 8 18 1 6 8 25 7
57	• •		Sweet, Wallach & Co	Photographic materials	18 7
58			Wilson & Christensen	Mop wringer	3 5
59 60			L. C. Garwood	Snot and repairing	3 5
61			Armour & Co	Ping have	17
62	• •		Fuller & Fuller Co	Chemicals	19 0
63			A. B. Dick Co	Mimeograph supplies	2 4
64	• •		D. H. Lloyde & Sons	Book, etc	2 4 29 9
65	::		T. H. Trevett	Lantern, nails, etc	6 8 70 7
66 67	• • •		G. C. Willis	Cloth, etc	70 7
68	• •		Chas A Resora	Lumbar	148 1 126 4
69			The Gazette	Printing, etc.	104 5
70			Champaign County Herald	,,	77 2 10 6
71	• •		Western Electrical Instur. Co.,	Electrical supplies	10 €
72	• • •		Wm. D. Pence	Expressage	1.5
73 74			American Society of C. E	Colorimotor	1 5 28 0
75			Kneffel & Esser Co	Protractor etc	8.7
76	• •		William Cox	Computer	3 6
77	• •		Riehle Bros	Sieves	12 2
78	• • •		Wm. J. Bohm	Tubes	6.5
79			Hubbard & Sons	Hardware	15 2 29 2
80 81	6.6		Ward's Nat. Science Estab't	Circulars	29 2 15 7
82	4.6		Alexander Lumber Co	Lamber	34 0
83			C. H. Mills.	Mare	8 0
84			H. M. Dickson Mfg. Co	Wire Repairing sheet tin and boxes. Advertisement Plates Photographic materials. Mop wringer Shot and repairing Services Pigs bags. Chemicals. Mimeograph supplies Book, etc Lantern, nails, etc. Cloth, etc Hauling Lumber Printing, etc Electrical supplies Expressage Book. Calorimeter, Protractor, etc Computer Sieves Tubes. Hardware Bird skins Circulars Lumber Mare Doors, glass, etc Books. Frames, chairs, etc Advertisement Repairing Books. Library Journal. Book. Library Journal. Book.	60 9
85			Callaghan & Co	Books	8 0 29 7
86			Walker & Mulliken	Frames, chairs, etc	29 7
87 88	::		George Rews and Prac. Educ'r	Advertisement	12 4
89			R R Rowker	Repairing	2 5 5 0
90	4.6		F M Morris	DOOKS	5 7
91	4.4		Boston Book Co	Library Journal	5 7 20 0
92	• •		The Burrows Bros. Co	Book	7 0
93	• • •		Freidenker Pub. Co		2 0 12 5
94	• • • • • • • • • • • • • • • • • • • •		Armour Inst. of Technology	Index	12 5
95 96			Wm H Amatrona & Co	Sups, covers, squares, etc,	47 6
90 97		ļ	D P & John Wilkinson Co	Tool holder	19 9
98			Brainard Milling Mach. Co	Renairing machine	1 2 12 0
99			Machinists Supply Co	Cutters, pins, studs, etc	6 0
00			Jones & Laughlins Co	Bolts and beams	6 4
01	4.4		Mittendorf & Kiler	Rubber tips, baskets, etc	6 4 23 8
02	4.4		H. M. Shuck & Co	Hooks and glue	1 7
03			westingnouse, Church, Kerr Co	Library Journal.  Books.  Index Slips, covers, squares, etc, Forceps, syringe, etc Tool holder Repairing machine Cutters, pins, studs, etc Bolts and beams. Rubber tips, baskets, etc Hooks and glue Oil Seeds. Milk	8 9 • 22 7
		İ	J. C. Vanghan	ShaaR	39 2 12 8
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lo.	Date.		To whom.	Pads and pens Hanger, pulleys, etc Brooms, shellac, etc Keys	Amoun
	1898.				
107	April	15	Library Bureau	Pads and pens	\$9
108	Troi:	10	Champaign Mach. & Supply Co.	Hanger, pulleys, etc	28
109			E. Henry	Brooms, shellac, etc	39
L10	• •		Yale & Towne Mfg. Co	Keys	2
111	• •		Urb. & Cham. Ry., Gas & El. Co.	Gas and electricity	1,088
12	• •		Cunningham Bros	Paper	6
13			M. C. Lilley & Co	Flag, sword and belt	69 8
14			A. C. McClurg & Co	Books, stationery, etc	100
15			William Price Estate	Moulding, shades, glass, etc	268
16			Henry Trevett	Chaik lines and plumb bobs	1 8 4
17			W. A. Olmsted Scientific Co	Dabbar boots	2 :
19			W & Royal	Adober boots	1
20			Public School Pub. Co	Advarticement	12
21			Edward Thompson Co	Books	76
22	• •		Geo. F. Blake Mfg. Co	Canvas	2
23			Boyer Ry. Speed Recorder Co.	Speed recorder	80
24			A. P. Carman	Expenses	7 (
25	+ 4		M. B. Hammond		15
26	• •		Odin Coal Co	Coal	788 275
27			H. W. Lynch	^-	275
28	• • •		Hubbard & Sons	Hardware and labor	10 8
29			Bausch & Lomb Optical Co	Microscope	29
30			A. A. A. Coll. Exp. St	Membership fee	10
31			David Kinley	Expenses	13
32			Dunlap & Wright	Contract plumbing and labor	65
33			Orr & Lockett Hardware Co	Locks and ninges	104 (
34 35			E H Bonnon & Bro	Hauling	19
136			E. Davannowt	Evnances	8
37			The Kny-Schoorer Co	Myographion knives etc	94
35:			C 9 Russell & Co	Doors keys etc	1 1
39			Francke Hardware Co	Screws washers etc	18 18
40			Frank F. Frederick	Services, hooks, etc	11
41	• •		Gustav E. Stechert	Books	249
12			Riehle Bros. Testing Mach. Co.	Sp. grav. apparatus	6 (
43			Central Union Telephone Co	Telephone service	15 35
44			W. W. Lindley	Stamps	35 (
45			T. R.(Leal	Hauling	56 8
46	• • • • • • • • • • • • • • • • • • • •		J. B. Colt & Co	Carbons	5 (
47	•.•		S. W. Shattuck, Business Mgr.	Expressage	63
48				Preight Manch 1909	144 1,392 277
49 50				Pay rolls of men, March, 1898	1, 592
51	April	20	The I C Witter Co	Portfolio	3
52	Abrii	90	Edward Thompson Co	Rooks	3 (
53		- 1	Callaghan & Co	DOURS	4 (
54			The Chicago Record	Daily News Almanac	3
55			The Burrows Bros. Co.	Books	7 (
56	• •		Champaign Mach. & Supply Co	Belting reducers	17
57	• •	- 1	C. H. Baddelev	Beef and lamp	4
58	* *		The Gazette	Cardboard, pedigree blanks, etc	12
59	• •		Narragansett Machine Co	Parallel bars, etc	52
60	• •		A. G. Spalding & Bros	Buck, striking bags, etc	58
61			Chas. A. Besore	Lumber	27
62			William Price Estate	Oil, shades, etc	80
h3			Central Electric Co	insulators, tubes, etc	53
64			John A. Roebling's Sons Co	Wire	65
65	4.		Lohn E Tommodow Mfg. Co.	Thursday	31 24
36	4.6		Fimor & Amond	Thormomotons tubing ata	24
67	4.4		Unbhand & Sans	Framel register etc	71 4
68 69		1	Singhuseh & Stolton	Soon	1
10			Pulsometer Steem Pump Co	Pulseometer	90
71			Henry Trevett	Hardware	15
72	• •		Twin City Ice & Cold St'ge Co	Ice	2
73		- 1	Fuller & Fuller Co	Chemicals	$1\overline{2}$
74	• •		Urbana & Cham, Gas & Elec.Co	Čoke	4
75	4 )		Chicago General Fixture Co	Posts, wire, etc	12
76	٠.	- 1	A. C. McClurg & Co	Books	120
77	4.4		Gustav E. Stechert	- 44	425
78			T. H. Trevett	Rope, plyers, etc	5
79			American Society of M. E	Copies of paper	1
		- 1	J. C. Vanghan	Seeds	10
80 81		- 1	of C. Amagnaniii.		1

0.	Date.	To whom.	· For what.	Ar
	1898.		Lenses, paper, etc Rubber boots Labor and materials Lumber. Machine screws Lenses, etc. Electrical supplies Lumps Lumber Expenses Napkins and cuspidors Pipe Expenses Stamps Hauling Hauling, etc Grading, etc Salary, April, 1898	
QQ	April 90	Knowlton & Bennett	Longes namer ate	İ
24	April 30	John Armstrong	Rubber hoote	
5		J D Green	Lahor and materials	ı
$\overset{\circ}{6}$	• •	W W Wells & Co	Lumber	1
7		Chag H Boslov & Co	Machine garows	i
3		Pangah & Lomb Ontical Co	T on and oto	i
9		Floatria Appliance Co	Floatrical cumpling	ŀ
)		Conoral Floatria Co	T amma	
ĺ		Alexander Cumber Co	Lamps	
2	4.6	File H Morrison	Empongog	
3		F W Debegen & Dro	Nontring and arguidance	1
į		The Mishigen Dine Co	Dino	
	4.6	Thomas I Smith (Twister)	Empanaga	1
5		W f Dillabrana	Expenses	
;		W. L. Pillsbury	a	1
7		Ozias Kiley	Stamps	1
ì		S. B. Heages	Hauling	
9		Ozias Kiley. S. B. Hedges E. H. Renner & Bro T. R. Leal. A. S. Draper T. J. Burrill. S. W. Shattuck N. C. Ricker Ira O. Baker S. A. Forbes	Hauling, etc	
)	1 ::	т. қ. Leal	Grading, etc	
Ļ	::	A. S. Draper	Salary, April, 1898	
2	::	T. J. Burrill		
ì	::	S. W. Shattuck		1
		N. C. Ricker	**	1
6				
		S. A. Forbes		
7		S. A. Forbes C. W. Rolfe.	**	1
3	1	D. McIntosh		
9		A. N. Talbot. A. W. Palmer.	44	
j		A. W. Palmer	**	l
i	• •	F. F. Frederick		1
2		F. F. Frederick. S. W. Parr.	**	ĺ
3	* *	H I Karton	**	
ί	* *	C. M. Moss	6.6	
5	• •	C. M. Moss. D. K. Dodge L. P. Breckenridge. D. Kinley	**	1
6		I. D. Brookenwidge	**	
7	4.4	D. I'mlow	**	1
ŝ	4.4	F Derronnent	**	1
,		A Thomas bin a	44	
9		A. Tompkins	**	1
1		A. P. Carman	44	
		W. H. Jones		1
3		E. B. Greene		1
3		Geo. E. Gardener		
ŀ		C. C. Pickett		1
5	4.4	Katharine L. Sharp	**	1
,		Geo. T. Kemp	**	
7	::	D. Kinley E. Davenport A. Tompkins A. P. Carman W. H. Jones E. B. Greene Geo. E. Gardener C. C. Pickett Katharine L. Sharp George W. Myers Edgar J. Townsend J. M. White L. A. Rhoades H. H. Everett W. H. VanDervoort W. D. Pence		
3		Edgar J. Townsend		1
1	::	J. M. White	**	1
)		L. A. Rhoades	**	
	• •	H. H. Everett	***	1
I		W. H. VanDervoort	44	l
	• •	W. D. Pence		
		H. S. Grindley	,.,	
		T. A. Clark		
		W. D. Pence. H. S. Grindley. T. A. Clark. H. S. Piatt. B. V. Swenson.	**	
		B. V. Swenson	44	
3		A. H. Daniels	••	1
,		George D. Fairfield	44	l
		C W Tooke	**	
		Fred A Sagar		l
		William Esty	4.6	1
3		B. V. Swenson. A. H. Daniels. George D. Fairfield. C. W. Tooke Fred A. Sager William Esty. Frank Smith		1
		C D MeLone		1
		D. C. H.lden		
		T. F. M. Cilermore		
		J. E. MCGHVrey		1
		petn J. Temple		1
3		j. p. Phillips		1
9	::	C. D. McLane. P. G. Holden. J. E. McGilvrey. Seth J. Temple. J. D. Phillips. Violet D. Jayne. Oscar Quick. E. I. Leke.		1
)		Oscar Quick		1
ŀ	• • •	Oscar Guite E. J. Lake. Ella H. Morrison George A. Huff. W. J. Fraser C. R. Rose.		1
2		Ella H. Morrison		1
3	• •	George A. Huff	**	1
4	• •	W. J. Fraser	**	1
5		C. R. Rose	44	1
3		J. C. Blair. Margaret Mann. Allison M. Fernie.		1
		Margaret Mann	44	1
7				

э.	Date.		To whom.	Fo	r what,
	1898,				
59	Arpil	30	Agnes S. Cook. A. C. Howland Chester H. Rowell	Salary, April, 18	398
U			A. C. Howland	1	
2			Chester H. Rowell		
			W. H. Meyer		
1			Geo. H. Meyer W. H. Kavanaugh. J. P. Hylan		
ŀ			Alico Putnom	٠.,	· · · · · · · · · · · · · · · · · · ·
6			Alice PutnamA. C. Burnham	• •	
7			A. C. Burnham Maude W. Striaght. Charles F. Hottes W. C. Brenke C. T. Wilder Jessie Y. Fox J. H. McKee G. D. Hubbard H. A. Webber C. V. Seastone. R. B. Ketchum		
3			Charles F Hottes	••	
9			W. C. Brenke	• •	
)			C. T. Wilder	••	,
ĺ			Jessie Y. Fox	••	
2			J. H. McKee	• •	
3	4.4		G. D. Hubbard	• •	
ı			H. A. Webber	•••	
5	٠. ٠		C. V. Seastone	**	
3	• •		R. B. Ketchum	•	
7			H. V. Carpenter J. L. Sammis M. B. Hammond.		
3			J. L. Sammis		
9			M. B. Hammond	• •	
D			Anna Fossier	•	
1			C. B. Clark	• • •	
2			A. R. Curtiss		
3			A. R. Curtiss Henry Jones. J. H. Wilson.	::	
4	• •		J. H. Wilson		
5					
3			A. C. Hobart	! !!	
7	• •		F. W. Schacht A. E. Paul Don Sweeney	::	
3	• •		A. E. Paul	::	
9	• •		Don Sweeney		
)			A. S. Williamson		
1	• •		E. G. Howe		
3	• •		Lillie A. Clendenin		
3			R. S. Douglass		
	• •		C. B. Randolph		
	• •		U. W. Alvord	1	
3			W. L. Pilisbury		
78	• •		O Willen		
)	• •		P. W. Stonk	4.	
0			Goo W Grohom	••	
i	• •		Lillie Heath		
2	• •		Sue W Ford	٠.	
3	• •		L A Roice	••	
ı			Jennie M. Laflin	••	
5			Georgia E. Hopper	••	
,			Aldelade M. Chase	••	
7			C. B. Randolph C. W. Alvord W. L. Pillsbury D. McIntosh C. V. Millar R. W. Stark Geo. W. Graham Lillie Heath Sue W. Ford L. A. Boice Jennie M. Laflin Georgia E. Hopper Aldelade M. Chase Mary T. Pierce W. O. Waters F. J. Foote	* *	
3			W. O. Waters	• •	
)			F. J. Foote	• •	
١			Loa Morrow		
l			E. W. Justus	•••	
i			W. H. Zimmerman	• •	
			E. W. Justus W. H. Zimmerman M. T. Lindsey R. Uttenweiler	• •	
			R. Uttenweiler		
			Fred Atkinson		
;			(Cl D El 14	• •	
7			J. H. Allen		
3			Henry J. East	l .	
)			Pearl Adams	::	
	::		W. R. Hoffman	l ::	
			L. G. Lathrop		
			J. J. Johnson		
			E. A. Nelson	::	
			Chas. B. Ewat. J. H. Allen Henry J. East. Pearl Adams. W. R. Hoffman L. G. Lathrop. J. J. Johnson. E. A. Nelson Elbert E. Pound. A. S. Golden		
	• • •		A. S. Golden	1 ::	
3	::		Allen McGlaughlin	1	
7			A. S. Golden. Allen McGlaughlin. Philip Schwehm. J. C. Sedgwick	n :	,,
ş	May,	14	J. C. Sedgwick	Eavment on con	tract
,			<u> </u> . G. Keith	Clerk services	,
)		į	James B. Clow & Sons	Copper floats, e	t <b>c</b>
2			wnitall, Tatum & Co	rincture, etc	
١			J. C. Sedgwick E. G. Keith James B. Clow & Sons. Whitall, Tatum & Co Queen & Co. L. E. Knott Appliance Co Cleveland Public Library	induction oil	
			L. P. Knott Appliance Co	wieter sticks, et	C

F. A. Sackmann   Stamp.   2338   The P. & S. Plezus   Advertises   2339   William Price Estate.   Varnish, e   2340   Orr & Lockett Hardware Co   Hooks and   2341   L. Myrtle Green   Typewriti   2342   H. M. Hooker & Co   White leat   2343   Fred P. Rush & Co   Coal   2344   W. S. Royal   Oil and ga   2345   Henry Trevett.   Wire, etc.   2346   Chicago Retort & Fire Brick Co   Brick   Chicago Retort & Fire Brick Co   Electrical   2349   Chas. A. Schieren & Co   Belting   2350   T. R. Leal   Labor and   2351   Sehaffer & Budenberg   Tachomet   2352   Thompson & Bushnell   Reducing   2353   C. H. Baddeley   Tumblers   2354   Alexander Lumber Co   Lumber   Lumber   2355   The Davis Motor Co, Limited   Peoria Steam Marble Works   Slabs   2356   Peoria Steam Marble Works   Slabs   2357   The Electric Arc Light Co   Bulbs   2358   Buffalo Meter Co   Meter   2360   R. Abernathy   Sign writi   Curtis & Curtis   Curtis & Curtis   Plate, etc.   2362   J. C. Vaughan   Seeds   2364   William R. Ware   Blue print   2366   Blue Print Department   Blue print   2366   J. W. Butler Paper Co   Paper   2367   A. C. McClurg & Co   Books   2369   Callaghan & Co   Book   2370   The Chas. A. Strelinger Co   Washers   2371   Ward Bros.   The Chas. A. Strelinger Co   Washers   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Washers   2373   Central Electric Co   Wire   2373   Central Electric Co   Washers   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Wire   2373   Central Electric Co   Central Electric Co   Central Electric Co   Central	ment 100 2 ment 211 tet. 205 i belts. 5 ng and postage 3 d, etc. 211 soline 11 205	04 00 94 20 58 00 17 95
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The Davis Motor Co., Limited Electrical	1 0	80 46
The Davis Motor Co., Limited Electrical	supplies 106	
The Davis Motor Co., Limited Electrical	344	
The Davis Motor Co., Limited Electrical	hauling 105	50
The Davis Motor Co., Limited Electrical	er and ejector. 63	00
The Davis Motor Co., Limited Electrical	wheels and indicators 111	50
The Davis Motor Co., Limited Electrical	etc	83
The Davis Motor Co., Limited Electrical		64
Peoria Steam Marole Works   Stabs	instrument	28
Western Electric Co.   Electrical 2359	170	00
Western Electric Co.   Electrical 2359		00
2369 '' Callaghan & Co	supplies	27 50
2369 '' Callaghan & Co	noi	95
2369 '' Callaghan & Co	ng	35 00
2369 '' Callaghan & Co	9	10
2369 '' Callaghan & Co	4	80
2369 '' Callaghan & Co	8 7	50
2369 '' Callaghan & Co	ting	72 15
2369 '' Callaghan & Co	13	15
2369 '' Callaghan & Co Book	114	59
Canaghan & Co	34	50
2371 Ward Bros Washers 2372 The Chas. A. Strelinger Co Washers 2373 Central Electric Co Wire.	9	50 00
2372 'The Chas. A. Strelinger Co Washers, Central Electric Co Wire.	59	40
2373 ' Central Electric Co. Wire.	etc10	37 38
		38
Francke Hardware Co Screws and	d casters 9	52
2375 Westinghouse Elect. & Mfg Co. Punchings	19	40
Eimer & Amend	28	16
2377 '' Robinson & Burr Machine st 2378 '' Twin City Electric Co Wire, etc.	upplies, etc	10 05
2379 "Champaign Mach. & Supply Co Machine s	unnlies 67	06
2380 '' Walch & Wyeth	overing	06
2381 '' Neptune Meter Co Meter	22	50
2382 Crosby Steam Gage & Valve Co Indicator,	etc	81
John B. Bennett	nd labor 137	85
General Electric Co Electric su	ipplies 67	13
2385 Tinos, Wright & Son Teaten basi	n 5	50
2386 Carbonic Acid Mig CoDrum gas. 2387 West Publishing CoAdvertiser	ment 55 20	00 00
2388 " West Fublishing Co Advertiser The 1898 Illio Plates	nent	00
9900) 11   Title   Person   Title   Person   Title   Person   Pers	20 5 183 116 amps 65 53 m apparatus 421 2d labor 117	00
2399		55
W. W. Lindley Stamps		00
Ozias Riley	amps	00
E. H. Renner & Bro Hauling		35
A. G. Spaulding & Bros Gymnasius	m apparatus	
2395 '' T. R. Leal		61
2397 Snattuck, business mgr. Freight Express	120 69	50
2398 '' Petty expe	nses	47
2399 " " " Pay rolls o	mses	88
2400	students. 225	28
2401 May 31 A. S. Draper Salary for	May, 1898 583	33
44041   1. 0. Duffill,		00
2403 S. W. Shattuck	166	66
	191	
2405 "Ira O. Baker	101	66
2406 ' S. A. Forbes		66 50
2407 2408 " D. McIntosh "		66 50 33
2404   N. C. Ricker   12405   1ra O. Baker   2406   S. A. Forbes   2407   C. W. Rolfe   2408   D. McIntosh   2409   A. N. Talbot   A. W. Palmer   12408   C. W. Palmer   12408   C. W. Palmer   12408   C. Ricker		66 50 33 00
2410 A. W. Palmer		66 50 33 00 00

٠.	Date.	To whom.		$\mathbf{For}$	what.	Amo
Ť	1898.		İ			Ì
1 1	ΛΛ 3.	F F Frederick	Salary for	r May	1898	\$1
2 "	ИУ. 3:	F. F.Frederick. S. W. Parr. H. J. Barton.	Surai, 3 10			\$1 1
3		H. J Barton				1
4	• • •	Charles M. Moss		• • • • • • • • • • • • • • • • • • • •		1
5		D. K. Dodge. L. P. Breckenridge	::			1
6  71		D. K. Dodge. L. P. Breckenridge. David Kinley. E. Davenport. Arnold Tompkins A. P. Carman. Walter H. Jones E. B. Greene. Geo. E. Gardener C. C. Pickett. Katharine L. Sharp Geo. T. Kemp George W. Myers E. J. Townsend. James M. White Lewis A. Rhoades Henry H. Everett W. H. VanDervoort W. D. Pence. H. S. Grindley. T. A. Clark H. S. Piatt B. V. Swenson. A. H. Daniels George D. Fairfield C. W. Tooke.				1
8	4.4	E Davenport				1
9	• •	Arnold Tompkins		• •		1
0	• •	A. P. Carman				1
1	• • •	Walter H. Jones				1
2		E. B. Greene	l ::	::		1
1		Geo. E. Gardener				1
5	4.	Ketherine I. Shern				1
6	• •	Geo T Kemp	••			1 1
7	* *	George W. Myers	••	• •		「 1
8	• •	E. J. Townsend		• •		1
9	• •	James M. White	::	• •		1
9		Lewis A. Rhoades		• • • • • • • • • • • • • • • • • • • •		1
2		Henry H. Everett				1
3	4	W. D. Pongo			•••••	1 1
í	• • •	H S Grindley				1
5	• •	T. A. Clark				î
3	• •	H. S. Piatt.		• •		1
7	• •	B. <u>V</u> . Swenson	• •			1
3	::	A. H. Daniels	::			1
3	• •	George D. Fairfield	;;			1
1	• •	C. W. Tooke. Fred A. Sager William Esty Frank Smith C. D. McLane.				1
2	• •	William Esty				1 1
3	• •	Frank Smith				1
Ĺ	• •	C. D. McLane	••			1
5	* *	P. G. Holden	•••	* *		1
3	• •	C. D. McLane P. G. Holden J. E. McGilvrey Seth J. Temple J. D. Phillips Violet D. Jayne Oscar Quick Edward J. Lake Ella H. Morrison George A. Huff W. J. Fraser Carlton R. Rose	• •	• •		1
7	• •	Seth J. Temple		::		1
3	• •	Violet D. Tayre				1
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ί	• •	Edward J. Lake	• •			1
2	4.4	Ella H, Morrison		• •		1 1
3	• •	George A. Huff	• •	• •		1
Į.		W. J. Fraser	::			
		Carlton R. Rose				
7	• •	Morganet Mann			• • • • • • • • • • • • • • • • • • • •	:
3		Alison M Fornio				1
ó		Agnes S. Cook				1 1
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L	• •	Chester H. Rowell		• •		1 '
3	• •	W. J. Fraser. Carlton R. Rose. Joseph C. Blair Margaret Mann Alison M. Fernie. Agnes S. Cook A. C. Howland Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh J. P. Hylan Alice Putnam		**		
3		W. H. Kavanaugh	::			
5	4.	J. r. Hylan				
3	• •	Alice Putnam				
2	٠.	Mande W. Straight				
3	• •	Charles F Hottes		• •		,
)	• •	W. C. Brenke	• •			ļ.
)[	• •	C. T. Wilder		• • •		ļ
	• • •	Jessie Y. Fox		• • • • • • • • • • • • • • • • • • • •	. ,	
3		James H. McKee	::			
1		George D. Hubbard				
		C V Seastone		4.4		
	• •	R. B. Ketchum		• •		
	* *	H. V. Carpenter				
3	• •	Alice Putnam A. C. Burnham M. C. Burnham Mande W. Straight Charles F. Hottes W. C. Brenke C. T. Wilder Jessie Y. Fox James H. McKee George D. Hubbard H. A. Webber C. V. Seastone R. B. Ketchum H. V. Carpenter J. L. Sammis M. B. Hammond Anna Fossler C. B. Clark		* *		
	• •	M. B. Hammond				
	• • •	Anna Fossler				
L 2		Allia Cossier C. B. Clark A. R. Curtiss Henry Jones J. H. Wilson D. H. Carnaham				
	4.6	Henry Jones				
		J. H. Wilson	**	* *		
	4.4	D. H. Carnaham			***************	
		A. C. Hobart.				1 :

۰.	Date.		To whom.		For	what.	Amo
ĺ	1898.						1
₹7	May :	31	F. W. Schacht	Salary	for May.	1898	\$8
8	May,	-	A. E. Paul.	Culting	101 1145,		1 5
9			Don Sweeney				1
0			A. S. Williamson		* * * * * * * * * * * * * * * * * * * *		1
1			Edward G. HoweLillie A. Clendenin		• •		1 18
2			Lillie A. Clendenin	• • •			(
3			Dillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alvord W. L. Pillsbury D. McIntosh C. V. Millar R. W. Stark George W. Graham	::			3
4	• • •		C. B. Randolph		• • •		3
5			U. W. Alvord				1.7
7	4.6		D Maintach				16
ś			C V Millon				1
9			R W Stark				
ó		-	George W. Graham				10
ĭ			Lillie Heath	• •	• •		1 7
2			Lillie Heath	• •			Ė
3	4 4		L. A. Boice		• •		1 5
1	4.4		Jennie M. Laflin	• •	• •		4
5	• •		Georgia E. Hopper	• •			1 8
6	• •	1	Adelaide M. Chase		**		2
7	• •		Sue W. Ford L. A. Boice L. A. Boice Jennie M. Laflin Georgia E. Hopper Adelaide M. Chase Mary T. Pierce W. O. Waters Henry J. East Pearl Adams W. R. Hoffman L. G. Lathrop J. J. Johnson E. A. Nelson Elbert E. Pound A. S. Golden Allen McGlaughlin Philip Schwehm F. J. Foote Joe Morrow E. W. Jistus W. H. Jistus		• • •		1 2
3[		-	W. O. Waters	**	* * *		2
9	••	- [	Henry J. East				4
		- 1	Pearl Adams				4
2	• • • • • • • • • • • • • • • • • • • •		W. R. Hollman				8
3	::		L. G. Lathrop				5
		- 1	E. A. Wolgon	4.4			8
		- 1	Elbert E. Pound				5
			A. S. Golden		• •		1 3
í!			Allen McGlaughlin		• •		1
	4.6		Philip Schwehm	• •			2
	4.4	J	F. J. Foote.	• •	• •		7
)			Joe Morrow				7
П	4.6	- 1	E. W. Justus	4.4	• •		5
2	4.6		Boe Morrow E. W. Justus W. H. Zimmerman M. T. Lindsey J. H. Allen R. Uttenweiler Fred Athirace	4.6			6
3			MT. Lindsey				4
	. •	- 1	J. H. Allen		• • • • • • • • • • • • • • • • • • • •		4
	. •	- 1	R. Uttenweiler				6
إز	. •		Fred Atkinson				3
		١	Chass B. Ewalt	X7 1			2
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		١	Fred Atkinson Chas. B. Ewalt. Champaign M. & Supply Co D. H. Lloyde & Sons Mittendorf & Kiler Chas. F. Witt H. Swannell A. S. Nelson & Son Champaign County Herald Champaign County Ptg. Co. E. Barr	Somer n	ino ota	r, etc	8
	• •	- 1	Mittendorf & Kiler	Picture	frames e	te	4
1		- 1	Chas. F Witt	Rings s	trans etc		1
1		- 1	H. Swannell	Toilet p	aper, etc.		2
			A. S. Nelson & Son	Butter.			
į.	, .	-	Champaign County Herald	Printing			6
		- 1	Champaign County Ptg. Co	••	etc		6
		- 1	E. Barr	Brick			
51		- 1	N. W. Davis	Sand	<b></b>		
			Sheldon Brick Co		<b></b>		
Ŋ		-	Twin City Electric Co	Switche	s		
	. •		Baker & Adamson Chem. Co	Filter			
	4.5	- 1	The Indiana Chemical Co	Acid, bo	ttles, and	cans	1
1			Fulls Direct & Machines Co	Unemica	ais		i
	. •	-1	The Wester Stillers Co	runeys		• • • • • • • • • • • • • • • • • • • •	
	. •	- [	American Society of M. E.	Oup pac.	Kings	· · · · · · · · · · · · · · · · · · ·	
1			Croshy Steem General Walter Co	Cobtes 0	r gaper	ota	9
1		- }-	Machinists' Supply Co	Lecorde Costina	r, gauge,	e.c	9
1		-	Jones & Laughling Co	Casung Rolte on	d screws		
	• •	- 1	Chas. H. Besly & Co	Spring h	rass etc		
		- 1	Chicago Retort & Fire Br Co	Brick	russ, etc.	•••••	11
	• •	-	Chas. A. Schieren & Co	Leather	belting		13
:		-1	Joseph Wilckes	Econom	eter		8
ı.		- [	North Central Association	Fee			· ·
ì			Kinsey & Mahler Co	Castings			
1			Edwin H. Pierce	Piano bo	x		
7	• • •		A. S. Nelson & Son Champaign County Herald. Champaign County Herald. Champaign County Ptg. Co. E. Barr. N. W. Davis. Sheldon Brick Co. Twin City Electric Co. Baker & Adamson Chem. Co. The Indiana Chemical Co. Fuller & Fuller Co. Falls Rivet & Machinery Co. The Watson-Stillman Co. American Society of M. E. Crosby Steam Gauge& Valve Co. Machinists' Supply Co. Jones & Laughlins Co. Chas. H. Besly & Co. Chas. H. Sely & Co. Chas. A. Schieren & Co. Joseph Wilckes. North Central Association Kinsey & Mahler Co. Edwin H. Pierce Eugene Dietzgen Co. Library Bureau Callaghan & Co. Houghton, Mifflin & Co. A. C. McClurg & Co. Nicholas Murray Butler.	Regulati	ion paper		i
		ľ	Library Bureau	Book su	pports, et	c	5
)		- 1	Callaghan & Co	Books			- :
1			Houghton, Mifflin & Co	Book			2
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#### Warrants—Concluded.

٠.	Date.		To whom paid.	For what.	Amou
i	1000				
٠.],	1898.	01	W T House	Ermanaga	\$48
05 1	Мау, .	31	Tohn P. Ponnott	Expenses Brick, etc Expenses	3
34			W 7 Wiles	Frances	"
00			T F Howard	Expenses	:
6			L. J. Hackney Geo. B. Wilson C. V. Millar Eimer & Amend Odin Coal Co. Illinois Agriculturist J. H. Voung	4.4	;
37	4.6		L.J. Hackney		5
8			G 57 Millson	44	10
39			U. V. Miliar	Chamiaala	
70			Limer & Amena	Chemicals	8:
1			Odin Coal Co	Coal	40
2			Illinois Agriculturist	Publication	50
3			Max, Kaehler & Martini E. H. Renner & Bro Robinson & Burr	Expenses on Technograph	100
14			Max, Kaehler & Martini	Apparatus	560
75			E. H. Renner & Bro	Hauling	40
16	• • • • • • • • • • • • • • • • • • • •		Robinson & Burr	Heating contracts, etc	653
77			The Gazette	F FIHLIH2. ClC	153
18	• •		Tower Mfg & Novelty Co	Adders	
79	• •		The Illini A. E. Wuesteman Katharine L. Sharp	Advarticament	128
30			A. E. Wuesteman	Pins and medals	5
31	4 4		Katharine L. Sharn	Expenses	18
32	4.4		W H Owang	Mimeograph conjes	1
	4.4		W. H. Owens J. C. Sedgwick B. A. Bullard	Pins and medals. Expenses. Mimeograph copies Payment on contract.	50
33	T 70.0	15	D A Dulland	Erronges	40
34	$_{ m June}$	10	Alox Maloon	Expenses	5
55			Alex McLean	44	2
36	• •		N. B Morrison		5
37	::		Isaac S. Kaymond		20
8	4		A. S. Draper		8
39			Wm. H. Maxwell	**	10
00			L. A. Rhoades	**	5
1			L. A. Rhoades J. E. McGilvrey Union Manufacturing Co.		;
2			Union Manufacturing Co	Water service.	50
3	• •		A. W. Palmer	Part sal. quarter ending May 31, '98	2
4			A. W. Palmer Inland Publishing Co	Engraving and printing	63
5			T. R. Leal	Hauling and labor	13
6			John B Rennett	Materials and labor	32
7			T. R. Leal John B. Bennett The Chesapeake & Ohio Co	Coal	21
			Thomas Naughton	Coal Photos	3
8			Champ you do Hough	Duinting	9
99			Onawit, Syn Co. Heraia	Madal of busin	3
00			The Kny-Scheerer Co	E	1 6
1			J. E. Armstrong	Photos Printing Model of brain Expenses Chinaware, forks, etc. Part salary for June	3
2			Pitkin & Brooks	Chinaware, forks, etc	1 40
)3			Miles Newberry	Part salary for June	2 2
)4			L. Goodman	Services	_ Z
)5			Pitkin & Brooks. Miles Newberry. L. Goodman. C. H. Baddeley J. M. Chase	Provisions Painting President's house	4
6	::		J. M. Chase	Painting President's house	13
7			IV m H. Armstrong	Instruments	1 2
8	4.		Bausch & Lomb Optical Co P. Blakiston Son & Co	Instruments etc	. 3
9			P. Blakiston Son & Co	Books	1
Ŏ	• •		The Gazette		35
1	• •		The Gazette		
2			Standard Oil Co	7	2
3			H. M. Shuck & Co	Nails etc	
4			Champaign Tile Co	Tile	1 8
5	• •		Academy of Nat Science Phila	Oil Nails, etc Tile Publication Book Pipe and fittings Governor shaft Recording gauge etc	
6			The Rurrows Rros Co	Rook	1
			N. O. Noloop Mitter Co.	Ding and Attings	. 1
7			Mumber Iven Wante	Corresponded of the contract o	1 1
8	4.4		Cabactan & Daylorks	Governor shaft	10
9					
0			Falls Rivet & Machinery Co	PulleysBattery cells	13
1			Illinois Electric Co	Battery cells	2
2			machinists Supply Cc	Waste	1 .
3			wadham's Oil and Grease Co	Qil	1
4	• • •			Book	
5			The Lukenheimer Co	Book Indicator cock, etc Tools, etc	. 1
6	• •		Chas. Strelinger Co	Tools, etc	1
7			The Lukenheimer Co. Chas. Strelinger Co. Adam Cook's Sons.	Oil and grease	.  5
8	6 6		Eimer & Amend	Tubes, etc	. 4
29	• •		Eimer & Amend Western Bank Note & Eng. Co.	Tubes, etcPlates and diplomas	26
Õ			J. W. Olcott & Co. Corning & Co. Lawton & Co.	Induction coil	
1			Corning & Co	Alcohol	:  a
	4.6		Lawton & Co	Alcohol	I .
$\frac{2}{2}$			Millon & Lomina	Tripod legs an : stakes Oil, etc. Labor and materials Frames. Expenses Advertising	1
33			A F Wrostomen	Oil oto	•
4			E C Colden	Uni, etc	'
5			E. O. Golden	Labor and materials	•
			w. 1. Saπell & Co	Frames	
6	4 6				

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June	15	C W Polfo	Camera Advertising Stamps Postage Hauling Expressage	8
ola une.	10	A W Mumford	Advertising	°
í ··		Ozias Riley	Stamps	22
<u> </u>		W. W. Lindley	Postage	220 12
3		E. H. Renner & Bro	Hauling	6
ıl "·		S. W. Shattuck, business mg	r. Expressage	5
5 ''				4
3		**	Freightage Sundry items. Photos and Paper Pay rolls of men, May, 1898 Pay rolls of students, May, 1898 Salary, June, 1898	143
7 **		**	Sundry items	59
3		C. T. Wilder S. W. Shattuck, business mg	Photos and Paper	1
) ''		S. W. Shattuck, business mg	r. Pay rolls of men, May, 1898	1,30
June	30		Pay rolls of students, May, 1898	790
l	00	A. S. Draper T. J. Burrill. S. W. Shattuck, business mg	Salary, June, 1898	588
2 '		T. J. Burrill		200
3		S. W. Shattuck, business mg	r	160
í ··		N. C. Ricker		10.
		Ira O. Baker		18'
3 ::		S. A. Forbes		8
7		C. W. Rolfe		8 17
<u>:</u>		S. W. Shattuck, business ing N. C. Ricker Ira O. Baker S. A. Forbes. C. W. Rolfe D. McIntosh		50
9		A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. F. Barton		178
기		<u>A. W. Palmer</u>		17
L		F. F. Frederick		158 178
4		S. W. Parr		17
51		H. F. Barton		17.
±)				17
)		D. K. Dodge L. P. Breckenridge		16
)		L. P. Breckenridge		18 18
()		D. Kiniey		18
31		E. Davenport. A. Tompkins. A. P. Carman. W. H. Jones E. B. Greene Geo. E. Gardener. C. C. Pickett. Katharine L. Sharp. Geo. T. Kemp. Geo. W. Myers. E. J. Townsend. J. M. White. L. A. Rhoades.		9
<b>1</b>		A. Tompkins		16
)		A. P. Carman		18
L)		W. H. Jones		10
41		E. B. Greene		14
51		Geo. E. Gardener		16
ł		C. C. Pickett	]	12
5		Katharine L. Sharp		16
3		Geo. T. Kemp		16 15
<u> </u>		Geo. W. Myers		13
3		I M White		13
<u> </u>		L. A. Phondon		14
í ··		L. A. Rhoades	::	139
		W H Van Dervoort	: :: :: :: : : : : : : : : : : : : : : :	13 13
		W. H. Van Dervoort. W. D. Pence. H. S. Grindly		133
٠٠ ا		H. S. Grindly	44	108
		T. A. Clark	''	13
			1	10
7		B. V. Swensen		108
		A. H. Daniels		108
		G. D. Fairfield	**	10
) "		C. W. Tooke	••	108
í ··		F. A. Sager	44	10
2		William Esty		108
3 ''		H. S. Piatt B. V. Swensen A. H. Daniels G. D. Fairfield C. W. Tooke F. A. Sager William Esty. Frank Smith C. D. McLane P. G. Holden J. E. McGilyrey	**	100 100
i ''		C. D. McLane	**	100
		P. G. Holden		5
3 **		J. E. McGilvrey		108
		Seth J. Temple		100
5		J. D. Phillips	::	8
*		Violet D. Jayne		12
<i>)</i>		Oscar Quick		8
L)		臣.J. Lake		70
31		Ella H. Morrison		100
51		Geo. A. Huff	::	120
E)		Wm. J. Fraser		3
		P. G. Holden. J. E. McGilvrey Seth J. Temple J. D. Phillips Violet D. Jayne Oscar Quick E. J. Lake Ella H. Morrison Geo. A. Huff Wm. J. Fraser C. R. Rose J. C. Blair		8
)		J. C. Blair		4
()		C. K. Kose J. C. Blair. Margaret Mann Alison M. Fernie Agnes S. Cook A. C. Howland Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh J. P. Hylan Alice Putnam		7
5		Alison M. Fernie		100
<b>7</b>		Agnes S. Cook		70
))		A. C. Howland		80
11		Unester H. Kowell		70
		Geo. H. Meyer		70
		IW H Kayananoh		80
::		T D II-1-	**	80

۱٠	Date.		To whom.	F	or what.	Amou
-	1898.		A. C. Burnham.  Maude W. Straight C. F. Hottes W. C. Brenke C. T. Wilder. Jessie Y. Fox J. H. McKee G. D. Hubbard H. A. Webber C. V. Seastone R. B. Ketchum H. V. Carpenter J. L. Sammis M. B. Hammond Anna Fossler.			
6		30	A. C. Burnham	Salary, June,	1898	\$90
7		-	Maude W. Straight	,,,		75
8			C. F. Hottes	•••		70
.9(	4.4		W. C. Brenke			75
10	4 4		C. T. Wilder	l ::		70
1	4.4		Jessie Y. Fox	1 ::		30
2	• • • • • • • • • • • • • • • • • • • •		J. Н. McKee	;;		50
3			G. D. Hubbard	;;		50
4			H. A. Webber			50
5	4.4		U. V. Seastone			50
6			K. B. Ketchum			50
7		1	H. V. Carpenter		• • • • • • • • • • • • • • • • • • • •	50 50
9			M P Hommond	٠.		50
0	4.4	- 1	Anne Fossler			50
1		1	C R Clark			85
2			A R Curtice			85
3			I H Wilson			60
4	4.4		Henry Jones			60
5			D. H. Carnahen	• •		30
6	4 4		A. C. Hobart	•••		30
7	• •	1	F. W. Schacht.	• • •		30
8			A. E. Paul	• •		30
9	4.4		M. B. Hammond Anna Fossler C. B. Clark A. R. Curtiss J. H. Wilson Henry Jones D. H. Carnahen A. C. Hobart F. W. Schacht A. E. Paul Don Sweeney A. S. Williamson E. G. Howe	**		30
ŏ			A. S. Williamson	**		16
1	• •		E. G. Howe Lillie A. Clendenin	• •		150
2	4.		Lillie A. Clendenin	• • •		65
3			R. S. Douglas	•••	,	75
4	• •		C. B. Randolph	•••		70
5	• • •		C. W. Alvord	• • •		70
6	• • • • • • • • • • • • • • • • • • • •		W. L. Pillsbury			162
7			S. W. Shattuck	Salary, 3 mont	hs, to June 30, 1898	100
8	**		D. McIntosh	Salary, June, 1	1898	78 78
9	4.4		C. V. Millar	::		75
0	4.6		R. W. Stark	l ::		50
1			Lillie A. Clendenin R. S. Douglas C. B. Randolph C. W. Alvord W. L. Pillsbury S. W. Shattuck D. McIntosh C. V. Millar R. W. Stark Geo. W. Graham Lillie Heath Sue W. Ford L. A. Boice Jennie M. Laffin Georgia E. Hopper Adelaide M. Chase Mary T. Pierce W. O. Waters F. J. Foote. Joe Morow	4.		100
3		- 1	Lillie Heath			75
4	. 4	- 1	Sue W. Ford			55 58
5			Innio M. Leffin	* *		45
6	4.4		Georgie F. Henney	• •		30
7			Adelaide M Chase			25
8	• •		Mary T. Pierce			2
9			W. O. Waters	"		20
ŏ	4.4		F. J. Foote.			78
1			Joe Mocrow	• • •		78
2	* *		E. W. Justus	• •		50
3			W. H. Zimmerman	• •		60
4	• • •		M. T. Lindsey	• • •		40
5	• • •	ı	J. H. Allen			40
6	• •		R. Uttenweiler			60
7	•••		Fred Atkinson	::		38
8	• • • • • • • • • • • • • • • • • • • •		Chas. B. Ewalt	::		25
9	• • •	ļ	Henry J. East	::		40
0			Peari Adams	l ::		4(
1	4.4		W. K. Hoffman			37
2	4.4		L. G. Lathrop			32
3		- }	J. J JOHNSON			32 32
5	4.4	-	Elbort E. Pound			32
6			A S Golden		•••••	32
7	4.4		Allen McGlanghlin			32
8			Philip Schwehm	4.6		27
9			Lucy L. Flower	Expenses		30
ő		ļ	L. P. Breckenridge	паропосо		15
1	4.4	- }	J. T. Wolcott	Services		70
2	4.4	- [	Westinghouse Elec. & Mfg Co.	Generator		105
3	4.4	-	I. Manz & Co	View.		100
4	• •		Engineering News Pub. Co	Advertisemen	h	l
5	• •		West Publishing Co	Book		6
6			Callaghan & Co	- 17		4
7	• •	ŀ	W. O. Waters. F. J. Foote. Joe Morrow. E. W. Justus W. H. Zimmerman. M. T. Lindsey J. H. Allen. R. Uttenweiler Fred Atkinson Chas. B. Ewalt Henry J. East Pearl Adams W. R. Hoffman L. G. Lathrop. J. J. Johnson. E. A. Nelson Elbert E. Pound A. S. Golden. Allen McGlaughlin Philip Schwehm Lucy L. Flower L. P. Breckenridge J. T. Wolcott L. P. Breckenridge J. T. Wolcott West Publishing Co Callaghan & Co Engineering News Pub. Co West Publishing Co Callaghan & Co Edward Thompson Co The Florence Co F. F. Frederick Library Bureau J. C. Sedgwick	**		g
8			The Florence Co	**		2
	* *		F. F. Frederick	Expenses		9
9						7

No.	Date.	To whom.	For what.	Amount.
2792 2793 2794 2795 2796 2797 2798 2799 2800	1898. June	Bickford Drill & Tool Co Keuffel & Esser Co J. D. Green Chas. A. Schieren & Co A. C. McClurg & Co.	Books Quartz Attachment Measuring tape, etc Labor and material Extracting oil from belting Envelopes, etc Fittings	20 00 10 02 51 67 8 87 16 93

#### STATE LABORATORY OF NATURAL HISTORY WARRANTS.

о.	Date.		To whom.	For what.	Amour
-	1897.				
1	July	15	S. A. Forbes	Expenses	\$34
2	· 415	10		Photographs.	10
2	• •			Labor.	9
4			W C Prople	Work	7
*			W. O Brenke	Work	4
0			Ed Gill		
6				Subscriptions	9
7			Н. Ж. коккег	Printing and binding	64
٤			E. H. Sargent & Co	Corks	2
9			Bausch & Lomb Opt'l Co	Boxes	1
0.			Charles A. Hart	Expenses	2
1	• •		E. V. Bronson.	Work	10
2	• •		The Gazette	Printing circulars, etc	9
3	• •			Railway Guide, 1897	š
4	• •		H C Forber	Petty expenses	2
5	• •		Goug Lithographing Co	Printing warrant book	ไ ร็
6	4.4		Library Bureau	Gummed labels	
			W II Allen	Defeate of the second s	
7			W. u. Anen	Paints, oils, etc	7
8			Miles Newberry	Labor.	1
9	4.4		D. S. Howard	Repairs and labor	6
0			Mat Farman	Labor	2
1			Starr & Cogswell	Fittings, etc	5
2			Charles T. Wilder	Blue prints	9
3	July	31	Frank Smith	Salary, July, 1897	100
4		-	Charles A. Kofoid	1 ••	108
5	4.6		H. C. Forbes.	**	91
6	4.4		Charles A. Hart		75
7	4.4		Mary J. Snyder		75
8					
있			C. C. Adams.		50
9			Harlen Scott		15
0	4.4		Frederic W. Schacht		60
1			Miles Newberry		50
2	••		Y. Zmrhal		30
3			Lydia M. Hart	Drawings	12
4			Mariorie D. Forbes	Work in library	20
5			Bausch & Lomb Opt'l Co	Vials, circles, etc	13
6	• •		C. B. Holzgrafe.	Refrigerator etc	17
7	• •		Richards & Co	Tubes	3
8			C. H. Besly & Co	Copper letters, etc	1
9	• •		Macmillan & Co	Subscription	6
ň	Aug.	14	Franklin Eng and Electro Co	Zinc cuts	25
1	aug.	1.4	Pontograph Dulling and Cla Co.	Paper boxes	
			Montagraph Fring and Sta. Co	Constains	7
2				Curtains	13
3			A. R. Curtiss	Bicycle	26
4			S. A. Forbes	Expenses	25
5			raul Klincksieck	Publications	5
6			S. W. Shattuck, business mgr.	Sundry items	38
7			J. W. Critchley	Pins	6
8			Pantagraph Pr'ting and Sta. Co	Gummed paper	í
9	• •		E. H. Sargent & Co	Corks and vials	14
Ö	• •		D. Appleton & Co.	Book	1
ĭ	Aug.	24	George F Lasher	Subscription 1897	2
$\dot{2}$			American Entom Society	Subscription, 1897	4
3	4.4		I M Cabilling	Groceries	
			Charles France	Groceries	11
4			Charles Foster	Lettering	6
5	4.4		The Gazette	Mounting board. Bottle racks, etc.	1
6			uteorge W Parker & Son	I BOTTIE racks etc	20

э.	Date.		To whom.	For what.	Amor
ا	1005		1		
7	1897.	94	G A Forbog	Colour 2 months to date	
ś	Aug.	ĐΙ	S. A. Forbes. H. C. Forbes. Charles A. Hart. Mary J. Snyder. C. A. Kofold. Wash I. Smith	Salary, 3 months, to date	\$6
9			Charles A Hand	Salary, August, 1897	
ő			Many I Spyden		7
1			C A Kofoid	**	10
2			Wasan la Canaitala		10
3			Frank Smith C. C. Adams. F. W. Schacht. Y. Zmrhal	**	5
1			F W Schookt		6
5			V Zmrhol	and expenses	5
3			Miles Newberry	and expenses	5
ž			Harlan Scott	**	1
3	• •		Mariorie D. Forbes	Work in library	
ы	• •		E. V. Bronson	Labor.	10
λl	Sept.	15	R. Freidlander & Son	Books	10
ĭl	~ CP	-0	C. A. Kofoid	Expenses	2
2	• •		S. W. Shattuck, business mgr.	Miscellaneous items	4
3	• •		Champaian County Herald	Printing.	ī
11			Keene & DeLang	Work in library Labor. Books. Expenses Miscellaneous items Printing. Copy book Books. Forceps, etc. Copies of plate. Insect pins	1 *
5	• •		A. C. McClurg & Co	Books	
3			Bausch & Lomb Opt'l Co	Forceps, etc	1
7	• •		Heliotype Printing Co	Copies of plate	1 4
31	4.4		J. W. Critchley	Insect pins	1
)			J. C. Winship Co	Printing bulletins	13
)	• •		Lydia M. Hart	Copies of plate. Insect pins. Printing bulletins. Drawings Petty expenses. Salary, September, 1897.	3
l	- **		H. C. Forbes	Petty expenses	"
2	Sept.	30	H. C. Forbes	Salary, September, 1897	9
3			C. A. Kofoid		10
H			C. A, Hart		8
į			Mary J. Snyder		7
3	• •		C. C. Adams	Work Row boat Salary and expenses Linoleum Salary, September, 1897 Work Lumber Guide book Meats Supplies Book Expenses Labor Letter files, etc Letter heads	5
7			Harlen Scott	l , ''	1
3	• • • • • • • • • • • • • • • • • • • •		R, W. Braucher	Work	3
)	• • • • • • • • • • • • • • • • • • • •		D. S. Howard	Row boat	2
)			Yaroslav Zmrhal	Salary and expenses	2
니	::		B. Zelle	Linoleum	_
1			Miles Newberry	Salary, September, 1897	5
3			Mrs. Miles Newberry	Work	
1			H. G. Bruning	Lumber	
5			E. W. Wheeler	Guide book	
i			W. H. Meyer	Meats	١.
7			J. M. Schilling	Supplies	1
3			Macmilian Co	B00K	
)			Frank Smith	Expenses	
1	Oat	15	D II I lord & Con	Labor	
5	Oct.	19	F F Hartman	Letter nies, etc	
3			Open Count Pub Co	Dublications	
ì	4.6		Migroggonical Publiching Co	Cubagaintian	
5			Control Union Tolonhone Co	Conviged to January 1 1969	
3			R S Wilhon	Drawage	
7			S A Forbes	Evnenses	2
3			Starr & Coorswell	Letter files, etc Letter heads Publications Subscription Services to January 1, 1898 Drayage Expenses Labor and materials Bunsen jars Work on geer netterns etc	1 1
3		1	Western Electric Co	Runsen jars	1
			Malthy & Wallace Co	Work on gear natterns, etc.	
ί			Brown & Sharne Mfg Co	Revel opers	
2	• •		Mechanical Engineering Shops	Services to January 1, 1898 Drayage Expenses Labor and materials Bunsen jars Work on gear patterns, etc Bevel gears Labor and material on centrifugal. Binding books Salary, October, 1897	10
١			Montgomery Ward & Co	Binding books	10
1	Oct.	30	C. A. Kofoid	Salary, October, 1897.	10
		,	H. C. Forbes		9
1	• •	ļ	Mary J. Snyder	., .,	7
1			C. A. Hart	to Sept. 30, 1897 Oct., 1897	8
3			Lydia M. Hart	'' to Sept. 30, 1897	Ĭ
)		1	Miles Newberry	'' Oct. 1897	2
)	• •		Harlen Scott		1 1
l	• •		R. W. Braucher		
1	• •		C. A. Hart Lydia M. Hart Miles Newberry Harlen Scott R. W. Braucher The Gazette	Printing circulars	-
3	• •		Houghton, Mifflin & Co	Books	5
٤l	• •	- 1	S. Raymond Roberts	Manual of Conchology	
5	• •		Watson Faulkner	Printing circulars Books Manual of Conchology Alcohol	
5	• •		August Goese	Apparatus	
1			Bausch & Lomb Optical Co	Scissors, pipettes, etc,	
3			Wm. Wesley & Son	Books	
)			H. E. Summers	Preparing exhibit, etc	4
ļ	* *		James Ingis	Alcohol Apparatus Scissors, pipettes, etc Books Preparing exhibit, etc Photographs Expenses Petty expenses. Labor Negative and print.	3
i		1	S. A. Forbes	Expenses.	3
Ì	• •	ì	H. C. Forbes	Petty expenses	
3			W/ D Dunton	Lohon	ĺ

Date.		To whom.	For what.	Amou
1897.				
Oct.	30	S W Shattuck, Business M'g'r	Sundry items Remodeling case Picture frames, etc. Zinc cuts Salary, 3 months, to date Nov., 1897 Oct., 1897 Nov., 1897 and part of Oct. Photographs	\$15
	00	Geo. W. Parker & Son	Remodeling case	1 7
27		Mittendorf & Kiler	Picture frames, etc.	32
381		Franklin Engr'y'g & Electo, Co	Zinc cuts	46
≀9 ''		S. A. Forbes.	Salary, 3 months, to date	62
m · ·		H. C. Forbes	Nov. 1897	91
11		C. A. Hart		88
12		Mary J. Snyder	** **	78
13 ' '		Lvdia M. Hart	" Oct. 1897	25
14 ''		Harlan Scott	'' Nov. 1897	18
5 "		C. A. Kofoid.	210,1,1200	108
6 ''		Miles Newherry	" and part of Oct	108
7		Clauser Bros	Photographs Bottles, oils, chemicles, etc. Copper tank, etc. Labor. Book binding Printing and binding. Stamped envelopes. Zinc cuts Drawings Patchment paper Expenses.	] -
8		W H Allen .	Rottles oils chemicles etc	38
9		G W Goary	Conner tank etc	1 %
0		Geo E MaHosa	Lahor	2
1		Montgomory Word & Co	Dook hinding	86
		W U Dokkon	Dwinting and hinding	58
2 ::		W. H. Nokker	Ctompod oppolonou	10
		Duantile Enguirie & Flacta Co	Zing orta	13
4		Franklin Engr v g & Electo. Co	Day resign or	10
5		Western Denk Note Enguer Co	Deschment non-	4
6		Western Dank Note Engrav.Co	Emparada	2
7		H. C. Forbes	Expenses	1 :
8		Keen & DeLang	Blank book	
9 ::		Keen & DeLang. Bausch & Lomb Optical Co W. W. Lindley Henry M. Skinner J. M. Dent & Co.	Biank book Brass discs, etc Stamps Subscription	19
0 ::		W. W. Lindley	Stamps	1 5
1 ::		Henry M. Skinner	Subscription	1 :
2 ::		д. м. репt & Co		
3		Ginn & Co	T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
4		Library Bureau	Labels and cards	
5 ''		K. S. Wilber	Drayage	3:
6		August Geise	Filter	3.
7		Esty Wire Works Co	Wire cloth	
8		Univ. of Illinois repair shop	Labor on centrifugal	1
91		S. W. Shattuck, business m'g'r.	Sundry items	1'
υ'		H. C. Forbes	Labels and cards Drayage Filter Wire cloth Labor on centrifuga l Sundry items Salary for Dec., 1897	9 108
1		C. A. Kofoid		108
2)		Chas. A. Hart	':	8
31		C. A. Adams		
4		Mary J. Snyder	::	78
51		Miles Newberry		28
6		C. A. Adams Mary J. Snyder Miles Newberry Harlen Scott.	**	1
1898.				_
7 Jan.	15	W.W.Lindley	Postag stamps	3
8		D. H. Lloyde & Son	lnk, pens, etc	
9		W. T. Falconer Mfg Co	Blocks for mounting insects	3
0		Montgomery Ward & Co	Registers	1
1		Geo. W. Parker & Son	Bottle racks	13
2		Western Union Telegraph Co	Telegrams for Dec., 1897	4
3		Chas. W. Smiley	Subscription	
4 ::		Wm. Wesley & Son	Foreign publications	
5		R. Freidlander & Son		4
6		J. C. Winship Co	Printing bulletins	21
7		Franklin Engr'v'g & Electo. Co	Zinc cuts	1
3 ''	•	V. W. Shuck	Tin forms	, ;
9 ::		Alfred L. Butz	Cork slabs	:
j ''		Cambridge Botanic'l Supply Co	Labels	
í ··		L. S. Poster	Copy of the Auk	1
2		C. A. Hart	Expenses	19
Jan.	31	C. A. Kofoid	Salary for Jan., 1898	108
1		H. C. Forbes	44"	9
5	1	C. A. Hart		91 88
6		Mary J. Snyder	**	78
7		C. C. Adams	**	2
8		Miles Newberry		28
ğ  ••		Lydia M. Hart	**	Î
ŏ · ·		Harlen Scott		2
Feb.	1/	Phillips Bros	Labor	37
2	7.3	Lydia M. Hart	Drawings	34
3		Bausch & Lomb Ontical Co	Subcription	1
4 "	- 1	Chicago Legal News Co	Revised statutes of Illinois	7
5	1	Las Bros & Co	Subscription for 1808	4
		Mittondorf & Wiler	Cutting frames	1 1
67		Champaian County Harald	Postag- stamps Ink, pens, etc Blocks for mounting insects Registers Bottle racks Telegrams for Dec., 1897 Subscription Poreign publications  Printing bulletins Zinc cuts Tin forms Cork slabs Labels Copy of the Auk Expenses Salary for Jan, 1898  Labor Drawings Subcription Revised statutes of Illinois Subscription for 1898 Cutting frames (Jards and paper Rugs, matting, etc Coal	ا ا
		onumpatyn county meruta	Yarus and haber	36
8		F V Doboson & D		

0.	Date.		To whom.	For what.	Amou
Ť	4000				<u> </u>
١,	1898.	90	Can W Dankan & Can	Walnut box. Envelopes. Expenses Cleaning furniture Salary, 3 months to date for Feb., 1898.	
V.	Feb.	28	Geo. W. Parker & Son	Wainut box	\$
	4.6		W. W. Lindley	E-nenges	1
3			H. U. Fordes	Expenses	
3			walker & Mulliken	Cleaning Turniture	
4		i	S. A. Forbes	Salary, 3 months to date	6
5			U. A. KOIOIO	ior Feb., 1898	10
3			H. U. Forbes		8
3		1	Many I Shadon	4. 4	2
3			Mary J. Shyder	:: :: :: :: :: :: :: :: :: :: :: :: ::	7 2
			Miles Nerrhoung	44 44	5
	4 4		Horlan Soott		$\begin{vmatrix} & \bar{2} \\ 2 \end{vmatrix}$
	4.4		R Emodlandon & Son	Publications	6
3	4.4		Kerl I Trubner	Pooks	1
í	4.4		Wm Wooley & Sen	Progodings Zoilogical Society	
5	4.4		W F Woohler	P. riodicals	1
3	4.4		Romand Overitah	Publications	1
7	4.4		S W Shottuak hugingg m'g'r	Expressed ata	1
	March	<b>1</b> 5	The Kny Schooner Co	Filtone	1
	Laron	-U	Philling Rrog	Printing	
3	4 4		S A Forbes	Evnenses	0
ί			Western Union Telegraph Co	Telegrams	9
			E H Sargent	Ovide	
3			Bausch & Lomb Ontical Co	Eve shades etc	
Ĺ			G W Parker & Son.	Catalogue case, etc	4
			W W Lindley P M	Envelones and stamps	2
			Ginn & Co	Publications Books. Proceedings Zoölogical Society. Priodicals Publications Expressage, etc. Filters Printing Expenses Telegrams. Oxide. Eye shades, etc. Catalogue case, etc Envelopes and stamps Journal of Morphology. Canadian Entomologist. Cyclopedia of Am. Biographies. Drawing. Barlock ribbon. Atomizers, book., etc.	~
1	• •		The Entom Society of Ontario.	Canadian Entomologist	
3	4.6		The Cyclonedia Pub. Co.	Cyclonedia of Am Biographies	
	• •		Lydia M Hart	Drawing	2
1	• •		Lawton & Co	Cyclopedia of Am. Biographies Drawing Barlock ribbon Atomizers, book., etc Salary, March, 1898	-
l			H. C. Forbes. C. A. Kofoid. Chas. A. Hart	Atomizers book etc.	l
1	March	31	C A Kofoid	Salary March 1898	10
1	• • •	-	Chas A Hart	Calary, Indicat, 1000	- š
į			H C Forbes	**	l ĕ
5			Mary J. Snyder	• •	7
5			Mary J. Snyder C. C. Adams. Harlen Scott	**	ż
7			Harlen Scott	,,	
3			Miles Newberry	**	2
)	April	15	Ginn & Co	Book	_
)			Bernard Quaritch	Publications	
	• • •		William Wesley & Son	* *	2
3	• •		M. l'Administrateur des Arch-	Book Publications  Printing	1
			ives de Parasitologie	* *	
3	• •		H. W. Rokker	Printing and binding.	5
Į	**		The Gazette		1
5	• • • • • • • • • • • • • • • • • • • •		E. H. Sargent & Co	Chemicals	ļ
3			Champaign County Herald	Manilla paper and envelopes	1
7			IVes de Parasitologie. H. W. Rokker The Gazette E. H. Sargeat & Co. Champaign County Herald W. W. Lindley. Blomgren Bros. & Co. Eugene Dictzgen & Co.	Stamps	1
3	••		Blomgren Bros. & Co	Reproductions of diagrams, etc	1
9			Eugene Dietzgen & Co	Paper	
1			Henry Trevett. R. S. Wilber. Columbia Typewriter Mfg Co.	Chemicals. Manilla paper and envelopes Stamps Reproductions of diagrams, etc Paper Welsbach lamps, tubing, etc	1
	::		K. S. Wilber	nating, occirring	
	::		Columbia Typewriter Mfg Co	Ribbons	4
	::		Columbia Typewriter Mfg Co. J M. Chase. Showlton & Bennett. C. A. Hart Walker & Mulliken. Western Union Telegraph Co. C. A. Kofoid. H. C. Forbes. Charles A. Hart. Mary J. Snyder. Charles C. Adams. E. B. Forbes.	Ribbons. Repairing Glass. pins Dip-nets. Chairs Telegrams Salary, April, 1898.	4
	**		Knowiton & Bennett	Giass, pins	
			U. A. Hart	Dip-nets	١.
1			waiker & Mulliken	Unairs	1
1		00	western Union Telegraph Co	Telegrams	10
	April	30	U. A. Kotoid	Salary, April, 1898	10
			H. U Forbes		9
)	• •		Unaries A. Hart		87
			Charles C. Adams		6
			Unaries U. Adams	Colomy half Manch and April 1999	100
			E. D. FOIDES	Calary, nan march and April, 1898	10
	• •		Uyula M. Hart	Labor and material	$\frac{4}{2}$
5	4.4		Miles Newborn	Safary, April, 1898	2
3	• •		Miles Newbery	X72-1-	2
			E. H. Sargent & Co	Viais	l
3	4.4		IT D Oldbana	Dates	
	4.6		Control Union Malanhana Ca	Pontal and garriess	1
9			Central Union Telephone Co	Salary, half March and April, 1898 Labor and material. Salary, April, 1898 Vials Labor. Putty Rental and services Laboratory expenses Expenses, etc Petty expenses Salary, May, 1898	1
L	• •		E. D. FOTDES	Expanses eta	
5			G. W. Shahuck, business mgr	Dayenses, etc	1
3				FELLY EXDELISES	ı

Date	•	To whom.	· For what.	Amou
1898.				1
	21	Lydia M. Hort	Salary, May, 1898	\$36
Мау.	91	Harlan Scott	Darary, may, 1000	20
• •		Morr T Cardon		75
		Chas A Hout		83
		H. C. Forbes.		91
		C A Forbes	Salary, quarter ending May 31 Services Postage. Petty expenses. Carboleum. Hardware. Copy book. Tire.	69
		H F Commons	Salary, quarter ending may of	62 75
		W W Findler	Postogo	19
		TE C. Floribae	Determine	3
		mb - Dues act Ob and all Ca	Carla large	2
		In It Towards	Carooieum	2
		T. H. Trevett	Casas bash	4
		Champaign Crale Co	Copy book	
		Champaign Cycle Co	Tire	2
		S. E. Cassino Bausch & Lomb Optical Co	D-1b 1 1	4
		Bausch & Lomb Optical Co	Buios and powder	1
		J. W. Critchley	Pins	25
		Miles Newberry	Salary, May, 1898	25
1		C. A. Kofoid	'' ,	108
		J. W. Critchley.  Miles Newberry. C. A. Kofoid. Central Rubber Supply Co.	Hose, coupling and clamps	5
l ::		Central Rubber Supply Co. Chas. A. Hart. J. D. Breene E. B. Forbes. E. H. Sargent & Co. E. B. Forbes. E. O. Vaile. The Nautilus. H. F. Hogner.	Tire Book Bulbs and powder. Pins. Salary, May, 1898 Hose, coupling and clamps. Expenses. Funnel. Expenses	$\epsilon$
		J. D. Breene	<u>  F</u> unnel	2
1 ::		E. B. Forbes	Expenses	18
		E. H. Sargent & Co	Rubber caps	2
::		E. B. Forbes	Salary, May, 1898	64
		E. O. Vaile	Subscription	1
		The Nautilus	Funnel Expenses Rubber caps Salary, May, 1898. Subscription Books Bookbinding Papers (Nat. Hist.) Books Expenses	1 1
		H. E. Hooper	Books	19
• • •		Chas. F. Hottes	**	20
••		H. E. Hooper Chas. F. Hottes Ward Bros.	Bookbinding	54
• •		Dulan & Co	Papers (Nat. Hist.)	20
• • •		William Wesley & Son	Books	14
		S. A. Forbes	Expenses.	258
**		H. E. Parker	D-441	44
• • •		William Wood & Co	Publication	1 7
• •		A C McClure & Co	Books	1 3
4 4		Daniel Appleton & Co	DOOKS	1 7
• •		Ward Bros. Dulan & Co. William Wesley & Son S. A. Forbes H. E. Parker William Wood & Co A. C. McClurg & Co Daniel Appleton & Co	Bothe racks, etc. Publication Books. Subscription	1
		Popular Science None	Subscription	1 3
		Rougah & Lomb Ontical Co	Laboratory funnishings	6
		Robinson & Rum	Bross wings	}
		Honny I Green	Instruments	9
		H Swannell	Clue eta	28
		T T Typyrott	Dubbon tubing	1
		I W Cuitables	Ding	13
		Hubband & Cana	Taban	16
		Enablis Edmantismal Ca	Dibbon	1
		White II Total Co	American in a linear in a line	2
		W nitali, Tatum & Co	Anatomical jars	
		р. н. Lloyde & Son	Stationery, etc	
		J. W. Critchley	Subscription  Laboratory furnishings.  Brass rings. Instruments Glue, etc. Rubber tubing Pins Labor Ribbon, etc Anatomical jars Stationery, etc Pins and postage Printing, etc Corks.	10
		The Gazette	Criming, etc	2
		Alfred L Butz S. W. Shattuck, Business Mgr.	Corks	2
		5. w. Snattuck, Business Mgr.	Expressage, etc	2
		S. W. Shattuck, Business Mgr Friedrich Cohen R. Friedlander & Son William Wesley & Son John Wheldon & Co T. H. Trevett S. A. Forbes W. W. Lindley Corning & Co Chemical Dep't U. of I. H. C. Forbes Ed. F. Hartman Mittendorf & Kiler H. E. Parker	Corks. Expressage, etc. Books. Publications Books.	
		K. Friedlander & Son	Euplications	12
1		William Wesley & Son	Books	1
1 ::		John Wheldon & Co	$\underline{\underline{\mathbf{T}}}$ hermometer case	2
		T. H. Trevett	Thermometer case	1
		S. A. Forbes	Expenses	
1		W. W. Lindley	Stamps	1
1		Corning & Co	Alcohol	1
		Chemical Dep't U. of I	and chemicals	1
• • •		H. C. Forbes	Expenses	1 :
		Ed. F. Hartman	Expenses Letter heads	1
• • •		Mittendorf & Kiler	Chairs and door mats	
• •		H. E. Parker	Labor	
• •			Railway guide	1 1
		J. M. Fisher	Labor	( :
* *		E O Vaile	Publication	
••		The Entomological Negro	Subscription	1 :
••		I H Studer	Rooks	1
		S Roymond Robowto	DOORS	1
•••		Gustav E. Stockart	Foreign literature	100
	90	National Railway Fub. Co. J. M. Fisher E. O. Vaile The Entomological News J. H. Studer S. Raymond Roberts Gustav E. Stechert H. C. Forbes.	Chairs and door mats Labor. Railway guide Labor Publication Subscription Books Foreign literature Salary, June, 1898.	129
June	οl	H. C. Forbes C. A. Kofoid E. B. Forbes H. E. Summers	Salary, June, 1898	1 10
		IU. A. N01010		
**		F D Flowboo	**	. 70

No. Date.	To whom.	For what.	Amount.
1898. 361 June 3 362 363 44 365 44 365 44 365 44 365 366 367 368 370 370 47 371 372 373 47 375 47 375	Haffen Scott. H. E. Parker. Hubbard & Sons Cunningham Bros H. J. Green. Central Rubber Supply Co. B. F. Gump. Geo. B. Holzgrafe Kny-Scheerer Co.	Salary, June, 1898	20 00 13 44 9 75 42 19 2 00 7 00 11 94 9 93 5 00

#### AGRICULTURAL EXPERIMENT STATION WARRANTS.

No,	Date.		To whom.	For what.	Amount
	1897.				
1	July	31	T. J. Burrill	Salary for July, 1897	\$50 00
$\frac{2}{3}$			W.L. Phisoury		25 00
3		ı	E. Davenport		91 66
4		-	D. McIntosh		25 00
5		-	P. G. Holden		50 00
6			G. P. Clinton	*************	83 33
7			Ç. G. Hopkins		125 OC
8			J. C. Blair		41 66
. 9		1	W. J. Fraser		33 33
10		- 1	Kate McIntyre		50 00
11		ı	S. W. Shattuck		16 66
12			T. J. Mairs.	TT	33 33
13		- 1	Huppard & Sons	Hardware	67 35
14		- 1	S. M. Marble	Rock salt	1 75
15	4.6		E. Henry	Şoda	1 50
16		- 1	Creamery Package Mig. Co	Jars, etc	17 50
17		- 1	Knowiton & Bennett	Leads, oils, etc	6 65
18			walker & Mulliken	Chairs, tables	3 30
19		ĺ		Hardware	8 63
20	4.	-	E. Henry	Brooms. etc	4 65
21	4.4	]		Whips, etc	5.80
22	4.4	1	Campoell & Spaulding	Horse-shoeing, etc	32 20
23		1	H. Swannell	Drugs, etc	20 93
24	4.4	-	C. H. Baddeley	Sauce dishes	5 50
25	4.4	- 1	v. w. Snuck	Galvanized iron, etc	4 30
26		Ì		Lumber	36 97
27		1	wm. Price	Paints, oils, etc	7 60
28	4.6	ı		Straw, hay, etc	10 60
29			The Gazette	Printing, etc	20 35
30	6.6	1	F. K. Robeson & Bros	Matting	3 00
31	4.4		Ferguson & Craig	Clock	1 00
32	4.4			Bolts, blocks, etc	5 25
33	6.6		Henry Trevett	Hardware	15 20
34	4.4	ı	wm. Miebach & Co	Apparatus	4 90
35			Bevis & Co	Lumber	2 35
36			Miller Harness Co	Curry combs, brushes, etc Berry boxes	8 50
37		-	Ed Lasell	Berry boxes	2 75
38		1	Thos. Franks	Plants Services	13 15
39			H. N. woodward	Services	10 00
40	4	ام	Goes Litnographing Co	Printing warrant book	8 34
	August 2	וטנ	P. G. Holden	Expense	3 20
42		- 1	Samuel Bartney	Plowing and planting corn Sponges	5 50
43		1	wasson Faulkner	Transfer	1 50
44			nuppard & Sons	Hardware	25 17
45			A. U. McClurg & Co	Adjusting typewriter	4 69
46		- (	John F. Miller	Harness, etc.	20 55
47				Repairing whip socket	1 00
48		-	Illinois Printing Co	Printing	6 50
49	4.4			Locks, etc	3 97
501		ı	v. w Snuck	Galvanized iron, etc	4 55

No	Date.		To whom.	. For what.	Amount
	1897.				
51	Angust	20	Twin City lee & Cold St'ge Co.	Tee	Q1.1 A1
52	August	40	C. J. Sehin	Ice Scraper, seeds, etc	\$14 40 15 20
53	4.4		Knowlton & Rennett	Records and journals	13 5
54	4.4		Robinson & Rurr	Records and journals Pulley Lumber, coal Old pipe Expenses Sundry items Pay rolls for July, 1997, etc. Salary for August, 1897.	1 20
55	4.4		Charles A Resore	Lumber goal	9 6
56			Ahe Selicovity	Old nine	1 1 2
57			I G Mosiar	Evnancee	1 25 9 40
58			S W Shattuck Business More	Sundry itams	16 9
59	6.6		D. W. Shattack, Dusiness, mgr.	Pay rolls for July 1997 etc	475 70
	August	21	T J Burrill	Salary for Angust 1897	50 00
61	Liugust	01	W L Pillshury	Datary, for Hagast, 1001	25 00
62	4.4		E Davennort		91 60
63			D McIntosh		25 00
64			B. Richtons G. P. G. Holden G. P. Clinton C. G. Hopkins J. C. Blair W. J. Fraser		50 00
65			G. P. Clinton		
66			C. G. Honkins	**	
67			J. C. Blair	**	11 01
68			W. J. Fraser		33 33
69	• •		Kate McIntyre.		50 00
70	• •		S. W. Shattuck		16 66
71	4.6	(	T. I. Mairs		33 38
$\frac{71}{72}$	Sept.	15	A. C. McClurg & Co	Shuttle Expenses. Flasks, etc. Chemicals, etc. Services Cutting samples Cider mill, etc. Postal guide. Linoleum, etc. Hardware, etc. Pine lumber Paints, oils, etc. Lumber and coal. Pay rolls, etc. August, 1897. Salary for September, 1897.	3 00
73	~~₽;;	10	P. G. Holden	Expenses	11 68
74			Eimer & Amend	Flasks etc	9 98
74 75			Richards & Co.	Chemicals, etc.	85 16
76			H. N. Woodward	Services	44 57
77		Ì	E. A. Riehl	Cutting samples	44 57 3 20
78		- 1	Montgomery Ward & Co	Cider mill etc	3 20 11 46
79			George F Lasher	Postal guide	2 50 37 88 12 20
			F. K. Robeson & Bro	Linoleum etc	37 8
80 81 82 83 84 85 86		-	Hubbard & Sons	Hardware etc	12 20
82			Miller & Leming	Pine lumber	1 60
83			H. Swannell	Paints oils etc	1 60 14 25 19 35
84	• •		Charles A Besore	Lumber and coal	19 3
85	• •		S. W. Shattuck Business Mor	Pay rolls etc. Angust 1897	404 99
86	Sept.	30	T. J. Burrill	Salary for Sentember 1897	50 00
.87	oop;	90	W. L. Pillsbury	Durang for Deptember, 1001	25 00
87 88			E. Davenport		91 67
89	• •	- 1	D. McIntosh		25 00
90			P. G. Holden J. C. Blair W. J. Fraser C. G. Hopkins G. P. Clinton		54 17
91	• •	i	J. C. Blair		45 84
92			W. J. Fraser		37 50
93		- 1	C. G. Hopkins		125 00
94	4.4		G. P. Clinton		
95		- 1	Kate McIntyre	Hardware Shoeing, etc. Expenses.	55 00
96			S. W. Shattuck	**	16 67
97			T. I. Mairs	**	41 67
98	٠.	- 1	Henry Trevett	Hardware	13 15 10 40
99	• •		Campbell & Spalding	Shoeing, etc	10 40
100			E. Davenport	Expenses	4 78
101	• •	- 1	Ottenheimer & Co	Overalls	1 00
102	October :	15	Vermont Farm Machine Co	Expenses. Overalls Babcock heater, etc. Ice. Supplies Rings Blankets, collars, etc. Galvanized iron *etc	12 72 26 20 10 65
103			Twin City Ice & Cold St'r'ge Co	Ice	26 20
104	• •	- 1	A. P. Cunningham & Son	Supplies	10 65
105	4.4		De Laval Separator Co	Rings	1 68
106	• •	J	John F. Miller	Blankets, collars, etc	6 00
	• •		T. H. Trevett	Galvanized iron.ºetc	8 15
108	• •	- 1	E. Henry	Brooms, buckets, etc	5 68 12 20 4 93
109	• •	1	C. A. Besore	Lumber, etc	12 20
110		- 1	Gustav E. Stechert	Books	4 93
111	• •	İ	Champaign County Herald	Record books, etc	6 20 3 00
112	4.4	Į	Robinson & Burr	Brass rings	3 00
113			W. W. Walls & Co	Lumber	1 40
114	• •		D. H. Lloyde & Son	Books, pens, etc	5 69 11 77
115	••	ļ	Alexander Lumber Co	Lumber	11 77
116	• •		G. C. Willis	Flannel, toweling, etc	6 29
117	••		Hubbard & Sons	Locks, fittings, etc	14 65
118	••	ì	George Besore	Oats, bran, etc	14 91
119	••	- 1	Knowlton & Bennett	Paints, oils, etc	12 40
120	• •	- 1	Martin Bibbius	Sand	1 20
121	* *	-	Eimer & Amend	Repairs of polariscope, etc	51 00
122	- "		George A. Garrison	Oats	17 67
123	Oct. :	30	T, J. Burrill	Salary for October, 1897	50 00
144	**	- 1	W. L. Pillsbury	Supplies Rings. Blankets, collars, etc. Galvanized iron'etc Brooms, buckets, etc. Lumber, etc. Bross rings Lumber. Books, pens, etc. Lumber. Flannel, toweling, etc. Locks, fittings, etc Oats, bran, etc. Paints, oils, etc Sand. Repairs of polariscope, etc. Oats. Salary for October, 1897.	25 00
195	• •		E. Davenport	**	91 66
125 126					25 00

Date.		To whom paid.	For what.	Amo
1897.				
Oct	30	P G Holden	Salary for October, 1897.  Pay rolls, men, September, 1897, etc. Expenses for board of men. Blankets, etc Letter books, etc. Wood specimens. Moving safe. Labor, cutting corn, etc. Condenser tubes.	\$8
000.	00	J C Blair	Dalai y 101 October, 100	4
•••		W. J. Fraser		
		C. G. Hopkins		12
••		G. P. Clinton		8
• •		Kate McIntyre	**	1 8
		S. W. Shattuck	**	1 1
::		T. I. Mairs		1 4
		S. W. Shattuck, Business Mgr.	Pay rolls, men, September, 1897, etc.	54
Nov.	15	S. E. Ball	Expenses for board of men	
		G. C. Willis	Blankets, etc	:
		Pantagraph Print, and Stat. Co	Letter books, etc	]
		William Paradan	Moving gofo	2
		Samuel Register	Labor autting corn ata	1
		Richards & Co	Condenser tubes	1 3
		Fuller & Fuller (lo	Acids	1
		J Hamilton & Son	Lumber	1 :
		Torrey Botanical Club	Subscription	1 -
		George Besore	Oats and feed	
		Mittendorf & Kiler	Mattress, etc	
		C. J. Sabin	Twine, etc	1
6.6		John F. Miller	Buggy, etc	1 4
**		Hubbard & Sons	Wheelbarrow, pipe, etc	:
		A. H. Barber & Co	Labor, cutting corn, etc. Condenser tubes. Acids. Lumber. Subscription. Oats and feed. Mattress. etc. Twine, etc. Buggy, etc. Wheelbarrow, pipe, etc. Jars, brushes, etc. Lumber. Postage. Chemicals, light, water, etc. Freight, express, etc.	1
::		C. A. Besore	Lumber	
		W. W. Lindley	Postage Chemicals, light, water, etc. Freight, express, etc. Pay roll of men, October, 1897 Salary for November, 1897.	1 2
		S. W. Shattuck, Business Mgr.	Chemicals, light, water, etc	1
1		1	Freight, express, etc	_3
		1	Pay roll of men, October, 1897	5
Nov.	30	T. J. Burrill W. L. Pillsbury E. Davenport.	Salary for November, 1897	1 !
1		W. L. Pilisbury		4
::		E. Davenport	:: :: :::::::::::::::::::::::::::::::::	
		B. Davenport D. McIntosh P. G. Holden J. C. Blair W. J. Fraser C. G. Hopkins G. P. Clinton Koto Malataria	· · · · · · · · · · · · · · · · · · ·	
		I C Bloin		1
		W I Fregar		
		C G Honkins		
• •		G. P. Clinton		1 7
		Kate McIntyre		
		S. W. Shattuck	**	
Dec:	20	Henry Fisher	Cow	1
1		N. B. Morrison	Expenses	1 :
		Hubbard & Sons	Milk can	. (
		Bevis & Co	Lumber	. [
		C. & U. Phœnix Telephone Co.	Services to December 15, 1897	
		Champaign County Heraia	Printing	
Nov.	30	Gustav E. Stechert	Books	١.
l.		Unaries A. Besore	Dog wells men Namenhan 1907	
	94	T I Burnill	Falory for Dogombon 1997, etc.	3
Dec:	οŢ	W I. Dillahuw	Parary for December, 1991	
		E Devenment	Cow. Expenses. Milk can. Lumber. Services to December 15, 1897. Printing Books. Lumber, etc. Pay rolls, men, November, 1897, etc. Salary for December, 1897.	
**		D MaIntoch		
••		P. G. Holden		
• •		W. J. Fraser. C. G. Hopkins G. P. Clinton Kate McIntyre		
		W. J. Fraser		
• •		C. G. Hopkins		1
		G. P. Clinton		.) .
• •		Kate McIntyre		
4.4		S. W. Shattuck		
• • •		Isaac S. Raymond	Expenses	.}
1909				1
Jan.	7	E. A. Riehl	Expenses	. :
1 .				
.1		W. J. Frazer		
1		W. J. Frazer P. G. Holden E. Davenport.	Lamp, etc. Services to March 15, 1898. Ribbons Thermometer. Lumber, etc Straw and milk Ice Board	
::		E. Davenport	T	-
:		C. H. Baddeley	Lamp, etc	1
::		O. & U. Phœnix Telephone Co	Services to March 15, 1898	1
		Honey I Groon	Thornometer	1
::		Charles A Reserve	Lumbon eta	
		S R Hadras	Straw and milk	
		Twin City Inc & Cold Stower Co	Tao	
1		17 win Sirk ream Cour prot Be Co	Donal	1

No.	Date.	To whom.	For what.	Amount.
	1898.		Hay carrier, etc. Salt, etc. Paints, oils, etc. Jars, etc. Rubber coat. Gilass, etc. Repairing sled. Sacks. Postage. Pay rolls, December, 1897, etc. Salary for January, 1898.  Bran. Linseed cake, etc. Picture frames. Objective, materials, etc. Apparatus. Nursery stock Detail paper, etc. Lantern, gold dust, etc. Toweling, etc. Bottles, etc. Baskets. Services. Printing circulars, etc. Half tones. Expenses. Subscription to January 22, 1899. to December 31, 1898. Book. Printing vouchers. Glass. Hardware. Bridle, etc. Pulley, etc. Cement, sand, plastering, etc. Rubber boots. Stove. Sundry items. Labor on experiment fields. Rebate. Photographic materials. Nessler tubes, etc. Ducking. Set of herd books. Subscriptions. Roofing, linings, etc. Hay and straw. Pay-rolls, January, 1898, etc. Salary for February, 1898.	}
202	Jan. 7	Hubbard & Sons	Hay carrier, etc	32 74
403	::	Kariher Grocery Co	Salt, etc	1 40
204 205	**	William Price Estate	Paints, oils, etc	16 50
206		Stern Bros	Rubber cost	42 58
207	**	Knowlton & Bennett	Glass, etc.	5 00 11 20
208	**	Frison Bros	Repairing sled	5 00 3 25
209	Jan. 15	Kariher Grocery Co	Sacks	3 25
210		W. W. Lindley	Postage	10 00
$\frac{211}{212}$	Ton 91	S. W. Shattuck, Business Mgr.	Pay rolls, December, 1897, etc	406 94
213	Jan <sub>:</sub> , 31	W I Pillebuwy	Salary for January, 1898	50 00 25 00
214	4.4	E. Davenport	.,	95 83
215	••	D. McIntosh	**	25 00
216	• •	P. G. Holden	**	54 16
217	- :: 1	J. C. Blair	] ::	45 83
218 219		C. G. Hopkins		125 00
219		W.J. rraser		37 50 83 33
221		Kate McIntyre		55 00
222	• •	S. W. Shattuck		16 66
223	• •	McFadden Bros	Bran	4 20
224	::	Swannell Mfg. Co	Linseed cake, etc	29 50 2 95
225	:: 1	Mittendorf & Kiler	Picture frames	2 95
226 227		Bausch & Lomb Optical Co	Objective, materials, etc	61 73
226	• •	Phonix Nursery Co	Margory etoek	4 00 1 00
229		D. H. Lloyde & Son.	Detail paper, etc.	14 75
230	••	C. H. Baddeley	Lantern, gold dust, etc	6 75
231	**	G. C. Willis	Toweling, etc	12 07
232	**	Creamery Package Mfg Co	Bottles, etc	17 93
233		L. K. Howse & Co	Baskets	4 45
234		Chammaian County Hanald	Services	25 00
236		J Many & Co	Half tonge	31 60 27 60
237	••	J. C. Blair	Expenses	21 83
238	"	Chicago Produce Co	Subscription to January 22, 1899	1 50
239	**	Thomas Meehan & Sons	to December 31, 1898	1 50 2 00
240		Register Co	Book	5 00
241 242	4.6	Gustav E. Stechert	Duinting was about	1 65
213		C A Hunt	Class	3 50
244		Hubbard & Sons	Hardware.	4 80 38 20 7 90
245	**	John F. Miller	Bridle, etc.	7 90
246	*:	Champaign Mach. and Sup. Co.	Pulley, etc	2 61
247	::	John B. Bennett,	Cement, sand, plastering, etc	23 25 3 50
248 249		J. W. Spaulding & Son	Rubber boots	2 00
250		S W Shattuck husiness mer	Sunday itoms	3 88
251	Feb. 28	H. N. Woodward	Labor on experiment fields	17 51
		N. O. Nelson	Rebate	3 50
253 254	::	H. Leiber Co	Photographic materials	20 24
254		Richards & Co	Nessler tubes, etc	13 54
255 256	4.4	Montgomery Ward & Co	Ducking.	3 00
257		G E Stochort	Set of nerd books	25 00 150 55
258	••	Hulbard & Sons	Roofing linings etc	47 76
259	• •	S. B. Hedges	Hav and straw	24 32
260	• •	S. W. Shattuck, business mgr.	Pay-rolls, January, 1898, etc	335 89
261	::	<u>T.</u> J. Burrill	Salary for February, 1898	50 00
262		W. L. Pillsbury		25 00
263 264		D. Maintagh		95 83
265		P G Holden	44	25 00 54 17
266		J. C. Blair		45 83
267	••	D. McIntosh. P. G. Holden J. C. Blair C. G. Hopkins.		45 83 125 00
268	I	W. J. Fraser		37 50
269				83 33
270		Kate McIntyre		55 00
271	March 15	o. w. Snattuck, Business mgr.	Hand negisters	16 67 54 00
273	Taron 19	American Jersey Cattle Club	Subscription	1 10
274		W. W. Lindley	Postage stamps	20 00
275	**	Eichberg & Baer	Rugs	1 00
276	**	C. H. Baddely	Lamp, chimneys, etc	6 20
277		A. E. Wuesteman	Herd registers Subscription Postage stamps. Rugs Lamp, chimneys, etc Clock. Freight, express. drayage.	1 07
278	1.	n. o. whoer	r reight, express. drayage	16 53

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No.	Date.		To whom.	For what.	Amoun
	1898				
279 280	March	15	The Alexander Lumber Co	Lumber Kerosene, cotton, etc. Hardware	\$93 ( 61 4
281			Henry Swannell	Kerosene, cotton, etc	4.9
282	••		T. H. Trevett	Hardware	42 4 10 8
283			H. H. Trevett. H. Bubbard & Sons H. Swannell E. Henry. Creamery Package Mfg. Co Cunningham Bros	Welsbach lights, etc Note books, etc. Salt, soda, soap, etc Brushes, pails, etc	10 8
284			H. Swannell	Note books, etc	4 (
285 286	4.6		Creamary Package Mfg Co	Salt, Soda, Soap, etc	13 6
287			Cunningham Bros		10
288			George Besore	Bran. oats. etc	151 2
289	• •		George Besore Edward B. Voorhees	Membership, A. A. A. C. and M. S	151 2 10 (
290			The Gazette Henry Heil Chemical Co Champaign Mach. and Sup. Co.	Labels Tubes, forceps, etc. Centrifuge Belting, pulleys, etc. Book	1 (
291 292			Champaign Mach and Sun Co	Tubes, forceps, etc	11 1
293	• •		Robinson & Rurr	Relting pulleys ate	45 E 26 T
294	• •		J. B. Ellis	Book	26 7 7 1
295	**		Hubbard & Sons	Hardware	11 6
296			Morrill & Morley	Pump, etc	37 4
297	::		Fuller & Fuller	Acid, etc	3 9
298 299	**		Champaign Mach. and Sup. Co. Robinson & Burr. J. B. Ellis Hubbard & Sons Morrill & Morley Fuller & Fuller G. A. Garrison Knowlton & Bennett Isaac S. Raymond E. A. Riehl S. W. Shattuck, business mgr. T. J. Burrill	Hardware. Pump, etc Acid, etc Oats Oil, shellac, etc.	76 ( 5 2
300			Isaac S. Raymond	Expenses	4 (
301	* *		E. A. Riehl.	Expenses	14 (
302	4.4		S. W. Shattuck, business mgr.	Express, freight, etc. Pay-roll, men, February, 1898. Salary, March, 1898.	48 8
303			S. W. Shattuck, business mgr.	Pay-roll, men. February, 1898	349 (
304	March	31	T. J. Burrill W. L. Pillsbury E. Davenport D. McIntosh	Salary, March, 1898	50 (
305 306			W. L. Pilisbury		25 ( 95 8
307	4.4		D. McIntosh		25 (
308	• •		P. G. Holden		54
309	• •		P. G. Holden J. C. Blair. C. G. Hopkins W. J. Fraser G. P. Clinton		45 8
310	**		C. G. Hopkins	:: ::::::::::::::::::::::::::::::::::::	125
311			W. J. Fraser		37 83
$\frac{312}{313}$	• •		Kata MaIntura	" " …	55 G
314			S. W. Shattuck		1o (
315			Kate McIntyre S. W. Shattuck Hack & Anderson	Printing. etc.	707
316	April	15	William Price estate	Printing, etc	1o (
317	• • •		C. E. Chapman Farmers Handy Wagon Co	Painting and papering rooms	49 (
318 319			Hubbard & Sons	Extra parts for wagon	26 5 37 9
320	6.6		TI-1	Hardware Wagon parts and repairing	3 7
321		-	Charles Lindley	Oats	25 8
322	• •	-	C. & U. Phœnix Telephone Co.	Oats Telephone services	3 (
323			V. W. Shuck	Shears, stone, etc	1 9
324	• •		Charles Lindley. C. & U. Phenix Telephone Co. V. W. Shuck. Eugene Dietzgen Co Champaign County Herald. E. Dayenport	Slide rule	3 ( 19 5
326		- 1	E. Davenport	Expenses etc	17 8
327			P. G. Holden	Printing Expenses, etc	17 8 18 6
328	4.6	- {	G. P. Clinton	4.6	2 3
329			J. A. Campbell & Co	Chop	2 3
330			J. C. Vaughan	Seeds	4 2
331	**		A C McClurg & Co	Multiplication hook	7 8 2 8
333	• •		E. Davenbort. P. G. Holden G. P. Clinton J. A. Campbell & Co J. C. Vaughan H. M. Simpson & Sons A. C. McClurg & Co Max Kaehler & Martini	Seeds Seeds and plants Multiplication book Chemicals Separator parts Book	16
334		- 1	DeLaval Separator Co	Separator parts	1 4
335		- 1	Mh a Claratta	Book	2 9
36			W. W. Lindley	Stamps	10 (
37	• •		Urbana Planing Mill	Sawing wood	1 5 1 5
38 39			Charles A Reserve	Lumber eta	38 6
40	• •	-	Mittendorf & Kiler	Chiffonier, etc.	14 8
41	4.4		Bausch & Lomb Optical Co	Stamps Sawing wood Dyeing blankets Lumber etc Chiffonier, etc Thermometer and razor	
42		].	A. S. Nelson & Sons	Sacks and seeds	3 4
43		- [	Walker & Mulliken	Chair, curtains, etc. Express and freight. Pay-roll, men March, 1898.	13 8
44	::	- 13	S. W. Shattuck, business mgr.	Express and freight	26 2 472 4
45 46	April	30	S W Shattuck business mgr.	Rottle rocks etc	13 5
47	crhiti e	90	H. C. Porter	Grain bags	2 2
48		1	C. H. Baddeley	Seeds	4. 8
49	• •	١,	Jos. Kuhn & Son	Rubber coat	5 (
50	• •		Walker & Mulliken	Chair, curtains, etc. Express and freight. Pay-roll, men March, 1898. Bottle racks, etc. Grain bags Seeds Rubber coat. Repairing chair. Salary, April, 1898.	1 (
51		1.	r. J. Burrill	Salary, April. 1898	50 (
52 53		- 1	W. L. Fillsbury		25 ( 95 8
54		- 1	F. J. Burrill W. L. Pillsbury E. Davenport D. McIntosh	**	25 (
		- 17	P. G. Holden		54 1
55				., .,	45 8

•	Date.		To whom.	For what.	Amo
Ī	1898.			Salary, April, 1898.  Stock Seed Stock Corn Seeds Stock Oil Rugs Pear stock Corn Seed	
7 A	pril	30	W J Freger	Salary April 1898	8
3 1	prii	00	G P Clinton	Sanary, reprin, 1000	١ '
3	4 4		Kate McIntyre	** **	1
ŏМ	ay,	14	S. W. Shattnek	** **	
i			Hammond & Willard	Stock	ì
2	4 4		J. W. Griesemer	~	1
3	• •		Hiram Howard	Seed	
1	• •		Silas Wilson Co	Stock	1
5			Augustine & Co	**	
3	4.6		Phœnix Nursery Co		
7			T. V. Munson & Son	~ · · · · · · · · · · · · · · · · · · ·	1
3			A. W. Livingston's Sons	Seeds	1
9			J. W. Kerr	Stock	
)	4.4		J. C. Suffern	Corn	1
	6.6		Willett & Gray	Seeds	
2			The Storms & Hamilton Co.	Drock	1
3			W A Wetson & Co		
Į.	**		Filmong a & Popur		ļ
5			Stork Brog Mingonias & Onch Co		
			Standard Oil Co	Oil	l
7			Eighborg & Roon	Ruge	
			A M Woodward & Co	Pagr stock	
	4.4		Iowa Seed Co	Corn	
			I B Purrows	Seed	l
	4.4		Meyer & Raapke J. C. Vaughan S. B. Hedges	Scell Seed Straw and hay Grinding, etc. Hay Book Harness, etc Sponges, etc Mitre box, etc Carpenter work Advertising, Frinishing desk Laboratory supplies Freight, express and drayage. Pay roll for April, 1898 Salary, May, 1898	
		i	Meyer & Raanke	Seed	ì
	4.4		J. C. Vaughan	Octor	
			S. B. Hedges	Straw and hav	
:			R. T. Robinson	Grinding, etc.	
1	4.4		Pattengale Bros	Hav	
	4 4		Philadelphia Book Co	Book	
ıl —	* *		J. F. Miller	Harness, etc	
r)			Knowlton & Bennett	Sponges, etc	
			Wm. Miebach & Co	Mitre box, etc	
			J. C. Sedgwick	Carpenter work	
1	• •		The Sanders Publishing Co	Advertising	
	• • •	- 1	G. R. Petty & Co	Finishing desk	
		- 1	Richards & Co	Laboratory supplies	2
			S. W. Shattuck, Business Mgr.	Freight, express and drayage	
M	ay,	31	m	Pay roll for April, 1898	6
	4.4	- 1	T. J. Burrill	Salary, May, 1898	
	6.6		W. L. Pilisbury		
l			E. Davenport		
			D. McIntosh		
	4.6	- 1	I C Bloin		
			W J Frager		
i			G. P. Clinton		
	4.4		Kate McIntyre	**	
1	4 4	- 1	S. W. Shattuck	.,	
Jii	ne	15	The Gazette	Printing	
ا ا	۲,		Fuller & Fuller Co	Vitriol	
			A. D. Barber	Expenses	
		ŀ	Isaac S. Raymond	-,,	
			N. B. Morrison	4.4	
			W. W. Lindley	Postage	
		- 1	Fred'k L. Houghton	Book	
			Holsteir-Friesian Asso. of Am.	Publication	:
	• •	1	Dr. Giovanni Briosi	Parasitic fungi	:
	••	-  -	J. Manz & Co	Diagram	
	• • • • • • • • • • • • • • • • • • • •	- 1	Champaign County Herald	Printing	
		- ]-	Matnews Bros	Hay and bran	
	• • • • • • • • • • • • • • • • • • • •	1	willer & Leming	Snavings	
		- [	Unas. Lindley	yats	:
		- 1	K. 1. Kobinson	Oats and grinding	3
		1	Estate of J. A. Campbell & Co.	nay, etc	
		- 1.	n. meradden & Bro	Bran, etc	
	**	- 13	S. Douglas	may	
		- [!	Oreamery Package Mfg. Co	Printing Vitriol Expenses Postage Book Publication Parasitic fungi Diagram Printing Hay aid bran Shavings Oats and grinding Hay etc Bran, etc Hay Mik jars Clock Harness Waste and glasses Steel tape Chemicals Lumber	
		- 1;	L. U Garwood	Hanneda	
	* *	- [	Pobinson & Party	Wests and classes	1
	6.6	- [:	Rugging & Burr	waste and glasses	
١	4.6	- 1:	Wiston Kookly & Co	Oberminals	
		1	VICTOR POECHLOS CO	Onemicais	- :

lo.	Date.		Date.		Date. To whom. For what.		Amoun
	1898.	Ī					
133	June 1	15	J C Vanghan	Seeds	\$2 5		
134	ո առել յ	10	Goo A Sweet Nurgery Co	Plums	2 8		
135	• • •			Plum trees	1 1		
136		- 1	Green's Vargory Co	Nursery stock	. 1		
137				Labor, oats, etc	3		
138				Painting signs	16		
139				Chemicals, etc	10		
		- 1	Danach & Lomb Ontical Co	Apparatus	11		
140			Dausen & Lomb Optical Co	Apparatus	11		
141		- 1	s. w. Shattuck, pusiness mgr.	Freight, drayage, etc			
142				Pay rolls for May, 1898	658		
143			M T D 111	Express etc.	36		
	June 3	Sυ	T. J. Burrill	Salary, June, 1898	50		
145		- 1	W. L. Phisoury		25		
46	::		E. Davenport	., .,	95		
47			D. McIntosh		25		
48			P. G. Holden		54		
49		ı	J. C. Blair		45		
50	•••		W. J. Frazer		37		
51	• •	- 1	G. P. Clinton		83		
52			C. G. Hopkins	., .,	125		
53	• •		Kate McIntyre	· · · · · · · · · · · · · · · · · · ·	55		
54		- 1	S. W. Shattuck	**	16		
55			H. M. Dunlan	Making cider, barrels, etc	85		
56	• •	ı	F. M. LeRov	Hay and stray	77		
57			Thomas Naughton	Hay and stray Toning and mounting prints	4		
58		- {	Chromery Package & Mfg Co.	Milk jars	9		
59	•••	- 1	Samual Bartlay	Labor	l š		
60			H N Woodword	Labor and material	50		
61			Ed. Ford	Hay.	3		
$\frac{62}{62}$		- 1	C A Donaired	Pasturing cattle			
63		1	Hubbard & Sons	Labor and material	51		
			C W Chattuak Dusings Man		1 1		
64			D. W. Shamuck, Dusiness Mgr.	Sunary items	8		
65 CC			n. S. Wilber	Freight and drayage			
66		1	H. Swannell	Sponges, oil, etc	8		
67			Karmer Grocery Co	Sacks and lye	2		
68	::		Knowiton & Bennett	Paint, etc	5		
69		į	Alexander Lumber Co	Lime, lumber, etc	23		
70		1	J. C. Vaughan	Seed, etc	1		
71				Printing, etc			
72	••	- (	C, A. Hunt	Glass, oil, etc	12		
73			E. H. Sargent & Co	Peptone	' 1		
74	• •			Lumber, etc			

# SCHOOL OF PHARMACY WARRANTS.

No.	Date.	To whom.	For what.	Amount
	1897.			
1	July,	10 J. H. Clough	Rent, April, 1897. Salary, May and July, 1897. Petty expenses Rebates on deposit. Expenses	\$300 9
2		W. B. Day	Salary, May and July, 1897	150 0
3		Henry Eulert		100 0
4		w. B. pay, Actuary	Petty expenses	36 1 199 6
0		II Common all	Repates on deposit	199 6
0		H. Swannell	Expenses	4 7
6		Theo C Looks		20 1
8		Chas A Kafaid	**	83
10		W M Goodman	Printing questions.	4 5
11		E I Anthony	Pomphlete onvolonce etc	68 7
19		John Malogen & Co	Pamphlets, envelopes, etc	1 1
13		Turney & Jones Co	Coal	18 0
14		J. C. Craig Superintendent	Water	5 2
15	• •	Wendell & Co.	Medals	30 0
16	"	S. W. Shattuck, business mg	r. Telephone charges	31 2
17	• • •	Mandel Bros	rTelephone charges Ribbons	2.5
18	•••	H. S. Cooper	Calcimining etc.	116 0
19	July	31 W. B. Day	Salary, July, 1897	75 0
20		Henry Eulert		50 0
21	July	W. B. Day, Actuary	Salary, July, 1897 Petty expenses	70 9
22	"	J. W. Wilson	Cabinet	38 0

٥.	Date.		To whom.	For what.	Amou
İ	1007				1
3	1897. July	21	W T Keener Co	Directory. Printing warrant book. Cuts. Expenses. Legal services Curtains Matting, etc. Printing. Envelopes and printing. Filter, pump, etc. Paints, ammonia, etc. Postage stamps. Expenses to September 15, 1898. Salary, August and September, 1897	8
3	July,	91	Goes Lithographing Co	Printing warrant book	Ψ
5			Pontiac Eng & Pub Co	Cuts.	
6	Oct	2	A. W. Palmer	Expenses	1
7	· · · ·	_	S. A. Reynolds	Legal services	3
ėl.	4.4		Alex. H. Revell & Co	Curtains	Ĭ
9	* *		Mandel Bros	Matting, etc	2
0	• •		G. P. Englehart & Co	Printing	1
1	• •		Donohue & Henneberry	_ **	27
2			E. J. Anthony	Envelopes and printing	1
3 4 5			Richards & Co	Filter, pump, etc	2
4			Fuller & Fuller Co	Paints, ammonia, etc	2
2			S. W. Shattuck, Business Mgr.	Postage stamps	18
<u>6</u>			W. B. Day, Actuary	Expenses to September 15, 1898	8
7			W. D. Day	Salary, August and September, 1897	15
8	Oct.	15	Dayagists? Circular	Advantigoment	3
۱۱۶	Jet.	19	Druggisis Circular	Adverusement	9
			pewson-AmerikanischeApoin-	Salary, August and September, 1897 Advertisement.	1
1	4.6		eker ZeitungPharmace Co.	**	2
2			Merck & Co		
3			American Druggist Pub. Co	Chairs, etc. Asphaltum, etc. Plumbing, gas fittings, etc. Repairing set of tubes, etc. Ammonia Wire cloth. Balance, tubing, chemicals. Printing invitations	2
4			D. O. Hynes & Co.	**	3
5	4 6		J. S. Ford Johnson & Co	Chairs, etc	ž
6			Fuller & Fuller Co	Asphaltum, etc	-
7	6.6		John McLogan	Plumbing, gas fittings, etc	3
3			Western Steam Boiler Works	Repairing set of tubes, etc	3
9			Chappell Chemical Co	Ammonia	}
0			Gilbert & Bennett Mfg. Co	Wire cloth	
1			Richards & Co	Balance, tubing, chemicals Printing invitations	44
2			E. J. Anthony	Printing invitations	2
3			P. F. Pettibone & Co	Supplies, etc	ង
4			Chicago Telephone Co	Services to January, 1898	3
5			F. W. A. KOWIES	Supplies	4
6	) at	90	W. B. Day, Actuary	Perty expenses to Oct. 15, 1897	15
7	Oct.	30	C S N Hellborg	Salary, October, 1897	14
9	4 4		F M Goodman		13
ő	4.4		Frank S Hereth		7
1			L. I. Schreiner	., .,	5
2	4 4		E. N. Gathercoal		5
3			G. E. Chase		1
1			W. B. Day	**	$\tilde{9}$
5		1	Henry Eulert	· · · · · · · · · · · · · · · · · · ·	5
ei.			J. H. Clough	Rent, 6 months, to November, 1897	1,20
7   1	Nov.	15	Frank S. Hereth	Balance salary, June 30, 1897	2
٦(			C. S. N. Hallberg	**	4
9[	• • •		W A. Puckner		5
O			F. M. Goodman		5
			Fuller & Fuller Co	Chemicals	15
(	::	- 1	Searie & Hereth Co	Drugs	١.,
3			Megistered Pharmacist	Advertisement	1
5	**		Meyer Bros. Druggist	F = 1 = 1 = -4 =	1
2	4.4		On & Lockett flord C-	Liabers, etc	1
6	4.6		Poshody Cool Co	Hand and	1 31
	4.4		A C. McClurg & Co	Tohlate	31
31			Marcantila Printing Co	Printing	1
3			R. W. McCready Cork Co.	Corks	2
íl			Mandel Bros	Cloth	1
2		j	Lehn & Fink	Specimens of drugs	9
3	4.4		E. J. Anthony	Cards	~
i	4.4		A. M. Foster & Co	Prescriptions, boxes	2
5	4.4		Richards & Co	Ammonia Wire cloth Balance, tubing, chemicals Printing invitations Supplies. Surpiles. Petty expenses to Oct. 15, 1897. Salary, October, 1897   Rent, 6 months, to November, 1897. Balance salary, June 30, 1897   Chemicals. Drugs Advertisement.  Labels, etc. Files Hard coal. Tablets Printing Corks Cloth Specimens of drugs Cards Prescriptions, boxes Chemicals. Prescriptions, boxes Chemicals. Paper. Stencils, etc. Galvanized iron, labor, etc. Salary, November, 1897.	27 27
3	• •		Donohue & Henneberry	Paper	
4 5 7			Thayer & Jackson Station'v Co	Stencils, etc	
8	• •		S. B. Frank	Galvanized iron, labor, etc	3
1 (	Nov.	30	W. A. Puckner	Salary, November, 1897	15
71	• •		C. S. N. Hallberg	74	14
1	• •		F. M. Goodman	44	13
2	••		Frank S. Hereth		7
3	• • • • • • • • • • • • • • • • • • • •		Frank S. Herein L. I. Schreiner. E. N. Gathercoal Geo. E. Case W. B. Day Henry Eulert.	44 44	5
1	::		த். N. Gathercoal	44	
-1			Geo. E. Case	44	9
3				**	

# 

Date.		To whom.	For what.	Amou
1897.				
8 Nov.	30	J. H. Clough	Rent of huilding, November 1897	\$200
9	00	H. W. Ralph, Agent	Typewriter and case.	76
ŏ  ''		W. B. Day, Actuary	Petty expenses	3
Dec.	20	S. B. Traub	Castings for stove	1
2		Henry R. Strong	Advertisement	25
3 ::		E. J. Anthony	Envelopes	1
4 ::		Donohue & Henneberry	Paper	14
5		A. M. Foster	Chemicals	14
7		Pichards & Co	Tablets	13
8 "	- 1	Fuller & Fuller Co	Chamianla	19
Dec.	31	W. A. Puckner	Salary December 1897	150
0	01	C. S. N. Hallberg	Dataly, December, 100	142
i "		F. M. Goodman	'' '' '''	138
2	1	Frank S. Hereth	44 44	7.
3 ''	- 1	L. I. Schreiner		5'
1 ::	- 1	E. N. Gathercoal	<u> </u>	50
5		Geo. E. Case	:: :: :: :: :: :: :: :: :: :: :: :: ::	14
6	İ	w. g. Day		21
7		Honor Enlant		75
8		I H Clough	Ront of building December 1907	50 200
1898.	1	9. 11. O10ugu	Rent of building, November, 1897 Typewriter and case. Petty expenses. Castings for stove. Advertisement. Envelopes. Paper. Chemicals. Tablets. Tubing, flasks, etc. Chemicals. Salary, December, 1897	200
Jan.	15	E. J. Anthony	Printing Sprinkling Expenses, gas, water, etc. Paper and stencils Advertisement Glass, labels, etc Rubber tubing Services Chemicals Petty expenses Salary, January, 1898	:
1 an:	10	T. P. Brankin	Sprinkling	1
		W. B. Day, actuary	Expenses, gas, water, etc	6
3	- 1	Thaver & Jackson Station'v Co	Paper and stencils	ľ
í ··	- 1	Nebraska State Phar. Ass'n	Advertisement	
::	- 1	C. P. Englehard & Co	**	3
3	- 1	Price Bros. & Co	Glass, labels, etc	18
::		Richards & Co	Rubber tubing	
3 ::		Chicago Tel. Co	Services	3 1
3	- 1	W. P. Downstram	Unemicals	38
ll Tan	9.1	W. D. Day, actuary	Colony Johnson 1909	150
Jan.	91	C S N Hallbarg	Salary, January, 1030	143
<u>.</u>	- 1	F. M. Goodman		13
í		Frank S. Hereth		7
• •	- 1	L. I. Schreiner		5
3		E. N. Gathercoal	**	50
::		Geo. E. Case	**	14
3(	- 1	W. B. Day	';' ';'	90
1		Frank S. Hereth L. I. Schreiner E. N. Gathercoal Geo. E. Case W. B. Day Henry Eulert J. H. Clough W. A. Puckner C. S. N. Hallberg F. M. Goodman Frank S. Hereth L. I. Schreiner	D	50
) ···	90	J. H. Clough	Rent, January, 1896	200 150
Feb:	48	C S N Hellborg	Salary, February, 1898	142
	- 1	F M Goodman	4. 4.	138
	- 1	Frank S. Hereth	., .,	7
		L. I. Schreiner	**	5
	- 1	E. N. Gathercoal	44 44	50
• •	- 1	Geo. E. Case	**	14
::		W. B. Day	:: ::	96
"		Henry Eulert	Rent, February, 1898. Expenses to February 19, 1898. Powder boxes. Time service to March 31, 1898. Expenses. Tin boxes. Paper. Beakers, filters, etc. Chemicals. Salary, March, 1898.	50
2 ::		J. H. Clough	Kent, February, 1898	200
4		W. D. Day, actuary	Expenses to February 19, 1898	48
		Western Union Tel Co	Time service to Morch 21 1909	8
::		A W Palmar	Evnances	11
		Pictorial Printing Co	Tin boxes	2
		Donohue & Henneberry	Paper	4
		Richards & Co	Beakers, filters, etc	4
• • •	- }	Fuller & Fuller Co	Chemicals	62
March	31	W. A. Puckner	Salary, March, 1898	150
::	1	C. S. N. Hallberg		142
::	ı	F. M. Goodman	**	135
::		Frank S. Hereth	**	7.1
::	- 1	L. I. Schreiner		57 50
::		Gao E Casa	**	14
• •		W. B. Day	**	96
	- 1	Henry Eulert	44	50
• • •		J. H. Clough	Rent. March. 1898	200
April	30	W. A. Puckner	Rent, March, 1898 Salary, April, 1898	150
	- 1	C S N Hallherg		142
	- 1	F. M. Goodman	44	135

Vо.	Date.		To whom.	For what.	Amoun
	1898.				Ī
173	1090.		T T Cobustan	Calama Amuil 1000	\$57
			L. I. Schreiner	Salary, April, 1898	
174			E. N. Garnercoal		50
175			Geo. E. Case		14
176			W. B. Day		96
177	• • •		Henry Eulert	Rent, April, 1898	50
178			J. H. Clough	Rent, April, 1898	200
179			W. B. Day, actuary	Petty expenses	35
180				Paper	
181	• •		The Inter Ocean	Advertisement	5
182			The Chicago Tulenhone Co	Sarvigo	31
183			T I Abol & Co	Service	1
			Older Description	Oblandars	4
184	• •		Clark Bros	Chloroform Chemicals, etc	4
185			Fuller & Fuller Co	Chemicais, etc	27
186				Diplomas	
87			Thayer & Jackson Station'y Co	Ink, etc	3
88	• •		Donohue & Henneberry	Pads and paper	6
89	Мау	14	W. B. Day, actuary	Laboratory deposits refunded	67
90			E. J. Anthony	Printing. Stencil paper.	17
91			Thaver & Jackson Station'v Co	Stencil namer	i
92	4.4		The Negetyle Co	Paner and ink	î
93			W P Down octrory	Paper and ink Expenses	112
94			W. D. Day, actuary	Models	20
			Wenden & Co	Medals	20
.95			western Union Telegraph Co	Time service	3
196			H. Swannell	Expenses Salary, May, 1898 Diplomas	15
97	May.	31	<u>W</u> . B. <u>Day</u>	Salary, May, 1898	75
90	•••	٠.	Henry Eulert		50
99			Goes Lithographing Co	Diplomas	13
00			W. B. Day, actuary		
01	June	30			
02	o u.z.,	••	Theo. C. Loehr	**	18
ŏã			H. H. Rogers	4.4	4
04			Grimes & Sheehan		4
05			Dullon & Dullon Co	Point ote	21
			runer & runer Co	Paint, etc Plastering and calcimining	41
06			д. S. Cooper	riastering and calcimining	53
07			р. ф. наупез & Co	Directory. Envelopes, etc.	_5
808			E. J. Anthony	Envelopes, etc	54
09	• •		S. W. Shattuck, business mgr.	Sundry items	14
10	**		W. B. Day	Salary, June, 1898	75
11			Henry Eulert	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50

#### SCHOOL OF MEDICINE WARRANTS.

Date.	•	To whom.	For what.	Am
1897.		[	[	1
Sept.	24	Winkle	Advertisement	ĺ
		McDonough & Co	214 v G1 bisomemb	1
		Weslevan Araus	Advertisement	
4.4		Chicago Clinical Review P. Co.		
		Arbutus.		
		Arbutus. R. L. Polk & Co. Densonian. J. A. Wesener W. A. Evans W. T. Eckley A. Gehrmann. E. G. Ferle	Addressing envelopes	
		Densonian	Advertisement. Salary, August, 1897.	
		J. A. Wesener	Salary, August, 1897	1
		W. A. Evans		ł
		W. T. Eckley		ļ
		A. Genrmann	**	1
		W A Pressy		1
		J S Tomlingon	44	
		Miss E M Heelan	**	
		Geo. Johnston		
••		Theo. Tieken	**	
6.		A. Gehrmann E. G. Earle W. A. Pusey J. S. Tomlinson Miss E. M. Heelan Geo. Johnston Theo. Tieken W. S. Royce John McClain Wm A. Pusey Wm A. Pusey	4.6	
		John McČlain		1
Sept.	30	Wm. A. Pusey	Expenses of stenographer, etc	
		D. A. K. Steele	Petty expenses	
		University of Chicago Weekly.	Advertisement	
		Cameron, Amberg & Co	Circulars	
		Brazil & Chicago Coal Co	Coal	1
		Geo. I. Johnson	Expenses of stenographer, etc	
0-4	9	Marghall Field & Co	Metoriela	
Oct;	4	Fullor & Fullor Co	Rangina	
		H. Ahrens	Sugar	
		H C Hall	Sugar Advertising in periodicals. Advertisement Chairs, settees, etc. Repairing bells. Phenosote Paper.	
		Jewish Herald Publishing Co	Advertisement	]
4.4		Brunswick-Balke Collender Co	Chairs, settees, etc	ŀ
		Otto Chellberg Co. Red Cross Hygienic Co. P. F. Pettibone & Co. Samuel I. Pope & Co. R. T. Jones H. M. Hooker Co. Lyon Costoctory	Repairing bells	
4.4		Red Cross Hygienic Co	Phenosote	
6.6		P. F. Pettibone & Co	Paper. Pipe and fittings. Painting, calcimining Benzine. Music furnished.	•
* *		Samuel I. Pope & Co	Pipe and fittings	
		R. T. Jones	Painting, calcimining	
		H. M. Hooker Co	Benzine	
		Lyons' Orchestra Exhardt Catering Co Orr & Lockett Hardware Co	Music Turnished	}
		Expardt Catering Co	Uatering	ŀ
4.6		F Pagget	Catering Frames and plates Gas fixtures Advertisement	İ
		Journal of Am Medical Ace'm	Advertisement	
4.4		E. Baggot.  Journal of Am. Medical Ass'n.  Medical Recorder Pub. Co	Architect's services Advertisement. Salary, Sept., 1897.	
4.4		G. L. Harvey	Architect's services	ì
		Knox College Coup d' Etat	Advertisement	ĺ
		J. A. Wesener	Salary, Sept., 1897	
		W. A. Evans		
		Medical Recorder Pub. Co. G. L. Harvey Knox College Coup d' Etat. J. A. Wesener. W. A. Evans W. T. Eckley Adolbh Gehrman		
		Adolph Gehrman		
		W. A. Pusey J. S. Tomlison Elizabeth M. Heelan		
4.6		W.A. Pusey		1
		J. S. Tomlison		
	1	Elizabeth M. Heelan	4.	
6.6		Theo. Tieken W. S. Royce John McClain. Richards & Co.		
		John McClain	44	
Oct.,	15	Richards & Co	Chemicals Labor and material on building Painting.	1
· · ·	10	G. D. Evans	Labor and material on building	1,
• •		John Parsons	Painting	
• •		John G. Bentler		l
		John G. Bentler. Orr & Lockett Hardware Co W. A. Pusey University of Chicago Weekly Chicago Addressing Co D. R. Crent	Door noiders	1
4.4		W. A. Pusey		
4.4		University of Chicago Weekly	Advertisement	
4.4		Chicago Addressing Co	Addressing envelopes	1
		D. R. Grant	Lockers	
		Columbia Typewriter Mfg Co	Kibbons	
		Fantus & Son	Printing, etc	
		D. R. Grant. Columbia Typewriter Mfg Co Fantus & Son Rogers, Pitkin & Hall	Dalma	
	- 1	H. Schiller Physicians Supply & Drug Co.	Expenses of stenographer and rent Advertisement. Addressing envelopes. Lockers Ribbons. Printing, etc. Palms Surgical supplies. Drugs, etc. Chairs	
	- ]	Chara & Cmith	Surgical supplies	
4.6		Sharp & Smith Searle & Hereth Co	Druge ata	
		J. S. Ford Johnson & Co.	Chairs	
	- 1	o. C. rolu somusom & Co	Диано	ı

Date.	To whom.	For what.
1907		
1897.	College of Physicians and Sur	Rent 6 months to Oct. 21, 1897
* *	S. W. Shattuck	g Rent 6 months to Oct. 21, 1897.  Salary 6 months, Oct. 31, 1897.  Printing  Services to Jan. 1, 1898.  Advertisement  Inspection of boilers  Printing, etc.  Sugar, etc
	Harvey Bogarth, Business Mg	r Advertisement
4.6	Rogers, Pitkin & Hall	. Printing
• •	Chicago Telephone Co	. Services to Jan. 1, 1898
• •	The P. & S. Plexus	. Advertisement
	James R. Pyne	. Inspection of boilers
	Cameron, Amberg & Co	Printing, etc. Sugar, etc. Drugs Typewriter Advertisement Salary, October, 1897.
• •	H. Anrens.	Sugar, etc
	Fuller & Fuller Co	. Drugs
	The Carle	- Typewriter
)at s	O T A Wassner	Salary October 1807
Oct., 8	W A Evens	Salary, October, 1891
4.4	W T Eckley	• • • • • • • • • • • • • • • • • • • •
	Adolph German	
	E G Earle	
	W. A. Pusev	
	I S Tomlingon	
4.4	George Johnson. Theo. Tieken. Mrs. F. A. Grubb. Grace M. Bryant	
• •	George Johnson	
	Theo. Tieken	
4.4	Mrs. F. A. Grubb	
• •	Grace M. Bryant	
4 4	C. H. Kuby C. A. Albright C. C. Hummel Robert Emmerson	
	C. A. Albright	
• •	C. C. Hummel	
4.4	Robert Emmerson	
	John McClain	
Nov. 1	5 J. N. Hostetter	. Coal
• • •	James Clancey & Sons	Plumbing, etc
	Wm. A Pusey	Expenses and rent, Oct., 1897
• •	S. J. Stebbins Co	Door holder, etc
	Wm. J. Bohm	. Tubes, etc
::	West Side Hospital	. Boarding and nursing patients
	Sharp & Smith	. Table and chair
**	John McClain. 5 J. N. Hostetter James Clancey & Sons Wm. A Pusey. S. J. Stebbins Co Wm. J. Bohm West Side Hospital. Sharp & Smith S. U. A. Bulletin The Student Chi. Clinical Review Pub. Co. M. Bondy	Tubes, etc. Boarding and nursing patients. Table and chair. Advertisement.
	The Student	
	Chi. Clinical Review Pub. Co.	
• •	M. Bondy	. Brooms, etc
4.4	Fuller & Fuller Co	. Drugs
	S. W. Snattuck, Business Mgr	Gas and alcohol
	M. Boldy Fuller & Fuller Co. S. W. Shattuck, Business Mgr Lawrentian Paper Association The P. & S. Plexus. Chas. Traux. Greene & Co.	Brooms, etc Drugs Gas and alcohol. Advertisement Surgical supplies. Cloth. Coil, manometers, etc Labor Coal.
	Char Carre Carres 6 Ca	·   C
	Marshall Field & Co	Surgical supplies
	Georgian Fleid & Co	Coil menometers etc
	Gaertner & Begennas Robert Emmerson	Tohon
	I N Hogtotton	Cool
	Fuller & Fuller Co	Drngs
lov∴ 8	Fuller & Fuller Co. 0 J. A. Wesener W. H. Evans W. T. Eck ey	Coal Drugs Salary, November, 1897
	W. H. Evans	Balaiy, November, 1881
	W. T. Eck ev.	
	E. G. Earle W. A. Pusey J. S. Tomlinson Elizabeth M. Heelan	
• •	W. A. Pusey	
	J. S. Tomlinson	
4 4	Elizabeth M. Heelan	
4.4	Elizabeth M. Heelah. Geo. Johnston. Theo. Tieken. Mrs. A. E. Grubbs Grace W. Bryant. C. H. Kuby C. A. Albright. C. A. Hummel	
4.	Theo. Tieken	
* *	Mrs. A. E. Grubbs	
	Grace W. Bryant	
• •	C. H. Kuby	
	C. A. Albright	
	C. A. Hummel	
4.4	Robert Emmerson	
	C. A. Hummel Robert Emmerson John McClain 0 Felix Lang, Superintendent	''
Dec: 2	0 Felix Lang, Superintendent	. Repairs on meter
• •	G. D. Evans	. Dissecting table, windows, etc
• •	F P. Smith Wire & Iron Wks.	. Wire guard
	Brunswick-Balke Collender C	o Qak pulpit
• •	Sharpe & Smith	. Surgical supplies
	Searle & Hereth Co	Repairs on meter Dissecting table, windows, etc. Wire guard Oak pulpit Surgical supplies Drugs Drugs, etc Pail of Kleansall Boarding and care of patients
	Huller & Huller Co	./Drugs. etc
• •	ranoi w ranoi co	18.4884

No.	Date.		To whom.	For what.	Amount.
	1897.				
177	Dec:	20	J. N. Hostetter	Coal. Advertisement. Gas	\$122 55
178 179			Modical Bosondon Pub. Co.	Advertisement	26 66
180			S W Shattuck business mar	Gas	10 13 78 70
181			Geo T Rutler	Services	200 00
182			Cameron Amberg & Co	Register books etc	21 78
183		1	W. A. Pusev	Expenses of stenographer	75 00
184			D. A. K. Steele	Petty expenses	56 21
185			Editors Index Medicus	Subscription	25 00
186			E Baggot	Gas fixtures	12 00
187	"		Physicians' Supply & Drug Co.	Absorbent cotton, etc	7 55
188			The Illini	Advertisement	20 00
189		_	Richards & Co	Sterilizers, tubes, etc	181 82
190	Dec:	31	J. A. Wesener	Salary, December, 1897	75 00
1911			W. A. Evans		50 00
192 193			W. T. Eckley		50 00 25 00
194			E C Forlo		25 00 25 00
195			W A Pugar		41 66
196			J S Tomlinson	Gas Services'. Register, books. etc. Expenses of stenographer Petty expenses Subscription Gas fixtures Absorbent cotton, etc. Advertisement. Sterilizers, tubes, etc Salary, December, 1897.	75 00
197			Elizabeth M. Heelan		60 00
198			George Johnston		40 00
199			Theo. Tieken	44	36 00
200	• •		Mrs. A. E. Grubbs		30 00
201			Elizabeth M. Heelan. George Johnston. Theo. Tieken. Mrs. A. E. Grubbs Grace W. Bryant. Chas. H. Kuby C. A. Albrecht. C. C. Hummel. Robert Emmerson		32 00
202			Chas. H. Kuby		25 00
203	4 4		C. A. Albrecht	** ** *** ****************************	15 00
204	• •		C. C. Hummel		15 00
205			Robert Emmerson		8 00
206	• •		John McClain	'' ''	25 00
00=	1898.		D. 1 1 0 0	Repairing microscopes, etc Board and care of patients. Cat gut Chemicals. Valves, etc Repairs on telephone, etc. Advertisement.  Coal Boiler compound Laundry work Telephone services. Expenses for stenographer, etc. Gas Assessment No. 2. Salary for January, 1898	40.00
207	Jan.	15	Richards & Co	Repairing microscopes, etc	18 22 65 62
208 209			West Side Hospital	Board and care of patients	2 25
210			Sharp & Smith	Chamiaala	45 39
211	4.4	1	Chiango Engineer Supply'Co	Valvas ate	15 90
212			E 1. Nime	Renairs on telephone etc	5 20
213	• •	ĺ	T. L. Flood	Advertisement	5 20 2 75
214			Journal of Amer. Med. Ass'n		15 00
215	• •		$P. & S. Plexus \dots \dots$	**	26 66
216		j	J. N. Hostetter	Coal	182 15
217	• •		Varty Oil Co	Boiler compound	5 00
218	• •		Goodhart's New Method L'ndry	Laundry work	22 22
219	•••		Chicago Telephone Co	Telephone services	22 22 31 25 75 00
220			W. A. Pusey	Expenses for stenographer, etc	114 20
$\frac{221}{222}$			S. W. Snattuck, Business Mgr.	Aggaggment No. 2	77 00
999	Tom	91	W A Pugor	Colour for Tennery 1909	41 66
224	Jan	21	I & Tomlineon	Salary for Sanuary, 1030	75 00
224 225		- 1	Elizabeth M. Heelan		60 00
226			Geo. Johnston		40 00
227			Pheo Tieken	••	36 00
228	4.4		Mrs. A. E. Grubbs	44	30 00
229	••		Grace W. Bryant	**	40 00
230	6.6		Chas. H. Kuby	** **	25 00
231	• •		C A. Albrecht	<u> </u>	15 00
232	• •		C. C. Hummel	4	15 00
233			Robert Emmerson	;;	8 00
234	• • •		John McClain		25 00
235		- 1	J. A. Wesener		75 00 50 00
236 237	• •		W. A. EVAUS	46 46	50 00·
	• •		A Cohrmann	44	25 00
238 239			A. Ochrinani E. G. Eorla		25 00
240			S W Shattuck	Salary three months	100 00
241			I. N. Hostetter	Coal	162 24 7 50
242	• •		Geo. T. Johnson	Toilet paper	7 50
243	4.6		Chicago Clinical Rev'w Pub. Co	Advertisement	18 75
244			P. & S. Plexus		26 66
245	• •		Richards & Co	Apparatus	192 25
246	• •		Fuller & Fuller Co	Chemicals	47 99 22 50
247	4.4		West Side Hospital	Board and care of patients	22 50
248	• •		Searle & Hereth Co	Drugs	10 50
249	• •		W. A. Pusey	Expenses of stenographer	78 86
250			S. W. Shattuck, Business Mgr.	Gas	107 20
251	Feb.	28	J. A. Wesener	Salary, three months. Coal. Toilet paper. Advertisement. Apparatus. Chemicals Board and care of patients. Drugs Expenses of stenographer Gas. Salary for February, 1898.	75 00 50 00
201				**	50 00
252 253	• • •	- 1	W. A. Evans		50 00

٠.	Date.		To whom.	For what.	Amou
Ī	1898.				
4 6	1080.	90	A Cohamonn	Calany for Holomany 1000	\$25
4 F	eb.	28	A. Genrinann	Salary for February, 1898	25
·•			E. G. Earle		
6			W. A. Pusey	ii	41
7			E. G. Earle W. A. Pusey J. S. Tomlinson Elizabeth M. Heelan Geo. Johnston Theo. Tieken Mrs. A. E. Grubbs Grace W. Bryant Chas. H. Kuby C. A. Albrecht C. C. Hummel Robert Emmerson	:	75
8			Elizabeth M. Heelan		60 40
9			Geo. Johnston		4(
0			Theo. Tieken	**	36
1	* *		Mrs. A. E. Grubbs		30
2	4.4		Grace W. Bryant		40
3	4.4	- 1	Chas. H. Kuby	4	25
4	4.6		C. A. Albrecht.		18
5	4.6		C. C. Hummel		1
5	4.6		Robert Emmerson		1 8
7	4.4		John MaClain	**	
	Innah	15	W A Proper	Ermanaga	80
9	Iarch	10	Fullon & Fullon Co	Chemicals	70
0	4.6		Manabati Field & Co	Cloth ming of	1 67
0	4.6		marshail Fleid & Co	Cloth, pins, etc	70
1			Richards & Co	Caustic, pepsin, etc	11
2			The West Side Hospital	Boarding and nursing patients	3
3			Ö. C. Hummel Robert Emmerson John McClain. W. A. Pusey. Fuller & Fuller Co. Marshail Field & Co Richards & Co The West Side Hospital. Sharp & Smith Medical Recorder Pub. Co. P. & S. Plexus The Northwestern B D. Evans. Geo. L. Lenham Hardware Co S. W. Shattuck, Business Mgr. H. Ahrens	Expenses Chemicals Cloth, pins, etc Caustic, pepsin, etc Boarding and nursing patients Nail files, etc Advertisement and copies of paper.	10
4			Medical Recorder Pub. Co	Advertisement	10
5	• •		P. & S. Plexus	and copies of paper.	20
6			The Northwestern	and copies of paper.  Repairing buildings	
7			B D. Evans	Repairing buildings	2
8	* *		Geo. L. Lenham Hardware Co.	**	
9	* *		S. W. Shattuck, Business Mgr.	Gas bills	11
ol .	6.6		H. Ahrens	Soan, brooms, etc	1
1			Library Bureau	Case	7
$\hat{2}$			Goodhart's New Method L'ndry	Laundry	4
3			I M Hogtotton	Cool	90
4			Boople's Cos Light & Coke Co	Cog hills	20
			D. E. Dettibers & Co	Eition manage	1 4
5	Tanah	91	F. F. Fettibone & Co	Calam Manch 1999	1 2
ÄΙΔ	March	91	Goodhart's New Method L'ndry J. N. Hostetter People's Gas Light & Coke Co. P. F. Pettibone & Co. J. A. Wesner W. A. Evans W. T. Eckley A. Gehrman E. G. Earle W. A. Pusey J. S. Tomlinson Elizabeth M. Heelan	Soap, brooms, etc. Case Laundry Coal Gas bills Examination paper Salary, March, 1898	7
7			W. A. Evans		5
8			w.T. Eckley	**	50
9	::		A. Gehrman	***	2
0	• • •		E. G. Earle		2
1	••		W.A. Pusey		4
2	* *		J. S. Tomlinson		7
3	4.6		Elizabeth M. Heelan	**	6
4			Geo. Johnston	4.4	4
5	• • •		Theo. Tieken	l	3
6			Geo. Johnston Theo. Tieken Mrs. A. E. Grubbs Grace W. Bryant Chas. H. Kuby C. A. Albrecht	**	3
žl			Grace W. Bryant	**	4
3	4.4		Chas H Kuhy		2
9	4.4		C A Albrocht	**	ĩ
ŏl	6.6		C. C. Hummel		1
	• •		Daba Electrical		1
1			Talas Ma Clais		
2			Pour McCiain	Petty expenses Crayons, centrifuge, etc Eggs, flour, etc Advertisement.  Expenses of foot ball team, 1897. Repairing Fire extinguishers recharged Electric lights and repairing Pepsin. Chemicals Battery service Salary, 3 months Rent and expenses Repairing Rent, 6 months Instruments Filters and fitting Letter beads and expelores	2
3	**		D. A. K. Steele	retty expenses	5
4	::		Kichards & Co	Crayons, centrifuge, etc	-
5			H. Anrens	rggs, nour, etc	
6)	::		Dononue & Henneberry	Advertisement	1
7	• • •		The Illini		2
3	• • •		D. A. K. Steele	Expenses of foot ball team, 1897	80
9	• •		John G. Beutler	Repairing	
Ō	• •		James Clancy & Sons		
ĭ	• •		Miller Chemical Engine Co	Fire extinguishers recharged.	
$\tilde{2}$	• •		E. Baggot	Electric lights and renairing	
3			Armour & Co	Pensin	
4	4.4		Fuller & Fuller Co	Chemicals	2
5			E I. Nime	Rattory sarvice	4
	April	15	S W Shottnak	Colory 2 months	10
	zbrii	TÜ	W A Program	Dant and armanges	1 70
7	4.4		W. A. Fusey	Denoising	8
8			Callana Phanaisi	nepairing	6,00
9			Conege Enviicians & Surgeons	rent, 6 months	6,00
0	• • • • • • • • • • • • • • • • • • • •		gnarp & Smith	Instruments	1
1			E. Baggot	Filters and fitting	1
2	4.4		Fantus & Son	Letter heads and envelopes	
3	4.		Rogers & Hall	Printing and envelopes	3
4			Cameron, Amberg & Co	Instruments Filters and fitting Letter heads and envelopes Printing and envelopes Book, etc Dues Preparing skeletons Tablets Gelatine Assessment	3
5	• •		Gas Consumers' Ass'n	Dues	
6			Robert Emmerson	Preparing skeletons	8
7			The Searle & Hereth Co	Tablets	
	4.4		Richards & Co	Gelatine	1
el.	• • •				

# $\textit{Warrants}\_\texttt{Continued}.$

э.	Date.		To whom.	For what.	Amou
i	4000			ı	
0	1898.	15	Fuller & Fuller Co	Chamianla	\$33
1	April	10	Journal of Am Modical Assin	Chemicals Advertisement	10
2			D & 2 Dlorna	Adverusement	20
3			University of Chicago Weekly	Advertisement.  Telephone service Kleansall Laundry work Addressing envelopes Coal Gas Boarding and nursing patients Diploma plate and diplomas Salary, April, 1898.	"
4	4.4		Chiango Tolophone Co	Tolonhono corrigo	3
5	4.4		Goo Righards Porn	Vloopgell	"
6			Goodhant's N. M. Launday	Lounday work	1 1
7	4.4		Chiango Addressing Co	Addressing onvolones	1
8			I N Hostottor	Cool	12
9			People's Gas Light & Coke Co	God	5
ó	4.6		West Side Hosnital	Roarding and nurging nationts	39
í	4.4		Western Rank Note & Eng Co.	Dinlome plate and dinlomes	513
5	April	30	J. A. Wesener	Salary April 1808	7
3		00	W. A. Evans	Cutary (April, 1000	5
íl	4.4		W. T. Eckley	**	5
5	4.4		A. Gehrman		2
3	4.4		E. G. Earle	• •	2
7	4.6		J S Tomlinson	**	7
3	4.6		E M Heelan		6
	4.4		A E Grubbs		
			Grace W. Bryant		
			J. A. Wesener W. A. Evans W. T. Eckley A. Gehrman E. G. Earle J. S. Tomlinson E. M. Heelan A. E. Grubbs Grace W. Bryant W. A. Pusey Theo. Tieken George, Johnston	4.4	4
			Theo. Tieken		3
			George Johnston	4.	4
	• •		George Johnston Charles H. Kuby John McClain C. A. Albrecht G. C. Hummel	**	*
	4.4		John McClain	**	2
	4.6		C A Albrecht	44	1 1
í	4.6		C. C. Hummel	**	1
3	4.		Robert Emerson	**	
1	May,	14	Fuller & Fuller Co	Chemicals	2
	uray, ,	1.1	Richards & Co	Cassarolae	2
			The West Side Hospital	Chemicals Casseroles Care of patients Instruments Coal Advertisement and copies of paper Recharging extinguisher Boxes Paper Brooms etc Banquet Service of orchestra Laundry work Petty expenses Expenses Programmes Programmes Engrossing parchments	
			Sharn & Smith	Instrumente	
			J. N. Hostetter	Coal	9
ĺ			The P & S Ploras	Advertisement and conies of namer	2
5	4.4		Miller Chemical Engine Co	Recharging extinguisher	1 7
3	4.4		Geo. E. Cole & Co.	Roves	
źŀ			G T Johnson	Panar	1 :
3	٠.		H. Ahrens	Brooms etc	1 :
á	4.4		Auditorium Hotel	Banquet	26
ĺ	• •		Lyon's Orchestra	Service of orchestra	7
	• •		Goodhart's N. Method Laundry	Laundry work	1. 50 9
	• •		D. A. K. Steele	Petty expenses	5
3			W. A. Pusev	Expenses	9
l			R. R. Donnelly & Sons Co	Programmes	1
5	• •		Rogers & Hall	Printing	2
	• •		C L. Ricketts	Engrossing parchments	5
7	* *		People's Gas Light & Coke Co.	Gas	4
3	• •		A. H. Revell & Co	Desk and chair	4:
)			Ass'n of Am. Medical College	Dues	1 :
1			Chicago Clinical Review Pub. Co	Advertisement	1
П	* *		J. Milhening	Medals	2
9	Мау.	31	J. A. Wesener	Expenses Printing Programmes Printing Engrossing parchments Gas Desk and chair Dues Advertisement Medals Salary, May, 1898.	11 12 7 5 5 2 2
5			W. A. Evans		5
i	• •		W. T. Eckley		5
	• •		A. Gehrman		2: 2: 7: 6: 3: 4:
	* *		E. G. Earle		2
			J. S. Tomlinson		7
3			E. M. Heelan	**	6
١			E. A. Grubbs	4.4	3
١			Grace W. Bryant		1 4
	4.4		W. A. Pusey	**	3
2	4.4		Theodore Tieken		3
3			E. A. Grubbs Grace W. Bryant. W. A. Puscy Theodore Tieken George Johnston	**	2
	4.6		John McClain		2
5	• •		C. A. Albrecht	44	1
5	• •		C. C. Hummel.	**	1
	• •		Robert Emmerson'		1
3			D. A. K. Steele	Deposits refunded	1.27
			Fuller & Fuller Co	Chemicals	1
			Sharp & Smith	Repairing	1 7
Į.	• •		The Ranger	Deposits refunded Chemicals Repairing Advertisement.	1,27 1,27
2	• •		The Wesleyan Araus		''i
3		- 1	The Voice Publishing Ass'n	44	1
i	• •	1	The Delphic Publishing Ass'n.	**	1
		,	Know Cound' Etat	6.6	1

# Warrants—Concluded.

٥.	Date.		To whom.	For what.	
ای	M	64	m, N, M, A, A, A, A, A, A, A, A, A, A, A, A, A,	A 3	<del></del>
0	Мау	31		Advertisement	1
7	4.4		The Kansas University Weekly		
8			The Chi. High School Review		١.
9	44.1		The Vidette Reporter		ł
0	**		Ægis Association		Į
1			Myrinkle. S. U. I. Quill. The Denisonian. College Index. The Student. The Knox Student.		l
2			$ S.\ U.\ I.\ Quill$	1	1
3		1	The Denisonian	••	
l			College Index	43	
5			The Student	4.4	1
			The Knor Student	**	
7	4.4		The Archaean Union	4.	l
3			The Standard Onton		1
			The Student. The Oberlin Review		
)			The Operiin Review	.,	
0			A. A. Stratford		1
L			The Wabash		
2			The Adelbert		1
3	• •		The Hiram College Advance		
il	4.4		The Adelbert. The Hiram College Advance The Oracle Co	• •	
1				6.6	
	4.4		Hehard's Wareh'se and Van Co	Hanling	
	June	15	Imit Typewrit's and Add's Co	Typewriting addressing etc	
ś	о чпе	10	D A E Stoole and Add & Co	Hauling. Typewriting, addressing, etc Postage Advertisement	1
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# BIENNIAL REPORT OF THE ILLINOIS STATE LABORATORY OF NATURAL HISTORY.

Io the Trustees of the University of Illinois.

GENTLEMEN: In pursuance to your general instructions as contained in your proceedings for 1892 (June meeting), I submit the following report of operations of the State Laboratory of Natural History for the past two years.

These operations have been connected almost wholly with the work of the State Entomologist or with that of the Biological Station. As the State Entomologist's operations will be reported, under the law, to the Governor previous to the next session of the Legislature, I will only say with regard to them here that they have been directed mainly to the study of the life histories of some of the insects injurious to corn, to an examination of the shade trees and other ornamental vegetation of several of the larger towns of central Illinois, and to work on the San José scale, distributed throughout the State.

Further investigation of the corn insects was undertaken with a view to preparing for my next biennal report a second installment of a monograph upon that subject. The study of the insects injurious to shade trees is the beginning of what I intend to make an exhaustive survey of that topic in this State; and the work on the San José scale has taken the form of a further examination of suspected premises with a view to the possible occurrence of hitherto undetected colonies of that insect in the State, a very thorough and careful spraying with insecticide solution of premises known to harbor the scale, the introduction of two fungus parasites of the scale obtained by me on a personal visit to Florida last spring, and several lines of experimental work undertaken in the hope of finding some cheaper and more effective insecticide than the one now generally in use. In this same connection I have provided for a general inspection of nurseries throughout the State, made at the expense of the nurserymen. Upon receipt of the report of the condition of these nurseries from my inspectors, I have given to nurserymen official certificates setting forth the facts as to the existence on their premises of insects likely to be conveyed in trade to the injury of their customers.

The operations of the Biological Station have been carried on during the past two years along lines practically the same as those previously reported upon, except that we have done much more during the last two years with fishes than previously, with the expectation of completing a formal report upon the fishes of Illinois on which considerable progress had been made by me long before the opening of the Station.

This study of the fishes of the Station field was taken up systematically in July, 1897, by Prof. Frank Smith, and continued by him without interruption until September 1 of that year. In the summer of 1898 this was passed over to Mr. Wallace Craig, assigned to the Biological Station as its resident naturalist, and he will make this his principal occupation during this entire year. He has been handsomely provided with various kinds of apparatus for the collection of fishes in all the Station situations, including seines of all sorts, fish traps of various size and construction, set nets, and trammel nets. This work is being so conducted as to give us correct indeas not only of the

species occurring at the Station, but of their relative abundance and local distribution, their haunts, their habits, their regular migrations and irregular movements, their breeding times and places, their rate of growth, their food, their diseases and their enemies, and, in short, the whole economy of each kind there represented and of the whole assemblage, taken together as a community group.

Extensive studies of the aquatic entomology of the situation have also been made, and an elaborate paper on ephemerids and dragon-flies, the joint contribution of Messrs. Hart and Adams, of the laboratory staff, and of Professor J. G. Needham, who worked with us during a part of the summer of 1897, is now nearly ready for the press.

The so-called plankton work, the systematic study, that is, of the minuter forms of plant and animal life suspended in the water, has gone steadily forward under Dr. Kofoid's immediate care. Refinements and improvements of method, new forms of apparatus, and a vast mass of material which has been largely identified and studied by him are some of the more obvious results of our recent work in this field. No part of the work of the Station attracts more general attention among scientific men or is likely to lead to more interesting and important results.

By the Chemical Department of the University regular analyses of the waters of certain selected localities have been made during the entire two years, including one series of analyses of the gaseous contents of the water, made at Havana, one for each of twenty-four consecutive hours. This chemical work combined with the continuous biological work of the Station will, when generalized, furnish a most substantial authoritative body of knowledge of the conditions of the waters of the middle Illinois previous to the opening of the Chicago drainage canal which can scarcely fail to have a high utility for comparison with the results of similar studies made after that event.

Our main equipment—the cabin boat, the launch, and the smaller boats—has served our purpose perfectly, and the Station property is in good order and condition in all respects.

The summer school for 1898, for whose expenses you voted a guarantee fund of \$300, proved a disappointment only in the number in attendance, a deficiency easily accounted for in part by the lateness of the period at which we were able to announce our session, and in part by the fact that we could not offer last year certain local and personal inducements which may easily be provided for another session. Authority to advertise the school was not given until the March meeting of the Board this year, too short an interval thus remaining before our opening in June. For want of any special building of our own we were obliged to resort to the village school building at Havana, generously placed at our disposal without compensation by the school trustees, and students of the school were thus compelled to live in the town. Vacation life in a village boarding house with work in a school room offers too little relief from the ordinary experience of the student or teacher to be especially attractive in itself. If the school is to be maintained—and I sincerely hope that it may be we should have a plot of land on the banks of Quiver lake, two miles and a half above Havana, should have erected there a building suitable for summer use as a students' laboratory, should provide facilities for life in camp to those who prefer them, and should also make it possible for students to live either at that place or in town.

Fifteen students were in attendance throughout our term of four weeks. The only instructors regularly engaged were Assistant Professor Frank Smith, of the Department of Zoölogy, and Instructor C. F. Hottes, of the Department of Botany. The work was carefully planned and very thoroughly and efficiently done, and was received very cordially by all in attendance.

Publication of papers has been made by the State Laboratory to the full limit of our appropriation for this purpose, nine articles of our Laboratory Bulletin, comprising four hundred and thirty-eight pages of text and sixty plates, having been printed and distributed during the last two years. They set forth mainly the general results of our Biological Station work combined with the results of studies by advanced students and the Station staff upon

other collections of the State Laboratory, but include also an article on scale insects of the State and one on insect disease. The influence of the State Laboratory upon the Department of Zoölogy is shown by the fact that three of the above papers, each a valuable contribution to science, have been prepared by University students in the course of their work for first and second degrees. Such work would have been entirely beyond their reach except for the materials, equipments, and literature provided by the Laboratory, which has also borne the expense of their publication and illustration.

With respect to the future of this work I am strongly of the opinion that a decided advance should be made in the Natural History Survey, for which the Laboratory is responsible under the law of its establishment. The annual appropriations made of late have been too small to provide for more than the necessary operations of the entomologist's office, which they are made to cover, and those of the Biological Station, with some incidental general work naturally growing out of the operations of these two establishments. I see no reason why the State of Illinois should not provide in a suitable manner for the energetic prosecution of this survey work which it long ago authorized, and I propose, consequently, to ask of the next Legislature a suitable sum for this purpose and a separate sum for the economic investigations for which the State Entomologist is responsible. I think, also, that the Legislature might well be asked to enlarge the field of the State Laboratory of Natural History to include an economic geological survey, with such topographical work as this might require, and a biological survey of the water supplies of the State, conducted with special reference to sanitary interests, a subject which is certainly not less important in some of its aspects than that of their chemistry.

For details respecting the various departments of the work of the Biological Station you are respectfully referred to the appended reports of the Station Superintendent, Dr. C. A. Kofoid, or Prof. A. W. Palmer, Director of the Chemical Survey, of Mr. Chas. A. Hart, Entomologist of the Station, and of Prof. Frank Smith, who served for a time as its Assistant Zoölogist and as principal instructor in the summer school.

Respectfully submitted,

S. A. FORBES,

Director.

REPORT OF THE SUPERINTENDENT OF THE BIOLOGICAL STATION.

To the Director of the Laboratory.

SIR:—The past two years have offered new and interesting conditions in the environment in which the work of the Illinois Biological Station has been prosecuted. The period of 1894 and 1895 was one of typical low water, without an extensive rise of the river during the spring and early summer, when such floods usually occur. On the other hand, these years were not marked by long uninterrupted periods of very low water. Under these conditions of two years of generally low water, without marked fluctuations, the lakes were thoroughly choked with vegetation, and even the banks of the river itself became fringed with a rank aquatic growth. A rise of 12.6 feet, culminating January 6, 1896, was succeeded by a series of minor floods at intervals of about two months throughout the year. The net result was an increase in the average height of the river for the year, which was 6.87 feet above the lowwater mark—fully two feet above that of the average for the two years preceding. This was, then, a high-water year, without marked fluctuations, and the result was that the vegetation remained to a considerable extent in the lakes and the river. The year 1897 opened with rising water, which culminated January 23 at 12.9 feet, while a subsequent rise on March 27 reached a height of sixteen feet—the highest point attained since 1892. From this maximum the river fell slowly through the four months that followed, reaching a minimum early in August. From this time until the close of the year, in consequence of a general drought throughout the State, low water persisted, their being only a slight rise as evaporation was checked during the cooler weather of Autumn. In spite of the long-continued low

water the average height for the year was 6.9 feet—a slight increase over the preceding year. There was thus present the somewhat unusual condition of the continued high water during the first half of the year followed by an uninterrupted period of unusually low water in the second half, the change from the one to the other being quite abrupt. Under these circumstances the vegetation was largely removed or its excessive growth prevented. This long-continued low water worked marked changes in the topography of the bottomlands adjacent to Havana. Phelps lake dried up earlier than it did the preceding year, Thompson's lake showed a marked diminution, principally at the northern and southern ends, long stretches of soft mud or matted vegetation in which dead fish were abundant being exposed. This mud, after a few weeks' exposure, hardened and cracked open to a depth of a foot or eighteen inches, and a growth of shore grasses began to spring up on it. Quiver lake, especially along the west shore and in the region known as Dogfish lake, was considerably reduced in area, and in the absence of any considerable amount of vegetation its depth was decreased more than usual. Flag lake, which in most years is a marsh with one to four feet of water filled with rushes, arrow leaves, water smartweed, water-lilies, and the lotus, dried up early and a wagon road was established across its bed. Havana lake, the expanse of the river above the mouth of Spoon river, presented the unusual appearance of a narrow river channel flanked on either side by a broad mud bank. The filling in and extension of these banks by the deposit of silt during recent years has been very marked, and is followed by an extension of the swamp willows over the rising banks.

In a general way the hydrological conditions of 1898 resembled those of 1897. The rise of the river began in January and continued through the winter, culminating April 2 at eighteen feet, a point equaled or exceeded but twice since 1879, at which time records were begun at the Government dam at Copperas Creek, eighteen miles above the location of the Station. As in 1897, the high water continued during the early summer, dropping rapidly in August to the minimum stage. It did not, however, reach the extreme condition of the previous year, several minor, fluctuations having occurred at frequent intervals during the fall months. The reduction in the acquatic vegetation begun in the previous year has continued. The increased activity in the fishing industry has also contributed largely to the removal of the vegetation from the lakes and the river on the fishing grounds, so that the river is now practically free from vegetation, as is also the main body of Quiver lake and almost the whole of Thompson's lake, only a restricted area at the southern end retaining its former condition.

In previous years the field headquarters of the Station have been on Quiver lake, either at Foster's Landing or at the Indian mounds. In the fall of 1896 the new laboratory boat was brought down to town and was stationed at the public landing along the river front. This location has been retained during the last two years with the exception of a week in August, 1898, when the boat was moved up to the Twin Mounds during some continued work upon the plankton and gas analyses in the Illinois river near that point. advantages of a location at town are the saving of the time required for transit to and from headquarters in the field and the expense of running the launch on these trips, and the ready access to the Station from living quarters at all times, while the distance from the collecting grounds is not greatly increased. Some disadvantages attend this location. The sheltered situation and the close proximity to the sand bluff increase the heat in the boat during the hot days in summer, and the nearness to the steamboat landing greatly increases the risk of damage to the boats and launch by the disturbance in the water caused by incoming and outgoing steamboats. Ropes and cavils are frequently broken, and boats are torn loose by the swells which follow in the wake of the larger steamers. On three separate occasions a steamboat in the

hands of an old and experienced pilot collided with our flotilla, resulting in the crushing and sinking of the steam launch in one instance, and in the breakage of glassware aboard the laboratory boat at another time. With the considerable and now increasing number of river craft of all sorts seeking temporary or permanent anchorage on the river front, we have been gradually crowded to the least desirable location, where the shore is somewhat springy, and where at low water access to our boat is possible only by means of a dike of sand or a trestle-work of planking, owing to the soft mud which is rapidly filling in the river front at this point. At such times our location is neither inviting nor salubrious. The crowding of the boats and the lax care usually given to such property in this locality greatly increase our danger of loss by wreck or fire while we remain in our present location. The experience of the past two years has only emphasized the necessity of the location of the Station at some suitable point—if at Havana, on Quiver lake—where we can control property which will afford us an abundance of room, freedom from disturbance, facilities for carrying on the shore operations that pertain to our work, and the location of breeding ponds.

The Station was occupied by the Station staff and in full operation in 1807

The Station was occupied by the Station staff and in full operation in 1897 during the months of July, August, and September, and in 1898 from June 13 to October 1. In addition to this, monthly visits were made to it for plankton work during the winter and spring of 1897, and beginning with the autumn of 1897 visits were made for the same purpose until the full opening of the Station in June, 1898. As a result of these visits a very full series of winter collections has been accumulated. Since September 1, 1898, Mr. Wallace Craig, resident assistant at the Station, has been in charge during my absence. Previous to this time the property of the Station was cared for at such times by Mr. Miles Newberry, who has been in our employ as general collector, janitor and engineer for the past four years. His service has been efficient and faithful in all the manifold and varied tasks which fall to his hands.

The work of the Station has been in the main prosecuted along the lines established in previous years, with a few expansions in some directions and curtailments in others. The primary purpose of the Station, that of investigation, has been carried on along three principal lines: entomology, ichthyology, and the quantitative investigation of the minute life of the water. The entomological work has been in the hands of Mr. C. A. Hart, who was at the Station during considerable intervals in 1897 and 1898.

Investigation of the fishes was taken up in July, 1897, by Prof. Frank Smith, and was continued by him until September 1 of that year. In the summer of 1898 this work was taken up by Mr. Craig, and additional equipment has been provided. The Station was equipped with a hundred-yard river seine of an inch-and a halt mesh, hung to fish eight feet; a forty-yard minnow seine of one-fourth inch mesh, hung to fish five feet; a thirty-foot minnow seine, hung to fish four feet; a Baird seine of the same dimensions; and a trammel net thirty yards in length and five feet in depth. The additions to the equipment consist of two set nets, one of three-fourths inch mesh and eighteen-inch hoops, the other of an inch-and-a-half mesh and four-foot hoops. Thirteen fish traps of quarter-inch galvanized wire netting were constructed especially for the work in deep water and in places where a minnow seine could not be used. They consist of a cylinder of netting ten inches in diameter, one end of which is closed by a circle of wood and the other by two successive funnels sloping inward, each with an opening three inches in diameter. For the capture of the smallest fish the nets are covered with fine wire cloth, and their efficiency is also increased by the use of wings of the same material or of minnow netting.

The plankton operations of the last two years have been carried on with increased regularity and greater attention to the correction of possible sources of error. The number of stations subject to regular examination at the beginning of the period covered by this report was seven; viz., the Illinois river two and a half miles above Havana, Quiver lake, Dogfish lake, Thompson's lake, Flag lake, Phelps lake, and Spoon river, the latter having been added to the list in August, 1896. The Illinois river Station was visited at intervals of one month until July, 1896, in which month

a number of examinations were made at frequent intervals during a remarkable development of a filamentous diatom, Melosira, in the plankton, and in correlation with gas analyses conducted by Professor Palmer. Weekly collections upon Tuesdays were begun August 3, 1896, and have since been maintained except when the condition of the ice or sickness necessitated a

slight shifting of the day of collection.

The station in Quiver lake was visited during intervals of one month during the first half of 1897, but during the latter part of July and the month of August and September the interval was reduced to a week. In October fortnightly visits were commenced, and have since been maintained. In the summer of 1895 a plankton station had been established in the west arm of Quiver lake, known as Dogfish lake. Examinations were continued in this locality for two years at intervals of a month or less, but were discontinued in July, 1897. During much of the year the conditions at this station differed but slightly from those in Quiver lake. Vegetation is a trifle more abundant and its duration is more extended. its duration is more extended. Except at times of high water there is no current passing through this arm of the lake. The difficulty of access to this station at times of low water—due to the deuse mat of Ceratophyllum through which the plankton boat must be rowed-were increased by the erection of a fence of wire netting across the mouth of the lake in the construction of a fish pond. In view of the similarity to Quiver lake and the difficulty of across it accomed desirable to difficulty of across it accomed desirable to difficulty. cess, it seemed desirable to drop this station from the regular list, especially as the two years' collections of micro flora and micro-fauna will suffice for detailed comparison with the plankton of the main body of the lake.

Monthly plankton collections were made in Thompson's lake during the first half of 1897, but in July of that year a fortnightly interval was adopted and has since been maintained. This station is, next to the river, the most important one on our list, being located in the largest permanent body of water within the field of our operations. During the period of high water (three to four months of the year), it is of easy access, as it is possible at such times to run the launch through the "cut road" across the bottom lands to the south end of the lake. As the water falls access may still be had for some time with a row boat through the "cut road;" or at still lower water, time with a row boat through the cut road; or at still lower water, through the "swale," a tortuous channel through the bottom land underbrush from the foot of Flag lake to Thompson's lake. When, however, the river falls below six feet, the only approach to this station is via Thompson's lake slough, a bayou connecting the lake with the river, leaving the latter at a point about six miles above Havana. Shallow water and a rank growth of aquatic vegetation found in some years at the northern end of the lake soon reader it impossible to enter from the slough with the launch, and when the render it impossible to enter from the slough with the launch, and when the water falls below three feet a mud bar at the northern end of the slough necessitates making the remainder of the trip in a row boat. During the months of September, October, and the most of November, 1897, the river stood at the present low water mark, that is, about two feet by the guage, and the lake was drained to the lowest limit reached since our operations were commenced at Havana. Its bed at the north end, for a distance of about three quarters of a mile, was exposed, leaving an expanse of the softest black ooze, through which a narrow, winding channel several feet in width, containing several inches of water, was kept open by our boats and those of occasional sportsmen. When winds from the north prevailed, even this insignificant highway was left bare. Under these conditions ingress and egress over and through this bed of ooze became a task of no small difficulty.

Owing to these two routes of approach to the lake, two points of collection have been established; one off Sand Point, in the northern half, and one about half a mile below Prickett's Landing, in the southern half. Both are in open water and at a considerable distance from vegetation, and are equally typical locations. Access to one of these two places is always possible during the period of open water, or when the lake is covered with thick ice, but when the ice is thin or rotten, it is at times only possible to work out a few rods

from the shore with the aid of ax and ice-hook.

Plankton operations were not carried on in Phelps' lake in 1895, owing to the failure of the river to overflow the bottomlands sufficiently to invade and fill the lake. During this year a heavy crop of corn was raised in its fertile bed, but before it was harvested the following winter the water asserted its claim to this territory and has since held possession. The rise which culminated January 1, 1896, filled the lake, and the water slowly decreased until November, when the few shallow pools that remained were frozen solid. Water again entered the lake January 6, 1897, and the last pool was dried up about September I the same year. Toward the last of February, 1898, rising waters again poured into the lake, and owing to the high water of the past spring continued to occupy it and the adjacent territory until the middle of July. Since that time the depth of the water has decreased rapidly and by the middle of September the lake was reduced to a few large pools. During the first half of 1896 monthly collections were made, and since that date the interval has been reduced to a fortnight.

During the past year a drainage district has been organized in the territory including and adjacent to Phelps lake. The object of this organization is the reclamation of the fertile bottom south of Spoon river. A large dike is being built along the north limit of the district, reaching the river a short distance above the north end of Phelps lake. From this point it passes southward along the river bank for several miles to a point some distance below the mouth of Phelps lake slough, and then turns westward to the west bluff. The drainage of the enclosed area will be accomplished by several large ditches leading to the southeast, where pumping works are planned to insure the removal of the water when the surrounding country is flooded. Owing to the drainage of this lake our operations in this locality must cease with the present season, which leaves us in possession of quantitative collections extending through three years, in each of which the water entered in the winter or spring overflow, and was slowly removed by evaporation and seepage throughout the summer months, the catastrophe culminating in the late fall. We have thus in our possession a basis for a tolerably complete record of the seasonal fluctuations and changes in the fauna and flora incident to the drying up of this ephemeral body of water.

Since September, 1896, collections have been made in Spoon river at intervals of a month or less, and during this time a number of qualitative towings have been taken for us by Mr. W. R. Deverman, of Topeka, Ill., from the waters of Quiver creek. We have thus a good series of collections from tributary streams of the river for a comparison with those of the river itself.

A plankton station was established in September, 1895, in Flag lake, a large marsh between Thompson's lake and the Illinois river. Collections have been made here from that time at intervals of a month or less and were continued in 1897 until July. Owing to the abundance of vegetation in Flag lake this station was extremely difficult of access during the summer months, and owing to the abundance of flocculent debris of vegetation it was at all times difficult to secure a satisfactory quantitative collection from this body of water. As it was necessary to reduce the amount of field work, it seemed best for these reasons to drop this station permanently from the list of places subject to regular visitation. During the summer of 1898 plankton collections have been made from time to time at the mouth of Flag lake slough in the hope of finding here Trochosphæra, as in former years. None, however, could be found in this locality, or, indeed, in any other in our field of operations during the past summer.

As a rule the collections made at the plankton stations above enumerated included a vertical one, one from the surface, and one from the bottom water, all made with a pump and a net of No. 20 silk bolting cloth. In addition to these a catch from a liter of water from a vertical sample at each station was made with filter paper, and from five liters with the Berkefield filter, the first method of filtration being introduced in September, 1896, and the second in November, 1897. The total number of bottles in the regular series for the years 1897 and 1898, each representing a different catch, is 1,075.

The collections above mentioned belong to the chronological series whose purpose is to afford a quantitative and qualitative representation of the changes through which the life in the water of the streams and the lakes examined passes during the course of a term of years. In addition to this series a considerable number of other catches have been made with a view to securing data upon certain allied and important phases of the plankton work.

The relation of the dissolved gases of the water to the amount and constitution of the life therein contained is an important problem, and an attempt to collect data has been made in connection with the chemical survey of the waters of the State. In July, 1897, Prof. A. W. Palmer, Director of this Survey, visited the Station and made a number of analyses of the oxygen dissclved in the surface and bottom waters in the lakes and river. In 1898 his visit was repeated, with Mr. R. W. Stark, assistant on the survey, and a number of similar analyses were made, the carbon dioxide being also determined. A series of collections extending throughout twenty-four hours was made from the surface and bottom waters of the Illinois river with a view of determining the diurnal fluctuation in the amount of the dissolved gases. In all these operations parallel collections of the plankton have been made at the same time and from water collected in the same manner, the plankton pump being used for the collection both of the plankton and the water for gas analysis. The twenty-four-hour series collected in 1898 can be brought into correlation with the movements of the water-bloom, which is a marked feature of the plankton of the river during the warmer months of the year. About one hundred bottles are comprised in the collections belonging in this series.

The serial plankton work rests upon the supposition that a single catch made in a typical locality of a lake or river will give a fair sample of the microscopic life of the water, both as to its quantity and constituent organisms. With a view of testing the validity of this supposition, Thompson's, Quiver, and Mantanzas lakes and the river have in previous years been subject to extended examinations, collections being made on the same date at a considerable number of localities at regular intervals throughout the body of water examined. In 1897 Thompson's lake was re-examined on this plan and a biographical cross section of the river was made at Harvard. The series of collections has been increased by twenty-five bottles during the period covered by this report.

The tests looked toward the detection and correction of sources of error in the plankton method and the justification of changes in it which we have made, have been continued during the past two years. Of the collections made in these tests about one hundred and fifty have been preserved. Tests have been made of the errors resulting from leakage, from the progressive clogging of the drawn net and the consequent variable coefficient, and from the active escape of the larger organisms of the plankton. Several types of funnels for the in-take of the plankton plump have also been devised and Tests of the leakage through the silk and efforts to correct it by some form of micro-filter or precipitation method have also been continued. A variety of filters have been examined, including the Sedgwick-Rafter sand filter, using sharp Berkshire sand according to the directions of Calkins,\* Jackson†, and Whipple‡. The loss by leakage from this filter was so great that we abandoned it and have been using filter paper as a supplementary method of collection since September, 1896, in all regular plankton examinations. For a short time ordinary filter paper was used, but owing to the looseness of its texture and consequent entanglement of the plankton and shedding of lint we rejected this paper and have since used the "hardened filter paper," No. 575, Schleicher & Schull. The water from which the sample for filtration is taken has been obtained by means of the pump. It was often necessary to take a much larger amount than was used filtration in order to secure a vertical collection. To obviate this and also to secure greater accuracy in the collection of a vertical sample, a vertical water-trap was devised, which consists of a light brass tube three inches in diameter and eight feet long, at whose lower end is a sliding brass gate by which the bottom of the tube can be closed after it is lowered to the desired depth.

Although the filter paper collections served to correct the loss by leakage in

<sup>\*</sup>Calkins, G. N.—The Microscopical Examination of Water. Rep. Mass. State Board of Health, 1891, pp. 396-421. 2 folding tables.

<sup>†</sup>Jackson, D. D.—An improvement in the Sedgwick-Rafter Method for the Microscopical Examination of Water. Tech. Quart, Vol. ix. pp. 271-274. 1896.

tWhipple, G. C.--Experience with the Sedgwick Rafter Method at the Biological Laboratory of the Boston Water Works. 1 bid. pp. 275-279. 1896.

an important degree, the method was defective in that a small portion of the catch, varying with the amount and character of the plankton, remained on the filter paper, entangled in the fibres of its surface. To obviate this difficulty and to secure, if possible, a method which would be effective and permit the handling of a large quantity of water, experiments were made with the centrifuge. The small machine described in the last report and adopted by us for use in the measurement of plankton collections was found to precipitate a large per cent of the organisms present in the water, accordingly a larger machine was devised and built at the mechanical shops of the University for this purpose. It consisted of a hollow cylinder axis of gun-metal with two returning arms, each bearing at the elbow a detachable receptacle which receives the solid matter precipitated from the water, which last passed through the revolving axis and out to the tips of the elbows before it returns to the axis for discharge at the lower end. This machine is geared to give, with power, 8,000 revolutions per minute. When fitted with cranks for two men, four to five thousand revolutions can be obtained. This apparatns was tested with water from the river at a time when it was full of water bloom,—formed principally of Carteria,—and also with water from the lakes in varying kinds and amounts of plankton. It proved to be more effective in the removal of the plankton than any method previously tried, but the operation of the machine by hand was extremely laborious, and the precipitation of the plankton was very slow. Furthermore, a variable and oftentimes considerable amount of the plankton—especially that found in the water-bloom—is at times lighter than the water, and thus can not be removed by centrifugal force with the heavier constituents.

In November, 1897, a Berkefeld army filter (system Bruckner), was added to the plankton equipment. It is very efficient in removing all the solid matter from the water, and its operation with ordinary samples is quite rapid. It consists of a force pump and a cylinder of diatomaceous earth, upon which the plankton and silt contained in the water are collected. This is removed by washing with a brush, but in the process a part of the substances of the cylinder is brushed off. This debris is added to the silt of the water and renders subsequent microscopic examination more difficult. The brushing is also disastrous to some of the more delicate organisms, but leaves by far the greater part of the minute forms which escape the silt intact and in suitable condition for enumeration.

During the past two years some progress has been made with an examination, measurement, and enumeration of the plankton of the regular series, though much of the time has been given to the preparation of plankton apparatus and the improvement of the method. In this work the examination of the test collections by the enumeration method has been particularly time-consuming. The work of enumeration has been facilitated by the use of a set of six counting machines, which enable the observer to keep a record of six different species at once without the mental effort of carrying the count in the mind. An extended amount of this work remains to be done before we shall utilize to any considerable extent the collections now accumulated. This work will be necessary to the full confirmation of the results of our investigation, and will also be very valuable in suggesting new fields for development, especially along experimental lines. The present provision for this work is quite inadequate to a prompt return for our present investment in this department of the operations of the Station. The enumeration of the smaller organisms, especially under the higher powers of the microscope, is particularly taxing upon the eyes, and long continued application is a severe strain upon the nerves of the plankton statistician. I believe it to be possible by the expenditure of a small amount of money to secure student aid for some of this work in such a way as to render promptly available a considererable portion of the now latent results of our plankton work.

The sanitary analysis of the water in connection with the chemical survey of the waters of the State have been continued. Weekly samples have been collected through the two years from the Illinois river and from Spoon river on days when plankton examinations have been made. Similar regular collections were commenced in Thompson's and Quiver lakes in September and October of 1897, and have been continued in connection with the fortnightly

plankton work. The total number of samples for sanitary analyses collected at the Station and shipped to Champaign during the two years is two hundred and eighty. As these analyses include the determination of the free and albuminoid ammonia, the nitrites and nitrates, the chlorine, and the oxygen consumed, they will furnish data of great value for a comparison with those derived from the plankton work.

The shipment of samples to Champaign for an analysis of the gases dissolved in the water was begun July 23, 1897, samples being sent from the surface water of the river for the determination of the oxygen. In August forthnightly surface samples from Thompson's and Quiver lakes were added to the shipments, and in November additional samples were sent from each of these localities for an analaysis of the carbon dioxide. With the beginning of 1898 samples were collected from both the surface and the bottom waters of the three localities above mentioned for the determination of both the oxygen and the carbon dioxide. This involves the collection and shipment of eight bottles of water from each of the three stations—a total of about nine hundred and fifty samples being shipped in 1897 and 1898. The water was collected with the plankton pump by means of a small pet cock inserted in the discharge pipe. A rubber tube is fastened upon this and inserted in the bottle and water sufficient to fill the bottle three times is pumped through it. The bottle is then closed, the sample being collected with a minimum contact with the air. If the change in the water between the time of collection and the time of analysis does not vitiate the results, we shall find these gas determinations of great importance in the discussion of the plankton data.

The equipment has been maintained in first-class condition so far as the wear and tear of property subject to the vicissitudes of an aquatic environment will permit. The hull of the laboratory boat has been provided with salt shelves and its bottom thoroughly salted to insure its preservation. The decks and guards have been painted repeatedly, and the canvas roof has received a heavy coat of paint. The floors have also been treated with several coats of oil. Three years experience in our floating laboratory has only increased our satisfaction with its fitness and convenience for the work of a biological station.

The steam launch, with the new equipment of machinery described in the last report, has been of great service. A few repairs have been made from time to time upon the engine, and the boiler and stack have been provided with a shield to decrease heat in the launch. New tubes have also been placed in the boiler. In 1897 the steamer "Josie Sivley" collided with the "Illini" while she was at anchor on the river front, and crushing her against the guard of the laboratory boat opened a seam up the larboard side and broke several ribs and a staunchion. The launch sunk in shoal water and was easily raised, the damage being subsequently thoroughly repaired. In the spring of 1897 Mr. Newberry secured an engineer's license, and has since cared for the launch.

During the session of the summer school the carrying capacity of the launch is severely taxed in providing transit for the field excursions of the classes. At no time is the speed very great, seven miles an hour being the maximum maintained. Furthermore, the draught of the boat interferes with its greatest usefulness in the shoal waters in which at times our work compels us to go. It is only a question of time when extensive repairs will be necessary upon the hull. I would therefore recommend that an effort be made to secure a larger boat with more powerful machinery so as to carry more passengers and, if necessary, to tow a barge. Greater speed and less draught can be secured with such a boat. It would also enable us to considerably extend the field of our operations. Such a launch will be a prime necessity when the work of the Station is extended to the Mississippi river.

The outfit of small boats, which consist of two lap-streak lake-boats, one lap-streak river boat, and an Illinois river skiff, has been supplemented by the addition of a large flat-bottomed seine boat twenty feet in length with five-foot beam for the plankton work. The increasing complexity of this work and the variety of apparatus necessary for its performance has made the load required

for a plankton trip too cumbersome for an ordinary boat. The total weight of the boat when manned and loaded with the outfit and water samples is not less than one thousand pounds. The increased attention given to winter work has necessitated the adaptation of the boat to the exigencies of that season. The bow and sides are protected with a sheath of zinc, and while the ice prevails the bottom is shod with two steel runners. With the boat thus equipped it is usually possible by rocking the boat and skillful manipulation of the ice-hooks to beat a way through the thin and rotten ice which will not carry the weight of the load, while the runners allow the boat to slide easily over the surface of the smooth ice wherever this is strong enough to bear the weight. The greatest difficulty attending transit in the field in the winter occurs at times when the river is low and access to Thompson's lake must be had by portage across the bottomlands at the southern end of the lake. A pair of wheels has been rigged up for this work, but in wet weather or after heavy snows they are hardly adequate to the task.

In the fall of 1896 the rented quarters which the Station had occupied in town were given up, and the property there accumulated was placed on board the laboratory boat. When the Station was opened the following summer it was necessary to secure storage elsewhere for property of a bulky nature or that for which there was only occasional use, and by the courtesy of the Illinois State Fish Commission we utilized a corner of their warehouse on the river front until the burning of the building in September. We suffered no loss of consequence, and our property, some of it in a damaged condition, was then returned to the laboratory boat for the winter. In 1898 the problem of storage was temporarily solved by the purchase of a cheaply constructed cabin boat twelve by twenty feet.

Although no formal opening of the Station to students was made during the summer of 1897 and no advertisements of its facilities was undertaken, a few applicants for places were accommodated under the conditions attending the opening of the Station to such persons in previous years. The following is a list of those in attendance and the lines of work pursued.

H. C. Beardslee, A. B., Instructor of Science, University School, Cleveland, Ohio. Fleshy fungi and Mycetozoa.

Miss Bertha V. H. Forbes, B. S., Teacher of Biology, High School, Austin, Ill. General biology.

- H. M. Kelly, A. M., Professor of Biology, Cornell College, Mt. Vernon, Iowa. Trematoda parasitic in Unionidæ.
- S. D. Magers, B. S., Principal of High School, Houston, Texas, Algæ and general biology.
- H. L. Roberts, Superintendent of Schools and Principal of High School, Farmington, Ill. General biology.

The following year a summer school of biology, with regular courses in botany and zoology and offerings of advanced work in zoölogy was planned, and authorized at the March meeting of the Board of Trustees. The school was well advertised in the educational journals, and preliminary and final circulars were distributed as far as possible among the teachers of the State. Extended advertising in the neighboring states was not attempted. The Station staff was mainly responsible for packing and shipping the equipment sent over by the University and the State Laboratory and for its return, for the registration of students, and for the financial management of the school. No effort was spared to make the equipment of the Station of use to the school. The board of education of Havana placed the high school building at our disposal for the summer school, and the teachers' institute in session during the opening days was transferred to one of the churches by the county superintendent, Mr. M. Bolan.

The following is a list of the persons in attendance and their present positions:

Miss Anna L. Baldwin, Science Teacher, High School, Pittsfield, Ill.

T. L. Cook, Superintendent of Schools, Mt. Pulaski, Ill.

Wallace Craig, B. S., Assistant of the Illinois State Laboratory of Natural History, Havana, Ill.

Miss Louise S. Dewey, B. S., Fellow in Physiology, University of Illinois, Urbana, Ill.

- C. C. Faust, Superintendent of Schools, Mansfield, Ill.
- J. F. Garber, A. B. Instructor in Biology and Mathematics, High School, Houston, Texas.
  - J. T. Johnson, Teacher of Biology, High School, Galesburg, Ill.

Miss Nellie I. Kofoid, B. S., Science Teacher, High School, DeKalb, Ill.

J. E. Meharry, Student, University of Illinois, Tolono, Ill.

Mrs. Sara E. Pierce, Principal of High School, Havana, Ill.

W. E. Praeger, Student, University of Illinois, Keokuk, Ia.

- L. H. Pratt, Teacher, Clear Creek, Ill.
- F. W. Schacht, M. S., Principal of High School, Chicago Heights, Ill.

Otto Widmann, Student, University of Illinois, Old Orchard, Mo.

C. W. Youngs, B. S., Assistant in Botany, University of Illinois, Urbana, Ill.

The total number enrolled in the School was fifteen. Of these nine are teachers of natural science in this and other states. Three of those in attendance are now connected with the University as assistants or fellows. Nine of the fifteen students of the school have been or are connected with the University, three are now undergraduates, and six have received their diplomas, two of them remaining as graduate students. This summer school of biology might be made a very efficient means of attracting attention to the facilities which the University offers for instruction in the sciences, since students availing themselves of the opportunities of the summer school are apt to be drawn to the University for further work.

Although the number in attendance was not so large as had been expected, still certain features of the enterprise are encouraging. Among these is the cordial response of the citizens of Havana to those needs of the school which can be supplied only by local support. There was no difficulty in securing pleasant and comfortable accommodations for all in attendance; and a much larger number would not have exhausted the facilities offered. From its beginning the Station has received generous treatment at the hands of the business men of the town. Indeed, the granting of a site for a Station building upon the public river front on the bluff overlooking the river has been urged in the local press. A second encouraging feature is the satisfaction expressed by those in attendance with the work they have been able to accomplish in Havana, and the frequently repeated desire to continue it when opportunity offers.

Very respectfully yours,

C. A. KOFOID,

Superintendent of Biological Station.

#### REPORT ON WATER ANALYSES.

To the Director of the Laboratory.

SIR: During the two years just passed the number of water samples, from the streams and lakes in the vicinity of Havana, Illinois, which were examined by the State Water Survey as conducted by the department of Chemistry of the University, were as follows: Illinois river and Spoon river 102 samples from each, these being regular weekly collections from each of these sources. The collections from Quiver lake number, all told, 28. and a like number has been taken from Thompson's lake. The waters from these different sources have been subjected to the regular sanitary analysis and

there has been in the different seasons of the year considerable variation in the quantities of organic matters contained, but it is to be noted that the quantities of organic matters in the water of the Illinois river and in the lakes adjacent thereto are ordinarily very high even for surface waters. During the last twelve months the average in the river and also in the lakes shows that the quantity of sewage contained has been considerably less than it was during the preceding twelve months, due of course to the fact that there have been repeated periods of high water and a more generally distributed rainfall during the year of '97-'98 than was the case during '96-'97.

Attempts have also been made during the last year to determine the quantity of dissolved oxygen and of dissolved or free carbonic acid gas in the waters of the Illinois river and the lakes at Havana. We have met with considerable difficulty in making these determinations because of the necessity of doing most of the work here at Champaign. The conditions are particularly formula for the conditions are particularly formula for the conditions are particularly formula for the conditions are particularly formula for the conditions are particularly formula for the conditions are particularly for the condi larly unfavorable for work at a distance because of the large quantities of organic matters contained in the water, and, further, because these matters are in a state of putrefactive change, that is, are undergoing somewhat rapid decomposition. The determinations of dissolved oxygen, consequently, commonly give us figures somewhat too low. Tests made on the spot at the time of collection show that the quantity of dissolved oxygen is ordinarily diminished very quickly on standing a few hours, particularly when the vessels containing the water are exposed to the light. Our results, however, have been obtained under practically similar conditions throughout the season and they show considerable variation, at times the quantity of dissolved oxygen being exceedingly low, while at other times the quantity reached the approximate maximum figure. This is true not only of water contained in the river, but also of the water of the lakes. The data which we have in hand have not yet been digested and can not be until the work has been carried on somewhat more extensively. The free carbonic acid,—that is the carbonic acid which exists not in combination with the bases in the water, but as gas merely dissolved in the water—varies yet more greatly than does the dissolved oxygen. At times there seems to be none present; at other times the quantity present is quite considerable; but these determinations are even more greatly influenced by permitting the samples to stand, or by the time which elapses during their transportation to the laboratory, and we can not at present attach very great importance to the results which have hitherto been obtained.

We expect soon to be able to extract gases from water by means of an air pump, and then we shall be in a position to obtain results which will not be influenced by the conditions mentioned above, and, provided we shall be able to have collections carefully made at Havana, the work can very easily be continued and completed here at the University.

Since early in the summer of 1897 we have made regular determinations of dissolved oxygen and of carbon dioxide in samples taken from the Illinois river and from Thompson and Quiver lakes, but the earlier results are less reliable than those obtained during the last six months, and these later results are themselves not sufficiently reliable to be made at present the basis of any general conclusions.

Yours very respectfully,

ARTHUR W. PALMER,

Professor of Chemistry.

#### REPORT OF THE ENTOMOLOGICAL ASSISTANT.

To the Director of the Laboratory.

SIR:—During the season of 1897 I was in the field, primarily for entomological observation and collection, from June 29 to August 13, giving attention particularly to the gathering of information and material for use in completing our work on Odonata and Mollusca. In 1898 two visits to the field were made for work on Odonata, Ephemerida and Mollusca; a week in spring, from April 19 to 25, and two weeks in midsummer, from June 21 to July 7.

The accumulations of material and notes were already sufficiently large for group studies at the beginning of the two year period covered by this report. Every opportunity has been taken to make desirable additions to them, and they now stand as a superb basis for the study of any group of aquatic forms. The material is all arranged by orders, and consists of about 4,250 vials and bottles of specimens.

There are now in various stages of preparation four papers, mainly on the entomology of the biological station field, one each on the Odonata, the Ephemerida, the fresh water Mollu3ca and the aquatic Coleoptera. The order of procedure which I have endeavored to pursue in the preparation of these papers, and which seems to lead to the most satisfactory and accurate results, is as follows: First, the collection of a large quantity of material and data under the greatest possible variety of conditions as to locality, surroundings, stage of water, season and time of day; then the careful study of these, in connection with the literature, and the making of copious notes and sketches preliminary to the preparation of manuscript, all evident deficiencies either in material or data being carefully noted down; next, a return to the field at times and places indicated by the previous collections for the special purpose of supplying, as far as possible, these deficiencies, and finally, after further study of the literature, the writing of the manuscript.

In the preparation of the paper on the Odonata I have had the valued assistance of Prof. J. G. Needham and Mr. C. C. Adams, who have furnished the systematic work on the nymphs and adults respectively, while it has been my part to discuss the biology and coology of the group and its species and to combine the several manuscripts into a single paper—now nearly ready for the press. Under Mr. Adams' supervision the State Laboratory Artist, Miss Hart, has prepared a valuable series of 134 drawings illustrating the abdominal structures of nearly all our Illinois species, and a series of general drawings of the nymphs and their distinguishing structures is well under way.

For the article on Ephemerida, the Station collections and notes have all been examined and the results are nearly ready to be put in manuscript form. It would add greatly to the usefulness of the paper, however, if a study of the large series of nymphs of this order in the general collections of the State Laboratory could be made before the article is completed.

Much time and labor have been spent on the *Mollusca* in the endeavor to place the study of this group on a truly scientific basis. Not merely the shell but all parts of the animal were studied, full use being made of the unusual facilities at the Station for work of this kind. The univalves of the Station collection have been determined by Mr. H. A. Pilsbry, of the University of Pennsylvania, and the *Sphærium* and *Pisidum* by Dr. V. Sterki. More time could profitably be spent on the biology of the *Unionidæ*, but otherwise the notes are ready to go into manuscript form.

The collections of water beetles have been exhaustively studied and determined, but the systematic examination of the immature stages has not yet been reached.

Respectfully submitted,

C. A. HART, Etomological Assistant.

REPORT ON THE SUMMER SCHOOL OF 1898.

To the Director of the Laboratory.

SIR:—Of the fifteen persons in regular attendance at the summer school twelve were either teachers or preparing to teach, in our public schools. Five of them had received training in the laboratories of the University of Illinois, but nearly all of them were without any considerable experience in fieldwork or in the methods of collecting and preserving aquatic organisms. On this account especial prominence was given to tri-weekly excursions for collecting and field observation, and these furnished probably the most important elements in the work of the session. With the steam launch, row boats, and

needful collecting equipment of the Biological Station the entire party made trips to Matanzas, Thompson's, and other lakes within reach of Havana. The use of the Station launch made the excursion highly enjoyable, and by reducing to a minimum the time en route gave the party ample opportunity for observing, collecting, and preserving such animals and plants as would best repay further study, or would be useful in the laboratories or museums of the high schools in which the various teachers present were interested. The work done in the laboratory by the several members of the school was largely determined by their past experience and the application to be made of of the knowledge acquired.

Soon after the opening of the session it became evident that the needs of the students would be best met by dividing their time equally between the zoology and botany; the forenoons were accordingly given to the former, and the afternoons to the latter.

In the department of zoology emphasis was given to the lines of work most useful to teachers. Material collected on excursions was used in various ways. For correct methods of dissection as well as better knowledge of anatomical details some work in dissection was done. Time was also given to acquiring the best methods of preserving specimens of various kinds of animals. as Hydra, worms of various groups, mollusks, Crustacea, insects—both larval and mature—and fishes. The identification of annelid worms, insects, mollusks, and fishes received due attention, and was aided by named collections belonging to the State Laboratory, and also by literature and by a number of synoptic keys to these groups prepared by members of the State Laboratory staff. As a result of this part of the work, teachers were enabled to take home with them properly preserved and named collections of various kinds of animals. All persons not already familiar with the ordinary methods of section cutting and the making of permanent microscopic preparations had practice in such work.

The work in botany consisted of as thorough a study of the aquatic and terrestrial flora of the surrounding region as the time would allow. The algæ of the Illinois river and connected waters were studied with special reference to their morphology and reproduction. The relation between land and water plants, both as to their differences in morphology and distribution, was observed and discussed on the field trips.

The phanerogams of the vicinity were treated with special reference to their adaptation for protection and cross fertilization. Instruction in the methods of the collection and preservation of herbarium material was given to those who desired it. The systematic work on the higher plants was in the nature of a study of the characteristics of orders from different representatives rather than by following an artificial key.

General plant physiology was illustrated by demonstrations with apparatus such as can be employed in laboratories of limited equipment. In the field special attention was paid to the movements of plant parts as influenced by light, temperature, and progress in seed development. Time at the end of the month was devoted to a discussion of the matter presented and its adaptation to the needs of the secondary schools, with which most of those present were connected.

Each student was provided with a first-class compound microscope for use in both botany and zoology and had also the use of a microtome and an abundance of apparatus, reagents, and general laboratory equipment from the zoological, botanical, and entomological laboratories of the University. An abundance of literature for general reading as well as for work on special groups was provided from the libraries of the University and the State Laboratory.

The instruction in field and laboratory was supplemented by lectures on special forms and groups of animals, and by others, of general biological interest on cell division, development, parasitism, cross-fertilization of plants, adaptive modifications for protection, etc.

Very respectfully yours,

### AGRICULTURAL EXPERIMENT STATION.

To the Board of Trustees of the University of Illinois.

Gentlemen:—By action taken by your honorable body at your meeting held June 9, 1896, the organization of the Agricultural Experiment Station was changed so that instead of a Board of Direction, to which the staff of Station officers were responsible, the office of Director was established, and this officer was charged with the entire responsibility for the work and business of the Station. By your appointment I was made Director of the Station and have continued in charge.

#### PRINCIPAL LINES OF WORK.

The energies of the Station have been directed principally to experiments in cattle feeding to determine variations in animals; variations in milk; production of pure milk; breeding of Indian corn; methods of cultivation of Indian corn; chemistry of the corn kernel; testing different treatments on permanent plats of prairie soil; the white clay soils of Southern Illinois; the sugar beet for Illinois; spraying for insect and fungus enemies of fruits; observations on varieties of apples, pears, and grapes; smuts and their prevention; the smut of broom-corn, sorghum, and Indian corn.

I beg leave also to refer you to reports in detail made in March, of 1897, and March, of 1898.

#### PUBLICATIONS.

Eight regular bulletins, Nos. 45 to 52, inclusive, and one special bulletin, and the tenth and eleventh annual reports have been published and distributed during the two years at an expense of \$2,065.32. The bulletins contained in all 252 pages. The annual report for the years 1896–7 and 1897–8 contained 18 and 16 pages respectively. One thousand copies of each were printed.

Besides these eight circulars were published. The articles contained in the bulletins and circulars were as follows:

Bulletin No. 45, 17,000, July, 1896, 32 pp. Varieties of Apples.

Bulletin No. 46, 17,600, January, 1897, 24 pp. Experiments with Corn. Attempts to grow Crimson Clover. On the Improvement of Retentive Clays; Drainage of the So called "Hard Pan" Lands of Southern Illinois. On the Importance of Physiological Requirements of the Animal Body; Results of an Attempt to Grow Cattle Without Coarse Food.

Special Bulletin, 2,500, March, 1897, 4 pp. Smuts and Their Prevention.

Bulletin No. 47, 17,000, March, 1897, 48 pp. Broom-Corn Smut.

Bulletin No. 48, 17,000, April, 1897, 16 pp. The San José Scale in Illinois.

Bulletin No. 49, 18,000, January, 1898. The Sugar Beet in Illinois, 52 pages, 13 illustrations.

Bulletin No. 50, 17,000, February, 1898. Cost of Production of Corn and Oats in Illinois in 1896, 24 pp.

Bulletin No. 51, 17,000, May, 1898. Variations in Milk and Milk Production, 28 pp.

Bulletin No. 52, 17,000, June, 1898. Orchard Cultivation, 24 pp., 13 illustrations.

Annual Report, 1896-7, 1,000, 18 pp. and cover.

Circular No. 3, October, 1897, 1,000. Instructions for Taking Samples of Sugar Beets for Analysis, 2 pp.

Circular No. 4, December, 1897, 1,000. Alfalfa, 4 pp.

Circular No. 5, December, 1897, 1,000. The Cow Pea and the Soja Bean, 4 pp.

Circular No. 6, December, 1897, 1,000. The Sugar Beet in Illinois, 4 pp.

Circular No. 7, January, 1898, 1,000. Sugar Beet Convention, 2 pp.

Circular No. 8, March, 1898, 1,000. Spraying Fruit Trees, 3 pp.

Circular No. 9, April, 1898, 1,000. Instructions for Growing Sugar Beets.

Circular No. 10, May, 1898, 1,000. Experiments in Corn Cultivation.

Respectfully submitted.

EUGENE DAVENPORT,

Director of Agricultural Experiment Station.

## SPECIAL REPORT OF THE SCHOOL OF PHARMACY.

To the Trustees of the University of Illinois.

Gentlemen: The Chicago College of Pharmacy, now the School of Pharmacy of the University of Illinois, was founded in 1859 by a number of pharmacists of Chicago and vicinity for the purpose of affording to their apprentices and to others a course of pharmaceutical instruction,—a course not then to be had at any school or university in the West.

At its inception, the course consisted entirely of lectures, given during the evening hours, when the clerks could best be spared from their duties in the drug stores.

As the institution grew, the scope of the course was extended, laboratory instruction was introduced and made a feature, day classes replaced those which had been conducted in the evening, and an excellent equipment was gradually provided.

At the time of its union with the University, the course given by the School, and leading to the degree of graduate in pharmacy or pharmaceutical chem ist, embraced instruction covering a period of two school years of seven months each and amounting to seven hours daily for three days each week. The annual attendance at this time was 160 and the total number of graduates nearly 900. The College possessed a serviceable equipment and occupied a leased building, which had been erected especially for its use. Chicago real estate, amounting to a little more than two acres, also formed a part of the college property.

Until this time, the College had been governed by an association of which any graduate of the school or pharmacist of the state might become a member. Under this government all receipts in excess of the running expenses were used in adding to the equipment of the school.

The trustees of the corporation had long been of the opinion that the college should be made a part of some university, and as the State, through the pharmacy law, demanded a pharmaceutical training of those desiring to qualify for the practice of pharmacy, it was the unaminous opinion of the members of the college association that the school should preferably be joined to the State University.

This union was effected upon the first of May, 1896.

At the session following, the attendance showed a decided increase, the number of matriculants being 181. A year later, however, the school felt the effects of the business depression, very marked in drug lines particularly, and the attendance decreased to 140. During these two years 80 students were graduated.

At the request of the President of the University, the state pharmaceutical association at the annual meeting held in July, 1896, nominated ten phar macists, from whom the president was to select five, to constitute an advisory board, whose aim would be to aid the University management in an advisory capacity, in the government of the school. It was further arranged that these first members should serve for one, two, three, four and five years respectively, new members to serve five years, and that one new member should be

selected annually from among three names submitted, these three being nominated, by ballot, by the pharmacists of the state. This arrangement was perfected and the Advisory Board, so created, has held two annual meetings and has, at each meeting, presented to the Trustees a report embodying suggestions touching the School of Pharmacy.

The course of instruction now given at the school, is such as is, in the opinion of the faculty, best fitted to impart to the student a thorough and practical knowledge of pharmacy and of the the sciences intimately related. It includes a careful exposition of the principles of pharmacy; ample practice in pharmaceutical manipulations; the manufacture of many typical galenical preparations, and drill in the compounding of prescriptions; as well as a thorough consideration of theoretical chemistry; laboratory practice in qualitive and quantitive analysis, especially with reference to the identification and valuation of drugs and medicines, and a presentation of the salient facts of inorganic and organic chemistry, from a pharmaceutical standpoint; also such instruction in botany and microscopy as may best prepare the student for the ensuing study of the various crude drugs, these being considered with reference to their identification, purity, chemical constituents, physiological effects and therapeutic uses.

At a meeting of the School of Pharmacy Committee of the University Trustees, together with the Faculty of the School, which meeting was held September 2nd, 1897, it was decided to recommend to the Board of Trustees of the University that the course for the degree of Pharmaceutical Chemist be lengthened so as to require a school-year of post-graduate work after the completion, by the student, of the two year course. It was further recommended that the advanced work consist chiefly of chemistry and be of such nature as to qualify the student for expert work, in this line, such as might fall within the province of the pharmacist to perform. A third recommendation was that a special laboratory and equipment be provided for this course. These recommendations were adopted by the Board of Trustees at the meeting held September 21st, 1897, and it is expected that the extended course will be put in operation during the coming year.

The diploma of this school, conferring the degree of Graduate in Pharmacy, entitles the recipient to registration in twenty-two states of the Union, but it does not do so in our own State, the pharmacy law of which recognizes no diploma whatever and obliges all candidates for registration to come before the State Board of Pharmacy for examination. While a graduate of any first-class school of pharmacy should not fear an examination before any state board, yet it would seem inconsistent that the State, through its pharmacy law, should not recognize the instruction given under its own supervision.

Another feature of our pharmacy law, and one that is unjust to the schools of pharmacy generally, is that the time spent by the student at a school of pharmacy is not recognized as "experience." For this reason, the young man who has worked in a drug store for four years and who has not attended a school of pharmacy, is eligible for examination before the Board of Pharmacy, while the young man who has been engaged in pharmaceutical practice for the same period, but who has devoted a part of his time to attendance at a school of pharmacy, is not eligible and becomes so only when he has had four years of actual drug store experience. Evidently, some provision should be made, such as the pharmacy laws of many other states contain, which would provide that the time spent at a school of pharmacy should count as "experience," with the provision, preferably, that such credit should not exceed two years. As the law stands at present, a young man is temporarily disqualified for registration because he has attended a school of pharmacy.

A feature of the course at this school, is that opportunities are provided for students to earn their living expenses while attending, by devoting a portion of their time to drug store practice. The facilities in this respect afforded by a large city, enable many young men to gain an education in their chosen profession, who would not otherwise, for financial reasons, be able to do so.

The indications for the coming session point to a larger attendance, and with the propective establishment of the post graduate course and the additions to the equipment of the school, the prospects for the future are bright.

Excepting only the physician, there is no person who holds such a responsible position, in regard to the public health, as does the pharmacist. To fit him for the assumption of this responsibility, a special training, such as is afforded by the best schools of pharmacy, is necessary. The scope of his training must be continually extended to keep pace with new duties and increasing demands upon the pharmacist's knowledge and skill. The University is to be commended for its efforts toward providing better facilities for the acquisition of this knowledge and skill and toward the elevation of the standard by which these attainments are judged.

Respectfully submitted,

W. B. DAY.

Secretary of the Faculty.

### THE SCHOOL OF MEDICINE.

To the Trustees of the University of Illinois.

Gentlemen:—Since the absorption of the College of Physicians and Surgeons of Chicago by the University, the number of students attending that institution has increased from 308 to 510.

The comparative thoroughness of its curriculum is set forth in the recently issued decennial report of the Minnesota State Board of Examiners. In Minnesota all applicants for license to practice medicine are required to pass the examination of the State Board, no matter how many diplomas they have.

Of the graduates of the School of Medicine of the University of Illinois who have taken this examination, fifteen per cent have failed; whereas, twenty-two per cent of the graduates of the Northwestern University Medical School and thirty and one-half of the graduates of the Rush Medical College, subjected to the same ordeal, failed.

Our School of Medicine includes a well organized and well sustained Medical Society, under the control of students, which meets bi-weekly, and has an average attendance of forty.

The Quine Library now contains 2,500 standard medical treatises and a wealth of periodical medical literature. It is believed to be the most active medical library in Chicago, the average daily attendance being 85.

Co-education in medicine, a problem that was regarded with much anxiety by the medical faculty, has proved a gratifying success. There are now thirty ladies in the classes and they sustain themselves very creditably in every department of work. Separate parlor and dressing rooms are provided for them and they are treated with every consideration by the young gentlemen of the school. They have just organized a Greek letter society.

The College Gymnasium is, as yet, somewhat primitive as to quarters and equipment, but it is none the less appreciated and used by the students of both sexes. It is the only medical school gymnasium in Chicago. Bath rooms are connected with it.

The Y. M. C. A. parlors in the school are comfortable and commodious and not equaled by any like institution in the Mississippi Valley.

The College Museum is growing vigorously and the equipment of the school is rapidly enlarging in every direction.

The enthusiasm of students and harmonious coöperation of teachers make a cheering prophecy of the future of the school. A little more than one-third of the students have degrees on admission, and the number of these has noticeably increased of late years. It is expected that arrangements will be made before the opening of another session, whereby the entrance requirements of the School of Medicine will be exactly the same as those of other departments of the University, and students may obtain a degree in science and a degree in medicine, on six years of work—three of which shall be done in Urbana and three in Chicago.

The Football Team is the champion medical team of this section of the country.

The College Glee and Mandolin Club recently organized, is in the throes of preparation for its first public performance in Studebaker Hall, February 15th, proximo.

For competitive examinations, for hospital appointments, participated in by the students of all the medical colleges of Chicago, the students of the School of Medicine of the University of Illinois may be confidently depended on to sustain the credit of their alma mater.

Respectfully submitted,

W. E. QUINE, Dean.

# INDEX.

INDEX.

Adams, C. C., appointed entomological assistant in Laboratory of Natural History  Agricultural Experiment Station—	75
Advisory board	3, 222
Biennial report	355
Management Report of Director Report of Director Alvord, C. W., appointed instructor in mathematics and history, in preparatory school. Appropriations, asked for Astronomical Observatory	3, 270
Alvord, C. W., appointed instructor in mathematics and history, in preparatory school.	205
Astronomical Observatory	28
Donations received	71
Baum, W. H., appointed assistant in civil engineering	253
Biological Station report	342
in horticulture	19
Made assistant professor of horticulture. Blue print room	$\frac{252}{207}$
Board of Trustees-	
Election of officers	75
Proceedings, 1896–1897.	
Meeting of September 15, 1896 September 30, 1896	17 38
October 6, 1896	40
'' December 8, 1896 '' March 9, 1897	41 63
Adjourned session, April 22, 1897	96
Meeting of April 13, 1897. June 8, 1897	91 109
'' June 29, 1897 '' September 21, 1897	134 184
'' October 1, 1897	206
'' December 14.1897	$\frac{207}{222}$
March 8, 1898. April 19, 1898.	245
June 7, 1898	252 280
Bridge on Burrill avenue 197, 200 Brenke, W. C., appointed assistant in mathematics. Brooks, N. C., appointed instructor in German. Buck, Gertrude, appointed instructor in rhetoric Burrill, Professor T. J., leave of absence	6, 221
Brenke, W. C., appointed assistant in mathematics	19 253
Buck, Gertrude, appointed instructor in rhetoric	65
Burrill, Professor T. J., leave of absence. Butterfield, Helen, resignation	125 65
Carpenter, Hubert V., appointed assistant in physics	205 29, 31
Chemical Laboratory, injury by fire 17. Committees, standing 44, 62, 72, 74, 22: Cook, Agnes S., appointed instructor in rhetoric 17.	2, 243
	111
Davenport, E., report of Agricultural Experiment Station for 1897-1898.  Day, W. B., report on School of Pharmacy.	355 387
Day, W. B., report on School of Pharmacy Degree of Pharmaceutical Chemist	7.188
Degrees conferred	5, 262
Dodge, Professor D. K., granted leave of absence	18
Domestic Economy, department	$\frac{247}{0.235}$
Re-elected President of the University	04
Re-elected President of the University Drew, W. L. appointed professor of law DuBois, A. D., appointed instructor in military	253 254
Electrical engineering department	97
Received Transferred	131
Transferred 12 Entomological work, report 12 Everett, H. H., made associate professor of physical training and director of the gym-	4, 159 352
Everett, H. H., made associate professor of physical training and director of the gymnasium	112
HOSTAIN	112

Executive Committee, appointed. 66 Reports	4, 222 7, 205
Fernie, Alison Marion, appointed instructor in vocal music  Made assistant professor of music  Financial Statement, 1896-97  1907-08	111 253 281 141
Fernie, Alison Marion, appointed instructor in Vocas music  Made assistant professor of music  Financial Statement, 1896-97  1897-98  Forbes, Ernest B., appointed entomological assistant  Forbes, S. A., Director State Laboratory of Natural History, biennial report  Fox, Jessie Y. appointed assistant piano instructor  Freshman class supper disturbance.	251 340 1 4 66
Gardner, G. E., appointed professor at law.  Gas contract.  Greene, E. B., made associate professor.  Greenhouse.  Gymnasium for men.  182, 186, 192, 193	96 234 1 2 7, 221 4, 196
Hammond, Assistant Professor G. D., granted leave of absence.  Hammond, M. B., appointed assistant in economics.  Made instructor in economics.  Hart, C. A. report of entomological work.  Heating, lighting, and power plant.  Howland, Arthur C., appointed instructor in history.  Hubbard, George D., appointed assistant in geology.  Hughes, Thomas W., appointed assistant professor of law.  Hylan, John P., appointed instructor in psychology.  Made assistant professor of psychology.	18 205 253 352 9, 269 111 205 253 205 252
Illinois Field	5, 278 2, 268 247 216
Jayne, Violet D., appointed assistant professor of the English language and literature and dean woman's department.  Made associate professor of the English language and literature.  Jones, Mary L., appointed assistant professor of library economy and librarian.  Resignation.  Jones, W. H., made professor of music	65 252 111 207 19
Kavanaugh, W. H., appointed instructor in mechanical engineering.  Keeler, H., appointed assistant in chemistry Keith, Elbridge G., bond. Elected treasurer Reports. Kemp, George T., appointed professor of physiology Ketchum, Richard B., appointed assistant in civil engineering Kinley, Professor D., title made professor of economics Kofoid, C. A., report of Biological Station Kyie, Martha J., appointed instructor in rhetoric	112 19 92, 93 91 2, 271 13 ( 205
Land contracts. Land for school house site donated	253 $31,81$ $241$
Land contracts.  Land for school house site donated  Law School  Legislature, thanks to, for relieving the University from loss by Spalding defalcation.  Lewis, Stanley M., appointed assistant in art and design  Library building  Decoration  Decoration  Dedication address by J. M. White.  Lightning losses  Lunch room.	139 254 7, 192 3, 192 138 221 247
McGilvrey, J. E., appointed assistant professor of pedagogy and high school visitor.  McKee, James H., appointed assistant in mechanical engineering.  Mann, Margaret, appointed instructor in library economy,  Meyer, George H., appointed instructor in German.  Milliary Hall, use for political meeting.  Milne, E. L., appointed instructor in mathematics.  Morgan horses.	15 205 111 112 249 253 135 207
Palmer, A. W., report on analysis of Illinois river water.  Paving and walks. Pence, W. D., made associate professor of civil engineering. Pharmaceutical chemist. Paillips, J. D. made assistant professor of general engineering drawing Physical training for men. Pickett, C. C., appoint et professor of law. Pierce, E. H., appointed instructor os the violin and leader of the band. Postoffices, Urbana and Champaign. Putnam, Alice, appointed instructor on the violin	351 7, 196 252 7, 188 112 184 96 19 19 205
Quick, Oscar, made assistant professor of physics	258

Randolph, Charles B., appointed instructor in Greek and Latin in the Preparatory	11
Rhoades, Lewis A., made associate professor.	11
Rhoades, Lewis A., made associate professor. Ricker, Professor N. C., appointed to State Board of Examiners of Architects.  Leave of absence.  Rose, C. R., appointed instructor in chemistry. Rowell, Chester H., appointed instructor in German.	19 12
Rose, C. R., appointed instructor in chemistry	1 11
Sammis, John L., appointed assistant in chemistry	20
Scholarship, special.	18
Scholarship, special. Scholarships, State. Requisitions on Treasurer. School of Medicine.  44	26
Athletics at	23
Facu'ty appointed	3, 11 24
Report	36 13
Women admitted. School of Music, reorganization. 107	7, 12 13
Fees	3. 25
Advisory Board 21, 101, 137 Graduates, 1897.	, 19 9
Graduates 1898	35
Report.  Report.  Seastone, Charles V., appointed assistant in applied mechanics Sharp, Katharine L., appointed professor of library economy, head librarian and di-	25 20
Sharp, Katharine L., appointed professor of library economy, head librarian and di-	
rector of Library School	35
rector of Library School	12 5
Reports	3, 27 9
Spalding, C. W., Treasurer—	-
Conveys property to University	, 10
Endowment bonds hypothecated	9 2, 10
Endowment bonds hypothecated. 26, 50, 76, 102 Spencer, N. S., appointed superintendent of buildings and grounds. Stark, Robert W., appointed assistant in chemistry. 22, 120, 270 State Laboratory of Natural History. 22, 120, 270	260 200
State Laboratory of Natural History	,34
Student labor     191       Summer School at Biological Station     40,46,235       Summer term     2.0	, 35
Superintendent of buildings and grounds223	3, 26 25
Sy, Albert, app_inted assistant in chemistry	
Telephones. Temple, S. J., appointed instructor in architecture.  Made assistant professor of architecture	18
Made assistant professor of architecture Townsend, associate professor, E. J., leave of absence.	11: 20'
Treasurer, authorized to receive moneys, etc	94
Turner, Professor J. B., memorial in honor of	260
Uniforms	i, :2
Warrants, year ending August 31, 1897	14
Year ending June 30, 1898 Water plant. Water analysis report, Illinois river.	283
Water analysis report, Illinois river	35 23
Water contract. Webber, Hubert A., appointed assistant in engineering drawing. Wite, J. M., address at dedication of library building Wilder, Chas. T., appointed instructor in photography and put in charge of blue print	20
Wilder, Chas. T., appointed instructor in photography and put in charge of blue print	20.
room. Williamson, Albert St. J., appointed assistant in military science and tactics	20
Wo nen admitted to the School of Medicine	24' 13
Woman's building Department 4	19' 16,6
Young, Charles W., appointed assistant in botany.	24
G,	